Final Submittal

Energy Engineering Analysis Program
Lighting Survey of Selected Buildings
Pine Bluff Arsenal

Pine Bluff, Arkansas

Volume IIA
Appendices

Contract No. DACA01-94-D-0038
Delivery Order No. 0001

June 1995

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FINAL SUBMITTAL

ENERGY ENGINEERING ANALYSIS PROGRAM

LIGHTING SURVEY OF SELECTED BUILDINGS

PINE BLUFF ARSENAL

PINE BLUFF, ARKANSAS

VOLUME IIA

APPENDICES

CONTRACT NO. DACA01-94-D-0038
DELIVERY ORDER NO. 0001

PREPARED FOR:

U.S. ARMY CORPS OF ENGINEERS
LITTLE ROCK, ARKANSAS

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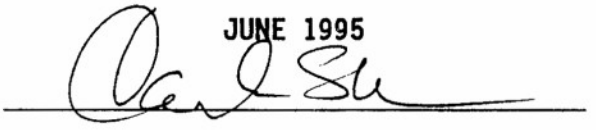
DTIC QUALITY INSPECTED 2

PROJECT NO. 6941331001

JUNE 1995



Carlos S. Warren, PhD, PE
Project Manager

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CESWL-ED-DE

~~June 1994~~
Revised 9/6/94

APPENDIX "A"

CONTRACT NUMBER DACA01-94-D-0038

DELIVERY ORDER NO. 0001

GENERAL SCOPE OF WORK

FOR A

LIGHTING STUDY

PINE BLUFF ARSENAL

Performed as part of the

ENERGY ENGINEERING ANALYSIS PROGRAM (EEAP)

SCOPE OF WORK
FOR A
LIGHTING STUDY

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1. BRIEF DESCRIPTION OF WORK. The Architect-Engineer (AE) shall:

1.1 Perform site survey of specific buildings or areas to collect all data required to evaluate the list of possible ECOs provided in Annex A.

1.2 Evaluate new ECOs discovered by the AE in his site survey to verify their energy savings potential and economic feasibility.

1.3 Provide project administrative/technical documentation (DD Form 1391 and Project Development Brochure (PDB)) for qualifying Energy Conservation Investment Program (ECIP) projects as detailed herein. See Annex C for required documentation.

1.4 Prepare a comprehensive report to document all work (site surveys, evaluations, etc.) performed, the results and all recommendations.

2. GENERAL

2.1 This study is limited to the evaluation of the specific buildings, systems, or ECOs listed in Annex A, DETAILED SCOPE OF WORK (the list of possible ECO's is not all inclusive, the A/E shall alert the Government when new ECOs are discovered).

2.2 The information and analysis outlined herein are considered to be minimum requirements for adequate performance of this work.

2.3 For the buildings, systems, or ECOs listed in Annex A, all methods of energy conservation as related to lighting, as well as its effects on HVAC systems, which are reasonable and practicable shall be considered, including improvements of operational methods and procedures as well as changing of the physical facilities. All energy conservation opportunities which produce energy or dollar savings shall be documented in the report. Any energy conservation opportunity considered infeasible shall also be documented in the report with reasons for elimination.

2.4 The study shall consider the use of all lighting sources applicable to each building, system, or ECO, including all effects lighting system changes may have on HVAC systems.

2.5 The "Energy Conservation Investment Program (ECIP) Guidance", described in letter from DAIM-FDF-U, dated 10 January 1994 establishes criteria for ECIP projects and shall be used for performing the economic analyses of all ECOs and projects. The program, Life Cycle Cost In Design (LCCID), has been developed for performing life cycle cost calculations in accordance with ECIP guidelines and is referenced in the ECIP Guidance. If any program other than LCCID is proposed for life cycle cost analysis, it must use the mode of calculation specified in the

ECIP Guidance. The output must be in the format of the ECIP LCCA summary sheet, and it must be submitted for approval to the Contracting Officer.

2.6 Energy conservation opportunities determined to be technically and economically feasible shall be developed into projects acceptable for installation input into DD Form 1391 processor (ready to submit); and hardcopy submission of PDB 1 and 2. This may involve combining similar ECOs into larger packages which will qualify for ECIP funding, and determining in coordination with installation personnel the appropriate packaging and implementation approach for all feasible ECOs.

2.6.1 Projects which qualify for ECIP funding shall be identified, separately listed, and prioritized by the Savings to Investment Ratio (SIR).

2.6.2 All feasible non-ECIP projects shall be ranked in order of highest to lowest SIR.

2.6.3 At this installation Defense Base Operating Funds (DBOF), Operations Maintenance, Army (OMA) and Military Construction, Army (MCA) funding will be used instead of ECIP funding. The criteria for each program is the same. The Director of Public Works (DPW) will indicate which program is applicable at this installation. This Scope of Work mentions ECIP, however, the intent is that DBOF, OMA and MCA be substituted where applicable.

3. PROJECT MANAGEMENT

3.1 Project Managers. The AE shall designate a project manager to serve as a point of contact and liaison for work required under this contract. Upon award of this contract, the individual shall be immediately designated in writing. The AE's designated project manager shall be approved by the Contracting Officer prior to commencement of work. This designated individual shall be responsible for coordination of all work. The Contracting Officer will designate a project manager to serve as the Government's point of contact and liaison for all work. This individual will be the Government's representative.

3.2 Installation Assistance. The Commanding Officer or authorized representative at the installation will designate an individual to assist the AE in obtaining information and establishing contacts necessary to accomplish the work required under this contract. This individual will be the installation administrative representative.

3.3 Public Disclosures. The AE shall make no public announcements or disclosures relative to information contained or developed in this contract, except as authorized by the Contracting Officer.

3.4 Meetings. Meetings will be scheduled whenever requested by the AE or the Contracting Officer for the resolution of questions or problems encountered in the performance of the work. The AE's project manager and the Government's representative shall be required to attend and participate in all meetings pertinent to the work required under this contract (as directed by the Contracting Officer). These meetings, if necessary, are in addition to the presentation and review conferences.

3.5 Site Visits, Inspections, and Investigations. The AE shall visit and inspect/investigate the site of the project as necessary and required during the preparation and accomplishment of the work. Specific safety and security requirements to be followed by the AE in site visits are provided in Annex A, DETAILED SCOPE OF WORK.

3.6 Records

3.6.1 The AE shall provide a record of all significant conferences, meetings, discussions, verbal directions, telephone conversations, etc., with Government representative(s) relative to this contract in which the AE and/or designated representative(s) thereof participated. These records shall be dated and shall identify the contract number, and modification number if applicable, participating personnel, subject discussed and conclusions reached. The AE shall forward to the Contracting Officer within ten calendar days, a reproducible copy of the records.

3.6.2 The AE shall provide a record of requests for and/or receipt of Government-furnished material, data, documents, information, etc., which if not furnished in a timely manner, would significantly impair the normal progression of the work under this contract. Government-furnished material, data, documents, information, etc. should be returned to DPW at contract completion. The records shall be dated and shall identify the contract number and modification number, if applicable. The AE shall forward to the Contracting Officer within ten calendar days, a reproducible copy of the record of request for receipt of items.

3.7 Interviews. The AE and the Government's representative shall conduct entry and exit interviews with the DPW before starting work at the installation and after completion of the field work. The Government's representative shall schedule the interviews at least one week in advance.

3.7.1 Entry. The entry interview shall describe the intended procedures for the survey and shall be conducted prior to commencing work at the facility. As a minimum, the interview shall cover the following points:

a. Schedules.

b. Names of energy analysts who will be conducting the site survey(s).

c. Proposed working hours.

d. Support requirements from the DPW.

3.7.2 Exit. The exit interview shall briefly describe the items surveyed and probable candidates for energy conservation. The interview shall also solicit input and advice from the DPW.

4. SERVICES AND MATERIALS. All services, materials (except those specifically enumerated to be furnished by the Government), plant, labor, measurement equipment, supervision and travel necessary to perform the work and render the data required under this contract are included in the lump sum contract price.

5. PROJECT DOCUMENTATION. All energy conservation opportunities which the AE has considered shall be included in one of the following categories and presented in the report as such:

5.1 ECIP Projects. To qualify as an ECIP project, an ECO, or several ECOs which have been combined, must have a construction cost estimate greater than $300,000, a SIR greater than 1.25 and a simple payback period of less than ten years. The overall project and each discrete part of the project shall have an SIR greater than 1.25. All ECIP qualifying projects shall be arranged as specified in paragraph 2.6.1 and shall be provided with project documentation. Project documentation shall consist of a DD Form 1391 (Section 1-23), life cycle cost analysis (LCCA) summary sheet(s) (with necessary backup data to verify the numbers presented), and a Project Development Brochure (PDB 1/2). See Annex C, Project Documentation, for specific requirements. A life cycle cost analysis summary sheet shall be developed for each ECO and for the overall project when two or more ECOs are combined. The energy savings for projects consisting of multiple ECOs must take into account the synergistic effects of the individual ECOs.

5.2 Non-ECIP Projects. Projects which do not meet ECIP criteria with regard to cost estimate or payback period, but which have an SIR greater than 1.25 shall be documented. Projects or ECOs in this category shall be arranged as specified in paragraph 2.6.2 and shall be provided with the following documentation: the life cycle cost analysis (LCCA) summary sheet completely filled out, a description of the work to be accomplished; backup data for the LCCA, i.e., energy savings calculations and cost estimate(s); and the simple payback period. The energy savings for projects consisting of multiple ECOs must take into account the synergistic effects of the individual ECOs. In addition, these projects shall have the necessary documentation prepared for the following category: Low Cost/No Cost Projects. These are projects which the DPW can perform using his resources. Documentation shall be as required by the DPW.

5.3 Nonfeasible ECOs. All ECOs which the AE has considered but which are not feasible, shall be documented in the report with reasons and justifications showing why they were rejected.

6. DETAILED SCOPE OF WORK. The Detailed Scope of Work is contained in Annex A.

7. WORK TO BE ACCOMPLISHED.

7.1 Perform a Site Survey. The AE shall obtain all necessary data to evaluate the possible ECOs by conducting a site survey. However, the AE is encouraged to use any data that may have been documented in a previous study if applicable. The AE shall obtain data specific to relamping projects accomplished by the DPW before starting the survey. The AE shall document his site survey on forms developed for the survey, or standard forms, and submit these completed forms as part of the report. All test and/or measurement equipment shall be properly calibrated prior to its use.

7.2 Evaluate Possible and New ECOs. The AE shall analyze the possible ECOs listed in Annex A and shall analyze new ECOs discovered during the site survey (new ECOs shall be submitted to the Government and approved prior to their study). ECOs shall be analyzed in detail to determine their feasibility. Savings to Investment Ratios (SIRs) shall be determined using current ECIP guidance. The AE shall provide all data and calculations needed to support the recommended ECO. All assumptions and engineering equations shall be clearly stated. Calculations shall be prepared showing how all numbers (quantities, costs, benefits, etc.) in the ECO were derived. Calculations shall be an orderly step-by-step progression from the first assumption to the final number. Descriptions of the products, manufacturers catalog cuts, pertinent drawings and sketches shall also be included. A life cycle cost analysis summary sheet shall be prepared for each ECO and included as part of the supporting data.

7.3 Combine ECOs Into Recommended Projects. During the Interim Review Conference, as outlined in the following paragraph 7.4.1, the AE will be advised of the DPW's preferred packaging of recommended ECOs into projects for implementation. Some projects may be a combination of several ECOs, and others may contain only one. These projects will be evaluated and arranged as outlined in previous paragraphs 5.1, 5.2, and 5.3. Energy savings calculations shall take into account the synergistic effects of multiple ECOs within a project and the effects of one project upon another. The results of this effort will be reported in the Final Submittal per paragraph 7.4.2.

7.4 Submittals, Presentations and Reviews. The work accomplished shall be fully documented by a comprehensive report. The report shall have a table of contents and shall be indexed. Tabs and dividers shall clearly and distinctly divide sections, subsections, and appendices. All pages shall be numbered. Names

of the persons primarily responsible for the project shall be included. The AE shall give a formal presentation of the interim submittal to installation, command, and other Government personnel. Slides or view graphs showing the results of the study to date shall be used during the presentation. During the presentation, the personnel in attendance shall be given ample opportunity to ask questions and discuss any changes deemed necessary to the study. Each comment presented at the review conference will be discussed and resolved or action items assigned. It is anticipated that the presentation and review conference will require approximately one working day. The presentation will be at the installation on the date agreeable to the DPW, the AE and the Government's representative. The Contracting Officer may require a resubmittal of any document(s), if such document(s) is (are) not approved by the Contracting Officer due to inadequacy for the intended purpose.

7.4.1 Interim Submittal. An interim report shall be submitted for review after the field survey has been completed and an analysis has been performed on all of the ECOs. The report shall indicate the work which has been accomplished to date, illustrate the methods and justifications of the approaches taken and contain a plan of the work remaining to complete the study. Calculations showing energy and dollar savings, SIR, and simple payback period of all the ECOs shall be included. The results of the ECO analyses shall be summarized by lists as follows:

a. All ECOs eliminated from consideration shall be grouped into one listing with reasons for their elimination as discussed in paragraph 5.3.

b. All ECOs which were analyzed shall be grouped into two listings, recommended and non-recommended ECIP, each arranged in order of descending SIR. These lists may be subdivided by building or area as appropriate for the study.

The AE shall submit the Scope of Work and any modifications to the Scope of Work as an appendix to the report. A narrative summary describing the work and results to date shall be a part of this submittal. At the Interim Submittal and Review Conference, the Government's and AE's representatives shall coordinate with the DPW to provide the AE with direction for packaging or combining ECOs for programming purposes and also indicate the fiscal year for which the project or implementation documentation shall be prepared. The survey forms completed during this stage shall be submitted with this report. The survey forms only may be submitted in final form with this submittal. They should be clearly marked at the time of submission that they are to be retained. They shall be bound in a standard three-ring binder which will allow repeated disassembly and reassembly of the material contained within.

7.4.2 Final Submittal. The AE shall prepare and submit the final report when all sections of the report are 100% complete and all comments from the interim submittal have been resolved. The AE shall submit the Scope of Work for the study and any modifications to the Scope of Work as an appendix to the submittal. The report shall contain a narrative summary of conclusions and recommendations, together with all raw and supporting data, methods used, and sources of information. The report shall integrate all aspects of the study. The recommended projects, as determined in accordance with paragraph 5, shall be presented in order of priority by SIR. The lists of ECOs specified in paragraph 7.4.1 shall also be included for continuity. The final report and all appendices shall be bound in standard three-ring binders which will allow repeated disassembly and reassembly. The final report shall be arranged to include:

a. An Executive Summary to give a brief overview of what was accomplished and the results of this study using graphs, tables and charts as much as possible (See Annex B for minimum requirements).

b. The narrative report describing the problem to be studied, the approach to be used, and the results of this study.

c. Documentation for the recommended projects (includes LCCA Summary Sheets).

d. Appendices to include as a minimum:

1) Energy cost development and backup data

2) Detailed calculations

3) Cost estimates

4) Computer printouts (where applicable)

5) Scope of Work

e. Project Documentation

ANNEX A

DETAILED SCOPE OF WORK

1. The Architect-Engineer (A-E) shall furnish all services, material, labor, equipment, investigations, studies, superintendence and travel as required in connection with the below identified work in accordance with the general scope of work and this Detailed Scope of Work.

INSTALLATION	PROJECT TITLE
Pine Bluff Arsenal, AR	Lighting Study

2. The work and related data and services required in accordance with this Delivery Order shall be accomplished within the limitation of cost on subject project stated above and scope of work described in paragraph 3. The schedule for delivery of data to the Contracting Officer is in calendar days as follows:

DATA	DELIVERY SCHEDULE
a. Interim Submittal and Related Data or Studies	210 calendar days (after receipt of signed D.O)
b. Final Submittal	90 calendar days (after approval of Interim Submittal)

3. The items of work included in this delivery order shall be in accordance with criteria furnished at the Prestudy Conference held at Pine Bluff Arsenal, 07/14/94. The services to be provided shall include, but not be limited to, the following:

a. Items of Work. The scope of the work includes survey and evaluation of ECOs for interior lighting in the following buildings:

BLDG NO.	NAME OF BUILDING	SURVEY TO INCLUDE	ASSIGN TO	SQ FT
10-020	Administration Building	*Partial	MPCAO (Adj)	21,284
10-030	Administration General Purpose	Complete	Environ Mgt/Sec	6,897
10-050	Fire Headquarters (7 days per week/24 hrs per day)	Complete	FF&P Div	6,532
13-010	Community Services Bldg	Complete	HQ Det	2,429
13-020	US Army Health Clinic	Complete	MEDDAC	3,844
13-030	52nd EOD	Complete	52d EOD	3,007
13-040	BZ/Counseling Facility	**Partial	MEDDAC	1,483
13-060	Clinic without beds	Complete	MEDDAC	2,835
13-080	Lab	Complete	MEDDAC/DIR/OTS	4,620

13-100	Infirmary	Complete	MEDDAC	2,201
13-110	Audio Visual Facility	Complete	DOIM	2,133
16-210	Barracks	Hall/shower /restrooms	MPCAO	1,200
16-220	Barracks	Hall/shower /restrooms	Dir/OTS	1,200
31-010	Elec Calibration Lab/No Conversion	Complete	TMDE	420
31-080	Electronic Calibration Facility	Complete	TMDE	2,052
32-030	Inspection Garage	Complete	Mob Equip	5,513
32-035	Ordnance Shop	Complete	Mob Equip	16,865
32-060	Boiler & Compressor House	Complete	BGU&PS Div	2,875
32-070	Impreg & Laundry	Complete	Prop Mgt Div	17,865
32-090	General Purpose Warehouse	Complete	Mob Equip	5,328
32-100	Elec/Com Calibration Fac	Complete	Dir, PA	11,662
32-130	Ammo Qual Assur Fac	Complete	Envir/Nat Resr	3,216
32-150	Ammo Qual Assur Fac	Complete	Envir/Nat Resr	1,600
33-060	Boiler/Compressor	Complete	BGU&PS Div	2,875
33-530	Fill & Press	East/West ends (packout area only)	Prod Div	13,808
34-110	WP Filling	Complete	Production Div	65,300
34-120	Ammo Quality Fac	South end only	Dir/PA	4,352
34-140	Boiler/Compressor	Complete	BGU&PS Div	5,050
34-910	Admin Gen Purpose/FE Maint Shop	Complete	BGU&PS Div	81,407
34-970	Admin Bldg Gen Purpose	Complete	DEH	2,124
44-100	Prod Fld Ofc Cplx	Complete	Prod Div	18,365
51-420	Office Bldg (DMMD)	Complete	DMMD	11,504
52-430	Engr Admin Bldg	Check Motion Sensors	LRDCE	1,800
53-160	Chemical Admin Bldg	Complete	Dir/E&T	3,763
60-020	Security Bldg (7 Days per week/ 24 hrs per day)	Complete	Sec Ofc	5,745
60-060	Admin Gen Purpose	Complete	DMMD	3,600
60-070	Fixed Laundry	Complete	DMMD	4,213
60-090	TC Admin Bldgr	Complete	DOL	2,000
60-630	Warehouse	Complete	DMMD	9,563
63-100	Chemical Field Maint Shop	Complete	DMMD	10,005
63-110	Chemical Maint Shop	Complete	DMMD	9,641
63-120	Chemical Field Maint Shop	Complete	DMMD	9,641
63-200	Chemical Field Maint Shop	Complete	DMMD	9,641
63-210	Mask Repair	Complete	DMMD	9,641
63-410	Toxic/Conventional Change House	Complete	DMMD	9,641

45

*See floor plan of upstairs/downstairs provided provided at 14 Jul 94 meeting
**Problem with lights remaining "ON" when room is unoccupied (need motion sensors)

b. Government Furnished Items.

(1) As-built drawings, as available.

(2) Energy consumption data (as available) and related documents.

(3) Guide Specifications and standard lighting fixture details (40-06-04) as requested.

(4) Access to facilities for the field investigation.

(5) Final reports of previously completed studies performed under the Energy Engineering Analysis Program (EEAP).

(6) Latest copies of other energy studies performed (Energy Awareness Program).

(7) ETLs 1110-3-254, Use of Electric Power for Comfort Space Heating (if applicable), and 1110-3-282, Energy Conservation.

(8) Architectural and Engineering Instructions.

(9) Energy Conservation Investment Program (ECIP) Guidance, dated 10 Jan 1994.

(10) TM 5-785, Engineering Weather Data, TM 5-800-2, General Criteria Preparation of Cost Estimates.

(11) AR 415-15, 1 Jan 84, Military Construction, Army (MCA) Program Development

(12) The latest MCP Index.

(13) Sample 1391 and PDB (see enclosures).

c. Special Requirements.

(1) Direct Distribution of Submittals: The AE shall make direct distribution of correspondence, minutes, report submittals, and responses to comments as indicated by the following schedule:

AGENCY	CORRESPONDENCE	EXECUTIVE SUMMARIES	REPORTS	FIELD NOTES
Commander U.S. Army, Pine Bluff Arsenal Attn: SMCPB-EHN (Ms. Rimmer) 10020 Kabrich Circle Pine Bluff, AR, 71602-9500	1	15I/5F*	15I/5F*	1**
Commander U.S. Army Materiel Command Attn: AMCEN-F (Energy Coordinator) 5001 Eisenhower Avenue Alexandria, VA, 22333-0001	-	1	1	-

Commander U.S. Army Engineer District, Little Rock Attn: CESWL-PM (Mr. Qualls) 700 West Capitol/P.O. Box 867 Little Rock, AR, 72203-0867	1	3	3	1**
Commander U.S. Army Engineer Division, Southwest Attn: CESWD-PP-MM (Mr. West) 1114 Commerce Street Dallas, TX, 75242-0216	-	1	1	-
Commander U.S. Army Engineer District, Mobile Attn: CESAM-EN-CM (Mr. Battaglia) P. O. Box 2288 Mobile, AL, 36628	1	1	1	-
Commander U.S. Army Corps of Engineers Attn: CEMP-ET (Mr. Gentil) 20 Massachusetts Avenue NW Washington, DC, 20314-1000	-	1	-	-
Commander U.S. Army Logistics Evaluation Agency Attn: LOEA-PL (Mr. Keath) New Cumberland Army Depot New Cumberland, PA, 17070-5007	-	1	-	-

* 15I/5F indicates fifteen (15) copies at interim submittal, five (5) copies at final submittal.

** Field notes submitted in final form at interim submittal.

(2) Security Requirements. The AE shall follow the requirements as stated in Annex D while conducting site surveys.

4. Energy Conservation Opportunities (ECOs). The following is a list of possible ECOs to be investigated in the lighting survey.

a. Reduce/enhance lighting

\ (1) Remove unneeded lamps or fixtures.

\ (2) Reduce indoor lighting where illumination exceeds AEI recommended levels.

(3) Increase daylighting.

\ (4) Lower light fixtures.

(5) Improve reflection and dispersion with light-colored ceiling and walls.

b. Improve lighting controls

\ (1) Install occupancy sensors to control lighting.

(2) Install photocells to lighting near windows.

(3) Install additional switches to control lighting arrangements.

(4) Use time-clocks to shut off exterior building lights.

c. Improve lighting efficiency

(1) Replace incandescent lamps in kitchen, hallway, and bathroom fixtures with compact fluorescent lamps.

(2) Replace incandescent exit sign fixtures with LED fixtures.

(3) Replace incandescent lamps in exit signs with compact fluorescent lamps.

(4) Replace standard fluorescent lamps with energy-conserving lamps.

(5) Replace standard fluorescent ballasts with electronic ballasts.

(6) Replace existing fluorescent fixtures with new fixtures having efficient reflectors, electronic ballasts, and energy-conserving lamps.

(7) Use more efficient lighting source, i.e., upgrade from incandescent to fluorescent, from fluorescent to HID, from mercury vapor to high pressure sodium, etc.

5. Designated coordinators. The government representative for this project is Mark Emmerling (Little Rock District, Corps of Engineers). The Energy coordinator (works under the DPW), Nancy Rimmer, will serve as administrative coordinator. The DPW technical coordinator is Ralph Rimmer.

6. Analysis programs. A computer program titled Life Cycle Costing in Design (LCCID) is available from the BLAST Support Office in Urbana, Illinois for a nominal fee. This computer program can be used for performing the economic calculations for ECIP and non-ECIP ECOs. The AE is encouraged to obtain and use this computer program. The BLAST Support Office can be contacted at 144 Mechanical Engineering Building, 1206 West Green Street, Urbana, Illinois 61801. The telephone number is (217) 333-3977 or (800) 842-5278.

7. Programming year for projects meeting ECIP criteria. All projects meeting the ECIP criteria shall be programmed for FY96, others such as ECAM and Low Cost/No Cost shall be programmed as directed by the DPW.

ENCLOSURES

1. One copy of sample 1391 and PDB (enclosure 1).

APPENDIX "B"

Contract No. DACA01-94-D-0038

INDEFINITE DELIVERY CONTRACT FOR A-E SERVICES FOR THE ENERGY ENGINEERING ANALYSIS PROGRAM (EEAP) - SOUTHEAST REGION .

RATES TO BE USED FOR NEGOTIATIONS
(Rates are inclusive of Overhead & FCCM)

Classification	Base Year Rate	Option Year Rate
Project Manager	$75.00/Hr.	$77.96/Hr.
Senior Engineer	58.00 "	60.29 "
Engineer	49.32 "	51.27 "
Senior Technician	36.00 "	37.42 "
Technician/CADD	30.73 "	31.94 "
Clerical	23.41 "	24.33 "
Reproduction Costs:		
Full Size B/L	$1.00 Ea.	$1.00 Ea.
Half Size B/L	0.27 "	0.27 "
Xerox copies	0.08 "	0.08 "

Profit will be calculated on each delivery order.

Travel costs will be in accordance with the current JTR.

ANNEX B

EXECUTIVE SUMMARY GUIDELINE

1. Introduction.

2. Building Data (types, number of similar buildings, sizes, etc.)

3. Present Energy Consumption of Buildings or Systems Studied.

- o Total Annual Energy Used.
- o Source Energy Consumption.

  Electricity - KWH, Dollars, BTU

4. Reevaluated Projects Results.

5. Energy Conservation Analysis.

- o ECOs Investigated.
- o ECOs Recommended.
- o ECOs Rejected. (Provide economics or reasons)
- o ECIP Projects Developed. (Provide list)*
- o Non-ECIP Projects. (Provide list)*
- o Operational or Policy Change Recommendations.

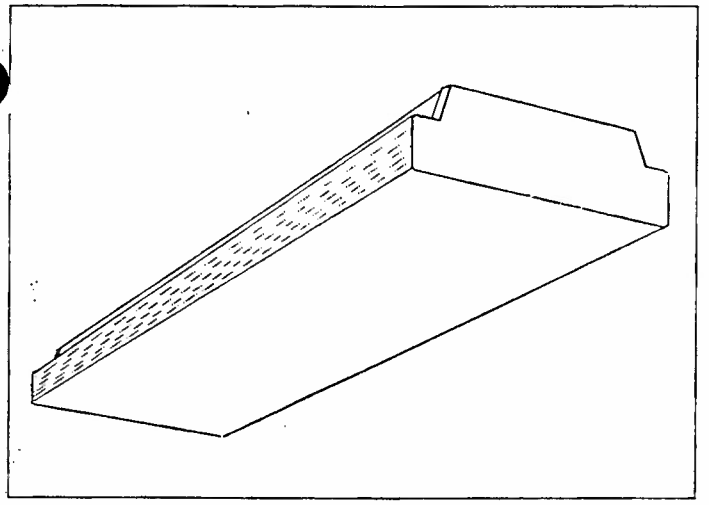
* Include the following data from the life cycle cost analysis summary sheet: the cost (construction plus SIOH), the annual energy savings (type and amount), the annual dollar savings, the SIR, the simple payback period and the analysis date.

6. Energy and Cost Savings.

- o Total Potential Energy and Cost Savings.
- o Percentage of Energy Conserved.
- o Energy Use and Cost Before and After the Energy Conservation Opportunities are Implemented.

FIXTURE/BUILDING SUMMARY

Fixture	Building
AW240-A	
	63-410
CFS 1026-782	
	10-020
	16-210/220
CH140	
	10-020
	63-410
CS240	
	10-030
CSR240	
	10-020
	33-530
	34-120
	34-140
	39-910
	60-070
CSR296	
	32-030
	34-140
	34-910
Screw-In CF	
	13-020
	13-040
	13-080
	13-110
	32-130
	34-140
	34-970
	44-100
	51-430
	53-160
	60-060
	60-090
	60-630
	63-120
KL240	
	60-090
LUN-240 WL	
	44-100
LUN-240 DMR	
	60-630
SBI10M	
	34-910
WCW240-A	
	10-020
	10-050
	13-020
	13-100
	34-910
	60-020
WCW240	
	34-970
	44-100
WCW440-A	
	60-020
WESN4	
	10-020
WRSN4	
	10-020
	13-020
	13-080
WRSN4STA	
	13-080
	34-910
	60-020
2SM240	
	13-020
2SG240	
	16-210/220
ISSOFSF	
	34-910
ISS04SSWWS042	
	60-070



AWW240A
AWW240-8A
APOLLO$_2$

TWO LAMP WIDE BODY
LOW PROFILE WRAPAROUND

TYPE _____

JOB INFORMATION _____

FEATURES:

- Wide body two lamp design produces lower surface brightness and improved VCP.
- Clear acrylic prismatic diffuser. Hinges from either side. Flat bottom and vertical sides complement the slender appearance of this low profile wraparound.
- Integral embossed white steel end plates with flush knockouts for continuous row mounting.
- Heavy gauge steel housing with levelling projections allows direct mounting on combustible low density cellulose fiberboard ceilings.*

*For fixtures with 277 Volt ballasts - consult factory.

SPECIFICATIONS:

BALLASTS

Energy efficient 40 watt ballasts are thermally protected, automatic resetting, Class P, high power factor, CBM, sound rated A, unless otherwise specified. 20 watt ballasts are trigger start, low power factor, Class P, U.L. listed.

FINISH

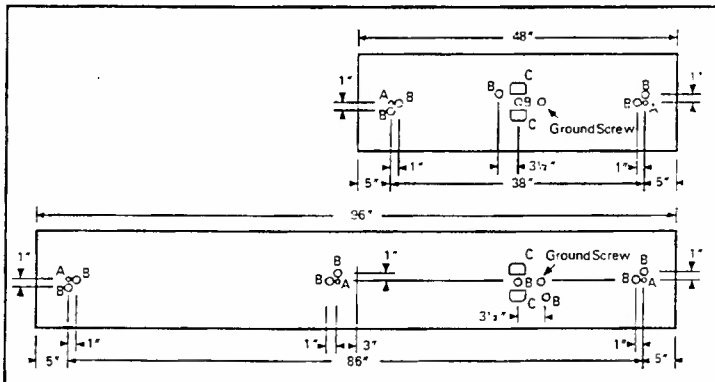
All parts pre-painted with high gloss baked white enamel, minimum reflectance 86%, applied over iron phosphate pre-treatment for maximum adhesion and rust resistance.

SHIELDING

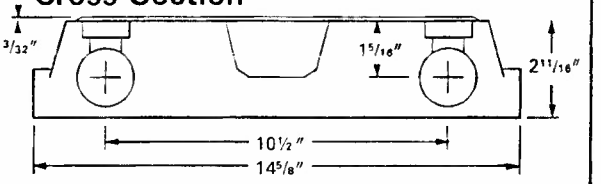
100% clear prismatic acrylic.

LABELS

All fixtures carry the U.L. label and are listed for direct mounting on a combustible low density cellulose fiberboard ceiling. (CSA approval available. Use Suffix "CSA").

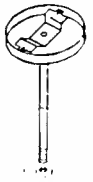


Cross Section

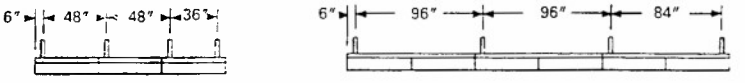


A - 5/16" Diameter Mounting Holes
B - 7/8" Diameter Knockouts
C - 1 1/8" x 2" "Butterfly" Knockouts for Outlet Attachment

Note: All dimensions are in inches; dimensions are subject to change without notice. Please consult factory or check sample for verification.



S-18 Stem Hanger



4'Fixtures 8'Fixtures

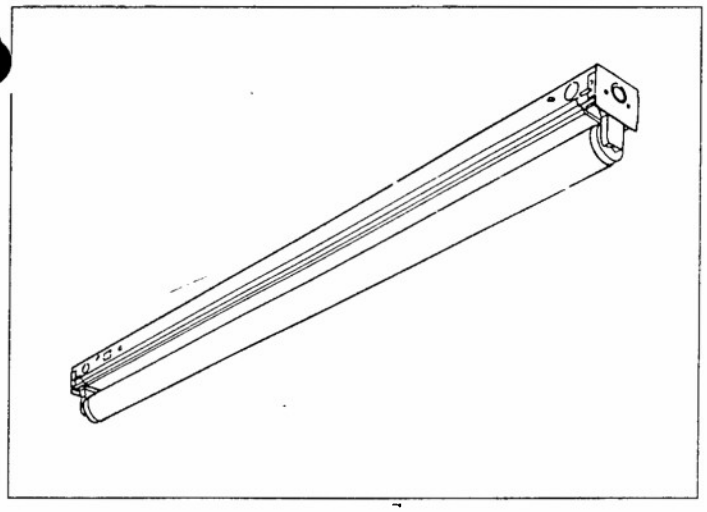
Recomended
Stem Hanging Arrangements

P.O. Box 2787, 3808 N. Sullivan Rd. (99216); Spokane, WA 99220-2787; (509) 924-7000

USI COLUMBIA

CH130L, CH130
CH140L, CH140
CH140-8
CH

ONE LAMP CHANNEL
RAPID START



TYPE _____

JOB INFORMATION _____

FEATURES:

- Available 3', 4' or 8'.
- Heavy die formed steel channel.
- Snap-on cover. No tools required. No hardware to lose.
- Rotary lock lampholders for positive lamp contact.
- Channel ends double as joiners.
- Individual or row mounting. Surface or suspended.

SPECIFICATIONS:

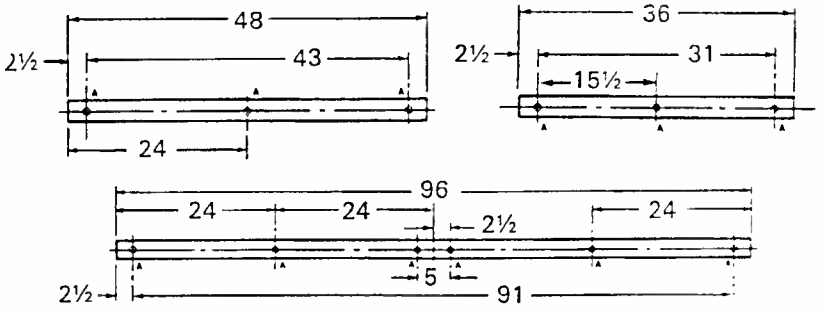
BALLASTS
Energy efficient, 30 and 40 watt ballasts are Rapid Start, thermally protected, automatic resetting, Class P, high or low power factor as required, sound rated A, unless otherwise specified. All are U.L. listed.

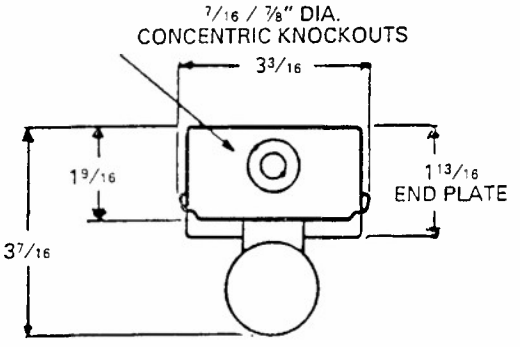
HOUSING
Die formed steel suitable for surface or stem mounting.

FINISH
All parts pre-painted with high gloss baked white enamel, minimum reflectance 86%, applied over iron phosphate pre-treatment for maximum adhesion and rust resistance.

LABELS
All fixtures carry the U.L. label. (CSA approval available. Use Suffix "CSA").

Cross Section



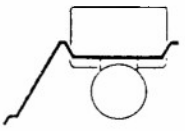


A - 7/8" Diameter Knockout
Note: All dimensions are in inches; dimensions are subject to change without notice. Please consult factory or check sample for verification.

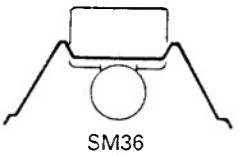
Mounting Data

ITB-4

Accessory Reflectors



AM36
AM48



SM36
SM48

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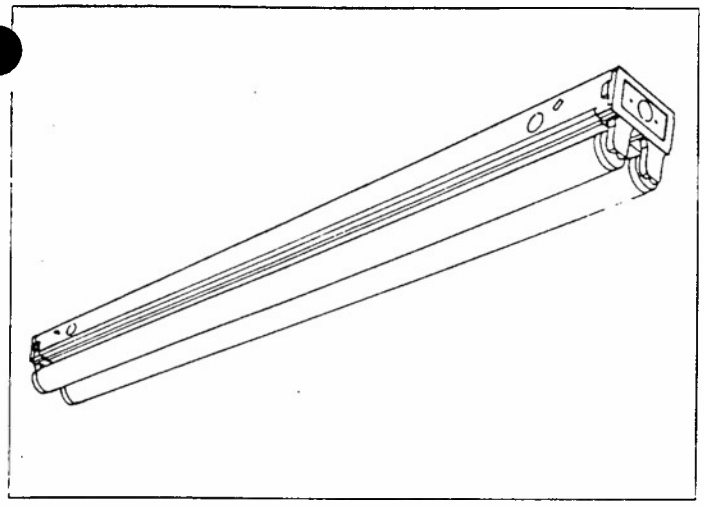
USI COLUMBIA



CS220L-T, CS230 CS240, CS240-8

STRAIGHTLINER

CHANNEL TWO LAMP TS & RS

TYPE _____

JOB INFORMATION _____

_____

FEATURES:

- Availble 2' 3', 4' or 8'.
- Heavy die formed steel channel.
- Snap-on cover. No tools required. No hardware to lose.
- Rotary lock lampholders for positive lamp contact.
- Channel ends double as joiners.
- Individual or row mounting. Surface or suspended.

SPECIFICATIONS:

BALLASTS

Energy efficient, 30 and 40 watt Rapid Start, thermally protected, automatic resetting, Class P, high power factor, CBM, sound rated A, unless otherwise specified. 20 watt ballasts are trigger start, low power factor, Class P, U.L. listed.

HOUSING

Die formed steel with heat sink embossments for cooler running ballasts. Socket saddles are factory installed.

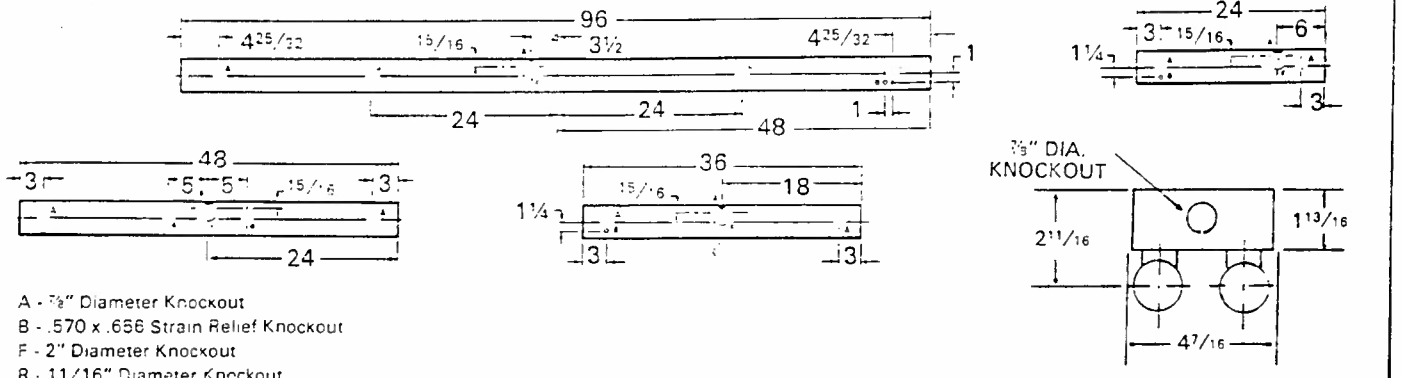
FINISH

All parts pre-painted with high gloss baked white enamel, minimum reflectance 86%, applied over iron phosphate pre-treatment for maximum adhesion and rust resistance.

LABELS

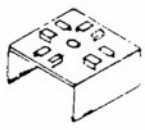
All fixtures carry the U.L. label. 2', 3' and 4' units are listed for use on combustible low density, cellulose fiberboard ceilings. CSA approval available. Use Suffix "CSA").

Cross Section

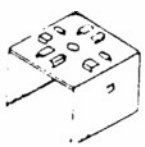


A - ⅞" Diameter Knockout
B - .570 x .656 Strain Relief Knockout
F - 2" Diameter Knockout
R - 11/16" Diameter Knockout
NOTE 1: All Non-Shielded (strip) fixtures—Deduct 1/16" from overall dimension for continuous row mounting. Dimensions shown include end panel.

Mounting Data



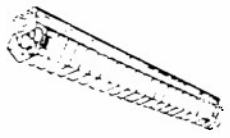
ZT-60F
Flush Mount



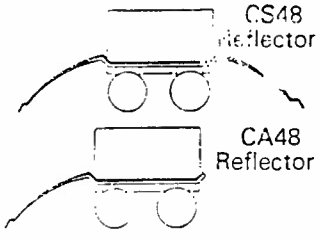
ZT-60
1 1/2" Space

CL60
Slide Clamp
Hanger

Accessories



4 WGA Wire Guards
3 WGA Wire Guards



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LSI COLUMBIA

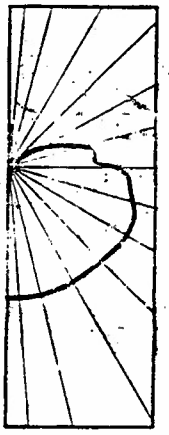
CS220L-T, CS230, CS240, CS240-8 TWO LAMP CHANNEL, TS & RS STRAIGHTLINER

Photometric Data - CS240

Coefficients of Utilization

RC	80		50	
RW	50	30	50	30
0	103	103	90	90
1	85	85	76	73
2	75	68	65	60
3	65	57	57	51
4	57	49	50	44
5	50	42	44	37
6	43	36	39	32
7	40	32	35	28
8	36	28	31	25
9	32	24	28	22
10	29	21	26	19

Floor Refl.-.20



Candlepower

Deg	Parl.	Norm.
0	1078.	1078.
5	1086.	1076.
15	1045.	1105.
25	966.	1122.
35	852.	1123.
45	713.	1096.
55	544.	1018.
65	360.	866.
75	177.	732.
85	35.	523.
90	0.	448.
95	0.	519.
105	0.	471.
115	0.	402.
125	0.	323.
135	0.	242.
145	0.	162.
155	0.	89.
165	0.	25.
175	0.	0.
180	0.	0.

Zonal Summary

Zone	Lumens	Lamp	Fixt.
0- 30	890.	14.1	15.6
0- 40	1515.	24.0	26.6
0- 60	2953.	47.0	52.0
0- 90	4567.	72.3	79.9
30-180	1143.	18.1	20.1
90-180	5695.	90.4	100.

Based on Coef. .95, Lamps Rated at 3150 Lumens each
Efficiency PARL 1.26, NORM 1.58

For complete photometric [illegible] contact factory.

Ordering Information

Example Complete Catalog Ordering Number: **CS 2 40 120 EL FF4**

CS 2 40

LAMPS

2 - 2 Lamps

LENGTH

20W - 24" Length
30W - 36" Length
40W - 48" Length

BALLAST

- Low Power Factor Trigger Start 20W only
- High Power Factor 8 Foot Tandem 40W Only

VOLTAGE

120, 277 or 347V

STRIP & CHANNEL OPTIONS

FF4	- Fast Blow Fuse
FF5	- Slow Blow Fuse
EL	- Emergency Battery Pack
GN	- Pilot Wiring System. See options section for details.
CSA	- Approved, Canadian Standards Assoc.
PAF	- Paint After Fabrication

STRIP & CHANNEL ACCESSORIES

ORDER SEPARATELY

ITB4	- Hanger for close mounting on a Tee Bar Ceiling
ZT60F	- Zip Tee Hanger - flush mount on Tee Bar Ceiling
ZT60	- Zip Tee Hanger - 1½" spacer on Tee Bar Ceiling
4WGA	- 4' Wire Guard, 2 required for 8' fixture
3WGA	- 3' Wire Guard
CA48	- 4' Asymmetric Reflector
CS48	- 4' Symmetric Reflector

For complete list of options, see [illegible] and accessories section

Project Schedule

Catalog Number

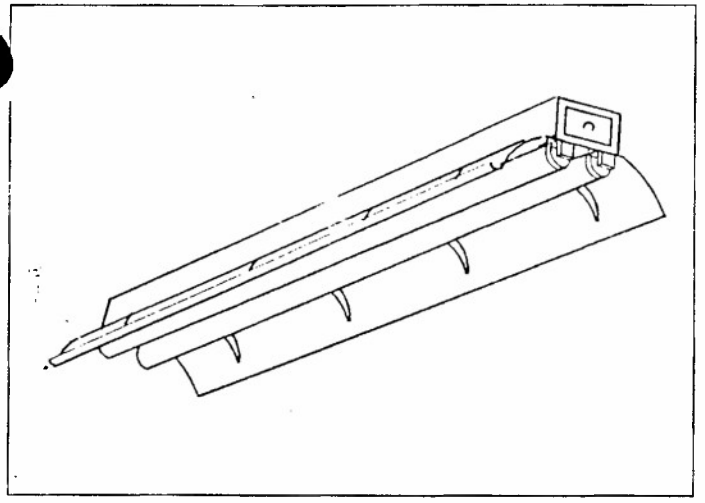
Approvals

C 492

[illegible] Rd. (99216); Spo[illegible]

CSR240
CSR240-8
CSR INDUSTRIAL

TWO LAMP
RAPID START



TYPE _____

JOB INFORMATION _____

FEATURES:

- Available in 4′ and 8′ lengths.
- Solid reflectors with optional uplight.
- Rotary lock tombstone lampholders.
- 2½″ lamp spacing.
- For individual or continuous row mounting.
- Channel ends double as joiners.
- Reflector aligners supplied on 8′ fixtures.

SPECIFICATIONS:

HOUSING
Die formed steel with knockouts for stems or chain hangers.

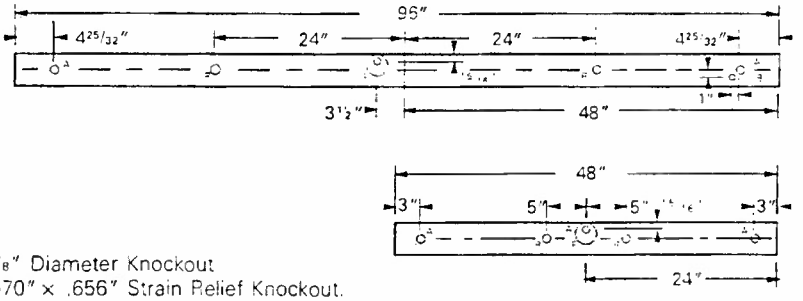
REFLECTOR
Die embossed with transverse ribs for maximum rigidity. Available with apertures for uplight.

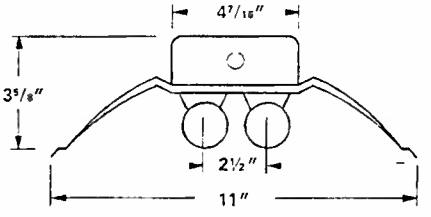
BALLASTS
Energy efficient, 40 Watt Rapid Start, thermally protected, automatic resetting, Class P, high power factor, CBM, sound rated A, unless otherwise specified.

FINISH
All parts pre-painted with high gloss baked white enamel, minimum reflectance 86%, applied over iron phosphate pre-treatment for maximum adhesion and rust resistance.

LABELS
All fixtures carry the U.L. label. (CSA approval available. Use Suffix "CSA").

Cross Section

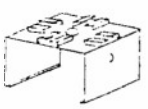


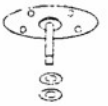


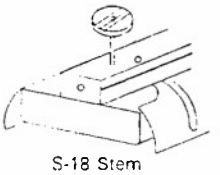
A - 7/8″ Diameter Knockout
B - .570″ × .656″ Strain Relief Knockout.
F - 2″ Diameter Knockout
R - 11/16′ Diameter Knockout
NOTE: All Non-Shielded (strip) fixtures - Deduct 1/16″ from overall dimension for continuous row mounting. Dimensions shown incluced end panel. All dimensions are in inches; dimensions are subject to change without notice. Please consult factory or check sample for verification.

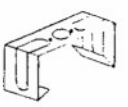
Mounting Accessories

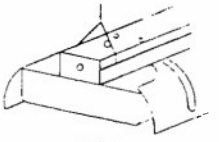
ZT-60F
Alp Tee Hanger


ZT-60
Zip-Tee Hanger


CS-2
Ceiling Spacer


S-18 Stem
and Canopy Set


CL-60
Slide Clamp Hanger


HC-3
Chain Set

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USI COLUMBIA

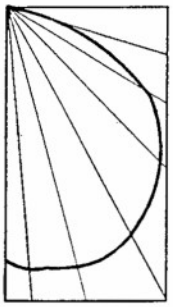
CSR240, CSR240-8 TWO LAMP, RAPID START, CSR INDUSTRIAL

Photometric Data - CSR240

Coefficients of Utilization

RC	80		50	
RW	50	30	50	30
0	103	103	96	96
1	89	86	84	81
2	78	72	73	68
3	68	61	64	58
4	60	52	57	50
5	52	44	50	43
6	47	39	44	37
7	42	34	40	33
8	37	30	35	29
9	33	26	32	25
10	30	24	29	22

Floor Refl.-.20



Report No.: 7990

Ballast Factor: .95, Lamps Rated at 3150 Lumens each
S/MH: PARL 1.27, NORM 1.46

For complete photometric report contact factory.

Candlepower

Deg	Parl.	Norm.
0	1535.	1535.
5	1545.	1528.
10	1521.	1542.
15	1489.	1542.
20	1443.	1533.
25	1388.	1516.
30	1316.	1498.
35	1233.	1466.
40	1142.	1428.
45	1940.	1371.
50	930.	1298.
55	812.	1193.
60	695.	1086.
65	558.	964.
70	422.	771.
75	285.	551.
80	154.	332.
85	50.	132.
90	4.	0.

Zonal Summary

Zone	Lumens	Lamp	Fixt.
0- 30	1245.	19.8	22.9
0- 40	2097.	33.3	38.5
0- 60	3972.	63.0	72.9
0- 90	5447.	86.5	100.0
90-180	0.	0.0	0.0
0-180	5447.	86.5	100.0

Ordering Information

Example Complete Catalog Ordering Number: **CSR 2 40 A 120 EL FF4**

CSR 2 40 _____ _____ _____ _____ _____ _____ _____

SERIES

No. OF LAMPS

LAMP WATTAGE

A - APERTURED REFLECTOR FOR UPLITE

-8 - 8 Foot Tandem

VOLTAGE

120, 277 or 347V

INDUSTRIAL OPTIONS

- **FF4** - Fast Blow Fuse
- **EL** - Emergency Battery Pack
- **GN** - Plug-on Wiring System - See options section for details.
- **CSA** - Approved, Canadian Standards Association
- **PAF** - Paint After Fabrication

INDUSTRIAL ACCESSORIES

ORDER SEPARATELY

- **ZT60F** - Zip Tee Hanger - flush mounting on tee bar ceiling
- **ZT60** - Zip Tee Hanger - 1½" spacer on tee bar ceiling
- **CL60** - Slide Clamp Hanger
- **S-18** - 18" Stem, canopy and 8° aligner
- **ITB4** - Close mounting on Tee Bar ceiling
- **HC3** - 14" Chain Hangers

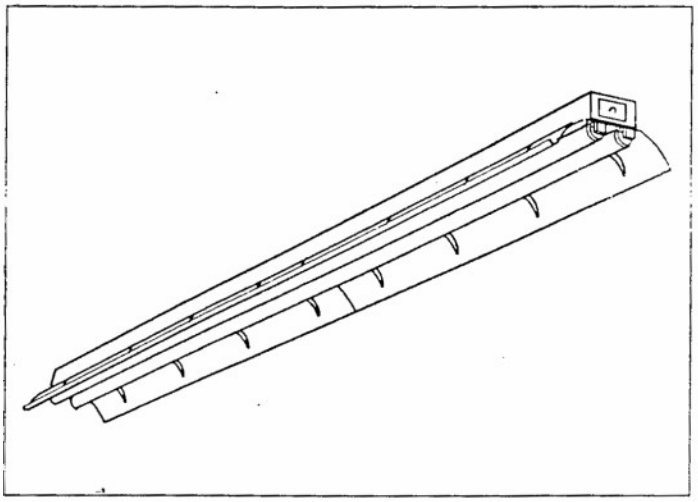
For complete list of options and accessories, see options and accessories section.

Fixture Schedule

Type	Catalog Number

Approvals

USI COLUMBIA P.O. Box 2787, 3808 N. Sullivan Rd. 99216; Spokane, WA 99220-2787; (509) 924-7000



CSR296

CSR INDUSTRIAL TWO LAMP, SLIMLINE

TYPE _____

JOB INFORMATION _____

_____

FEATURES:

- Solid reflectors with optional uplight.
- Telescopic spring loaded lampholders.
- 2½" lamp spacing.
- For individual or continuous row mounting.
- Channel ends double as joiners.
- Reflector aligners supplied on 8' fixtures.

SPECIFICATIONS:

HOUSING
Die formed steel with knockouts for stems or chain hangers.

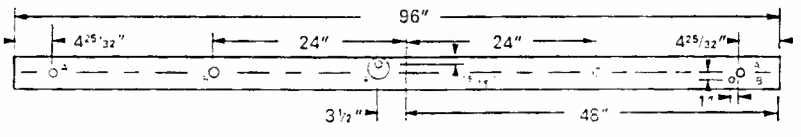
REFLECTOR
Die embossed with transverse ribs for maximum rigidity. Available with apertures for uplight.

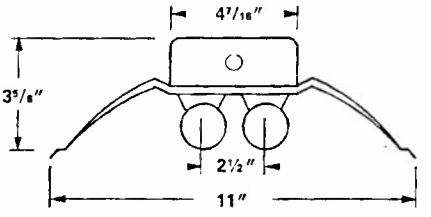
BALLASTS
75 watt Slimline, thermally protected, automatic resetting, Class P, high power factor, CBM, unless otherwise specified.

FINISH
All parts pre-painted with high gloss baked white enamel, minimum reflectance 86%, applied over iron phosphate pre-treatment for maximum adhesion and rust resistance.

LABELS
All fixtures carry the U.L. label. (CSA approval available. Use Suffix "CSA").

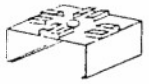
Cross Section

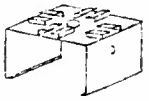


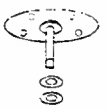


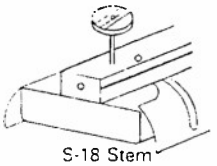
A - ⅞" Diameter Knockout
B - .570" x .656" Strain Relief Knockout.
F - 2" Diameter Knockout
R - 11/16" Diameter Knockout
NOTE: All Non-Shielded (strip) fixtures - Deduct 1/16" from overall dimension for continuous row mounting. Dimensions shown include end panel. All dimensions are in inches; dimensions are subject to change without notice. Please consult factory or check sample for verification.

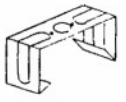
Recommended Hanging Accessories

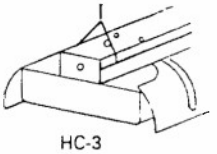

ZT-60F
Zip Tee Hanger


ZT-60
Zip-Tee Hanger


CS-2
Ceiling Spacer


S-18 Stem
and Canopy Set


CL-60 Slide
Clamp Hanger


HC-3
Chain Set

P.O. Box 2787, 3308 N. Sullivan Rd. (99216); Spokane, WA 99220-2787; (509) 924-7000

USI COLUMBIA

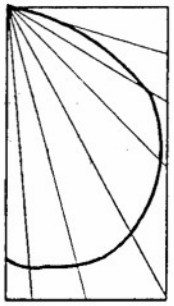
CSR296 Two Lamp Slimline

Photometric Data - CSR 296

Coefficients of Utilization

RC	80		50	
RW	50	30	50	30
0	102	102	96	96
1	89	85	83	81
2	77	71	72	68
3	68	61	64	58
4	60	52	56	50
5	52	44	49	43
6	46	38	44	37
7	42	34	39	33
8	37	29	35	29
9	33	26	32	25
10	30	23	29	22

Floor Refl.-.20



Candlepower

Deg	Parl.	Norm.
0	3056.	3056.
5	3077.	3043.
10	3030.	3070.
15	2966.	3070.
20	2875.	3053.
25	2763.	3020.
30	2621.	2983.
35	2456.	2918.
40	2274.	2844.
45	2072.	2729.
50	1852.	2584.
55	1616.	2375.
60	1383.	2163.
65	1110.	1920.
70	840.	1535.
75	567.	1098.
80	307.	660.
85	100.	262.
90	8.	1.

Zonal Summary

Zone	Lumens	Lamp	Fixt.
0- 30	2480.	19.7	22.9
0- 40	4175.	33.1	38.5
0- 60	7910	62.8	72.9
0- 90	10848.	86.1	100.0
90-180	0.	0.0	0.0
0-180	10848.	86.1	100.0

Report No.: 7993

Ballast Factor: .95, Lamps Rated at 6300 Lumens each
S/MH: PARL 1.27, NORM 1.46

For complete photometric report contact factory.

Ordering Information

Example Complete Catalog Ordering Number: **CSR 296 A 120 EL FF4**

CSR 2 96 _____ _____ _____ _____ _____ _____ _____

SERIES

No. OF LAMPS

LAMP WATTAGE

A - Apertured Reflector for Uplight

VOLTAGE
120, 277V or 347V

INDUSTRIAL OPTIONS

FF4 - Fast Blow Fuse
EL - Emergency Battery Pack
GN - Plug-on Wiring System
See options section for details.
CSA- Approved, Canadian Standards Association
PAF - Paint After Fabrication

INDUSTRIAL ACCESSORIES
ORDER SEPARATELY
ZT60F - Zip Tee Hanger - flush mounting on tee bar ceiling
ZT60 - Zip Tee Hanger - 1½" spacer on tee bar ceiling
CL60 - Slide Clamp Hanger
S-18 - 18" Stem, canopy and 8° aligner
ITB4 - Close mounting on Tee Bar ceiling
HC3 - 14" Chain Hangers

For complete list of options and accessories, see options and accessories section.

Fixture Schedule

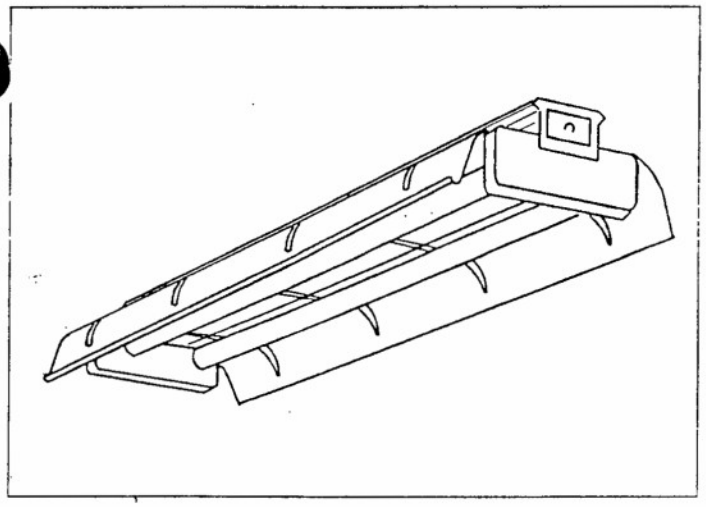
Type	Catalog Number

Approvals

USI COLUMBIA P.O. Box 2787 3808 N. Sullivan Rd. 99216, Spokane, WA 99220-2787: (509) 924-7000

KL240
KL240-8
DYNAMO INDUSTRIAL

TWO LAMP
RAPID START



TYPE _____

JOB INFORMATION _____

_____

FEATURES:

- Available in 4′ and 8′ lengths.
- Reflectors have 15% uplight.
- Spring loaded turret lampholders.
- 6″ lamp spacing.
- For individual or continuous row mounting.
- Channel ends double as joiners.
- Reflector end closures available.

SPECIFICATIONS:

HOUSING
Heavy steel with longitudinal reinforcing ribs for extra strength.

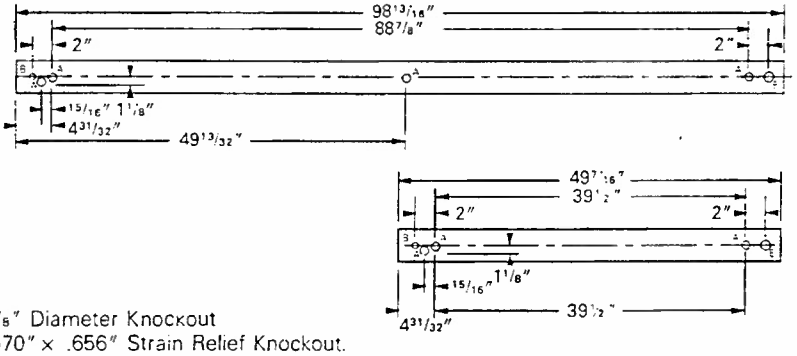
REFLECTOR
Die embossed with transverse ribs for maximum rigidity. Smooth extruded apertures for 15% uplight.

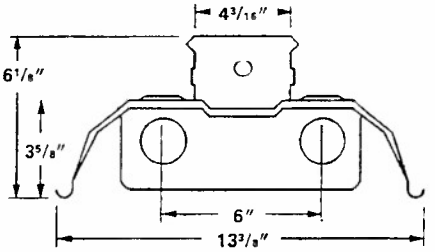
BALLASTS
Energy efficient, 40 watt Rapid Start thermally protected, automatic resetting, Class P, high power factor, CBM, sound rated A, unless otherwise specified.

FINISH
All parts pre-painted with high gloss baked white enamel, minimum reflectance 86%, applied over iron phosphate pre-treatment for maximum adhesion and rust resistance.

LABELS
All fixtures carry the U.L. label. (CSA approval available. Use Suffix "CSA").

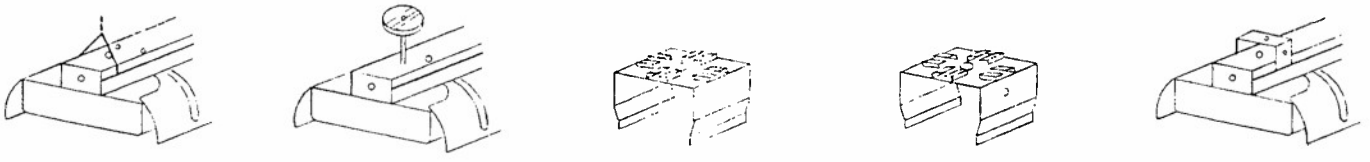
Cross Section





A - 7/8″ Diameter Knockout
B - .570″ × .656″ Strain Relief Knockout.
E - 1 1/8″ Diameter Knockout
NOTE: All dimensions are in inches; dimensions are subject to change without notice. Please consult factory or check sample for verification.

Mounting Accessories



HC4 S-18 ZT-2 CL-2

P.O. Box 2787, 3808 N. Sullivan Rd. (99216); Spokane, WA 99220-2787; (509) 924-7000

USI COLUMBIA

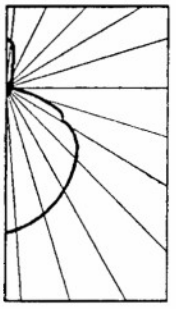
KL240, KL240-8 TWO LAMP, RAPID START DYNAMO INDUSTRIAL

Photometric Data - KL240

Coefficients of Utilization

RC	80		50	
RW	50	30	50	30
0	97	97	86	86
1	85	81	75	73
2	74	68	66	62
3	65	58	58	53
4	58	50	52	46
5	51	43	46	40
6	45	38	41	35
7	40	33	37	31
8	36	29	33	27
9	32	26	29	24
10	29	23	27	21

Floor Refl.-.20



Report No.: 10170

Ballast Factor: .95, Lamps Rated at 3050 Lumens each
S/MH: PARL 1.28, NORM 1.31

For complete photometric report contact factory.

Candlepower

Deg	Parl.	Norm.
0	1382.	1382.
5	1372.	1358.
15	1326.	1300.
25	1238.	1233.
35	1109.	1137.
45	941.	1054.
55	740.	827.
65	511.	608.
75	268.	356.
85	58.	85.
90	5.	43.
95	18.	50.
105	77.	96.
115	171.	51.
125	266.	55.
135	356.	104.
145	426.	165.
155	461.	232.
165	463.	374.
175	476.	525.
180	471.	541.

Zonal Summary

Zone	Lumens	Lamp	Fixt.
0- 30	1068.	17.5	20.8
0- 40	1767.	29.0	34.4
0- 60	3242.	53.1	63.1
0- 90	4279.	70.1	83.3
90-180	857.	14.1	16.7
0-180	5136.	84.2	100.0

Ordering Information

Example Complete Catalog Ordering Number: **KL 2 40 120 FF4**

KL 2 40 ____ ____ ____ ____

SERIES

No. OF LAMPS

LAMP WATTAGE

-8 - 8 Foot Tandem

VOLTAGE

120, 277 or 347V

INDUSTRIAL OPTIONS

FF4 - Fast Blow Fuse
EL - Emergency Battery Pack
GN - Plug-on Wiring System - See options section for details.
CSA - Approved, Canadian Standards Association
PAF - Paint After Fabrication

INDUSTRIAL ACCESSORIES

ORDER SEPARATELY
ZT-2F - Zip Tee Hanger - flush mounting on tee bar ceiling
ZT-2 - Zip Tee Hanger - 1½" spacer on tee bar ceiling
CL-2 - Slide Clamp Hanger
S-18 - 18" Stem, canopy and 8° aligner
HC4 - 24" Chain Hanging Assembly
CE2 - Reflector end closure
LG2 - Wire Guard 4' lg. - 2 required per 8' fixture

For complete list of options and accessories, see options and accessories section.

Fixture Schedule

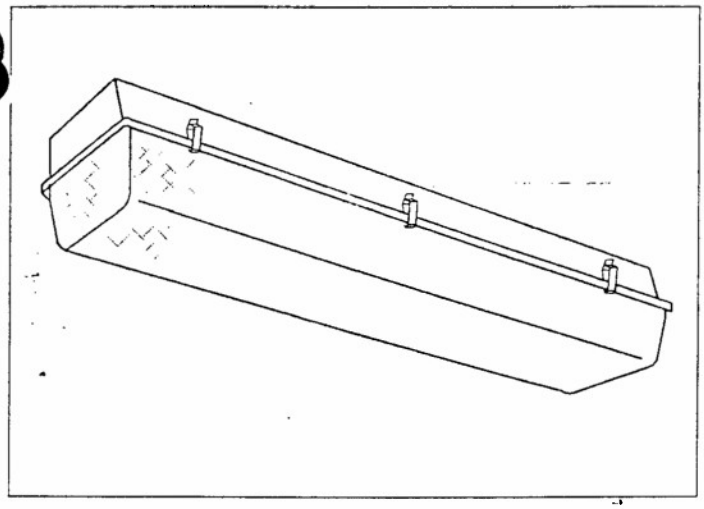
Type	Catalog Number

Approvals

C-1192
I-1

LUN240-WL
LUN240-8-WL

FIBERGLASS FLUORESCENT
ENCLOSED AND GASKETED, RAPID START



TYPE _____

JOB INFORMATION _____

FEATURES:

- Non-metallic enclosure resists the destructive effects of most corrosive agents.
- Smooth surfaces of housing and diffuser lens make cleaning easy. Housing and lens have no seams or crevices to trap dirt and dust.
- Fixture housing has an inverted "U" slot which allows the diffuser to nest tightly, shedding water.
- Neoprene gasketing is sandwiched between housing and diffuser forming an effective seal.
- Diffuser lens is secured to the housing with captive, non-metallic, snap-action cam latches.
- Full steel liner for ballast heat dissipation and maximum reflectivity.
- Ballast cover plates snap-lock without tools; eliminates loose hardware or fasteners

SPECIFICATIONS:

BALLASTS
Low Energy type. 40 watt Rapid Start, thermally protected, automatic resetting, Class P, high power factor, CBM, sound rated A, unless otherwise specified.

HOUSING
One-piece, high-impact, molded polyester fiberglass. Factory installed neoprene gasketing.

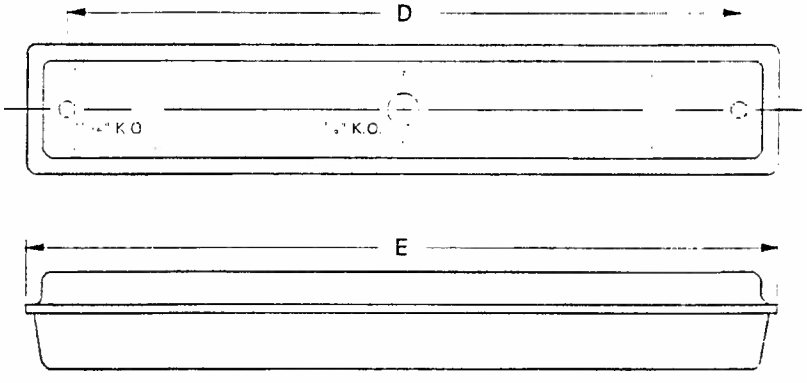
DIFFUSER
One-piece, impact-resistant, molded acrylic. Smooth outside, male prisms inside. Retained by molded ABS thermoplastic latches.

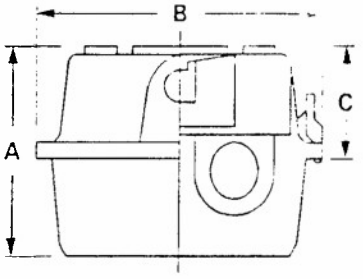
LINER
Heavy gauge die-formed steel.

FINISH
Housing - Cream tone fiberglass. Liner - Pre-painted high gloss baked white enamel, minimum 86% reflectance.

LABELS
U.L. listed and labelled. USDA and NSF Approved when ordered with suffix "NSF". (CSA approval available. Use Suffix "CSA").

Cross Section





Catalog Number	A	B	C	D	E
LUN240-WL	5 9/16"	7 9/16"	3"	41 1/2"	49 13/16"
LUN240-8-WL	5 9/16"	7 9/16"	3"	89 1/2"	97 13/16"

Note: Fixtures are designed for ceiling mounting only.

P.O. Box 2767, 6 E. 5th St., Suite 1900, Spokane, WA 99220-2767, (509) 624-7500

COLUMBIA

LUN240-WL LUN240-8-WL

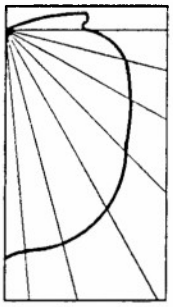
FIBERGLASS FLUORESCENT, RAPID START

Photometric Data - LUN240WL

Coefficients of Utilization

RC	80		50	
RW	50	30	50	30
0	78	78	69	69
1	66	63	58	56
2	57	52	50	46
3	50	44	44	39
4	44	38	39	34
5	39	32	34	29
6	35	28	31	26
7	31	25	28	23
8	28	22	25	20
9	25	19	22	18
10	23	17	20	16

Floor Refl.-.20



Candlepower

Deg	Parl.	Norm.
0	985.	985.
5	975.	982.
15	923.	976.
25	824.	934.
35	699.	855.
45	568.	752.
55	433.	675.
65	297.	609.
75	159.	535.
85	43.	458.
90	19.	445.
95	18.	438.
105	16.	420.
115	11.	321.
125	7.	193.
135	4.	94.
145	2.	35.
155	2.	12.
165	1.	1.
175	1.	0.
180	0.	0.

Zonal Summary

Zone	Lumens	Lamp	Fixt.
0- 30	773.	12.3	17.9
0- 40	1266.	20.1	29.4
0- 60	2307.	36.6	53.5
0- 90	3476.	55.2	80.7
90-180	834.	13.2	19.3
0-180	4310.	68.4	100.0

Report No.: 9801

Ballast Factor: .95, Lamps Rated at 3150 Lumens each
S:MH: PARL 1.18, NORM 1.35

For complete photometric report contact factory.

Ordering Information

Example Complete Catalog Ordering Number: LUN240-WL

LU N 2 40 — WL

- **LU** — SERIES
- **N** — NON-METALLIC
- **2** — No. OF LAMPS
- **40** — LAMP LENGTH
- **WL** — WET LOCATION
- **VOLTAGE** — 120, 277 or 347V
- **ACCESSORIES**
  - HK - Stainless Steel Chain Hanging Kit *(Chain not included)*
  - HK2 - Stem Hanging Kit *Stem by others)*
- **OPTIONS**
  - **NSF** - USDA & NSF Approved
  - **TP** - Tamper Resistant Latches
  - **OP** - Smooth Opal Acrylic Diffuser
  - **CP** - Clear Prismatic Polycarbonate Diffuser
  - **DR** - 100% DR Acrylic Lens
  - **SSL** - Stainless Steel Latches
  - **SSLTP** - Tamper Resistant Stainless Steel Latches
  - **CSA** - Approved, Canadian Standards Association
  - **PAF** - Paint After Fabrication

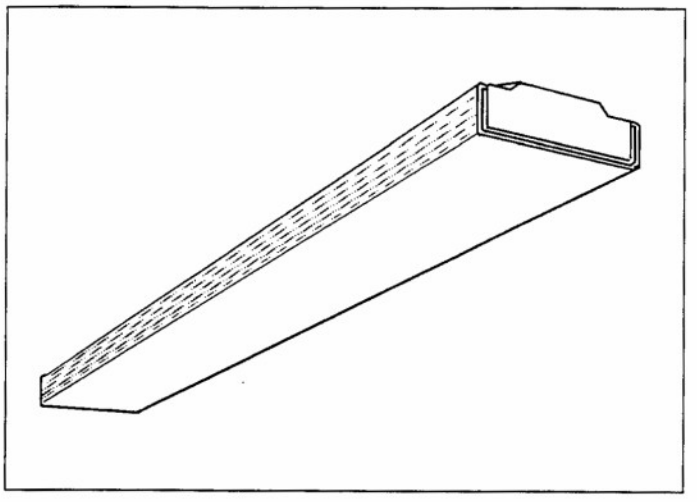
For complete list of options and accessories, see options and accessories section.

Fixture Schedule

Type	Catalog Number

Approvals

LSI COLUMBIA P.O. Box 2787, 3808 N. Sullivan Rd., #216, Spokane, WA 99220-2787, (509) 924-7000



WC220A
WC240A
WC240-8A
PRODIGY

TWO LAMP WRAPAROUND

TYPE _____

JOB INFORMATION _____

_____

FEATURES:

- Clear acrylic prismatic diffuser. Hinges from either side. Flat bottom and vertical sides.
- Linear side prisms control visual brightness and direct light onto adjacent ceiling area.
- Injection molded decorative glow ends on diffuser baskets.
- Heavy gauge steel housing, die embossed for maximum rigidity.
- Heat sink embossments and levelling projections allow direct mounting of 4′ and 8′ fixtures on combustible low density cellulose fiberboard ceilings.*

*For fixtures with 277V ballasts, consult factory.

SPECIFICATIONS:

BALLASTS

Energy efficient 40 watt ballasts are thermally protected, automatic resetting, Class P, high power factor, CBM, sound rated A. 20 watt ballasts are trigger start, low power factor, Class P, U.L. listed.

FINISH

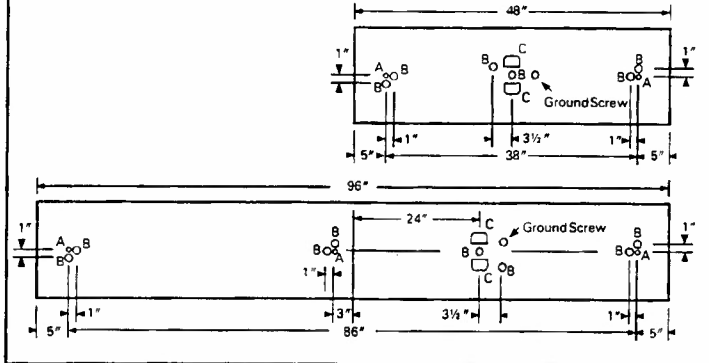
All parts pre-painted with high gloss baked white enamel, minimum reflectance 86%, applied over iron phosphate pre-treatment for maximum adhesion and rust resistance.

SHIELDING

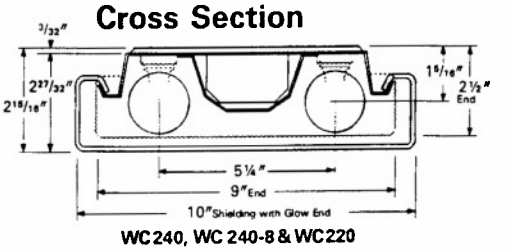
100% clear prismatic acrylic.

LABELS

All fixtures carry the U.L. label and 4′ and 8′ fixtures are listed for direct mounting on a combustible low density cellulose fiberboard ceiling.* (CSA approval available. Use suffix "CSA").

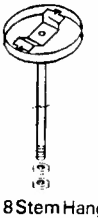


Cross Section



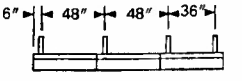
WC240, WC 240-8 & WC220

A-9/16″ Dia. Mounting Holes
B-7/8″ Dia. Knockouts
C-1 1/8″ × 2″ "Butterfly" Knockouts for Outlet Attachment



S-18 Stem Hanger

4′Fixtures



8′Fixtures

Recomended
Stem Hanging Arrangements

P.O. Box 2787, 3808 N. Sullivan Rd. (99216); Spokane, WA 99220-2787; (509) 924-7000

USI COLUMBIA

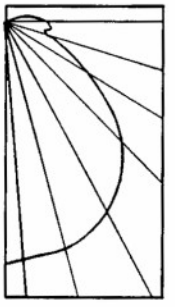
WC220A, WC240A, WC240-8A TWO LAMP WRAPAROUND PRODIGY

Photometric Data - WC240A

Coefficients of Utilization

RC	80		50	
RW	50	30	50	30
0	82	82	73	73
1	71	68	64	62
2	63	58	57	53
3	56	51	51	47
4	50	45	46	41
5	45	39	41	36
6	41	35	37	32
7	37	31	34	29
8	33	27	30	26
9	30	24	27	23
10	27	22	25	20

Floor Refl.-.20



Report No. A9513

Ballast Factor: .95, Lamps Rated at 3150 Lumens each
S/MH: PARL 1.27, NORM 1.30

For complete photometric report contact factory.

Candlepower

Deg	Parl.	Norm.
0	1459.	1459.
5	1452.	1453.
15	1404.	1437.
25	1306.	1359.
35	1163.	1190.
45	938.	875.
55	490.	491.
65	270.	282.
75	145.	334.
85	51.	338.
90	4.	303.
95	5.	294.
105	13.	210.
115	21.	168.
125	27.	97.
135	31.	76.
145	33.	76.
155	32.	65.
165	28.	42.
175	25.	28.
180	26.	26.

Zonal Summary

Zone	Lumens	Lamp	Fixt.
0- 30	1162.	18.4	26.1
0- 40	1904.	30.2	42.9
0- 60	3075.	48.8	69.2
0- 90	3805.	60.4	85.6
90-180	638.	10.1	14.4
0-180	4443.	70.5	100.0

Ordering Information

Example Complete Catalog Ordering Number: WC 240 A 120 EL FF4

WC 240

SERIES

No. OF LAMPS

LAMP WATTAGE

20 = 20W - 24″ Lgth.
40 = 40W - 48″ Lgth.

BALLAST

LT = LOW POWER FACTOR TRIGGER START
BLANK = HIGH POWER FACTOR RAPID START

-8 = 8 FOOT TANDEM

A = ACRYLIC DIFFUSER

VOLTAGE

120, 277 or **347V**

WRAPAROUND OPTIONS

FF4 - Fast Blow Fuse
FF5 - Slow Blow Fuse
NL - Intermediate Base Lamp Holder for T 6½ lamp (120V only) (lamp not included)
EL - Emergency Battery Pack
CSA - Approved, Canadian Standards Association
PAF - Paint After Fabrication

WRAPAROUND ACCESSORIES

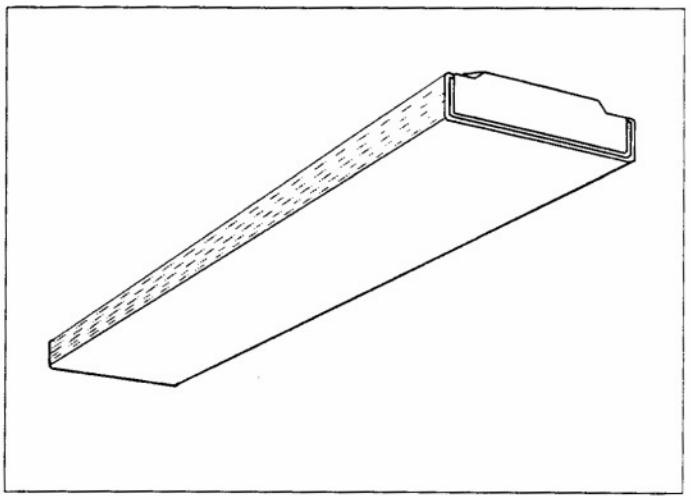
ORDER SEPARATELY
ITB4 - Tee Bar Hanger
S-18 - 18″ Stem, Canopy and 8° Aligner
86512 - 5″ × 3/8″ Canopy - for outlet box mounting

Fixture Schedule

Type	Catalog Number

Approvals

USI COLUMBIA P.O. Box 2787, 3808 N. Sullivan Rd. (99216); Spokane, WA 99220-2787; (509) 924-7000



WCW240A
WCW240-8A
PRODIGY

TWO LAMP WIDE BODY WRAPAROUND

TYPE _____

JOB INFORMATION _____

_____

FEATURES:

- Wide body two lamp design produces lower surface brightness and improved VCP.
- Clear acrylic prismatic diffuser. Hinges from either side. Flat bottom and vertical sides.
- Linear side prisms control visual brightness and direct light onto adjacent ceiling area.
- Injection molded decorative glow ends on diffuser baskets.
- Heavy gauge steel housing die embossed for maximum rigidity.
- Heat sink embossments and levelling projections allow direct mounting of 4′ and 8′ fixtures on combustible low density cellulose fiberboard ceilings.*

*For fixtures with 277V ballasts, consult factory.

SPECIFICATIONS:

BALLASTS

Energy efficient 40 watt ballasts are thermally protected, automatic resetting, Class P, high power factor, CBM, sound rated A.

FINISH

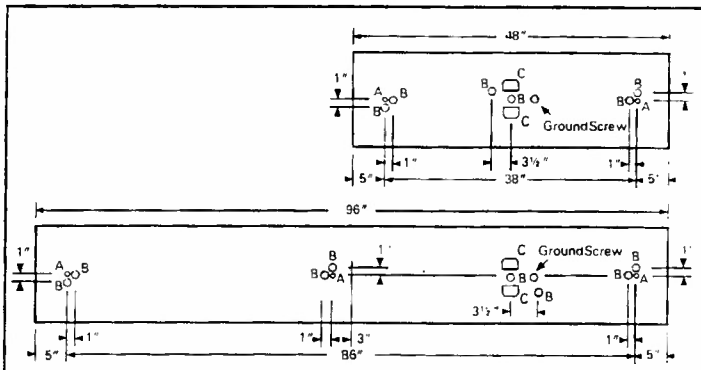
All parts pre-painted with high gloss baked white enamel, minimum reflectance 86%, applied over iron phosphate pre-treatment for maximum adhesion and rust resistance.

SHIELDING

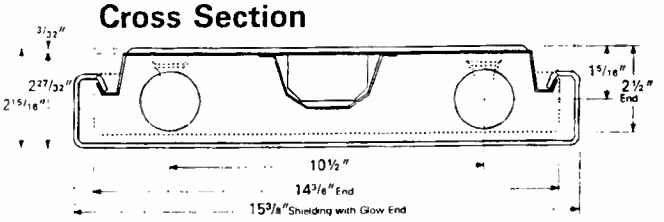
100% clear prismatic acrylic.

LABELS

All fixtures carry the U.L. label and 4′ and 8′ fixtures are listed for direct mounting on a combustible low density cellulose fiberboard ceiling.* (CSA approval available. Use Suffix "CSA").



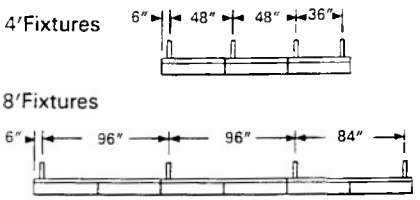
Cross Section



WCW240A & WCW240-8A

A - 5/16" Dia. Mounting Holes
B - 7/8" Diameter Knockout
C - 1 1/8" x 2" "Butterfly" Knockouts for Outlet Attachment

S-18 Stem Hanger



Recomended
Stem Hanging Arrangements

P.O. Box 2787, 3808 N. Sullivan Rd. (99216); Spokane, WA 99220-2787; (509) 924-7000

USI COLUMBIA

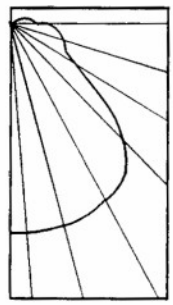
WCW240A, WCW240-8A TWO LAMP WIDE BODY WRAPAROUND PRODIGY

Photometric Data - WCW240A

Coefficients of Utilization

RC	80		50	
RW	50	30	50	30
0	92	92	83	83
1	81	77	73	70
2	71	66	65	61
3	63	57	58	53
4	57	50	52	47
5	50	44	46	41
6	45	39	42	36
7	41	34	38	32
8	36	30	34	28
9	33	26	30	25
10	30	23	27	22

Floor Refl.-.20



Report No.: 9604

Ballast Factor: .95, Lamps Rated at 3150 Lumens each
S/MH: PARL 1.28, NORM 1.43

For complete photometric report contact factory.

Candlepower

Deg	Parl.	Norm.
0	1527.	1527.
5	1516.	1525.
15	1465.	1535.
25	1368.	1511.
35	1223.	1427.
45	1012.	1247.
55	565.	678.
65	322.	361.
75	169.	355.
85	62.	350.
90	5.	297.
95	6.	282.
105	13.	226.
115	19.	155.
125	24.	87.
135	28.	69.
145	30.	72.
155	29.	65.
165	25.	43.
175	23.	26.
180	23.	22.

Zonal Summary

Zone	Lumens	Lamp	Fixt.
0- 30	1242.	19.7	24.9
0- 40	2085.	33.1	41.8
0- 60	3560.	56.5	71.3
0- 90	4393.	69.7	88.0
90-180	599.	9.5	12.0
0-180	4991.	79.2	100.0

Ordering Information

Example Complete Catalog Ordering Number: WCW 240 -8 A 120 EL FF4

WC W 2 40

SERIES

WIDEBODY

No. OF LAMPS

LAMP WATTAGE

-8 = 8 FOOT TANDEM

A = ACRYLIC DIFFUSER

VOLTAGE

120, 277 or 347V

WRAPAROUND OPTIONS

- **FF4** - Fast Blow Fuse
- **FF5** - Slow Blow Fuse
- **NL** - Intermediate Base Lamp Holder for T 6½ lamp (120V only) (lamp not included)
- **EL** - Emergency Battery Pack
- **CSA** - Approved, Canadian Standards Association
- **PAF** - Paint After Fabrication

WRAPAROUND ACCESSORIES

ORDER SEPARATELY

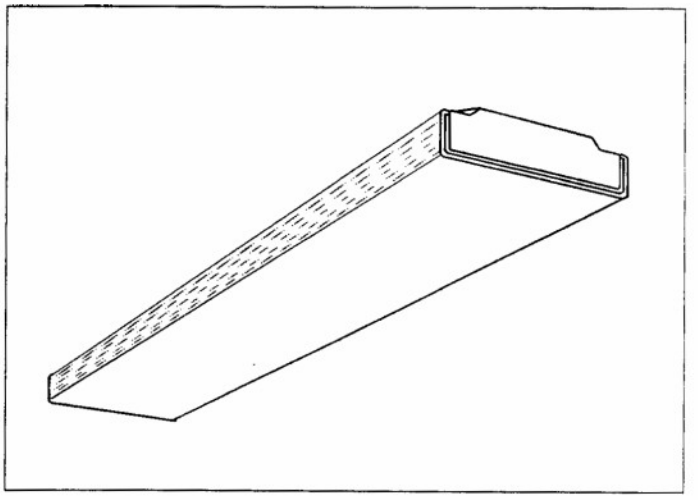
- **ITB4** - Tee Bar Hanger
- **S-18** - 18″ Stem, Canopy and 8° Aligner
- **86512** - 5″ × ⅜″ Canopy - for outlet box mounting

Fixture Schedule

Type	Catalog Number

Approvals

USI COLUMBIA P.O. Box 2787, 3808 N. Sullivan Rd. (99216); Spokane, WA 99220-2787; (509) 924-7000



WCW420A
WCW440A
WCW440-8A
PRODIGY

FOUR LAMP WRAPAROUND

TYPE _____

JOB INFORMATION _____

FEATURES:

- Clear acrylic prismatic diffuser. Hinges from either side. Flat bottom and vertical sides.
- Linear side prisms control visual brightness and direct light onto adjacent ceiling area.
- Injection molded decorative glow ends on diffuser baskets.
- Heavy gauge steel housing die embossed for maximum rigidity.
- Heat sink embossments and levelling projections allow direct mounting of 4′ and 8′ fixtures on combustible low density cellulose fiberboard ceilings.*

*NOTE: For fixtures with 277 Volt ballasts - consult factory.

SPECIFICATIONS:

BALLASTS

Energy efficient 40 watt ballasts are thermally protected, automatic resetting, Class P, high power factor, CBM, sound rated A. 20 watt ballasts are trigger start, low power factor, Class P, U.L. listed.

FINISH

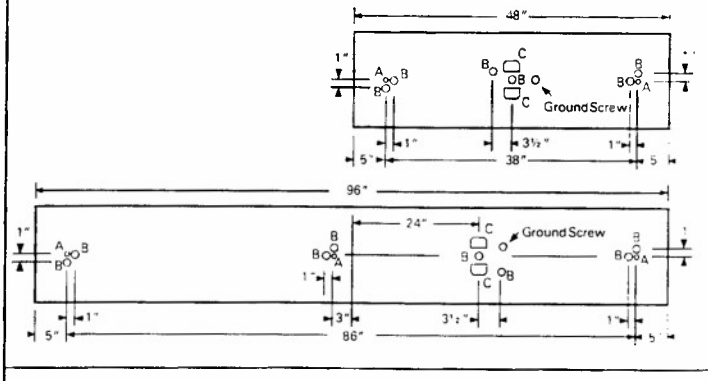
All parts pre-painted with high gloss baked white enamel, minimum reflectance 86%, applied over iron phosphate pre-treatment for maximum adhesion and rust resistance.

SHIELDING

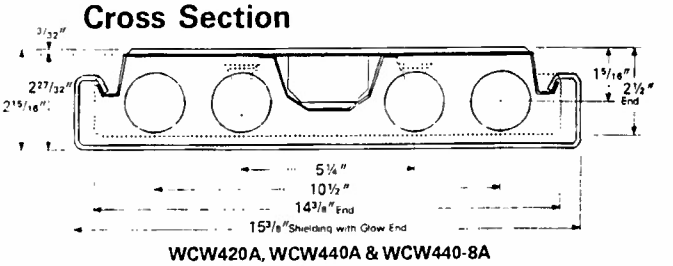
100% clear prismatic acrylic.

LABELS

Fixtures carry the U.L. label and 4′ and 8′ fixtures are listed for direct mounting on a combustible low density cellulose fiberboard ceiling.* (CSA approval available. Use Suffix "CSA").

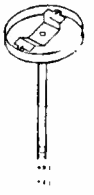


Cross Section

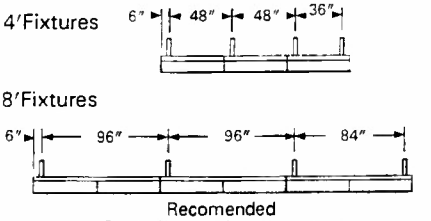


WCW420A, WCW440A & WCW440-8A

A - 5/16″ Dia. Mounting Holes
B - 7/8″ Diameter Knockout
C - 1 1/8″ × 2″ "Butterfly" Knockouts for Outlet Attachment



S-18 Stem Hanger



Recomended
Stem Hanging Arrangements

P.O. Box 2787, 3808 N. Sullivan Rd. (99216); Spokane, WA 99220-2787; (509) 924-7000 USI COLUMBIA

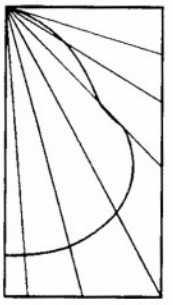
WCW420A, WCW440A, WCW440-8A FOUR LAMP WRAPAROUND PRODIGY

Photometric Data - WCW440A

Coefficients of Utilization

RC	80		50	
RW	50	30	50	30
0	81	81	75	75
1	72	70	67	65
2	65	61	60	57
3	58	53	54	50
4	52	47	49	45
5	47	41	44	39
6	42	37	40	35
7	38	32	36	31
8	34	29	33	28
9	31	25	29	24
10	28	23	27	22

Floor Refl.-.20



Report No. 9708

Ballast Factor: .95, Lamps Rated at 3150 Lumens each
S/MH: PARL 1.26, NORM 1.35

For complete photometric report contact factory.

Candlepower

Deg	Parl.	Norm.
0	3374.	3374.
5	3373.	3347.
15	3251.	3294.
25	3017.	3161.
35	2654.	2908.
45	2066.	2219.
55	1024.	1080.
65	598.	478.
75	283.	393.
85	111.	298.
90	0.	202.
95	2.	197.
105	6.	141.
115	9.	111.
125	12.	81.
135	15.	61.
145	19.	56.
155	21.	47.
165	26.	37.
175	28.	30.
185	28.	28.

Zonal Summary

Zone	Lumens	Lamp	Fixt.
0- 30	2674.	21.2	30.7
0- 40	4421.	35.1	50.8
0- 60	7090.	56.3	81.4
0- 90	8280.	65.7	95.1
90-180	428.	3.4	4.9
0-180	8708.	69.1	100.0

Ordering Information

Example Complete Catalog Ordering Number: WCW 440 A 120 EL FF4

WC W 4 40

SERIES
WIDEBODY

No. OF LAMPS

LAMP WATTAGE

20 = 20W - 24″ Lgth.
40 = 40W - 48″ Lgth.

BALLAST

LT = LOW POWER FACTOR TRIGGER START

BLANK = HIGH POWER FACTOR RAPID START

-8 = 8 FOOT TANDEM

A = ACRYLIC DIFFUSER

VOLTAGE

120, 277 or **347V**

WRAPAROUND OPTIONS

FF4 - Fast Blow Fuse
FF5 - Slow Blow Fuse
NL - Intermediate Base Lamp Holder for T 6½ lamp (120V only) (lamp not included)
EL - Emergency Battery Pack
CSA - Approved, Canadian Standards Association
PAF - Paint After Fabrication

WRAPAROUND ACCESSORIES

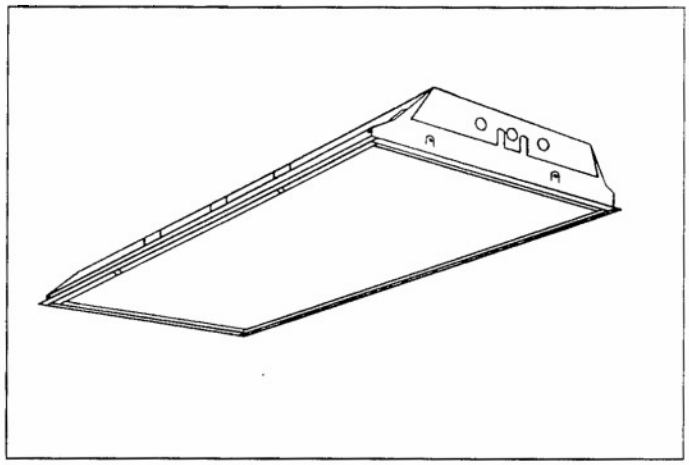
ORDER SEPARATELY
ITB4 - Tee Bar Hanger
S-18 - 18″ Stem, Canopy and 8° Aligner
86512 - 5″ × 3/8″ Canopy - for outlet box mounting

Fixture Schedule

Type	Catalog Number

Approvals

USI COLUMBIA P.O. Box 2787, 3808 N. Sullivan Rd. (99216); Spokane, WA 99220-2787; (509) 924-7000



2SG240 SPECTRUM GRID TROFFER

2′×4′, 2 LAMPS RAPID START

TYPE _____

JOB INFORMATION _____

FEATURES:

- Rolled fixture edges reduce risk of injury during fixture handling and installation.
- Full paint coverage, from top to bottom, for maximum protection and premium appearance.
- Integral T-bar clips quickly secure fixture to the grid system without the need for time-consuming loose parts.
- Spring loaded trigger latches provide smooth operation and secure shielding retention.
- Snap-in ballast covers can be removed when lamps are installed.
- Corner hinging for easy insertion and removal of shielding frame.
- Heavy duty, post painted flush steel shielding frame is screw assembled for easy diffuser replacement.
- Optional flush or regressed aluminum shielding frames available with positive action corner slide latches.
- Aluminum frames also available with spring loaded slide latches.
- Housing ends secured by unique corner interlock and screws.

SPECIFICATIONS:

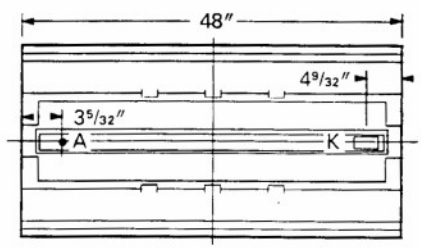
HOUSING
Heavy gauge steel. Die formed for extra rigidity. Designed for installation in standard inverted tee grid ceilings.

BALLASTS
Energy efficient, thermally protected, automatic resetting, Class P, high power factor, CBM, sound rated A, unless otherwise specified.

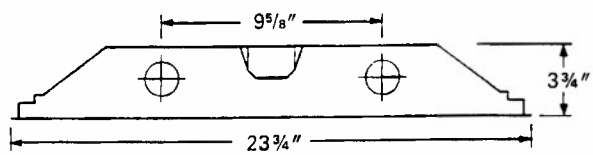
FINISH
All parts pre-painted with high gloss baked white enamel, minimum reflectance 86%, applied over iron phosphate pre-treatment for maximum adhesion and rust resistance.

SHIELDING
100% acrylic prismatic, extruded and roll-embossed, diagonally oriented female prisms, unless otherwise specified.

LABELS
All fixtures carry the U.L. label. (CSA approval available. Use Suffix "CSA").

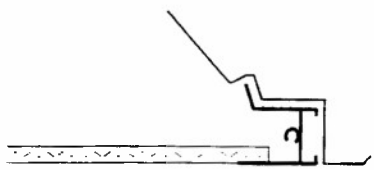


Cross Section

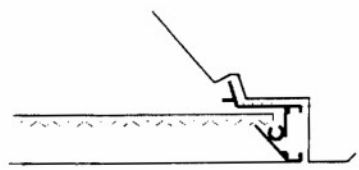


2×4 2 Lamp
Lay-In

A - 7/8″ Diameter Knockout
K - 2″×3″ through hole for access plate.
Note: All dimensions are in inches; dimensions are subject to change without notice. Please consult factory or check sample for verification.



Optional Flush Aluminum Frame - **WF**



Optional Regressed Aluminum Frame - **WR**

P.O. Box 2787, N. 3808 Sullivan Rd. (99216); Spokane, WA 99220-2787; (509) 924-7000

USI COLUMBIA

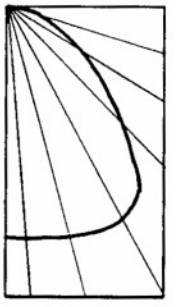
2SG240 2′×4′, 2 LAMPS RAPID START SPECTRUM GRID TROFFER

Photometric Data - 2SG240

Coefficients of Utilization

RC	80		50	
RW	50	30	50	30
0	89	89	83	83
1	80	77	75	73
2	71	67	67	64
3	64	59	61	57
4	58	52	55	50
5	52	46	49	44
6	47	41	45	40
7	42	36	40	35
8	38	32	36	31
9	34	28	33	27
10	31	25	30	25

Floor Refl.-.20



Candlepower

Deg	Parl.	Norm.
0	1889.	1889.
5	1882.	1883.
10	1858.	1880.
15	1819.	1873.
20	1763.	1863.
25	1689.	1846.
30	1592.	1824.
35	1468.	1766.
40	1297.	1605.
45	1117.	1363.
50	915.	1069.
55	728.	810.
60	532.	553.
65	360.	357.
70	242.	241.
75	153.	151.
80	104.	106.
85	68.	72.
90	0.	0.

Zonal Summary

Zone	Lumens	Lamp	Fixt.
0- 30	1522.	24.2	32.3
0- 40	2543.	40.4	54.0
0- 60	4130.	65.5	87.7
0- 90	4708.	74.7	100.0
90-180	0.	0.0	0.0
0-180	4708.	74.7	100.0

Report No. 7965

Ballast Factor: .95, Lamps Rated at 3150 Lumens each
S/MH: PARL 1.26 NORM 1.43

For complete photometric report contact factory.

Ordering Information

Example Complete Catalog Ordering Number: 2SG 240 EXA 120 LKLW C388 FF4

2SG 240

SERIES

No. OF LAMPS

LAMP WATTAGE

VOLTAGE

120, 277 or 347V

FRAME OPTIONS

WR - White Regressed Aluminum
BR - Black Regressed Aluminum
SR - Silver Regressed Aluminum
WF - White Flush Aluminum
BF - Black Flush Aluminum
SF - Silver Flush Aluminum

Corner slide latches standard on aluminum frames. For spring loaded slide latches, add SL to catalog number.

TROFFER OPTIONS

FF4 - Fast Blow Fuse
FF5 - Slow Blow Fuse
C388 - 3/8″ Flex with 3 No. 18 Wires
C384 - 3/8″ Flex with 3 No. 14 Wires
C488 - 3/8″ Flex with 4 No. 18 Wires
C424 - ½″ Flex with 4 No. 14 Wires
LKCW - Cool White Lamps Installed
LKWW - Warm White Lamps Installed
LKLC - Cool White Energy Saving Lamps Inst.
LKLW - Warm White Energy Saving Lamps Inst.
LKLL - Lite White Energy Saving Lamps Inst.
EL - Emergency Battery Pack
CSA - Approved, Canadian Standards Assoc.
PAF - Paint After Fabrication

For complete list of options, see options and accessories section.

DIFFUSER OPTIONS

EXA .100 Nom. - Pattern 12 Acrylic .100″ Nominal (Standard)
EXA .125 Nom. - Pattern 12 Acrylic .125″ Nominal
EXA .125 Min. - Pattern 12 Acrylic .125″ Minimum
FH - Pattern 19 Acrylic .156″ Male Prism
IMA - Injection Molded Acrylic .156″ Male Prism
DP - White Dished Acrylic
PWS - Silver Parabolic Louver ½″ × ½″ × ½″
PWG - Gold Parabolic Louver ½″ × ½″ × ½
PCS - Silver Parabolic Louver 1½″ × 1½″1″
PCG - Gold Parabolic Louver 1½″ × 1½″ × 1″

For complete list of lenses and louvers, see options and accessories section.

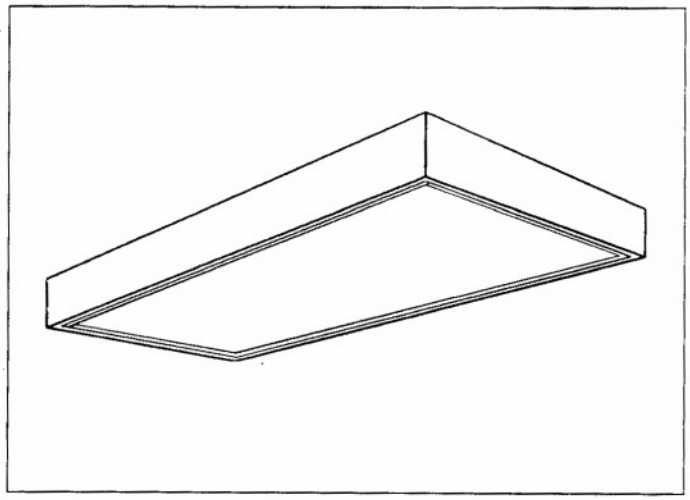
Fixture Schedule

Type	Catalog Number

Approvals

C.592
T27

2SM240
SKYLARK
SURFACE MODULAR
2′×4′, 2 LAMPS
RAPID START



TYPE: _____

JOB INFORMATION: _____

_____

FEATURES:

- Only 3½′ deep. Modular dimensions.
- Clean mitered corners, no overlap.
- Heavy gauge flush steel shielding frame screw assembled for easy diffuser replacement.
- Optional flush or regressed aluminum shielding frames available with spring action slide latches.
- Rotary lock lampholders for positive lamp contact.
- Heat sink embossments behind ballasts for cooler operation, longer life.

SPECIFICATIONS:

HOUSING
Heavy gauge steel. Die formed for extra rigidity. Designed for surface mounting.

BALLASTS
Energy efficient, thermally protected, automatic resetting, Class P, high power factor, CBM, sound rated A, unless otherwise specified.

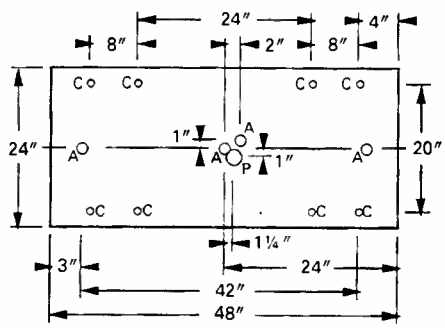
SHIELDING
100% acrylic prismatic, extruded and roll-embossed, diagonally oriented female prisms, unless otherwise specified.

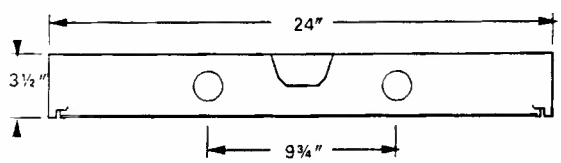
FINISH
All parts pre-painted with high gloss baked white enamel, minimum reflectance 86%, applied over iron phosphate pre-treatment for maximum adhersion and rust resistance.

LABELS
All fixtures carry the U.L. label. (CSA approval available. Use Suffix "CSA").

Cross Section

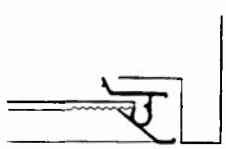
2′×4′ 2-Lamps



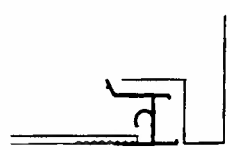


A - 7/8″ Diameter Knockout
C - ½″ Diameter Knockout.
P - 1½″ Diameter Knockout

NOTE: All dimensions are in inches; dimensions are subject to change without notice. Please consult factory or check sample for verification.



Optional Regressed Aluminum Frame - **WR**



Optional Flush Aluminum Frame - **WF**

P.O. Box 2787, 3808 N. Sullivan Rd. (99216); Spokane, WA 99220-2787; (509) 924-7000

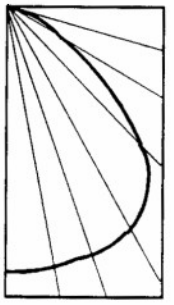
2SM240 2′×4′, 2 LAMPS, RAPID START SKYLARK SURFACE MODULAR

Photometric Data - 2SM240

Coefficients of Utilization

RC	80		50	
RW	50	30	50	30
0	79	79	73	73
1	70	68	66	64
2	62	58	59	56
3	56	51	53	49
4	50	44	47	43
5	44	39	42	38
6	40	34	38	33
7	36	30	34	29
8	32	27	31	26
9	29	23	28	23
10	26	21	25	20

Floor Refl.-.20



Candlepower

Deg	Parl.	Norm.
0	1507.	1507.
5	1493.	1505.
10	1474.	1507.
15	1442.	1512.
20	1399.	1513.
25	1341.	1512.
30	1267.	1491.
35	1174.	1451.
40	1060.	1381.
45	922.	1235.
50	760.	1014.
55	606.	773.
60	474.	549.
65	345.	375.
70	242.	262.
75	170.	202.
80	124.	155.
85	66.	82.
90	0	0.

Zonal Summary

Zone	Lumens	Lamp	Fixt.
0- 30	1225.	19.5	29.4
0- 40	2056.	32.6	49.4
0- 60	3527.	56.0	84.7
0- 90	4163.	66.1	100.0
90-180	0.	0.0	0.0
0-180	4163.	66.1	100.0

Report No. 8592

Ballast Factor: .95, Lamps Rated at 3150 Lumens each
S/MH: PARL 1.26, NORM 1.47

For complete photometric report contact factory.

Ordering Information

Example Complete Catalog Ordering Number: 2SM 240 EXA 120 WR SL FF4

2SM 2 40

SERIES

No. OF LAMPS

LAMP WATTAGE

VOLTAGE

120, 277 or 347V

FRAME OPTIONS

WR - White Regressed Aluminum
BR - Black Regressed Aluminum
SR - Silver Regressed Aluminum
WF - White Flush Aluminum
BF - Black Flush Aluminum
SF - Silver Flush Aluminum

Spring action slide latches standard on aluminum frames.

SKYLARK OPTIONS

FF4 - Fast Blow Fuse
FF5 - Slow Blow Fuse
SL - Spring loaded latches, available on aluminum frames only
CSA - Approved, Canadian Standards Assoc.
PAF - Paint After Fabrication

Note: Skylark fixtures are not recommended for stem hanging.

DIFFUSER OPTIONS

EXA (Std.) - Pattern 12 Acrylic
EXA .125 Nom. - Pattern 12 Acrylic .125″ Nominal
EXA .125 Min. - Pattern 12 Acrylic .125″ Minimum
FH - Pattern 19 Acrylic .156″ Male Prism
IMA - Injection Molded Acrylic .156″ Male Prism
DP - White Dished Acrylic
PWS - Silver Parabolic Louver ½″ × ½″ × ½″
PWG - Gold Parabolic Louver ½″ × ½″ × ½

For complete list of options, see options and accessories section.

For complete list of lenses and louvers, see options and accessories section.

Fixture Schedule

Type	Catalog Number

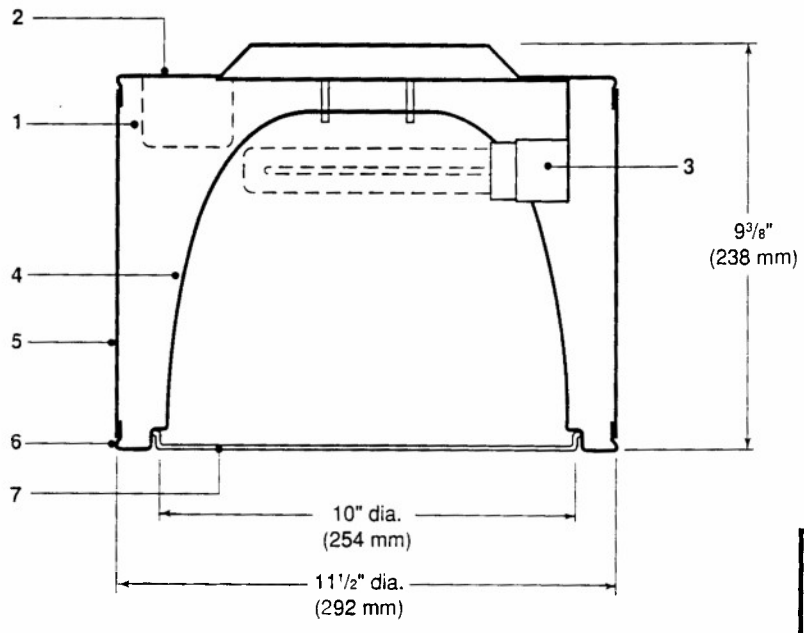
Approvals

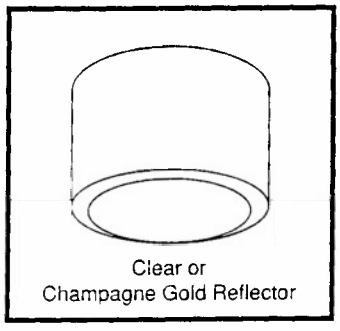
USI COLUMBIA P.O. Box 2787, 3808 N. Sullivan Rd. (99216); Spokane, WA 99220-2787; (509) 924-7000

TYPE: _____
VOLTAGE: 120V, 277V

CFS1026

Round Surface Mount Drum **Two 26W Quad Tube** Compact Fluorescent





Scale: NTS

Features

1. Two (2) 26W fluorescent encased and potted ballasts. 120V or 277V.
2. Drawn aluminum top with provisions for direct mounting to 3½" or 4" octagonal box.
3. Injection molded Valox lamp holder for G24d-3 lamp base.
4. Clear or champagne gold specular Alzak reflector hydroformed from .050" aluminum.
5. Heavy wall. rolled and welded housing.
6. Drawn aluminum bottom with provisions for lens retention standard.
7. Clear (stippled) acrylic lens - see options.

Labels

U.L. Listed
Suitable for damp locations

NOTE: Refer to back side for Photometric and Lamp Data.

Complete Fixtures

CFS1026-782 Clear Alzak Reflector

CFS1026-783 Champagne Gold Alzak Reflector

- Suffix voltage 120V or 277V.

FINISH SELECTION	FINISH CODE
Matte White	MW
Matte Black	MB
Bronze	Z

Note: Suffix catalog number with finish code.
Example: CFS1026-782-MW-120-HPF

Options

SL10 - 10" Lens (see item #7).

HPF - For High Power Factor 120V suffix HPF (277V Std. HPF).

IS - Suffix catalog number with IS for iridescence suppression.

Two 26W Quad Tube
Compact Fluorescent

CFS1026
Round Surface Mount Drum

LAMP DATA (two per fixture)

	26W
Rated Lumens	1800
Efficacy (LPW)	69
Rated Life (hours)	10,000
Color Temperature	2700K
CRI	86
Minimum Starting Temp.	15°F

BALLAST DATA

	POWER FACTOR	FIXTURE OPERATING AMPS	FIXTURE WATTS
High Power Factor			
Two 26W (120V) (optional)	.95	.56	64
Two 26W (277V) (standard)	.94	.23	60
Normal Power Factor			
Two 26W (120V) (standard)	.41	1.30	64

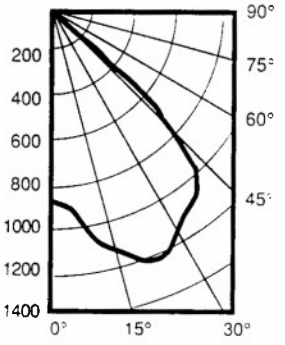
CFS1026-782 with Clear Alzak® Reflector

Rated Lumens = 1800 Luminaire Spacing Criterion = 1.5
For gold reflector multiply C.P. value by .9

CANDLEPOWER DATA

Angle	Candle Power	Lumens
0	888	
5	933	90
15	1032	319
25	1214	551
35	1072	675
45	741	520
55	18	51
65	4	5
75	1	2
85	1	1

CANDLEPOWER DISTRIBUTION



COEFFICIENTS OF UTILIZATION Zonal Cavity Method

ROOM CAVITY RATIO	% EFFECTIVE CEILING CAVITY REFLECTANCE 80%				70%				50%			30%			10%		
	20% EFFECTIVE FLOOR CAVITY REFLECTANCE																
	% WALL REFLECTANCE 70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
1	70	68	66	65	68	67	65	64	64	63	62	62	61	60	60	59	58
2	66	63	60	58	65	62	59	57	60	58	56	58	56	55	56	55	54
3	62	58	55	52	61	57	54	52	55	53	51	54	52	50	53	51	49
4	59	54	50	47	58	53	50	47	42	49	46	50	48	46	49	47	45
5	55	50	46	43	54	49	45	43	48	45	42	47	44	42	46	43	41
6	52	46	42	39	51	45	41	39	44	41	38	43	40	38	42	40	38
7	48	42	38	35	47	41	37	35	40	37	34	40	37	34	39	36	34
8	45	38	34	31	44	38	34	31	37	33	31	36	33	31	36	33	30
9	42	35	31	28	41	34	30	28	34	30	27	33	30	27	33	29	27
10	38	32	27	24	38	31	27	24	31	27	24	30	27	24	30	26	24

TEST NO. A1256A

USI PRESCOLITE

General Office: **Prescolite** • 1251 Doolittle Dr. • San Leandro, California 94577 U.S.A. • Phone (415) 562-3500
In Canada: **Prescolite-Moldcast** • 8989 Cavendish Blvd. • St. Laurent, Quebec H4T 1M8 • Phone (514) 731-7666. Fax (514) 731-7202
With representatives' offices in principal cities throughout the United States and Canada

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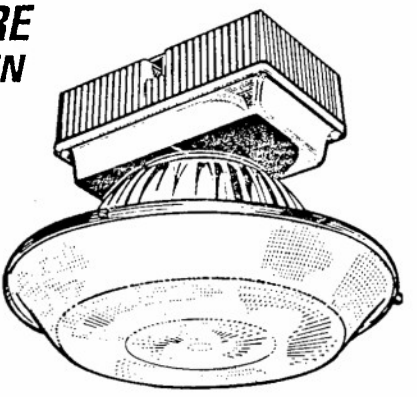
SBI® INDUSTRIAL LUMINAIRE
LOW BAY ENCLOSED OR OPEN

APPLICATIONS

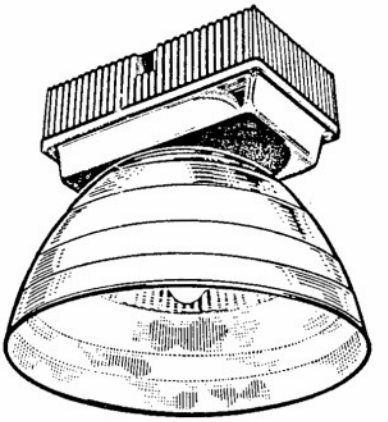
For under 20 ft. (6 meter) applications in industial plants, garages, gymnasiums, docks, warehouses and incandescent or fluorescent replacements.

SPECIFICATION FEATURES

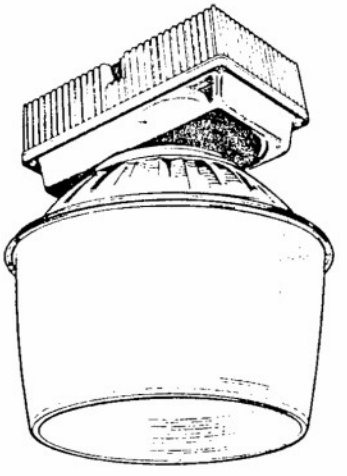
- UL1572 Listed SUITABLE FOR DAMP LOCATIONS
- UL1572 Listed for metal halide lamps in polymeric lamp containment barriers
- CSA Certified for indoor locations
- Standard construction is IP52 for enclosed units, IP22 for open
- Die-cast aluminum ballast housing with electrocoat dark bronze paint finish
- Versatile junction box mounting (octagonal, square, rectangular)
- Multiple optical choices
- Medium base high pressure sodium (HPS) or metal halide lamp included
- Shipped as components: Ballast and Lamp, Optical



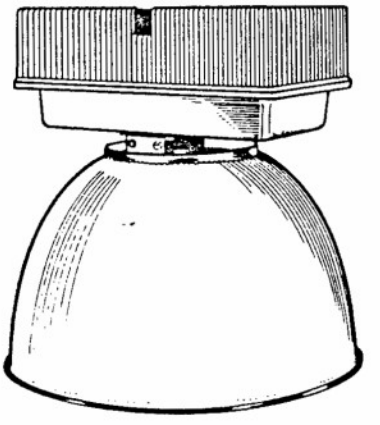
LOW BAY REFRACTOR
LBR



VENTILATED
INDUSTRIAL REFRACTOR
VIR



OPEN ACRYLIC
REFRACTOR TYPE V
VA5



VENTILATED INDUSTRIAL
ACRYLIC REFLECTOR
VIA

ORDERING NUMBER LOGIC

SB LISTED

SBI 15 S 0 N LBR DB

PRODUCT ID. XXX	WATTAGE XX	LIGHT SOURCE X	VOLTAGE X	BALLAST TYPE X	OPTICAL XXX	COLOR XX
SBI = SBI Luminaire	**05** = 50 **07** = 70 **10** = 100 **15** = 150 (55V) NOTE: Ambient for 150W, 40°C; 100W MH, 40°C; all others, 55°C.	**S** = HPS **M** = MH NOTE: Lamp is vertical base up. Standard: Lamp included.	**0** = 120/208/240/277 Multivolt NOTE: Factory connected for 277V **1** = 120 **2** = 208 **3** = 240 **4** = 277 **D** = 347 **F** = 120X347 NOTE: Metal halide is available in multivolt only.	See Ballast and Photometric Selection Table **H** = HPF Reactor or Lag **N** = NPF Reactor	See Ballast, Optical and Photometric Selection Table **LBR** = Low Bay Refractor (Enclosed, Acrylic) **VA5** = Open Acrylic Refractor Type V **VIA** = Ventilated Industrial Acrylic Reflector **VIR** = Ventilated Industrial Reflector (Metallic) NOTE: Do not use **VA5, VIA,** or **VIR** with metal halide.	**DB** = Dark Bronze **WH** = White

SB
UL The catalog numbers, options and modifications on this page are UL Listed unless otherwise noted.
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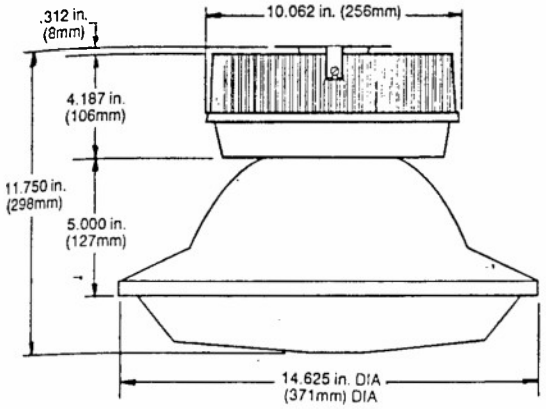
Data subject to change without notice

SBI® INDUSTRIAL LUMINAIRE

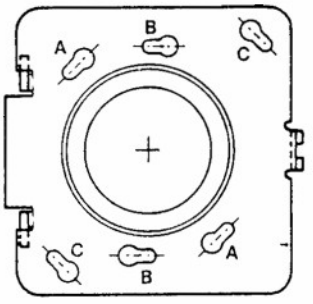
LOW BAY ENCLOSED OR OPEN

DIMENSIONS

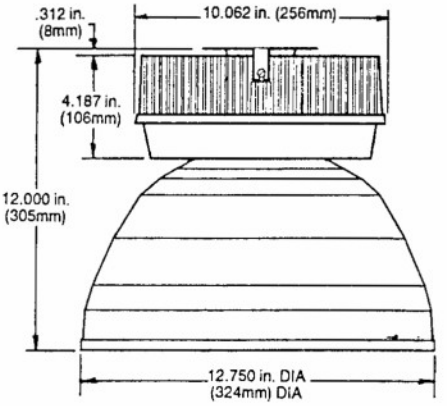


LOW BAY REFRACTOR–LBR

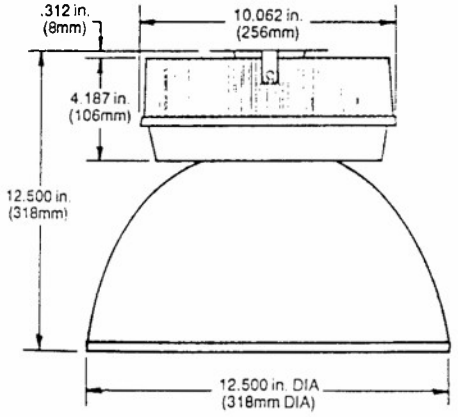
HOLES	DIMENSION BETWEEN HOLES	FITS THE FOLLOWING BOX
A, A	3.500 in. (89mm)	4 in. (102mm) OCTAGONAL
B, B	3.300 in. (84mm)	2x4 in. (51x102mm) UTILITY
C, C	4.750 in. (121mm)	4 in. (102mm) JUNCTION



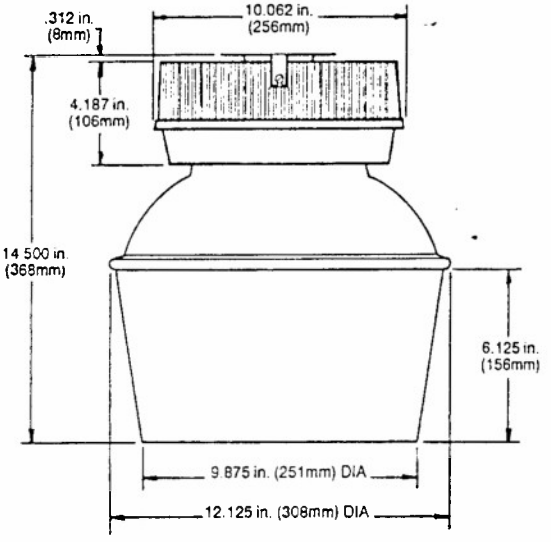
MOUNTING PLATE
(Enlarged to show detail)



INDUSTRIAL REFRACTOR–VIR



VENTILATED INDUSTRIAL ACRYLIC REFLECTOR–VIA



OPEN ACRYLIC REFRACTOR TYPE V–VA5

BALLAST, OPTICAL AND PHOTOMETRIC SELECTION TABLE

Light source is coated

Wattage	Light Source	Ballast Type All Voltages	Optical	Photometric Curve Number 35-17 - - - -
50*, 70, 100, 150 (55V)	HPS	H, N	LBR	7145
50*, 70, 100, 150 (55V)	HPS	H, N	VA5	7147
50*, 70, 100, 150 (55V)	HPS	H, N	VIA	8416
50*, 70, 100, 150 (55V)	HPS	H, N	VIR	7146
70, 100	MH	H**	LBR	7843

NOTE: *50W HPS available multivolt and 120V only
NOTE: **Not available in 347 volt nor 120X347 volts

DATA

Approximate Net Weight	12 lbs (5 kgs)

REFERENCES

See Page 1940 for start of Component Ordering Number Logic

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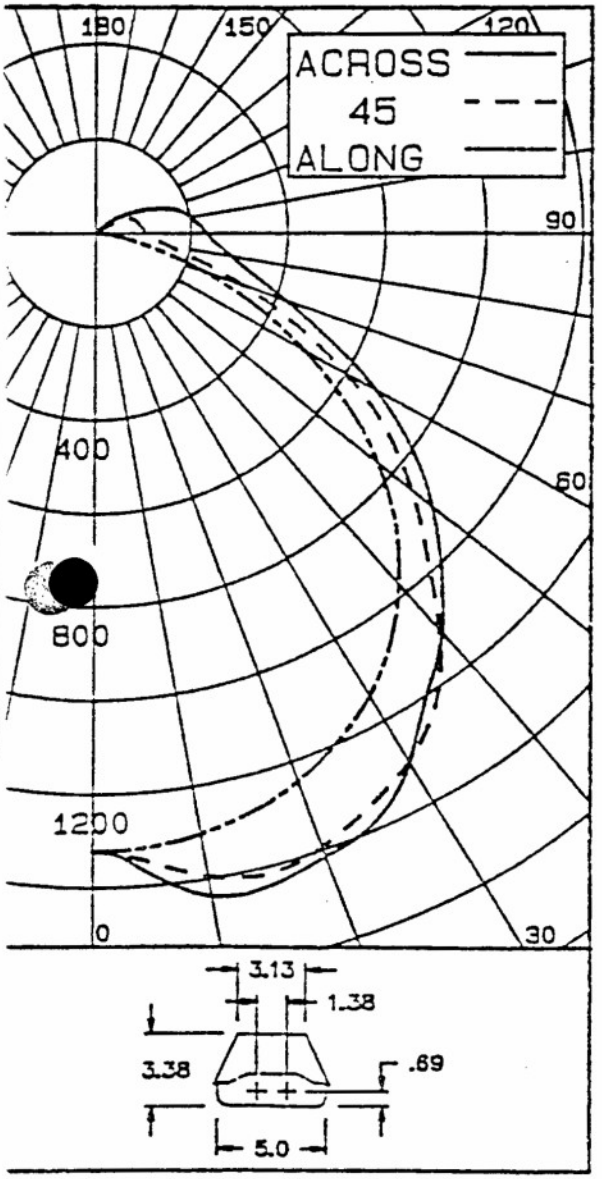
Data subject to change without notice

LIGHTING SCIENCES INC.

7830 East Evans Road
Scottsdale, Arizona U.S.A. 85260
(602) 991-9260 • Fax (602) 991-0375

CERTIFIED TEST REPORT NO. LSI11619
COMPUTED BY LSI PROGRAM **TEST-LITE**

METALOPTICS CAT. NO. WESN4LNACLO42EP11; E-SERIES WRAPAROUND FIXTURE
WITH ALUMINUM-FILM-ON-STEEL NORMAL BEAM REFLECTOR AND WRAPAROUND LENS
TWO F32T8/TL835 32 WATT FLUORESCENT LAMPS. LUMEN RATING = 3050 LMS.
E EBT SSB2-120-2/32IS LH ELECTRONIC BALLAST OPERATING AT 120 VAC & 52.1 WATTS



	CANDLEPOWER SUMMARY					OUTPUT LUMENS
ANGLE	ALONG	22.5	45	67.5	ACROSS	
0	1323	1323	1323	1323	1323	
5	1318	1331	1349	1367	1374	132
15	1278	1348	1416	1433	1440	392
25	1198	1308	1351	1375	1383	612
35	1067	1185	1228	1199	1198	740
45	879	993	967	996	1009	751
55	636	716	734	776	796	654
65	368	411	456	512	536	454
75	132	165	221	300	337	250
85	14	45	120	214	252	144
90	0	24	105	196	231	
95	0	17	100	186	216	112
105	0	14	90	159	182	92
115	0	8	72	109	122	62
125	0	1	10	54	60	22
135	0	0	0	4	3	1
145	0	0	0	0	0	0
155	0	0	0	0	0	0
165	0	0	0	0	0	0
175	0	0	0	0	0	0
180	0	0	0	0	0	

ZONE	LUMENS	% LAMP	%LUMINAIRE
0-30	1135	18.61	25.70
0-40	1875	30.75	42.45
0-60	3281	53.79	74.26
0-90	4129	67.70	93.46
40-90	2253	36.95	51.00
60-90	848	13.91	19.20
90-180	289	4.74	6.54
0-180	4418	72.44	100.00

** EFFICIENCY = 72.4% **

LUMINANCE SUMMARY-CD. / SQ. M.

S/MH = 1.4
SC(ALONG) = 1.3, SC(ACROSS) = 1.4

ANGLE	ALONG	45	ACROSS
45	8025	7768	7712
65	7166	6905	6997
75	5628	5367	5756
75	3303	3617	4831
85	1040	3400	5698

CERTIFIED BY:
Jack E. Walk III

DATE:
NOV 10, 1993

PREPARED FOR:
METALOPTICS
AUSTIN, TX

TESTED ACCORDING TO IES PROCEDURES. TEST DISTANCE EXCEEDS FIVE TIMES THE GREATEST LUMINOUS OPENING OF LUMINAIRE.

LIGHTING SCIENCES, INC.
7830 EAST EVANS ROAD
SCOTTSDALE, ARIZONA, USA 85260-3412

CERTIFIED TEST REPORT NO. LSI11619
COMPUTED BY LSI PROGRAM **TEST-LITE**

METALOPTICS CAT. NO. WESN4LNACLO42EP11; E-SERIES WRAPAROUND FIXTURE
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TWO F32T8/TL835 32 WATT FLUORESCENT LAMPS. LUMEN RATING = 3050 LMS.
NE EBT SSB2-120-2/32IS LH ELECTRONIC BALLAST OPERATING AT 120 VAC & 52.1 WATTS

COEFFICIENTS OF UTILIZATION

ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE = .20

CC	80				70				50			30			10			0
WALL	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	.85	.85	.85	.85	.83	.83	.83	.83	.78	.78	.78	.74	.74	.74	.70	.70	.70	.68
1	.78	.75	.72	.69	.76	.73	.70	.67	.69	.66	.64	.65	.63	.62	.62	.60	.59	.57
2	.71	.66	.61	.57	.69	.64	.60	.56	.61	.57	.54	.58	.55	.52	.55	.52	.50	.49
3	.65	.58	.53	.48	.63	.57	.52	.48	.54	.50	.46	.51	.48	.45	.49	.46	.43	.42
4	.60	.52	.46	.41	.58	.51	.45	.41	.48	.43	.40	.46	.42	.39	.44	.41	.38	.36
5	.55	.46	.40	.35	.53	.45	.39	.35	.43	.38	.34	.41	.36	.33	.39	.35	.32	.31
6	.51	.41	.35	.30	.49	.40	.34	.30	.38	.33	.29	.37	.32	.29	.35	.31	.28	.27
7	.47	.37	.31	.27	.45	.36	.30	.26	.35	.29	.26	.33	.29	.25	.32	.28	.25	.23
8	.43	.33	.27	.23	.42	.32	.27	.23	.31	.26	.22	.30	.25	.22	.29	.24	.21	.20
9	.40	.30	.24	.20	.38	.29	.24	.20	.28	.23	.19	.27	.22	.19	.26	.22	.18	.17
10	.37	.27	.21	.17	.36	.26	.21	.17	.25	.20	.17	.24	.20	.17	.24	.19	.16	.15

DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES
LUMINAIRE INPUT WATTS = 52.1

LABORATORY RESULTS MAY NOT BE REPRESENTATIVE OF FIELD PERFORMANCE.

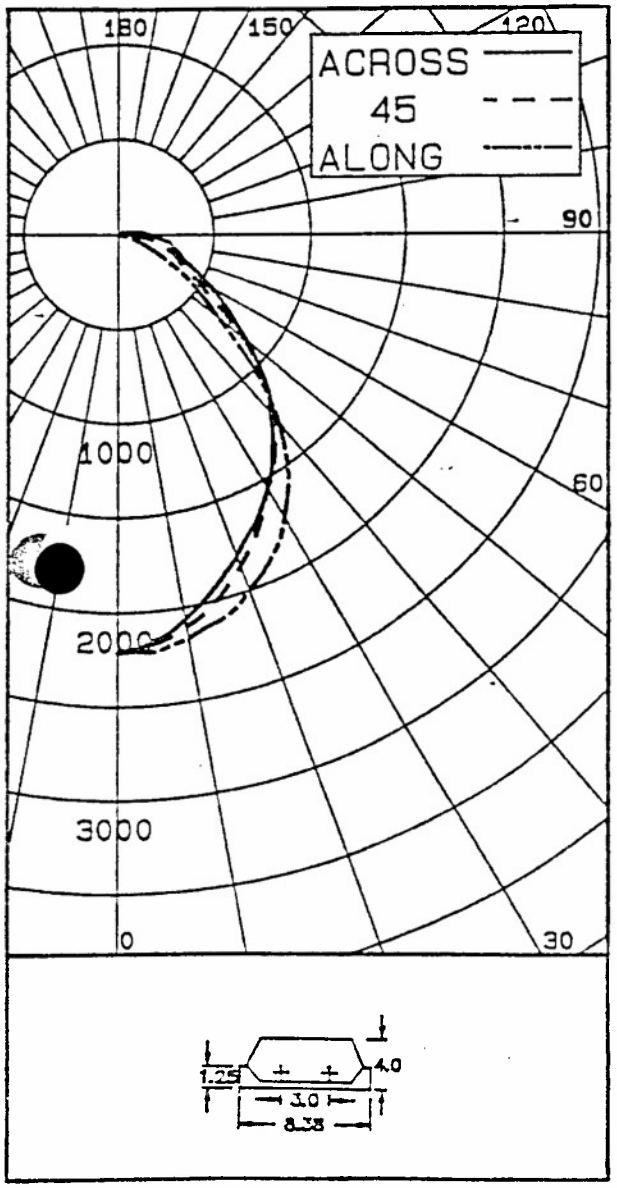
BALLAST FACTORS HAVE NOT BEEN APPLIED.

LIGHTING SCIENCES INC.

7830 East Evans Road
Scottsdale, Arizona U.S.A. 85260
(602) 991-9260 • Fax (602) 991-0375

CERTIFIED TEST REPORT NO. LSI9939
COMPUTED BY LSI PROGRAM **TEST-LITE**

METALOPTICS WRSN4STACLO42EP11 4' WRAPAROUND FIXTURE
SILVER TASK BEAM REFLECTOR AND ACRYLIC LENS
TWO F32/SP41 32 WATT FLUORESCENT LAMPS. LUMEN RATING = 2950 LMS.
ONE MAGNETEK TRIAD ELECTRONIC BALLAST



CANDLEPOWER SUMMARY

ANGLE	ALONG	22.5	45	67.5	ACROSS	OUTPUT LUMENS
0	2207	2207	2207	2207	2207	
5	2214	2186	2173	2176	2156	207
15	2101	2062	2000	1950	1937	568
25	1882	1812	1719	1685	1684	808
35	1539	1468	1414	1414	1393	900
45	991	991	1049	1071	1067	799
55	510	519	627	728	708	567
65	238	295	386	475	455	379
75	89	175	265	328	322	259
85	19	73	140	232	227	155
90	0	12	80	159	172	
95	0	16	63	107	137	69
105	0	0	28	59	47	30
115	0	0	12	29	20	12
125	0	0	0	12	17	3
135	0	0	0	0	0	0
145	0	0	0	0	0	0
155	0	0	0	0	0	0
165	0	0	0	0	0	0
175	0	0	0	0	0	0
180	0	0	0	0	0	

ZONE	LUMENS	% LAMP	%LUMINAIRE
0-30	1582	26.83	33.28
0-40	2482	42.08	52.20
0-60	3848	65.23	80.93
0-90	4641	78.68	97.61
40-90	2159	36.60	45.40
60-90	793	13.44	16.68
90-180	113	1.93	2.39
0-180	4755	80.60	100.00

** EFFICIENCY = 80.6% **

LUMINANCE SUMMARY - CD. / SQ. M.

ANGLE	ALONG	45	ACROSS
45	5387	5171	5053
55	3420	3658	3916
65	2160	2865	3134
75	1319	2816	3063
85	834	2786	3675

S/MH = 1.1
SC(ALONG) = 1.2, SC(ACROSS) = 1.1
CERTIFIED BY:
Jon Lewin
DATE:
APR 12, 1993
PREPARED FOR:
METALOPTICS
AUSTIN, TEXAS

TESTED ACCORDING TO IES PROCEDURES. TEST DISTANCE EXCEEDS FIVE TIMES THE GREATEST LUMINOUS OPENING OF LUMINAIRE.

LIGHTING SCIENCES, INC.
7830 EAST EVANS ROAD
SCOTTSDALE, ARIZONA, USA 85260-3412

CERTIFIED TEST REPORT NO. LSI9939
COMPUTED BY LSI PROGRAM **TEST-LITE**

METALOPTICS WRSN4STACLO42EP11 4' WRAPAROUND FIXTURE
SILVER TASK BEAM REFLECTOR AND ACRYLIC LENS
TWO F32/SP41 32 WATT FLUORESCENT LAMPS. LUMEN RATING = 2950 LMS.
ONE MAGNETEK TRIAD ELECTRONIC BALLAST

COEFFICIENTS OF UTILIZATION

ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE = .20

CC	80				70				50			30			10			
WALL	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	.95	.95	.95	.95	.93	.93	.93	.93	.88	.88	.88	.84	.84	.84	.80	.80	.80	.79
1	.88	.85	.81	.79	.86	.83	.80	.77	.79	.76	.74	.75	.73	.72	.72	.71	.69	.68
2	.81	.75	.70	.66	.79	.74	.69	.65	.70	.67	.63	.68	.65	.62	.65	.62	.60	.58
3	.75	.67	.62	.57	.73	.66	.61	.56	.64	.59	.55	.61	.57	.54	.59	.56	.53	.51
4	.69	.61	.54	.50	.68	.60	.54	.49	.57	.52	.48	.55	.51	.47	.53	.50	.47	.45
5	.64	.55	.48	.43	.62	.54	.47	.43	.52	.46	.42	.50	.45	.41	.48	.44	.41	.39
6	.59	.49	.43	.38	.58	.49	.42	.38	.47	.41	.37	.45	.41	.37	.44	.40	.36	.35
7	.55	.45	.38	.34	.54	.44	.38	.33	.43	.37	.33	.41	.36	.33	.40	.36	.32	.31
8	.51	.41	.34	.30	.50	.40	.34	.29	.39	.33	.29	.38	.33	.29	.36	.32	.29	.27
9	.47	.37	.30	.26	.46	.36	.30	.26	.35	.30	.26	.34	.29	.25	.33	.29	.25	.24
10	.44	.34	.27	.23	.43	.33	.27	.23	.32	.27	.23	.31	.26	.23	.30	.26	.22	.21

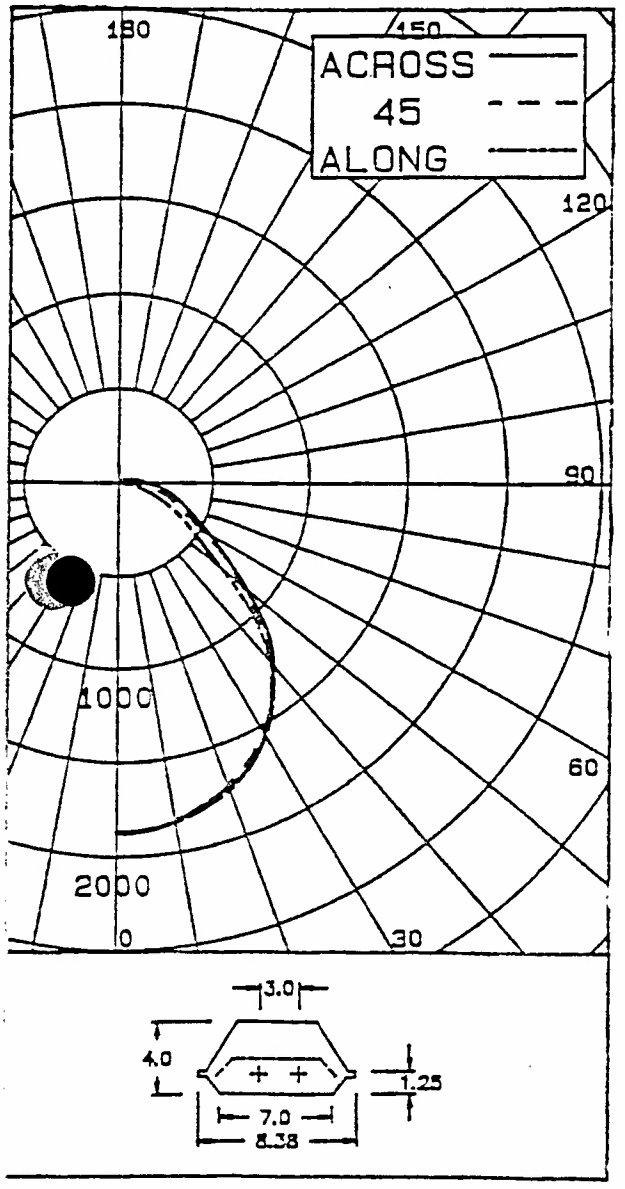
DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES
LUMINAIRE INPUT WATTS = 61.4

LIGHTING SCIENCES INC.

7830 East Evans Road
Scottsdale, Arizona U.S.A. 85260
(602) 991-9260 • Fax (602) 991-0375

CERTIFIED TEST REPORT NO. LSI10394
COMPUTED BY LSI PROGRAM **TEST-LITE**

METALOPTICS WRSN4SNACLO42EP11 4' WRAPAROUND FIXTURE
SILVER NORMAL BEAM REFLECTOR AND ARCYLIC LENS
TWO F32T8/TL841 32 WATT FLUORESCENT LAMPS. LUMEN RATING = 3050 LMS.
ONE MAGNETEK TRIAD ELECTRONIC BALLAST, DIRECT/INDIRECT UNIT



CANDLEPOWER SUMMARY

ANGLE	ALONG	22.5	45	67.5	ACROSS	OUTPUT LUMENS
0	1868	1868	1868	1868	1868	
5	1857	1860	1860	1857	1864	177
15	1797	1798	1787	1778	1778	506
25	1664	1645	1636	1651	1661	760
35	1423	1387	1405	1409	1412	878
45	1010	1007	1054	1087	1102	809
55	521	574	685	720	701	591
65	310	325	412	476	456	402
75	145	184	267	326	320	269
85	38	82	138	201	211	149
90	0	24	85	134	155	
95	0	17	65	105	120	68
105	0	7	37	59	69	37
115	0	0	24	39	43	21
125	0	1	10	26	31	12
135	0	2	9	10	15	5
145	0	4	7	6	8	3
155	0	2	6	5	7	2
165	0	0	3	4	5	1
175	0	0	0	0	1	0
180	0	0	0	0	0	

ZONE	LUMENS	% LAMP	%LUMINAIRE
0-30	1442	23.65	30.75
0-40	2320	38.04	49.48
0-60	3719	60.98	79.31
0-90	4540	74.44	96.82
40-90	2220	36.40	47.34
60-90	820	13.46	17.50
90-180	149	2.45	3.18
0-180	4689	76.88	100.00

** EFFICIENCY = 76.9% **

LUMINANCE SUMMARY - CD. / SQ. M.

ANGLE	ALONG	45	ACROSS
45	5588	5291	5318
55	3552	4070	3950
65	2870	3111	3199
75	2198	2885	3101
85	1714	2788	3482

S/MH = 1.2
SC = 1.2

CERTIFIED BY: Ian Lewin
DATE: APR 12, 1993

PREPARED FOR:
METALOPTICS
AUSTIN, TX

TESTED ACCORDING TO IES PROCEDURES. TEST DISTANCE EXCEEDS FIVE TIMES THE GREATEST LUMINOUS OPENING OF LUMINAIRE.

LIGHTING SCIENCES, INC.
7830 EAST EVANS ROAD
SCOTTSDALE, ARIZONA, USA 85260-3412

CERTIFIED TEST REPORT NO. LSI10394
COMPUTED BY LSI PROGRAM **TEST-LITE**

METALOPTICS WRSN4SNACLO42EP11 4' WRAPAROUND FIXTURE
SILVER NORMAL BEAM REFLECTOR AND ARCYLIC LENS
TWO F32T8/TL841 32 WATT FLUORESCENT LAMPS. LUMEN RATING = 3050 LMS.
ONE MAGNETEK TRIAD ELECTRONIC BALLAST, DIRECT/INDIRECT UNIT

COEFFICIENTS OF UTILIZATION

ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE = .20

CC	80				70				50			30			10			
WALL	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	.91	.91	.91	.91	.89	.89	.89	.89	.84	.84	.84	.80	.80	.80	.76	.76	.76	.74
1	.84	.80	.77	.75	.81	.78	.76	.73	.75	.72	.70	.71	.69	.68	.68	.67	.65	.64
2	.77	.71	.67	.62	.75	.70	.65	.62	.66	.63	.60	.64	.61	.58	.61	.59	.56	.55
3	.71	.64	.58	.53	.69	.62	.57	.53	.60	.55	.52	.57	.54	.50	.55	.52	.49	.48
4	.66	.57	.51	.46	.64	.56	.50	.46	.54	.49	.45	.52	.47	.44	.50	.46	.43	.42
5	.60	.51	.45	.40	.58	.50	.44	.40	.48	.43	.39	.46	.42	.38	.45	.41	.38	.36
6	.56	.46	.40	.35	.54	.45	.39	.35	.44	.38	.34	.42	.37	.34	.41	.37	.33	.32
7	.52	.42	.35	.31	.50	.41	.35	.31	.40	.34	.30	.38	.33	.30	.37	.33	.29	.28
8	.48	.38	.31	.27	.46	.37	.31	.27	.36	.30	.27	.35	.30	.26	.34	.29	.26	.24
9	.44	.34	.28	.23	.43	.33	.28	.23	.32	.27	.23	.31	.26	.23	.30	.26	.23	.21
10	.41	.31	.25	.21	.40	.30	.25	.21	.29	.24	.21	.29	.24	.20	.28	.23	.20	.19

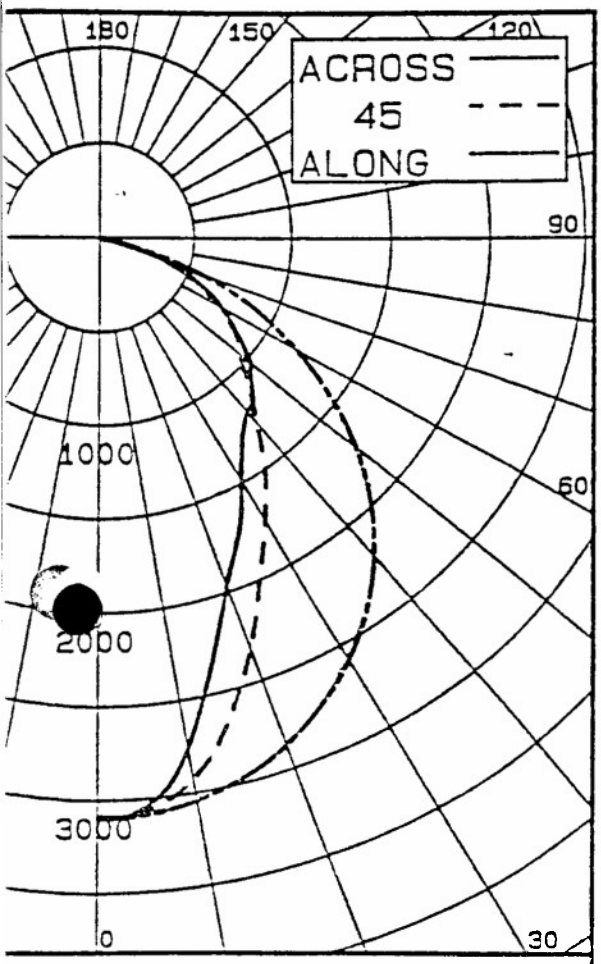
DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES
LUMINAIRE INPUT WATTS = 56.8

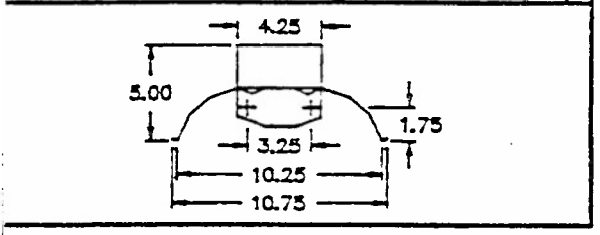
LIGHTING SCIENCES INC.

7830 East Evans Road
Scottsdale, Arizona U.S.A. 85260
(602) 991-9260 • Fax (602) 991-0375

CERTIFIED TEST REPORT NO. LSI11307
COMPUTED BY LSI PROGRAM **TEST-LITE**

METALOPTICS ISS04SFTTSO42EP11 4' OPEN FOCUSED INDUSTRIAL FIXTURE
SILVER TASK BEAM REFLECTOR
TWO F32T8/TL841 32 WATT FLUORESCENT LAMPS. LUMEN RATING = 3050 LMS.
ONE EBT SSB2-120-2/32IS LH BALLAST OPERATING AT 120 VAC & 56.8 WATTS





CANDLEPOWER SUMMARY

ANGLE	ALONG	22.5	45	67.5	ACROSS	OUTPUT LUMENS
0	3085	3085	3085	3085	3085	
5	3079	3064	3059	3032	3031	289
10	3036	3014	2921	2780	2758	
15	2965	2894	2650	2415	2326	750
20	2868	2716	2321	2052	1967	
25	2740	2481	1985	1785	1732	984
30	2586	2220	1732	1537	1485	
35	2407	1931	1506	1330	1301	1043
40	2204	1634	1271	1188	1198	
45	1976	1385	1095	1110	1123	994
50	1728	1131	951	999	1028	
55	1465	897	857	874	873	852
60	1189	695	745	733	741	
65	905	537	589	607	596	612
70	607	372	455	423	407	
75	240	209	210	194	173	239
80	68	104	56	19	1	
85	14	39	2	0	0	21
90	1	2	0	0	0	

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LAMP	%LUMINAIRE
0-30	2022	33.15	34.97
0-40	3065	50.25	53.01
0-60	4910	80.50	84.92
0-90	5782	94.80	100.00
40-90	2717	44.55	46.99
60-90	871	14.29	15.08
90-180	0	.00	.00
0-180	5782	94.80	100.00

** EFFICIENCY = 94.8% **

LUMINANCE SUMMARY-CD. / SQ. M.

S/MH = .8
SC(ALONG) = 1.2, SC(ACROSS) = .8

ANGLE	ALONG	45	ACROSS
45	8756	4871	4995
55	8005	4702	4787
65	6714	4383	4437
75	2909	2543	2098
85	485	81	0

CERTIFIED BY:
Jamal C. Wahl III

DATE:
JUL 19, 1993

PREPARED FOR:
METALOPTICS
AUSTIN, TX

TESTED ACCORDING TO IES PROCEDURES. TEST DISTANCE EXCEEDS FIVE TIMES THE GREATEST LUMINOUS OPENING OF LUMINAIRE.

LIGHTING SCIENCES, INC.
7830 EAST EVANS ROAD
SCOTTSDALE, ARIZONA, USA 85260-3412

CERTIFIED TEST REPORT NO. LSI11307
COMPUTED BY LSI PROGRAM **TEST-LITE**

METALOPTICS ISS04SFTTS042EP11 4' OPEN FOCUSED INDUSTRIAL FIXTURE
SILVER TASK BEAM REFLECTOR
TWO F32T8/TL841 32 WATT FLUORESCENT LAMPS. LUMEN RATING = 3050 LMS.
ONE EBT SSB2-120-2/32IS LH BALLAST OPERATING AT 120 VAC & 56.8 WATTS

COEFFICIENTS OF UTILIZATION

ZONAL CAVITY METHOD

EFFECTIVE FLOOR-CAVITY REFLECTANCE = .20

CC	80				70				50			30			10			0
WALL	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	1.13	1.13	1.13	1.13	1.10	1.10	1.10	1.10	1.05	1.05	1.05	1.01	1.01	1.01	.97	.97	.97	.95
1	1.05	1.01	.98	.95	1.03	1.00	.96	.94	.95	.93	.91	.92	.90	.88	.88	.87	.85	.84
2	.97	.91	.85	.81	.95	.89	.84	.80	.85	.81	.78	.83	.79	.76	.80	.77	.75	.73
3	.90	.81	.75	.69	.88	.80	.74	.69	.77	.72	.68	.75	.70	.66	.72	.69	.65	.64
4	.83	.73	.66	.60	.81	.72	.65	.60	.69	.64	.59	.67	.62	.58	.65	.61	.57	.56
5	.76	.65	.57	.52	.74	.64	.57	.52	.62	.56	.51	.60	.55	.50	.59	.54	.50	.48
6	.71	.59	.51	.46	.69	.58	.51	.45	.56	.50	.45	.55	.49	.45	.54	.48	.44	.42
7	.65	.53	.46	.41	.64	.53	.45	.40	.51	.45	.40	.50	.44	.40	.49	.43	.39	.38
8	.61	.48	.41	.36	.59	.48	.40	.35	.46	.40	.35	.45	.39	.35	.44	.39	.35	.33
9	.56	.44	.36	.31	.55	.43	.36	.31	.42	.36	.31	.41	.35	.31	.40	.35	.31	.29
10	.52	.40	.33	.28	.51	.40	.33	.28	.39	.32	.28	.38	.33	.28	.37	.31	.27	.26

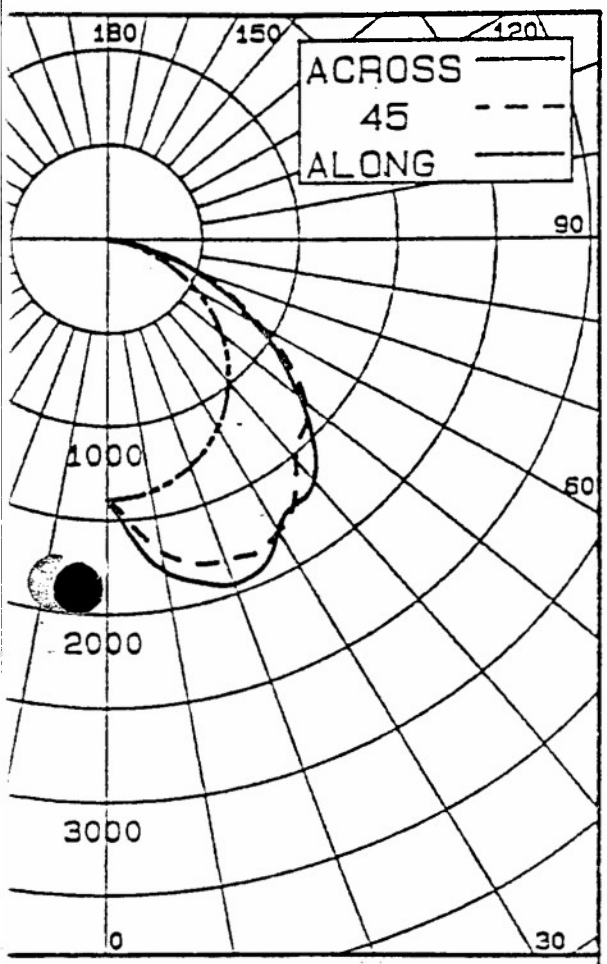
DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES
LUMINAIRE INPUT WATTS = 56
LABORATORY RESULT MAY NOT BE REPRESENTATIVE OF FIELD PERFORMANCE.
BALLAST FACTORS HAVE NOT BEEN APPLIED.

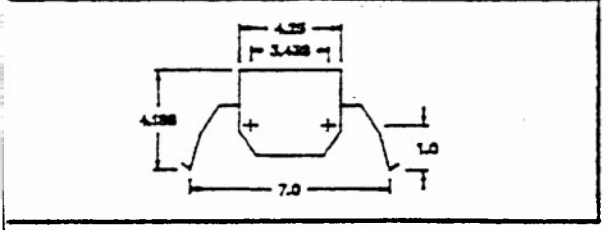
LIGHTING SCIENCES INC.

7830 East Evans Road
Scottsdale, Arizona U.S.A. 85260
(602) 991-9280 • Fax (602) 991-0375

CERTIFIED TEST REPORT NO. LSI11272
COMPUTED BY LSI PROGRAM **TEST-LITE**

METALOPTICS ISS04SSWWSO42EP11 4' OPEN INDUSTRIAL FIXTURE
SILVER SPREAD BEAM REFLECTOR
TWO F32T8/TL841 32 WATT FLUORESCENT LAMPS. LUMEN RATING = 3050 LMS.
ONE EBT SSB2-120-2/32IS BALLAST OPERATING AT 120 VAC & 61.1 WATTS





CANDLEPOWER SUMMARY

ANGLE	ALONG	22.5	45	67.5	ACROSS	OUTPUT LUMENS
0	1390	1390	1390	1390	1390	
5	1378	1433	1523	1582	1597	144
10	1360	1521	1689	1779	1794	
15	1328	1591	1781	1859	1887	482
20	1284	1633	1815	1926	1948	
25	1228	1629	1835	1905	1921	797
30	1158	1594	1788	1811	1789	
35	1079	1529	1701	1663	1713	990
40	988	1461	1529	1652	1677	
45	890	1359	1442	1522	1520	1065
50	780	1239	1351	1334	1316	
55	668	1061	1162	1107	1102	946
60	545	889	938	924	895	
65	423	755	732	694	696	680
70	306	564	527	508	508	
75	192	358	346	337	321	344
80	97	185	175	130	112	
85	31	55	12	0	0	52
90	0	0	0	0	0	

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LAMP	%LUMINAIRE
0-30	1423	23.34	25.88
0-40	2413	39.57	43.88
0-60	4424	72.54	80.45
0-90	5499	90.16	100.00
40-90	3086	50.59	56.12
60-90	1075	17.63	19.55
90-180	0	.00	.00
0-180	5499	90.16	100.00

** EFFICIENCY = 90.2% **

LUMINANCE SUMMARY-CD. / SQ. M.

S/MH = 1.8
SC(ALONG) = 1.2, SC(ACROSS) = 1.8

ANGLE	ALONG	45	ACROSS
45	5777	9393	9903
55	5342	9335	8847
65	4598	7976	7590
75	3399	6144	5711
85	1636	620	0

CERTIFIED BY:
James E. Walsh III

DATE:
JUL 19, 1993

PREPARED FOR:
METALOPTICS
AUSTIN, TX

TESTED ACCORDING TO IES PROCEDURES. TEST DISTANCE EXCEEDS FIVE TIMES THE GREATEST LUMINOUS OPENING OF LUMINAIRE.

LIGHTING SCIENCES, INC.
7830 EAST EVANS ROAD
SCOTTSDALE, ARIZONA, USA 85260-3412

CERTIFIED TEST REPORT NO. LSI11272
COMPUTED BY LSI PROGRAM **TEST-LITE**

METALOPTICS ISS04SSWWSO42EP11 4' OPEN INDUSTRIAL FIXTURE
SILVER SPREAD BEAM REFLECTOR
TWO F32T8/TL841 32 WATT FLUORESCENT LAMPS. LUMEN RATING = 3050 LMS.
ONE EBT SSB2-120-2/32IS BALLAST OPERATING AT 120 VAC & 61.1 WATTS

COEFFICIENTS OF UTILIZATION

ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE = .20

CC	80				70				50			30			10			0
WALL	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	1.07	1.07	1.07	1.07	1.05	1.05	1.05	1.05	1.00	1.00	1.00	.96	.96	.96	.92	.92	.92	.90
1	.99	.95	.92	.88	.97	.93	.90	.87	.89	.87	.84	.86	.84	.82	.83	.81	.79	.77
2	.91	.84	.78	.73	.88	.82	.77	.72	.79	.75	.71	.76	.72	.69	.73	.70	.68	.66
3	.83	.74	.67	.62	.81	.73	.66	.61	.70	.65	.60	.68	.63	.59	.65	.61	.58	.56
4	.76	.66	.58	.52	.74	.65	.58	.52	.62	.56	.51	.60	.55	.51	.58	.54	.50	.48
5	.69	.58	.50	.44	.67	.57	.49	.44	.55	.48	.43	.53	.47	.43	.52	.47	.42	.40
6	.64	.52	.44	.38	.62	.51	.43	.38	.49	.42	.37	.48	.42	.37	.46	.41	.37	.35
7	.58	.46	.38	.33	.57	.45	.38	.33	.44	.37	.32	.43	.37	.32	.42	.36	.32	.30
8	.54	.41	.34	.28	.52	.40	.33	.28	.39	.33	.28	.38	.32	.28	.37	.32	.27	.26
9	.49	.37	.29	.24	.48	.36	.29	.24	.35	.29	.24	.34	.28	.24	.33	.28	.23	.22
10	.46	.33	.26	.21	.45	.33	.26	.21	.32	.25	.21	.31	.25	.21	.30	.25	.20	.19

DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES
LUMINAIRE INPUT WATTS = 61.1
LABORATORY RESULT MAY NOT BE REPRESENTATIVE OF FIELD PERFORMANCE.
BALLAST FACTORS HAVE NOT BEEN APPLIED.

ANNEX C

REQUIRED PROJECT DOCUMENTATION

To facilitate ECIP project approval, the following data shall be provided:

Document (Data)

1. Administrative Package

b. Annotated General Site Plan

c. Facilities Requirements Sketch

d. DD Form 1391
SECTION 1 (HEADER)
SECTION 2 (COST DATA)
SECTION 3 (JUSTIFICATION SUMMARY)
SECTION 4 (REQUIREMENTS/APPROVALS)
SECTION 5 (NOT USED)
SECTION 6 (DESIGN DATA/COSTS)
SECTION 7 (GENERAL)
SECTION 8 (EXISTING/DEMOLITION)
SECTION 9 (INVENTORY IMPACTS)
SECTION 10 (DEFICIENCY)
SECTION 11 (ECONOMIC ANALYSIS)
SECTION 12 (CONSTRUCTION CRITERIA)
SECTION 13 (EQUIPMENT PROGRAM)
SECTION 14 (NOT USED)
SECTION 15 (ENVIRONMENTAL)
SECTION 16 (FLOOD)
SECTION 17 (COMMUNICATIONS)
SECTION 18 (HISTORICAL)
SECTION 19 (ENERGY)
SECTION 20 (HANDICAPPED)
SECTION 21 (NEW START)
SECTION 22 (SECURITY)
SECTION 23 (MISCELLANEOUS)

2. Technical Package

a. Detail Site Plan
b. Building Area Plan
c. Single Line Floor Plan
d. PDB 1
e. PDB 2

To facilitate ECIP project approval, the following 1391 additional data shall be provided:

a. In title block clearly identify projects as "ECIP." (Section 1H).

b. Complete description of each item of work to be accomplished including quantity, square footage, etc. (Section 3A).

c. A comprehensive list of buildings, zones, or areas including building numbers, square foot floor area, designated temporary or permanent, and usage (administration, patient treatment, etc.). (Section 8).

d. List references, and assumptions, and provide calculations to support dollar and energy savings, and indicate any added costs. (Section 11).

(1) If a specific building, zone, or area is used for sample calculations, identify building, zone or area, category, orientation, square footage, floor area, window and wall area for each exposure. (Section 12).

(2) Identify weather data source. (Section 12).

(3) Identify infiltration assumptions before and after improvements. (Section 12).

(4) Include source of expertise and demonstrate savings claimed. Identify any special or critical environmental conditions such as pressure relationships, exhaust or outside air quantities, temperatures, humidity, etc. (Section 12).

e. Lighting retrofit projects must identify number and type of fixtures, and wattage of each fixture being deleted and installed. New lighting shall be only of the level to meet current criteria. Lamp changes in existing fixtures is not considered an ECIP type project. (Section 8).

f. An ECIP life cycle cost analysis summary sheet as shown in the ECIP Guidance shall be provided for the complete project and for each discrete part included in the project. The SIR is applicable to all segments of the project. Supporting documentation consisting of basic engineering and economic calculations showing how savings were determined shall be included. (Section 11).

g. The DD Form 1391 face sheet shall include, for the complete project, the annual dollar and KW-HR savings, SIR, simple amortization period and a statement attesting that all buildings and retrofit actions will be in active use throughout the amortization period. (Section 3G).

h. The calendar year in which the cost was calculated shall be clearly shown on the DD Form 1391. (Section 1D).

i. Nonappropriated funded facilities will not be included in an ECIP project without an accompanying statement certifying that utility costs are not reimbursable.

j. Any requirements required by ECIP guidance dated 4 November 1992 and any revisions thereto. Note that unescalated costs/savings are to be used in the economic analyses.

k. The five digit category number for all ECIP projects except for Family Housing is 80000. The category code number for Family Housing projects is 71100. Project(s) will be classified "Lighting Systems" (Section 1H). Lighting systems (15 year life cycle cost basis) are defined as follows: Projects to install replacement lighting systems and controls. This would include daylighting, new fixtures, lamps, ballasts, photocells, motion sensors, IR sensors, light wells, highly reflective painting, etc.

ANNEX D

PINE BLUFF ARSENAL - SECURITY REQUIREMENTS

1.1 The work to be accomplished under this contract is located within the Pine Bluff Arsenal. Below are special security requirements of the Pine Bluff Arsenal Security Office and shall be applicable to all contracts within the Pine Bluff Arsenal.

1.1.1 Notice of Magistrate System

In accordance with the Arkansas State statutes, the Federal Magistrate System has been enacted at Pine Bluff Arsenal. Persons issued a citation on Pine Bluff Arsenal are subject to fines and may be required to appear before a Federal Magistrate in Little Rock, AR.

1.1.2 Security Awareness

Pine Bluff Arsenal is a controlled access installation. Specific security requirements as they apply to the project site will be noted during a prestudy conference. The Contractor will exercise care to prevent unauthorized intrusion by locking gates, closing and locking doors/windows, and performing similar actions. In the event that a breach of security occurs notwithstanding the Contractor's efforts to prevent it, he shall immediately notify the Pine Bluff Arsenal Security Police (543-3505), reporting the occurrence and explaining the nature of the violation.

1.1.3 Security Requirements For Contractors

1.1.3.1 Specific Requirements

All Contractors working at the Pine Bluff Arsenal shall comply with security rules and regulations generally applicable to all persons entering the installation. In addition, specific requirements applicable to Contractor personnel are as follows:

a. Contractors will register vehicles, privately owned vehicle (POV) or otherwise, used in the performance of contract with the Security Office. An affidavit will be signed by the Contractor stating that he has and will continue to maintain liability insurance on all vehicles in an amount not lower than the minimum limits prescribed by the financial responsibility or the compulsory law of the State of Arkansas.

b. All Contractor or subcontractor vehicles used on Pine Bluff Arsenal must have a company sign prominently displayed on each side of the vehicle, if work is being performed in production area. These signs may be permanently affixed to the vehicle or may be the magnetic type.

c. All Contractor personnel will be required to be badged prior to the beginning of any Contractor services as follows:

(i) Contractors performing services within non-sensitive areas of the installation will be issued a non-photographic type ID badge if the contract does not exceed 21 calendar days. Employee need not be present.

(ii) Contractors performing services within non-sensitive areas of the installation will be issued a photographic type ID badge if the contract exceeds 21 calendar days. Contractor employee must be present at the Security Office to be issued the badge.

(iii) Contractors performing services within sensitive areas of the installation will be issued a non-photographic type ID badge and visitor pass if the contract does not exceed 21 calendar days. Contractor employees must be present at the Security Office to be issued the badge and pass. Badge exchange will be required by all personnel at the entrance to areas where required.

(iv) Contractors performing services within sensitive areas of the installation will be issued a photographic type ID badge if the contract exceeds 21 calendar days. Contractor employees must be present at the Security Office to be issued the badge. Badge exchange is required by all personnel at the entrance to areas where required.

(v) If non-photographic type badges are used, the Contractor or subcontractor will furnish the Security Office with the names of all Contractor employees to whom such badges are issued by number. This list of names will remain current at all times. If visitor passes are issued with non-photographic type badges, the procedures in paragraph (vi) below apply.

(vi) If photographic type badges are issued to Contractor employees, the Security Office will maintain a list of all badges issued by name, number, etc. However, the Contractor will insure that all employees report to the Security Office for issuance of photographic type ID badges or visitor passes.

(vii) The Contractor or subcontractor will insure that all ID badges of any type are returned to the Security Office upon termination of the contract or termination of any individual employee. Contractors will also be responsible to insure that all vehicle registrations are cancelled and vehicle decals are removed and returned to the Security Office.

(viii) Contractors or subcontractors will be required to reimburse the U.S. Government in the amount of $2.00 for replacement of ID badges lost or not returned to the Security Office upon termination of contract.

(ix) Contractor employees arriving at any gate or area improperly badged or without an Arsenal ID badge will be denied entrance until proper identification or badging has been accomplished.

(x) Contractor and subcontractor personnel performing services within exclusion areas or highly sensitive areas will be required to be escorted by an appropriately cleared and authorized individual at all times while in such areas.

1.1.3.2 Work In Exclusion Area

a. Some of the contract work may be in the BREA. All personnel engaged in work in the Conventional Limited Area, Building 34-111, Hanlon Road Igloo Area and Bond Road Exclusion Area (BREA) shall be required to carry properly fitted protective mask on their person at all times. Personnel must be clean shaven to be properly fitted with the protective mask or with a respirator. Personnel working within Public Access Exclusion Areas (all areas north and west of Atkisson Road) shall have protective mask immediately available. Protective masks will be furnished, fitted and periodically inspected by the Government. Protective masks will be issued to the Contractor on a receipt basis for each employee under his supervision. Masks must be returned to the Government upon termination of the contract. The Contractor shall not take any masks off the Pine Bluff Arsenal. The Contractor shall provide a waterproof box with lock for storage of the masks during non-working hours. The box shall be kept at a site approved by the Contracting Officer. Masks must be returned to the Government, immediately, upon termination or release of any employee.

b. Individual fitting of mask takes approximately 20 minutes. In addition, masks must be inspected semi-annually and annually, based on date of last inspection. Masks must be turned in for inspection when requested. Every two weeks, the Arsenal will publish a list of masks due or over due for inspection and furnish same to Contracting Officer. This list will be provided to the Contractor for action. Mask inspection takes 1-2 days but the individual need not be present. The Contractor will be notified when masks are ready for re-issue and re-fitting.

c. If mask is more than 8 weeks overdue, the Contracting Officer may take any reasonable action to ensure that the Government's interest in the mask is protected and that the safety of Contractor personnel is ensured.

d. Such other safety measures as the Contracting Officer may determine to be reasonable and necessary for the protection of personnel and property will be enforced.

e. Contractor personnel working in restricted areas shall have an additional safety briefing, a blood test, and a 288 card before starting work. These areas include, but are not limited to Bond Road Exclusion Area (BREA) and Building 34-111. The general safety briefing takes approximately 45 minutes to complete and the safety briefing for work in the BREA takes approximately 3 hours. A waiting period of approximately 10 days is required between the blood test and entering the BREA.

f. Escorts are required in the BREA. The Contractor must give 48 hours advance notice to the Contracting Officer who in-turn will contact the escort agency. There is no set maximum number of workers that an individual escort can accompany at one time. All costs in connection with furnishing escorts for this contract will be borne by the Government.

1.1.3.3 Encounter of Irritants

In chemical manufacturing and storage areas, there exists a possibility of encounter with irritants by contract personnel. These areas will be identified to the Contractor prior to the start of the contract. Instructions and guidance will be furnished to the Contractor by the Contracting Officer, the Installation Safety Office and the Director of Law Enforcement and Security.

1.1.4 Employee Identification

The Contractor shall be responsible for providing positive identification of employees as required by the Security Office at Pine Bluff Arsenal. Prior to beginning work or receiving a notice to proceed, the Contractor shall identify with the Procurement and Security Offices points of contact who shall be responsible for identifying employees, subcontractors, vendors and delivery personnel. One identified point of contact shall personally accompany any Contractor personnel, subcontractors, vendors or delivery personnel to be badged to the Security Office. Employees or other personnel arriving without an identification point of contact will not be badged. Any delays caused by improper identification of employees shall be at the Contractor's expense and no time extension shall be allowed for such delays.

1.1.5 Notice To Contractors

All personnel are hereby notified that any Non-U.S. Citizen must meet the provisions of AR 380-25 prior to being permitted on Pine Bluff Arsenal.

1.1.5.1 Authorization for Alien

All Contractor personnel will be required to produce proof of citizenship prior to being badged. If Contractor's employees are aliens, the Contractor will submit a request through the COR, through the Security Office to the Commander, asking for authorization for the resident alien to work on Pine Bluff Arsenal. The request should include:

Name:
Resident Alien No.:
Country of citizenship:

1.1.5.2 Alien Escort

Upon authorization, resident aliens will be issued an "Escort Required" badge, meaning a U.S. Citizen must escort the individual while working on Pine Bluff Arsenal. Failure to do so could mean the employee will be escorted off-post and barred from re-entry.

1.1.5.3 Badging of Citizens of Communist Block Countries

Requests for badging of Contractor personnel who are citizens of communist block countries will be submitted to Contracting Officer's Representative for processing through the local Security Office to the Assistant Chief of Staff Intelligence, HQ DO (DAMI-FL) Washington, DC 20310 and shall include:

Full Name:
Date of birth:
Official Title/Position:
Nationality:
Security Clearance: (If Individual Has One)
Firm Name and Address:
VISA/Passport/Orders No. or Serial No.:
Dates of Requested Access:
Social Security Number: (If Individual Has One)
Sponsor: (Will Be Provided by Procurement Office)
Name of Activity: (Pine Bluff Arsenal)
Purpose: (Justification of Reason for Requested Entry to Pine Bluff Arsenal).

1.1.6 Not Used

1.1.7 Notice of Possible Delays

During the time a Contractor is working on the Arsenal, he may, from time to time, be working in an area where munitions test exercises are conducted; delays may occur. These delays may involve Contractor personnel being withdrawn from an area or being denied access for a period of time. The length of time and frequency of these delays will be held to a minimum. Delays will be encountered when entering the BREA (Bond Road Exclusion Area).

1.2 PINE BLUFF ARSENAL - USE OF CAMERAS

1.2.1 Policy

Pine Bluff Arsenal has a policy restricting use of cameras in order to ensure that National Security is not jeopardized. This policy covers any level of Contractor, subcontractor, supplier, employee, or consultant.

1.2.2 Definitions

The terms "camera", "picture", and "photography" or any derivative used below refer to any medium which can record exact or near-exact images (stills, video, movies, etc).

1.2.3 Camera Pass

All cameras shall be registered with the PBA Provost Marshal's Office (PMO) and with the Contracting Officer. Each Contractor-owned camera shall be assigned to a designated photographer who will be the only one authorized to use it. Once registered, the camera will have a camera pass issued for it. The camera pass shall be with the camera at all times.

1.2.4 Photographers

Only designated photographers will be allowed to take pictures using cameras registered as above. The photographer shall be responsible for ensuring that the recorded frame does not contain any sensitive information as defined in paragraph: Photographic Restrictions below. Photographers' names will be placed on lists maintained by both the Contracting Officer and the PBA PMO. Only two photographers will be allowed for this contract.

1.2.5 Photographic Restrictions Agreement Form

Prior to having their names put on the list, potential photographers will be briefed on photographic restrictions on PBA. Each photographer will sign the following agreement form, copies of which are to be returned to the Contracting Officer and the PBA PMO.

STATEMENT OF UNDERSTANDING
PHOTOGRAPHIC RESTRICTIONS ON PBA

1. I, _____, am a designated photographer for

_____.

2. I understand that there are certain restrictions on taking pictures on Pine Bluff Arsenal. Specifically, pictures are not to be taken of the following:

a. Vehicle convoys and convoy-like movements.

b. PBA vehicles (except for the express reason of documenting accidents involving these vehicles and then only after receiving permission from the PMO to take the picture).

c. Emergency Ordnance Disposal (EOD) teams, equipment, procedures, or when they are in the performance of their duties.

d. Sensitive sites and facilities (controlled, limited, and restricted), including -- but not limited to -- the BZ Plant, the Binary I Production Facility, other production facilities, storage facilities, etc. and similar type facilities.

e. Sensitive items, facilities (controlled, limited, and restricted), or activities as designated by the Commander, PBA, or an authorized representative.

3. I will only take pictures to record study items subject to the above limitations and within limits of the designated area of our contract.

4. I will take all pictures in such direction as necessary to prevent inadvertent inclusion of sensitive sites, facilities, and activities as mentioned above.

5. I will not allow others to use my camera equipment.

6. I understand taking unauthorized pictures will result in the following:

a. Film and equipment will be confiscated with NO WARNING.

b. I will be <u>immediately</u> escorted off the Arsenal by PBA Security personnel, have my badge confiscated, and be denied further access to the installation. NO WARNING WILL BE GIVEN.

c. I may also be subject to penalties and disciplinary actions pursuant to federal laws, codes, or regulations.

_____ _____ _____

(printed name) (signature) (date)

1.2.6 Photographic Restrictions

Pictures are not to be taken of the following items:

(1) Vehicle convoys and convoy-like movements.

(2) PBA vehicles (except for the express reason of documenting accidents involving these vehicles and then only after receiving permission from the PMO to take the picture).

(3) Emergency Ordnance Disposal (EOD) teams, equipment, procedures, or when they are in the performance of their duties.

(4) Sensitive sites and facilities (controlled, limited, and restricted), including -- but not limited to -- the BZ Plant, the Binary I Production Facility, other production facilities, storage facilities, etc. and similar type facilities.

(5) Other items, facilities, or activities as designated by the Commander, PBA, or his authorized representatives.

1.2.7 Use of Cameras

The cameras shall be used only to record study items subject to the limitations and exceptions stated herein, and within the limits of the designated area of the contract. Pictures shall be taken in such direction as necessary to prevent inadvertent inclusion of sensitive sites, facilities, and activities as mentioned above.

1.2.8 Exceptions

At the request of the Government (EOD, Security, etc.) and AFTER receiving approval of the PBA Provost Marshal, pictures may be taken of selected sensitive sites or activities as an exception to the above. When so authorized, a representative of the Contracting Officer shall personally accompany the photographer. The film to be used will be issued by the Arsenal. The exposed film will be immediately turned over to the PMO for development and review and turned over to the requested agency after appropriate security checks have been made.

1.2.9 Actions for Unauthorized Pictures

Unauthorized pictures are those taken in violation of the above paragraphs. Specifically, unauthorized pictures are those taken with unauthorized equipment, by an unauthorized person, or of an unauthorized activity or facility. Taking of unauthorized pictures will result in the following actions being taken:

(1) Film and equipment will be confiscated. NO WARNINGS WILL BE GIVEN. Film may not be exposed until after a determination has been made concerning disciplinary action or federal charges.

(2) The individual will be immediately escorted off the Arsenal by PBA Security personnel, have his badge confiscated, and be denied further access to the installation. NO WARNINGS WILL BE GIVEN.

(3) At the discretion of the Contracting Officer, the Commander, PBA, or other Government agencies, violators may also be subject to penalties and disciplinary actions pursuant to federal laws, codes, or regulations.

PBA Lighting Survey

10-20-94

Month

1 2 3 4 5 6 7 8 9 10 11 12

07-13-94 PBA LIGHTING SURVEY 06-05-95

07-13-94 1.0 Prenegotiations 09-23-94

09-29-94 2.0 Interim Submittal 04-12-95

09-29-94 2.1 NTP 09-29-94

10-18-94 2.2 Preparation 11-02-94

11-14-94 2.3 Field Work (SURVEY) 11-18-94

12-05-94 2.4 Interim Report 03-24-95

03-24-95 2.5 Submit Report 03-24-95

04-10-95 2.6 Interim Presentation 04-12-95

3.0 Final Submittal 04-26-95 06-05-95

04-26-95 3.1 Comments Received 04-26-95

04-27-95 3.2 Response to Comments 05-10-95

05-11-95 3.3 Project Documentation 05-24-95

05-16-95 3.4 Final Report 06-05-95

06-05-95 3.5 Report Submittal 06-05-95

Plan Res. Delay Today

COMPUTATION SHEET

Page ____ of ____

SUBJECT _____

COMPUTATION _____ FILE NO. _____

COMPUTED BY _____ DATE _____ CHECKED BY _____ DATE _____

ENTRANCE INTERVIEW DATE: 11/15/94

EEAP LIGHTING STUDY, PINE BLUFF ARSENAL

LIST OF ATTENDEES LOCATION: DPW, PBA

NAME	COMPANY	PHONE (BUS)	(FAX)
EXA HARTMAN	COE	324-6153	324-6968
Nancy Rimmer	EHN	540-3312	540-3251
RALPH RIMMER	EP&S	540-3236	540-3251
Donald Faoost	Ch. EP/S	540-3253	540-3251
PAUL Hutchins	RS&H	(904) 279-2277	(904) 279-2491
CARLOS WARREN	RS&H	(904) 279-2275	(904) 279-2491
RAJESH SHARMA	RS&H	(904)-279-2391	—
Art Hill	RS&H	(904)-279-2359	(904) 279-2491
Mark Emmerling	COE	(501) 324 6905	(501) 324 6968

SWD FORM 521

RS&H

MEMORANDUM

DATE: 4 November 1994

TO: Ms. Nancy Rimmer
Pine Bluff Arsenal

FROM: Carlos S. Warren, PhD, PE
Project Manager
Reynolds Smith and Hills, Inc.

SUBJECT: PBA Lighting Survey
Contract DACA01-94-D-0038
Delivery Order No. 0001

This is to confirm that four persons will be on site at Pine Bluff Arsenal (PBA) 15 November 1994 through 18 November 1994 for the purpose of conducting the referenced lighting survey. We would like to schedule the entry interview for 0800 hours 15 November.

The following individuals will conduct the survey:

PII Redacted

Name: Carlos S. Warren
[redacted]
Address: 4651 Salisbury Road
Jacksonville FL 32256
Work Phone: 904-279-2275
FAX Number: 904-279-2491

Name: Paul Hutchins
[redacted]
Address: 4651 Salisbury Road
Jacksonville FL 32256
Work Phone: 904-279-2277
FAX Number: 904-279-2491

PII Redacted

Name: Rakesh Sharma
[redacted]
Address: 4651 Salisbury Road
Jacksonville FL 32256
Work Phone: 904-279-2351
FAX Number: 904-279-2491

Name: Arthur B. Hill
[redacted]
Address: 4651 Salisbury Road
Jacksonville FL 32256
Work Phone: 904-279-2358
FAX Number: 904-279-2491

I do not yet have the information on the two cameras that we will bring, but will forward it to you prior to our arrival. We will also need some office space where we can store equipment, lay out drawings, etc.

Thanks for your help.

cc: Mark Emmerling
Little Rock District
Corps of Engineers

RS&H

MEMORANDUM

DATE: 14 December 1994

TO: Ms. Nancy Rimmer
Pine Bluff Arsenal

FROM: Carlos S. Warren, PhD, PE
Project Manager
Reynolds Smith and Hills, Inc.

SUBJECT: PBA Lighting Survey
Contract DACA01-94-D-0038
Delivery Order No. 0001

This is to confirm that two persons will be on site at Pine Bluff Arsenal (PBA) 09 January 1995 through 11 January 1995 for the purpose of completing the referenced lighting survey. We will arrive on site at approximately 1300 hours 09 January.

The following individuals will conduct the survey:

PII Redacted

Name:	Carlos S. Warren	Name:	Arthur B. Hill
Address:	4651 Salisbury Road Jacksonville FL 32256	Address:	4651 Salisbury Road Jacksonville FL 32256
Work Phone:	904-279-2275	Work Phone:	904-279-2358
FAX Number:	904-279-2491	FAX Number:	904-279-2491

We will also bring one camera, Yashica Microtec Zoom 70, SN# 049238. We look forward to seeing you again.

cc: Mark Emmerling
Little Rock District
Corps of Engineers

cw

RS&H

MEMORANDUM

DATE: 23 January 1995

TO: Distribution

FROM: Carlos S. Warren, PhD, PE
Project Manager
Reynolds Smith and Hills, Inc.

SUBJECT: PBA Lighting Survey
Contract DACA01-94-D-0038
Delivery Order No. 0001
Site Survey Report

The site survey of 45 buildings at Pine Bluff Arsenal was completed in two increments - 15-18 November 1994 and 9-11 January 1995. Four engineers conducted the initial survey, and two engineers completed the survey. The second survey was required because the time estimated for the survey was insufficient. The Project Manager was one of the engineers on both surveys.

An entry interview was conducted on 15 November 1994. The following persons attended the interview:

Nancy Rimmer	- Pine Bluff Arsenal
Ralph Rimmer	- Pine Bluff Arsenal
Don Faust	- Pine Bluff Arsenal
Mark Emmerling	- Little Rock Corps of Engineers
Carlos Warren	- Reynolds, Smith and Hills
Paul Hutchins	- Reynolds, Smith and Hills
Arthur Hill	- Reynolds, Smith and Hills
Rakesh Sharma	- Reynolds, Smith and Hills

The list of buildings to be surveyed was reviewed; a room was provided for use by RS&H during the stay at PBA. The survey procedures were explained and arrangements for PBA employee escorts for each of the two survey teams were made.

The exit interview was conducted on 11 January 1995. The following persons attended the interview:

Nancy Rimmer	- Pine Bluff Arsenal
Don Faust	- Pine Bluff Arsenal
Mark Emmerling	- Little Rock Corps of Engineers
Carlos Warren	- Reynolds, Smith and Hills
Arthur Hill	- Reynolds, Smith and Hills

A list of the buildings that had been surveyed was furnished to the attendees (copy enclosed). Preliminary observations made during the surveys were discussed. Based upon analysis of some of the buildings, it appears that an ECIP project will be possible. Despite the delay in completing the site survey, no delays in the original delivery schedules are anticipated.

Distribution:

Commander
U.S. Army, Pine Bluff Arsenal
Attn: SMCPB-EHN (Ms. Rimmer)
10020 Kabrich Circle
Pine Bluff, AR 71602-9500

Commander
U.S. Army Engineer District, Little Rock
Attn: CESWL-PM (Mr. Qualls)
700 West Capitol
P.O. Box 867
Little Rock, AR 72203-0867

Commander
U.S. Army Engineer District, Mobile
Attn: CESAM-EN-CM (Mr. Battaglia)
P.O. Box 2288
Mobile, AL 36628

PBA Building Inventory
File: PBABLDG.WQ1
Update: 23-Jan-95

	Bldg. No.	Function	Sq. Ft.	Dwgs.	Cum Sq. Ft	Team	Surveyed	LPro	W/SF	kW
1	10020	Administration	21,284	Y	21,284	PH/RS	Y	Y	2.7	57.5
2	10030	Admin General Purpose	6,897	Y	28,181	PH/RS	Y			
3	10050	Fire HQ	6,532		34,713	PH/RS	Y			
4	13010	Community Services	2,429	Y	37,142	PH/RS	Y			
5	13020	Health Clinic	3,844		40,986	CW/AH	Y			
6	13030	52nd EOD	3,007		43,993	CW/AH	Y			
7	13040	Counseling Facility	1,483		45,476	CW/AH	Y			
8	13060	Clinic	2,835		48,311	CW/AH	Y			
9	13080	Laboratory	4,620	Y	52,931	CW/AH	Y			
10	13100	Infirmary	2,201	Y	55,132	CW/AH	Y			
11	13110	Audio-Visual Facility	2,133	Y	57,265	PH/RS	Y			
12	16210	Barracks (halls, showers, latrines)	1,200	Y	58,465	PH/RS	Y	Y	1.0	1.2
13	16220	Barracks (halls, showers, latrines)	1,200		59,665	PH/RS	Y	Y	1.0	1.2
14	31010	Electronic Calibration	420		60,085	PH/RS	Y			
15	31080	Electronic Calibration	2,052	Y	62,137	PH/RS	Y			
16	32030	Inspection Garage	5,513	Y	67,650	PH/RS	Y			
17	32035	Ordinance Shop	16,865	Y	84,515	PH/RS	Y			
18	32060	Boiler & Compressor House	2,875		87,390	PH/RS	Y			
19	32070	Impreg. & Laundry	17,865	Y	105,255	PH/RS	Y			
20	32090	Warehouse	5,328		110,583	PH/RS	Y			
21	32100	Elect/Comm. Calibration	11,662		122,245	PH/RS	Y			
22	32130	Ammo Quality Assurance	3,216	Y	125,461	PH/RS	Y			
23	32150	Ammo Quality Assurance	1,600	Y	127,061	PH/RS	Y			
24	33060	Boiler & Compressor House	2,875		129,936	PH/RS	Y			
25	33530	Fill and Press (packout areas only)	13,808	Y	143,744	PH/RS	Y			
26	34110	WP Filling	65,300		209,044	PH/RS	Y			
27	34120	Ammo Quality (south end only)	4,352		213,396	PH/RS	Y			
28	34140	Boiler & Compressor House	5,050	Y	218,446	PH/RS	Y			
29	34910	Admin/FE Maint. Shop	81,407	Y	299,853	CW/AH	Y	Y	2.5	203.5
30	34970	Administration	2,124		301,977	CW/AH	Y	Y	3.0	6.4
31	44100	Production Field Office	18,365	Y	320,342	CW/AH	Y	Y	1.4	25.7
32	51420	Offices/DMMD	11,504	Y	331,846	CW/AH	Y	Y	2.8	32.2
33	51430	Engineering Administration	1,800		333,646	CW/AH	Y	Y	2.7	4.9
34	53160	Chemical Administration	3,763		337,409	CW/AH	Y	Y	2.0	7.5
35	60020	Security	5,745	Y	343,154	CW/AH	Y			
36	60060	Administration	3,600		346,754	CW/AH	Y			
37	60070	Fixed Laundry	4,213	Y	350,967	CW/AH	Y			
38	60090	TC Administration	2,000	Y	352,967	CW/AH	Y			
39	60630	Warehouse	9,563		362,530	CW/AH	Y			
40	63100	Chemical Field Maint. Shop	10,005		372,535	CW/AH	Y	Y	1.6	16.0
41	63110	Chemical Maint. shop	9,641		382,176	CW/AH	Y	Y	1.4	13.5
42	63120	Chemical Field Maint. Shop	9,641		391,817	CW/AH	Y	Y	0.9	8.7
43	63200	Chemical Field Maint. Shop	9,641		401,458	CW/AH	Y	Y	1.4	13.5
44	63210	Mask Repair	9,641	Y	411,099	CW/AH	Y			
45	63410	Toxic/Conventional Change House	9,641	Y	420,740	CW/AH	Y			

APPENDIX B

Bldg 10-020 Summary
File: 10_020.WQ1
Date: 17-Mar-95

Present System

Fixture Type	Fixture Description	Watts/ Fixture	Number Fixtures	Total Watts
A	2L Ceiling Wraparound	83	3	249
B1	4L Ceiling Wraparound	159	43	6,837
F	4L Lensed Troffer	163	4	652
H1	2L Surface Strip	173	4	692
H3	1L Surface Strip	100	2	200
M2	4L Surface Strip	192	15	2,880
M3	4L Eggcrate Louvers	192	138	26,496
M4	4L Eggcrate Louvers	96	5	480
Totals			214	38,486

Replacement System

Fixture Type	Fixture Description	Watts/ Fixture	Number Fixtures	Total Watts
CF	Surface Downlight	56	5	280
H2	2L Surface Strip	113	4	452
I2	2L Industrial	60	2	120
R2	2L Wraparound w/ Reflector	60	46	2,760
RR	2L Troffer w/ Reflector	61	4	244
SM	1L Surface Strip	35	1	35
W2	2L Wraparound	60	19	1,140
WL	2L Wraparound w/ Reflector	61	112	6,832
Totals			193	11,863

10-020 Schedule

Reynolds, Smith & Hills, Inc.
4651 Salisbury Road
Jacksonville, FL 32256
Buildings Engineering

Luminaire Fixture Schedule
Generated by LitePro V2.27E
Provided and supported by USI Lighting, Inc.
Filename: 10-020 Type: Indoor

Luminaire Fixture Schedule PRESENT

Project name: PBA LIGHTING SURVEY - BLDG 10-020	Project #6941331
Prepared for: CORP OF ENGINEERS	Date: 27-Feb-95
Prepared by: R. SHARMA	UPD: 3.0W/Sq.Ft

TYPE	DESCRIPTION	LAMP/BALLAST	V/W	QTY	REMARKS
B1	18"X4'4L CEILING MT.WRAPAROUND LENS- PRISMATIC W/ GLOW ENDS COLUMBIA WPW440-A	F40CW ESB	000 - 159	24	
F	2X4 4L FLUSH STATIC TROFFER LENS- .125" POLARIZED PATT.12 COLUMBIA 4PS2*-87-244	F40CW ESB	000 - 163	4	
H1	4"X8'2L EMBOSSED SURFACE STRIP OPEN BOTTOM- NO SHIELDING COLUMBIA CS296	F96T12/CW STD	000 - 173	4	
H3	4"X8'1L EMBOSSED SURFACE STRIP OPEN BOTTOM- NO SHIELDING COLUMBIA CS196	F96T12/CW STD	000 - 100	2	
M2	9"X4' 4L SM HSG SURFACE STRIP OPEN BOTTOM- NO SHIELDING COLUMBIA CH440	F40CW STD	000 - 192	8	
M3	9"X4' 4L SURFACE TURRET STRIP EGGCRATE LOUVERS COLUMBIA K440-T	F40CW STD	000 - 192	66	
M4	9"X4' 2L SURFACE TURRET STRIP EGGCRATE LOUVERS COLUMBIA K240-T	F40CW STD	000 - 96	4	

NOTES:

10-020A Schedule

Reynolds, Smith & Hills, Inc.
4651 Salisbury Road
Jacksonville, FL 32256
Buildings Engineering

Luminaire Fixture Schedule
Generated by LitePro V2.27E
Provided and supported by USI Lighting, Inc.
Filename: 10-020A Type: Indoor

Luminaire Fixture Schedule PRESENT

Project name: PBA LIGHTING SURVEY - BLDG 10-020A | Project #6941331
Prepared for: CORP OF ENGINEERS | Date: 27-Feb-95
Prepared by: R. SHARMA | UPD: 2.9W/Sq.Ft

TYPE	DESCRIPTION	LAMP/BALLAST	V/W	QTY	REMARKS
A	15"X4'2L CEILING MT.WRAPAROUND LENS- PRISMATIC W/ GLOW ENDS COLUMBIA WCW240-A	F40CW ESB	000 - 83	3	
B1	18"X4'4L CEILING MT.WRAPAROUND LENS- PRISMATIC W/ GLOW ENDS COLUMBIA WPW440-A	F40CW ESB	000 - 159	19	
M2	9"X4' 4L SM HSG SURFACE STRIP OPEN BOTTOM- NO SHIELDING COLUMBIA CH440	F40CW STD	000 - 192	7	
M3	9"X4' 4L SURFACE TURRET STRIP EGGCRATE LOUVERS COLUMBIA K440-T	F40CW STD	000 - 192	72	
M4	9"X4' 2L SURFACE TURRET STRIP EGGCRATE LOUVERS COLUMBIA K240-T	F40CW STD	000 - 96	1	

NOTES:

10-020 Schedule

Reynolds, Smith & Hills, Inc.
4651 Salisbury Road
Jacksonville, FL 32256
Buildings Engineering

Luminaire Fixture Schedule
Generated by LitePro V2.27E
Provided and supported by USI Lighting, Inc.
Filename: 10-020 Type: Indoor

Luminaire Fixture Schedule PROPOSED

Project name: PBA LIGHTING SURVEY - BLDG 10-020 | Project #6941331
Prepared for: CORP OF ENGINEERS | Date: 27-Feb-95
Prepared by: R. SHARMA | UPD: 1.0W/Sq.Ft

TYPE	DESCRIPTION	LAMP/BALLAST	V/W	QTY	REMARKS
CF	11" 2L SURFACE ROUND DOWNLIGHT LENS - OPTIONAL SPREAD LENS PRESCOLITE CFS1026-782-SL10	F26DTT/27K STD	000 - 56	5	New
H2	4"X8'2L EMBOSSED SURFACE STRIP OPEN BOTTOM- NO SHIELDING COLUMBIA CS296	FO96/735 EOCT	000 - 113	4	Upgrade
I2	1X4 2L SOLID REFL.INDUSTRIAL OPEN- NO SHIELDING COLUMBIA CSR240-PAF-EOCT	FO32/35K EOCT	000 - 60	2	New
R2	WRAPAROUND ACRYLIC LENS NORMAL BEAM REFLECTOR METALOPTICS WESN4LNACLO42EP11	FO32/35K EOCT	000 - 60	27	
RR	2X4 ACRYLIC LENSED TROFFER SILVER REFLECTOR RETROFIT METALOPTICS 24TRSO42EP11	FO32/35K EOCT	000 - 61	4	Upgrade
W2	10"X4'2L CEILING MT.WRAPAROUND LENS- PRISMATIC W/ GLOW ENDS COLUMBIA WC240-A	FO32/35K EOCT	000 - 60	7	New
WL	4' WRAPAROUND FIXTURE REFLECTOR AND ACRYLIC LENS METALOPTICS WRSN4STACLO42EP11	FO32/35K EOCT	000 - 61	52	New

NOTES:

10-020A Schedule

Reynolds, Smith & Hills, Inc.
4651 Salisbury Road
Jacksonville, FL 32256
Buildings Engineering

Luminaire Fixture Schedule
Generated by LitePro V2.27E
Provided and supported by USI Lighting, Inc.
Filename: 10-020A Type: Indoor

Luminaire Fixture Schedule PROPOSED

Project name: PBA LIGHTING SURVEY - BLDG 10-020	Project #6941331
Prepared for: CORP OF ENGINEERS	Date: 27-Feb-95
Prepared by: R. SHARMA	UPD: 0.8W/Sq.Ft

TYPE	DESCRIPTION	LAMP/BALLAST	V/W	QTY	REMARKS
R2	WRAPAROUND LENS NORMAL BEAM REFLECTOR METALOPTICS WESN4LNACLO42EP11	FO32/35K EOCT	000 - 52	19	
M	3"X4' 1L SM HSG SURFACE STRIP OPEN BOTTOM- NO SHIELDING COLUMBIA CH140	FO32/31K EOCT	000 - 35	1	New
W2	10"X4'2L CEILING MT.WRAPAROUND LENS- PRISMATIC W/ GLOW ENDS COLUMBIA WC240-A	FO32/35K EOCT	000 - 60	12	New
WL	4' WRAPAROUND FIXTURE REFLECTOR AND ACRYLIC LENS METALOPTICS WRSN4STACLO42EP11	FO32/35K EOCT	000 - 61	60	New

NOTES:

Reynolds, Smith & Hills, Inc.
4651 Salisbury Road
Jacksonville, FL 32256
Buildings Engineering

Project Area Summary
Generated by LitePro V2.27E
Provided and supported by USI Lighting, Inc.
Filename: 10-020 Type: Indoor

Project Area Summary

Project name: PBA LIGHTING SURVEY - BLDG 10-020	Project #6941331
Prepared for: CORP OF ENGINEERS	Date: 1-Mar-95
Prepared by: R. SHARMA	UPD: 2.0W/Sq.Ft

AREA NAME	DIMENSIONS	LUMINAIRES	W/SQ.FT	QTY
BREAK ROOM - N	30x21x9Ft	(4) Type H2	0.7	1
BREAK ROOM ORIG	30x21x9Ft	(4) Type H1 (2) Type H3	1.4	1
ENDING	15x9x9Ft	(3) Type M4	2.1	1
ENDING NEW	15x9x9Ft	(2) Type I2	0.9	1
RM. 100	13x17x8Ft	(4) Type M3	3.5	1
RM. 100-N	13x17x8Ft	(4) Type WL	1.1	1
RM. 101	13x14x8Ft	(4) Type M3	4.2	1
RM. 101-N	13x14x8Ft	(4) Type R2	1.3	1
RM. 103	13x13x8Ft	(4) Type M3	4.5	1
RM. 103-N	13x13x8Ft	(4) Type R2	1.4	1
RM. 106	18x12x9Ft	(4) Type B1	2.9	1
RM. 106-N	18x12x9Ft	(4) Type WL	1.1	1
RM. 107	37x13x9Ft	(10) Type B1	3.3	1
RM. 107-N	37x13x9Ft	(8) Type R2	1.0	1
RM. 112	14x18x9Ft	(6) Type M3	4.6	1
RM. 112-N	14x18x9Ft	(4) Type WL	1.0	1
HALLWAY	6x32x9Ft	(4) Type M3	4.0	1
HALLWAY-N	6x32x9Ft	(5) Type CF	1.5	1

M. 115	14x18x8Ft	(6) Type M3	4.6	1
RM. 115-N	14x18x8Ft	(4) Type WL	1.0	1
RM. 117	18x13x9Ft	(1) Type B1 (5) Type M3	4.8	1
RM. 117-N	18x13x9Ft	(4) Type WL	1.0	1
RM. 201/203	21x18x8Ft	(6) Type M3	3.0	1
RM. 201/203-N	21x18x8Ft	(5) Type WL	0.8	1
ROOM 202	22x14x8Ft	(4) Type F	2.1	1
ROOM 202-N	22x14x8Ft	(4) Type RR	0.8	1
ROOM 205	21x14x9Ft	(7) Type M3	4.6	1
ROOM 205-N	21x14x9Ft	(7) Type R2	1.4	1
RM. 206	28x14x8Ft	(6) Type B1	2.4	1
RM. 206-N	28x14x8Ft	(6) Type WL	0.9	1
RM. 207	20x14x9Ft	(4) Type M2	2.7	1
M. 207-N	20x14x9Ft	(4) Type WL	0.9	1
RM. 209	21x14x9Ft	(4) Type M2	2.6	1
RM. 209-N	21x14x9Ft	(4) Type WL	0.8	1
RM. 215	19x14x9Ft	(6) Type M3	4.3	1
RM. 215-N	19x14x9Ft	(6) Type W2	1.4	1
RM. 213/216	25x33x9Ft	(1) Type B1 (6) Type M3	1.6	1
RM. 213/216-N	25x33x9Ft	(7) Type WL	0.5	1
RM. 217	12x19x9Ft	(4) Type M3	3.4	1
RM. 217-N	12x19x9Ft	(4) Type R2	1.1	1
RM. 221	19x15x9Ft	(4) Type M3	2.8	1
RM. 221-N	19x15x9Ft	(4) Type WL	0.9	1
CASHIER	15x10x9Ft	(2) Type B1 (1) Type M4	2.9	1
CASHIER-N	15x10x9Ft	(1) Type W2 (2) Type WL	1.3	1

10-020A Areas

Reynolds, Smith & Hills, Inc.
4651 Salisbury Road
Jacksonville, FL 32256
Buildings Engineering

Project Area Summary
Generated by LitePro V2.27E
Provided and supported by USI Lighting, Inc.
Filename: 10-020A Type: Indoor

Project Area Summary

Project name: PBA LIGHTING SURVEY - BLDG 10-020	Project #6941331
Prepared for: CORP OF ENGINEERS	Date: 1-Mar-95
Prepared by: R. SHARMA	UPD: 1.9W/Sq.Ft

AREA NAME	DIMENSIONS	LUMINAIRES	W/SQ.FT	QTY
RM. 223 & 229	15x51x9Ft	(12) Type B1	2.5	1
RM. 223/229-N	15x51x9Ft	(12) Type R2	0.8	1
RM. 228	15x9x9Ft	(2) Type M3	2.8	1
RM. 228-N	15x9x9Ft	(2) Type WL	0.9	1
RM. 231	15x15x9Ft	(2) Type M3	1.7	1
RM. 231-N	15x15x9Ft	(3) Type WL	0.8	1
OPEN OFFICE-232	23x43x9Ft	(10) Type M3	2.0	1
OPEN OFF. 232-N	23x43x9Ft	(10) Type WL	0.6	1
RM. 263	16x18x9Ft	(5) Type M3	3.4	1
RM. 263-N	16x18x9Ft	(2) Type W2 (3) Type WL	1.1	1
RM. 265	14x18x9Ft	(4) Type M3	3.2	1
RM. 265-N	14x18x9Ft	(4) Type R2	0.9	1
RM. 266	34x15x9Ft	(8) Type M3	3.1	1
RM. 266-N	34x15x9Ft	(8) Type WL	1.0	1
RM. 267	15x14x9Ft	(4) Type M3	3.8	1
RM. 267-N	15x14x9Ft	(4) Type WL	1.2	1
RM. 269	27x14x9Ft	(6) Type M3	3.1	1
RM. 269-N	27x14x9Ft	(6) Type WL	1.0	1

RM. 270	23x15x9Ft	(6) Type M3	3.5	1
RM. 270-N	23x15x9Ft	(3) Type R2 (3) Type WL	1.0	1
RM. 282	19x14x9Ft	(4) Type M2	2.9	1
RM. 282-N	19x14x9Ft	(4) Type WL	0.9	1
RM. 284	15x11x8Ft	(2) Type M3	2.3	1
RM. 284-N	15x11x8Ft	(2) Type WL	0.7	1
RM. 286B	15x13x9Ft	(3) Type M2 (1) Type M4	3.4	1
RM. 286B-N	15x13x9Ft	(3) Type WL	0.9	1
RM. 288	15x25x9Ft	(7) Type B1	3.0	1
RM. 288-N	15x25x9Ft	(6) Type WL	1.0	1
RM. 289	15x9x9Ft	(2) Type A	1.2	1
RM. 289-N	15x9x9Ft	(1) Type SM	0.3	1
RM. 292A	15x16x9Ft	(4) Type M3	3.2	1
RM. 292A-N	15x16x9Ft	(4) Type WL	1.0	1
RM. 292	15x10x9Ft	(1) Type A (1) Type M3	1.9	1
RM. 292-N	15x10x9Ft	(2) Type WL	0.9	1
RM. 290	22x43x9Ft	(18) Type M3	3.7	1
RM. 290-N	22x43x9Ft	(10) Type W2	0.6	1

NOTES:

10-020 Calculations

Reynolds, Smith & Hills, Inc.
4651 Salisbury Road
Jacksonville, FL 32256
Buildings Engineering

Project Calculation Summary
Generated by LitePro V2.27E
Provided and supported by USI Lighting, Inc.
Filename: 10-020 Type: Indoor

Project Calculation Summary

Project name: PBA LIGHTING SURVEY - BLDG 10-020	Project #6941331
Prepared for: CORP OF ENGINEERS	Date: 1-Mar-95
Prepared by: R. SHARMA	UPD: 2.0W/Sq.Ft

AREA NAME	DIMENSIONS	GRID NAME	AVE	MAX	MIN
BREAK ROOM - N	30x21x9Ft	GRID	<+> 20.8	38.9	5.2
BREAK ROOM ORIG	30x21x9Ft	GRID	<+> 26.8	40.3	11.5
VENDING	15x9x9Ft	GRID	<+> 18.9	25.9	8.1
VENDING NEW	15x9x9Ft	GRID C.U. CALC	<+> 24.1 24.4	35.1 ---	9.2 ---
RM. 100	13x17x8Ft	GRID	<+> 47.7	65.4	13.4
RM. 100-N	13x17x8Ft	GRID	<+> 49.7	74.7	13.3
RM. 101	13x14x8Ft	GRID	<+> 53.3	75.4	16.7
RM. 101-N	13x14x8Ft	GRID	<+> 46.0	69.1	15.5
RM. 103	13x13x8Ft	GRID	<+> 58.7	80.8	18.3
RM. 103-N	13x13x8Ft	GRID	<+> 50.4	70.4	17.4
RM. 106	18x12x9Ft	GRID	<+> 61.8	90.6	27.2
RM. 106-N	18x12x9Ft	GRID	<+> 44.0	65.9	17.7
RM. 107	37x13x9Ft	GRID	<+> 77.9	101.8	26.9
RM. 107-N	37x13x9Ft	GRID	<+> 40.0	58.6	8.9
RM. 112	14x18x9Ft	GRID	<+> 52.8	71.1	21.3
RM. 112-N	14x18x9Ft	GRID	<+> 39.5	62.0	11.4
HALLWAY	6x32x9Ft	GRID	<+> 36.5	51.9	13.6

ALLWAY-N	6x32x9Ft	GRID	<+>	10.5	14.7	3.8
RM. 115	14x18x8Ft	GRID	<+>	76.3	112.9	42.4
RM. 115-N	14x18x8Ft	GRID	<+>	41.9	72.1	10.1
RM. 117	18x13x9Ft	GRID	<+>	57.3	79.8	28.4
RM. 117-N	18x13x9Ft	GRID	<+>	43.0	67.2	12.6
RM. 201/203	21x18x8Ft	GRID	<+>	39.3	79.3	0.6
RM. 201/203-N	21x18x8Ft	GRID	<+>	38.8	73.3	0.3
ROOM 202	22x14x8Ft	Ceiling	<+>	59.6	91.3	25.2
ROOM 202-N	22x14x8Ft	Ceiling	<+>	47.4	76.1	21.0
ROOM 205	21x14x9Ft	Ceiling	<+>	66.8	77.2	42.6
ROOM 205-N	21x14x9Ft	Ceiling	<+>	56.2	65.1	34.8
RM. 206	28x14x8Ft	GRID	<+>	58.4	91.6	12.6
RM. 206-N	28x14x8Ft	GRID	<+>	42.8	74.0	8.2
RM. 207	20x14x9Ft	GRID	<+>	65.8	96.5	19.2
RM. 207-N	20x14x9Ft	GRID	<+>	37.2	61.0	7.9
RM. 209	21x14x9Ft	GRID	<+>	66.0	95.8	19.1
RM. 209-N	21x14x9Ft	GRID	<+>	37.2	61.0	7.9
RM. 215	19x14x9Ft	GRID	<+>	77.2	106.7	29.9
RM. 215-N	19x14x9Ft	GRID	<+>	39.7	57.6	13.9
RM. 213/216	25x33x9Ft	GRID	<+>	23.2	48.8	0.0
RM. 213/216-N	25x33x9Ft	GRID	<+>	24.2	61.8	0.0
RM. 217	12x19x9Ft	GRID	<+>	55.7	75.9	20.2
RM. 217-N	12x19x9Ft	GRID	<+>	44.6	65.9	14.5
RM. 221	19x15x9Ft	GRID	<+>	40.4	54.2	17.3
RM. 221-N	19x15x9Ft	GRID	<+>	39.7	66.6	9.5
CASHIER	15x10x9Ft	GRID	<+>	61.5	91.1	29.0
CASHIER-N	15x10x9Ft	GRID	<+>	44.1	72.3	15.8

10-020A Calculations

Reynolds, Smith & Hills, Inc.
4651 Salisbury Road
Jacksonville, FL 32256
Buildings Engineering

Project Calculation Summary
Generated by LitePro V2.27E
Provided and supported by USI Lighting, Inc.
Filename: 10-020A Type: Indoor

Project Calculation Summary

Project name: PBA LIGHTING SURVEY - BLDG 10-020	Project #6941331
Prepared for: CORP OF ENGINEERS	Date: 1-Mar-95
Prepared by: R. SHARMA	UPD: 1.9W/Sq.Ft

AREA NAME	DIMENSIONS	GRID NAME	AVE	MAX	MIN
RM. 223 & 229	15x51x9Ft	GRID	<+> 70.0	97.9	7.8
RM. 223/229-N	15x51x9Ft	GRID	<+> 42.3	60.1	5.2
RM. 228	15x9x9Ft	GRID	<+> 47.2	65.6	16.8
RM. 228-N	15x9x9Ft	GRID	<+> 35.7	60.3	10.0
RM. 231	15x15x9Ft	GRID	<+> 31.3	52.6	8.7
RM. 231-N	15x15x9Ft	GRID	<+> 36.3	76.7	6.8
OPEN OFFICE-232	23x43x9Ft	GRID	<+> 46.4	62.2	12.5
OPEN OFF. 232-N	23x43x9Ft	GRID	<+> 34.6	57.9	6.5
RM. 263	16x18x9Ft	GRID	<+> 49.5	73.0	13.4
RM. 263-N	16x18x9Ft	GRID	<+> 43.4	64.0	10.1
RM. 265	14x18x9Ft	GRID	<+> 41.8	73.6	9.3
RM. 265-N	14x18x9Ft	GRID	<+> 35.7	65.0	6.5
RM. 266	34x15x9Ft	GRID	<+> 45.4	61.1	13.4
RM. 266-N	34x15x9Ft	GRID	<+> 45.7	65.0	11.0
RM. 267	15x14x9Ft	GRID	<+> 44.7	67.2	15.7
RM. 267-N	15x14x9Ft	GRID	<+> 46.8	68.0	13.1
RM. 269	27x14x9Ft	GRID	<+> 43.2	66.6	12.5
RM. 269-N	27x14x9Ft	GRID	<+> 43.7	76.3	9.6

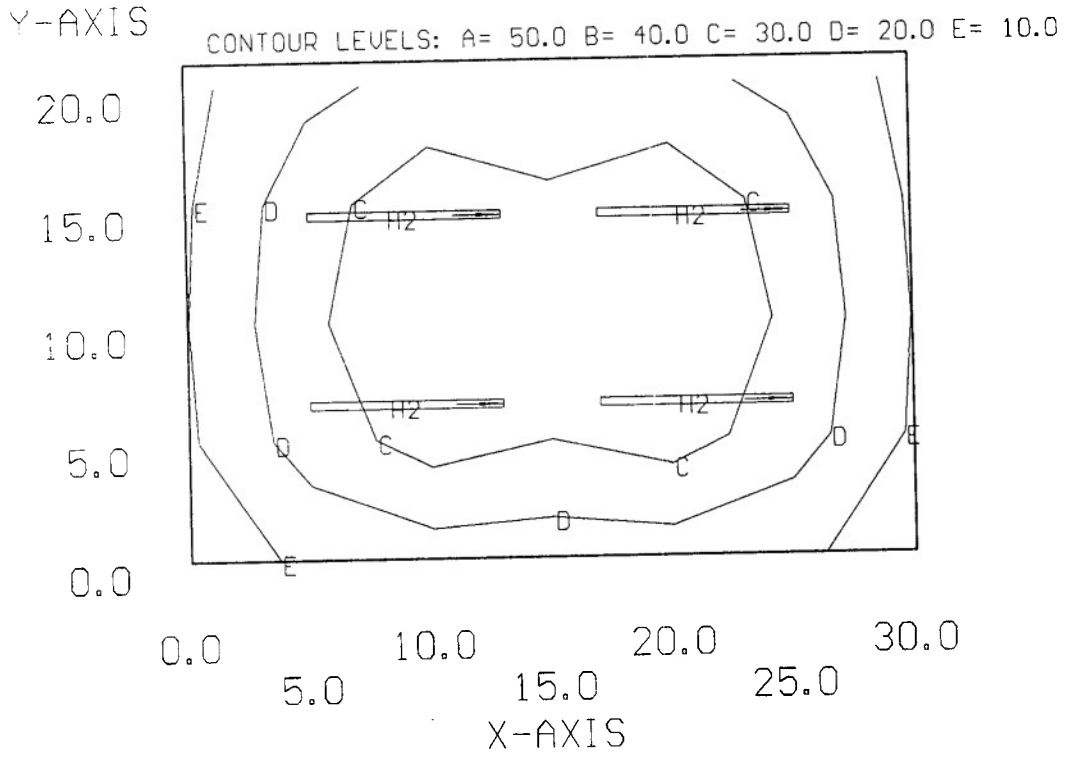
RM. 270	23x15x9Ft	GRID	<+>	48.3	68.4	15.3
RM. 270-N	23x15x9Ft	GRID	<+>	44.9	69.4	10.9
RM. 282	19x14x9Ft	GRID	<+>	63.3	95.4	18.3
RM. 282-N	19x14x9Ft	GRID	<+>	39.4	66.7	10.0
RM. 284	15x11x8Ft	GRID	<+>	42.5	65.9	13.6
RM. 284-N	15x11x8Ft	GRID	<+>	33.8	72.2	6.9
RM. 286B	15x13x9Ft	GRID	<+>	58.4	90.7	20.9
RM. 286B-N	15x13x9Ft	GRID	<+>	40.0	75.3	9.6
RM. 288	15x25x9Ft	GRID	<+>	58.6	90.3	12.6
RM. 288-N	15x25x9Ft	GRID	<+>	45.2	66.7	9.6
RM. 289	15x9x9Ft	GRID	<+>	26.5	35.0	11.0
RM. 289-N	15x9x9Ft	GRID	<+>	5.8	10.1	1.8
RM. 292A	15x16x9Ft	GRID	<+>	40.0	51.2	16.7
RM. 292A-N	15x16x9Ft	GRID	<+>	46.7	64.4	17.2
RM. 292	15x10x9Ft	GRID	<+>	27.9	38.9	10.9
RM. 292-N	15x10x9Ft	GRID	<+>	33.3	53.3	9.7
RM. 290	22x43x9Ft	GRID	<+>	61.3	82.8	13.9
RM. 290-N	22x43x9Ft	GRID	<+>	22.6	36.2	3.4

NOTES:

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 09:21 15-Feb-95
PROJECT: 10-020 AREA: BREAK ROOM GRID: GRID
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=5.23 MAX=38.9 AVE=20.8 AVE/MIN= 3.98 MAX/MIN= 7.44

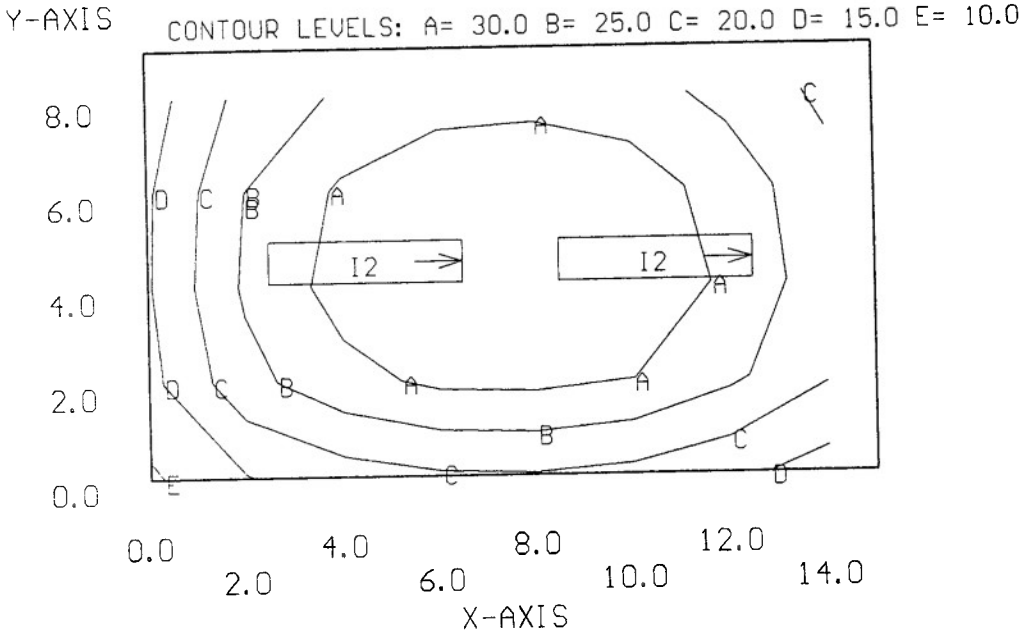
H2 <4> = K7994 COLUMBIA CS296, (2) F096/735, LLF= 0.59



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 10:03 15-Feb-95
PROJECT: 10-020 AREA: VENDING NEW GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=9.21 MAX=35.1 AVE=24.1 AVE/MIN= 2.62 MAX/MIN= 3.81

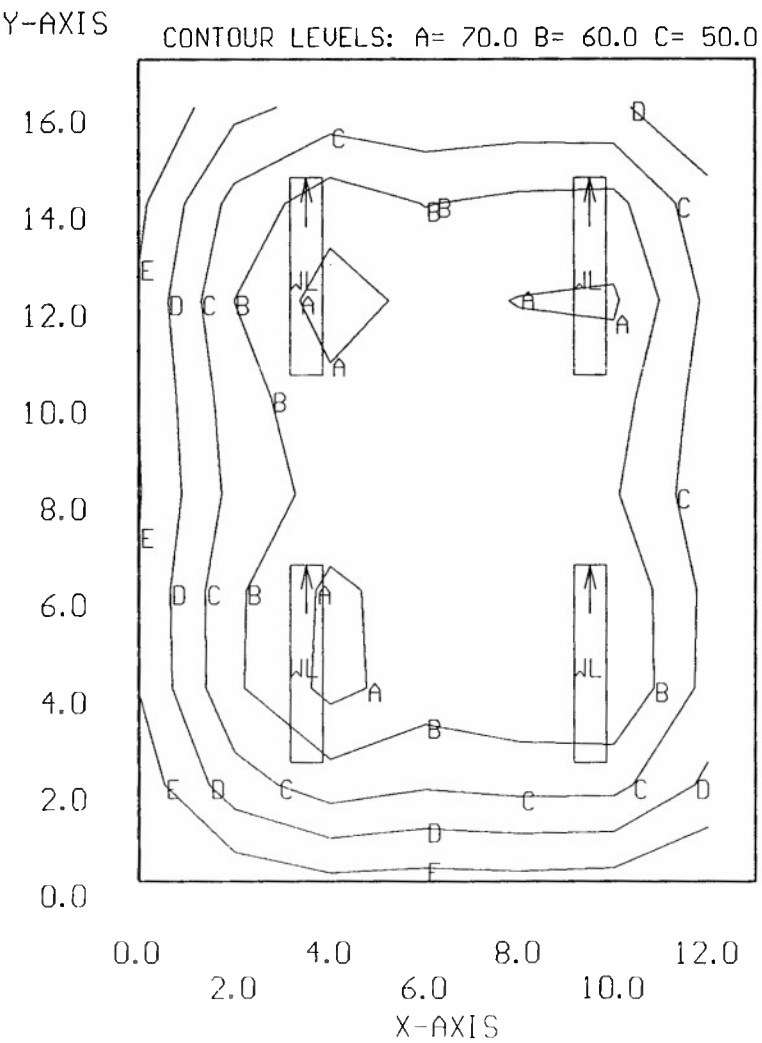
I2 <2> = 10331 COLUMBIA CSR240-PAF-EOCT, (2) F032/35K, LLF= 0.58



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 16:52 24-Feb-95
PROJECT: 10-020 AREA: RM. 100-N GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=13.3 MAX=74.7 AVE=49.7 AVE/MIN= 3.73 MAX/MIN= 5.60

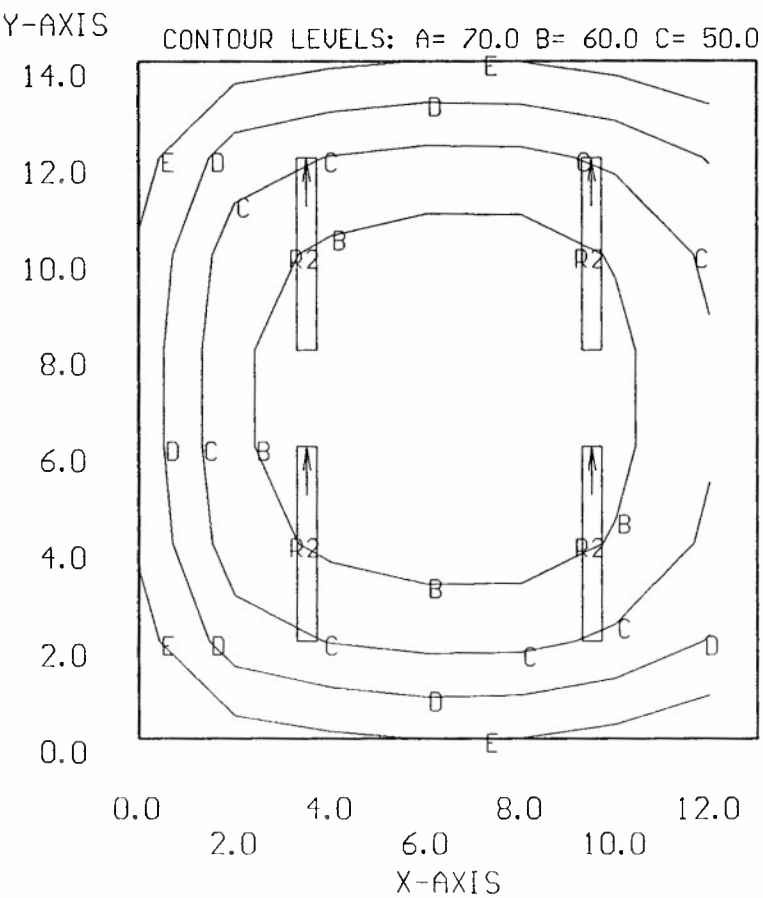
WL <4> = T9939 METALOPTICS WRSN4STACL042EP11, (2) F032/35K, LLF= 0.79



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 16:59 24-Feb-95
PROJECT: 10-020 AREA: RM. 101-N GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=15.5 MAX=69.1 AVE=46.0 AVE/MIN= 2.98 MAX/MIN= 4.47

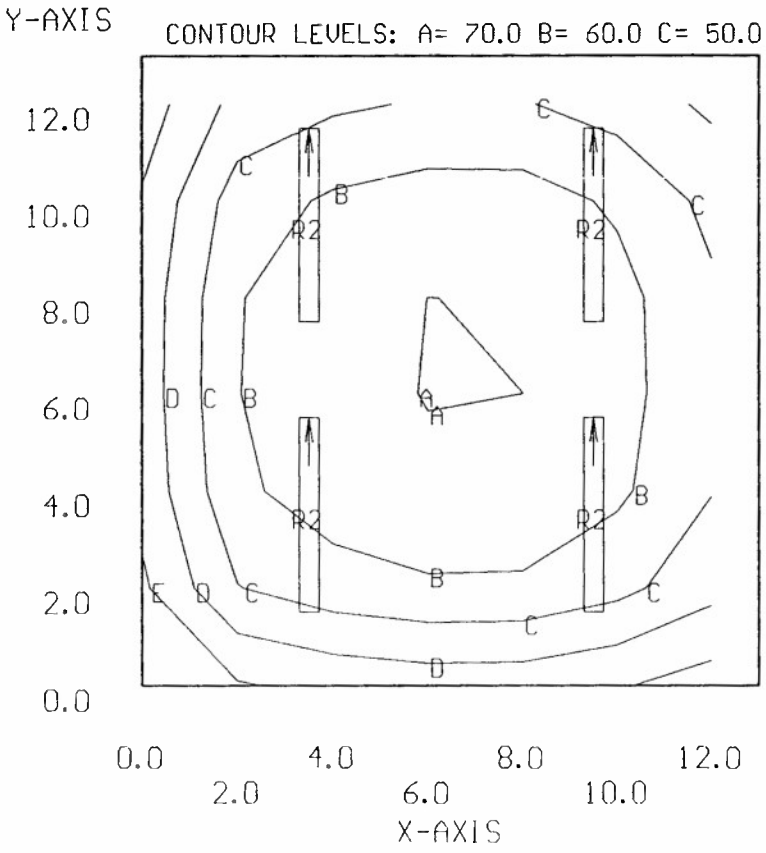
R2 (4) = T11619 METALOPTICS WESN4LNACL042EP11, (2) F032/35K, LLF= 0.79



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 17:05 24-Feb-95
PROJECT: 10-020 AREA: RM. 103-N GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=17.4 MAX=70.4 AVE=50.4 AVE/MIN= 2.89 MAX/MIN= 4.04

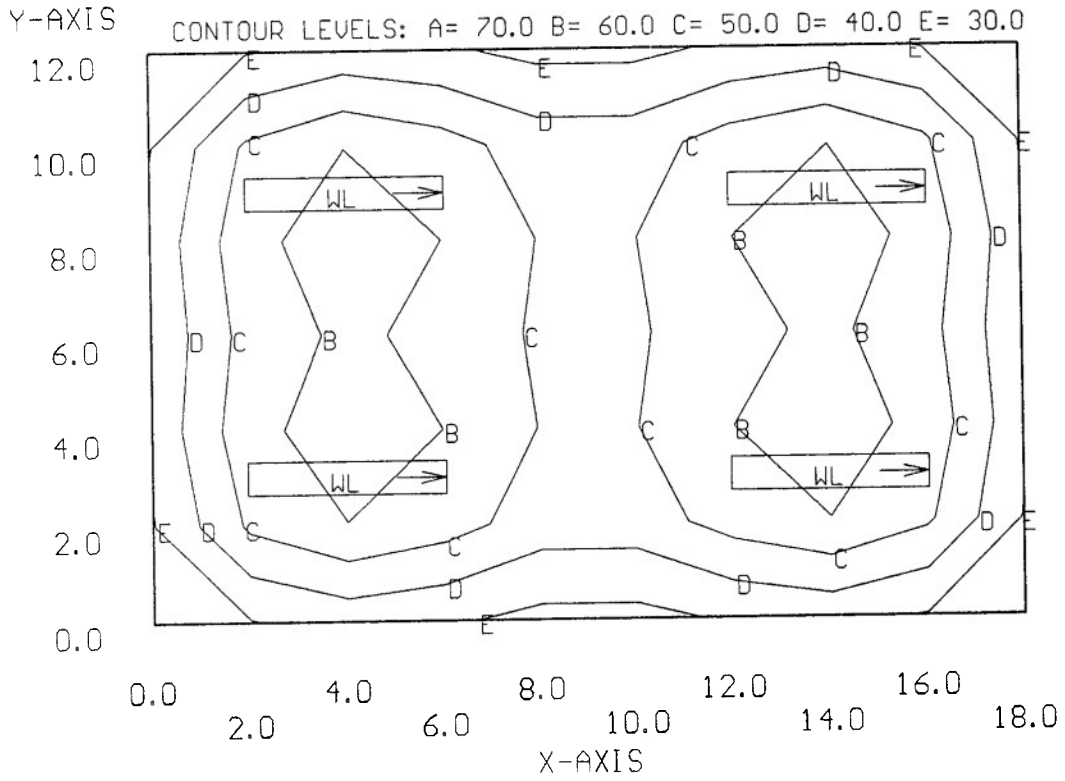
R2 (4) = T11619 METALOPTICS WESN4LNACL042EP11, (2) F032/35K, LLF= 0.79



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 17:08 24-Feb-95
PROJECT: 10-020 AREA: RM. 106-N GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=17.7 MAX=65.9 AVE=44.0 AVE/MIN= 2.49 MAX/MIN= 3.73

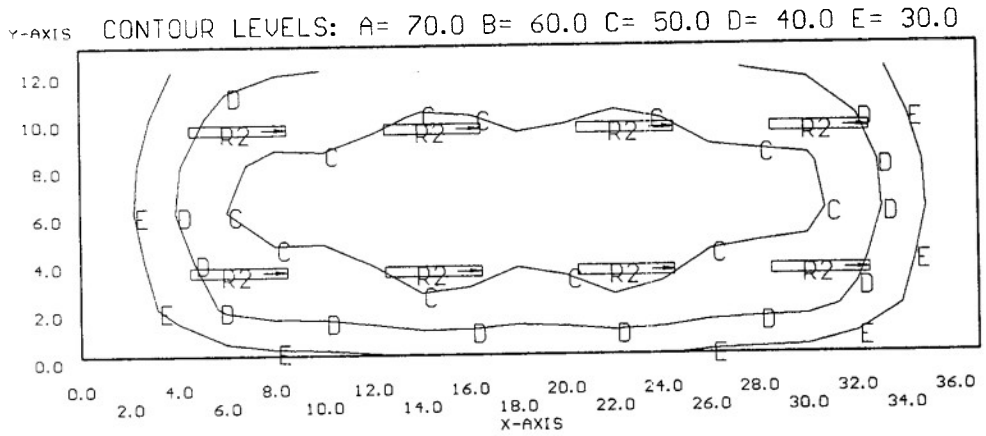
WL <4> = T9939 METALOPTICS WRSN4STACL042EP11, (2) F032/35K, LLF= 0.79



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 17:12 24-Feb-95
PROJECT: 10-020 AREA: RM. 107-N GRID: GRID
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=8.95 MAX=58.6 AVE=40.0 AVE/MIN= 4.47 MAX/MIN= 6.55

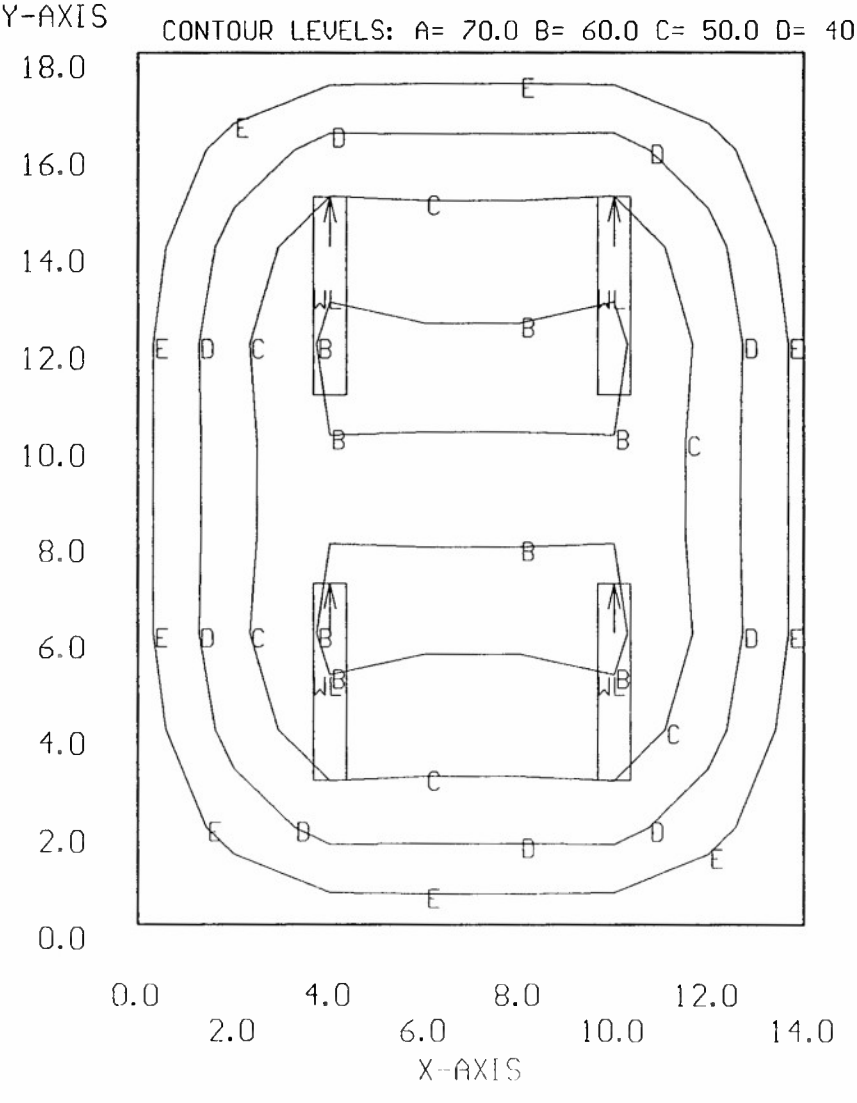
R2 <8> = T11619 METALOPTICS WESN4LNACL042EP11, (2) F032/35K, LLF= 0.79



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 17:14 24-Feb-95
PROJECT: 10-020 AREA: RM. 112-N GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=11.4 MAX=62.0 AVE=39.5 AVE/MIN= 3.46 MAX/MIN= 5.43

WL <4> = T9939 METALOPTICS WRSN4STACL042EP11, (2) F032/35K, LLF= 0.79

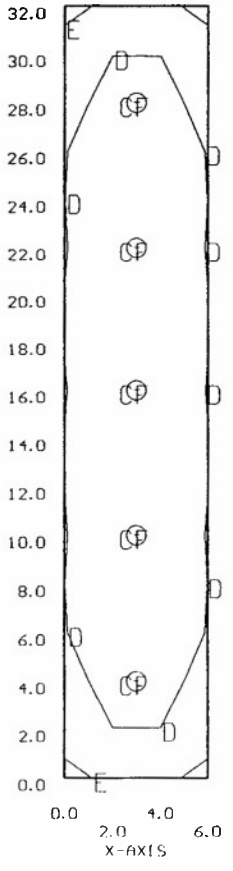


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 16:03 15-Feb-95
PROJECT: 10-020 AREA: HALLWAY-N GRID: GRID
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=3.85 MAX=14.7 AVE=10.5 AVE/MIN= 2.73 MAX/MIN= 3.81

CF (5) = B2354B PRESCOLITE CFS1026-782-SL10, (2) F26DTT/27K, LLF= 0.47

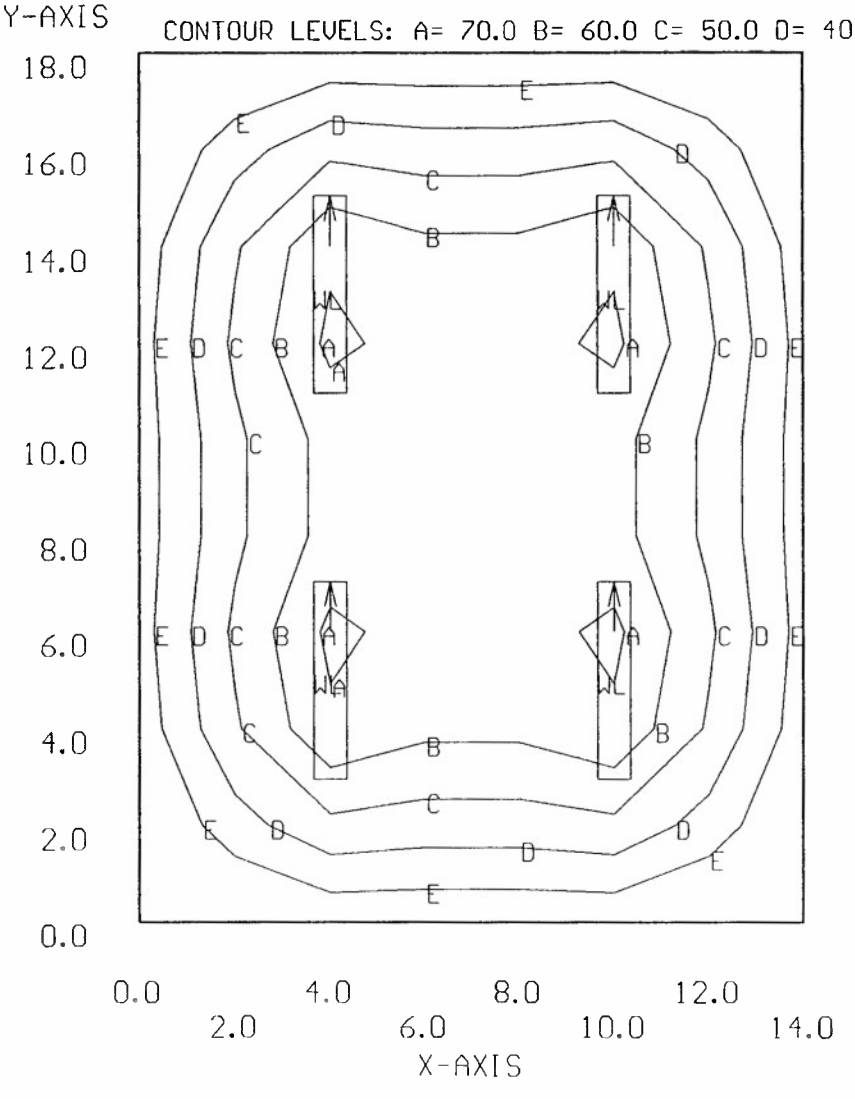
Y-AXIS CONTOUR LEVELS: A= 25.0 B= 20.0 C= 15.0 D= 10.0 E= 5.00



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 17:45 24-Feb-95
PROJECT: 10-020 AREA: RM. 115-N GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=10.1 MAX=72.1 AVE=41.9 AVE/MIN= 4.14 MAX/MIN= 7.13

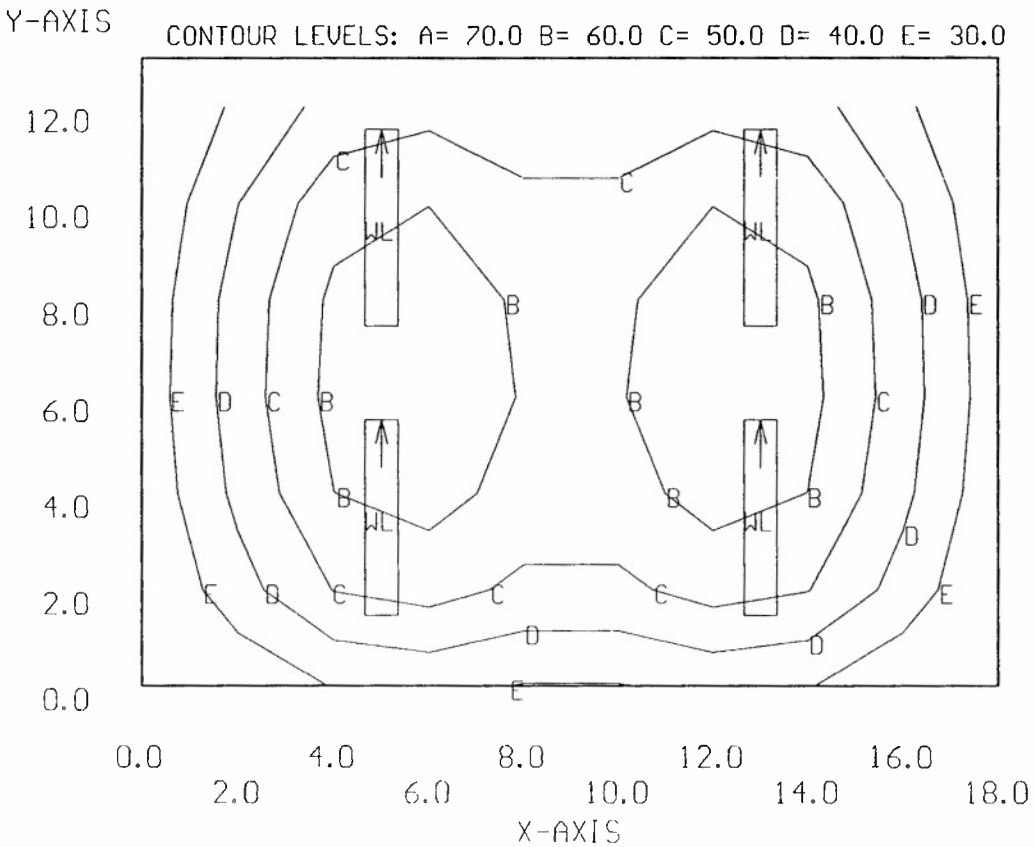
WL (4) = T9939 METALOPTICS WRSN4STACL042EP11, (2) F032/35K, LLF= 0.79



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 14:30 25-Feb-95
PROJECT: 10-020 AREA: RM. 117-N GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=12.6 MAX=67.2 AVE=43.0 AVE/MIN= 3.42 MAX/MIN= 5.34

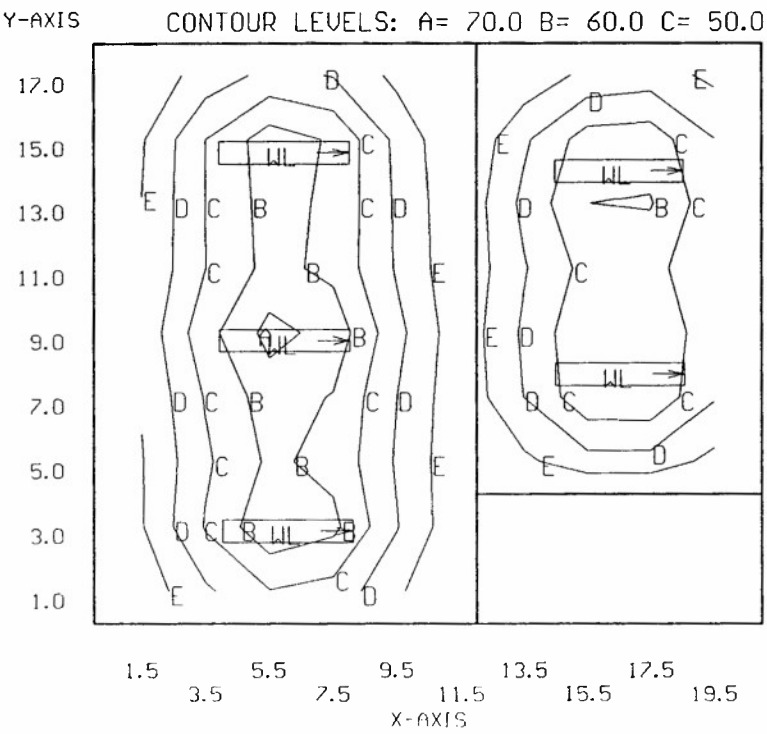
WL (4) = T9939 METALOPTICS WRSN4STACL042EP11, (2) F032/35K, LLF= 0.79



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 14:39 25-Feb-95
PROJECT: 10-020 AREA: RM. 201/203-N GRID: GRID
Values are FC, SCALE: 1 IN= 6.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=0.34 MAX=73.3 AVE=38.8 AVE/MIN= 113.23 MAX/MIN= 213.82

WL (5) = T9939 METALOPTICS WRSN4STACL042EP11, (2) F032/35K, LLF= 0.79

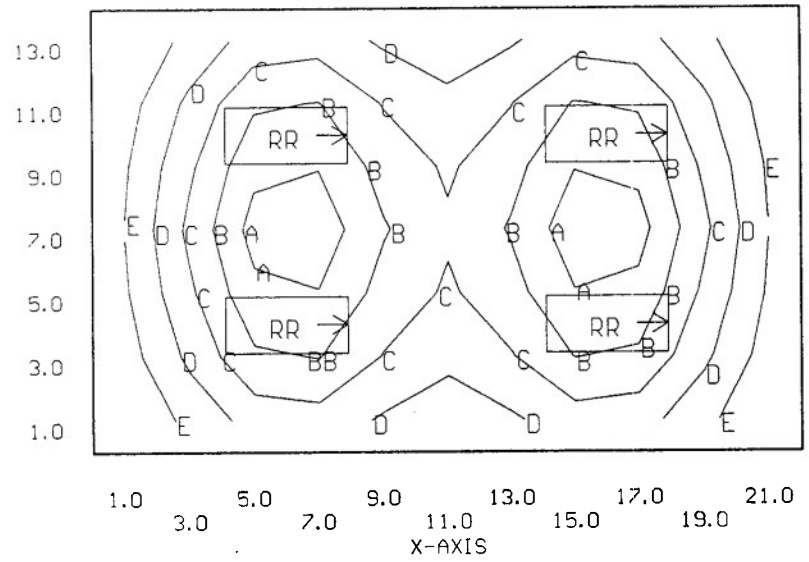


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:35 27-Feb-95
PROJECT: 10-020 AREA: ROOM 202-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 6.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=21.0 MAX=76.1 AVE=47.4 AVE/MIN= 2.25 MAX/MIN= 3.61

RR (4) = T10618 METALOPTICS 24TRS042EP11, (2) F032/35K, LLF= 0.79

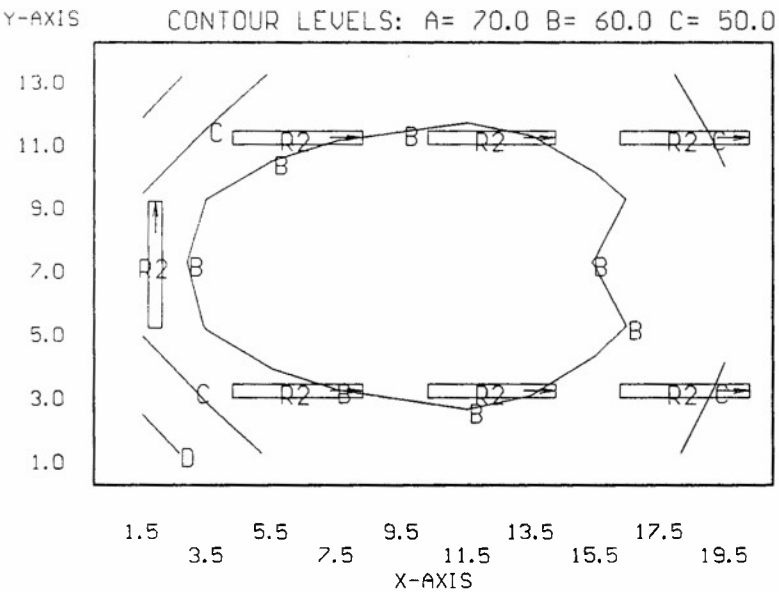
Y-AXIS CONTOUR LEVELS: A= 70.0 B= 60.0 C= 50.0 D= 40.0 E= 30.0



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 14:56 27-Feb-95
PROJECT: 10-020 AREA: ROOM 205-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 6.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=34.8 MAX=65.1 AVE=56.2 AVE/MIN= 1.61 MAX/MIN= 1.87

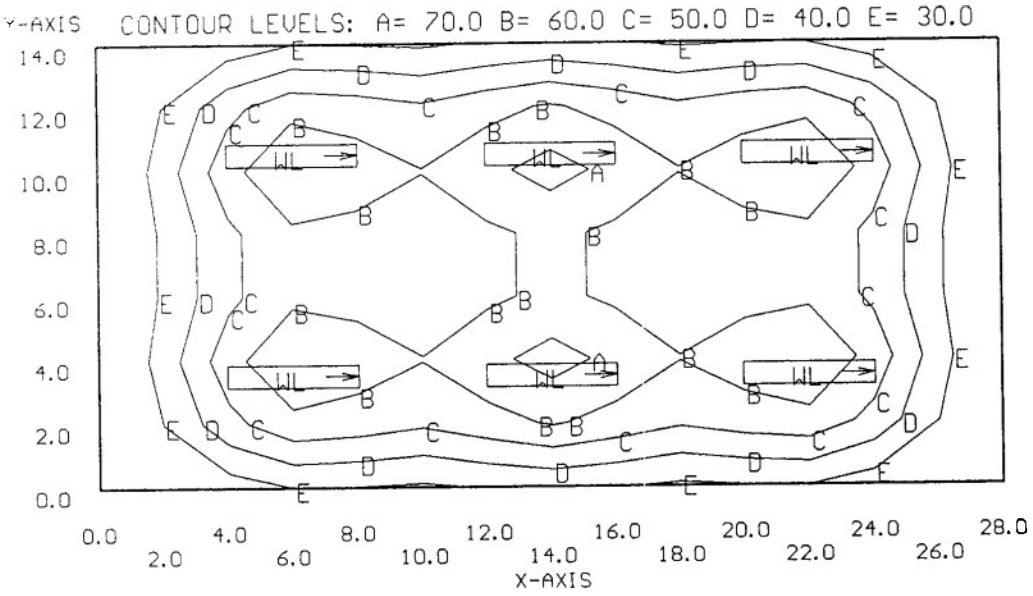
R2 (7) = T11619 METALOPTICS WESN4LNACL042EP11, (2) F032/35K, LLF= 0.79



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:21 27-Feb-95
PROJECT: 10-020 AREA: RM. 206-N GRID: GRID
Values are FC, SCALE: 1 IN= 6.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=8.17 MAX=74.0 AVE=42.8 AVE/MIN= 5.24 MAX/MIN= 9.06

WL (6) = T9939 METALOPTICS WRSN4STACL042EP11, (2) F032/35K, LLF= 0.79

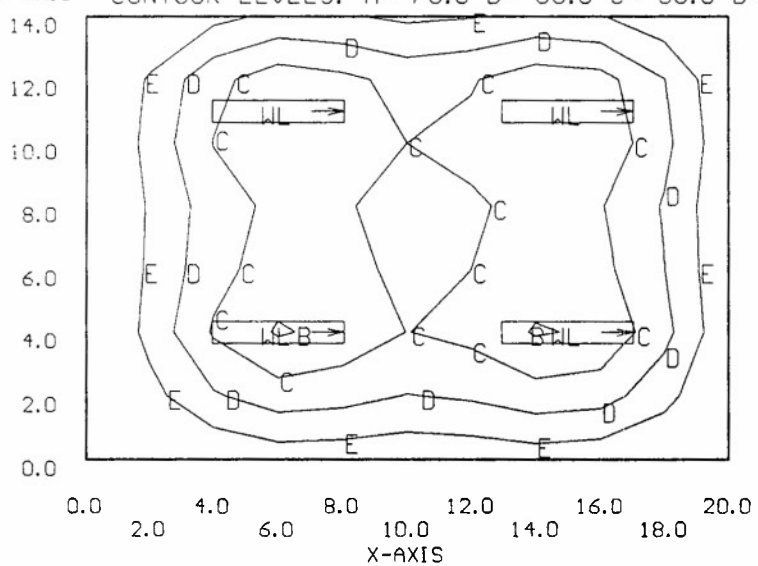


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:02 27-Feb-95
PROJECT: 10-020 AREA: RM. 207-N GRID: GRID
Values are FC, SCALE: 1 IN= 6.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=7.92 MAX=61.0 AVE=37.2 AVE/MIN= 4.70 MAX/MIN= 7.71

WL (4) = T9939 METALOPTICS WRSN4STACL042EP11, (2) FO32/35K, LLF= 0.79

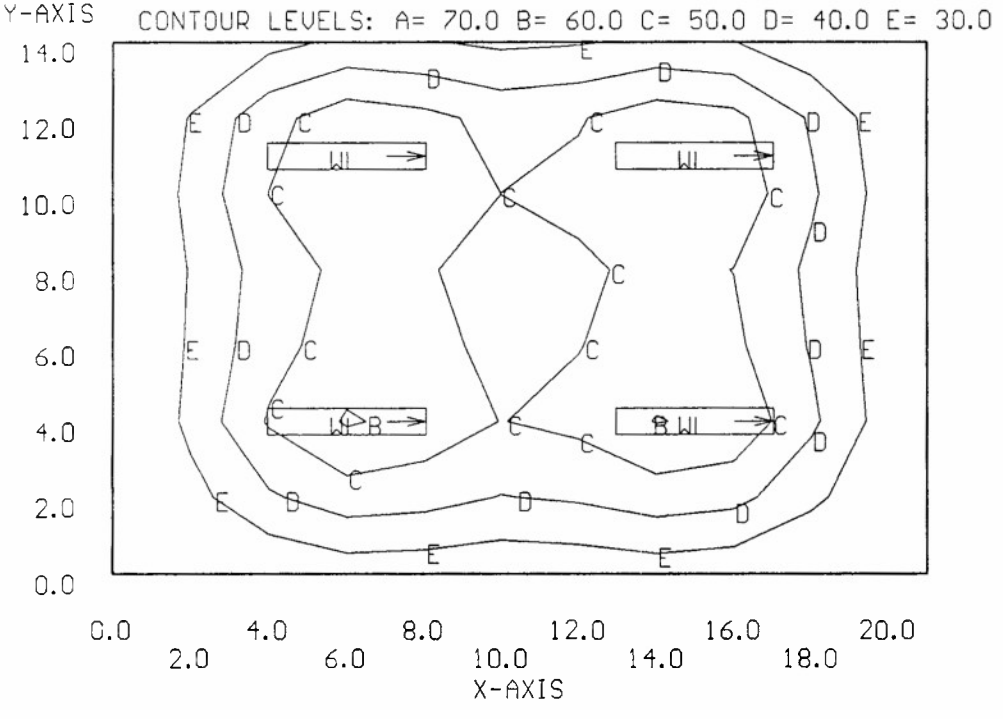
Y-AXIS CONTOUR LEVELS: A= 70.0 B= 60.0 C= 50.0 D= 40.0 E= 30.0



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 16:40 24-Feb-95
PROJECT: 10-020 AREA: RM. 209-N GRID: GRID
Values are FC, SCALE: 1 IN= 5.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=7.87 MAX=61.0 AVE=37.2 AVE/MIN= 4.73 MAX/MIN= 7.75

WL <4> = T9939 METALOPTICS WRSN4STACL042EP11, (2) F032/35K, LLF= 0.79

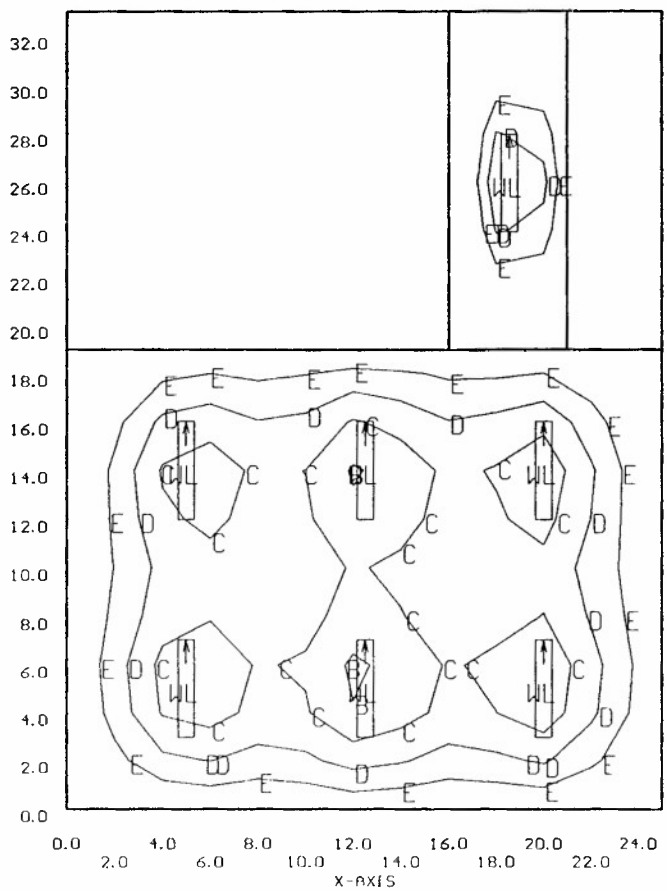


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 14:42 25-Feb-95
PROJECT: 10-020 AREA: RM. 213/216-N GRID: GRID
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=0.00 MAX=61.8 AVE=24.2 AVE/MIN=N/A MAX/MIN=N/A

WL (7) = T9939 METALOPTICS WRSN4STACL042EP11, (2) F032/35K, LLF= 0.79

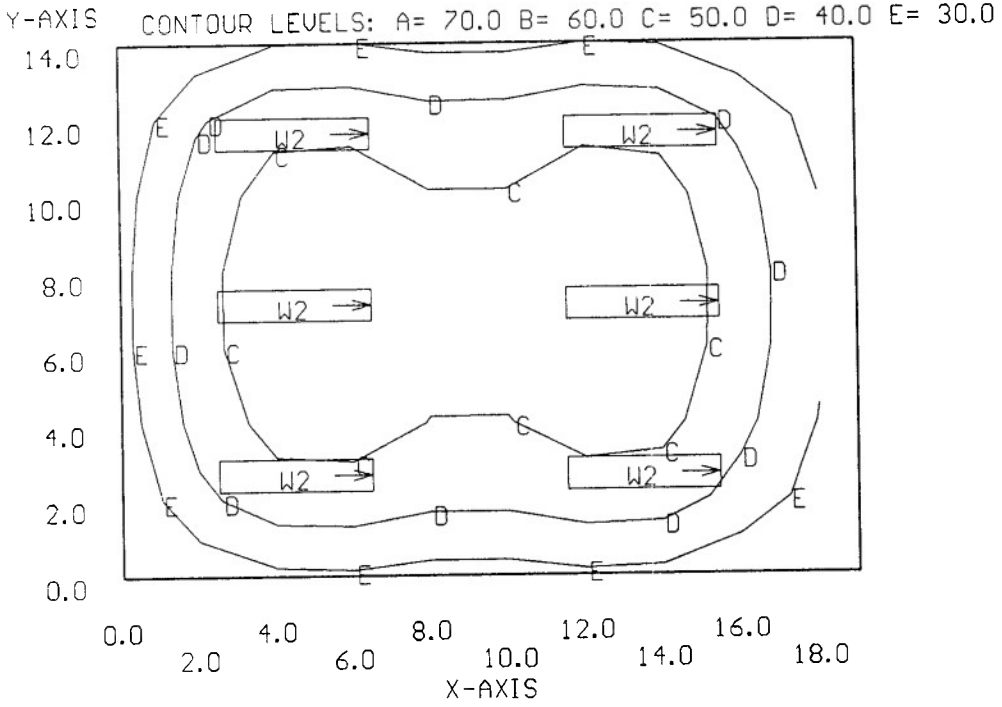
Y-AXIS CONTOUR LEVELS: A= 70.0 B= 60.0 C= 50.0 D= 40.0 E= 30.0



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:28 24-Feb-95
PROJECT: 10-020 AREA: RM. 215-N GRID: GRID
Values are FC, SCALE: 1 IN= 5.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=13.9 MAX=57.6 AVE=39.7 AVE/MIN= 2.86 MAX/MIN= 4.15

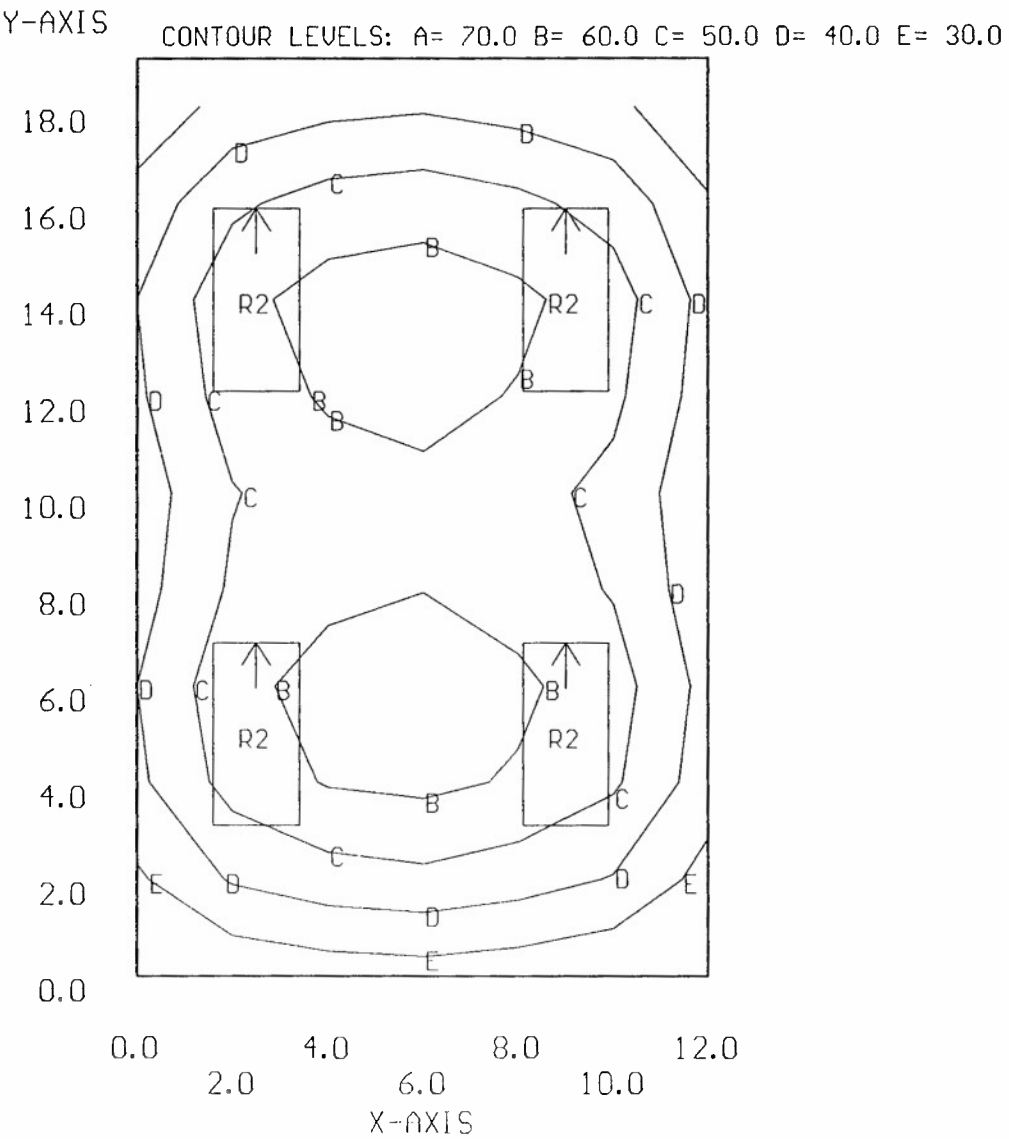
W2 (6) = KA9513 COLUMBIA WC240-A, (2) F032/35K, LLF= 0.69



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:35 24-Feb-95
PROJECT: 10-020 AREA: RM. 217-N GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=14.5 MAX=65.9 AVE=44.6 AVE/MIN= 3.08 MAX/MIN= 4.56

R2 (4) = T11466 METALOPTICS 24TRS042EP11, (2) F032/35K, LLF= 0.79

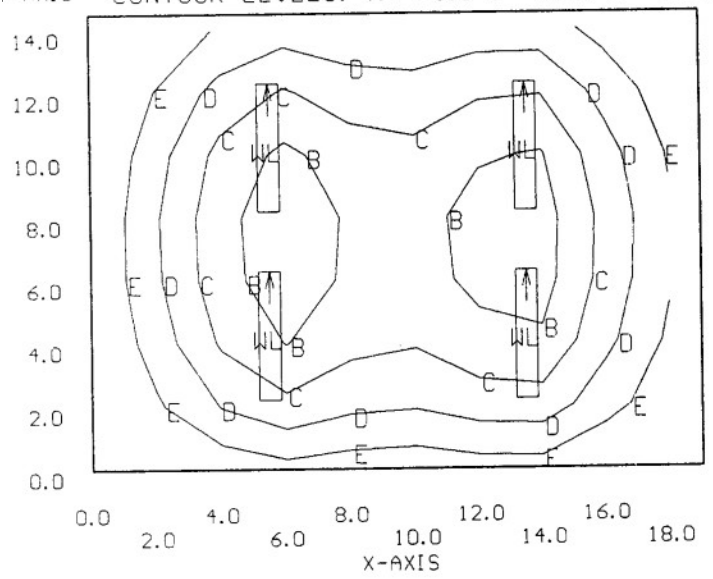


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 14:45 25-Feb-95
PROJECT: 10-020 AREA: RM. 221-N GRID: GRID
Values are FC, SCALE: 1 IN= 6.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=9.50 MAX=66.6 AVE=39.7 AVE/MIN= 4.18 MAX/MIN= 7.01

WL (4) = T9939 METALOPTICS WRSN4STACL042EP11, (2) FO32/35K, LLF= 0.79

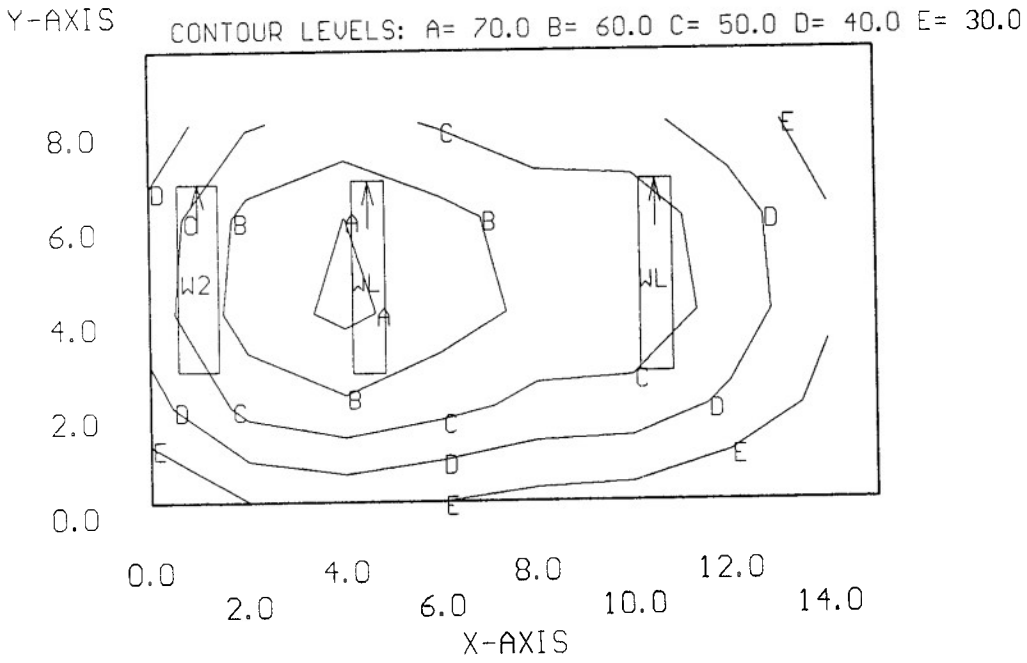
Y-AXIS CONTOUR LEVELS: A= 70.0 B= 60.0 C= 50.0 D= 40.0 E= 30.0



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 14:48 25-Feb-95
PROJECT: 10-020 AREA: CASHIER-N GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=15.8 MAX=72.3 AVE=44.1 AVE/MIN= 2.79 MAX/MIN= 4.58

W2 (1) = KA9513 COLUMBIA WC240-A, (2) F032/35K, LLF= 0.69
WL (2) = T9939 METALOPTICS WRSN4STACL042EP11, (2) F032/35K, LLF= 0.79

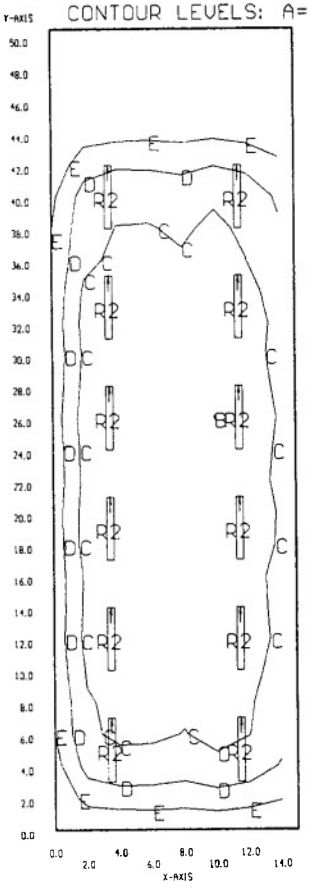


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 14:57 25-Feb-95
PROJECT: 10-020A AREA: RM. 223/229-N GRID: GRID
Values are FC, SCALE: 1 IN= 9.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=5.20 MAX=60.1 AVE=42.3 AVE/MIN= 8.13 MAX/MIN= 11.56

R2 (12) = T11619 METALOPTICS WESN4LNACL042EP11, (2) F032/35K, LLF= 0.79

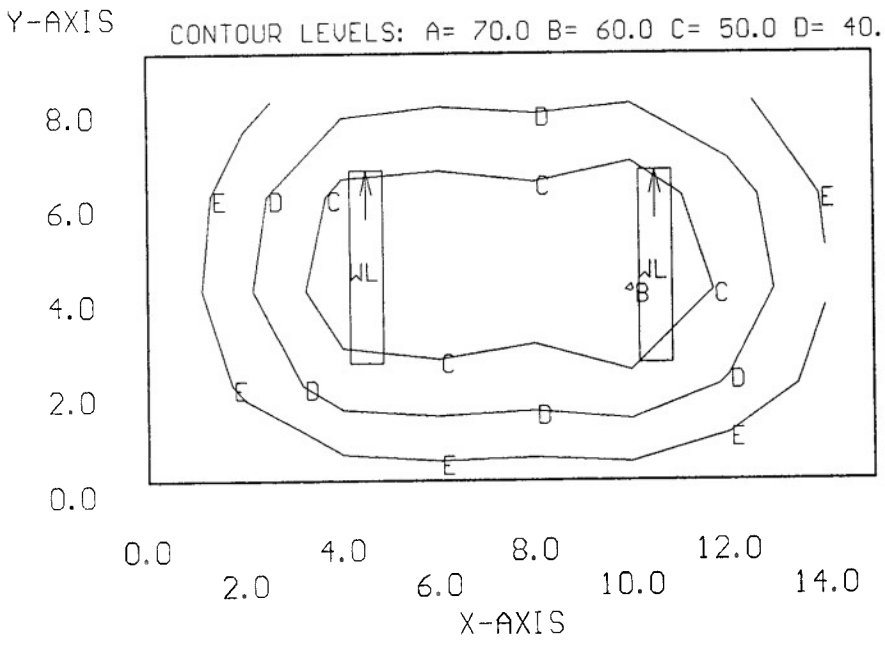
CONTOUR LEVELS: A= 70.0 B= 60.0 C= 50.0 D= 40.0 E= 30.0



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:01 25-Feb-95
PROJECT: 10-020A AREA: RM. 228-N GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=9.99 MAX=60.3 AVE=35.7 AVE/MIN= 3.57 MAX/MIN= 6.03

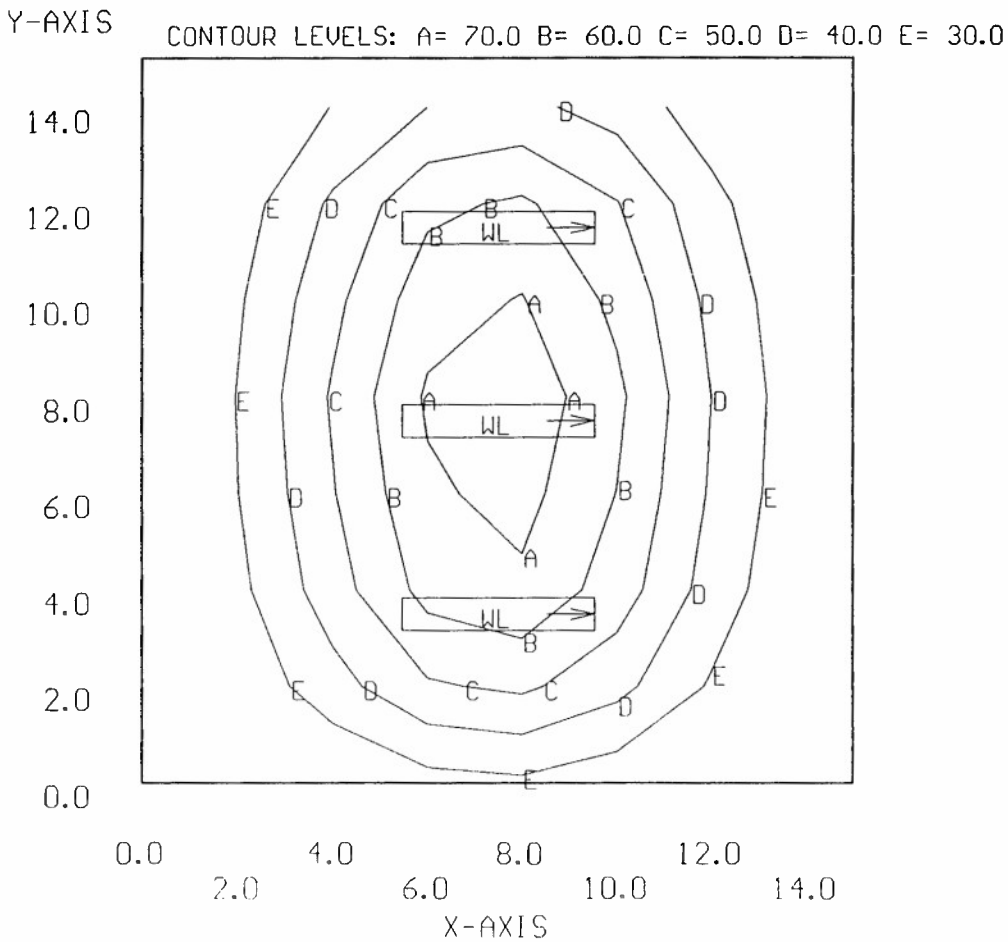
WL (2) = T9939 METALOPTICS WRSN4STACL042EP11, (2) F032/35K, LLF= 0.79



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:03 25-Feb-95
PROJECT: 10-020A AREA: RM. 231-N GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=6.79 MAX=76.7 AVE=36.3 AVE/MIN= 5.34 MAX/MIN= 11.30

WL (3) = T9939 METALOPTICS WRSN4STACL042EP11, (2) F032/35K, LLF= 0.79

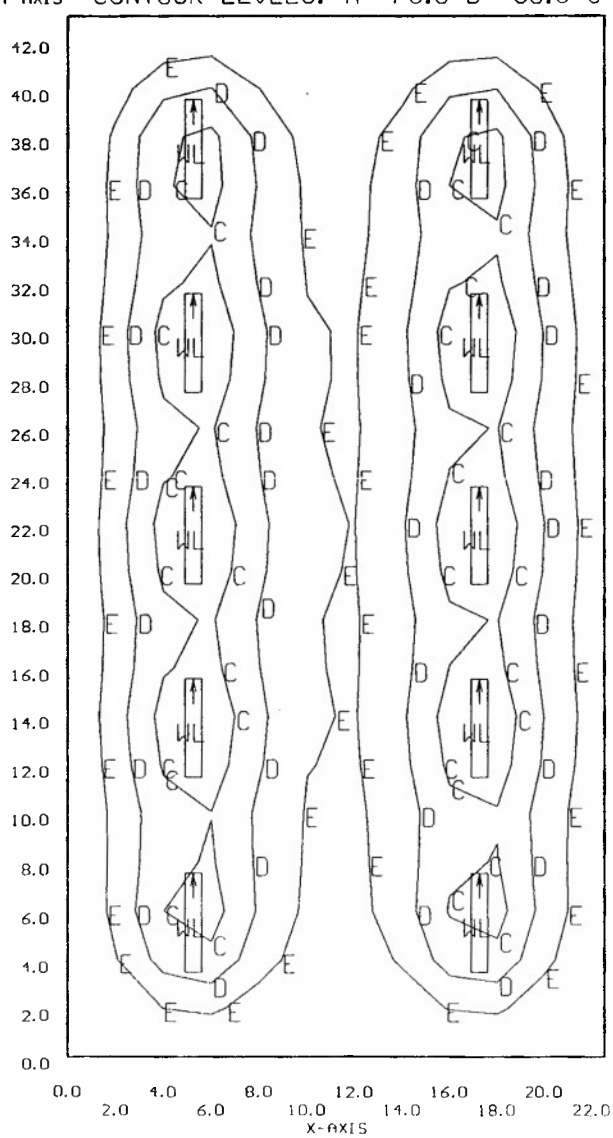


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:06 25-Feb-95
PROJECT: 10-020A AREA: OPEN OFF. 232-N GRID: GRID
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=6.50 MAX=57.9 AVE=34.6 AVE/MIN= 5.33 MAX/MIN= 8.90

WL <10> = T9939 METALOPTICS WRSN4STACL042EP11, (2) F032/35K, LLF= 0.79

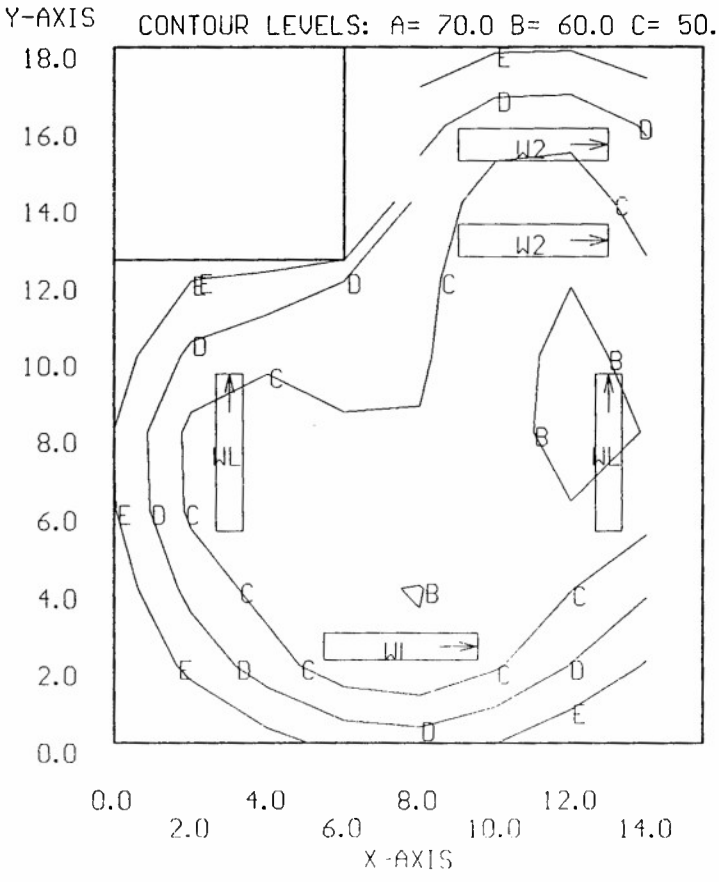
Y-AXIS CONTOUR LEVELS: A= 70.0 B= 60.0 C= 50.0 D= 40.0 E= 30.0



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:36 25-Feb-95
PROJECT: 10-020A AREA: RM. 263-N GRID: GRID
Values are FC, SCALE: 1 IN= 5.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=10.1 MAX=64.0 AVE=43.4 AVE/MIN= 4.31 MAX/MIN= 6.37

W2 (2) = KA9513 COLUMBIA WC240-A, (2) F032/35K, LLF= 0.69
WL (3) = T9939 METALOPTICS WRSN4STACL042EP11, (2) F032/35K, LLF= 0.79

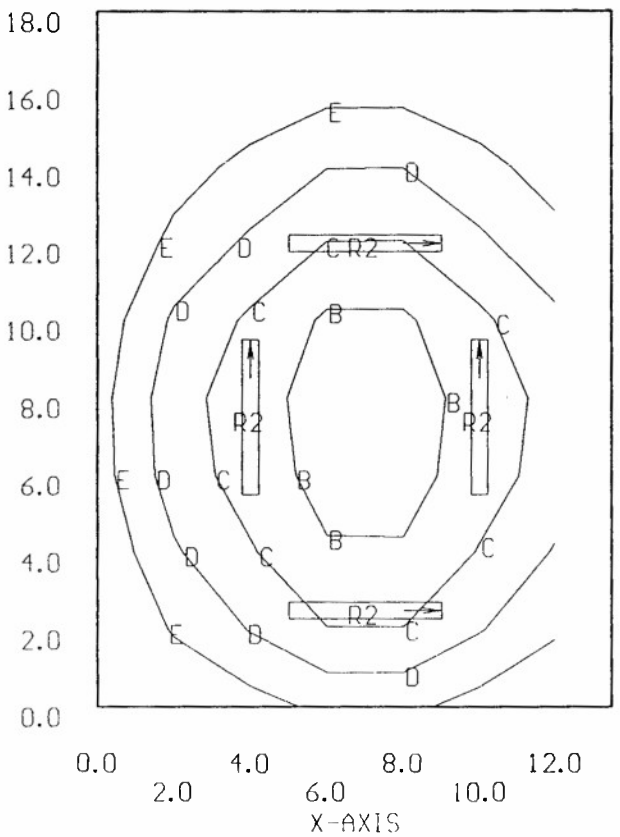


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:46 25-Feb-95
PROJECT: 10-020A AREA: RM. 265-N GRID: GRID
Values are FC, SCALE: 1 IN= 5.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=6.49 MAX=65.0 AVE=35.7 AVE/MIN= 5.50 MAX/MIN= 10.01

R2 (4) = T11619 METALOPTICS WESN4LNACL042EP11, (2) F032/35K, LLF= 0.79

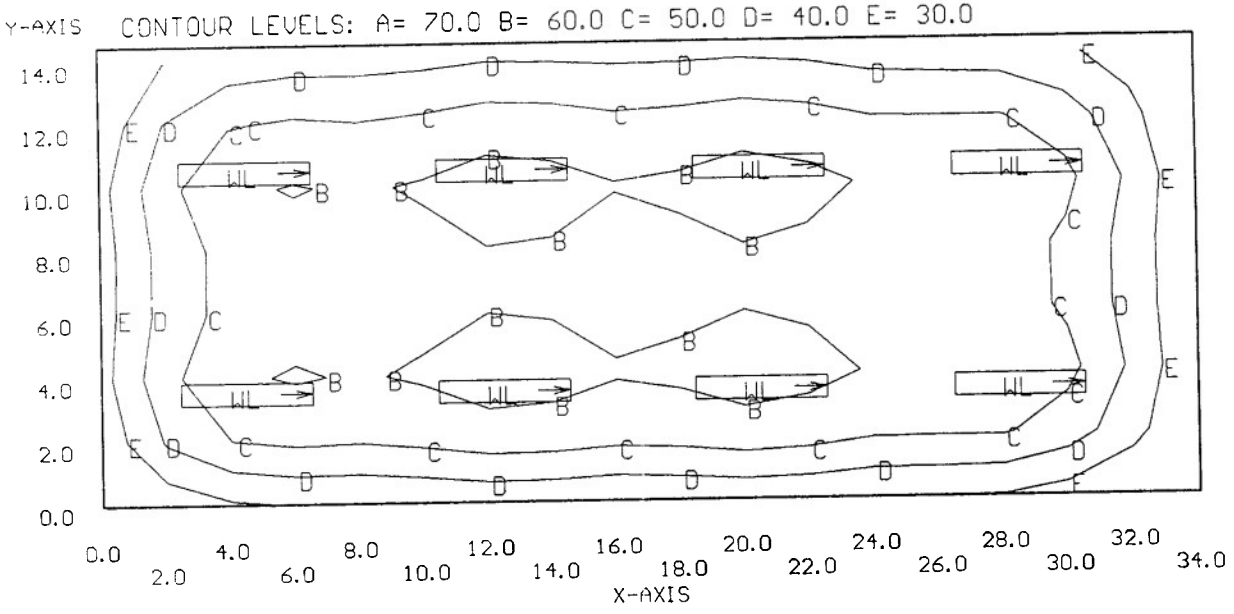
Y-AXIS CONTOUR LEVELS: A= 70.0 B= 60.0 C= 50.0 D= 40.0 E= 30.0



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:54 25-Feb-95
PROJECT: 10-020A AREA: RM. 266-N GRID: GRID
Values are FC, SCALE: 1 IN= 6.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=11.0 MAX=65.0 AVE=45.7 AVE/MIN= 4.16 MAX/MIN= 5.92

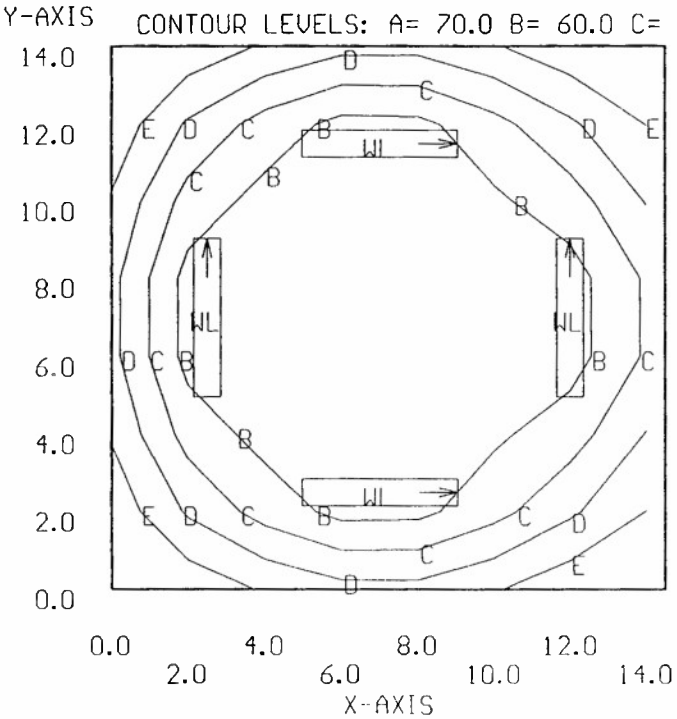
WL <8> = T9939 METALOPTICS WRSN4STACL042EP11, (2) F032/35K, LLF= 0.79



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:50 25-Feb-95
PROJECT: 10-020A AREA: RM. 267-N GRID: GRID
Values are FC, SCALE: 1 IN= 5.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=13.1 MAX=68.0 AVE=46.8 AVE/MIN= 3.58 MAX/MIN= 5.20

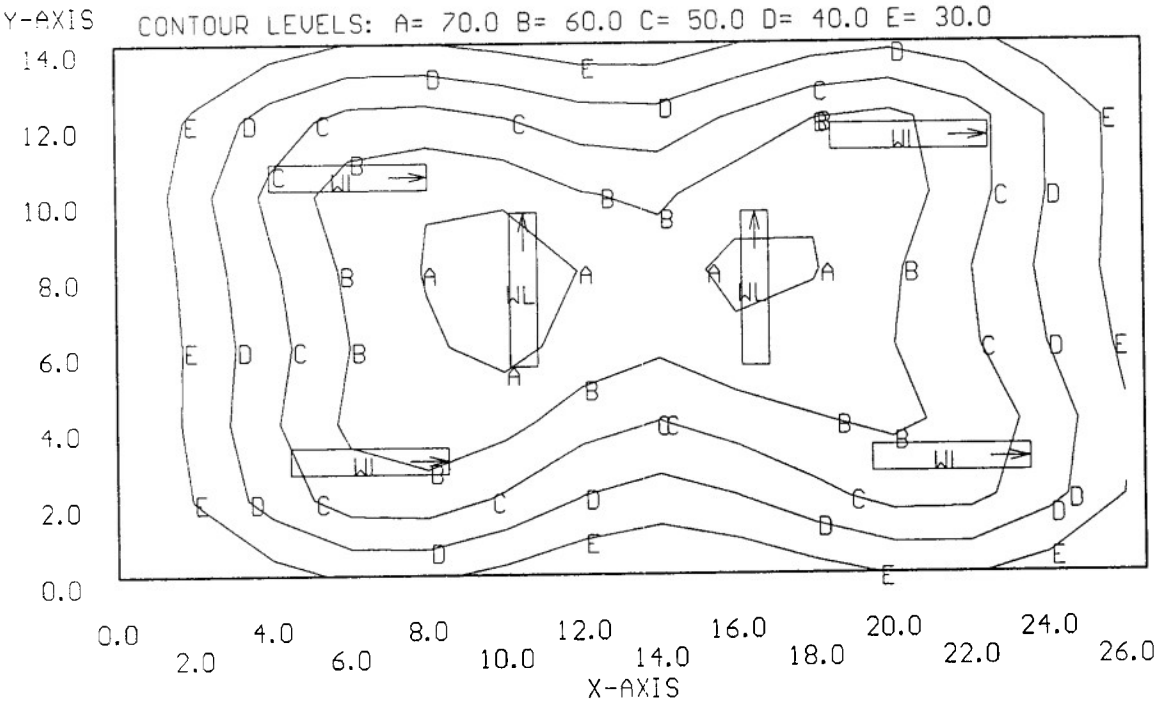
WL (4) = T9939 METALOPTICS WRSN4STACL042EP11, (2) F032/35K, LLF= 0.79



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:57 25-Feb-95
PROJECT: 10-020A AREA: RM. 269-N GRID: GRID
Values are FC, SCALE: 1 IN= 5.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=9.59 MAX=76.3 AVE=43.7 AVE/MIN= 4.56 MAX/MIN= 7.96

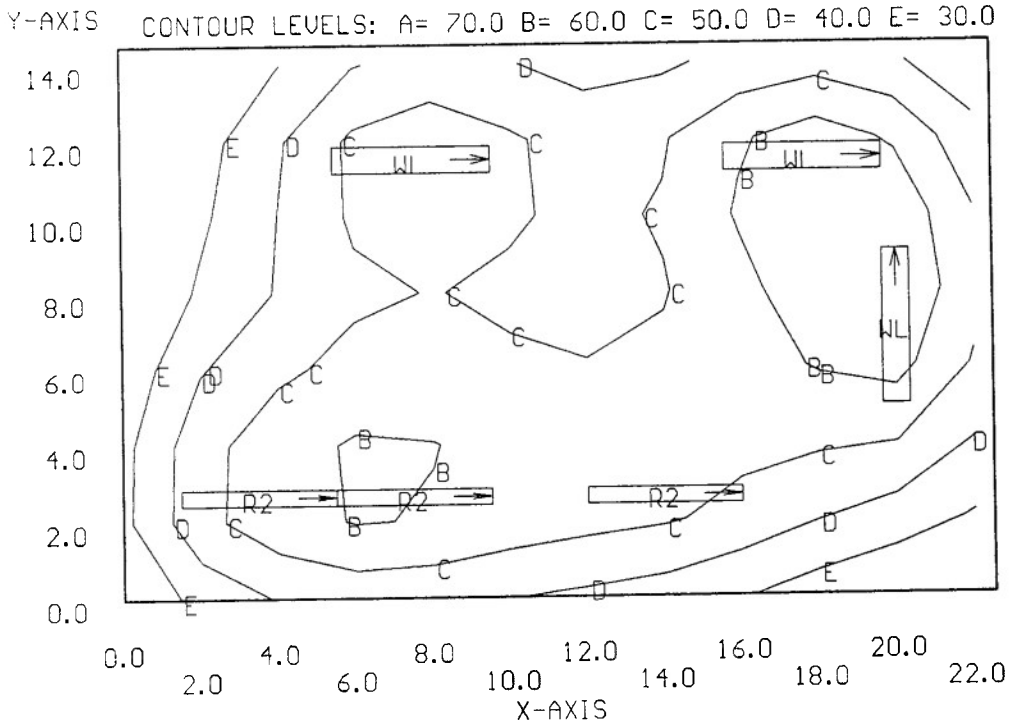
WL (6) = T9939 METALOPTICS WRSN4STACL042EP11, (2) F032/35K, LLF= 0.79



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 16:01 25-Feb-95
PROJECT: 10-020A AREA: RM. 270-N GRID: GRID
Values are FC, SCALE: 1 IN= 5.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=10.9 MAX=69.4 AVE=44.9 AVE/MIN= 4.12 MAX/MIN= 6.36

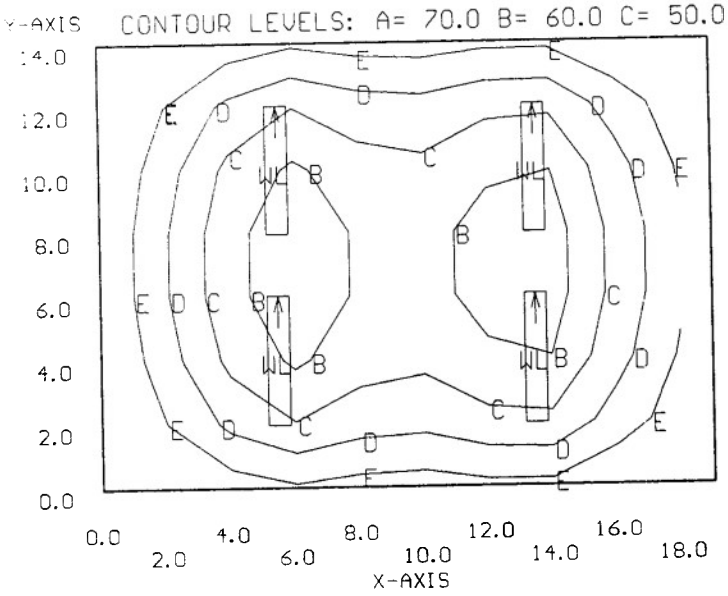
R2 (3) = T11619 METALOPTICS WESN4LNACL042EP11, (2) F032/35K, LLF= 0.79
WL (3) = T9939 METALOPTICS WRSN4STACL042EP11, (2) F032/35K, LLF= 0.79



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:09 25-Feb-95
PROJECT: 10-020A AREA: RM. 282-N GRID: GRID
Values are FC, SCALE: 1 IN= 6.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=10.0 MAX=66.7 AVE=39.4 AVE/MIN= 3.94 MAX/MIN= 6.66

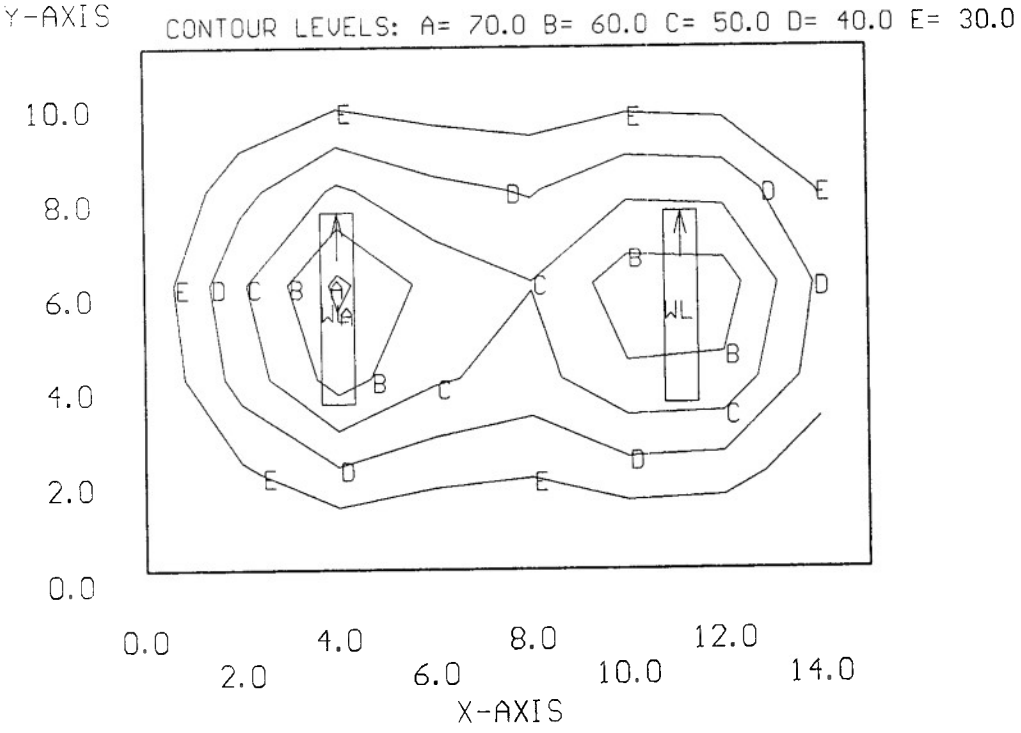
WL <4> = T9939 METALOPTICS WRSN4STACL042EP11, (2) F032/35K, LLF= 0.79



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:12 25-Feb-95
PROJECT: 10-020A AREA: RM. 284-N GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=6.91 MAX=72.2 AVE=33.8 AVE/MIN= 4.89 MAX/MIN= 10.45

WL <2> = T9939 METALOPTICS WRSN4STACL042EP11, (2) F032/35K, LLF= 0.79

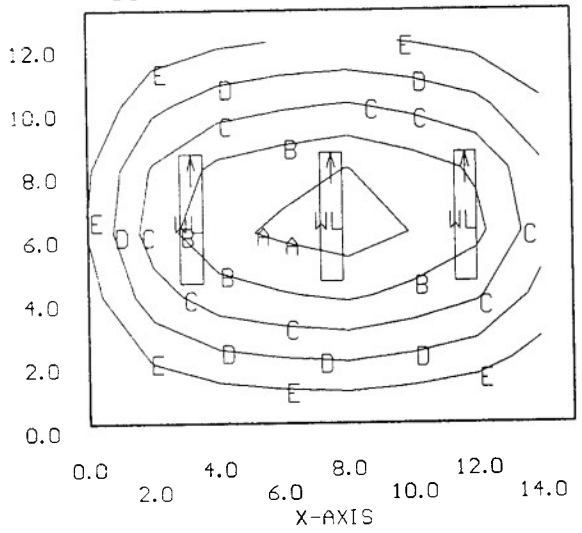


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:14 25-Feb-95
PROJECT: 10-020A AREA: RM. 286B-N GRID: GRID
Values are FC, SCALE: 1 IN= 6.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=9.56 MAX=75.3 AVE=40.0 AVE/MIN= 4.19 MAX/MIN= 7.88

WL <3> = T9939 METALOPTICS WRSN4STACL042EP11, (2) FO32/35K, LLF= 0.79

Y-AXIS CONTOUR LEVELS: A= 70.0 B= 60.0 C= 50.0 D= 40.0 E= 30.0

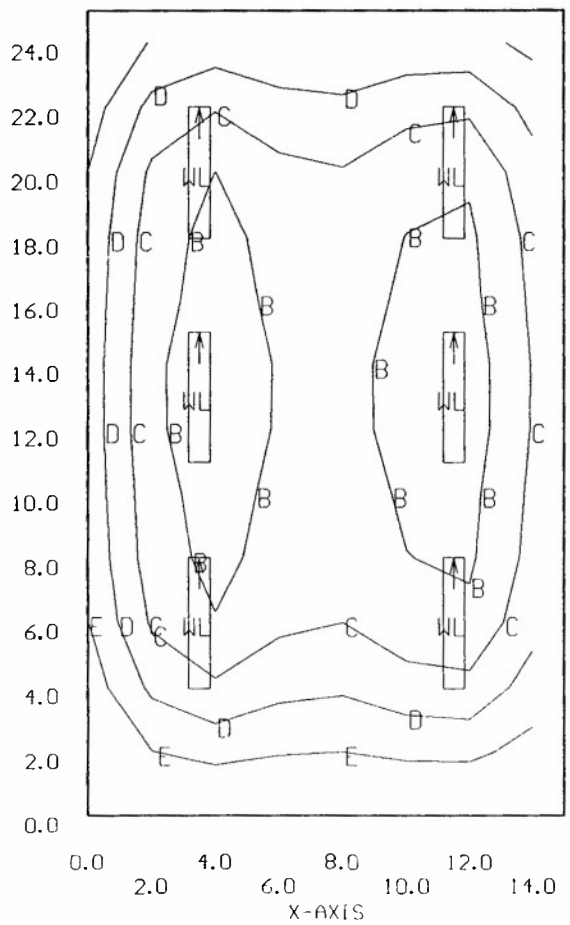


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:16 25-Feb-95
PROJECT: 10-020A AREA: RM. 288-N GRID: GRID
Values are FC, SCALE: 1 IN= 6.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=9.56 MAX=66.7 AVE=45.2 AVE/MIN= 4.73 MAX/MIN= 6.97

WL (6) = T9939 METALOPTICS WRSN4STACL042EP11, (2) F032/35K, LLF= 0.79

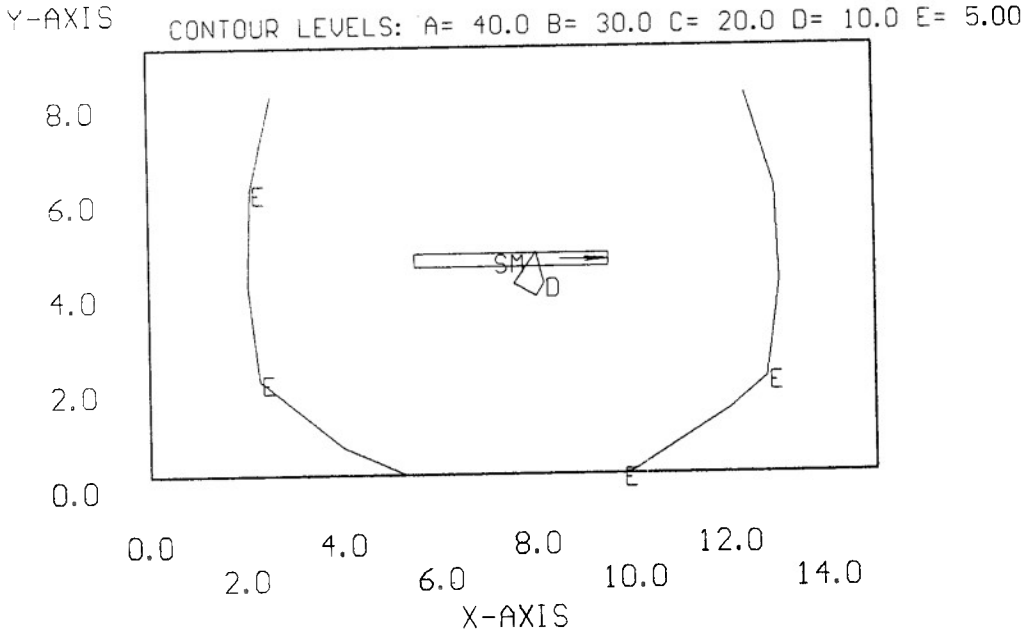
Y-AXIS CONTOUR LEVELS: A= 70.0 B= 60.0 C= 50.0 D= 40.0 E= 30.0



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 16:59 16-Feb-95
PROJECT: 10-020A AREA: RM. 289-N GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=1.81 MAX=10.1 AVE=5.76 AVE/MIN= 3.17 MAX/MIN= 5.59

SM <1> = K8959 COLUMBIA CH140, <1> F032/31K, LLF= 0.83

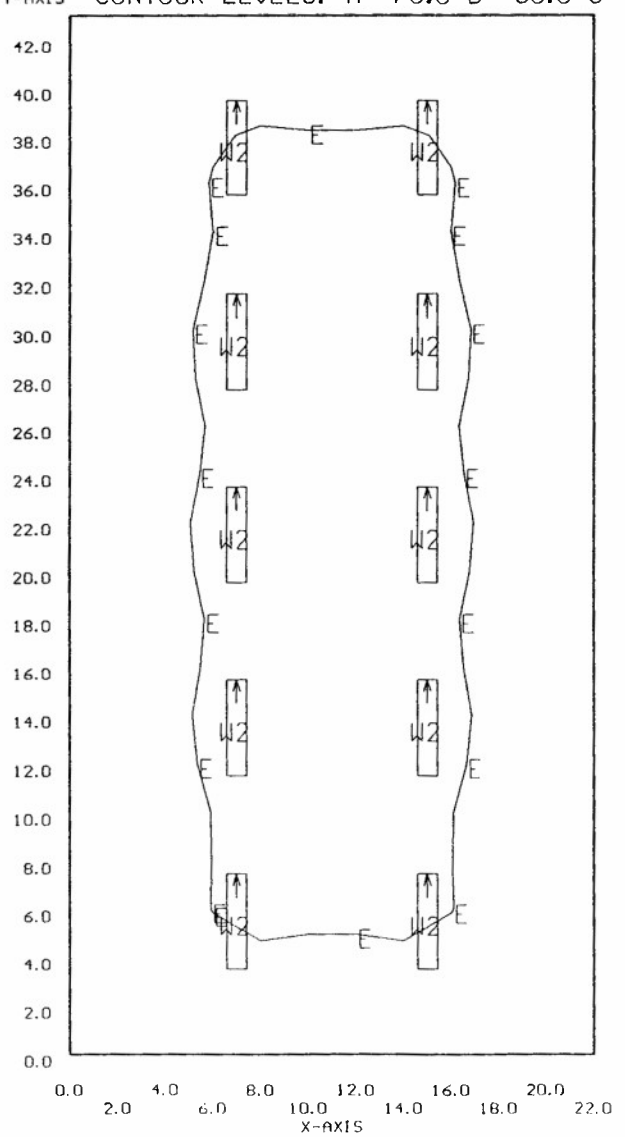


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 16:40 16-Feb-95
PROJECT: 10-020A AREA: RM. 290-N GRID: GRID
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=3.37 MAX=36.2 AVE=22.6 AVE/MIN= 6.72 MAX/MIN= 10.75

W2 (10) = KA9513 COLUMBIA WC240-A, (2) F032/35K, LLF= 0.69

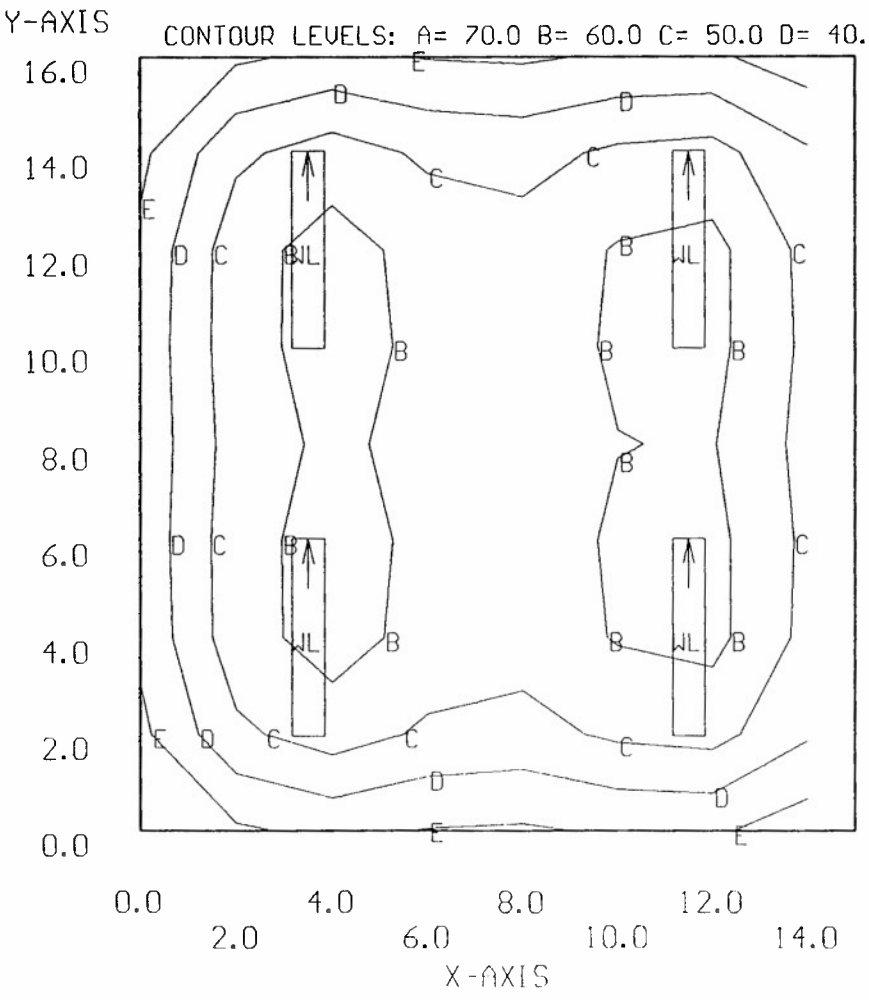
Y-AXIS CONTOUR LEVELS: A= 70.0 B= 60.0 C= 50.0 D= 40.0 E= 30.0



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 16:12 16-Feb-95
PROJECT: 10-020A AREA: RM. 292A-N GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=17.2 MAX=64.4 AVE=46.7 AVE/MIN= 2.71 MAX/MIN= 3.75

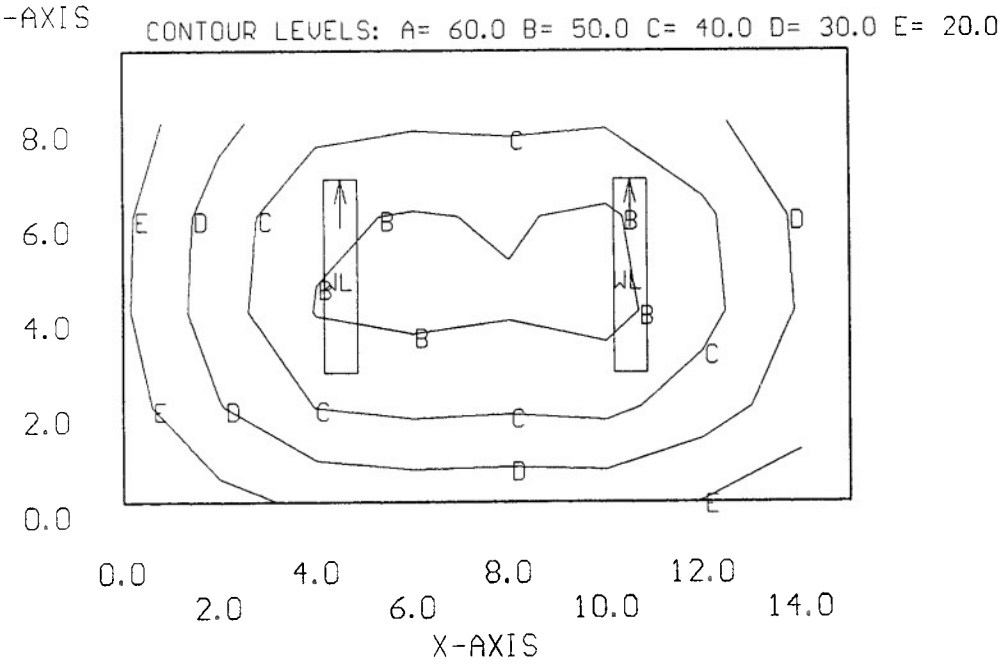
WL <4> = T9939 METALOPTICS WRSN4STACL042EP11, <2> F32/SP41, LLF= 0.88



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 16:32 16-Feb-95
PROJECT: 10-020A AREA: RM. 292-N GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=9.73 MAX=53.3 AVE=33.3 AVE/MIN= 3.43 MAX/MIN= 5.48

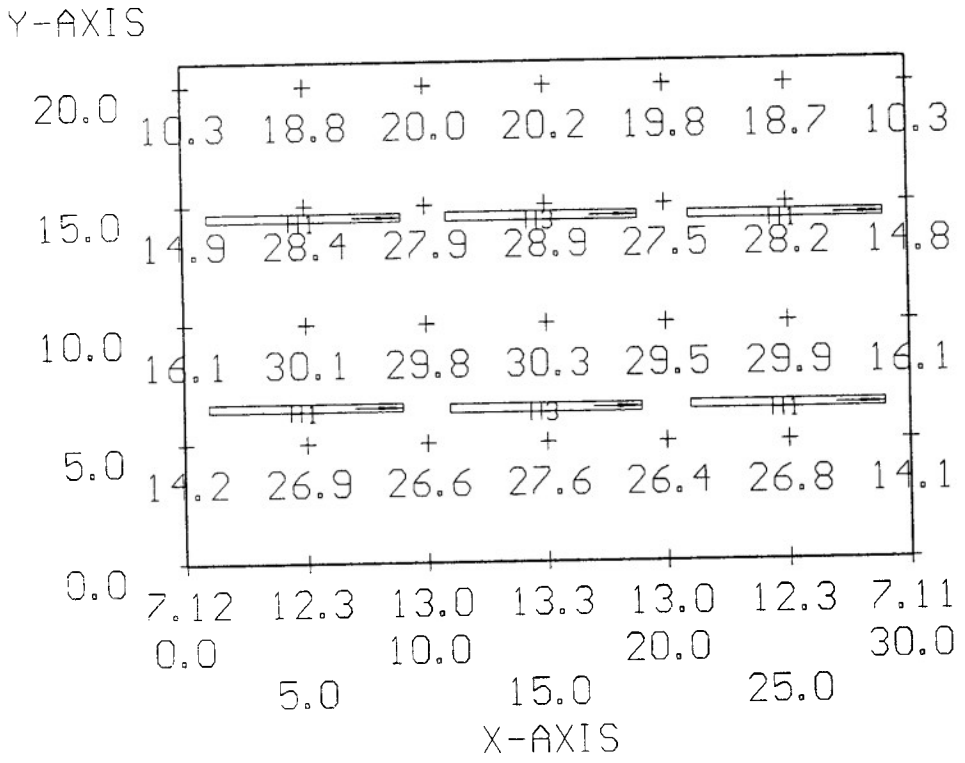
WL <2> = T9939 METALOPTICS WRSN4STACL042EP11, (2) F032/35K, LLF= 0.79



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:16 3-Feb-95
PROJECT: 10-020 AREA: BREAK ROOM GRID: GRID
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=7.11 MAX=30.3 AVE=20.3 AVE/MIN= 2.86 MAX/MIN= 4.26

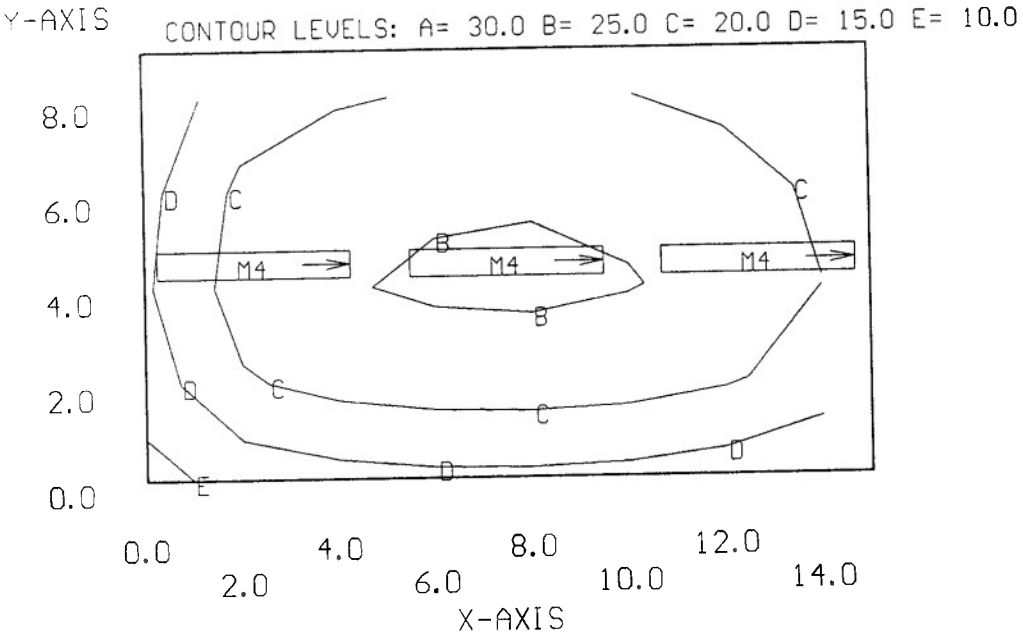
H1 (4) = K7994 COLUMBIA CS296, (2) F96T12/CW, LLF= 0.36
H3 (2) = K8962 COLUMBIA CS196, (1) F96T12/CW, LLF= 0.72



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 09:37 15-Feb-95
PROJECT: 10-020 AREA: VENDING GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=8.12 MAX=25.9 AVE=18.9 AVE/MIN= 2.33 MAX/MIN= 3.20

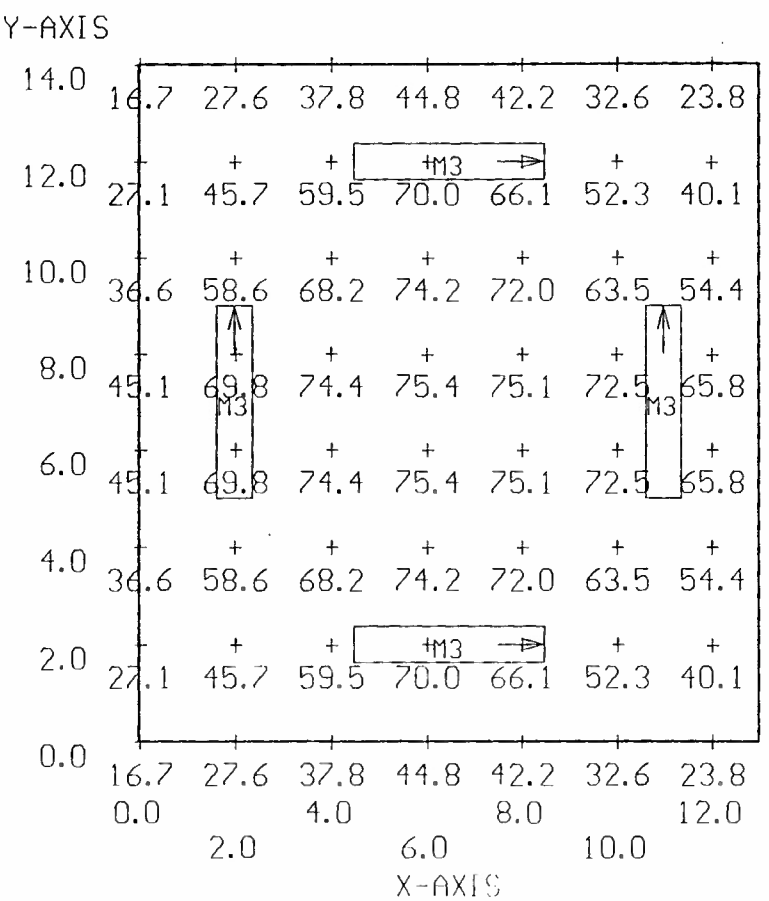
M4 (3) = K7988K COLUMBIA K240-T, (2) F40CW, LLF= 0.47



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:34 3-Feb-95
PROJECT: 10-020 AREA: RM. 101 GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=16.7 MAX=75.4 AVE=53.3 AVE/MIN= 3.19 MAX/MIN= 4.51

M3 <4> = K8966 COLUMBIA K440-T, (4) F40CW, LLF= 0.51

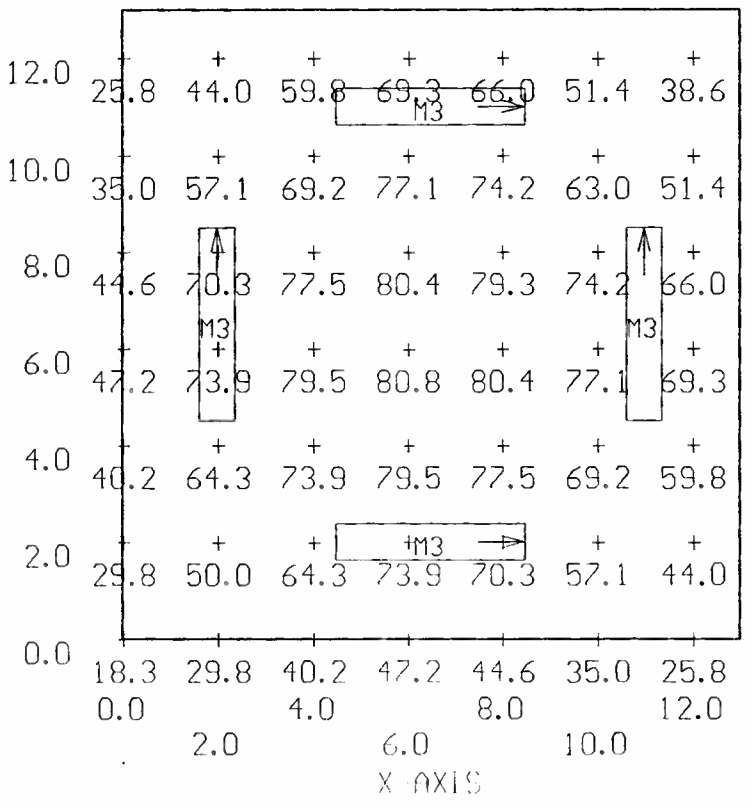


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:36 3-Feb-95
PROJECT: 10-020 AREA: RM. 103 GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=18.3 MAX=80.8 AVE=58.7 AVE/MIN= 3.21 MAX/MIN= 4.42

M3 (4) = K8966 COLUMBIA K440-T, (4) F40CW, LLF= 0.51

Y-AXIS

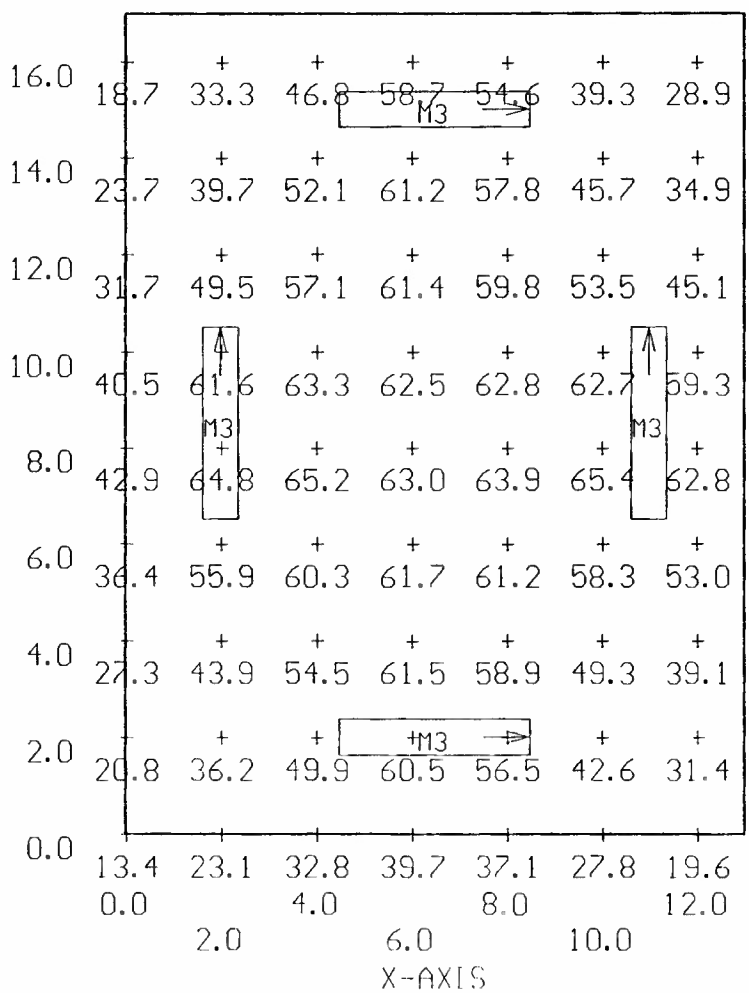


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:29 3-Feb-95
PROJECT: 10-020 AREA: RM. 100 GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=13.4 MAX=65.4 AVE=47.7 AVE/MIN= 3.57 MAX/MIN= 4.90

M3 (4) = K8966 COLUMBIA K440-T, (4) F40CW, LLF= 0.51

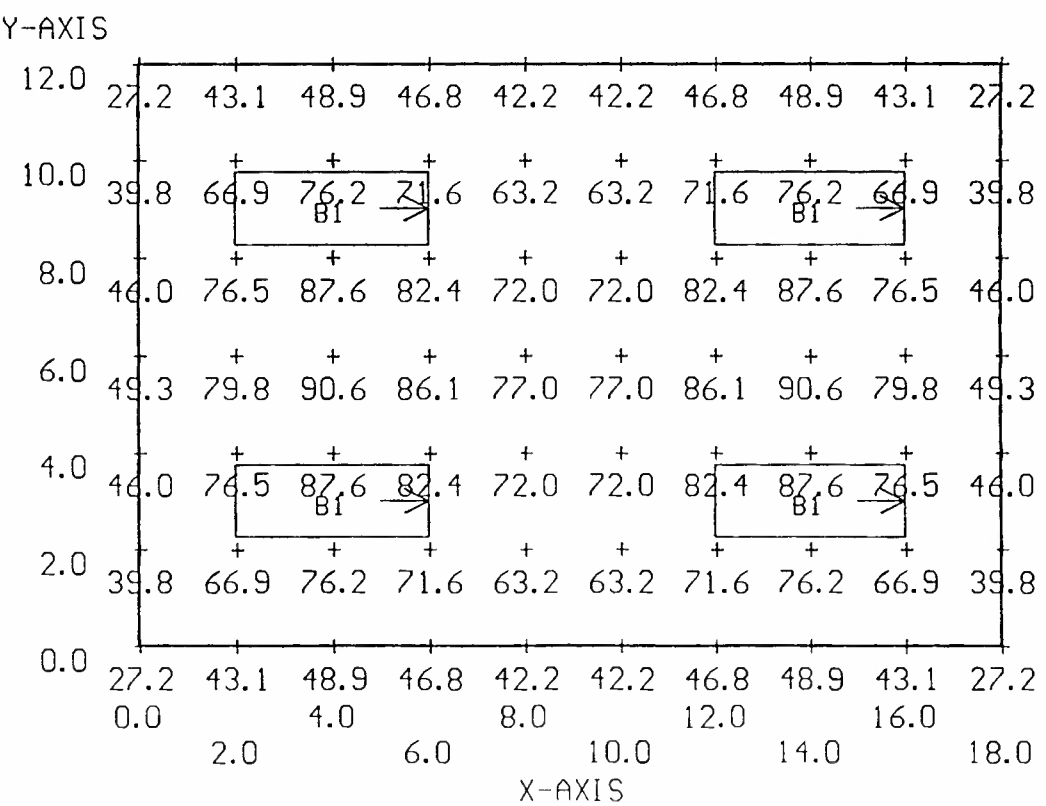
Y-AXIS



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:24 4-Jan-95
PROJECT: 10-020 AREA: RM. 106 GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

MIN=27.2 MAX=90.6 AVE=61.8 AVE/MIN= 2.28 MAX/MIN= 3.34

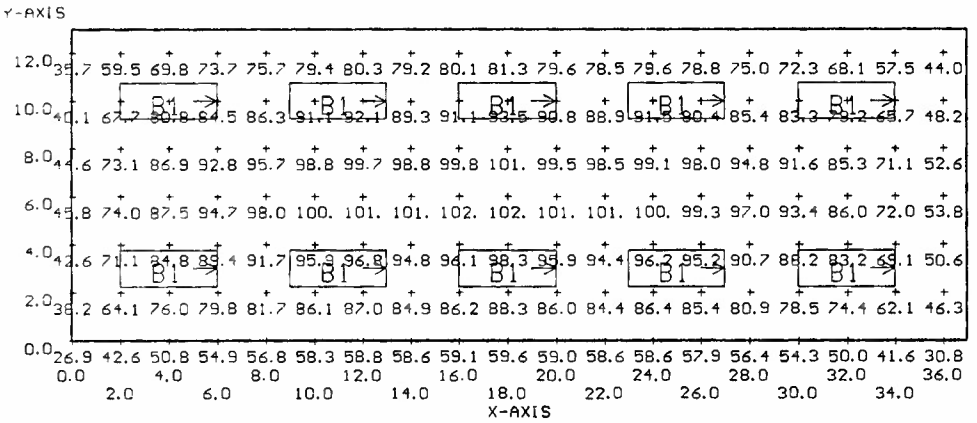
B1 (4) = K9691 COLUMBIA WPW440-A, (4) F40CW, LLF= 0.68



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:41 3-Feb-95
PROJECT: 10-020 AREA: RM. 107 GRID: GRID
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=26.9 MAX=102. AVE=77.9 AVE/MIN= 2.90 MAX/MIN= 3.79

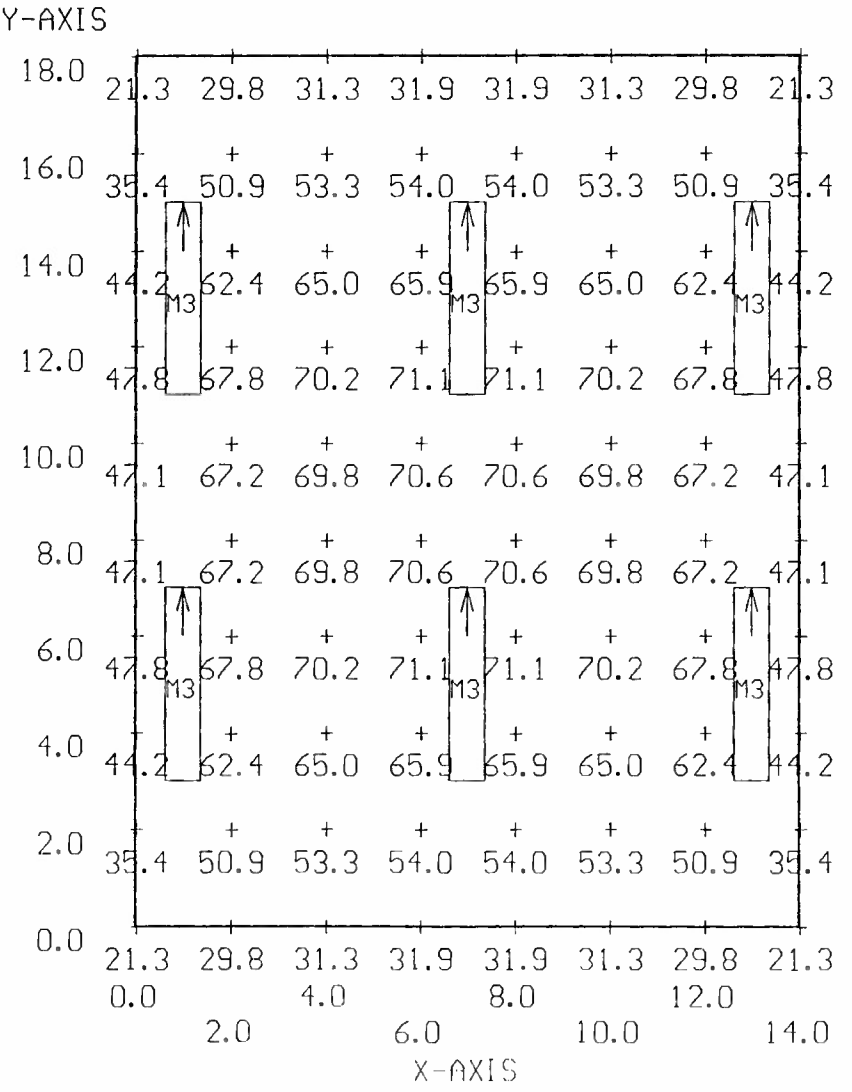
B1 <10> = K9691 COLUMBIA WPW440-A, (4) F40CW, LLF= 0.68



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:46 3-Feb-95
PROJECT: 10-020 AREA: RM. 112 GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=21.3 MAX=71.1 AVE=52.8 AVE/MIN= 2.48 MAX/MIN= 3.34

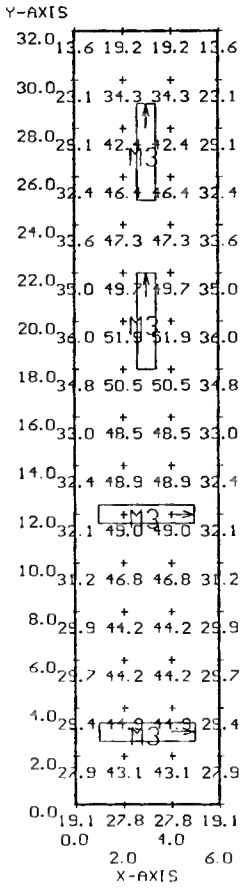
M3 <6> = K8966 COLUMBIA K440-T, (4) F40CW, LLF= 0.51



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:48 3-Feb-95
PROJECT: 10-020 AREA: HALLWAY GRID: GRID
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=13.6 MAX=51.9 AVE=36.5 AVE/MIN= 2.69 MAX/MIN= 3.82

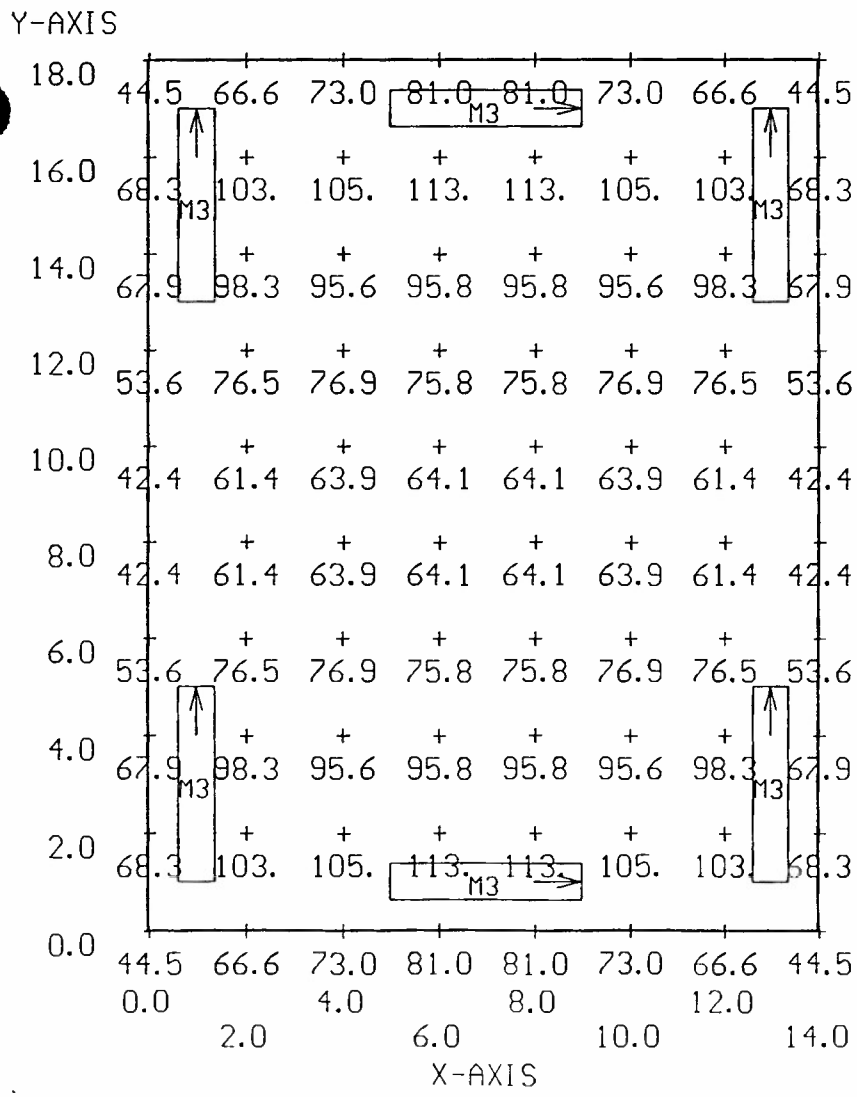
M3 (4) = K8966 COLUMBIA K440-T, (4) F40CW, LLF= 0.51



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 09:32 4-Jan-95
PROJECT: 10-020 AREA: RM. 115 GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=42.4 MAX=113. AVE=76.3 AVE/MIN= 1.80 MAX/MIN= 2.66

M3 <6> = K8966 COLUMBIA K440-T, (4) F40CW, LLF= 0.51

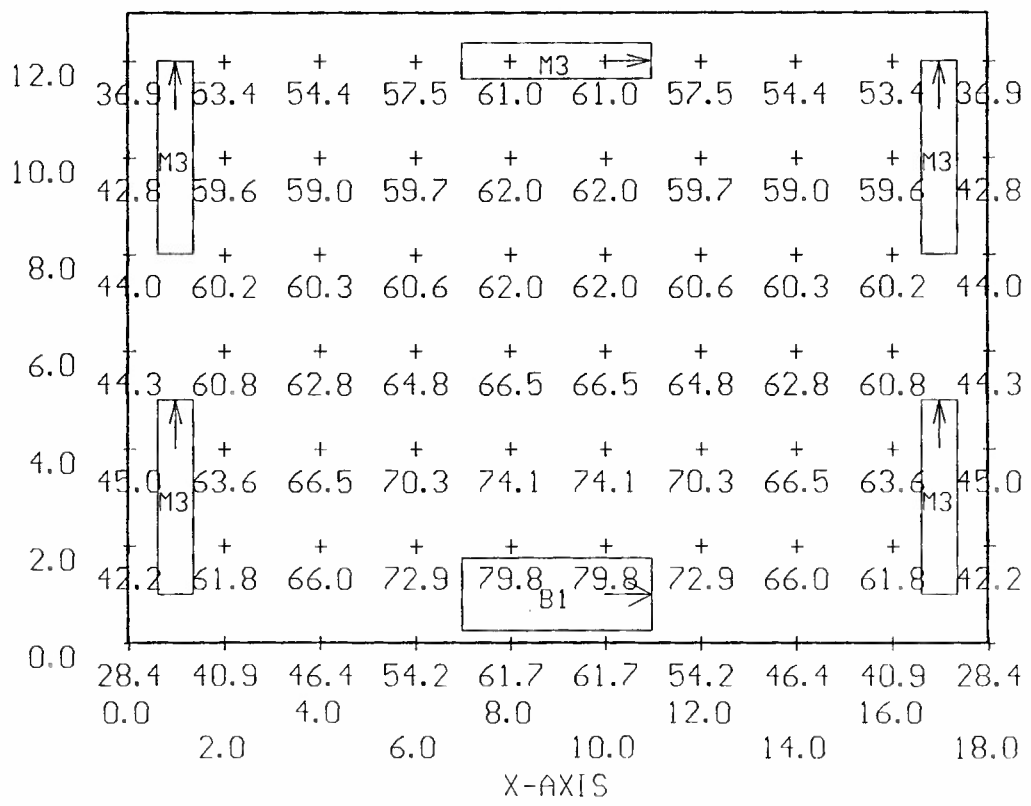


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:53 3-Feb-95
PROJECT: 10-020 AREA: RM. 117 GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=28.4 MAX=79.8 AVE=57.3 AVE/MIN= 2.02 MAX/MIN= 2.81

B1 <1> = K9691 COLUMBIA WPW440-A, (4) F40CW, LLF= 0.68
M3 <5> = K8966 COLUMBIA K440-T, (4) F40CW, LLF= 0.51

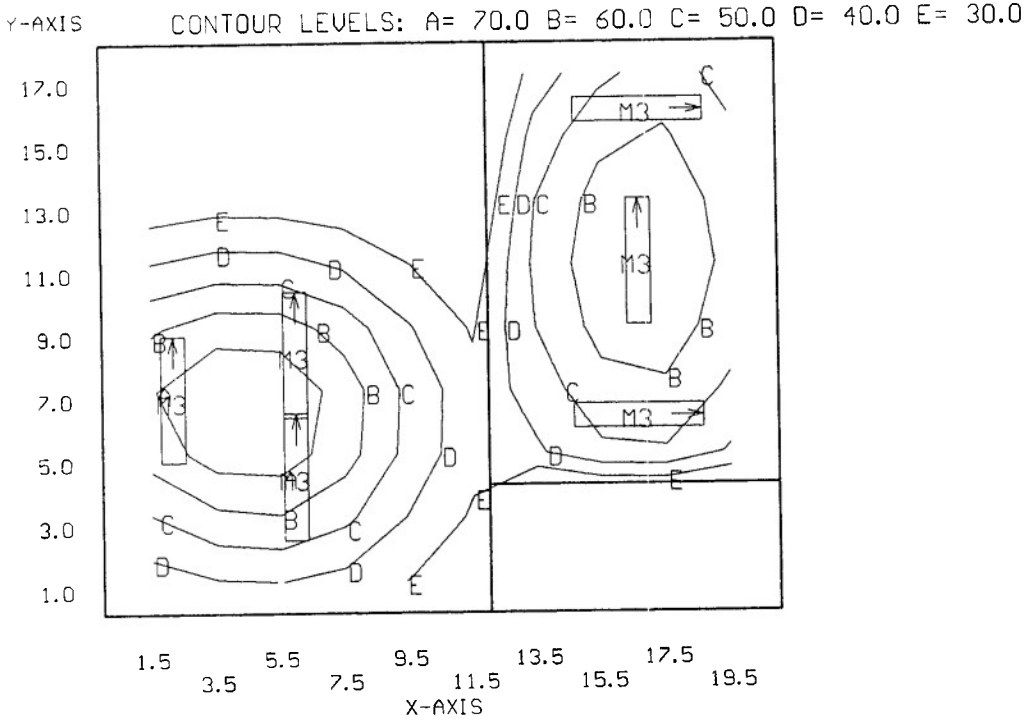
Y-AXIS



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 14:42 16-Feb-95
PROJECT: 10-020 AREA: RM. 201/203 GRID: GRID
Values are FC, SCALE: 1 IN= 6.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=0.55 MAX=79.3 AVE=39.3 AVE/MIN= 70.92 MAX/MIN= 143.24

M3 (6) = K8966 COLUMBIA K440-T, (4) F40CW, LLF= 0.48

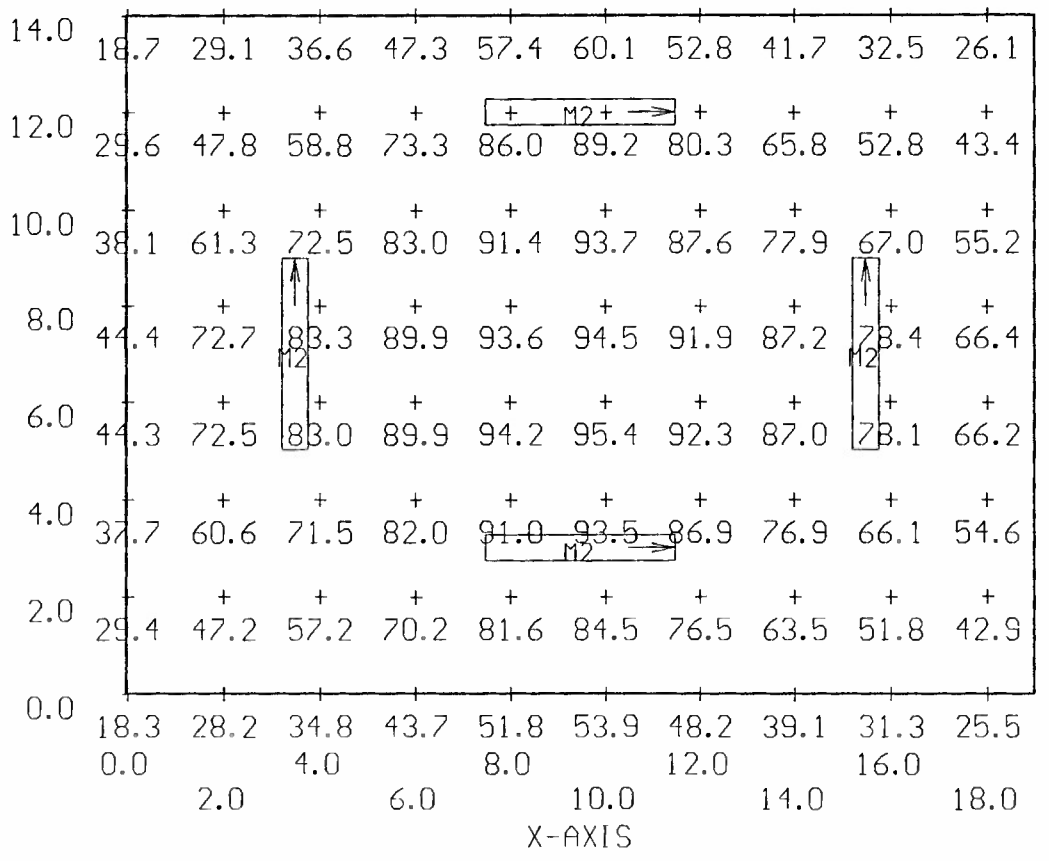


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 13:13 3-Feb-95
PROJECT: 10-020 AREA: RM. 282 GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=18.3 MAX=95.4 AVE=63.3 AVE/MIN= 3.45 MAX/MIN= 5.20

M2 (4) = K8963 COLUMBIA CH440, (4) F40CW, LLF= 0.73

Y-AXIS

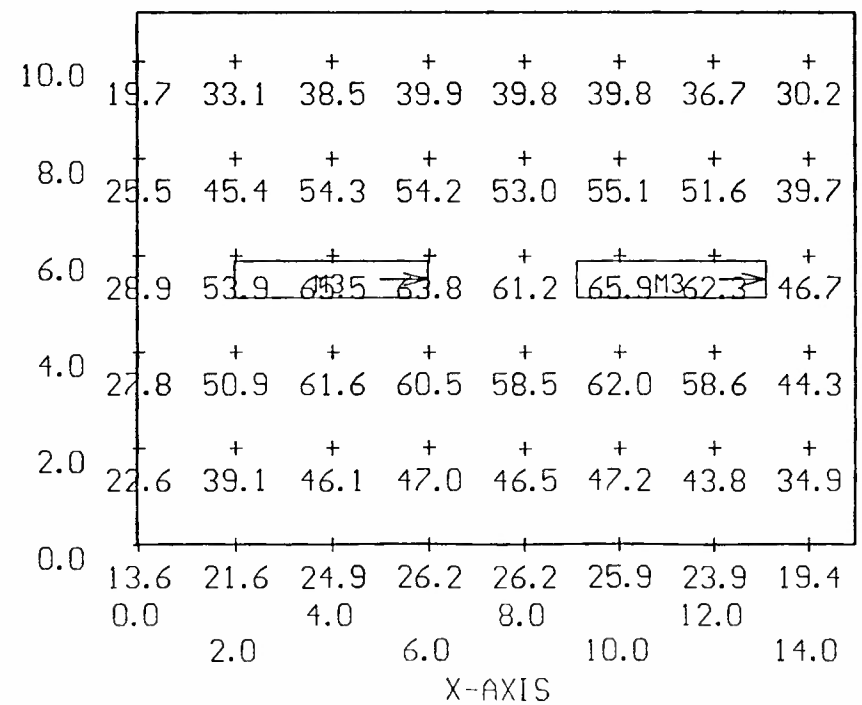


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:05 4-Jan-95
PROJECT: 10-020 AREA: RM. 284 GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=13.6 MAX=65.9 AVE=42.5 AVE/MIN= 3.12 MAX/MIN= 4.85

M3 <2> = K8966 COLUMBIA K440-T, (4) F40CW, LLF= 0.51

Y-AXIS

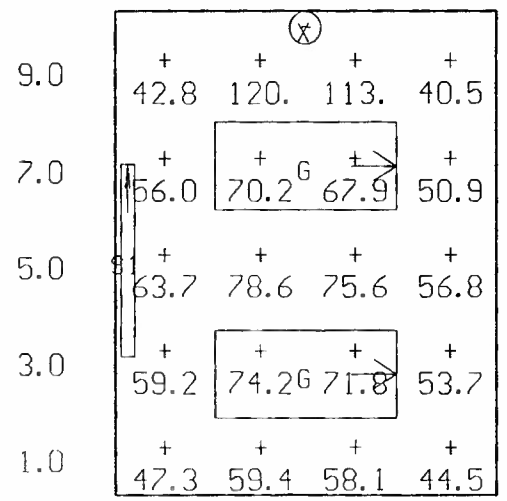


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 13:30 3-Feb-95
PROJECT: 10-020 AREA: RESTROOM GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=40.5 MAX=120. AVE=65.2 AVE/MIN= 1.61 MAX/MIN= 2.96

G <2> = 9975 COLUMBIA 4PS2*-52-242, (2) F40CW, LLF= 0.68
S1 <1> = K8959 COLUMBIA CH140, (1) F40CW, LLF= 0.73
X <1> = B1073A PRESCOLITE 1128-930, (1) 75A19/SW, LLF= 0.77

Y-AXIS

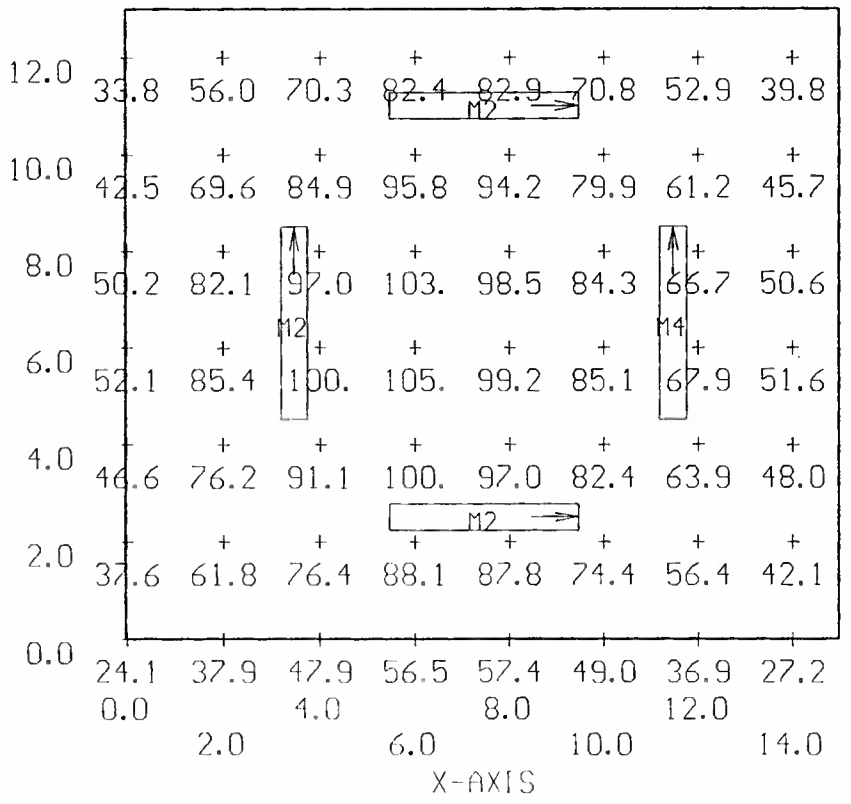


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 14:23 3-Feb-95
PROJECT: 10-020 AREA: RM. 286B GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=24.1 MAX=105. AVE=68.0 AVE/MIN= 2.82 MAX/MIN= 4.36

M2 (3) = K8963 COLUMBIA CH440, (4) F40CW, LLF= 0.73
M4 (1) = K7988K COLUMBIA K240-T, (2) F40CW, LLF= 0.58

Y-AXIS

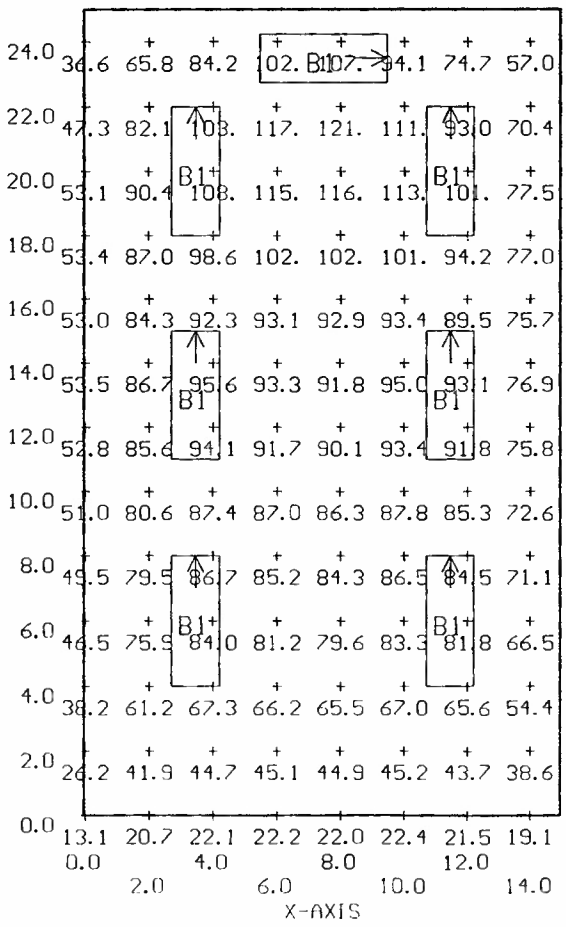


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 14:27 3-Feb-95
PROJECT: 10-020 AREA: RM. 288 GRID: GRID
Values are FC, SCALE: 1 IN= 6.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=13.1 MAX=121. AVE=74.4 AVE/MIN= 5.69 MAX/MIN= 9.28

B1 <7> = K9691 COLUMBIA WPW440-A, (4) F40CW, LLF= 0.68

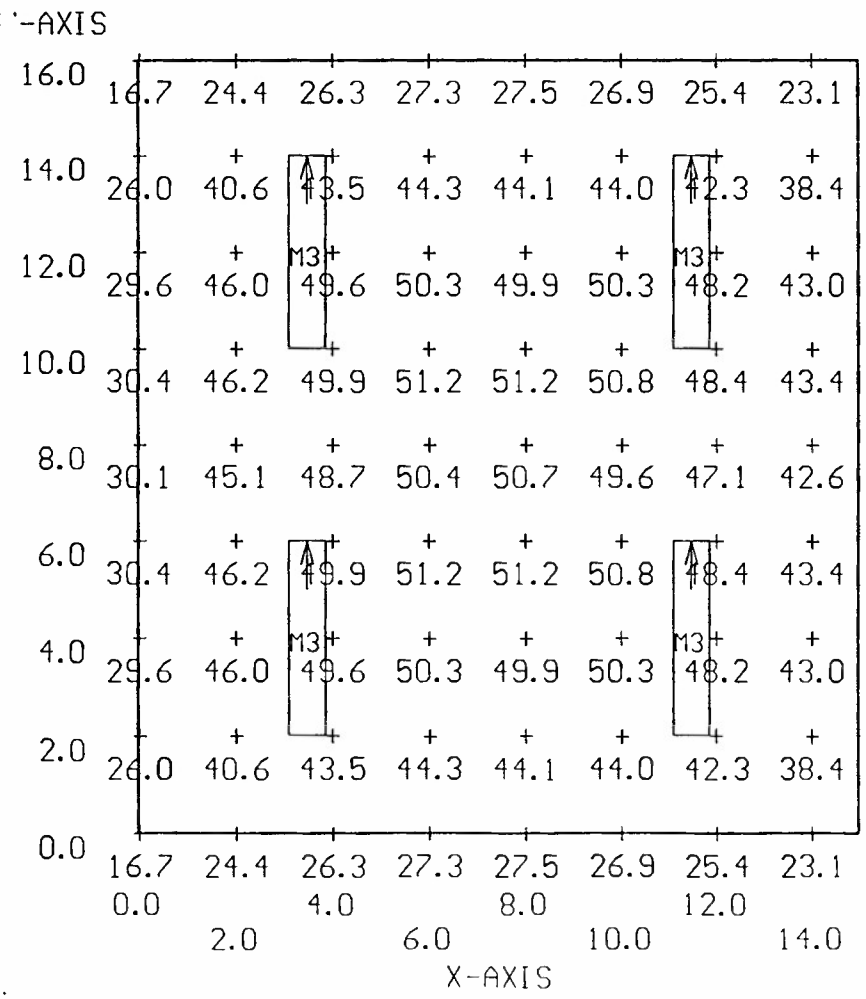
Y-AXIS



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 16:04 4-Jan-95
PROJECT: 10-020 AREA: RM. 292A GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=16.7 MAX=51.2 AVE=40.0 AVE/MIN= 2.40 MAX/MIN= 3.07

M3 (4) = K8966 COLUMBIA K440-T, (4) F40CW, LLF= 0.51

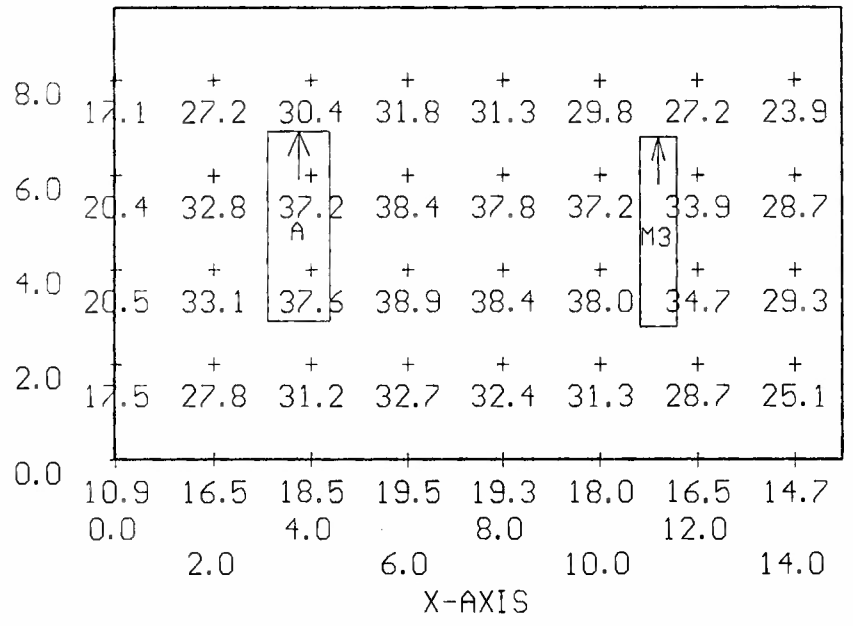


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 14:34 3-Feb-95
PROJECT: 10-020 AREA: RM. 292 GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=10.9 MAX=38.9 AVE=27.9 AVE/MIN= 2.55 MAX/MIN= 3.56

A (1) = K9604 COLUMBIA WCW240-A, (2) F40CW, LLF= 0.68
M3 (1) = K8966 COLUMBIA K440-T, (4) F40CW, LLF= 0.51

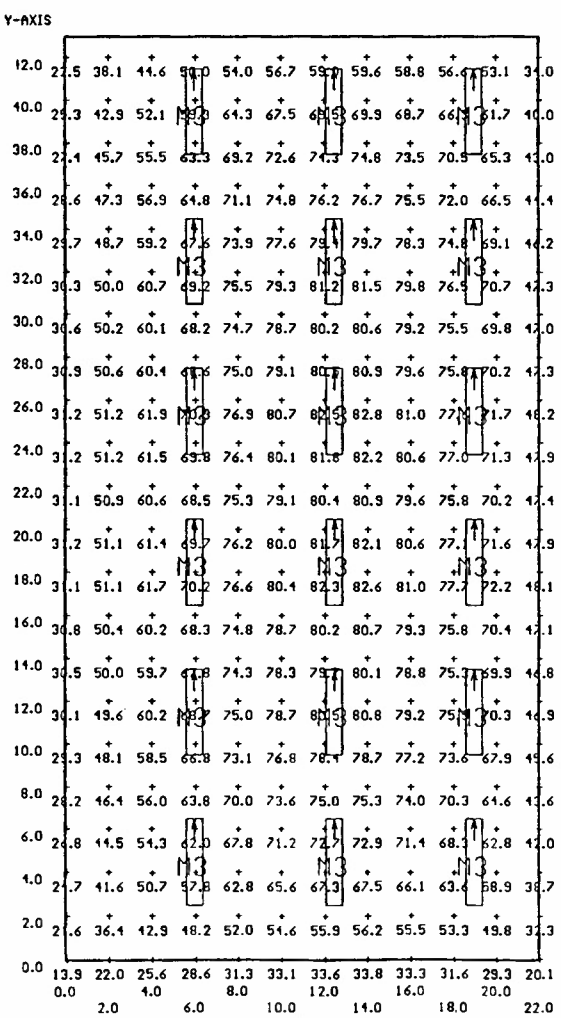
Y-AXIS



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 16:26 4-Jan-95
PROJECT: 10-020 AREA: RM. 290 GRID: GRID
Values are FC, SCALE: 1 IN= 9.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=13.9 MAX=82.8 AVE=61.3 AVE/MIN= 4.40 MAX/MIN= 5.95

M3 <18> = K8966 COLUMBIA K440-T, (4) F40CW, LLF= 0.51

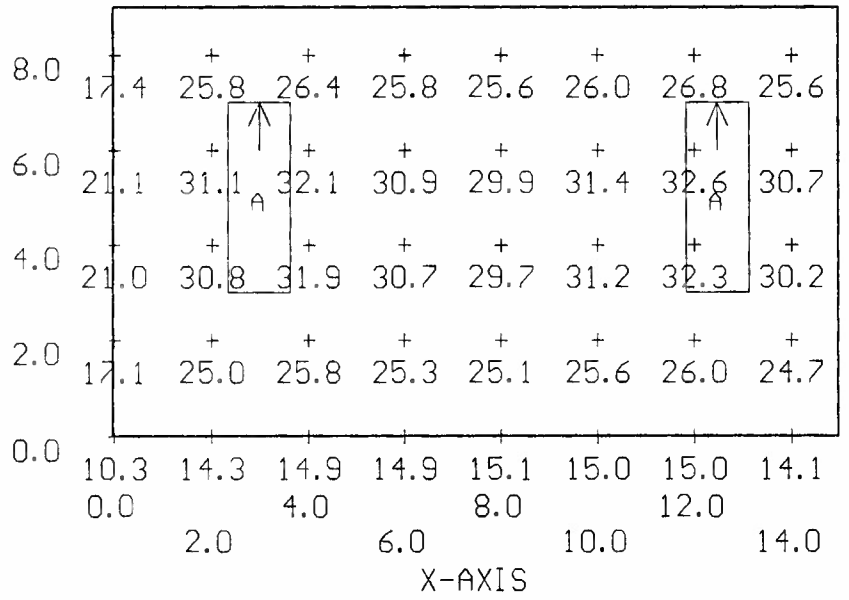


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 14:39 3-Feb-95
PROJECT: 10-020 AREA: RM. 289 GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=10.3 MAX=32.6 AVE=24.6 AVE/MIN= 2.40 MAX/MIN= 3.17

A (2) = K9604 COLUMBIA WCW240-A, (2) F40CW, LLF= 0.68

Y-AXIS

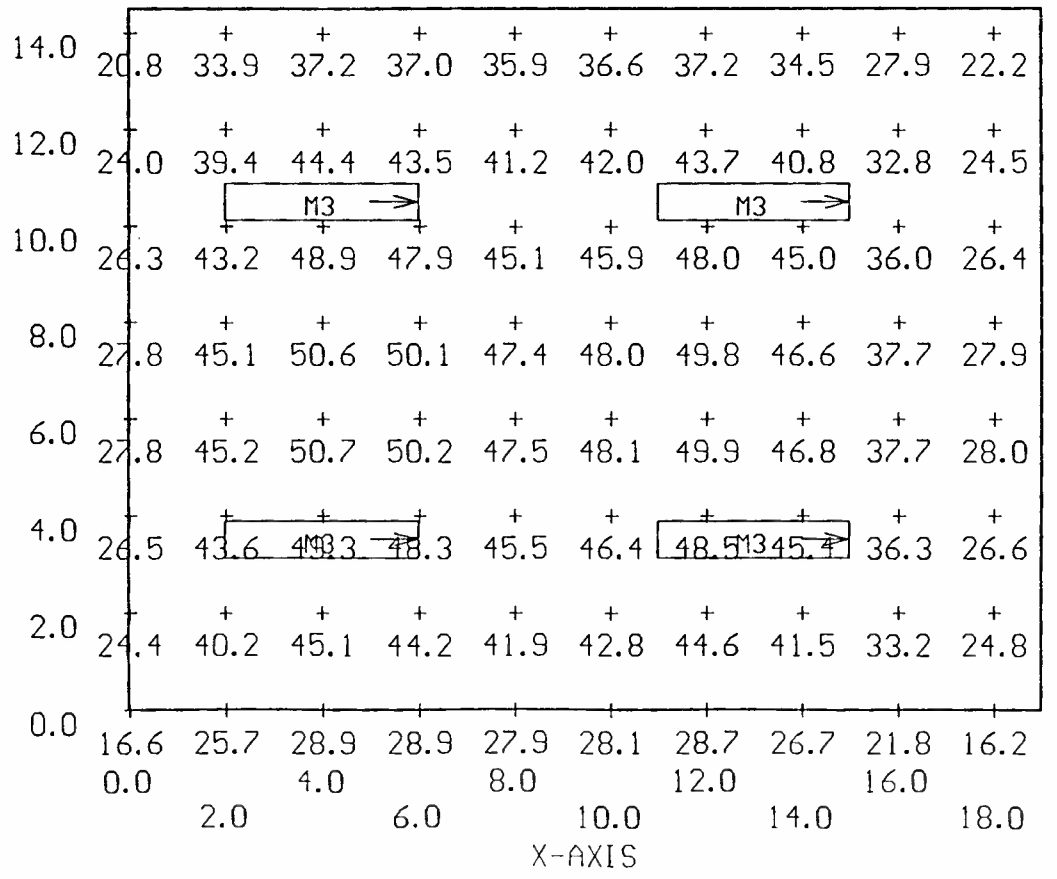


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 17:42 4-Jan-95
PROJECT: 10-020 AREA: RM. 221 GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=16.2 MAX=50.7 AVE=37.8 AVE/MIN= 2.33 MAX/MIN= 3.13

M3 (4) = K8966 COLUMBIA K440-T, (4) F40CW, LLF= 0.51

Y-AXIS

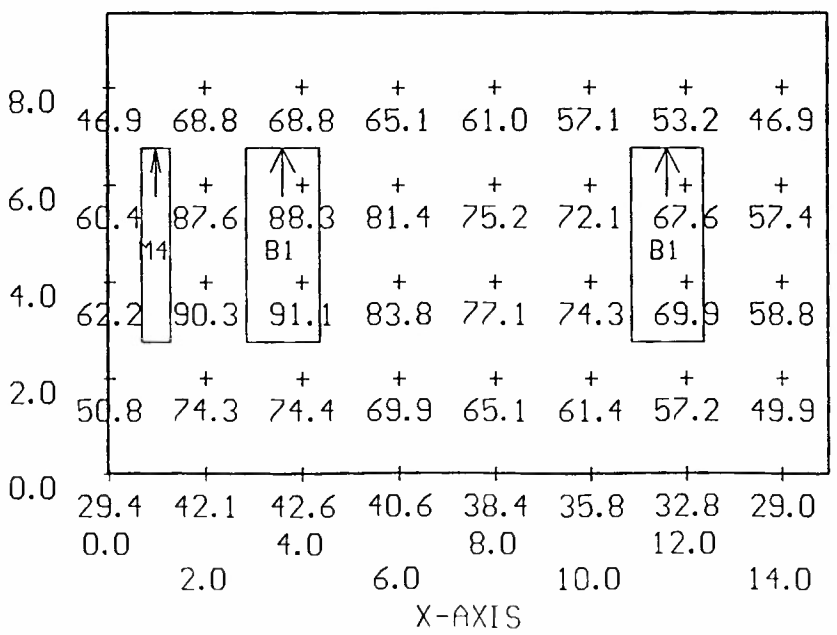


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 09:09 5-Jan-95
PROJECT: 10-020 AREA: CASHIER GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=29.0 MAX=91.1 AVE=61.5 AVE/MIN= 2.12 MAX/MIN= 3.15

B1 <2> = K9691 COLUMBIA WPW440-A, (4) F40CW, LLF= 0.68
M4 <1> = K7988K COLUMBIA K240-T, (2) F40CW, LLF= 0.73

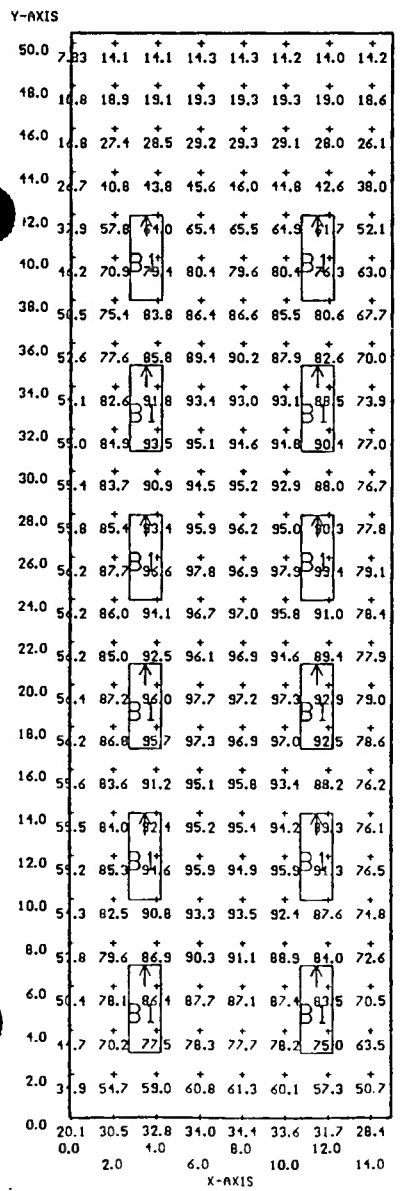
Y-AXIS



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 09:02 5-Jan-95
PROJECT: 10-020 AREA: RM. 223 & 229 GRID: GRID
Values are FC, SCALE: 1 IN= 9.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=7.83 MAX=97.9 AVE=70.0 AVE/MIN= 8.94 MAX/MIN= 12.50

B1 (12) = K9691 COLUMBIA WPW440-A, (4) F40CW, LLF= 0.68



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 09:21 5-Jan-95
PROJECT: 10-020 AREA: RM. 231 GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=8.75 MAX=52.6 AVE=31.3 AVE/MIN= 3.58 MAX/MIN= 6.02

M3 <2> = K8966 COLUMBIA K440-T, (4) F40CW, LLF= 0.51

Y-AXIS

14.0	11.7	21.6	31.1	40.2	42.4	36.2	25.8	18.5
12.0	13.0	24.4	35.5	47.1	M3 0.2 →	41.8	29.5	20.4
10.0	14.1	26.3	37.8	49.5	52.6	44.1	31.6	22.2
8.0	14.5	27.0	38.1	48.8	51.6	44.0	32.2	22.9
6.0	14.5	26.7	38.1	49.3	52.2	44.3	32.0	22.5
4.0	13.6	25.4	37.0	48.9	M3 2.2 →	43.4	30.7	21.4
2.0	12.4	23.3	33.6	44.1	46.8	39.3	27.9	19.6
0.0	8.75	15.3	21.7	27.7	29.3	25.0	18.3	12.8

0.0 2.0 4.0 6.0 8.0 10.0 12.0 14.0

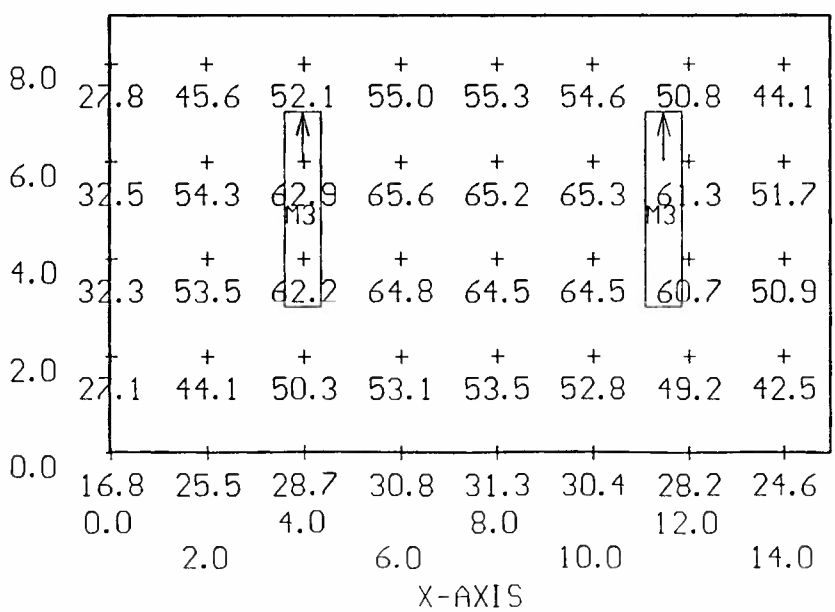
X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 09:19 6-Jan-95
ROJECT: 10-020 AREA: RM. 228 GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=16.8 MAX=65.6 AVE=47.2 AVE/MIN= 2.80 MAX/MIN= 3.90

M3 <2> = K8966 COLUMBIA K440-T, (4) F40CW, LLF= 0.51

Y-AXIS

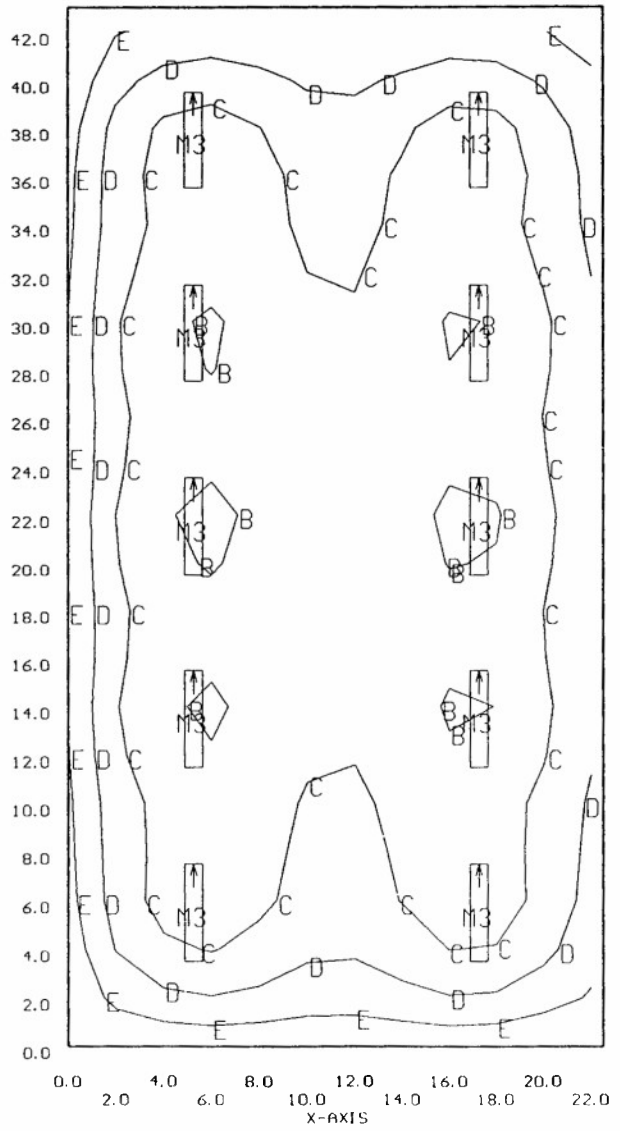


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:00 24-Feb-95
PROJECT: 10-020A AREA: OPEN OFFICE-232 GRID: GRID
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=12.5 MAX=62.2 AVE=46.4 AVE/MIN= 3.70 MAX/MIN= 4.96

M3 <10> = K8966 COLUMBIA K440-T, (4) F40CW, LLF= 0.51

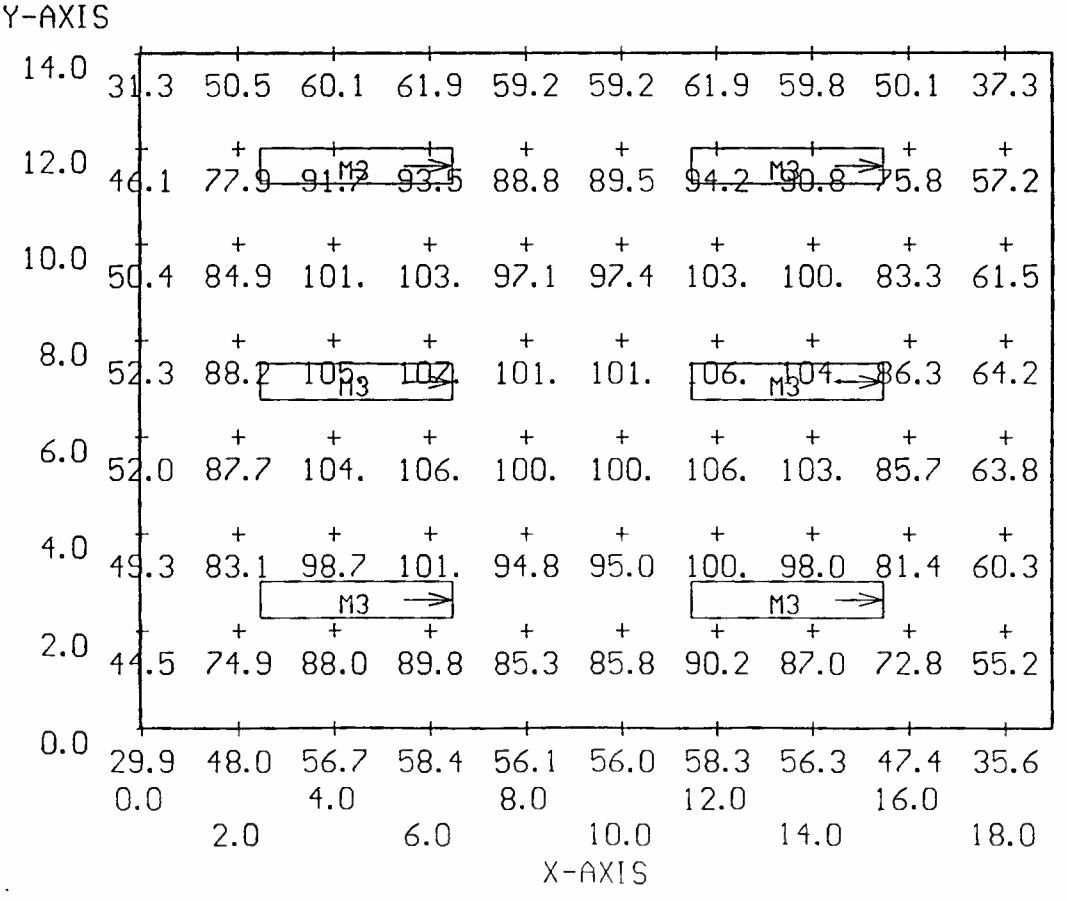
Y-AXIS CONTOUR LEVELS: A= 70.0 B= 60.0 C= 50.0 D= 40.0 E= 30.0



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 10:02 5-Jan-95
PROJECT: 10-020 AREA: RM. 215 GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=29.9 MAX=107. AVE=77.2 AVE/MIN= 2.58 MAX/MIN= 3.57

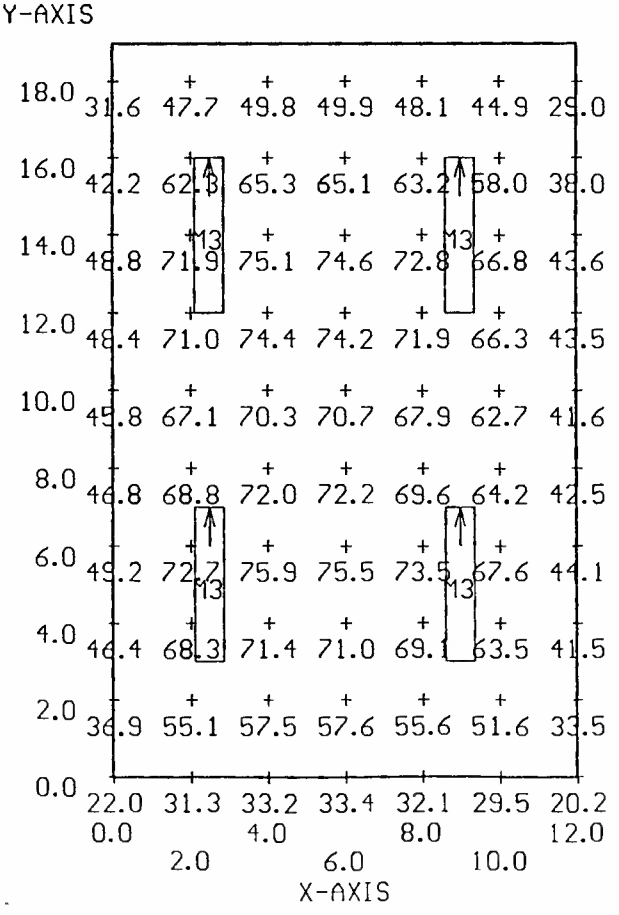
3 <6> = K8966 COLUMBIA K440-T, (4) F40CW, LLF= 0.51



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 10:20 5-Jan-95
PROJECT: 10-020 AREA: RM. 217 GRID: GRID
Values are FC, SCALE: 1 IN= 5.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=20.2 MAX=75.9 AVE=55.7 AVE/MIN= 2.76 MAX/MIN= 3.75

'3 (4) = K8966 COLUMBIA K440-T, (4) F40CW, LLF= 0.51

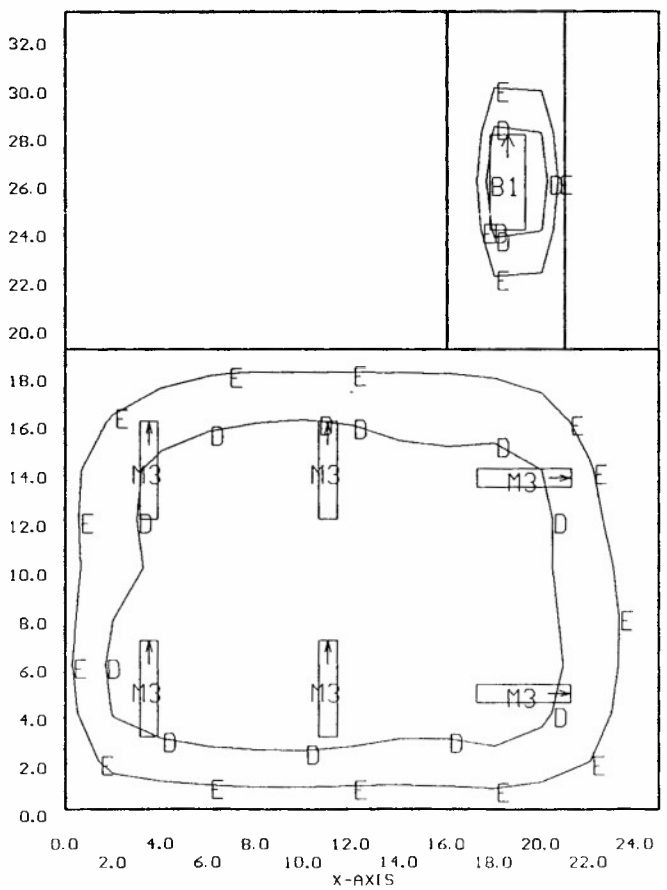


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:46 24-Feb-95
PROJECT: 10-020 AREA: RM. 213/216 GRID: GRID
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=0.00 MAX=48.8 AVE=23.2 AVE/MIN=N/A MAX/MIN=N/A

B1 (1) = K9691 COLUMBIA WPW440-A, (4) F40CW, LLF= 0.68
M3 (6) = K8966 COLUMBIA K440-T, (4) F40CW, LLF= 0.48

Y-AXIS CONTOUR LEVELS: A= 70.0 B= 60.0 C= 50.0 D= 40.0 E= 30.0



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:23 5-Jan-95
PROJECT: 10-020 AREA: RM. 209 GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=19.1 MAX=95.8 AVE=66.0 AVE/MIN= 3.46 MAX/MIN= 5.02

2 (4) = K8963 COLUMBIA CH440, (4) F40CW, LLF= 0.84

Y-AXIS

14.0	21.2	36.7	49.3	57.1	56.8	54.0	55.2	57.9	54.2	43.1	30.9
12.0	30.6	55.9	75.1	88.1	86.9	81.4	83.7	89.0	83.2	65.4	47.5
10.0	33.1	59.9	81.2	94.8	93.3	87.5	89.9	95.8	89.8	70.5	50.5
8.0	34.0	61.0	81.5	94.3	93.8	89.3	91.0	95.4	89.4	71.5	51.7
6.0	33.6	60.3	81.2	94.4	93.3	88.1	90.1	95.3	89.4	70.9	50.8
4.0	31.3	56.9	77.7	90.8	88.8	82.6	85.1	91.6	86.0	67.2	47.9
2.0	28.4	51.1	67.4	78.4	77.8	73.5	75.3	79.4	74.3	59.3	43.8
0.0	19.1	32.1	41.6	47.6	48.1	46.6	47.2	48.5	45.3	37.0	27.6

M2 M2 M2

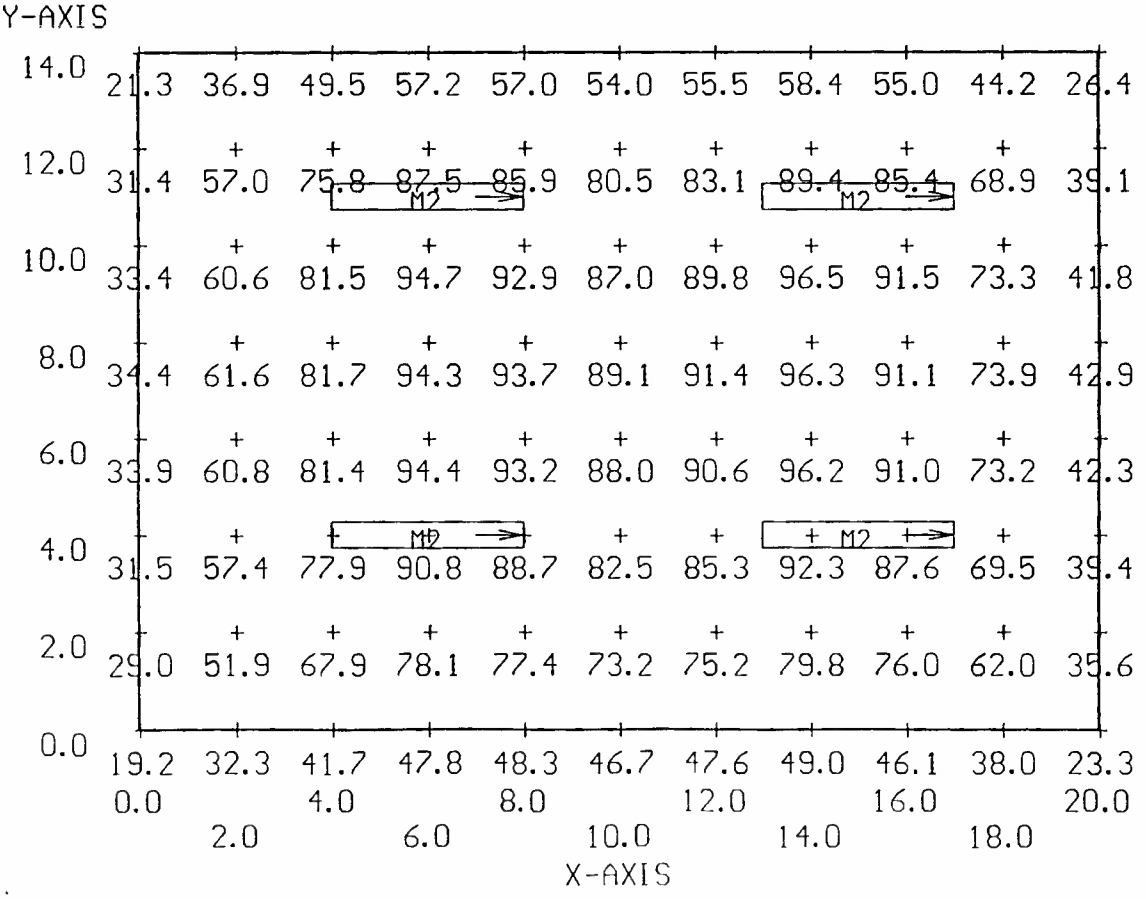
0.0 2.0 4.0 6.0 8.0 10.0 12.0 14.0 16.0 18.0 20.0

X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:32 5-Jan-95
PROJECT: 10-020 AREA: RM. 207 GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=19.2 MAX=96.5 AVE=65.8 AVE/MIN= 3.43 MAX/MIN= 5.03

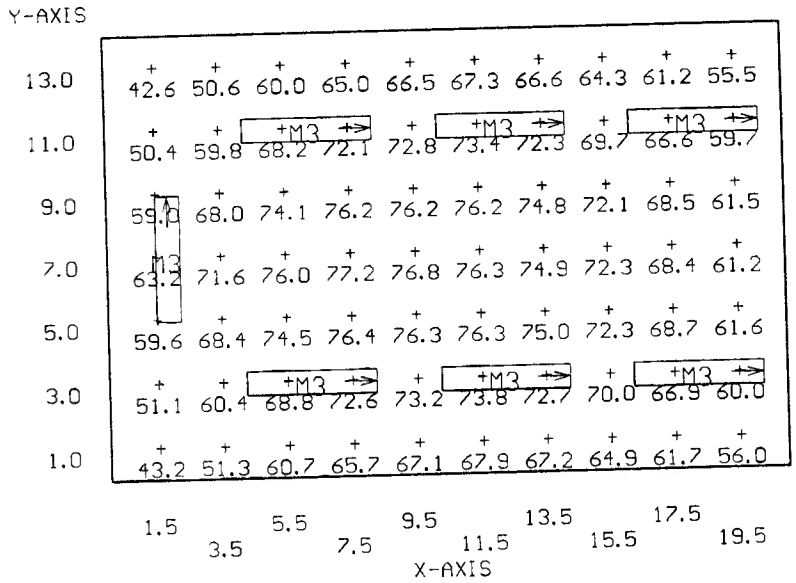
2 <4> = K8963 COLUMBIA CH440, <4> F40CW, LLF= 0.84



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:02 3-Feb-95
PROJECT: 10-020 AREA: ROOM 205 GRID: Ceiling
Values are FC, SCALE: 1 IN= 6.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=42.6 MAX=77.2 AVE=66.8 AVE/MIN= 1.57 MAX/MIN= 1.81

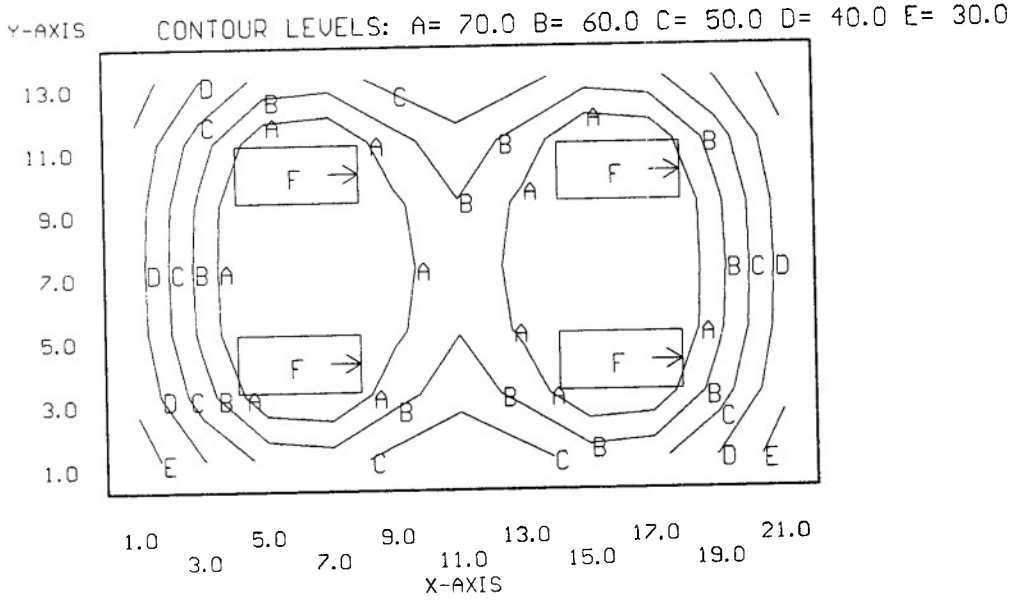
M3 (7) = K8966 COLUMBIA K440-T, (4) F40CW, LLF= 0.51



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:33 27-Feb-95
PROJECT: 10-020 AREA: ROOM 202 GRID: Ceiling
Values are FC, SCALE: 1 IN= 6.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=25.2 MAX=91.3 AVE=59.6 AVE/MIN= 2.36 MAX/MIN= 3.62

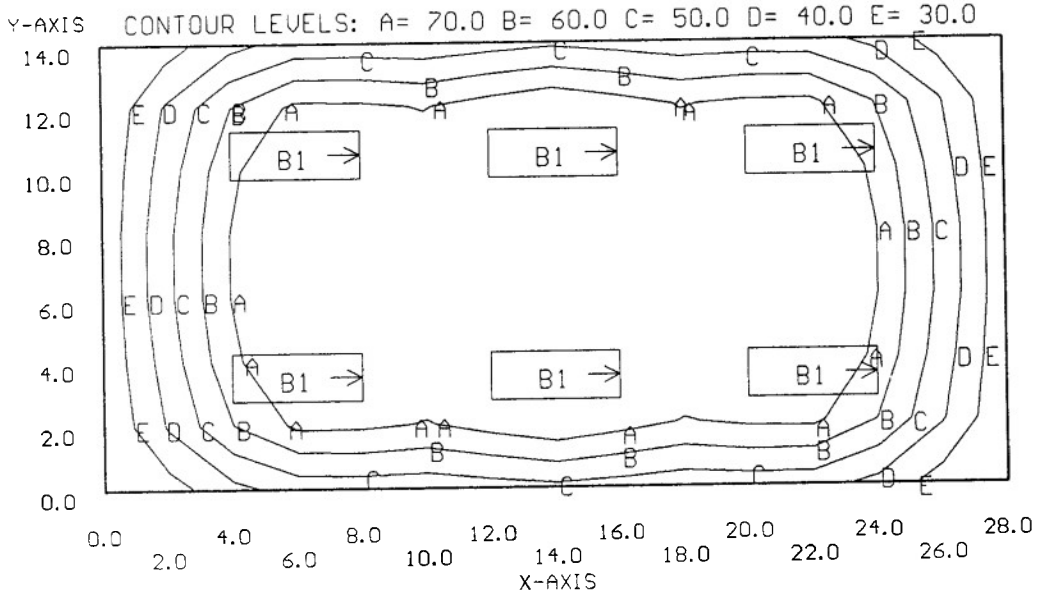
F (4) = 9753 COLUMBIA 4PS2*-87-244, (4) F40CW, LLF= 0.73



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:18 27-Feb-95
PROJECT: 10-020 AREA: RM. 206 GRID: GRID
Values are FC, SCALE: 1 IN= 6.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=12.6 MAX=91.6 AVE=58.4 AVE/MIN= 4.63 MAX/MIN= 7.26

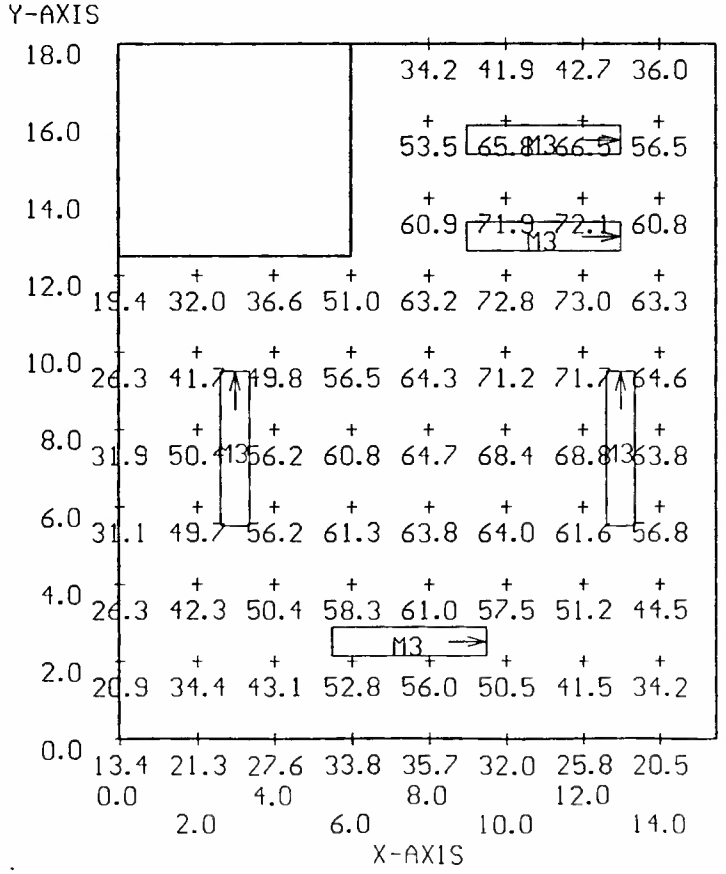
B1 (6) = K9691 COLUMBIA WPW440-A, (4) F40CW, LLF= 0.68



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 14:29 5-Jan-95
PROJECT: 10-020 AREA: RM. 263 GRID: GRID
Values are FC, SCALE: 1 IN= 5.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=13.4 MAX=73.0 AVE=49.5 AVE/MIN= 3.69 MAX/MIN= 5.44

M3 (5) = K8966 COLUMBIA K440-T, (4) F40CW, LLF= 0.51

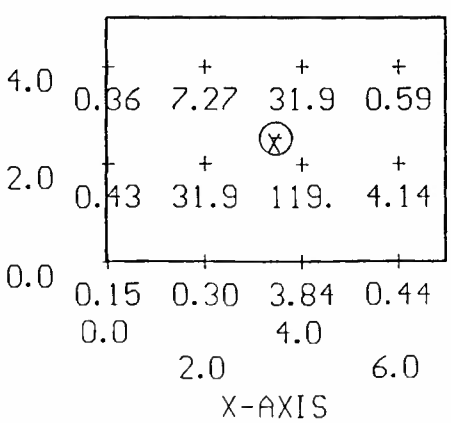


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:54 5-Jan-95
PROJECT: 10-020 AREA: RM. 263A GRID: GRID
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=0.15 MAX=119. AVE=16.7 AVE/MIN= 107.03 MAX/MIN= 762.87

X <1> = B1073A PRESCOLITE 1128-930, (1) 75A19/SW, LLF= 0.77

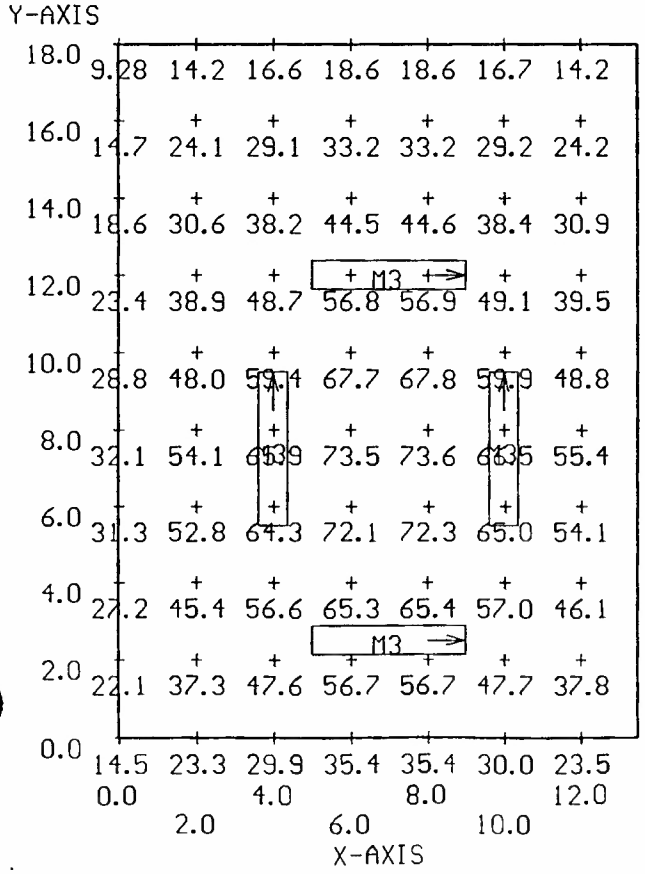
Y-AXIS



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 13:48 5-Jan-95
PROJECT: 10-020 AREA: RM. 265 GRID: GRID
Values are FC, SCALE: 1 IN= 5.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=9.28 MAX=73.6 AVE=41.8 AVE/MIN= 4.51 MAX/MIN= 7.93

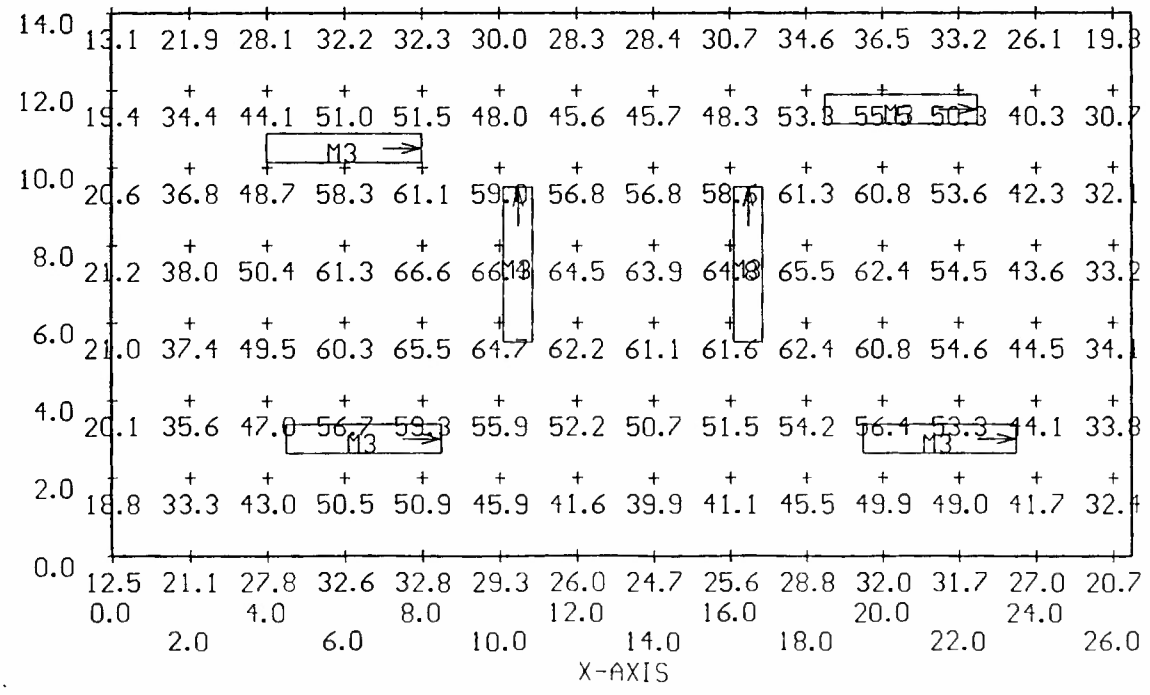
M3 (4) = K8966 COLUMBIA K440-T, (4) F40CW, LLF= 0.51



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 16:01 5-Jan-95
PROJECT: 10-020 AREA: RM. 269 GRID: GRID
Values are FC, SCALE: 1 IN= 5.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=12.5 MAX=66.6 AVE=43.2 AVE/MIN= 3.47 MAX/MIN= 5.35

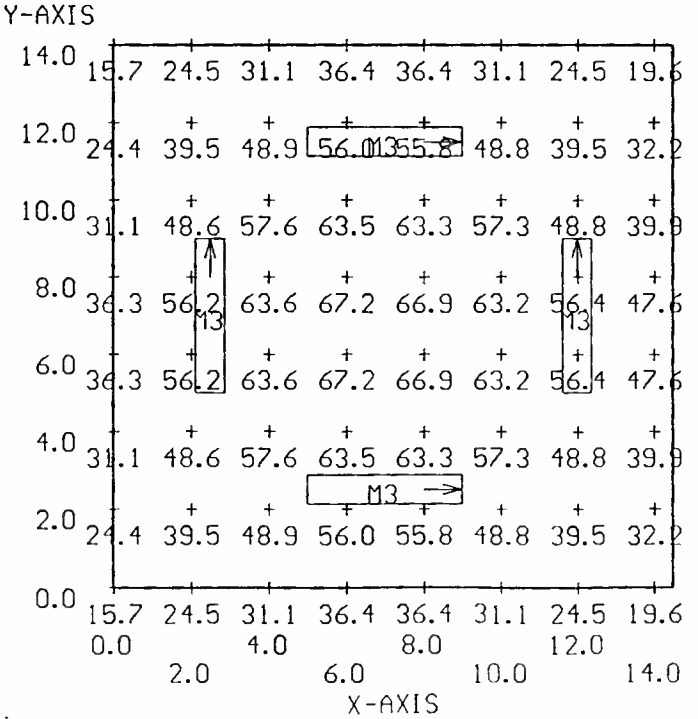
M3 (6) = K8966 COLUMBIA K440-T, (4) F40CW, LLF= 0.51



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 16:08 5-Jan-95
PROJECT: 10-020 AREA: RM. 267 GRID: GRID
Values are FC, SCALE: 1 IN= 5.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=15.7 MAX=67.2 AVE=44.7 AVE/MIN= 2.85 MAX/MIN= 4.29

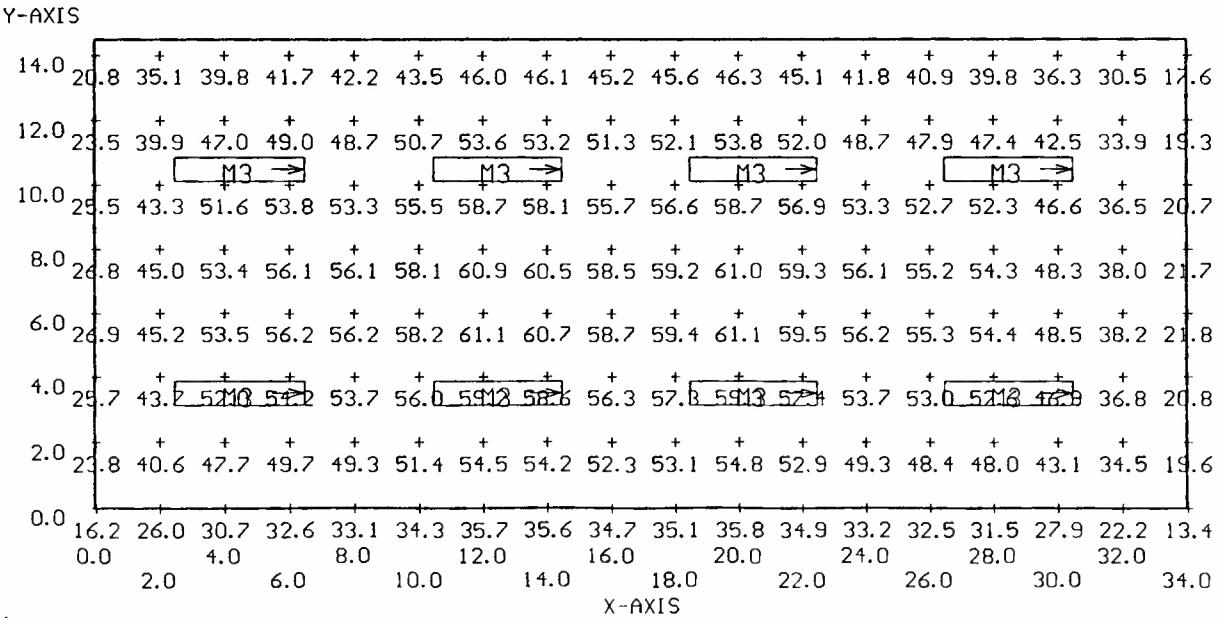
M3 (4) = K8966 COLUMBIA K440-T, (4) F40CW, LLF= 0.51



SI's LITE*PRO V2.27E Point-By-Point Numeric Output 16:13 5-Jan-95
PROJECT: 10-020 AREA: RM. 266 GRID: GRID
Values are FC, SCALE: 1 IN= 6.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=13.4 MAX=61.1 AVE=45.4 AVE/MIN= 3.40 MAX/MIN= 4.58

M3 (8) = K8966 COLUMBIA K440-T, (4) F40CW, LLF= 0.51

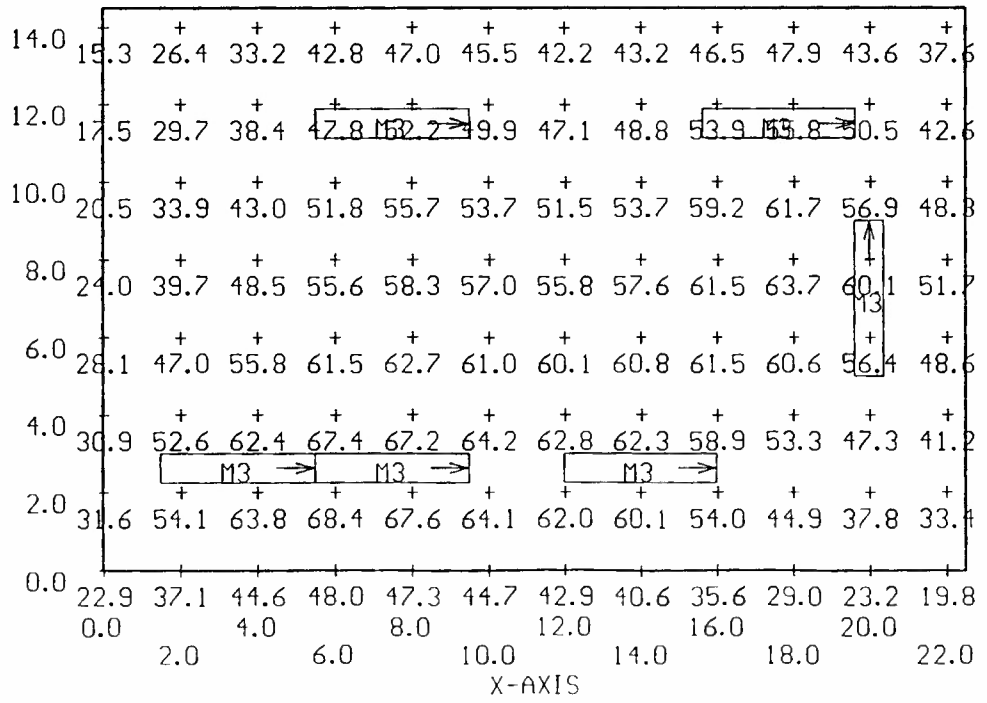


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 16:43 5-Jan-95
PROJECT: 10-020 AREA: RM. 270 GRID: GRID
Values are FC, SCALE: 1 IN= 5.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=15.3 MAX=68.4 AVE=48.3 AVE/MIN= 3.16 MAX/MIN= 4.46

M3 <6> = K8966 COLUMBIA K440-T, (4) F40CW, LLF= 0.51

Y-AXIS



Bldg 10-030 Summary

Present System

Fixture Type		Watts/ Fixture	Number Fixtures	Total Watts
G2	2L Wet Location	80	2	160
P2	2x4 2L Troffer	82	3	246
P4	2x4 4L Troffer	140	33	4,620
R1	1x4 2L Troffer	82	2	164
R2	2x4 2L Troffer	72	8	576
R4	2x4 4L Troffer	164	12	1,968
S2	2x2 2L Troffer	72	5	360
SM	4' 2L Strip	82	6	492
Totals			71	8,586

Replacement System

Fixture Type		Watts/ Fixture	Number Fixtures	Total Watts
M8	4' 2L Troffer	60	2	120
P8	2x4 4L Troffer	113	8	904
R	1x4 2L Troffer	34	2	68
R3	2x4 3L Troffer	91	13	1,183
R8	2x4 2L Troffer	59	13	767
RR	2x4 2L Troffer w/ reflector	61	21	1,281
S1	4' 1L Strip	34	6	204
S8	2x2 2L Troffer	60	4	240
Totals			69	4,767

10-030 Schedule

Reynolds, Smith & Hills, Inc.
4651 Salisbury Road
Jacksonville, FL 32256
Buildings Engineering

Luminaire Fixture Schedule
Generated by LitePro V2.27E
Provided and supported by USI Lighting, Inc.
Filename: 10-030 Type: Indoor

Luminaire Fixture Schedule - PRESENT

Project name: PBA Lighting Survey - Bldg 10-030	Project #6941331
Prepared for: Corps of Engineers	Date: 1-Mar-95
Prepared by: C. Warren	UPD: 1.4W/Sq.Ft

TYPE	DESCRIPTION	LAMP/BALLAST	V/W	QTY	REMARKS
G2	7"X4' 2L WET LOCATION WRAP LENS- PRISMATIC BOTTOM & SIDES COLUMBIA LUN240-WL	F40CW ESB	000 - 80	2	
P2	2'X4' 2L FLUSH STATIC TROFFER LENS- .110" THK PRISMATIC A12 COLUMBIA 5PS2*-52-242	F40CW ESB	000 - 82	3	
P4	2X4 4L FLUSH STATIC TROFFER LENS-PRISMATIC ACRYLIC PATT-12 COLUMBIA 5PS2*-52-244	F40CW/RS/WM ESB	000 - 140	33	
R1	1'X4' 2L FLUSH STATIC TROFFER LENS- .110" THK PRISMATIC A12 COLUMBIA 5PS2*-52-142	F40CW ESB	000 - 82	2	
R2	2X4 2L FLUSH STATIC TROFFER LENS-PRISMATIC ACRYLIC PATT-12 COLUMBIA 5PS2*-52-242	F40CW/RS/WM ESB	000 - 72	8	
R4	2'X4' 4L FLUSH STATIC TROFFER LENS- .110" THK PRISMATIC A12 COLUMBIA 5PS2*-52-244	F40CW ESB	000 - 164	12	
S2	2'X2' 2L FLUSH STATIC TROFFER LENS- .110" THK PRISMATIC A12 COLUMBIA 5PS2*-52-222U	F40CW/U6/RS/WM ESB	000 - 72	5	
SM	4"X4'2L EMBOSSED SURFACE STRIP OPEN BOTTOM- NO SHIELDING COLUMBIA CS240	F40CW ESB	000 - 82	6	

10-030 Schedule

Reynolds, Smith & Hills, Inc.
4651 Salisbury Road
Jacksonville, FL 32256
Buildings Engineering

Luminaire Fixture Schedule
Generated by LitePro V2.27E
Provided and supported by USI Lighting, Inc.
Filename: 10-030 Type: Indoor

Luminaire Fixture Schedule PROPOSED

Project name: PBA Lighting Survey - Bldg 10-030	Project #6941331
Prepared for: Corps of Engineers	Date: 1-Mar-95
Prepared by: C. Warren	UPD: 0.6W/Sq.Ft

TYPE	DESCRIPTION	LAMP/BALLAST	V/W	QTY	REMARKS
M8	4"X4'2L EMBOSSED SURFACE STRIP OPEN BOTTOM- NO SHIELDING COLUMBIA CS240	FO32/35K EOCT	000 - 60	2	
P8	2X4 4L FLUSH STATIC TROFFER LENS-PRISMATIC ACRYLIC PATT-12 COLUMBIA 5PS2*-52-244	FO32/35K EOCT	000 - 113	8	
R	1'X4' 1L FLUSH STATIC TROFFER LENS-.110" THK PRISMATIC A12 COLUMBIA 5PS2*-52-141	FO32/35K ESB	000 - 34	2	
R3	2X4 3L FLUSH STATIC TROFFER LENS-PRISMATIC ACRYLIC PATT-12 COLUMBIA T85PS2*-52-243-3EOCT	FO32/31K EOCT	000 - 92	13	
R8	2X4 2L FLUSH STATIC TROFFER LENS-PRISMATIC ACRYLIC PATT-12 COLUMBIA 5PS2*-52-242	FO32/35K EOCT	000 - 59	13	
RR	2X4 ACRYLIC LENSED TROFFER SILVER BEAM REFLECTOR METALOPTICS 24TRSO42EP11	FO32/35K EOCT	000 - 61	21	
S1	3"X4' 1L SM HSG SURFACE STRIP OPEN BOTTOM- NO SHIELDING COLUMBIA CH140	FO32/35K EOCT	000 - 34	6	
S8	2'X2' 2L FLUSH STATIC TROFFER LENS- .110" THK PRISMATIC A12 COLUMBIA 5PS2*-52-222U	FBO31/35K EOCT	000 - 60	4	

Reynolds, Smith & Hills, Inc.
4651 Salisbury Road
Jacksonville, FL 32256
Buildings Engineering

Project Area Summary
Generated by LitePro V2.27E
Provided and supported by USI Lighting, Inc.
Filename: 10-030 Type: Indoor

Project Area Summary	
Project name: PBA Lighting Survey - Bldg 10-030	Project #6941331
Prepared for: Corps of Engineers	Date: 1-Mar-95
Prepared by: C. Warren	UPD: 1.1W/Sq.Ft

AREA NAME	DIMENSIONS	LUMINAIRES	W/SQ.FT	QTY
CONFERENCE	14x15x10Ft	(2) Type R4	1.6	1
CONFERENCE-N	14x15x10Ft	(2) Type RR	0.6	1
ENTRANCE HALL	27x24x10Ft	(4) Type P4	0.9	1
ENTRANCE HALL-N	27x24x10Ft	(4) Type R8	0.4	1
FILE ROOM	33x12x10Ft	(4) Type P4	1.4	1
FILE ROOM-N	33x12x10Ft	(4) Type RR	0.6	1
STORAGE	20x10x8Ft	(1) Type P4 (1) Type R2	1.1	1
STORAGE-N	20x10x8Ft	(2) Type R8	0.6	1
OFFICE 1	14x15x10Ft	(2) Type P4	1.3	1
OFFICE 1-N	14x15x10Ft	(2) Type RR	0.6	1
OPEN OFFICE	38x24x10Ft	(8) Type P4	1.2	1
OPEN OFFICE-N	38x24x10Ft	(8) Type P8	1.0	1
EAST HALLWAY	24x5x10Ft	(2) Type R2	1.2	1
EAST HALLWAY-N	24x5x10Ft	(2) Type R8	1.0	1
ENTRANCE FOYERS	7x7x10Ft	(1) Type S2	1.5	2
NT. FOYERS-N	7x7x10Ft	(1) Type S8	1.2	2
OFFICES 2 & 3	11x16x10Ft	(2) Type P4	1.6	2
OFFICES 2 & 3-N	11x16x10Ft	(2) Type R3	1.0	2

FICES 4 & 5	12x15x10Ft	(2)	Type P4	1.6	2
OFFICES 4 & 5-N	12x15x10Ft	(2)	Type R3	1.0	2
OFFICE 6	14x12x10Ft	(2)	Type P4	1.7	1
OFFICE 6-N	14x12x10Ft	(2)	Type R3	1.1	1
SHORT HALL	4x8x10Ft	(2)	Type S2	4.5	1
SHORT HALL-N	4x8x10Ft	(1)	Type S8	1.9	1
BREAKROOM	11x26x8Ft	(2)	Type R2	0.5	1
BREAKROOM-N	11x26x8Ft	(2)	Type R8	0.4	1
RESTROOMS	21x9x8Ft	(3)	Type SM	1.3	2
RESTROOMS-N	21x9x8Ft	(3)	Type S1	0.5	2
JANITOR	4x8x10Ft	(2)	Type R1	5.1	1
JANITOR-N	4x8x10Ft	(1)	Type R	1.1	1
OFFICE 7	23x12x10Ft	(3)	Type P2	0.9	1
FFICE 7-N	23x12x10Ft	(3)	Type RR	0.7	1
OFFICE 8	14x9x10Ft	(2)	Type P4	2.2	1
OFFICE 8-N	14x9x10Ft	(2)	Type R3	1.4	1
EAST ENTRANCE 2	7x8x10Ft	(1)	Type S2	1.3	1
EAST ENT. 2-N	7x8x10Ft	(1)	Type S8	1.1	1
HALL/OFFICE 9	26x18x10Ft	(2) (3)	Type P4 Type R2	1.1	1
HALL/OFFICE 9-N	26x18x10Ft	(3) (2)	Type R8 Type RR	0.6	1
TOILETS	20x8x10Ft	(2)	Type G2	1.0	1
TOILETS-N	20x8x10Ft	(2)	Type M8	0.8	1
OPEN OFFICE 2	20x35x8Ft	(8)	Type R4	1.9	1
OPEN OFFICE 2-N	20x35x8Ft	(8)	Type RR	0.7	1
COMPUTER	9x10x8Ft	(1)	Type R4	1.8	1
MPUTER-N	9x10x8Ft	(1)	Type R3	1.0	1
SOUTH FOYER	10x7x8Ft	(1)	Type R4	2.3	1
SOUTH FOYER-N	10x7x8Ft	(1)	Type R	0.5	1

10-030 Calculations

Reynolds, Smith & Hills, Inc.
4651 Salisbury Road
Jacksonville, FL 32256
Buildings Engineering

Project Calculation Summary
Generated by LitePro V2.27E
Provided and supported by USI Lighting, Inc.
Filename: 10-030 Type: Indoor

Project Calculation Summary	
Project name: PBA Lighting Survey - Bldg 10-030	Project #6941331
Prepared for: Corps of Engineers	Date: 1-Mar-95
Prepared by: C. Warren	UPD: 1.0W/Sq.Ft

AREA NAME	DIMENSIONS	GRID NAME	AVE	MAX	MIN
CONFERENCE	14x15x10Ft	Ceiling	<+> 42.6	64.0	23.1
CONFERENCE-N	14x15x10Ft	Ceiling	<+> 29.7	46.7	16.7
ENTRANCE HALL	27x24x10Ft	Ceiling	<+> 21.7	58.2	0.0
ENTRANCE HALL-N	27x24x10Ft	Ceiling	<+> 13.5	35.9	0.0
FILE ROOM	33x12x10Ft	Ceiling	<+> 43.0	64.3	18.3
FILE ROOM-N	33x12x10Ft	Ceiling	<+> 35.4	53.7	16.1
STORAGE	20x10x8Ft	Ceiling	<+> 32.2	70.5	8.5
STORAGE-N	20x10x8Ft	Ceiling	<+> 25.9	44.4	8.6
OFFICE 1	14x15x10Ft	Ceiling	<+> 42.3	83.6	14.5
OFFICE 1-N	14x15x10Ft	Ceiling	<+> 34.8	71.6	12.9
OPEN OFFICE	38x24x10Ft	Ceiling	<+> 41.4	61.3	14.2
OPEN OFFICE-N	38x24x10Ft	Ceiling	<+> 46.3	68.6	15.9
EAST HALLWAY	24x5x10Ft	Ceiling	<+> 23.5	28.7	17.0
EAST HALLWAY-N	24x5x10Ft	Ceiling	<+> 26.3	32.1	19.0
ENTRANCE FOYERS	7x7x10Ft	Ceiling	<+> 24.5	28.3	22.8
ENT. FOYERS-N	7x7x10Ft	Ceiling	<+> 24.6	28.3	22.8
OFFICES 2 & 3	11x16x10Ft	Ceiling	<+> 43.4	66.4	25.1
OFFICES 2 & 3-N	11x16x10Ft	Ceiling	<+> 42.0	64.3	24.2

OFFICES 4 & 5	12x15x10Ft	Ceiling	<+>	42.5	64.8	22.0
OFFICES 4 & 5-N	12x15x10Ft	Ceiling	<+>	41.1	62.6	21.2
OFFICE 6	14x12x10Ft	Ceiling	<+>	43.3	65.5	24.8
OFFICE 6-N	14x12x10Ft	Ceiling	<+>	41.9	63.3	23.9
SHORT HALL	4x8x10Ft	Ceiling	<+>	48.3	51.8	44.7
SHORT HALL-N	4x8x10Ft	Ceiling	<+>	26.0	29.0	22.8
BREAKROOM	11x26x8Ft	Ceiling	<+>	18.2	37.6	4.1
BREAKROOM-N	11x26x8Ft	Ceiling	<+>	20.4	42.0	4.6
RESTROOMS	21x9x8Ft	Ceiling	<+>	39.7	58.8	19.7
RESTROOMS-N	21x9x8Ft	Ceiling	<+>	17.1	29.4	8.7
JANITOR	4x8x10Ft	Ceiling	<+>	55.6	61.4	49.8
JANITOR-N	4x8x10Ft	Ceiling	<+>	14.8	16.3	13.2
OFFICE 7	23x12x10Ft	Ceiling	<+>	26.9	36.4	16.7
OFFICE 7-N	23x12x10Ft	Ceiling	<+>	34.7	47.5	21.9
OFFICE 8	14x9x10Ft	Ceiling	<+>	51.6	63.2	39.4
OFFICE 8-N	14x9x10Ft	Ceiling	<+>	49.9	61.0	38.1
EAST ENTRANCE 2	7x8x10Ft	Ceiling	<+>	22.4	26.6	19.2
EAST ENT. 2-N	7x8x10Ft	Ceiling	<+>	22.4	26.6	19.3
HALL/OFFICE 9	26x18x10Ft	Ceiling	<+>	18.2	68.1	0.0
HALL/OFFICE 9-N	26x18x10Ft	Ceiling	<+>	17.0	56.7	0.0
TOILETS	20x8x10Ft	Ceiling	<+>	12.0	16.8	0.0
TOILETS-N	20x8x10Ft	Ceiling	<+>	13.9	18.7	0.0
OPEN OFFICE 2	20x35x8Ft	Ceiling	<+>	60.2	88.3	34.2
OPEN OFFICE 2-N	20x35x8Ft	Ceiling	<+>	42.7	59.2	25.7
COMPUTER	9x10x8Ft	Ceiling	<+>	49.6	78.4	29.9
COMPUTER-N	9x10x8Ft	Ceiling	<+>	41.0	64.8	24.7
SOUTH FOYER	10x7x8Ft	Ceiling	<+>	57.1	85.4	38.9
SOUTH FOYER-N	10x7x8Ft	Ceiling	<+>	14.4	20.9	9.9

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 10:40 11-Feb-95
PROJECT: 10-030 AREA: CONFERENCE GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=23.1 MAX=64.0 AVE=42.6 AVE/MIN= 1.85 MAX/MIN= 2.77

R4 <2> = 8500 COLUMBIA 5PS2*-52-244, (4) F40CW, LLF= 0.68

Y-AXIS

13.5	23.1	34.8	48.2	54.4	48.2	34.8	23.1
11.5	25.8	39.8	55.3	62.6	55.3	39.8	25.8
9.5	27.1	41.4	56.9	64.0	56.9	41.4	27.1
7.5	27.1	41.7	56.8	63.3	56.8	41.7	27.1
5.5	27.1	41.4	56.9	64.0	56.9	41.4	27.1
3.5	25.8	39.8	55.3	62.6	55.3	39.8	25.8
1.5	23.1	34.8	48.2	54.4	48.2	34.8	23.1

R4

1.0 3.0 5.0 7.0 9.0 11.0 13.0

X-AXIS

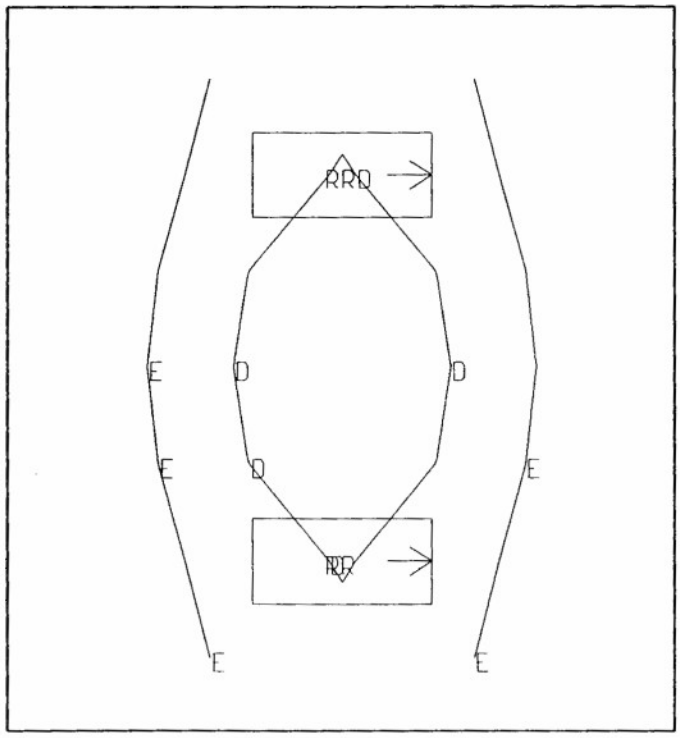
USI's LITE*PRO V2.27E Point-By-Point Numeric Output 17:49 27-Feb-95
PROJECT: 10-030 AREA: CONFERENCE-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=16.7 MAX=46.7 AVE=29.7 AVE/MIN= 1.78 MAX/MIN= 2.80

RR <2> = T10618 METALOPTICS 24TRS042EP11, (2) F032/35K, LLF= 0.79

Y-AXIS

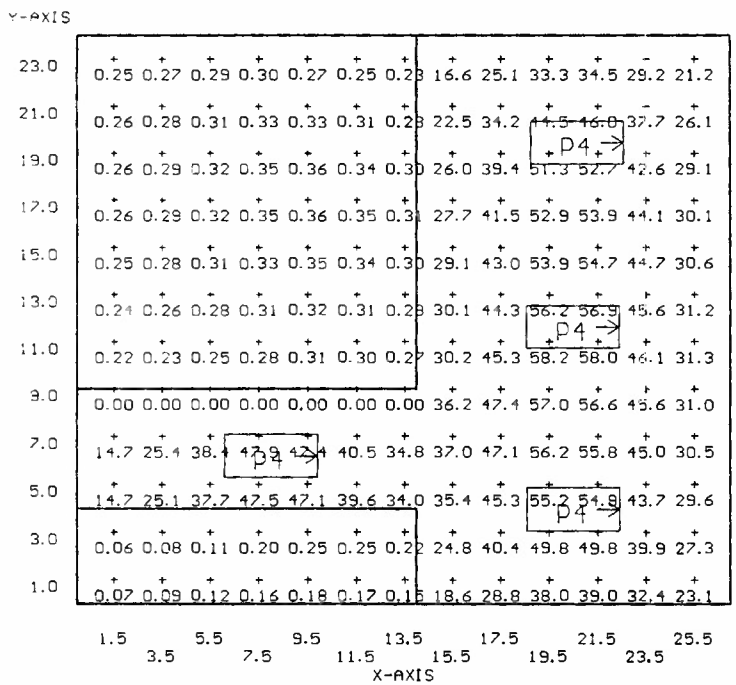
CONTOUR LEVELS: A= 70.0 B= 60.0 C= 50.0 D= 40.0 E= 30.0



JSI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:03 11-Feb-95
PROJECT: 10-030 AREA: ENTRANCE HALL GRID: Ceiling
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=0.00 MAX=58.2 AVE=21.7 AVE/MIN=N/A MAX/MIN=N/A

P4 (4) = 9600 COLUMBIA 5PS2*-52-244, (4) F40CW/RS/WM, LLF= 0.63

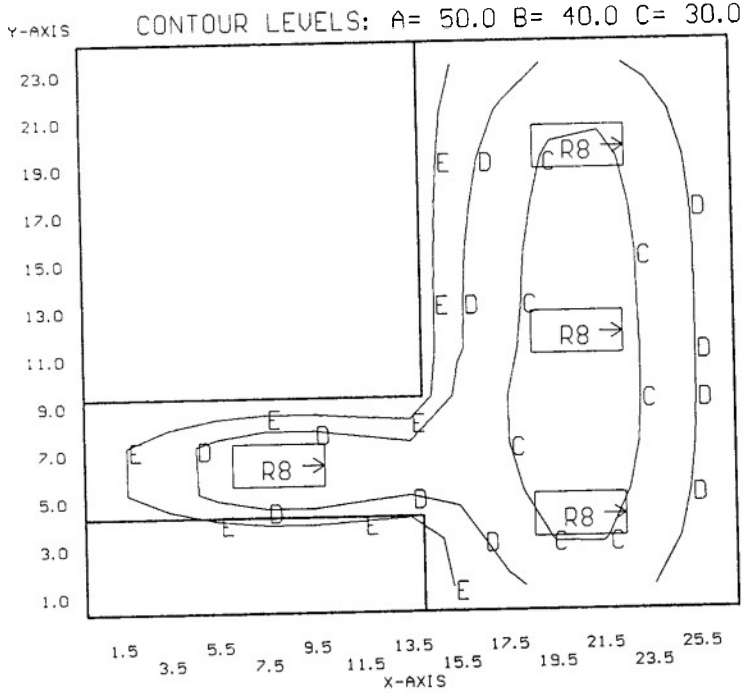


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 13:33 1-Mar-95
PROJECT: 10-030 AREA: ENTRANCE HALL-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=0.00 MAX=35.9 AVE=13.5 AVE/MIN=N/A MAX/MIN=N/A

R8 (4) = 9602 COLUMBIA 5PS2*-52-242, (2) FO32/35K, LLF= 0.64

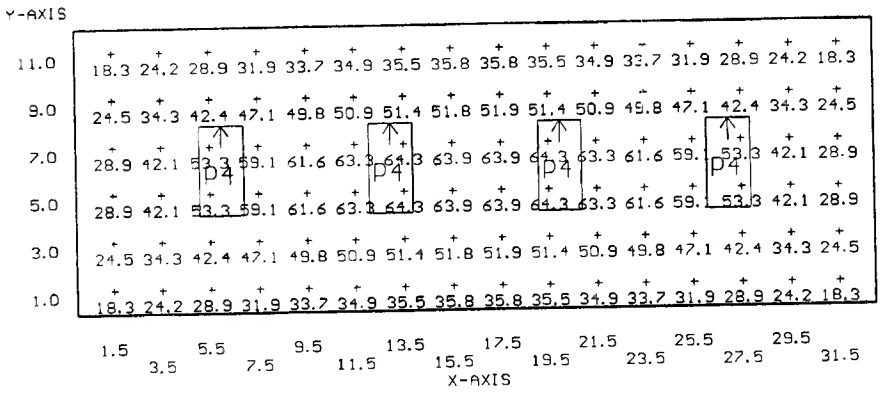
CONTOUR LEVELS: A= 50.0 B= 40.0 C= 30.0 D= 20.0 E= 10.0



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:09 11-Feb-95
PROJECT: 10-030 AREA: FILE ROOM GRID: Ceiling
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=18.3 MAX=64.3 AVE=43.0 AVE/MIN= 2.34 MAX/MIN= 3.50

P4 (4) = 9600 COLUMBIA 5PS2*-52-244, (4) F40CW/RS/WM, LLF= 0.63

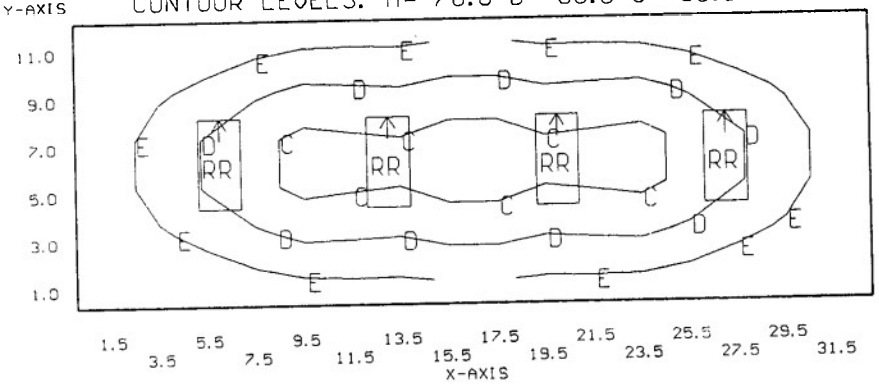


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 17:58 27-Feb-95
PROJECT: 10-030 AREA: FILE ROOM GRID: Ceiling
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=16.1 MAX=53.7 AVE=35.4 AVE/MIN= 2.20 MAX/MIN= 3.35

RR (4) = T10618 METALOPTICS 24TRS042EP11, (2) F032/35K, LLF= 0.79

CONTOUR LEVELS: A= 70.0 B= 60.0 C= 50.0 D= 40.0 E= 30.0



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:13 11-Feb-95
PROJECT: 10-030 AREA: STORAGE GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=8.53 MAX=70.5 AVE=32.2 AVE/MIN= 3.77 MAX/MIN= 8.26

P4 (1) = 9600 COLUMBIA 5PS2*-52-244, (4) F40CW/RS/WM, LLF= 0.63
R2 (1) = 9602 COLUMBIA 5PS2*-52-242, (2) F40CW/RS/WM, LLF= 0.63

Y-AXIS

9.0	22.5	31.0	33.7	28.7	22.2	20.6	20.3	17.9	13.1	8.53
7.0	33.5	50.8	56.5	46.3	33.8	31.8	33.0	29.2	20.1	11.2
5.0	39.9	62.7	70.5	56.5	40.7	38.5	41.4	36.5	24.4	12.8
3.0	35.5	54.1	60.4	49.2	36.1	34.5	36.6	32.4	22.0	12.0
1.0	24.7	34.6	37.7	32.0	24.8	23.8	24.0	21.2	15.3	9.51

P4 R2

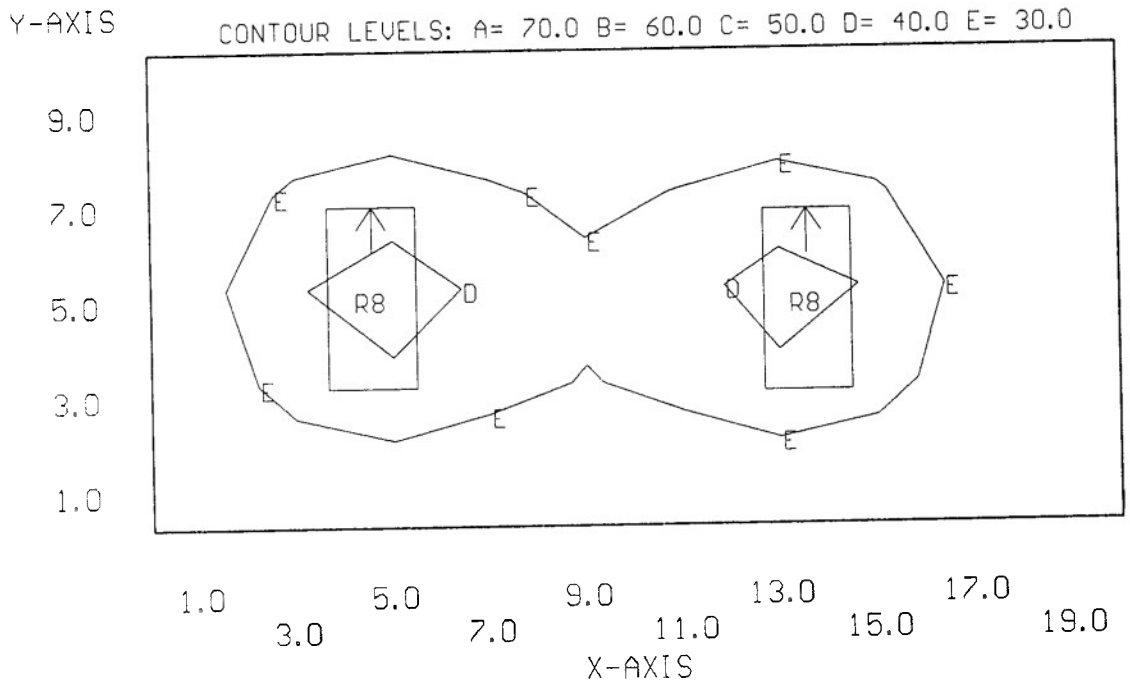
1.0 3.0 5.0 7.0 9.0 11.0 13.0 15.0 17.0 19.0

X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 18:01 27-Feb-95
PROJECT: 10-030 AREA: STORAGE GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=8.64 MAX=44.4 AVE=25.9 AVE/MIN= 3.00 MAX/MIN= 5.14

R8 <2> = 9602 COLUMBIA 5PS2*-52-242, (2) F032/35K, LLF= 0.64

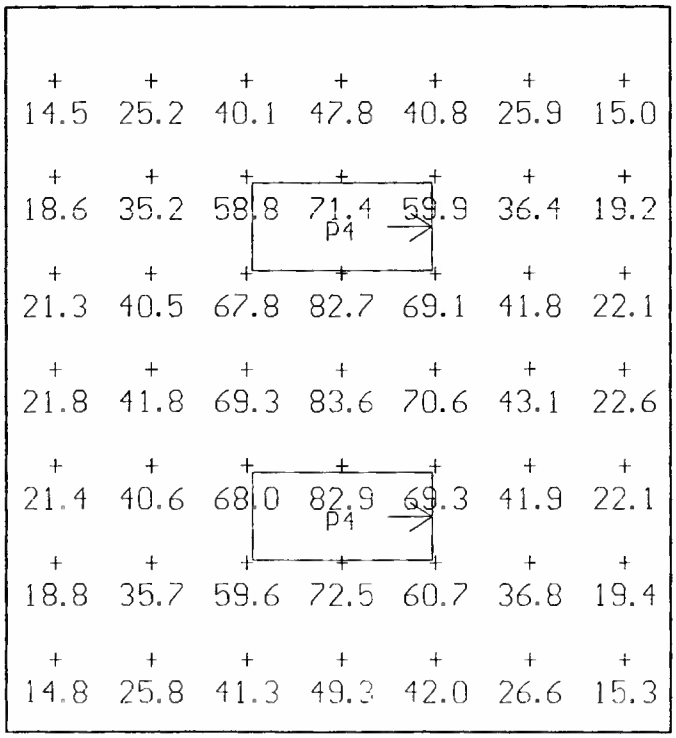


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:19 11-Feb-95
PROJECT: 10-030 AREA: OFFICE 1 GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=14.5 MAX=83.6 AVE=42.3 AVE/MIN= 2.91 MAX/MIN= 5.76

P4 <2> = 9600 COLUMBIA 5PS2*-52-244, (4) F40CW/RS/WM, LLF= 0.63

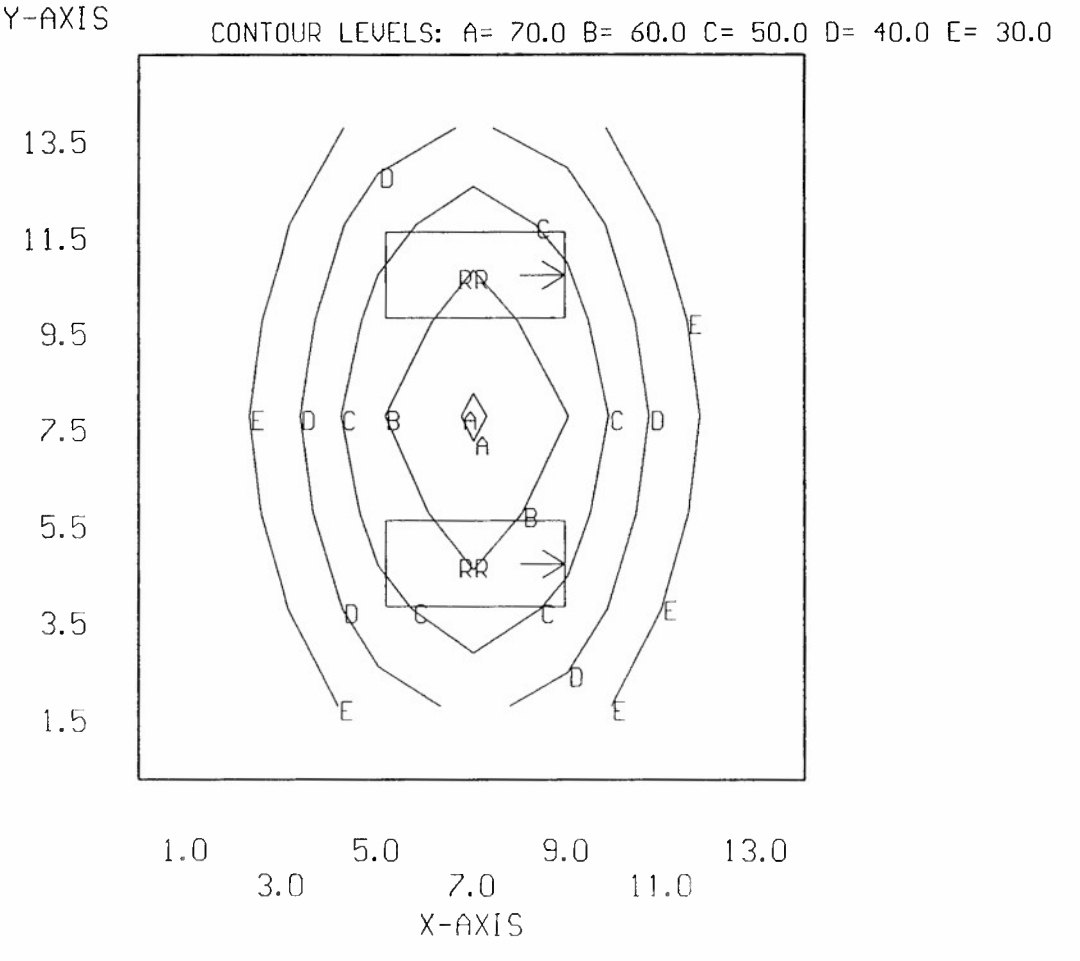
Y-AXIS



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 18:04 27-Feb-95
PROJECT: 10-030 AREA: OFFICE 1 GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=12.9 MAX=71.6 AVE=34.8 AVE/MIN= 2.69 MAX/MIN= 5.53

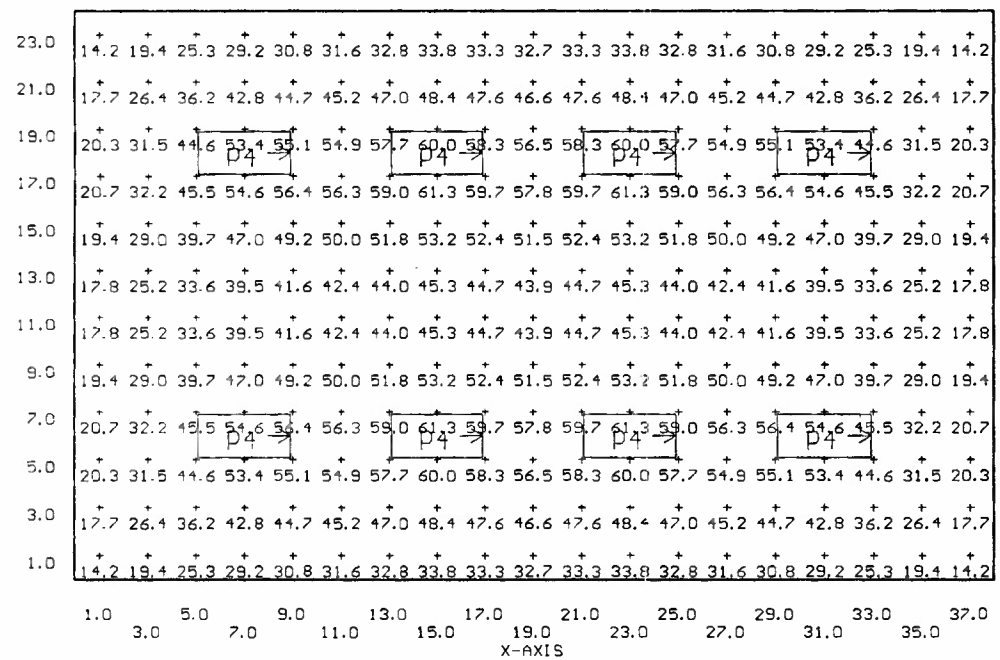
RR <2> = T10618 METALOPTICS 24TRS042EP11, <2> F032/35K, LLF= 0.79



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:31 11-Feb-95
PROJECT: 10-030 AREA: OPEN OFFICE GRID: Ceiling
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=14.2 MAX=61.3 AVE=41.4 AVE/MIN= 2.91 MAX/MIN= 4.31

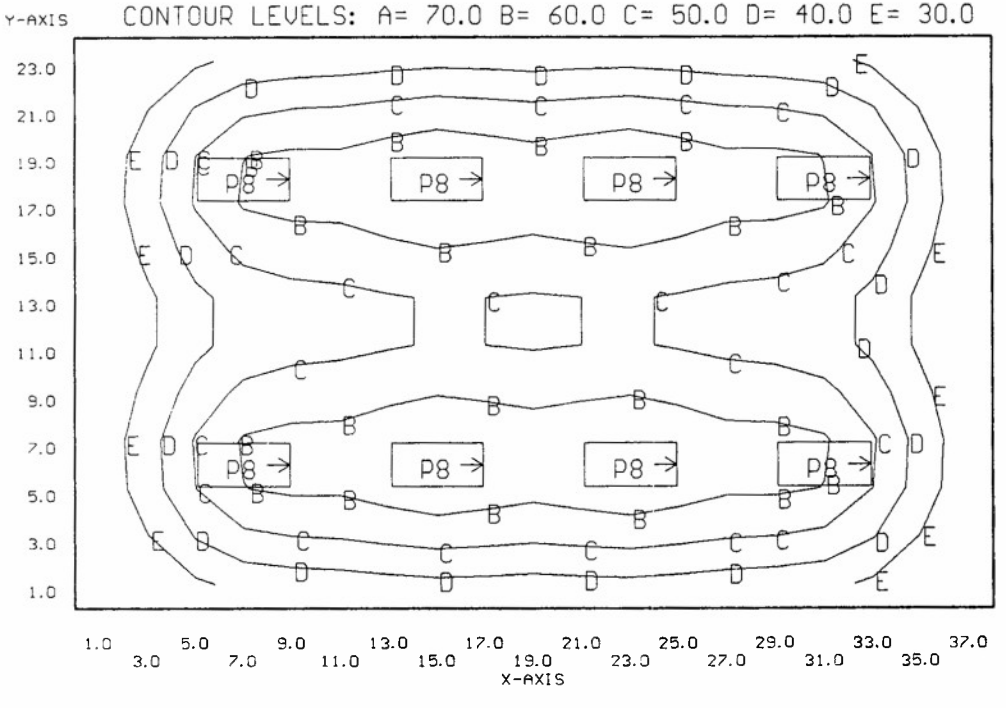
P4 (8) = 9600 COLUMBIA 5PS2*-52-244, (4) F40CW/RS/WM, LLF= 0.63



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 18:08 27-Feb-95
PROJECT: 10-030 AREA: OPEN OFFICE GRID: Ceiling
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=15.9 MAX=68.6 AVE=46.3 AVE/MIN= 2.91 MAX/MIN= 4.31

P8 (8) = 9600 COLUMBIA 5PS2*-52-244, (4) F032/35K, LLF= 0.64



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 13:11 1-Mar-95
PROJECT: 10-030 AREA: EAST HALLWAY GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=17.0 MAX=28.7 AVE=23.5 AVE/MIN= 1.38 MAX/MIN= 1.69

R2 (2) = 9602 COLUMBIA 5PS2*-52-242, (2) F40CW/RS/WM, LLF= 0.63

Y-AXIS

3.5	17.0	23.6	28.7 R2	28.6 R2	23.7	19.5	19.5	23.7	28.6 R2	28.7 R2	23.6	17.0
1.5	17.0	23.6	28.7	28.6	23.7	19.5	19.5	23.7	28.6	28.7	23.6	17.0

1.0 3.0 5.0 7.0 9.0 11.0 13.0 15.0 17.0 19.0 21.0 23.0

X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 13:15 1-Mar-95
PROJECT: 10-030 AREA: EAST HALLWAY-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=19.0 MAX=32.1 AVE=26.3 AVE/MIN= 1.38 MAX/MIN= 1.69

R8 <2> = 9602 COLUMBIA 5PS2*-52-242, (2) F032/35K, LLF= 0.64

Y-AXIS

3.5	19.0	26.4	32.1 R8	32.1	26.6	21.9	21.9	26.6	32.1 R8	32.1	26.4	19.0
1.5	19.0	26.4	32.1	32.1	26.6	21.9	21.9	26.6	32.1	32.1	26.4	19.0

1.0 3.0 5.0 7.0 9.0 11.0 13.0 15.0 17.0 19.0 21.0 23.0

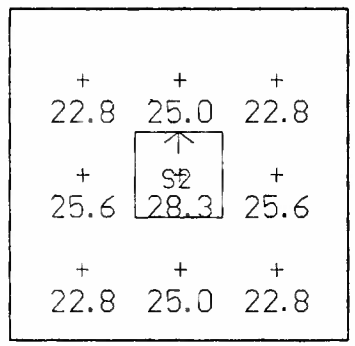
X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:37 11-Feb-95
PROJECT: 10-030 AREA: ENTRANCE FOYERS GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=22.8 MAX=28.3 AVE=24.5 AVE/MIN= 1.08 MAX/MIN= 1.24

S2 (2) = 8512 COLUMBIA 5PS2*-52-222U, (2) F40CW/U6/RS/WM, LLF= 0.68

Y-AXIS



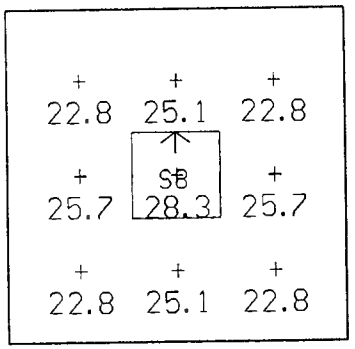
1.5 5.5
3.5
X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 13:20 1-Mar-95
PROJECT: 10-030 AREA: ENT. FOYERS-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=22.8 MAX=28.3 AVE=24.6 AVE/MIN= 1.08 MAX/MIN= 1.24

S8 <2> = 8512 COLUMBIA 5PS2*-52-222U, (2) FB031/35K, LLF= 0.64

Y-AXIS



1.5 3.5 5.5

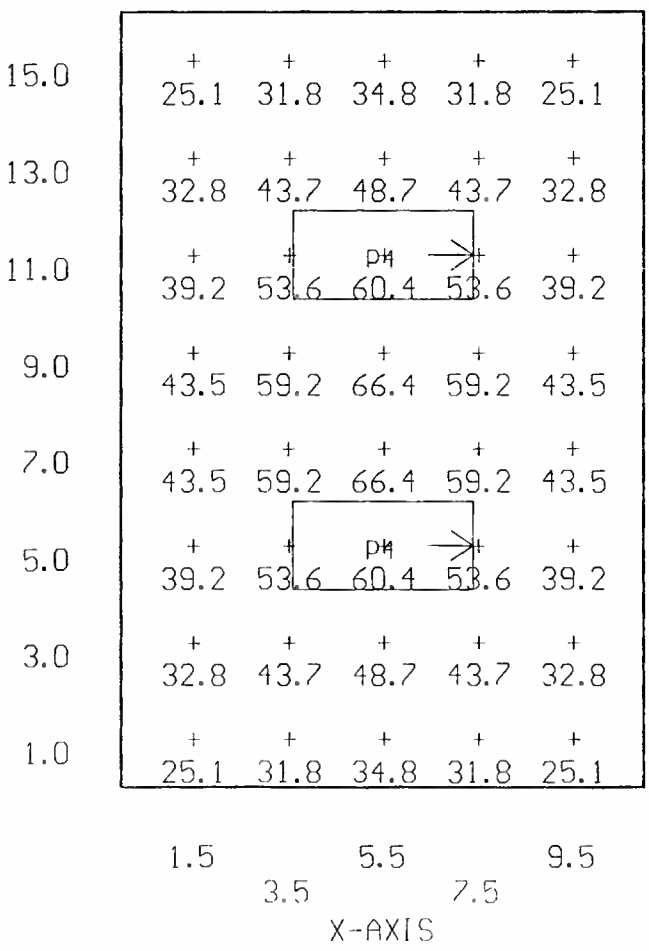
X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:41 11-Feb-95
PROJECT: 10-030 AREA: OFFICES 2 & 3 GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=25.1 MAX=66.4 AVE=43.4 AVE/MIN= 1.73 MAX/MIN= 2.64

P4 (4) = 9600 COLUMBIA 5PS2*-52-244, (4) F40CW/RS/WM, LLF= 0.63

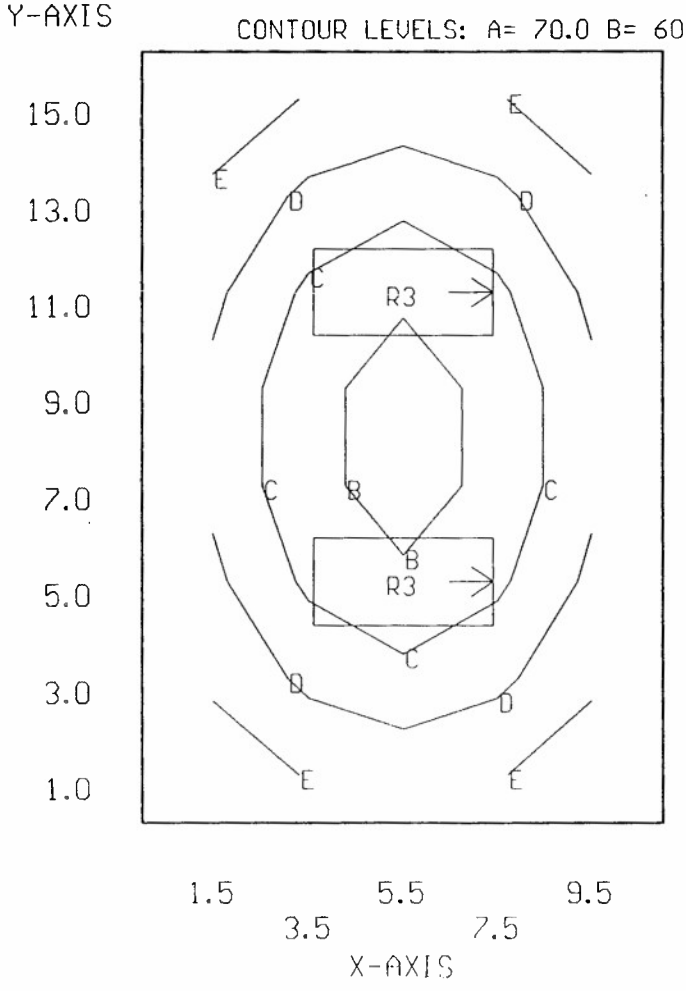
Y-AXIS



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 13:58 1-Mar-95
PROJECT: 10-030 AREA: OFFICES 2 & 3-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=24.2 MAX=64.3 AVE=42.0 AVE/MIN= 1.73 MAX/MIN= 2.65

R3 (4) = 9861 COLUMBIA T85PS2*-52-243-3EOCT, (3) FO32/31K, LLF= 0.69



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:45 11-Feb-95
PROJECT: 10-030 AREA: OFFICES 4 & 5 GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=22.0 MAX=64.8 AVE=42.5 AVE/MIN= 1.93 MAX/MIN= 2.95

P4 (4) = 9600 COLUMBIA 5PS2*-52-244, (4) F40CW/RS/WM, LLF= 0.63

Y-AXIS

13.5	+ 25.9	+ 36.5	+ 45.3	+ 45.3	+ 36.5	+ 25.9
11.5	+ 31.0	+ 45.2	+ 56.8 P4	+ 56.8	+ 45.2	+ 31.0
9.5	+ 34.7	+ 50.8	+ 63.6	+ 63.6	+ 50.8	+ 34.7
7.5	+ 35.4	+ 51.9	+ 64.8	+ 64.8	+ 51.9	+ 35.4
5.5	+ 32.9	+ 48.0	+ 60.5 P4	+ 60.5	+ 48.0	+ 32.9
3.5	+ 28.1	+ 40.4	+ 50.4	+ 50.4	+ 40.4	+ 28.1
1.5	+ 22.0	+ 30.5	+ 37.2	+ 37.2	+ 30.5	+ 22.0

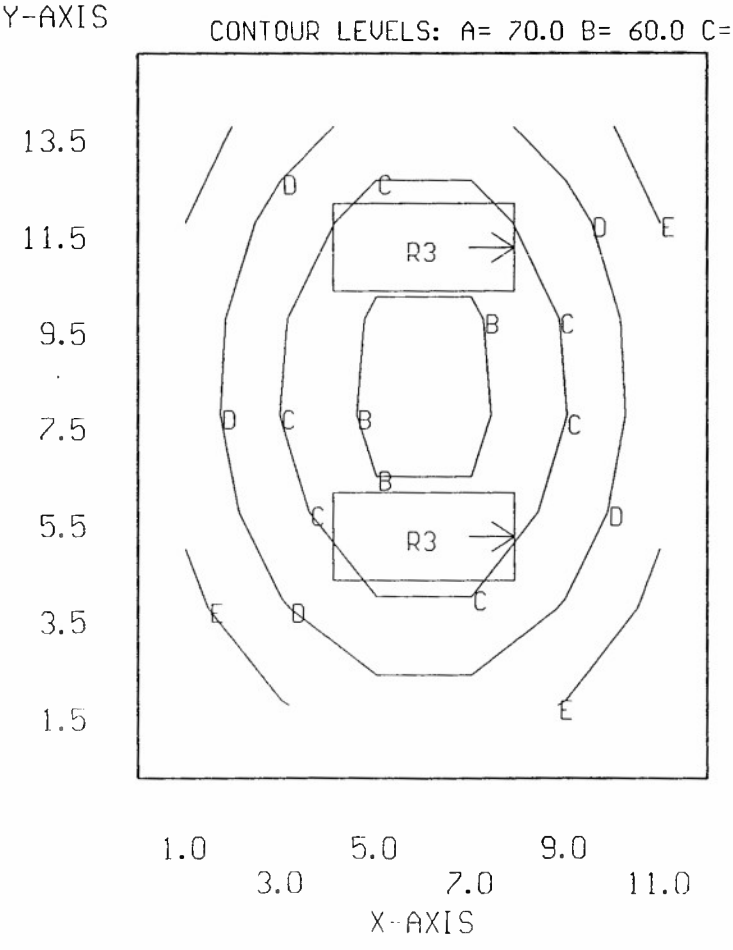
1.0 3.0 5.0 7.0 9.0 11.0

X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 14:02 1-Mar-95
PROJECT: 10-030 AREA: OFFICES 4 & 5-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=21.2 MAX=62.6 AVE=41.1 AVE/MIN= 1.94 MAX/MIN= 2.96

R3 (4) = 9861 COLUMBIA T85PS2*-52-243-3EOCT, (3) FO32/31K, LLF= 0.69

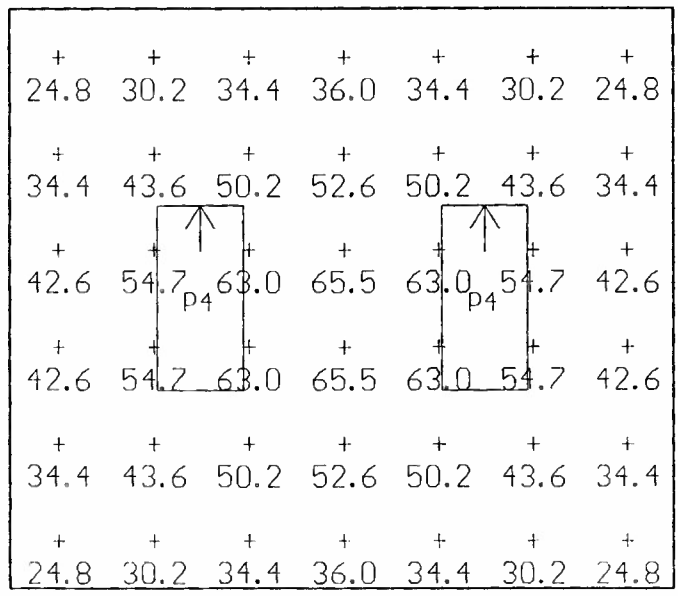


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:49 11-Feb-95
PROJECT: 10-030 AREA: OFFICE 6 GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=24.8 MAX=65.5 AVE=43.3 AVE/MIN= 1.75 MAX/MIN= 2.65

P4 (2) = 9600 COLUMBIA SPS2*-52-244, (4) F40CW/RS/WM, LLF= 0.63

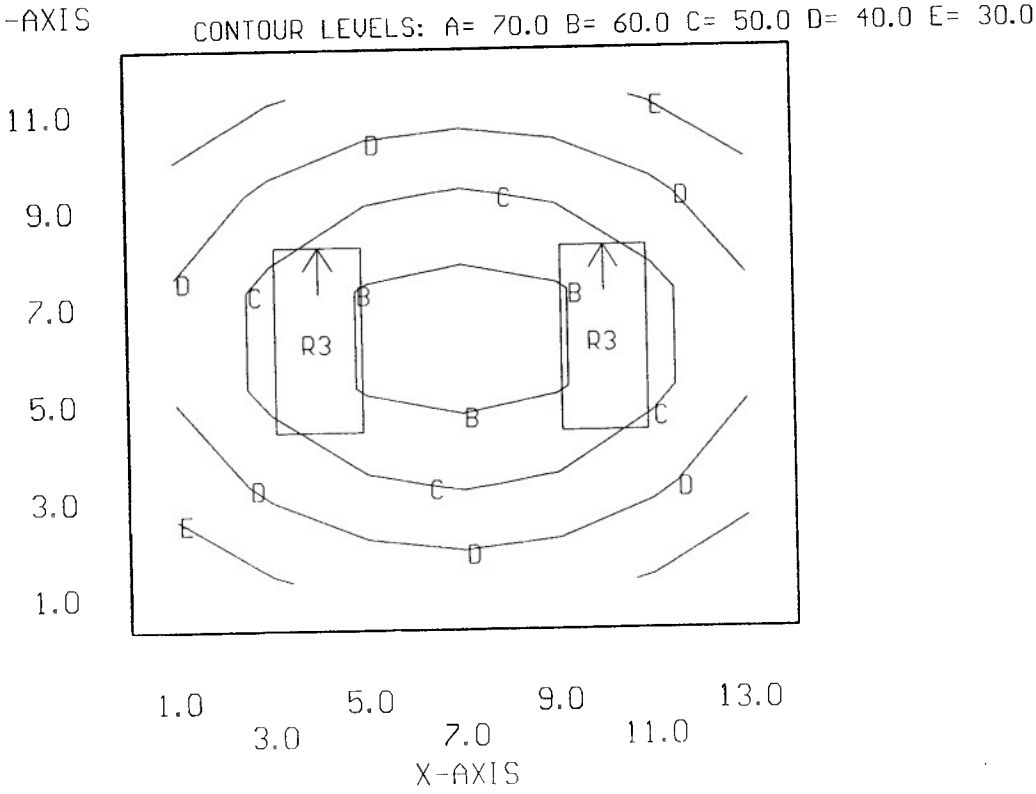
Y-AXIS



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 14:04 1-Mar-95
PROJECT: 10-030 AREA: OFFICE 6-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=23.9 MAX=63.3 AVE=41.9 AVE/MIN= 1.75 MAX/MIN= 2.65

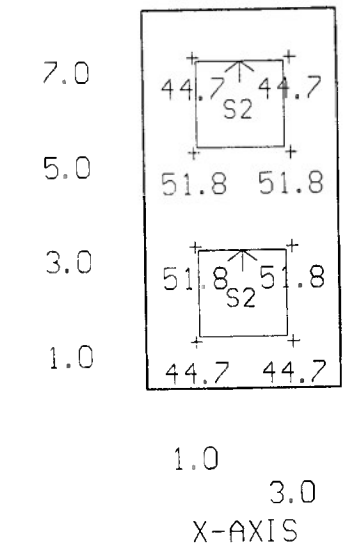
R3 (2) = 9861 COLUMBIA T85PS2*-52-243-3EOCT, (3) FO32/31K, LLF= 0.69



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:54 11-Feb-95
PROJECT: 10-030 AREA: SHORT HALL GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=44.7 MAX=51.8 AVE=48.3 AVE/MIN= 1.08 MAX/MIN= 1.16

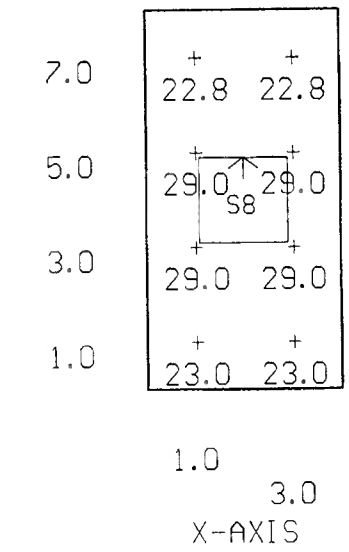
S2 (2) = 8512 COLUMBIA 5PS2*-52-222U, (2) F40CW/U6/RS/WM, LLF= 0.68



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 14:12 1-Mar-95
PROJECT: 10-030 AREA: SHORT HALL-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=22.8 MAX=29.0 AVE=26.0 AVE/MIN= 1.14 MAX/MIN= 1.27

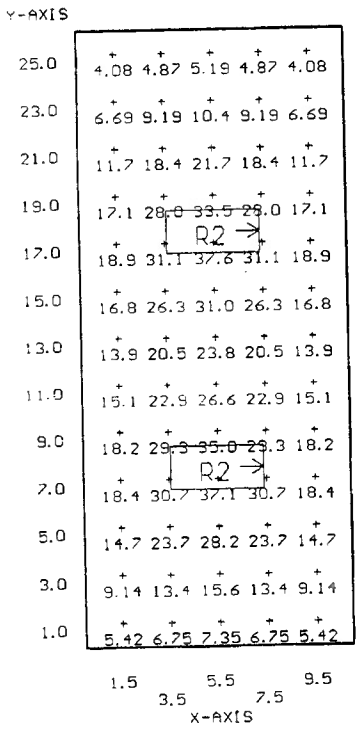
S8 (1) = 8512 COLUMBIA 5PS2*-52-222U, (2) FB031/35K, LLF= 0.64



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 12:01 11-Feb-95
PROJECT: 10-030 AREA: BREAKROOM GRID: Ceiling
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=4.08 MAX=37.6 AVE=18.2 AVE/MIN= 4.46 MAX/MIN= 9.20

R2 <2> = 9602 COLUMBIA 5PS2*-52-242, (2) F40CW/RS/WM, LLF= 0.63

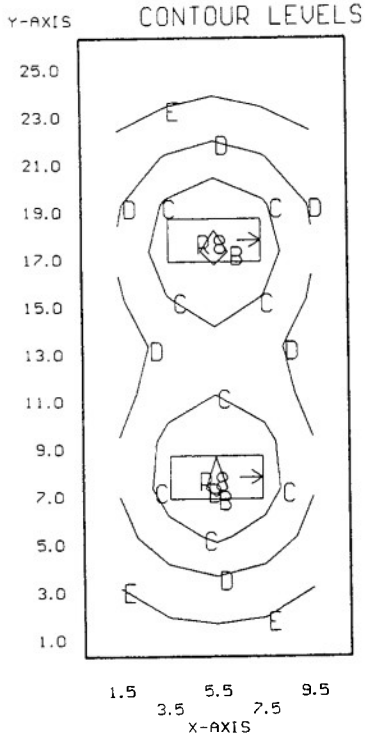


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 14:14 1-Mar-95
PROJECT: 10-030 AREA: BREAKROOM-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=4.57 MAX=42.0 AVE=20.4 AVE/MIN= 4.46 MAX/MIN= 9.20

R8 (2) = 9602 COLUMBIA 5PS2*-52-242, (2) F032/35K, LLF= 0.64

CONTOUR LEVELS: A= 50.0 B= 40.0 C= 30.0 D= 20.0 E= 10.0

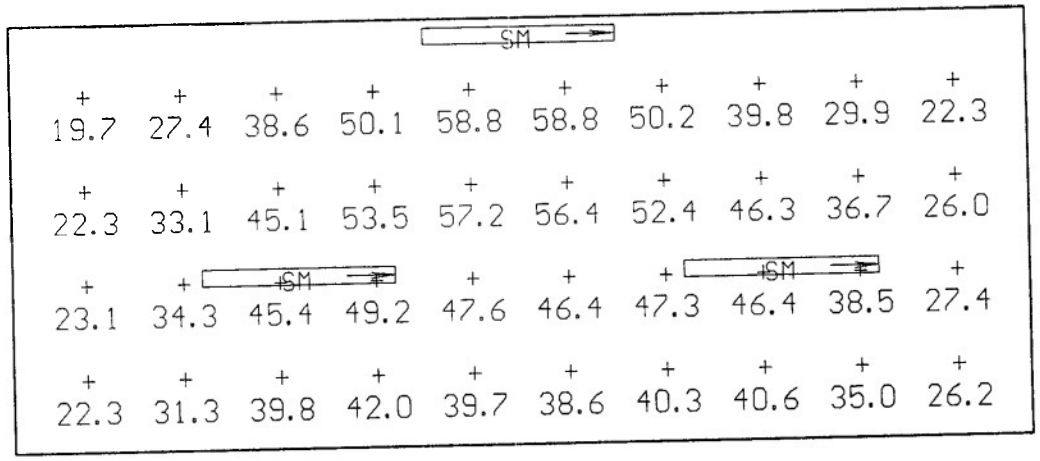


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 12:11 11-Feb-95
PROJECT: 10-030 AREA: RESTROOMS GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=19.7 MAX=58.8 AVE=39.7 AVE/MIN= 2.02 MAX/MIN= 2.99

SM <6> = K7992 COLUMBIA CS240, (2) F40CW, LLF= 0.73

Y-AXIS

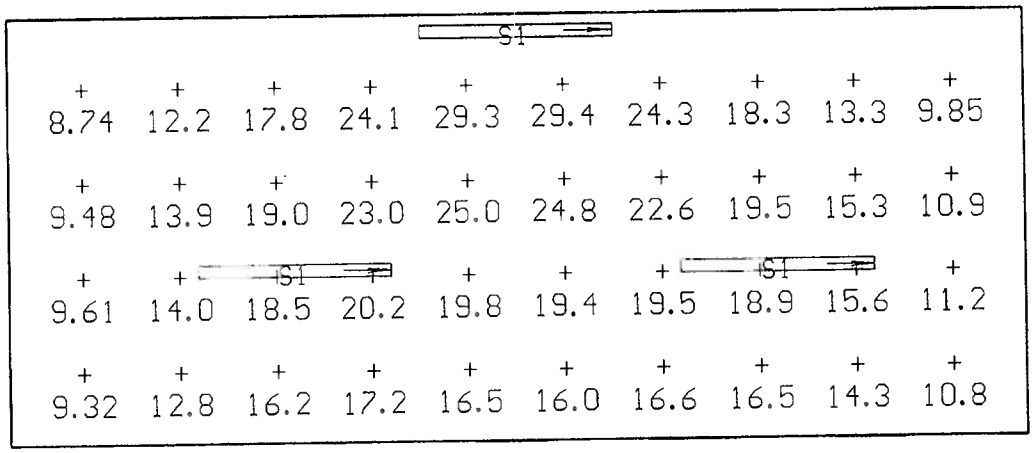


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 14:24 1-Mar-95
PROJECT: 10-030 AREA: RESTROOMS-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=8.74 MAX=29.4 AVE=17.1 AVE/MIN= 1.95 MAX/MIN= 3.36

S1 (6) = K8959 COLUMBIA CH140, (1) FO32/35K, LLF= 0.73

Y-AXIS

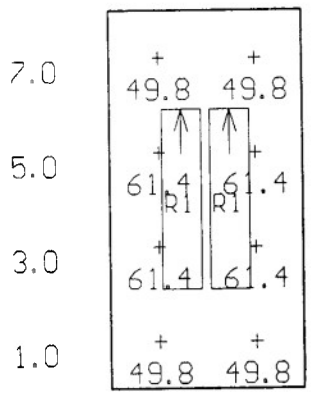


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 09:48 13-Feb-95
PROJECT: 10-030 AREA: JANITOR GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=49.8 MAX=61.4 AVE=55.6 AVE/MIN= 1.12 MAX/MIN= 1.23

R1 (2) = 8510 COLUMBIA 5PS2*-52-142, (2) F40CW, LLF= 0.68

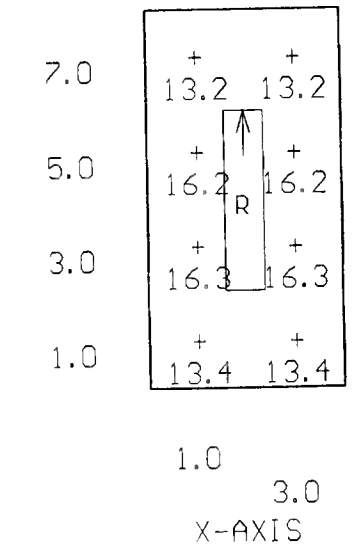
Y-AXIS



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 14:29 1-Mar-95
PROJECT: 10-030 AREA: JANITOR-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=13.2 MAX=16.3 AVE=14.8 AVE/MIN= 1.12 MAX/MIN= 1.23

R (1) = 9150 COLUMBIA 5PS2*-52-141, (1) FO32/35K, LLF= 0.68



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 14:31 1-Mar-95
PROJECT: 10-030 AREA: OFFICE 7 GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=16.7 MAX=36.4 AVE=26.9 AVE/MIN= 1.61 MAX/MIN= 2.18

P2 (3) = 8508 COLUMBIA 5PS2*-52-242, (2) F40CW, LLF= 0.68

Y-AXIS

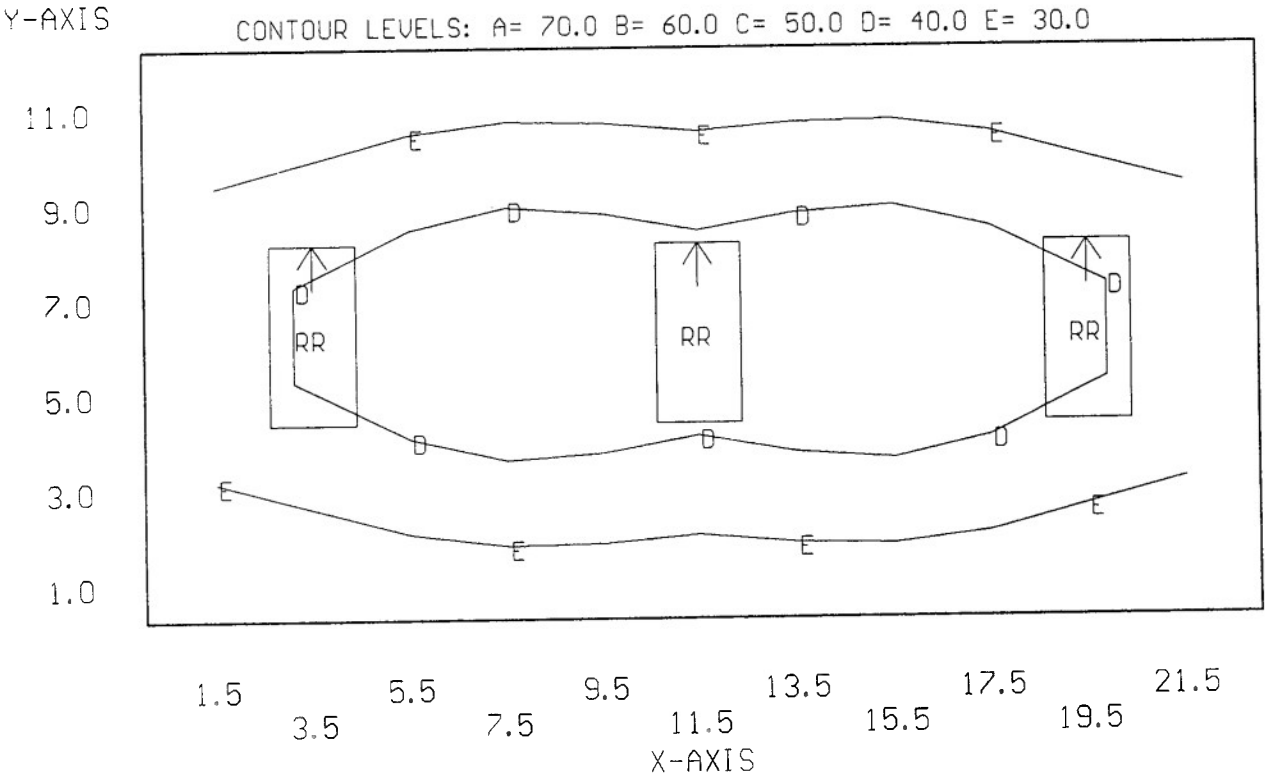
	1.5	3.5	5.5	7.5	9.5	11.5	13.5	15.5	17.5	19.5	21.5
11.0	16.7	18.6	19.6	20.1	20.3	20.3	20.3	20.1	19.6	18.6	16.7
9.0	23.5	26.8	28.2	29.0	29.1	29.4	29.1	29.0	28.2	26.8	23.5
7.0	28.7	33.4 P2	34.9	35.4	36.0	36.4 P2	36.0	35.4	34.9	33.4 P2	28.7
5.0	28.7	33.4	34.9	35.4	36.0	36.4	36.0	35.4	34.9	33.4	28.7
3.0	23.5	26.8	28.2	29.0	29.1	29.4	29.1	29.0	28.2	26.8	23.5
1.0	16.7	18.6	19.6	20.1	20.3	20.3	20.3	20.1	19.6	18.6	16.7

X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 14:35 1-Mar-95
PROJECT: 10-030 AREA: OFFICE 7-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=21.9 MAX=47.5 AVE=34.7 AVE/MIN= 1.58 MAX/MIN= 2.17

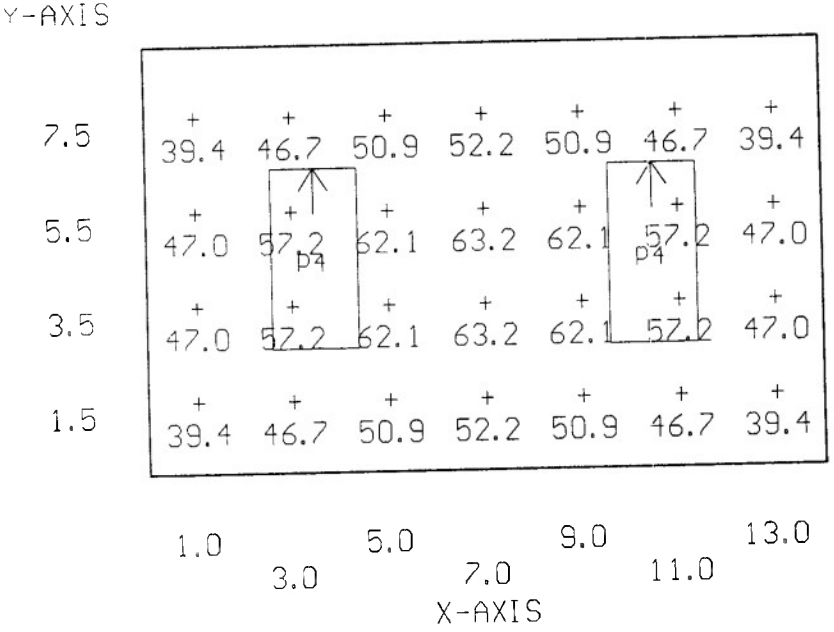
RR (3) = T10618 METALOPTICS 24TRS042EP11, (2) F032/35K, LLF= 0.79



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 09:28 13-Feb-95
PROJECT: 10-030 AREA: OFFICE 8 GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=39.4 MAX=63.2 AVE=51.6 AVE/MIN= 1.31 MAX/MIN= 1.60

P4 (2) = 9600 COLUMBIA 5PS2*-52-244, (4) F40CW/RS/WM, LLF= 0.63



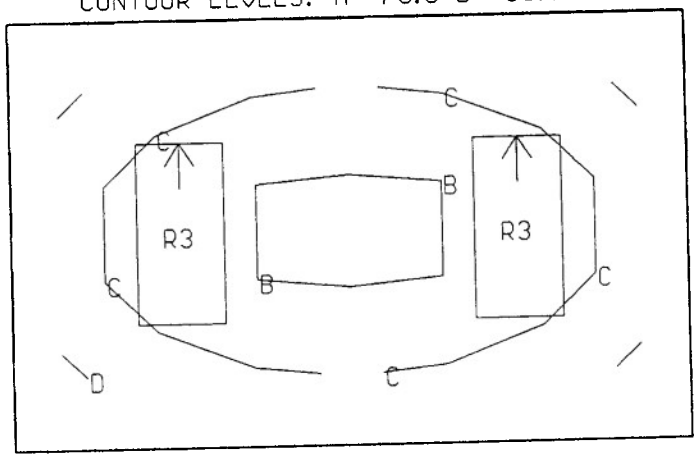
USI's LITE*PRO V2.27E Point-By-Point Numeric Output 14:43 1-Mar-95
PROJECT: 10-030 AREA: OFFICE 8-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=38.1 MAX=61.0 AVE=49.9 AVE/MIN= 1.31 MAX/MIN= 1.60

R3 (2) = 9861 COLUMBIA T85PS2*-52-243-3EOCT, (3) FO32/31K, LLF= 0.69

Y-AXIS

CONTOUR LEVELS: A= 70.0 B= 60.0 C= 50.0 D= 40.0 E= 30.0



7.5
5.5
3.5
1.5

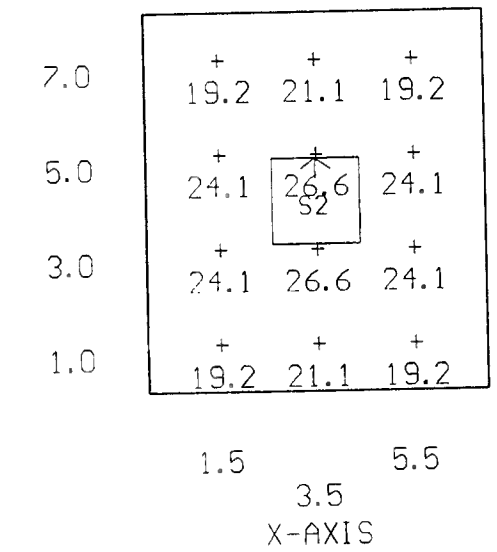
1.0 3.0 5.0 7.0 9.0 11.0 13.0

X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 09:54 13-Feb-95
PROJECT: 10-030 AREA: EAST ENTRANCE 2 GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=19.2 MAX=26.6 AVE=22.4 AVE/MIN= 1.16 MAX/MIN= 1.38

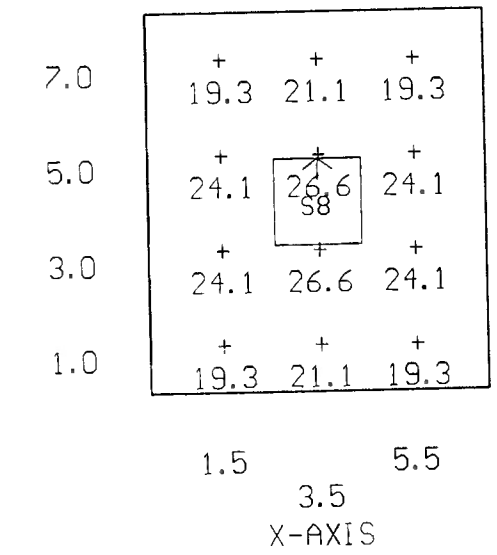
S2 (1) = 8512 COLUMBIA 5PS2*-52-222U, (2) F40CW/U6/RS/WM, LLF= 0.68



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 14:45 1-Mar-95
PROJECT: 10-030 AREA: EAST ENT. 2-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=19.3 MAX=26.6 AVE=22.4 AVE/MIN= 1.16 MAX/MIN= 1.38

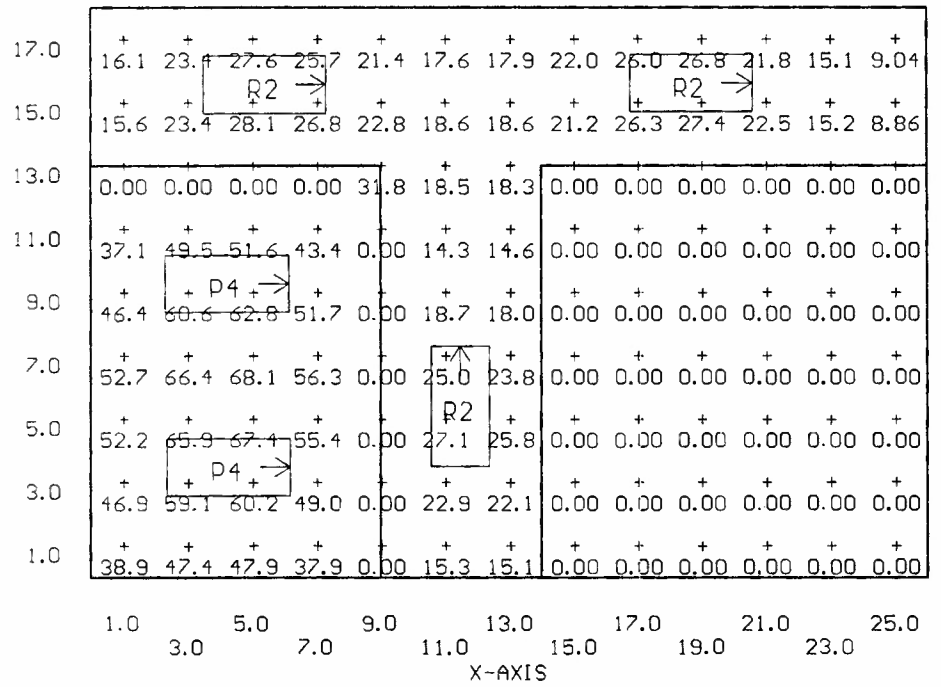
S8 (1) = 8512 COLUMBIA 5PS2*-52-222U, (2) FB031/35K, LLF= 0.64



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 10:07 13-Feb-95
PROJECT: 10-030 AREA: HALL/OFFICE 9 GRID: Ceiling
Values are FC, SCALE: 1 IN= 6.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=0.00 MAX=68.1 AVE=18.2 AVE/MIN=N/A MAX/MIN=N/A

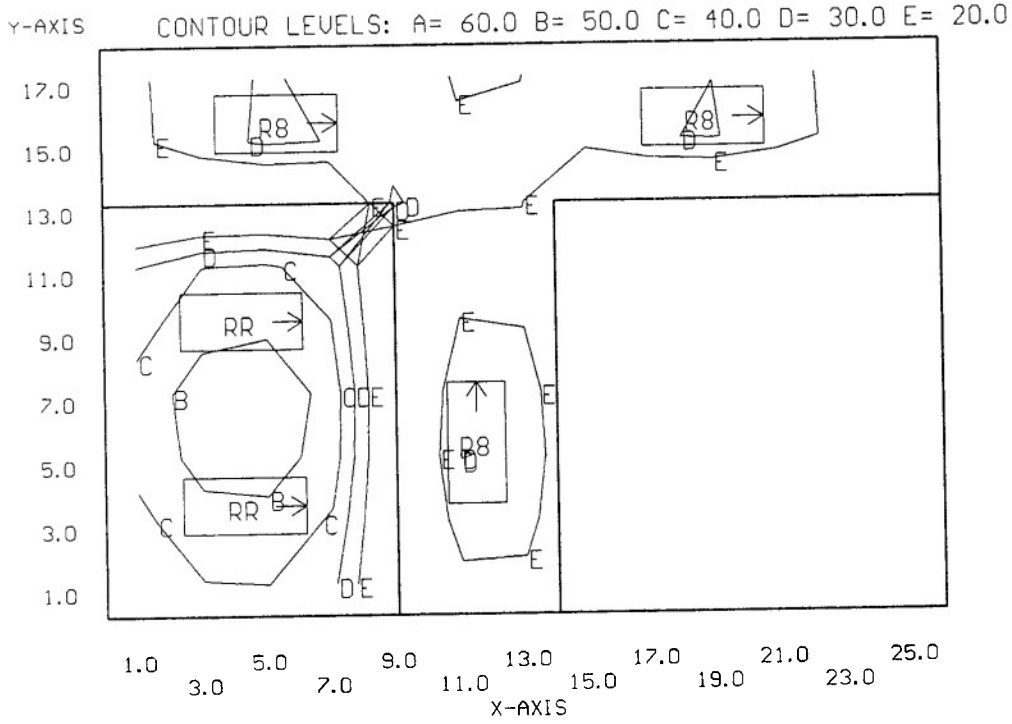
P4 (2) = 9600 COLUMBIA 5PS2*-52-244, (4) F40CW/RS/WM, LLF= 0.63
R2 (3) = 9602 COLUMBIA 5PS2*-52-242, (2) F40CW/RS/WM, LLF= 0.63



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 14:50 1-Mar-95
PROJECT: 10-030 AREA: HALL/OFFICE 9-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 6.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=0.00 MAX=56.7 AVE=17.0 AVE/MIN=N/A MAX/MIN=N/A

R8 <3> = 9602 COLUMBIA 5PS2*-52-242, (2) F032/35K, LLF= 0.64
RR <2> = T10618 METALOPTICS 24TRS042EP11, (2) F032/35K, LLF= 0.79



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 10:13 13-Feb-95
PROJECT: 10-030 AREA: TOILETS GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=0.00 MAX=16.8 AVE=12.0 AVE/MIN=N/A MAX/MIN=N/A

G2 (2) = K9801X COLUMBIA LUN240-WL, (2) F40CW, LLF= 0.68

Y-AXIS

7.0	12.2	13.9	13.8	11.2	0.00	8.59	11.3	13.2	12.5	10.5
5.0	14.0	16.7	16.8	14.0	0.00	11.0	14.7	16.3	15.0	11.9
3.0	14.1	16.7	16.8	14.1	0.00	11.2	14.9	16.6	15.3	12.1
1.0	12.3	14.0	14.0	11.3	0.00	8.92	11.9	13.9	13.1	10.9

G2 G2

1.0 3.0 5.0 7.0 9.0 11.0 13.0 15.0 17.0 19.0

X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:00 1-Mar-95
PROJECT: 10-030 AREA: TOILETS-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=0.00 MAX=18.7 AVE=13.9 AVE/MIN=N/A MAX/MIN=N/A

M8 (2) = K7992 COLUMBIA CS240, (2) FO32/35K, LLF= 0.69

Y-AXIS

7.0	14.8	16.0	15.8	13.1	0.00	10.4	13.0	15.1	14.6	13.0
5.0	16.7	18.7	18.5	16.1	0.00	13.2	16.3	17.9	17.1	14.6
3.0	16.8	18.7	18.6	16.2	0.00	13.3	16.6	18.2	17.4	14.8
1.0	14.9	16.2	16.0	13.2	0.00	10.7	13.5	15.7	15.2	13.5

M8 M8

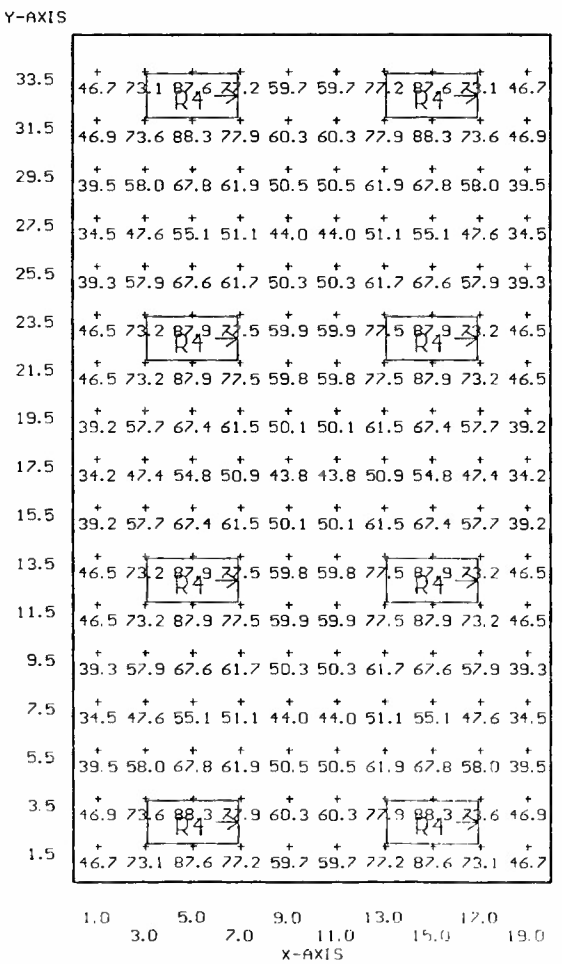
1.0 3.0 5.0 7.0 9.0 11.0 13.0 15.0 17.0 19.0

X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 10:41 13-Feb-95
PROJECT: 10-030 AREA: OPEN OFFICE 2 GRID: Ceiling
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=34.2 MAX=88.3 AVE=60.2 AVE/MIN= 1.76 MAX/MIN= 2.58

R4 <8> = 8500 COLUMBIA 5PS2*-52-244, (4) F40CW, LLF= 0.68

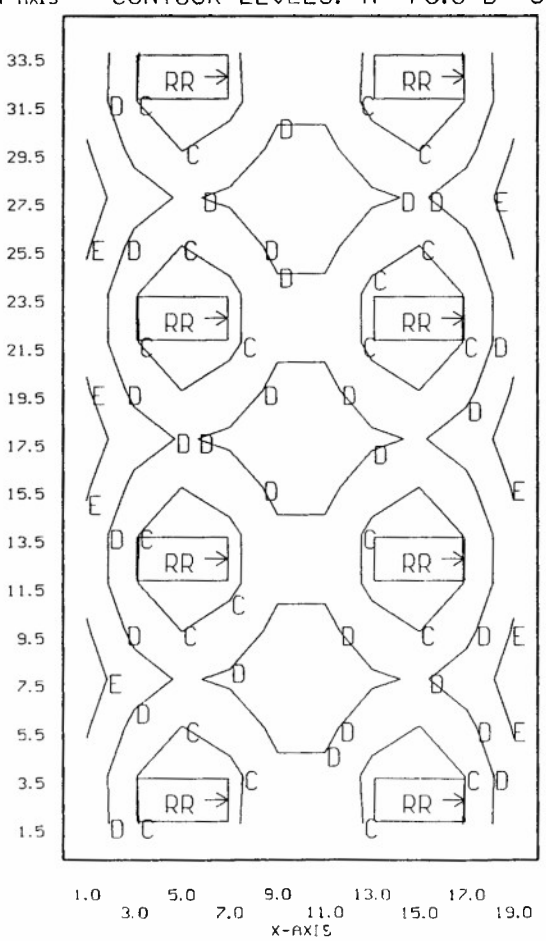


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:03 1-Mar-95
PROJECT: 10-030 AREA: OPEN OFFICE 2-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=25.7 MAX=59.2 AVE=42.7 AVE/MIN= 1.66 MAX/MIN= 2.30

RR <8> = T10618 METALOPTICS 24TRS042EP11, (2) F032/35K, LLF= 0.79

Y-AXIS CONTOUR LEVELS: A= 70.0 B= 60.0 C= 50.0 D= 40.0 E= 30.0

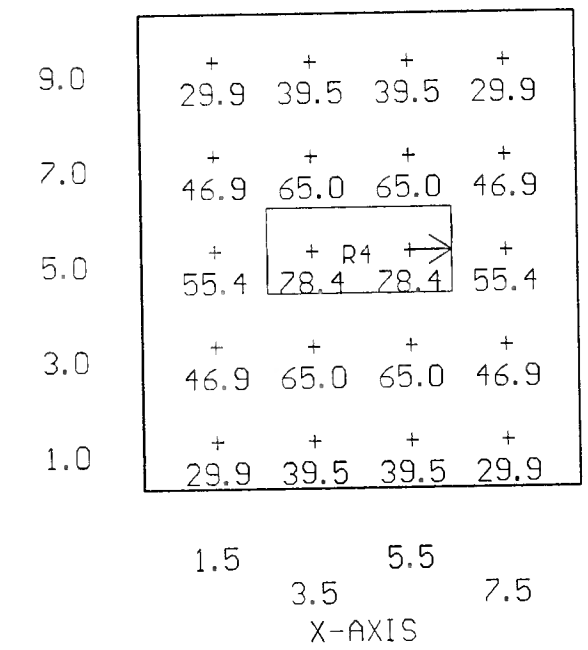


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 10:45 13-Feb-95
PROJECT: 10-030 AREA: COMPUTER GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

\+ MIN=29.9 MAX=78.4 AVE=49.6 AVE/MIN= 1.66 MAX/MIN= 2.62

R4 (1) = 8500 COLUMBIA 5PS2*-52-244, (4) F40CW, LLF= 0.68

Y-AXIS



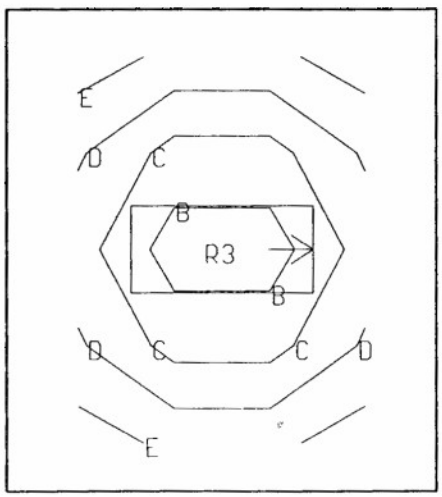
USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:24 1-Mar-95
PROJECT: 10-030 AREA: COMPUTER-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=24.7 MAX=64.8 AVE=41.0 AVE/MIN= 1.66 MAX/MIN= 2.63

R3 (1) = 9861 COLUMBIA T85PS2*-52-243-3EOCT, (3) FO32/31K, LLF= 0.69

Y-AXIS

CONTOUR LEVELS: A= 70.0 B= 60.0 C= 50.0 D= 40.0 E= 30.0

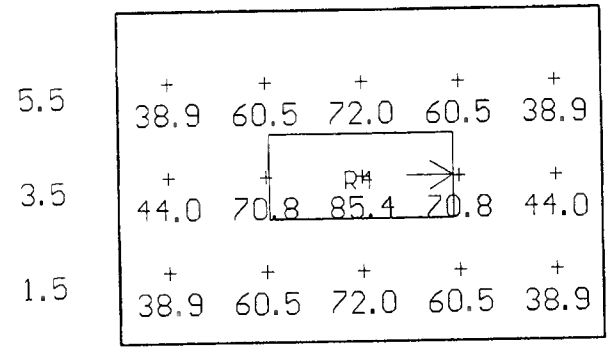


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 10:48 13-Feb-95
PROJECT: 10-030 AREA: SOUTH FOYER GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

- MIN=38.9 MAX=85.4 AVE=57.1 AVE/MIN= 1.47 MAX/MIN= 2.19

R4 (1) = 8500 COLUMBIA 5PS2*-52-244, (4) F40CW, LLF= 0.68

Y-AXIS

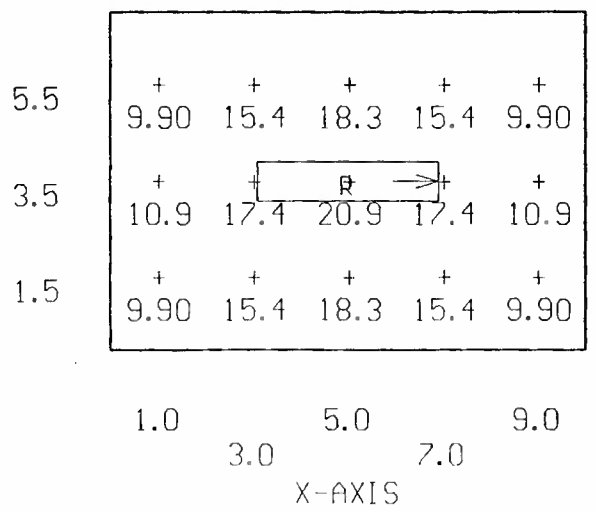


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:27 1-Mar-95
PROJECT: 10-030 AREA: SOUTH FOYER-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=9.90 MAX=20.9 AVE=14.4 AVE/MIN= 1.45 MAX/MIN= 2.11

R (1) = 9150 COLUMBIA 5PS2*-52-141, (1) F032/35K, LLF= 0.68

Y-AXIS



Bldg 10-050 Summary

Present System

Fixture Type	Watts/ Fixture	Number Fixtures	Total Watts
I	25	12	300
L2	83	25	2,075
L4	164	19	3,116
R2	82	24	1,968
W2	173	8	1,384
X	75	16	1,200
X1	150	1	150
Totals		105	10,193

Replacement System

Fixture Type	Watts/ Fixture	Number Fixtures	Total Watts
I	25	12	300
L2	83	16	1,328
L8	59	29	1,711
LR	61	17	1,037
W2	173	8	1,384
W8	59	4	236
X	75	16	1,200
X1	150	1	150
Totals		103	7,346

10-050 Schedule

Reynolds, Smith & Hills, Inc.
4651 Salisbury Road
Jacksonville, FL 32256
Buildings Engineering

Luminaire Fixture Schedule
Generated by LitePro V2.27E
Provided and supported by USI Lighting, Inc.
Filename: 10-050 Type: Indoor

Luminaire Fixture Schedule / PRESENT

Project name: PBA Lighting Survey - Bldg 10-050
Prepared for: Corps of Engineers
Prepared by: C. Warren

Project #6941331
Date: 2-Mar-95
UPD: 0.9W/Sq.Ft

TYPE	DESCRIPTION	LAMP/BALLAST	V/W	QTY	REMARKS
I	6" RECESSED ROUND DOWNLIGHT OPEN- BL.BAFFLE W/ WIDE TRIM PRESCOLITE PBX-TB12	25A19/IF NA	000 - 25	12	
2	15"X4'2L CEILING MT.WRAPAROUND LENS- PRISMATIC W/ GLOW ENDS COLUMBIA WCW240-A	F40CW ESB	000 - 83	25	
L4	2'X4' 4L STATIC GRID TROFFER LENS- .125" NOM PRISMATIC A12 COLUMBIA 2SG440-EXA.125NOM	F40CW ESB	000 - 164	19	
R2	2'X4' 2L STATIC GRID TROFFER LENS- .125" THK PRISMATIC A12 COLUMBIA 2SG240-EXA.125NOM	F40CW ESB	000 - 82	24	
W2	8"X8' 2L GASKETTED INDUSTRIAL LENS- DROP PRISMATIC ACRYLIC COLUMBIA LUN296-CW-HO	F96T12/CW STD	000 - 173	8	
X	SPHERE TRACKLIGHT OPEN- BLK.BAFFLE PRESCOLITE T123	75R30/FL-IES NA	000 - 75	16	
X1	6" RECESSED ROUND DOWNLIGHT OPEN - BALCK SPECULAR REFL. PRESCOLITE PBX-TO70B	150PAR38/FL NA	000 - 150	1	

NOTES:

10-050 Schedule

Reynolds, Smith & Hills, Inc.
4651 Salisbury Road
Jacksonville, FL 32256
Buildings Engineering

Luminaire Fixture Schedule
Generated by LitePro V2.27E
Provided and supported by USI Lighting, Inc.
Filename: 10-050 Type: Indoor

Luminaire Fixture Schedule /PROPOSED

Project name: PBA Lighting Survey - Bldg 10-050 | Project #6941331
Prepared for: Corps of Engineers | Date: 2-Mar-95
Prepared by: C. Warren | UPD: 0.7W/Sq.Ft

TYPE	DESCRIPTION	LAMP/BALLAST	V/W	QTY	REMARKS
I	6" RECESSED ROUND DOWNLIGHT OPEN- BL.BAFFLE W/ WIDE TRIM PRESCOLITE PBX-TB12	25A19/IF NA	000 - 25	12	
L2	15"X4'2L CEILING MT.WRAPAROUND LENS- PRISMATIC W/ GLOW ENDS COLUMBIA WCW240-A	F40CW ESB	000 - 83	16	
L8	2X4 2L FLUSH STATIC TROFFER LENS-PRISMATIC ACRYLIC PATT-12 COLUMBIA T84PS2*-52-242-2EOCT	FO32/31K EOCT	000 - 59	29	
LR	2X4 ACRYLIC LENSED TROFFER SILVER NORMAL BEAM REFLECTOR METALOPTICS 24TRSO42EP11	FO32/35K EOCT	000 - 61	17	
W2	8"X8' 2L GASKETTED INDUSTRIAL LENS- DROP PRISMATIC ACRYLIC COLUMBIA LUN296-CW-HO	F96T12/CW STD	000 - 173	8	
W8	15"X4'2L CEILING MT.WRAPAROUND LENS- PRISMATIC W/ GLOW ENDS COLUMBIA WCW240-A	FO32/35K EOCT	000 - 59	4	
X	SPHERE TRACKLIGHT OPEN- BLK.BAFFLE PRESCOLITE T123	75R30/FL-IES NA	000 - 75	16	
X1	6" RECESSED ROUND DOWNLIGHT OPEN - BALCK SPECULAR REFL. PRESCOLITE PBX-TO70B	150PAR38/FL NA	000 - 150	1	

10-050 Areas

Reynolds, Smith & Hills, Inc.
4651 Salisbury Road
Jacksonville, FL 32256
Buildings Engineering

Project Area Summary
Generated by LitePro V2.27E
Provided and supported by USI Lighting, Inc.
Filename: 10-050 Type: Indoor

Project Area Summary	
Project name: PBA Lighting Survey - Bldg 10-050	Project #6941331
Prepared for: Corps of Engineers	Date: 2-Mar-95
Prepared by: C. Warren	UPD: 0.8W/Sq.Ft

AREA NAME	DIMENSIONS	LUMINAIRES	W/SQ.FT	QTY
ENTRANCE	24x20x9Ft	(4) Type L4	1.4	1
ENTRANCE-N	24x20x9Ft	(2) Type LR	0.3	1
OFFICE 1	24x20x9Ft	(4) Type L4	1.4	1
OFFICE 1-N	24x20x9Ft	(4) Type LR	0.5	1
OFFICE 2	24x20x9Ft	(4) Type L4	1.4	1
OFFICE 2-N	24x20x9Ft	(4) Type LR	0.5	1
HALLWAY 1	68x6x7Ft	(5) Type R2	1.0	1
HALLWAY 1-N	68x6x7Ft	(5) Type L8	0.7	1
HALLWAY 2	8x70x7Ft	(4) Type R2	0.6	1
HALLWAY 2-N	8x70x7Ft	(4) Type L8	0.4	1
KITCHEN	22x11x9Ft	(5) Type L2	1.7	1
KITCHEN-N	22x11x9Ft	(5) Type LR	1.3	1
LOUNGE	22x24x9Ft	(4) Type R2	0.6	1
LOUNGE-N	22x24x9Ft	(4) Type L8	0.4	1
EXERCISE ROOM	40x16x9Ft	(6) Type R2	0.8	1
EXERCISE ROOM-N	40x16x9Ft	(6) Type L8	0.6	1
LAUNDRY	12x16x9Ft	(2) Type R2	0.9	1
LAUNDRY-N	12x16x9Ft	(2) Type L8	0.6	1

TOILET/SHOWER	22x20x9Ft	(4) Type L2	0.8	1

TOILET/SHOWER-N	22x20x9Ft	(4) Type W8	0.5	1
SLEEPING AREAS	22x16x9Ft	(4) Type I (1) Type R2	0.5	3
SLEEP AREAS-N	22x16x9Ft	(4) Type I (1) Type L8	0.5	3
TV ROOM	32x12x9Ft	(4) Type L4	1.7	1
TV ROOM-N	32x12x9Ft	(4) Type L8	0.6	1
OFFICE 3	16x12x9Ft	(2) Type L4	1.7	1
OFFICE 3-N	16x12x9Ft	(2) Type LR	0.6	1
WOMENS TOILET	8x10x9Ft	(1) Type L4	2.0	1
WOMENS TOILET-N	8x10x9Ft	(1) Type L8	0.7	1

NOTES:

10-050 Calculations

Reynolds, Smith & Hills, Inc.
4651 Salisbury Road
Jacksonville, FL 32256
Buildings Engineering

Project Calculation Summary
Generated by LitePro V2.27E
Provided and supported by USI Lighting, Inc.
Filename: 10-050 Type: Indoor

Project Calculation Summary	
Project name: PBA Lighting Survey - Bldg 10-050	Project #6941331
Prepared for: Corps of Engineers	Date: 2-Mar-95
Prepared by: C. Warren	UPD: 0.8W/Sq.Ft

AREA NAME	DIMENSIONS	GRID NAME	AVE	MAX	MIN
ENTRANCE	24x20x9Ft	Ceiling	<+> 46.9	109.2	11.0
ENTRANCE-N	24x20x9Ft	Ceiling	<+> 17.4	43.6	4.1
OFFICE 1	24x20x9Ft	Ceiling	<+> 46.9	109.2	11.0
OFFICE 1-N	24x20x9Ft	Ceiling	<+> 34.6	75.0	9.3
OFFICE 2	24x20x9Ft	Ceiling	<+> 47.4	120.1	8.4
OFFICE 2-N	24x20x9Ft	Ceiling	<+> 35.1	85.9	7.1
HALLWAY 1	68x6x7Ft	Ceiling	<+> 33.7	68.4	10.4
HALLWAY 1-N	68x6x7Ft	Ceiling	<+> 30.5	62.2	10.3
HALLWAY 2	8x70x7Ft	Ceiling	<+> 20.7	56.2	4.8
HALLWAY 2-N	8x70x7Ft	Ceiling	<+> 18.7	51.0	4.8
KITCHEN	22x11x9Ft	Ceiling	<+> 46.0	57.5	25.0
KITCHEN-N	22x11x9Ft	Ceiling	<+> 67.8	86.1	34.2
LOUNGE	22x24x9Ft	Ceiling	<+> 23.1	37.9	11.1
LOUNGE-N	22x24x9Ft	Ceiling	<+> 21.0	34.6	11.1
EXERCISE ROOM	40x16x9Ft	Ceiling	<+> 28.5	51.7	9.7
EXERCISE ROOM-N	40x16x9Ft	Ceiling	<+> 25.9	46.8	9.7
LAUNDRY	12x16x9Ft	Ceiling	<+> 27.4	50.6	10.1
LAUNDRY-N	12x16x9Ft	Ceiling	<+> 24.9	44.9	9.6

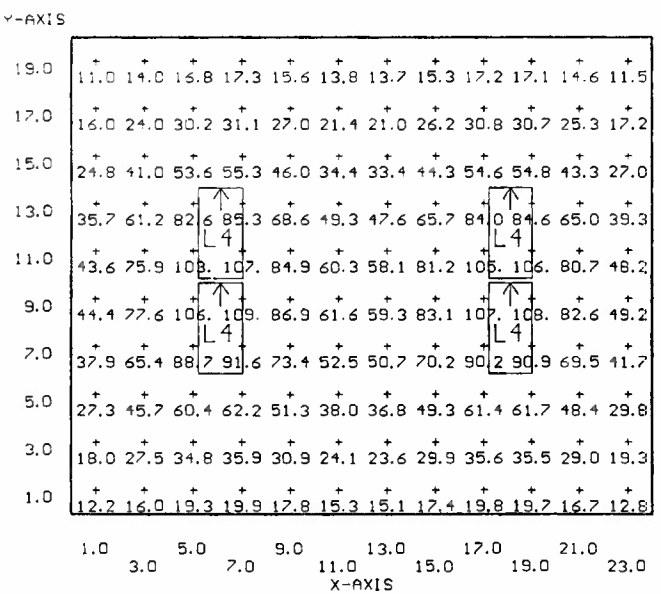
TOILET/SHOWER	22x20x9Ft	Ceiling	<+>	23.8	33.9	14.6
TOILET/SHOWER-N	22x20x9Ft	Ceiling	<+>	20.7	29.5	12.7
SLEEPING AREAS	22x16x9Ft	Ceiling	<+>	9.6	33.5	2.6
SLEEP AREAS-N	22x16x9Ft	Ceiling	<+>	8.8	30.4	2.6
TV ROOM	32x12x9Ft	Ceiling	<+>	53.6	78.7	27.3
TV ROOM-N	32x12x9Ft	Ceiling	<+>	27.2	39.5	14.2
OFFICE 3	16x12x9Ft	Ceiling	<+>	49.8	75.1	25.4
OFFICE 3-N	16x12x9Ft	Ceiling	<+>	36.4	52.3	19.6
WOMENS TOILET	8x10x9Ft	Ceiling	<+>	48.8	69.8	33.5
WOMENS TOILET-N	8x10x9Ft	Ceiling	<+>	24.3	34.6	16.9

NOTES:

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 14:49 10-Feb-95
PROJECT: 10-050 AREA: ENTRANCE GRID: Ceiling
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=11.0 MAX=109. AVE=46.9 AVE/MIN= 4.27 MAX/MIN= 9.95

L4 (4) = K7952 COLUMBIA 2SG440-EXA.125NOM, (4) F40CW, LLF= 0.68

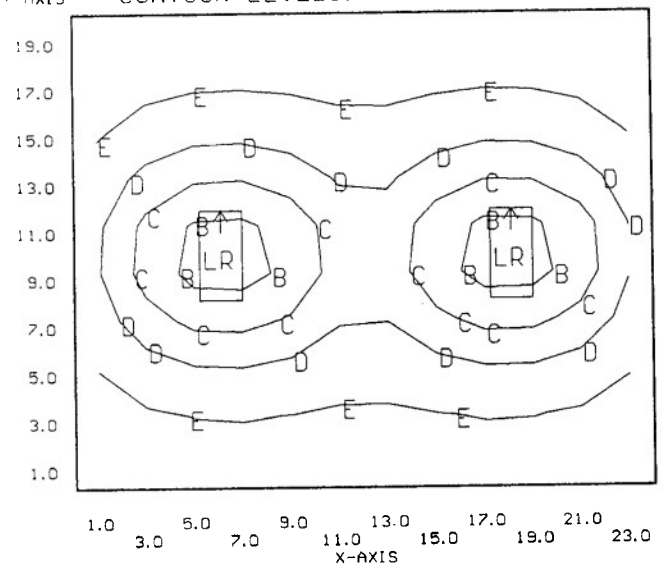


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 16:48 1-Mar-95
PROJECT: 10-050 AREA: ENTRANCE-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=4.12 MAX=43.6 AVE=17.4 AVE/MIN= 4.23 MAX/MIN= 10.60

LR <2> = T10618 METALOPTICS 24TRS042EP11, <2> F032/35K, LLF= 0.84

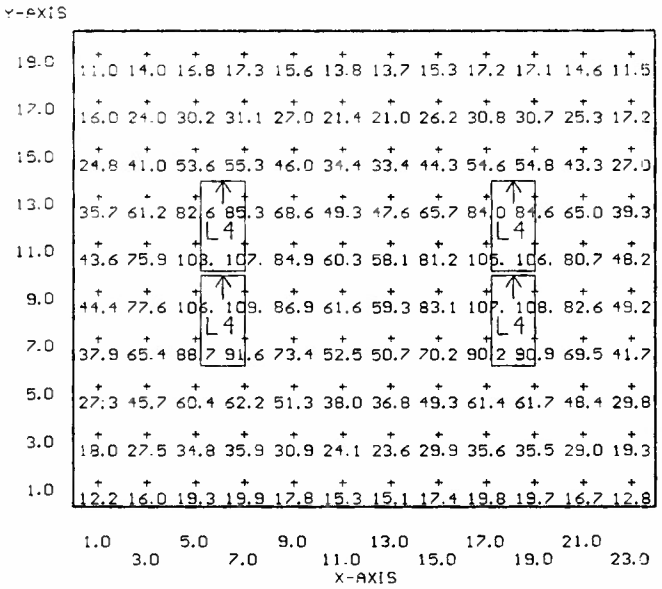
CONTOUR LEVELS: A= 50.0 B= 40.0 C= 30.0 D= 20.0 E= 10.0



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 14:51 10-Feb-95
PROJECT: 10-050 AREA: OFFICE 1 GRID: Ceiling
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=11.0 MAX=109. AVE=46.9 AVE/MIN= 4.27 MAX/MIN= 9.95

L4 (4) = K7952 COLUMBIA 2SG440-EXA.125NOM, (4) F40CW, LLF= 0.68

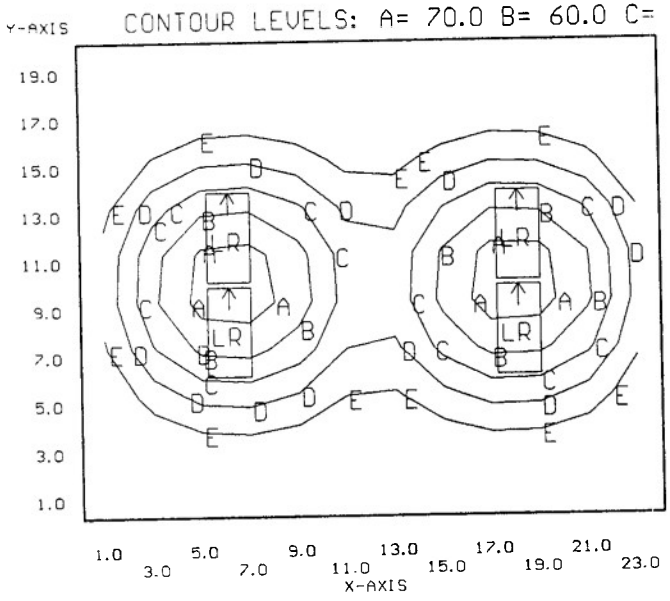


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 16:51 1-Mar-95
PROJECT: 10-050 AREA: OFFICE 1-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=9.32 MAX=75.0 AVE=34.6 AVE/MIN= 3.71 MAX/MIN= 8.05

LR <4> = T10618 METALOPTICS 24TRS042EP11, (2) F032/35K, LLF= 0.84

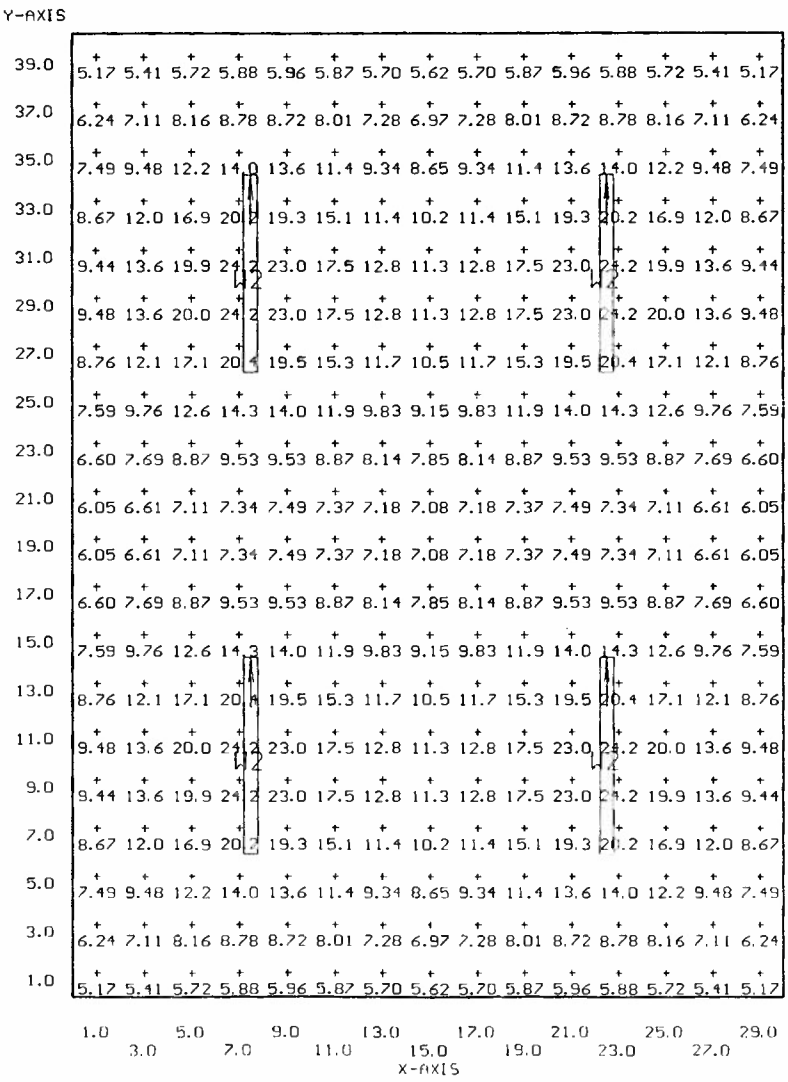
CONTOUR LEVELS: A= 70.0 B= 60.0 C= 50.0 D= 40.0 E= 30.0



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:09 10-Feb-95
PROJECT: 10-050 AREA: BAY 1 GRID: Ceiling
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=5.17 MAX=24.2 AVE=11.4 AVE/MIN= 2.20 MAX/MIN= 4.69

W2 (4) = 10597 COLUMBIA LUN296-CW-HO, (2) F96T12/CW, LLF= 0.67



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:18 10-Feb-95
PROJECT: 10-050 AREA: OFFICE 2 GRID: Ceiling
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=8.35 MAX=120. AVE=47.4 AVE/MIN= 5.68 MAX/MIN= 14.39

L4 (4) = K7952 COLUMBIA 2SG440-EXA.125NOM, (4) F40CW, LLF= 0.68

Y-AXIS

19.0	8.85	12.1	18.8	30.1	43.6	52.1	52.1	43.6	30.1	18.8	12.1	8.85
17.0	10.3	15.9	28.3	48.3	71.2	86.4	86.4	71.2	48.3	28.3	15.9	10.3
15.0	11.7	19.2	35.0	61.9	93.3	L4	L4	93.3	61.9	35.0	19.2	11.7
13.0	12.4	20.2	37.2	65.5	98.3	120.	120.	98.3	65.5	37.2	20.2	12.4
11.0	12.2	19.8	36.4	63.8	94.4	115.	115.	94.4	63.8	36.4	19.8	12.2
9.0	12.3	19.9	36.7	64.1	95.0	116.	116.	95.0	64.1	36.7	19.9	12.3
7.0	12.3	20.1	36.9	65.3	98.4	L4	L4	98.4	65.3	36.9	20.1	12.3
5.0	11.3	18.4	33.6	59.0	88.6	108.	108.	88.6	59.0	33.6	18.4	11.3
3.0	9.71	14.7	25.7	43.4	63.4	76.8	76.8	63.4	43.4	25.7	14.7	9.71
1.0	8.35	11.1	16.6	25.6	36.4	43.3	43.3	36.4	25.6	16.6	11.1	8.35

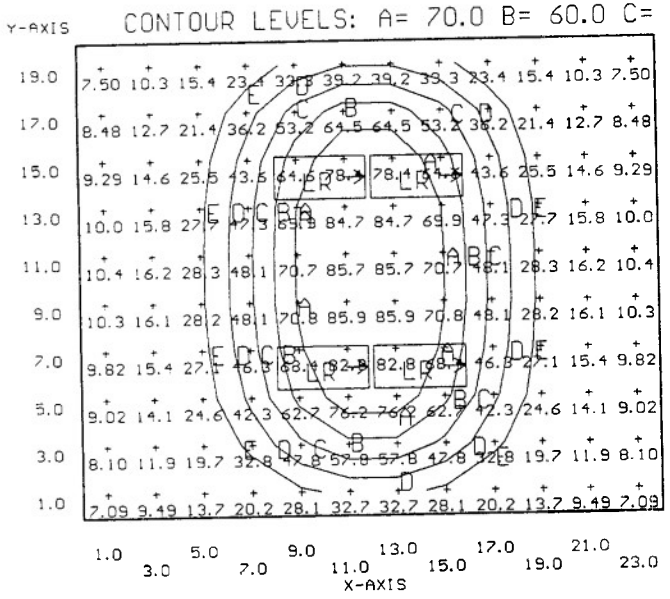
1.0 3.0 5.0 7.0 9.0 11.0 13.0 15.0 17.0 19.0 21.0 23.0

X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 16:58 1-Mar-95
PROJECT: 10-050 AREA: OFFICE 2-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=7.09 MAX=85.9 AVE=35.1 AVE/MIN= 4.95 MAX/MIN= 12.12

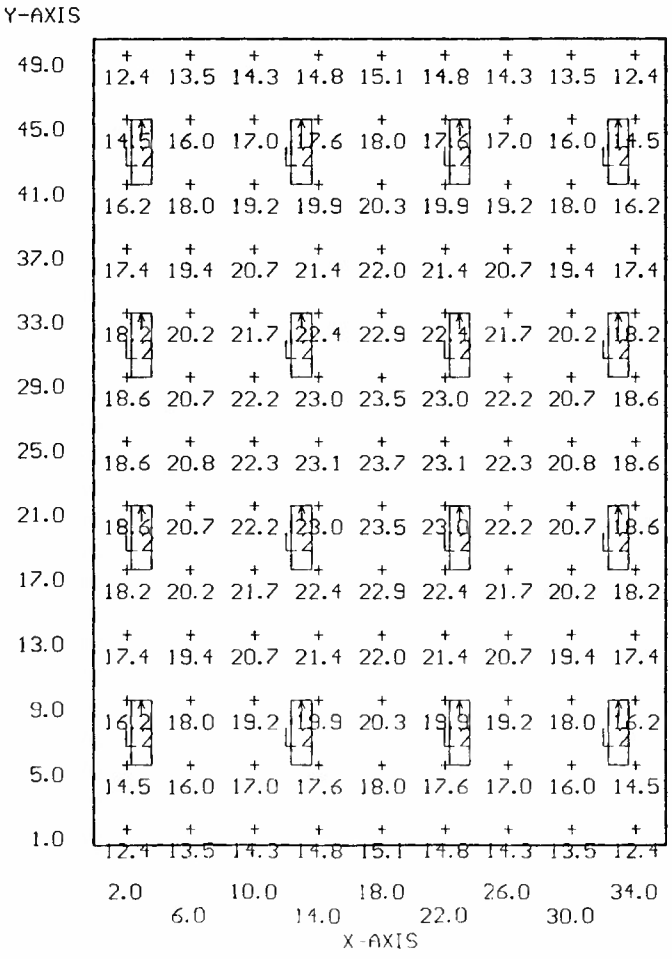
LR <4> = T10618 METALOPTICS 24TRS042EP11, (2) FO32/35K, LLF= 0.84



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:13 10-Feb-95
PROJECT: 10-050 AREA: BAY 2 GRID: Ceiling
Values are FC, SCALE: 1 IN= 12.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=12.4 MAX=23.7 AVE=18.7 AVE/MIN= 1.51 MAX/MIN= 1.91

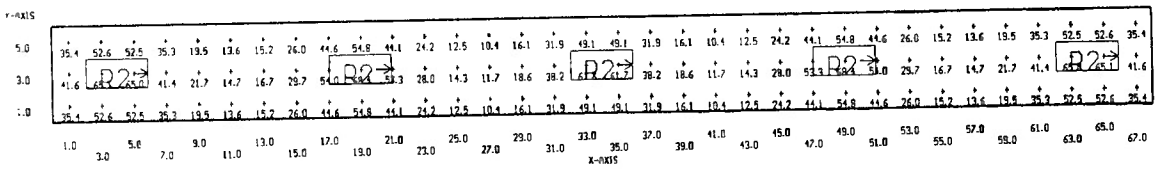
L2 (16) = K9604 COLUMBIA WCW240-A, (2) F40CW, LLF= 0.68



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:23 10-Feb-95
PROJECT: 10-050 AREA: HALLWAY 1 GRID: Ceiling
Values are FC, SCALE: 1 IN= 12.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=10.4 MAX=68.4 AVE=33.7 AVE/MIN= 3.24 MAX/MIN= 6.56

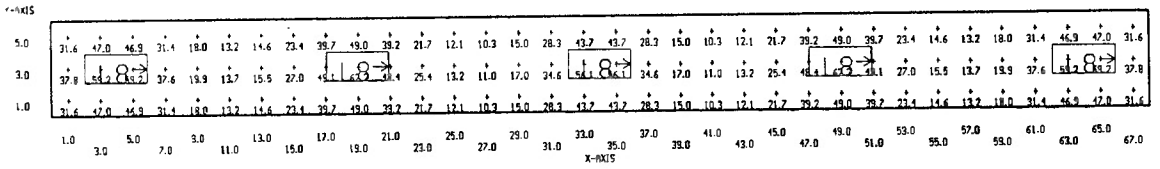
R2 (5) = K7965 COLUMBIA 2SG240-EXA.125NOM, (2) F40CW, LLF= 0.73



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 17:09 1-Mar-95
PROJECT: 10-050 AREA: HALLWAY 1-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 12.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=10.3 MAX=62.2 AVE=30.5 AVE/MIN= 2.96 MAX/MIN= 6.04

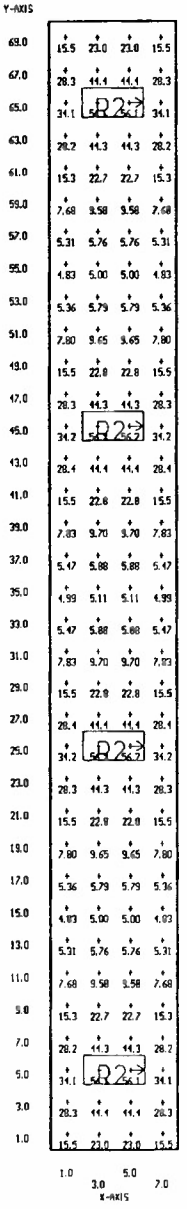
L8 <5> = 9869 COLUMBIA T84PS2*-52-242-2EOCT, (2) F032/31K, LLF= 0.66



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:33 10-Feb-95
PROJECT: 10-050 AREA: HALLWAY 2 GRID: Ceiling
Values are FC, SCALE: 1 IN= 12.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=4.83 MAX=56.2 AVE=20.7 AVE/MIN= 4.29 MAX/MIN= 11.63

R2 (4) = K7965 COLUMBIA 2SG240-EXA.125NOM, (2) F40CW, LLF= 0.73

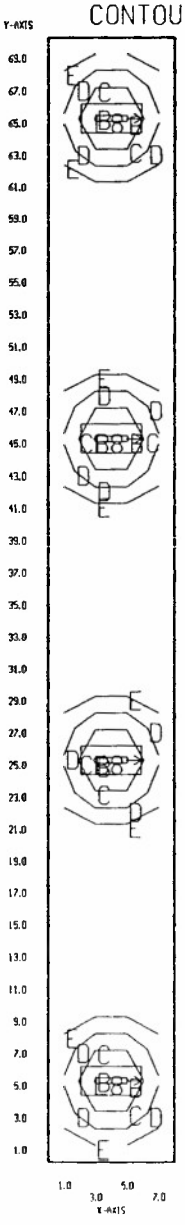


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 17:11 1-Mar-95
PROJECT: 10-050 AREA: HALLWAY 2-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 12.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=4.82 MAX=51.0 AVE=18.7 AVE/MIN= 3.88 MAX/MIN= 10.58

L8 <4> = 9869 COLUMBIA T84PS2*-52-242-2EOCT, (2) F032/31K, LLF= 0.66

CONTOUR LEVELS: A= 60.0 B= 50.0 C= 40.0 D= 30.0 E= 20.0



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:45 10-Feb-95
PROJECT: 10-050 AREA: DINING GRID: Ceiling
Values are FC, SCALE: 1 IN= 6.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=15.6 MAX=79.5 AVE=21.6 AVE/MIN= 1.38 MAX/MIN= 5.09

X (16) = $75R30FL PRESCOLITE T123, (1) 75R30/FL-IES, LLF= 0.78
X1 (1) = B2273B PRESCOLITE PBX-T070B, (1) 150PAR38/FL, LLF= 0.72

Y-AXIS

21.0	18.8	20.1	15.6	20.9	21.0	16.0	21.0	20.9	15.6	20.1	18.8
19.0	20.1	21.6	17.2	22.6	22.7	17.7	22.7	22.6	17.2	21.6	20.1
17.0	15.6	17.2	16.0	18.3	18.7	17.0	18.6	18.3	16.0	17.2	15.6
15.0	20.9	22.6	18.3	24.5	26.6	22.6	26.3	24.3	18.3	22.6	20.9
13.0	21.0	22.7	18.6	26.4	35.5	47.2	33.7	25.9	18.6	22.7	21.0
11.0	16.0	17.6	16.9	22.3	44.0	79.5	38.4	21.7	16.8	17.6	16.0
9.0	21.0	22.7	18.6	25.9	32.3	36.3	31.2	25.5	18.5	22.7	21.0
7.0	20.9	22.6	18.3	24.2	25.6	21.4	25.5	24.1	18.3	22.6	20.9
5.0	15.6	17.2	16.0	18.3	18.5	16.7	18.5	18.3	16.0	17.2	15.6
3.0	20.1	21.6	17.2	22.6	22.7	17.6	22.7	22.6	17.2	21.6	20.1
1.0	18.8	20.1	15.6	20.9	21.0	16.0	21.0	20.9	15.6	20.1	18.8

1.0 3.0 5.0 7.0 9.0 11.0 13.0 15.0 17.0 19.0 21.0

X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:55 10-Feb-95
PROJECT: 10-050 AREA: KITCHEN GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=25.0 MAX=57.5 AVE=46.0 AVE/MIN= 1.84 MAX/MIN= 2.30

L2 (5) = K9604 COLUMBIA WCW240-A, (2) F40CW, LLF= 0.68

V-AXIS

9.5	33.1	38.6	39.9	39.7	41.3	43.0	42.1	40.2	40.4	40.3	36.2
7.5	37.1	44.9	47.4	47.3	49.6	51.9	50.5	47.9	47.9	47.1	40.9
5.5	36.1	45.8	51.0	53.1	55.6	57.5	56.4	53.9	52.3	48.5	40.0
3.5	30.8	40.8	49.8	55.7	57.4	57.1	57.2	56.5	52.1	44.1	34.2
1.5	25.0	34.4	45.5	54.5	57.7	54.1	54.8	55.0	48.6	38.3	28.4

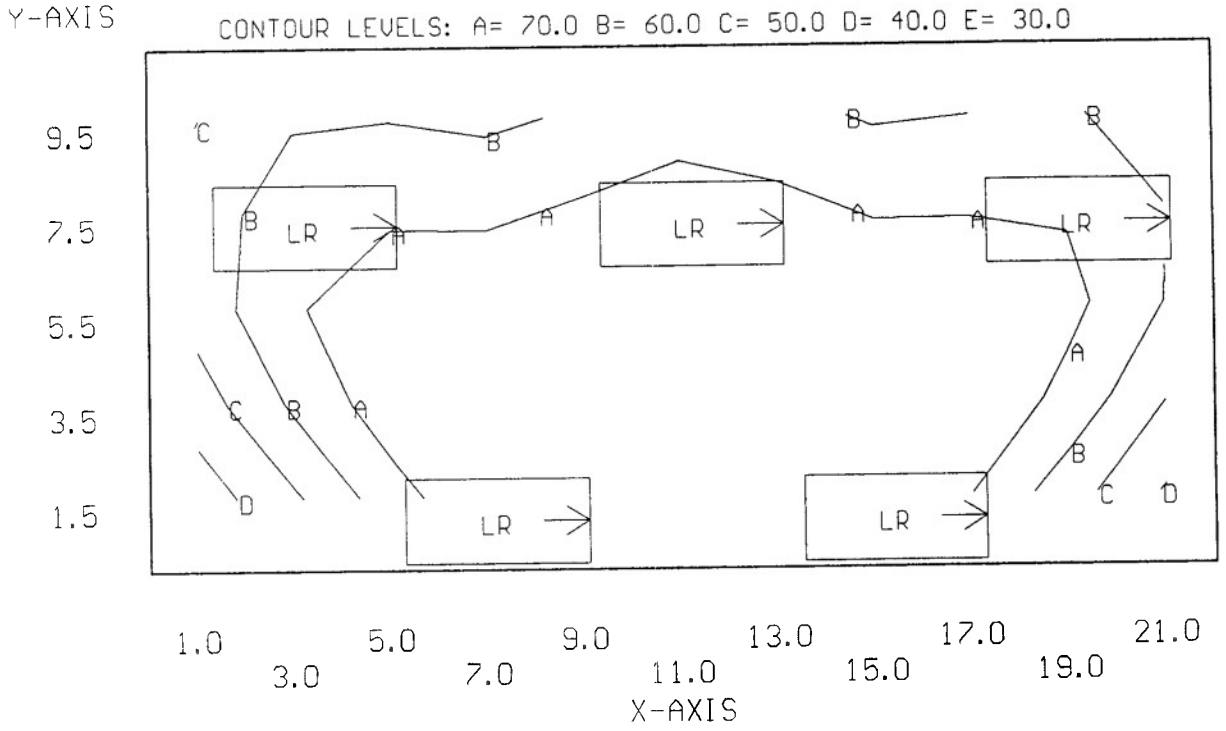
1.0 3.0 5.0 7.0 9.0 11.0 13.0 15.0 17.0 19.0 21.0

X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 17:14 1-Mar-95
PROJECT: 10-050 AREA: KITCHEN-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=34.2 MAX=86.1 AVE=67.8 AVE/MIN= 1.98 MAX/MIN= 2.52

LR <5> = T10618 METALOPTICS 24TRS042EP11, (2) F032/35K, LLF= 0.84



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 16:03 10-Feb-95
PROJECT: 10-050 AREA: LOUNGE GRID: Ceiling
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=11.1 MAX=37.9 AVE=23.1 AVE/MIN= 2.07 MAX/MIN= 3.40

R2 (4) = K7965 COLUMBIA 2SG240-EXA.125NOM, (2) F40CW, LLF= 0.73

Y-AXIS

23.0	12.0	16.2	18.1	16.4	12.9	11.1	12.9	16.4	18.1	16.2	12.0
21.0	17.9	25.2	28.6	25.8	19.8	16.6	19.8	25.8	28.6	25.2	17.9
19.0	21.5	32.0	37.4	32.9	24.2	20.3	24.2	32.9	37.4	32.0	21.5
17.0	21.8	32.3	37.9	33.3	24.6	20.7	24.6	33.3	37.9	32.3	21.8
15.0	18.7	26.7	30.5	27.5	21.2	18.0	21.2	27.5	30.5	26.7	18.7
13.0	14.6	20.4	23.2	21.2	16.6	14.4	16.6	21.2	23.2	20.4	14.6
11.0	14.6	20.4	23.2	21.2	16.6	14.4	16.6	21.2	23.2	20.4	14.6
9.0	18.7	26.7	30.5	27.5	21.2	18.0	21.2	27.5	30.5	26.7	18.7
7.0	21.8	32.3	37.9	33.3	24.6	20.7	24.6	33.3	37.9	32.3	21.8
5.0	21.5	32.0	37.4	32.9	24.2	20.3	24.2	32.9	37.4	32.0	21.5
3.0	17.9	25.2	28.6	25.8	19.8	16.6	19.8	25.8	28.6	25.2	17.9
1.0	12.0	16.2	18.1	16.4	12.9	11.1	12.9	16.4	18.1	16.2	12.0

R2 R2 R2 R2

1.0 3.0 5.0 7.0 9.0 11.0 13.0 15.0 17.0 19.0 21.0

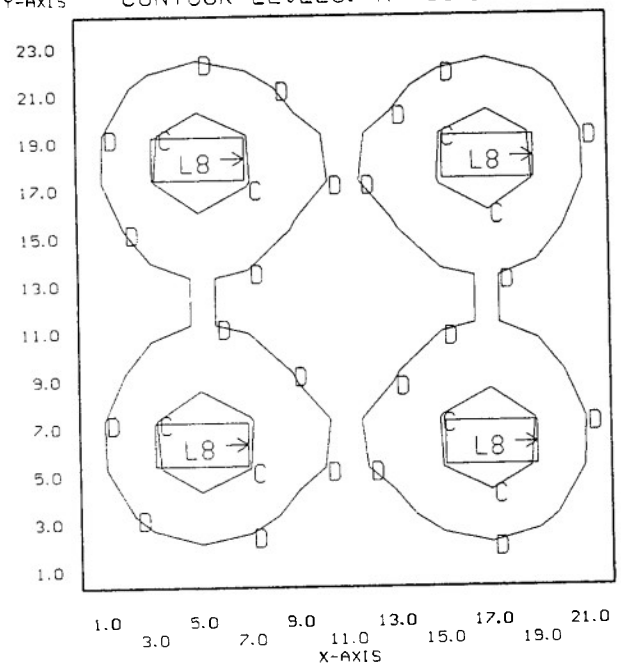
X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 09:18 2-Mar-95
PROJECT: 10-050 AREA: LOUNGE-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=11.1 MAX=34.6 AVE=21.0 AVE/MIN= 1.89 MAX/MIN= 3.12

L8 (4) = 9869 COLUMBIA T84PS2*-52-242-2EOCT, (2) FO32/31K, LLF= 0.66

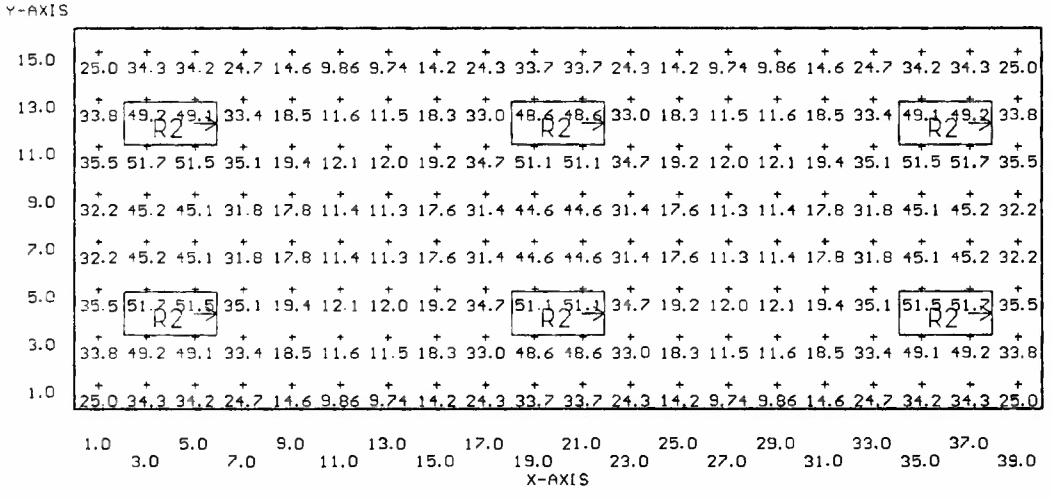
CONTOUR LEVELS: A= 50.0 B= 40.0 C= 30.0 D= 20.0 E= 10.0



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 16:13 10-Feb-95
PROJECT: 10-050 AREA: EXERCISE ROOM GRID: Ceiling
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=9.74 MAX=51.7 AVE=28.5 AVE/MIN= 2.93 MAX/MIN= 5.30

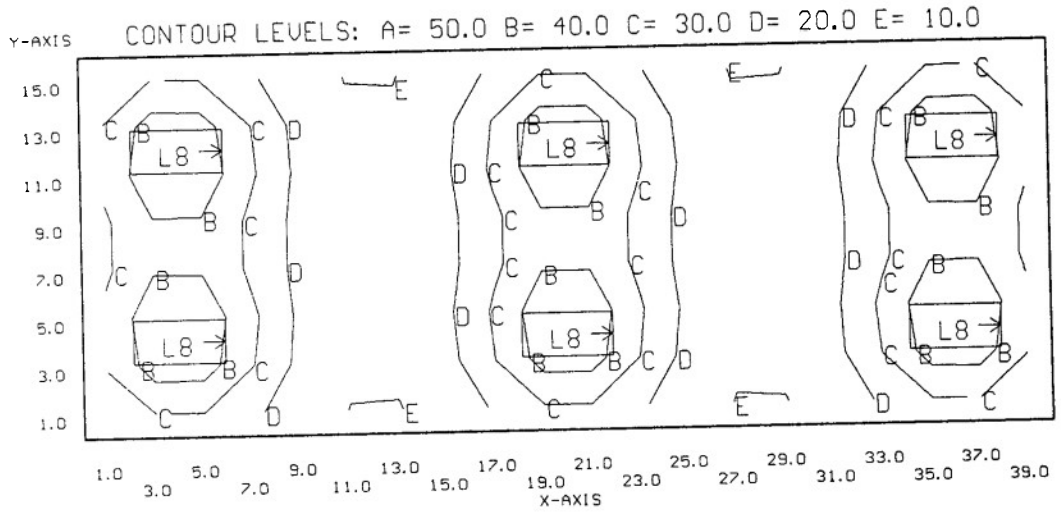
R2 (6) = K7965 COLUMBIA 2SG240-EXA.125NOM, (2) F40CW, LLF= 0.73



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 09:21 2-Mar-95
PROJECT: 10-050 AREA: EXERCISE ROOM-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=9.72 MAX=46.8 AVE=25.9 AVE/MIN= 2.66 MAX/MIN= 4.82

L8 (6) = 9869 COLUMBIA T84PS2*-52-242-2EOCT, (2) FO32/31K, LLF= 0.66



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 16:16 10-Feb-95
PROJECT: 10-050 AREA: LAUNDRY GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=10.1 MAX=50.6 AVE=27.4 AVE/MIN= 2.72 MAX/MIN= 5.02

R2 <2> = K7965 COLUMBIA 2SG240-EXA.125NOM, (2) F40CW, LLF= 0.73

Y-AXIS

15.0	10.1	11.6	12.5	12.5	11.6	10.1
13.0	17.1	20.2	22.8	22.8	20.2	17.1
11.0	27.9	34.0	38.1	38.1	34.0	27.9
9.0	37.7	46.2 R2	50.6	50.6	46.2 R2	37.7
7.0	37.7	46.2	50.6	50.6	46.2	37.7
5.0	27.9	34.0	38.1	38.1	34.0	27.9
3.0	17.1	20.2	22.8	22.8	20.2	17.1
1.0	10.1	11.6	12.5	12.5	11.6	10.1

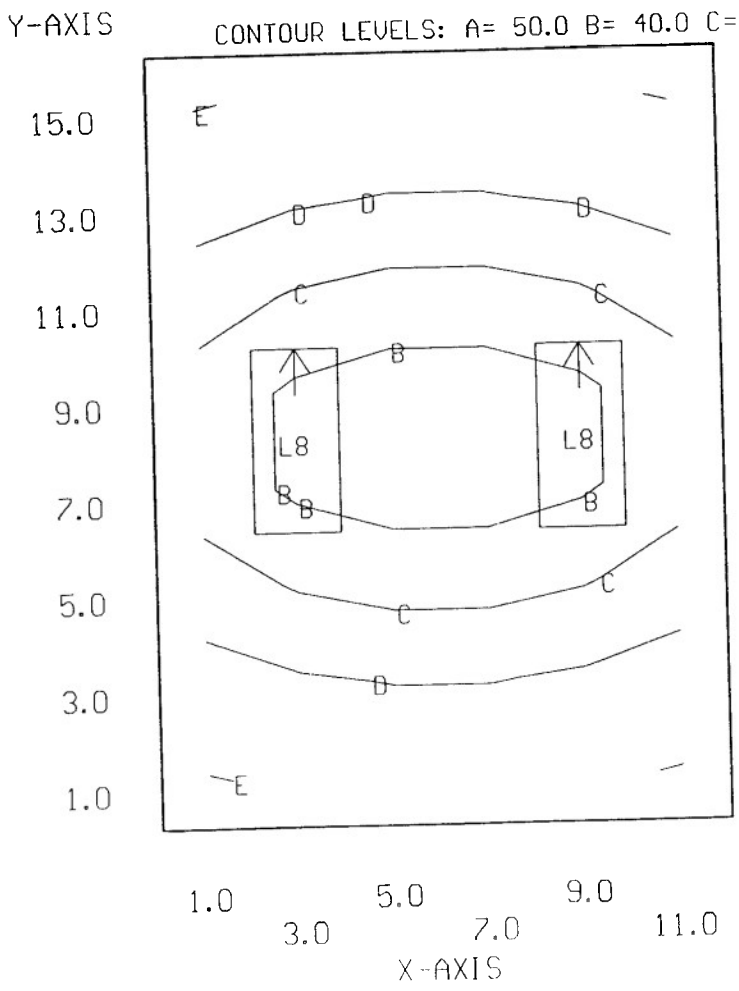
1.0 3.0 5.0 7.0 9.0 11.0

X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 09:23 2-Mar-95
PROJECT: 10-050 AREA: LAUNDRY-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=9.64 MAX=44.9 AVE=24.9 AVE/MIN= 2.58 MAX/MIN= 4.66

L8 <2> = 9869 COLUMBIA T84PS2*-52-242-2EOCT, (2) F032/31K, LLF= 0.66



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 16:21 10-Feb-95
PROJECT: 10-050 AREA: TOILET/SHOWER GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=14.6 MAX=33.9 AVE=23.8 AVE/MIN= 1.63 MAX/MIN= 2.32

L2 (4) = K9604 COLUMBIA WCW240-A, (2) F40CW, LLF= 0.68

Y-AXIS

19.0	15.2	18.9	20.2	19.2	16.3	14.6	16.3	19.2	20.2	18.9	15.2
17.0	19.6	26.2	28.9	26.8	21.4	19.2	21.4	26.8	28.9	26.2	19.6
15.0	21.9	30.3	L2 33.9	31.0	24.1	21.9	24.1	31.0	L2 33.9	30.3	21.9
13.0	21.1	28.5	31.3	29.2	23.4	21.0	23.4	29.2	31.3	28.5	21.1
11.0	19.4	25.0	26.9	25.7	21.6	19.1	21.6	25.7	26.9	25.0	19.4
9.0	19.4	25.0	26.9	25.7	21.6	19.1	21.6	25.7	26.9	25.0	19.4
7.0	21.1	28.5	31.3	29.2	23.4	21.0	23.4	29.2	31.3	28.5	21.1
5.0	21.9	30.3	L2 33.9	31.0	24.1	21.9	24.1	31.0	L2 33.9	30.3	21.9
3.0	19.6	26.2	28.9	26.8	21.4	19.2	21.4	26.8	28.9	26.2	19.6
1.0	15.2	18.9	20.2	19.2	16.3	14.6	16.3	19.2	20.2	18.9	15.2

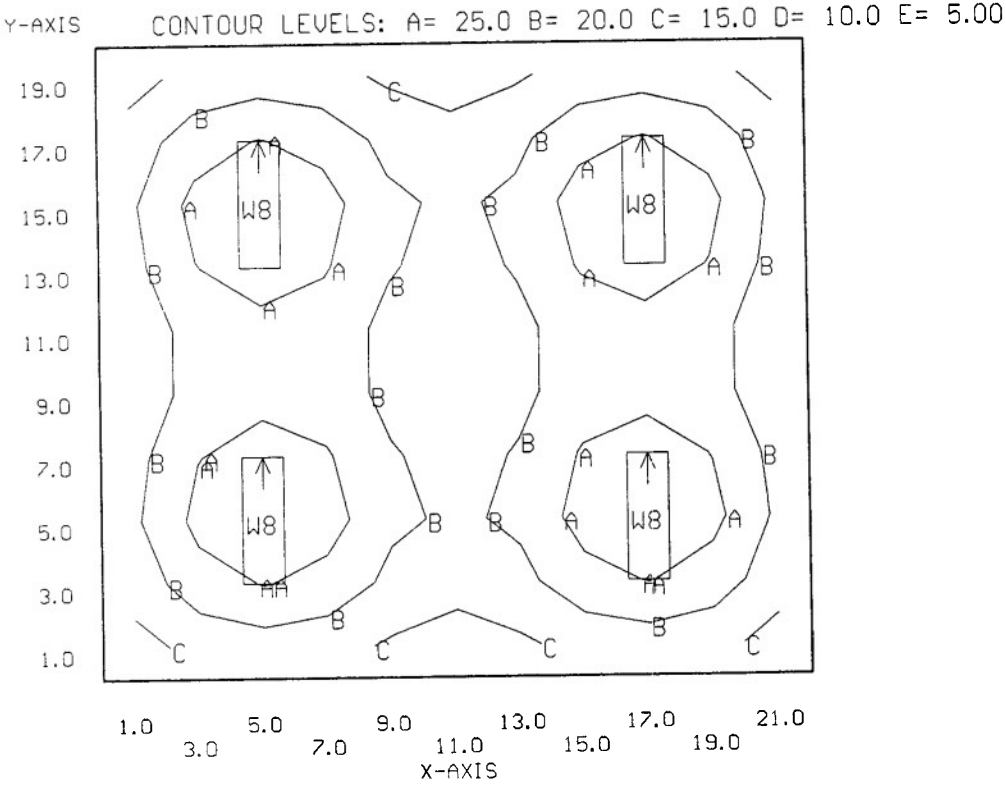
1.0 3.0 5.0 7.0 9.0 11.0 13.0 15.0 17.0 19.0 21.0

X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 09:29 2-Mar-95
PROJECT: 10-050 AREA: TOILET/SHOWER-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 6.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=12.7 MAX=29.5 AVE=20.7 AVE/MIN= 1.63 MAX/MIN= 2.32

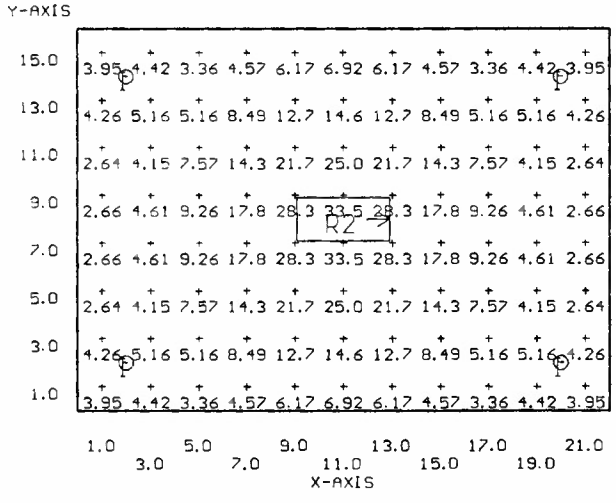
W8 (4) = K9604 COLUMBIA WCW240-A, (2) F032/35K, LLF= 0.64



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 16:32 10-Feb-95
PROJECT: 10-050 AREA: SLEEPING AREAS GRID: Ceiling
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=2.64 MAX=33.5 AVE=9.60 AVE/MIN= 3.64 MAX/MIN= 12.70

I (12) = B1401C PRESCOLITE PBX-TB12, (1) 25A19/IF, LLF= 0.76
R2 (3) = K7965 COLUMBIA 2SG240-EXA.125NOM, (2) F40CW, LLF= 0.73

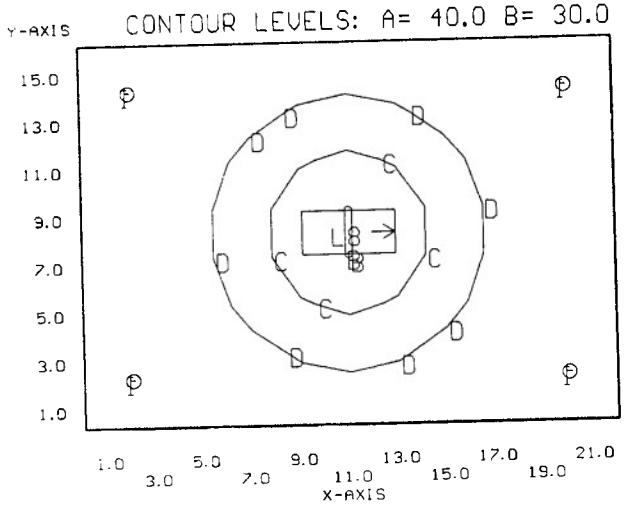


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 09:34 2-Mar-95
PROJECT: 10-050 AREA: SLEEP AREAS-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=2.56 MAX=30.4 AVE=8.78 AVE/MIN= 3.43 MAX/MIN= 11.87

I <12> = B1401C PRESCOLITE PBX-TB12, (1) 25A19/IF, LLF= 0.76
L8 <3> = 9869 COLUMBIA T84PS2*-52-242-2EOCT, (2) F032/31K, LLF= 0.66

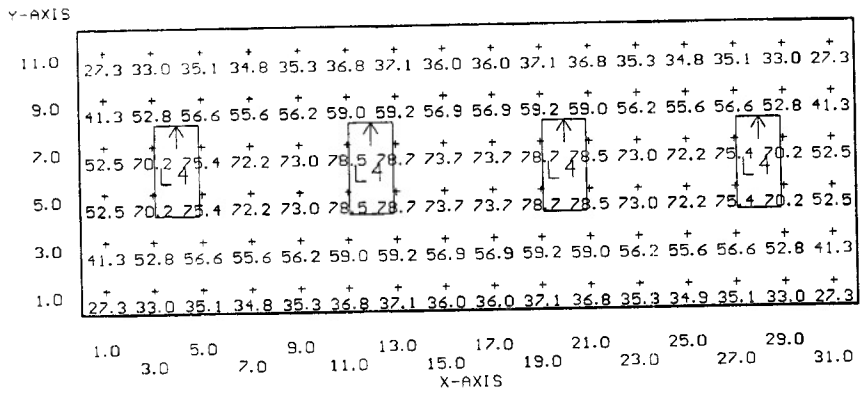
CONTOUR LEVELS: A= 40.0 B= 30.0 C= 20.0 D= 10.0



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 16:35 10-Feb-95
PROJECT: 10-050 AREA: TV ROOM GRID: Ceiling
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=27.3 MAX=78.7 AVE=53.6 AVE/MIN= 1.97 MAX/MIN= 2.88

L4 (4) = K7952 COLUMBIA 2SG44O-EXA.125NOM, (4) F40CW, LLF= 0.68

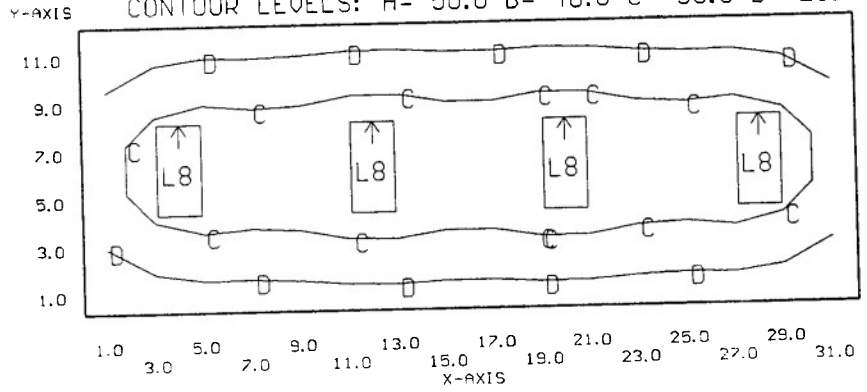


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 09:36 2-Mar-95
PROJECT: 10-050 AREA: TV ROOM-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=14.2 MAX=39.5 AVE=27.2 AVE/MIN= 1.92 MAX/MIN= 2.78

L8 <4> = 9869 COLUMBIA T84PS2*-52-242-2EOCT, (2) FO32/31K, LLF= 0.66

CONTOUR LEVELS: A= 50.0 B= 40.0 C= 30.0 D= 20.0 E= 10.0



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 16:41 10-Feb-95
PROJECT: 10-050 AREA: OFFICE 3 GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=25.4 MAX=75.1 AVE=49.8 AVE/MIN= 1.96 MAX/MIN= 2.96

L4 (2) = K7952 COLUMBIA 2SG440-EXA.125NOM, (4) F40CW, LLF= 0.68

Y-AXIS

11.0	25.4	32.1	34.2	33.3	33.3	34.2	32.1	25.4
9.0	40.3	52.7	56.6	54.8	54.8	56.6	52.7	40.3
7.0	52.7	70.2	75.1	70.3	70.3	75.1	70.2	52.7
5.0	52.7	70.2	75.1	70.3	70.3	75.1	70.2	52.7
3.0	40.3	52.7	56.6	54.8	54.8	56.6	52.7	40.3
1.0	25.4	32.1	34.2	33.3	33.3	34.2	32.1	25.4

L4 L4

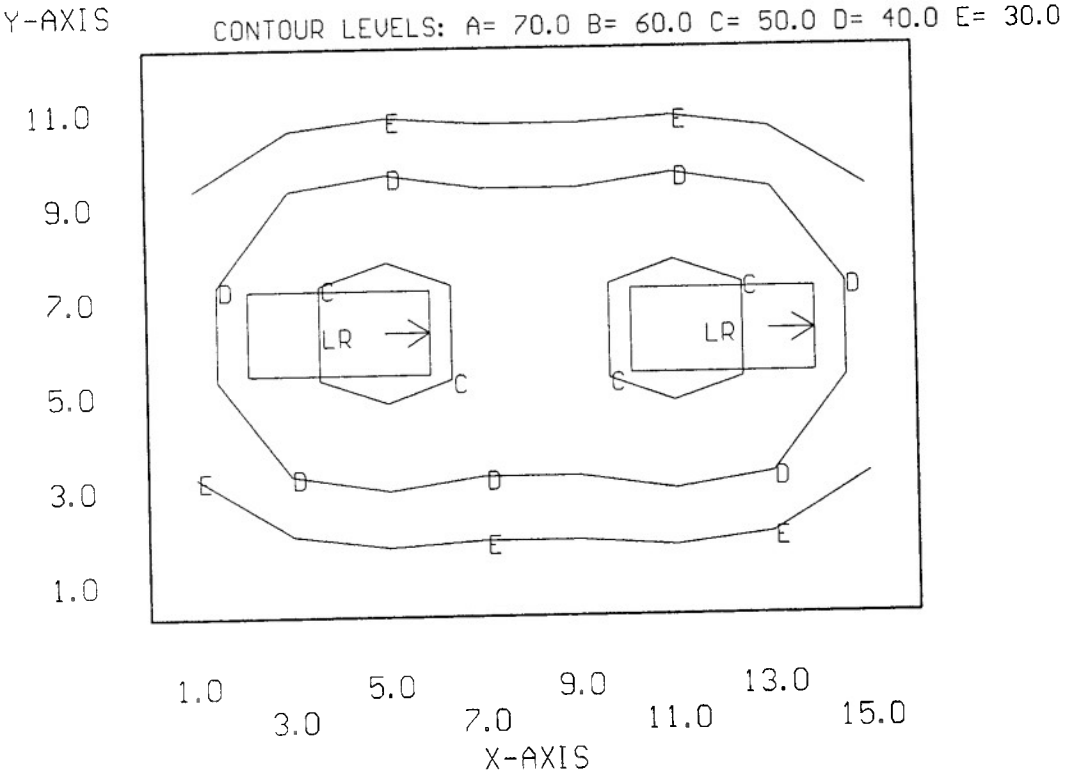
1.0 3.0 5.0 7.0 9.0 11.0 13.0 15.0

X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 09:40 2-Mar-95
PROJECT: 10-050 AREA: OFFICE 3-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=19.6 MAX=52.3 AVE=36.4 AVE/MIN= 1.86 MAX/MIN= 2.67

LR <2> = T10618 METALOPTICS 24TRS042EP11, <2> F032/35K, LLF= 0.84

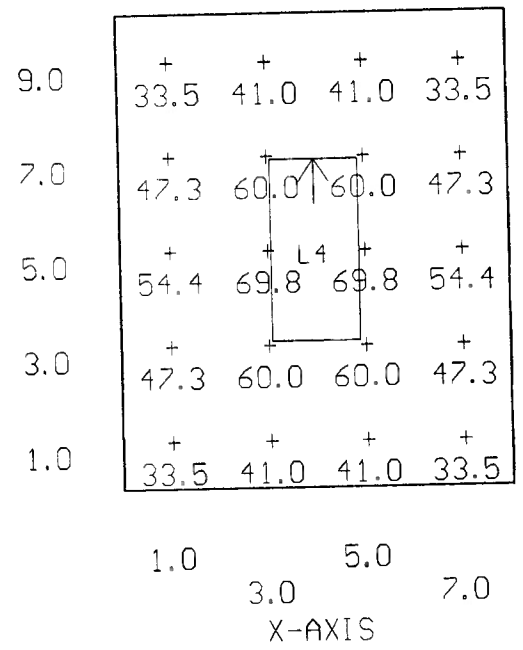


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 16:44 10-Feb-95
PROJECT: 10-050 AREA: WOMENS TOILET GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=33.5 MAX=69.8 AVE=48.8 AVE/MIN= 1.46 MAX/MIN= 2.08

L4 (1) = K7952 COLUMBIA 2SG440-EXA.125NOM, (4) F40CW, LLF= 0.68

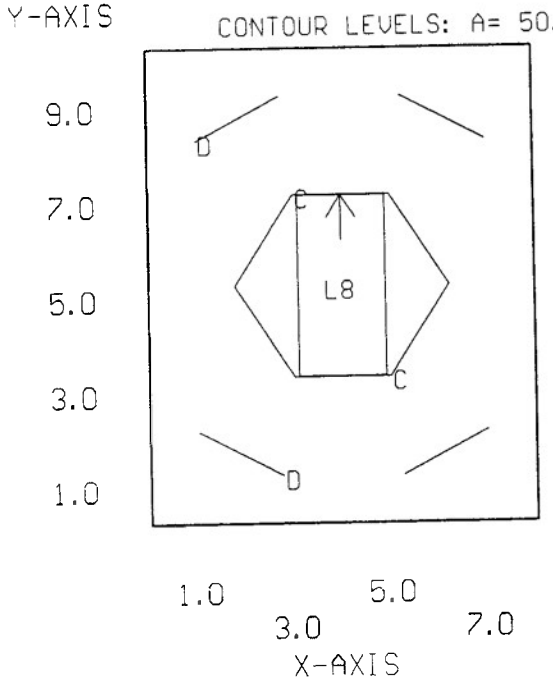
Y-AXIS



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 09:42 2-Mar-95
PROJECT: 10-050 AREA: WOMENS TOILET-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=16.9 MAX=34.6 AVE=24.3 AVE/MIN= 1.44 MAX/MIN= 2.05

L8 (1) = 9869 COLUMBIA T84PS2*-52-242-2EOCT, (2) FO32/31K, LLF= 0.66



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 16:48 10-Feb-95
PROJECT: 10-050 AREA: BAY 3 GRID: Ceiling
Values are FC, SCALE: 1 IN= 8.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=4.86 MAX=13.5 AVE=8.96 AVE/MIN= 1.84 MAX/MIN= 2.78

W2 (4) = 10597 COLUMBIA LUN296-CW-HO, (2) F96T12/CW, LLF= 0.67

Y-AXIS

39.0	4.86	5.19	5.57	5.89	6.04	6.17	6.17	6.09	6.08	6.09	6.17	6.17	6.04	5.89	5.57	5.19	4.86	
37.0	5.55	6.16	6.88	7.47	7.73	7.81	7.59	7.31	7.18	7.31	7.59	7.81	7.73	7.47	6.88	6.16	5.55	
35.0	6.21	7.26	8.47	9.46	9.88	9.87	9.33	8.69	8.42	8.69	9.33	9.87	9.88	9.46	8.47	7.26	6.21	
33.0	6.81	8.25	9.96	11.4	12.0	11.9	11.0	9.96	9.52	9.96	11.0	11.9	12.0	11.4	9.96	8.25	6.81	
31.0	7.20	8.91	11.0	12.7	13.4	13.2	12.1	10.8	10.2	10.8	12.1	13.2	13.4	12.7	11.0	8.91	7.20	
29.0	7.30	9.01	11.1	12.8	13.5	13.4	12.2	10.9	10.4	10.9	12.2	13.4	13.5	12.8	11.1	9.01	7.30	
27.0	7.08	8.57	10.3	11.8	12.4	12.3	11.4	10.4	9.98	10.4	11.4	12.3	12.4	11.8	10.3	8.57	7.08	
25.0	6.68	7.84	9.14	10.2	10.6	10.7	10.2	9.53	9.25	9.53	10.2	10.7	10.6	10.2	9.14	7.84	6.68	
23.0	6.32	7.13	7.99	8.69	8.99	9.14	8.93	8.65	8.52	8.65	8.93	9.14	8.99	8.69	7.99	7.13	6.32	
21.0	6.10	6.72	7.32	7.83	8.06	8.26	8.22	8.14	8.11	8.14	8.22	8.26	8.06	7.83	7.32	6.72	6.10	
19.0	6.10	6.72	7.32	7.83	8.06	8.26	8.22	8.14	8.11	8.14	8.22	8.26	8.06	7.83	7.32	6.72	6.10	
17.0	6.32	7.13	7.99	8.69	8.99	9.14	8.93	8.65	8.52	8.65	8.93	9.14	8.99	8.69	7.99	7.13	6.32	
15.0	6.68	7.84	9.14	10.2	10.6	10.7	10.2	9.53	9.25	9.53	10.2	10.7	10.6	10.2	9.14	7.84	6.68	
13.0	7.08	8.57	10.3	11.8	12.4	12.3	11.4	10.4	9.98	10.4	11.4	12.3	12.4	11.8	10.3	8.57	7.08	
11.0	7.30	9.01	11.1	12.8	13.5	13.4	12.2	10.9	10.4	10.9	12.2	13.4	13.5	12.8	11.1	9.01	7.30	
9.0	7.20	8.91	11.0	12.7	13.4	13.2	12.1	10.8	10.2	10.8	12.1	13.2	13.4	12.7	11.0	8.91	7.20	
7.0	6.81	8.25	9.96	11.4	12.0	11.9	11.0	9.96	9.52	9.96	11.0	11.9	12.0	11.4	9.96	8.25	6.81	
5.0	6.21	7.26	8.47	9.46	9.88	9.87	9.33	8.69	8.42	8.69	9.33	9.87	9.88	9.46	8.47	7.26	6.21	
3.0	5.55	6.16	6.88	7.47	7.73	7.81	7.59	7.31	7.18	7.31	7.59	7.81	7.73	7.47	6.88	6.16	5.55	
1.0	4.86	5.19	5.57	5.89	6.04	6.17	6.17	6.09	6.08	6.09	6.17	6.17	6.04	5.89	5.57	5.19	4.86	

1.0 3.0 5.0 7.0 9.0 11.0 13.0 15.0 17.0 19.0 21.0 23.0 25.0 27.0 29.0 31.0 33.0

X-AXIS

Bldg 13-010 Summary

Present System

Fixture Type	Watts/ Fixture	Number Fixtures	Total Watts
I1	100	2	200
L1	52	2	104
L2	83	4	332
L4	192	24	4,608
Totals		32	5,244

Replacement System

Fixture Type	Watts/ Fixture	Number Fixtures	Total Watts
I1	100	2	200
L1	52	2	104
L8	60	8	480
LR	61	20	1,220
Totals		32	2,004

13-010 Schedule

Reynolds, Smith & Hills, Inc.
4651 Salisbury Road
Jacksonville, FL 32256
Buildings Engineering

Luminaire Fixture Schedule
Generated by LitePro V2.27E
Provided and supported by USI Lighting, Inc.
Filename: 13-010 Type: Indoor

Luminaire Fixture Schedule /PRESENT

Project name: PBA Lighting Survey - Bldg 13-010
Prepared for: Corps of Engineers
Prepared by: C. Warren

Project #6941331
Date: 10-Feb-95
UPD: 2.6W/Sq.Ft

TYPE	DESCRIPTION	LAMP/BALLAST	V/W	QTY	REMARKS
I1	10" RECESSED ROUND DOWNLIGHT LENS- DROP OPAL PRESCOLITE 90HF-3	100A19/IF NA	000 - 100	2	
L1	5"X4"X4' 1L WALL CORRIDOR WRAP LENS- SMOOTH WHITE ACRYLIC COLUMBIA W140-A	F40CW ESB	000 - 52	2	
L2	15"X4'2L CEILING MT.WRAPAROUND LENS- PRISMATIC W/ GLOW ENDS COLUMBIA WCW240-A	F40CW ESB	000 - 83	4	
L4	2'X4' 4L STATIC GRID TROFFER LENS- .125" NOM PRISMATIC A12 COLUMBIA 2SG440-EXA.125NOM	F40CW STD	000 - 192	24	

NOTES:

13-010 Schedule

Reynolds, Smith & Hills, Inc.
4651 Salisbury Road
Jacksonville, FL 32256
Buildings Engineering

Luminaire Fixture Schedule
Generated by LitePro V2.27E
Provided and supported by USI Lighting, Inc.
Filename: 13-010 Type: Indoor

Luminaire Fixture Schedule / PROPOSED

Project name: PBA Lighting Survey - Bldg 13-010 | Project #6941331
Prepared for: Corps of Engineers | Date: 2-Mar-95
Prepared by: C. Warren | UPD: 1.0W/Sq.Ft

TYPE	DESCRIPTION	LAMP/BALLAST	V/W	QTY	REMARKS
I1	10" RECESSED ROUND DOWNLIGHT LENS- DROP OPAL PRESCOLITE 90HF-3	100A19/IF NA	000 - 100	2	
L1	5"X4"X4' 1L WALL CORRIDOR WRAP LENS- SMOOTH WHITE ACRYLIC COLUMBIA W140-A	F40CW ESB	000 - 52	2	
L8	2X4 2L FLUSH STATIC TROFFER LENS- .125" THK PRISMATIC A-12 COLUMBIA T84PS2*52.125-242-EO	FO32/35K EOCT	000 - 60	8	
LR	2X4 ACRYLIC LENSED TROFFER SILVER NORMAL BEAM REFLECTOR METALOPTICS 24TRSO4EP11	FO32/35K EOCT	000 - 61	20	

NOTES:

Reynolds, Smith & Hills, Inc.
4651 Salisbury Road
Jacksonville, FL 32256
Buildings Engineering

Project Area Summary
Generated by LitePro V2.27E
Provided and supported by USI Lighting, Inc.
Filename: 13-010 Type: Indoor

Project Area Summary	
Project name: PBA Lighting Survey - Bldg 13-010	Project #6941331
Prepared for: Corps of Engineers	Date: 2-Mar-95
Prepared by: C. Warren	UPD: 1.9W/Sq.Ft

AREA NAME	DIMENSIONS	LUMINAIRES	W/SQ.FT	QTY
ADMIN OFFICES	11x11x10Ft	(2) Type L4	3.2	10
ADMIN OFFICES-N	11x11x10Ft	(2) Type LR	1.0	10
TRAINING	23x11x9Ft	(4) Type L4	3.0	1
RAINING-N	23x11x9Ft	(4) Type L8	0.9	1
HALLWAY	78x4x10Ft	(4) Type L2	1.1	1
HALLWAY-N	78x4x10Ft	(4) Type L8	0.8	1

NOTES:

13-010 Calculations

Reynolds, Smith & Hills, Inc.
4651 Salisbury Road
Jacksonville, FL 32256
Buildings Engineering

Project Calculation Summary
Generated by LitePro V2.27E
Provided and supported by USI Lighting, Inc.
Filename: 13-010 Type: Indoor

Project Calculation Summary	
Project name: PBA Lighting Survey - Bldg 13-010	Project #6941331
Prepared for: Corps of Engineers	Date: 2-Mar-95
Prepared by: C. Warren	UPD: 1.9W/Sq.Ft

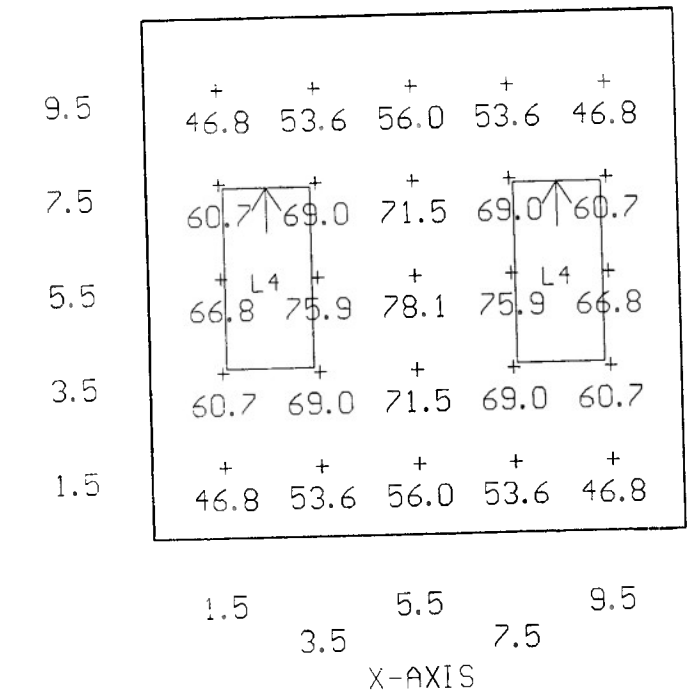
AREA NAME	DIMENSIONS	GRID NAME	AVE	MAX	MIN
ADMIN OFFICES	11x11x10Ft	Ceiling	<+> 61.6	78.1	46.8
ADMIN OFFICES-N	11x11x10Ft	Ceiling	<+> 42.8	56.4	32.5
TRAINING	23x11x9Ft	Ceiling	<+> 76.1	100.3	51.3
TRAINING-N	23x11x9Ft	Ceiling	<+> 40.5	53.3	27.4
HALLWAY	78x4x10Ft	Ceiling	<+> 18.6	26.8	10.4
HALLWAY-N	78x4x10Ft	Ceiling	<+> 21.0	30.8	11.0

NOTES:

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 10:47 9-Feb-95
PROJECT: 13-010 AREA: ADMIN OFFICES GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=46.8 MAX=78.1 AVE=61.6 AVE/MIN= 1.32 MAX/MIN= 1.67

L4 (20) = K7952 COLUMBIA 2SG440-EXA.125NOM, (4) F40CW, LLF= 0.68



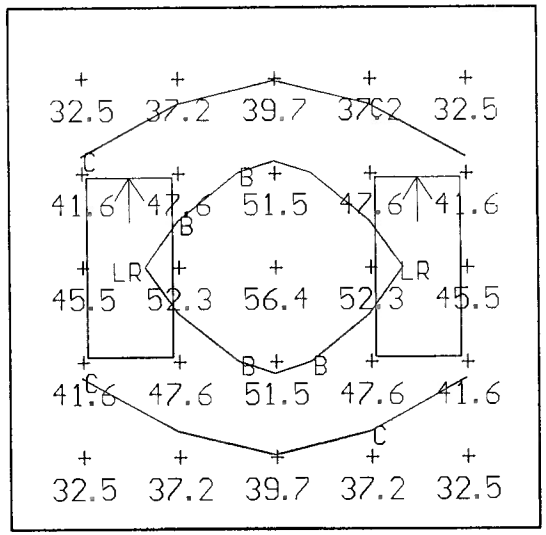
USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:04 2-Mar-95
PROJECT: 13-010 AREA: ADMIN OFFICES-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=32.5 MAX=56.4 AVE=42.8 AVE/MIN= 1.32 MAX/MIN= 1.74

LR <20> = T10618 METALOPTICS 24TRS04EP11, (2) FO32/35K, LLF= 0.81

Y-AXIS

CONTOUR LEVELS: A= 60.0 B= 50.0 C= 40.0 D= 30.0 E= 20.0



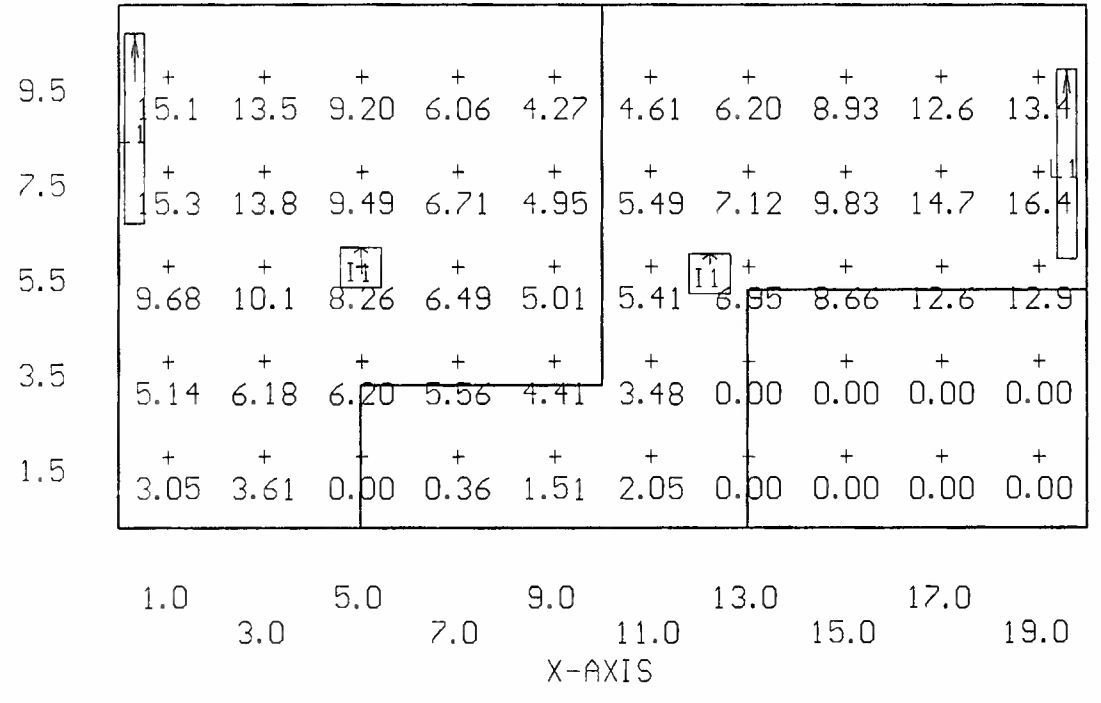
1.5 5.5 9.5
3.5 7.5
X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 09:58 10-Feb-95
PROJECT: 13-010 AREA: TOILETS GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=0.00 MAX=16.4 AVE=6.50 AVE/MIN=N/A MAX/MIN=N/A

I1 <2> = B1491A PRESCOLITE 90HF-3, (1) 100A19/IF, LLF= 0.75
L1 <2> = K8958 COLUMBIA W140-A, (1) F40CW, LLF= 0.60

Y-AXIS

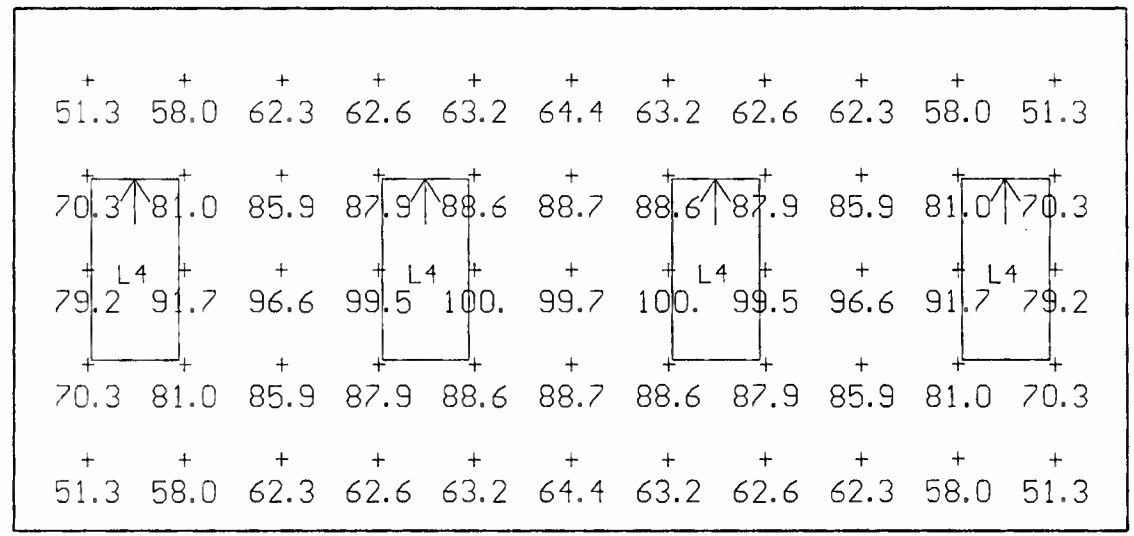


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 10:03 10-Feb-95
PROJECT: 13-010 AREA: TRAINING GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=51.3 MAX=100. AVE=76.1 AVE/MIN= 1.48 MAX/MIN= 1.96

L4 (4) = K7952 COLUMBIA 2SG440-EXA.125NOM, (4) F40CW, LLF= 0.68

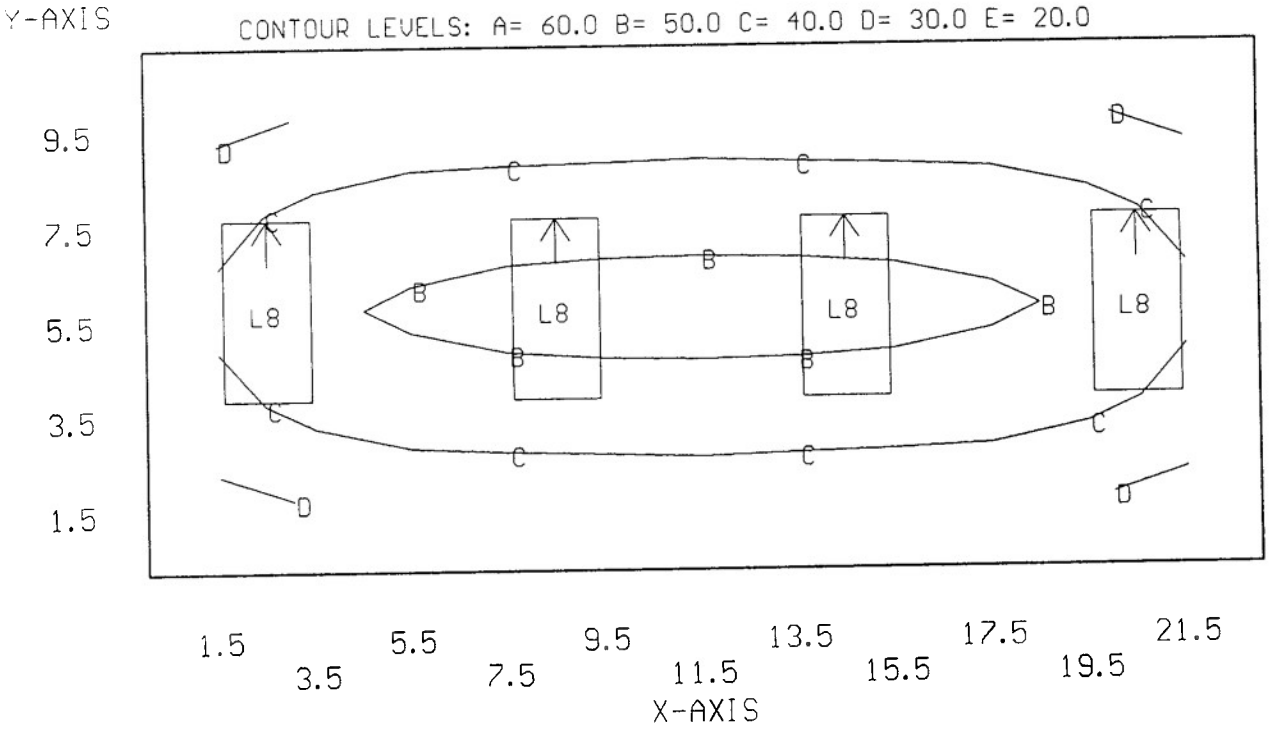
Y-AXIS



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:17 2-Mar-95
PROJECT: 13-010 AREA: TRAINING-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=27.4 MAX=53.3 AVE=40.5 AVE/MIN= 1.48 MAX/MIN= 1.94

L8 (4) = L10067 COLUMBIA T84PS2*52.125-242-EO, (2) FO32/35K, LLF= 0.70



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 10:12 10-Feb-95
PROJECT: 13-010 AREA: HALLWAY GRID: Ceiling
Values are FC, SCALE: 1 IN= 12.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

\+ MIN=10.4 MAX=26.8 AVE=18.6 AVE/MIN= 1.79 MAX/MIN= 2.57

L2 (4) = K9604 COLUMBIA WCW240-A, (2) F40CW, LLF= 0.68

Y-AXIS

2.0 +
13.0 22.0 22.2 13.9 10.4 14.5 25.5 26.8 18.4 14.9 18.4 26.8 25.5 14.5 10.4 13.9 22.2 22.0

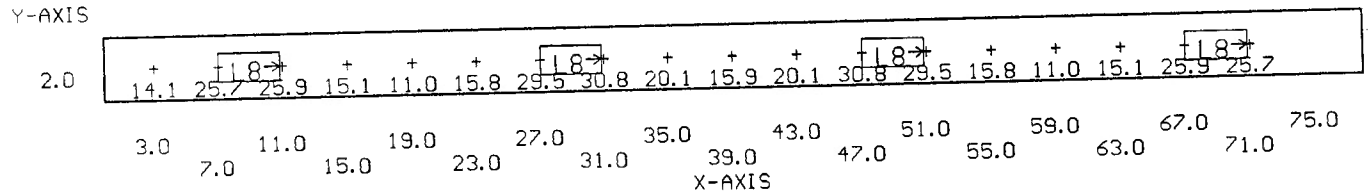
3.0 7.0 11.0 15.0 19.0 23.0 27.0 31.0 35.0 39.0 43.0 47.0 51.0 55.0 59.0 63.0 67.0 71.0 75.0

X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:22 2-Mar-95
PROJECT: 13-010 AREA: HALLWAY-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 12.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=11.0 MAX=30.8 AVE=21.0 AVE/MIN= 1.90 MAX/MIN= 2.80

L8 (4) = L10067 COLUMBIA T84PS2*52.125-242-E0, (2) F032/35K, LLF= 0.70



Bldg 13-020 Summary

Present System

Fixture Type	Watts/ Fixture	Number Fixtures	Total Watts
A1	83	4	332
B1	171	1	171
J	96	1	96
M3	192	5	960
M4	96	20	1,920
T	82	1	82
T2	164	12	1,968
T6	100	2	200
X5	75	11	825
Totals		57	6,554

Replacement System

Fixture Type	Watts/ Fixture	Number Fixtures	Total Watts
A8	59	6	354
BR	61	6	366
J8	60	1	60
S8	59	11	649
SR	57	6	342
T4	110	4	440
T6	100	2	200
T8	60	2	120
TR	61	7	427
GC	18	11	198
Totals		56	3,156

13-020 Schedule

Reynolds, Smith & Hills, Inc.
4651 Salisbury Road
Jacksonville, FL 32256
Buildings Engineering

Luminaire Fixture Schedule
Generated by LitePro V2.27E
Provided and supported by USI Lighting, Inc.
Filename: 13-020 Type: Indoor

Luminaire Fixture Schedule PRESENT

Project name: PBA Lighting Survey
Prepared for: Corps of Engineers
Prepared by: C. Warren

Project #6941331
Date: 1-Feb-95
UPD: 1.7W/Sq.Ft

TYPE	DESCRIPTION	LAMP/BALLAST	V/W	QTY	REMARKS
A1	15"X4'2L CEILING MT.WRAPAROUND LENS- PRISMATIC W/ GLOW ENDS COLUMBIA WCW240-A	F40CW ESB	000 - 83	4	
B1	15"X4'4L CEILING MT.WRAPAROUND LENS- PRISMATIC W/ GLOW ENDS COLUMBIA WCW440-A	F40CW ESB	000 - 171	1	
J	7"X4' 2L WET LOCATION WRAP LENS- PRISMATIC BOTTOM & SIDES COLUMBIA LUN240-WL	F40CW STD	000 - 96	1	
M3	9"X4' 4L SURFACE TURRET STRIP EGGCRATE LOUVERS COLUMBIA K440-T	F40CW STD	000 - 192	5	
M4	9"X4' 2L SM HSG SURFACE STRIP OPEN BOTTOM- NO SHIELDING COLUMBIA CH248	F40CW STD	000 - 96	20	
T	2'X4' 2L SURFACE MOUNT LENS- PRISMATIC A12 COLUMBIA 2SM240-EXA	F40CW ESB	000 - 82	1	
T2	2'X4' 4L SURFACE MOUNT LENS- PRISMATIC A12 COLUMBIA 2SM440-EXA	F40CW ESB	000 - 164	12	
T6	6" RECESSED ROUND DOWNLIGHT OPEN- BL.BAFFLE W/ WIDE TRIM PRESCOLITE PBX-TB12	100A19/IF NA	000 - 100	2	
X5	6" RECESSED ROUND DOWNLIGHT OPEN- BL.BAFFLE W/ WIDE TRIM PRESCOLITE PBX-TB12	75A19/IF NA	000 - 75	11	

13-020 Schedule

Reynolds, Smith & Hills, Inc.
4651 Salisbury Road
Jacksonville, FL 32256
Buildings Engineering

Luminaire Fixture Schedule
Generated by LitePro V2.27E
Provided and supported by USI Lighting, Inc.
Filename: 13-020 Type: Indoor

Luminaire Fixture Schedule / PROPOSED

Project name: PBA Lighting Survey
Prepared for: Corps of Engineers
Prepared by: C. Warren

Project #6941331
Date: 3-Mar-95
UPD: 1.0W/Sq.Ft

TYPE	DESCRIPTION	LAMP/BALLAST	V/W	QTY	REMARKS
A8	15"X4'2L CEILING MT.WRAPAROUND LENS- PRISMATIC W/ GLOW ENDS COLUMBIA WCW240-A	FO32/35K EOCT	000 - 59	6	
R	4' WRAPAROUND ACRYLIC LENS SILVER TASK BEAM REFLECTOR METALOPTICS WRSN4STACLO42EP11	FO32/35K EOCT	000 - 61	6	
J8	7"X4' 2L WET LOCATION WRAP LENS- PRISMATIC BOTTOM & SIDES COLUMBIA LUN240-WL	FO32/35K EOCT	000 - 60	1	
S8	9"X4' 2L SM HSG SURFACE STRIP OPEN BOTTOM- NO SHIELDING COLUMBIA CH248	FO32/35K EOCT	000 - 59	11	
SR	4' OPEN STRIP FIXTURE SILVER NORMAL BEAM REFLECTOR METALOPTICS SES04SNNNSO42EP11	FO32/35K EOCT	000 - 57	6	
T4	2'X4' 4L SURFACE MOUNT LENS- PRISMATIC A12 COLUMBIA 2SM440-EXA	FO32/35K EOCT	000 - 110	4	
T6	6" RECESSED ROUND DOWNLIGHT OPEN- BL.BAFFLE W/ WIDE TRIM PRESCOLITE PBX-TB12	100A19/IF NA	000 - 100	2	
T8	2'X4' 2L SURFACE MOUNT LENS- PRISMATIC A12 COLUMBIA 2SM240-EXA	FO32/35K EOCT	000 - 60	2	
TR	2X4 SURFACE MOUNT ACRYLIC LENS SILVER NORMAL BEAM REFLECTOR METALOPTICS 24TRSO42EP11	FO32/35K EOCT	000 - 61	7	

GC X5	6" ~~RECESSED ROUND~~ DOWNLIGHT COMPACT FLUORESCENT	~~75A19/IF~~ 18W/T4Q/4PR	~~000~~ 18	11	

Reynolds, Smith & Hills, Inc.
4651 Salisbury Road
Jacksonville, FL 32256
Buildings Engineering

Project Area Summary
Generated by LitePro V2.27E
Provided and supported by USI Lighting, Inc.
Filename: 13-020 Type: Indoor

Project Area Summary

Project name: PBA Lighting Survey	Project #6941331
Prepared for: Corps of Engineers	Date: 3-Mar-95
Prepared by: C. Warren	UPD: 1.2W/Sq.Ft

AREA NAME	DIMENSIONS	LUMINAIRES	W/SQ.FT	QTY
WAITING ROOM	18x20x9Ft	(4) Type A1	0.9	1
WAITING ROOM-N	18x20x9Ft	(4) Type A8	0.7	1
ENTRANCE	9x17x9Ft	(2) Type M4	1.3	1
ENTRANCE-N	9x17x9Ft	(2) Type S8	0.8	1
RECEPTION	7x17x9Ft	(3) Type M4	2.4	1
RECEPTION-N	7x17x9Ft	(3) Type S8	1.5	1
RECORDS	12x17x9Ft	(4) Type M4	1.9	1
RECORDS-N	12x17x9Ft	(4) Type S8	1.2	1
OFFICE 1	15x17x9Ft	(4) Type M4	1.5	1
OFFICE 1-N	15x17x9Ft	(4) Type SR	0.9	1
DOCTOR OFFICE	17x12x9Ft	(1) Type B1 (3) Type M4	2.3	1
DOCTOR OFFICE-N	17x12x9Ft	(4) Type BR	1.2	1
EXAM ROOM	14x12x9Ft	(2) Type M4	1.1	1
EXAM ROOM-N	14x12x9Ft	(2) Type SR	0.7	1
PATIENT LOBBY	8x12x9Ft	(1) Type T	0.9	1
PATIENT LOBBY-N	8x12x9Ft	(1) Type T8	0.6	1
HALLWAY 1	85x8x9Ft	(1) Type M3 (1) Type T2 (2) Type X5	0.7	1

13-020 Areas

HALLWAY 1-N	85x8x9Ft	(1) (2)	Type T8 Type ~~X5~~GC.	0.3	1
X-RAY ROOM	11x17x10Ft	(2)	Type T2	1.8	1
X-RAY ROOM-N	11x17x10Ft	(2)	Type TR	0.7	1
X-RAY TECH	7x10x10Ft	(1)	Type M3	2.7	1
X-RAY TECH-N	7x10x10Ft	(1)	Type BR	0.9	1
X-RAY WAITING	7x10x10Ft	(1)	Type M3	2.7	1
X-RAY WAITING-N	7x10x10Ft	(1)	Type BR	0.9	1
RECORDS STORAGE	15x10x10Ft	(2)	Type M4	1.3	1
RECORDS STOR.-N	15x10x10Ft	(2)	Type S8	0.8	1
HALLWAY 2	23x6x10Ft	(2)	Type M3	2.8	1
HALLWAY 2-N	23x6x10Ft	(2)	Type A8	0.9	1
SCRUB ROOM	7x14x10Ft	(2)	Type T2	3.3	1
SCRUB ROOM-N	7x14x10Ft	(2)	Type TR	1.2	1
EMERGENCY ROOM	17x17x10Ft	(4)	Type T2	2.3	1
EMERG. ROOM-N	17x17x10Ft	(4)	Type T4	1.5	1
MEDICINE STOR.	17x7x10Ft	(3)	Type T2	4.1	1
MEDICINE STOR.N	17x7x10Ft	(3)	Type TR	1.5	1
ER ENTRANCE	11x7x10Ft	(1)	Type J	1.2	1
ER ENTRANCE-N	11x7x10Ft	(1)	Type J8	0.8	1

NOTES:

13-020 Calculations

Reynolds, Smith & Hills, Inc.
4651 Salisbury Road
Jacksonville, FL 32256
Buildings Engineering

Project Calculation Summary
Generated by LitePro V2.27E
Provided and supported by USI Lighting, Inc.
Filename: 13-020 Type: Indoor

Project Calculation Summary

Project name: PBA Lighting Survey | Project #6941331
Prepared for: Corps of Engineers | Date: 3-Mar-95
Prepared by: C. Warren | UPD: 1.2W/Sq.Ft

AREA NAME	DIMENSIONS	GRID NAME	AVE	MAX	MIN
WAITING ROOM	18x20x9Ft	Ceiling	<+> 26.8	32.6	18.8
WAITING ROOM-N	18x20x9Ft	Ceiling	<+> 23.9	29.1	16.8
ENTRANCE	9x17x9Ft	Ceiling	<+> 24.0	27.4	19.5
ENTRANCE-N	9x17x9Ft	Ceiling	<+> 22.1	25.2	18.0
RECEPTION	7x17x9Ft	Ceiling	<+> 41.4	51.5	30.4
RECEPTION-N	7x17x9Ft	Ceiling	<+> 38.2	47.4	28.0
RECORDS	12x17x9Ft	Ceiling	<+> 38.5	43.8	31.3
RECORDS-N	12x17x9Ft	Ceiling	<+> 35.5	40.3	28.8
OFFICE 1	15x17x9Ft	Ceiling	<+> 35.5	46.7	24.1
OFFICE 1-N	15x17x9Ft	Ceiling	<+> 57.5	80.1	34.7
DOCTOR OFFICE	17x12x9Ft	Ceiling	<+> 49.9	77.9	31.6
DOCTOR OFFICE-N	17x12x9Ft	Ceiling	<+> 55.3	66.2	38.5
EXAM ROOM	14x12x9Ft	Ceiling	<+> 22.5	32.8	14.1
EXAM ROOM-N	14x12x9Ft	Ceiling	<+> 37.1	58.1	21.5
PATIENT LOBBY	8x12x9Ft	Ceiling	<+> 18.8	26.3	12.4
PATIENT LOBBY-N	8x12x9Ft	Ceiling	<+> 16.8	23.4	11.0
HALLWAY 1	85x8x9Ft	Ceiling	<+> 12.8	66.2	0.4
HALLWAY 1-N	85x8x9Ft	Ceiling	<+> 3.8	21.4	0.2

-RAY ROOM	11x17x10Ft	Ceiling	<+>	48.6	63.5	33.1
X-RAY ROOM-N	11x17x10Ft	Ceiling	<+>	38.2	47.2	26.9
X-RAY TECH	7x10x10Ft	Ceiling	<+>	28.7	34.6	24.6
X-RAY TECH-N	7x10x10Ft	Ceiling	<+>	29.6	42.3	21.7
X-RAY WAITING	7x10x10Ft	Ceiling	<+>	28.7	34.6	24.6
X-RAY WAITING-N	7x10x10Ft	Ceiling	<+>	29.6	42.3	21.7
RECORDS STORAGE	15x10x10Ft	Ceiling	<+>	22.8	27.4	18.2
RECORDS STOR.-N	15x10x10Ft	Ceiling	<+>	21.0	25.2	16.8
HALLWAY 2	23x6x10Ft	Ceiling	<+>	31.8	38.2	26.4
HALLWAY 2-N	23x6x10Ft	Ceiling	<+>	20.4	25.0	16.8
SCRUB ROOM	7x14x10Ft	Ceiling	<+>	68.1	82.5	53.5
SCRUB ROOM-N	7x14x10Ft	Ceiling	<+>	53.3	64.4	42.4
EMERGENCY ROOM	17x17x10Ft	Ceiling	<+>	66.5	81.4	44.4
EMERG. ROOM-N	17x17x10Ft	Ceiling	<+>	62.6	76.6	41.8
MEDICINE STOR.	17x7x10Ft	Ceiling	<+>	87.3	99.8	74.1
MEDICINE STOR.N	17x7x10Ft	Ceiling	<+>	69.1	79.6	58.0
ER ENTRANCE	11x7x10Ft	Ceiling	<+>	14.3	18.3	11.4
ER ENTRANCE-N	11x7x10Ft	Ceiling	<+>	12.8	16.4	10.2

NOTES:

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:01 31-Jan-95
PROJECT: 13-020 AREA: WAITING ROOM GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=18.8 MAX=32.6 AVE=26.8 AVE/MIN= 1.43 MAX/MIN= 1.73

A1 <4> = K9604 COLUMBIA WCW240-A, (2) F40CW, LLF= 0.68

Y-AXIS

19.0	18.8	21.8	22.5	21.3	20.5	21.3	22.5	21.8	18.8
17.0	23.3	28.4	29.4	26.9	25.3	26.9	29.4	28.4	23.3
15.0	25.2	A1 → 31.4	32.6	29.4	27.3	29.4	A1 → 32.6	31.4	25.2
13.0	24.8	30.8	32.0	29.4	27.7	29.4	32.0	30.8	24.8
11.0	23.8	28.9	30.2	28.4	27.0	28.4	30.2	28.9	23.8
9.0	23.8	28.9	30.2	28.4	27.0	28.4	30.2	28.9	23.8
7.0	24.8	30.8	32.0	29.4	27.7	29.4	32.0	30.8	24.8
5.0	25.2	A1 → 31.4	32.6	29.4	27.3	29.4	A1 → 32.6	31.4	25.2
3.0	23.3	28.4	29.4	26.9	25.3	26.9	29.4	28.4	23.3
1.0	18.8	21.8	22.5	21.3	20.5	21.3	22.5	21.8	18.8

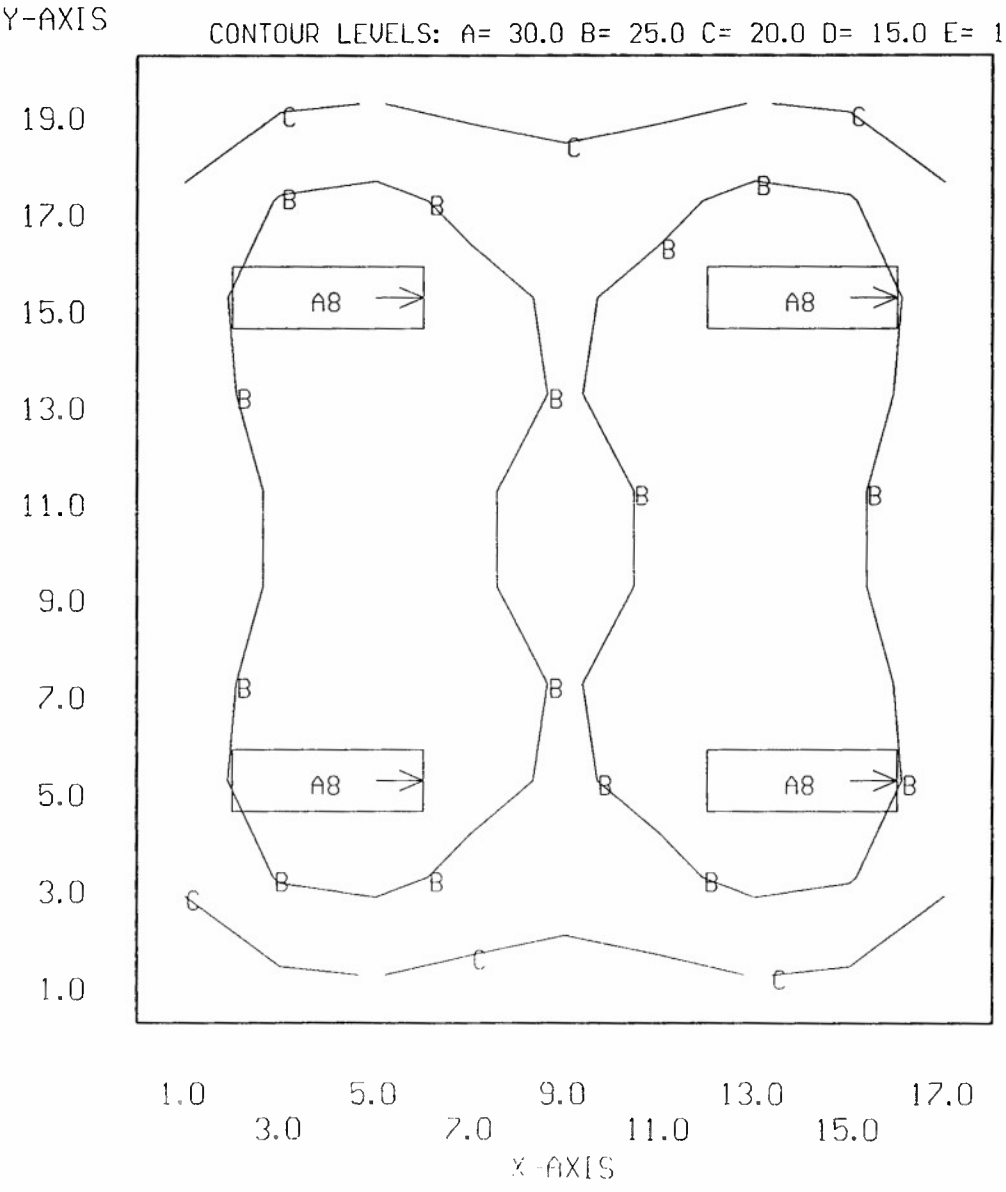
1.0 3.0 5.0 7.0 9.0 11.0 13.0 15.0 17.0

X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:37 3-Mar-95
PROJECT: 13-020 AREA: WAITING ROOM-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=16.8 MAX=29.1 AVE=23.9 AVE/MIN= 1.43 MAX/MIN= 1.73

A8 (4) = K9604 COLUMBIA WCW240-A, (2) F032/35K, LLF= 0.66

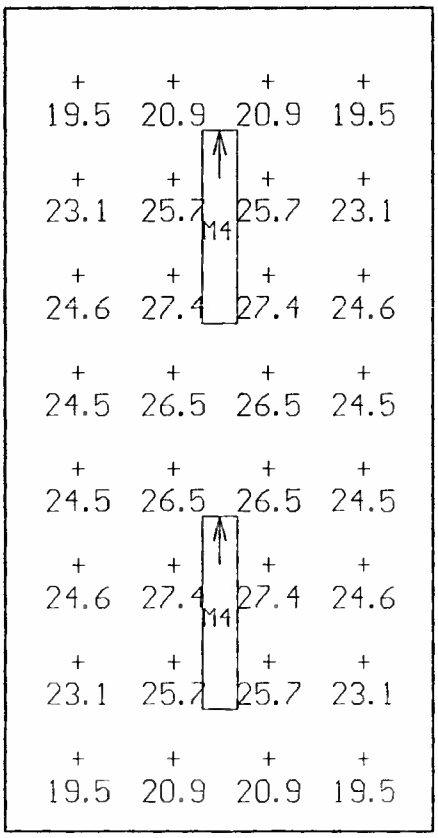


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:11 31-Jan-95
PROJECT: 13-020 AREA: ENTRANCE GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=19.5 MAX=27.4 AVE=24.0 AVE/MIN= 1.23 MAX/MIN= 1.40

M4 (2) = K8986 COLUMBIA CH248, (2) F40CW, LLF= 0.73

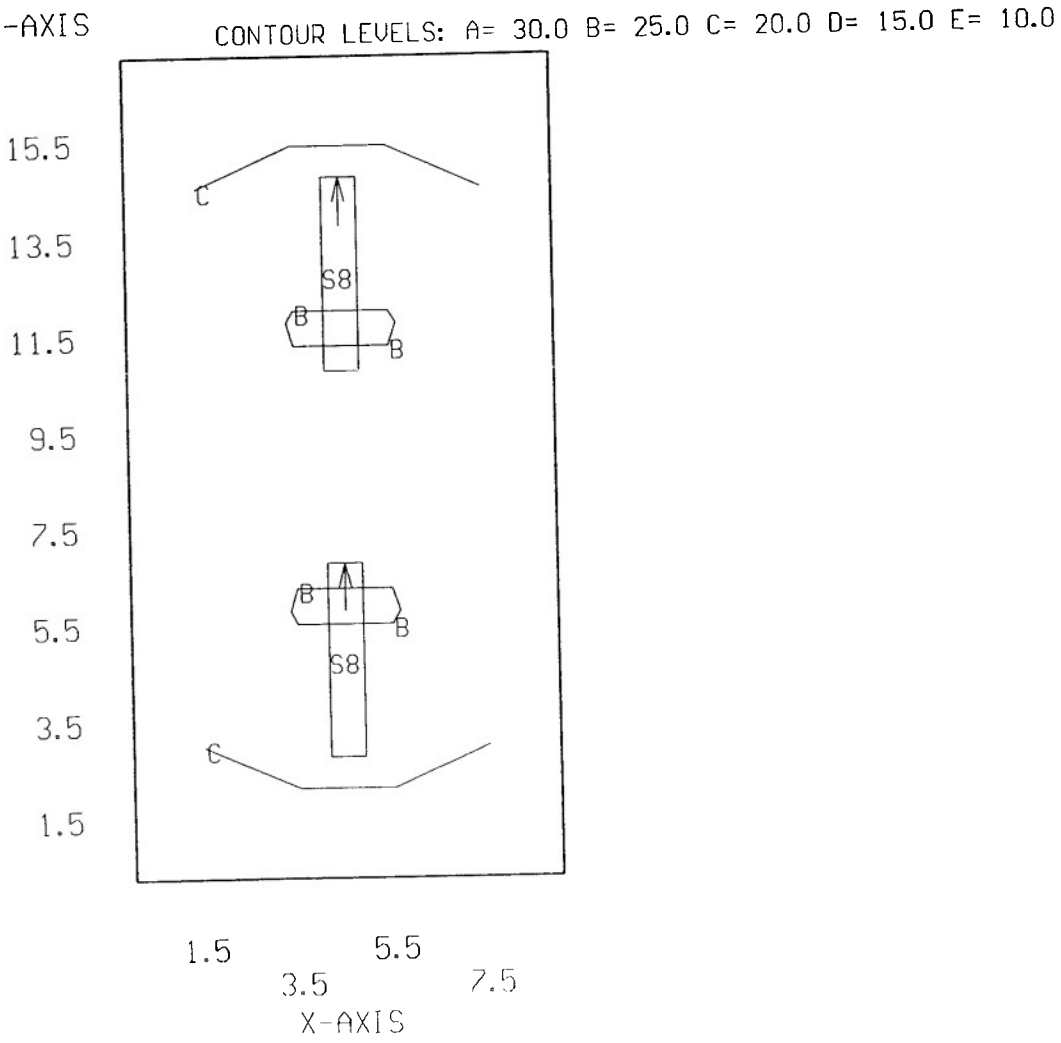
Y-AXIS



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:46 3-Mar-95
PROJECT: 13-020 AREA: ENTRANCE-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=18.0 MAX=25.2 AVE=22.1 AVE/MIN= 1.23 MAX/MIN= 1.40

S8 <2> = K8986 COLUMBIA CH248, (2) F032/35K, LLF= 0.70

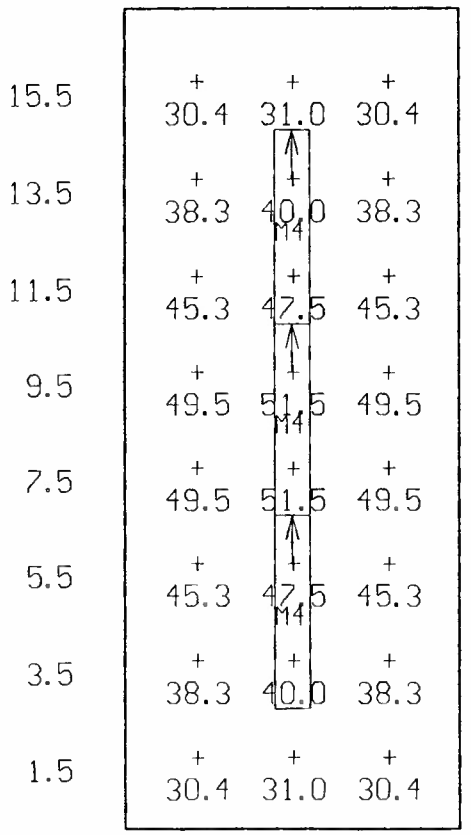


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:17 31-Jan-95
PROJECT: 13-020 AREA: RECEPTION GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=30.4 MAX=51.5 AVE=41.4 AVE/MIN= 1.36 MAX/MIN= 1.69

M4 <3> = K8986 COLUMBIA CH248, (2) F40CW, LLF= 0.73

Y-AXIS



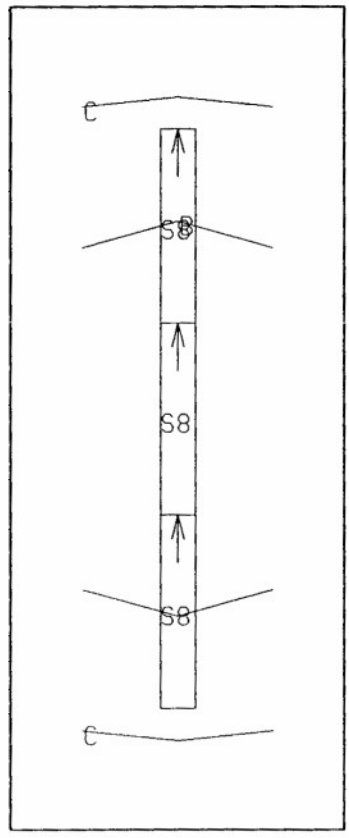
USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:49 3-Mar-95
PROJECT: 13-020 AREA: RECEPTION-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=28.0 MAX=47.4 AVE=38.2 AVE/MIN= 1.36 MAX/MIN= 1.69

S8 (3) = K8986 COLUMBIA CH248, (2) FO32/35K, LLF= 0.70

Y-AXIS

CONTOUR LEVELS: A= 50.0 B= 40.0 C= 30.0 D= 20.0 E= 10.0

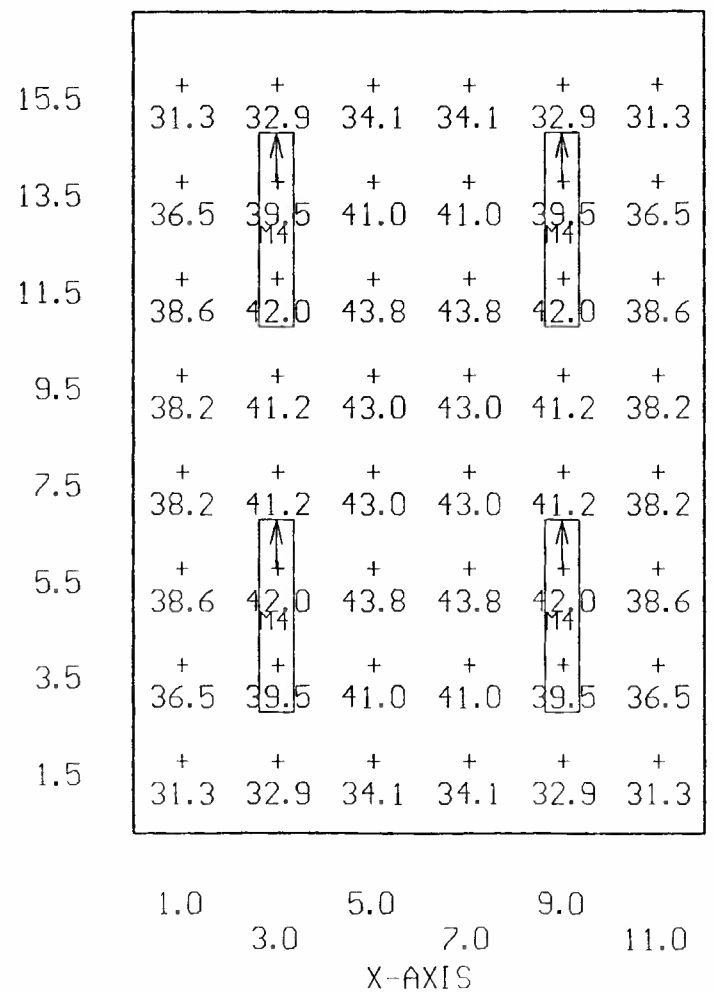


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:20 31-Jan-95
PROJECT: 13-020 AREA: RECORDS GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=31.3 MAX=43.8 AVE=38.5 AVE/MIN= 1.23 MAX/MIN= 1.40

M4 (4) = K8986 COLUMBIA CH248, (2) F40CW, LLF= 0.73

Y-AXIS



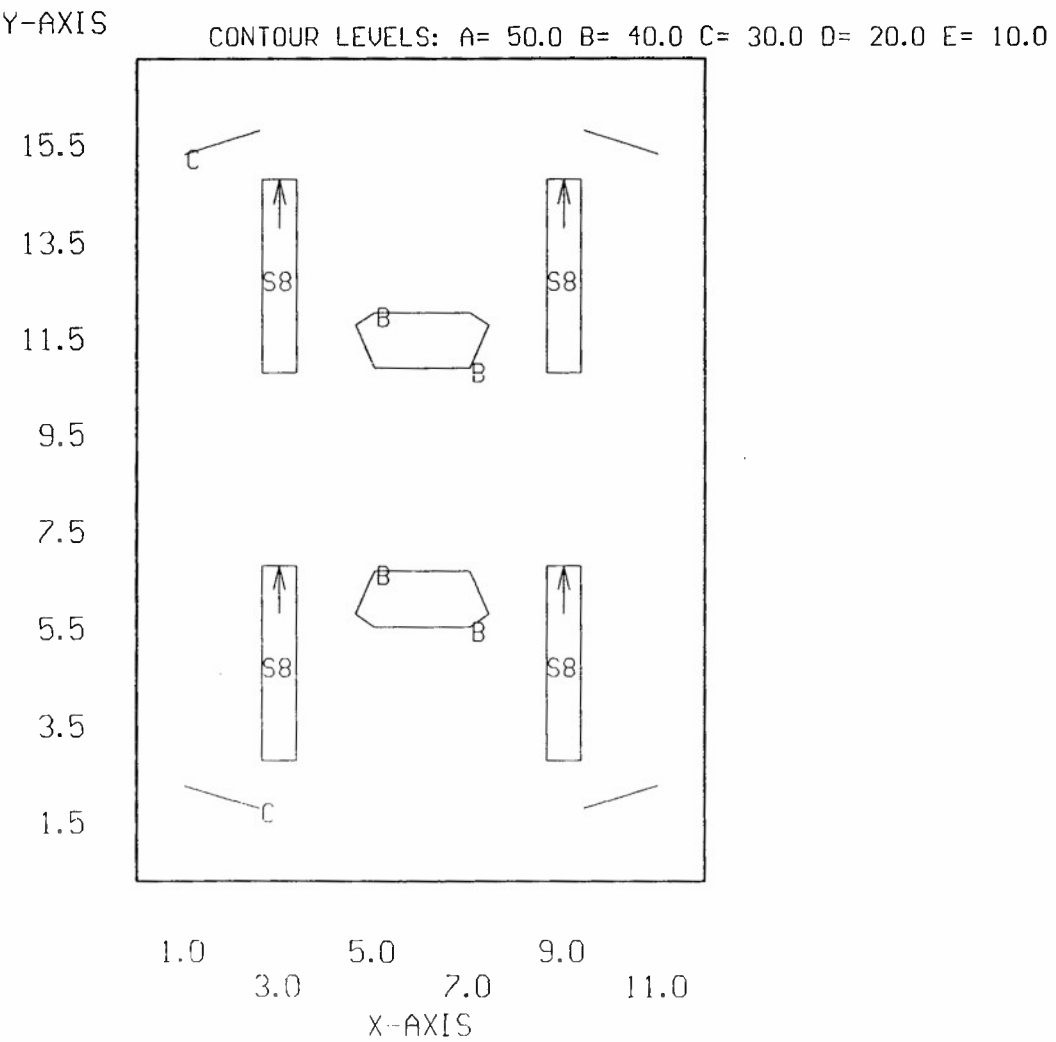
1.0 3.0 5.0 7.0 9.0 11.0

X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:51 3-Mar-95
PROJECT: 13-020 AREA: RECORDS-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=28.8 MAX=40.3 AVE=35.5 AVE/MIN= 1.23 MAX/MIN= 1.40

S8 <4> = K8986 COLUMBIA CH248, (2) F032/35K, LLF= 0.70



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:25 31-Jan-95
PROJECT: 13-020 AREA: OFFICE 1 GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=24.1 MAX=46.7 AVE=35.5 AVE/MIN= 1.47 MAX/MIN= 1.94

M4 (4) = K8986 COLUMBIA CH248, (2) F40CW, LLF= 0.73

Y-AXIS

15.5	24.1	30.4	36.6	39.1	36.6	30.4	24.1
13.5	26.0	34.2	41.5	44.3	41.5	34.2	26.0
11.5	27.4	36.1	43.8	46.7	43.8	36.1	27.4
9.5	28.1	36.4	43.7	46.7	43.7	36.4	28.1
7.5	28.1	36.4	43.7	46.7	43.7	36.4	28.1
5.5	27.4	36.1	43.8	46.7	43.8	36.1	27.4
3.5	26.0	34.2	41.5	44.3	41.5	34.2	26.0
1.5	24.1	30.4	36.6	39.1	36.6	30.4	24.1

M4 → M4 →

1.5 3.5 5.5 7.5 9.5 11.5 13.5

X-AXIS

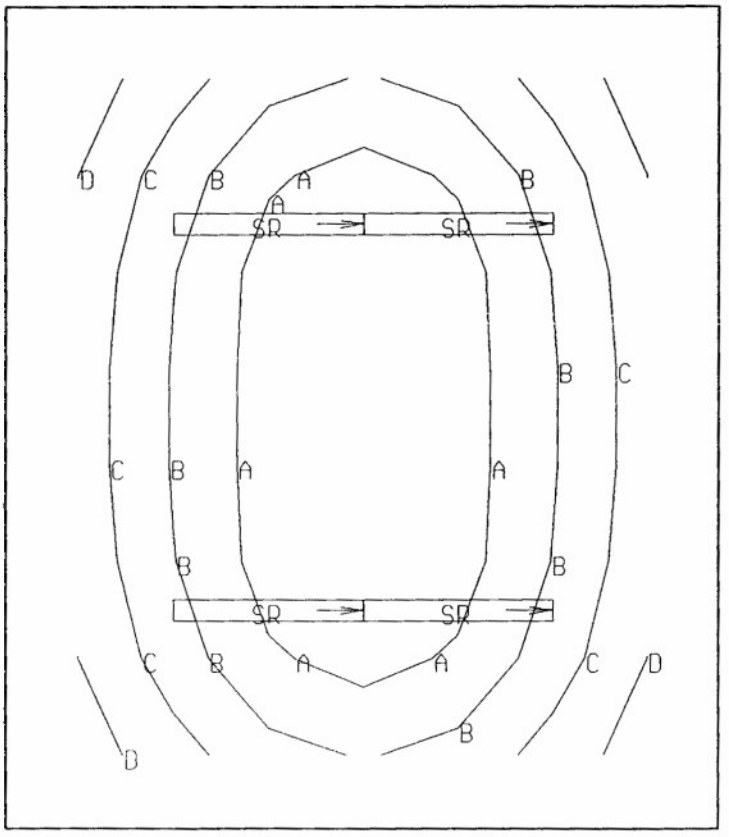
USI's LITE*PRO V2.27E Point-By-Point Numeric Output 12:08 3-Mar-95
PROJECT: 13-020 AREA: OFFICE 1-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=34.7 MAX=80.1 AVE=57.5 AVE/MIN= 1.66 MAX/MIN= 2.31

SR (4) = T11303 METALOPTICS SES04SNNNS042EP11, (2) F032/35K, LLF= 0.81

Y-AXIS

CONTOUR LEVELS: A= 70.0 B= 60.0 C= 50.0 D= 40.0 E= 30.0



1.5 3.5 5.5 7.5 9.5 11.5 13.5

X AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:32 31-Jan-95
PROJECT: 13-020 AREA: WOMENS TOILET GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=0.00 MAX=16.1 AVE=4.32 AVE/MIN= 476.89 MAX/MIN=1775.37

X5 <2> = B1401C PRESCOLITE PBX-TB12, (1) 75A19/IF, LLF= 0.77

Y-AXIS

15.5	2.91	2.70	0.01	0.01
13.5	9.66	7.68	0.01	0.01
11.5	15.0	10.8	0.01	0.01
9.5	5.82	4.96	0.01	0.00
7.5	2.05	2.59	2.05	1.61
5.5	1.52	3.88	7.49	5.12
3.5	1.76	6.38	16.1	9.50
1.5	1.31	3.86	7.91	5.46

1.0 3.0 5.0 7.0

X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:38 31-Jan-95
PROJECT: 13-020 AREA: MENS TOILET GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=0.00 MAX=14.3 AVE=4.26 AVE/MIN=N/A MAX/MIN=N/A

X5 (2) = B1401C PRESCOLITE PBX-TB12, (1) 75A19/IF, LLF= 0.77

Y-AXIS

15.5	11.8	9.20	0.00	0.00
13.5	14.1	10.3	0.00	0.00
11.5	4.65	3.75	0.30	0.25
9.5	1.42	1.56	1.29	0.85
7.5	1.04	2.36	3.48	2.57
5.5	1.65	5.44	11.7	7.24
3.5	1.71	5.99	14.3	8.11
1.5	1.03	2.63	4.50	3.27

1.0 5.0
3.0 7.0
X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:44 31-Jan-95
PROJECT: 13-020 AREA: DOCTOR OFFICE GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=31.6 MAX=77.9 AVE=49.9 AVE/MIN= 1.58 MAX/MIN= 2.46

B1 (1) = K9708 COLUMBIA WCW440-A, (4) F40CW, LLF= 0.68
M4 (3) = K8986 COLUMBIA CH248, (2) F40CW, LLF= 0.73

Y-AXIS

11.0	31.6	36.9	39.2	39.1	39.4	40.2	38.0	32.3
9.0	33.6	+ M4 → 40.6	44.0	44.7	47.3	+ M4 → 50.6	48.1	38.9
7.0	35.3	43.2	48.1	51.8	57.6	62.6	59.9	48.9
5.0	35.7	44.0	50.5	56.7	65.6	73.6	71.1	57.5
3.0	34.6	+ M4 → 42.5	49.5	56.9	67.7	+ B1 → 77.9	75.8	60.6
1.0	32.9	39.4	45.5	52.2	61.3	69.3	67.5	55.5

1.5 3.5 5.5 7.5 9.5 11.5 13.5 15.5

X-AXIS

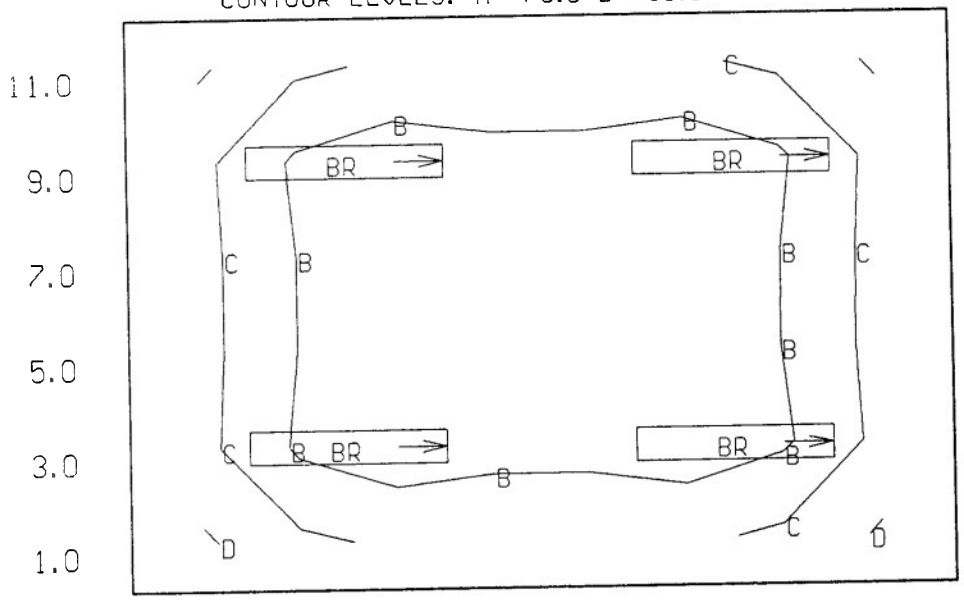
USI's LITE*PRO V2.27E Point-By-Point Numeric Output 12:15 3-Mar-95
PROJECT: 13-020 AREA: DOCTOR OFFICE-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

\+ MIN=38.5 MAX=66.2 AVE=55.3 AVE/MIN= 1.44 MAX/MIN= 1.72

BR (4) = T9939 METALOPTICS WRSN4STACL042EP11, (2) F032/35K, LLF= 0.81

Y-AXIS

CONTOUR LEVELS: A= 70.0 B= 60.0 C= 50.0 D= 40.0 E= 30.0



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 15:51 31-Jan-95
PROJECT: 13-020 AREA: EXAM ROOM GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=14.1 MAX=32.8 AVE=22.5 AVE/MIN= 1.60 MAX/MIN= 2.33

M4 <2> = K8986 COLUMBIA CH248, (2) F40CW, LLF= 0.73

Y-AXIS

11.0	14.1	19.0	24.9	27.5	24.9	19.0	14.1
9.0	15.3	21.2	28.0	31.3	28.0	21.2	15.3
7.0	16.1	22.3	29.4	32.8	29.4	22.3	16.1
5.0	16.1	22.3	29.4	32.8	29.4	22.3	16.1
3.0	15.3	21.2	28.0	31.3	28.0	21.2	15.3
1.0	14.1	19.0	24.9	27.5	24.9	19.0	14.1

M4 →

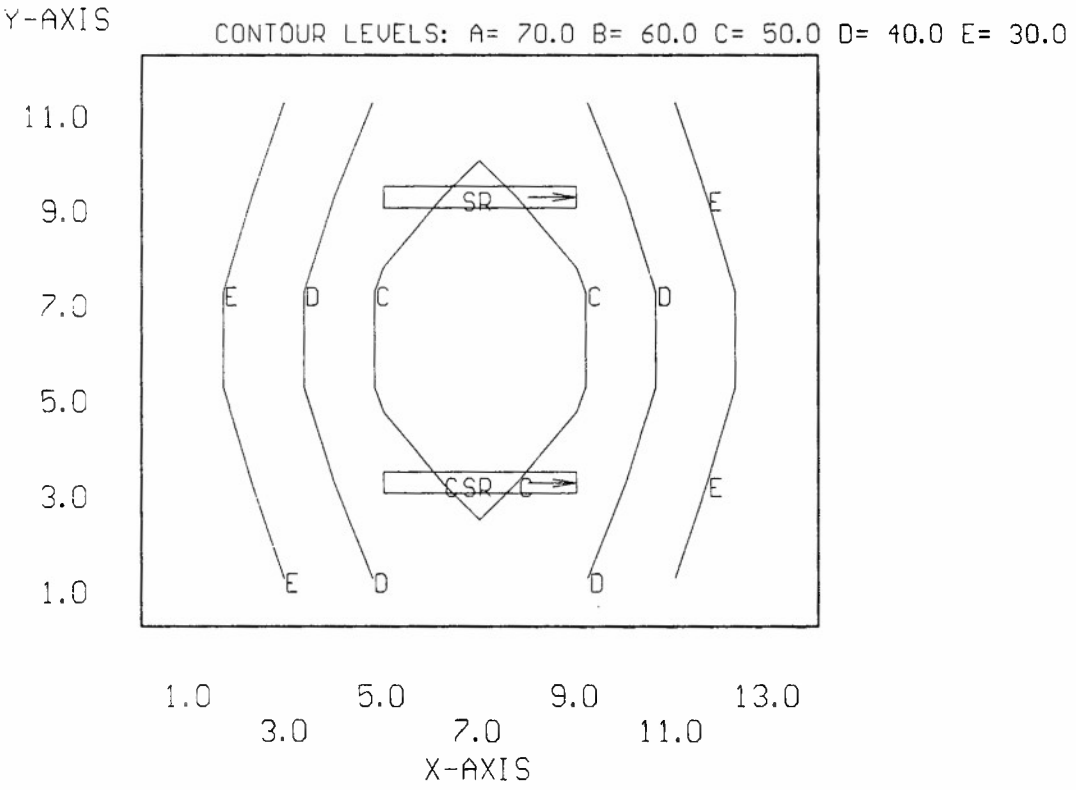
1.0 3.0 5.0 7.0 9.0 11.0 13.0

X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 13:15 3-Mar-95
PROJECT: 13-020 AREA: EXAM ROOM-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=21.5 MAX=58.1 AVE=37.1 AVE/MIN= 1.73 MAX/MIN= 2.71

SR (2) = T11303 METALOPTICS SES04SNNNS042EP11, (2) F032/35K, LLF= 0.81



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 16:00 31-Jan-95
PROJECT: 13-020 AREA: PATIENT LOBBY GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=12.4 MAX=26.3 AVE=18.8 AVE/MIN= 1.52 MAX/MIN= 2.12

T <1> = K8592 COLUMBIA 2SM240-EXA, <2> F40CW, LLF= 0.68

Y-AXIS

11.0	12.4	13.7	13.7	12.4
9.0	17.6	20.4	20.4	17.6
7.0	22.4	26.3	26.3	22.4
5.0	22.4	26.3	26.3	22.4
3.0	17.6	20.4	20.4	17.6
1.0	12.4	13.7	13.7	12.4

T

1.0 3.0 5.0 7.0

X-AXIS

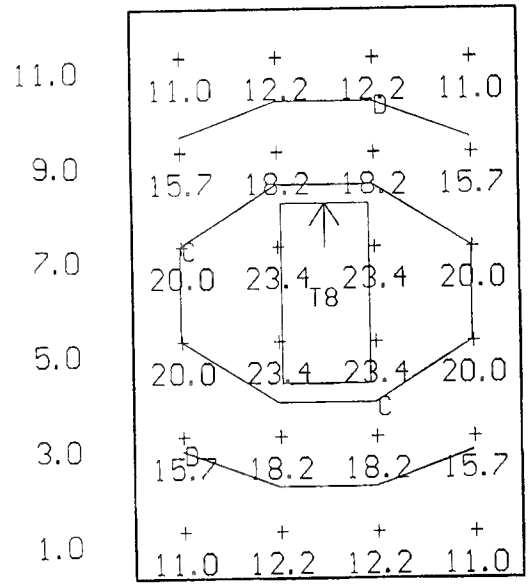
USI's LITE*PRO V2.27E Point-By-Point Numeric Output 13:22 3-Mar-95
PROJECT: 13-020 AREA: PATIENT LOBBY-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=11.0 MAX=23.4 AVE=16.8 AVE/MIN= 1.52 MAX/MIN= 2.12

T8 (1) = K8592 COLUMBIA 2SM240-EXA, (2) F032/35K, LLF= 0.66

Y-AXIS

CONTOUR LEVELS: A= 30.0 B= 25.0 C= 20.0 D= 15.0 E= 10.0



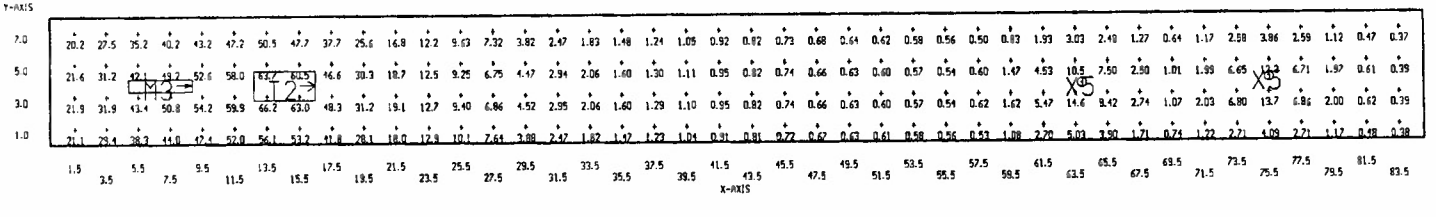
1.0 3.0 5.0 7.0

X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 16:20 31-Jan-95
PROJECT: 13-020 AREA: HALLWAY 1 GRID: Ceiling
Values are FC, SCALE: 1 IN= 12.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=0.37 MAX=66.2 AVE=12.8 AVE/MIN= 34.02 MAX/MIN= 175.58

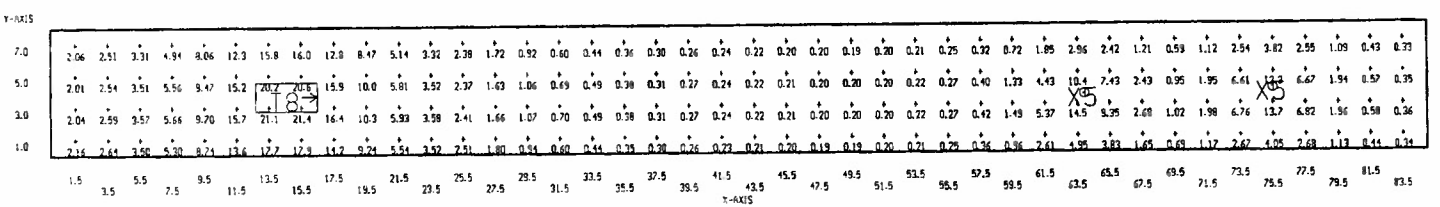
M3 (1) = K8966 COLUMBIA K440-T, (4) F40CW, LLF= 0.73
T2 (1) = K8277 COLUMBIA 2SM440-EXA, (4) F40CW, LLF= 0.68
X5 (2) = B1401C PRESCOLITE PBX-TB12, (1) 75A19/IF, LLF= 0.77



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 13:28 3-Mar-95
PROJECT: 13-020 AREA: HALLWAY 1-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 12.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=0.19 MAX=21.4 AVE=3.82 AVE/MIN= 19.55 MAX/MIN= 109.57

T8 (1) = K8592 COLUMBIA 2SM240-EXA, (2) F032/35K, LLF= 0.66
X5 (2) = B1401C PRESCOLITE PBX-TB12, (1) 75A19/IF, LLF= 0.77



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 19:16 31-Jan-95
PROJECT: 13-020 AREA: X-RAY LAB GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=1.03 MAX=24.2 AVE=12.0 AVE/MIN= 11.66 MAX/MIN= 23.49

T6 (2) = B1401C PRESCOLITE PBX-TB12, (1) 100A19/IF, LLF= 0.76
X5 (4) = B1401C PRESCOLITE PBX-TB12, (1) 75A19/IF, LLF= 0.77

Y-AXIS

15.0	12.0	13.8	5.79	2.16	1.03
13.0	14.2	15.5	7.11	2.81	1.28
11.0	15.4	18.0	8.62	4.12	2.14
9.0	14.8	17.0	10.3	8.28	4.74
7.0	14.2	17.9	13.7	17.8	11.2
5.0	8.39	10.5	12.8	19.0	13.0
3.0	16.1	22.0	17.2	24.2	15.5
1.0	11.9	14.9	12.8	16.4	11.5

1.0 3.0 5.0 7.0 9.0

X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 19:24 31-Jan-95
PROJECT: 13-020 AREA: X-RAY ROOM GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=33.1 MAX=63.5 AVE=48.6 AVE/MIN= 1.47 MAX/MIN= 1.92

T2 (2) = K8277 COLUMBIA 2SM440-EXA, (4) F40CW, LLF= 0.68

Y-AXIS

15.5	33.1	41.8	45.5	41.8	33.1
13.5	40.5	52.7	58.2	52.7	40.5
11.5	43.9	57.5	63.5	57.5	43.9
9.5	44.3	57.5	62.7	57.5	44.3
7.5	44.3	57.5	62.7	57.5	44.3
5.5	43.9	57.5	63.5	57.5	43.9
3.5	40.5	52.7	58.2	52.7	40.5
1.5	33.1	41.8	45.5	41.8	33.1

T2 T2

1.5 3.5 5.5 7.5 9.5

X-AXIS

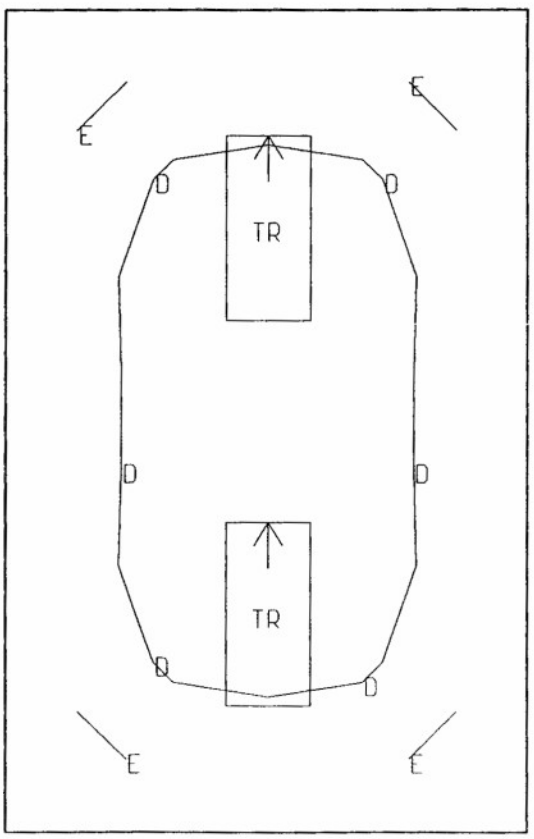
USI's LITE*PRO V2.27E Point-By-Point Numeric Output 13:38 3-Mar-95
PROJECT: 13-020 AREA: X-RAY ROOM-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=26.9 MAX=47.2 AVE=38.2 AVE/MIN= 1.42 MAX/MIN= 1.75

TR <2> = T10618 METALOPTICS 24TRS042EP11, (2) F032/35K, LLF= 0.90

Y-AXIS

CONTOUR LEVELS: A= 70.0 B= 60.0 C= 50.0 D= 40.0 E= 30.0

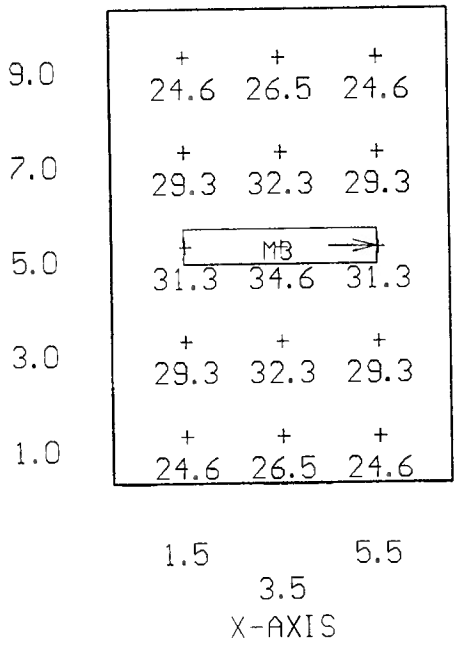


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:31 1-Feb-95
PROJECT: 13-020 AREA: X-RAY TECH GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=24.6 MAX=34.6 AVE=28.7 AVE/MIN= 1.16 MAX/MIN= 1.40

M3 (1) = K8966 COLUMBIA K440-T, (4) F40CW, LLF= 0.58

Y-AXIS



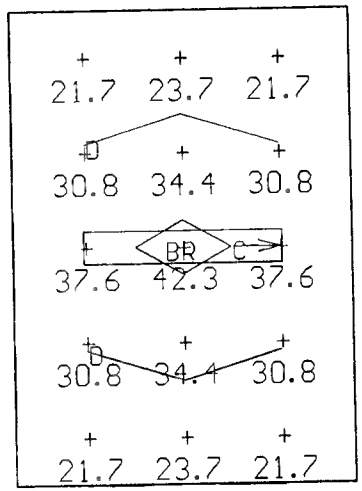
USI's LITE*PRO V2.27E Point-By-Point Numeric Output 13:41 3-Mar-95
PROJECT: 13-020 AREA: X-RAY TECH-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=21.7 MAX=42.3 AVE=29.6 AVE/MIN= 1.36 MAX/MIN= 1.95

BR <1> = T9939 METALOPTICS WRSN4STACL042EP11, (2) F032/35K, LLF= 0.81

Y-AXIS

CONTOUR LEVELS: A= 60.0 B= 50.0 C= 40.0 D= 30.0 E= 20.0



1.5 3.5 5.5

X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:33 1-Feb-95
PROJECT: 13-020 AREA: X-RAY WAITING GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=24.6 MAX=34.6 AVE=28.7 AVE/MIN= 1.16 MAX/MIN= 1.40

M3 (1) = K8966 COLUMBIA K440-T, (4) F40CW, LLF= 0.58

Y-AXIS

9.0	24.6	26.5	24.6
7.0	29.3	32.3	29.3
5.0	31.3	M3 → 34.6	31.3
3.0	29.3	32.3	29.3
1.0	24.6	26.5	24.6

1.5 3.5 5.5

X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 13:44 3-Mar-95
PROJECT: 13-020 AREA: X-RAY WAITING-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=21.7 MAX=42.3 AVE=29.6 AVE/MIN= 1.36 MAX/MIN= 1.95

BR <1> = T9939 METALOPTICS WRSN4STACL042EP11, (2) F032/35K, LLF= 0.81

Y-AXIS

9.0	21.7	23.7	21.7
7.0	30.8	34.4	30.8
5.0	37.6	42.3	37.6
3.0	30.8	34.4	30.8
1.0	21.7	23.7	21.7

BR

1.5 3.5 5.5

X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:37 1-Feb-95
PROJECT: 13-020 AREA: RESTROOM GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=3.64 MAX=10.5 AVE=6.98 AVE/MIN= 1.92 MAX/MIN= 2.89

X5 <1> = B1401C PRESCOLITE PBX-TB12, (1) 75A19/IF, LLF= 0.77

Y-AXIS

7.0	3.69	3.64
5.0	9.81 (X5)	9.58
3.0	10.5	10.2
1.0	4.21	4.14

1.5 3.5

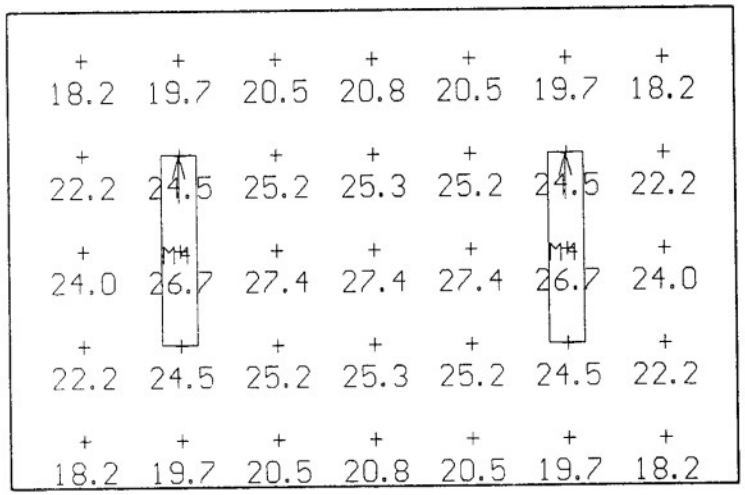
X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:40 1-Feb-95
PROJECT: 13-020 AREA: RECORDS STORAGE GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=18.2 MAX=27.4 AVE=22.8 AVE/MIN= 1.25 MAX/MIN= 1.50

M4 (2) = K8986 COLUMBIA CH248, (2) F40CW, LLF= 0.73

Y-AXIS

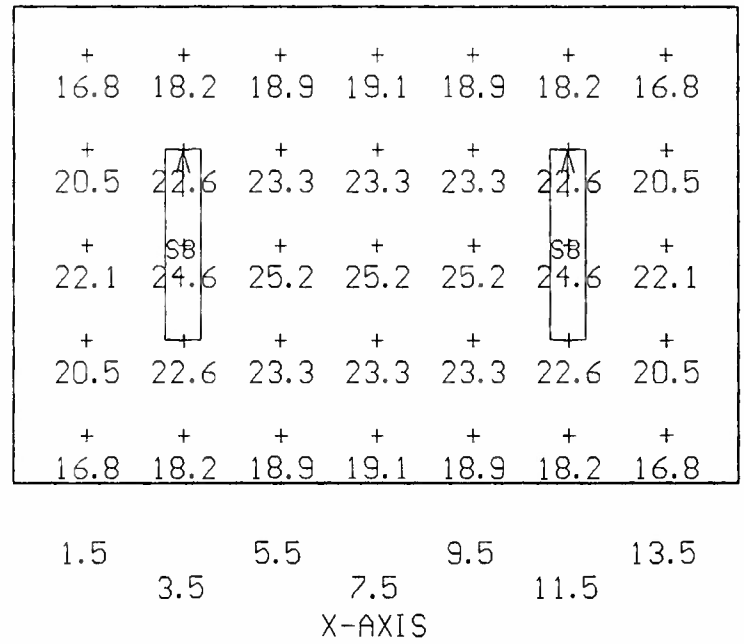


USI's LITE*PRO V2.27E Point-By-Point Numeric Output 13:47 3-Mar-95
PROJECT: 13-020 AREA: RECORDS STOR.-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=16.8 MAX=25.2 AVE=21.0 AVE/MIN= 1.25 MAX/MIN= 1.50

S8 <2> = K8986 COLUMBIA CH248, (2) FO32/35K, LLF= 0.70

Y-AXIS



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:46 1-Feb-95
PROJECT: 13-020 AREA: HALLWAY 2 GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=26.4 MAX=38.2 AVE=31.8 AVE/MIN= 1.21 MAX/MIN= 1.45

M3 <2> = K8966 COLUMBIA K440-T, (4) F40CW, LLF= 0.58

Y-AXIS

5.0	27.3	33.6	36.6	33.7	28.4	26.4	28.4	33.7	36.6	33.6	27.3
3.0	27.6	34.9	38.2	35.1	29.5	27.0	29.5	35.1	38.2	34.9	27.6
1.0	27.3	33.6	36.6	33.7	28.4	26.4	28.4	33.7	36.6	33.6	27.3

M3 M3

1.5 3.5 5.5 7.5 9.5 11.5 13.5 15.5 17.5 19.5 21.5

X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 14:16 3-Mar-95
PROJECT: 13-020 AREA: HALLWAY 2-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=16.8 MAX=25.0 AVE=20.4 AVE/MIN= 1.22 MAX/MIN= 1.49

A8 (2) = K9604 COLUMBIA WCW240-A, (2) F032/35K, LLF= 0.66

Y-AXIS

5.0	16.8	21.3	23.5	21.7	18.4	17.1	18.4	21.7	23.5	21.3	16.8
3.0	17.3	22.5	25.0	23.0	19.4	17.8	19.4	23.0	25.0	22.5	17.3
1.0	16.8	21.3	23.5	21.7	18.4	17.1	18.4	21.7	23.5	21.3	16.8

A8 → A8 →

1.5 3.5 5.5 7.5 9.5 11.5 13.5 15.5 17.5 19.5 21.5

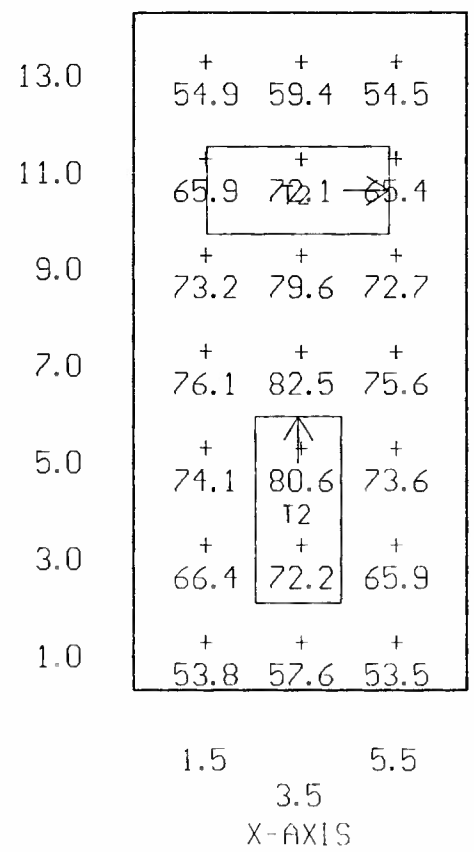
X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:50 1-Feb-95
PROJECT: 13-020 AREA: SCRUB ROOM GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=53.5 MAX=82.5 AVE=68.1 AVE/MIN= 1.27 MAX/MIN= 1.54

T2 (2) = K8277 COLUMBIA 2SM440-EXA, (4) F40CW, LLF= 0.68

Y-AXIS



USI's LITE*PRO V2.27E Point-By-Point Numeric Output 14:21 3-Mar-95
PROJECT: 13-020 AREA: SCRUB ROOM-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=42.4 MAX=64.4 AVE=53.3 AVE/MIN= 1.26 MAX/MIN= 1.52

TR <2> = T10618 METALOPTICS 24TRS042EP11, (2) F032/35K, LLF= 0.90

Y-AXIS

13.0	44.1	47.8	43.8
11.0	50.3	57.6	49.9
9.0	56.7	61.0	56.3
7.0	60.7	64.4	60.3
5.0	59.2	61.7 TR	58.9
3.0	52.8	54.6	52.5
1.0	42.6	43.7	42.4

1.5 3.5 5.5

X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:55 1-Feb-95
PROJECT: 13-020 AREA: EMERGENCY ROOM GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=44.4 MAX=81.4 AVE=66.5 AVE/MIN= 1.50 MAX/MIN= 1.83

T2 <4> = K8277 COLUMBIA 2SM440-EXA, (4) F40CW, LLF= 0.68

Y-AXIS

15.5	44.4	54.1	58.5	59.2	59.2	58.5	54.1	44.4
13.5	53.0	66.3	72.2 (T2)	72.0	72.0	72.2 (T2)	66.3	53.0
11.5	57.6	72.4	79.0	78.8	78.8	79.0	72.4	57.6
9.5	59.4	74.2	80.8	81.4	81.4	80.8	74.2	59.4
7.5	59.4	74.2	80.8	81.4	81.4	80.8	74.2	59.4
5.5	57.6	72.4	79.0 (T2)	78.8	78.8	79.0 (T2)	72.4	57.6
3.5	53.0	66.3	72.2	72.0	72.0	72.2	66.3	53.0
1.5	44.4	54.1	58.5	59.2	59.2	58.5	54.1	44.4

1.5 3.5 5.5 7.5 9.5 11.5 13.5 15.5

X-AXIS

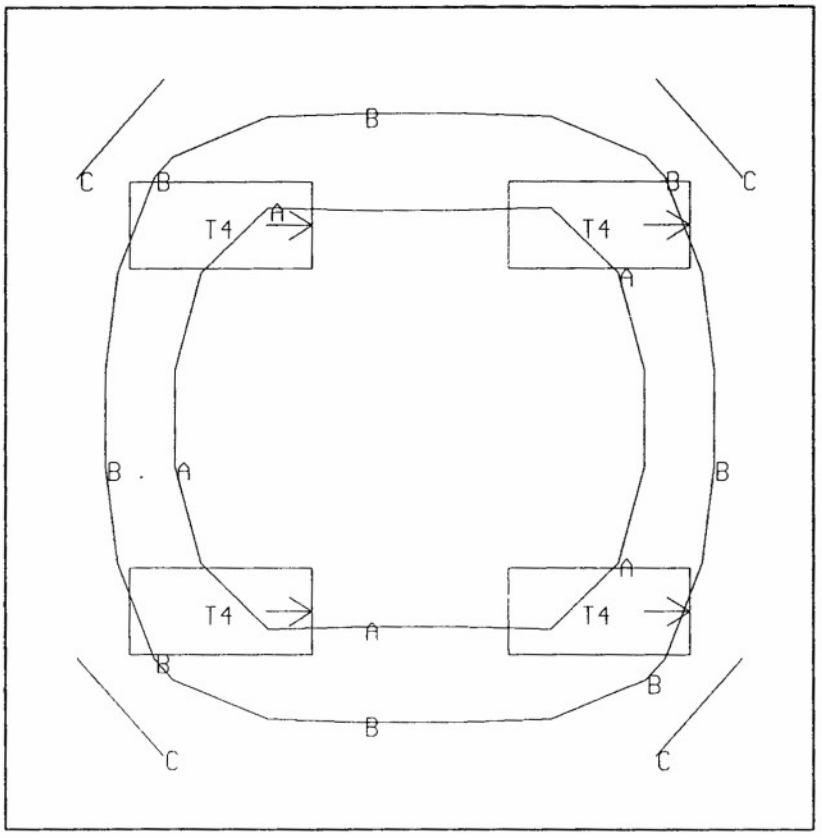
USI's LITE*PRO V2.27E Point-By-Point Numeric Output 14:26 3-Mar-95
PROJECT: 13-020 AREA: EMERG. ROOM-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=41.8 MAX=76.6 AVE=62.6 AVE/MIN= 1.50 MAX/MIN= 1.83

T4 (4) = K8277 COLUMBIA 2SM440-EXA, (4) FO32/35K, LLF= 0.69

Y-AXIS

CONTOUR LEVELS: A= 70.0 B= 60.0 C= 50.0 D= 40.0 E= 30.0



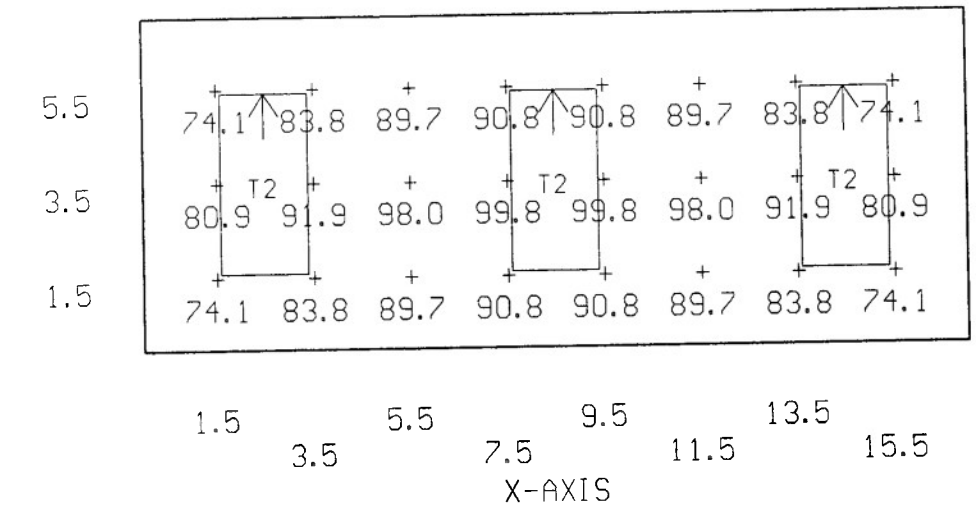
1.5 3.5 5.5 7.5 9.5 11.5 13.5 15.5

X-AXIS

USI's LITE*PRO V2.27E Point-By-Point Numeric Output 11:59 1-Feb-95
PROJECT: 13-020 AREA: MEDICINE STOR. GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=74.1 MAX=99.8 AVE=87.3 AVE/MIN= 1.18 MAX/MIN= 1.35

T2 <3> = K8277 COLUMBIA 2SM440-EXA, (4) F40CW, LLF= 0.68



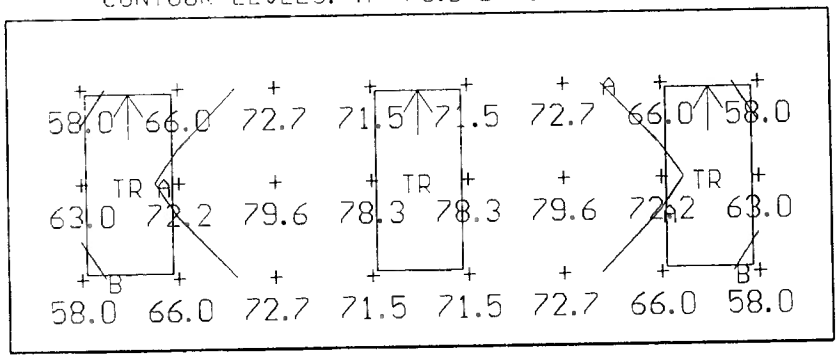
USI's LITE*PRO V2.27E Point-By-Point Numeric Output 14:29 3-Mar-95
PROJECT: 13-020 AREA: MEDICINE STOR.N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=58.0 MAX=79.6 AVE=69.1 AVE/MIN= 1.19 MAX/MIN= 1.37

TR (3) = T10618 METALOPTICS 24TRS042EP11, (2) F032/35K, LLF= 0.90

Y-AXIS

CONTOUR LEVELS: A= 70.0 B= 60.0 C= 50.0 D= 40.0 E= 30.0



5.5
3.5
1.5

1.5 5.5 9.5 13.5
3.5 7.5 11.5 15.5

X-AXIS

LSI's LITE*PRO V2.27E Point-By-Point Numeric Output 12:05 1-Feb-95
PROJECT: 13-020 AREA: ER ENTRANCE GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=11.4 MAX=18.3 AVE=14.3 AVE/MIN= 1.26 MAX/MIN= 1.61

J <1> = KS801X COLUMBIA LUN240-WL, (2) F40CW, LLF= 0.68

Y-AXIS

5.5	11.4	15.1	16.9	15.1	11.4
3.5	12.1	16.3	18.3	16.3	12.1
1.5	11.4	15.1	16.9	15.1	11.4

1.5 3.5 5.5 7.5 9.5

X-AXIS

JSI's LITE*PRO V2.27E Point-By-Point Numeric Output 14:33 3-Mar-95
PROJECT: 13-020 AREA: ER ENTRANCE-N GRID: Ceiling
Values are FC, SCALE: 1 IN= 4.0FT, HORZ GRID (U), HORZ CALC, Z= 2.5
Computed in accordance with IES recommendations

+ MIN=10.2 MAX=16.4 AVE=12.8 AVE/MIN= 1.26 MAX/MIN= 1.61

JB (1) = K9801X COLUMBIA LUN240-WL, (2) FO32/35K, LLF= 0.66

Y-AXIS

5.5	10.2	13.5	15.1	13.5	10.2
3.5	10.8	14.5	16.4	14.5	10.8
1.5	10.2	13.5	15.1	13.5	10.2

JB

1.5 3.5 5.5 7.5 9.5

X-AXIS