

AD-A151 757

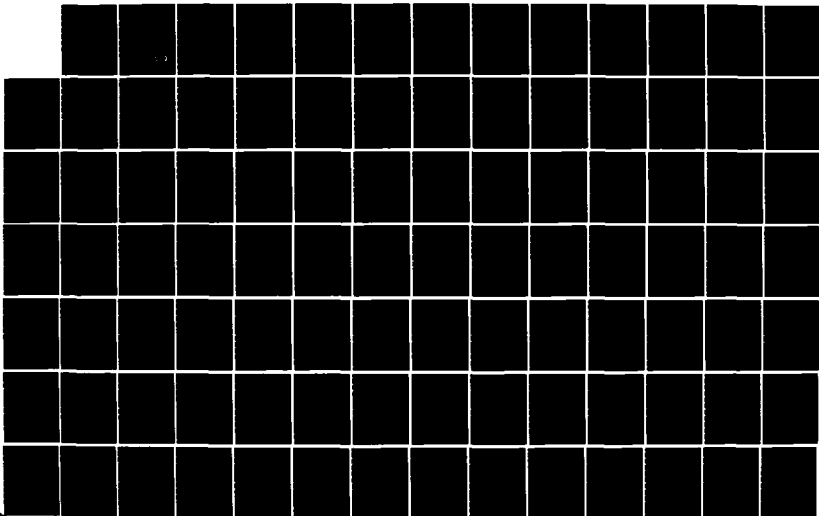
AN ATLAS OF PURE WATER VAPOR SPECTRA FROM 500 TO
5000/CN VOLUME 2. (U) OHIO STATE UNIV COLUMBUS
ELECTROSCIENCE LAB R K LONG ET AL. SEP 84
ESL-713774-3-VOL-2 ARO-17603. 4-GS

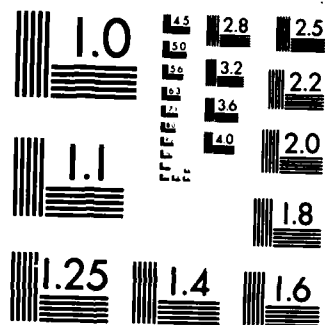
1/5

UNCLASSIFIED

F/G 7/4

NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963 A

17603.4-65

②

OSU

The Ohio State University

AN ATLAS OF PURE WATER VAPOR SPECTRA
FROM 500 TO 5000 cm^{-1}

R.K. Long
E.K. Damon

The Ohio State University

ElectroScience Laboratory

Department of Electrical Engineering
Columbus, Ohio 43212

September 1984

Technical Report 713774-3

Contract DAAG29-81-K-0084

VOLUME II

APPROVED FOR PUBLIC RELEASE;
DISTRIBUTION UNLIMITED

U.S. Army Research Office
Post Office Box 12211
Research Triangle Park, North Carolina

DTIC
ELECTE
MAR 26 1985
S D E

85 03 06 120

AD-A151 757

DTIC FILE COPY

NOTICES

When Government drawings, specifications, or other data are used for any purpose other than in connection with a definitely related Government procurement operation, the United States Government thereby incurs no responsibility nor any obligation whatsoever, and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data, is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use, or sell any patented invention that may in any way be related thereto.

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM	
1. REPORT NUMBER ARO 17603.4-65	2. GOVT ACCESSION NO. AD-A151757	3. RECIPIENT'S CATALOG NUMBER	
4. TITLE (and Subtitle) AN ATLAS OF PURE WATER VAPOR SPECTRA FROM 500 TO 5000 cm⁻¹ (VOLUME II)		5. TYPE OF REPORT & PERIOD COVERED Technical	
7. AUTHOR(s) R.K. Long and E.K. Damon		6. PERFORMING ORG. REPORT NUMBER 713774-3	
9. PERFORMING ORGANIZATION NAME AND ADDRESS The Ohio State University ElectroScience Laboratory Department of Electrical Engineering Columbus, Ohio 43212		8. CONTRACT OR GRANT NUMBER(s) DAAG29-81-K-0084	
11. CONTROLLING OFFICE NAME AND ADDRESS U.S. Army Research Office Post Office Box 12211 Research Triangle Park, N.C. 27709		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS	
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		12. REPORT DATE September 1984	
		13. NUMBER OF PAGES 908	
		15. SECURITY CLASS. (of this report) UNCLASSIFIED	
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE	
16. DISTRIBUTION STATEMENT (of this Report) This document has been approved for public release and sale; its distribution is unlimited.			
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)			
18. SUPPLEMENTARY NOTES The view, opinions, and/or findings contained in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy, or decision, unless so designated by other documentation.			
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)			
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) → An Atlas of the pure H₂O absorption spectrum between 500 and 5000 cm⁻¹ is presented. For each frequency, four spectra are presented, from top to bottom: 5 Torr @ 284 k; 10 Torr @ 294.3 k; 20 Torr @ 308 k; and 40 Torr @ 320 k. The path length is 821 meters. Tables of approximate line frequencies are also included.			

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

A

500.627
500.764
500.895
502.502
503.647
503.963
504.334
505.598
507.924
10 510.219

B

501.282
502.285
502.914
504.180
507.152
507.271
507.350
508.125
510.047
10 510.125

C

504.062
506.366
506.873
510.147

D

500.199
505.923
506.164
508.946
509.297
509.795
510.143

5

Accession For	
NTIS GRA&I	☒
DTIC TAB	☐
Unannounced	☐
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	



A
511.347
511.843
511.987
514.307
514.699
514.911
515.066
515.916
517.092
517.795
518.417
520.088
520.246

5

10

B
510.956
511.377
511.939
514.283
518.428
518.505
520.087
520.211

5

C
516.556
516.654
518.737
520.032

D
511.470
511.956
512.471
512.706
513.501
514.334
515.853
520.261

5

A

520.911
522.739
523.279
524.037
524.725
524.938
526.347
527.047
527.470
528.753
529.307
529.383
529.580
529.881
530.132

5

10

15

B

520.087
521.106
522.743
523.280
525.933
527.045
527.470
528.743
529.384
529.477
529.570
530.241

5

10

C

522.111
522.429
525.714
529.849
530.002
530.250

5

D

520.472
521.029
525.091
525.995
527.546
530.235

5

A
530.525
532.133
532.508
533.138
533.872
534.270
534.825
535.562
536.327
536.468
536.609
536.943
537.997
539.583
15 540.155

B
530.664
531.178
532.507
532.742
533.197
533.351
533.519
533.877
534.258
534.825
535.567
536.330
536.612
536.964
537.990
538.137
539.575
540.213

C
530.001
534.824
539.625
540.219

D
530.235
530.411
530.906
531.065
531.243
531.444
531.535
532.363
535.553
535.812
10 536.102
537.835
538.137
540.160

A
540.609
541.127
542.457
543.112
543.270
544.156
544.256
545.324
546.305
547.870
548.021
548.811
550.072
550.188

5

10

B
540.611
541.101
541.967
542.450
543.263
543.770
544.155
544.243
544.522
544.697
545.765
546.035
546.318
546.434
547.839
547.932
548.374
548.660
548.808
550.210

5

10

15

20

C
542.449
543.662
546.365
550.202

D
548.242
549.081
550.204

A

550.686
552.303
554.688
555.417
5
557.123
557.205
557.544
557.627
557.994
10 558.792
559.681
560.101

B

550.700
552.279
552.972
553.360
5
554.794
555.705
556.666
557.118
557.549
10 557.988
558.793
559.873
560.212

C

560.214

D

559.054
559.877
560.175

A
560.443
560.659
562.744
563.240
564.417
564.869
567.302
569.333
570.194

5

B
560.442
560.657
563.241
564.420
564.867
569.481
570.188

5

C
560.448
564.836
570.221

D
563.908
568.273
568.629
570.113

A

571.265
571.573
573.399
574.549
574.635
575.348
575.582
576.142
578.183
10 578.501
580.223

B

571.354
572.932
573.035
574.545
574.636
575.336
576.308
577.234
578.503
10 579.330
579.455
580.216

C

572.941
579.473
580.233

D

574.147
577.596
580.235

A
580.223
580.715
581.079
582.446
582.552
583.518
584.940
586.701
588.788
589.033
590.204

5

10

B
580.603
581.199
582.445
582.652
583.031
583.304
583.380
584.828
586.691
587.131
588.016
588.640
588.774
589.031
590.239

5

10

15

C
582.426
586.859
588.769
589.031
590.234

5

D
586.685
590.144

A
720.075
720.173
720.267
720.367
5 720.442
720.514
720.590
720.775
10 721.428
727.023
728.573
729.210
729.397
15 730.113
730.205

B
720.069
720.168
720.266
720.360
5 720.440
720.508
720.770
721.426
10 721.885
727.019
728.567
729.222
729.358
15 730.108
730.202

C
720.074
720.172
720.268
720.361
5 720.441
720.511
720.770
721.416
10 721.881
723.570
725.473
725.563
726.890
15 728.574
729.259
729.409
730.113
730.204

D
720.073
720.173
720.272
720.362
5 720.442
720.589
720.776
721.414
10 721.879
723.571
725.112
725.564
726.888
15 728.571
729.148
729.355
730.111
730.200

A
 710.584
 711.491
 712.163
 713.139
 5 713.485
 713.798
 715.319
 716.886
 718.446
 10 718.652
 719.117
 719.423
 719.569
 719.712
 15 719.838
 719.958
 720.075
 720.179

B
 710.584
 711.038
 711.490
 712.157
 5 713.128
 713.809
 714.108
 714.781
 718.435
 10 718.661
 719.565
 719.702
 719.835
 719.955
 15 720.070
 720.168

C
 710.584
 711.040
 711.495
 712.161
 5 713.137
 713.545
 713.812
 714.108
 714.776
 10 715.320
 716.431
 716.887
 717.597
 718.438
 15 718.661
 719.114
 719.271
 719.429
 719.567
 20 719.711
 719.836
 719.957
 720.075
 720.172

D
 710.583
 711.037
 711.497
 712.156
 5 713.883
 714.107
 715.319
 716.890
 717.606
 10 718.433
 718.662
 719.266
 719.417
 719.566
 15 719.711
 719.836
 719.958
 720.074
 720.173

A

700.064
700.645
701.016
701.687
5 702.607
703.319
703.718
704.224
704.948
10 705.099
705.364
705.821
706.580
707.398
15 708.214
708.996
709.856
710.047

B

700.062
700.643
701.679
702.597
5 703.316
703.751
704.209
704.947
705.101
10 705.386
706.578
707.450
708.211
709.851
15 710.182

C

700.060
700.503
700.647
701.017
5 701.683
701.781
702.602
703.317
703.778
10 704.215
704.949
705.448
706.578
707.440
15 708.211
709.048
709.854
710.234

D

700.060
701.024
701.670
701.786
5 702.367
702.589
703.310
703.852
705.654
10 706.578
707.480
708.208
709.037
709.852
15 710.224

A

5 690.125
690.267
690.404
690.545
691.686
691.824
692.964
693.104
693.244
693.384
693.524
693.664
693.804
693.944
694.084
694.224
694.364
694.504
694.644
694.784
694.924
695.064
695.204
695.344
695.484
695.624
695.764
695.904
696.044
696.184
696.324
696.464
696.604
696.744
696.884
697.024
697.164
697.304
697.444
697.584
697.724
697.864
698.004
698.144
698.284
698.424
698.564
698.704
698.844
698.984
699.124
699.264
699.404
699.544
699.684
699.824
699.964
700.104
700.244
700.384
700.524
700.664
700.804
700.944
701.084
701.224
701.364
701.504
701.644
701.784
701.924
702.064
702.204
702.344
702.484
702.624
702.764
702.904
703.044
703.184
703.324
703.464
703.604
703.744
703.884
704.024
704.164
704.304
704.444
704.584
704.724
704.864
705.004
705.144
705.284
705.424
705.564
705.704
705.844
705.984
706.124
706.264
706.404
706.544
706.684
706.824
706.964
707.104
707.244
707.384
707.524
707.664
707.804
707.944
708.084
708.224
708.364
708.504
708.644
708.784
708.924
709.064
709.204
709.344
709.484
709.624
709.764
709.904
710.044
710.184
710.324
710.464
710.604
710.744
710.884
711.024
711.164
711.304
711.444
711.584
711.724
711.864
712.004
712.144
712.284
712.424
712.564
712.704
712.844
712.984
713.124
713.264
713.404
713.544
713.684
713.824
713.964
714.104
714.244
714.384
714.524
714.664
714.804
714.944
715.084
715.224
715.364
715.504
715.644
715.784
715.924
716.064
716.204
716.344
716.484
716.624
716.764
716.904
717.044
717.184
717.324
717.464
717.604
717.744
717.884
718.024
718.164
718.304
718.444
718.584
718.724
718.864
719.004
719.144
719.284
719.424
719.564
719.704
719.844
719.984
720.124
720.264
720.404
720.544
720.684
720.824
720.964
721.104
721.244
721.384
721.524
721.664
721.804
721.944
722.084
722.224
722.364
722.504
722.644
722.784
722.924
723.064
723.204
723.344
723.484
723.624
723.764
723.904
724.044
724.184
724.324
724.464
724.604
724.744
724.884
725.024
725.164
725.304
725.444
725.584
725.724
725.864
726.004
726.144
726.284
726.424
726.564
726.704
726.844
726.984
727.124
727.264
727.404
727.544
727.684
727.824
727.964
728.104
728.244
728.384
728.524
728.664
728.804
728.944
729.084
729.224
729.364
729.504
729.644
729.784
729.924
730.064
730.204
730.344
730.484
730.624
730.764
730.904
731.044
731.184
731.324
731.464
731.604
731.744
731.884
732.024
732.164
732.304
732.444
732.584
732.724
732.864
733.004
733.144
733.284
733.424
733.564
733.704
733.844
733.984
734.124
734.264
734.404
734.544
734.684
734.824
734.964
735.104
735.244
735.384
735.524
735.664
735.804
735.944
736.084
736.224
736.364
736.504
736.644
736.784
736.924
737.064
737.204
737.344
737.484
737.624
737.764
737.904
738.044
738.184
738.324
738.464
738.604
738.744
738.884
739.024
739.164
739.304
739.444
739.584
739.724
739.864
740.004
740.144
740.284
740.424
740.564
740.704
740.844
740.984
741.124
741.264
741.404
741.544
741.684
741.824
741.964
742.104
742.244
742.384
742.524
742.664
742.804
742.944
743.084
743.224
743.364
743.504
743.644
743.784
743.924
744.064
744.204
744.344
744.484
744.624
744.764
744.904
745.044
745.184
745.324
745.464
745.604
745.744
745.884
746.024
746.164
746.304
746.444
746.584
746.724
746.864
747.004
747.144
747.284
747.424
747.564
747.704
747.844
747.984
748.124
748.264
748.404
748.544
748.684
748.824
748.964
749.104
749.244
749.384
749.524
749.664
749.804
749.944
750.084
750.224
750.364
750.504
750.644
750.784
750.924
751.064
751.204
751.344
751.484
751.624
751.764
751.904
752.044
752.184
752.324
752.464
752.604
752.744
752.884
753.024
753.164
753.304
753.444
753.584
753.724
753.864
754.004
754.144
754.284
754.424
754.564
754.704
754.844
754.984
755.124
755.264
755.404
755.544
755.684
755.824
755.964
756.104
756.244
756.384
756.524
756.664
756.804
756.944
757.084
757.224
757.364
757.504
757.644
757.784
757.924
758.064
758.204
758.344
758.484
758.624
758.764
758.904
759.044
759.184
759.324
759.464
759.604
759.744
759.884
760.024
760.164
760.304
760.444
760.584
760.724
760.864
761.004
761.144
761.284
761.424
761.564
761.704
761.844
761.984
762.124
762.264
762.404
762.544
762.684
762.824
762.964
763.104
763.244
763.384
763.524
763.664
763.804
763.944
764.084
764.224
764.364
764.504
764.644
764.784
764.924
765.064
765.204
765.344
765.484
765.624
765.764
765.904
766.044
766.184
766.324
766.464
766.604
766.744
766.884
767.024
767.164
767.304
767.444
767.584
767.724
767.864
768.004
768.144
768.284
768.424
768.564
768.704
768.844
768.984
769.124
769.264
769.404
769.544
769.684
769.824
769.964
770.104
770.244
770.384
770.524
770.664
770.804
770.944
771.084
771.224
771.364
771.504
771.644
771.784
771.924
772.064
772.204
772.344
772.484
772.624
772.764
772.904
773.044
773.184
773.324
773.464
773.604
773.744
773.884
774.024
774.164
774.304
774.444
774.584
774.724
774.864
775.004
775.144
775.284
775.424
775.564
775.704
775.844
775.984
776.124
776.264
776.404
776.544
776.684
776.824
776.964
777.104
777.244
777.384
777.524
777.664
777.804
777.944
778.084
778.224
778.364
778.504
778.644
778.784
778.924
779.064
779.204
779.344
779.484
779.624
779.764
779.904
780.044
780.184
780.324
780.464
780.604
780.744
780.884
781.024
781.164
781.304
781.444
781.584
781.724
781.864
782.004
782.144
782.284
782.424
782.564
782.704
782.844
782.984
783.124
783.264
783.404
783.544
783.684
783.824
783.964
784.104
784.244
784.384
784.524
784.664
784.804
784.944
785.084
785.224
785.364
785.504
785.644
785.784
785.924
786.064
786.204
786.344
786.484
786.624
786.764
786.904
787.044
787.184
787.324
787.464
787.604
787.744
787.884
788.024
788.164
788.304
788.444
788.584
788.724
788.864
789.004
789.144
789.284
789.424
789.564
789.704
789.844
789.984
790.124
790.264
790.404
790.544
790.684
790.824
790.964
791.104
791.244
791.384
791.524
791.664
791.804
791.944
792.084
792.224
792.364
792.504
792.644
792.784
792.924
793.064
793.204
793.344
793.484
793.624
793.764
793.904
794.044
794.184
794.324
794.464
794.604
794.744
794.884
795.024
795.164
795.304
795.444
795.584
795.724
795.864
796.004
796.144
796.284
796.424
796.564
796.704
796.844
796.984
797.124
797.264
797.404
797.544
797.684
797.824
797.964
798.104
798.244
798.384
798.524
798.664
798.804
798.944
799.084
799.224
799.364
799.504
799.644
799.784
799.924
800.064
800.204
800.344
800.484
800.624
800.764
800.904
801.044
801.184
801.324
801.464
801.604
801.744
801.884
802.024
802.164
802.304
802.444
802.584
802.724
802.864
803.004
803.144
803.284
803.424
803.564
803.704
803.844
803.984
804.124
804.264
804.404
804.544
804.684
804.824
804.964
805.104
805.244
805.384
805.524
805.664
805.804
805.944
806.084
806.224
806.364
806.504
806.644
806.784
806.924
807.064
807.204
807.344
807.484
807.624
807.764
807.904
808.044
808.184
808.324
808.464
808.604
808.744
808.884
809.024
809.164
809.304
809.444
809.584
809.724
809.864
810.004
810.144
810.284
810.424
810.564
810.704
810.844
810.984
811.124
811.264
811.404
811.544
811.684
811.824
811.964
812.104
812.244
812.384
812.524
812.664
812.804
812.944
813.084
813.224
813.364
813.504
813.644
813.784
813.924
814.064
814.204
814.344
814.484
814.624
814.764
814.904
815.044
815.184
815.324
815.464
815.604
815.744
815.884
816.024
816.164
816.304
816.444
816.584
816.724
816.864
817.004
817.144
817.284
817.424
817.564
817.704
817.844
817.984
818.124
818.264
818.404
818.544
818.684
818.824
818.964
819.104
819.244
819.384
819.524
819.664
819.804
819.944
820.084
820.224
820.364
820.504
820.644
820.784
820.924
821.064
821.204
821.344
821.484
821.624
821.764
821.904
822.044
822.184
822.324
822.464
822.604
822.744
822.884
823.024
823.164
823.304
823.444
823.584
823.724
823.864
824.004
824.144
824.284
824.424
824.564
824.704
824.844
824.984
825.124
825.264
825.404
825.544
825.684
825.824
825.964
826.104
826.244
826.384
826.524
826.664
826.804
826.944
827.084
827.224
827.364
827.504
827.644
827.784
827.924
828.064
828.204
828.344
828.484
828.624
828.764
828.904
829.044
829.184
829.324
829.464
829.604
829.744
829.884
830.024
830.164
830.304
830.444
830.584
830.724
830.864
831.004
831.144
831.284
831.424
831.564
831.704
831.844
831.984
832.124
832.264
832.404
832.544
832.684
832.824
832.964
833.104
833.244
833.384
833.524
833.664
833.804
833.944
834.084
834.224
834.364
834.504
834.644
834.784
834.924
835.064
835.204
835.344
835.484
835.624
835.764
835.904
836.044
836.184
836.324
836.464
836.604
836.744
836.884
837.024
837.164
837.304
837.444
837.584
837.724
837.864
838.004
838.144
838.284
838.424
838.564
838.704
838.844
838.984
839.124
839.264
839.404
839.544
839.684
839.824
839.964
840.104
840.244
840.384
840.524
840.664
840.804
840.944
841.084
841.224
841.364
841.504
841.644
841.784
841.924
842.064
842.204
842.344
842.484
842.624
842.764
842.904
843.044
843.184
843.324
843.464
843.604
843.744
843.884
844.024
844.164
844.304
844.444
844.584
844.724
844.864
845.004
845.144
845.284
845.424
845.564
845.704
845.844
845.984
846.124
846.264
846.404
846.544
846.684
846.824
846.964
847.104
847.244
847.384
847.524
847.664
847.804
847.944
848.084
848.224
848.364
848.504
848.644
848.784
848.924
849.064
849.204
849.344
849.484
849.624
849.764
849.904
850.044
850.184
850.324
850.464
850.604
850.744
850.884
851.024
851.164
851.304
851.444
851.584
851.724
851.864
852.004
852.144
852.284
852.424
852.564
852.704
852.844
852.984
853.124
853.264
853.404
853.544
853.684
853.824
853.964
854.104
854.244
854.384
854.524
854.664
854.804
854.944
855.084
855.224
855.364
855.504
855.644
855.784
855.924
856.064
856.204
856.344
856.484
856.624
856.764
856.904
857.044
857.184
857.324
857.464
857.604
857.744
857.884
858.024
858.164
858.304
858.444
858.584
858.724
858.864
859.004
859.144
859.284
859.424
859.564
859.704
859.844
859.984
860.124
860.264
860.404
860.544
860.684
860.824
860.964
861.104
861.244
861.384
861.524
861.664
861.804
861.944
862.084
862.224
862.364
862.504
862.644
862.784
862.924
863.064
863.204
863.344
863.484
863.624
863.764
863.904
864.044
864.184
864.324
864.464
864.604
864.744
864.884
865.024
865.164
865.304
865.444
865.584
865.724
865.864
866.004
866.144
866.284
866.424
866.564
866.704
866.844
866.984
867.124
867.264
867.404
867.544
867.684
867.824
867.964
868.104
868.244
868.384
868.524
868.664
868.804
868.944
869.084
869.224
869.364
869.504
869.644
869.784
869.924
870.064
870.204
870.344
870.484
870.624
870.764
870.904
871.044
871.184
871.324
871.464
871.604
871.744
871.884
872.024
872.164
872.304
872.444
872.584
872.724
872.864
873.004
873.144
873.284
873.424
873.564
873.704
873.844
873.984
874.124
874.264
874.404
874.544
874.684
874.824
874.964
875.104
875.244
875.384
875.524
875.664
875.804
875.944
876.084
876.224
876.364
876.504
876.644
876.784
876.924
877.064
877.204
877.344
877.484
877.624
877.764
877.904
878.044
878.184
878.324
878.464
878.604
878.744
878.884
879.024
879.164
879.304
879.444
879.584
879.724
879.864
880.004
880.144
880.284
880.424
880.564
880.704
880.844
880.984
881.124
881.264
881.404
881.544
881.684
881.824
881.964
882.104
882.244
882.384
882.524
882.664
882.804
882.944
883.084
883.224
883.364
883.504
883.644
883

A
680.531
680.576
681.061
681.177
5 682.170
682.364
682.772
683.805
683.957
10 684.373
685.457
685.555
685.969
686.930
15 687.152
687.572
688.894
688.765
689.043
20 689.170
690.225

B
680.525
680.777
681.057
681.177
5 682.164
682.365
682.763
683.801
683.959
10 684.372
685.458
685.554
685.968
686.829
15 687.157
687.567
688.888
688.765
689.083
20 690.186

C
680.528
680.775
681.060
681.178
5 682.167
682.368
682.763
683.803
683.961
10 684.372
685.458
685.557
685.969
686.826
15 687.152
688.075
688.774
688.232
690.162

D
680.538
680.788
681.056
681.182
5 682.165
682.253
682.362
682.744
683.284
10 683.801
683.953
684.372
685.222
685.456
15 685.549
685.975
686.512
686.822
687.146
20 688.137
688.221
690.215

A
670.117
670.217
670.436
670.661
5 670.899
671.139
671.297
671.360
671.681
10 671.893
672.496
673.866
673.282
674.076
15 674.448
674.524
674.831
675.685
676.024
20 676.415
676.552
677.289
677.604
677.746
25 678.003
678.819
679.189
679.589
680.214

B
670.121
670.212
670.432
670.658
5 670.894
671.134
671.377
671.676
671.884
10 672.497
672.865
673.272
674.068
674.444
15 674.526
674.827
675.670
676.023
676.235
20 676.414
676.550
677.288
677.603
677.744
25 677.999
678.824
679.188
679.586
680.154

C
670.187
670.431
670.662
670.900
5 671.305
671.679
671.774
671.885
672.499
10 672.865
673.335
674.072
674.443
674.529
15 674.831
675.676
676.018
676.413
676.550
20 677.288
677.600
677.743
677.997
678.914
25 679.189
679.583
680.195

D
670.662
670.899
671.295
671.773
5 671.884
672.496
672.862
673.326
674.071
10 674.435
674.523
674.825
675.674
676.023
15 676.416
676.542
677.285
677.599
677.742
20 678.006
679.038
679.192
679.583
680.214

A

	660.276
	660.794
	661.159
5	661.513
	661.861
	662.589
	662.710
	662.950
	663.454
10	663.871
	664.268
	665.822
	666.638
	667.594
15	668.220
	668.337
	668.466
	668.616
	668.761
20	668.929
	669.067
	669.243
	669.334
	669.423
25	669.608
	669.726
	669.808
	670.003
	670.117
30	670.217

B

	660.785
	661.166
	661.519
5	662.592
	662.708
	662.960
	664.267
	665.818
	665.906
10	667.523
	668.219
	668.338
	668.469
	668.617
15	668.757
	669.053
	669.240
	669.328
	669.422
20	669.511
	669.607
	669.725
	669.800
	670.001
25	670.122
	670.212

C

	660.030
	661.167
	661.520
5	662.714
	663.064
	663.447
	664.267
	665.819
	665.908
10	666.437
	669.240
	669.419
	669.606
	669.723
15	669.807
	670.008
	670.187

D

	661.171
	662.590
	662.707
	663.056
5	663.456
	664.268
	664.469
	665.817
	665.913
10	666.434
	666.806
	669.419
	669.603
	669.723
15	669.800
	670.188

A	B	C	D
650.311	650.411	650.309	650.407
650.412	650.723	650.406	650.730
650.740	651.583	650.738	651.810
651.583	651.940	651.656	651.940
5 651.787	5 652.252	5 651.935	5 652.267
651.937	652.377	652.255	652.372
652.259	653.256	652.369	652.772
653.271	653.463	652.902	652.897
653.463	653.789	653.265	653.271
10 653.793	10 654.750	10 653.461	10 653.455
654.752	654.996	653.794	654.087
654.996	655.326	654.752	654.749
655.328	656.250	654.997	654.992
655.538	656.529	15 655.330	655.862
656.258	657.761	15 656.245	656.531
656.532	658.069	656.868	658.066
656.875	658.418	658.067	660.032
657.763	658.690	658.422	660.209
20 658.072	20 658.242	20 659.694	
658.419	659.239	660.032	
658.696	659.478	660.119	
659.478	659.612		
659.612	659.964		
25 659.964	660.184		

A
 5 640.296
 641.340
 641.644
 642.238
 642.640
 643.145
 643.518
 644.342
 645.602
 10 645.862
 646.166
 647.374
 647.680
 648.512
 15 648.694
 648.756
 648.896
 648.983
 20 649.082
 649.203
 649.418
 649.549
 649.683
 650.144

B
 5 640.287
 641.337
 641.621
 642.231
 642.842
 643.123
 643.215
 644.272
 645.606
 10 645.864
 646.161
 647.371
 647.678
 648.499
 15 648.755
 648.890
 648.976
 649.072
 20 649.207
 649.550
 650.134

C
 5 641.337
 641.643
 642.257
 642.837
 644.239
 645.628
 645.862
 646.162
 647.379
 10 647.684
 648.513
 648.887
 648.976
 649.204
 15 649.416
 649.546
 650.138

D
 5 641.336
 642.303
 642.839
 644.606
 645.659
 645.855
 647.376
 647.671
 648.698
 10 648.875
 648.971
 649.065
 649.205
 649.556
 15 650.135

A
 630.918
 631.237
 631.550
 632.033
 5 632.393
 632.715
 633.105
 633.578
 633.873
 10 635.126
 635.444
 636.086
 636.670
 636.850
 15 637.035
 637.627
 638.078
 638.338
 639.170
 20 639.436
 639.839
 639.984
 640.235

B
 630.481
 630.917
 631.233
 632.030
 5 632.393
 632.777
 633.141
 633.575
 633.723
 10 633.870
 634.237
 635.535
 636.851
 637.040
 15 638.087
 638.335
 638.846
 639.433
 640.031

C
 630.919
 631.230
 632.394
 633.720
 5 633.871
 635.192
 637.095
 638.242
 638.334
 10 639.436
 640.087

D
 631.219
 632.091
 633.712
 633.870
 5 634.229
 637.090
 638.234
 639.423
 640.235

A
620.565
623.593
624.262
625.316
5 625.827
626.322
627.966
628.929
629.443
10 629.713
630.107

B
620.610
621.061
625.404
626.287
5 627.963
628.929
629.441
629.711
630.172

C
626.334
627.960
628.441
628.708
5 630.161

D
620.451
625.763
627.944
629.439
629.712
629.983
630.191

A
610.178
610.992
612.411
612.539
5 612.940
614.199
614.581
616.138
617.115
10 617.359
617.563
617.631
618.008
619.200
15 619.526
620.170

B
610.170
612.403
612.535
612.631
5 612.986
614.199
614.579
616.211
617.095
10 617.354
617.628
617.991
619.198
619.526
15 620.179

C
610.175
612.518
612.640
613.042
5 614.205
614.588
617.383
617.630
617.956
10 618.174
619.204
619.526
620.069

D
610.159
611.980
613.016
614.199
5 614.622
616.629
617.139
617.916
618.163
10 619.225
620.240

A

600.151
601.570
604.444
604.708
5 608.054
608.622
609.425
609.720
610.178
10 610.256

B

600.663
602.119
602.732
604.518
5 606.138
607.776
608.051
608.666
609.716
10 610.170

C

601.571
602.118
602.715
604.616
5 605.870
606.708
607.782
608.049
608.658
10 609.718
610.175

D

601.576
602.713
603.113
608.064
608.645
609.254
609.724
610.159
5

A
590.337
591.758
592.127
593.666
594.091
594.972
596.285
596.827
597.335
10 597.808
597.893
598.022
598.174
598.712
15 599.004
600.151

B
590.328
590.580
591.900
594.089
594.486
5 594.919
595.536
595.787
596.284
10 596.364
597.808
597.894
598.021
598.402
15 598.900
599.001
600.228

C
590.328
596.376
597.804
597.894
5 598.026
599.002
600.254

D
595.343
595.601
600.207

A
730.113
730.545
730.921
731.649
5 733.186
734.718
736.242
737.268
739.286
10 740.239

B
730.108
730.202
730.546
730.934
5 731.648
732.507
733.176
734.719
734.983
10 736.237
737.264
739.276
740.238

C
730.113
730.204
730.547
730.979
5 731.649
732.513
733.185
734.715
734.979
10 735.149
736.238
737.265
738.986
739.287
15 739.395
740.063

D
730.111
730.200
730.513
730.966
5 731.650
732.509
733.179
734.154
734.716
10 734.979
735.148
736.244
736.830
737.265
15 738.987
739.403
740.098

A
740.570
740.808
742.073
742.437
5 743.347
743.825
744.215
744.818
10 745.335
746.358
749.840
750.165

B
740.539
742.073
742.434
743.345
5 743.822
744.217
744.843
748.369
750.255

C
740.629
741.706
742.074
742.214
5 742.469
742.844
742.987
743.348
10 743.824
744.241
744.861
745.334
746.837
748.393
15 750.238

D
740.563
740.681
741.704
742.072
5 742.215
742.476
742.836
742.983
743.350
10 744.215
744.914
746.835
748.353
750.247

A
751.185
752.266
753.895
754.641
755.988
760.189
S

B
751.183
752.267
753.898
754.655
755.988
760.264
S

C
751.183
752.287
753.873
754.679
755.481
755.983
760.156
S

D
750.689
751.182
752.237
752.318
753.937
754.706
755.477
755.966
760.161
S

A

760.428
761.479
767.267
768.949
5 770.078
770.166

B

760.426
760.717
761.479
767.268
5 768.946
770.075
770.228

C

760.425
760.714
761.478
761.933
5 767.268
768.945
770.078

D

760.427
760.712
761.931
764.987
5 767.260
768.937
770.101

A
770.076
775.554
776.991
779.309
5 780.218

B
770.075
775.551
776.989
779.307
5 780.187

C
770.078
775.585
777.024
779.304
5 780.221

D
770.101
771.946
774.224
775.597
5 777.084
779.342
780.137

A
784.460
790.228

B
784.467
790.222

C
783.762
784.535
787.697
790.168

D
783.209
783.761
784.536
785.586
5 787.694
790.196

A

792.041
793.910
795.894
797.557
798.555
798.759
799.067
800.223

5

B

792.042
793.906
795.920
797.559
798.534
798.768
799.067
800.252

5

C

792.041
793.937
795.327
795.948
796.691
797.551
798.811
799.076
800.210

5

D

792.045
793.285
793.981
795.977
797.589
798.839
799.077
800.093

5

A
802.995
803.549
805.995
808.039
S 808.281
810.056

B
802.993
803.536
805.994
806.691
S 808.037
808.282
810.025

C
802.982
803.575
805.993
806.698
S 808.040
808.278
810.116

D
803.026
803.504
805.990
806.699
S 808.054
808.301
810.236

A
813.849
814.518
820.121

B
813.850
814.518
819.998

C
813.855
814.499
816.451
820.219

D
813.845
814.503
816.448
820.135

A
825.167
827.117
827.678
827.746
5 830.148

B
825.163
827.117
827.675
827.743
5 830.153

C
825.163
827.116
827.741
830.183

D
822.664
825.161
827.119
827.675
5 830.196

A
835.553
839.877
840.010
840.117

B
835.551
839.874
840.009
840.123

C
835.551
838.048
839.645
839.869
5 840.008

D
832.628
834.825
835.554
838.048
839.646
839.860
840.007
5

A
840.008
840.320
841.906
849.585
5 850.192

B
840.007
840.318
841.905
849.582
5 850.224

C
840.008
840.318
841.098
841.904
5 845.731
849.570
850.203

D
840.007
840.315
841.096
841.903
5 845.730
849.600
850.222

A

852.423
852.487
852.756
852.911
853.382
854.587
858.542
860.074

5

B

852.423
852.480
852.754
852.909
853.381
854.588
858.541
859.657
860.191

5

C

852.462
852.753
852.913
853.378
853.814
854.586
858.541
859.658
859.917
860.180

5

10

D

851.326
852.452
852.750
852.919
853.278
853.550
853.815
854.589
858.540
859.656
859.905
860.222

5

10

A
864.959
865.443
869.997

B
864.959
865.444
865.685
870.167

C
864.958
865.446
865.684
867.724
5 867.995
870.207

D
864.958
865.444
865.683
867.721
5 867.992
870.211

1. The first part of the document is a letter from the President of the United States to the Congress, dated January 1, 1861. It is a very important document, as it sets out the policy of the new administration.

2. The second part of the document is a report from the Secretary of the Treasury, dated January 1, 1861. It contains a detailed account of the financial state of the country.

3. The third part of the document is a report from the Secretary of the Interior, dated January 1, 1861. It contains a detailed account of the state of the public lands.

4. The fourth part of the document is a report from the Secretary of the War, dated January 1, 1861. It contains a detailed account of the military forces of the country.

A
990.89
991.7
992.54

B
990.134
991.383
992.631
993.807
994.894
1000.101

5

C

990.143
990.446
992.099
994.394
995.251
995.981
997.635
998.809
998.897
999.558
1000.105

5

10

D

990.139
990.221
990.444
992.699
994.386
995.251
995.975
996.728
997.337
997.530
998.606
999.865

5

10

PAGE 49

U
903.007
902.117
900.110
907.300
907.300
907.300
900.100
900.100

S

C
022.066
041.006
008.006
000.000
000.000
000.000
000.000
000.000

S

U
022.066
041.006
008.006
000.000
000.000
000.000
000.000
000.000

S

U
022.066
041.006
008.006
000.000
000.000
000.000
000.000
000.000

S

970.271
970.574
971.366
971.449
972.352
973.489
973.797
973.924
975.940
977.430
978.821
980.197

5

10

970.271
970.574
971.366
971.449
972.352
973.489
973.797
973.924
975.940
977.430
978.821
980.197

5

10

970.271
970.574
971.366
971.449
972.352
973.489
973.797
973.924
975.940
977.430
978.821
980.197

5

10

970.271
970.574
971.366
971.449
972.352
973.489
973.797
973.924
975.940
977.430
978.821
980.213

5

10

H
965.997
966.000
966.001

B
960.485
961.907
965.888
965.904
5 966.807
970.145

C
960.488
960.759
961.100
961.916
5 962.107
965.354
965.700
965.967
966.620
10 967.340
967.961
970.090

D
960.403
960.707
966.801
967.100
5 967.907
967.179
967.357
967.357
967.827
10 968.904
968.100
968.868
967.300
967.789
15 967.970
970.140

H
953.366
954.110
955.110
955.254
955.329
955.686
958.844
959.228
959.647
959.851
960.243

5

B
953.366
954.110
955.110
955.254
955.329
955.686
958.844
959.228
959.647
959.851
960.243

5

10

C
953.368
954.114
954.240
955.258
955.688
958.848
959.226
959.654
959.858
960.235

5

10

D
953.366
954.109
954.239
955.252
955.685
958.845
959.218
959.653
959.851
960.244

5

10

A
940.154

B
937.316
938.027
940.221

C
930.761
932.273
937.324
938.023
5 940.229

D
930.756
931.775
932.270
937.317
5 938.025
940.230

PAGE 44

D

921.399
922.137
924.984
925.471
5 926.681
927.758
928.990
929.597
10 930.231

C

921.399
922.136
924.990
925.477
5 927.329
928.684
928.755
928.991
930.210

B

921.396
922.135
922.644
924.986
5 925.470
926.681
928.990
930.157

A
910.276
910.708
913.982
918.474
920.221
5

B
910.276
910.708
913.982
918.474
920.221
5

C
910.100
910.279
910.711
911.231
913.983
914.787
918.475
920.212
5

D
910.096
910.276
910.705
911.234
913.981
914.792
918.472
920.195
5

B
905.430
906.232
906.405
906.751
908.040
909.972
910.101

C
902.647
905.432
906.232
906.306
906.753
908.026
908.959
910.100

D
902.642
905.431
906.232
906.306
906.754
908.027
908.979
910.096

5

5

5

A
890.093
891.303
897.700
900.220

B
890.091
891.298
896.507
897.694
5 900.203

C
890.091
891.300
892.164
895.929
5 896.505
897.694
900.162

D
890.090
891.297
891.880
892.157
5 895.929
896.504
897.693
900.263

A
881.084
883.073
883.848
887.224
5 888.644
890.093
890.182

B
881.083
883.070
883.847
887.224
5 888.642
890.091
890.187

C
881.081
883.073
883.845
887.217
5 888.643
890.091
890.239

D
881.081
883.071
883.840
887.215
5 887.882
888.642
890.090
890.237

A
871.255
878.541
880.149

B
871.255
878.540
880.228

C
871.255
875.954
878.533
880.238

D
870.983
871.234
872.567
875.951
878.531
880.172
5

A
1010.036
1010.112
1010.819
1010.893
1014.477
1017.458
1017.875
1019.662
1020.231

5

B
1010.026
1010.111
1010.813
1010.894
1011.622
1014.474
1017.454
1017.665
1017.871
1017.943
1018.000
1019.658
1020.137

5

10

C
1010.031
1010.818
1011.627
1014.477
1017.457
1017.666
1017.873
1018.972
1019.662
1020.145

5

10

D
1010.026
1010.809
1011.619
1012.432
1014.493
1017.454
1017.664
1017.867
1018.966
1019.659
1020.150

5

10

A

1030.548
1032.168
1032.689
1034.250
1039.485
1039.547
1040.231

5

B

1030.542
1030.628
1032.164
1032.684
1038.053
1039.482
1039.546
1040.210

5

C

1030.547
1032.167
1032.688
1038.059
1039.484
1039.543
1040.208

5

D

1030.542
1032.163
1032.683
1033.359
1034.017
1034.251
1035.458
1038.053
1038.604
1039.480
1040.234

5

10

1934, 1935

1934, 1935
1936, 1937
1938, 1939

1934, 1935
1936, 1937
1938, 1939

1934, 1935
1936, 1937
1938, 1939

A

1051.266
1054.974
1055.519
1058.496
1058.635
1060.123

5

B

1050.168
1051.264
1055.516
1058.629
1060.119
1060.246

5

C

1050.167
1051.266
1055.519
1058.635
1060.121

5

D

1050.162
1051.261
1053.134
1055.515
1058.628
1060.110

5

A

1072.619
1070.167
1074.410
1076.142
5 1080.181

B

1072.612
1072.696
1073.300
1074.165
5 1074.407
1076.135
1076.854
1080.170

C

1072.616
1073.302
1074.165
1074.412
5 1076.141
1076.855
1080.073

D

1070.069
1072.611
1073.301
1074.162
5 1074.390
1076.135
1076.853
1080.243

U
1081.070
1081.248
1081.413
1081.576
5 1081.739
1081.902
1082.065
1082.228

C
1081.010
1081.292
1081.500
1081.553
5 1081.606
1081.676
1081.746
1081.816
1081.886
10 1081.956
1082.026
1082.096
1082.166
1082.236
1082.306
15 1082.376
1082.446
1082.516
1082.586
1082.656
1082.726
1082.796

U
1081.853
1081.906
1081.959
1082.012
5 1082.065
1082.118
1082.171
1082.224
10 1082.277
1082.330
1082.383
1082.436
1082.489
15 1082.542
1082.595
1082.648
1082.701
1082.754
1082.807
1082.860
1082.913
1082.966
1083.019
1083.072
1083.125
1083.178
1083.231
1083.284
1083.337
1083.390
1083.443
1083.496
1083.549
1083.602
1083.655
1083.708
1083.761
1083.814
1083.867
1083.920
1083.973
1084.026
1084.079
1084.132
1084.185
1084.238
1084.291
1084.344
1084.397
1084.450
1084.503
1084.556
1084.609
1084.662
1084.715
1084.768
1084.821
1084.874
1084.927
1084.980
1085.033
1085.086
1085.139
1085.192
1085.245
1085.298
1085.351
1085.404
1085.457
1085.510
1085.563
1085.616
1085.669
1085.722
1085.775
1085.828
1085.881
1085.934
1085.987
1086.040
1086.093
1086.146
1086.199
1086.252
1086.305
1086.358
1086.411
1086.464
1086.517
1086.570
1086.623
1086.676
1086.729
1086.782
1086.835
1086.888
1086.941
1086.994
1087.047
1087.100
1087.153
1087.206
1087.259
1087.312
1087.365
1087.418
1087.471
1087.524
1087.577
1087.630
1087.683
1087.736
1087.789
1087.842
1087.895
1087.948
1088.001
1088.054
1088.107
1088.160
1088.213
1088.266
1088.319
1088.372
1088.425
1088.478
1088.531
1088.584
1088.637
1088.690
1088.743
1088.796
1088.849
1088.902
1088.955
1089.008
1089.061
1089.114
1089.167
1089.220
1089.273
1089.326
1089.379
1089.432
1089.485
1089.538
1089.591
1089.644
1089.697
1089.750
1089.803
1089.856
1089.909
1089.962
1090.015
1090.068
1090.121
1090.174
1090.227
1090.280
1090.333
1090.386
1090.439
1090.492
1090.545
1090.598
1090.651
1090.704
1090.757
1090.810
1090.863
1090.916
1090.969
1091.022
1091.075
1091.128
1091.181
1091.234
1091.287
1091.340
1091.393
1091.446
1091.499
1091.552
1091.605
1091.658
1091.711
1091.764
1091.817
1091.870
1091.923
1091.976
1092.029
1092.082
1092.135
1092.188
1092.241
1092.294
1092.347
1092.400
1092.453
1092.506
1092.559
1092.612
1092.665
1092.718
1092.771
1092.824
1092.877
1092.930
1092.983
1093.036
1093.089
1093.142
1093.195
1093.248
1093.301
1093.354
1093.407
1093.460
1093.513
1093.566
1093.619
1093.672
1093.725
1093.778
1093.831
1093.884
1093.937
1093.990
1094.043
1094.096
1094.149
1094.202
1094.255
1094.308
1094.361
1094.414
1094.467
1094.520
1094.573
1094.626
1094.679
1094.732
1094.785
1094.838
1094.891
1094.944
1094.997
1095.050
1095.103
1095.156
1095.209
1095.262
1095.315
1095.368
1095.421
1095.474
1095.527
1095.580
1095.633
1095.686
1095.739
1095.792
1095.845
1095.898
1095.951
1096.004
1096.057
1096.110
1096.163
1096.216
1096.269
1096.322
1096.375
1096.428
1096.481
1096.534
1096.587
1096.640
1096.693
1096.746
1096.799
1096.852
1096.905
1096.958
1097.011
1097.064
1097.117
1097.170
1097.223
1097.276
1097.329
1097.382
1097.435
1097.488
1097.541
1097.594
1097.647
1097.700
1097.753
1097.806
1097.859
1097.912
1097.965
1098.018
1098.071
1098.124
1098.177
1098.230
1098.283
1098.336
1098.389
1098.442
1098.495
1098.548
1098.601
1098.654
1098.707
1098.760
1098.813
1098.866
1098.919
1098.972
1099.025
1099.078
1099.131
1099.184
1099.237
1099.290
1099.343
1099.396
1099.449
1099.502
1099.555
1099.608
1099.661
1099.714
1099.767
1099.820
1099.873
1099.926
1100.000

1081.000

A

1091.210
1091.287
1099.685
1100.133

B

1091.204
1092.572
1092.852
1098.065
5 1099.680
1100.167

C

1090.406
1090.646
1091.203
1092.484
5 1092.559
1092.850
1093.369
1093.803
1094.471
10 1095.118
1095.685
1096.491
1099.677
1100.161

D

1090.394
1090.646
1091.223
1091.746
5 1092.098
1092.197
1092.559
1092.853
1092.942
10 1093.366
1093.660
1093.797
1094.331
1094.469
15 1095.112
1095.256
1095.443
1095.688
1095.919
20 1096.481
1096.591
1097.276
1097.499
1098.063
25 1098.827
1099.713
1100.161

A

1111.521
1111.590
1111.656
1117.619
5 1120.146

B

1110.384
1111.017
1111.512
1111.655
5 1113.794
1114.629
1115.299
1116.568
1117.617
10 1119.439
1119.703
1120.100

C

1110.386
1110.838
1111.024
1111.506
5 1112.474
1113.074
1113.698
1113.797
1114.635
10 1115.106
1115.194
1115.299
1115.876
1116.452
15 1116.573
1116.692
1117.281
1117.375
20 1117.619
1117.862
1118.063
1118.214
1118.461
1118.736
25 1118.864
1119.435
1120.201

D

1110.110
1110.384
1111.018
1111.551
5 1112.360
1112.472
1112.627
1113.070
1113.798
10 1113.888
1114.631
1114.904
1115.194
1115.299
15 1115.590
1115.876
1115.988
1116.267
20 1116.360
1116.460
1116.570
1116.685
1116.983
25 1117.281
1117.617
1117.855
1118.047
1118.197
30 1118.459
1118.527
1118.649
1118.733
1118.858
1119.209
35 1119.334
1119.430
1119.863
1120.086
1120.234

A
1133.079
1134.187
1135.522
1135.749
5 1137.428
1137.509
1140.125

B
1131.884
1133.086
1133.319
1134.173
5 1135.133
1135.518
1135.733
1137.424
1140.126
10 1140.211

C
1131.897
1133.076
1133.319
1133.684
5 1133.799
1134.186
1135.139
1135.234
1135.521
10 1135.688
1135.803
1137.404
1140.127
1140.220

D
1131.883
1132.626
1133.077
1133.319
5 1133.798
1134.177
1135.134
1135.536
1135.811
10 1137.439
1140.125

C
1140.120
1141.500
1142.880
1144.260
1145.640

D
1140.120
1141.500
1142.880
1144.260
1145.640
1147.020
1148.400
1149.780
1150.160
1150.540

C
1140.120
1141.500
1142.880
1144.260
1145.640
1147.020
1148.400
1149.780
1150.160
1150.540

D
1140.120
1141.500
1142.880
1144.260
1145.640
1147.020
1148.400
1149.780
1150.160
1150.540

1	1290.150
2	1290.150
3	1290.150
4	1290.150
5	1290.150
6	1290.150
7	1290.150
8	1290.150
9	1290.150
10	1290.150
11	1290.150
12	1290.150
13	1290.150
14	1290.150
15	1290.150
16	1290.150
17	1290.150
18	1290.150
19	1290.150
20	1290.150
21	1290.150
22	1290.150
23	1290.150
24	1290.150
25	1290.150
26	1290.150
27	1290.150
28	1290.150
29	1290.150
30	1290.150

1	1290.150
2	1290.150
3	1290.150
4	1290.150
5	1290.150
6	1290.150
7	1290.150
8	1290.150
9	1290.150
10	1290.150
11	1290.150
12	1290.150
13	1290.150
14	1290.150
15	1290.150
16	1290.150
17	1290.150
18	1290.150
19	1290.150
20	1290.150
21	1290.150
22	1290.150
23	1290.150
24	1290.150
25	1290.150
26	1290.150
27	1290.150
28	1290.150
29	1290.150
30	1290.150

1	1290.150
2	1290.150
3	1290.150
4	1290.150
5	1290.150
6	1290.150
7	1290.150
8	1290.150
9	1290.150
10	1290.150
11	1290.150
12	1290.150
13	1290.150
14	1290.150
15	1290.150
16	1290.150
17	1290.150
18	1290.150
19	1290.150
20	1290.150
21	1290.150
22	1290.150
23	1290.150
24	1290.150
25	1290.150
26	1290.150
27	1290.150
28	1290.150
29	1290.150
30	1290.150

1	1290.150
2	1290.150
3	1290.150
4	1290.150
5	1290.150
6	1290.150
7	1290.150
8	1290.150
9	1290.150
10	1290.150
11	1290.150
12	1290.150
13	1290.150
14	1290.150
15	1290.150
16	1290.150
17	1290.150
18	1290.150
19	1290.150
20	1290.150
21	1290.150
22	1290.150
23	1290.150
24	1290.150
25	1290.150
26	1290.150
27	1290.150
28	1290.150
29	1290.150
30	1290.150

A

	1271.295
	1271.396
	1271.630
	1271.773
5	1271.832
	1272.347
	1272.688
	1272.777
	1273.294
10	1273.535
	1273.618
	1273.676
	1275.665
	1276.629
15	1276.720
	1277.275
	1279.873
	1280.049

B

	1270.022
	1271.292
	1271.391
	1271.635
5	1271.893
	1272.342
	1272.684
	1272.953
	1273.292
10	1273.529
	1275.662
	1276.546
	1276.627
	1276.717
15	1277.268
	1277.914
	1278.861
	1280.065

C

	1271.295
	1272.043
	1272.367
	1272.688
5	1272.955
	1273.294
	1273.534
	1275.665
	1276.629
10	1276.720
	1277.276
	1277.920
	1278.285
	1278.645
15	1278.860
	1280.072

D

	1272.408
	1272.697
	1272.951
	1273.294
5	1273.555
	1273.732
	1274.613
	1275.491
	1275.661
10	1276.360
	1276.627
	1276.715
	1277.266
	1277.657
15	1277.917
	1278.101
	1278.281
	1278.644
	1278.859
20	1278.953
	1279.916
	1280.183

1260.403
1260.501
1261.586
1261.925
1261.124
1261.259
1261.336
1261.016
1261.077
1261.442
1261.505
1261.671
1261.777
1261.639
1261.319
1261.005
1261.506
1261.047
1261.953
1261.091
1261.107
1261.362
1261.700
1261.980
1261.60
1261.946

5

10

15

20

25

1260.251
1260.488
1261.578
1261.922
1262.118
1262.257
1261.948
1261.506
1261.722
1261.012
1261.787
1261.917
1261.305
1261.950
1261.441
1261.561
1261.665
1261.775
1261.877
1261.958
1261.133
1261.197
1261.317
1261.459
1261.644
1261.951
1261.125
1261.332
1261.426
1261.762
1261.261
1261.438
1261.604
1261.914
1270.024

5

10

15

20

25

30

35

1260.583
1261.580
1261.925
1262.124
1261.262
1261.828
1261.949
1261.511
1261.502
1261.505
1261.720
1261.000
1261.789
1261.918
1261.310
1261.387
1261.004
1261.107
1261.443
1261.549
1261.651
1261.880
1261.322
1261.522
1261.646
1261.952
1261.125
1261.495
1261.763
1261.269
1261.495
1261.820
1270.174

5

10

15

20

25

A

1250.856
1251.350
1251.439
1252.344
5 1253.352
1253.444
1253.931
1254.029
1254.113
10 1254.196
1254.359
1254.452
1254.735
1254.816
15 1255.807
1255.961
1256.888
1256.952
1257.095
20 1257.167
1257.345
1257.612
1258.621
1258.899
25 1258.975
1259.152
1259.724

B

1250.843
1251.347
1252.340
1253.345
5 1253.444
1253.728
1253.924
1254.028
1254.109
10 1254.191
1254.357
1254.449
1254.729
1254.813
15 1255.801
1255.958
1256.681
1256.886
1256.951
20 1257.086
1257.169
1257.342
1257.609
1258.621
25 1258.890
1258.973
1259.149
1259.576

C

1250.348
1250.848
1251.351
1252.342
5 1253.349
1253.452
1253.524
1253.929
1254.034
10 1254.111
1254.198
1254.360
1254.453
1254.733
15 1255.165
1255.803
1255.962
1256.050
1256.554
20 1256.684
1256.888
1256.952
1257.092
1257.345
25 1257.612
1258.295
1258.636
1258.896
30 1259.150
1260.175

D

1250.340
1250.845
1251.330
1252.359
5 1253.344
1253.449
1253.515
1253.924
1254.031
10 1254.102
1254.193
1254.357
1254.452
1254.730
15 1255.045
1255.156
1255.795
1255.959
1256.547
20 1256.682
1256.887
1257.088
1257.341
1257.608
25 1258.533
1258.890
1259.147
1260.198

B	C	D	E
5	1240.300	1240.300	1240.300
	1240.300	1240.300	1240.300
	1240.300	1240.300	1240.300
	1240.300	1240.300	1240.300
	1240.300	1240.300	1240.300
10	1240.300	1240.300	1240.300
	1240.300	1240.300	1240.300
	1240.300	1240.300	1240.300
	1240.300	1240.300	1240.300
	1240.300	1240.300	1240.300
15	1240.300	1240.300	1240.300
	1240.300	1240.300	1240.300
	1240.300	1240.300	1240.300
	1240.300	1240.300	1240.300
	1240.300	1240.300	1240.300
20	1240.300	1240.300	1240.300
	1240.300	1240.300	1240.300
	1240.300	1240.300	1240.300
	1240.300	1240.300	1240.300
	1240.300	1240.300	1240.300

D
1230.364
1232.063
1232.729
1232.965
5 1233.284
1234.951
1235.201
1235.288
1235.537
10 1236.293
1236.758
1237.075
1237.276
1237.525
15 1237.819
1239.173
1239.271
1239.998

C
1230.371
1232.073
1232.733
1232.965
5 1233.292
1234.954
1235.205
1235.291
1236.299
10 1236.761
1237.079
1237.279
1237.538
1237.824
15 1239.199
1240.000
1240.171

B
1230.357
1232.729
1233.288
1233.362
5 1235.203
1236.294
1236.374
1236.758
1237.075
10 1237.157
1237.276
1237.530
1239.217
1239.323
15 1239.995
1240.081
1240.197

A
1232.734
1233.292
1236.302
1236.377
5 1236.761
1237.084
1237.157
1237.279
1239.225
10 1240.002
1240.082
1240.202

A

1220.345
1220.433
1220.730
1221.054
1221.130
1221.314
1221.624
1221.882
1221.980
1222.005
1222.481
1223.085
1224.481
1225.085
1225.554
1225.873
1226.106
1226.139
1226.943
1227.056
1227.163
1229.370
1229.415
1230.224

5

10

15

20

B

1220.342
1220.436
1220.730
1221.048
1221.127
1221.317
1221.609
1221.867
1222.000
1222.330
1223.768
1224.971
1225.072
1225.650
1225.921
1226.101
1226.137
1226.656
1226.858
1226.940
1227.054
1227.535
1228.527
1228.795
1229.363
1229.413
1230.164

5

10

15

20

25

C

1220.347
1220.729
1221.057
1221.813
1222.204
1222.511
1222.624
1222.789
1222.880
1223.769
1224.903
1225.171
1225.529
1225.823
1226.105
1226.659
1226.942
1227.057
1227.540
1228.534
1228.762
1229.368
1229.885
1230.160

5

10

15

20

D

1220.345
1220.724
1221.040
1221.405
1221.815
1221.146
1221.504
1221.626
1221.742
1221.880
1222.330
1222.765
1223.983
1224.904
1225.631
1225.818
1226.111
1226.655
1226.938
1227.052
1227.536
1228.530
1228.747
1229.345
1229.508
1229.860
1230.222

5

10

15

20

25

A

1211.259
1212.246
1213.014
1213.082
5 1214.826
1214.962
1215.040
1215.488
1215.615
10 1216.203
1218.522
1219.151
1220.219

B

1210.184
1211.251
1212.215
1212.269
5 1213.011
1214.956
1215.040
1215.486
1215.611
10 1216.193
1217.902
1218.511
1219.144
1219.231
15 1219.647
1220.199

C

1210.187
1211.240
1212.204
1212.317
5 1213.013
1214.375
1214.961
1215.487
1215.614
10 1216.202
1217.920
1218.469
1218.531
1219.150
15 1219.646
1219.958
1220.196

D

1210.184
1211.193
1212.238
1212.443
5 1213.007
1213.860
1213.953
1214.373
1214.960
10 1215.484
1215.610
1216.194
1216.685
1216.998
15 1217.303
1217.909
1218.506
1218.626
1219.144
20 1219.643
1219.953
1220.043

A

1190.387
1191.138
1191.216
1191.471
5 1191.923
1192.704
1193.428
1193.519
1193.583
10 1195.349
1196.199
1197.758
1198.181
1198.531
15 1200.191

B

1190.385
1190.971
1191.137
1191.211
5 1191.300
1191.469
1191.921
1192.703
1193.516
10 1193.586
1193.647
1195.146
1195.341
1195.426
15 1196.040
1196.194
1196.270
1197.749
1198.161
20 1198.530
1199.089
1200.243

C

1190.387
1190.982
1191.138
1191.217
5 1191.472
1191.924
1192.705
1193.519
1194.857
10 1195.347
1195.427
1195.542
1196.025
1196.188
15 1196.197
1197.756
1198.134
1198.529
1199.092
20 1199.572
1200.243

D

1190.383
1190.978
1191.136
1191.211
5 1191.467
1191.921
1192.701
1193.515
1193.826
10 1194.852
1195.341
1196.024
1196.188
15 1197.045
1197.749
1198.075
1198.281
1198.526
20 1199.090
1199.574
1199.985
1200.243

A

1170.044
1171.083
1171.494
1173.343
5 1173.723
1174.526
1176.385
1176.681
1177.017
10 1178.676
1178.762
1180.193

B

1170.037
1170.892
1171.082
1171.492
5 1172.156
1173.338
1173.718
1174.012
1174.497
10 1176.382
1176.678
1177.014
1178.373
15 1178.673
1178.759
1178.990
1180.202

C

1170.041
1170.115
1170.207
1170.890
5 1171.085
1171.494
1172.159
1173.343
1173.744
10 1174.017
1174.449
1174.625
1175.202
15 1176.383
1176.681
1176.834
1177.019
1177.336
20 1178.382
1178.677
1178.761
1178.992
1180.190

D

1170.032
1170.209
1170.885
1171.079
5 1171.492
1172.154
1172.735
1173.338
1173.727
10 1174.386
1174.692
1175.195
1176.381
15 1176.678
1177.012
1177.319
1178.375
1178.673
20 1178.985
1180.202

A	B	C	D
1161.212	1160.102	1160.102	1161.076
1161.202	1161.728	1161.728	1161.728
1161.192	1162.594	1162.601	1161.592
1161.182	1163.660	1163.660	1161.177
1161.172	1163.991	1163.991	1161.991
1161.162	1165.057	1165.057	1161.057
1161.152	1165.397	1165.397	1161.000
1161.142	1165.904	1165.904	1161.000
1161.132	1166.669	1166.669	1161.646
1161.122	1167.067	1167.067	1161.994
1161.112	1167.262	1169.262	1161.874
1161.102	1169.339	1169.339	1171.067
1161.092	1170.000	1170.000	1171.209
1161.082	1170.115	1170.115	
1161.072	1170.207	1170.207	

A

1151.547
1152.449
1153.193
1154.613
5 1160.184

B

1151.007
1151.544
1152.445
1153.188
5 1154.525
1154.605
1155.040
1158.235
1159.080
10 1160.102
1160.193

C

1150.634
1151.007
1151.543
1152.432
5 1153.195
1153.270
1154.527
1154.614
1155.041
10 1158.234
1159.086
1160.102

D

1150.625
1151.007
1151.533
1152.397
5 1152.478
1153.188
1153.270
1154.345
1154.526
10 1154.609
1155.038
1155.224
1158.234
1158.628
15 1159.083
1160.099

A	B	C	D
1290.545	1290.156	1290.160	1290.159
1290.724	1290.246	1290.254	1290.579
1291.355	1290.569	1290.478	1291.345
1291.913	1290.706	1290.633	1291.637
1292.014	5 1291.210	5 1291.353	5 1291.912
1292.379	1291.348	1291.632	1292.012
1292.452	1291.428	1291.918	1292.366
1292.833	1291.911	1292.017	1292.821
1292.961	1292.010	1292.375	1292.960
1293.304	10 1292.094	10 1292.828	10 1293.080
1293.747	1292.370	1292.963	1293.303
1293.981	1292.451	1293.304	1293.744
1294.731	1292.825	1293.747	1293.973
1294.923	1292.958	1293.978	1294.297
1295.025	15 1293.300	15 1294.654	15 1294.707
1295.613	1293.744	1294.922	1294.917
1295.492	1293.977	1295.034	1295.030
1296.711	1294.919	1295.168	1295.155
1296.997	1295.028	1295.523	1295.521
20 1297.201	20 1295.520	20 1295.612	20 1295.608
1298.163	1295.610	1295.797	1295.797
1298.237	1295.792	1296.450	1296.386
1298.378	1296.416	1296.995	1296.969
1299.229	1296.493	1297.160	1297.169
25 1299.981	25 1296.677	25 1297.213	25 1297.836
1300.063	1296.745	1298.160	1298.157
1300.190	1296.994	1298.382	1298.379
	1297.194	1298.606	1298.614
	1298.156	1298.923	1298.918
	30 1298.237	30 1299.229	30 1299.226
	1298.375	1299.981	1299.378
	1298.918	1300.057	1299.981
	1299.226	1300.138	1300.049
	1299.979	1300.192	1300.145
	35 1300.051		
	1300.136		
	1300.190		

A

1300.064
1300.845
1300.941
1301.203
5 1302.081
1302.696
1302.824
1303.327
1303.290
10 1304.562
1304.706
1305.144
1305.288
1305.503
15 1305.891
1306.304
1306.445
1306.524
1306.813
20 1306.885
1307.025
1307.369
1308.153
1308.204
25 1308.384
1308.464
1308.566
1308.637
1309.261
30 1309.592
1309.669
1309.817
1310.129
1310.201

B

1300.051
1300.838
1300.938
1301.196
5 1302.074
1302.208
1302.693
1302.816
1303.325
10 1304.287
1304.561
1304.700
1305.140
1305.289
15 1305.501
1305.735
1305.886
1306.301
1306.438
20 1306.804
1307.019
1307.364
1308.151
1308.379
25 1308.458
1308.563
1308.633
1309.258
1309.661
30 1309.812
1310.121
1310.198

C

1300.058
1300.138
1300.435
1300.842
5 1300.942
1301.201
1301.932
1302.079
10 1302.209
1302.696
1302.820
1303.326
1304.288
15 1304.564
1304.705
1305.145
1305.296
1305.471
20 1305.523
1305.736
1305.889
1306.303
1306.445
25 1306.805
1307.024
1307.203
1307.367
1308.458
30 1308.564
1308.634
1309.260
1309.667
1309.824
35 1310.127

D

1300.049
1300.145
1300.429
1300.841
5 1300.937
1301.032
1301.194
1301.691
1302.070
10 1302.204
1302.449
1302.694
1302.815
1303.202
15 1303.324
1303.750
1303.953
1304.284
1304.561
20 1304.698
1305.141
1305.291
1305.437
1305.732
25 1305.881
1306.287
1306.448
1306.799
1307.014
30 1307.366
1308.630
1309.256
1309.660
1309.818
35 1310.118

A

1310.129
1310.201
1310.383
1310.514
5 1310.593
1311.045
1311.130
1311.313
1311.897
10 1311.978
1312.398
1312.574
1312.718
1312.947
15 1313.151
1313.471
1313.565
1314.080
1314.754
20 1315.012
1315.092
1315.195
1315.554
1315.618
25 1315.708
1315.861
1315.928
1316.007
1316.093
30 1316.260
1316.455
1316.552
1316.808
1316.947
35 1317.003
1317.127
1317.393
1317.614
1317.700
40 1318.118
1318.858
1319.233
1319.441
1320.045

B

1310.121
1310.198
1310.379
1310.505
5 1310.803
1311.040
1311.126
1311.310
1311.431
10 1311.889
1312.392
1312.700
1312.941
1313.072
15 1313.148
1313.399
1313.675
1314.077
1314.750
20 1315.006
1315.084
1315.191
1315.546
1315.614
25 1315.698
1315.860
1315.923
1315.999
1316.083
30 1316.254
1316.447
1316.549
1316.887
1317.114
35 1317.387
1317.611
1317.696
1318.115
1318.728
40 1319.433
1319.976
1320.097

C

1310.127
1310.384
1310.510
1310.805
5 1311.043
1311.128
1311.312
1311.433
1311.894
10 1312.945
1313.782
1314.079
1314.801
1315.008
15 1315.085
1315.193
1315.554
1315.614
1315.708
20 1315.866
1316.132
1316.257
1316.437
1317.676
25 1318.117
1320.224

D

1310.118
1310.379
1310.516
1310.802
5 1311.038
1311.309
1315.182
1320.219

A	B	C	D
1320.038	1320.322	1320.950	1321.131
1320.528	1320.839	1321.082	1321.431
1320.878	1320.890	1321.432	1321.858
1321.093	1321.078	1321.879	1322.544
1321.158	1321.226	1322.095	1323.576
1321.227	1321.284	1322.559	1324.175
1321.433	1321.429	1323.370	1324.359
1321.684	1321.880	1323.517	1324.799
1322.561	1322.555	1324.182	1325.161
1323.336	1323.319	1324.347	1325.228
1323.536	1323.523	1324.811	1325.597
1324.182	1324.177	1325.166	1325.821
1324.355	1324.350	1325.233	1326.109
1324.812	1324.808	1325.606	1326.325
1325.168	1325.162	1325.828	1326.524
1325.613	1325.232	1326.055	1326.840
1325.679	1325.470	1326.138	1327.952
1325.829	1325.602	1326.345	1328.108
1326.039	1325.820	1326.443	1328.270
1326.137	1326.029	1326.528	1328.437
1326.227	1326.133	1326.848	1328.838
1326.349	1326.345	1327.584	1329.258
1326.447	1326.440	1327.736	1330.171
1326.528	1326.526	1327.948	
1326.856	1326.851	1328.098	
1327.584	1327.581	1328.276	
1327.738	1327.734	1328.446	
1327.849	1327.843	1328.844	
1327.950	1327.945	1329.275	
1328.099	1328.095	1329.630	
1328.276	1328.273	1330.103	
1328.845	1328.443		
1329.276	1328.840		
1329.909	1329.271		
1330.097	1329.901		
1330.244	1330.090		
	1330.236		
5	5	5	5
10	10	10	10
15	15	15	15
20	20	20	20
25	25	25	
30	30	30	
35	35		

A	B	C	D
1330.097	1330.090	1331.648	1330.171
1331.649	1331.646	1331.800	1331.645
1331.802	1331.796	1332.020	1331.795
5 1332.105	5 1332.018	5 1332.297	5 1332.022
1332.296	1332.102	1332.477	1332.289
1332.480	1332.193	1332.589	1332.469
1332.585	1332.291	1332.735	1332.574
1332.757	1332.469	1333.474	1332.745
10 1333.491	10 1332.582	1333.672	1333.511
1333.668	1332.751	10 1333.975	10 1333.641
1334.300	1333.487	1334.290	1333.971
1334.604	1333.667	1334.604	1334.280
1335.383	1333.972	1335.383	1334.603
15 1335.492	15 1334.295	15 1335.521	1340.245
1335.981	1334.601	1335.982	
1336.320	1335.380	1340.175	
1336.431	1335.499		
20 1336.614	20 1335.973		
1336.857	1336.318		
1337.214	1336.844		
1337.304	1337.202		
1337.904	1337.298		
1338.290	1337.921		
25 1338.606	1340.211		
1339.156			
1339.590			
1339.915			
1340.104			

D

1343.115
1343.673
1344.880
1345.508
1347.170
1347.493
1350.235

5

C

1342.289
1343.116
1343.457
1343.677
1344.060
1344.301
1344.455
1344.599
1344.728
1344.900
1345.539
1345.730
1345.989
1347.031
1347.186
1347.466
1348.495
1350.214

5

10

15

B

1340.710
1341.100
1341.228
1341.295
1341.793
1342.286
1343.110
1343.453
1343.674
1344.067
1344.298
1344.453
1344.592
1344.726
1344.901
1345.539
1345.724
1346.001
1347.033
1347.208
1347.463
1348.493
1348.820
1349.463
1350.210

5

10

15

20

25

A

1340.624
1341.107
1341.234
1341.303
1341.800
1342.289
1343.118
1343.458
1343.677
1344.073
1344.302
1344.602
1344.729
1344.905
1345.542
1345.730
1346.008
1347.041
1347.242
1347.469
1348.823
1349.380
1350.211

5

10

15

20

A	B	C	D
1350.211	1350.210	1350.268	1352.650
1350.270	1350.751	1350.754	1356.844
1351.754	1351.569	1351.601	1360.227
1352.573	1352.366	1352.358	
1352.663	1352.656	1352.663	
1354.582	1354.582	1352.901	
1354.594	1355.003	1353.448	
1355.213	1355.207	1355.741	
1355.441	1355.431	1355.999	
1355.741	1355.602	1356.155	
1355.995	1355.734	1356.628	
1356.162	1355.991	1356.847	
1356.630	1356.153	1357.158	
1356.776	1356.627	1358.131	
1356.847	1356.770	1358.592	
1357.167	1356.843	1358.731	
1358.025	1357.156	1358.876	
1358.469	1358.045	1359.168	
1358.584	1358.464	1359.571	
1358.730	1358.579	1360.263	
1358.867	1358.719		
1359.013	1358.863		
1359.091	1359.014		
1359.172	1359.086		
1359.574	1359.167		
1360.153	1359.563		
	1359.645		
	1360.193		

A

1360.517
1361.199
1361.803
5 1362.657
1363.435
1363.832
1363.968
1365.306
1365.872
10 1366.167
1367.578
1368.000
1368.215
1368.730
15 1368.931
1369.025
1369.426
1369.533
1369.832
20 1369.956
1370.222

B

1360.513
1361.325
1361.795
5 1363.673
1363.968
1365.095
1365.302
1365.865
1366.158
10 1367.571
1367.992
1368.207
1369.017
1369.418
15 1369.527
1369.819
1369.950
1370.206

C

1365.098
1365.304
1365.861
1366.160
5 1367.579
1370.006

D

1370.222

A
1370.581
1370.504
1370.979
1371.044
5 1371.481
1371.841
1372.024
1372.269
1372.542
10 1372.872
1373.703
1373.988
1375.253
1376.245
15 1377.092
1377.179
1378.067
1378.355
1378.496
20 1378.596
1379.589
1379.757
1380.238

B
1370.576
1370.892
1370.979
1371.040
5 1371.474
1371.833
1372.020
1372.241
1372.535
10 1372.869
1375.551
1376.240
1377.089
1377.174
15 1377.409
1377.993
1378.458
1378.589
1379.740
20 1380.238

C
1370.580
1371.037
1371.479
1377.182
5 1378.620
1380.227

D
1380.225

A

	1380.238
	1380.627
	1381.539
	1381.621
5	1381.767
	1382.069
	1382.339
	1382.426
	1382.974
10	1383.135
	1383.341
	1383.618
	1384.173
	1384.315
15	1385.320
	1386.550
	1387.942
	1388.356
	1388.487
20	1388.870
	1389.022
	1389.156
	1389.917
	1390.233

B

	1380.238
	1380.619
	1381.529
	1381.619
5	1381.761
	1382.076
	1382.333
	1382.422
	1382.968
10	1383.140
	1383.336
	1383.610
	1384.170
	1384.301
15	1385.072
	1385.314
	1388.459
	1388.866
	1389.017
20	1389.128
	1389.909
	1390.229

C

	1380.303
	1380.626
	1381.536
	1381.754
5	1382.094
	1382.339
	1382.425
	1382.974
	1383.369
10	1383.651
	1384.171
	1384.304
	1385.315
	1389.955
15	1390.103

D

	1390.193

A
 1390.233
 1390.521
 1390.765
 1391.031
 5 1391.334
 1391.583
 1391.802
 1392.070
 1392.161
 10 1392.251
 1393.449
 1393.883
 1394.921
 1395.983
 15 1396.402
 1397.329
 1397.581
 1399.448
 20 1400.090
 1400.235

B
 1390.229
 1390.501
 1390.751
 1391.034
 5 1391.322
 1391.576
 1391.796
 1392.065
 1392.156
 10 1392.247
 1393.448
 1396.383
 1400.083

C
 1400.167

D
 1400.169

A
1400.090
1400.544
1400.950
5 1401.074
1401.974
1402.062
1402.644
1403.810
1403.469
10 1403.819
1404.176
1404.269
1404.452
1405.174
15 1405.729
1406.162
1406.225
1406.436
1406.735
20 1407.164
1407.309
1408.226
1408.397
1408.536
25 1408.665
1408.837
1409.510
1409.763
1409.955
30 1410.010
1410.113
1410.240

B
1400.083
1400.534
1400.941
5 1401.060
1401.969
1402.052
1402.440
1402.801
1403.478
10 1403.815
1404.176
1405.416
1405.723
1406.153
15 1406.432
1406.727
1407.160
1407.302
1408.079
20 1408.222
1408.394
1408.522
1408.652
1408.826
25 1409.506
1409.756
1410.060
1410.235

C
1400.937
1402.044
1402.631
5 1402.810
1404.030
1406.734
1407.141
1407.306
1408.526
10 1408.831
1410.242

D
1410.149

A

5	1410.113
	1410.240
	1410.505
	1411.329
	1411.525
	1411.823
	1411.912
	1412.089
10	1412.648
	1412.927
	1413.185
	1413.640
	1414.004
15	1414.080
	1414.156
	1414.286
	1414.425
	1414.497
20	1414.577
	1414.785
	1414.991
	1416.060
	1416.149
25	1416.482
	1416.927
	1417.206
	1417.634
	1417.810
	1420.145

B

5	1410.059
	1410.235
	1410.503
	1411.319
	1411.589
	1412.127
	1412.640
	1412.922
10	1413.184
	1413.340
	1413.636
	1414.001
	1414.068
15	1414.279
	1414.421
	1414.483
	1414.774
	1414.993
20	1416.275
	1416.475
	1420.244

C

5	1410.501
	1411.239
	1412.927
	1413.640
	1414.004
	1414.087
	1414.272
	1415.147
	1420.212

D

1420.240

M
1420.596
1420.726
1420.987
1421.224
5 1421.364
1421.640
1422.042
1422.548
1422.699
10 1422.857
1423.057
1423.674
1424.257
15 1424.573
1425.848
1426.029
1426.135
20 1426.446
1426.618
1426.815
1427.200
1427.274
25 1427.356
1427.859
1428.311
1428.887
1429.427
1430.246

D
1421.209
1421.359
1421.649
1422.029
5 1422.536
1422.689
1422.851
1423.047
10 1424.572
1424.873
1425.841
1426.023
15 1426.127
1426.442
1426.617
1426.807
1427.198
20 1427.265
1427.856
1428.196
1428.880
1430.164

U
1430.187

U
1423.511
1426.638
1427.269
1430.186

AD-A151 757

AN ATLAS OF PURE WATER VAPOR SPECTRA FROM 500 TO

2/5

5000/CM VOLUME 2. (U) OHIO STATE UNIV COLUMBUS

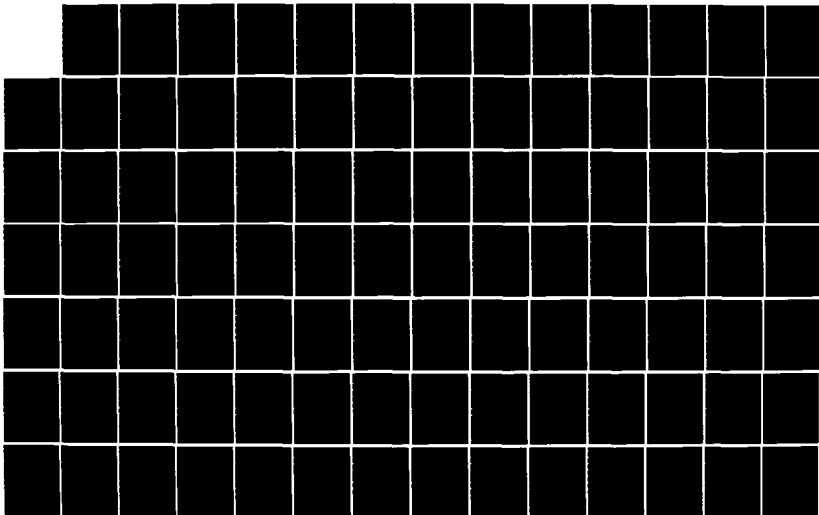
ELECTROSCIENCE LAB R K LONG ET AL. SEP 84

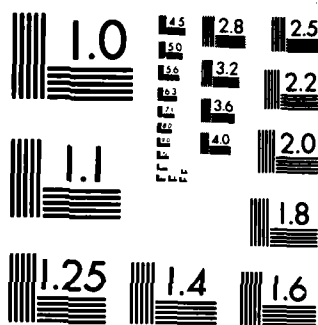
UNCLASSIFIED

ESL-713774-3-VOL-2 ARO-17603. 4-G5

F/G 7/4

NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

A		B		C		D	
	1430.750		1430.732		1431.618		1440.184
	1431.237		1431.232		1440.228		
	1431.498		1431.489				
	1431.603		1431.596				
5	1431.693	5	1431.949				
	1431.996		1432.412				
	1432.416		1433.206				
	1433.184		1433.651				
	1433.264		1433.947				
10	1433.451	10	1434.271				
	1433.602		1434.675				
	1433.951		1434.941				
	1434.282		1438.802				
15	1434.683	15	1439.701				
	1434.949		1439.886				
	1435.186		1440.164				
	1435.316						
	1435.689						
	1437.464						
20	1438.810						
	1439.706						
	1439.893						
	1439.978						
	1440.222						

A	B	C	D
1440.579	1440.572	1441.573	1450.154
1440.703	1440.698	1442.896	
1441.092	1441.087	1443.237	
1441.353	1441.340	1443.975	
5 1441.560	5 1441.553	5 1450.178	
1442.718	1442.822		
1442.834	1443.232		
1443.239	1443.952		
1443.955	1444.749		
10 1444.495	10 1444.856		
1444.673	1445.067		
1444.761	1446.151		
1444.860	1446.493		
1445.103	1448.920		
15 1445.180	15 1449.501		
1445.249	1450.131		
1446.156			
1446.496			
1448.268			
20 1448.897			
1449.506			
1450.181			

A	B	C	D
1450.341	1450.336		1460.099
1450.494	1450.487		
1450.609	1450.593		
1450.984	1450.979		
5 1451.096	5 1451.084		
1451.312	1451.309		
1451.464	1451.460		
1451.912	1452.619		
1452.234	1453.374		
10 1452.476	10 1453.588		
1452.599	1453.785		
1453.363	1454.078		
1453.588	1460.228		
15 1454.091			
1454.263			
1454.411			
1454.647			
1459.618			
20 1459.892			

A

1460.440
1460.946
1461.916
1462.115
5 1462.186
1462.369
1462.644
1462.733
10 1462.849
1463.188
1463.389
1464.456
1465.551
15 1466.589
1466.786
1466.914
1467.032
20 1467.482
1467.670
1467.797
1467.990
1468.271
1468.352
25 1468.702
1469.115
1469.271
1469.372
1469.751
1469.866
30 1470.085
1470.247

B

1460.920
1461.912
1462.096
1462.363
5 1462.554
1462.639
1462.842
1463.181
10 1463.382
1466.584
1466.818
1466.909
1467.028
15 1467.468
1467.676
1467.790
1467.976
20 1468.265
1468.336
1468.699
1469.109
1469.265
1469.360
25 1469.747
1469.864
1470.086

C

1466.101
1470.211

D

1470.166

A

1470.085
1470.437
1470.874
1474.354
1474.636
1475.599
1476.845
1477.032
1477.252
1477.490
1477.559
1477.817
1477.939
1478.128
1479.089
1480.103
1480.241

5

10

15

B

1477.244
1477.552
1477.798
1478.117
1479.083
1479.153
1480.096
1480.234

5

C

1472.281
1479.998
1480.189

D

1480.048

A	B	C	D
1480.103	1480.096	1482.456	1490.238
1480.241	1480.234	1483.188	
1480.336	1481.791	1490.151	
1480.707	1481.975		
5 1480.775	1482.540		
1481.383	1483.168		
1481.789	1483.923		
1481.983	1484.104		
1482.491	1484.259		
10 1482.551	1484.499		
1483.180	1484.630		
1483.934	1484.781		
1484.115	1484.964		
1484.267	1485.127		
15 1484.326	15 1490.257		
1484.510			
1484.636			
1484.786			
1484.977			
20 1485.142			
1485.661			
1486.169			
1486.741			
1487.738			
25 1488.031			
1488.197			
1488.544			
1490.088			

A

1491.397
1492.315
1492.527
1492.974
5 1493.282
1494.871
1497.170
1497.624
1497.889
10 1499.219
1499.634
1500.159

B

1492.313
1492.967
1493.277
1500.208

C

1500.208

D

1500.169

A

1500.159
1500.297
1500.563
1500.773
5 1500.843
1501.187
1501.244
1501.635
1501.950
10 1502.082
1502.290
1502.440
1502.736
1503.224
15 1503.531
1503.735
1503.820
1503.972
20 1508.977
1510.032
1510.186

B

1510.166

C

1510.230

D

1510.243

1510.186
 1510.578
 1510.705
 1511.028
 1511.234
 1511.433
 1511.622
 1512.262
 1512.895
 1513.087
 1513.291
 1513.820
 1514.052
 1514.259
 1514.671
 1515.295
 1515.714
 1516.677
 1517.790
 1518.183
 1518.654
 1519.022
 1519.352
 1520.139

B
 1520.234

C
 1520.204

D
 1520.181

A

1523.715
1524.057
1524.057
1524.254
5 1527.542
1528.751
1529.042
1529.230
1529.382
10 1529.470
1530.191

B

1530.175

C

1530.157

D

1530.208

A
1530.191
1530.790
1531.132
1531.319
5 1531.752
1532.236
1534.353
1534.939
1535.391
10 1535.893
1536.060
1536.158
1536.568
1536.825
15 1537.245
1540.129

B
1540.224

C
1540.148

D
1540.233

A

1545.928
1546.511
1547.075
1547.211
5 1547.396
1547.520
1547.896
1548.122
1548.303
10 1548.630
1549.140
1550.177

B

1550.202

C

1550.201

U

1550.235

A

1630.647
1630.877
1631.090
1631.307
5 1631.415
1631.180
1631.347
1631.840
1631.621
10 1631.726
1631.826
1631.910
1631.533
1631.932
15 1631.179
1631.107
1631.230

B

1690.163

C

1690.193

D

1690.198

A
1671.883
1672.196
1673.458
1672.600
5 1674.135
1674.318
1676.954
1677.224
1677.226
10 1678.986
1679.110
1679.262
1679.393
1679.472
15 1679.963

B
1680.229

C
1680.199

D
1680.224

A
1660.246
1660.468
1660.690
1660.812
1660.934
5 1661.056
1661.178
1661.300
1661.422
1661.544
1661.666
1661.788
1661.910
1662.032
10 1662.154
1662.276
1662.398
1662.520
1662.642
1662.764
1662.886
1663.008
15 1663.130

B
1670.196

C
1670.193

D
1670.191

A
1650.033
1650.272
1650.836
1655.241
5 1656.289
1656.418
1657.016
1657.391
1657.765
10 1658.275
1658.298
1660.247

B
1660.149

C
1660.103

D
1660.235

D
1650.183

C
1650.142

B
1650.120

A
1640.081
1630.263
1619.651
1641.972
5 1642.724
1642.527
1644.260
1644.693
1642.673
10 1649.032
1642.290
1642.423
1642.574
1642.305
15 1650.034

A

1631.317
1631.323
1632.167
1632.792
5 1633.468
1637.916
1640.238
1648.397
1649.087
10 1640.081

B

1640.211

C

1640.214

D

1640.184

PAGE 114

A
 1620.338
 1620.471
 1620.754
 1621.129
 5 1621.594
 1621.111
 1621.451
 1621.533
 1621.715
 10 1621.787
 1621.139
 1621.640
 1621.663
 1621.163
 15 1621.673
 1621.645
 1621.054
 1630.253

B
 1630.171

C
 1630.141

D
 1630.238

A

1611.099
1611.281
1611.580
1612.182
5 1613.102
1617.694
1619.362
1619.511
1619.717
10 1619.805
1619.885
1619.989
1620.082

B

1620.175

C

1620.212

D

1620.198

PAGE 112

A

1600.239
1600.482
1600.574
1601.157
5 1601.460
1602.299
1602.730
1602.868
1603.267
10 1603.984
1604.859
1605.678
1606.193
1606.682
15 1607.056
1609.319
1609.883

B

1602.121
1605.580
1610.081

C

1610.157

D

1610.196

A
 1590.140
 1590.394
 1590.782
 5 1591.038
 1591.652
 1592.270
 1592.320
 1592.617
 10 1593.137
 1593.779
 1593.872
 1594.419
 1596.192
 1597.329
 15 1597.481
 1597.866
 1598.074
 1598.265
 20 1598.449
 1598.013
 1600.239

B
 1600.181

C
 1600.188

D
 1600.198

	A	B	C	D
	1580.368			1590.217
	1581.151			
	1581.390			
	1581.711		1590.211	
5	1582.474			
	1582.997			
	1583.357			
	1584.167			
	1585.479			
10	1585.666			
	1585.990			
	1586.060			
	1586.295			
	1586.996			
15	1587.086			
	1587.469			
	1588.494			
	1588.948			
	1589.222			
20	1589.725			
	1590.140			

A		B		C		D	
1571.155		1580.235		1580.211		1580.247	
1571.486							
1572.941							
1573.369							
5	1573.586						
	1573.954						
	1574.456						
	1577.655						
	1578.319						
10	1579.248						
	1579.480						
	1580.187						

D
1570.209

C
1570.234

B
1570.243

A
1562.135
1562.259
1562.374
1562.614
5 1563.239
1563.549
1564.934
1565.370
1565.715
10 1566.033
1566.490
1567.432
1570.179

A
1550.501
1551.086
1551.530
1551.954
5 1552.149
1552.642
1553.009
1553.260
1555.466
10 1556.025
1560.205

B
1560.205

C
1560.158

D
1560.200

A
1690.298
1690.894
1692.191
1692.370
1692.699
1693.240
1693.420
1693.696
1694.034
1694.172
1700.192

S

10

B
1700.112

C
1700.220

D
1700.237

A
1701.978
1702.302
1702.400
1702.803
5 1703.442
1703.687
1703.955
1704.860
1705.824
10 1707.281
1708.274
1708.791
1709.653
1710.084
15 1710.177

B
1707.790
1708.317
1708.805
1710.194

C
1710.203

D
1710.215

H		B		C		D	
5	1710.780	1710.777	1720.200	1720.216			
	1711.523	1711.529					
	1711.638	1712.077					
	1712.045	1720.238					
	1712.494						
10	1712.895						
	1713.672						
	1715.895						
	1719.150						
	1719.764						
	1720.060						
	1720.154						

A	B	C	D
1720.060	1721.566		1730.202
1721.502	1722.541		
1721.558	1722.633		
1722.540	1723.912		
5 1722.649	1724.285		
1723.049	1724.484		
1723.109	1724.802		
1723.421	1724.919		
1723.593	1725.192		
10 1723.806	1725.376		
1723.805	1725.520		
1724.025	1726.212		
1724.005	1726.363		
1725.202	1726.805		
15 1725.377	1727.295		
1725.520	1727.419		
1726.217	1727.763		
1726.395	1727.836		
20 1726.730	1728.286		
1727.299	1730.240		
1727.413			
1727.764			
1727.837			
25 1728.286			
1729.435			
1730.093			

A
1730.640
1731.040
1731.474
1732.013
5 1732.310
1735.363
1735.851
1736.330
1737.015
10 1737.527
1737.960
1738.382
1738.497
1738.664
15 1740.175

B
1740.146

C
1740.266

D
1740.245

	A	B	C	D
	1740.654	1741.959		1750.191
	1740.859	1742.119		
	1741.002	1744.765	1750.178	
	1741.120	1750.143		
5	1741.455			
	1742.134			
	1742.475			
	1743.892			
	1744.290			
10	1744.508			
	1745.723			
	1746.322			
	1746.970			
	1747.235			
15	1747.895			
	1749.485			
	1750.095			

A

1750.365
1751.880
1752.780
1753.392
5 1753.603
1753.822
1754.120
1754.428
10 1755.696
1756.159
1757.148
1757.599
1758.336
1758.594
15 1759.320
1760.246

B

1752.987
1753.388
1753.597
1753.843
5 1754.114
1754.417
1757.575
1758.723
10 1759.317
1760.059

C

1760.200

D

1760.165

D
1770.208

C
1770.223

B
1762.700
1763.234
1764.173
1764.328
5 1764.510
1764.596
1764.698
1765.365
1765.802
10 1766.729
1767.124
1770.121

A
1760.901
1761.125
1761.329
1762.680
5 1763.241
1764.151
1764.341
1764.522
1764.600
10 1764.708
1765.301
1766.733
1767.095
1767.734
15 1768.354
1769.525
1769.894

A

1770.386
1773.297
1773.902
1774.634
5 1775.052
1775.771
1776.353
1776.763
1777.137
10 1777.457
1777.669
1777.740
1777.887
1778.080
15 1778.424
1778.539
1778.766
1779.066
1779.922

B

1774.640
1776.122
1776.755
1777.132
5 1777.449
1777.734
1777.883
1778.071
1778.396
10 1778.525
1778.757
1779.020
1779.908

C

1780.176

D

1780.148

A

1780.476
1781.144
1781.942
1782.369
5 1783.698
1784.187
1785.857
1787.122
1789.795
10 1791.082
1792.566
1794.810
1796.889
15 1798.026
1799.844
1799.927
1799.946
20 1799.934
1799.960
1799.617
1799.880
1799.010

B

1781.254
1781.991
1782.363
1782.688
5 1783.181
1783.819
1785.327
1785.557
1785.807
10 1785.877
1786.023
1786.691
1786.837
1787.340
15 1788.026
1788.327
1788.597
1789.884
1790.005

C

1790.259

D

1790.243

D
1800.238

C
1800.206

B
1793.878
1794.051
1795.076
1795.367
5 1796.473
1796.580
1796.892
1797.014
10 1797.479
1798.131
1798.571
1800.065

A
1790.393
1790.779
1793.132
1794.057
5 1795.081
1795.375
1795.751
1796.301
1796.478
10 1796.595
1796.938
1797.487
1798.137
15 1798.593
1798.812
1798.972
1799.410
1800.033

A
 1800.030
 1801.267
 1801.685
 1801.736
 5 1802.417
 1802.615
 1802.903
 1803.652
 1803.794
 10 1804.614
 1805.124
 1805.176
 1805.340
 15 1805.750
 1805.909
 1806.577
 1806.900
 20 1807.640
 1808.377
 1808.658
 1808.298
 1810.129

B
 1801.634
 1802.763
 1803.646
 1803.786
 5 1804.610
 1805.120
 1805.322
 1805.748
 1805.906
 10 1806.571
 1807.056
 1807.625
 1807.830
 1808.373
 15 1808.649
 1809.290
 1810.133

C
 1804.609
 1805.907
 1806.574
 1808.695
 5 1809.262
 1810.205

D
 1810.215

A

1810.129
1810.816
1810.996
1812.333
5 1813.034
1813.144
1813.250
1813.381
1813.589
10 1814.19
1815.457
1815.525
1816.003
15 1816.146
1816.413
1816.477
1817.676
1818.900
20 1820.162

B

1811.142
1812.384
1812.879
1813.047
5 1813.228
1813.377
1813.584
1814.712
1814.946
10 1815.452
1815.570
1816.057
1816.658
1817.148
15 1817.667
1818.894
1820.159

C

1813.055
1813.238
1813.380
1813.587
5 1814.691
1814.945
1815.454
1815.572
1816.062
10 1816.551
1816.660
1818.199
1818.897
1820.158

D

1812.622
1820.187

A

1820.370
1820.823
1821.382
1821.841
5 1822.099
1822.429
1822.788
1825.523
1825.742
10 1825.898
1825.976
1826.251
1827.535
1827.902
15 1828.212
1828.537
1829.142
1830.164

B

1820.365
1820.821
1821.343
1821.829
5 1822.091
1822.423
1822.811
1825.968
1827.897
10 1828.205
1830.182

C

1820.372
1820.822
1821.411
1821.871
5 1822.073
1830.133

D

1830.191

A

1960.707
1961.150
1961.929
1961.929
1964.166
5 1965.424
1966.214
1967.364
1968.168
10 1969.233
1969.376
1969.555
1969.769
1970.043

B

1960.702
1961.129
1961.174
1961.925
5 1963.185
1964.163
1965.421
1966.163
1966.269
10 1967.596
1968.164
1969.229
1969.374
15 1969.552
1969.767
1970.039

C

1960.709
1961.070
1961.295
1961.929
5 1963.191
1964.157
1965.426
1966.064
1967.776
10 1968.167
1969.236
1969.377
1969.555
1969.771
15 1970.038

D

1960.700
1961.245
1961.916
1963.176
5 1964.161
1965.417
1968.133
1969.225
1969.369
10 1969.546
1969.762

A

	1950.101
	1950.226
	1950.322
	1950.447
5	1951.124
	1951.208
	1951.267
	1952.182
	1954.401
10	1954.971
	1955.244
	1955.728
	1955.818
15	1956.230
	1956.374
	1956.637
	1956.720
	1956.805
20	1957.023
	1957.145
	1957.652
	1958.104
	1958.630
	1959.708
25	1960.194

B

	1950.097
	1950.217
	1950.320
	1950.445
5	1951.120
	1951.415
	1952.178
	1953.294
	1954.399
10	1954.927
	1955.239
	1955.725
	1955.815
15	1956.222
	1956.372
	1956.629
	1956.802
	1957.021
20	1957.142
	1957.646
	1958.101
	1959.624
	1960.012

C

	1950.104
	1950.224
	1950.329
	1950.449
5	1951.130
	1951.418
	1952.045
	1952.185
	1953.301
10	1954.402
	1954.883
	1955.240
	1955.730
15	1955.814
	1956.202
	1956.263
	1956.576
	1956.630
20	1957.026
	1957.147
	1957.626
	1957.678
25	1958.104
	1958.615
	1959.633

D

	1950.096
	1950.212
	1950.320
	1950.440
5	1951.104
	1951.410
	1952.021
	1952.172
	1953.287
10	1954.397
	1954.845
	1955.721
	1956.203
15	1956.574
	1956.795
	1957.010
	1957.139
	1957.582
	1958.093
20	1958.604
	1959.621

A
 1940.264
 1941.332
 1941.620
 1941.747
 1941.830
 1941.901
 1942.497
 1942.802
 1943.153
 1944.064
 1944.189
 1944.747
 1945.317
 1945.600
 1946.329
 1947.401
 1949.246
 1949.427
 1949.739
 1950.101
 1950.226

5
 10
 15
 20

B
 1940.261
 1941.334
 1941.574
 1941.740
 1942.916
 1943.145
 1944.062
 1944.183
 1944.446
 1944.741
 1945.244
 1945.656
 1946.270
 1946.397
 1947.081
 1947.396
 1949.240
 1949.423
 1949.798
 1950.097
 1950.217

5
 10
 15
 20

C
 1940.264
 1943.275
 1944.064
 1944.185
 1944.450
 1944.751
 1945.530
 1946.533
 1947.085
 1947.266
 1947.403
 1948.515
 1949.248
 1949.427
 1949.806
 1950.104
 1950.224

5
 10
 15

D
 1940.252
 1943.462
 1944.166
 1946.490
 1947.387
 1948.395
 1948.500
 1948.189
 1949.413
 1949.794
 1950.096
 1950.212

5
 10

A

1930.697
1931.731
1932.112
1932.193
5 1932.252
1932.387
1932.467
1932.525
1932.827
10 1933.168
1933.549
1934.390
1934.513
1935.323
15 1935.676
1935.837
1936.676
1937.010
1937.218
20 1937.351
1937.462
1937.944
1938.373
1938.697
25 1939.121
1940.056

B

1930.692
1930.778
1931.720
1932.108
5 1932.381
1932.821
1933.118
1933.546
1934.388
10 1934.510
1935.319
1935.669
1935.835
1936.213
15 1936.670
1937.008
1937.208
1937.349
1937.458
20 1937.941
1938.372
1938.694
1939.118
1939.758

C

1930.052
1930.699
1930.865
1931.588
5 1931.728
1932.115
1932.389
1932.825
1933.248
10 1933.549
1934.390
1934.513
1935.323
1935.487
15 1935.677
1935.839
1936.220
1936.676
1937.011
20 1937.209
1937.461
1937.943
1938.153
1938.379
25 1938.698
1939.122
1939.610

D

1930.046
1930.688
1930.856
1931.582
5 1931.714
1932.097
1932.378
1932.810
1933.330
10 1933.536
1934.383
1934.506
1935.308
1935.478
15 1935.664
1935.832
1936.205
1936.663
1937.002
20 1937.180
1937.449
1937.912
1938.138
1938.371
25 1938.689
1939.098
1939.603

A
 1920.708
 1920.898
 1921.593
 1922.260
 5 1923.265
 1924.731
 1924.811
 1925.067
 1925.145
 10 1925.202
 1926.286
 1926.525
 1926.722
 15 1926.802
 1927.276
 1927.461
 1927.673
 1927.854
 20 1927.943
 1929.026
 1929.701
 1930.204

B
 1920.706
 1920.894
 1922.485
 5 1923.382
 1924.726
 1925.061
 1926.284
 1926.716
 10 1927.273
 1927.459
 1927.672
 1927.851
 1929.023
 15 1929.698
 1930.202

C
 1920.710
 1920.907
 1923.687
 5 1924.449
 1924.733
 1925.069
 1926.287
 1926.723
 10 1927.275
 1927.462
 1927.677
 1927.859
 1929.026
 15 1929.707
 1929.801
 1930.052
 1930.203

D
 1920.915
 1923.997
 1924.721
 5 1925.058
 1926.281
 1926.711
 1927.261
 1927.458
 10 1927.674
 1927.827
 1929.016
 1929.695
 1929.797
 15 1930.045
 1930.173

A

1911.865
1911.946
1912.069
1912.558
1912.788
1913.929
1914.222
1914.577
1914.986
1915.192
1915.264
1915.351
1915.558
1915.767
1916.676
1916.796
1918.161
1918.855
1919.375
1919.508
1919.684
1920.131

5

10

15

20

B

1910.109
1911.860
1912.066
1912.552
1912.786
1913.926
1914.221
1914.573
1914.984
1915.186
1915.260
1915.355
1915.555
1915.766
1916.674
1916.794
1918.374
1918.849
1919.367
1919.505
1919.679
1920.074

5

10

15

20

C

1910.301
1911.870
1912.072
1912.560
1912.790
1913.292
1913.603
1913.930
1914.227
1914.599
1914.987
1915.190
1915.261
1915.559
1915.768
1916.679
1918.865
1919.514
1919.675
1920.072

5

10

15

20

D

1910.641
1911.857
1912.063
1912.553
1912.784
1913.286
1913.912
1914.214
1914.576
1914.981
1915.224
1915.551
1920.136

5

10

A

1900.071
1900.517
1901.241
1901.756
5 1902.039
1903.603
1903.124
1903.647
1903.980
10 1904.326
1904.372
1904.759
1905.064
15 1906.730
1907.697
1907.932
1907.990
20 1909.127
1909.865
1909.981

B

1900.069
1900.513
1901.235
1901.737
5 1902.036
1902.600
1903.124
1903.641
1903.975
10 1904.349
1904.753
1906.061
1906.135
15 1906.730
1907.059
1907.689
1908.076
1909.122
20 1909.801
1910.109

C

1900.072
1900.312
1900.518
1901.241
5 1901.791
1902.042
1902.606
1903.132
1903.647
10 1903.982
1904.493
1904.760
1906.064
15 1906.143
1906.733
1907.063
1908.265
1909.130
1910.200

D

1900.066
1900.308
1900.506
1901.231
5 1901.704
1902.027
1902.589
1903.122
1903.633
10 1903.970
1904.741
1906.057
1906.130
15 1906.727
1910.184

A	B	C	D
1890.214	1891.547	1891.553	1891.993
1890.719	1891.993	1891.900	1892.631
1891.558	1892.594	1891.995	1896.992
1891.637	1893.419	1892.564	1897.329
5 1891.997	5 1893.704	5 1893.429	5 1897.839
1891.602	1894.355	1893.685	1898.662
1893.430	1894.668	1894.356	1899.346
1893.723	1895.507	1895.749	1900.072
1893.869	1895.737	1896.995	1900.230
10 1893.162	10 1896.991	10 1897.368	
1894.367	1897.367	1897.529	
1894.678	1897.518	1897.655	
1895.132	1897.850	1898.670	
1895.253	1898.662	1899.355	
15 1895.516	15 1899.348	15 1900.077	
1895.749	1900.073	1900.224	
1896.992	1900.243		
1897.380			
1897.529			
20 1897.862			
1898.675			
1899.351			
1900.081			
1900.169			

A

1880.982
1881.482
1882.126
1883.405
5 1884.563
1885.029
1886.206
1887.522
10 1888.259
1889.405
1890.737
1891.214

B

1880.972
1881.076
1882.015
1882.513
5 1882.899
1884.406
1885.492
1886.020
10 1887.279
1888.766
1889.451
1890.253
1891.799
1892.203

C

1880.758
1880.979
1881.078
1882.019
5 1882.522
1882.910
1883.379
1884.377
1885.035
10 1885.391
1885.773
1887.530
1890.166

D

1880.968
1881.066
1882.017
1882.510
5 1882.900
1885.790
1890.181

A
5
1870.816
1871.146
1876.636
1877.761
1879.027
1879.304
1879.606
1879.790
1880.213

B
5
10
1870.910
1871.631
1874.779
1875.243
1875.459
1876.617
1877.774
1879.016
1879.290
1879.595
1879.782
1880.204

C
5
10
15
1871.632
1871.892
1874.785
1875.246
1875.461
1875.814
1876.083
1876.241
1876.579
1876.681
1877.779
1878.676
1879.014
1879.235
1879.582
1879.808
1880.213

D
5
10
1871.175
1874.784
1875.458
1875.598
1875.725
1876.565
1877.773
1878.653
1879.747
1880.241

A

1860.923
1861.537
1861.921
1862.200
1862.792
1863.956
1864.052
1864.178
1864.334
1864.428
1866.319
1866.428
1867.110
1868.727
1869.503

5

10

B

1860.905
1861.492
1861.916
1862.194
1862.782
1862.949
1863.681
1864.052
1864.168
1864.329
1865.147
1866.323
1869.993

5

10

C

1860.113
1860.961
1861.594
1861.921
1862.196
1862.789
1862.954
1863.681
1864.031
1864.181
1864.328
1870.188

5

10

D

1862.191
1862.770
1862.957
1865.825
1870.058

5

A

1850.179
1851.344
1851.855
1852.410
5 1853.240
1853.352
1853.665
1853.752
1853.879
10 1854.126
1854.208
1855.290
1855.509
15 1856.264
1856.921
1857.281
1857.633
1857.490
20 1857.708
1858.279
1858.375
1858.525
1859.709
25 1859.871
1860.207

B

1850.171
1850.379
1850.867
1851.340
5 1851.847
1852.377
1852.861
1853.239
1853.347
10 1853.661
1853.738
1853.875
1854.118
15 1854.814
1855.276
1855.504
1855.800
1855.948
20 1856.250
1856.572
1856.917
1857.277
1857.487
25 1857.622
1858.273
1858.576
1859.688
1859.861
1860.113

C

1850.179
1850.868
1851.343
1851.852
5 1852.482
1852.884
1852.967
1853.240
1853.351
10 1853.662
1853.750
1853.878
1854.115
15 1854.573
1854.819
1855.175
1855.276
1855.507
20 1855.804
1855.957
1856.208
1856.578
1856.919
25 1857.280
1857.490
1857.627
1858.393
1858.734
30 1859.900
1860.113

D

1851.337
1851.854
1852.867
1853.344
5 1853.733
1853.865
1854.069
1854.815
1855.170
10 1855.287
1855.504
1855.799
1855.945
15 1856.343
1856.526
1856.906
1857.275
1857.622
20 1860.111
1860.207

A

1840.305
1840.801
1841.133
1841.366
5 1842.162
1842.856
1842.946
1843.403
1844.717
10 1845.236
1845.377
1845.609
1845.792
1845.965
15 1846.470
1846.573
1847.390
1847.697
20 1847.873
1848.819
1849.346
1849.651
1849.723
1850.179

B

1840.295
1840.797
1841.128
1841.375
5 1842.219
1842.856
1845.982
1846.464
1847.378
10 1847.999
1848.822
1849.335
1849.639
1850.171

C

1840.294
1841.129
1848.964
1849.344
5 1849.647
1850.179

D

1850.176

A
 1830.415
 1831.728
 1832.000
 1832.273
 1833.275
 1834.018
 1834.156
 1834.370
 1834.527
 1834.705
 1834.940
 1835.574
 1835.778
 1835.898
 1837.096
 1837.370
 1838.196
 1838.476
 1839.160
 1839.327
 1839.399
 1839.477
 1839.538
 1841.164

B
 1831.722
 1831.995
 1832.268
 1832.930
 1833.211
 1833.289
 1834.146
 1834.360
 1834.519
 1834.704
 1834.932
 1835.565
 1835.868
 1837.413
 1838.185
 1838.467
 1838.868
 1839.149
 1839.323
 1839.383
 1839.536
 1839.742
 1840.153

C
 1833.443
 1834.136
 1834.365
 1834.720
 1834.952
 1835.564
 1835.943
 1838.197
 1838.470
 1839.141
 1839.384
 1839.744
 1840.146

D
 1840.202

A
 1970.250
 1972.592
 1974.605
 1975.343
 5 1975.438
 1975.798
 1976.193
 1976.332
 1977.628
 10 1979.080
 1980.193

B
 1970.248
 1972.585
 1972.983
 1974.599
 5 1974.733
 1975.340
 1975.435
 1975.795
 1976.189
 10 1976.863
 1977.625
 1978.015
 1979.077
 1980.188

C
 1970.251
 1972.592
 1972.988
 1973.116
 5 1974.347
 1974.608
 1974.682
 1974.738
 1975.344
 10 1975.439
 1975.800
 1976.174
 1976.870
 15 1977.628
 1978.021
 1979.081
 1980.189

D
 1970.240
 1972.578
 1972.975
 1973.110
 5 1974.342
 1974.593
 1974.802
 1975.336
 1975.430
 10 1975.791
 1976.128
 1976.855
 1977.616
 15 1978.010
 1979.073
 1980.228

A

1980.760
1981.017
1981.326
1981.402
1981.460
5 1981.599
1981.989
1982.063
1982.190
10 1982.696
1983.025
1984.288
1984.499
1984.774
15 1985.797
1985.996
1986.074
1986.456
1986.653
20 1986.879
1987.151
1987.335
1988.343
1989.927
25 1990.196

B

1980.755
1981.016
1981.319
1981.401
1981.459
5 1981.594
1981.981
1982.064
1982.187
10 1982.694
1983.022
1983.395
1984.285
1984.495
15 1984.772
1985.989
1986.073
1986.453
1986.648
20 1986.877
1987.148
1987.333
1988.298
1988.420
25 1989.924
1990.204

C

1980.759
1981.026
1981.327
1981.602
1981.989
5 1982.192
1982.699
1983.026
1983.405
10 1984.288
1984.490
1984.775
1985.997
1986.336
15 1986.457
1986.654
1986.735
1986.881
1987.152
20 1987.338
1988.599
1989.928
1990.082

D

1980.745
1981.011
1981.314
1981.588
1981.975
5 1982.182
1982.694
1983.017
1983.392
10 1983.654
1984.279
1984.456
1984.767
1985.984
15 1986.324
1986.445
1986.643
1986.872
1987.145
20 1987.326
1988.787
1989.922

A

1991.812
1991.942
1992.373
1992.618
5 1993.662
1993.253
1994.858
1995.238
1995.562
10 1995.964
1996.526
1996.807
1998.637
1998.914
15 1999.542
1999.940
2000.024
2000.203

B

1990.295
1992.013
1992.668
1993.222
5 1993.263
1993.520
1994.851
1995.234
1995.513
10 1995.559
1995.959
1996.523
1996.803
1998.636
15 1998.880
1999.537
1999.936
2000.022
2000.202

C

1990.303
1992.795
1993.324
1993.528
5 1993.928
1994.859
1995.240
1995.314
1995.563
10 1995.967
1996.527
1996.811
1996.890
1998.642
15 1998.827
1999.541
1999.943

D

1990.290
1993.339
1993.915
1994.844
5 1995.231
1995.555
1995.955
1996.519
1996.799
10 1998.749
1998.991
1999.532
1999.932

A		B		C		D	
	2000.018		2000.894		2000.898		2000.889
	2000.897		2001.009		2001.013		2001.002
	2001.012		2001.789		2001.793		2001.561
	2001.884		2001.879		2001.884		2001.869
5	2002.642	5	2002.639	5	2002.643	5	2002.636
	2002.999		2002.995		2002.999		2002.987
	2003.391		2003.387		2003.391		2003.379
	2003.634		2003.631		2003.633		2003.622
	2004.181		2004.178		2004.183		2004.175
10	2004.899	10	2004.896	10	2004.899	10	2004.510
	2005.633		2005.456		2004.899		2004.889
	2005.720		2005.623		2005.472		2005.460
	2006.977		2006.971		2005.631		2005.607
	2007.694		2007.669		2006.977		2006.965
15	2008.065	15	2008.062	15	2007.644	15	2007.577
	2009.329		2009.312		2008.065		2008.052
	2010.235		2010.243		2009.280		2009.243
					2009.329		2010.249
					2010.239		

A	B	C	D
2010.901	2010.897	2010.901	2010.538
2011.017	2011.014	2011.018	2010.892
2011.316	2011.313	2011.317	2011.009
2011.950	2011.947	2011.950	2011.307
2012.152	2012.145	2012.153	5 2011.939
2012.290	2012.285	2012.312	2012.139
2012.905	2012.783	2012.790	2012.303
2013.904	2012.895	2012.903	2012.776
2014.427	2013.899	2013.905	2012.888
10 2014.641	10 2014.424	10 2014.410	10 2013.891
2014.728	2014.639	2014.514	2014.422
2014.831	2014.723	2014.646	2014.641
2015.276	2014.824	2014.726	2014.719
2016.766	2015.274	2014.832	2014.819
15 2018.320	15 2015.741	15 2015.281	15 2015.273
2019.050	2016.281	2015.748	2016.429
2019.955	2016.712	2016.661	2017.230
2020.207	2018.285	2017.033	2019.194
	2019.034	2018.462	2019.938
	20 2019.945	20 2019.073	
		2019.724	
		2019.956	
		2020.204	

A

2020.534
2020.606
2022.080
2023.024
5 2024.399
2025.248
2025.896
2026.115
10 2026.597
2026.860
2027.020
2028.317
15 2029.996
2030.071
2030.229

B

2020.528
2022.078
2022.998
2024.380
5 2025.244
2025.891
2025.994
2026.113
10 2026.578
2027.015
2027.319
2028.313
2029.991
2030.221

C

2020.534
2021.798
2022.083
5 2022.954
2023.067
2023.625
2024.389
2025.250
10 2025.898
2025.997
2026.116
2026.568
2026.633
15 2027.036
2027.321
2027.986
2028.316
2028.816
2029.997
20 2030.230

D

2020.520
2021.259
2021.786
5 2022.076
2022.894
2023.612
2024.374
2025.240
10 2025.889
2025.991
2026.108
2026.536
2026.946
15 2027.310
2027.979
2028.305
2028.801
2029.983
2030.217

A

2030.229
2030.304
2032.289
2034.046
5 2034.135
2034.360
2035.140
2035.307
10 2035.524
2037.503
2038.089
2039.944
2040.013
2040.217

B

2030.221
2030.303
2032.286
2034.043
5 2034.128
2034.352
2035.134
2035.304
10 2035.522
2037.509
2038.084
2039.281
15 2039.542
2040.007
2040.097

C

2030.230
2030.303
2031.449
2032.291
5 2034.058
2034.361
2035.143
2035.308
10 2035.528
2036.618
2037.529
2038.092
2038.764
15 2039.284
2039.946

D

2030.217
2031.442
2031.896
2032.281
5 2034.029
2034.347
2035.130
2035.300
10 2035.519
2036.604
2037.431
2038.080
2038.747
15 2039.278
2039.939

A

2041.263
2041.493
2043.942
2046.512
5 2046.789
2047.721
2048.648
2049.718
2050.226

B

2041.229
2041.456
2043.159
2043.913
5 2046.502
2046.786
2047.719
2048.642
2049.714
10 2050.234

C

2040.306
2041.186
2041.542
2043.165
5 2043.892
2043.952
2046.485
2046.539
2046.790
10 2047.536
2047.723
2048.018
2048.502
2048.649
15 2048.979
2049.458
2049.538
2049.720
2049.921
20 2050.237

D

2040.300
2041.610
2043.151
2043.804
5 2043.879
2046.475
2046.780
2047.520
2047.716
10 2048.635
2048.961
2049.437
2049.538
2049.710
15 2049.915
2050.238

A
 2050.637
 2050.977
 2051.390
 2051.550
 5 2052.991
 2053.577
 2053.863
 2054.433
 2054.508
 10 2058.570
 2059.085
 2059.924

B
 2050.630
 2050.975
 2051.385
 2051.547
 5 2052.987
 2053.572
 2053.857
 2054.425
 2054.504
 10 2054.771
 2057.413
 2058.233
 2058.567
 2059.082
 15 2059.836

C
 2050.393
 2050.487
 2050.637
 2050.858
 5 2050.979
 2051.043
 2051.127
 2051.391
 2051.552
 10 2051.791
 2051.994
 2052.251
 2052.718
 2052.991
 15 2053.169
 2053.579
 2053.863
 2054.075
 2054.433
 20 2054.510
 2054.775
 2054.973
 2055.412
 2055.857
 25 2056.301
 2056.731
 2057.418
 2058.237
 2058.494
 30 2058.571
 2058.885
 2058.961
 2059.088
 2059.217
 35 2059.763
 2059.845

D
 2050.289
 2050.382
 2050.622
 2050.852
 5 2051.031
 2051.377
 2051.543
 2051.976
 2052.242
 10 2052.701
 2052.979
 2053.569
 2053.849
 2054.417
 15 2054.500
 2054.768
 2054.959
 2055.402
 2055.852
 20 2056.286
 2056.723
 2057.156
 2057.404
 2058.024
 25 2058.229
 2058.478
 2058.563
 2058.868
 2058.957
 30 2059.080
 2059.197
 2059.749
 2059.836

A

2060.478
2062.546
2063.082
2064.833
5 2065.013
2065.841
2066.612
2067.276
2067.777
10 2070.231

B

2060.448
2061.868
2062.544
2063.077
5 2064.792
2064.998
2065.809
2066.608
2067.273
10 2067.769
2067.853
2068.886
2069.337
2070.246

C

2060.413
2060.528
2061.875
2062.136
5 2062.548
2063.085
2065.066
2065.910
2066.612
10 2067.275
2067.630
2067.778
2067.990
2068.358
15 2068.891
2068.922
2069.082
2069.347
2069.441
20 2069.802
2070.156
2070.246

D

2060.354
2061.859
2062.127
2062.540
5 2063.074
2065.156
2065.978
2066.600
2067.265
10 2067.764
2067.976
2068.338
2068.876
2069.076
15 2069.332
2069.429
2069.788
2070.142
2070.247

A

2071.946
2072.537
2073.372
2073.990
5 2074.231
2075.716
2076.033
2076.703
2076.970
10 2077.043
2078.161
2078.239
2078.307
2078.565
15 2079.930
2080.204

B

2071.943
2072.530
2073.367
2073.985
5 2074.221
2075.713
2076.023
2076.696
2076.962
10 2078.156
2078.556
2079.927
2080.242

C

2070.155
2070.558
2070.858
2071.201
5 2071.551
2071.678
2071.948
2072.226
2072.537
10 2072.900
2073.243
2073.375
2073.571
15 2073.991
2074.187
2074.236
2074.555
2075.173
2075.630
20 2075.717
2075.804
2075.896
2076.032
2076.107
25 2076.702
2076.970
2077.638
2077.913
2078.161
30 2078.546
2078.599
2079.931
2080.166

D

2070.142
2070.503
2070.843
2071.193
5 2071.540
2071.672
2071.941
2072.522
2072.888
10 2073.364
2073.978
2074.150
2074.534
15 2075.621
2075.166
2075.709
2075.890
2076.017
2076.685
20 2076.855
2077.629
2078.156
2078.211
2078.494
25 2078.542
2079.918
2080.170

A

2081.867
2083.783
2085.083
2085.499
5 2087.403
2089.738
2090.097

B

2081.863
2082.901
2083.445
2083.779
5 2084.980
2085.079
2085.359
2085.491
2086.829
10 2087.387
2089.731
2090.020
2090.080

C

2081.226
2081.874
2082.907
2083.453
5 2083.784
2084.987
2085.083
2085.367
2085.499
10 2086.320
2086.607
2086.833
2087.366
15 2088.645
2088.733
2089.713
2089.761
2089.990
20 2090.182

D

2081.216
2081.829
2082.892
2083.438
5 2083.770
2084.977
2085.072
2085.361
2085.483
10 2086.313
2086.599
2086.826
2087.304
15 2088.638
2088.726
2089.669
2090.205

A

2090.031
2090.097
2090.357
2090.602
5 2090.968
2091.087
2092.346
2092.982
2093.311
10 2093.403
2093.858
2094.091
2094.864
2095.055
15 2095.244
2095.491
2095.573
2096.317
2097.363
20 2098.545
2099.077
2099.967
2100.112

B

2090.082
2090.354
2090.965
2091.082
5 2092.344
2092.979
2093.308
2093.400
2093.854
10 2094.086
2095.051
2095.239
2095.485
15 2095.573
2096.311
2097.356
2098.537
2099.071
2099.963

C

2090.182
2090.358
2090.971
2091.088
5 2091.746
2092.348
2092.983
2093.313
2093.403
10 2093.495
2093.638
2093.859
2094.091
2094.866
15 2095.055
2095.246
2095.494
2096.319
2097.019
20 2097.366
2098.546
2099.081
2099.968

D

2090.205
2090.891
2090.962
2091.078
5 2091.738
2092.339
2092.975
2093.301
2093.629
10 2093.851
2094.078
2094.850
2095.042
15 2095.232
2095.480
2096.304
2097.015
2097.328
2097.927
20 2098.530
2099.067
2099.460
2099.957

A

2100.427
2102.988
2103.255
2103.327
5 2103.526
2105.780
2106.343
2107.414
2107.540
10 2107.626
2107.685
2108.948
2110.264

B

2100.422
2102.982
2103.320
2103.522
5 2104.638
2105.773
2106.336
2107.535
2108.946
10 2110.266

C

2100.439
2102.988
2103.128
2103.329
5 2103.526
2104.641
2105.780
2106.344
2107.545
10 2108.646
2108.949
2109.571
2109.998
2110.266

D

2100.388
2101.777
2102.978
2103.106
5 2103.315
2103.517
2104.633
2105.767
2106.320
10 2107.515
2108.635
2109.941
2109.555
2109.983
15 2110.128

A

2240.437
2241.112
2241.500
2241.779
2242.453
2242.732
2243.194
2243.500
2243.758
2243.879
2244.397
2245.032
2245.645
2245.024
2246.291
2246.780
2246.920
2247.675
2249.689
2249.850
2250.250

5

10

15

20

B

2240.428
2241.109
2241.494
2241.779
2242.444
2242.726
2243.079
2243.563
2243.753
2243.876
2244.395
2244.697
2245.029
2245.644
2246.021
2246.289
2246.776
2247.667
2247.994
2248.699
2249.680
2249.847
2250.254

5

10

15

20

C

2240.439
2240.960
2241.113
2241.500
2241.784
2241.865
2242.450
2242.731
2243.105
2243.437
2243.579
2243.760
2243.881
2244.398
2244.703
2244.835
2245.034
2245.651
2246.027
2246.291
2246.634
2246.782
2246.893
2247.513
2247.676
2248.002
2248.111
2248.616
2248.705
2249.299
2249.501
2249.691
2249.852
2250.250

5

10

15

20

25

30

D

2240.422
2240.951
2241.104
2241.487
2241.773
2242.220
2242.438
2242.714
2243.096
2243.429
2243.562
2243.745
2243.873
2244.390
2244.693
2244.811
2245.025
2245.644
2246.017
2246.274
2246.767
2247.499
2247.661
2247.987
2248.100
2248.697
2249.279
2249.492
2249.674
2249.842
2250.255

5

10

15

20

25

30

A
2230.205
2230.984
2231.134
2231.752
5 2232.518
2233.210
2233.276
2234.019
2234.755
10 2235.114
2235.496
2235.634
2235.733
2236.257
15 2236.942
2237.266
2237.648
2237.771
2238.099
20 2238.362
2238.940
2239.060
2239.394
2239.489
25 2239.752
2240.249

B
2230.203
2230.982
2231.129
2231.744
5 2232.514
2232.588
2233.203
2233.346
2234.010
10 2234.749
2235.486
2235.629
2235.729
2236.254
15 2236.931
2237.261
2237.647
2237.767
2238.095
20 2238.356
2238.935
2239.056
2239.485
25 2239.748
2240.250

C
2230.208
2230.986
2231.134
2231.753
5 2232.518
2232.594
2232.942
2233.210
2233.363
10 2234.021
2234.753
2235.115
2235.497
2235.636
15 2235.738
2236.258
2236.943
2237.267
2237.652
20 2237.773
2237.979
2238.099
2238.269
25 2238.364
2238.940
2239.060
2239.397
2239.492
30 2239.752
2240.245

D
2230.199
2230.978
2231.118
2231.484
5 2231.740
2232.118
2232.502
2232.586
2232.724
10 2232.931
2233.193
2233.345
2234.003
2234.745
15 2235.113
2235.480
2235.625
2235.722
2236.238
20 2236.926
2237.255
2237.645
2237.761
2237.973
25 2238.090
2238.257
2238.347
2238.927
2239.047
30 2239.481
2239.739
2239.878
2240.250

A

2220.355
2222.037
2223.807
2224.767
5 2225.144
2225.862
2226.227
2227.046
2227.397
10 2227.842
2228.635
2229.422
2230.205

B

2220.788
2222.033
2223.278
2223.798
5 2224.759
2225.141
2225.858
2226.225
2227.054
10 2227.393
2227.842
2228.632
2229.419
15 2229.796
2229.990
2230.203

C

2220.358
2220.797
2221.218
2222.037
5 2222.283
2223.807
2224.769
2225.146
2225.410
10 2225.863
2226.230
2226.746
2227.053
15 2227.396
2227.844
2228.636
2229.424
20 2229.805
2229.997
2230.208

D

2220.348
2220.536
2220.781
2221.203
5 2221.280
2222.027
2222.274
2222.726
2222.906
10 2223.444
2223.791
2224.150
2224.571
15 2224.753
2224.846
2225.138
2225.398
2225.548
20 2225.850
2226.221
2226.736
2226.923
2227.033
25 2227.377
2227.584
2227.826
2228.254
2228.626
30 2228.918
2229.416
2229.572
2229.788
2229.879
35 2229.996
2230.199

A
 2210.069
 2210.522
 2211.396
 2211.516
 5 2211.616
 2211.707
 2212.326
 2212.539
 2212.612
 10 2213.243
 2213.401
 2213.484
 2214.156
 2214.354
 15 2215.061
 2215.673
 2215.958
 2216.226
 2216.855
 20 2217.737
 2218.062
 2218.520
 2218.609
 2218.843
 25 2219.425
 2219.504
 2220.236

B
 2210.062
 2210.518
 2211.393
 2211.512
 5 2211.611
 2212.148
 2212.321
 2212.532
 2213.237
 10 2213.395
 2213.483
 2214.148
 2214.351
 15 2215.055
 2215.665
 2215.946
 2216.223
 2216.851
 20 2217.702
 2218.057
 2218.515
 2218.840
 2219.419
 2220.243

C
 2210.069
 2210.523
 2211.399
 2211.518
 5 2211.618
 2212.152
 2212.327
 2212.540
 2213.243
 10 2213.403
 2214.157
 2214.356
 2215.066
 15 2215.673
 2215.954
 2216.229
 2216.855
 2217.711
 20 2218.062
 2218.523
 2218.843
 2219.426
 2220.234

D
 2210.052
 2210.511
 2211.389
 2211.512
 5 2211.594
 2212.140
 2212.309
 2212.524
 2212.798
 10 2213.234
 2213.390
 2213.601
 2214.144
 2214.344
 15 2215.049
 2215.195
 2215.657
 2215.948
 2216.219
 20 2216.847
 2217.526
 2217.725
 2218.054
 2218.298
 25 2218.503
 2218.832
 2219.047
 2219.415
 2219.799
 30 2220.247

A
2200.304
2200.730
2201.746
2202.742
5 2203.729
2204.710
2205.216
2205.684
2205.879
10 2206.206
2206.275
2206.414
2206.651
2206.733
15 2206.791
2206.969
2207.620
2208.572
2208.734
20 2208.873
2209.514
2210.069
2210.140

B
2200.296
2200.734
2201.736
2202.734
5 2203.720
2204.708
2205.207
2205.678
2205.869
10 2206.196
2206.408
2206.645
2206.964
2207.609
15 2208.566
2208.726
2208.869
2209.508
2210.062
20 2210.196

C
2200.303
2200.741
2201.746
2202.745
5 2203.161
2203.729
2204.712
2205.049
2205.213
10 2205.685
2205.878
2206.207
2206.270
2206.419
15 2206.654
2206.967
2207.422
2207.510
2207.619
20 2208.572
2208.735
2208.876
2209.520
2210.069
25 2210.195

D
2200.288
2200.731
2201.729
2202.605
5 2203.727
2203.143
2203.488
2203.716
2204.375
10 2204.704
2205.194
2205.675
2205.861
2206.194
15 2206.404
2206.639
2206.953
2207.415
2207.491
20 2207.604
2208.563
2208.722
2208.864
2209.505
25 2210.052

A

2190.010
2190.603
2191.721
2193.035
5 2193.114
2193.354
2194.376
2194.586
2195.629
10 2196.653
2197.693
2198.528
2198.603
2198.712
15 2198.736
2199.920
2200.098

B

2190.595
2191.718
2192.474
2193.027
5 2193.114
2193.351
2194.373
2194.583
2196.660
10 2197.688
2198.523
2198.598
2198.702
15 2199.732
2199.920
2200.037

C

2190.013
2190.344
2190.603
2191.420
5 2191.722
2192.108
2192.477
2193.037
2193.356
10 2193.534
2194.378
2194.586
2195.098
15 2195.632
2196.664
2197.693
2198.529
2198.604
20 2198.713
2198.736
2199.923

D

2190.003
2190.335
2190.588
2191.408
5 2191.711
2192.090
2192.470
2193.022
2193.354
10 2193.527
2194.366
2194.576
2195.084
2195.267
15 2195.615
2196.209
2196.655
2197.143
2197.685
20 2198.073
2198.515
2198.593
2198.707
2198.990
25 2199.722
2199.913

A

2181.338
2181.422
2183.221
2184.741
5 2185.209
2185.275
2186.635
2186.911
2186.996
10 2187.117
2187.375
2187.698
2189.277
15 2189.427
2189.656
2190.010
2190.263

B

2181.333
2183.212
2184.736
2185.205
5 2185.271
2186.630
2186.906
2187.115
2187.371
10 2187.691
2188.287
2189.420
2189.651
2190.007
15 2190.265

C

2181.341
2183.222
2184.743
2184.887
5 2185.274
2185.998
2186.122
2186.635
2186.917
10 2187.122
2187.378
2187.698
2188.190
2188.292
15 2189.277
2189.427
2189.659
2190.014
2190.264

D

2180.395
2181.316
2182.654
2182.934
5 2183.207
2183.463
2183.771
2184.485
2184.732
10 2184.882
2185.258
2185.990
2186.114
2186.632
15 2186.880
2187.106
2187.361
2187.686
2188.173
20 2188.281
2188.483
2189.258
2189.413
2189.646
25 2190.003
2190.258

A

2171.254
2172.319
2172.479
2172.753
2175.031
2176.277
2178.895
2179.764
2180.256

5

B

2171.245
2171.808
2172.315
2172.474
2172.744
2175.028
2176.271
2178.890
2179.760
2180.258

5

10

C

2171.253
2171.815
2172.140
2172.319
2172.481
2172.751
2174.224
2175.032
2176.281
2177.019
2178.897
2179.766
2180.258

5

10

D

2171.240
2171.806
2172.133
2172.308
2172.469
2172.740
2173.480
2174.215
2174.646
2175.021
2175.812
2176.267
2177.006
2178.122
2178.886
2179.260
2179.758
2180.259

5

10

15

A

2160.689
2161.719
2162.008
2162.885
5 2163.427
2163.222
2165.596
2166.108
2167.339
10 2167.413
2167.767
2169.190
2170.256

B

2160.687
2161.714
2162.006
2162.882
5 2163.422
2165.215
2165.593
2166.103
2167.331
10 2167.413
2167.765
2169.186
2170.254

C

2160.263
2160.692
2161.727
2162.010
5 2162.886
2163.425
2165.225
2165.598
2166.108
10 2167.340
2167.768
2169.193
2170.253

D

2160.247
2160.681
2161.668
2161.996
5 2162.871
2163.397
2165.211
2165.587
2166.094
10 2167.324
2167.758
2168.306
2169.183
2170.254

A

2150.858
2151.192
2152.552
2154.577
5 2154.708
2154.786
2154.996
2156.559
2156.643
10 2158.099
2158.300
2159.999
2160.145

B

2151.108
2151.553
2152.548
2154.340
5 2154.700
2154.992
2156.555
2158.096
2158.292
10 2159.995
2160.253

C

2150.855
2151.192
2151.556
2152.563
5 2154.046
2154.352
2154.709
2154.998
10 2155.292
2156.560
2158.100
2158.302
2160.001
2160.256

D

2150.842
2151.178
2151.399
2151.546
5 2152.520
2153.522
2154.036
2154.337
10 2154.695
2154.989
2155.281
2156.546
2157.436
15 2158.091
2158.281
2159.992
2160.249

A

2141.518
2142.246
2144.710
2144.805
5 2145.465
2145.676
2147.399
2148.183
2148.335
10 2149.122
2150.247

B

2141.513
2142.243
2144.706
2144.800
5 2145.457
2145.671
2147.395
2148.180
2148.332
10 2148.477
2148.622
2149.118
2150.247

C

2141.518
2142.248
2143.842
2144.804
5 2145.450
2145.676
2147.404
2148.185
2148.337
10 2148.479
2148.629
2149.123
2149.623
2150.245

D

2141.504
2142.238
2143.833
2144.702
5 2144.788
2145.422
2145.661
2147.370
2148.176
10 2148.326
2148.458
2148.617
2149.113
2149.604
15 2150.246

A

5 2131.576
2135.529
2136.137
2136.670
2137.218
2137.357
2138.182
2138.271
2139.323
10 2139.473
2139.807
2139.919
2140.246

B

5 2131.571
2135.525
2136.733
2136.129
2136.668
2137.213
2137.344
2138.178
2139.317
10 2139.469
2139.804
2139.918
2140.242

C

5 2130.041
2131.579
2132.546
2135.529
2135.738
2136.103
2136.160
2136.678
2137.233
10 2137.351
2138.184
2139.311
2139.475
2139.809
15 2139.923
2140.243

D

5 2130.029
2131.567
2132.540
2132.891
2135.520
2136.093
2136.156
2136.671
2137.186
10 2138.164
2139.269
2139.797
2139.908
2140.242

	A	B	C	D
	2121.267	2121.260	2121.267	2121.254
	2121.409	2121.414	2121.420	2121.404
	2121.641	2121.637	2121.644	2121.633
5	2121.733	2121.731	2121.736	2121.723
	2122.449	2122.446	2122.450	2121.888
	2122.748	2122.833	2122.839	2122.438
	2122.838	2123.168	2123.172	2122.824
	2123.171	2123.616	2123.620	2123.162
	2123.621	2123.690	2123.692	2123.605
10	2123.692	2124.282	2124.039	2123.685
	2124.286	2124.878	2124.287	2124.030
	2124.885	2126.124	2126.129	2124.265
	2126.127	2127.152	2127.161	2124.861
	2127.157	2127.671	2127.360	2126.122
15	2127.678	2128.441	2127.682	2127.150
	2128.769	2128.760	2128.333	2127.352
	2129.712	2129.504	2128.446	2127.666
	2130.233	2129.709	2128.769	2128.328
		2130.236	2129.512	2128.437
			2129.714	2128.754
			2130.041	2128.501
			2130.228	2129.704
				2130.028
				2130.193

A

2110.345
2111.538
2113.629
2113.803
5 2114.310
2114.424
2114.521
2114.637
2114.995
10 2115.625
2116.004
2116.217
2116.333
2116.423
15 2119.226
2119.384
2119.676
2120.230

B

2110.341
2111.625
2113.800
2114.008
5 2114.307
2114.417
2114.518
2114.631
2114.977
10 2115.617
2116.000
2116.214
2116.329
2119.223
15 2119.380
2119.669
2120.234

C

2110.349
2111.630
2113.805
2114.011
5 2114.314
2114.423
2114.637
2114.975
2115.627
10 2116.005
2116.220
2116.333
2118.572
2119.228
15 2119.387
2119.676
2120.184

D

2110.128
2110.337
2111.617
2113.796
5 2114.004
2114.399
2114.623
2115.062
2115.609
10 2115.997
2116.210
2116.321
2118.562
2119.219
15 2119.376
2119.668
2120.172

A

	2250.468
	2251.418
	2251.680
	2251.866
5	2252.295
	2253.189
	2253.643
	2254.125
	2254.602
10	2254.987
	2255.298
	2255.388
	2255.448
	2255.581
15	2255.912
	2256.450
	2256.612
	2256.694
	2256.765
20	2257.454
	2257.660
	2258.535
	2258.684
25	2258.766
	2258.835
	2259.179
	2259.401
	2260.267

B

	2250.448
	2251.415
	2251.670
	2251.863
5	2252.290
	2253.190
	2253.636
	2254.594
	2255.293
10	2255.381
	2255.576
	2256.446
	2256.605
	2256.695
15	2256.754
	2257.449
	2258.680
	2258.763
	2258.833
20	2259.170
	2259.394
	2260.263

C

	2250.459
	2251.015
	2251.420
	2251.681
5	2251.867
	2252.118
	2252.295
	2252.871
	2253.191
10	2253.644
	2253.751
	2254.126
	2254.603
	2254.783
15	2254.990
	2255.298
	2255.392
	2255.583
	2255.912
20	2256.452
	2256.615
	2256.768
	2257.454
	2257.665
25	2258.534
	2258.688
	2258.765
	2259.177
30	2259.402
	2260.028

D

	2250.439
	2250.998
	2251.409
	2251.562
5	2251.663
	2251.855
	2252.111
	2252.284
	2252.653
10	2252.861
	2253.187
	2253.631
	2253.733
	2253.823
15	2254.113
	2254.246
	2254.586
	2254.762
	2254.978
20	2255.284
	2255.360
	2255.571
	2255.903
25	2256.272
	2256.444
	2256.600
	2256.754
	2257.443
30	2257.849
	2258.677
	2259.162
	2259.392
	2260.256

A

2260.268
2260.546
2261.271
2261.974
5 2262.842
2263.122
2263.670
2264.519
10 2264.946
2265.309
2266.751
2268.530
2269.674

C

2260.270
2260.549
2260.823
2261.272
5 2261.976
2262.844
2263.125
2263.670
10 2263.981
2264.520
2264.948
2265.309
2266.169
2266.752
15 2267.674
2268.532
2268.856
2269.676

D

2260.254
2260.541
2260.813
2261.263
5 2261.964
2262.833
2263.109
2263.652
10 2263.970
2264.502
2264.938
2265.299
2266.153
2266.739
15 2267.666
2268.521
2268.838
2269.664

A
 5 2270.283
 2270.766
 2271.722
 2272.020
 2272.406
 2272.987
 2273.063
 2273.725
 2274.323
 10 2274.426
 2274.707
 2274.853
 2275.015
 2275.409
 15 2277.071
 2277.436
 2277.533
 2277.790
 2278.054
 20 2278.712
 2278.245
 2279.832
 2279.976

B
 5 2270.277
 2270.761
 2271.717
 2272.010
 2272.399
 2272.982
 2273.058
 2273.718
 2274.315
 10 2274.418
 2274.703
 2274.849
 2275.012
 2275.403
 15 2275.515
 2276.544
 2277.065
 2277.525
 20 2278.051
 2278.705
 2279.960

C
 5 2270.285
 2270.768
 2271.722
 2272.021
 2272.409
 2272.987
 2273.065
 2273.728
 2274.322
 10 2274.426
 2274.707
 2274.854
 2275.018
 2275.410
 15 2275.526
 2276.331
 2276.548
 2276.648
 20 2277.074
 2277.433
 2277.534
 2277.793
 2278.055
 2278.547
 25 2278.713
 2278.950
 2279.246
 2279.833
 2279.978

D
 5 2270.274
 2270.758
 2271.707
 2272.003
 2272.393
 2272.972
 2273.049
 2273.714
 2274.313
 10 2274.411
 2274.693
 2274.836
 2275.004
 2275.400
 15 2275.516
 2276.316
 2276.538
 2276.641
 20 2277.060
 2277.517
 2277.781
 2278.044
 2278.698
 2278.939
 25 2279.235
 2279.825
 2279.957

A	B	C	D
2280.323	2280.316	2280.324	2280.313
2280.671	2281.548	2280.672	2280.661
2281.389	2281.779	2280.949	2280.940
2281.551	2281.909	2281.222	2281.212
5 2281.785	5 2282.213	5 2281.391	5 2281.381
2282.218	2283.455	2281.553	2281.542
2282.478	2284.049	2281.785	2281.769
2282.783	2284.252	2281.913	2281.903
10 2283.461	10 2284.441	10 2282.064	10 2282.032
2284.054	2285.583	2282.221	2282.210
2284.149	2286.781	2282.480	2282.463
2284.258	2286.913	2282.784	2282.773
2284.587	2287.291	2283.465	2282.924
15 2284.707	15 2287.883	15 2284.054	15 2283.275
2284.808	2288.774	2284.260	2284.450
2285.497	2289.094	2284.443	2284.044
2285.790	2289.234	2284.589	2284.137
2286.141	2289.887	2284.708	2284.438
20 2286.919	20 2290.151	20 2284.811	20 2284.572
2287.299	2287.447	2285.022	2284.692
2287.447	2287.889	2285.499	2284.795
2287.889	2288.115	2285.700	2285.013
25 2288.778	2288.778	25 2286.064	25 2285.387
2289.095	2289.241	2286.140	2285.490
2289.241	2289.892	2286.635	2285.682
2289.892	2290.159	2286.921	2285.774
30 2290.237	30 2290.239	30 2287.299	30 2286.047
		30 2287.454	30 2286.131
		2287.891	2286.367
		2288.116	2286.618
		2288.474	2286.909
		2288.779	2287.078
		35 2289.096	35 2287.283
		2289.243	2287.442
		2289.385	2287.877
		2289.540	2288.104
		2289.659	2288.457
		40 2289.892	40 2288.766
		2290.157	2289.083
			2289.232
			2289.378
			2289.532
			2289.650
			45 2289.876
			2290.142

A	B	C	D
2290.159	2290.151	2290.157	2290.142
2290.237	2290.232	2290.239	2290.523
2290.984	2290.981	2290.542	2290.626
2291.067	2291.062	2290.636	2290.982
2291.248	2291.247	2290.988	2291.045
2291.541	2291.536	2291.066	2291.233
2291.673	2291.669	2291.249	2291.527
2292.216	2292.217	2291.543	2291.665
2293.087	2293.083	2291.674	2292.212
2293.380	2293.370	2292.221	2292.435
2293.807	2293.799	2292.451	2292.559
2294.115	2294.098	2292.574	2293.076
2294.349	2294.470	2293.089	2293.366
2294.475	2295.486	2293.383	2293.581
2295.107	2295.834	2293.603	2293.793
2295.492	2296.042	2293.808	2294.099
2295.839	2296.440	2293.898	2294.332
2296.049	2296.721	2294.111	2294.466
2296.446	2297.176	2294.350	2294.790
2296.728	2297.569	2294.476	2295.097
2297.103	2297.969	2294.806	2295.237
2297.574	2298.266	2295.108	2295.477
2297.977	2298.499	2295.254	2295.569
2298.271	2298.950	2295.493	2295.830
2298.509	2299.419	2295.583	2296.040
2298.968	2299.634	2295.842	2296.434
2299.120	2299.781	2296.052	2296.711
2299.637	2300.073	2296.448	2297.050
2299.787		2296.579	2297.171
2299.922		2296.728	2297.438
2300.078		2296.973	2297.559
		2297.185	2297.964
		2297.456	2298.261
		2297.575	2298.500
		2297.973	2298.957
		2298.273	2299.113
		2298.511	2299.411
		2298.966	2299.495
		2299.121	2299.627
		2299.419	2299.777
		2299.508	2299.906
		2299.639	2300.064
		2299.789	
		2299.924	
		2300.079	

A
 2300.079
 2300.470
 2300.722
 2300.868
 5 2301.056
 2301.429
 2301.676
 2301.802
 2301.802
 10 2301.973
 2302.306
 2302.635
 2302.900
 2303.328
 2303.524
 15 2303.688
 2304.090
 2304.283
 2304.625
 2304.790
 20 2305.198
 2305.512
 2305.681
 2305.892
 2306.145
 25 2306.419
 2306.606
 2306.918
 2307.315
 2307.442
 30 2307.645
 2307.982
 2308.165
 2308.564
 2309.020
 35 2309.266
 2309.591
 2309.799
 2309.994
 2310.204

B
 2300.464
 2300.717
 2301.049
 5 2302.302
 2302.627
 2303.521
 2303.680
 2304.086
 10 2304.773
 2305.184
 2305.676
 2305.879
 2306.599
 15 2306.897
 2307.436
 2307.641
 2308.164
 2308.558
 20 2309.018
 2309.583
 2310.052
 2310.207

C
 2300.079
 2300.472
 2300.579
 5 2300.730
 2300.868
 2301.059
 2301.429
 2301.677
 2301.806
 10 2301.973
 2302.307
 2302.635
 2303.328
 2303.525
 15 2303.689
 2304.090
 2304.284
 2304.624
 2304.784
 20 2305.199
 2305.511
 2305.682
 2305.891
 2306.146
 25 2306.419
 2306.608
 2306.895
 2307.317
 2307.442
 30 2307.647
 2307.984
 2308.167
 2308.565
 35 2308.975
 2309.028
 2309.267
 2309.593
 2309.803
 2309.996
 40 2310.056
 2310.204

D
 2300.084
 2300.457
 2300.560
 2300.714
 5 2300.860
 2301.045
 2301.410
 2301.665
 2301.796
 10 2301.960
 2302.293
 2302.369
 2302.612
 2302.879
 15 2303.310
 2303.515
 2303.674
 2303.815
 2304.081
 20 2304.269
 2304.610
 2304.736
 2305.183
 25 2305.503
 2305.670
 2305.869
 2306.134
 2306.410
 30 2306.593
 2307.427
 2307.637
 2307.817
 35 2307.975
 2308.159
 2308.552
 2308.957
 2309.250
 2309.577
 40 2309.784
 2310.048
 2310.190

A		B		C		D	
	2310.204		2310.051		2310.055		2310.048
	2310.501		2310.494		2310.204		2310.190
	2310.683		2311.040		2310.352		2310.337
5	2311.076		2311.500	5	2310.502	5	2310.485
	2311.507		2311.957		2310.683		2310.667
	2311.746		2312.406		2311.077		2311.023
	2311.966		2313.085		2311.509		2311.495
	2312.411		2313.388		2311.748		2311.738
	2312.616		2314.294	10	2311.968	10	2311.953
10	2313.101		2314.566		2312.414		2312.402
	2313.399		2315.091		2312.616		2312.608
	2313.704		2316.155		2313.095		2312.844
	2314.301		2317.072		2313.399		2313.069
15	2314.572	15	2317.991		2313.705	15	2313.384
	2315.117		2318.548		2314.303		2313.695
	2316.164		2319.808		2314.571		2314.287
	2317.132		2320.167		2315.093		2314.557
	2317.672				2315.960		2315.080
20	2317.997			20	2316.155	20	2315.950
	2318.521				2316.758		2316.147
	2318.948				2317.075		2316.748
	2319.183				2317.673		2317.052
	2319.635			25	2317.997		2317.659
25	2319.815				2318.520	25	2317.984
	2320.174				2319.815		2318.508
					2319.835		2318.942
					2320.174		2319.799
							2320.157

A

2320.173
2320.457
2320.747
2321.173
5 2321.604
2322.082
2322.522
2322.967
2323.368
10 2323.696
2323.769
2324.271
2324.488
15 2325.831
2325.995
2326.743
2327.699
2328.532
2329.373
20 2330.201

B

2320.740
2321.229
2321.595
5 2322.078
2322.514
2323.123
2323.697
2323.766
2324.265
10 2324.909
2325.989
2326.714
2327.689
15 2328.829
2329.368

C

2320.174
2320.458
2320.746
5 2321.229
2321.607
2322.083
2322.522
2323.349
2323.702
10 2323.774
2323.965
2324.272
2324.818
15 2325.995
2326.680
2327.700
2328.796
2329.375
2330.205

D

2320.157
2320.450
2320.729
5 2321.171
2321.590
2322.075
2322.507
2323.357
2323.761
10 2323.947
2324.256
2325.058
2325.983
15 2326.779
2326.983
2327.682
2328.464
2329.361
2330.189

A

2330.201
2330.655
2331.026
2331.843
5 2332.417
2333.464
2334.130
2335.060
2335.926
10 2336.606
2337.478
2338.166
2338.447
2338.946
15 2339.294

B

2330.403
2331.019
2331.842
5 2332.592
2333.460
2334.281
2335.054
2336.125
2336.541
10 2337.834
2339.562

C

2330.205
2331.027
2331.844
5 2332.650
2333.062
2333.464
2334.387
2335.061
2335.153
10 2335.724
2336.609
2337.476
2338.167
2338.445
15 2339.559
2340.238

D

2330.189
2331.010
2331.837
5 2332.587
2333.046
2333.450
2334.346
2335.046
2336.094
10 2336.596
2337.835
2338.155
2338.432
2339.102
15 2340.219

A
 2340.458
 2341.235
 2341.933
 2342.777
 5 2343.394
 2343.740
 2344.117
 2344.826
 2344.994
 10 2345.527
 2346.060
 2346.233
 2346.924
 2347.551
 15 2348.033
 2348.294
 2348.631
 2348.988
 2349.205
 20 2349.647
 2349.914

B
 2340.454
 2341.213
 2341.928
 2342.898
 5 2343.386
 2344.219
 2344.815
 2345.523
 2346.154
 10 2346.911
 2347.460
 2347.625
 2348.289
 15 2348.628
 2348.980
 2349.640
 2349.878

C
 2340.459
 2341.182
 2341.933
 2342.755
 5 2343.396
 2343.740
 2344.548
 2344.825
 2344.995
 10 2345.529
 2346.236
 2346.924
 2347.539
 15 2348.034
 2348.295
 2348.637
 2348.990
 2349.206
 20 2349.647
 2349.881

D
 2340.442
 2341.268
 2341.923
 2342.890
 5 2343.376
 2343.726
 2344.523
 2344.808
 2344.978
 10 2345.520
 2346.150
 2346.911
 2347.455
 15 2348.020
 2348.278
 2348.630
 2348.973
 2349.194
 20 2349.637
 2349.869

A
 2350.310
 2350.968
 2351.434
 2352.268
 5 2353.017
 2353.511
 2354.503
 2354.787
 2355.430
 10 2356.060
 2356.611
 2357.449
 2357.826
 2358.918
 15 2359.546
 2360.165

B
 2350.319
 2350.962
 2351.517
 2352.264
 5 2353.052
 2353.533
 2354.557
 2355.426
 2356.072
 10 2356.635
 2357.460
 2358.998
 2360.163

C
 2350.330
 2350.969
 2351.367
 2351.633
 5 2352.268
 2353.078
 2353.543
 2354.598
 2355.429
 10 2356.114
 2356.643
 2357.461
 2358.896
 15 2359.547
 2360.198

D
 2350.314
 2350.950
 2351.495
 2352.255
 5 2353.087
 2353.526
 2354.752
 2356.101
 2356.634
 10 2357.808
 2359.035
 2360.128

A

2360.672
2361.639
2362.339
2362.919
2363.393
2364.258
2365.497
2365.924
2366.730
2368.001
2368.963
2369.152
2370.208

5

10

B

2361.671
2362.931
2364.318
2365.563
2366.821
2367.968
2369.238
2370.167

5

C

2360.671
2361.716
2363.019
2363.395
2364.311
2365.615
2365.924
2366.823
2368.027
2369.238
2370.172

5

10

D

2361.760
2363.022
2364.376
2365.532
2366.839
2367.972
2369.257
2370.177

5

A
2370.348
2371.343
2372.471
2373.594
5 2374.691
2375.761
2376.807
2377.827
2378.816
10 2379.776

B
2370.324
2371.413
2372.432
2373.553
5 2374.649
2375.717
2376.771
2377.817
2378.797
10 2379.761

C
2370.328
2371.526
2372.609
2373.575
5 2373.720
2374.681
2375.789
2376.857
10 2376.847
2377.855
2378.820
2379.778

D
2370.256
2371.442
2372.411
2372.542
5 2373.539
2374.669
2375.708
2376.748
2377.816
10 2378.777
2379.756

H
2380.708
2381.615
2382.494
2383.353
5 2384.181
2384.990
2385.771
2386.525
2387.252
10 2387.953
2388.636
2389.289
2390.255

D
2380.699
2381.607
2382.489
2383.344
5 2384.176
2384.982
2385.760
2386.516
2387.246
10 2387.948
2388.631
2390.137

L
2380.710
2381.617
2382.497
2383.355
5 2384.183
2384.991
2385.772
2386.526
2387.253
10 2387.956
2388.637
2389.291
2389.534
2389.914
15 2390.258

L
2380.689
2381.600
2382.483
2383.337
5 2384.172
2384.975
2385.755
2386.509
2387.241
10 2387.945
2388.621
2389.274
2389.514
2389.904
15 2390.153

AD-A151 757

AN ATLAS OF PURE WATER VAPOR SPECTRA FROM 500 TO

3/5

5000/CN VOLUME 2. (U) OHIO STATE UNIV COLUMBUS

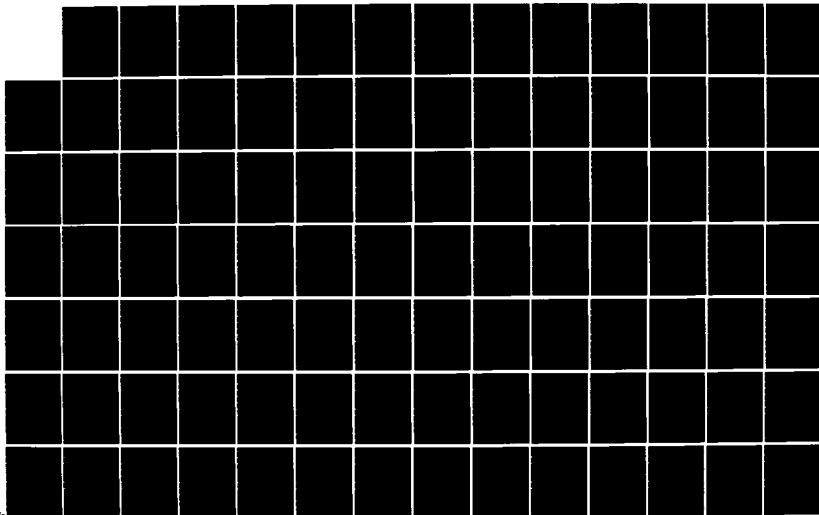
ELECTROSCIENCE LAB R K LONG ET AL. SEP 84

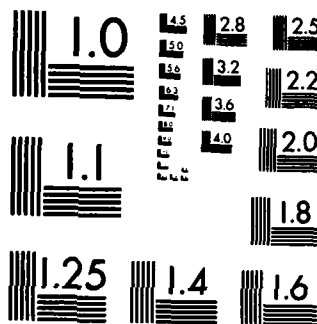
UNCLASSIFIED

ESL-713774-3-VOL-2 ARO-17603. 4-GS

F/G 7/4

NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

A
2400.199

B
2393.590
2400.077

C
2393.599
2400.002

D
2390.505
2391.086
2393.582
2399.980

PAGE 190

A
2410.216

B
2407.157
2410.227

C
2405.513
2407.165
2410.192

D
2405.501
2405.798
2407.148
2410.199

A
2420.233

B
2420.185

C
2420.237

D
2420.240

PAGE 192

A

2430.225

B

2429.921
2430.135

C

2422.706
2429.928
2430.197

D

2422.687
2429.916
2430.222

A
2440.139

B
2437.392
2440.135

C
2437.252
2437.396
2440.150

D
2437.240
2437.384
2440.230

PAGE 194

A
2450.120

B
2450.246

C
2440.415
2450.244

D
2440.403
2446.644
2450.122

A
2460.163

B
2460.193

C
2460.220

D
2451.944
2460.248

470

PAGE 196

A
2470.223

B
2470.154

C
2469.210
2470.237

D
2463.858
2469.192
2470.229

PAGE 197

A
2480.208

B
2480.089

C
2471.116
2480.196

D
2471.105
2480.207

A
2490.249

B
2490.193

C
2482.606
2485.521
2490.249

D
2482.592
2483.063
2485.607
2490.215

A
2500.241

B
2500.116

C
2497.243
2497.686
2500.191

D
2497.233
2497.672
2499.742
2500.184

PAGE 200

2510.169

2510.070

2502.295
2504.823
2510.194

2502.270
2502.657
2504.802
2505.699
5 2508.788
2510.193

PAGE 201

A

2641.990
2642.203
2642.560
2644.461
2649.343
2650.165

5

B

2641.985
2642.198
2642.552
2643.417
2644.455
2647.567
2648.260
2649.337
2650.123

5

C

2640.010
2641.991
2642.204
2642.561
2643.427
2644.461
2646.102
2646.610
2647.573
2648.266
2649.099
2649.343
2650.233

10

D

2641.973
2642.187
2642.541
2643.411
2644.443
2646.087
2646.596
2647.557
2648.251
2649.324
2650.163

5

10

A

2635.585
2635.671
2637.351
2638.551
5 2638.719
2638.804
2640.117

B

2635.579
2637.024
2637.345
2638.542
5 2638.712
2640.005

C

2635.588
2637.031
2637.351
2638.552
5 2638.720
2640.011
2640.220

D

2630.942
2635.571
2637.020
2637.333
2638.534
5 2638.704
2639.998
2640.217

A

2621.724
2621.810
2622.102
2622.854
5 2623.975
2624.541
2624.939
2625.005
2625.437
10 2625.517
2628.455
2628.531
2630.208

B

2621.718
2622.096
2622.563
5 2622.846
2623.971
2624.533
2624.937
2624.999
2625.428
10 2628.446
2630.201

C

2621.726
2622.103
2622.570
2622.854
5 2623.977
2624.542
2624.941
2625.005
2625.237
10 2625.439
2628.457
2629.704
2629.845
2630.150

D

2621.711
2622.084
2622.554
2622.836
5 2623.962
2624.523
2624.936
2625.224
2625.421
10 2628.437
2629.692
2630.255

A

2612.531
2612.619
2619.755
2620.217

B

2612.526
2619.750
2620.215

C

2611.982
2612.534
2619.756
2620.209

D

2612.519
2619.740
2620.243

A
2600.857
2605.173
2606.301
2606.383
5 2606.500
2607.103
2607.188
2607.445
2607.615
10 2608.156
2608.282
2608.369
2610.247

B
2600.850
2605.169
2606.293
2606.498
5 2607.099
2607.183
2607.439
2607.611
2608.153
10 2608.277
2610.221

C
2600.858
2604.660
2605.174
2606.303
5 2606.502
2607.106
2607.188
2607.448
2607.617
10 2608.157
2608.284
2610.150

D
2600.840
2604.651
2605.160
2606.286
5 2606.490
2607.096
2607.165
2607.433
2607.602
10 2608.146
2608.269
2610.252

A

2590.822
2591.214
2593.237
2593.610
2596.731
2600.225

5

B

2590.813
2591.205
2593.233
2593.604
2596.724
2600.228

5

C

2590.823
2591.214
2591.604
2593.239
2593.613
2596.731
2600.167

5

D

2590.803
2591.194
2591.585
2593.222
2593.599
2596.712
2600.194

5

A

2581.037
2582.298
2585.428
2588.995
2589.324
2589.568
2590.196

5

B

2581.033
2582.293
2585.420
2588.853
2588.991
2589.321
2589.563
2590.192

5

C

2581.038
2582.299
2585.429
2588.864
2588.997
2589.326
2589.570
2590.193

5

D

2581.024
2582.282
2585.409
2588.844
2588.985
2589.313
2589.557
2590.181

5

A

2570.130
2571.426
2573.509
2576.658
2578.597
2578.804
2580.144

5

B

2570.125
2570.883
2571.218
2571.423
2573.504
2576.648
2578.593
2578.800
2580.191

5

C

2570.130
2570.891
2571.151
2571.226
2571.429
2573.512
2576.659
2578.599
2578.805
2580.190

5

10

D

2570.118
2570.878
2571.138
2571.211
2571.417
2573.499
2576.639
2578.586
2578.788
2580.160

5

10

A

2562.292
2563.735
2563.840
2564.282
2565.123
2565.441
2570.130
2570.225

5

B

2562.288
2563.728
2563.833
2564.278
2565.119
2565.434
2570.125
2570.221

5

C

2562.293
2563.736
2563.843
2564.283
2565.124
2565.444
2567.295
2570.130
2570.219

5

D

2562.278
2563.720
2563.827
2564.270
2565.108
2565.427
2567.277
2569.787
2570.118

5

A

2553.100
2556.308
2560.210

B

2550.491
2552.579
2553.097
2556.302
5 2560.163

C

2550.502
2552.587
2552.777
2553.102
5 2556.311
2560.187

D

2550.483
2552.569
2552.767
2553.087
5 2556.296
2560.225

A

2544.662
2546.986
2547.818
2548.712
5 2549.899
2550.212

B

2544.655
2546.982
2547.809
2548.700
5 2549.889
2550.252

C

2544.662
2546.987
2547.819
2548.657
5 2548.708
2549.900
2550.244

D

2544.399
2544.645
2546.974
2547.801
5 2548.651
2549.881
2550.236

A
2530.527
2533.396
2540.252

B
2530.518
2533.061
2533.393
2534.354
2539.260
2540.259

C
2530.030
2530.527
2533.066
2533.398
2534.023
2534.359
2534.681
2539.268
2540.251

D
2530.018
2530.509
2533.054
2533.385
2533.995
2534.341
2534.663
2538.336
2539.248
2540.253

A
2530.250

B
2524.449
2530.197

C
2522.399
2524.457
2530.030
2530.247

D
2520.195
2522.384
2524.444
2530.017
5 2530.200

A
2520.204

B
2520.199

C
2510.521
2514.863
2516.261
2517.935
5 2518.006
2518.776
2520.205

D
2510.501
2510.932
2514.149
2514.846
2516.245
5 2517.918
2518.758
2520.195

A

2651.816
2655.452
2657.326
2659.266
5 2659.434
2660.128
2660.195

B

2651.812
2652.603
2654.238
2655.443
5 2657.319
2659.261
2659.427
2659.759
10 2660.116
2660.200

C

2651.817
2652.611
2654.250
2655.453
5 2657.327
2658.051
2659.268
2659.436
10 2659.768
2660.126

D

2651.799
2652.596
2653.357
2654.230
5 2655.434
2657.307
2658.030
2659.254
10 2659.417
2659.749
2660.105

A

2660.128
2660.504
2660.591
2660.647
5 2663.279
2663.363
2664.792
2666.281
2670.174

B

2660.117
2660.498
2660.645
2663.272
5 2664.782
2666.276
2670.165

C

2660.127
2660.507
2660.645
2662.025
5 2663.280
2664.793
2666.282
2669.777
2669.998
10 2670.139

D

2660.105
2660.491
2660.896
2662.004
5 2663.263
2664.773
2666.265
2669.762
2669.985
10 2670.202

A

2672.585
2672.673
2673.056
2674.546
5 2675.192
2676.533
2676.620
2677.713
2677.796
10 2680.138

B

2672.580
2673.054
2674.541
2675.183
5 2675.986
2676.361
2676.527
2677.706
2680.078

C

2671.047
2671.397
2672.369
2672.588
5 2673.059
2674.547
2675.193
2675.993
2676.372
10 2676.535
2677.715
2678.564
2678.695
2680.077

D

2671.037
2671.377
2672.572
2673.041
5 2674.532
2675.173
2675.978
2676.520
2677.698
10 2678.545
2678.678
2680.122

A

2680.746
2681.041
2685.958
2686.555
2688.363
2689.778
2690.087

5

B

2680.742
2681.036
2681.801
2684.666
2685.954
2686.201
2686.545
2687.250
2687.631
2688.355
2689.770
2690.203

5

10

C

2680.749
2681.044
2681.808
2682.881
2684.676
2685.959
2686.208
2686.556
2687.258
2687.638
2688.363
2689.779
2690.248

5

10

D

2680.732
2681.027
2681.794
2682.862
2684.659
2685.944
2686.195
2686.537
2687.243
2687.618
2688.343
2689.759
2690.205

5

10

A

5
2692.736
2693.326
2693.488
2694.697
2695.197
2696.205
2698.518
2699.413
2700.188

B

5
10
2692.731
2693.318
2693.482
2694.693
2695.188
2696.200
2698.154
2698.511
2699.405
2700.209

C

5
10
2692.737
2693.330
2693.489
2694.699
2695.198
2696.207
2698.159
2698.519
2699.416
2700.152

D

5
10
2692.719
2693.311
2693.469
2694.684
2695.178
2696.193
2698.143
2698.500
2699.397
2700.240

A

2702.137
2703.081
2706.204
2707.093
5 2708.165
2709.336
2710.028
2710.157

B

2702.131
2703.075
2704.439
2706.199
5 2707.085
2707.608
2707.920
2708.161
2709.096
10 2709.330
2710.021
2710.161

C

2702.139
2703.084
2704.451
2704.605
5 2705.501
2706.205
2706.359
2706.944
2707.097
10 2707.619
2707.733
2707.925
2708.167
2708.685
15 2708.882
2709.101
2709.337
2710.029
2710.168

D

2702.122
2703.343
2703.069
2704.431
5 2704.586
2705.124
2705.482
2706.188
2706.343
10 2707.076
2707.599
2707.713
2707.907
2708.151
15 2708.674
2708.862
2709.085
2709.318
2710.007

A		B		C		D	
	2710.029		2710.021		2710.029		2710.007
	2710.336		2710.330		2710.334		2710.314
	2710.479		2710.470		2710.480		2710.459
5	2710.945		2710.940		2710.948	5	2710.934
	2711.529		2711.521		2711.532		2711.512
	2712.734		2711.608		2711.619		2711.599
	2713.202		2712.725		2711.685		2712.298
	2713.862		2713.197		2712.738		2712.717
	2714.522		2713.859		2713.203	10	2713.189
10	2714.840		2714.519		2713.864		2713.849
	2714.957		2714.833		2714.523		2714.508
	2715.060		2714.949		2714.844		2714.826
	2715.397		2715.059		2714.961		2714.942
	2715.949		2715.394		2715.066		2715.049
15	2716.262		2715.943	15	2715.398	15	2715.383
	2716.796		2716.253		2715.951		2715.935
	2716.903		2716.790		2716.264		2716.244
	2717.445		2716.899		2716.800		2716.783
	2717.739		2717.440		2716.905	20	2716.888
20	2717.813		2717.729	20	2717.170		2717.126
	2718.539		2718.533		2717.447		2717.433
	2718.652		2718.646		2717.740		2717.720
	2718.763		2718.756		2718.542		2718.529
	2719.105		2719.101		2718.654		2718.636
25	2719.619	25	2719.615	25	2719.106	25	2719.093
	2719.975		2719.970		2719.622		2719.608
	2720.125		2720.118		2719.976		2719.959
	2720.214				2720.125		2720.106

A

2720.125
2720.317
2720.486
2720.548
5 2720.823
2720.911
2721.694
2721.878
2722.001
10 2722.656
2722.897
2723.326
2723.416
2723.673
15 2723.771
2724.198
2724.791
2725.672
2726.152
20 2726.050
2724.669
2724.891
2730.222

B

2720.119
2720.310
2720.483
2720.820
5 2720.907
2721.689
2721.882
2722.650
2722.891
10 2723.321
2723.667
2723.766
2724.194
2724.779
15 2725.668
2726.147
2728.045
2729.659
2729.887
20 2730.080

C

2720.125
2720.316
2720.490
2720.544
5 2720.827
2720.911
2721.696
2721.885
2722.656
10 2722.896
2723.328
2723.677
2723.772
2724.200
15 2724.791
2725.673
2726.153
2726.615
2727.086
20 2727.516
2727.860
2728.051
2728.996
2729.669
25 2729.893
2730.091

D

2720.106
2720.303
2720.479
2720.615
5 2720.888
2721.684
2721.870
2722.637
2722.875
10 2723.311
2723.753
2724.184
2724.770
2725.656
15 2726.134
2726.601
2727.063
2727.500
2727.842
20 2728.032
2728.982
2729.649
2729.876
2730.070

A
2730.918
2732.485
2735.673
2736.104
2737.097
5 2738.044
2738.764
2738.908
2739.475
10 2740.195

B
2730.914
2732.481
2735.399
2735.667
5 2736.099
2737.092
2738.035
2738.753
10 2738.902
2739.471
2739.589
2740.216

C
2730.091
2730.920
2731.248
2732.487
5 2735.403
2735.674
2736.106
2736.671
10 2737.099
2738.045
2738.762
2738.910
2739.478
2739.595
15 2740.213

D
2730.070
2730.904
2731.228
2732.471
5 2735.387
2735.655
2736.091
2736.653
10 2737.084
2738.025
2738.748
2738.895
2739.466
2739.575
15 2740.225

A

2743.931
2744.956
2747.400
2747.610
5 2749.909
2750.184

B

2743.927
2744.952
2747.396
2747.605
5 2749.903
2750.166

C

2743.569
2743.932
2744.141
2744.281
5 2744.957
2747.401
2747.610
2748.216
2749.912
10 2750.210

D

2743.547
2743.915
2744.122
2744.261
5 2744.938
2747.385
2747.591
2748.206
2749.897
10 2750.172

A

2750.496
2751.334
2751.422
2752.003
5 2752.329
2753.098
2753.538
2753.662
2756.555
10 2757.366
2758.081
2758.743
2760.212

B

2750.489
2751.325
2751.418
2751.994
5 2752.191
2752.323
2752.983
2753.093
2753.531
10 2753.651
2755.979
2756.550
2757.363
2758.073
15 2758.735
2760.108

C

2750.497
2751.336
2751.428
2751.993
5 2752.197
2752.333
2752.994
2753.100
2753.539
10 2755.982
2756.557
2757.369
2758.083
2758.746
15 2759.277
2759.444
2760.214

D

2750.475
2751.316
2751.983
2752.187
5 2752.311
2752.979
2753.086
2753.520
2755.964
10 2756.540
2757.351
2758.063
2758.728
2759.421
15 2760.199

A

2762.253
2764.539
2765.110
2766.498
5 2767.261
2767.349
2768.619
2769.891
2769.972
10 2770.209

B

2762.250
2764.531
2765.103
2766.493
5 2767.256
2768.614
2769.883
2770.209

C

2762.255
2764.539
2765.112
2766.500
5 2767.264
2768.622
2769.894
2770.146

D

2761.473
2762.240
2764.519
2765.091
5 2766.481
2767.247
2768.606
2769.875
2770.184

A

2771.603
2772.251
2777.289
2778.135
2779.958
2780.212

5

B

2770.717
2771.596
2772.243
2777.285
2778.132
2779.950
2780.211

5

C

2770.723
2771.355
2771.604
2772.251
2777.291
2778.137
2779.960

5

D

2770.708
2771.335
2771.589
2772.231
2777.273
2778.124
2778.470
2779.940

5

2782.708
2783.198
2783.347
2783.709
5 2785.333
2785.650
2785.733
2787.322
2788.806
10 2789.180
2789.582
2790.217

2782.701
2783.193
2783.343
2783.705
5 2785.328
2785.642
2787.318
2787.930
2788.801
10 2789.477
2789.577
2790.155

2782.709
2783.199
2783.348
2783.711
5 2784.765
2785.333
2785.653
2786.216
2786.354
10 2787.323
2787.939
2788.808
2789.583
2790.156

2780.993
2782.689
2783.185
2783.332
5 2783.697
2784.745
2785.314
2785.634
2786.202
10 2787.304
2787.922
2788.793
2789.564
2790.186

2920.934
2922.104
2924.250
2924.635
2925.176
2926.418
2928.744
2930.121
2930.214

5

2920.931
2921.236
2921.385
2922.099
2922.203
2922.373
2922.571
2924.246
2924.628
2925.169
2926.444
2928.738
2930.115

5

10

2920.938
2921.248
2921.396
2921.526
2921.899
2922.106
2922.213
2922.381
2922.583
2922.872
2924.253
2924.636
2924.827
2925.177
2925.515
2926.185
2926.450
2926.896
2927.349
2927.916
2928.472
2928.748
2929.092
2930.123

5

10

15

20

2920.178
2920.924
2921.229
2921.380
2921.500
2922.088
2922.193
2922.374
2922.560
2922.856
2924.238
2924.618
2924.813
2925.155
2925.500
2926.162
2926.433
2926.878
2927.332
2927.887
2928.729
2930.092

5

10

15

20

A

2910.775
2911.323
2911.887
2911.908
5 2912.270
2912.452
2913.723
2913.902
2917.984
2918.984
10 2919.178
2920.207

B

2910.770
2911.319
2911.882
2912.367
5 2912.458
2913.719
2916.467
2917.396
2918.551
10 2918.977
2919.167
2920.168

C

2910.776
2911.327
2911.470
2911.569
5 2911.890
2912.373
2912.463
2913.345
2913.726
10 2914.529
2915.599
2916.473
2917.403
2918.559
15 2918.986
2919.177
2920.198

D

2910.104
2910.755
2911.311
2911.418
5 2911.545
2911.868
2912.412
2913.327
2913.704
10 2914.085
2914.509
2915.584
2916.453
2916.890
15 2917.382
2917.875
2918.545
2918.966
2919.153
20 2920.179

N
 2901.375
 2901.831
 2902.339
 2902.518
 2903.213
 2903.431
 2904.115
 2905.332
 2906.718
 2906.804
 2907.947
 2908.177
 2909.428
 2909.688
 2910.239

5

10

15

B
 2901.013
 2901.370
 2901.496
 2901.826
 2902.333
 2902.511
 2902.875
 2903.209
 2903.417
 2904.424
 2905.828
 2906.711
 2907.941
 2908.033
 2908.164
 2909.422
 2909.681
 2910.237

5

10

15

C
 2900.622
 2900.767
 2901.022
 2901.375
 2901.505
 2901.833
 2902.338
 2902.518
 2902.884
 2903.215
 2903.425
 2904.434
 2905.834
 2906.195
 2906.720
 2907.951
 2908.037
 2908.177
 2908.545
 2908.738
 2909.429
 2909.688
 2910.229

5

10

15

20

D
 2900.603
 2900.743
 2901.005
 2901.376
 2901.470
 2901.814
 2902.316
 2902.496
 2902.870
 2903.198
 2903.411
 2904.412
 2905.814
 2906.181
 2906.701
 2907.200
 2908.071
 2908.154
 2908.523
 2908.723
 2909.413
 2909.667
 2910.105

5

10

15

20

D
2890.159
2890.878
2890.992
2891.520
5 2891.824
2892.289
2893.054
2893.476
2893.772
10 2896.229
2897.101
2897.855
2899.266
2899.513
15 2900.133

C
2890.181
2890.800
2890.892
2891.011
5 2891.847
2892.303
2893.072
2893.493
2893.806
10 2896.249
2897.880
2899.291
2899.383
2899.535
15 2900.137

B
2890.172
2890.886
2891.002
2892.284
5 2893.062
2893.483
2893.801
2896.242
2897.875
10 2898.374
2900.114

A
2890.183
2891.009
2893.068
2893.494
5 2893.809
2900.194

A
2881.226
2881.441
2883.022
2883.821
2889.417
2889.620
2889.728
2890.183

5

B
2881.219
2881.432
2883.017
2883.813
2884.906
2885.369
2888.173
2889.411
2889.615
2889.719
2890.172

5

10

C
2881.229
2881.444
2883.023
2883.825
2884.344
2884.443
2884.781
2884.910
2885.375
2885.930
2886.554
2887.211
2888.177
2889.418
2889.621
2889.731
2890.181

5

10

15

D
2881.211
2881.426
2882.100
2883.002
2883.806
2884.322
2884.765
2884.892
2885.009
2885.354
2885.910
2886.558
2887.188
2888.159
2889.403
2889.711
2890.159

5

10

15

A

2870.573
2870.857
2871.326
2871.815
5 2873.012
2874.948
2875.790
2876.549
2877.859
10 2879.137
2879.258
2879.604
2879.703
2880.014

B

2870.566
2870.851
2871.317
2871.812
5 2873.003
2873.718
2874.939
2875.784
2876.300
10 2876.546
2876.951
2877.347
2877.850
2878.575
15 2879.134
2879.253
2879.694
2880.135

C

2870.575
2870.858
2871.119
2871.327
5 2871.817
2873.014
2873.145
2873.726
2874.946
10 2875.791
2876.104
2876.305
2876.552
2876.961
15 2877.355
2877.629
2877.862
2878.588
2879.139
20 2879.259
2879.488
2879.704
2880.190

D

2870.553
2870.839
2871.305
2871.799
5 2872.992
2873.708
2874.266
2874.659
2874.925
10 2875.770
2876.087
2876.285
2876.538
2876.938
15 2877.334
2877.613
2877.840
2878.565
2879.123
20 2879.241
2879.682
2880.227

A
2860.605
2862.431
2863.256
2864.344
5 2865.293
2865.696
2866.321
2866.937
2867.173
10 2868.088
2869.035
2870.171

B
2860.600
2861.447
2862.420
2863.253
5 2863.530
2864.339
2865.288
2865.692
2866.310
10 2866.932
2867.169
2868.081
2869.029
2870.042

C
2860.606
2860.998
2861.453
2861.805
5 2861.959
2862.423
2863.259
2863.536
2864.346
10 2865.297
2865.696
2866.324
2866.939
2867.175
15 2868.091
2869.036
2870.104

D
2860.588
2860.986
2861.433
2861.783
5 2861.956
2862.145
2862.402
2863.241
2863.521
10 2864.327
2865.280
2865.652
2866.309
2866.923
15 2867.155
2868.073
2869.014
2869.832
2870.098

A

2850.484
2850.657
2850.805
2851.864
5 2854.376
2854.622
2855.360
2855.433
10 2855.872
2855.928
2857.434
2858.555
2858.746
2860.161

B

2850.480
2850.661
2850.795
5 2851.172
2851.379
2851.858
2854.372
2854.668
2855.356
10 2855.427
2855.872
2857.424
2858.551
15 2858.740
2860.088

C

2850.486
2850.668
2850.805
5 2850.927
2851.180
2851.385
2851.865
2854.380
10 2854.675
2855.361
2855.437
2855.883
2857.435
15 2858.556
2858.749
2859.159
2859.619
2860.195

D

2850.205
2850.469
2850.652
5 2850.782
2851.163
2851.366
2851.845
2854.364
10 2854.659
2855.342
2855.418
2855.891
2857.413
15 2858.537
2858.731
2859.143
2859.608
2860.178

A

2840.102
2840.419
2841.048
2841.439
5 2841.563
2842.553
2843.128
2844.003
2845.071
10 2845.173
2845.331
2845.715
2845.804
2846.873
15 2848.244
2848.449
2848.793
2850.216

B

2840.091
2840.417
2841.042
2841.434
5 2841.559
2842.548
2843.125
2843.818
2843.999
10 2845.064
2845.167
2845.327
2845.707
2845.796
15 2846.866
2847.044
2848.233
2848.442
2848.789
20 2849.094
2850.207

C

2840.105
2840.421
2841.048
2841.440
5 2841.565
2842.326
2842.554
2843.130
2843.215
10 2843.825
2844.005
2845.175
2845.075
2845.333
15 2845.714
2845.805
2846.020
2846.510
2846.874
20 2847.050
2848.244
2848.452
2848.654
2848.795
25 2849.040
2849.098
2850.221

D

2840.083
2840.405
2841.033
2841.420
5 2841.548
2842.533
2843.114
2843.988
2845.057
10 2845.154
2845.316
2845.693
2845.783
15 2846.492
2846.859
2847.035
2848.220
2848.432
2848.776
20 2849.034
2850.206

A
 2830.087
 2831.833
 2832.500
 2833.706
 2834.715
 2835.015
 2836.013
 2837.681
 2837.974
 10 2838.155
 2838.479
 2839.779
 2840.103
 2840.238

B
 2831.828
 2832.493
 2833.700
 2834.038
 2834.199
 2834.706
 2835.006
 2836.007
 2837.676
 10 2837.969
 2838.151
 2838.470
 2839.771
 2840.091
 15 2840.236

C
 2830.348
 2831.834
 2832.503
 2832.989
 2833.709
 2834.049
 2834.206
 2834.327
 2834.715
 10 2835.016
 2835.406
 2836.014
 2837.683
 2837.975
 15 2838.157
 2838.480
 2839.780
 2840.105
 2840.238

D
 2830.330
 2831.817
 2832.483
 2832.969
 5 2833.692
 2834.032
 2834.184
 2834.694
 2834.984
 10 2835.384
 2835.994
 2837.668
 2837.954
 15 2838.137
 2838.459
 2839.760
 2840.083
 2840.206

A

	2820.483
	2821.050
	2821.797
	2821.888
5	2822.180
	2822.704
	2823.958
	2824.240
	2824.417
10	2824.504
	2824.925
	2827.269
	2827.555
15	2827.649
	2828.149
	2828.815
	2830.000
	2830.086
	2830.202

B

	2820.474
	2821.045
	2821.793
	2821.886
5	2822.130
	2822.485
	2822.699
	2823.210
	2823.951
10	2824.236
	2824.415
	2824.499
	2824.919
	2827.259
15	2827.550
	2827.646
	2828.143
	2828.449
	2828.810
20	2829.994
	2830.141

C

	2820.485
	2821.057
	2821.799
	2821.886
5	2822.129
	2822.490
	2822.706
	2823.049
	2823.217
10	2823.514
	2823.960
	2824.242
	2824.421
	2824.505
15	2824.926
	2825.240
	2827.271
	2827.557
	2827.653
20	2828.150
	2828.454
	2828.815
	2830.002

D

	2820.486
	2821.040
	2821.783
	2822.109
5	2822.477
	2822.690
	2823.031
	2823.202
	2823.495
10	2823.939
	2824.229
	2824.483
	2824.905
	2825.225
15	2827.249
	2827.542
	2827.635
	2828.130
	2828.437
20	2828.796
	2829.984

A

2810.527
2811.396
2812.210
2812.725
5 2812.875
2813.345
2813.815
2813.905
2814.510
10 2814.983
2815.701
2816.207
2816.980
2817.068
15 2819.443
2820.138

B

2810.523
2810.800
2811.390
2812.206
5 2812.721
2812.872
2813.337
2813.810
2814.504
10 2814.978
2815.696
2816.198
2816.975
15 2819.438
2820.146

C

2810.529
2810.804
2811.396
2811.514
5 2812.026
2812.212
2812.727
2812.877
2813.350
10 2813.818
2814.512
2814.984
2815.175
15 2815.703
2816.208
2816.982
2819.444
2820.226

D

2810.513
2810.790
2811.376
2812.192
5 2812.711
2812.859
2813.328
2813.801
2814.496
10 2814.965
2815.681
2816.186
2816.966
15 2818.501
2819.425
2820.140

A

2800.465
2801.446
2801.624
2802.119
5 2802.938
2803.027
2803.775
2807.370
2808.721
10 2809.144
2809.322
2810.194

B

2800.461
2801.440
2801.615
2802.115
5 2802.933
2803.507
2803.771
2804.281
2805.709
10 2807.363
2808.717
2809.140
2809.318
2810.142

C

2800.468
2801.447
2801.625
2802.120
5 2802.941
2803.514
2803.776
2804.287
2805.351
10 2807.370
2808.723
2809.146
2809.324
15 2810.156

D

2800.135
2800.453
2801.430
2801.604
5 2802.104
2802.924
2803.500
2803.756
2804.269
10 2804.871
2805.021
2805.334
2805.702
2807.352
15 2808.707
2809.133
2809.307
2810.135

A		B		C		D	
5	2791.747	2791.372	2790.909	2790.909	2790.889	2790.889	2790.889
	2796.285	2791.739	2791.385	2791.385	2791.361	2791.361	2791.361
	2796.368	2795.414	2791.748	2791.748	2791.727	2791.727	2791.727
	2796.573	2795.996	2795.424	2795.424	2795.400	2795.400	2795.400
	2797.463	2796.278	2795.812	2795.812	2795.792	2795.792	2795.792
10	2797.601	2796.569	2796.001	2796.001	2795.990	2795.990	2795.990
	2797.961	2797.455	2796.288	2796.288	2796.269	2796.269	2796.269
	2798.737	2797.598	2796.574	2796.574	2796.557	2796.557	2796.557
	2798.775	2797.957	2797.465	2797.465	2797.446	2797.446	2797.446
	2800.162	2798.730	2797.602	2797.602	2797.588	2797.588	2797.588
15		2799.769	2797.962	2797.962	2797.945	2797.945	2797.945
		2800.161	2798.638	2798.638	2798.716	2798.716	2798.716
			2798.738	2798.738	2799.008	2799.008	2799.008
			2799.022	2799.022	2799.164	2799.164	2799.164
			2799.186	2799.186	2799.762	2799.762	2799.762
20			2799.777	2799.777	2800.135	2800.135	2800.135
			2800.159	2800.159			

A
 2930.121
 2930.653
 2932.647
 2933.114
 2933.223
 2933.348
 2933.440
 2933.722
 2935.185
 2935.346
 2936.735
 2936.960
 2937.771
 2938.497
 2939.679
 2940.063
 2940.230
 5
 10
 15

B
 2930.115
 2930.644
 2931.366
 2932.640
 2933.111
 2933.217
 2933.343
 2933.713
 2935.176
 2935.842
 2936.023
 2936.729
 2936.954
 2937.765
 2938.493
 2939.674
 2940.057
 5
 10
 15

C
 2930.123
 2930.654
 2931.377
 2932.226
 2932.648
 2933.123
 2933.220
 2933.352
 2933.712
 2934.024
 2935.166
 2935.737
 2935.848
 2936.039
 2936.179
 2936.741
 2936.961
 2937.528
 2937.772
 2937.843
 2938.499
 2939.074
 2939.406
 2939.682
 2940.063
 2940.233
 5
 10
 15
 20
 25

D
 2930.092
 2930.632
 2931.356
 2932.204
 2932.626
 2933.196
 2933.676
 2934.002
 2935.132
 2935.720
 2935.830
 2936.021
 2936.728
 2936.921
 2937.506
 2937.750
 2938.478
 2939.050
 2939.391
 2939.665
 2940.042
 5
 10
 15
 20

A

2940.063
2940.330
2940.950
2941.755
5 2941.979
2943.139
2944.650
2944.882
2945.663
10 2946.042
2947.678
2948.096
2948.762
2948.893
15 2949.139
2950.238

B

2940.057
2940.320
2940.944
2941.750
5 2941.971
2943.135
2944.647
2944.876
2945.652
10 2946.035
2946.987
2947.669
2948.084
2948.750
15 2948.889
2949.135
2950.234

C

2940.063
2940.331
2940.954
2941.757
5 2941.981
2942.517
2942.743
2943.140
2944.420
10 2944.655
2944.755
2944.884
2945.045
2945.662
15 2945.800
2946.044
2946.994
2947.112
2947.681
20 2948.096
2948.762
2948.895
2949.141
2949.984
25 2950.135

D

2940.043
2940.308
2940.935
2941.740
5 2941.960
2942.501
2942.720
2943.121
2944.071
10 2944.400
2944.639
2944.744
2944.864
2945.034
15 2945.640
2945.786
2946.013
2946.972
2947.091
20 2947.658
2948.076
2948.742
2948.874
2949.124
25 2949.973
2950.225

A

2953.409
2953.529
2954.145
2954.393
5 2954.911
2955.106
2955.251
2955.673
2956.398
10 2956.901
2957.004
2958.375
2958.452
2960.138

B

2950.911
2951.525
2953.402
2953.518
5 2954.139
2954.384
2954.906
2955.101
2955.247
10 2955.666
2956.393
2956.893
2956.997
15 2957.984
2958.366
2960.130

C

2950.343
2950.918
2951.538
2953.409
5 2953.528
2954.145
2954.394
2954.914
2955.106
10 2955.252
2955.665
2956.400
2956.904
2957.007
15 2957.330
2957.994
2958.376
2960.139

D

2950.326
2950.902
2951.515
2953.389
5 2953.500
2954.107
2954.363
2954.892
2955.095
10 2955.232
2955.630
2956.376
2956.888
2956.972
15 2957.974
2958.354
2960.129

A

2960.764
2961.366
2961.538
2961.704
5 2961.871
2962.582
2963.299
2964.208
10 2964.498
2965.999
2966.824
2967.070
2967.330
15 2967.977
2968.904
2969.200
2969.508
2970.167

B

2960.306
2960.763
2961.358
2961.533
5 2961.697
2961.870
2962.576
2963.295
2963.400
10 2964.202
2964.492
2965.987
2966.820
15 2967.064
2967.322
2967.970
2968.900
20 2969.192
2969.502
2970.163

C

2960.311
2960.779
2961.353
2961.542
5 2961.706
2961.875
2962.583
2962.856
2963.302
10 2963.409
2964.211
2964.500
2965.972
15 2966.827
2967.072
2967.331
2967.979
2968.906
20 2969.200
2969.510
2969.924
2970.168

D

2960.289
2960.761
2961.353
2961.666
5 2962.563
2962.842
2962.987
2963.285
2963.386
10 2964.192
2964.477
2965.921
2966.032
15 2966.807
2967.054
2967.308
2967.944
2968.888
20 2969.180
2969.480
2969.897
2970.148

A
 2970.167
 2973.243
 2973.983
 2974.583
 5 2975.077
 2975.217
 2975.292
 2976.278
 2977.935
 10 2979.063
 2980.233

B
 2970.163
 2971.655
 2973.220
 2973.973
 5 2974.574
 2975.067
 2975.204
 2976.270
 10 2977.428
 2977.916
 2979.057
 2980.228

C
 2970.168
 2971.709
 2972.136
 2973.190
 5 2973.985
 2974.581
 2975.068
 2975.212
 10 2976.280
 2977.435
 2977.892
 2978.406
 2979.065
 2979.755

D
 2970.148
 2971.691
 2972.036
 2973.102
 5 2973.963
 2974.550
 2975.015
 2976.255
 10 2977.841
 2978.385
 2979.046
 2980.205

A

2980.233
2980.381
2981.147
2981.356
5 2981.746
2982.445
2982.635
2983.308
2984.205
10 2987.515
2988.187
2988.279
2988.607
15 2989.619
2990.235

B

2980.228
2980.371
2980.893
2981.138
5 2981.349
2981.741
2982.436
2982.622
10 2983.303
2983.543
2984.195
2987.494
2988.182
15 2988.275
2988.597
2989.610
2990.235

C

2980.235
2980.360
2980.900
2981.150
5 2981.359
2981.579
2981.748
2982.445
10 2982.631
2983.310
2983.549
2984.189
2984.601
15 2987.463
2988.188
2988.281
2988.560
2988.613
2989.066
20 2989.620
2990.189

D

2980.205
2980.317
2981.106
2981.336
5 2981.729
2982.418
2982.607
2983.292
2983.528
10 2984.161
2984.578
2987.397
2988.177
15 2988.257
2988.573
2989.049
2989.594
2990.173

A

2991.446
2991.963
2992.377
2992.646
5 2993.515
2993.729
2994.110
2994.437
10 2995.447
2996.386
2997.710
2998.974
2999.153
3000.171

B

2991.441
2991.951
2992.373
2992.639
5 2993.510
2993.717
2994.104
2994.413
10 2995.435
2996.382
2997.705
2998.708
2998.968
15 2999.147
2999.635
2999.849
3000.195

C

2991.448
2991.944
2992.380
2992.637
5 2993.520
2993.707
2994.116
2994.380
10 2995.447
2996.388
2997.712
2998.722
15 2999.153
2999.333
2999.644
2999.855
3000.184

D

2991.432
2991.893
2992.369
2992.603
5 2993.567
2994.098
2994.480
2995.387
10 2996.371
2997.302
2997.693
2998.706
2998.952
15 2999.130
2999.622
2999.839
3000.204

A

3001.167
3001.329
3001.694
3003.310
5 3003.466
3003.572
3003.829
3004.474
3004.682
10 3004.974
3005.446
3006.598
3009.645
3010.218

B

3001.163
3001.323
3001.687
3003.458
5 3003.812
3004.288
3004.472
3004.663
3004.969
10 3005.436
3006.420
3006.595
3006.959
3009.243
15 3009.638
3010.183

C

3001.171
3001.331
3001.696
3003.479
5 3003.822
3004.302
3004.667
3004.727
3004.974
10 3005.435
3006.424
3006.604
3006.969
3007.120
15 3007.293
3008.268
3009.250
3009.648
3010.130

D

3000.857
3001.153
3001.311
3001.678
5 3003.429
3003.748
3004.653
3004.946
3005.395
10 3006.407
3006.585
3006.951
3007.102
3007.268
15 3008.249
3009.231
3009.603
3010.126

A
5 3010.218
3011.004
3011.270
3011.902
3012.005
3012.229
3012.353
3012.520
3013.206
10 3013.564
3013.911
3015.599
3016.269
3016.568
15 3016.716
3017.814
3019.010
3019.363
3019.496
20 3019.821
3019.959
3020.234

B
5 3010.183
3010.999
3011.263
3011.896
3012.061
3012.225
3012.358
3012.495
3013.199
10 3013.539
3013.901
3015.566
3016.261
3016.564
15 3016.703
3017.097
3017.835
3019.001
3019.354
20 3019.492
3019.812
3019.952
3020.232

C
5 3010.130
3011.009
3011.270
3011.904
3012.072
3012.233
3012.600
3013.208
3013.529
10 3013.587
3013.911
3014.720
3015.522
3015.660
15 3016.268
3016.570
3016.716
3017.104
3017.815
20 3018.187
3018.524
3019.010
3019.366
3019.495
25 3019.822
3019.965
3020.232

D
5 3010.298
3010.997
3011.237
3011.884
3012.722
3013.188
3013.500
3013.881
3015.442
10 3016.245
3016.548
3016.691
3017.081
3017.806
15 3018.165
3018.988
3019.344
3019.799
3019.943
20 3020.234

A
3020.520
3020.670
3021.303
3022.357
5 3022.658
3022.795
3023.142
3023.590
3024.146
10 3024.718
3025.435
3025.743
3026.819
3027.119
15 3028.229
3028.898
3029.904
3030.042

B
3020.516
3020.666
3021.298
3022.338
5 3022.652
3022.784
3023.137
3023.589
3024.140
10 3024.711
3025.437
3025.708
3026.815
3027.114
15 3027.780
3028.223
3028.892
3029.895

C
3020.523
3020.672
3021.305
3021.939
5 3022.357
3022.660
3022.792
3023.144
3023.595
10 3023.648
3023.805
3024.151
3024.721
3025.673
15 3025.791
3026.430
3026.821
3027.010
3027.121
20 3027.787
3028.233
3028.900
3029.342
3029.903

D
3020.505
3020.650
3021.284
3022.289
5 3022.632
3023.123
3023.613
3023.782
3024.130
10 3024.705
3025.617
3025.719
3026.804
3027.101
15 3027.769
3028.213
3028.879
3029.326
3029.872

A

3030.701
3031.118
3031.892
3032.492
3033.613
5 3034.041
3034.374
3034.824
3035.294
3035.704
10 3036.104
3036.543
3036.993
3037.492
3037.974
15 3038.574
3039.178
3040.118

B

3030.656
3031.688
3031.913
3032.494
3033.526
5 3033.704
3034.195
3035.747
3035.980
10 3036.060
3036.208
3036.729
3036.891
3037.087
15 3037.472
3037.569
3038.773
3040.244

C

3030.634
3031.693
3032.057
3032.494
5 3033.036
3033.535
3033.715
3034.140
3034.426
10 3035.797
3035.990
3036.063
3036.216
3036.736
15 3036.905
3037.094
3037.480
3037.575
3038.780
20 3039.058
3040.242

D

3030.534
3031.963
3032.470
3033.017
5 3033.514
3034.045
3035.766
3035.850
3036.189
10 3036.717
3036.883
3037.072
3037.552
3038.756
15 3039.040
3040.168

A

3040.736
3041.427
3042.262
3042.420
5 3043.255
3043.544
3043.986
3048.213
3048.660
10 3048.940
3049.035
3049.810
3050.071
3050.201

B

3040.730
3041.419
3042.252
3042.411
5 3043.245
3043.539
3043.976
3045.683
3047.655
10 3048.024
3048.209
3048.633
3048.922
15 3049.805
3050.061
3050.249

C

3040.736
3041.086
3041.225
3041.428
5 3042.265
3042.421
3042.933
3043.257
3043.547
10 3043.986
3044.504
3044.970
3045.691
15 3046.171
3047.226
3047.665
3048.029
3048.219
3048.602
20 3049.082
3049.810
3050.073

D

3040.712
3041.066
3041.207
3041.403
5 3042.247
3042.397
3042.909
3043.236
3043.528
10 3043.963
3044.479
3044.950
3045.673
15 3046.155
3047.208
3047.642
3048.008
3048.212
3048.569
20 3049.036
3049.788
3050.050

A
 3050.071
 3050.697
 3052.004
 3052.436
 5 3054.268
 3055.289
 3055.377
 3055.602
 3056.322
 10 3057.138
 3057.594
 3058.075
 3059.257
 15 3059.720
 3059.917
 3060.232

B
 3050.051
 3050.688
 3051.997
 5 3052.430
 3054.263
 3055.370
 3055.592
 3 36.279
 3057.130
 10 3058.068
 3058.541
 3059.245
 3059.720
 3059.892

C
 3050.073
 3050.698
 3051.273
 5 3051.390
 3052.005
 3052.439
 3053.425
 3053.733
 3054.268
 10 3055.292
 3055.380
 3055.581
 3056.284
 3056.509
 15 3057.122
 3057.690
 3058.078
 3058.548
 20 3059.257
 3059.728
 3059.871

D
 3050.050
 3050.670
 3051.368
 5 3051.982
 3052.421
 3053.403
 3053.711
 3054.245
 3055.361
 10 3055.546
 3056.563
 3057.084
 3058.059
 15 3058.526
 3059.237
 3059.790
 3059.904

A
3060.862
3061.224
3062.342
3064.364
5 3065.357
3065.610
3066.263
3066.974
3067.649
10 3068.910
3069.410
3070.139

B
3060.854
3061.216
3062.336
3064.326
5 3065.353
3065.602
3066.251
3066.918
3067.644
10 3067.644
3068.506
3069.400
3070.210

C
3060.862
3061.223
3062.343
3064.270
5 3065.360
3065.610
3066.245
3066.892
3067.148
10 3067.651
3068.913
3069.413
3070.254

D
3060.839
3061.192
3062.321
3064.097
5 3065.343
3065.590
3066.220
3067.138
3067.625
10 3068.896
3069.391
3070.251

A

3200.168
3200.258
3200.829
3200.957
5 3202.006
3203.152
3203.323
3203.456
10 3203.548
3203.791
3203.938
3205.408
3206.687
15 3207.158
3207.315
3207.976
3208.800
3209.235
20 3209.710

B

3200.260
3200.823
3200.954
3202.003
5 3202.092
3203.147
3203.312
3203.451
3203.785
10 3203.932
3205.401
3206.679
3207.154
3207.309
15 3207.971
3208.792
3209.228
3209.663

C

3200.266
3200.830
3200.964
3202.010
5 3202.098
3203.155
3203.324
3203.459
3203.795
10 3203.938
3205.409
3206.689
3207.160
3207.318
15 3207.617
3207.978
3208.801
3209.238
3209.587
20 3209.872

D

3200.230
3200.808
3200.937
3201.998
5 3202.066
3203.137
3203.304
3203.432
3203.772
10 3203.899
3205.384
3206.668
3207.149
3207.291
15 3207.956
3208.774
3209.221
3209.946

H
 3190.163
 3190.937
 3191.099
 3191.968
 5 3192.095
 3192.221
 3193.054
 3195.156
 3196.079
 10 3196.640
 3197.277
 3197.824
 3198.191
 3199.353
 15 3199.716
 3200.168

B
 3190.157
 3190.927
 3191.094
 3191.959
 5 3192.090
 3192.214
 3193.047
 3195.144
 3196.047
 10 3196.631
 3197.273
 3197.765
 3198.180
 3199.347
 15 3199.699

U
 3190.165
 3190.938
 3191.100
 3191.968
 5 3192.098
 3192.223
 3193.055
 3195.157
 3196.080
 10 3196.643
 3196.636
 3197.281
 3198.030
 3198.187
 15 3199.354
 3199.678

U
 3190.140
 3190.911
 3191.951
 3192.076
 5 3192.198
 3193.030
 3195.133
 3195.465
 3196.005
 10 3196.136
 3196.623
 3197.262
 3198.093
 3199.332
 15 3199.687
 3200.230

A

3181.071
3181.524
3182.021
3182.271
5 3182.511
3182.696
3182.998
3184.152
3184.395
10 3184.528
3184.734
3184.813
3185.140
3185.231
15 3185.737
3186.773
3187.526
3187.937
3188.292
20 3189.869
3190.163

B

3181.066
3181.518
3181.893
3182.008
5 3182.266
3182.505
3182.690
3182.992
3184.123
10 3184.385
3184.524
3184.799
3185.154
3185.217
15 3185.729
3186.765
3187.365
3187.519
3187.930
20 3188.284
3189.863
3190.157

C

3181.074
3181.527
3181.892
3182.020
5 3182.273
3182.513
3182.697
3182.990
3183.000
3183.264
10 3184.131
3184.395
3184.531
3184.723
3185.133
15 3185.300
3185.735
3186.778
3187.377
3187.530
20 3187.937
3188.293
3189.167
3189.871
3190.165

D

3181.052
3181.506
3181.879
3181.998
5 3182.251
3182.481
3182.669
3182.981
3183.240
10 3184.105
3184.378
3184.515
3184.682
3185.313
15 3185.705
3186.755
3187.358
3187.505
3187.918
20 3188.269
3189.146
3189.848
3190.140

A

5 3170.073
3170.224
3170.893
3171.120
3171.230
3172.303
3172.472
3173.151
3174.679
10 3174.924
3175.068
3175.396
3175.891
3175.978
15 3176.493
3177.250
3178.076
3178.951
3179.485
20 3179.663
3180.223

B

5 3170.067
3170.219
3170.885
3171.115
3171.220
3172.297
3172.465
3173.144
3174.675
10 3174.917
3175.062
3175.389
3175.885
3176.484
15 3176.493
3177.243
3178.021
3178.941
3179.477
20 3180.235

C

5 3170.076
3170.229
3170.895
3171.121
3171.231
3172.305
3172.474
3173.153
3174.682
10 3174.927
3175.068
3175.221
3175.397
3175.895
15 3176.492
3177.255
3177.969
3178.268
3178.951
20 3179.490
3179.663
3180.237

D

5 3170.053
3170.205
3170.869
3171.099
3171.201
3172.283
3172.447
3173.121
3174.662
10 3174.890
3175.040
3175.194
3175.373
3175.870
15 3176.470
3177.231
3177.829
3178.353
3178.925
20 3179.468
3179.623
3180.131

A

3162.082
3162.562
3163.162
3163.823
5 3164.028
3164.181
3164.368
3164.557
3165.095
10 3165.454
3165.663
3166.449
3166.693
3167.230
15 3167.902
3169.307
3169.542
3169.813
3170.073
20 3170.224

B

3162.079
3162.556
3163.157
3163.813
5 3164.016
3164.171
3164.354
3164.552
3165.089
10 3165.449
3165.655
3166.444
3166.688
3167.221
15 3167.891
3169.296
3169.532
3169.803
3170.067
20 3170.220

C

3162.088
3162.563
3163.164
3163.821
5 3164.026
3164.180
3164.365
3164.560
3165.095
10 3165.455
3165.664
3166.450
3166.696
3167.228
15 3167.880
3169.302
3169.536
3169.808
3170.076
20 3170.229

D

3161.174
3162.069
3162.541
3163.140
5 3163.795
3164.006
3164.155
3164.339
3164.537
10 3165.071
3165.432
3165.639
3166.428
3166.673
15 3167.198
3167.847
3169.276
3169.505
3169.762
20 3170.053
3170.205

A
 3151.349
 3152.098
 3152.282
 3152.427
 5 3152.717
 3153.120
 3153.275
 3154.342
 3155.340
 10 3155.790
 3157.680
 3158.232
 3158.853
 3160.257

B
 3151.337
 3152.087
 3152.274
 3152.415
 5 3152.710
 3153.121
 3153.264
 3154.336
 3154.451
 10 3155.334
 3155.783
 3156.116
 3157.675
 15 3158.225
 3158.846
 3160.258

C
 3150.200
 3151.331
 3152.099
 3152.283
 5 3152.424
 3152.718
 3153.129
 3153.276
 10 3154.342
 3154.461
 3155.344
 3155.791
 3156.125
 15 3157.234
 3157.439
 3157.682
 3158.234
 20 3158.854
 3160.259

D
 3150.177
 3151.302
 3152.076
 3152.261
 5 3152.372
 3152.696
 3153.106
 3153.250
 10 3153.700
 3154.323
 3155.321
 3155.770
 3156.106
 15 3157.220
 3157.418
 3157.658
 3158.213
 20 3158.831
 3159.189
 3160.259

A

3140.019
 3140.458
 3142.127
 3142.770
 5 3144.231
 3145.408
 3145.892
 3146.998
 3147.918
 10 3148.346
 3149.251
 3150.205

B

3140.450
 3142.119
 3142.754
 3142.221
 5 3144.400
 3145.880
 3146.990
 3147.912
 3148.340
 10 3149.245
 3149.330
 3149.524
 3150.185

C

3140.020
 3140.460
 3142.129
 3142.734
 5 3144.233
 3145.410
 3145.685
 3145.891
 3147.000
 10 3147.918
 3148.349
 3149.254
 3149.335
 3149.536
 15 3150.199

D

3140.437
 3140.898
 3142.104
 3142.684
 5 3144.210
 3145.386
 3145.660
 3145.867
 3146.978
 10 3147.894
 3148.326
 3149.237
 3149.514
 3150.177

A

3130.392
3130.478
3131.437
3133.021
5 3133.563
3134.489
3134.627
3135.091
3135.373
10 3136.273
3136.406
3136.738
3139.106
3139.547
15 3139.659
3140.017
3140.203

B

3130.385
3131.433
3132.976
3133.552
5 3134.483
3134.618
3135.083
3135.365
3135.899
10 3136.265
3136.401
3136.735
3139.097
3139.542
15 3139.654
3140.007
3140.251

C

3130.395
3130.666
3131.346
3131.439
5 3132.888
3133.242
3133.562
3134.492
3134.625
10 3135.091
3135.376
3135.912
3136.169
3136.277
15 3136.408
3136.740
3139.108
3139.549
3139.662
20 3140.019
3140.199

D

3130.372
3130.648
3131.325
3131.415
5 3132.853
3133.519
3134.472
3134.597
3135.072
10 3135.352
3135.893
3136.256
3136.384
3136.717
15 3139.085
3139.529
3139.637
3139.994
3140.253

A

3120.189
3120.793
3120.965
5 3121.591
3122.435
3122.782
3123.119
3123.405
10 3125.123
3125.508
3125.993
3126.563
3126.769
15 3126.905
3127.413
3127.848
3128.092
3128.580
20 3128.784
3129.595
3130.079

B

3120.177
3120.784
3120.950
5 3121.583
3122.396
3122.753
3123.075
3123.397
10 3125.108
3125.502
3125.970
3126.559
3126.728
15 3126.774
3127.404
3127.841
3128.085
3128.543
20 3128.779
3128.588
3130.247

C

3120.189
3120.794
3120.961
5 3121.578
3122.855
3123.145
3123.407
3125.082
10 3125.510
3125.951
3126.010
3126.567
3126.911
15 3127.414
3127.849
3128.091
3128.552
3128.785
20 3129.595
3130.247

D

3120.165
3120.771
3120.941
5 3121.537
3121.750
3123.084
3123.380
3124.168
3125.045
10 3125.490
3125.936
3126.915
3127.388
3127.826
15 3128.066
3128.519
3128.752
3129.571
3129.898

A

3110.301
3110.589
3110.710
3112.090
5 3112.176
3112.383
3112.574
3112.672
3112.841
10 3113.112
3113.268
3113.571
3114.477
3115.836
15 3116.198
3116.615
3116.710
3118.098
3118.921
20 3119.171
3120.188

B

3110.289
3110.580
3110.700
3111.483
5 3112.079
3112.369
3112.565
3112.667
3112.831
10 3113.105
3113.566
3114.445
3115.227
3115.796
15 3116.611
3116.703
3118.068
3118.880
3119.145
20 3119.928
3120.177

C

3110.272
3110.584
3111.491
3112.043
5 3112.390
3112.568
3112.673
3112.840
3113.114
10 3113.573
3114.437
3115.236
3115.745
3116.033
15 3116.619
3116.710
3118.027
3118.867
3119.213
20 3119.937
3120.189

D

3110.258
3110.536
3111.470
3112.005
5 3112.432
3113.090
3113.552
3114.340
3115.219
10 3115.760
3115.889
3116.161
3116.625
3117.941
15 3119.261
3119.917
3120.165

A

3100.606
3100.798
3101.873
5 3102.300
3102.453
3102.906
3103.383
3104.509
3104.880
10 3105.802
3106.063
3106.558
3106.728
3107.317
15 3108.233
3109.373
3109.749

B

3100.602
3101.070
3101.864
5 3102.440
3102.967
3103.377
3104.557
3104.974
3105.855
10 3106.056
3106.552
3106.723
3107.291
15 3108.222
3108.867
3109.362
3109.738

C

3100.612
3101.058
3101.245
5 3101.871
3102.444
3102.963
3103.088
3103.382
3104.203
10 3104.570
3104.980
3105.220
3105.864
3106.063
15 3106.563
3106.729
3107.251
3108.210
3108.667
20 3108.873
3109.363
3109.726

D

3100.986
3101.822
3102.405
3103.136
5 3103.346
3104.556
3104.957
3105.833
3106.038
10 3106.543
3106.707
3107.313
3108.157
3108.856
15 3109.323
3109.718

A	B	C	D
3090.980	3090.973	3090.049	3090.021
3091.235	3091.227	3090.983	3090.966
3092.421	3092.271	3091.236	3091.213
3093.680	3092.416	3092.284	3091.988
5 3094.540	5 3093.659	5 3092.424	5 3092.263
3095.905	3094.530	3093.635	3092.404
3096.460	3095.868	3094.523	3093.613
3096.918	3096.452	3095.851	3094.478
3097.311	3096.904	3096.048	3096.177
10 3098.425	10 3097.299	10 3096.457	10 3096.904
3098.808	3097.565	3096.932	3097.277
3099.537	3097.982	3097.304	3097.547
3099.789	3098.265	3097.572	3097.967
3100.222	3098.417	3097.990	3098.260
	15 3098.802	15 3098.275	15 3098.407
	3099.503	3098.428	3098.789
	3099.763	3098.533	3099.389
		3098.811	3099.857
		3099.462	
		20 3099.829	

A

3081.327
3081.836
3082.566
3083.296
5 3083.827
3085.354
3085.547
3085.838
3086.030
10 3087.182
3087.976
3088.381
3089.539
3089.621
15 3090.265

B

3081.283
3081.831
3082.542
3083.288
5 3083.823
3085.344
3085.543
3085.677
3086.118
10 3087.967
3088.376
3089.529
3089.615
3090.049
15 3090.261

C

3080.363
3081.250
3081.401
3081.836
5 3082.509
3082.668
3083.297
3083.830
3085.356
10 3085.548
3085.689
3085.839
3086.125
3087.142
15 3087.979
3088.134
3088.386
3089.542
3089.623
20 3090.049
3090.263

D

3081.200
3082.444
3083.275
3083.810
5 3085.333
3085.529
3085.664
3085.822
3086.109
10 3087.085
3087.955
3088.364
3089.522
3090.021
15 3090.261

A

3073.371
3075.326
3076.552
3076.709
5 3077.467
3077.924
3079.061
3079.513
3079.669
10 3079.917
3080.243

B

3071.277
3072.793
3073.363
3075.027
5 3075.320
3076.702
3077.460
3077.892
3079.051
10 3079.484
3079.909

C

3071.288
3072.800
3073.371
3074.716
5 3075.034
3075.329
3076.225
3076.555
3076.710
10 3077.465
3077.884
3077.970
3079.062
3079.423
15 3079.918

D

3071.265
3072.776
3073.348
3074.695
5 3075.010
3075.308
3076.202
3076.685
3077.429
10 3077.827
3078.020
3079.045
3079.817

A

	3210.713
	3211.551
	3211.987
	3213.153
5	3214.068
	3214.665
	3214.784
	3215.316
	3216.512
10	3216.657
	3218.747
	3219.344
	3219.666
15	3219.760
	3220.000

B

	3210.706
	3211.204
	3211.540
	3211.980
5	3213.145
	3214.012
	3214.659
	3214.779
	3215.306
10	3216.491
	3217.071
	3218.325
	3219.292
	3219.656
15	3219.994

C

	3210.714
	3211.212
	3211.551
	3211.990
5	3213.152
	3213.995
	3214.294
	3214.667
	3214.786
10	3215.317
	3215.915
	3216.461
	3217.081
	3218.080
15	3218.738
	3218.221
	3220.004

D

	3210.687
	3211.192
	3211.523
	3211.969
5	3213.127
	3213.969
	3214.641
	3215.290
	3215.898
10	3216.390
	3216.528
	3217.058
	3218.063
	3218.711
15	3219.661
	3219.984

A
 3220.292
 3220.427
 3221.243
 3222.024
 5 3222.678
 3222.895
 3223.317
 3223.459
 10 3224.481
 3225.697
 3226.060
 3227.358
 3227.447
 3229.038
 15 3229.369
 3229.885

B
 3220.408
 3221.236
 3221.995
 3222.673
 5 3222.892
 3223.311
 3223.452
 3224.473
 10 3225.690
 3226.052
 3226.328
 3227.363
 3229.031
 15 3229.365
 3229.851

C
 3220.421
 3221.244
 3221.982
 3222.680
 5 3222.899
 3223.319
 3223.460
 3224.481
 10 3225.083
 3225.244
 3225.698
 3226.061
 3226.342
 3227.344
 15 3229.038
 3229.371
 3229.818
 3229.938

D
 3220.503
 3221.223
 3221.903
 3222.656
 5 3222.881
 3223.300
 3223.434
 3224.455
 10 3225.057
 3225.222
 3225.641
 3225.705
 3226.021
 3227.281
 15 3227.627
 3228.990
 3229.347
 3229.718
 3229.995

A

3230.276
3230.416
3230.977
3231.353
5 3231.507
3231.691
3232.264
3232.615
3232.748
10 3233.005
3233.478
3233.980
3234.615
3236.392
15 3236.621
3237.945
3240.091

B

3230.271
3230.405
3230.959
3231.346
5 3231.503
3231.685
3232.255
3232.604
3232.743
10 3232.964
3233.471
3233.698
3233.975
3234.609
15 3236.389
3236.593
3237.935
3240.057

C

3230.281
3230.408
3230.936
3231.353
5 3231.510
3231.693
3231.908
3232.240
3232.615
10 3232.752
3233.089
3233.480
3233.705
3233.983
15 3234.617
3235.152
3236.399
3236.747
3237.944
20 3238.608
3240.024
3240.090

D

3230.330
3230.418
3230.924
3231.329
5 3231.485
3231.671
3231.898
3232.220
3232.597
10 3233.128
3233.454
3233.679
3233.960
3234.594
15 3235.126
3236.397
3236.741
3237.919
3239.195
20 3239.592
3239.926
3240.189

A

3240.091
3241.334
3241.765
3242.803
5 3243.040
3243.438
3244.399
3244.894
3245.391
10 3245.920
3246.119
3246.546
3247.204
15 3247.356
3248.974
3249.191
3249.465
3249.927
3250.216

B

3240.057
3241.329
3241.753
3242.796
5 3243.029
3243.432
3244.389
3244.837
3245.342
10 3245.374
3245.913
3246.106
3246.540
15 3247.201
3247.348
3248.399
3248.963
3249.183
3249.459
20 3249.922
3250.229

C

3240.090
3241.337
3241.737
3242.805
5 3243.028
3243.439
3244.385
3245.433
3245.923
10 3246.116
3246.548
3247.212
3247.347
15 3248.408
3248.783
3248.976
3249.192
3249.466
3249.746
20 3249.936
3250.235

D

3240.189
3241.317
3241.691
3241.765
5 3242.784
3242.991
3243.416
3244.325
3245.511
10 3245.898
3246.087
3246.521
3247.304
15 3248.382
3248.774
3248.947
3249.167
3249.443
3249.715
20 3249.911
3250.189

A

3251.503
3251.633
3253.011
3253.100
5 3254.109
3254.617
3256.077
3257.206
10 3258.068
3258.149
3259.645
3260.053

B

3250.930
3251.493
3251.618
3252.325
5 3253.002
3253.090
3253.432
3254.068
3254.610
10 3255.733
3256.069
3257.172
3258.060
3258.140
15 3259.637

C

3250.938
3251.500
3252.332
3253.015
5 3253.101
3253.443
3253.968
3254.292
3254.616
10 3255.741
3256.065
3257.111
3257.269
3258.063
15 3258.752
3259.646

D

3250.915
3251.470
3252.310
3252.992
5 3253.076
3253.868
3254.584
3256.020
3257.086
10 3257.364
3258.029
3259.622

A

3260.410
3260.781
3261.007
3261.259
5 3262.511
3263.269
3263.673
3264.232
3264.339
10 3265.080
3266.086
3266.377
3267.226
15 3267.516
3269.611
3269.806

B

3260.386
3260.772
3261.002
3261.251
5 3262.504
3263.252
3263.700
3263.664
3263.510
3264.226
10 3264.336
3265.053
3266.076
3266.369
3267.218
15 3267.511
3268.022
3268.392
3269.524
3269.602

C

3260.334
3260.457
3260.779
3261.008
5 3261.261
3261.824
3262.062
3262.510
3262.709
10 3263.236
3263.674
3264.233
3264.345
15 3265.032
3265.753
3266.085
3266.365
3267.227
20 3267.519
3268.029
3268.403
3268.788
3269.614
3269.810

D

3260.257
3260.983
3261.238
3261.805
5 3262.036
3262.480
3262.682
3263.196
3263.649
10 3264.208
3264.957
3265.731
3266.050
3266.322
15 3267.203
3267.490
3267.999
3268.383
3268.760
20 3269.589

A

	3270.418
	3270.794
	3271.011
	3271.405
5	3271.885
	3272.042
	3272.513
	3272.789
	3273.179
10	3273.411
	3273.734
	3274.629
	3275.167
	3275.354
15	3275.594
	3275.829
	3276.209
	3276.475
20	3276.956
	3277.607
	3278.283
	3278.452
	3278.613
	3278.716
25	3278.837
	3279.088
	3279.355
	3279.616
	3280.059

B

	3270.407
	3270.790
	3271.002
	3271.400
5	3271.871
	3272.034
	3272.505
	3272.784
	3273.391
10	3273.684
	3274.623
	3275.157
	3275.344
	3275.589
15	3275.823
	3276.183
	3276.439
	3276.949
20	3277.600
	3278.276
	3278.449
	3278.605
	3278.707
	3278.827
25	3279.078
	3279.348
	3279.608
	3280.033

C

	3270.395
	3270.799
	3270.992
	3271.406
5	3271.854
	3272.040
	3272.514
	3272.792
	3273.368
10	3273.693
	3274.630
	3275.155
	3275.597
	3275.831
15	3276.145
	3276.531
	3276.957
	3277.607
20	3278.119
	3278.286
	3278.457
	3278.613
	3278.717
	3278.838
25	3279.067
	3279.355
	3279.622
	3279.991
	3280.094

D

	3270.346
	3271.004
	3271.384
	3271.826
5	3271.889
	3272.488
	3272.771
	3273.271
	3274.606
10	3275.135
	3275.578
	3275.814
	3276.759
15	3276.926
	3277.582
	3278.265
	3278.582
	3278.813
20	3279.027
	3279.323
	3279.961
	3280.194

A

5 3280.059
3280.706
3282.452
3282.940
3283.054
3283.756
3284.204
3285.047
10 3285.718
3285.817
3286.163
3288.468
3288.909
15 3289.543
3289.842
3290.073

B

5 3280.031
3280.695
3282.442
3282.930
3283.037
3283.746
3284.193
3284.636
10 3285.036
3285.712
3285.814
3286.154
3288.439
15 3288.891
3289.537
3289.839
3290.058

C

5 3280.093
3280.702
3281.086
3281.728
3282.455
3282.903
3282.975
3283.744
10 3284.180
3284.639
3285.044
3285.717
3285.818
15 3286.159
3286.844
3288.100
3288.401
3288.874
20 3288.936
3289.544
3289.844
3290.076

D

5 3280.670
3281.064
3281.155
3281.704
3281.980
3282.432
3282.867
3283.668
10 3283.780
3284.225
3285.010
3285.676
3285.797
15 3286.123
3286.824
3288.085
3288.354
3288.916
20 3289.519
3289.821

A

3290.327
3291.333
3291.875
3292.492
5 3292.808
3293.085
3293.341
3293.784
3294.053
10 3294.201
3294.384
3295.780
3296.106
3296.865
15 3297.489
3297.932
3298.098
3299.302
3299.788
20 3300.206

B

3290.321
3291.305
3291.868
3292.478
5 3292.797
3293.074
3293.336
3293.578
3293.774
10 3294.046
3294.189
3294.371
3295.154
3295.774
15 3296.096
3296.853
3297.458
3297.930
3298.082
20 3298.285
3299.783
3300.196

C

3290.329
3291.247
3291.877
3292.463
5 3292.854
3293.091
3293.342
3293.578
3293.785
10 3294.051
3294.164
3294.378
3295.163
3295.551
15 3295.781
3296.104
3296.842
3297.426
3297.511
20 3298.069
3298.132
3299.303
3299.789
3300.187

D

3290.301
3291.174
3291.853
3292.421
5 3293.040
3293.314
3293.761
3294.125
3294.906
10 3295.140
3295.523
3295.757
3296.077
3296.795
15 3297.530
3298.045
3299.277
3299.768
3300.147

A
 3300.206
 3300.493
 3301.123
 3302.649
 3303.067
 3303.277
 3303.672
 3304.411
 3304.633
 3305.157
 3305.823
 3306.273
 3307.472
 3307.681
 3308.071
 3308.312
 3308.609
 3308.997
 3309.248
 3309.339
 3309.498
 3310.048

5

10

15

20

B
 3300.196
 3300.484
 3301.117
 3302.004
 3302.744
 3303.058
 3303.263
 3303.668
 3304.402
 3304.628
 3305.151
 3305.624
 3305.865
 3306.073
 3306.267
 3307.469
 3307.674
 3308.060
 3308.302
 3308.638
 3308.971
 3309.240
 3309.350
 3309.488
 3309.826

5

10

15

20

25

C
 3300.187
 3300.492
 3301.129
 3302.015
 3302.651
 3303.053
 3303.250
 3303.674
 3304.260
 3304.414
 3304.541
 3304.634
 3304.980
 3305.159
 3305.630
 3305.872
 3306.083
 3306.276
 3307.478
 3307.681
 3308.046
 3308.346
 3309.064
 3309.245
 3309.360
 3309.493
 3309.703

5

10

15

20

25

D
 3300.147
 3300.451
 3301.106
 3301.988
 3302.630
 3303.009
 3303.227
 3303.646
 3304.390
 3304.513
 3304.607
 3305.137
 3305.604
 3305.844
 3306.045
 3306.254
 3307.645
 3309.067
 3309.333
 3309.460
 3309.822

5

10

15

20

25

A
 5 3310.517
 3310.784
 3310.816
 3311.297
 3311.590
 3312.046
 3313.229
 3313.382
 3313.805
 10 3314.049
 3314.759
 3315.035
 3317.271
 3317.683
 15 3318.354
 3318.501
 3318.768
 3319.689
 3320.227

B
 5 3310.496
 3310.839
 3311.292
 3311.579
 3312.031
 3312.487
 3313.206
 3313.857
 3314.093
 10 3314.752
 3315.029
 3317.257
 3317.674
 3318.349
 15 3318.493
 3318.760
 3319.679
 3320.126

C
 5 3310.477
 3310.780
 3310.844
 3311.299
 3311.588
 3312.015
 3312.498
 3313.163
 3313.400
 10 3313.864
 3314.100
 3314.458
 3314.761
 3315.036
 15 3317.242
 3317.682
 3318.358
 3318.496
 20 3318.768
 3319.487
 3319.686
 3319.817
 3320.132

D
 5 3310.426
 3311.274
 3311.565
 3311.991
 3312.469
 3313.062
 3314.071
 3314.429
 3314.586
 10 3314.737
 3315.009
 3315.842
 3316.204
 3317.176
 15 3317.652
 3318.339
 3318.442
 3318.736
 20 3319.449
 3319.663
 3319.797
 3320.111

A

5	3320.450
	3321.889
	3322.258
	3323.342
	3324.010
	3325.136
	3326.334
	3327.571
	3328.804
10	3329.000
	3330.532
	3331.859
	3332.029
15	3333.218
	3334.415
	3335.788
	3337.321
	3338.656
20	3339.867
	3340.638
	3341.034

B

5	3320.125
	3321.449
	3322.880
	3323.334
	3324.990
	3325.325
	3326.563
	3327.803
	3328.990
10	3329.517
	3330.851
	3331.651
	3332.017
15	3333.215
	3334.526
	3335.780
	3337.309
	3338.557
20	3339.652
	3340.862
	3341.105
	3342.624
	3343.160

C

5	3320.132
	3321.456
	3322.891
	3323.347
	3324.016
	3325.336
	3326.474
10	3327.572
	3328.810
	3329.000
	3330.494
	3331.848
15	3332.660
	3333.989
	3335.221
	3336.375
20	3337.787
	3338.300
	3339.609
	3340.660
	3341.870
	3342.109
25	3343.597
	3344.023

D

5	3320.111
	3321.429
	3322.792
	3323.393
	3324.864
	3325.328
	3326.949
	3327.299
10	3328.545
	3329.972
	3330.468
	3331.821
	3332.643
15	3333.000
	3334.813
	3335.218
	3336.446
20	3337.643
	3338.843
	3339.563

3330.764
3331.181
3332.124
3332.578
5 3332.689
3333.038
3333.348
3334.612
10 3336.152
3336.405
3336.701
3336.828
3337.101
15 3338.981
3339.279
3340.135

3330.759
3331.175
3331.907
3332.116
5 3332.573
3332.682
3333.029
3333.333
3334.577
10 3336.142
3336.406
3336.689
3336.813
15 3337.183
3338.970
3339.268
3340.128

3330.024
3330.765
3331.183
3331.911
5 3332.126
3332.585
3332.680
3333.041
10 3333.348
3333.577
3333.837
3334.538
3334.586
15 3336.153
3336.621
3336.943
3337.191
3337.356
20 3338.977
3339.278
3339.931
3340.136

3330.739
3331.155
3331.892
3332.102
5 3332.549
3332.656
3333.016
3333.320
10 3333.555
3333.816
3334.371
3336.128
3336.507
15 3337.146
3338.958
3339.247
3340.125
3340.206

A

3340.135
 3340.290
 3340.625
 3341.375
 5 3342.003
 3342.287
 3342.518
 3342.973
 3343.300
 10 3343.542
 3343.718
 3344.576
 3346.032
 3347.219
 15 3347.303
 3347.759
 3348.026
 3348.184
 3348.438
 3349.055
 20 3349.856
 3350.042
 3350.235

B

3340.128
 3340.281
 3340.618
 3341.366
 5 3341.998
 3342.276
 3342.609
 3342.966
 3343.295
 10 3343.537
 3343.711
 3344.369
 3344.568
 3344.984
 15 3345.657
 3346.020
 3347.214
 3347.757
 3348.018
 20 3348.178
 3348.427
 3349.050
 3349.462
 3349.846
 25 3350.028
 3350.232

C

3340.136
 3340.273
 3340.628
 3340.816
 5 3341.371
 3342.007
 3342.270
 3342.621
 3342.976
 10 3343.302
 3343.546
 3343.719
 3344.380
 3344.583
 15 3344.709
 3344.991
 3345.286
 3345.387
 3345.672
 20 3346.021
 3346.507
 3346.794
 3347.226
 3347.302
 25 3347.511
 3347.765
 3347.813
 3347.907
 3348.026
 30 3348.187
 3348.433
 3349.058
 3349.474
 3349.853
 35 3350.041
 3350.243

U

3340.125
 3340.206
 3340.603
 3340.779
 5 3341.338
 3341.995
 3342.215
 3342.591
 3342.948
 10 3343.278
 3343.527
 3343.691
 3344.352
 3344.557
 15 3344.966
 3345.275
 3345.363
 3345.649
 3345.984
 20 3346.765
 3347.204
 3347.766
 3348.002
 3348.162
 25 3348.373
 3349.033
 3349.450
 3349.809
 3350.219

AD-A151 757

AN ATLAS OF PURE WATER VAPOR SPECTRA FROM 500 TO
5000/CN VOLUME 2. (U) OHIO STATE UNIV COLUMBUS
ELECTROSCIENCE LAB R K LONG ET AL. SEP 84

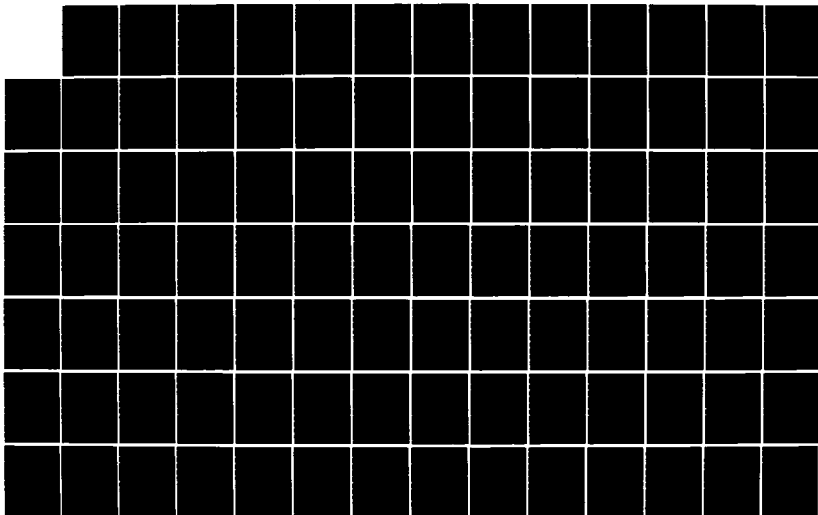
4/5

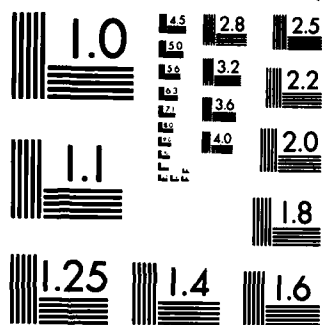
UNCLASSIFIED

ESL-713774-3-VOL-2 ARO-17603. 4-GS

F/G 7/4

NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

A

3350.042
3350.235
3350.500
3351.254
5 3351.613
3352.696
3353.222
3353.653
3353.838
10 3354.292
3354.499
3355.178
3355.259
3355.689
15 3355.864
3356.281
3356.532
3356.622
20 3357.020
3357.673
3358.083
3358.815
3358.944
3359.180
25 3359.510
3359.792
3360.167

B

3350.028
3350.231
3350.496
3351.240
5 3351.602
3352.686
3353.213
3353.637
3354.283
10 3354.487
3355.173
3355.613
3356.275
15 3356.525
3356.993
3357.666
3358.073
3358.803
20 3358.939
3359.177
3359.484
3359.779
3360.151

C

3350.042
3350.243
3350.505
3351.220
5 3351.614
3352.695
3353.222
3353.623
3354.293
10 3354.494
3355.183
3355.586
3356.285
15 3356.535
3356.931
3357.067
3357.675
20 3358.085
3358.815
3358.917
3359.185
3359.471
25 3359.536
3359.789
3360.156

D

3350.028
3350.248
3351.183
3351.585
5 3352.655
3353.180
3353.564
3354.265
3354.450
10 3355.145
3355.859
3356.261
3356.523
15 3356.906
3357.638
3358.060
3358.793
3358.931
3359.352
20 3360.065
3360.142

A	B	C	D
3360.151	3360.156		3360.142
3360.384	3360.392		3360.652
3360.667	3360.679		3360.863
3360.887	3360.890	5	3361.188
3361.055	3361.185		3362.368
3362.112	3361.555		3362.866
3362.275	3361.749		3363.850
3362.926	3362.236		3364.363
3363.872	3362.640		3364.902
3364.246	3362.926	10	3365.361
3364.819	3363.873		3365.966
3364.899	3364.194		3366.198
3365.379	3364.427		3366.444
3365.704	3364.815	15	3366.967
3366.226	3365.384		3367.379
3366.529	3365.881		3368.269
3366.996	3366.226		3368.510
3367.343	3366.507		3368.824
3367.515	3366.990	20	3369.149
3367.628	3367.462		3369.706
3368.294	3368.291		3369.826
3368.521	3368.526		3370.242
3368.672	3368.682		
3368.811	3368.785	25	
3369.146	3369.131		
3369.735	3369.735		
3369.870	3369.866		
3370.030			

A

3370.268
3370.900
3371.045
3372.823
5 3373.042
3373.873
3374.011
3374.674
3375.181
10 3375.418
3375.612
3376.095
3376.287
3376.666
15 3377.224
3377.543
3378.057
3378.431
3378.525
20 3378.913
3379.117
3379.662
3380.153

B

3370.262
3371.033
3372.531
3372.812
5 3373.037
3373.865
3374.004
3374.320
3374.661
10 3375.175
3375.410
3375.603
3376.086
3376.273
15 3376.658
3377.217
3377.532
3378.048
3378.423
20 3378.518
3378.905
3379.104
3379.650
3380.137

C

3370.269
3370.906
3371.033
3371.990
5 3372.204
3372.544
3372.825
3373.044
3373.201
10 3373.882
3374.012
3374.332
3374.646
3374.705
15 3375.181
3375.419
3375.614
3376.097
3376.286
20 3376.609
3377.226
3377.543
3378.056
3378.431
25 3378.519
3378.914
3379.109
3379.662
3380.160

D

3370.242
3371.013
3371.971
3372.180
5 3372.524
3372.798
3373.020
3373.178
3373.884
10 3373.975
3374.307
3374.632
3375.156
3375.395
15 3375.584
3376.073
3376.259
3376.645
3377.208
20 3377.482
3378.027
3378.404
3378.894
3379.068
25 3379.635
3380.135

A

3380.153
3380.458
3380.600
3382.469
3382.865
3383.067
3383.760
3384.107
3384.362
3385.342
3385.680
3386.349
3386.803
3387.204
3387.371
3387.706
3387.839
3388.095
3388.630
3389.314
3389.461
3389.821
3390.112

5

10

15

20

B

3380.137
3380.444
3380.788
3381.680
3381.840
3382.461
3382.863
3383.047
3383.750
3384.102
3384.327
3385.335
3385.616
3386.338
3386.789
3387.198
3387.360
3387.698
3387.833
3388.082
3388.620
3389.308
3389.455
3389.812
3390.107
3390.226

5

10

15

20

25

C

3380.160
3380.426
3380.479
3380.800
3381.688
3381.845
3382.469
3382.873
3383.019
3383.100
3383.761
3384.115
3384.458
3385.345
3385.750
3386.350
3386.803
3387.206
3387.373
3387.712
3387.841
3388.099
3388.633
3389.165
3389.316
3389.461
3389.821
3389.962
3390.121

5

10

15

20

25

D

3380.135
3380.368
3380.771
3381.666
3381.828
3382.445
3382.971
3383.738
3384.309
3384.576
3385.330
3385.819
3386.323
3386.772
3387.182
3387.347
3387.688
3387.812
3388.072
3388.605
3389.141
3389.280
3389.432
3389.795
3390.096

5

10

15

20

25

A

3390.112
3391.043
3391.335
3391.424
5 3391.565
3391.808
3392.421
3392.714
3392.914
10 3393.206
3393.417
3393.509
3393.682
3394.273
15 3394.573
3395.871
3395.998
3396.166
3397.164
20 3397.365
3398.139
3398.805
3399.744
3400.002
25 3400.150

B

3390.107
3391.032
3391.421
3391.550
5 3391.800
3392.396
3392.925
3393.409
3393.676
10 3394.258
3394.562
3394.673
3395.089
3395.865
15 3395.992
3396.156
3397.099
3398.133
3398.795
20 3399.737
3399.992
3400.152

C

3390.121
3391.044
3391.341
3391.429
5 3391.538
3391.808
3392.446
3393.196
3393.421
10 3393.682
3394.272
3394.575
3394.686
3395.097
15 3395.690
3395.877
3396.001
3396.160
3397.365
20 3398.140
3398.786
3399.212
3399.748
3400.002
25 3400.158

D

3390.096
3391.022
3391.453
3391.784
5 3393.412
3393.655
3394.239
3394.549
3395.073
10 3395.668
3395.856
3395.991
3396.141
3397.517
15 3398.115
3398.743
3399.714
3399.975

A
 3400.003
 3400.399
 3400.569
 3400.613
 5 3401.019
 3401.400
 3402.074
 3402.565
 10 3403.572
 3403.703
 3404.140
 3404.788
 3405.022
 3406.007
 15 3407.324
 3407.816
 3408.846
 3409.097
 20 3409.197
 3409.632
 3409.978
 3410.196

B
 3400.393
 3400.636
 3401.044
 3401.481
 5 3402.057
 3402.681
 3403.548
 3404.132
 3405.014
 10 3406.655
 3407.313
 3407.812
 3408.826
 3409.085
 15 3409.198
 3409.625
 3409.969
 3410.190

C
 3400.004
 3400.158
 3400.401
 3400.572
 5 3400.646
 3401.024
 3401.484
 3402.044
 3402.689
 10 3403.484
 3403.687
 3404.141
 3405.024
 3405.537
 15 3406.647
 3407.326
 3407.476
 3407.820
 20 3408.029
 3408.808
 3409.092
 3409.197
 3409.635
 3409.979
 25 3410.199

D
 3400.378
 3400.570
 3401.061
 3401.423
 5 3401.485
 3402.002
 3402.662
 3403.435
 3404.104
 10 3405.000
 3405.500
 3406.589
 3406.635
 3407.299
 15 3407.444
 3407.804
 3408.013
 3408.747
 3408.834
 20 3409.168
 3409.614
 3409.954
 3410.175

A

3410.196
3410.471
3411.099
3411.161
5 3411.214
3411.847
3412.465
3413.057
3413.353
10 3413.563
3413.844
3413.992
3414.463
3414.922
15 3415.093
3415.430
3415.528
3415.661
3415.743
20 3415.849
3416.034
3416.155
3416.647
3416.822
25 3417.172
3417.365
3417.803
3418.445
3419.123
30 3419.452
3419.936

B

3410.190
3410.466
3410.648
3411.099
5 3411.707
3411.839
3412.456
3413.032
3413.337
10 3413.553
3413.844
3413.988
3414.451
3414.915
15 3415.081
3415.422
3415.522
3415.649
3415.883
20 3416.021
3416.144
3416.314
3416.641
3416.812
25 3417.160
3417.547
3417.793
3418.423
3419.116
30 3419.428
3419.901

C

3410.199
3410.475
3410.658
3411.104
5 3411.153
3411.720
3411.847
3412.466
3413.007
10 3413.564
3413.850
3413.988
3414.464
3414.924
15 3415.092
3415.434
3415.530
3415.660
3415.891
20 3416.035
3416.155
3416.330
3416.650
3416.822
25 3417.171
3417.366
3417.556
3417.807
3418.405
30 3419.130
3419.381
3420.108

D

3410.175
3410.453
3410.633
3411.110
5 3411.700
3411.823
3412.440
3413.048
3413.125
10 3413.537
3413.821
3413.896
3414.319
3414.436
15 3414.903
3415.070
3415.467
3415.868
3416.124
20 3416.299
3416.626
3416.795
3417.142
3417.529
25 3417.783
3418.324
3419.355
3419.769
3420.073
30 3420.197

A

3420.440
3421.179
3421.709
3422.336
5 3423.113
3423.253
3424.076
3424.225
3424.418
10 3425.013
3425.216
3426.180
3426.790
3427.093
15 3427.337
3427.697
3429.263
3429.569
3430.223

B

3420.416
3421.168
3421.663
3422.287
5 3423.107
3423.231
3424.062
3424.207
3424.412
10 3425.002
3425.205
3425.677
3426.170
3426.555
15 3426.783
3427.083
3427.334
3427.861
3429.255
20 3429.564
3429.767
3430.214

C

3420.747
3421.180
3421.877
3422.405
5 3423.110
3423.230
3424.069
3424.215
3424.420
10 3425.593
3425.014
3425.219
3425.462
3425.684
15 3425.902
3426.177
3426.564
3426.798
3427.094
20 3427.341
3427.850
3427.969
3428.540
3429.264
25 3429.573
3429.773
3430.228

D

3420.073
3422.541
3423.320
3424.022
5 3424.109
3424.386
3424.570
3424.988
3425.190
10 3425.660
3426.158
3426.551
3426.781
3427.070
15 3427.709
3428.056
3429.238
3429.550
3429.748
20 3430.206

A
3430.413
3430.834
3431.016
3432.125
5 3432.475
3432.503
3432.816
3433.100
3433.770
10 3434.019
3434.506
3435.005
3435.036
3435.973
15 3436.287
3436.453
3436.820
3436.918
3437.395
20 3437.469
3437.762
3437.930
3438.188
3438.440
25 3438.635
3438.745
3439.186
3439.307
3439.573
30 3439.663
3439.756
3439.919
3440.165

B
3430.214
3430.407
3430.829
3430.989
5 3432.119
3432.467
3432.579
3432.791
3433.762
10 3434.038
3434.558
3434.707
3435.080
3435.679
15 3435.962
3436.279
3436.442
3436.808
3436.910
20 3437.392
3437.752
3437.979
3438.169
3438.430
25 3438.615
3438.733
3439.179
3439.296
3439.567
30 3439.656
3439.751
3439.906
3440.153

C
3430.227
3430.416
3430.813
3431.084
5 3432.128
3432.478
3432.589
3432.744
3433.772
10 3434.050
3434.567
3434.702
3435.087
3435.687
15 3435.964
3436.285
3436.439
3436.821
3436.920
20 3437.395
3437.755
3437.989
3438.181
3438.434
25 3438.628
3438.742
3439.188
3439.303
3439.575
30 3439.656
3439.759
3439.910
3440.158

D
3430.206
3430.392
3430.808
3431.258
5 3432.103
3432.464
3432.883
3433.740
3434.018
10 3434.541
3434.685
3435.064
3435.669
3435.923
15 3436.228
3436.433
3436.794
3437.425
3437.750
20 3438.011
3438.617
3439.168
3439.563
3439.906
25 3440.117

A

3440.165
3440.383
3440.605
3440.715
5 3440.798
3441.319
3441.442
3441.775
10 3442.072
3442.163
3442.366
3443.005
3443.194
15 3444.212
3444.375
3444.533
3444.882
20 3445.000
3445.145
3445.239
3445.352
3446.177
3446.303
25 3446.867
3447.221
3448.380
3448.693
30 3448.937
3449.775
3450.183

B

3440.153
3440.374
3440.598
3440.709
5 3441.313
3441.482
3441.771
3442.065
10 3442.552
3442.750
3443.090
3444.203
3444.364
15 3444.524
3444.832
3445.001
3445.103
3445.591
20 3445.731
3445.834
3446.284
3446.780
3448.336
3448.680
25 3448.925
3449.765
3450.175

C

3440.158
3440.382
3440.609
3440.713
5 3441.321
3441.495
3441.779
3442.014
10 3443.188
3444.215
3444.379
3444.536
3445.055
15 3445.597
3445.741
3445.844
3446.297
3447.575
20 3448.507
3448.683
3448.937
3449.321
3449.776
3450.184

D

3440.117
3440.361
3440.568
3440.630
5 3441.301
3441.459
3441.945
3443.307
10 3444.194
3444.358
3444.511
3444.950
3445.807
15 3446.648
3448.904
3449.747
3450.152

A
 3450.183
 3451.238
 3451.054
 3452.628
 5 3453.117
 3454.023
 3454.529
 3455.769
 3456.245
 10 3456.597
 3456.746
 3456.874
 3457.338
 3457.428
 15 3457.578
 3458.045
 3458.257
 3458.545
 20 3458.751
 3458.922
 3459.276
 3459.518
 3459.642
 25 3460.006
 3460.206

B
 3450.175
 3451.231
 3451.946
 3452.624
 5 3453.107
 3454.010
 3454.523
 3455.737
 3456.230
 10 3456.593
 3456.739
 3456.866
 3457.329
 3457.565
 15 3458.037
 3458.253
 3458.534
 3458.739
 20 3458.911
 3459.268
 3459.511
 3459.635
 3460.000

C
 3450.184
 3450.876
 3451.239
 3451.798
 5 3451.955
 3452.352
 3452.640
 3453.115
 3453.729
 10 3454.023
 3454.536
 3455.700
 3456.219
 15 3456.599
 3456.746
 3456.872
 3457.340
 3457.508
 20 3457.560
 3457.796
 3458.045
 3458.258
 3458.484
 3458.725
 25 3458.777
 3459.519
 3459.642
 3459.727
 3460.009

D
 3450.152
 3450.844
 3451.211
 3451.776
 5 3451.928
 3452.342
 3452.598
 3453.047
 3453.106
 10 3453.705
 3453.981
 3454.513
 3455.597
 15 3456.342
 3456.576
 3456.719
 3457.318
 3457.508
 20 3458.029
 3458.419
 3458.784
 3459.490
 3459.977
 3460.226

3460.691
 3463.078
 3464.337
 3464.556
 3464.974
 3465.116
 3465.885
 3467.505
 3467.771
 3468.421
 3468.984
 3469.222
 3469.490
 3470.151
 3470.238

3460.290
 3460.610
 3461.095
 3461.659
 3462.951
 3463.280
 3463.998
 3464.373
 3464.638
 3465.307
 3465.146
 3465.949
 3466.115
 3466.599
 3467.147
 3467.808
 3468.522
 3469.015
 3469.252
 3469.524
 3469.986

3460.372
 3460.575
 3460.693
 3461.090
 3461.295
 3461.529
 3461.819
 3462.105
 3462.375
 3463.997
 3464.246
 3464.608
 3465.092
 3465.349
 3465.940
 3466.046
 3466.583
 3466.844
 3467.111
 3467.479
 3467.800
 3468.534
 3469.007
 3469.245
 3469.516
 3469.976

A

3600.195
3600.735
3601.407
3601.689
5 3601.975
3602.082
3602.345
3602.469
3602.956
10 3603.498
3603.632
3603.996
3604.235
3604.785
15 3604.893
3605.245
3605.372
3605.521
3605.659
20 3605.831
3606.076
3606.444
3607.313
3607.642
25 3607.823
3608.042
3608.196
3608.400
3609.667
30 3610.158

B

3603.156
3603.990
3604.231
3610.207

C

3610.244

D

3610.202

A
3590.187
3590.428
3590.679
3590.775
5 3590.855
3591.253
3591.345
3591.600
3591.787
10 3592.012
3592.286
3592.611
3593.027
3593.522
15 3593.786
3593.961
3594.165
3594.283
3594.410
20 3594.580
3595.118
3595.788
3595.957
3596.266
25 3596.896
3597.064
3597.287
3597.980
3598.551
30 3598.913
3598.969
3599.044
3599.373
3599.542
35 3600.017
3600.195

B
3590.424
3590.842
3591.591
3592.005
5 3597.063
3597.285
3600.186

C
3600.146

D
3600.156

A

3580.076
3580.297
3580.516
3580.686
5 3580.894
3581.037
3581.120
3581.318
3581.423
10 3581.529
3581.801
3582.019
3582.359
3582.689
15 3583.367
3583.628
3584.263
3584.362
3584.748
20 3585.198
3585.640
3585.710
3585.847
3586.380
25 3587.149
3587.469
3587.796
3587.959
3588.756
30 3589.581
3589.717
3590.187

B

3580.111
3580.680
3580.892
3581.043
5 3581.317
3581.414
3581.520
3581.870
3582.017
10 3582.341
3582.757
3583.782
3584.354
3585.264
15 3590.206

C

3590.227

D

3590.154

A

3570.034
3570.168
3570.248
3570.483
5 3570.557
3571.262
3571.767
3572.207
3572.740
10 3572.851
3572.941
3573.116
3573.391
3573.637
15 3574.080
3574.221
3574.439
3574.524
3574.795
20 3575.000
3575.044
3575.343
3575.767
3576.359
25 3576.507
3576.794
3577.148
3578.004
30 3578.566
3578.658
3579.070
3579.288
3580.023
3580.075

B

3570.636
3571.761
3572.197
3572.735
5 3572.850
3573.091
3573.389
3573.639
3574.078
10 3574.551
3575.140
3575.758
3576.941
3577.992
15 3578.560
3578.648
3579.071
3579.355
3580.111

C

3571.764
3572.210
3575.760
3577.434
5 3577.976
3578.658
3580.174

D

3580.146

A
 3560.034
 3560.156
 3560.771
 3560.893
 5 3561.153
 3561.218
 3561.422
 3561.576
 3561.911
 10 3562.060
 3562.299
 3562.693
 3562.928
 15 3563.508
 3563.938
 3564.423
 3564.661
 3565.008
 3565.551
 20 3567.204
 3568.419
 3568.813
 3569.277
 3569.617
 25 3570.033
 3570.168
 3570.248

B
 3560.766
 3560.887
 3561.265
 3561.566
 5 3561.904
 3562.373
 3562.682
 3562.919
 3564.063
 10 3564.706
 3564.993
 3568.838
 3569.605
 3570.027

C
 3570.075

D
 3570.198

A

3550.004
3550.201
3550.395
3550.745
5 3550.884
3551.000
3551.280
3551.411
3551.798
10 3552.327
3552.588
3552.800
3552.904
3553.410
15 3553.706
3553.836
3554.344
3554.440
3554.771
20 3554.900
3555.127
3555.547
3555.670
3556.020
25 3556.498
3556.690
3557.076
3557.543
3557.917
30 3557.992
3558.383
3558.850
3558.930
3559.107
35 3559.201
3559.328
3559.737
3560.037
3560.156

B

3550.201
3550.413
3550.735
3550.879
5 3551.278
3551.935
3552.781
3553.401
3553.871
10 3554.338
3554.428
3554.759
3554.889
3555.119
15 3555.540
3555.666
3555.909
3556.011
3557.001
20 3557.534
3557.985
3558.375
3558.842
3558.926
25 3559.094
3559.318
3559.730
3560.237

C

3550.190
3554.383
3554.894
3555.189
5 3555.551
3555.678
3556.027
3557.049
3557.579
10 3558.026
3558.385
3558.857
3559.193
3560.239

D

3560.162

A

3540.046
3540.166
3540.315
3540.489
5 3540.673
3540.868
3541.323
3541.610
3542.240
10 3542.349
3542.713
3542.872
3542.995
3543.570
15 3543.850
3544.115
3544.633
3544.986
3545.542
20 3545.987
3546.303
3546.493
3546.820
3547.209
25 3547.505
3547.597
3548.094
3548.326
3548.865
30 3549.014
3549.345
3549.639
3550.003
3550.201

B

3540.141
3540.302
3540.482
3540.659
5 3540.851
3541.312
3541.601
3542.239
10 3542.657
3543.605
3544.245
3545.574
3545.974
15 3546.300
3546.490
3547.483
3548.495
3548.854
20 3549.337
3549.630
3549.998
3550.201

C

3540.222
3540.309
3540.492
3540.706
5 3541.325
3541.613
3548.866
3549.344
3549.637
10 3550.190

D

3550.145

A

3530.066
3530.477
3530.704
3530.928
5 3531.350
3531.667
3531.839
3532.204
3532.514
10 3532.710
3533.417
3533.521
3534.262
3534.507
15 3535.006
3536.163
3536.562
3536.865
3537.166
20 3537.356
3537.581
3537.720
3537.956
3538.125
25 3538.344
3538.479
3538.774
3539.389
3539.611
30 3539.798
3540.046
3540.166

B

3530.055
3530.653
3530.770
3531.292
5 3531.355
3531.657
3531.831
3532.196
3532.505
10 3532.701
3533.511
3534.251
3534.495
3535.002
15 3536.111
3536.850
3537.152
3537.349
3537.572
20 3537.710
3537.948
3538.115
3538.335
3538.477
25 3538.760
3539.377
3539.601
3539.791
3540.141

C

3530.114
3531.674
3531.843
3532.208
5 3532.520
3532.712
3532.822
3533.524
3534.270
10 3534.509
3535.017
3536.124
3537.190
3537.356
15 3537.585
3537.739
3537.958
3538.130
3538.347
20 3538.490
3538.830
3539.401
3539.618
3539.805
25 3540.138
3540.221

D

3540.095

A

3520.231
3520.434
3520.558
3520.803
5 3520.937
3521.107
3521.283
3521.917
3522.212
10 3522.430
3522.609
3523.098
3523.860
3524.060
15 3524.572
3524.817
3525.013
3525.594
3526.025
20 3526.386
3526.565
3526.947
3527.471
3527.958
25 3528.076
3528.725
3528.970
3529.561
3530.066
30 3530.263

B

3520.219
3520.434
3520.548
5 3520.652
3520.797
3520.932
3521.086
3521.267
3521.917
10 3522.184
3523.244
3524.158
3524.771
3524.991
15 3525.489
3525.714
3526.016
3526.378
3526.564
20 3527.458
3528.114
3528.853
3530.055

C

3520.226
3520.446
3520.550
3520.661
5 3520.943
3521.323
3529.582
3530.114

D

3530.178

A

3510.493
3510.642
3510.835
3511.551
5 3512.076
3512.371
3512.607
3513.051
3513.303
10 3513.668
3513.824
3514.037
3514.157
3514.299
15 3514.393
3514.538
3514.816
3514.903
20 3515.386
3515.709
3515.805
3516.013
3516.118
25 3516.215
3516.825
3517.069
3517.427
3517.798
3518.065
30 3518.217
3518.440
3518.520
3518.605
3518.955
35 3519.138
3519.635
3519.840
3520.231

B

3510.484
3510.597
3510.821
3511.474
5 3512.061
3512.364
3512.595
3513.023
3513.290
10 3513.666
3513.811
3514.031
3514.148
3514.292
15 3514.386
3514.526
3514.810
3515.379
20 3515.697
3516.003
3516.111
3516.205
3516.522
25 3517.059
3517.401
3517.792
3518.058
3518.211
30 3518.433
3518.513
3518.602
3518.882
3519.089
35 3519.631
3519.825
3520.219

C

3510.805
3511.750
3512.048
3512.373
5 3512.601
3513.066
3513.305
3513.675
3513.813
10 3514.121
3514.297
3514.396
3514.535
3514.820
15 3514.898
3515.390
3515.710
3516.015
20 3516.120
3516.217
3516.616
3516.932
3517.072
25 3517.333
3517.549
3517.801
3518.067
3518.219
30 3518.445
3519.208
3519.638
3519.893
3520.226

D

3515.669
3520.207

A

3500.246
3500.317
3500.675
3500.865
5 3501.055
3501.222
3501.460
3501.536
3501.810
10 3501.972
3502.120
3502.220
3502.390
3502.852
15 3503.196
3503.334
3503.566
3504.151
3504.336
20 3504.461
3504.687
3505.263
3505.550
3505.858
25 3505.944
3506.072
3506.693
3507.006
3507.211
30 3507.824
3508.373
3508.804
3509.366
3509.499
35 3510.251

B

3500.237
3500.665
3500.859
3501.039
5 3501.213
3501.430
3501.789
3502.205
3502.368
10 3502.787
3503.401
3504.115
3504.453
3504.834
15 3505.253
3505.540
3505.838
3506.058
3506.675
20 3506.998
3507.207
3507.818
3508.367
3508.733
25 3509.684
3510.254

C

3500.252
3500.312
3500.678
3500.865
5 3505.017
3505.568
3506.088
3506.678
3506.763
10 3507.007
3507.214
3507.682
3507.828
3508.373
15 3508.646
3510.197

D

3510.222

A

3490.550
3490.648
3491.002
3491.096
5 3491.162
3491.305
3491.734
3491.886
3492.303
10 3492.702
3493.430
3493.663
3494.153
3494.494
15 3494.624
3494.924
3495.138
3495.380
3496.024
20 3496.277
3496.302
3496.575
3496.638
25 3497.180
3497.432
3497.582
3497.977
3498.170
30 3498.596
3499.110
3499.731
3499.918
3500.246

B

3490.538
3490.986
3491.877
3492.356
5 3492.695
3493.416
3493.657
3494.144
3494.493
10 3494.622
3494.921
3495.090
3495.170
3495.022
15 3496.275
3496.645
3497.166
3497.426
3497.574
20 3497.969
3498.155
3498.583
3499.101
3499.697
25 3499.900
3500.237

C

3490.538
3490.949
3491.098
3491.878
5 3492.363
3492.703
3493.398
3493.667
3494.154
10 3494.503
3494.630
3494.943
3496.870
3497.179
15 3497.437
3497.584
3497.978
3498.167
3498.585
20 3499.111
3499.677
3499.927

D

3490.453
3491.694
3492.316
3492.660
5 3493.244
3493.571
3494.035
3494.822
3496.161
10 3497.481
3497.698
3498.450
3499.044
3500.178

A

3480.215
3480.384
3480.595
3480.875
5 3481.356
3481.651
3482.167
3482.467
3483.840
10 3484.120
3484.479
3484.784
3485.021
3485.148
15 3485.726
3486.460
3486.677
3486.762
3487.817
20 3487.974
3488.296
3488.568
3489.077
3489.233
25 3489.319
3489.565
3489.926
3490.207

B

3480.208
3480.349
3480.788
3481.344
5 3481.641
3482.123
3482.418
3483.842
3484.097
10 3484.469
3485.009
3485.133
3485.694
3486.430
15 3486.608
3487.011
3487.822
3488.323
3489.068
20 3489.228
3489.559
3489.918
3490.239

C

3480.355
3481.360
3482.621
3484.105
5 3484.479
3484.770
3484.992
3485.133
3485.665
10 3486.389
3486.674
3487.025
3487.813
3488.498
15 3489.077
3489.235
3489.319
3489.567
3489.927
20 3490.242

D

3483.985
3484.963
3487.666
3489.173
5 3489.516
3489.868

A

3470.330
3470.554
3471.121
3471.271
5 3471.698
3471.796
3471.950
3472.484
3472.831
10 3472.958
3473.141
3473.245
3473.357
15 3473.465
3473.670
3474.000
3474.743
20 3474.912
3474.988
3475.794
3475.941
3476.337
25 3476.747
3477.097
3477.282
3477.373
3477.756
3477.841
3478.008
30 3479.358
3479.637
3480.215

B

3470.307
3470.540
3470.875
3471.114
5 3471.266
3471.698
3471.774
3472.479
10 3472.820
3473.139
3473.291
15 3473.990
3474.709
3474.926
3475.787
20 3476.331
3476.735
3477.089
3477.271
25 3477.363
3477.538
3477.753
3477.833
3477.998
3478.682
30 3478.989
3479.345
3479.625
3480.208

C

3470.233
3470.492
3470.875
3471.122
5 3471.273
3471.702
3471.938
3472.488
10 3472.833
3473.153
3473.249
3474.004
15 3474.732
3475.218
3475.793
3476.339
20 3476.745
3477.097
3477.286
3477.375
25 3477.543
3477.764
3477.839
3478.012
3478.116
3478.688
30 3479.048
3479.344
3479.630
3480.196

D

3470.238
3471.089
3471.245
3471.626
5 3472.454
3472.802
3472.934
3473.102
10 3473.974
3474.470
3475.755
3475.899
3476.295
15 3476.696
3477.061
3477.248
3477.333
3477.724
20 3477.972
3478.083
3478.653
3478.955
3479.221
3480.221

A
 3610.158
 3610.351
 3610.604
 3610.698
 5 3610.784
 3611.268
 3611.941
 3614.250
 3615.330
 10 3615.624
 3615.803
 3615.921
 3616.048
 3616.365
 15 3616.657
 3617.104
 3618.166
 3619.896

B
 3620.217

C
 3620.122

D
 3620.193

A

3620.728
3621.045
3621.654
3622.025
5 3622.138
3622.378
3623.478
3623.127
10 3623.527
3623.621
3623.887
3623.949
3624.115
15 3624.219
3624.590
3625.146
3626.069
3626.504
20 3626.617
3626.791
3626.882
3630.128

B

3630.220

C

3630.197

D

3630.087

A

3630.852
3631.823
3632.251
3632.402
5 3632.644
3632.792
3632.866
3633.075
3633.624
10 3634.042
3634.254
3634.969
3635.139
15 3635.403
3635.656
3635.945
3636.219
3636.622
20 3636.812
3637.148
3637.209
3637.807
3637.948
3638.321
25 3639.013
3639.578
3639.893
3640.133

B

3635.449
3635.662
3636.218
3636.622
5 3637.235
3638.387
3639.001
3639.576
3640.130

C

3640.139

D

3640.221

A

3640.133
3640.749
3641.127
3641.322
5 3641.632
3642.289
3642.502
3643.013
3643.289
10 3643.656
3643.867
3644.142
3644.317
3644.492
15 3645.241
3645.892
3646.494
3650.164

B

3643.421
3643.871
3650.240

C

3650.197

D

3650.217

A

3652.378
3652.709
3652.875
3653.841
5 3654.314
3654.797
3655.323
3655.490
3656.795
10 3658.424
3658.554
3659.865

B

3654.313
3658.564
3660.073

C

3660.244

D

3660.227

A
3660.368
3660.691
3660.834
3661.107
5 3661.366
3661.763
3661.965
3662.146
3662.781
10 3662.913
3663.036
3663.312
3663.836
15 3664.386
3664.666
3664.753
3664.963
3665.078
20 3665.319
3665.411
3665.897
3666.074
3666.495
3666.833
25 3666.928
3667.014
3667.152
3667.399
3668.069
30 3669.208
3670.112

B
3660.383
3660.717
3660.846
3661.110
5 3661.377
3661.823
3661.984
3662.156
3662.927
10 3663.055
3663.346
3663.846
3664.397
15 3664.675
3664.974
3665.084
3665.437
3666.120
3670.186

C
3670.209

D
3670.236

A
3671.498
3671.930
3672.750
3672.896
5 3673.218
3677.527
3678.028
3678.237
10 3678.527
3678.718
3679.664

B
3680.177

C
3680.202

D
3680.210

PAGE 318

A
3680.314
3680.416
3680.746
3680.968
5 3681.091
3681.304
3681.414
3681.513
3681.702
10 3681.896
3682.042
3682.376
3682.562
3682.674
15 3682.760
3682.950
3683.221
3683.367
3683.606
20 3683.809
3683.927
3684.242
3684.444
3684.521
25 3685.311
3685.526
3686.086
3686.439
3686.705
30 3687.147
3689.156
3689.902

B
3681.116
3681.365
3681.733
3681.938
5 3682.595
3682.970
3683.252
3683.981
3690.192

C
3690.250

D
3690.246

A
3691.825
3692.033
3692.479
3692.692
5 3693.263
3693.769
3694.144
3694.357
3694.775
10 3695.022
3695.156
3695.622
3695.693
3695.760
15 3696.161
3696.399
3696.510
3696.883
3697.179
20 3697.303
3697.639
3697.803
3697.991
3698.153
25 3698.391
3698.531
3698.854
3699.261
3699.490
30 3699.625
3699.765
3700.033
3700.152

B
3694.452
3695.269
3695.789
3697.345
5 3697.677
3698.230
3698.568
3698.890
3699.368
10 3699.528
3700.214

C
3700.163

D
3700.159

A

3700.034
3700.152
3700.727
3700.894
5 3702.081
3702.573
3702.822
3702.898
3703.266
10 3703.600
3703.804
3704.671
3704.854
3704.998
15 3705.085
3705.388
3705.464
3705.698
3706.413
20 3706.566
3706.831
3707.054
3707.419
3707.675
25 3707.833
3707.905
3708.010
3708.254
3708.361
30 3708.597
3709.887

B

3710.111

C

3710.186

D

3710.179

A		B	C	D
	3713.147			
	3713.397			
	3713.747			
	3713.960			
5	3714.363			
	3714.512			
	3714.755			
	3715.435			
	3715.549			
10	3715.703			
	3716.017			
	3716.155			
	3716.306			
	3716.576			
15	3716.820			
	3717.065			
	3717.798			
	3718.390			
	3718.579			
20	3719.075			
	3719.385			
	3719.753			
	3720.122			
				3720.138

A
3720.122
3720.329
3720.440
3721.159
5 3721.489
3722.898
3723.279
3723.825
3723.952
10 3724.202
3724.538
3725.045
3725.620
3725.750
15 3726.796
3727.001
3727.727
3728.174
3728.266
20 3728.406
3728.744
3728.882
3729.255
3729.385
25 3729.709
3730.020
3730.118

B
3730.195

C
3730.225

D
3730.146

A

3730.118
3730.500
3730.572
3731.012
5 3732.052
3732.457
3737.620
3737.633
3738.523
10 3739.058
3739.370

B

3740.125

C

3740.233

D

3740.179

A
3740.327
3741.447
3741.705
3741.820
5 3741.990
3742.094
3742.369
3742.565
3746.406
10 3746.909
3747.585
3750.241

B
3750.246

C
3750.083

D
3750.238

A
3881.101
3881.646
3881.863
3882.043
5 3882.935
3883.152
3883.379
3884.871
3886.314
10 3886.756
3886.912
3887.283
3888.020
15 3888.631
3888.721
3889.634
3889.777

B
3887.258
3888.002
3888.612
3889.604
5 3890.090

C
3890.178

D
3890.192

A
3871.166
3871.494
3871.788
3871.980
5 3872.586
3873.726
3873.203
3874.677
3875.140
10 3875.458
3876.277
3876.555
3876.904
3877.413
15 3877.788
3878.181
3879.480
3880.138

B
3876.274
3876.525
3877.382
3877.788
5 3878.167
3880.200

C
3880.179

D
3880.173

A
3850.306
3860.497
3861.500
3861.979
5 3862.262
3862.484
3862.934
3863.272
3863.400
10 3863.769
3865.584
3865.845
3866.123
3866.558
15 3866.669
3866.755
3867.204
3867.398
3867.523
20 3867.643
3867.748
3867.963
3868.219
3868.622
25 3870.036

B
3866.652
3870.213

C
3870.115

D
3870.221

A
3850.093
3850.303
3855.256
3856.445
5 3856.756
3857.447
3857.819
3857.943
3858.170
10 3858.391
3859.027
3859.286
3859.402
3859.605
15 3860.048

B
3858.988
3859.991

C
3860.189

D
3860.133

A
3841.281
3841.648
3842.413
3842.734
5 3843.418
3843.957
3844.322
3844.809
3845.349
10 3845.553
3846.241
3846.393
3846.706
3847.262
15 3847.741
3848.107
3848.543
3848.888
3849.069
20 3849.524
3849.825
3850.093

B
3846.301
3847.241
3847.719
3850.189

C
3850.221

D
3850.219

A
3830.050
3830.150
3830.210
3830.360
5 3832.056
3832.456
3832.598
3832.767
3833.358
10 3833.684
3834.012
3834.212
3835.512
3835.867
15 3835.984
3836.156
3838.657
3839.283
3840.182

B
3840.250

C
3840.217

D
3840.186

A
3822.279
3823.101
3823.215
5 3824.030
3824.302
3825.099
3825.503
3825.939
10 3826.080
3826.207
3826.327
3827.017
3827.374
15 3827.497
3827.657
3827.932
3828.041
3828.563
20 3828.887
3828.980
3829.292
3829.452
3829.872
25 3830.050
3830.150
3830.210

B
3828.520
3829.401
3830.148

C
3830.172

D
3830.238

A
3810.317
3810.589
3810.816
3811.092
5 3811.248
3811.781
3812.344
3812.539
10 3812.652
3812.976
3813.485
3813.786
3813.971
15 3814.167
3814.627
3816.953
3817.229
3817.959
3818.308
20 3818.600
3818.726
3819.208
3820.204

B
3810.201
3810.535
3810.750
3811.192
5 3811.711
3812.458
3812.907
3820.183

C
3820.207

D
3820.116

A
3800.316
3803.179
3803.822
3804.572
5 3804.889
3804.966
3805.225
3806.504
3807.612
10 3808.005
3808.159
3808.309
3808.585
15 3808.885
3809.096
3809.188
3809.298
3809.419
3809.794
20 3810.088

B
3809.662
3810.201

C
3810.242

D
3810.239

A		B	C	D
		3800.106	3800.201	3800.200
5	3790.066			
	3790.141			
	3790.423			
	3790.658			
	3790.888			
	3791.311			
	3791.631			
	3791.816			
	3791.946			
10	3792.181			
	3792.607			
	3792.754			
	3793.732			
	3793.811			
15	3794.179			
	3794.631			
	3795.163			
	3795.490			
	3795.617			
20	3795.789			
	3796.883			
	3797.692			
	3798.177			
	3798.572			
25	3798.794			
	3798.995			
	3799.385			
	3799.507			
	3799.904			
30	3800.149			

	A	B	C	D
	3780.908			3790.219
	3781.393			
	3781.631			
	3781.795			
5	3781.908			
	3782.170			
	3782.625			
	3782.743			
	3782.961			
10	3783.720			
	3783.953			
	3784.047			
	3784.354			
	3785.194			
15	3785.672			
	3786.185			
	3786.680			
	3786.904			
	3787.117			
20	3787.412			
	3787.655			
	3788.057			
	3788.327			
	3788.782			
25	3788.902			
	3789.243			
	3789.611			
	3789.881			
	3790.066			
30	3790.141			
	3790.235			

A
 3770.481
 3771.527
 3771.774
 3772.298
 5 3772.510
 3773.371
 3773.457
 3773.906
 3774.041
 10 3774.465
 3774.852
 3775.651
 3775.742
 3776.061
 15 3776.274
 3776.432
 3776.536
 3776.892
 3777.069
 20 3777.519
 3777.886
 3778.255
 3778.331
 3778.651
 25 3779.204
 3780.099

B
 3780.221

C
 3780.142

D
 3780.124

	A	B	C	D
	3760.346			3770.197
	3761.136			
	3761.333			
	3761.664			
5	3762.159			
	3762.360			
	3762.423			
	3763.054			
	3763.253			
10	3763.653			
	3764.243			
	3764.579			
	3764.871			
	3765.082			
15	3766.076			
	3766.733			
	3767.124			
	3767.453			
	3767.881			
20	3768.078			
	3768.671			
	3768.926			
	3770.261			

A
3753.789
3754.639
3754.795
3755.024
5 3755.165
3755.372
3755.560
3755.811
3756.784
10 3757.619
3758.042
3758.397
3758.613
3758.886
15 3760.218

B
3760.213

C
3760.243

D
3760.223

A

3890.947
3892.075
3892.766
3893.665
5 3893.779
3894.043
3894.254
3895.045
3895.135
10 3895.679
3896.332
3896.416
3896.469
3896.619
15 3896.772
3897.211
3897.556
3897.925
3898.210
20 3898.741
3899.661

B

3892.941
3894.296
3895.114
3895.664
5 3896.329
3896.414
3896.755
3897.198
3897.557
10 3900.042

C

3900.249

D

3900.210

A

3901.405
3903.186
3904.492
3904.905
5 3904.997
3905.387
3905.873
3906.171
3906.477
10 3907.437
3907.743
3908.480
3908.575
3909.031
15 3909.348
3909.426
3909.908
3910.170

B

3906.344
3907.420
3907.731
3908.471
5 3908.561
3908.013
3909.340
3909.895
3910.154

C

3907.743
3908.485
3908.570
3909.011
5 3909.349
3909.905
3910.141

D

3910.136

A

3910.170
3910.328
3910.435
5 3910.534
3910.762
3911.142
3911.337
3911.418
3912.039
10 3912.328
3912.697
3913.021
3913.422
3913.855
15 3914.024
3914.193
3914.819
3915.134
3915.271
20 3915.663
3916.219
3916.595
3916.781
3917.425
25 3917.688
3918.319
3918.739
3918.930
3919.899
30 3920.224

B

3910.154
3910.316
3910.422
3910.520
5 3910.753
3911.128
3911.329
3911.408
3912.025
10 3912.319
3912.678
3913.008
3913.411
3913.988
15 3914.172
3914.809
3915.131
3915.265
3915.662
20 3916.264
3917.665
3918.921
3919.704
3920.216

C

3910.141
3910.517
3910.759
3911.135
5 3911.337
3911.417
3912.034
3912.324
3912.651
10 3912.986
3913.406
3913.858
3914.147
3914.820
15 3920.133

D

3920.237

A

3920.224
3921.100
3921.321
5 3921.517
3922.532
3922.890
3922.997
3923.165
3923.395
10 3923.751
3924.313
3924.422
3924.604
3925.124
15 3925.278
3925.878
3926.026
3926.116
20 3927.083
3927.447
3928.021
3928.206
3928.510
3929.246
25 3929.990

B

3921.086
3921.303
3921.506
5 3922.521
3922.869
3923.517
3925.482
3925.862
3926.018
10 3927.071
3927.435
3927.991
3928.177
3928.500
15 3929.232
3929.978

C

3921.066
3921.487
3922.531
5 3926.026
3927.421
3928.080
3930.187

D

3930.071

A

3930.489
3931.152
3931.363
3932.060
5 3932.449
3933.013
3934.046
3934.592
3935.111
10 3935.276
3935.384
3935.631
3935.792
15 3937.084
3937.177
3938.052
3938.271
3938.447
3939.092
20 3939.483
3940.134

B

3930.516
3931.136
3931.352
3932.325
5 3932.984
3933.971
3934.581
3935.087
3935.372
10 3935.618
3935.779
3936.471
3937.073
15 3938.013
3938.221
3939.053
3939.469
3940.128

C

3935.193
3935.619
3935.782
3936.024
5 3936.481
3937.081
3937.951
3939.168
3939.477
10 3940.136

D

3932.151
3936.966
3940.156

A
3940.134
3940.296
3940.575
3941.273
5 3941.382
3941.699
3942.507
3942.894
3944.338
10 3944.661
3945.020
3945.256
3946.608
3946.793
15 3946.952
3947.149
3947.393
3948.108
3948.664
20 3948.812
3949.417
3949.557
3949.869
3950.049

B
3940.128
3940.287
3940.540
3941.372
5 3941.670
3942.344
3944.349
3945.010
3945.247
10 3946.166
3946.597
3946.792
3947.119
3947.545
15 3948.209
3948.412
3949.471
3949.568
3949.629
20 3950.120

C
3940.136
3940.292
3940.525
3941.378
5 3944.847
3945.017
3945.254
3946.184
3946.605
10 3948.479
3949.573
3950.167

D
3949.524
3949.601
3950.183

A

3950.048
3950.535
3951.970
3952.330
5 3953.035
3953.531
3953.702
3954.033
3954.149
10 3955.221
3956.833
3957.382
3957.520
3958.007
15 3958.156
3958.386
3959.017
3959.139
3959.496
20 3959.706
3959.871
3960.207

B

3950.588
3951.959
3952.302
3952.941
5 3953.516
3953.695
3954.024
3954.139
3954.399
10 3955.184
3956.767
3956.916
3957.369
3957.510
15 3958.125
3959.010
3959.113
3959.483
3959.673
20 3960.200

C

3951.973
3952.275
3953.517
3953.701
5 3954.031
3954.147
3954.416
3955.099
3955.244
10 3956.052
3956.704
3957.381
3957.521
3958.052
15 3958.299
3959.015
3959.128
3959.469
3959.809
20 3960.209

D

3951.929
3954.092
3954.354
3954.982
5 3958.906
3960.154

A

3960.207
3960.770
3961.140
3961.629
5 3962.010
3962.172
3963.265
3963.831
3964.227
10 3964.325
3964.588
3964.788
3965.250
15 3965.688
3965.952
3966.045
3966.220
3966.436
3966.761
20 3966.854
3967.229
3967.552
3968.019
3968.180
25 3969.105
3970.199

B

3960.200
3960.756
3961.135
3961.582
5 3962.096
3963.252
3963.807
3964.215
3964.318
10 3964.580
3964.743
3965.235
3965.680
15 3965.939
3966.030
3966.207
3966.419
3966.749
3966.842
20 3967.221
3967.536
3968.005
3968.170
3969.024
25 3969.112
3970.231

C

3960.209
3960.760
3961.143
3962.244
5 3963.270
3963.789
3964.229
3964.329
3964.590
10 3964.706
3965.247
3965.689
3965.949
15 3966.046
3966.438
3966.762
3966.855
20 3967.232
3967.513
3967.555
3968.016
3968.186
25 3969.035
3969.335
3969.688

D

3962.582
3963.222
3963.791
3964.503
5 3965.650
3965.897
3966.168
3966.403
3966.708
10 3967.417
3967.965
3969.299
3970.153

A

3970.672
3970.923
3971.644
3972.083
5 3972.625
3973.523
3973.884
3974.421
3974.741
10 3974.963
3975.125
3975.504
3975.712
3975.998
15 3976.244
3976.562
3977.160
3977.503
3978.804
20 3979.397
3979.596
3979.732
3979.979
3980.178

B

3970.659
3970.909
3971.637
3972.030
5 3972.576
3972.640
3973.521
3973.813
3974.421
10 3974.716
3974.961
3975.109
3975.490
3975.761
3975.982
15 3976.208
3976.536
3977.144
3977.493
3978.790
20 3979.392
3979.715
3979.967
3980.250

C

3970.658
3970.923
3971.647
5 3971.895
3972.752
3973.531
3973.794
3974.675
3975.210
10 3975.504
3975.729
3976.600
3977.161
3977.506
15 3978.794
3979.403
3979.689
3979.983
3980.173

D

3970.592
3970.870
3971.597
5 3977.448
3978.679
3979.372
3979.544
3979.820
10 3980.212

A
 3980.178
 3980.264
 3980.825
 3981.264
 5 3981.500
 3982.054
 3982.270
 3982.508
 3982.855
 10 3983.757
 3985.011
 3985.996
 3986.220
 3986.434
 15 3988.285
 3988.748
 3989.448
 3989.559
 3989.819
 20 3990.219

B
 3980.250
 3980.803
 3981.255
 3981.497
 5 3982.033
 3982.229
 3982.490
 3982.782
 3982.934
 3983.744
 10 3984.988
 3985.979
 3986.208
 3986.420
 3986.770
 15 3987.722
 3988.278
 3988.740
 3989.435
 3989.806
 20 3990.208

C
 3980.173
 3980.265
 3980.802
 3981.265
 5 3981.505
 3981.997
 3982.782
 3982.934
 3983.759
 10 3984.219
 3984.446
 3984.661
 3985.029
 3985.964
 15 3986.024
 3986.222
 3986.440
 3986.783
 3987.439
 20 3987.625
 3987.738
 3988.290
 3988.420
 3988.754
 25 3989.428
 3989.557
 3989.803

D
 3980.212
 3980.688
 3981.231
 3982.926
 5 3983.715
 3984.187
 3984.423
 3984.880
 3985.934
 10 3986.400
 3986.765
 3987.591
 3987.706
 3988.262
 15 3988.715
 3989.311
 3990.223

A

3990.219
3990.676
3991.171
3992.512
5 3993.657
3993.286
3994.970
3995.966
3997.069
10 3997.817
3998.059
3998.833
3999.731
4000.064
15 4000.194

B

3990.208
3990.640
3991.157
3992.505
5 3992.637
3993.276
3993.809
3994.846
3994.980
10 3995.952
3996.331
3997.056
3997.808
3998.050
15 3998.831
3999.719
4000.185

C

3990.262
3990.902
3991.169
3991.564
5 3992.514
3992.679
3993.288
3993.825
3994.982
10 3995.192
3995.966
3996.343
3997.066
3997.823
15 3998.061
3998.496
3998.860
3999.734
4000.067
20 4000.198

D

3991.126
3992.510
3993.253
3995.426
5 3995.914
3997.022
3997.786
3998.024
3998.458
10 3999.693
4000.164

A

4000.065
4000.194
4000.462
4000.725
5 4001.273
4001.419
4002.762
4002.853
4002.959
10 4003.129
4003.583
4003.851
4004.004
4004.411
15 4004.700
4005.477
4007.578
4008.511
4010.235

B

4000.185
4000.453
4000.709
4000.974
5 4001.262
4001.401
4002.063
4002.757
4002.845
10 4002.947
4003.111
4003.569
4003.839
4003.992
15 4004.404
4004.687
4005.462
4006.885
4007.560
20 4008.441
4008.591
4010.193

C

4000.067
4000.198
4000.464
4000.726
5 4000.863
4000.994
4001.289
4002.070
4002.572
10 4002.775
4002.953
4003.114
4003.581
4003.853
15 4004.009
4004.415
4004.698
4005.445
4005.517
20 4005.912
4006.622
4006.894
4007.544
4007.625
25 4008.830
4010.193

D

4000.164
4000.414
4000.683
4000.969
5 4001.217
4002.034
4002.763
4002.913
4003.572
10 4003.821
4003.968
4004.382
4004.661
4005.402
15 4005.534
4006.604
4007.459
4009.054
4009.945

4010.518
4010.591
4010.827
4011.117
5 4011.324
4011.728
4011.815
4012.226
4012.675
10 4013.707
4014.073
4014.444
4014.605
4015.377
15 4015.543
4015.851
4016.739
4017.027
20 4017.488
4017.605
4017.999
4018.234
4018.514
4019.435
25 4019.676
4019.919
4020.112

4010.504
4010.741
4010.814
4011.104
5 4011.317
4011.721
4012.214
4012.645
4013.704
10 4014.059
4014.435
4014.594
4015.364
4015.529
15 4015.837
4016.740
4017.013
4017.487
20 4017.599
4017.992
4018.238
4018.498
4019.441
25 4019.654
4019.904
4020.243

4010.513
4010.826
4011.113
4011.333
5 4011.729
4012.232
4012.635
4012.776
4013.714
10 4014.071
4014.447
4014.607
4015.375
4015.538
15 4015.852
4016.324
4016.747
4016.983
20 4017.046
4017.492
4017.609
4018.002
4018.239
4018.508
25 4019.368
4019.633
4019.915

4010.488
4010.784
4011.060
4011.696
5 4012.199
4012.530
4013.668
4014.415
4014.504
10 4015.342
4015.431
4015.813
4016.701
4017.043
15 4017.577
4017.974
4018.221
4018.424
4018.566
20 4019.709
4020.219

4021.627
4022.228
4022.403
5 4025.346
4026.768
4027.036
4027.332
4027.943
10 4028.168
4028.249
4028.572
4028.891
4029.517
15 4029.766
4030.193

4021.620
4022.217
4022.898
5 4025.292
4025.375
4026.759
4027.028
4027.321
10 4027.937
4028.156
4028.240
4028.564
4028.881
15 4029.512
4029.738
4030.163

4021.098
4021.637
4022.229
5 4022.693
4022.902
4025.441
4025.543
4026.771
10 4027.039
4027.334
4027.948
4028.171
4028.250
15 4028.575
4028.896
4029.524
4029.735

4021.078
4021.600
4022.194
5 4022.654
4022.871
4025.050
4025.603
4026.732
10 4027.007
4027.301
4027.918
4028.133
4028.195
15 4028.542
4028.862
4029.494
4029.776

U

4160.974
4161.761
4163.090
4163.557
5 4166.014
4167.781
4168.830
4169.057
4169.588
10 4169.729
4169.868
4170.183

D

4160.973
4161.746
4163.078
4163.547
5 4165.480
4166.004
4167.778
4168.818
4169.050
10 4169.569
4169.714
4169.863
4170.170

U

4160.989
4161.759
4163.093
4163.559
5 4165.084
4165.496
4166.017
4166.314
4167.785
10 4168.832
4168.833
4169.059
4169.505
4169.586
15 4169.729
4169.872
4170.178

U

4160.947
4161.723
4163.050
4163.523
5 4165.456
4165.993
4167.772
4168.313
4168.772
10 4169.028
4169.556
4169.689
4169.834
4170.241

H
4153.333
4153.747
4154.581
4155.025
5 4155.321
4156.591
4157.668
4157.758
4159.170
10 4159.341
4160.125

B
4153.322
4153.740
4154.568
4155.018
5 4155.312
4156.081
4157.657
4157.747
4159.162
10 4159.327
4160.187

L
4151.764
4152.390
4152.757
4153.325
5 4153.751
4154.566
4155.025
4155.330
4156.092
10 4157.677
4157.758
4159.200
4159.337
4160.058

U
4151.726
4152.365
4152.698
4153.262
5 4154.487
4154.982
4155.289
4156.046
4157.640
10 4157.727
4159.144
4159.321
4160.162

5
4140.164
4141.383
4141.922
4142.919
4144.488
4145.246
4145.417
4146.334
4147.977
10 4148.870
4149.503
4149.731
4150.222

5
4140.157
4140.839
4141.368
4141.911
4142.907
4144.479
4145.238
4145.405
4146.325
10 4147.971
4148.861
4149.494
4149.721
4150.209

5
4140.164
4140.848
4141.014
4141.171
4141.383
4141.898
4142.523
4142.919
4144.490
10 4145.246
4145.417
4146.327
4146.904
4147.986
15 4148.872
4149.504
4149.731
4150.166

5
4140.121
4140.813
4140.989
4141.349
4141.841
4142.495
4144.456
4145.375
10 4146.295
4146.869
4147.956
4148.836
4149.462
15 4149.689
4150.157

A

4130.313
4131.054
4131.720
4132.202
5 4133.059
4133.672
4134.677
4138.806
4139.382
10 4140.164

B

4130.305
4131.047
4131.712
4132.194
5 4133.047
4133.655
4134.660
4138.055
4138.785
10 4139.374
4140.157

C

4130.319
4131.057
4131.723
4131.866
5 4132.204
4133.035
4133.672
4134.634
4137.714
10 4138.075
4138.824
4139.371
4140.164

D

4130.283
4131.021
4131.687
4131.890
5 4132.172
4132.927
4133.062
4133.730
4134.604
10 4134.743
4138.052
4138.768
4139.310
4139.396
15 4140.121

A

4121.361
4122.347
4123.497
4124.124
5 4125.184
4125.430
4127.160
4127.379
4127.751
10 4128.470
4128.714
4129.960
4130.177

B

4120.246
4121.350
4122.349
4123.489
5 4124.111
4125.176
4125.420
4125.712
4127.141
10 4127.368
4127.742
4128.463
4128.706
4129.948
15 4130.173

C

4120.266
4121.353
4122.351
4122.702
5 4122.986
4123.501
4124.124
4124.525
4125.181
10 4125.431
4125.716
4127.158
4127.385
4127.760
15 4128.475
4128.712
4129.960
4130.079

D

4120.259
4121.285
4122.318
4122.656
5 4122.966
4123.464
4123.849
4124.088
4125.118
10 4125.391
4126.157
4127.120
4127.345
4127.722
15 4128.441
4128.664
4129.919
4130.152

A
4110.503
4111.803
4112.848
4113.003
5 4113.622
4113.736
4114.547
4114.811
4115.193
10 4115.500
4116.186
4116.569
4116.961
4117.376
15 4118.153
4119.378
4120.250

B
4110.497
4111.795
4112.829
4112.981
5 4113.609
4113.733
4114.364
4114.542
4114.799
10 4115.188
4115.492
4116.172
4116.561
4116.961
15 4117.369
4118.142
4119.366
4120.247

C
4110.506
4111.805
4112.842
4113.001
5 4113.618
4113.746
4114.208
4114.374
4114.552
10 4114.813
4115.199
4115.356
4115.502
4116.186
15 4116.572
4116.975
4117.378
4117.616
4118.153
20 4118.513
4119.385
4120.029

D
4110.468
4111.778
4112.803
4112.967
5 4113.582
4113.708
4114.179
4114.514
4114.772
10 4115.161
4115.467
4116.148
4116.534
4116.935
15 4117.365
4117.595
4118.119
4118.468
4119.340
20 4120.210

A
4100.350
4101.266
4101.801
4104.094
5 4104.748
4106.008
4106.371
4107.038
4107.542
10 4108.086
4109.549
4110.178

B
4100.347
4101.261
4101.796
4102.251
5 4104.083
4104.739
4106.014
4106.359
4107.030
10 4107.521
4107.800
4107.965
4108.070
4109.541
15 4110.148

C
4100.353
4101.270
4101.806
4102.260
5 4103.230
4104.063
4104.703
4104.778
4105.936
10 4106.370
4107.035
4107.537
4107.818
4107.973
15 4108.086
4109.535
4109.931
4110.110

D
4100.318
4101.242
4101.766
4102.235
5 4103.962
4104.794
4105.814
4106.976
4107.494
10 4107.937
4108.040
4109.498
4109.896
4110.243

A

4090.006
4090.863
4091.818
4093.055
5 4093.265
4093.529
4093.885
4095.380
4098.210
10 4100.110

B

4090.958
4091.810
4093.049
4093.518
5 4093.873
4095.375
4097.127
4098.205
4100.173

C

4090.007
4090.554
4090.869
4091.080
5 4091.819
4093.058
4093.255
4093.526
4093.886
10 4093.969
4095.384
4095.487
4095.828
4097.131
15 4098.034
4098.212
4100.104

D

4090.835
4091.043
4091.784
4093.021
5 4093.458
4093.939
4095.348
4095.451
4095.781
10 4097.098
4098.177
4100.106

A

4080.202
4081.240
4081.535
4084.847
5 4085.772
4086.165
4086.741
4088.097
4088.360
10 4088.648
4089.217
4090.003
4090.215

B

4080.193
4081.220
4081.524
4084.467
5 4084.837
4085.770
4086.155
4086.731
4087.291
10 4088.091
4088.347
4088.635
4089.205
4089.989
15 4090.211

C

4080.202
4080.527
4081.183
4081.246
5 4081.536
4083.699
4084.162
4084.511
4084.842
10 4085.784
4086.128
4086.743
4087.299
4087.990
15 4088.232
4088.646
4089.217
4090.004

D

4080.159
4081.147
4081.488
4083.668
5 4084.123
4084.478
4084.792
4085.438
4085.781
10 4086.101
4086.709
4087.267
4087.969
4088.283
15 4088.599
4089.178
4089.966

A

4070.164
 4070.582
 4073.491
 4073.844
 5 4075.136
 4075.307
 4075.627
 4076.248
 4077.381
 10 4078.435
 4079.020
 4079.369
 4079.763
 4080.202

B

4070.156
 4070.574
 4071.099
 4073.483
 5 4073.830
 4075.130
 4075.296
 4075.613
 4076.241
 10 4077.368
 4078.423
 4079.015
 4079.347
 4080.193

C

4070.168
 4070.586
 4070.884
 4071.152
 5 4071.354
 4073.494
 4073.810
 4075.142
 4075.301
 10 4075.624
 4076.251
 4076.845
 4077.381
 4078.433
 15 4079.026
 4079.313
 4079.492
 4080.202

D

4070.132
 4070.552
 4070.893
 4071.116
 5 4071.321
 4073.470
 4073.767
 4073.903
 4075.110
 10 4075.253
 4075.588
 4076.214
 4076.804
 4077.344
 15 4078.390
 4079.283
 4079.576
 4080.159

A
4060.365
4060.599
4061.209
4061.623
5 4062.420
4062.876
4065.481
4065.695
4066.118
10 4066.719
4067.364
4069.191
4070.164
4070.260

B
4060.358
4060.581
4061.264
4061.611
5 4062.412
4062.875
4065.476
4065.687
4066.111
10 4066.709
4067.355
4068.043
4068.265
4069.177
15 4069.363
4070.156

C
4060.393
4060.543
4061.269
4061.624
5 4061.949
4062.423
4062.884
4063.459
4063.760
10 4064.105
4065.484
4065.694
4065.861
4066.120
15 4066.721
4067.372
4068.047
4068.286
4069.188
20 4069.375
4069.944
4070.168

D
4060.659
4061.230
4061.592
4062.387
5 4062.850
4063.416
4063.590
4063.718
4064.109
10 4064.671
4065.450
4065.655
4065.830
4066.087
15 4066.690
4067.340
4068.015
4068.246
4069.151
20 4069.339
4070.132

A

4050.359
4050.519
4050.844
4052.170
5 4053.641
4054.489
4054.665
4055.009
4056.592
10 4057.746
4058.949
4059.495
4060.063

B

4050.352
4050.512
4050.836
4051.618
5 4052.155
4053.632
4054.484
4054.659
4055.000
10 4055.350
4056.581
4057.737
4058.943
4059.487
15 4059.714

C

4050.361
4050.524
4050.846
4051.041
5 4051.564
4052.193
4053.644
4053.937
4054.494
10 4054.667
4055.011
4055.137
4055.362
4056.593
15 4057.740
4058.952
4059.036
4059.497

D

4050.326
4050.808
4051.532
4052.078
5 4052.192
4053.612
4053.904
4054.460
4054.633
10 4054.974
4055.332
4056.564
4057.697
4058.921
15 4059.462
4060.198

A

4040.289
4040.361
4040.504
4040.656
5 4041.917
4042.296
4043.004
4043.335
4043.764
10 4044.824
4045.457
4046.990
4047.132
4047.938
15 4048.171
4048.329
4050.199

B

4040.280
4040.350
4040.493
4040.650
5 4040.978
4041.910
4042.288
4042.992
4043.325
10 4043.757
4044.786
4044.903
4045.446
4046.772
15 4046.979
4047.115
4047.925
4048.159
4048.322
20 4048.818
4049.377
4050.053

C

4040.292
4040.363
4040.503
4040.659
5 4040.990
4041.347
4041.920
4042.300
4043.004
10 4043.334
4043.650
4043.872
4044.723
4045.083
15 4046.445
4046.791
4046.990
4047.130
4047.940
20 4048.174
4048.335
4048.592
4048.838
4049.400
25 4050.073

D

4040.266
4040.470
4040.627
4040.969
5 4041.316
4041.887
4042.268
4042.967
4043.298
10 4043.877
4045.090
4046.413
4046.755
4046.971
15 4047.098
4047.905
4048.138
4048.301
4048.533
20 4048.790
4049.368
4049.914

A	B	C	D
4030.561	4030.350	4030.566	4030.335
4031.391	4030.551	4030.563	4030.531
4032.285	4031.372	4031.357	4031.292
4032.429	4032.281	4031.458	4032.631
5 4032.626	5 4032.615	4032.288	5 4033.219
4033.251	4033.241	4032.632	4033.493
4033.511	4033.501	4033.252	4033.657
4033.692	4033.680	4033.515	4034.484
4034.531	4034.516	4033.692	4035.314
10 4035.347	10 4035.338	10 4034.522	10 4035.942
4035.581	4035.569	4035.349	4036.342
4035.970	4035.959	4035.582	4036.653
4036.421	4036.398	4035.705	4037.498
4036.688	4036.679	4035.975	4037.898
15 4037.926	15 4037.919	15 4036.370	15 4038.350
4038.520	4038.513	4036.692	4038.486
4039.226	4039.216	4037.517	4038.935
4039.377	4039.365	4037.934	4039.204
4039.991	4039.981	20 4038.380	20 4039.340
20 4040.144		4038.522	4039.970
		4038.961	
		4039.227	
		4039.379	
		4039.992	

C

4171.282
4171.676
4172.032
4172.315
5 4173.633
4173.906
4174.591
4176.166
4176.366
4178.658
10 4179.346
4179.778
4180.100

C

4171.282
4171.676
4172.032
4172.315
5 4173.633
4173.906
4174.591
4176.166
4176.366
10 4178.658
4179.346
4179.778
4180.100

D

4171.231
4171.644
4171.999
4172.252
5 4173.871
4176.155
4176.337
4178.141
4178.636
10 4179.333
4179.752
4180.247

A

4181.147
4181.284
4181.467
4182.551
5 4185.228
4186.168
4187.334
4187.465
4189.219
10 4190.051
4190.184

B

4181.137
4181.452
4182.542
4185.212
5 4186.162
4187.323
4189.213
4190.174

C

4180.540
4180.700
4181.154
4181.451
5 4182.554
4185.227
4186.170
4187.313
4188.600
10 4189.222
4190.047
4190.186

D

4181.354
4181.509
4182.518
4183.772
5 4185.188
4186.137
4187.288
4188.571
4189.197
10 4189.622
4189.821
4190.155

A

4190.051
4190.184
4190.720
4191.147
5 4192.132
4193.186
4193.864
4194.553
10 4195.722
4197.097
4197.262
4197.792
4200.216

B

4190.174
4190.713
4191.137
4192.086
5 4193.180
4193.852
4194.546
4195.712
10 4197.085
4197.253
4197.781
4200.207

C

4190.047
4190.186
4190.729
4191.151
5 4192.047
4192.118
4193.198
4193.865
10 4194.532
4195.721
4195.927
4197.099
4197.266
4197.793
15 4200.218

D

4190.155
4190.697
4191.125
4192.049
5 4193.157
4193.829
4194.480
4194.546
10 4195.670
4197.065
4197.231
4197.759
4200.175

A
4200.216
4200.922
4201.372
5 4202.250
4202.406
4202.517
4202.766
4203.677
10 4204.462
4204.832
4205.147
4205.234
4206.351
4207.626
15 4208.063
4209.934
4210.122

B
4200.207
4200.907
4201.355
5 4202.235
4202.398
4202.521
4202.762
4203.673
10 4204.455
4204.817
4205.226
4206.340
4207.616
15 4208.049
4210.095

C
4200.218
4200.924
4201.370
5 4202.250
4202.408
4202.518
4202.750
4203.680
10 4204.467
4204.802
4205.146
4205.235
4206.226
15 4206.353
4207.628
4208.062
4209.634
4210.194

D
4200.174
4200.890
4201.329
5 4202.210
4202.473
4202.730
4203.068
4203.640
10 4204.439
4204.776
4206.318
4207.591
4208.030
15 4208.646
4209.611
4210.013
4210.212

A

4212.292
4212.465
4214.105
4216.447
5 4216.644
4216.926
4217.182
4217.437
10 4217.923
4218.246
4218.982
4219.877
4220.258

B

4212.278
4212.466
4214.096
4215.919
5 4216.437
4216.563
4216.915
4217.172
4217.420
10 4217.917
4218.234
4218.972
4219.864
4220.246

C

4212.283
4212.472
4214.108
4215.531
5 4215.941
4216.450
4216.636
4216.919
4217.185
10 4217.434
4217.929
4218.247
4218.985
4219.874
15 4220.259

D

4210.843
4212.246
4212.441
4214.066
5 4215.513
4215.897
4216.416
4216.863
4217.146
10 4217.388
4217.896
4218.211
4218.936
4219.843
15 4220.221

A

4220.258
4221.281
4222.121
4222.939
5 4224.336
4229.040
4229.552
4229.806
4230.119

B

4220.243
4221.271
4221.686
4222.112
5 4222.936
4224.324
4228.628
4229.024
4229.538
10 4229.796
4230.110

C

4220.259
4221.283
4221.710
4222.123
5 4222.943
4224.333
4228.645
4229.039
4229.554
10 4229.806
4230.123

D

4220.221
4221.236
4221.670
4222.088
5 4222.904
4224.287
4226.155
4226.872
4228.238
10 4228.603
4229.009
4229.505
4229.777
4230.089

A

4230.119
4230.305
4231.245
4233.020
5 4234.084
4237.006
4239.910
4240.012
4240.115

B

4230.110
4230.293
4231.237
4231.514
5 4232.381
4233.006
4234.080
4234.559
4235.625
10 4236.611
4236.997
4239.890
4240.111

C

4230.123
4230.306
4230.704
4231.249
5 4231.537
4232.412
4232.875
4233.021
4234.094
10 4234.583
4235.635
4236.289
4236.624
4236.775
15 4237.012
4239.255
4239.901
4240.190

D

4230.089
4230.288
4230.683
4231.212
5 4231.486
4232.361
4232.848
4232.990
4234.058
10 4234.555
4235.594
4236.265
4236.590
4236.752
15 4236.987
4239.849

A
4240.010
4241.750
4242.099
4242.875
5 4250.171

B
4241.527
4241.729
4242.102
4242.866
5 4244.199
4247.944
4249.118
4250.067
4250.169

C
4240.496
4240.861
4241.538
4241.747
5 4242.103
4242.875
4244.205
4246.561
10 4247.005
4247.952
4249.140
4249.499
4250.079

D
4240.827
4241.509
4241.708
4242.056
5 4242.830
4244.153
4246.669
4246.971
10 4247.288
4247.917
4249.084
4249.473
4249.772
4250.043

A

4250.330
4250.612
4250.885
4251.560
5 4252.318
4252.591
4253.306
4253.873
10 4253.987
4254.100
4255.738
4258.556
4260.081

B

4250.067
4250.314
4250.601
4250.871
5 4251.553
4252.320
4252.577
4253.298
10 4253.585
4253.974
4254.087
4255.727
4259.542
4260.106

C

4250.079
4250.329
4250.612
4250.879
5 4251.566
4252.318
4252.591
4253.310
10 4253.609
4253.879
4253.989
4254.102
4255.737
15 4257.703
4258.989
4259.558
4260.112

D

4250.043
4250.299
4250.576
4250.831
5 4251.527
4252.258
4253.273
4253.583
10 4253.953
4254.061
4255.687
4257.668
4259.517
4260.083

A

4260.403
4261.747
4263.250
4264.308
4264.920
4269.756
4270.256

5

B

4260.391
4261.733
4263.244
4264.299
4264.899
4269.747
4270.249

5

C

4260.405
4260.768
4261.740
4262.313
4263.254
4264.310
4264.518
4264.755
4264.923
4266.945
4269.757
4270.248

5

10

D

4260.364
4261.700
4262.277
4263.220
4264.260
4264.882
4265.476
4266.920
4269.706
4270.030

5

10

A

4271.046
4271.392
4272.824
4273.673
5 4275.550
4280.237

B

4270.358
4271.032
4271.382
4272.381
5 4272.813
4273.666
4275.540
4277.433
4280.187

C

4270.373
4271.027
4271.395
4272.401
5 4272.825
4273.678
4274.283
4275.553
4277.431
10 4280.234

U

4270.322
4270.993
4271.352
4272.352
5 4272.788
4273.642
4275.514
4276.239
4277.382
10 4278.859
4279.344
4280.234

A
4282.422
4288.735
4289.602
4290.167

B
4282.408
4284.259
4286.864
4288.789
4289.589
4290.211

5

C
4280.973
4282.023
4282.421
4285.285
4286.460
4286.869
4287.888
4288.799
4289.604
4290.214

5

10

D
4280.939
4281.412
4282.381
4285.592
4285.844
4286.244
4286.433
4286.844
4287.654
4287.856
4288.762
4289.565
4290.196

5

10

4290.736
4294.641
4295.811
4300.157

4290.727
4294.628
4295.796
4300.240

4290.741
4290.869
4292.325
4294.642
4295.590
4295.810
4300.172

5

4290.700
4290.830
4294.603
4295.558
4295.771
4296.957
4300.151

5

PAGE 380

H
4302.869
4303.210
4304.262
4304.455
4304.595
4305.403
4306.710
4309.534
4310.188

5

H
4302.862
4303.198
4304.253
4304.452
4304.582
4305.393
4306.697
4309.524
4310.040

5

L
4302.873
4303.208
4304.266
4304.464
4304.594
4304.915
4305.404
4305.577
4306.710
4309.540
4310.220

5

10

L
4302.836
4303.172
4304.230
4304.423
4304.555
4304.864
4305.367
4305.536
4306.665
4309.505
4310.192

5

10

PAGE 381

AD-A151 757

AN ATLAS OF PURE WATER VAPOR SPECTRA FROM 500 TO
5000/CN VOLUME 2. (U) OHIO STATE UNIV COLUMBUS
ELECTROSCIENCE LAB R K LONG ET AL. SEP 84

5/5

UNCLASSIFIED

ESL-713774-3-VOL-2 ARO-17603. 4-G5

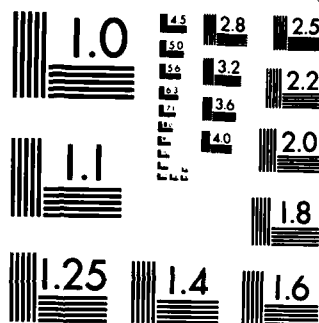
F/G 7/4

NL

END

FILMED

DTIC



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

A
4313.602
4315.615
4316.720
4319.680
4320.232
5

B
4313.592
4315.601
4316.708
4319.663
4320.213
5

C
4313.151
4313.605
4315.618
4316.724
4319.682
4320.236
5

D
4313.119
4313.566
4314.640
4315.579
4316.688
4319.644
4320.204
5

A

4325.917
4328.729
4329.604
4330.238

B

4325.898
4328.722
4329.595
4330.350

C

4320.236
4325.432
4325.916
4328.730
4329.608
4330.196

S

D

4320.204
4325.385
4325.881
4328.693
4329.571
4330.178

S

A
4340.245

B
4335.385
4337.159
4339.953
4340.144

C
4335.412
4337.173
4339.982
4340.170

D
4331.895
4335.380
4337.133
4339.947
4340.209
5

PAGE 384

A
4342.949
4344.993
4350.202

B
4342.939
4344.976
4349.323
4350.233

C
4342.946
4344.988
4346.411
4349.333
5 4350.144

D
4342.913
4344.954
4345.928
4346.369
5 4349.299
4350.145

A

4353.695
4356.214
4357.407
4358.011
5 4360.235

B

4353.665
4356.202
4357.392
4358.008
5 4360.204

C

4351.162
4351.327
4353.700
4354.085
5 4354.457
4356.218
4356.922
4357.409
4358.023
10 4360.196

D

4351.128
4353.666
4354.048
4354.425
5 4356.177
4356.890
4357.373
4357.986
4359.396
10 4360.135

A
4363.011
4364.274
4370.066

B
4362.997
4364.259
4370.183

C
4363.013
4364.275
4366.153
4370.243

D
4362.973
4364.239
4366.114
4368.070
5 4369.886
4370.223

PAGE 387

A
4379.593
4380.127

B
4379.582
4380.226

C
4371.722
4372.664
4379.602
4380.218

D
4371.690
4372.957
4375.033
4379.565
S 4380.196

A
4390.193

B
4390.203

C
4385.604
4386.550
4390.245

D
4385.559
4390.230

PAGE 389

A
4400.232

B
4400.235

C
4400.162

D
4400.164

PAGE 390

A
4407.063
4407.617
4408.772
4410.203

B
4407.049
4407.606
4408.747
4410.203

C
4401.185
4402.776
4405.983
4407.064
4407.621
4408.763
4409.741
4410.234

S

D
4401.138
4401.893
4407.024
4407.582
4408.721
4409.710
4410.228

S

PAGE 391

A
4414.826
4420.231

B
4414.784
4420.229

C
4411.761
4414.813
4415.085
4420.224

D
4411.709
4414.753
4415.058
4420.229

PAGE 392

A
4430.181

B
4430.214

C
4421.508
4428.477
4428.683
4430.104

D
4421.465
4428.441
4430.233

PAGE 393

A

4565.110
4569.873
4570.209

B

4565.097
4569.861
4570.060

C

4565.109
4569.875
4570.206

D

4565.073
4569.833
4570.148

PAGE 407

A
4552.294
4552.516
4553.146
4555.863
5 4556.550
4560.197

B
4550.914
4552.283
4552.503
4553.128
5 4555.857
4556.536
4560.195

C
4550.924
4552.297
4552.517
4553.147
5 4555.866
4556.550
4560.176

D
4550.889
4552.280
4552.464
4553.109
5 4554.229
4555.827
4556.508
4560.249

PAGE 406

A
4543.015
4545.467
4546.856
4548.747
5 4549.023
4550.237

B
4543.000
4545.459
4546.849
4548.738
5 4549.014
4550.164

C
4543.016
4545.470
4546.861
4548.750
5 4549.025
4550.222

D
4542.972
4545.425
4546.824
4548.708
5 4548.981
4550.200

A
4530.451
4531.507
4535.189
4535.349
5 4537.119
4540.194

B
4530.447
4531.491
4535.171
4535.340
5 4537.110
4540.173

C
4530.459
4531.506
4535.190
4535.352
5 4537.122
4540.227

D
4530.419
4531.462
4532.936
4535.154
5 4535.310
4537.080
4540.041

PAGE 404

A
4524.092
4529.832
4530.084

B
4524.079
4529.822
4530.190

C
4524.095
4526.417
4527.536
4528.738
5 4529.831
4530.238

D
4524.054
4526.397
4527.502
4529.796
5 4530.185

PAGE 403

A

4512.572
4512.677
4514.794
4515.046
5 4520.188

B

4512.664
4514.790
4515.034
4516.788
5 4520.148

C

4512.584
4512.678
4514.801
4515.052
5 4516.799
4520.229

D

4512.641
4514.763
4515.004
4516.761
5 4520.214

4510.121

3

4504.387
4504.843
4507.992
4510.146

C

4504.392
4504.965
4506.222
4507.916
5 4510.121

D

4504.364
4504.919
4506.185
4507.882
5 4510.258

A

4492.789
4493.951
4499.092
4500.243

B

4492.778
4493.939
4498.430
4499.067
S 4500.126

C

4490.657
4492.792
4493.955
4496.441
S 4498.456
4499.087
4500.139

D

4490.617
4492.756
4493.913
4496.409
S 4498.420
4499.046
4500.154

PAGE 400

A
4490.197

B
4490.234

C
4488.580
4490.210

D
4481.885
4483.243
4487.129
4488.552
5 4490.241

PAGE 399

A
4472.033
4480.232

B
4472.024
4472.673
4480.139

C
4472.036
4472.682
4480.239

D
4471.998
4472.639
4477.373
4479.020
4479.220
4480.229

S

PAGE 398

A
4470.242

B
4470.221

C
4470.191

D
4465.470
4466.751
4470.176

A
4450.924
4457.009
4460.223

B
4450.909
4457.008
4460.104

C
4450.568
4450.929
4455.621
4457.024
4457.242
4458.771
4460.148
S

D
4450.518
4450.884
4456.985
4457.207
4458.737
4460.122
S

A
4450.128

B
4450.138

C
4448.225
4449.351
4450.146

D
4448.296
4450.214

PAGE 395

A
4440.179

B
4440.265

C
4434.099
4435.092
4440.133

D
4433.695
4435.060
4440.247

PAGE 394

A

4570.892
4570.989
4572.244
4575.723
5 4576.774
4577.218
4577.342
4580.065

B

4570.888
4570.979
4572.230
4575.715
5 4576.765
4577.203
4577.326
4580.057

C

4570.893
4570.991
4572.247
4575.729
5 4576.776
4577.224
4577.341
4580.066

D

4570.853
4572.201
4575.690
4576.727
5 4577.180
4577.299
4580.024
4580.259

A
4580.065
4581.304
4588.637
4590.245

B
4580.057
4581.286
4588.176
4588.624
4590.237
S

C
4580.066
4581.304
4585.222
4588.190
4588.639
4590.224
S

D
4580.025
4581.258
4588.139
4588.590
4590.211
S

A

4594.917
4595.274
4596.814
4598.704
5 4600.107
5 4600.240

B

4594.907
4595.265
4596.809
4598.691
5 4600.097
5 4600.212

C

4594.918
4595.276
4596.821
4598.705
5 4600.108

D

4594.878
4595.236
4596.783
4598.659
5 4600.064

A

4600.107
4609.437
4610.164

B

4600.097
4601.751
4609.431
4610.175

C

4600.108
4601.760
4609.436
4610.191

D

4600.064
4601.722
4609.402
4610.100

PAGE 411

A

4611.078
4620.198

B

4611.066
4616.232
4620.198

C

4611.081
4614.458
4615.667
4616.243
5 4620.198

D

4611.037
4614.424
4615.638
4616.197
5 4620.143

A

4621.927
4622.254
4624.112
4629.653
5 4630.228

B

4621.915
4622.243
4624.101
4629.633
5 4630.200

C

4621.931
4622.355
4624.118
4627.280
5 4627.486
4629.652
4630.133

D

4621.888
4622.212
4624.080
4627.235
4629.610
5 4630.225

A

4631.541
4633.666
4640.247

B

4631.530
4633.652
4638.853
4640.140

C

4631.544
4633.666
4637.294
4638.873
5 4640.242

D

4631.505
4632.974
4633.625
4638.798
5 4640.230

PAGE 414

A

4641.034
4642.024
4643.518
4644.733
5 4645.870
4647.280
4647.375
4648.203
4650.207

B

4641.006
4642.007
4643.508
4644.742
5 4647.271
4647.363
4648.190
4650.236

C

4641.037
4642.026
4643.524
4644.757
5 4645.884
4647.284
4647.375
4648.207
4649.869
10 4650.057

D

4640.996
4641.986
4643.486
4644.718
5 4645.852
4647.246
4647.326
4648.168
4649.749
10 4650.242

PAGE 415

A

4651.355
4655.207
4660.241

B

4651.348
4655.207
4660.252

C

4651.360
4655.214
4660.097

D

4651.324
4655.177
4660.078

PAGE 416

A
4670.223

B
4670.249

C
4662.843
4670.185

D
4662.789
4670.155

PAGE 417

A
4680.224

B
4672.973
4680.161

C
4673.677
4674.067
4676.217
4680.152

D
4673.639
4674.046
4676.178
4680.018

PAGE 418

A
4681.931
4690.237

B
4681.393
4681.909
4690.180

C
4681.423
4681.932
4688.584
4690.076

D
4681.351
4681.896
4690.144

PAGE 419

A
4699.743
4700.061

B
4699.732
4700.048

C
4693.537
4699.743
4700.064

D
4693.518
4699.695
4700.198

PAGE 420

A
4706.426
4707.098
4710.223

B
4706.413
4707.085
4710.177

C
4700.063
4706.430
4707.099
4710.202

D
4706.392
4707.060
4710.178

PAGE 421

A

4840.046
4845.800
4847.179
4848.022
4848.501
4850.246

5

B

4840.033
4845.782
4847.471
4848.005
4848.488
4849.041
4850.249

5

C

4840.049
4843.442
4845.803
4847.484
4848.025
4848.505
4848.934
4849.039
4850.148

5

D

4840.008
4843.436
4845.753
4847.440
4847.976
4848.468
4848.994
4850.078

5

PAGE 435

A

4830.667
4830.959
4831.681
4833.502
4834.472
4835.395
4840.046
4840.225

5

B

4830.638
4830.942
4831.667
4833.494
4834.458
4835.376
4840.033

5

C

4830.660
4830.959
4831.691
4833.377
4833.500
4834.473
4835.394
4837.293
4839.834
4840.049

5

10

D

4830.610
4830.918
4831.647
4833.468
4834.439
4835.354
4840.007

5

A
4823.443
4826.165
4827.053
4829.205
5 4830.158

B
4823.437
4826.146
4827.027
4829.194
5 4830.219

C
4823.450
4826.163
4827.056
4829.210
5 4830.113

D
4823.409
4826.120
4827.024
4829.171
5 4830.188

A

4811.561
4812.922
4814.322
4815.353
5 4819.071
4820.180

B

4811.544
4812.907
4814.309
4815.338
5 4819.057
4820.247

C

4811.561
4812.558
4812.926
4814.325
5 4815.361
4819.074
4820.253

D

4811.508
4812.512
4812.885
4814.281
5 4815.310
4815.873
4819.038
4820.219

A

4800.990
4803.487
4805.385
4810.193

B

4800.975
4803.476
4803.952
4810.176

C

4800.991
4802.708
4803.492
4803.979
4805.385
4810.123

D

4800.946
4802.678
4803.448
4803.942
4805.350
4810.103

A
4793.369
4796.550
4800.247

B
4793.361
4796.534
4800.225

C
4793.371
4794.401
4795.978
4796.552
5 4800.236

D
4793.316
4795.954
4796.500
4800.207

PAGE 430

A
4784.575
4787.870
4790.174

B
4784.560
4787.855
4790.167

C
4784.581
4787.876
4790.146

D
4784.544
4787.831
4790.232

PAGE 429

A

4775.797
4780.120

B

4775.780
4778.724
4780.132

C

4774.896
4775.798
4776.592
4778.749
5 4780.131

D

4775.760
4776.572
4778.696
4780.130

A

4761.035
4764.566
4764.683
4765.088
5 4765.365
4770.224

B

4761.025
4761.572
4764.557
4764.670
5 4765.070
4765.348
4768.386
4770.229

C

4761.036
4761.597
4764.570
4764.684
5 4765.089
4765.368
4768.408
4770.168

D

4760.985
4761.534
4764.527
4764.642
5 4765.051
4765.326
4768.349
4770.199

A

4750.666
4757.899
4758.207
4760.133

B

4750.644
4757.886
4758.195
4760.130

C

4750.667
4757.901
4758.205
4760.157

D

4750.623
4757.856
4758.154
4760.145

PAGE 426

A
4747.050
4750.221

B
4747.027
4750.215

C
4747.045
4750.175

D
4747.001
4750.213

A
4733.646
4735.219
4739.622
4740.243

B
4733.632
4735.207
4739.617
4740.252

C
4733.040
4733.646
4735.221
4739.632
4740.123
5

D
4733.005
4733.597
4735.180
4739.588
4740.242
5

A
4720.147
4725.408
4730.214

B
4720.138
4725.398
4730.180

C
4720.146
4725.412
4726.671
4727.766
5 4730.255

D
4720.102
4725.364
4726.634
4727.485
5 4727.720
4730.192

A

4716.130
4716.772
4717.462
4720.147

B

4713.925
4716.120
4716.760
4717.454
5 4720.138

C

4713.934
4716.131
4716.773
4717.466
5 4720.146

D

4713.886
4716.091
4716.728
4717.431
5 4720.102

A

4851.767
4853.293
4856.759
4859.054
5 4859.991
4860.250

B

4851.752
4853.276
4856.881
4859.037
5 4859.974
4860.210

C

4851.770
4853.295
4856.763
4856.888
5 4859.056
4859.994
4860.236

D

4851.724
4853.245
4854.478
4856.716
5 4856.836
4859.016
4859.952

A

4860.637
4862.275
4866.244
4867.977
5 4869.565
4870.088

B

4862.259
4862.227
4867.969
4869.548
5 4870.081

C

4862.278
4862.695
4866.247
4867.871
5 4867.979
4869.565
4870.091

D

4862.229
4863.457
4863.925
4866.190
5 4867.827
4867.927
4869.521
4870.042
4870.199

A

4870.088
4873.087
4874.269
4876.774
4877.390
4880.198

5

B

4870.082
4873.065
4874.256
4876.760
4877.376
4877.456
4880.201

5

C

4870.091
4871.984
4873.093
4874.271
4876.538
4876.778
4877.013
4877.393
4878.474
4880.257

5

10

D

4870.043
4871.941
4873.053
4874.232
4876.725
4877.351
4879.436
4880.184

5

A
4890.075

B
4884.304
4888.946
4890.072

C
4881.109
4881.383
4888.199
4888.971
5 4890.077

D
4881.339
4885.007
4887.378
4888.161
5 4888.923
4890.254

PAGE 439

A

4890.311
4891.895
4892.124
4893.136
5 4894.351
4894.762
4900.252

B

4890.295
4891.408
4891.879
4892.110
5 4893.120
4894.359
4894.744
4898.832
4900.174

C

4890.315
4891.426
4891.895
5 4892.119
4893.136
4894.365
4894.764
4894.874
10 4898.858
4899.844
4900.181

D

4890.254
4891.384
4891.845
5 4892.066
4893.089
4894.292
4894.716
4898.810
4899.796
10 4900.143

A

4900.714
4901.327
4901.791
4904.499
4905.085
4905.850
4906.541
4910.216

5

B

4900.701
4901.313
4901.780
4904.488
4905.835
4910.141

5

C

4900.182
4900.716
4901.330
4901.793
4902.389
4904.510
4905.851
4906.542
4910.224

5

D

4900.143
4900.661
4901.274
4901.738
4902.345
4904.448
4905.806
4906.499
4910.129

5

PAGE 441

A

4916.011
4916.940
4917.902
4918.123
5 4918.354
4920.138

B

4916.021
4916.935
4917.889
4918.113
5 4918.343
4920.231

C

4914.682
4915.009
4915.984
4916.939
5 4917.902
4918.123
4918.354
4920.169

D

4913.264
4914.927
4916.892
4917.858
5 4918.075
4918.299
4920.166

A

4920.633
4922.496
4923.300
4923.922
5 4924.718
4925.711
4927.118
4928.591
4928.717
10 4929.116
4930.237

B

4920.620
4921.941
4923.904
4924.705
5 4925.700
4927.100
4928.702
4929.107
4930.119

C

4920.639
4921.447
4921.890
4923.922
5 4924.719
4925.716
4927.122
4928.597
10 4928.718
4929.119
4930.155

D

4920.585
4921.361
4922.425
4923.869
5 4924.677
4925.664
4925.952
4927.071
10 4928.548
4928.670
4929.064
4930.221

PAGE 443

A
4930.540
4931.599
4932.490
4938.189
4939.192
4940.137

5

B
4930.526
4931.587
4932.459
4936.951
4938.178
4939.189
4940.176

5

C
4930.540
4931.607
4932.973
4936.934
4937.434
4938.195
4939.197
4940.175

5

D
4930.494
4931.550
4932.475
4938.151
4939.161
4940.125

5

PAGE 444

A

4940.328
4942.449
4944.828
4946.150
4948.590
4950.093

5

B

4940.315
4941.697
4942.431
4948.133
4949.574
4950.082

5

C

4940.331
4941.714
4942.445
4945.920
4948.148
4949.593
4950.208

5

D

4940.291
4941.678
4942.396
4948.099
4949.544
4949.998

5

PAGE 445

A

4950.481
4952.433
4953.907
4955.020
5 4955.145
4955.512
4956.957
4957.913
10 4957.981
4958.479
4959.667
4960.063

B

4950.465
4951.815
4952.417
4953.890
5 4955.000
4955.129
4955.501
4956.944
10 4957.898
4958.460
4959.655
4960.093

C

4950.324
4950.481
4951.233
4951.825
5 4952.436
4953.532
4953.910
4955.019
10 4955.145
4955.515
4956.959
4957.916
4958.475
15 4958.970
4959.669
4960.161

D

4950.282
4950.440
4951.224
4951.770
5 4952.393
4953.492
4953.862
4954.995
10 4955.093
4955.470
4956.915
4957.884
4958.440
15 4959.630
4960.259

PAGE 446

A

4960.287
4961.221
4961.776
4962.638
5 4962.708
4963.132
4964.425
4965.137
4966.561
10 4968.146
4968.817
4969.678
4970.248

B

4960.284
4961.188
4961.761
4962.663
5 4963.116
4965.121
4966.542
4968.407
4968.826
10 4970.185

C

4960.292
4960.627
4961.216
4961.780
5 4962.140
4962.648
4963.136
4964.891
4965.137
10 4966.560
4967.255
4968.416
4969.772
4970.093

D

4960.259
4960.607
4961.178
4961.741
5 4962.108
4962.626
4963.091
4965.094
4966.504
10 4967.546
4968.372
4970.064

H

4970.351
4971.600
4973.048
4974.446
5 4975.664
4977.419
4978.379
4980.216

B

4970.319
4972.714
4975.139
4975.650
5 4976.476
4977.412
4977.888
4980.170

C

4970.346
4971.955
4972.721
4973.080
5 4975.162
4975.669
4976.478
4977.901
4978.382
10 4980.209

U

4970.290
4971.919
4973.314
4975.104
5 4975.622
4976.029
4976.448
4977.477
4977.866
10 4978.342
4980.174

A

4980.216
4981.517
4982.570
4983.173
5 4984.173
4984.826
4985.488
4986.196
4986.852
10 4987.171
4988.657
4988.789
4989.307
4989.996

B

4981.500
4982.557
4983.149
4984.163
5 4984.813
4985.469
4986.185
4986.838
4987.152
10 4988.655
4988.770
4989.288
4990.075

C

4980.209
4981.518
4982.573
4983.179
5 4983.419
4984.177
4984.829
4985.490
4986.201
10 4986.853
4987.171
4988.669
4988.785
4989.329
15 4990.029

D

4980.174
4981.472
4982.526
4983.140
5 4983.372
4984.133
4984.787
4985.448
4986.155
10 4986.804
4987.135
4988.657
4989.265
4990.069

A

4990.286
4991.354
4992.511
4992.932
4994.243
4996.802
4996.956
4998.447
5000.220

5

B

4990.273
4991.318
4992.515
4994.233
4996.938
4998.430
5000.204

5

C

4990.296
4991.340
4991.582
4992.338
4992.524
4992.926
4994.250
4995.156
4996.691
4996.803
4996.956
4997.351
4998.447
5000.221

5

10

D

4990.250
4991.298
4992.502
4994.206
4995.128
4995.627
4996.915
4997.320
4998.402
5000.179

5

10

END

FILMED

5-85

DTIC