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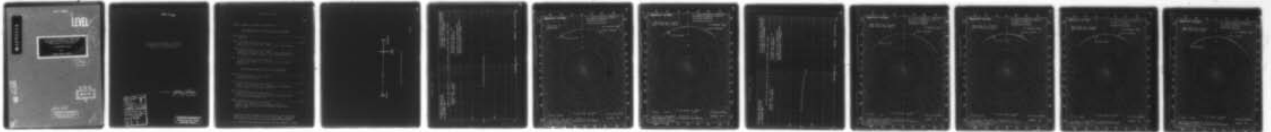
NAVY ELECTRONICS LAB SAN DIEGO CA  
CALIBRATION DATA ON SONAR DOME PAINTS. (U)  
JAN 63

F/G 17/1

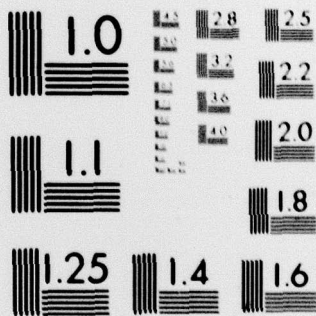
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MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS-1963-A

U.S. NAVY ELECTRONICS LABORATORY  
Transducer Calibration Facility  
San Diego 52, California

CALIBRATION DATA  
on  
SONAR DOME PAINTS

11 Jan 63

12  
42p.

DDC  
RECEIVED  
SEP 26 1973  
A

253 550

DISTRIBUTION STATEMENT A  
Approved for public release  
Distribution Unlimited

MOST Project

U.S. NAVY ELECTRONICS LABORATORY  
Transducer Calibration Facility  
San Diego 52, California

Approved:

*Delores Pierce*  
Miss Delores A. Pierce  
Head - Data Reduction

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NTIS GRA&I	<input checked="" type="checkbox"/>
DDC TAB	<input type="checkbox"/>
Unannounced Justification	<input type="checkbox"/>
<i>NTIS enfd</i>	
Distribution/	
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**DISTRIBUTION STATEMENT A**  
Approved for public release  
Distribution Unlimited

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\* Indicates forced drying of the particular coat of paint with hot air at 120° F ± 10° F for one hour. Otherwise all coatings air dried at ambient indoor temperatures.

\*\* All panels coated similarly front and back except as noted.

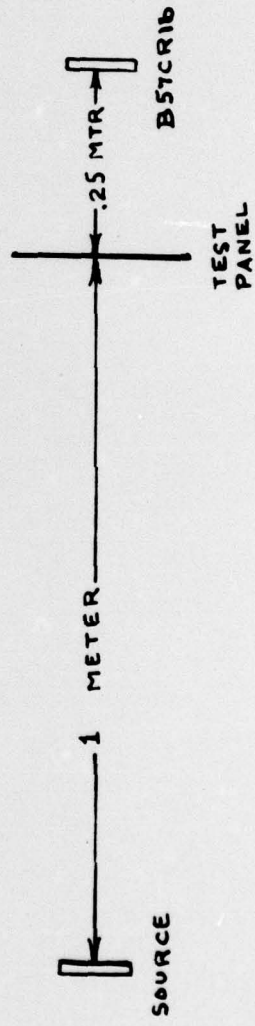


DIAGRAM OF MOUNTING ARRANGEMENT

D3769

Measured at Sweetwater  
Calibration Station  
19 December 1962

U.S. NAVY ELECTRONICS LABORATORY  
Transducer Calibration Facility  
San Diego 52, California

EFFECT OF TEST PANELS No. 1, 2, 3 and 4 (COATED and UNCOATED)\* on SOUND FIELD

Temperature: 13.3°C  
Depth: 3.90 meters

See Diagram, Page 1, for  
mounting arrangement.

\* As there was no measureable  
difference between these panels  
they are shown as 1 curve.



Frequency in Kc  
10

U3769-2 R11, 12, 15 & 16  
100

30° 20° 10° 50 350° 340° 330°  
330° 340° 350° 10° 20° 30°

# DIRECTIVITY PATTERN

U. S. NAVY ELECTRONICS LABORATORY  
TRANSDUCER CALIBRATION FACILITY  
SAN DIEGO, CALIFORNIA  
Sweetwater Station

Test Panel No. 1  
(UNCOATED)

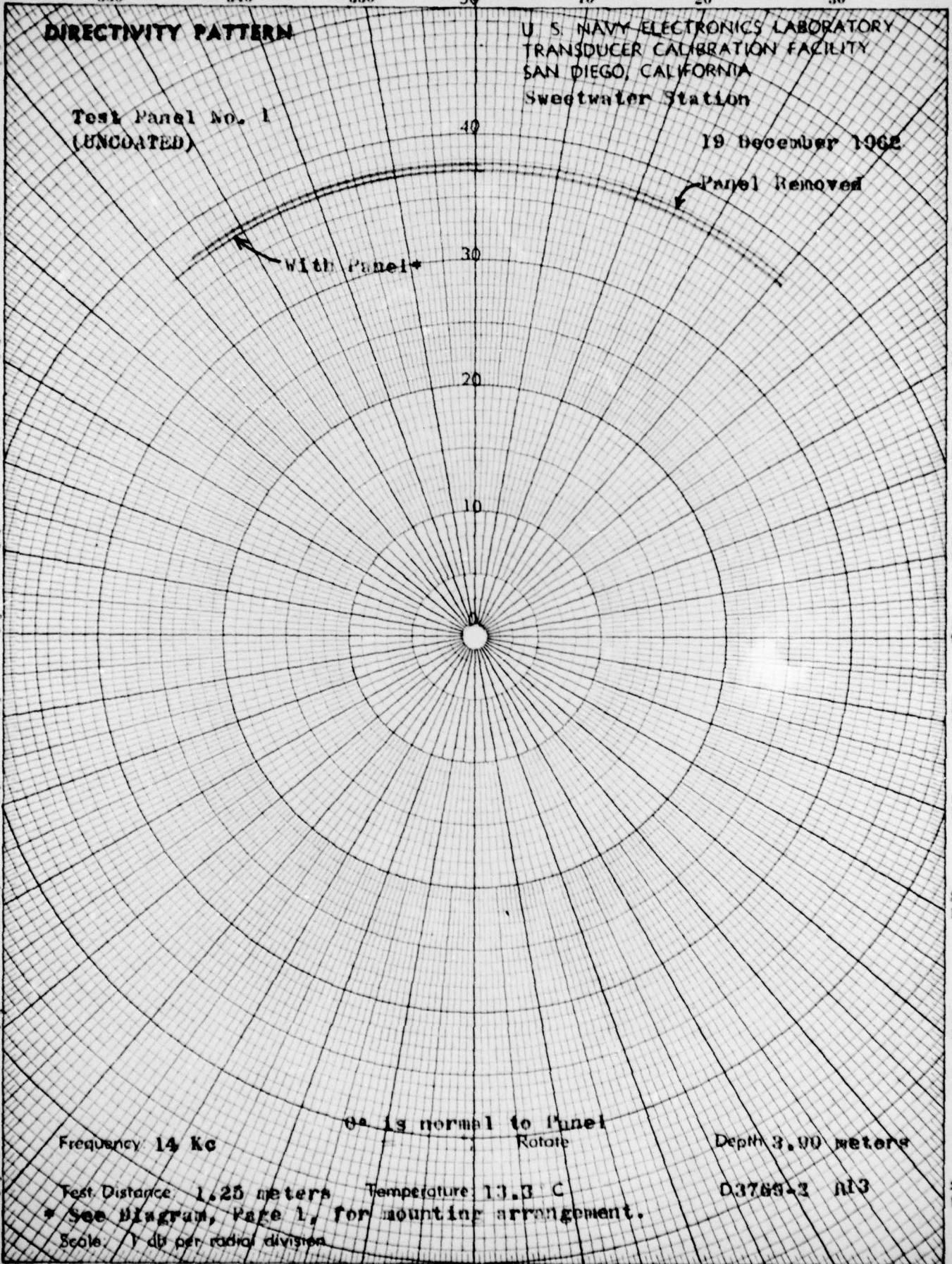
19 December 1962

Panel Removed

With Panel

CODEX BOOK COMPANY, INC. NORWOOD, MASSACHUSETTS.  
PRINTED IN U. S. A.

NO. 3124. POLAR CO-ORDINATE



Frequency 14 Kc

0° is normal to Panel  
Rotate

Depth 3.00 meters

Test Distance 1.25 meters

Temperature 13.3 C

03789-3 A13

\* See Diagram, Page 1, for mounting arrangement.

Scale 1 db per radial division

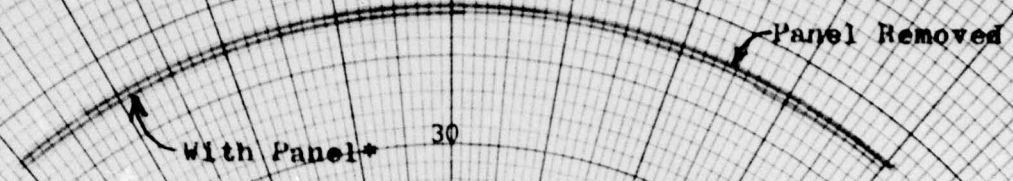
30° 20° 10° 50 350° 340° 330°  
330° 340° 350° 10° 20° 30°

# DIRECTIVITY PATTERN

U. S. NAVY ELECTRONICS LABORATORY  
TRANSDUCER CALIBRATION FACILITY  
SAN DIEGO, CALIFORNIA  
Sweetwater Station

Test Panel No. 2 coated  
with SONAR DOME PAINTS

19 December 1962



CODEY BOOK COMPANY, INC. NORWOOD, MASSACHUSETTS.  
MADE IN U.S.A.

3769  
D

Frequency 14 Kc

0° is normal to Panel  
Rotate

Depth 3.90 meters

Test Distance 1.25 meters

Temperature 13.3 °C

D3769-2 R 10

\* See Diagram, Page 1, for mounting arrangement.

Scale 1 db per radial division

11ND-N55000/22 (4-61) 160° 170° 180° 190° 200° 210°  
210° 200° 190° 180° 170° 160° 150°

Measured at Sweetwater  
Calibration Station  
18 December 1963

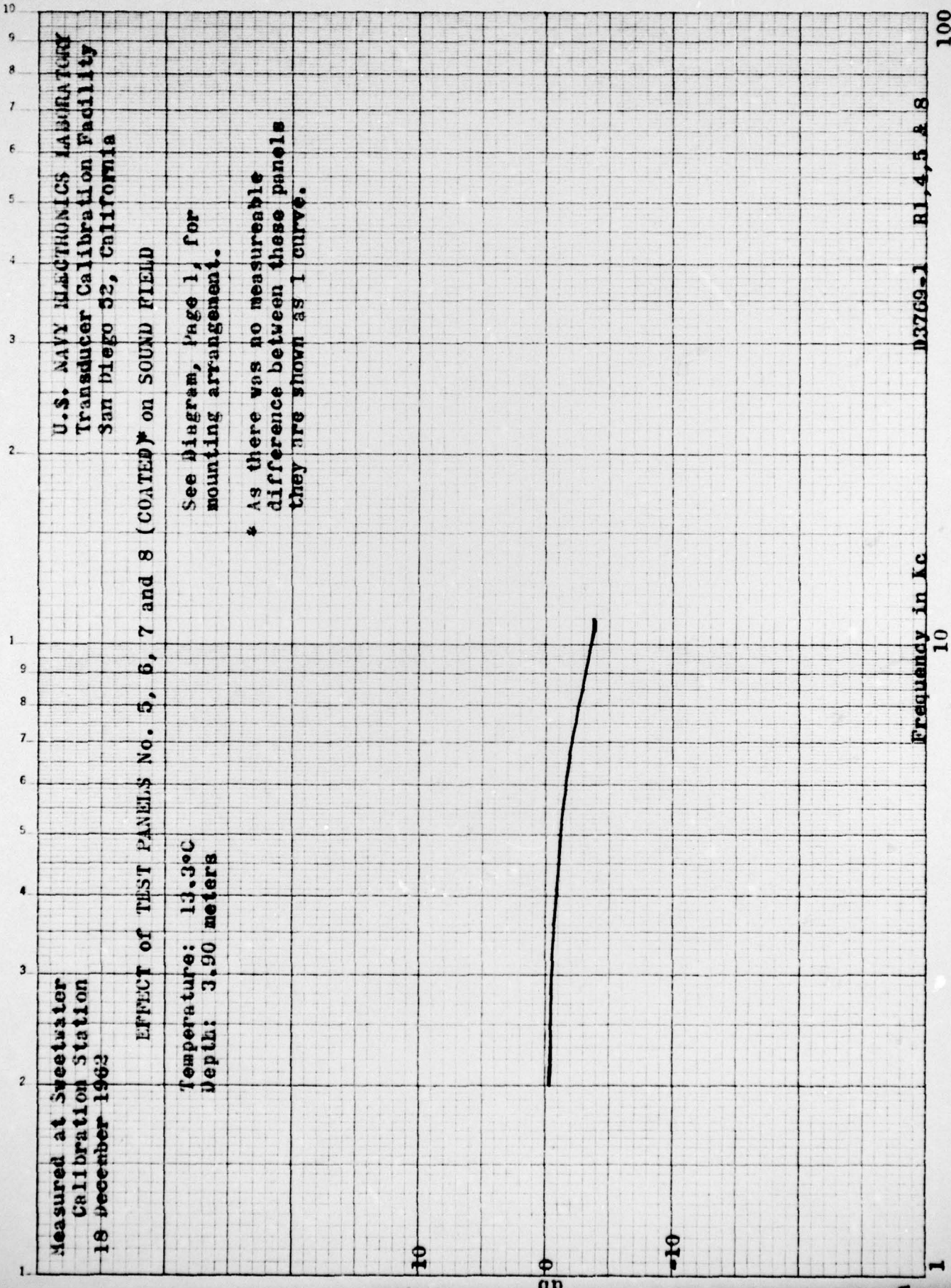
EFFECT OF TEST PANELS No. 5, 6, 7 and 8 (COATED)\* on SOUND FIELD

Temperature: 13.3°C  
Depth: 3.90 meters

See Diagram, Page 1, for  
mounting arrangement.

\* As there was no measurable  
difference between these panels  
they are shown as 1 curve.

U.S. NAVY ELECTRONICS LABORATORY  
Transducer Calibration Facility  
San Diego 52, California



Frequency in Kc 100  
D3769-1 R1, 4, 5 & 8

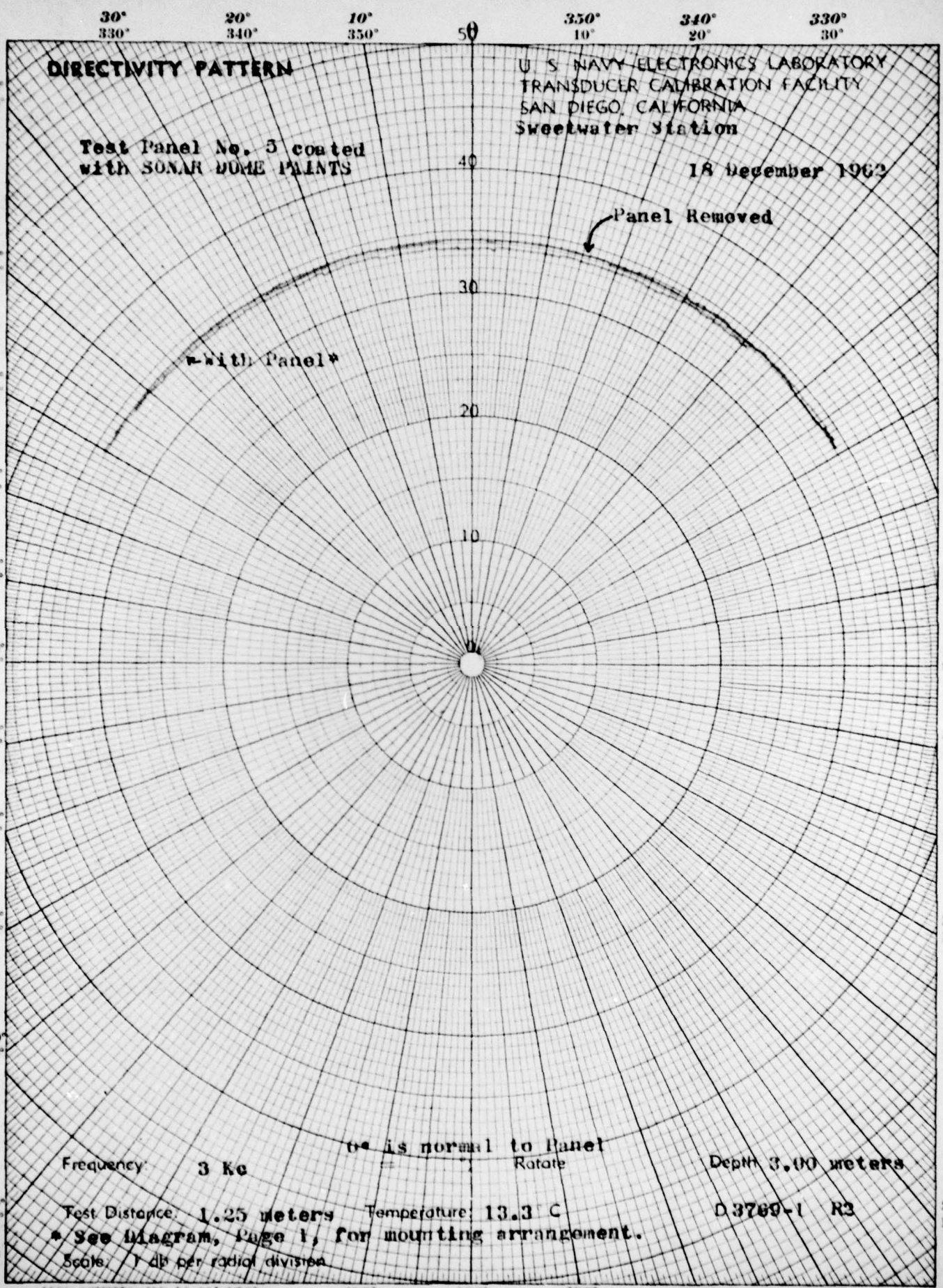
PANEL # 5

CODER BOOK COMPANY, INC. NORWOOD, MASSACHUSETTS. PRINTED IN U.S.A.

342

NO. 3124 POLAR CO-ORDINATE

3769



30° 20° 10° 50 350° 340° 330°  
330° 340° 350° 10° 20° 30°

# DIRECTIVITY PATTERN

U. S. NAVY ELECTRONICS LABORATORY  
TRANSDUCER CALIBRATION FACILITY  
SAN DIEGO, CALIFORNIA  
Sweetwater Station

Test Panel No. 6 coated  
with SONAR DOME PAINTS

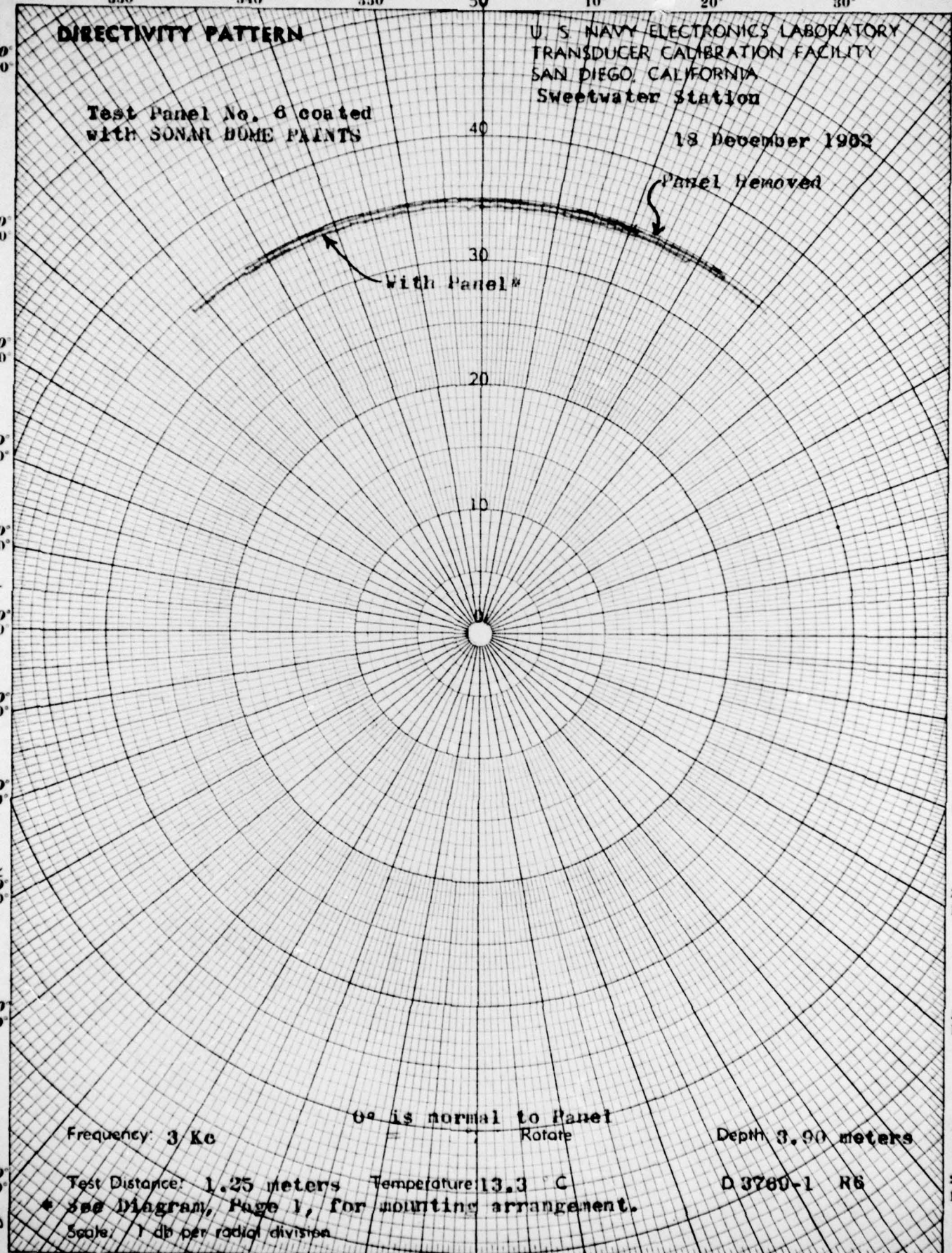
18 December 1962

Panel removed

With Panel

CODING BOOK COMPANY, INC. NORWOOD, MASSACHUSETTS  
PRINTED IN U.S.A.

NO. 3124 POLAR CO-ORDINATE



Frequency: 3 Kc

0° is normal to Panel  
Rotate

Depth: 3.90 meters

Test Distance: 1.25 meters Temperature: 13.3 °C

D 3780-1 R6

\* See Diagram, Page 1, for mounting arrangement.

Scale: 1 db per radial division

11ND-NR-0000/22 (4-61) 160° 170° 180° 190° 200° 210°  
210° 200° 190° 180° 170° 160° 150°

30° 20° 10° 0 350° 340° 330°  
330° 340° 350° 10° 20° 30°

# DIRECTIVITY PATTERN

U. S. NAVY ELECTRONICS LABORATORY  
TRANSDUCER CALIBRATION FACILITY  
SAN DIEGO, CALIFORNIA  
Sweetwater Station

Test Panel No. 7 coated  
with SONAR DOME PAINTS

18 December 1962

Panel Removed

With Panel\*

PRINTED IN U.S.A.

3769

3769

3769

0° is normal to Panel  
Katate

Frequency 3 Kc

Depth 3.90 meters

Test Distance 1.25 meters Temperature 13.3 °C

D 3769-1 R7

\* See Diagram, Page 1, for mounting arrangement.

Scale 1 volt per radial division

11ND-N15000/22 (4-81) 150° 160° 170° 180° 190° 200° 210°  
210° 200° 190° 180° 170° 160° 150°

PANEL 8

30° 20° 10° 50 350° 340° 330°  
330° 340° 350° 10° 20° 30°

# DIRECTIVITY PATTERN

U. S. NAVY ELECTRONICS LABORATORY  
TRANSDUCER CALIBRATION FACILITY  
SAN DIEGO, CALIFORNIA  
Sweetwater Station

Test Panel No. 8 coated  
with SONAR DOME PAINTS

18 December 1962

Panel Removed

With Panel\*

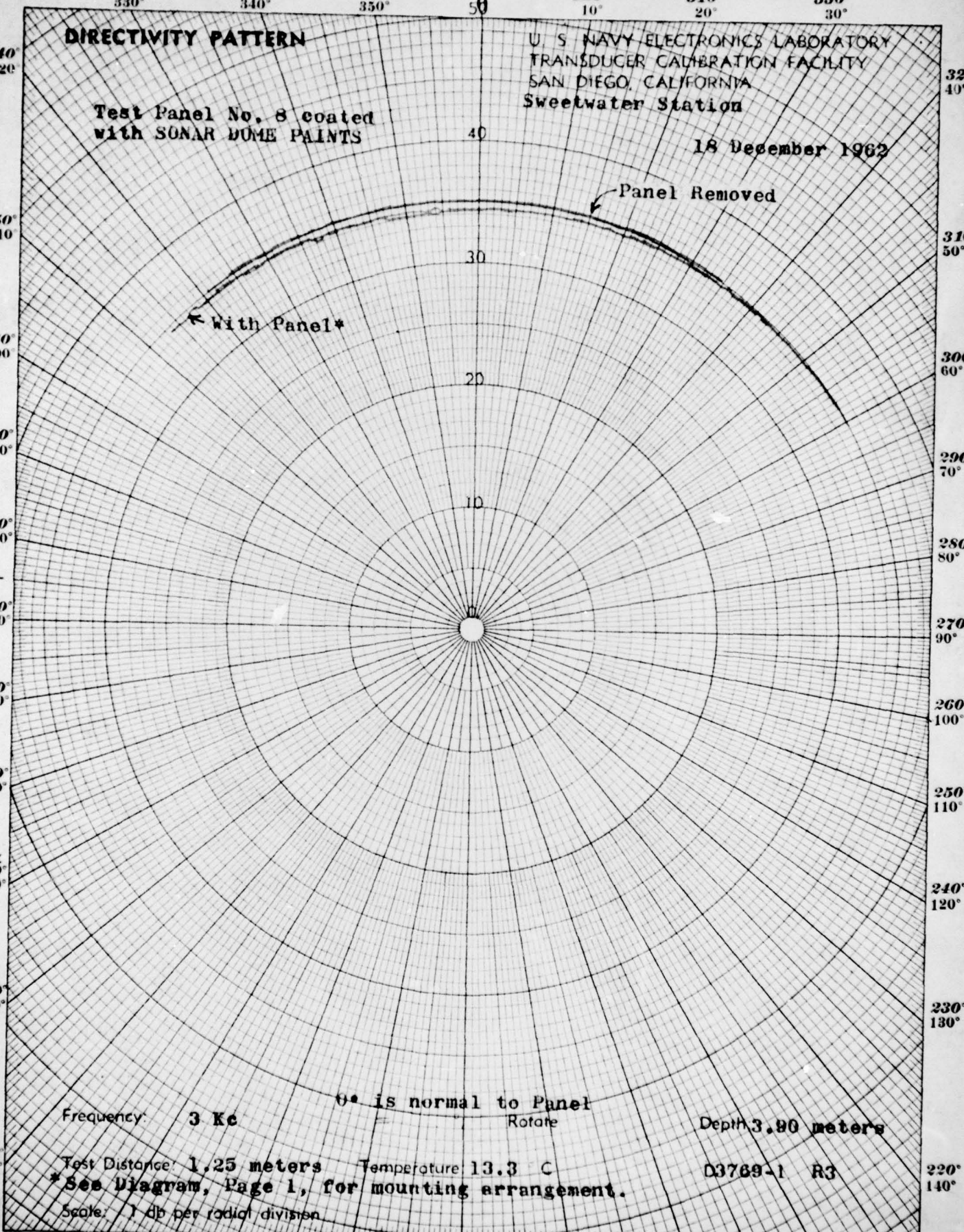
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NO. 3124 POLAR CO-ORDINATE

3 Kc

3 R

3769 D



Frequency: 3 Kc

0° is normal to Panel  
Rotate

Depth 3.90 meters

Test Distance: 1.25 meters Temperature 13.3 C

\* See Diagram, Page 1, for mounting arrangement.

D3769-1 R3

Scale: 1 db per radial division

11ND-N 900/22 (4-61) 160° 170° 180° 190° 200° 210°  
210° 200° 190° 180° 170° 160° 150°