1300

Station	Main Studio	Freq	Power	Date
CBAF	Moncton, NB	1300	5 kW/DA-1	7/24/52
CJME	Regina, Sask.	1300	10 kW/DA-2	9/25/81
KBRL	McCook, NE	1300	5 kW/DA-D	3/28/60
KGLO	Mason City, IA	1300	5 kW/DA-N	5/28/63
KKCN	Ukiah, CA	1300	5 kW/DA-D	12/21/59
KLAR	Laredo, TX	1300	0.5/1 kW/DA-N	6/29/70
KMPS	Seattle, WA	1300	5 kW/DA-N	8/74
KOZE	Lewiston, ID	1300	1/5 kW/DA-N	12/7/54
KPTL	Carson City, NV	1300	0.5/5 kW/DA-N	10/26/65
KVET	Austin, TX	1300	1/5 kW/DA-2	12/22/64
KVET	Austin, TX	1300	1 kW/DA-N	11/20/45
KWKW	Pasadena, CA	1300	1/5 kW/DA-2	8/12/60
KWKW	Pasadena, CA	1300	1 kW/DA-N	5/8/61
KXXO	Tulsa, OK	1300	1/5 kW/DA-2	1/28/50
KXXO	Tulsa, OK	1330	5 kW/DA-D	2/24/48
KXXO	Tulsa, OK	1300	1 kW/DA-N	2/24/48
KYNO	Fresno, CA	1300	1/5 kW/DA-N	7/26/61
WAVZ	New Haven, CT	1300	1 kW/DA-N	11/28/67
WBLG	Lexington, KY	1300	1 kW/DA-N	9/45
WERE	Cleveland, OH	1300	5 kW/DA-1	10/47
WFBR	Baltimore, MD	1300	5 kW/DA-1	7/72
WFFG	Marathon, FL	1300	5 kW/DA-2	11/29/66
WFFG	Marathon, FL	1300	0.5 kW/DA-D	5/25/62
WHLT	Huntington, IN	1300	0.5 kW/DA-D	11/16/79
WHZN	West Hazelton, PA	1300	5 kW/DA-D	1/30/67
WIBR	Baton Rouge, LA	1300	1/5 kW/DA-2	6/9/77

1300

Station	Main Studio	Freq	Power	Date
WIBR	Baton Rouge, LA	1300	1 kW/DA-2	8/26/70
WIMG	Ewing, NJ	1300	2.5/5 kW/DA-2	11/9/79
WKQW	Spring Valley, NY	1300	0.5/1 kW/DA-2	12/15/60
WKQW	Spring Valley, NY	1300	0.5 kW/DA-D	3/30/66
WMAK	Nashville, TN	1300	5 kW/DA-1	7/20/50
WMAK	Nashville, TN	1300	5 kW/DA-N	9/15/76
WMTN	Bristol, TN	1300	5 kW/DA-D	3/8/57
WMVO	Mount Vernon, OH	1300	0.5 kW/DA-D	2/6/74
WOOD	Grand Rapids, MI	1300	5 kW/DA-N	11/42
WQBK	Rensselaer, NY	1300	5 kW/DA-D	3/30/62
WRKT	Cocoa Beach, FL	1300	1/5 kW/DA-2	8/28/64
WSOL	Tampa, FL	1300	5 kW/DA-D	9/28/79
WSYD	Mt. Airy, NC	1300	1/5 kW/DA-N	10/6/55
WSYD	Mt. Airy, NC	1300	1 kW/DA-N	9/14/56
WTAQ	La Grange, IL	1300	0.5/5 kW/DA-2	9/28/65
WTAQ	La Grange, IL	1300	0.5 kW/DA-N	5/20/54
WTNJ	Trenton, NJ	1300	5 kW/DA-D	8/27/65
WXRL	Lancaster, NY	1300	2.5/1 kW/DA-2	11/9/79
WXRL	Lancaster, NY	1300	1 kW/DA-D	4/28/65
NEW	Hamburg, NY	1300	1 kW/DA-D	12/21/59
NEW	Freeland, PA	1300	1 kW/DA-D	8/26/66
NEW	West Hazelton, PA	1300	1 kW/DA-D	10/66
XEHU	Martinez, Veracruz	1300	0.1/5 kW/DA-D	8/26/66

MONCTON, N.B.

CBAF

CANADIAN BROADCASTING CORPORATION
ENGINEERING DIVISION MONTREAL
TITLE Directional Antenna
NEW 5 kw. 1300 kc/s Moncton, N.B.

Part V

DWG. NO
DATE July 24/52
ENG. M.R.K. APP R.E.S.

DA-1

Description of array:

Station: NEW Main Studio: Moncton, N.B.

Power: 5 kw. Frequency: 1300 kc/s Class: III

Location: St. Anselme, N.B.

North Latitude: 46° 04' 59"

West Longitude: 64° 42' 58"

Antenna:

Mode of operation: Series fed - 2 elements. DA-1

Each guyed and insulated.

Tower:	1	2
Height above insulator	280' (140°)	280' (140°)
Spacing	274' (130°)	
Phasing	0°	-55°
Field Ratio	1	1.15

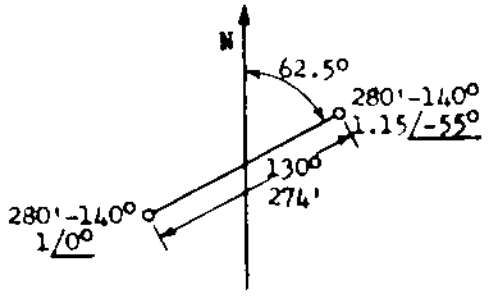
Ground System:

120 radials per tower, maximum length 290 feet. Radials joined along line between towers.

Predicted Effective Field: 458 mv/m at one mile (205 mv/r for 1 kw.)

Orientation: Center of line of towers along a line bearing N62.5°E

10/21/52



CBC-IDA

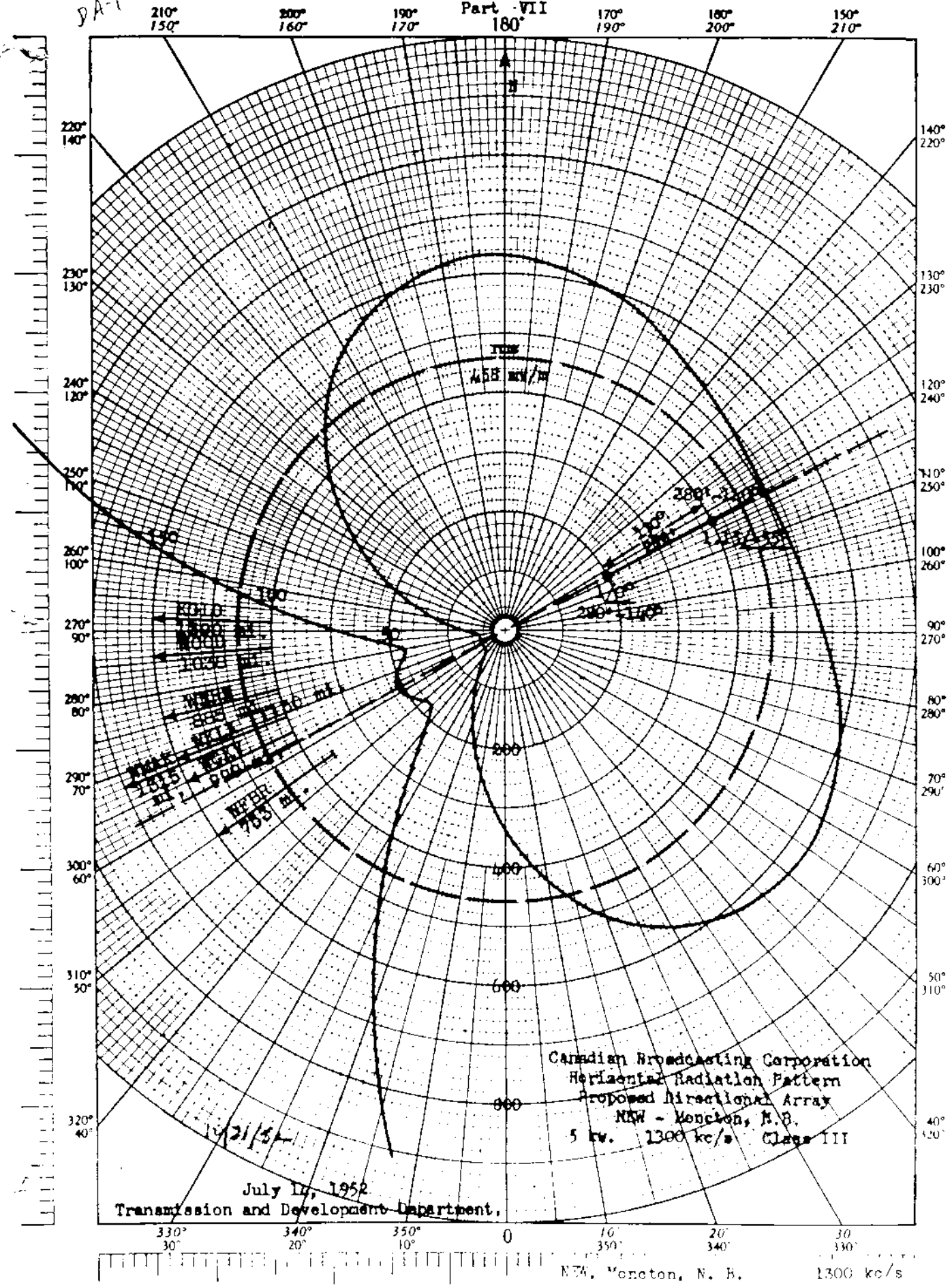
Transmission & Development Department.

CBAF MONCTON N.B.

PROPOSED NIGHT (3/18/53G) NEW, MONCTON, N. B. 5 kw DA-1 1300 kc/s

DA-1

Part VII



NEW, Moncton, N. B. 1300 kc/s

CJME
1300 kHz

PROJECT #5511

DESCRIPTION SHEET - DIRECTIONAL ANTENNA

STATION: CJME

STATION LOCATION: Regina, Sask.

FREQUENCY: 1300 kHz

POWER: 10 kW

NOTIFICATION LIST: 408

DATE: September 25, 1981

GEOGRAPHICAL LOCATION:

Latitude 50° 23' 54" North
Longitude 104° 32' 44" West

ANTENNA CHARACTERISTICS:

Mode of Operation: DA-2
Number of Elements: 4 (Four)
Type of Elements: Guyed steel towers, uniform cross-section, base insulated for series feed

TOWER:	#1(South)	#2(East)	#3(West)	#4(North)
HEIGHT ABOVE BASE INSULATOR:	189'(89.9°)	189'(89.9°)	189'(89.9°)	189'(89.9°)
OVERALL HEIGHT:	194'	194'	194'	194'
FIELD RATIO:				
Nighttime	0.83	0.84	1.0	.84
Daytime	1.0	Unused	0.8	Unused
PHASING:				
Nighttime:	0°	-155°	-95°	122°
Daytime:	0°	Unused	-96°	Unused
SPACING:	Ref.	189.3'(90°)	190.3'(90.5°)	328.1(156°)
ORIENTATION:	Ref.	11.45°	313.13°	342.16°

GROUND SYSTEM: 120 equally spaced radials of No.10 B&S gauge bare soft copper wire extend from the base of each tower. The radials are buried approximately 8 inches. The ground system radials have been adjusted so as to have an effective radial length of 0.4 wavelength. The minimum length of any radial, with the exception of those joined along the common chords, is 210' (at 1300 kHz, 210' is 0.277 wavelength).

PREDICTED EFFECTIVE FIELDS:

DAYTIME	NIGHTTIME
588 mV/m at 1 mile for 10 kW	619 mV/m at 1 mile for 10 kW
186 mV/m at 1 mile for 1 kW	196 mV/m at 1 mile for 1 kW

NIGHTTIME PATTERN AUGMENTATION:

Azimuth of Maximum Augmentation: 222.5°
Augmented Radiation: 390 mV/m
Span of Augmentation: 183°-262°

August 17, 1981

CJME

PROJECT #5505

DESCRIPTION SHEET - DIRECTIONAL ANTENNA

STATION: CJME — STATION LOCATION: Regina, Sask.

FREQUENCY: 1300 kHz — POWER: 10 kW

NOTIFICATION LIST: 350 — DATE: January 20, 1976

GEOGRAPHICAL LOCATION: Latitude 50° 23' 54" North, Longitude 104° 32' 44" West

ANTENNA CHARACTERISTICS:

Mode of Operation:	DA-2
Number of Elements:	4 (Four)
Type of Elements:	Guyed steel towers, uniform cross-section, base insulated for series feed

Tower:	#1 (South)	#2 (East)	#3 (West)	#4 (North)
Height above base insulator:	189' (89.9°)	189' (89.9°)	189' (89.9°)	189' 89.9°)
Overall Height:	194'	194'	194'	194'
Field Ratio:				
Nighttime	1.02	1.03	1.23	1.0
Daytime	1.0	unused	.75	unused
Phasing:				
Nighttime	0°	-133°	-85°	127°
Daytime	0°	unused	-90°	unused
Spacing:	Reference	189.3' (90°)	189.3' (90°)	328.1' (156°)
Orientation:	Reference	20°	320°	350°

Ground System: 120 equally spaced radials of No. 10 B & S gauge bare soft copper wire extend from the base of each tower. The radials are buried approximately 8 inches. The ground system radials have been adjusted so as to have an effective radial length of 0.4 wavelength. The minimum length of any radial, with the exception of those joined along the common chords, is 210' (at 1300 kHz, 210' is 0.277 wavelength).

Predicted Effective Fields:

Daytime	Nighttime
585 mV/m at 1 mile for 10 kW	613 mV/m at 1 mile for 10 kW
185 mV/m at 1 mile for 1 kW	194 mV/m at 1 mile for 1 kW

August 4, 1975

CJME

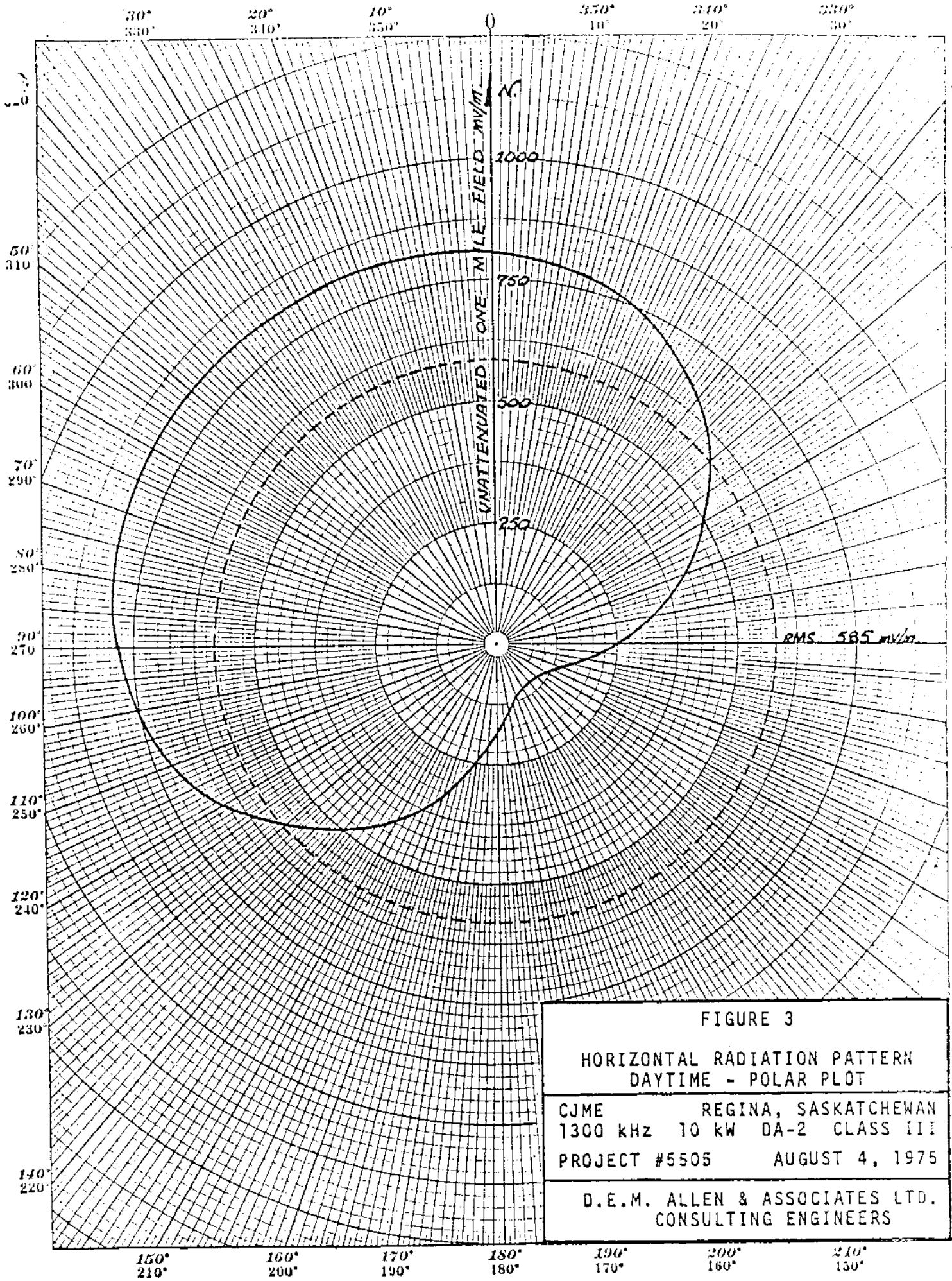


FIGURE 3

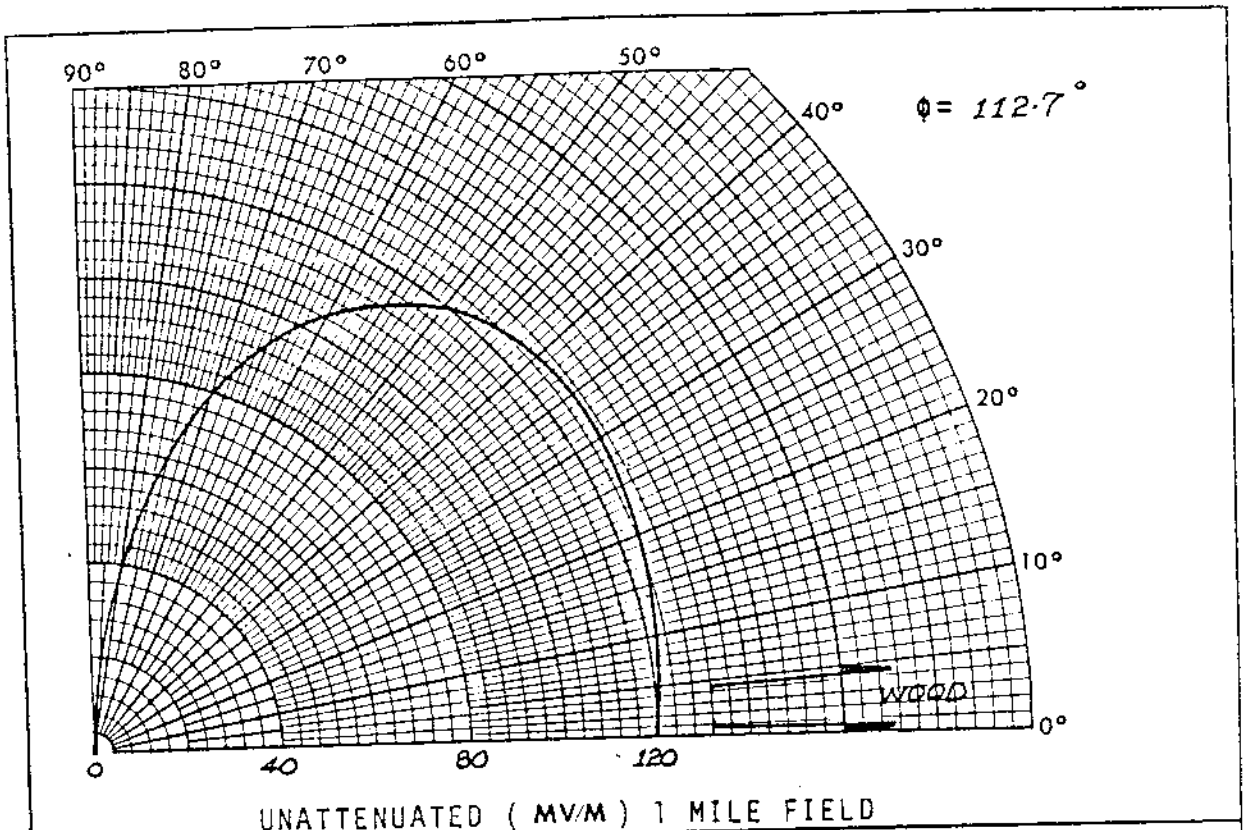
HORIZONTAL RADIATION PATTERN
DAYTIME - POLAR PLOT

CJME REGINA, SASKATCHEWAN
1300 kHz 10 kW DA-2 CLASS III

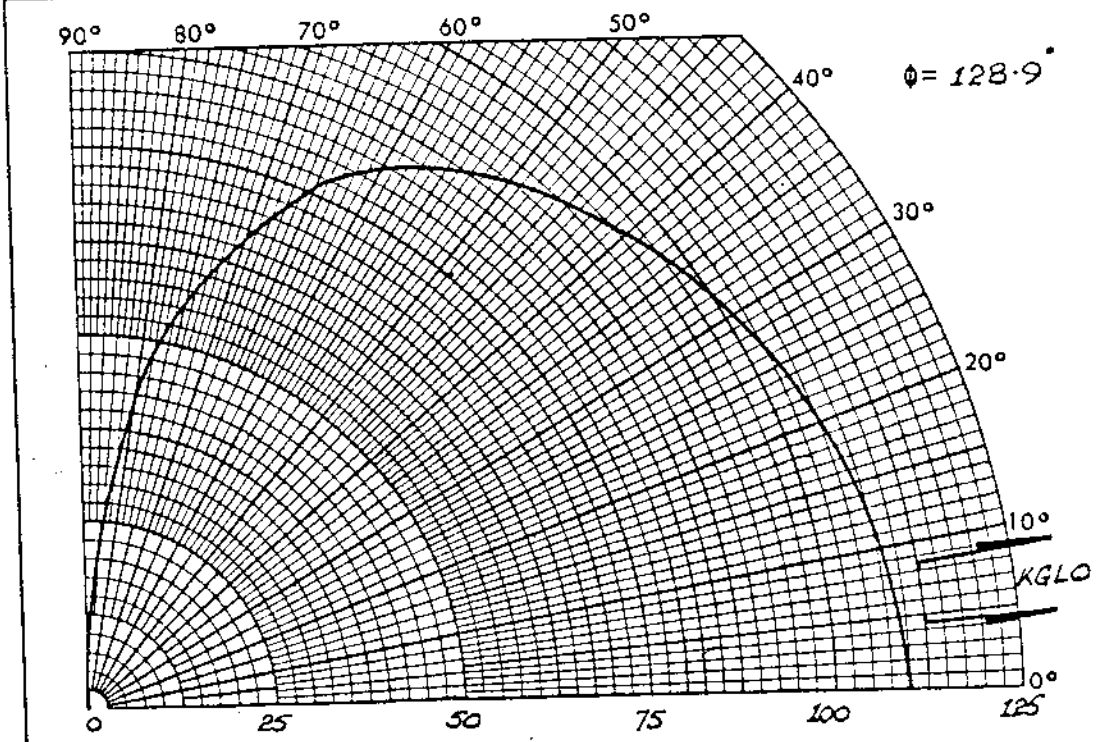
PROJECT #5505 AUGUST 4, 1975

D.E.M. ALLEN & ASSOCIATES LTD.
CONSULTING ENGINEERS

CJmE



UNATTENUATED (MV/M) 1 MILE FIELD



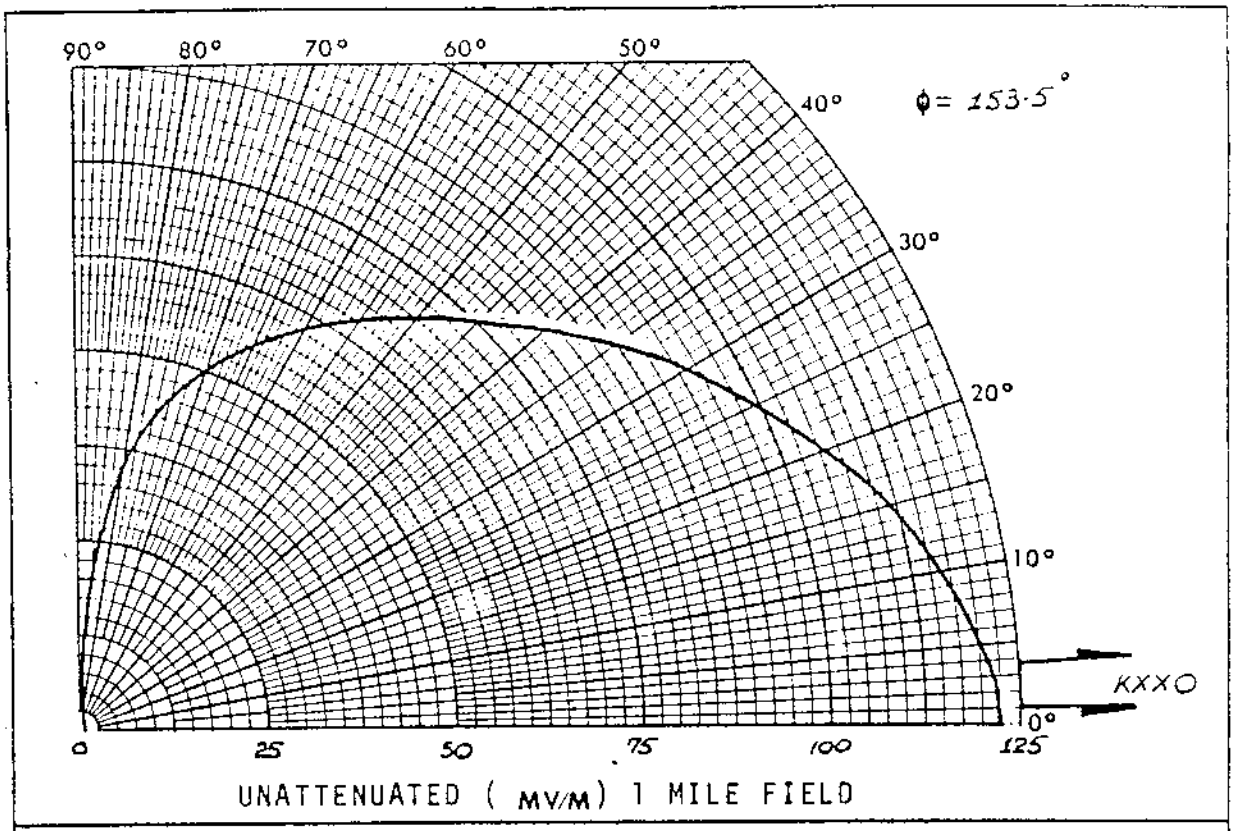
UNATTENUATED (MV/M) 1 MILE FIELD

VERTICAL RADIATION PATTERNS

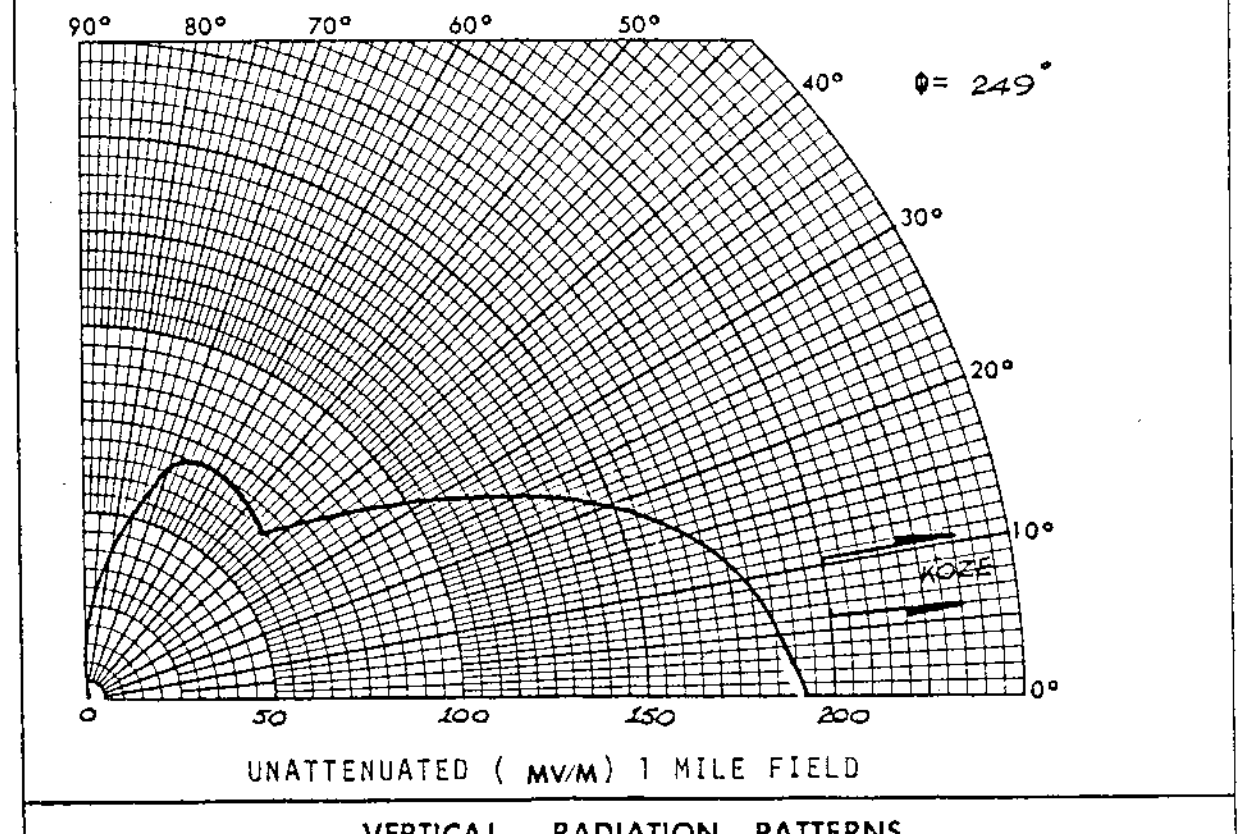
FIGURE 5

CJME
1300 kHz 10 kW DA-2
PROJECT #5505
REGINA, SASKATCHEWAN
CLASS III
AUGUST 4, 1975
D.E.M. ALLEN & ASSOCIATES LTD., CONSULTING ENGINEERS

CJME



UNATTENUATED (MV/M) 1 MILE FIELD



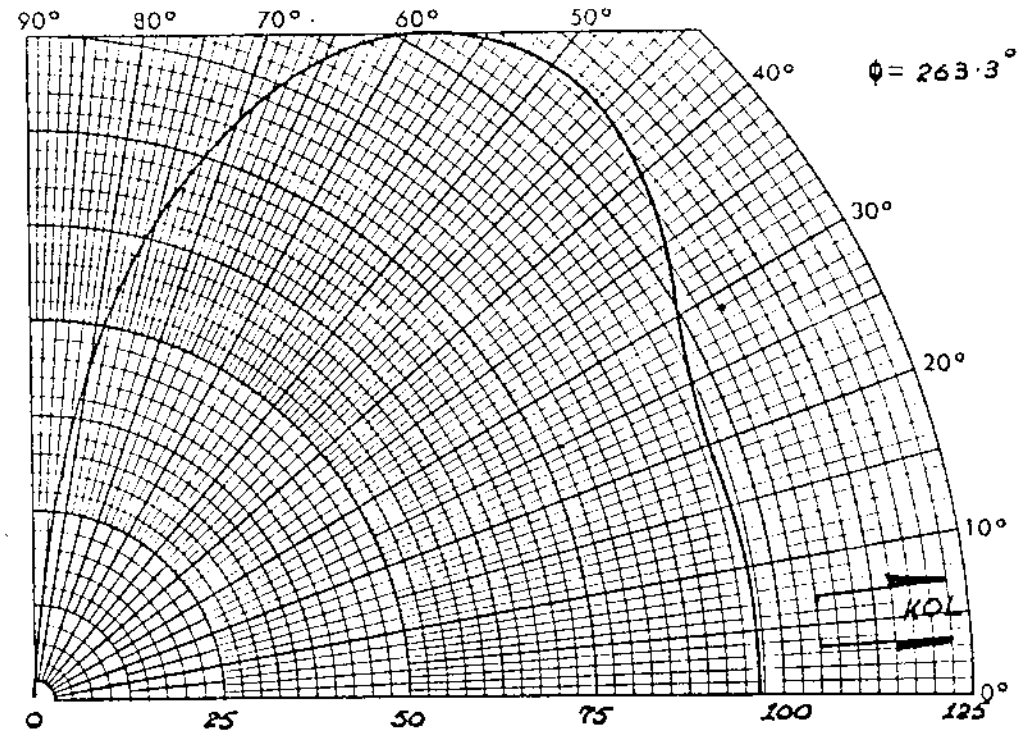
UNATTENUATED (MV/M) 1 MILE FIELD

VERTICAL RADIATION PATTERNS

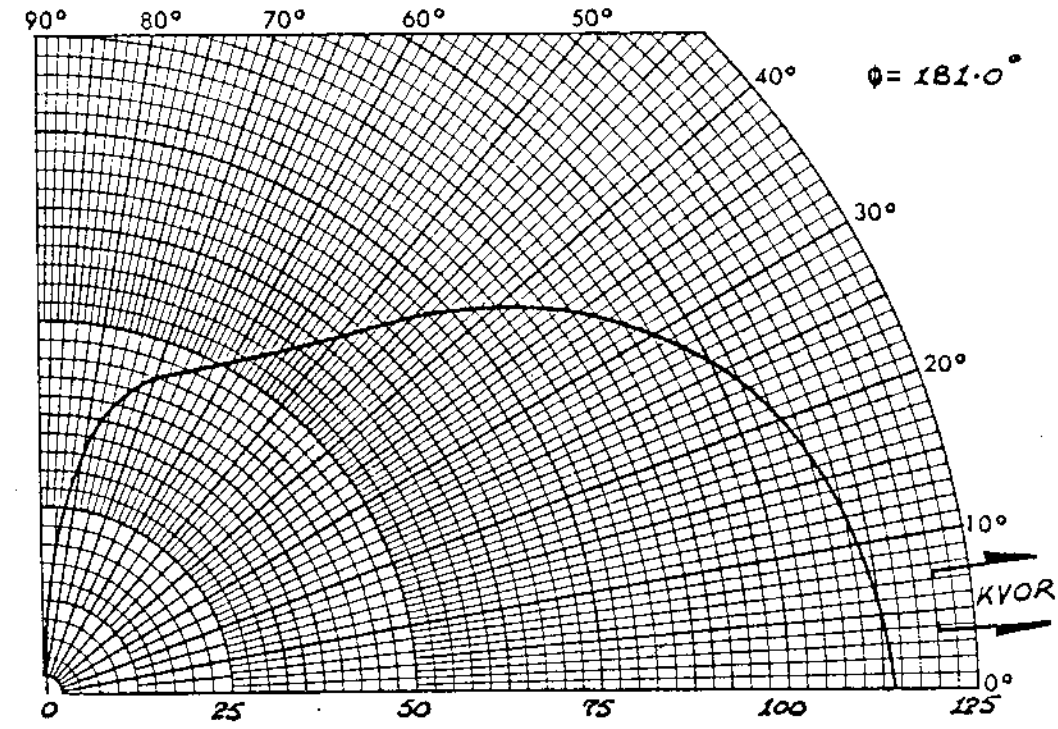
FIGURE 6

CJME REGINA, SASKATCHEWAN
1300 kHz 10 kW DA-2 CLASS III
PROJECT #5505 AUGUST 4, 1975
D.E.M. ALLEN & ASSOCIATES LTD., CONSULTING ENGINEERS

CJME



UNATTENUATED (MV/M) 1 MILE FIELD



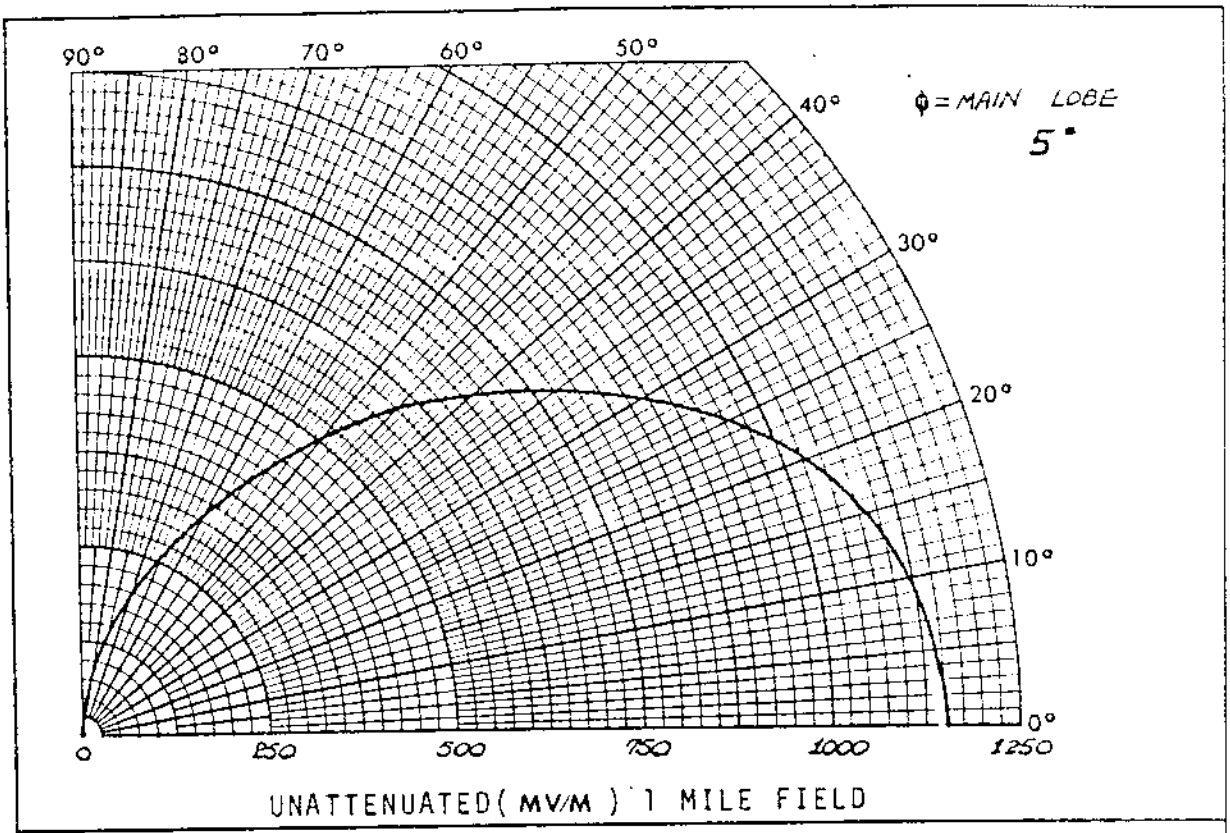
UNATTENUATED (MV/M) 1 MILE FIELD

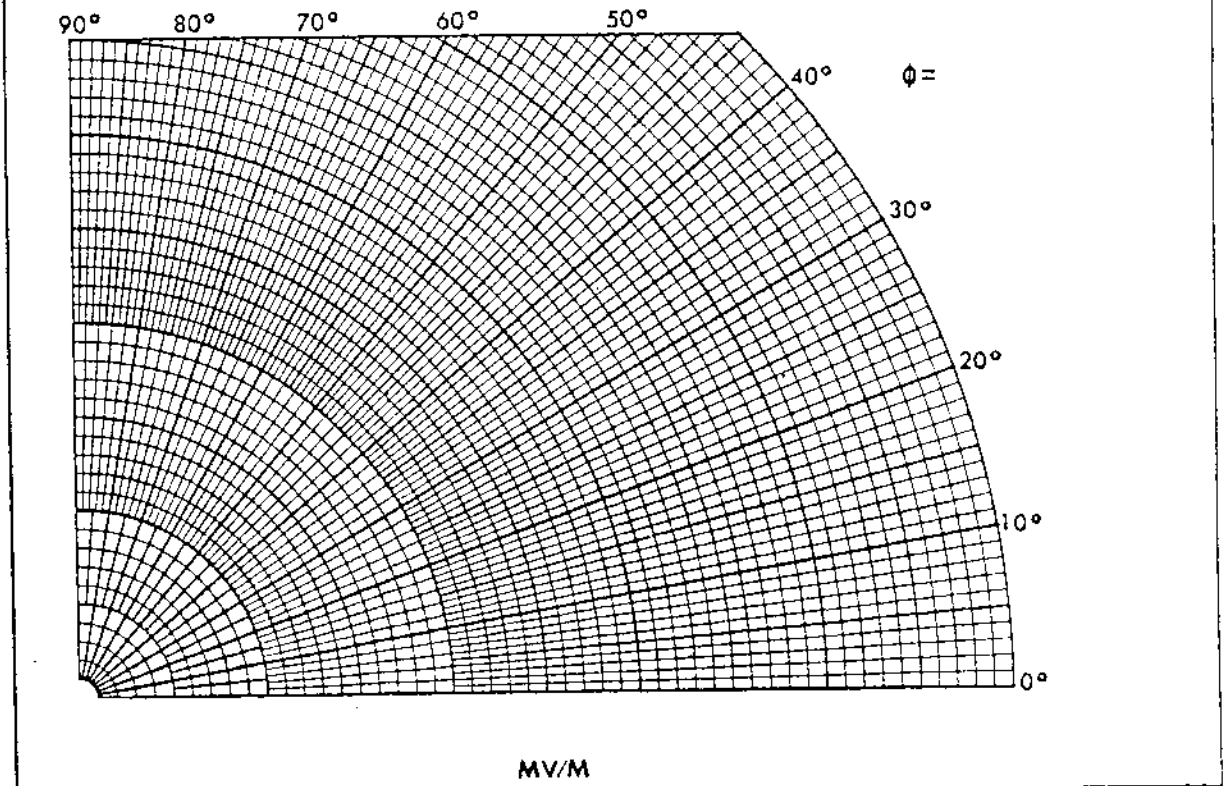
VERTICAL RADIATION PATTERNS

FIGURE 7

CJME REGINA, SASKATCHEWAN
1300 kHz 10 kW DA-2 CLASS III
PROJECT #5505 AUGUST 4, 1975
D.E.M. ALLEN & ASSOCIATES LTD., CONSULTING ENGINEERS

CJME





VERTICAL RADIATION PATTERNS

FIGURE 8

CJME
1300 kHz 10 kW DA-2
PROJECT #5505
REGINA, SASKATCHEWAN
CLASS III
AUGUST 4, 1975
D.E.M. ALLEN & ASSOCIATES LTD., CONSULTING ENGINEERS

CJME

DESCRIPTION SHEET - DIRECTIONAL ANTENNA

STATION: CJME

STATION LOCATION: Regina, Sask.

FREQUENCY: 1300 kHz

POWER: 10 kW

NOTIFICATION LIST: 369

DATE: December 5, 1977

GEOGRAPHICAL LOCATION:

Latitude 50° 23' 54" North
Longitude 104° 32' 44" West

ANTENNA CHARACTERISTICS:

Mode of Operation: DA-2
Number of Elements: 4 (Four)
Type of Elements: Guyed steel towers, uniform cross-section, base insulated for series feed

Tower:	#1(South)	#2(East)	#3(West)	#4(North)
Height above base insulator:	189'(89.9°)	189'(89.9°)	189'(89.9°)	189'(89.9°)
Overall Height:	194'	194'	194'	194'
Field Ratio:				
Nighttime	0.83	0.84	1.0	.84
Daytime	1.0	unused	0.8	unused
Phasing:				
Nighttime	0°	-155°	-95°	122°
Daytime	0°	unused	-96°	unused
Spacing:	Reference	189.3'(90°)	190.3'(90.5°)	328.1'(156°)
Orientation:	Reference	11.45°	313.13°	342.16°

Ground System: 120 equally spaced radials of No. 10 B & S gauge bare soft copper wire extend from the base of each tower. The radials are buried approximately 8 inches. The ground system radials have been adjusted so as to have an effective radial length of 0.4 wavelength. The minimum length of any radial, with the exception of those joined along the common chords, is 210'(at 1300 kHz, 210' is 0.277 wavelength).

Predicted Effective Fields:

Daytime	Nighttime
588 mV/m at 1 mile for 10 kW	619 mV/m at 1 mile for 10 kW
186 mV/m at 1 mile for 1 kW	196 mV/m at 1 mile for 1 kW

July 18, 1977

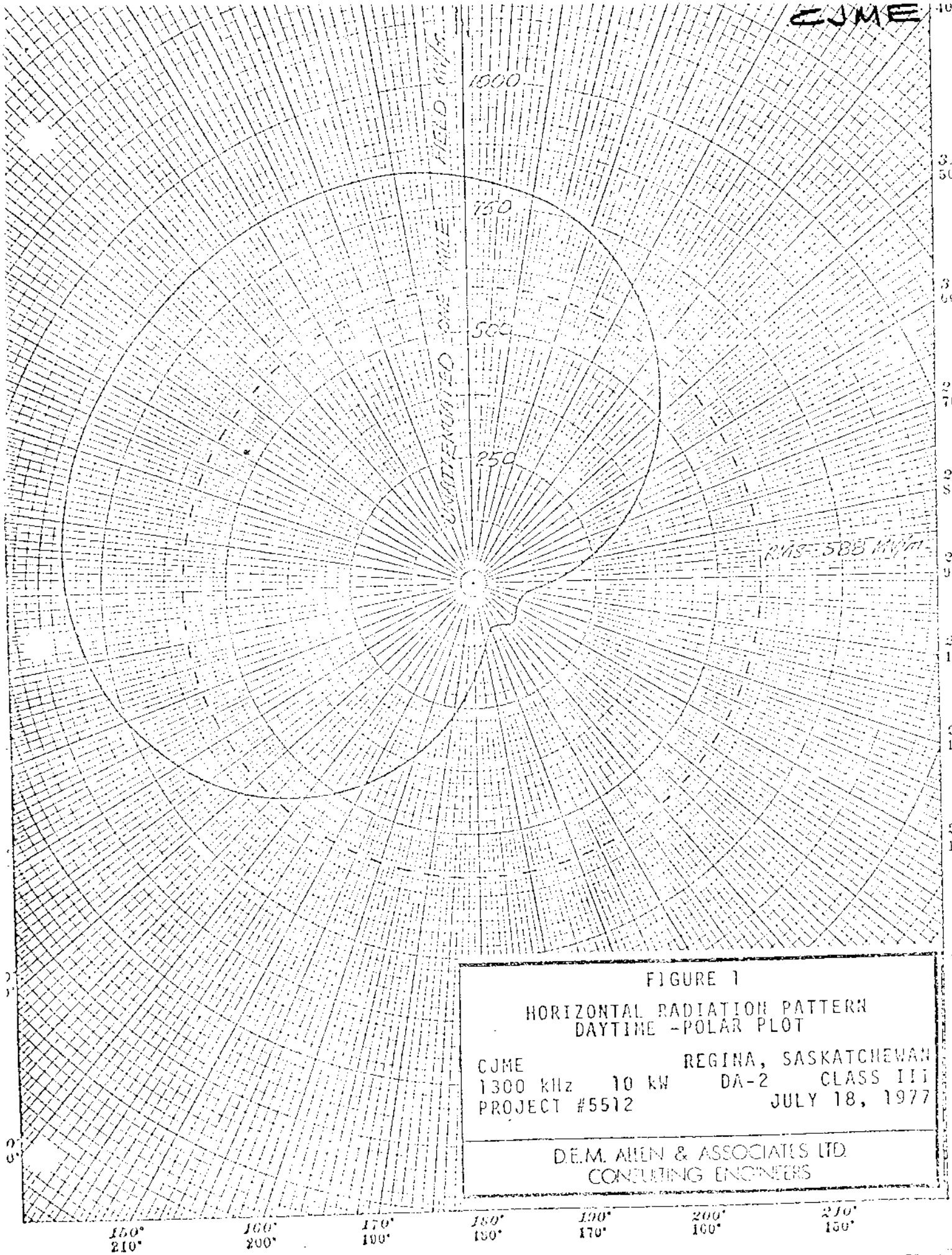


FIGURE 1

HORIZONTAL RADIATION PATTERN
DAYTIME -POLAR PLOT

CJME REGINA, SASKATCHEWAN
1300 kHz 10 kW DA-2 CLASS III
PROJECT #5512 JULY 18, 1977

D.E.M. ALLEN & ASSOCIATES LTD.
CONSULTING ENGINEERS

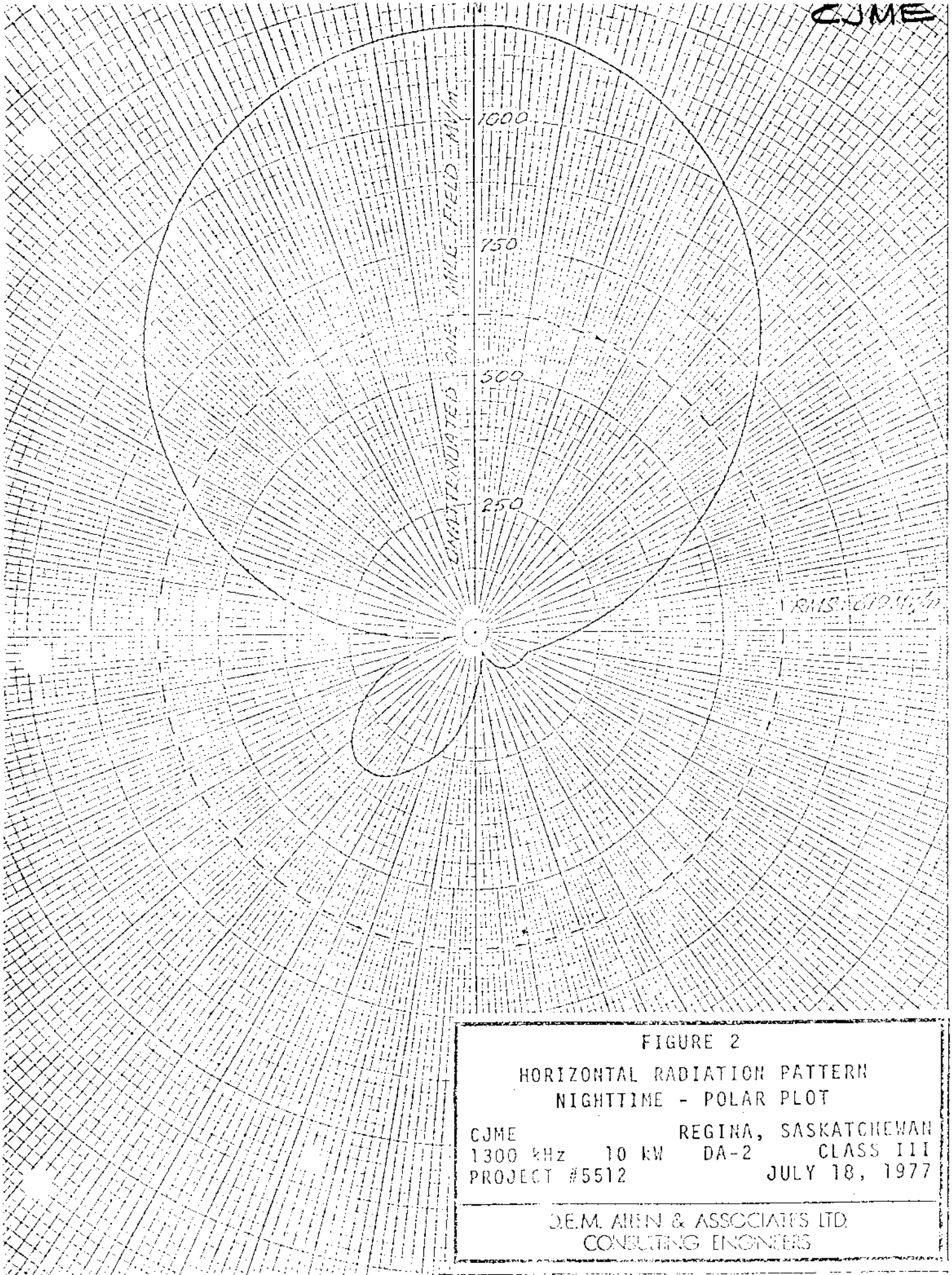


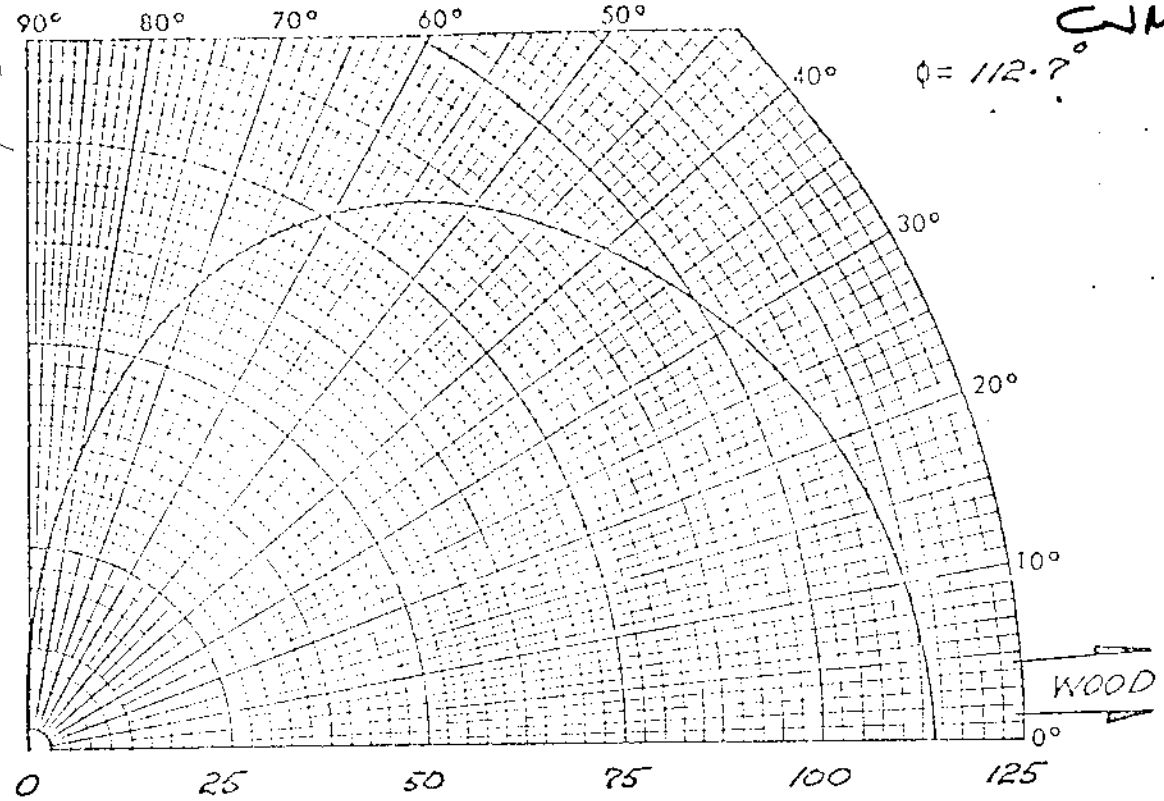
FIGURE 2

HORIZONTAL RADIATION PATTERN
NIGHTTIME - POLAR PLOT

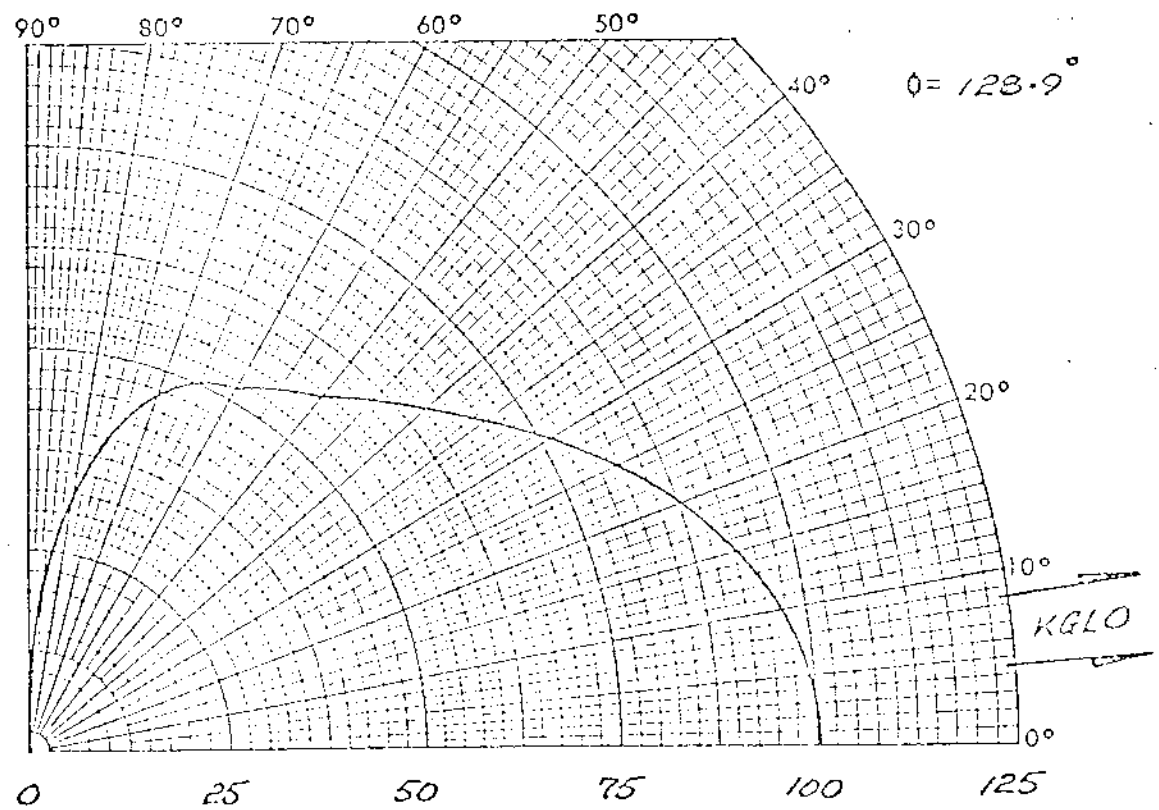
CJME — REGINA, SASKATCHEWAN
1300 kHz — 10 kW — DA-2 — CLASS III
PROJECT #5512 — JULY 18, 1977

D.E.M. ALLEN & ASSOCIATES LTD.
CONSULTING ENGINEERS

CJME



UNATTENUATED (MV/M) 1 MILE FIELD



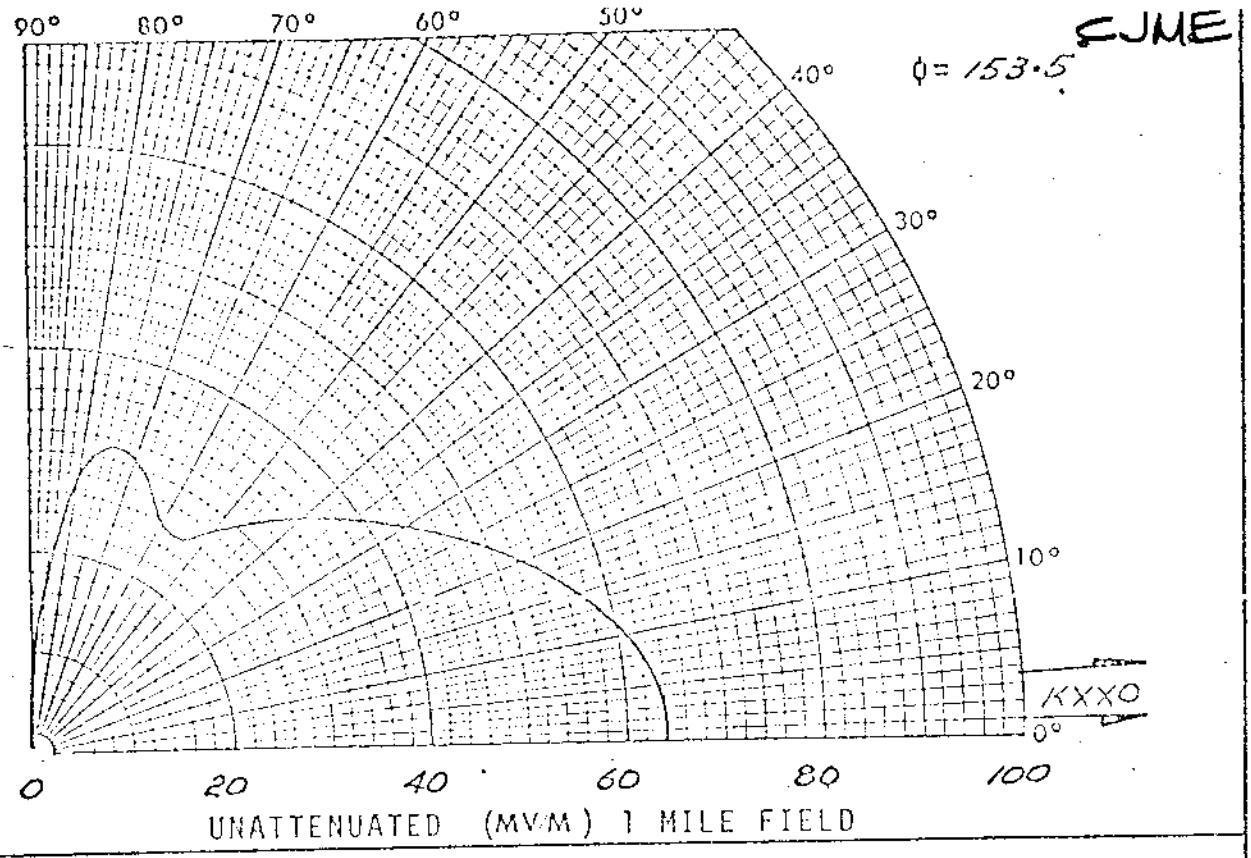
UNATTENUATED (MV/M) 1 MILE FIELD

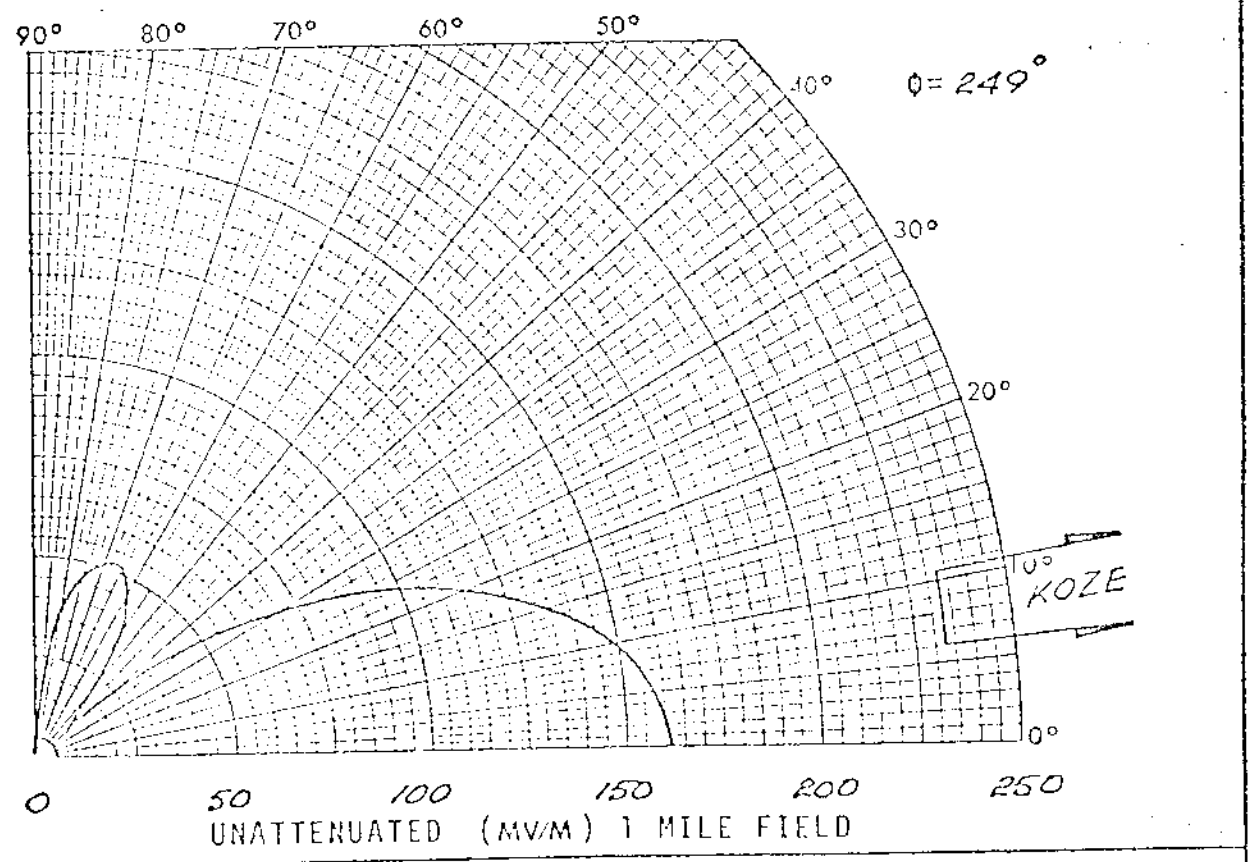
VERTICAL RADIATION PATTERNS

FIGURE 3

CJME — REGINA, SASKATCHEWAN
1300 kHz — 10 kW — DA-2 — CLASS III
PROJECT #5512 — JULY 18, 1977

D.E.M. ALLEN & ASSOCIATES LTD., CONSULTING ENGINEERS





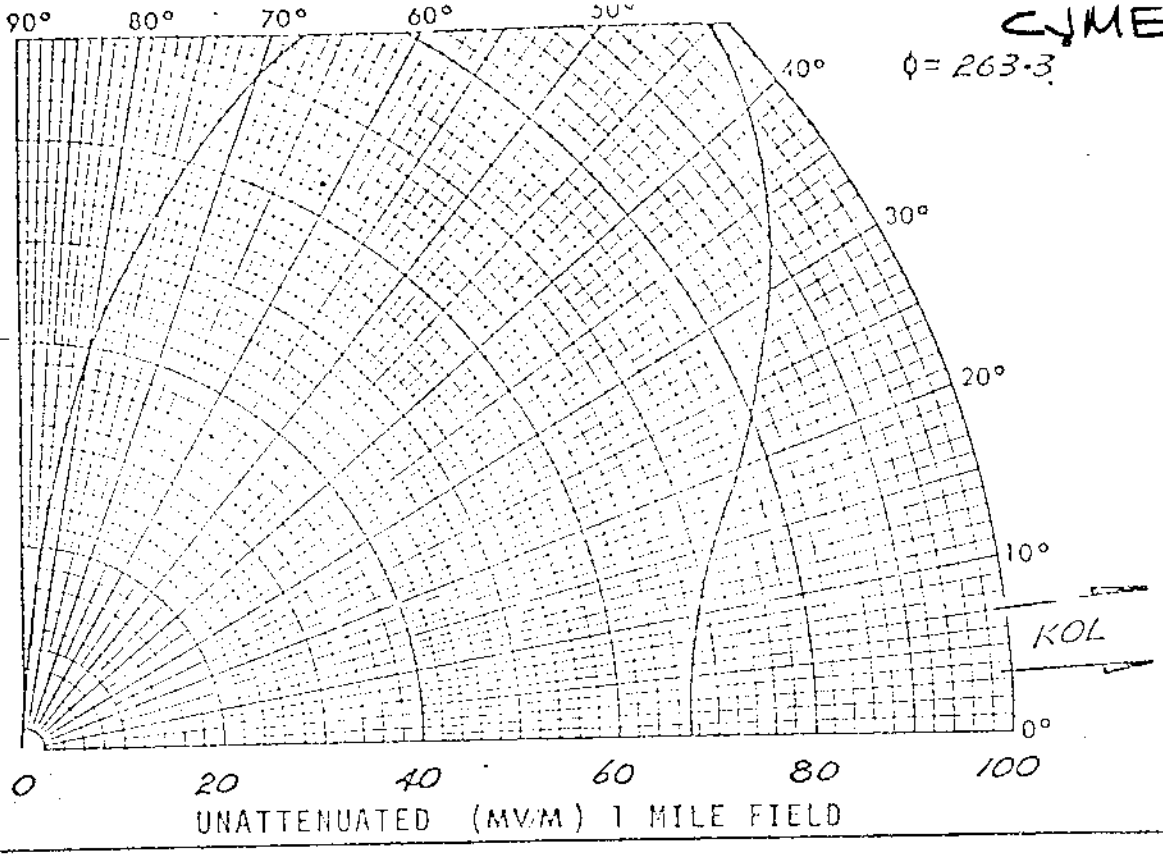
VERTICAL RADIATION PATTERNS

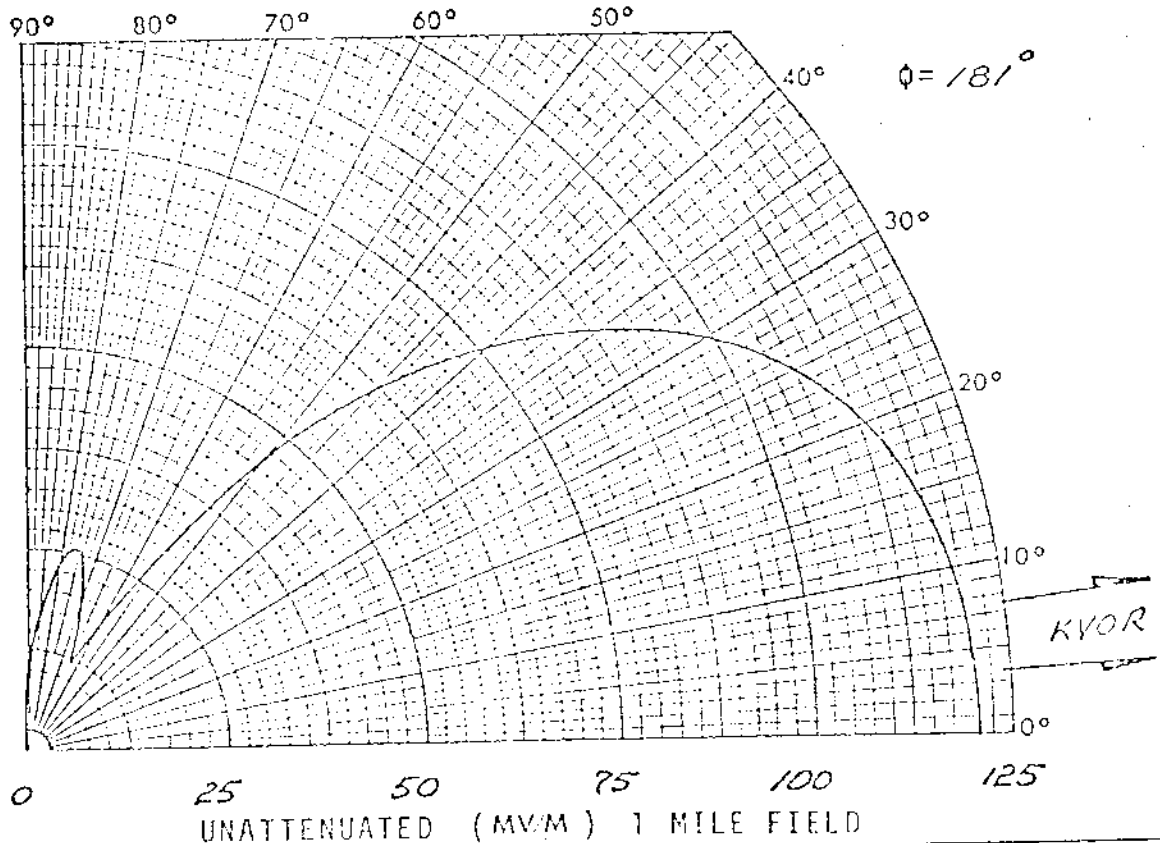
FIGURE 4

CJME
1300 kHz 10 kW DA-2 REGINA, SASKATCHEWAN
PROJECT #5512 CLASS III
JULY 18, 1977

D.E.M. ALLEN & ASSOCIATES LTD., CONSULTING ENGINEERS

CJME



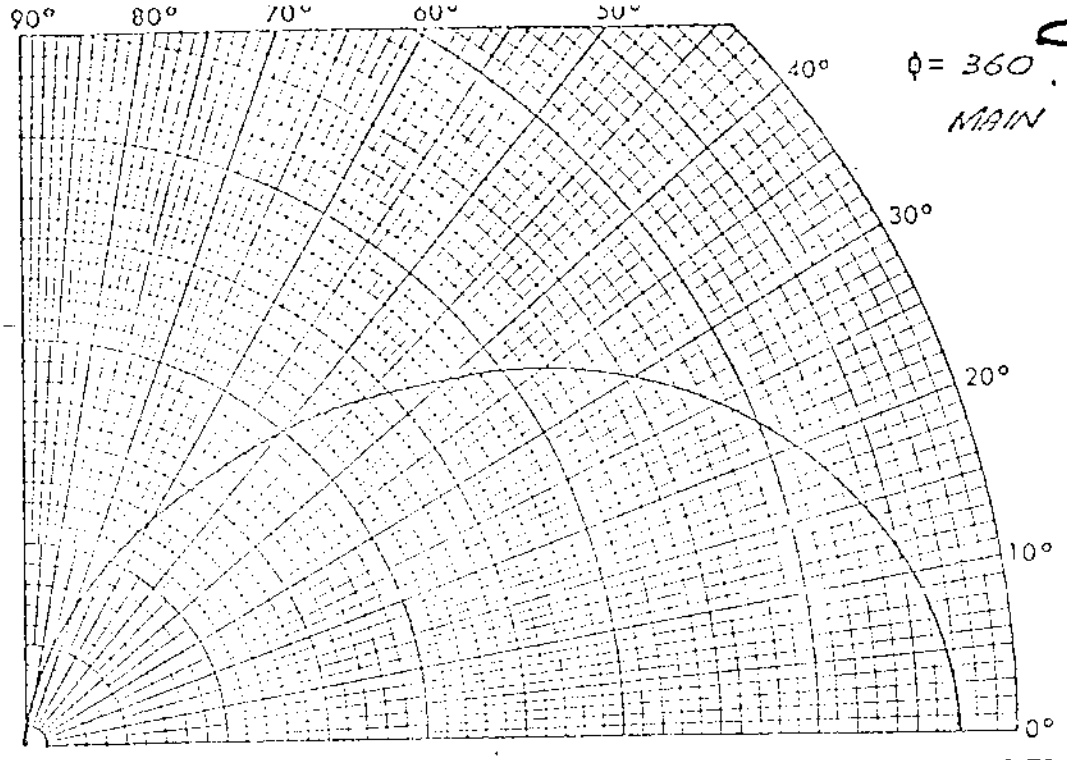


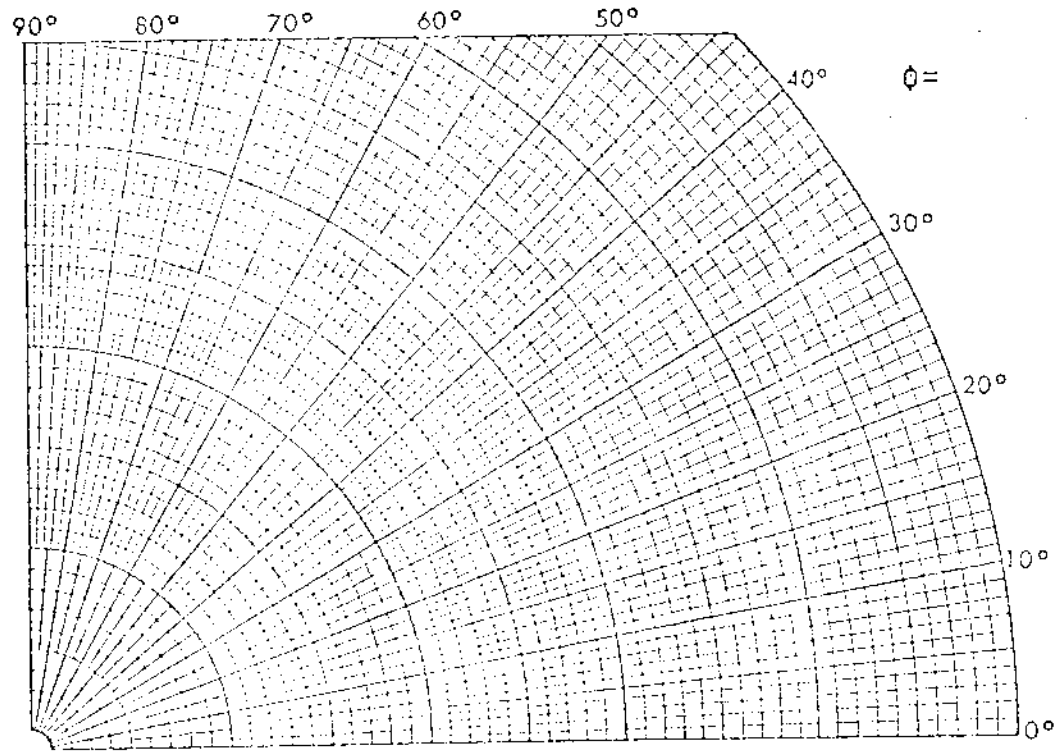
VERTICAL RADIATION PATTERNS

FIGURE 5

CJME
1300 kHz 10 kW DA-2 REGINA, SASKATCHEWAN
PROJECT #5512 CLASS III
JULY 18, 1977

D.E.M. ALLEN & ASSOCIATES LTD., CONSULTING ENGINEERS





VERTICAL RADIATION PATTERNS

FIGURE 6

CJME
1300 kHz
PROJECT #5512

10 kW

DA-2

REGINA, SASKATCHEWAN
CLASS III
JULY 18, 1977

D.E.M. ALLEN & ASSOCIATES LTD., CONSULTING ENGINEERS

PROJECT #5512

CJME

DESCRIPTION SHEET - DIRECTIONAL ANTENNA

STATION: CJME

STATION LOCATION: Regina, Sask.

FREQUENCY: 1300 kHz

POWER: 10 kW

NOTIFICATION LIST: 369

DATE: December 5, 1977

GEOGRAPHICAL LOCATION: Latitude 50° 23' 54" North
Longitude 104° 32' 44" West

ANTENNA CHARACTERISTICS:

Mode of Operation: DA-2
Number of Elements: 4 (Four)
Type of Elements: Guyed steel towers, uniform cross-section, base insulated for series feed

Tower:	#1(South)	#2(East)	#3(West)	#4(North)
Height above base insulator:	189'(89.9°)	189'(89.9°)	189'(89.9°)	189'(89.9°)
Overall Height:	194'	194'	194'	194'
Field Ratio:				
Nighttime	0.83	0.84	1.0	.84
Daytime	1.0	unused	0.8	unused
Phasing:				
Nighttime	0°	-155°	-95°	122°
Daytime	0°	unused	-96°	unused
Spacing:	Reference	189.3'(90°)	190.3'(90.5°)	328.1'(156°)
Orientation:	Reference	11.45°	313.13°	342.16°

Ground System: 120 equally spaced radials of No. 10 B & S gauge bare soft copper wire extend from the base of each tower. The radials are buried approximately 8 inches. The ground system radials have been adjusted so as to have an effective radial length of 0.4 wavelength. The minimum length of any radial, with the exception of those joined along the common chords, is 210'(at 1300 kHz, 210' is 0.277 wavelength).

Predicted Effective Fields:

Daytime	Nighttime
588 mV/m at 1 mile for 10 kW	619 mV/m at 1 mile for 10 kW
186 mV/m at 1 mile for 1 kW	196 mV/m at 1 mile for 1 kW

July 18, 1977

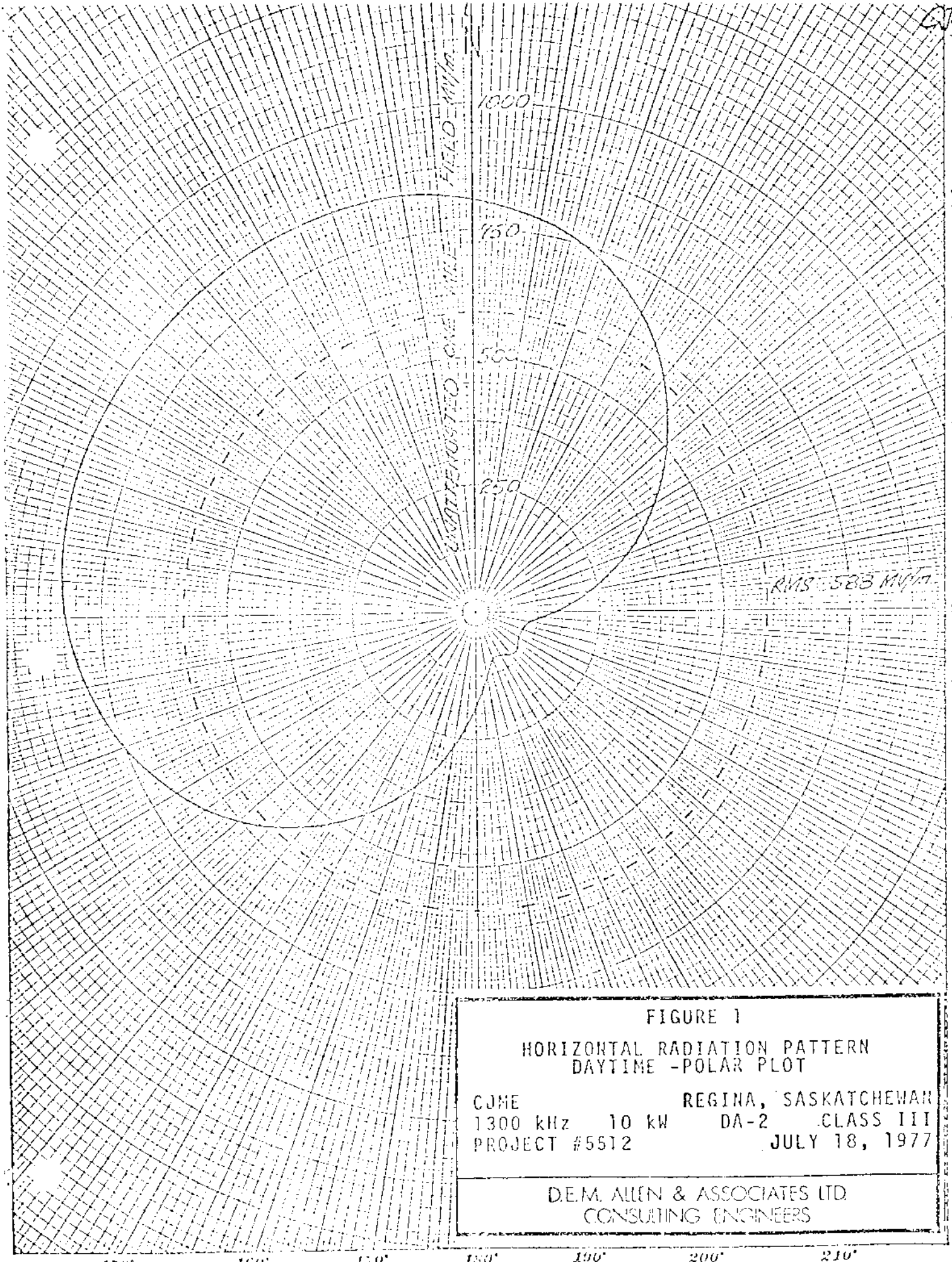


FIGURE 1

HORIZONTAL RADIATION PATTERN
DAYTIME -POLAR PLOT

CJME REGINA, SASKATCHEWAN
1300 kHz 10 kW DA-2 CLASS III
PROJECT #5512 JULY 18, 1977

D.E.M. ALLEN & ASSOCIATES LTD.
CONSULTING ENGINEERS

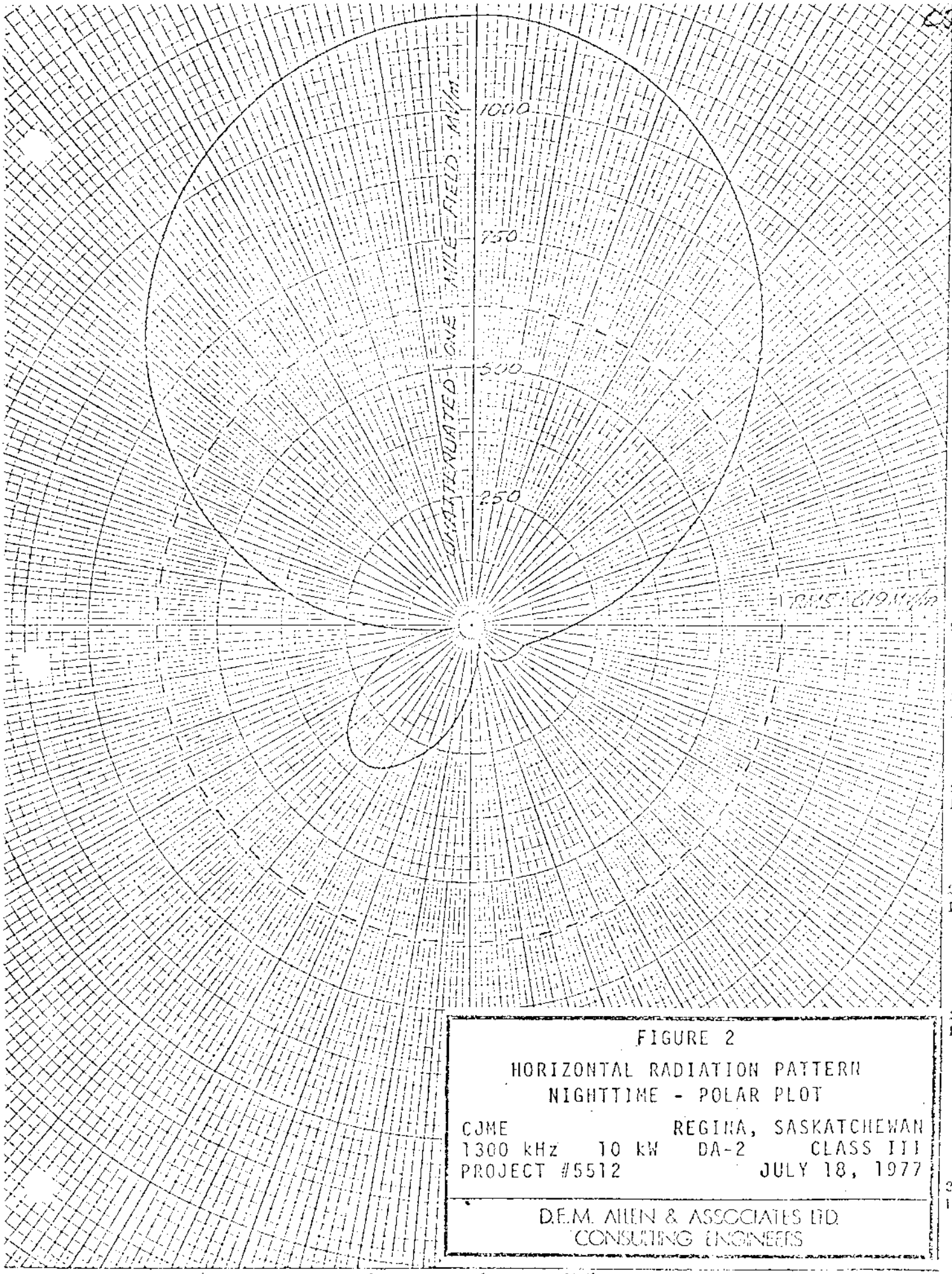


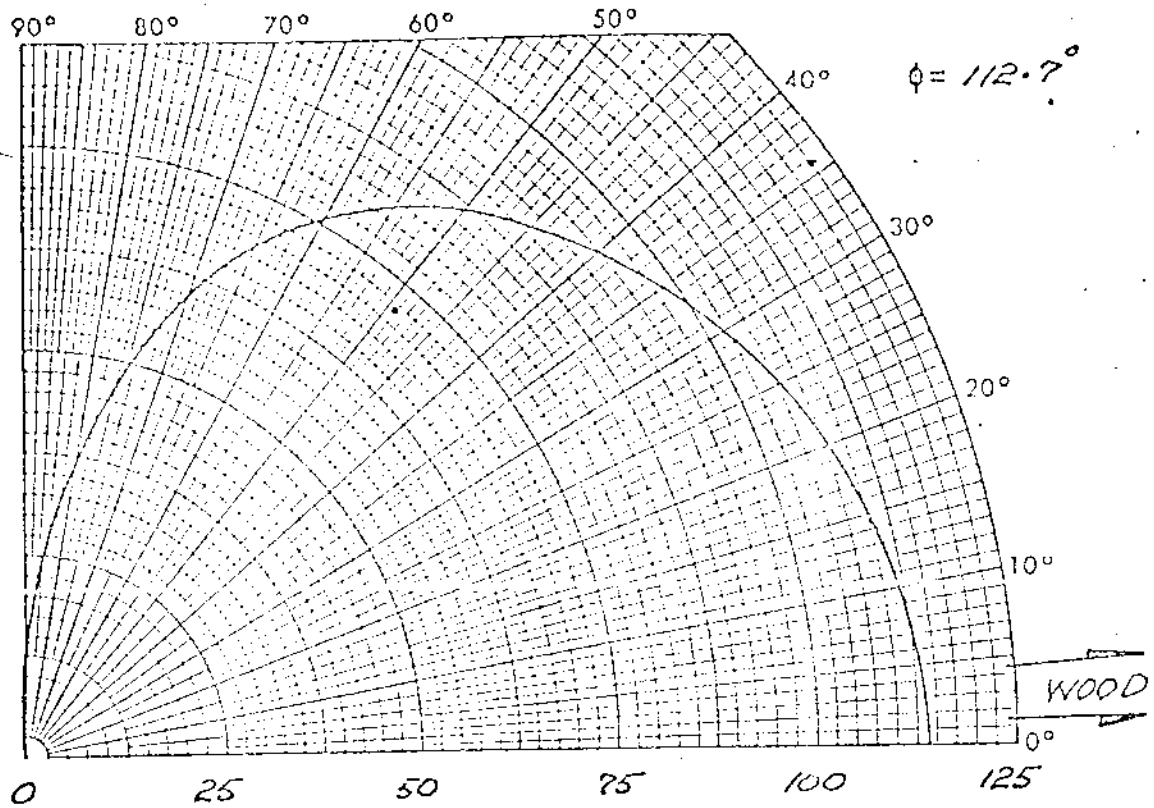
FIGURE 2

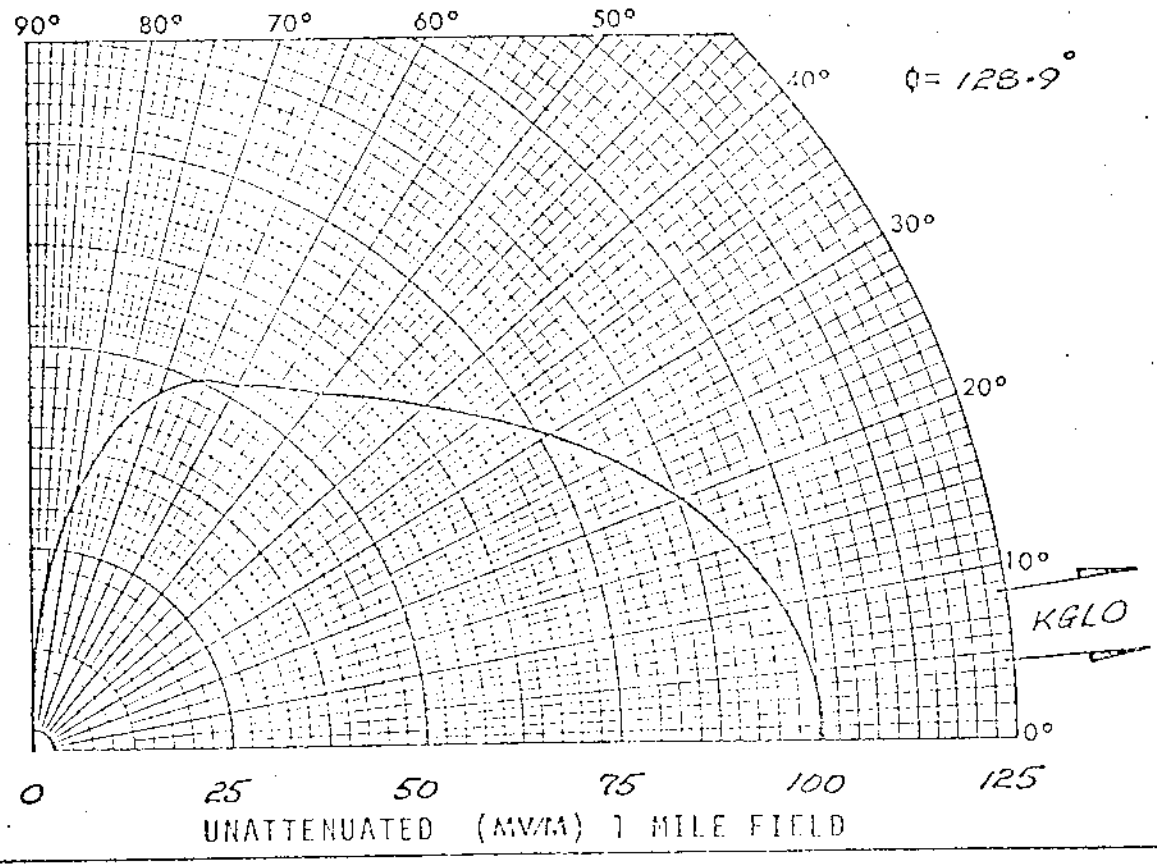
HORIZONTAL RADIATION PATTERN
NIGHTTIME - POLAR PLOT

CJME REGINA, SASKATCHEWAN
1300 kHz 10 kW DA-2 CLASS III
PROJECT #5512 JULY 18, 1977

D.E.M. ALLEN & ASSOCIATES LTD.
CONSULTING ENGINEERS

CJME



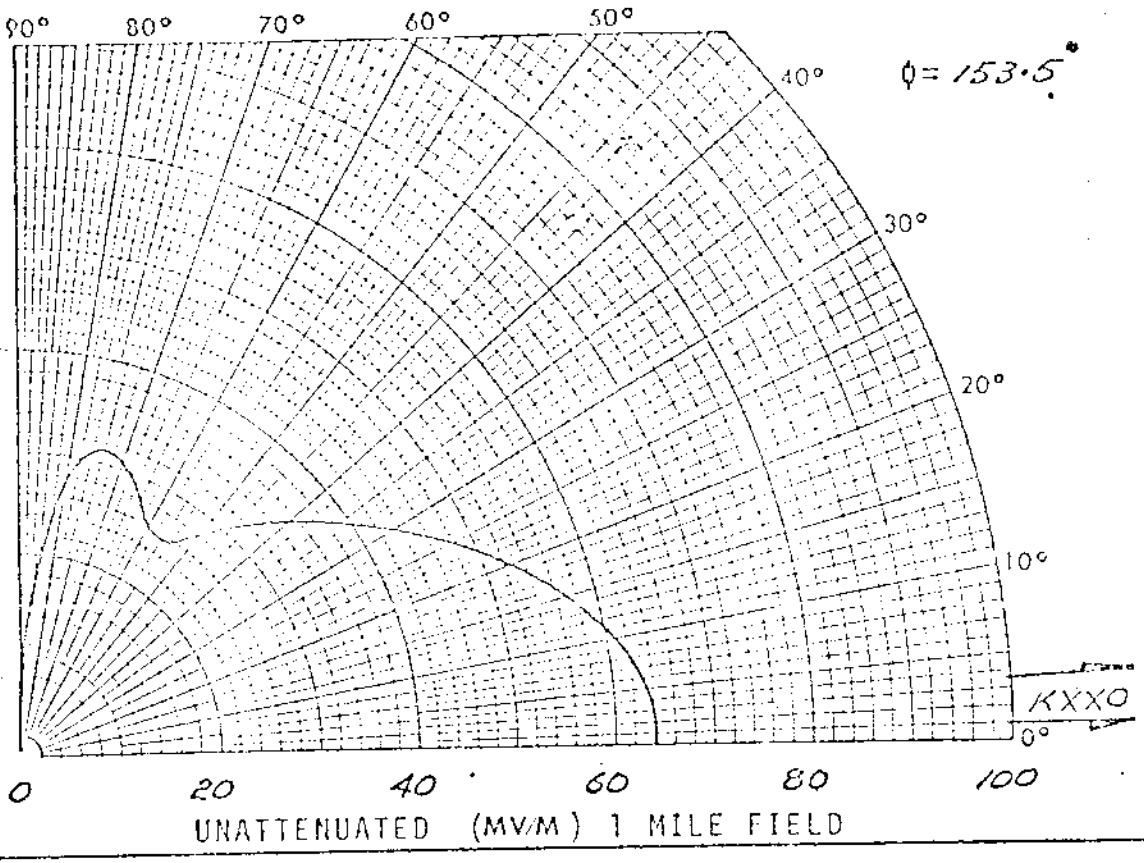


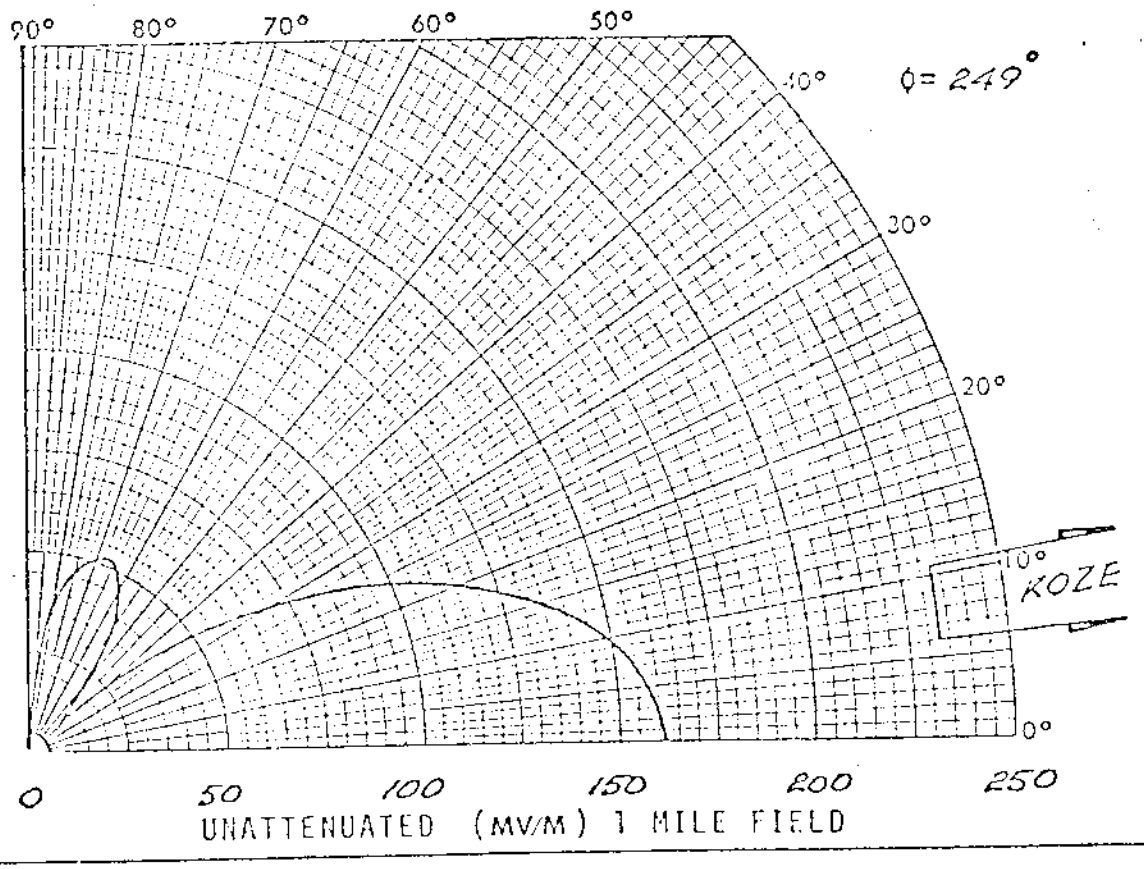
VERTICAL RADIATION PATTERNS

FIGURE 3

CJME — REGINA, SASKATCHEWAN
1300 kHz — 10 kW — DA-2 — CLASS III
PROJECT #5512 — JULY 18, 1977

D.E.M. ALLEN & ASSOCIATES LTD., CONSULTING ENGINEERS



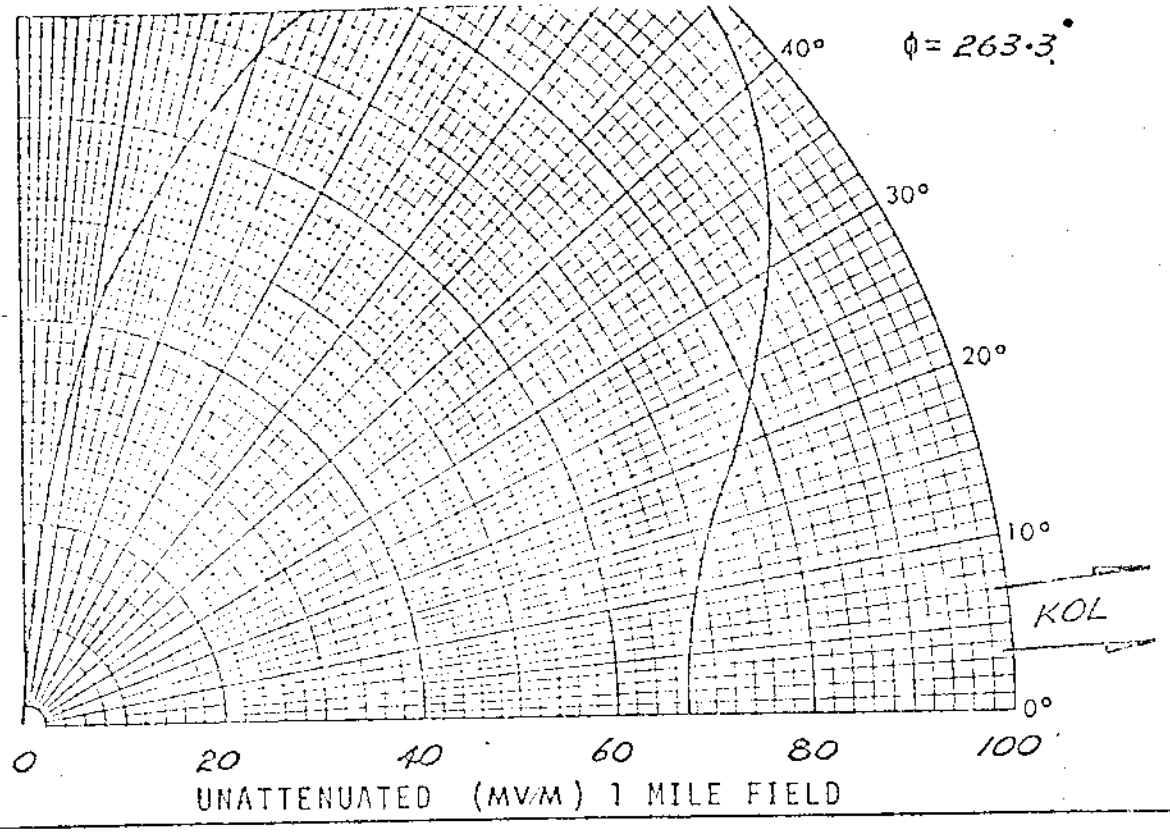


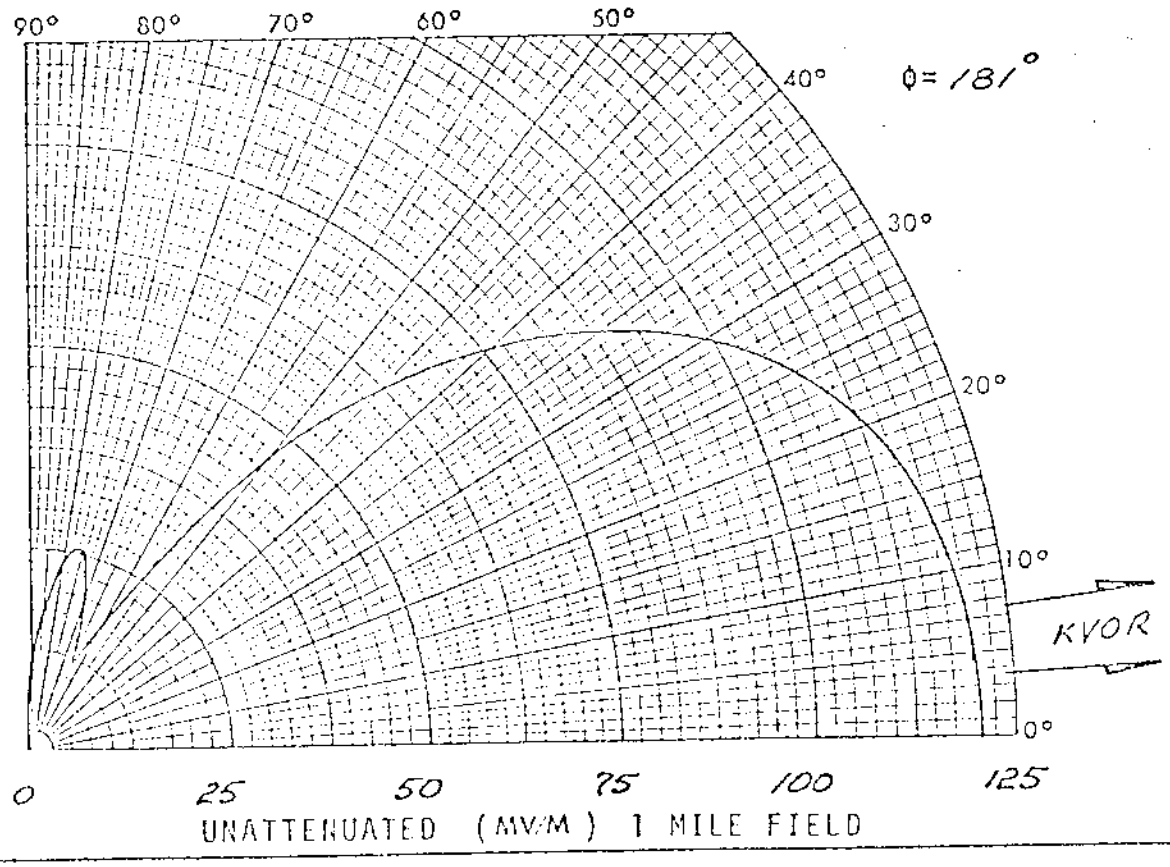
VERTICAL RADIATION PATTERNS

FIGURE 4

CJME
1300 kHz 10 kW DA-2 REGINA, SASKATCHEWAN
PROJECT #5512 CLASS III
JULY 18, 1977

D.E.M. ALLEN & ASSOCIATES LTD., CONSULTING ENGINEERS





VERTICAL RADIATION PATTERNS

FIGURE 5

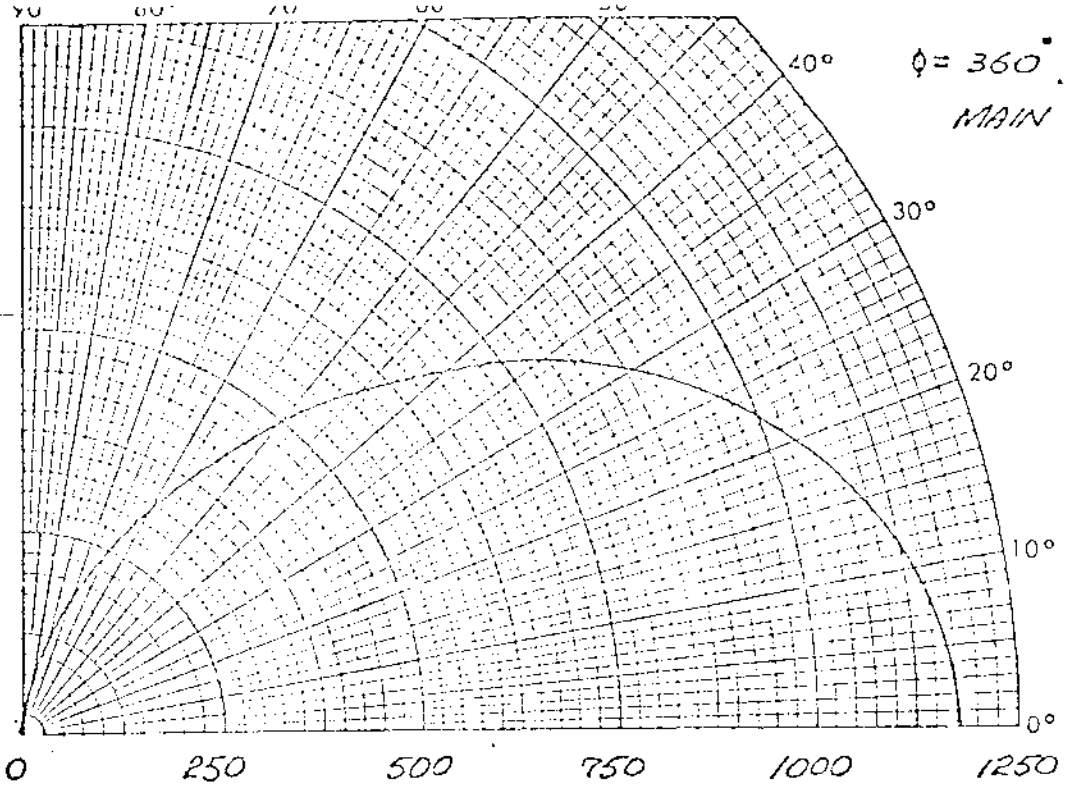
CJME
1300 kHz
PROJECT #5512

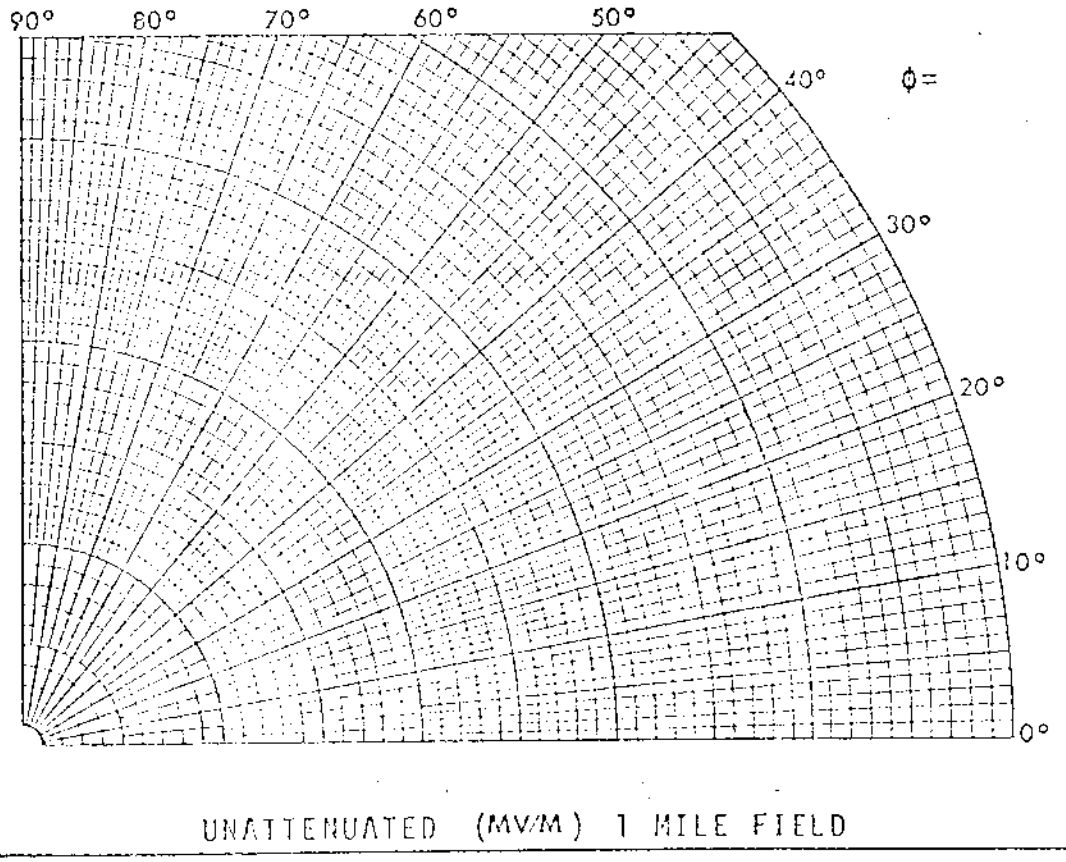
10 kW

DA-2

REGINA, SASKATCHEWAN
CLASS III
JULY 18, 1977

D.E.M. ALLEN & ASSOCIATES LTD., CONSULTING ENGINEERS





VERTICAL RADIATION PATTERNS

FIGURE 6

CJME
1300 kHz 10 kW DA-2 REGINA, SASKATCHEWAN
PROJECT #5512 CLASS III
JULY 18, 1977

D.E.M. ALLEN & ASSOCIATES LTD., CONSULTING ENGINEERS

KBRL

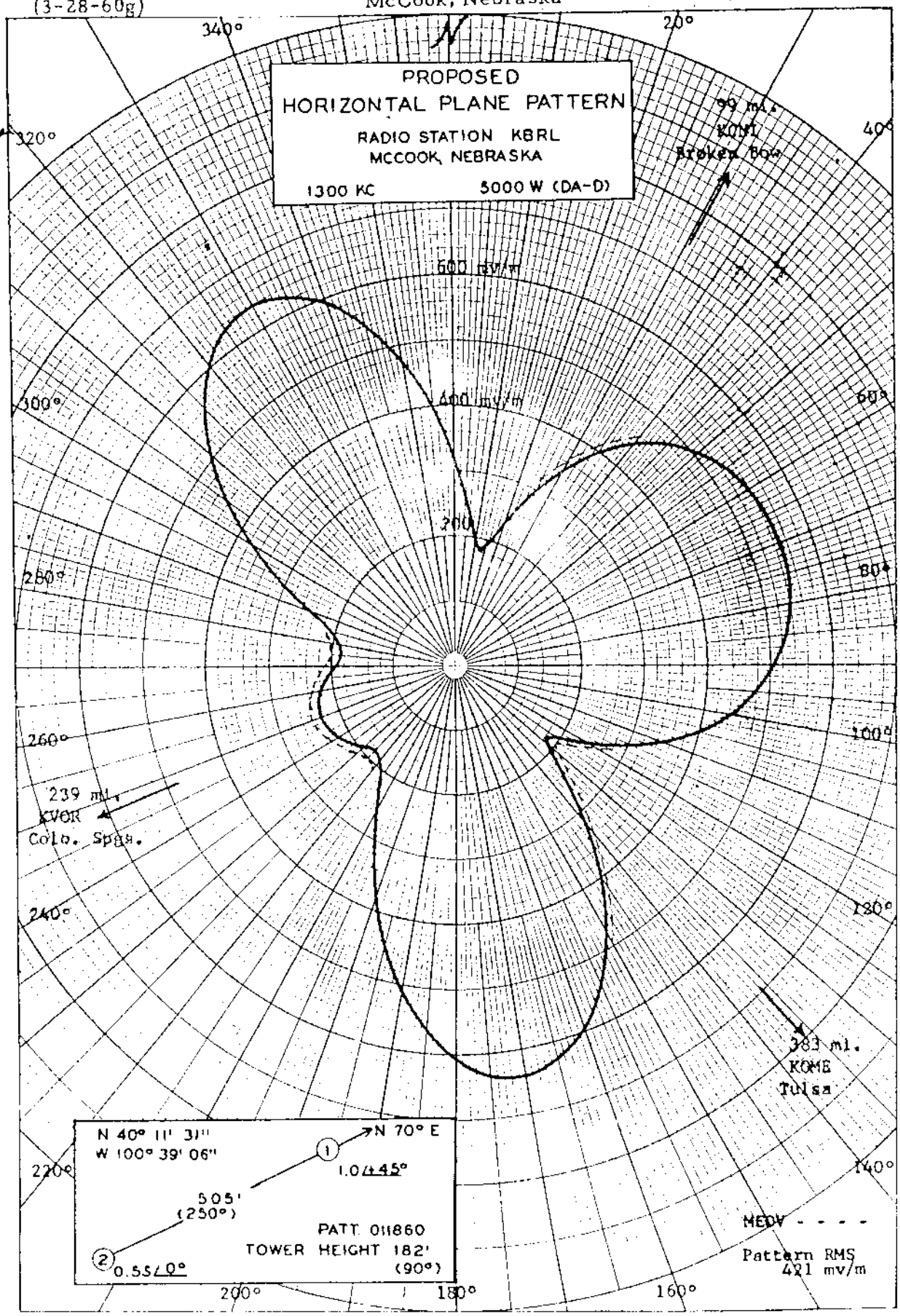
PROPOSED DAY
(3-28-60g)

Station KBRL
McCook, Nebraska

5kw, DA-D,D
1300 KC

11-1-61
Granted CP
increase
day directional
hours (to 5 KW.

BL 9635
11-25-63
granted L



FCC File No. BP-13903
Accepted 2-29-60

KBRL
McCook, Nebraska

1300 KC

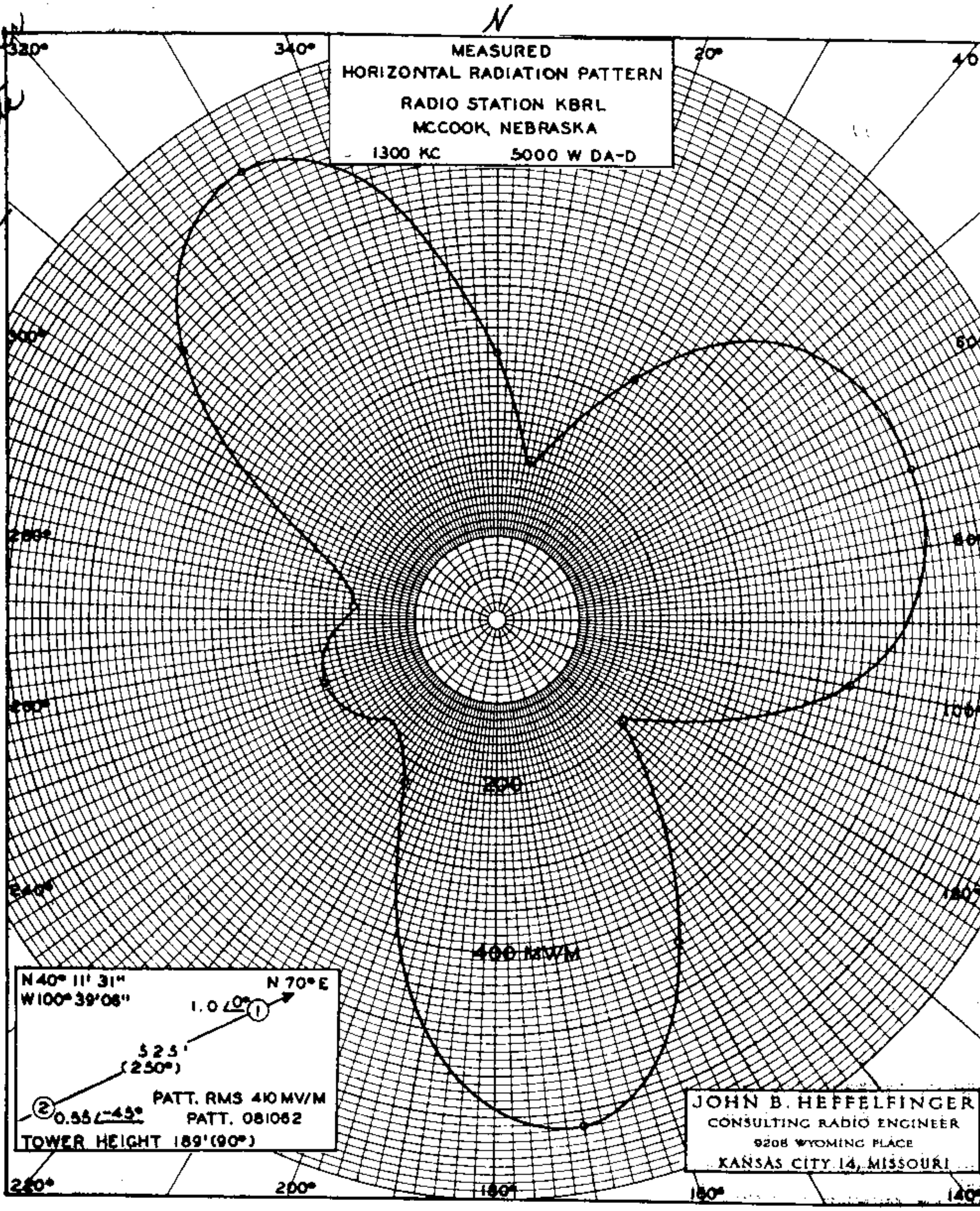
KBRL

Measured Day
(12-28-62ct)

Station KBRL
McCook, Nebraska

5kw,DA-D,D
1300kc

1-25-63
granted L:
increase in power
change transmitter site
+ DA-D



FCC File No.BL-9635
Accepted 12-12-62

Station KBRL
McCook, Nebraska

1300kc

KGLO

Prposed Night
(5-28-63ct)

Station KGLO
Mason City, Iowa

5kw, DA-N, U
1300 kc

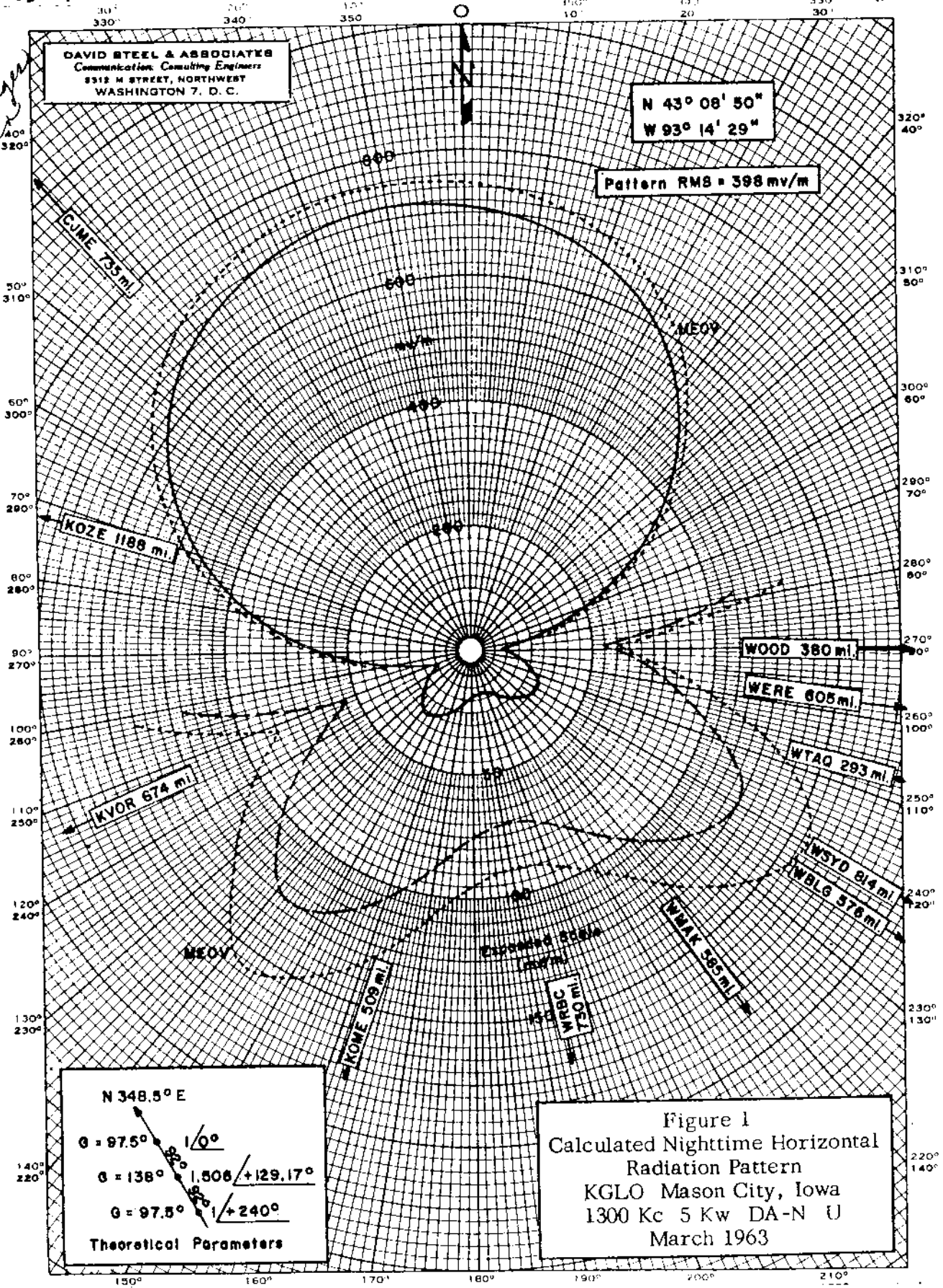


Figure 1
Calculated Nighttime Horizontal
Radiation Pattern
KGLO Mason City, Iowa
1300 Kc 5 Kw DA-N U
March 1963

FCC File No. BP-15911
Accepted 5-3-63

Station KGLO
Mason City, Iowa

1300 kc

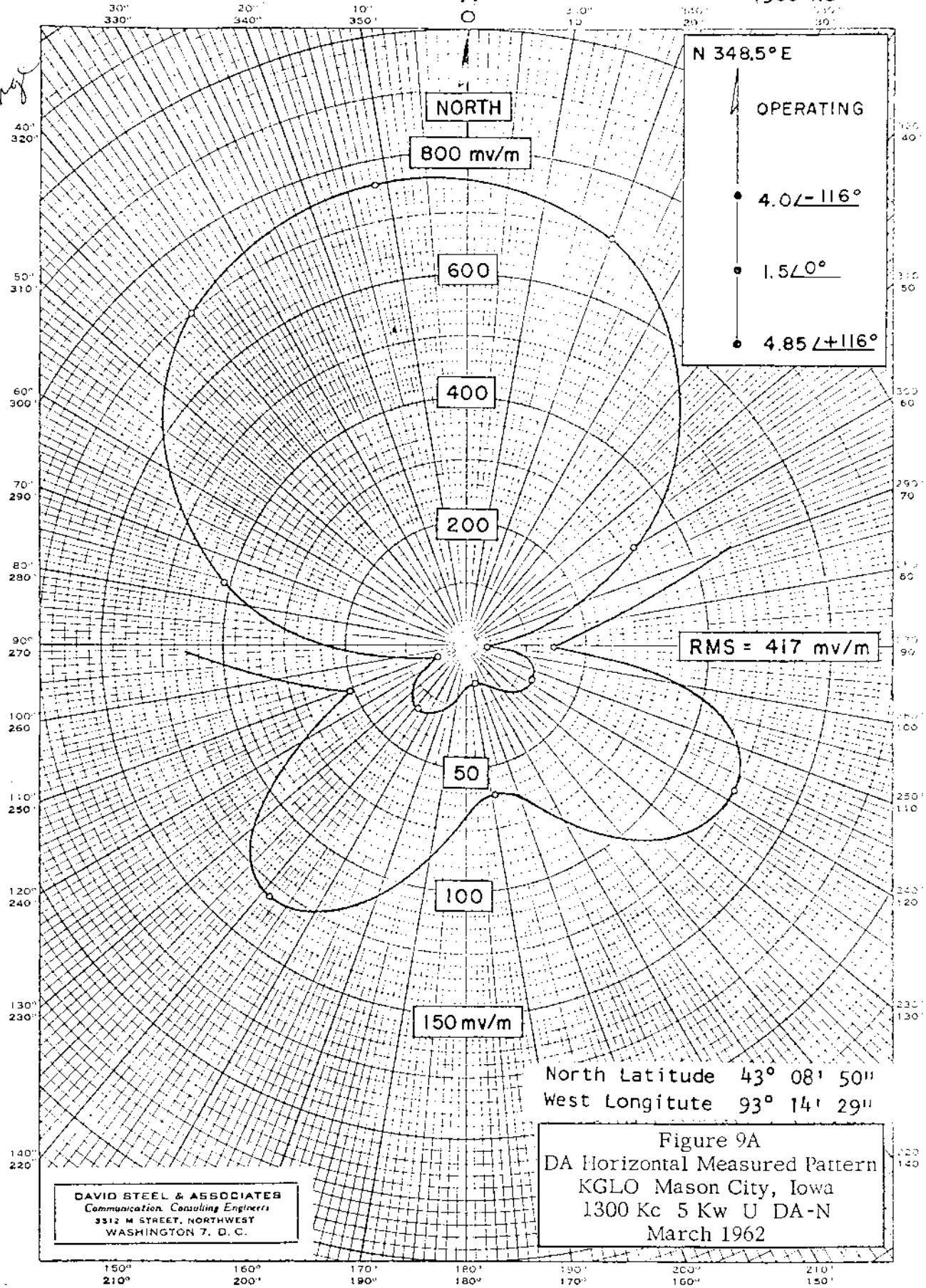
KGLO

Measured Night
(6-22-62ct)

Station KGLO
Mason City, Iowa

5kw, DA-N, U
1300 kc

6/29/64
Ltr change
DA-N.



EUGENE DIETZGEN CO.

NO. 340R-4 DIETZGEN GRAPH PAPER
POLAR CO-ORDINATE

North Latitude 43° 08' 50"
West Longitute 93° 14' 29"

Figure 9A
DA Horizontal Measured Pattern
KGLO Mason City, Iowa
1300 Kc 5 Kw U DA-N
March 1962

DAVID STEEL & ASSOCIATES
Communication Consulting Engineers
3512 M STREET, NORTHWEST
WASHINGTON 7, D. C.

FCC File No.BZ-4667
Accepted 6-12-62

Station KGLO
Mason City, Iowa

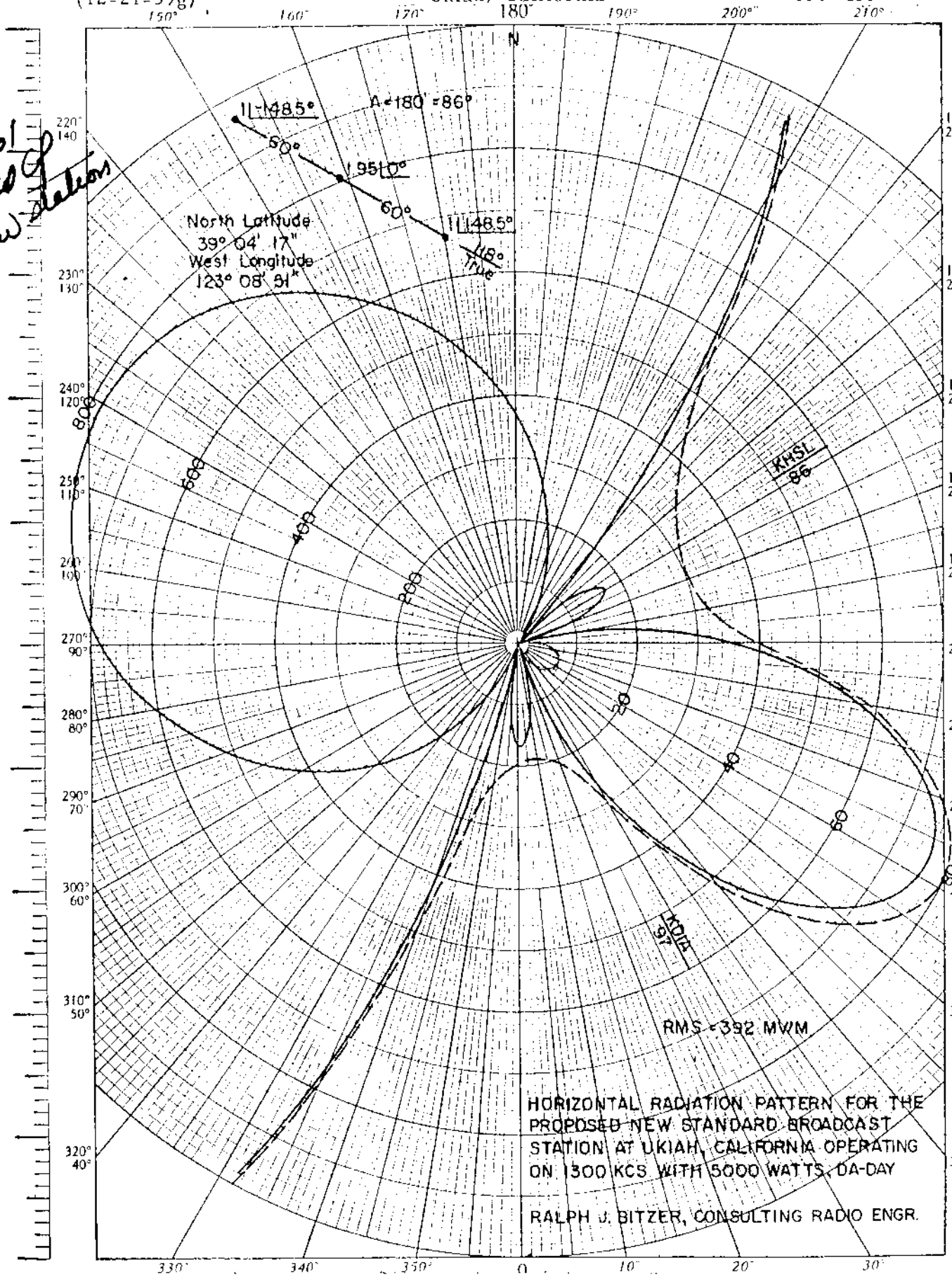
1300 kc

UKIAH, CAL. KKCN

PROPOSED DAY
(12-21-59g)

New; Ukiah Radio
Ukiah, California

5kw, DA-D, D
1300 KC



4-12-61 granted CP new station

FCC File No. BP-13624
Accepted 11-24-59

Ukiah Radio
Ukiah, California

1300 KC

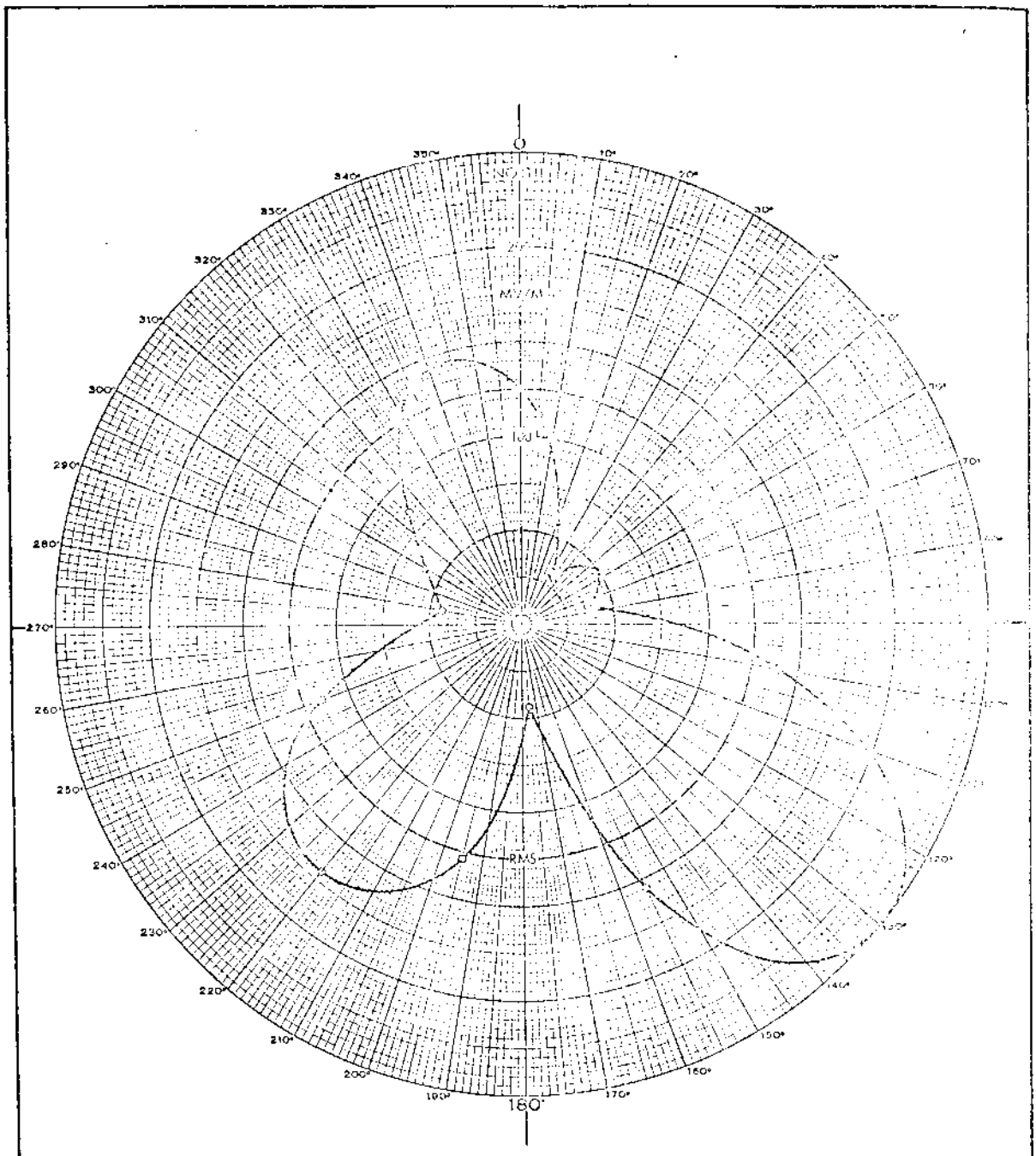
SEE REVERSE SIDE 6/24/70

KLAR

Measured Night
(6-29-70ct)

Station KLAR
Laredo, Texas

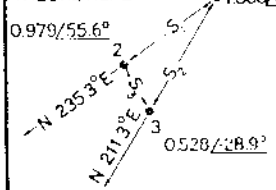
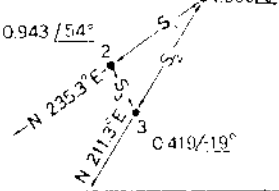
500w, 1kw-LS, DA-N, U
1300 kc



S_1 = 232.7° = 489.3'
S_2 = 272.0° = 571.9'
S_3 = 111.7° = 234.9'

G = 90° = 189' ABOVE GROUND PLANE
G = 88° = 185' ABOVE BASE INSULATOR
RMS = 125 MV/M

N LAT. 27° 28' 17"
W. LONG. 99° 28' 47"

THEORETICAL	OPERATING
	
HAMMETT & EDISON CONSULTING ENGINEERS SAN FRANCISCO	RADIO STATION KLAR 1300KHZ, 0.5KW, 1KW-LS, DA-N LAREDO, TEXAS

MEASURED HORIZONTAL RADIATION NIGHTTIME

UNATTENUATED FIELD INTENSITY
AT ONE MILE

6-29-70

FIGURE 1(A)

FCC File No. BL-12626
Accepted 5-27-70

Station KLAR
Laredo, Texas

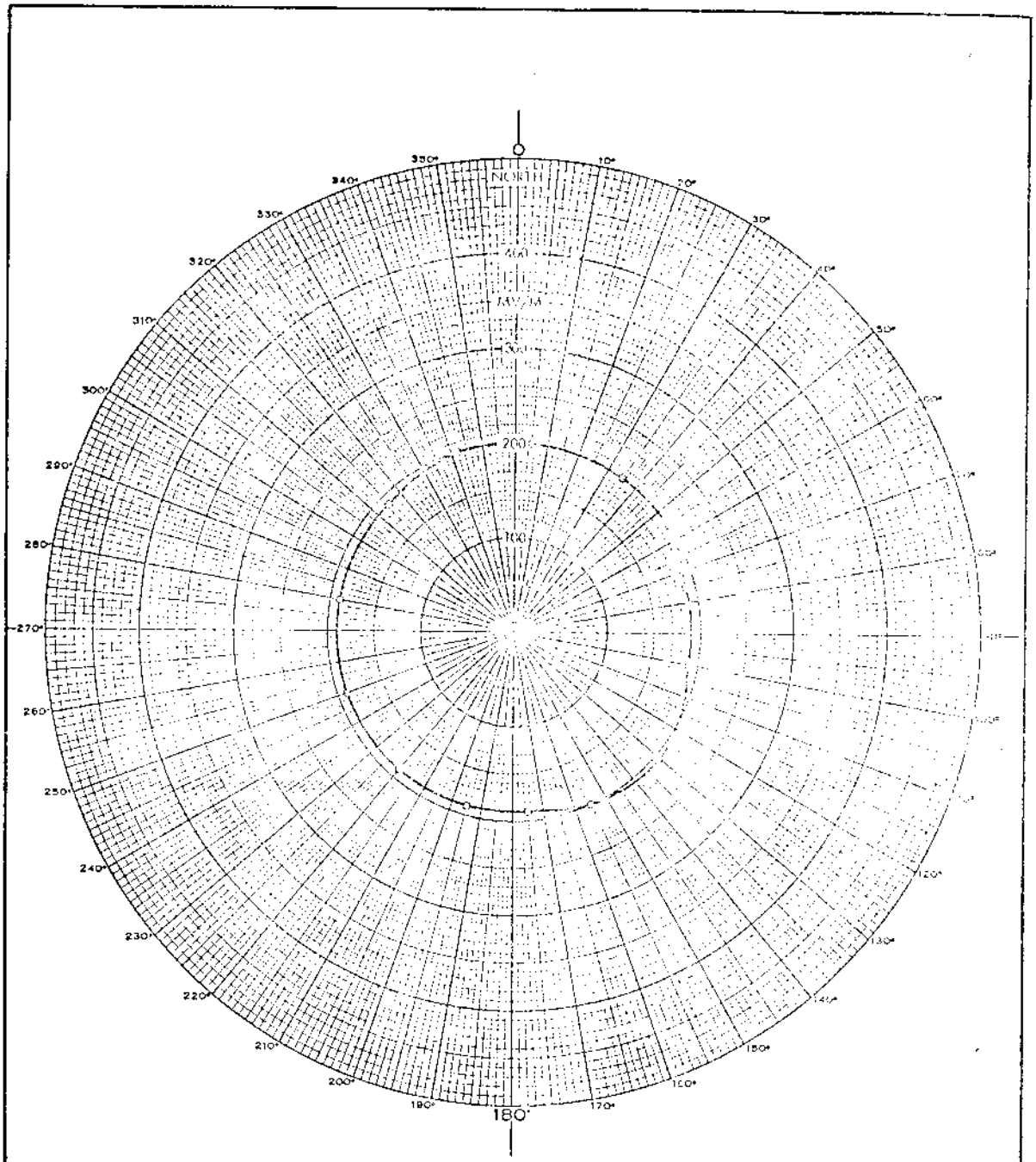
1300 kc

Measured Non-DA
(6-29-70ct)

Station KLAR
Laredo, Texas

SEE REVERSE SIDE 6/29/70

KLAR
500w, 1kw-LS, DA-N, U
1300 kc



N. LAT. 27° 28' 17"
W. LONG 99° 28' 47"

TOWER 3 EXCITED, TOWERS 1 AND 2 FLOATING

RMS = 193 MV/M

MEASURED HORIZONTAL RADIATION
NON-DIRECTIONAL

UNATTENUATED FIELD INTENSITY
AT ONE MILE

HAMMETT & EDISON CONSULTING ENGINEERS SAN FRANCISCO	RADIO STATION KLAR 1300KHZ, 0.5W, 1KW-LS, DA-N LAREDO,TEXAS	690311

FIGURE 10A

FCC File No. BL-12626
Accepted 5-27-70

Station KLAR
Laredo, Texas

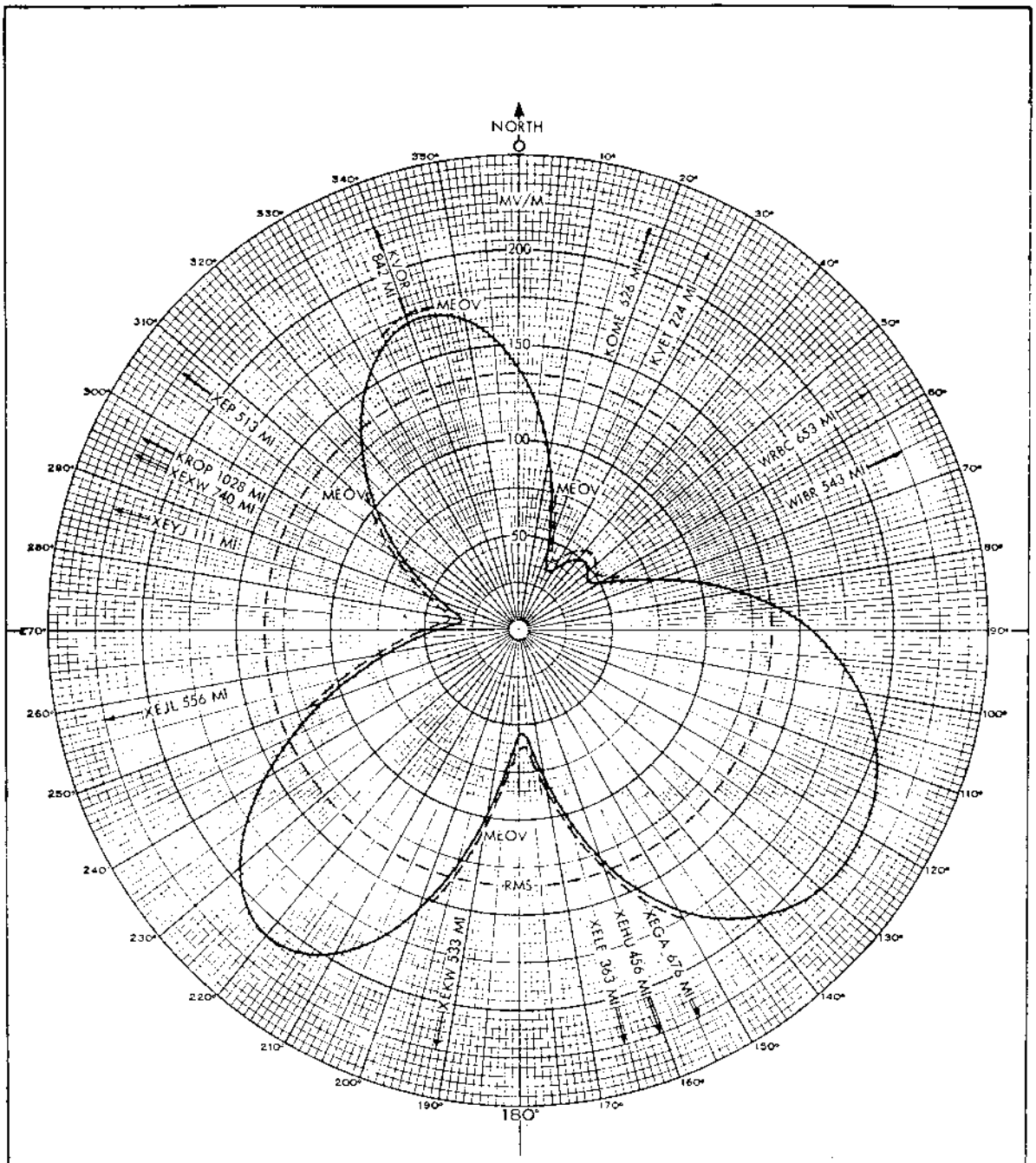
1300 kc

BP-18691
GR (2-9-70) CP to replace expired Permit (BP17969). KLAR

Proposed Night
(3-28-68ct)

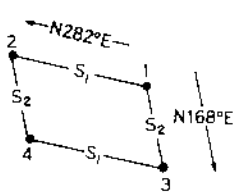
Station KGNS
Laredo, Texas

500w, 1kw-LS, DA-N, U
1300 kc



N. LAT. 27° 28' 17"
W. LONG. 99° 28' 47"

S_1=240°=505'
S_2=160°=336'
G=90°=189'
RMS=135 MV/M



HAMMETT & EDISON
CONSULTING RADIO ENGINEERS
SAN FRANCISCO

RADIO STATION KGNS
1300 KC. 0.5 KW. 1 KW-LS. DA-N
LAREDO TEXAS

PROPOSED HORIZONTAL RADIATION NIGHTTIME

UNATTENUATED FIELD INTENSITY AT ONE MILE

660302

FIGURE 5C

FCC File No. BP-17969
Accepted 3-15-68

Station KGNS
Laredo, Texas

1300 kc

BP 18697
GR (2-9-70) CP to replace expired Permit (BP-17969)

KLAR

Proposed Night Nulls
(3-28-68ct)

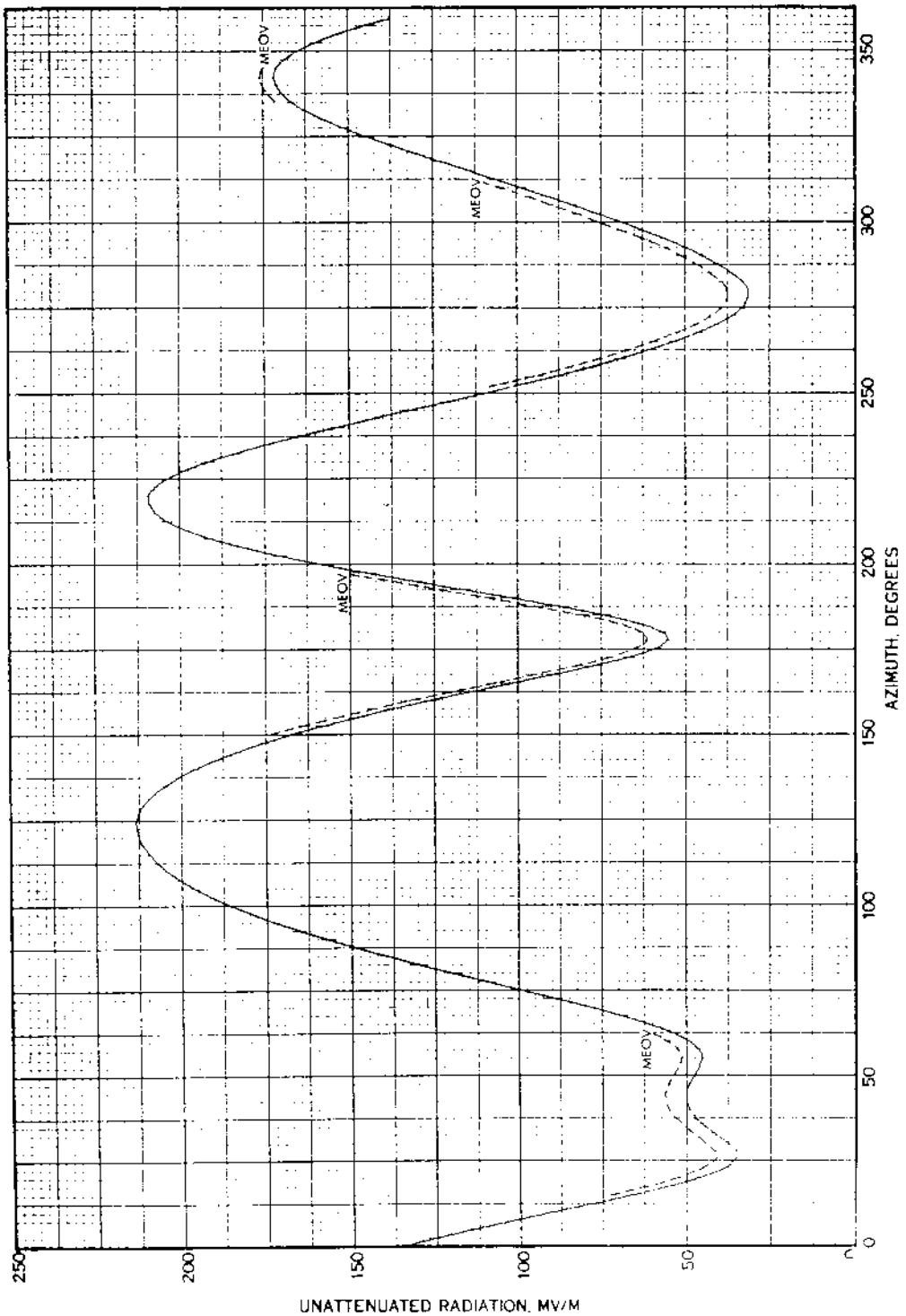
Station KGNS
Laredo, Texas

500w, 1kw-LS, DA-N, U
1300 kc

RADIO STATION KGNS

CALCULATED RADIATION

ELEVATION ANGLE = 00°



660302

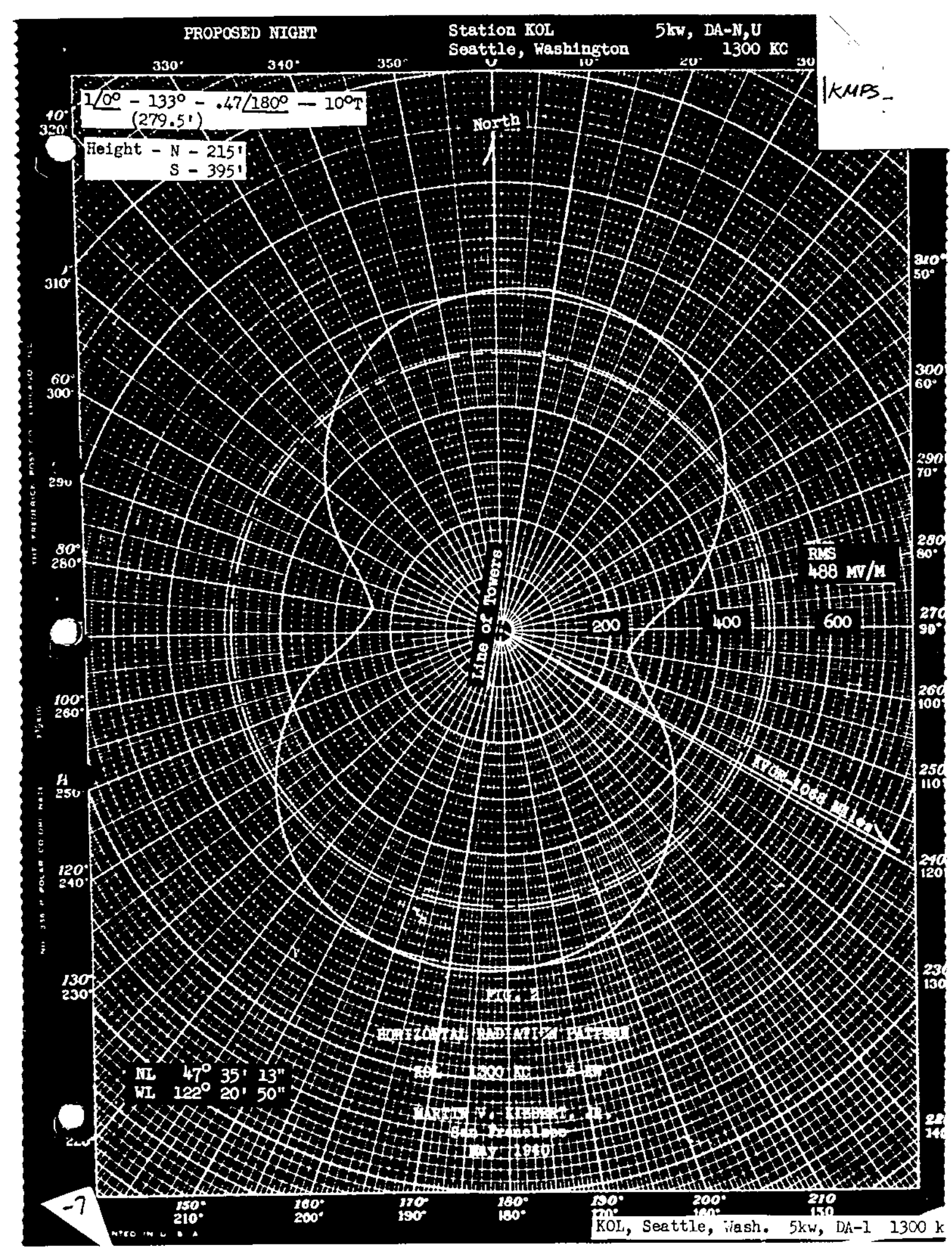
HAMMETT & EDISON
CONSULTING RADIO ENGINEERS

FIGURE 5D

FCC File No. BP-17969
Accepted 3-15-68

Station KGNS
Laredo, Texas

1300 kc

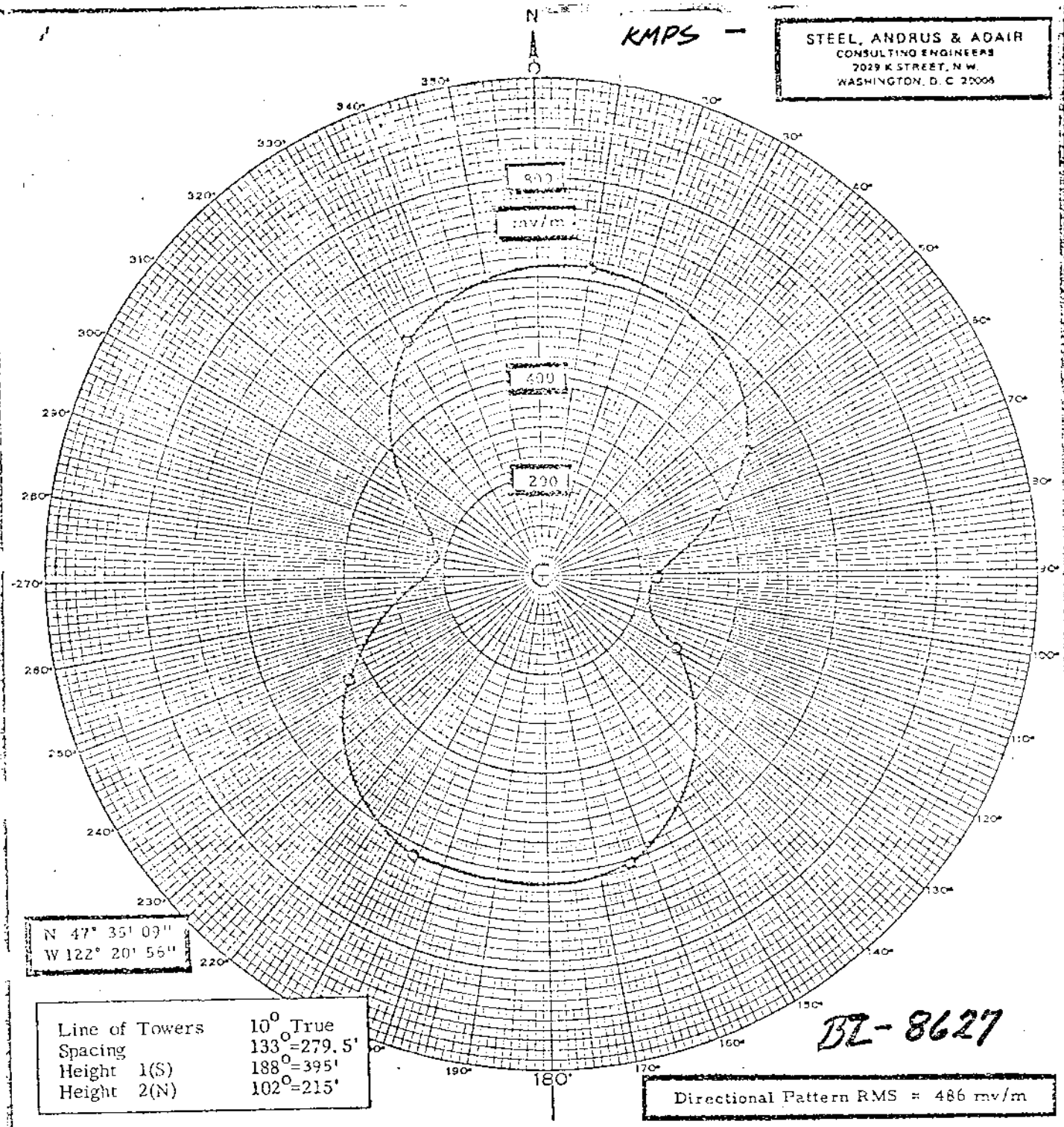


-7

KOL, Seattle, Wash. 5kw, DA-1 1300 k

KMPS —

STEEL, ANDRUS & ADAIR
CONSULTING ENGINEERS
2029 K STREET, N.W.
WASHINGTON, D.C. 20006



N 47° 35' 09"
W 122° 20' 56"

Line of Towers	10° True
Spacing	133°=279.5'
Height 1(S)	188°=395'
Height 2(N)	102°=215'

BL-8627

Directional Pattern RMS = 486 mv/m

Antenna Parameters

THEORETICAL			MEASURED				
Tower	Field	Phase	I Base	R Base	I Loop	R Loop	Phase Reading
1(S)	1.0	0°	14.6amps	1.0	84	1.0	0°
2(N)	0.47	-180°	5.8amps	0.415	48	0.57	-142°

FIGURE 4
MEASURED DIRECTIONAL HORIZONTAL RADIATION PATTERN
KOL SEATTLE, WASHINGTON
1300 KHz 5KW DA-N
AUGUST 1974

KOZE

PROPOSED NIGHT (12/7/54G) | STATION KLER LEWISTON, IDAHO | 1 KW, 5 KW-LS DA-N, U | 1300 KC

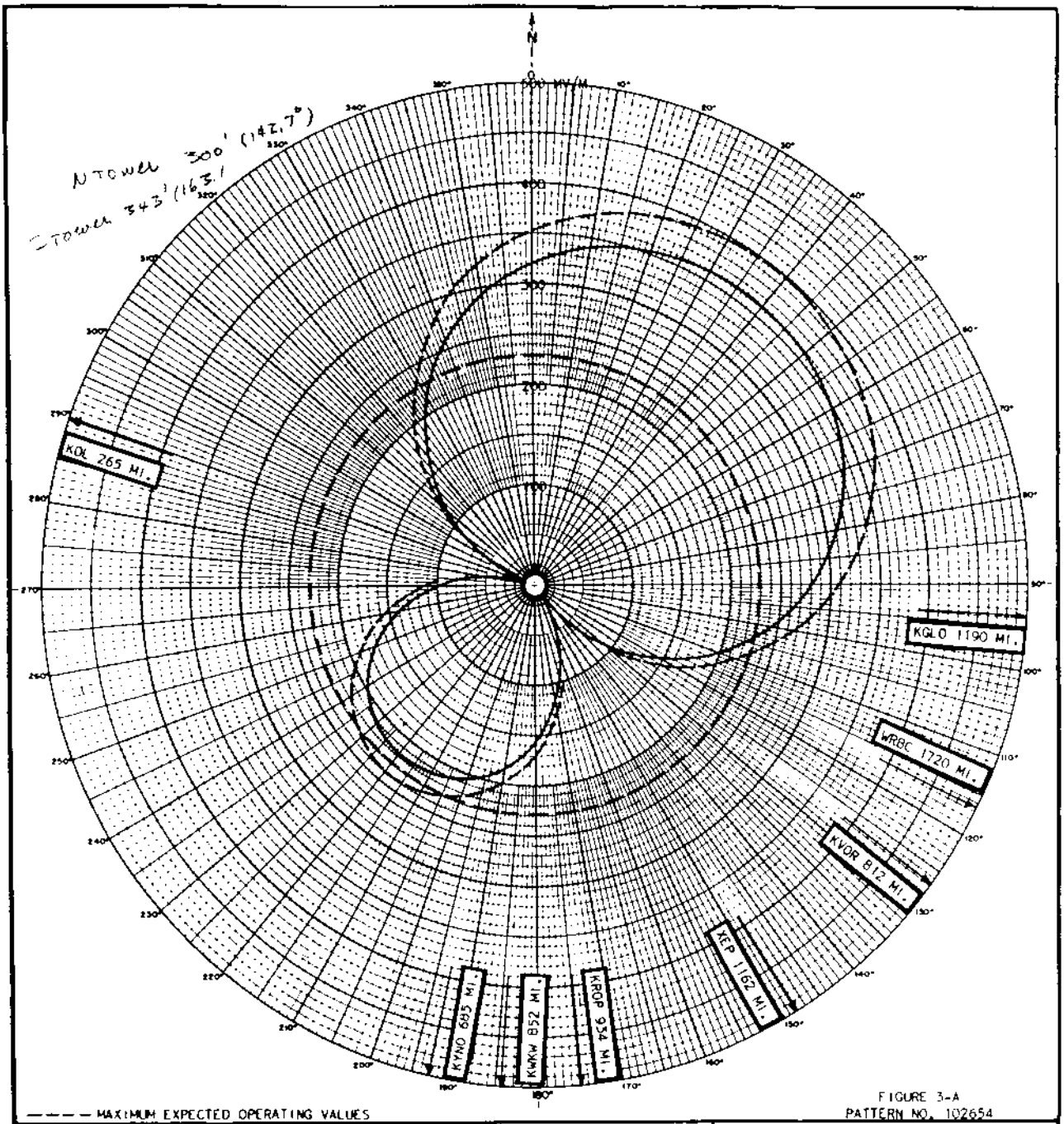


FIGURE 3-A
PATTERN NO. 102654

– – – – MAXIMUM EXPECTED OPERATING VALUES

KLER - LEWISTON, IDAHO

HORIZONTAL RADIATION PATTERN

	South	North				
ANTENNA	NO. 1	NO. 2	NO. 3	NO. 4	NO. 5	NO. 6
PHASE DEG	476	-76				
HEIGHT DEG	163.1°	142.7°				
FIELD RATIO	1.00	.95				
NON-DA ANT						

ORIENTATION: ON A LINE BEARING N 218° E SPACING: 90°

FREQUENCY	1300 KC
ASSIGNMENT	5KW-D, 1KW-N, DA-N
LONGITUDE:	117 DEG. 02 MIN. 03 SEC.
LATITUDE:	46 DEG. 23 MIN. 32 SEC.
WHEN USED:	NIGHTTIME
R.M.S. FIELD:	228.1 MV/M
DATE:	OCTOBER 1954

ROBERT M. SILLIMAN
CONSULTING RADIO ENGINEERS
WASHINGTON, D. C.

FILE NO. BP-9101 (Amended) ACCEPTED 11/22/54 KLER LEWISTON, IDAHO 1300 KC

PROPOSED NIGHT NULLS (12/7/54G)

STATION KLER
LEWISTON, IDAHO

1 KW, 5KW-LS
DA-N, U

~~KLER~~
KOZE
1300 KC

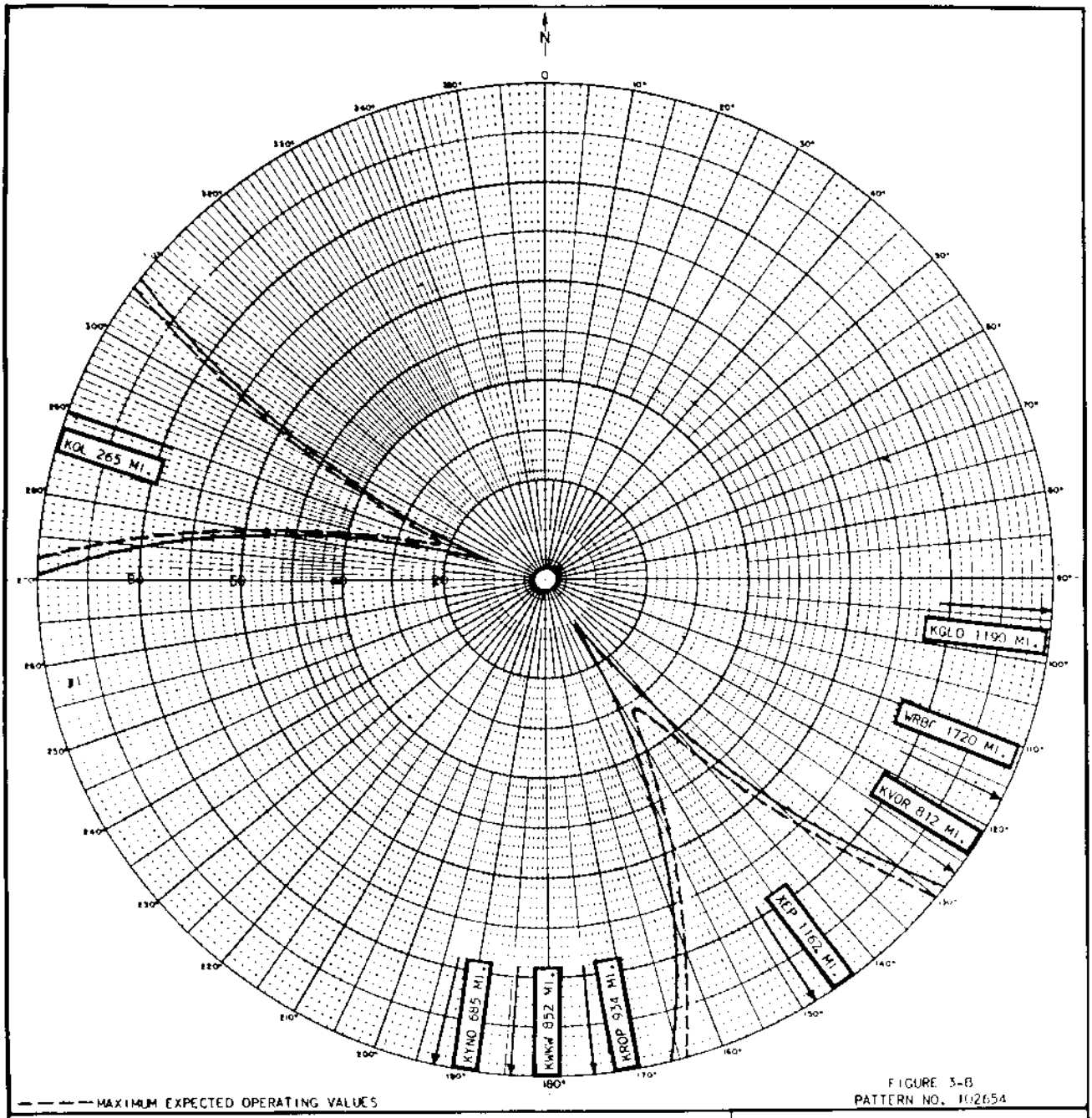


FIGURE 3-B
PATTERN NO. 102654

——— MAXIMUM EXPECTED OPERATING VALUES

KLER - LEWISTON, IDAHO

HORIZONTAL RADIATION PATTERN

	South	North				
ANTENNA	NO. 1	NO. 2	NO. 3	NO. 4	NO. 5	NO. 6
PHASE DEG	+76	-76				
HEIGHT DEG	165.1°	142.7°				
FIELD RATIO	1.00	.95				
NON-DA ANT						

ORIENTATION: ON A LINE BEARING N 218° E SPACING: 90°

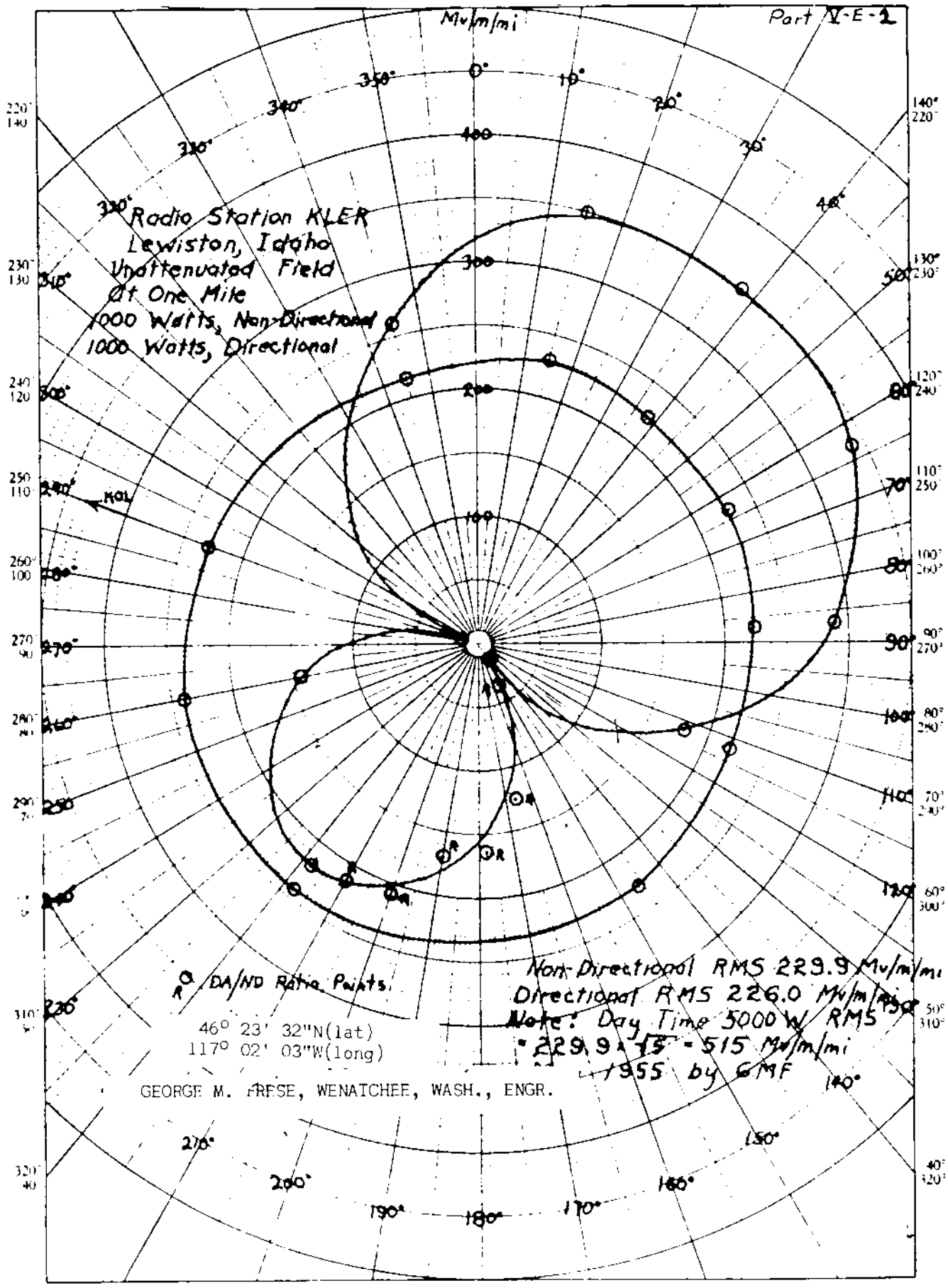
FREQUENCY	1300 KC
ASSIGNMENT	5KW-D, 1KW-N, DA-N
LONGITUDE	117 DEG. 02 MIN. 03 SEC.
LATITUDE	46 DEG. 23 MIN. 32 SEC.
WHEN USED	NIGHTTIME
RMS. FIELD	224.1 MV/M
DATE	OCTOBER 1954

ROBERT M. SILLIMAN
CONSULTING RADIO ENGINEERS
WASHINGTON, D. C.

FILE NO. BP-9101 (Amended) ACCEPTED 11/22/54 KLER, LEWISTON, IDAHO 1300 KC

~~KLER~~
KOZE

MEASURED NIGHT & NON-DIRECTIONAL (6/21/55G) STATION KLER LEWISTON, IDAHO 1KW, 5KW-LS DA-N, U 1300 KC



FILE NO. BL-5733 ACCEPTED FCC 6/3/55 KLER, Lewiston, Idaho 1300 KC

~~KLER~~
KOZE

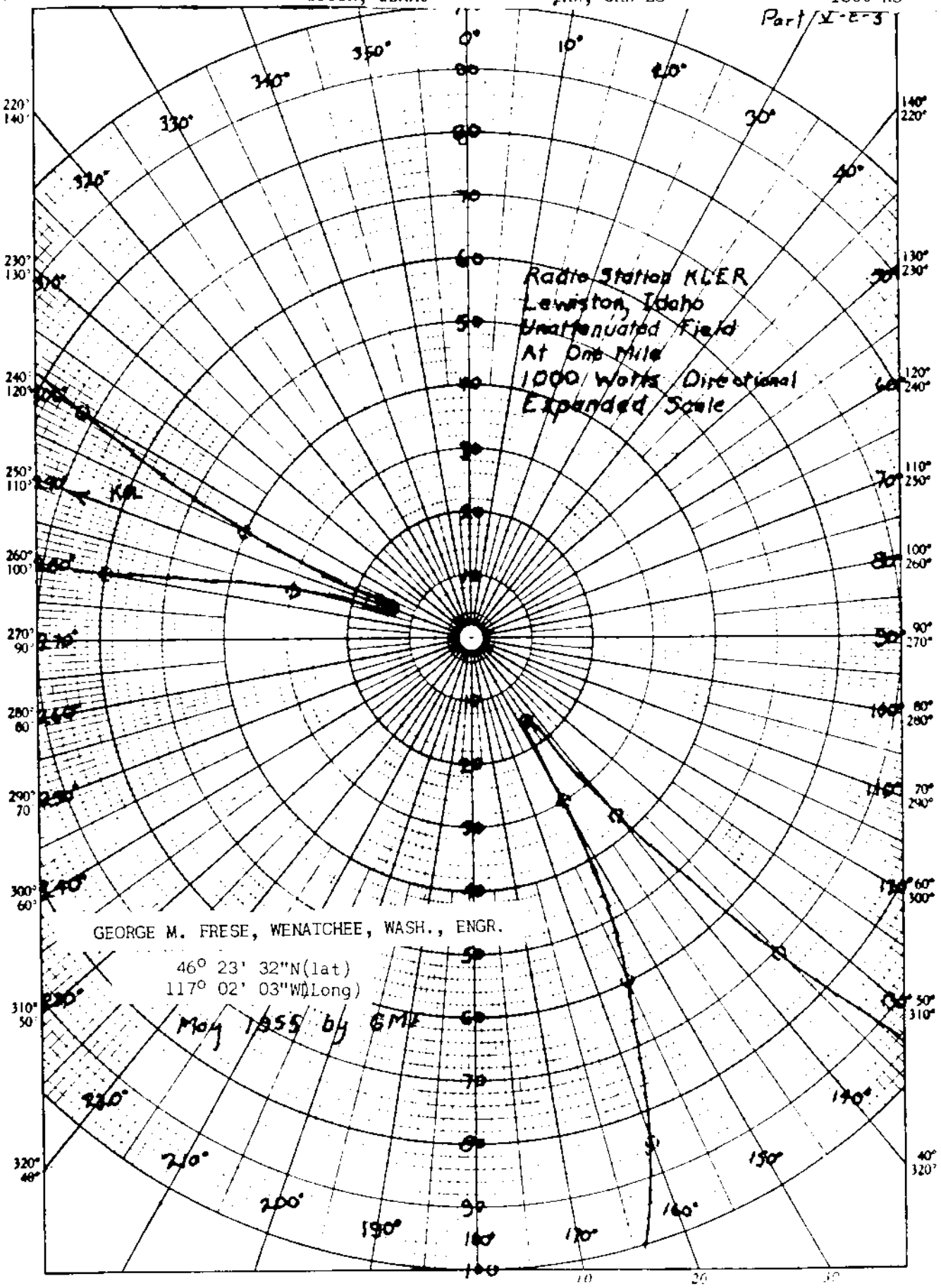
MEASURED NIGHT NULLS
(6/21/55G)

STATION KLER
LEWISTON, IDAHO

DA-N, U
1KW, 5KW-LS

1300 KC

Part V-E-3



FILE NO. BL-5733

ACCEPTED FCC 6/3/55

KLER, Lewiston, Idaho 1300 KC

KPTL

Proposed Night
(10-26-65ct)

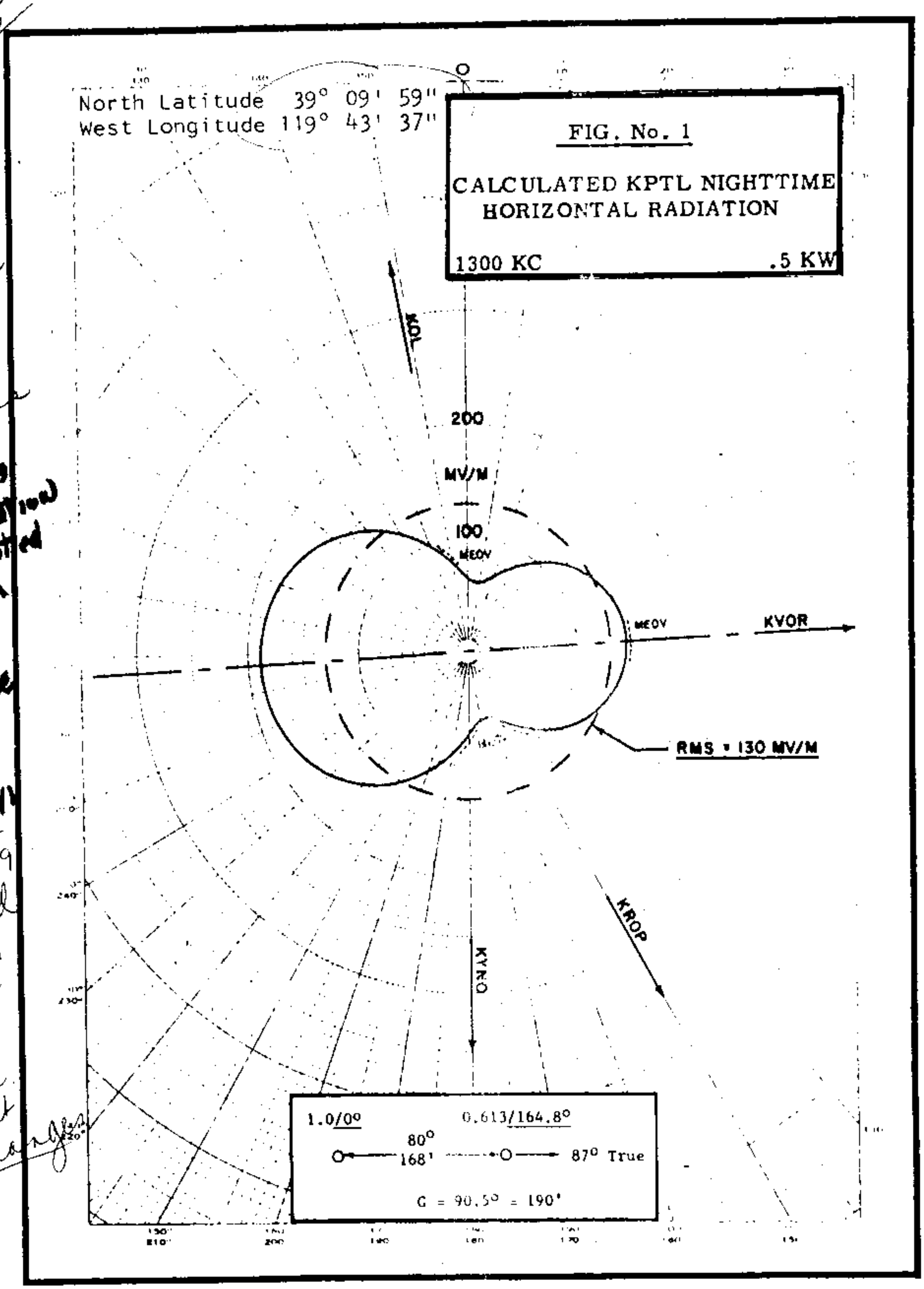
Station KPTL
Carson City, Nevada

500w,5kw-LS,DA-N,U
1300 kc

P 11-17-65
BP-18441 granted -6-69 P to replace expired permit for changes

BP-18669 application was accepted 11-18-69 by FCC to replace expired permit BP-18441

BP-18669 granted 1-20-69 P to replace expired permit for changes



FCC File No. BP-16671
Accepted 10-15-65

Station KPTL
Carson City, Nevada

1300 kc

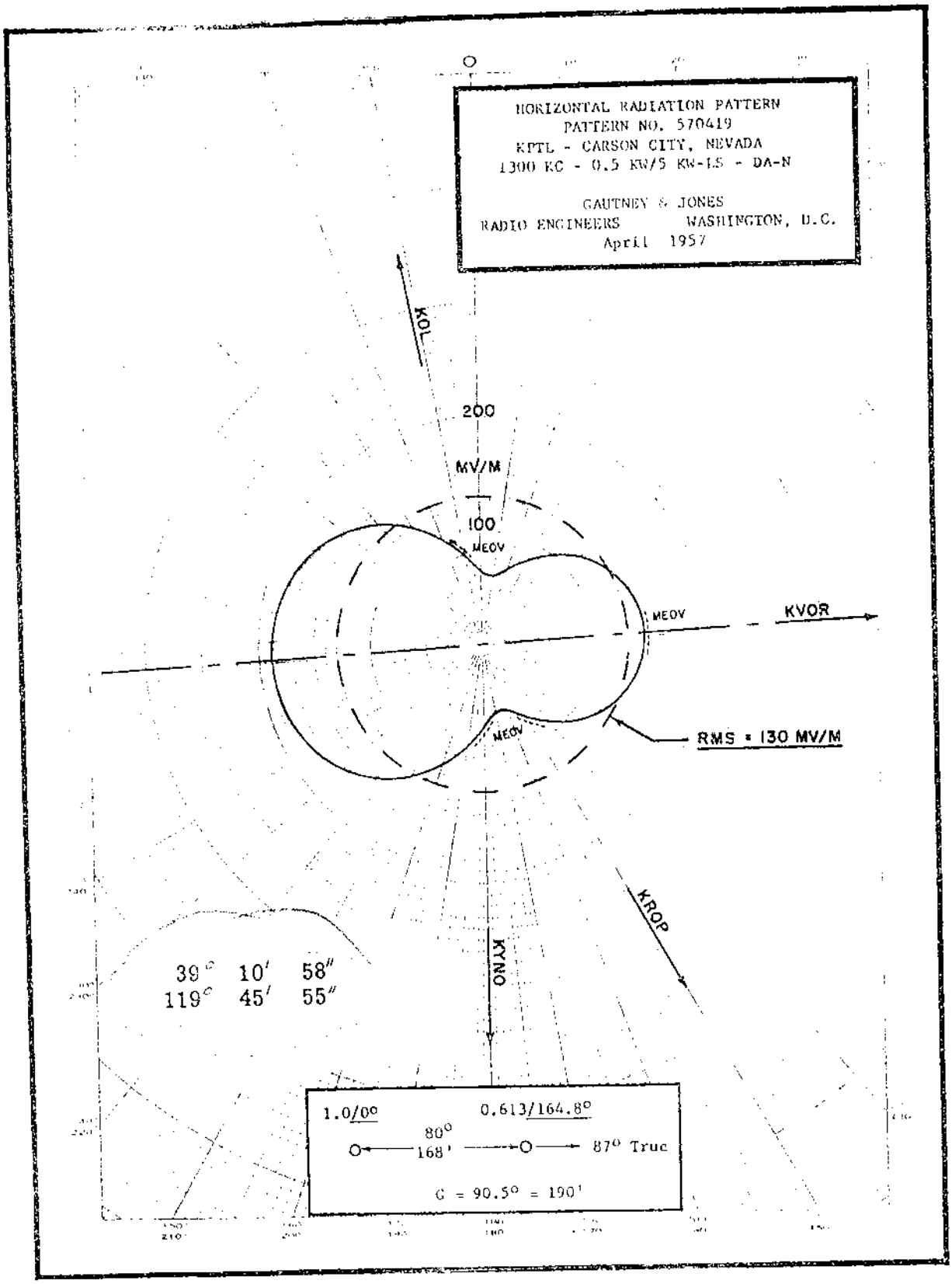
KPTL

PROPOSED NIGHT
(5/27/57g)

Station KPTL
Carson City, Nevada

500w,5kw-LS, DA-N,U
1300 KC

granted change
12/2/58 of
freq. & instal.
of DA system



FCC File No. BP-11,277
Accepted 5/15/57.

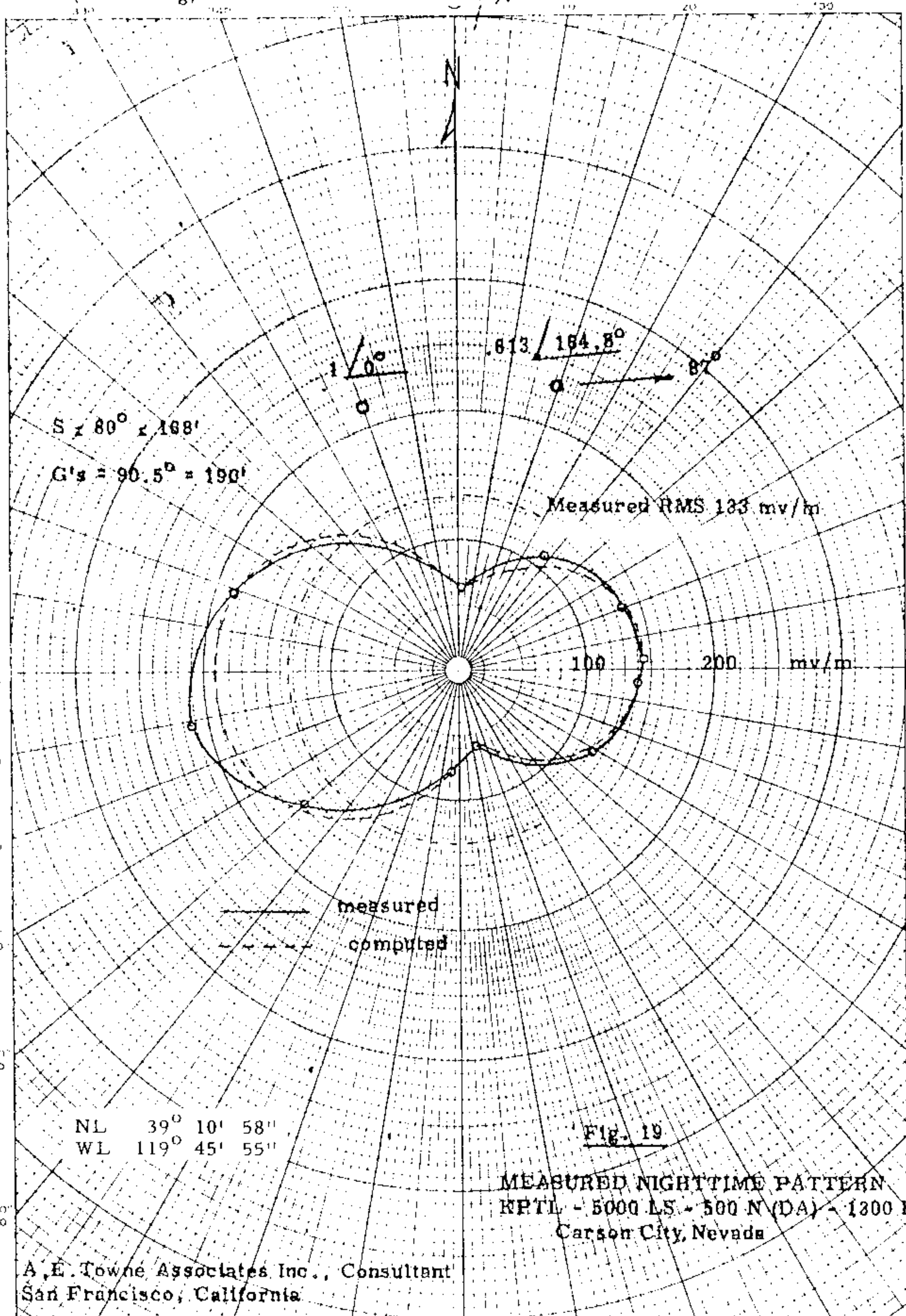
KPTL
Carson City, Nevada

1300 KC

KPTL

7-31-59 grantedlicense for change in Pack and inst DAN

MEASURED NIGHT (11-17-58g) | Station KPTL Carson City, Nevada | 500w, 5kw-LS, DA-N, U 1300 KC



FCC File No. BL-7258
Accepted 11-4-58

KPTL
Carson City, Nevada

1300 KC

KPTL

MEASURED NON-DA
(11-17-58g)

Station KPTL
Carson City, Nevada

500w, 5kw-LS, DA-N, U
1300 KC

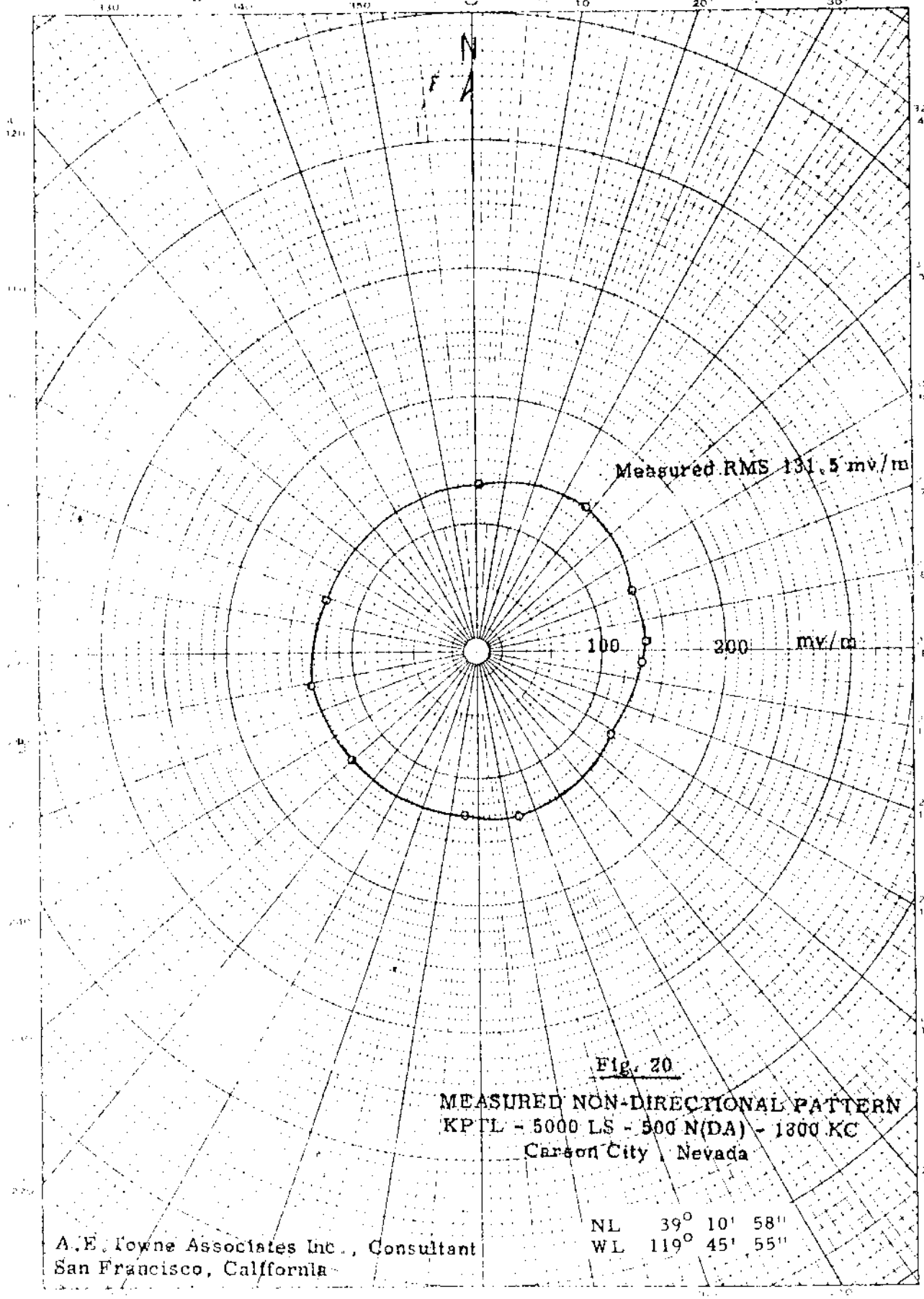


Fig. 20

MEASURED NON-DIRECTIONAL PATTERN
KPTL - 5000 LS - 500 N(DA) - 1300 KC
Carson City, Nevada

NL 39° 10' 58"
WL 119° 45' 55"

A.E. Towne Associates Inc., Consultant
San Francisco, California

FCC File No. BL-7258
Accepted 11-4-58

KPTL
Carson City, Nevada

1300 KC

KVET

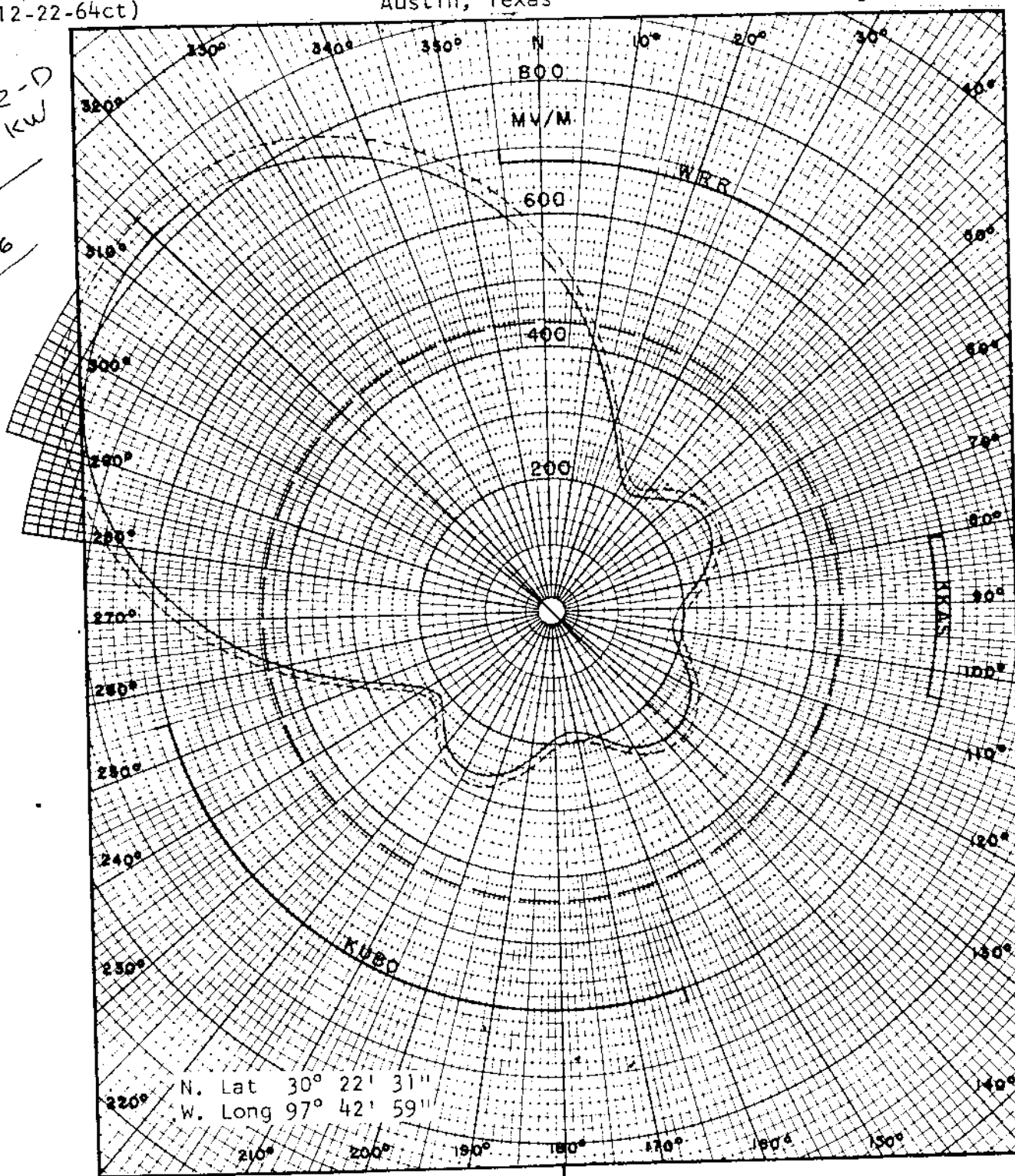
1kw, 5kw-LS, DA-2, U
1300 kc

Proposed Day
(12-22-64ct)

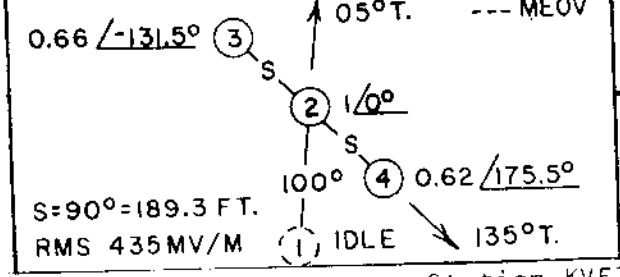
Station KVET
Austin, Texas

3-G-G5
NCR. PWR-D
1 KW TO 5 KW
DA-2

SL 11359
LIC 8-17-66



N. Lat 30° 22' 31"
W. Long 97° 42' 59"



J. G. ROUNTREE
CONSULTING ENGINEER
P. O. BOX 9044
AUSTIN 66, TEXAS

RADIO STATION KVET
AUSTIN, TEXAS
PROPOSED DA-D PATTERN
640825 FIGURE 6A

FCC File No. BP-16381
Accepted 11-30-64

Station KVET
Austin, Texas

1300 kc

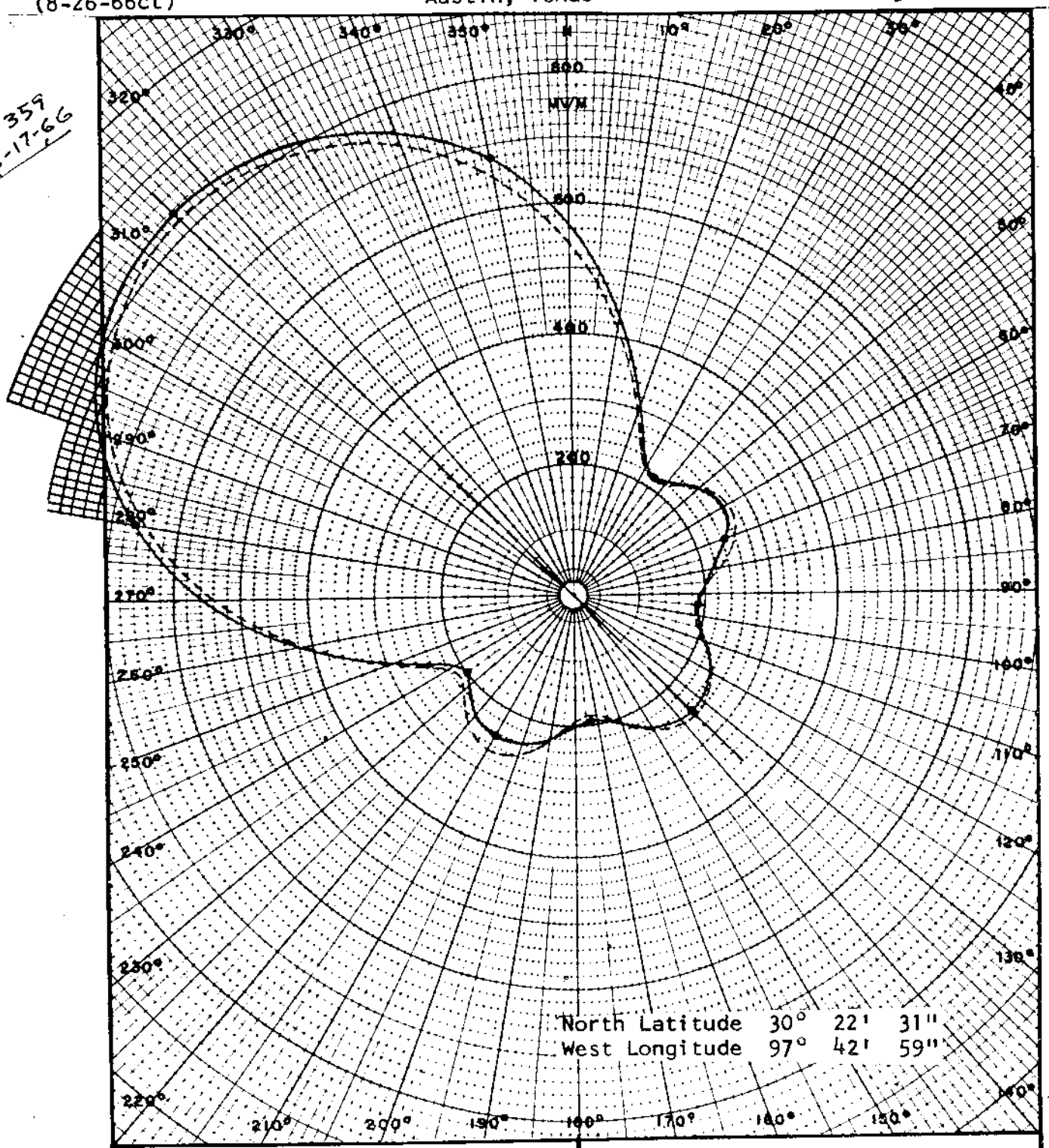
KVET

Measured Day
(8-26-66ct)

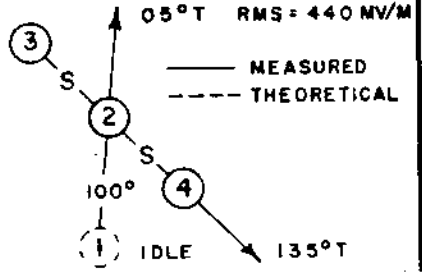
Station KVET
Austin, Texas

1kw, 5kw-LS, DA-2, U
1300 kc

BL 11359
Lic 8-17-66



North Latitude 30° 22' 31"
West Longitude 97° 42' 59"



S = 90° = 189.3'

FOR OPERATING PARAMETERS, SEE FIGURE 1.

J. G. ROUNTREE
CONSULTING ENGINEER
P. O. BOX 9044
AUSTIN, TEXAS 78766

RADIO STATION KVET
AUSTIN, TEXAS
MEASURED DA-D PATTERN
660523 FIGURE 2B

FCC File No. BL-11359
Accepted 8-10-66

Station KVET
Austin, Texas

1300 kc

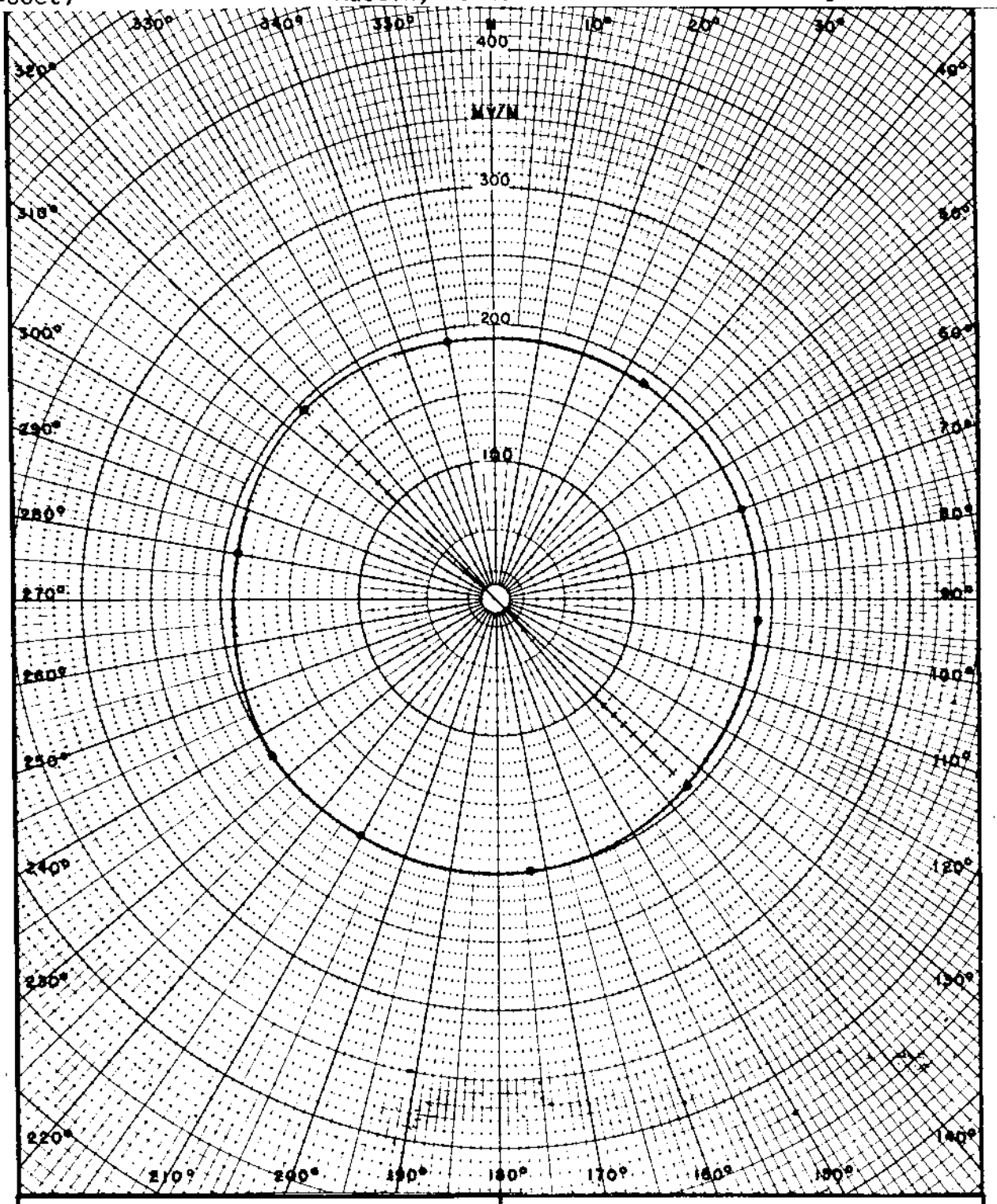
KVET

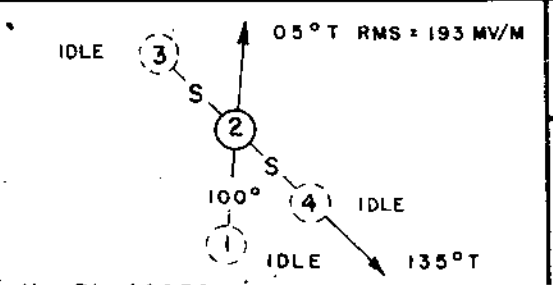
Measured Non-DA
(8-26-66ct)

Station KVET
Austin, Texas

1kw, 5kw-LS, DA-2, U
1300 kc

BL 11359
Lic 8-17-66





J. G. ROUNTREE
CONSULTING ENGINEER
P. O. BOX 9044
AUSTIN, TEXAS 78766

RADIO STATION KVET
AUSTIN, TEXAS
MEASURED ND PATTERN

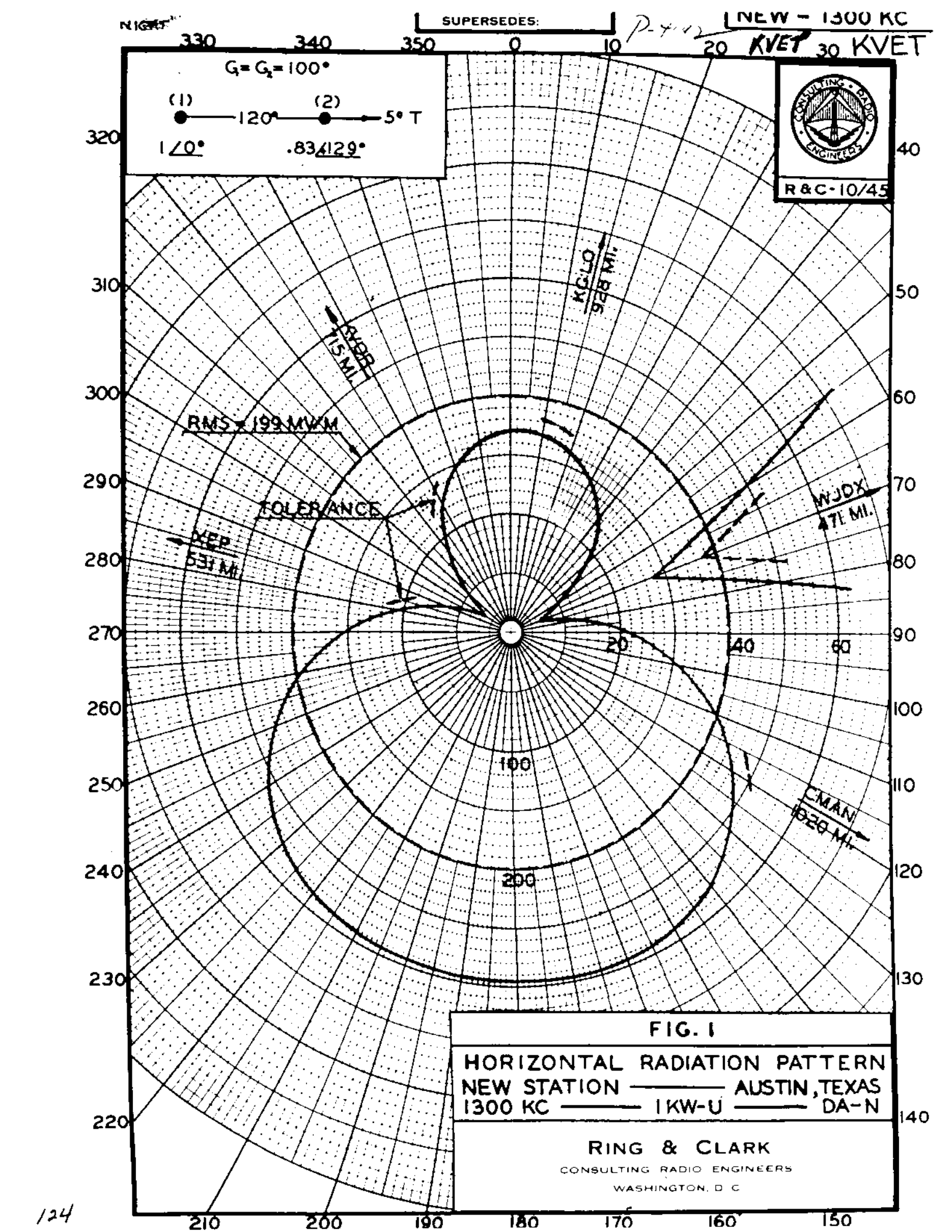
660523

FIGURE 2A

FCC File No. BL-11359
Accepted 8-10-66

Station KVET
Austin, Texas

1300 kc


NIGHT
SUPERSEDES:
NEW - 1300 KC
KVET
KVET
330
340
350
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
210
220
230
240
250
260
270
280
290
300
310
320
G1 = G2 = 100°
(1)
120°
(2)
5° T
170°
.83 129°
CONSULTING · RADIO · ENGINEERS
R&C-10/45
KGLO
928 MI.
KYOR
715 MI.
RMS × 199 MVM
TOLERANCE
KFP
531 MI.
WJDX
471 MI.
CMAN
1020 MI.
20
40
60
100
200
FIG. 1
HORIZONTAL RADIATION PATTERN
NEW STATION —— AUSTIN, TEXAS
1300 KC —— 1 KW-U —— DA-N
RING & CLARK
CONSULTING RADIO ENGINEERS
WASHINGTON, D. C.

124

KVET

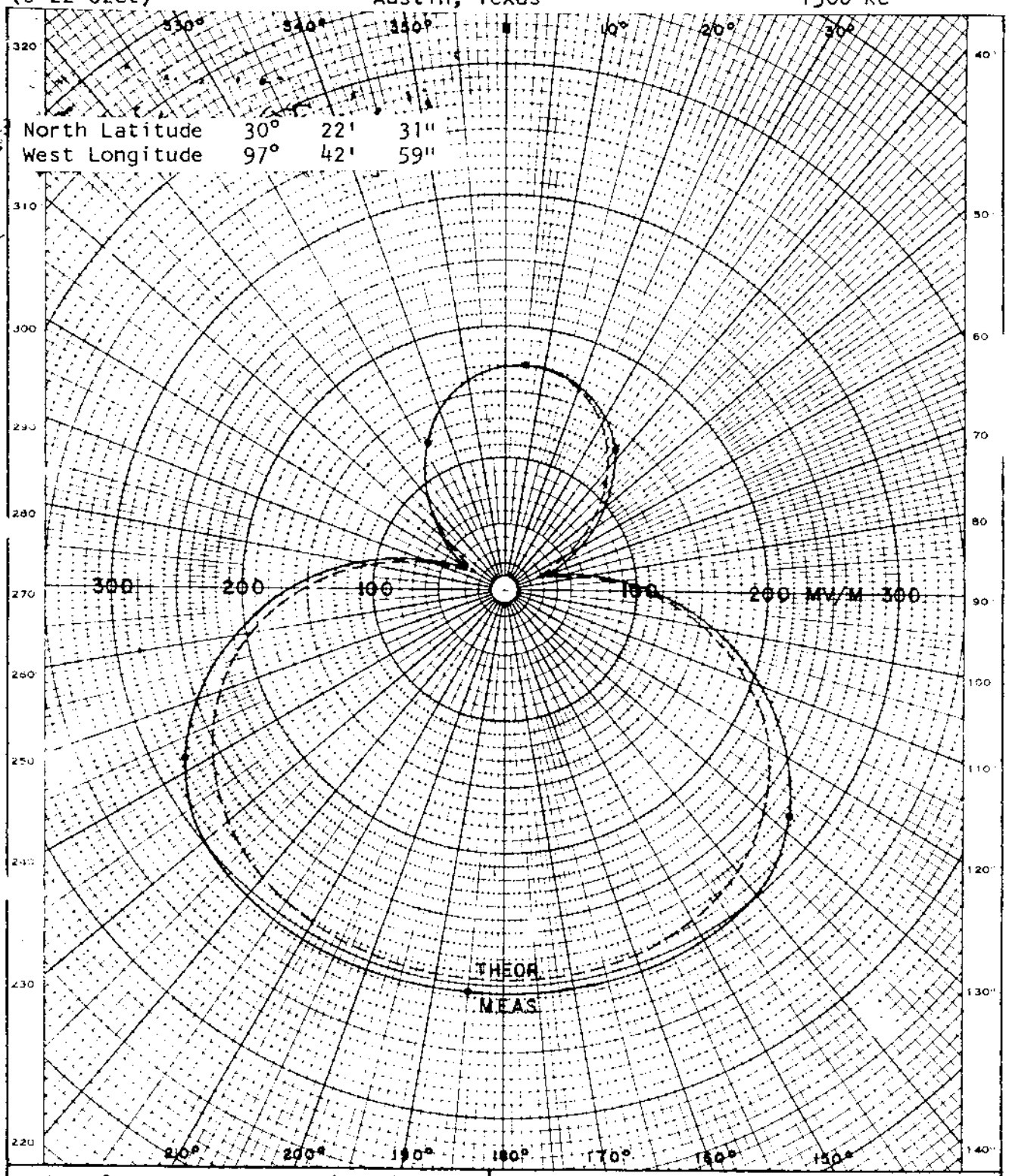
Measured Night
(6-22-62ct)

Station KVET
Austin, Texas

1kw N/5kw D, DA-2, U
1300 kc

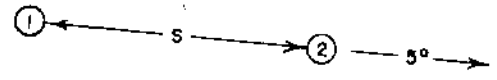
LIC 1-25-63
CHG. LOC.

BL 11359
1/5, DA-2
LIC 8-17-66



S=120°=252.2 FT. 6°S=100°=210 FT.

SEE FIGURE I FOR OPERATING PARAMETERS



MEASURED RMS = 211

J. G. ROUNTREE
CONSULTING ENGINEER
P. O. BOX 8044
AUSTIN 12, TEXAS

RADIO STATION KVET
AUSTIN, TEXAS
MEASURED DA PATTERN

620326 FIGURE 2B

FCC File No. BL-9296
Accepted 5-22-62

Station KVET
Austin, Texas

1300 kc

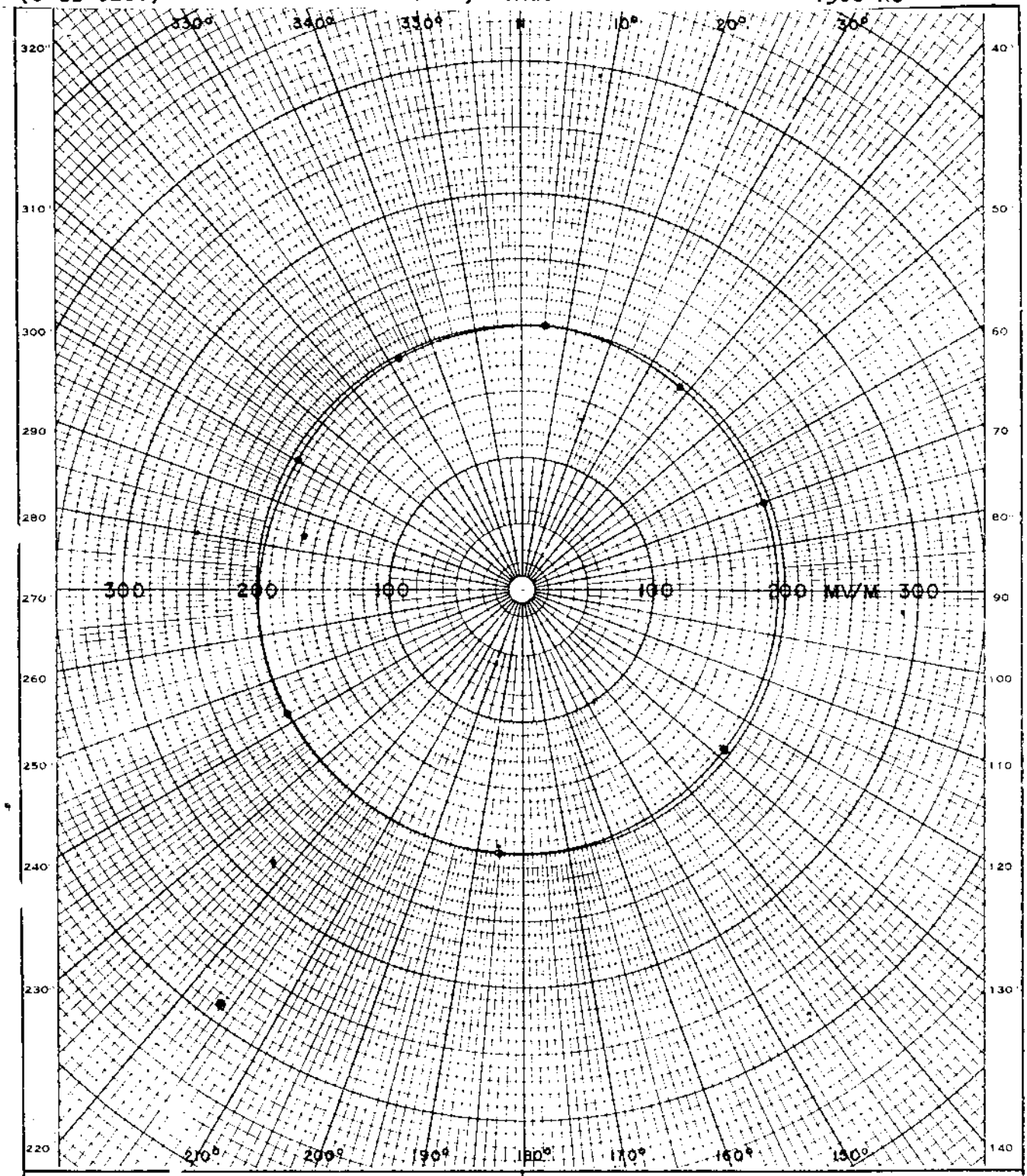
KVET

Measured Non-DA
(6-22-62ct)

Station KVET
Austin, Texas

1kw N/5D, DA-2
1300 kc

LIC 1-25-63
CHG. LOC.
BL 11 359
1/5, DA-2
LIC 8-17-66



S=120°=252.2 FT.

G'S=100°=210 FT.

DETUNED

(1) ← S → (2) ND TOWER — 5° →

MEASURED RMS=197

J. G. ROUNTREE
CONSULTING ENGINEER
P. O. BOX 9044
AUSTIN 17, TEXAS

RADIO STATION KVET
AUSTIN, TEXAS
MEASURED ND PATTERN

620326

FIGURE 2A

FCC File No. BL-9296
Accepted 5-22-62

Station KVET
Austin, Texas

1300 kc

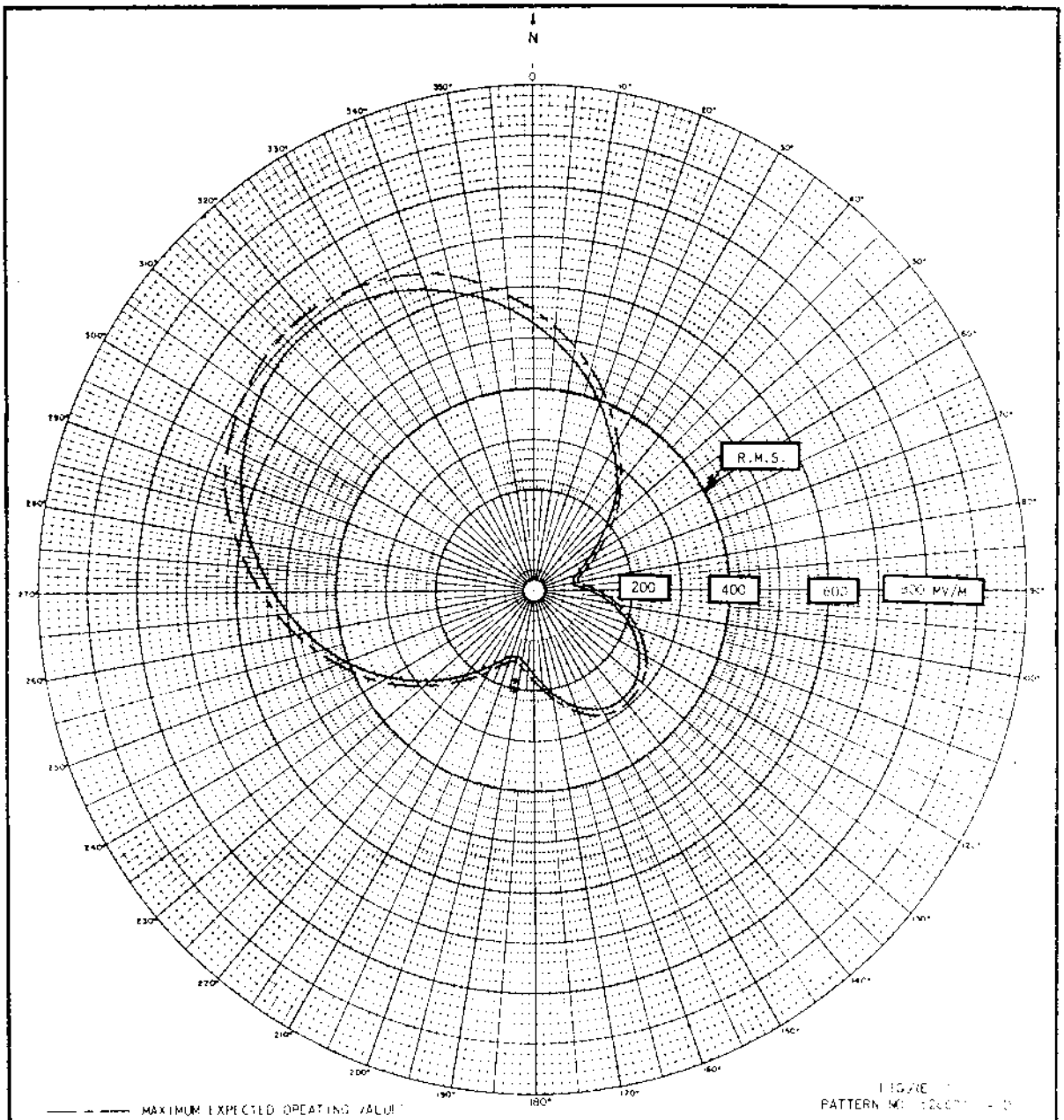
KWKW

PROPOSED DAY
(8-12-60g)

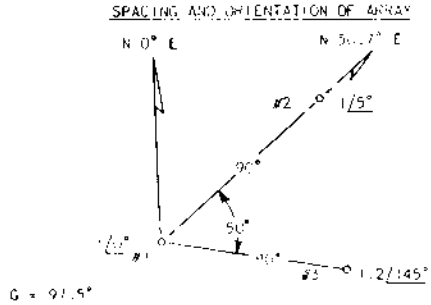
Station KWKW
Pasadena, California

1kw,5kw-LS, DA-2,U
1300 KC

-17-62
Granted CP for
DA-2 operation



HORIZONTAL RADIATION PATTERN



APPLICANT	SOUTHERN CALIF. BROADCASTING CO.
LOCATION	PASADENA, CALIFORNIA
FREQUENCY	1300 KC/S
POWER	5 KW-LS, 1 KW-N (DA-2)
LATITUDE	34 DEG 09 MIN 38 SEC
LONGITUDE	118 DEG 04 MIN 57 SEC
WHEN USED	DAYTIME
R.M.S. FIELD	430 MV/M
DATE	JUNE 1960

SILLIMAN, MOFFET & ROHRER
CONSULTING RADIO ENGINEERS
WASHINGTON D.C.

FCC File No. BP-14233
Accepted 8-4-60

KWKW
Pasadena, California

1300 KC

5-5-[illegible] granted [illegible] covering [illegible] day pow[illegible] installation of DA-D

Measured Day
(4-30-63ct)

Station KWKW
Pasadena, California

1kw, 5kw-LS, DA-2, U
1300 kc

KWKW

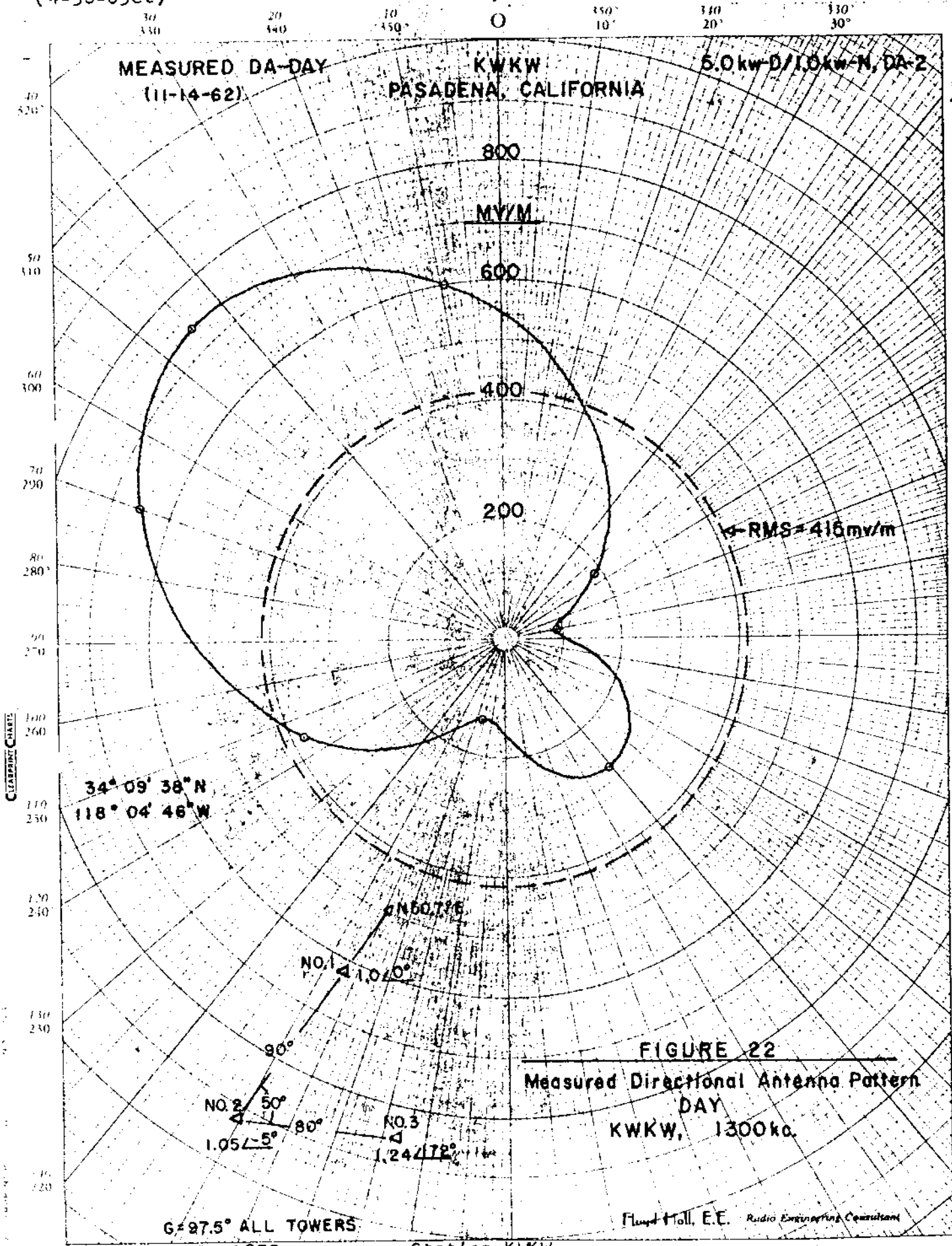


FIGURE 22
Measured Directional Antenna Pattern
DAY
KWKW, 1300kc.

FCC File No. BL-9875
Accepted 4-10-63

Station KWKW
Pasadena, California

1300 kc

KWKW

PROPOSED NIGHT
(5-8-61g)

Station KWKW
Pasadena, California

1kw, DA-N,U
1300 KC

5-22-61 granted CP no change in night DA pattern

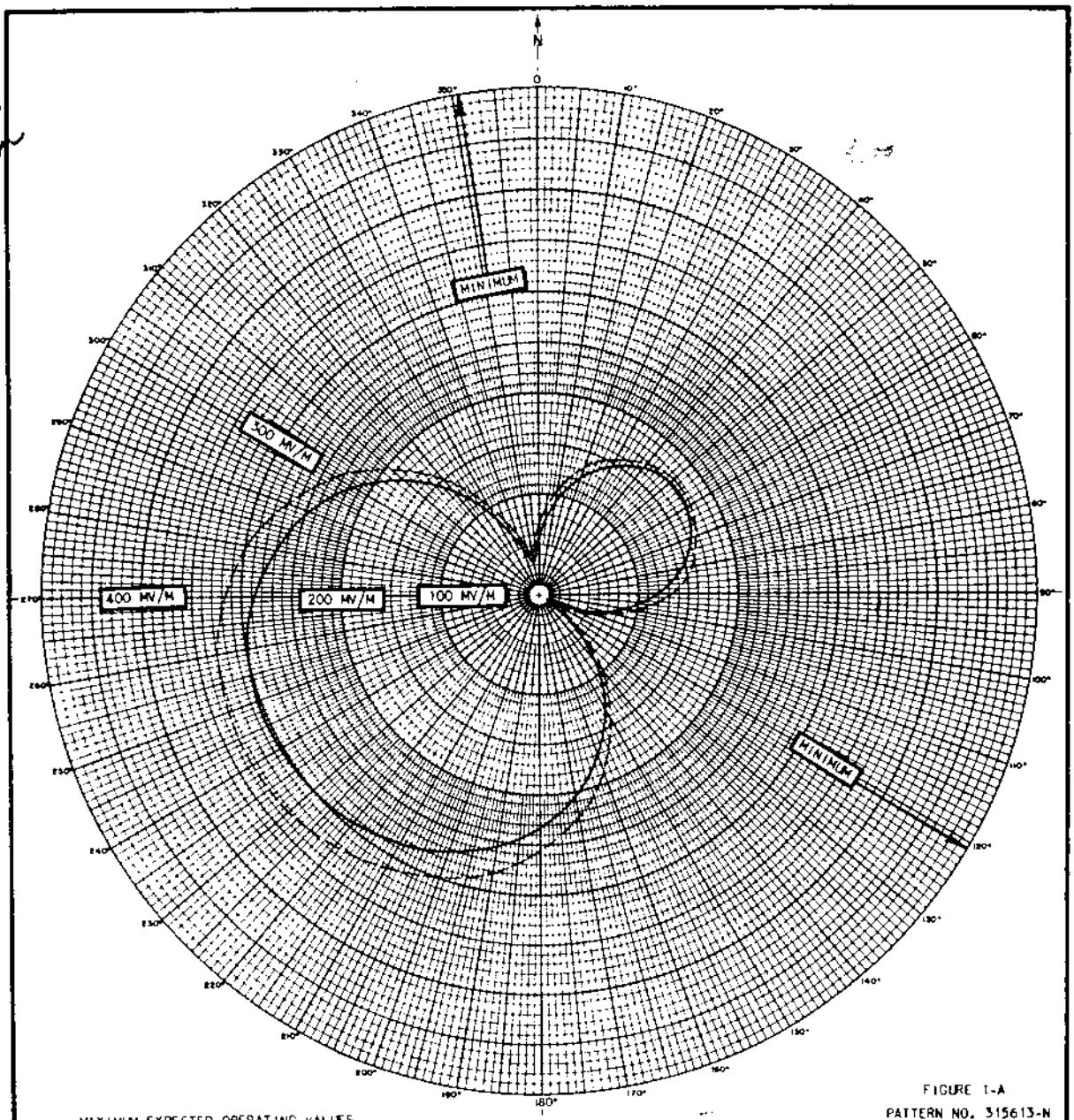
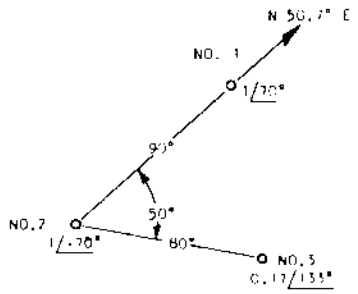


FIGURE 1-A
PATTERN NO. 315613-N

------ MAXIMUM EXPECTED OPERATING VALUES

HORIZONTAL RADIATION PATTERN

SPACING AND ORIENTATION



G= 97.5° ALL TOWERS

APPLICANT	KWKW, INC.
LOCATION	PASADENA, CALIFORNIA
FREQUENCY	1300 KC/S
POWER	1 Kw-U, DA-N
LATITUDE	34 DEG 09 MIN 38 SEC
LONGITUDE	118 DEG 04 MIN 46 SEC
WHEN USED	NIGHTTIME
R M S FIELD	194.3 MV/M
DATE	MARCH 1961

SILLIMAN, MOFFET & ROHRER
CONSULTING RADIO ENGINEERS
WASHINGTON, D.C.

FCC File No. BP-14770
Accepted 5-3-61

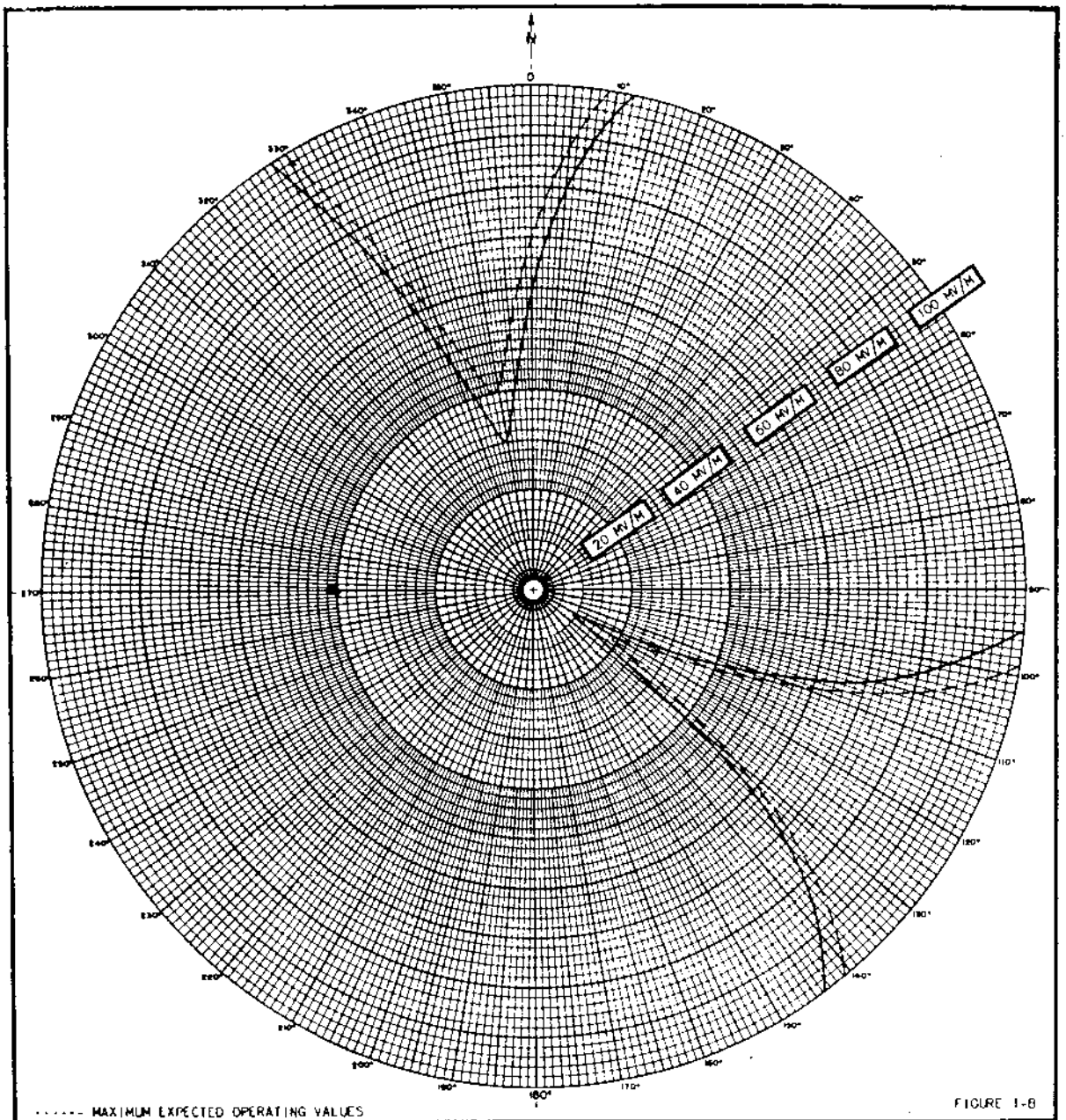
KWKW
Pasadena, California

1300 KC

KWKW

PROPOSED NIGHT NULLS
(5-8-61g)

Station KWKW 1kw, DA-N,U
Pasadena, California 1300 KC



------ MAXIMUM EXPECTED OPERATING VALUES

FIGURE 1-B

KWKW, INC. PASADENA, CALIFORNIA

EXPANDED VIEW

SILLIMAN, MOFFET & ROHRER
CONSULTING RADIO ENGINEERS
WASHINGTON, D.C.

FCC File No. BP-14770
Accepted 5-3-61

KWKW
Pasadena, California 1300 KC

KWKW

Measured Night
(4-27-62ct)

Station KWKW
Pasadena, California

1kw, 5kw-LS, DA-N, U
1300 kc

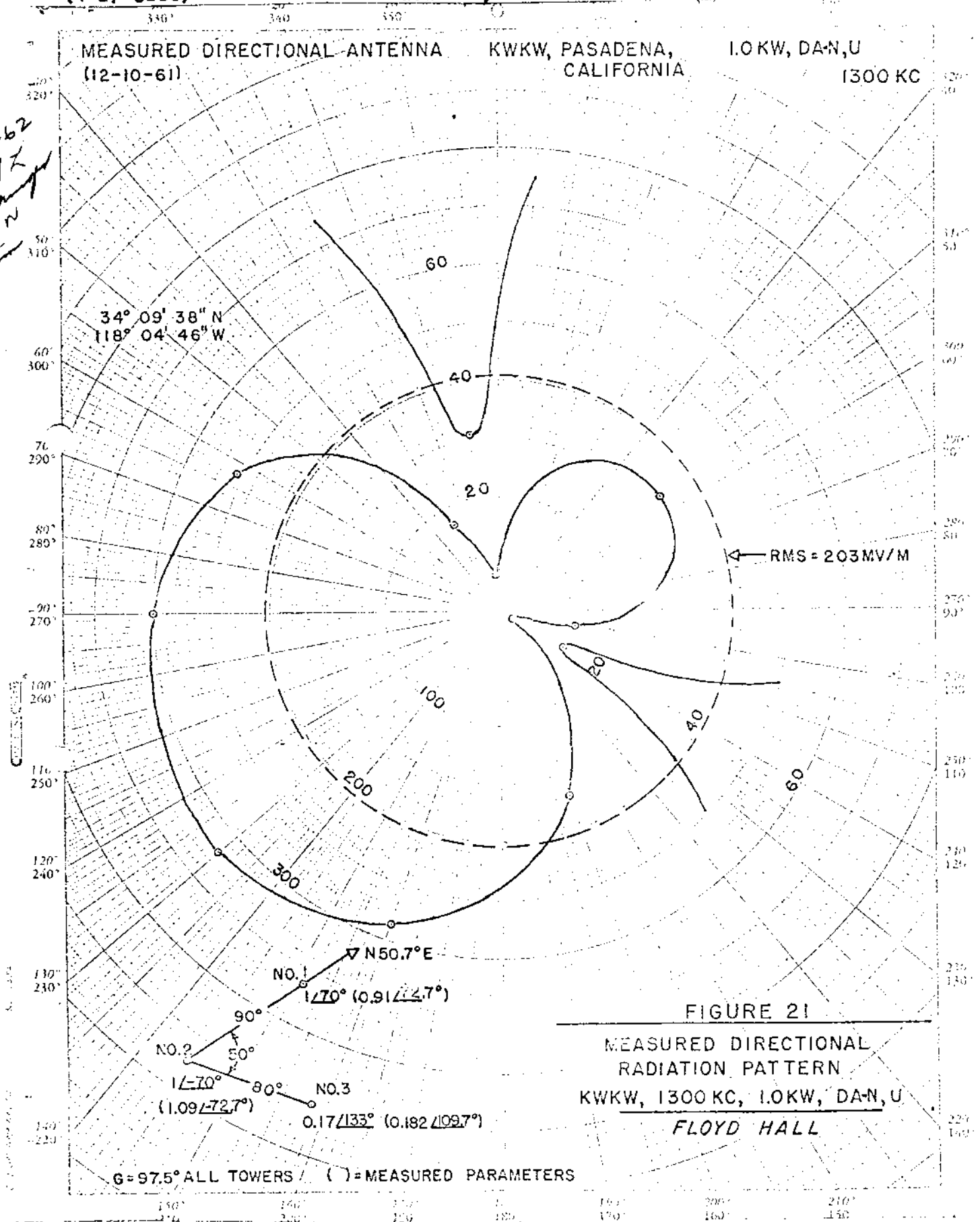


FIGURE 21

MEASURED DIRECTIONAL RADIATION PATTERN
KWKW, 1300 KC, 1.0KW, DA-N, U

FLOYD HALL

FCC File No. BL-9078
Accepted 4-6-62

Station KWKW
Pasadena, California

1300 kc

5-3 wanted lic covering increase in day power and change to DA-2

Measured Non-DA
(4-30-63ct)

Station KWKW
Pasadena, California

KWKW
1kw, 5kw-LS, DA-2, U
1300 kc

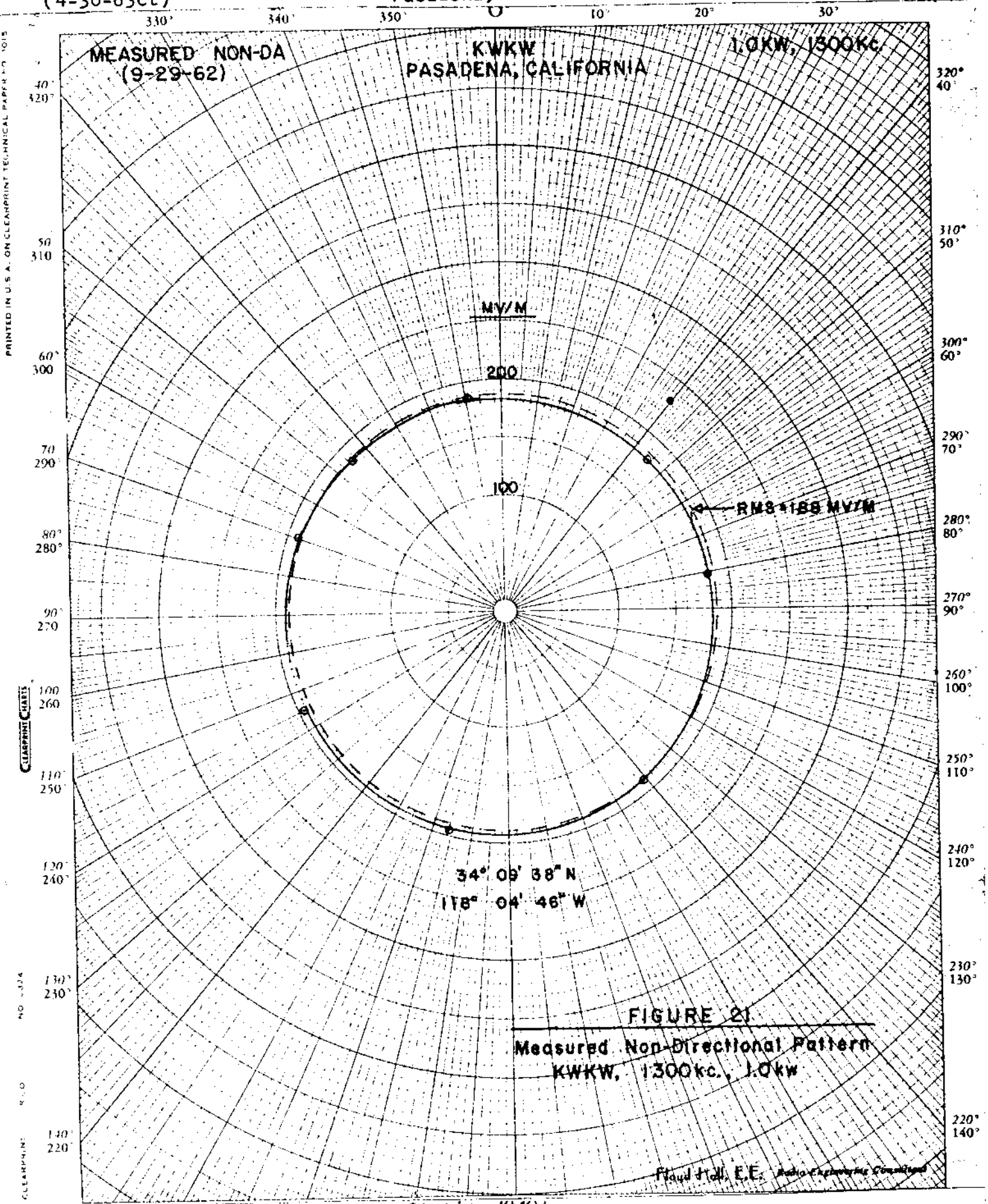


FIGURE 21
Measured Non-Directional Pattern
KWKW, 1300kc., 1.0kw

FCC File No. BL-9875
Accepted 4-10-63

Station KWKW
Pasadena, California

1300 kc

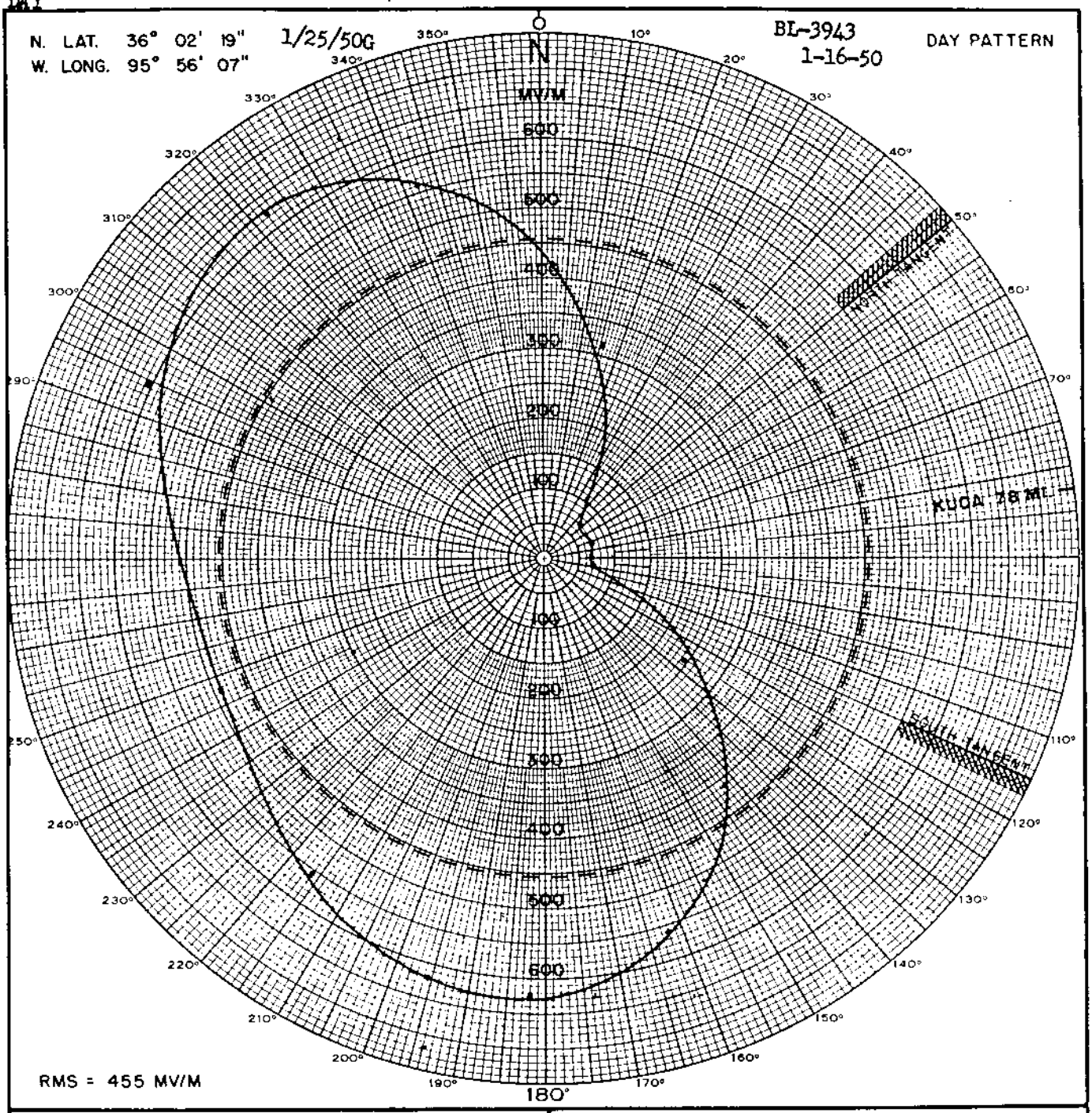
KGNW KXXO

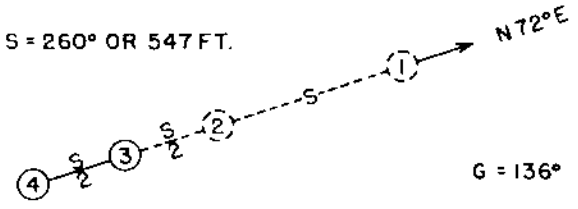
MEASURED DAY

KOME, TULSA, OKLA.

1kw, 5kw-LS, DA-2

1300 kc





RADIO STATION KOME

TULSA, OKLAHOMA

1300 KC, 1 KW, 5 KW-LS, DA-2

PATTERN BASED ON FIELD INTENSITY MEASUREMENTS

A. EARL CULLUM, JR.

CONSULTING RADIO ENGINEERS

491217-D FIGURE 2A

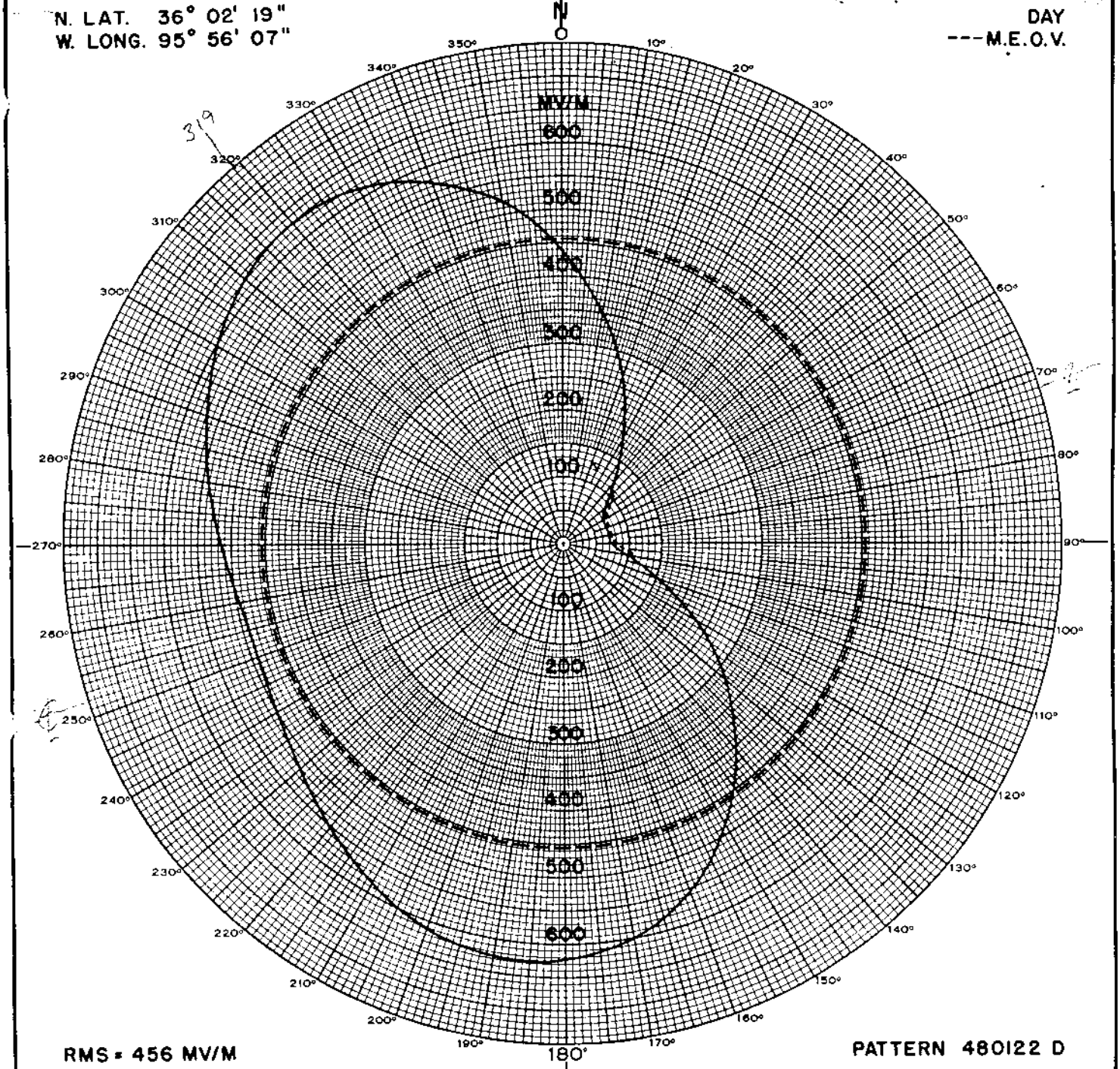
2-24-48

KCNW KXXC

1300

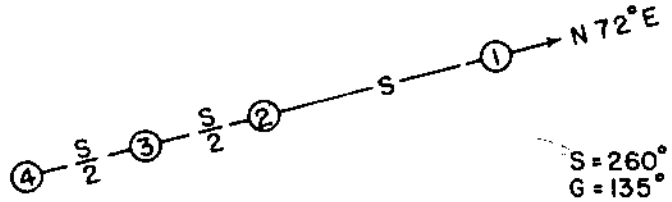
N. LAT. 36° 02' 19"
W. LONG. 95° 56' 07"

DAY
---M.E.O.V.



RMS = 456 MV/M

PATTERN 480122 D



A. EARL CULLUM, JR.
CONSULTING RADIO ENGINEERS
DALLAS 480122

NO.	4	3	2	1
FIELD	0.8	1.0	0.0	0.0
PHASE	-52°	0.0°	X.X	X.X

RADIO STATION KOME
1300-KC, 5-KW, DA-D
FIGURE 5A

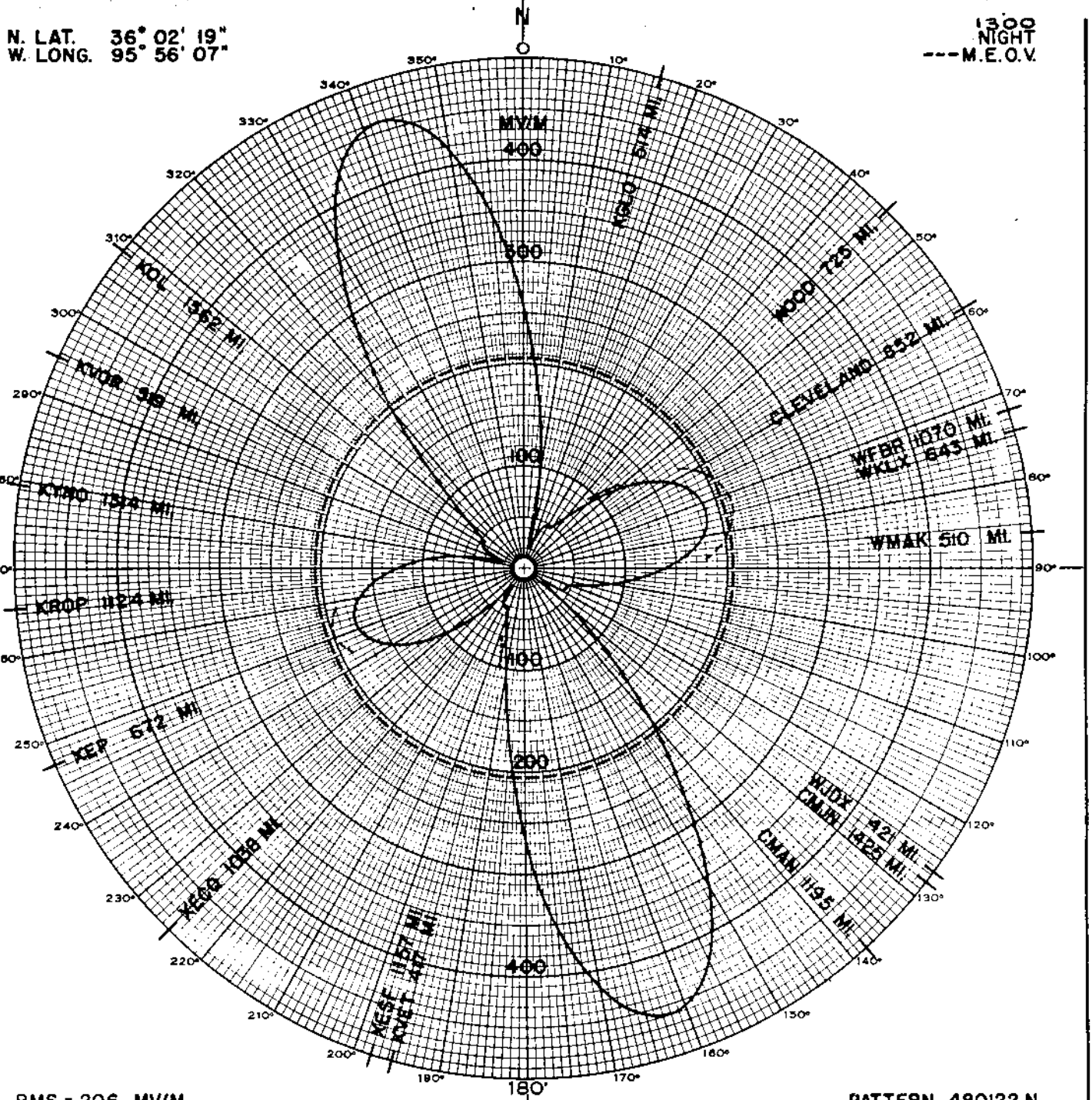
2-24-48

2-24-48

KCNW

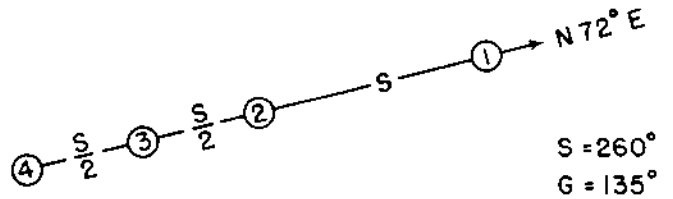
N. LAT. 36° 02' 19"
W. LONG. 95° 56' 07"

1300
NIGHT
---M.E.O.V.



RMS = 206 MV/M

PATTERN 480122 N



A. EARL CULLUM, JR.
CONSULTING RADIO ENGINEERS
DALLAS 480122

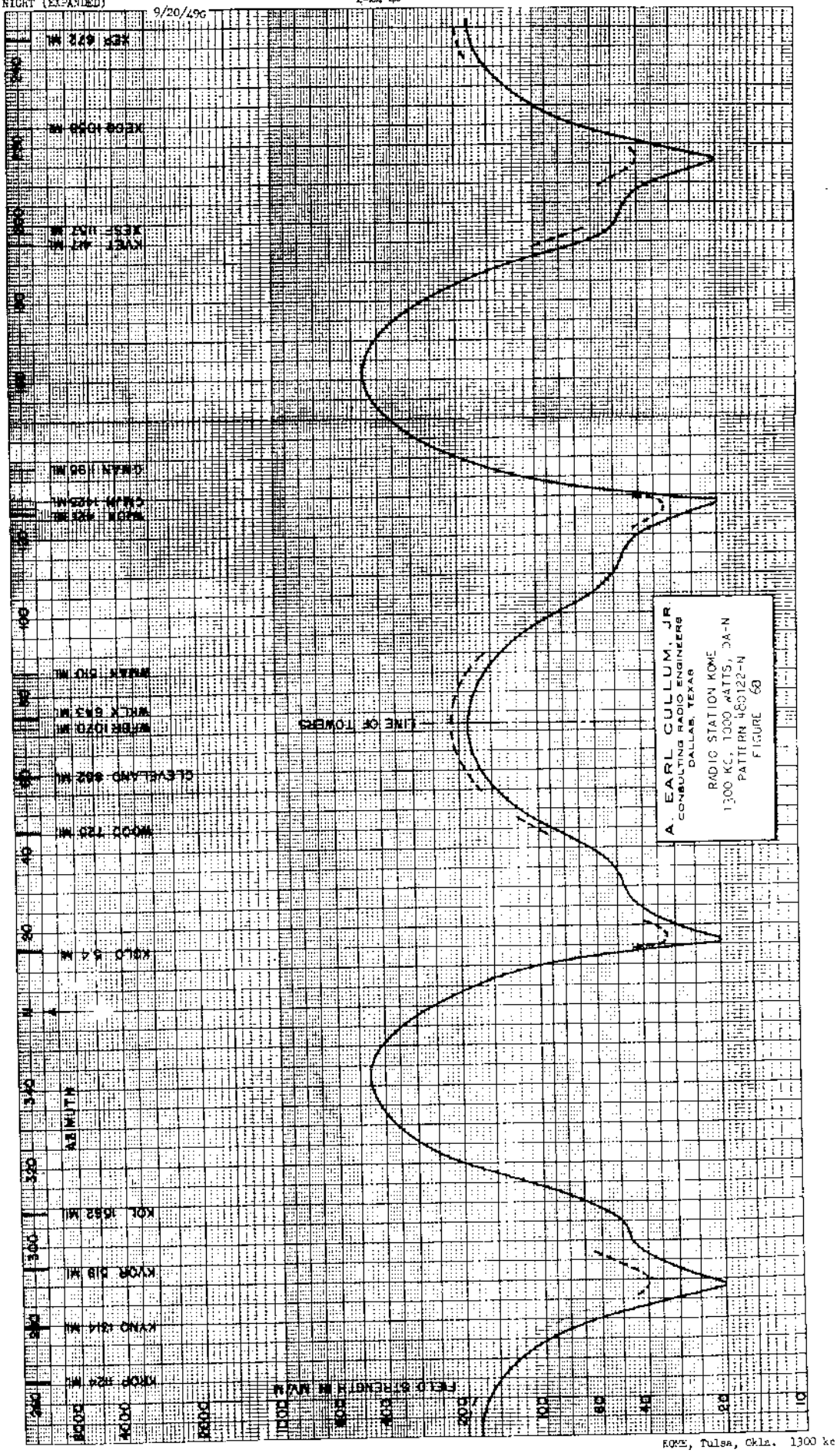
NO.	4	3	2	1
FIELD	0.65	0.0	1.36	0.85
PHASE	0.00°	X.X	-9.44°	0.00°

RADIO STATION KOME
1300-KC, 1-KW, DA-N
FIGURE 6A

2-24-48

KXXO
KONW

PROPOSED NIGHT (EXPANDED) KOME, TULSA, OKLA. 2-24-48 BMP-3662 Granted 12-9-48 1kw, DAN 1300 kc



KOME, Tulsa, Okla. 1300 kc

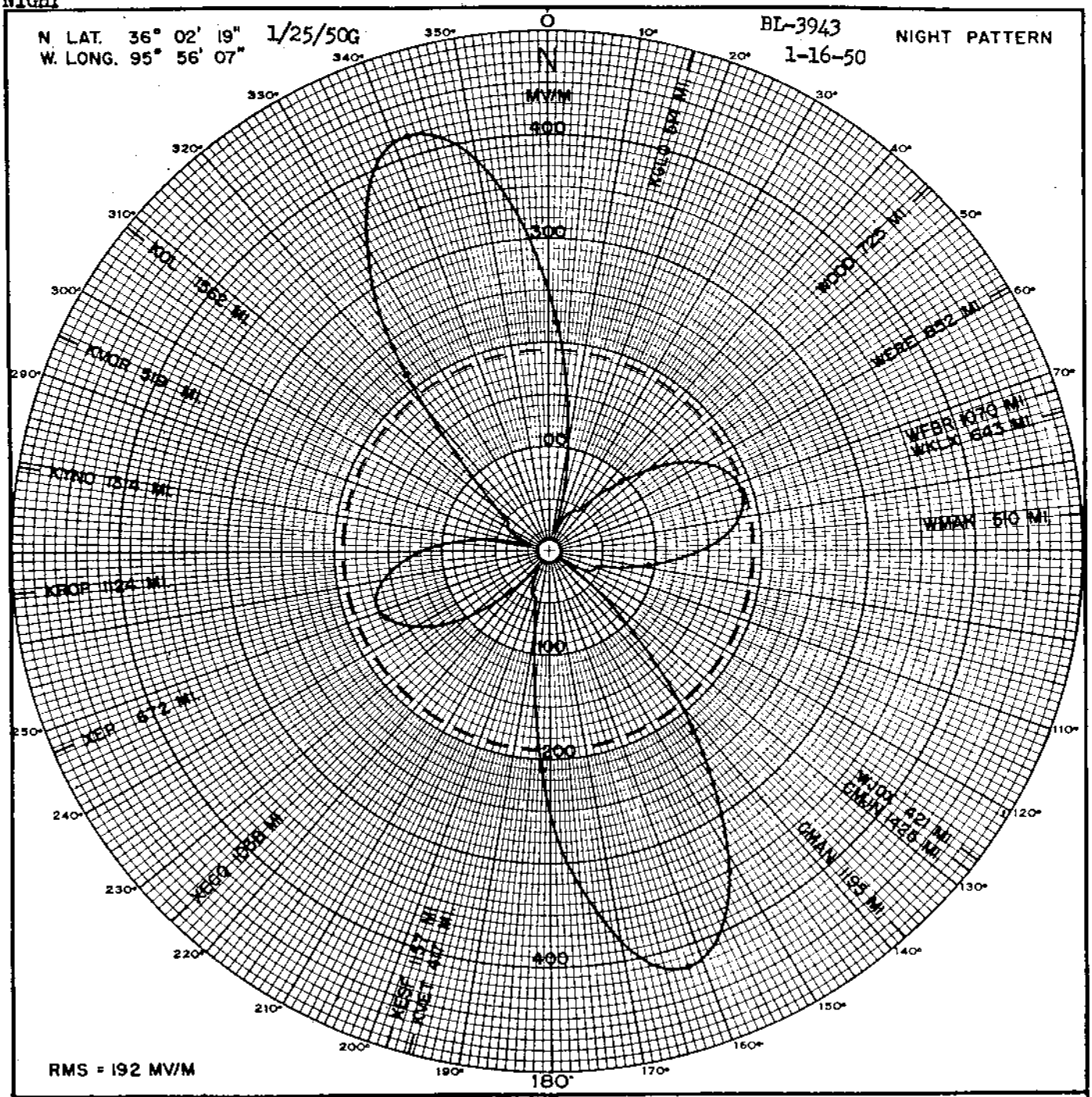
~~KCAW~~ KXXO

MEASURED NIGHT

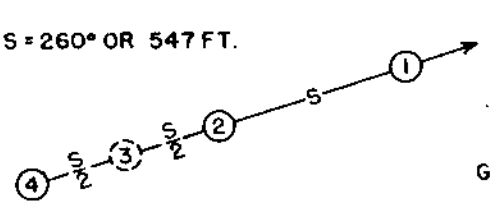
KOME, TULSA, OKLA.

1kw, 5kw-LS, DA-2

1300 kc



S = 260° OR 547 FT.



G = 136°

RADIO STATION KOME

TULSA, OKLAHOMA

1300 KC, 1 KW, 5 KW-LS, DA-2

PATTERN BASED ON FIELD INTENSITY MEASUREMENTS

A. EARL CULLUM, JR.
CONSULTING RADIO ENGINEERS
491217-N FIGURE 2B

MEASURED NIGHT DETAILS

KOME, TULSA, OKLA.

1-16-50

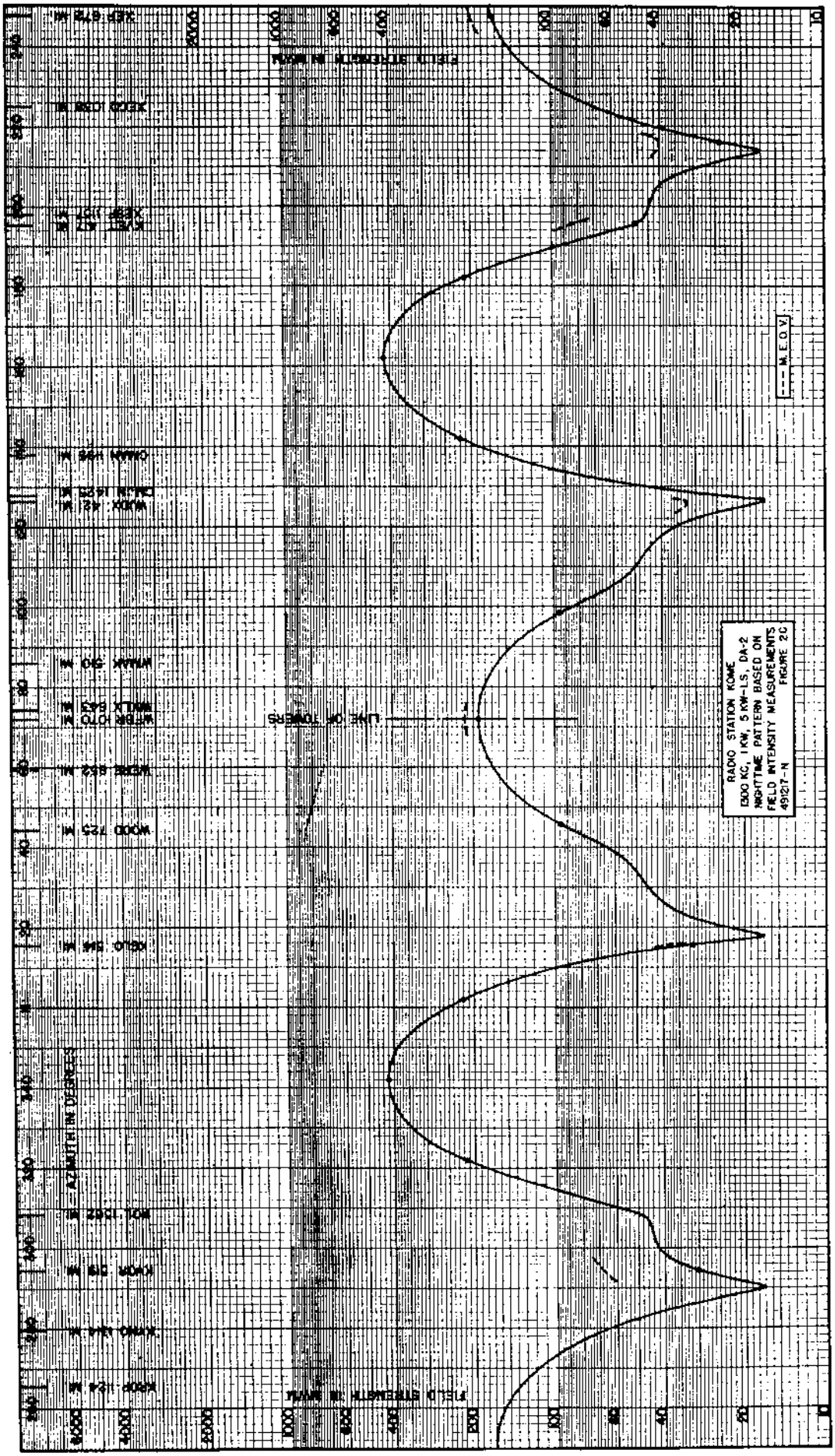
1kw, 5kw-LS, DA-2

KCMW KAKO

1300 kc

1/25/50G

BL-3943



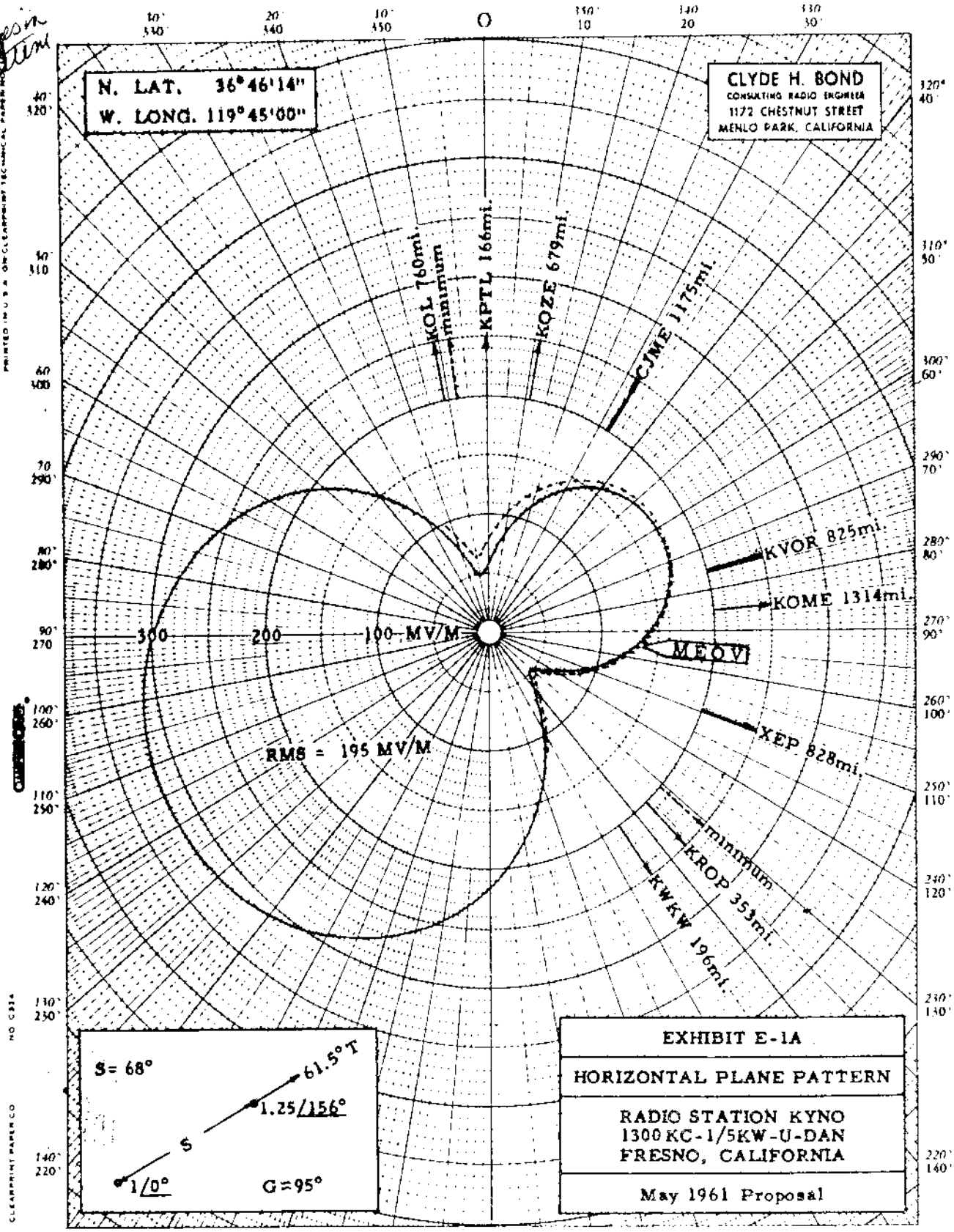
KOME, Tulsa, Okla. 1300 kc

KYNO

PROPOSED NIGHT
(7-26-61ct)

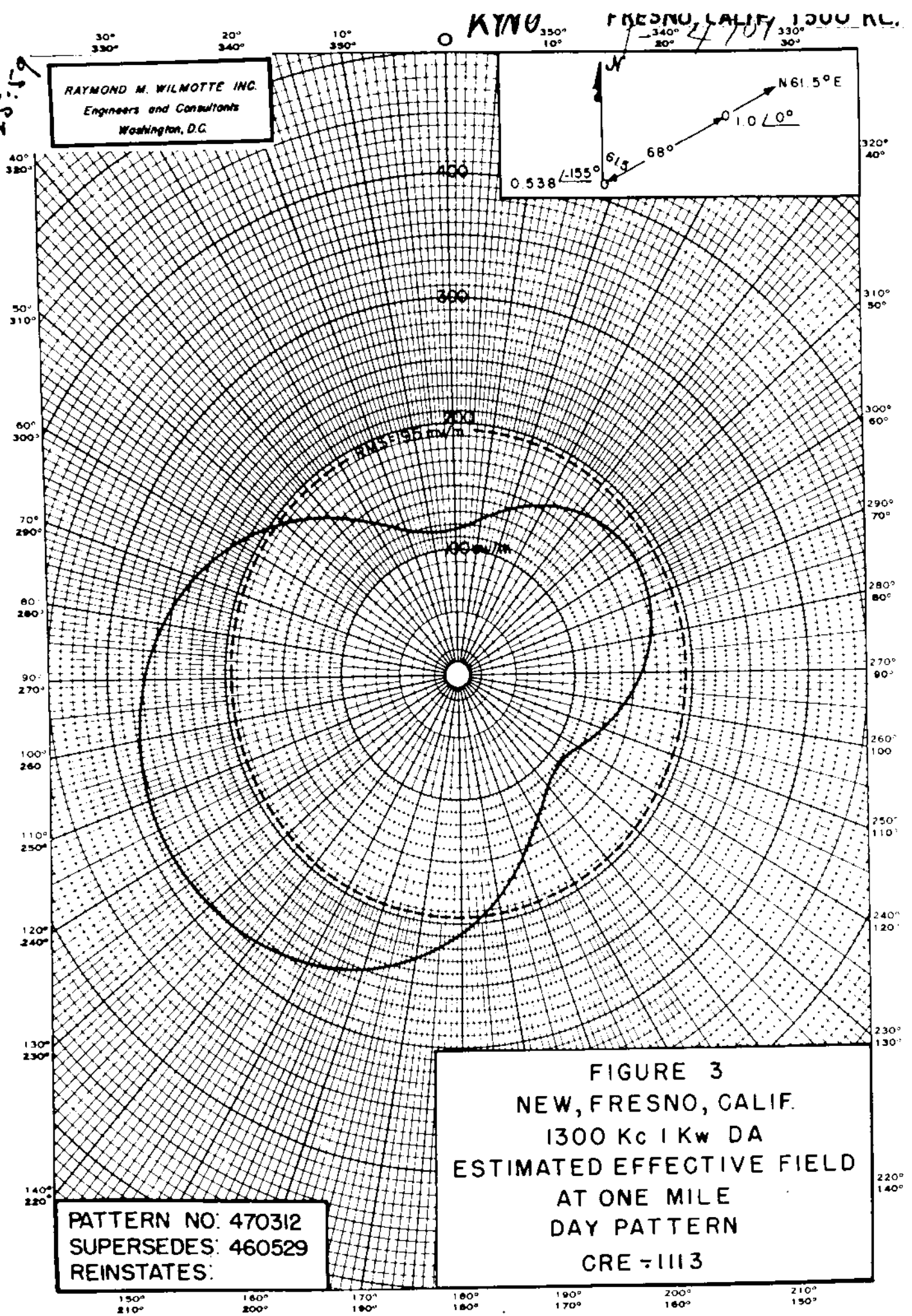
Station KYNO 1kw,5kw-LS, DA-N,U
Fresno, California 1300 KC

11-20-61
granted CP
to make changes in
night DA pattern



FCC File No. BP-14904
Accepted 7-12-61

KYNO
Fresno, California 1300 KC


KYNO
FRESNO, CALIF. 1300 KC.
RAYMOND M. WILMOTTE INC.
Engineers and Consultants
Washington, D.C.
N
N61.5°E
1.0 ∠0°
68°
0.538 ∠-155°
400
300
200
RMS=195 mv/m
100 mv/m
PATTERN NO: 470312
SUPERSEDES: 460529
REINSTATES:
FIGURE 3
NEW, FRESNO, CALIF.
1300 Kc 1 Kw DA
ESTIMATED EFFECTIVE FIELD
AT ONE MILE
DAY PATTERN
CRE-1113

KYNO

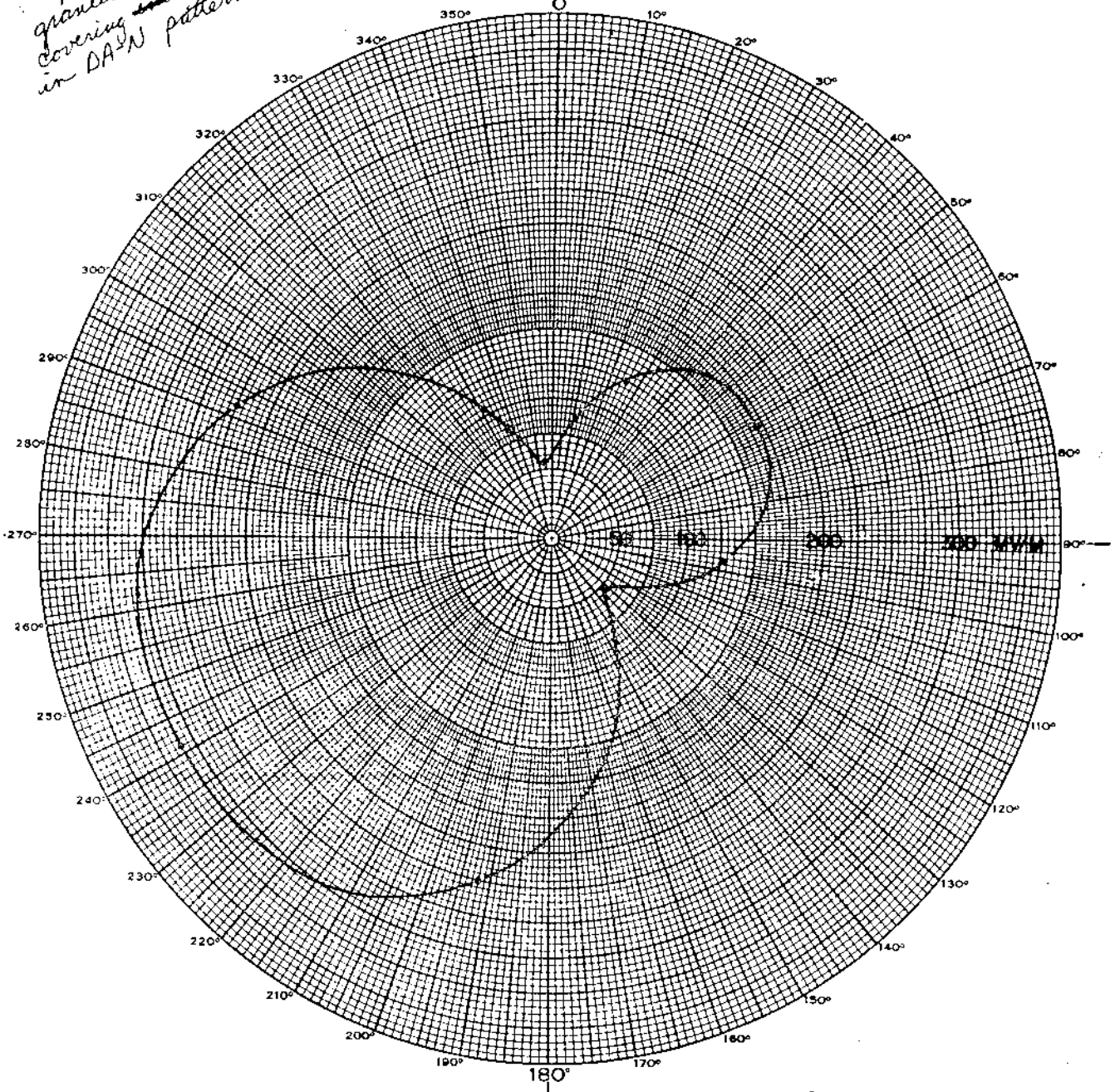
Measured Night
(2-26-63ct)

Station KYNO
Fresno, California

1kw, 5kw-LS, DA-N, U
1300 kc

T

1-25-63.
granted license change
covering ~~increase~~ change
in DA-N pattern



RMS = 192 mv/m

TOWER PLACEMENT SKETCH	PATTERN PARAMETERS								STATION DATA	
	TOWER No.	ELECTRICAL HEIGHT $G°$	TRUE TOWER ORIENTATION $\phi°$	SPACING $S°$	PHASING $\psi°$	HORIZONTAL FIELD mv/m E	FIELD RATIO F	ELEV. ANGLE $\theta°$	ELEVATION RMS FIELD mv/m E_θ	
1 → 61.5°	1	95	61.5	68	156		1.25	0	192	CALL KYNO
1 ↔ 5° ↔ 2	2	95	0	0	0		1	10		FREQUENCY 1300 kc
	3							20		POWER kw
	4							30		TIME OF OPERATION N
	5							40		TYPE OF OPERATION DA
	6							50		DAYTIME TOWERS
	7							60		NIGHTTIME TOWERS
	8							70		No. RADIALS PER TOWER
	9							80		LENGTH OF RADIALS ° ′ ″
	10							E_1* mv/m		GROUND SCREEN DIMENSION
	DAYTIME OPERATION ☐ NIGHTTIME OPERATION ☒							P_1* kw		LAT. 36 ° 46 ′ 14 ″
										LONG. 119 ° 45 ′ 00 ″
										SUPERSEDES
										PATTERN No. 62090IN

KYNO

CLYDE H BOND
CONSULTING RADIO ENGINEER
1172 CHESTNUT STREET
MENLO PARK, CALIFORNIA

FIGURE 5

FCC File No. BL-9754
Accepted 2-19-63

Station KYNO
Fresno, California

1300 kc

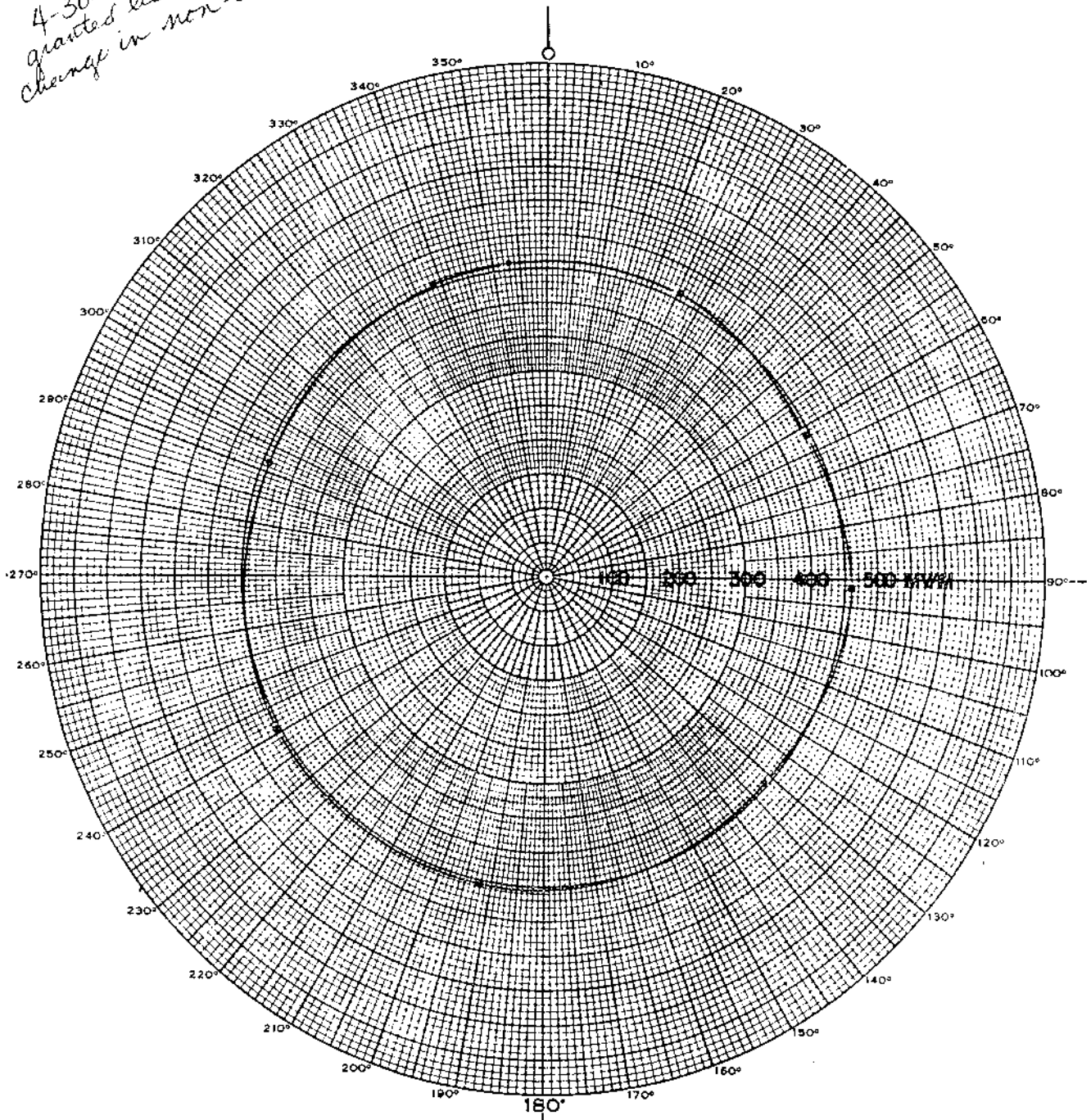
KYNO

Measured Non-DA
(2-26-63ct)

Station KYNO
Fresno, California

1kw, 5kw-LS, DA-N, U
1300 kc

4-30-63
granted lic. covering
change in non-DA



RMS = 451 mv/m

TOWER PLACEMENT SKETCH	PATTERN PARAMETERS									STATION DATA
	TOWER No.	ELECTRICAL HEIGHT θ°	TRUE TOWER ORIENTATION ϕ°	SPACING S°	PHASING V°	HORIZONTAL FIELD mv/m E	FIELD RATIO F	ELEV. ANGLE θ°	ELEVATION RMS FIELD mv/m E_θ	CALL KYNO
										FREQUENCY 1300 kc
										POWER 5 kw
	1							0		TIME OF OPERATION D
NON-DIRECTIONAL	2							10		TYPE OF OPERATION ND
	3							20		DAYTIME TOWERS
	4							30		NIGHTTIME TOWERS
	5							40		No. RADIALS PER TOWER
	6							50		LENGTH OF RADIALS ° ft
	7							60		GROUND SCREEN DIMENSION
	8							70		LAT. 36 ° 46 ' 14 "
	9							80		LONG. 119 ° 45 ' 00 "
	10							E_θ°	mv/m	SUPERSEDES
	DAYTIME OPERATION ☒ NIGHTTIME OPERATION ☐							P_θ°	kw	PATTERN No. 6206050

KYNO

CLYDE H. BOND
CONSULTING RADIO ENGINEER
1172 CHESTNUT STREET
MENLO PARK, CALIFORNIA

FIGURE 4

FCC File No. BL-9754
Accepted 2-19-63

Station KYNO
Fresno, California

1300 kc

WAVZ

Proposed Night
(11-28-67ct)

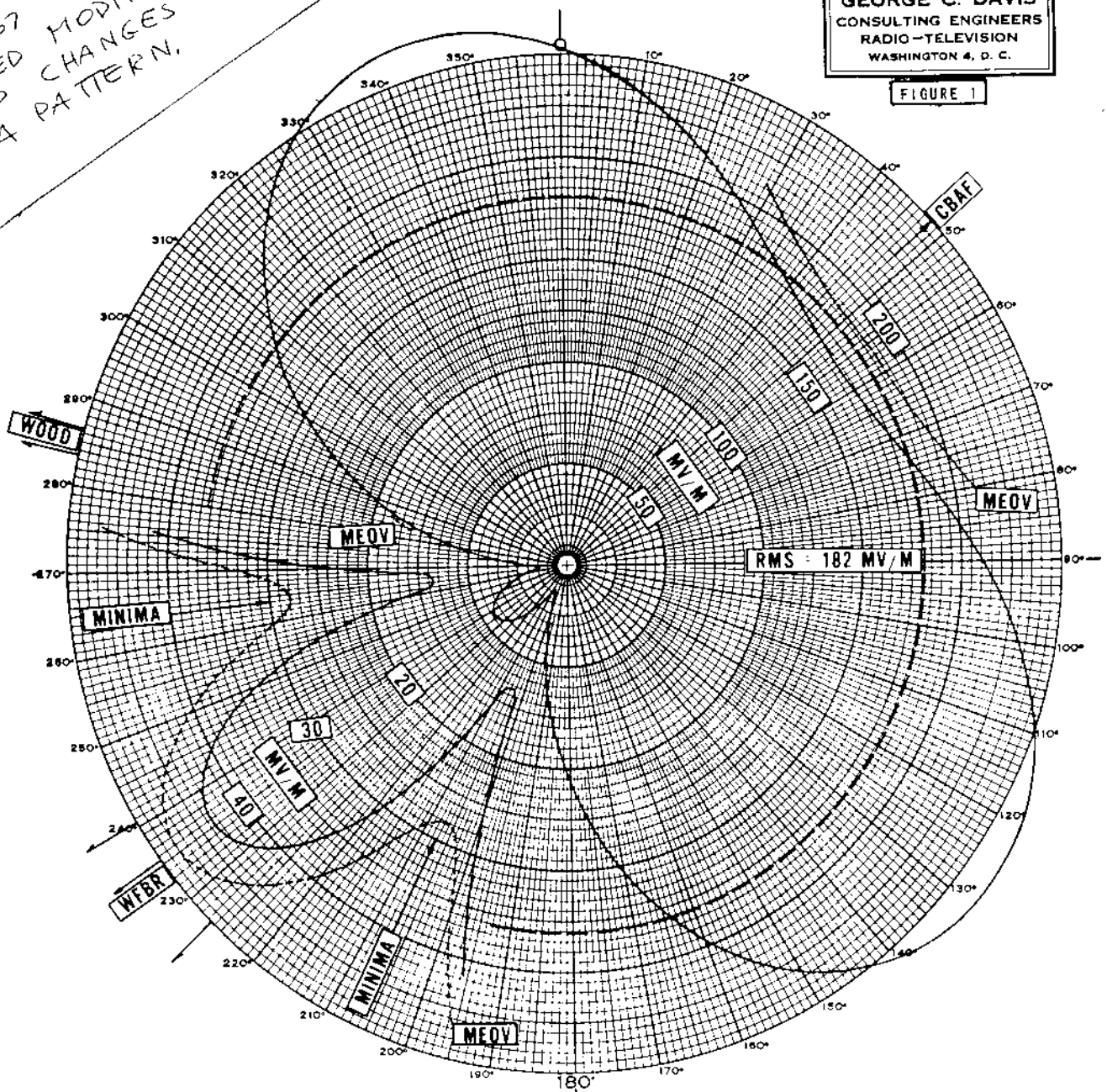
Station WAVZ
New Haven, Connecticut

1kw, DA-N, U
1300 kc

11-27-67 GRANTED MODIF. OF CP CHANGES IN DA PATTERN.

GEORGE C. DAVIS
CONSULTING ENGINEERS
RADIO—TELEVISION
WASHINGTON 4, D. C.

FIGURE 1



COMPUTED HORIZONTAL
PLANE RADIATION PATTERN
FOR THE PRESENT OPERATION OF
WAVZ, NEW HAVEN, CONNECTICUT
1300 KC - 1 KW - DA-N
SHOWING PROPOSED CHANGES IN RADIATION
THROUGH THE NULL AREA
SEPTEMBER 1967

N235.36°E — 1.1/+24° No 1 — 150° — 1.0/-24° No 2

H=90°

NORTH LATITUDE 41° 17' 16"
WEST LONGITUDE 72° 56' 48"

FCC File No. BMP-12192
Accepted 10-26-67

Station WAVZ
New Haven, Connecticut

1300 kc

WAVZ

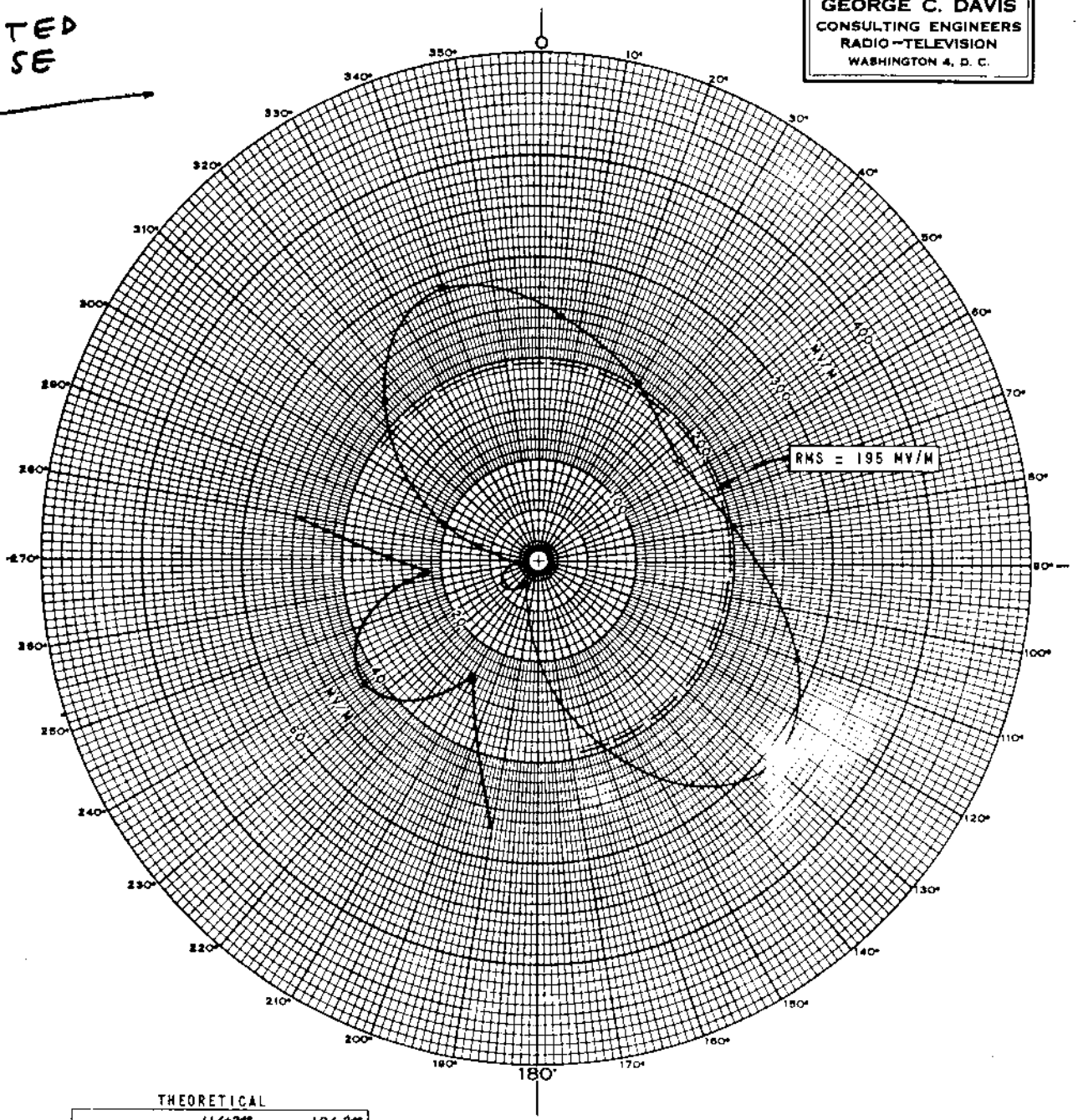
Measured Night
(1-29-68ct)

Station WAVZ
New Haven, Connecticut

1kw,DA-N,U
1300 kc

4-30-58
GRANTED
LICENSE

GEORGE C. DAVIS
CONSULTING ENGINEERS
RADIO—TELEVISION
WASHINGTON 4, D. C.



THEORETICAL
N235.36°E — 1.1∠+24° No.1 — 150° — 1.0∠-24° No.2
H=90°

NORTH LATITUDE 41° 17' 16"
WEST LONGITUDE 72° 56' 48"

MEASURED HORIZONTAL PLANE RADIATION PATTERN
WAVZ, NEW HAVEN, CONNECTICUT
1300 KC - 1 KW - DA-N
SEPTEMBER 1967

FCC File No.BL-11859
Accepted 1-10-68

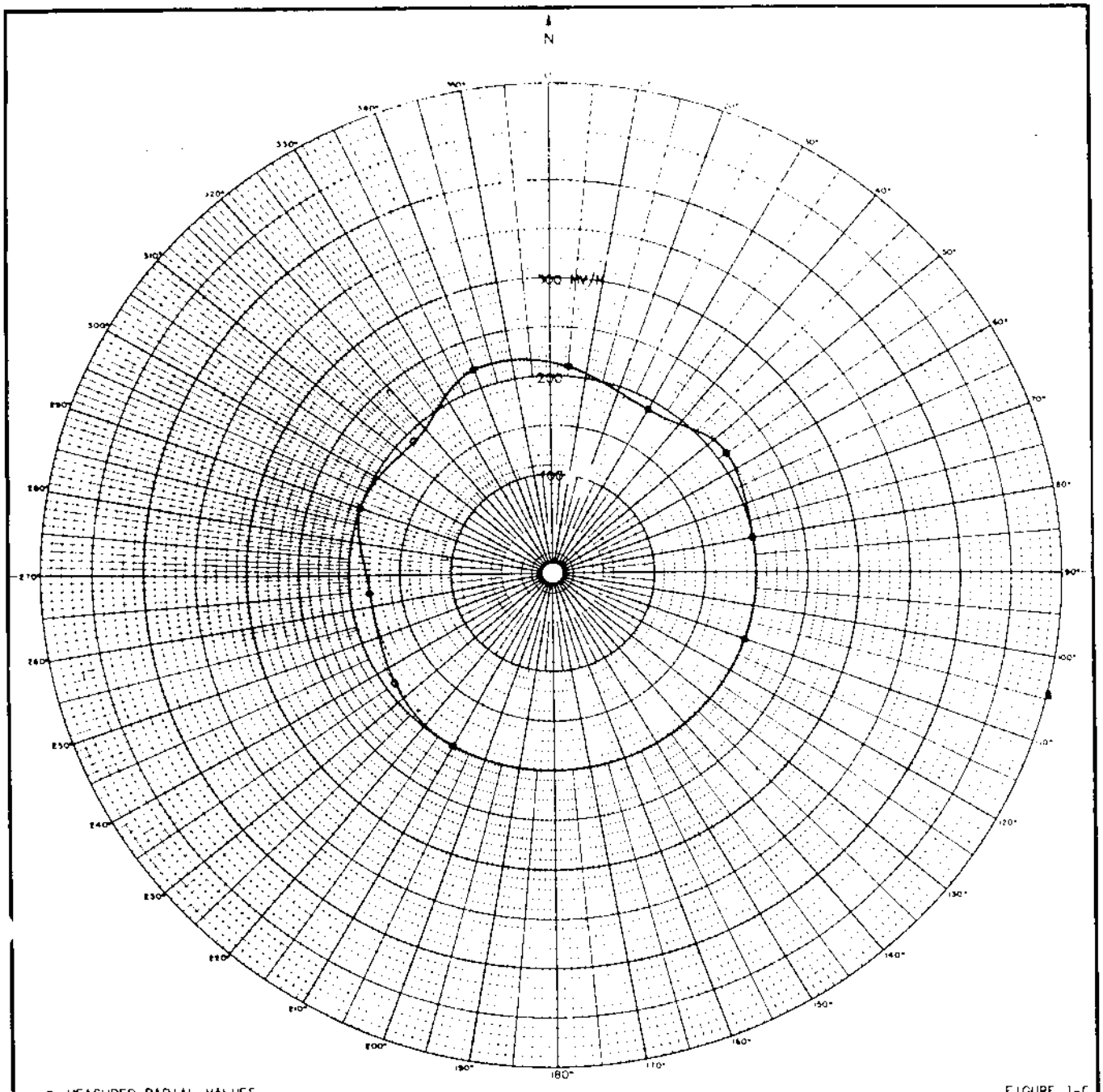
Station WAVZ
New Haven, Connecticut

1300 kc

granted license 7-1-1

WAVZ

MEASURED NON-DIRECTIONAL STATION WAVZ 1KW
(5-7-56G) NEW HAVEN, CONNECTICUT DA-N, U 1300 KC



o MEASURED RADIAL VALUES

FIGURE 1-C

WAVZ - NEW HAVEN, CONN.

HORIZONTAL RADIATION PATTERN

NON-DIRECTIONAL DAY OPERATION

ANTENNA	NO. 1(SW)	NO. 2(NE)	NO. 3	NO. 4	NO. 5	NO. 6
PHASE DEG						
HEIGHT DEG						
FIELD RATIO						
NON-DA ANT	0					

FREQUENCY	1300 KC
ASSIGNMENT	1 Kw-U(DA-N)
LONGITUDE	72 DEG 56 MIN 48 SEC
LATITUDE	41 DEG 17 MIN 16 SEC
WHEN USED	DAYTIME
RMS FIELD	199 MV/M (MEASURED)
DATE	MARCH 1956

ROBERT M. SILLIMAN

CONSULTING RADIO ENGINEERS

WASHINGTON, D.C.

FILE NO. BL-6115 ACCEPTED 4-18-56 FCC WAVZ, New Haven, Conn. 1300 KC

PATTERN No.:
SUPERSEDES:

WIF

NEW 1300 KC

VV 51-17

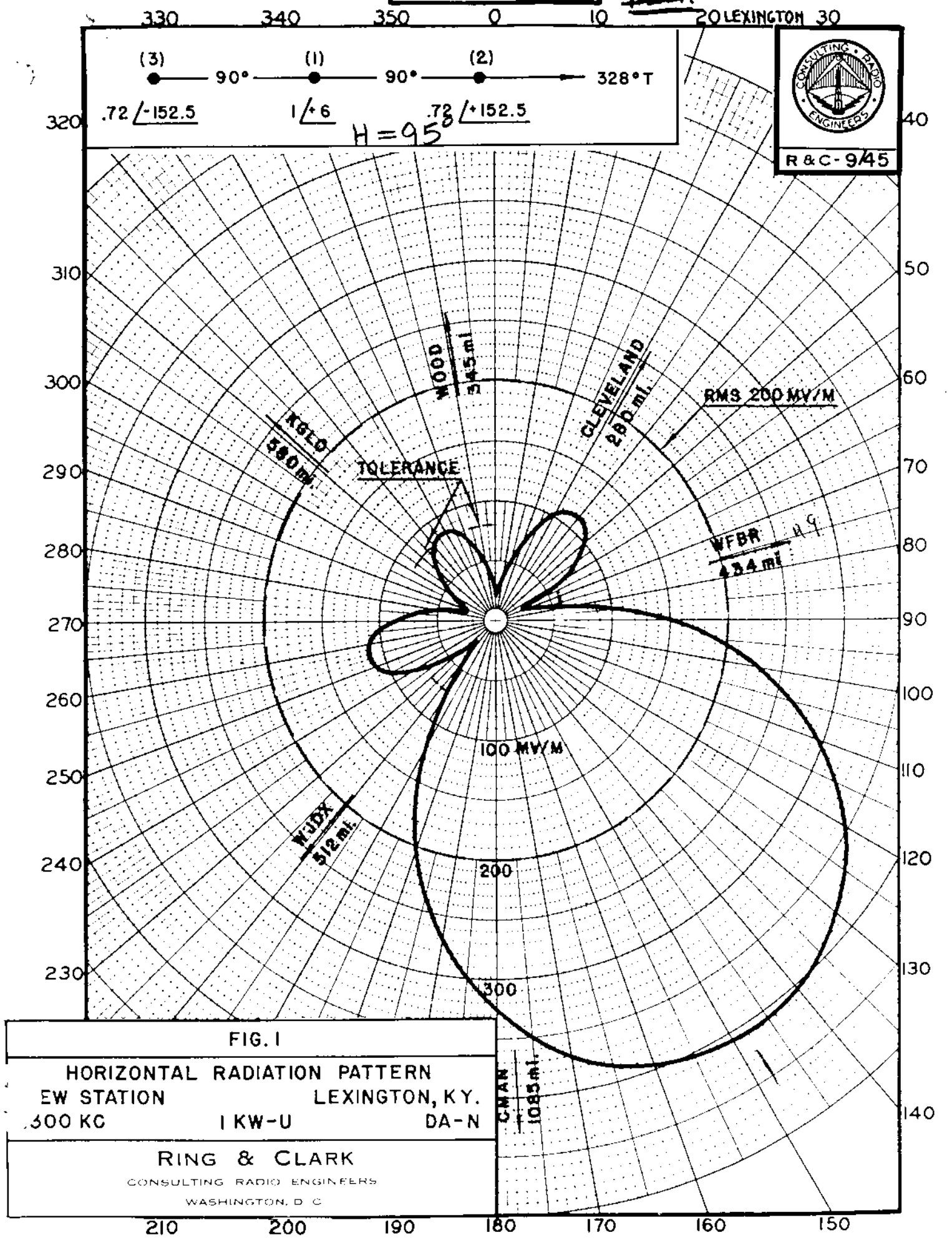


FIG. 1

HORIZONTAL RADIATION PATTERN

EW STATION — LEXINGTON, KY.

300 KC — 1 KW-U — DA-N

RING & CLARK

CONSULTING RADIO ENGINEERS

WASHINGTON, D. C.

N L-2107 WLEX WKLX WBLG

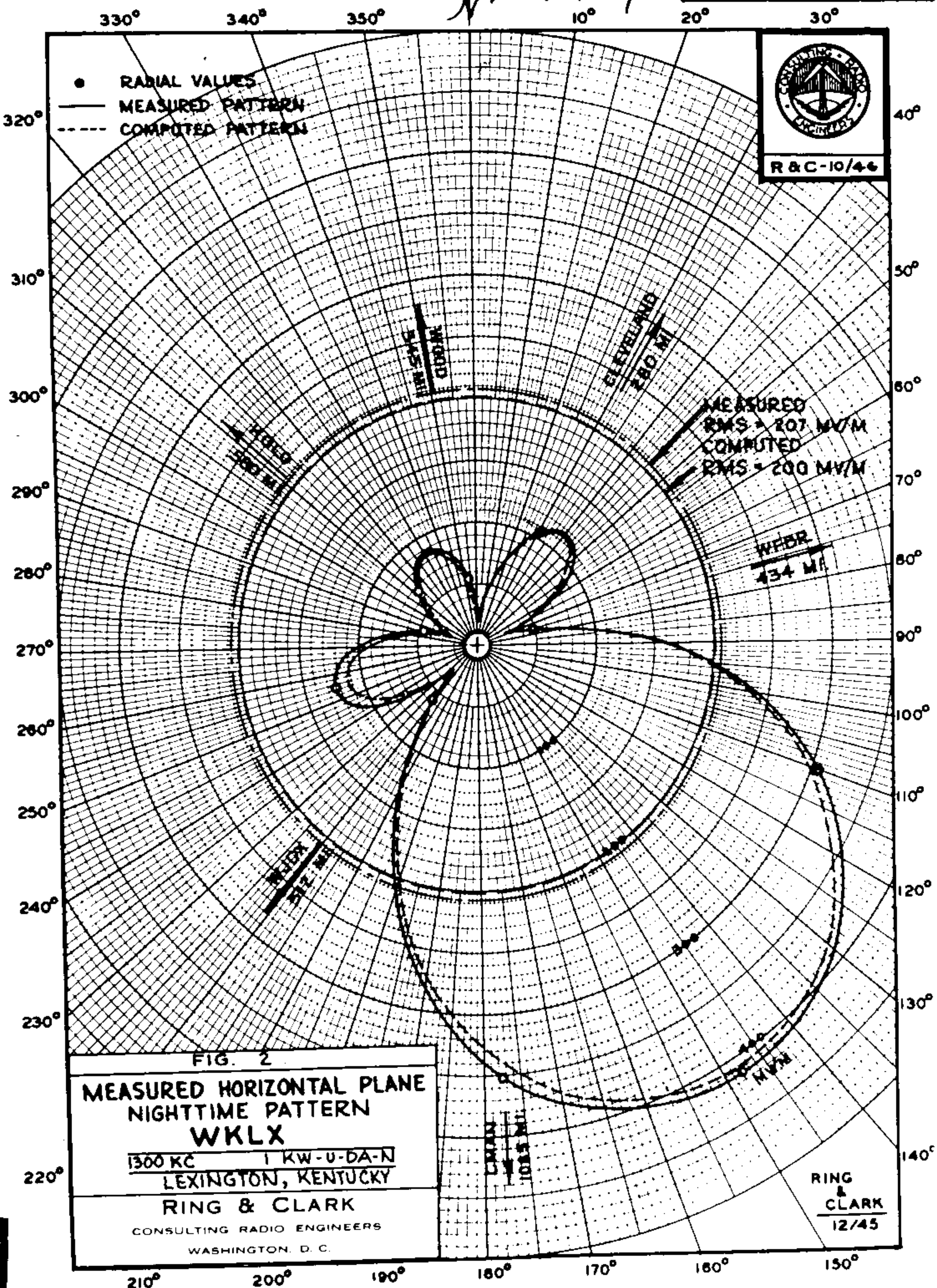


FIG. 2

MEASURED HORIZONTAL PLANE NIGHTTIME PATTERN

WKLX

1300 KC 1 KW-U-DA-N

LEXINGTON, KENTUCKY

RING & CLARK

CONSULTING RADIO ENGINEERS

WASHINGTON, D. C.

2

WLBX WKLX WBLG

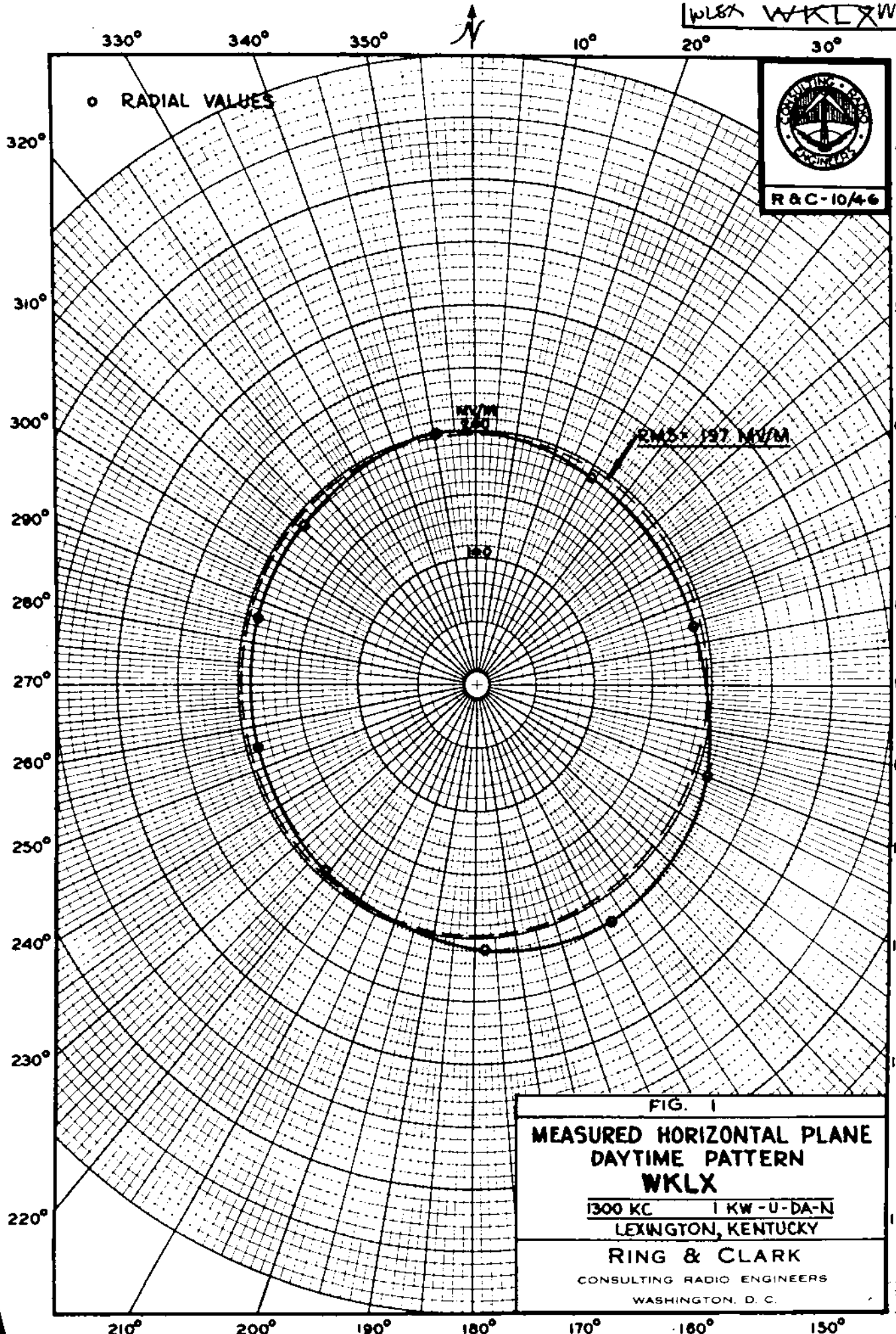


FIG. 1

MEASURED HORIZONTAL PLANE DAYTIME PATTERN

WKLX

1300 KC 1 KW - U - DA - N

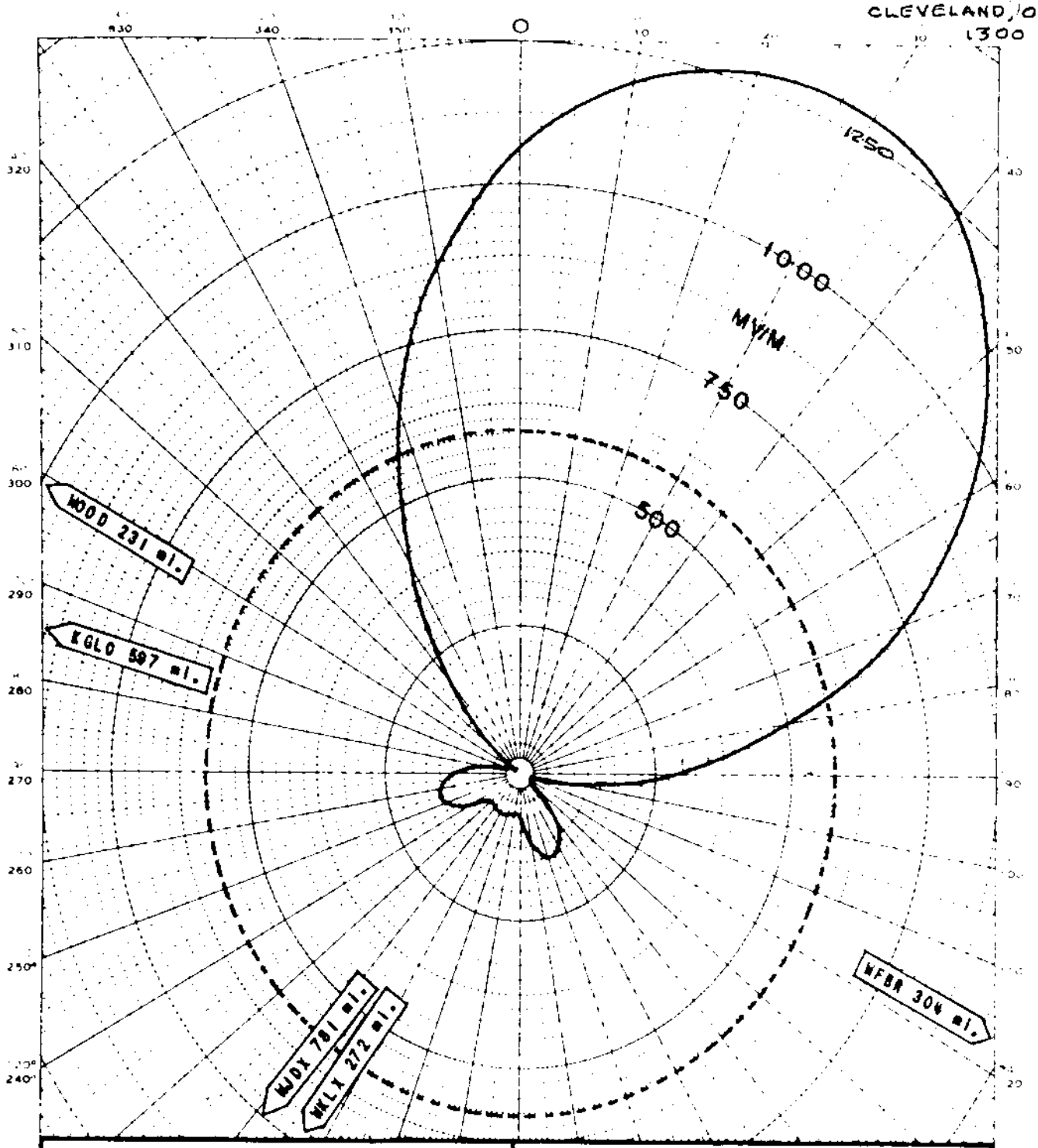
LEXINGTON, KENTUCKY

RING & CLARK

CONSULTING RADIO ENGINEERS

WASHINGTON, D. C.

WERE
CLEVELAND, O
1300



G = 200°

90° 189° 90° 189° 90° 189° 27° T

.9/93° 2.1/60.1° 2.26/152.3° 1/0°

.915/93 2.116/-59.8 2.285/155.4 1.0/0

DO NOT PRODUCE PATTERN

CLEVELAND BROADCASTING CO. INC.
1300KC - 5KW - U - DA(1)
CLEVELAND, OHIO
AMENDMENT

HORIZONTAL RADIATION PATTERN

LAT: 41° 20' 28"
LONG: 81° 44' 29"

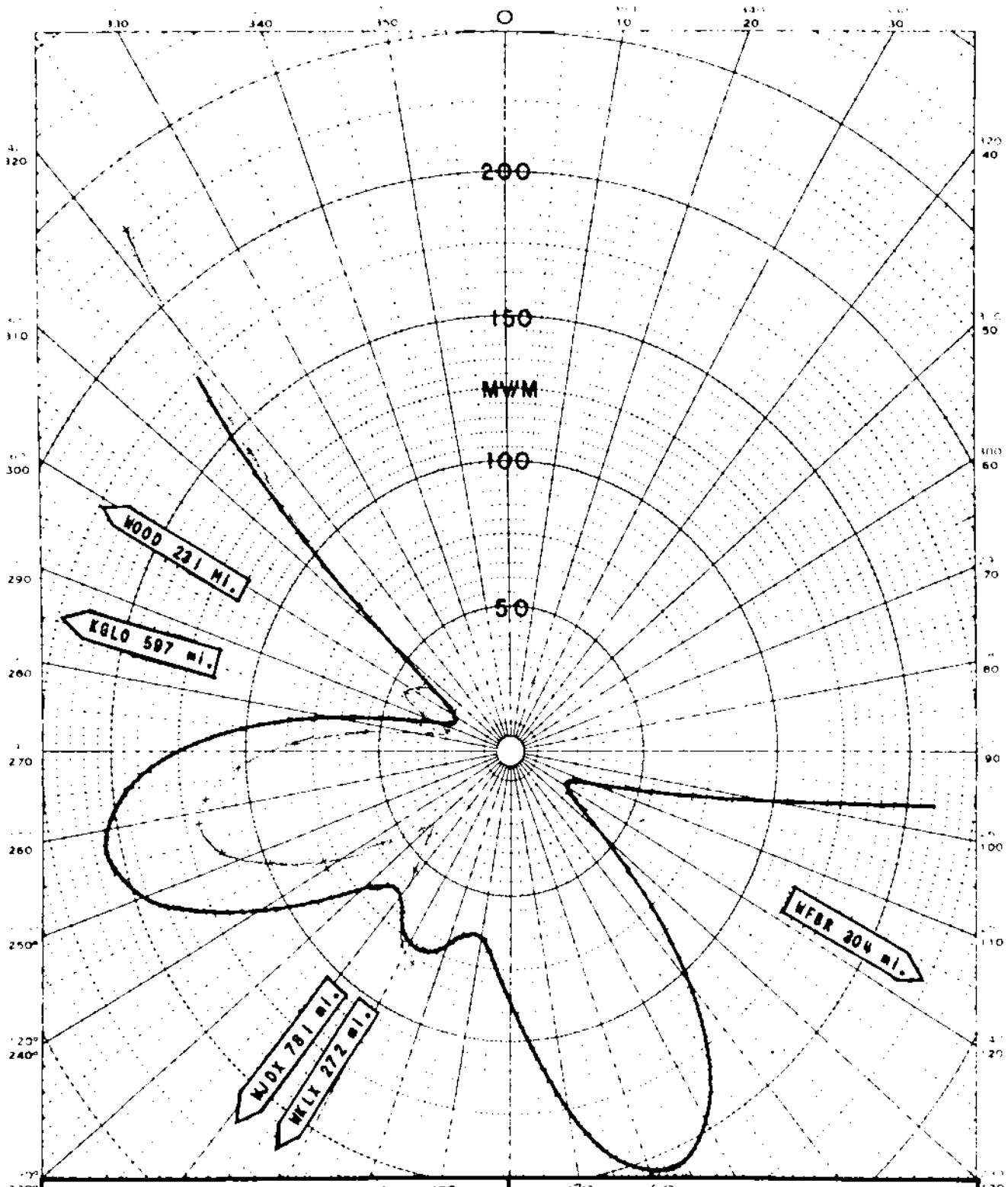
RUSSELL P. MAY
Consulting Radio Engineer
Washington 4, D. C.

RMS = 576

OCT. 1947

FIG. NO. 4

WERE



G = 200°

90° 189° 90° 189° 90° 189° 27° T

.9/93° 2.1/60.1° 2.28/152.3° 1/0°

CLEVELAND BROADCASTING CO. INC.
1300KC - 5KW - U - DA(1)
CLEVELAND, OHIO
AMENDMENT

ENLARGED HORIZONTAL
RADIATION PATTERN

LAT: 41° 20' 28"
LONG: 81° 44' 29"

RUSSELL P. MAY
Consulting Radio Engineer
Washington 4, D. C.

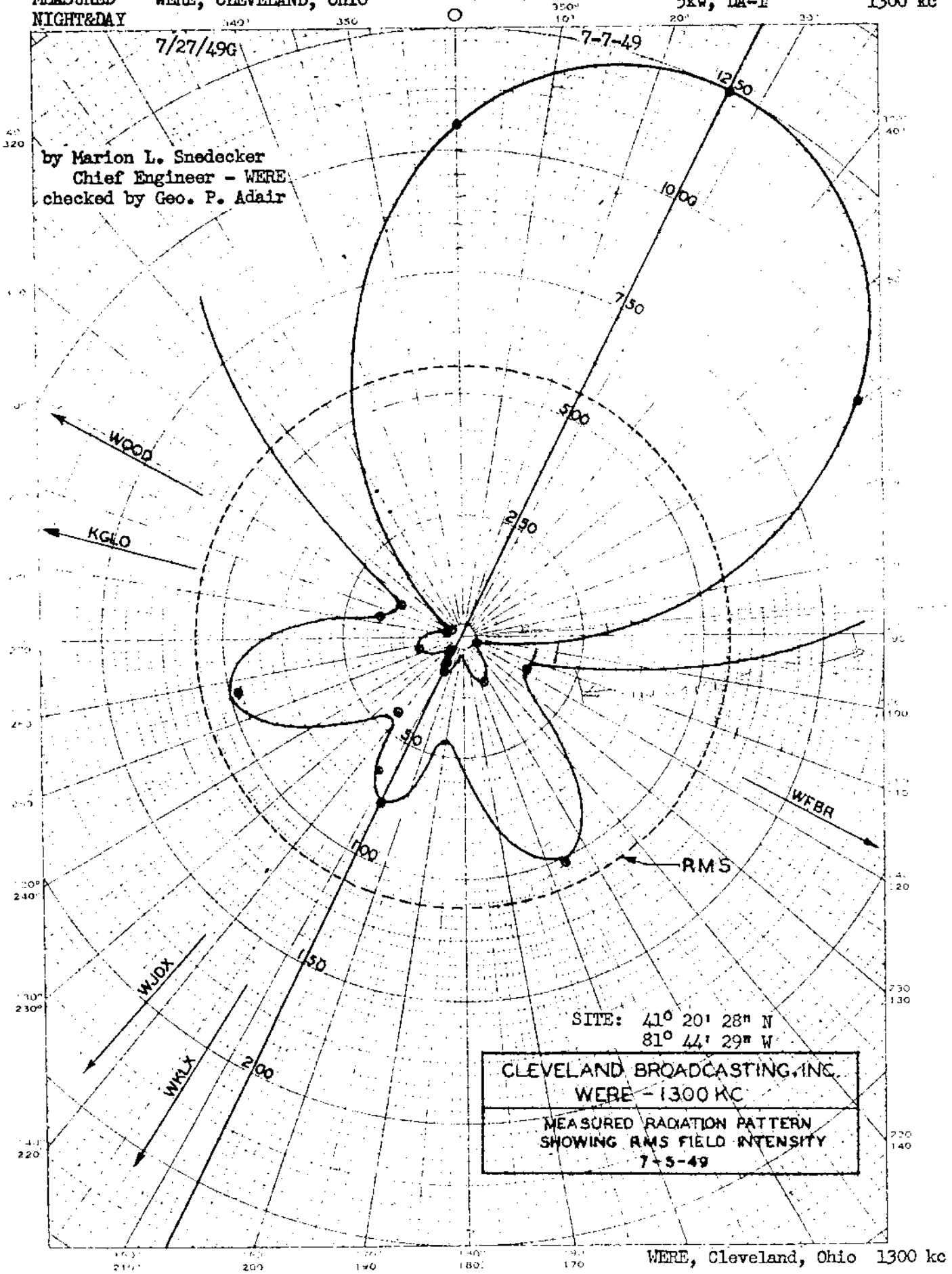
RMS = 576

OCT. 1947

FIG. NO. 6

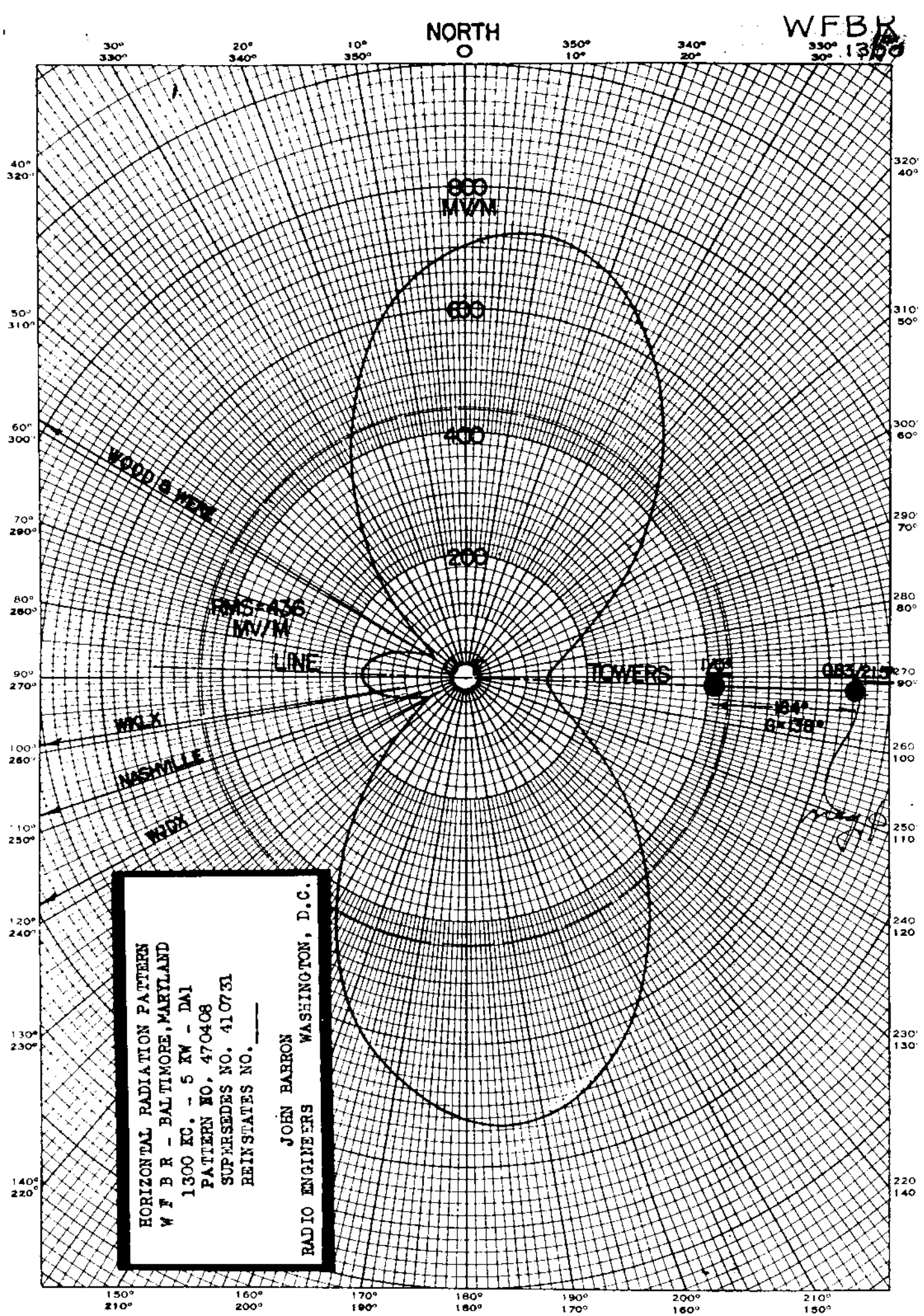
WERE

MEASURED WERE, CLEVELAND, OHIO BL-3748 5kw, DA-1 1300 kc
NIGHT&DAY

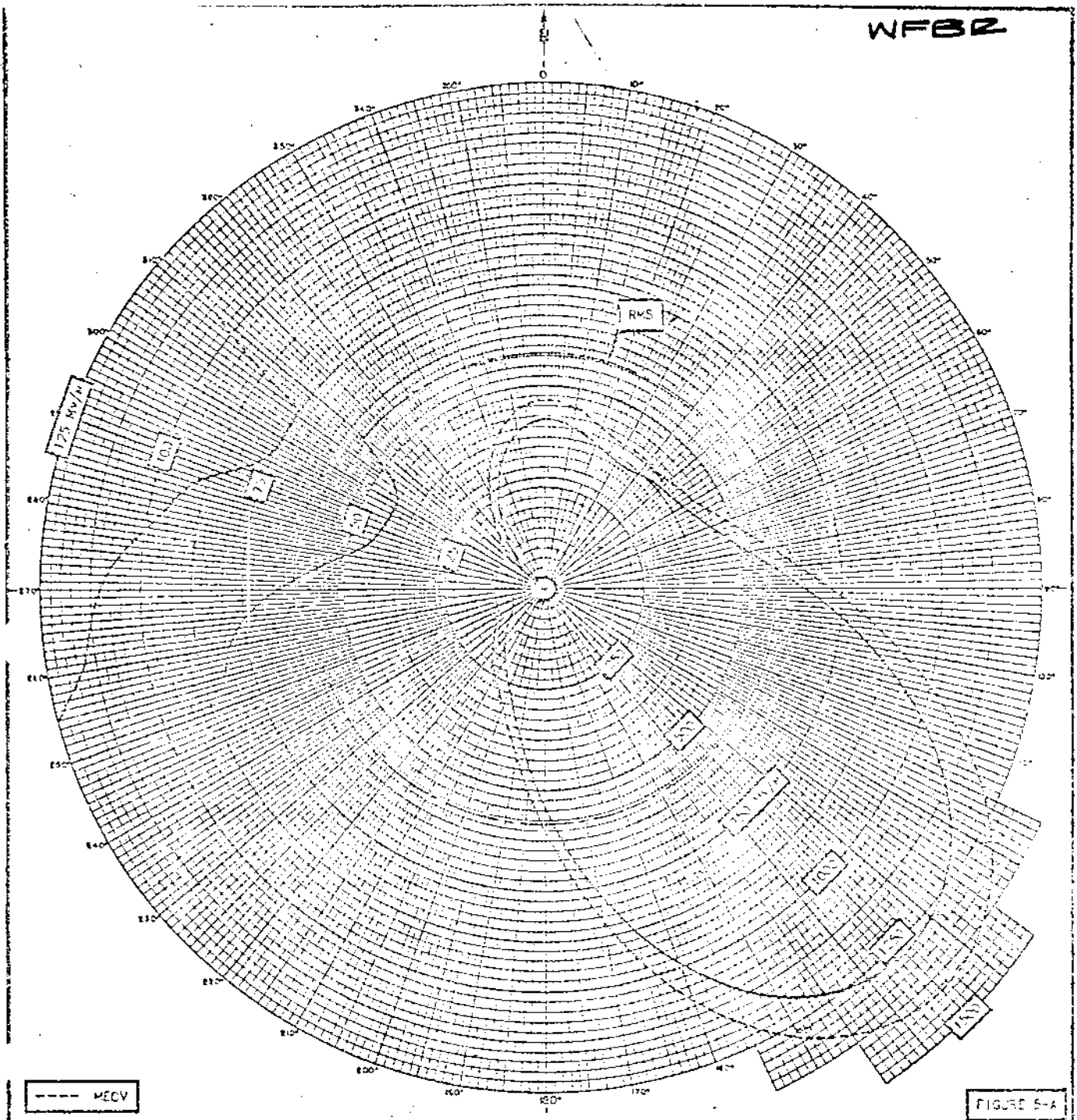


WERE, Cleveland, Ohio 1300 kc

FIG. 16


NORTH
WFBR
1300
800 MV/M
600
400
200
RMS=436 MV/M LINE
TOWERS
WOODS MEM.
WOLX
NASHVILLE
WDIA
DAS
WSB
084°
038°
HORIZONTAL RADIATION PATTERN
W F B R - BALTIMORE, MARYLAND
1300 KC. - 5 KW - DA1
PATTERN NO. 470408
SUPERSEDES NO. 410731
REINSTATES NO. ___
JOHN BARRON
RADIO ENGINEERS WASHINGTON, D.C.

WFBR

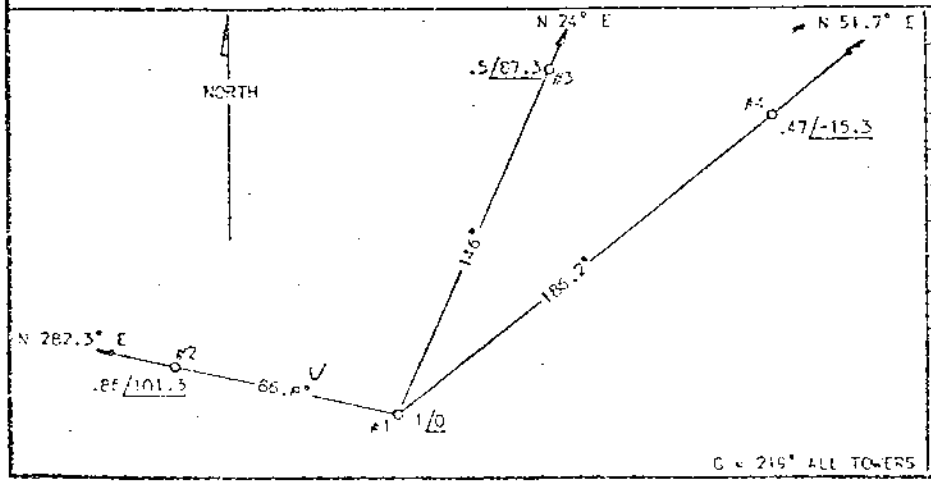


---- MEDV

FIGURE 5-A

HORIZONTAL RADIATION PATTERN

BL-13,776



APPLICANT	: BALTIMORE RADIO SHOW, INC.
LOCATION	: BALTIMORE, MARYLAND
FREQUENCY	: 1300 KCS
POWER	: 5 Kw.
LATITUDE	: 39 DEG. 20 MIN. 00 SEC
LONGITUDE	: 76 DEG. 46 MIN. 13 SEC
WHEN USED	: NIGHTTIME
R.M.S. FIELD	: 562 MV/M
DATE	: JULY 1972

SILLIMAN, MOFFET & KOWALSKI

CONSULTING RADIO ENGINEERS

WASHINGTON, D.C.

WFBR

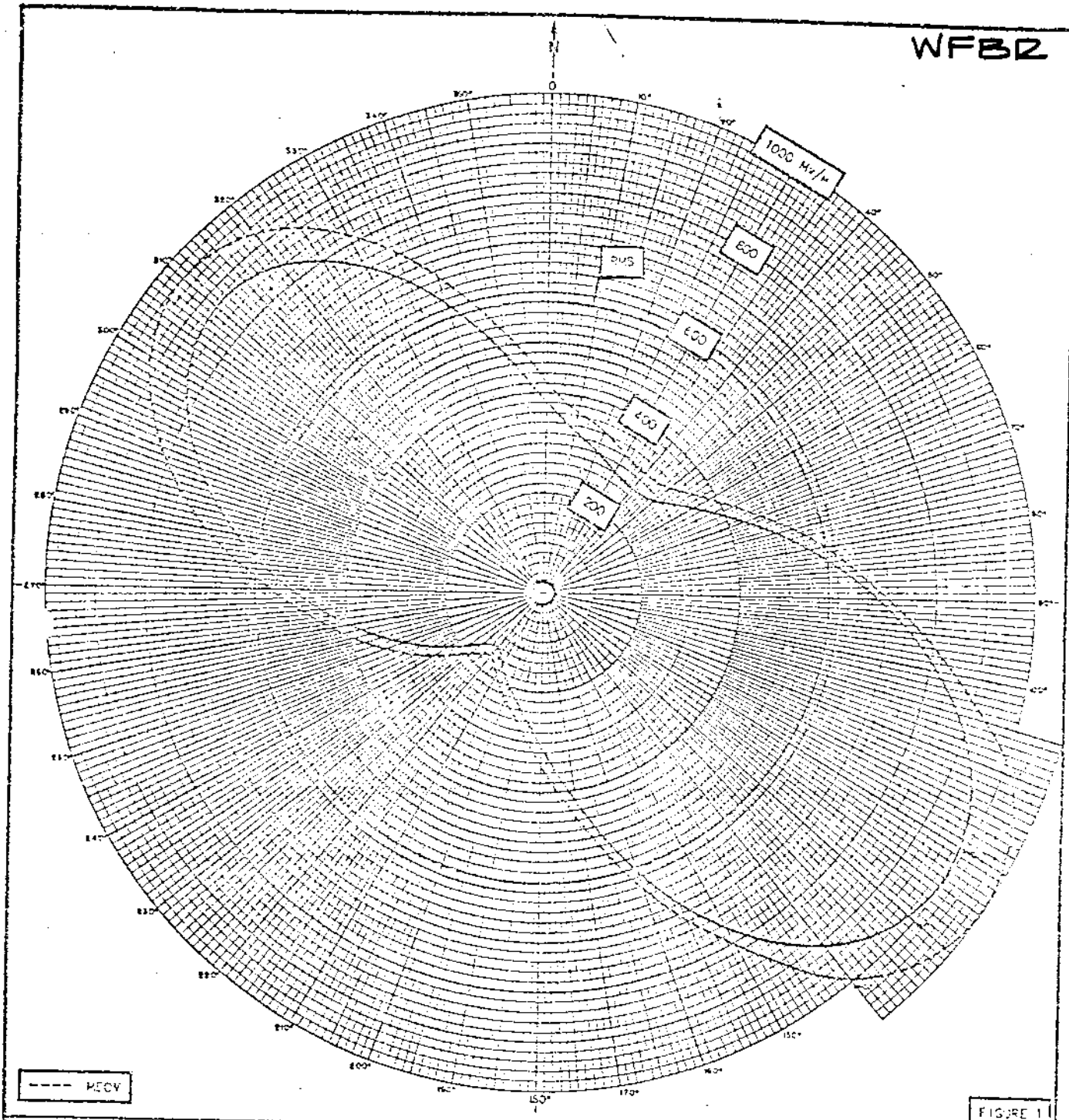
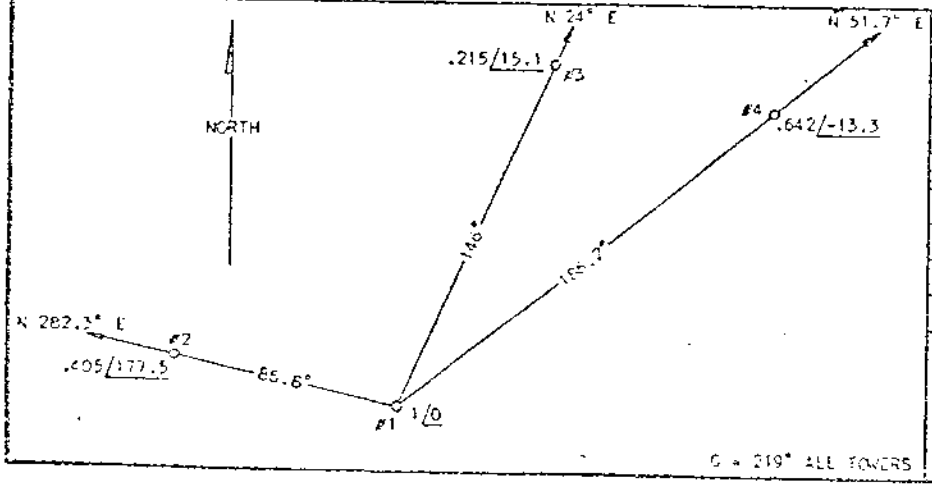


FIGURE 1

HORIZONTAL RADIATION PATTERN

BL-13,776



APPLICANT	BALTIMORE RADIO SHOW, INC.
LOCATION	BALTIMORE, MARYLAND
FREQUENCY	1300 KC/S
POWER	5 KW.
LATITUDE	39 DEG. 20 MIN. 00 SEC.
LONGITUDE	76 DEG. 46 MIN. 15 SEC.
WHEN USED	DAYTIME
R.M.S. FIELD	581 MV/M
DATE	JULY 1972

SILLIMAN, MOFFET & KOWALSKI

CONSULTING RADIO ENGINEERS

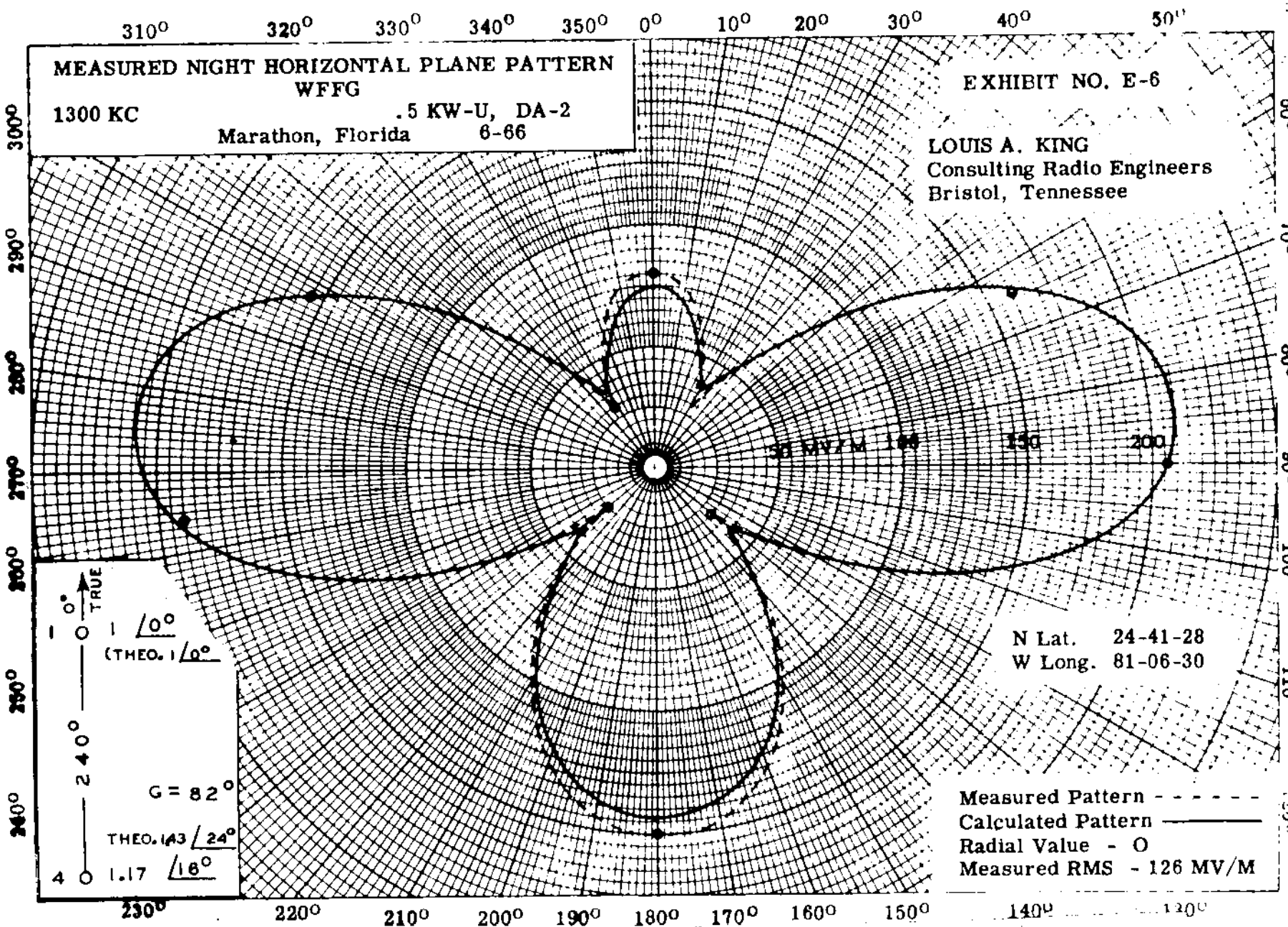
WASHINGTON, D.C.

BL-11445

Measured Night
(11-29-66ct)

Station WFFG
Marathon, Florida

GRANTED LICENSE 500w, DA-2, U
5-16-67 CHANGE 1300 kc
FROM DA-D TO DA-2.



FCC File No. BL-11445
Accepted 11-25-66

Station WFFG
Marathon, Florida

1300 kc

WFFG

WFFG

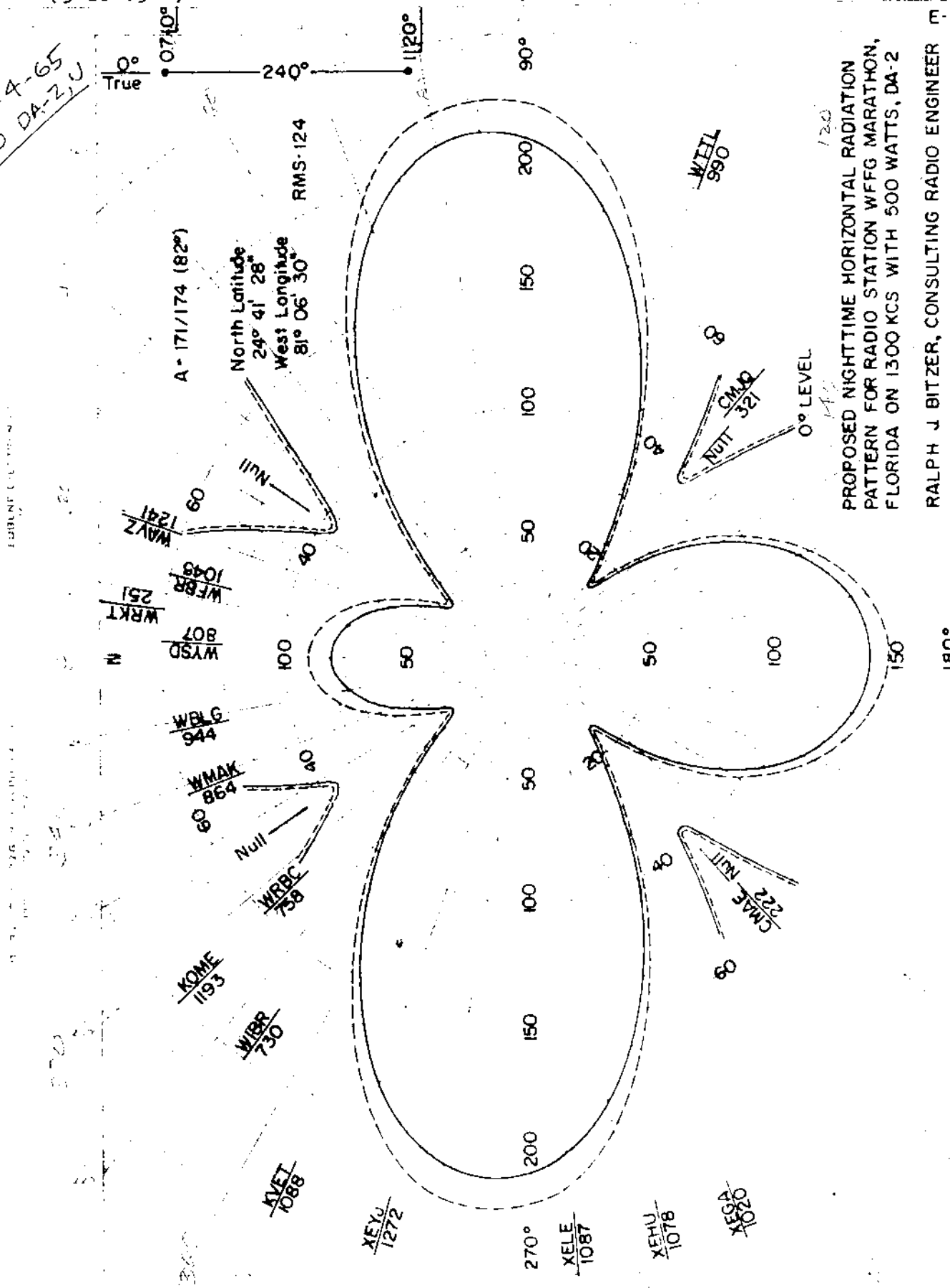
Proposed Night
(3-26-65ct)

Station WFFG
Marathon, Florida

500w, DA-2, U
1300 kc

E-12C

CP 8-4-65
CHG TO DA-2, U



FCC File No. BP-16227
Accepted 3-5-65 Amended

Station WFFG
Marathon, Florida

1300 kc

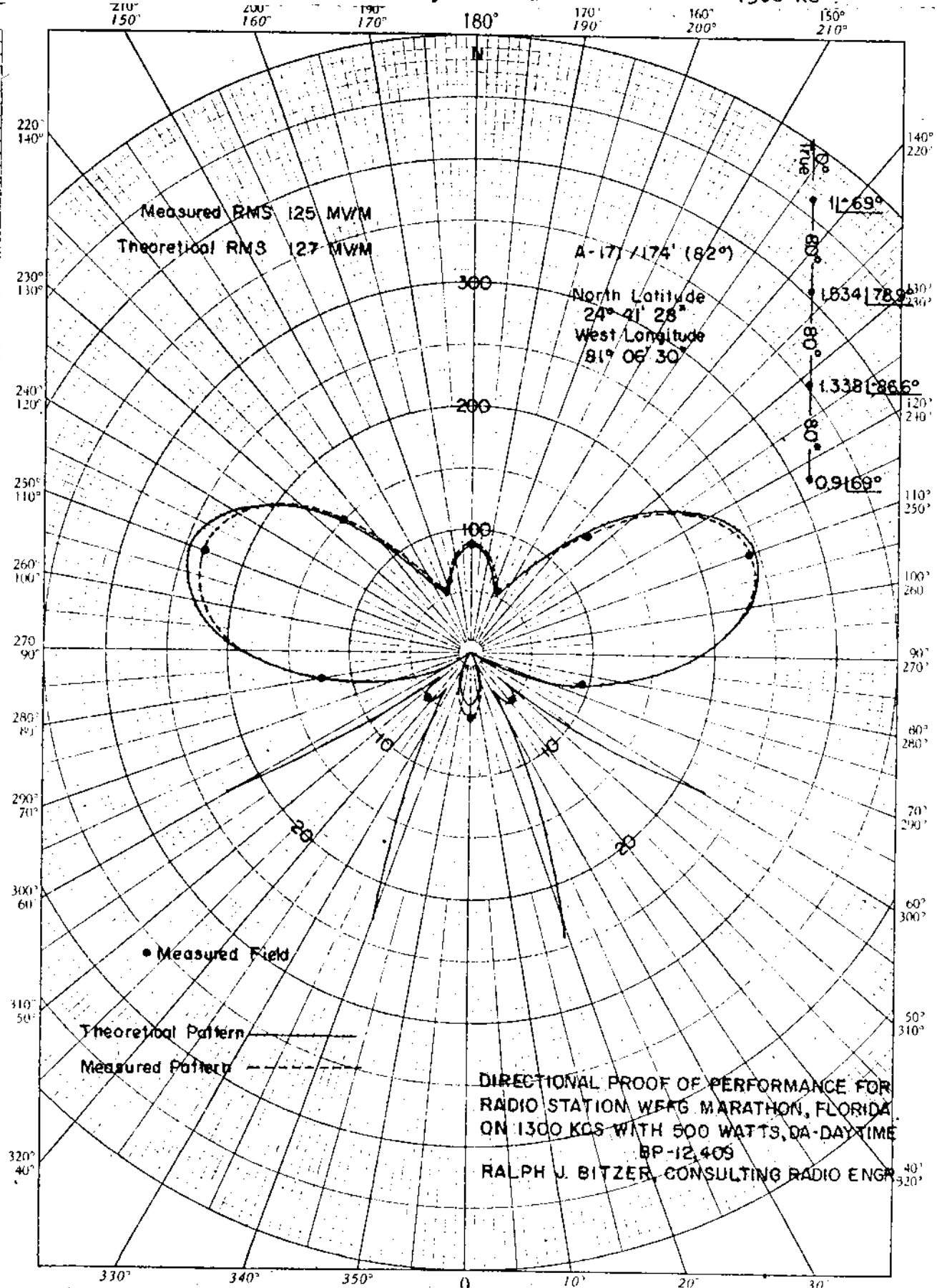
WFFG

Measured Day
(5-25-62ct)

Station WFFG
Marathon, Florida

500w,DA-D,D
1300 kc

c 8-15-62



FCC File No. BL-9285
Accepted 5-18-62

Station WFFG
Marathon, Florida

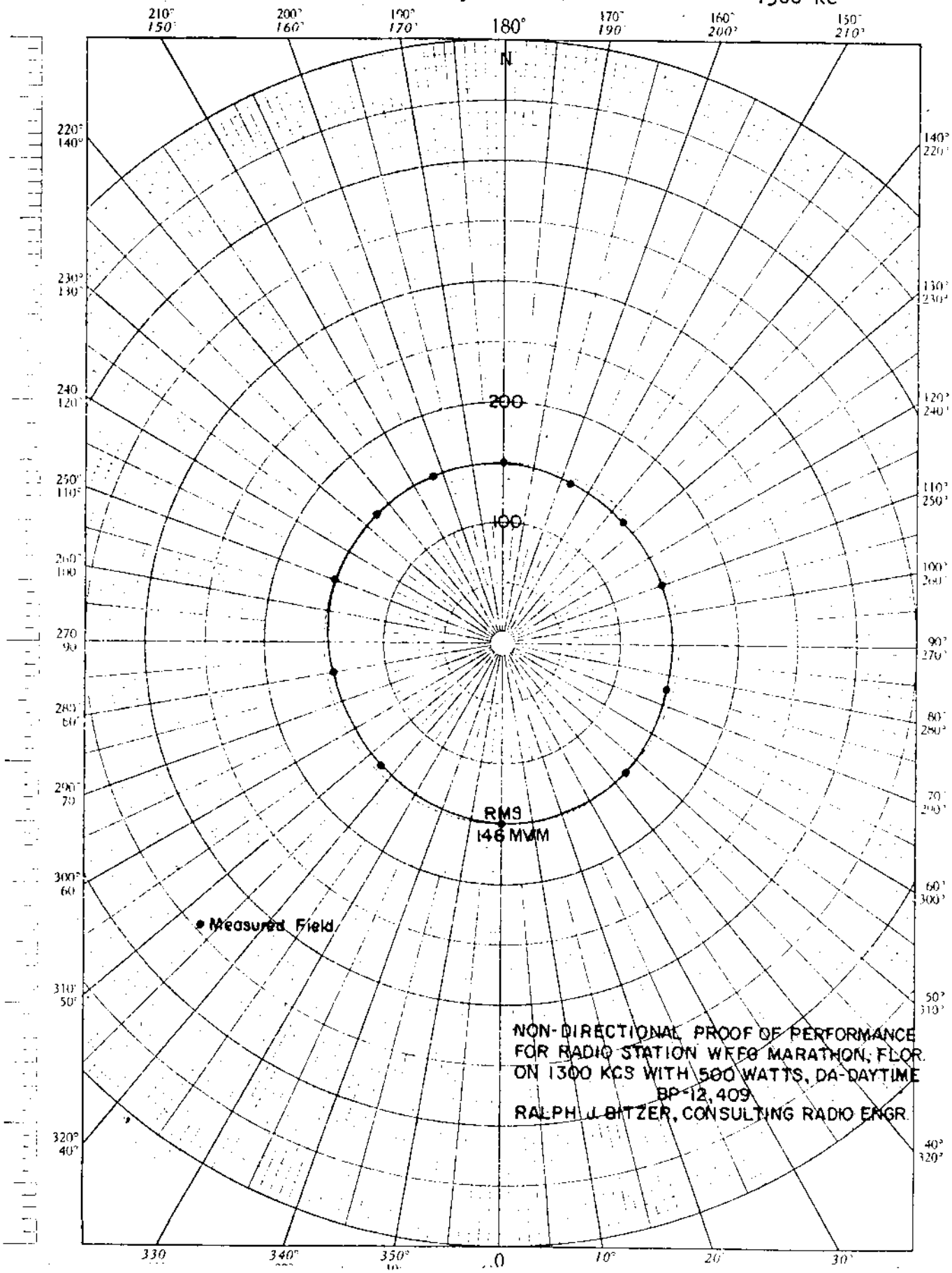
1300 kc

WFFG

Measured Non-DA
(5-25-62ct)

Station WFFG
Marathon, Florida

500w,DA-D,D
1300 kc



NON-DIRECTIONAL PROOF OF PERFORMANCE
FOR RADIO STATION WFFG MARATHON, FLOR.
ON 1300 KCS WITH 500 WATTS, DA-DAYTIME
BP-12,409
RALPH J. BITZER, CONSULTING RADIO ENGR.

FCC File No. BL-9285
Accepted 5-18-62

Station WFFG
Marathon, Florida

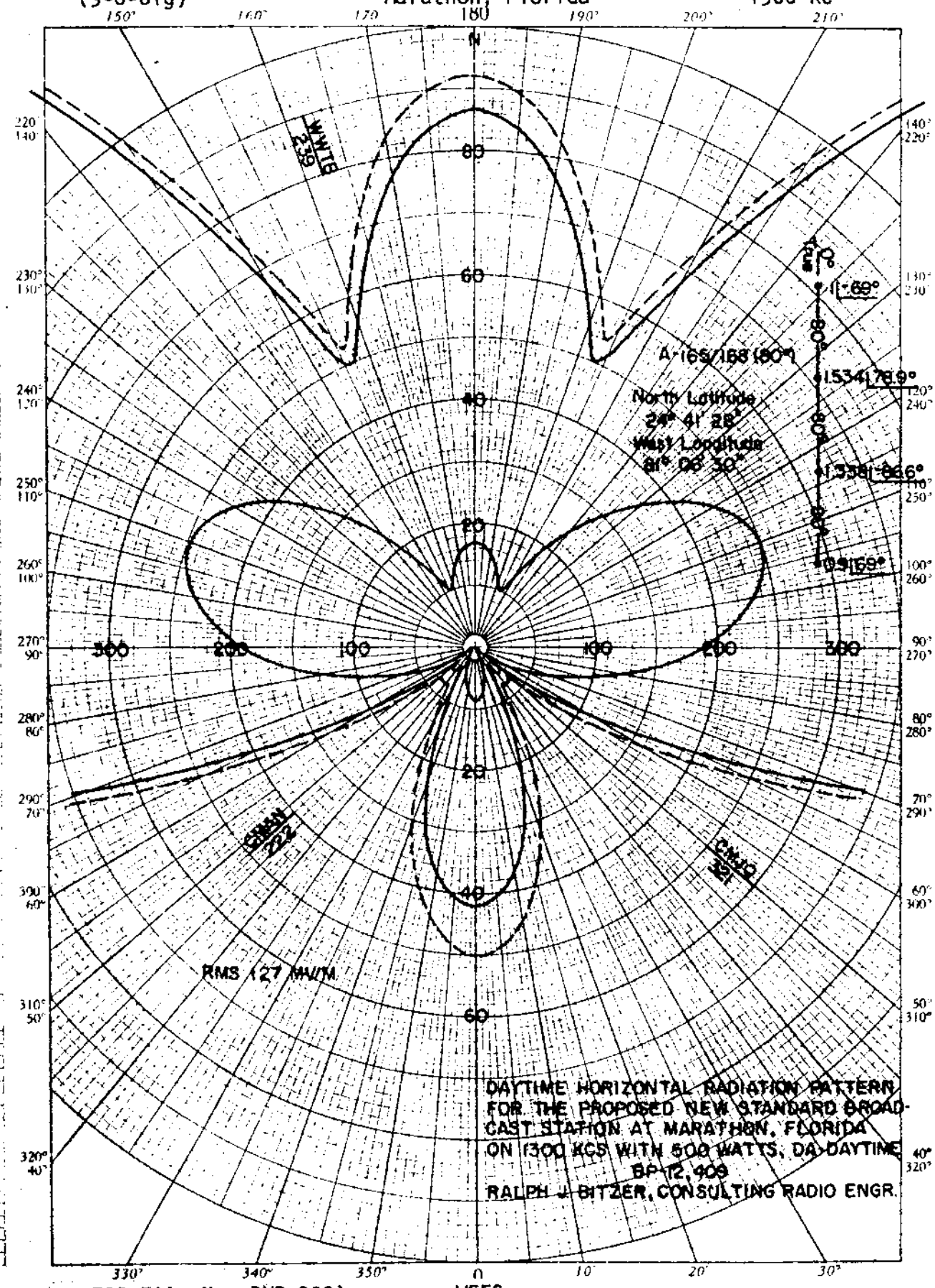
1300 kc

WFFG

PROPOSED DAY
(3-8-61g)

Station WFFG
Marathon, Florida

500w, DA-D,D
1300 KC



K&E POLAR CO-ORDINATE 359-31G

FCC File No. BMP-9321
Accepted 2-27-61

WFFG
Marathon, Florida

1300 KC

WHLT
1300 kHz

DIRECTIONAL ANTENNA DESCRIPTION SHEET

Station: WHLT

Main Studio: Huntington, Indiana

Frequency: 1300 kHz

Power: 0.5kw Day

Notification List No. 1785

Date: November 16, 1979 Class: III

GEOGRAPHICAL LOCATION OF THE CENTER OF THE ANTENNA SYSTEM:

North Latitude: 40° 52' 29"
West Longitude: 85° 28' 26"

ANTENNA CHARACTERISTICS

Authorized for Daytime operation. (DA-D)
Number of elements: 2
Type of elements: Series excited, uniform cross-section, guyed, vertical steel towers.

TOWER:	S(#1)	N(#2)
HEIGHT ABOVE INSULATORS:	150'	150' (71°)
PHASING:	0°	-138°
FIELD RATIO:	1.0	0.6

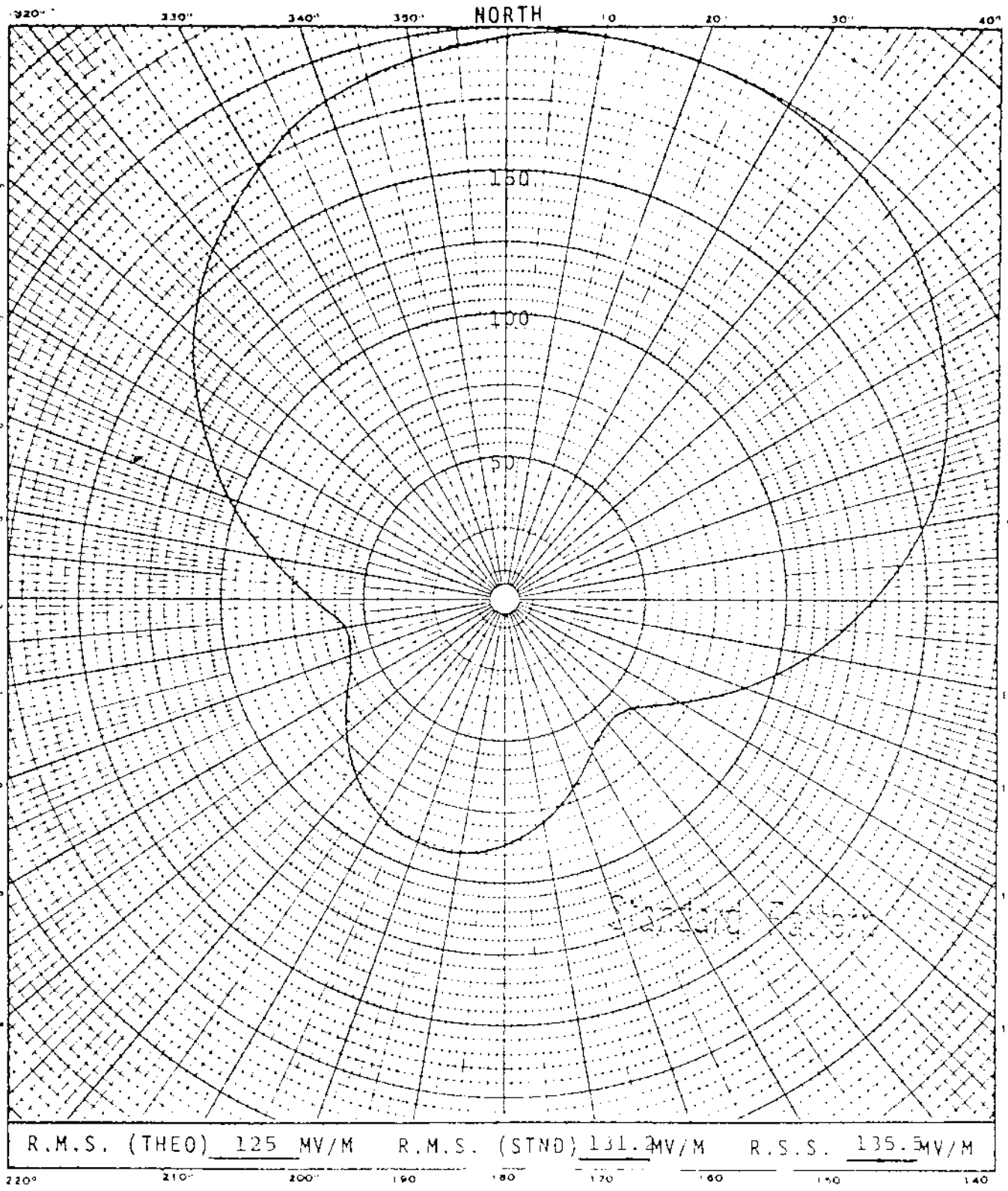
SPACING AND ORIENTATION: Adjacent towers in a row are spaced 168.2' (80°) on a line bearing 17° true.

GROUND SYSTEM: 120 - 150' equally spaced copper radials about each tower.

PREDICTED EFFECTIVE FIELDS AT RATED POWER:

	THEORETICAL RMS	THEORETICAL RSS	STANDARD RMS
Day	125 mv/m	135.5 mv/m	131.2 mv/m

WHLT
1330 kHz



R.M.S. (THEO) 125 MV/M R.M.S. (STND) 131.3 MV/M R.S.S. 135.5 MV/M

PATTERN PARAMETERS

17° True

#2 0.60/-138°

80°

#1 1.00/ 0°

G = 71.3°

RADIO STATION W H L T

☐ MEASURED ☒ PROPOSED

FREQ 1330 (KHZ) POWER 0.5 (KW) ☐ DA-D

N LAT 40 ° 52 ' 28 " ☐ DA-N

W LONG 85 ° 28 ' 20 " ☐ N-D

LOCATION Huntington, Indiana

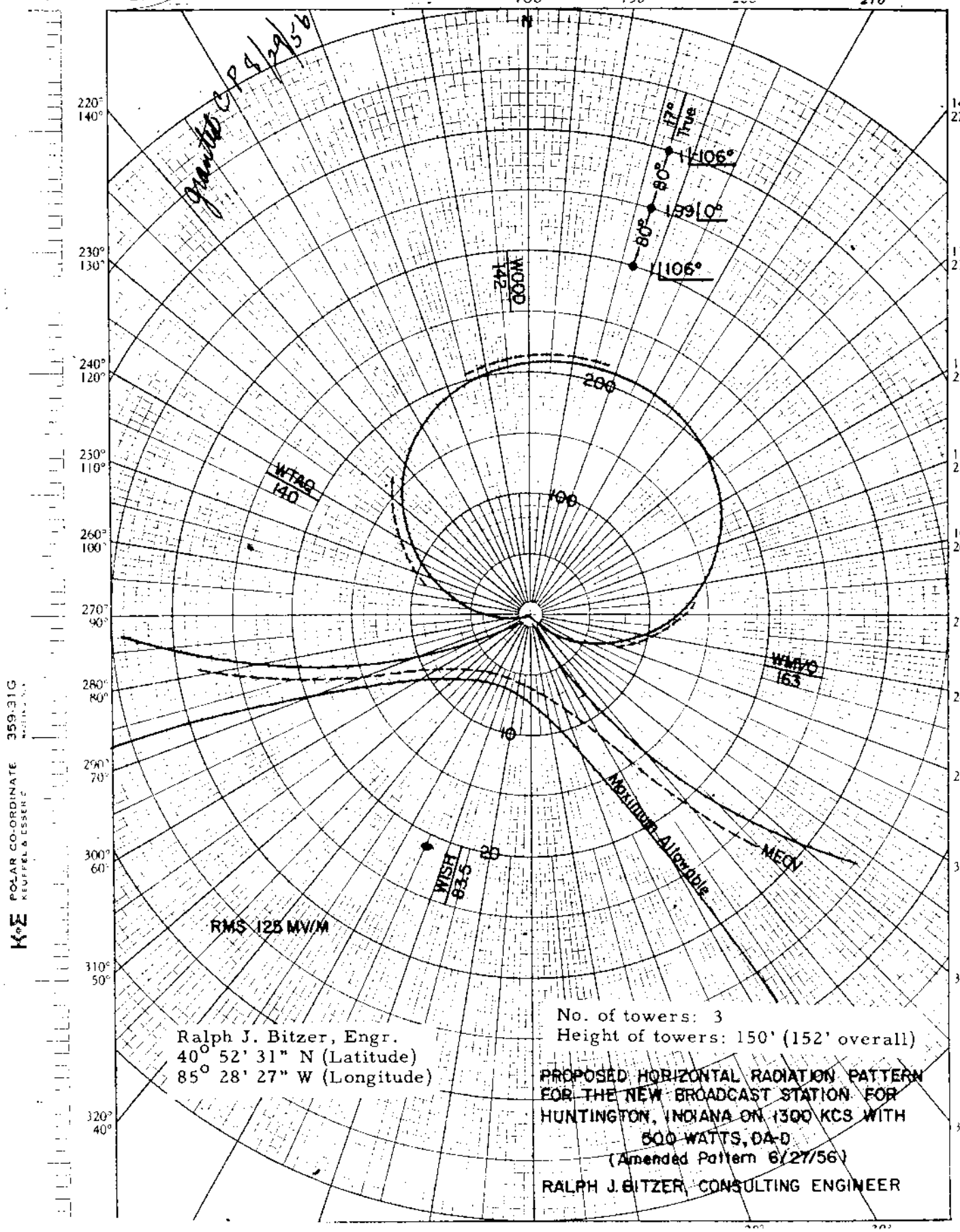
DATE December 1977

ROBERT A JONES
CONSULTING ENGINEERS
LA GRANGE, ILLINOIS

PROPOSED
DAY (7-19-56g)

HUNTINGTON VALLEY B/C CO.
HUNGTINGTON, INDIANA

HUNTINGTON, IND
500 W
DA-D, D
WHLT
1300 KC



Ralph J. Bitzer, Engr.
40° 52' 31" N (Latitude)
85° 28' 27" W (Longitude)

No. of towers: 3
Height of towers: 150' (152' overall)

PROPOSED HORIZONTAL RADIATION PATTERN FOR THE NEW BROADCAST STATION FOR HUNTINGTON, INDIANA ON 1300 KCS WITH 500 WATTS, DA-D
(Amended Pattern 6/27/56)
RALPH J. BITZER, CONSULTING ENGINEER

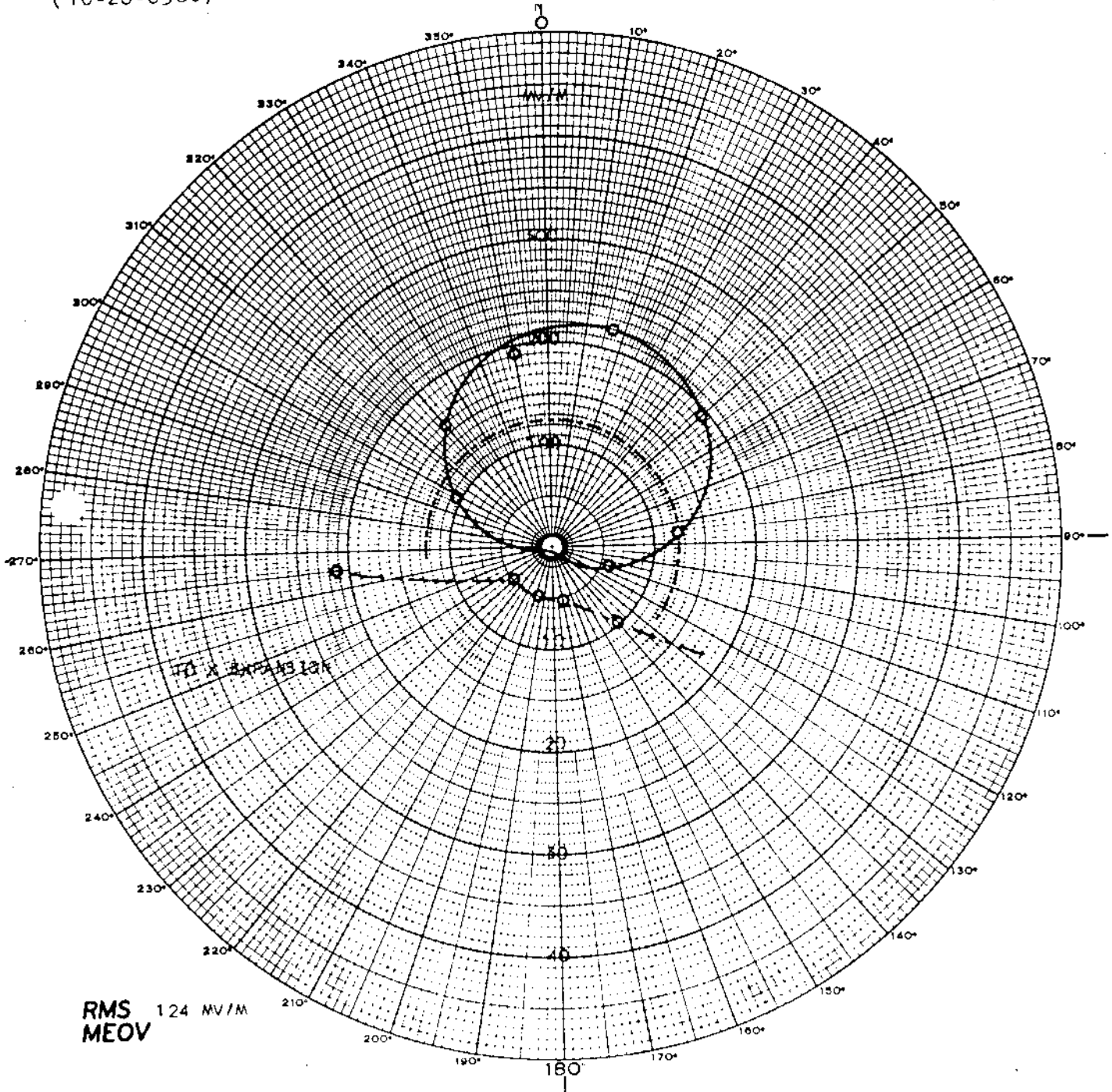
FCC File No. BP-10,080 (Amended) Accepted 7-11-56 Huntington Valley B/C Co. 1300 KC
Huntington, Indiana

WHLT

Measured Day
(10-26-65ct)

Station WHLT
Huntington, Indiana

500w,DA-D,D
1300 kc



TOWER PLACEMENT SKETCH	PATTERN PARAMETERS	FIGURE 2	STATION DATA
S = 80° 17° T. G = 71° #1 S #2 S #3	TOWER / ELECTRICAL HEIGHT / SPACING / PHASING / FIELD RATIO 1: 71° — 80° — 112° — .52H 2: 71° — 80° — 0° — 1.00 3: 71° — 80° — -155° — .505 4–10: DAYTIME OPERATION ☒ NIGHTTIME OPERATION ☐	WHLT MEASURED DA-D RADIATION PATTERN SKELETON PROOF 8 - 65 θ° 0°	CALL WHLT FREQ 1300 Kc/S POWER 0.5 Kw TYPE DA-D TIME DAYTIME LAT. 40-52-31 LONG. 85-28-27 E.H.MUNN,JR. RADIO ENGINEER COLDWATER, MICH.

FCC File No. BZ-5733
Accepted 10-20-65

Station WHLT
Huntington, Indiana

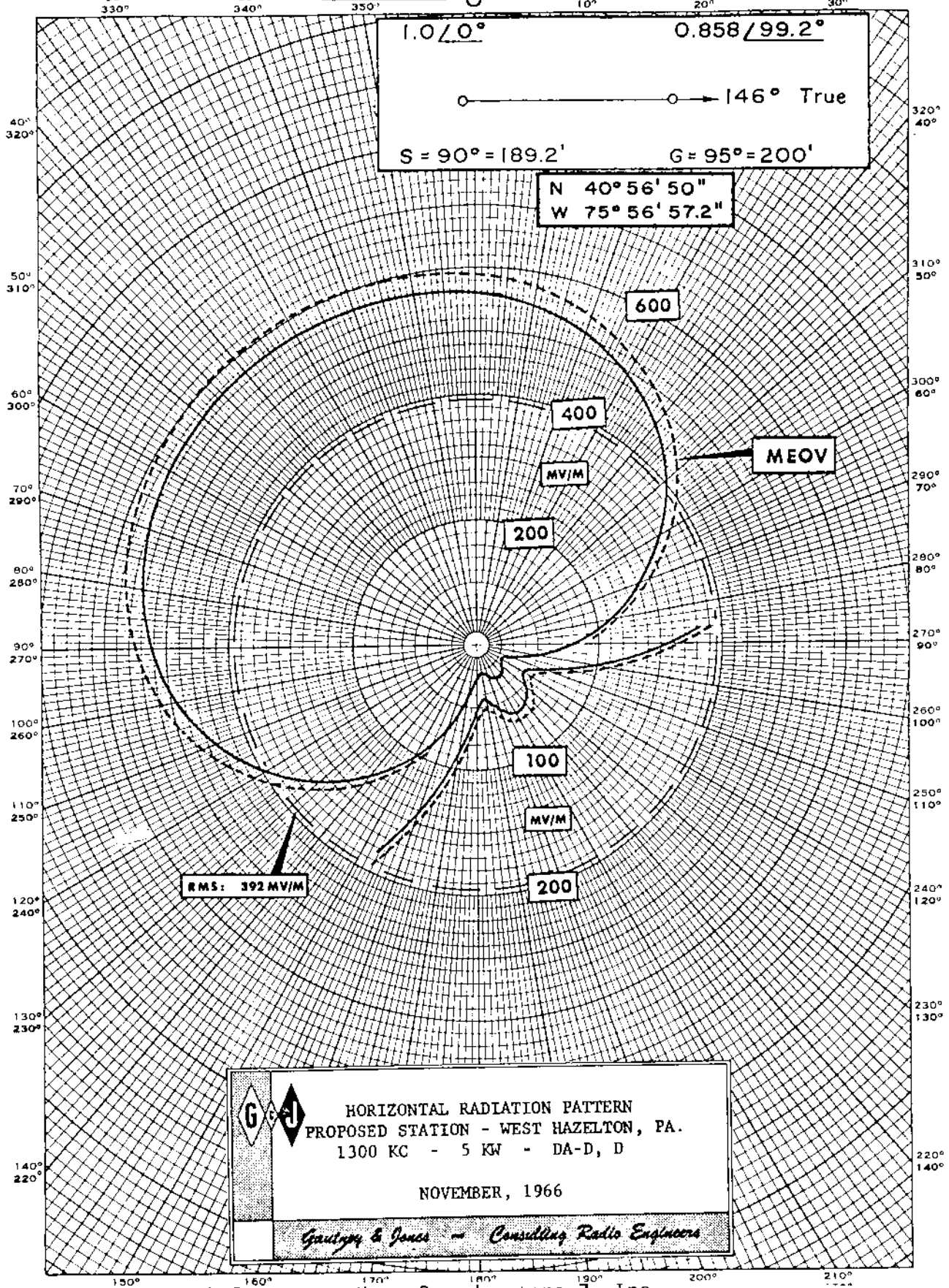
1300 kc

WHZN

Proposed Day
(1-30-67ct)

New; Broadcasters 7, Inc.
West Hazelton, Pennsylvania

5kw,DA-D,D
1300 kc



EUGENE DIETZGEN CO. MADE IN U. S. A.

NO. 340-P DIETZGEN GRAPH PAPER POLAR CO-ORDINATE

FCC File No. BP-17498
Accepted 1-10-67

New; Broadcasters 7, Inc.
West Hazelton, Pennsylvania

1300 kc

WIBR

DIRECTIONAL ANTENNA DESCRIPTION SHEET

Station: WIBR — Main Studio: Baton Rouge, Louisiana

Frequency: 1300 kHz — Power: 1 kW Night 5 kW Day

Notification List No. 1737 — Date: June 9, 1977 — Class: III

GEOGRAPHICAL LOCATION OF THE CENTER OF THE ANTENNA SYSTEM:
North Latitude: 30° 28' 25"
West Longitude: 91° 13' 34"

ANTENNA CHARACTERISTICS

Authorized for Daytime and Nighttime operation. (DA-2)
Number of elements: 4
Type of elements: Series excited, uniform cross-section, guyed, vertical steel towers.

TOWER:	N(#3)	C(#4)	SW(#1)	S(#2)
HEIGHT ABOVE INSULATORS:	196'	196'	196'	196' (93.2°)
NIGHT PHASING:	+78°	-	0°	-95°
NIGHT FIELD RATIO:	1.0	-	1.82	1.0
DAY PHASING:	+229°	+114.5°	0°	-
DAY FIELD RATIO:	0.372	1.181	1	-

SPACING AND ORIENTATION: Daytime, adjacent towers #3, #4 and #1 are spaced 186.5' (88.75°) on a line bearing 334.7° true. Nighttime, from tower #1, tower #2 is spaced 396.5' (188.5°) on a line bearing 146° true and tower #3 is spaced 373' (177.5°) on a line bearing 334.7° true.

GROUND SYSTEM: 120-210' equally spaced copper radials plus 120-50' interspaced radials about each tower. Radials are shortened and bonded to transverse straps along intersections between towers. Centers of system are bonded together.

PREDICTED EFFECTIVE FIELDS AT RATED POWER:

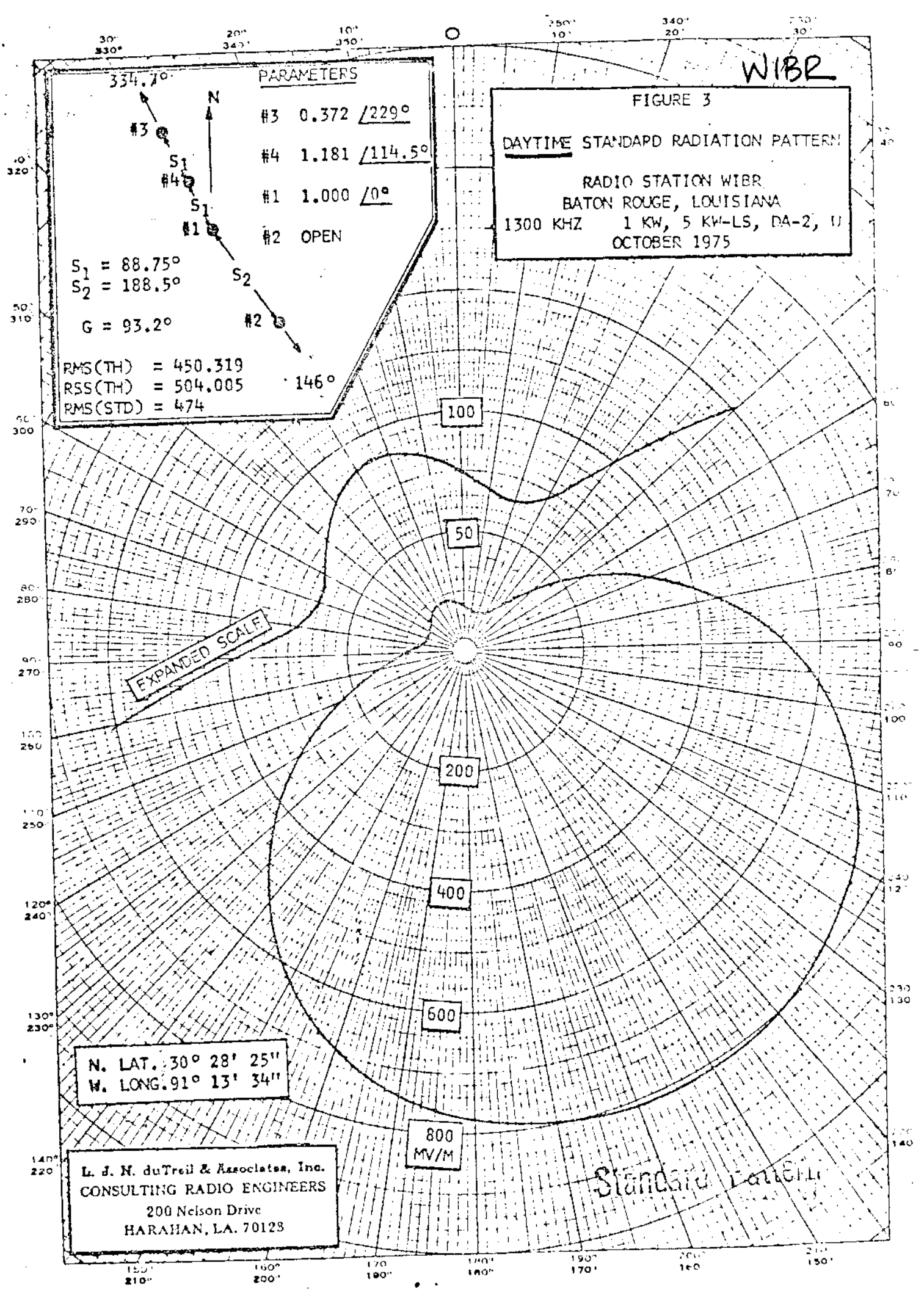
	THEORETICAL		STANDARD
	RMS	RSS	RMS
Day	450.319 mv/m	504.005 mv/m	474 mv/m
Night	183.5 mv/m	- mv/m	- mv/m

(Cont'd)

WIBR

Note: Please retain the Nighttime horizontal directional antenna radiation pattern notified for Station WIBR in United States Change List Number 1384 dated August 5, 1970 and the nighttime vertical angle directional antenna radiation patterns notified for Station WIBR in U.S. Change List No. 371 dated August 17, 1950 and attach to this Revised Description Sheet and Daytime pattern. This notification concerns only a change in the Daytime operation of the station with Nighttime operation continued as previously notified.

CTR NO 30971A4

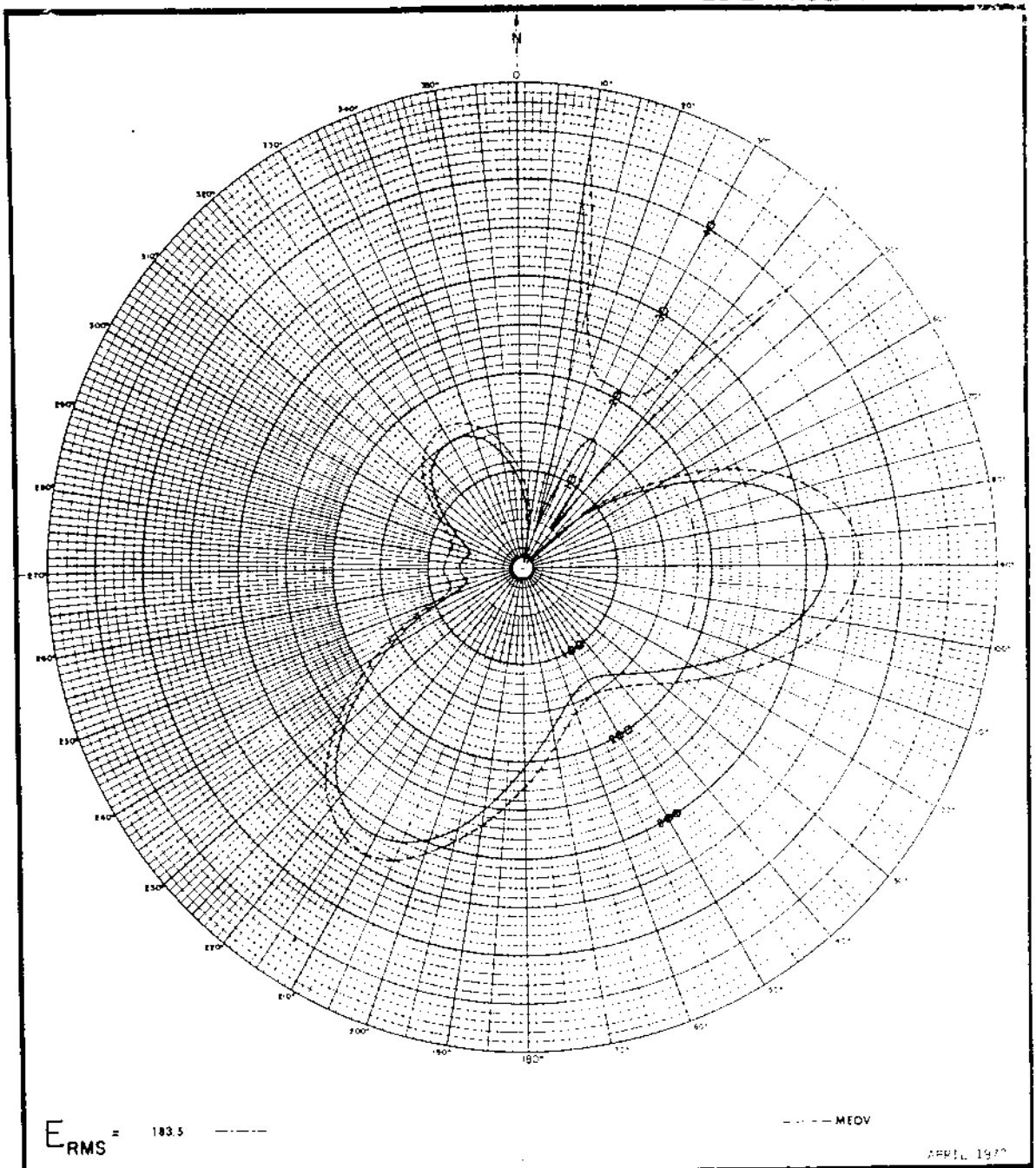

WIBR
FIGURE 3
DAYTIME STANDARD RADIATION PATTERN
RADIO STATION WIBR
BATON ROUGE, LOUISIANA
1300 KHZ 1 KW, 5 KW-LS, DA-2, U
OCTOBER 1975
PARAMETERS
#3 0.372 /229°
#4 1.181 /114.5°
#1 1.000 /0°
#2 OPEN
334.7°
N
#3
#4
#1
#2
S1
S1
S2
S1 = 88.75°
S2 = 188.5°
G = 93.2°
RMS(TH) = 450.319
RSS(TH) = 504.005
RMS(STD) = 474
146°
100
50
200
400
600
800 MV/M
EXPANDED SCALE
N. LAT. 30° 28' 25"
W. LONG. 91° 13' 34"
L. J. N. duTreil & Associates, Inc.
CONSULTING RADIO ENGINEERS
200 Nelson Drive
HARAHAN, LA. 70123
Standard Pattern

Proposed Night
(8-26-70ct)

Station WIBR
Baton Rouge, Louisiana

WIBR
1kw, DA-2, U
1300 kc

SEE REVERSE SIDE



E_{RMS} = 183.5 ——

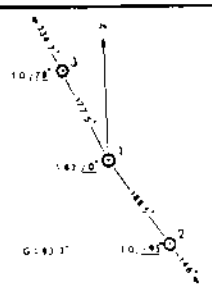
– – – – MEDV

APRIL 197?

LATITUDE: 30° 28' 25"

LONGITUDE: 91° 13' 34"

ANTENNA PARAMETERS



L. J. N. du Treil & Associates, Inc
CONSULTING RADIO ENGINEERS
201 Neiman Drive
NEW ORLEANS, LA 70123

AMENDED
FIGURE 3
PROPOSED NIGHTTIME PATTERN

RADIO STATION WIBR
BATON ROUGE, LOUISIANA

1300 KHZ 1 KW, DA-2, U

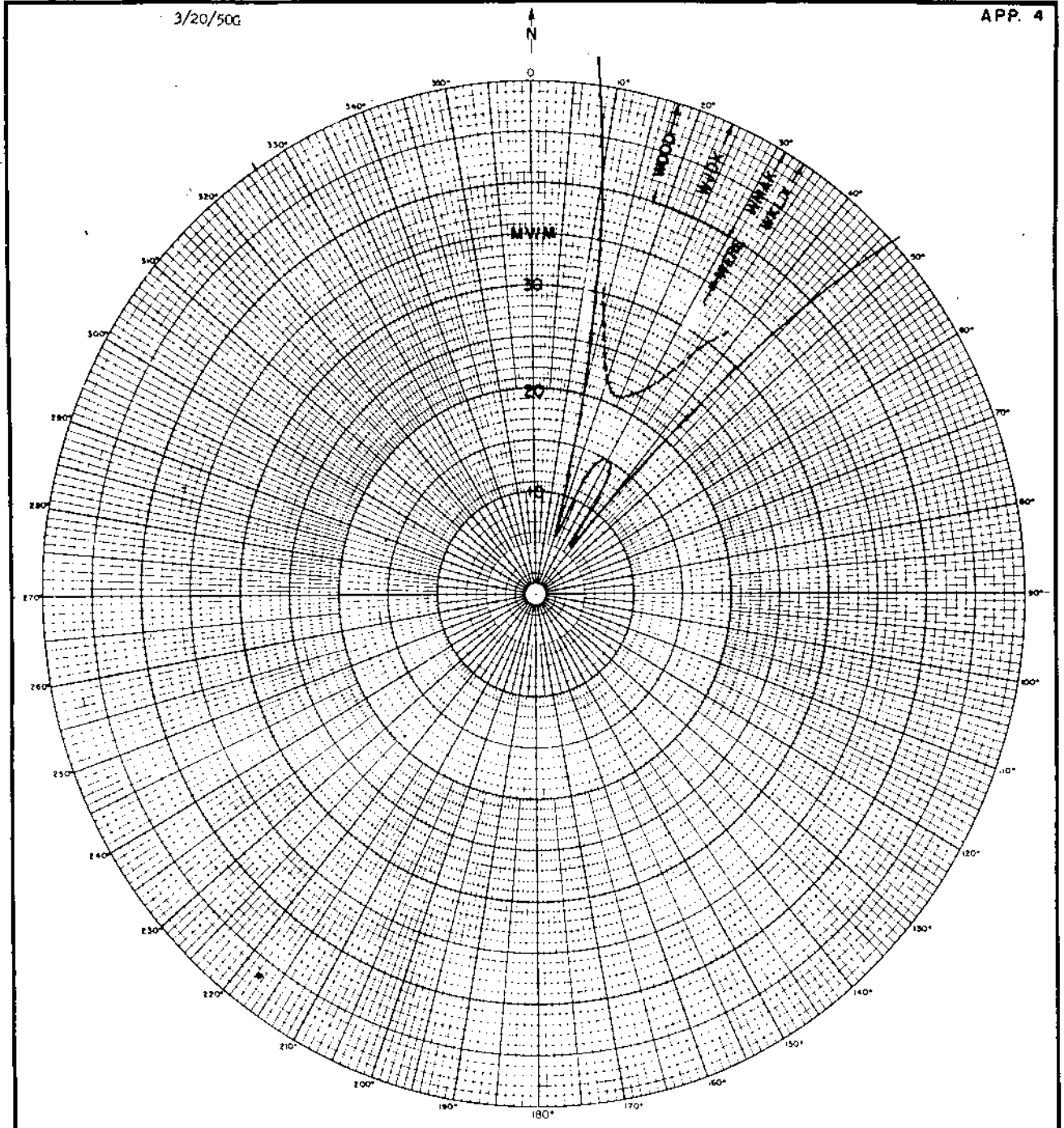
FCC File No. BP-18811
Accepted 7-31-70

Station WIBR
Baton Rouge, Louisiana

1300 kc

3/20/50G

APP. 4



ANTENNA PARAMETERS

Glenn D. Gillett And Associates
Consulting Radio Engineers
National Press Building
Washington, D.C.

Tower No.	Electrical Height G°	True Tower Orientation θ°	Spacing s°	Phasing ψ°	Horizontal Field mv/m E	Field Ratio F	Elev. Angle δ°	Elevation Field mv/m E_δ
0							0	
1							10	
2							20	
3							30	
4							40	
5							50	
6							60	
7							70	
8							80	
9							RMS/Field RMS	
							Ant Gain g°	

WIBR
BATON ROUGE, LA.
1 KW DA-2 - 1300 KC

NIGHT TIME NULL DETAILS

Latitude 30° 28' 06"
Longitude 91° 11' 03"

Supervision 481230
Pattern No. 500216

WIMG
1300 kHz

DIRECTIONAL ANTENNA DESCRIPTION SHEET

Station: W I M G — Main Studio: Ewing, New Jersey

Frequency: 1300 kHz — Power: 2.5 kW Night 5 kW Day

Notification List No. 1784 — Date: November 9, 1979 Class: III

GEOGRAPHICAL LOCATION OF THE CENTER OF THE ANTENNA SYSTEM: North Latitude: 40° 17' 16"
West Longitude: 74° 52' 23"

ANTENNA CHARACTERISTICS

Authorized for Daytime and Nighttime operation. (DA-2)
Number of elements: 4
Type of elements: Series excited, uniform cross-section, guyed vertical steel tower, top-loaded with 150' (71.32°)* sections of top most guy wires.

TOWER:	NE(#1)	SE(#2)	NW(#3)	SW(#4)
HEIGHT ABOVE INSULATORS:	300'	300'	300'	300' (142.68°)*
NIGHT PHASING:	0°	79°	164°	243°
NIGHT FIELD RATIO:	1.00	0.90	0.90	0.81
DAY PHASING:	0°	10°	98°	108°
DAY FIELD RATIO:	1.00	0.90	0.95	0.855

SPACING AND ORIENTATION: The towers are located at the vertices of a parallelogram the long sides of which are 387.5' (184°) in length on a line bearing 232.5° true. The short sides are 189.5 (90°) in length on a line bearing 312.5° true.

GROUND SYSTEM: 120-190' equally spaced copper radials plus a 48' x 48' square ground screen about each tower. Radials are shortened and bonded to transverse straps along intersections between towers.

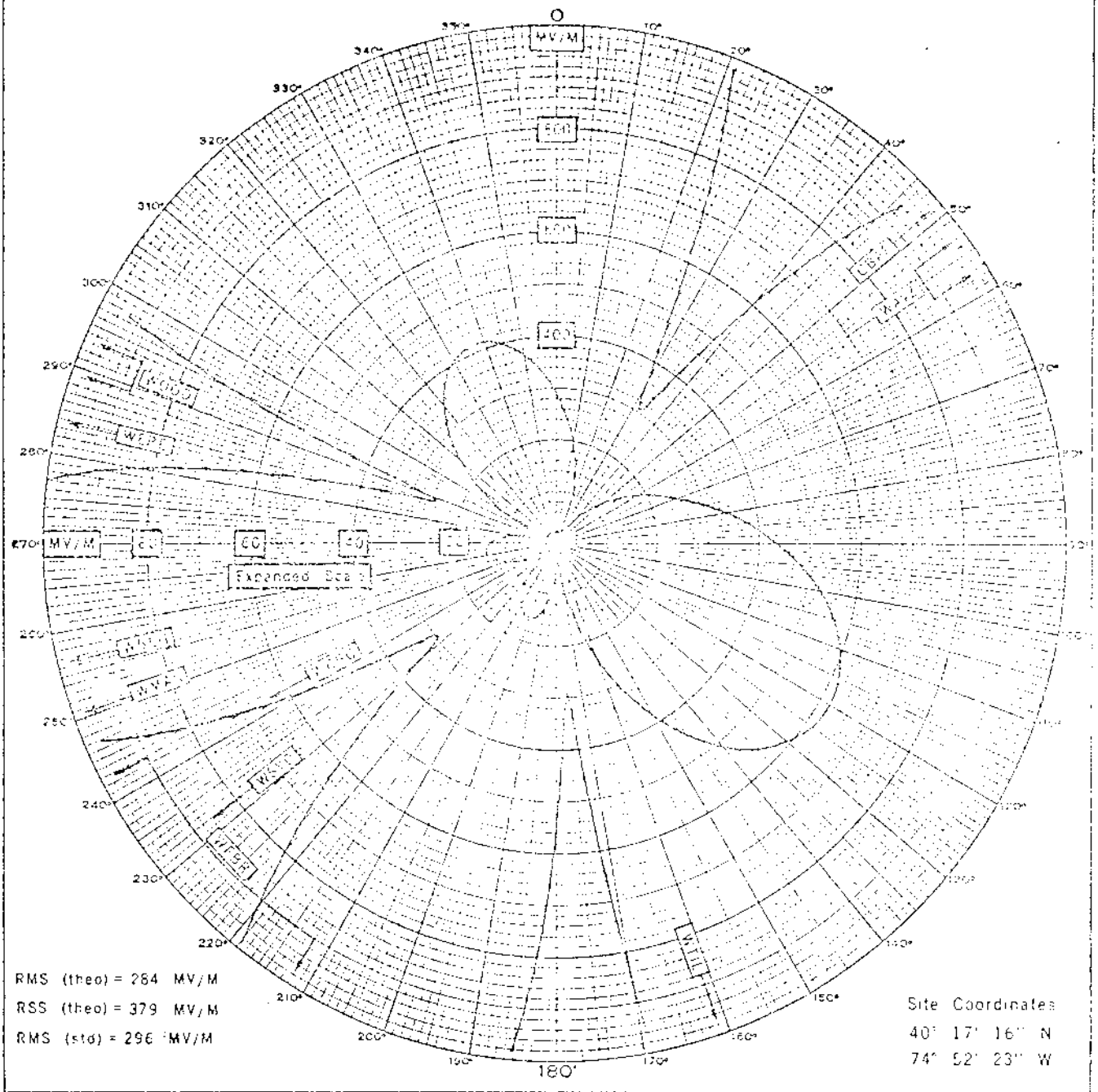
PREDICTED EFFECTIVE FIELDS AT RATED POWER:

	THEORETICAL RMS	THEORETICAL RSS	STANDARD RMS
Day	466.55 mV/m		
Night	234 mV/m	379 mV/m	296 mV/m

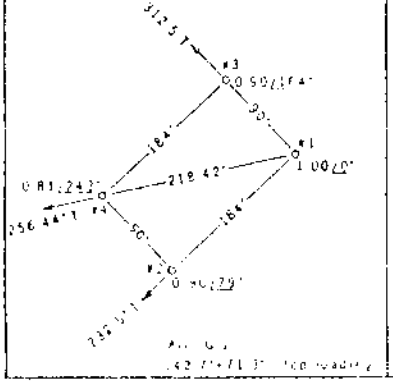
WIMG
1300 KHz

Note: Please retain the Daytime directional antenna radiation pattern notified for Station WAAT in United States Change List Number 1126 dated August 25, 1965 and attached to this Revised Description Sheet and Nighttime pattern. This notification concerns only a change in the Nighttime operation of the station with Daytime operation continued as previously notified.

WIMG
1300KHz
Figure 2 Revised
Sheet 1 of 13 DA-N



PROPOSED NIGHTTIME HORIZONTAL PLANE STANDARD RADIATION PATTERN



PROGRESSIVE COMMUNICATIONS, INC.

EWING, NEW JERSEY

Jules Cohen & Associates
Consulting Electronics Engineers

WTNJ

1300 KHZ

2.5 KW, 5 KW LS U DA 2

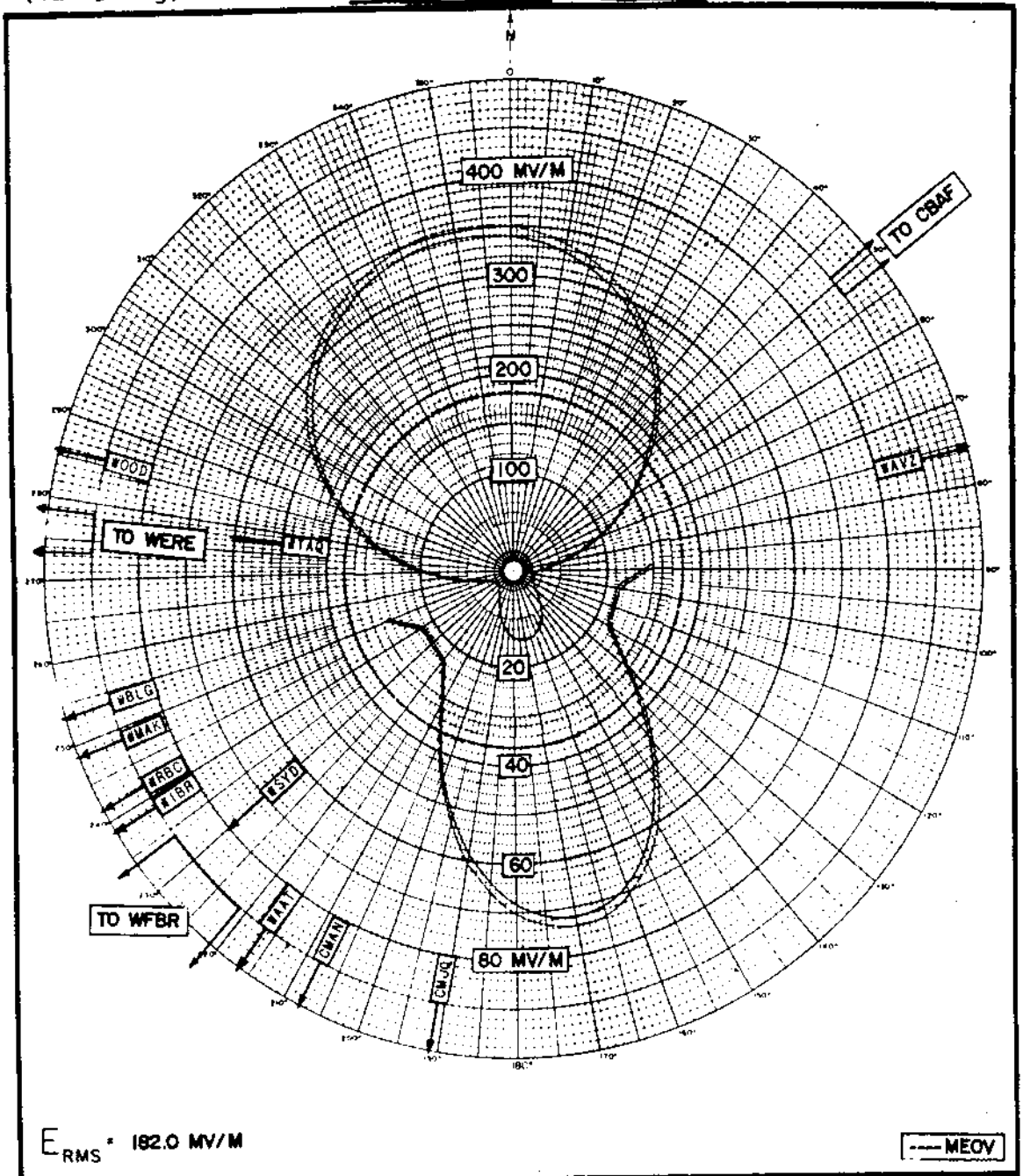
Pattern 760530FN

NOVEMBER 1978

WKQW

PROPOSED NIGHT
(12-15-60g)

New; Rockland Bcstrs. 500w, 1kw-LS, DA-2, U
Spring Valley, New York 1300 KC



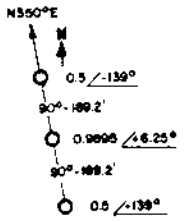
E_{RMS} = 182.0 MV/M

---MEOV

LATITUDE N 41° 05' 47"
LONGITUDE W 74° 00' 08"

JOHN H MULLANEY
CONSULTING RADIO ENGINEERS
WASHINGTON, D. C.

ANTENNA PARAMETERS



G=200'(86°)

FIGURE 4A

PROPOSED
NIGHTTIME DIRECTIONAL
HORIZONTAL PATTERN

ROCKLAND BROADCASTERS
SPRING VALLEY, NEW YORK

1300 KC 1/0.5KW-LS, DA-2, U

FCC File No. BP-14461
Accepted 11-25-60

Rockland Broadcasters
Spring Valley, New York 1300 KC

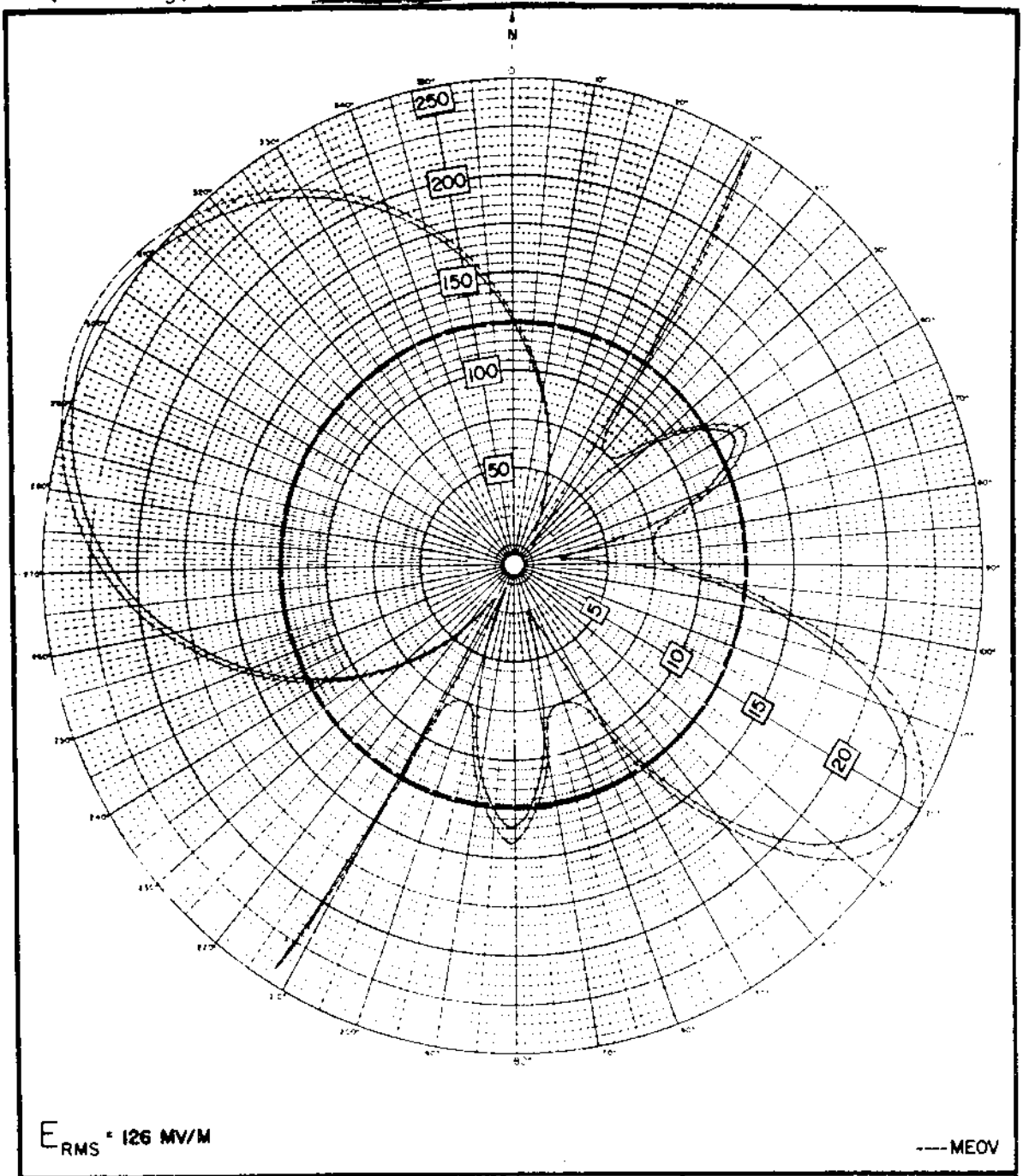
WKQW

PROPOSED DAY (6-14-61g)

New; Rockland Bcstrs. Spring Valley, New York

500w, DA-2,U 1300 KC

2-12-64 Granted CP for new station.



E_{RMS} = 126 MV/M

----MEOV

LATITUDE N 41° 05' 48"

LONGITUDE W 74° 00' 17.6"

JOHN H. MULLANEY AND ASSOCIATES

WASHINGTON, D. C.

ANTENNA PARAMETERS

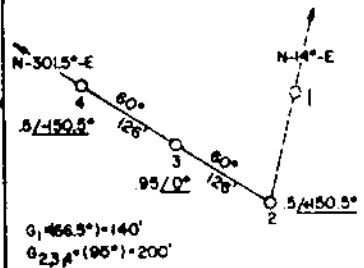


FIGURE 3A

PROPOSED DAYTIME DIRECTIONAL HORIZONTAL PATTERN

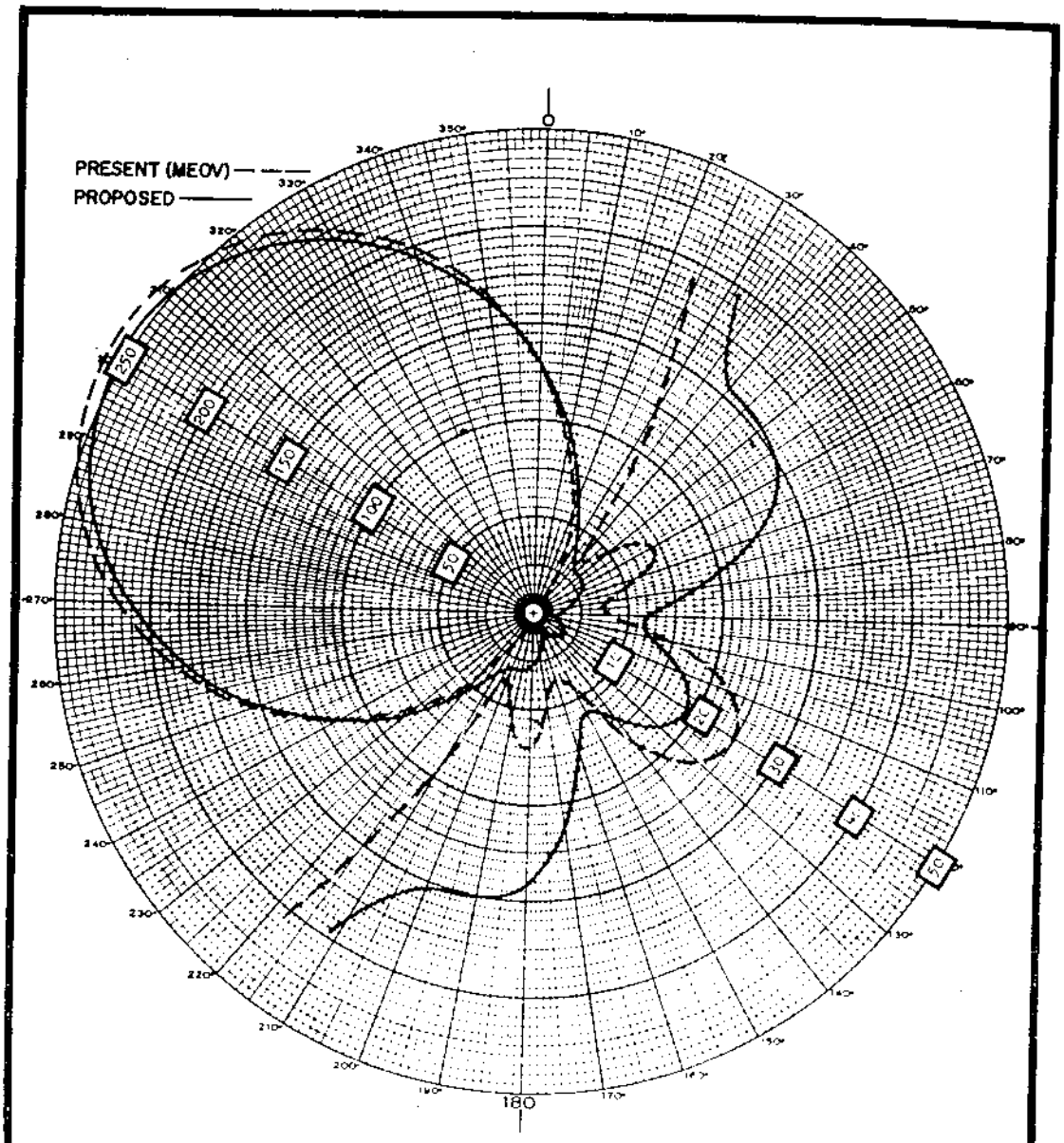
ROCKLAND BROADCASTERS
SPRING VALLEY, NEW YORK

1300 KC 0.5 KW, DA-2, U

FCC File No. BP-14461
Accepted 5-11-61 (Amended)

Rockland Broadcasters
Spring Valley, New York 1300 KC

MCP 3-3-66
CHG DA



E_{RMS} = 127 MV/M (BY ADJUSTMENT)

LATITUDE: 41° 05' 28"
LONGITUDE: 74° 00' 17.6"

JOHN H. MULLANEY AND ASSOCIATES
A DIVISION OF MULTRONICS, INC

ANTENNA PARAMETERS

N-30L5°-E
#3 0.6 |-150°
#2 0.9864 |-23.93°
#1 0.4 |+150°
S

S= 60°
G= 95°

FIGURE 4

PROPOSED DIRECTIONAL PATTERN

RADIO STATION WRRC
SPRING VALLEY, N.Y.

1300 KC 0.5 KW, DA-D

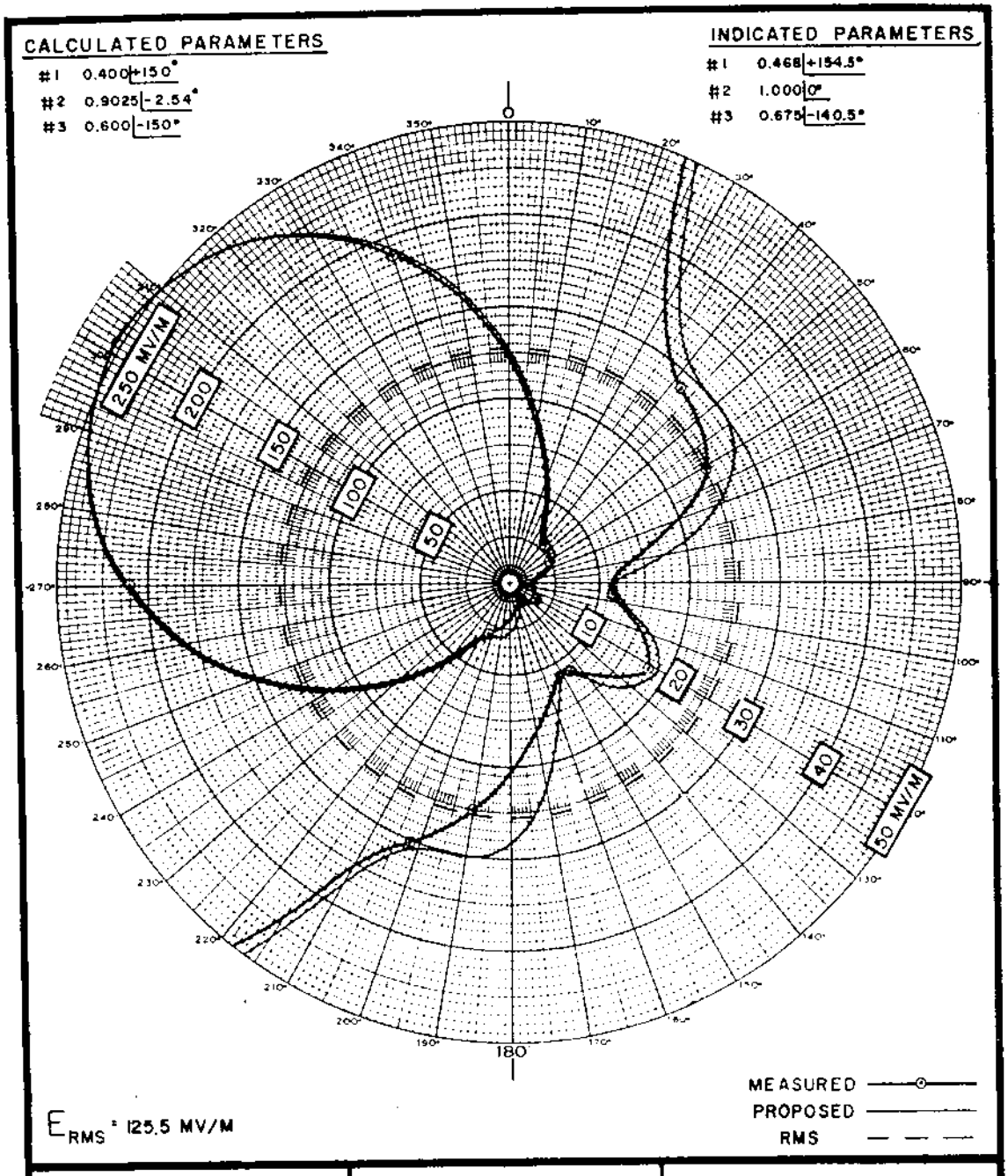
WKQW ~~WRRC~~

Measured Day
(10-28-66ct)

Station WRRC
Spring Valley, New York

500w, DA-D, D
1300 kc

granted
license
3-12-67
w/ new AM
STATION.



LATITUDE 41° 05' 28"
LONGITUDE 74° 00' 17.6"

JOHN H. MULLANEY
AND
ASSOCIATES
A DIVISION OF MULTRONICS, INC

ANTENNA PARAMETERS

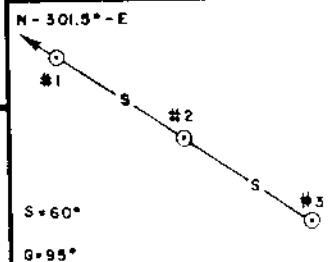


FIGURE 13

MEASURED
DIRECTIONAL PATTERN

RADIO STATION WRRC
SPRING VALLEY, NEW YORK

1300 KC 0.5 KW, DA-D, D.

FCC File No. BL-11167
Accepted 10-13-66 Amended

Station WRRC
Spring Valley, New York

1300kc

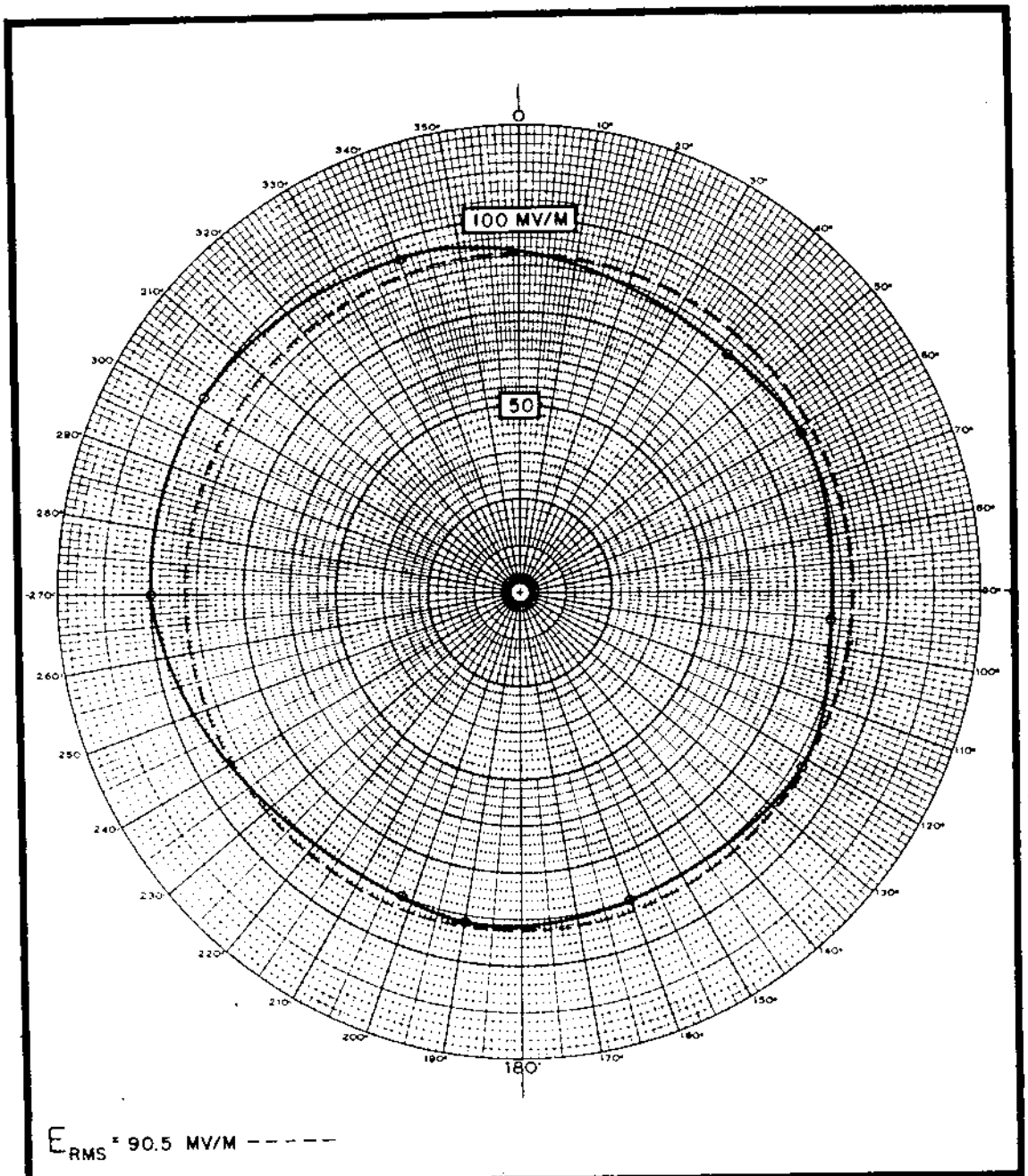
WKQW ~~WRRC~~

Measured Non-DA
(10-28-66ct)

Station WRRC
Spring Valley, New York

500w, DA-D, D
1300 kc

Granted
License
3-14-67
Conv. view
AM STATION.



E_{RMS} = 90.5 MV/M - - - - -

LATITUDE: 41° 05' 28" LONGITUDE: 74° 00' 17.6"	ANTENNA PARAMETERS TOWER # 2 (250 W)	FIGURE 12 MEASURED NONDIRECTIONAL PATTERN RADIO STATION WRRC SPRING VALLEY, NEW YORK 1300 KC 0.5 KW, DA-D, D
JOHN H. MULLANEY AND ASSOCIATES A DIVISION OF MULTRONICS INC		

FCC File No. BL-11167
Accepted 10-13-66 Amended

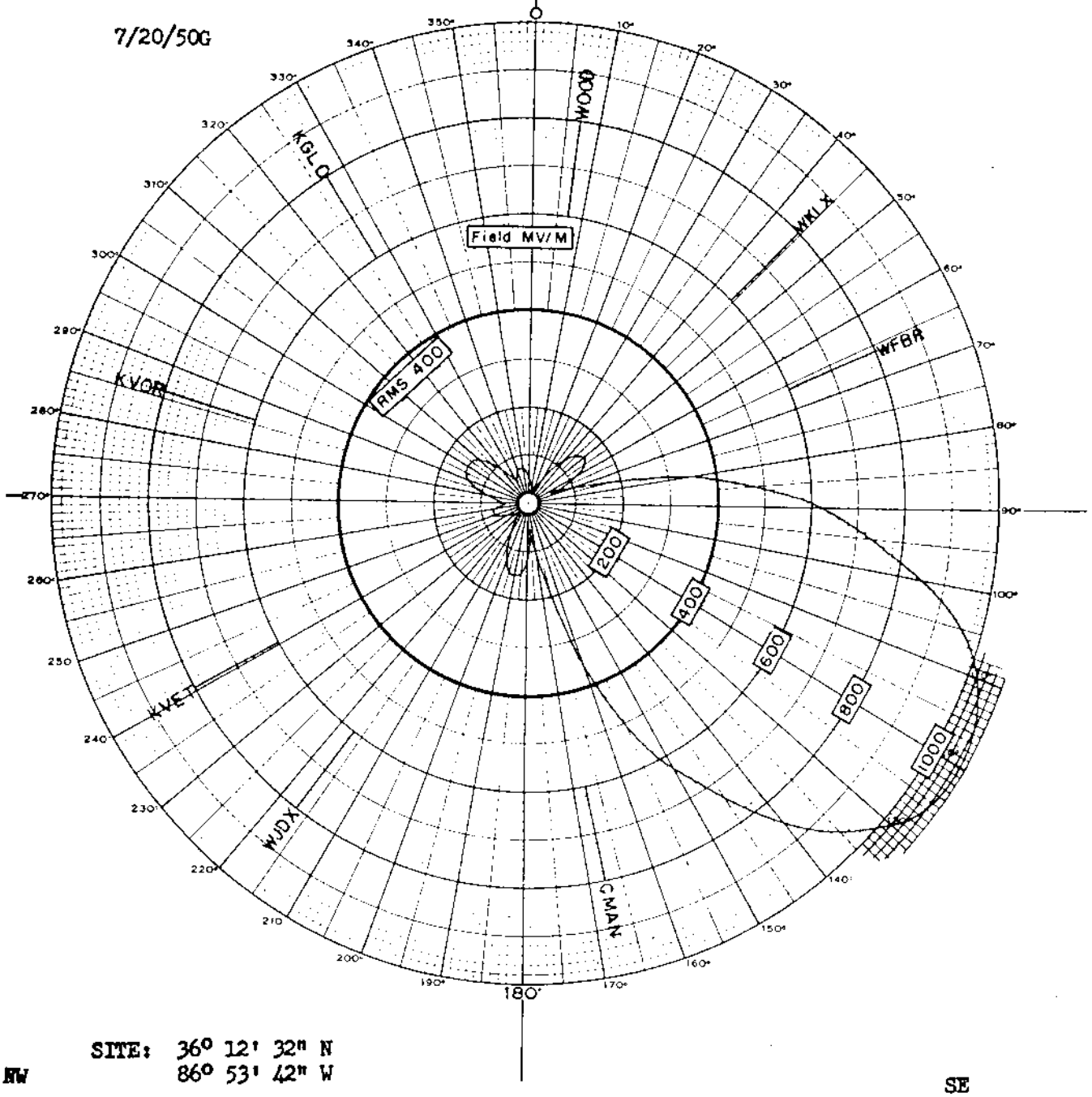
Station WRRC
Spring Valley, New York

1300 kc

WMAK

PROPOSED NIGHT&~~DAY~~ WMAK, NASHVILLE, TENN. 7-19-50 5kw, DA-1 1300 kc

7/20/50G



SITE: 36° 12' 32" N
86° 53' 42" W

NW SE

.79/0° - 90° - 2.52/-159.2° - 90° - 3.54/37.7° - 90° - 2.91/-125.9° - 90° - 1.27/71.6°

Orientation - 120° T Height - 98°

STATION WMAK NASHVILLE, TENNESSEE	Figure 3 Series C 500707
	1300 KC 5000 WATTS
DIRECTIONAL ANTENNA PATTERN	McINTOSH & INGLIS *Consulting Radio Engineers* Washington, D.C.

PROPOSED WMAK, NASHVILLE, TENN.
NIGHTTIME NULLS 7-19-50 5kw, DA-1 1300 kc

7/20/50G

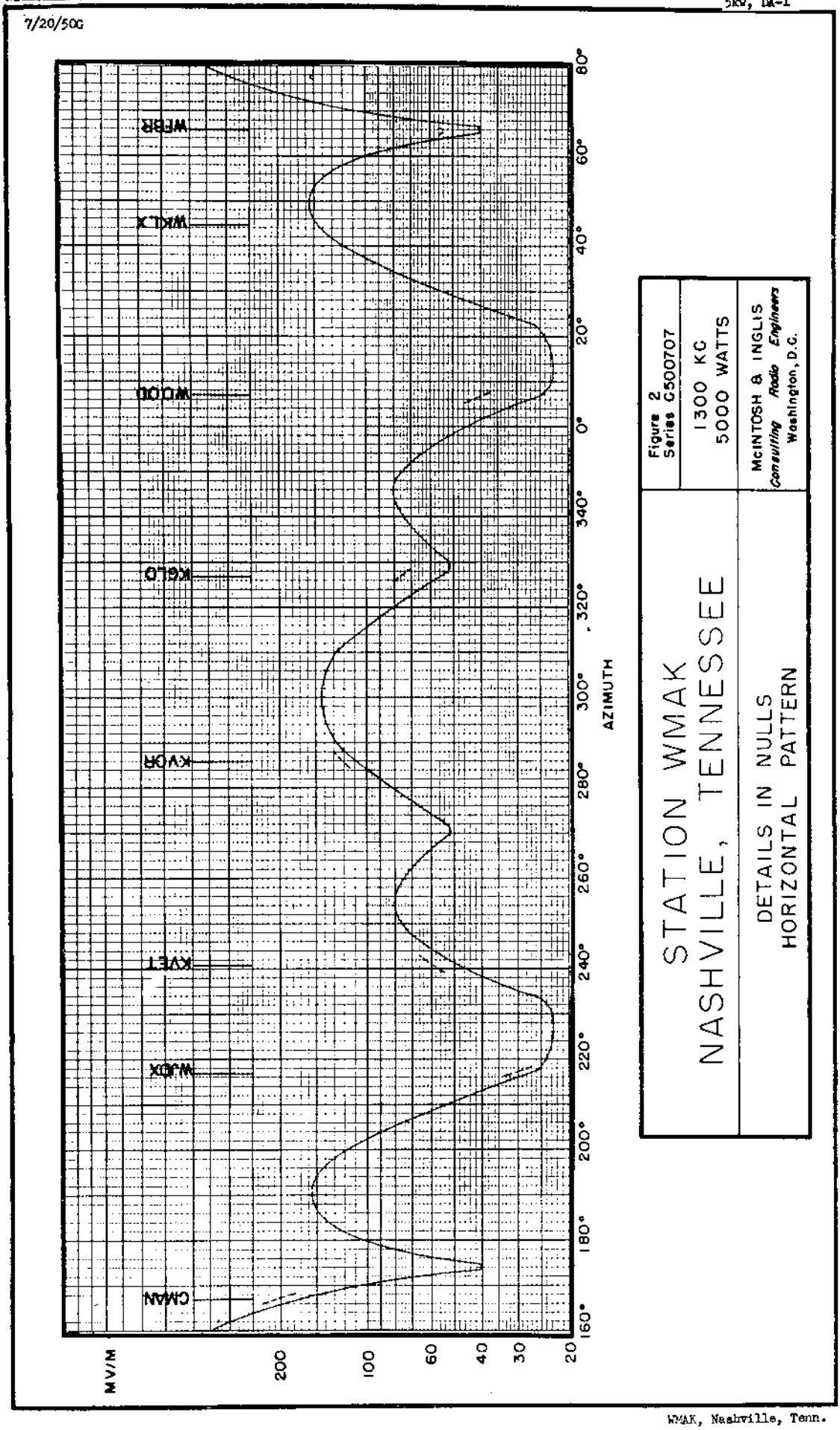


Figure 2
Series G500707

1300 KC
5000 WATTS

McINTOSH & INGLIS
Consulting Radio Engineers
Washington, D.C.

STATION WMAK
NASHVILLE, TENNESSEE

DETAILS IN NULLS
HORIZONTAL PATTERN

WMAK

Measured Night
(10-28-67ct)

Station WMAK
Nashville, Tennessee

5kw,DA-N,U
1300 kc

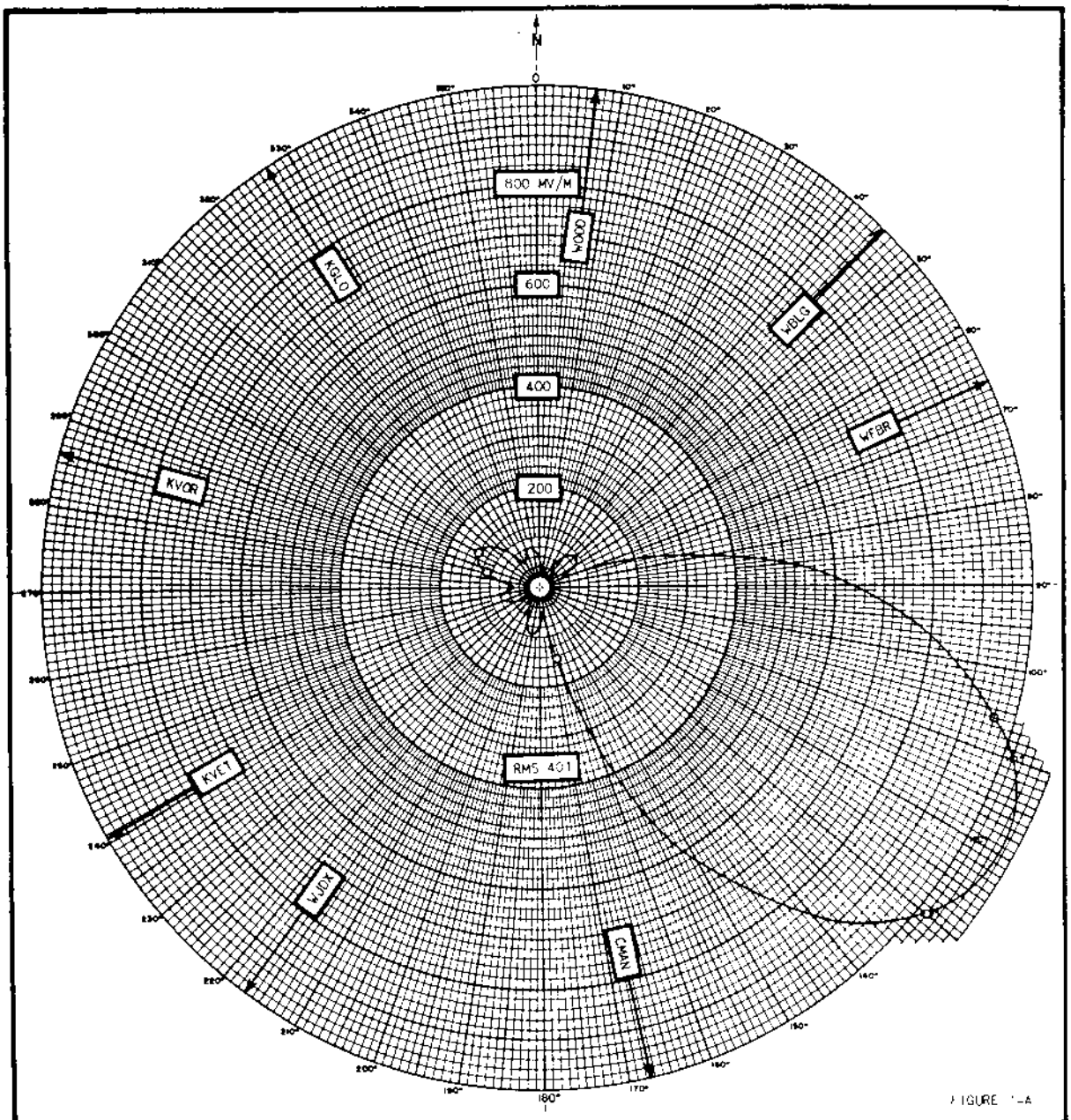
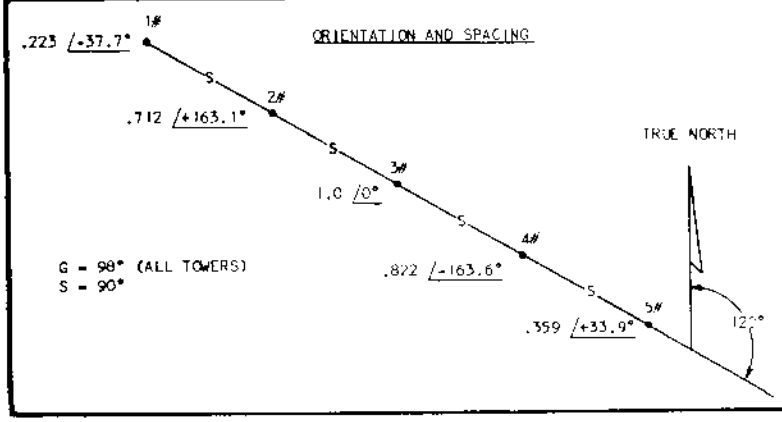


FIGURE 1-A

HORIZONTAL RADIATION PATTERN



APPLICANT	MEDALLION PICTURES CORP. (WMAK)
LOCATION	NASHVILLE, TENNESSEE
FREQUENCY	1300 KC/S
POWER	5 KW-D(DA-N)
LATITUDE	36 DEG 12 MIN 32 SEC
LONGITUDE	86 DEG 55 MIN 42 SEC
WHEN USED	NIGHTTIME
RMS FIELD	401 MV/M
DATE	MAY 1967

SILLIMAN, MOFFET & KOWALSKI
CONSULTING RADIO ENGINEERS
WASHINGTON, D.C.

FCC File No. BZ-6632
Accepted 10-12-67

Station WMAK
Nashville, Tennessee

1300 kc

WMAK

Measured Night Nulls
(10-28-67ct)

Station WMAK
Nashville, Tennessee

5kw, DA-N, U
1300 kc

12

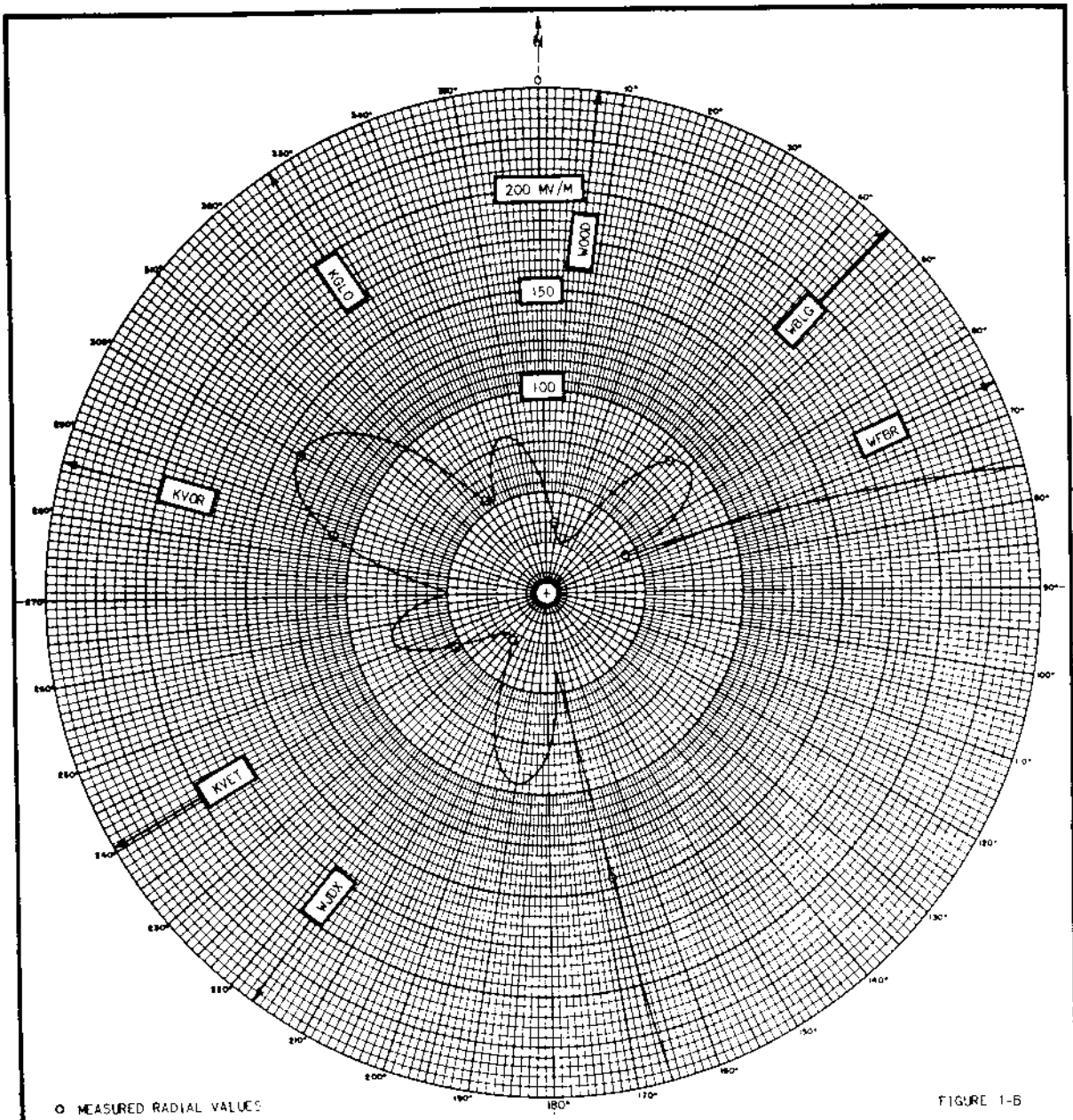


FIGURE 1-B

HORIZONTAL RADIATION PATTERN

EXPANDED VIEW

APPLICANT	MEDALLION PICTURES CORP. (WMAK)
LOCATION	NASHVILLE, TENNESSEE
FREQUENCY	1300 KC/S
POWER	5KW-U(DA-N)
LATITUDE	36 DEG 12 MIN. 32 SEC.
LONGITUDE	86 DEG 53 MIN. 42 SEC.
WHEN USED	NIGHTTIME
RMS FIELD	401 MV/M
DATE	MAY 1967

SILLIMAN, MOFFET & KOWALSKI
CONSULTING RADIO ENGINEERS
WASHINGTON, D.C.

FCC File No. BZ-6632
Accepted 10-12-67

Station WMAK
Nashville, Tennessee

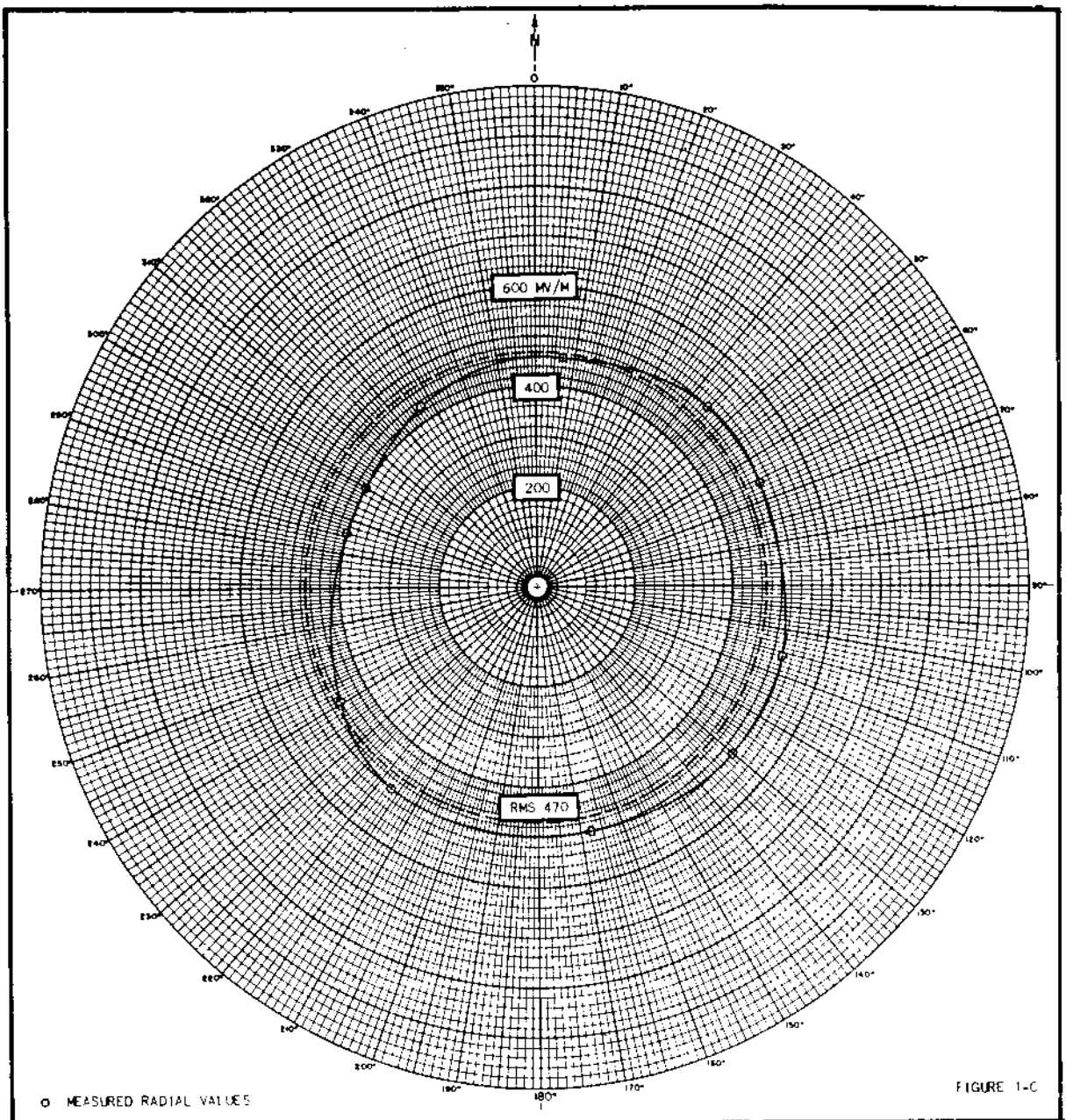
1300 kc

WMAK

Measured Non-DA
(10-28-67ct)

Station WMAK
Nashville, Tennessee

5kw, DA-N, U
1300 kc



o MEASURED RADIAL VALUES

FIGURE 1-C

HORIZONTAL RADIATION PATTERN

NON-DIRECTIONAL SURVEY

APPLICANT	METRO-GOLDWYN-MAYER PICTURES CORP. (WMAK)
LOCATION	NASHVILLE, TENNESSEE
FREQUENCY	1300 KC/S
POWER	5KW-U(DA-N)
LATITUDE	36 DEG 12 MIN 32 SEC.
LONGITUDE	86 DEG 53 MIN 47 SEC
WHEN USED	NON-DIRECTIONAL SURVEY
RMS FIELD	470 MV/M
DATE	MAY 1967

SILLIMAN, MOFFET & KOWALSKI
CONSULTING RADIO ENGINEERS
WASHINGTON, D.C.

FCC File No. BZ-6632
Accepted 10-12-67

Station WMAK
Nashville, Tennessee

1300 kc

WMAK

SUPPLEMENTAL DIRECTIONAL ANTENNA
DESCRIPTION SHEET

Station: WMAK — Main Studio: Nashville, Tennessee

Frequency: 1300 kHz — Power: 5 kW

Notification List No. 1702 — Date: September 15, 1976 — Class: III

GEOGRAPHICAL LOCATION OF THE CENTER OF THE ANTENNA SYSTEM:

North Latitude: 36° 12' 30"

West Longitude: 86° 53' 38"

Authorized for Nighttime operation (DA-N).

Predicted effective Day Field: (omnidirectional) 431.6 mv/m at rated power.

Note: Please retain the description sheet and directional antenna radiation patterns notified for station WMAK in United States Change List Number 392, dated February 14, 1951 and attach to this supplemental Description Sheet. This notification is for the purpose of indicating only a change or correction in the geographical coordinates of the center of the antenna system.

CTR NO. 31262A3

Granted CP 3/27/57 for new AM Station

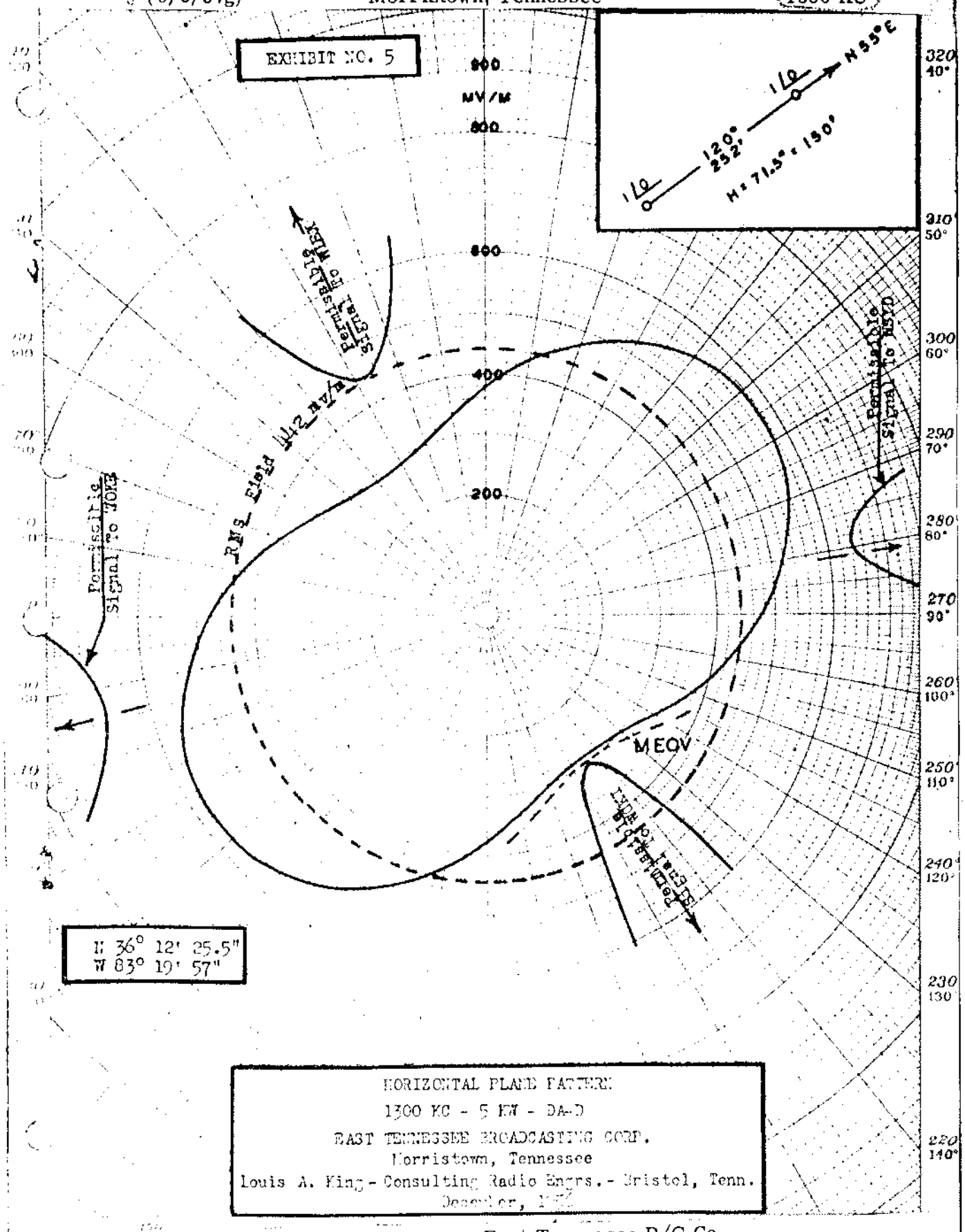
MORRISTOWN, TENN
WMTN

PROPOSED DAY (3/8/57g)

East Tennessee B/C Co
Morristown, Tennessee

5KW, DA-D,D
1300 KC

EXHIBIT NO. 5



N 36° 12' 25.5"
W 83° 19' 57"

HORIZONTAL PLANE PATTERN
1300 KC - 5 KW - DA-D
EAST TENNESSEE BROADCASTING CORP.
Morristown, Tennessee
Louis A. King - Consulting Radio Engrs. - Bristol, Tenn.
December, 1957

FCC File No. BP-10,979
Accepted 2/21/57

East Tennessee B/C Co.
Morristown, Tennessee

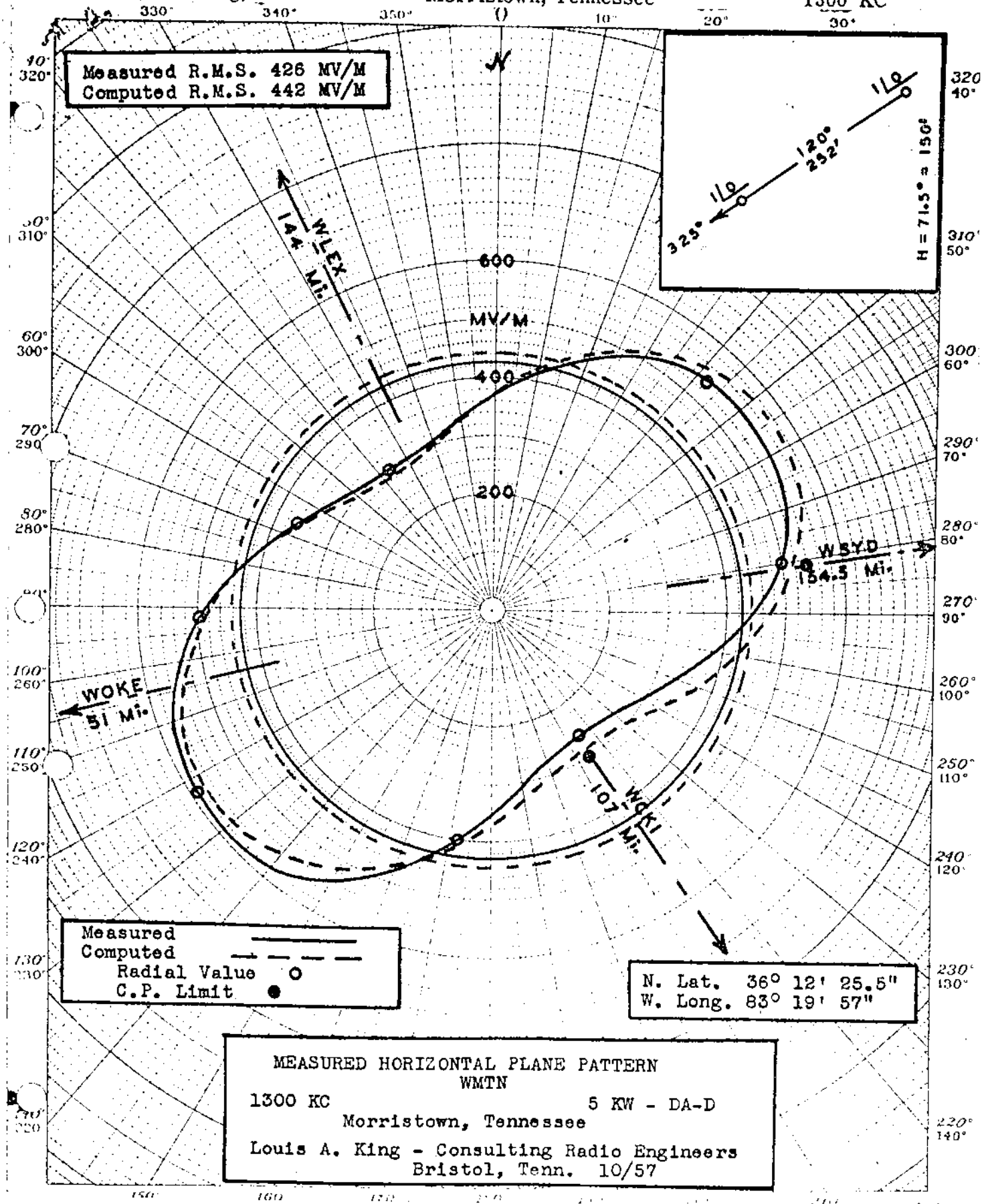
1300 KC

WMTN

MEASURED DAY
(12-20-57g)

Station WMTN
Morristown, Tennessee

5kw, DA-D,D
1300 KC



MEASURED HORIZONTAL PLANE PATTERN
WMTN
1300 KC 5 KW - DA-D
Morristown, Tennessee
Louis A. King - Consulting Radio Engineers
Bristol, Tenn. 10/57

FCC File No. BL-6786
Accepted 11-29-57

WMTN
Morristown, Tennessee

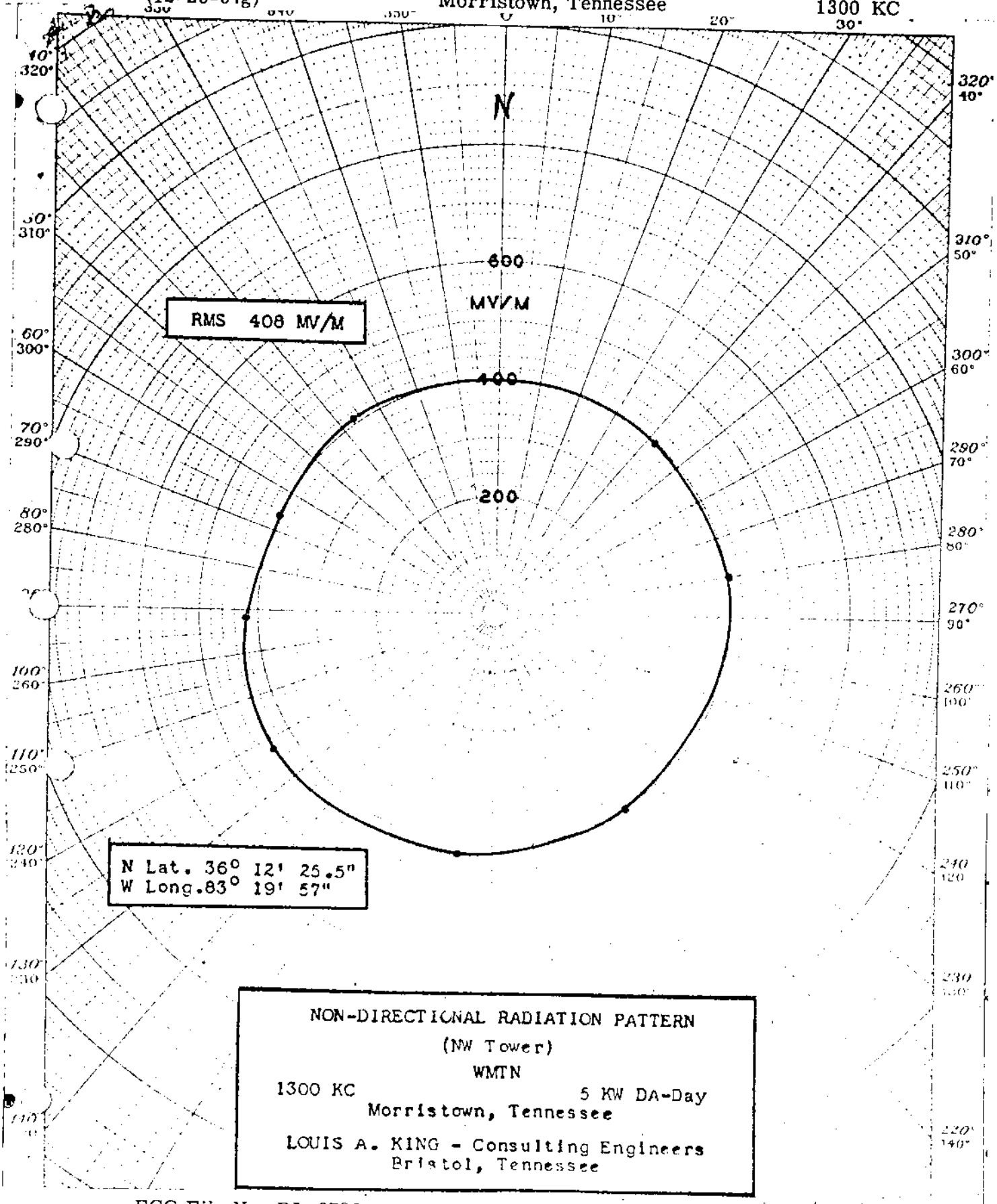
1300 KC

WMTN

MEASURED NON-DA
(12-20-57g)

Station WMTN
Morristown, Tennessee

5kw, DA-D,D
1300 KC



NON-DIRECTIONAL RADIATION PATTERN
(NW Tower)
WMTN
1300 KC
5 KW DA-Day
Morristown, Tennessee
LOUIS A. KING - Consulting Engineers
Bristol, Tennessee

FCC File No. BL-6786
Accepted 11-29-57

WMTN
Morristown, Tennessee

1300 KC

WMVO

DIRECTIONAL ANTENNA DESCRIPTION SHEET

Station: WMVO — Main Studio: Mount Vernon, Ohio

Frequency: 1300 kHz — Power: 0.5 kW

Notification List No. 1566 — Date: February 6, 1974 — Class: III

GEOGRAPHICAL LOCATION OF THE CENTER OF THE ANTENNA SYSTEM:
North Latitude: 40° 24' 17"
West Longitude: 82° 26' 23"

ANTENNA CHARACTERISTICS

Authorized for Daytime operation. (DA-D)
Number of elements: 2
Type of elements: Series-excited, uniform cross-section, guyed, vertical steel towers.

	SW(#2)	NE(#1)
TOWER:		
HEIGHT ABOVE INSULATORS:	300' (143°)	190' (90°)
PHASING:	0°	+42°
FIELD RATIO:	0.8	1

SPACING AND ORIENTATION: Elements are spaced 295' (140°) on a line bearing 30° true.

GROUND SYSTEM: 120-200' equally spaced copper radials about each tower. Radials are shortened and bonded to a transverse strap along intersections between towers.

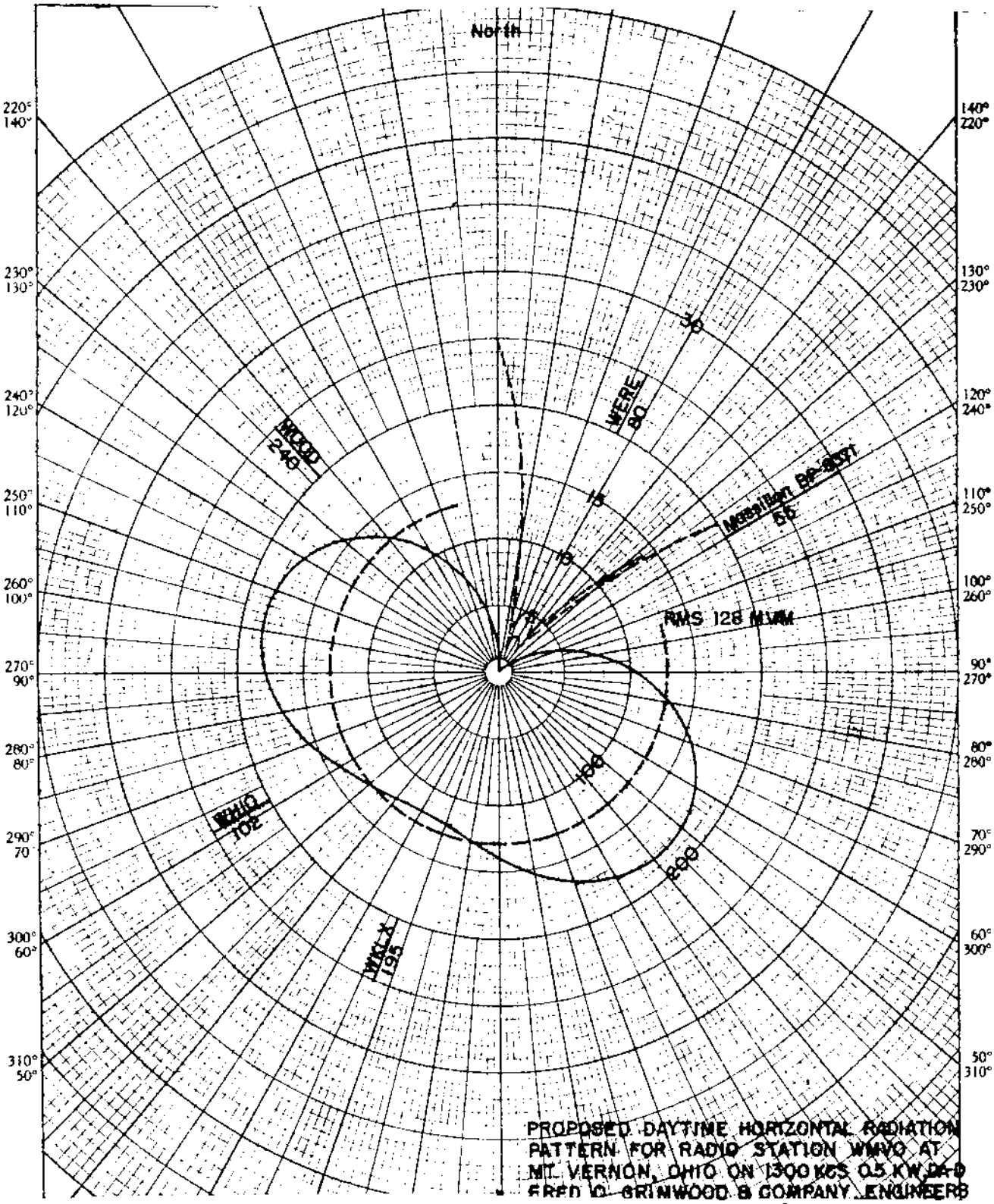
Predicted effective Field: 128 mv/m at rated power.

Note: This notification concerns only minor changes in MEOV's of radiation in the directional antenna radiation pattern.

WMVO

MT. VERNON, O

PROPOSED DAY — NEW, MT. VERNON, OHIO — Mt. Vernon B/cg Co. — 500W, D, DA-D — 12/9/52G — 1300 KC



30° True

N.L. 40° 24" 17"
W.L. 82° 26' 23"

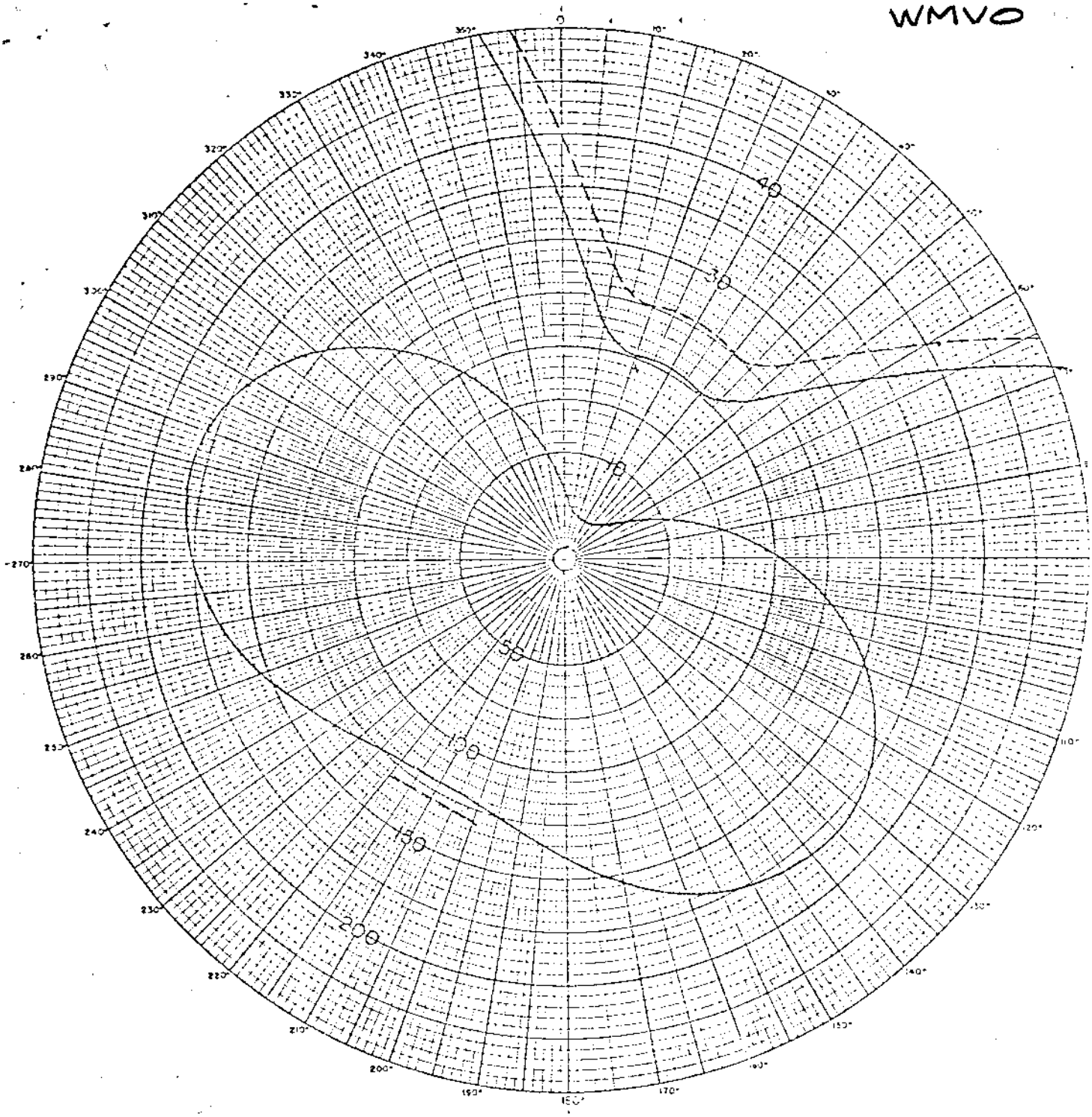
No. of towers: 2
Height of towers: 90°
Spacing between towers: 140°
Orientation: 30° True

(1) 1.0/0°

(2) 1.0/42°

APPL RECD 10/29/52 ACC 11/26/52 BP-8665 NEW, MT. VERNON, OHIO 1300 KC

WMVO



HORIZONTAL RADIATION PATTERN

30° True

1.42° A = 190/195' (90°)

140°

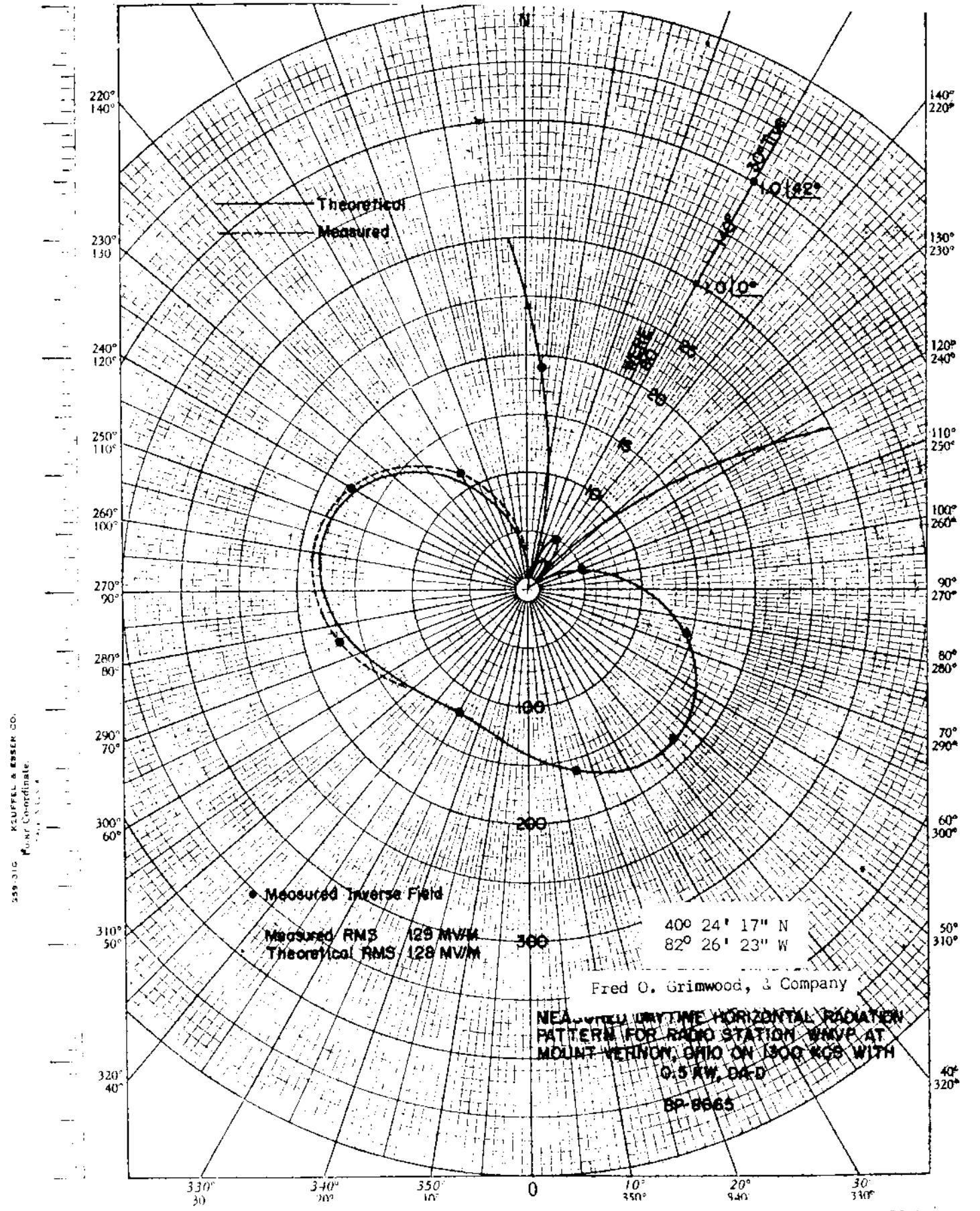
0.81.0° A = 300/305' (143°)

APPLICANT	WMVO
LOCATION	Mount Vernon, Ohio
FREQUENCY	1300 KC/S
POWER	500 Watts
LATITUDE	40 DEG 24 MIN 17 SEC
LONGITUDE	82 DEG 26 MIN 23 SEC
WHEN USED	Daytime
R.M.S. FIELD	128 MV/M
DATE	October 31st, 1970

RALPH J. BITZER
CONSULTING RADIO ENGINEER
ST. LOUIS, MISSOURI

WMVP

MEASURED DAY (2/5/54G) WMVP, MT.VERNON, OHIO 500W, D, DA-D 1300 kc



FCC File No. BL-5164 WMVP, MT.VERNON, OHIO 1300 kc

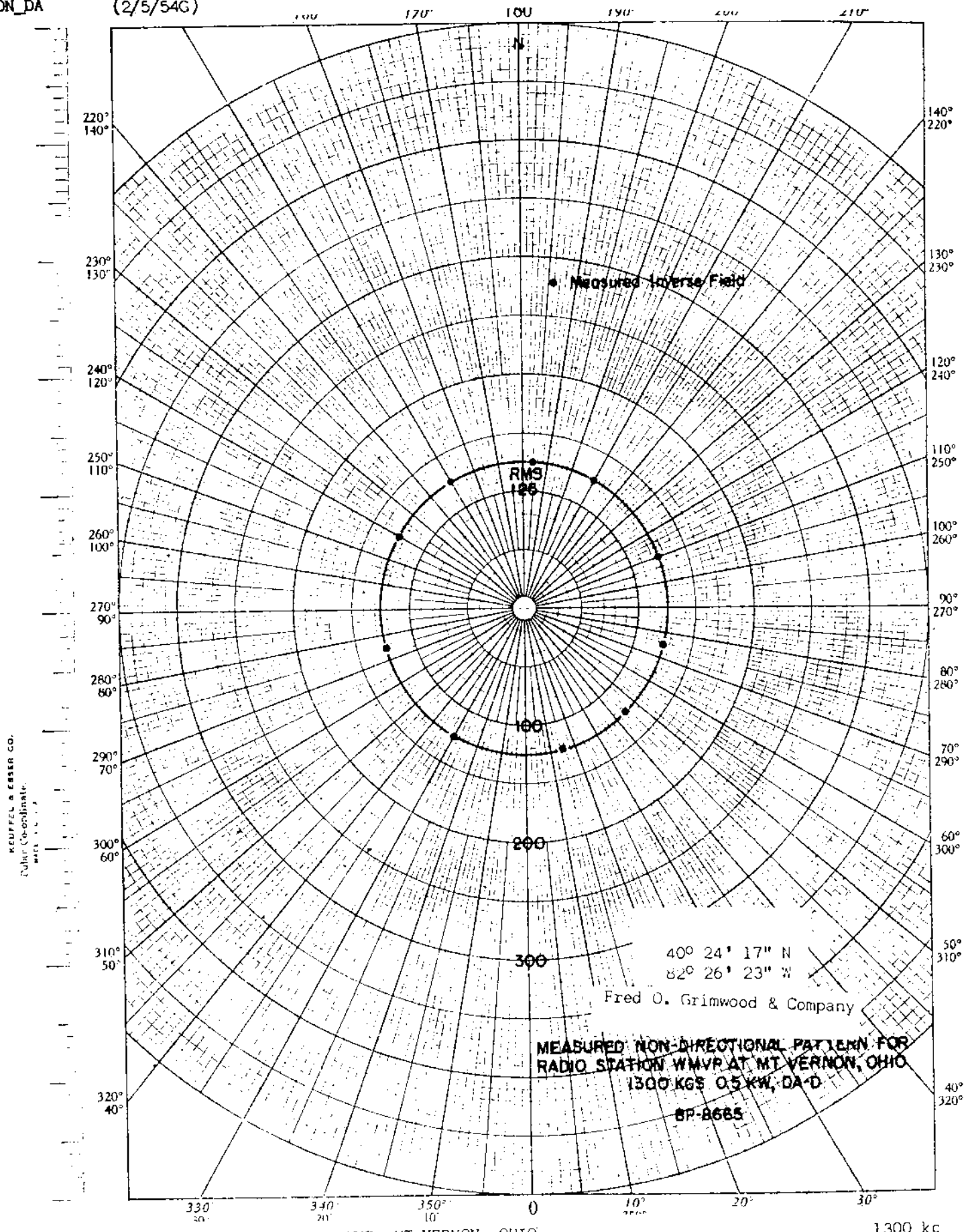
WMVP

MEASURED NON_DA

WMVP, MR.VERNON, OHIO (2/5/54G)

500W, D, DA-D

1300 kc



FCC File No. BL-5164

WMVP, MT.VERNON, OHIO

1300 kc

85-39-03 WOOD

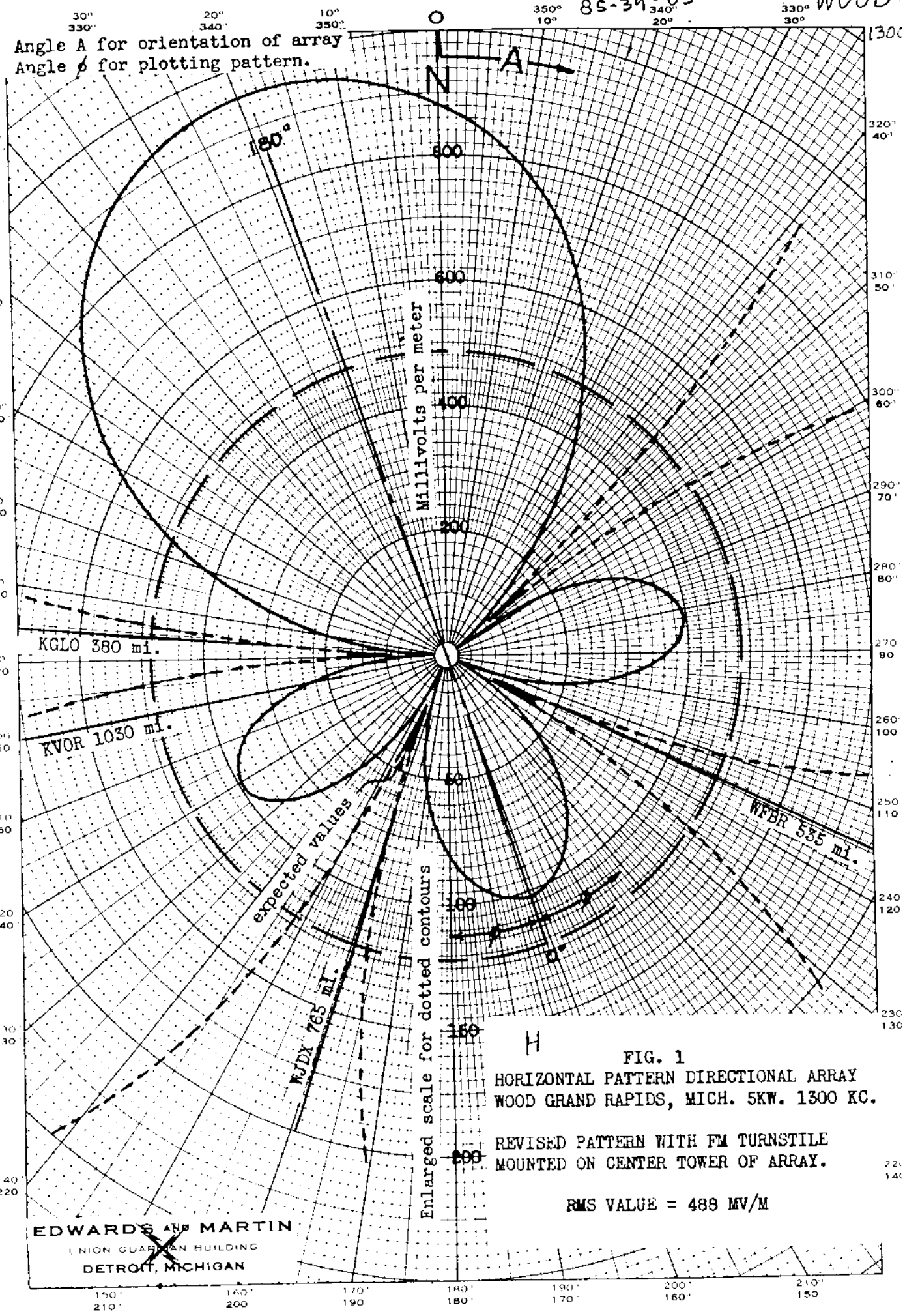
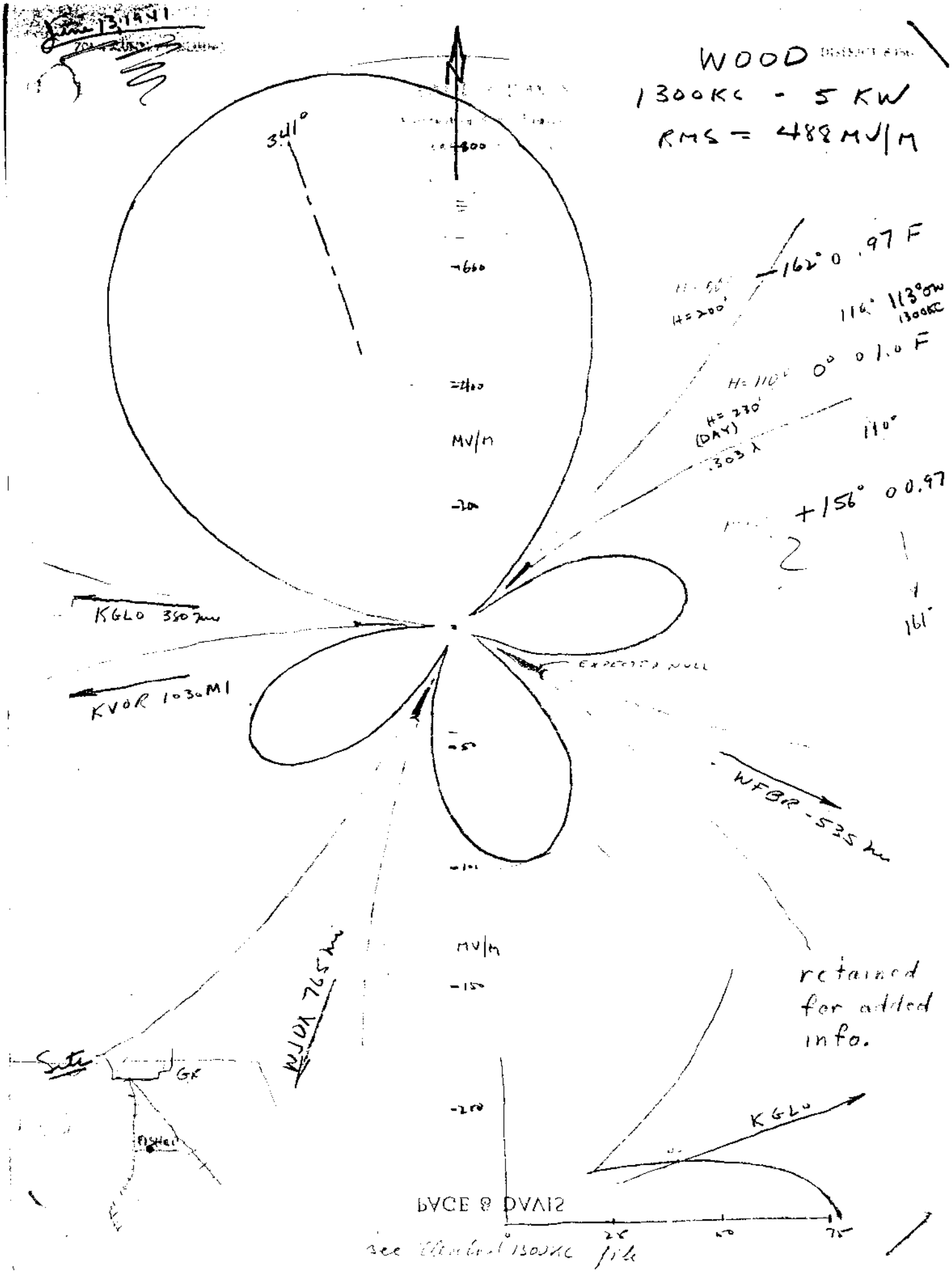


FIG. 1
HORIZONTAL PATTERN DIRECTIONAL ARRAY
WOOD GRAND RAPIDS, MICH. 5KW. 1300 KC.

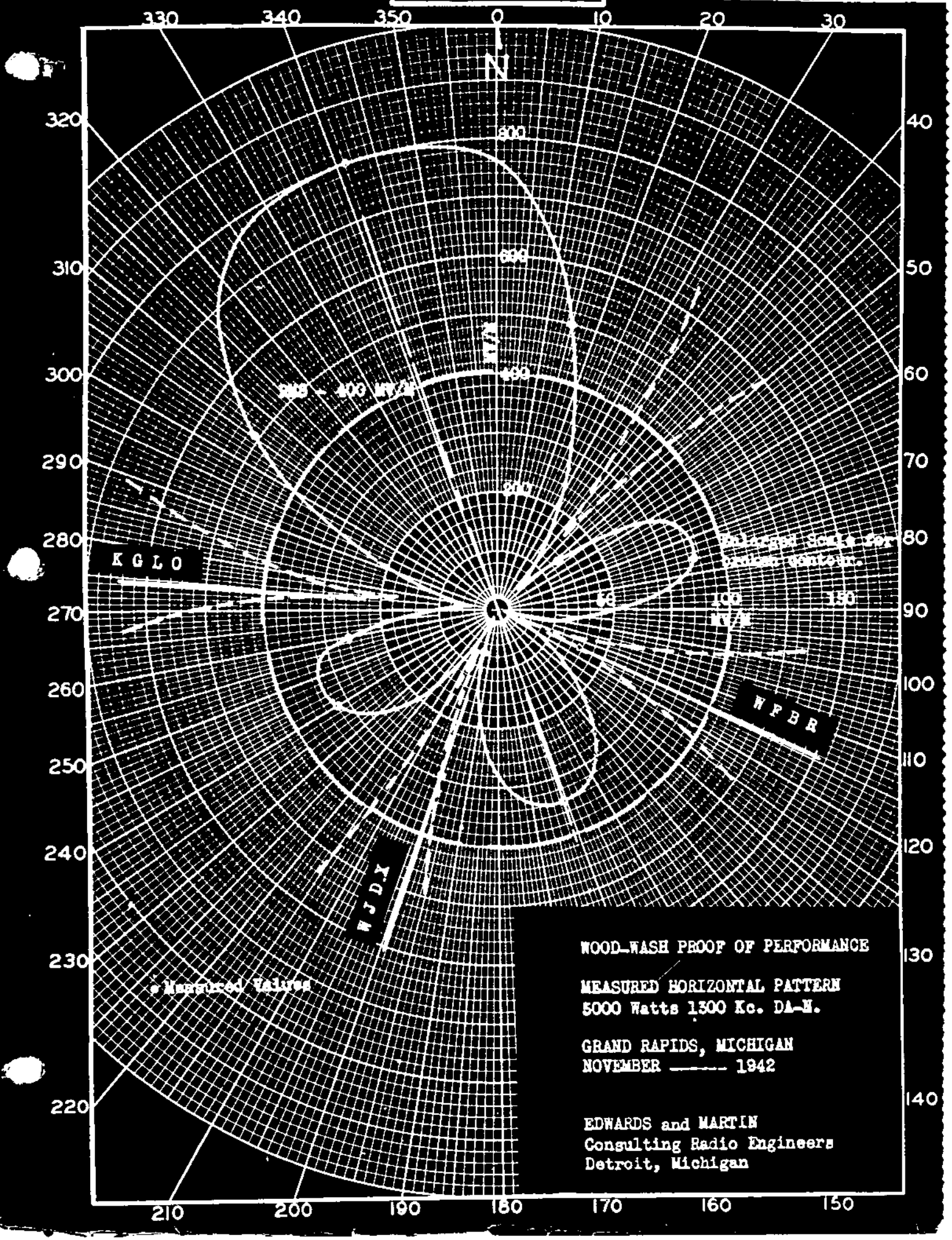
REVISED PATTERN WITH FM TURNSTILE
MOUNTED ON CENTER TOWER OF ARRAY.

RMS VALUE = 488 MV/M


WOOD
1300KC - 5 KW
RMS = 488 MV/M
341°
MV/M
KGLO 350 MI
KVOR 1030 MI
EXPECTED NULL
WFBR - 535 MI
MV/M
KJOY 765 MI
retained for added info.
KGLO
PACE & DAVIS
see Standard 1300KC file

PATTERN No.:
SUPERSEDES:

WOOD-[illegible] 1300 KC.



WOOD-WASH PROOF OF PERFORMANCE

MEASURED HORIZONTAL PATTERN
5000 Watts 1300 Kc. DA-N.

GRAND RAPIDS, MICHIGAN
NOVEMBER ——— 1942

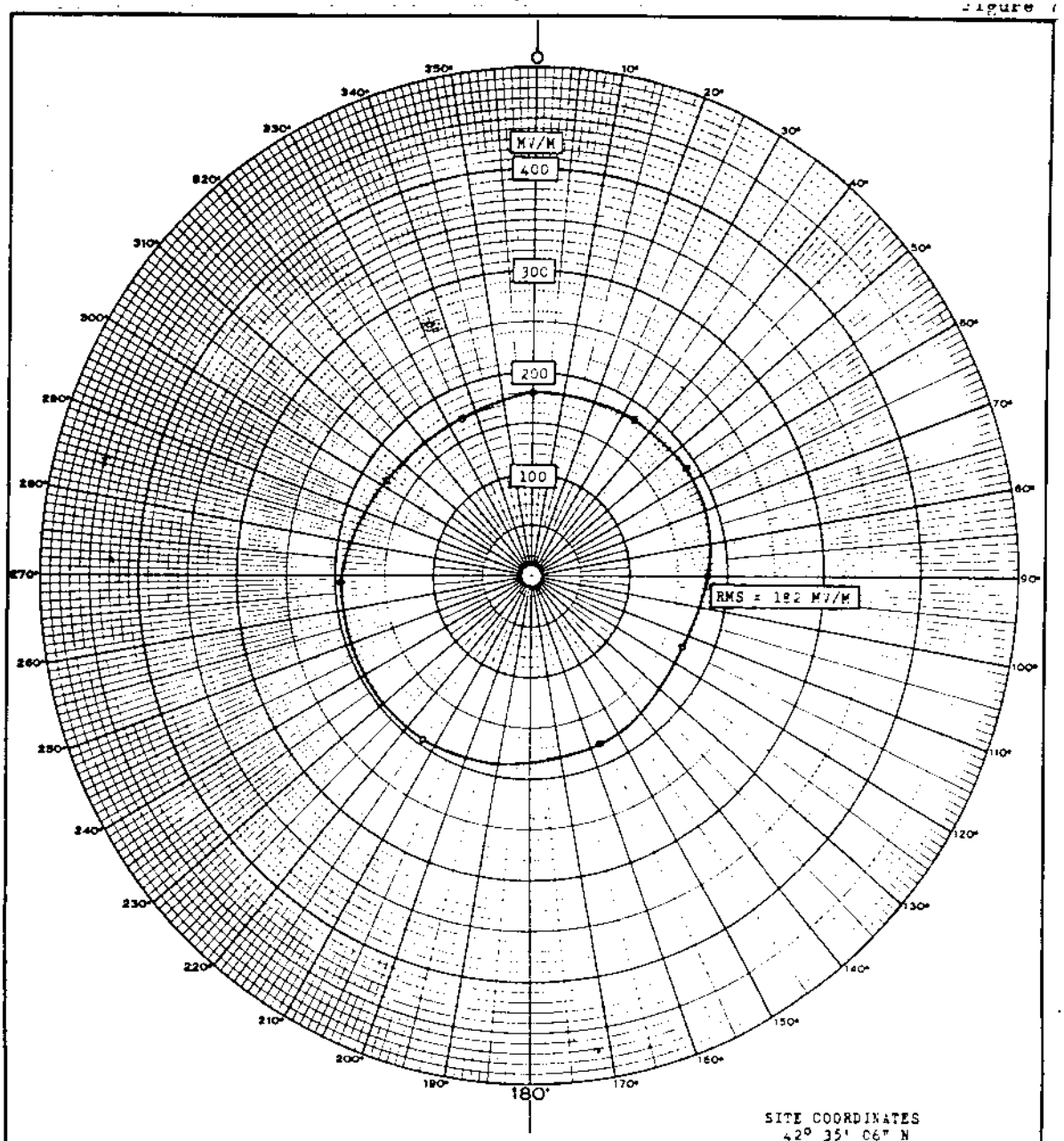
EDWARDS and MARTIN
Consulting Radio Engineers
Detroit, Michigan

WQBK

Measured Non-DA
(3-30-62ct)

Station WEEE
Rensselaer, New York

5kw,DA-D,D
1300 kc



MEASURED NO. DIRECTIONAL HORIZONTAL PLANE RADIATION PATTERN

S = 160°=336.5'
G = 95.08°=200'
34°T
(1)
S
(2) 1.0/0°

FAIRVIEW BROADCASTERS CO., INC.
RENSSELAER, NEW YORK

Jules Cohen
Consulting Electronic Engineer

RADIO STATION WEEE
1300 KC
5 KW D DA
November 15, 1961

FCC File No.BL-8956
Accepted 3-13-62

Station WEEE
Rensselaer, New York

1300 kc

WQBK

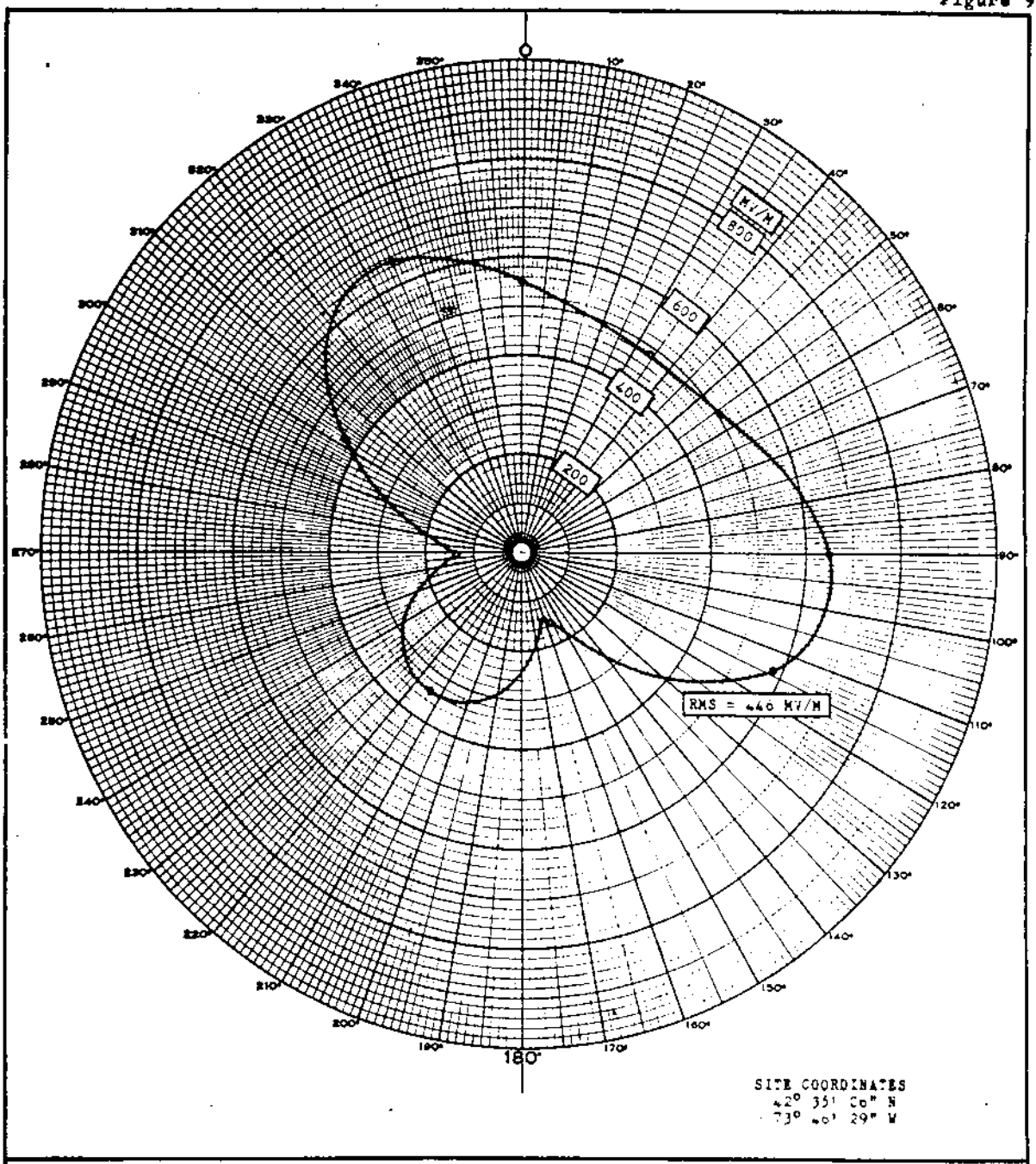
Measured Day
(3-30-62ct)

Station WEEE
Rensselaer, New York

5kw,DA-D,D
1300 kc

Figure 9

BL 8956 granted 2-5-62 for new station



MEASURED DIRECTIONAL HORIZONTAL PLANE RADIATION PATTERN

S=160°=336.5'
G=95.08°=200'
34°T
(1) 0.6/0°
S
(2) 1.0/+88.2°

FAIRVIEW BROADCASTERS CO., INC.
RENSSELAER, NEW YORK

Jules Cohen
Consulting Electronic Engineer

RADIO STATION WEEE
1300 KC
5.0 KW D DA
Pattern c11115

FCC File No.BL-8956
Accepted 3-13-62

Station WEEE
Rensselaer, New York

1300 kc

Rensselaer, N.Y.

WQBK

PROPOSED DAY
(12-12-58g)

New; Fairview Bcstrs.
Rensselaer, New York

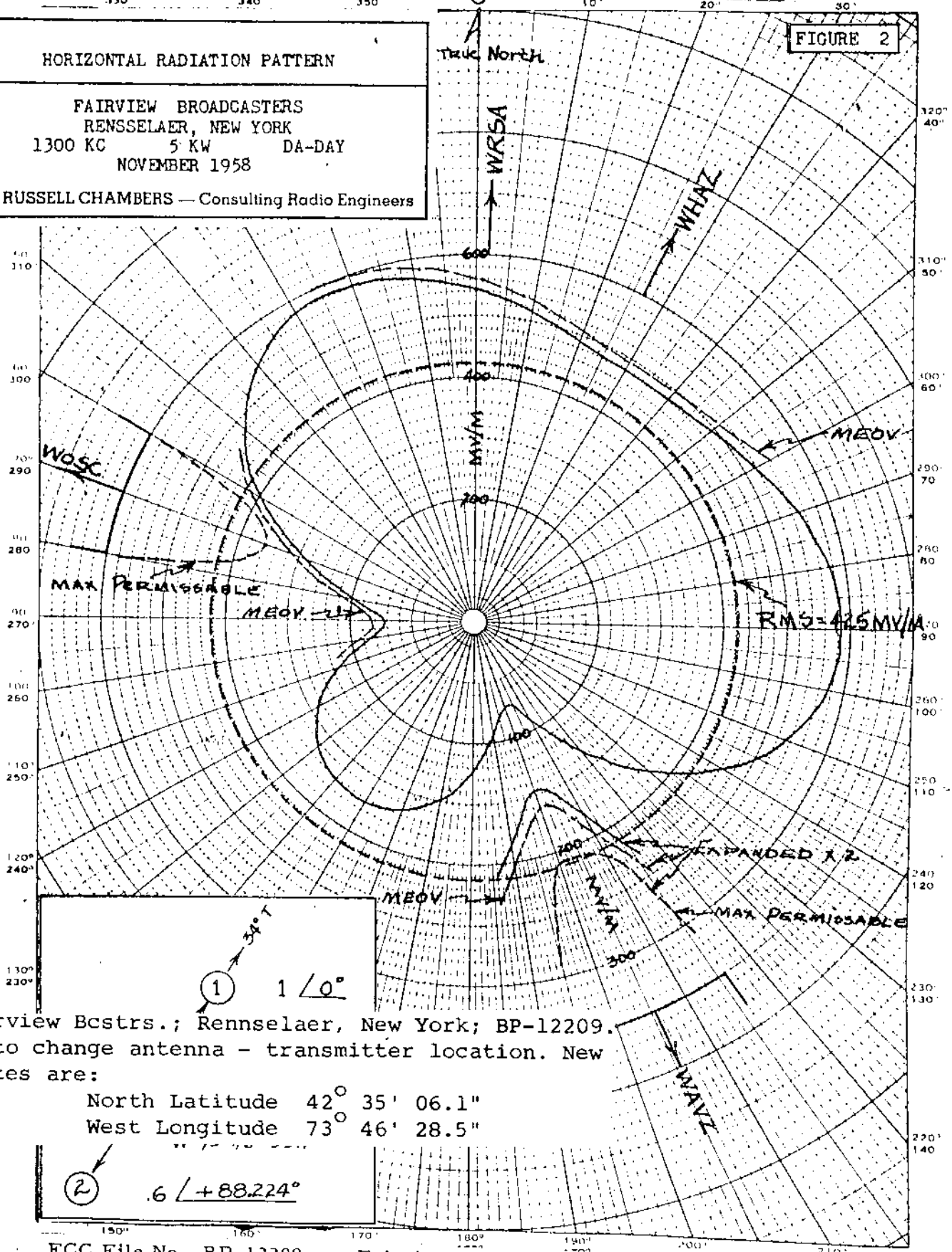
5kw, DA-D, D
1300 KC

FIGURE 2

HORIZONTAL RADIATION PATTERN

FAIRVIEW BROADCASTERS
RENSSELAER, NEW YORK
1300 KC 5 KW DA-DAY
NOVEMBER 1958

G. RUSSELL CHAMBERS — Consulting Radio Engineers



New; Fairview Bcstrs.; Rennselaer, New York; BP-12209. Amended to change antenna - transmitter location. New coordinates are:

North Latitude 42° 35' 06.1"
West Longitude 73° 46' 28.5"

FCC File No. BP-12209
Accepted 11-18-58

Fairview Broadcasters
Rensselaer, New York

1300 KC

Feb. 18 1959

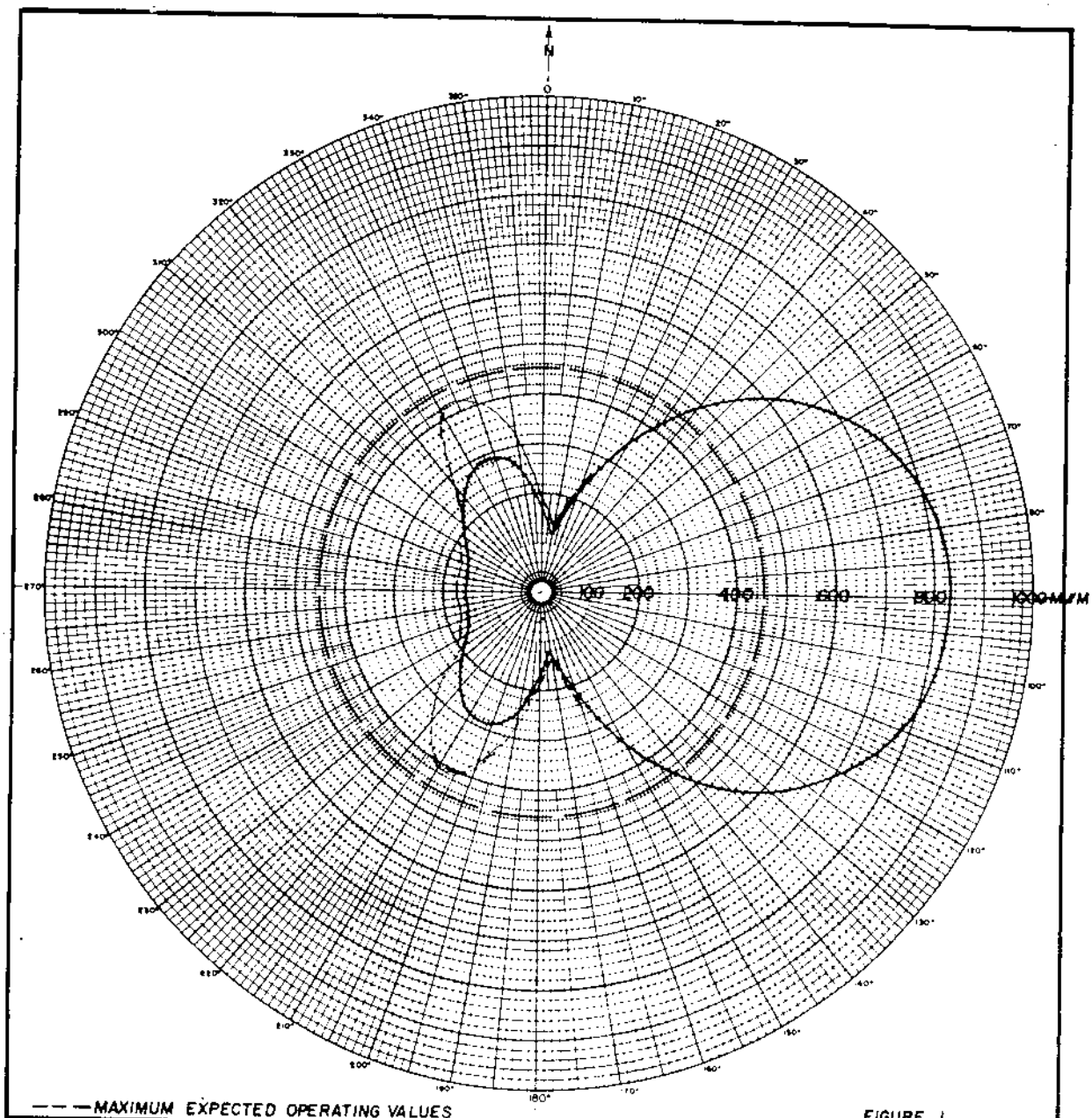
WRKT

Proposed Day
(8-28-64ct)

Station WRKT
Cocoa Beach, Florida

1kw, 5kw-LS, DA-2, U
1300 kc

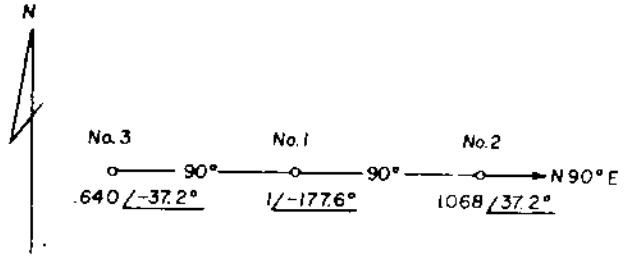
102 - 9-16-64
granted CP for
1kw/5kw, DA-2



— — — MAXIMUM EXPECTED OPERATING VALUES

FIGURE 1

HORIZONTAL RADIATION PATTERN



G = 90°

APPLICANT	WRKT
LOCATION	COCOA BEACH, FLORIDA
FREQUENCY	1300 KC/S
POWER	5 KW
LATITUDE	28 DEG 20 MIN 38 SEC
LONGITUDE	80 DEG 46 MIN 06 SEC
WHEN USED	DAYTIME
RMS FIELD	455 MV/M
DATE	JUNE 1964

RAYMOND E. ROHRER & ASSOCIATES
CONSULTING RADIO ENGINEERS
WASHINGTON D. C.

FCC File No. BP-15584
Accepted 7-29-64 Amended

Station WRKT
Cocoa Beach, Florida

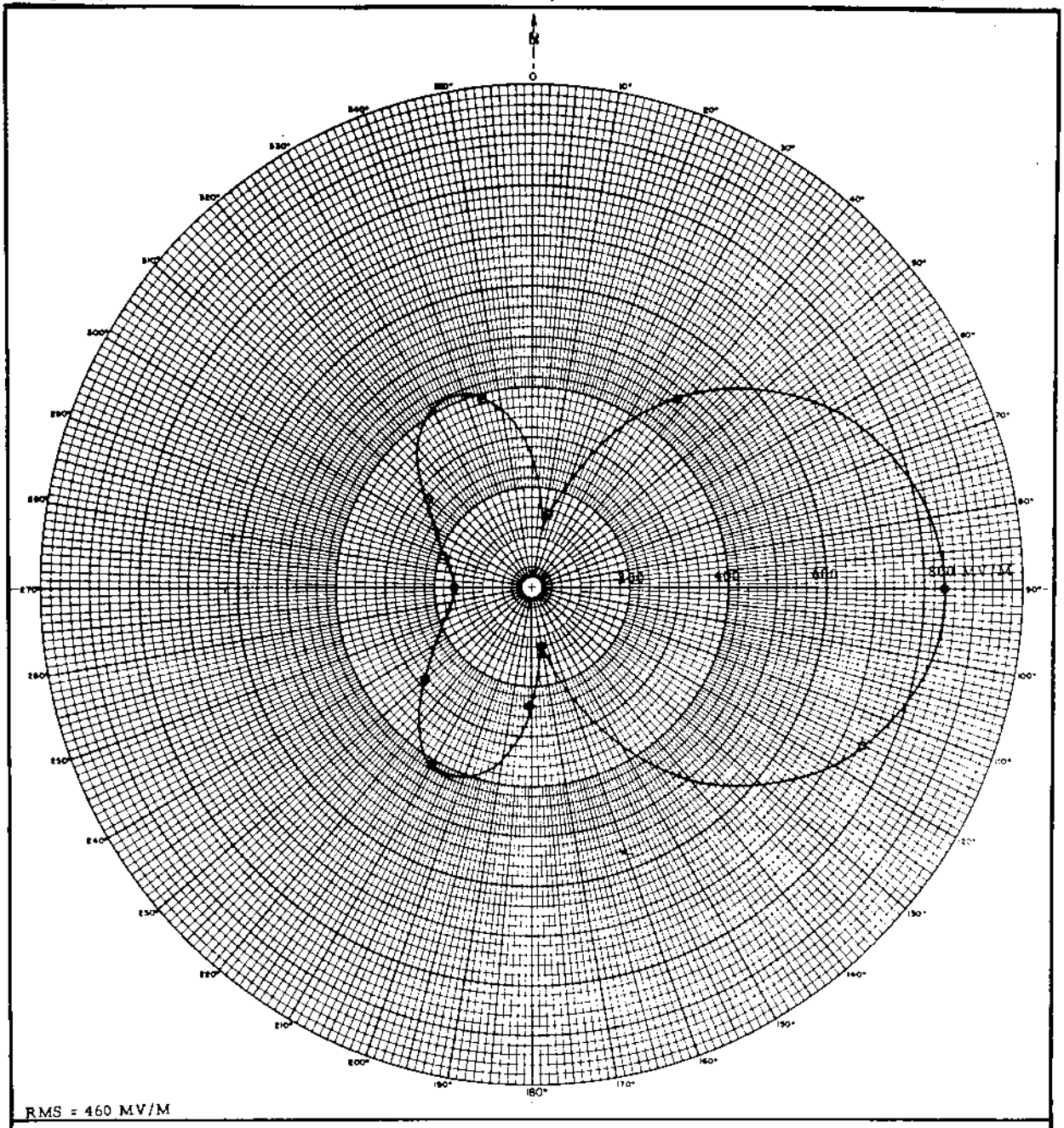
1300 kc

WRKT

Measured Day
(9-26-69ct)

Station WRKT
Cocoa Beach, Florida

1kw,5kw-LS,DA-2,U
1300 kc



RMS = 460 MV/M

FIGURE VII
POLAR PLAT OF MEASURED DAY PATTERN
C. SWEET SMITH, JR.
RADIO STATION WRKT
COCOA BEACH, FLORIDA
1300KC 1N/5D KW DA-2
DECEMBER 1967

OPERATING CONSTANTS (DAY)

3(W) 90° 1(C) 90° 2(E) → N 90° E
189.5' 189.5'

.915/-135° 1/0° 1.073/+100°

G = 90°

North Latitude 28° 20' 38"
West Longitude 80° 46' 06"

FCC File No.BZ-7264
Accepted 8-27-69

Station WRKT
Cocoa Beach, Florida

1300 kc

WRKT

Measured Night
(9-26-69ct)

Station WRKT
Cocoa Beach, Florida

1kw, 5kw-LS, DA-2, U
1300 kc

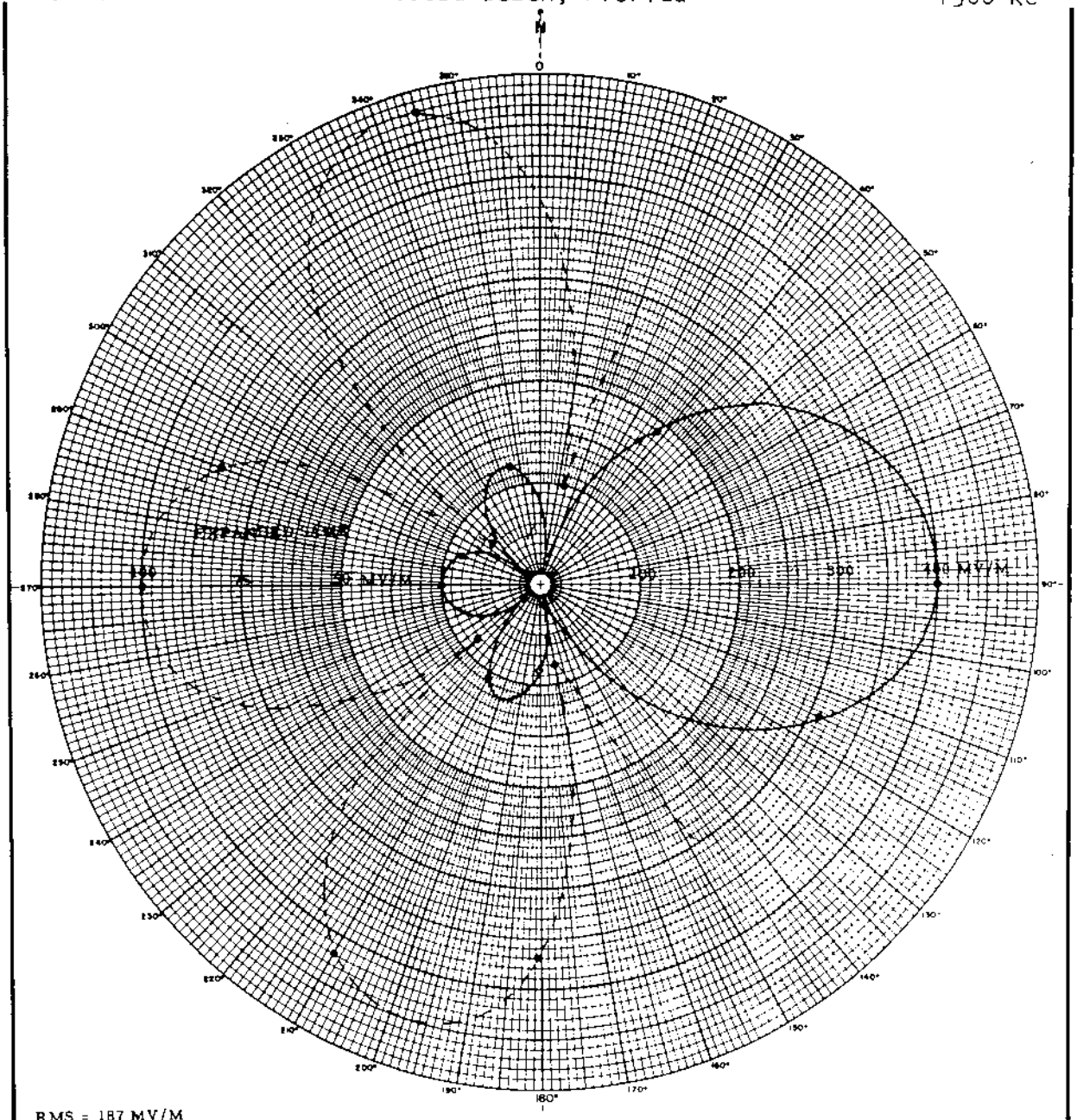


FIGURE VI
POLAR PLAT OF MEASURED NIGHT PATTERN
C. SWEET SMITH, JR.
RADIO STATION WRKT
COCOA BEACH, FLORIDA
1300KC 1N/5D KW DA-2
DECEMBER 1967

OPERATING CONSTANTS
(NIGHT)

3(W) 90° 1(C) 90° 2(E)
0 ← 189.5' → 0 ← 189.5' → 0 → N 90° E

.85/-125° 1/0° .681/+88°

G = 90°

North Latitude 28° 20' 38"
West Longitude 80° 46' 06"

FCC File No. BZ-7264
Accepted 8-27-69

Station WRKT
Cocoa Beach, Florida

1300 kc

WRKT

Measured Day
(7-27-65ct)

Station WRKT
Cocoa Beach, Florida

1kw, 5kw-LS, DA-2, U
1300 kc

IC, 11-1-65

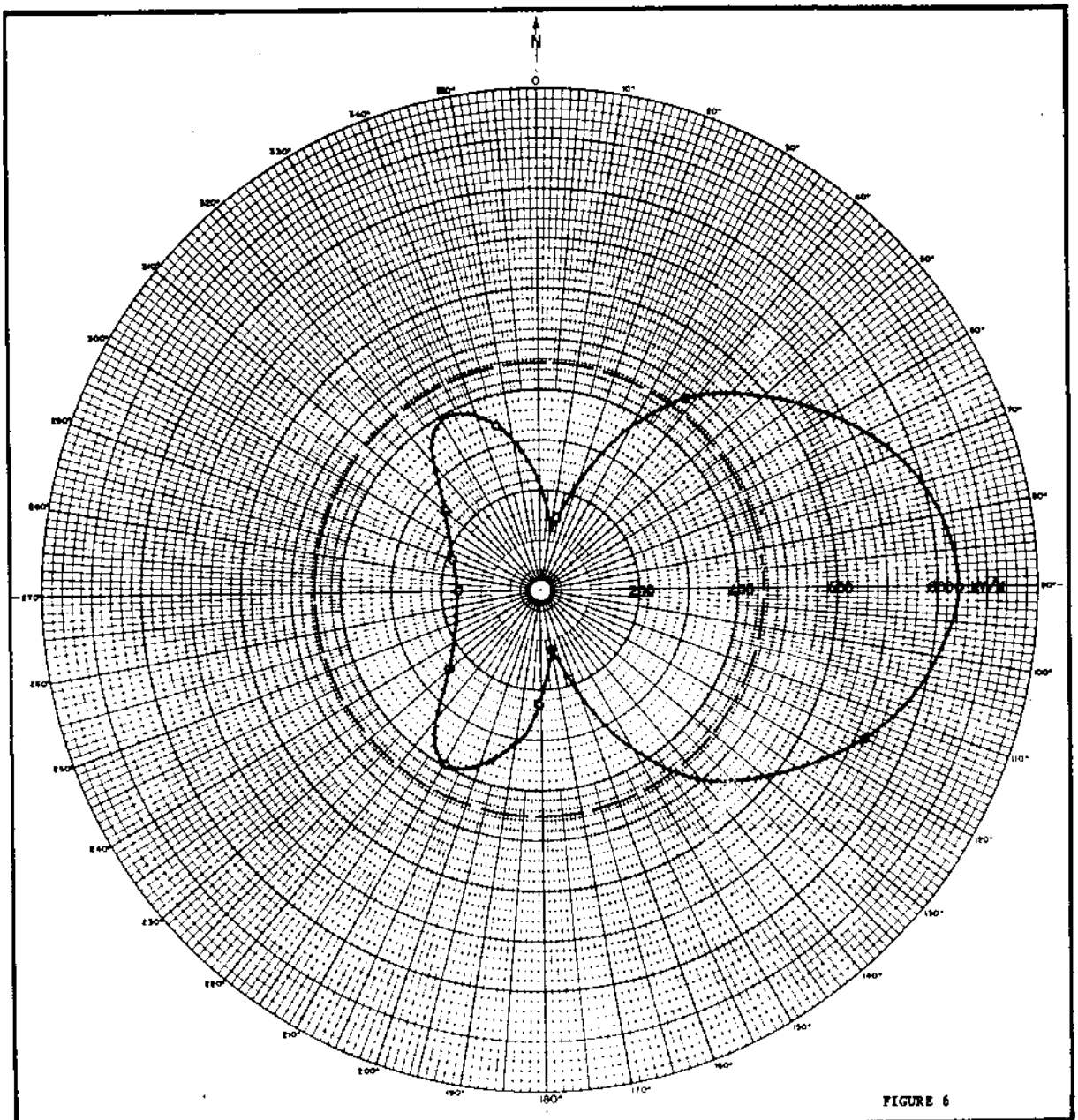
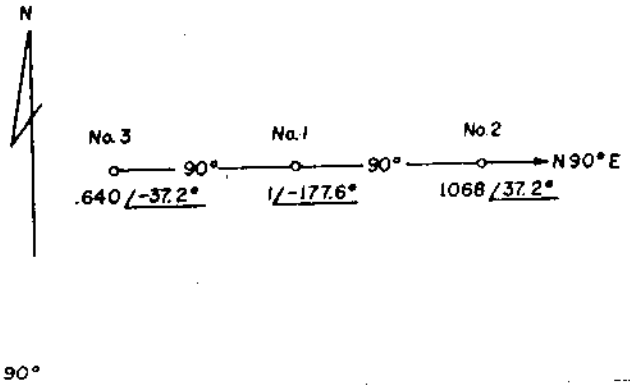


FIGURE 6

HORIZONTAL RADIATION PATTERN



G = 90°

APPLICANT	WRKT
LOCATION	Cocoa Beach, Florida
FREQUENCY	1300 KC/S
POWER	1 KW/5 KW-LS, DA-2
LATITUDE	28 DEG 20 MIN 38 SEC
LONGITUDE	80 DEG 46 MIN 06 SEC
WHEN USED	Daytime
RMS FIELD	458 MV/M
DATE	March 1965

RAYMOND E. ROHRER & ASSOCIATES
CONSULTING RADIO ENGINEERS
WASHINGTON, D. C

FCC File No. BL-10967
Accepted 7-20-65

Station WRKT
Cocoa Beach, Florida

1300 kc

WRKT

Proposed Night
(8-28-64ct)

Station WRKT
Cocoa Beach, Florida

1kw, 5kw-LS, DA-2, U
1300 kc

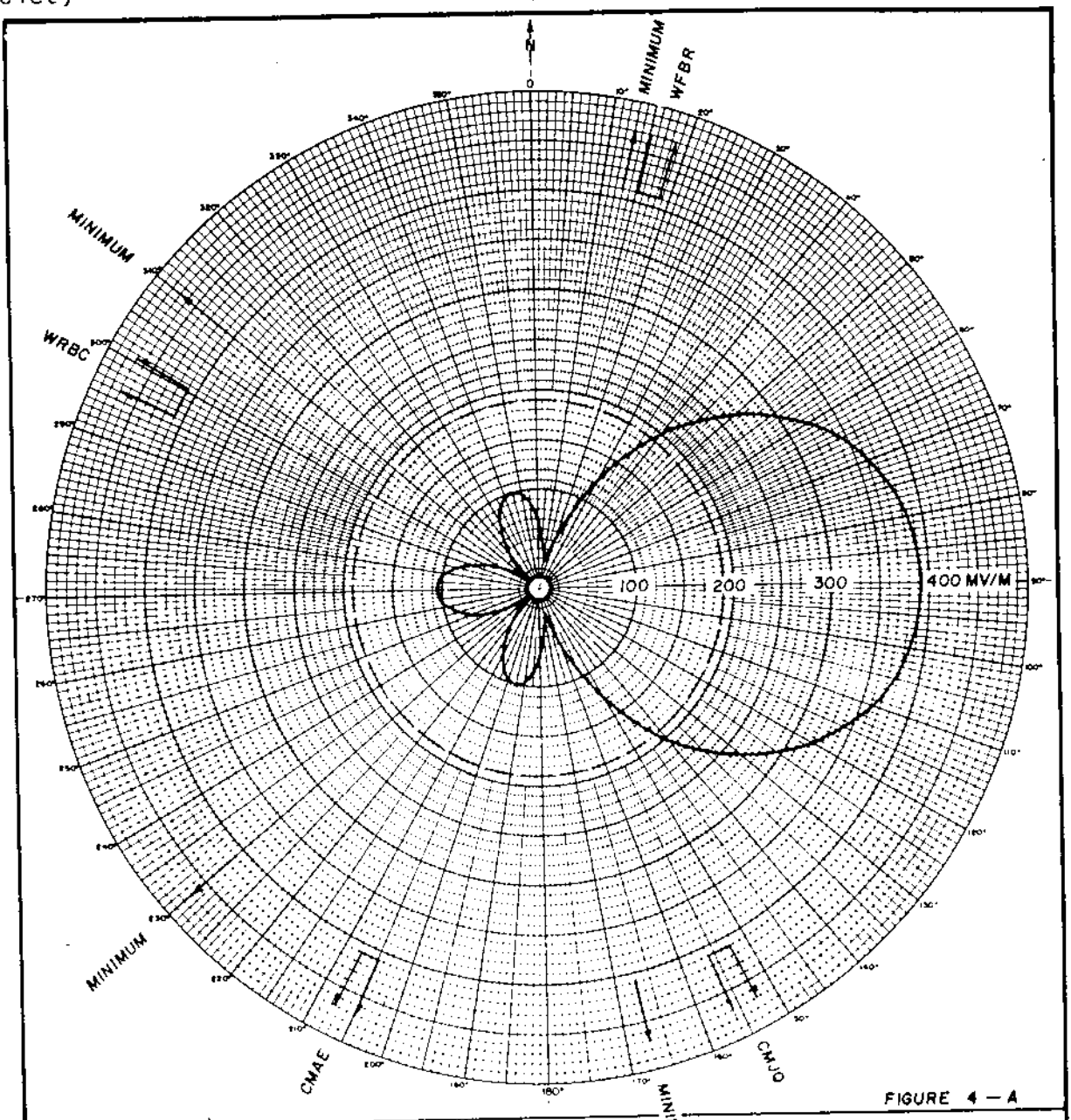
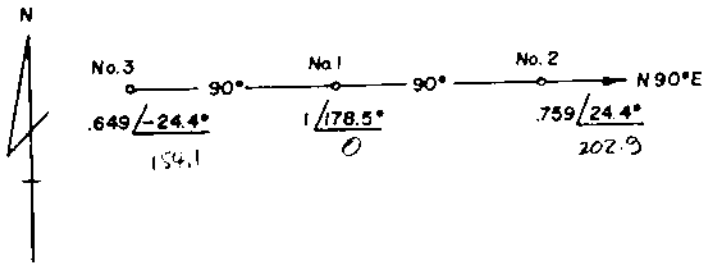


FIGURE 4 — A

HORIZONTAL RADIATION PATTERN

SPACING AND ORIENTATION OF ARRAY



G = 90°

APPLICANT	WRKT
LOCATION	COCOA BEACH, FLORIDA
FREQUENCY	1300 KC/S
POWER	1 KW
LATITUDE	28 DEG 20 MIN 38 SEC.
LONGITUDE	80 DEG 46 MIN 06 SEC.
WHEN USED	NIGHTTIME
RMS FIELD	190 MV/M
DATE	JUNE 1964

RAYMOND E. ROHRER & ASSOCIATES
CONSULTING RADIO ENGINEERS
WASHINGTON, D. C.

FCC File No. BP-15584
Accepted 7-29-64 Amended

Station WRKT
Cocoa Beach, Florida

1300 kc

WRKT

Measured Night
(7-27-65ct)

Station WRKT
Cocoa Beach, Florida

1kw, 5kw-LS, DA-2, U
1300 kc

.IC. 11-1-65

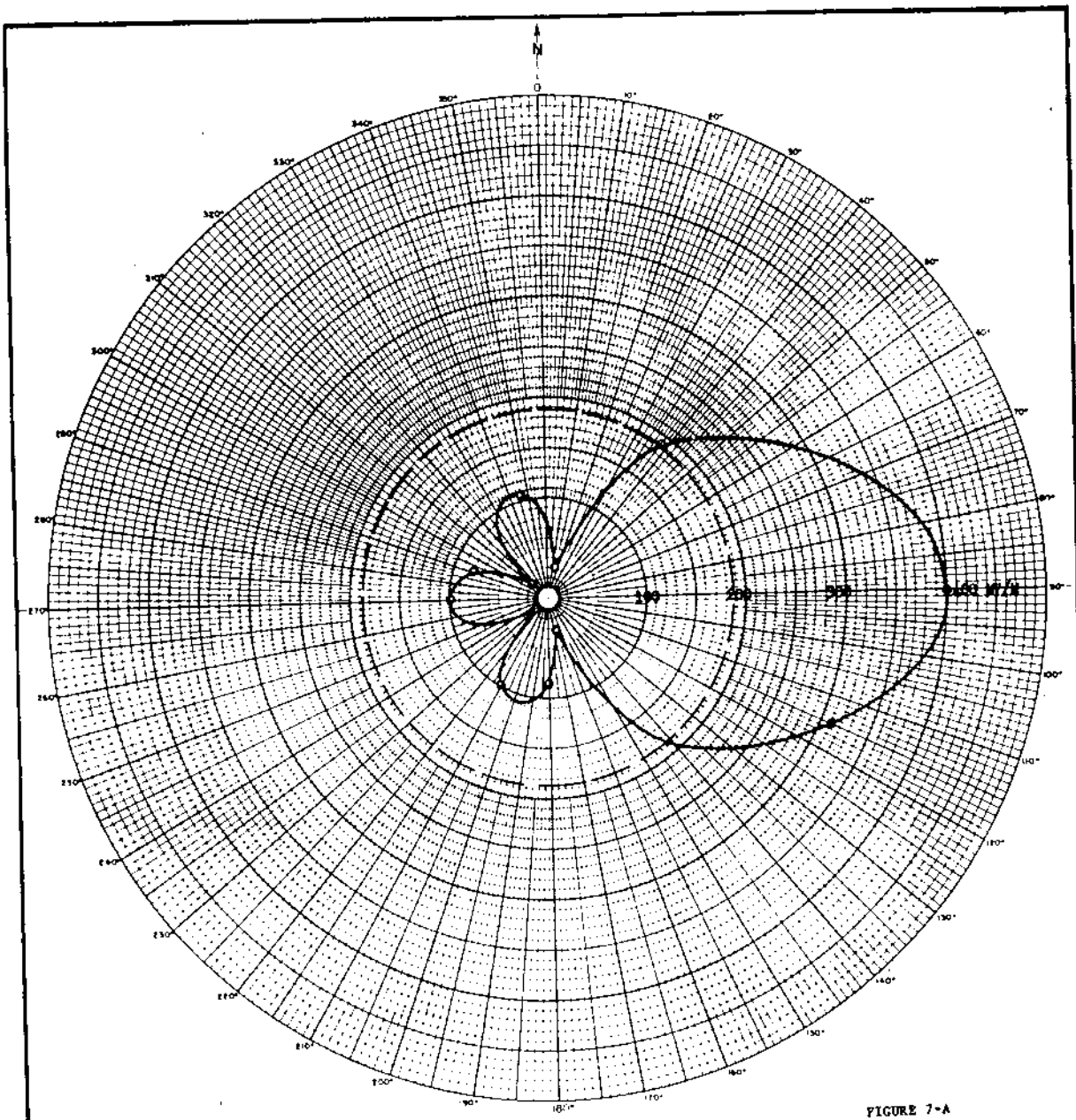
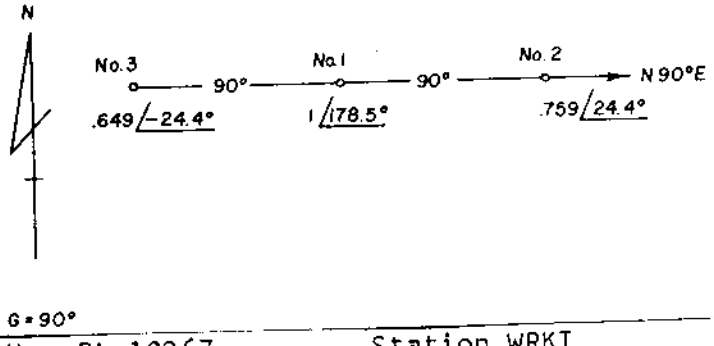


FIGURE 7-A

HORIZONTAL RADIATION PATTERN

SPACING AND ORIENTATION OF ARRAY



APPLICANT	WRKT
LOCATION	Cocoa Beach, Florida
FREQUENCY	1300KC/S
POWER	1 KW/5 KW-LS, DA-2
LATITUDE	28 DEG 20 MIN 38 SEC.
LONGITUDE	80 DEG 46 MIN 06 SEC.
WHEN USED	Nighttime
RMS FIELD	186 MV/M
DATE	March 1965

RAYMOND E. ROHRER & ASSOCIATES
CONSULTING RADIO ENGINEERS
WASHINGTON, D. C.

FCC File No. BL-10967
Accepted 7-20-65

Station WRKT
Cocoa Beach, Florida

1300 kc

WRKT

Proposed Night Nulls
(8-28-64ct)

Station WRKT
Cocoa Beach, Florida

1kw,5kw-LS,DA-2,U
1300 kc

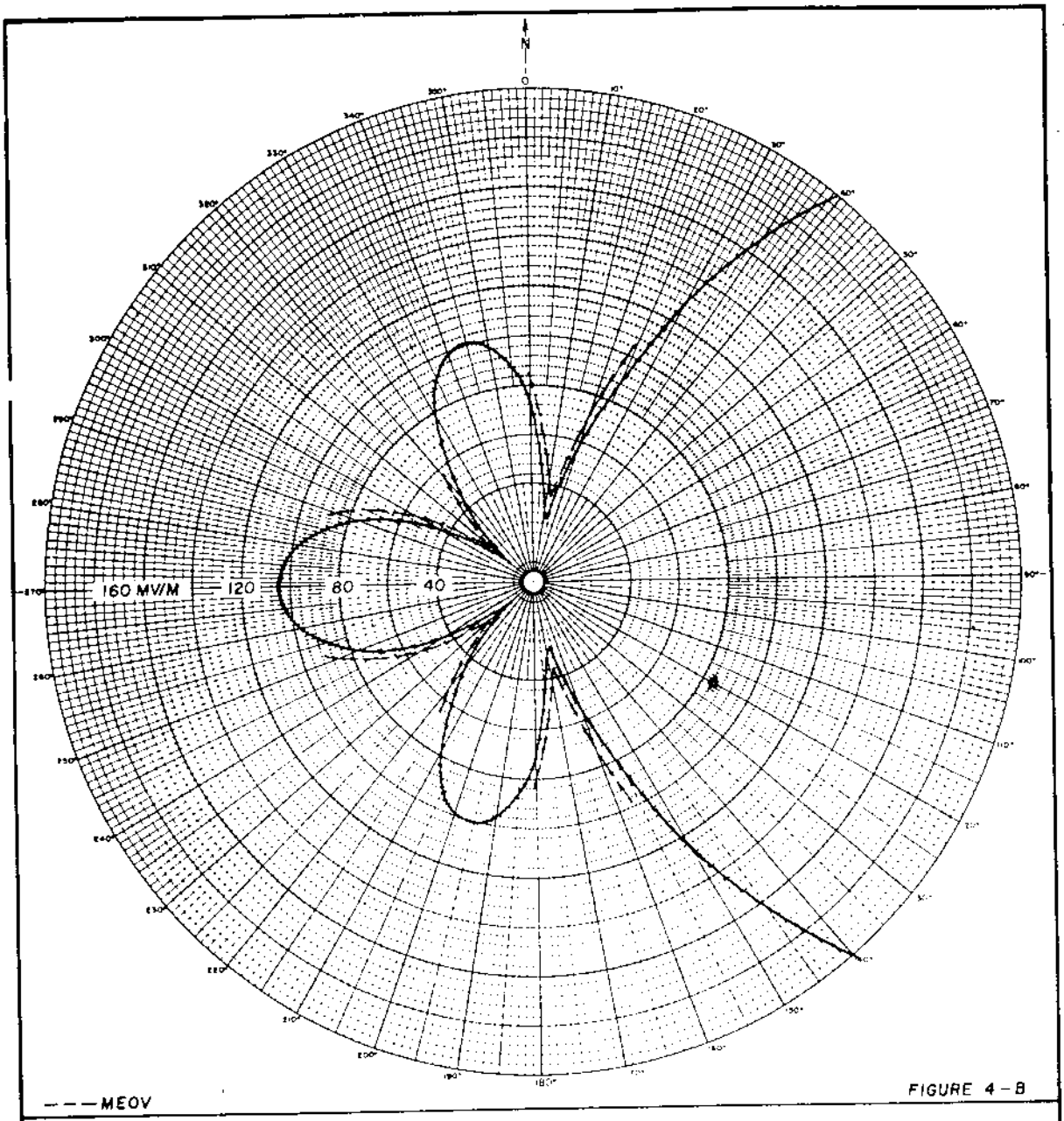


FIGURE 4-B

EXPANDED VIEW

RAYMOND E. ROHRER & ASSOCIATES
CONSULTING RADIO ENGINEERS
WASHINGTON, D. C.

FCC File No. BP-15584
Accepted 7-29-64 Amended

Station WRKT
Cocoa Beach, Florida

1300 kc

WRKT

Measured Night Nulls
(7-27-65ct)

Station WRKT
Cocoa Beach, Florida

1kw,5kw-LS,DA-2,U
1300 kc

LIC. 11-1-65

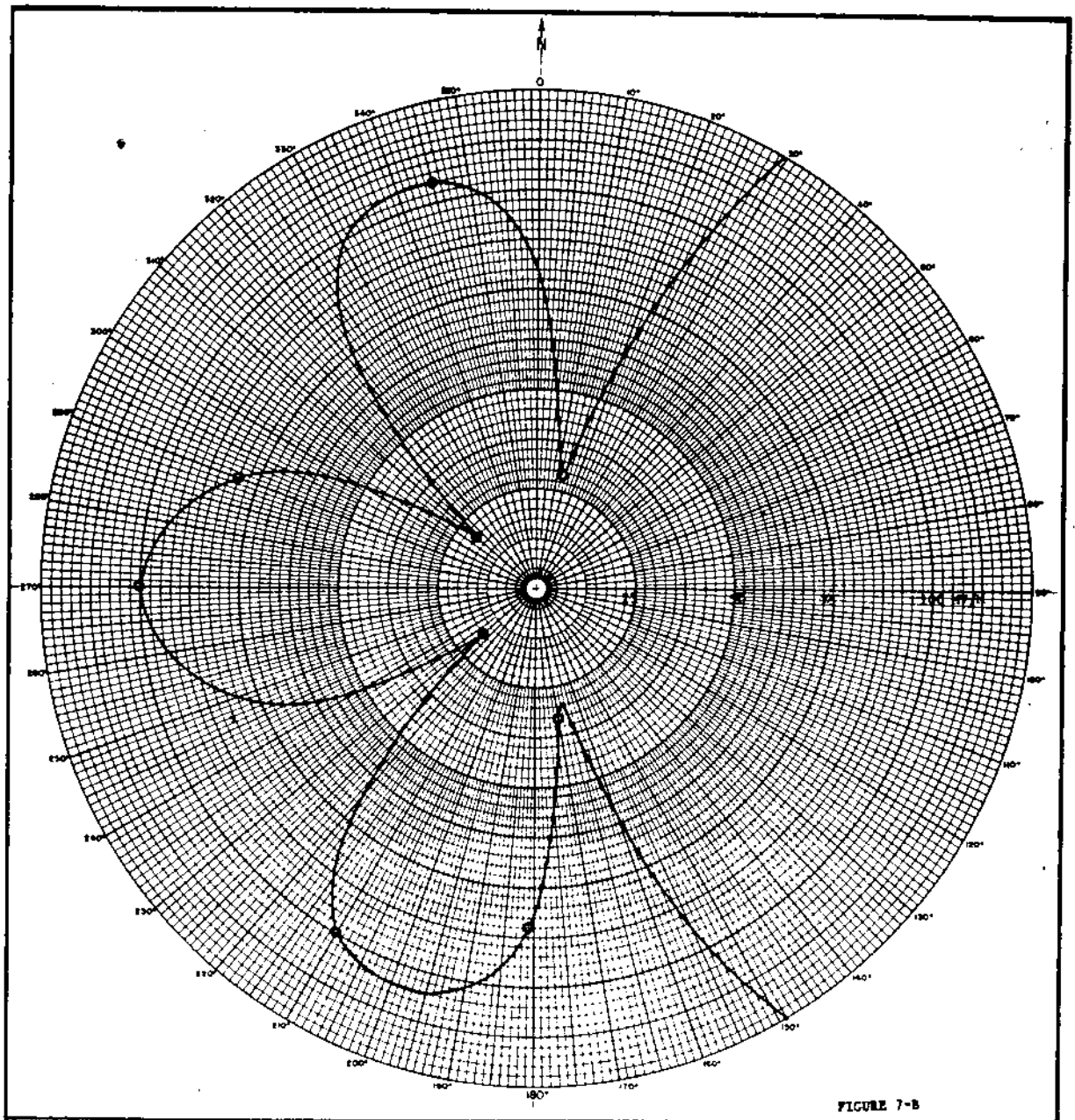


FIGURE 7-B

EXPANDED VIEW

RAYMOND E. ROHRER & ASSOCIATES
CONSULTING RADIO ENGINEERS
WASHINGTON, D. C.

FCC File No. BL-10967
Accepted 7-20-65

Station WRKT
Cocoa Beach, Florida

1300 kc

WRKT

Measured Non-DA
(7-27-65ct)

Station WRKT
Cocoa Beach, Florida

1kw,5kw-LS,DA-2,U
1300 kc

-IC. 11-1-65

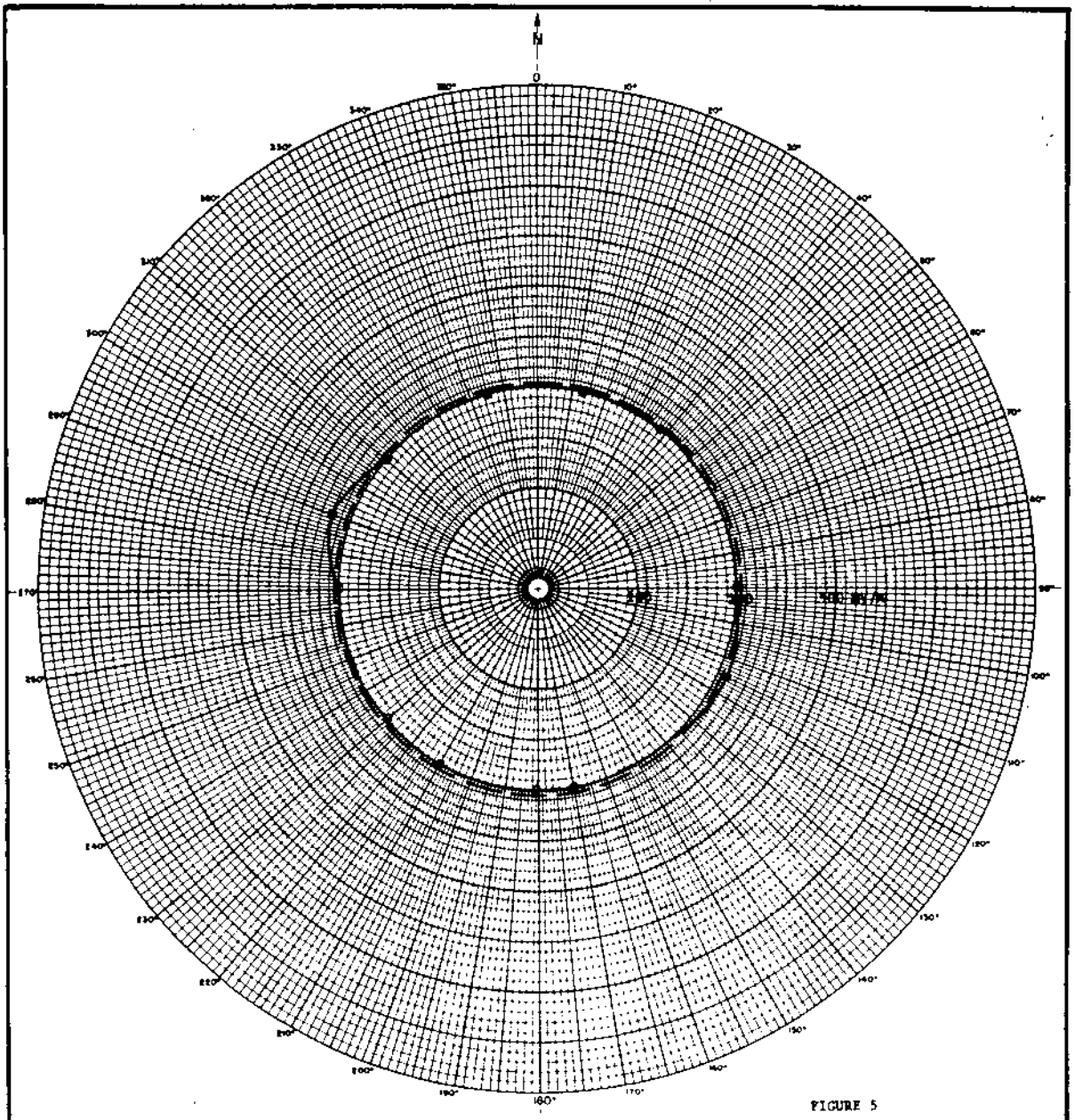


FIGURE 5

HORIZONTAL RADIATION PATTERN

NON-DIRECTIONAL FIELD SURVEY

APPLICANT	WRKT
LOCATION	Cocoa Beach, Florida
FREQUENCY	1300 KC/S
POWER	1 KW
LATITUDE	28 DEG 20 MIN. 38 SEC.
LONGITUDE	80 DEG 46 MIN. 06 SEC.
WHEN USED	Non-directional Survey
R.M.S. FIELD	204 MV/M
DATE	March 1965

RAYMOND E. ROHRER & ASSOCIATES
CONSULTING RADIO ENGINEERS
WASHINGTON, D. C.

FCC File No. BL-10967
Accepted 7-20-65

Station WRKT
Cocoa Beach, Florida

1300 kc

WSOL

DIRECTIONAL ANTENNA DESCRIPTION SHEET

Station : WSOL Main Studio: Tampa Florida

Frequency : 1300 KHz Power : __ kW Night 5 kW Day

Notification : 1780 Date : Sept. 28, 1979 Class: III

GEOGRAPHICAL LOCATION OF THE CENTER OF THE ANTENNA SYSTEM:

North Latitude:	27	58	29
West Longitude:	82	21	17

ANTENNA CHARACTERISTICS

Authorized for Daytime operation. (DA-D)
Number of elements: 2
Type of elements : Series excited, uniform cross-section, guyed, vertical steel towers.

TOWER	:	SE(#1)	NE(#2)				
HEIGHT ABOVE INSULATORS	:	300'	300'	(142.6°)			
PHASING	:	0°	+90°				
RATIO	:	1	0.6				

SPACING AND ORIENTATION : Towers in a row are spaced 665' (316°) on a line bearing 280° true.

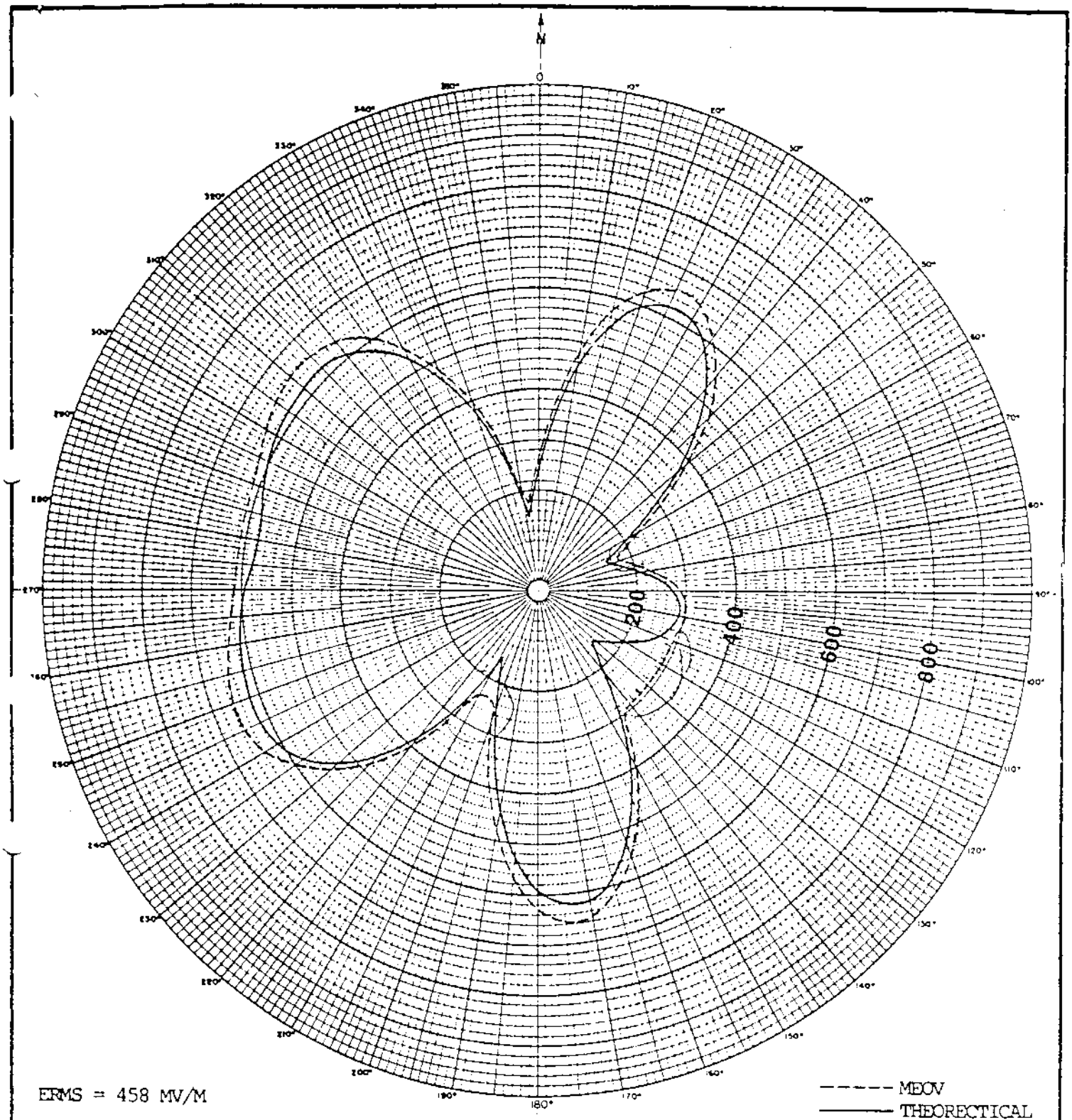
GROUND SYSTEM : 120 - 300' equally spaced copper radials plus a 24' square ground screen about each tower. Radials are shortened and bonded to a transverse strap along intersections between towers. Centers of system are bonded together.

PREDICTED EFFECTIVE FIELDS AT RATED POWER:

	THEORETICAL RMS
Day	458 mV/m

Note: This notification concerns only a change in the Daytime and Nighttime directional radiation pattern MEOV's.

WSOL



LATITUDE: 27° 58' 28.6"
LONGITUDE: 82° 21' 16.7"

Peter V. Gureckis & Assoc.
Consulting Radio Engineers
Potomac, MD

ANTENNA PARAMETERS
MARCH, 1979

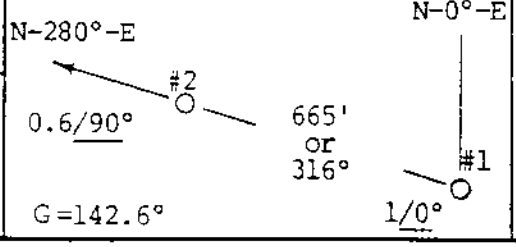


FIGURE 2

DAYTIME HORIZONTAL PATTERN

RADIO STATION WSOL

TAMPO, FLORIDA

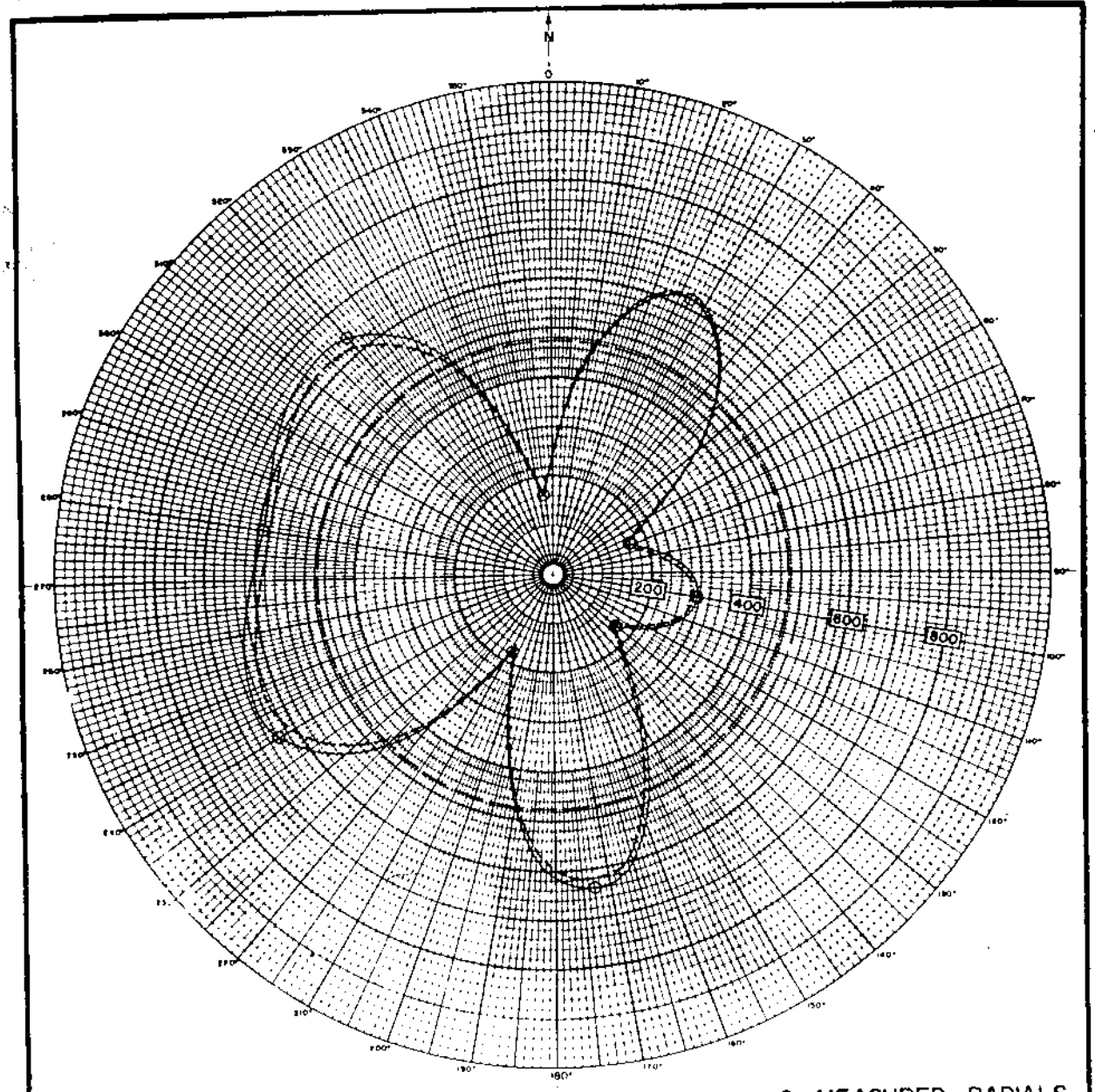
1300 KHz 5KW-DA-D

~~WWTB~~
WSOL

MEASURED DAY
(3-19-58g)

Station WWTB
Tampa, Florida

5kw, DA-D,D
1300 KC



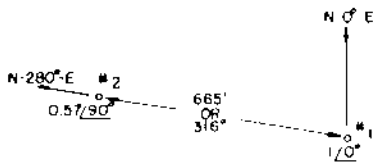
O = MEASURED RADIALS
---- = COMPUTED PATTERN
——— = MEASURED PATTERN

E_{RMS} = 474 MV/M

LATITUDE: 27° 58' 28.6"
LONGITUDE: 82° 21' 16.7"

JOHN H. MULLANEY
CONSULTING RADIO ENGINEERS
WASHINGTON, D. C.

ANTENNA PARAMETERS



G=142.6°

FIGURE 18

MEASURED DAYTIME
HORIZONTAL POLAR PATTERN
RADIO STATION WWTB
TAMPA, FLORIDA

1300 KC 5 KW-DA-D

FCC File No. BL-7040
Accepted 3-13-58

WWTB
Tampa, Florida

1300 KC

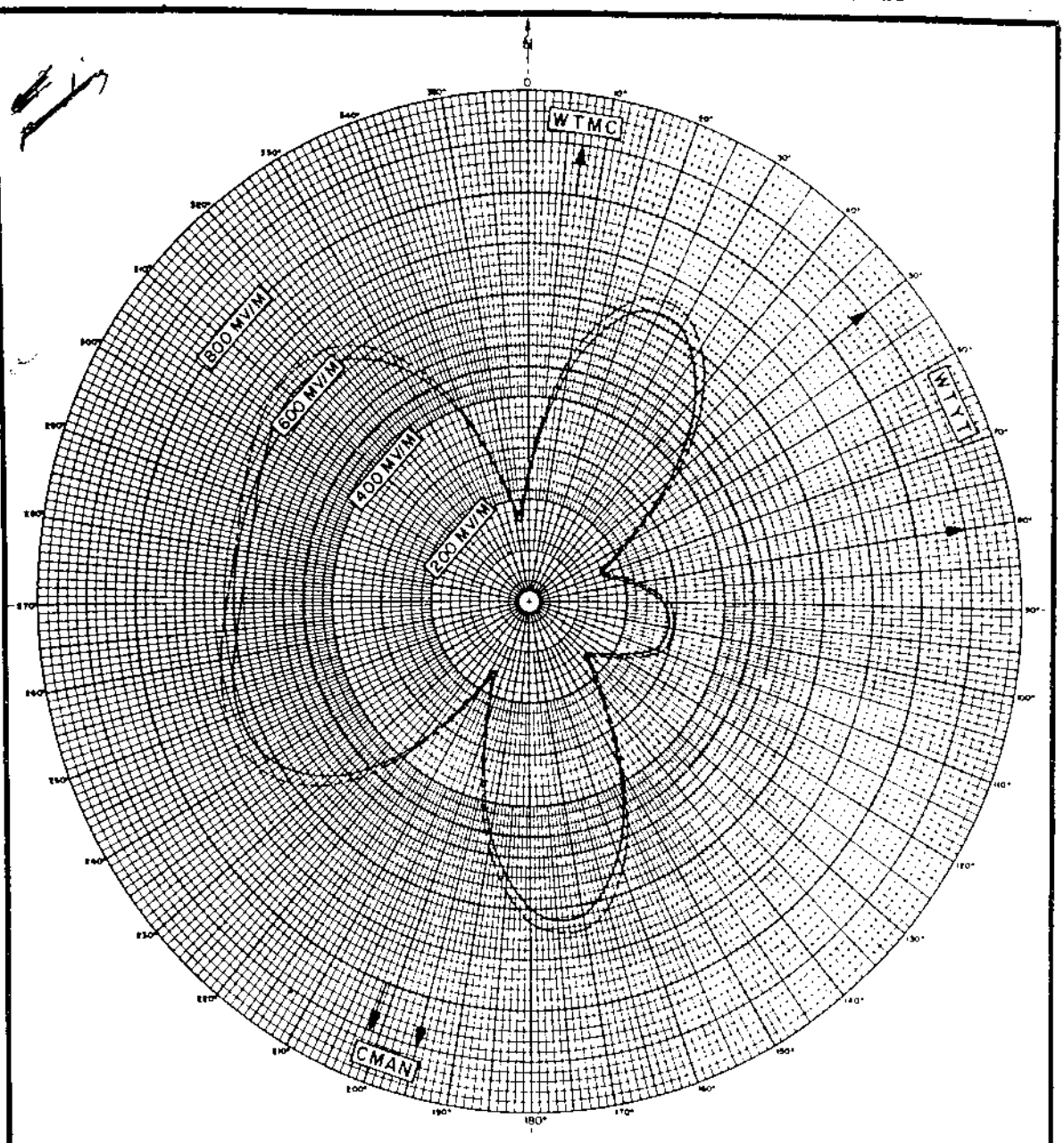
~~WWTB~~
WSOL

PROPOSED DAY
(5/17/57g)

Station WWTB
Tampa, Florida

5kw, DA-D,D
1300 KC

Granted CP
8/11/57 To
increase power

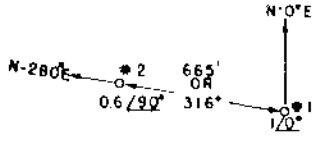


E_{RMS} = 458 MV/M

– – – – – = MEOV

LATITUDE: 27° 58' 28.6"
LONGITUDE: 82° 21' 16.7"

ANTENNA PARAMETERS



G=142.6°

FIGURE 4
DAYTIME
HORIZONTAL POLAR PATTERN
RADIO STATION WWTB
TAMPA, FLORIDA

1300 KC 5 KW-DA-D

JOHN H. MULLANEY
CONSULTING RADIO ENGINEERS
WASHINGTON, D. C.

FCC File No. BP-11,102
Accepted 2/18/57

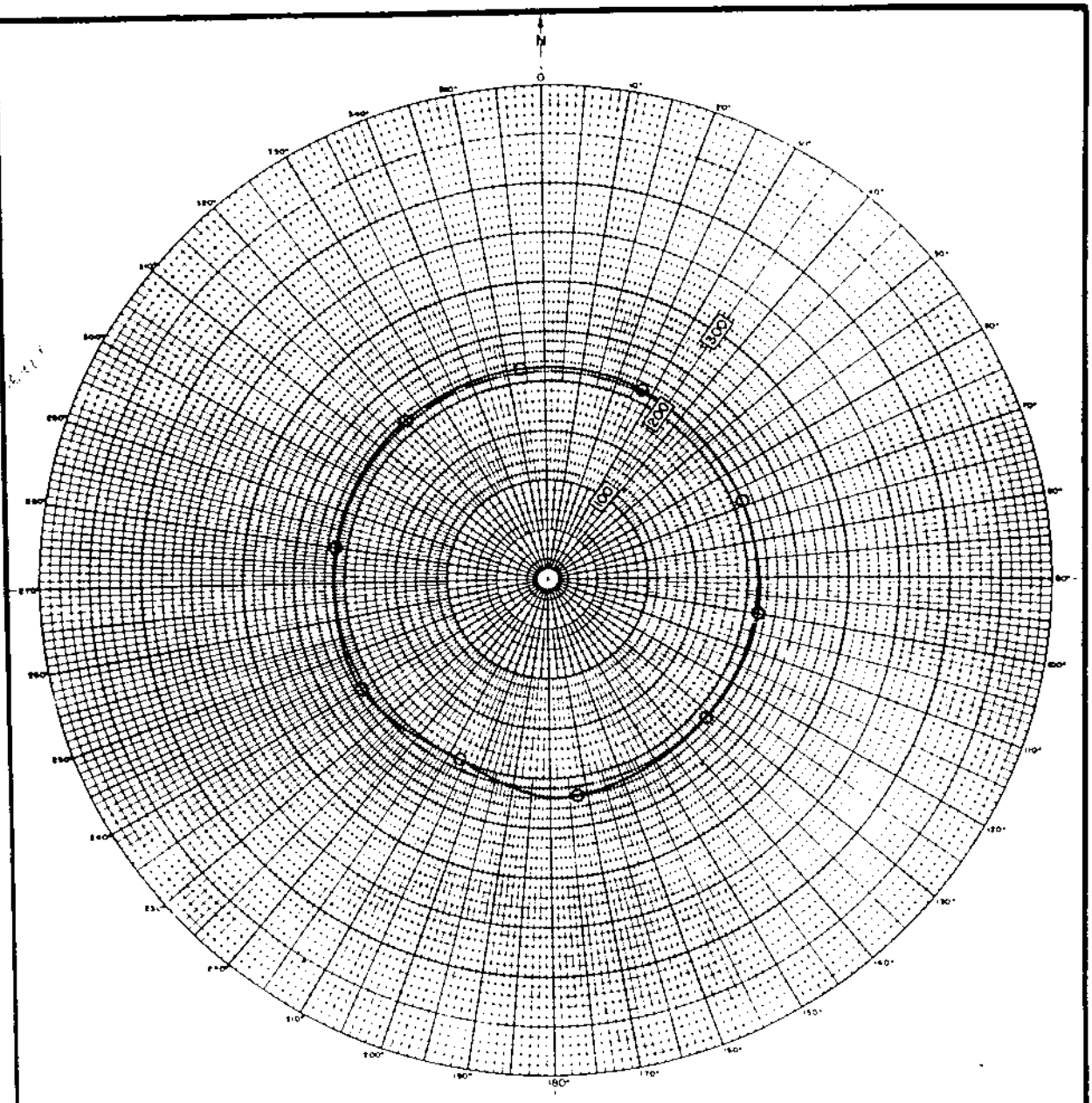
WWTB
Tampa, Florida 1300 KC

~~WWTB~~
WSOL

MEASURED NON-DA
(3-19-58g)

Station WWTB
Tampa, Florida

5kw, DA-D,D
1300 KC



E_{RMS} = 210 MV/M

O = MEASURED RADIALS

LATITUDE: 27° 58' 28.6"
LONGITUDE 82° 21' 16.7"

ANTENNA PARAMETERS

G=142.6°

JOHN H. MULLANEY
CONSULTING RADIO ENGINEERS
WASHINGTON, D. C.

FIGURE 16
MEASURED NON-DA
HORIZONTAL POLAR PATTERN
RADIO STATION WWTB
TAMPA, FLORIDA
1300 KC 5 KW-DA-D

FCC File No. BL-7040
Accepted 3-13-58

WWTB
Tampa, Florida

1300 KC

WSYD

PROPOSED NIGHT
10/6/55G

STATION WSYD
MT. AIRY, N.C.

1 KW, 5 KW-LS
DA-N, U

1300 KC

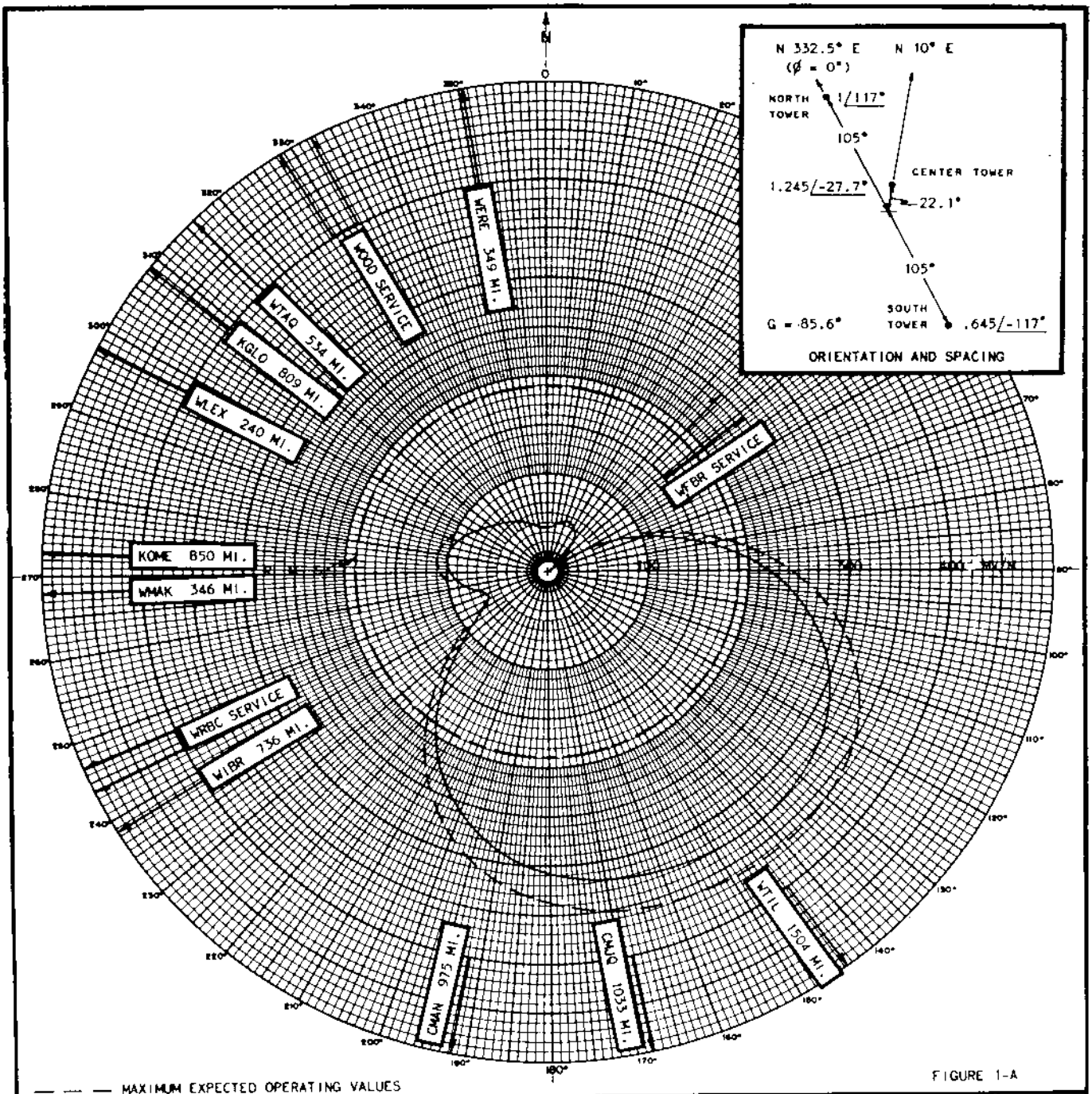


FIGURE 1-A

WSYD - MOUNT AIRY, N.C.

HORIZONTAL RADIATION PATTERN

ANTENNA	NORTH	CENTER	SOUTH	NO. 4	NO. 5	NO. 6
PHASE DEG.	+117°	-27.7°	-117°			
HEIGHT DEG	85.6°	85.6°	85.6°			
FIELD RATIO	1.000	1.245	0.645			
NON-DA ANT.						

FREQUENCY:	1300 KC
ASSIGNMENT:	REQ. 5 KW-LS, 1 KW-N (DA-N)
LONGITUDE:	80 DEG. 35 MIN. 35.35 SEC.
LATITUDE:	36 DEG. 30 MIN. 12.50 SEC.
WHEN USED:	NIGHTTIME
R.M.S. FIELD:	189.9 MV/M (CALCULATED)
DATE:	JULY 1955

ROBERT M. SILLIMAN
CONSULTING RADIO ENGINEERS
WASHINGTON, D. C.

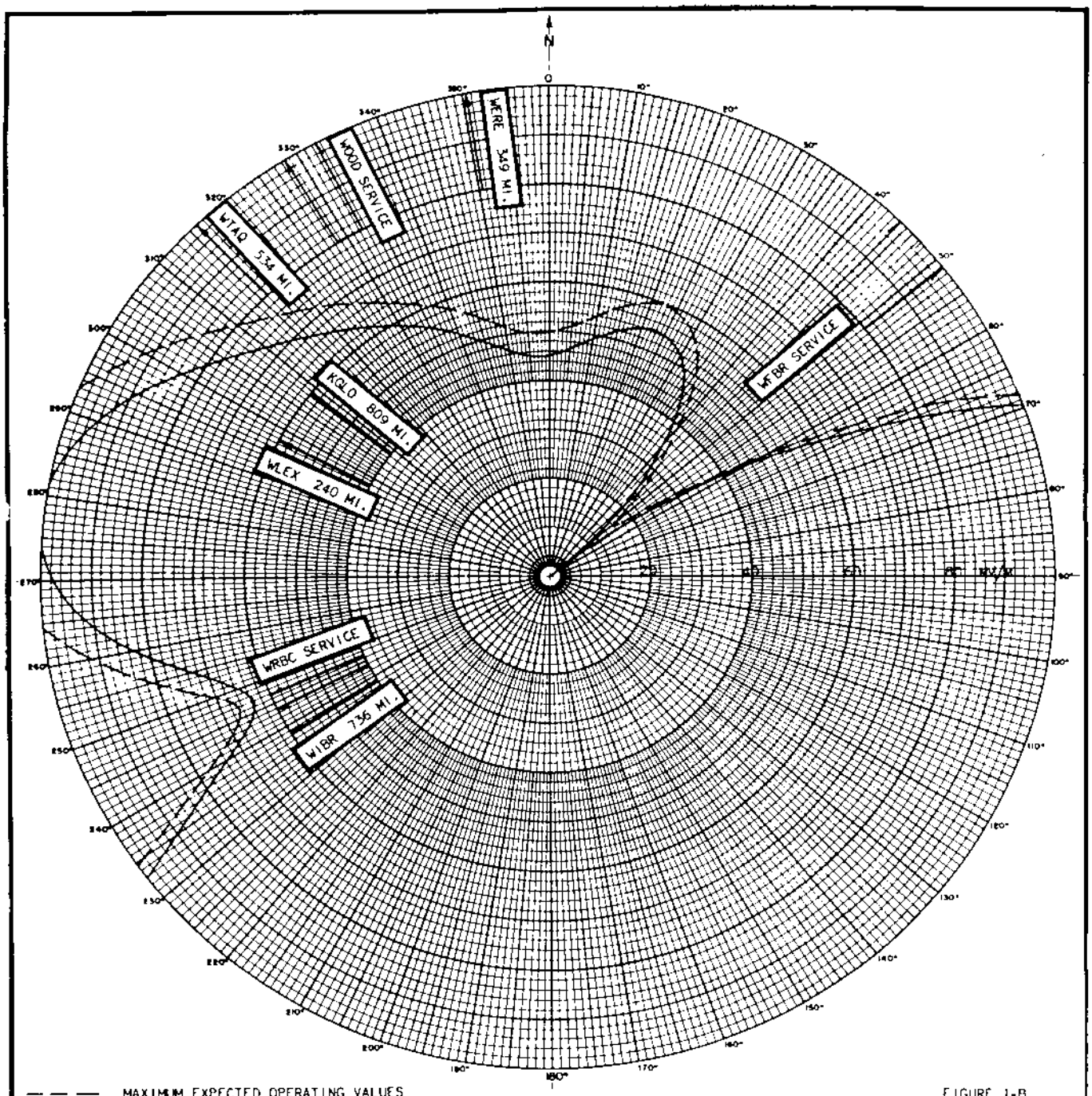
WSYD

PROPOSED NIGHT
NULLS 10/6/55G

STATION WSYD
MT. AIRY, N.C.

1 KW, 5KW-LS
DA-N, U

1300 KC



— — — MAXIMUM EXPECTED OPERATING VALUES

FIGURE 1-B

WSYD - MOUNT AIRY, N. C.

HORIZONTAL RADIATION PATTERN

EXPANDED SCALE

ANTENNA	NORTH	CENTER	SOUTH	NO. 4	NO. 5	NO. 6
PHASE DEG.	+117°	-27.7°	-117°			
HEIGHT DEG.	85.6°	85.6°	85.6°			
FIELD RATIO	1.000	1.245	0.645			
NON-DA ANT.						

FREQUENCY: 1300 KC.

ASSIGNMENT: REQ. 5 KW-LS, 1 KW-N (DA-N)

LONGITUDE: 80 DEG. 35 MIN. 35.35 SEC.

LATITUDE: 36 DEG. 30 MIN. 12.50 SEC.

WHEN USED: NIGHTTIME

R.M.S. FIELD: 189.9 MV/M (CALCULATED)

DATE: JULY 1955

ROBERT M. SILLIMAN

CONSULTING RADIO ENGINEERS

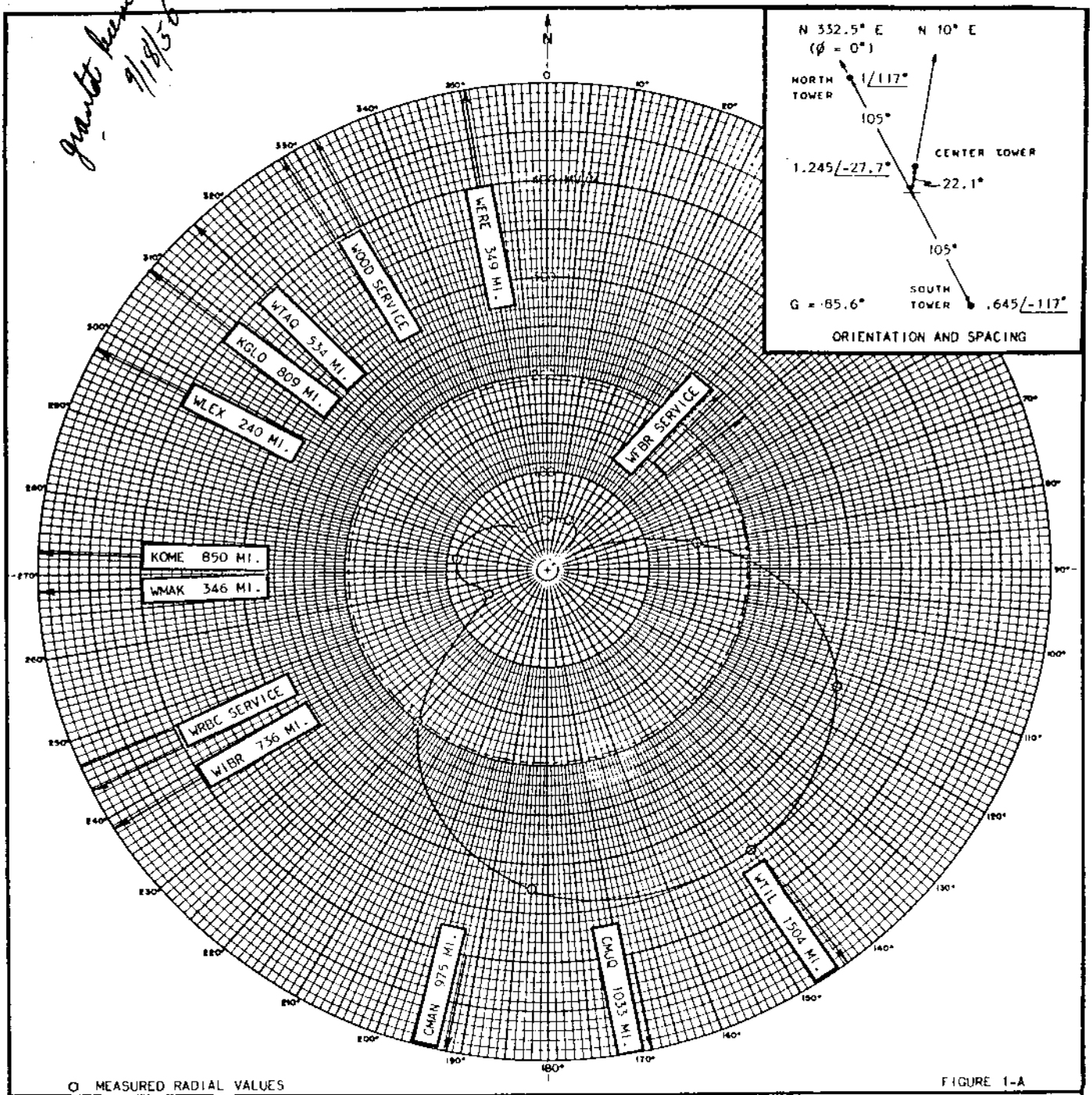
WASHINGTON, D. C.

File No. BMP-6946 Accepted 9/1/55 WSYD, MT. AIRY, N.C. 1300 KC

WSYD

MEASURED NIGHT (9-14-56g) STATION W S Y D Mt. Airy, North Carolina DA-N, U 1 KW, 1300KC

granted here 9/18/56



O MEASURED RADIAL VALUES

FIGURE 1-A

WSYD - MOUNT AIRY, NORTH CAROLINA

HORIZONTAL RADIATION PATTERN

NIGHTTIME DIRECTIONAL OPERATION

	NORTH	CENTER	SOUTH			
ANTENNA	NO. 1	NO. 2	NO. 3	NO. 4	NO. 5	NO. 6
THEO. PHASE	+117°	-27.7°	-117°			
FIELD RATIO	1.000	1.245	0.645			
MEAS. PHASE	+17.5°	0°	+149.7°			
LOOP RATIO	1.000	1.044	0.711			
ELEC. HGT.	85.6°	85.6°	85.6°			

FREQUENCY: 1300 KC.
ASSIGNMENT: 5 Kw-LS, 1 Kw-N(DA)
LONGITUDE: 80 DEG. 35 MIN. 35.35 SEC.
LATITUDE: 36 DEG. 30 MIN. 12.50 SEC.
WHEN USED: NIGHTTIME
R.M.S. FIELD: 197.6 MV/M (MEASURED)
DATE: JULY 1956

ROBERT M. SILLIMAN
CONSULTING RADIO ENGINEERS
WASHINGTON, D. C.

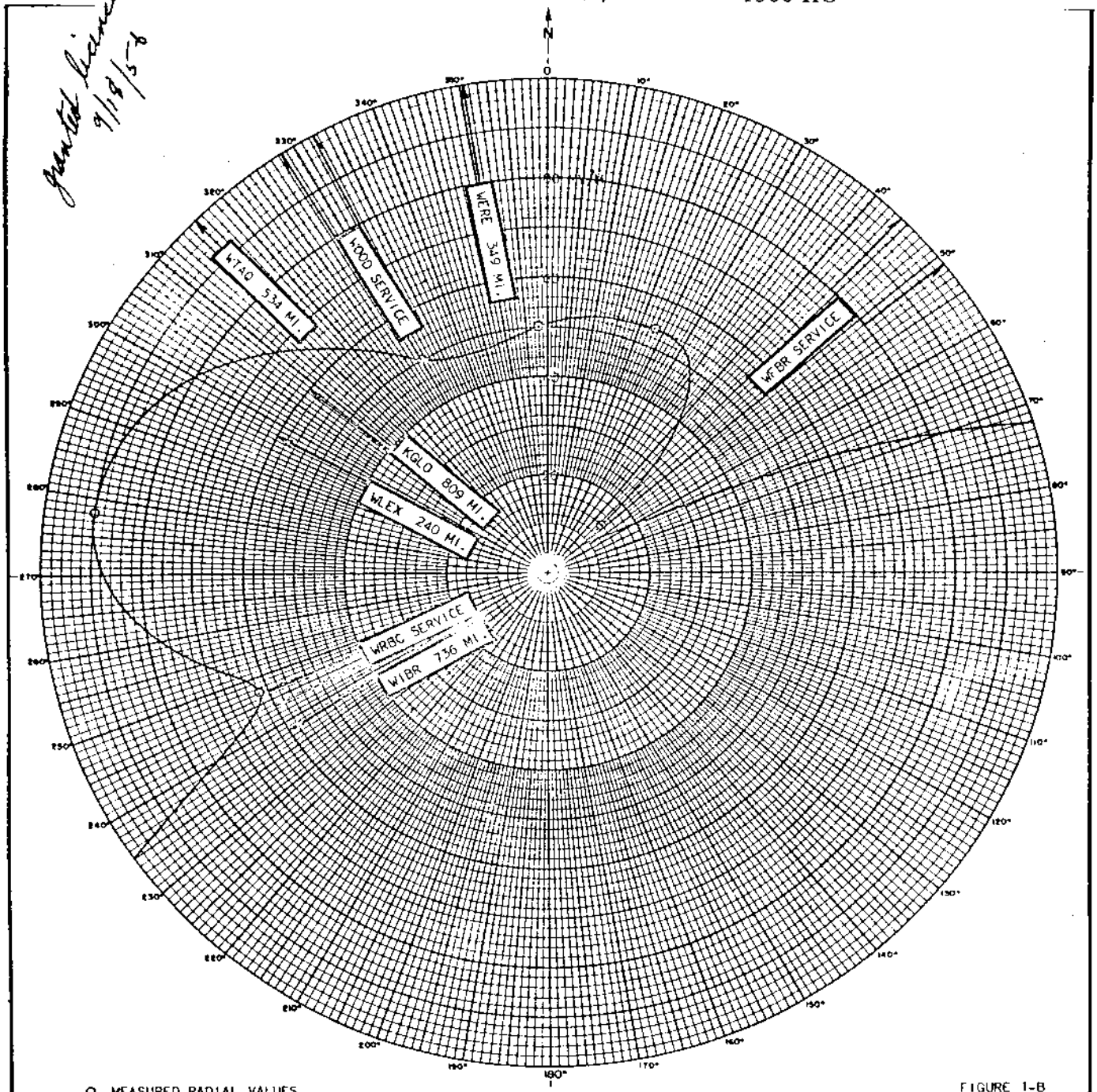
FCC File BL-6291 Accepted 9-6-56 Station WSYD Mt. Airy, N. C. DA-N, U 1KW, 1300 KC

WSYD

MEASURED
NIGHT (9-14-56g)
NULL

STATION W S Y D
Mt. Airy, North Carolina DA-N, U
1 KW, 1300 KC

granted license 9/19/56



O MEASURED RADIAL VALUES

FIGURE 1-B

WSYD - MOUNT AIRY, NORTH CAROLINA

HORIZONTAL RADIATION PATTERN

EXPANDED VIEW OF NIGHTTIME DIRECTIONAL PATTERN

ANTENNA	NO. 1	NO. 2	NO. 3	NO. 4	NO. 5	NO. 6
PHASE DEG.						
HEIGHT DEG.		SEE FIGURE 1-A				
FIELD RATIO						
NON-DA ANT.						

FREQUENCY:	1300 KC
ASSIGNMENT:	5 Kw-LS, 1 Kw-N(DA)
LONGITUDE:	80, DEG. 35 MIN. 35, 35 SEC.
LATITUDE:	36 DEG. 30 MIN. 12, 50 SEC.
WHEN USED:	NIGHTTIME
R.M.S. FIELD:	197.6 MV/M (MEASURED)
DATE:	JULY 1956

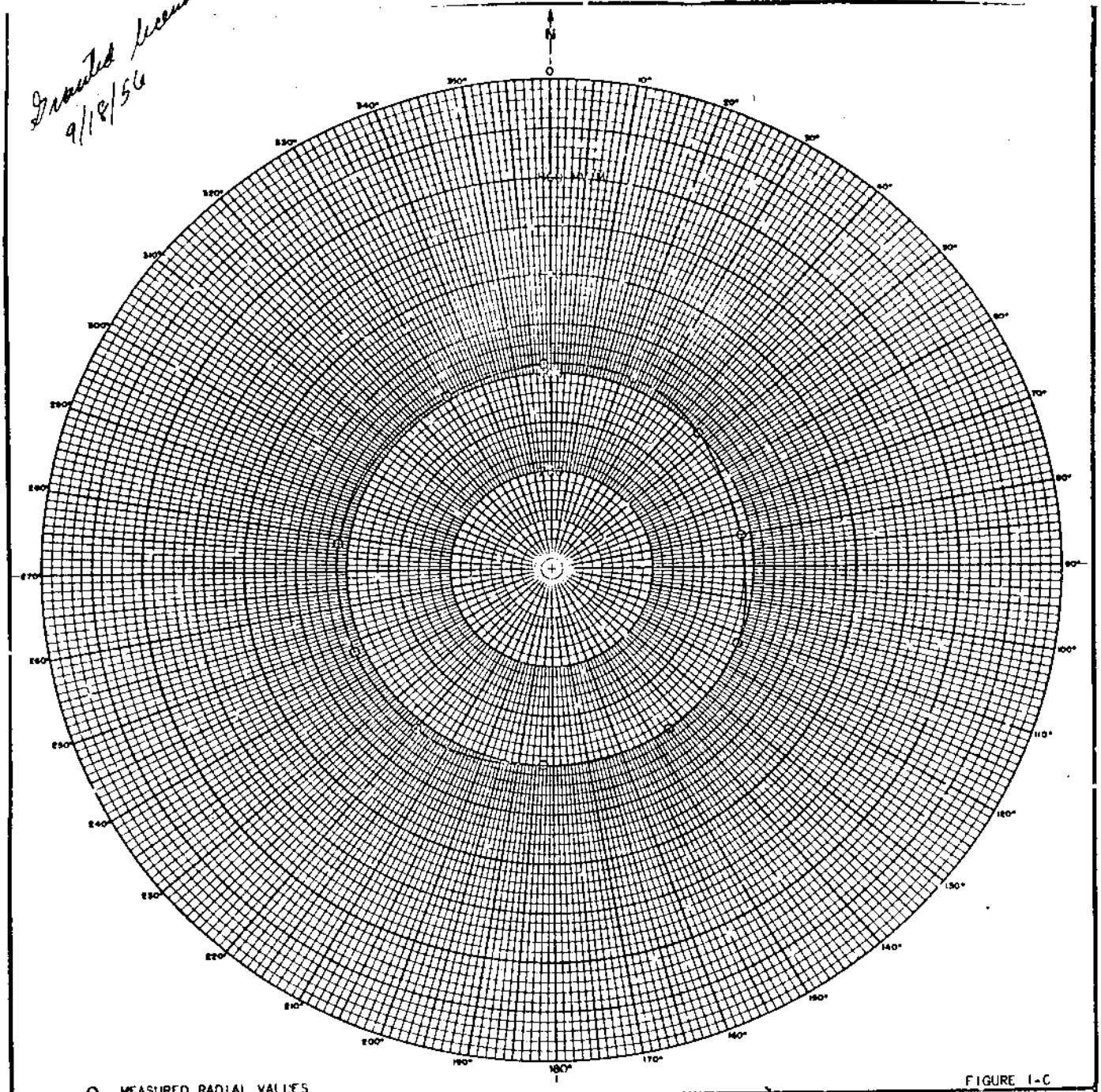
ROBERT M. SILLIMAN
CONSULTING RADIO ENGINEERS
WASHINGTON, D. C.

FCC File BL-6291 | Accepted 9-6-56 | Station WSYD Mt. Airy, N. C. | DA-N, U 1 KW, | 1300 KC

WSYD

MEASURED ~~NIGHT~~ STATION W S Y D DA-N, U 1300KC
Non-Da 9-14-56 Mt. Airy, North Carolina 1KW,

Granted license 9/18/56



O MEASURED RADIAL VALUES

FIGURE 1-C

WSYD - MOUNT AIRY, NORTH CAROLINA

HORIZONTAL RADIATION PATTERN

DAYTIME NON-DIRECTIONAL OPERATION

	NORTH	CENTER	SOUTH			
ANTENNA	NO. 1	NO. 2	NO. 3	NO. 4	NO. 5	NO. 6
PHASE DEG.						
HEIGHT DEG.						
FIELD RATIO						
NON-DA ANT.		#				

FREQUENCY:	1300 KC.
ASSIGNMENT:	5 Kw-LS, 1 Kw-N(DA)
LONGITUDE:	80 DEG. 35 MIN. 35.35 SEC.
LATITUDE:	36 DEG. 30 MIN. 12.50 SEC.
WHEN USED:	DAYTIME
R.M.S. FIELD:	405.6 MV/M (MEASURED)
DATE:	JULY 1956

ROBERT M. SILLIMAN
CONSULTING RADIO ENGINEERS
WASHINGTON, D. C.

FCC FILE BL-6291 · Accepted 9-6-56 Station WSYD Mt. Airy, N.C. DA-N, U 1 KW, 1300 KC

WTAQ

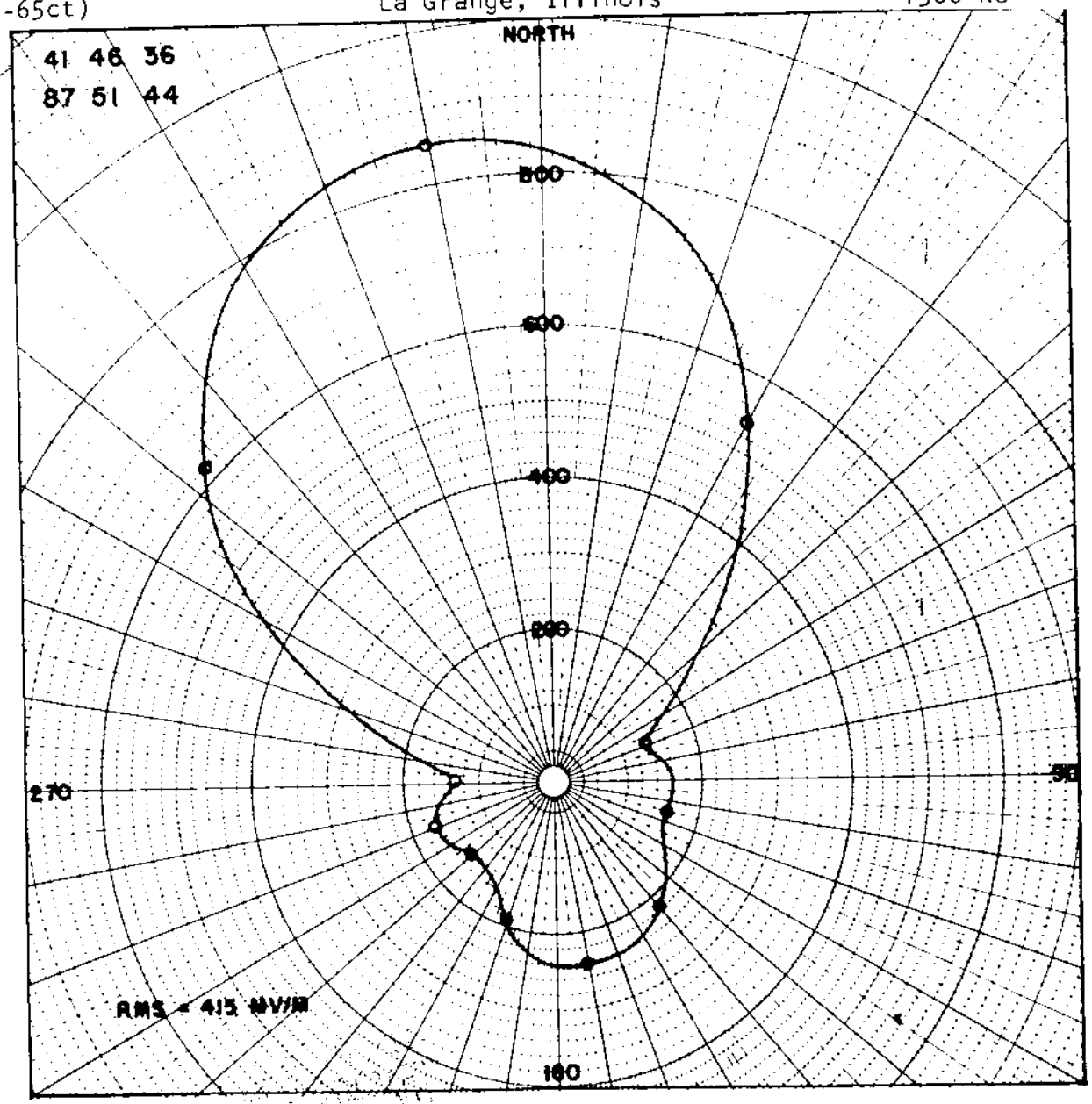
Measured Day
(9-28-65ct)

Station WTAQ
La Grange, Illinois

500w,5kw-LS,DA-2,U
1300 kc

-IC, IZ-20-65

41 46 36
87 51 44



	CALC	MEAS
4	0.1725 /-132.2	0.287 /-141
3	0.6875 / 0	0.744 / 0
2	1.148 / 144.5	1.19 / 135
1	1.00 /-63.2	1.00 /-69

350°
349°
S
S
S

S = 90° G = 90°

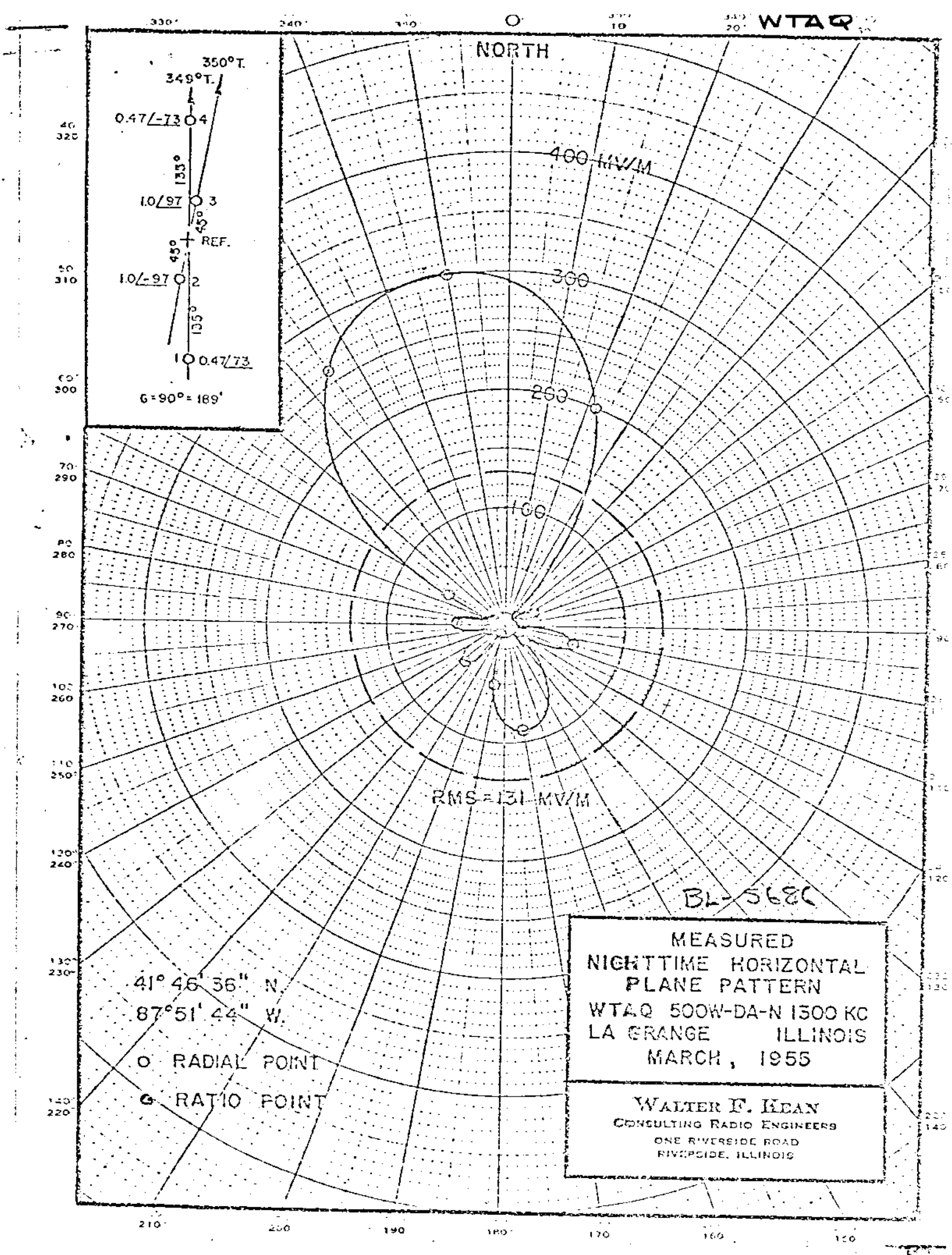
MEASURED
DAYTIME RADIATION PATTERN
WTAQ 5.0 KW
LA GRANGE ILL
MAY 1965

ROBERT A. JONES
CONSULTING ENGINEERS
LA GRANGE, ILLINOIS

FCC File No. BL-11042
Accepted 9-20-65

Station WTAQ
La Grange, Illinois

1300 kc


WTAQ
NORTH
350°T.
349°T.
0.47/-73 4
133°
1.0/97 3
45°
REF.
45°
1.0/-97 2
135°
1 0.47/73
G=90°=189'
400 MV/M
300
200
100
RMS=131 MV/M
BL-5680
MEASURED
NIGHTTIME HORIZONTAL
PLANE PATTERN
WTAQ 500W-DA-N 1300 KC
LA GRANGE ILLINOIS
MARCH, 1955
WALTER F. KEAN
CONSULTING RADIO ENGINEERS
ONE RIVERSIDE ROAD
RIVERSIDE, ILLINOIS
41° 46' 36" N.
87° 51' 44" W.
O RADIAL POINT
G RATIO POINT

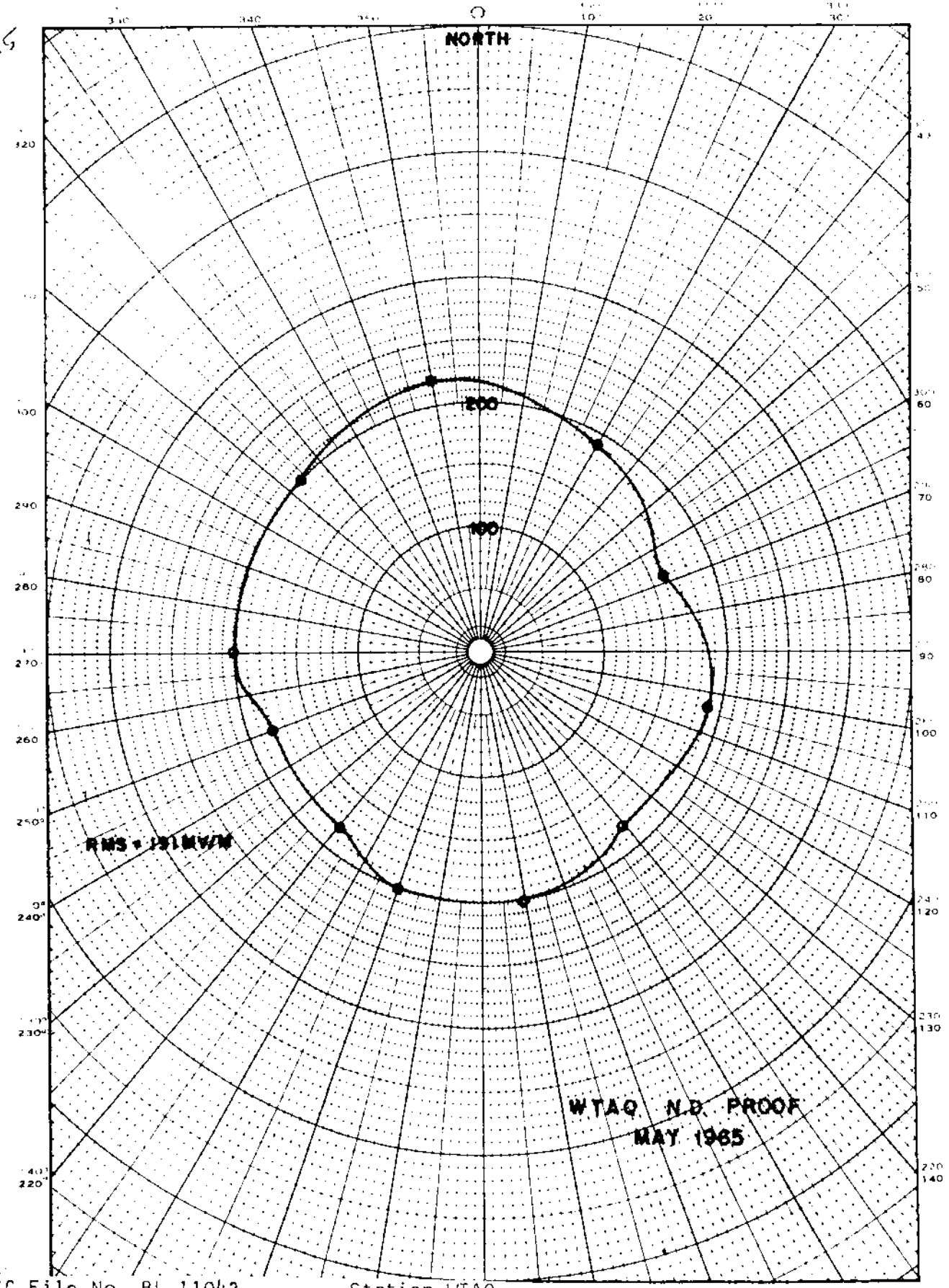
WTAQ

Measured Non-DA
(9-28-65ct)

Station WTAQ
La Grange, Illinois

500w,5kw-LS,DA-2,U
1300 kc

LIC-12-20-65



FCC File No. BL-11042
Accepted 9-20-65

Station WTAQ
La Grange, Illinois

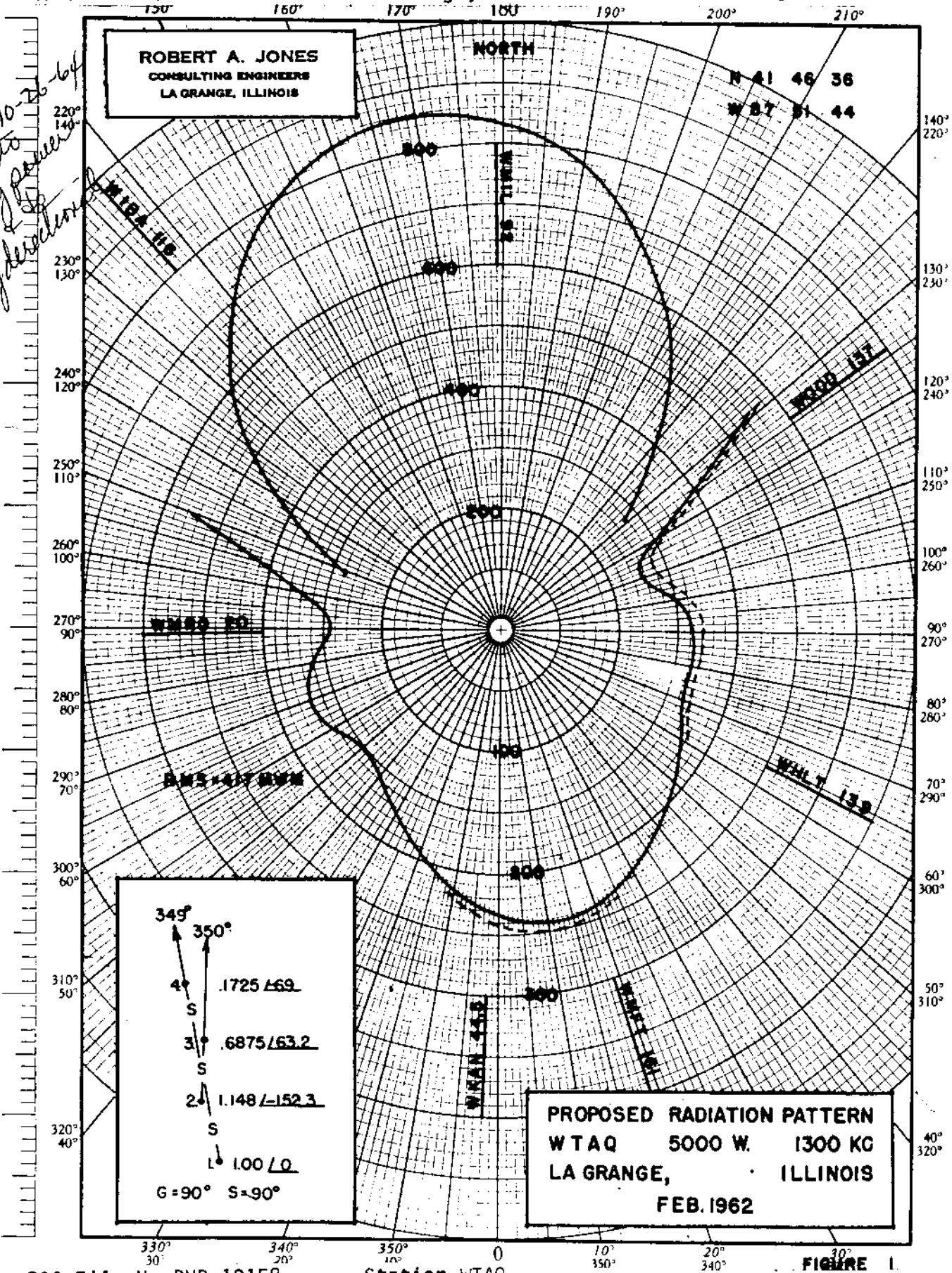
1300 kc

WTAQ

Proposed Day
(3-30-62ct)

Station WTAQ
LaGrange, Illinois

500w, 5kw-LS, DA-2, U
1300 kc



FCC File No. BMP-10158
Accepted 3-20-62

Station WTAQ
LaGrange, Illinois

1300 kc

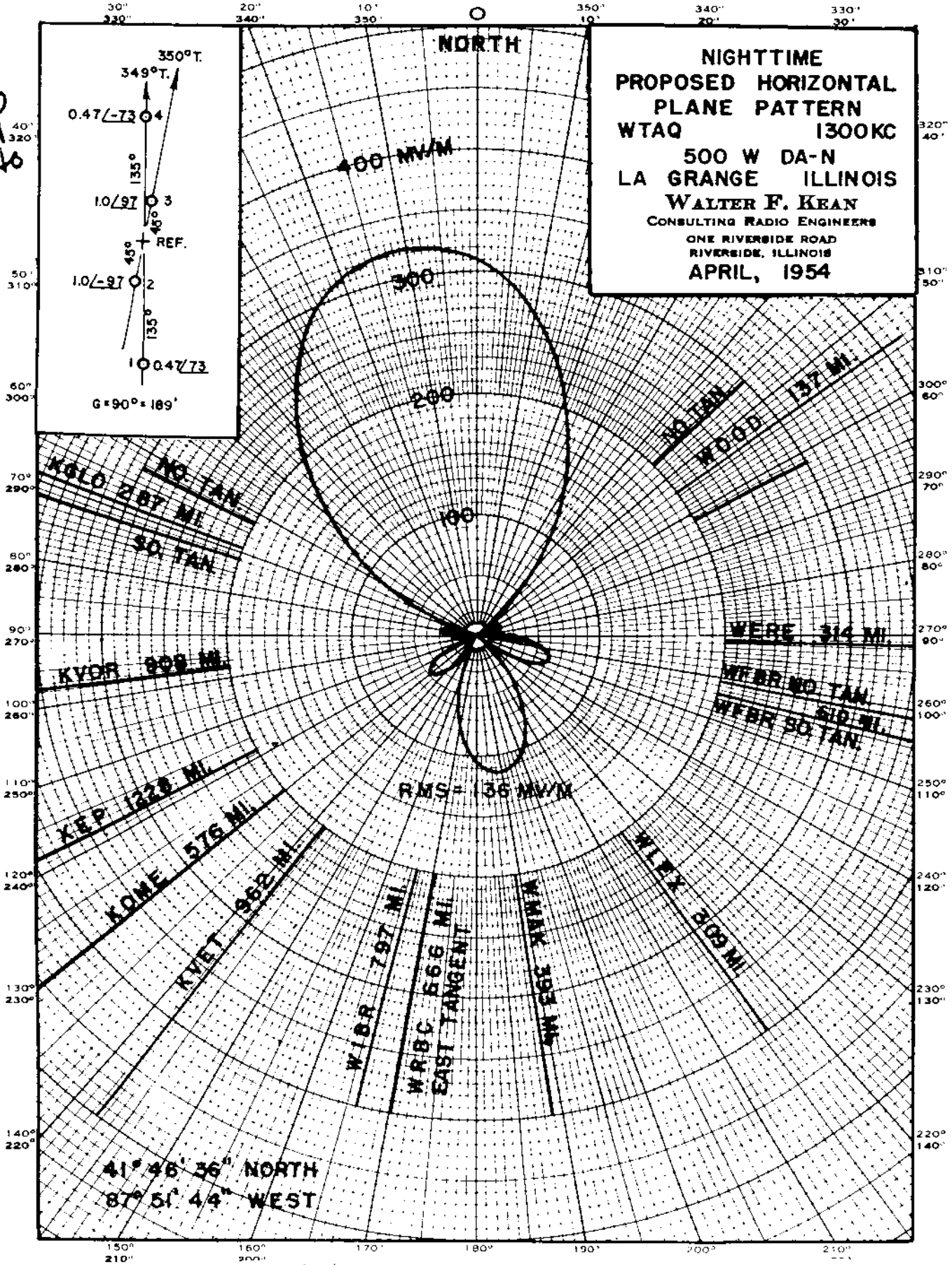
FIGURE 1

F-203 - 10-12-64
granted op to increase day power to 5 KW & to change day location

WTAQ

PROPOSED NIGHT (5/20/54G) WTAQ, LaGrange, Illinois 500W, U, DA-N 1300 kc

3-21-61 granted CP to change to DA-2



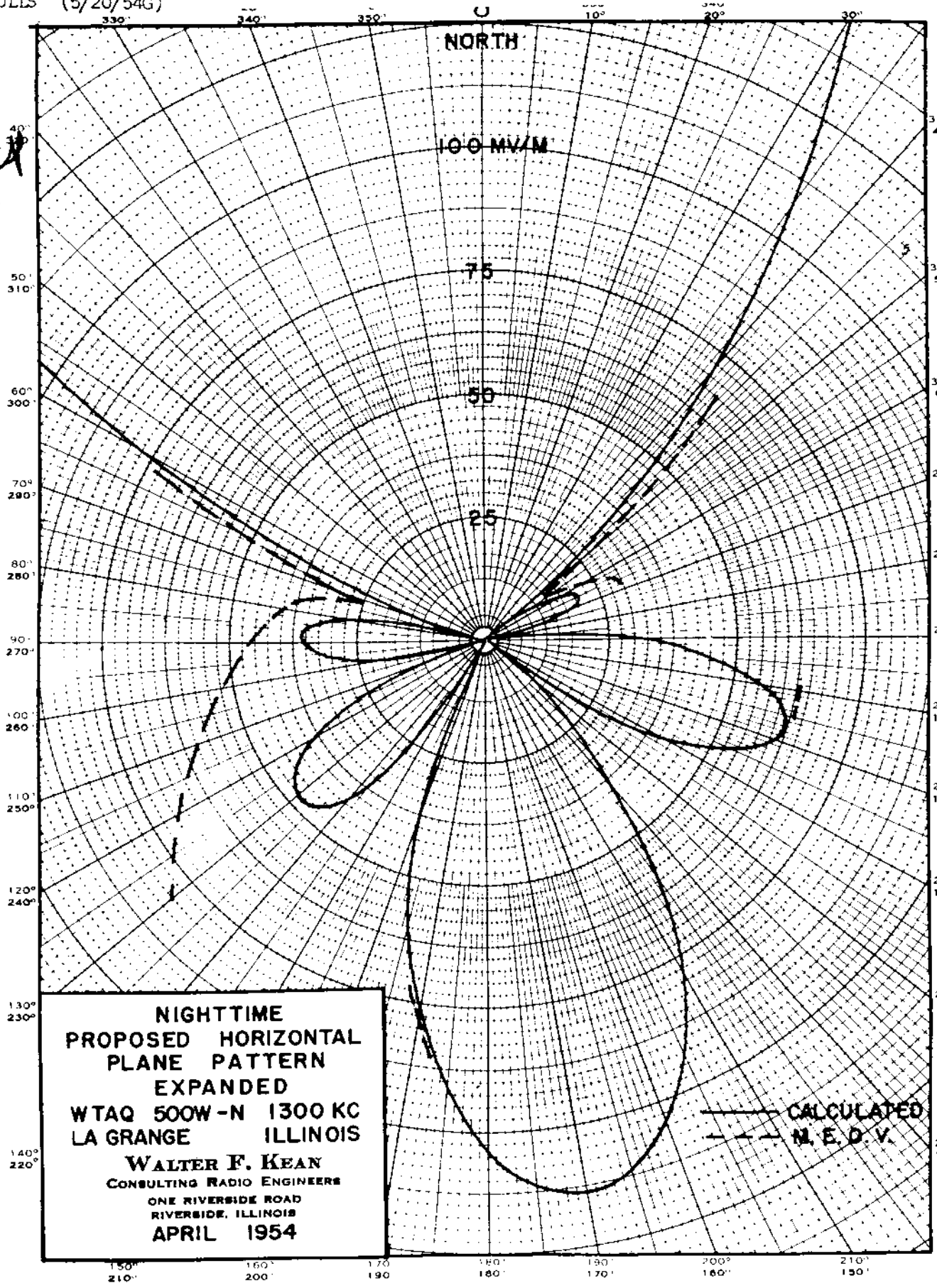
FCC File No. BP-9044 Accepted 5/13/54 WTAQ, LaGrange, Illinois 1300 kc

WTAQ

PROPOSED NIGHT NULLS (5/20/54G)

WTAQ, LaGrange, Illinois 500W, U, DA-N 1300 kc

3-21-61 granted CP for DA-2



1300 kc

FCC File No. BP-9044 Accepted 5/13/54 WTAQ, LaGrange, Illinois

WTNJ WAAT

Proposed Day
(8-27-65ct)

Station WAAT
Trenton, New Jersey

5kw, DA-D, D
1300 kc

MCP
8-18-65
CHG. DA.

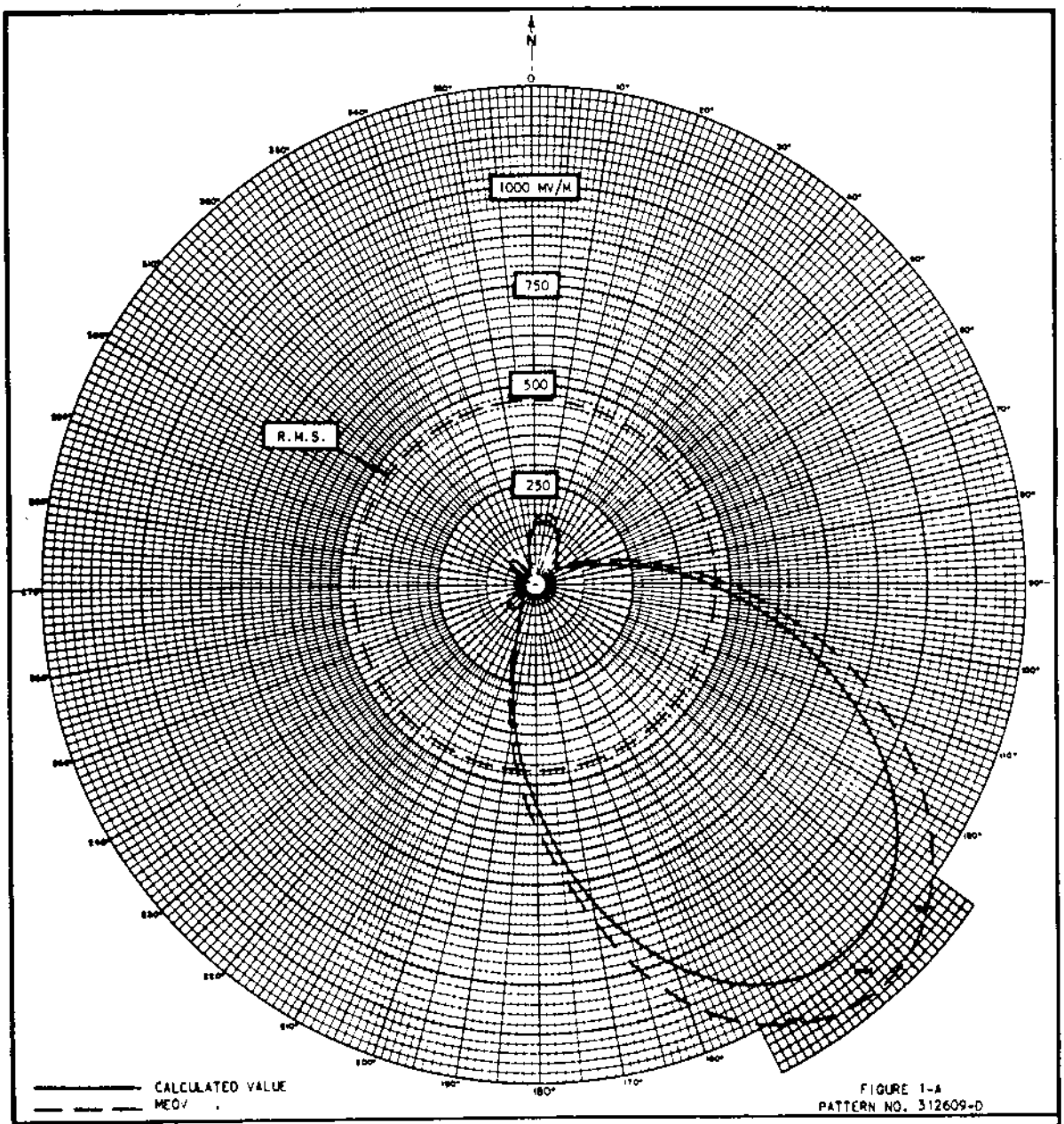
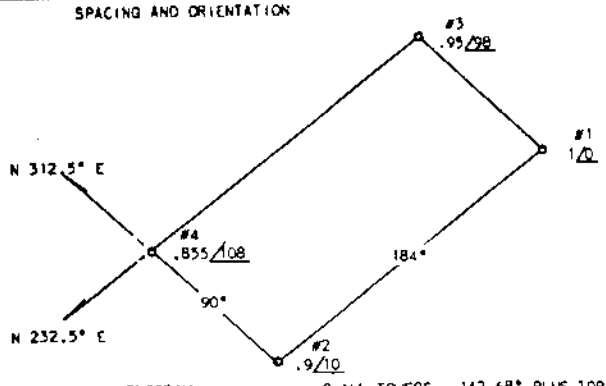


FIGURE 1-A
PATTERN NO. 312609-D

HORIZONTAL RADIATION PATTERN

SPACING AND ORIENTATION



4 TOWER PARALLELOGRAM

G ALL TOWERS = 142.68° PLUS TOP LOADING

APPLICANT	DELAWARE VALLEY BROADCASTING CO.
LOCATION	TRENTON, NEW JERSEY
FREQUENCY	1300 KC/S
POWER	5 KW(DA-2)
LATITUDE	40 DEG 17 MIN. 16 SEC.
LONGITUDE	74 DEG 52 MIN. 23 SEC.
WHEN USED	DAYTIME
RMS FIELD	466.55 MV/M
DATE	JUNE 1965

RAYMOND E. ROHRER & ASSOCIATES
CONSULTING RADIO ENGINEERS
WASHINGTON, D. C.

FCC File No. BMP-11555
Accepted 7-30-65

Station WAAT
Trenton, New Jersey

1300 kc

WTNJ ~~WAAT~~

Proposed Day Nulls
(8-27-65ct)

Station WAAT
Trenton, New Jersey

5kw,DA-D,D
1300 kc

MCP
8-18-65
CHG. DA

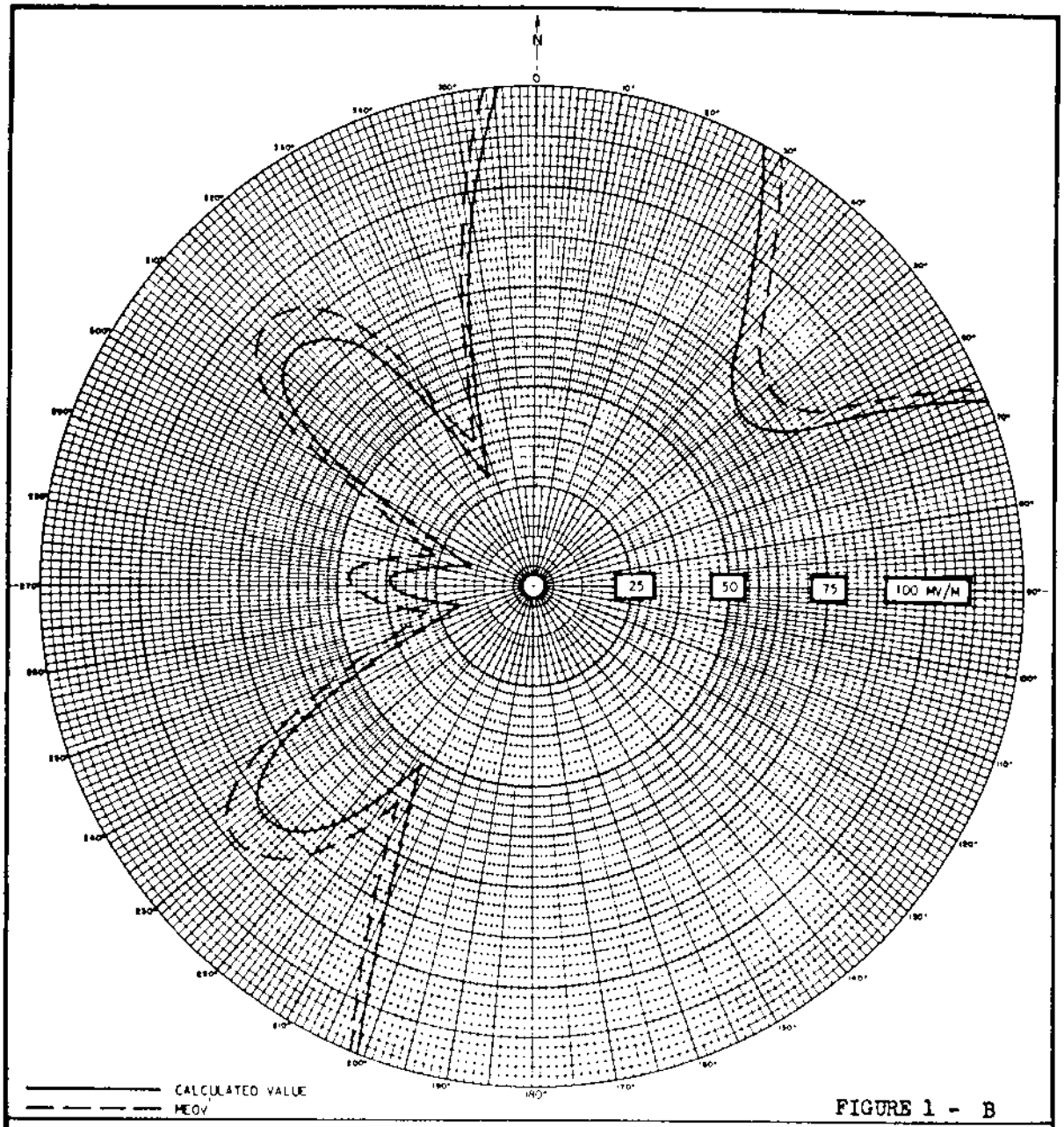


FIGURE 1 - B

EXPANDED VIEW

RAYMOND E. ROHRER & ASSOC
CONSULTING RADIO ENGINEERS
WASHINGTON, D.C.

FCC File No.BMP-11555
Accepted 7-30-65

Station WAAT
Trenton, New Jersey

1300 kc

WTNJ

~~WAAT~~

Measured Day
(3-30-66CT)

Station WAAT
Trenton, New Jersey

5kw, DA-D, D
1300 kc

BL-11237
2-6-67
GRANTED LICENSE
covering increased
power installation
of DA-D1
change in
antenna - transm

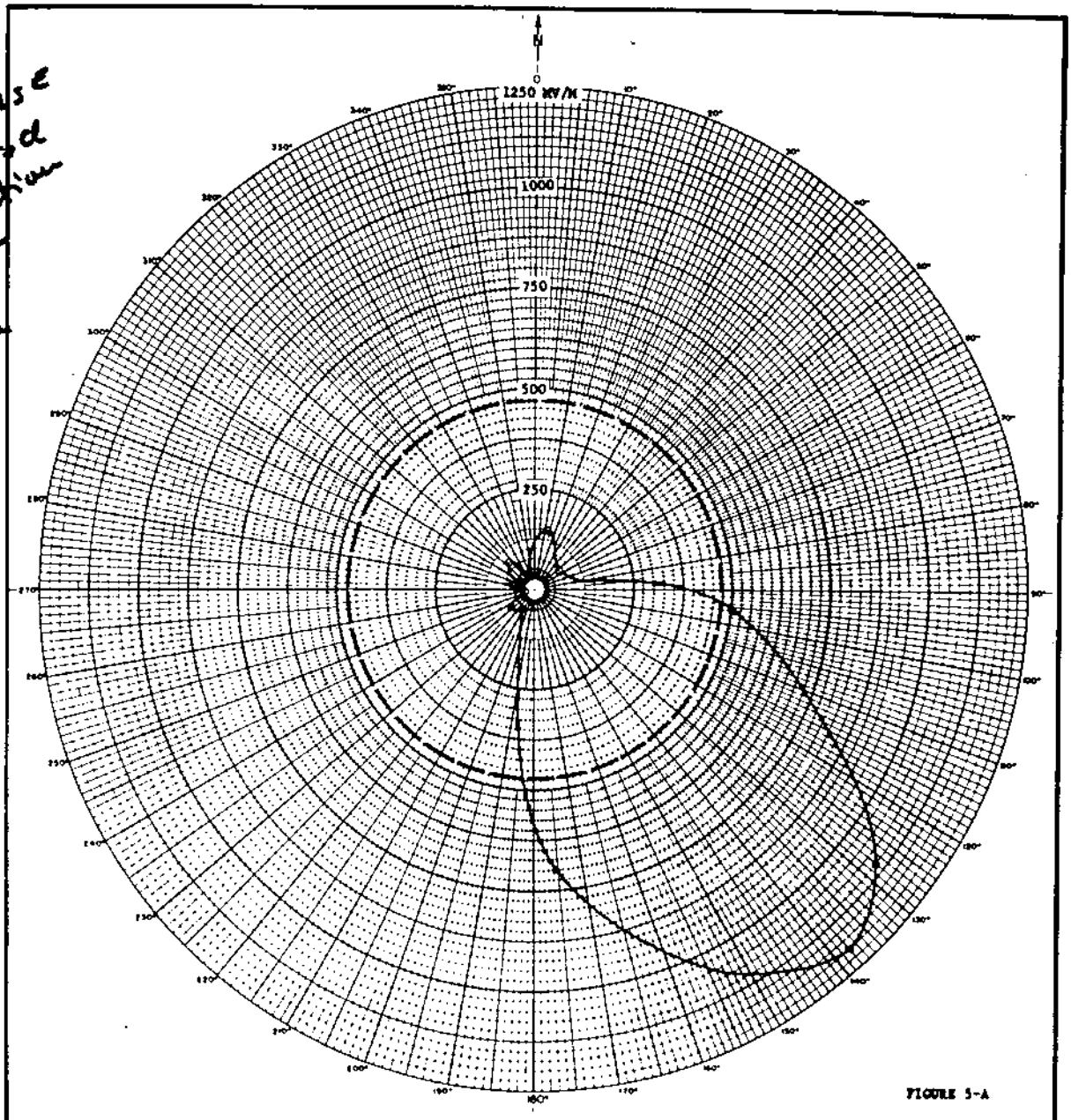
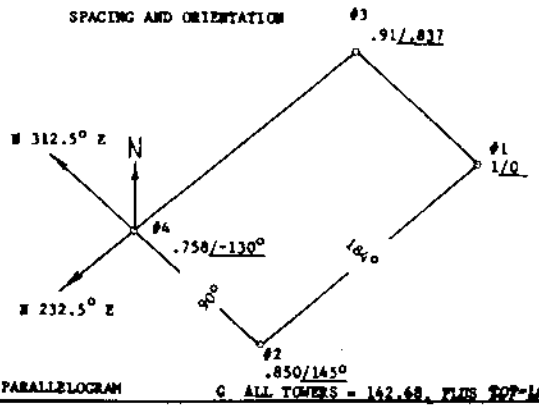


FIGURE 5-A

HORIZONTAL RADIATION PATTERN

SPACING AND ORIENTATION



4 TOWER PARALLELOGRAM

ALL TOWERS - 142.68, PLUS TOP-LOADING

APPLICANT	Radio Station WAAT
LOCATION	Trenton, New Jersey
FREQUENCY	1300 kc/s
POWER	5 KW
LATITUDE	40 DEG 17 MIN 16 SEC
LONGITUDE	74 DEG 52 MIN 23 SEC
WHEN USED	Daytime
RMS FIELD	470 MV/M
DATE	February 1966

RAYMOND E. ROHRER & ASSOCIATES
CONSULTING RADIO ENGINEERS
WASHINGTON, D. C.

FCC File No. BL-11237
Accepted 3-14-66

Station WAAT
Trenton, New Jersey

1300 kc

WTNJ WAAT

Measured Day Nulls
(3-30-66CT)

Station WAAT
Trenton, New Jersey

5kw,DA-D,D
1300 kc

BL-11237
2-6-67
GRANTED
LICENSE
covering incr.
power
installation of
DA-D and
change in
antenna-Trans.
location.

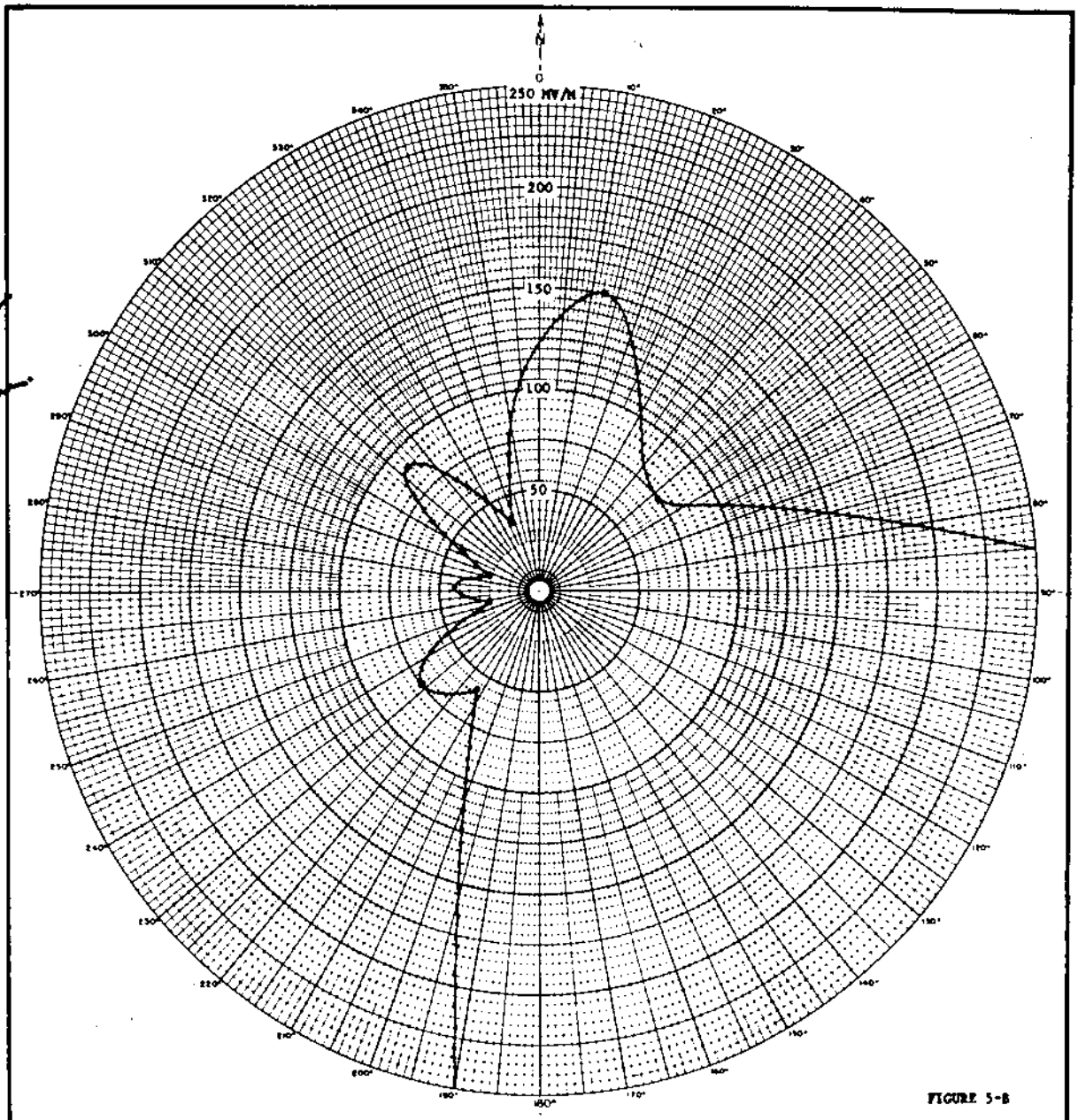


FIGURE 5-B

HORIZONTAL RADIATION PATTERN

EXPANDED HORIZONTAL PATTERN

RAYMOND E. ROHRER & ASSOCIATES
CONSULTING RADIO ENGINEERS
WASHINGTON, D. C.

FCC File No.BL-11237
Accepted 3-14-66

Station WAAT
Trenton, New Jersey

1300 kc

WTNJ ~~WAAT~~

Measured Non-DA
(3-30-66CT)

Station WAAT
Trenton, New Jersey

5kw, DA-D, D
1300 kc

BL-11237
2-6-67
GRANTED LICENSE
cov. incr. power
install. of DA-D
& change in
Antenna-Transm.
location.

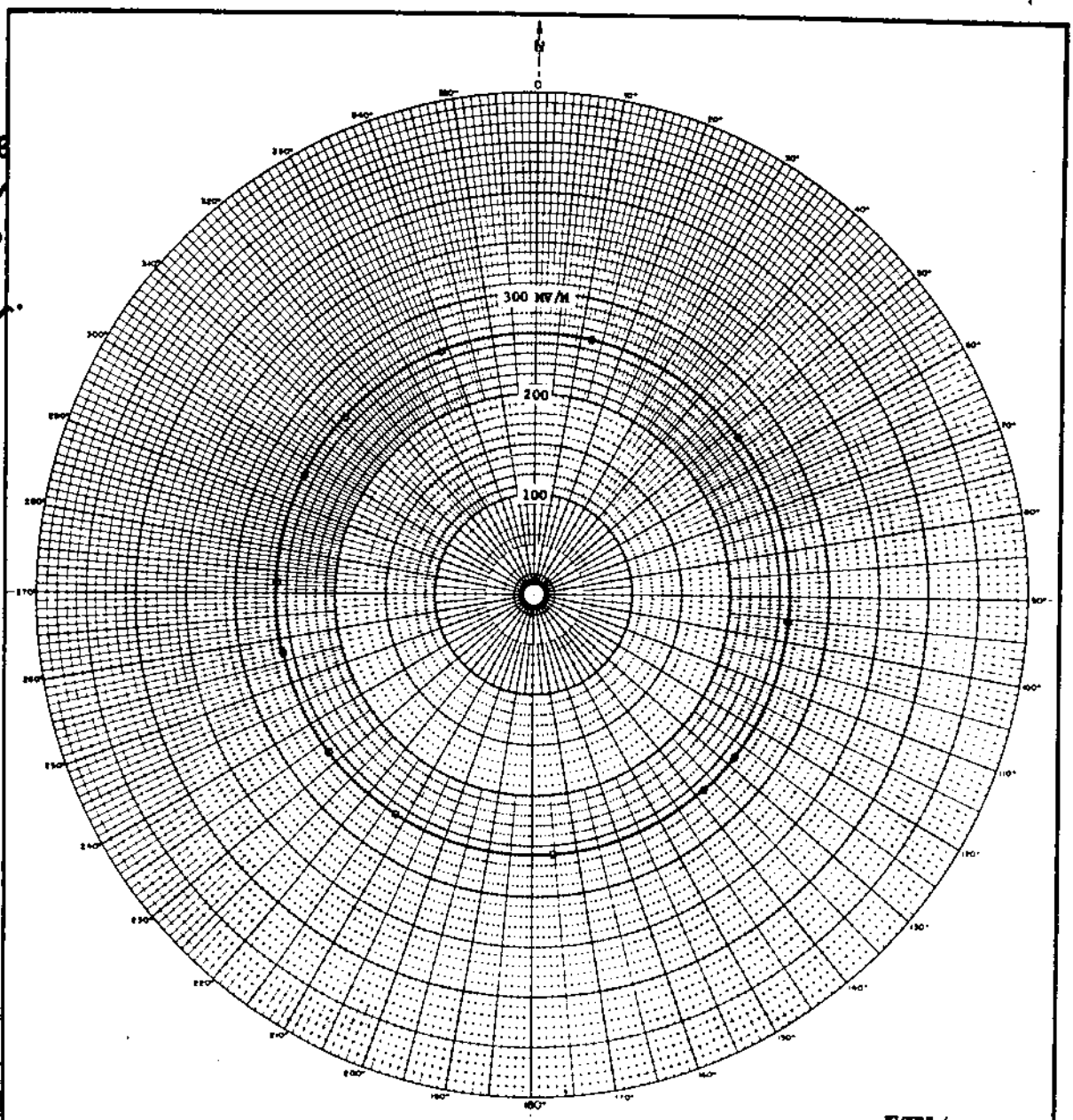


FIGURE 4

HORIZONTAL RADIATION PATTERN

APPLICANT	WAAT
LOCATION	Trenton, New Jersey
FREQUENCY	1300 KC/S
POWER	5 KW
LATITUDE	40 DEG 17 MIN. 16 SEC
LONGITUDE	74 DEG 52 MIN. 23 SEC
WHEN USED	Non-directional Survey
R.M.S. FIELD	260 MV/M
DATE	February 1966

RAYMOND E. ROHRER & ASSOCIATES
CONSULTING RADIO ENGINEERS
WASHINGTON, D. C.

WXRL
1300kHz

DIRECTIONAL ANTENNA DESCRIPTION SHEET

Station: W X R L — Main Studio: Lancaster, New York

Frequency: 1300 kHz — Power: 2.5 kW Night 1 kW Day

Notification List No. 1784 — Date: November 9, 1979 Class: III

GEOGRAPHICAL LOCATION OF THE CENTER OF THE ANTENNA SYSTEM: North Latitude: 42° 52' 58"
West Longitude: 78° 37' 54"

ANTENNA CHARACTERISTICS

Authorized for ~~Daytime and Nighttime~~ operation. (DA-2)
Number of elements: 3
Type of elements: Series excited, uniform cross-section, guyed, vertical steel towers.

TOWER:	#1	#2	#3
HEIGHT ABOVE INSULATORS:	189'	189'	189' (90°)
NIGHT PHASING:	-140.7°	0°	140.7°
NIGHT FIELD RATIO:	.566	1.0	.566
DAY PHASING:	0°	-160°	-
DAY FIELD RATIO:	1.43	1.0	-

SPACING AND ORIENTATION: Night: Tower #1 as reference, tower #2 is spaced 172.34' (82°) on a line bearing 189°, tower #3 is spaced 104° on a line bearing 189°
Day: Two towers spaced 90° on a line bearing 330° T.

GROUND SYSTEM: 120-189' equally spaced copper radials plus a 24' x 24' square ground screen about each tower. Radials are shortened and bonded to a transverse strap along intersections between towers. Centers of system are bonded together.

PREDICTED EFFECTIVE FIELDS AT RATED POWER:

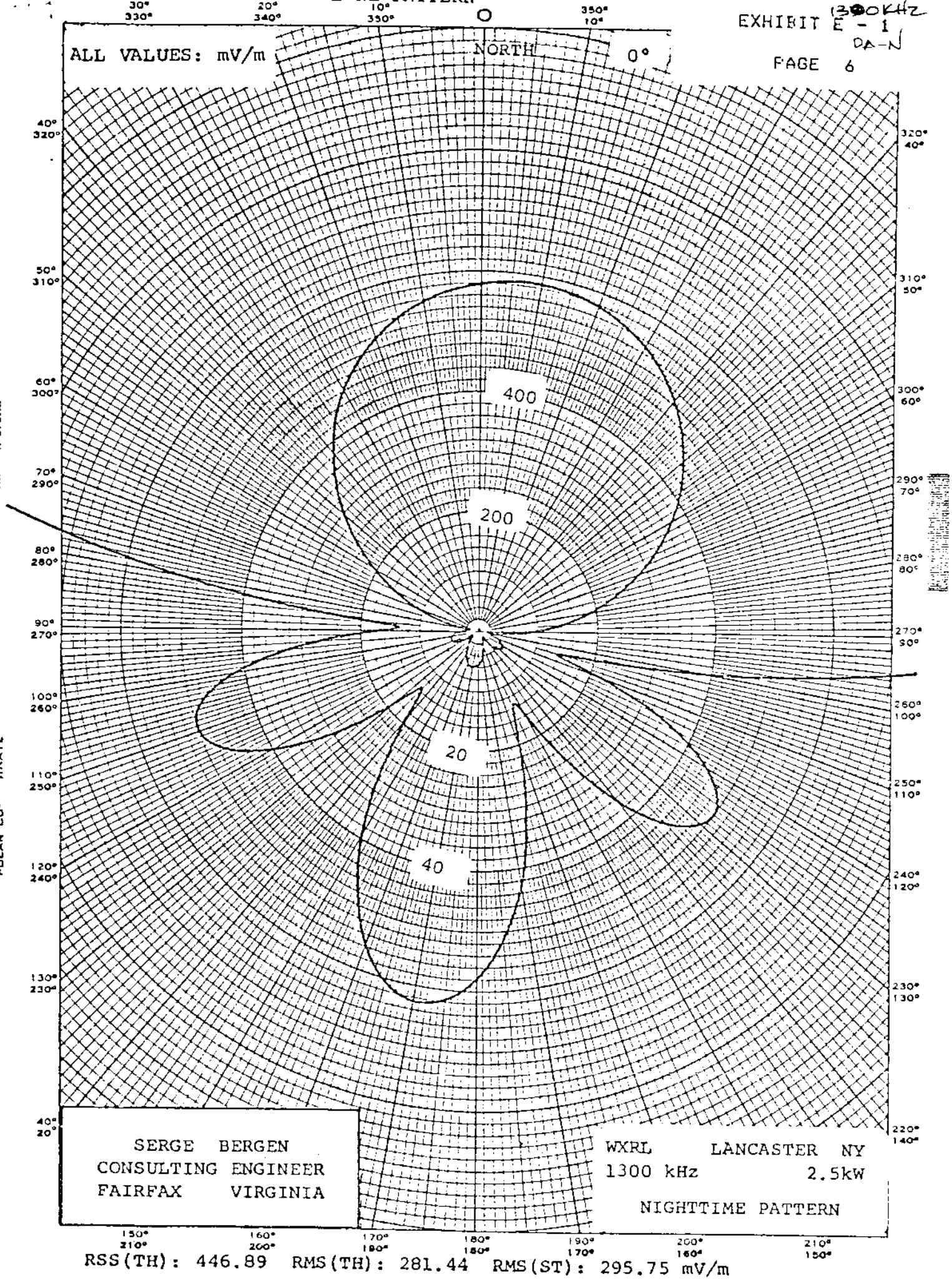
	THEORETICAL RMS	THEORETICAL RSS	STANDARD RMS
Day	206 mV/m		
Night	281.44 mV/m	446.89 mV/m	295.75 mV/m

WXRL
1300kHz

Note: Please retain the Daytime directional antenna radiation pattern notified for Station NEW in United States Change List Number 990 dated December 26, 1962 and attached to this Revised Description Sheet and Nighttime pattern. This notification concerns only a change in the Nighttime operation of the station with Daytime operation continued as previously notified.

STANDARD HORIZONTAL PLANE PATTERN

WXRL
1300KHz
EXHIBIT E - 1
DA-N
PAGE 6



SERGE BERGEN
CONSULTING ENGINEER
FAIRFAX VIRGINIA

WXRL LANCASTER NY
1300 kHz 2.5kW
NIGHTTIME PATTERN

RSS(TH): 446.89 RMS(TH): 281.44 RMS(ST): 295.75 mV/m

WXRL

Measured Non-DA
(4-28-65ct)

Station WMMJ
Lancaster, New York

1kw, DA-D,C
1300 kc

BL-10858
4-22-65 LIC

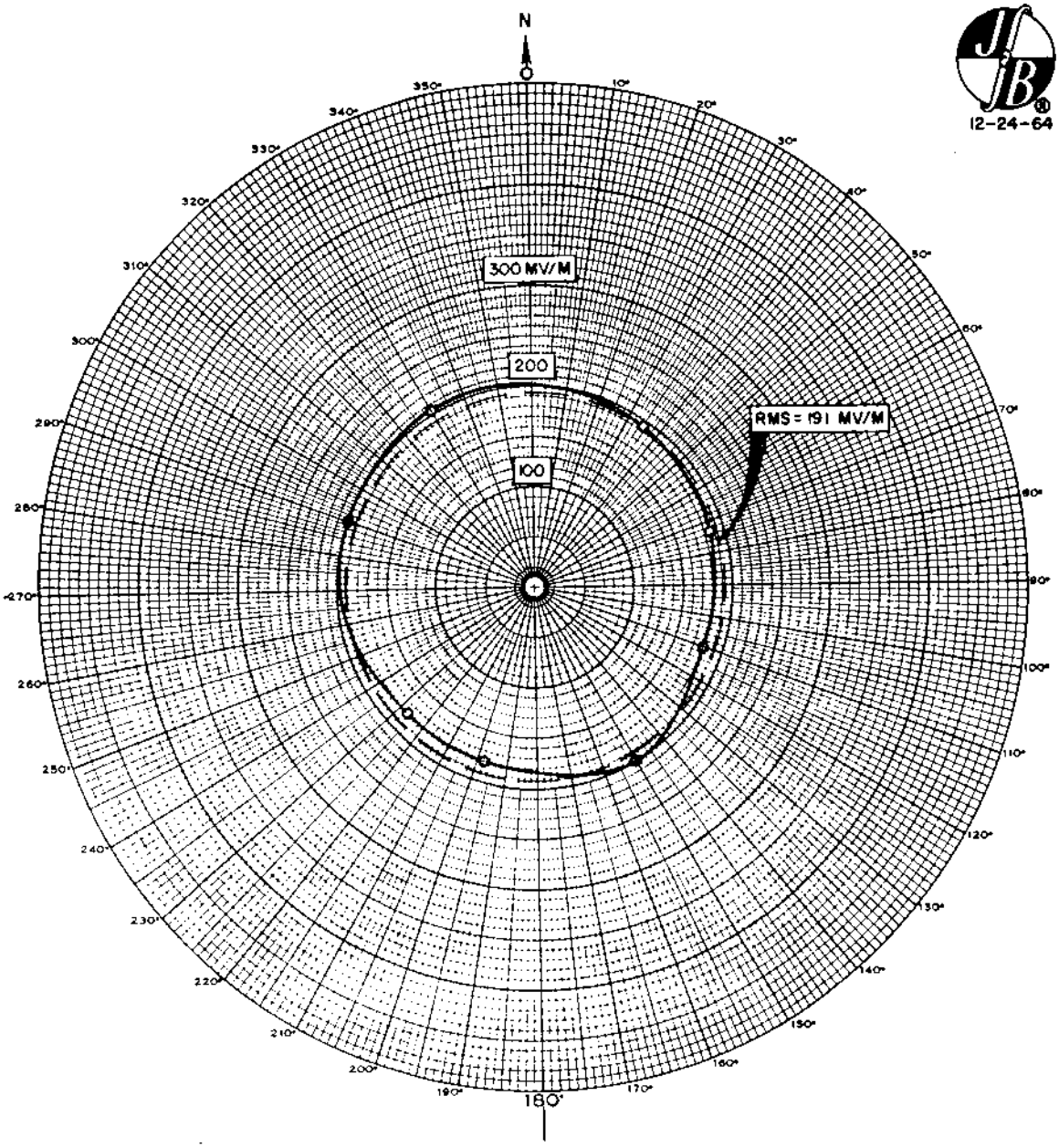


FIG. 11
MEASURED NONDIRECTIONAL
RADIATION PATTERN

WMMJ 1300KC 1KW N-DA
SEAPORT BROADCASTING CORP.
LANCASTER, NEW YORK

FCC File No. BL-10858
Accepted 4-8-65

Station WMMJ
Lancaster, New York

1300 kc

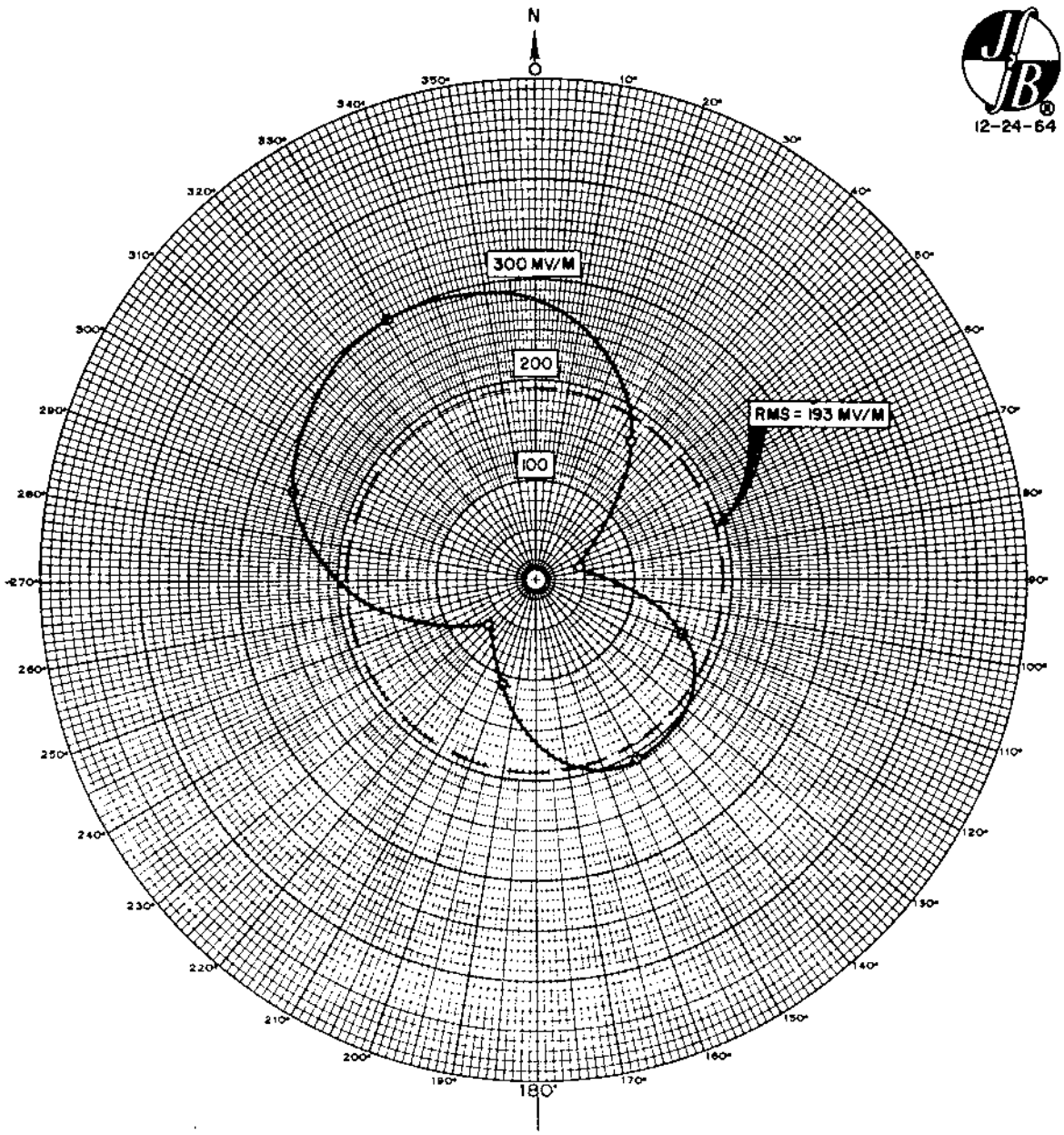
WXRL

Measured Day
(4-28-65ct)

Station WMMJ
Lancaster, New York

1kw,DA-D,D
1300 kc

BL-10858
4-22-65 LIC.



12-24-64

N 330° E

G = 90°

TOWER # 2

90°

189°

TOWER # 1

N 42° 52' 58"
W 78° 37' 54"

	THEORETICAL	OPERATING
TOWER # 1	1.43/0°	1.531/0°
TOWER # 2	1/-160°	1/-160°

FIG. 12
MEASURED DIRECTIONAL RADIATION PATTERN

WMMJ 1300KC 1KW DA-D

SEAPORT BROADCASTING CORP.
LANCASTER, NEW YORK

FCC File No. BL-10858
Accepted 4-8-65

Station WMMJ
Lancaster, New York

1300 kc

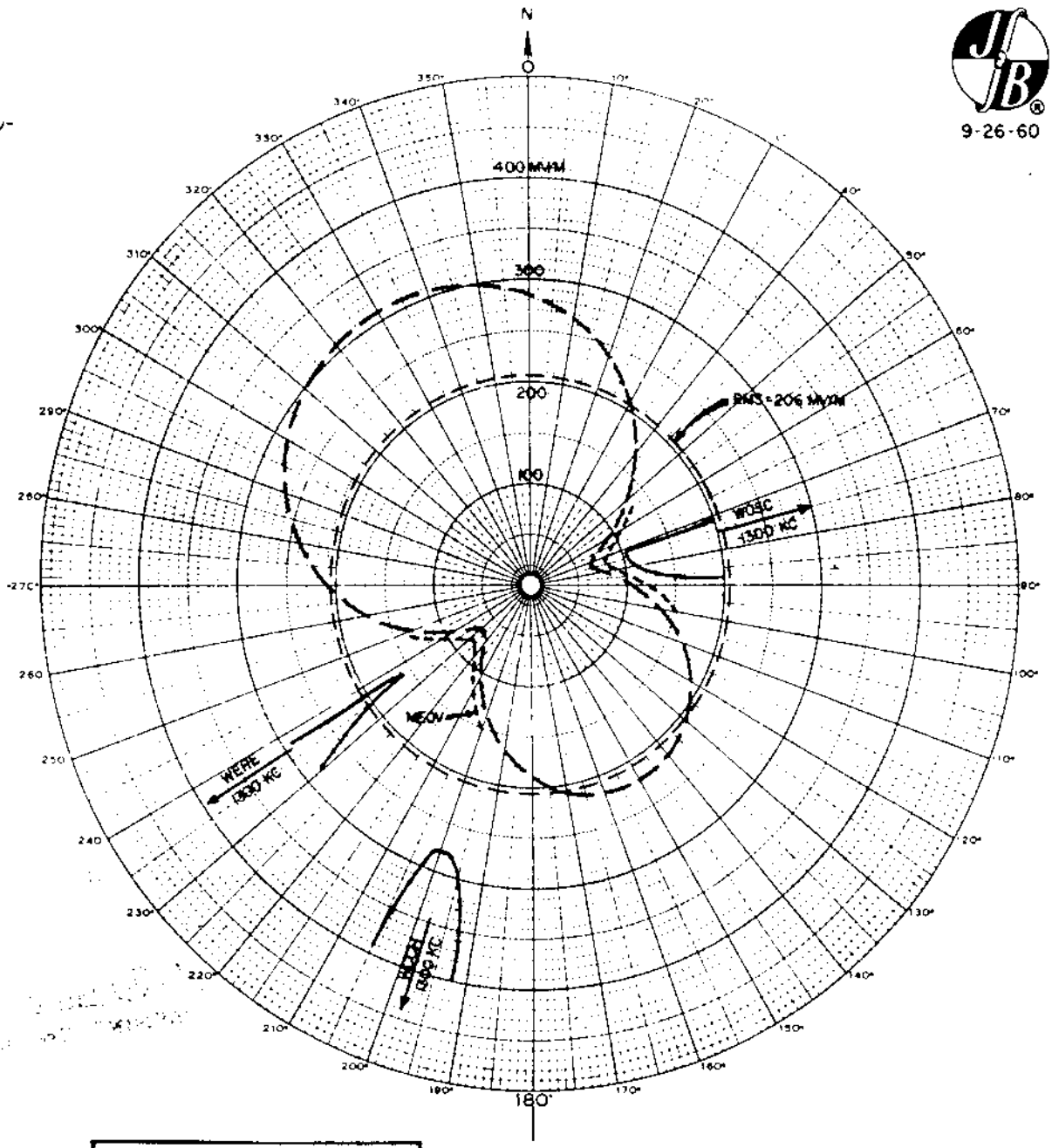
WXRL

PROPOSED DAY
(11-11-60g)

New; Seaport Bcstng. Corp. 1kw, DA-D,D
Lancaster, New York 1300 KC

6/14/64
Granted app.
for new station
BL-10 858
4-22-65 Lic.

9-26-60



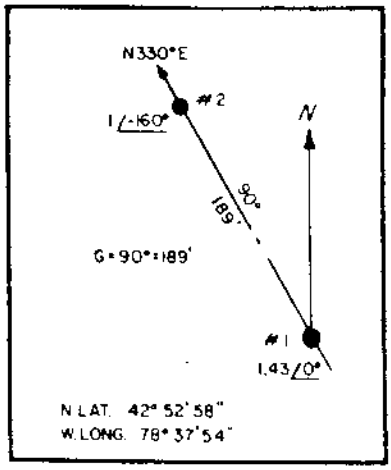


FIG. 4 - REVISED
PROPOSED DAYTIME HORIZONTAL RADIATION PATTERN
1300 KC 1 KW DA D
SEAPORT BROADCASTING CORPORATION
LANCASTER, N.Y.

FCC File No. BP-14085
Accepted 10-18-60 (Amended)

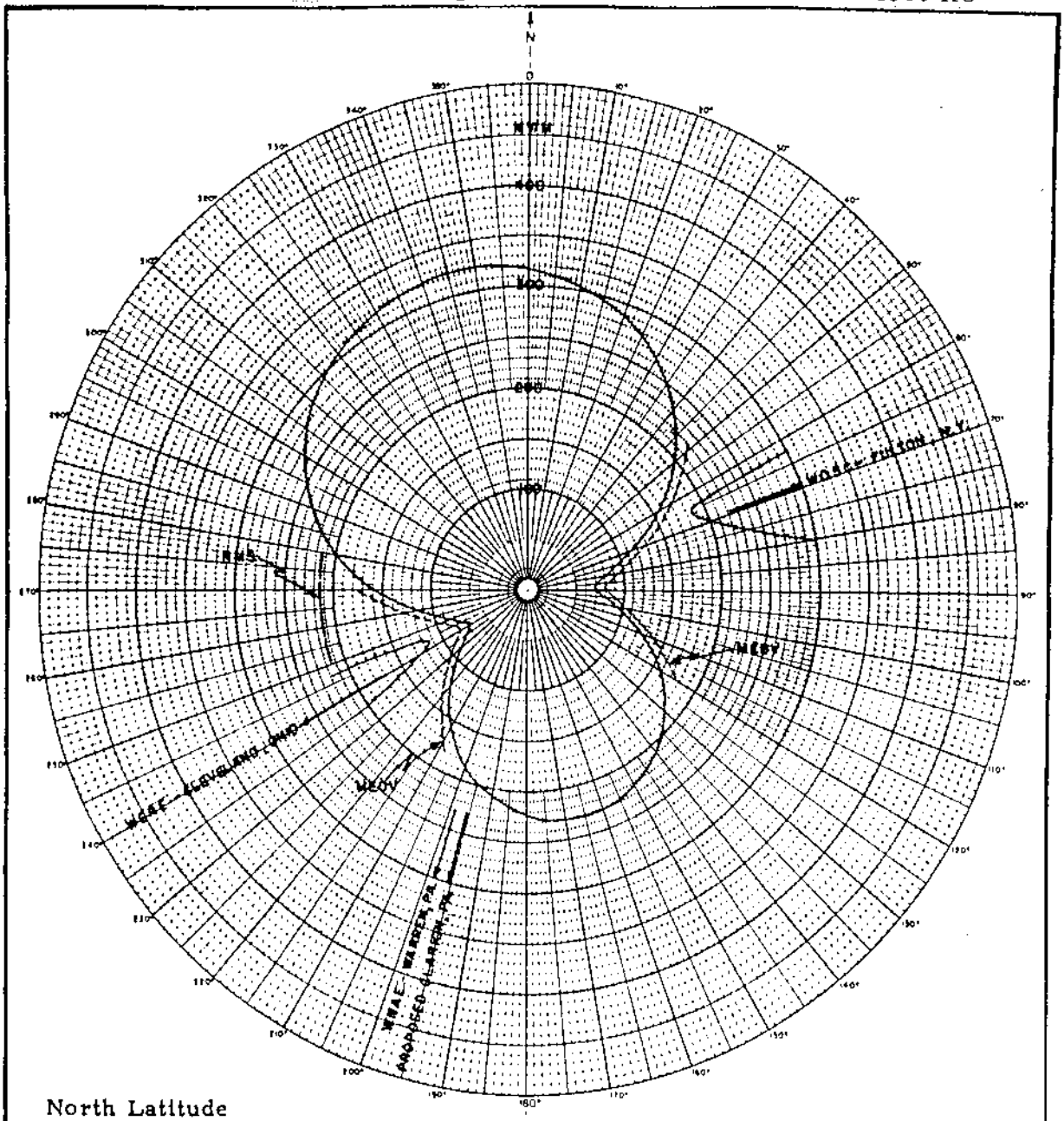
Seaport Broadcasting Corp.
Lancaster, New York 1300 KC

HAMBURG, N.Y.

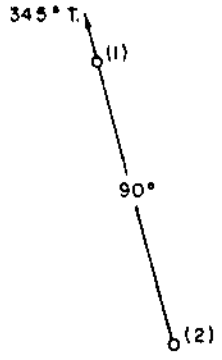
PROPOSED DAY
(12-21-59g)

New; Leon Lawrence Sidell
Hamburg, New York

1kw, DA-D, D
1300 KC



North Latitude
42° 39' 56"
West Longitude
78° 46' 57"



LATITUDE
LONGITUDE

ANTENNA NUMBER	AZIMUTH DEG	SPACING DEG	PHASING DEG	FIELD RATIO	M.V.M. FOR 1 KW	HEIGHT DEG
1	345	90	-160	1.43		90
2	0	0	0	1.0		90

HORIZONTAL PLANE PATTERN
FOR
PROPOSED STATION
HAMBURG, NEW YORK
1300 KC. 1 KW., D - DA
690811.

KEAR AND KENNEDY
CONSULTING ENGINEERS
WASHINGTON, D. C.

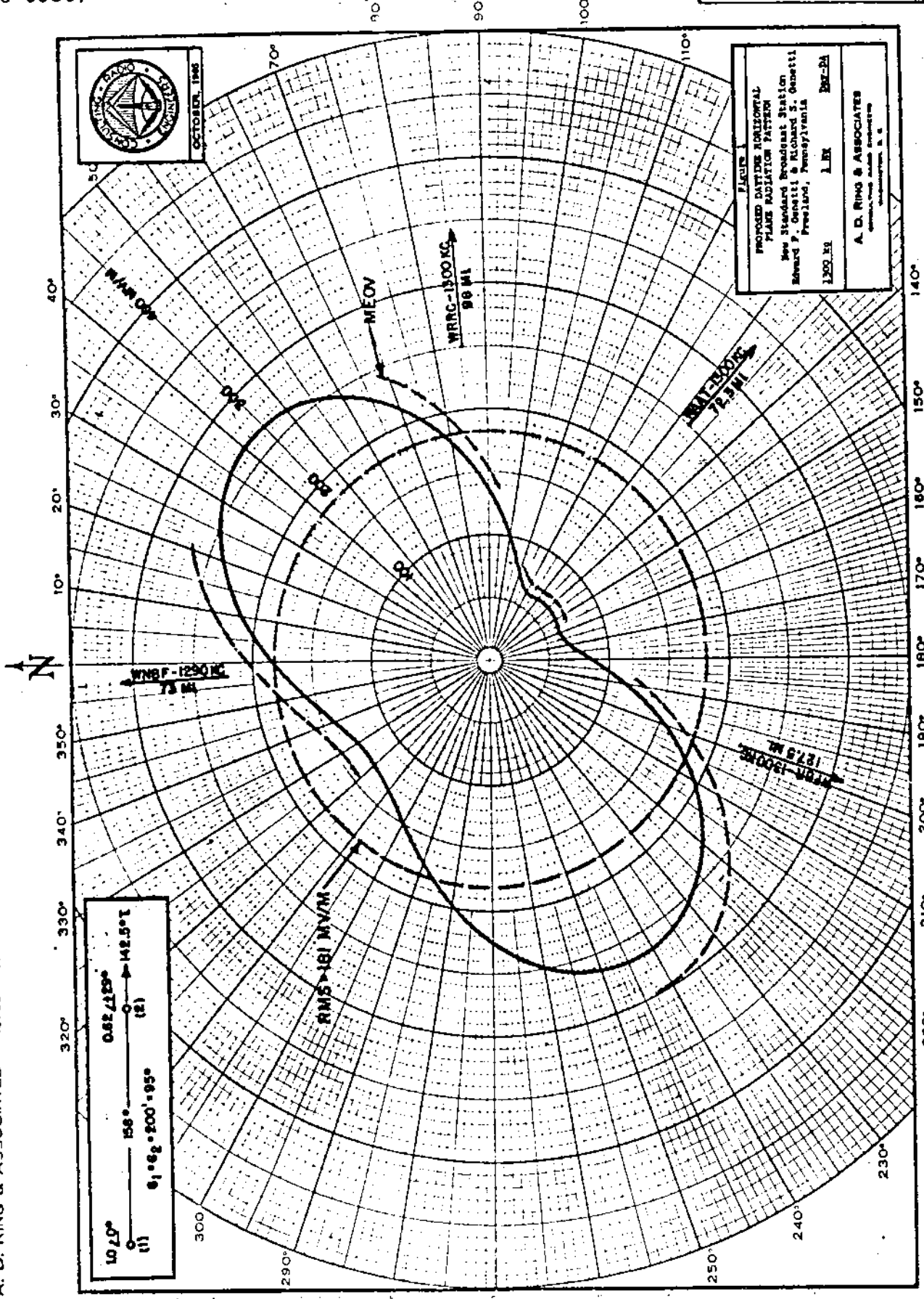
FCC File No. BP-13688
Accepted 12-11-59

Leon Lawrence Sidell
Hamburg, New York

1300 KC

Proposed Day
(8-26-66ct)

New; R. S. Genetti & E. F. Genetti PA 1kw,DA-D,D
Freeland, Pennsylvania 1300 kc



A. D. RING & ASSOCIATES · 10/60 · M

FCC File No.BP-16986
Accepted 8-3-66

New; R. S. Genetti & E. F. Genetti
Freeland, Pennsylvania 1300 kc

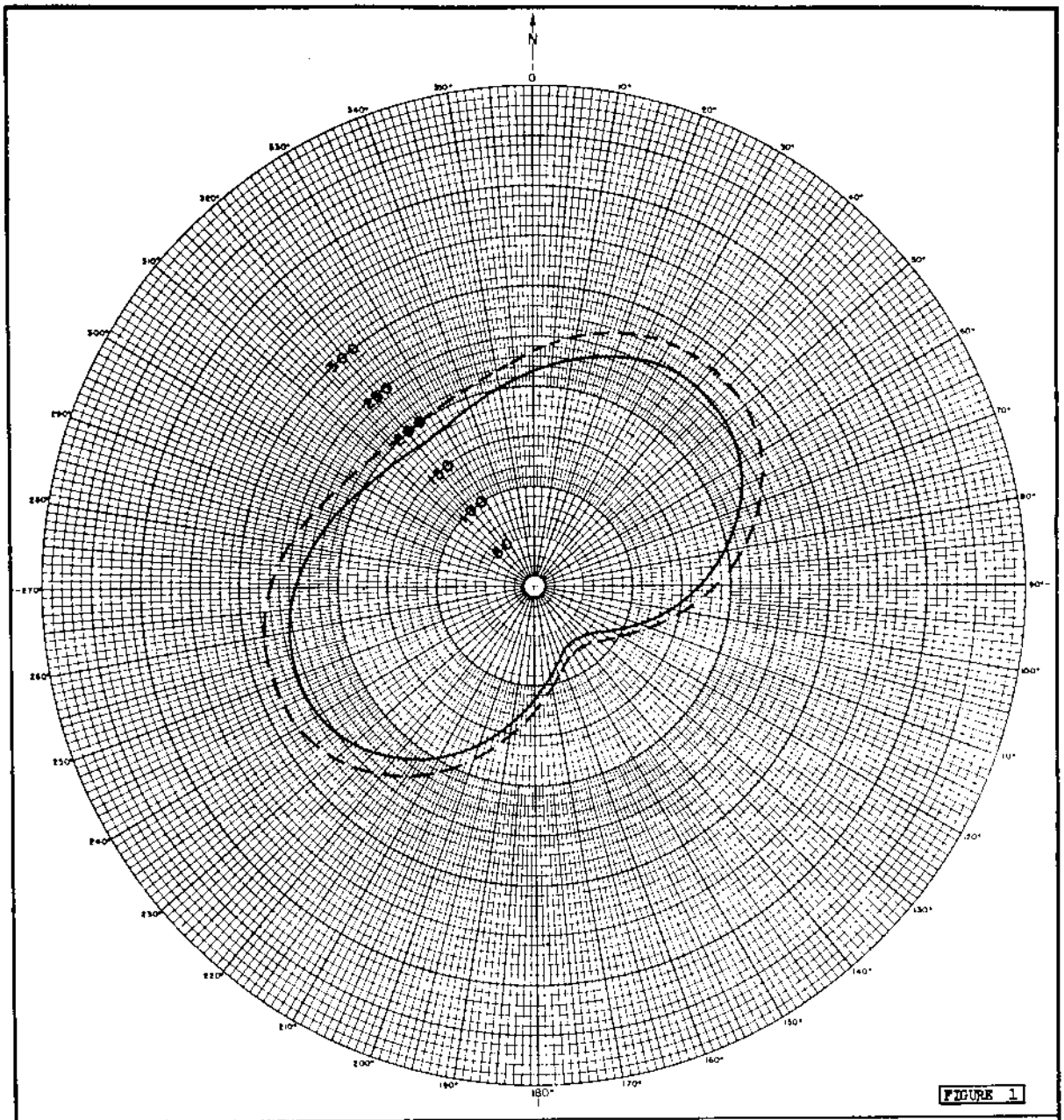
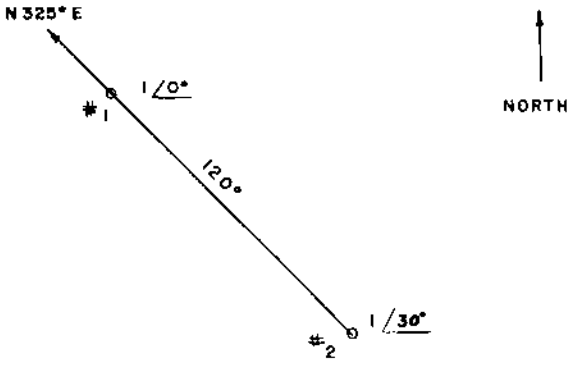


FIGURE 1

HORIZONTAL RADIATION PATTERN



APPLICANT	~~C B M, INC.~~ RADIO 117c EWC
LOCATION	WEST HAZLETON, PA.
FREQUENCY	1300 KC/S
POWER	1 KW
LATITUDE	40 DEG 57 MIN 27 SEC.
LONGITUDE	76 DEG 01 MIN. 11 SEC.
WHEN USED	DAYTIME
RMS FIELD	197.1 MV/M
DATE	OCTOBER, 1966

RAYMOND E. ROHRER & ASSOCIATES
CONSULTING RADIO ENGINEERS
WASHINGTON D. C

235

XEHU

Description Sheet (8-26-66ct) | Station XEHU Martinez de la Torre, Veracruz | 100w,5kw-LS,DA-D,U,Class III 1300 kc

CORRECTED

DIRECTIONAL ANTENNA DESCRIPTION SHEET

Station: XEHU

Main Studio: Martinez de la Torre, Veracruz

Frequency: 1300 kc/s

Power: 0.1kw night 5kw day

Notification List No. 235

Date:

Class: III

GEOGRAPHICAL LOCATION OF THE CENTER OF THE ANTENNA SYSTEM:

North Latitude: 20° 06' 00"

West Longitude: 97° 02' 00"

ANTENNA CHARACTERISTICS

Authorized for daytime operation. (DA-D)
Number of elements: 2
Type of elements: Series-excited, uniform cross-section, guyed, vertical steel towers.

Tower:	#1(N)	#2(S)	
Height above insulators:	210'	210'	(100°)
Phasing	0°	+80°	
Field Ratio	1	0.67	

Spacing and Orientation: Elements are spaced 588.7'(280°) on a line bearing 203° true.

Ground System: 120~~+210~~' equally spaced copper radials about each tower. Centers of systems are bonded together.

Predicted effective field: 433.18 mv/m at rated power.

Note: This notification concerns only a correction in the orientation of the line of towers as shown on the description sheet to conform to the orientation shown on the radiation pattern.

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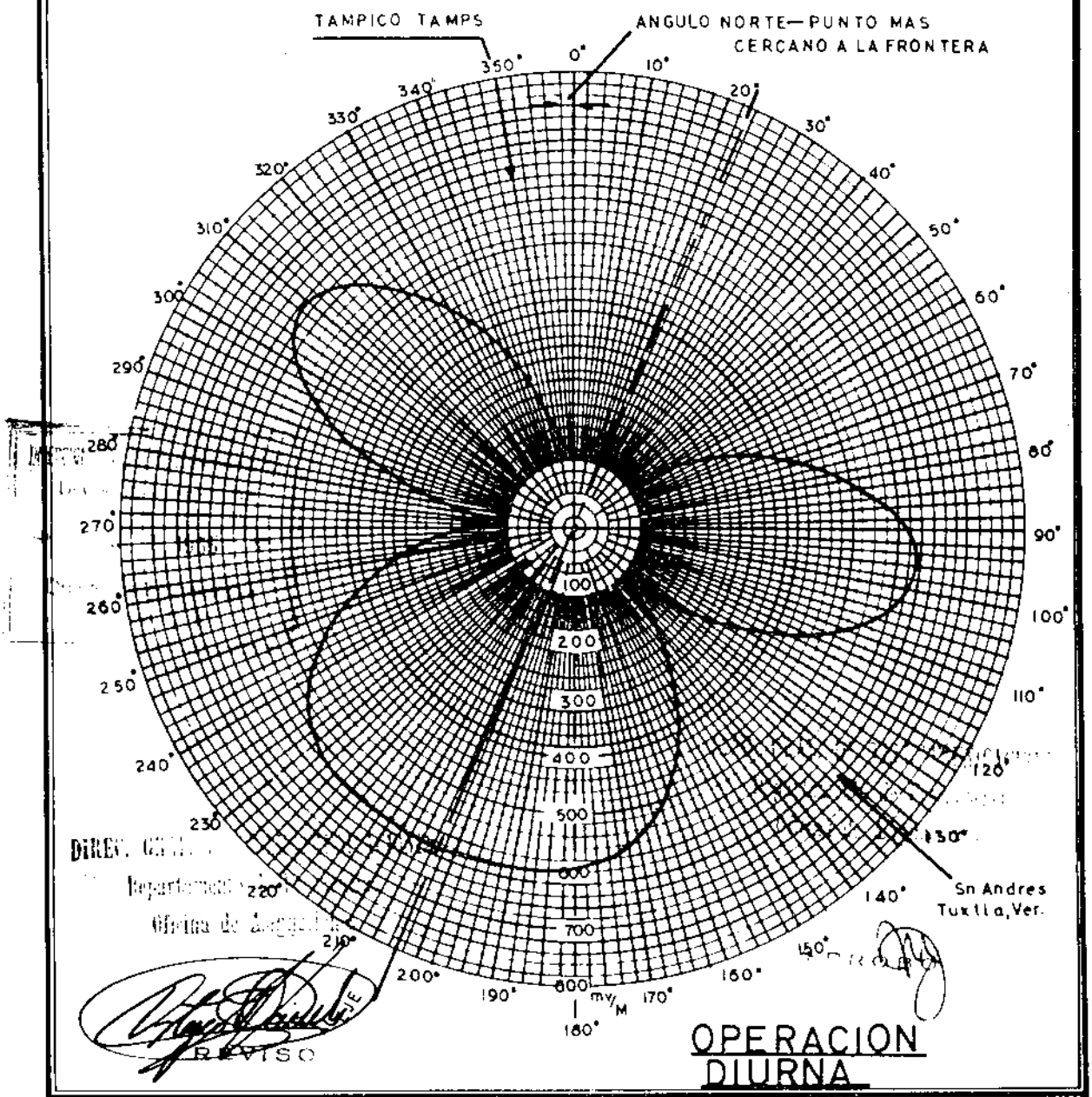
XEHU

Proposed Day
(8-26-66ct)

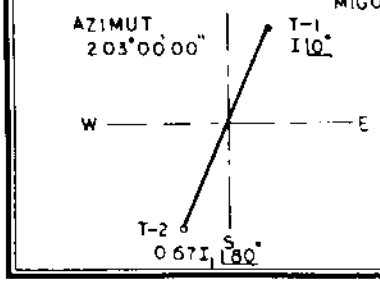
Station XEHU
Martinez de la Torre, Veracruz

100w, 5kw-LS, DA-D, U, Class III
1300 kc



PATRON DE RADIACION HORIZONTAL CALCEN mv/M a 1609 MTS

ESQUEMA DE LAS TORRES Y SU ORIENTACION CON RESPECTO AL NORTE ASTRONOMICO



RADIODIFUSORA

XEHU

Martinez de la torre. Ver.

1300 KHz
5000 Watts. D.
100 Watts. N.

DISEÑO:
DYCE

DIBUJO:
H. RIVAS