

Exhibit 13 – APPENDIX B

SUMMARY OF INCLUDED MEASURED CONDUCTIVITY DATA

**APPLICATION FOR CONSTRUCTION PERMIT
WZHF Capitol Heights, MD (FCC Facility ID 73306)
1390 kHz 9 kW – D 1 kW – N DA-2**

Prepared November 2013 for
Way Broadcast Licensee, LLC

Dataset 3 – Co-Channel (1390 kHz)

**WRSC State College, PA
Licensed Site (Facility ID 64849)**

MULLANEY ENGINEERING, INC.

FIGURE 1
PAGE 3

RADIO STATION WRSC
STATE COLLEGE, PA.

TABULATION OF SUMMER FIELD INTENSITY MEASUREMENTS
RADIAL N 15 E

POINT #	DISTANCE (MILES)	DA (MV/M)	N-DA (MV/M)
*****	*****	*****	*****
1.6	1.60	-	25.500
1.7	1.70	-	25.000
1.8	1.80	-	27.000
1.9	1.90	-	29.000
2.0	2.10	-	31.000
5.	5.20	-	3.800
6	6.90	-	1.250
8	8.20	-	0.740
8A	8.50	-	0.840
9	9.65	-	0.580
10	10.45	-	0.560
11	11.00	-	0.810
14	14.25	-	0.310
14A	14.90	-	0.350
14B	14.85	-	0.360
15	15.30	-	0.350
18	18.80	-	0.200
19	19.80	-	0.160

Points:

0.2-1.0 Mi.
1.0-2.0 Mi.
2 - 14
14B - 19

Date:

8-04-83
8-04-83
7-26-83
7-25-83

Time:

9:00-12:00PM
1:00- 2:30PM
2:30- 6:00PM
5:00- 6:00PM

15° (Clear, dry 80'±)

FIGURE 1
PAGE 2

RADIO STATION WRSC
STATE COLLEGE, PA.

TABULATION OF SUMMER FIELD INTENSITY MEASUREMENTS
RADIAL N 15° E

POINT #	DISTANCE (MILES)	DA (KV/M)	N-DA (KV/M)
*****	*****	*****	*****
.20	0.20	-	580.000
.25	0.25	-	460.000
.30	0.30	-	360.000
.35	0.35	-	280.000
.40	0.40	-	260.000
.45	0.45	-	218.000
.50	0.50	-	205.000
.55	0.55	-	180.000
.60	0.60	-	180.000
.65	0.65	-	190.000
.70	0.70	-	162.000
.75	0.75	-	132.000
.80	0.80	-	68.000
.85	0.85	-	64.000
.90	0.90	-	125.000
.95	0.95	-	110.000
1.00	1.00	-	96.000
1.05	1.05	-	80.000
1.10	1.10	-	74.000
1.15	1.15	-	70.000
1.20	1.20	-	56.000
1.25	1.25	-	60.000
1.30	1.30	-	39.000
1.35	1.35	-	36.000
1.40	1.40	-	34.500
1.45	1.45	-	42.000
1.50	1.50	-	35.000

MILES FROM ANTENNA

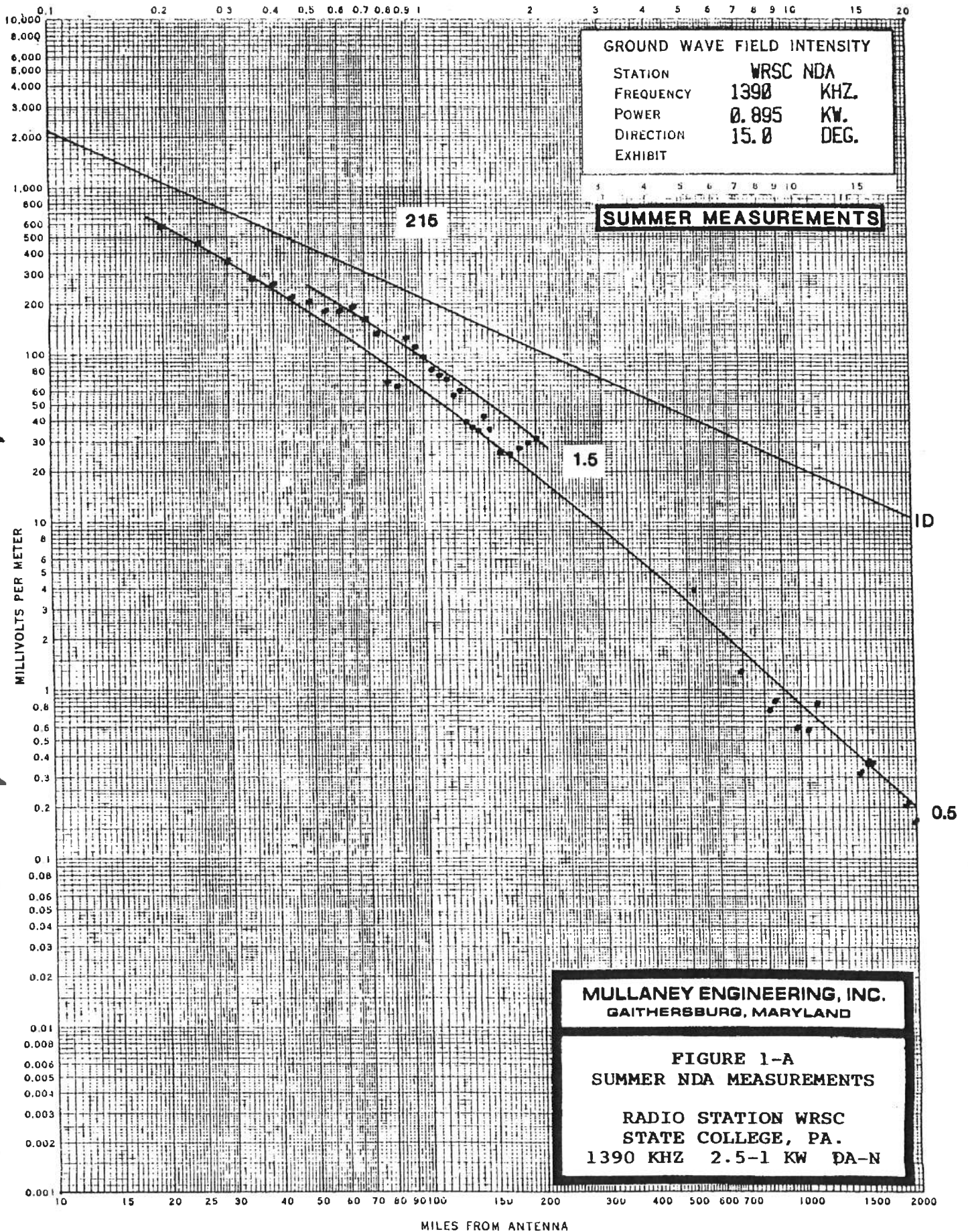


FIGURE 2
PAGE 2

RADIO STATION WRSC
STATE COLLEGE, PA.

TABULATION OF SUMMER FIELD INTENSITY MEASUREMENTS
RADIAL N 28.3° E

POINT #	DISTANCE (MILES)	DA (KV/M)	N-DA (KV/M)
*****	*****	*****	*****
.20	0.20	-	690.000
.25	0.25	-	520.000
.30	0.30	-	450.000
.35	0.35	-	460.000
.40	0.40	-	300.000
.45	0.45	-	230.000
.50	0.50	-	178.000
.55	0.55	-	156.000
.60	0.60	-	138.000
.65	0.65	-	156.000
.85	0.85	-	130.000
.90	0.90	-	110.000
.95	0.95	-	96.000
1.0	1.00	-	83.000
1.05	1.05	-	78.000
1.10	1.10	-	72.000
1.15	1.15	-	57.000
1.20	1.20	-	46.000
1.25	1.25	-	44.500
1.30	1.30	-	42.000
1.35	1.35	-	38.000
1.40	1.40	-	38.000
1.45	1.45	-	34.000
1.50	1.50	-	29.500

MULLANEY ENGINEERING, INC.

FIGURE 2
PAGE 3

RADIO STATION WRSC
STATE COLLEGE, PA.

TABULATION OF SUMMER FIELD INTENSITY MEASUREMENTS
RADIAL N 28.3° E

POINT #	DISTANCE (MILES)	DA (MV/M)	H-DA (MV/M)
*****	*****	*****	*****
1.6	1.60	-	28.000
1.7	1.70	-	29.000
1.8	1.80	-	19.500
1.9	1.90	-	15.000
2.0	2.00	-	10.500
2A	2.45	-	9.800
2B	2.50	-	11.400
4	4.15	-	7.400
5	5.00	-	1.250
5A	5.55	-	2.100
7	7.50	-	0.720
7A	7.60	-	0.960
8	8.10	-	0.760
8A	8.80	-	0.860
10	10.10	-	0.810
11	11.75	-	0.390
12	12.40	-	0.470
13	13.50	-	0.580
14	14.90	-	0.500
15	15.80	-	0.350
17	17.30	-	0.180
18	18.80	-	0.110

28° (Clear, dry 80's)

Points:

0.2-1.0 Mi.
1.0-2.0 Mi.
2, 2A, 2B
4 - 18

Date:

8-05-83
8-08-83
7-28-83
7-25-83

Time:

2:00- 5:00PM
3:15- 5:45PM
2:30- 3:00PM
1:00- 4:30PM

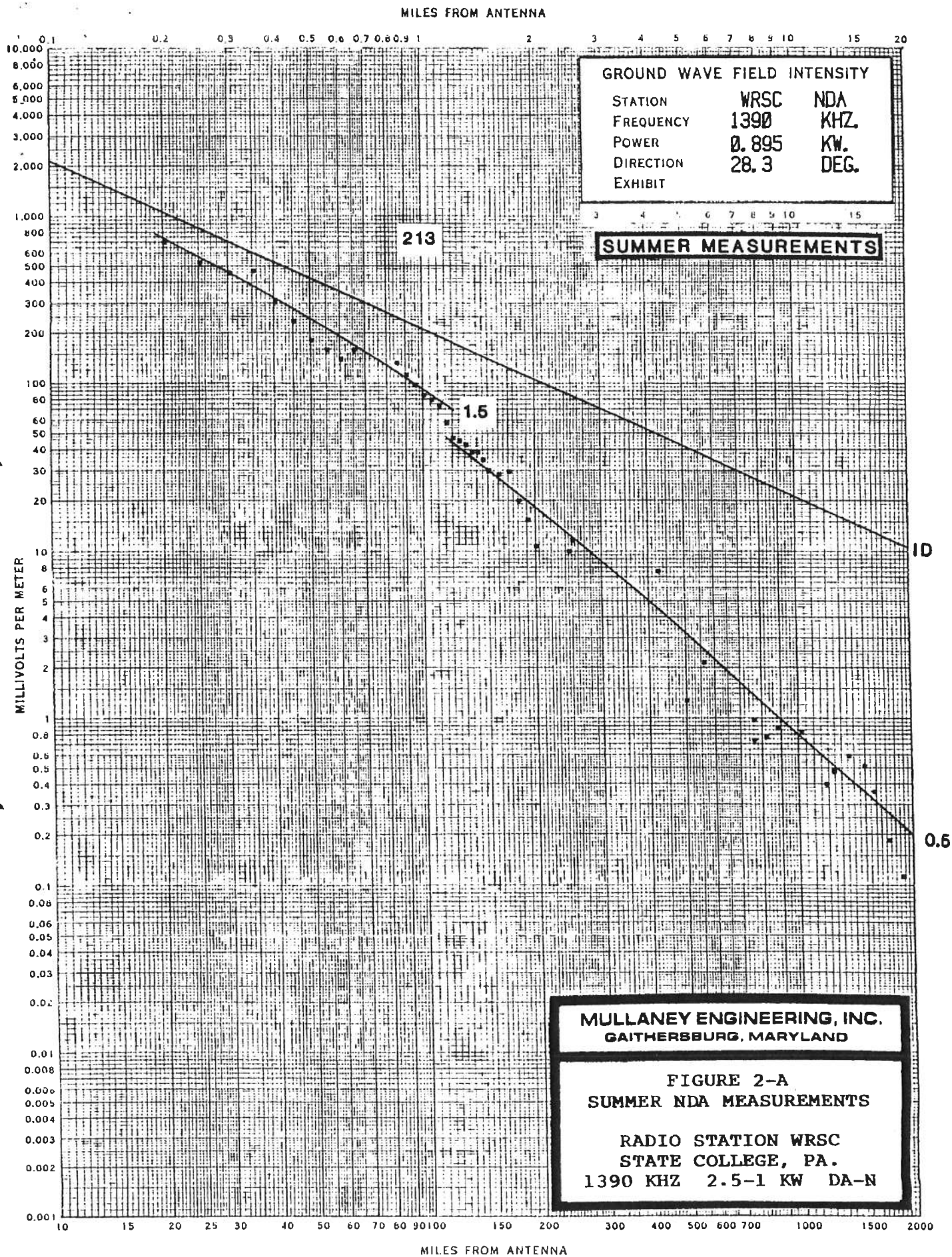


FIGURE 3
Page 5

RADIO STATION WRSC
STATE COLLEGE, PA.

TABULATION OF FIELD INTENSITY MEASUREMENTS
NEAR FIELD
RADIAL N 52 E

BEARING 52.00 HEIGHT 0.00

RANGE	E-VERTICAL		E-RADIAL		H-HORIZONTAL	
	MV/M	DEG.	MV/M	DEG.	MA/M	DEG.
0.10	1025.75	23.54	0.00	90.00	2.97	-159.92
0.15	112.65	94.24	0.00	90.00	0.30	-90.45
0.20	485.72	-13.38	0.00	90.00	1.32	165.69
0.25	580.33	-134.93	0.00	90.00	1.57	44.65
0.30	582.35	99.03	0.00	90.00	1.57	-81.18
0.35	554.61	-29.50	0.00	90.00	1.49	150.38
0.40	518.84	-159.57	0.00	90.00	1.39	20.36
0.45	482.79	69.35	0.00	90.00	1.29	-110.69
0.50	449.11	-62.41	0.00	90.00	1.20	117.56
0.55	418.56	165.33	0.00	90.00	1.12	-14.69
0.60	391.16	32.71	0.00	90.00	1.04	-147.30
0.65	366.68	-100.18	0.00	90.00	0.98	79.81
0.70	344.78	126.71	0.00	90.00	0.92	-53.30
0.75	325.16	-6.57	0.00	90.00	0.87	173.43
0.80	307.52	-139.98	0.00	90.00	0.82	40.01
0.85	291.59	86.49	0.00	90.00	0.78	-93.51
0.90	277.17	-47.13	0.00	90.00	0.74	132.87
0.95	264.05	179.18	0.00	90.00	0.70	-0.82
1.00	252.08	45.42	0.00	90.00	0.67	-134.57
1.10	231.05	137.75	0.00	90.00	0.61	-42.25
1.20	213.19	-130.08	0.00	90.00	0.57	49.92
1.30	197.85	-38.05	0.00	90.00	0.53	141.96
1.40	184.55	53.89	0.00	90.00	0.49	-126.10
1.50	172.90	145.76	0.00	90.00	0.46	-34.24
1.60	162.62	-122.44	0.00	90.00	0.43	57.56
1.70	153.48	-30.69	0.00	90.00	0.41	149.31
1.80	145.31	61.01	0.00	90.00	0.39	-118.98
1.90	137.96	152.69	0.00	90.00	0.37	-27.31
2.00	131.32	-115.67	0.00	90.00	0.35	64.33
2.20	119.77	67.53	0.00	90.00	0.32	-112.47
2.40	110.08	-109.34	0.00	90.00	0.29	70.66
2.60	101.84	73.73	0.00	90.00	0.27	-106.26
2.80	94.74	-103.24	0.00	90.00	0.25	76.76
3.00	88.57	79.75	0.00	90.00	0.24	-100.25
3.20	83.15	-97.29	0.00	90.00	0.22	82.71
3.40	78.35	85.64	0.00	90.00	0.21	-94.36
3.60	74.08	-91.45	0.00	90.00	0.20	88.55
3.80	70.24	91.45	0.00	90.00	0.19	-88.55
4.00	66.79	-85.67	0.00	90.00	0.18	94.33
4.20	63.66	97.20	0.00	90.00	0.17	-82.80
4.40	60.81	-79.94	0.00	90.00	0.16	100.06

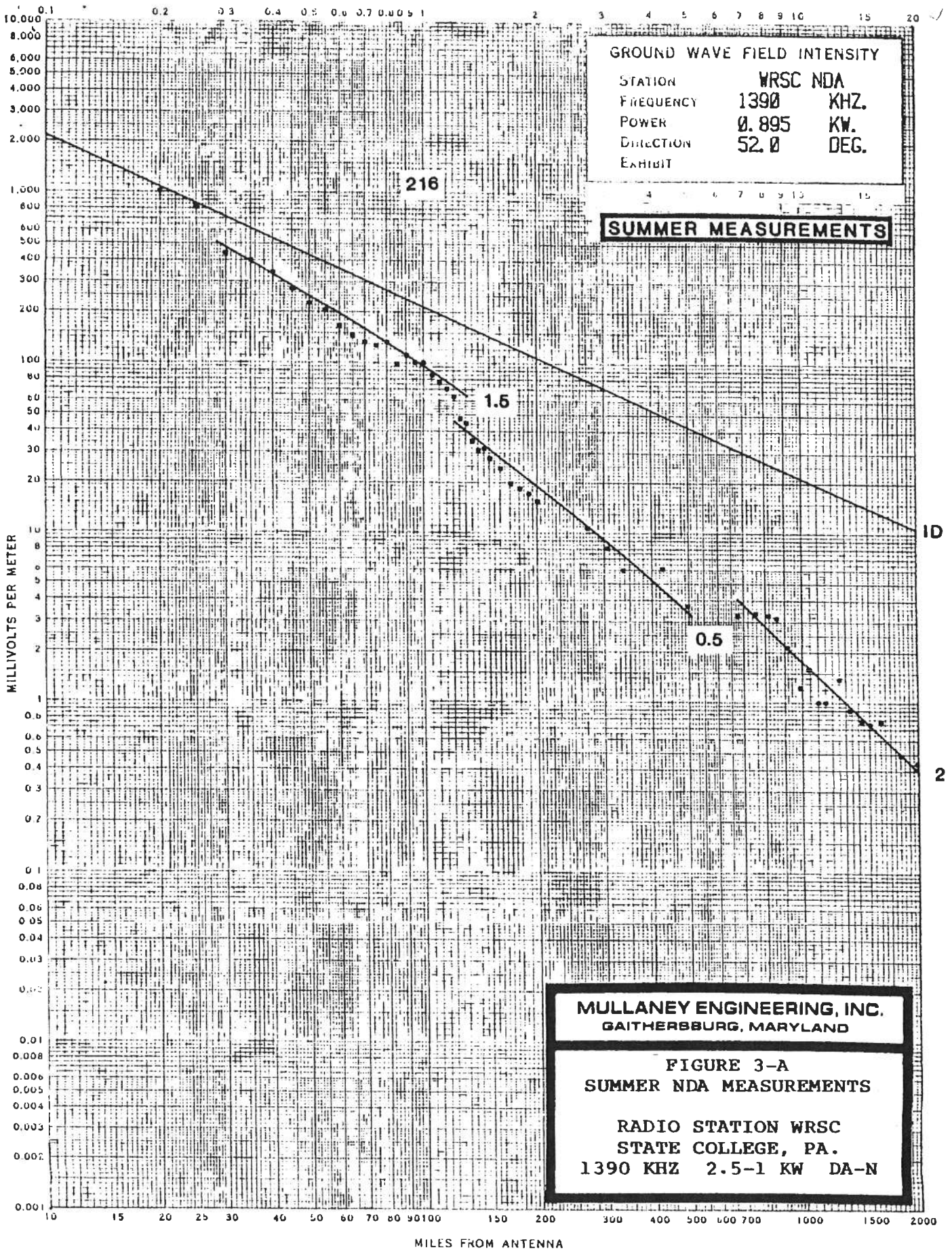
FIGURE 3
Page 6

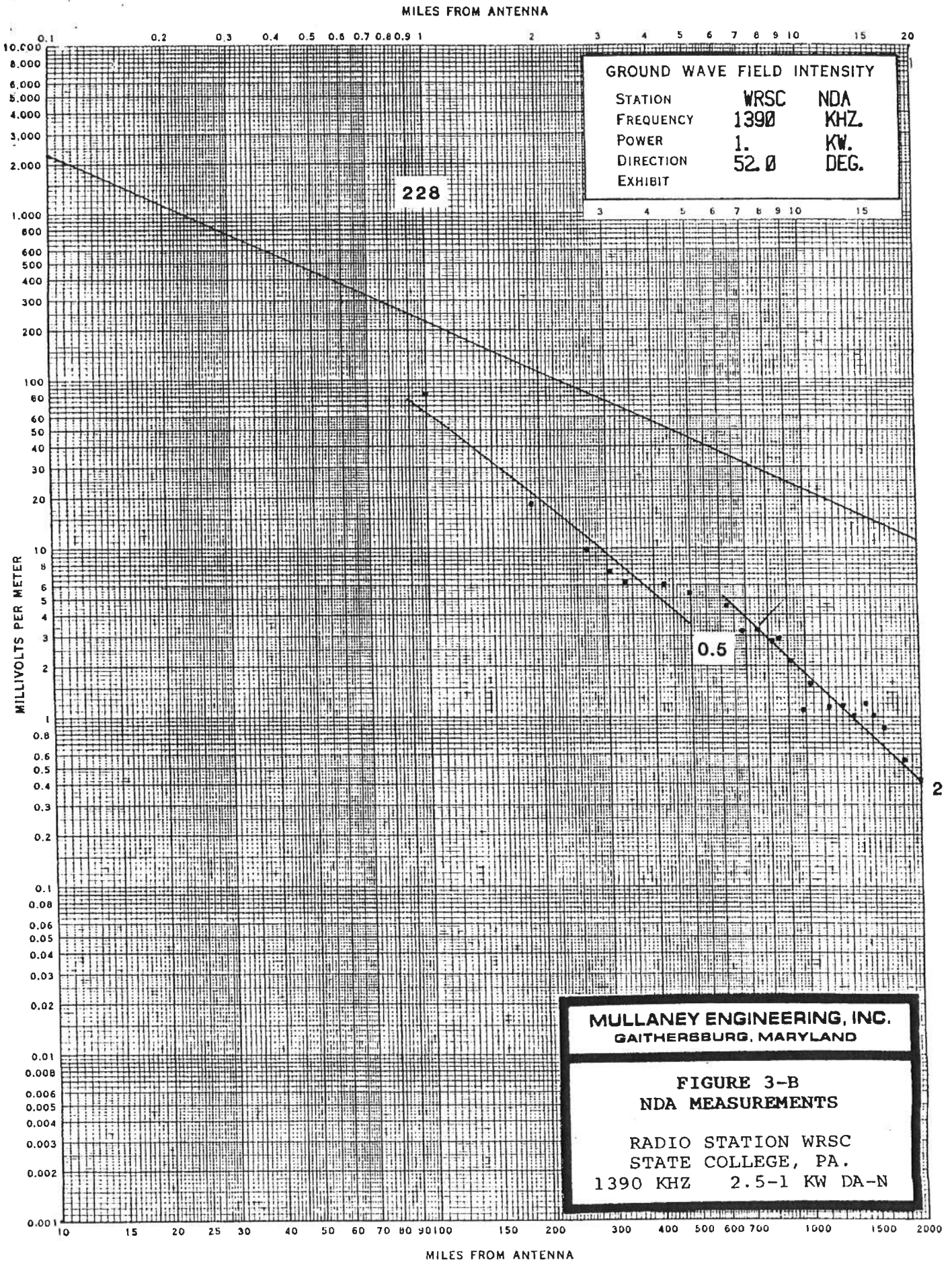
RADIO STATION WRSC
STATE COLLEGE, PA.

TABULATION OF FIELD INTENSITY MEASUREMENTS
NEAR FIELD
RADIAL N 52 E

BEARING 52.00			HEIGHT 0.00			
RANGE	E-VERTICAL		E-RADIAL		H-HORIZONTAL	
	MV/M	DEG.	MV/M	DEG.	MA/M	DEG.
4.60	58.20	102.91	0.00	90.00	0.15	-77.09
4.80	55.80	-74.25	0.00	90.00	0.15	105.75
5.00	53.60	108.58	0.00	90.00	0.14	-71.42
5.50	48.78	-154.36	0.00	90.00	0.13	25.64
6.00	44.76	-57.33	0.00	90.00	0.12	122.67
6.50	41.35	39.67	0.00	90.00	0.11	-140.33
7.00	38.42	136.66	0.00	90.00	0.10	-43.34
7.50	35.88	-126.37	0.00	90.00	0.10	53.63
8.00	33.65	-29.41	0.00	90.00	0.09	150.59
8.50	31.69	67.54	0.00	90.00	0.08	-112.46
9.00	29.94	164.49	0.00	90.00	0.08	-15.51
9.50	28.37	-98.58	0.00	90.00	0.08	81.42
10.00	26.96	-1.65	0.00	90.00	0.07	178.35
11.00	24.53	-167.80	0.00	90.00	0.07	12.20
12.00	22.49	26.03	0.00	90.00	0.06	-153.97
13.00	20.77	-140.14	0.00	90.00	0.06	39.86
14.00	19.29	53.67	0.00	90.00	0.05	-126.33
15.00	18.01	-112.52	0.00	90.00	0.05	67.48
16.00	16.89	81.28	0.00	90.00	0.04	-98.72
17.00	15.90	-84.92	0.00	90.00	0.04	95.08
18.00	15.02	108.87	0.00	90.00	0.04	-71.13
19.00	14.23	-57.34	0.00	90.00	0.04	122.66
20.00	13.52	136.44	0.00	90.00	0.04	-43.56

MILES FROM ANTENNA





MULLANEY ENGINEERING, INC.

FIGURE 4

PAGE 3

RADIO STATION WRSC
STATE COLLEGE, PA.

TABULATION OF SUMMER FIELD INTENSITY MEASUREMENTS
RADIAL N 80 E

POINT #	DISTANCE (MILES)	DA (KV/M)	N-DA (KV/M)
*****	*****	*****	*****
.20	0.20	-	870.000
.25	0.25	-	540.000
.30	0.30	-	540.000
.35	0.35	-	490.000
.40	0.40	-	385.000
.45	0.45	-	315.000
.50	0.50	-	260.000
.55	0.55	-	185.000
.60	0.60	-	160.000
.65	0.65	-	190.000
.70	0.70	-	132.000
.75	0.75	-	142.000
.80	0.80	-	111.000
.85	0.85	-	95.000
.90	0.90	-	106.000
.95	0.95	-	66.000
1.0	1.00	-	69.000
1.05	1.05	-	64.000
1.10	1.10	-	48.000
1.15	1.15	-	58.000
1.20	1.20	-	67.000
1.25	1.25	-	46.000
1.30	1.30	-	29.000
1.35	1.35	-	41.000
1.40	1.40	-	40.000
1.45	1.45	-	34.000
1.5	1.50	-	40.000
1.6	1.60	-	39.000
1.7	1.70	-	36.000
1.8	1.80	-	33.000
1.9	1.90	-	27.000
2.0	2.00	-	21.000

MULLANEY ENGINEERING, INC.

FIGURE 4
PAGE 4

RADIO STATION WRSC
STATE COLLEGE, PA.

TABULATION OF SUMMER FIELD INTENSITY MEASUREMENTS
RADIAL N 80 E

POINT #	DISTANCE (MILES)	DA (MV/K)	N-DA (MV/K)
*****	*****	*****	*****
2B	2.30	-	14.500
2C	2.40	-	12.200
2D	2.50	-	13.600
2E	2.65	-	14.500
3	3.05	-	12.400
3A	3.40	-	6.800
3B	3.60	-	8.000
4	4.30	-	8.000
4A	4.50	-	4.800
4B	4.80	-	8.600
5	5.00	-	5.700
5A	5.70	-	6.200
6	6.25	-	5.400
7	7.10	-	4.600
8	8.80	-	2.250
8A	8.95	-	2.250
9	9.90	-	0.540
10A	10.70	-	0.840
11	11.15	-	0.750
11A	11.60	-	0.530
12	12.90	-	0.300
13	13.70	-	0.520
14	14.05	-	0.620
14A	14.30	-	0.560
15	15.30	-	0.700
16	16.20	-	0.700
16A	16.75	-	0.540
17	17.90	-	0.440
19	19.50	-	0.380
19A	19.60	-	0.470
20	20.30	-	0.285

Points:

Date:

Time:

0.2-1.0 Mi.

8-01-83

11:15- 2:45PM

1.0-2.0 Mi.

8-01-83

2:45- 5:30PM

8 - 10A

8-01-83

4:45- 5:45PM

2B - 5

7-28-83

4:00- 6:30PM

5A - 14

7-28-83

9:30-12:30PM

14A - 20

7-27-83

5:30- 6:30PM

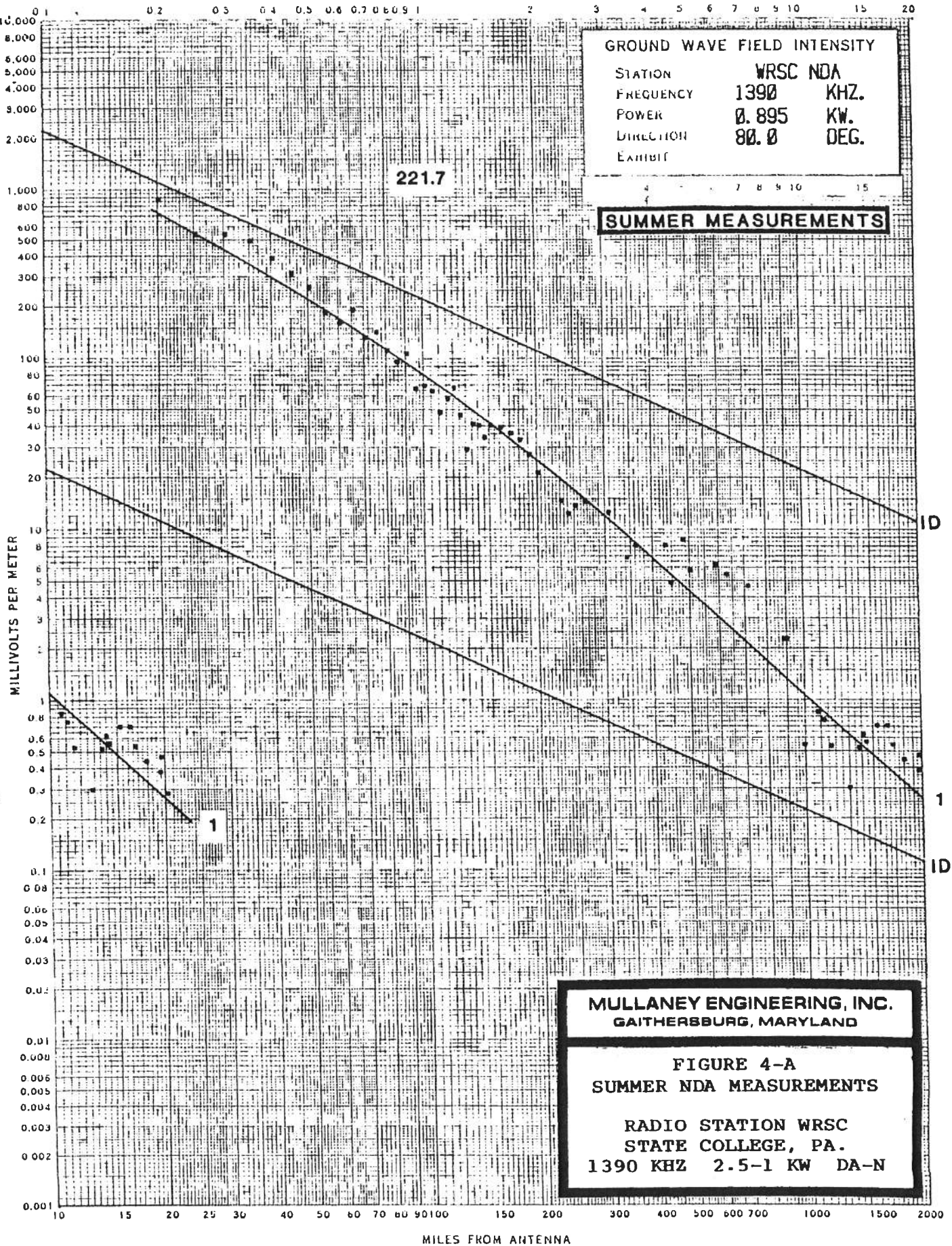
(Clear, dry 80's)

MILES FROM ANTENNA

GROUND WAVE FIELD INTENSITY

STATION WRSC NDA
 FREQUENCY 1390 KHZ.
 POWER 0.895 KW.
 DIRECTION 80.0 DEG.
 EXHIBIT

SUMMER MEASUREMENTS



MULLANEY ENGINEERING, INC.
 GAITHERSBURG, MARYLAND

FIGURE 4-A
 SUMMER NDA MEASUREMENTS

RADIO STATION WRSC
 STATE COLLEGE, PA.
 1390 KHZ 2.5-1 KW DA-N

MULLANEY ENGINEERING, INC.

FIGURE 5
PAGE 2

RADIO STATION WRSC
STATE COLLEGE, PA.

TABULATION OF SUMMER FIELD INTENSITY MEASUREMENTS
RADIAL N 120 E

POINT #	DISTANCE (MILES)	DA (MV/M)	N-DA (MV/M)
#####	#####	#####	#####
.20	0.20	-	900.000
.25	0.25	-	700.000
.30	0.30	-	580.000
.35	0.35	-	420.000
.40	0.40	-	375.000
.45	0.45	-	500.000
.50	0.50	-	280.000
.55	0.55	-	310.000
.60	0.60	-	282.000
.65	0.65	-	242.000
.70	0.70	-	225.000
.75	0.75	-	195.000
.80	0.80	-	175.000
.85	0.85	-	170.000
.90	0.90	-	140.000
.95	0.95	-	130.000
1.0	1.00	-	130.000
1.05	1.05	-	122.000
1.10	1.10	-	105.000
1.15	1.15	-	103.000
1.20	1.20	-	86.000
1.25	1.25	-	84.000
1.30	1.30	-	66.000
1.35	1.35	-	65.000
1.40	1.40	-	56.000
1.45	1.45	-	60.000
1.5	1.50	-	50.000

MULLANEY ENGINEERING, INC.

FIGURE 5
PAGE 3

RADIO STATION WRSC
STATE COLLEGE, PA.

TABULATION OF SUMMER FIELD INTENSITY MEASUREMENTS
RADIAL N 120 E

POINT #	DISTANCE (MILES)	DA (KV/M)	H-DA (KV/M)
*****	*****	*****	*****

1.6	1.60	-	43.500
1.7	1.70	-	39.500
1.8	1.80	-	38.000
1.9	1.90	-	26.000
2	2.00	-	25.500
2A	2.25	-	21.300
2B	2.40	-	22.800
2C	2.90	-	22.400
3A	3.40	-	16.100
3B	3.80	-	12.500
4	4.10	-	11.500
4A	4.85	-	8.400
5	5.10	-	11.900
6	6.00	-	7.600
7	7.50	-	3.900
9	9.40	-	1.000
9A	9.70	-	1.400
10	10.20	-	0.900
11	11.30	-	1.100
12	12.05	-	0.350
13	13.70	-	0.238
15	15.70	-	0.214
15A	15.90	-	0.281
17	17.75	-	0.172
18	18.10	-	0.164
18A	18.80	-	0.213
19	19.75	-	0.194
19A	19.90	-	0.245

120° (Clear, dry 80's)

Points:	Date:	Time:
0.2-1.0 Mi.	8-02-83	9:30-12:30PM
1.0-2.0 Mi.	8-02-83	1:00- 2:45PM
2A - 7	7-29-83	1:30- 3:30PM
9 - 13	7-28-83	10:15-12:00PM
15 - 19A	7-28-83	12:30- 2:30PM

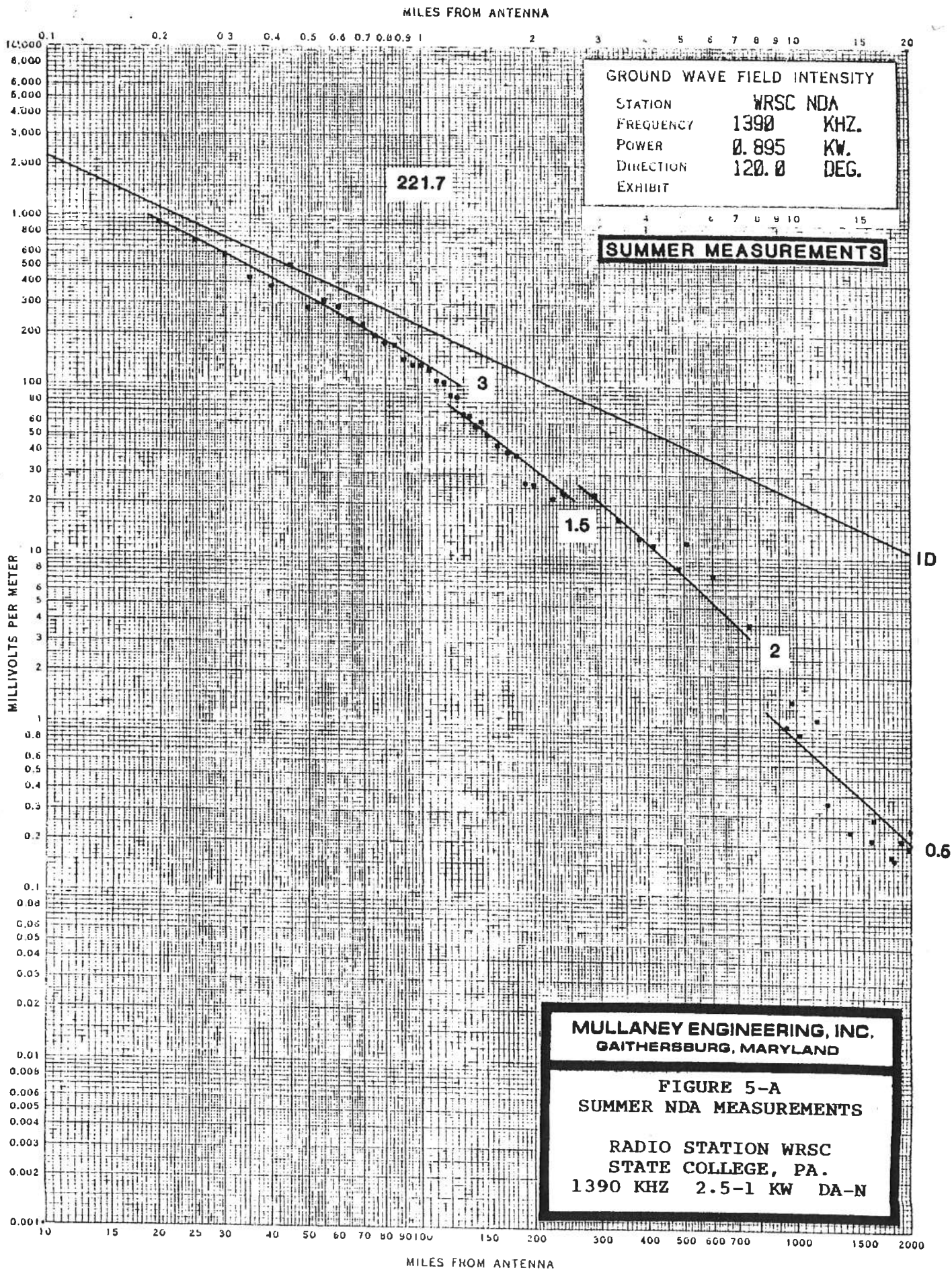


FIGURE 6
PAGE 2

RADIO STATION WRSC
STATE COLLEGE, PA.

TABULATION OF SUMMER FIELD INTENSITY MEASUREMENTS
RADIAL N 155 E

POINT #	DISTANCE (MILES)	DA (KV/H)	N-DA (KV/H)
*****	*****	*****	*****
.20	0.20	-	780.000
.25	0.25	-	700.000
.30	0.30	-	520.000
.35	0.35	-	460.000
.45	0.45	-	460.000
.50	0.50	-	350.000
.55	0.55	-	295.000
.60	0.60	-	290.000
.65	0.65	-	260.000
.70	0.70	-	225.000
.75	0.75	-	160.000
.80	0.80	-	150.000
.85	0.85	-	120.000
.90	0.90	-	120.000
.95	0.95	-	102.000
1.0	1.00	-	88.000
1.10	1.10	-	78.000
1.15	1.15	-	70.000
1.20	1.20	-	67.000
1.25	1.25	-	61.000
1.30	1.30	-	52.000
1.35	1.35	-	48.000
1.40	1.40	-	46.000
1.45	1.45	-	41.000
1.5	1.50	-	35.000

FIGURE 6
PAGE 3

RADIO STATION WRSC
STATE COLLEGE, PA.

TABULATION OF SUMMER FIELD INTENSITY MEASUREMENTS
RADIAL N 155 E

POINT #	DISTANCE (MILES)	DA (KV/H)	N-DA (KV/H)
#####	#####	#####	#####
1.6	1.60	-	32.000
1.7	1.70	-	28.000
1.8	1.80	-	20.000
1.9	1.90	-	18.600
2.0	2.00	-	15.000
2A	2.50	-	14.000
2B	2.70	-	7.800
3	3.10	-	13.000
3A	3.60	-	8.200
4	4.44	-	9.400
4A	4.75	-	9.800
5	5.80	-	6.300
6	6.60	-	4.500
7	7.55	-	0.930
9	9.20	-	0.830
9A	9.40	-	0.530
9B	9.50	-	0.660
10	10.10	-	0.430
10A	10.95	-	0.235
11	11.75	-	0.490
12	12.40	-	0.430
12A	12.90	-	0.600
14	14.10	-	0.560
14A	14.90	-	0.385
15	15.90	-	0.325
16	16.95	-	0.235
17	17.70	-	0.140
18	18.75	-	0.245
20	20.05	-	0.420

155° (Clear, dry 80's)

Points:

Date:

Time:

0.2-2.0 MI.

8-08-83

9:00- 1:30PM

2A - 4

7-29-83

3:45- 4:30PM

4A - 12

7-27-83

9:30- 1:00PM

12A - 20

7-27-83

1:30- 3:30PM

MILES FROM ANTENNA

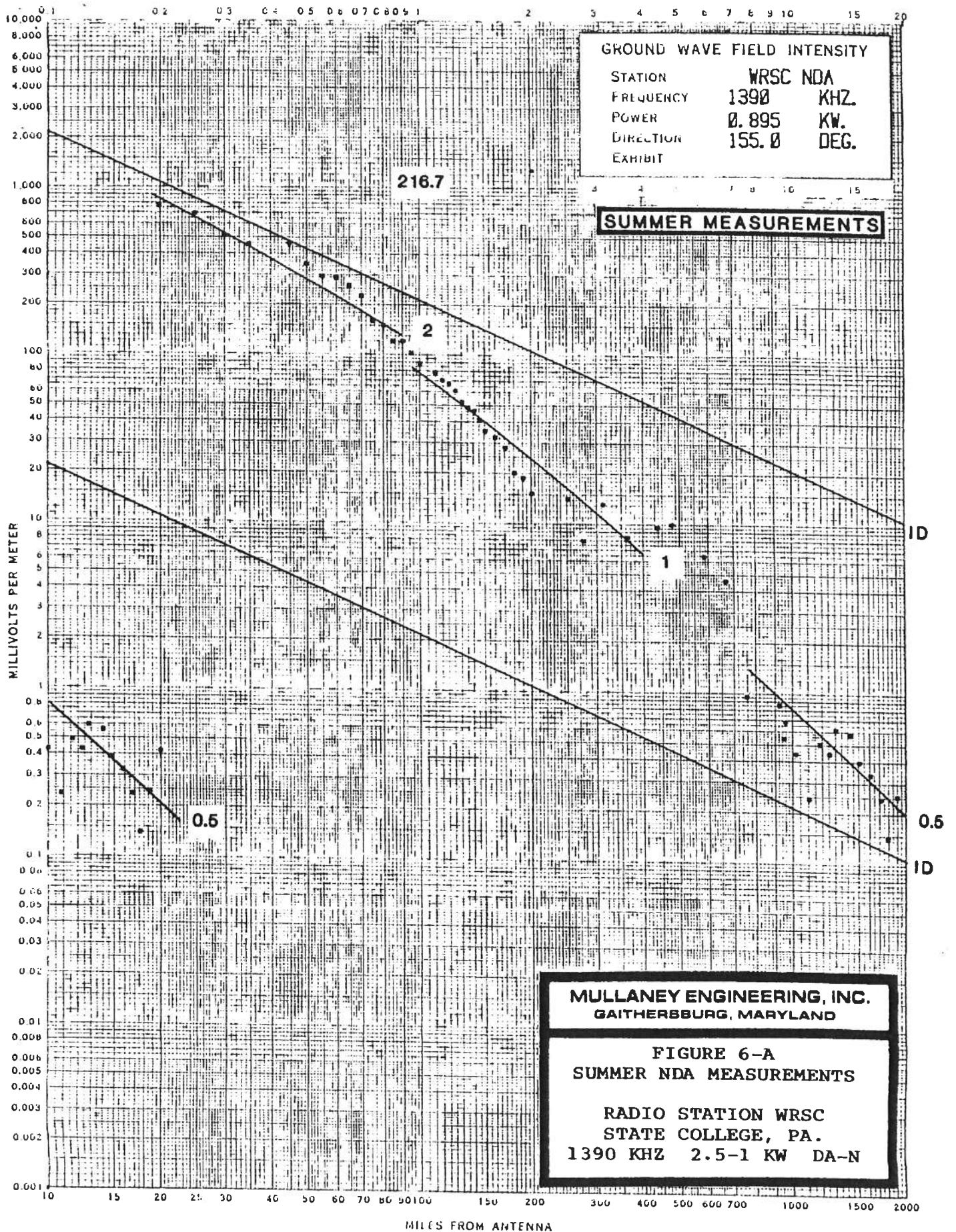


FIGURE 7
Page 5

RADIO STATION WRSC
STATE COLLEGE, PA.

TABULATION OF FIELD INTENSITY MEASUREMENTS
NEAR FIELD
RADIAL N 192.1 E

BEARING 192.10 HEIGHT 0.00

RANGE	E-VERTICAL		E-RADIAL		H-HORIZONTAL	
	MV/M	DEG.	MV/M	DEG.	MA/M	DEG.
0.10	1184.50	-17.43	0.00	90.00	3.10	172.08
0.15	830.42	-111.91	0.00	90.00	2.23	69.49
0.20	610.24	137.23	0.00	90.00	1.64	-42.42
0.25	469.86	19.21	0.00	90.00	1.26	-160.69
0.30	376.84	-103.09	0.00	90.00	1.01	76.94
0.35	312.34	131.82	0.00	90.00	0.83	-48.18
0.40	265.67	4.80	0.00	90.00	0.71	-175.21
0.45	230.64	-123.61	0.00	90.00	0.61	56.38
0.50	203.52	106.95	0.00	90.00	0.54	-73.06
0.55	181.99	-23.27	0.00	90.00	0.48	156.71
0.60	164.50	-154.11	0.00	90.00	0.44	25.88
0.65	150.04	74.57	0.00	90.00	0.40	-105.44
0.70	137.90	-57.14	0.00	90.00	0.37	122.85
0.75	127.57	170.83	0.00	90.00	0.34	-9.18
0.80	118.67	38.53	0.00	90.00	0.32	-141.48
0.85	110.93	-93.98	0.00	90.00	0.29	86.01
0.90	104.13	133.31	0.00	90.00	0.28	-46.70
0.95	98.12	0.45	0.00	90.00	0.26	-179.56
1.00	92.77	-132.56	0.00	90.00	0.25	47.44
1.10	83.64	-38.90	0.00	90.00	0.22	141.09
1.20	76.15	54.39	0.00	90.00	0.20	-125.61
1.30	69.89	147.40	0.00	90.00	0.19	-32.60
1.40	64.59	-119.82	0.00	90.00	0.17	60.18
1.50	60.04	-27.22	0.00	90.00	0.16	152.78
1.60	56.08	65.24	0.00	90.00	0.15	-114.77
1.70	52.62	157.56	0.00	90.00	0.14	-22.44
1.80	49.56	-110.21	0.00	90.00	0.13	69.79
1.90	46.84	-18.07	0.00	90.00	0.12	161.92
2.00	44.40	73.99	0.00	90.00	0.12	-106.01
2.20	40.21	-102.07	0.00	90.00	0.11	77.93
2.40	36.75	81.68	0.00	90.00	0.10	-98.32
2.60	33.84	-94.73	0.00	90.00	0.09	85.27
2.80	31.35	88.75	0.00	90.00	0.08	-91.25
3.00	29.21	-87.87	0.00	90.00	0.08	92.13
3.20	27.34	95.44	0.00	90.00	0.07	-84.56
3.40	25.69	-81.32	0.00	90.00	0.07	98.68
3.60	24.23	101.86	0.00	90.00	0.06	-78.14
3.80	22.93	-75.00	0.00	90.00	0.06	105.00
4.00	21.76	108.11	0.00	90.00	0.06	-71.90
4.20	20.71	-68.82	0.00	90.00	0.05	111.17
4.40	19.75	114.22	0.00	90.00	0.05	-65.78

FIGURE 7
Page 6

RADIO STATION WRSC
STATE COLLEGE, PA.

TABULATION OF FIELD INTENSITY MEASUREMENTS
NEAR FIELD
RADIAL N 192.1 E

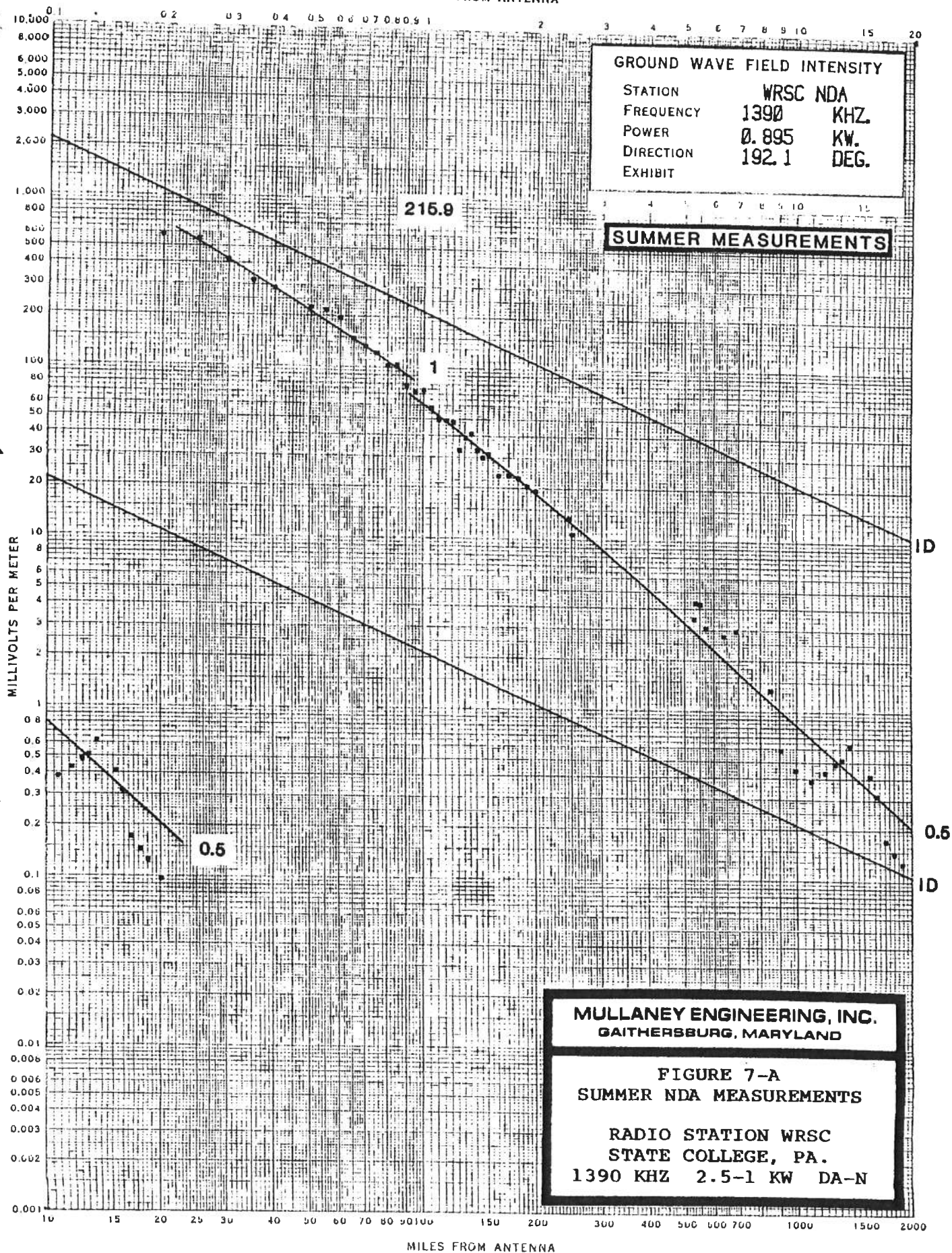
BEARING 192.10			HEIGHT 0.00			
RANGE	E-VERTICAL		E-RADIAL		H-HORIZONTAL	
	MV/M	DEG.	MV/M	DEG.	MA/M	DEG.
4.60	18.88	-62.77	0.00	90.00	0.05	117.23
4.80	18.08	120.23	0.00	90.00	0.05	-59.77
5.00	17.35	-56.80	0.00	90.00	0.05	123.20
5.50	15.75	40.56	0.00	90.00	0.04	-139.44
6.00	14.42	137.85	0.00	90.00	0.04	-42.15
6.50	13.30	-124.93	0.00	90.00	0.04	55.07
7.00	12.34	-27.75	0.00	90.00	0.03	152.25
7.50	11.51	69.38	0.00	90.00	0.03	-110.62
8.00	10.78	166.49	0.00	90.00	0.03	-13.51
8.50	10.14	-96.44	0.00	90.00	0.03	83.56
9.00	9.58	0.62	0.00	90.00	0.03	-179.38
9.50	9.07	97.66	0.00	90.00	0.02	-82.34
10.00	8.61	-165.32	0.00	90.00	0.02	14.68
11.00	7.82	28.68	0.00	90.00	0.02	-151.32
12.00	7.17	-137.36	0.00	90.00	0.02	42.64
13.00	6.61	56.58	0.00	90.00	0.02	-123.42
14.00	6.14	-109.52	0.00	90.00	0.02	70.48
15.00	5.73	84.38	0.00	90.00	0.02	-95.62
16.00	5.37	-81.74	0.00	90.00	0.01	98.26
17.00	5.05	112.11	0.00	90.00	0.01	-67.89
18.00	4.77	-54.04	0.00	90.00	0.01	125.96
19.00	4.52	139.80	0.00	90.00	0.01	-40.20
20.00	4.29	-26.37	0.00	90.00	0.01	153.63

MILES FROM ANTENNA

GROUND WAVE FIELD INTENSITY

STATION WRSC NDA
 FREQUENCY 1390 KHZ.
 POWER 0.895 KW.
 DIRECTION 192.1 DEG.
 EXHIBIT

SUMMER MEASUREMENTS



MULLANEY ENGINEERING, INC.
 GAITHERSBURG, MARYLAND

FIGURE 7-A
 SUMMER NDA MEASUREMENTS

RADIO STATION WRSC
 STATE COLLEGE, PA.
 1390 KHZ 2.5-1 KW DA-N

MULLANEY ENGINEERING, INC.

FIGURE 8
PAGE 2

RADIO STATION WRSC
STATE COLLEGE, PA.

TABULATION OF SUMMER FIELD INTENSITY MEASUREMENTS
RADIAL N 222.3 E

POINT #	DISTANCE (MILES)	DA (KV/H)	N-DA (KV/H)
*****	*****	*****	*****
.20	0.20	-	560.000
.25	0.25	-	460.000
.30	0.30	-	380.000
.35	0.35	-	295.000
.40	0.40	-	260.000
.45	0.45	-	190.000
.50	0.50	-	137.000
.55	0.55	-	160.000
.60	0.60	-	115.000
.65	0.65	-	98.000
.70	0.70	-	80.000
.75	0.75	-	76.000
.80	0.80	-	74.000
.85	0.85	-	52.000
.90	0.90	-	58.000
.95	0.95	-	58.000
1.0	1.00	-	60.000
1.05	1.05	-	60.000
1.10	1.10	-	52.000
1.15	1.15	-	51.000
1.20	1.20	-	54.000
1.25	1.25	-	37.000
1.30	1.30	-	42.000
1.35	1.35	-	38.000
1.40	1.40	-	36.000
1.45	1.45	-	29.000
1.5	1.50	-	26.000

MULLANEY ENGINEERING, INC.

FIGURE 8
PAGE 3

RADIO STATION WRSC
STATE COLLEGE, PA.

TABULATION OF SUMMER FIELD INTENSITY MEASUREMENTS
RADIAL N 222.3 E

POINT #	DISTANCE (MILES)	DA (MV/M)	N-DA (MV/M)
#####	#####	#####	#####
1.6	1.60	-	26.000
1.7	1.70	-	18.500
1.8	1.80	-	16.000
1.9	1.90	-	16.000
2.0	2.10	-	14.000
2A	3.00	-	7.900
3	3.80	-	3.030
5	5.40	-	2.940
5A	5.95	-	2.160
6	5.90	-	2.290
6A	6.50	-	2.240
7	6.70	-	2.000
9	7.10	-	1.050
12	12.10	-	0.310
12A	12.70	-	0.430
13	13.00	-	0.380
14	13.80	-	0.325
16	16.25	-	0.305
17	17.50	-	0.270
17A	17.50	-	0.225
19	18.10	-	0.200

222.3° (Clear, dry 80's)

Points:	Date:	Time:
0.2-1.0 Mi.	8-08-83	8:45-10:30AM
1.0-2.0 Mi.	8-09-83	10:00- 2:00PM
2,2A,3	8-05-83	9:00-10:00AM
5 - 20	7-29-83	1:15- 4:30PM

MILES FROM ANTENNA

GROUND WAVE FIELD INTENSITY

STATION WRSC NDA
 FREQUENCY 1390 KHZ.
 POWER 0.895 KW.
 DIRECTION 222.3 DEG.
 EXHIBIT

SUMMER MEASUREMENTS

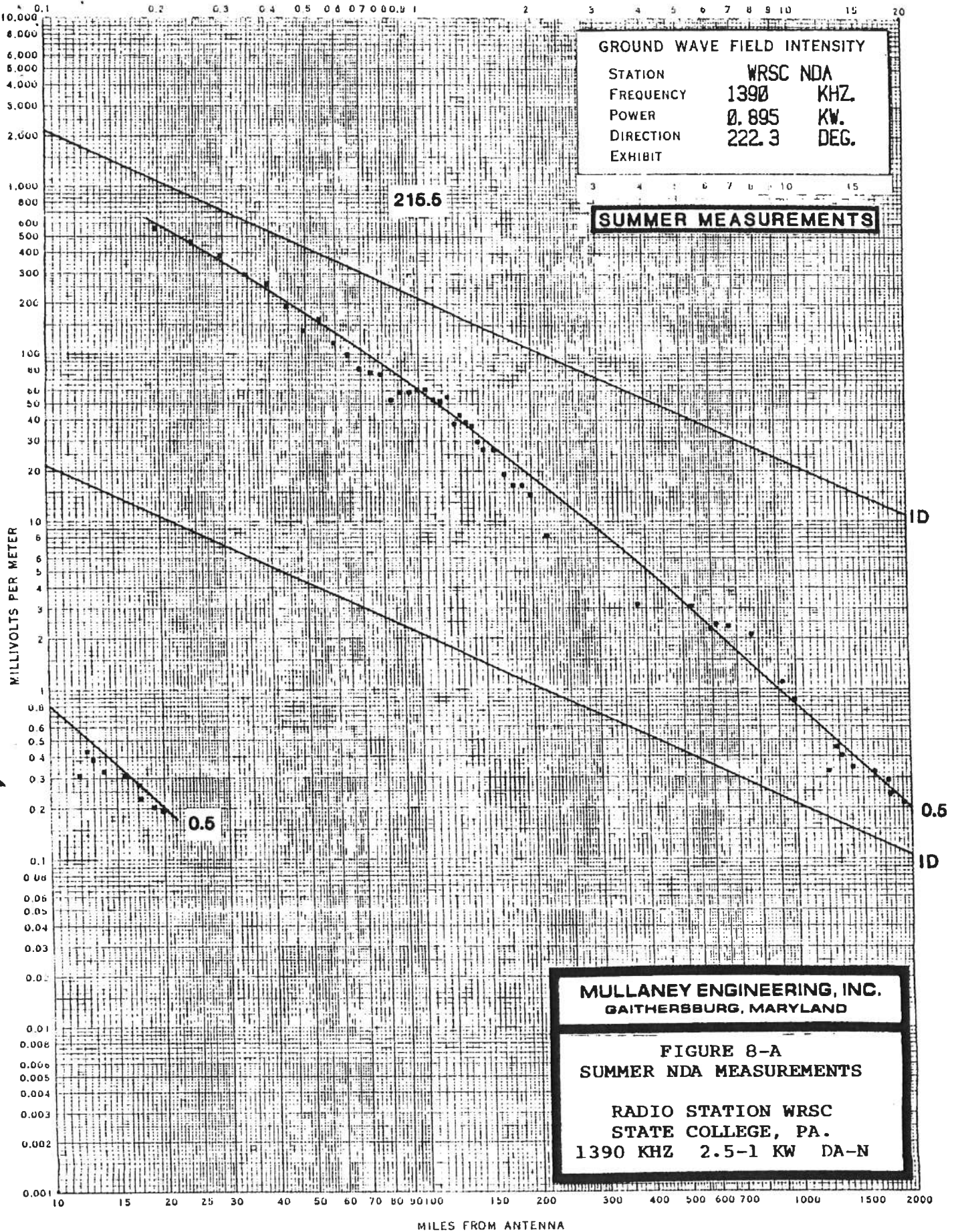


FIGURE 9
Page 4

RADIO STATION WRSC
STATE COLLEGE, PA.

TABULATION OF FIELD INTENSITY MEASUREMENTS
NEAR FIELD
RADIAL N 260.7 E

BEARING 260.70

HEIGHT 0.00

RANGE	E-VERTICAL		E-RADIAL		H-HORIZONTAL	
	MV/M	DEG.	MV/M	DEG.	MA/M	DEG.
0.10	870.87	-7.30	0.00	90.00	2.73	167.51
0.15	533.97	-126.96	0.00	90.00	1.55	51.04
0.20	354.06	107.61	0.00	90.00	1.00	-73.42
0.25	250.95	-21.09	0.00	90.00	0.69	158.29
0.30	187.26	-151.67	0.00	90.00	0.51	27.91
0.35	145.35	76.58	0.00	90.00	0.39	-103.72
0.40	116.36	-55.94	0.00	90.00	0.31	123.84
0.45	95.48	171.02	0.00	90.00	0.26	-9.16
0.50	79.94	37.60	0.00	90.00	0.21	-142.54
0.55	68.06	-96.09	0.00	90.00	0.18	83.80
0.60	58.76	130.02	0.00	90.00	0.16	-50.07
0.65	51.34	-4.03	0.00	90.00	0.14	175.89
0.70	45.32	-138.20	0.00	90.00	0.12	41.74
0.75	40.37	87.54	0.00	90.00	0.11	-92.51
0.80	36.24	-46.79	0.00	90.00	0.10	133.16
0.85	32.76	178.81	0.00	90.00	0.09	-1.23
0.90	29.80	44.37	0.00	90.00	0.08	-135.66
0.95	27.26	-90.10	0.00	90.00	0.07	89.87
1.00	25.06	135.39	0.00	90.00	0.07	-44.64
1.10	21.46	-133.69	0.00	90.00	0.06	46.29
1.20	18.65	-42.82	0.00	90.00	0.05	137.16
1.30	16.42	48.00	0.00	90.00	0.04	-132.01
1.40	14.61	138.81	0.00	90.00	0.04	-41.20
1.50	13.12	-130.39	0.00	90.00	0.03	49.60
1.60	11.88	-39.59	0.00	90.00	0.03	140.41
1.70	10.83	51.21	0.00	90.00	0.03	-128.79
1.80	9.93	142.03	0.00	90.00	0.03	-37.97
1.90	9.16	-127.15	0.00	90.00	0.02	52.85
2.00	8.49	-36.30	0.00	90.00	0.02	143.70
2.20	7.39	145.41	0.00	90.00	0.02	-34.59
2.40	6.52	-32.80	0.00	90.00	0.02	147.20
2.60	5.82	149.04	0.00	90.00	0.02	-30.96
2.80	5.25	-29.05	0.00	90.00	0.01	150.95
3.00	4.78	152.92	0.00	90.00	0.01	-27.08
3.20	4.38	-25.08	0.00	90.00	0.01	154.92
3.40	4.04	156.99	0.00	90.00	0.01	-23.01
3.60	3.75	-20.91	0.00	90.00	0.01	159.09
3.80	3.49	161.25	0.00	90.00	0.01	-18.75
4.00	3.27	-16.57	0.00	90.00	0.01	163.43
4.20	3.07	165.65	0.00	90.00	0.01	-14.35
4.40	2.89	-12.10	0.00	90.00	0.01	167.90

FIGURE 9
Page 5

RADIO STATION WRSC
STATE COLLEGE, PA.

TABULATION OF FIELD INTENSITY MEASUREMENTS
NEAR FIELD
RADIAL N 260.7 E

BEARING 260.70

HEIGHT 0.00

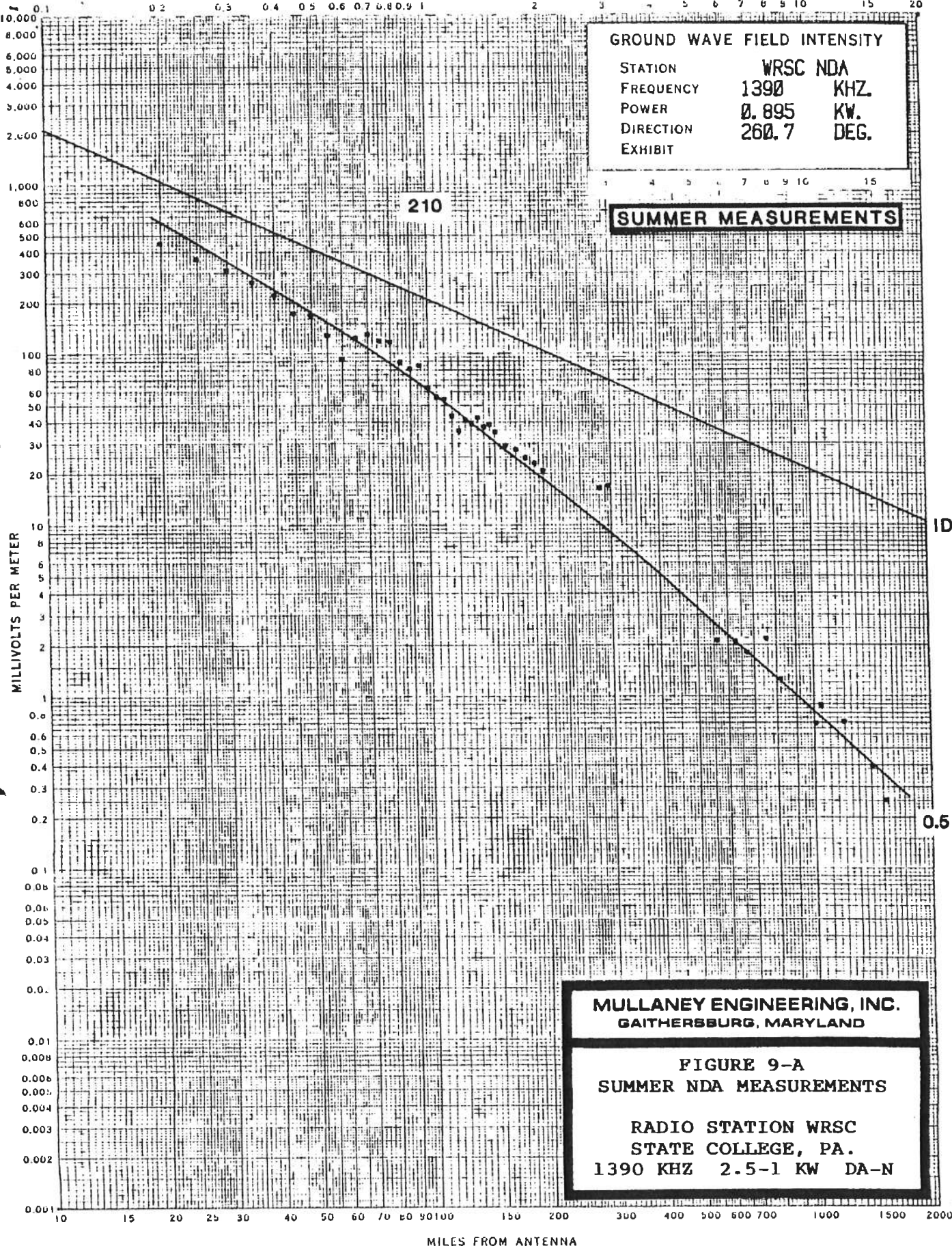
RANGE	E-VERTICAL		E-RADIAL		H-HORIZONTAL	
	MV/M	DEG.	MV/M	DEG.	MA/M	DEG.
4.60	2.74	170.18	0.00	90.00	0.01	-9.82
4.80	2.60	-7.50	0.00	90.00	0.01	172.50
5.00	2.47	174.83	0.00	90.00	0.01	-5.17
5.50	2.20	-89.26	0.00	90.00	0.01	90.74
6.00	1.98	6.82	0.00	90.00	0.01	-173.18
6.50	1.80	102.94	0.00	90.00	0.00	-77.06
7.00	1.65	-160.83	0.00	90.00	0.00	19.17
7.50	1.52	-64.54	0.00	90.00	0.00	115.46
8.00	1.41	31.86	0.00	90.00	0.00	-148.14
8.50	1.32	128.28	0.00	90.00	0.00	-51.72
9.00	1.23	-135.29	0.00	90.00	0.00	44.71
9.50	1.16	-38.80	0.00	90.00	0.00	141.20
10.00	1.10	57.70	0.00	90.00	0.00	-122.30
11.00	0.99	-109.16	0.00	90.00	0.00	70.84
12.00	0.90	84.08	0.00	90.00	0.00	-95.92
13.00	0.82	-82.61	0.00	90.00	0.00	97.39
14.00	0.76	110.75	0.00	90.00	0.00	-69.25
15.00	0.70	-55.86	0.00	90.00	0.00	124.14
16.00	0.66	137.61	0.00	90.00	0.00	-42.39
17.00	0.61	-28.91	0.00	90.00	0.00	151.09
18.00	0.58	164.60	0.00	90.00	0.00	-15.40
19.00	0.55	-1.86	0.00	90.00	0.00	178.14
20.00	0.52	-168.30	0.00	90.00	0.00	11.70

MILES FROM ANTENNA

GROUND WAVE FIELD INTENSITY

STATION WRSC NDA
 FREQUENCY 1390 KHZ.
 POWER 0.895 KW.
 DIRECTION 260.7 DEG.
 EXHIBIT

SUMMER MEASUREMENTS



MULLANEY ENGINEERING, INC.
 GAITHERSBURG, MARYLAND

FIGURE 9-A
 SUMMER NDA MEASUREMENTS

RADIO STATION WRSC
 STATE COLLEGE, PA.
 1390 KHZ 2.5-1 KW DA-N

FIGURE 10
Page 4

RADIO STATION WRSC
STATE COLLEGE, PA.

TABULATION OF FIELD INTENSITY MEASUREMENTS
NEAR FIELD
RADIAL N 280 E

BEARING 280.00 HEIGHT 0.00

RANGE	E-VERTICAL		E-RADIAL		H-HORIZONTAL	
	MV/M	DEG.	MV/M	DEG.	MA/M	DEG.
0.10	1210.32	63.76	0.00	90.00	4.12	-127.96
0.15	851.43	-52.54	0.00	90.00	2.54	123.88
0.20	619.49	-174.46	0.00	90.00	1.75	3.92
0.25	474.87	59.61	0.00	90.00	1.31	-121.30
0.30	380.33	-68.73	0.00	90.00	1.04	110.70
0.35	315.06	161.43	0.00	90.00	0.85	-18.96
0.40	267.84	30.59	0.00	90.00	0.72	-149.69
0.45	232.33	-100.94	0.00	90.00	0.62	78.84
0.50	204.80	127.02	0.00	90.00	0.55	-53.14
0.55	182.88	-5.39	0.00	90.00	0.49	174.48
0.60	165.07	-138.09	0.00	90.00	0.44	41.80
0.65	150.32	88.98	0.00	90.00	0.40	-91.11
0.70	137.94	-44.13	0.00	90.00	0.37	135.80
0.75	127.39	-177.39	0.00	90.00	0.34	2.55
0.80	118.31	49.23	0.00	90.00	0.32	-130.82
0.85	110.42	-84.25	0.00	90.00	0.29	95.70
0.90	103.49	142.18	0.00	90.00	0.28	-37.86
0.95	97.37	8.54	0.00	90.00	0.26	-171.50
1.00	91.93	-125.17	0.00	90.00	0.24	54.80
1.10	82.66	-32.73	0.00	90.00	0.22	147.24
1.20	75.07	59.53	0.00	90.00	0.20	-120.49
1.30	68.74	151.67	0.00	90.00	0.18	-28.35
1.40	63.39	-116.30	0.00	90.00	0.17	63.69
1.50	58.81	-24.35	0.00	90.00	0.16	155.64
1.60	54.84	67.53	0.00	90.00	0.15	-112.48
1.70	51.37	159.36	0.00	90.00	0.14	-20.65
1.80	48.31	-108.87	0.00	90.00	0.13	71.12
1.90	45.59	-17.13	0.00	90.00	0.12	162.86
2.00	43.16	74.57	0.00	90.00	0.11	-105.44
2.20	39.00	-102.12	0.00	90.00	0.10	77.88
2.40	35.57	81.11	0.00	90.00	0.09	-98.90
2.60	32.70	-95.74	0.00	90.00	0.09	84.26
2.80	30.25	87.36	0.00	90.00	0.08	-92.64
3.00	28.14	-89.58	0.00	90.00	0.07	90.41
3.20	26.31	93.43	0.00	90.00	0.07	-86.57
3.40	24.70	-83.58	0.00	90.00	0.07	96.41
3.60	23.27	99.38	0.00	90.00	0.06	-80.62
3.80	22.00	-77.68	0.00	90.00	0.06	102.32
4.00	20.87	105.24	0.00	90.00	0.06	-74.76
4.20	19.84	-71.86	0.00	90.00	0.05	108.14
4.40	18.91	111.04	0.00	90.00	0.05	-68.97

FIGURE 10
Page 5

RADIO STATION WRSC
STATE COLLEGE, PA.

TABULATION OF FIELD INTENSITY MEASUREMENTS
NEAR FIELD

RADIAL N 280 E

RANGE	BEARING 280.00		HEIGHT 0.00			
	E-VERTICAL		E-RADIAL		H-HORIZONTAL	
	MV/M	DEG.	MV/M	DEG.	MA/M	DEG.
4.60	18.06	-66.08	0.00	90.00	0.05	113.91
4.80	17.29	116.79	0.00	90.00	0.05	-63.21
5.00	16.58	-60.35	0.00	90.00	0.04	119.64
5.50	15.03	36.76	0.00	90.00	0.04	-143.24
6.00	13.75	133.83	0.00	90.00	0.04	-46.17
6.50	12.67	-129.12	0.00	90.00	0.03	50.88
7.00	11.75	-32.09	0.00	90.00	0.03	147.91
7.50	10.95	64.91	0.00	90.00	0.03	-115.09
8.00	10.25	161.90	0.00	90.00	0.03	-18.10
8.50	9.64	-101.12	0.00	90.00	0.03	78.88
9.00	9.10	-4.15	0.00	90.00	0.02	175.85
9.50	8.61	92.80	0.00	90.00	0.02	-87.20
10.00	8.17	-170.25	0.00	90.00	0.02	9.75

MILES FROM ANTENNA

GROUND WAVE FIELD INTENSITY

STATION **WRSC NDA**
 FREQUENCY **1390 KHZ.**
 POWER **0.895 KW.**
 DIRECTION **280.0 DEG.**
 EXHIBIT

SUMMER MEASUREMENTS

MILLIVOLTS PER METER

211.3

0.5

1

10

0.5

MULLANEY ENGINEERING, INC.
 GAITHERSBURG, MARYLAND

FIGURE 10-A
 SUMMER NDA MEASUREMENTS

RADIO STATION WRSC
 STATE COLLEGE, PA.
 1390 KHZ 2.5-1 KW DA-N

MILES FROM ANTENNA

MULLANEY ENGINEERING, INC.

FIGURE 11
PAGE 3

RADIO STATION WRSC
STATE COLLEGE, PA.

TABULATION OF SUMMER FIELD INTENSITY MEASUREMENTS
RADIAL N 320 E

POINT #	DISTANCE (MILES)	DA (MV/M)	N-DA (MV/M)
*****	*****	*****	*****
.20	0.20	-	680.000
.25	0.25	-	630.000
.30	0.30	-	480.000
.35	0.35	-	350.000
.40	0.40	-	285.000
.45	0.45	-	178.000
.50	0.50	-	108.000
.55	0.55	-	102.000
.60	0.60	-	145.000
.65	0.65	-	120.000
.70	0.70	-	143.000
.75	0.75	-	140.000
.80	0.80	-	109.000
.85	0.85	-	96.000
.90	0.90	-	160.000
.95	0.95	-	104.000
1.	1.00	-	77.000
1.05	1.05	-	74.000
1.10	1.10	-	89.000
1.15	1.15	-	76.000
1.20	1.20	-	93.000
1.25	1.25	-	66.000
1.30	1.30	-	63.000
1.35	1.35	-	59.000
1.40	1.40	-	60.000
1.45	1.45	-	58.000
1.50	1.50	-	56.000

MULLANEY ENGINEERING, INC.

FIGURE 11
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RADIO STATION WRSC
STATE COLLEGE, PA.

TABULATION OF SUMMER FIELD INTENSITY MEASUREMENTS
RADIAL N 320 E

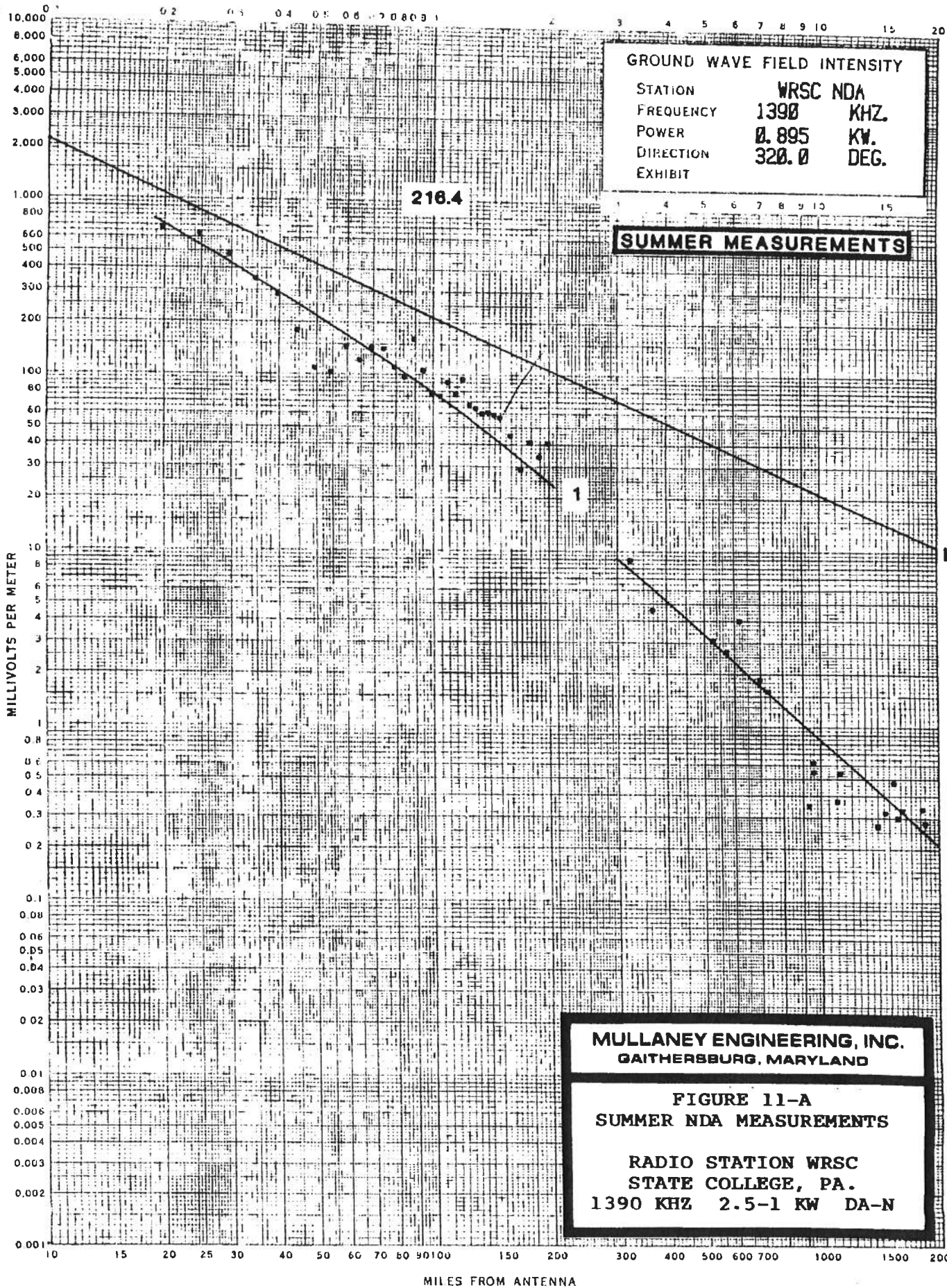
POINT #	DISTANCE (MILES)	DA (MV/M)	N-DA (MV/M)
*****	*****	*****	*****

1.6	1.60	-	44.000
1.7	1.70	-	23.500
1.8	1.80	-	40.500
1.9	1.90	-	33.500
2A	2.10	-	40.000
3A	3.70	-	4.500
5	5.30	-	3.000
5A	5.75	-	2.600
6	6.20	-	3.900
7	7.00	-	1.800
7A	7.33	-	1.550
9	9.35	-	0.340
9A	9.60	-	0.300
9B	9.60	-	0.530
11	11.05	-	0.360
11A	11.25	-	0.520
14	14.00	-	0.260
14A	14.65	-	0.310
15	15.40	-	0.460
15A	15.75	-	0.290
16	16.20	-	0.320
18	18.20	-	0.325
18A	18.50	-	0.270

320° (Clear, dry 80's)

Points:	Date:	Time:
0.2-1.0 Mi.	8-03-83	8:30-11:30AM
1.0-2.0 Mi.	8-03-83	11:30- 1:30PM
3A - 4A	7-26-83	3:00- 3:15PM
5 & 5A	7-26-83	6:00- 6:30PM
6 - 14A	7-26-83	12:00- 2:45PM
15 - 18	7-27-83	12:00- 1:00PM

MILES FROM ANTENNA



MULLANEY ENGINEERING, INC.

FIGURE 12
PAGE 2

RADIO STATION WRSC
STATE COLLEGE, PA.

TABULATION OF SUMMER FIELD INTENSITY MEASUREMENTS
RADIAL N 348 E

POINT #	DISTANCE (MILES)	DA (MV/M)	N-DA (MV/H)
*****	*****	*****	*****
.2	0.20	-	650.000
.25	0.25	-	510.000
.30	0.30	-	390.000
.35	0.35	-	288.000
.40	0.40	-	264.000
.45	0.45	-	165.000
.50	0.50	-	195.000
.55	0.55	-	200.000
.60	0.60	-	260.000
.65	0.65	-	153.000
.70	0.70	-	140.000
.75	0.75	-	145.000
.80	0.80	-	125.000
.85	0.85	-	82.000
.90	0.90	-	81.000
.95	0.95	-	92.000
1.	1.00	-	83.000
1.05	1.05	-	83.000
1.10	1.10	-	76.000
1.15	1.15	-	58.000
1.2	1.20	-	49.000
1.25	1.25	-	62.000

MULLANEY ENGINEERING, INC.

FIGURE 12

PAGE 3

RADIO STATION WRSC
STATE COLLEGE, PA.

TABULATION OF SUMMER FIELD INTENSITY MEASUREMENTS
RADIAL N 348 E

POINT #	DISTANCE (MILES)	DA (MV/M)	N-DA (MV/M)
*****	*****	*****	*****

1.3	1.30	-	63.000
1.35	1.35	-	71.000
1.4	1.40	-	63.000
1.45	1.45	-	61.000
1.5	1.50	-	54.000
1.6	1.60	-	51.000
1.7	1.70	-	31.500
1.8	1.80	-	44.500
1.9	1.90	-	32.000
2	1.95	-	37.500
2A	2.40	-	15.800
3	3.45	-	6.300
3A	3.80	-	4.600
4	4.10	-	3.800
5	5.25	-	2.800
6	6.20	-	2.200
7	7.80	-	1.400
15	15.60	-	0.180
15A	15.95	-	0.210
17	17.05	-	0.145

348° (Clear, dry 80's)

Points:	Date:	Time:
0.2-1.0 Mi.	8-03-83	9:45- 1:00PM
1.0-2.0 Mi.	8-03-83	1:00- 3:15PM
5,6,7,15	7-26-83	11:30- 1:00PM
3,3A,4,15,15A,17	7-27-83	1:15- 3:00PM

