



Proposal Number

Date

Call Letters

Location

Customer

Antenna Type

**15 Apr 2001**

**KUSI-DT**

**SAN DIEGO, CA**

**TFU-24GTH-R S180**

Exhibit 39

Sheet 1

Channel

**18**

### AZIMUTH PATTERN

RMS Gain at Main Lobe

Calculated / Measured

**1.80 (2.55 dB)**

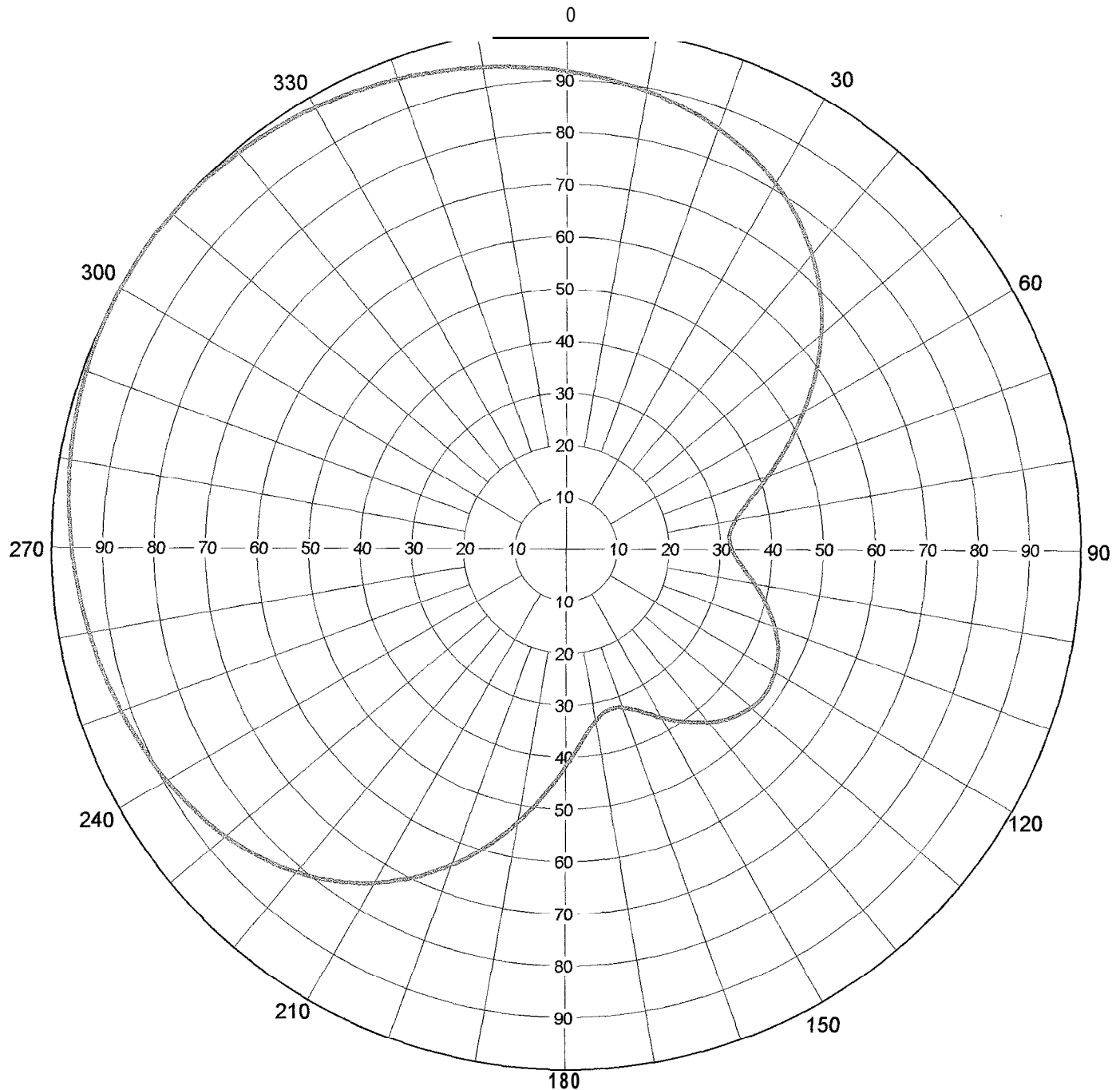
**Calculated**

Frequency

Drawing #

**496 MHz**

**TFUS180**



Remarks:

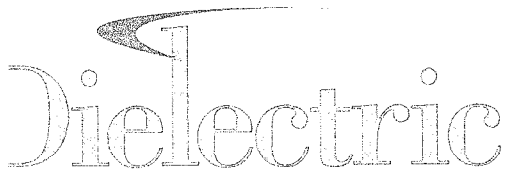


Exhibit 39  
 Sheet 2  
 Proposal Number  
 Date **15 Apr 2001**  
 Call Letters **KUSI-DT** Channel **18**  
 Location **SAN DIEGO, CA**  
 Customer  
 Antenna Type **TFU-24GTH-R S180**

## TABULATION OF AZIMUTH PATTERN

Azimuth Pattern Drawing # **TFU-S180**

Angle	Field	ERP (kW)	ERP (dBk)
0	0.917	298.5	24.75
10	0.893	283.1	24.52
20	0.860	262.6	24.19
30	0.812	234.1	23.69
40	0.741	194.9	22.90
50	0.647	148.6	21.72
60	0.533	100.9	20.04
70	0.417	61.7	17.91
80	0.335	39.8	16.00
90	0.323	37.0	15.69
100	0.372	49.1	16.91
110	0.432	66.3	18.21
120	0.470	78.4	18.94
130	0.470	78.4	18.94
140	0.432	66.3	18.21
150	0.372	49.1	16.91
160	0.323	37.0	15.69
170	0.335	39.8	16.00
180	0.417	61.7	17.91
190	0.533	100.9	20.04
200	0.647	148.6	21.72
210	0.741	194.9	22.90
220	0.812	234.1	23.69
230	0.860	262.6	24.19
240	0.893	283.1	24.52
250	0.917	298.5	24.75
260	0.939	313.0	24.96
270	0.959	326.5	25.14
280	0.977	338.9	25.30
290	0.991	348.6	25.42
300	0.999	354.3	25.49
310	0.999	354.3	25.49
320	0.991	348.6	25.42
330	0.977	338.9	25.30
340	0.959	326.5	25.14
350	0.939	313.0	24.96

### Maxima

Angle	Field	ERP (kW)	ERP (dBk)
125	0.475	80.1	19.04
305	1.000	355.0	25.50

### Minima

Angle	Field	ERP (kW)	ERP (dBk)
86	0.318	35.9	15.55
164	0.318	35.9	15.55

Remarks:



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Exhibit 39

Sheet 3**15 Apr 2001****KUSI-DT**

Channel

**18****SAN DIEGO, CA****TFU-24GTH-R S180****ELEVATION PATTERN**

RMS Gain at Main Lobe

**21.5 (13.32 dB)**

Beam Tilt

**1 .00 Degrees**

RMS Gain at Horizontal

**14.1 (11.49 dB)**

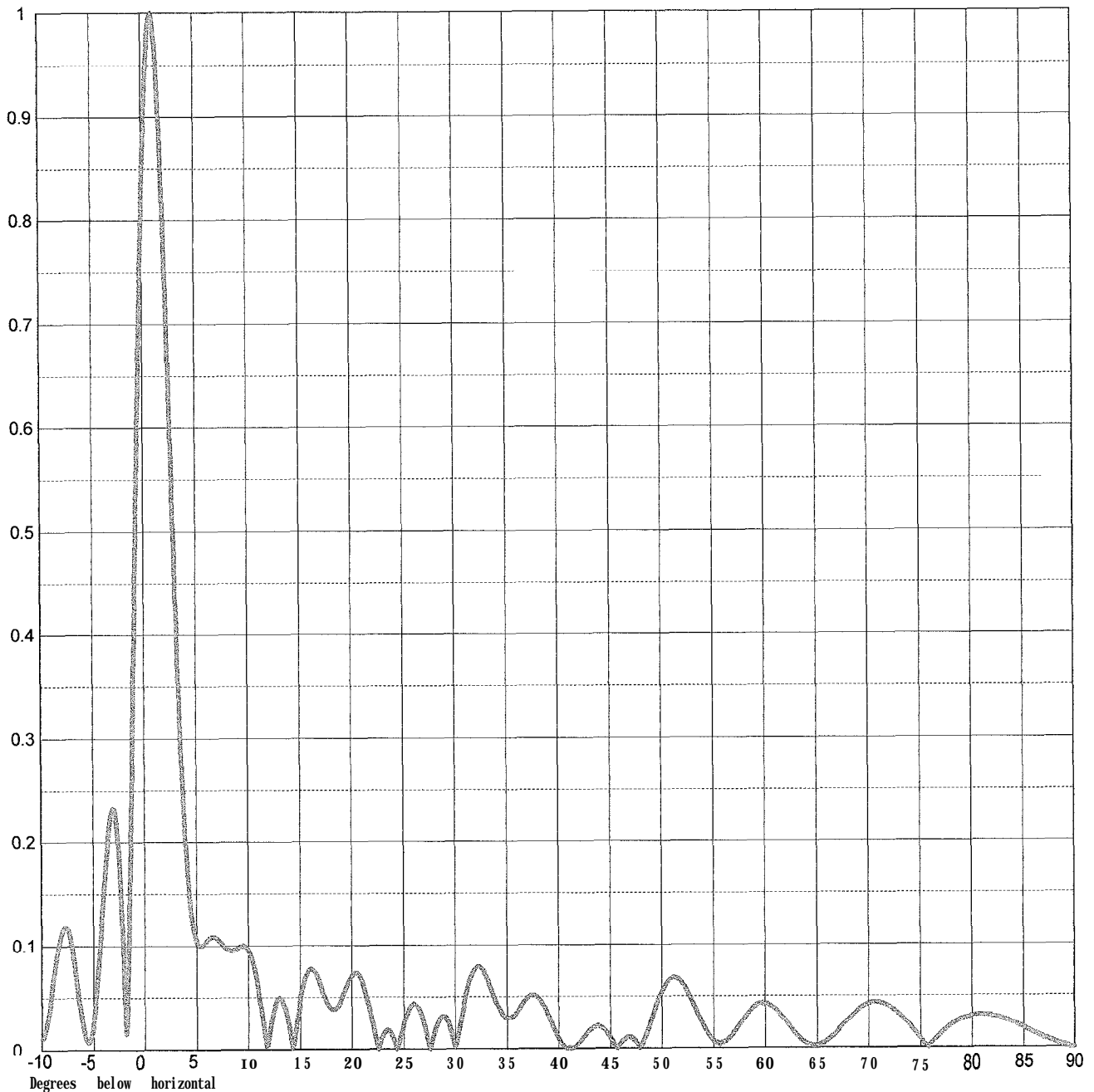
Frequency

**496.00 MHz**

Calculated / Measured

**Calculated**

Drawing #

**24G215100-90**

Remarks:



Proposal Number

Date

Call Letters

Location

Customer

Antenna Type

Exhibit 39

Sheet 4

15 Apr 2001

KUSI-DT

Channel

18

SAN DIEGO, CA

TFU-24GTH-R S180

## ELEVATION PATTERN

RMS Gain at Main Lobe

21.5 (13.32 dB)

Beam Tilt

1 .00 Degrees

RMS Gain at Horizontal

14.1 (11.49 dB)

Frequency

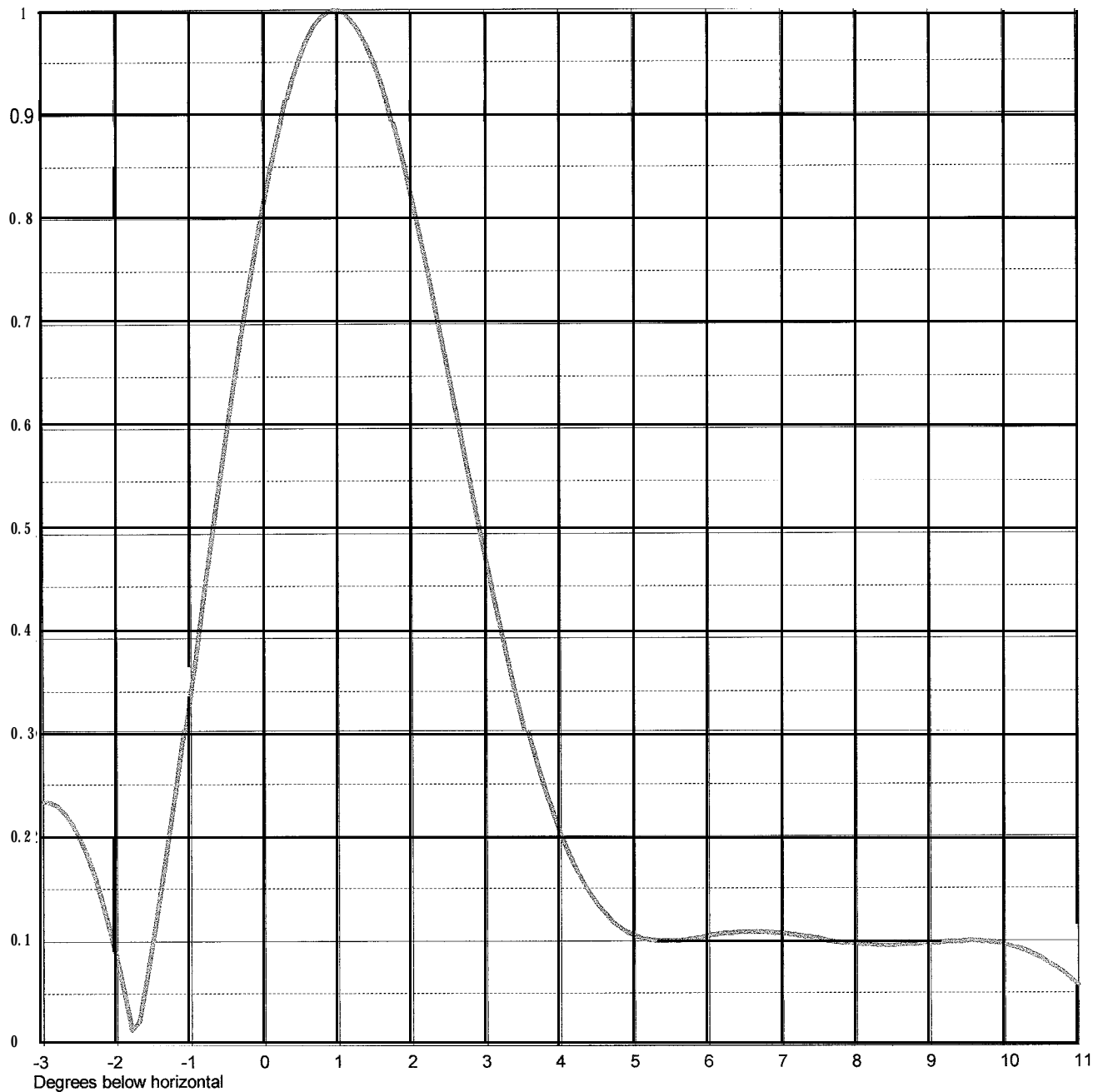
496.00 MHz

Calculated / Measured

Calculated

Drawing #

24G215100



Remarks:



Proposal Number

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15 Apr 2001

KUSI-DT

SAN DIEGO, CA

TFU-24GTH S180

Exhibit 39

Sheet 5

Channel 18

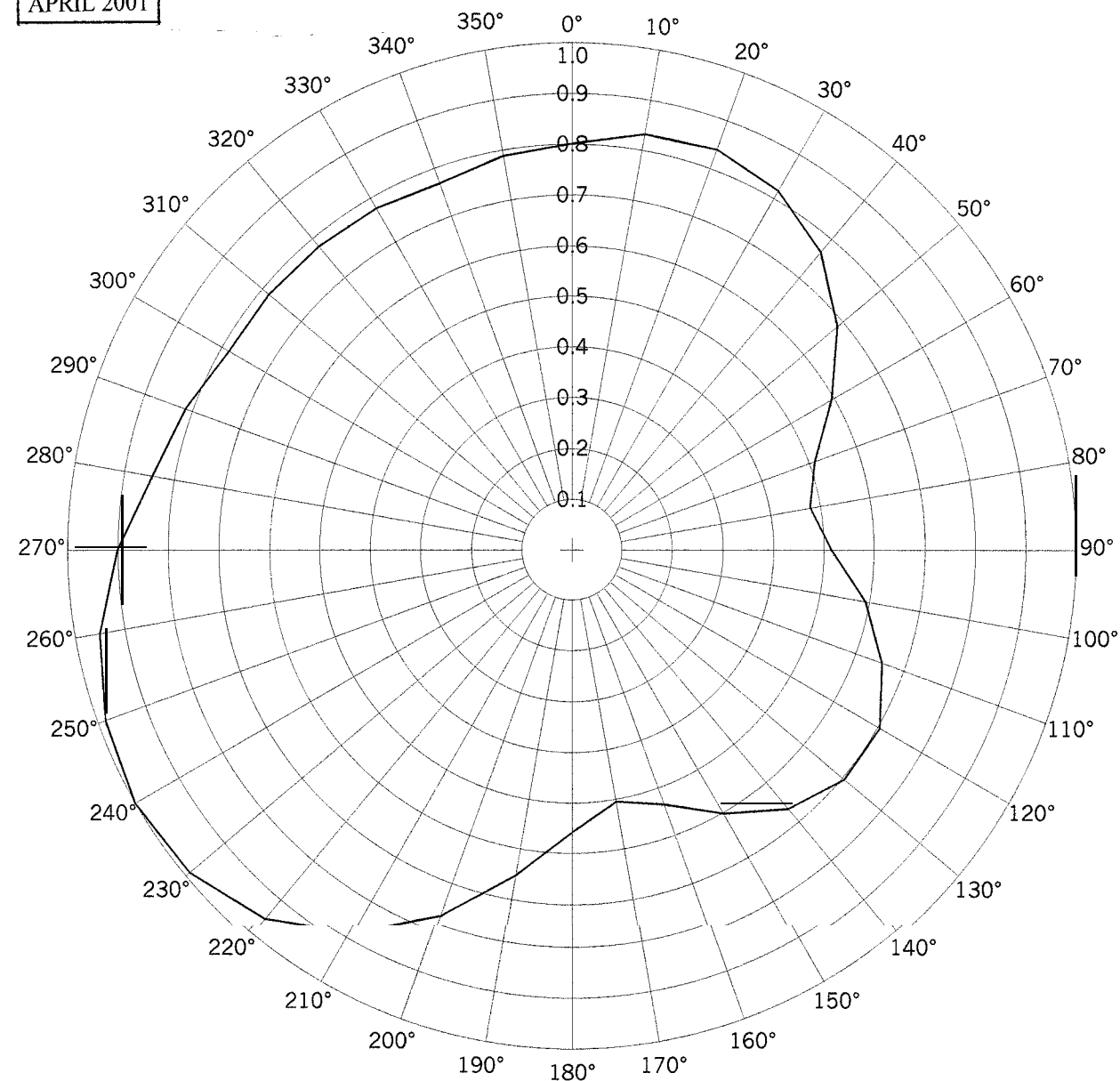
## TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing # 246215100

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.010	2.4	0.690	10.6	0.078	30.5	0.023	51.0	0.067	71.5	0.042
-9.5	0.024	2.6	0.617	10.8	0.069	31.0	0.048	51.5	0.067	72.0	0.039
-9.0	0.054	2.8	0.545	11.0	0.057	31.5	0.067	52.0	0.062	72.5	0.036
-8.5	0.089	3.0	0.474	11.5	0.024	32.0	0.077	52.5	0.054	73.0	0.031
-8.0	0.113	3.2	0.407	12.0	0.011	32.5	0.078	53.0	0.044	73.5	0.026
-7.5	0.117	3.4	0.346	12.5	0.037	33.0	0.070	53.5	0.032	74.0	0.021
-7.0	0.097	3.6	0.291	13.0	0.049	33.5	0.058	54.0	0.022	74.5	0.015
-6.5	0.061	3.8	0.243	13.5	0.042	34.0	0.044	54.5	0.013	75.0	0.009
-6.0	0.025	4.0	0.202	14.0	0.020	34.5	0.034	55.0	0.007	75.5	0.003
-5.5	0.007	4.2	0.170	14.5	0.012	35.0	0.029	55.5	0.005	76.0	0.003
-5.0	0.022	4.4	0.144	15.0	0.043	35.5	0.030	56.0	0.005	76.5	0.008
-4.5	0.070	4.6	0.126	15.5	0.067	36.0	0.035	56.5	0.009	77.0	0.013
-4.0	0.139	4.8	0.113	16.0	0.077	36.5	0.042	57.0	0.015	77.5	0.017
-3.5	0.204	5.0	0.105	16.5	0.074	37.0	0.048	57.5	0.021	78.0	0.021
-3.0	0.233	5.2	0.101	17.0	0.062	37.5	0.051	58.0	0.028	78.5	0.024
-2.8	0.228	5.4	0.100	17.5	0.048	38.0	0.049	58.5	0.035	79.0	0.027
-2.6	0.211	5.6	0.100	18.0	0.039	38.5	0.042	59.0	0.039	79.5	0.028
-2.4	0.181	5.8	0.102	18.5	0.039	39.0	0.032	59.5	0.042	80.0	0.030
-2.2	0.138	6.0	0.105	19.0	0.046	39.5	0.020	60.0	0.042	80.5	0.030
-2.0	0.083	6.2	0.107	19.5	0.059	40.0	0.010	60.5	0.040	81.0	0.031
-1.8	0.015	6.4	0.108	20.0	0.069	40.5	0.003	61.0	0.037	81.5	0.030
-1.6	0.063	6.6	0.108	20.5	0.073	41.0	0.001	61.5	0.031	82.0	0.029
-1.4	0.151	6.8	0.108	21.0	0.066	41.5	0.001	62.0	0.025	82.5	0.028
-1.2	0.246	7.0	0.107	21.5	0.049	42.0	0.005	62.5	0.019	83.0	0.027
-1.0	0.346	7.2	0.105	22.0	0.026	42.5	0.011	63.0	0.013	83.5	0.025
-0.8	0.447	7.4	0.103	22.5	0.004	43.0	0.017	63.5	0.008	84.0	0.023
-0.6	0.547	7.6	0.100	23.0	0.012	43.5	0.020	64.0	0.004	84.5	0.021
-0.4	0.642	7.8	0.098	23.5	0.018	44.0	0.020	64.5	0.002	85.0	0.019
-0.2	0.731	8.0	0.097	24.0	0.011	44.5	0.017	65.0	0.002	85.5	0.016
0.0	0.810	8.2	0.096	24.5	0.004	45.0	0.011	65.5	0.004	86.0	0.014
0.2	0.878	8.4	0.095	25.0	0.022	45.5	0.003	66.0	0.006	86.5	0.012
0.4	0.931	8.6	0.096	25.5	0.036	46.0	0.004	66.5	0.010	87.0	0.009
0.6	0.970	8.8	0.096	26.0	0.043	46.5	0.009	67.0	0.015	87.5	0.007
0.8	0.993	9.0	0.097	26.5	0.038	47.0	0.010	67.5	0.021	88.0	0.005
1.0	1.000	9.2	0.099	27.0	0.024	47.5	0.006	68.0	0.026	88.5	0.003
1.2	0.991	9.4	0.099	27.5	0.004	48.0	0.002	68.5	0.031	89.0	0.002
1.4	0.968	9.6	0.100	28.0	0.015	48.5	0.013	69.0	0.036	89.5	0.001
1.6	0.931	9.8	0.099	28.5	0.028	49.0	0.027	69.5	0.039	90.0	0.000
1.8	0.883	10.0	0.096	29.0	0.031	49.5	0.041	70.0	0.042		
2.0	0.825	10.2	0.092	29.5	0.021	50.0	0.053	70.5	0.043		
2.2	0.760	10.4	0.086	30.0	0.002	50.5	0.062	71.0	0.043		

Remarks:

APRIL 2001



Relative Intensity

### NORMALIZED HORIZONTAL PLANE PATTERN

CHANNEL 51 OF SAN DIEGO, INC.  
STATION KUSI-DT SAN DIEGO, CALIFORNIA  
CH. 18 355 KW (AVG., MAX.-DA) 576 METERS

Bernard R. Segal, P. E.

Consulting Engineer