

**Exhibit EE-3**  
**Proposed Daytime Directional Antenna System**

Input Parameters: TPO = 50.0 KW

Field				Tow Ref							
Ratio	Phasing	Spacing	Orient	Switch	Height	TL/Sec	A	B	C	D	Z sub 0
.5500	-14.000	140.000	240.000	0	90.0	0	.0	.0	.0	.0	.00
1.0000	.000	.000	.000	0	90.0	0	.0	.0	.0	.0	.00
.6400	6.000	140.000	60.000	0	90.0	0	.0	.0	.0	.0	.00

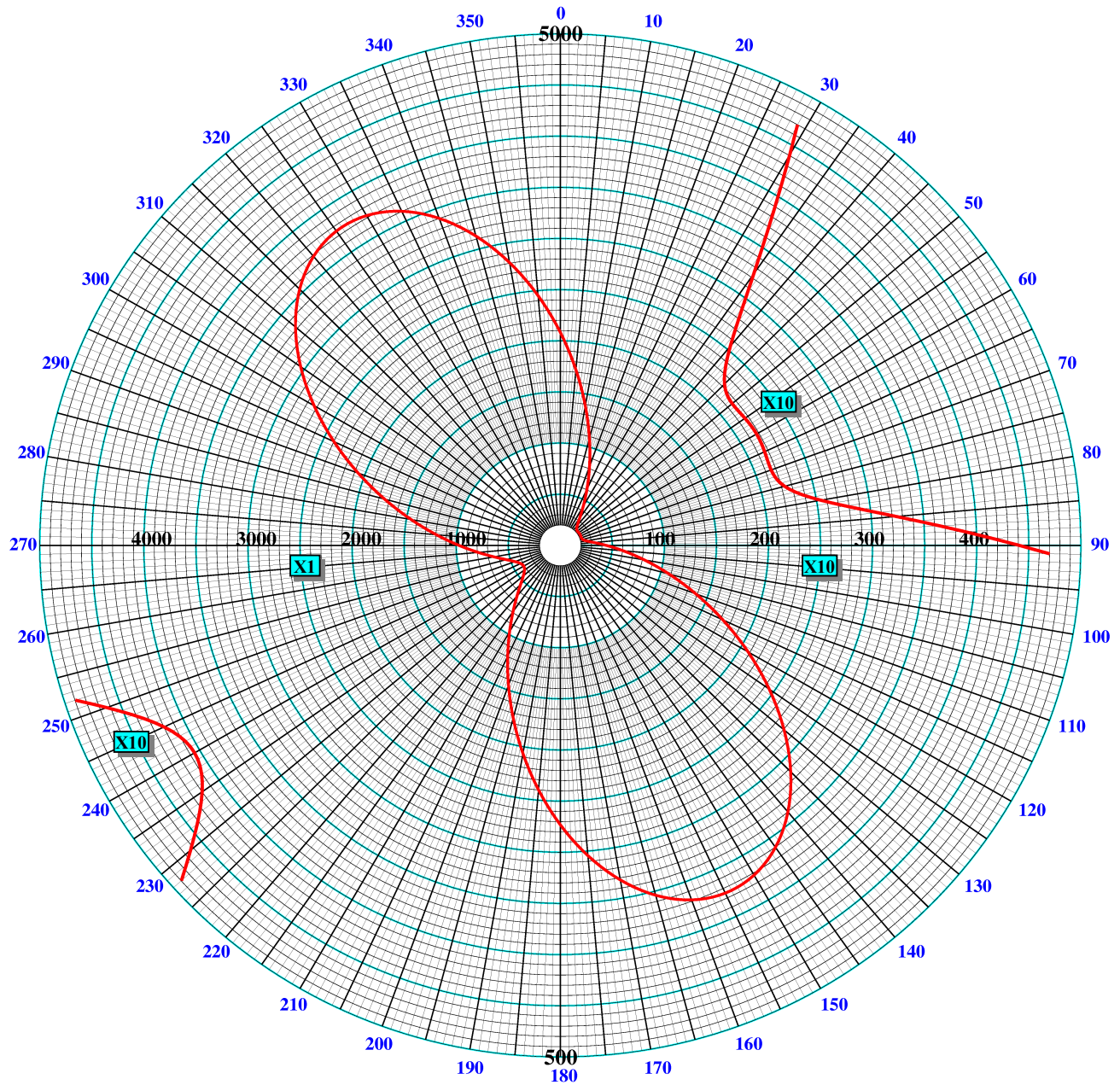
Total RMS (small)= 1.0485; Computed (no-loss) K=1651.3230  
No Loss RMS = 2038.62 mV/m at one KILOMETER  
No Loss RMS (for 1 kW) = 288.30 mV/m at one KILOMETER  
Adjusted K =1630.2870 Big RMS = 2012.65 mV/m at one KILOMETER  
Big RMS (adjusted for 1 kW) = 284.63 mV/m at one KILOMETER

**STANDARD RADIATION PATTERN**

(mV/m at one kilometer)

Azimuth	mV/m	Azimuth	mV/m	Azimuth	mV/m	Azimuth	mV/m
0.00	2080.44	90.00	440.29	180.00	2727.20	270.00	972.68
5.00	1720.44	95.00	605.78	185.00	2395.58	275.00	1194.04
10.00	1383.11	100.00	819.71	190.00	2063.29	280.00	1452.97
15.00	1080.27	105.00	1080.27	195.00	1745.29	285.00	1745.28
20.00	819.71	110.00	1383.11	200.00	1452.98	290.00	2063.29
25.00	605.78	115.00	1720.44	205.00	1194.04	295.00	2395.57
30.00	440.29	120.00	2080.44	210.00	972.68	300.00	2727.20
35.00	323.58	125.00	2447.46	215.00	790.24	305.00	3040.48
40.00	253.78	130.00	2802.78	220.00	645.94	310.00	3316.33
45.00	222.82	135.00	3126.07	225.00	537.74	315.00	3535.99
50.00	215.30	140.00	3397.29	230.00	463.06	320.00	3683.11
55.00	216.32	145.00	3598.80	235.00	419.43	325.00	3745.63
60.00	217.47	150.00	3717.34	240.00	405.11	330.00	3717.35
65.00	216.32	155.00	3745.63	245.00	419.43	335.00	3598.80
70.00	215.30	160.00	3683.11	250.00	463.06	340.00	3397.30
75.00	222.82	165.00	3535.99	255.00	537.74	345.00	3126.08
80.00	253.78	170.00	3316.33	260.00	645.94	350.00	2802.78
85.00	323.58	175.00	3040.49	265.00	790.24	355.00	2447.46

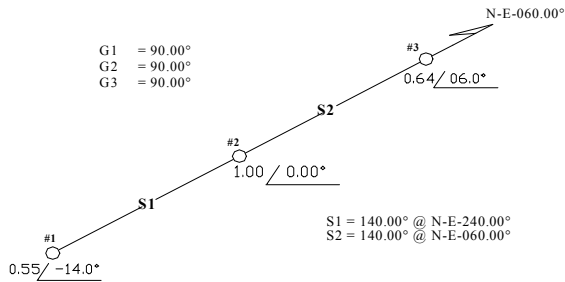
RSS used in computing Q = 2133.1860  
Q used for horizontal pattern = 70.711 (Calculated Q is 70.711)  
**Corresponding Standard Pattern RMS = 2114.5840 mV/m at one KILOMETER**



**Standard Horizontal Pattern**  
Theoretical Pattern RMS = 2012.6480  
Standard Pattern RMS = 2114.5840  
RSS = 2133.1860  
Q = 70.711

Radiation Nulls (Elevation = 0°)  
Azimuth Theoretical Standard  
50.9 192.361 215.193  
69.1 192.361 215.193  
240.0 379.283 405.109  
Radiation Maximas (Elevation = 0°)  
Azimuth Theoretical Standard  
60.0 194.671 217.471  
154.0 3568.174 3747.318  
326.0 3568.174 3747.318

N



S1 = 140.00° @ N-E-240.00°  
S2 = 140.00° @ N-E-060.00°

**Exhibit EE-3A**

Proposed Standard  
Daylight Hours  
Horizontal Pattern

Proposed KCKN  
1020 KHz DA2-U 50/50 kW  
N.Lat 33° 27' 53"  
W.Lon 104° 29' 58"  
(NAD 1927)