

Directional Antenna Parameters

The proposed antenna system will operate with the following parameters:

Power in watts: 10,000 watts daytime, 500 watts nighttime (DA-2)

Number of towers: 3 daytime and nighttime

Type of towers: Vertical, steel, uniform-cross-section base-insulated guyed towers

Height of towers: 58.9 meters above base insulator (70°)
59.8 meters overall height

Tower Orientation: Tower 1, reference
Tower 2, 165.0° true
Tower 3, 82.9° true

Tower Spacing: Tower 1, reference
Tower 2, 90.0° (75.76 meters)
Tower 3, 92.9° (78.20 meters)

Ground System: 120 buried copper radials 75.8 meters in length (90°) around each tower except shortened and bonded to 4 inch copper strap at intersections. Another 4 inch copper strap to interconnect tower bases. (No change to existing ground system.)

Design Parameters:	<u>Daytime</u>	<u>Nighttime</u>
	#1 : 0.40 / +138°	#1 : 1.00 / 0°
	#2 : 0.77 / +139°	#2 : 0.20 / -92°
	#3 : 1.00 / 0°	#3 : 0.55 / -80°

RMS (Theoretical):	991.45 mv/m/km	209.46 mv/m/km
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RMS (Standard):	1041.56 mv/m/km	220.19 mv/m/km
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RSS:	1042.86 mv/m/km	201.08 mv/m/km
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Q Term:	31.62 mv/m/km	10.00 mv/m/km
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Pattern Multiplier (K):	787.68 mv/m/km	173.54 mv/m/km
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All pattern calculations were made in compliance with 47 CFR 73.15.