

KESO 92.7 MHz - South Padre Island

Transmitter:

Transmitter Power Output (TPO) 14.864 kW

Antenna:

Type of Antenna 6-bay - Center Fed - Full Wave
Length of Antenna 53.07 ft
Effective Radiated Power (ERP) 38 kW
Height of Top Bay (AGL) 475 ft
Center of Radiation (AGL) 449 ft
Antenna Power Gain (H & V) 3.3028
Antenna Field Gain (H & V) 1.8174
Antenna Input Power 11.505 kW
Field Intensity (1kW @ 1 mile) 250.069 mV/m
1st Null (no beam tilt) 9.6 Degrees 0.528 Miles
2nd Null (no beam tilt) 19.5 Degrees 0.252 Miles

Transmission Line:

Type of Line 2-1/4" Air Andrew #HJ12-50
Transmission line average power rating is 22.6 kW
Total Length of Line 500.96 ft
Length of Line on Tower 473.46 ft
Distance to Transmitter 27.5 ft
Line Loss at 92.7 MHz..... 0.1622 db/100 ft.
Other Losses3 db
Power Loss in System 3.359 kW
System Efficiency 77.401 %

Hangers:

Distance Between Hangers 6 ft
Number of Hangers 79
Number of Hanger Adapters 79
Number of Hoist Grips 3

Provided by Greg Shapiro - Consulting Engineer - RF Services Inc.

Thursday, June 14,2007 at 09:16pm