

A-2 ERI Antenna Specification Sheet

TRANSMISSION SITE

AUSTIN, TEXAS

General Specifications

Antenna TypeHigh Power FM-Broadcast, Suitable for Multiplexing
 Model NumberCog 1084-9CP
 Number of Bay Levels.....Nine
 Polarization..... Right Hand Circular

Electrical Specifications

Antenna Input Power Capability150 kW Max ⁽¹⁾
 Operating Frequency Band..... 89.5 ~ 105.9 Megahertz.
 VSWR.....<1.22:1 @ Operating Frequencies⁽²⁾
 Azimuthal Pattern Circularity Better Then +/- 2dB From RMS (Free Space)
 Power Split 50/50 (Horizontal & Vertical)
 Frequency Specific Information:

<u>Frequency</u>	<u>Station ERP</u>	<u>Beam Tilt</u>	<u>First Null Fill</u>	<u>Second Null Fill</u>	<u>Power Gain</u>	<u>Line Loss</u> ⁽³⁾	<u>Filter Loss</u> ⁽⁴⁾	<u>Computed TPO</u>
90.5	24.5 KW	-.50°	10 %	1 %	3.599	-0.562 dB	-0.394 dB	8.48 kW
98.9	1.600 KW	-.50°	10 %	1 %	3.873	-0.587 dB	-0.773 dB	.565 kW

Mechanical Specifications

Antenna Feed SystemSingle Input
 Input Connector6 1/8"-50 Ohm EIA Flanged
 Element Deicing.....None
 Interbay Spacing..... 92" Center to Center
 Array Length..... 80 Feet
 Construction Material (Antenna)..... Galvanized Plated Steel and Stainless Steel

- 1) Power Capability Has Been Rated Assuming an Operating Transmission VSWR of 1.5:1
 2) VSWR Specification Achieved After on Site Tuning For User Specific Frequencies.
 3) Line Loss Assumes A Feed Run of 1222 Feet of Dielectric DC-675-006 6 1/8" Rigid.
 4) Losses Taken From Actual Combiner.