



SYSTEMS WITH RELIABILITY, LP

**Broadcast Antenna & Transmission Systems**

# SYSTEM DATA SHEET

Customer K283CC  
 Contact Joe Farrington  
 Location Des Moines, IA  
 Antenna Model FMEC/1-PLUS-TA  
 Channel / Frequency 104.5 MHz

## ELECTRICAL SPECIFICATION

Polarization Type	Circular		
Polarization Ratio			
H-Pol. (PRH)	50.000	%	
V-Pol. (PRV)	50.000	%	
Elevation Directivity (ED)	0.883		
Azimuth Directivity (AD) H-Pol.	1.465		as Built
Azimuth Directivity (AD) V-Pol.	1.465		as Built
Antenna Efficiency	100.000	%	
Antenna Gain (GH)			
H-Pol. (GH)	0.647		
V-Pol. (GV)	0.647		
dB Gain (AG)			
H-Pol. (AGH)	-1.892		
V-Pol. (AGV)	-1.892		
ERP			
H-Pol. (ERPH)	0.250	kW	
V-Pol. (ERPV)	0.250	kW	
Line Type	7/8" Foam	LCF78-50JA	
Attenuation per 100 ft.	0.350	dB/100ft	
Line Length (LL) AGL + 30'	915.87	ft.	as Given
Total Line Attenuation	3.21	dB	
Line Efficiency (LE)	47.80	%	
Line Loss (LPL)	0.42	kW	as Built
Antenna Input Power (AIP)	0.39	kW	as Built
Req'd. Transmitter Output Power	0.809	kW	as Built

## MECHANICAL SPECIFICATION

No. Of Bays	1			
Antenna Aperture	0.00	ft.	0.00	m
Antenna Total Length	6.00	ft.	1.83	m
Center of Radiation AGL	885.87	ft.	270.00	m
Antenna Weight - Everything Included	79.00	lbs.	35.91	kg
Windload (50/33) / CaAc	225.00	lbs. 50/33PSF	5.75	ft^2

Prepared by:

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