

TRANSMITTER POWER OUTPUT CALCULATION
FM TRANSLATOR W298CO
GEORGETOWN, SOUTH CAROLINA
CHANNEL 298, 107.5 MHZ, 0.25 KW, 133 M AMSL

Channel	298
Center Frequency	107.5 MHz
Transmission line	Commscope model LDF4.5-50A (5/8-inch foam)
Length	10 ft.
Efficiency (0.492 dB/100 ft. at 107.5 MHz)	0.05 dB (98.9%)
Transmission line	Commscope model AVA7-50 (1-5/8-inch foam)
Length	447 ft.
Efficiency (0.204 dB/100 ft. at 107.5 MHz)	0.91 dB (81.1%)
Antenna	Jampro model JLPC-2 RFR.5
Polarization	Circular
Peak power gain	0.70 (-1.55 dB)

Proposed Operation	
Parameter	FM Analog
Transmitter power output	0.45 kW
Transmission line efficiency	80.2%
Antenna input power	0.36 kW
Antenna gain	0.70
Effective radiated power (H & V)	0.25 kW