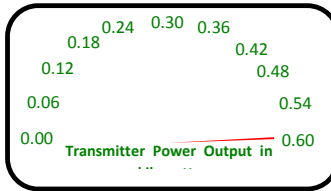
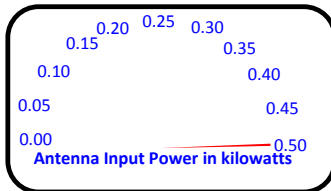


TPO Calculation Summary

Main Antenna Operation

Call letters: W223CH
City of License: Lancaster, PA
Frequency: CH223D (92.5 MHz)
File No: BPFT-20151027AFD
Facility ID: 155427
Applicant: Hall Communications Inc.



Operating Effective Radiated Power (ERP): 0.250 kW

Antenna Make: Nicom USA Inc.

Antenna Model: BKG1/P-1DA(Slant45)

No of Elements: One (1)

Antenna COR AGL: 62 meters AGL

Antenna COR AMSL: 172 meters AMSL

Max Input Power: 0.50 kW

Power Gain: 0.5 (0 dB-3 dB)

Log[power gain]*10 = Antenna Gain: -3.0 dBd

Calculated Antenna Input Power: 0.500 kW

Transmitter Rated Power: 0.6 kW

System Loss Info:

Description	Component Make/Model	Length	Loss
Type N End Connector	Generic (1 @0.02 dB each)		-0.020 dBd
Jumper to Transmitter	Andrew 1/2" FSJ4-50B (Superflex)	(0.995 dB/100 ft)	-0.060 dBd
Type N End Connector	Generic (1 @0.02 dB each)		-0.020 dBd
Type N to 7/8 Inch Adaptor	Generic (1 @0.02 dB each)		-0.020 dBd
Main Antenna Feedline	Andrew 7/8" LDF5-50A (foam)	(0.348 dB/100 ft)	-0.557 dBd
7/8 Inch to Type N Adaptor	Generic (1 @0.02 dB each)		-0.020 dBd
Type N End Connector	Generic (1 @0.02 dB each)		-0.020 dBd
Jumper to Transmitter	Andrew 1/2" FSJ4-50B (Superflex)	(0.995 dB/100 ft)	-0.060 dBd
Type N End Connector	Generic (1 @0.02 dB each)		-0.020 dBd
Type N to DIN Adaptor	Generic (1 @0.02 dB each)		-0.020 dBd

TOTAL SYSTEM GAIN/LOSS: -3.826 dBd

1 / [[10^(dB/10)/ERP]] = CALCULATED TRANSMITTER POWER OUTPUT: 0.603 kW