TPO Calculation Summary
Main Antenna Operation

Call letters: W296CS
City of License: Lakeland, FL
Frequency: CH296CS (107.1 MHz)
File No: BMPFT-20150218ABJ
Facility ID: 139198
Applicant: Hall Communications, Inc.

Operating Effective Radiated Power (ERP): 0.250 kW

Antenna Make: Propagation Systems, Inc. (PSI)
Antenna Model: FML-1A-DA
No of Elements: One (1)
Antenna COR AGL: 110 meters AGL
Antenna COR AMSL: 171 meters AMSL
Max Input Power: 0.75 kW
Power Gain: 0.69
Log[power gain]*10 = **Antenna Gain:** -1.612 dB
Calculated Antenna Input Power: 0.362 kW

System Loss Info:

Description	Component Make/Model		Length	Loss
7/8 Inch End Connector	Generic (1@0.02 dB each)			-0.020 dB
Main Antenna Feedline	Andrew 7/8" LDF5-50A (or equivalent)	(0.378 dB/100 ft)	395 ft	-1.493 dB
7/8 Inch End Connector	Generic (1@0.02 dB each)			-0.020 dB
7/8 Inch to 1/2 Inch Adaptor	Generic (1@0.02 dB each)			-0.020 dB
1/2 Inch End Connector	Generic (1@0.02 dB each)			-0.020 dB
Jumper to Transmitter	Andrew 1/2" FSJ4-50B (Superflex)	(1.076 dB/100 ft)	6 ft	-0.065 dB
1/2 Inch End Connector	Generic (1@0.02 dB each)			-0.020 dB
90 Deg Elbow Coupler	Generic (1@0.02 dB each)			-0.020 dB

TOTAL SYSTEM GAIN/LOSS: -3.289 dB
1 / [[10^[dB/10]/ERP]] = **CALCULATED TRANSMITTER POWER OUTPUT:** 0.533 kW

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