

OUT-OF-CORE DISPLACEMENT APPLICATION
LAWRENCE F. LOESCH
W56EC LPTV STATION
CH 24Z - 530-536 MHZ - 0.15 KW (DA)
MANTEO, NORTH CAROLINA
July 2011

EXHIBIT C

Displacement LPTV Proposed Transmission System Calculations

| | |
|---|---|
| Effective Radiated Power: | |
| Horizontal | 0.115 kilowatt (peak) |
| Antenna: | Nicom Antenna Model BKU4-5 |
| Horizontal gain (maximum): | Power gain 10.715 (10.3 dB) |
| Transmission Line: | Andrew Corporation LDF5-50A |
| (90 feet) | 7/8 inch foam dielectric 82.7% efficiency |
| Transmitter filter: | Communications and Energy Corp. Insertion loss: 0.6 dB 87.096% efficiency |
| Required Transmitter Power Output To Reach Effective Radiated Power: | 0.0148 kilowatt (14.8 watts) |