

DIGITAL FLASH-CUT APPLICATION
LAWRENCE F. LOESCH
W45CL LPTV STATION
CH 45 - 656-662 MHZ - 0.100 kW
MANTEO, NORTH CAROLINA
June 2012

EXHIBIT C

Digital Transmission System Calculations

Effective Radiated Power: Horizontal	0.100 kilowatt
Antenna:	Nicom Model - BKU4-5
Horizontal gain (maximum):	Power gain 12.023
Transmission Line: (80 feet)	Andrew Corporation - LDF4-50A 1/2 foam dielectric foam 71.0% efficiency
Antenna filter :	Insertion loss 0.22 dB 95.060% efficiency ¹
Required Transmitter Power Output To Reach Effective Radiated Power:	0.0123 kilowatt (12.3 watts)

1) The actual loss will be determined at installation and may result in a slight change of transmitter power output to maintain effective radiated power.