

APPLICATION FOR STATION LICENSE
QANTUM OF FLORENCE LICENSE COMPANY, LLC
W290CD FM TRANSLATOR
CH 290D - 105.9 MHZ - 0.145 KW
DARLINGTON, SOUTH CAROLINA
July 2011

EXHIBIT A

W290CD Transmission System Calculations

Effective Radiated Power: 0.145 kilowatt (horizontal/vertical)

Antenna: Electronics Research, Inc. LPX-3E
Three bay circularly polarized

Power Gain 1.5588

Transmission Line: Andrew Corporation HJ7-50A
(402 feet) 1 5/8 inch air dielectric
82.1% Efficiency

Required Transmitter Power Output
To Reach Effective Radiated Power: 0.1133 kilowatt (113.3 watts)

Facilities Authorized: Channel 290D - 105.9 MHz

Effective Radiated Power: 0.145 kilowatt (H/V)

Geographic Coordinates: North Latitude 34° 18' 58"
West Longitude 79° 53' 17"

Antenna Center of Radiation: Above Ground 113.0 meters
Above MSL 159.0 meters

Antenna Structure Registration #: 1201848