

**APPLICATION FOR MODIFICATION OF STATION LICENSE**  
**QANTUM OF CAPE COD LICENSE COMPANY, LLC**  
**WCOD-FM RADIO STATION**  
**CH 291B - 106.1 MHZ - 50.0 KW**  
**HYANNIS, MASSACHUSETTS**  
**June 2008**

**EXHIBIT A**

**WCOD-FM Transmission System Calculations**

Effective Radiated Power:	
Horizontal	50.0 kilowatts
Vertical	50.0 kilowatts
Antenna:	Shively 6810-5R
	5 bay full wavelength spaced.
Horizontal gain	2.7
Transmission Line:	Andrew HJ8-50B
(318 feet)	3 inch air dielectric
	89.9% Efficiency
Required Transmitter Power Output To Reach Effective Radiated Power:	20.599 kilowatts

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Facilities Authorized:	Channel 291B - 106.1 MHz
Effective Radiated Power:	50.0 kilowatts (H/V)
Geographic Coordinates: <sup>2</sup>	North Latitude     41° 43' 44"
	West Longitude    70° 10' 02"
Antenna Center of Radiation:	Above Ground    101.0 meters
	Above MSL       125.0 meters
	HAAT            131.0 meters
Antenna Structure Registration #:	1007750

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2) Corrected coordinates.