

7. Measurement Data (continued)

7.10. Public Exposure to Radio Frequency Energy Levels

Requirement: (15.407(f))

U-NII devices are subject to the radio frequency radiation exposure requirements specified in 47CFR 1.1307(b), FCC 47 CFR 2.1091 and 47 CFR 2.1093, as appropriate. All equipment shall be considered to operate in a “general population/uncontrolled” environment. Applications for equipment authorization of devices operating under this section must contain a statement confirming compliance with these requirements for both fundamental emissions and unwanted emissions. Technical information showing the basis for this statement must be submitted to the Commission upon request

Procedure: The power density is calculated from the peak field strength and device antenna gain.

$$PD = \frac{OP + AG}{(4 \times \pi \times d^2)}$$

PD Power Density	mW/cm ²
OP DUT Output Power	dBm
AG DUT Antenna Gain	dBi
d MPE Distance	cm

Conclusion: The device under test is meets radio frequency radiation exposure requirements specified in 47CFR 1.1307(b), § 2.1091 and § 2.1093.

Power Calculated from Peak Field Strength

Channel	Frequency	Field Strength	Distance	Antenna Gain ¹	Measured Output Power	
	(MHz)	(dBµV/m)	(m)	(dBi)	(mW)	(dBm)
52	5260	130.06	3.0	11.5	215.34	23.33
60	5300	129.53	3.0	11.5	190.60	22.80
64	5320	129.53	3.0	11.5	190.60	22.80
52	5260	130.39	3.0	11.5	232.34	23.66
60	5300	130.21	3.0	11.5	222.91	23.48
64	5320	130.28	3.0	11.5	226.53	23.55
54	5270	130.48	3.0	11.5	237.20	23.75
62	5310	124.46	3.0	11.5	59.31	17.73

¹ Taken from the antenna manufacture's data guide.