

RF EXPOSURE EVALUATION

MPE-Based Exemption

Applicable Standard

According to subpart 2.1091 systems operating under the provisions of this section shall be operated in a manner that ensures the public is not exposed to RF energy level in excess of the communication guidelines.

According to KDB 447498 D04 v01 Interim General RF Exposure Guidance

MPE-Based Exemption:

General frequency and separation-distance dependent MPE-based effective radiated power(ERP) thresholds are in Table B.1 [Table 1 of § 1.1307(b)(3)(i)(C)] to support an exemption from further evaluation from 300 kHz through 100 GHz.

Table 1 to § 1.1307(b)(3)(i)(C) - Single RF Sources Subject to Routine Environmental Evaluation

RF Source frequency (MHz)	Threshold ERP (watts)
0.3-1.34	$1,920 R^2$.
1.34-30	$3,450 R^2/f^2$.
30-300	$3.83 R^2$.
300-1,500	$0.0128 R^2 f$.
1,500-100,000	$19.2 R^2$.

R is the minimum separation distance in meters

f = frequency in MHz

Result

Mode	Frequency (MHz)	Tune up conducted power [#] (dBm)	Antenna Gain [#]		ERP		Evaluation Distance (m)	ERP Limit (mW)
			(dBi)	(dBd)	(dBm)	(mW)		
2.4G Wi-Fi	2412-2462	22	3.1	0.95	22.95	197.24	0.2	768
5G Wi-Fi	5180-5240	16	0.3	-1.85	14.15	26.00	0.2	768
	5260-5320	15	0.82	-1.33	13.67	23.28	0.2	768
	5500-5720	11	-0.5	-2.65	8.35	6.84	0.2	768
	5745-5825	13	-1.7	-3.85	9.15	8.22	0.2	768

Note1: The tune up conducted power[#] and antenna gain[#] was declared by the applicant.

Note2: 2.4G and 5G Wi-Fi cannot be transmitted synchronously.

To maintain compliance with the FCC's RF exposure guidelines, place the equipment at least 20cm from nearby persons.

Result: Compliant