

FCC §15.247(i), §1.1307(b)(3)(i) - RF Exposure

Applicable Standard

According to §1.1307(b)(3)(i), 447498 D04 Interim General RF Exposure Guidance v01

(C) Or using Table 1 and the minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency. For the exemption in Table 1 to apply, R must be at least $\lambda/2\pi$, where λ is the free-space operating wavelength in meters. If the ERP of a single RF source is not easily obtained, then the available maximum time-averaged power may be used in lieu of ERP if the physical dimensions of the radiating structure(s) do not exceed the electrical length of $\lambda/4$ or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).

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	$19.2 R^2$.

RF Exposure Evaluation Result

Frequency (MHz)	Tune-up Conducted Power*	Ant Gain* (dBi)	Evaluation Distance (mm)	ERP		ERP Limit (mW)	Exemption
	(dBm)			(dBm)	(mW)		
2402-2480	0.50	4.41	200	2.76	1.89	768	Compliant

Note: $\text{dBi} = \text{dBd} + 2.15$

Result: The device meets the Exemption at 20cm distances.