

**RF exposure evaluation**

The WAVE140 PWS operating according to FCC part 15 subpart C section 15.249. The WAVE140 PWS operating at 2433 MHz that is a far field region. The radiated power within the 1-mW in the far-field region can be exempt and no evaluation is required according to §1.1307(b)(3)(i)(A).

Far-Field Region:

Power estimate via the far-field was described by the following equation:

$$P = 4\pi r^2 \frac{E^2}{Z_o}, \text{ where } Z = 120\pi$$

Where:

Z_0 = free impedance in Far-Field region = 377Ω

Power calculation for Far-Field region

<i>F, MHz</i>	<i>d, m</i>	<i>λ, m</i>	<i>E, dBμV/m</i>	<i>E, V/m</i>	Near-field formula		Far-field formula	
					<i>P, W</i>	<i>P, mW</i>	<i>P, W</i>	<i>P, mW</i>
2433	3	0.123304	90.89	0.035035	0.000368	0.368232	0.000368	0.368232

Based on the above the product can be considered complying with the RF exposure limitations.

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