

RF EXPOSURE & MPE CALCULATION
FCC ID: WAOGSXLF / IC ID: 7733A-GSXLF

RF EXPOSURE CALCULATION

Evaluation:

The SAR test reduction is calculated at below,

Formula description

1-g SAR with frequency range in 100M-6GHz	Sep ≤ 50mm	<input checked="" type="checkbox"/> $[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$
	Sep > 50mm	<input type="checkbox"/> a) [Power allowed at numeric threshold for 50 mm in step 1) + (test separation distance - 50 mm) · (f(MHz)/150)] mW, at 100 MHz to 1500 MHz <input type="checkbox"/> b) [Power allowed at numeric threshold for 50 mm in step 1) + (test separation distance - 50 mm) · 10] mW at > 1500 MHz and ≤ 6 GHz

Calculation

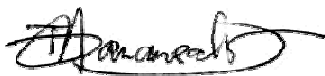
For Antenna with separation of 3 cm

CH (MHz)	Zigbee (dBm)	Max Rated Power/CH	Sep distance (mm)	Calculated Threshold	FCC SAR Exempted Threshold)	SAR Test Exclusion
2405	2.61	1.85 mW / 2440MHz	5	0.58	≤3	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes
2440	2.67					
2480	2.56					

CH (MHz)	Zigbee (dBm)	Max Rated Power/CH	Antenna Gain (dBi)	EIRP 9dBm)	IC SAR Exempted Threshold(dBm)	SAR Test Exclusion
2405	2.61	1.85 mW / 2440MHz	3.3dBi	5.97	≤14 dBm (EIRP)	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes
2440	2.67					
2480	2.56					

Conclusion: SAR is not required.

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