

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

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"/> [(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] · [√f(GHz)] ≤ 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

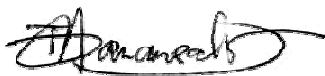
For Antenna with separation of 3 cm

CH (MHz)	Zigbee (dBm)	Max Rated Power/CH	Sep distance (mm)	Calculated Threshold	FCC SAR Exmpted 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 Exmpted 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.

Completed By: Teody Manansala



SIEMIC, Inc

775 Montague Expressway, Milpitas, CA 95035

Phone: (408) 526-1188

Date: July 18, 2014