

RF EXPOSURE EVALUATION METHOD

SAR Test Exclusion Thresholds for 100 MHz - 6 GHz and ≤ 50 mm

Approximate SAR Test Exclusion Power Thresholds at Selected Frequencies and Test Separation Distances are illustrated in the following Table.

MHz	5	10	15	20	25	mm
150	39	77	116	155	194	SAR Test Exclusion Threshold (mW)
300	27	55	82	110	137	
450	22	45	67	89	112	
835	16	33	49	66	82	
900	16	32	47	63	79	
1500	12	24	37	49	61	
1900	11	22	33	44	54	
2450	10	19	29	38	48	
3600	8	16	24	32	40	
5200	7	13	20	26	33	
5400	6	13	19	26	32	
5800	6	12	19	25	31	

Maximum measured transmitter power.

frequency range	Maximum Peak Conducted Output Power (dBm)	Maximum Conducted Output Power(AV) (dBm)	Maximum Conducted Output Power (mW)
2412	12.64	8.27	6.71mW
2437	12.45	8.62	7.27mW
2462	12.34	7.98	6.28mW

Refer to 447498 25 D01 General RF Exposure Guidance v05 Appendix A,

you see that for Maximum Conducted Output Power 7.27 mW(<10mW), so no SAR is required.

max possible output power (AV) : $8 \pm 1 \text{ dbm}$

9dbm=7.94mW

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] = 7.94/5 \cdot \sqrt{2.412} = 2.46 \leq 3.0$

Threshold at which no SAR required is 10mw and ≤ 3.0 for 1-g SAR, Separation distance is 5mm.

Conclusion: No SAR is required.