RF EXPOSURE TEST

FCC ID: Y44-R2W

SAR Test Exclusion Thresholds for 100 MHz - 6 GHz and \leq 50 mm Approximate SAR Test Exclusion Power Thresholds at Selected Frequencies and Test Separation Distances are illustrated in the following Table.

3.677						
MHz	5	10	15	20	25	mm
150	39	77	116	155	194	
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	SAR Test Exclusion
1900	11	22	33	44	54	Threshold (mW)
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	
MHz	30	35	40	45	50	mm
150	232	271	310	349	387	
150 300	232 164	271 192	310 219	349 246	387 274	
300	164	192	219	246	274	
300 450	164 134	192 157 115 111	219 179 131 126	246 201	274 224	CAR T.
300 450 835	164 134 98	192 157 115	219 179 131	246 201 148	274 224 164	SAR Test
300 450 835 900	164 134 98 95	192 157 115 111	219 179 131 126	246 201 148 142	274 224 164 158	Exclusion
300 450 835 900 1500	164 134 98 95 73	192 157 115 111 86	219 179 131 126 98	246 201 148 142 110	274 224 164 158 122 109 96	
300 450 835 900 1500 1900	164 134 98 95 73 65	192 157 115 111 86 76	219 179 131 126 98 87	246 201 148 142 110 98	274 224 164 158 122 109	Exclusion
300 450 835 900 1500 1900 2450	164 134 98 95 73 65 57	192 157 115 111 86 76 67	219 179 131 126 98 87 77 63 53	246 201 148 142 110 98 86 71 59	274 224 164 158 122 109 96	Exclusion
300 450 835 900 1500 1900 2450 3600	164 134 98 95 73 65 57 47	192 157 115 111 86 76 67 55	219 179 131 126 98 87 77 63	246 201 148 142 110 98 86 71	274 224 164 158 122 109 96 79	Exclusion

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at *test separation distances* \leq 50 mm are determined by:

$[(max.\ power\ of\ channel,\ including\ tune-up\ tolerance,\ mW)/(min.\ test\ separation\ distance,\ mm)] \ \bullet$
[$\sqrt{f_{\text{(GHz)}}}$] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR,16 where
\square f _(GHz) is the RF channel transmit frequency in GHz
☐ Power and distance are rounded to the nearest mW and mm before calculation₁7
☐ The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum *test separation distance* is \leq 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum *test separation distance* is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

With OP Maximum transmitter power: 2dBm=, So $(1.58/5)^* \sqrt{2.480}=0.498 \le 3.0$

Note: $\sqrt{2.480} = 1.5748$

Conclusion: No SAR is required.

Maximum measured transmitter power.

GFSK

frequency range	Maximum Peak Conducted Output Power (dBm)	Maximum Peak Conducted Output Power (mW)
2402	1.67	1.47
2440	1.49	1.41
2480	1.31	1.35

π/4 DQPSK

frequency range	Maximum Peak Conducted Output Power (dBm)	Maximum Peak Conducted Output Power (mW)
2402	1.28	1.34
2440	1.13	1.30
2480	1.06	1.28

8-DPSK

frequency range	Maximum Peak Conducted Output Power (dBm)	Maximum Peak Conducted Output Power (mW)
2402	1.52	1.42
2440	1.29	1.35
2480	1.18	1.31

The max. peak output power is 1.67dBm=1.47mW, Frequency is 2.402GHz with GFSK, So $(1.47/5)^*$ $\sqrt{2.402}=0.456 \lesssim 3.0$

Note: $\sqrt{2.402} = 1.5498$

Conclusion: No SAR is required.