

## **RF EXPOSURE EVALUATION METHOD**

## FCC ID: 2A9MI-Y80 According to KDB 447498 D01 General RF Exposure Guidance v06

## 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.

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)] •  $[\sqrt{f(GHz)}] \le 3.0$  for 1-g SAR and  $\le 7.5$  for 10-g extremity SAR,where f(GHz) is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation 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.

Maximum measured transmitter power.

ΒT

1Mbps							
Test Channel	Frequency	Peak Output Power	Peak Output Power				
	(MHz)	(dBm)	(mW)				
CH00	2402	-2.950	0.507				
CH39	2441	-2.833	0.521				
CH78	2480	-3.184	0.480				
2Mbps							
CH00	2402	-2.156	0.609				
CH39	2441	-2.062	0.622				
CH78	2480	-2.422	0.573				

Remark: The best case gain of the antenna is 2.8dBi.

2.8dBi logarithmic terms convert to numeric result is nearly 1.91

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)] • [ $\sqrt{f(GHz)}$ ]



BT									
Test Channel	Range	tune up max power (dBm)	[(max. power of channel, including tune-up tolerance, mW)	(min. test separation distance,mm)]	[f(GHz)]	Result	Limit		
1Mbps									
CH00	-2~-4	-2	0.631	5	2.402	0.196	3		
CH39	-2~-4	-2	0.631	5	2.441	0.197	3		
CH78	-2~-4	-2	0.631	5	2.480	0.199	3		
2Mbps									
CH00	-2~-4	-2	0.631	5	2.402	0.196	3		
CH39	-2~-4	-2	0.631	5	2.441	0.197	3		
CH78	-2~-4	-2	0.631	5	2.480	0.199	3		

The test Result is less than 3.0 for 1-g SAR and  $\leqslant$  7.5 for 10-g extremity SAR.

**Conclusion:** No SAR is required.