## **RF EXPOSURE EVALUATION METHOD**

## 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

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 Threshold (mW)		
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			

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.

## **BT The Worst Case**

Mode	2402.85-2480.85MHz
Detector	PEAK
2402.85MHz	-9±1dBm

Remark: The worst case gain of the antenna is -0.61dBi.

-0.61dBi logarithmic terms convert to numeric result is nearly 0.869

frequency (GHz)	Maximum Peak Conducted Output Power (dBm)	Tune up Power (dBm)	Tune up Power (mW)	Result	Limit
2.40285	-9.75	-8	0.158489319	0.0491	3

Threshold at which no SAR required is  $0.0491 \le 3.0$  for 1-g SAR, Separation distance is 5mm.