

RF Exposure Letter

For frequencies below 100 MHz, the following may be considered for SAR test exclusion (also illustrated in Appendix C)

- 1) For test separation distances > 50 mm and < 200 mm the power threshold at the corresponding test separation distance at 100 MHz in step b) is multiplied by $[1 + \lg(100/f\text{MHz})]$
- 2) For test separation distances ≤ 50 mm, the power threshold determined by the equation in c) 1) for 50 mm and 100 MHz is multiplied by $\frac{1}{2}$
- 3) SAR measurement procedures are not established below 100 MHz

Appendix C

SAR Test Exclusion Thresholds for < 100 MHz and < 200 mm

Approximate SAR test exclusion power thresholds at selected frequencies and test separation distances are illustrated in the following table. The equation and threshold in 4.3.1 must be applied to determine SAR test exclusion.

MHz	< 50	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	mm
100	237	474	481	487	494	501	507	514	521	527	534	541	547	554	561	567	mW
50	308	617	625	634	643	651	660	669	677	686	695	703	712	721	729	738	
10	474	948	961	975	988	1001	1015	1028	1041	1055	1068	1081	1095	1108	1121	1135	
1	711	1422	1442	1462	1482	1502	1522	1542	1562	1582	1602	1622	1642	1662	1682	1702	
0.1	948	1896	1923	1949	1976	2003	2029	2056	2083	2109	2136	2163	2189	2216	2243	2269	

Power and distance are rounded to the nearest mW and mm before calculation
The result is rounded to one decimal place for comparison

13.56Mhz:

$$d = 3m \text{ EIRP(dBm)} = E(\text{dBuV/m}) - 95.3mW = 10[\text{dBm}/10]$$

$$pt = 90.18\text{dBuV/m} = -5.0488\text{dBm} = 0.3127\text{mW at } 13.56\text{MHz}$$

$$\text{So } 0.3127\text{mW} < 474\text{mW}$$

Then SAR evaluation is not required