

Appendix 5

Radio Frequency Exposure

Safety Human Exposure – Radio Frequency Exposure Compliance		Pass
Test Specification	: FCC KDB Publication 447498 D01 v05r02	
Requirement	: 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:	
	$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \times [\sqrt{f(\text{GHz})}]$ $\leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR}$ <p>where</p> <p>$f(\text{GHz})$ 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</p>	
Results	: max. power found in channel 2402MHz = -4.18dBm max. EIRP = output power + antenna gain = -4.18 + 0 = -4.18dBm (0.382mW) min. test separation distance = 5mm frequency = 2.402GHz Exclusion threshold = $(3 \times 5) / (\sqrt{2.402})$ = 9.68 mW Since maximum peak output power of the transmitter is 0.382mW $<$ 9.68mW, the EUT is excluded from SAR evaluation according to FCC KDB publication 447498 D01: Mobile and Portable RF Exposure v05r02.	

Test Specification : RSS-102 Issue 5

Requirement : SAR evaluation is required if the separation distance between the user and/or bystander and the antenna and/or radiating element of the device is less than or equal to 20 cm, except when the device operates at or below the applicable output power level (adjusted for tune-up tolerance) for the specified separation distance defined in Table 1 in RSS-102 Issue 5.

According to table 1 in RSS-102 Issue 5, below exemption limit is applied

- Frequency: 2450MHz
- At separation distance of \leq 5mm
- Exemption limits: 4mW

Results : max. power of channel = $-4.18\text{dBm} = 0.382\text{ mW}$ (e.i.r.p.)
 $< 4\text{mW}$

The maximum peak output power of the transmitter is less than the SAR evaluation exemption threshold and hence it complies with the RSS-102 RF exposure requirement.

For test results, please refer to Appendix 1 page 4-5.