

1. R.F Exposure/Safety for BLE (DTS)

The typical placement of the E.U.T. is on a motorcycle helmet. The typical distance between the E.U.T. and the user is 4cm. See photos on following page.

SAR Testing Exclusion Based on Section 4.3.1 and Appendix A of KDB447498 D01 V05 and RSS 102, Issue 5, Section 2.5.2 Requirements

For FCC

Section 4.3.1 and Appendix A of KDB447498 D01 V05 was used as the guidance as follows:

Peak power output = 18.13 dBm taking into consideration average factor of -4.5db (page 44) maximum power = $18.13 - 4.5 = 13.63\text{dBm} = 23.1\text{mW}$

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] = 23.1 / 40 \cdot 1.55 = 0.89$ this value is less than 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR.

The SAR measurement is not necessary.

For IC

(a) For IC per Table 1 of RSS 102 Issue 5, SAR exemption based on IC limit of 173.0mW at a separation distance of 40mm = 4.0cm at 2450 MHz.

EUT power transmission is 18.13 dBm = 65mW.

18.13 dBm taking into consideration average factor of -4.5db (page 44) maximum power = $18.13 - 4.5 = 13.63\text{dBm} = 23.1\text{mW}$

This is below the 173.0mW SAR exemption limits.

See photos on following page.

