



13. Radio Frequency Exposure

13.1 Applicable Standards

The measurements shown in this test report were made in accordance with the procedures given in
FCC Part 2 (Section 2.1093)
KDB 447498
IEEE C95.1

LIMIT

KDB 447498 D01 § 4.3(a)

For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR, and ≤ 7.5 for 10-g extremity SAR, where $\square$

*f(GHz) is the RF channel transmit frequency in GHz

* Power and distance are rounded to the nearest mW and mm before calculation $\square$

*The result is rounded to one decimal place for comparison $\square$

*The values 3.0 and 7.5 are referred to as numeric thresholds in step b) below

The test exclusions are applicable only when the minimum test separation distance is ≤ 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 according to 4.1 f) is applied to determine SAR test exclusion



13.2 EUT Specification

Frequency band (Operating)	☐ WLAN: 2412MHz ~ 2462MHz ☒ Bluetooth: 2402MHz ~ 2480MHz
Modulation	GFSK (1Mbps)
Device category	☒ Portable (<20cm separation) ☐ Mobile (>20cm separation)
Exposure classification	☐ Occupational/Controlled exposure ☒ General Population/Uncontrolled exposure
Antenna diversity	☒ Single antenna ☐ Multiple antennas ☐ Tx diversity ☐ Rx diversity ☐ Tx/Rx diversity
Evaluation applied	☐ MPE Evaluation* ☒ SAR Evaluation ☐ N/A
Remark: 1. The maximum output power is <u>-2.31 dBm (0.587mW)</u> at <u>2402MHz</u> (with <u>numeric 2.78 antenna gain</u> .) 2. DTS device is not subject to routine RF evaluation; MPE estimate is used to justify the compliance. 3. For mobile or fixed location transmitters, no SAR consideration applied.	

TEST RESULTS

According to the KDB447498:

The SAR test exclusion thresholds Level:

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] * \text{sqrt}(\text{freq. in GHz}) < 3$$

Calculation

Modulation Mode	Frequency band (MHz)	Max. Conducted output power (dBm)	Max. Conducted output power(mW)	Distance (mm)	SAR test exclusion thresholds (mW)
GFSK	2402-2480	-2.31	0.59	5	10.0000

Since the source-based time-averaging conducted output power is well below the SAR low threshold level, so the EUT is considered to comply with SAR requirement without testing