

Radiofrequency Radiation Exposure Evaluation

This exposure evaluation is intended for FCC ID: O4GH3

According to KDB 447498 D01v06 section 4.3.1, For frequencies between 100 MHz to 6GHz and test separation distances ≤ 50 mm, the Numeric threshold is determined as:

Step a)

[(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)] $\cdot [\sqrt{f(GHz)}] \le 3.0$ for 1-g SAR

>> The fundamental frequency of the EUT is 2457MHz, the test separation distance is ≤ 50mm.

(Manufacturer specified the separation distance is: 20mm) (5mm is the worst case according to the KDB)

Step b)

>> Numeric threshold (2457MHz), mW / 5mm * $\sqrt{2.457}$ GHz \leq 3.0 Numeric threshold (2457MHz) \leq 9.569mW

Power calculation (According to C63.10 chapter 9.5)

		1
	Value	Unit
Field Strength Measured (E)	84.06	dBµV/m
Measurement Distance (D)	3	m
Equivalent Isotropically Radiated Power (E.I.R.P in dBm)	-11.1	dBm
Equivalent Isotropically Radiated Power (E.I.R.P in mW)	0.08	mW

Remark: EIRP = E + $20\log(D) - 104.7$

(EIRP is in dBm, E is in dBuV/m, D is in metres)

The Power according to the RF Report No: 60.790.23.011.01R02

>> The power (calculated power + tune up tolerance) of EUT at 2457MHz is: 0.08mW Which is smaller than the Numeric threshold.

Therefore, the device is exempt from stand-alone SAR test requirements.

Reviewed by:

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