

10 Appendix A - General Product Information

Radiofrequency radiation exposure evaluation

This exposure evaluation is intended for FCC ID: 2AA2X-15000282.

According to KDB 447498 D01v06 section 4.3.1, For frequencies below 100 MHz 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)] · [√f(GHz)] ≤ 3.0 for 1-g SAR

Step b)

{[Power allowed at numeric threshold for 50mm in step a)] + [(test separation distance – 50mm) · (f(MHz)/150)]}

Step c) 1)

For test separation distances > 50mm and < 200mm, the power threshold at the corresponding test separation distance at 100MHz in step b) is multiplied by [1 + log(100/f(MHz))]

Step c) 2)

For test separation distances ≤ 50mm, the power threshold determined by the equation in c) 1) for 50mm and 100MHz is multiplied by ½.

>> The fundamental frequency of the EUT is 125kHz, the test separation distance is ≤ 50mm. (Manufacturer specified the separation distance is: 20mm)

Step a)

>> Numeric threshold, mW / 50mm * √0.1GHz ≤ 3.0 Numeric threshold ≤ 474.3mW

Step b)

>> Numeric threshold ≤ 474.3mW + (50mm-50mm) * 100MHz/150) Numeric threshold ≤ 474.3mW

Step c) 1) & c) 2)

- >> Numeric threshold ≤ 474.3mW * [1 + log 100/100MHz] * ½ Numeric threshold ≤ 237.15mW
- >> The power (calculated power + tune up tolerance) of EUT at 125kHz is: 0.0008mW Which is smaller than the Numeric threshold.

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



Appendix A

Power calculation (According to C63.10 chapter 9.5)

	Value	Unit
Field Strength Measured (E)	64.19	dBµV/m
Measurement Distance (D)	3	m
Equivalent Isotropically Radiated Power (E.I.R.P in dBm)	-30.97	dBm
Equivalent Isotropically Radiated Power (E.I.R.P in mW)	0.0008	mW

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

(EIRP is in dBm, E is in dBµV/m, D is in meters)

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