

10 Appendix A - General Product Information

Radiofrequency radiation exposure evaluation

This exposure evaluation is intended for **FCC ID: 2AX6LQTMAGP10**

According to FCC CFR 47 part1 §1.1310, Part 2 §2.1091, and KDB447498 D01 General RF Exposure Guidance v06, As specified in Table 1B of 47 CFR 1.1310 – Limits for Maximum Permissible Exposure (MPE), Limits for General Population/Uncontrolled Exposure

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*100	30
1.34-30	824/f	2.19/f	*180/f ²	30
30-300	27.5	0.073	0.2	30
300-1,500			f/1500	30
1,500-100,000			1.0	30

MPE calculation method:

$P_d = (P \cdot G) / (4 \cdot \pi \cdot R^2)$, where

P_d = power density in mW/cm²

P = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

R = calculation distance in cm

- >> The limit of Power density in 2402-2480MHz band is 1 mW/cm²
- >> The internal antenna gain is 5.2dBi (=3.31 in linear scale).
The external antenna gain is 2.0dBi (=1.58 in linear scale).
Manufacturer specified the separation distance is: 20cm
- >> For internal antenna chain, the max. power (calculated power + tune up tolerance) of EUT in 2402-2483.5MHz band is: 0.99mW
The calculated P_d for the EUT through internal in 2402-2480MHz band is 0.00065mW/cm²
- >> For external antenna chain, the max. power (calculated power + tune up tolerance) of EUT in 2402-2483.5MHz band is: 2.24mW
The calculated P_d for the EUT through external in 2402-2480MHz band is 0.00070mW/cm²
- >> So, no matter for internal antenna chain or external antenna chain,
The calculated P_d is smaller than the threshold of the limit.
Therefore, the device is exempt from stand-alone SAR test requirements.

Appendix A

Calculated Data

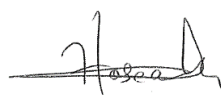
	Internal Antenna	External Antenna
Maximum peak output power at antenna input terminal (dBm):	-0.06	3.50
Maximum peak output power at antenna input terminal (mW):	0.99	2.24
Prediction distance (cm):	20	20
Maximum Antenna Gain, typical (dBi):	5.2	2.0
Maximum Antenna Gain (numeric):	3.31	1.58
The worst case is power density at predication frequency at 20 cm (mW/cm2):	0.00065	0.00070

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