

## **10** Appendix A - General Product Information

## Radiofrequency radiation exposure evaluation

This exposure evaluation is intended for FCC ID: 2AX6LQTMEAP10

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 <sup>2</sup> )	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 <sup>2</sup>	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:

Pd = (P\*G) / (4\*Pi\* R<sup>2</sup>), where Pd = power density in mW/cm<sup>2</sup> P = output power to antenna in mW G = gain of antenna in linear scale Pi = 3.1416R= calculation distance in cm

- >> The limit of Power density in 2402-2480MHz band is 1 mW/cm<sup>2</sup>
- >> The antenna gain is 3.2dBi (=2.09 in linear scale). Manufacturer specified the separation distance is: 20cm The max. power (calculated power + tune up tolerance) of EUT in 2402-2483.5MHz band is: 2.21mW
- >> The calculated Pd for the EUT in 2402-2480MHz band is 0.00092mW/cm<sup>2</sup>
- >> So, the calculated Pd is smaller than the threshold of the limit. Therefore, the device is exempt from stand-alone SAR test requirements.



## Appendix A

Calculated Data				
Maximum peak output power at antenna input terminal (dBm):	3.44			
Maximum peak output power at antenna input terminal (mW):	2.21			
Prediction distance (cm):	20			
Maximum Antenna Gain, typical (dBi):	3.2			
Maximum Antenna Gain (numeric):	2.09			
The worst case is power density at predication frequency at 20 cm (mW/cm2):	0.00092			

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