

## 10 Appendix A - General Product Information

## Radiofrequency radiation exposure evaluation

This exposure evaluation is intended for FCC ID: 2AJOATX2065A

According to FCC CFR 47 part1 1.1310, 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/cm²)	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:

 $Pd = (P*G) / (4*Pi* R^2)$ , 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 = 3.1416

R= calculation distance in cm

- >> The limit of Power density 433.92MHz is 433.92 /1500=0.29mW/cm<sup>2</sup>
- >> The antenna gain is 0dBi (=1 in linear scale).

  Manufacturer specified the separation distance is: 20cm

  The max. power (calculated power + tune up tolerance) of EUT at 433.92MHz is: 0.0098mW
- >> The Pd calculated of 433.92MHz is 0.000002mW/cm<sup>2</sup>

Which is smaller than the threshold of the limit.

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



Power calculation (According to C63.10 chapter 9.5)

	433.920	MHz
Field Strength Measured (E)	75.09	dBµV/m
Measurement Distance (D)	3	m
Equivalent Isotropically Radiated Power (E.I.R.P in dBm)	-20.07	dBm
Equivalent Isotropically Radiated Power (E.I.R.P in mW)	0.0098	mW

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

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

Reviewed by:

Prepared by:

Eric LI EMC Project Manager Hosea CHAN EMC Project Engineer