FCC ID: **2A2CXFBLB003**

RF Exposure Evaluation

LIMIT

The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3–3.0	614	1.63	*(100)	6
3.0–30	1842/f	4.89/f	*($900/f^2$)	6
30–300	61.4	0.163	1.0	6
300–1500	-	-	f/300	6
1500–100,000	-	-	5	6
(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
300–1500	-	-	f/1500	30
1500–100,000	-	-	1.0	30

Note: f = frequency in MHz

EVALUATION METHOD

Transmission formula: **$Pd = (Pout*G)/(4*pi*r^2)$**

Where

Pd = power density in mW/cm^2, **Pout** = output power to antenna in mW, **G** = gain of antenna in linear scale;

Pi = 3.1416, **R** = distance between observation point and center of the radiator in cm

TEST RESULT

☒ **Passed** ☐ **Not Applicable**

Frequency range (MHz)	Type	Conducted Average Power (dBm)	Maximum Tune-up (dBm)	Power Density (mW/cm2)	Limit (mW/cm2)	Result
2402-2480	BT-EDR	4.56	5.00	0.0013	1.0000	Pass
2402-2480	BT-BLE	2.76	3.00	0.0008	1.0000	Pass
2412-2462	2.4G WIFI	13.03	14.00	0.0100	1.0000	Pass
5150-5850	5G WIFI	11.58	12.00	0.0099	1.0000	Pass

Considering that BT-EDR and 2.4G WIFI can transmit simultaneously, the total transmission MPE rate is as follows:

(BT-EDR power density / limit) + (2.4G WIFI power density / limit) < 1

The worst case is BT-EDR, 2.4G WIFI transmitting simultaneously, the result as below:

Evaluation mode	Power density/limit (mW/cm2)	Sum of the MPE rate (mW/cm2)	Limit (mW/cm2)
BT-EDR	0.0013	0.0113	1.0000
2.4G WIFI	0.0100		

Note:

1) *The maximum antenna gain is 4.98dBi*
2) *The exposure evaluation safety distance is 20cm.*