Test Requirement

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

Assessment Result

☒ **Passed** ☐ **Not Applicable**

Frequency (MHz)	Type	Conducted Power (dBm)	Maximum Tune-up (dBm)	Power Density (mW/cm2)	Limit (mW/cm2)	Result
2437	2.4G-Wi-Fi	21.189	22	0.062367	1.0000	Pass
2402	BLE	-1.748	-1	0.000204	1.0000	Pass
5180	U-NII Band 1	9.415	10	0.004528	1.0000	Pass
5785	U-NII Band UNII_3	13.039	14	0.011375	1.0000	Pass

Simultaneous emission=0.062367+0.000204 +0.004528 +0.011375 =0.078474<1.0000

Note: The exposure evaluation safety distance is 20cm.

BLE EIRP= Reading result -95.2

2.4G-Wi-Fi Antenna Gain:2.96 dBi, BLE Antenna Gain:1.1dBi, 5G-Wi-Fi Antenna Gain:3.57dBi

------The End------