

FCC §18.313, §1.1310, §2.1091- MAXIMUM PERMISSIBLE EXPOSURE

Applicable Standard

According to subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

(B) 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)
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

f = frequency in MHz; * = Plane-wave equivalent power density;

Measurement

Environmental Conditions

Temperature:	25.8 °C
Relative Humidity:	69 %
ATM Pressure:	100.2 kPa

The testing was performed by Joson Xiao on 2025-08-08.

Radiation leakage was measured in the as-received condition with the oven door closed using a microwave leakage meter.

A 275 mL water load was placed in the center of the oven and the oven was operated at maximum output power.

☒ There was no microwave leakage exceeding a power level of 0.1mW/cm² observed at any point 5 cm or more from the external surface of the oven.

A maximum of 1.0 mW/cm² is allowed in accordance with the applicable Federal Standards. Hence, microwave leakage in the as-received condition with the oven door closed was below the maximum allowed

Simultaneously transmit Consideration:

Radio	Frequency (MHz)	Maximum Conducted Power including Tune-up Tolerance		Antenna Gain		Min. test separation distance (cm)	Power Density (mW/cm ²)	MPE Limit (mW/cm ²)	Verdict
		(dBm)	(mW)	(dBi)	(numeric)				
2.4G WLAN	2412-2462	22.0	158.49	4.2	2.63	20	0.0829	1.0	Pass
BT	2402-2480	3.0	2.0	4.2	2.63	20	0.0010	1.0	Pass
BLE	2402-2480	0	1.0	4.2	2.63	20	0.0005	1.0	Pass

Note: The device contains a certified Wi-Fi module(Model: RIGEL, FCC ID: 2AC7Z-RIGEL), the Maximum Conducted Power including Tune-up Tolerance and Antenna Gain in above table was refer from the module report.

Simultaneously transmit Consideration:

Microwave Oven + Wi-Fi module

The ratio=0.0829/1.0+0.1/1.0=0.1829<1

Result: Complied.