

## 5. RF EXPOSURE EVALUATION

### 5.1 Applicable Standard

According to §1.1307(b)(3)(i)

(B) Or the available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold  $P_{th}$  (mW) described in the following formula. This method shall only be used at separation distances (cm) from 0.5 centimeters to 40 centimeters and at frequencies from 0.3 GHz to 6 GHz (inclusive).  $P_{th}$  is given by:

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

Where

$$x = -\log_{10} \left( \frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right) \text{ and } f \text{ is in GHz;}$$

and

$$ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases}$$

$d$  = the separation distance (cm);

### 5.2 Measurement Result

Operation Modes	Frequency (MHz)	Distance (mm)	$P_{th}$		Maximum Conducted Power including Tune-up Tolerance (dBm)	Antenna Gain (dBi)	ERP (P) (dBm)	ERP (P) (mW)	Exemption
			(mW)	(dBm)					
WLAN 2.4G	2412-2462	200	3060	<b>34.86</b>	23	7.1	27.95	623.73	Compliant
WLAN 5G	5150-5250	200	3060	<b>34.86</b>	23	7.0	27.85	609.54	Compliant
	5725-5850	200	3060	<b>34.86</b>	25	7.8	30.65	1161.45	Compliant

Note:

Antenna gain includes beamforming gain. The Maximum Conducted Power including Tune-up Tolerance was declared by manufacturer.

WLAN 2.4G and 5G can't transmit simultaneously.

**Result: The device compliant the Exemption at 20cm distances.**

===== END OF REPORT =====