12. Radio Frequency Exposure

12.1.Applicable Standards

<table>
<tr><td>☐
§1.1307(b)(3)(i)(A)</td><td>The available maximum time-averaged power is no more than 1 mW, regardless of separation distance.</td></tr>
<tr><td>☐
§1.1307(b)(3)(i)(c)</td><td>ERP is below a threshold calculated based on the distance , R between the person and t

antenna / radiating structure, where R > λ / 2 π .

TABLE B.1—THRESHOLDS FOR SINGLE RF SOURCES SUBJECT TO ROUTINE ENVIRONMENTAL EVALUATION
<table>
<tr><th colspan="3">RF Source Frequency</th><th colspan="3">Minimum Distance</th><th>Threshold ERP</th></tr>
<tr><td>f_L MHz</td><td></td><td>f_H MHz</td><td>$\lambda_L / 2\pi$</td><td></td><td>$\lambda_H / 2\pi$</td><td>W</td></tr>
<tr><td>0.3</td><td>–</td><td>1.34</td><td>159 m</td><td>–</td><td>35.6 m</td><td>1,920 R²</td></tr>
<tr><td>1.34</td><td>–</td><td>30</td><td>35.6 m</td><td>–</td><td>1.6 m</td><td>3,450 R²/f^2</td></tr>
<tr><td>30</td><td>–</td><td>300</td><td>1.6 m</td><td>–</td><td>159 mm</td><td>3.83 R²</td></tr>
<tr><td>300</td><td>–</td><td>1,500</td><td>159 mm</td><td>–</td><td>31.8 mm</td><td>0.0128 R²f</td></tr>
<tr><td>1,500</td><td>–</td><td>100,000</td><td>31.8 mm</td><td>–</td><td>0.5 mm</td><td>19.2R²</td></tr>
<tr><td colspan="7">Subscripts L and H are low and high; λ is wavelength.
From § 1.1307(b)(3)(i)(C), modified by adding Minimum Distance columns.</td></tr>
</table>
</td></tr>
<tr><td>☒
§ 1.1307(b)(3)(i)(B).</td><td>Device operates between 300 MHz and 6 GHz and the maximum time-averaged power or effective radiated power (ERP), whichever is greater, <= Pth

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

Where

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

and

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

d = the separation distance (cm);</td></tr>
</table>

12.2.EUT Specification

Frequency band (Operating)	☐ WLAN: 2412MHz ~ 2462MHz ☒ WLAN: 5150MHz ~ 5250MHz ☒ WLAN: 5250MHz ~ 5350MHz ☒ WLAN: 5470MHz ~ 5725MHz ☒ WLAN: 5725MHz ~ 5850MHz ☐ Bluetooth: 2402MHz ~ 2480MHz
Device category	☐ Portable (<20cm separation) ☒ Mobile (>20cm separation)
Antenna diversity	SISO ☒ Single antenna ☐ Multiple antennas ☐ Tx diversity ☐ Rx diversity ☐ Tx/Rx diversity MIMO ☐ Single antenna ☒ Multiple antennas ☒ Tx diversity ☐ Rx diversity ☐ Tx/Rx diversity
Evaluation applied	☐ Blanket 1 mW Blanket Exemption ☒ MPE-based Exemption ☐ SAR-based Exemption
Remark: ANT A: The maximum conducted output power is 20.78dBm (119.674mW) at 5785MHz (with 2.40dBi antenna gain.) ANT B: The maximum conducted output power is 20.91dBm (123.310mW) at 5240MHz (with 2.11dBi antenna gain.) ANT A, B**:** The maximum conducted output power is 21.51dBm (141.468mW) at 5785MHz (with 2.40dBi antenna gain.)	

12.3.Result

ANT A

Modulation Type	Channel Frequency (MHz)	Max. Conducted output power(dBm)	Max. Tune up power (dBm)	Antenna Gain(dBi)	Max.Tune up e.r.p. Power (dBm)	Max. Tune up e.r.p power (mW)	Limit (mW)
11a	5180-5240	19.08	19.58	2.73	20.16	103.75	3060
11a	5260-5320	18.50	19.00	2.73	19.58	90.78	3060
11a	5500-5720	19.00	19.50	2.35	19.70	93.33	3060
11a	5745-5825	20.78	21.28	2.4	21.53	142.23	3060

ANT B

Modulation Type	Channel Frequency (MHz)	Max. Conducted output power(dBm)	Max. Tune up power (dBm)	Antenna Gain(dBi)	Max.Tune up e.r.p. Power (dBm)	Max. Tune up e.r.p power (mW)	Limit (mW)
11a	5180-5240	20.91	21.41	2.11	21.37	137.09	3060
11a	5260-5320	19.68	20.18	2.54	20.57	114.02	3060
11a	5500-5720	20.46	20.96	2.4	21.21	132.13	3060
11a	5745-5825	20.73	21.23	2.34	21.42	138.68	3060

ANT A, B

Modulation Type	Channel Frequency (MHz)	Max. Conducted output power(dBm)	Max. Tune up power (dBm)	Antenna Gain(dBi)	Max.Tune up e.r.p. Power (dBm)	Max. Tune up e.r.p power (mW)	Limit (mW)
11ax HE20	5180-5240	20.27	20.77	2.73	21.35	136.39	3060
11ax HE40	5260-5320	19.72	20.22	2.73	20.80	120.30	3060
11ax HE40	5500-5720	20.42	20.92	2.4	21.17	130.78	3060
11ax HE20	5745-5825	21.51	22.01	2.4	22.26	168.13	3060

No non-compliance noted.

Co-Located

Modulation Type	Channel Frequency (MHz)	Max. Conducted output power (dBm)	Max. Tune up power (dBm)	Antenna Gain(dBi)	Distance (cm)	Max.Tune up e.r.p. Power(mW)	Limit (mW)	MPE Ratio
GFSK	2402-2480	17.40	17.90	1.97	20	59.16	3060.00	0.02
11ax HE20	5745-5825	21.51	22.01	2.4	20	168.13	3060.00	0.05
Co-location Total							---	0.07
ΣMPE ratios Limit							---	1.00

----------THE END OF REPORT----------