



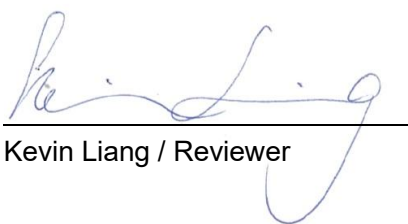
Radio Frequency Exposure

Applicant : Franklin Wireless Corp
Address : 6205 Lusk Blvd. SAN DIEGO,
California 92121 United States
Equipment : 5G Router
Model No. : SG1000
Trade Name : Franklin Wireless
FCC ID. : RB2-SG1000

I HEREBY CERTIFY THAT :

The sample was received on Aug. 12, 2026 and the testing was completed on Sep. 17, 2026 at CerpPASS Technology Corp. The test result refers exclusively to the test presented test model / sample. Without written approval of CerpPASS Technology Corp., the test report shall not be reproduced except in full.

Approved by:



Kevin Liang / Reviewer

Laboratory Accreditation:

CerpPASS Technology Corporation Test Laboratory





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History of this test report

Report No.	Issued Date	Description
26060017-TRFCC04	Sep. 18, 2026	Original



1. Summary of Test Procedure and Test Results

1.1. Applicable Standards

FCC Rules and Regulations Part 2.1091

FCC Rule	Description of Test	Result
2.1091	Radio Frequency Exposure	PASS

*The lab has reduced the uncertainty risk factor from test equipment, environment and staff technicians which according to the standard on contract. Therefore, the test result will only be determined by standard requirement, measurement uncertainty evaluation is not considered.



2. Test Configuration of Equipment under Test

2.1. Feature of Equipment under Test

Operation Frequency Range	2.4GHz: 802.11b/g/n/ax/be: 2400-2483.5MHz 5GHz: 802.11a/n/ac/ax/be:5150-5250MHz, 5250-5350MHz, 5470-5725MHz, 5725-5875MHz 6GHz: 802.11a/ax/be: 5925MHz-6425MHz, 6425MHz-6525MHz 6525MHz-6875MHz, 6875MHz-7125MHz
Center Frequency Range	2.4GHz:802.11b/g/n/ax/be: 2412MHz-2462MHz 5GHz:802.11a/n/ac/ax/be:5180-5240MHz, 5260-5320MHz, 5500-5720MHz, 5745-5825MHz 6GHz: 802.11a/ax/be: 5955MHz-6415MHz, 6435MHz-6515MHz 6535MHz-6855MHz, 6875MHz-7115MHz
Modulation Type	2.4GHz: 802.11b: CCK, DQPSK, DBPSK 802.11g/n: BPSK, QPSK, 16QAM, 64QAM 802.11ax: BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM 802.11be: BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM, 4096QAM 5GHz: 802.11a/n: BPSK, QPSK, 16QAM, 64QAM 802.11ac: BPSK, QPSK, 16QAM, 64QAM, 256QAM 802.11ax: BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM 802.11be: BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM, 4096QAM 6GHz: 802.11a: BPSK, QPSK, 16QAM, 64QAM 802.11ax: BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM 802.11be: BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM, 4096QAM
Modulation Technology	DSSS 、 OFDM 、 OFDMA
Data Rate	2.4GHz: 802.11b: 1, 2, 5.5, 11Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11n: MCS0 – MCS15, HT20/40 802.11ax: MCS0 – MCS11, HE20/40 802.11be: MCS0 – MCS13, EHT20/40 5GHz: 802.11a: 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11n: MCS0 – MCS15, HT20/40 802.11ac: MCS0 – MCS9, VHT20/40/80/160 802.11ax: MCS0 – MCS11, HE20/40/80/160 802.11be: MCS0 – MCS13, EHT20/40/80/160 6GHz 802.11a: 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11ax: MCS0 – MCS11, HE20/40/80/160 802.11be: MCS0 – MCS13, EHT20/40/80/160



Antenna Type	PCB Antenna
Antenna Gain	2412-2484MHz: ANT-9: 1.28dBi, ANT-10: 1.47dBi 5150-5260MHz: ANT-9: 2.54dBi, ANT-10: 3.15dBi 5260-5320MHz: ANT-9: 2.33dBi, ANT-10: 2.85dBi 5470-5700MHz: ANT-9: 3.10dBi, ANT-10: 3.66dBi 5745-5850MHz: ANT-9: 2.29dBi, ANT-10: 3.74dBi 5945-6425MHz: ANT-9: 2.45dBi, ANT-10: 3.82dBi 6425-6525MHz: ANT-9: 2.45dBi, ANT-10: 3.47dBi 6525-7115MHz: ANT-9: 2.10dBi, ANT-10: 3.45dBi 6855-7125MHz: ANT-9: 2.10dBi, ANT-10: 2.19dBi
Adapter	Franklin Wireless \ PS24V120K2000UD \ 24W
	Franklin Wireless \ APS-M024120200W-G \ 24W

Note:

1. EUT support TPC Function.
2. EUT support Master Mode.
3. EUT only support Full RU.
4. EUT: Low Power indoor Access Point.
5. For more details, please refer to the User's manual of the EUT.



2.2. General Information of Test

Organization	Cerpass Technology Corp.		
☒ Test Site	Cerpass Technology Corporation Test Laboratory Address: No.10, Ln. 2, Lianfu St., Luzhu Dist., Taoyuan City 33848, Taiwan (R.O.C.) Tel: +886-3-3226-888 Fax: +886-3-3226-881		
	FCC	TW1439, TW1079	
	ISED Company Number	4934E-1, 4934E-2	
	ISED CAB identifier	TW1439	
Frequency Range Investigated	Conducted: from 150kHz to 30MHz Radiation: from 9kHz to 40,000MHz		
Test Distance	The test distance of radiated emission from antenna to EUT is 3 M.		

2.4GHz

Test Item	Test Site	Test period	Environmental Conditions	Tested By
RF Conducted	RFCON02-NK	2026/09/09	24.7°C / 46%	Peter Pan
RF Conducted	RFCON02-NK	2026/09/10	24.8°C / 52%	Peter Pan

5GHz

Test Item	Test Site	Test period	Environmental Conditions	Tested By
RF Conducted	RFCON02-NK	2026/09/09	24.7°C / 46%	Peter Pan
RF Conducted	RFCON02-NK	2026/09/10	24.8°C / 52%	Peter Pan
RF Conducted	RFCON02-NK	2026/09/11	25°C / 50%	Peter Pan

6GHz

Test Item	Test Site	Test period	Environmental Conditions	Tested By
RF Conducted	RFCON02-NK	2026/09/14	26.1°C / 48%	Peter Pan
RF Conducted	RFCON02-NK	2026/09/15	26.7°C / 49%	Peter Pan
RF Conducted	RFCON02-NK	2026/09/16	24.3°C / 45%	Peter Pan
RF Conducted	RFCON02-NK	2026/09/17	26.4°C / 50%	Peter Pan



2.3. Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

2.4GHz

Measurement Item	Uncertainty
AC Power Line Conduction(150kHz~30MHz)	±3.2dB
Radiated Spurious Emission(9kHz~30MHz)	±3.4dB
Radiated Spurious Emission(30MHz~1GHz)	±5.2dB
Radiated Spurious Emission(1GHz~40GHz)	±5.2dB
6dB Bandwidth	±4.4%
26dB Bandwidth	±4.5%
Occupied Bandwidth	±4.4%
Peak Output Power (Conducted Power Meter)	±1.1dB
Power Spectral Density	±2.0dB
Duty Cycle	±3.5%
Frequency Stability	±223.073Hz

5GHz/6E

Measurement Item	Uncertainty
AC Power Line Conduction(150kHz~30MHz)	±3.2dB
Radiated Spurious Emission(9kHz~30MHz)	±3.4dB
Radiated Spurious Emission(30MHz~1GHz)	±5.2dB
Radiated Spurious Emission(1GHz~40GHz)	±5.2dB
Conducted Spurious Emission	±2.1dB
6dB Bandwidth	±4.4%
20dB Bandwidth	±4.5%
Occupied Bandwidth	±4.4%
Peak Output Power (Conducted Power Meter)	±1.1dB
Dwell Time / Deactivation Time	±3.5%
Power Spectral Density	±2.0dB
Duty Cycle	±3.5%



3. Test Equipment and Ancillaries Used for Tests

2.4GHz

Test Item	RF Conducted				
Test Site	RFCON02-NK				
Instrument	Manufacturer	Model No	Serial No	Calibration Date	Valid Date
CAX Signal Analyzer	KEYSIGHT	N9000B	MY57100339	2025/10/23	2026/10/22
Power Meter	Anritsu	ML2495A	1224005	2026/01/27	2027/01/26
Power Sensor	Anritsu	MA2411B	1207295	2026/01/27	2027/01/26
Attenuator	KEYSIGHT	8491B	MY39250703	2026/01/29	2027/01/28

5GHz/6E

Test Item	RF Conducted				
Test Site	RFCON02-NK				
Instrument	Manufacturer	Model No	Serial No	Calibration Date	Valid Date
Spectrum Analyzer	R&S	FSP 40	100047	2026/02/24	2027/02/23
Attenuator	KEYSIGHT	8491B	MY39250703	2026/01/29	2027/01/28
Cable-0.5m (30M-40G)	HUBER SUHNER	SUCOFLEX 102	28420/2	2025/10/13	2026/10/12
Power Meter	Anritsu	ML2495A	1224005	2026/01/27	2027/01/26
Power Sensor	Anritsu	MA2411B	1207295	2026/01/27	2027/01/26
Switch Box	Theda	1-4	TW5451159	NA	NA

6E

Test Item	RF Conducted				
Test Site	RFCON02-NK				
Instrument	Manufacturer	Model No	Serial No	Calibration Date	Valid Date
CAX Signal Analyzer	KEYSIGHT	N9000B	MY57100339	2025/10/23	2026/10/22
Power Meter	Anritsu	ML2495A	1224005	2026/01/27	2027/01/26
Power Sensor	Anritsu	MA2411B	1207295	2026/01/27	2027/01/26
Attenuator	KEYSIGHT	8491B	MY39250703	2026/01/29	2027/01/28



4. Radio Frequency Exposure

4.1. Applicable Standards

§1.1307(b)(3)(i)(A)	The available maximum time-averaged power is no more than 1 mW, regardless of separation distance.																																																	
§1.1307(b)(3)(i)(c)	ERP is below a threshold calculated based on the distance , R between the person and the antenna / radiating structure, where $R > \lambda / 2 \pi$. 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><th>f_L MHz</th><th></th><th>f_H MHz</th><th>$\lambda_L / 2\pi$</th><th></th><th>$\lambda_H / 2\pi$</th><th>W</th></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 R²/f</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></table> Subscripts L and H are low and high; λ is wavelength. From § 1.1307(b)(3)(i)(C), modified by adding Minimum Distance columns.	RF Source Frequency			Minimum Distance			Threshold ERP	f_L MHz		f_H MHz	$\lambda_L / 2\pi$		$\lambda_H / 2\pi$	W	0.3	–	1.34	159 m	–	35.6 m	1,920 R ²	1.34	–	30	35.6 m	–	1.6 m	3,450 R ² / f^2	30	–	300	1.6 m	–	159 mm	3.83 R ²	300	–	1,500	159 mm	–	31.8 mm	0.0128 R ² / f	1,500	–	100,000	31.8 mm	–	0.5 mm	19.2R ²
RF Source Frequency			Minimum Distance			Threshold ERP																																												
f_L MHz		f_H MHz	$\lambda_L / 2\pi$		$\lambda_H / 2\pi$	W																																												
0.3	–	1.34	159 m	–	35.6 m	1,920 R ²																																												
1.34	–	30	35.6 m	–	1.6 m	3,450 R ² / f^2																																												
30	–	300	1.6 m	–	159 mm	3.83 R ²																																												
300	–	1,500	159 mm	–	31.8 mm	0.0128 R ² / f																																												
1,500	–	100,000	31.8 mm	–	0.5 mm	19.2R ²																																												
§ 1.1307(b)(3)(i)(B).	Device operates between 300 MHz and 6 GHz and the maximum time-averaged power or effective radiated power (ERP), whichever is greater, $\leq P_{th}$ $P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$ 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);																																																	

**4.2. EUT Specification**

Frequency band (Operating)	☒ WLAN: 2412MHz ~ 2462MHz ☒ WLAN: 5150MHz ~ 5250MHz ☒ WLAN: 5250MHz ~ 5350MHz ☒ WLAN: 5500MHz ~ 5720MHz ☒ WLAN: 5745MHz ~ 5825MHz ☒ WLAN: 5955MHz ~ 6415MHz ☒ WLAN: 6435MHz ~ 6515MHz ☒ WLAN: 6535MHz ~ 6855MHz ☒ WLAN: 6875MHz ~ 7115MHz
Device category	☐ Portable (<20cm separation) ☒ Mobile (>20cm separation)
Antenna diversity	☐ Single antenna ☒ Multiple antennas ☒ Tx diversity ☐ Rx diversity ☐ Tx/Rx diversity
Evaluation applied	☐ Blanket 1 mW Blanket Exemption ☒ MPE-based Exemption ☐ SAR-based Exemption



4.3. Test Result

2.4GHz

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)
2412-2462	23.58	24.08	1.47	23.40	218.68	3060

5GHz

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)
5180-5240	21.78	22.28	3.15	23.28	213.03	3060
5260-5320	21.55	22.05	2.85	22.75	188.36	3060
5500-5720	21.09	21.59	3.66	23.10	204.19	3060
5745-5825	21.99	22.49	3.74	24.08	255.95	3060

6E

CH Freq. (MHz)	Max. Conducted output power (dBm)	Max. Tune up power (dBm)	Antenna Gain (dBi)	Max. Tune up EIRP (dBm)	Max. Tune up ERP (dBm)	Distance (cm)	$\lambda/2\pi$ (cm)	Max. Tune up ERP (W)	ERP Threshold (W)
6025	18.61	19.11	3.82	22.93	20.78	20	0.7929	0.120	0.768
6465	15.61	16.11	3.47	19.58	17.43	20	0.73891	0.055	0.768
6665	19.02	19.52	3.45	22.97	20.82	20	0.71674	0.121	0.768
6985	18.98	19.48	2.19	21.67	19.52	20	0.6839	0.089	0.768

**Maximum Permissible Exposure (Co-location)****2.4GHz + 5G NR**

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
11be EHT20	2412-2462	23.58	24.58	1.47	20	245.37	3060.00	0.080
5G NR Band n41	2500-2690	25.00	26.00	1.55	20	346.74	3060.00	0.113
Co-location Total								0.193
Σ MPE ratios Limit								1.000

5GHz + 5G NR

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
11be EHT40	5745-5825	21.99	22.99	3.74	20	287.18	3060.00	0.094
5G NR Band n41	2500-2690	25.00	26.00	1.55	20	346.74	3060.00	0.113
Co-location Total								0.207
Σ MPE ratios Limit								1.000

6GHz + 5G NR

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
11be EHT160	6665	19.02	20.02	3.45	20	135.54	3060.00	0.044
5G NR Band n41	2500-2690	25.00	26.00	1.55	20	346.74	3060.00	0.113
Co-location Total								0.157
Σ MPE ratios Limit								1.000

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