



Radio Frequency Exposure

Applicant : StreamUnlimited Engineering GmbH

Address : Gutheil Schoder Gasse 10, Vienna, A1100, Austria

Equipment : Streaming DAC Preamplifier

Model No. : SDX 3100 HV

Trade Name : T+A

FCC ID : 2AJYB-ST1955

I HEREBY CERTIFY THAT :

The sample was received on Apr. 30, 2026 and the testing was completed on Jun. 30, 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:

Mark Liao / Supervisor

Laboratory Accreditation:

CerpPASS Technology Corporation Test Laboratory





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History of this test report

Report No.	Issued Date	Description
26040453-TRFCC06	Aug. 17, 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.

Customer Info	
Note: Laboratory assumes no responsibility for the customer information of description field.	



2. Test Configuration of Equipment under Test

2.1. Feature of Equipment under Test

Operation Frequency Range	WLAN:802.11b/g/n/ax: 2400-2483.5MHz 5GHz:802.11a/n/ac/ax: 5150-5250MHz, 5250-5350MHz, 5470-5725MHz, 5725-5875MHz
Center Frequency Range	WLAN:802.11b/g/n/ax: 2412MHz-2462MHz 5GHz:802.11a/n/ac/ax: 5180-5240MHz, 5260-5320MHz, 5500-5720MHz, 5745-5825MHz
Modulation Type	WLAN: 2.4GHz: 802.11b: CCK, DQPSK, DBPSK 802.11g/n: BPSK, QPSK, 16QAM, 64QAM, 802.11ax: BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM 5GHz: 802.11a/n: BPSK, QPSK, 16QAM, 64QAM 802.11ac: BPSK, QPSK, 16QAM, 64QAM, 256QAM 802.11ax: BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM
Modulation Spread Spectrum	DSSS 、 OFDM 、 OFDMA
Data Rate	WLAN: 2.4GHz: 802.11b: 1, 2, 5.5, 11Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11n: MCS0 – MCS15, HT20 802.11ax: MCS0 – MCS11, HE20 5GHz: 802.11a: 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11n: MCS0 – MCS15, HT20/40 802.11ac: MCS0 – MCS9, VHT20/40/80 802.11ax: MCS0 – MCS11, HE20/40/80
Antenna Type	Dipole Antenna
Antenna Gain	For WLAN: 2400-2500MHz: ANT 1: 2.46dBi, ANT 2: 2.46dBi 5150-5250MHz: ANT 1: 1.20dBi, ANT 2: 1.20dBi 5250-5350MHz: ANT 1: 1.55dBi, ANT 2: 1.55dBi 5470-5725MHz: ANT 1: 1.55dBi, ANT 2: 1.55dBi 5725-5850MHz: ANT 1: 2.85dBi, ANT 2: 2.85dBi
Antenna Cable Loss	For WLAN: 2400-2500MHz: ANT 1: 1.50dB, ANT 2: 0.50dB 5150-5250MHz: ANT 1: 0.50dB, ANT 2: 0.50dB 5250-5350MHz: ANT 1: 0.50dB, ANT 2: 0.50dB 5470-5725MHz: ANT 1: 0.50dB, ANT 2: 0.50dB 5725-5850MHz: ANT 1: 0.50dB, ANT 2: 0.50dB

Note: 1. EUT not support TPC Function.
2. EUT support Client Mode without radar detection
3. 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	
	IC	4934E-1, 4934E-2	
Frequency Range Investigated	Conducted: from 150kHz to 30 MHz Radiation: from 30 MHz to 40,000MHz		
Test Distance	The test distance of radiated emission from antenna to EUT is 3 M.		

Test Item	Test Site	Test period	Environmental Conditions	Tested By
RF Conducted	RFCON02-NK	2026/06/30	24.1°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))

For 2.4G

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

For 5G

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



3. Test Equipment and Ancillaries Used for Tests

Test Item	RF Conducted				
Test Site	RFCON02-NK				
Instrument	Manufacturer	Model No	Serial No	Calibration Date	Valid Date
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 t 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/f²</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></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																																												
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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: 5470MHz ~ 5725MHz ☒ WLAN: 5725MHz ~ 5850MHz
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
Remark: The maximum conducted output power is <u>19.81 dBm (95.719mW)</u> at <u>2437MHz</u> (with <u>1.96dBi antenna gain</u> .)	



4.3. Result

For 2.4G

ANT 1

Channel Frequency (MHz)	Max. Conducted output power (dBm)	Max. Tune up power (dBm)	Antenna Gain (dBi)	Antena Cable Loss (dB)	Max.Tune up e.r.p. Power (dBm)	Max.Tune up e.r.p. Power (mW)	Limit (mW)
2412-2462	19.33	19.83	2.46	1.50	18.64	73.11	3060

ANT 2

Channel Frequency (MHz)	Max. Conducted output power (dBm)	Max. Tune up power (dBm)	Antenna Gain (dBi)	Antena Cable Loss (dB)	Max.Tune up e.r.p. Power (dBm)	Max.Tune up e.r.p. Power (mW)	Limit (mW)
2412-2462	19.81	20.31	2.46	0.50	20.12	102.80	3060

For 5G

ANT 1

Channel Frequency (MHz)	Max. Conducted output power (dBm)	Max. Tune up power (dBm)	Antenna Gain (dBi)	Antena Cable Loss (dB)	Max.Tune up e.r.p. Power (dBm)	Max.Tune up e.r.p. Power (mW)	Limit (mW)
5180-5240	11.39	11.89	1.2	1.5	9.44	8.79	3060
5260-5320	12.47	12.97	1.55	1.5	10.87	12.22	3060
5500-5720	14.91	15.41	1.55	1.5	13.31	21.43	3060
5745-5825	13.13	13.63	2.85	1.5	12.83	19.19	3060

ANT 2

Channel Frequency (MHz)	Max. Conducted output power (dBm)	Max. Tune up power (dBm)	Antenna Gain (dBi)	Antena Cable Loss (dB)	Max.Tune up e.r.p. Power (dBm)	Max.Tune up e.r.p. Power (mW)	Limit (mW)
5180-5240	11.74	12.24	1.2	0.5	10.79	11.99	3060
5260-5320	12.77	13.27	1.55	0.5	12.17	16.48	3060
5500-5720	15.08	15.58	1.55	0.5	14.48	28.05	3060
5745-5825	13.29	13.79	2.85	0.5	13.99	25.06	3060

No non-compliance noted.

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