



TEST REPORT

APPLICANT : Anker Innovations Limited

PRODUCT NAME : HomeBase Professional S1

MODEL NAME : T9000

BRAND NAME : eufy

FCC ID : 2AOKB-T9000

STANDARD(S) : 47 CFR Part 2
: 47 CFR Part 90, Subpart R

RECEIPT DATE : 2025-04-01

TEST DATE : 2025-05-12 to 2025-06-05

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Edited by:

Zeng Xiaoying
Zeng Xiaoying (Rapporteur)

Approved by:

Shen Junsheng
Shen Junsheng (Supervisor)

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Change History		
Version	Date	Reason for change
1.0	2025-06-17	First edition



1. Technical Information

Note: Provide by applicant.

1.1. Applicant and Manufacturer Information

Applicant:	Anker Innovations Limited
Applicant Address:	Unit 56, 8th Floor, Tower 2, Admiralty Centre, 18 Harcourt Road, Hong Kong
Manufacturer:	Anker Innovations Limited
Manufacturer Address:	Unit 56, 8th Floor, Tower 2, Admiralty Centre, 18 Harcourt Road, Hong Kong

1.2. Equipment Under Test (EUT) Description

Product Name:	HomeBase Professional S1	
Sample No.:	17#, 18#	
Hardware Version:	V7	
Software Version:	V4.0.1.6	
Modulation Type:	QPSK, 16QAM	
Operation Band:	Band 14	
Carrier Aggregation(UL):	Not Support	
Frequency Range:	LTE Band 14	Tx: 788MHz-798MHz
		Rx: 758MHz-768MHz
Channel Bandwidth	LTE Band 14	5MHz, 10MHz
Antenna Type:	PCB Antenna	
Antenna Gain:	LTE Band 14	2.97dBi
Accessory Information:	Battery	
	Brand Name:	N/A
	Model No.:	T9000
	Serial No.:	N/A
	Capacity:	9800mAh
	Rated Voltage:	9.6V
	Charge Limit:	10.95V
	Manufacturer:	Fujian SCUD Power Technology Co., Ltd.
	AC Adapter	
	Brand Name:	Huntkey



	Model No.:	HKA12048025-7E
	Serial No.:	N/A
	Rated Output:	48V \Rightarrow 2.5A
	Rated Input:	100-240V \sim 50/60Hz, 1.8A
	Manufacturer:	Shenzhen Huntkey Electric Co., Ltd.

Note 1: The test results of all conducted test items please refer to the module FCC test report (FCC ID: XMR202008EC25AFXD, Report No.: R2203A0238-R4), which issued on Apr. 11, 2022 by TA Technology (Shanghai) co.,Ltd. We only recorded the radiated test result in this report.

Note 2: The EUT description presented in the report are provided by applicant and/or manufacturer, and the test laboratory is not responsible for the accuracy of the information. For a more detailed description, please refer to Specification or User’s Manual supplied by the applicant and/or manufacturer.



1.3. Maximum E.R.P./E.I.R.P.

LTE Band 14	Maximum E.R.P./E.I.R.P. (W)	
	QPSK	16QAM
BW(MHz)		
10	0.293	0.263
5	0.296	0.220



1.4. Test Standards and Results

The objective of the report is to perform testing according to Part 2 and Part 90 for the EUT FCC ID Certification:

No	Identity	Document Title
1	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	47 CFR Part 90	Miscellaneous Wireless Communications Services

Test detailed items/section required by FCC rules and results are as below:

Section	Description	Test Date	Test Engineer	Result	Remark
2.1046, 90.635(b)	E.R.P./E.I.R.P.	Jun. 05, 2025	Liu Huiyan	PASS	/
2.1053, 90.691	Radiated Spurious Emissions	May. 12, 2025	Li Hanbin	PASS	/
<p>Note 1: The test results of all conducted test items please refer to the module FCC test report (Report No.: R2203A0238-R4), which issued on Apr. 11, 2022 by TA Technology (Shanghai) co.,Ltd. We only recorded the radiated test result in this report.</p> <p>Note 2: The tests were performed according to the method of measurements prescribed in KDB971168 D01 v03 and ANSI/TIA-603-E-2016.</p> <p>Note 3: Any additions, deviation, or exclusions from the method shall be noted in the "Remark".</p> <p>Note 4: The antenna gain presented in the report are provided by applicant and/or manufacturer, and the test laboratory is not responsible for the accuracy of the information.</p>					

1.5. Environmental Conditions

During the measurement, the environmental conditions were within the listed ranges:

Temperature (°C):	15-35
Relative Humidity (%):	30-60
Atmospheric Pressure (kPa):	86-106

2.47 CFR Part 2, Part 90R Requirements

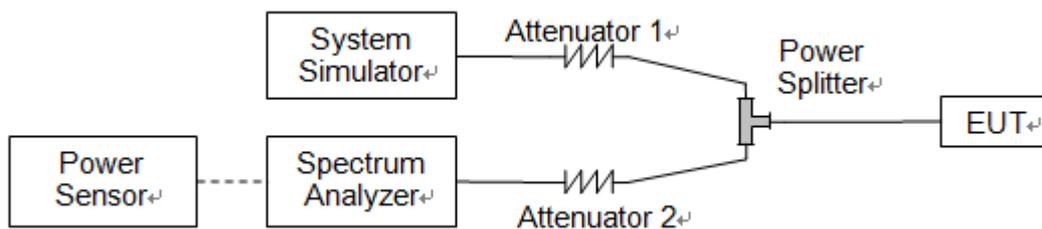
2.1. Transmitter Conducted Output Power and E.R.P./E.I.R.P.

2.1.1. Requirement

According to FCC section 2.1046(a), for transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in FCC section 2.1033(c)(8).

According to FCC section 90.635(b) for LTE Band 14, the maximum output power of the transmitter for mobile stations is 100 watts.

2.1.2. Test Description



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power. A call is established between the EUT and the SS.

2.1.3. Test procedure

KDB 971168 D01v03 Section 5.2 and ANSI/TIA-603-E-2016.

$EIRP \text{ (dBm)} = \text{Conducted Output Power (dBm)} + \text{Antenna Gain (dBi)}$

$ERP \text{ (dBm)} = EIPR \text{ (dBm)} - 2.15$



2.1.4. Result

Effective Radiated Power and Effective Isotropic Radiated Power

LTE Band 14				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				/		23330		/	
Frequency (MHz)				/		793		/	
				/	/	dBm	W	/	/
10	QPSK	1	0	/	/	24.55	0.285	/	/
10	QPSK	1	25	/	/	24.67	0.293	/	/
10	QPSK	1	49	/	/	24.35	0.272	/	/
10	QPSK	25	0	/	/	23.66	0.232	/	/
10	QPSK	25	12	/	/	23.60	0.229	/	/
10	QPSK	25	25	/	/	23.64	0.231	/	/
10	QPSK	50	0	/	/	23.65	0.232	/	/
10	16QAM	1	0	/	/	23.52	0.225	/	/
10	16QAM	1	25	/	/	24.20	0.263	/	/
10	16QAM	1	49	/	/	23.67	0.233	/	/
10	16QAM	25	0	/	/	22.46	0.176	/	/
10	16QAM	25	12	/	/	22.62	0.183	/	/
10	16QAM	25	25	/	/	22.58	0.181	/	/
10	16QAM	50	0	/	/	22.59	0.182	/	/



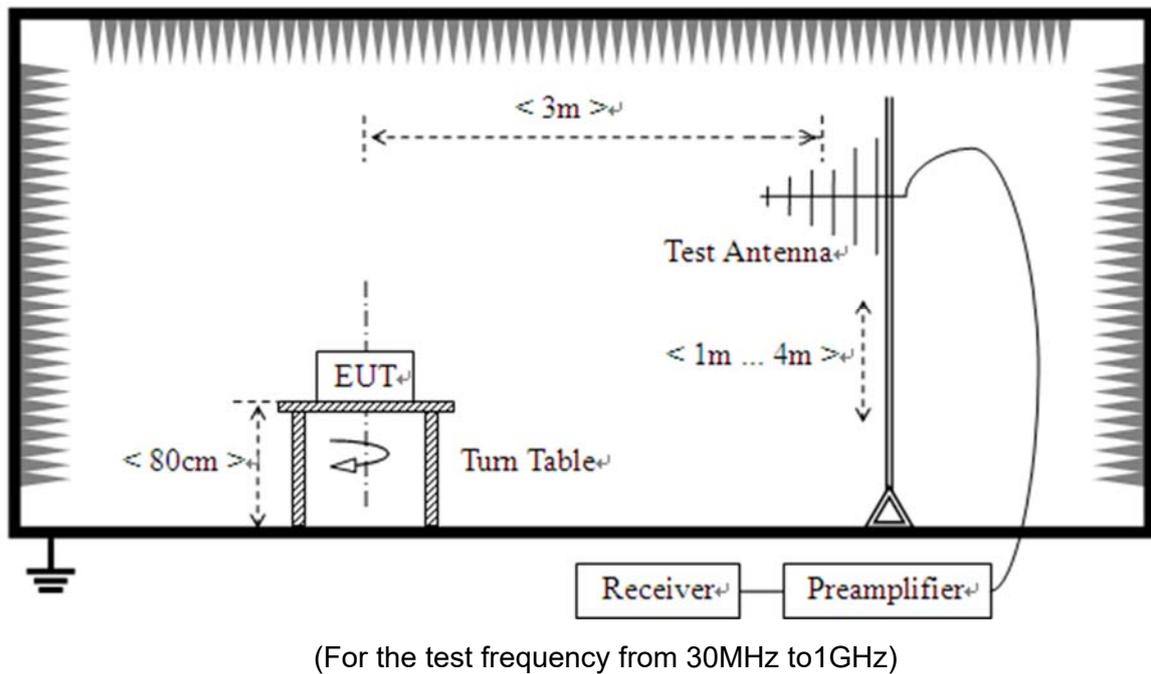
LTE Band 14				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23305		23330		23355	
Frequency (MHz)				790.5		793		795.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	24.63	0.290	24.41	0.276	24.41	0.276
5	QPSK	1	12	24.46	0.279	24.66	0.292	24.57	0.286
5	QPSK	1	24	24.50	0.282	24.70	0.295	24.72	0.296
5	QPSK	12	0	23.65	0.232	23.65	0.232	23.57	0.228
5	QPSK	12	7	23.59	0.229	23.62	0.230	23.53	0.225
5	QPSK	12	13	23.64	0.231	23.67	0.233	23.59	0.229
5	QPSK	25	0	23.71	0.235	23.58	0.228	23.55	0.226
5	16QAM	1	0	23.32	0.215	23.29	0.213	23.24	0.211
5	16QAM	1	12	23.20	0.209	23.43	0.220	23.36	0.217
5	16QAM	1	24	23.03	0.201	23.39	0.218	23.04	0.201
5	16QAM	12	0	22.47	0.177	22.50	0.178	22.56	0.180
5	16QAM	12	7	22.66	0.185	22.41	0.174	22.67	0.185
5	16QAM	12	13	22.49	0.177	22.32	0.171	22.47	0.177
5	16QAM	25	0	22.59	0.182	22.55	0.180	22.51	0.178

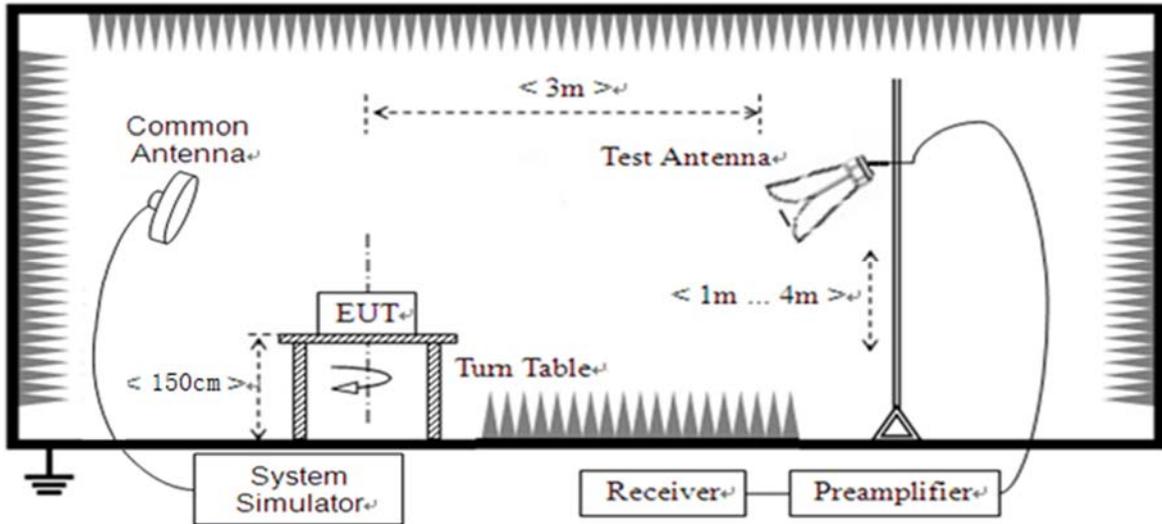
2.2. Radiated Spurious Emissions

2.2.1. Requirement

According to FCC section 2.1051, the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43+10*\log(P)$ dB. This calculated to be -13dBm.

2.2.2. Test Description





(For the test frequency above 1GHz)

The EUT is located in a 3m Full-Anechoic Chamber, the cable loss, air loss and so on of the site as factors are pre-calibrated using the "Substitution" method, and calculated to correct the reading. A call is established between the EUT and the SS via a Common Antenna. The EUT is commanded by the SS to operate at the maximum and minimum output power, and only the test result of the maximum output power was recorded.

In the frequency range above 30MHz, Bi-Log Test Antenna (30MHz to 1GHz) and Horn Test Antenna (above 1GHz) are used. Test Antenna is 3m away from the EUT. Test Antenna height is varied from 1m to 4m above the ground and the Turn Table is actuated to turn from 0° to 360° to determine the maximum value of the radiated power. The emission levels at both horizontal and vertical polarizations should be tested. The Filters consists of Notch Filters and High Pass Filter.

Note: when doing measurements above 1GHz, the EUT has been within the 3dB cone width of the horn antenna during horizontal antenna.

2.2.3. Test procedure

KDB 971168 D01v03 Section 5.8 and ANSI/TIA-603-E-2016.

For measurements below 1GHz the resolution bandwidth is set to 100kHz for peak detection measurements.

For measurements above 1GHz the resolution bandwidth is set to 1MHz, the video band width is set to 3MHz for peak measurements.



2.2.4. Test Result

The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. The lowest, middle and highest channels are tested to verify the out of band emissions.

The substitution corrections are obtained as described below:

$$A_{\text{SUBST}} = P_{\text{SUBST_TX}} - P_{\text{SUBST_RX}} - L_{\text{SUBST_CABLES}} + G_{\text{SUBST_TX_ANT}}$$

$$A_{\text{TOT}} = L_{\text{CABLES}} + A_{\text{SUBST}}$$

Where A_{SUBST} is the final substitution correction including receive antenna gain.

$P_{\text{SUBST_TX}}$ is signal generator level,

$P_{\text{SUBST_RX}}$ is receiver level,

$L_{\text{SUBST_CABLES}}$ is cable losses including TX cable,

$G_{\text{SUBST_TX_ANT}}$ is substitution antenna gain.

A_{TOT} is total correction factor including cable loss and substitution correction

During the test, the data of A_{TOT} was added in the test spectrum analyze, so spectrum analyze reading is the final values which contain the data of A_{TOT} .

Note1: The power of the EUT transmitting frequency should be ignored.

Note2: All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

Note3: All bandwidth and modulation were considered and evaluated respectively by performing full test for each band, only the worst cases (Max Bandwidth and QPSK mode) were recorded in this test report.

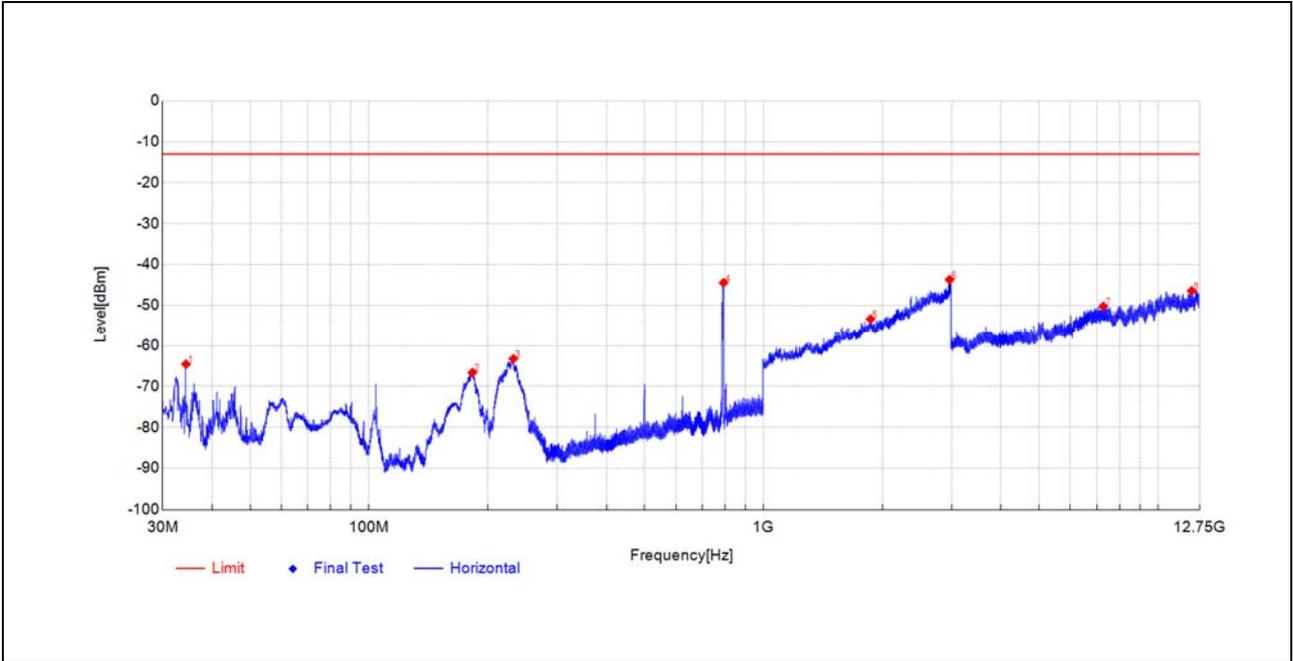
Note4: N/A means the frequency is the basic frequency or the base station frequency, they are no need to verdict.

Note5: The amplitude of emissions (18GHz to 10th harmonics) which are attenuated more than 20 dB below the limit are not be reported.

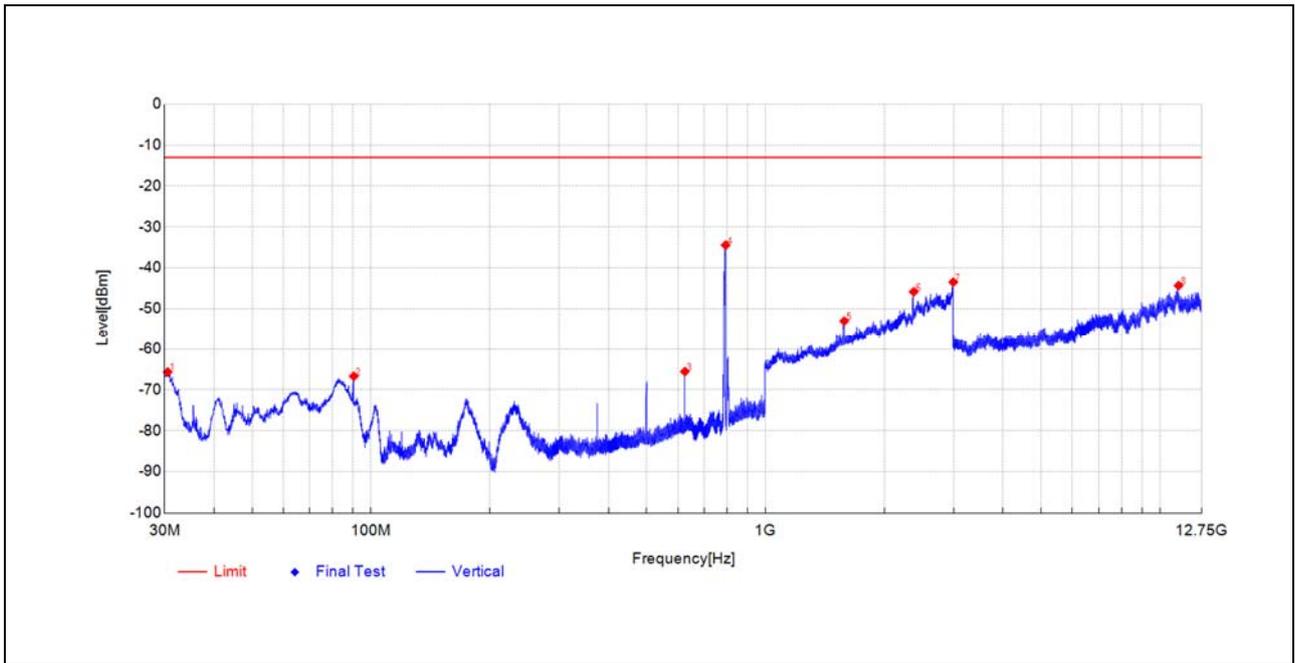


LTE Band 14

Plot for Low Channel

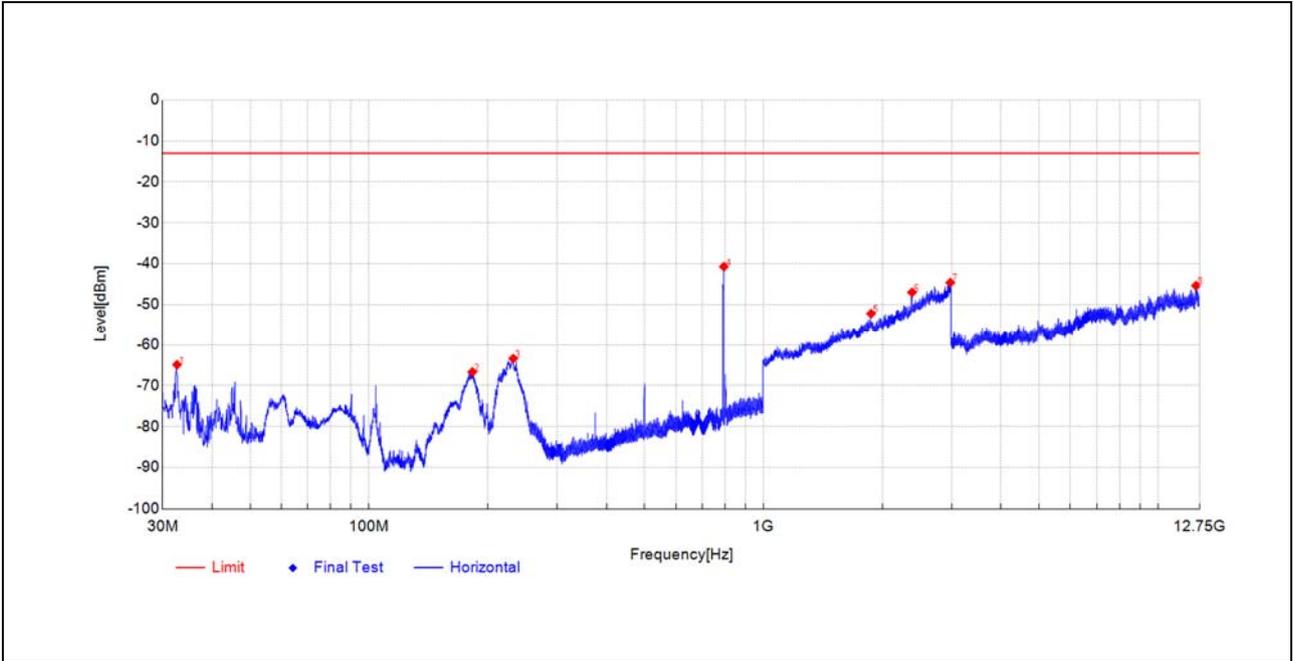


Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
34.3652	-49.50	-64.56	-15.1	-13.0	51.6	Horizontal	PK	PASS
182.9281	-46.34	-66.61	-20.3	-13.0	53.6	Horizontal	PK	PASS
232.3521	-48.50	-63.25	-14.8	-13.0	50.3	Horizontal	PK	PASS
792.7006	-37.32	-44.45	-7.1	-	-	Horizontal	PK	NA
1868.1736	-58.76	-53.34	5.4	-13.0	40.3	Horizontal	PK	PASS
2962.7926	-58.72	-43.71	15.0	-13.0	30.7	Horizontal	PK	PASS
7272.6636	-62.77	-50.21	12.6	-13.0	37.2	Horizontal	PK	PASS
12173.746	-68.12	-46.41	21.7	-13.0	33.4	Horizontal	PK	PASS

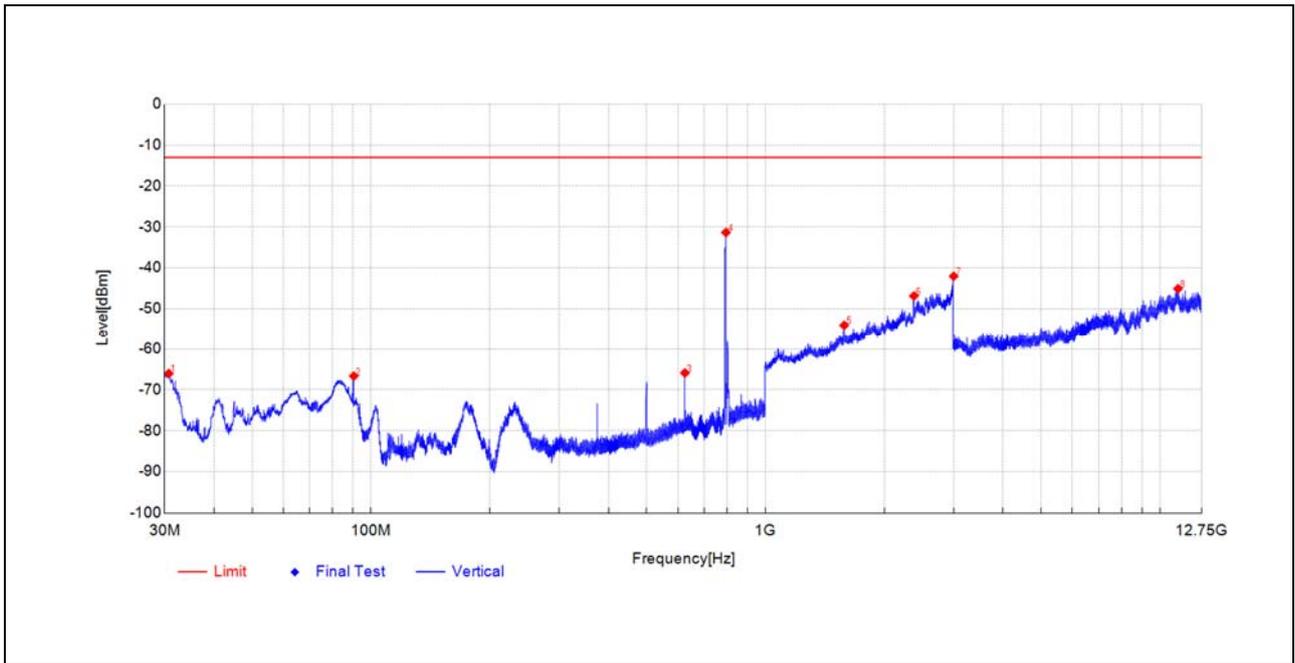


Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
30.5335	-40.78	-65.67	-24.9	-13.0	52.7	Vertical	PK	PASS
90.434	-44.63	-66.70	-22.1	-13.0	53.7	Vertical	PK	PASS
624.9792	-57.00	-65.56	-8.6	-13.0	52.6	Vertical	PK	PASS
792.6521	-27.63	-34.43	-6.8	-	-	Vertical	PK	NA
1583.7167	-55.37	-52.99	2.4	-13.0	40.0	Vertical	PK	PASS
2375.8752	-54.21	-45.83	8.4	-13.0	32.8	Vertical	PK	PASS
2992.7986	-60.28	-43.46	16.8	-13.0	30.5	Vertical	PK	PASS
11148.969	-66.03	-44.31	21.7	-13.0	31.3	Vertical	PK	PASS

Plot for Mid Channel



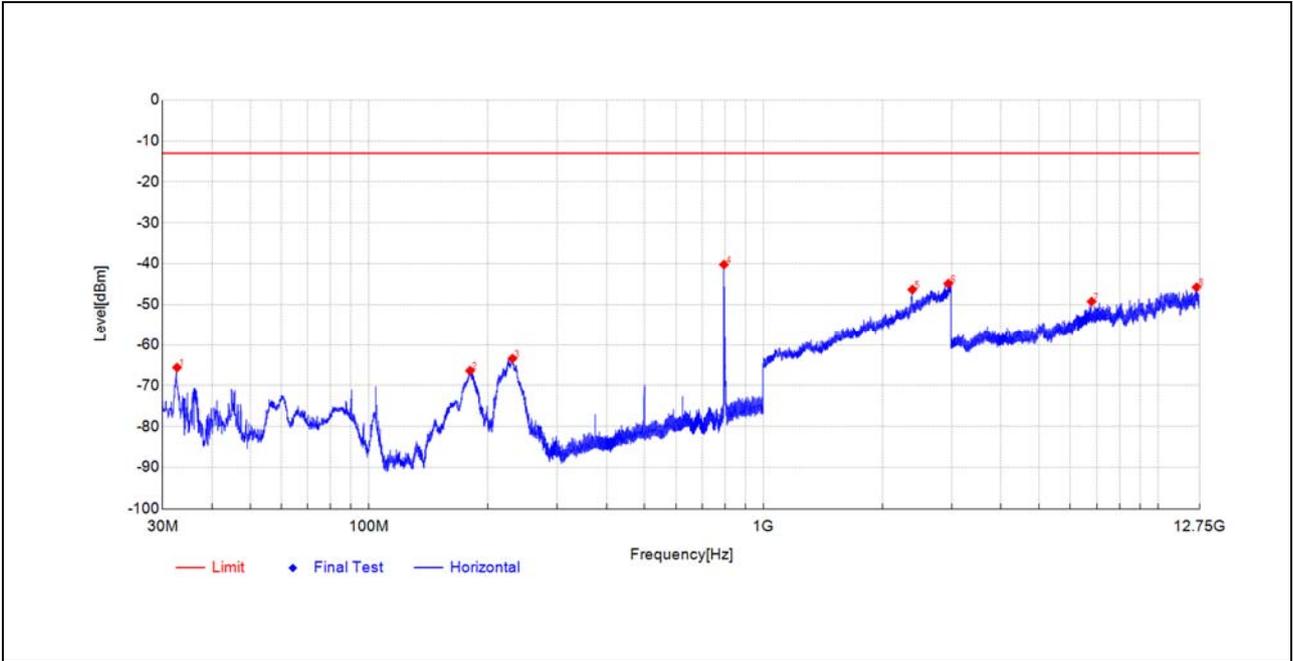
Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
32.6191	-49.85	-64.90	-15.1	-13.0	51.9	Horizontal	PK	PASS
182.8311	-46.40	-66.68	-20.3	-13.0	53.7	Horizontal	PK	PASS
232.1581	-48.69	-63.42	-14.7	-13.0	50.4	Horizontal	PK	PASS
793.7677	-33.57	-40.70	-7.1	-	-	Horizontal	PK	NA
1874.1748	-57.83	-52.20	5.6	-13.0	39.2	Horizontal	PK	PASS
2379.4759	-56.57	-47.00	9.6	-13.0	34.0	Horizontal	PK	PASS
2976.3953	-59.47	-44.61	14.9	-13.0	31.6	Horizontal	PK	PASS
12490.149	-68.56	-45.36	23.2	-13.0	32.4	Horizontal	PK	PASS



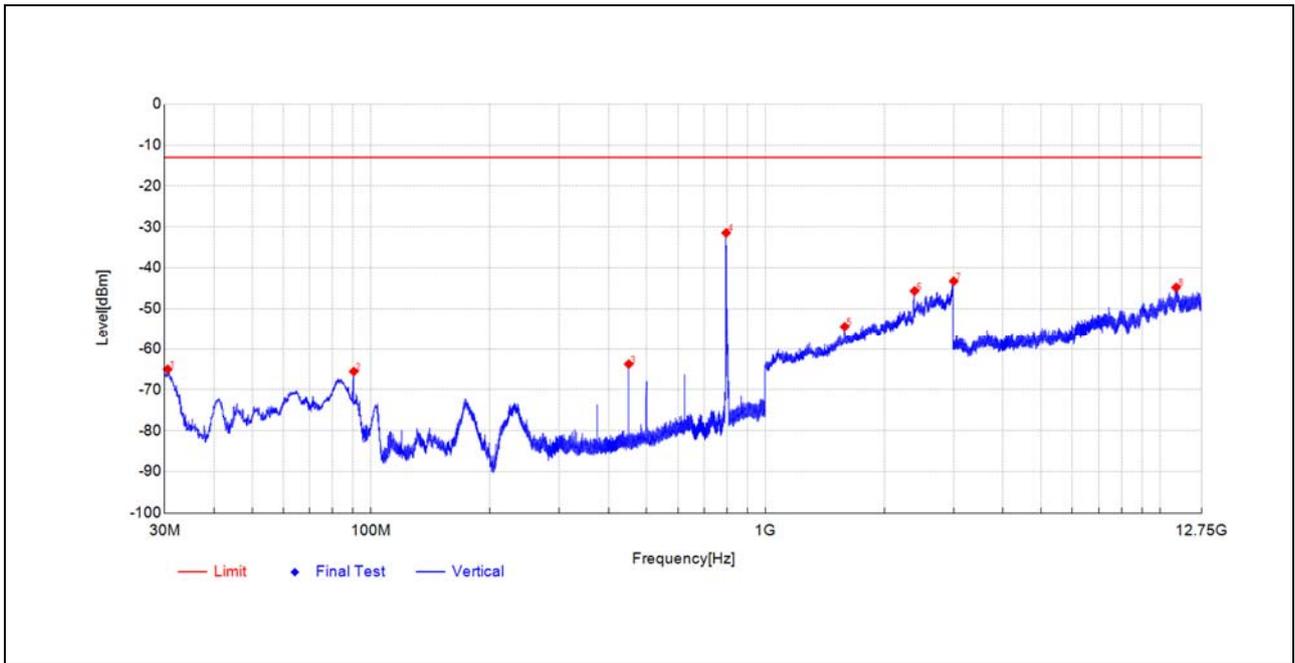
Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
30.7275	-41.23	-66.05	-24.8	-13.0	53.1	Vertical	PK	PASS
90.434	-44.60	-66.67	-22.1	-13.0	53.7	Vertical	PK	PASS
624.9792	-57.35	-65.91	-8.6	-13.0	52.9	Vertical	PK	PASS
794.2042	-24.55	-31.32	-6.8	-	-	Vertical	PK	NA
1583.3167	-56.43	-54.05	2.4	-13.0	41.1	Vertical	PK	PASS
2379.0758	-55.36	-46.85	8.5	-13.0	33.9	Vertical	PK	PASS
3000	-59.75	-42.02	17.7	-13.0	29.0	Vertical	PK	PASS
11113.380	-67.30	-45.08	22.2	-13.0	32.1	Vertical	PK	PASS



Plot for High Channel



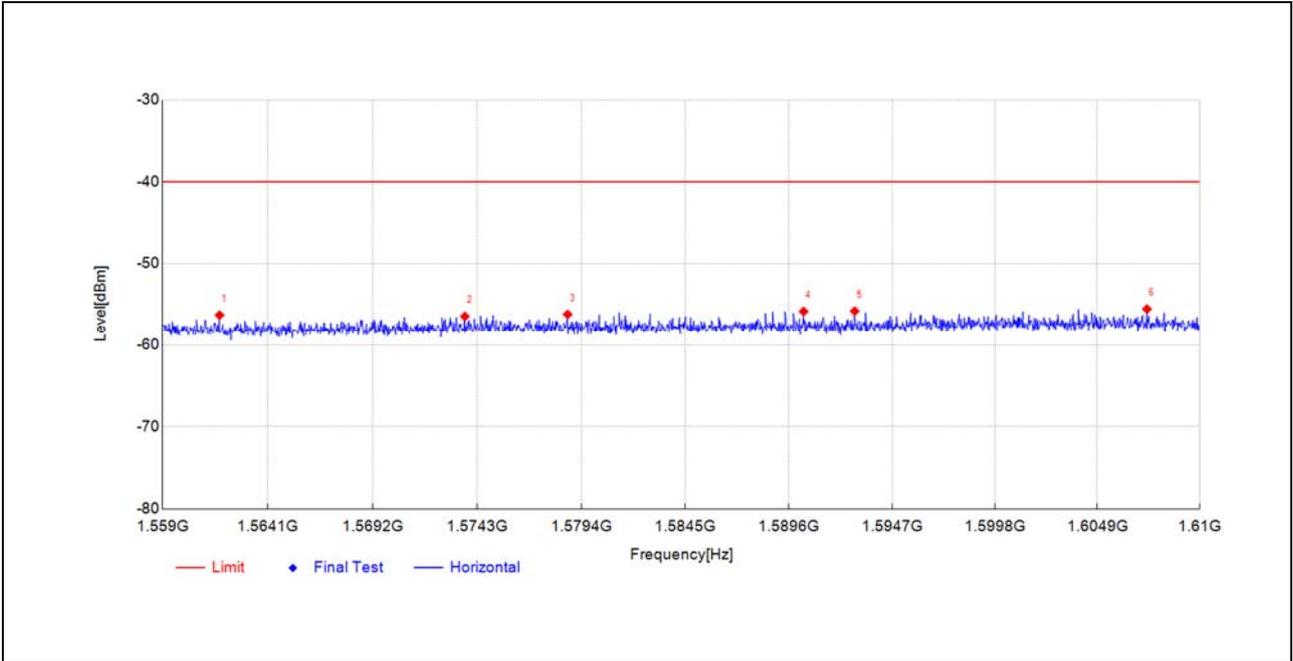
Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
32.6191	-50.54	-65.59	-15.1	-13.0	52.6	Horizontal	PK	PASS
180.406	-45.66	-66.38	-20.7	-13.0	53.4	Horizontal	PK	PASS
231.0911	-48.75	-63.40	-14.7	-13.0	50.4	Horizontal	PK	PASS
794.2042	-33.07	-40.19	-7.1	-	-	Horizontal	PK	NA
2384.6769	-55.86	-46.30	9.6	-13.0	33.3	Horizontal	PK	PASS
2942.7886	-59.17	-44.85	14.3	-13.0	31.9	Horizontal	PK	PASS
6791.9646	-60.98	-49.23	11.8	-13.0	36.2	Horizontal	PK	PASS
12529.639	-69.11	-45.74	23.4	-13.0	32.7	Horizontal	PK	PASS



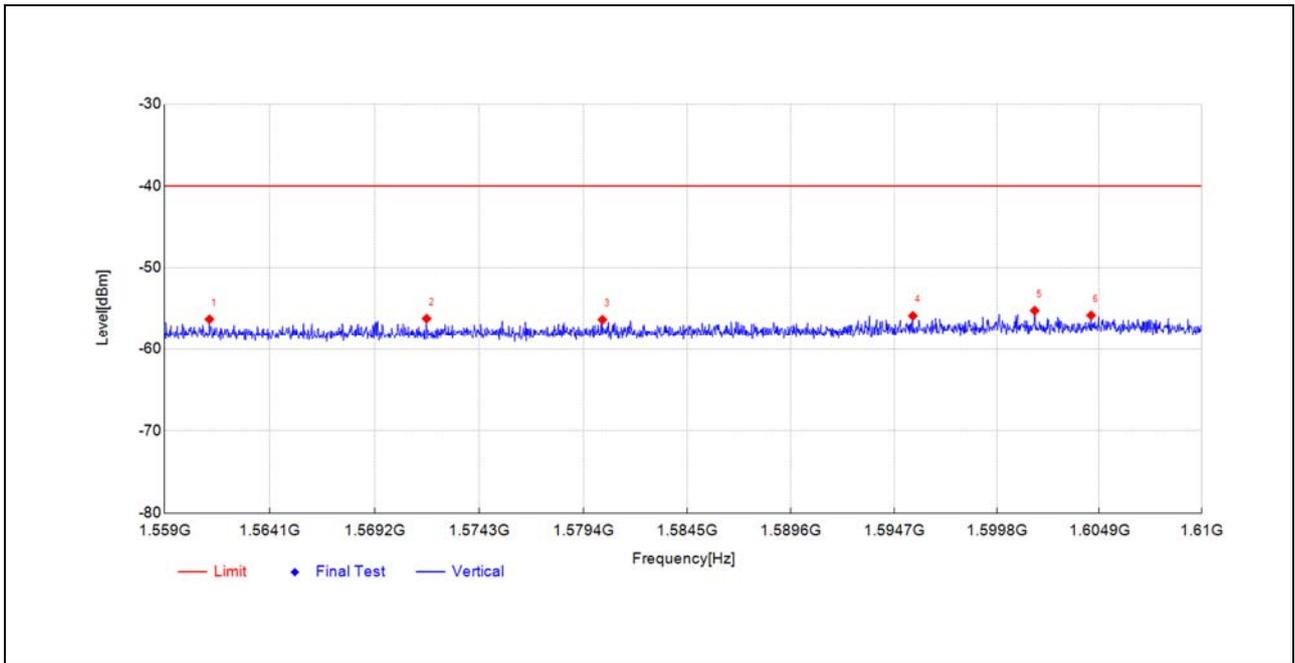
Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
30.5335	-40.11	-65.00	-24.9	-13.0	52.0	Vertical	PK	PASS
90.434	-43.49	-65.56	-22.1	-13.0	52.6	Vertical	PK	PASS
450.225	-50.75	-63.74	-13.0	-13.0	50.7	Vertical	PK	PASS
795.2228	-24.67	-31.42	-6.8	-	-	Vertical	PK	NA
1588.5177	-56.82	-54.37	2.5	-13.0	41.4	Vertical	PK	PASS
2387.0774	-54.52	-45.63	8.9	-13.0	32.6	Vertical	PK	PASS
3000	-60.97	-43.24	17.7	-13.0	30.2	Vertical	PK	PASS
10988.574	-66.60	-44.77	21.8	-13.0	31.8	Vertical	PK	PASS



Plot for 1559MHz-1610MHz



Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1561.7554	-58.77	-56.28	2.5	-40.0	16.3	Horizontal	PK	PASS
1573.6953	-58.96	-56.44	2.5	-40.0	16.4	Horizontal	PK	PASS
1578.7214	-58.72	-56.19	2.5	-40.0	16.2	Horizontal	PK	PASS
1590.3297	-58.35	-55.83	2.5	-40.0	15.8	Horizontal	PK	PASS
1592.8554	-58.31	-55.79	2.5	-40.0	15.8	Horizontal	PK	PASS
1607.3722	-58.10	-55.54	2.6	-40.0	15.5	Horizontal	PK	PASS



Frequency [MHz]	Reading [dBm]	Level [dBm]	Factor [dB]	Limit [dBm]	Margin [dB]	Polarity	Detector	Verdict
1561.1686	-58.91	-56.27	2.6	-40.0	16.3	Vertical	PK	PASS
1571.7309	-58.66	-56.19	2.5	-40.0	16.2	Vertical	PK	PASS
1580.3287	-58.66	-56.33	2.3	-40.0	16.3	Vertical	PK	PASS
1595.6363	-58.40	-55.86	2.5	-40.0	15.9	Vertical	PK	PASS
1601.6828	-57.83	-55.21	2.6	-40.0	15.2	Vertical	PK	PASS
1604.4892	-58.45	-55.79	2.7	-40.0	15.8	Vertical	PK	PASS

Annex A Test Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for test performed on the EUT as specified in CISPR 16-1-2:

Test items	Uncertainty
Output Power	± 2.22 dB
Bandwidth	$\pm 5\%$
Conducted Spurious Emission	± 2.77 dB
Band Edge	± 2.77 dB
Equivalent Isotropic Radiated Power	± 2.22 dB
Radiated Spurious Emissions	± 6 dB

This uncertainty represent an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.



Annex B Testing Laboratory Information

1. Identification of the Responsible Testing Laboratory

Laboratory Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Laboratory Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
Telephone:	+86 755 36698555
Facsimile:	+86 755 36698525

2. Identification of the Responsible Testing Location

Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China

3. Facilities and Accreditations

All measurement facilities used to collect the measurement data are located at FL.3, Building A, FeiYang Science Park, Block 67, BaoAn District, Shenzhen, 518101 P. R. China. The test site is constructed in conformance with the requirements of ANSI C63.10-2013 and CISPR Publication 22; the FCC designation number is CN1192, the test firm registration number is 226174.

**4. Test Equipment Utilized****4.1 List of Software Used**

Description	Manufacturer	Software Version
JS36-RSE	Tonscend	5.0.0

4.2 Radiated Test Equipment

Equipment	Serial No.	Type	Manufacturer	Cal. Date	Due Date
System Simulator	152038	CMW500	R&S	2024.09.11	2025.09.10
Receiver	MY56060145	N9020A	Agilent	2024.05.30	2025.05.29
				2025.05.13	2026.05.12
Test Antenna - Bi-Log	9163-519	VULB 9163	Schwarzbeck	2024.06.22	2025.06.21
Test Antenna - Horn	9120D-963	BBHA 9120D	Schwarzbeck	2024.06.22	2025.06.21
RF Coaxial Cable (DC-18GHz)	MRE001	PE330	Pasternack	2024.05.30	2025.05.29
				2025.05.13	2026.05.12
RF Coaxial Cable (DC-18GHz)	MRE002	CLU18	Pasternack	2024.05.30	2025.05.29
				2025.05.13	2026.05.12
RF Coaxial Cable (DC-18GHz)	MRE003	CLU18	Pasternack	2024.05.30	2025.05.29
				2025.05.13	2026.05.12
RF Coaxial Cable (DC-40GHz)	22290045	QA360-40-KK-0.5	Qualwave	2024.07.03	2025.07.02
RF Coaxial Cable (DC-40GHz)	22290046	QA360-40-KK F-2	Qualwave	2024.07.03	2025.07.02
Pre-amplifier (10MHz-6GHz)	46732	S10M100L380 2	LUCIX CORP.	2024.05.30	2025.05.29
				2025.05.13	2026.05.12
Pre-amplifier (2GHz-18GHz)	61171/61172	S020180L320 3	LUCIX CORP.	2024.05.30	2025.05.29
				2025.05.13	2026.05.12
Pre-amplifier (18GHz-40GHz)	DS77209	DCLNA0118-4 0C-S	Decentest	2024.05.30	2025.05.29
				2025.05.13	2026.05.12
Notch Filter	N/A	WRCGV -LTE B14	Wainwright	N/A	N/A
Anechoic Chamber	N/A	9m*6m*6m	CRT	2025.04.19	2028.04.18
Anechoic Chamber	N/A	9m*6m*6m	CRT	2022.11.30	2025.11.29

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