



TEST REPORT

APPLICANT : KonnectONE, LLC

PRODUCT NAME : Tablet

MODEL NAME : MT-T8B22

BRAND NAME : moxee

FCC ID : 2APQU-MT-T8B22

STANDARD(S) : 47 CFR Part 2
47 CFR Part 22 Subpart H
47 CFR Part 24 Subpart E
47 CFR Part 27 Subpart H&L&M&N

RECEIPT DATE : 2022-12-06

TEST DATE : 2022-12-06

ISSUE DATE : 2022-12-15

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Shen Junsheng (Supervisor)

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Change History		
Version	Date	Reason for change
1.0	2022-12-15	First edition





1. Technical Information

Note: Provide by applicant.

1.1. Applicant and Manufacturer Information

Applicant:	KonnectONE, LLC
Applicant Address:	40 Lake Bellevue Drive, Suite 350, Bellevue, WA 98005
Manufacturer:	KonnectONE, LLC
Manufacturer Address:	40 Lake Bellevue Drive, Suite 350, Bellevue, WA 98005

1.2. Equipment Under Test (EUT) Description

Product Name:	Tablet	
EUT IMEI:	357612471873761; 357612471870528; 357612471871161	
Hardware Version:	T8002_V1.1	
Software Version:	MT8BV1.0.0B015	
Modulation Type:	GSM/GPRS Mode with GMSK Modulation EDGE Mode with 8PSK Modulation WCDMA Mode with QPSK Modulation HSDPA Mode with QPSK Modulation HSUPA Mode with QPSK Modulation HSPA+ Mode with 16QAM Modulation DC-HSDPA with QPSK Modulation QPSK, 16QAM, 64QAM	
Operating Frequency Range:	GSM 850MHz	Tx: 824MHz-849MHz
		Rx: 869MHz-894MHz
	GSM 1900MHz	Tx: 1850MHz-1910MHz
		Rx: 1930MHz-1990MHz
	WCDMA Band V	Tx: 824MHz-849MHz
		Rx: 869MHz-894MHz
	WCDMA Band IV	Tx: 1710MHz-1755MHz
		Rx: 2110MHz-2155MHz
	WCDMA Band II	Tx: 1850MHz-1910MHz
		Rx: 1930MHz-1990MHz





Operation Band:	Band 2 / 4 / 5 / 12 / 25 / 26 / 41 / 66 / 71	
Frequency Range:	LTE Band 2	Tx: 1850MHz–1910MHz
		Rx: 1930MHz–1990MHz
	LTE Band 4	Tx: 1710MHz–1755MHz
		Rx: 2110MHz–2155MHz
	LTE Band 5	Tx: 824MHz–849MHz
		Rx: 869MHz–894MHz
	LTE Band 12	Tx: 699MHz–716MHz
		Rx: 729MHz–746MHz
	LTE Band 25	Tx: 1850MHz–1915MHz
		Rx: 1930MHz–1995MHz
	LTE Band 26	Tx: 824MHz–849MHz
		Rx: 869MHz–894MHz
	LTE Band 41	Tx: 2496MHz–2690MHz
		Tx: 2496MHz–2690MHz
LTE Band 66	Tx: 1710MHz–1780MHz	
	Rx: 2110MHz–2200MHz	
LTE Band 71	Tx: 663MHz–698MHz	
	Rx: 617MHz–652MHz	
Channel Bandwidth:	LTE Band 2	1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
	LTE Band 4	1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
	LTE Band 5	1.4MHz, 3MHz, 5MHz, 10MHz
	LTE Band 12	1.4MHz, 3 MHz, 5 MHz, 10MHz
	LTE Band 25	1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
	LTE Band 26	1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz
	LTE Band 41	5 MHz, 10MHz, 15MHz, 20MHz
	LTE Band 66	1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
	LTE Band 71	5MHz, 10MHz, 15MHz, 20MHz





Note 1: This is a variant report to request a Class II Permissive change for the original report (Report No.: SZ22020126W05/W06, FCC ID: 2ALZM-T8002; Change ID Report No.: SZ22050278W05/W06, FCC ID: 2APQU-MT-T8B22). Based on the similarity between before, only changed the screen supplier model consistency, changed the antenna switch, changed the vibrator wiring, changed the horn height, changed the battery FPC length, changed software and hardware version number. Software version change does not affect RF performance. Due to the above changes, we have evaluated and retested worst case of conducted output power and radiated spurious emissions, the test results are better than before, all other test items are no need to be retested. We only recorded the worse case of conducted output power and radiated spurious emissions in this report.

Note 2: For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.



1.3. Test Standards and Results

The objective of the report is to perform testing according to 47 CFR Part 2, Part 22, Part 24 and Part 27 for the EUT FCC ID Certification:

No.	Identity	Document Title
1	47 CFR Part 2 (10-1-12 Edition)	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	47 CFR Part 22 (10-1-12 Edition)	Public Mobile Services
3	47 CFR Part 24 (10-1-12 Edition)	Personal Communications Services
4	47 CFR Part 27 (10-1-12 Edition)	Miscellaneous Wireless Communications Services

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

No.	Section	Description	Test Date	Test Engineer	Result	Method determination/ Remark
1	2.1046	Conducted RF Output Power	Dec. 06, 2022	Chen Hao	PASS	No deviation
2	2.1053, 22.917(a), 24.238(a), 27.53(h)	Radiated Out of Band Emissions	Dec. 06, 2022	Yang Lian	PASS	No deviation

Note 1: Additions to, deviation, or exclusions from the method shall be judged in the "method determination" column of add, deviate or exclude from the specific method shall be explained in the "Remark" of the above table.

Note 2: When the test result is a critical value, we will use the measurement uncertainty give the judgment result based on the 95% confidence intervals.

1.4. 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 22H, 24E&27H&L&M Requirements

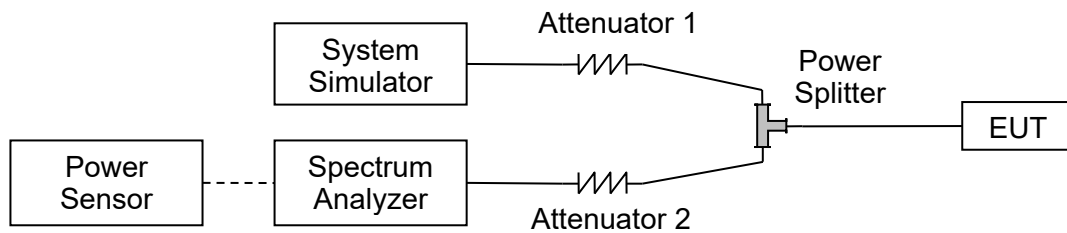
2.1. Conducted RF Output Power

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).

2.1.2. Test Description

Test Setup:



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 i.e. Power Control Level (PCL) = 5 and Power Class = 4. A call is established between the EUT and the SS.



**2.1.3. Test Results**

GSM850	Average Power (dBm)		
TX Channel	128	189	251
Frequency (MHz)	824.2	836.4	848.8
GPRS 2 Tx slots	30.35	30.38	30.34

GSM1900	Average Power (dBm)		
TX Channel	512	661	810
Frequency (MHz)	1850.2	1880	1909.8
GPRS 3 Tx slots	24.61	24.66	24.59

WCDMA Band V	Average Power (dBm)		
TX Channel	4132	4182	4233
Frequency (MHz)	826.4	836.4	846.6
RMC 12.2Kbps	22.43	22.55	22.40

WCDMA Band IV	Average Power (dBm)		
TX Channel	1312	1413	1513
Frequency (MHz)	1712.4	1732.6	1752.6
RMC 12.2Kbps	22.94	22.99	22.93

WCDMA Band II	Average Power (dBm)		
TX Channel	9262	9400	9538
Frequency (MHz)	1852.4	1880.0	1907.6
RMC 12.2Kbps	22.55	22.63	22.57





LTE Band 2						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				18700	18900	19100
Frequency (MHz)				1860	1880	1900
20	QPSK	1	0	23.15	23.18	23.11

LTE Band 4						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20050	20175	20300
Frequency (MHz)				1720	1732.5	1745
20	QPSK	1	0	23.10	23.27	23.08

LTE Band 5						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20450	20525	20600
Frequency (MHz)				829	836.5	844
10	QPSK	1	0	23.02	23.10	22.94

LTE Band 12						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23060	23095	23130
Frequency (MHz)				704	707.5	711
10	QPSK	1	0	23.43	23.54	23.36





LTE Band 25						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				26140	26365	26590
Frequency (MHz)				1860	1882.5	1905
20	QPSK	1	0	22.77	22.89	22.74

LTE Band 26						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				26765	26865	26965
Frequency (MHz)				821.5	831.5	841.5
15	QPSK	1	0	22.42	22.61	22.55

LTE Band 41 (Class 2)						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				39750	40620	41490
Frequency (MHz)				2506	2593	2680
20	QPSK	1	0	25.53	25.64	25.55

LTE Band 41 (Class 3)						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				39750	40620	41490
Frequency (MHz)				2506	2593	2680
20	QPSK	1	0	22.97	23.12	22.88





LTE Band 66						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				132072	132322	132572
Frequency (MHz)				1720	1745	1770
20	QPSK	1	0	22.88	22.96	22.83

LTE Band 71						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				133222	133322	133372
Frequency (MHz)				673	683	688
20	QPSK	1	0	22.66	22.74	22.61

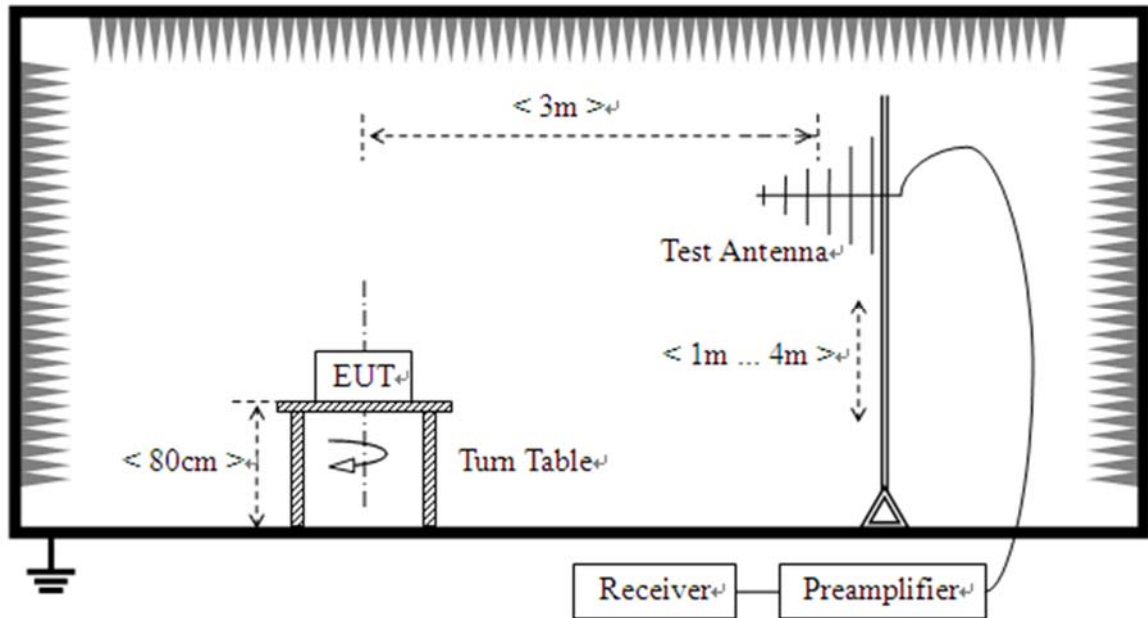


2.2. Radiated Out of Band Emissions

2.2.1. Requirement

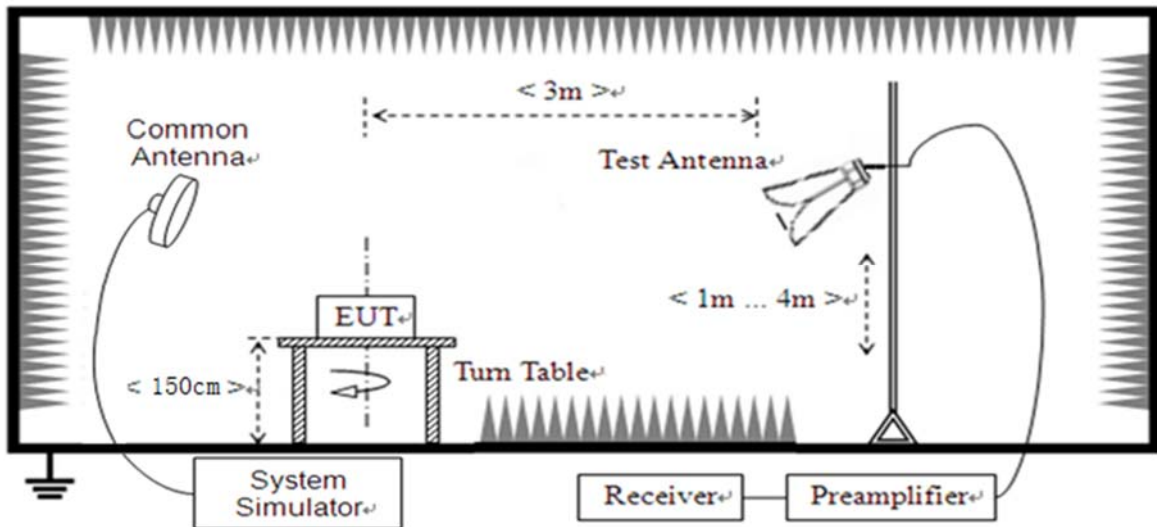
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43+10*\log(P)$ dB. This calculated to be -13dBm. The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency.

2.2.2. Test Description



(For the test frequency from 30MHz to 1GHz)





(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

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz 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 test mode and condition mentioned were considered and evaluated respectively by performing full test, only the worst data were recorded and reported.

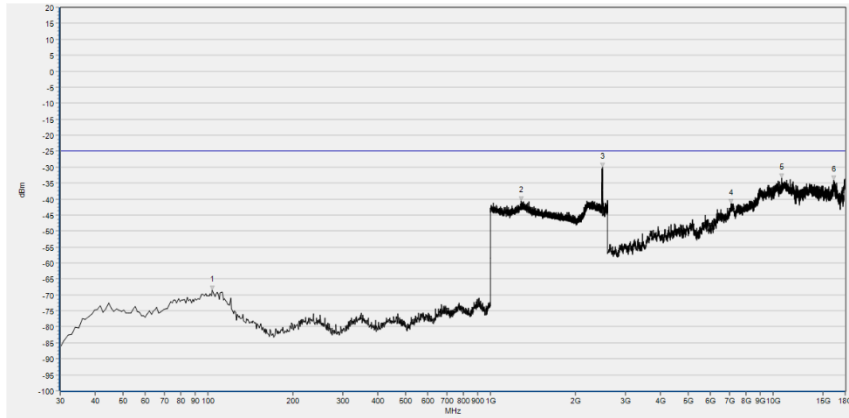
Note3: All spurious emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

Note 4: N/A means the frequency is the basic frequency or the base station frequency, they are no need to verdict.

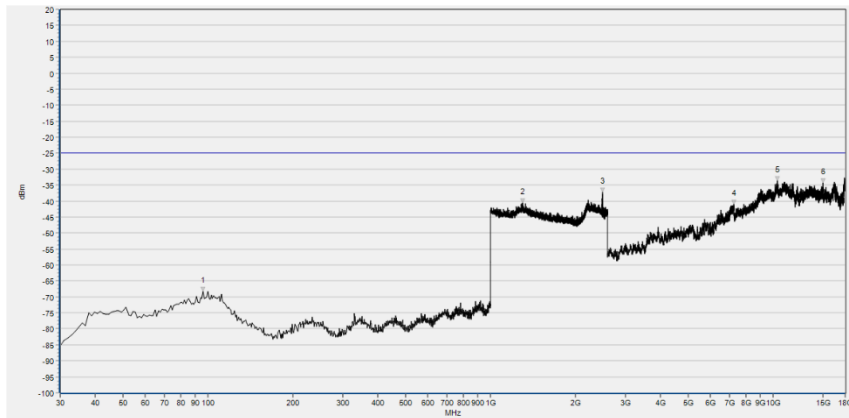
Note 5: The amplitude of emissions (18GHz to 10th harmonics) which are attenuated more than 20 dB below the limit are not be reported.



LTE Band 41, 20MHz BW, Low Channel, QPSK



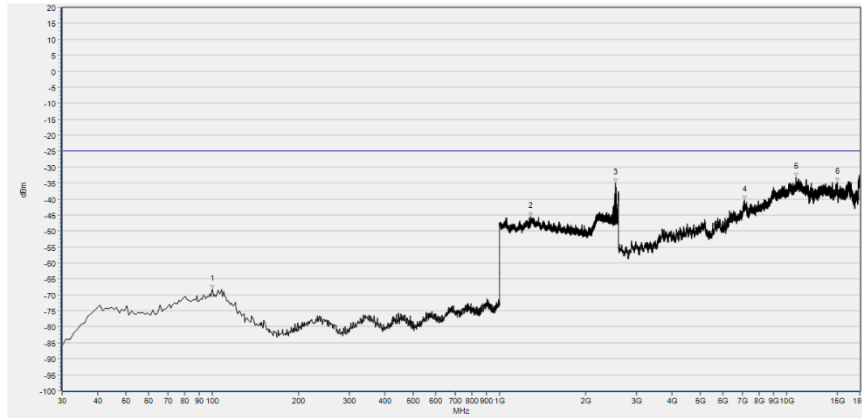
No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	103.794	-68.56	-25.00	Horizontal	PASS
2	1283.294	-40.60	-25.00	Horizontal	PASS
3	2497.032	-30.03	-25.00	Horizontal	N/A
4	7097.700	-41.42	-25.00	Horizontal	PASS
5	10726.665	-33.50	-25.00	Horizontal	PASS
6	16394.999	-34.18	-25.00	Horizontal	PASS



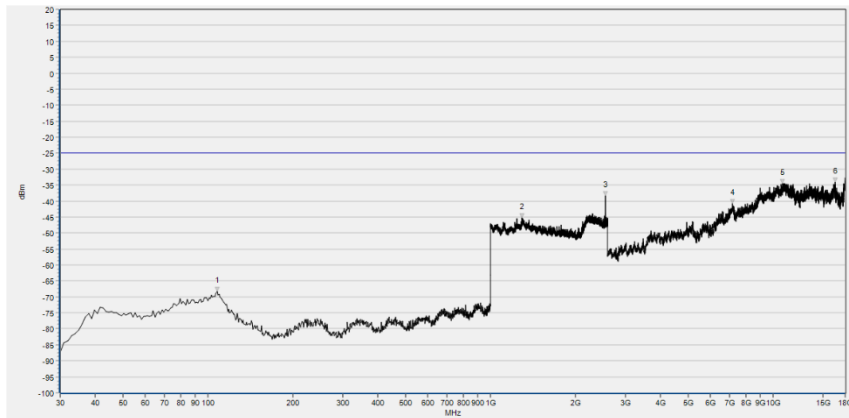
No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	96.026	-68.32	-25.00	Vertical	PASS
2	1297.166	-40.61	-25.00	Vertical	PASS
3	2497.032	-37.29	-25.00	Vertical	N/A
4	7264.053	-41.04	-25.00	Vertical	PASS
5	10356.991	-33.73	-25.00	Vertical	PASS
6	14999.480	-34.19	-25.00	Vertical	PASS



LTE Band 41, 20MHz BW, Mid Channel, QPSK



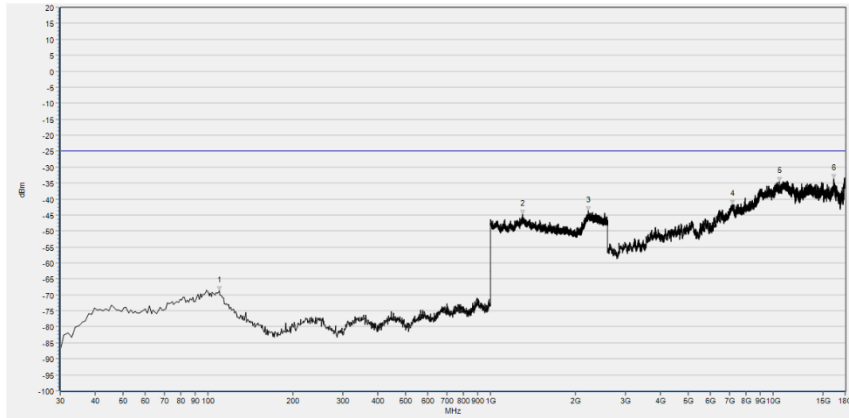
No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	99.910	-68.16	-25.00	Horizontal	PASS
2	1285.962	-45.51	-25.00	Horizontal	PASS
3	2541.314	-34.92	-25.00	Horizontal	N/A
4	7143.909	-40.39	-25.00	Horizontal	PASS
5	10794.439	-33.15	-25.00	Horizontal	PASS
6	14987.157	-34.75	-25.00	Horizontal	PASS



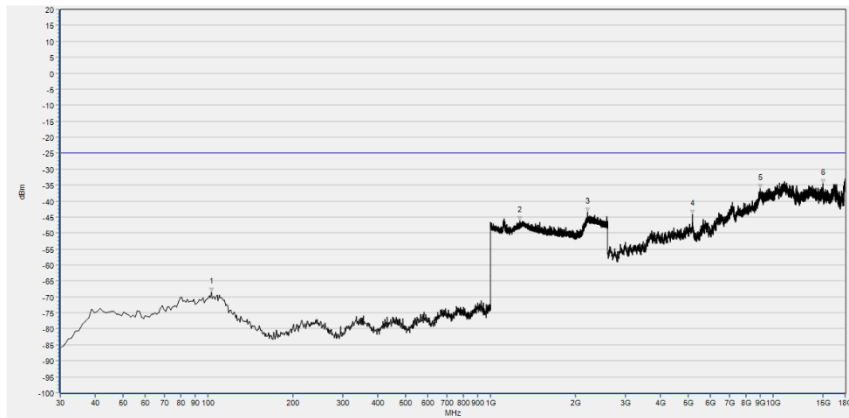
No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	107.678	-68.23	-25.00	Vertical	PASS
2	1294.498	-45.31	-25.00	Vertical	PASS
3	2551.450	-38.43	-25.00	Vertical	N/A
4	7165.473	-40.70	-25.00	Vertical	PASS
5	10794.439	-34.46	-25.00	Vertical	PASS
6	16561.352	-33.98	-25.00	Vertical	PASS



LTE Band 41, 20MHz BW, High Channel, QPSK



No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	109.620	-68.69	-25.00	Horizontal	PASS
2	1297.699	-44.91	-25.00	Horizontal	PASS
3	2217.472	-43.76	-25.00	Horizontal	PASS
4	7193.199	-41.77	-25.00	Horizontal	PASS
5	10514.103	-34.55	-25.00	Horizontal	PASS
6	16370.354	-33.63	-25.00	Horizontal	PASS



No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	102.823	-68.44	-25.00	Vertical	PASS
2	1268.890	-46.20	-25.00	Vertical	PASS
3	2210.003	-43.56	-25.00	Vertical	PASS
4	5196.959	-44.10	-25.00	Vertical	PASS
5	8998.440	-36.10	-25.00	Vertical	PASS
6	15024.125	-34.63	-25.00	Vertical	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
Radiated Emission	$\pm 2.95\text{dB}$

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 Equipments Utilized

4.1 List of Software Used

Description	Manufacturer	Software Version
MORLAB EMCR	MORLAB	V1.2



**4.3 Radiated Test Equipments**

Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Due Date
System Simulator	152038	CMW500	R&S	2022.10.11	2023.10.10
System Simulator	6200995016	MT8820C	Anritsu	2022.03.01	2023.02.28
Receiver	MY54130016	N9038A	Agilent	2022.07.07	2023.07.06
Test Antenna - Bi-Log	9163-519	VULB 9163	Schwarzbeck	2022.02.25	2025.02.24
Test Antenna - Horn	9170C-531	BBHA9170	Schwarzbeck	2022.05.23	2025.05.24
Test Antenna - Horn	01774	BBHA 9120D	Schwarzbeck	2022.07.13	2025.07.12
Coaxial cable (N male) (9KHz-30MHz)	CB04	EMC04	Morlab	N/A	N/A
Coaxial cable (N male) (30MHz-26GHz)	CB02	EMC02	Morlab	N/A	N/A
Coaxial cable (N male) (30MHz-26GHz)	CB03	EMC03	Morlab	N/A	N/A
Coaxial cable (N male) (30MHz-40GHz)	CB05	EMC05	Morlab	N/A	N/A
1-18GHz pre-Amplifier	61171/61172	S020180L3203	Tonscend	2022.07.08	2023.07.07
18-26.5GHz pre-Amplifier	46732	S10M100L3802	Tonscend	2022.07.08	2023.07.07
26-40GHz pre-Amplifier	56774	S40M400L4002	Tonscend	2022.07.08	2023.07.07
Notch Filter	N/A	WRCGV -LTE B2	Wainwright	2022.07.08	2023.07.07
Notch Filter	N/A	WRCGV -LTE B4	Wainwright	2022.07.08	2023.07.07
Notch Filter	N/A	WRCGV -LTE B5	Wainwright	2022.07.08	2023.07.07
Notch Filter	N/A	WRCGV -LTE B7	Wainwright	2022.07.08	2023.07.07





Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Due Date
Notch Filter	N/A	WRCGV -LTE B13	Wainwright	2022.07.08	2023.07.07
Notch Filter	N/A	WRCGV -LTE 38	Wainwright	2022.07.08	2023.07.07
Notch Filter	N/A	WRCGV -LTE B41	Wainwright	2022.07.08	2023.07.07
Notch Filter	N/A	WRCGV -LTE B66	Wainwright	2022.07.08	2023.07.07
Anechoic Chamber	N/A	9m*6m*6m	CRT	2020.01.06	2023.01.05

_____ END OF REPORT _____

