TEST REPORT

Product Name	:	Petloc8
Brand Name	:	Myloc8, Petloc8
Model	:	MYLC001
Series Model	:	N/A
FCC ID	:	2BLZX-MYLC001
Applicant	:	**Myloc8 Inc**
Address	:	680 Central Ave, suite 108, Cedarhurst, New York 11516, USA
Manufacturer	:	**Myloc8 Inc**
Address	:	680 Central Ave, suite 108, Cedarhurst, New York 11516, USA
Standard(s)	:	FCC CFR Title 47 Part 2, Part 22H, Part 24E, Part 27 and Part 90 ANSI C63.26:2015 KDB 971168 D01
Date of Receipt	:	Sep. 11, 2024
Date of Test	:	Sep. 12, 2024 ~ Oct. 14, 2024
Issued Date	:	Oct. 15, 2024

Issued By: **Guangdong Asia Hongke Test Technology Limited**
B1/F, Building 11, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street,
Bao'an District, Shenzhen, Guangdong, China
Tel.: +86 0755-230967639 Fax.: +86 0755-230967639

Reviewed by: Leon Yi
Leon.yi

Approved by: Sean She
Sean She

Note: This device has been tested and found to comply with the standard(s) listed, this test report merely corresponds to the test sample. It is not permitted to copy extracts of these test result without the written permission of the test laboratory. This report shall not be reproduced except in full, without the written approval of Guangdong Asia Hongke Test Technology Limited. If there is a need to alter or revise this document, the right belongs to Guangdong Asia Hongke Test Technology Limited, and it should give a prior written notice of the revision document. This test report must not be used by the client to claim product endorsement.

Report Revise Record

Report Version	Issued Date	Notes
M1	Oct. 15, 2024	Initial Release

Contents

1 TEST SUMMARY 4

1.1 TEST STANDARDS 4
1.2 TEST SUMMARY 4
1.3 TEST FACILITY 7
1.4 MEASUREMENT UNCERTAINTY 7

2 GENGENERAL INFORMATION 8

2.1 ENVIRONMENTAL CONDITIONS 8
2.2 GENERAL DESCRIPTION OF EUT 8
2.3 DESCRIPTION OF TEST MODES AND TEST FREQUENCY 9
2.4 TEST SETUP AND CONDITIONS 12
2.4.1 Conducted Measurement Test Setup 12
2.4.2 Radiated Measurement Test Setup 12
2.5 EQUIPMENT LIST FOR THE TEST 13

3 TEST CONDITIONS AND RESULTS 14

3.1 OUTPUT POWER 14
3.2 PEAK-TO-AVERAGE RATIO 15
3.3 OCCUPIED BANDWIDTH 16
3.4 BAND EDGE COMPLIANCE 17
3.5 SPURIOUS EMISSION 18
3.6 FREQUENCY STABILITY UNDER TEMPERATURE & VOLTAGE VARIATIONS 31

4 TEST SETUP PHOTOGRAPHS OF EUT 32

5 EXTERNAL PHOTOGRAPHS OF EUT 33

6 INTERNAL PHOTOGRAPHS OF EUT 33

1 TEST SUMMARY

1.1 Test Standards

The tests were performed according to following standards:

FCC Part 22: PRIVATE LAND MOBILE RADIO SERVICES.

FCC Part 24: PUBLIC MOBILE SERVICES

Part 27: MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES

FCC Part 90 : PRIVATE LAND MOBILE RADIO SERVICES

FCC Part 2: FREQUENCY ALLOCA-TIONS AND RADIO TREATY MAT-TERS; GENERAL RULES AND REG-ULATIONS

ANSI C63.26:2015: American National Standard of procedures for compliance testing of transmitters used in licensed radio services.

ANSI C63.10-2013 Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz

KDB971168 D01:v03r01 MEASUREMENT GUIDANCE FOR CERTIFICATION OF LICENSED DIGITAL TRANSMITTERS

1.2 Test Summary

Band2/ Band25

Test Item	FCC Rule No.	Requirements	Verdict (Note1)
Effective (Isotropic) Radiated Power Output Data	Part 2.1046, Part 24.232	EIRP ≤ 2 W	Pass
Peak-Average Ratio	Part 2.1046, Part 24.232	Limit≤13 dB	Pass
Bandwidth	Part 2.1049 Part 24.238	OBW: No limit. EBW: No limit.	Pass
Band Edges Compliance	Part 2.1051, Part 24.238	≤ -13 dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the frequency block.	Pass
Spurious Emission at Antenna Terminals	Part 2.1051, Part 24.238	≤ -13 dBm/1 MHz, from 9 kHz to 10th harmonics but outside authorized operating frequency ranges.	Pass
Field Strength of Spurious Radiation	Part 2.1053, Part 24.238	≤ -13 dBm/1 MHz.	Pass
Frequency Stability	Part 2.1055, Part 24.235	≤ ± 2.5 ppm.	Pass
Note1: For the verdict, the “N/A” denotes “not applicable”, the “N/T” denotes “not tested”.			

Band4

Test Item	FCC Rule No.	Requirements	Verdict (Note1)
Effective(Isotropic) Radiated Power Output Data	Part 2.1046, 27.50(d)	EIRP ≤ 1W	Pass
Peak-Average Ratio	Part 2.1046, 27.50(d)	Limit≤13 dB	Pass
Bandwidth	Part 2.1049	OBW:No limit. EBW:No limit.	Pass
Band Edges Compliance	Part 2.1051, 27.53(h)	≤ -13 dBm/1%*EBW,in1MHz bands immediately outside and adjacent to the frequency block.	Pass
Spurious Emission at Antenna Terminals	Part 2.1051, 27.53(h)	≤ -13 dBm/1MHz,from9 kHz to 10th harmonics but out sideathorized operating frequency ranges.	Pass
Field Strength of Spurious Radiation	Part 2.1053, 27.53(h)	≤ -13 dBm/1MHz.	Pass
Frequency Stability	Part 2.1055, 27.54	≤ ±2.5ppm.	Pass
Note1: For the verdict, the “N/A” denotes “not applicable”, the “N/T” denotes “not tested”.			

Band5/Band26 Higher band (824MHz-849)

Test Item	FCC Rule No.	Requirements	Verdict (Note1)
Effective(Isotropic) Radiated Power Output Data	Part 2.1046, 22.913(a)	ERP ≤ 3W	Pass
Peak-Average Ratio	--	Limit≤13 dB	Pass
Bandwidth	Part 2.1049	OBW:No limit. EBW:No limit.	Pass
Band Edges Compliance	Part 2.1051, 22.917(a)	≤ -13 dBm/1%*EBW,in1MHz bands immediately outside and adjacent to the frequency block.	Pass
Spurious Emission at Antenna Terminals	Part 2.1051, 22.917(a)	≤ -13 dBm/1MHz,from9 kHz to 10th harmonics but out sideathorized operating frequency ranges.	Pass
Field Strength of Spurious Radiation	Part 2.1051, 22.917(a)	≤ -13 dBm/1MHz.	Pass
Frequency Stability	Part 2.1055, 22.355	≤ ±2.5ppm.	Pass
Note1: For the verdict, the “N/A” denotes “not applicable”, the “N/T” denotes “not tested”.			

Band12/Band 17

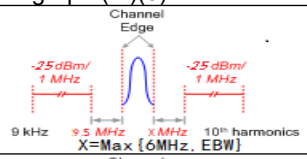
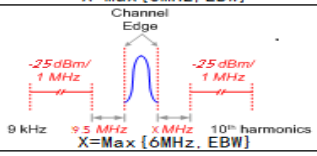
Test Item	FCC Rule No.	Requirements	Verdict (Note1)
Effective (Isotropic) Radiated Power Output Data	Part 27.50(c)	FCC: ERP ≤ 3 W.	Pass
Peak-Average Ratio	Part 2.1046, Part 27.50(c)	Limit≤13 dB	Pass
Bandwidth	Part 2.1049	OBW: No limit. EBW: No limit.	Pass
Band Edges Compliance	Part 2.1051, Part 27.53(g) ,	≤ -13 dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the frequency block.	Pass
Spurious Emission at Antenna Terminals	Part 2.1051, 27.53(g)	FCC: ≤ -13 dBm/100 kHz, from 9 kHz to 10th harmonics but outside authorized operating frequency ranges.	Pass
Field Strength of Spurious Radiation	Part 2.1053, 27.53(g)	FCC: ≤ -13 dBm/100 kHz.	Pass
Frequency Stability	Part 2.1055 27.54	≤ ±2.5ppm.	Pass
Note1: For the verdict, the “N/A” denotes “not applicable”, the “N/T” denotes “not tested”.			

Band26 Lower band (814MHz-824MHz)

Test Item	FCC Rule No.	Requirements	Verdict (Note1)
Effective (Isotropic) Radiated Power Output Data	90.635(b)	FCC: ERP ≤100Watt	Pass
Peak-Average Ratio	Part 2.1046, 22.913(d)	Limit≤13 dB	Pass
Bandwidth	Part 2.1049	OBW: No limit. EBW: No limit.	Pass
Band Edges Compliance	Part 2.1051, Part 90.691	For any frequency removed from the EA licensee’s frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 116Log10(f/6.1) decibels or 50 + 10 Log10(P) decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz. For any frequency removed from the EA licensee’s frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 43 + 10Log10(P) decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.	Pass

Spurious Emission at Antenna Terminals	Part 2.1051, Part 90.691	< 43+10log10(P[Watts])	Pass
Field Strength of Spurious Radiation	Part 2.1053, Part 90.691	< 43+10log10(P[Watts])	Pass
Frequency Stability	Part 2.1055 Part 90.213	≤ ±2.5ppm	Pass
Note1: For the verdict, the “N/A” denotes “not applicable”, the “N/T” denotes “not tested”.			

Band7/ Band 41

Test Item	FCC Rule No.	Requirements	Verdict (Note1)
Effective (Isotropic) Radiated Power Output Data	Part 2.1046 27.50(h)	EIRP ≤ 2 W	Pass
Peak-Average Ratio	Part 27.50(a)	Limit≤13 dB	Pass
Bandwidth	Part 2.1049	OBW: No limit. EBW: No limit.	Pass
Band Edges Compliance	Part 2.1051, 27.53(m4)	For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section.	Pass
Spurious Emission at Antenna Terminals	Part 2.1051, 27.53(m)		Pass
Field Strength of Spurious Radiation	Part 2.1053, 27.53(m)		Pass
Frequency Stability	Part 2.1055, 27.54	Within authorized bands of operation/frequency block.	Pass
Note1: For the verdict, the “N/A” denotes “not applicable”, the “N/T” denotes “not tested”.			

1.3 Test Facility

Test Laboratory:
Guangdong Asia Hongke Test Technology Limited
B1/F, Building 11, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

The test facility is recognized, certified or accredited by the following organizations:
FCC-Registration No.: 251906 Designation Number: CN1376
Guangdong Asia Hongke Test Technology Limited has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

IC —Registration No.: 31737 CAB identifier: CN0165
The 3m Semi-anechoic chamber of Guangdong Asia Hongke Test Technology Limited has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 31737

A2LA-Lab Cert. No.: 7133.01
Guangdong Asia Hongke Test Technology Limited has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

1.4 Measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report according to CISPR 16 - 4 “Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements” and is documented in the Guangdong Asia Hongke Test Technology Limited’s quality system according to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.
Hereafter the best measurement capability for Asia Hongke laboratory is reported:

Test	Measurement Uncertainty	Notes
Power Line Conducted Emission	9KHz~30MHz ±1.20 dB	(1)
Radiated Emission	9KHz~30MHz ±3.10dB	(1)
Radiated Emission	30MHz ~1GHz ±3.75dB	(1)
Radiated Emission	1GHz~18GHz ±3.88 dB	(1)
Radiated Emission	18GHz-40GHz ±3.88dB	(1)
RF power, conducted	30MHz~6GHz ±0.16dB	(1)
RF power density, conducted	±0.24dB	(1)
Spurious emissions, conducted	±0.21dB	(1)
Temperature	±1℃	(1)
Humidity	±3%	(1)
DC and low frequency voltages	±1.5%	(1)
Time	±2%	(1)
Duty cycle	±2%	(1)

The report uncertainty of measurement y ± U, where expended uncertainty U is based on a standard uncertainty Multiplied by a coverage factor of k=2 , providing a level of confidence of approximately 95%

2 GENGENERAL INFORMATION

2.1 Environmental conditions

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

Normal Temperature:	25°C
Relative Humidity:	55 %
Air Pressure:	101 kPa

2.2 General Description of EUT

Product Name:	Petloc8
Model/Type reference:	MYLC001
Power Supply:	DC 3.8V from battery
Hardware Version:	VPET PCB V1.1
Software Version:	N/A
Sample(s) Status:	AiTSZ-240911024-1(Normal sample) AiTSZ-240911024-2(Engineer sample)
LTE:	
Operation Band:	FDD-LTE: Band 2/4/5//7/12/17/25/26a/26b TDD-LTE: Band 41
Support Bandwidth:	Band 2: ☑1.4MHz,☑3MHz,☑5MHz,☑10MHz,☑15MHz,☑20MHz Band 4: ☑1.4MHz,☑3MHz,☑5MHz,☑10MHz,☑15MHz,☑20MHz Band 5: ☑1.4MHz,☑3MHz,☑5MHz,☑10MHz Band 7: ☑5MHz,☑10MHz,☑15MHz,☑20MHz Band 12: ☑1.4MHz,☑3MHz,☑5MHz,☑10MHz Band 17: ☑5MHz,☑10MHz Band 25: ☑1.4MHz,☑3MHz,☑5MHz,☑10MHz,☑15MHz,☑20MHz Band 26a: ☑1.4MHz,☑3MHz,☑5MHz,☑10MHz Band 26b: ☑1.4MHz,☑3MHz,☑5MHz,☑10MHz,☑15MHz Band 41: ☑5MHz,☑10MHz,☑15MHz,☑20MHz
Frequency Range:	Band 2:uplink 1850MHz to 1910MHz; downlink 1930MHz to 1990MHz Band 4:uplink 1710MHz to 1755MHz; downlink 2110MHz to 2155MHz Band 5:uplink 824MHz to 849MHz; downlink 869MHz to 894MHz Band 7:uplink 2500MHz to 2570MHz; downlink 2620MHz to 2690MHz Band 12:uplink 699MHz to 716MHz; downlink 729MHz to 746MHz Band 17:uplink 704MHz to 716MHz;downlink 734MHz to 746MHz Band 25:uplink 1850MHz to 1915MHz;downlink 1930MHz to 1995MHz Band 26a:uplink 814MHz to 824MHz; downlink 859MHz to 869MHz Band 26b:uplink 824MHz to 849MHz; downlink 869MHz to 894MHz Band 41:uplink 2496MHz to 2690MHz;downlink 2496MHz to 2690MHz
Power Class:	Power Class 3
Modulation Type:	QPSK, 16QAM
Antenna type:	LDS Antenna

Antenna gain:	LTE Band 2: -0.65dBi; LTE Band 4: -7.24dBi; LTE Band 5: -8.36dBi; LTE Band 7:-1.21dBi, LTE Band 12: -11.32dBi; LTE Band 17: -11.32dBi; LTE Band 25: -0.65dBi; LTE Band 26: -7.18dBi;LTE Band 41: -1.12dBi
Remark: The above DUT's information was declared by manufacturer. For more detailed features description, please refer to the manufacturer's specifications or the User's Manual.	

2.3 Description of Test Modes and Test Frequency

The EUT has been tested under typical operating condition. The CMW500 used to control the EUT staying in continuous transmitting and receiving mode for testing. Regards to the frequency band operation: the lowest、middle and highest frequency of channel were selected to perform the test, then shown on this report.

Test Frequency:

Band 2

Test Frequency ID	Bandwidth [MHz]	NUL	Frequency of Uplink [MHz]	NDL	Frequency of Downlink [MHz]
Low Range	1.4	18607	1850.7	607	1930.7
	3	18615	1851.5	615	1931.5
	5	18625	1852.5	625	1932.5
	10	18650	1855	650	1935
	15	18675	1857.5	675	1937.5
	20	18700	1860	700	1940
Mid Range	1.4/3/5/10/15/20	18900	1880	900	1960
High Range	1.4	19193	1909.3	1193	1989.3
	3	19185	1908.5	1185	1988.5
	5	19175	1907.5	1175	1987.5
	10	19150	1905	1150	1985
	15	19125	1902.5	1125	1982.5
	20	19100	1900	1100	1980

Band 4

Test Frequency ID	Bandwidth [MHz]	NUL	Frequency of Uplink [MHz]	NDL	Frequency of Downlink [MHz]
Low Range	1.4	19957	1710.7	1957	2110.7
	3	19965	1711.5	1965	2111.5
	5	19975	1712.5	1975	2112.5
	10	20000	1715	2000	2115
	15	20025	1717.5	2025	2117.5
	20	20050	1720	2050	2120
Mid Range	1.4/3/5/10/15/20	20175	1732.5	2175	2132.5
High Range	1.4	20393	1754.3	2393	2154.3
	3	20385	1753.5	2385	2153.5
	5	20375	1752.5	2375	2152.5
	10	20350	1750	2350	2150
	15	20325	1747.5	2325	2147.5
	20	20300	1745	2300	2145

Band 5

Test Frequency ID	Bandwidth [MHz]	NUL	Frequency of Uplink [MHz]	NDL	Frequency of Downlink [MHz]
Low Range	1.4	20407	824.7	2407	869.7
	3	20415	825.5	2415	870.5
	5	20425	826.5	2425	871.5
	10	20450	829	2450	874
Mid Range	1.4/3/5/10	20525	836.5	2525	881.5
High Range	1.4	20643	848.3	2643	893.3
	3	20635	847.5	2635	892.5
	5	20625	846.5	2625	891.5
	10	20700	835	2700	880

Band 7

Test Frequency ID	Bandwidth [MHz]	NUL	Frequency of Uplink [MHz]	NDL	Frequency of Downlink [MHz]
Low Range	5	20775	2502.5	2775	2622.5
	10	20800	2505	2800	2625
	15	20825	2507.5	2825	2627.5
	20	20850	2510	2850	2630
Mid Range	5/10/15/20	21100	2535	3100	2655
High Range	5	21425	2567.5	3425	2687.5
	10	21400	2565	3400	2685
	15	21375	2562.5	3375	2682.5
	20	21350	2560	3350	2680

Band 12

Test Frequency ID	Bandwidth [MHz]	NUL	Frequency of Uplink [MHz]	NDL	Frequency of Downlink [MHz]
Low Range	1.4	23017	699.7	5017	729.7
	3	23025	700.5	5025	730.5
	5	23035	701.5	5035	731.5
	10	23060	704	5060	734
Mid Range	1.4/3/5/10	23095	707.5	5095	737.5
High Range	1.4	23173	715.3	5173	745.3
	3	23165	714.5	5165	744.5
	5	23155	713.5	5155	743.5
	10	23130	711	5130	741

Band 17

Test Frequency ID	Bandwidth [MHz]	NUL	Frequency of Uplink [MHz]	NDL	Frequency of Downlink [MHz]
Low Range	5	23755	706.5	5755	736.5
	10	23780	709	5780	739
Mid Range	5 /10	23790	710	5790	740
High Range	5	23825	713.5	5825	743.5
	10	23800	711	5800	741

Band 25

Test Frequency ID	Bandwidth [MHz]	NUL	Frequency of Uplink [MHz]	NDL	Frequency of Downlink [MHz]
Low Range	1.4	26047	1850.7	8047	1930.7
	3	26055	1851.5	8055	1931.5
	5	26065	1852.5	8065	1932.5
	10	26090	1855	8090	1935
	15	26115	1857.5	8115	1937.5
	20	26140	1860	8140	1940
Mid Range	1.4/3/5/10/15/20	26365	1882,5	8365	1962.5
High Range	1.4	26683	1914.3	8683	1994.3
	3	26675	1913.5	8675	1993.5
	5	26665	1912.5	8665	1992.5
	10	26640	1910	8640	1990
	15	26615	1907.5	8615	1987.5
	20	26590	1905	8590	1985

Band 26a

Test Frequency ID	Bandwidth [MHz]	NUL	Frequency of Uplink [MHz]	NDL	Frequency of Downlink [MHz]
Low Range	1.4	26697	814.7	8697	859.70
	3	26705	815.5	8705	860.50
	5	26715	816.5	8715	861.50
	10	26740	819	8740	864.00
Mid Range	1.4/3/5/10	26740	819	8740	864.00
High Range	1.4	26783	823.3	8783	868.30
	3	26775	822.5	8775	867.50
	5	26765	821.5	8765	866.50
	10	26740	819	8740	864.00

Band 26b

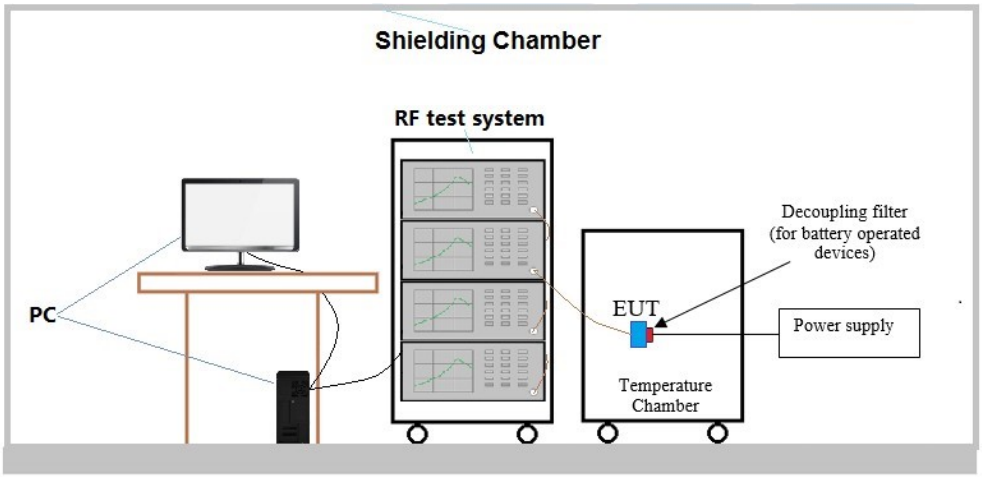
Test Frequency ID	Bandwidth [MHz]	NUL	Frequency of Uplink [MHz]	NDL	Frequency of Downlink [MHz]
Low Range	1.4	26797	824.7	8797	869.70
	3	26805	825.5	8805	870.50
	5	26815	826.5	8815	871.50
	10	26840	829	8840	874.00
	15	26865	831.5	8865	876.50
Mid Range	1.4/3/5/10/15	26915	836.5	8915	881.50
High Range	1.4	27033	848.3	9033	893.30
	3	27025	847.5	9025	892.50
	5	27015	846.5	9015	891.50
	10	26990	844	8990	889.00
	15	26965	841.5	8965	886.50

Band 41

Test Frequency ID	Bandwidth [MHz]	NUL	Frequency (UL and DL) [MHz]
Low Range	5	40265	2557.5
	10	40290	2560
	15	40315	2562.5
	20	40340	2565
Mid Range	5/10/15/20	40740	2605
High Range	5	41215	2652.5
	10	41190	2650
	15	41165	2647.5
	20	41140	2645

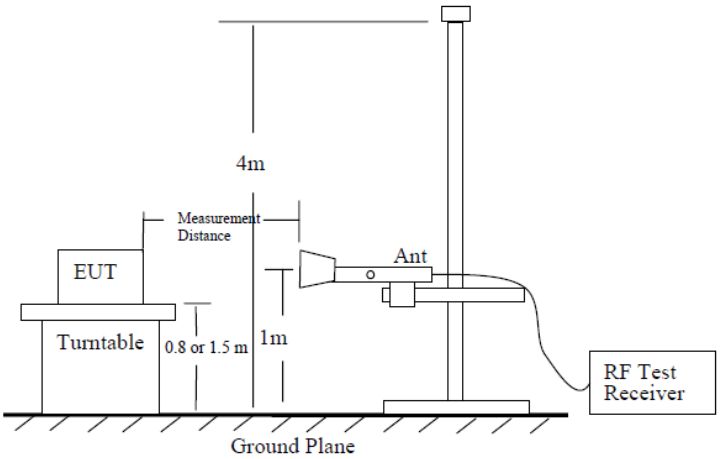
2.4 Test Setup and Conditions

2.4.1 Conducted Measurement Test Setup

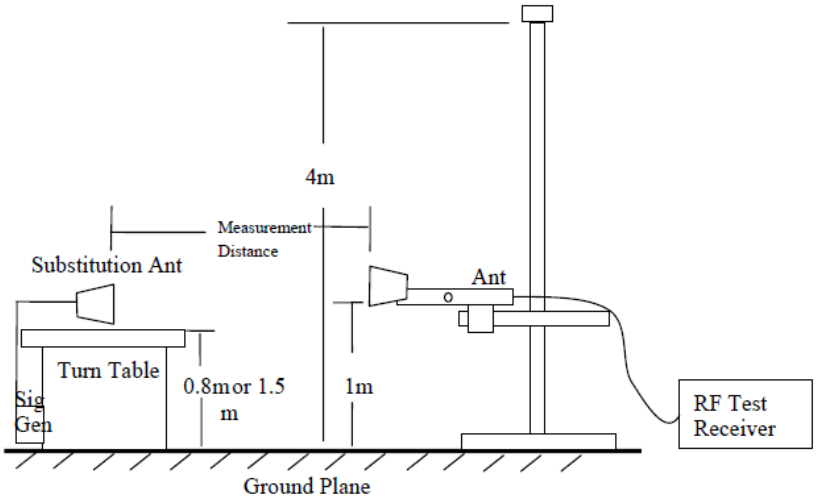


2.4.2 Radiated Measurement Test Setup

Step 1: Pre-test



Step 2: Substitution method to verify the maximum ERP/EIRP



2.5 Equipment List for the Test

No	Test Equipment	Manufacturer	Model No	Serial No	Pre.Cal. Date	New Cal. Date	Cal. Due Date
1	EMI Measuring Receiver	R&S	ESR	101160	2023.09.26	2024.09.25	2025.09.24
2	Spectrum Analyzer	R&S	FSV40	101470	2023.09.24	2024.09.23	2025.09.22
3	Low Noise Pre Amplifier	SCHWARZBECK	BBV 9745	00282	2023.09.26	2024.09.25	2025.09.24
4	Low Noise Pre Amplifier	CESHENG	CSKJLNA231016A	CSKJLNA231016A	2023.09.26	2024.09.25	2025.09.24
5	Loop antenna	ETS	6512	00165355	2024.08.29	--	2027.08.28
6	TRILOG Super Broadband test Antenna	SCHWARZBECK	VULB9168	01434	2024.08.29	--	2027.08.28
7	Broadband Horn Antenna	Schwarzbeck	BBHA 9120D	452	2024.08.29	--	2027.08.28
8	Horn Antenna 15-40GHz	SCHWARZBECK	BBHA9170	BBHA9170367	2024.08.28	--	2027.08.27
9	6dB Attenuator	JFW	50FPE-006	4360846-949-1	2023.09.25	2024.09.24	2025.09.23
10	EMI Test Receiver	R&S	ESPI	100771	2023.09.26	2024.09.25	2025.09.24
11	LISN	R&S	NNLK 8129	8130179	2023.09.25	2024.09.24	2025.09.23
12	LISN	R&S	ESH3-Z5	892785/016	2023.09.24	2024.09.23	2025.09.22
13	Pulse Limiter	R&S	ESH3-Z2	102789	2023.09.25	2024.09.24	2025.09.23
14	RF Automatic Test system	TST	TSTPASS	21033016	2023.09.26	2024.09.25	2025.09.24
15	Vector Signal Generator	Agilent	N5182A	MY50143009	2023.09.26	2024.09.25	2025.09.24
16	Analog signal generator	Agilent	E8257	MY51554256	2023.09.26	2024.09.25	2025.09.24
17	Spectrum Analyzer	Agilent	N9020A	MY51289843	2023.09.26	2024.09.25	2025.09.24
18	Spectrum Analyzer	Agilent	N9020A	MY53421570	2023.09.26	2024.09.25	2025.09.24
19	Power Sensor	Agilent	8481A	MY41097697	2023.09.26	2024.09.25	2025.09.24
20	Wideband Radio communication tester	R&S	CMW500	1201.0002K50	2023.09.25	2024.09.24	2025.09.23
21	DC power supply	ZHAOXIN	RXN-305D-2	28070002559		N/A	N/A
22	RE Software	EZ	EZ-EMC_RE	Ver.AIT-03A		N/A	N/A
23	CE Software	EZ	EZ-EMC_CE	Ver.AIT-03A		N/A	N/A
24	RF Software	TST	TSTPASS	Version 2.0		N/A	N/A
25	RF Software	cesheng	WCS-WCN	Version 2024.6.20		N/A	N/A
26	temporary antenna connector(Note)	NTS	R001	N/A		N/A	N/A

Note: The temporary antenna connector is soldered on the PCB board in order to perform conducted tests and this temporary antenna connector is listed in the equipment list.

3 TEST CONDITIONS AND RESULTS

3.1 Output Power

MEASUREMENT SETUP

Test set up as section 2.4.1& 2.4.2.

TEST PROCEDURE

The EUT was setup according to ANSI C63.26:2015

Conducted Power Measurement:

a) Place the EUT on a bench and set it in transmitting mode.

b) Connect a low loss RF cable from the antenna port to a spectrum analyzer and CMW500 by a Directional Couple.

c) EUT Communicate with CMW500 then selects a channel for testing.

d) Add a correction factor to the display of spectrum, and then test.

Radiated Power Measurement:
Determining ERP and/or EIRP from conducted RF output power measurements according to ANSI C63.26 2015 Section 5.2.5.5.
In many cases, RF output power limits are specified in terms of the ERP or the EIRP. Typically, ERP is specified when the operating frequency is less than or equal to 1 GHz and EIRP is specified when the operating frequency is greater than 1 GHz. Both are defined as the product of the power supplied to the antenna and its gain (relative to a dipole antenna in the case of ERP, and relative to an isotropic antenna in the case of EIRP); however, when working in decibels (i.e., logarithmic scale), the ERP and EIRP represent the sum of the transmit antenna gain (in dBd or dBi, respectively) and the conducted RF output power (expressed in dB relative to watts or milliwatts).
The relevant equation for determining the maximum ERP or EIRP from the measured RF output power is given in Equation (1) as follows:

ERP or EIRP = PMeas + G_T
ERP= EIRP-2.15
where
ERP or EIRP effective radiated power or equivalent isotropically radiated power, respectively (expressed in the same units as P_{Meas}, e.g., dBm or dBW)
P_{Meas} measured transmitter output power or PSD, in dBm or dBW
G_T gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP)

For devices utilizing multiple antennas, see 6.4 for guidance with respect to determining the effective array transmit antenna gain term to be used in the above equation.
The following equations demonstrate the mathematical relationship between ERP and EIRP:
a) ERP = EIRP − 2.15, where ERP and EIRP are expressed in consistent units.
b) EIRP = ERP + 2.15, where ERP and EIRP are expressed in consistent units.

TEST RESULTS

Passed

☒ **Pass** ☐ **Not Applicable**

Note:
For test data, please refer to Appendix RF test data for LTE.

3.2 Peak-to-Average Ratio

MEASUREMENT SETUP

Test set up as section 2.4.1.

TEST PROCEDURE

CCDF Procedure for PAPR :

1. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;
2. Set the number of counts to a value that stabilizes the measured CCDF curve;
3. Set the measurement interval as follows:
   -for continuous transmissions, set to 1 ms,
   -or burst transmissions, employ an external trigger that is synchronized with the EUT burst timing sequence, or use the internal burst trigger with a trigger level that allows the burst to stabilize and set the measurement interval to a time that is less than or equal to the burst duration.
4. Record the maximum PAPR level associated with a probability of 0.1%.

TEST RESULTS

Passed

☒ **Pass** ☐ **Not Applicable**

Note:
For test data, please refer to Appendix RF test data for LTE.

3.3 Occupied Bandwidth

MEASUREMENT SETUP

Test set up as section 2.4.1.

TEST PROCEDURE

1. The signal analyzer's automatic bandwidth measurement capability was used to perform the 99%occupied bandwidth and the 26dB bandwidth. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
2. RBW = 1 – 5% of the expected OBW
3. VBW ≥ 3 x RBW
4. Detector = Peak
5. Trace mode = max hold
6. Sweep = auto couple
7. The trace was allowed to stabilize
8. If necessary, steps 2 – 7 were repeated after changing the RBW such that it would be within 1 – 5% of the 99% occupied bandwidth observed in Step 7

TEST RESULTS

Passed

☒ **Pass** ☐ **Not Applicable**

Note:
For test data, please refer to Appendix RF test data for LTE.

3.4 Band Edge compliance

MEASUREMENT SETUP

Test set up as section 2.4.1.

TEST PROCEDURE

1. Set the spectrum analyzer center frequency to the block, band, or channel edge frequency.
2. Span was set large enough so as to capture all out of band emissions near the band edge
3. RBW > 1% of the emission bandwidth
4. VBW ≥ 3 x RBW
5. Detector = RMS
6. Number of sweep points ≥ 2 x Span/RBW
7. Trace mode = Average
8. Sweep time = > (number of points in sweep) × (symbol period)
9. Sweep =Single

TEST RESULTS

Passed

☒ **Pass** ☐ **Not Applicable**

Note:
For test data, please refer to Appendix RF test data for LTE.

3.5 Spurious Emission

MEASUREMENT SETUP

Test set up as section 2.4.1& 2.4.2.

TEST PROCEDURE

The EUT was setup according to ANSI C63.26:2015

Conducted Spurious Measurement:

Test Settings

1. RBW = 1KHz (for 9K-150KHz), 10KHz (for 150KHz-10MHz), 100KHz (for 10MHz-30MHz), 1MHz(for above 1GHz)

2. VBW ≥ 3 * RBW

3. Detector = RMS

4. Trace Mode = Trace average

5. Sweep time > (number of points in sweep) × (symbol period)

6. Number of points in sweep ≥ 2 x Span / RBW

7. Sweep =Single

Radiated Spurious Measurement:

1. The EUT shall be placed at the specified height on a support, and in the position closest to normal use as declared by provider.

2. The test antenna shall be oriented initially for vertical polarization and shall be chosen to correspond to the frequency of the transmitter

3. The output of the test antenna shall be connected to the measuring receiver.

4. The transmitter shall be switched on and the measuring receiver shall be tuned to the frequency of the transmitter under test.

5. The test antenna shall be raised and lowered through the specified range of height until a maximum signal level is detected by the measuring receiver.

6. The transmitter shall then be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.

7. The test antenna shall be raised and lowered again through the specified range of height until a maximum signal level is detected by the measuring receiver.

8. The maximum signal level detected by the measuring receiver shall be noted.

9. The transmitter shall be replaced by a substitution antenna.

10. The substitution antenna shall be orientated for vertical polarization and the length of the substitution antenna shall be adjusted to correspond to the frequency of the transmitter.

11. The substitution antenna shall be connected to a calibrated signal generator.

12. If necessary, the input attenuator setting of the measuring receiver shall be adjusted in order to increase the sensitivity of the measuring receiver.

13. The test antenna shall be raised and lowered through the specified range of height to ensure that the maximum signal is received.

14. The input signal to the substitution antenna shall be adjusted to the level that produces a level detected by the measuring receiver, that is equal to the level noted while the transmitter radiated power was measured, corrected for the change of input attenuator setting of the measuring receiver.

15. The measurement shall be repeated with the test antenna and the substitution antenna orientated for horizontal polarization.

16. The measure of the effective radiated power is the larger of the two levels recorded at the input to the substitution antenna, corrected for gain of the substitution antenna if necessary.

17. The frequency range need checked up to 10th harmonic.

Final measurement calculation as below:
The relevant equation for determining the ERP/EIRP from the radiated RF output power is:
ERP/EIRP (dBm) = SA Read Value (dBm) + Correction Factor (dB)
where:
ERP/EIRP = effective or equivalent radiated power, in dBm;
SA Read Value = measured transmitter power received by EMI receiver or spectrum analyzer, in dBm;
Correction Factor = total correction factor including cable loss, in dB;

TEST RESULTS

Conducted Measurement result:

Passed

☒ **Pass** ☐ **Not Applicable**

Note:
For test data, please refer to Appendix RF test data for LTE.

Radiated Measurement:

LTE Band 2 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3702.00	-43.31	11.63	5.22	-36.90	-13.00	-23.90	H
5553.00	-46.00	12.19	6.34	-40.15	-13.00	-27.15	H
7402.35	-49.19	11.12	7.58	-45.65	-13.00	-32.65	H
3702.00	-42.89	11.63	5.22	**-36.48**	-13.00	-23.48	V
5553.00	-45.94	12.19	6.34	-40.09	-13.00	-27.09	V
7402.35	-48.60	11.12	7.58	-45.06	-13.00	-32.06	V
LTE Band 2 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3760.55	-44.60	11.55	5.29	-38.34	-13.00	-25.34	H
5640.00	-47.15	12.1	6.34	-41.39	-13.00	-28.39	H
7519.25	-48.62	11.35	7.64	-44.91	-13.00	-31.91	H
3760.55	-43.51	11.55	5.29	**-37.25**	-13.00	-24.25	V
5640.00	-47.10	12.1	6.34	-41.34	-13.00	-28.34	V
7519.25	-47.74	11.35	7.64	-44.03	-13.00	-31.03	V
LTE Band 2 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3819.50	-41.19	11.48	5.33	-35.04	-13.00	-22.04	H
5728.00	-44.49	11.94	6.36	-38.91	-13.00	-25.91	H
7638.00	-49.56	11.43	7.69	-45.82	-13.00	-32.82	H
3819.50	-40.83	11.48	5.33	**-34.68**	-13.00	-21.68	V
5728.00	-43.70	11.94	6.36	-38.12	-13.00	-25.12	V
7638.00	-49.33	11.43	7.69	-45.59	-13.00	-32.59	V

LTE Band 4 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3421.35	-42.12	11.47	4.9	-35.55	-13.00	-22.55	H
5133.00	-44.29	11.41	5.71	-38.59	-13.00	-25.59	H
6843.20	-49.67	11.06	6.89	-45.50	-13.00	-32.50	H
3421.35	-42.04	11.47	4.9	**-35.47**	-13.00	-22.47	V
5133.00	-43.54	11.41	5.71	-37.84	-13.00	-24.84	V
6843.20	-48.52	11.06	6.89	-44.35	-13.00	-31.35	V
LTE Band 4 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3464.95	-45.99	11.57	4.93	-39.35	-13.00	-26.35	H
5198.55	-47.29	11.55	5.88	-41.62	-13.00	-28.62	H
6929.70	-47.66	11.07	6.93	-43.52	-13.00	-30.52	H
3464.95	-45.77	11.57	4.93	**-39.13**	-13.00	-26.13	V
5198.55	-46.28	11.55	5.88	-40.61	-13.00	-27.61	V
6929.70	-46.64	11.07	6.93	-42.50	-13.00	-29.50	V
LTE Band 4 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3509.65	-43.21	11.66	4.96	-36.51	-13.00	-23.51	H
5263.00	-43.98	11.73	5.92	-38.17	-13.00	-25.17	H
7018.00	-51.24	11.01	6.99	-47.22	-13.00	-34.22	H
3509.65	-42.31	11.66	4.96	**-35.61**	-13.00	-22.61	V
5263.00	-43.15	11.73	5.92	-37.34	-13.00	-24.34	V
7018.00	-50.20	11.01	6.99	-46.18	-13.00	-33.18	V

LTE Band 5 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1649.60	-44.66	9.31	3.02	-38.37	-13.00	-25.37	H
2475.45	-44.73	10.4	3.97	-38.30	-13.00	-25.30	H
3298.80	-50.03	11.08	4.74	-43.69	-13.00	-30.69	H
1649.60	-44.19	9.31	3.02	-37.90	-13.00	-24.90	V
2475.45	-44.05	10.4	3.97	**-37.62**	-13.00	-24.62	V
3298.80	-49.50	11.08	4.74	-43.16	-13.00	-30.16	V
LTE Band 5 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1673.75	-44.30	9.49	3.07	-37.88	-13.00	-24.88	H
2509.45	-48.68	10.41	4	-42.27	-13.00	-29.27	H
3346.45	-52.87	11.24	4.81	-46.44	-13.00	-33.44	H
1673.75	-43.40	9.49	3.07	**-36.98**	-13.00	-23.98	V
2509.45	-48.42	10.41	4	-42.01	-13.00	-29.01	V
3346.45	-51.74	11.24	4.81	-45.31	-13.00	-32.31	V
LTE Band 5 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1697.00	-42.04	9.65	3.11	-35.50	-13.00	-22.50	H
2544.75	-44.87	10.41	4.04	-38.50	-13.00	-25.50	H
3394.70	-49.77	11.41	4.88	-43.24	-13.00	-30.24	H
1697.00	-41.82	9.65	3.11	**-35.28**	-13.00	-22.28	V
2544.75	-44.50	10.41	4.04	-38.13	-13.00	-25.13	V
3394.70	-49.71	11.41	4.88	-43.18	-13.00	-30.18	V

LTE Band 7 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
5004.80	-42.46	11.33	5.76	-36.89	-25.00	-11.89	H
7508.00	-41.78	11.33	7.63	-38.08	-25.00	-13.08	H
10010.00	-45.78	11.72	9.09	-43.15	-25.00	-18.15	H
5004.80	-42.41	11.33	5.76	**-36.84**	-25.00	-11.84	V
7508.00	-41.66	11.33	7.63	-37.96	-25.00	-12.96	V
10010.00	-45.66	11.72	9.09	-43.03	-25.00	-18.03	V
LTE Band 7 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
5070.00	-45.24	11.33	5.67	-39.58	-25.00	-14.58	H
7605.70	-44.72	11.44	7.69	-40.97	-25.00	-15.97	H
10139.45	-45.84	11.61	9.21	-43.44	-25.00	-18.44	H
5070.00	-44.72	11.33	5.67	**-39.06**	-25.00	-14.06	V
7605.70	-43.98	11.44	7.69	-40.23	-25.00	-15.23	V
10139.45	-45.48	11.61	9.21	-43.08	-25.00	-18.08	V
LTE Band 7 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
5135.25	-44.05	11.41	5.72	-38.36	-25.00	-13.36	H
7703.45	-42.29	11.40	7.71	-38.60	-25.00	-13.60	H
10269.25	-46.26	11.63	9.19	-43.82	-25.00	-18.82	H
5135.25	-43.37	11.41	5.72	**-37.68**	-25.00	-12.68	V
7703.45	-42.16	11.40	7.71	-38.47	-25.00	-13.47	V
10269.25	-45.55	11.63	9.19	-43.11	-25.00	-18.11	V

LTE Band 12 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1400.25	-40.04	7.53	2.68	-35.19	-13.00	-22.19	H
2100.55	-46.39	9.51	3.56	-40.44	-13.00	-27.44	H
2799.00	-54.14	10.68	4.35	-47.81	-13.00	-34.81	H
1400.25	-38.96	7.53	2.68	**-34.11**	-13.00	-21.11	V
2100.55	-45.84	9.51	3.56	-39.89	-13.00	-26.89	V
2799.00	-53.40	10.68	4.35	-47.07	-13.00	-34.07	V
LTE Band 12 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1415.60	-41.23	7.65	2.73	-36.31	-13.00	-23.31	H
2123.35	-44.17	9.56	3.58	-38.19	-13.00	-25.19	H
2830.75	-54.21	10.67	4.33	-47.87	-13.00	-34.87	H
1415.60	-40.30	7.65	2.73	**-35.38**	-13.00	-22.38	V
2123.35	-43.13	9.56	3.58	-37.15	-13.00	-24.15	V
2830.75	-53.94	10.67	4.33	-47.60	-13.00	-34.60	V
LTE Band 12 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1431.00	-41.62	7.76	2.78	-36.64	-13.00	-23.64	H
2146.00	-44.86	9.61	3.6	-38.85	-13.00	-25.85	H
2862.20	-52.18	10.65	4.31	-45.84	-13.00	-32.84	H
1431.00	-40.50	7.76	2.78	**-35.52**	-13.00	-22.52	V
2146.00	-44.06	9.61	3.6	-38.05	-13.00	-25.05	V
2862.20	-51.36	10.65	4.31	-45.02	-13.00	-32.02	V

LTE Band 17 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1413.20	-42.19	7.63	2.72	-37.28	-13.00	-24.28	H
2120.45	-47.79	9.55	3.57	-41.81	-13.00	-28.81	H
2826.35	-49.97	10.67	4.33	-43.63	-13.00	-30.63	H
1413.20	-41.14	7.63	2.72	**-36.23**	-13.00	-23.23	V
2120.45	-46.82	9.55	3.57	-40.84	-13.00	-27.84	V
2826.35	-48.97	10.67	4.33	-42.63	-13.00	-29.63	V
LTE Band 17 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1420.40	-41.29	7.68	2.75	-36.36	-13.00	-23.36	H
2130.20	-47.09	9.57	3.58	-41.10	-13.00	-28.10	H
2839.80	-54.11	10.66	4.32	-47.77	-13.00	-34.77	H
1420.40	-40.66	7.68	2.75	**-35.73**	-13.00	-22.73	V
2130.20	-46.95	9.57	3.58	-40.96	-13.00	-27.96	V
2839.80	-53.29	10.66	4.32	-46.95	-13.00	-33.95	V
LTE Band 17 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1427.00	-41.69	7.73	2.77	-36.73	-13.00	-23.73	H
2141.65	-44.86	9.60	3.59	-38.85	-13.00	-25.85	H
2854.55	-51.49	10.65	4.31	-45.15	-13.00	-32.15	H
1427.00	-40.53	7.73	2.77	**-35.57**	-13.00	-22.57	V
2141.65	-44.40	9.60	3.59	-38.39	-13.00	-25.39	V
2854.55	-50.85	10.65	4.31	-44.51	-13.00	-31.51	V

LTE Band 25 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3701.50	-46.11	11.63	5.22	-39.70	-13.00	-26.70	H
5553.15	-45.66	12.19	6.34	-39.81	-13.00	-26.81	H
7402.85	-49.66	11.12	7.58	-46.12	-13.00	-33.12	H
3701.50	-46.10	11.63	5.22	-39.69	-13.00	-26.69	V
5553.15	-44.76	12.19	6.34	**-38.91**	-13.00	-25.91	V
7402.85	-48.63	11.12	7.58	-45.09	-13.00	-32.09	V
LTE Band 25 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3764.75	-42.38	11.54	5.29	-36.13	-13.00	-23.13	H
5648.00	-46.47	12.09	6.34	-40.72	-13.00	-27.72	H
7530.45	-47.79	11.36	7.64	-44.07	-13.00	-31.07	H
3764.75	-42.20	11.54	5.29	**-35.95**	-13.00	-22.95	V
5648.00	-45.42	12.09	6.34	-39.67	-13.00	-26.67	V
7530.45	-47.36	11.36	7.64	-43.64	-13.00	-30.64	V
LTE Band 25 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3828.75	-45.88	11.48	5.32	-39.72	-13.00	-26.72	H
5743.65	-46.75	11.9	6.36	-41.21	-13.00	-28.21	H
7658.70	-49.85	11.42	7.7	-46.13	-13.00	-33.13	H
3828.75	-45.80	11.48	5.32	**-39.64**	-13.00	-26.64	V
5743.65	-46.15	11.9	6.36	-40.61	-13.00	-27.61	V
7658.70	-49.61	11.42	7.7	-45.89	-13.00	-32.89	V

LTE Band 26a / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1630.70	-44.62	9.18	2.98	-38.42	-13.00	-25.42	H
2445.00	-47.20	10.39	3.93	-40.74	-13.00	-27.74	H
3259.00	-50.47	10.91	4.68	-44.24	-13.00	-31.24	H
1630.70	-43.70	9.18	2.98	**-37.50**	-13.00	-24.50	V
2445.00	-47.00	10.39	3.93	-40.54	-13.00	-27.54	V
3259.00	-49.66	10.91	4.68	-43.43	-13.00	-30.43	V
LTE Band 26a / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1637.70	-45.11	9.23	3	-38.88	-13.00	-25.88	H
2457.00	-48.62	10.4	3.94	-42.16	-13.00	-29.16	H
3276.65	-49.33	10.98	4.71	-43.06	-13.00	-30.06	H
1637.70	-44.28	9.23	3	**-38.05**	-13.00	-25.05	V
2457.00	-48.16	10.4	3.94	-41.70	-13.00	-28.70	V
3276.65	-48.96	10.98	4.71	-42.69	-13.00	-29.69	V
LTE Band 26a / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1646.65	-42.22	9.29	3.01	-35.94	-13.00	-22.94	H
2469.25	-45.80	10.4	3.96	-39.36	-13.00	-26.36	H
3294.40	-52.64	11.06	4.74	-46.32	-13.00	-33.32	H
1646.65	-41.29	9.29	3.01	**-35.01**	-13.00	-22.01	V
2469.25	-44.97	10.4	3.96	-38.53	-13.00	-25.53	V
3294.40	-52.32	11.06	4.74	-46.00	-13.00	-33.00	V

LTE Band 26b / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1649.30	-42.19	9.31	3.02	-35.90	-13.00	-22.90	H
2475.75	-48.14	10.4	3.97	-41.71	-13.00	-28.71	H
3299.25	-51.81	11.08	4.74	-45.47	-13.00	-32.47	H
1649.30	-41.63	9.31	3.02	**-35.34**	-13.00	-22.34	V
2475.75	-46.94	10.4	3.97	-40.51	-13.00	-27.51	V
3299.25	-51.50	11.08	4.74	-45.16	-13.00	-32.16	V
LTE Band 26b / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1673.50	-45.11	9.48	3.06	-38.69	-13.00	-25.69	H
2510.00	-45.88	10.41	4	-39.47	-13.00	-26.47	H
3345.70	-52.84	11.24	4.81	-46.41	-13.00	-33.41	H
1673.50	-44.13	9.48	3.06	**-37.71**	-13.00	-24.71	V
2510.00	-45.81	10.41	4	-39.40	-13.00	-26.40	V
3345.70	-52.32	11.24	4.81	-45.89	-13.00	-32.89	V
LTE Band 26b / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1697.30	-41.91	9.66	3.11	-35.36	-13.00	-22.36	H
2545.00	-49.19	10.41	4.04	-42.82	-13.00	-29.82	H
3394.50	-51.12	11.41	4.88	-44.59	-13.00	-31.59	H
1697.30	-41.76	9.66	3.11	**-35.21**	-13.00	-22.21	V
2545.00	-48.19	10.41	4.04	-41.82	-13.00	-28.82	V
3394.50	-50.36	11.41	4.88	-43.83	-13.00	-30.83	V

LTE Band 41 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
4996.40	-42.11	11.33	5.75	-36.53	-25.00	-11.53	H
7495.50	-46.05	11.32	7.62	-42.35	-25.00	-17.35	H
9993.95	-49.21	11.74	9.11	-46.58	-25.00	-21.58	H
4996.40	-42.03	11.33	5.75	**-36.45**	-25.00	-11.45	V
7495.50	-45.55	11.32	7.62	-41.85	-25.00	-16.85	V
9993.95	-48.45	11.74	9.11	-45.82	-25.00	-20.82	V
LTE Band 41 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
5186.00	-43.13	11.52	5.85	-37.46	-25.00	-12.46	H
7779.70	-42.46	11.31	7.71	-38.86	-25.00	-13.86	H
10372.05	-47.95	11.69	9.22	-45.48	-25.00	-20.48	H
5186.00	-42.13	11.52	5.85	**-36.46**	-25.00	-11.46	V
7779.70	-41.91	11.31	7.71	-38.31	-25.00	-13.31	V
10372.05	-46.92	11.69	9.22	-44.45	-25.00	-19.45	V
LTE Band 41 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
5374.40	-41.01	12.01	6.15	-35.15	-25.00	-10.15	H
8062.85	-44.06	11.33	7.82	-40.55	-25.00	-15.55	H
10750.70	-48.39	11.66	9.70	-46.43	-25.00	-21.43	H
5374.40	-40.34	12.01	6.15	**-34.48**	-25.00	-9.48	V
8062.85	-43.77	11.33	7.82	-40.26	-25.00	-15.26	V
10750.70	-47.36	11.66	9.70	-45.40	-25.00	-20.40	V

Remark:

1. PMea = S G.Lev + Ant - Loss
2. Margin = PMea – Limit
3. *Other emission levels are attenuated 20dB below the limit and not recorded in report.*

3.6 Frequency Stability under Temperature & Voltage Variations

TEST CONFIGURATION

Test set up as section 2.4.1.

TEST PROCEDURE

The EUT was setup according to ANSI C63.26:2015

Frequency Stability under Temperature Variations:
The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20℃ operating frequency as reference frequency. Turn EUT off and set the chamber temperature to -30℃. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10℃ increased per stage until the highest temperature of +50℃ reached.

Frequency Stability under Voltage Variations:
Set chamber temperature to 20℃. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.
Reduce the input voltage to specify extreme voltage variation (±15%) and endpoint, record the maximum frequency change.

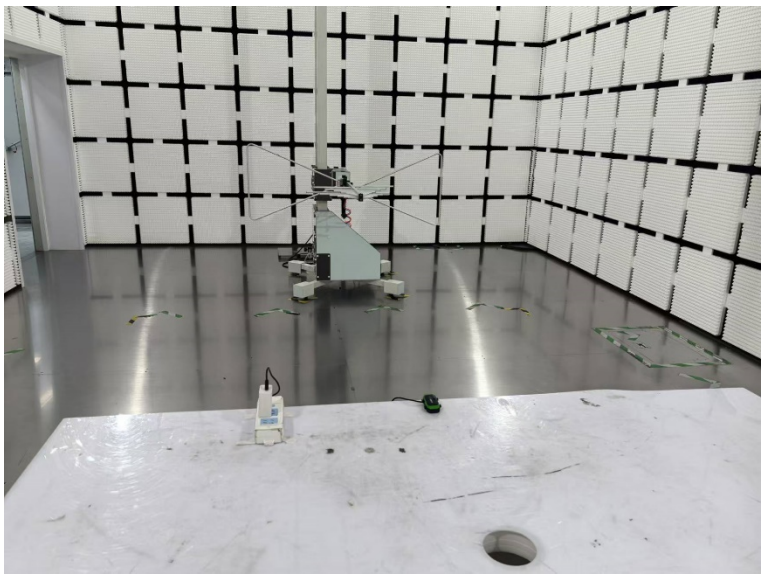
TEST RESULTS

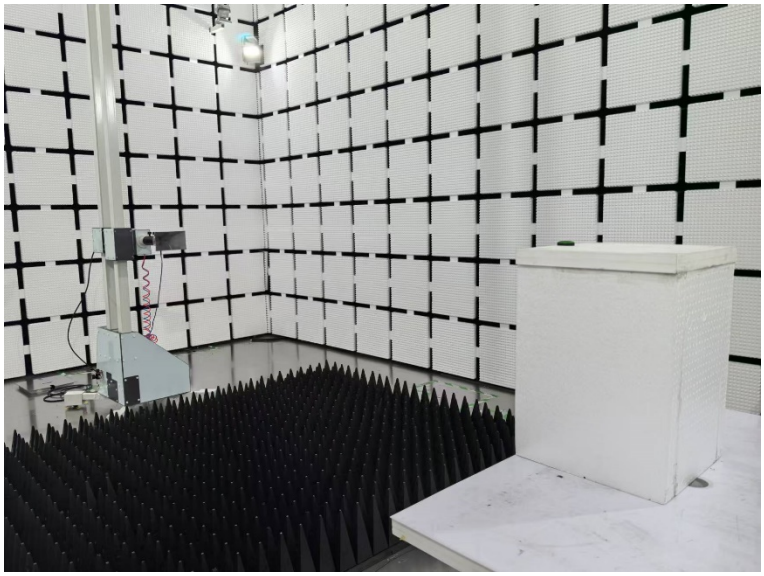
Passed

☒ **Pass** ☐ **Not Applicable**

Note:
For test data, please refer to Appendix RF test data for LTE.

4 Test Setup Photographs of EUT





5 External Photographs of EUT

Please refer to test report AiTSZ-240911024FW1.

6 Internal Photographs of EUT

Please refer to test report AiTSZ-240911024FW1.

********** **End of Report** **********