

TEST REPORT

Application No.: SZCR2408003385ME
Applicant: Ziyang Freqty Medical Equipment Co., Ltd.
Address of Applicant: Floor 2-3, unit7, building3, No. 222, West Section3 outer ring road, Yanjiang District Ziyang China
Manufacturer: Ziyang Freqty Medical Equipment Co., Ltd.
Address of Manufacturer: Floor 2-3, unit7, building3, No. 222, West Section3 outer ring road, Yanjiang District Ziyang China
Factory: Ziyang Freqty Medical Equipment Co., Ltd.
Address of Factory: Floor 2-3, unit7, building3, No. 222, West Section3 outer ring road, Yanjiang District Ziyang China
Equipment Under Test (EUT):
EUT Name: Intraoral Digital Impression Instrument
Model No.: PANDA free
FCC ID: 2BA59PANDAG
Standard(s) : FCC 47 CFR Part 15, Subpart C
Date of Receipt: 2024-08-30
Date of Test: 2024-11-27 to 2025-02-28
Date of Issue: 2025-02-28

Test Result:	Pass*
---------------------	--------------

* In the configuration tested, the EUT complied with the standards specified above.



Keny Xu
EMC Laboratory Manager



SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZEMC-TRF-01 Rev. A/1

Report No.: SZCR240800338503

Page: 2 of 52

Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2025-02-28		Original

Authorized for issue by:				
		Edison Li		
		Edison Li/Project Engineer		
		Eric Fu		
		Eric Fu/Reviewer		



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

2 Test Summary

Test Item	FCC Rule No.	Test Method	Result
Antenna Requirement	15.203	--	PASS
Conducted Emissions at AC Power Line (150kHz-30MHz)	47 CFR Part 15, Subpart C 15.207	ANSI C63.10 (2013) Section 6.2	PASS
Transmitter power	15.255 (c)(2) (iii)(A)	ANSI C63.10-2020 Section 9.2.1/9.2.2	PASS
Occupied bandwidth	15.215 (c), 15.255 (c)(2)	ANSI C63.10-2020 Section 9.4	PASS
Radiated spurious emissions below 40 GHz	15.255 (d)(2)	ANSI C63.10-2020 Section 9.11	PASS
Radiated emissions outside assigned band and above 40 GHz up to 200 GHz	15.255 (d)(3)	ANSI C63.10-2020 Section 9.10	PASS
Frequency stability	15.255 (f)	ANSI C63.10-2020 Section 9.5	PASS



3 Contents

	Page
1 Cover Page	1
2 Test Summary	3
3 Contents	4
4 General Information.....	6
4.1 Details of E.U.T.	6
4.2 Description of Support Units	6
4.3 Test Environment	7
4.4 Measurement Uncertainty	7
4.5 Test Location.....	8
4.6 Test Facility	8
4.7 Deviation from Standards.....	8
4.8 Abnormalities from Standard Conditions	8
5 Equipment List	9
6 Radio Spectrum Technical Requirement	11
6.1 Antenna Requirement	11
6.1.1 Test Requirement:	11
6.1.2 Conclusion	11
7 Radio Spectrum Matter Test Results	12
7.1 Conducted Emissions at AC Power Line (150kHz-30MHz).....	12
7.1.1 E.U.T. Operation	12
7.1.2 Test Mode Description	12
7.1.3 Test Setup Diagram	12
7.1.4 Measurement Procedure and Data.....	13
7.2 Transmitter power	16
7.2.1 E.U.T. Operation	16
7.2.2 Test Mode Description	16
7.2.3 Test Setup Diagram	16
7.2.4 Measurement Procedure and Data.....	17
7.3 Occupied Bandwidth	18
7.3.1 E.U.T. Operation	18
7.3.2 Test Mode Description	18
7.3.3 Test Setup Diagram	18
7.3.4 Measurement Procedure and Data.....	18
7.4 Radiated spurious emissions below 40 GHz	19
7.4.1 E.U.T. Operation	20
7.4.2 Test Mode Description	20
7.4.3 Test Setup Diagram	21
7.4.4 Measurement Procedure and Data.....	22
7.5 Radiated emissions outside assigned band and above 40 GHz up to 200 GHz	29



SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZEMC-TRF-01 Rev. A/1

Report No.: SZCR240800338503

Page: 5 of 52

7.5.1	E.U.T. Operation	29
7.5.2	Test Mode Description	29
7.5.3	Test Setup Diagram	30
7.5.4	Measurement Procedure and Data.....	30
7.6	Frequency Stability	37
7.6.1	E.U.T. Operation	37
7.6.2	Test Mode Description	37
7.6.3	Test Setup Diagram	37
7.6.4	Measurement Procedure and Data.....	38
8	Test Setup Photo	39
9	EUT Constructional Details (EUT Photos)	39
10	Appendix.....	40



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch Testing Center EEC Laboratory

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

4 General Information

4.1 Details of E.U.T.

Power supply:	DC 3.65V, 3500mAh rechargeable lithium battery which charged by base
Cable(s):	DC cable:149cm unshielded
Operation Frequency:	60.160GHz-62.640GHz
Certer Frequency:	60.160GHz, 60.480GHz, 62.320GHz, 62.640GHz
Number of Channels:	4
Modulation Type:	See the table below
Data rate:	See the table below
Antenna Type:	See the table below
Antenna Gain:	See the table below

Frequency	60.160GHz	60.480GHz	62.320GHz	62.640GHz
Modulation Type	BPSK	QPSK	BPSK	QPSK
Data Rate	0.476Gb/s	0.952 Gb/s	1.904 Gb/s	3.807 Gb/s
Antenna Type	PCB Antenna	PCB Antenna	PCB Antenna	PCB Antenna
Antenna Gain	0dBi	0dBi	0dBi	0dBi

Remark:The information in this section is provided by the applicant or manufacturer, SGS is not liable to the accuracy, suitability, reliability or/and integrity of the information.

4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
RF Cable	SGS	N/A(cable loss: 0.8dB)	N/A
Base	Provided by cilent	PSS-2	P620240011
Adapter	Provided by cilent	UES36LCP2-120300SPA	Input: AC 100-240V,50/60Hz, 1.0-0.5A Output: DC 12.0V, 3.0A, 36.0W



4.3 Test Environment

Environment Parameter	Selected Values During Tests	
Relative Humidity	Ambient	
Value	Temperature(°C)	Voltage(V)
NTNV	20	3.6
LTHV	-20	4.14
LTLV	-20	3.06
HTHV	40	4.14
HTLV	40	3.06
Note: NV:Normal Voltage LV:Low Extreme Test Voltage HV:High Extreme Test Voltage NT:Normal Temperature LT:Low Extreme Test Temperature HT:High Extreme Test Temperature		

4.4 Measurement Uncertainty

Test Item	Measurement Uncertainty
Conducted Emissions at AC Power Line (150kHz-30MHz)	± 3.1dB
Transmitter power and power spectral density	± 4.8dB
Occupied bandwidth	± 3%
Radiated Spurious Emissions Below 1GHz	± 6.0dB for 3m; ± 5.0dB for 10m
Radiated Spurious Emissions Above 1GHz	± 4.6dB (1-18GHz);± 4.8dB (Above 18GHz)
Remark: The U _{lab} (lab Uncertainty) is less than U _{CISPR/ETSI} (CISPR/ETSI Uncertainty), so the test results – compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit; – non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.	

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZEMC-TRF-01 Rev. A/1

Report No.: SZCR240800338503

Page: 8 of 52

4.5 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China. 518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

4.6 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

• A2LA (Certificate No. 3816.01)

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

• VCCI (Member No. 1937)

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen EMC laboratory have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

• FCC –Designation Number: CN1336

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1336. Test Firm Registration Number: 787754.

• Innovation, Science and Economic Development Canada

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C.

4.7 Deviation from Standards

None

4.8 Abnormalities from Standard Conditions

None



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch EMC Laboratory

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.ssgroup.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

5 Equipment List

Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
3m Semi-Anechoic Chamber	AUDIX	N/A	SEM001-02	2024-05-11	2027-05-10
EXA Signal Analyzer(10Hz-44GHz)	Keysight	N9010A	SEM004-20	2024-03-30	2025-03-29
Horn Antenna(800MHz-18GHz)	Rohde&Schwarz	HF907	SEM003-07	2023-07-23	2025-07-22
Microwave system amplifier (0.5GHz-26.5GHz)	Agilent	83017A	SEM005-25	2024-09-14	2025-09-13
Broad-Band Horn Antenna(15GHz-40GHz)	SCHWARZBECK	BBHA 9170	SEM003-15	2024-08-10	2025-08-09
Programmable Temperature&Humidity Chamber	Votsch Industrietechnik GmbH	VT 4002	SEM002-15	2024-03-19	2025-03-18
Pre-amplifier (26GHz-40GHz)	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2024-03-15	2025-03-14
Coaxial Cable	SGS	N/A	SEM026-01	2024-07-06	2025-07-05
Waveguide(40-60GHz)	REBES	SWG-19025-FB	06303-01	2023-02-19	2025-02-18
Waveguide(50-75GHz)	REBES	SWG-15025-FB	01525-09	2023-02-19	2025-02-18
Waveguide(75-110GHz)	REBES	SWG-10025-FB	01509-01	2023-02-19	2025-02-18
Waveguide(110-170GHz)	REBES	SWG-06025-FB	06302-01	2023-02-19	2025-02-18
Waveguide(140-220GHz)	REBES	SWG-05025-FB	SEM020-12	2023-02-19	2025-02-18
Waveguide Harmonic Mixer(40-60GHz)	REBES	STH-19SF-S1	06937-01	2023-02-19	2025-02-18
Waveguide Harmonic Mixer(50-75GHz)	KEYSIGHT	M1970V	MY51390966	2023-02-19	2025-02-18
Waveguide Harmonic Mixer(75-110GHz)	KEYSIGHT	M1970W	MY51430883	2023-02-19	2025-02-18
Waveguide Harmonic Mixer(110-170GHz)	REBES	STH-06SF-S1	06110-01	2023-02-19	2025-02-18
Waveguide Harmonic Mixer(140-220GHz)	Rohde&Schwarz	HM140-220	SEM020-18	2023-02-19	2025-02-18
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (Shenzhen) Laboratory.

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZEMC-TRF-01 Rev. A/1

Report No.: SZCR240800338503

Page: 10 of 52

Conducted Emissions at Mains Terminals (150kHz-30MHz)					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Shielding Room	ZhongYu Electron	GB-88	SEM001-06	2022-05-14	2025-05-13
EMI Test Receiver	Rohde&Schwarz	ESR	SZ-WRG-M-047	2025-01-8	2026-01-7
Measurement Software	AUDIX	e3 V8.2014-6-27a	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM024-01	2024-07-06	2025-07-05
LISN	Rohde&Schwarz	ENV216	SEM007-01	2024-08-15	2025-08-14
LISN	ETS-LINDGREN	3816/2	SEM007-02	2024-03-14	2025-03-13

General used equipment					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Humidity/ Temperature Indicator	deli	8838	SEM002-32	2024-07-24	2025-07-23
Humidity/ Temperature Indicator	deli	8838	SEM002-33	2024-07-24	2025-07-23
Barometer	Changchun Meteorological Industry Factory	DYM3	SEM002-01	2024-03-18	2025-03-17



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch Inspection & Testing Laboratory

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

6 Radio Spectrum Technical Requirement

6.1 Antenna Requirement

6.1.1 Test Requirement:

47 CFR Part 15, Subpart C 15.203

6.1.2 Conclusion

15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

EUT Antenna:

The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is 0dBi.

Antenna location: Refer to internal photos



7 Radio Spectrum Matter Test Results

7.1 Conducted Emissions at AC Power Line (150kHz-30MHz)

Test Requirement 47 CFR Part 15, Subpart C 15.207

Test Method: ANSI C63.10 (2013) Section 6.2

Limit:

Frequency of emission(MHz)	Conducted limit(dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

Detector: Peak for pre-scan (9kHz resolution bandwidth) 0.15M to 30MHz

7.1.1 E.U.T. Operation

Operating Environment:

Temperature: 22.5 °C

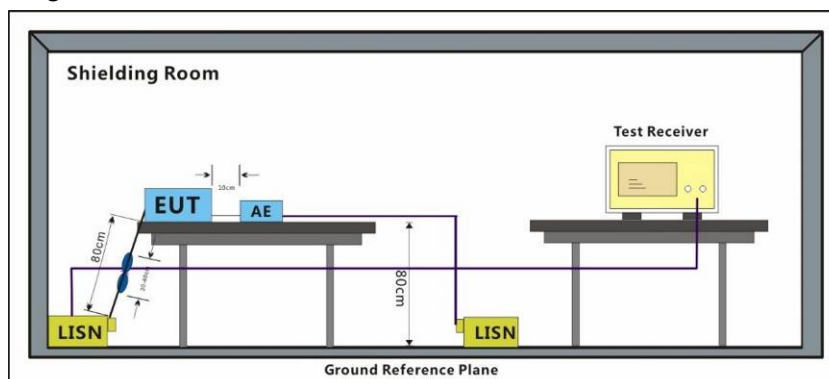
Humidity: 44.5 % RH

Atmospheric Pressure: 1020 mbar

7.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	07	Charge + TX mode_Keep the EUT in charging and continuously transmitting mode.

7.1.3 Test Setup Diagram



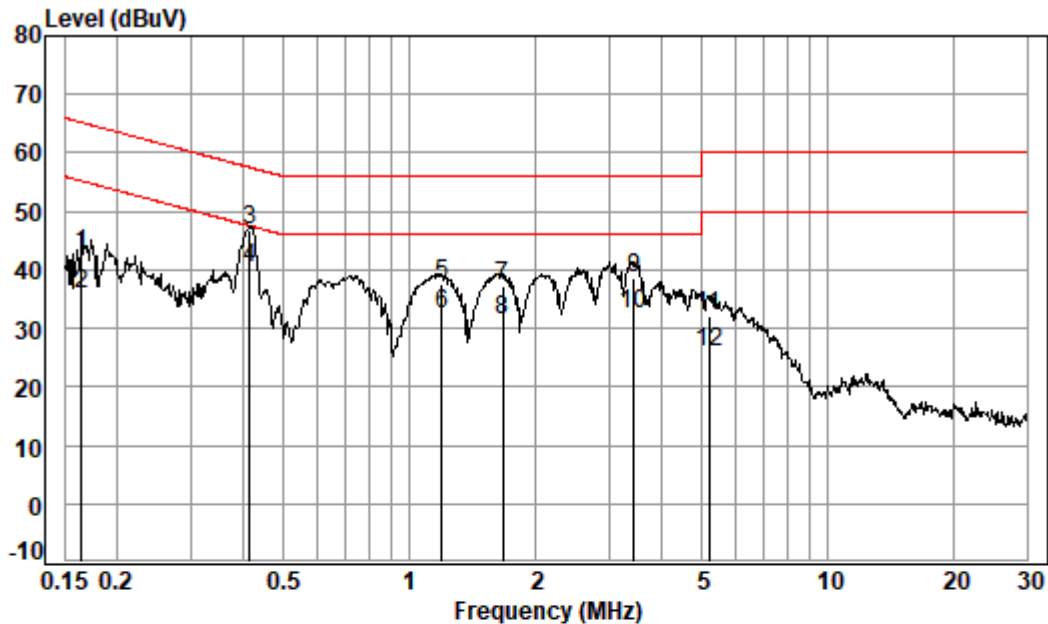
7.1.4 Measurement Procedure and Data

- 1) The mains terminal disturbance voltage test was conducted in a shielded room.
- 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50ohm/50μH + 5ohm linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.
- 3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane.
- 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.
- 5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.

Remark: Level=Read Level+ Cable Loss+ LISN Factor



Test Mode: 07; Line: Live line



Site : Shielding Room

Condition: Line

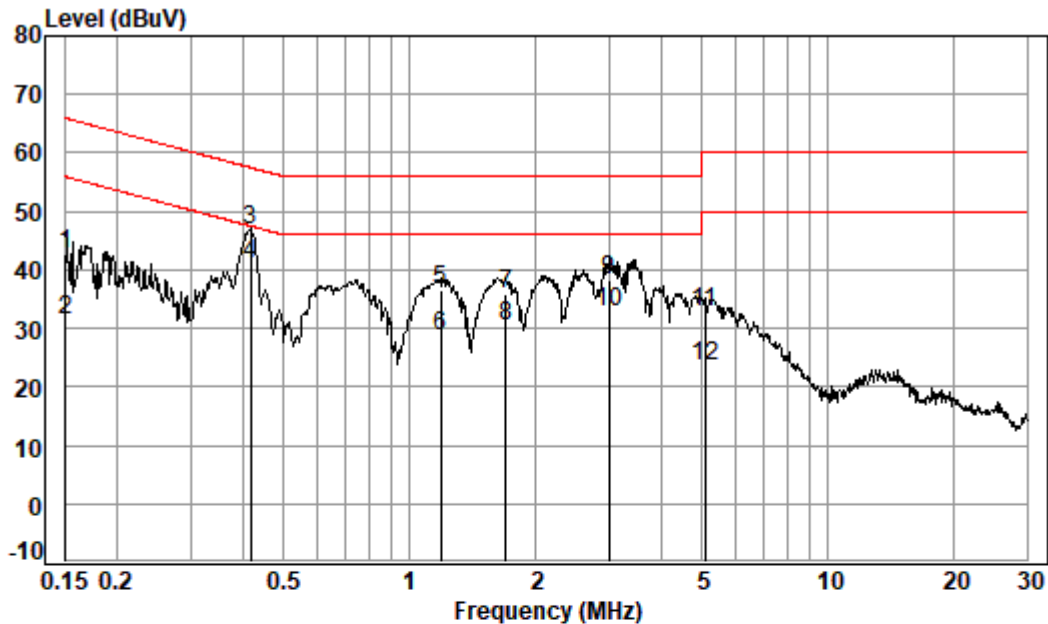
Job No. : 03385ME

Test mode: 07

	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.1650	0.06	10.17	32.43	42.66	65.21	-22.55	QP
2	0.1650	0.06	10.17	25.67	35.90	55.21	-19.31	Average
3 *	0.4148	0.07	9.65	37.24	46.96	57.55	-10.59	QP
4 *	0.4148	0.07	9.65	30.70	40.42	47.55	-7.13	Average
5	1.1970	0.09	9.58	27.97	37.64	56.00	-18.36	QP
6	1.1970	0.09	9.58	22.79	32.46	46.00	-13.54	Average
7	1.6713	0.10	9.58	27.40	37.08	56.00	-18.92	QP
8	1.6713	0.10	9.58	21.64	31.32	46.00	-14.68	Average
9	3.4356	0.11	9.65	28.92	38.68	56.00	-17.32	QP
10	3.4356	0.11	9.65	22.59	32.35	46.00	-13.65	Average
11	5.1937	0.12	9.66	22.45	32.23	60.00	-27.77	QP
12	5.1937	0.12	9.66	16.26	26.04	50.00	-23.96	Average



Test Mode: 07; Line: Neutral Line



Site : Shielding Room

Condition: Neutral

Job No. : 03385ME

Test mode: 07

	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.1508	0.06	10.15	32.64	42.85	65.96	-23.11	QP
2	0.1508	0.06	10.15	21.08	31.29	55.96	-24.67	Average
3 *	0.4171	0.07	9.73	36.93	46.73	57.51	-10.78	QP
4 *	0.4171	0.07	9.73	31.08	40.88	47.51	-6.63	Average
5	1.1907	0.09	9.54	26.96	36.59	56.00	-19.41	QP
6	1.1907	0.09	9.54	19.13	28.76	46.00	-17.24	Average
7	1.6981	0.10	9.55	26.31	35.96	56.00	-20.04	QP
8	1.6981	0.10	9.55	20.64	30.29	46.00	-15.71	Average
9	2.9935	0.11	9.54	28.48	38.13	56.00	-17.87	QP
10	2.9935	0.11	9.54	23.08	32.73	46.00	-13.27	Average
11	5.0580	0.12	9.56	22.93	32.61	60.00	-27.39	QP
12	5.0580	0.12	9.56	13.89	23.57	50.00	-26.43	Average



7.2 Transmitter power

Test Requirement 47 CFR Part 15C Section 15.255 (c)(2)(iii)(A)

Test Method: ANSI C63.10-2020 Section 9.2.1, 9.2.2

Limit:

The peak EIRP shall not exceed 14 dBm, and the sum of continuous transmitter off-times of at least two milliseconds shall equal at least 25.5 milliseconds within any contiguous interval of 33 milliseconds.

7.2.1 E.U.T. Operation

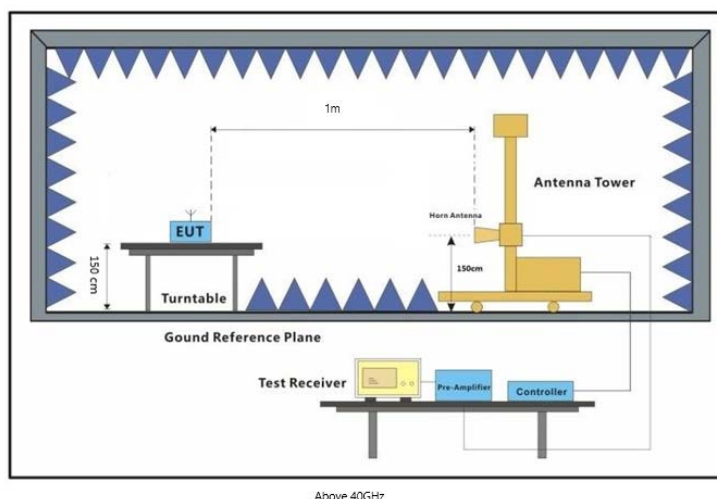
Operating Environment:

Temperature: 21.7 °C Humidity: 35.8 % RH Atmospheric Pressure: 1020 mbar

7.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Pre-scan	06	TX mode_Keep the EUT in continuously transmitting mode.
Final test	07	Charge + TX mode_Keep the EUT in charging and continuously transmitting mode.

7.2.3 Test Setup Diagram



7.2.4 Measurement Procedure and Data

- a. For transmitter power test, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 1 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation
- b. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- c. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to the same height and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- d. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- e. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- g. Repeat above procedures until all frequencies measured was complete.

Remark 1: Level= Read Level+ Cable Loss+ Antenna Factor

Please Refer to Appendix for Details



7.3 Occupied Bandwidth

Test Requirement 47 CFR Part 15C Section 15.215(c), 15.255 (c)(2)

Test Method: ANSI C63.10-2020 Section 9.4

Limit: 57-64GHz

7.3.1 E.U.T. Operation

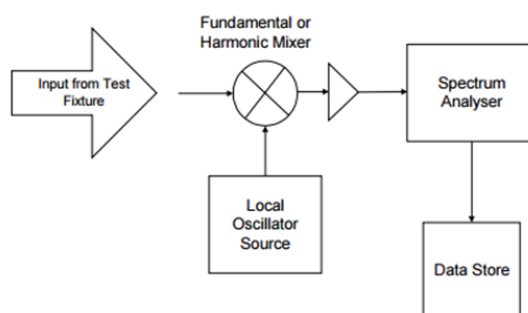
Operating Environment:

Temperature: 21.7 °C Humidity: 35.8 % RH Atmospheric Pressure: 1020 mbar

7.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Pre-scan	06	TX mode_Keep the EUT in continuously transmitting mode.
Final test	07	Charge + TX mode_Keep the EUT in charging and continuously transmitting mode.

7.3.3 Test Setup Diagram



7.3.4 Measurement Procedure and Data

1. Place the EUT on the table and set it in the transmitting mode.
2. SA set RBW=1%~5% OBW, or a minimum of 1 MHz if this is not possible due to a large OBW, VBW=3*RBW and Detector=Peak.
3. Measure and record the result of 20dB and 99% bandwidth.

Please Refer to Appendix for Details



7.4 Radiated spurious emissions below 40 GHz

Test Requirement 47 CFR Part 15C Section 15.255 (d)(2)

Test Method: ANSI C63.10-2020 Section 9.11

Limit:

Below 30MHz:

Frequency	Field Strength (μV/m)	Measurement Distance (metres)
9 - 490 kHz	2,400/F (kHz)	300
490 - 1,705 kHz	24,000/F (kHz)	30
1.705-30 MHz	30	30

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

Above 30MHz:

Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (metres)
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241.



Frequency (MHz)	Field strength at 3 m, dB(uV/m)*		
	Within restricted bands		
	Peak	Quasi Peak	Average
0.009 - 0.090	148.5 - 128.5	NA	128.5 - 108.5**
0.090 - 0.110	NA	108.5 - 106.8**	NA
0.110 - 0.490	126.8 - 113.8	NA	106.8 - 93.8**
0.490 - 1.705	NA	73.8 - 63.0**	NA
1.705 - 30.0*		69.5	
30 - 88		40.0	
88 - 216		43.5	
216 - 960		46.0	
Above 960		54.0	
1000 - 200000	74.0	N/A	54.0

*- The limit for 3 m test distance was calculated using the inverse square distance extrapolation factor as follows:

$$\text{LimS2} = \text{LimS1} + 20 \log (S1/S2),$$

where S1 and S2 - standard defined and test distance respectively in meters.

** - The limit decreases linearly with the logarithm of frequency.

Note: The above field strength limits applied from the lowest radio frequency generated in the device, without going below 9 kHz up to the tenth harmonic of the highest fundamental frequency but not exceeding 40 GHz for intentional radiators operated below 10 GHz and up to the fifth harmonic of the highest fundamental frequency but not exceeding 200 GHz for intentional radiators operated above 30 GHz.

Frequency (MHz)	Field strength at 1 m, dB(uV/m)*		
	Within restricted bands		
	Peak	Quasi Peak	Average
1000 - 200000	83.5	N/A	63.5

7.4.1 E.U.T. Operation

Operating Environment:

Temperature: 21.7 °C

Humidity: 35.8 % RH

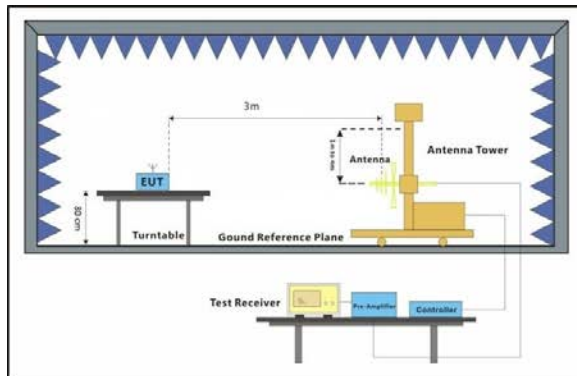
Atmospheric Pressure: 1020 mbar

7.4.2 Test Mode Description

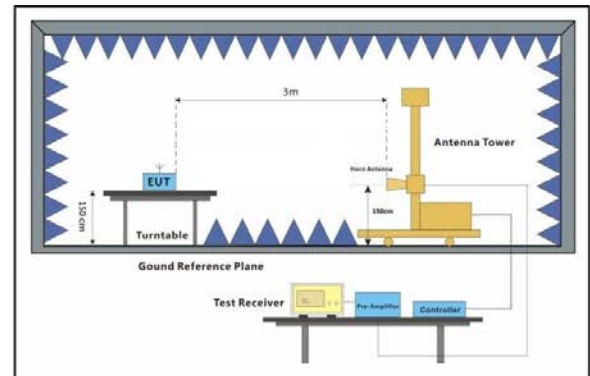
Pre-scan / Final test	Mode Code	Description
Pre-scan	06	TX mode_Keep the EUT in continuously transmitting mode.
Final test	07	Charge + TX mode_Keep the EUT in charging and continuously transmitting mode.



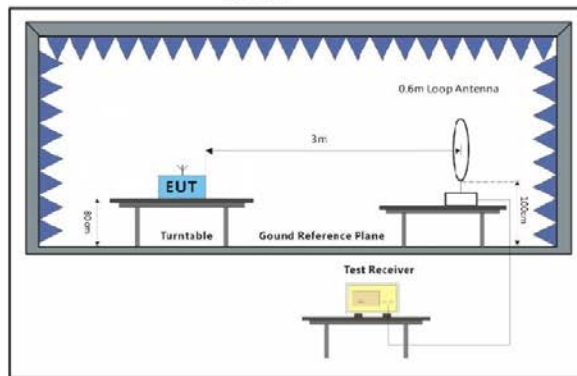
7.4.3 Test Setup Diagram



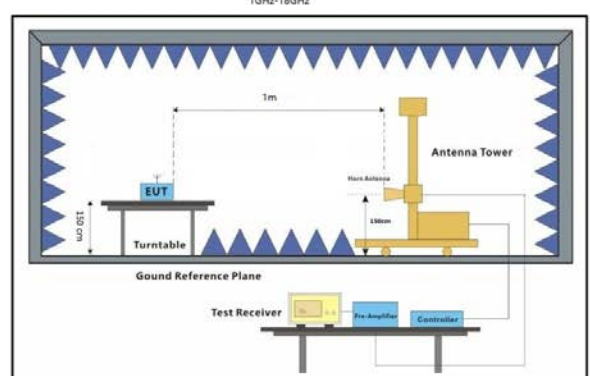
30MHz-1GHz



1GHz-18GHz



Below 30MHz



18GHz-40GHz



7.4.4 Measurement Procedure and Data

- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. For 1-18GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. For 18-40GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 1 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to the same height (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- g. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- i. Repeat above procedures until all frequencies measured was complete.

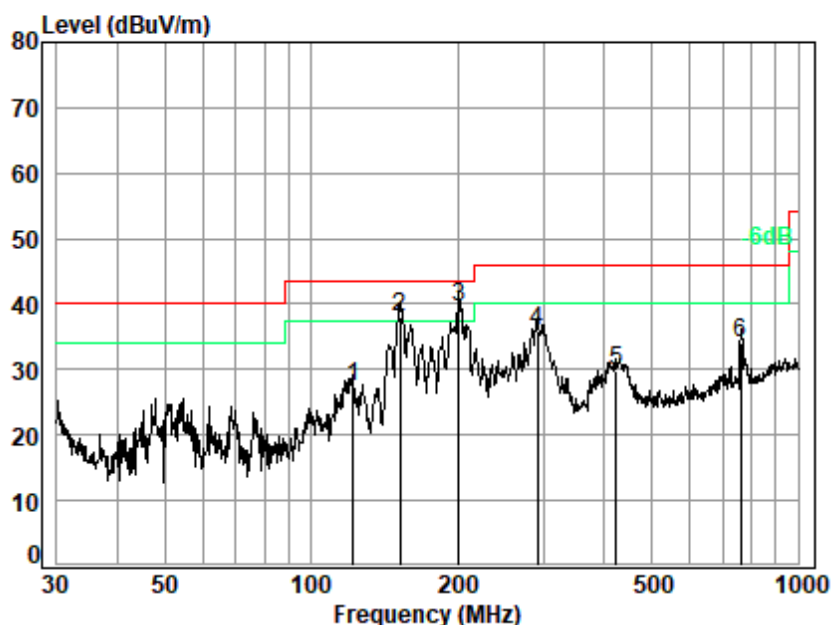
Remark 1: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

Remark 2: For frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.

Remark 3: Scan from 9kHz to 40GHz, the disturbance below 30MHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.



Test Mode: 07; Polarity: Horizontal

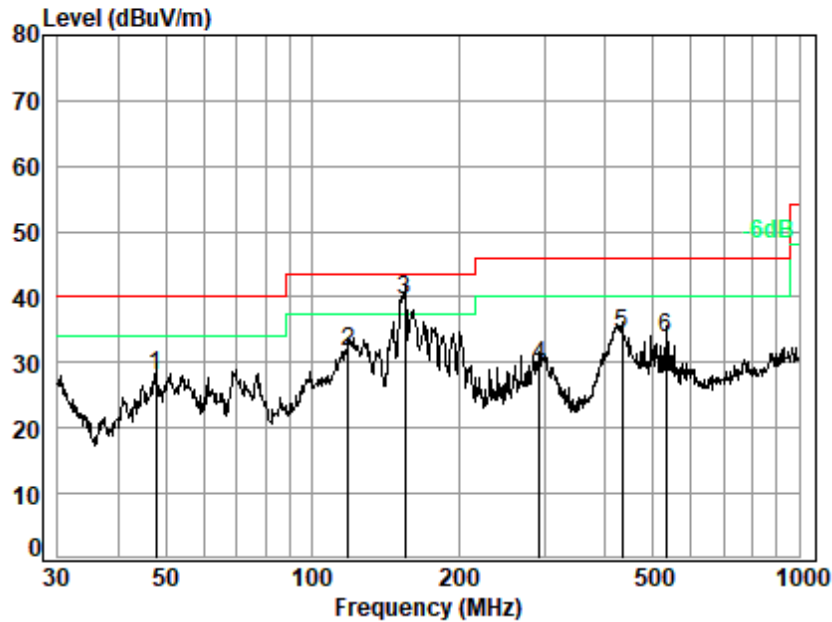


Site : chamber
Condition: 3m HORIZONTAL
Job No. : 3385ME
Test Mode: 07

	Ant	Cable	Preamp	Read		Limit	Over	
	Freq	Factor	Loss	Factor	Level	Level	Line	Limit
	MHz	dB/m	dB	dB	dBuV	dBuV/m	dBuV/m	dB
1	121.976	11.01	1.37	27.50	42.36	27.24	43.50	-16.26 QP
2	152.130	13.28	1.55	27.37	50.63	38.09	43.50	-5.41 QP
3 q	200.688	14.16	1.76	27.17	50.89	39.64	43.50	-3.86 QP
4	291.036	17.12	2.17	26.79	43.52	36.02	46.00	-9.98 QP
5	422.058	20.67	2.66	27.25	33.61	29.69	46.00	-16.31 QP
6	763.376	26.52	3.75	27.57	31.48	34.18	46.00	-11.82 QP



Test Mode: 07; Polarity: Vertical



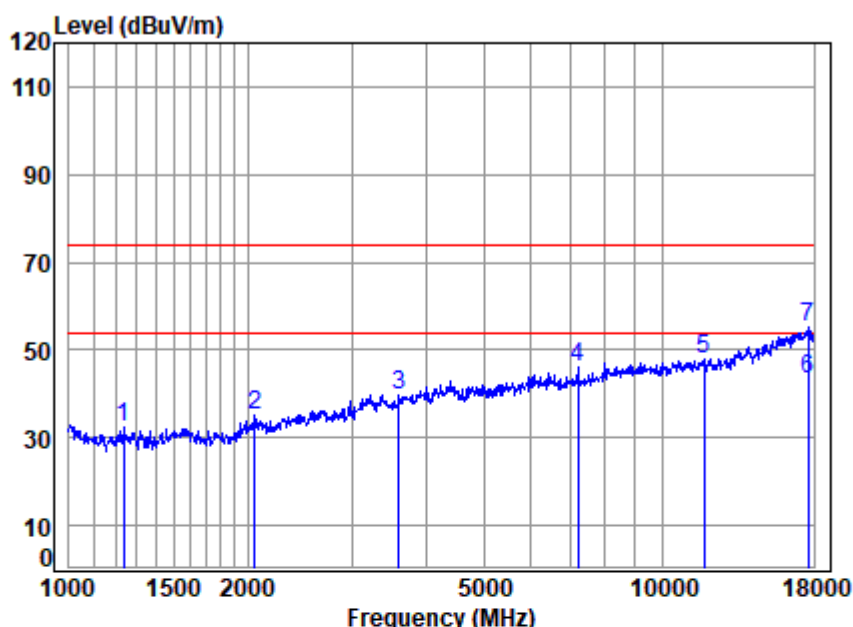
Site : chamber
Condition: 3m VERTICAL
Job No. : 3385ME
Test Mode: 07

		Ant	Cable	Preamp	Read		Limit	Over	
	Freq	Factor	Loss	Factor	Level	Level	Line	Limit	Remark
	MHz	dB/m	dB	dB	dBuV	dBuV/m	dBuV/m	dB	
1	47.659	13.42	0.84	27.74	41.43	27.95	40.00	-12.05	QP
2	118.601	11.16	1.35	27.51	46.73	31.73	43.50	-11.77	QP
3 q	154.821	13.52	1.56	27.36	51.83	39.55	43.50	-3.95	QP
4	293.084	17.28	2.17	26.78	36.98	29.65	46.00	-16.35	QP
5	432.546	20.99	2.70	27.29	37.92	34.32	46.00	-11.68	QP
6	531.964	23.33	3.03	27.69	34.95	33.62	46.00	-12.38	QP



Test data for low channel

Test Mode: 07; Polarity: Horizontal

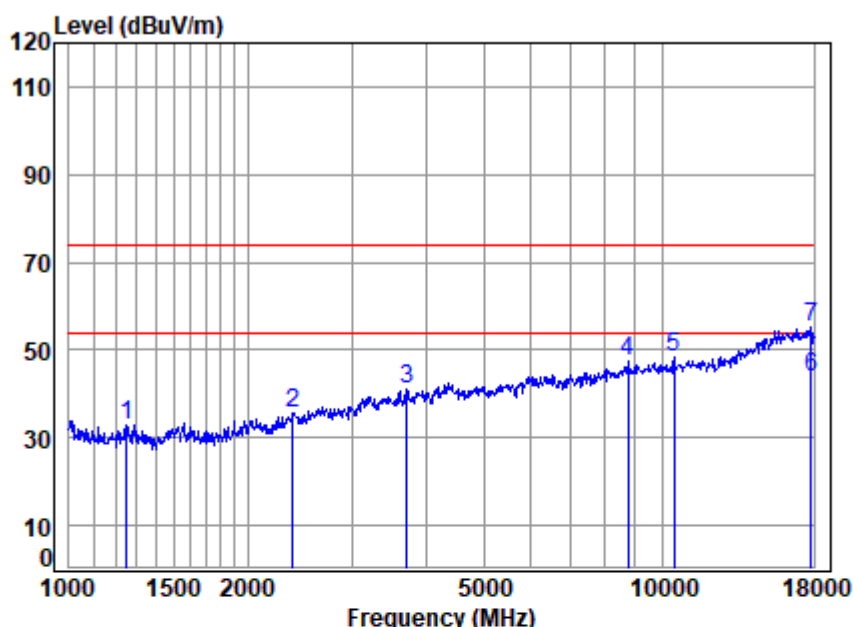


Site : chamber
Condition: 3m HORIZONTAL
Job No : 03385ME
Mode : RSE TX

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1234.909	5.40	24.89	54.69	56.77	32.37	74.00	-41.63	Peak
2	2053.822	5.11	28.98	54.91	55.96	35.14	74.00	-38.86	Peak
3	3598.203	6.38	32.08	54.56	55.99	39.89	74.00	-34.11	Peak
4	7200.309	8.54	35.70	53.18	55.07	46.13	74.00	-27.87	Peak
5	11769.210	12.08	37.90	53.16	51.23	48.05	74.00	-25.95	Peak
6	q17639.470	14.69	43.68	52.58	37.53	43.32	54.00	-10.68	Average
7	p17639.470	14.69	43.68	52.58	49.39	55.18	74.00	-18.82	Peak



Test Mode: 07; Polarity: Vertical



Site : chamber
Condition: 3m VERTICAL
Job No : 03385ME
Mode : RSE TX

		Cable	Ant	Preamp	Read	Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	1252.885	5.36	25.08	54.70	56.96	32.70	74.00	-41.30 Peak
2	2386.915	5.37	29.10	54.94	56.14	35.67	74.00	-38.33 Peak
3	3703.723	6.49	32.99	54.49	56.19	41.18	74.00	-32.82 Peak
4	8738.852	10.10	36.90	53.47	54.09	47.62	74.00	-26.38 Peak
5	10453.970	11.09	37.21	53.11	53.26	48.45	74.00	-25.55 Peak
6	q17844.590	14.75	43.90	52.48	37.80	43.97	54.00	-10.03 Average
7	p17844.590	14.75	43.90	52.48	48.98	55.15	74.00	-18.85 Peak



SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

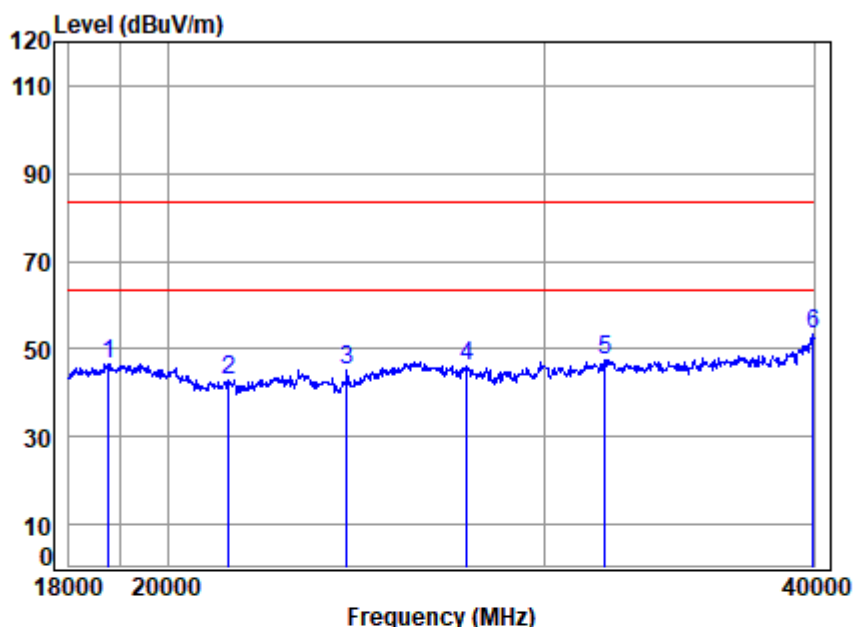
SZEMC-TRF-01 Rev. A/1

Report No.: SZCR240800338503

Page: 27 of 52

Test data for High channel

Test Mode: 07; Polarity: Horizontal



Site : chamber
Condition: 1m HORIZONTAL
Job No : 03385ME
Mode : RSE TX
Note :

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	18778.130	5.79	36.88	54.71	58.75	46.71	83.54	-36.83	Peak
2	21354.290	6.00	36.98	55.07	55.12	43.03	83.54	-40.51	Peak
3	24245.120	6.69	38.10	54.55	54.89	45.13	83.54	-38.41	Peak
4	27549.280	7.15	38.60	52.47	52.76	46.04	83.54	-37.50	Peak
5	31985.970	7.98	39.98	52.10	51.53	47.39	83.54	-36.15	Peak
6	39968.070	7.73	43.16	51.82	54.11	53.18	83.54	-30.36	Peak



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

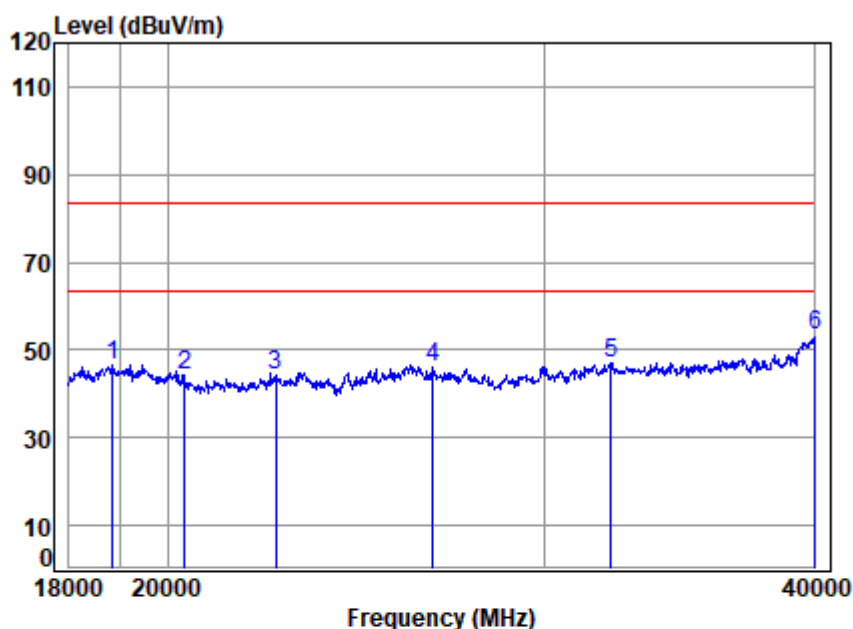
SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZEMC-TRF-01 Rev. A/1

Report No.: SZCR240800338503

Page: 28 of 52

Test Mode: 07; Polarity: Vertical



Site : chamber
Condition: 1m VERTICAL
Job No : 03385ME
Mode : RSE TX
Note :

	Cable	Ant	Preamp	Read		Limit	Over	
Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 18853.250	5.89	36.82	54.74	58.79	46.76	83.54	-36.78	Peak
2 20371.570	5.98	37.10	55.59	56.66	44.15	83.54	-39.39	Peak
3 22456.010	6.27	36.70	53.05	54.36	44.28	83.54	-39.26	Peak
4 26598.160	7.44	38.48	52.22	52.26	45.96	83.54	-37.58	Peak
5 32165.260	8.02	40.13	52.15	51.14	47.14	83.54	-36.40	Peak
6 p40000.000	7.74	43.20	51.80	54.08	53.22	83.54	-30.32	Peak



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

7.5 Radiated emissions outside assigned band and above 40 GHz up to 200 GHz

Test Requirement 47 CFR Part 15C Section 15.255 (d)(3)

Test Method: ANSI C63.10-2020 Section 9.10

Limit:

Above 40GHz:

Frequency (GHz)	Power density at 3 m distance (pW/cm ²)	Distance (m)	Field strength (dBuV/m)*, peak	Field strength (dBuV/m)*, average
40 - 200	90	3.0	105.31	85.31
40 - 200	90	1.0	114.85**	94.85**

* - Field strength was calculated per equation (26) of ANSI C63.10-2013 section 9 as follows:
 $E = \sqrt{PD \times 377}$, where PD is the power density at the distance specified by the limit in W/m², E- field strength in V/m.

** - The limit for other test distance was calculated using the inverse distance extrapolation factor as follows:
 $LimS2 = LimS1 + 20 \log (S1/S2)$, where S1 and S2 - standard defined and test distance respectively in meters.

7.5.1 E.U.T. Operation

Operating Environment:

Temperature: 21.7 °C

Humidity: 35.8 % RH

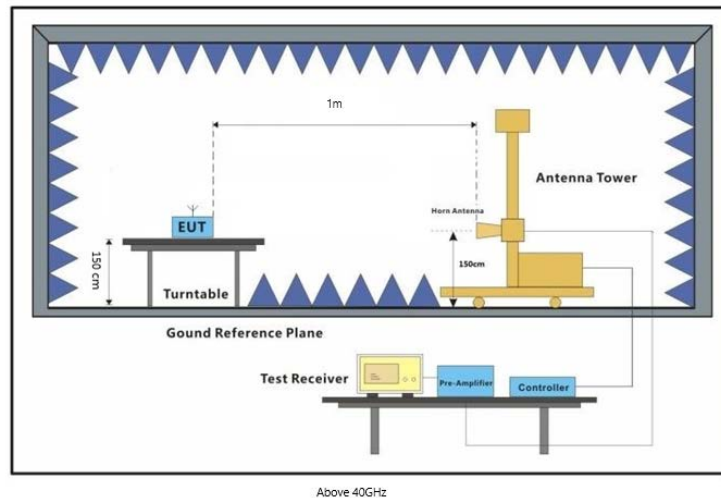
Atmospheric Pressure: 1020 mbar

7.5.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Pre-scan	06	TX mode_Keep the EUT in continuously transmitting mode.
Final test	07	Charge + TX mode_Keep the EUT in charging and continuously transmitting mode.



7.5.3 Test Setup Diagram



7.5.4 Measurement Procedure and Data

- For above 40GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 1 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation
- The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to the same height (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- Repeat above procedures until all frequencies measured was complete.

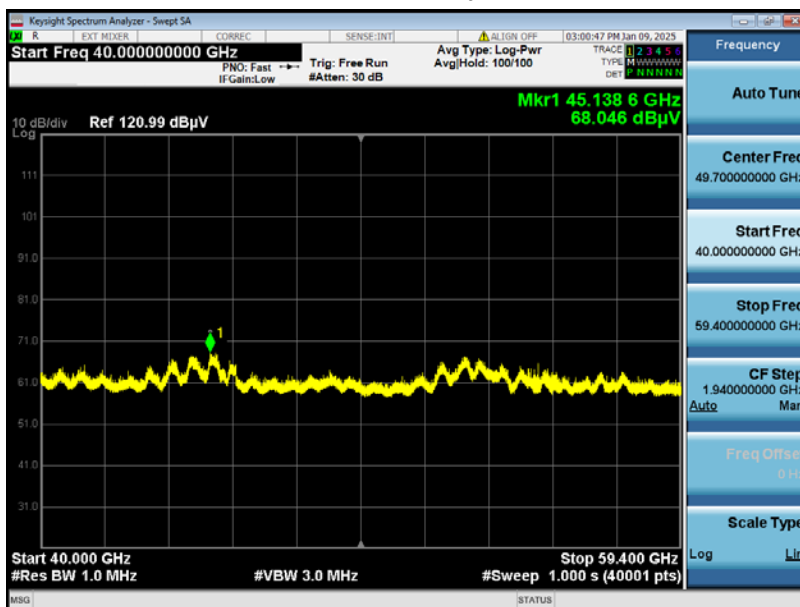
Remark 1: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

Remark 2: For frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.

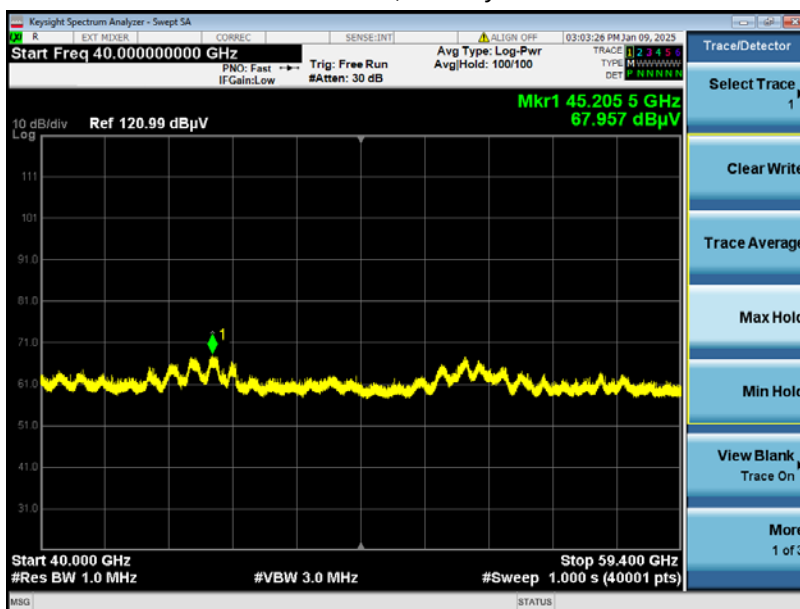
Remark 3: Only record the worst case in the report.



Test Mode: 07; Polarity: Horizontal



Test Mode: 07; Polarity: Vertical



Frequency (MHz)	PK Value (dBuV/m)	Distance (M)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Polarization	Result
45138.6	68.046	1	114.85	94.85	H	PASS
45205.5	67.957	1	114.85	94.85	V	PASS



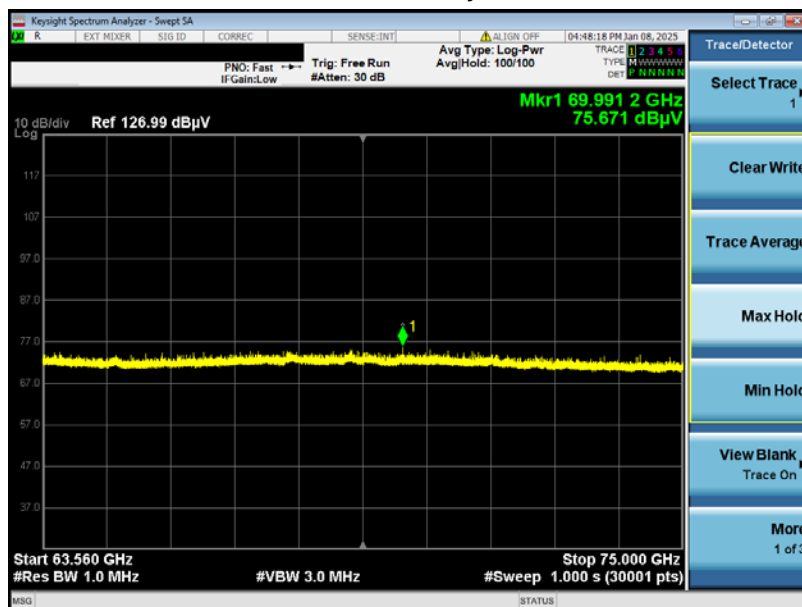
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

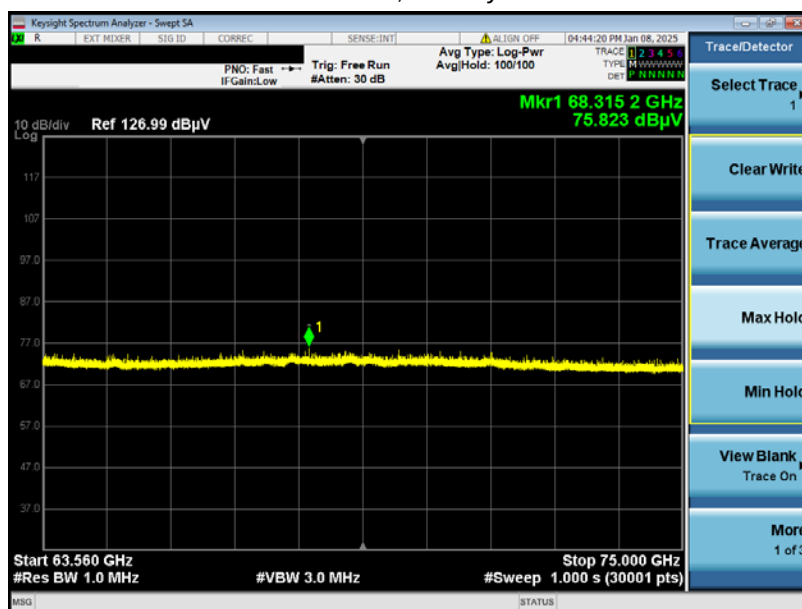
SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (SZEMC) EMC Laboratory.

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

Test Mode: 07; Polarity: Horizontal



Test Mode: 07; Polarity: Vertical

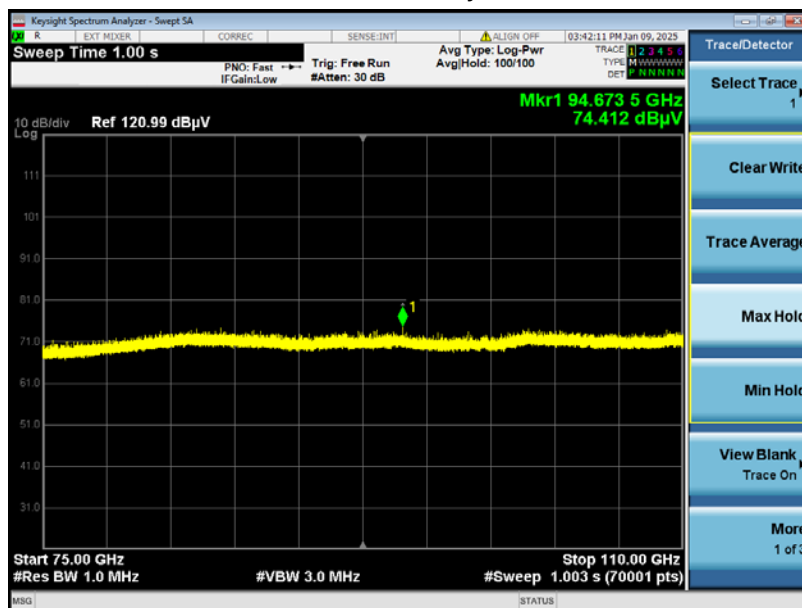


Frequency (MHz)	PK Value (dBuV/m)	Distance (M)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Polarization	Result
69991.2	75.671	1	114.85	94.85	H	PASS
75823.0	75.823	1	114.85	94.85	V	PASS

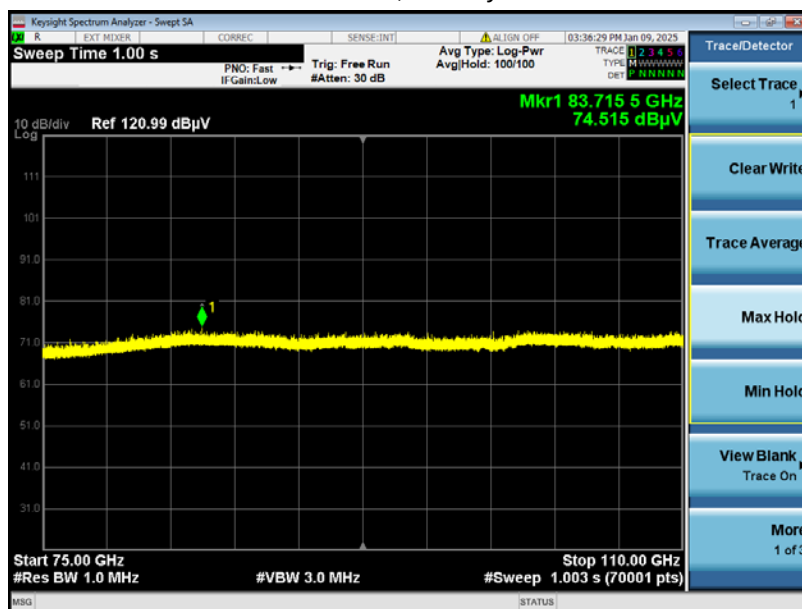
Note: * means the frequency is the fundamental signal of the EUT.



Test Mode: 07; Polarity: Horizontal

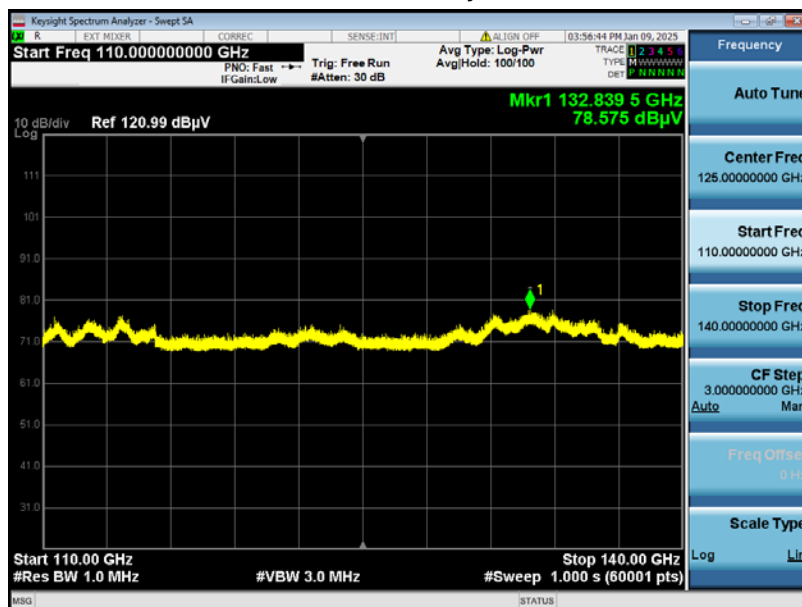


Test Mode: 07; Polarity: Vertical

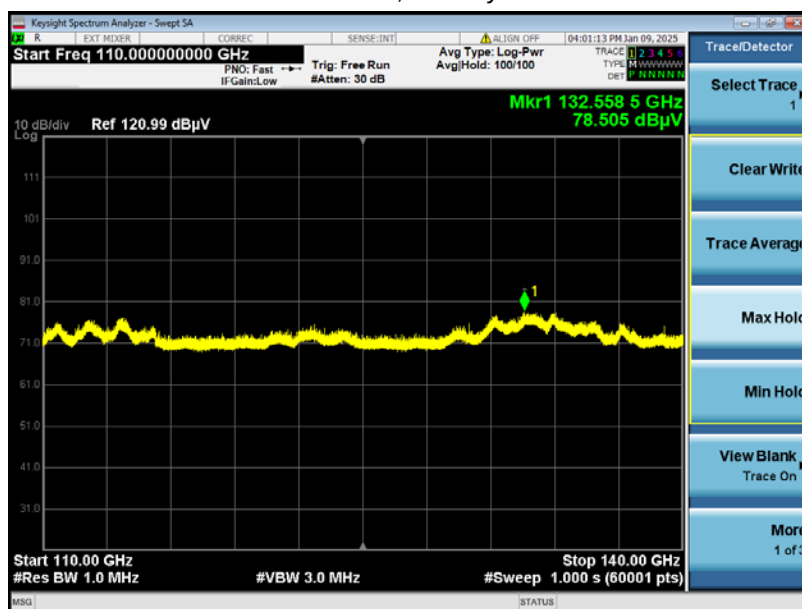


Frequency (MHz)	PK Value (dBuV/m)	Distance (M)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Polarization	Result
94673.5	74.412	1	114.85	94.85	H	PASS
83715.5	74.515	1	114.85	94.85	V	PASS

Test Mode: 07; Polarity: Horizontal



Test Mode: 07; Polarity: Vertical



Frequency (MHz)	PK Value (dBuV/m)	Distance (M)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Polarization	Result
132839.5	78.575	1	114.85	94.85	H	PASS
132558.5	78.505	1	114.85	94.85	V	PASS



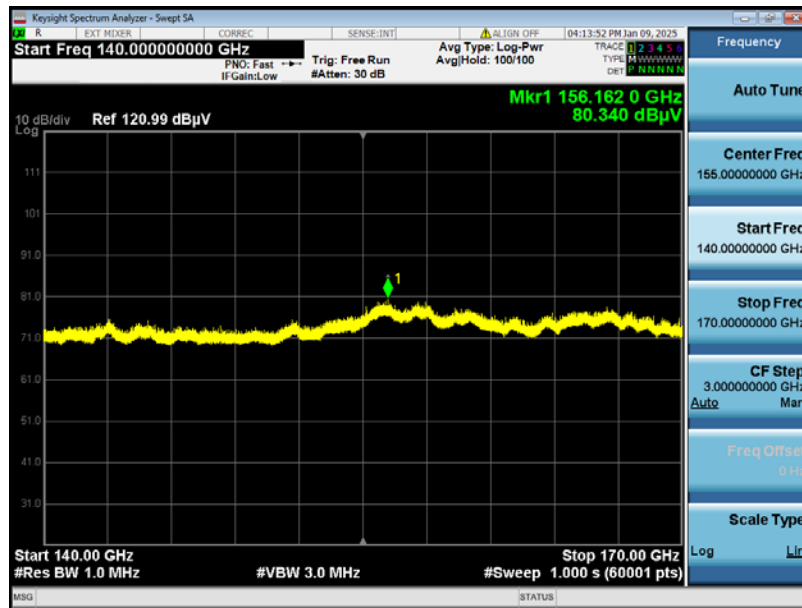
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

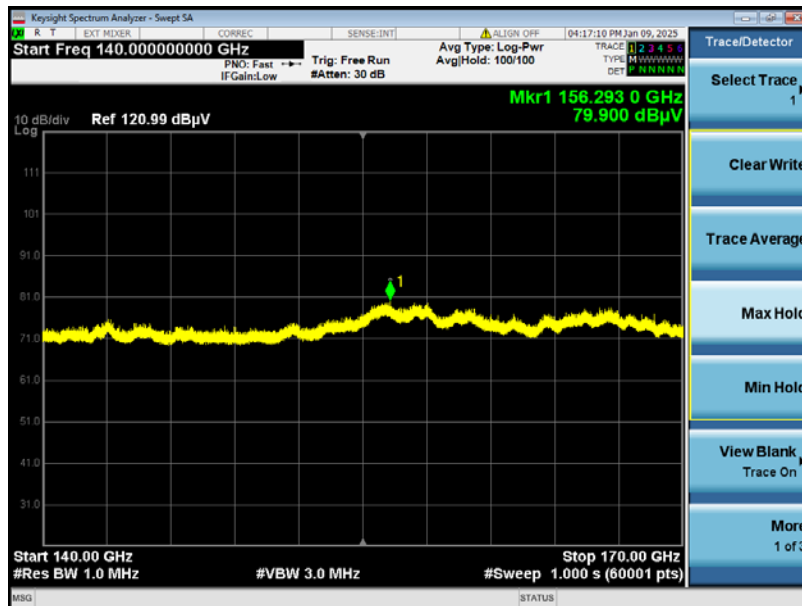
SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch Inspection & Testing Services

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

Test Mode: 07; Polarity: Horizontal

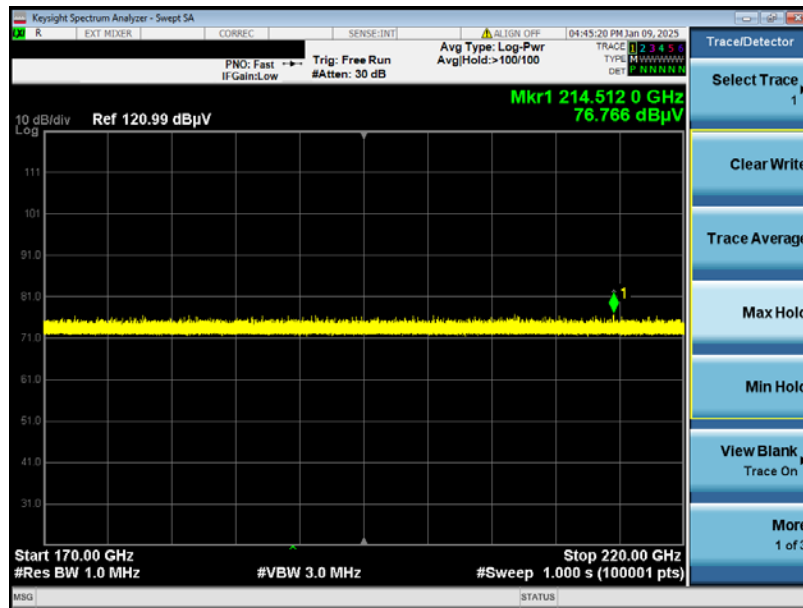


Test Mode: 07; Polarity: Vertical

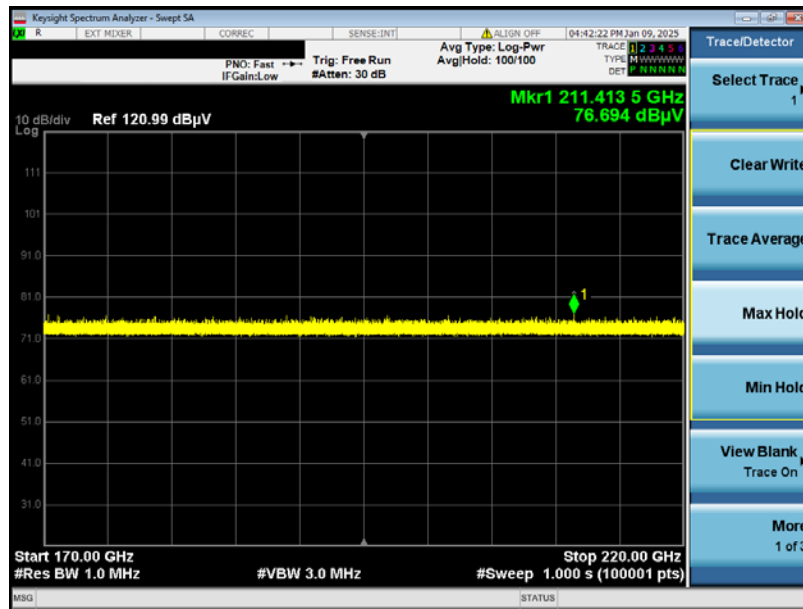


Frequency (MHz)	PK Value (dBuV/m)	Distance (M)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Polarization	Result
156162.0	80.340	1	114.85	94.85	H	PASS
156293.0	79.900	1	114.85	94.85	V	PASS

Test Mode: 07; Polarity: Horizontal



Test Mode: 07; Polarity: Vertical



Frequency (MHz)	PK Value (dBuV/m)	Distance (M)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Polarization	Result
214512.0	76.766	1	114.85	94.85	H	PASS
211413.5	76.694	1	114.85	94.85	V	PASS

7.6 Frequency Stability

Test Requirement 47 CFR Part 15C Section 15.255 (f)

Test Method: ANSI C63.10-2020 Section 9.5

Limit:

Frequency (GHz)	Limit
57 - 64	The signal must be contained within assigned frequency band.

7.6.1 E.U.T. Operation

Operating Environment:

Temperature: 21.7 °C

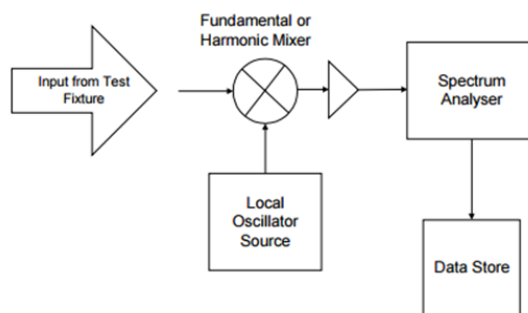
Humidity: 35.8 % RH

Atmospheric Pressure: 1020 mbar

7.6.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Pre-scan	06	TX mode_Keep the EUT in continuously transmitting mode.
Final test	07	Charge + TX mode_Keep the EUT in charging and continuously transmitting mode.

7.6.3 Test Setup Diagram



7.6.4 Measurement Procedure and Data

1. Temperature conditions:

- a) The RF output port of the EUT was connected to Frequency Meter;
- b) Set the working Frequency in the middle channel;
- c) record the 20°C and nominal voltage frequency value as reference point;
- d) vary the temperature from -20°C to 40°C with step 10°C
- e) when reach a temperature point, keep the temperature balance at least 1 hour to make the product working in this status;
- f) read the frequency at the relative temperature.

2. Voltage conditions:

- a) record the 20°C and nominal voltage frequency value as reference point;
 - b) vary the voltage from -15% nominal voltage to +15% voltage;
- read the frequency at the relative voltage.

Remark: Manufacturer declared that the minimum temperature for normal operation of this product is -20°C.

Please Refer to Appendix for Details



8 Test Setup Photo

Refer to Appendix - Test Setup Photo for SZCR2408003385ME.

9 EUT Constructional Details (EUT Photos)

Refer to Appendix – External and Internal Photos for SZCR2408003385ME.

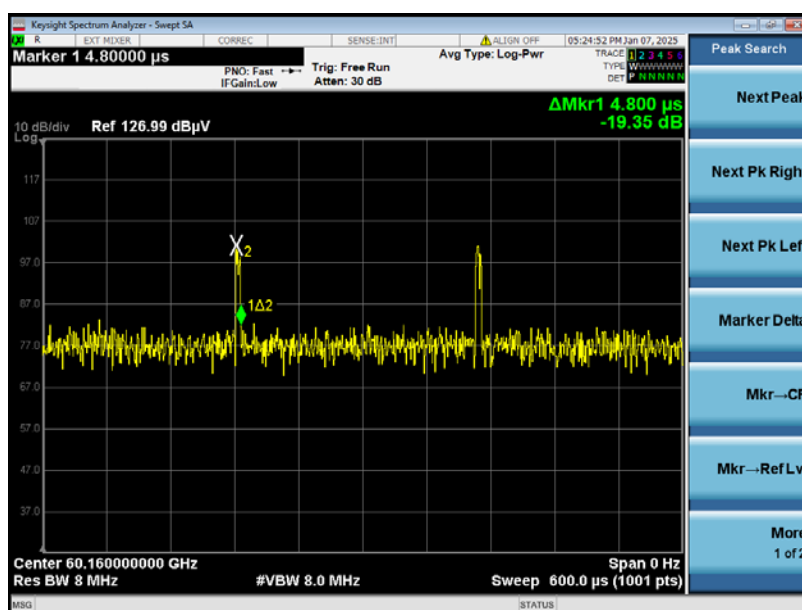
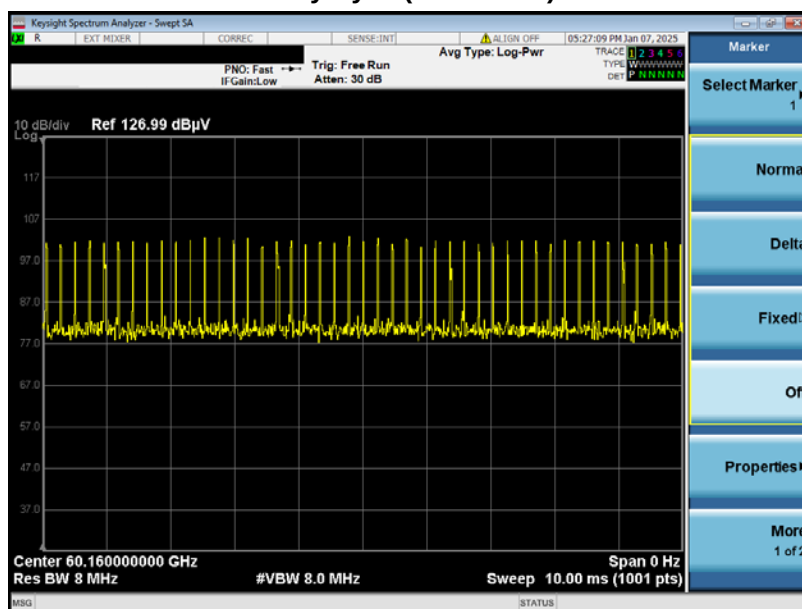


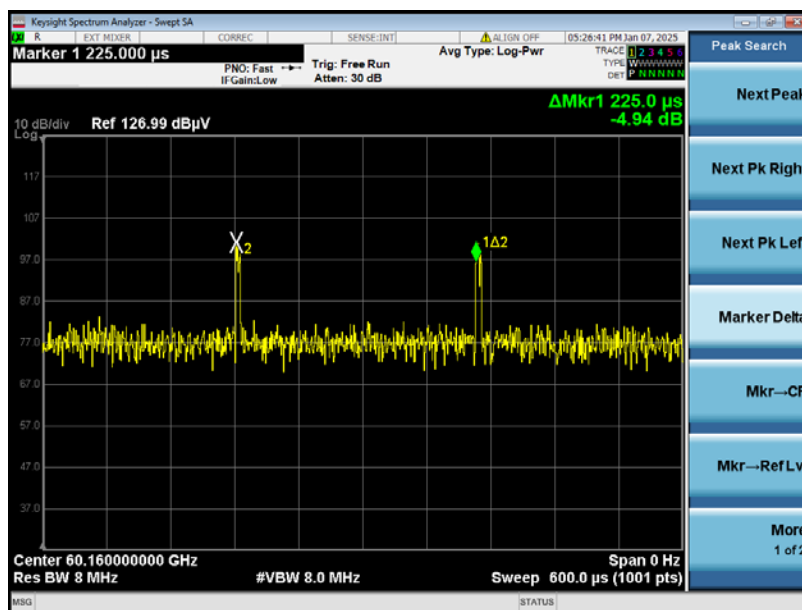
10 Appendix

1. Transmitter power

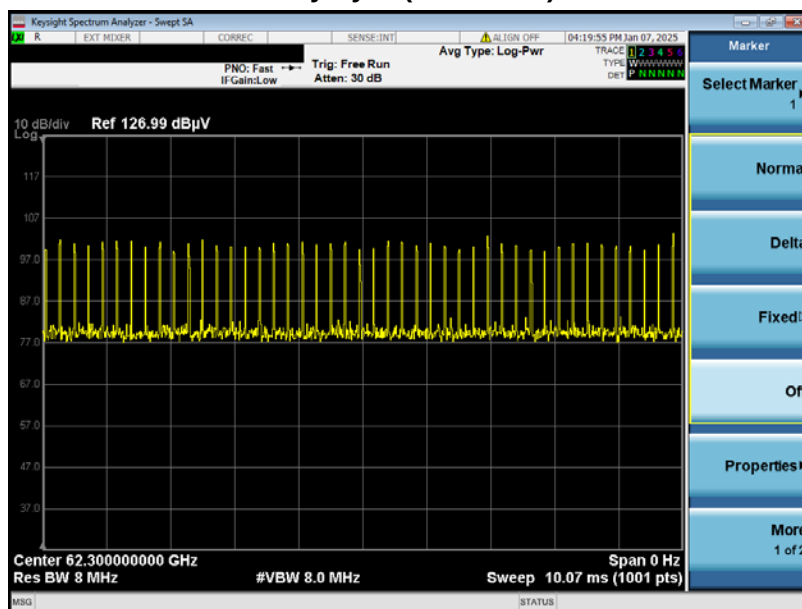
1.1 Test Result of duty cycle

Duty Cycle(60.160GHz)





Duty Cycle(62.320GHz)



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

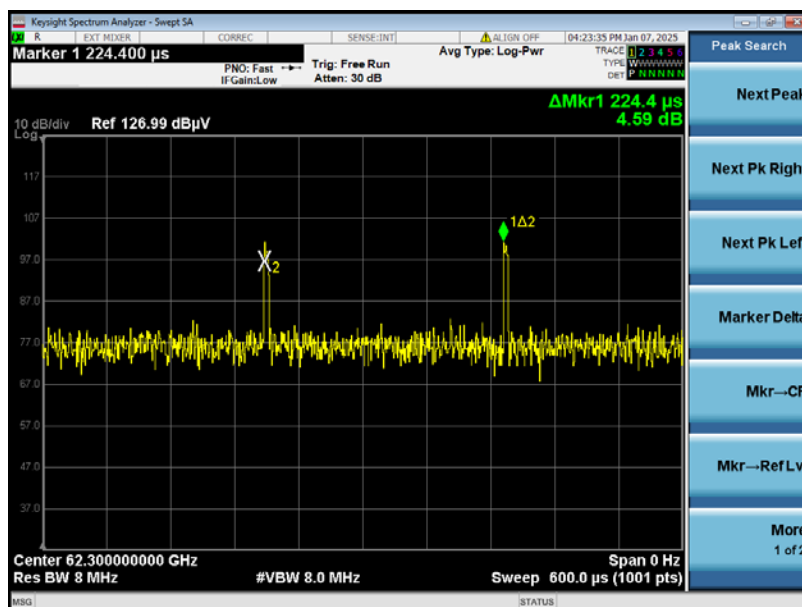
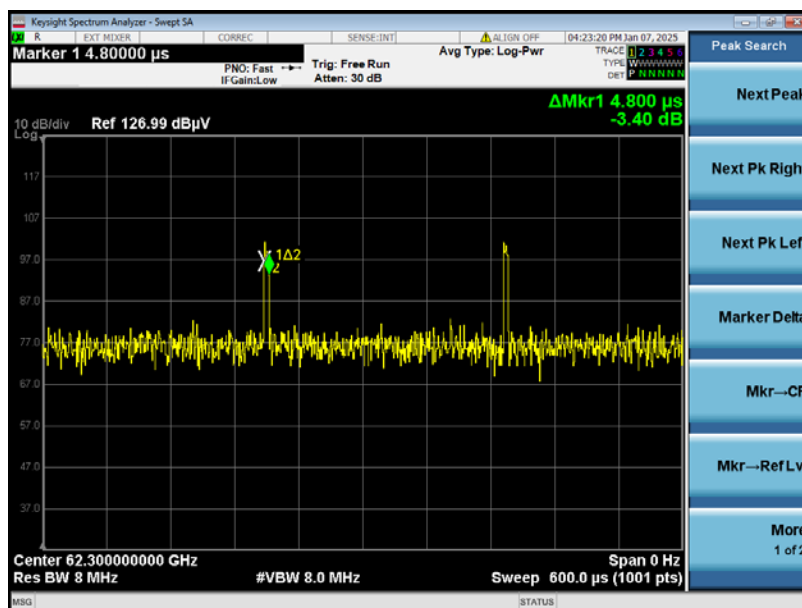
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZEMC-TRF-01 Rev. A/1

Report No.: SZCR240800338503

Page: 42 of 52



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch Inspection & Testing Laboratory

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZEMC-TRF-01 Rev. A/1

Report No.: SZCR240800338503

Page: 43 of 52

Duty Cycle(60.160GHz)

Burst time(us)	Number of Burst	TX ON Time(ms)	TX OFF Time(ms)	Tx OFF Limit (ms)	Verdict
4.8	45	7.128	25.872	25.50	Pass

Duty Cycle(62.320GHz)

Burst time(us)	Number of Burst	TX ON Time(ms)	TX OFF Time(ms)	Tx OFF Limit (ms)	Verdict
4.8	45	7.128	25.872	25.50	Pass

TX ON Time(ms) = Burst time(us)*Number of Burst*33

TX OFF Time(ms) = 33- TX ON Time(ms)

TX OFF Time Limit =25.50ms

Record only the data of the worst.



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch Inspection & Testing Laboratory

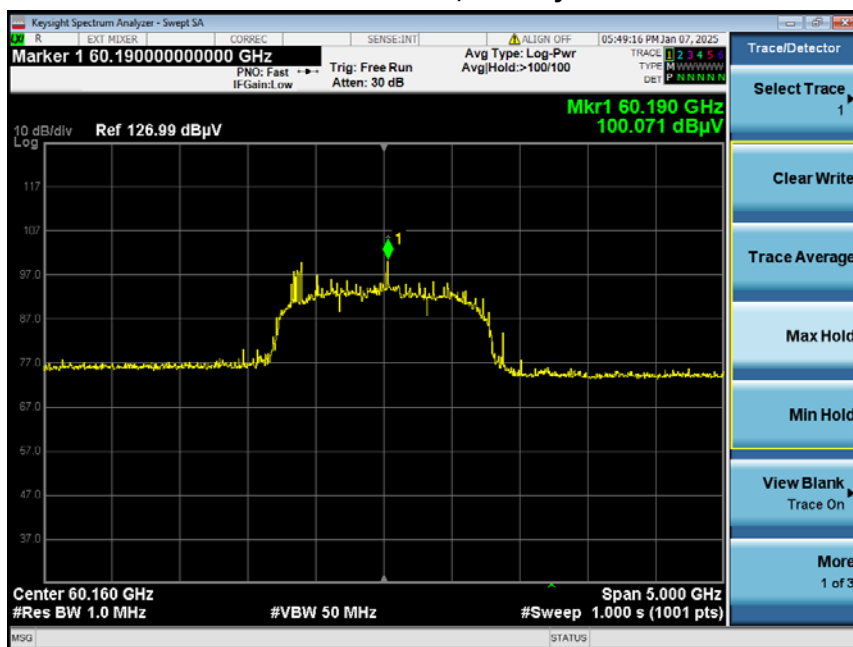
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

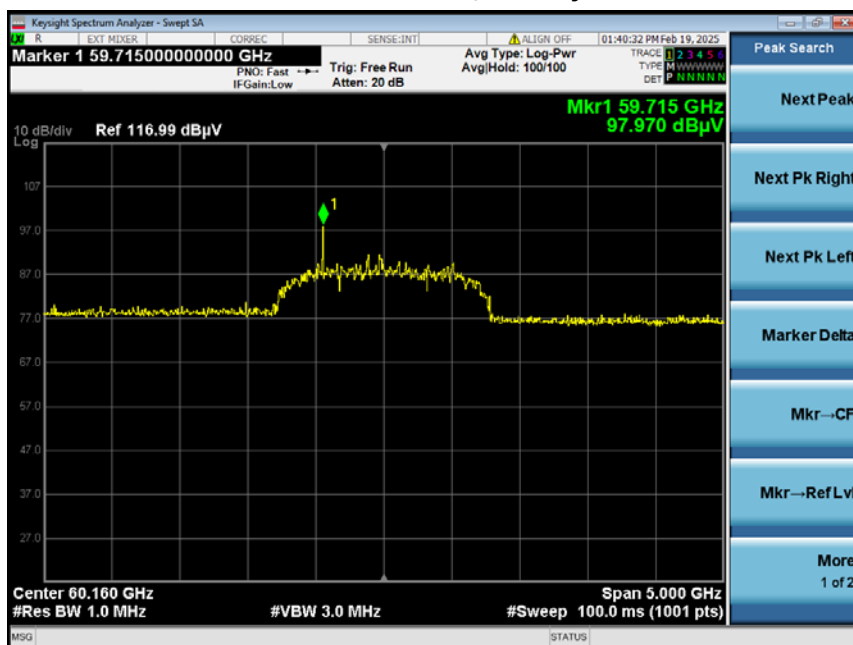
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

1.1.2 Test Result of EIRP

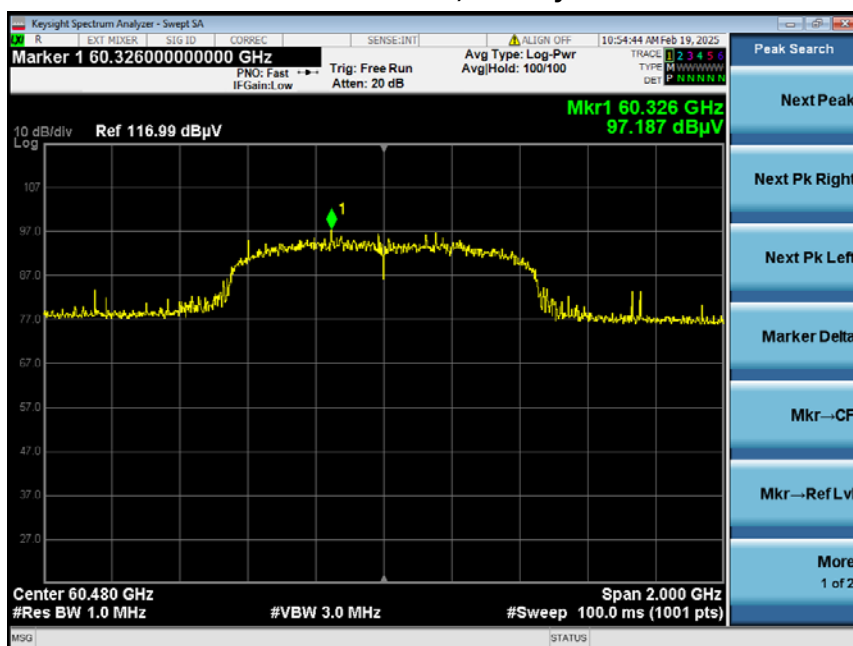
Peak Power- 60.160GHz, Polarity: Horizontal



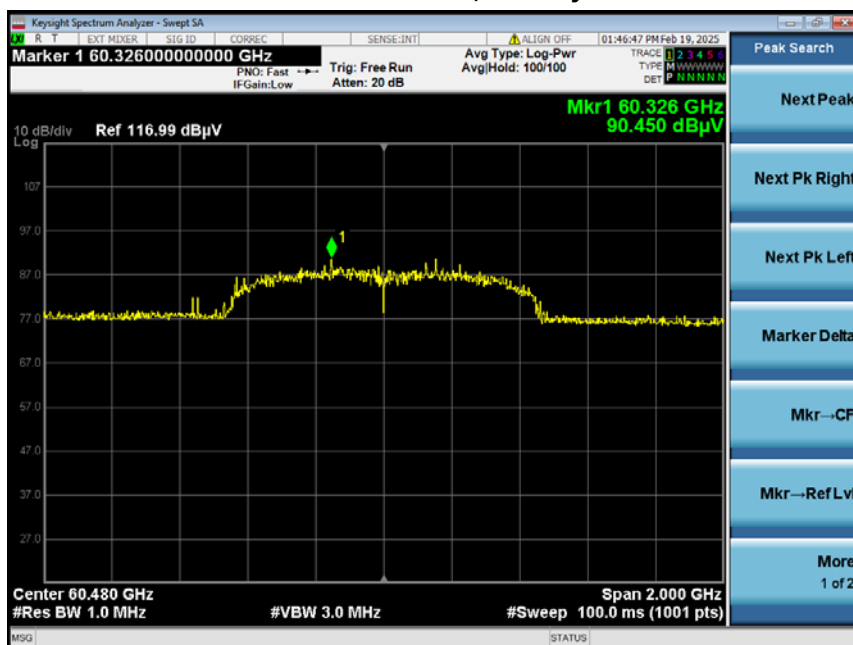
Peak Power- 60.160GHz, Polarity: Vertical



Peak Power- 60.480GHz, Polarity: Horizontal



Peak Power- 60.480GHz, Polarity: Vertical



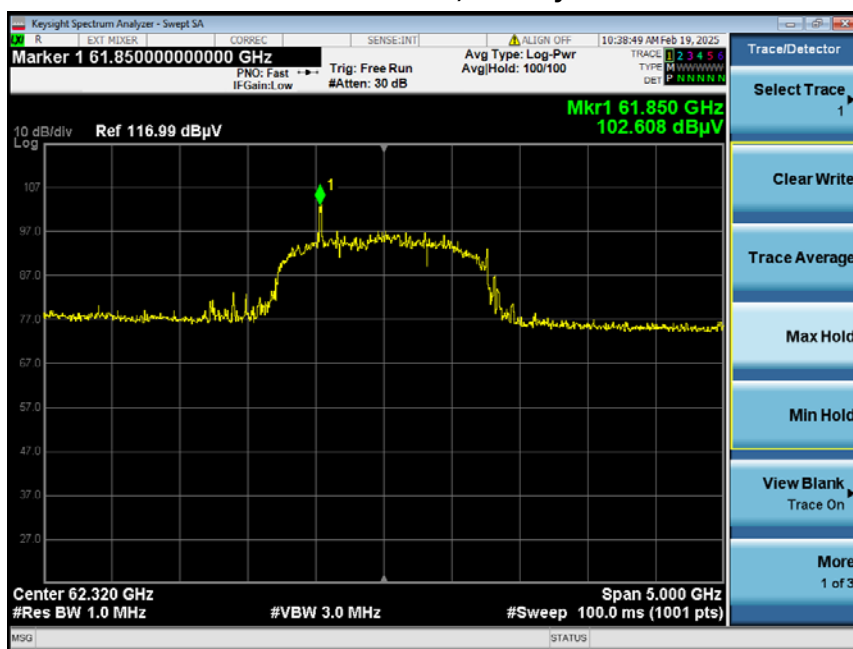
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

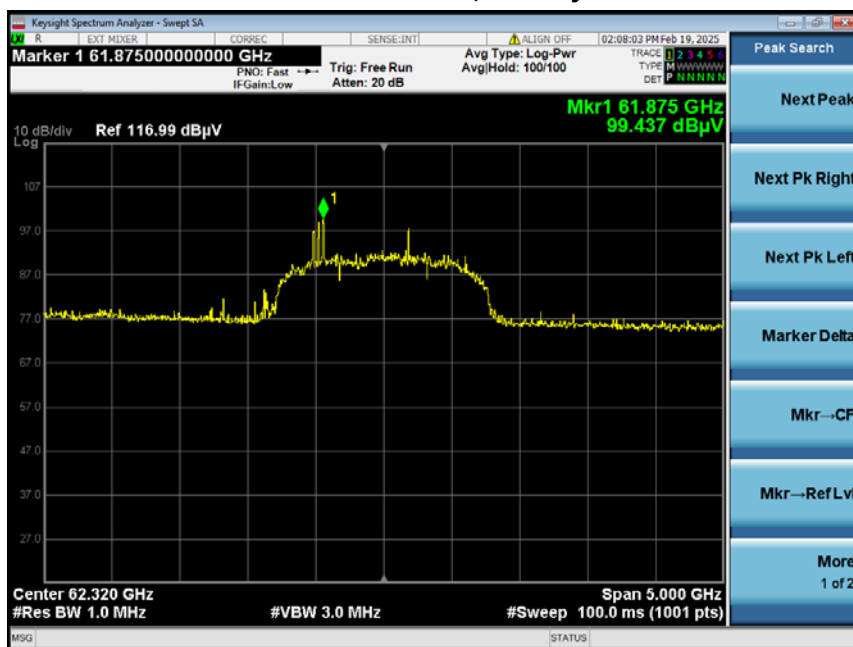
SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

Peak Power- 62.320GHz, Polarity: Horizontal



Peak Power- 62.320GHz, Polarity: Vertical



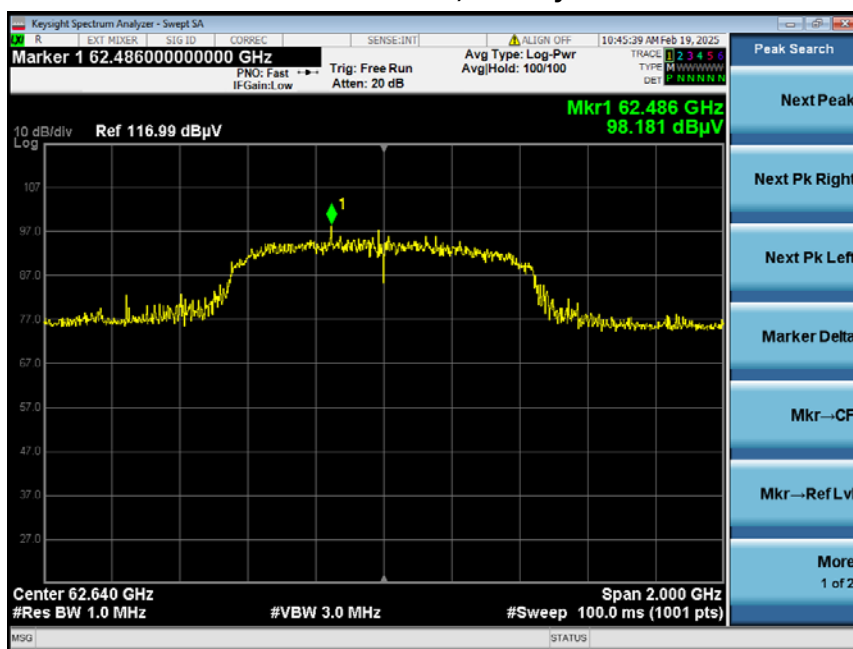
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

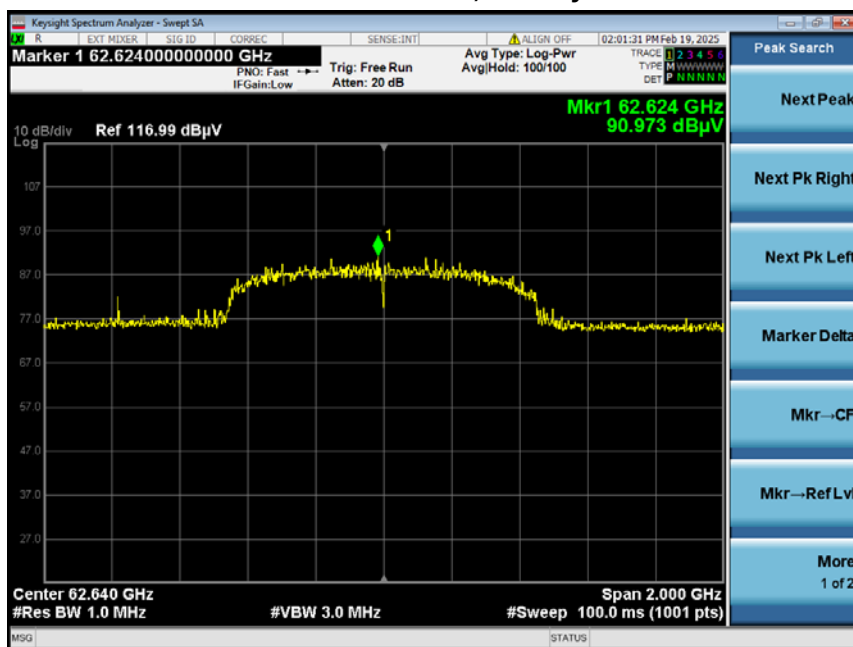
SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

Peak Power- 62.640GHz, Polarity: Horizontal



Peak Power- 62.640GHz, Polarity: Vertical



SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZEMC-TRF-01 Rev. A/1

Report No.: SZCR240800338503

Page: 48 of 52

Frequency (GHz)	Distance (m)	Polarity	dBuV/m@ 3m	E.I.R.P. Power (dBm)	E.I.R.P. Limit (dBm)	Remark	Tx OFF Result (ms)	Tx OFF Limit (ms)	Result
60.160	1	Horizontal	100.071	-4.699	14	peak	25.872	25.50	Pass
60.160	1	Vertical	97.970	-6.800	14	peak			Pass
60.480	1	Horizontal	97.187	-7.583	14	peak	25.872	25.50	Pass
60.480	1	Vertical	90.450	-14.32	14	peak			Pass
62.320	1	Horizontal	102.608	-2.162	14	peak	25.872	25.50	Pass
62.320	1	Vertical	99.437	-5.333	14	peak			Pass
62.640	1	Horizontal	98.181	-6.589	14	peak	25.872	25.50	Pass
62.640	1	Vertical	90.973	-13.797	14	peak			Pass

Remark:

1. $E[\text{dB}\mu\text{V}/\text{m}] = \text{EIRP}[\text{dBm}] - 20 \log(d[\text{meters}]) + 104.77$, where E = field strength and d = distance at which field strength limit is specified in the rules
2. Record only the data of the worst.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch Testing & Calibration Laboratory

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

2. Occupied bandwidth

2.1 OBW

2.1.1 Test Result

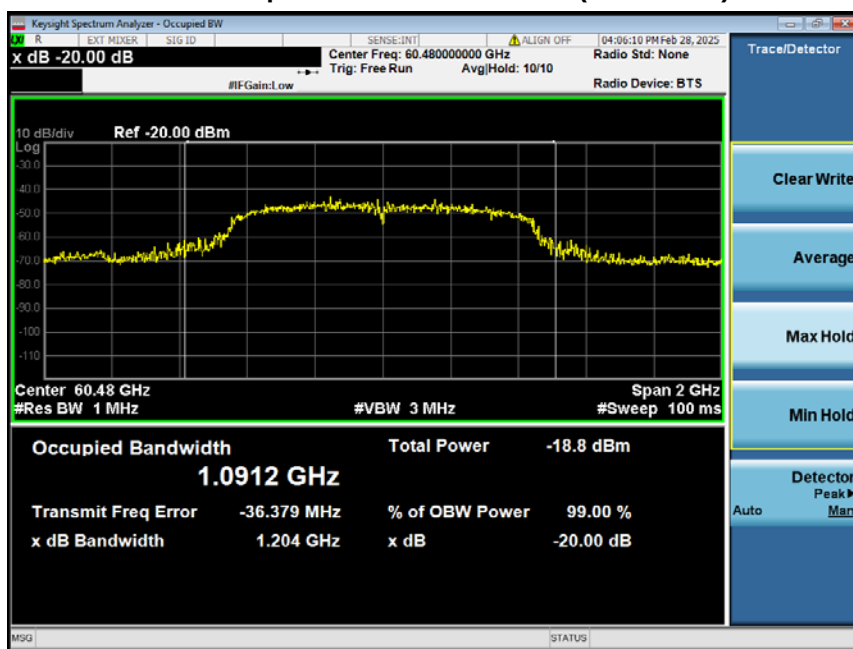
99% Occupied Channel Bandwidth(60.160GHz)



99% Occupied Channel Bandwidth(62.320GHz)



99% Occupied Channel Bandwidth(60.480GHz)



99% Occupied Channel Bandwidth(62.640GHz)



SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZEMC-TRF-01 Rev. A/1

Report No.: SZCR240800338503

Page: 51 of 52

Centre Frequency (GHz)	99% OCW (GHz)	F _L (GHz)	Limit (GHz)	F _H (GHz)	Limit (GHz)	Result
60.160	1.5615	59.379	57	60.941	64	Pass
62.320	1.5798	61.510	57	63.110	64	Pass
60.480	1.0912	59.934	57	61.103	64	Pass
62.640	1.1959	62.042	57	63.238	64	Pass

Remark:

F_L: Frequency Low Band Edge, F_H: Frequency High Band Edge



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch Testing & Calibration Laboratory

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

3. Frequency stability

3.1.1 Test Result

Frequency Stability vs temperature:

1. Test for 57GHz to 64GHz

Frequency (GHz)	Temperature (°C)	Voltage (V DC)	F _L (GHz)	Limit (GHz)	F _H (GHz)	Limit (GHz)	Result
57-64	40	3.6	57.2874	57	63.0123	64	Pass
	30	3.6	57.2863	57	63.0121	64	Pass
	20	3.6	57.2877	57	63.0128	64	Pass
	10	3.6	57.2872	57	63.0132	64	Pass
	0	3.6	57.2872	57	63.0138	64	Pass
	-10	3.6	57.2823	57	63.0117	64	Pass
	-20	3.6	57.2803	57	63.0196	64	Pass

Frequency Stability vs voltage:

1. Test for 57GHz to 64GHz

Frequency (GHz)	Voltage (V DC)	Temperature (°C)	F _L (GHz)	Limit (GHz)	F _H (GHz)	Limit (GHz)	Result
57-64	3.06	20	57.2873	57	63.0133	64	Pass
	3.6	20	57.2878	57	63.0126	64	Pass
	4.14	20	57.2880	57	63.0143	64	Pass

Remark:

F_L: Frequency Low Band Edge, F_H: Frequency High Band Edge

- End of the Report -