

TEST REPORT

Application No.: SZCR2501000078WM
Applicant: vivo Mobile Communication Co., Ltd.
Address of Applicant: No.1, vivo Road, Chang'an, Dongguan, Guangdong, China
Manufacturer: vivo Mobile Communication Co., Ltd.
Address of Manufacturer: No.1, vivo Road, Chang'an, Dongguan, Guangdong, China
Equipment Under Test (EUT):
EUT Name: Mobile phone
Model No.: V2446
Trade Mark: vivo
FCC ID: 2AUCY-V2446
Standard(s) : 47 CFR Part 15, Subpart B
Date of Receipt: 2025-01-06
Date of Test: 2025-01-17 to 2025-01-18
Date of Issue: 2025-02-20

Test Result:	Pass*
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* In the configuration tested, the EUT complied with the standards specified above.

Keny Xu

Keny Xu
EMC Laboratory Manager

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

SZEMC-TRF-01 Rev. A/1

Report No.: SZCR250100007808

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Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2025-02-20		Original

Authorized for issue by:			
		Sherlock Fang	
		Sherlock Fang/Project Engineer	
		Eric Fu	
		Eric Fu/Reviewer	



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2 Test Summary

Emission Part				
Item	Standard	Method	Requirement	Result
Conducted Emissions at Mains Terminals (150kHz-30MHz)	47 CFR Part 15, Subpart B	ANSI C63.4:2014	15.107(a);Class B	Pass
Radiated Emissions (30MHz-1GHz)		ANSI C63.4:2014	15.109(a);Class B	Pass
Radiated Emissions (Above 1GHz)		ANSI C63.4:2014	15.109(g);Class B	Pass



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4 General Information

4.1 Details of E.U.T.

Power supply:	DC 3.85V from internal rechargeable battery which can be charged by AC/DC adapter
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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.

Item No.	Mode No.	Manufacturer	Remark
Adapter 1	V1530L0B0-US	vivo Mobile Communication Co., Ltd.	Same design
Adapter 2	V1530L0B0-EU		
Adapter 3	V1530L0B0-UK		
Adapter 4	V1530L0B0-TL		
USB cable	BK-C-50-B	/	/
Battery	BA60	Sunwoda Electronic Co., Ltd.	/

Remark: Adapter 1 was selected to test.

4.2 Test modes

Pretest these modes to find the worst case and show the worse data in the test items:	18	Transfer data between the EUT and the PC+USB Cable
	19	Telecom Idle+EUT+FM+USB cable+Adapter+earphone
	20	Telecom Idle+EUT+playing MP4+USB cable+Adapter+earphone
	21	Telecom Idle+EUT+playing MP4+USB cable+Adapter+earphone
	22	Telecom Idle+EUT+BT+WLAN5G+USB cable+Adapter+earphone
	23	Telecom Idle+EUT+camera(Front)+USB cable+Adapter+earphone
	24	Telecom Idle+EUT+camera(Back)+USB cable+Adapter+earphone
	25	Telecom Idle+EUT+BT+WLAN2.4G+GNSS+OTG output
	26	GSM 850(RX)+EUT+BT+WLAN2.4G+USB cable+Adapter+earphone
	27	WCDMA Band 5(RX)+EUT+BT+WLAN2.4G+USB cable+Adapter+earphone
	28	LTE band 5(RX)+EUT+BT+WLAN2.4G+USB cable+Adapter+earphone
	29	LTE band 12(RX)+EUT+BT+WLAN2.4G+USB cable+Adapter+earphone
	30	LTE band 13(RX)+EUT+BT+WLAN2.4G+USB cable+Adapter+earphone
	31	LTE band 17(RX)+EUT+BT+WLAN2.4G+USB cable+Adapter+earphone
	32	LTE band 26(RX)+EUT+BT+WLAN2.4G+USB cable+Adapter+earphone
	33	NR_SA_N5(RX)+EUT+BT+WLAN2.4G+USB cable+Adapter+earphone
	34	NR_SA_N26(RX)+EUT+BT+WLAN2.4G+USB cable+Adapter+earphone



4.3 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Router	NETGEAR	DGN2200	REF. No.SEA22A00
Laptop	Lenovo	T14	REF. No.SEA18F04
Mouse	Lenovo	M-U0025-O	REF. No.:SEA24A00
Earphone	vivo	XE710	/

4.4 Measurement Uncertainty

Test Item	Measurement Uncertainty
Conducted Emissions at Mains Terminals (150kHz-30MHz)	$\pm 3.1\text{dB}$
Radiated Emissions (30MHz-1GHz)	$\pm 6.0\text{dB}$ for 3m; $\pm 5.0\text{dB}$ for 10m
Radiated Emissions (Above 1GHz)	$\pm 4.6\text{dB}$

Remark:

The U_{lab} (lab Uncertainty) is less than $U_{\text{CISPR/ETSI}}$ (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.



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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



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Shenzhen Branch EMC Laboratory

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5 Equipment List

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

Radiated Emissions (30MHz-1GHz)					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEM001-01	2023-06-19	2026-06-18
MXE EMI Receiver	Agilent Technologies	N9038A	SEM004-15	2024-08-14	2025-08-13
BiConiLog Antenna	ETS-LINDGREN	3142C	SEM003-01	2023-09-16	2025-09-15
Pre-Amplifier	Agilent Technologies	8447D	SEM005-01	2024-03-14	2025-03-13
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM025-01	2024-07-06	2025-07-05

Radiated Emissions (Above 1GHz)					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
3m Fully-Anechoic Chamber	AUDIX	N/A	SEM001-02	2024-05-11	2027-05-10
Signal Analyzer	Rohde & Schwarz	FSV40	SEM008-04	2024-03-15	2025-03-14
Horn Antenna	Rohde&Schwarz	HF907	SEM003-07	2023-07-23	2025-07-22
Microwave system amplifier	Agilent	83017A	SEM005-25	2024-09-14	2025-09-13
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM026-01	2024-07-06	2025-07-05



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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



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6 Emission Test Results

6.1 Conducted Emissions at Mains Terminals (150kHz-30MHz)

Test Requirement: 47 CFR Part 15, Subpart B

Test Method: ANSI C63.4:2014

Limit:

0.15M-0.5MHz 66dB(μV)-56dB(μV) quasi-peak, 56dB(μV)-46dB(μV) average

0.5M-5MHz 56dB(μV) quasi-peak, 46dB(μV) average

5M-30MHz 60dB(μV) quasi-peak, 50dB(μV) average

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

6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 22.5 °C

Humidity: 44.5 % RH

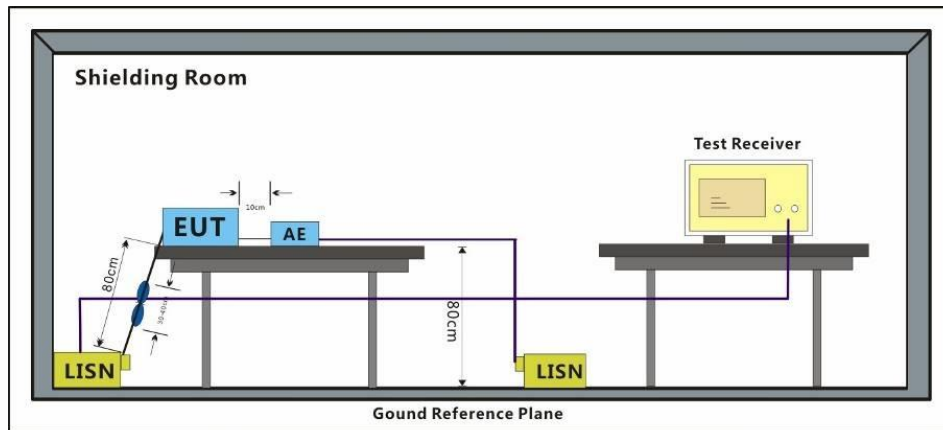
Atmospheric Pressure: 1020 mbar

6.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	18	Transfer data between the EUT and the PC+USB Cable
Final test	19	Telecom Idle+EUT+FM+USB cable+Adapter+earphone
Pre-scan	20	Telecom Idle+EUT+playing MP4+USB cable+Adapter+earphone
Pre-scan	21	Telecom Idle+EUT+playing MP4+USB cable+Adapter+earphone
Pre-scan	22	Telecom Idle+EUT+BT+WLAN5G+USB cable+Adapter+earphone
Pre-scan	23	Telecom Idle+EUT+camera(Front)+USB cable+Adapter+earphone
Pre-scan	24	Telecom Idle+EUT+camera(Back)+USB cable+Adapter+earphone
Pre-scan	25	Telecom Idle+EUT+BT+WLAN2.4G+GNSS+OTG output
Pre-scan	26	GSM 850(RX)+EUT+BT+WLAN2.4G+USB cable+Adapter+earphone
Pre-scan	27	WCDMA Band 5(RX)+EUT+BT+WLAN2.4G+USB cable+Adapter+earphone
Pre-scan	28	LTE band 5(RX)+EUT+BT+WLAN2.4G+USB cable+Adapter+earphone
Pre-scan	33	NR_SA_N5(RX)+EUT+BT+WLAN2.4G+USB cable+Adapter+earphone



6.1.3 Test Setup Diagram



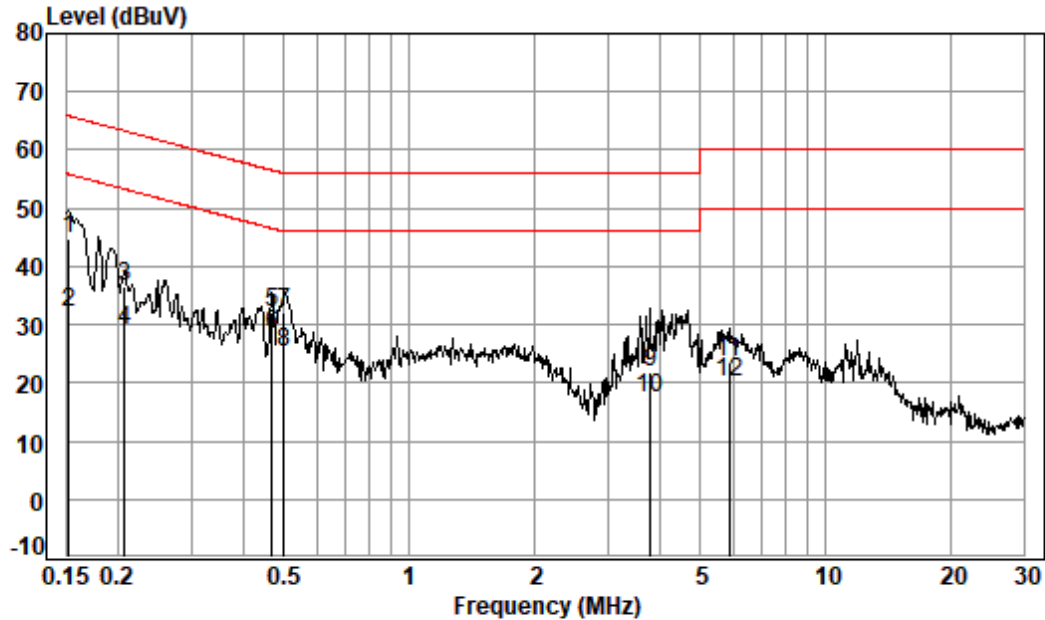
6.1.4 Measurement Procedure and Data

An initial pre-scan was performed with peak detector. Quasi-Peak or Average measurement were performed at the frequencies with maximized peak emission were detected.

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



Test Mode: 18; Line: Live line

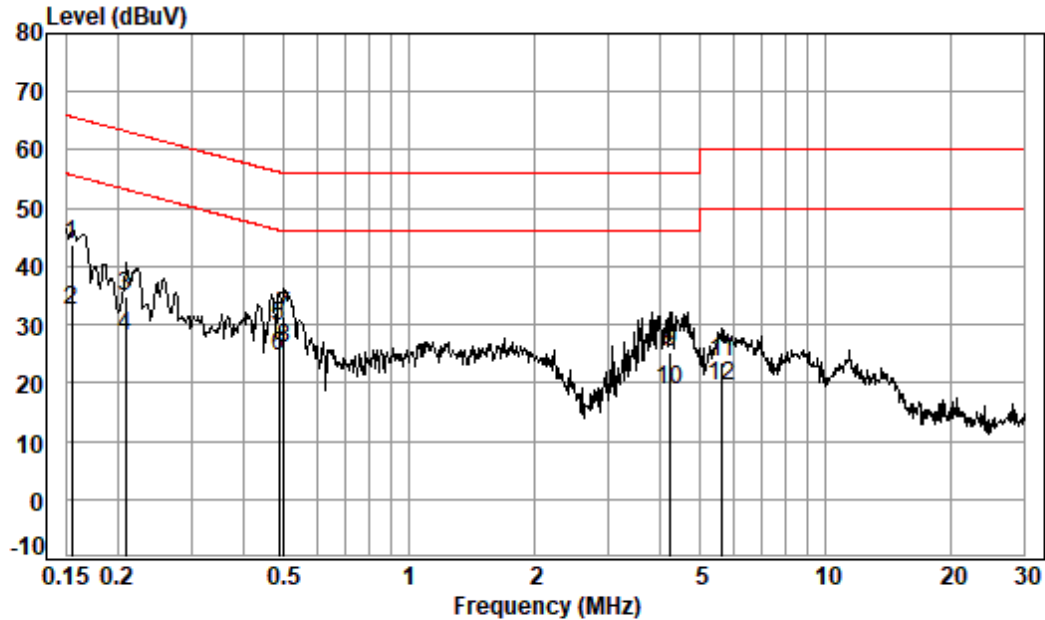


Site : Shielding Room
Condition: Line
Job No. : 00078WM
Test mode: 18

	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1 *	0.1524	0.06	10.19	34.39	44.64	65.87	-21.23	QP
2	0.1524	0.06	10.19	21.98	32.23	55.87	-23.64	Average
3	0.2072	0.06	10.10	26.29	36.45	63.32	-26.87	QP
4	0.2072	0.06	10.10	18.71	28.87	53.32	-24.45	Average
5	0.4686	0.08	9.58	22.35	32.01	56.54	-24.53	QP
6 *	0.4686	0.08	9.58	18.71	28.37	46.54	-18.17	Average
7	0.5020	0.08	9.54	22.50	32.12	56.00	-23.88	QP
8	0.5020	0.08	9.54	15.48	25.10	46.00	-20.90	Average
9	3.7794	0.11	9.65	12.03	21.79	56.00	-34.21	QP
10	3.7794	0.11	9.65	7.62	17.38	46.00	-28.62	Average
11	5.8668	0.14	9.67	13.75	23.56	60.00	-36.44	QP
12	5.8668	0.14	9.67	10.16	19.97	50.00	-30.03	Average



Test Mode: 18; Line: Neutral Line

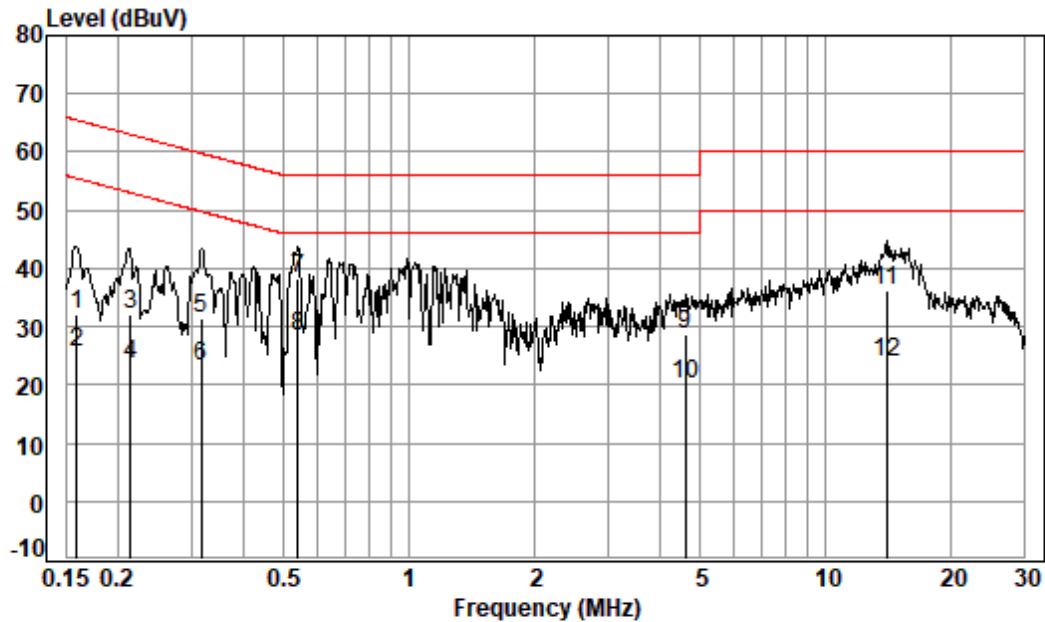


Site : Shielding Room
Condition: Neutral
Job No. : 00078WM
Test mode: 18

	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1 *	0.1548	0.06	10.14	33.64	43.84	65.74	-21.90	QP
2	0.1548	0.06	10.14	22.20	32.40	55.74	-23.34	Average
3	0.2094	0.06	10.04	24.69	34.79	63.23	-28.44	QP
4	0.2094	0.06	10.04	17.88	27.98	53.23	-25.25	Average
5	0.4863	0.08	9.71	20.05	29.84	56.23	-26.39	QP
6	0.4863	0.08	9.71	14.93	24.72	46.23	-21.51	Average
7	0.5020	0.08	9.71	21.61	31.40	56.00	-24.60	QP
8 *	0.5020	0.08	9.71	15.98	25.77	46.00	-20.23	Average
9	4.2242	0.12	9.55	15.53	25.20	56.00	-30.80	QP
10	4.2242	0.12	9.55	9.13	18.80	46.00	-27.20	Average
11	5.6234	0.13	9.59	13.76	23.48	60.00	-36.52	QP
12	5.6234	0.13	9.59	9.86	19.58	50.00	-30.42	Average



Test Mode: 19; Line: Live line

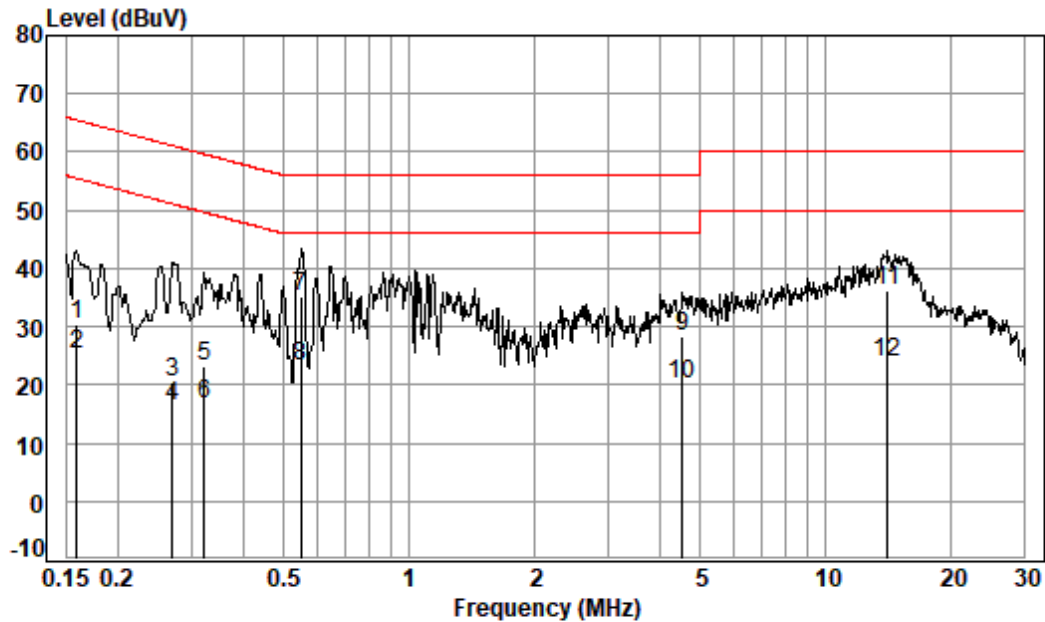


Site : Shielding Room
Condition: Line
Job No. : 00078WM
Test mode: 19

	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.1598	0.06	10.18	21.86	32.10	65.47	-33.37	QP
2	0.1598	0.06	10.18	15.43	25.67	55.47	-29.80	Average
3	0.2151	0.06	10.07	21.95	32.08	63.01	-30.93	QP
4	0.2151	0.06	10.07	13.56	23.69	53.01	-29.32	Average
5	0.3166	0.07	9.82	21.45	31.34	59.80	-28.46	QP
6	0.3166	0.07	9.82	13.36	23.25	49.80	-26.55	Average
7 *	0.5407	0.08	9.57	28.63	38.28	56.00	-17.72	QP
8 *	0.5407	0.08	9.57	18.57	28.22	46.00	-17.78	Average
9	4.5979	0.12	9.66	18.96	28.74	56.00	-27.26	QP
10	4.5979	0.12	9.66	10.32	20.10	46.00	-25.90	Average
11	13.9146	0.25	9.88	25.98	36.11	60.00	-23.89	QP
12	13.9146	0.25	9.88	13.89	24.02	50.00	-25.98	Average



Test Mode: 19; Line: Neutral Line



Site : Shielding Room
Condition: Neutral
Job No. : 00078WM
Test mode: 19

	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.1598	0.06	10.13	20.33	30.52	65.47	-34.95	QP
2	0.1598	0.06	10.13	14.90	25.09	55.47	-30.38	Average
3	0.2701	0.07	9.85	10.44	20.36	61.12	-40.76	QP
4	0.2701	0.07	9.85	6.59	16.51	51.12	-34.61	Average
5	0.3234	0.07	9.76	13.48	23.31	59.62	-36.31	QP
6	0.3234	0.07	9.76	6.88	16.71	49.62	-32.91	Average
7 *	0.5493	0.08	9.69	25.49	35.26	56.00	-20.74	QP
8 *	0.5493	0.08	9.69	13.34	23.11	46.00	-22.89	Average
9	4.5254	0.12	9.56	18.60	28.28	56.00	-27.72	QP
10	4.5254	0.12	9.56	10.38	20.06	46.00	-25.94	Average
11	14.0629	0.25	9.81	26.23	36.29	60.00	-23.71	QP
12	14.0629	0.25	9.81	13.91	23.97	50.00	-26.03	Average



6.2 Radiated Emissions (30MHz-1GHz)

Test Requirement: 47 CFR Part 15, Subpart B

Test Method: ANSI C63.4:2014

Measurement Distance: 3m

Limit:

FREQUENCY (MHz)	dBμV/m (At 10m)	dBμV/m (At 3m)
	Class B	Class B
30MHz -88MHz	29.5	40.0
88MHz-216MHz	33.1	43.5
216MHz-960MHz	35.6	46.0
960MHz-1000MHz	43.5	54.0
Detector: Peak for pre-scan (120kHz resolution bandwidth) 30M to 1000MHz		

6.2.1 E.U.T. Operation

Operating Environment:

Temperature: 20.2 °C

Humidity: 45.2 % RH

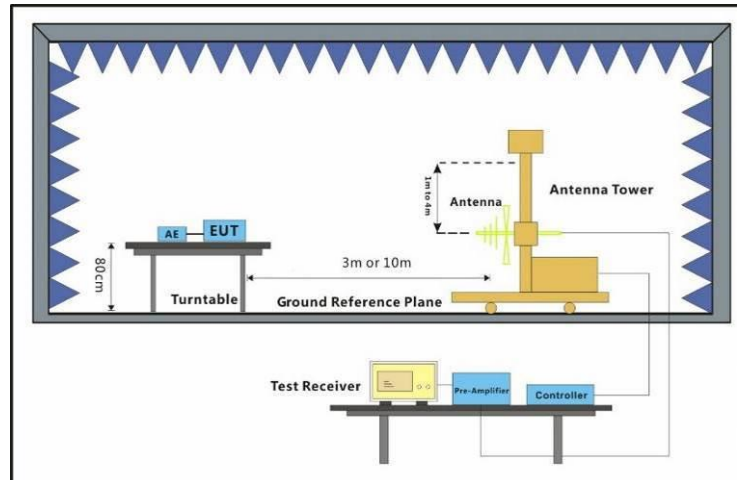
Atmospheric Pressure: 1020 mbar

6.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	18	Transfer data between the EUT and the PC+USB Cable
Final test	19	Telecom Idle+EUT+FM+USB cable+Adapter+earphone
Final test	20	Telecom Idle+EUT+playing MP4+USB cable+Adapter+earphone
Pre-scan	21	Telecom Idle+EUT+playing MP4+USB cable+Adapter+earphone
Pre-scan	22	Telecom Idle+EUT+BT+WLAN5G+USB cable+Adapter+earphone
Pre-scan	23	Telecom Idle+EUT+camera(Front)+USB cable+Adapter+earphone
Pre-scan	24	Telecom Idle+EUT+camera(Back)+USB cable+Adapter+earphone
Pre-scan	25	Telecom Idle+EUT+BT+WLAN2.4G+GNSS+OTG output
Pre-scan	26	GSM 850(RX)+EUT+BT+WLAN2.4G+USB cable+Adapter+earphone
Pre-scan	27	WCDMA Band 5(RX)+EUT+BT+WLAN2.4G+USB cable+Adapter+earphone
Pre-scan	28	LTE band 5(RX)+EUT+BT+WLAN2.4G+USB cable+Adapter+earphone
Pre-scan	33	NR_SA_N5(RX)+EUT+BT+WLAN2.4G+USB cable+Adapter+earphone



6.2.3 Test Setup Diagram



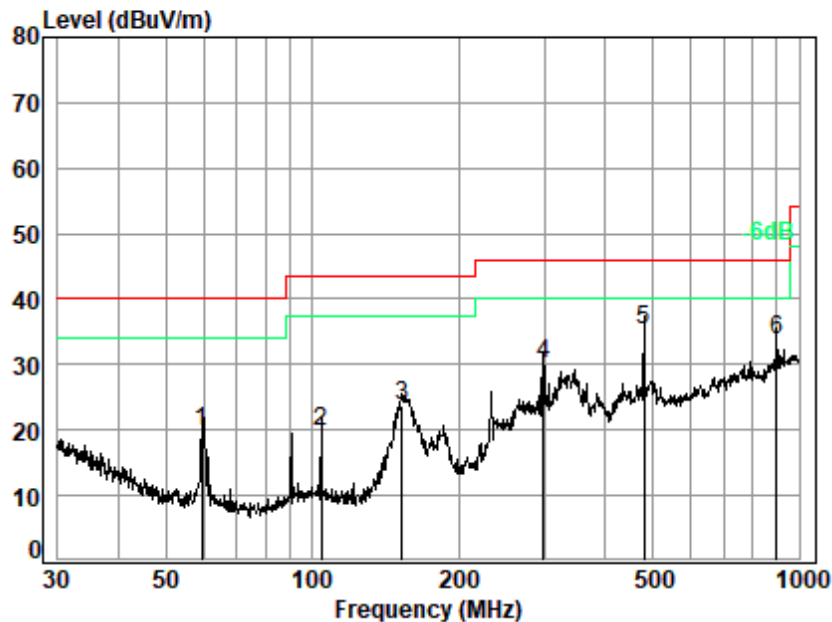
6.2.4 Measurement Procedure and Data

An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by BiConiLog antenna with 2 orthogonal polarities.

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



Test Mode: 18; Polarity: Horizontal



Site : chamber

Condition: 3m HORIZONTAL

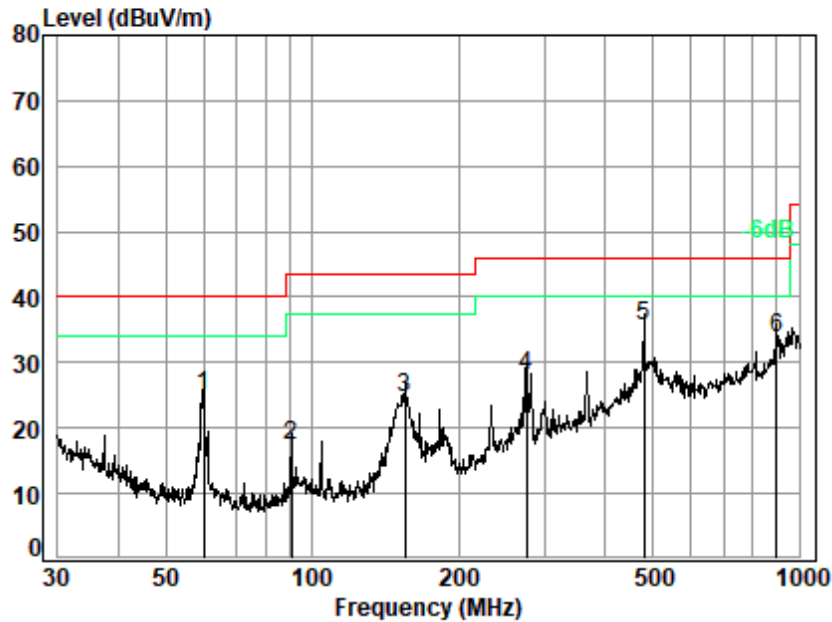
Job No. : 00078WM

Test Mode: 18

	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	59.232	11.56	0.94	27.71	34.88	19.67	40.00	-20.33 QP
2	104.170	12.22	1.25	27.57	34.02	19.92	43.50	-23.58 QP
3	152.664	13.34	1.55	27.37	36.14	23.66	43.50	-19.84 QP
4	298.268	17.82	2.19	26.76	36.76	30.01	46.00	-15.99 QP
5 q	480.528	22.75	2.86	27.48	37.24	35.37	46.00	-10.63 QP
6	900.147	27.82	4.12	26.76	28.44	33.62	46.00	-12.38 QP



Test Mode: 18; Polarity: Vertical



Site : chamber
Condition: 3m VERTICAL
Job No. : 00078WM
Test Mode: 18

	Ant Freq	Cable Factor	Preamp Loss	Read Factor	Level	Limit	Over	
	MHz	dB/m	dB	dB	dBuV	dBuV/m	dBuV/m	dB
1	59.859	11.50	0.95	27.71	40.32	25.06	40.00	-14.94 QP
2	90.537	11.77	1.16	27.62	31.96	17.27	43.50	-26.23 QP
3	155.364	13.55	1.56	27.36	37.00	24.75	43.50	-18.75 QP
4	275.157	17.06	2.11	26.85	35.60	27.92	46.00	-18.08 QP
5 q	480.528	22.75	2.86	27.48	37.33	35.46	46.00	-10.54 QP
6	896.997	27.93	4.11	26.79	28.58	33.83	46.00	-12.17 QP



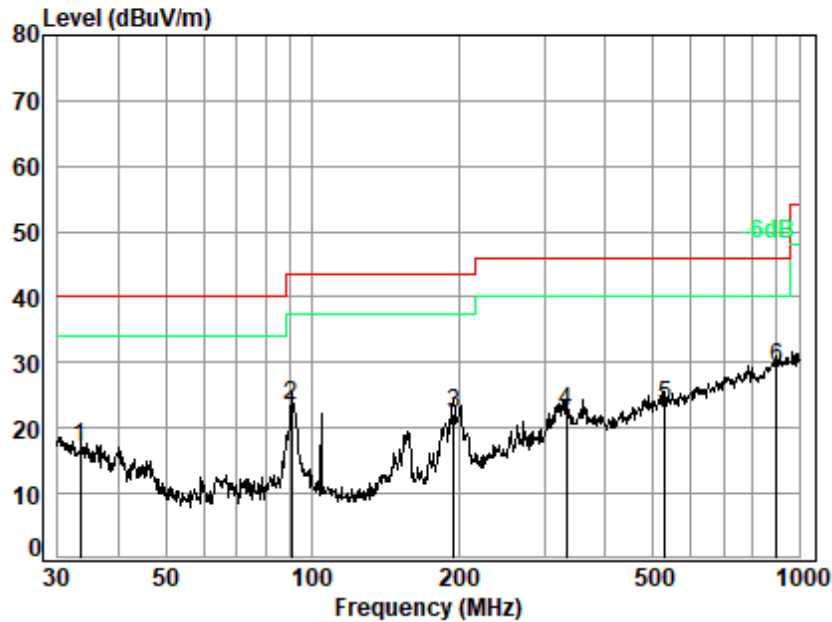
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Test Mode: 19; Polarity: Horizontal



Site : chamber
Condition: 3m HORIZONTAL
Job No. : 00078WM
Test Mode: 19

	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	33.445	19.68	0.71	27.78	24.41	17.02	40.00	-22.98 QP
2	90.537	11.77	1.16	27.62	38.13	23.44	43.50	-20.06 QP
3	195.137	14.13	1.74	27.19	33.57	22.25	43.50	-21.25 QP
4	332.519	18.77	2.34	26.88	28.15	22.38	46.00	-23.62 QP
5	530.101	23.27	3.02	27.69	24.94	23.54	46.00	-22.46 QP
6 q	900.147	27.82	4.12	26.76	23.94	29.12	46.00	-16.88 QP



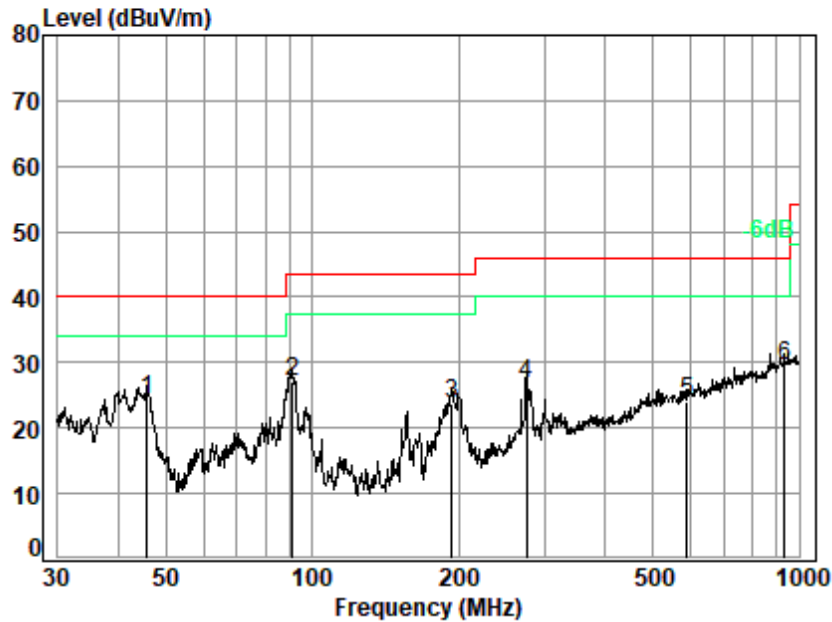
SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch Testing & Calibration Laboratory

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Test Mode: 19; Polarity: Vertical

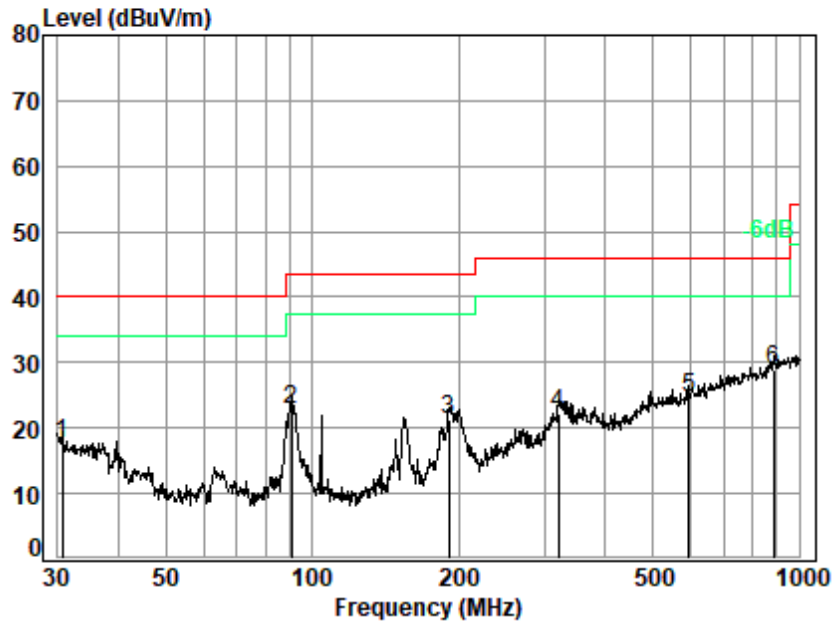


Site : chamber
Condition: 3m VERTICAL
Job No. : 00078WM
Test Mode: 19

		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 q	45.695	14.03	0.83	27.75	37.22	24.33	40.00	-15.67	QP
2	91.175	11.83	1.17	27.62	41.57	26.95	43.50	-16.55	QP
3	193.773	14.18	1.74	27.20	35.08	23.80	43.50	-19.70	QP
4	275.157	17.06	2.11	26.85	34.41	26.73	46.00	-19.27	QP
5	588.905	24.37	3.21	27.92	24.24	23.90	46.00	-22.10	QP
6	932.272	28.16	4.21	26.53	23.53	29.37	46.00	-16.63	QP



Test Mode: 20; Polarity: Horizontal

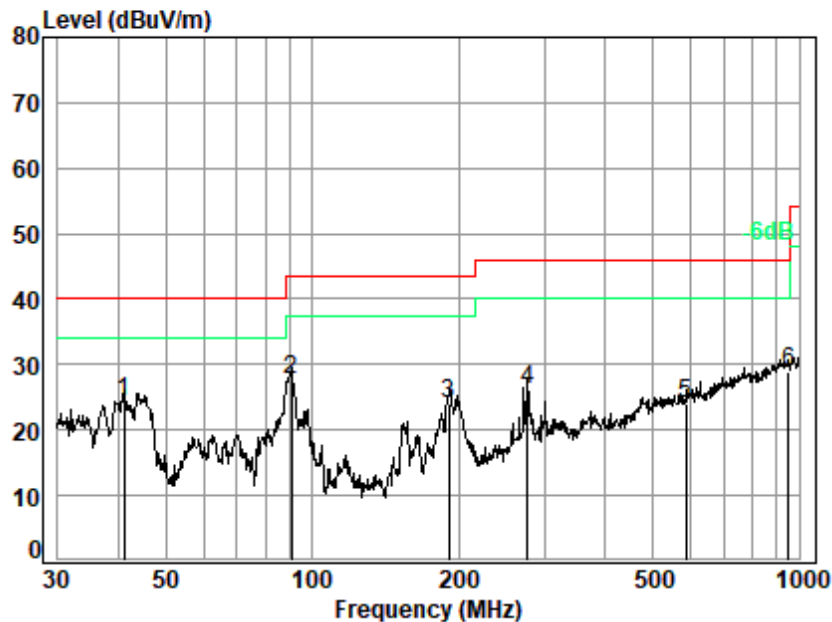


Site : chamber
Condition: 3m HORIZONTAL
Job No. : 00078WM
Test Mode: 20

	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	30.638	20.90	0.68	27.79	23.83	17.62	40.00	-22.38 QP
2	90.537	11.77	1.16	27.62	37.53	22.84	43.50	-20.66 QP
3	190.405	14.29	1.72	27.21	32.42	21.22	43.50	-22.28 QP
4	319.937	18.51	2.28	26.83	28.25	22.21	46.00	-23.79 QP
5	595.133	24.47	3.23	27.95	24.84	24.59	46.00	-21.41 QP
6 q	884.503	27.84	4.08	26.88	23.96	29.00	46.00	-17.00 QP



Test Mode: 20; Polarity: Vertical



Site : chamber
Condition: 3m VERTICAL
Job No. : 00078WM
Test Mode: 20

		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	q	40.988	15.91	0.79	27.76	35.31	24.25	40.00	-15.75 QP
2		90.537	11.77	1.16	27.62	42.33	27.64	43.50	-15.86 QP
3		191.074	14.28	1.72	27.21	35.25	24.04	43.50	-19.46 QP
4		277.094	17.00	2.11	26.85	33.86	26.12	46.00	-19.88 QP
5		586.844	24.26	3.20	27.92	24.47	24.01	46.00	-21.99 QP
6		952.094	28.17	4.26	26.39	22.78	28.82	46.00	-17.18 QP



6.3 Radiated Emissions (Above 1GHz)

Test Requirement: 47 CFR Part 15, Subpart B

Test Method: ANSI C63.4:2014

Measurement Distance: 3m

Limit:

Above 1GHz 74(dBμV/m) peak, 54(dBμV/m) average at 3m distance
83.54(dBμV/m) peak, 63.54(dBμV/m) average at 1m distance

Detector: Peak for pre-scan (1MHz resolution bandwidth) 1GHz to 40GHz

6.3.1 E.U.T. Operation

Operating Environment:

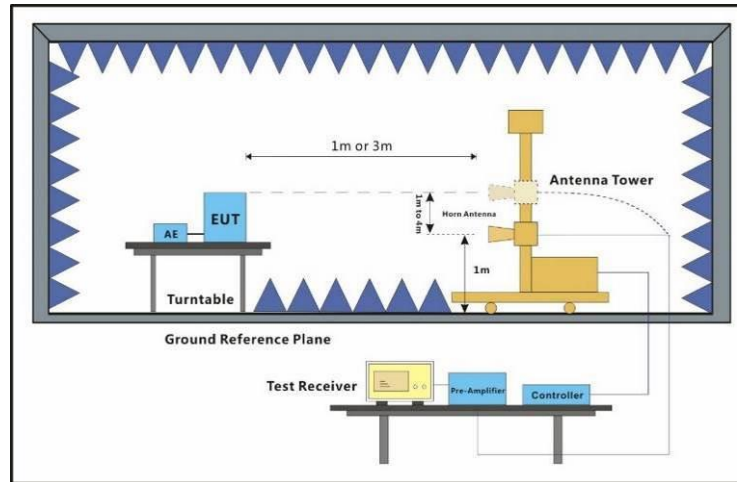
Temperature: 21.5 °C Humidity: 45.2 % RH Atmospheric Pressure: 1020 mbar

6.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	18	Transfer data between the EUT and the PC+USB Cable
Final test	19	Telecom Idle+EUT+FM+USB cable+Adapter+earphone
Final test	20	Telecom Idle+EUT+playing MP4+USB cable+Adapter+earphone
Pre-scan	21	Telecom Idle+EUT+playing MP4+USB cable+Adapter+earphone
Pre-scan	22	Telecom Idle+EUT+BT+WLAN5G+USB cable+Adapter+earphone
Pre-scan	23	Telecom Idle+EUT+camera(Front)+USB cable+Adapter+earphone
Pre-scan	24	Telecom Idle+EUT+camera(Back)+USB cable+Adapter+earphone
Pre-scan	25	Telecom Idle+EUT+BT+WLAN2.4G+GNSS+OTG output
Pre-scan	26	GSM 850(RX)+EUT+BT+WLAN2.4G+USB cable+Adapter+earphone
Pre-scan	27	WCDMA Band 5(RX)+EUT+BT+WLAN2.4G+USB cable+Adapter+earphone
Pre-scan	28	LTE band 5(RX)+EUT+BT+WLAN2.4G+USB cable+Adapter+earphone
Pre-scan	33	NR_SA_N5(RX)+EUT+BT+WLAN2.4G+USB cable+Adapter+earphone



6.3.3 Test Setup Diagram



6.3.4 Measurement Procedure and Data

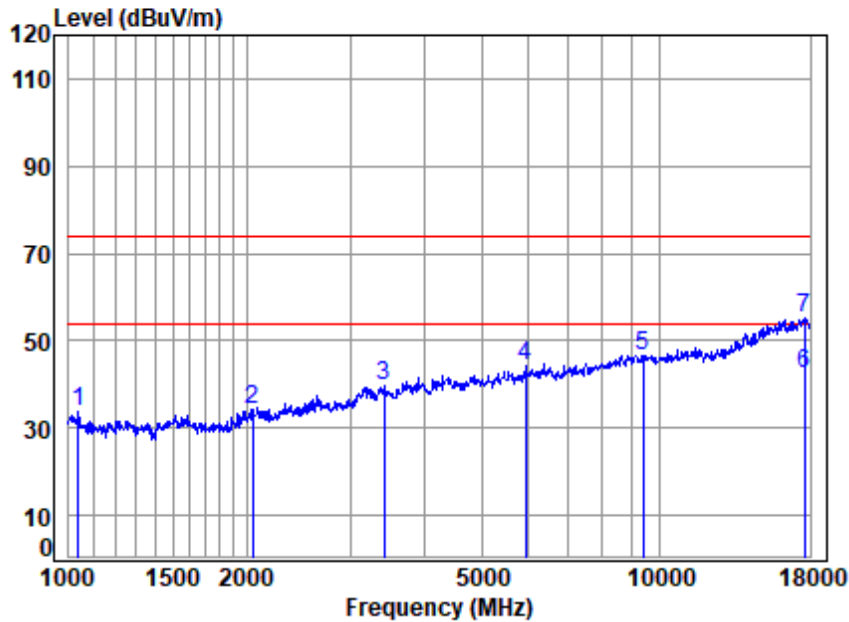
An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Average measurements were conducted based on the peak sweep graph. The EUT was measured by Horn antenna with 2 orthogonal polarities.

The red line show in graphic is the limit in standard used in this section.

Remark: $\text{Level} = \text{Read Level} + \text{Cable Loss} + \text{Antenna Factor} - \text{Preamplifier Factor}$



Test Mode: 18; Polarity: Horizontal

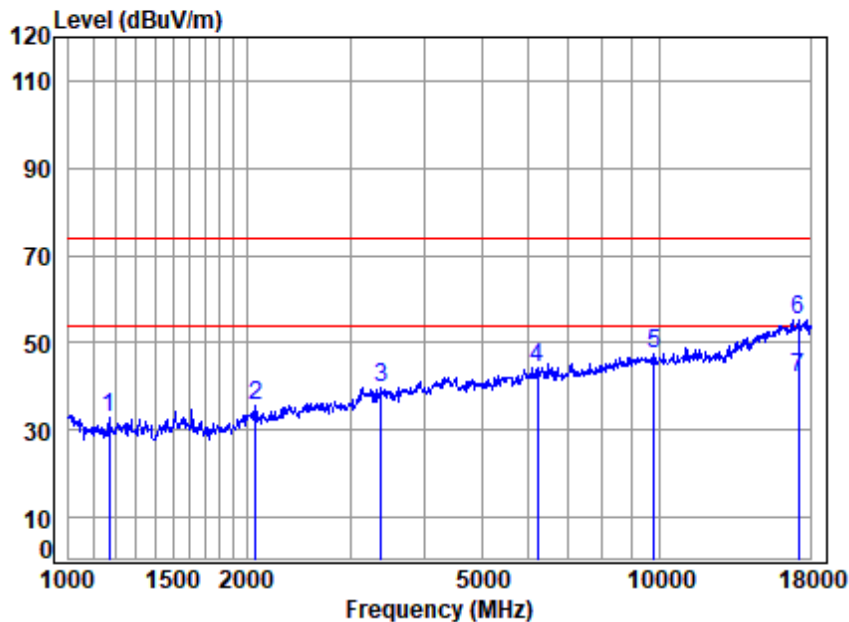


Site : chamber
Condition: 3m HORIZONTAL
Job No : 00078WM
Mode : 18

	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	1038.290	5.85	25.07	54.62	57.43	33.73	74.00	-40.27	Peak
2	2047.895	5.10	28.99	54.91	55.12	34.30	74.00	-39.70	Peak
3	3425.675	6.23	32.09	54.68	56.05	39.69	74.00	-34.31	Peak
4	5932.638	8.71	34.67	53.17	53.86	44.07	74.00	-29.93	Peak
5	9393.689	10.63	37.31	53.44	52.22	46.72	74.00	-27.28	Peak
6	q17639.470	14.69	43.68	52.58	36.56	42.35	54.00	-11.65	Average
7	p17639.470	14.69	43.68	52.58	49.40	55.19	74.00	-18.81	Peak



Test Mode: 18; Polarity: Vertical

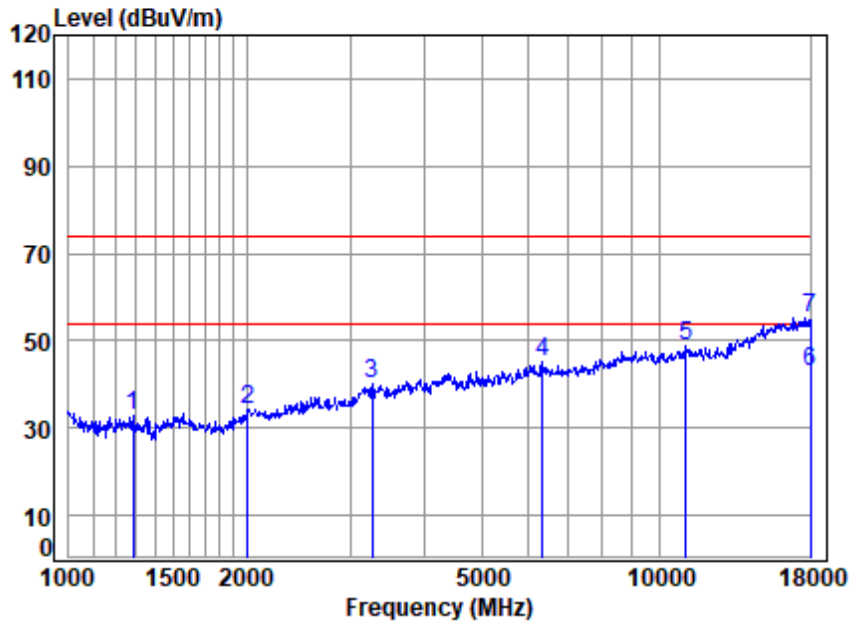


Site : chamber
Condition: 3m VERTICAL
Job No : 00078WM
Mode : 18

		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	1168.920	5.54	24.09	54.67	57.81	32.77	74.00	-41.23	Peak
2	2071.708	5.12	28.91	54.91	56.38	35.50	74.00	-38.50	Peak
3	3376.523	6.20	32.26	54.71	55.95	39.70	74.00	-34.30	Peak
4	6213.441	8.80	34.75	53.12	53.97	44.40	74.00	-29.60	Peak
5	9781.603	10.55	37.34	53.28	52.77	47.38	74.00	-26.62	Peak
6	p17186.530	14.41	43.01	52.80	50.71	55.33	74.00	-18.67	Peak
7	q17186.530	14.41	43.01	52.80	37.49	42.11	54.00	-11.89	Average



Test Mode: 19; Polarity: Horizontal

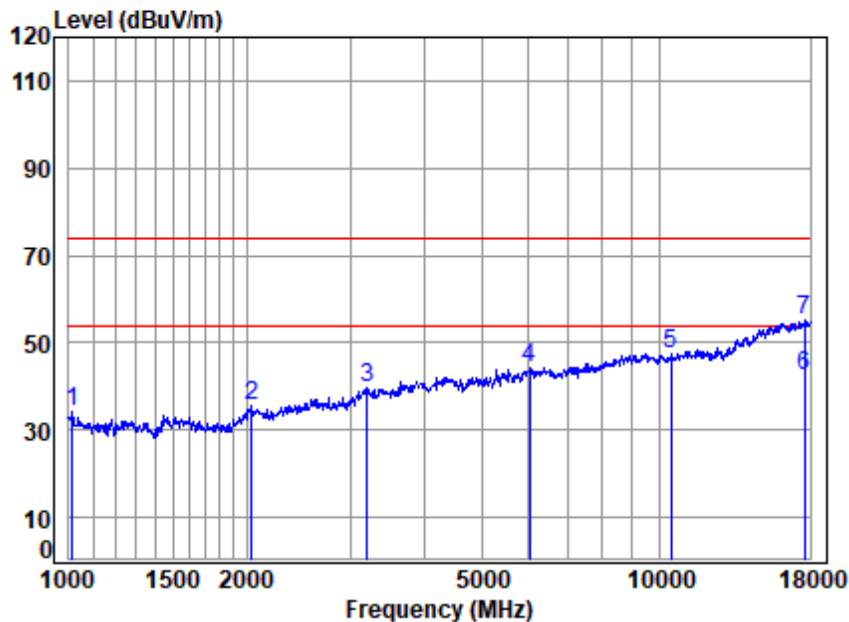


Site : chamber
Condition: 3m HORIZONTAL
Job No : 00078WM
Mode : 19

	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	1285.904	5.29	24.88	54.71	57.25	32.71	74.00	-41.29	Peak
2	2006.877	5.07	28.83	54.90	55.24	34.24	74.00	-39.76	Peak
3	3261.418	6.13	31.89	54.80	56.79	40.01	74.00	-33.99	Peak
4	6340.436	8.81	34.92	53.14	54.48	45.07	74.00	-28.93	Peak
5	11076.100	11.67	37.50	53.02	52.60	48.75	74.00	-25.25	Peak
6	q18000.000	14.80	44.30	52.40	36.32	43.02	54.00	-10.98	Average
7	p18000.000	14.80	44.30	52.40	48.51	55.21	74.00	-18.79	Peak



Test Mode: 19; Polarity: Vertical



Site : chamber
Condition: 3m VERTICAL
Job No : 00078WM
Mode : 19

		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	1014.557	5.91	25.83	54.61	57.15	34.28	74.00	-39.72	Peak
2	2041.984	5.10	28.97	54.91	56.22	35.38	74.00	-38.62	Peak
3	3205.345	6.09	32.81	54.84	55.43	39.49	74.00	-34.51	Peak
4	6036.421	8.77	34.97	53.10	53.47	44.11	74.00	-29.89	Peak
5	10453.970	11.09	37.21	53.11	52.47	47.66	74.00	-26.34	Peak
6	q17639.470	14.69	43.68	52.58	36.55	42.34	54.00	-11.66	Average
7	p17639.470	14.69	43.68	52.58	49.53	55.32	74.00	-18.68	Peak



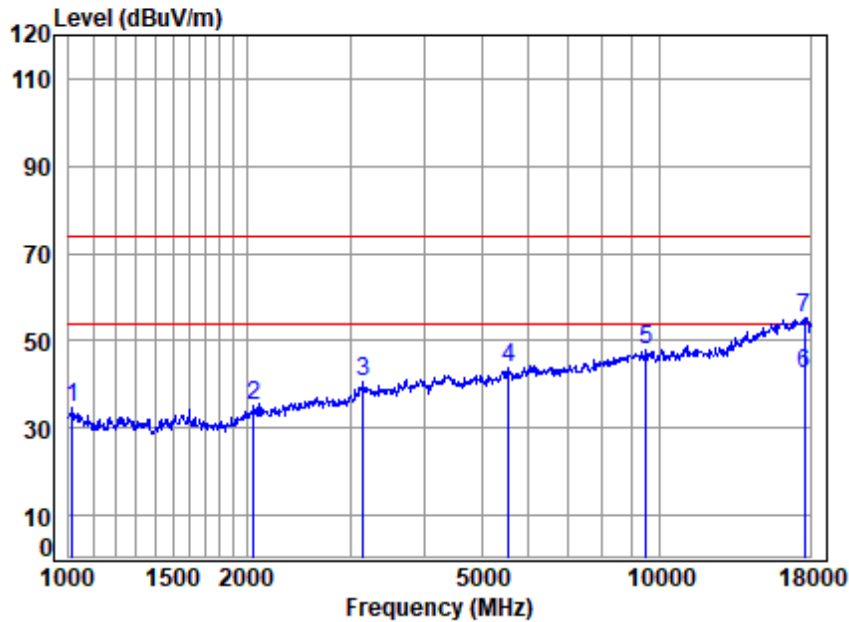
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Test Mode: 20; Polarity: Horizontal



Site : chamber
Condition: 3m HORIZONTAL
Job No : 00078WM
Mode : 20

	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	1014.557	5.91	25.83	54.61	57.57	34.70	74.00	-39.30	Peak
2	2059.767	5.11	28.96	54.91	55.87	35.03	74.00	-38.97	Peak
3	3150.237	6.05	32.50	54.88	56.79	40.46	74.00	-33.54	Peak
4	5567.137	8.37	34.70	53.55	54.12	43.64	74.00	-30.36	Peak
5	9502.925	10.64	37.50	53.39	53.19	47.94	74.00	-26.06	Peak
6	q17639.470	14.69	43.68	52.58	36.62	42.41	54.00	-11.59	Average
7	p17639.470	14.69	43.68	52.58	49.36	55.15	74.00	-18.85	Peak



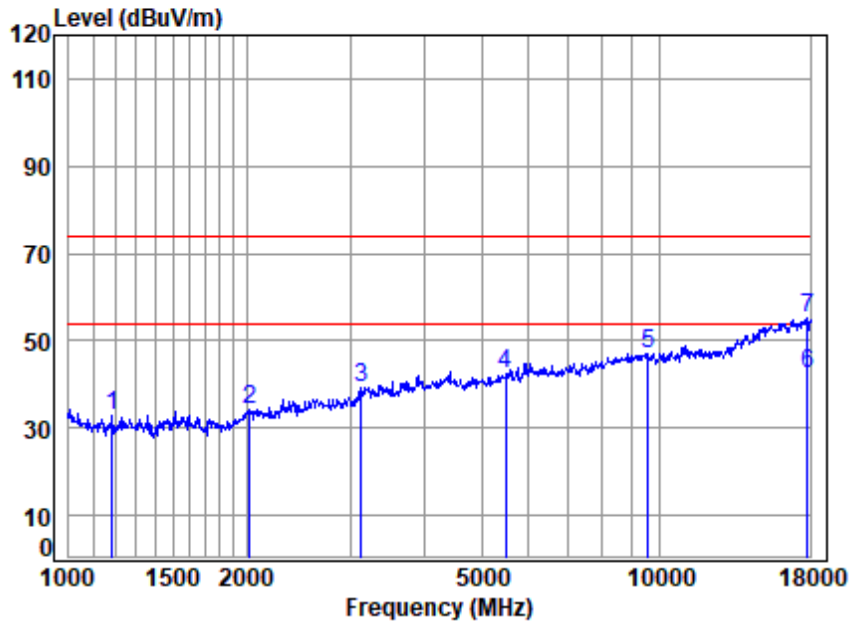
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Shenzhen Branch (SZEMC) Laboratory

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Test Mode: 20; Polarity: Vertical



Site : chamber
Condition: 3m VERTICAL
Job No : 00078WM
Mode : 20

	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	1185.936	5.50	24.26	54.67	57.89	32.98	74.00	-41.02	Peak
2	2024.354	5.08	28.90	54.90	55.29	34.37	74.00	-39.63	Peak
3	3132.079	6.04	32.18	54.90	55.90	39.22	74.00	-34.78	Peak
4	5503.143	8.30	34.51	53.62	53.28	42.47	74.00	-31.53	Peak
5	9558.018	10.62	37.48	53.37	52.42	47.15	74.00	-26.85	Peak
6	q17793.090	14.74	43.89	52.50	36.40	42.53	54.00	-11.47	Average
7	p17793.090	14.74	43.89	52.50	48.96	55.09	74.00	-18.91	Peak



7 Test Setup Photo

Please refer to SZCR2501000078WM Appendix_Setup Photo

8 EUT Constructional Details (EUT Photos)

Refer to Appendix – External and Internal Photos for SZCR2501000078WM

- End of the Report -

