

# TEST REPORT

**Application No.:** SZCR2502000510WM  
**Applicant:** TCL Communication Ltd.  
**Address of Applicant:** 5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science Park, Shatin, NT, Hong Kong  
**Manufacturer:** TCL Communication Ltd.  
**Address of Manufacturer:** 5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science Park, Shatin, NT, Hong Kong  
**Equipment Under Test (EUT):**  
**EUT Description:** Mobile Phone  
**Model No.:** T450A  
**Trade Mark:** Alcatel  
**FCC ID:** 2ACCJB235  
**Standard(s) :** 47 CFR Part 15, Subpart B  
**Date of Receipt:** 2025-02-13  
**Date of Test:** 2025-03-14 to 2025-03-19  
**Date of Issue:** 2025-03-20

<b>Test Result:</b>	<b>Pass*</b>
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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 EMC Laboratory

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Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2025-03-20		Original

Authorized for issue by:				
		Darren Yuan		
		Darren Yuan/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	Reference report SZCR250100020705
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

### For Model. T450A:

Remark:

This test report (Report No.: SZCR250200051005 issue on 2025-03-20) is based on the original test report (Report No.: SZCR250100020705 issue on 2025-02-06).

Review this report and original report, this report just changing the parts according to the declaration letter from client.

Considering to the difference, pre-scan were performed on the sample in this report to find the items which can be influential to the result in the original test report for fully retest.

Therefore in this report the Radiated Emissions (30MHz-1GHz) and Radiated Emissions (Above 1GHz) were performed based on the worst case of the original report with report number SZCR250100020705 issue on 2025-02-06 and other test data please refer to the previous report with report number SZCR250100020705 issue on 2025-02-06.

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## 4 General Information

### 4.1 Details of E.U.T.

EUT Description:	Mobile Phone
Model No.:	T450A
Trade Mark:	Alcatel
Hardware Version:	V00
Software Version:	450ADA11

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.

#### Accessory:

Adapter No.	Model Name	Brand Name
1	UT-681A-5200MY	TCL
2	UC13US	TCL
3	UC13AR	TCL

Remark: The design of all chargers is the same, only the plug is different, Testing the Adapter No.1.

Battery No.	Model Name	Remark
1	TLp049LB	EUT1
2	TLp049L9	EUT2

USB Cable No.	Model Name	Brand Name
1	JWUB1686-M01R	TCL

Earphone No.	Model Name	Brand Name
1	JWEP1295	TCL

### 4.2 Test modes

Pretest these modes to find the worst case and show the worse data in the test items:	04	Transfer data between the EUT and the PC+USB cable
	05	EUT+adapter+usb
	Cable+BT(Idle)+WIFI(Idle)+FM+GNSS+Camera(Rear)+WWAN idle+Earphone	
	06	EUT+adapter+usb
	Cable+BT(Idle)+WIFI(Idle)+FM+GNSS+Camera(Front)+WWAN idle+Earphone	
	07	EUT+adapter+usb Cable+BT(Idle)+WIFI(Idle)+FM+GNSS+Play MP4+WWAN idle+Earphone
	08	EUT OTG mode(read data from USB disk)



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### 4.3 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Laptop	Lenovo	L480	REF. No.SEA18C00E
Mouse	Lenovo	M-U0025-O	REF. No.:SEA24A01
Router	NETGEAR	DGN2200	REF. No.SEA22A00

### 4.4 Measurement Uncertainty

Test Item	Measurement Uncertainty
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  $U_{\text{lab}}$  (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:

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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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## 5 Equipment List

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	2025-03-04	2026-03-03
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	2025-03-04	2026-03-03
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

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	2025-03-03	2026-03-02



## 6 Emission Test Results

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

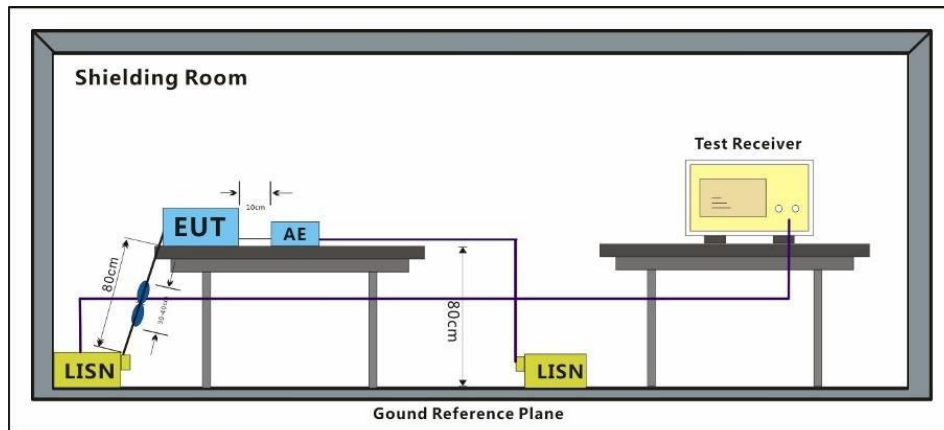
Test Requirement: 47 CFR Part 15, Subpart B

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 Test Setup Diagram



#### 6.1.2 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

The detailed test data see: **Reference report SZCR250100020705**

## 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: 23.5 °C

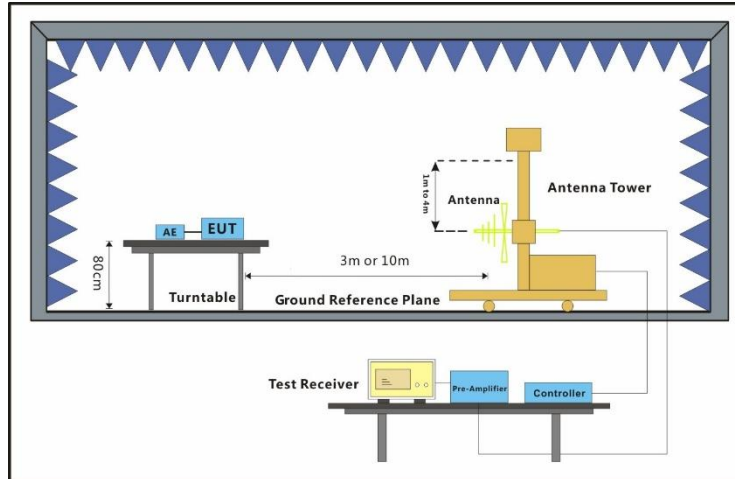
Humidity: 46.8 % RH

Atmospheric Pressure: 1020 mbar

### 6.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	04	Transfer data between the EUT and the PC+USB cable
Pre-scan	05	EUT+adapter+usb Cable+BT(Idle)+WIFI(Idle)+FM+GNSS+Camera(Rear)+WWAN idle+Earphone
Pre-scan	06	EUT+adapter+usb Cable+BT(Idle)+WIFI(Idle)+FM+GNSS+Camera(Front)+WWAN idle+Earphone
Final test	07	EUT+adapter+usb Cable+BT(Idle)+WIFI(Idle)+FM+GNSS+Play MP4+WWAN idle+Earphone
Pre-scan	08	EUT OTG mode(read data from USB disk)

### 6.2.3 Test Setup Diagram



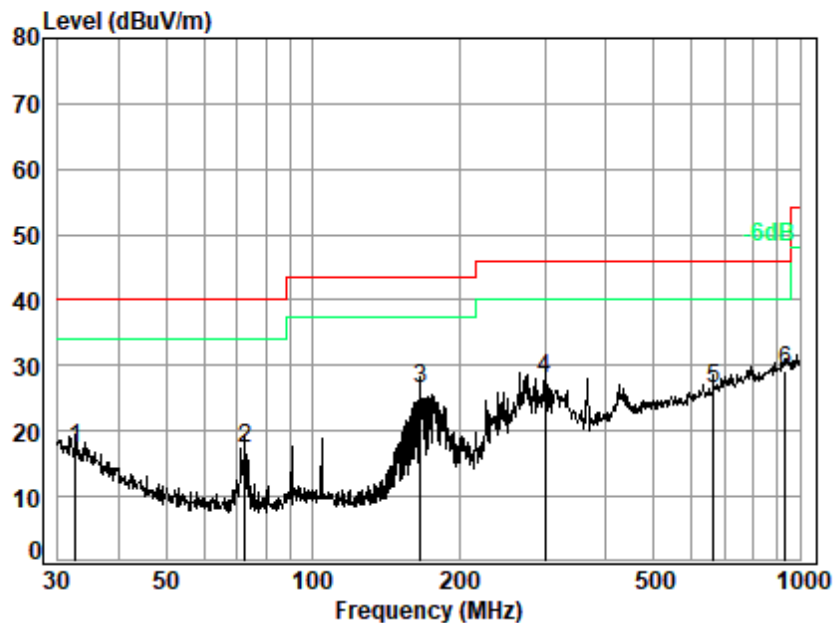
### 6.2.4 Measurement Procedure and Data

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 on the worst case:

Test Mode: 04; Polarity: Horizontal



Site : chamber

Condition: 3m HORIZONTAL

Job No. : 00510WM

Test Mode: 04

	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	32.634	20.02	0.70	27.78	24.44	17.38	40.00	-22.62 QP
2	72.592	10.45	1.04	27.67	33.40	17.22	40.00	-22.78 QP
3	166.068	13.16	1.62	27.31	38.93	26.40	43.50	-17.10 QP
4	300.367	18.05	2.20	26.75	34.43	27.93	46.00	-18.07 QP
5	663.473	25.32	3.44	27.81	25.52	26.47	46.00	-19.53 QP
6 q	935.546	28.18	4.22	26.51	23.25	29.14	46.00	-16.86 QP





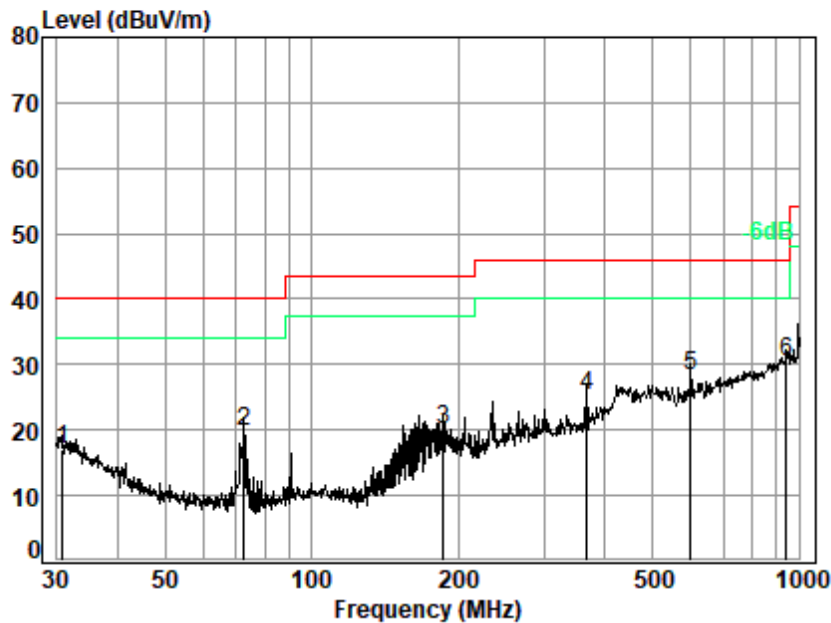
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Test Mode: 04; Polarity: Vertical



Site : chamber  
Condition: 3m VERTICAL  
Job No. : 00510WM  
Test Mode: 04

		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	30.745	20.86	0.68	27.79	23.37	17.12	40.00	-22.88	QP
2	72.592	10.45	1.04	27.67	36.01	19.83	40.00	-20.17	QP
3	186.441	14.30	1.71	27.23	31.34	20.12	43.50	-23.38	QP
4	366.823	20.35	2.47	27.02	29.33	25.13	46.00	-20.87	QP
5	599.321	24.42	3.24	27.97	28.56	28.25	46.00	-17.75	QP
6 q	942.131	28.19	4.23	26.46	24.39	30.35	46.00	-15.65	QP



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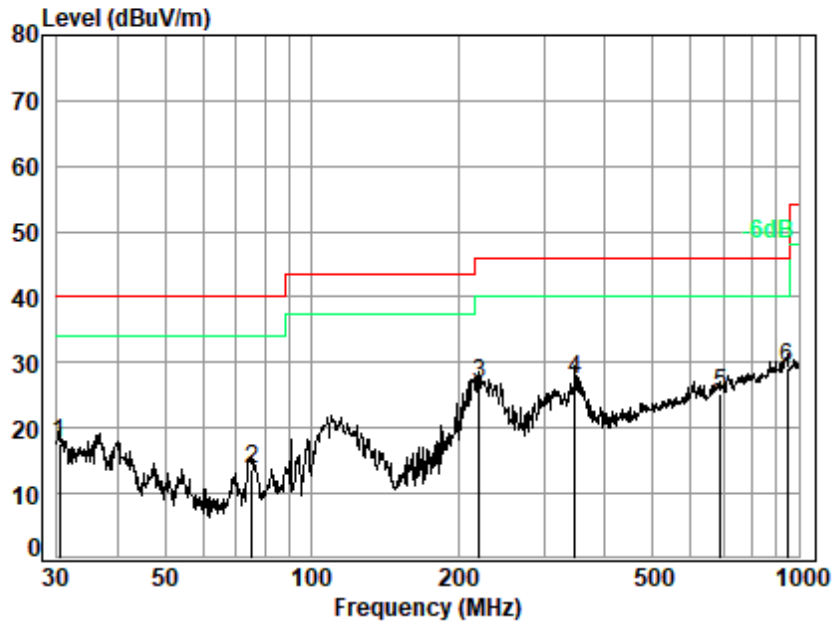
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Test Mode: 07; Polarity: Horizontal



Site : chamber  
Condition: 3m HORIZONTAL  
Job No. : 00510WM  
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	30.317	21.05	0.67	27.79	23.85	17.78	40.00	-22.22	QP
2	75.446	10.38	1.06	27.66	29.76	13.54	40.00	-26.46	QP
3	220.617	15.22	1.87	27.08	36.69	26.70	46.00	-19.30	QP
4	346.809	19.67	2.39	26.94	32.26	27.38	46.00	-18.62	QP
5	689.565	25.69	3.51	27.75	23.66	25.11	46.00	-20.89	QP
6 q	945.440	28.26	4.24	26.44	23.17	29.23	46.00	-16.77	QP



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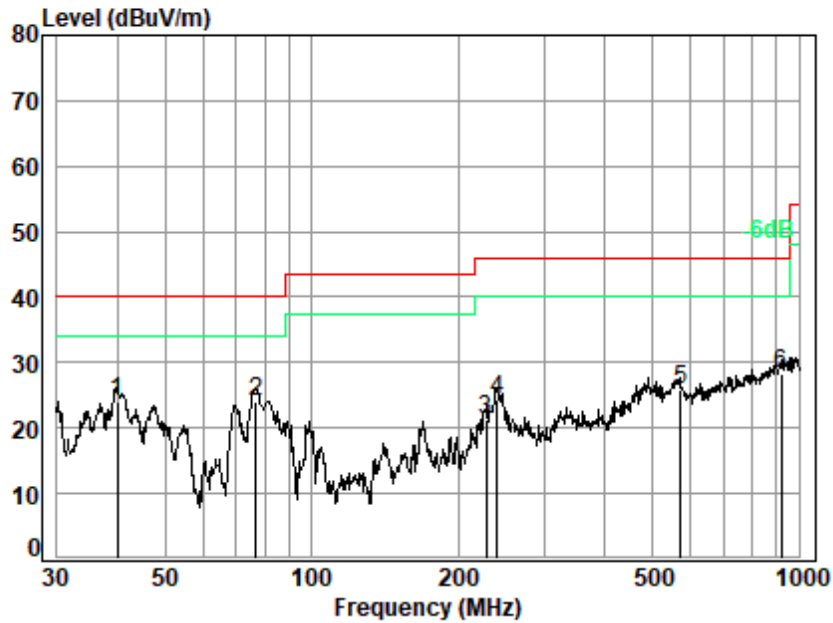
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Test Mode: 07; Polarity: Vertical



Site : chamber  
Condition: 3m VERTICAL  
Job No. : 00510WM  
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	q	39.854	16.48	0.78	27.76	34.67	24.17	40.00
2		76.781	10.39	1.07	27.66	40.09	23.89	40.00
3		227.691	16.12	1.90	27.05	30.34	21.31	46.00
4		239.987	17.07	1.96	27.00	32.20	24.23	46.00
5		570.610	23.67	3.15	27.85	26.84	25.81	46.00
6		919.287	28.17	4.17	26.63	22.70	28.41	46.00



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### 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: 22.5 °C

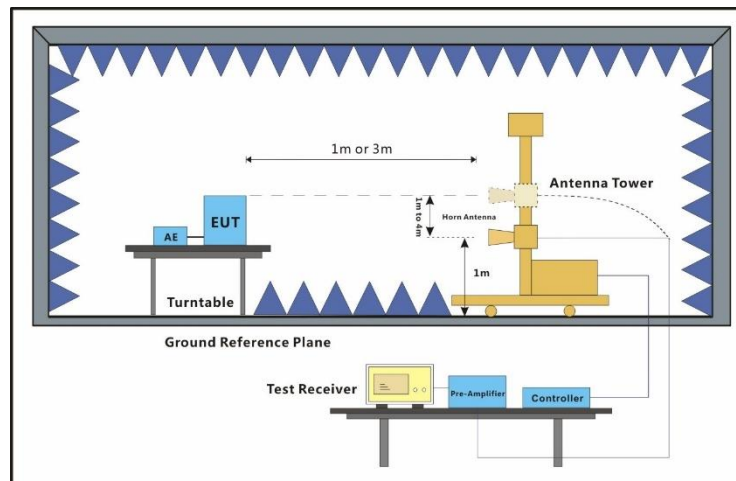
Humidity: 45.6 % RH

Atmospheric Pressure: 1020 mbar

#### 6.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	04	Transfer data between the EUT and the PC+USB cable
Pre-scan	05	EUT+adapter+usb Cable+BT(Idle)+WIFI(Idle)+FM+GNSS+Camera(Rear)+WWAN idle+Earphone
Pre-scan	06	EUT+adapter+usb Cable+BT(Idle)+WIFI(Idle)+FM+GNSS+Camera(Front)+WWAN idle+Earphone
Final test	07	EUT+adapter+usb Cable+BT(Idle)+WIFI(Idle)+FM+GNSS+Play MP4+WWAN idle+Earphone
Pre-scan	08	EUT OTG mode(read data from USB disk)

#### 6.3.3 Test Setup Diagram





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



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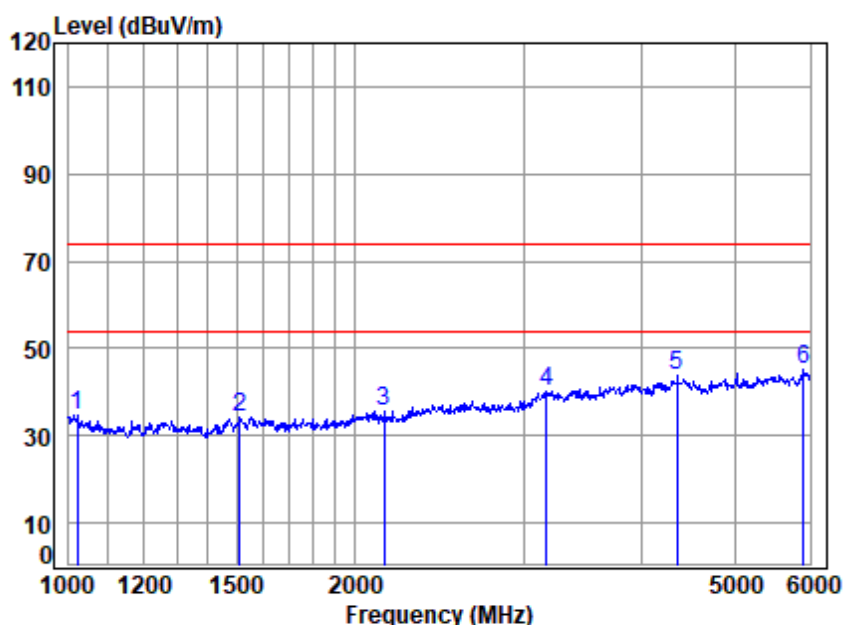
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### Test on the worst case:

Test Mode: 04; Polarity: Horizontal



Site : chamber  
Condition: 3m HORIZONTAL  
Job No : 00510WM  
Mode : 04

	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	1021.734	5.89	25.60	54.61	57.69	34.57	74.00	-39.43	Peak
2	1509.992	4.89	26.84	54.78	57.38	34.33	74.00	-39.67	Peak
3	2141.481	5.18	28.30	54.92	56.92	35.48	74.00	-38.52	Peak
4	3176.198	6.07	32.71	54.86	56.04	39.96	74.00	-34.04	Peak
5	4353.737	7.04	34.43	54.26	56.68	43.89	74.00	-30.11	Peak
6 p	5904.021	8.68	34.61	53.20	55.07	45.16	74.00	-28.84	Peak



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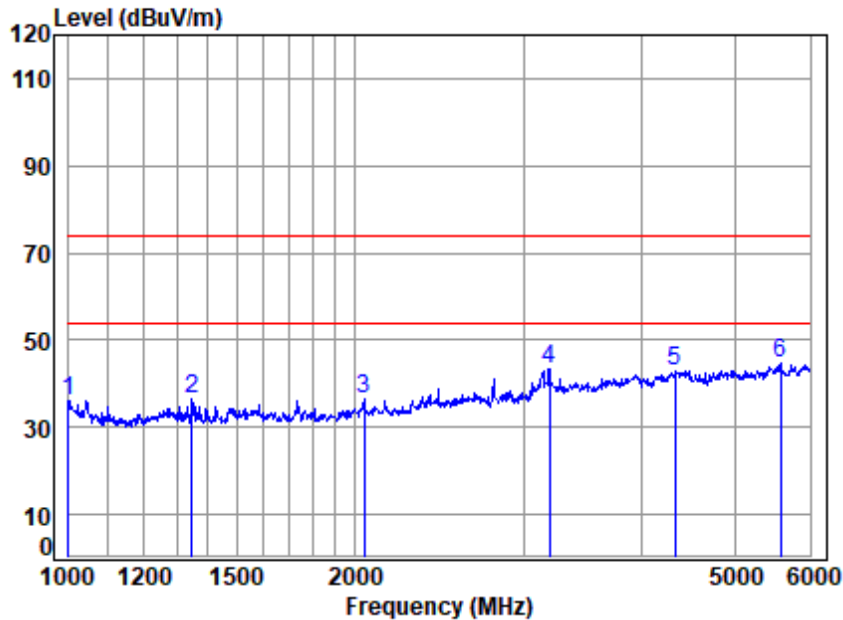
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Test Mode: 04; Polarity: Vertical



Site : chamber  
Condition: 3m VERTICAL  
Job No : 00510WM  
Mode : 04

	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	1000.000	5.95	26.30	54.60	58.42	36.07	74.00	-37.93	Peak
2	1346.397	5.17	24.52	54.73	61.44	36.40	74.00	-37.60	Peak
3	2040.348	5.09	28.96	54.90	57.42	36.57	74.00	-37.43	Peak
4	3199.044	6.09	32.89	54.84	59.35	43.49	74.00	-30.51	Peak
5	4330.397	7.02	34.24	54.26	55.89	42.89	74.00	-31.11	Peak
6 p	5585.026	8.38	34.70	53.53	54.99	44.54	74.00	-29.46	Peak



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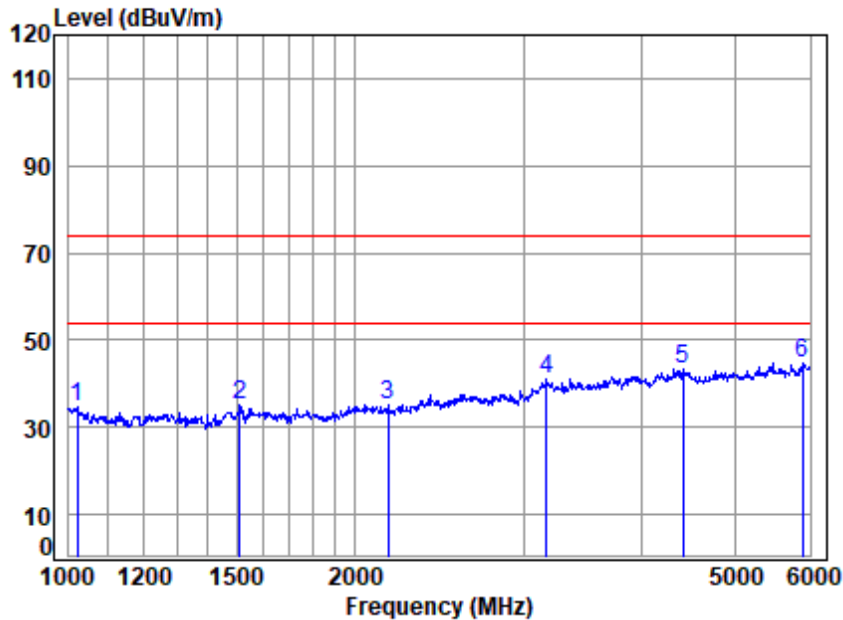
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Test Mode: 07; Polarity: Horizontal



Site : chamber  
Condition: 3m HORIZONTAL  
Job No : 00510WM  
Mode : 07

	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	1019.905	5.90	25.66	54.61	57.52	34.47	74.00	-39.53	Peak
2	1512.700	4.89	26.85	54.78	57.95	34.91	74.00	-39.09	Peak
3	2164.628	5.20	28.08	54.92	56.87	35.23	74.00	-38.77	Peak
4	3176.198	6.07	32.71	54.86	57.02	40.94	74.00	-33.06	Peak
5	4416.593	7.08	34.60	54.26	55.86	43.28	74.00	-30.72	Peak
6 p	5893.452	8.67	34.57	53.21	54.79	44.82	74.00	-29.18	Peak



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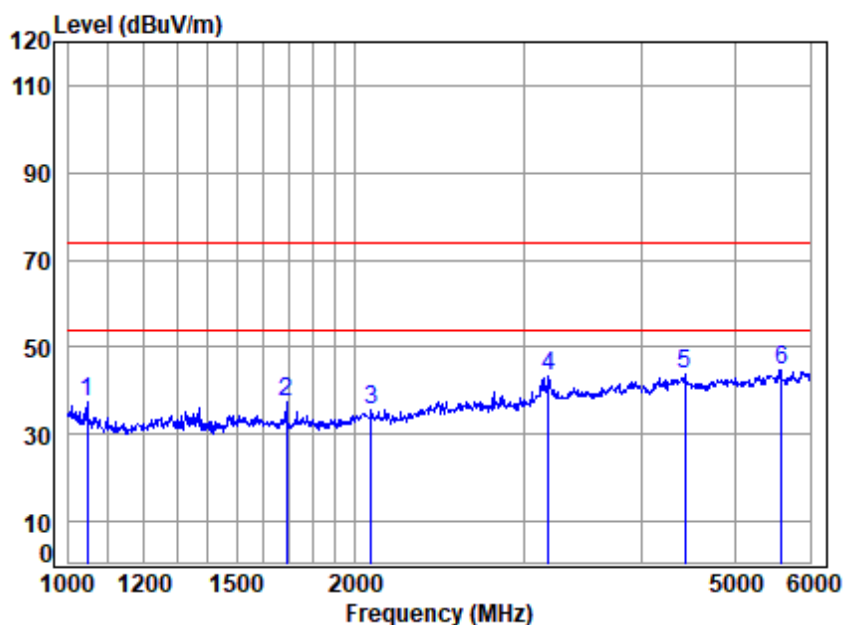
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Test Mode: 07; Polarity: Vertical



Site : chamber  
Condition: 3m VERTICAL  
Job No : 00510WM  
Mode : 07

	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	1045.812	5.83	24.83	54.62	61.50	37.54	74.00	-36.46	Peak
2	1693.466	4.96	26.21	54.83	61.09	37.43	74.00	-36.57	Peak
3	2077.235	5.13	28.89	54.91	56.30	35.41	74.00	-38.59	Peak
4	3187.600	6.08	32.80	54.85	59.13	43.16	74.00	-30.84	Peak
5	4432.448	7.09	34.41	54.25	56.36	43.61	74.00	-30.39	Peak
6 p	5595.042	8.39	34.70	53.52	55.18	44.75	74.00	-29.25	Peak



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## 7 Test Setup Photo

Please refer to SZCR2502000510 Appendix\_Setup Photo

## 8 EUT Constructional Details (EUT Photos)

Refer to Appendix – External and Internal Photos for SZCR2502000510.

- End of the Report -

