



Test Report No.: FV181120W002



EMC TEST REPORT



Applicant:	TCL Communication Ltd.
Address:	7/F, Block F4, TCL Communication Technology Building, TCL International E City, Zhong Shan Yuan Road, Nanshan District, Shenzhen, Guangdong, P.R. China 518052

Manufacturer or Supplier:	TCL Communication Ltd.
Address:	7/F, Block F4, TCL Communication Technology Building, TCL International E City, Zhong Shan Yuan Road, Nanshan District, Shenzhen, Guangdong, P.R. China 518052
Product:	UMTS/GSM Smartphone
Brand Name:	Alcatel
Model Name:	5003G
FCC ID:	2ACCJB105
Date of tests:	Nov. 21, 2018 ~ Dec. 18, 2018

The submitted sample of the above equipment has been tested for according to the requirements of the following standards:

- FCC Part 15, Subpart B, Class B**
- ANSI C63.4:2014**

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Issued by Alex Chen Engineer / Mobile Department	Approved by Sam Tung Manager / Mobile Department
 Date: Dec. 20, 2018	 Date: Dec. 20, 2018

This report is governed by, and incorporates by reference, CPS Conditions of Service as posted at the date of issuance of this report at <http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions> and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.



TABLE OF CONTENTS

RELEASE CONTROL RECORD 3

1 GENERAL INFORMATION 4

1.1 GENERAL DESCRIPTION OF EUT 4

1.2 SUMMARY OF TEST RESULTS 6

1.3 MEASUREMENT UNCERTAINTY 6

1.4 DESCRIPTION OF TEST MODES 7

1.5 DESCRIPTION OF SUPPORT UNITS 8

2 EMISSION TEST 9

2.1 CONDUCTED EMISSION MEASUREMENT 9

2.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT 9

2.1.2 TEST INSTRUMENTS 9

2.1.3 TEST PROCEDURES 10

2.1.4 DEVIATION FROM TEST STANDARD 10

2.1.5 TEST SETUP 11

2.1.6 EUT OPERATING CONDITIONS 11

2.1.7 TEST RESULTS 12

2.2 RADIATED EMISSION MEASUREMENT 14

2.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT 14

2.2.2 TEST INSTRUMENTS 15

2.2.3 TEST PROCEDURE 16

2.2.4 DEVIATION FROM TEST STANDARD 17

2.2.5 TEST SETUP 18

2.2.6 EUT OPERATING CONDITIONS 18

2.2.7 TEST RESULTS 19

**3 APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT
BY THE LAB 23**



**BUREAU
VERITAS**

Test Report No.: FV181120W002

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FV181120W002	Original release	Dec. 20, 2018



1 GENERAL INFORMATION

1.1 GENERAL DESCRIPTION OF EUT

PRODUCT	UMTS/GSM Smartphone	
BRAND NAME	Alcatel	
MODEL NAME	5003G	
NOMINAL VOLTAGE	5.0Vdc (adapter or host equipment) 3.8Vdc (Li-ion, battery)	
MODULATION TYPE	WLAN	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
	BT_LE	BT-LE(GFSK) for DTS
	Bluetooth	GFSK, $\pi/4$ -DQPSK, 8DPSK
	GPS/ BDS	C/A code
	FM	FSK
	GSM	GMSK
	WCDMA	BPSK/QPSK
OPERATING FREQUENCY	WLAN	2412 ~ 2462MHz for 11b/g/n(HT20)
	Bluetooth/BT_LE	2402MHz ~ 2480MHz
	GPS	1575.42MHz
	BDS	1561.098MHz
	FM	88MHz ~ 108MHz
	GSM	824.2MHz ~ 848.8MHz (FOR GSM 850) 1850.2MHz ~ 1909.8MHz (FOR GSM 1900)
	WCDMA	1852.4MHz ~ 1907.6MHz (FOR WCDMA Band 2) 1712.4 MHz ~ 1752.6MHz(FOR WCDMA Band 4) 826.4MHz ~ 846.6MHz (FOR WCDMA Band 5)
HW VERSION	PIO	
SW VERSION	V1.0	
I/O PORTS	Refer to user's manual	
CABLE SUPPLIED	N/A	
ACCESSORY DEVICES	Refer to note as below	

NOTE:

- For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
- For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.

List of Accessory:

ACCESSORIES	BRAND	MODEL	Manufacturer	SPECIFICATION
AC Adapter 1	alcatel	CBA0066AGAC5(PA-5V550mA-005)	PUAN	I/P:100-240Vac, 150mA O/P: 5Vdc, 550mA
AC Adapter 2	alcatel	CBA0066AGAC7(CY050055US-L)	chenyang	I/P:100-240Vac, 150mA O/P: 5Vdc, 550mA
Battery 1	alcatel	CAB2000080C7(TLi020F7)	VEKEN	Rating: 3.8Vdc, 2050mAh
Battery 2	alcatel	CAB2000070C1(TLi020F1)	BYD	Rating: 3.8Vdc, 2050mAh
Battery 3	alcatel	CAB2000095CA (TLi020FA)	Tianmao	Rating: 3.8Vdc, 2050mAh

1.2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 15, Subpart B			
Standard Section	Test Item	Result	Remark
FCC Part 15, Subpart B, Class B ANSI C63.4:2014	Conducted Test	PASS	Meets limits minimum passing margin is -6.75dB at 3.940000MHz.
	Radiated Emission Test (30MHz ~ 1GHz)	PASS	Meets Class B Limit Minimum passing margin is -5.81dB at 39.7MHz
	Radiated Emission Test (Above 1GHz)	PASS	Meets Class B Limit Minimum passing margin is -13.58dB at 3670MHz

1.3 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	150kHz ~ 30MHz	+/-2.66dB
Radiated emissions	30MHz ~ 1GHz	+/-3.26dB
	1GHz ~ 18GHz	+/-4.48dB

1.4 DESCRIPTION OF TEST MODES

Test Mode	Test Condition
Radiated emission test	
1	5003G+ Adapter 1+ Earphone+ Battery 1+ WIFI 2.4G Idle+ BT Idle+ GPS RX
2	5003G+ Adapter 2+ Earphone+ Battery 1+ WIFI 2.4G Idle+ BT Idle+ BDS Rx
3	5003G+ Worst Mode of(1-2)+ Battery 2
4	5003G+ Worst Mode of(1-2)+ Battery 3
5	5003G+ Worst Mode of(1-4)+ Front Camera On
6	5003G+ Worst Mode of(1-4)+ Back Camera On
7	5003G+ Worst Mode of(1-4)+ MPG4
8	5003G+ Worst Mode of(1-4)+ FM RX
9	5003G+ Worst Mode of(1-8)+ GSM 850 Idle
10	5003G+ Worst Mode of(1-8)+ GSM 1900 Idle
11	5003G+ Worst Mode of(1-8)+ WCDMA B2 Idle
12	5003G+ Worst Mode of(1-8)+ WCDMA B4 Idle
13	5003G+ Worst Mode of(1-8)+ WCDMA B5 Idle
Conducted emission test	
1	5003G+ Adapter 1+ Earphone+ Battery 1+ WIFI 2.4G Idle+ BT Idle+ GPS RX
2	5003G+ Adapter 2+ Earphone+ Battery 1+ WIFI 2.4G Idle+ BT Idle+ BDS Rx
3	5003G+ Worst Mode of(1-2)+ Battery 2
4	5003G+ Worst Mode of(1-2)+ Battery 3
5	5003G+ Worst Mode of(1-4)+ Front Camera On
6	5003G+ Worst Mode of(1-4)+ Back Camera On
7	5003G+ Worst Mode of(1-4)+ MPG4
8	5003G+ Worst Mode of(1-4)+ FM RX
9	5003G+ Worst Mode of(1-8)+ GSM 850 Idle
10	5003G+ Worst Mode of(1-8)+ GSM 1900 Idle
11	5003G+ Worst Mode of(1-8)+ WCDMA B2 Idle
12	5003G+ Worst Mode of(1-8)+ WCDMA B4 Idle
13	5003G+ Worst Mode of(1-8)+ WCDMA B5 Idle

NOTE:

1. For conducted emission test, test mode 5 was the worst case and only this mode was presented in this report.
2. For radiated emission test, test mode 5 was the worst case and only this mode was presented in this report

1.5 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

FOR EMISSION TESTS

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	GPS Simulator +Antenna	TOJOIN	GNSS-5000A	E1-010-010119	N/A
2	Wireless AP	ABOCOM	WR224GR	060500749P	N/A
3	FM signal generator	Rohde & Schwarz	SMB100A	109279	N/A
4	Earphone	Stereo	CCB0050A11C1	N/A	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	N/A
2	N/A
3	N/A
4	N/A

2 EMISSION TEST

2.1 CONDUCTED EMISSION MEASUREMENT

2.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

TEST STANDARD: FCC Part 15, Subpart B (Section: 15.107)

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dB μ V)	
	Quasi-peak	Average
0.15 ~ 0.5	66 to 56	56 to 46
0.5 ~ 5	56	46
5 ~ 30	60	50

- NOTE:**
1. The lower limit shall apply at the transition frequencies.
 2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.
 3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

2.1.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR3	101900	Mar. 15,18	Mar. 14,19
EMC32 test software	Rohde&Schwarz	EMC32	NA	NA	NA
LISN network	Rohde&Schwarz	ENV216	101922	Mar. 15,18	Mar. 14,19

- NOTE:**
1. The test was performed in CE shielded room.
 2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

2.1.3 TEST PROCEDURES

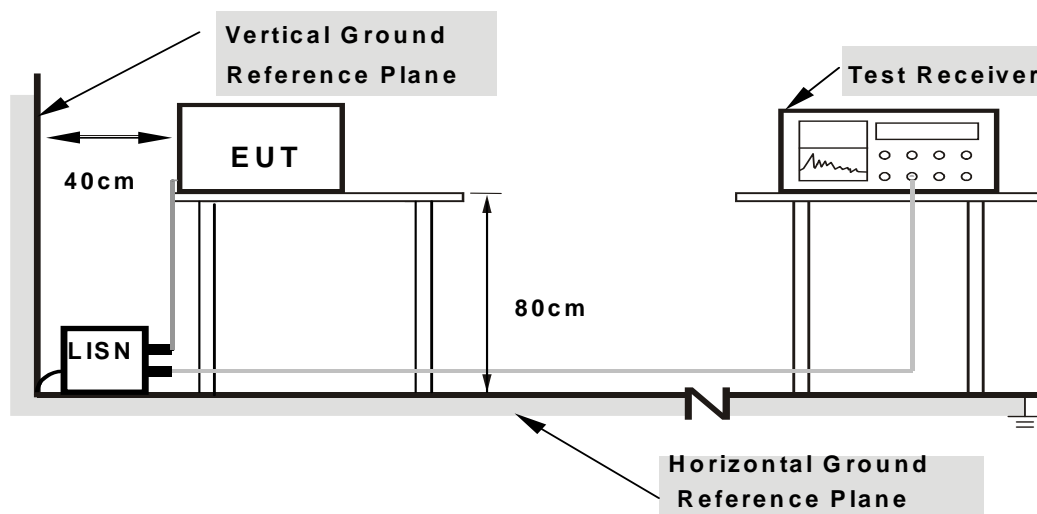
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency range from 150 kHz to 30MHz was searched. Emission levels under (Limit - 20dB) were not recorded.

NOTE: All modes of operation were investigated and the worst-case emissions are reported.

2.1.4 DEVIATION FROM TEST STANDARD

No deviation.

2.1.5 TEST SETUP



- Note:**
- 1.Support units were connected to second LISN.
 - 2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

For the actual test configuration, please refer to the attached file (Test Setup Photo).

2.1.6 EUT OPERATING CONDITIONS

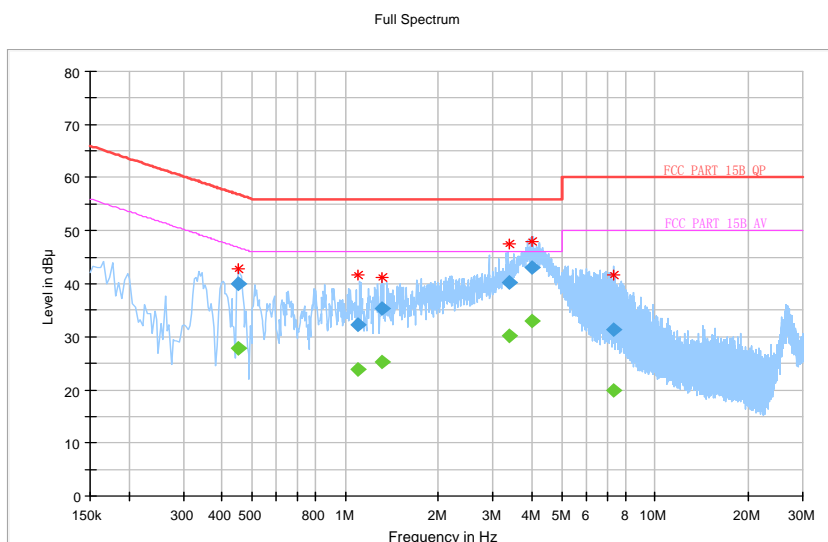
- a. Turned on the power and connected of all equipment.
- b. EUT was operated according to the use type described in the manufacturer's specifications or the user's manual.

2.1.7 TEST RESULTS

TEST VOLTAGE	DC 5V From Adapter Input 120 Vac, 60 Hz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
ENVIRONMENTAL CONDITIONS	26deg. C, 55RH	TESTED BY	John Wen

Frequency (MHz)	QuasiPeak (dBUV)	CAverage (dBUV)	Limit (dBUV)	Margin (dB)	Line	Filter	Corr. (dB)
0.452000	---	27.85	46.84	-18.99	L1	ON	9.7
0.452000	39.93	---	56.84	-16.91	L1	ON	9.7
1.100000	---	23.85	46.00	-22.15	L1	ON	9.7
1.100000	32.30	---	56.00	-23.70	L1	ON	9.7
1.316000	---	25.36	46.00	-20.64	L1	ON	9.7
1.316000	35.25	---	56.00	-20.75	L1	ON	9.7
3.376000	---	30.27	46.00	-15.73	L1	ON	9.7
3.376000	40.14	---	56.00	-15.86	L1	ON	9.7
3.984000	---	32.97	46.00	-13.03	L1	ON	9.7
3.984000	43.07	---	56.00	-12.93	L1	ON	9.7
7.316000	---	19.83	50.00	-30.17	L1	ON	9.8
7.316000	31.31	---	60.00	-28.69	L1	ON	9.8

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = Emission level - Limit value
 5. Correction factor = Insertion loss + Cable loss
 6. Emission Level = Correction Factor + Reading Value.

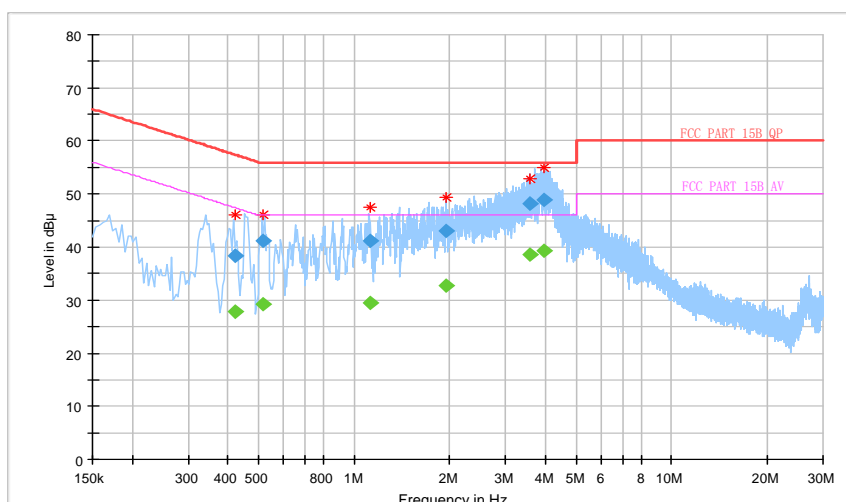


TEST VOLTAGE	DC 5V From Adapter Input 120 Vac, 60 Hz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
ENVIRONMENTAL CONDITIONS	26deg. C, 55RH	TESTED BY	John Wen

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.420000	---	27.80	47.45	-19.65	N	ON	10.1
0.420000	38.31	---	57.45	-19.14	N	ON	10.1
0.516000	---	29.30	46.00	-16.70	N	ON	10.1
0.516000	41.20	---	56.00	-14.80	N	ON	10.1
1.124000	---	29.52	46.00	-16.48	N	ON	9.9
1.124000	41.15	---	56.00	-14.85	N	ON	9.9
1.944000	---	32.73	46.00	-13.27	N	ON	9.8
1.944000	43.03	---	56.00	-12.97	N	ON	9.8
3.584000	---	38.58	46.00	-7.42	N	ON	9.8
3.584000	48.12	---	56.00	-7.88	N	ON	9.8
3.940000	---	39.25	46.00	-6.75	N	ON	9.8
3.940000	48.86	---	56.00	-7.14	N	ON	9.8

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value = Emission level - Limit value
 5. Correction factor = Insertion loss + Cable loss
 6. Emission Level = Correction Factor + Reading Value.

Full Spectrum



2.2 RADIATED EMISSION MEASUREMENT

2.2.1. LIMITS OF RADIATED EMISSION MEASUREMENT

TEST STANDARD: FCC Part 15, Subpart B (Section: 15.109)

Emissions radiated outside of the specified bands, shall be according to the general radiated limits as following:

Radiated Emissions Limits at 10 meters (dB μ V/m)				
Frequencies (MHz)	FCC 15B/ ICES-003, Class A	FCC 15B / ICES-003, Class B	CISPR 22, Class A	CISPR 22, Class B
30-88	39	29.5	40	30
88-216	43.5	33.1		
216-230	46.4	35.6		
230-960			47	37
960-1000	49.5	43.5	Not defined	Not defined
1000-3000	Avg: 49.5	Avg: 43.5		
3000+	Peak: 69.5	Peak: 63.5	Not defined	Not defined

Radiated Emissions Limits at 3 meters (dB μ V/m)				
Frequencies (MHz)	FCC 15B / ICES-003, Class A	FCC 15B / ICES-003, Class B	CISPR 22, Class A	CISPR 22, Class B
30-88	49.5	40	50.5	40.5
88-216	54	43.5		
216-230	56.9	46		
230-960			57.5	47.5
960-1000	60	54	Avg: 56 Peak: 76	Avg: 50 Peak: 70
1000-3000	Avg: 60	Avg: 54		
3000+	Peak: 80	Peak: 74	Avg: 60 Peak: 80	Avg: 54 Peak: 74

Frequency Range (For unintentional radiators)

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30
1.705-108	1000
108-500	2000
500-1000	5000
Above 1000	5 th harmonic of the highest frequency or 40GHz, whichever is lower

- NOTE:**
1. The lower limit shall apply at the transition frequencies.
 2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
 3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.
 4. QP detector shall be applied if not specified.

2.2.2. TEST INSTRUMENTS

Frequency range below 1GHz

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	Euroshieldpn-CT0001143-1216	Apr. 21,18	Apr. 20,19
Bilog Antenna	ETS-LINDGREN	3143B	00161965	Mar. 15,18	Mar. 14,19
MXE EMI Receiver	KEYSIGHT	N9038A-544	MY54450026	Mar. 16,18	Mar. 15,19
Signal Pre-Amplifier	EMSI	EMC 9135	980249	Jul. 09,18	Jul. 08,19

Frequency range above 1GHz

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	Euroshieldpn-CT0001143-1216	Apr. 21,18	Apr. 20,19
Horn Antenna	ETS-LINDGREN	3117	00168728	Mar. 15,18	Mar. 14,19
MXE EMI Receiver	KEYSIGHT	N9038A-544	MY54450026	Mar. 16,18	Mar. 15,19
Signal Pre-Amplifier	EMSI	EMC 012645B	980257	Jul. 09,18	Jul. 08,19

- NOTE:**
1. The test was performed in 3m chamber.
 2. The calibration interval of the above test instruments is 12 months or 24 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
 3. The FCC Site Registration No. is 525120; The Designation No. is CN1171.

2.2.3. TEST PROCEDURE

<Frequency Range below 1GHz>

The basic test procedure was in accordance with ANSI C63.4:2014 (section 12).

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from 1 meter to 4 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.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1GHz.

NOTE:

1. The resolution bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
3. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) (if the raw value not contains the amplifier);
4. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) – Amplifier Gain(dB) (if the raw value contains the amplifier).
5. Margin value = Emission level – Limit value.

<Frequency Range above 1GHz>

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter fully-anechoic chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna 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. The bore sight should be used during the test above 1GHz.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz

NOTE:

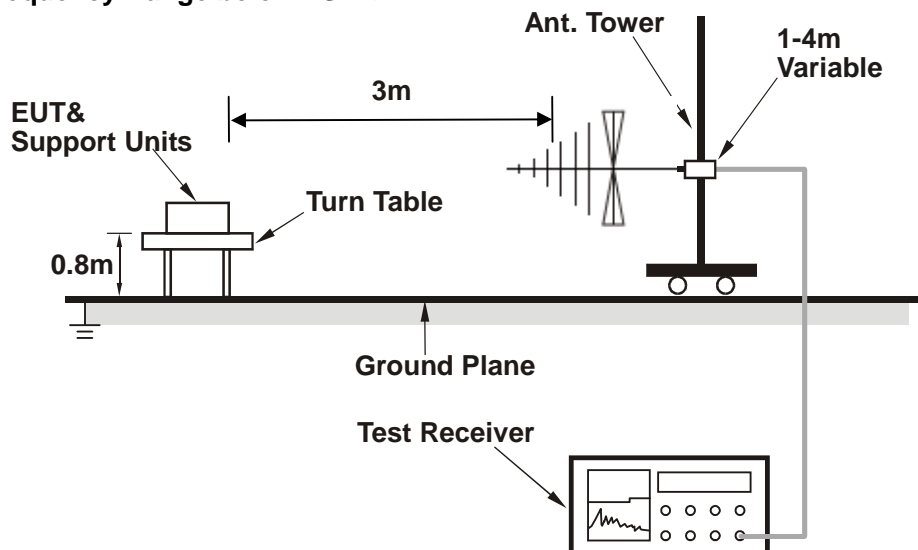
1. The resolution bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth is 1MHz and video bandwidth of test receiver/spectrum analyzer is 3MHz for Peak detection at frequency above 1GHz. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and video bandwidth of test receiver/spectrum analyzer is 10Hz for Average detection (AV) at frequency above 1GHz.
3. For measurement of frequency above 1000 MHz, the EUT was set 3 meters away from the receiver antenna.
4. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
5. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) (if the raw value not contains the amplifier);
6. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) – Amplifier Gain(dB) (if the raw value contains the amplifier)
7. Margin value = Emission level – Limit value.

2.2.4. DEVIATION FROM TEST STANDARD

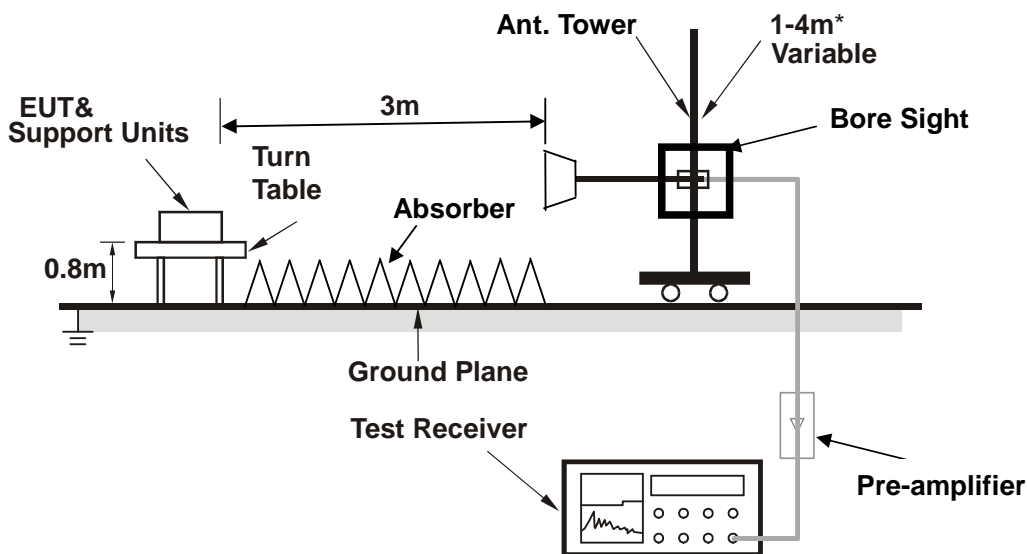
No deviation.

2.2.5. TEST SETUP

<Frequency Range below 1GHz>



<Frequency Range above 1GHz>



* : depends on the EUT height and the antenna 3dB beamwidth both, refer to section 7.3 of CISPR 16-2-3.

2.2.6. EUT OPERATING CONDITIONS

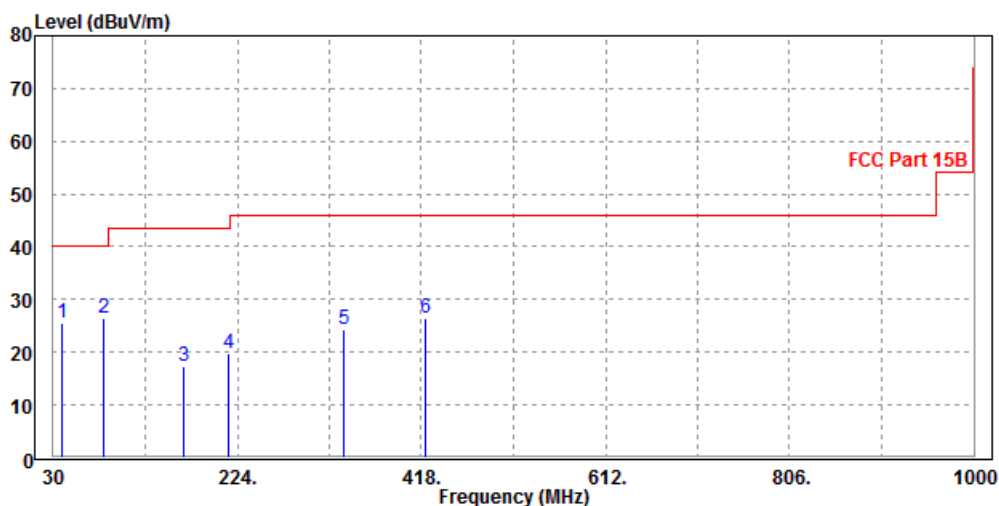
Same as item 2.1.6.

2.2.7. TEST RESULTS

TEST VOLTAGE	DC 5V From Adapter Input 120 Vac, 60 Hz	FREQUENCY RANGE	30-1000 MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70 %RH	DETECTOR FUNCTION & RESOLUTION BANDWIDTH	Quasi-Peak, 120 kHz
TESTED BY	Star Le		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
39.7	25.69	50.97	40	-14.31	11.29	0.91	37.48	148	25	QP
82.38	26.34	54.14	40	-13.66	8.1	1.22	37.12	136	257	QP
167.74	17.39	42.02	43.5	-26.11	10.41	1.68	36.72	123	218	QP
215.27	19.75	43.17	43.5	-23.75	11.24	1.87	36.53	195	230	QP
336.52	24.25	43.46	46	-21.75	15.01	2.36	36.58	116	65	QP
422.85	26.54	43.3	46	-19.46	17.31	2.7	36.77	155	328	QP

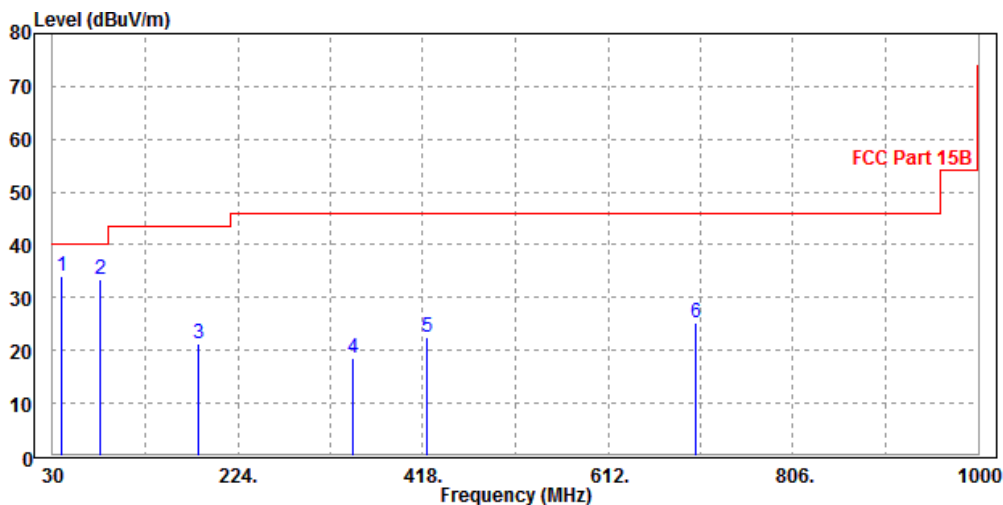
- REMARKS:**
1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
 2. Negative sign (-) in the margin column signify levels below the limit.
 3. Frequency range scanned: 30MHz to 1000MHz.
 4. Only emissions significantly above equipment noise floor are reported.



TEST VOLTAGE	DC 5V From Adapter Input 120 Vac, 60 Hz	FREQUENCY RANGE	30-1000 MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70 %RH	DETECTOR FUNCTION & RESOLUTION BANDWIDTH	Quasi-Peak, 120 kHz
TESTED BY	Star Le		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
39.7	34.19	59.47	40	-5.81	11.29	0.91	37.48	100	23	QP
79.47	33.33	61.31	40	-6.67	7.98	1.2	37.16	115	69	QP
183.26	21.23	46.01	43.5	-22.27	10.18	1.71	36.67	125	156	QP
344.28	18.65	37.6	46	-27.35	15.26	2.39	36.6	154	189	QP
422.85	22.36	39.12	46	-23.64	17.31	2.7	36.77	175	215	QP
703.18	25.21	36.33	46	-20.79	22.71	3.54	37.37	145	256	QP

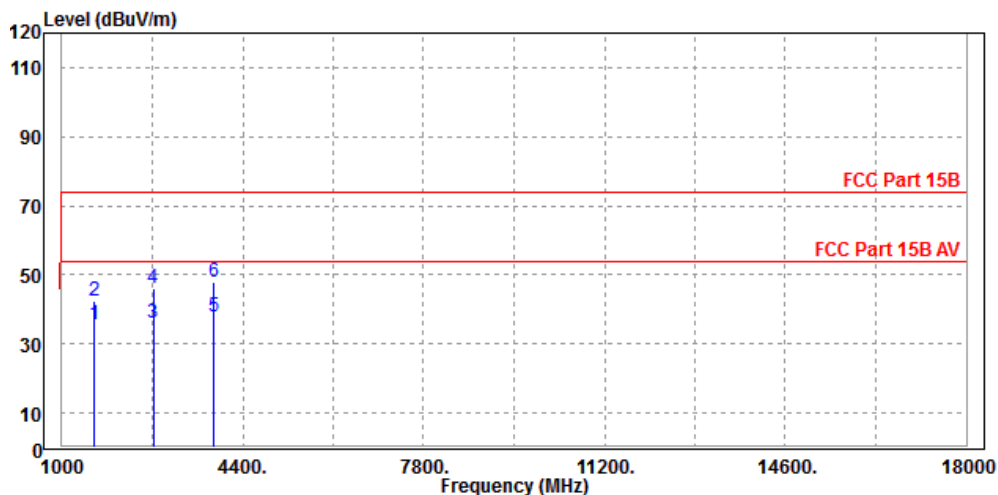
- REMARKS:**
1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
 2. Negative sign (-) in the margin column signify levels below the limit.
 3. Frequency range scanned: 30MHz to 1000MHz.
 4. Only emissions significantly above equipment noise floor are reported.



TEST VOLTAGE	DC 5V From Adapter Input 120 Vac, 60 Hz	FREQUENCY RANGE	1-18 GHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70 %RH	DETECTOR FUNCTION & RESOLUTION BANDWIDTH	Peak/Average, 1 MHz
TESTED BY	Star Le		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
1595	35.48	48	54	-18.52	29.31	6.53	48.36	100	120	Average
1595	42.29	54.81	74	-31.71	29.31	6.53	48.36	100	120	Peak
2715	36.12	43.09	54	-17.88	32.62	8.72	48.31	100	63	Average
2715	46.29	53.26	74	-27.71	32.62	8.72	48.31	100	63	Peak
3865	38.07	42.44	54	-15.93	33.58	10.58	48.53	100	112	Average
3865	47.73	52.1	74	-26.27	33.58	10.58	48.53	100	112	Peak

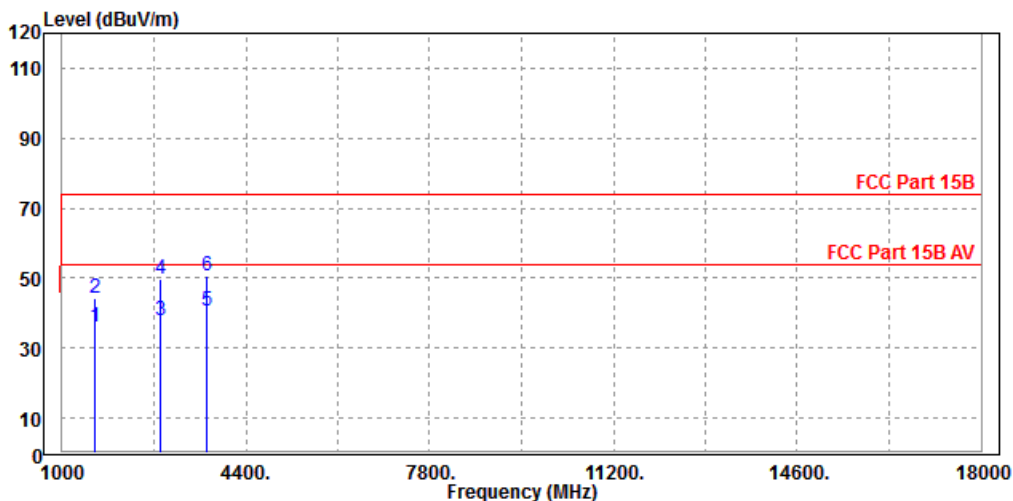
- REMARKS:**
1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
 2. Negative sign (-) in the margin column signify levels below the limit.
 3. Frequency range scanned: 1GHz to 18GHz.
 4. Only emissions significantly above equipment noise floor are reported.



TEST VOLTAGE	DC 5V From Adapter Input 120 Vac, 60 Hz	FREQUENCY RANGE	1-18 GHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70 %RH	DETECTOR FUNCTION & RESOLUTION BANDWIDTH	Peak/Average, 1 MHz
TESTED BY	Star Le		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
1595	35.87	48.39	54	-18.13	29.31	6.53	48.36	100	96	Average
1595	44.34	56.86	74	-29.66	29.31	6.53	48.36	100	96	Peak
2805	37.85	44.59	54	-16.15	32.71	8.87	48.32	100	248	Average
2805	49.57	56.31	74	-24.43	32.71	8.87	48.32	100	248	Peak
3670	40.42	45.37	54	-13.58	33.27	10.24	48.46	100	45	Average
3670	50.56	55.51	74	-23.44	33.27	10.24	48.46	100	45	Peak

- REMARKS:**
1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
 2. Negative sign (-) in the margin column signify levels below the limit.
 3. Frequency range scanned: 1GHz to 18GHz.
 4. Only emissions significantly above equipment noise floor are reported.





Test Report No.: FV181120W002

3 APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications were made to the EUT by the lab during the test.

---END---