

EMC TEST REPORT



Applicant:	TCL Communication Ltd.
Address:	5F, C-Tower, No. 232, Liang Jing Road, ZhangJiang High-Tech Park, Pudong Area, Shanghai, 201203, P.R.China

Manufacturer or Supplier	TCL Communication Ltd.
Address	5F, C-Tower, No. 232, Liang Jing Road, ZhangJiang High-Tech Park, Pudong Area, Shanghai, 201203, P.R.China
Product	Mobile Phone
Brand Name	alcatel
Model Name	5098S
FCC ID	2ACCJB057
Date of tests	Mar. 17, 2016 ~ Apr. 18, 2016

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 C63.4:2013**

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

Issued by Amyee Qian Engineer / Mobile Department	Approved by William Chung Manager / Mobile Department
	
	Date: Apr. 19, 2016

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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
1.6 CONFIGURATION OF SYSTEM UNDER TEST	9
2 EMISSION TEST.....	10
2.1 CONDUCTED EMISSION MEASUREMENT.....	10
2.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT	10
2.1.2 TEST INSTRUMENTS	10
2.1.3 TEST PROCEDURES.....	11
2.1.4 DEVIATION FROM TEST STANDARD	11
2.1.5 TEST SETUP	12
2.1.6 EUT OPERATING CONDITIONS.....	12
2.1.7 TEST RESULTS.....	13
2.2 RADIATED EMISSION MEASUREMENT.....	15
2.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT	15
2.2.2 TEST INSTRUMENTS	16
2.2.3 TEST PROCEDURE	17
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.....	22



Test Report No.: FV160316W002

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FV160316W002	Original release	Apr. 19, 2016



1 GENERAL INFORMATION

1.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Mobile Phone	
MODEL NAME	5098S	
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
	Bluetooth	GFSK, $\pi/4$ -DQPSK, 8DPSK
	GSM/EDGE	GMSK, 8PSK
	WCDMA	BPSK/QPSK
	LTE	QPSK/16QAM
OPERATING FREQUENCY	WLAN	2412 ~ 2462MHz for 11b/g/n(HT20) 2422 ~ 2452MHz for 11n(HT40)
	Bluetooth	2402MHz ~ 2480MHz
	GSM/EDGE	824.2MHz ~ 848.8MHz (FOR GSM 850) 1850.2MHz ~ 1909.8MHz (FOR PCS 1900)
	WCDMA	1852.4MHz ~ 1907.6MHz (FOR WCDMA 850) 826.4MHz ~ 846.6MHz (FOR WCDMA 1900)
	LTE	1850MHz ~ 1910MHz (FOR LTE Band2) 1710MHz ~ 1755MHz (FOR LTE Band4) 824MHz ~ 849MHz (FOR LTE Band5) 2500MHz ~ 2570MHz (FOR LTE Band7) 699MHz ~ 716MHz (FOR LTE Band12) 704MHz ~ 716MHz (FOR LTE Band17)
HW Version	V05	
SW Version	D1G	
I/O PORTS	Refer to user's manual	
CABLE	USB cable: shielded, detachable, 1.0m Earphone cable: Unshielded, detachable, 1.5m	
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:

Adapter 1	Brand Name	ALCATEL ONETOUCH
	Model Name	UC11EU
	Power Rating	I/P:100 - 240Vac, 200mA, O/P: 5Vdc, 1000mA
	Power Cord	1.0 meter shielded cable without ferrite core
Adapter 2	Brand Name	ALCATEL ONETOUCH
	Model Name	UC11EU
	Power Rating	I/P:100 - 240Vac, 200mA, O/P: 5Vdc, 1000mA
	Power Cord	1.0 meter shielded cable without ferrite core
Battery 1	Brand Name	ALCATEL ONETOUCH
	Model Name	TLp025D2
	Power Rating	3.8Vdc, 2580mAh
	Type	Li-polymer
Battery 2	Brand Name	ALCATEL ONETOUCH
	Model Name	TLp025DC
	Power Rating	3.8Vdc, 2580mAh
	Type	Li-polymer
Earphone 1	Brand Name	N/A
	Model Name	N/A
	Signal Line Type	1.5 meter non-shielded cable without ferrite core
Earphone 2	Brand Name	N/A
	Model Name	N/A
	Signal Line Type	1.5 meter non-shielded cable without ferrite core
USB Cable 1	Brand Name	N/A
	Model Name	N/A
	Signal Line Type	1.0 meter shielded cable without ferrite core
USB Cable 2	Brand Name	N/A
	Model Name	N/A
	Signal Line Type	1.0 meter shielded cable without ferrite core



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 C63.4:2013	Conducted Test	PASS	Meets limits minimum passing margin is -7.71dB at 0.640000MHz.
	Radiated Emission Test (30MHz ~ 1GHz)	PASS	Meets Class B Limit Minimum passing margin is -3.18dB at 44.55MHz
	Radiated Emission Test (Above 1GHz)	PASS	Meets Class B Limit Minimum passing margin is -5.68dB at 5790MHz.

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	+/-4.06dB
	1GHz ~ 18GHz	+/-4.58dB

1.4 DESCRIPTION OF TEST MODES

Test Mode	Test Condition
Radiated emission test	
1	GSM850 Idle+ Adapter1 + USB cable2+ Earphone 1 +BT Idle + Wifi Idle(2.4G) + GPS Rx
2	GSM1900 Idle + Adapter1 + Earphone 1 + USB cable1+BT Idle + Wifi Idle(2.4G) + GPS Rx
3	WCDMA850 Idle + Adapter1 + Earphone 2+ USB cable2 +BT Idle + Wifi Idle(2.4G) + GPS Rx
4	WCDMA 1900 Idle + Adapter1 + Earphone 2 + USB cable1+BT Idle + Wifi Idle(2.4G) + GPS Rx
5	LTE B2 Idle+ Adapter 2+ USB cable1 + Earphone1 +BT Idle + Wifi Idle(2.4G)+ GPS Rx
6	LTE B4 Idle + Adapter2 + USB cable2 + Earphone1 +BT Idle + Wifi Idle(2.4G)+ GPS Rx
7	LTE B5 Idle + Adapter2 + USB cable1 + Earphone2 +BT Idle + Wifi Idle(2.4G)+ GPS Rx
8	LTE B7 Idle + Adapter2 + USB cable2 + Earphone2 +BT Idle + Wifi Idle(2.4G)+ GPS Rx
9	LTE B12 Idle + USB Link + USB cable1 + Earphone1 +BT Idle + Wifi Idle(2.4G)+ GPS Rx
10	LTE B17 Idle + USB Link + USB cable2 + Earphone 2+BT Idle + Wifi Idle(2.4G)+ GPS Rx
Conducted emission test	
1	GSM850 Idle+ Adapter1 + USB cable2+ Earphone 1 +BT Idle + Wifi Idle(2.4G) + GPS Rx
2	GSM1900 Idle + Adapter1 + Earphone 1 + USB cable1+BT Idle + Wifi Idle(2.4G) + GPS Rx
3	WCDMA850 Idle + Adapter1 + Earphone 2+ USB cable2 +BT Idle + Wifi Idle(2.4G) + GPS Rx
4	WCDMA 1900 Idle + Adapter1 + Earphone 2 + USB cable1+BT Idle + Wifi Idle(2.4G) + GPS Rx
5	LTE B2 Idle+ Adapter 2+ USB cable1 + Earphone1 +BT Idle + Wifi Idle(2.4G)+ GPS Rx
6	LTE B4 Idle + Adapter2 + USB cable2 + Earphone1 +BT Idle + Wifi Idle(2.4G)+ GPS Rx
7	LTE B5 Idle + Adapter2 + USB cable1 + Earphone2 +BT Idle + Wifi Idle(2.4G)+ GPS Rx
8	LTE B7 Idle + Adapter2 + USB cable2 + Earphone2 +BT Idle + Wifi Idle(2.4G)+ GPS Rx
9	LTE B12 Idle + Adapter1 + USB cable1 + Earphone1 +BT Idle + Wifi Idle(2.4G)+ GPS Rx
10	LTE B17 Idle + Adapter2 + USB cable2 + Earphone 2+BT Idle + Wifi Idle(2.4G)+ GPS Rx

NOTE:

1. For conducted emission test, test mode 9 was the worst case and only this mode was presented in this report.
2. For radiated emission test, test mode 9 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	Universal Radio Communication Tester	R&S	CMU200	123259	N/A
2	Wireless AP	ABOCOM	WR224GR	060500749P	D43064
3	Bluetooth Earphone	FAP00	H6080	12098	N/A
4	Notebook	DELL	E6420	9H12FS1	N/A
5	Mouse	DELL	M056UOA	01688082	N/A
6	Printer	HP	hp LaserJet 1300	CNSJF75989	N/A

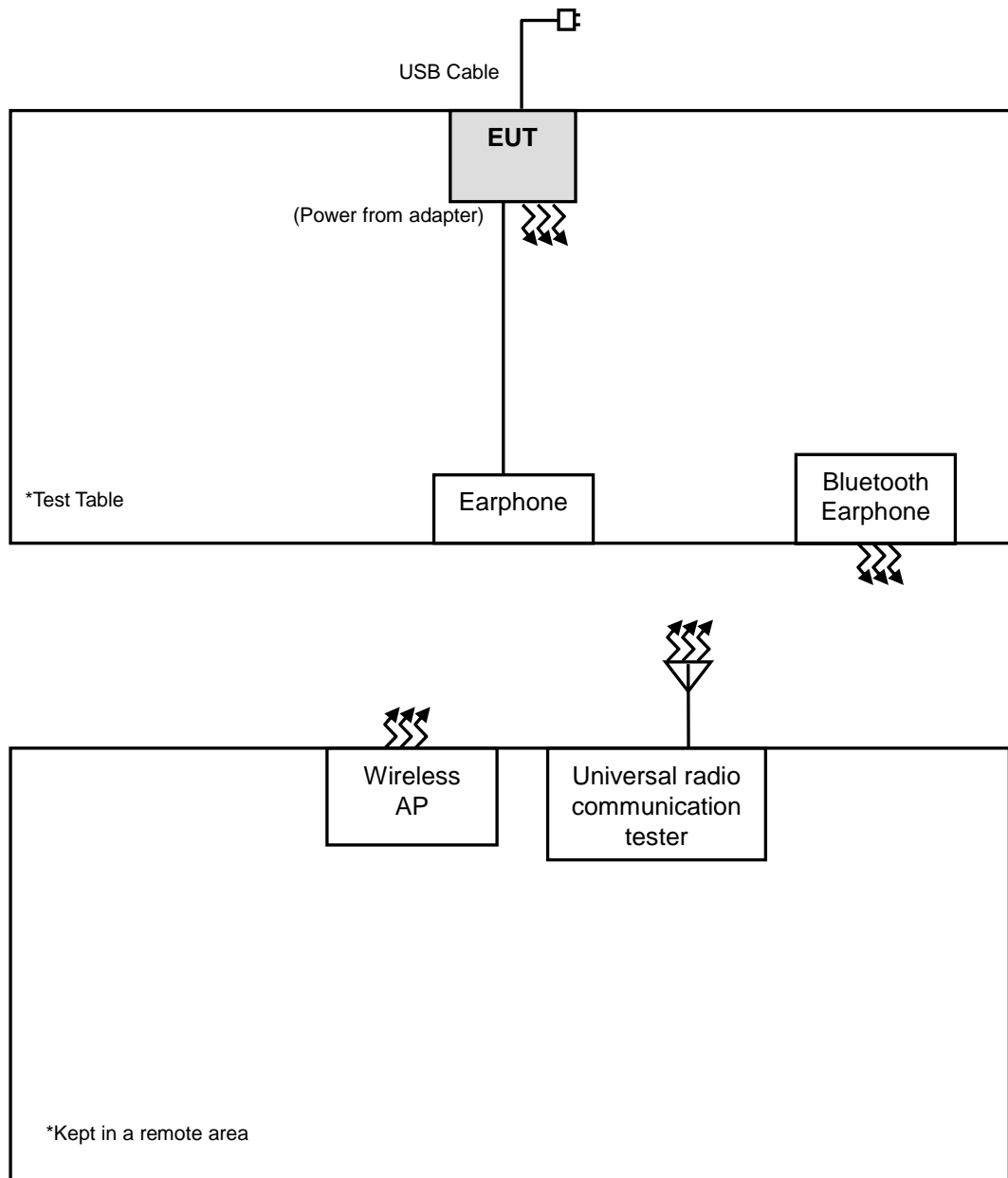
NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	N/A
2	N/A
3	N/A
4	DC Line: Unshielded, Undetachable, 2.0m
5	USB Line: Unshielded, Undetachable 1.8m;
6	USB Line: Shielded, Detachable 1.5m;

NOTE:

1. All power cords of the above support units are non shielded (1.8m).
2. Items 3-4 acted as communication partners.



1.6 CONFIGURATION OF SYSTEM UNDER TEST





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 (dBμV)	
	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	ESCS30	100340	May 11,15	May 10,17
Artificial Mains Network	Rohde&Schwarz	ENV216	101173	Mar. 04,16	Mar. 03,17
Artificial Mains Network	Rohde&Schwarz	ESH3-Z5	100317	Apr. 05,16	Apr. 04,17
Voltage probe	SCHWARZBECK	TK 9421	TK 9421-176	Jan. 08,16	Jan. 07,17
Test software	ADT	ADT_Cond_V7.3.7	N/A	N/A	N/A

NOTE: 1. 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. The test was performed in Dongguan Shielded Room 553.



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.

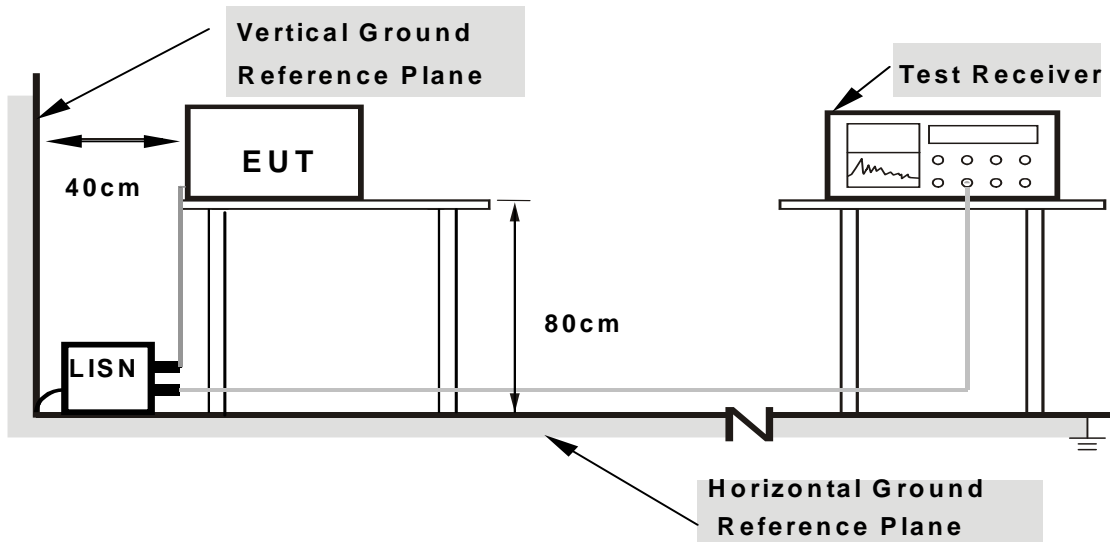
NOTE: All modes of operation were investigated and the worst-case emissions are reported.

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

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



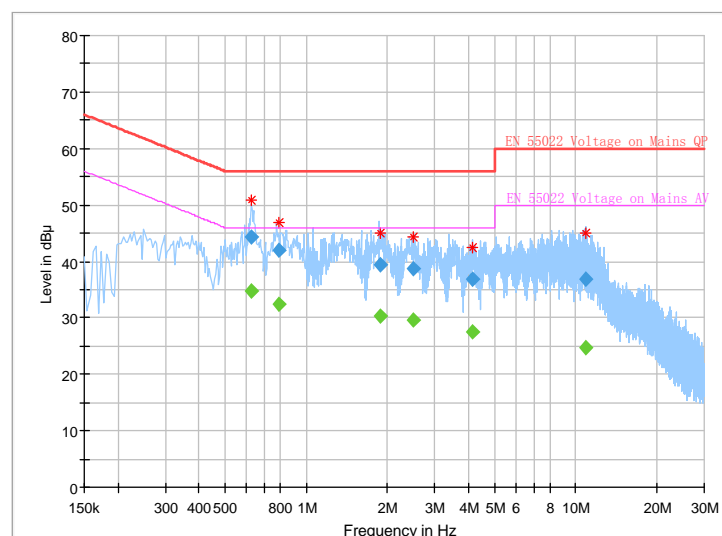
2.1.7 TEST RESULTS

TEST VOLTAGE	DC 5V From Adapter Input 230 Vac, 50 Hz	6dB BANDWIDTH	9 kHz
ENVIRONMENTAL CONDITIONS	24deg. C, 55RH	TESTED BY	Aizhong Tang

Frequency (MHz)	QuasiPeak (dB μ V)	CAverage (dB μ V)	Limit (dB μ V)	Margin (dB)	Line	Filter	Corr. (dB)
0.624000	---	34.70	46.00	-11.30	L1	ON	9.7
0.624000	44.27	---	56.00	-11.73	L1	ON	9.7
0.792000	---	32.32	46.00	-13.68	L1	ON	9.7
0.792000	41.97	---	56.00	-14.03	L1	ON	9.7
1.876000	---	30.38	46.00	-15.62	L1	ON	9.7
1.876000	39.38	---	56.00	-16.62	L1	ON	9.7
2.504000	---	29.68	46.00	-16.32	L1	ON	9.7
2.504000	38.61	---	56.00	-17.39	L1	ON	9.7
4.164000	---	27.60	46.00	-18.40	L1	ON	9.7
4.164000	36.95	---	56.00	-19.05	L1	ON	9.7
10.924000	---	24.61	50.00	-25.39	L1	ON	9.9
10.924000	36.83	---	60.00	-23.17	L1	ON	9.9

- 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



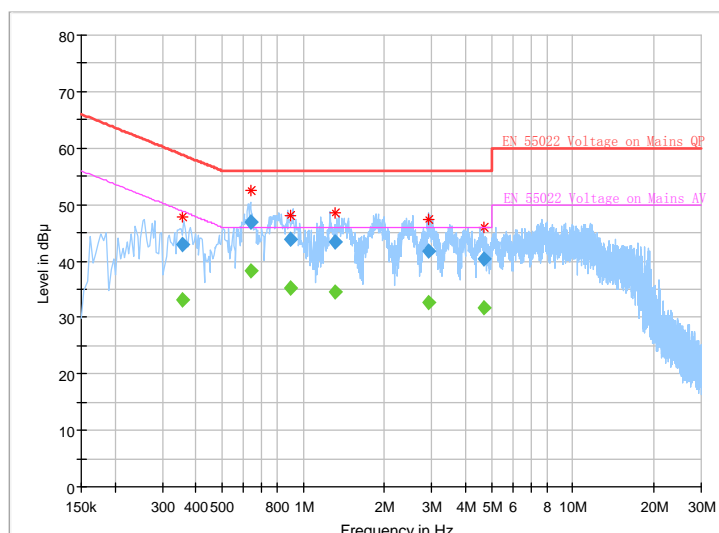


TEST VOLTAGE	DC 5V From Adapter Input 230 Vac, 50 Hz	6dB BANDWIDTH	9 kHz
ENVIRONMENTAL CONDITIONS	24deg. C, 55RH	TESTED BY	Aizhong Tang

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.356000	---	33.09	48.82	-15.73	N	OFF	10.0
0.356000	43.01	---	58.82	-15.81	N	OFF	10.0
0.640000	---	38.29	46.00	-7.71	N	OFF	10.0
0.640000	46.88	---	56.00	-9.12	N	OFF	10.0
0.900000	---	35.23	46.00	-10.77	N	OFF	9.9
0.900000	43.86	---	56.00	-12.14	N	OFF	9.9
1.316000	---	34.62	46.00	-11.38	N	OFF	9.9
1.316000	43.44	---	56.00	-12.56	N	OFF	9.9
2.916000	---	32.70	46.00	-13.30	N	OFF	9.8
2.916000	41.69	---	56.00	-14.31	N	OFF	9.8
4.664000	---	31.66	46.00	-14.34	N	OFF	9.8
4.664000	40.42	---	56.00	-15.58	N	OFF	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 (dBμV/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		
1000-3000	Avg: 49.5	Avg: 43.5	Not defined	Not defined
3000+	Peak: 69.5	Peak: 63.5	Not defined	Not defined

Radiated Emissions Limits at 3 meters (dBμV/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				
960-1000	60	54	57.5	47.5
1000-3000	Avg: 60 Peak: 80	Avg: 54 Peak: 74	Avg: 56 Peak: 76	Avg: 50 Peak: 70
3000+			Avg: 60 Peak: 80	Avg: 54 Peak: 74

- NOTE:**
1. The lower limit shall apply at the transition frequencies.
 2. Emission level (dB μ V/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

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR7	101494	Apr. 05,16	Apr. 04,17
Bilog Antenna	Teseq	CBL 6111D	30643	Jul. 16, 15	Jul. 15, 16
Horn Antenna (1GHz -18GHz)	ETS -Lindgren	3117	00062558	May 30, 15	May 29, 17
Amplifier	Burgeon	BPA-530	100220	Apr. 05,16	Apr. 04,17
Pre-Amplifier (18GHz-40GHz)	EMCI	EMC 184045	980102	Nov. 20,15	Nov. 19,17
Pre-Amplifier	HP	8449B	3008A00409	Apr. 25,15	Apr. 24,17
GPS Generator+ Antenna	TOJOIN	GNSS-5000A	E1-010119	Aug. 08, 14	Aug. 07, 16
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	NSEMC003	Mar. 12,16	Mar. 11,18
Test Software	ADT	ADT_Radiated _V7.6.15.9.2	N/A	N/A	N/A

- NOTE:**
1. The test was performed in 966m 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 494399.

2.2.3 TEST PROCEDURE

The basic test procedure was in accordance with ANSI C63.4:2013 (section 12).

- a. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meters 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 (below 1GHz) and 3 meters (above 1GHz) 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 quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- f. The test receiver/spectrum was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz.

NOTE:

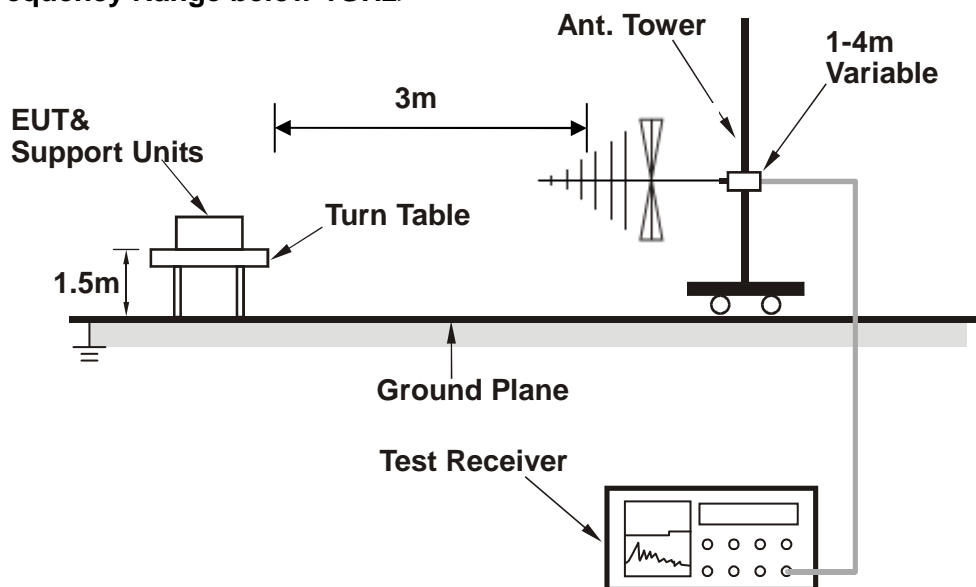
1. The resolution bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth is 1MHz and video bandwidth of test receiver/spectrum analyzer is 3MHz for Peak detection at frequency above 1GHz. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and video bandwidth of test receiver/spectrum analyzer is 3MHz 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. $\text{Emission level(dBuV/m)} = \text{Raw Value(dBuV)} + \text{Correction Factor(dB/m)}$
5. $\text{Correction Factor(dB/m)} = \text{Antenna Factor (dB/m)} + \text{Cable Factor (dB)}$ (if the raw value not contains the amplifier);
6. $\text{Correction Factor(dB/m)} = \text{Antenna Factor (dB/m)} + \text{Cable Factor (dB)} - \text{Amplifier Gain(dB)}$ (if the raw value contains the amplifier).
7. $\text{Margin value} = \text{Emission level} - \text{Limit value}$.

2.2.4 DEVIATION FROM TEST STANDARD

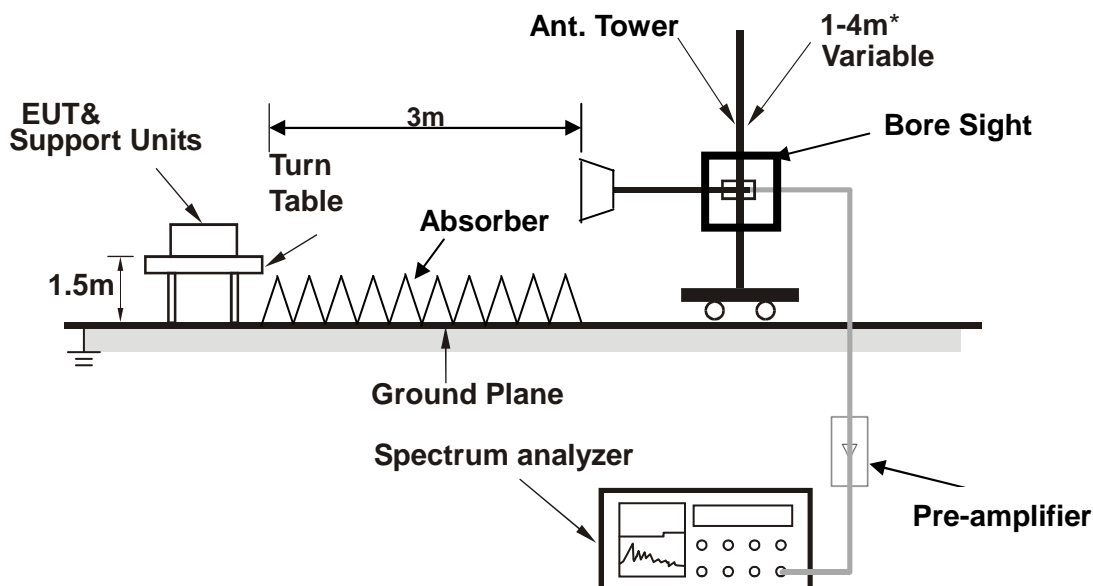
No deviation.

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.

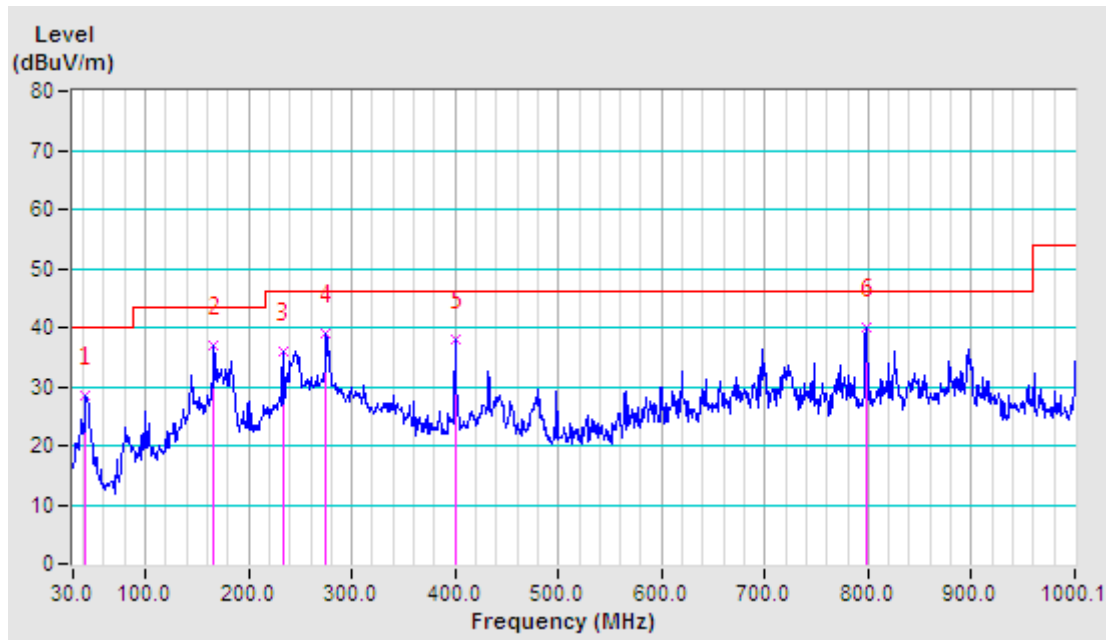


2.2.7 TEST RESULTS

TEST VOLTAGE	DC 5V From Adapter Input 120Vac, 50 Hz	FREQUENCY RANGE	30-1000 MHz
ENVIRONMENTAL CONDITIONS	26deg. C, 61 %RH	DETECTOR FUNCTION & BANDWIDTH	Quasi-Peak , 120 kHz
TESTED BY	Alex Chen		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	41.64	-25.58	54.03	28.45	40.00	-11.55	--	--
2	165.81	-23.90	60.99	37.09	43.50	-6.41	--	--
3	232.75	-22.13	58.17	36.04	46.00	-9.96	--	--
4	274.47	-20.89	59.78	38.89	46.00	-7.11	--	--
5	399.61	-16.06	53.98	37.92	46.00	-8.08	--	--
6	798.32	-9.77	49.85	40.08	46.00	-5.92	--	--

- 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.

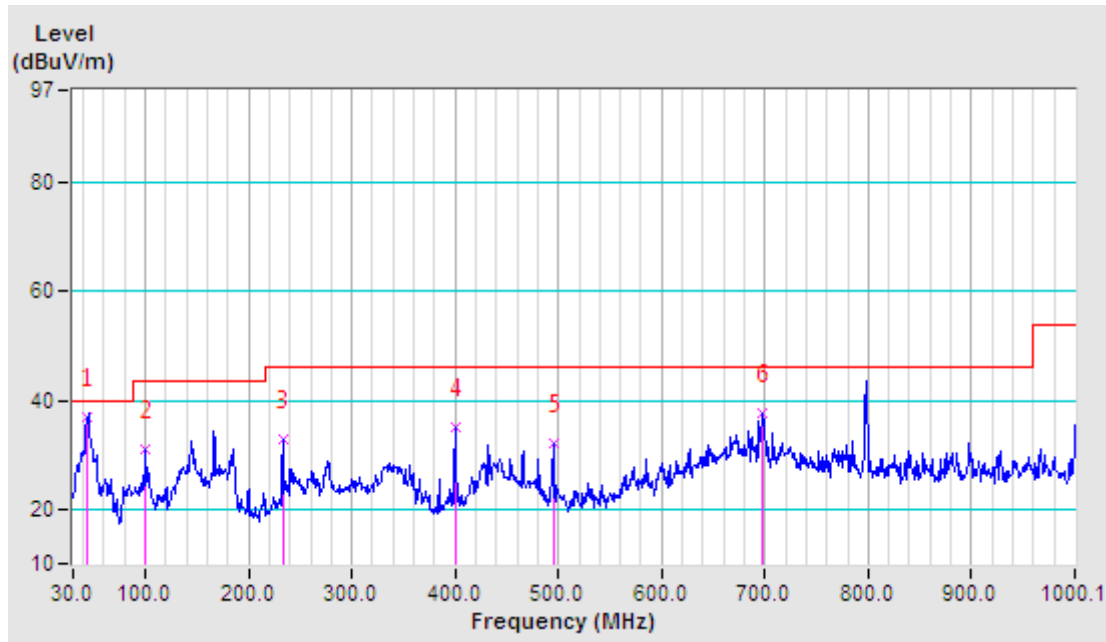




TEST VOLTAGE	DC 5V From Adapter Input 120 Vac, 50 Hz	FREQUENCY RANGE	30-1000 MHz
ENVIRONMENTAL CONDITIONS	26deg. C, 61 %RH	DETECTOR FUNCTION & BANDWIDTH	Quasi-Peak , 120 kHz
TESTED BY	Alex Chen		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	44.55	-26.63	63.45	36.82	40.00	-3.18	--	--
2	99.85	-26.56	57.66	31.10	43.50	-12.40	--	--
3	232.75	-22.13	55.16	33.03	46.00	-12.97	--	--
4	399.61	-16.06	51.17	35.11	46.00	-10.89	--	--
5	494.68	-14.87	47.06	32.19	46.00	-13.81	--	--
6	696.46	-9.80	47.36	37.56	46.00	-8.44	--	--

- 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, 50 Hz	FREQUENCY RANGE	1-6 GHz
ENVIRONMENTAL CONDITIONS	26deg. C, 61 %RH	DETECTOR FUNCTION & BANDWIDTH	Peak/Average, 1 MHz
TESTED BY	Alex Chen		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3M

No.	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	1760 PK	-11.08	53.14	42.06	70.00	-27.94	200	114
2	1760 AV	-11.08	44.31	33.23	50.00	-16.77	200	114
3	3765 PK	-4.66	52.70	48.04	74.00	-25.96	200	88
4	3765 AV	-4.66	44.67	40.01	54.00	-13.99	200	88
5	5790 PK	2.70	54.79	57.49	74.00	-16.51	200	287
6	5790 AV	2.70	45.62	48.32	54.00	-5.68	200	287

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3M

No.	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	1595 PK	-12.52	58.29	45.77	70.00	-24.23	100	318
2	1595 AV	-12.52	50.91	38.39	50.00	-11.61	100	318
3	3185 PK	-5.94	52.17	46.23	74.00	-27.77	100	199
4	3185 AV	-5.94	46.56	40.62	54.00	-13.38	100	199
5	5685 PK	1.90	52.65	54.55	74.00	-19.45	100	85
6	5685 AV	1.90	44.96	46.86	54.00	-7.14	100	85

- 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 6GHz.
 4. Only emissions significantly above equipment noise floor are reported.



Test Report No.: FV160316W002

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.

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