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Test Report No.: FS180829N016



Certificate # 2951.01

FCC TEST REPORT

Applicant	Crestron Electronics, Inc.
Address	15 Volvo Drive, Rockleigh, New Jersey, 07647, USA

Manufacturer or Supplier	YEALINK(XIAMEN) NETWORK TECHNOLOGY CO.,LTD.
Address	309, 3rd Floor, No.16, Yun Ding North Road, Huli District, Xiamen City, Fujian, P.R. China
Product	Smart Business Phone
Brand Name	CRESTRON
Model	UC-PHONE-PLUS
Additional Model & Model Difference	N/A
Date of tests	Aug. 15, 2018 ~ Sep. 26, 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

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

Tested by Andy Zhu Project Engineer / EMC Department	Approved by Glyn He Supervisor / EMC Department
	 Date: Oct. 25, 2018

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FS180815N038	Original release	Sep. 26, 2018
FS180829N016	Based on the original report FS180815N038 changed the information about the applicant, model no. and Brand Name, but it doesn't need to be retest after engineer evaluated.	Oct. 25, 2018



1 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	Conducted test	PASS	Meets limits minimum passing margin is -6.07 dB at 3.92100 MHz
	Radiated Emission Test (30MHz ~ 1GHz)	PASS	Meets limits minimum passing margin is -3.29 dB at 56.482 MHz
	Radiated Emission Test (Above 1GHz)	PASS	Meets limits minimum passing margin is -14.3 dB at 5057.85 MHz

1.1 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 emission test	0.15MHz ~ 30MHz	+/- 2.70 dB
Radiated emissions	30MHz ~ 1GHz	+/- 4.04 dB
	Above 1GHz	+/- 5.02dB



2 GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Smart Business Phone
MODEL NO.	UC-PHONE-PLUS
ADDITIONAL MODEL	N/A
FCC ID	ERO-UCPPL
POWER SUPPLY	DC 5V from Adapter or DC 48V From POE
CABLE SUPPLIED	RJ45 Line: Shielded detachable 200cm Handset Line: unshielded detachable 330cm
OPERATING FREQUENCY	2.4GHz 2402 ~ 2480MHz for BT 2412 ~ 2472MHz for 11b/g/n(HT20) 2422MHz ~ 2462MHz for 11n(HT40) 5GHz 5180MHz ~ 5240MHz, 5260MHz ~ 5320MHz, 5500MHz ~ 5700MHz 5745MHz ~ 5825MHz

NOTE:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
2. For the test results, the EUT had been tested with all conditions, but only the worst case was shown in test report.
3. Please refer to the EUT photo document (Reference No.: 180829N016) for detailed product photo.
4. The EUT uses following adapters.

Adapter 1:	
Brand	Yealink
Model	YLPS052000B-US
Input Power	AC 100-240V, 50/60Hz 0.35A Max
Output Power	DC 5V, 2A
DC Line	Unshielded, Undetachable, 1.80m.
Adapter 2 :	
Brand	Yealink
Model	YLPS052000C-US
Input Power	AC 100-240V, 50/60Hz 0.5A Max.
Output Power	DC 5V, 2A
DC Line	Unshielded, Undetachable, 1.80m.

5. This report is issued for changing the model SIP-T58A to UC-PHONE-PLUS base on the original report FS180815N038, and the model SIP-T58A is identical with the model UC-PHONE-PLUS except the model no. and Brand Name for trading purpose.



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2.2 DESCRIPTION OF TEST MODES

The EUT were tested under the following modes, the final worst mode was marked in boldface and recorded in this report.

◆ CONDUCTED EMISSION TEST:

Test Mode	Power Supply	Test Voltage
WiFi 2.4G Link+ Earphone +Video Call(Handset)	POE	DC 48V
WiFi 2.4G Link+ Earphone +Video Call(handsfree)		
WiFi 2.4G Link+ Earphone +Video Call(Earphone)		
WiFi 2.4G Link+ Earphone +BT Link		
WiFi 5G Link+ Earphone +Video Call(handsfree)		
Wired Network Link + Earphone + Video Call(handsfree)		
USB Playing + Wired Network Link(10Mbps data transmitting) +RJ45 Connect to PC + Earphone		
USB Playing + Wired Network Link(100Mbps data transmitting) +RJ45 Connect to PC + Earphone		
USB Playing + Wired Network Link(1000Mbps data transmitting) +RJ45 Connect to PC + Earphone		
USB Playing + Wired Network Link(idle) +RJ45 Connect to PC + Earphone		
Memory Playing + Wired Network Link(10Mbps data transmitting) +RJ45 Connect to PC + Earphone		
WiFi 2.4G Link+ Earphone +Video Call(Handset)+Adapter	YLPS052000B-U S; YLPS052000C-A U	AC120V/60Hz
WiFi 2.4G Link+ Earphone +Video Call(handsfree)+Adapter		
WiFi 2.4G Link+ Earphone +Video Call(Earphone)+Adapter		
WiFi 2.4G Link+ Earphone +BT Link+Adapter		
WiFi 5G Link+ Earphone +Video Call(handsfree)		
Wired Network Link + Earphone + Video Call(handsfree) +Adapter		
USB Playing + Wired Network Link(10Mbps data transmitting) +RJ45 Connect to PC + Earphone+Adapter		
USB Playing + Wired Network Link(100Mbps data transmitting) +RJ45 Connect to PC + Earphone+Adapter		
USB Playing + Wired Network Link(1000Mbps data transmitting) +RJ45 Connect to PC + Earphone+Adapter		
USB Playing + Wired Network Link(idle) +RJ45 Connect to PC + Earphone+Adapter		
Memory Playing + Wired Network Link(10Mbps data transmitting) +RJ45 Connect to PC + Earphone+Adapter		



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◆ RADIATED EMISSION TEST:

Test Mode	Power Supply	Test Voltage
WiFi 2.4G Link+ Earphone +Video Call(Handset)	POE	DC 48V
WiFi 2.4G Link+ Earphone +Video Call(handsfree)		
WiFi 2.4G Link+ Earphone +Video Call(Earphone)		
WiFi 2.4G Link+ Earphone +BT Link		
WiFi 5G Link+ Earphone +Video Call(handsfree)		
Wired Network Link + Earphone + Video Call(handsfree)		
USB Playing + Wired Network Link(10Mbps data transmitting) +RJ45 Connect to PC + Earphone		
USB Playing + Wired Network Link(100Mbps data transmitting) +RJ45 Connect to PC + Earphone		
USB Playing + Wired Network Link(1000Mbps data transmitting) +RJ45 Connect to PC + Earphone		
USB Playing + Wired Network Link(idle) +RJ45 Connect to PC + Earphone		
Memory Playing + Wired Network Link(10Mbps data transmitting) +RJ45 Connect to PC + Earphone		
WiFi 2.4G Link+ Earphone +Video Call(Handset)+Adapter	YLPS052000B-U S; YLPS052000C-A U	AC120V/60Hz
WiFi 2.4G Link+ Earphone +Video Call(handsfree)+Adapter		
WiFi 2.4G Link+ Earphone +Video Call(Earphone)+Adapter		
WiFi 2.4G Link+ Earphone +BT Link+Adapter		
WiFi 5G Link+ Earphone +Video Call(handsfree)		
Wired Network Link + Earphone + Video Call(handsfree) +Adapter		
USB Playing + Wired Network Link(10Mbps data transmitting) +RJ45 Connect to PC + Earphone+Adapter		
USB Playing + Wired Network Link(100Mbps data transmitting) +RJ45 Connect to PC + Earphone+Adapter		
USB Playing + Wired Network Link(1000Mbps data transmitting) +RJ45 Connect to PC + Earphone+Adapter		
USB Playing + Wired Network Link(idle) +RJ45 Connect to PC + Earphone+Adapter		
Memory Playing + Wired Network Link(10Mbps data transmitting) +RJ45 Connect to PC + Earphone+Adapter		



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2.3 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.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	POE Power	Yealink	YLPOE30	N/A	N/A
2	Notebook	DELL	Latitude 5280	CZFTNH2	N/A
3	Wireless Router	TP-LINK	TL-WDR3310	1240431130	N/A
4	Earphone	N/A	N/A	N/A	N/A
5	BT Speaker	N/A	N/A	N/A	N/A
6	USB Driver 3.0	Kingston	DTSE9G2/16GB	YVLP9-B8HTAQ-XXAYB	N/A

NO.	DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	AC Line: Unshielded, detachable 1.75m; RJ45 Line: Unshielded, detachable 10m
2	AC Line: Unshielded, detachable 0.8m; DC Line: Unshielded, Undetachable 1.8m
3	DC Line: Unshielded, detachable 1.2m
4	Earphone Line: Unshielded, detachable 1.8m
5~6	N/A



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3 EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

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

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.5	79	66	66 - 56	56 - 46
0.50 - 5.0	73	60	56	46
5.0 - 30.0	73	60	60	50

NOTES:

- (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 0.50 MHz.
- (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.

3.1.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR7	101494	Mar. 21,18	Mar. 20,19
Artificial Mains Network	Rohde&Schwarz	ENV216	101173	Mar. 03,18	Mar. 02,19
Artificial Mains Network	Rohde&Schwarz	ESH3-Z5	100317	Apr. 11,18	Apr. 10,19
Voltage probe	SCHWARZBEC K	TK 9421	TK 9421-176	Jan. 17,18	Jan. 16,19
Test software	ADT	ADT_Cond_V 7.3.7	N/A	N/A	N/A

NOTE:

- 1. The test was performed at Shielded Room 553.
- 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.



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3.1.3 TEST PROCEDURE

The basic test procedure was in accordance with ANSI C63.4:2014 (section 7).

- 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 30 MHz was searched. Emission levels under (Limit – 20dB) were not recorded.

NOTE:

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. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

3.1.4 DEVIATION FROM TEST STANDARD

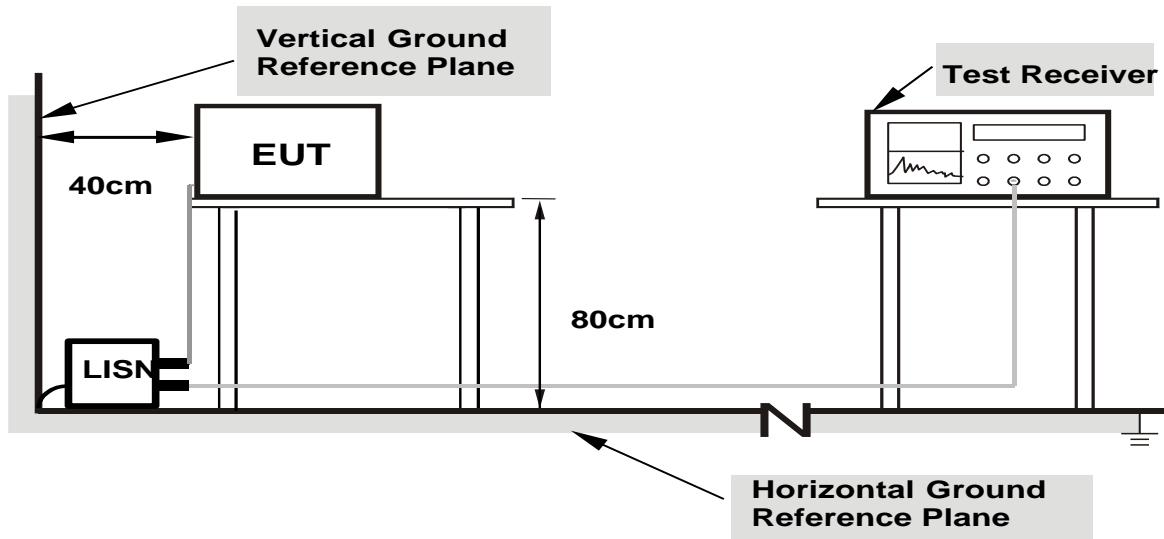
No deviation.



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3.1.5 TEST SETUP



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

3.1.6 EUT OPERATING CONDITIONS

- Turned on the power of all equipment.
- EUT was operated according to the type description in manufacturer's specifications or the User's Manual.



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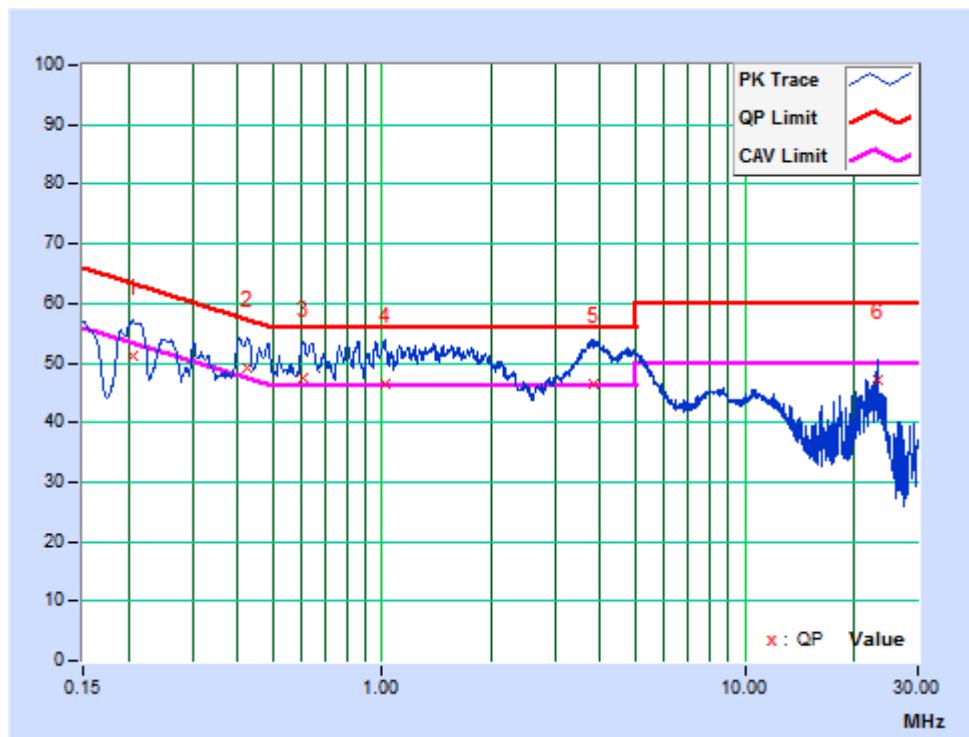
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3.1.7 TEST RESULTS

TEST MODE	USB Playing + Wired Network Link(10Mbps data transmitting) +RJ45 Connect to PC + Earphone+Adapter	6DB BANDWIDTH	9 kHz
TEST VOLTAGE	AC 120V 60Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	27deg.C, 46% RH	TESTED BY	Dargon

No.	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.20572	10.29	40.97	30.84	51.26	41.13	63.38	53.38	-12.12	-12.25
2	0.42410	10.22	38.78	27.98	49.00	38.20	57.37	47.37	-8.37	-9.17
3	0.60893	10.36	37.22	26.82	47.58	37.18	56.00	46.00	-8.42	-8.82
4	1.01630	10.37	36.02	27.39	46.39	37.76	56.00	46.00	-9.61	-8.24
5	3.81750	9.81	36.74	27.93	46.55	37.74	56.00	46.00	-9.45	-8.26
6	23.12700	10.12	36.85	30.25	46.97	40.37	60.00	50.00	-13.03	-9.63

REMARKS: The emission levels of other frequencies were very low against the limit.





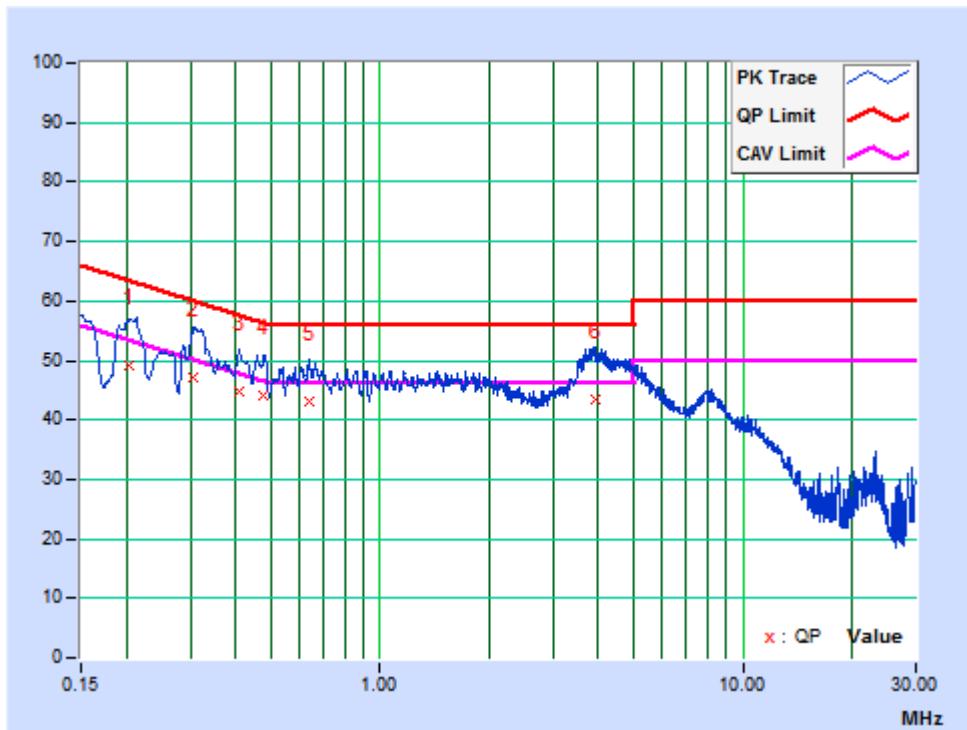
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TEST MODE	USB Playing + Wired Network Link(10Mbps data transmitting) +RJ45 Connect to PC + Earphone+Adapter	6DB BANDWIDTH	9 kHz
TEST VOLTAGE	AC 120V 60Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	27deg.C, 46% RH	TESTED BY	Dargon

No.	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.20302	9.75	39.48	27.11	49.23	36.86	63.49	53.49	-14.25	-16.62
2	0.30731	9.93	37.10	28.70	47.03	38.63	60.04	50.04	-13.02	-11.42
3	0.40871	10.34	34.51	25.77	44.85	36.11	57.67	47.67	-12.82	-11.56
4	0.47761	9.83	34.11	25.76	43.94	35.59	56.38	46.38	-12.44	-10.79
5	0.63600	9.89	33.18	25.27	43.07	35.16	56.00	46.00	-12.93	-10.84
6	3.92100	9.73	33.55	30.20	43.28	39.93	56.00	46.00	-12.72	-6.07

REMARKS: The emission levels of other frequencies were very low against the limit.





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3.2 RADIATED EMISSION MEASUREMENT

3.2.1 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		
88-216	43.5	33.1	40	30
216-230		46.4	35.6	
230-960				
960-1000	49.5	43.5	47	37
1000-3000	Avg: 49.5	Avg: 43.5	Not defined	Not defined
Above 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		
88-216	54	43.5	50.5	40.5
216-230		56.9	46	
230-960				
960-1000	60	54	57.5	47.5
1000-3000	Avg: 60	Avg: 54	Avg: 56	Avg: 50
Above 3000	Peak: 80	Peak: 74	Peak: 76	Peak: 70
			Avg: 60	Avg: 54
			Peak: 80	Peak: 74



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FREQUENCY RANGE OF RADIATED MEASUREMENT (For unintentional radiators)

Highest frequency generated or Upper frequency of measurement used in the device or on which the device operates or tunes (MHz)	Range (MHz)
Below 1.705	30
1.705 – 108	1000
108 – 500	2000
500 – 1000	5000
Above 1000	5th harmonic of the highest frequency or 40 GHz, 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) All emanation 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.



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3.2.2 TEST INSTRUMENTS

FREQUENCY RANGE BELOW 1GHz

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESU26	100005	Jun. 05,18	Jun. 04,19
EMI Test Receiver	Rohde&Schwarz	ESR7	101564	Jan. 18,18	Jan. 17,19
Trilog-Broadband Antenna	SCHWARZBECK	VULB 9168	9168-555	Nov. 10, 17	Nov. 09, 18
Trilog-Broadband Antenna	SCHWARZBECK	VULB 9168	9168-554	Dec. 10, 17	Dec. 09, 18
Preamplifier	EMCI	EMC1135	980378	Mar. 19,18	Mar. 18,19
Preamplifier	EMCI	EMC1135	980423	Mar. 19,18	Mar. 18,19
10m Semi-anechoic Chamber	CHANGLING	21.4m*12.1m*8.8m	NSEMC006	Feb. 10,18	Feb. 09,19
Test Software	ADT	ADT_Radiated_V8.7.07	N/A	N/A	N/A

NOTES: 1. The test was performed in 10m Chamber.

2. The calibration interval of the above test instruments is 12 months. And the calibrations are traceable to CEPREI/CHINA, GRRG/CHINA and NIM/CHINA.
3. The FCC Site Registration No. is 749762.

FREQUENCY RANGE ABOVE 1GHz

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Horn Antenna	ETS-Lindgren	3117	00085519	Dec. 10, 17	Dec. 09, 18
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170242	May 05,18	May 04,19
Signal and Spectrum Analyzer	Rohde&Schwarz	FSV40	101003	Apr. 21,18	Apr. 20,19
Broadband Preamplifier (1~18GHz)	SCHWARZBECK	BBV9718	266	Apr. 18,18	Apr. 18,19
Pre-Amplifier (18GHz-40GHz)	EMCI	EMC 184045	980102	Nov. 08,17	Nov. 07,18
Test Software	ADT	ADT_Radiated_V8.7.07	N/A	N/A	N/A

NOTES: 1. The test was performed in 10m Chamber.

2. The calibration interval of the above test instruments is 12 months. And the calibrations are traceable to CEPREI/CHINA, GRRG/CHINA and NIM/CHINA.
3. The FCC Site Registration No. is 749762.



3.2.3 TEST PROCEDURE

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

<Frequency Range below 1GHz>

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter semi-anechoic chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 10 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



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<Frequency Range above 1GHz>

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter 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 can be varied from one meter-to four meters, the height of adjustment depends on the EUT height and the antenna 3dB beamwidth both, to detect 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 and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. 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 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 for Average detection (AV) at frequency above 1GHz.
2. For measurement of frequency above 1000 MHz, the EUT was set 3 meters away from the receiver antenna.
3. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
4. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) (if the raw value not contains the amplifier)
5. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) – Amplifier Gain(dB) (if the raw value contains the amplifier).
6. Margin value = Emission level – Limit value

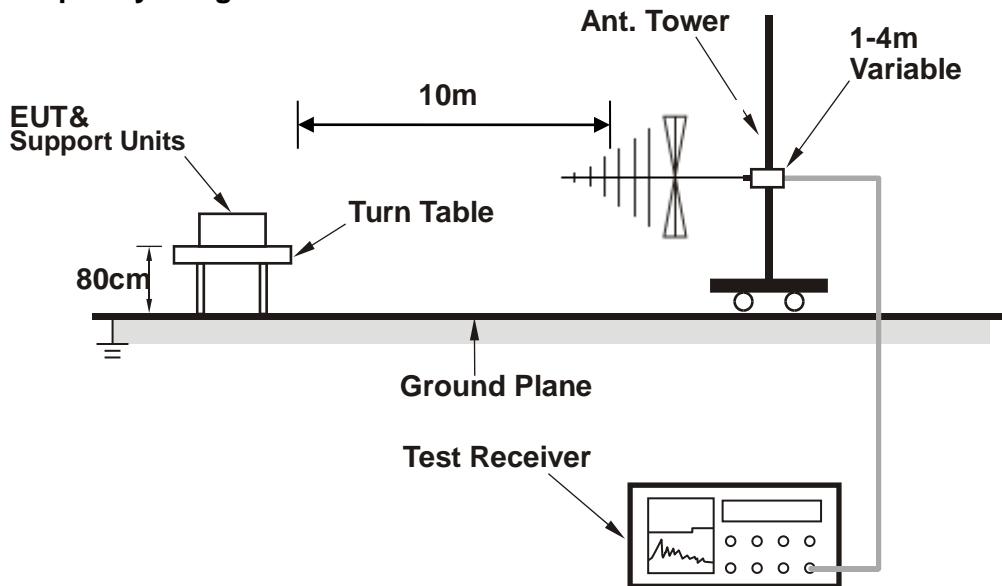
3.2.4 DEVIATION FROM TEST STANDARD

No deviation.

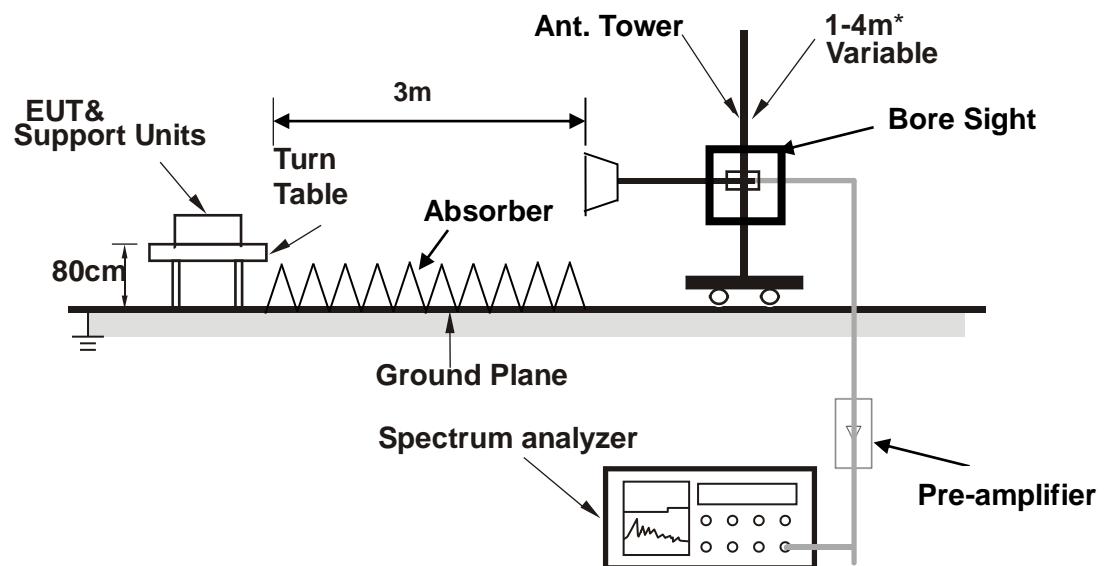


3.2.5 TEST SETUP

<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.

3.2.6 EUT OPERATING CONDITIONS

See items 3.1.6.



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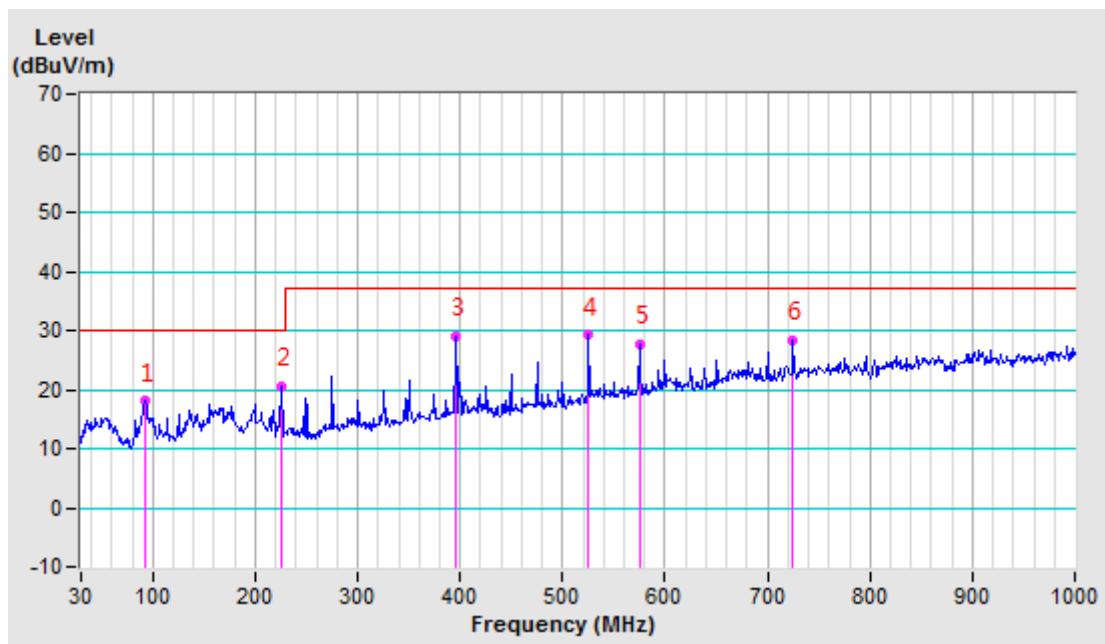
3.2.7 TEST RESULTS (BELOW 1GHz)

TEST MODE	USB Playing + Wired Network Link(10Mbps data transmitting) +RJ45 Connect to PC + Earphone	FREQUENCY RANGE	30-1000MHz
TEST VOLTAGE	DC 48V	DETECTOR FUNCTION & RESOLUTION BANDWIDTH	Quasi-Peak, 120kHz
ENVIRONMENTAL CONDITIONS	23deg. C, 56% RH		TESTED BY: Daniel

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 10 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	92.444	-21.13	39.13	18.00	30.00	-12.00	400	186
2	224.970	-18.29	38.83	20.54	30.00	-9.46	400	313
3	396.054	-13.17	42.19	29.02	37.00	-7.98	200	95
4	525.064	-10.61	39.82	29.21	37.00	-7.79	200	228
5	575.019	-9.28	36.91	27.63	37.00	-9.37	200	264
6	725.005	-5.75	33.98	28.23	37.00	-8.77	400	340

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.





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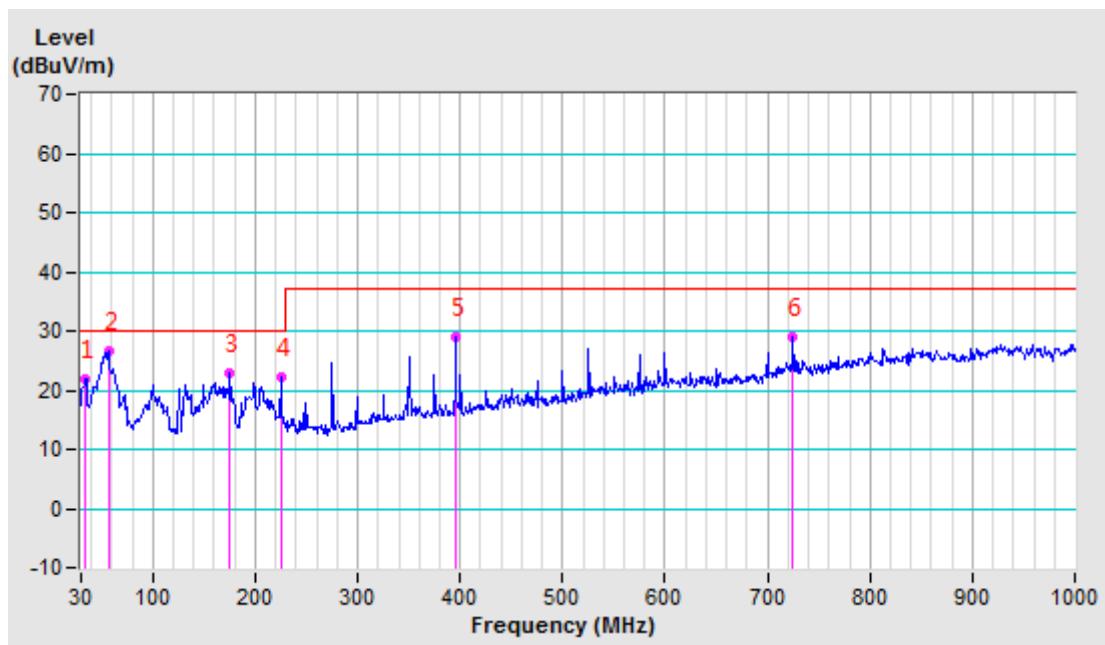
Test Report No.: FS180829N016

TEST MODE	USB Playing + Wired Network Link(10Mbps data transmitting) +RJ45 Connect to PC + Earphone	FREQUENCY RANGE	30-1000MHz
TEST VOLTAGE	DC 48V	DETECTOR FUNCTION & RESOLUTION BANDWIDTH	Quasi-Peak, 120kHz
ENVIRONMENTAL CONDITIONS	23deg. C, 56% RH		TESTED BY: Daniel

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 10 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	34.123	-18.38	40.33	21.95	30.00	-8.05	300	338
2	56.482	-18.62	45.33	26.71	30.00	-3.29	300	304
3	174.974	-17.27	40.25	22.98	30.00	-7.02	300	338
4	224.980	-17.96	40.30	22.34	30.00	-7.66	100	299
5	395.999	-12.36	41.48	29.12	37.00	-7.88	100	125
6	724.991	-5.24	34.32	29.08	37.00	-7.92	300	338

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.



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3.2.8 TEST RESULTS (ABOVE 1GHz)

TEST MODE	USB Playing + Wired Network Link(10Mbps data transmitting) +RJ45 Connect to PC + Earphone	FREQUENCY RANGE	Above 1GHz
TEST VOLTAGE	DC 48V	DETECTOR FUNCTION & RESOLUTION BANDWIDTH	Peak, Average 1MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 56% RH		TESTED BY: Tom

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	2054.64PK	2.03	52.37	54.40	74.00	-19.60	100	247
2	2054.64AV	2.03	33.67	35.70	54.00	-18.30	100	247
3	3658.96PK	5.07	52.73	57.80	74.00	-16.20	100	132
4	3658.96AV	5.07	33.53	38.60	54.00	-15.40	100	132
5	5057.85PK	7.11	51.49	58.60	74.00	-15.40	100	21
6	5057.85AV	7.11	32.59	39.70	54.00	-14.30	100	21
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	1865.31PK	0.62	53.68	54.30	74.00	-19.70	100	204
2	1865.31AV	0.62	34.28	34.90	54.00	-19.10	100	204
3	3354.62PK	4.5	54.10	58.60	74.00	-15.40	100	243
4	3354.62AV	4.5	34.90	39.40	54.00	-14.60	100	243
5	5138.56PK	7.1	51.30	58.40	74.00	-15.60	100	35
6	5138.56AV	7.1	31.60	38.70	54.00	-15.30	100	35

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 40GHz.
4. Only emissions significantly above equipment noise floor are reported.



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4 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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