



## FCC PART 15, CLASS B

## MEASUREMENT AND TEST REPORT

For

**Yealink (Xiamen) Network Technology Co., Ltd.**

4th-5th Floor, South Building, NO.63 WangHai Road, 2nd Software Park, Xiamen, China

**FCC ID: T2C-T23P**

<b>Report Type:</b>	<b>Product Type:</b>
Original Report	IP Phone
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**Note:** This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp.

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## GENERAL INFORMATION

### Product Description for Equipment under Test (EUT)

The *Yealink (Xiamen) Network Technology Co., Ltd.*'s product, model number: *SIP-T23P (FCC ID: T2C-T23P)* or the "EUT" in this report is an *IP Phone*, which was measured approximately: 20.6 cm (L) x 15.6 cm (W) x 16.0 cm (H), rated with input voltage: *DC 5.0V from adapter*. The highest operation frequency is 133 MHz.

Adapter 1 Information:

Model: NSA6EU-050060

Input: AC 100-240V~50/60Hz, 0.2A

Output: DC 5.0V, 0.6A

Adapter 2 Information:

Model: OH-1006B0500600U-UL

Input: AC 100-240V~50/60Hz, 250mA

Output: DC 5.0V, 600mA

*Note: The series products model: SIP-T23 and SIP-T23P, the model SIP-T23P was selected to fully testing by BACL, the differences among them please refer to the attached declaration letter that stated and guaranteed by the applicant.*

*\*All measurement and test data in this report was gathered from production sample serial number: 1408083 (Assigned by the BACL, Shenzhen). The EUT supplied by the applicant was received on 2014-08-08.*

### Objective

This report is prepared on behalf of *Yealink (Xiamen) Network Technology Co., Ltd.* in accordance with Part 2-Subpart J, and Part 15-Subparts A and B of the Federal Communication Commissions rules.

The objective of the manufacturer is to determine the compliance of EUT with FCC Part 15, Class B.

### Related Submittal(s)/Grant(s)

No related submittal(s).

### Test Methodology

All measurements contained in this report were conducted with ANSI C63.4-2009, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

All radiated and conducted emissions measurement was performed at Bay Area Compliance Laboratories Corp. (Shenzhen). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

## Test Facility

The test site used by Bay Area Compliance Laboratories Corp.(Shenzhen) to collect test data is located on the 6/F, the 3rd Phase of WanLi Industrial Building, ShiHua Road, FuTian Free Trade Zone Shenzhen, Guangdong, China.

Test site at Bay Area Compliance Laboratories Corp. (Shenzhen) has been fully described in reports submitted to the Federal Communication Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on December 06, 2010. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2009.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 382179. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

## SYSTEM TEST CONFIGURATION (FCC §15.27)

### Justification

The system was configured for testing in a typical fashion (as normally used by a typical user).

### EUT Exercise Software

No exercise software was used.

### Special Accessories

No special accessory was used.

### Equipment Modifications

No modification was made to the EUT tested.

### Support Equipment List and Details

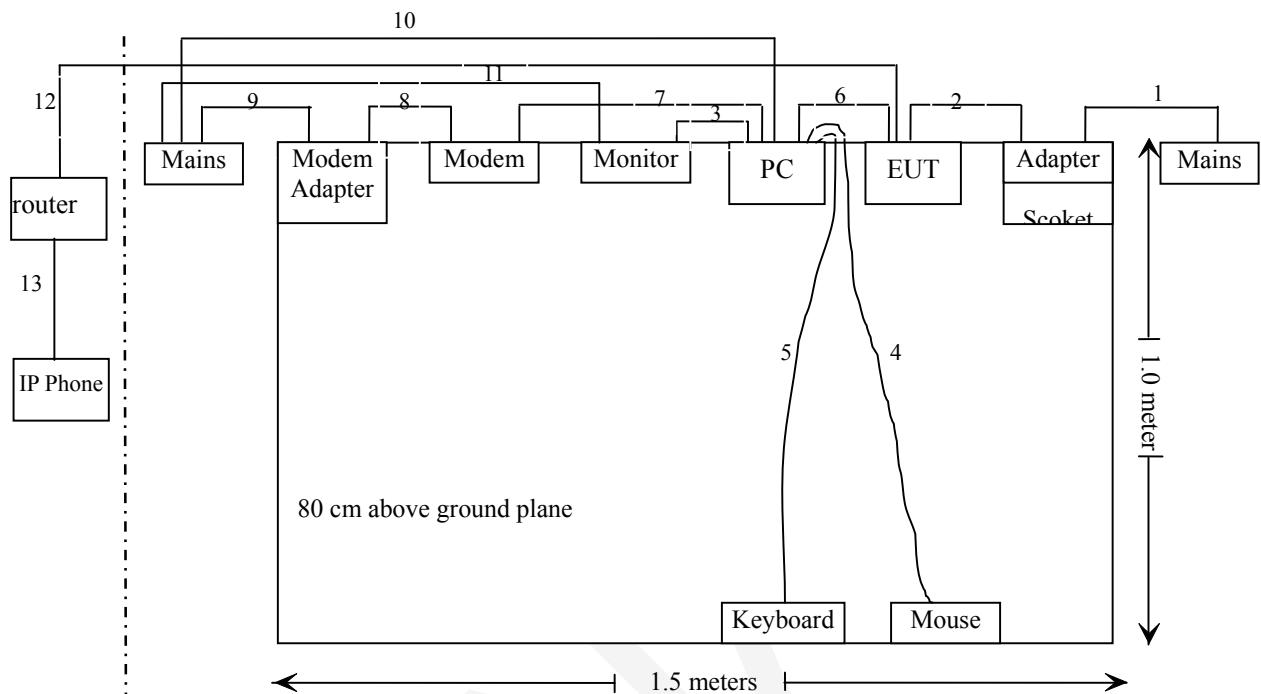
Manufacturer	Description	Model	Serial Number
Sagem	Router	N/A	N/A
Yealink	IP phone	SIP-T23P	N/A
BULL	Scoket	GN-415K	5503290068073
DELL	PC	DCSCSF	LE513565
DELL	Monitor	E178FPc	070072
DELL	Keyboard	SK-8115	CN-0DJ313-71616-0CE-0ATX
A4TECH	Mouse	D-300	N/A
ECOM	Modem	56000bps	21654684
LISTED	Modem Adapter	TYP60-1207000Z	326703
NETGEAR	POE	FS108P	1DL2943M003E5
N/A	POE adapter	ZY-480100	N/A

**External I/O Cable**

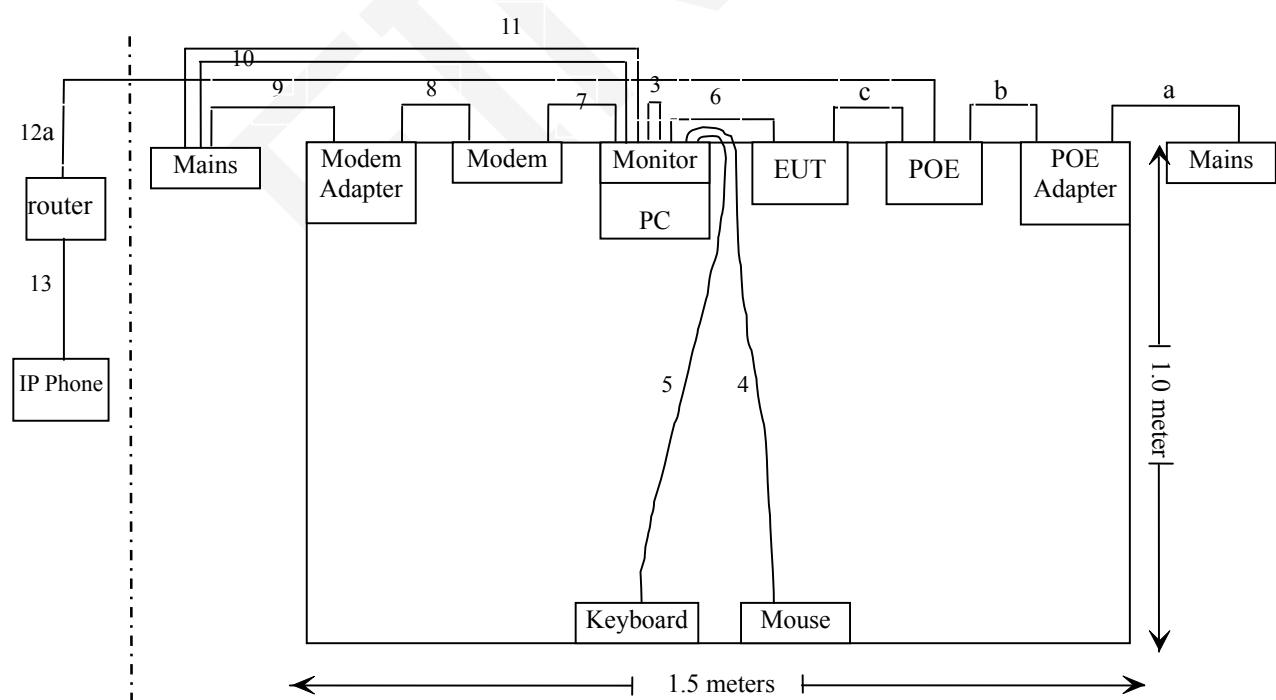
<b>Cable Description</b>		<b>Length (m)</b>	<b>From / Port</b>	<b>To</b>
1	Un-shielding Un-detachable AC cable	1.0	Mains	Socket
2	Un-shielding Un-detachable DC cable	1.8	EUT	Adapter
3	Shielding Detachable VGA cable	1.5	PC	Monitor
4	Shielding Un-detachable USB cable	1.5	PC	Mouse
5	Shielding Un-detachable USB cable	1.5	PC	Keyboard
6	Un-shielding Detachable RJ45 cable	1.6	EUT	PC
7	Un-shielding Detachable RS232 cable	1.8	PC	Modem
8	Un-shielding Un-detachable DC cable	1.7	Modem adapter	Modem
9	Un-shielding Detachable AC cable	1.5	Mains	Modem adapter
10	Un-shielding Un-detachable AC cable	1.5	Mains	PC
11	Un-shielding Un-detachable AC cable	1.5	Mains	Monitor
12	Un-shielding Detachable RJ45 cable	3.0	EUT	Router
12a	Un-shielding Detachable RJ45 cable	3.0	PoE	Router
13	Un-shielding Detachable RJ45 cable	1.5	IP phone	Router
14	Un-shielding Detachable AC cable	1.0	Mains	PoE adapter
15	Un-shielding Un-detachable DC cable	1.2	PoE	PoE adapter
16	Un-shielding Detachable RJ45 cable	1.0	PoE	EUT

## Block Diagram of Test Setup

### For Adapter



### For PoE



## **SUMMARY OF TEST RESULTS**

FCC Rules	Description of Test	Results
§15.107	AC Line Conducted Emissions	Compliance
§15.109	Radiated Emissions	Compliance

FINAL

## FCC §15.107 – AC LINE CONDUCTED EMISSIONS

### Applicable Standard

According to FCC§15.107

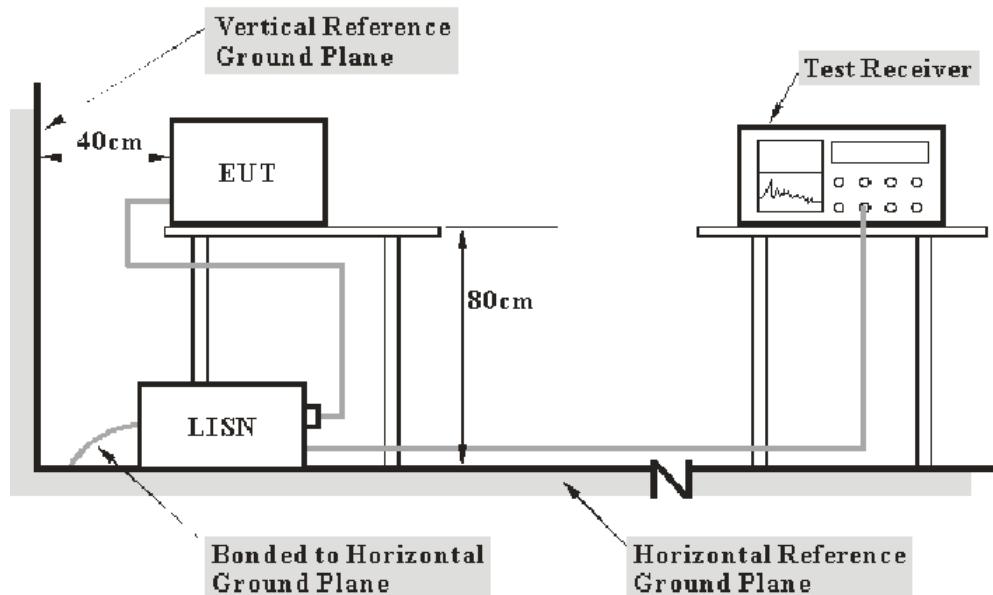
### Measurement Uncertainty

Input quantities to be considered for conducted disturbance measurements maybe receiver reading, attenuation of the connection between LISN and receiver, LISN voltage division factor, A LISN VDF frequency interpolation and receiver related input quantities, etc.

Based on CISPR 16-4-2:2011, the expended combined standard uncertainty of conducted disturbance test at Bay Area Compliance Laboratories Corp. (Shenzhen) is shown as below. And the uncertainty will not be taken into consideration for the test data recorded in the report.

Port	Measurement uncertainty
AC Mains	3.26 dB (k=2, 95% level of confidence)
CAT 3	3.70 dB (k=2, 95% level of confidence)
CAT 5	3.86 dB (k=2, 95% level of confidence)
CAT 6	4.64 dB (k=2, 95% level of confidence)

### EUT Setup



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

The measurement procedure of EUT setup is according with ANSI C63.4-2009. The related limit was specified in FCC Part 15.107 Class B.

The socket was connected to an AC 120V/60 Hz power source.

### EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

### Test Procedure

During the conducted emission test, the socket was connected to the outlet of the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All final data was recorded in the Quasi-peak and average detection mode.

### Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCS30	100176	2014-06-03	2015-06-03
Rohde & Schwarz	LISN	ESH3-Z5	100113	NCR	NCR
Rohde & Schwarz	LISN	ENV216	3560.6650.12-10 1613-Yb	2014-06-09	2015-06-09
Rohde & Schwarz	Transient Limiter	ESH3Z2	DE25985	2014-05-14	2015-05-14
Rohde & Schwarz	CE Test software	EMC 32	V8.53	-	-

\* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

## Corrected Factor & Margin Calculation

The Corrected factor is calculated by adding LISN/ISN VDF (Voltage Division Factor), Cable Loss and Transient Limiter Attenuation. The basic equation is as follows:

$$\text{Correction Factor} = \text{LISN VDF} + \text{Cable Loss} + \text{Transient Limiter Attenuation}$$

The “Margin” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7 dB below the limit. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Limit} - \text{Corrected Amplitude}$$

## Test Results Summary

According to the recorded data in following table, the worst margin reading as below:

**7.2 dB at 21.665010 MHz in the Line conducted mode for adapter 2**

Refer to CISPR16-4-2:2011 and CISPR 16-4-1:2009, the measured level is in compliance with the limit if

$$L_m + U_{(Lm)} \leq L_{\lim} + U_{\text{cisp}}$$

In BACL,  $U_{(Lm)}$  is less than  $U_{\text{cisp}}$ , if  $L_m$  is less than  $L_{\lim}$ , it implies that the EUT complies with the limit.

## Test Data

### Environmental Conditions

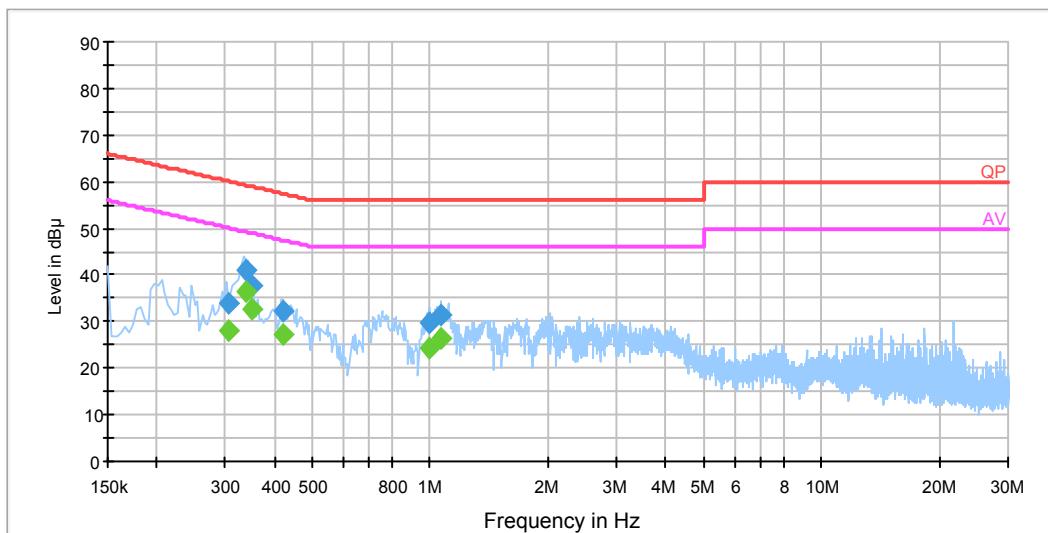
<b>Temperature:</b>	24~26 °C
<b>Relative Humidity:</b>	53~56 %
<b>ATM Pressure:</b>	101.0 kPa

*The testing was performed by Joson Xiao on 2014-08-09 and 2014-09-25.*

EUT operation mode: Talking & ping data with PC

**For Adapter 1, AC 120V/60 Hz, Line**

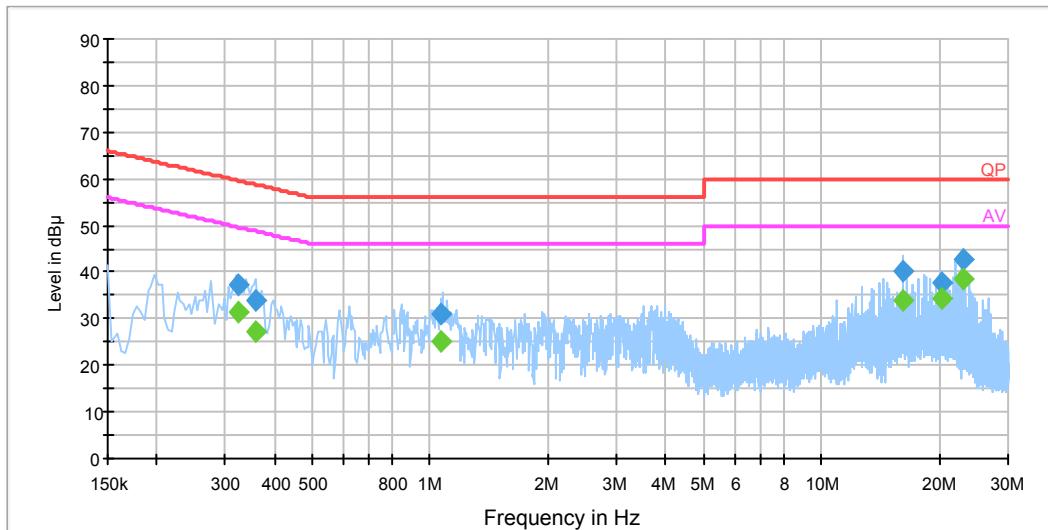
EMI Auto Test L



Frequency (MHz)	Corrected Amplitude (dB $\mu$ V)	Correction Factor (dB)	Limit (dB $\mu$ V)	Margin (dB)	Detector (PK/Ave./QP)
0.305470	33.8	19.4	60.1	26.3	QP
0.305470	28.1	19.4	50.1	22.0	Ave.
0.339010	40.9	19.5	59.2	18.3	QP
0.339010	36.5	19.5	49.2	12.7	Ave.
0.348690	37.9	19.5	59.0	21.1	QP
0.348690	32.6	19.5	49.0	16.4	Ave.
0.419670	32.2	19.5	57.5	25.2	QP
0.419670	27.2	19.5	47.5	20.3	Ave.
0.999030	29.8	19.5	56.0	26.2	QP
0.999030	24.5	19.5	46.0	21.5	Ave.
1.066010	31.3	19.5	56.0	24.7	QP
1.066010	26.3	19.5	46.0	19.7	Ave.

**For Adapter 1, AC 120V/60 Hz, Neutral**

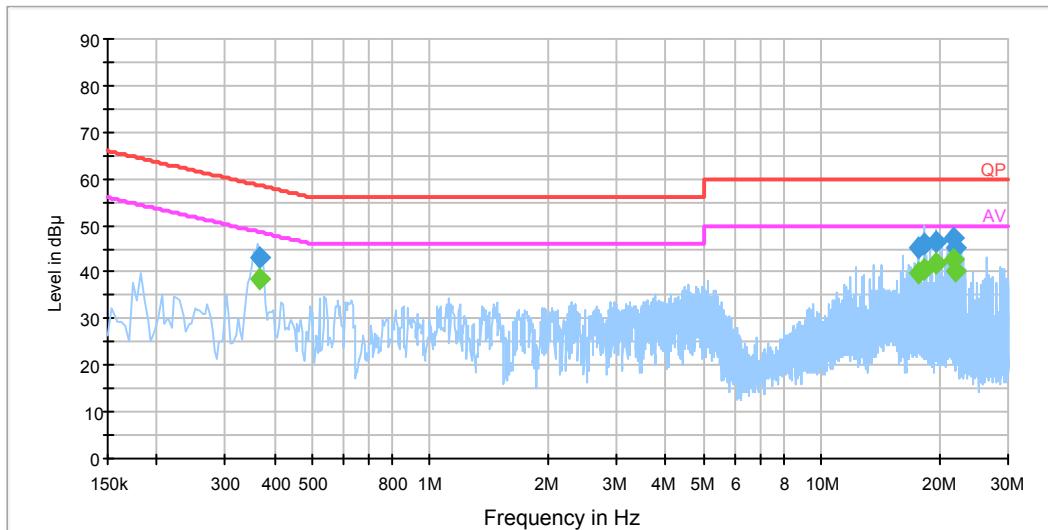
EMI Auto Test N



Frequency (MHz)	Corrected Amplitude (dB $\mu$ V)	Correction Factor (dB)	Limit (dB $\mu$ V)	Margin (dB)	Detector (PK/Ave./QP)
0.322770	37.3	19.5	59.6	22.3	QP
0.322770	31.3	19.5	49.6	18.3	Ave.
0.360630	33.7	19.5	58.7	25.0	QP
0.360630	27.1	19.5	48.7	21.7	Ave.
1.061830	30.8	19.5	56.0	25.2	QP
1.061830	24.9	19.5	46.0	21.1	Ave.
16.167510	40.1	19.9	60.0	19.9	QP
16.167510	33.7	19.9	50.0	16.3	Ave.
20.318130	37.5	20.1	60.0	22.5	QP
20.318130	34.4	20.1	50.0	15.6	Ave.
23.127110	42.6	20.1	60.0	17.4	QP
23.127110	38.7	20.1	50.0	11.3	Ave.

**For Adapter 2, AC 120V/60 Hz, Line**

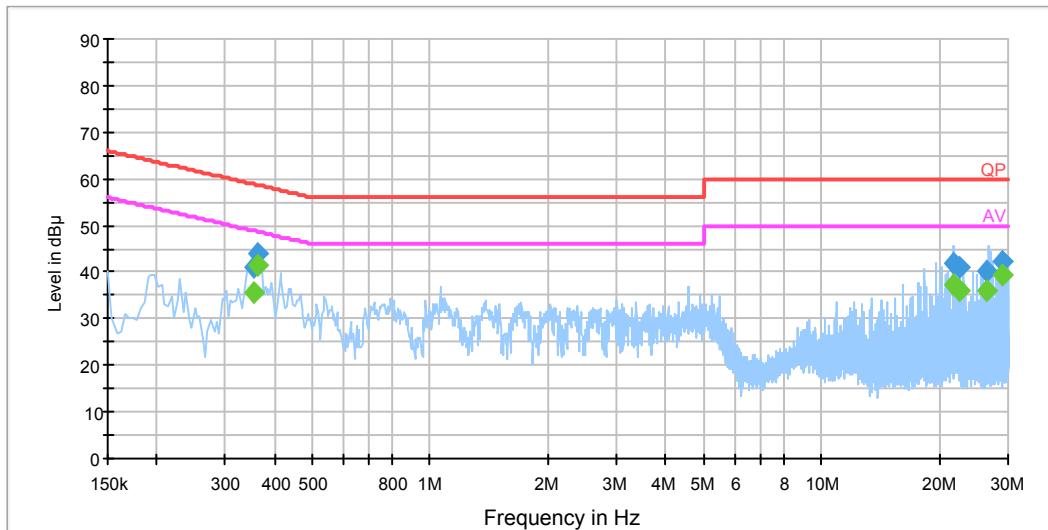
EMI Auto Test L



Frequency (MHz)	Corrected Amplitude (dB $\mu$ V)	Correction Factor (dB)	Limit (dB $\mu$ V)	Margin (dB)	Detector (PK/Ave./QP)
0.367430	43.3	19.5	58.6	15.2	QP
0.367430	38.3	19.5	48.6	10.2	Ave.
17.696590	45.2	19.9	60.0	14.8	QP
17.696590	39.7	19.9	50.0	10.3	Ave.
18.304370	46.0	19.9	60.0	14.0	QP
18.304370	40.7	19.9	50.0	9.3	Ave.
19.710350	46.6	19.9	60.0	13.4	QP
19.710350	42.0	19.9	50.0	8.0	Ave.
21.665010	47.4	20.0	60.0	12.6	QP
21.665010	42.8	20.0	50.0	7.2	Ave.
21.908790	45.1	20.0	60.0	14.9	QP
21.908790	40.3	20.0	50.0	9.7	Ave.

**For Adapter 2, AC 120V/60 Hz, Neutral**

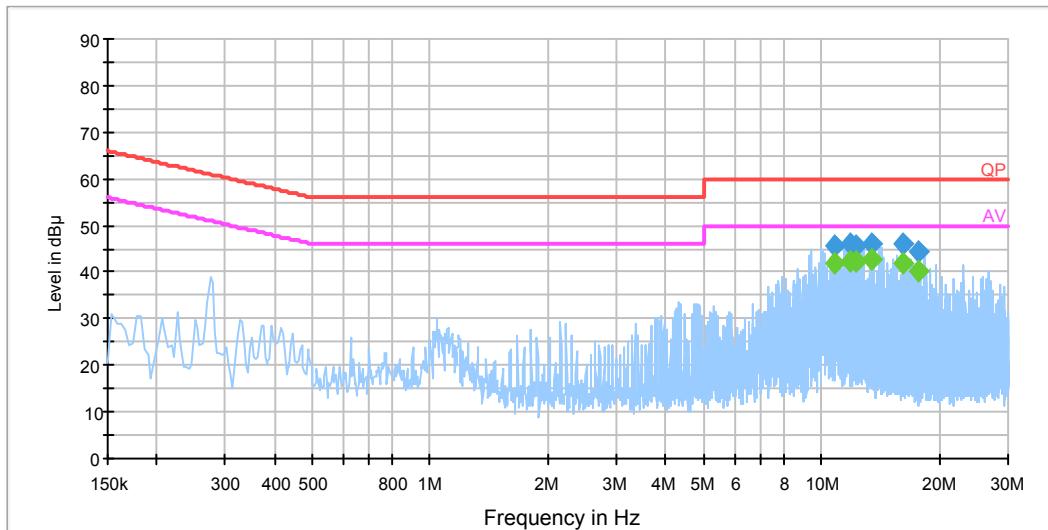
EMI Auto Test N



Frequency (MHz)	Corrected Amplitude (dB $\mu$ V)	Correction Factor (dB)	Limit (dB $\mu$ V)	Margin (dB)	Detector (PK/Ave./QP)
0.352750	41.0	19.5	58.9	17.9	QP
0.352750	35.5	19.5	48.9	13.4	Ave.
0.364570	44.1	19.5	58.6	14.6	QP
0.364570	41.4	19.5	48.6	7.2	Ave.
21.661070	41.9	20.1	60.0	18.1	QP
21.661070	37.1	20.1	50.0	12.9	Ave.
22.457130	40.9	20.1	60.0	19.1	QP
22.457130	36.1	20.1	50.0	13.9	Ave.
26.546850	40.2	20.2	60.0	19.8	QP
26.546850	35.8	20.2	50.0	14.2	Ave.
29.113290	42.2	20.3	60.0	17.8	QP
29.113290	39.4	20.3	50.0	10.6	Ave.

**For PoE, AC 120V/60 Hz, Line**

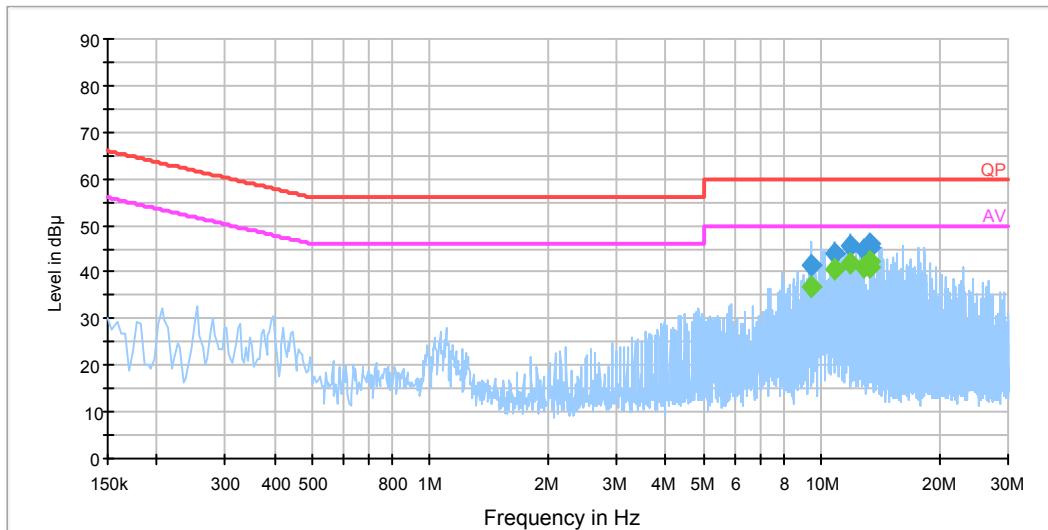
EMI Auto Test L



Frequency (MHz)	Corrected Amplitude (dB $\mu$ V)	Correction Factor (dB)	Limit (dB $\mu$ V)	Margin (dB)	Detector (PK/Ave./QP)
10.792150	45.5	19.7	60.0	14.5	QP
10.792150	41.8	19.7	50.0	8.2	Ave.
11.891590	45.9	19.7	60.0	14.1	QP
11.891590	42.4	19.7	50.0	7.6	Ave.
12.199030	45.7	19.7	60.0	14.3	QP
12.199030	42.4	19.7	50.0	7.6	Ave.
13.420730	46.1	19.7	60.0	13.9	QP
13.420730	42.5	19.7	50.0	7.5	Ave.
16.226610	46.1	19.8	60.0	13.9	QP
16.226610	41.8	19.8	50.0	8.2	Ave.
17.692590	44.5	19.9	60.0	15.5	QP
17.692590	40.2	19.9	50.0	9.8	Ave.

**For PoE, AC 120V/60 Hz, Neutral**

EMI Auto Test N



Frequency (MHz)	Corrected Amplitude (dB $\mu$ V)	Correction Factor (dB)	Limit (dB $\mu$ V)	Margin (dB)	Detector (PK/Ave./QP)
9.393150	41.3	19.8	60.0	18.7	QP
9.393150	36.7	19.8	50.0	13.4	Ave.
10.796090	44.1	19.8	60.0	15.9	QP
10.796090	40.4	19.8	50.0	9.6	Ave.
11.891590	45.7	19.8	60.0	14.3	QP
11.891590	41.9	19.8	50.0	8.1	Ave.
12.809850	44.7	19.8	60.0	15.3	QP
12.809850	41.2	19.8	50.0	8.8	Ave.
13.357630	46.1	19.8	60.0	13.9	QP
13.357630	42.2	19.8	50.0	7.8	Ave.
13.360730	45.2	19.8	60.0	14.8	QP
13.360730	41.2	19.8	50.0	8.8	Ave.

## Note:

- 1) Corrected Amplitude = Reading + Correction Factor
- 2) Correction Factor = LISN VDF (Voltage Division Factor) + Cable Loss + Transient Limiter Attenuation
- 3) Margin = Limit – Corrected Amplitude

## FCC§15.109 - RADIATED EMISSIONS

### Applicable Standard

FCC §15.109

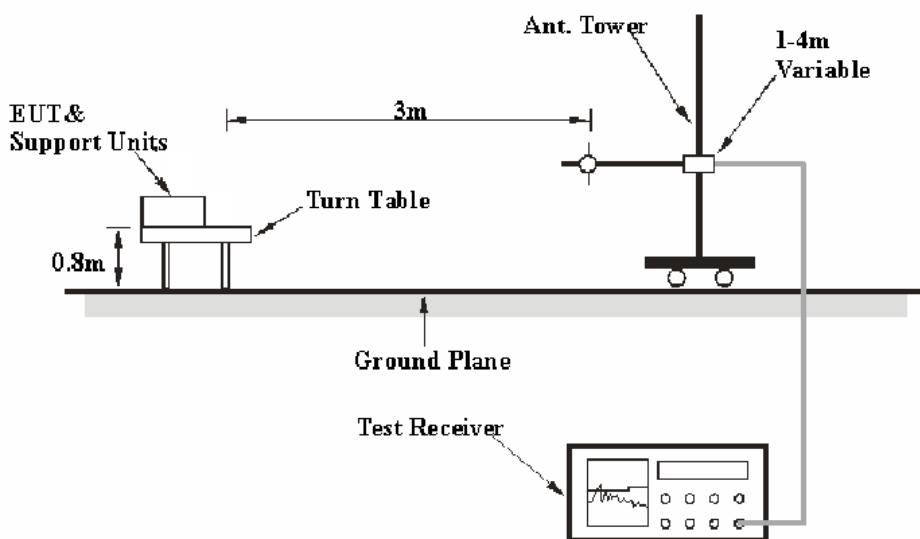
### Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, antenna factor calibration, antenna directivity, antenna factor variation with height, antenna phase center variation, antenna factor frequency interpolation, measurement distance variation, site imperfections, mismatch (average), and system repeatability.

Based on CISPR 16-4-2:2011, the expended combined standard uncertainty of radiation emissions at Bay Area Compliance Laboratories Corp. (Shenzhen) is shown in below table. And the uncertainty will not be taken into consideration for the test data recorded in the report

Frequency	Polarity	Expanded Measurement uncertainty
30MHz~200MHz	Horizontal	4.62 dB (k=2, 95% level of confidence)
	Vertical	4.54 dB (k=2, 95% level of confidence)
200MHz~1GHz	Horizontal	4.84 dB (k=2, 95% level of confidence)
	Vertical	5.91 dB (k=2, 95% level of confidence)
1 GHz~6 GHz	Horizontal/Vertical	4.68 dB (k=2, 95% level of confidence)
Above 6 GHz	Horizontal/Vertical	4.92 dB (k=2, 95% level of confidence)

### EUT Setup



The radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.4-2009. The related limit was specified in FCC Part 15.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

### EMI Test Receiver Setup

According to FCC 15.33 requirements, the EUT system was measured from 30 MHz to 2 GHz.

During the radiated emission test, the EMI test receiver Setup was set with the following configurations:

Frequency Range	RBW	Video B/W	IF B/W	Detector
30 MHz – 1000 MHz	100 kHz	300 kHz	120 kHz	QP
Above 1 GHz	1 MHz	3 MHz	-	Peak
	1 MHz	10 Hz	-	Average

### Test Procedure

During the radiated emission test, the socket was connected to the AC floor outlet.

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

All final data was recorded in the Quasi-peak detection mode for below 1 GHz, and Peak and Average for above 1 GHz.

### Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
TDK	Chamber	Chamber A	2#	2012-10-15	2015-10-15
TDK	Chamber	Chamber B	1#	2012-07-22	2015-07-22
HP	Amplifier	HP8447E	1937A01046	2015-05-06	2015-05-06
Rohde & Schwarz	EMI Test Receiver	ESCI	101120	2013-11-12	2014-11-12
Sunol Sciences	Broadband Antenna	JB1	A040904-2	2011-11-28	2014-11-27
Rohde & Schwarz	Signal Analyzer	FSIQ26	8386001028	2013-11-12	2014-11-12
Mini	Pre-Amplifier	ZVA-183-S+	5969001149	2014-04-03	2015-04-03
A.H.System	Horn Antenna	SAS-200/571	135	2012-02-11	2015-02-10
R&S	Auto test Software	EMC32	V9.10	-	-

**\* Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to requirements, traceable to National Primary Standards and International System of Units (SI).

## Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

$$\text{Corrected Amplitude} = \text{Meter Reading} + \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

The “Margin” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Limit} - \text{Corrected Amplitude}$$

## Test Results Summary

According to the data in the following table, the EUT complied with the FCC §15.109, the worst margin reading as below:

**4.57 dB at 66.316125 MHz** in the **Vertical** polarization for PoE

## Test Data

### Environmental Conditions

<b>Temperature:</b>	24~26 °C
<b>Relative Humidity:</b>	53~56 %
<b>ATM Pressure:</b>	101.0kPa

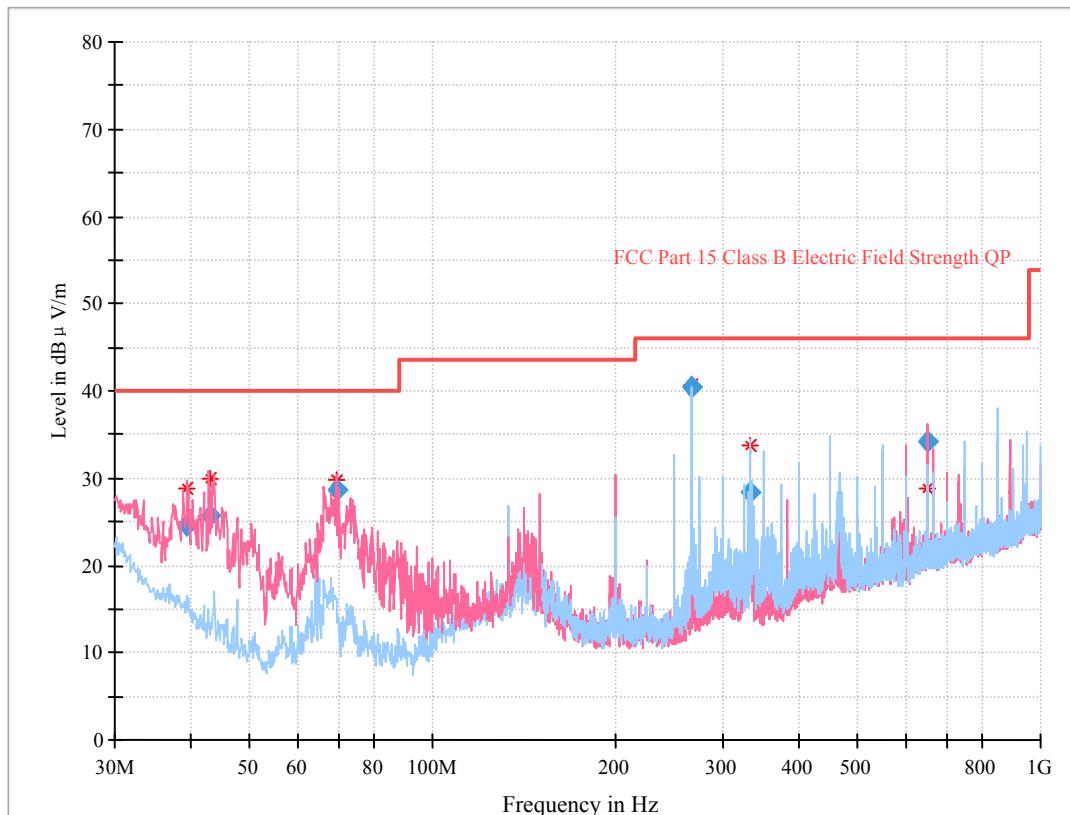
*The testing was performed by Joson Xiao on 2014-08-09 and 2014-09-25.*

EUT operation mode: Talking & ping data with PC

### For adapter 1

**30 MHz ~ 1000 MHz**

Full Spectrum



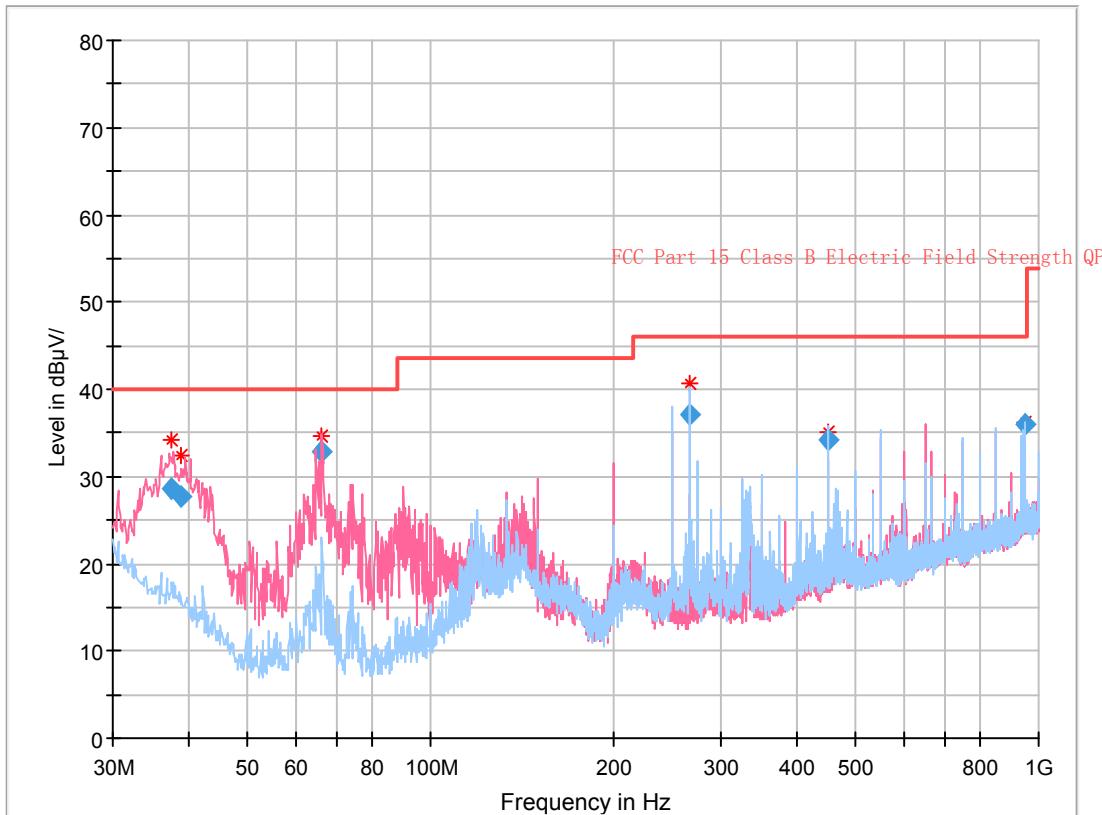
Frequency (MHz)	Corrected Amplitude (dB $\mu$ V/m)	Antenna height (cm)	Antenna Polarity	Turntable position (deg)	Correction Factor (dB/m)	Limit (dB $\mu$ V/m)	Margin (dB)
39.541125	24.52	102.0	V	145.0	-13.1	40.00	15.48
42.916500	25.62	105.0	V	180.0	-15.6	40.00	14.38
69.412589	28.68	100.0	V	72.0	-19.6	40.00	11.32
266.654375	40.38	116.0	H	27.0	-13.3	46.00	5.62
333.329250	28.27	100.0	H	273.0	-12.0	46.00	17.73
650.016625	34.18	106.0	V	0.0	-6.1	46.00	11.82

**1 GHz ~ 2 GHz**

Frequency (MHz)	Reading (dB $\mu$ V)	Detector (PK/QP/Ave.)	Turntable Degree	Height (m)	Polar (H/V)	Correction Factor (dB/m)	Corrected Amplitude (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
1266.53	43.73	PK	228	1.2	H	0.16	43.89	74	30.11
1266.53	33.37	Ave.	228	1.2	H	0.16	33.53	54	20.47
1332.67	43.01	PK	76	1.0	H	0.19	43.2	74	30.80
1332.67	32.02	Ave.	76	1.0	H	0.19	32.21	54	21.79
1400.80	43.14	PK	81	1.6	H	0.68	43.82	74	30.18
1400.80	31.43	Ave.	81	1.6	H	0.68	32.11	54	21.89
1266.53	43.03	PK	228	1.2	V	0.16	43.19	74	30.81
1266.53	34.11	Ave.	228	1.2	V	0.16	34.27	54	19.73
1400.80	43.45	PK	81	1.6	V	0.68	44.13	74	29.87
1400.80	34.84	Ave.	81	1.6	V	0.68	35.52	54	18.48
1501.00	41.59	PK	124	1.0	V	0.74	42.33	74	31.67
1501.00	32.02	Ave.	124	1.0	V	0.74	32.76	54	21.24

**For adapter 2****30 MHz ~ 1000 MHz**

Full Spectrum



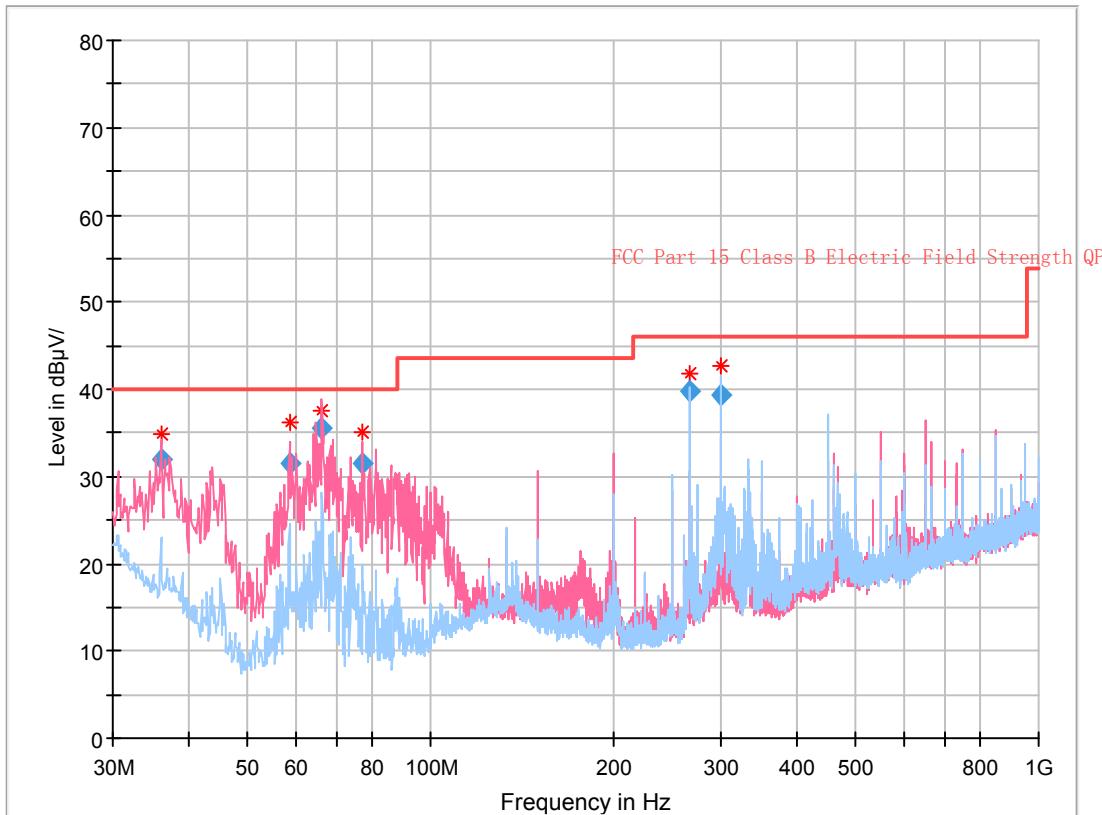
Frequency (MHz)	Corrected Amplitude (dB $\mu$ V/m)	Antenna height (cm)	Antenna Polarity	Turntable position (deg)	Correction Factor (dB/m)	Limit (dB $\mu$ V/m)	Margin (dB)
37.526000	28.67	100.0	V	276.0	-11.8	40.00	11.33
38.973500	27.79	100.0	V	271.0	-12.7	40.00	12.21
66.274125	32.91	100.0	V	133.0	-19.6	40.00	7.09
266.714500	37.02	127.0	H	347.0	-13.3	46.00	8.98
450.001625	34.13	100.0	H	157.0	-9.6	46.00	11.87
950.014000	35.98	100.0	H	141.0	-1.9	46.00	10.02

**1 GHz ~ 2 GHz**

Frequency (MHz)	Reading (dB $\mu$ V)	Detector (PK/QP/Ave.)	Turntable Degree	Height (m)	Polar (H/V)	Correction Factor (dB/m)	Corrected Amplitude (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
1301.61	37.41	PK	330	1.2	H	0.16	37.57	74	36.43
1301.61	27.22	Ave.	330	1.2	H	0.16	27.38	54	26.62
1656.62	44.75	PK	213	2.1	H	1.77	46.52	74	27.48
1656.62	26.22	Ave.	213	2.1	H	1.77	27.99	54	26.01
1301.61	40.84	PK	60	1.5	V	0.16	41.00	74	33.00
1301.61	24.43	Ave.	60	1.5	V	0.16	24.59	54	29.41
1656.62	41.76	PK	292	1.6	V	1.77	43.53	74	30.47
1656.62	26.48	Ave.	292	1.6	V	1.77	28.25	54	25.75

**For PoE****30 MHz ~ 1000 MHz**

Full Spectrum



Frequency (MHz)	Corrected Amplitude (dB $\mu$ V/m)	Antenna height (cm)	Antenna Polarity	Turntable position (deg)	Correction Factor (dB/m)	Limit (dB $\mu$ V/m)	Margin (dB)
36.137375	32.04	100.0	V	122.0	-10.9	40.00	7.96
58.691250	31.45	103.0	V	147.0	-19.9	40.00	8.55
66.316125	35.43	100.0	V	125.0	-19.6	40.00	4.57
77.202875	31.49	115.0	V	119.0	-19.3	40.00	8.51
266.657875	39.82	130.0	H	164.0	-13.3	46.00	6.18
300.009250	39.39	100.0	H	105.0	-12.3	46.00	6.61

**1 GHz ~ 2 GHz**

Frequency (MHz)	Reading (dB $\mu$ V)	Detector (PK/QP/Ave.)	Turntable Degree	Height (m)	Polar (H/V)	Correction Factor (dB/m)	Corrected Amplitude (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
1198.39	43.25	PK	116	1.0	H	0.13	43.38	74	30.62
1198.39	30.64	Ave.	116	1.0	H	0.13	30.77	54	23.23
1264.52	43.07	PK	44	1.0	H	0.16	43.23	74	30.77
1264.52	31.84	Ave.	44	1.0	H	0.16	32.00	54	22.00
1300.60	41.10	PK	251	1.2	H	0.16	41.26	74	32.74
1300.60	30.73	Ave.	251	1.2	H	0.16	30.89	54	23.11

Note:

1) Correction Factor = Antenna Factor + Cable Loss - Amplifier Gain

2) Corrected Amplitude = Meter Reading + Correction Factor

3) Margin = Limit – Corrected Amplitude

## **PRODUCT SIMILARITY DECLARATION LETTER**



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Tel: 86-592-5702000 Fax: 86-592-5702455

2013-9-11

### **Product Similarity Declaration Letter**

To Whom It May Concern,

We, Yealink (Xiamen) Network Technology Co., LTD. hereby declare that our product IP Phone, the model SIP-T23P and SIP-T23 are electrically identical, they have the same PCB layout and schematic, the only difference is the model T23P with POE circuit, the model T23 without POE circuit . SIP-T23P was tested by BACL.

Please contact me if you have any question.

Signature:

A handwritten signature in black ink, appearing to read "Stone Lu".

Stone Lu

Vice General Manager

**\*\*\*\*\*END OF REPORT\*\*\*\*\***