



FCC PART 15 CLASS B

TEST REPORT

For

Grandstream Networks, INC

5F, Bldg #1, No.2 Kefa Rd., Science & Technology Park, Shenzhen, Guangdong, China

FCC ID: YZZGXV3672-HD

Report Type: Original Report	Product Name: IP CAMERA
Test Engineer: <u>Lebron Wang</u>	<i>Lebron Wang</i>
Report Number: <u>RSZ120919008-00</u>	
Report Date: <u>2012-11-13</u>	
Reviewed By: <u>Sula Huang RF Engineer</u>	<i>Sula Huang</i>
Test Laboratory:	Bay Area Compliance Laboratories Corp. (Shenzhen) 6/F, the 3rd Phase of WanLi Industrial Building ShiHua Road, FuTian Free Trade Zone Shenzhen, Guangdong, China Tel: +86-755-33320018 Fax: +86-755-33320008 www.baclcorp.com.cn

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. This report **must not** be used by the customer to claim product certification, approval, or endorsement by NVLAP*, or any agency of the Federal Government.

* This report may contain data that are not covered by the NVLAP accreditation and shall be marked with an asterisk "★"

TABLE OF CONTENTS

GENERAL INFORMATION	3
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT).....	3
OBJECTIVE	3
RELATED SUBMITTAL(S)/GRANT(S).....	3
TEST METHODOLOGY	3
TEST FACILITY	3
SYSTEM TEST CONFIGURATION (FCC §15.27)	5
JUSTIFICATION	5
EQUIPMENT MODIFICATIONS	5
SUPPORT EQUIPMENT LIST AND DETAILS	5
EXTERNAL I/O CABLE.....	5
BLOCK DIAGRAM OF TEST SETUP	6
SUMMARY OF TEST RESULTS	7
FCC §15.107 – AC LINE CONDUCTED EMISSIONS	8
APPLICABLE STANDARD	8
EUT SETUP	8
EMI TEST RECEIVER SETUP.....	8
TEST PROCEDURE	9
TEST EQUIPMENT LIST AND DETAILS.....	9
CORRECTED FACTOR & MARGIN CALCULATION	9
TEST RESULTS SUMMARY	9
TEST DATA	10
FCC§15.109 - RADIATED EMISSIONS	18
APPLICABLE STANDARD	18
EUT SETUP	18
EMI TEST RECEIVER SETUP.....	18
TEST PROCEDURE	19
TEST EQUIPMENT LIST AND DETAILS.....	19
CORRECTED AMPLITUDE & MARGIN CALCULATION	19
TEST RESULTS SUMMARY	19
TEST DATA	20
DECLARATION LETTER	28

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

The *Grandstream Networks, INC's* product, model number *GXV3672_FHD, GXV3672_HD (FCC ID: YZZGXV3672-HD)* or the "EUT" in this report was an *IP CAMERA*, which was measured approximately: 8.5 cm (L) x 8.0 cm (W) x 23.0 cm (H), rated input: DC 12.0V from adapter or PoE, the highest operating frequency of EUT is 680 MHz.

Adapter information:

Model: SEF1200100A1BB

Input: 100-240V~50/60 Hz, 0.3A

Output: DC 12.0V, 1.0A

Note: the series product, model GXV3672_FHD and GXV3672_HD are electrically identical, the difference between them please refer to the attached declaration which was stated and guaranteed by the applicant

**All measurement and test data in this report was gathered from production sample serial number: 1209097 (Assigned by BACL, Shenzhen). The EUT supplied by the applicant was received on 2012-09-19.*

Objective

The following test report is prepared on behalf of *Grandstream Networks, INC* 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 compliance with FCC Part 15B, Class B.

Related Submittal(s)/Grant(s)

No related submittal.

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.

Additionally, Bay Area Compliance Laboratories Corp. (Shenzhen) is an ISO/IEC 17025 accredited laboratory, and is accredited by National Voluntary Laboratory Accredited Program (Lab Code 200707-0).



The current scope of accreditations can be found at <http://ts.nist.gov/Standards/scopes/2007070.htm>.

SYSTEM TEST CONFIGURATION (FCC §15.27)

Justification

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

Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

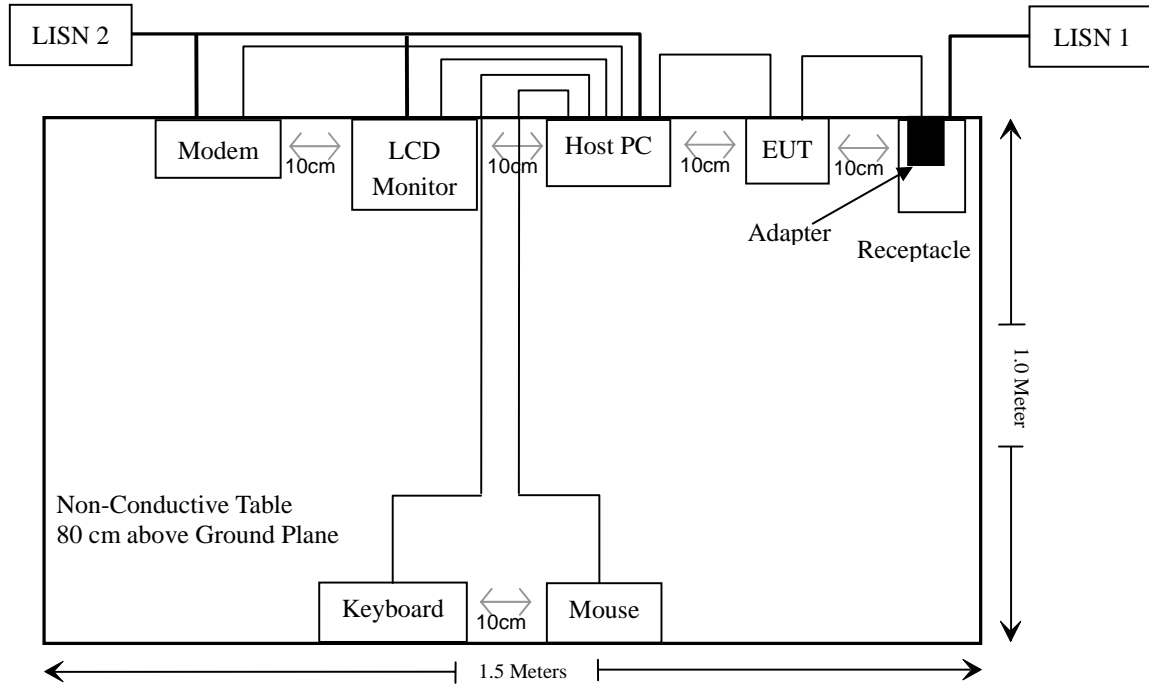
Manufacturer	Description	Model	Serial Number
DELL	PC	VOSTRO 220S	127BP2X
DELL	Keyboard	L100	CNORH656658907BL05DC
DELL	Mouse	MOC5UO	G1900NKD
DELL	LCD Monitor	E178WFPC	CN-OWY564-64180-7C4-2SQH
SAST	Modem	AEM-2100	0293
Netgear	PoE Switch	FS108P	N/A

External I/O Cable

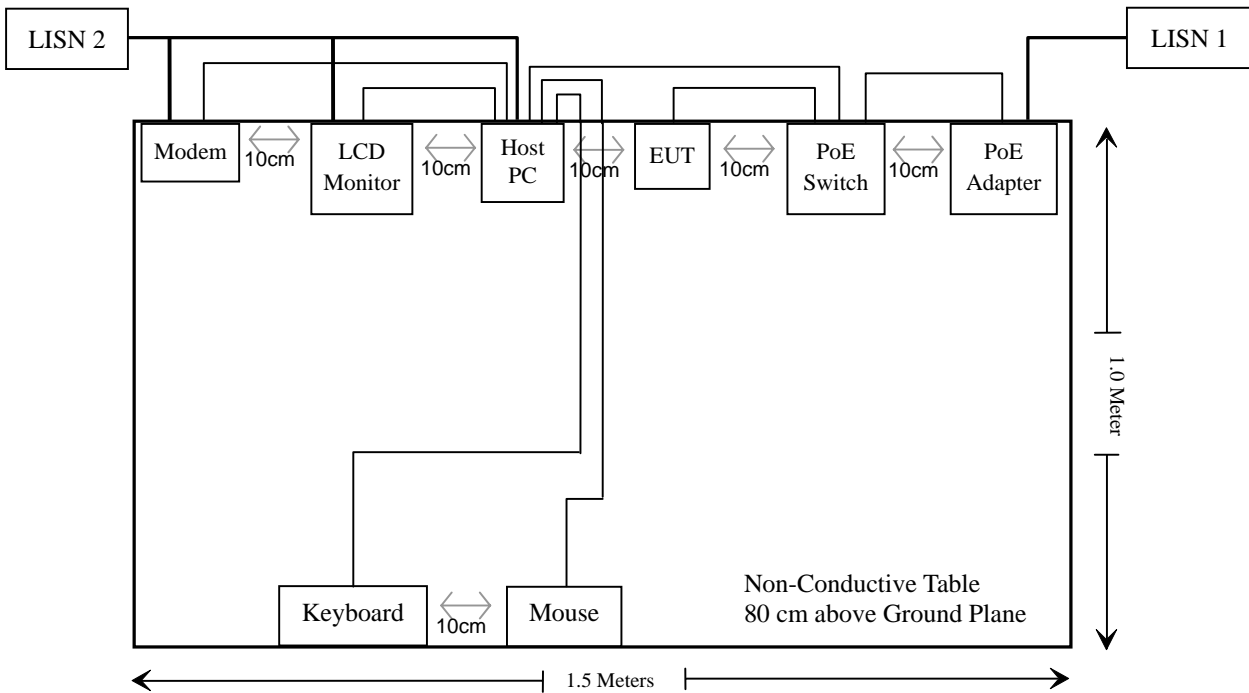
Cable Description	Length (m)	From/Port	To
Unshielded Detachable RJ45 Cable	1.5	EUT	Host PC
Unshielded Detachable DC Power Cable	1.5	EUT	Adapter
Shielded Detachable USB Cable	1.5	Host PC	Mouse
Shielded Detachable Serial Cable	1.2	Host PC	Modem
Shielded Detachable K/B Cable	1.5	Host PC	Keyboard
Shielded Detachable VGA Cable	1.5	Host PC	LCD Monitor
Unshielded Detachable RJ45 Cable	1.5	EUT	PoE Switch
Unshielded Detachable DC Power Cable	1.2	PoE Switch	PoE Adapter
Unshielded Detachable AC Power Cable	1.8	PoE Adapter	LISN 1
Unshielded Detachable RJ45 Cable	1.5	PoE Switch	Host PC

Block Diagram of Test Setup

Powered by adapter:



Powered by PoE:



SUMMARY OF TEST RESULTS

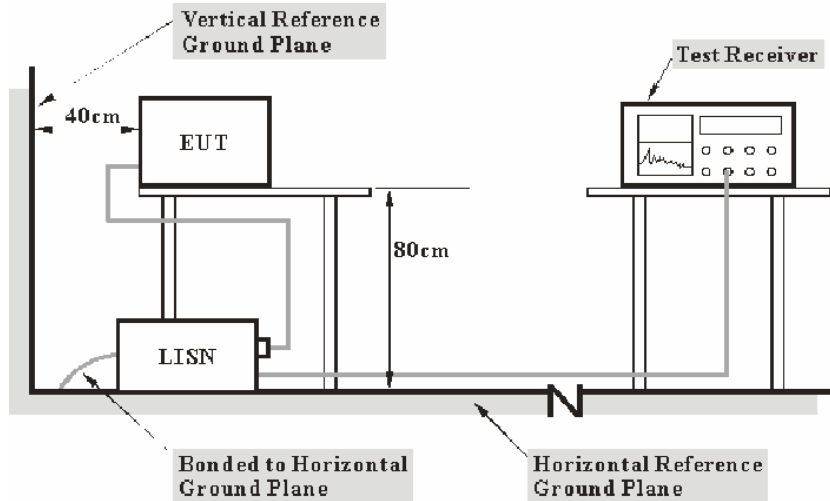
FCC Rules	Description of Test	Results
§15.107	Conducted Emissions	Compliance
§15.109	Radiated Emissions	Compliance

FCC §15.107 – AC LINE CONDUCTED EMISSIONS

Applicable Standard

FCC §15.107

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 spacing between the peripherals was 10 cm.

The adapter was connected to a 120 VAC/60 Hz power source for adapter power supply.

The PoE adapter was connected to a 120 VAC/60 Hz power source for PoE power supply.

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:

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

Test Procedure

During the conducted emission test, the adapter was connected to the LISN.

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

All 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	2011-11-24	2012-11-23
Rohde & Schwarz	L.I.S.N.	ESH2-Z5	892107/021	2012-08-22	2013-08-21
Rohde & Schwarz	Attenuator	ESH3Z2	DE25985	2012-07-08	2013-07-07
BACL	CE Test software	BACL-CE	V1.0	-	-

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Corrected Factor & Margin Calculation

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

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

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 of:

Model: GXV3672_FHD

4.20 dB at 19.430 MHz in the Neutral conducted mode (powered by PoE)

Model: GXV3672_HD

3.21 dB at 19.430 MHz in the Neutral conducted mode (powered by PoE)

Test Data

Environmental Conditions

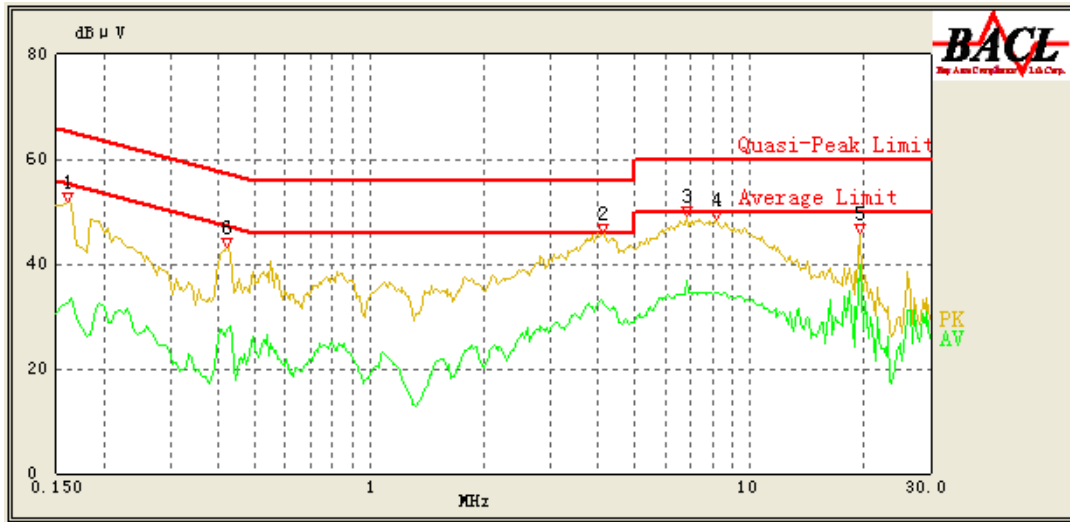
Temperature:	25 °C
Relative Humidity:	48 %
ATM Pressure:	100.0 kPa

The testing was performed by Lebron Wang on 2012-11-12.

Model: GXV3672_FHD

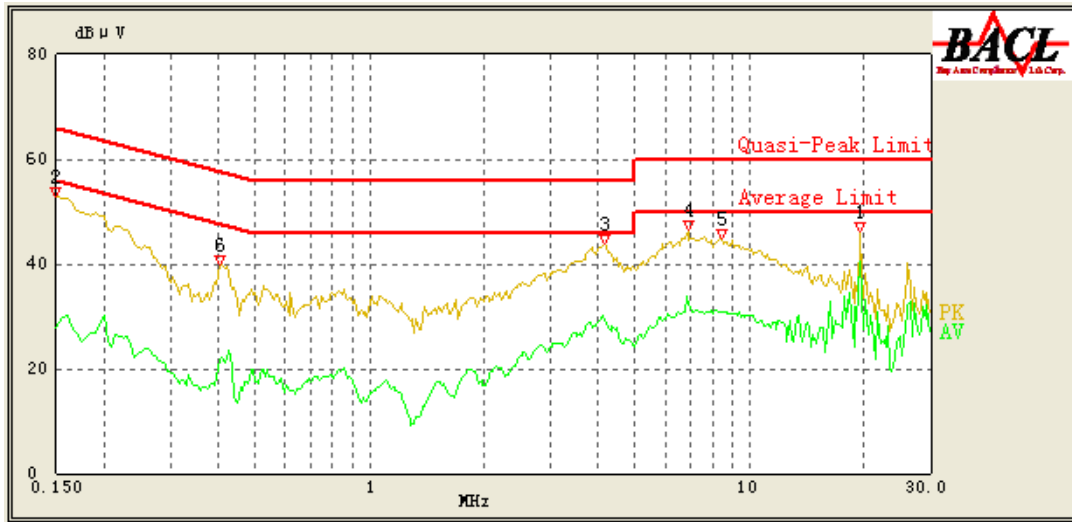
Test Mode: Video (Powered by adapter)

AC 120V/60 Hz, Line:



Frequency (MHz)	Corrected Amplitude (dBµV)	Correction Factor (dB)	Limit (dBµV)	Margin (dB)	Detector (PK/ QP/Ave.)
0.160	46.77	10.27	65.71	18.94	QP
4.100	40.15	10.27	56.00	15.85	QP
6.845	43.31	10.37	60.00	16.69	QP
0.420	38.52	10.26	58.29	19.77	QP
0.420	27.52	10.26	48.29	20.77	Ave.
4.060	33.16	10.27	46.00	12.84	Ave.
19.430	39.85	12.62	50.00	10.15	Ave.
6.875	36.72	10.37	50.00	13.28	Ave.
8.240	34.50	10.42	50.00	15.50	Ave.
19.430	43.55	12.62	60.00	16.45	QP
8.195	41.41	10.42	60.00	18.59	QP
0.160	32.35	10.27	55.71	23.36	Ave.

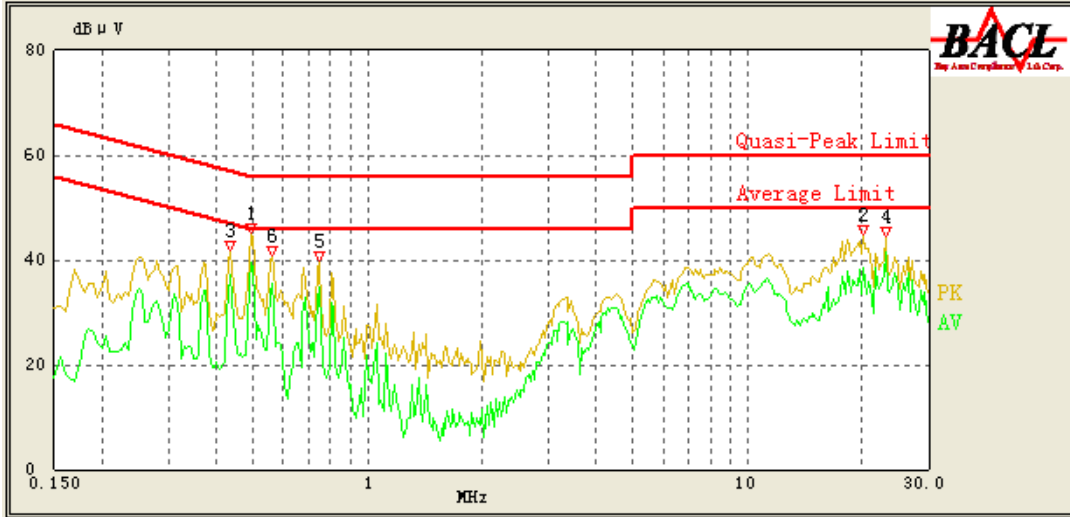
AC 120V/60 Hz, Neutral



Frequency (MHz)	Corrected Amplitude (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)	Detector (PK/ QP/Ave.)
19.430	40.61	12.42	50.00	9.39	Ave.
19.430	44.22	12.42	60.00	15.78	QP
6.875	33.97	10.36	50.00	16.03	Ave.
4.135	29.85	10.26	46.00	16.15	Ave.
4.155	37.03	10.26	56.00	18.97	QP
8.500	30.89	10.43	50.00	19.11	Ave.
6.890	40.21	10.37	60.00	19.79	QP
0.150	45.56	10.24	66.00	20.44	QP
8.480	37.36	10.43	60.00	22.64	QP
0.405	34.11	10.25	58.71	24.60	QP
0.405	21.93	10.25	48.71	26.78	Ave.
0.150	27.82	10.24	56.00	28.18	Ave.

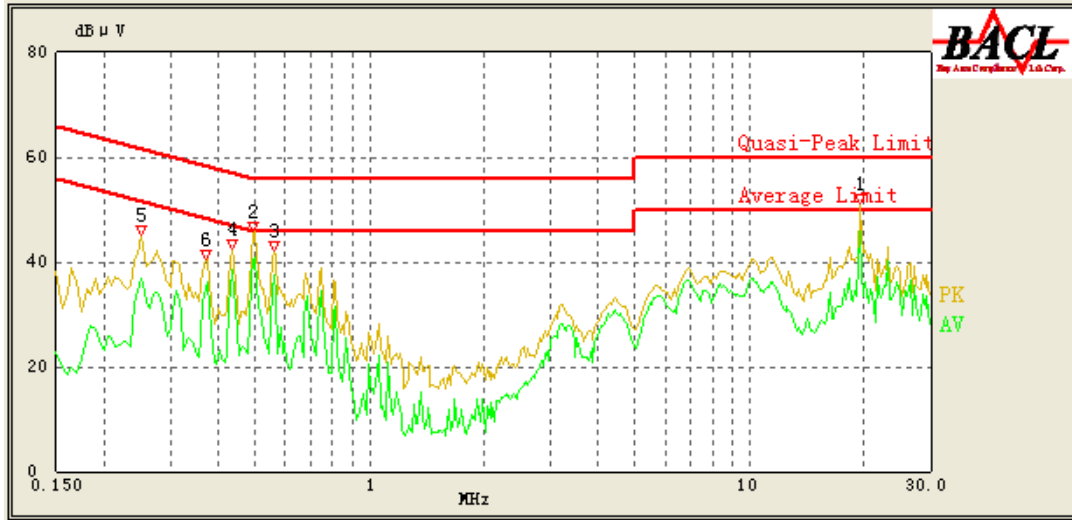
Test Mode: Video (Powered by PoE)

AC 120V/60 Hz, Line:



Frequency (MHz)	Corrected Amplitude (dBµV)	Correction Factor (dB)	Limit (dBµV)	Margin (dB)	Detector (PK/ QP/Ave.)
0.495	39.50	10.24	46.14	6.64	Ave.
23.130	41.55	12.23	50.00	8.45	Ave.
0.560	35.57	10.23	46.00	10.43	Ave.
0.435	37.07	10.25	47.86	10.79	Ave.
0.745	34.88	10.21	46.00	11.12	Ave.
20.260	38.61	12.54	50.00	11.39	Ave.
0.495	42.23	10.24	56.14	13.91	QP
23.130	42.13	12.23	60.00	17.87	QP
0.560	38.12	10.23	56.00	17.88	QP
20.260	42.03	12.54	60.00	17.97	QP
0.435	38.96	10.25	57.86	18.90	QP
0.745	36.93	10.21	56.00	19.07	QP

AC 120V/60 Hz, Neutral

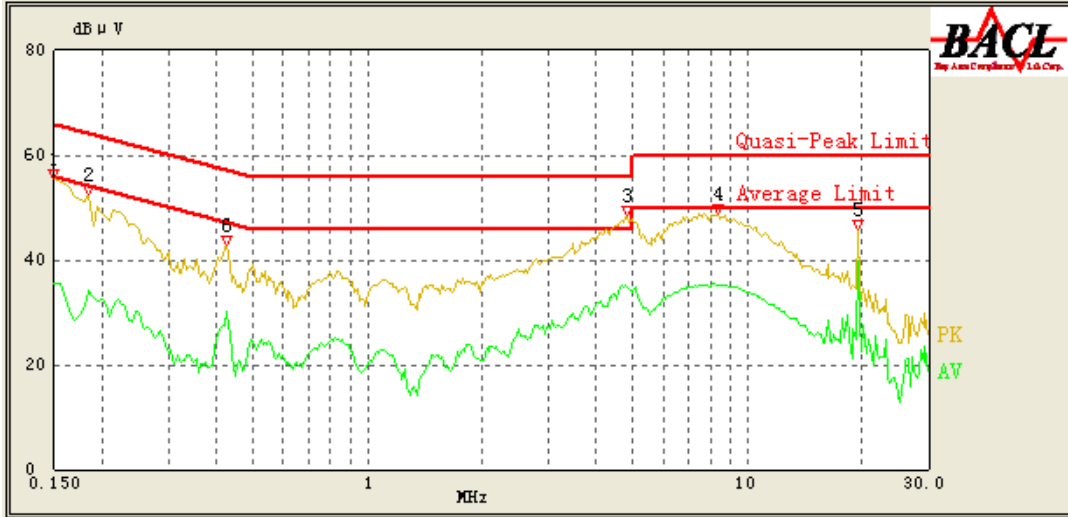


Frequency (MHz)	Corrected Amplitude (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)	Detector (PK/ QP/Ave.)
19.430	45.80	12.42	50.00	4.20	Ave.
0.495	40.62	10.24	46.14	5.52	Ave.
0.560	37.50	10.23	46.00	8.50	Ave.
0.435	38.63	10.25	47.86	9.23	Ave.
19.430	49.76	12.42	60.00	10.24	QP
0.495	43.20	10.24	56.14	12.94	QP
0.370	34.83	10.25	49.71	14.88	Ave.
0.250	36.75	10.25	53.14	16.39	Ave.
0.560	39.58	10.23	56.00	16.42	QP
0.435	40.47	10.25	57.86	17.39	QP
0.370	38.00	10.25	59.71	21.71	QP
0.250	38.97	10.25	63.14	24.17	QP

Model: GXV3672_HD

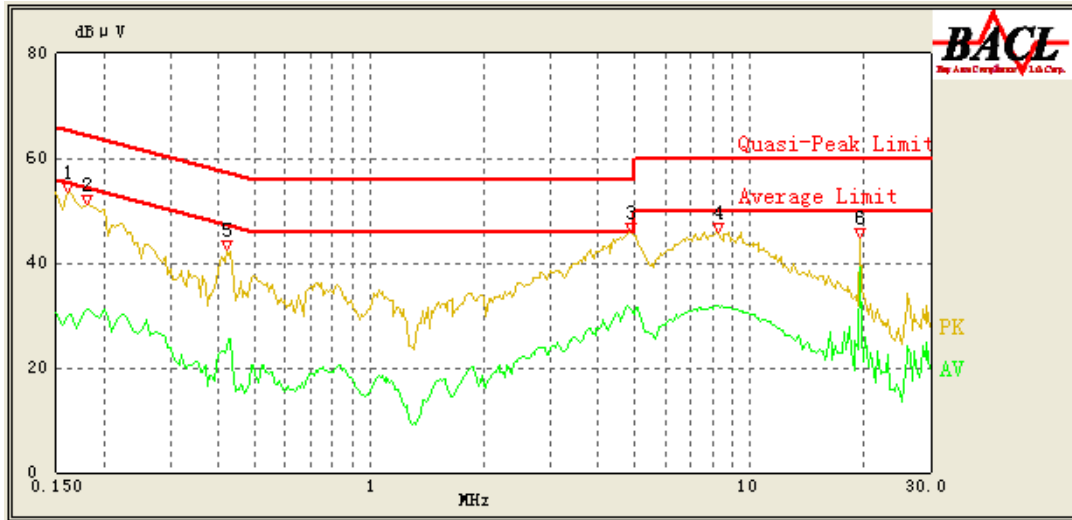
Test Mode: Video (Powered by adapter)

AC 120V/60 Hz, Line:



Frequency (MHz)	Corrected Amplitude (dBµV)	Correction Factor (dB)	Limit (dBµV)	Margin (dB)	Detector (PK/ QP/Ave.)
19.430	39.76	12.42	50.00	10.24	Ave.
4.760	35.32	10.28	46.00	10.68	Ave.
4.810	42.40	10.28	56.00	13.60	QP
8.370	35.15	10.42	50.00	14.85	Ave.
19.430	44.54	12.42	60.00	15.46	QP
0.150	48.14	10.24	66.00	17.86	QP
8.405	42.06	10.43	60.00	17.94	QP
0.425	30.03	10.25	48.14	18.11	Ave.
0.185	46.58	10.24	65.00	18.42	QP
0.425	38.41	10.25	58.14	19.73	QP
0.150	35.50	10.24	56.00	20.50	Ave.
0.185	34.21	10.24	55.00	20.79	Ave.

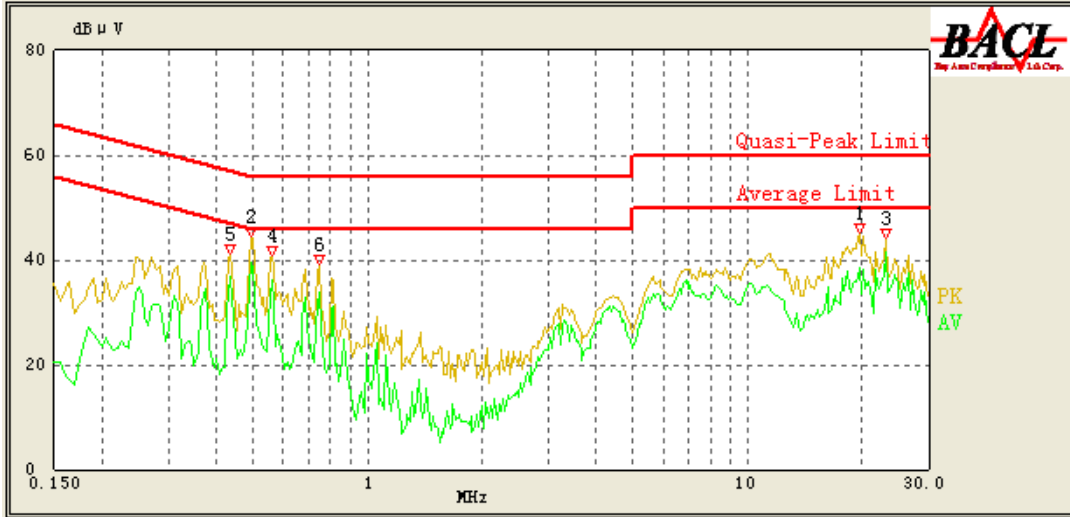
AC 120V/60 Hz, Neutral



Frequency (MHz)	Corrected Amplitude (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)	Detector (PK/ QP/Ave.)
19.430	39.03	12.62	50.00	10.97	Ave.
4.840	31.62	10.29	46.00	14.38	Ave.
4.850	40.04	10.30	56.00	15.96	QP
19.430	43.19	12.62	60.00	16.81	QP
0.160	48.24	10.27	65.71	17.47	QP
8.215	31.69	10.42	50.00	18.31	Ave.
8.295	39.12	10.43	60.00	20.88	QP
0.420	36.64	10.26	58.29	21.65	QP
0.180	42.77	10.27	65.14	22.37	QP
0.180	31.03	10.27	55.14	24.11	Ave.
0.420	23.98	10.26	48.29	24.31	Ave.
0.160	29.94	10.27	55.71	25.77	Ave.

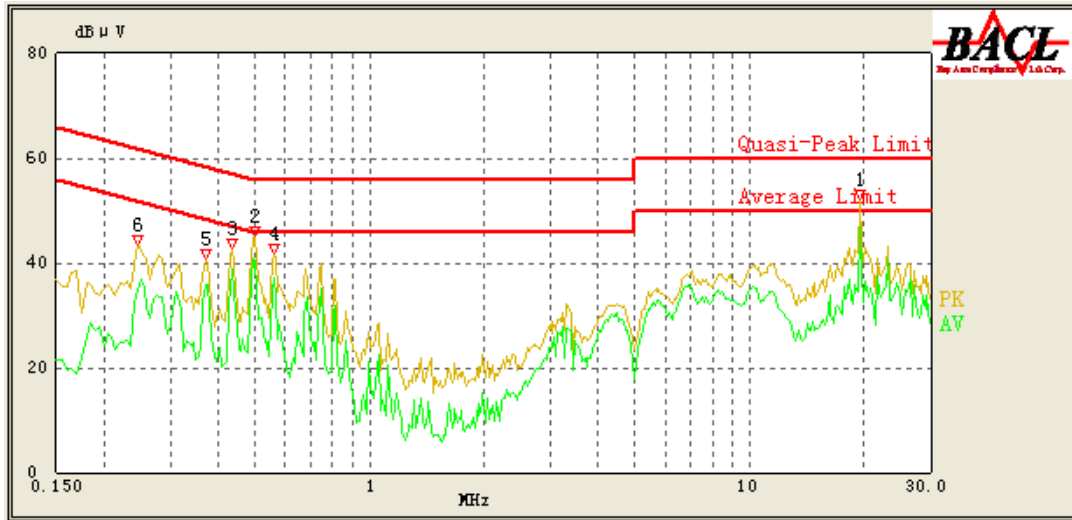
Test Mode: Video (Powered by PoE)

AC 120V/60 Hz, Line:



Frequency (MHz)	Corrected Amplitude (dBµV)	Correction Factor (dB)	Limit (dBµV)	Margin (dB)	Detector (PK/ QP/Ave.)
0.495	39.45	10.24	46.14	6.69	Ave.
23.130	41.60	12.23	50.00	8.40	Ave.
0.560	36.24	10.23	46.00	9.76	Ave.
0.435	36.67	10.25	47.86	11.19	Ave.
19.710	38.45	12.49	50.00	11.55	Ave.
0.745	33.96	10.21	46.00	12.04	Ave.
0.495	42.33	10.24	56.14	13.81	QP
23.130	42.21	12.23	60.00	17.79	QP
0.560	38.02	10.23	56.00	17.98	QP
19.710	41.78	12.49	60.00	18.22	QP
0.435	38.84	10.25	57.86	19.02	QP
0.745	36.63	10.21	56.00	19.37	QP

AC 120V/60 Hz, Neutral



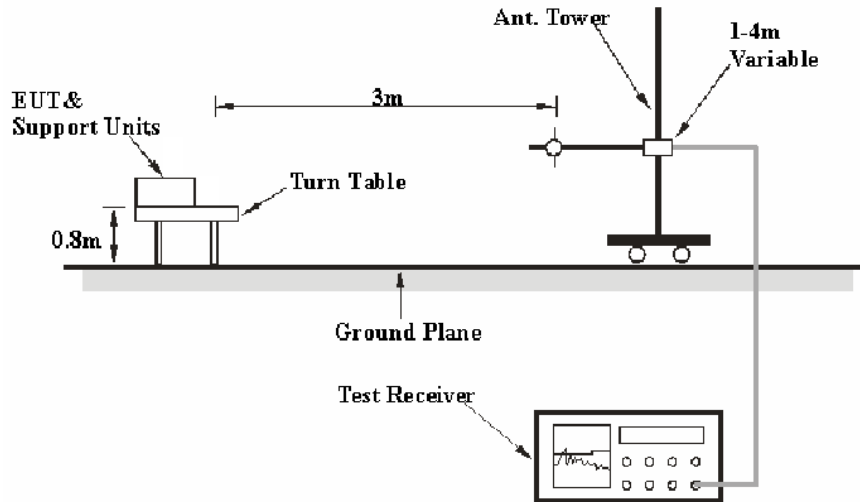
Frequency (MHz)	Corrected Amplitude (dBμV)	Correction Factor (dB)	Limit (dBμV)	Margin (dB)	Detector (PK/ QP/Ave.)
19.430	46.79	12.42	50.00	3.21	Ave.
0.500	40.39	10.24	46.00	5.61	Ave.
0.560	37.25	10.23	46.00	8.75	Ave.
0.435	38.79	10.25	47.86	9.07	Ave.
19.430	48.88	12.42	60.00	11.12	QP
0.500	43.33	10.24	56.00	12.67	QP
0.370	35.71	10.25	49.71	14.00	Ave.
0.560	39.58	10.23	56.00	16.42	QP
0.435	40.57	10.25	57.86	17.29	QP
0.245	34.93	10.25	53.29	18.36	Ave.
0.370	38.38	10.25	59.71	21.33	QP
0.245	38.14	10.25	63.29	25.15	QP

FCC§15.109 - RADIATED EMISSIONS

Applicable Standard

FCC §15.109

EUT Setup



The radiated emission tests were performed in the 3 meters chamber B test site, using the setup accordance with the ANSI C63.4-2009. The specification used was the FCC Part 15 Class B limits.

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

The adapter/PoE was connected to a 120 VAC/60 Hz power source.

EMI Test Receiver Setup

According to FCC 15.33 requirements, the EUT system was measured from 30 MHz to 5 GHz.

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

<i>Frequency Range</i>	<i>RBW</i>	<i>Video B/W</i>	<i>Detector</i>
30 MHz – 1000 MHz	100 kHz	300 kHz	QP
1000 MHz – 5 GHz	1 MHz	3 MHz	PK
1000 MHz – 5 GHz	1 MHz	10 Hz	Ave.

Test Procedure

For the radiated emissions test, the adapter and other relevant support equipments were connected to AC floor outlet.

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

The data was recorded in Quasi-peak detection mode for frequency range of 30 MHz to 1 GHz and peak and Average detection modes for frequencies above 1 GHz.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCI	101122	2012-08-08	2013-08-07
HP	Amplifier	8447E	1937A01046	2011-11-24	2012-11-23
Sunol Sciences	Broadband Antenna	JB1	A040904-2	2011-11-28	2012-11-27
SUPER ULTRA	Amplifier	ZVA-213+	N/A	2011-11-24	2012-11-23
Sunol Sciences	Horn Antenna	DRH-118	A052304	2011-12-01	2012-11-30
Rohde & Schwarz	Signal Analyzer	FSIQ26	8386001028	2011-11-24	2012-11-23
R&S	Auto test Software	EMC32	V6.30	-	-

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

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 worst margin reading is below:

Model: GXV3672_FHD

4.8 dB at 71.464475 MHz in the Vertical polarization (powered by PoE)

Model: GXV3672_HD

4.3 dB at 71.464475 MHz in the Vertical polarization (powered by PoE)

Test Data

Environmental Conditions

Temperature:	25 °C
Relative Humidity:	56 %
ATM Pressure:	100.0 kPa

The testing was performed by Lebron Wang on 2012-11-12.

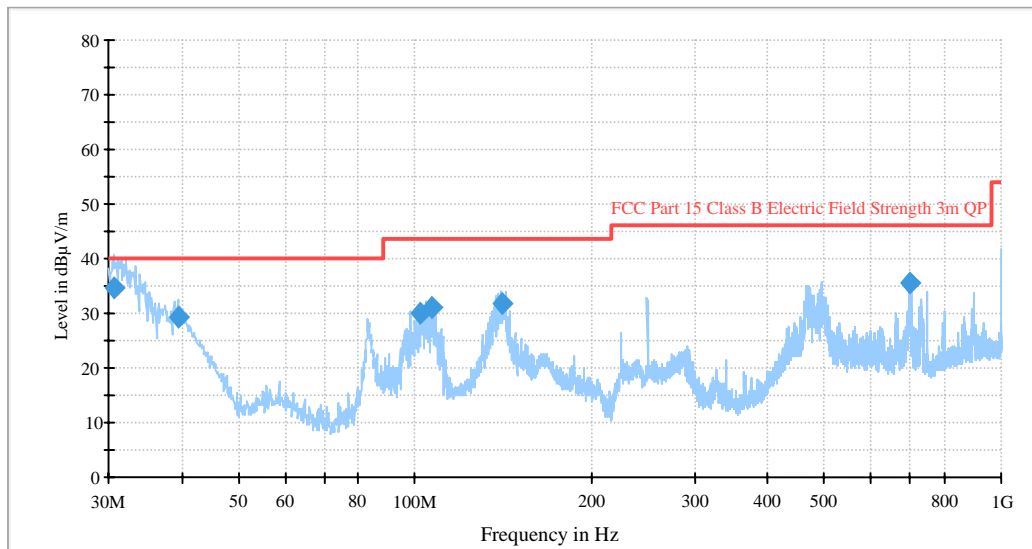
Test Mode: Video

Model: GXV3672_FHD

Powered by adapter

30 MHz ~ 1000 MHz

FCC Part 15B



Frequency (MHz)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Ant. Polarity (H/V)	Turntable Position (degree)	Correction Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
30.682075	34.5	106.0	V	218.0	-7.3	40.0	5.5
499.601250	35.6	106.0	H	132.0	-10.1	46.0	10.4
39.479400	29.4	107.0	V	144.0	-14.0	40.0	10.6
141.244150	31.8	106.0	V	0.0	-14.3	43.5	11.7
106.701525	31.1	278.0	H	197.0	-15.6	43.5	12.4
101.891750	30.0	279.0	H	210.0	-16.8	43.5	13.5

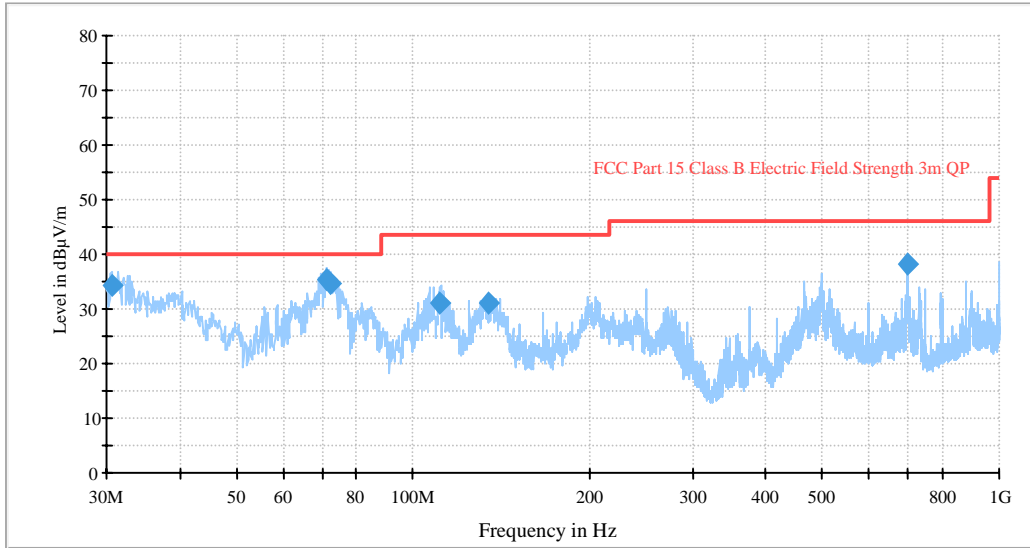
1-5 GHz:

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBµV/m)	FCC Part 15B CLASS B	
	Reading (dBµV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H/V)			Limit (dBµV/m)	Margin (dB)
1030.6	31.96	Ave.	32	1.1	H	0.19	32.15	54	21.85
1859.4	28.32	Ave.	112	1.2	H	2.63	30.95	54	23.05
1030.6	50.12	PK	32	1.1	H	0.19	50.31	74	23.69
1496.3	27.93	Ave.	87	1.2	V	1.15	29.08	54	24.92
1699.2	25.97	Ave.	135	1.0	V	2.24	28.21	54	25.79
1496.3	46.24	PK	87	1.2	V	1.15	47.39	74	26.61
1699.2	43.83	PK	135	1.0	V	2.24	46.07	74	27.93
1859.4	42.11	PK	112	1.2	H	2.63	44.74	74	29.26

Powered by PoE:

30 MHz ~ 1000 MHz

FCC Part 15B



Frequency (MHz)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Ant. Polarity (H/V)	Turntable Position (degree)	Correction Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
71.464475	35.2	116.0	V	242.0	-20.6	40.0	4.8
72.396200	34.6	117.0	V	284.0	-20.5	40.0	5.4
30.614800	34.4	104.0	V	1.0	-7.2	40.0	5.6
700.148750	38.3	108.0	H	86.0	-7.0	46.0	7.7
110.794200	31.2	269.0	H	156.0	-14.7	43.5	12.3
134.427900	30.9	226.0	H	232.0	-13.7	43.5	12.6

1 -5 GHz:

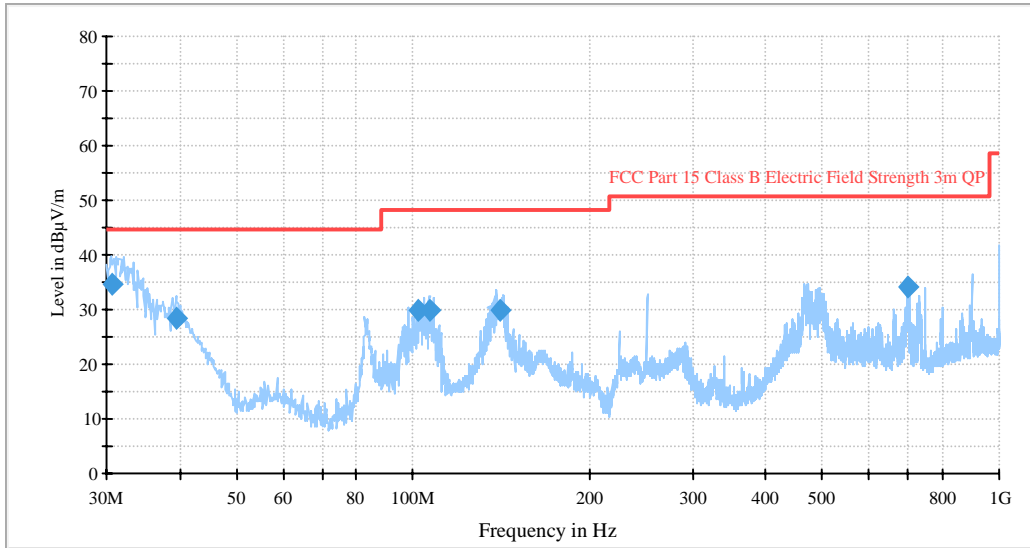
Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBµV/m)	FCC Part 15B CLASS B	
	Reading (dBµV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H/V)			Limit (dBµV/m)	Margin (dB)
1938.9	28.96	Ave.	128	1.0	V	3.07	32.03	54	21.97
1027.9	31.93	Ave.	96	1.1	H	-1.20	30.73	54	23.27
1943.6	27.65	Ave.	115	1.3	H	3.07	30.72	54	23.28
1490.2	49.32	PK	34	1.2	V	1.15	50.47	74	23.53
1490.2	28.19	Ave.	34	1.2	V	1.15	29.34	54	24.66
1938.9	45.73	PK	128	1.0	V	3.07	48.80	74	25.20
1027.9	47.88	PK	96	1.1	H	-1.20	46.68	74	27.32
1943.6	42.31	PK	115	1.3	H	3.07	45.38	74	28.62

Model: GXV3672_HD

Powered by adapter

30 MHz ~ 1000 MHz

FCC Part 15 B



Frequency (MHz)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Ant. Polarity (H/V)	Turntable Position (degree)	Correction Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
30.682075	34.3	106.0	V	218.0	-7.3	40.0	5.7
499.601250	35.3	106.0	H	132.0	-10.1	46.0	10.7
39.479400	29.2	107.0	V	144.0	-14.0	40.0	10.8
141.244150	31.5	106.0	V	0.0	-14.3	43.5	12.0
106.701525	30.9	278.0	H	197.0	-15.6	43.5	12.6
101.891750	29.8	279.0	H	210.0	-16.8	43.5	13.7

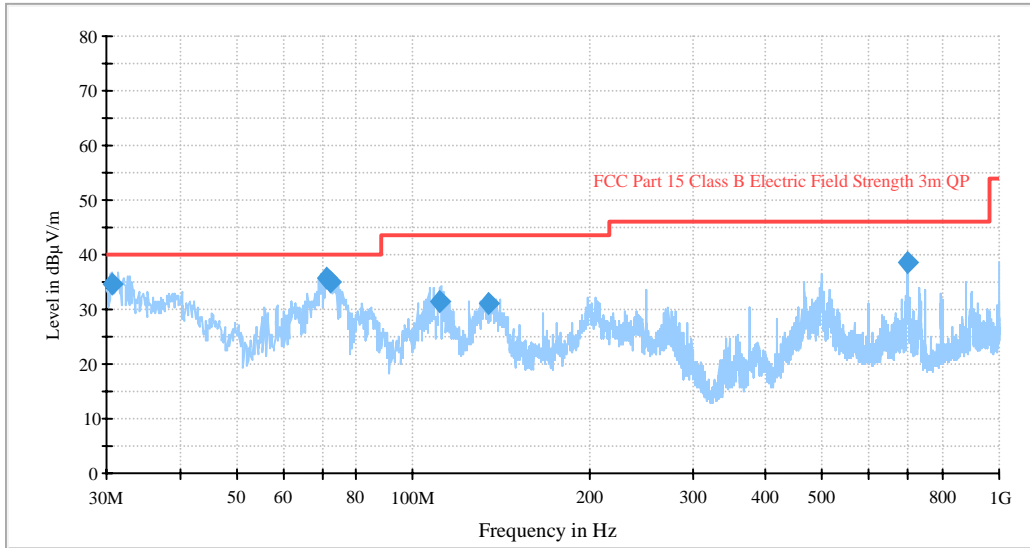
1-5 GHz:

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dB μ V/m)	FCC Part 15B CLASS B	
	Reading (dB μ V)	Detector (PK/QP/Ave.)		Height (m)	Polar (H/V)			Limit (dB μ V/m)	Margin (dB)
1941.2	50.11	PK	115	1.1	H	3.07	53.18	74	20.82
1941.2	29.36	Ave.	115	1.1	H	3.07	32.43	54	21.57
1724.6	28.93	Ave.	65	1.1	V	2.24	31.17	54	22.83
1032.7	29.83	Ave.	96	1.2	H	-0.66	29.17	54	24.83
1486.5	47.93	PK	34	1.0	V	1.15	49.08	74	24.92
1486.5	27.02	Ave.	34	1.0	V	1.15	28.17	54	25.83
1032.7	47.96	PK	96	1.2	H	-0.66	47.30	74	26.70
1724.6	45.06	PK	65	1.1	V	2.24	47.30	74	26.70

Powered by PoE:

30 MHz ~ 1000 MHz

FCC Part 15 B



Frequency (MHz)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Ant. Polarity (H/V)	Turntable Position (degree)	Correction Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
71.464475	35.7	116.0	V	242.0	-20.6	40.0	4.3
72.396200	35.0	117.0	V	284.0	-20.5	40.0	5.0
30.614800	34.8	104.0	V	1.0	-7.2	40.0	5.2
700.148750	38.7	110.0	H	95.0	-7.0	46.0	7.3
110.794200	31.5	269.0	H	156.0	-14.7	43.5	12.0
134.427900	31.2	226.0	H	232.0	-13.7	43.5	12.3

1-5 GHz:

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dBµV/m)	FCC Part 15B CLASS B	
	Reading (dBµV)	Detector (PK/QP/Ave.)		Height (m)	Polar (H/V)			Limit (dBµV/m)	Margin (dB)
1505.2	30.96	Ave.	85	1.2	V	1.15	32.11	54	21.89
1036.8	31.56	Ave.	77	1.1	H	-0.66	30.90	54	23.10
1949.5	27.57	Ave.	135	1.3	H	3.07	30.64	54	23.36
1947.1	27.38	Ave.	23	1.0	V	3.07	30.45	54	23.55
1505.2	48.71	PK	85	1.2	V	1.15	49.86	74	24.14
1036.8	49.63	PK	77	1.1	H	-0.66	48.97	74	25.03
1947.1	45.11	PK	23	1.0	V	3.07	48.18	74	25.82
1949.5	40.43	PK	135	1.3	H	3.07	43.50	74	30.50

DECLARATION LETTER



Grandstream Networks, Inc.
5F, Bldg #1, No.2 Kefa Rd., Science & Technology Park, Shenzhen, China
Tel: 0755-26014600 Fax: 0755-26014601

DECLARATION OF SIMILARITY

November 13, 2012

To:
Bay Area Compliance Laboratories Corp. (Shenzhen)
6/F, the 3rd Phase of Wan Li Industrial Bldg., Shihua Rd.,
FuTian Free Trade Zone, Shenzhen, China
Tel: +86 755 33320018 Fax: +86 755 33320008
Website: www.baclcorp.com.cn

Dear Sir or Madam:

We Grandstream Networks, Inc. hereby declare that our product: IP CAMERA, the series products have two models GXV3672_FHD and GXV3672_HD. The differences between them are as follows:

GXV3672_HD is HD digital which use the DSP of DM365-300 and the Sensor of 9M034 .
GXV3672_FHD is Full HD digital which use the DSP of DM368-400 and the Sensor of AR0331.
The others are the same, and the models GXV3672_FHD and GXV3672_HD both were tested.

Please contact me if you need for any additional clarification or information.

Best Regards,

Ning Wei
Signature

Ning Wei
Deputy management

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