### FCC TEST REPORT

For

### **NEXXT SOLUTIONS**

IP Camera

Model No.: Xpy330

Prepared for : NEXXT SOLUTIONS

Address : 3505 N.W 107TH AVE, MIAMI, FL 33178

Prepared by : Shenzhen LCS Compliance Testing Laboratory Ltd.

Address : 1F., Xingyuan Industrial Park, Tongda Road, Bao'an Blvd., Bao'an

District, Shenzhen, Guangdong, China

Date of receipt of test sample : December 13, 2012

Number of tested samples : 1

Serial number : Prototype

Date of Test : December 13, 2012 – January 25, 2012

Date of Report : January 25, 2012

#### FCC TEST REPORT

#### FCC CFR 47 PART 15 C(15.247)

Report Reference No. .....: LCS121213062QF

Date of Issue ...... : January 25, 2012

Testing Laboratory Name......: Shenzhen LCS Compliance Testing Laboratory Ltd.

Address ..... : 1F., Xingyuan Industrial Park, Tongda Road, Bao'an Blvd.,

Bao'an District, Shenzhen, Guangdong, China

Testing Location/ Procedure......: Full application of Harmonised standards

Partial application of Harmonised standards  $\Box$ 

Other standard testing method  $\Box$ 

Applicant's Name.....: NEXXT SOLUTIONS

Address .....: 3505 N.W 107TH AVE, MIAMI, FL 33178

**Test Specification** 

Standard ...... : FCC CFR 47 PART 15 Subpart C: 2011, ANSI C63.4-2003,

**Test Report Form No.....:** LCSEMC-1.0

TRF Originator .....: Shenzhen LCS Compliance Testing Laboratory Ltd.

Master TRF..... : Dated 2011-03

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Test Item Description. .....: IP Camera

Trade Mark : NAVICO

Model/ Type reference.....: Xpy330

Ratings .....: Input: AC 100-240V, 50/60Hz

Output: DC 5V, 1500mA

Result : Positive

Compiled by:

**Supervised by:** 

Approved by:

Gavin lians

Ada Liang / File administrators

Vito Cao/ Technique principal

Gavin Liang/ Manager

# **FCC -- TEST REPORT**

Test Report No.: LCS121213062QF

January 25, 2012
Date of issue

Type / Model	: IP Camera
EUT	: Xpy330
Applicant	: NEXXT SOLUTIONS
Address	: 3505 N.W 107TH AVE, MIAMI, FL 33178
Telephone	: /
Fax	: /
Manufacturer	: NEXXT SOLUTIONS
Address	: 3505 N.W 107TH AVE, MIAMI, FL 33178
Telephone	: /
Fax	: /
Factory	: NEXXT SOLUTIONS
Address	: 3505 N.W 107TH AVE, MIAMI, FL 33178
Telephone	: /
Fax	: /

1	Test Result:	Positive

The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

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# 1. GENERAL INFORMATION

## 1.1. Description of Device (EUT)

EUT : IP Camera

Model Number : Xpy330

Power Supply : Input: AC 100-240V, 50/60Hz

Output: DC 5V, 1500mA

Frequency Range : 2412.00-2462.00MHz, (Channel Number: 11, Channel

Frequency=2412+5(K-1), K=1, 2, 3 .....11)

Modulation Technology: IEEE 802.11b: DSSS(CCK,DQPSK,DBPSK)

IEEE 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK)

Data Rates : IEEE 802.11b: 1-11Mbps

IEEE 802.11g: 6-54Mbps

Antenna Gain : 2.0dBi

## 1.2. Host System Configuration List and Details

Manufacturer	Description	Model	Serial Number	Certificate
NEXXT SOLUTIONS	Adapter	GTF-050200	001	Verification

### 1.3. External I/O Cable

Cable Description	Length (M)	From/Port	То
N/A	N/A	N/A	N/A

# 1.4. Description of Test Facility

Site Description

EMC Lab. : Accredited by CNAS, June 04, 2010

The Certificate Registration Number. is L4595.

Accredited by FCC, July 14, 2011

The Certificate Registration Number. is 899208.

Accredited by Industry Canada, May. 02, 2011

The Certificate Registration Number. is 9642A-1

## 1.5. Statement of The Measurement Uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. To CISPR 16 – 4 "Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements" and is documented in the LCS quality system acc. To DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

## 1.6. Measurement Uncertainty

Test Item		Frequency Range	Uncertainty	Note
		30MHz~200MHz	±2.96dB	(1)
Radiation Uncertainty	:	200MHz~1000MHz	±3.10dB	(1)
		1GHz~26.5GHz	±3.80dB	(1)
Conduction Uncertainty	:	150kHz~30MHz	±1.63dB	(1)
Power disturbance	:	30MHz~300MHz	±1.60dB	(1)

<sup>(1).</sup> This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

## 1.7. Description Of Test Modes

The EUT has been tested under operating condition.

Worst-case mode and channel used for 150kHz-30 MHz power line conducted emissions was the mode and channel with the highest output power, that was determined to be 802.11b/g mode, mid channel.

Worst-case mode and channel used for 9kHz-26.5GHz radiated and power line conducted emissions was the mode and channel with the highest output power, that was determined to be 802.11b/g mode, mid channel.

Worst-Case data rates were utilized from preliminary testing of the Chipset, worst-case data rates used during the testing are as follows:

802.11b Mode : 1 Mbps, DSSS. 802.11g Mode : 6 Mbps, OFDM.

### 2. TEST METHODOLOGY

All measurements contained in this report were conducted with ANSI C63.4-2003, 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.

The radiated testing was performed at an antenna-to-EUT distance of 3 meters. All radiated and conducted emissions measurement was performed at Shenzhen LCS Compliance Testing Laboratory Ltd..

## 2.1. EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

#### 2.2. EUT Exercise

The EUT was operated in the engineering mode to fix the TX frequency that was for the purpose of the measurements.

According to FCC's request, Test Procedure ANSI C63.4-2003&KDB558074 V02 is required to be used for this kind of FCC 15.247 digital modulation device.

According to its specifications, the EUT must comply with the requirements of the Section 15.203, 15.205, 15.207, 15.209 and 15.247 under the FCC Rules Part 15 Subpart C.

#### 2.3. General Test Procedures

#### 2.3.1 Conducted Emissions

The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 13.1.4.1 of ANSI C63.4 Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using Quasi-peak and average detector modes.

#### 2.3.2 Radiated Emissions

The EUT is placed on a turn table, which is 0.8 m above ground plane. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna, which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the maximum emissions, exploratory radiated emission measurements were made according to the requirements in Section 13.1.4.1 of ANSI C63.4.

## 3. SYSTEM TEST CONFIGURATION

## 3.1. Justification

The system was configured for testing in a typical fashion.

### 3.2. EUT Exercise Software

N/A.

## 3.3. Special Accessories

N/A.

## 3.4. Block Diagram/Schematics

Please refer to the report.

## 3.5. Equipment Modifications

Shenzhen LCS Compliance Testing Laboratory Ltd. has not done any modification on the EUT.

## 3.6. Block Diagram of Test Setup

Please refer to the test setup photo.

# 4. SUMMARY OF TEST RESULTS

Applied Standard: 47 CFR FCC Part 15 Subpart C				
FCC Part 15 Rules	FCC Part 15 Rules Description of Test			
§15.247(b)	Maximum Conducted Output Power	Compliant		
§15.247(e)	Power Spectral Density	Compliant		
§15.247(a)(2)	6dB Bandwidth	Compliant		
§15.209, §15.247(d)	Radiated and Conducted Spurious Emissions	Compliant		
§15.205	Emissions at Restricted Band	Compliant		
§15.207(a)	Conducted Emissions	Compliant		
§15.203	Antenna Requirements	Compliant		
§15.247(i)§2.1093	RF Exposure	Compliant		

N/A is not applicable.

## 5. TEST RESULT

### 5.1. Maximum Conducted Output Power Measurement

#### 5.1.1. Standard Applicable

According to §15.247(b): For systems using digital modulation in the 2400-2483.5MHz, the limit for peak output power is 30dBm. The limited has to be reduced by the amount in dB that the gain of the antenna exceed 6dBi. In case of point-to-point operation, the limit has to be reduced by 1dB for every 3dB that the directional gain of the antenna exceeds 6dBi.

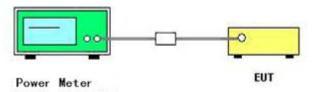
#### 5.1.2. Measuring Instruments and Setting

Please refer to section 6 of equipments list in this report.

#### 5.1.3. Test Procedures

- a. The transmitter output (antenna port) was connected to a Power meter.
- b. Detector= Peak.

### 5.1.4. Test Setup Layout



5.1.5. Test Result of Maximum Conducted Output Power

Temperature	<b>25</b> ℃	Humidity	60%
Test Engineer	Vito Cao	Configurations	802.11b,g

#### 802.11b

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
1	2412	17.19	30	Complies
6	2437	16.69	30	Complies
11	2462	16.90	30	Complies

#### 802.11g

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
1	2412	14.48	30	Complies
6	2437	15.55	30	Complies
11	2462	15.82	30	Complies

### 5.2. Power Spectral Density Measurement

#### 5.2.1. Standard Applicable

According to §15.247(e): For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3 kHz band during any time interval of continuous transmission.

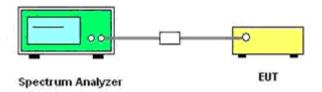
### 5.2.2. Measuring Instruments and Setting

Please refer to section 6 of equipments list in this report.

#### 5.2.3. Test Procedures

- 1. The transmitter was connected directly to a Spectrum Analyzer through a directional couple.
- 2. The power was monitored at the coupler port with a Spectrum Analyzer. The power level was set to the maximum level.
- 3. Set the RBW = 3 kHz.
- 4. Set the VBW  $\geq$  3\*RBW
- 5. Set the span to 1.5 times the DTS channel bandwidth.
- 6. Detector = peak.
- 7. Sweep time = auto couple.
- 8. Trace mode = max hold.
- 9. Allow trace to fully stabilize.
- 10. Use the peak marker function to determine the maximum power level in any 3 kHz band segment within the fundamental EBW.

#### 5.2.4. Test Setup Layout



## 5.2.5. Test Result of Power Spectral Density

Temperature 25°C		Humidity	60%
Test Engineer	Vito Cao	Configurations	802.11b,g

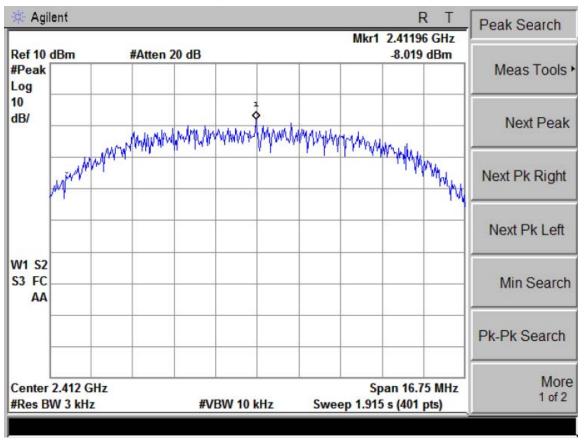
#### 802.11b

Channel	Frequency	Power <i>Density</i> (dBm)	Max. Limit (dBm)	Result
1	2412	-8.02	8	Complies
6	2437	-8.44	8	Complies
11	2462	-8.93	8	Complies

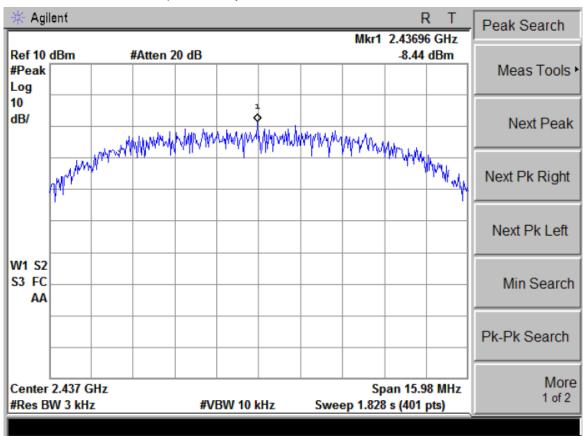
## 802.11g

Channel	Frequency	Power <i>Density</i> (dBm)	Max. Limit (dBm)	Result
1	2412	-14.4	8	Complies
6	2437	-14.96	8	Complies
11	2462	-14.38	8	Complies

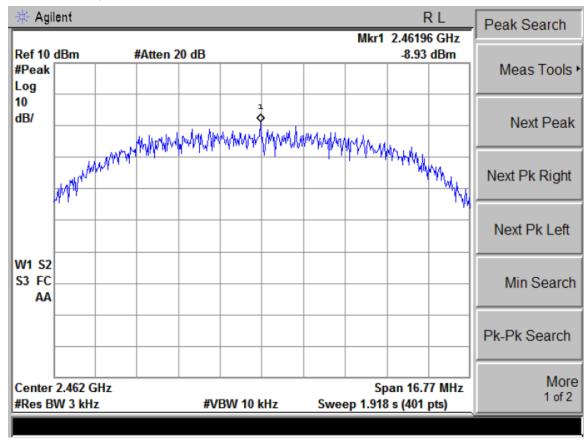
802.11b Low channel power density



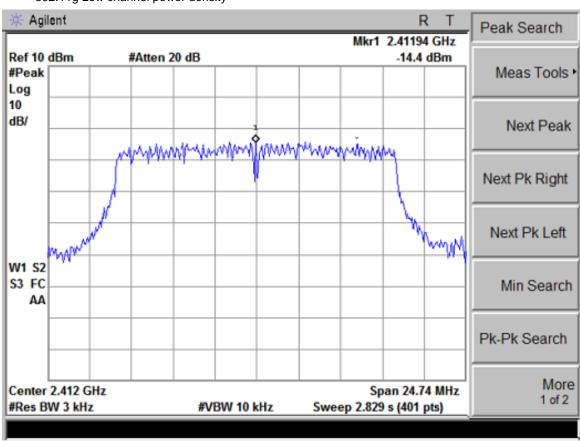
802.11b Middle channel power density



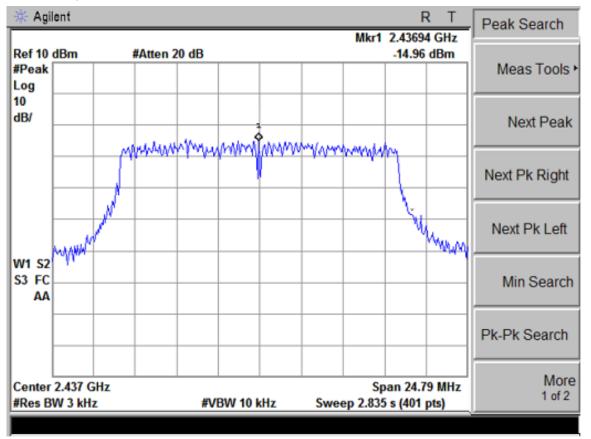
802.11b High channel power density



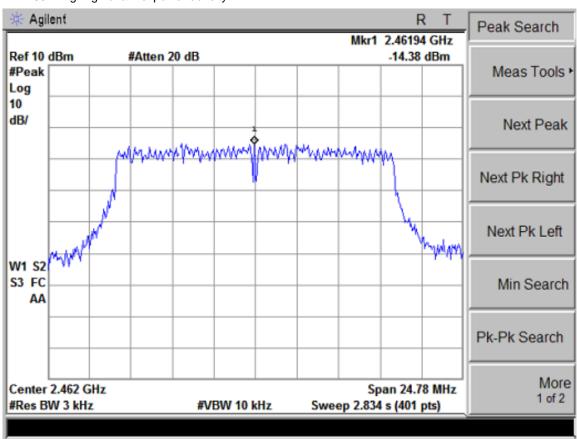
802.11g Low channel power density



802.11g Middle channel power density



802.11g High channel power density



## 5.3. 6 dB Spectrum Bandwidth Measurement

### 5.3.1. Standard Applicable

According to §15.247(a)(2): For digital modulation systems, the minimum 6 dB bandwidth shall be at least 500 kHz.

### 5.3.2. Measuring Instruments and Setting

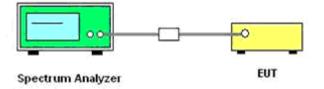
Please refer to section 6 of equipments list in this report. The following table is the setting of the Spectrum Analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	> RBW
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

#### 5.3.3. Test Procedures

- 1. The transmitter output (antenna port) was connected to the spectrum analyzer in peak hold mode.
- 2. The resolution bandwidth of 100 kHz and the video bandwidth of 300 kHz were used.
- 3. Measured the spectrum width with power higher than 6dB below carrier.

#### 5.3.4. Test Setup Layout



## 5.3.5. Test Result of 6dB Spectrum Bandwidth

Temperature	<b>25</b> ℃	Humidity	60%
Test Engineer	Vito Cao	Configurations	802.11b,g

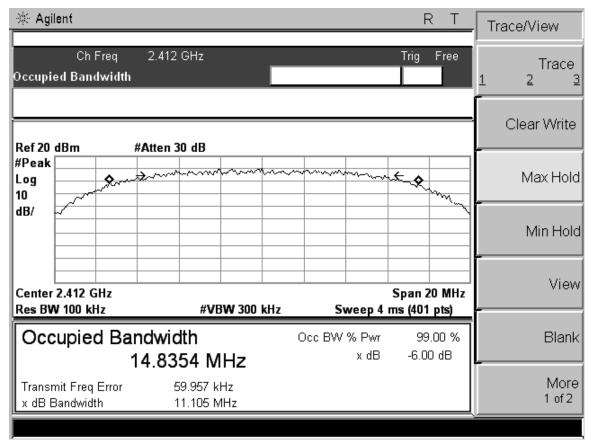
### 802.11b

Channel	Frequency	6dB Bandwidth (MHz)	Min. Limit (kHz)	Result
1	2412	11.105	500	Complies
6	2437	10.245	500	Complies
11	2462	11.099	500	Complies

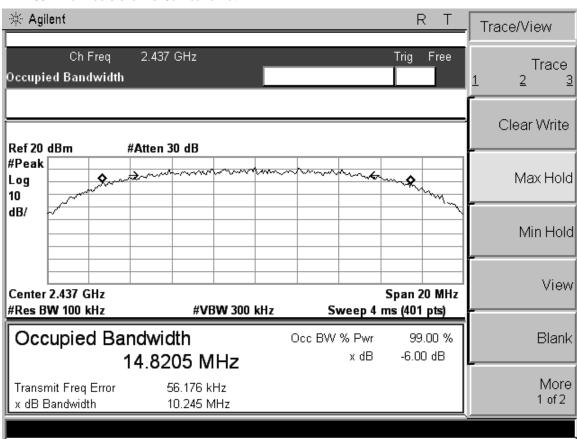
### 802.11g

Channel	Frequency 6dB Bandwidth (MHz)		Min. Limit (kHz)	Result
1	2412	16.507	500	Complies
6	2437	16.481	500	Complies
11	2462	16.488	500	Complies

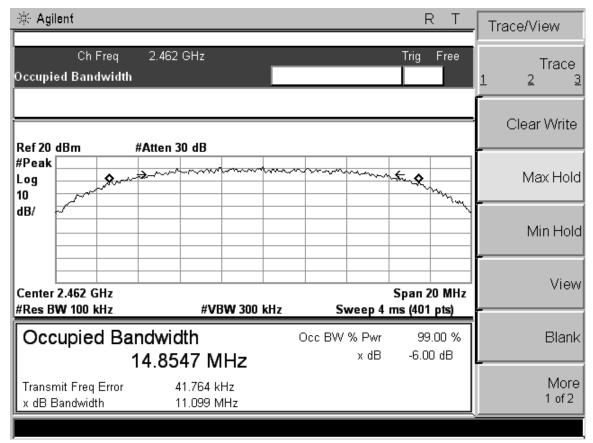
#### 802.11b Low channel 6dB bandwidth



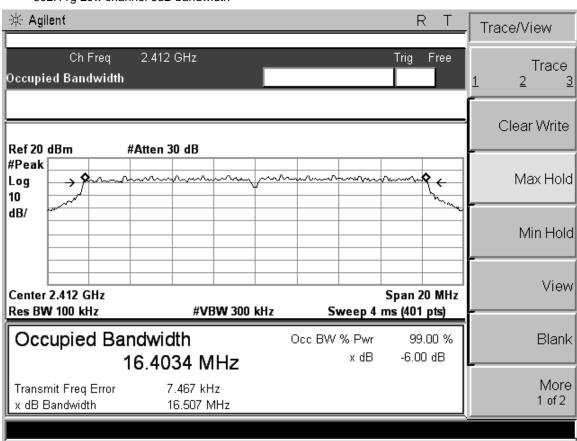
802.11b Middle channel 6dB bandwidth



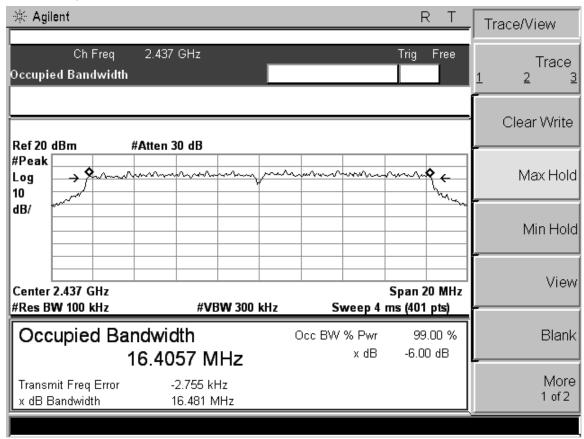
#### 802.11b Middle channel 6dB bandwidth



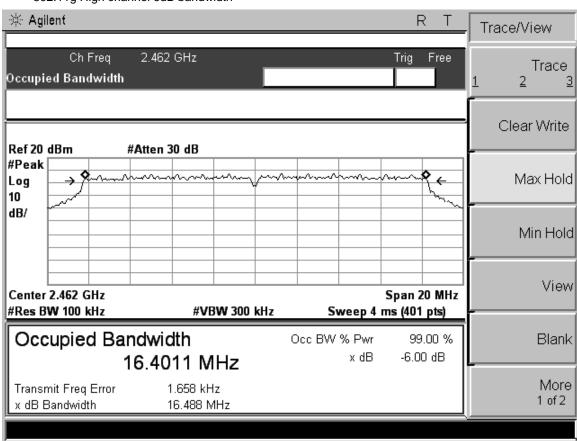
802.11g Low channel 6dB bandwidth



802.11g Middle channel 6dB bandwidth



802.11g High channel 6dB bandwidth



#### 5.4. Radiated Emissions Measurement

#### 5.4.1. Standard Applicable

According to §15.247 (d): 20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies(MHz)	Field Strength(micorvolts/meter)	Measurement Distance(meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

#### 5.4.2. Measuring Instruments and Setting

Please refer to section 6 of equipments list in this report. The following table is the setting of spectrum analyzer and receiver.

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (Emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average
RB / VB (Emission in non-restricted band)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average

Spectrum Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 100kHz for QP

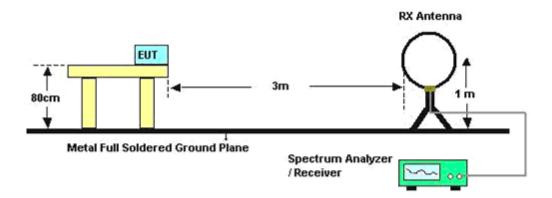
#### 5.4.3. Test Procedures

- 1. Configure the EUT according to ANSI C63.4. The EUT was placed on the top of the turntable 0.8 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
- 2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
- 3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
- 4. For each suspected emissions, the antenna tower was scan (from 1 m to 4 m) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading

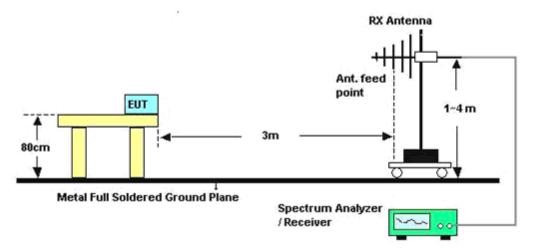
- 5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
- 6. For emissions above 1GHz, use 1MHz VBW and RBW for peak reading. Then 1MHz RBW and 10Hz VBW for average reading in spectrum analyzer.
- 7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.
- 8. If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
- 9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
- 10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High Low scan is not required in this case.

#### 5.4.4. Test Setup Layout

For radiated emissions below 30MHz



For radiated emissions above 30MHz



Above 10 GHz shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade form 3m to 1.5m.

Distance extrapolation factor = 20 log (specific distance [3m] / test distance [1.5m]) (dB); Limit line = specific limits (dBuV) + distance extrapolation factor [6 dB].

### 5.4.5. Results of Radiated Emissions (9kHz~30MHz)

Temperature	25℃	Humidity	60%
Test Engineer	Vito Cao	Configurations	802.11b,g

Freq.	Level	Over Limit	Over Limit	Remark
(MHz)	(dBuV)	(dB)	(dBuV)	
-	-	-	-	See Note

#### Note:

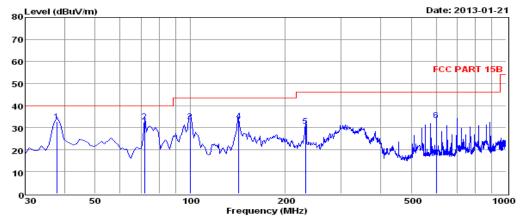
The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.

Distance extrapolation factor = 40 log (specific distance / test distance) (dB);

Limit line = specific limits (dBuV) + distance extrapolation factor.

### 5.4.6. Results of Radiated Emissions (30MHz~1GHz)

Temperature	25℃	Humidity	60%
Test Engineer	Vito Cao	Configurations	802.11b,g



24°C/56% Env. /Ins: EUT: IP Camera M/N: Хру330 Power Rating:

Test Mode: 802.11b Tx2412MHz

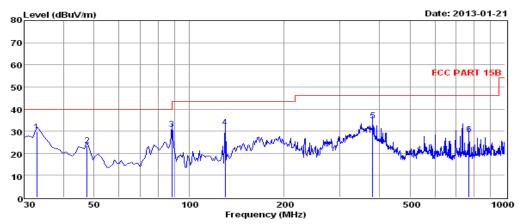
Operator: ANDY Memo:

HORIZONTAL pol:

	Freq.	Reading	CabLos	AntFac	PreFac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB/m	dB	dBuV/m	dBuV/m	dB	
1	37.76	49.49	0.38	13.01	30.13	32.75	40.00	-7.25	QP
2	71.71	54.04	0.55	8.36	30.17	32.78	40.00	-7.22	QP
3	99.84	49.06	0.60	13.15	30.20	32.61	43.50	-10.89	QP
4	142.52	54.20	0.71	8.21	30.20	32.92	43.50	-10.58	QP
5	231.76	48.11	0.98	11.72	30.18	30.63	46.00	-15.37	QP
6	601.33	43.33	1.43	18.45	30.00	33.21	46.00	-12.79	QP

Note: 1. All readings are Quasi-peak values. 2. Measured = Reading + Antenna Factor + Cable Loss - Amp Factor.

The emission levels that ate 20dB below the official limit are not reported.



24°C/56% Env. /Ins: EUT: IP Camera M/N: Хру330 Power Rating: DC 5V

Test Mode: Operator: 802.11b Tx2412MHz

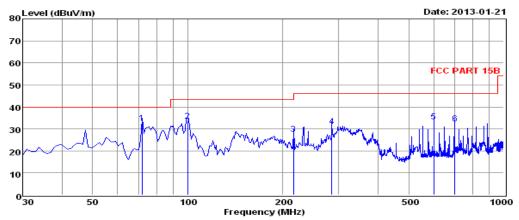
ANDY Memo:

pol: VERTICAL

	Freq.	Reading	CabLos	AntFac	PreFac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB/m	dB	dBuV/m	dBuV/m	dВ	
1	32.91	47.25	0.37	12.31	30.13	29.80	40.00	-10.20	QP
2	47.46	39.81	0.35	13.40	30.14	23.42	40.00	-16.58	QP
3	88.20	49.18	0.68	11.33	30.19	31.00	43.50	-12.50	QP
4	129.91	52.28	0.76	8.94	30.20	31.78	43.50	-11.72	QP
5	381.14	49.24	1.18	14.62	30.11	34.93	46.00	-11.07	QP
6	769.14	37.06	1.76	19.67	30.08	28.41	46.00	-17.59	QP

Note: 1. All readings are Quasi-peak values.

2. Measured = Reading + Antenna Factor + Cable Loss - Amp Factor. The emission levels that ate 20dB below the official limit are not reported.



24℃/56% Env. /Ins: IP Camera Хру330 DC 5V M/N: Power Rating:

802.11b Tx2437MHz Test Mode:

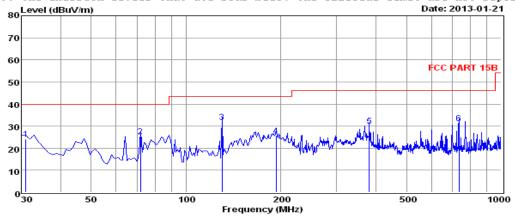
Operator: ANDY

Memo:

pol: HORIZONTAL

	Freq.	Reading	CabLos	AntFac	PreFac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB/m	dB	dBuV/m	dBuV/m	dB	
1	71.71	54.04	0.55	8.36	30.17	32.78	40.00	-7.22	QP
2	99.84	50.06	0.60	13.15	30.20	33.61	43.50	-9.89	QP
3	216.24	45.84	0.88	11.08	30.19	27.61	46.00	-18.39	QP
4	286.08	47.67	1.00	12.79	30.16	31.30	46.00	-14.70	QP
5	601.33	43.33	1.43	18.45	30.00	33.21	46.00	-12.79	QP
6	700.27	41.87	1.70	18.81	30.05	32.33	46.00	-13.67	QP

- Note: 1. All readings are Quasi-peak values. 2. Measured = Reading + Antenna Factor + Cable Loss Amp Factor.
- 3. The emission levels that ate 20dB below the official limit are not reported.



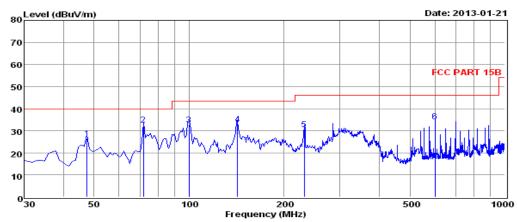
24°C/56% Env. /Ins: IP Camera EUT: M/N: Хру330 Power Rating: DC 5V

802.11b Tx2437MHz ANDY Test Mode: Operator:

Memo: pol: VERTICAL

	Freq.	Reading	CabLos	AntFac	PreFac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB/m	dВ	dBuV/m	dBuV/m	dВ	
1	30.97	41.39	0.39	12.32	30.12	23.98	40.00	-16.02	QP QP
2	71.71	46.63	0.55	8.36	30.17	25.37	40.00	-14.63	QP
3	129.91	52.28	0.76	8.94	30.20	31.78	43.50	-11.72	QP
4	192.96	44.55	0.76	10.56	30.20	25.67	43.50	-17.83	QP
5	381.14	44.24	1.18	14.62	30.11	29.93	46.00	-16.07	QP
6	733.25	40.32	1.74	19.23	30.07	31.22	46.00	-14.78	QP

- Note: 1. All readings are Quasi-peak values. 2. Measured = Reading + Antenna Factor + Cable Loss Amp Factor.
- 3. The emission levels that ate 20dB below the official limit are not reported.



24°C/56% Env. /Ins: IP Camera M/N: Хру330 Power Rating: DC 5V

802.11b Tx2462MHz Test Mode:

Operator: ANDY

Memo:

pol: HORIZONTAL

	rreq.	Reading	Capros	Antrac	Prerac	neasurea	Limit	Over	Remark
	MHz	dBuV	dB	dB/m	dB	dBuV/m	dBuV/m	dB	
1	47.46	42.71	0.35	13.40	30.14	26.32	40.00	-13.68	QP
2	71.71	54.04	0.55	8.36	30.17	32.78	40.00	-7.22	QP
3	99.84	49.06	0.60	13.15	30.20	32.61	43.50	-10.89	QP
4	142.52	54.20	0.71	8.21	30.20	32.92	43.50	-10.58	QP
5	231.76	48.11	0.98	11.72	30.18	30.63	46.00	-15.37	QP
6	601.33	44.33	1.43	18.45	30.00	34.21	46.00	-11.79	QP

Note: 1. All readings are Quasi-peak values.
2. Measured = Reading + Antenna Factor + Cable Loss - Amp Factor.

2. Measured = Reading + Antenna ractor + capit moso samp .accor.

3. The emission levels that ate 20dB below the official limit are not reported.

Date: 2013-01-21 80 Level (dBuV/m) 70 60 FCC PART 15B 50 40 30 20 10 0<mark>30</mark> 100 200 500 1000

Frequency (MHz)

24°C/56% Env. /Ins: EUT: IP Camera Хру330 M/N: Power Rating: DC 5V

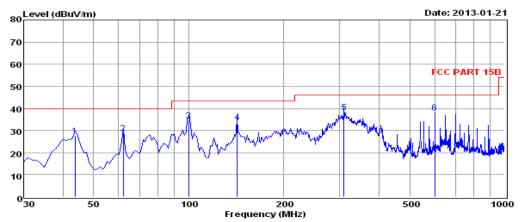
Test Mode: 802.11b Tx2462MHz

Operator: ANDY Memo: VERTICAL pol:

	Freq.	Reading	CabLos	Antrac	PreFac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB/m	dB	dBuV/m	dBuV/m	dB	
1	32.91	49.25	0.37	12.31	30.13	31.80	40.00	-8.20	QP
2	47.46	42.81	0.35	13.40	30.14	26.42	40.00	-13.58	QP
3	63.95	43.93	0.48	11.13	30.16	25.38	40.00	-14.62	QP
4	71.71	48.63	0.55	8.36	30.17	27.37	40.00	-12.63	QP
5	88.20	51.18	0.68	11.33	30.19	33.00	43.50	-10.50	QP
6	129.91	48.28	0.76	8.94	30.20	27.78	43.50	-15.72	QP

Note: 1. All readings are Quasi-peak values.

- 2. Measured = Reading + Antenna Factor + Cable Loss Amp Factor.
- 3. The emission levels that ate 20dB below the official limit are not reported.



Env. /Ins: 24 ℃ / 56% EUT: IP Camera M/N: Xpy330 Power Rating: DC 5V

Test Mode: 802.11g Tx2412MHz

Operator: ANDY

Memo:

pol: HORIZONTAL

	Freq.	Reading	CabLos	AntFac	PreFac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB/m	dB	dBuV/m	dBuV/m	dB	
1	43.58	43.88	0.41	13.56	30.14	27.71	40.00	-12.29	QP
2	62.01	46.69	0.48	11.89	30.16	28.90	40.00	-11.10	QP
3	99.84	51.06	0.60	13.15	30.20	34.61	43.50	-8.89	QP
4	142.52	55.20	0.71	8.21	30.20	33.92	43.50	-9.58	QP
5	310.33	54.22	1.08	13.20	30.14	38.36	46.00	-7.64	QP
6	601.33	48.33	1.43	18.45	30.00	38.21	46.00	-7.79	QP

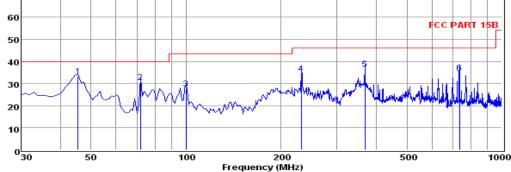
Note: 1. All readings are Quasi-peak values.

Measured = Reading + Antenna Factor + Cable Loss - Amp Factor.
 The emission levels that ate 20dB below the official limit are

3. The emission levels that ate 20dB below the official limit are not reported.

80 Date: 2013-01-21

70 FCC PART 15B



Env. /Ins: 24℃/56% EUT: IP Camera M/N: Xpy330 Power Rating: DC 5V

Test Mode: 802.11g Tx2412MHz

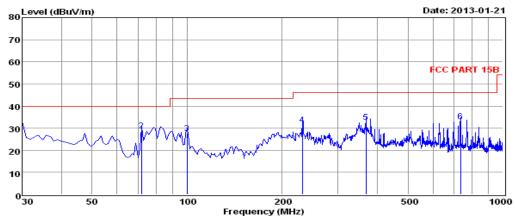
Operator: ANDY
Memo:
pol: VERTICAL

	Freq.	Reading	CabLos	AntFac	PreFac	Measured	Limit	Over	Remark
	MHz	dBuV	dВ	dB/m	dB	dBuV/m	dBuV/m	dB	
1	45.52	49.38	0.41	13.52	30.14	33.17	40.00	-6.83	QP QP
2	71.71	52.01	0.55	8.36	30.17	30.75	40.00	-9.25	QP
3	99.84	44.20	0.60	13.15	30.20	27.75	43.50	-15.75	QP
4	231.76	52.05	0.98	11.72	30.18	34.57	46.00	-11.43	QP
5	368.53	51.12	1.22	14.50	30.12	36.72	46.00	-9.28	QP
6	734.22	44.03	1.74	19.24	30.07	34.94	46.00	-11.06	QP

Note: 1. All readings are Quasi-peak values.

- Note: 1. All readings are Quasi-peak values.

  2. Measured = Reading + Antenna Factor + Cable Loss Amp Factor.
- 3. The emission levels that ate 20dB below the official limit are not reported.



24℃/56% Env. /Ins: EUT: IP Camera M/N: Хру330 DC 5V Power Rating:

802.11g Tx2437MHz Test Mode:

Operator: ANDY

Memo:

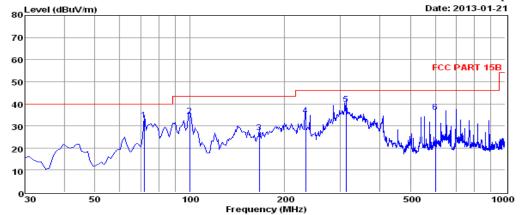
pol: VERTICAL

Freq.	Reading	CabLos	AntFac	PreFac	Measured	Limit	Over	Remark
MHz	dBuV	dB	dB/m	dB	dBuV/m	dBuV/m	dB	
30.00	48.43	0.39	12.33	30.12	31.03	40.00	-8.97	_ <u>QP</u>
71.71	50.01	0.55	8.36	30.17	28.75	40.00	-11.25	QP
99.84	44.20	0.60	13.15	30.20	27.75	43.50	-15.75	QP
231.76	49.05	0.98	11.72	30.18	31.57	46.00	-14.43	QP
368.53	47.12	1.22	14.50	30.12	32.72	46.00	-13.28	QP
735.19	41.98	1.74	19.25	30.07	32.90	46.00	-13.10	QP
	30.00 71.71 99.84 231.76 368.53	MHz dBuV  30.00 48.43 71.71 50.01 99.84 44.20 231.76 49.05 368.53 47.12	MHz dBuV dB  30.00 48.43 0.39 71.71 50.01 0.55 99.84 44.20 0.60 231.76 49.05 0.98 368.53 47.12 1.22	MHz dBuV dB dB/m  30.00 48.43 0.39 12.33 71.71 50.01 0.55 8.36 99.84 44.20 0.60 13.15 231.76 49.05 0.98 11.72 368.53 47.12 1.22 14.50	MHz dBuV dB dB/m dB  30.00 48.43 0.39 12.33 30.12 71.71 50.01 0.55 8.36 30.17 99.84 44.20 0.60 13.15 30.20 231.76 49.05 0.98 11.72 30.18 368.53 47.12 1.22 14.50 30.12	MHz dBuV dB dB/m dB dBuV/m  30.00 48.43 0.39 12.33 30.12 31.03  71.71 50.01 0.55 8.36 30.17 28.75  99.84 44.20 0.60 13.15 30.20 27.75  231.76 49.05 0.98 11.72 30.18 31.57  368.53 47.12 1.22 14.50 30.12 32.72	MHz dBuV dB dB/m dB dBuV/m dBuV/m  30.00 48.43 0.39 12.33 30.12 31.03 40.00 71.71 50.01 0.55 8.36 30.17 28.75 40.00 99.84 44.20 0.60 13.15 30.20 27.75 43.50 231.76 49.05 0.98 11.72 30.18 31.57 46.00 368.53 47.12 1.22 14.50 30.12 32.72 46.00	MHz         dBuV         dB         dB/m         dB         dBuV/m         dBuV/m         dB           30.00         48.43         0.39         12.33         30.12         31.03         40.00         -8.97           71.71         50.01         0.55         8.36         30.17         28.75         40.00         -11.25           99.84         44.20         0.60         13.15         30.20         27.75         43.50         -15.75           231.76         49.05         0.98         11.72         30.18         31.57         46.00         -14.43           368.53         47.12         1.22         14.50         30.12         32.72         46.00         -13.28

Note: 1. All readings are Quasi-peak values.

2. Measured = Reading + Antenna Factor + Cable Loss - Amp Factor.

3. The emission levels that ate 20dB below the official limit are not reported.



24°C/56% Env. /Ins: IP Camera EUT: Хру330 DC 5V M/N: Power Rating:

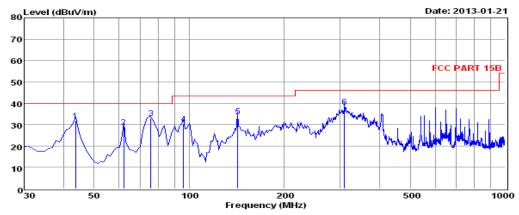
Test Mode: 802.11g Tx2437MHz

Operator: ANDY Memo:

HORIZONTAL pol:

	Freq.	Reading	CabLos	AntFac	PreFac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB/m	dB	dBuV/m	dBuV/m	dВ	
1	71.71	54.04	0.55	8.36	30.17	32.78	40.00	-7.22	OP
_	71.71	34.04	0.55	0.30	30.17	34.70		-7.22	QP
2	99.84	51.06	0.60	13.15	30.20	34.61	43.50	-8.89	QP
3	165.80	47.74	0.77	8.84	30.20	27.15	43.50	-16.35	QP
4	232.73	52.32	0.98	11.77	30.18	34.89	46.00	-11.11	QP
5	313.24	55.68	1.09	13.24	30.14	39.87	46.00	-6.13	QP
6	601.33	46.33	1.43	18.45	30.00	36.21	46.00	-9.79	QP

Note: 1. All readings are Quasi-peak values. 2. Measured = Reading + Antenna Factor + Cable Loss - Amp Factor. 3. The emission levels that ate 20dB below the official limit are not reported.



24°C/56% Env. /Ins: IP Camera EUT: Хру330 M/N: Power Rating:

802.11g Tx2462MHz Test Mode:

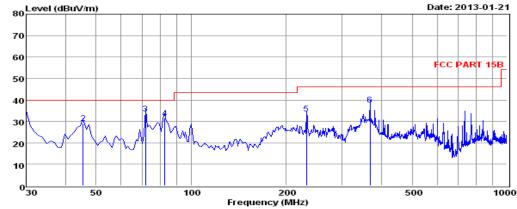
Operator: Memo:

pol: HORIZONTAL

	Freq.	Reading	CabLos	AntFac	PreFac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB/m	dB	dBuV/m	dBuV/m	dB	
1	43.58	47.88	0.41	13.56	30.14	31.71	40.00	-8.29	QP
2	62.01	46.69	0.48	11.89	30.16	28.90	40.00	-11.10	QP
3	75.59	54.72	0.54	7.89	30.17	32.98	40.00	-7.02	QP
4	95.96	47.08	0.58	12.90	30.20	30.36	43.50	-13.14	QP
5	142.52	55.20	0.71	8.21	30.20	33.92	43.50	-9.58	QP
6	310.33	54.22	1.08	13.20	30.14	38.36	46.00	-7.64	QP

Note: 1. All readings are Quasi-peak values. 2. Measured = Reading + Antenna Factor + Cable Loss - Amp Factor.

3. The emission levels that ate 20dB below the official limit are not reported.



Env. /Ins: 24°C/56% EUT: IP Camera M/N: Хру330 DC 5V Power Rating:

Test Mode: 802.11g Tx2462MHz

Operator: ANDY

Memo: pol: VERTICAL

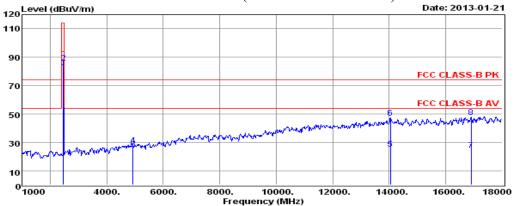
	Freq.	Reading	CabLos	AntFac	PreFac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB/m	dB	dBuV/m	dBuV/m	dВ	
1	30.00	50.43	0.39	12.33	30.12	33.03	40.00	-6.97	QP
2	45.52	45.38	0.41	13.52	30.14	29.17	40.00	-10.83	QP
3	71.71	55.01	0.55	8.36	30.17	33.75	40.00	-6.25	QP
4	82.38	51.77	0.54	9.38	30.18	31.51	40.00	-8.49	QP
5	231.76	51.05	0.98	11.72	30.18	33.57	46.00	-12.43	QP
6	368.53	52.12	1.22	14.50	30.12	37.72	46.00	-8.28	QP
-									

Note: 1. All readings are Quasi-peak values.
2. Measured = Reading + Antenna Factor + Cable Loss - Amp Factor.
3. The emission levels that ate 20dB below the official limit are not reported.

Note: Emission level  $(dBuV/m) = 20 \log Emission level (uV/m)$ .

 $Corrected \ Reading: Antenna \ Factor + Cable \ Loss + Read \ Level - Preamp \ Factor = Level.$ 

### 5.4.7. Results for Radiated Emissions (1GHz~10th Harmonic)



24°C/56% Env. /Ins: IP Camera EUT: Хру330 DC 5V M/N: Power Rating:

Test Mode: 802.11g Tx2462MHz

Operator: ANDY

Memo: pol:

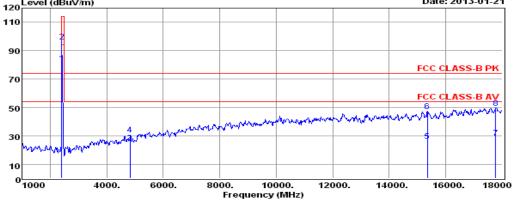
HORIZONTAL

Freq.	Reading	CabLos	AntFac	PreFac	Measured	l Limit	Over	Remark
MHz	dBuV	dB	dB/m	dB	dBuV/m	dBuV/m	dB	
12462.00	83.89	5.15	27.71	37.10	79.65	94.00	-14.35	Average
22462.00	90.51	5.15	27.71	37.10	86.27	114.00	-27.73	Peak
34924.00	20.60	7.75	33.61	36.41	25.55	54.00	-28.45	Average
44924.00	23.18	7.75	33.61	36.41	28.13	74.00	-45.87	Peak
14039.00	10.55	10.34	40.28	35.69	25.48	54.00	-28.52	Average
14039.00	32.18	10.34	40.28	35.69	47.11	74.00	-26.89	Peak
16895.00	8.63	10.97	39.89	34.91	24.58	54.00	-29.42	Average
16895.00	31.68	10.97	39.89	34.91	47.63	74.00	-26.37	Peak

Note: 1. All readings are Quasi-peak values.

2. Measured = Reading + Antenna Factor + Cable Loss - Amp Factor.

3. The emission levels that ate 20dB below the official limit are not repo reported. 120 Level (dBuV/m)



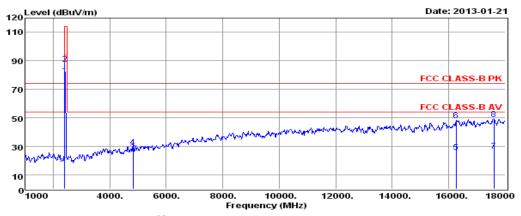
24°C/56% Env. /Ins: EUT: IP Camera M/N: Хру330 Power Rating:

DC 5V 802.11b Tx2412MHz Test Mode:

Operator: ANDY Memo: VERTICAL pol:

Freq.	Reading	CabLos	AntFac	PreFac	Measured	Limit	Over	Remark
MHz	dBuV	dВ	dB/m	dB	dBuV/m	dBuV/m	dB	
12412.00 22412.00 34824.00 44824.00	85.46 100.35 20.18 26.16	5.08 5.08 7.69 7.69	27.86 27.86 33.36 33.36	37.10 37.10 36.43 36.43	24.80 30.78	94.00 114.00 54.00 74.00	-12.70 -17.81 -29.20 -43.22	Average Peak Average Peak
15348.00 15348.00 17762.00 17762.00	13.20 34.44 11.55 32.72	10.50 10.50 11.23 11.23	38.29 38.29 41.70 41.70	35.85 35.85 36.10 36.10	26.14 47.38 28.38 49.55	54.00 74.00 54.00 74.00	-27.86 -26.62 -25.62 -24.45	Average Peak Average Peak

Note: 1. All readings are Quasi-peak values.
2. Measured = Reading + Antenna Factor + Cable Loss - Amp Factor.
3. The emission levels that ate 20dB below the official limit are not reported.



24°C/56% Env. /Ins: EUT: IP Camera M/N: Хру330 Power Rating: DC 5V

Test Mode: 802.11b Tx2412MHz

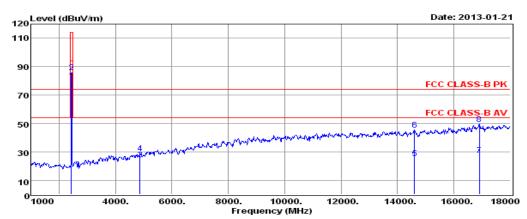
Operator: ANDY

Memo:

pol: HORIZONTAL

Freq.	Reading	CabLos	AntFac	PreFac	Measured	Limit	Over	Remark
MHz	dBuV	dВ	dB/m	dB	dBuV/m	dBuV/m	dB	
12412.00	84.15	5.08	27.86	37.10	79.99	94.00	-14.01	Average
22412.00	91.88	5.08	27.86	37.10	87.72	114.00	-26.28	Peak
34824.00	21.13	7.69	33.36	36.43	25.75	54.00	-28.25	Average
44824.00	24.88	7.69	33.36	36.43	29.50	74.00	-44.50	Peak
16266.00	11.55	10.78	38.57	35.00	25.90	54.00	-28.10	Average
16266.00	33.70	10.78	38.57	35.00	48.05	74.00	-25.95	Peak
17592.00	9.94	11.18	41.35	35.89	26.58	54.00	-27.42	Average
17592.00	32.33	11.18	41.35	35.89	48.97	74.00	-25.03	Peak

- Note: 1. All readings are Quasi-peak values. 2. Measured = Reading + Antenna Factor + Cable Loss Amp Factor. 3. The emission levels that ate 20dB below the official limit are not reported.



24°C/56% Env. /Ins: EUT: IP Camera M/N: Хру330 DC 5V Power Rating:

Test Mode: 802.11b Tx2437MHz

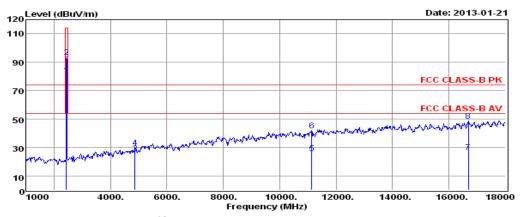
Operator: ANDY

Memo:

VERTICAL

Freq.	Reading	CabLos	AntFac	PreFac	Measured	Limit	Over	Remark
MHz	dBuV	dВ	dB/m	dB	dBuV/m	dBuV/m	dВ	
12437.00	84.36	5.11	27.79	37.10	80.16	94.00	-13.84	Average
22437.00	90.46	5.11	27.79	37.10	86.26	114.00	-27.74	Peak
34874.00	19.69	7.72	33.49	36.42	24.48	54.00	-29.52	Average
44874.00	24.40	7.72	33.49	36.42	29.19	74.00	-44.81	Peak
14600.00	11.64	10.38	39.43	36.18	25.27	54.00	-28.73	Average
14600.00	32.04	10.38	39.43	36.18	45.67	74.00	-28.33	Peak
16895.00	11.51	10.97	39.89	34.91	27.46	54.00	-26.54	Average
16895.00	33.68	10.97	39.89	34.91	49.63	74.00	-24.37	Peak

- Note: 1. All readings are Quasi-peak values.
  2. Measured = Reading + Antenna Factor + Cable Loss Amp Factor.
  3. The emission levels that ate 20dB below the official limit are not reported.



24°C/56% Env. /Ins: EUT: IP Camera M/N: Хру330 Power Rating: DC 5V

Test Mode: 802.11b Tx2437MHz

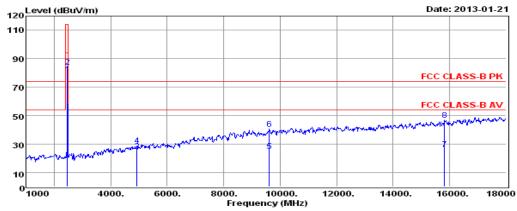
Operator: ANDY

Memo:

HORIZONTAL pol:

Freq.	Reading	CabLos	AntFac	PreFac	Measured	Limit	Over	Remark
MHz	dBuV	dВ	dB/m	dB	dBuV/m	dBuV/m	dB	
12437.00	85.54	5.11	27.79	37.10	81.34	94.00	-12.66	Average
22437.00	98.00	5.11	27.79	37.10	93.80	114.00	-20.20	Peak
34874.00	20.88	7.72	33.49	36.42	25.67	54.00	-28.33	Average
44874.00	25.31	7.72	33.49	36.42	30.10	74.00	-43.90	Peak
11132.00	13.83	10.17	37.89	35.95	25.94	54.00	-28.06	Average
11132.00	29.79	10.17	37.89	35.95	41.90	74.00	-32.10	Peak
16691.00	11.17	10.91	39.46	34.94	26.60	54.00	-27.40	Average
16691.00	32.98	10.91	39.46	34.94	48.41	74.00	-25.59	Peak

- Note: 1. All readings are Quasi-peak values.
  2. Measured = Reading + Antenna Factor + Cable Loss Amp Factor.
  3. The emission levels that ate 20dB below the official limit are not reported.



24°C/56% Env. /Ins: EUT: IP Camera Хру330 DC 5V M/N: Power Rating:

Test Mode: 802.11b Tx2462MHz

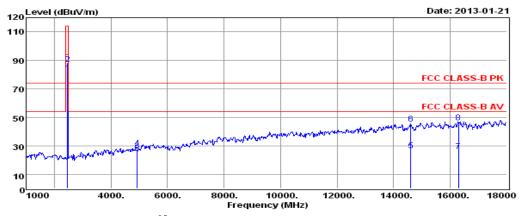
Operator: ANDY

Memo:

VERTICAL pol:

Freq.	Reading	CabLos	AntFac	PreFac	Measured	Limit	Over	Remark
MHz	dBuV	dB	dB/m	dB	dBuV/m	dBuV/m	dB	
12462.00	83.07	5.15	27.71	37.10	78.83	94.00	-15.17	Average
22462.00	88.66	5.15	27.71	37.10	84.42	114.00	-29.58	Peak
34924.00	19.95	7.75	33.61	36.41	24.90	54.00	-29.10	Average
44924.00	24.05	7.75	33.61	36.41	29.00	74.00	-45.00	Peak
59619.00	12.39	9.99	38.02	35.30	25.10	54.00	-28.90	Average
69619.00	27.84	9.99	38.02	35.30	40.55	74.00	-33.45	Peak
15824.00	13.24	10.65	37.65	35.44	26.10	54.00	-27.90	Average
15824.00	33.96	10.65	37.65	35.44	46.82	74.00	-27.18	Peak
15824.00	33.96	10.65	37.65	35.44	46.82	74.00	-27.18	Peak

- Note: 1. All readings are Quasi-peak values.
  2. Measured = Reading + Antenna Factor + Cable Loss Amp Factor.
  3. The emission levels that ate 20dB below the official limit are not reported.



24°C/56% Env. /Ins: EUT: IP Camera M/N: Хру330 Power Rating:

DC 5V 802.11b Tx2462MHz Test Mode:

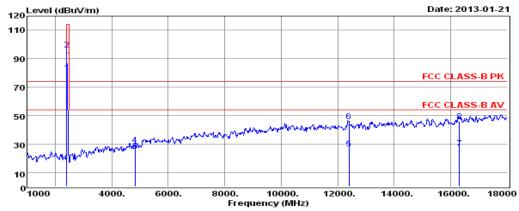
Operator: ANDY

Memo:

HORIZONTAL pol:

Freq.	Reading	CabLos	AntFac	PreFac	Measured	Limit	Over	Remark
MHz	dBuV	dВ	dB/m	dB	dBuV/m	dBuV/m	dB	
12462.00	85.29	5.15	27.71	37.10	81.05	94.00	-12.95	Average
22462.00	91.84	5.15	27.71	37.10	87.60	114.00	-26.40	Peak
34924.00	20.22	7.75	33.61	36.41	25.17	54.00	-28.83	Average
44924.00	23.65	7.75	33.61	36.41	28.60	74.00	-45.40	Peak
14600.00	12.98	10.38	39.43	36.18	26.61	54.00	-27.39	Average
14600.00	32.04	10.38	39.43	36.18	45.67	74.00	-28.33	Peak
16283.00	11.79	10.78	38.61	34.99	26.19	54.00	-27.81	Average
16283.00	32.16	10.78	38.61	34.99	46.56	74.00	-27.44	Peak

- Note: 1. All readings are Quasi-peak values. 2. Measured = Reading + Antenna Factor + Cable Loss Amp Factor.
- 3. The emission levels that ate 20dB below the official limit are not reported.



24°C/56% Env. /Ins: EUT: IP Camera Хру330 DC 5V M/N: Power Rating:

Test Mode: 802.11g Tx2412MHz

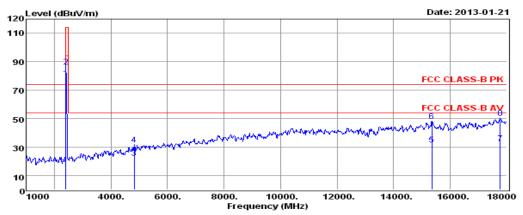
ANDY Operator:

Memo:

VERTICAL pol:

Freq.	Reading	CabLos	AntFac	PreFac	Measured	Limit	Over	Remark
MHz	dBuV	dB	dB/m	dB	dBuV/m	dBuV/m	dB	
12412.00	84.35	5.08	27.86	37.10	80.19	94.00	-13.81	Average
22412.00	100.53	5.08	27.86	37.10	96.37	114.00	-17.63	Peak
34824.00	20.55	7.69	33.36	36.43	25.17	54.00	-28.83	Average
44824.00	24.98	7.69	33.36	36.43	29.60	74.00	-44.40	Peak
12390.00	14.44	10.24	36.92	34.77	26.83	54.00	-27.17	Average
12390.00	33.37	10.24	36.92	34.77	45.76	74.00	-28.24	Peak
16300.00	12.71	10.79	38.65	34.99	27.16	54.00	-26.84	Average
16300.00	31.63	10.79	38.65	34.99	46.08	74.00	-27.92	Peak

- Note: 1. All readings are Quasi-peak values.
  2. Measured = Reading + Antenna Factor + Cable Loss Amp Factor.
  3. The emission levels that ate 20dB below the official limit are not reported.



Env. /Ins: 24℃/56% EUT: IP Camera Хру330 DC 5V M/N: Power Rating:

Test Mode: 802.11g Tx2412MHz

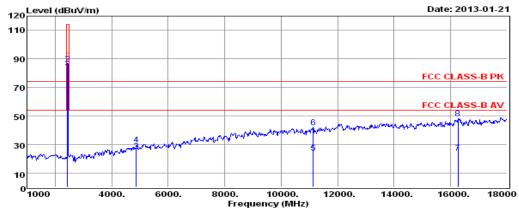
Operator: ANDY

Memo:

HORIZONTAL pol:

Freq.	Reading	CabLos	AntFac	PreFac	Measured	Limit	Over	Remark
MHz	dBuV	dB	dB/m	dB	dBuV/m	dBuV/m	dB	
12412.00	82.83	5.08	27.86	37.10	78.67	94.00	-15.33	Average
22412.00	90.57	5.08	27.86	37.10	86.41	114.00	-27.59	Peak
34824.00	17.54	7.69	33.36	36.43	22.16	54.00	-31.84	Average
44824.00	27.16	7.69	33.36	36.43	31.78	74.00	-42.22	Peak
15348.00	18.60	10.50	38.29	35.85	31.54	54.00	-22.46	Average
15348.00	35.44	10.50	38.29	35.85	48.38	74.00	-25.62	Peak
17762.00	15.64	11.23	41.70	36.10	32.47	54.00	-21.53	Average
17762.00	33.72	11.23	41.70	36.10	50.55	74.00	-23.45	Peak

- Note: 1. All readings are Quasi-peak values.
  2. Measured = Reading + Antenna Factor + Cable Loss Amp Factor.
  3. The emission levels that ate 20dB below the official limit are not reported.



24°C/56% Env. / Ins: EUT: IP Camera M/N: Хру330 Power Rating:

DC 5V 802.11g Tx2437MHz Test Mode:

Operator: ANDY

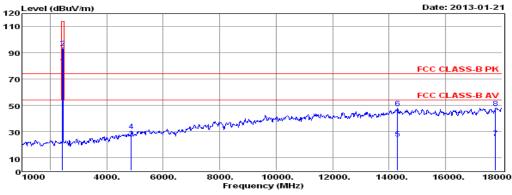
Memo:

pol: VERTICAL

Freq.	Reading	CabLos	AntFac	PreFac	Measured	Limit	Over	Remark
MHz	dBuV	dВ	dB/m	dВ	dBuV/m	dBuV/m	dB	
12437.00	85.90	5.11	27.79	37.10	81.70	94.00	-12.30	Average
22437.00	90.71	5.11	27.79	37.10	86.51	114.00	-27.49	Peak
34874.00	20.82	7.72	33.49	36.42	25.61	54.00	-28.39	Average
44874.00	24.88	7.72	33.49	36.42	29.67	74.00	-44.33	Peak
11132.00	12.05	10.17	37.89	35.95	24.16	54.00	-29.84	Average
11132.00	29.79	10.17	37.89	35.95	41.90	74.00	-32.10	Peak
16266.00	9.96	10.78	38.57	35.00	24.31	54.00	-29.69	Average
16266.00	33.70	10.78	38.57	35.00	48.05	74.00	-25.95	Peak

Note: 1. All readings are Quasi-peak values.

- Measured = Reading + Antenna Factor + Cable Loss Amp Factor.
   The emission levels that ate 20dB below the official limit are not reported.



Env. /Ins: 24°C/56% IP Camera M/N: Power Rating:

лууз30 DC 5V 802.11g Тx2437MHz ANDY Test Mode:

Operator: Memo:

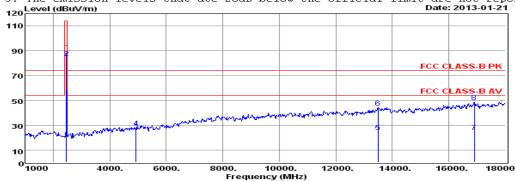
pol: HORIZONTAL

Freq.	Reading	CabLos	AntFac	PreFac	Measured	l Limit	Over	Remark
MHz	dBuV	dВ	dB/m	dВ	dBuV/m	dBuV/m	dB	
12437.00 22437.00 34874.00 44874.00 14294.00	84.59 97.77 19.67 25.72	5.11 5.11 7.72 7.72 10.36	27.79 27.79 33.49 33.49 39.89	37.10 37.10 36.42 36.42 35.91	80.39 93.57 24.46 30.51 24.46	94.00 114.00 54.00 74.00	-13.61 -20.43 -29.54 -43.49 -29.54	Average Peak Average Peak Average
14294.00 14294.00 17762.00	33.57 8.33 30.72	10.36 11.23 11.23	39.89 41.70 41.70	35.91 36.10 36.10	47.91 25.16 47.55	74.00 54.00 74.00	-26.09 -28.84 -26.45	Peak Average Peak

Note: 1. All readings are Quasi-peak values.

2. Measured = Reading + Antenna Factor + Cable Loss - Amp Factor.

3. The emission levels that ate 20dB below the official limit are not reported by Date: 2013-01-21 reported.



24°C/56% Env. /Ins: IP Camera Xpy330 Power Rating:

DC 5V 802.11g Tx2462MHz ANDY Test Mode: Operator:

Memo:

pol: VERTICAL

Freq.	Reading	CabLos	AntFac	PreFac	Measured	Limit	Over	Remark
MHz	dBuV	dВ	dB/m	dВ	dBuV/m	dBuV/m	dВ	
12462.00	87.07	5.15	27.71	37.10	82.83	94.00	-11.17	Average
22462.00	88.46	5.15	27.71	37.10	84.22	114.00	-29.78	Peak
34924.00	20.22	7.75	33.61	36.41	25.17	54.00	-28.83	Average
44924.00	23.35	7.75	33.61	36.41	28.30	74.00	-45.70	Peak
13495.00	8.53	10.31	41.08	35.32	24.60	54.00	-29.40	Average
13495.00	28.10	10.31	41.08	35.32	44.17	74.00	-29.83	Peak
16895.00	8.72	10.97	39.89	34.91	24.67	54.00	-29.33	Average
16895.00	32.68	10.97	39.89	34.91	48.63	74.00	-25.37	Peak

Note: 1. All readings are Quasi-peak values. 2. Measured = Reading + Antenna Factor + Cable Loss - Amp Factor. 3. The emission levels that ate 20dB below the official limit are not reported.

Notes: 1. Measuring frequencies from 9k~10th harmonic (ex. 26GHz), No emission found between lowest internal used/generated frequency to 30 MHz.

- 2. Radiated emissions measured in frequency range from 9k~10th harmonic (ex. 26GHz) were made with an instrument using Peak detector mode.
- 3. Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB. No emission found above 18GHz.

## 5.5. Conducted Spurious Emissions

### 5.5.1. Standard Applicable

According to §15.247 (d): Output power was measured based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.

#### 5.5.2. Measuring Instruments and Setting

Please refer to section 6 of equipments list in this report. The following table is the setting of the spectrum analyzer.

Spectrum Parameter	Setting
Detector	Peak
Attenuation	Auto
RB / VB (Emission in restricted band)	100KHz/100KHz
RB / VB (Emission in non-restricted band)	100KHz/100KHz

#### 5.5.3. Test Procedures

The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 100 kHz

The spectrum from 30 MHz to 26.5 GHz is investigated with the transmitter set to the lowest, middle, and highest channels.

Preliminary tests on individual chains, and on all chains with a combiner, were performed. The worst-case configuration was with a combiner, therefore final test were performed with all chains feeding a combiner.

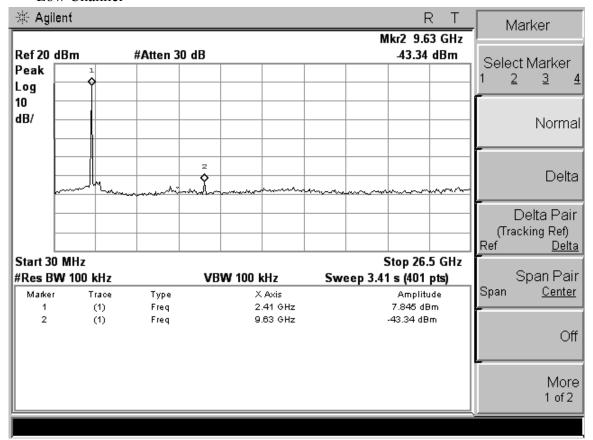
#### 5.5.4. Test Setup Layout

This test setup layout is the same as that shown in section 5.4.4.

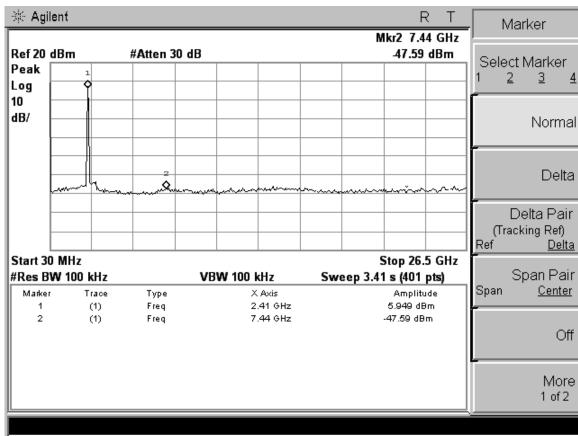
### 5.5.5. Test Results of Conducted Spurious Emissions

802.11b

#### Low Channel

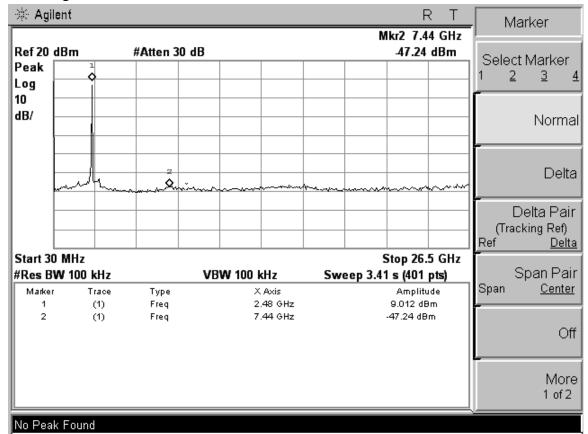


#### Middle Channel



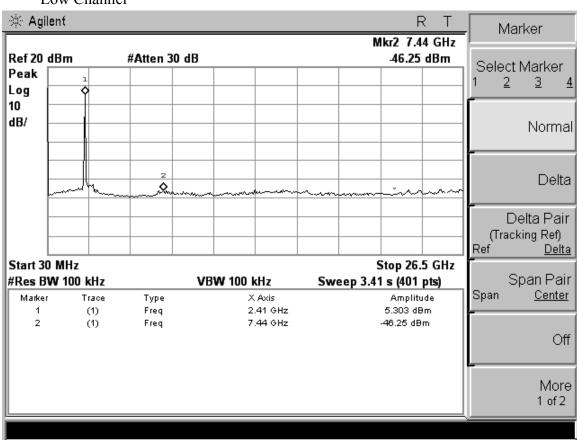
FCC ID: X4Y330U1

#### High Channel

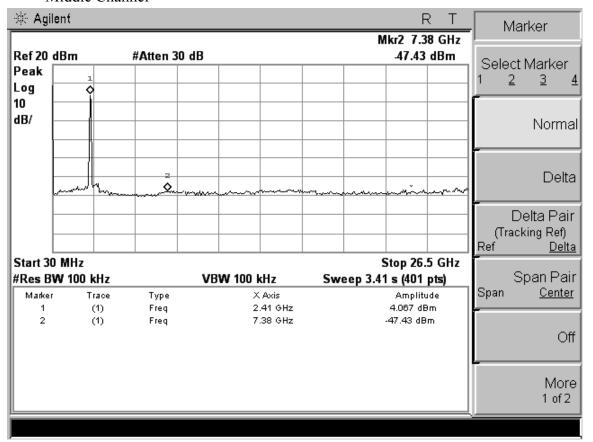


802.11g

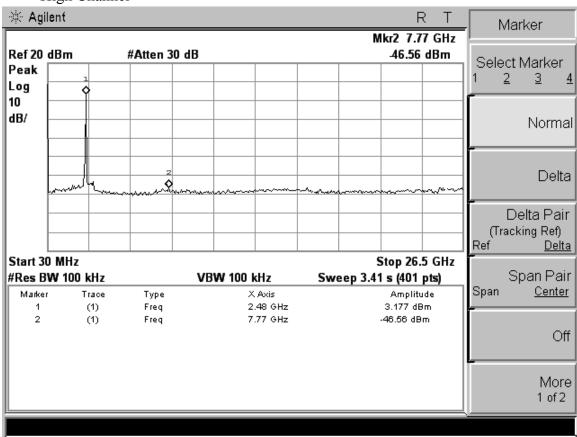
#### Low Channel



#### Middle Channel

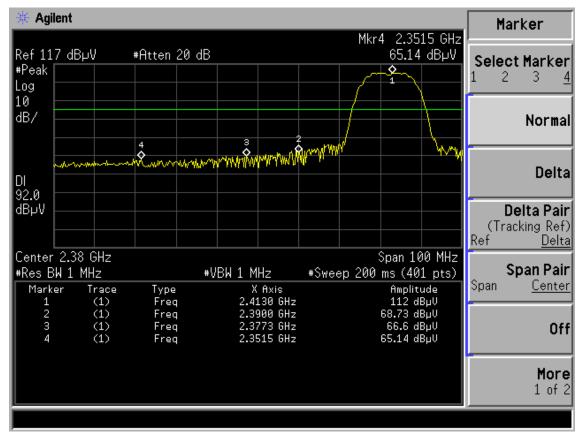


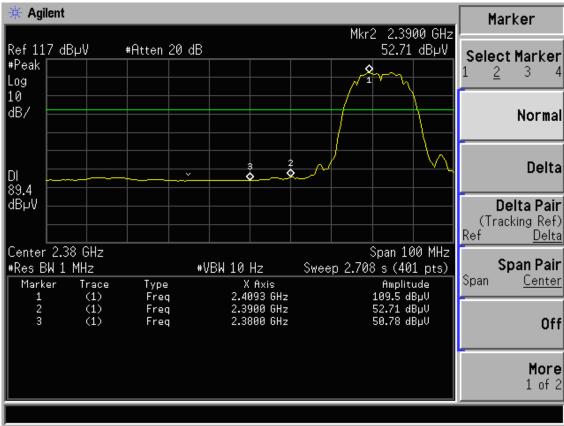
## High Channel



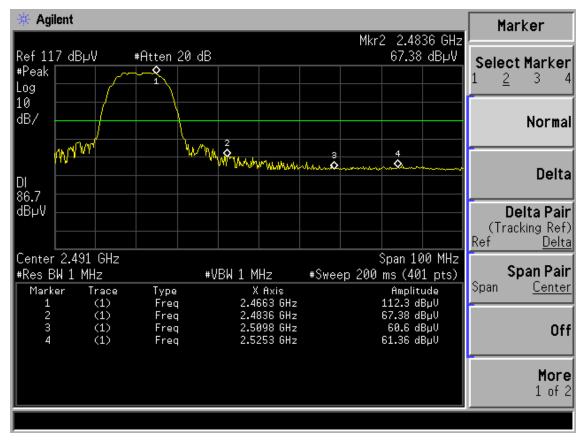
#### 5.5.6. Test Results of Band Edge Emissions

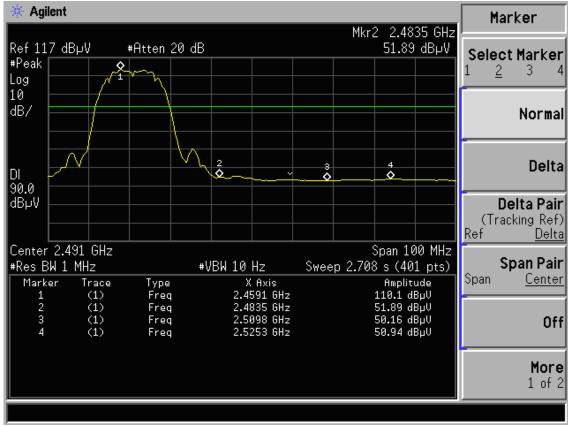
#### 802.11b Low Channel



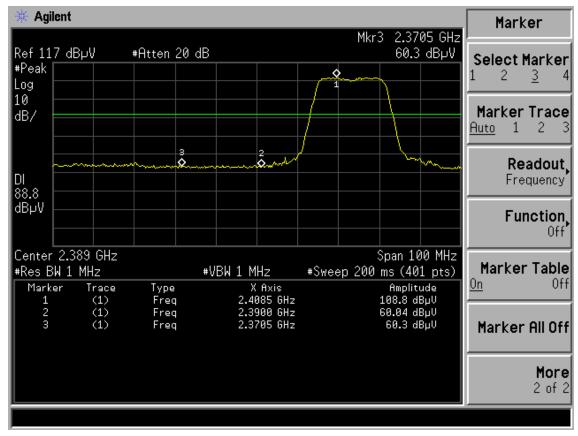


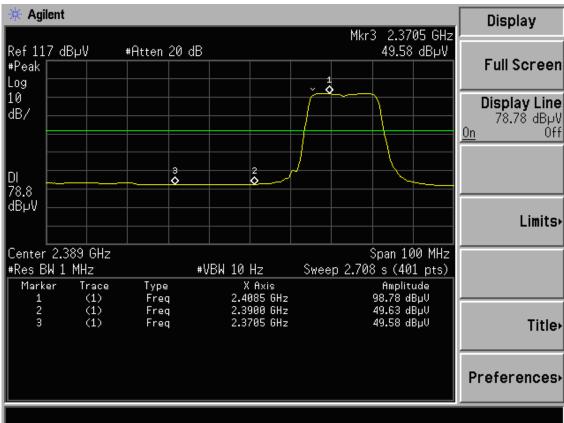
## 802.11b High Channel



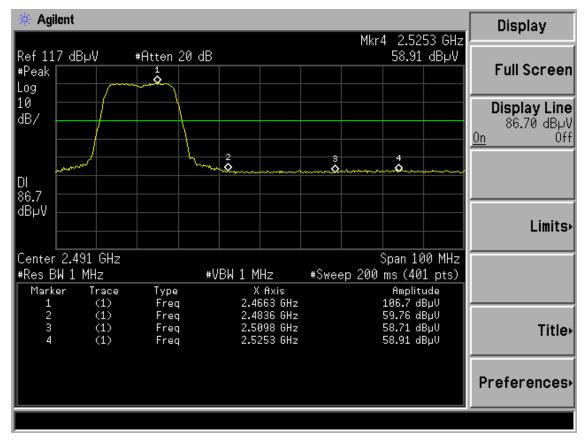


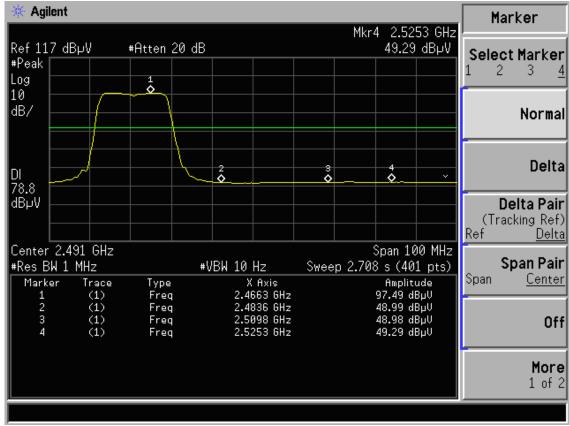
## 802.11g Low Channel





## 802.11g High Channel





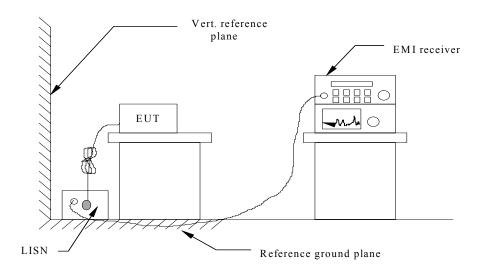
## 5.6. Power line conducted emissions

## 5.6.1 Standard Applicable

According to §15.207 (a): For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed 250 microvolts (The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz). The limits at specific frequency range is listed as follows:

Frequency Range	Limits	(dBμV)
(MHz)	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5	56	46
5 to 30	60	50

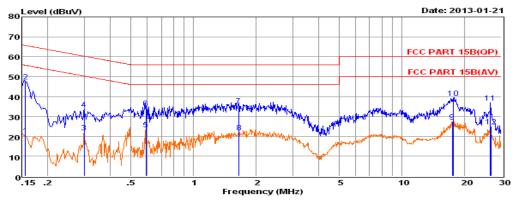
#### 5.6.2 Block Diagram of Test Setup



## 5.6.3 Test Results

PASS.

The test data please refer to following page.



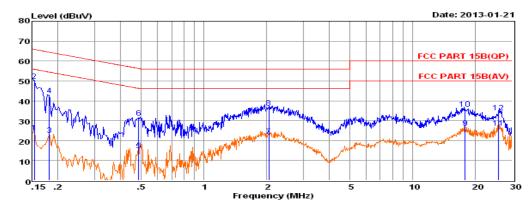
Env. Ins: 24\*/56% EUT: M/N: IP Camera Xpy330

DC 5V 802.11b Tx2412MHz ANDY

Power Rating: Test Mode: Operator: Memo: Pol: NEUTRAL

	Freq	Reading	LisnFac	CabLos	Measured	Limit	0ver	Remark
	MHz	dBuV	dB	dВ	dBuV	dBuV	dВ	
1 2 3 4 5 6 7 8 9	0.16 0.16 0.30 0.30 0.59 0.59 1.64 1.65	10.85 37.99 12.23 23.85 13.85 24.57 25.75 12.42 17.61	9.68 9.60 9.60 9.63 9.63 9.63 9.63	0.02 0.02 0.03 0.03 0.04 0.04 0.05 0.05	20.55 47.69 21.86 33.48 23.52 34.24 35.43 22.10 27.50	55.65 65.65 50.28 60.28 46.00 56.00 46.00 50.00	-35.10 -17.96 -28.42 -26.80 -22.48 -21.76 -20.57 -23.90 -22.50	Average QP Average QP Average QP QP QP Average Average
10 11 12	17.57 26.56 26.70	29.37 27.02 14.94	9.79 9.83 9.83	0.11 0.13 0.13	39.27 36.98 24.90	60.00 60.00 50.00	-20.73 -23.02 -25.10	QP QP Average

Remarks: 1. Measured = Reading + Lisn Factor +Cable Loss.
2. The emission levels that are 20dB below the official limit are not reported.

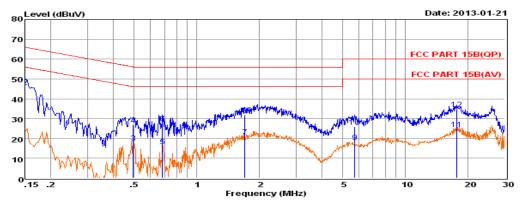


Env. Ins: EUT: M/N: 24\*/56% IP Camera Xpy330 DC 5V 802.11b Tx2412MHz Power Rating: Test Mode: ANDY

Operator: Memo: Pol: LINE

	Freq	Reading	LisnFac	CabLos	Measured	Limit	0ver	Remark
	MHz	dBu∀	dB	dB	dBu∀	dBu∀	dB	
1	0.15	14.60	9.58	0.02	24.20	55.78	-31.58	Average
2	0.15	40.24	9.58	0.02	49.84	65.78	-15.94	QP
3	0.18	13.15	9.61	0.02	22.78	54.42	-31.64	Average
4	0.18	33.11	9.61	0.02	42.74	64.42	-21.68	QP
5	0.49	5.50	9.62	0.04	15.16	46.23	-31.07	Average
6	0.49	21.78	9.62	0.04	31.44	56.23	-24.79	QP
7	2.04	12.51	9.64	0.05	22.20	46.00	-23.80	Average
8	2.04	26.82	9.64	0.05	36.51	56.00	-19.49	QP
9	17.85	16.49	9.74	0.11	26.34	50.00	-23.66	Average
10	17.85	26.07	9.74	0.11	35.92	60.00	-24.08	QP
11	25.86	16.55	9.71	0.13	26.39	50.00	-23.61	Average
12	25.86	24.23	9.71	0.13	34.07	60.00	-25.93	QP

Remarks: 1. Measured = Reading + Lisn Factor +Cable Loss.
2. The emission levels that are 20dB below the official limit are not reported.



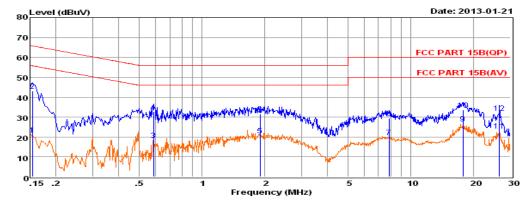
24\*/56% IP Camera Xpy330 DC 5V 802.11b Tx2437MHz AMDY Env. Ins: EUT: M/N: Power Rating:

Test Mode: Operator:

Memo: LINE

	Freq	Reading	LisnFac	CabLos	Measured	Limit	0ver	Remark
	MHz	dBu∀	dB	dВ	dBuV	dBuV	dB	
1	0.15	13.98	9.57	0.02	23.57	56.00	-32.43	Average
2	0.15	36.50	9.57	0.02	46.09	66.00	-19.91	QP
3	0.50	8.26	9.62	0.04	17.92	46.05	-28.13	Average
4	0.50	17.03	9.62	0.04	26.69	56.05	-29.36	QP
5	0.69	6.34	9.64	0.04	16.02	46.00	-29.98	Average
6	0.69	18.04	9.64	0.04	27.72	56.00	-28.28	QP
7	1.70	11.17	9.64	0.05	20.86	46.00	-25.14	Average
8	1.70	22.02	9.64	0.05	31.71	56.00	-24.29	QP
9	5.71	8.40	9.66	0.06	18.12	50.00	-31.88	Average
10	5.71	16.25	9.66	0.06	25.97	60.00	-34.03	QP
11	17.57	14.69	9.74	0.11	24.54	50.00	-25.46	Average
12	17.57	24.97	9.74	0.11	34.82	60.00	-25.18	QP

Remarks: 1. Measured = Reading + Lisn Factor +Cable Loss.
2. The emission levels that are 20dB below the official limit are not reported.



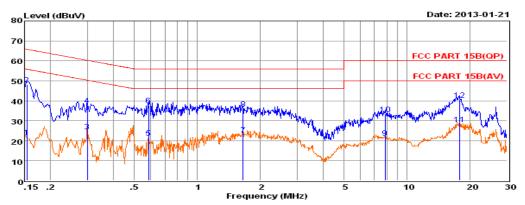
24\*/56% IP Camera Xpy330 DC 5V 802.11b Tx2437MHz Env. Ins: EUT: M/N: Power Rating: Test Mode:

Operator: ANDY

Memo: Pol: NEUTRAL

	Freq	Reading	LisnFac	CabLos	Measured	Limit	0ver	Remark
	MHz	dBu∀	dB	dВ	dBu∀	dBu∀	dB	
1	0.15	11.31	9.69	0.02	21.02	55.78	-34.76	Average
2	0.15	33.43	9.69	0.02	43.14	65.78	-22.64	QP
3	0.59	8.76	9.62	0.04	18.42	46.00	-27.58	Average
4	0.59	23.00	9.62	0.04	32.66	56.00	-23.34	QP
5	1.90	11.13	9.63	0.05	20.81	46.00	-25.19	Average
6	1.90	21.81	9.63	0.05	31.49	56.00	-24.51	QP
7	7.85	10.26	9.70	0.07	20.03	50.00	-29.97	Average
8	7.85	19.53	9.70	0.07	29.30	60.00	-30.70	QP
9	17.75	16.93	9.79	0.11	26.83	50.00	-23.17	Average
10	17.75	23.60	9.79	0.11	33.50	60.00	-26.50	QP
11	26.56	13.16	9.83	0.13	23.12	50.00	-26.88	Average
12	26.56	22.02	9.83	0.13	31.98	60.00	-28.02	QP

Remarks: 1. Measured = Reading + Lisn Factor +Cable Loss.
2. The emission levels that are 20dB below the official limit are not reported.



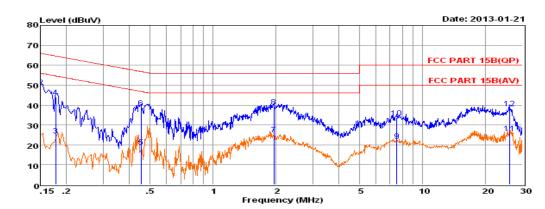
24\*/56% IP Camera Xpy330 DC 5V 802.11b Tx2462MHz Env. Ins: EUT: M/N:

Power Rating: Test Mode: ANDY

Operator: Memo: Pol: NEUTRAL

	Freq	Reading	LisnFac	CabLos	Measured	Limit	0ver	Remark
	MHz	dBu∀	dB	dВ	dBuV	dBu∀	dB	
1	0.15	12.10	9.69	0.02	21.81	55.78	-33.97	Average
2	0.15	38.43	9.69	0.02	48.14	65.78	-17.64	QP
3	0.30	15.02	9.60	0.03	24.65	50.28	-25.63	Average
4	0.30	28.23	9.60	0.03	37.86	60.28	-22.42	QP
5	0.59	11.76	9.62	0.04	21.42	46.00	-24.58	Average
6	0.59	28.00	9.62	0.04	37.66	56.00	-18.34	QP
7	1.65	13.23	9.63	0.05	22.91	46.00	-23.09	Average
8	1.65	26.32	9.63	0.05	36.00	56.00	-20.00	QP
9	7.85	11.56	9.70	0.07	21.33	50.00	-28.67	Average
10	7.85	23.53	9.70	0.07	33.30	60.00	-26.70	QP
11	17.75	18.29	9.79	0.11	28.19	50.00	-21.81	Average
12	17.75	30.60	9.79	0.11	40.50	60.00	-19.50	QP

Remarks: 1. Measured = Reading + Lisn Factor +Cable Loss.
2. The emission levels that are 20dB below the official limit are not reported.

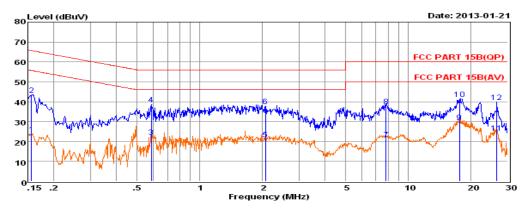


24\*/56% IP Camera Xpy330 DC 5V 802.11b Tx2462MHz ANDY Env. Ins: EUT: Power Rating: Test Mode: Operator: Memo:

LINE

	Freq	Reading	LisnFac	CabLos	Measured	Limit	0ver	Remark
	MHz	dBuV	dB	dB	dBuV	dBu∀	dB	
1 2 3 4 5 6 7 8	0.15 0.15 0.18 0.18 0.45 0.45 1.95	16.77 39.50 15.19 34.41 9.47 28.89 15.67 29.42	9.57 9.57 9.61 9.61 9.62 9.62 9.64 9.64	0.02 0.02 0.02 0.02 0.04 0.04 0.05	26.36 49.09 24.82 44.04 19.13 38.55 25.36 39.11	56.00 66.00 54.59 64.59 46.80 56.80 46.00	-29.64 -16.91 -29.77 -20.55 -27.67 -18.25 -20.64 -16.89	Average QP Average QP Average QP Average QP
9 10 11 12	7.53 7.53 26.00 26.00	12.20 23.76 15.96 28.42	9.68 9.68 9.71 9.71	0.07 0.07 0.13 0.13	21.95 33.51 25.80 38.26	50.00 60.00 50.00 60.00	-28.05 -26.49 -24.20 -21.74	Average QP Average QP

Remarks: 1. Measured = Reading + Lisn Factor +Cable Loss.
2. The emission levels that are 20dB below the official limit are not reported.



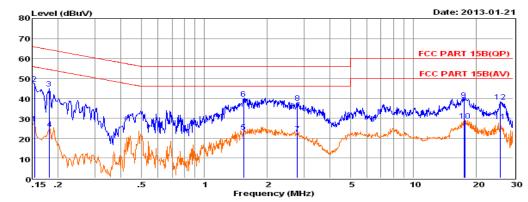
Env. Ins: EUT: M/N: 24\*/56% IP Camera

Xpy330 DC 5V 802.11g Tx2412MHz Power Rating: Test Mode: ANDY

Operator: Memo: Pol: NEUTRAL

	Freq	Reading	LisnFac	CabLos	Measured	Limit	0ver	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1 2 3 4 5 6 7 8 9	0.16 0.16 0.59 0.59 2.07 2.07 7.81 7.81 17.57	14.20 33.85 12.70 29.00 11.43 28.02 11.49 28.12 19.84 31.37	9.68 9.62 9.62 9.63 9.63 9.70 9.70	0.02 0.02 0.04 0.04 0.05 0.05 0.07 0.07 0.11 0.11	23.90 43.55 22.36 38.66 21.11 37.70 21.26 37.89 29.74 41.27	55.65 65.65 46.00 56.00 46.00 56.00 50.00 60.00 50.00	-31.75 -22.10 -23.64 -17.34 -24.89 -18.30 -28.74 -22.11 -20.26 -18.73	Average QP Average QP Average QP Average QP Average QP
11 12	26.56 26.56	14.34 30.02	9.83 9.83	0.13 0.13	24.30 39.98	50.00 60.00	-25.70 -20.02	Average QP

Remarks: 1. Measured = Reading + Lisn Factor +Cable Loss.
2. The emission levels that are 20dB below the official limit are not reported.

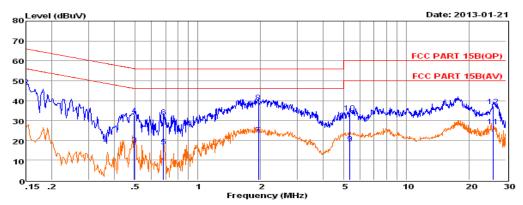


Env. Ins: EUT: M/N: 24\*/56% IP Camera Tr Camera Xpy330 DC 5V 802.11g Tx2412MHz ANDY Power Rating: Test Mode: Operator:

Memo: Pol: LINE

	Freq	Reading	LisnFac	CabLos	Measured	Limit	0ver	Remark
	MHz	dBu∀	dB	dB	dBuV	dBu∀	dB	
1 2 3 4 5 6 7 8 9	0.15 0.15 0.18 0.18 1.54 1.54 2.78 2.78	17.90 37.63 35.19 15.11 13.41 30.02 12.73 27.99 29.48	9.58 9.58 9.61 9.64 9.64 9.64	0.02 0.02 0.02 0.02 0.05 0.05 0.05	27.50 47.23 44.82 24.74 23.10 39.71 22.42 37.68	55.78 65.78 64.46 54.42 46.00 56.00 46.00	-28.28 -18.55 -19.64 -29.68 -22.90 -16.29 -23.58 -18.32 -20.67	Average QP QP Average Average QP Average QP
10 11 12	17.47 17.57 26.00 26.00	18.97 18.78 28.42	9.74 9.74 9.71 9.71	0.11 0.13 0.13	39.33 28.82 28.62 38.26	60.00 50.00 50.00 60.00	-20.67 -21.18 -21.38 -21.74	QP Average Average QP

Remarks: 1. Measured = Reading + Lisn Factor +Cable Loss.
2. The emission levels that are 20dB below the official limit are not reported.



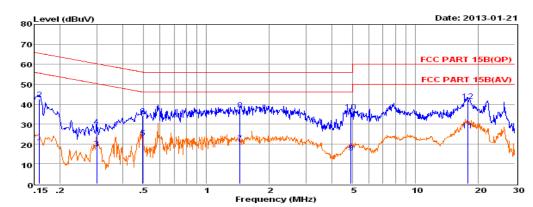
Env. Ins: EUT: M/N: 24\*/56% IP Camera

Th Gamel 1 Xpy330 DC 5V 802.11g Tx2437MHz ANDY Power Rating: Test Mode: Operator:

Memo: Pol: LINE

	Freq	Reading	LisnFac	CabLos	Measured	Limit	0ver	Remark
	MHz	dBu∀	dB	dB	dBuV	dBu∀	dB	
1	0.15	13.98	9.57	0.02	23.57	56.00	-32.43	Average
2	0.15	37.50	9.57	0.02	47.09	66.00	-18.91	QP
3	0.50	8.26	9.62	0.04	17.92	46.05	-28.13	Average
4	0.50	23.03	9.62	0.04	32.69	56.05	-23.36	QP
5	0.69	7.34	9.64	0.04	17.02	46.00	-28.98	Average
6	0.69	22.04	9.64	0.04	31.72	56.00	-24.28	QP
7	1.95	13.17	9.64	0.05	22.86	46.00	-23.14	Average
8	1.95	29.42	9.64	0.05	39.11	56.00	-16.89	QP
9	5.36	8.70	9.66	0.06	18.42	50.00	-31.58	Average
10	5.36	24.27	9.66	0.06	33.99	60.00	-26.01	QP
11	26.00	17.20	9.71	0.13	27.04	50.00	-22.96	Average
12	26.00	27.42	9.71	0.13	37.26	60.00	-22.74	QP

Remarks: 1. Measured = Reading + Lisn Factor +Cable Loss.
2. The emission levels that are 20dB below the official limit are not reported.

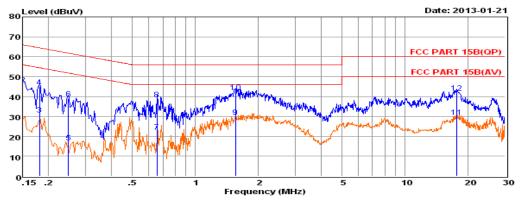


Env. Ins: 24\*/56% 24,755% IP Camera Xpy330 DC 5V 802.11g Tx2437MHz ANDY EUT: M/N: Power Rating: Test Mode: Operator:

Memo: Pol: NEUTRAL

	Freq	Reading	LisnFac	CabLos	Measured	Limit	0ver	Remark
	MHz	dBuV	dB	dB	dBu∀	dBu∀	dВ	
1	0.16	9.19	9.68	0.02	18.89	55.52	-36.63	Average
2	0.16	32.92	9.68	0.02	42.62	65.52	-22.90	QP
3	0.30	8.31	9.60	0.03	17.94	50.28	-32.34	Average
4	0.30	19.23	9.60	0.03	28.86	60.28	-31.42	QP
5	0.50	13.51	9.62	0.04	23.17	46.05	-22.88	Average
6	0.50	24.44	9.62	0.04	34.10	56.05	-21.95	QP
7	1.45	10.71	9.63	0.05	20.39	46.00	-25.61	Average
8	1.45	27.37	9.63	0.05	37.05	56.00	-18.95	QP
9	4.93	5.90	9.66	0.06	15.62	46.00	-30.38	Average
10	4.93	26.49	9.66	0.06	36.21	56.00	-19.79	QP
11	17.75	16.93	9.79	0.11	26.83	50.00	-23.17	Average
12	17.75	31.60	9.79	0.11	41.50	60.00	-18.50	QP

Remarks: 1. Measured = Reading + Lisn Factor +Cable Loss.
2. The emission levels that are 20dB below the official limit are not reported.



Env. Ins: 24\*/56% EUT: IP Camera M/N: Xpy330

 Power Rating:
 DC 5V

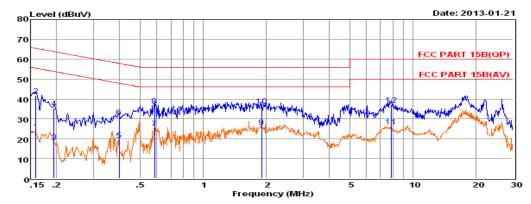
 Test Mode:
 802.11g Tx2462MHz

 Operator:
 ANDY

Memo: Pol: LINE

	Freq	Reading	LisnFac	CabLos	Measured	Limit	0ver	Remark
	MHz	dBuV	dB	dB	dBu∀	dBu∀	dВ	
1 2 3 4 5 6 7 8	0.15 0.15 0.18 0.18 0.25 0.25 0.66 0.66	36.77 36.50 21.39 35.19 7.21 29.23 12.61 29.09 20.09	9.57 9.61 9.61 9.63 9.63 9.64 9.64	0.02 0.02 0.02 0.02 0.03 0.03 0.04 0.04	46.36 46.09 31.02 44.82 16.87 38.89 22.29 38.77 29.78	56.00 66.00 54.46 64.46 51.82 61.82 46.00 56.00	-9.64 -19.91 -23.44 -19.64 -34.95 -22.93 -23.71 -17.23 -16.22	Average QP Average QP Average QP Average QP Average
10 11 12	1.55 17.57 17.57	32.44 19.92 31.97	9.64 9.74 9.74	0.05 0.11 0.11	42.13 29.77 41.82	56.00 50.00 60.00	-13.87 -20.23 -18.18	QP Average QP

Remarks: 1. Measured = Reading + Lisn Factor +Cable Loss.
2. The emission levels that are 20dB below the official limit are not reported.



Env. Ins: 24\*/56%
EUT: IP Camera
M/N: Xpy330
Power Rating: DC 5V
Test Mode: 802.11g Tx2462MHz
Operator: ANDY
Memo:
Pol: NEUTRAL

	Freq	Reading	LisnFac	CabLos	Measured	Limit	0ver	Remark
	MHz	dBu∀	dB	dB	dBu∀	dBuV	dB	
1	0.16	14.19	9.68	0.02	23.89	55.52	-31.63	Average
2	0.16	31.92	9.68	0.02	41.62	65.52	-23.90	QP
3	0.19	8.75	9.60	0.02	18.37	53.84	-35.47	Average
4	0.19	25.66	9.60	0.02	35.28	63.84	-28.56	QP
5	0.40	9.54	9.61	0.04	19.19	47.90	-28.71	Average
6	0.40	21.28	9.61	0.04	30.93	57.90	-26.97	QP
7	0.59	15.76	9.62	0.04	25.42	46.00	-20.58	Average
8	0.59	27.00	9.62	0.04	36.66	56.00	-19.34	QP
9	1.90	16.25	9.63	0.05	25.93	46.00	-20.07	Average
10	1.90	26.81	9.63	0.05	36.49	56.00	-19.51	QP
11	7.85	16.26	9.70	0.07	26.03	50.00	-23.97	Average
12	7.85	27.53	9.70	0.07	37.30	60.00	-22.70	QP

Remarks: 1. Measured = Reading + Lisn Factor +Cable Loss.
2. The emission levels that are 20dB below the official limit are not reported.

## 5.7. Antenna Requirements

#### 5.7.1. Standard Applicable

According to § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

#### 5.7.2. Antenna Construction

Section 15.203 of the rules states that the subject device must meet at least one of the following criteria:

- (a) Antenna must be permanently attached to the unit.
- (b) Antenna must use a unique type of connector to attach to the EUT.
- (c) Unit must be professionally installed. Installer shall be responsible for verifying that the correct antenna is employed with the unit.

#### 5.7.3. Results

The antenna used for this product is antenna with SMA connector (see EUT photo) that no antenna other than that furnished by the responsible party shall be used with the device, The maximum peak gain of this antenna is only 2dBi.

## 5.8. Deviation to test specifications

[NONE]

# **6. LIST OF MEASURING EQUIPMENTS**

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Cal Date	<b>Due Date</b>
EMC Receiver	R&S	ESCS 30	100174	9kHz – 2.75GHz	June 18,2012	June 17,2013
LISN	MESS Tec	NNB-2/16Z	99079	9KHz-30MHz	June 18,2012	June 17,2013
LISN (Support Unit)	EMCO	3819/2NM	9703-1839	9KHz-30MHz	June 18,2012	June 17,2013
RF Cable-CON	UTIFLEX	3102-26886-4	CB049	9KHz-30MHz	June 29,2012	June 28,2013
ISN	SCHAFFNER	ISN ST08	21653	9KHz-30MHz	June 18,2012	June 17,2013
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03СН03-НҮ	30M-1GHz 3m	June 18,2012	June 17,2013
Amplifier	SCHAFFNER	COA9231A	18667	9kHz-2GHzz	June 18,2012	June 17,2013
Amplifier	Agilent	8449B	3008A02120	1GHz-26.5GHz	June 18,2012	June 17,2013
Amplifier	MITEQ	AMF-6F-260400	9121372	26.5GHz-40GHz	June 18,2012	June 17,2013
Spectrum Analyzer	Agilent	E4446A	MY41440289	9k-26.5GHz	June 18,2012	June 17,2013
Spectrum Analyzer	Agilent	E4407B	MY41440292	9k-26.5GHz	June 18,2012	June 17,2013
Loop Antenna	R&S	HFH2-Z2	860004/001	9k-30MHz	July 07,2012	July 06,2013
By-log Antenna	SCHAFFNER	CBL 6112D	22237	30MHz-1GHz	July 07,2012	July 06,2013
Horn Antenna	EMCO	3115	4580	1GHz-18GHz	July 07,2012	July 06,2013
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	15GHz-40GHz	July 07,2012	July 06,2013
RF Cable-R03m	Jye Bao	RG142	CB021	30MHz-1GHz	June 29,2012	June 28,2013
RF Cable-HIGH	SUHNER	SUCOFLEX 106	03CH03-HY	1GHz-40GHz	June 29,2012	June 28,2013
Spectrum Meter	R&S	FSP 30	100023	9kHz-30GHz	June 25,2012	June 24,2013
Power Meter	R&S	NRVS	100444	DC-40GHz	June 25,2012	June 24,2013
Power Sensor	R&S	NRV-Z51	100458	DC-30GHz	June 18,2012	June 17,2013
Power Sensor	R&S	NRV-Z32	10057	30MHz-6GHz	June 18,2012	June 17,2013
AC Power Source	НРС	HPA-500E	HPA-9100024	AC 0~300V	June 25,2012	June 24,2013
DC power Soure	GW	GPC-6030D	C671845	DC 1V-60V	June 25,2012	June 24,2013
Temp. and Humidigy	Giant Force	GTH-225-20-S	MAB0103-00	N/A	June 18,2012	June 17,2013
RF CABLE-1m	JYE Bao	RG142	CB034-1m	20MHz-7GHz	June 29,2012	June 28,2013
RF CABLE-2m	JYE Bao	RG142	CB)35-2m	20MHz-1GHz	June 29,2012	June 28,2013
Vector signal Generator	R&S	SMU200A	102098	100kHz~6GHz	June 25,2012	June 24,2013
Signal Generator	R&S	SMR40	10016	10MHz~40GHa	June 25,2012	June 24,2013
Oscilloscope	Tektonix	TDS380	B016197	400MHz/2GRS	June 18,2012	June 17,2013

## 7. MANUFACTURER/ APPROVAL HOLDER DECLARATION

The following identical model(s):


Belong to the tested device:

Product description : IP Camera

Model name : Xpy330

No additional models were tested.

-----THE END OF REPORT-----