# FCC PART 15 SUBPART B

# MEASUREMENT AND TEST REPORT

For

# Nexxt Solutions

| | |
|---|---|
| **Product description:** | **IP Camera** |
| **Model No.:** | **XPY310** |
| **Supplementary Model:** | **N/A** |
| **FCC ID:** | **X4Y310** |


**Prepared for:** **Nexxt Solutions**

3505 NW 107th Ave, Miami, Fl., 33178, USA

**Prepared by:** **Bontek Compliance Laboratory Co., Ltd**

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**Report No.:** BCT12KR-2200E-1

**Issue Date:** January 19, 2013

**Test Date:** November 26, 2012~January 19, 2013

**Tested by:** Lion Cai

**Reviewed by:** Kendy Wang

**Approved by:** Tony Wu

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# 1 - GENERAL INFORMATION

## 1.1 Product Description for Equipment Under Test (EUT)

Client Information

| | |
|---|---|
| Applicant: | **Nexxt Solutions** |
| Address of applicant: | 3505 NW 107th Ave, Miami, Fl., 33178, USA |
| Manufacturer: | **Nexxt Solutions** |
| Address of manufacturer: | 3505 NW 107th Ave, Miami, Fl., 33178, USA |

General Description of E.U.T

| | |
|---|---|
| EUT Description: | **IP Camera** |
| Model No.: | **XPY310** |
| Supplementary Model: | **N/A** |
| Trade Mark: | **NEXXT** |
| Power Supply: | Input: 5VDC 1.0A |
| Adapter description: | Model: RD20W120100<br>Input:100-240V 1.5A max 50/60Hz<br>Output: 12V DC 1A |

Remark: * *The test data gathered are from the production sample provided by the manufacturer.*

## 1.2 Test Standards

The following Declaration of Conformity report of EUT is prepared in accordance with
FCC Rules and Regulations Part 15 Subpart B 2011

The objective of the manufacturer is to demonstrate compliance with the described above standards.

## 1.3 Test Summary

For the EUT described above. The standards used were FCC Part 15 Subpart B for Emissions

Table 1 : Tests Carried Out Under FCC Part 15 Subpart B

| Standard | Test Items | Status |
|---|---|---|
| FCC Part 15 Subpart B | Conduction Emission, 0.15MHz to 30MHz | √ |
| FCC Part 15 Subpart B | Radiation Emission, 30MHz to 1000MHz | √ |

√ Indicates that the test is applicable

× Indicates that the test is not applicable

## 1.4 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.

The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the Operating Instructions.

The maximum emission levels emanating from the device are compared to the FCC Part 15 Subpart B limits for radiation emissions and the measurement results contained in this test report show that EUT is to be technically compliant with FCC requirements.

All measurement required was performed at Shenzhen Bontek Compliance Testing Laboratory Co., Ltd at 1/F, Block East H-3, OCT Eastern Ind. Zone, Qiaocheng East Road, Nanshan, Shenzhen, China

## 1.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

**FCC – Registration No.: 338263**

Shenzhen Bontek Compliance Testing Laboratory Co., Ltd., EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 338263, March, 2011.

**IC Registration No.: 7631A**

The 3m alternate test site of Shenzhen Bontek Compliance Testing Laboratory Co., Ltd. EMC Laboratory has been registered by Certification and Engineer Bureau of Industry Canada for the performance of with Registration NO.: 7631A on January 2011.
The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2003.

**CNAS - Registration No.: L3923**

Shenzhen Bontek Compliance Testing Laboratory Co., Ltd. to ISO/IEC 17025:25 General Requirements for the Competence of Testing and Calibration Laboratories(CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.The acceptance letter from the CNAS is maintained in our files: Registration: L3923, March, 2012.

**TUV - Registration No.: UA 50242657-0001**

Shenzhen Bontek Compliance Testing Laboratory Co.,Ltd. An assessment of the laboratory was conducted according to the"Procedures and Conditions for EMC Test Laboratories"with reference to EN ISO/IEC 17025 by a TUV Rheinland auditor. Audit Report NO.17010783-003

## 1.6 Test Equipment List and Details

Test equipments list of Shenzhen Bontek Compliance Testing Laboratory Co., Ltd .

| No. | Instrument no. | Equipment | Manufacturer | Model No. | S/N | Last Calculator | Due Calculator |
|---|---|---|---|---|---|---|---|
| 1 | BCT-EMC001 | EMI Test Receiver | R&S | ESCI | 100687 | 2012-4-17 | 2013-4-16 |
| 2 | BCT-EMC002 | EMI Test Receiver | R&S | ESPI | 100097 | 2012-11-1 | 2013-10-31 |
| 3 | BCT-EMC003 | Amplifier | HP | 8447D | 1937A02492 | 2012-4-20 | 2013-4-19 |
| 4 | BCT-EMC004 | Single Power Conductor Module | R&S | NNBM 8124 | 242 | 2012-4-20 | 2013-4-19 |
| 5 | BCT-EMC005 | Single Power Conductor Module | R&S | NNBM 8124 | 243 | 2012-4-20 | 2013-4-19 |
| 6 | BCT-EMC006 | Power Clamp | SCHWARZBECK | MDS-21 | 3812 | 2012-11-5 | 2013-11-4 |
| 7 | BCT-EMC007 | Positioning Controller | C&C | CC-C-1F | MF7802113 | N/A | N/A |
| 8 | BCT-EMC008 | `Electrostatic Discharge Simulator | TESEQ | NSG437 | 125 | 2012-11-2 | 2013-11-1 |
| 9 | BCT-EMC009 | Fast Transient Burst Generator | SCHAFFNER | MODULA6150 | 34572 | 2012-4-17 | 2013-4-16 |
| 10 | BCT-EMC010 | Fast Transient Noise Simulator | Noiseken | FNS-105AX | 10501 | 2012-6-26 | 2013-6-25 |
| 11 | BCT-EMC011 | Color TV Pattern Genenator | PHILIPS | PM5418 | TM209947 | N/A | N/A |
| 12 | BCT-EMC012 | Power Frequency Magnetic Field Generator | EVERFINE | EMS61000-8K | 608002 | 2012-4-17 | 2013-4-16 |
| 14 | BCT-EMC014 | Capacitive Coupling Clamp | TESEQ | CDN8014 | 25096 | 2012-4-17 | 2013-4-16 |
| 15 | BCT-EMC015 | High Field Biconical Antenna | ELECTRO-METRICS | EM-6913 | 166 | 2011-11-28 | 2013-11-27 |
| 16 | BCT-EMC016 | Log Periodic Antenna | ELECTRO-METRICS | EM-6950 | 811 | 2011-11-28 | 2013-11-27 |
| 17 | BCT-EMC017 | Remote Active Vertical Antenna | ELECTRO-METRICS | EM-6892 | 304 | 2011-11-28 | 2013-11-27 |
| 18 | BCT-EMC018 | TRILOG Broadband Test-Antenna | SCHWARZBECK | VULB9163 | 9163-324 | 2012-5-19 | 2014-5-18 |
| 19 | BCT-EMC019 | Horn Antenna | SCHWARZBECK | BBHA9120A | 0499 | 2011-11-28 | 2013-11-27 |
| 20 | BCT-EMC020 | Teo Line Single Phase Module | SCHWARZBECK | NSLK8128 | 8128247 | 2012-11-1 | 2013-10-31 |
| 21 | BCT-EMC021 | Triple-Loop Antenna | EVERFINE | LLA-2 | 711002 | 2012-11-15 | 2013-11-14 |
| 22 | BCT-EMC022 | Electric bridge | Jhai | JK2812C | 803024 | N/A | N/A |
| 23 | BCT-EMC026 | RF POWER AMPLIFIER | FRANKONIA | FLL-75 | 1020A1109 | 2012-4-17 | 2013-4-16 |
| 24 | BCT-EMC027 | CDN | FRANKONIA | CDN M2+M3 | A3027019 | 2012-4-17 | 2013-4-16 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 25 | BCT-EMC029 | 6DB Attenuator | FRANKONIA | N/A | 1001698 | 2012-4-17 | 2013-4-16 |
| 26 | BCT-EMC030 | EM Injection clamp | FCC | F-203I-23mm | 091536 | 2012-4-17 | 2013-4-16 |
| 27 | BCT-EMC031 | 9kHz-2.4GHz signal generator 2024 | MARCONI | 10S/6625-99-457-8730 | 112260/042 | 2012-4-17 | 2013-4-16 |
| 28 | BCT-EMC032 | 10dB attenuator | ELECTRO-METRICS | EM-7600 | 836 | 2012-4-17 | 2013-4-16 |
| 29 | BCT-EMC033 | ISN | TESEQ | ISN-T800 | 30301 | 2012-11-15 | 2013-11-14 |
| 30 | BCT-EMC034 | 10KV surge generator | SANKI | SKS-0510M | 048110003E 321 | 2012-11-01 | 2013-10-31 |
| 31 | BCT-EMC035 | HRMONICS&FLICK RE ANALYSER | VOLTECH | PM6000 | 200006700433 | 2012-11-20 | 2013-11-19 |
| 32 | BCT-EMC036 | Spectrum Analyzer | R&S | FSP | 100397 | 2012-11-1 | 2013-10-31 |
| 33 | BCT-EMC037 | Broadband preamplifier | SCH WARZBECK | BBV9718 | 9718-182 | 2012-4-20 | 2013-4-19 |

# 2 - SYSTEM TEST CONFIGURATION

## 2.1 Justification

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

## 2.2 EUT Exercise Software

The EUT exercising program used during radiated and conducted testing was designed to exercise the various system components in a manner similar to a typical use. The software offered by manufacture, can let the EUT being ON operation.

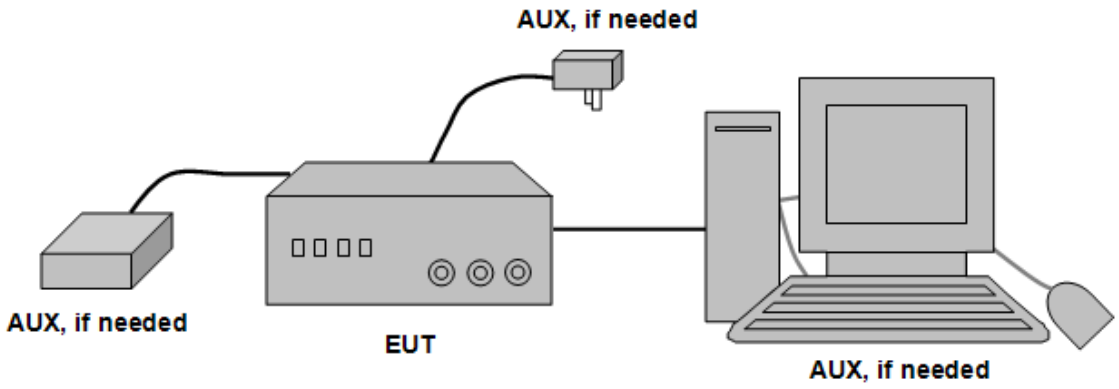
## 2.3 Special Accessories

As shown in section 2.5, interface cable used for compliance testing is shielded as normally supplied by **Nexxt Solutions** and its respective support equipment manufacturers.

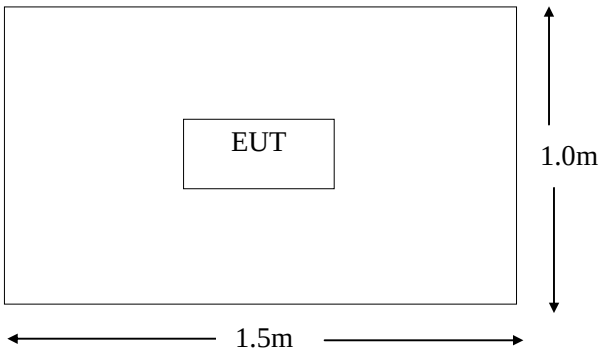
## 2.4 Equipment Modifications

The EUT tested was not modified by BCT.

## 2.5 Configuration of Test System




## 2.6 Test Setup Diagram



# 3 - DISTURBANCE VOLTAGE AT THE MAINS TERMINALS

## 3.1 Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, and LISN.

The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any conducted emissions measurement is 3.4 dB.

## 3.2 Limit of Disturbance Voltage at The Mains Terminals

| Frequency Range (MHz) | Limits ( dBuV) | |
|---|---|---|
| | Quasi-Peak | Average |
| 0.150～0.500 | 66～56 | 56～46 |
| 0.500～5.000 | 56 | 46 |
| 5.000～30.00 | 60 | 50 |

Note: (1)The tighter limit shall apply at the edge between two frequency bands.

## 3.3 EUT Setup

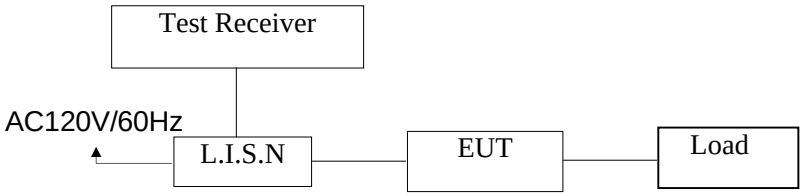
The setup of EUT is according with ANSI C63.4-2009 measurement procedure. The specification used was the FCC Rules and Regulations Part 15 Subpart B limits.

The EUT was placed center and the back edge of the test table.

The AV cables were draped along the test table and bundled to 30-40cm in the middle.

The spacing between the peripherals was 10 cm.

Maximum emission emitted from EUT was determined by manipulating the EUT, support equipment, interconnecting cables and varying the mode of operation and the levels in the final result of the test were recorded with the EUT running in the operating mode that maximum emission was emitted.




## 3.4 Instrument Setup

The test receiver was set with the following configurations:

Test Receiver Setting:

Frequency Range……150 KHz to 30 MHz
Detector……Peak & Quasi-Peak & Average
Sweep Speed……Auto
IF Band Width……9 KHz

## 3.5 Test Procedure

During the conducted emission test, the EUT power cord was connected to the auxiliary outlet of the first Artificial Mains.

Maximizing procedure was performed on the six (6) highest emissions to ensure EUT compliance using all installation combination.

All data was recorded in the peak detection mode. Quasi-peak and Average readings were only performed when an emission was found to be marginal (within -10 dB μ V of specification limits). Quasi-peak readings are distinguished with a "**QP**". Average readings are distinguished with a "**AV**".

## 3.6 Summary of Test Results

According to the data in section 3.6, the EUT complied with the FCC Part 15 B Conducted margin, with the *worst* margin reading of:

## 3.7 Disturbance Voltage Test Data

| | |
|---|---|
| Temperature ( ℃ ) | 22~25 |
| Humidity ( %RH ) | 50~55 |
| Barometric Pressure ( mbar ) | 950~1000 |
| EUT | IP Camera |
| M/N | XPY310 |
| Operating Mode | Connect to PC/On |

Test data see following pages

**Remark**: (1) When PK reading is less than relevant limit 20dB, the QP reading and AV reading will not be recorded.
(2) Where QP reading is less than relevant AV limit, the AV reading will not be measured

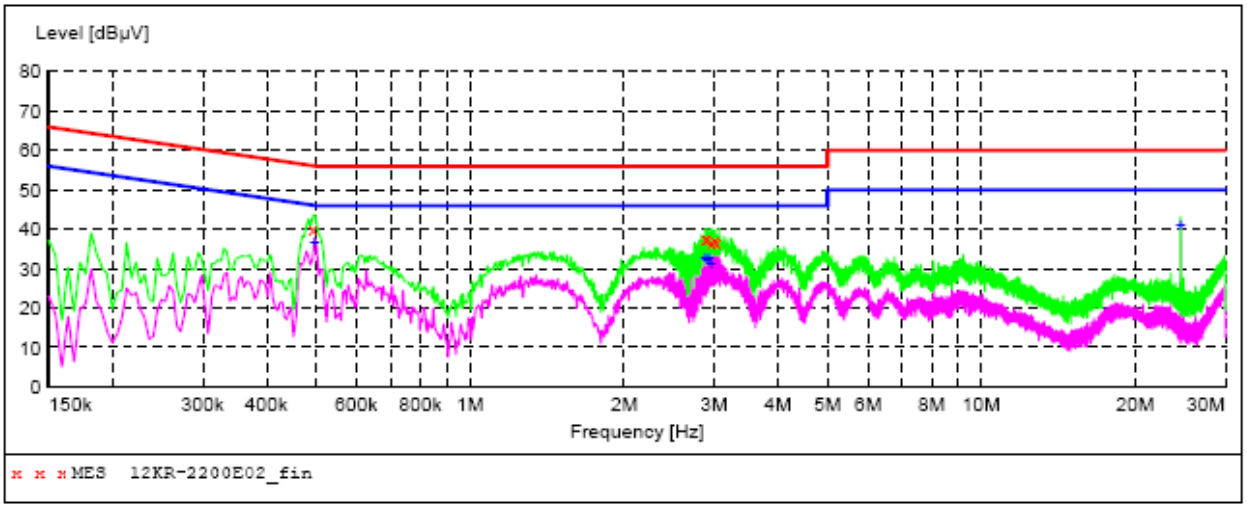
## 3.8 Test Result

**PASS**

**Conducted Emission:**

| | |
|---|---|
| EUT: | IP Camera |
| M/N: | XPY310 |
| Operating Condition: | Connect to PC |
| Test Site: | Shielded Room |
| Operator: | Yang |
| Test Specification: | AC 120V/60Hz for adapter |
| Comment: | L Line |

*SCAN TABLE: "Voltage (9K-30M)FIN"*
Short Description: 150K-30M Voltage




*MEASUREMENT RESULT: "12KR-2200E02_fin"*

1/13/2013

| Frequency MHz | Level dBµV | Transd dB | Limit dBµV | Margin dB | Detector | Line | PE |
|---|---|---|---|---|---|---|---|
| 0.492000 | 40.10 | 10.3 | 56 | 16.0 | QP | L1 | GND |
| 2.881500 | 37.70 | 10.2 | 56 | 18.3 | QP | L1 | GND |
| 2.908500 | 37.80 | 10.2 | 56 | 18.2 | QP | L1 | GND |
| 2.962500 | 36.80 | 10.2 | 56 | 19.2 | QP | L1 | GND |
| 3.012000 | 37.00 | 10.2 | 56 | 19.0 | QP | L1 | GND |
| 3.039000 | 36.80 | 10.3 | 56 | 19.2 | QP | L1 | GND |

*MEASUREMENT RESULT: "12KR-2200E02_fin2"*

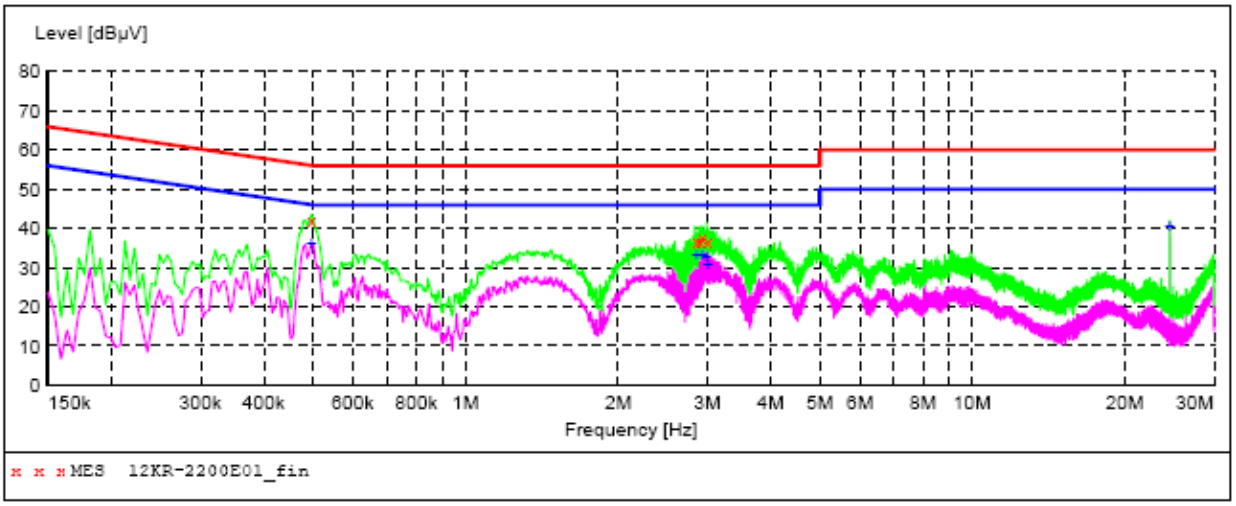
1/13/2013

| Frequency MHz | Level dBµV | Transd dB | Limit dBµV | Margin dB | Detector | Line | PE |
|---|---|---|---|---|---|---|---|
| 0.496500 | 36.90 | 10.3 | 46 | 9.2 | AV | L1 | GND |
| 2.881500 | 32.60 | 10.2 | 46 | 13.4 | AV | L1 | GND |
| 2.908500 | 32.40 | 10.2 | 46 | 13.6 | AV | L1 | GND |
| 2.931000 | 32.60 | 10.2 | 46 | 13.4 | AV | L1 | GND |
| 2.962500 | 31.40 | 10.2 | 46 | 14.6 | AV | L1 | GND |
| 24.549000 | 41.40 | 10.9 | 50 | 8.6 | AV | L1 | GND |

**Conducted Emission:**

| | |
|---|---|
| EUT: | IP Camera |
| M/N: | XPY310 |
| Operating Condition: | Connect to PC |
| Test Site: | Shielded Room |
| Operator: | Yang |
| Test Specification: | AC 120V/60Hz for adapter |
| Comment: | N Line |

*SCAN TABLE: "Voltage (9K-30M)FIN"*
Short Description: 150K-30M Voltage




*MEASUREMENT RESULT: "12KR-2200E01_fin"*

1/13/2013

| Frequency MHz | Level dBµV | Transd dB | Limit dBµV | Margin dB | Detector | Line | PE |
|---|---|---|---|---|---|---|---|
| 0.496500 | 41.90 | 10.3 | 56 | 14.2 | QP | N | GND |
| 2.859000 | 36.50 | 10.2 | 56 | 19.5 | QP | N | GND |
| 2.913000 | 36.60 | 10.2 | 56 | 19.4 | QP | N | GND |
| 2.935500 | 37.90 | 10.2 | 56 | 18.1 | QP | N | GND |
| 3.012000 | 36.70 | 10.2 | 56 | 19.3 | QP | N | GND |

*MEASUREMENT RESULT: "12KR-2200E01_fin2"*

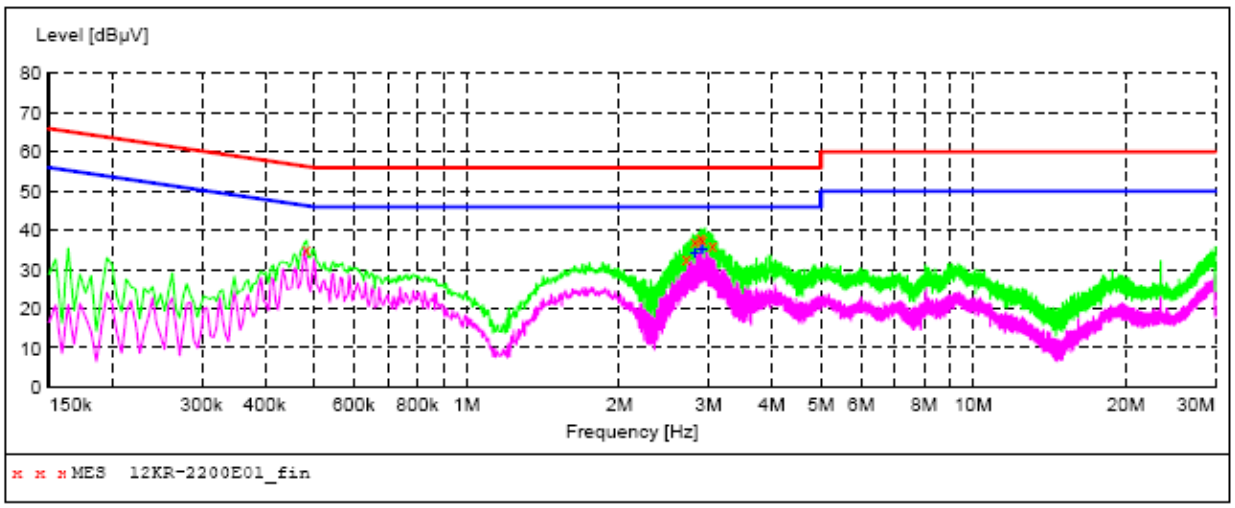
1/13/2013

| Frequency MHz | Level dBµV | Transd dB | Limit dBµV | Margin dB | Detector | Line | PE |
|---|---|---|---|---|---|---|---|
| 0.496500 | 36.00 | 10.3 | 46 | 10.1 | AV | N | GND |
| 2.854500 | 33.30 | 10.2 | 46 | 12.7 | AV | N | GND |
| 2.935500 | 33.50 | 10.2 | 46 | 12.5 | AV | N | GND |
| 2.989500 | 32.80 | 10.2 | 46 | 13.2 | AV | N | GND |
| 3.012000 | 30.80 | 10.2 | 46 | 15.2 | AV | N | GND |
| 24.549000 | 40.40 | 10.9 | 50 | 9.6 | AV | N | GND |

**Conducted Emission:**

| | |
|---|---|
| EUT: | IP Camera |
| M/N: | XPY310 |
| Operating Condition: | On |
| Test Site: | Shielded Room |
| Operator: | Yang |
| Test Specification: | AC 120V/60Hz for adapter |
| Comment: | L Line |

*SCAN TABLE: "Voltage (9K-30M)FIN"*
Short Description: 150K-30M Voltage




*MEASUREMENT RESULT: "12KR-2200E01_fin"*

1/13/2013

| Frequency MHz | Level dBµV | Transd dB | Limit dBµV | Margin dB | Detector | Line | PE |
|---|---|---|---|---|---|---|---|
| 0.483000 | 35.40 | 10.3 | 56 | 20.9 | QP | L1 | GND |
| 2.715000 | 32.80 | 10.2 | 56 | 23.2 | QP | L1 | GND |
| 2.818500 | 37.00 | 10.2 | 56 | 19.0 | QP | L1 | GND |
| 2.899500 | 38.40 | 10.2 | 56 | 17.6 | QP | L1 | GND |
| 2.922000 | 37.80 | 10.2 | 56 | 18.2 | QP | L1 | GND |
| 3.061500 | 36.00 | 10.3 | 56 | 20.0 | QP | L1 | GND |

*MEASUREMENT RESULT: "12KR-2200E01_fin2"*

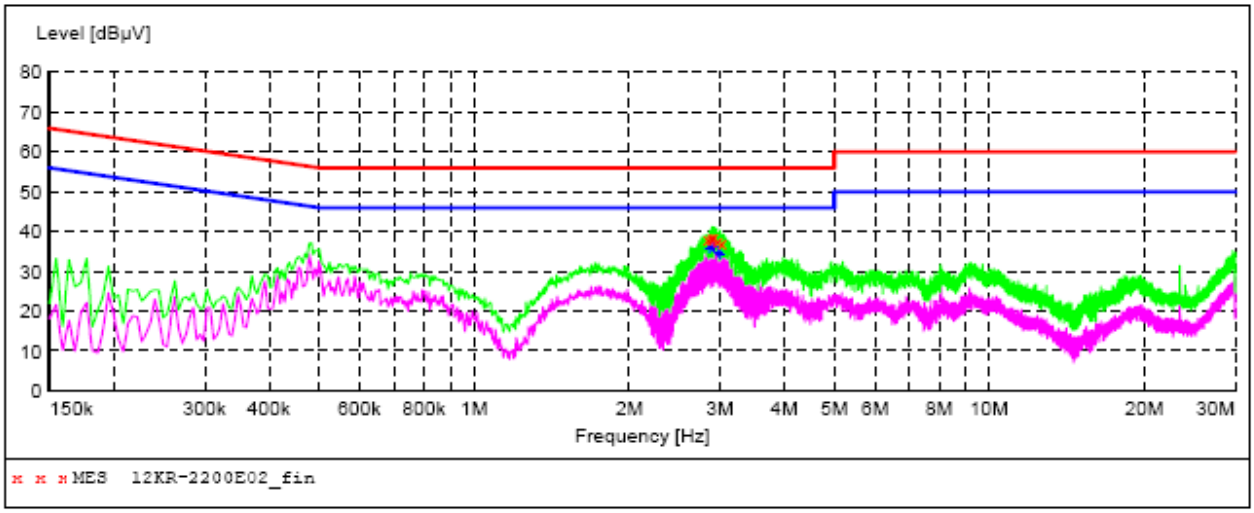
1/13/2013

| Frequency MHz | Level dBµV | Transd dB | Limit dBµV | Margin dB | Detector | Line | PE |
|---|---|---|---|---|---|---|---|
| 2.818500 | 34.30 | 10.2 | 46 | 11.7 | AV | L1 | GND |
| 2.899500 | 35.40 | 10.2 | 46 | 10.6 | AV | L1 | GND |
| 2.926500 | 35.30 | 10.2 | 46 | 10.7 | AV | L1 | GND |

**Conducted Emission:**

| | |
|---|---|
| EUT: | IP Camera |
| M/N: | XPY310 |
| Operating Condition: | On |
| Test Site: | Shielded Room |
| Operator: | Yang |
| Test Specification: | AC 120V/60Hz for adapter |
| Comment: | N Line |

*SCAN TABLE: "Voltage (9K-30M)FIN"*
Short Description: 150K-30M Voltage




*MEASUREMENT RESULT: "12KR-2200E02_fin"*

1/13/2013

| Frequency MHz | Level dBµV | Transd dB | Limit dBµV | Margin dB | Detector | Line | PE |
|---|---|---|---|---|---|---|---|
| 2.841000 | 38.10 | 10.2 | 56 | 17.9 | QP | N | GND |
| 2.890500 | 38.00 | 10.2 | 56 | 18.0 | QP | N | GND |
| 2.895000 | 38.90 | 10.2 | 56 | 17.1 | QP | N | GND |
| 2.922000 | 38.80 | 10.2 | 56 | 17.2 | QP | N | GND |
| 2.971500 | 37.70 | 10.2 | 56 | 18.3 | QP | N | GND |
| 3.030000 | 37.10 | 10.3 | 56 | 18.9 | QP | N | GND |

*MEASUREMENT RESULT: "12KR-2200E02_fin2"*

1/13/2013

| Frequency MHz | Level dBµV | Transd dB | Limit dBµV | Margin dB | Detector | Line | PE |
|---|---|---|---|---|---|---|---|
| 2.868000 | 35.70 | 10.2 | 46 | 10.3 | AV | N | GND |
| 2.895000 | 36.10 | 10.2 | 46 | 9.9 | AV | N | GND |
| 2.922000 | 36.00 | 10.2 | 46 | 10.0 | AV | N | GND |
| 2.976000 | 34.80 | 10.2 | 46 | 11.2 | AV | N | GND |
| 3.003000 | 34.10 | 10.2 | 46 | 11.9 | AV | N | GND |

# 4 - RADIATED DISTURBANCES

## 4.1 Measurement Uncertainty

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

The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of a radiation emissions measurement is 4.0 dB.

## 4.2 Limit of Radiated Disturbances

| Frequency (MHz) | Distance (Meters) | Field Strengths Limits (dB μ V/m) |
|---|---|---|
| 30 ~ 88 | 3 | 40 |
| 88~216 | 3 | 43.5 |
| 216 ~ 960 | 3 | 46 |
| 960 ~ 1000 | 3 | 54 |

Note: (1) The tighter limit shall apply at the edge between two frequency bands.
(2) Distance refers to the distance in meters between the test instrument antenna and the closest point of any part of the E.U.T.

## 4.3 EUT Setup

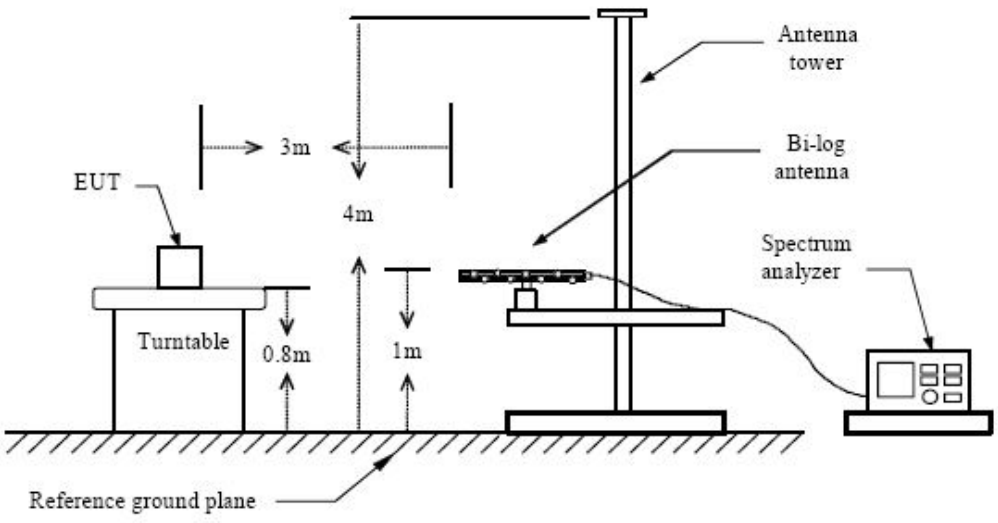
The radiated emission tests were performed in the in the 3-meter anechoic chamber, using the setup accordance with the ANSI C63.4-2009. The specification used was the FCC Part 15 Subpart B limits.

The EUT was placed on the center of the test table.

Maximum emission emitted from EUT was determined by manipulating the EUT, support equipment, interconnecting cables and varying the mode of operation and the levels in the final result of the test were recorded with the EUT running in the operating mode that maximum emission was emitted.

Block diagram of test setup (In chamber)

**Below 1 GHz**



## 4.4 Test Receiver Setup

According to FCC Part 15 rule, the frequency was investigated from 30 to 1000 MHz. During the radiated emission test, the test receiver was set with the following configurations:

Test Receiver Setting:

Detector……..Peak & Quasi-Peak
IF Band Width……..120KHz
Frequency Range……30MHz to 1000MHz
Turntable Rotated……0 to 360 degrees

Antenna Position:

Height……1m to 4m
Polarity……...Horizontal and Vertical

## 4.5 Test Procedure

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

All data was recorded in the peak detection mode. Quasi-peak readings performed only when an emission was found to be marginal (within -10 dBμV of specification limits), and are distinguished with a "**QP**" in the data table.

## 4.6 Corrected Amplitude & Margin Calculation

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

Corr. Ampl. = Indicated Reading + Antenna Factor + Cable Factor - Amplifier Gain

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -7dBμV means the emission is 7dBμV below the maximum limit for Subpart B. The equation for margin calculation is as follows:

Margin = Limit – Corr. Ampl.

## 4.7 Radiated Emissions Test Result

| | |
|---|---|
| Temperature ( ℃ ) | 22~25 |
| Humidity ( %RH ) | 50~54 |
| Barometric Pressure ( mbar ) | 950~1000 |
| EUT | IP Camera |
| M/N | XPY310 |
| Operating Mode | Connect to PC/On |

Test data see following pages

**Remark**: (1) When PK reading is less than relevant limit 20dB, the QP reading and AV reading will not be recorded.
(2) Where QP reading is less than relevant AV limit, the AV reading will not be measured

## 4.8 Test Result

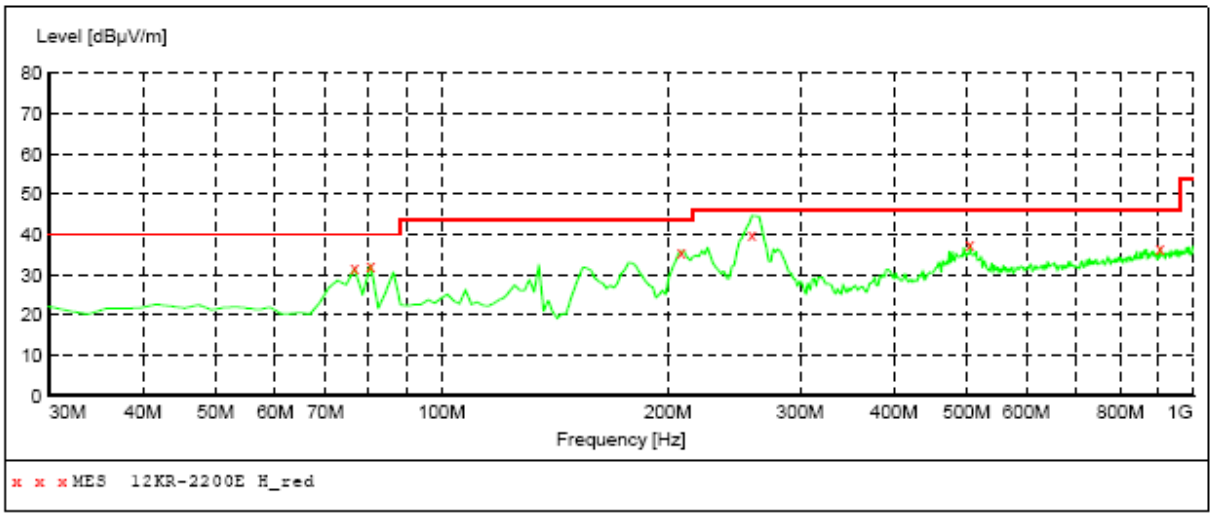
**PASS**

**Radiated Emission Test Data:**

| | |
|---|---|
| EUT: | IP Camera |
| M/N: | XPY310 |
| Operating Condition: | Connect to PC |
| Test Site: | 3m CHAMBER |
| Operator: | Chen |
| Test Specification: | AC 120V/60Hz for adapter |
| Comment: | Polarization: Horizontal |

*SWEEP TABLE: "test (30M-1G)"*

| Short Description: | | | Field Strength | | |
|---|---|---|---|---|---|
| Start Frequency | Stop Frequency | Detector | Meas. Time | IF Bandw. | Transducer |
| 30.0 MHz | 1.0 GHz | MaxPeak | Coupled | 100 kHz | VULB9163 NEW |




*MEASUREMENT RESULT: "12KR-2200E H_red"*

1/13/2013

| Frequency MHz | Level dBµV/m | Transd dB | Limit dBµV/m | Margin dB | Det. | Height cm | Azimuth deg | Polarization |
|---|---|---|---|---|---|---|---|---|
| 76.560000 | 31.60 | 12.0 | 40.0 | 8.4 | QP | 300.0 | 0.00 | HORIZONTAL |
| 80.440000 | 32.50 | 12.7 | 40.0 | 7.5 | QP | 300.0 | 0.00 | HORIZONTAL |
| 208.480000 | 35.90 | 15.1 | 43.5 | 7.6 | QP | 100.0 | 0.00 | HORIZONTAL |
| 258.920000 | 39.96 | 17.3 | 46.0 | 6.0 | QP | 100.0 | 0.00 | HORIZONTAL |
| 505.300000 | 37.40 | 24.0 | 46.0 | 8.6 | QP | 100.0 | 0.00 | HORIZONTAL |
| 904.940000 | 36.70 | 29.2 | 46.0 | 9.3 | QP | 300.0 | 0.00 | HORIZONTAL |

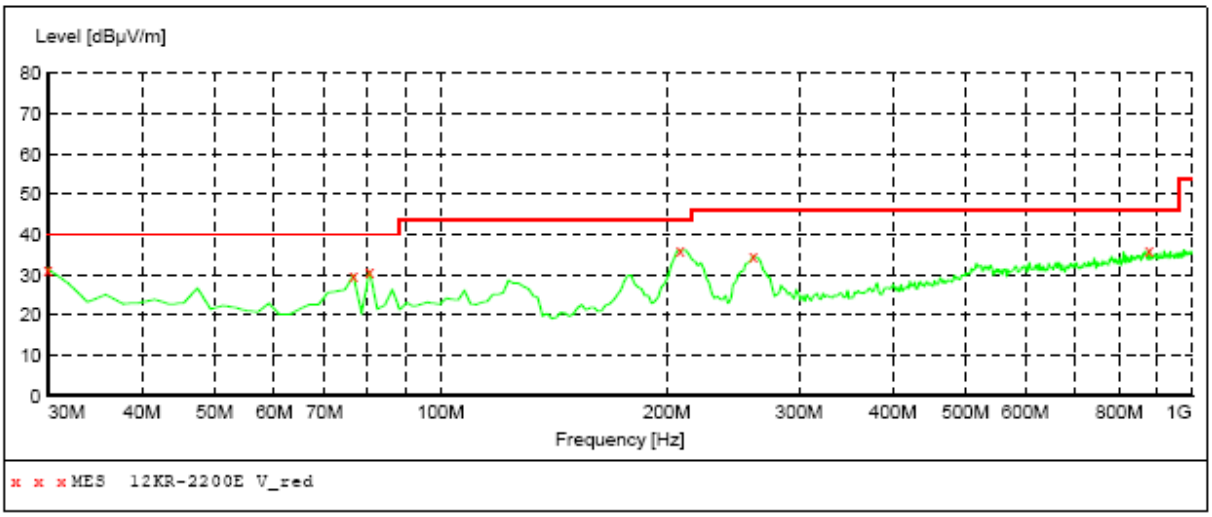
**Radiated Emission Test Data:**

| | |
|---|---|
| EUT: | IP Camera |
| M/N: | XPY310 |
| Operating Condition: | Connect to PC |
| Test Site: | 3m CHAMBER |
| Operator: | Chen |
| Test Specification: | AC 120V/60Hz for adapter |
| Comment: | Polarization: Vertical |

*SWEEP TABLE: "test (30M-1G)"*

Short Description: Field Strength

| Start Frequency | Stop Frequency | Detector | Meas. Time | IF Bandw. | Transducer |
|---|---|---|---|---|---|
| 30.0 MHz | 1.0 GHz | MaxPeak | Coupled | 100 kHz | VULB9163 NEW |




*MEASUREMENT RESULT: "12KR-2200E V_red"*

1/13/2013

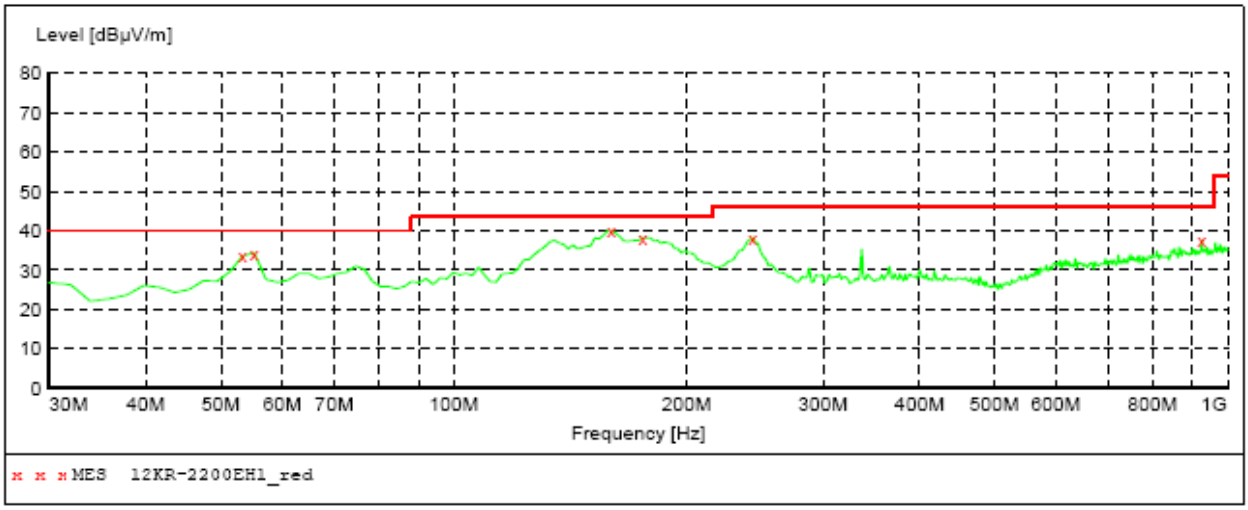
| Frequency MHz | Level dBµV/m | Transd dB | Limit dBµV/m | Margin dB | Det. | Height cm | Azimuth deg | Polarization |
|---|---|---|---|---|---|---|---|---|
| 30.000000 | 31.40 | 14.3 | 40.0 | 8.6 | QP | 100.0 | 0.00 | VERTICAL |
| 76.560000 | 29.90 | 12.0 | 40.0 | 10.1 | QP | 100.0 | 0.00 | VERTICAL |
| 80.440000 | 31.00 | 12.7 | 40.0 | 9.0 | QP | 100.0 | 0.00 | VERTICAL |
| 208.480000 | 36.20 | 15.1 | 43.5 | 7.3 | QP | 100.0 | 0.00 | VERTICAL |
| 260.860000 | 34.70 | 17.4 | 46.0 | 11.3 | QP | 100.0 | 0.00 | VERTICAL |
| 877.780000 | 36.10 | 28.9 | 46.0 | 9.9 | QP | 100.0 | 0.00 | VERTICAL |

**Radiated Emission Test Data:**

| | |
|---|---|
| EUT: | IP Camera |
| M/N: | XPY310 |
| Operating Condition: | On |
| Test Site: | 3m CHAMBER |
| Operator: | Chen |
| Test Specification: | AC 120V/60Hz for adapter |
| Comment: | Polarization: Horizontal |

*SWEEP TABLE: "test (30M-1G)"*

| Short Description: | | | Field Strength | | |
|---|---|---|---|---|---|
| Start Frequency | Stop Frequency | Detector | Meas. Time | IF Bandw. | Transducer |
| 30.0 MHz | 1.0 GHz | MaxPeak | Coupled | 100 kHz | VULB9163 NEW T |




*MEASUREMENT RESULT: "12KR-2200EH1_red"*

1/13/2013

| Frequency MHz | Level dBµV/m | Transd dB | Limit dBµV/m | Margin dB | Det. | Height cm | Azimuth deg | Polarization |
|---|---|---|---|---|---|---|---|---|
| 53.280000 | 33.50 | 15.7 | 40.0 | 6.5 | QP | 100.0 | 0.00 | HORIZONTAL |
| 55.220000 | 34.40 | 15.6 | 40.0 | 5.6 | QP | 100.0 | 0.00 | HORIZONTAL |
| 159.980000 | 39.90 | 12.8 | 43.5 | 3.6 | QP | 100.0 | 0.00 | HORIZONTAL |
| 175.500000 | 38.30 | 13.5 | 43.5 | 5.2 | QP | 100.0 | 0.00 | HORIZONTAL |
| 243.400000 | 38.20 | 17.0 | 46.0 | 7.8 | QP | 100.0 | 0.00 | HORIZONTAL |
| 926.280000 | 37.60 | 29.4 | 46.0 | 8.4 | QP | 100.0 | 0.00 | HORIZONTAL |

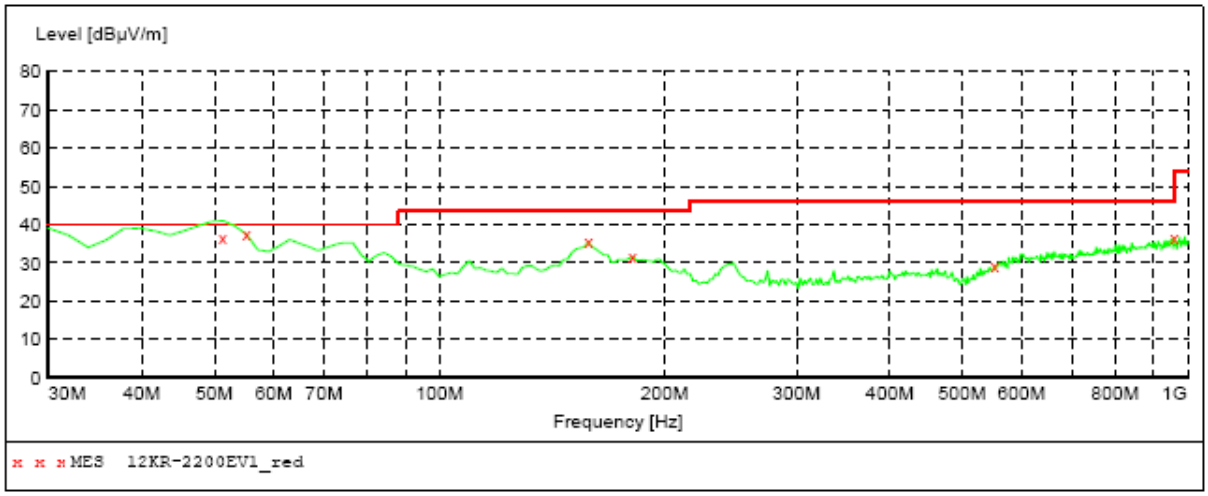
**Radiated Emission Test Data:**

| | |
|---|---|
| EUT: | IP Camera |
| M/N: | XPY310 |
| Operating Condition: | On |
| Test Site: | 3m CHAMBER |
| Operator: | Chen |
| Test Specification: | AC 120V/60Hz for adapter |
| Comment: | Polarization: Vertical |

*SWEEP TABLE: "test (30M-1G)"*

Short Description: Field Strength

| Start Frequency | Stop Frequency | Detector | Meas. Time | IF Bandw. | Transducer |
|---|---|---|---|---|---|
| 30.0 MHz | 1.0 GHz | MaxPeak | Coupled | 100 kHz | VULB9163 NEW T |




*MEASUREMENT RESULT: "12KR-2200EV1_red"*

1/13/2013

| Frequency MHz | Level dBµV/m | Transd dB | Limit dBµV/m | Margin dB | Det. | Height cm | Azimuth deg | Polarization |
|---|---|---|---|---|---|---|---|---|
| 51.340000 | 36.70 | 15.7 | 40.0 | 3.3 | QP | 100.0 | 0.00 | VERTICAL |
| 55.220000 | 37.40 | 15.6 | 40.0 | 2.6 | QP | 100.0 | 0.00 | VERTICAL |
| 158.040000 | 35.50 | 12.7 | 43.5 | 8.0 | QP | 100.0 | 0.00 | VERTICAL |
| 181.320000 | 31.60 | 14.0 | 43.5 | 11.9 | QP | 100.0 | 0.00 | VERTICAL |
| 551.860000 | 29.10 | 23.2 | 46.0 | 16.9 | QP | 100.0 | 0.00 | VERTICAL |
| 959.260000 | 36.70 | 29.6 | 46.0 | 9.3 | QP | 100.0 | 0.00 | VERTICAL |