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# MEASUREMENT REPORT FCC PART 15.247 WLAN 802.11b/g/n

X4YXPY12K

APPLICANT: NEXXT SOLUTIONS

Application Type:	Certification
Product:	HD Wireless IP Camera
Model No.:	XPY1200
Brand Name:	Nexxt Solutions
FCC Classification:	Digital Transmission System (DTS)
FCC Rule Part(s):	Part 15.247
Test Procedure(s):	ANSI C63.10-2013, KDB 558074 D01v03r03
Test Date:	September 09 ~ 23, 2015

Reviewed By

Approved By

: Robin Wu ) Marlinchen :

(Marlin Chen)



The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in KDB 558074 D01v03r03. Test results reported herein relate only to the item(s) tested.

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# **Revision History**

Report No.	Version	Description	Issue Date
1509RSU00501	Rev. 01	Initial report	09-23-2015



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Applicant:	NEXXT SOLUTIONS					
Applicant Address:	3505 N.W 107TH AVE. MIAMI, Florida 33178, United States					
Manufacturer:	NEXXT SOLUTIONS					
Manufacturer Address:	3505 N.W 107TH AVE. MIAMI, Florida 33178, United States					
Test Site:	MRT Technology (Suzhou) Co., Ltd					
Test Site Address:	D8 Building, Youxin Industrial Park, No.2 Tian'edang Rd., Wuzhong					
	Economic Development Zone, Suzhou, China					
MRT FCC Registration No.:	809388					
FCC Rule Part(s):	Part 15.247					
Model No.:	XPY1200					
FCC ID:	X4YXPY12K					
Test Device Serial No.:	N/A Droduction Pre-Production Dengineering					
FCC Classification:	Digital Transmission System (DTS)					

# §2.1033 General Information

## **Test Facility / Accreditations**

Measurements were performed at MRT Laboratory located in Tian'edang Rd., Suzhou, China.

- MRT facility is a FCC registered (MRT Reg. No. 809388) test facility with the site description report on file and has met all the requirements specified in Section 2.948 of the FCC Rules.
- MRT facility is an IC registered (MRT Reg. No. 11384A-1) test laboratory with the site description on file at Industry Canada.
- MRT facility is a VCCI registered (R-4179, G-814, C-4664, T-2206) test laboratory with the site description on file at VCCI Council.
- MRT Lab is accredited to ISO 17025 by the American Association for Laboratory Accreditation (A2LA) under the American Association for Laboratory Accreditation Program (A2LA Cert. No. 3628.01) in EMC, Telecommunications and Radio testing for FCC, Industry Canada, EU and TELEC Rules.





# 1. INTRODUCTION

### 1.1. Scope

Measurement and determination of electromagnetic emissions (EMC) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission and the Industry Canada Certification and Engineering Bureau.

### 1.2. MRT Test Location

The map below shows the location of the MRT LABORATORY, its proximity to the Taihu Lake. These measurement tests were conducted at the MRT Technology (Suzhou) Co., Ltd. Facility located at D8 Building, Youxin Industrial Park, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China. The detailed description of the measurement facility was found to be in compliance with the requirements of § 2.948 according to ANSI C63.4-2009 on September 30, 2013.





# 2. PRODUCT INFORMATION

# 2.1. Equipment Description

Product Name	HD Wireless IP Camera				
Model No.	XPY1200				
Frequency Range	302.11b/g/n-HT20: 2412 ~ 2462 MHz				
	802.11n-HT40: 2422 ~ 2452MHz				
Maximum PK Output Power	802.11b: 7.22dBm;				
	802.11g: 9.72dBm;				
	802.11n-HT20: 9.56dBm;				
	802.11n-HT40: 9.41dBm.				
Type of Modulation	802.11b: DSSS				
	802.11g/n: OFDM				
Antenna Type	Internal				
Antenna Gain	2.1dBi				

### 2.2. Working Frequencies

Channel List for 802.11b/g/n-HT20

Channel	Frequency	Channel	Frequency	Channel	Frequency
01	2412 MHz	02	2417 MHz	03	2422 MHz
04	2427 MHz	05	2432 MHz	06	2437 MHz
07	2442 MHz	08	2447 MHz	09	2452 MHz
10	2457 MHz	11	2462 MHz		

#### Channel List for 802.11n-HT40

Channel	Frequency	Channel	Frequency	Channel	Frequency
03	2422 MHz	04	2427 MHz	05	2432 MHz
06	2437 MHz	07	2442 MHz	08	2447 MHz
09	2452 MHz				



### 2.3. Device Capabilities

This device contains the following capabilities:

#### 802.11b/g/n WLAN (DTS)

**Note:** 2.4GHz WLAN (DTS) operation is possible in 20MHz, and 40MHz channel bandwidths. The maximum achievable duty cycles for all modes were determined based on measurements performed on a spectrum analyzer in zero-span mode with RBW = 8MHz, VBW = 50MHz. The RBW and VBW were both greater than 50/T, where T is the minimum transmission duration, and the number of sweep points across T was greater than 100. The duty cycles are as follows:

- 🛛 802.11b 100%
- 🛛 802.11g 100%
- 🛛 802.11n-HT20 100%
- 🛛 802.11h-HT40 100%

### 2.4. Test Configuration

The **HD Wireless IP Camera FCC ID: X4YXPY12K** was tested per the guidance of KDB 558074 D01v03r03. ANSI C63.10-2013 was used to reference the appropriate EUT setup for radiated spurious emissions testing and AC line conducted testing.

### 2.5. EMI Suppression Device(s)/Modifications

No EMI suppression device(s) were added and/or no modifications were made during testing.

#### 2.6. Labeling Requirements

#### Per 2.1074 & 15.19; Docket 95-19

The label shall be permanently affixed at a conspicuous location on the device; instruction manual or pamphlet supplied to the user and be readily visible to the purchaser at the time of purchase. However, when the device is so small wherein placement of the label with specified statement is not practical, only the trade name and FCC ID must be displayed on the device per Section 15.19(a)(5). Please see attachment for FCC ID label and label location.



# 3. DESCRIPTION OF TEST

### 3.1. Evaluation Procedure

### 3.2. AC Line Conducted Emissions

The line-conducted facility is located inside an 8'x4'x4' shielded enclosure. A 1m x 2m wooden table 80cm high is placed 40cm away from the vertical wall and 80cm away from the sidewall of the shielded room. Two 10kHz-30MHz,  $50\Omega/50$ uH Line-Impedance Stabilization Networks (LISNs) are bonded to the shielded room floor. Power to the LISNs is filtered by external high-current high-insertion loss power line filters. These filters attenuate ambient signal noise from entering the measurement lines. These filters are also bonded to the shielded enclosure.

The EUT is powered from one LISN and the support equipment is powered from the second LISN. All interconnecting cables more than 1 meter were shortened to a 1 meter length by non-inductive bundling (serpentine fashion) and draped over the back edge of the test table. All cables were at least 40cm above the horizontal reference ground-plane. Power cables for support equipment were routed down to the second LISN while ensuring that that cables were not draped over the second LISN.

Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The RF output of the LISN was connected to the receiver and exploratory measurements were made to determine the frequencies producing the maximum emission from the EUT. The receiver was scanned from 150kHz to 30MHz. The detector function was set to peak mode for exploratory measurements while the bandwidth of the analyzer was set to 9kHz. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Each emission was also maximized by varying: power lines, the mode of operation or data exchange speed, or support equipment whichever determined the worst-case emission. Once the worst case emissions have been identified, the one EUT cable configuration/arrangement and mode of operation that produced these emissions were used for final measurements on the same test site. The analyzer is set to CISPR quasi-peak and average detectors with a 9kHz resolution bandwidth for final measurements.

An extension cord was used to connect to a single LISN which powered by EUT. The extension cord was calibrated with LISN, the impedance and insertion loss are compliance with the requirements as stated in ANSI C63.10-2013 at Clause 4.3.

Line conducted emissions test results are shown in Section 7.8.



### 3.3. Radiated Emissions

The radiated test facilities consisted of an indoor 3 meter semi-anechoic chamber used for final measurements and exploratory measurements, when necessary. The measurement area is contained within the semi-anechoic chamber which is shielded from any ambient interference. For measurements above 1GHz absorbers are arranged on the floor between the turn table and the Antenna mast in such a way so as to maximize the reduction of reflections. For measurements below 1GHz, the absorbers are removed. A MF Model 210SS turntable is used for radiated measurement. It is a continuously rotatable, remote controlled, metallic turntable and 2 meters (6.56 ft.) in diameter. The turn table is flush with the raised floor of the chamber in order to maintain its function as a ground plane. An 80cm high PVC support structure is placed on top of the turntable. For all measurements, the spectrum was scanned through all EUT azimuths and from 1 to 4 meter receive Antenna height using a broadband Antenna from 30MHz up to the upper frequency shown in 15.33(b)(1) depending on the highest frequency generated or used in the device or on which the device operates or tunes. For frequencies above 1GHz, linearly polarized double ridge horn Antennas were used. For frequencies below 30MHz, a calibrated loop Antenna was used. When exploratory measurements were necessary, they were performed at 1 meter test distance inside the semi-anechoic chamber using broadband Antennas, broadband amplifiers, and spectrum analyzers to determine the frequencies and modes producing the maximum emissions. Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The test set-up for frequencies below 1GHz was placed on top of the 0.8 meter high, 1 x 1.5 meter table; and test set-up for frequencies 1-40GHz was placed on top of the 1.5 meter high, 1 x 1.5 meter table. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Appropriate precaution was taken to ensure that all emissions from the EUT were maximized and investigated. The system configuration, clock speed, mode of operation or video resolution, if applicable, turntable azimuth, and receive Antenna height was noted for each frequency found.

Final measurements were made in the semi-anechoic chamber using calibrated, linearly polarized broadband and horn Antennas. The test setup was configured to the setup that produced the worst case emissions. The spectrum analyzer was set to investigate all frequencies required for testing to compare the highest radiated disturbances with respect to the specified limits. The turntable containing the EUT was rotated through 360 degrees and the height of the receive Antenna was varied 1 to 4 meters and stopped at the azimuth and height producing the maximum emission. Each emission was maximized by changing the orientation of the EUT through three orthogonal planes and changing the polarity of the receive Antenna, whichever produced the worst-case emissions. According to 3dB Beam-Width of horn Antenna, the horn Antenna should be always directed to the EUT when rising height.



# 4. ANTENNA REQUIREMENTS

#### Excerpt from §15.203 of the FCC Rules/Regulations:

"An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section."

- The antenna of the HD Wireless IP Camera is permanently attached.
- There are no provisions for connection to an external antenna.

#### Conclusion:

The HD Wireless IP Camera FCC ID: X4YXPY12K unit complies with the requirement of §15.203.



# 5. TEST EQUIPMENT CALIBRATION DATE

**Conducted Emissions** 

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EMI Test Receiver	R&S	ESR7	MRTSUE06001	1 year	2015/11/07
Two-Line V-Network	R&S	ENV216	MRTSUE06002	1 year	2015/11/07
Two-Line V-Network	R&S	ENV216	MRTSUE06003	1 year	2015/11/07
Temperature/Humidity Meter	Ouleinuo	N/A	MRTSUE06114	1 year	2015/11/20

#### **Radiated Emissions**

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Spectrum Analyzer	Agilent	E4447A	MRTSUE06028	1 year	2015/12/09
EMI Test Receiver	R&S	ESR7	MRTSUE06001	1 year	2015/11/07
Preamplifier	Agilent	83017A	MRTSUE06020	1 year	2016/03/29
Preamplifier	Schwarzbeck	BBV9721	MRTSUE06121	1 year	2016/04/15
Loop Antenna	Schwarzbeck	FMZB1519	MRTSUE06025	1 year	2015/12/09
TRILOG Antenna	Schwarzbeck	VULB9162	MRTSUE06022	1 year	2015/11/08
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	MRTSUE06023	1 year	2015/11/08
Broadband Horn Antenna	Schwarzbeck	BBHA9170	MRTSUE06024	1 year	2016/01/05
Temperature/Humidity Meter	Ouleinuo	N/A	MRTSUE06115	1 year	2015/11/20

#### Conducted Test Equipment

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Spectrum Analyzer	Agilent	N9020A	MRTSUE06106	1 year	2016/05/08
USB Wideband Power Sensor	Boonton	55006	MRTSUE06109	1 year	2016/05/08
Temperature/Humidity Meter	Ouleinuo	N/A	MRTSUE06112	1 year	2015/11/20

Software	Version	Function
e3	V8.3.5	EMI Test Software



# 6. MEASUREMENT UNCERTAINTY

Where relevant, the following test uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k = 2.

AC Co	onducted Emission Measurement
Μ	leasuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)):
1:	50kHz~30MHz: 3.46dB
Radia	ted Emission Measurement
Μ	leasuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)):
9	kHz ~ 1GHz: 4.18dB
1	GHz ~ 25GHz: 4.76dB



# 7. TEST RESULT

### 7.1. Summary

Company Name:	NEXXT SOLUTIONS
FCC ID:	<u>X4YXPY12K</u>
FCC Classification:	Digital Transmission System (DTS)
Data Rate(s)	<u>1Mbps ~ 11Mbps (b); 6Mbps ~ 54Mbps (g);</u>
Tested:	<u>6.5/7.2Mbps ~ 65/72.2Mbps (n-HT20);</u>
	<u> 13.5/15Mbps ~ 135/150Mbps (n-HT40)</u>

FCC Part Section(s)	Test Description	Test Limit	Test Condition	Test Result	Reference
15.247(a)(2)	6dB Bandwidth	≥ 500kHz		Pass	Section 7.2
15.247(b)(3)	Output Power	≤ 1Watt	Conducted	Pass	Section 7.3
15.247(e)	Power Spectral Density	≤ 8dBm / 3kHz Band	Conducted	Pass	Section 7.4
15.247(d)	Band Edge / Out-of-Band Emissions	≥ 20dBc(Peak)		Pass	Section 7.5
15.205 15.209	General Field Strength Limits (Restricted Bands and Radiated Emission Limits)	Emissions in restricted bands must meet the radiated limits detailed in 15.209	Radiated	Pass	Section 7.6 & 7.7
15.207	AC Conducted Emissions 150kHz - 30MHz	< FCC 15.207 limits	Line Conducted	Pass	Section 7.8

#### Notes:

- All modes of operation and data rates were investigated. For radiated emission test, every axis (X, Y, Z) was also verified. The test results shown in the following sections represent the worst case emissions.
- 2) The analyzer plots shown in this section were all taken with a correction table loaded into the analyzer. The correction table was used to account for the losses of the cables and attenuators used as part of the system to connect the EUT to the analyzer at all frequencies of interest.
- 3) All antenna port conducted emissions testing was performed on a test bench with the antenna port of the EUT connected to the spectrum analyzer through calibrated cables and attenuators.



#### 7.2. 6dB Bandwidth Measurement

#### 7.2.1. Test Limit

The minimum 6dB bandwidth shall be at least 500 kHz.

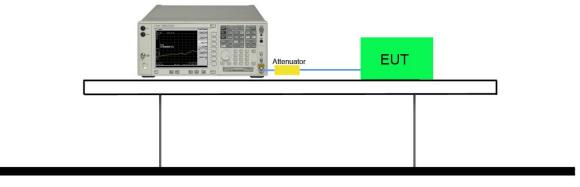
#### 7.2.2. Test Procedure used

KDB 558074 D01v03r03 - Section 8.2 Option 2

#### 7.2.3. Test Setting

- The Spectrum's automatic bandwidth measurement capability was used to perform the 6dB bandwidth measurement. The "X" dB bandwidth parameter was set to X = 6. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
- 2. Set RBW = 100 kHz
- 3. VBW  $\geq$  3 × RBW
- 4. Detector = Peak
- 5. Trace mode = max hold
- 6. Sweep = auto couple
- 7. Allow the trace was allowed to stabilize
- 7.2.4. Test Setup

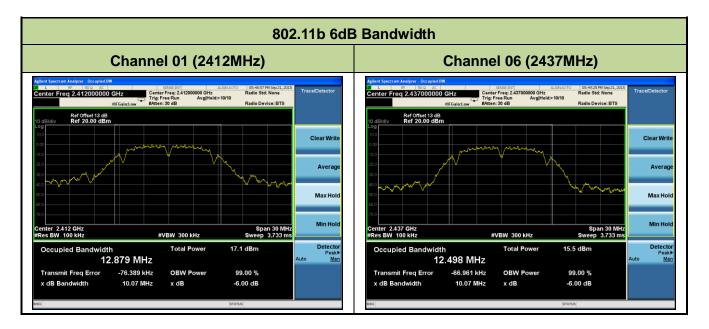
#### Spectrum Analyzer



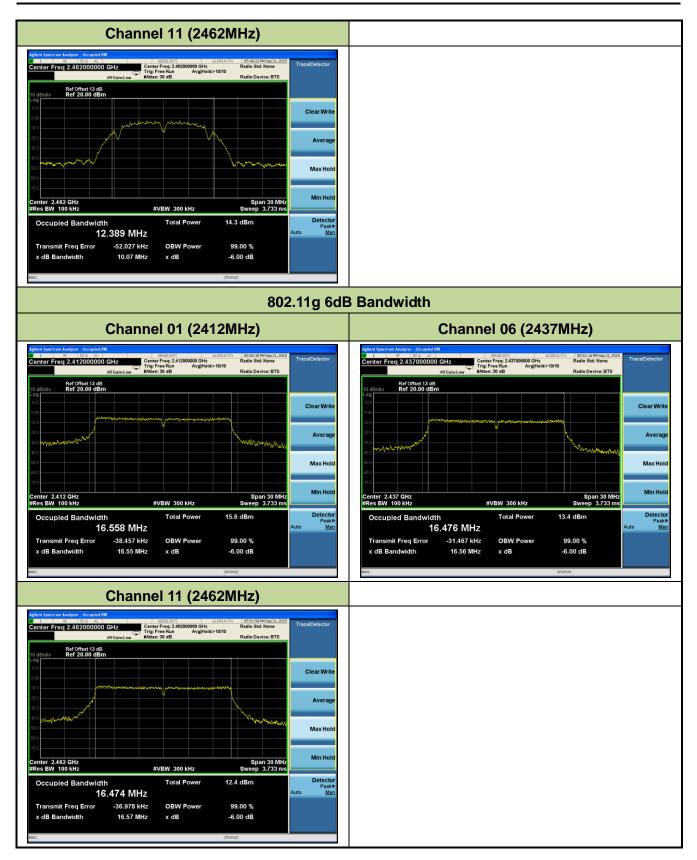


#### 7.2.5. Test Result

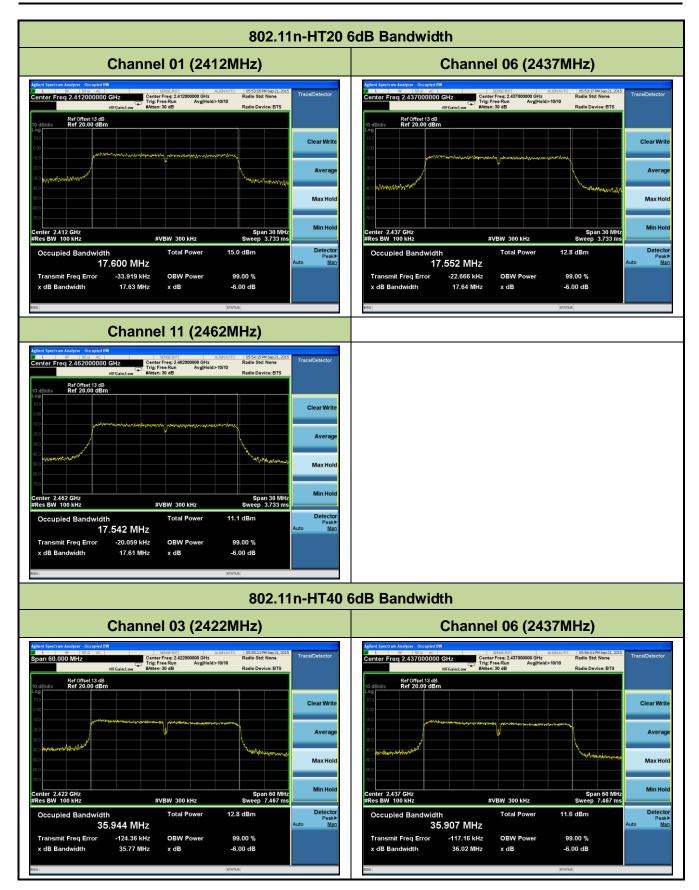
Test Mode	Data Rate (Mbps)	Channel No.	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Result
802.11b	1	01	2412	10.07	≥ 0.5	Pass
802.11b	1	06	2437	10.07	≥ 0.5	Pass
802.11b	1	11	2462	10.07	≥ 0.5	Pass
802.11g	6	01	2412	16.55	≥ 0.5	Pass
802.11g	6	06	2437	16.56	≥ 0.5	Pass
802.11g	6	11	2462	16.57	≥ 0.5	Pass
802.11n-HT20	6.5	01	2412	17.63	≥ 0.5	Pass
802.11n-HT20	6.5	06	2437	17.64	≥ 0.5	Pass
802.11n-HT20	6.5	11	2462	17.61	≥ 0.5	Pass
802.11n-HT40	13.5	03	2422	35.77	≥ 0.5	Pass
802.11n-HT40	13.5	06	2437	36.02	≥ 0.5	Pass
802.11n-HT40	13.5	09	2452	36.12	≥ 0.5	Pass





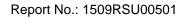








CI	hannel 09 (245	52MHz)	
Aglient Spectrum Analyzer - Oscupied IW SP 1000 Second Center Freq 2.452000000 GHz ziFGal Ref Offset 13 dB 10 dB/dly Ref 20.00 dBm	Center Freq: 2.452000000 GHz Trig: Free Run Avg Hold:	ALION AUTO 05:56:47 PM Sep 21, 2015 Radio Std: None > 10/10 Radio Device: BTS	Trace/Detector
10 abraiv Rei 20.00 UBIII Log 10.0 0.00			Clear Write
-20 0 -30 0 -40 0 -40 0			Average Max Hold
60 0 70 0 Center 2.452 GHz		Span 60 MHz	Min Hold
#Res BW 100 kHz Occupied Bandwidth 35.91	#VBW 300 kHz Total Power 8 MHz	Sweep 7.467 ms 10.6 dBm	Detector Peak≯ Auto <u>Man</u>
	05.25 kHz OBW Power 36.12 MHz x dB	99.00 % -6.00 dB	





#### 7.3. Output Power Measurement

#### 7.3.1. Test Limit

The maximum out power shall be less 1 Watt (30dBm).

#### 7.3.2. Test Procedure Used

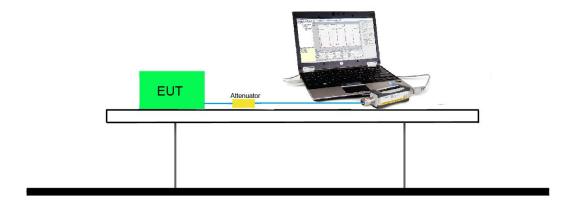
KDB 558074 D01v03r03 - Section 9.1.2 A PKPM1 - Peak Power Method

#### 7.3.3. Test Setting

#### Method PKPM1 (Peak Power Measurement of Signals with DTS BW ≤ 50MHz)

Peak power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The pulse sensor employs a VBW = 50MHz so this method was only used for signals whose DTS bandwidth was less than or equal to 50MHz.

#### 7.3.4. Test Setup





Test Mode	Data Rate (Mbps)	Channel No.	Frequency (MHz)	Peak Power (dBm)	Limit (dBm)	Result
11b	1	1	2412	7.22	≤ 30	Pass
11b	1	6	2437	6.79	≤ 30	Pass
11b	1	11	2462	6.83	≤ 30	Pass
11g	6	1	2412	9.72	≤ 30	Pass
11g	6	6	2437	9.67	≤ 30	Pass
11g	6	11	2462	9.69	≤ 30	Pass
11n-HT20	6.5	1	2412	9.56	≤ 30	Pass
11n-HT20	6.5	6	2437	9.51	≤ 30	Pass
11n-HT20	6.5	11	2462	9.34	≤ 30	Pass
11n-HT40	13.5	3	2422	9.41	≤ 30	Pass
11n-HT40	13.5	6	2437	9.24	≤ 30	Pass
11n-HT40	13.5	9	2452	8.91	≤ 30	Pass

# 7.3.5. Test Result of Output Power



#### 7.4. Power Spectral Density Measurement

#### 7.4.1. Test Limit

The maximum permissible power spectral density is 8dBm in any 3 kHz band.

#### 7.4.2. Test Procedure Used

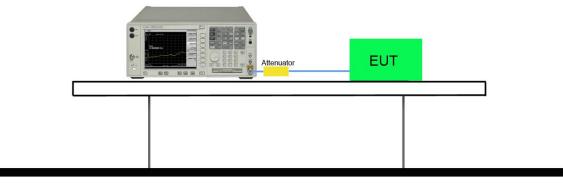
KDB 558074 D01v03r03 - Section 10.2 Method PKPSD

#### 7.4.3. Test Setting

- 1. Analyzer was set to the center frequency of the DTS channel under investigation
- 2. Span = 1.5 times the DTS channel bandwidth
- 3. RBW = 3kHz
- 4. VBW = 10kHz
- 5. Detector = peak
- 6. Sweep time = auto couple
- 7. Trace mode = max hold
- 8. Trace was allowed to stabilize

#### 7.4.4. Test Setup

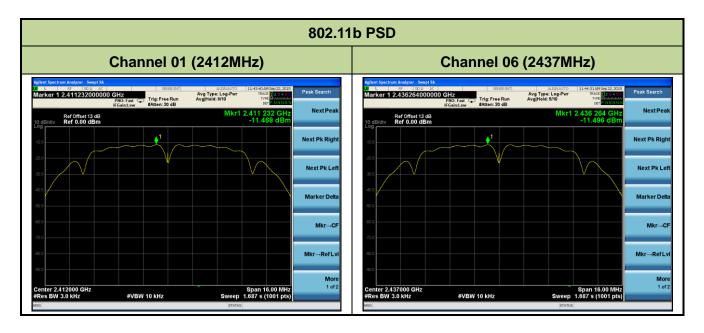
#### Spectrum Analyzer



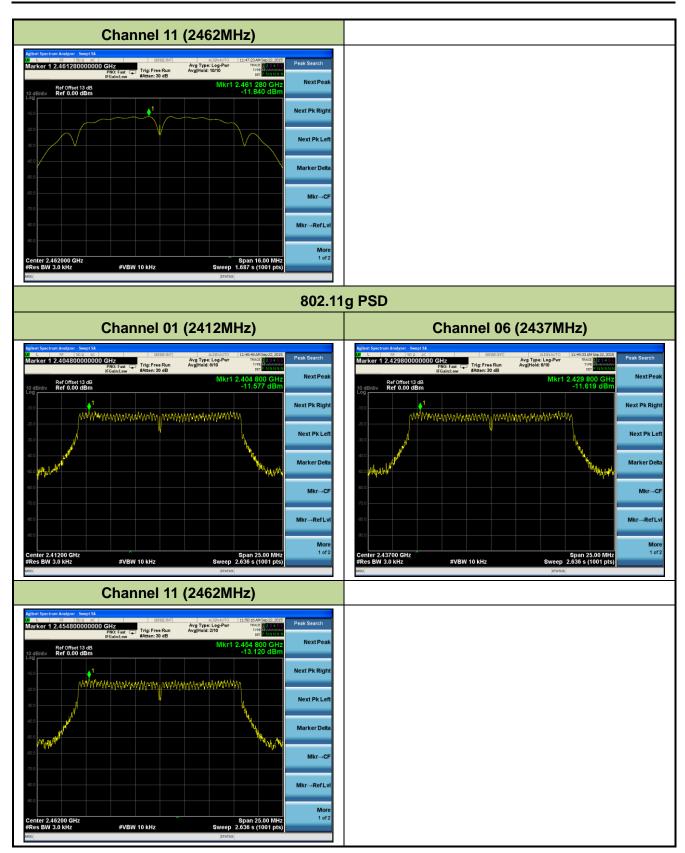


#### 7.4.5. Test Result

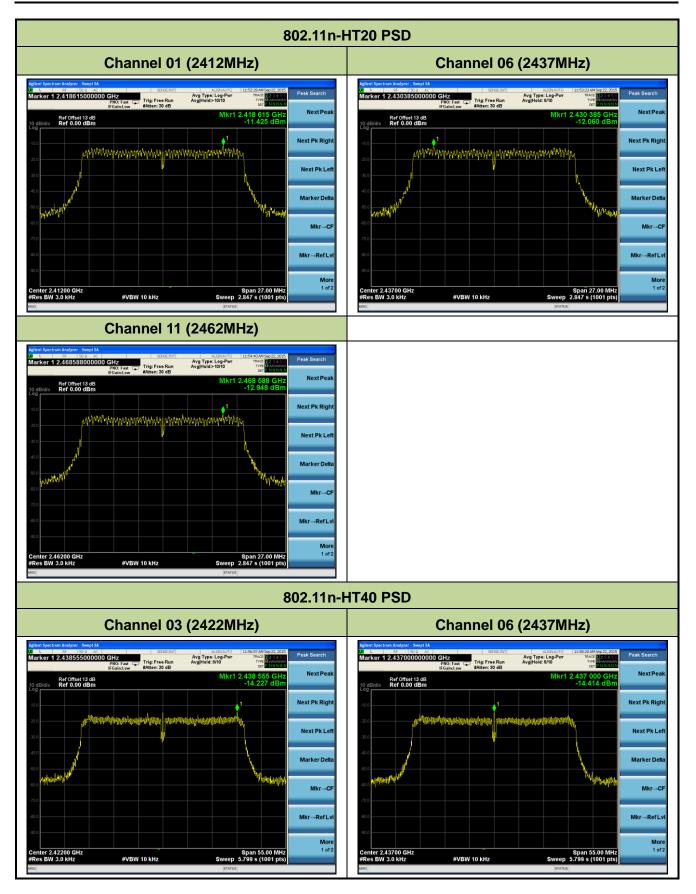
Test Mode	Data Rate (Mbps)	Channel No.	Frequency (MHz)	PSD Result (dBm / 3kHz)	Limit (dBm / 3kHz)	Result
11b	1	1	2412	-11.47	≤ 8	Pass
11b	1	6	2437	-11.50	≤ 8	Pass
11b	1	11	2462	-11.84	≤ 8	Pass
11g	6	1	2412	-11.58	≤ 8	Pass
11g	6	6	2437	-11.62	≤ 8	Pass
11g	6	11	2462	-13.12	≤ 8	Pass
11n-HT20	6.5	1	2412	-11.43	≤ 8	Pass
11n-HT20	6.5	6	2437	-12.06	≤ 8	Pass
11n-HT20	6.5	11	2462	-12.95	≤ 8	Pass
11n-HT40	13.5	03	2422	-14.23	≤ 8	Pass
11n-HT40	13.5	06	2437	-14.41	≤ 8	Pass
11n-HT40	13.5	09	2452	-10.12	≤ 8	Pass



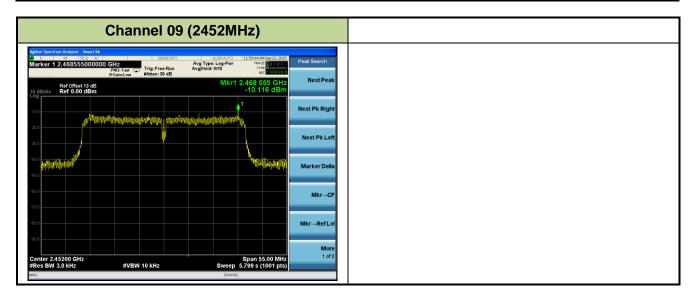














### 7.5. Conducted Band Edge and Out-of-Band Emissions

#### 7.5.1. Test Limit

The limit for out-of-band spurious emissions at the band edge is 20dB below the fundamental emission level, as determined from the in-band power measurement of the DTS channel performed in a 100kHz bandwidth per the PSD procedure.

#### 7.5.2. Test Procedure Used

KDB 558074 D01v03r03 - Section 11.2 & Section 11.3

#### 7.5.3. Test Settitng

#### 1. Reference level measurement

- (a) Set instrument center frequency to DTS channel center frequency
- (b) Set the span to  $\geq$  1.5 times the DTS bandwidth
- (c) Set the RBW = 100 kHz
- (d) Set the VBW  $\geq$  3 x RBW
- (e) Detector = peak
- (f) Sweep time = auto couple
- (g) Trace mode = max hold
- (h) Allow trace to fully stabilize

#### 2. Emission level measurement

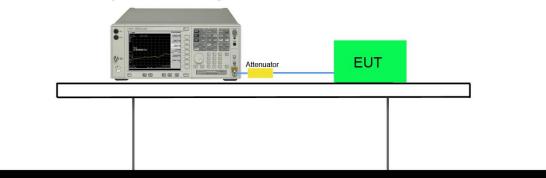
- (a) Set the center frequency and span to encompass frequency range to be measured
- (b) RBW = 100kHz
- (c) VBW = 300kHz
- (d) Detector = Peak
- (e) Number of sweep points  $\geq$  2 x Span/RBW
- (f) Trace mode = max hold
- (g) Sweep time = auto couple



(h) The trace was allowed to stabilize

#### 7.5.4. Test Setup

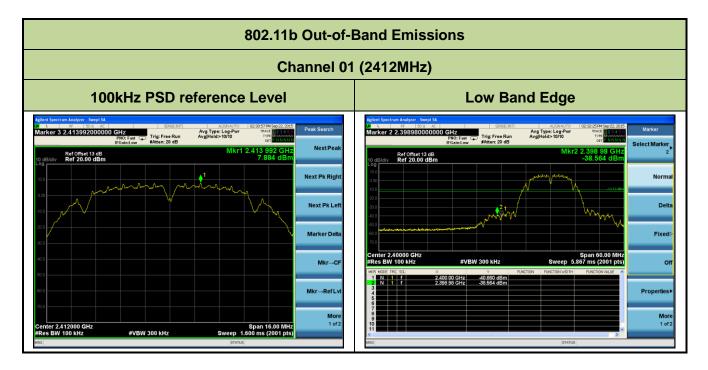
# Spectrum Analyzer



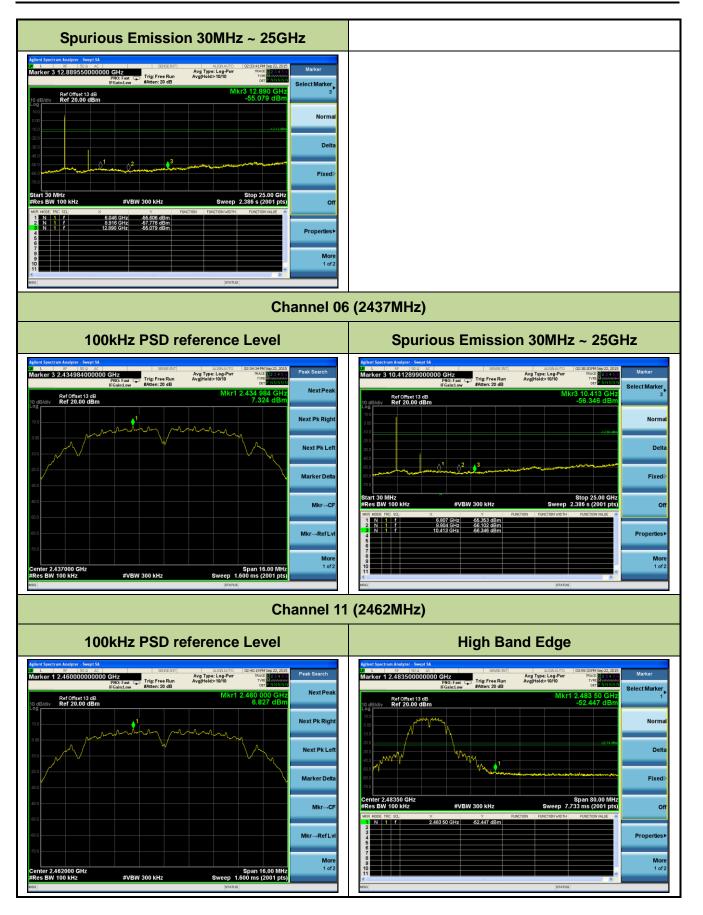


#### 7.5.5. Test Result

Test Mode	Data Rate (Mbps)	Channel No.	Frequency (MHz)	Limit	Result
802.11b	1	1	2412	20dBc	Pass
802.11b	1	6	2437	20dBc	Pass
802.11b	1	11	2462	20dBc	Pass
802.11g	6	1	2412	20dBc	Pass
802.11g	6	6	2437	20dBc	Pass
802.11g	6	11	2462	20dBc	Pass
802.11n-HT20	6.5	1	2412	20dBc	Pass
802.11n-HT20	6.5	6	2437	20dBc	Pass
802.11n-HT20	6.5	11	2462	20dBc	Pass
802.11n-HT40	13.5	3	2422	20dBc	Pass
802.11n-HT40	13.5	6	2437	20dBc	Pass
802.11n-HT40	13.5	9	2452	20dBc	Pass





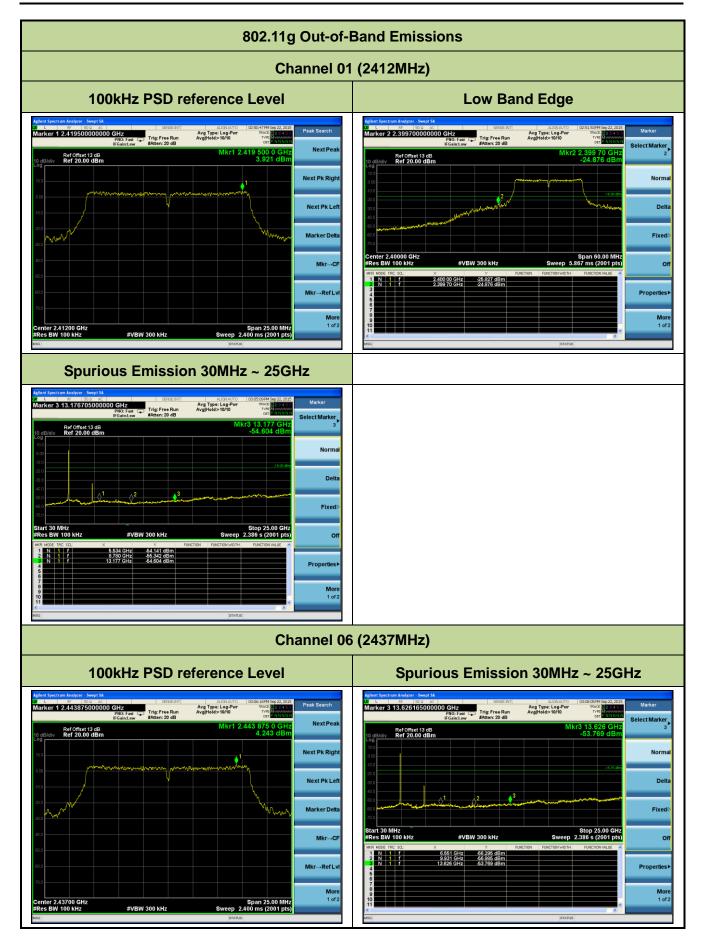






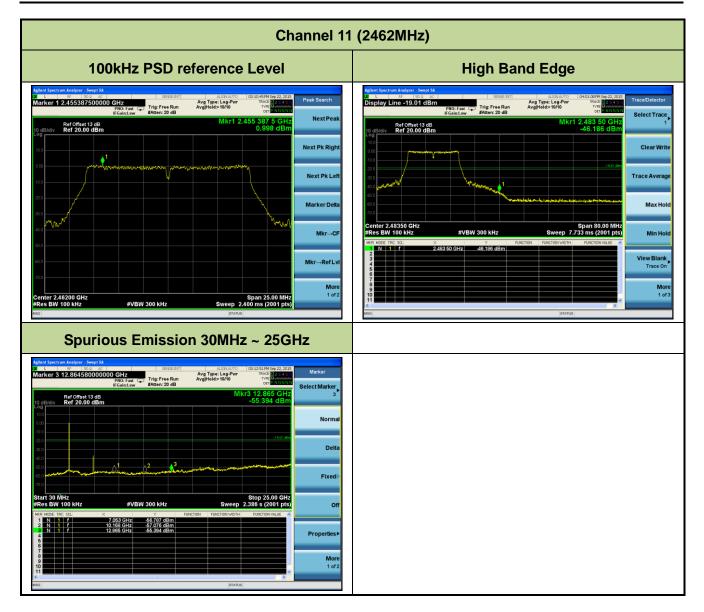
Spurio	us Emission 3	30MHz ~ 25GI	Hz
	) GHz Avg PNO: Fast Trig: Free Run Avg #Atten: 20 dB	ALIGNAUTO 04:07:46PM Sep 22, 2015 Type: Log-Per Hold>10/10 TRACE 12.2.2015 UPD 12:00 Det 10:00 Mkr3 13:052 GHz	Marker Select Marker 3
Ref Offset 13 dB 10 dB/div Ref 20.00 dBm 10 0 0.00 -10 0		-53.703 dBm	Normal
-200	2 <sup>1</sup> 0 <sup>2</sup> <b>∮</b> <sup>3</sup>	2074 dim	Delta
50.0		Stop 25.00 GHz	Fixed⊳
#Res BW 100 kHz	#VBW 300 kHz	Sweep 2.386 s (2001 pts) FUNCTION WIDTH FUNCTION VALUE	Off
2 N 1 f 8/	.863 GHz -56 145 dBm .819 GHz -57 880 dBm .052 GHz -53.703 dBm		Properties►
8 9 10 11			More 1 of 2
K MSG		STATUS	



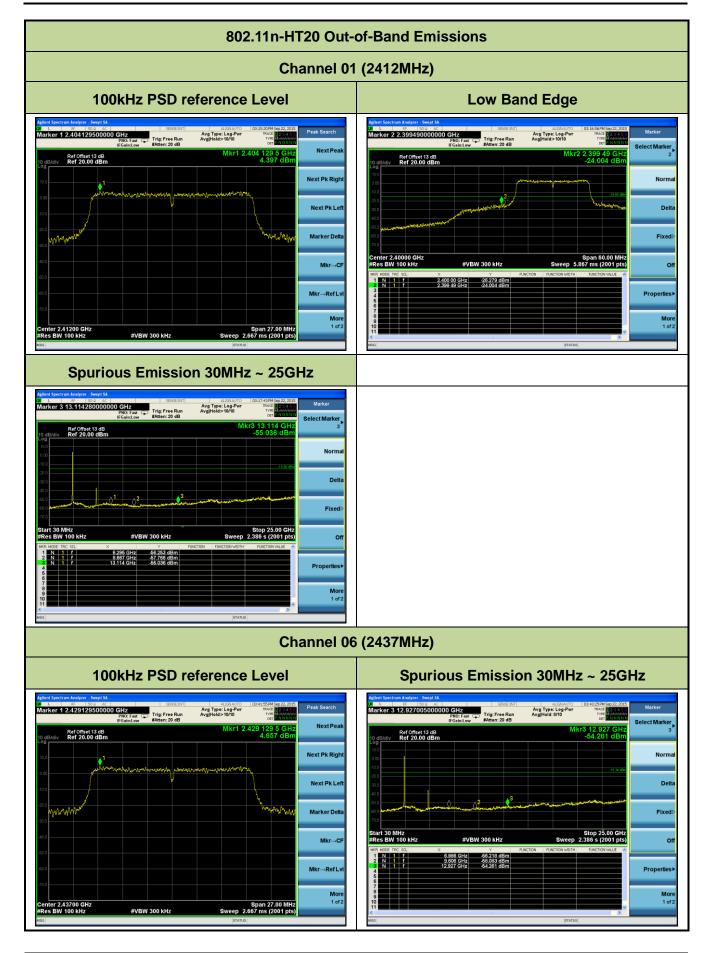




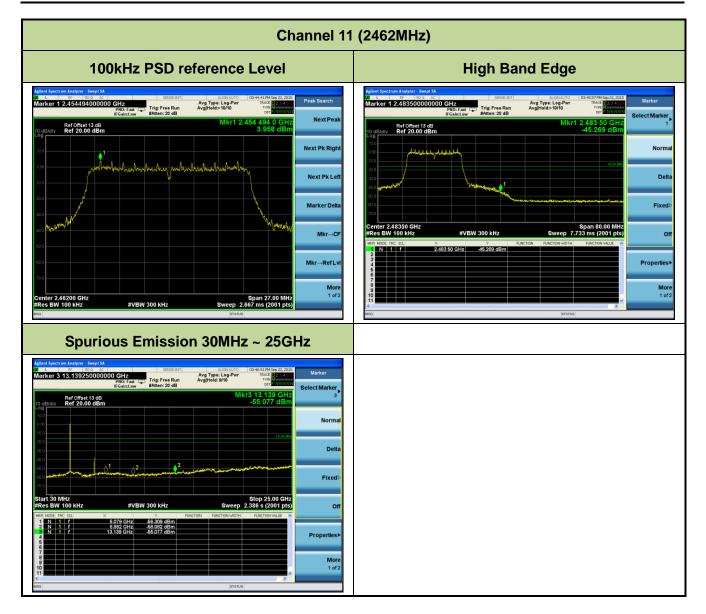




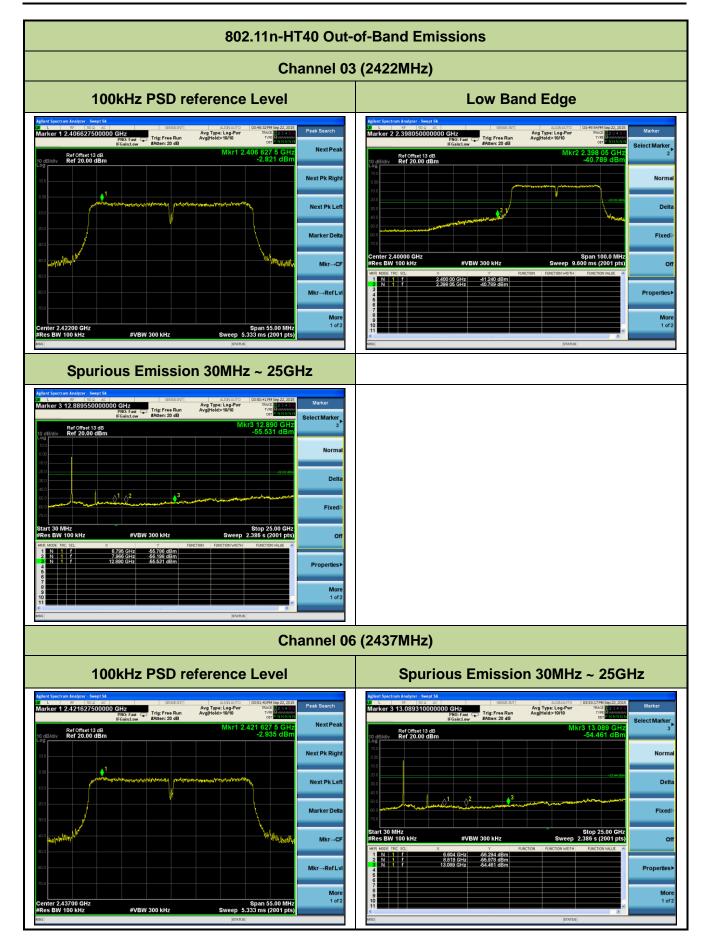




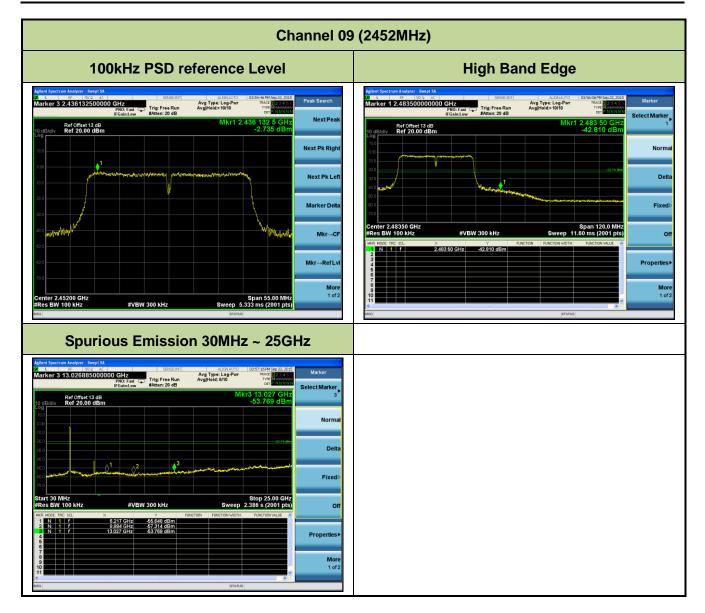














# 7.6. Radiated Spurious Emission Measurement

#### 7.6.1. Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209								
Frequency [MHz]	Field Strength [V/m]	Measured Distance [Meters]						
0.009 - 0.490	2400/F (kHz)	300						
0.490 - 1.705	24000/F (kHz)	30						
1.705 - 30	30	30						
30 - 88	100	3						
88 - 216	150	3						
216 - 960	200	3						
Above 960	500	3						

#### 7.6.2. Test Procedure Used

KDB 558074 D01v03r03 - Section 12.2.3 (quasi-peak measurements)

KDB 558074 D01v03r03 - Section 12.2.4 (peak power measurements)

KDB 558074 D01v03r03 - Section 12.2.5 (average power measurements)

#### 7.6.3. Test Setting

#### Peak Field Strength Measurements per Section 12.2.4 of KDB 558074 D01v03r03

- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = as specified in Table 1
- 3. VBW = 3MHz
- 4. Detector = peak
- 5. Sweep time = auto couple



- 6. Trace mode = max hold
- 7. Trace was allowed to stabilize

#### Table 1 - RBW as a function of frequency

Frequency	RBW			
9 ~ 150 kHz	200 ~ 300 Hz			
0.15 ~ 30 MHz	9 ~ 10 kHz			
30 ~ 1000 MHz	100 ~ 120 kHz			
> 1000 MHz	1 MHz			

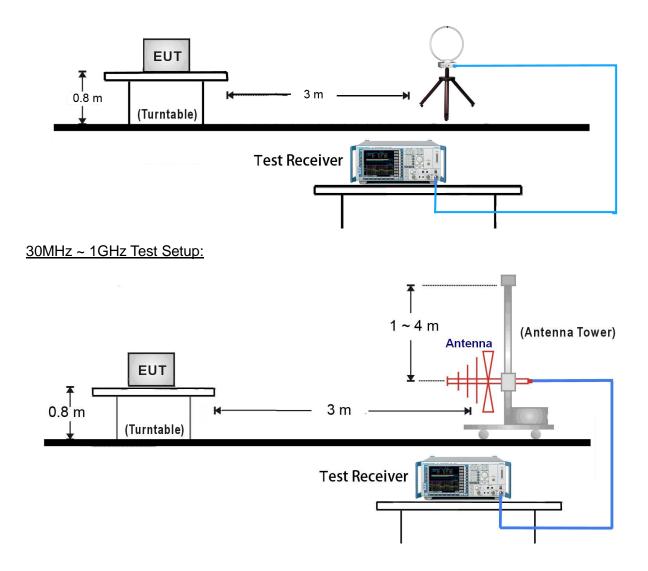
#### Average Field Strength Measurements

- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = 1MHz
- 3. VBW ≥ 1/T
- 4. De As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to "Voltage" regardless of the display mode
- 5. Detector = Peak
- 6. Sweep time = auto
- 7. Trace mode = max hold
- 8. Allow max hold to run for at least 50 times (1/duty cycle) traces



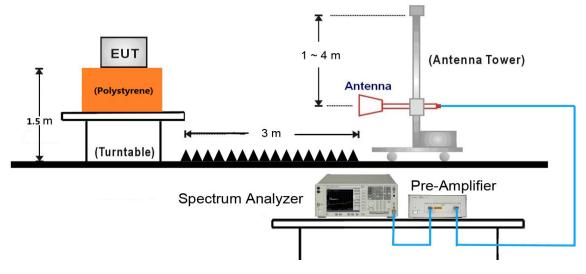
# 7.6.4. Test Setup

9kHz ~ 30MHz Test Setup:





## 1GHz ~ 25GHz Test Setup:





## 7.6.5. Test Result

Test Mode:	802.11g	Test Site:	AC1				
Test Channel:	01	Test Engineer:	Roy Cheng				
Remark:	1. Average measurement was not performed if peak level lower than average						
	limit.						
	2. The worst case of Radiated Spurious Emission.						
	3. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	3018.0	39.6	-2.1	37.5	88.1	-50.6	Peak	Horizontal
*	3577.0	38.5	-0.8	37.7	88.1	-50.4	Peak	Horizontal
	4825.0	48.5	2.7	51.2	74.0	-22.8	Peak	Horizontal
	7256.0	35.4	7.9	43.3	74.0	-30.7	Peak	Horizontal
*	3051.0	38.3	-2.0	36.3	88.1	-51.8	Peak	Vertical
*	3586.0	38.1	-0.8	37.3	88.1	-50.8	Peak	Vertical
	4825.0	48.2	2.7	50.9	74.0	-23.1	Peak	Vertical
	7256.0	35.1	7.9	43.0	74.0	-31.0	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is 20dBc of the fundamental emission level (108.1dBµV/m) or 15.209 which is higher.

Note 2: Measure Level ( $dB\mu V/m$ ) = Reading Level ( $dB\mu V$ ) + Factor (dB).

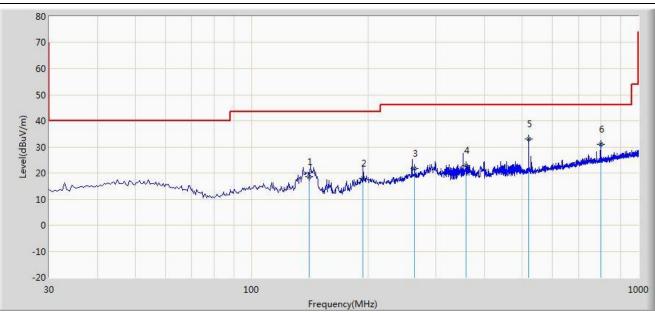
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB).



#### The worst case of Radiated Emission below 1GHz:

Site: AC1	Time: 2015/09/23 - 19:19
Limit: FCC_Part15.209_RE(3m)	Engineer: Roy Cheng
Probe: VULB9162_0.03-8GHz	Polarity: Horizontal
EUT: HD Wireless IP Camera	Power: AC 120V/60Hz

#### Worse Case Mode: 802.11g at Channel 2412MHz



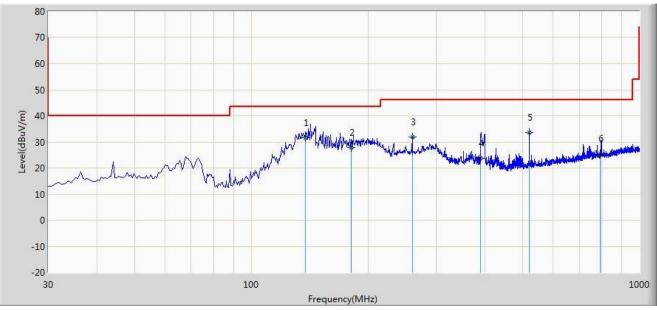
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			141.065	18.420	8.988	-25.080	43.500	9.432	QP
2			193.930	17.862	5.878	-25.638	43.500	11.984	QP
3			263.770	21.876	7.975	-24.124	46.000	13.901	QP
4			358.830	22.958	7.048	-23.042	46.000	15.910	QP
5		*	519.850	33.146	14.634	-12.854	46.000	18.512	QP
6			798.240	31.071	8.376	-14.929	46.000	22.695	QP

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)



Site: AC1	Time: 2015/09/23 - 19:19
Limit: FCC_Part15.209_RE(3m)	Engineer: Roy Cheng
Probe: VULB9162_0.03-8GHz	Polarity: Vertical
EUT: HD Wireless IP Camera	Power: AC 120V/60Hz

#### Worse Case Mode: 802.11g at Channel 2412MHz



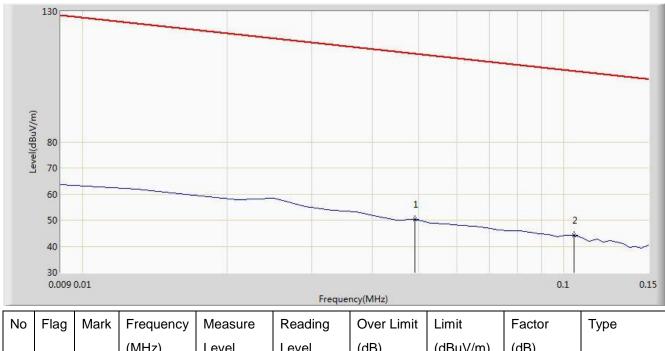
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	137.670	31.618	22.047	-11.882	43.500	9.571	QP
2			181.320	27.864	16.875	-15.636	43.500	10.989	QP
3			259.890	31.897	18.062	-14.103	46.000	13.835	QP
4			389.870	23.847	7.410	-22.153	46.000	16.437	QP
5			519.850	33.537	15.025	-12.463	46.000	18.512	QP
6			794.360	25.589	2.947	-20.411	46.000	22.642	QP

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)



Site: AC1	Time: 2015/09/12 - 15:32
Limit: FCC_Part15.209_RE(3m)	Engineer: Roy Cheng
Probe: FMZB1519_0.009-30MHz	Polarity: Face On
EUT: HD Wireless IP Camera	Power: AC 120V/60Hz

Note: There is the ambient noise within frequency range 9kHz~30MHz.



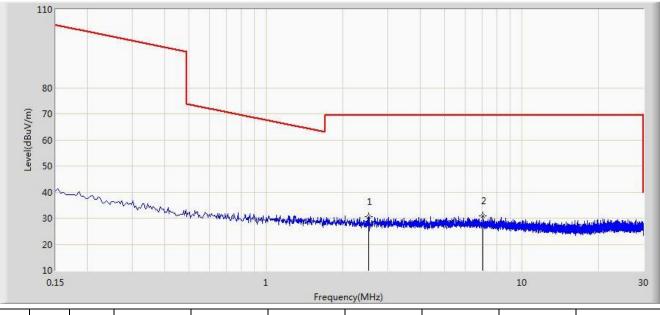
		(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
			(dBuV/m)	(dBuV)				
1		0.049	50.367	29.861	-63.422	113.789	20.505	QP
2	*	0.105	44.143	23.996	-63.029	107.173	20.147	QP

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)



Site: AC1	Time: 2015/09/12 - 15:41
Limit: FCC_Part15.209_RE(3m)	Engineer: Roy Cheng
Probe: FMZB1519_0.009-30MHz	Polarity: Face On
EUT: HD Wireless IP Camera	Power: AC 120V/60Hz

Note: There is the ambient noise within frequency range 9kHz~30MHz.



No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			2.513	30.495	10.336	-39.005	69.500	20.159	QP
2		*	7.041	30.974	10.579	-38.526	69.500	20.395	QP

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)



Site: AC1	Time: 2015/09/16 - 10:21
Limit: FCC_Part15.209_RE(3m)	Engineer: Roy Cheng
Probe: BBHA9170_18-40GHz	Polarity: Horizontal
EUT: HD Wireless IP Camera	Power: AC 120V/60Hz

#### Note: There is the ambient noise within frequency range 18GHz~25GHz.



No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			21517.500	55.869	17.883	-18.131	74.000	37.986	PK
2			21517.650	43.351	5.365	-10.649	54.000	37.986	AV
3			22630.500	56.509	18.223	-17.491	74.000	38.286	PK
4		*	22630.540	44.310	6.024	-9.690	54.000	38.286	AV

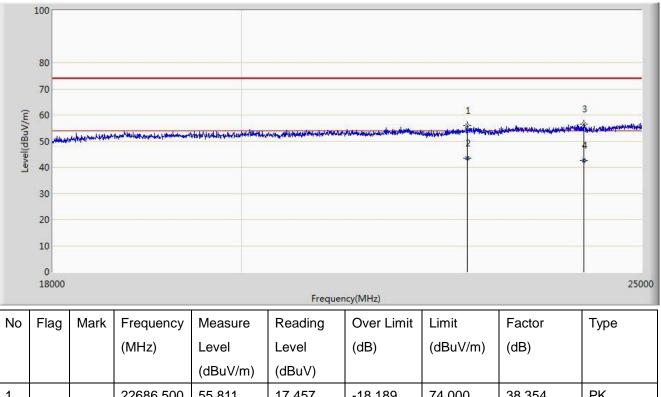
Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)



Site: AC1	Time: 2015/09/16 - 10:21
Limit: FCC_Part15.209_RE(3m)	Engineer: Roy Cheng
Probe: BBHA9170_18-40GHz	Polarity: Vertical
EUT: HD Wireless IP Camera	Power: AC 120V/60Hz

Note: There is the ambient noise within frequency range 18GHz~25GHz.



1		22686.500	55.811	17.457	-18.189	74.000	38.354	PK
2		22686.540	43.598	5.244	-10.402	54.000	38.354	AV
3		24205.500	56.430	17.607	-17.570	74.000	38.823	PK
4	*	24205.658	42.518	3.695	-11.482	54.000	38.823	AV

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)



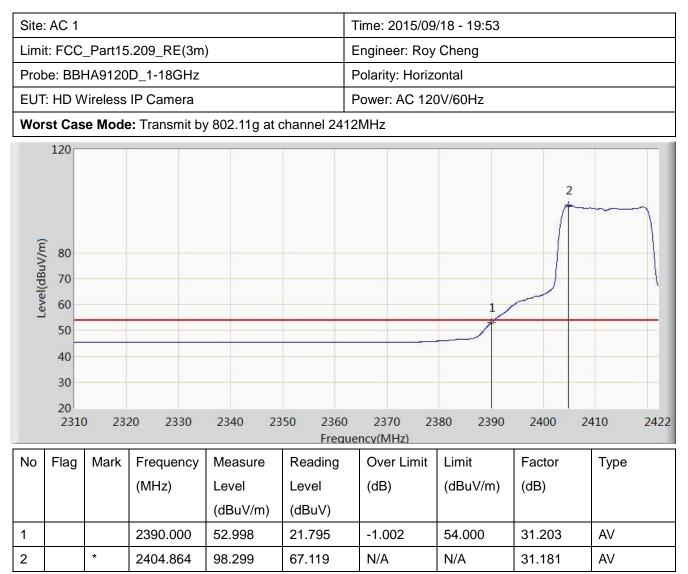
# 7.7. Radiated Restricted Band Edge Measurement

#### 7.7.1. Test Result

Site: A	C 1								
Limit: F	-					Time: 2015/09	/18 - 20:32		
1	FCC_	Part15	.209_RE(3m)	)		Engineer: Roy	Cheng		
Probe:	BBH	IA9120	D_1-18GHz			Polarity: Horiz	ontal		
EUT: H	HD W	ireless	IP Camera			Power: AC 120	0V/60Hz		
Worst	Case	e Mode	: Transmit by	/ 802.1g at ch	nannel 2412	MHz			
Level(dBuV/m)	20 80 70 60 40 30 20 2310	232	20 2330	2340 23	50 2360	2370 2: ency(MHz)	380 2390	2	410 2422
No FI	lag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
	-		(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			2390.000	72.545	41.342	-1.455	74.000	31.203	PK
2		*	2404.864	108.055	76.875	N/A	N/A	31.181	PK

Note: Measure Level ( $dB\mu V/m$ ) = Reading Level ( $dB\mu V$ ) + Factor (dB)

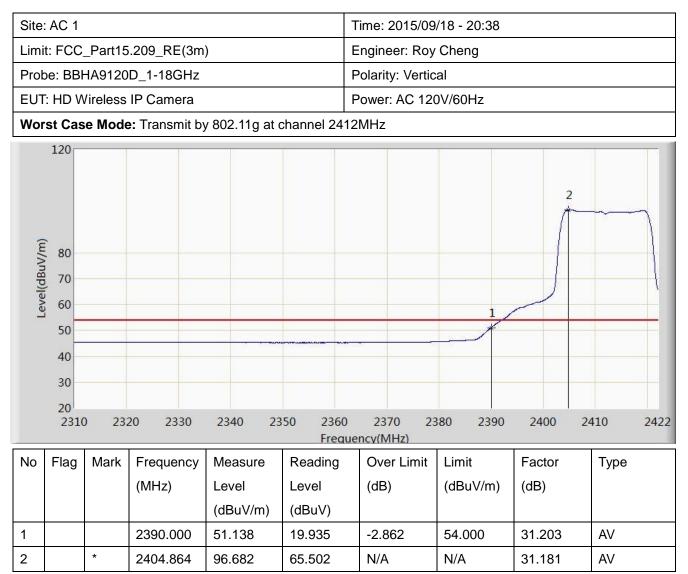






Site:	AC 1					Time: 2015/09	/18 - 20:33		
Limit	t: FCC	_Part15	5.209_RE(3m	)		Engineer: Roy	Cheng		
Prob	e: BBH	HA9120	D_1-18GHz			Polarity: Vertic	al		
EUT	: HD W	/ireless	IP Camera			Power: AC 120	0V/60Hz		
Wor	st Cas	e Mode	e: Transmit by	y 802.11g at o	channel 241	2MHz			
Level(dBuV/m)	120 80 70 60 40 30 20 2310	. <b>ромулир (на</b>	20 2330	2340 23		10. mbo stal una dita 1. ma 2370 23	380 2390	2	410 2422
Ne		Mork	Frequency	Magguro		encv(MHz)	Limit	Factor	Turne
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
1			2200.000	(dBuV/m)	(dBuV)	2 2 2 2 2	74.000	21 202	DK
1		*	2390.000	70.667	39.464	-3.333	74.000	31.203	PK
2		*	2405.592	106.365	75.186	N/A	N/A	31.179	PK







Site	: AC 1				Т	ime: 2015/09	/20 - 18:07		
Limi	t: FCC	_Part15	.209_RE(3m	)	E	Engineer: Roy	Cheng		
Prot	be: BBH	HA9120	D_1-18GHz		F	olarity: Horiz	ontal		
EUT	: HD W	Vireless	IP Camera		F	ower: AC 120	0V/60Hz		
Wor	st Cas	e Mode	e: Transmit by	y 802.11g at o	channel 2462	MHz			
l evel(dBuV/m)	50 40 30 20	1						Alf de la constat de seconde	
3	2452	2 2455	2460	2465	2470 247 Freque	75 2480 ncv(MHz)	2485	2490	2495 2500
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	2454.760	105.898	74.776	N/A	N/A	31.123	PK
2			2483.500	73.242	42.049	-0.758	74.000	31.194	PK
3			2483.920	73.658	42.464	-0.342	74.000	31.194	PK



Site:	AC 1				Т	īme: 2015/09	/20 - 18:06		
Limi	t: FCC	_Part15	.209_RE(3m)	)	E	Engineer: Roy	Cheng		
Prob	be: BBH	HA9120	D_1-18GHz		F	Polarity: Horizo	ontal		
EUT	: HD W	/ireless	IP Camera		F	Power: AC 120	0V/60Hz		
Wor	st Cas	e Mode	e: Transmit by	/ 802.11g at o	channel 2462	MHz			
Level(dBuV/m)	50 40 30 20	2 2455	2460	2465	2470 247 Freque	75 2480 ency(MHz)	2 2 2 2 2 2 2 2 4 8 5	2490 2	495 2500
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	2455.024	96.252	65.129	N/A	N/A	31.123	AV
2			2483.500	53.391	22.198	-0.609	54.000	31.194	AV



Site:	AC 1				-	Fime: 2015/09	/20 - 18:08		
Limi	t: FCC	_Part15	.209_RE(3m)	)	E	Engineer: Roy	Cheng		
Prob	be: BBH	HA9120	D_1-18GHz		F	Polarity: Vertic	al		
EUT	: HD W	/ireless	IP Camera		F	Power: AC 120	0V/60Hz		
Wor	st Cas	e Mode	e: Transmit by	/ 802.11g at o	channel 2462	2MHz			
Level(dBuV/m)	50 40 30 20	2 2455	2460	2465	2470 24 Freque	75 2480 encv(MHz)	2	2490	2495 2500
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	2454.664	105.025	73.903	N/A	N/A	31.123	PK
2			2483.500	71.259	40.066	-2.741	74.000	31.194	PK



Site	AC 1				Т	ime: 2015/09	/20 - 18:10		
Limi	t: FCC	_Part15	.209_RE(3m)	)	E	ngineer: Roy	Cheng		
Prob	be: BB⊦	HA9120	D_1-18GHz		F	olarity: Vertic	al		
EUT	: HD W	/ireless	IP Camera		F	ower: AC 120	)V/60Hz		
Wor	st Cas	e Mode	: Transmit by	/ 802.11g at o	channel 2462	MHz			
Level(dBuV/m)	50 40 30 20	2 2455	2460	2465	2470 247 Freque	75 2480 ncv(MHz)	2	2490 2	2495 2500
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	2454.952	95.613	64.490	N/A	N/A	31.123	AV
2			2483.500	51.051	19.858	-2.949	54.000	31.194	AV



# 7.8. AC Conducted Emissions Measurement

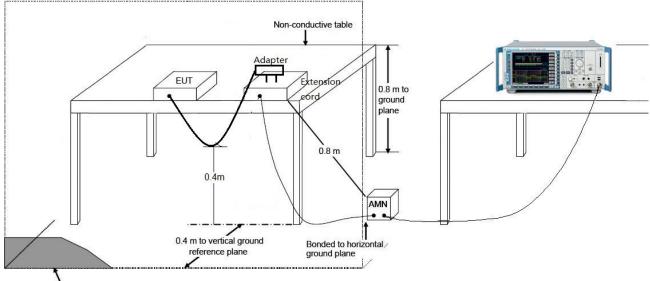
#### 7.8.1. Test Limit

FCC P	art 15 Subpart C Paragraph 15.20	)7 Limits
Frequency (MHz)	QP (dBuV)	AV (dBuV)
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Note 1: The lower limit shall apply at the transition frequencies.

Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

#### 7.8.2. Test Setup



Vertical ground reference plane



## 7.8.3. Test Result

Site	: SR2				7	Time: 2015/09	/16 - 14:50		
Limi	t: FCC	_Part15	.207_CE_AC	Power	E	Engineer: Line	e Chen		
Prob	be: EN	V216_1	01683_Filter	On	F	Polarity: Line			
EUT	: HD W	Vireless	IP Camera		F	Power: AC 120	0V/60Hz		
Test	t Mode	: Trans	mit by 802.11	g at channel	2412MHz				
I evel(dBuV)	10	3 4 MM 4 6 * +	MMM	Mulminger	nan gitter an the same				
	0 -10 -20								
	-10			1		ncy(MHz)		10	30
No	-10 -20	Mark	Frequency	1 Measure		ncy(MHz)	Limit	10 Factor	30 Type
No	-10 -20 0.15	Mark	Frequency (MHz)		Freque		Limit (dBuV)		
No	-10 -20 0.15	Mark		Measure	Freque	Over Limit			
1	-10 -20 0.15	Mark	(MHz) 0.166	Measure Level (dBuV) 33.730	Freque Reading Level (dBuV) 23.643	Over Limit (dB) -31.428	(dBuV) 65.158	Factor 10.087	Type     QP
1 2	-10 -20 0.15	Mark	(MHz) 0.166 0.166	Measure Level (dBuV) 33.730 15.543	Freque Reading Level (dBuV)	Over Limit (dB)	(dBuV) 65.158 55.158	Factor 10.087 10.087	Type     QP     AV
1	-10 -20 0.15	Mark	(MHz) 0.166 0.166 0.178	Measure Level (dBuV) 33.730 15.543 35.805	Freque Reading Level (dBuV) 23.643 5.456 25.747	Over Limit (dB) -31.428 -39.615 -28.774	(dBuV) 65.158 55.158 64.578	Factor 10.087 10.087 10.058	Type     QP
1 2 3 4	-10 -20 0.15	Mark	(MHz) 0.166 0.166 0.178 0.178	Measure Level (dBuV) 33.730 15.543 35.805 17.406	Freque Reading Level (dBuV) 23.643 5.456	Over Limit (dB) -31.428 -39.615	(dBuV) 65.158 55.158 64.578 54.578	Factor 10.087 10.087 10.058 10.058	Type       QP       AV       QP       AV       QP       AV
1 2 3 4	-10 -20 0.15	Mark	(MHz) 0.166 0.166 0.178	Measure Level (dBuV) 33.730 15.543 35.805 17.406 31.617	Freque Reading Level (dBuV) 23.643 5.456 25.747	Over Limit (dB) -31.428 -39.615 -28.774	(dBuV) 65.158 55.158 64.578	Factor 10.087 10.087 10.058	Type     QP     AV     QP
1 2 3 4 5	-10 -20 0.15	Mark	(MHz) 0.166 0.166 0.178 0.178	Measure Level (dBuV) 33.730 15.543 35.805 17.406	Freque Reading Level (dBuV) 23.643 5.456 25.747 7.348	Over Limit (dB) -31.428 -39.615 -28.774 -37.172	(dBuV) 65.158 55.158 64.578 54.578	Factor 10.087 10.087 10.058 10.058	Type       QP       AV       QP       AV       QP       AV
1 2 3 4 5 6	-10 -20 0.15	Mark	(MHz) 0.166 0.166 0.178 0.178 0.214	Measure Level (dBuV) 33.730 15.543 35.805 17.406 31.617	Freque Reading Level (dBuV) 23.643 5.456 25.747 7.348 21.660	Over Limit (dB) -31.428 -39.615 -28.774 -37.172 -31.431	(dBuV) 65.158 55.158 64.578 54.578 63.049	Factor 10.087 10.087 10.058 10.058 9.957	Type       QP       AV       QP       AV       QP       QP       QP
1 2 3 4 5 6 7	-10 -20 0.15	Mark	(MHz) 0.166 0.166 0.178 0.178 0.214 0.214	Measure Level (dBuV) 33.730 15.543 35.805 17.406 31.617 16.353	Freque           Reading           Level           (dBuV)           23.643           5.456           25.747           7.348           21.660           6.396	Over Limit (dB) -31.428 -39.615 -28.774 -37.172 -31.431 -36.696	(dBuV) 65.158 55.158 64.578 54.578 63.049 53.049	Factor 10.087 10.087 10.058 10.058 9.957 9.957	Type       QP       AV       QP       AV       QP       AV       QP       AV       QP       AV
1 2 3	-10 -20 0.15	Mark	(MHz) 0.166 0.166 0.178 0.178 0.214 0.214 0.214 0.494	Measure Level (dBuV) 33.730 15.543 35.805 17.406 31.617 16.353 29.772	Freque         Reading         Level         (dBuV)         23.643         5.456         25.747         7.348         21.660         6.396         19.614	Over Limit (dB) -31.428 -39.615 -28.774 -37.172 -31.431 -36.696 -26.328	(dBuV) 65.158 55.158 64.578 54.578 63.049 53.049 56.100	Factor 10.087 10.087 10.058 10.058 9.957 9.957 10.158	Type       QP       AV       QP       AV       QP       AV       QP       AV       QP       QP
1 2 3 4 5 6 7 8	-10 -20 0.15	Mark	(MHz) 0.166 0.166 0.178 0.178 0.214 0.214 0.214 0.494 0.494	Measure Level (dBuV) 33.730 15.543 35.805 17.406 31.617 16.353 29.772 18.453	Freque         Reading         Level         (dBuV)         23.643         5.456         25.747         7.348         21.660         6.396         19.614         8.295	Over Limit (dB) -31.428 -39.615 -28.774 -37.172 -31.431 -36.696 -26.328 -27.647	(dBuV) 65.158 55.158 64.578 54.578 63.049 53.049 56.100 46.100	Factor 10.087 10.087 10.058 10.058 9.957 9.957 10.158 10.158	TypeQPAVQPAVQPAVQPAVQPAVQPAVQPAV

Note: Measure Level (dB $\mu$ V) = Reading Level (dB $\mu$ V) + Factor (dB)

35.327

25.105

-14.673

50.000

Factor (dB) = Cable Loss (dB) + LISN Factor (dB)

25.002

\*

12

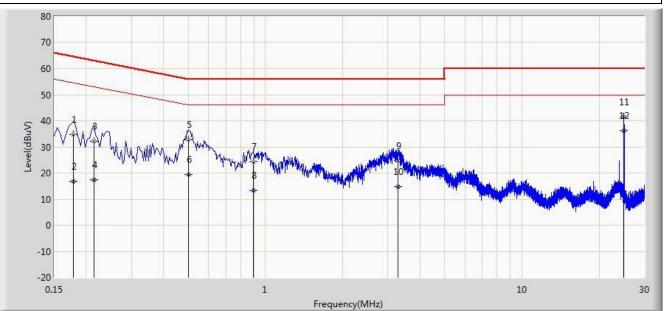
AV

10.222



Site: SR2	Time: 2015/09/16 - 14:56				
Limit: FCC_Part15.207_CE_AC Power	Engineer: Line Chen				
Probe: ENV216_101683_Filter On	Polarity: Neutral				
EUT: HD Wireless IP Camera	Power: AC 120V/60Hz				

Test Mode: Transmit by 802.11g at channel 2412MHz



No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV)		
				(dBuV)	(dBuV)				
1			0.178	34.692	24.642	-29.887	64.578	10.049	QP
2			0.178	16.852	6.802	-37.726	54.578	10.049	AV
3			0.214	32.060	22.072	-30.988	63.049	9.988	QP
4			0.214	17.270	7.282	-35.778	53.049	9.988	AV
5			0.502	32.789	22.612	-23.211	56.000	10.177	QP
6			0.502	19.295	9.118	-26.705	46.000	10.177	AV
7			0.898	24.467	14.502	-31.533	56.000	9.965	QP
8			0.898	13.190	3.225	-32.810	46.000	9.965	AV
9			3.278	24.695	14.804	-31.305	56.000	9.891	QP
10			3.278	14.839	4.948	-31.161	46.000	9.891	AV
11			25.002	41.559	31.247	-18.441	60.000	10.312	QP
12		*	25.002	36.314	26.002	-13.686	50.000	10.312	AV

Note: Measure Level (dB $\mu$ V) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB)



# 8. CONCLUSION

The data collected relate only the item(s) tested and show that the HD Wireless IP Camera FCC ID:

X4YXPY12K is in compliance with Part 15C of the FCC Rules.