FCC Part 15C Measurement and Test Report

For

Y-Cam Solutions Ltd

Vision House, 3 Dee Road, Richmond, Surrey. UK

FCC ID: V4FYCK020

FCC Rules: FCC Part 15C

Product Description: Network Camera

Tested Model: YCK0xx

Report No.: <u>STR121081801</u>

Tested Date: <u>2012-10-28 to 2012-12-11</u>

Issued Date: <u>2012-12-13</u>

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Note: This test report is limited to the above client company and the product model only. It may not be duplicated without prior permitted by SEM.Test Compliance Service Co., Ltd

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1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant: Y-Cam Solutions Ltd

Address of applicant: Vision House, 3 Dee Road, Richmond, Surrey. UK

Manufacturer: Y-Cam Solutions Ltd

Address of manufacturer: Vision House, 3 Dee Road, Richmond, Surrey. UK

General Description of EUT	
Product Name:	Network Camera
Trade Name:	Y-Cam
Model No.:	YCK0xx
Adding Model(s):	YCB0xx, YCW0xx, WFBYMKx-N
Rated Voltage:	5V
Power Adepter Model:	FKS308HSC-050200N
Power Adapter Model:	(Input: AC 100-240V, Output: DC 5V)

Note: The test data is gathered from a production sample, provided by the manufacturer. The other model listed in the report has different appearance only of YCK0xx without circuit and electronic construction changed, declared by the manufacturer.

Technical Characteristics of EUT	
Support Standards:	802.11b, 802.11g, 802.11n
Frequency Range:	2412-2462MHz
RF Output Power:	9.55dBm (Conducted)
Type of Modulation:	CCK, OFDM, QPSK, BPSK, 16QAM, 64QAM
Data Rate:	1-11Mbps, 6-54Mbps, up to 150Mbps
Quantity of Channels	11
Channel Separation:	5MHz
Type of Antenna:	Integral Antenna
Antenna Gain:	2.0 dBi
Lowest Internal Frequency of EUT:	32.768kHz
Device Category:	Portable Device

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1.2 Test Standards

The following report is prepared on behalf of the Y-Cam Solutions Ltd in accordance with FCC Part 15, Subpart C, and section 15.203, 15.205, 15.207, 15.209 and 15.247 of the Federal Communication Commissions rules.

The objective is to determine compliance with FCC Part 15, Subpart C, and section 15.203, 15.205, 15.207, 15.209 and 15.247 of the Federal Communication Commissions rules.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product, which result in lowering the emission, should be checked to ensure compliance has been maintained.

1.3 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 public notice KDB 558074 for digital transmission systems shall be performed also.

1.4 Test Facility

• FCC – Registration No.: 994117

SEM.Test Compliance Services 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 and the Registration is 994117.

• Industry Canada (IC) Registration No.: 7673A

The 3m Semi-anechoic chamber of SEM.Test Compliance Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 7673A.

• CNAS Registration No.: L4062

Shenzhen SEM. Test Electronics Service Co., Ltd. is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L4062. All measurement facilities used to collect the measurement data are located at 3/F, Jinbao Commerce Building, Xin'an Fanshen Road, Bao'an District, Shenzhen, P.R.C (518101)

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1.5 EUT Setup and Test Mode

The EUT was operated in the engineering mode to fix the Tx frequency that was for the purpose of the measurements. All testing shall be performed under maximum output power condition, and to measure its highest possible emissions level, more detailed description as follows:

Test Mode List			
Test Mode	Description	Remark	
TM1	802.11b	2412MHz, 2437MHz, 2462MHz	
TM2	802.11g	2412MHz, 2437MHz, 2462MHz	
TM3	802.11n-HT20	2412MHz, 2437MHz, 2462MHz	
TM4	Working	Wireless connect or connect to pc	

Special Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
DC Line	3.0	Unshielded	With Ferrite
RJ45	1.0	Unshielded	Without Ferrite

Auxiliary Equipment List and Details			
Description	Manufacturer	Model	Serial Number
PC	Samsung	R20	/

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2. SUMMARY OF TEST RESULTS

FCC Rules	Description of Test Item Resul	
§ 15.203; § 15.247(b)(4)(i)	Antenna Requirement	Compliant
§ 15.207(a)	Conducted Emission	Compliant
§ 15.247(e)	Power Spectral Density	Compliant
§ 15.247(a)(2)	6 dB Bandwidth	Compliant
§ 15.247(b)(3)	RF Output Power	Compliant
§ 15.209(a)(d)	Radiated Emission	Compliant
§ 15.247(d)	Band Edge (Out of Band Emissions)	Compliant

N/A: not applicable

3. Antenna Requirement

3.1 Standard Applicable

According to FCC Part 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. 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.

3.2 Evaluation Information

This product has a permanent antenna, fulfill the requirement of this section.

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4. Power Spectral Density

4.1 Standard Applicable

According to 15.247(a)(1)(iii), For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

4.2 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
Spectrum Analyzer	Agilent	E4402B	US41192821	2012-03-28	2013-03-27
Attenuator	ATTEN	ATS100-4-20	/	2012-03-28	2013-03-27

Statement of Traceability: All calibrations have been performed per the NVLAP requirements traceable to the NIST.

4.3 Test Procedure

According to the KDB 558074, the test method of power spectral density as below:

- 1. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- 2. Set analyzer center frequency to DTS channel center frequency.
- 3. Set the span to 1.5 times the DTS channel bandwidth.
- 4. Set the RBW \geq 3 kHz.
- 5. Set the VBW \geq 3 x RBW.
- 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 amplitude level.
- 11. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

4.4 Environmental Conditions

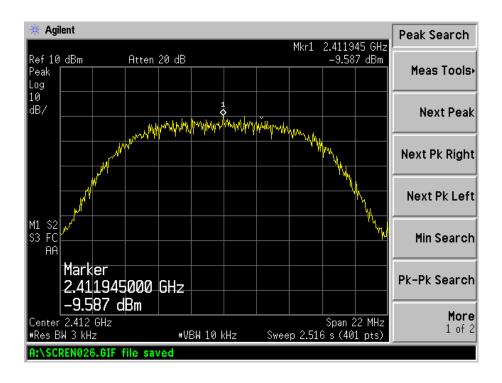
Temperature:	20° C
Relative Humidity:	54%
ATM Pressure:	1011 mbar

4.5 Summary of Test Results/Plots

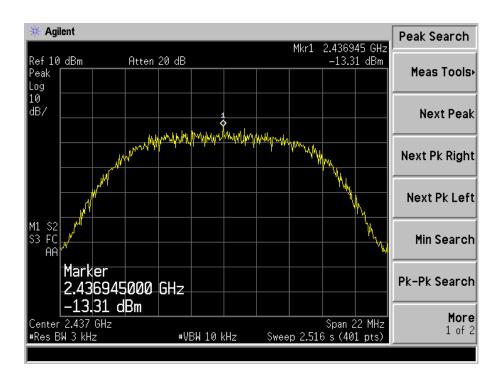
Test Mode	Test Channel MHz	Power Spectral Density dBm/3kHz	Limit dBm/3kHz
	2412	-9.587	8
802.11b	2437	-13.31	8
	2462	-13.12	8
	2412	-13.26	8
802.11g	2437	-14.70	8
	2462	-16.26	8
	2412	-12.86	8
802.11n HT20	2437	-14.15	8
	2462	-15.96	8

Please refer to the following test plots:

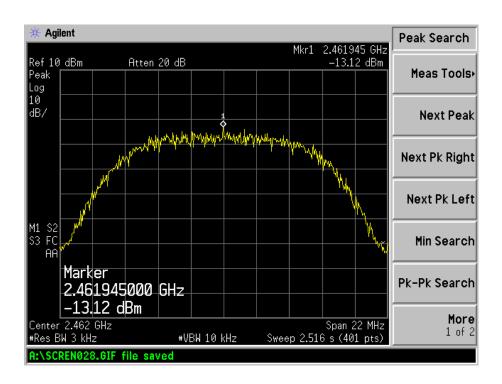
802.11b-Low Channel



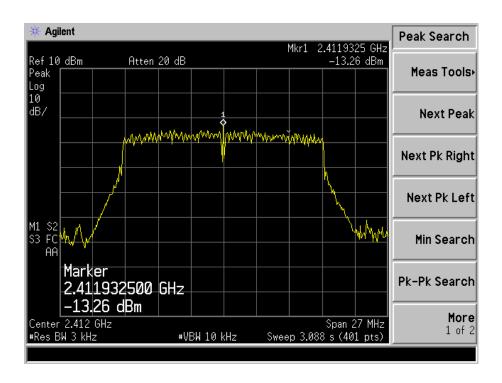
802.11b-Middle Channel



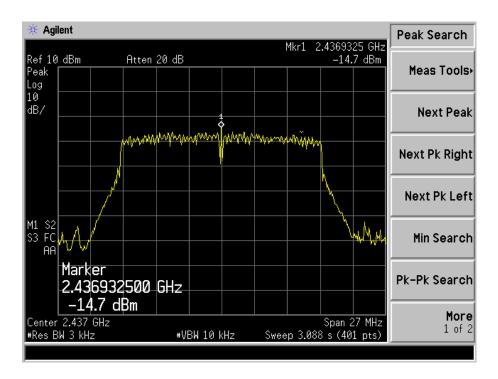
802.11b-High Channel



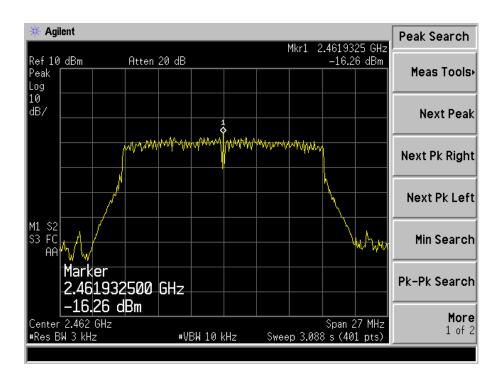
802.11g-Low Channel



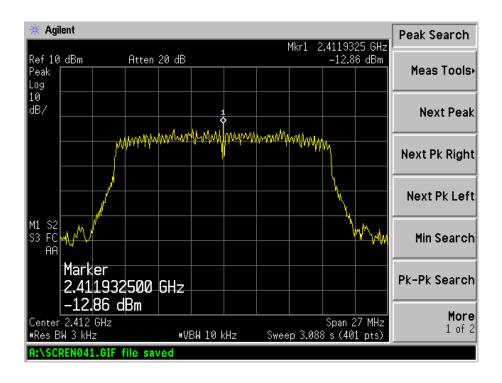
802.11g-Middle Channel



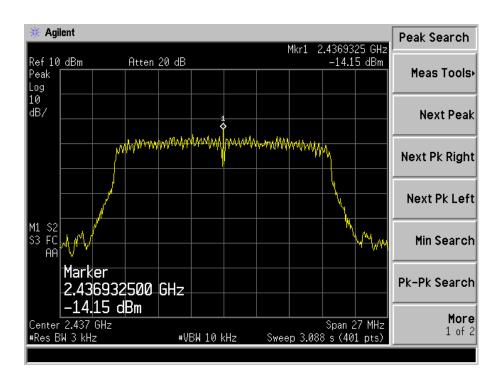
802.11g-High Channel



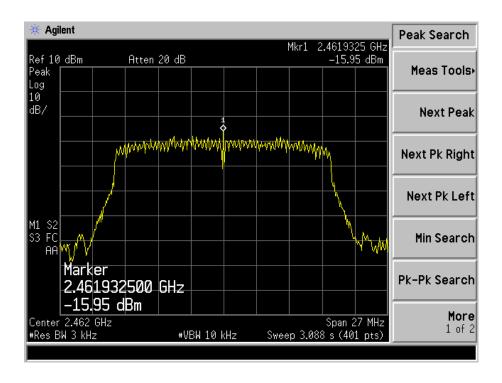
802.11n-HT20-Low Channel



802.11n-HT20-Middle Channel



802.11n-HT20-High Channel



5. 6dB Bandwidth

5.1 Standard Applicable

According to 15.247(a)(2). Systems using digital modulation techniques may operate in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

5.2 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
Spectrum Analyzer	Agilent	E4402B	US41192821	2012-03-28	2013-03-27
Attenuator	ATTEN	ATS100-4-20	/	2012-03-28	2013-03-27

5.3 Test Procedure

- 1. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- 2. Set resolution bandwidth (RBW) = 1-5% or DTS BW, not to exceed 100 kHz.
- 3. Set the video bandwidth (VBW) \geq 3 x RBW.
- 4. Detector = Peak.
- 5. Trace mode = max hold.
- 6. Sweep = auto couple.
- 7. Allow the trace to stabilize.
- 8. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission..

5.4 Environmental Conditions

Temperature:	24° C
Relative Humidity:	53%
ATM Pressure:	1018 mbar

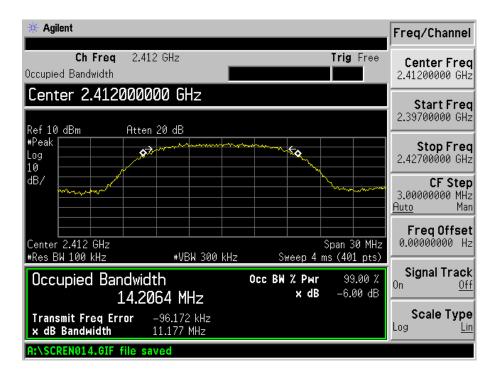
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5.5 Summary of Test Results/Plots

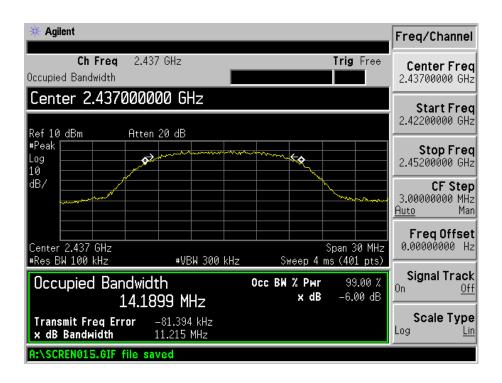
Test Mode	Test Channel MHz	6 dB Bandwidth kHz	Limit kHz
	2412	11177	500
802.11b	2437	11215	500
	2462	11235	500
	2422	16465	500
802.11g	2437	16480	500
	2452	16472	500
	2412	17525	500
802.11n-HT20	2437	17239	500
	2462	17600	500

Please refer to the following test plots:

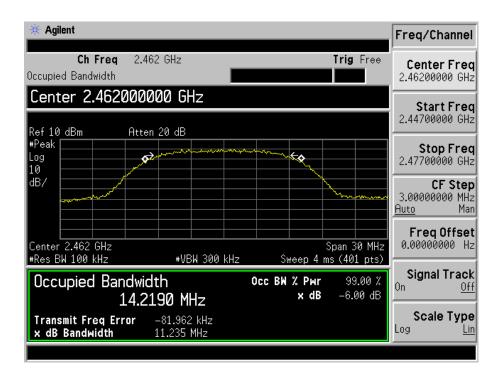
802.11b-Low Channel



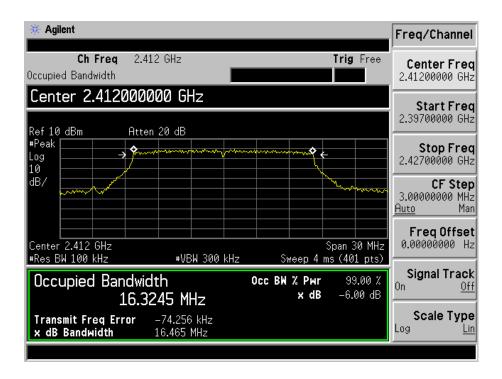
802.11b-Middle Channel



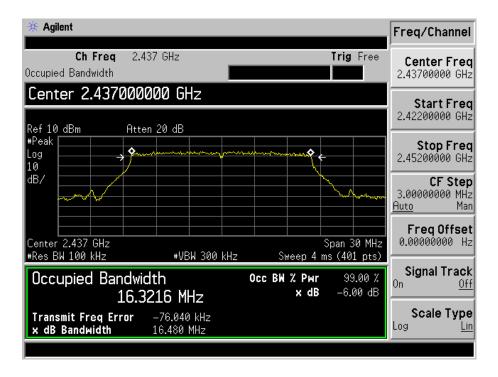
802.11b-High Channel



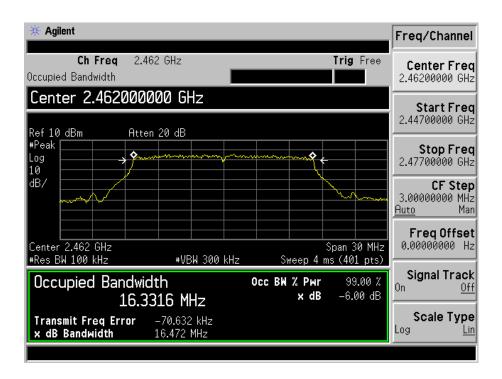
802.11g-Low Channel



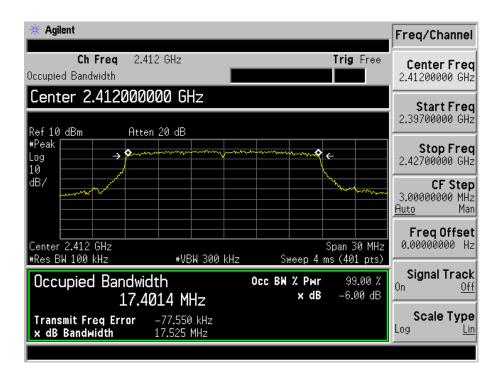
802.11g-Middle Channel



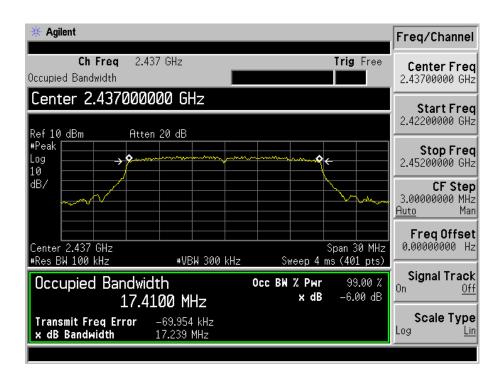
802.11g-High Channel



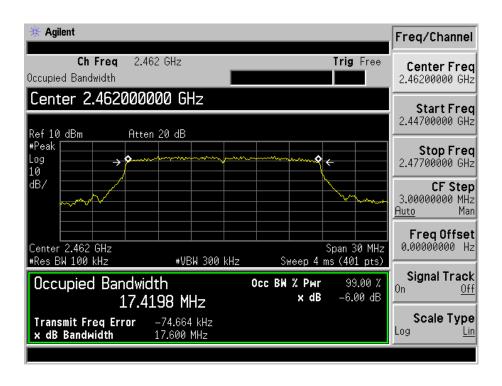
802.11n-HT20-Low Channel



802.11n-HT20-Middle Channel



802.11n-HT20-High Channel



6. RF Output Power

6.1 Standard Applicable

According to 15.247(b)(3). For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt.

6.2 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
Spectrum Analyzer	Agilent	E4402B	US41192821	2012-03-28	2013-03-27
Attenuator	ATTEN	ATS100-4-20	/	2012-03-28	2013-03-27

Statement of Traceability: All calibrations have been performed per the NVLAP requirements traceable to the NIST.

6.3 Test Procedure

According to section 15.247(b)-power output of the KDB-558074 (2012),

- 1. This procedure provides an integrated measurement alternative when the maximum available RBW < EBW.
- 2. Set the RBW = 1 MHz.
- 3. Set the VBW = 3 MHz.
- 4. Set the span to a value that is 5-30 % greater than the EBW.
- 5. Detector = peak.
- 6. Sweep time = auto couple.
- 7. Trace mode = max hold.
- 8. Allow trace to fully stabilize.
- 9. Use the spectrum analyzer's integrated band power measurement function with band limits set equal to the EBW band edges (for some analyzers, this may require a manual override to ensure use of peak detector). If the spectrum analyzer does not have a band power function, sum the spectrum levels (in linear power units) at 1 MHz intervals extending across the EBW of the spectrum.

6.4 Environmental Conditions

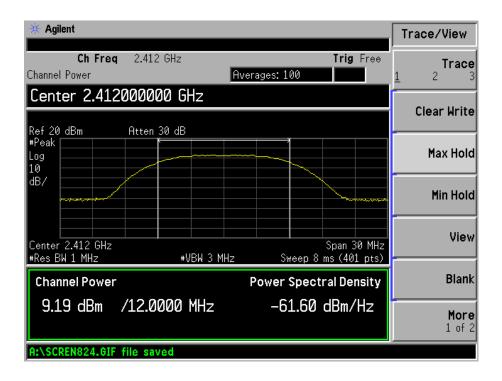
Temperature:	21° C
Relative Humidity:	55%
ATM Pressure:	1011 mbar

6.5 Summary of Test Results/Plots

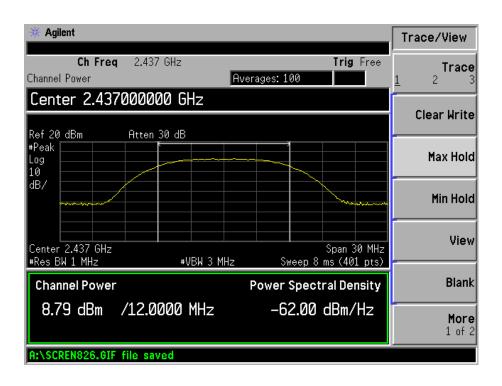
Test Mode	Frequency Reading MHz dBm		Output Power mW	Limit mW	
	2412	9.19	8.2985	1000	
802.11b _1Mbps	2437	8.79	7.8886	1000	
	2462	8.27	6.7143	1000	
	2412	9.55	9.0157	1000	
802.11b _11Mbps	2437	9.32	8.5507	1000	
	2462	7.90	6.1660	1000	
	2412	6.38	4.3451	1000	
802.11g_6Mbps	2437	5.83	3.8282	1000	
	2462	5.03	3.1842	1000	
	2412	6.68	4.6559	1000	
802.11g_54Mbps	2437	5.96	3.9446	1000	
	2462	5.11	3.2434	1000	
	2412	6.73	4.7098	1000	
802.11n HT20_MCS0	2437	6.10	4.0738	1000	
	2462	5.25	3.3497	1000	
	2412	6.74	4.7206	1000	
802.11n HT20_MCS7	2437	6.11	4.0832	1000	
	2462	5.95	3.9355	1000	

Please refer to the following test plots:

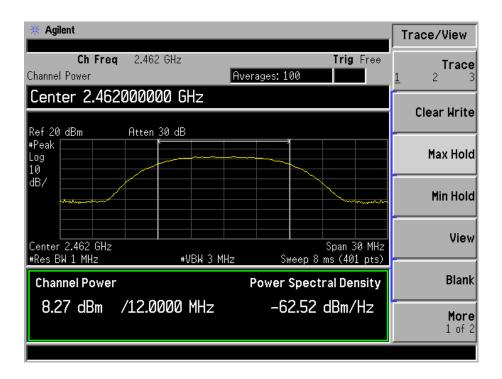
802.11b-1Mbps-Low Channel



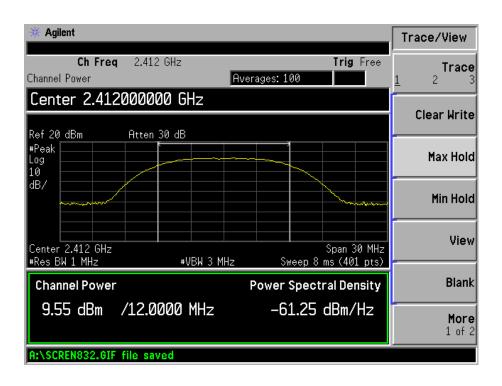
802.11b -1Mbps-Middle Channel



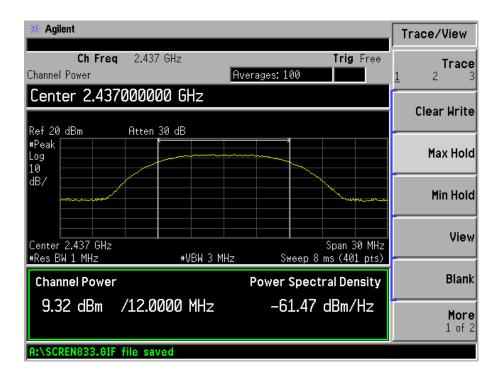
802.11b -1Mpbs-High Channel



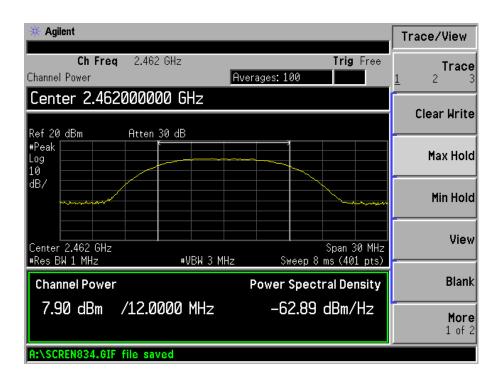
802.11-11Mbps-Low Channel



802.11b -11Mbps-Middle Channel

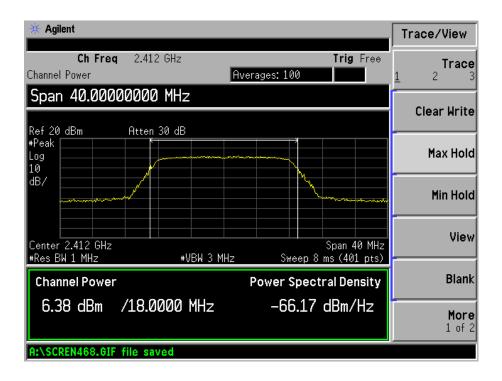


802.11b -11Mpbs-High Channel

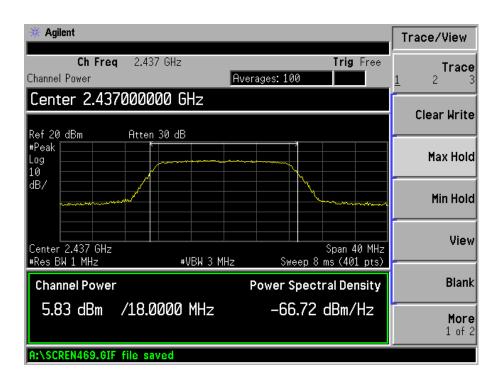


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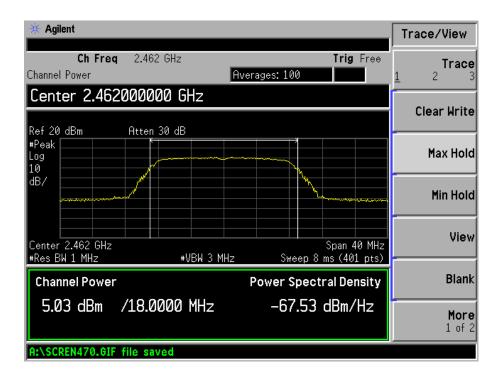
802.11g-6Mbps-Low Channel



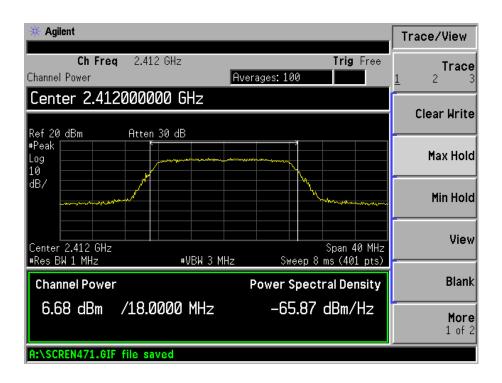
802.11g-6Mbps-Middle Channel



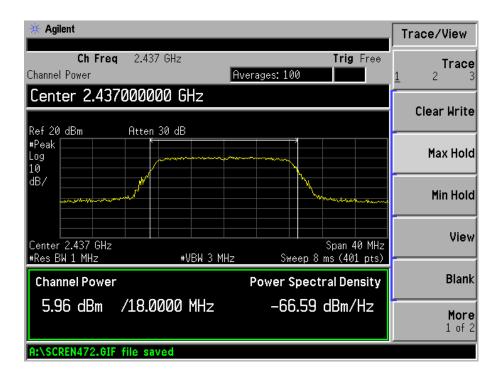
802.11g-6Mpbs-High Channel



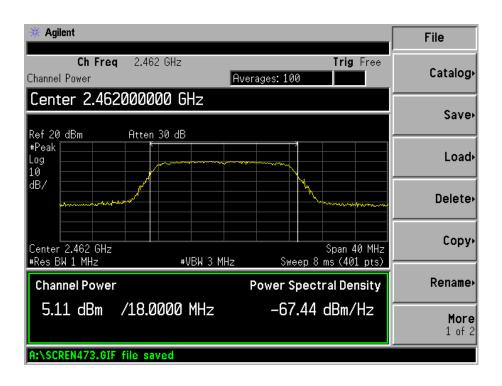
802.11g-54Mbps-Low Channel



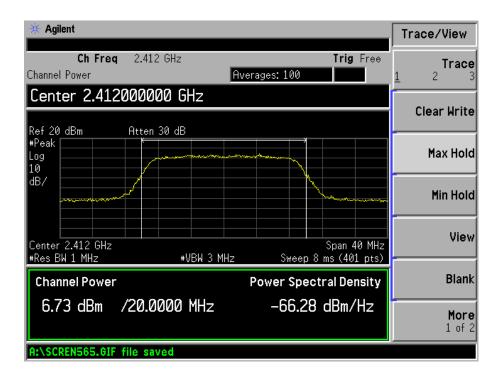
802.11g-54Mbps-Middle Channel



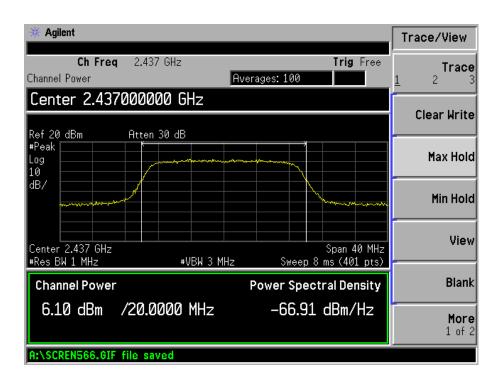
802.11g-54Mpbs-High Channel



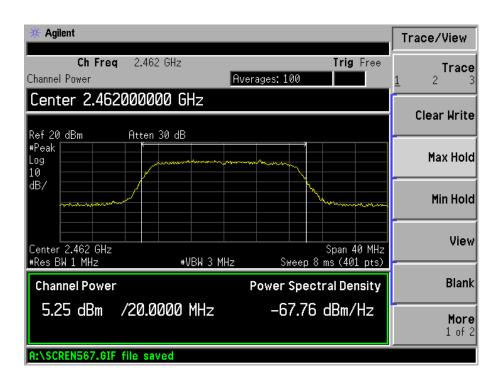
802.11n-HT20-MCS0-Low Channel



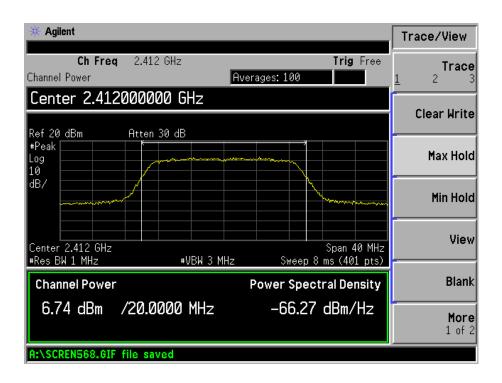
802.11n-HT20-MCS0-Middle Channel



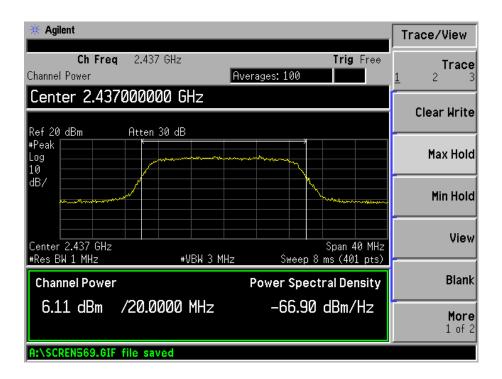
802.11n-HT20-MCS0-High Channel



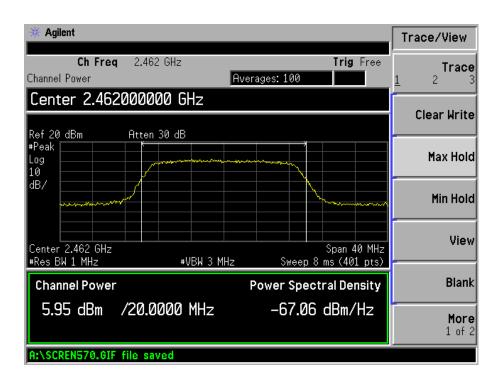
802.11n-HT20-MCS7-Low Channel



802.11n-HT20-MCS7-Middle Channel



802.11n-HT20-MCS7-High Channel



7. Field Strength of Spurious Emissions

7.1 Measurement Uncertainty

Based on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of a radiation emissions measurement is ± 5.10 dB.

7.2 Standard Applicable

According to §15.247(d), in any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a).

The emission limit in this paragraph is based on measurement instrumentation employing an average detector. The provisions in §15.35 for limiting peak emissions apply. Spurious Radiated Emissions measurements starting below or at the lowest crystal frequency.

7.3 Test Equipment List and Details

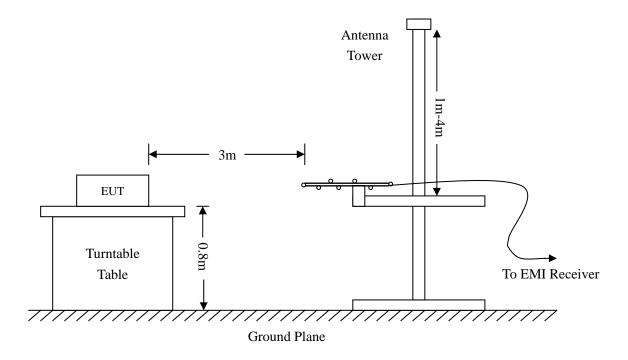
Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
Spectrum Analyzer	R&S	FSP	836079/035	2012-03-28	2013-03-27
EMI Test Receiver	R&S	ESVB	825471/005	2012-03-28	2013-03-27
Pre-amplifier	plifier Agilent		3113A06717	2012-03-28	2013-03-27
Pre-amplifier Compliance Direction		PAP-0118	24002	2012-03-28	2013-03-27
Trilog Broadband Antenna	SCHWARZBECK	VULB9163	9163-333	2012-02-25	2013-02-24
Horn Antenna	ETS	3117	00086197	2012-02-25	2013-02-24
Horn Antenna	Horn Antenna ETS		00088203	2012-02-25	2013-02-24
Loop Antenna	SCHWARZECK	HFRA 5165	9365	2012-02-25	2013-02-24

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7.4 Test Procedure

The setup of EUT is according with per ANSI C63.4-2003 measurement procedure. The specification used was with the FCC Part 15.205 15.247(a) and FCC Part 15.209 Limit.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle. The spacing between the peripherals was 10 cm.



7.5 Corrected Amplitude & Margin Calculation

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

The "Margin" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of $-6dB\mu V$ means the emission is $6dB\mu V$ below the maximum limit for Class B. The equation for margin calculation is as follows:

7.6 Environmental Conditions

Temperature:	25 °C
Relative Humidity:	52%
ATM Pressure:	1012 mbar

7.7 Summary of Test Results/Plots

According to the data below, the FCC Part 15.205, 15.209 and 15.247 standards, and had the worst margin of:

-2.42 dB at 277.0935MHz in the Horizontal polarization for Middle Channel, 9kHz to 25 GHz, 3 Meters

Note: this EUT was tested in 3 orthogonal positions and the worst case position data was reported.

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Plot of Radiated Emissions Test Data (30MHz to 1GHz)

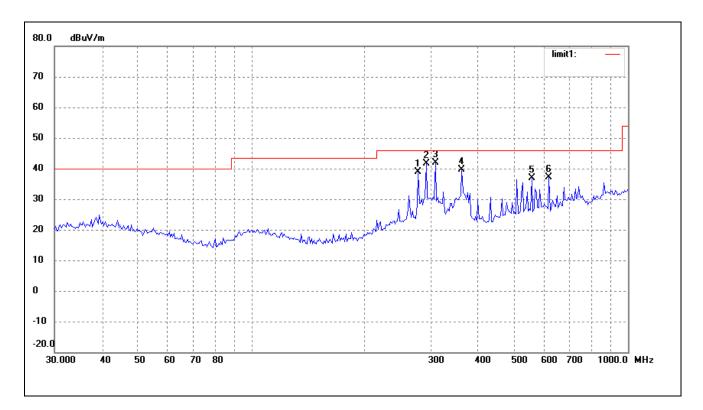
EUT: Network Camera

Tested Model: YCK0xx

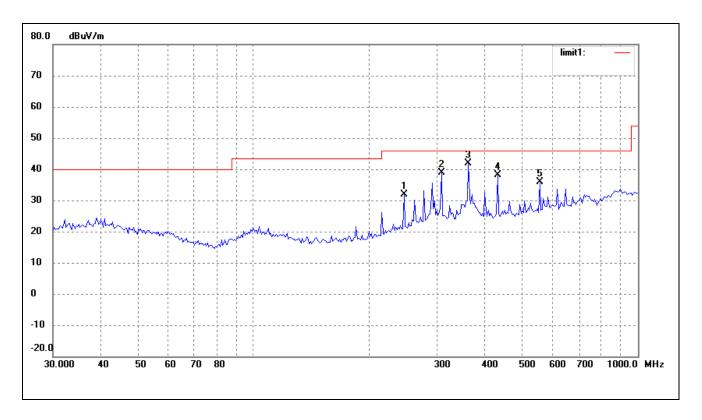
Operating Condition: 802.11b Transmitting Low Channel-2412MHz

Comment: AC120V/60Hz, Adapter 5V

Test Specification: Horizontal



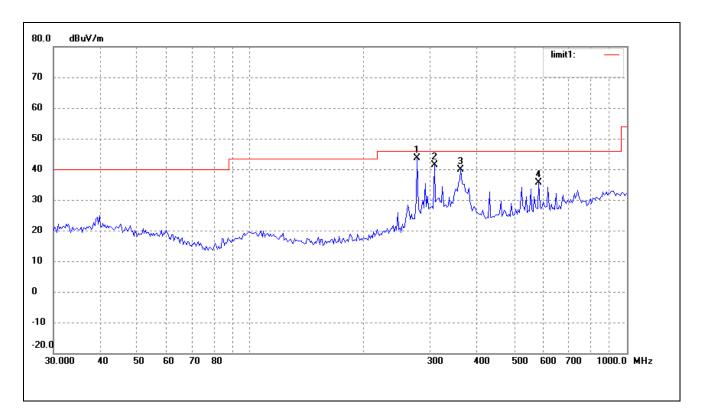
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	277.0935	30.80	8.13	38.93	46.00	-7.07	360	100	peak
2	291.0360	32.96	8.79	41.75	46.00	-4.25	360	100	peak
3	307.8313	32.68	9.20	41.88	46.00	-4.12	360	100	peak
4	361.7139	30.25	9.26	39.51	46.00	-6.49	360	100	peak
5	554.8254	25.37	11.42	36.79	46.00	-9.21	360	100	peak
6	616.3718	25.08	12.07	37.15	46.00	-8.85	360	100	peak



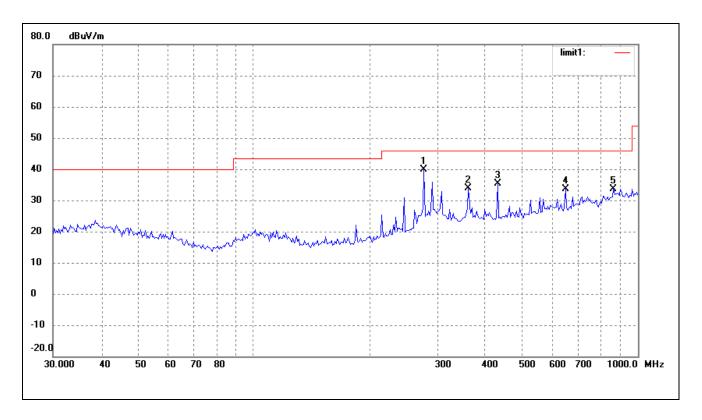
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	245.9509	25.37	6.47	31.84	46.00	-14.16	360	100	peak
2	307.8313	29.59	9.20	38.79	46.00	-7.21	360	100	peak
3	361.7139	32.51	9.26	41.77	46.00	-4.23	360	100	peak
4	431.0316	28.45	9.74	38.19	46.00	-7.81	360	100	peak
5	554.8254	24.50	11.42	35.92	46.00	-10.08	360	100	peak

Operating Condition: 802.11b Transmitting Middle Channel-2437MHz

Comment: AC120V/60Hz, Adapter 5V



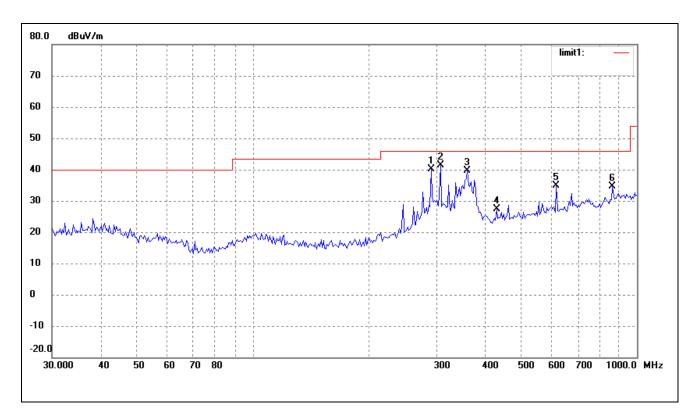
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	277.0935	35.45	8.13	43.58	46.00	-2.42	360	100	peak
2	307.8313	32.11	9.20	41.31	46.00	-4.69	360	100	peak
3	361.7139	30.71	9.26	39.97	46.00	-6.03	360	100	peak
4	582.7425	22.97	12.60	35.57	46.00	-10.43	360	100	peak



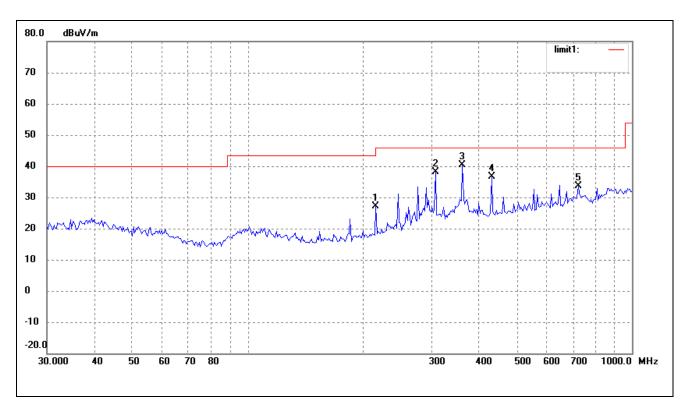
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	277.0935	31.63	8.13	39.76	46.00	-6.24	360	100	peak
2	361.7139	24.51	9.26	33.77	46.00	-12.23	360	100	peak
3	431.0316	25.54	9.74	35.28	46.00	-10.72	360	100	peak
4	647.3856	21.29	12.37	33.66	46.00	-12.34	360	100	peak
5	863.0562	17.31	16.30	33.61	46.00	-12.39	360	100	peak

Operating Condition: 802.11b Transmitting High Channel-2462MHz

Comment: AC120V/60Hz, Adapter 5V



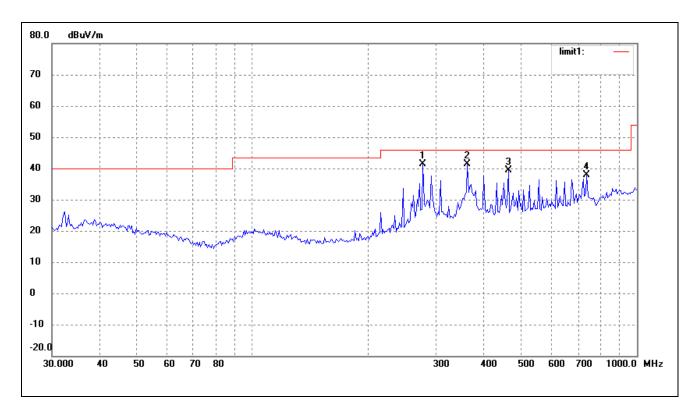
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	291.0360	31.44	8.79	40.23	46.00	-5.77	360	100	peak
2	307.8313	32.13	9.20	41.33	46.00	-4.67	360	100	peak
3	361.7139	30.33	9.26	39.59	46.00	-6.41	360	100	peak
4	431.0316	17.69	9.74	27.43	46.00	-18.57	360	100	peak
5	616.3718	22.75	12.07	34.82	46.00	-11.18	360	100	peak
6	863.0562	18.40	16.30	34.70	46.00	-11.30	360	100	peak



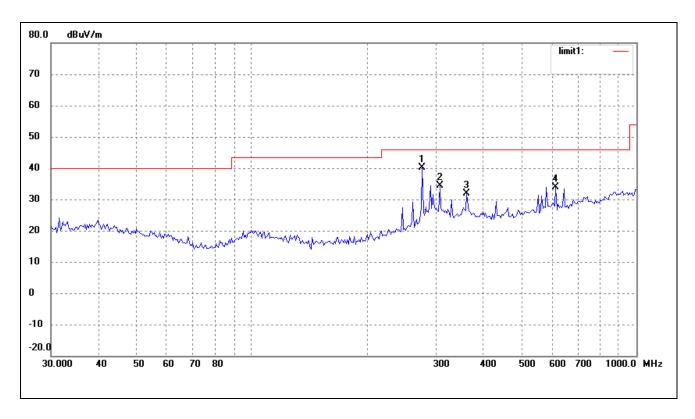
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	215.2678	22.35	4.74	27.09	43.50	-16.41	360	100	peak
2	307.8313	29.03	9.20	38.23	46.00	-7.77	360	100	peak
3	361.7139	31.22	9.26	40.48	46.00	-5.52	360	100	peak
4	431.0316	26.97	9.74	36.71	46.00	-9.29	360	100	peak
5	724.2611	19.12	14.56	33.68	46.00	-12.32	360	100	peak

Operating Condition: 802.11g Transmitting Low Channel-2412MHz

Comment: AC120V/60Hz, Adapter 5V



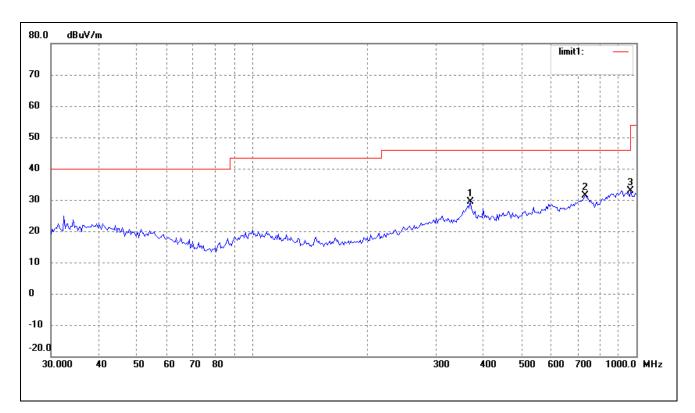
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	277.0935	33.22	8.13	41.35	46.00	-4.65	360	100	peak
2	361.7139	32.11	9.26	41.37	46.00	-4.63	360	100	peak
3	462.3455	28.92	10.49	39.41	46.00	-6.59	360	100	peak
4	739.6605	22.48	15.49	37.97	46.00	-8.03	360	100	peak



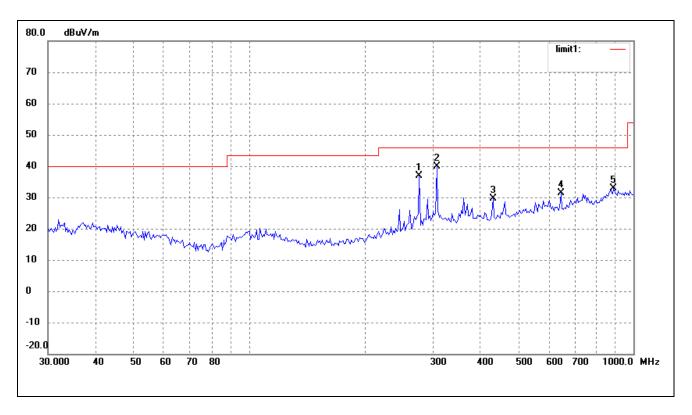
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	277.0935	31.93	8.13	40.06	46.00	-5.94	360	100	peak
2	307.8313	25.07	9.20	34.27	46.00	-11.73	360	100	peak
3	361.7139	22.70	9.26	31.96	46.00	-14.04	360	100	peak
4	616.3718	21.72	12.07	33.79	46.00	-12.21	360	100	peak

Operating Condition: 802.11g Transmitting Middle Channel-2437MHz

Comment: AC120V/60Hz, Adapter 5V



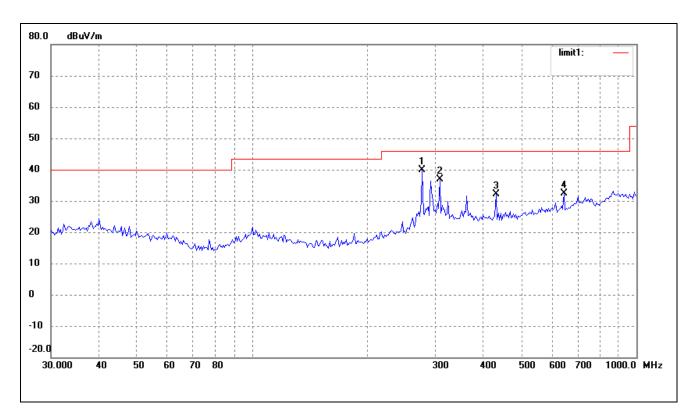
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	369.4047	20.13	9.25	29.38	46.00	-16.62	360	100	peak
2	734.4913	16.22	15.18	31.40	46.00	-14.60	360	100	peak
3	965.5421	16.68	16.30	32.98	54.00	-21.02	360	100	peak



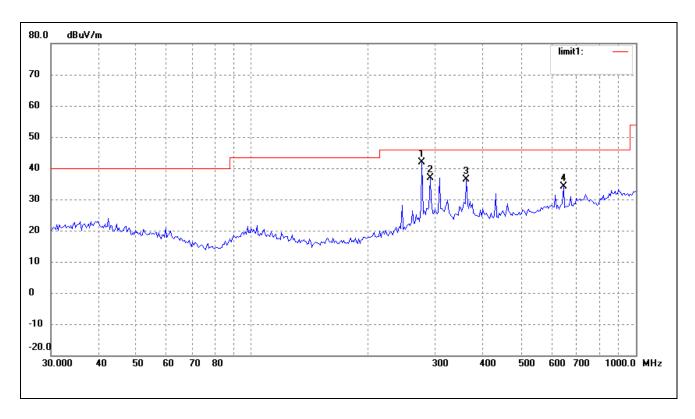
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	277.0935	28.86	8.13	36.99	46.00	-9.01	360	100	peak
2	307.8313	30.72	9.20	39.92	46.00	-6.08	360	100	peak
3	431.0316	19.87	9.74	29.61	46.00	-16.39	360	100	peak
4	647.3856	19.10	12.37	31.47	46.00	-14.53	360	100	peak
5	887.6099	16.04	16.74	32.78	46.00	-13.22	360	100	peak

Operating Condition: 802.11g Transmitting High Channel-2462MHz

Comment: AC120V/60Hz, Adapter 5V



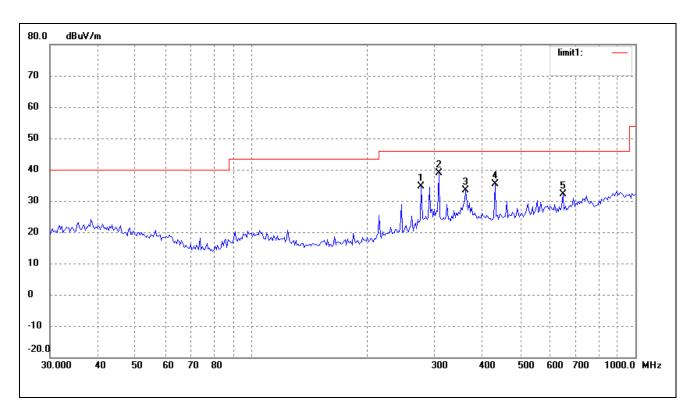
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	277.0935	31.74	8.13	39.87	46.00	-6.13	360	100	peak
2	307.8313	27.80	9.20	37.00	46.00	-9.00	360	100	peak
3	431.0316	22.34	9.74	32.08	46.00	-13.92	360	100	peak
4	647.3856	20.06	12.37	32.43	46.00	-13.57	360	100	peak



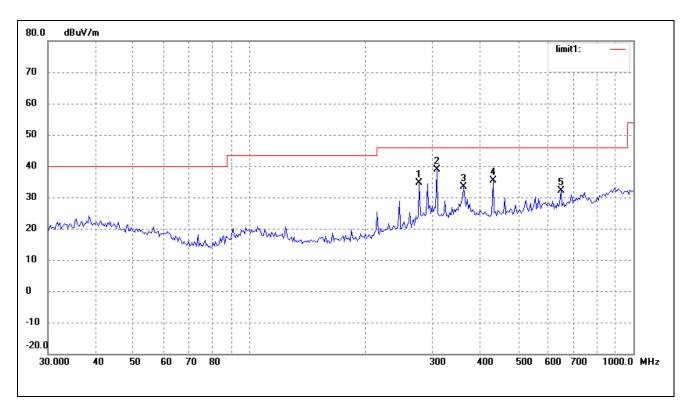
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	277.0935	33.63	8.13	41.76	46.00	-4.24	360	100	peak
2	291.0360	28.07	8.79	36.86	46.00	-9.14	360	100	peak
3	361.7139	27.23	9.26	36.49	46.00	-9.51	360	100	peak
4	647.3856	21.65	12.37	34.02	46.00	-11.98	360	100	peak

Operating Condition: 802.11n-HT20 Transmitting Low Channel-2412MHz

Comment: AC120V/60Hz, Adapter 5V



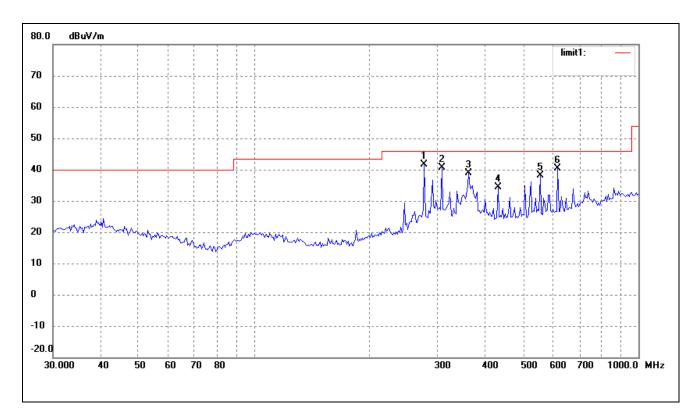
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	307.8313	30.46	9.20	39.66	46.00	-6.34	360	100	peak
2	361.7139	30.50	9.26	39.76	46.00	-6.24	360	100	peak
3	554.8254	29.40	11.42	40.82	46.00	-5.18	360	100	peak
4	582.7425	26.06	12.60	38.66	46.00	-7.34	360	100	peak



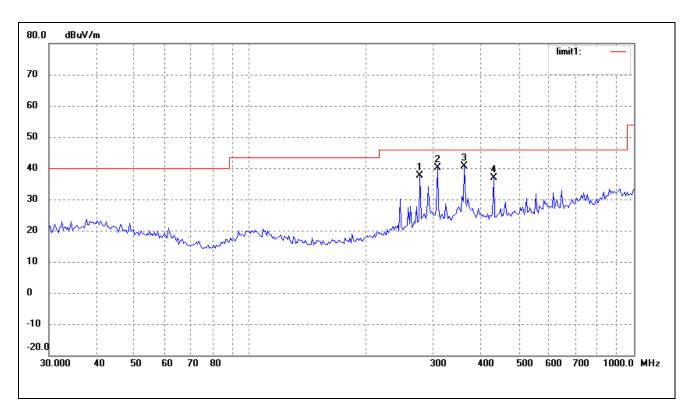
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	277.0935	26.43	8.13	34.56	46.00	-11.44	360	100	peak
2	307.8313	29.63	9.20	38.83	46.00	-7.17	360	100	peak
3	361.7139	24.02	9.26	33.28	46.00	-12.72	360	100	peak
4	431.0316	25.59	9.74	35.33	46.00	-10.67	360	100	peak
5	647.3856	19.78	12.37	32.15	46.00	-13.85	360	100	peak

Operating Condition: 802.11n-HT20 Transmitting Middle Channel-2437MHz

Comment: AC120V/60Hz, Adapter 5V



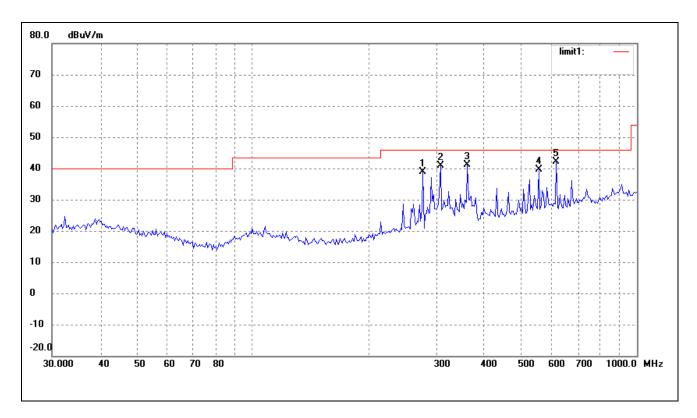
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	277.0935	33.59	8.13	41.72	46.00	-4.28	360	100	peak
2	307.8313	31.47	9.20	40.67	46.00	-5.33	360	100	peak
3	361.7139	29.73	9.26	38.99	46.00	-7.01	360	100	peak
4	431.0316	24.68	9.74	34.42	46.00	-11.58	360	100	peak
5	554.8254	26.72	11.42	38.14	46.00	-7.86	360	100	peak
6	616.3718	28.26	12.07	40.33	46.00	-5.67	360	100	peak



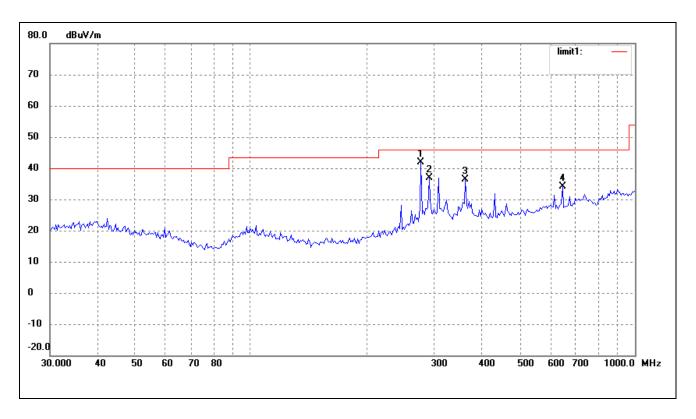
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	277.0935	29.57	8.13	37.70	46.00	-8.30	360	100	peak
2	307.8313	30.93	9.20	40.13	46.00	-5.87	360	100	peak
3	361.7139	31.41	9.26	40.67	46.00	-5.33	360	100	peak
4	431.0316	27.15	9.74	36.89	46.00	-9.11	360	100	peak

Operating Condition: 802.11n-HT20 Transmitting High Channel-2462MHz

Comment: AC120V/60Hz, Adapter 5V



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	277.0935	30.79	8.13	38.92	46.00	-7.08	360	100	peak
2	307.8313	31.64	9.20	40.84	46.00	-5.16	360	100	peak
3	361.7139	31.94	9.26	41.20	46.00	-4.80	360	100	peak
4	554.8254	28.28	11.42	39.70	46.00	-6.30	360	100	peak
5	616.3718	30.03	12.07	42.10	46.00	-3.90	360	100	peak



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	277.0935	33.63	8.13	41.76	46.00	-4.24	360	100	peak
2	291.0360	28.07	8.79	36.86	46.00	-9.14	360	100	peak
3	361.7139	27.23	9.26	36.49	46.00	-9.51	360	100	peak
4	647.3856	21.65	12.37	34.02	46.00	-11.98	360	100	peak

Spurious Emissions Above 1GHz

Test Mode: 802.11b

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	H/V	
			Low Channe	el-2412MHz			
4821.757	48.96	-3.88	45.08	74.00	-28.92	Н	PK
4821.757	36.62	-3.88	32.74	54.00	-21.26	Н	AV
7236.000	46.64	1.14	47.78	74.00	-26.22	Н	PK
7245.810	34.60	1.18	35.78	54.00	-18.22	Н	AV
4821.757	64.22	-3.88	60.34	74.00	-13.66	V	PK
4821.757	46.68	-3.88	42.80	54.00	-11.20	V	AV
7236.000	48.62	1.14	49.76	74.00	-24.24	V	PK
7245.810	35.92	1.18	37.10	54.00	-16.90	V	AV
			Middle Chan	nel-2437MHz			
4871.103	51.71	-3.75	47.96	74.00	-26.04	Н	PK
4871.103	37.11	-3.75	33.36	54.00	-20.64	Н	AV
7311.000	46.70	1.47	48.17	74.00	-25.83	Н	PK
7319.964	34.88	1.50	36.38	54.00	-17.62	Н	AV
4871.103	61.17	-3.75	57.42	74.00	-16.58	V	PK
4871.103	43.55	-3.75	39.80	54.00	-14.20	V	AV
7311.000	47.76	1.47	49.23	74.00	-24.77	V	PK
7319.964	35.19	1.50	36.69	54.00	-17.31	V	AV
			High Chann	el-2462MHz			
4920.955	58.55	-3.61	54.94	74.00	-19.06	Н	PK
4920.955	41.73	-3.61	38.12	54.00	-15.88	Н	AV
7386.000	47.20	1.79	48.99	74.00	-25.01	Н	PK
7394.878	35.16	1.84	37.00	54.00	-17.00	Н	AV
4920.955	53.08	-3.61	49.47	74.00	-24.53	V	PK
4920.955	38.46	-3.61	34.85	54.00	-19.15	V	AV
7386.000	46.36	1.79	48.15	74.00	-25.85	V	PK
7394.878	35.06	1.84	36.90	54.00	-17.10	V	AV

Test Mode: 802.11g

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	H/V	
			Low Channe	el-2412MHz			
4821.757	54.16	-3.88	50.28	74.00	-23.72	Н	PK
4821.757	37.93	-3.88	34.05	54.00	-19.95	Н	AV
7236.000	46.59	1.14	47.73	74.00	-26.27	Н	PK
7245.810	34.99	1.18	36.17	54.00	-17.83	Н	AV
4821.757	61.54	-3.88	57.66	74.00	-16.34	V	PK
4821.757	46.04	-3.88	42.16	54.00	-11.84	V	AV
7245.810	50.26	1.18	51.44	74.00	-22.56	V	PK
7245.810	36.19	1.18	37.37	54.00	-16.63	V	AV
			Middle Chan	nel-2437MHz			
4871.103	50.24	-3.75	46.49	74.00	-27.51	Н	PK
4871.103	37.76	-3.75	34.01	54.00	-19.99	Н	AV
7311.000	46.56	1.47	48.03	74.00	-25.97	Н	PK
7319.964	35.23	1.50	36.73	54.00	-17.27	Н	AV
4871.103	61.97	-3.75	58.22	74.00	-15.78	V	PK
4871.103	45.46	-3.75	41.71	54.00	-12.29	V	AV
7311.000	48.23	1.47	49.70	74.00	-24.30	V	PK
7319.964	35.78	1.50	37.28	54.00	-16.72	V	AV
			High Chann	el-2462MHz			
4920.955	38.83	-3.61	35.22	54.00	-18.78	Н	PK
4946.072	54.20	-3.53	50.67	74.00	-23.33	Н	AV
7386.000	46.94	1.79	48.73	74.00	-25.27	Н	PK
7394.878	35.41	1.84	37.25	54.00	-16.75	Н	AV
4920.955	52.33	-3.61	48.72	74.00	-25.28	V	PK
4920.955	37.31	-3.61	33.70	54.00	-20.30	V	AV
7386.000	47.16	1.79	48.95	74.00	-25.05	V	PK
7394.878	35.55	1.84	37.39	54.00	-16.61	V	AV

Test Mode: 802.11n-HT20

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	H/V	
			Low Chann	el-2412MHz			
4821.757	52.90	-3.88	49.02	74.00	-24.98	Н	PK
4821.757	39.21	-3.88	35.33	54.00	-18.67	Н	AV
7236.000	46.55	1.14	47.69	74.00	-26.31	Н	PK
7245.810	34.66	1.18	35.84	54.00	-18.16	Н	AV
4821.757	63.46	-3.88	59.58	74.00	-14.42	V	PK
4821.757	48.30	-3.88	44.42	54.00	-9.58	V	AV
7245.810	49.46	1.18	50.64	74.00	-23.36	V	PK
7245.810	36.77	1.18	37.95	54.00	-16.05	V	AV
			Middle Chan	nel-2437MHz			
4871.103	40.52	-3.75	36.77	54.00	-17.23	Н	PK
4895.966	53.28	-3.67	49.61	74.00	-24.39	Н	AV
7311.000	47.09	1.47	48.56	74.00	-25.44	Н	PK
7319.964	34.90	1.50	36.40	54.00	-17.60	Н	AV
4871.103	60.71	-3.75	56.96	74.00	-17.04	V	PK
4871.103	47.27	-3.75	43.52	54.00	-10.48	V	AV
7319.964	48.70	1.50	50.20	74.00	-23.80	V	PK
7319.964	36.49	1.50	37.99	54.00	-16.01	V	AV
			High Chann	el-2462MHz			
4920.955	54.76	-3.61	51.15	74.00	-22.85	Н	PK
4920.955	40.08	-3.61	36.47	54.00	-17.53	Н	AV
7386.000	47.31	1.79	49.10	74.00	-24.90	Н	PK
7394.878	35.89	1.84	37.73	54.00	-16.27	Н	AV
4920.955	61.09	-3.61	57.48	74.00	-16.52	V	PK
4920.955	45.47	-3.61	41.86	54.00	-12.14	V	AV
7394.878	51.79	1.84	53.63	74.00	-20.37	V	PK
7394.878	37.50	1.84	39.34	54.00	-14.66	V	AV

Note: Testing is carried out with frequency rang 9kHz to the tenth harmonics, which above 5th Harmonics are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured. The measurements greater than 20dB below the limit from 9kHz to 30MHz..

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8. Out of Band Emissions

8.1 Standard Applicable

According to §15.247 (d) In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a).

8.2 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
Spectrum Analyzer	R&S	FSP	836079/035	2012-03-28	2013-03-27
EMI Test Receiver	R&S	ESVB	825471/005	2012-03-28	2013-03-27
Pre-amplifier	Agilent	8447F	3113A06717	2012-03-28	2013-03-27
Pre-amplifier	Compliance Direction	PAP-0118	24002	2012-03-28	2013-03-27
Trilog Broadband Antenna	SCHWARZBECK	VULB9163	9163-333	2012-02-25	2013-02-24
Horn Antenna	ETS	3117	00086197	2012-02-25	2013-02-24

8.3 Test Procedure

According to the KDB 558074, the band-edge radiated test method as follows:

Set span = wide enough to capture the peak level of the emission operating on the channel closest to the bandedge, as well as any modulation products which fall outside of the authorized band of operation (2310MHz to 2420MHz for low bandedge, 2460MHz to 2500MHz for the high bandedge)

RBW = 1MHz, VBW = 1MHz for peak value measured

RBW = 1MHz, VBW = 10Hz for average value measured

Sweep = auto; Detector function = peak/average; Trace = max hold

All the trace to stabilize, set the marker on the emission at the bandedge, or on the highest modulation porduct outside of the band, if this level is greater than that at the bandedge. Enable the marker-delta function, then use the marker-to-peak function to move the marker to the peak of the in-band emission. Those emission must comply with the 15.209 limit for fall in the restricted bands listed in section 15.205.

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8.4 Environmental Conditions

Temperature:	23°C
Relative Humidity:	54%
ATM Pressure:	1011 mbar

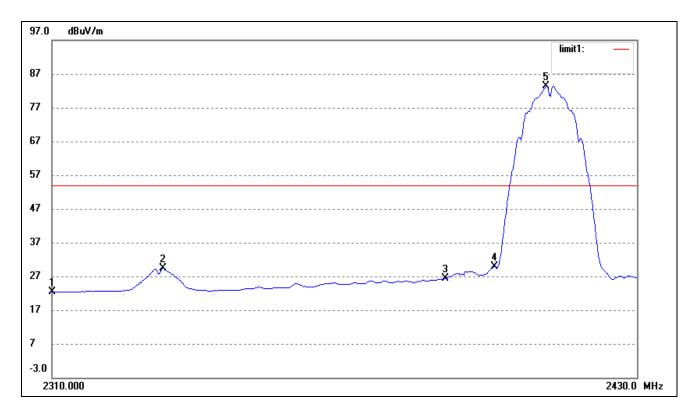
8.5 Summary of Test Results/Plots

Test Mode	Test Frequency MHz	Limit dBuV / dBc	Result
	2390.00	<54 dBuV	Pass
802.11b	2400.00	>20 dBc	Pass
	2483.50	<54 dBuV	Pass
	2390.00	<54 dBuV	Pass
802.11g	2400.00	>20 dBc	Pass
	2483.50	<54 dBuV	Pass
	2390.00	<54 dBuV	Pass
802.11n-HT20	2400.00	>20 dBc	Pass
	2483.50	<54 dBuV	Pass
	2390.00	<54 dBuV	Pass
802.11n-HT40	2400.00	>20 dBc	Pass
	2483.50	<54 dBuV	Pass

The edge emissions are below the FCC 15.209 Limits or complies with the 15.247(d) requirements.

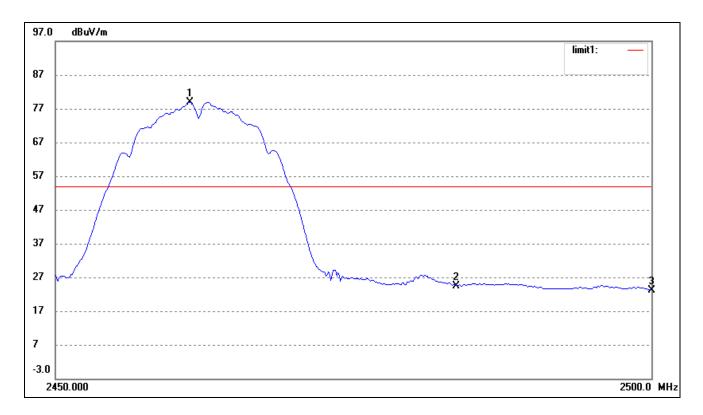
Please refer to the test plots as below.

802.11b-Lowest Bandedge



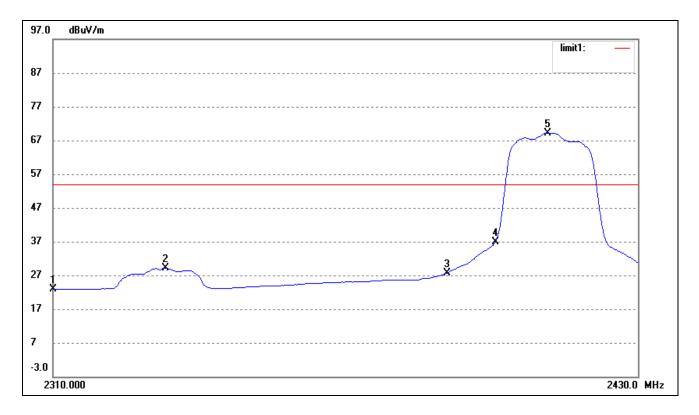
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	(°)	(cm)	
1	2310.000	34.07	-11.72	22.35	54.00	-31.65	256	100	Ave
	2310.000	47.01	-11.72	35.29	74.00	-38.71	256	100	peak
2	2332.335	41.09	-11.73	29.36	54.00	-24.64	256	100	Ave
	2332.335	52.99	-11.73	41.26	74.00	-32.74	256	100	peak
3	2390.000	38.05	-11.75	26.30	54.00	-27.70	256	100	Ave
	2390.000	51.23	-11.75	39.48	74.00	-34.52	256	100	peak
4	2400.000	41.63	-11.75	29.88	/	/	256	100	Ave
5	2410.878	95.21	-11.75	83.46	/	/	256	100	Ave

802.11b-Highest Bandedge



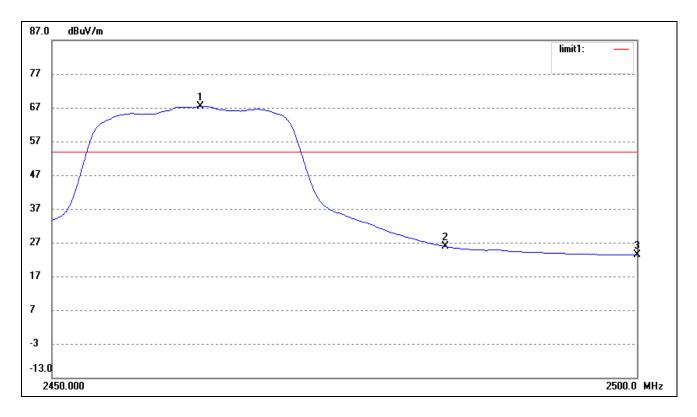
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	(°)	(cm)	
1	2461.212	90.65	-11.77	78.88			256	100	Ave
	2461.212	104.13	-11.77	92.36			256	100	Peak
2	2483.500	Dalta	Delta=54.43		54.00	-29.55	256	100	Ave
	2483.500	Dena	-34.43	37.93	74.00	-36.07	256	100	Peak
3	2500.000	35.03	-11.78	23.25	54.00	-30.75	256	100	Ave
	2500.000	48.86	-11.78	37.08	74.00	-36.92	256	100	Peak

802.11g-Lowest Bandedge



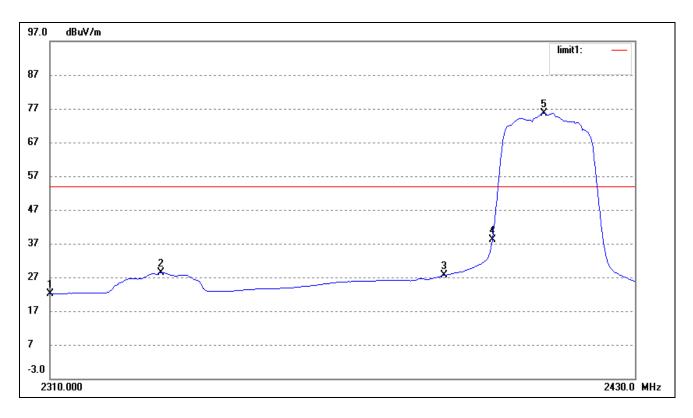
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	(°)	(cm)	
1	2310.000	34.53	-11.72	22.81	54.00	-31.19	256	100	Ave
	2310.000	47.98	-11.72	36.26	74.00	-37.74	256	100	peak
2	2332.571	40.98	-11.73	29.25	54.00	-24.75	256	100	Ave
	2332.571	57.08	-11.73	45.35	74.00	-28.64	256	100	peak
3	2390.000	39.48	-11.75	27.73	54.00	-26.27	256	100	Ave
	2390.000	55.21	-11.75	43.46	74.00	-30.54	256	100	peak
4	2400.000	48.61	-11.75	36.86	/	/	256	100	Ave
5	2411.122	80.98	-11.75	69.23	/	/	256	100	Ave

802.11g-Highest Bandedge



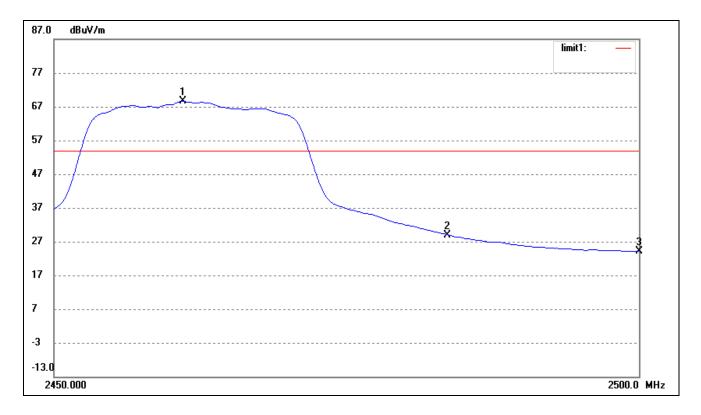
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	(°)	(cm)	
1	2462.604	79.24	-11.78	67.46			256	100	Ave
	2462.604	101.61	-11.78	89.83			256	100	Peak
2	2483.500	Dalta	Delta=41.59		54.00	-28.13	256	100	Ave
	2483.500	Dena	-41.37	48.24	74.00	-25.76	256	100	Peak
3	2500.000	35.25	-11.78	23.47	54.00	-30.53	256	100	Ave
	2500.000	54.02	-11.78	42.24	74.00	-31.76	256	100	Peak

802.11n-HT20-Lowest Bandedge



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	(°)	(cm)	
1	2310.000	33.94	-11.72	22.22	54.00	-31.78	256	100	Ave
	2310.000	46.17	-11.72	34.45	74.00	-39.55	256	100	peak
2	2332.335	40.15	-11.73	28.42	54.00	-25.58	256	100	Ave
	2332.335	61.10	-11.73	49.37	74.00	-24.63	256	100	peak
3	2390.000	39.30	-11.75	27.55	54.00	-26.45	256	100	Ave
	2390.000	53.27	-11.75	41.52	74.00	-32.48	256	100	peak
4	2400.000	49.90	-11.75	38.15			256	100	Ave
5	2410.878	87.36	-11.75	75.61			256	100	Ave

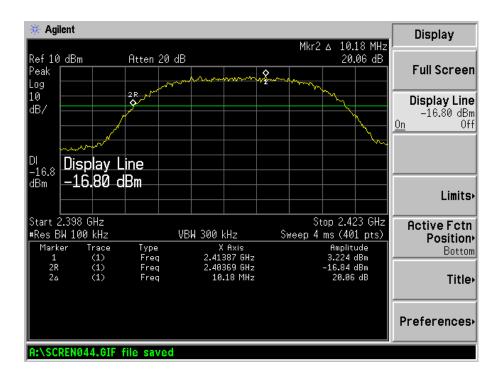
802.11n-HT20-Highest Bandedge



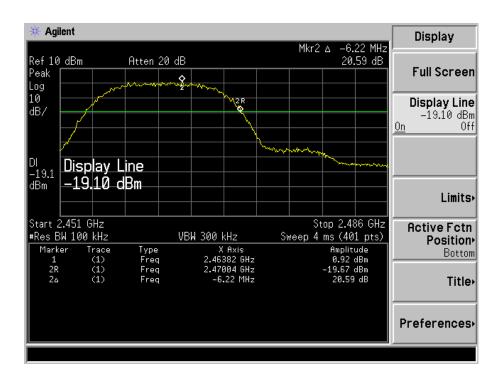
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	(°)	(cm)	
1	2460.914	80.34	-11.77	68.57			256	100	Ave
	2460.914	100.71	-11.77	88.94			256	100	Peak
2	2483.500	Dalta	Delta=39.74		54.00	-25.17	256	100	Ave
	2483.500	Dena	-39.74	49.20	74.00	-24.80	256	100	Peak
3	2500.000	35.87	-11.78	24.09	54.00	-29.91	256	100	Ave
	2500.000	48.17	-11.78	36.39	74.00	-37.61	256	100	Peak

Bandedge (Conducted)

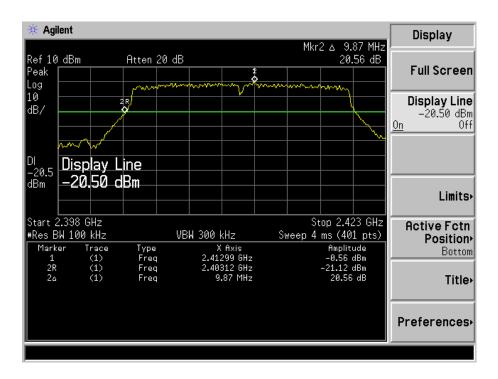
802.11b-Lowest Bandedge



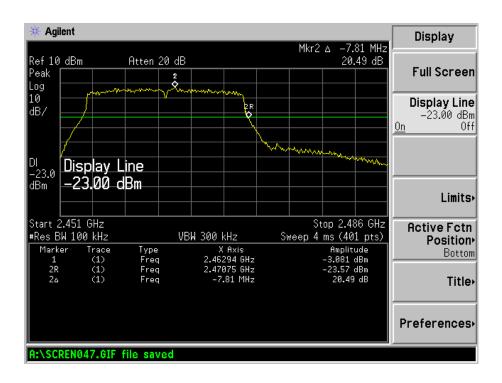
802.11b-Highest Bandedge



802.11g-Lowest Bandedge

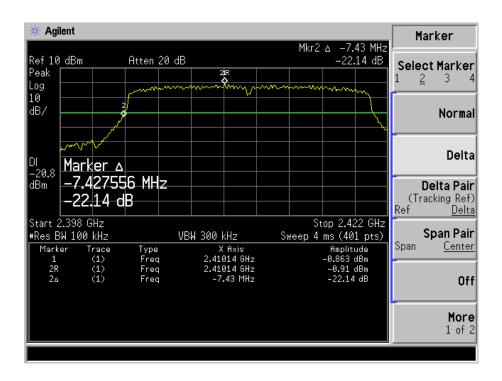


802.11g-Highest Bandedge

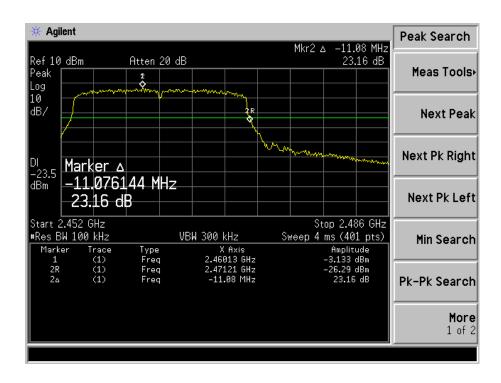


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802.11n-HT20-Lowest Bandedge

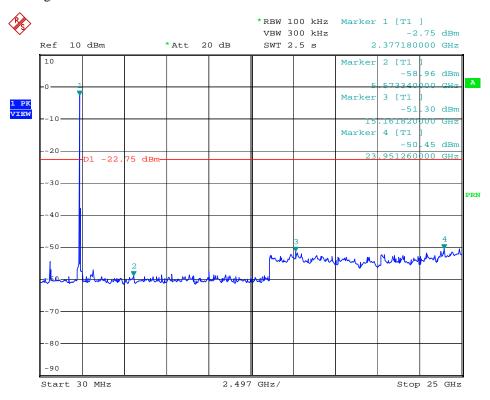


802.11n-HT20-Highest Bandedge

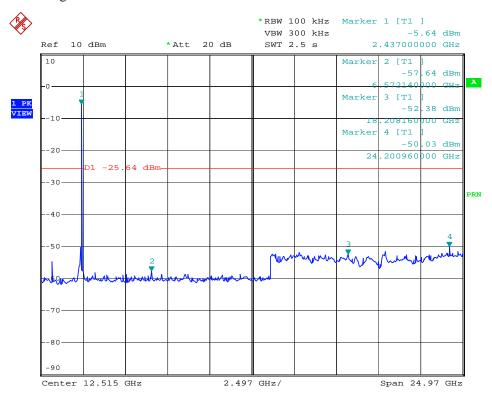


Conducted Spurious Emissions

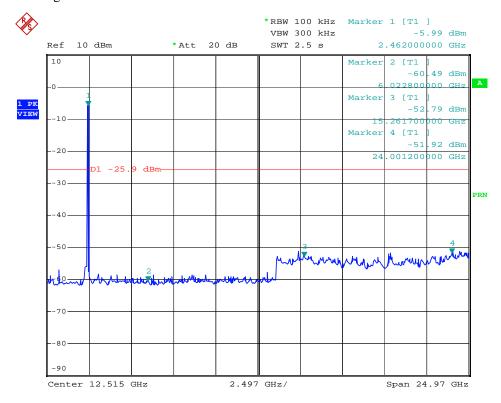
802.11b Low Bandedge



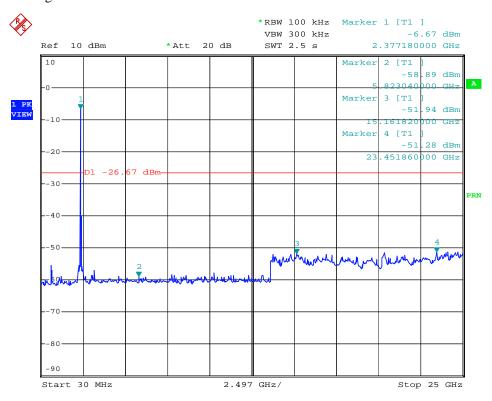
802.11b Middle Bandedge



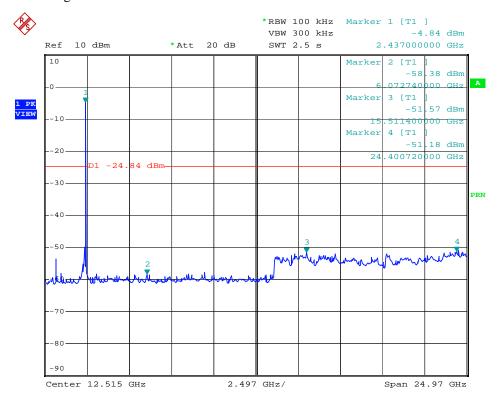
802.11b High Bandedge



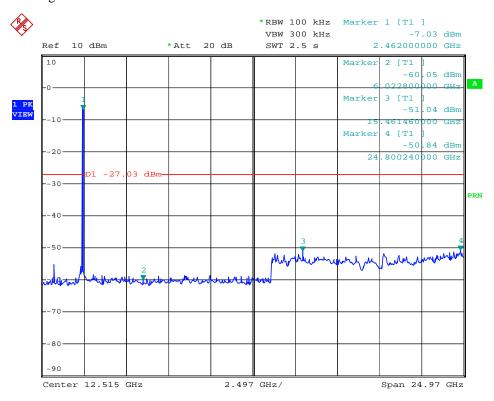
802.11g Low Bandedge



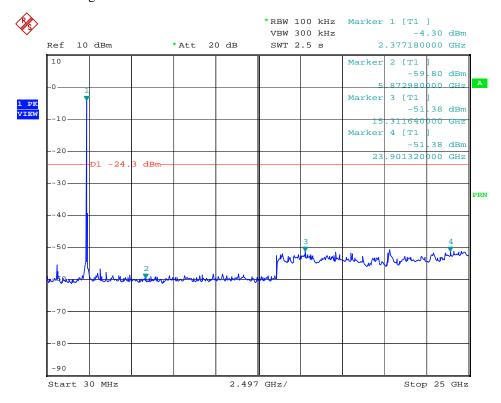
802.11g Middle Bandedge



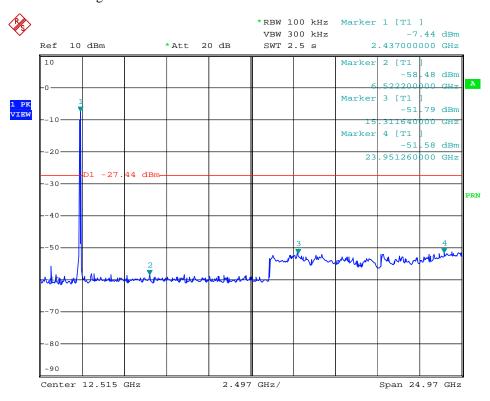
802.11g High Bandedge



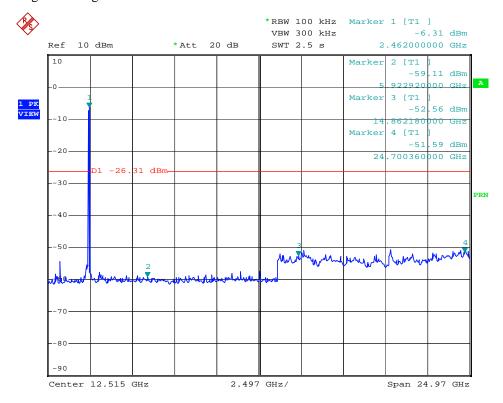
802.11n-HT20 Low Bandedge



802.11n-HT20 Middle Bandedge



802.11n-HT20 High Bandedge



9. Conducted Emissions

9.1 Measurement Uncertainty

Base on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any conducted emissions measurement is ± 2.88 dB.

9.2 Test Equipment List and Details

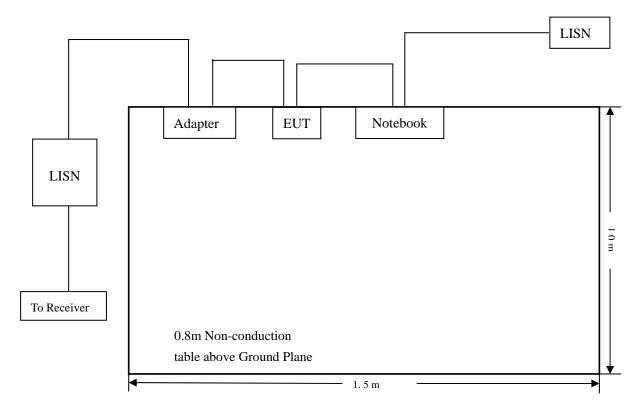
Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2012-03-28	2013-03-27
L.I.S.N	Schwarz beck	NSLK8126	8126-224	2012-03-28	2013-03-27
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2012-03-28	2013-03-27

9.3 Test Procedure

The setup of EUT is according with per ANSI C63.4-2003 measurement procedure. The specification used was with the FCC Part 15.207 Limit.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle. The spacing between the peripherals was 10 cm.

9.4 Basic Test Setup Block Diagram



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9.5 Environmental Conditions

Temperature:	25 °C
Relative Humidity:	52%
ATM Pressure:	1012 mbar

9.6 Test Receiver Setup

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

Start Frequency	. 150 kHz
Stop Frequency	. 30 MHz
Sweep Speed	. Auto
IF Bandwidth	. 10 kHz
Quasi-Peak Adapter Bandwidth	.9 kHz
Quasi-Peak Adapter Mode	. Normal

9.7 Summary of Test Results/Plots

According to the data in section 3.8, the EUT <u>complied with the FCC Part 15.207</u> Conducted margin for a Class B device, with the *worst* margin reading of:

-4.32 $dB\mu V$ at 0.550 MHz in the Line mode, Peak detector, 0.15-30MHz

9.8 Conducted Emissions Test Data

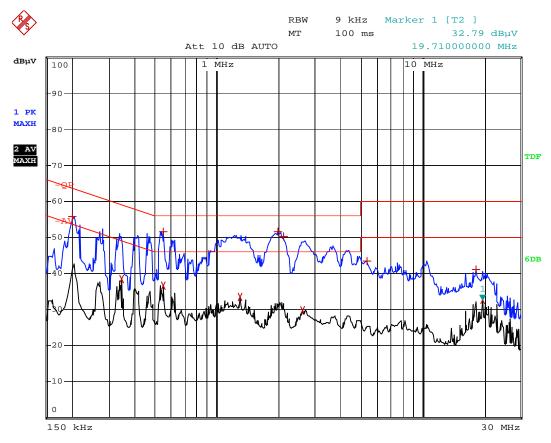
Plot of Conducted Emissions Test Data

EUT: Network Camera

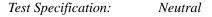
Tested Model: YCK0xx
Operating Conditation: Transmitting

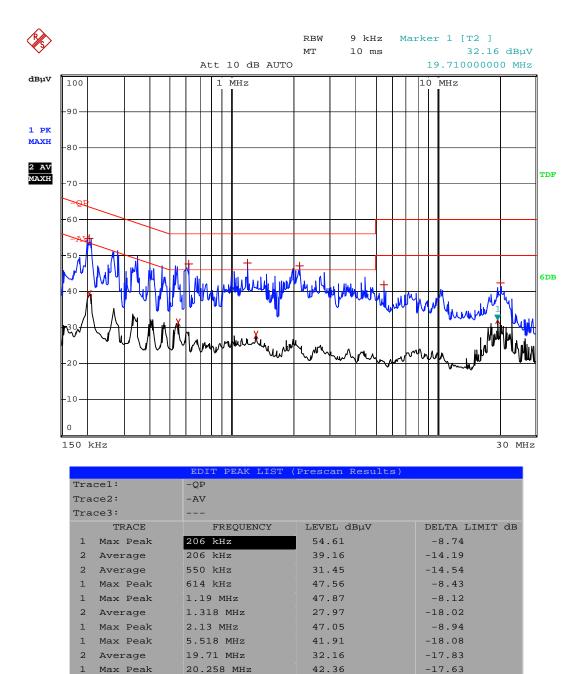
Comment: AC 120V/60Hz, 12V DC

Test Specification: Line



	DDIE DDIE IIO	(D						
		(Prescan Results)						
Tracel:	Tracel: -QP							
Trace2:	-AV							
Trace3:								
TRACE	FREQUENCY	LEVEL dBµV	DELTA LIMIT dB					
1 Max Peak	202 kHz	55.79	-7.72					
2 Average	342 kHz	38.47	-10.68					
2 Average	546 kHz	36.71	-9.28					
1 Max Peak	550 kHz	51.67	-4.32					
2 Average	1.302 MHz	33.36	-12.63					
1 Max Peak	1.994 MHz	51.44	-4.55					
1 Max Peak	2.122 MHz	50.27	-5.72					
2 Average	2.626 MHz	29.87	-16.12					
1 Max Peak	5.366 MHz	43.54	-16.45					
1 Max Peak	18.246 MHz	40.99	-19.00					
2 Average	19.71 MHz	32.79	-17.20					





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