FCC Part 15C Measurement and Test Report

For

Amelia World Corporation dba LINSAY

16340 West Dixie Highway, North Miami Beach, Florida

FCC ID: 2AAC310XHD4CORE

FCC Rules: FCC Part 15C

Product Description: Tablet PC

Tested Model: F-10XHD4Core

Report No.: STR13058330I-1

Tested Date: 2013-05-24 to 2013-06-20

Issued Date: 2013-06-24

Susom Su Lahm perg Jumbers Tested By: Susan Su / Engineer

Lahm Peng / EMC Manager **Reviewed By:**

Approved & Authorized By: Jandy so / PSQ Manager

Prepared By:

SEM.Test Compliance Service Co., Ltd

3/F, Jinbao Commerce Building, Xin'an Fanshen Road,

Bao'an District, Shenzhen, P.R.C. (518101)

Tel.: +86-755-33663308 Fax.: +86-755-33663309 Website: www.semtest.com.cn

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: Amelia World Corporation dba LINSAY

Address of applicant: 16340 West Dixie Highway, North Miami Beach,

Florida

Manufacturer: Amelia World Corporation dba LINSAY

Address of manufacturer: 16340 West Dixie Highway, North Miami Beach,

Florida

General Description of EUT		
Product Name:	Tablet PC	
Trade Name:	LINSAY	
Model No.:	F-10XHD4Core	
Adding Model(s):	1	
Rated Voltage:	DC 3.7V battery	
ZFXPA02000050		
Power Adapter Model: (Input: AC 100-240V/0.5A; Output: DC 5V/2.5A)		
Note: The test data is gathered from	a production sample, provided by the manufacturer.	

Technical Characteristics of EUT	
Support Standards:	802.11b/g/n
Frequency Range:	2412-2462MHz, 2422-2452MHz
RF Output Power:	7.52 dBm (Conducted)
Data Rate:	1-11Mbps, 6-54Mbps, up to 150Mbps
Modulation:	CCK, BPSK, QPSK, 16QAM, 64QAM
Quantity of Channels:	11/7
Channel Separation:	5MHz
Antenna Type:	Integral Antenna
Antenna Gain:	2 dBi
Lowest Internal Frequency of EUT:	32.768kHz
Device Category:	Portable Device

1.2 Test Standards

The following report is prepared on behalf of the Amelia World Corporation dba LINSAY 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)

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	802.11n-HT40	2422MHz, 2437MHz, 2452MHz	

Special Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
Power Cable	1.7	Unshielded	Without Ferrite
USB Cable	1.0	Shielded	Without Ferrite

Auxiliary Equipment List and Details			
Description	Manufacturer	Model	Serial Number
Monitor	DELL	U2713H	/
Notebook	IBM	E10	/

2. SUMMARY OF TEST RESULTS

FCC Rules	Description of Test Item	Result
§ 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.

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	2013-05-07	2014-05-06
Attenuator	ATTEN	ATS100-4-20	/	2013-05-07	2014-05-06

4.3 Test Procedure

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

- a) Set analyzer center frequency to DTS channel center frequency.
- b) Set the span to 1.5 times the DTS bandwidth.
- c) Set the RBW to: $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
- d) Set the VBW ≥ 3 RBW.
- e) Detector = peak.
- f) Sweep time = auto couple.
- g) Trace mode = \max hold.
- h) Allow trace to fully stabilize.
- i) Use the peak marker function to determine the maximum amplitude level within the RBW.
- j) If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

4.4 Environmental Conditions

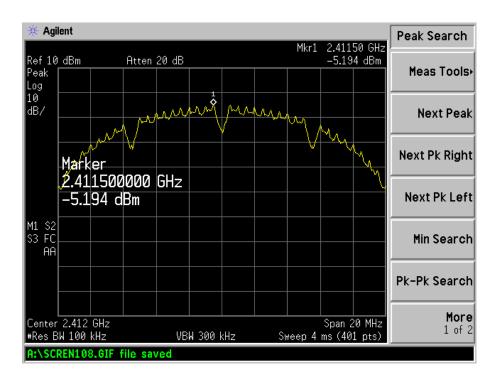
Temperature:	20° C
Relative Humidity:	54%
ATM Pressure:	1011 mbar

4.5 Summary of Test Results/Plots

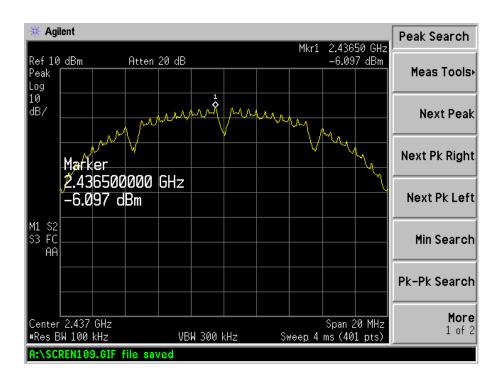
Test Mode	Test Channel MHz	Power Spectral Density dBm/100kHz	Limit dBm
	2412	-5.194	8
802.11b	2437	-6.097	8
	2462	-7.031	8
	2412	-8.979	8
802.11g	2437	-9.832	8
	2462	-10.850	8
	2412	-11.840	8
802.11n HT20	2437	-12.660	8
	2462	-13.600	8
	2422	-13.750	8
802.11n HT40	2437	-14.190	8
	2452	-15.510	8

Please refer to the following test plots:

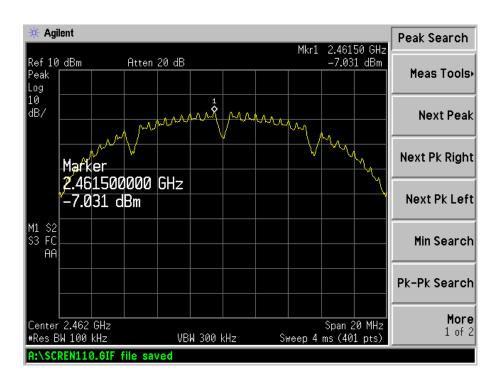
802.11b-Low Channel



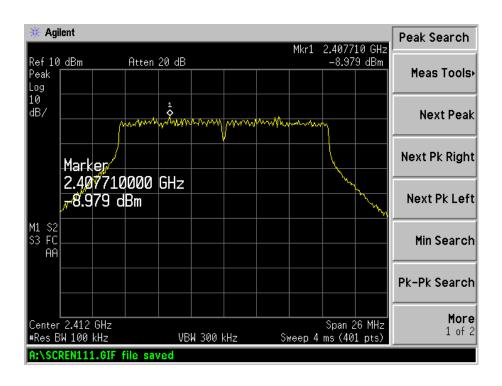
802.11b-Middle Channel



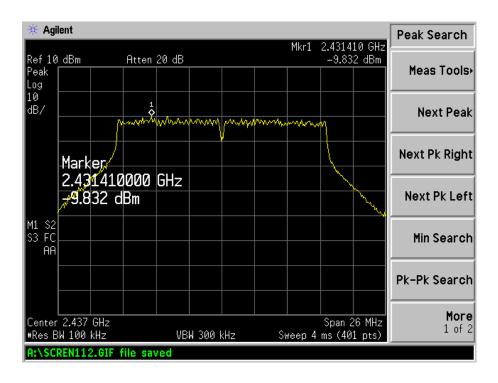
802.11b-High Channel



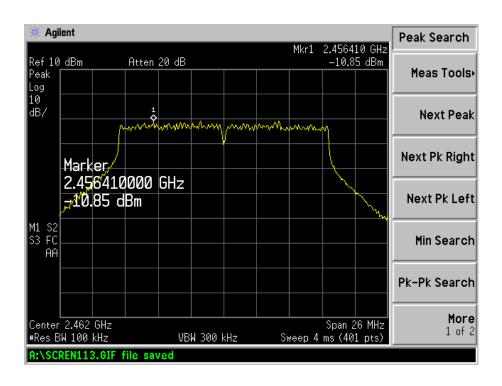
802.11g-Low Channel



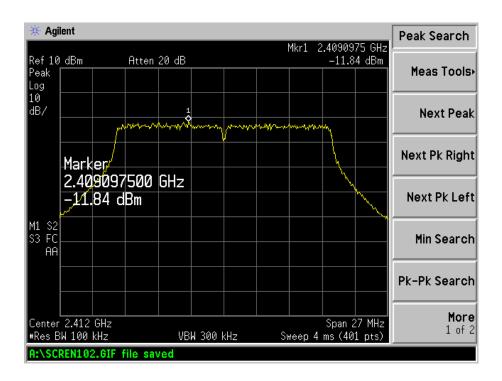
802.11g-Middle Channel



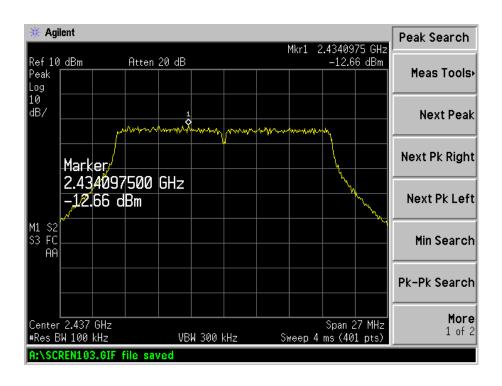
802.11g-High Channel



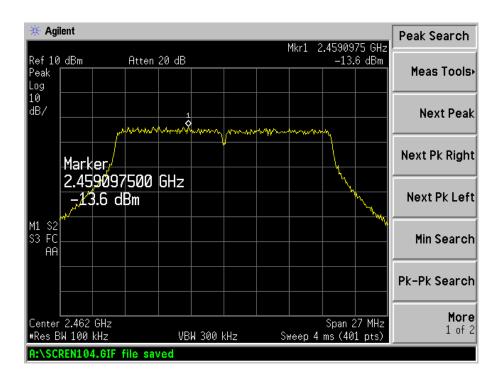
802.11n-HT20-Low Channel



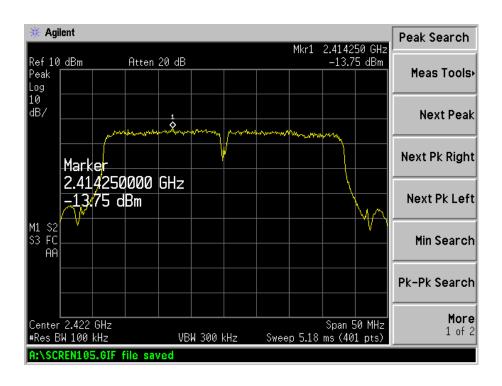
802.11n-HT20-Middle Channel



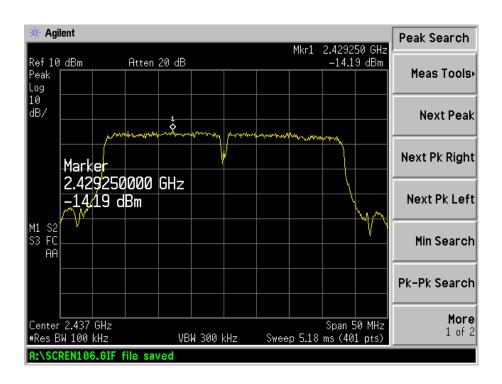
802.11n-HT20-High Channel



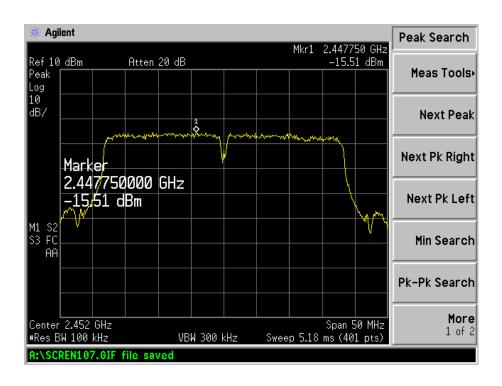
802.11n-HT40-Low Channel



802.11n-HT40-Middle Channel



802.11n-HT40-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	2013-05-07	2014-05-06
Attenuator	ATTEN	ATS100-4-20	/	2013-05-07	2014-05-06

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 RBW = 100 kHz.
- 3. Set the video bandwidth (VBW) \geq 3XRBW.
- 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 frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

5.4 Environmental Conditions

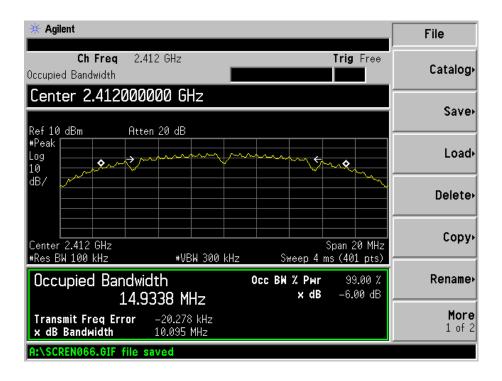
Temperature:	24° C
Relative Humidity:	53%
ATM Pressure:	1018 mbar

5.5 Summary of Test Results/Plots

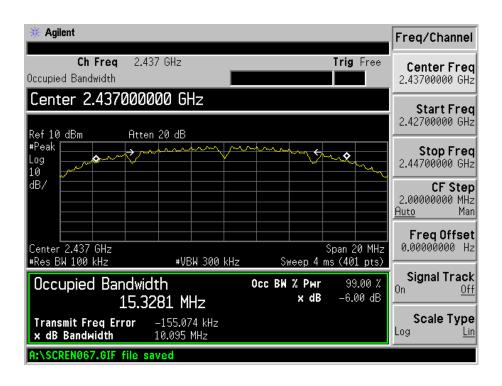
Test Mode	Test Channel	6 dB Bandwidth	Limit
Test Wiode	MHz	kHz	kHz
802.11b	2412	10095	500
	2437	10095	500
	2462	10095	500
802.11g	2412	16533	500
	2437	16547	500
	2462	16576	500
802.11n-HT20	2412	17797	500
	2437	17815	500
	2462	17825	500
802.11n-HT40	2422	36390	500
	2437	36329	500
	2452	36345	500

Please refer to the following test plots:

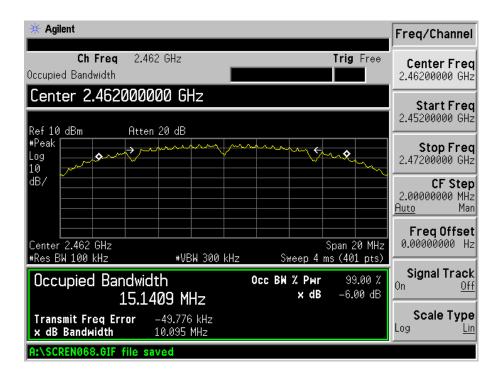
802.11b-Low Channel



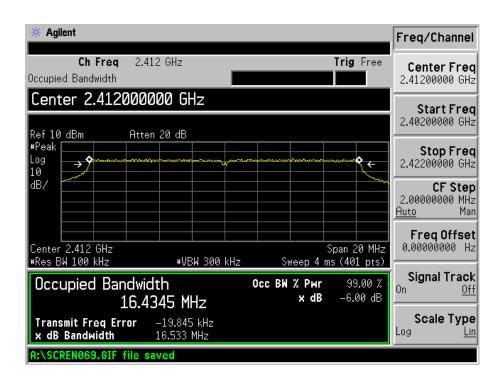
802.11b-Middle Channel



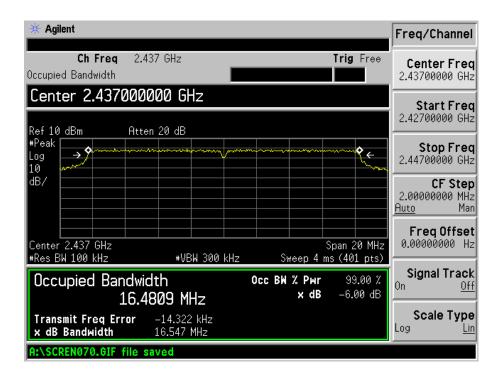
802.11b-High Channel



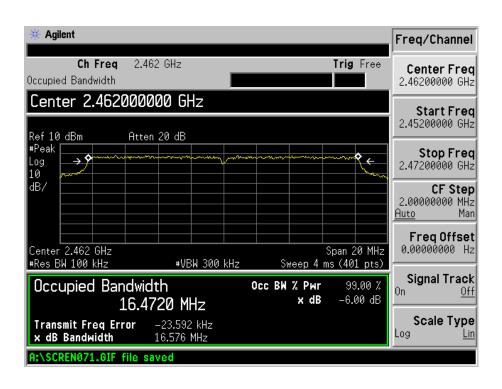
802.11g-Low Channel



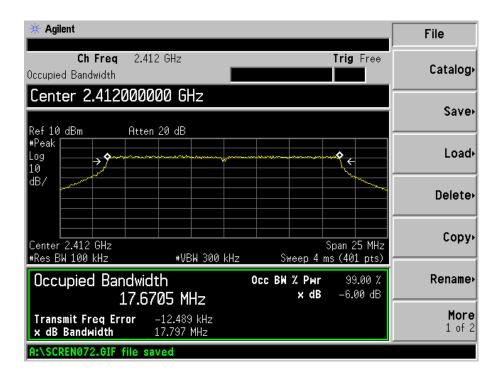
802.11g-Middle Channel



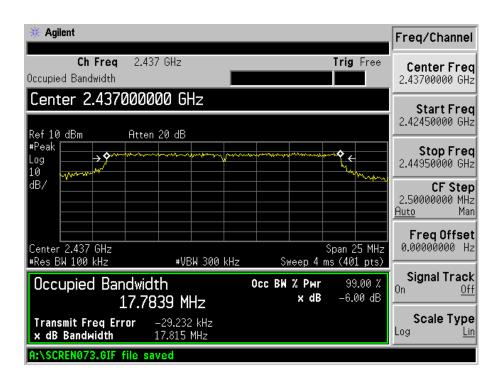
802.11g-High Channel



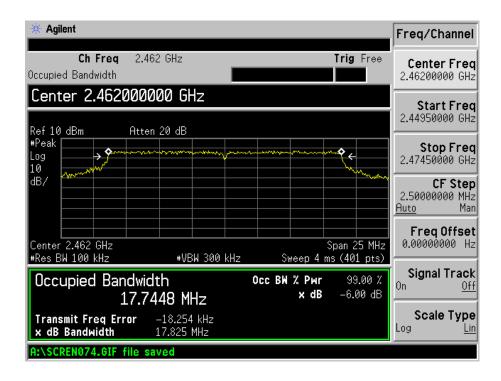
802.11n-HT20-Low Channel



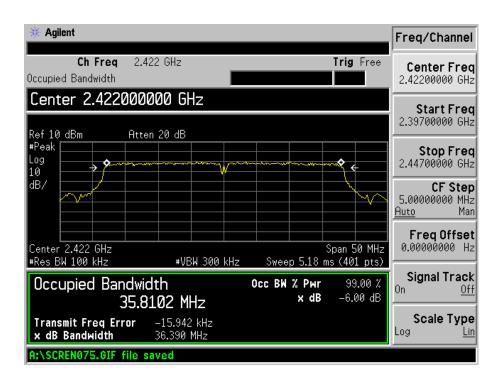
802.11n-HT20-Middle Channel



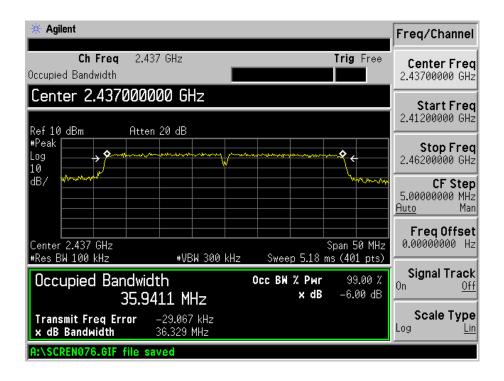
802.11n-HT20-High Channel



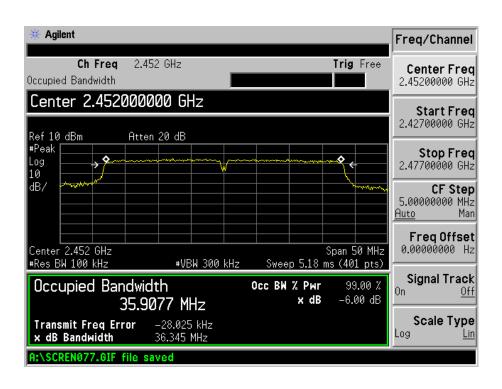
802.11n-HT40-Low Channel



802.11n-HT40-Middle Channel



802.11n-HT40-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	2013-05-07	2014-05-06
Attenuator	ATTEN	ATS100-4-20	/	2013-05-07	2014-05-06

6.3 Test Procedure

According to section 15.247(b)-power output of the KDB-558074 D01 V02 (2012), 8.1.2 Option 2 (channel integration method) this procedure should only be used when the maximum available RBW of the spectrum/signal analyzer is less than the DTS bandwidth.

- 1. Set the RBW = maximum available (at least 1 MHz).
- 2. Set the VBW = $3 \times RBW$ or maximum available setting (must be $\geq RBW$).
- 3. Set the span to fully encompass the DTS bandwidth.
- 4. Detector = peak.
- 5. Sweep time = auto couple.
- 6. Trace mode = max hold.
- 7. Allow trace to fully stabilize.
- 8. Use the spectrum analyzer's band/channel power measurement function with the band limits set equal to the DTS bandwidth edges (for some analyzers, this may require a manual override to ensure use of peak detector).

6.4 Environmental Conditions

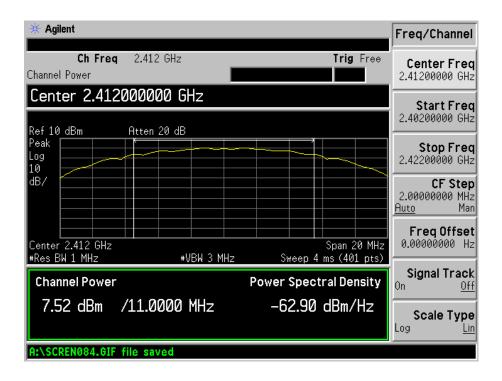
Temperature:	21° C
Relative Humidity:	55%
ATM Pressure:	1011 mbar

6.5 Summary of Test Results/Plots

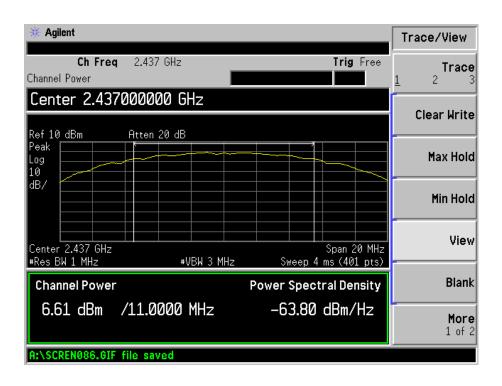
The AME 1	Frequency	Reading	Output Power	Limit
Test Mode	MHz	dBm	mW	\mathbf{mW}
802.11b _1Mbps	2412	7.52	5.6494	1000
	2437	6.61	4.5814	1000
	2462	6.71	4.6881	1000
	2412	7.48	5.5976	1000
802.11b _11Mbps	2437	6.63	4.6026	1000
	2462	6.70	4.6774	1000
	2412	7.10	5.1286	1000
802.11g_6Mbps	2437	6.24	4.2073	1000
	2462	6.32	4.2855	1000
	2412	7.08	5.1051	1000
802.11g_54Mbps	2437	6.39	4.3551	1000
	2462	6.32	4.2855	1000
	2412	6.89	4.8865	1000
802.11n HT20_MCS0	2437	6.15	4.1210	1000
	2462	5.65	3.6728	1000
	2412	6.82	4.8084	1000
802.11n HT20_MCS7	2437	6.02	3.9994	1000
	2462	5.49	3.5400	1000
	2422	7.23	5.2845	1000
802.11n HT40_MCS0	2437	6.82	4.8084	1000
	2452	6.68	4.6559	1000
	2422	7.44	5.5463	1000
802.11n HT40_MCS7	2437	6.78	4.7643	1000
	2452	6.75	4.7315	1000

Please refer to the following test plots:

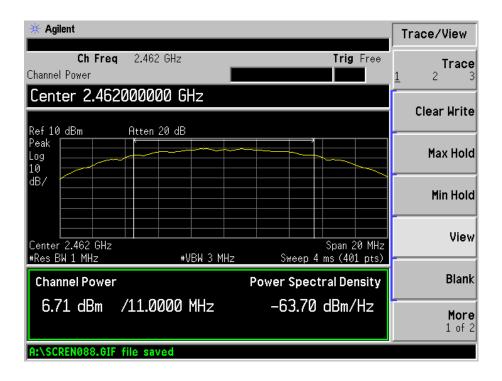
802.11b-1Mbps-Low Channel



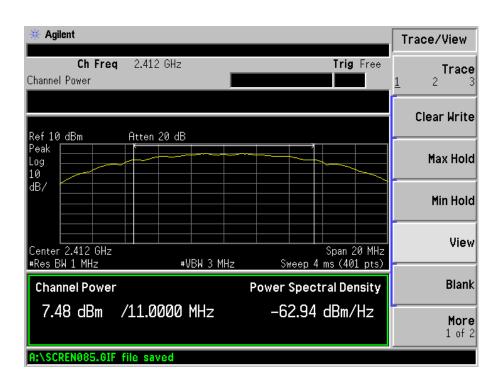
802.11b-1Mbps-Middle Channel



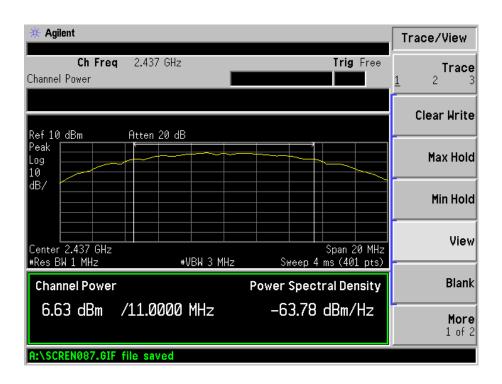
802.11b-1Mpbs-High Channel



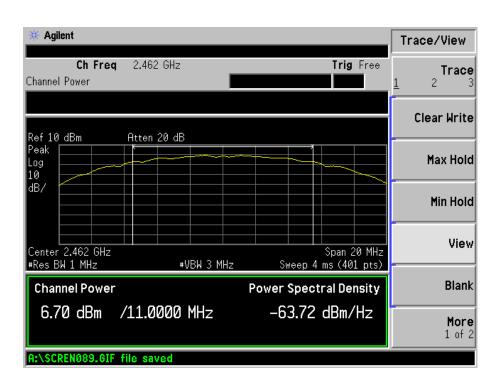
802.11b-11Mbps-Low Channel



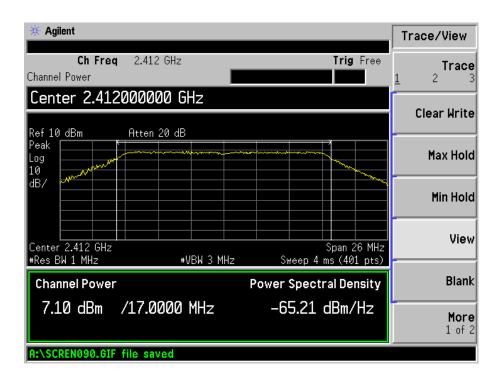
802.11b-11Mbps-Middle Channel



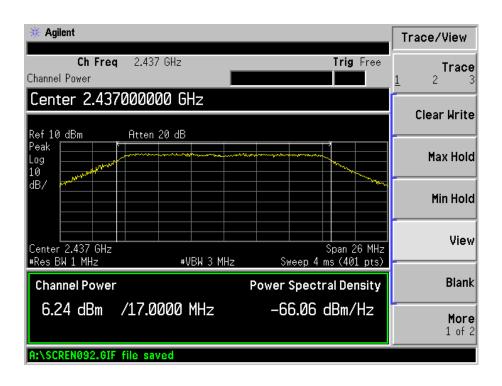
802.11b-11Mpbs-High Channel



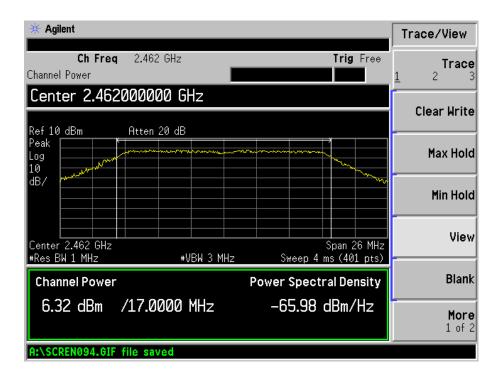
802.11g-6Mbps-Low Channel



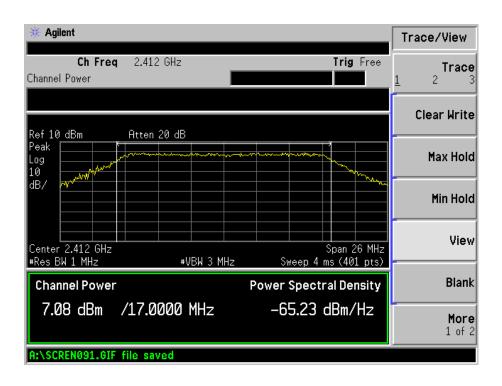
802.11g-6Mbps-Middle Channel



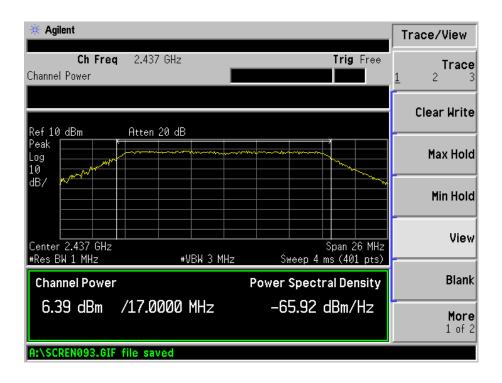
802.11g-6Mpbs-High Channel



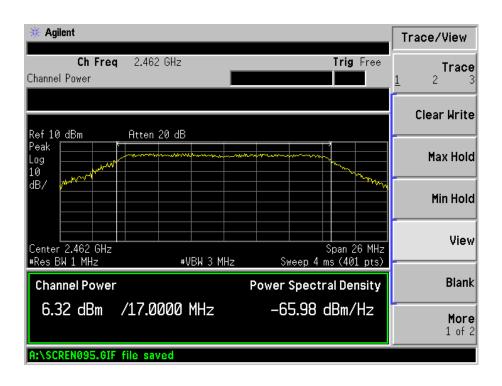
802.11g-54Mbps-Low Channel



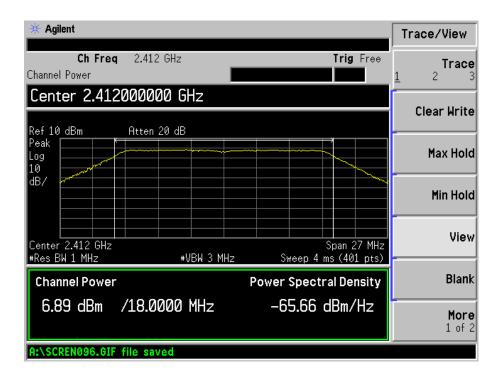
802.11g-54Mbps-Middle Channel



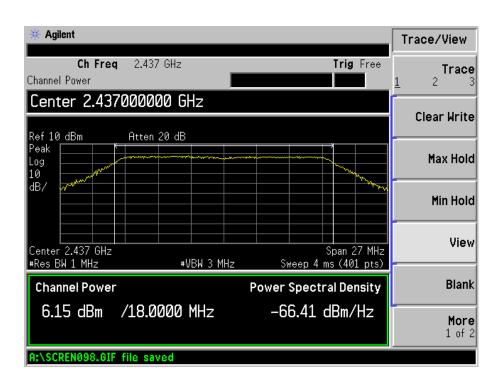
802.11g-54Mpbs-High Channel



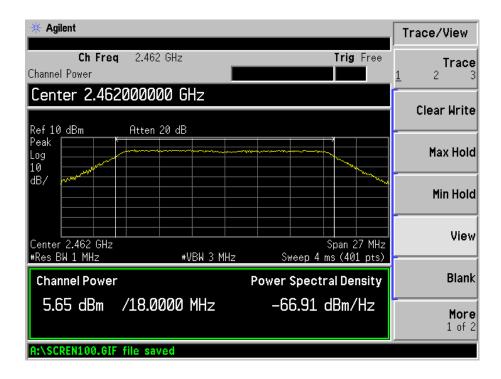
802.11n-HT20-MCS0-Low Channel



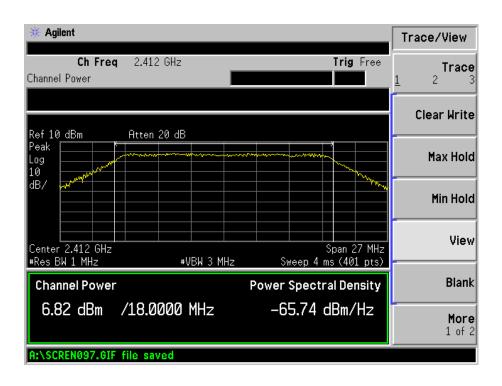
802.11n-HT20-MCS0-Middle Channel



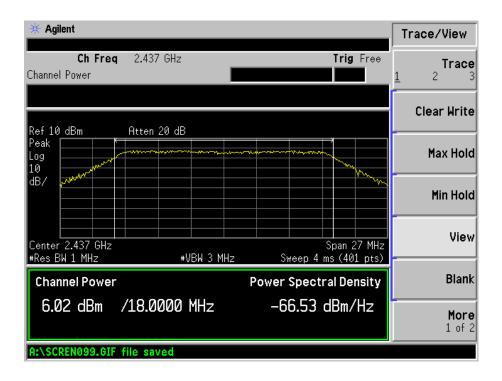
802.11n-HT20-MCS0-High Channel



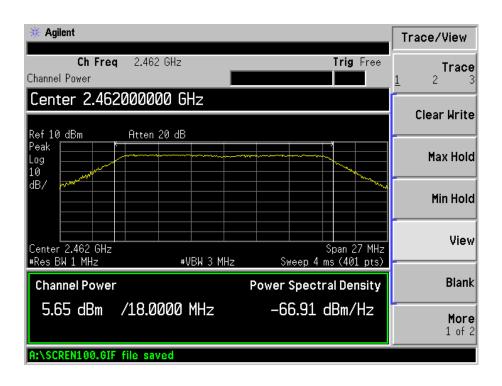
802.11n-HT20-MCS7-Low Channel



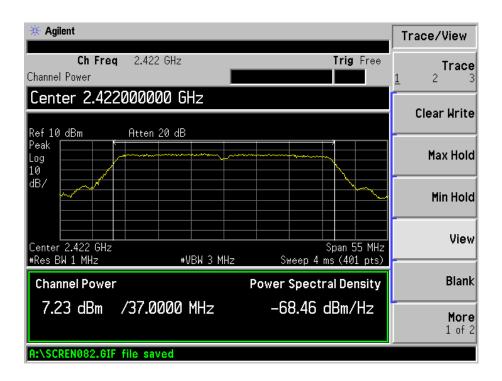
802.11n-HT20-MCS7-Middle Channel



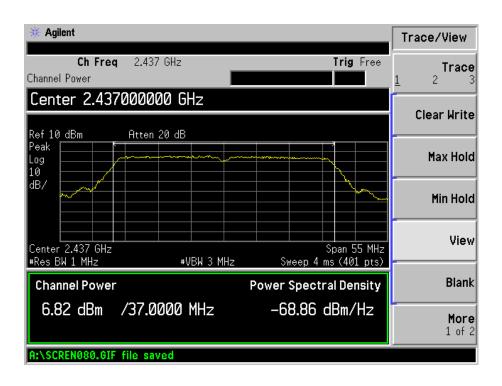
802.11n-HT20-MCS7-High Channel



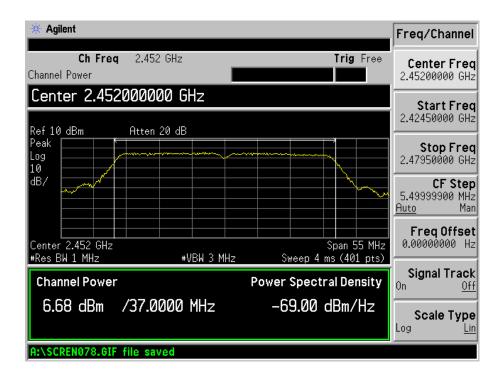
802.11n-HT40-MCS0-Low Channel



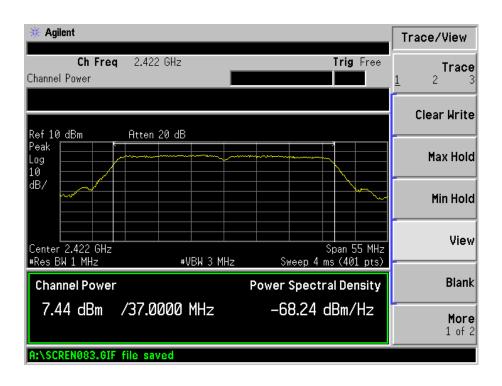
802.11n-HT40-MCS0-Middle Channel



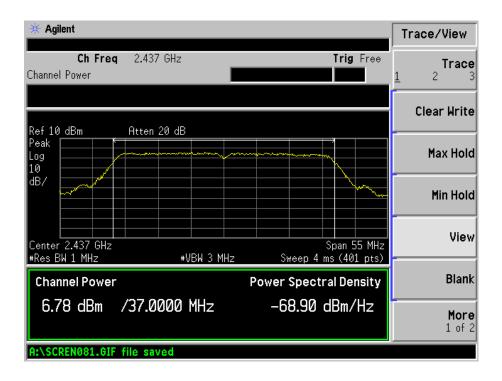
802.11n-HT40-MCS0-High Channel



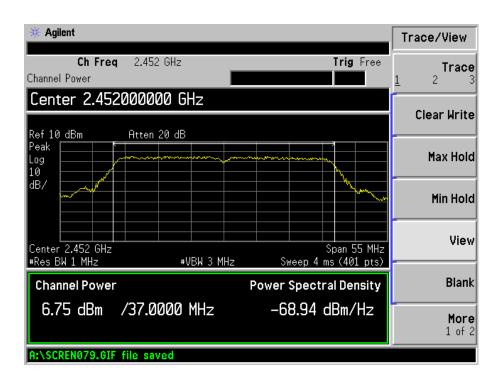
802.11n-HT40-MCS7-Low Channel



802.11n-HT40-MCS7-Middle Channel



802.11n-HT40-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

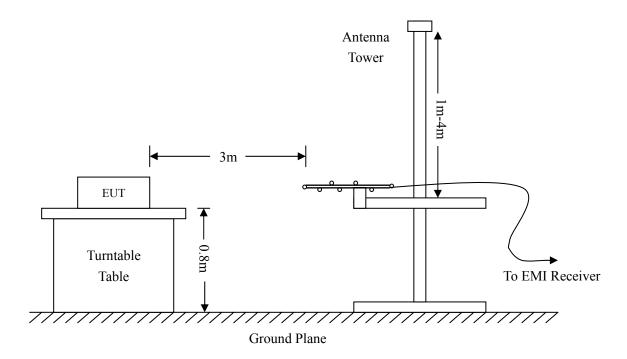
Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
Spectrum Analyzer	R&S	FSP	836079/035	2013-05-07	2014-05-06
EMI Test Receiver	R&S	ESVB	825471/005	2013-05-07	2014-05-06
Pre-amplifier	Agilent	8447F	3113A06717	2013-05-07	2014-05-06
Pre-amplifier	Compliance Direction	PAP-0118	24002	2013-05-07	2014-05-06
Trilog Broadband Antenna	SCHWARZBECK	VULB9163	9163-333	2013-04-20	2014-04-19
Horn Antenna	ETS	3117	00086197	2013-04-20	2014-04-19
Horn Antenna	ETS	3116B	00088203	2013-04-20	2014-04-19
Loop Antenna	SCHWARZECK	HFRA 5165	9365	2013-04-20	2014-04-19

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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 μ V means the emission is 6dB μ 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:

-2.45 dB at 33.5624 MHz in the Vertical polarization for 802.11g-Low Channel, 9kHz to 25 GHz, 3 Meters

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

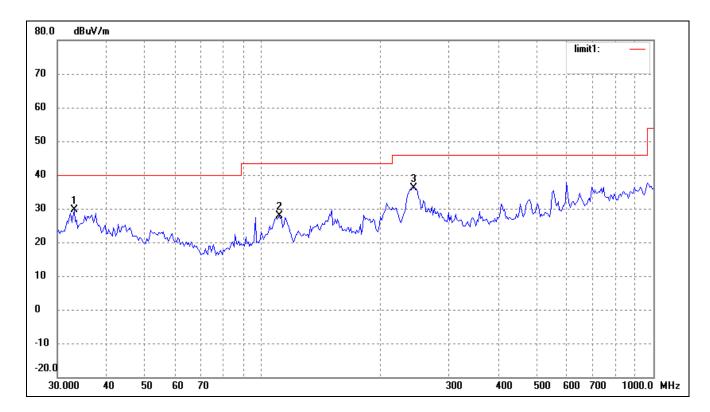
Plot of Radiated Emissions Test Data (30MHz to 1GHz)

EUT: Tablet PC

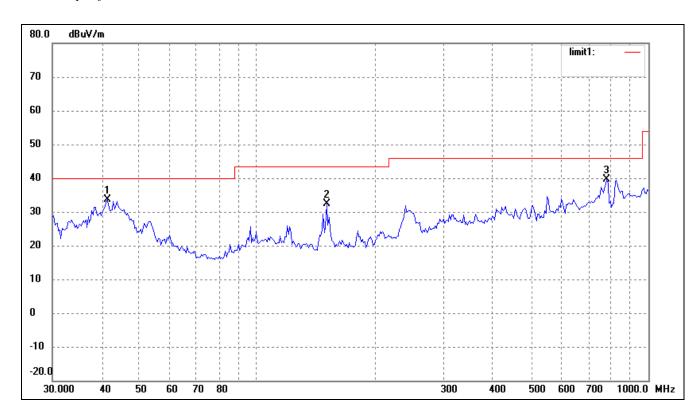
Tested Model: F-10XHD4Core

Operating Condition: 802.11b Transmitting Low Channel-2412MHz

Comment: AC 120V/60Hz; USB 5V



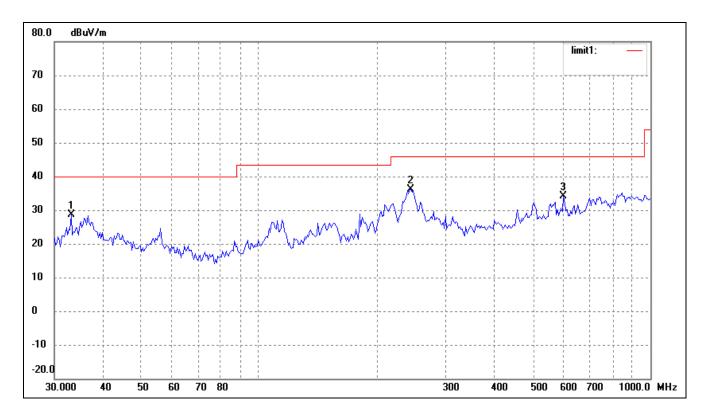
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	33.0950	21.02	8.56	29.58	40.00	-10.42	240	100	peak
2	110.5687	21.98	5.80	27.78	43.50	-15.72	187	100	peak
3	244.2321	29.04	7.12	36.16	46.00	-9.84	220	100	peak



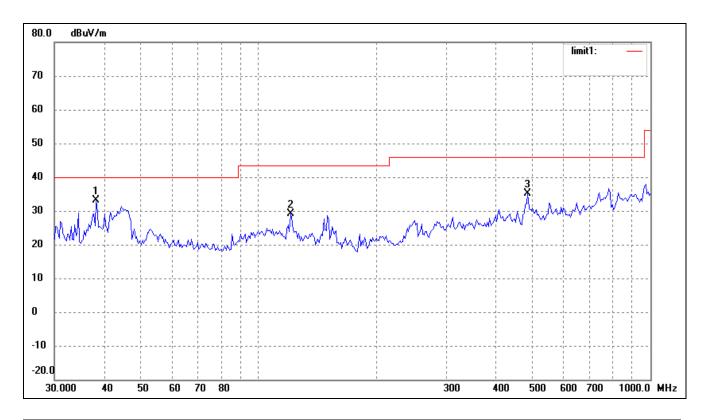
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	41.4215	24.40	9.24	33.64	40.00	-6.36	162	100	peak
2	150.5378	28.85	3.55	32.40	43.50	-11.10	200	100	peak
3	782.3453	23.70	15.81	39.51	46.00	-6.49	255	100	peak

Operating Condition: 802.11b Transmitting Middle Channel-2437MHz

Comment: AC 120V/60Hz; USB 5V



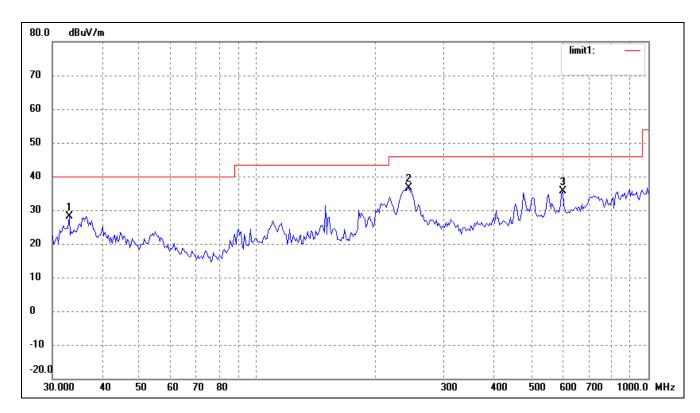
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	33.0950	20.19	8.56	28.75	40.00	-11.25	240	100	peak
2	244.2321	29.06	7.12	36.18	46.00	-9.82	187	100	peak
3	599.3213	19.42	14.76	34.18	46.00	-11.82	220	100	peak



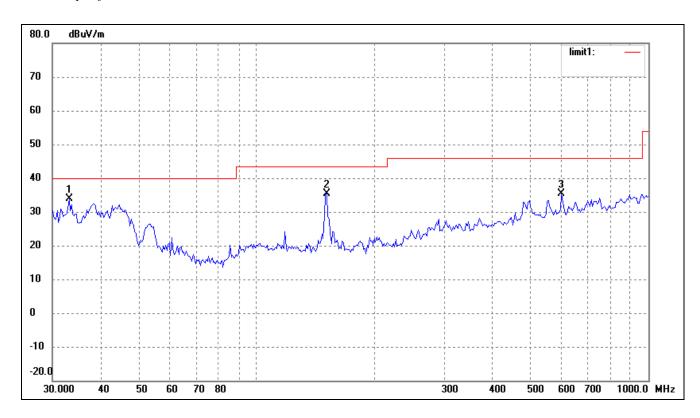
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	38.3462	23.75	9.42	33.17	40.00	-6.83	162	100	peak
2	120.2766	24.20	4.85	29.05	43.50	-14.45	200	100	peak
3	485.6093	23.55	11.62	35.17	46.00	-10.83	360	100	peak

Operating Condition: 802.11b Transmitting High Channel-2462MHz

Comment: AC 120V/60Hz; USB 5V



	No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
		(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
ſ	1	33.0950	19.51	8.56	28.07	40.00	-11.93	240	100	peak
ſ	2	244.2321	29.49	7.12	36.61	46.00	-9.39	187	100	peak
	3	603.5392	21.11	14.62	35.73	46.00	-10.27	220	100	peak



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	33.0950	25.42	8.56	33.98	40.00	-6.02	251	100	peak
2	150.5378	31.75	3.55	35.30	43.50	-8.20	36	100	peak
3	599.3213	20.59	14.76	35.35	46.00	-10.65	15	100	peak

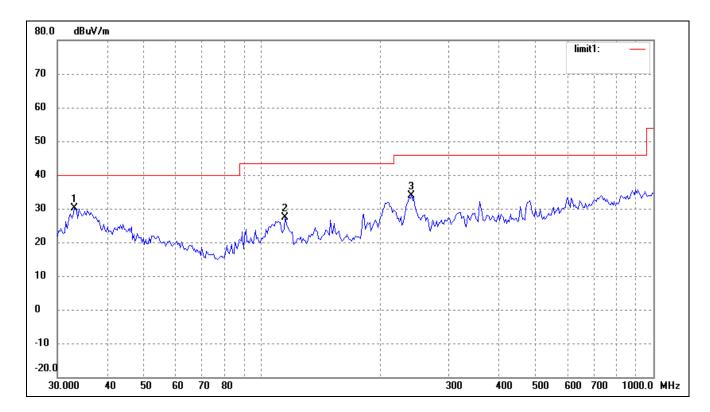
Plot of Radiated Emissions Test Data (30MHz to 1GHz)

EUT: Tablet PC

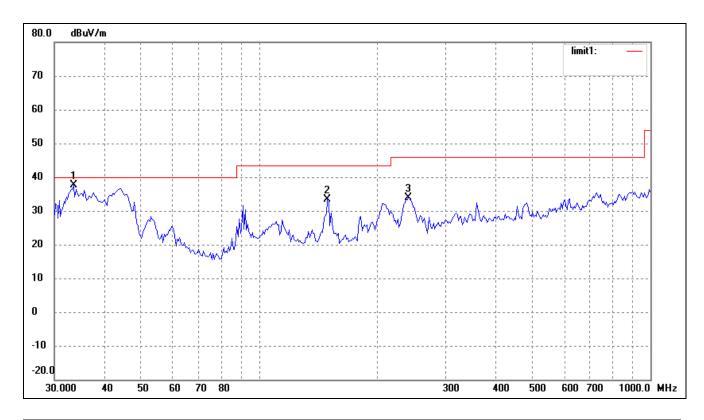
Tested Model: F-10XHD4Core

Operating Condition: 802.11g Transmitting Low Channel-2412MHz

Comment: AC 120V/60Hz; USB 5V



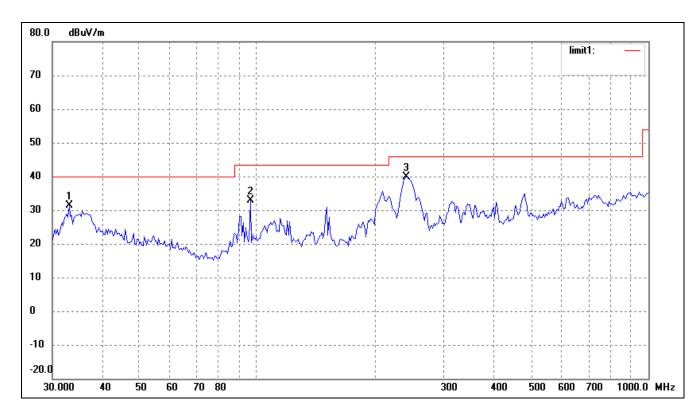
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	33.0950	21.49	8.56	30.05	40.00	-9.95	25	100	peak
2	114.5146	22.02	5.41	27.43	43.50	-16.07	139	100	peak
3	240.8304	26.97	7.02	33.99	46.00	-12.01	79	100	peak



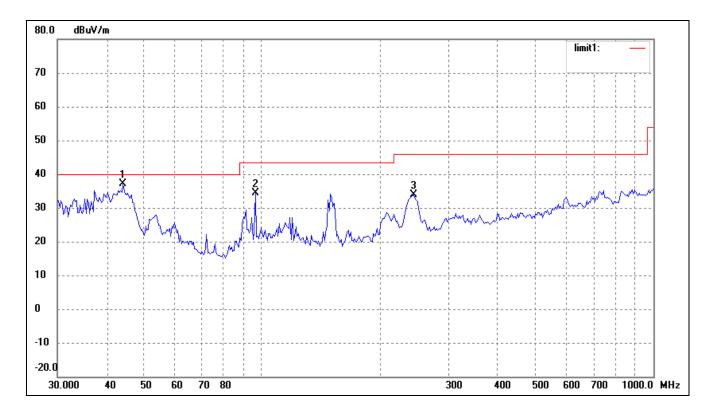
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	33.5624	28.92	8.63	37.55	40.00	-2.45	214	100	peak
2	149.4857	29.94	3.55	33.49	43.50	-10.01	76	100	peak
3	240.8304	26.97	7.02	33.99	46.00	-12.01	93	100	peak

Operating Condition: 802.11g Transmitting Middle Channel-2437MHz

Comment: AC 120V/60Hz; USB 5V



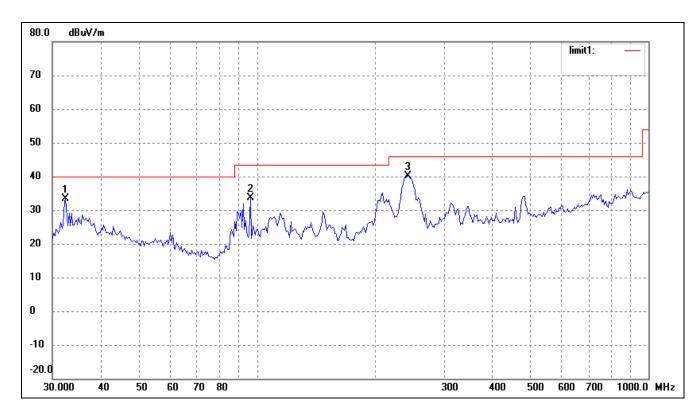
	No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
		(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
Ī	1	33.0950	22.74	8.56	31.30	40.00	-8.70	241	100	peak
Ī	2	96.0986	26.96	5.87	32.83	43.50	-10.67	36	100	peak
	3	240.8304	32.84	7.02	39.86	46.00	-6.14	24	100	peak



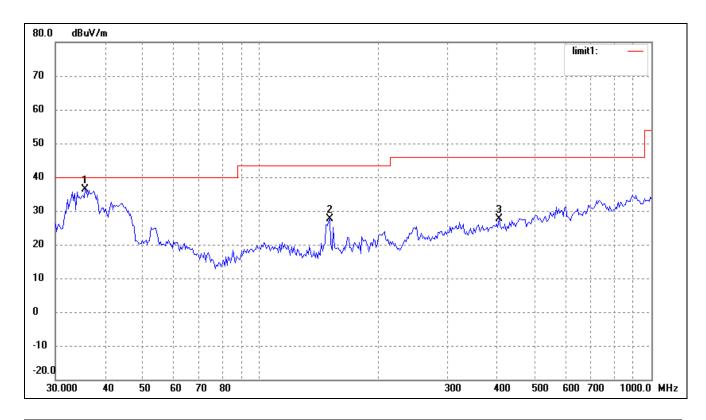
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	44.1202	28.75	8.43	37.18	40.00	-2.82	263	100	peak
2	96.0986	28.59	5.87	34.46	43.50	-9.04	14	100	peak
3	244.2321	26.78	7.12	33.90	46.00	-12.10	64	100	peak

Operating Condition: 802.11g Transmitting High Channel-2462MHz

Comment: AC 120V/60Hz; USB 5V



ľ	No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
		(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
	1	32.4059	24.96	8.44	33.40	40.00	-6.60	254	100	peak
	2	96.0986	27.71	5.87	33.58	43.50	-9.92	68	100	peak
	3	242.5253	33.15	7.08	40.23	46.00	-5.77	15	100	peak



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	Factor(dB)	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	35.7491	27.49	9.00	36.49	40.00	-3.51	336	100	peak
2	150.5378	24.20	3.55	27.75	43.50	-15.75	185	100	peak
3	407.5145	16.51	11.22	27.73	46.00	-18.27	41	100	peak

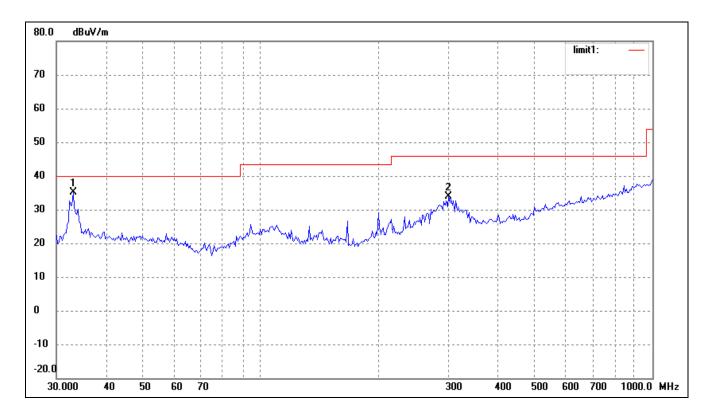
Plot of Radiated Emissions Test Data (30MHz to 1GHz)

EUT: Tablet PC

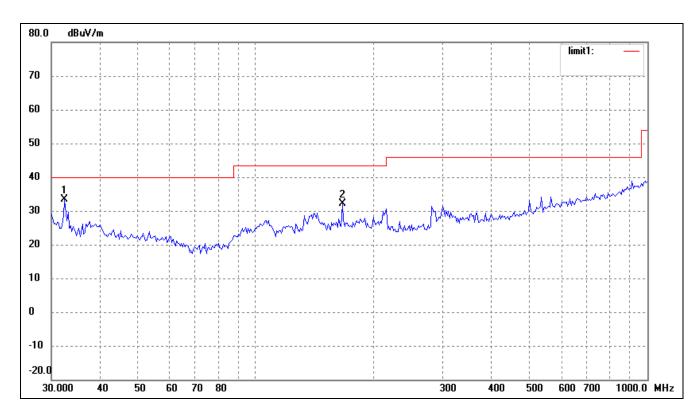
Tested Model: F-10XHD4Core

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

Comment: AC 120V/60Hz; USB 5V



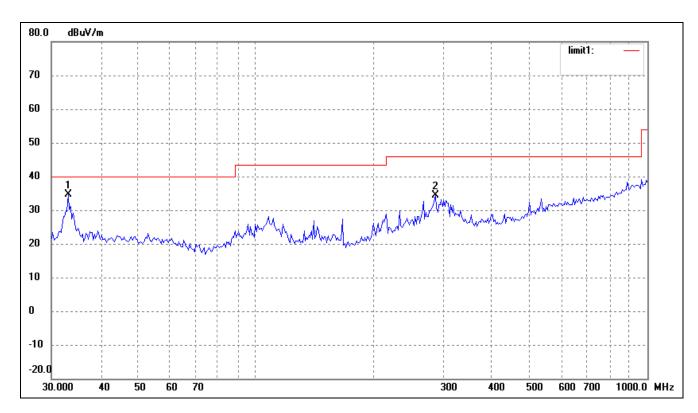
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	33.0950	28.27	6.77	35.04	40.00	-4.96	254	100	peak
2	301.4224	24.18	9.78	33.96	46.00	-12.04	13	100	peak



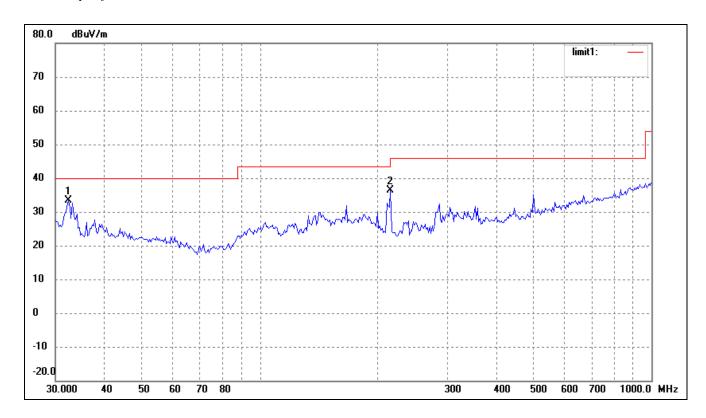
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	32.4059	26.72	6.77	33.49	40.00	-6.51	214	100	peak
2	166.0680	27.28	4.75	32.03	43.50	-11.47	31	100	peak

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

Comment: AC 120V/60Hz; USB 5V



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	33.0950	27.74	6.77	34.51	40.00	-5.49	23	100	peak
2	286.9823	24.70	9.61	34.31	46.00	-11.69	64	100	peak

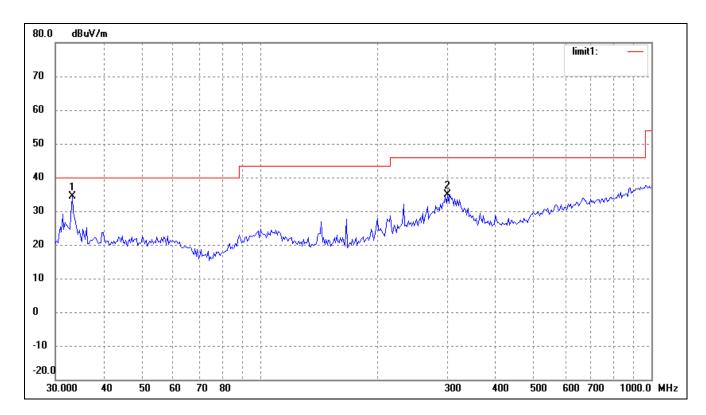


No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	32.4059	26.73	6.77	33.50	40.00	-6.50	256	100	peak
2	215.2678	29.26	7.12	36.38	43.50	-7.12	34	100	peak

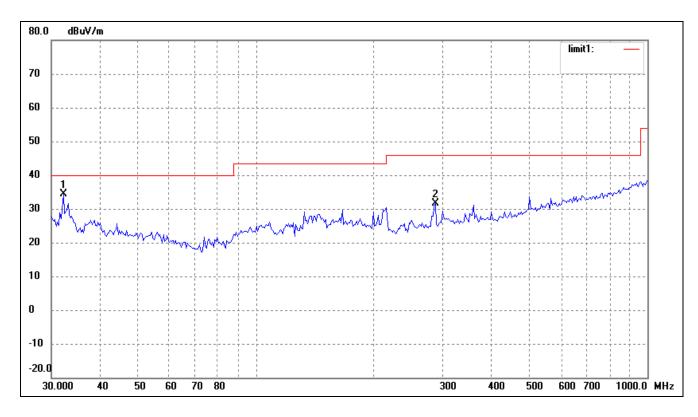
FCC PART 15.247

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

Comment: AC 120V/60Hz; USB 5V



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	33.0950	27.65	6.77	34.42	40.00	-5.58	360	100	peak
2	301.4224	25.18	9.78	34.96	46.00	-11.04	24	100	peak



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	32.1795	27.52	6.77	34.29	40.00	-5.71	214	100	peak
2	286.9823	22.01	9.61	31.62	46.00	-14.38	334	100	peak

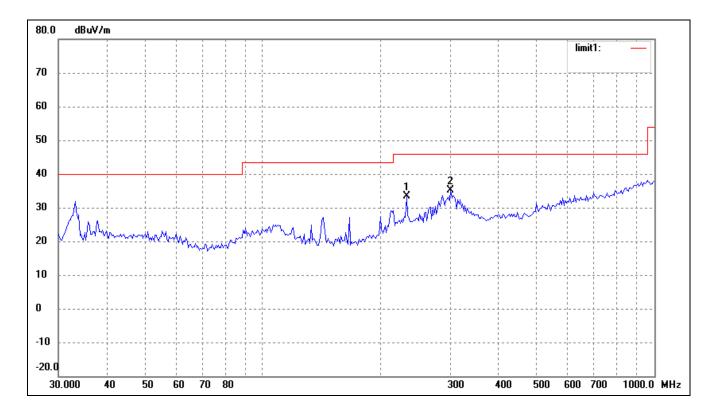
Plot of Radiated Emissions Test Data (30MHz to 1GHz)

EUT: Tablet PC

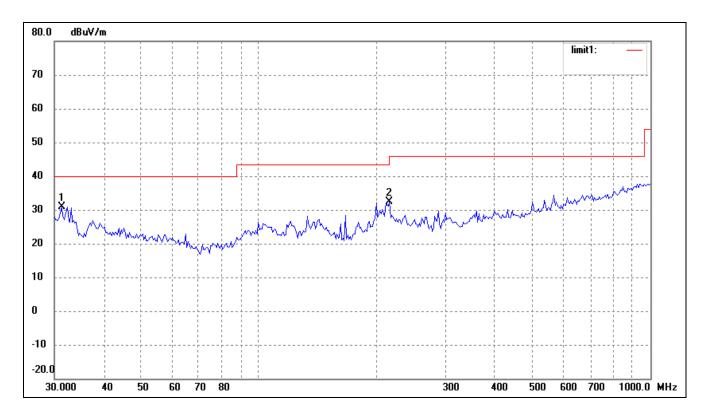
Tested Model: F-10XHD4Core

Operating Condition: 802.11n-HT40 Transmitting Low Channel-2422MHz

Comment: AC 120V/60Hz; USB 5V



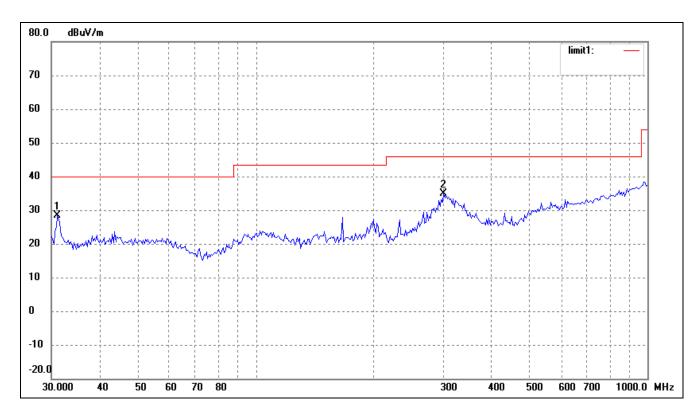
	No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
		(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
Ī	1	232.5318	25.46	8.01	33.47	46.00	-12.53	24	100	peak
	2	301.4224	25.37	9.78	35.15	46.00	-10.85	35	100	peak



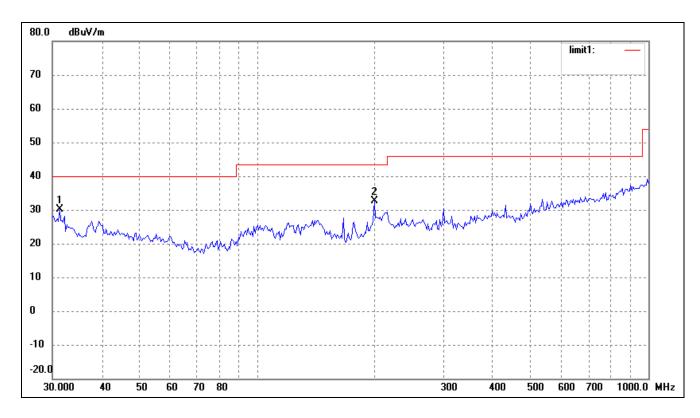
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	31.2893	24.15	6.77	30.92	40.00	-9.08	24	100	peak
2	215.2678	25.33	7.12	32.45	43.50	-11.05	341	100	peak

Operating Condition: 802.11n-HT40 Transmitting Middle Channel-2437MHz

Comment: AC 120V/60Hz; USB 5V



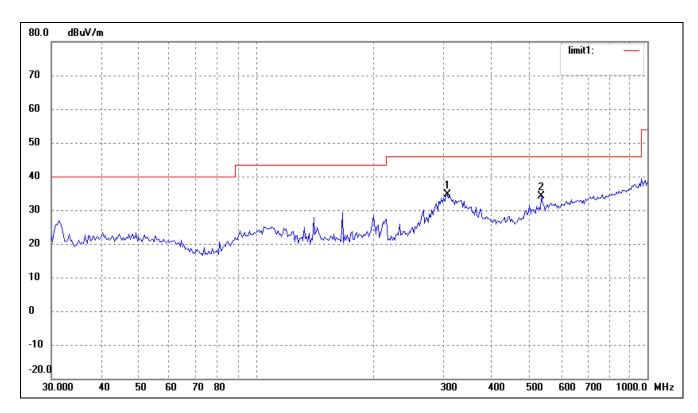
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	31.0706	21.70	6.77	28.47	40.00	-11.53	321	100	peak
2	301.4224	25.08	9.78	34.86	46.00	-11.14	47	100	peak



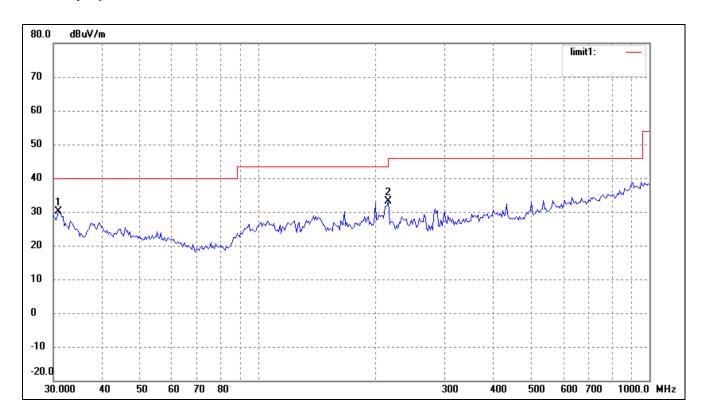
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	31.2893	23.27	6.77	30.04	40.00	-9.96	254	100	peak
2	199.2855	26.14	6.58	32.72	43.50	-10.78	27	100	peak

Operating Condition: 802.11n-HT40 Transmitting High Channel-2452MHz

Comment: AC 120V/60Hz; USB 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	24.85	9.86	34.71	46.00	-11.29	354	100	peak
2	535.7073	18.99	15.21	34.20	46.00	-11.80	12	100	peak



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	30.8535	23.47	6.77	30.24	40.00	-9.76	257	100	peak
2	215.2678	26.10	7.12	33.22	43.50	-10.28	34	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			•		
4824	54.06	0.57	54.63	74.00	-19.37	Н	PK		
4824	39.95	0.57	40.52	54.00	-13.48	Н	AV		
7236	42.16	3.69	45.85	74.00	-28.15	Н	PK		
7236	30.92	3.69	34.61	54.00	-19.39	Н	AV		
4824	58.73	0.57	59.30	74.00	-14.70	V	PK		
4824	42.03	0.57	42.60	54.00	-11.40	V	AV		
7236	42.42	3.69	46.11	74.00	-27.89	V	PK		
7236	30.76	3.69	34.45	54.00	-19.55	V	AV		
Middle Channel-2437MHz									
4874	62.37	0.64	63.01	74.00	-10.99	Н	PK		
4874	47.47	0.64	48.11	54.00	-5.89	Н	AV		
7311	45.73	3.75	49.48	74.00	-24.52	Н	PK		
7311	33.63	3.75	37.38	54.00	-16.62	Н	AV		
4874	55.72	0.64	56.36	74.00	-17.64	V	PK		
4874	41.31	0.64	41.95	54.00	-12.05	V	AV		
7311	43.57	3.75	47.32	74.00	-26.68	V	PK		
7311	31.43	3.75	35.18	54.00	-18.82	V	AV		
			High Chann	el-2462MHz					
4924	60.18	0.72	60.90	74.00	-13.10	Н	PK		
4924	46.52	0.72	47.24	54.00	-6.76	Н	AV		
7386	44.74	3.81	48.55	74.00	-25.45	Н	PK		
7386	31.33	3.81	35.14	54.00	-18.86	Н	AV		
4924	55.29	0.72	56.01	74.00	-17.99	V	PK		
4924	41.57	0.72	42.29	54.00	-11.71	V	AV		
7386	42.36	3.81	46.17	74.00	-27.83	V	PK		
7386	31.31	3.81	35.12	54.00	-18.88	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				
4824	44.16	0.57	44.73	74.00	-29.27	Н	PK	
4824	33.21	0.57	33.78	54.00	-20.22	Н	AV	
7236	42.47	3.69	46.16	74.00	-27.84	Н	PK	
7236	31.06	3.69	34.75	54.00	-19.25	Н	AV	
4824	50.45	0.57	51.02	74.00	-22.98	V	PK	
4824	35.95	0.57	36.52	54.00	-17.48	V	AV	
7236	42.93	3.69	46.62	74.00	-27.38	V	PK	
7236	31.22	3.69	34.91	54.00	-19.09	V	AV	
Middle Channel-2437MHz								
4874	45.23	0.64	45.87	74.00	-28.13	Н	PK	
4874	34.02	0.64	34.66	54.00	-19.34	Н	AV	
7311	42.52	3.75	46.27	74.00	-27.73	Н	PK	
7311	31.55	3.75	35.30	54.00	-18.70	Н	AV	
4874	57.02	0.64	57.66	74.00	-16.34	V	PK	
4874	42.33	0.64	42.97	54.00	-11.03	V	AV	
7311	45.59	3.75	49.34	74.00	-24.66	V	PK	
7311	31.31	3.75	35.06	54.00	-18.94	V	AV	
			High Chann	el-2462MHz				
4924	45.12	0.72	45.84	74.00	-28.16	Н	PK	
4924	33.29	0.72	34.01	54.00	-19.99	Н	AV	
7386	42.83	3.81	46.64	74.00	-27.36	Н	PK	
7386	31.53	3.81	35.34	54.00	-18.66	Н	AV	
4924	52.45	0.72	53.17	74.00	-20.83	V	PK	
4924	40.15	0.72	40.87	54.00	-13.13	V	AV	
7386	43.28	3.81	47.09	74.00	-26.91	V	PK	
7386	31.47	3.81	35.28	54.00	-18.72	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 Channe	el-2412MHz			
4824	50.63	0.57	51.20	74.00	-21.80	Н	PK
4824	35.80	0.57	36.37	54.00	-17.63	Н	AV
7236	41.69	3.69	45.38	74.00	-28.62	Н	PK
7236	30.76	3.69	34.45	54.00	-19.55	Н	AV
4824	52.45	0.57	53.02	74.00	-20.98	V	PK
4824	37.30	0.57	37.87	54.00	-16.13	V	AV
7236	41.86	3.69	45.55	74.00	-28.45	V	PK
7236	30.75	3.69	34.44	54.00	-19.56	V	AV
			Middle Chan	nel-2437MHz			
4874	55.44	0.64	56.08	74.00	-17.92	Н	PK
4874	43.71	0.64	44.35	54.00	-9.65	Н	AV
7311	43.38	3.75	47.13	74.00	-26.87	Н	PK
7311	31.88	3.75	35.63	54.00	-18.37	Н	AV
4874	50.87	0.64	51.51	74.00	-22.49	V	PK
4874	38.98	0.64	39.62	54.00	-14.38	V	AV
7311	43.40	3.75	47.15	74.00	-26.85	V	PK
7311	31.39	3.75	35.20	54.00	-18.80	V	AV
			High Chann	el-2462MHz			
4924	52.19	0.72	52.91	74.00	-21.09	Н	PK
4924	38.64	0.72	39.36	54.00	-14.64	Н	AV
7386	44.28	3.81	48.09	74.00	-25.91	Н	PK
7386	31.50	3.81	35.31	54.00	-18.69	Н	AV
4924	48.76	0.72	49.48	74.00	-24.52	V	PK
4924	36.13	0.72	36.85	54.00	-17.15	V	AV
7386	43.13	3.81	46.94	74.00	-27.06	V	PK
7386	31.33	3.81	35.14	54.00	-18.86	V	AV

Test Mode: 802.11n-HT40

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector			
(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	H/V				
			Low Chann	el-2422MHz						
4844	49.96	0.60	50.56	74.00	-23.44	Н	PK			
4844	38.33	0.60	38.93	54.00	-15.07	Н	AV			
7266	42.17	3.72	45.89	74.00	-28.11	Н	PK			
7266	30.81	3.72	34.53	54.00	-19.47	Н	AV			
4844	48.62	0.60	49.22	74.00	-24.78	V	PK			
4844	38.64	0.60	39.24	54.00	-14.76	V	AV			
7266	41.34	3.72	45.06	74.00	-28.94	V	PK			
7266	30.88	3.72	34.60	54.00	-19.40	V	AV			
	Middle Channel-2437MHz									
4874	53.69	0.64	54.33	74.00	-19.67	Н	PK			
4874	43.46	0.64	44.10	54.00	-9.90	Н	AV			
7311	43.86	3.75	47.61	74.00	-26.39	Н	PK			
7311	32.65	3.75	36.40	54.00	-17.60	Н	AV			
4874	47.89	0.64	48.53	74.00	-25.47	V	PK			
4874	36.45	0.64	37.09	54.00	-16.91	V	AV			
7311	42.36	3.75	46.11	74.00	-27.89	V	PK			
7311	33.95	3.75	37.70	54.00	-16.30	V	AV			
			High Chann	el-2452MHz						
4904	54.72	0.68	55.40	74.00	-18.60	Н	PK			
4904	45.65	0.68	46.33	54.00	-7.67	Н	AV			
7356	45.75	3.79	49.54	74.00	-24.46	Н	PK			
7356	33.32	3.79	37.11	54.00	-16.89	Н	AV			
4904	52.82	0.68	53.50	74.00	-20.50	V	PK			
4904	42.76	0.68	43.44	54.00	-10.56	V	AV			
7356	44.01	3.79	47.80	74.00	-26.20	V	PK			
7356	32.52	3.79	36.31	54.00	-17.69	V	AV			

Note: Testing is carried out with frequency rang 9kHz to the tenth harmonics, which above 3^{th} 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.

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	2013-05-07	2014-05-06
EMI Test Receiver	R&S	ESVB	825471/005	2013-05-07	2014-05-06
Pre-amplifier	Agilent	8447F	3113A06717	2013-05-07	2014-05-06
Pre-amplifier	Compliance Direction	PAP-0118	24002	2013-05-07	2014-05-06
Trilog Broadband Antenna	SCHWARZBECK	VULB9163	9163-333	2013-04-20	2014-04-19
Horn Antenna	ETS	3117	00086197	2013-04-20	2014-04-19

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.

8.4 Environmental Conditions

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

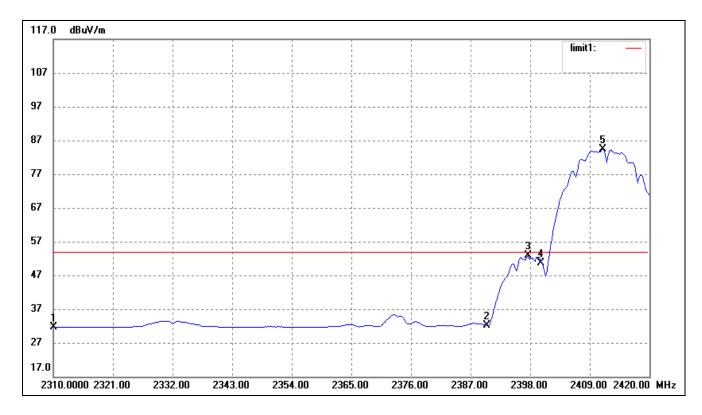
8.5 Summary of Test Results/Plots

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.

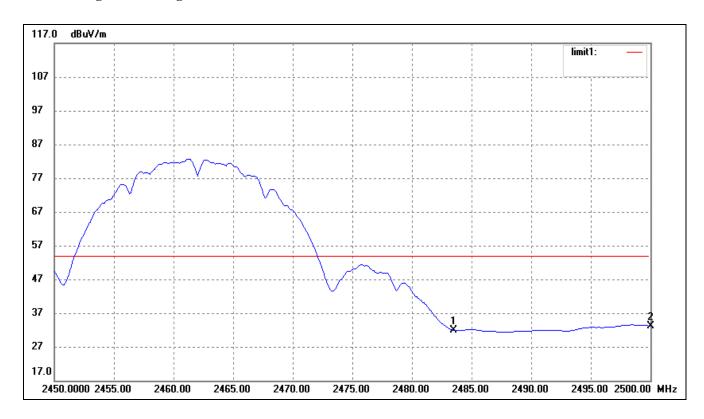
Please refer to the test plots as below.

802.11b-Lowest Bandedge



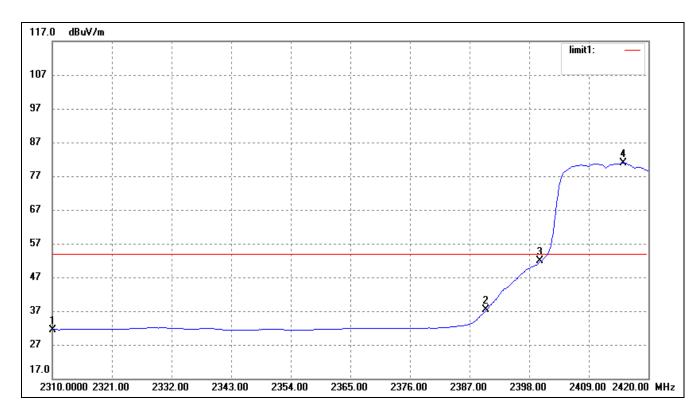
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	2310.000	39.12	-7.51	31.61	54.00	-22.39	AV Detector
	2310.000	53.08	-7.51	45.57	74.00	-28.43	Peak Detector
2	2390.000	39.36	-7.34	32.02	54.00	-21.98	AV Detector
	2390.000	53.60	-7.34	46.26	74.00	-27.74	Peak Detector
3	2397.560	60.07	-7.31	52.76	Delta = 31	1.55 dBc	AV Detector
4	2400.000	57.87	-7.31	50.56	Delta = 33.75 dBc		AV Detector
5	2411.420	91.59	-7.28	84.31	/	/	AV Detector

802.11b-Highest Bandedge



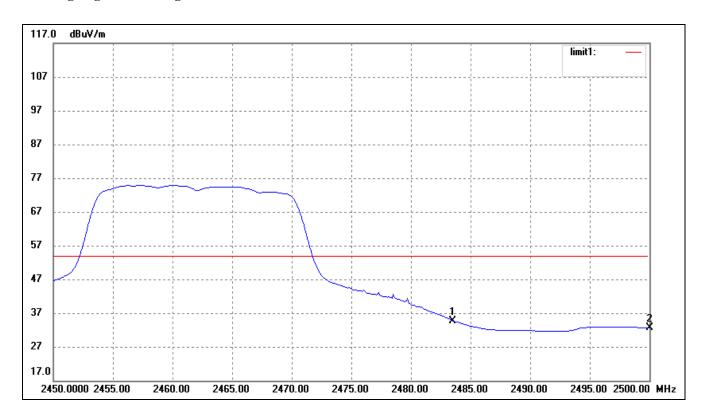
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.500	39.02	-7.13	31.89	54.00	-22.11	AV Detector
	2483.500	52.16	-7.13	45.03	74.00	-28.97	Peak Detector
2	2500.000	40.16	-7.08	33.08	54.00	-20.92	AV Detector
	2500.000	53.91	-7.08	46.83	74.00	-27.17	Peak Detector

802.11g-Lowest Bandedge



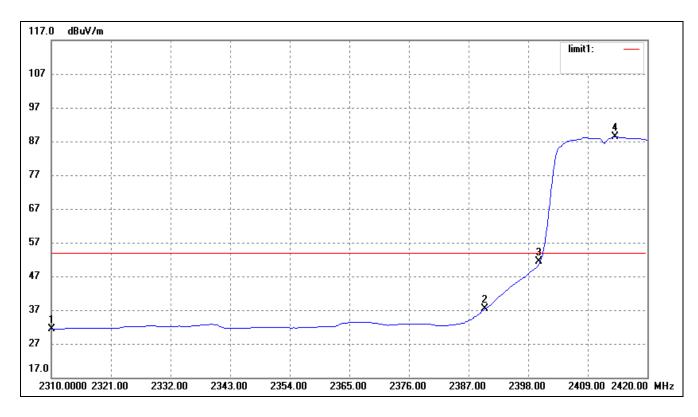
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	2310.000	39.01	-7.51	31.50	54.00	-22.50	AV Detector
	2310.000	52.13	-7.51	44.62	74.00	-29.38	Peak Detector
2	2390.000	44.63	-7.34	37.29	54.00	-16.71	AV Detector
	2390.000	63.94	-7.34	56.60	74.00	-17.40	Peak Detector
3	2400.000	59.25	-7.31	51.94	Delta = 28.95 dBc		AV Detector
4	2415.380	88.17	-7.28	80.89	/	/	AV Detector

802.11g-Highest Bandedge



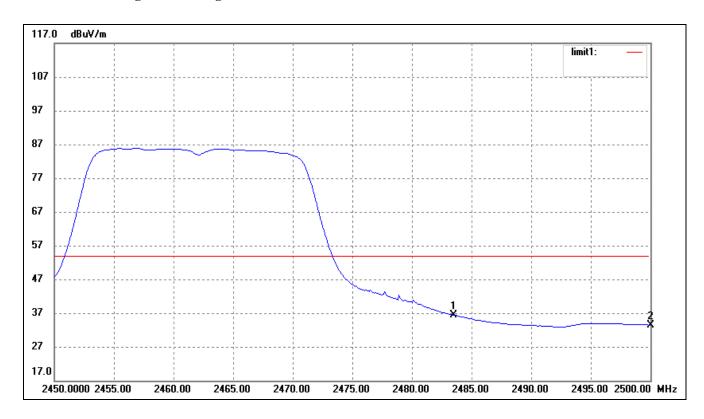
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.500	41.87	-7.13	34.74	54.00	-19.26	AV Detector
	2483.500	58.35	-7.13	51.22	74.00	-22.78	Peak Detector
2	2500.000	39.60	-7.08	32.52	54.00	-21.48	AV Detector
	2500.000	53.99	-7.08	46.91	74.00	-27.09	Peak Detector

802.11n-HT20-Lowest Bandedge



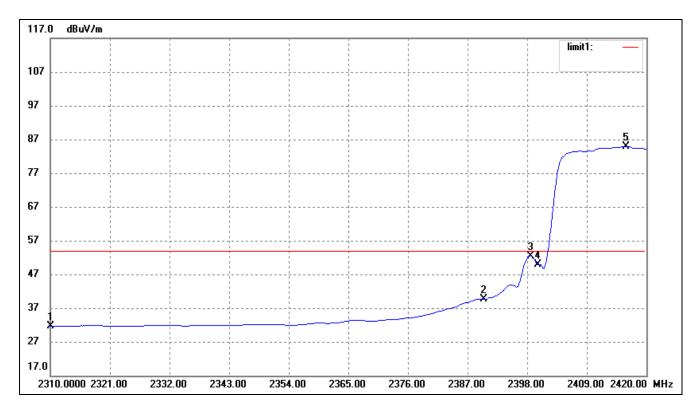
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	2310.000	38.91	-7.51	31.40	54.00	-22.60	AV Detector
	2310.000	52.27	-7.51	44.76	74.00	-29.24	Peak Detector
2	2390.000	44.80	-7.34	37.46	54.00	-16.54	AV Detector
	2390.000	64.47	-7.34	57.13	74.00	-16.87	Peak Detector
3	2400.000	58.67	-7.31	51.36	Delta = 36	5.95 dBc	AV Detector
4	2414.060	95.59	-7.28	88.31	/	/	AV Detector

802.11n-HT20-Highest Bandedge



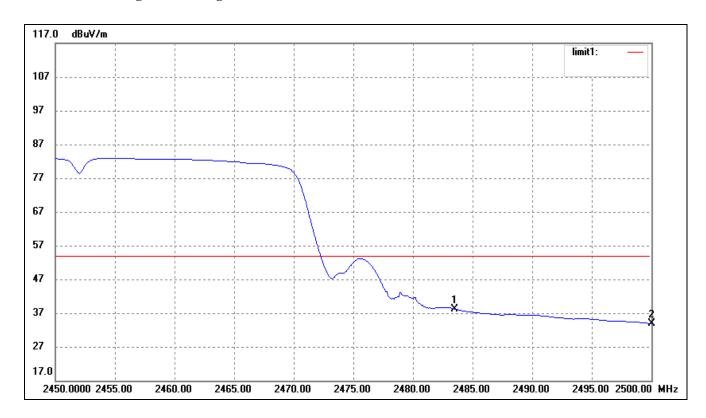
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.500	43.53	-7.13	36.40	54.00	-17.60	AV Detector
	2483.500	60.79	-7.13	53.66	74.00	-20.34	Peak Detector
2	2500.000	40.54	-7.08	33.46	54.00	-20.54	AV Detector
	2500.000	55.47	-7.08	48.39	74.00	-25.61	Peak Detector

802.11n-HT40-Lowest Bandedge



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	2310.000	39.05	-7.51	31.54	54.00	-22.46	AV Detector
	2310.000	51.85	-7.51	44.34	74.00	-29.66	Peak Detector
2	2390.000	46.91	-7.34	39.57	54.00	-14.43	AV Detector
	2390.000	61.31	-7.34	53.97	74.00	-20.03	Peak Detector
3	2398.660	59.81	-7.31	52.50	Delta = 32	2.46 dBc	AV Detector
4	2400.000	57.26	-7.31	49.95	Delta = 35	5.01 dBc	AV Detector
5	2416.260	92.23	-7.27	84.96	/	/	AV Detector

802.11n-HT40-Highest Bandedge



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.500	45.33	-7.13	38.20	54.00	-15.80	AV Detector
	2483.500	60.49	-7.13	53.36	74.00	-20.64	Peak Detector
2	2500.000	41.01	-7.08	33.93	54.00	-20.07	AV Detector
	2500.000	53.79	-7.08	46.71	74.00	-27.29	Peak Detector

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

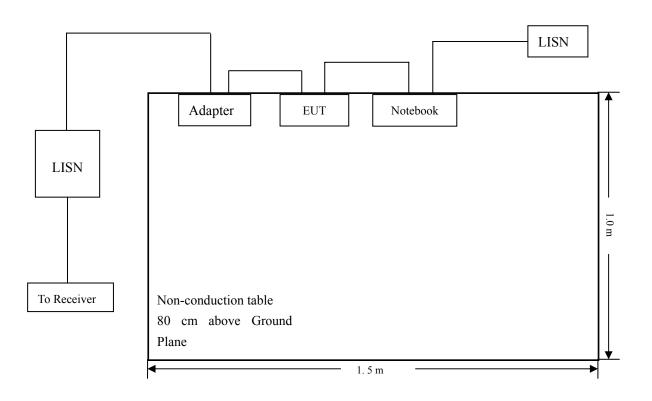
Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2013-05-07	2014-05-06
L.I.S.N	Schwarz beck	NSLK8126	8126-224	2013-05-07	2014-05-06
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2013-05-07	2014-05-06

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



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	
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 9.8, the EUT <u>complied with the FCC Part 15.207</u> Conducted margin for a Class B device, with the *worst* margin reading of:

-7.34 dB at 0.582 MHz in the Line mode, Ave detector, 0.15-30MHz

9.8 Conducted Emissions Test Data

Plot of Conducted Emissions Test Data

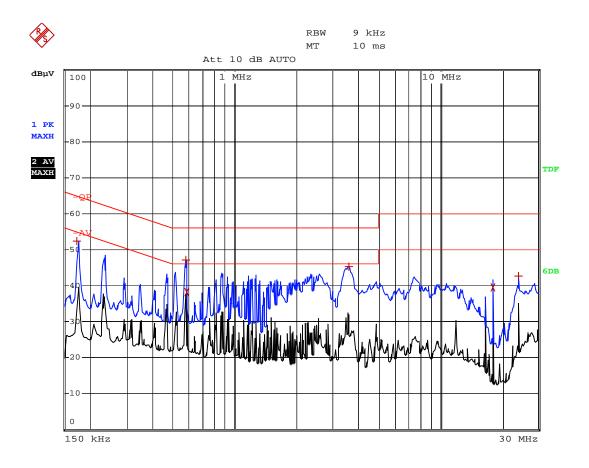
EUT: Tablet PC

Tested Model: F-10XHD4Core

Operating Condition: Wireless Transmitting

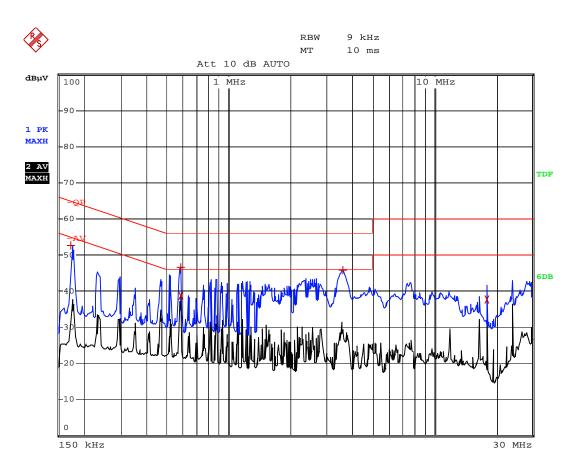
Comment: AC 120V/60Hz; Adapter DC 5V

Test Specification: Neutral



	EDIT PEAK LIST (Prescan Results)							
Trace1:	-QP							
Trace2:	-AV							
Trace3:								
TRACE	FREQUENCY	LEVEL dBµV	DELTA LIMIT dB					
1 Max Peak	174 kHz	52.33	-12.43					
1 Max Peak	578 kHz	47.03	-8.96					
2 Average	582 kHz	38.21	-7.78					
1 Max Peak	3.594 MHz	45.24	-10.75					
2 Average	17.982 MHz	39.41	-10.58					
1 Max Peak	24.006 MHz	42.54	-17.45					

Test Specification: Line



EDIT PEAK LIST (Prescan Results)						
Tracel: -QP						
Trace2:	-AV					
Trace3:						
TRACE	FREQUENCY	LEVEL dBµV	DELTA LIMIT dB			
1 Max Peak	174 kHz	52.75	-12.01			
1 Max Peak	582 kHz	46.56	-9.43			
2 Average	582 kHz	38.65	-7.34			
1 Max Peak	3.61 MHz	45.80	-10.19			
2 Average	17.982 MHz	37.79	-12.20			

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