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TEST REPORT

Report Number: 101646993LEX-001

Project Number: G101646993

Report Issue Date: 5/22/2014

Product Name: Cisco ME4624-ONT-RGW / PTIN GR2402G

FCC Standards: Title 47 CFR Part 15 Subpart B and C Industry Canada Standards: RSS-210 Issue 8 & RSS-GEN Issue 3

Tested by: Intertek Testing Services NA, Inc. 731 Enterprise Drive Lexington, KY 40510 Client:
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1 Introduction and Conclusion

The tests indicated in section 2 were performed on the product constructed as described in section 3. The remaining test sections are the verbatim text from the actual data sheets used during the investigation. These test sections include the test name, the specified test method, a list of the actual test equipment used, documentation photos, results and raw data. No additions, deviations, or exclusions have been made from the standard(s) unless specifically noted.

Based on the results of our investigation, we have concluded the product tested complied with the requirements of the standard(s) indicated. The results obtained in this test report pertain only to the item(s) tested.

The INTERTEK-Lexington is located at 731 Enterprise Drive, Lexington Kentucky, 40510. The radiated emission test site is a 10-meter semi-anechoic chamber. The chamber meets the characteristics of CISPR 16-1 and ANSI C63.4. For measurements, a remotely controlled flush-mount metal-top turntable is used to rotate the EUT a full 360 degrees. A remote controlled non-conductive antenna mast is used to scan the antenna height from one to four meters. The test site is listed with the FCC under registration number 485103. The test site is listed with Industry Canada under site number IC 2042M-1.

2 Test Summary

Page	Test full name	FCC Reference	IC Reference	Result
7	Peak Conducted Power	§ 15.247(b)(3)(4)	RSS-210 (A8.4)	Pass
9	Occupied Bandwidth	§ 15.247(a)(2)	RSS-210 (A8.2), RSS-GEN (4.6.1)	Pass
16	Conducted Spurious Emissions	§ 15.247(d)	RSS-210 (A8.5)	Pass
20	Power Spectral Density	§ 15.247(e)	RSS-210 (A8.2b)	Pass
26	Radiated Spurious Emissions (Transmitter)	§ 15.247(d), § 15.209, and § 15.205	RSS-210 (2.2) (A8.5)	Pass
34	Radiated Spurious Emissions (Receiver)	§ 15.109	RSS-Gen (6.1)	Pass
37	AC Powerline Conducted Emissions	§ 15.107, § 15.207	RSS-Gen (7.2.4)	Pass
40	Antenna Requirement per FCC Part 15.203	§ 15.203	RSS-Gen (7.1.2)	Pass

3 Description of Equipment Under Test

Equipm	nent Under Test
Manufacturer	Portugal Telecom, Inovacao S.A.
Model Number	Cisco ME4624-ONT-RGW / PTIN GR2402G
Serial Number	5054494E07C1306F
Receive Date	5/5/2014
Test Start Date	5/5/2014
Test End Date	5/9/2014
Device Received Condition	Good
Test Sample Type	Production
Frequency Band	2412MHz – 2462MHz
Mode(s) of Operation	802.11b/g/n
Modulation Type	BPSK, QPSK, CCK, OFDM
Duty Cycle	100%
Transmission Control	Test Commands
Test Channels	1, 6, 11
Antenna Type (15.203)	Internal
Power Supply	115VAC/60Hz (Via AC / DC Power Adapter)

Description of Equipment Under Test

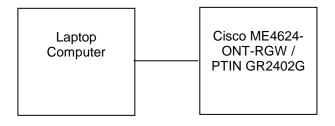
The product under test was a Cisco ME4624-ONT-RGW / PTIN GR2402G. It is a solution for residential customers based on Rec. ITU-T G.984.x that supports triple play services (high speed internet, voice and video) which are deployed over Ethernet and RF video Overlay interfaces. GEM (GPON encapsulation method) is employed to adapt technologies. This product also includes HGW features. This system can be used in triple play service delivery network solutions for residential customers. Includes Home Gateway functionalities, 4 GbE ports for internet access and IPTV, WiFi, 2 FXS ports for voice, 2 USB ports and one RF video overlay output for analog TV service.

Operating modes of the EUT:

No.	Descriptions of EUT Exercising
1	Transmitting 802.11 b, g, or n (HT-20) on low mid or high channels
2	Receive / idle mode

3.1 System setup including cable interconnection details, support equipment and simplified block diagram

3.2 EUT Block Diagram:



3.3 Cables:

Cables													
Description	Otv	Longth	Shielding	Ferrites	Conr	ection							
Description	Qty	Length	Shleiding	remiles	From	То							
USB Cable	2	4 ft	None	Yes	USB Ports	Resistive termination							
Ethernet Cable	4	6 ft	None	None	Test Sample	Laptop							
RJ11 Cables	2	6 ft	None	None	FXS Ports	Resistive termination							
DC Power Cable	1	6ft	None	None	DC Power Input	AC/DC Power Adapter							

3.4 Support Equipment:

Support Equipment									
Description	Manufacturer	Model Number	Serial Number						
Laptop	Gateway	LT28002u	Not labeled						

3.5 Models Covered:

The following models are covered under this report as they all use the same WiFi interface and differ only in the wired interfaces populated.

Equipment Trademark / Model	Product Code	Power	GPON	VoIP FXS	LAN 1000 BaseT	T1/E1	USB	RF	Wireless LAN IEEE 802.11n
Cisco ME4624- ONT-RGW PTIN GR2402G	1300008130	X	X	(2 ports)	(4 ports)		(2 ports)		X
Cisco ME4624- ONT-RGW- RF PTIN GR2412G	1300008102	X	X	(2 ports)	(4 ports)		(2 ports)	X	X
Cisco ME46212- ONT-RGW PTIN GR21202G	1300008351	X	X	(2 ports)	(12 ports)		(2 ports)		X
Cisco ME46044- ONT-NTAW PTIN GB04024GA	1300008001	X	X		(4 ports)	(4 ports)	(2 ports)		X
ME46244- ONT-NTAW PTIN GB24024GA	1300007952	X	X	(2 ports)	(4 ports)	(4 ports)	(2 ports)		X

X - Equipped	- Not Equipped
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4 Peak Conducted Power

4.1 Test Limits

§ 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. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.

§ 15.247(b)(4): The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

4.2 Test Procedure

ANSI C63.10: 2009 and KDB Publication No. 558074: Guidance on Measurements for Digital Transmission Systems (47 CFR 15.247). The peak output power was measured using the channel power function of the spectrum analyzer. The two outputs were measured and summed (in linear terms) for comparison to the limit per KDB 662911 D01.

4.3 Test Equipment Used:

Description	Serial Number	Manufacturer	Model	Cal. Date	Cal. Due
Spectrum Analyzer	3720	Rohde&Schwarz	FSEK30	9/10/2013	9/10/2014

4.4 Results:

All measurements below were performed with peak detection using the channel power function of the analyzer. The two outputs were measured and summed (in linear terms) for comparison to the limit per KDB 662911 D01.

802.11 b Mode								
			Co	Conducted Power (dBm)				
	Frequency	Channel		Data Rate (Mbps)				
Mode	(MHz)	Number	1	2	5.5	11		
	2412	1	20.56	20.81	22.22	23.78		
	2437	6	21.01	21.19	22.42	24.04		
802.11b	2462	11	21.12	21.54	22.79	24.36		

802.11g Mode										
				Conducted Power (dBm)						
	Frequency	Channel				Data Rat	e (Mbps)			
Mode	(MHz)	Number	6	9	12	18	24	36	48	54
	2412	1	23.95	24.06	24.11	24.15	24.43	24.52	24.91	23.51
	2437	6	24.12	24.21	24.41	24.41	24.55	24.81	24.94	23.56
802.11g	2462	11	24.61	24.69	24.89	24.64	24.75	24.79	24.88	23.67

802.11n Mode (20MHz)										
	Frequency	Channel		Conducted Power (dBm)						
Mode	(MHz)	Number	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
	2412	1	23.28	24.12	24.22	24.22	24.09	24.07	23.96	23.97
802.11n	2437	6	23.61	23.18	24.23	24.27	24.03	24.06	23.95	23.86
(20MHz)	2462	11	24.19	24.13	24.23	24.47	24.38	24.21	24.07	23.98

5 Occupied Bandwidth

5.1 Test Limits

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

5.2 Test Procedure

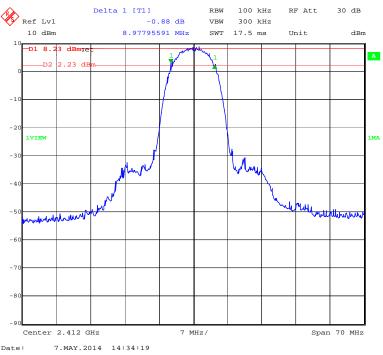
ANSI C63.10: 2009 and KDB Publication No. 558074: Guidance on Measurements for Digital Transmission Systems (47 CFR 15.247)

5.3 Test Equipment Used:

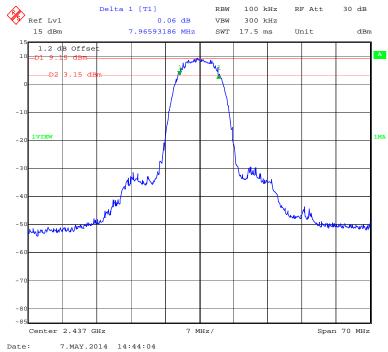
Description	Serial Number	Manufacturer	Model	Cal. Date	Cal. Due
Spectrum Analyzer	3720	Rohde&Schwarz	FSEK30	9/10/2013	9/10/2014

5.4 Results:

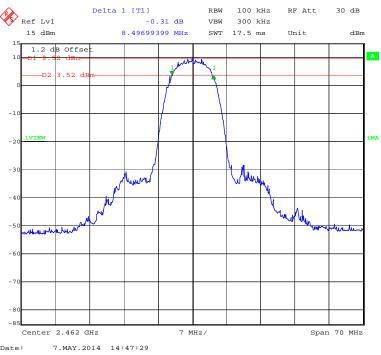
Mode	Channel Number	Frequency (MHz)	6dB Bandwidth	99% Power Bandwidth	Result
802.11b	1	2412	8.97MHz		Pass
802.11b	6	2437	7.96MHz	10.802MHz	Pass
802.11b	11	2462	8.49MHz		Pass
802.11g	1	2412	14.87MHz		Pass
802.11g	6	2437	15.26MHz	16.41MHz	Pass
802.11g	11	2462	15.51MHz		Pass
802.11n (20MHz)	1	2412	15.99MHz		Pass
802.11n (20MHz)	6	2437	16.38MHz	17.53MHz	Pass
802.11n (20MHz)	11	2462	15.85MHz		Pass



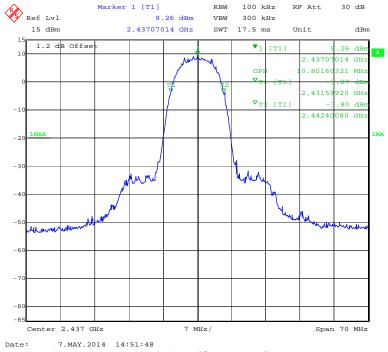
6dB Bandwidth Plot (Channel 1) - 802.11b mode



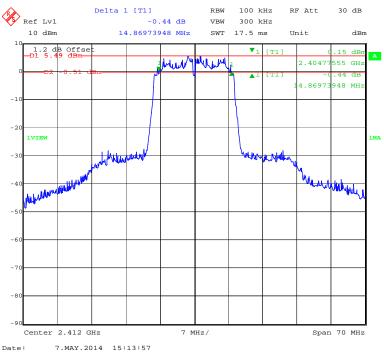
6dB Bandwidth Plot (Channel 6) - 802.11b mode



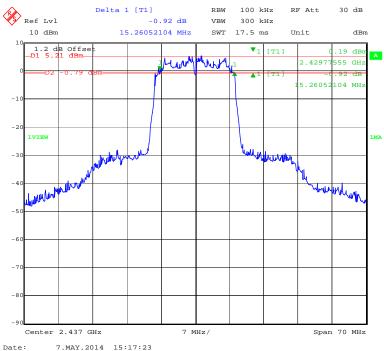
6dB Bandwidth Plot (Channel 11) - 802.11b mode



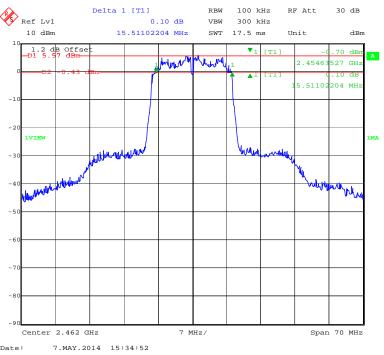
99% Power Bandwidth Plot (Channel 6) - 802.11b mode



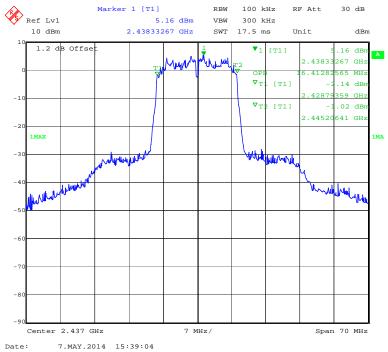
6dB Bandwidth Plot (Channel 1) - 802.11g mode



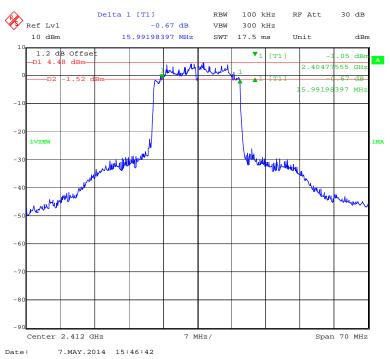
6dB Bandwidth Plot (Channel 6) - 802.11g mode



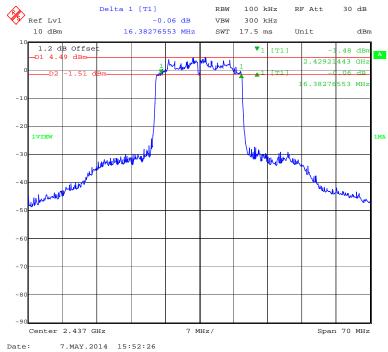
6dB Bandwidth Plot (Channel 11) - 802.11g mode



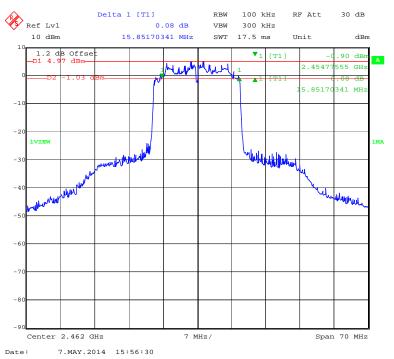
99% Power Bandwidth Plot (Channel 6) - 802.11g mode



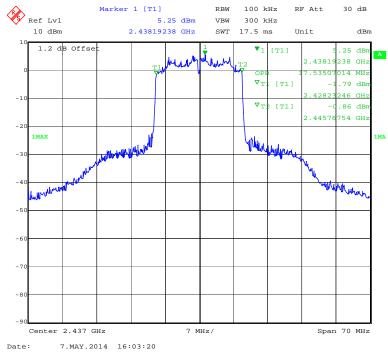
6dB Bandwidth Plot (Channel 1) – 802.11n mode (20MHz)



6dB Bandwidth Plot (Channel 6) - 802.11n mode (20MHz)



6dB Bandwidth Plot (Channel 11) – 802.11n mode (20MHz)



99% Power Bandwidth Plot (Channel 6) - 802.11n mode (20MHz)

6 Conducted Spurious Emissions

6.1 Test Limits

§ 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.

6.2 Test Procedure

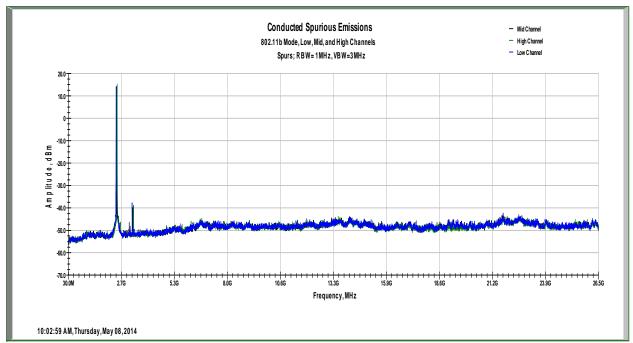
ANSI C63.10: 2009 and KDB Publication No. 558074: Guidance on Measurements for Digital Transmission Systems (47 CFR 15.247)

6.3 Test Equipment Used:

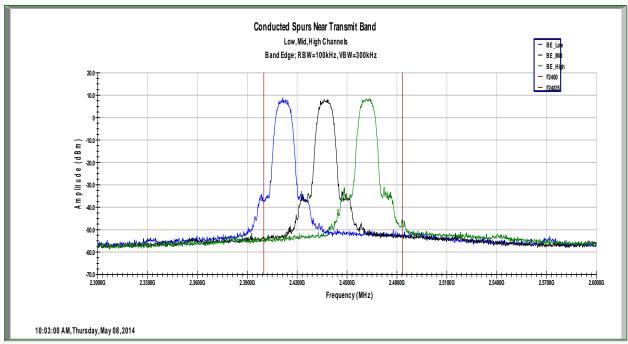
Description	Serial Number	Manufacturer	Model	Cal. Date	Cal. Due
Spectrum Analyzer	3720	Rohde&Schwarz	FSEK30	9/10/2013	9/10/2014

6.4 Results:

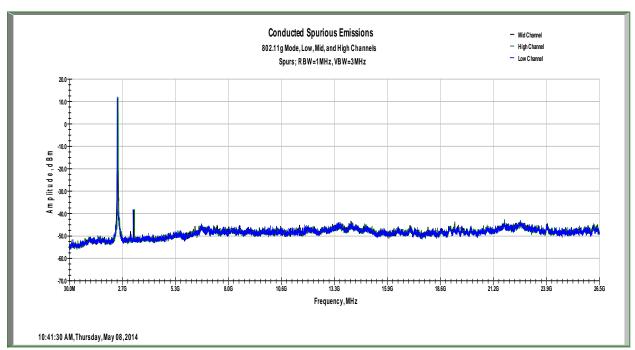
The following plots show that there are no conducted spurious emissions exceeding the 20dB down criteria. The two outputs were measured and summed (in linear terms) for comparison to the limit per KDB 662911 D01.



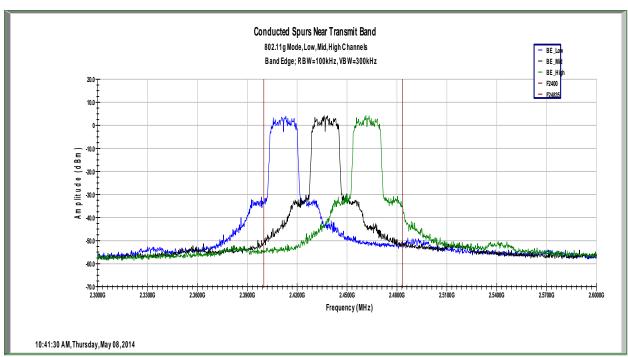
Conducted Spurious Emissions - 802.11b Mode Low, Mid, High Channels



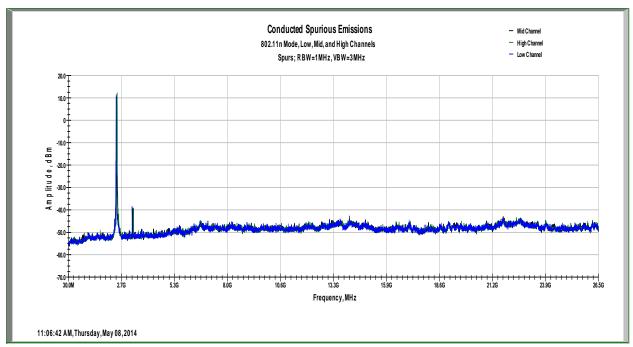
Emissions Close to Band Edge - 802.11b Mode (20MHz) Low, Mid, and High Channel



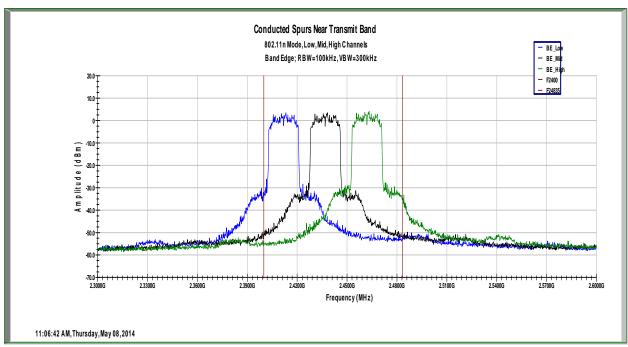
Conducted Spurious Emissions - 802.11g Mode Low, Mid, High Channels



Emissions Close to Band Edge - 802.11g Mode (20MHz) Low, Mid, and High Channel



Conducted Spurious Emissions - 802.11n Mode (20MHz) Low, Mid, High Channels



Emissions Close to Band Edge - 802.11n Mode (20MHz) Low, Mid, and High Channel

7 Power Spectral Density

7.1 Test Limits

§ 15.247(e): 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. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

7.2 Test Procedure

ANSI C63.10: 2009 and KDB Publication No. 558074: Guidance on Measurements for Digital Transmission Systems (47 CFR 15.247). The two outputs were measured and summed (in linear terms) for comparison to the limit per KDB 662911 D01.

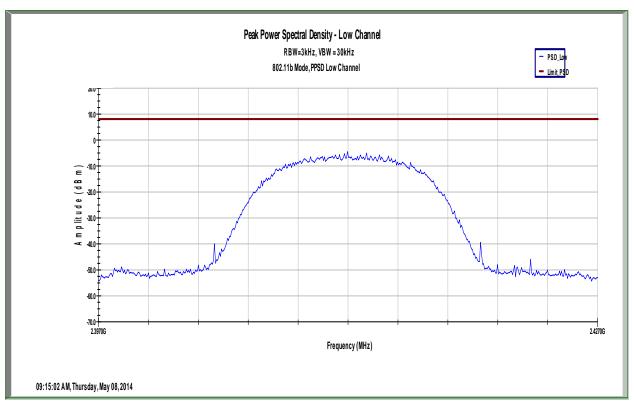
7.3 Test Equipment Used:

Description	Serial Number	Manufacturer	Model	Cal. Date	Cal. Due
Spectrum Analyzer	3720	Rohde&Schwarz	FSEK30	9/10/2013	9/10/2014

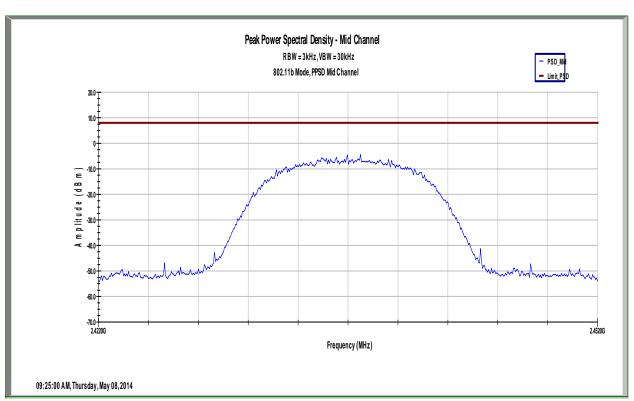
7.4 Results:

*PSD Option 1 Method

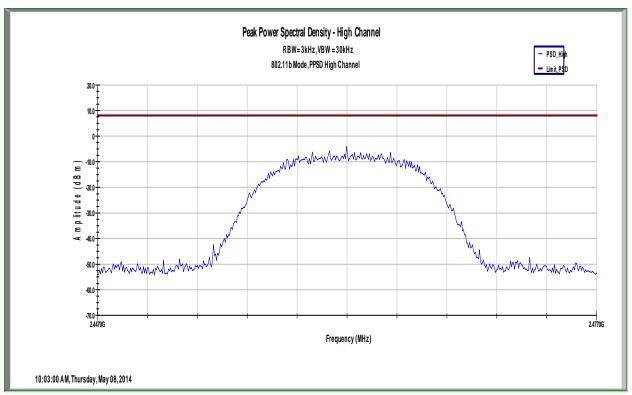
Mode	Channel Number	Frequency (MHz)	PSD in 3kHz BW (dBm)	Limit (dBm)	Result
802.11b	1	2412	-4.46	8.0	Pass
802.11b	6	2437	-4.59	8.0	Pass
802.11b	11	2462	-3.97	8.0	Pass
802.11g	1	2412	-9.03	8.0	Pass
802.11g	6	2437	-8.99	8.0	Pass
802.11g	11	2462	-10.30	8.0	Pass
802.11n (20MHz)	1	2412	-9.38	8.0	Pass
802.11n (20MHz)	6	2437	-9.21	8.0	Pass
802.11n (20MHz)	11	2462	-10.77	8.0	Pass



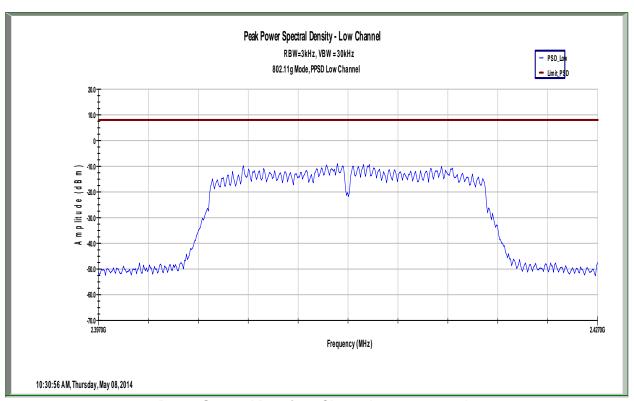
Power Spectral Density - Channel 1 802.11b mode



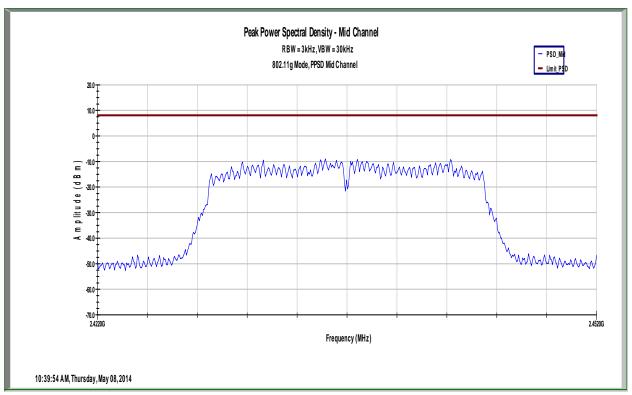
Power Spectral Density - Channel 6 802.11b mode



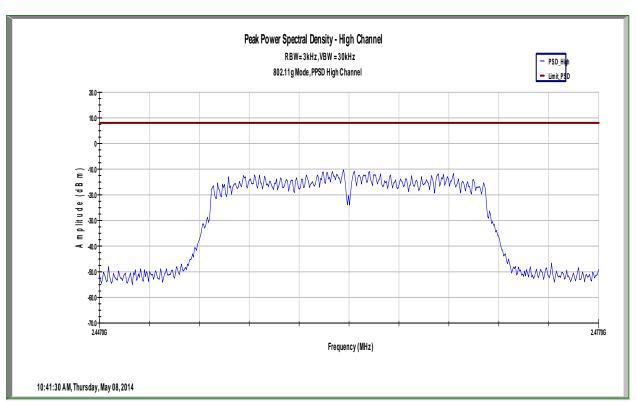
Power Spectral Density - Channel 11 802.11b mode



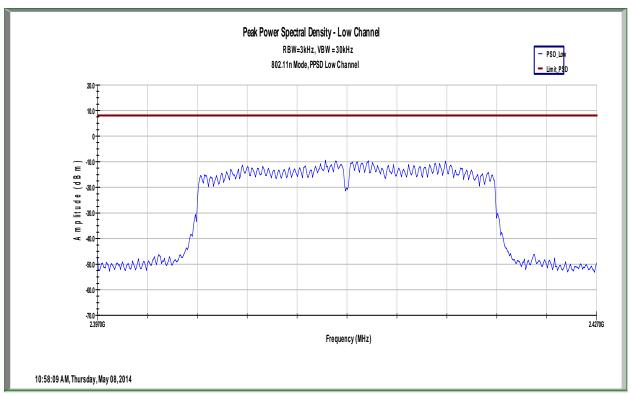
Power Spectral Density - Channel 1 802.11g mode



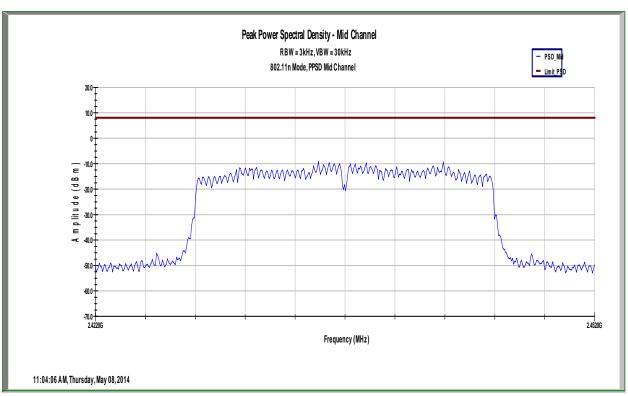
Power Spectral Density - Channel 6 802.11g mode



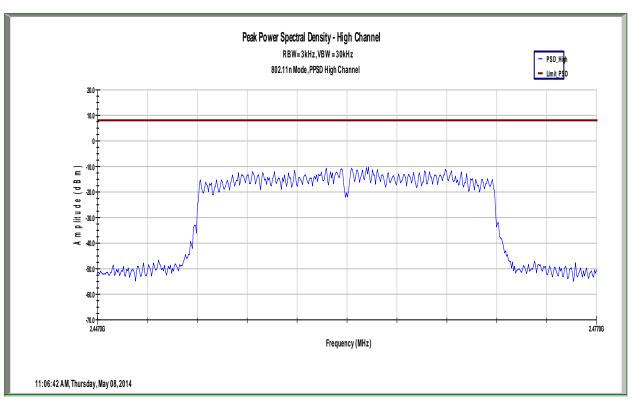
Power Spectral Density - Channel 11 802.11g mode



Power Spectral Density – Channel 1 802.11n mode (20MHz)



Power Spectral Density – Channel 6 802.11n mode (20MHz)



Power Spectral Density - Channel 11 802.11n mode (20MHz)

8 Radiated Spurious Emissions (Transmitter)

8.1 Test Limits

§ 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) (see §15.205(c)).

Part 15.205(a): Restricted Bands of Operations

MHz	MHz	MHz	GHz	
0.090-0.110	16.42-16.423	399.9-410	4.5–5.15	
10.495-0.505	16.69475-16.69525	608-614	5.35-5.46	
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75	
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5	
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2	
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5	
6.215–6.218	74.8-75.2	1660-1710	10.6-12.7	
6.26775–6.26825	108-121.94	1718.8-1722.2	13.25-13.4	
6.31175-6.31225	123-138	2200-2300	14.47-14.5	
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2	
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4	
8.37625-8.38675	156.7-156.9	2655-2900	22.01-23.12	
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0	
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8	
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5	
12.57675-12.57725	322-335.4	3600-4400	(2)	
13.36-13.41.			335	

¹ Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

Part 15.209(a): Field Strength Limits for Restricted Bands of Operation

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)		
0.009 - 0.490	2,400 / F (kHz)	300		
0.490 - 1.705	24,000 / F (kHz)	30		
1.705 - 30.0	30	30		
30 - 88	100	3		
88 - 216	150	3		
216 - 960	200	3		
Above 960	500	3		

²Above 38.6

8.2 Test Procedure

ANSI C63.10: 2009 and KDB Publication No. 558074: Guidance on Measurements for Digital Transmission Systems (47 CFR 15.247)

8.3 Example of Field Strength Calculation Method:

The measured field strength was calculated by summing the readings taken from the spectrum analyzer with the appropriate correction factors associated with the antenna losses and cable losses. The calculation formula and sample calculations are listed below:

Formula:

FS = RA + AF + CF

 $FS = Field Strength in dB\mu V/m$

 $RA = Receiver Amplitude in dB\mu V$

AF = Antenna Factor in dB

CF = Cable Attenuation Factor in dB (Including preamplifier and filter attenuation)

Example Calculation:

 $RA = 19.48 dB\mu V$

 $AF = 18.52 \, dB$

CF = 0.78 dB

 $FS = 19.48 + 18.52 + 0.78 = 38.78 \, dB\mu V/m$

Level in $\mu V/m = Common Antilogarithm [(38.78 dB<math>\mu V/m)/20] = 86.89 \mu V/m$

8.4 Test Equipment Used:

Description	Serial Number	Manufacturer	Model	Cal. Date	Cal. Due
EMI Test Receiver	1302.6005.40	Rohde & Schwarz	ESU40	9/11/2013	9/11/2014
Bilog Antenna	00051864	ETS	3142C	12/17/2013	12/17/2014
Horn Antenna	00154521	ETS	3117	10/10/2013	10/10/2014
Horn Antenna (18 – 26.5GHz)	LM8621	ETS	3160-09	10/9/2013	10/9/2014
Preamplifier	122005	Rohde&Schwarz	TS-PR18	9/19/2013	9/19/2014
Preamplifier	100050	Rohde&Schwarz	TS-PR26	9/19/2013	9/19/2014
System Controller	3957	Sunol Sciences	SC110V	Time of Use	Time of Use

8.5 Results:

All spurious emissions were attenuated by at least 20dB below the level of the fundamental as required by Part 15.247(d). Additionally, all emissions falling within restricted bands of operation and at the band edges were found to be below the limit specified in Part 15.209(a). The spurious emissions listed in the following tables are the worst case emissions. Emissions not reported were at or below the measurement noise floor. The test sample was evaluated on three orthogonal axes since it could be used in any orientation.

Worst Case Spurious Measurements (802.11b Mode, Low Channel)

	worst case spurious measurements (602.11b mode, Low Channer)										
	Radiated Emissions										
Test Engineer:	Bryan Tayl	or	Start Date:	5/7/2014		End Date:	5/7/2014				
Temperature:	23.3C		Humidity:	43.50%		Pressure:	988.9mBar				
Specification:	FCC Part 1	15B	Test Limit:	Class B							
Notes:	802.11 B N	Node. Low	Channel								
Α	В	С	D	E	F	G	Н	ı	J	K	
Frequency	Polarity (H/V)	Raw Reading (dBuV)	Cab. (dB)	Ant. (dB)	Corr. Reading. (dBuV/m)	Limit (dBuV/m)	Delta (dB)	RBW / Detector	Test Distance	Results	
4.824 GHz	V	35.81	-29.594	34.7	40.916	74	-33.084	1MHz / Pk	3m	Compliant	
7.236 GHz	V	30.31	-22.495	35.911	43.726	74	-30.274	1MHz / Pk	3m	Compliant	
4.824 GHz	Н	35.76	-29.594	34.7	40.866	74	-33.134	1MHz / Pk	3m	Compliant	
7.236 GHz	Н	29.42	-22.495	35.911	42.836	74	-31.164	1MHz / Pk	3m	Compliant	
4.824 GHz	V	25.24	-29.594	34.7	30.346	54	-23.654	1MHz / Av	3m	Compliant	
7.236 GHz	V	20.9	-22.495	35.911	34.316	54	-19.684	1MHz / Av	3m	Compliant	
4.824 GHz	Н	25.23	-29.594	34.7	30.336	54	-23.664	1MHz / Av	3m	Compliant	
7.236 GHz	Н	20.88	-22.495	35.911	34.296	54	-19.704	1MHz / Av	3m	Compliant	
				Ban	d Edge Meas	surements					
2.39 GHz	V	21.76	4.673	32.944	59.377	74	-14.623	1MHz / Pk	3m	Compliant	
2.3899 GHz	Н	23.02	4.672	32.944	60.636	74	-13.364	1MHz / Pk	3m	Compliant	
2.39 GHz	V	13.26	4.673	32.944	50.877	54	-3.123	1MHz / Av	3m	Compliant	
2.3899 GHz	Н	13.09	4.672	32.944	50.706	54	-3.294	1MHz / Av	3m	Compliant	
Calculations:					F = C + D +	Е	H = F - G				

Worst Case Spurious Measurements (802.11b Mode, Mid Channel)

			-	R	adiated Emi	ssions				
Test Engineer:	Bryan Tayl	or	Start Date:	5/7/2014 End Date: 5		5/7/2014	14			
Temperature:	23.3C		Humidity:	43.50%		Pressure:	988.9mBar			
Specification:	FCC Part 1	5B	Test Limit:	Class B						
Notes:	802.11 B M	1ode. Mid (Channel							
Α	В	С	D	E	F	G	Н		J	K
		Raw			Corr.					
	Polarity	Reading			Reading.	Limit		RBW /	Test	
Frequency	(H/V)	(dBuV)	Cab. (dB)	Ant. (dB)	(dBuV/m)	(dBuV/m)	Delta (dB)	Detector	Distance	Results
4.874 GHz	V	33.37	-29.521	34.7	38.549	74	-35.451	1MHz / Pk	3m	Compliant
7.311 GHz	V	29.86	-22.2	35.9	43.56	74	-30.44	1MHz / Pk	3m	Compliant
4.874 GHz	Н	35.25	-29.521	34.7	40.429	74	-33.571	1MHz / Pk	3m	Compliant
7.311 GHz	Н	30.47	-22.2	35.9	44.17	74	-29.83	1MHz / Pk	3m	Compliant
4.874 GHz	V	24.99	-29.521	34.7	30.169	54	-23.831	1MHz / Av	3m	Compliant
7.311 GHz	V	21.45	-22.2	35.9	35.15	54	-18.85	1MHz / Av	3m	Compliant
4.874 GHz	Н	25.82	-29.521	34.7	30.999	54	-23.001	1MHz / Av	3m	Compliant
7.311 GHz	Н	21.9	-22.2	35.9	35.6	54	-18.4	1MHz / Av	3m	Compliant

Worst Case Spurious Measurements (802 11h Mode, High Channel)

F = C + D + E

H = F - G

Calculations:

	Worst Case Spurious Measurements (802.11b Mode, High Channel)										
				R	adiated Emi	ssions					
Test Engineer:	Bryan Tayl	or	Start Date:	5/7/2014		End Date:	5/7/2014				
Temperature:	23.3C		Humidity:	43.50%		Pressure:	988.9mBar				
Specification:	FCC Part 1	15B	Test Limit:	Class B							
Notes:	802.11 B N	lode. High	Channel								
Α	В	С	D	E	F	G	Н		J	K	
Frequency	Polarity (H/V)	Raw Reading (dBuV)	Cab. (dB)	Ant. (dB)	Corr. Reading. (dBuV/m)	Limit (dBuV/m)	Delta (dB)	RBW / Detector	Test Distance	Results	
4.924 GHz	V	34.71	-29.449	34.7	39.961	74	-34.039	1MHz / Pk	3m	Compliant	
7.386 GHz	V	31.29	-21.904	35.9	45.286	74	-28.714	1MHz / Pk	3m	Compliant	
4.924 GHz	Н	34.21	-29.449	34.7	39.461	74	-34.539	1MHz / Pk	3m	Compliant	
7.386 GHz	Н	32	-21.905	35.9	45.995	74	-28.005	1MHz / Pk	3m	Compliant	
4.924 GHz	V	24.62	-29.449	34.7	29.871	54	-24.129	1MHz / Av	3m	Compliant	
7.386 GHz	V	21.45	-21.904	35.9	35.446	54	-18.554	1MHz / Av	3m	Compliant	
4.924 GHz	Н	25.65	-29.449	34.7	30.901	54	-23.099	1MHz / Av	3m	Compliant	
7.386 GHz	Н	21.69	-21.905	35.9	35.685	54	-18.315	1MHz / Av	3m	Compliant	
				Ban	d Edge Meas	surements					
2.4835 GHz	V	22.71	4.773	32.907	60.39	74	-13.61	1MHz / Pk	3m	Compliant	
2.4835 GHz	Н	23.38	4.773	32.907	61.06	74	-12.94	1MHz / Pk	3m	Compliant	
2.4835 GHz	V	13.79	4.773	32.907	51.47	54	-2.53	1MHz / Av	3m	Compliant	
2.4835 GHz	Н	13.73	4.773	32.907	51.41	54	-2.59	1MHz / Av	3m	Compliant	
Calculations:					F = C + D +	E	H = F - G				

Worst Case Spurious Measurements (802.11g Mode, Low Channel)

				R	adiated Emi	ssions				
Test Engineer:	Bryan Tayl	or	Start Date:	5/7/2014		End Date:	5/7/2014			
Temperature:	23.3C		Humidity:	43.50%	3.50% Pressure: 988.9mBar					
Specification:	FCC Part 1	15B	Test Limit:	Class B						
Notes:	802.11 G N	Node. Low	Channel							
Α	В	С	D	E	F	G	Н		J	K
		Raw			Corr.					
	Polarity	Reading			Reading.	Limit		RBW/	Test	
Frequency	(H/V)	(dBuV)	Cab. (dB)	Ant. (dB)	(dBuV/m)	(dBuV/m)	Delta (dB)	Detector	Distance	Results
4.824 GHz	V	34.23	-29.594	34.7	39.336	74	-34.664	1MHz / Pk	3m	Compliant
7.236 GHz	V	29.67	-22.495	35.911	43.086	74	-30.914	1MHz / Pk	3m	Compliant
4.824 GHz	Н	34.38	-29.594	34.7	39.486	74	-34.514	1MHz / Pk	3m	Compliant
7.236 GHz	Н	30.13	-22.495	35.911	43.546	74	-30.454	1MHz / Pk	3m	Compliant
4.824 GHz	V	25.39	-29.594	34.7	30.496	54	-23.504	1MHz / Pk	3m	Compliant
7.236 GHz	V	20.98	-22.495	35.911	34.396	54	-19.604	1MHz / Pk	3m	Compliant
4.824 GHz	Н	25.4	-29.594	34.7	30.506	54	-23.494	1MHz / Av	3m	Compliant
7.236 GHz	Н	20.97	-22.495	35.911	34.386	54	-19.614	1MHz / Av	3m	Compliant
				Ban	d Edge Meas	surements				
2.39 GHz	V	21.76	4.673	32.944	59.377	74	-14.623	1MHz / Pk	3m	Compliant
2.3899 GHz	Н	23.02	4.672	32.944	60.636	74	-13.364	1MHz / Pk	3m	Compliant
2.39 GHz	V	13.26	4.673	32.944	50.877	54	-3.123	1MHz / Av	3m	Compliant
2.3899 GHz	Н	13.09	4.672	32.944	50.706	54	-3.294	1MHz / Av	3m	Compliant

Worst Case Spurious Measurements (802.11g Mode, Mid Channel)

F = C + D + E

H = F - G

Calculations:

	worst Case Spurious Measurements (802.11g Mode, Mid Channel)												
				R	adiated Emi	ssions							
Test Engineer:	Bryan Tayl	or	Start Date:	5/7/2014		End Date:	5/7/2014						
Temperature:	23.3C		Humidity:	43.50%	43.50% Pressure : 988.9mBar								
Specification:	FCC Part 1	15B	Test Limit:	Class B									
Notes:	802.11 G N	802.11 G Mode. Mid Channel											
Α	В	С	D	E	F	G	Н		J	K			
		Raw			Corr.								
	Polarity	Reading			Reading.	Limit		RBW /	Test				
Frequency	(H/V)	(dBuV)	Cab. (dB)	Ant. (dB)	(dBuV/m)	(dBuV/m)	Delta (dB)	Detector	Distance	Results			
4.874 GHz	V	34.09	-29.521	34.7	39.269	74	-34.731	1MHz / Pk	3m	Compliant			
7.311 GHz	V	30.56	-22.2	35.9	44.26	74	-29.74	1MHz / Pk	3m	Compliant			
4.874 GHz	Н	34.83	-29.521	34.7	40.009	74	-33.991	1MHz / Pk	3m	Compliant			
7.311 GHz	Н	31.1	-22.2	35.9	44.8	74	-29.2	1MHz / Pk	3m	Compliant			
4.874 GHz	V	25.03	-29.521	34.7	30.209	54	-23.791	1MHz / Pk	3m	Compliant			
7.311 GHz	V	21.42	-22.2	35.9	35.12	54	-18.88	1MHz / Pk	3m	Compliant			
4.874 GHz	Н	25.05	-29.521	34.7	30.229	54	-23.771	1MHz / Av	3m	Compliant			
7.311 GHz	Н	21.45	-22.2	35.9	35.15	54	-18.85	1MHz / Av	3m	Compliant			
Calculations:					F = C + D +	Е	H = F - G						

Worst Case Spurious Measurements (802.11g Mode, High Channel)

				R	adiated Emi	ssions				
Test Engineer:	Bryan Tayl	or	Start Date:	5/7/2014		End Date:	5/7/2014			
Temperature:	23.3C		Humidity:	43.50%		Pressure:	988.9mBar			
Specification:	FCC Part	15B	Test Limit:	Class B						
Notes:	802.11 G I	Mode. High	Channel							
Α	В	С	D	E	F	G	Н	I	J	K
		Raw			Corr.					
	Polarity	Reading			Reading.	Limit		RBW /	Test	
Frequency	(H/V)	(dBuV)	Cab. (dB)	Ant. (dB)	(dBuV/m)	(dBuV/m)	Delta (dB)	Detector	Distance	Results
4.924 GHz	V	34.71	-29.449	34.7	39.961	74	-34.039	1MHz / Pk	3m	Compliant
7.386 GHz	V	30.45	-21.905	35.9	44.445	74	-29.555	1MHz / Pk	3m	Compliant
4.924 GHz	Н	35.01	-29.449	34.7	40.261	74	-33.739	1MHz / Pk	3m	Compliant
7.386 GHz	Н	31.39	-21.905	35.9	45.385	74	-28.615	1MHz / Pk	3m	Compliant
4.924 GHz	V	24.51	-29.449	34.7	29.761	54	-24.239	1MHz / Av	3m	Compliant
7.386 GHz	V	21.32	-21.905	35.9	35.315	54	-18.685	1MHz / Av	3m	Compliant
4.924 GHz	Н	25.56	-29.449	34.7	30.811	54	-23.189	1MHz / Av	3m	Compliant
7.386 GHz	Н	21.44	-21.905	35.9	35.435	54	-18.565	1MHz / Av	3m	Compliant
				Ban	d Edge Meas	surements				
2.4835 GHz	V	23.82	4.773	32.907	61.5	74	-12.5	1MHz / Pk	3m	Compliant
2.4835 GHz	Н	23.43	4.773	32.907	61.11	74	-12.89	1MHz / Pk	3m	Compliant
2.4835 GHz	V	14.12	4.773	32.907	51.8	54	-2.2	1MHz / Av	3m	Compliant
2.4835 GHz	Н	13.73	4.773	32.907	51.41	54	-2.59	1MHz / Av	3m	Compliant
Calculations:					F = C + D +	E	H = F - G			

Worst Case Spurious Measurements (802.11n (20MHz) Mode, Low Channel)

	Radiated Emissions												
Test Engineer:	Bryan Tayl	or	Start Date:	5/7/2014		End Date:	5/7/2014						
Temperature:	23.3C		Humidity:	43.50%	3.50% Pressure: 988.9mBar								
Specification:	FCC Part 1	15B	Test Limit:	Class B									
Notes:	802.11 N N	Node. Low	Channel										
Α	В	С	D	E	F	G	Н	ı	J	K			
		Raw			Corr.								
	Polarity	Reading			Reading.	Limit		RBW /	Test				
Frequency	(H/V)	(dBuV)	Cab. (dB)	Ant. (dB)	(dBuV/m)	(dBuV/m)	Delta (dB)	Detector	Distance	Results			
4.824 GHz	V	35.48	-29.594	34.7	40.586	74	-33.414	1MHz / Pk	3m	Compliant			
7.236 GHz	V	30.96	-22.495	35.911	44.376	74	-29.624	1MHz / Pk	3m	Compliant			
4.824 GHz	Н	35.62	-29.594	34.7	40.726	74	-33.274	1MHz / Pk	3m	Compliant			
7.236 GHz	Н	29.91	-22.495	35.911	43.326	74	-30.674	1MHz / Pk	3m	Compliant			
4.824 GHz	V	25.44	-29.594	34.7	30.546	54	-23.454	1MHz / Pk	3m	Compliant			
7.236 GHz	V	21	-22.495	35.911	34.416	54	-19.584	1MHz / Pk	3m	Compliant			
4.824 GHz	Н	26.06	-29.594	34.7	31.166	54	-22.834	1MHz / Av	3m	Compliant			
7.236 GHz	Н	21.07	-22.495	35.911	34.486	54	-19.514	1MHz / Av	3m	Compliant			

Band Edge Measurements

74

74

54 54

-12.803

-14.113

-3.113 -3.303

H = F - G

1MHz / Pk

1MHz / Pk

1MHz / Av

1MHz / Av

3m

3m

3m 3m

61.197

59.887

50.887 50.697

F = C + D + E

23.58

22.27

13.27 13.08

Н

Н

2.39 GHz

2.3899 GHz

2.39 GHz 2.3899 GHz

Calculations:

4.673

4.673

4.673 4.673

32.944

32.944

32.944 32.944

	Worst Case Spurious Measurements (802.11n (20MHz) Mode, Mid Channel)													
	Radiated Emissions													
Test Engineer:	Bryan Tayl	lor	Start Date:	5/7/2014		End Date:	5/7/2014							
Temperature:	23.3C		Humidity:	43.50%		Pressure:	988.9mBar							
Specification:	FCC Part 1	15B	Test Limit:	Class B										
Notes:	802.11 N N	Mode. Mid	Channel											
Α	В	С	D	E	F	G	Н		J	K				
		Raw			Corr.									
	Polarity	Reading			Reading.	Limit		RBW /	Test					
Frequency	(H/V)	(dBuV)	Cab. (dB)	Ant. (dB)	(dBuV/m)	(dBuV/m)	Delta (dB)	Detector	Distance	Results				
4.874 GHz	V	34.9	-29.521	34.7	40.079	74	-33.921	1MHz / Pk	3m	Compliant				
7.311 GHz	V	30.41	-22.2	35.9	44.11	74	-29.89	1MHz / Pk	3m	Compliant				
4.874 GHz	Н	34.38	-29.521	34.7	39.559	74	-34.441	1MHz / Pk	3m	Compliant				
7.311 GHz	Н	32.9	-22.2	35.9	46.6	74	-27.4	1MHz / Pk	3m	Compliant				
4.874 GHz	V	25.08	-29.521	34.7	30.259	54	-23.741	1MHz / Pk	3m	Compliant				
7.311 GHz	V	21.42	-22.2	35.9	35.12	54	-18.88	1MHz / Pk	3m	Compliant				
4.874 GHz	Н	25.87	-29.521	34.7	31.049	54	-22.951	1MHz / Av	3m	Compliant				
7.311 GHz	Н	21.54	-22.2	35.9	35.24	54	-18.76	1MHz / Av	3m	Compliant				
Calculations:	·	·		·	F = C + D +	E	H = F - G			·				

Compliant

Compliant

Compliant Compliant

Worst Case Spurious Measurements (802.11n (20MHz) Mode, High Channel)

				R	adiated Emi	ssions				
Test Engineer:	Bryan Tayl	or	Start Date:	5/7/2014		End Date:	5/7/2014			
Temperature:	23.3C		Humidity:	43.50%		Pressure:	988.9mBar			
Specification:	FCC Part 1	15B	Test Limit:	Class B						
Notes:	802.11 N N	/lode. High	Channel							
Α	В	С	D	E	F	G	Н		J	K
		Raw			Corr.					
	Polarity	Reading			Reading.	Limit		RBW /	Test	
Frequency	(H/V)	(dBuV)	Cab. (dB)	Ant. (dB)	(dBuV/m)	(dBuV/m)	Delta (dB)	Detector	Distance	Results
4.924 GHz	V	36.07	-29.449	34.7	41.321	74	-32.679	1MHz / Pk	3m	Compliant
7.386 GHz	V	30.52	-21.905	35.9	44.515	74	-29.485	1MHz / Pk	3m	Compliant
4.924 GHz	Н	34.41	-29.449	34.7	39.661	74	-34.339	1MHz / Pk	3m	Compliant
7.386 GHz	Н	30.99	-21.904	35.9	44.986	74	-29.014	1MHz / Pk	3m	Compliant
4.924 GHz	V	24.48	-29.449	34.7	29.731	54	-24.269	1MHz / Pk	3m	Compliant
7.386 GHz	V	21.24	-21.905	35.9	35.235	54	-18.765	1MHz / Pk	3m	Compliant
4.924 GHz	Н	25.5	-29.449	34.7	30.751	54	-23.249	1MHz / Av	3m	Compliant
7.386 GHz	Н	21.34	-21.904	35.9	35.336	54	-18.664	1MHz / Av	3m	Compliant
				Band	d Edge Meas	surements				
2.4835 GHz	V	24.76	4.774	32.907	62.44	74	-11.56	1MHz / Pk	3m	Compliant
2.4835 GHz	Н	24.3	4.773	32.907	61.98	74	-12.02	1MHz / Pk	3m	Compliant
2.4835 GHz	V	14.35	4.774	32.907	52.03	54	-1.97	1MHz / Av	3m	Compliant
2.4835 GHz	Н	13.73	4.773	32.907	51.41	54	-2.59	1MHz / Av	3m	Compliant
Calculations:					F = C + D +	E	H = F - G			

9 Radiated Spurious Emissions (Receiver)

9.1 Test Limits

§ 15.109: Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency of emission (MHz)	Field strength (microvolts/meter)	Field strength (dBuV/m)
30–88	100	40
88–216	150	43.5
216–960	200	46
Above 960	500	54

These limits are identical to those in RSS-GEN

9.2 Test Procedure

ANSI C63.4: 2009

9.3 Example of Field Strength Calculation Method:

The measured field strength was calculated by summing the readings taken from the spectrum analyzer with the appropriate correction factors associated with the antenna losses and cable losses. The calculation formula and sample calculations are listed below:

Formula:

FS = RA + AF + CF

 $FS = Field \ Strength \ in \ dB\mu V/m$

RA = Receiver Amplitude in dBuV

AF = Antenna Factor in dB

CF = Cable Attenuation Factor in dB (Including preamplifier and filter attenuation)

Example Calculation:

 $RA = 19.48 dB\mu V$

AF = 18.52 dB

CF = 0.78 dB

 $FS = 19.48 + 18.52 + 0.78 = 38.78 \, dB\mu V/m$

Level in $\mu V/m = Common Antilogarithm [(38.78 dB<math>\mu V/m)/20] = 86.89 \mu V/m$

9.4 Test Equipment Used:

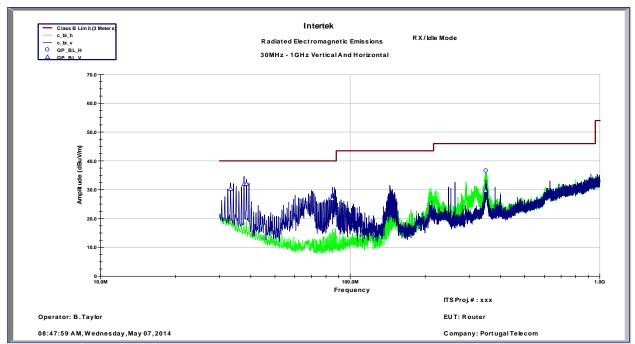
Description	Serial Number	Manufacturer	Model	Cal. Date	Cal. Due
EMI Test Receiver	1302.6005.40	Rohde & Schwarz	ESU40	9/11/2013	9/11/2014
Bilog Antenna	00051864	ETS	3142C	12/17/2013	12/17/2014
Horn Antenna	00154521	ETS	3117	10/10/2013	10/10/2014
Preamplifier	122005	Rohde&Schwarz	TS-PR18	9/19/2013	9/19/2014
System Controller	3957	Sunol Sciences	SC110V	Time of Use	Time of Use

9.5 Results:

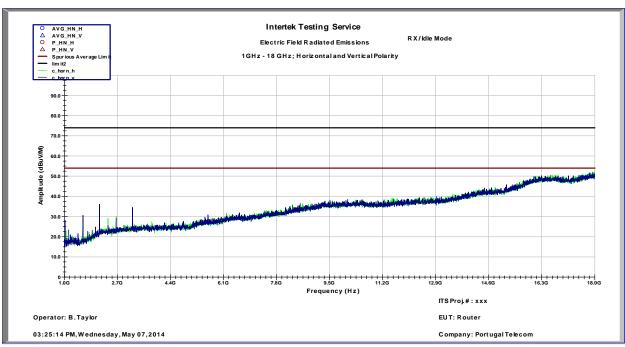
All spurious emissions with the test sample in receive mode were below the limits specified in Part 15.109 for a class B digital device and RSS-GEN Section 6.1.

9.6 Test Data:

				R	adiated Emi	ssions						
Test Engineer:	Bryan Tayl	or	Start Date:	5/7/2014		End Date:	5/7/2014	7/2014				
Temperature:	23.3C		Humidity:	43.50%		Pressure:	988.9mBar					
Specification:	FCC Part 1	5B	Test Limit:	Class B								
Notes:	RX / Idle M	lode										
Α	В	С	D	E	F	G	Н		J	K		
Frequency	Polarity (H/V)	Raw Reading (dBuV)	Cab. (dB)	Ant. (dB)	Corr. Reading. (dBuV/m)	Limit (dBuV/m)	Delta (dB)	RBW / Detector	Test Distance	Results		
33.169 MHz	\ \	13.38	0.8	16.13	30.31	40	-9.69	120kHz / QP	3m	Compliant		
	V											
37.595 MHz	<u> </u>	17.06	1.2	13.72	31.98	40	-8.02	120kHz / QP	3m	Compliant		
38.403 MHz	V	17.69	1	13.32	32.01	40	-7.99	120kHz / QP	3m	Compliant		
84.757 MHz	V	18.37	1.41	7.05	26.83	40	-13.17	120kHz / QP	3m	Compliant		
348.33 MHz	V	11.21	3	15.5	29.71	46.02	-16.31	120kHz / QP	3m	Compliant		
350.1 MHz	Н	17.95	2.99	15.6	36.55	46.02	-9.47	120kHz / QP	3m	Compliant		
Calculations:		•	·		F = C + D +	E	H = F - G	·	•			



Bilog Prescan



Horn Prescan

10 AC Powerline Conducted Emissions

10.1 Test Limits

§ 15.107(e): Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μH/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Eraguanay of amission	Conducted lir	nit (dBµV)
Frequency of emission (MHz)	Quasi-peak	Average
0.15–0.5	66 to 56*	56 to 46*
0.5–5	56	46
5–30	60	50

^{*}Decreases with the logarithm of the frequency.

10.2 Test Procedure

ANSI C63.4: 2009

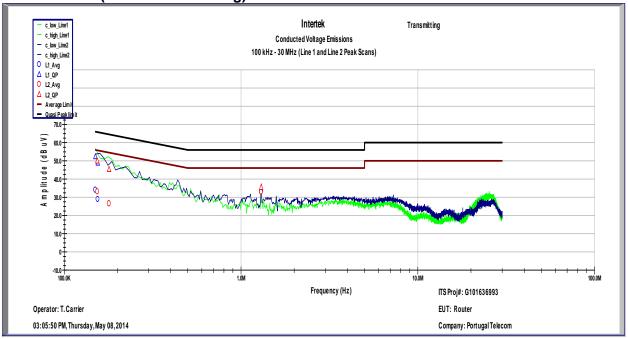
10.3 Test Equipment Used:

Description	Serial Number	Manufacturer	Model	Cal. Date	Cal. Due
EMI Test Receiver	10887490.26	Rohde & Schwarz	ESI26	9/11/2013	9/11/2014
LISN	3333	Teseq	NNB52	3/12/2014	3/12/2015

10.4 Results:

The sample tested was found to Comply.

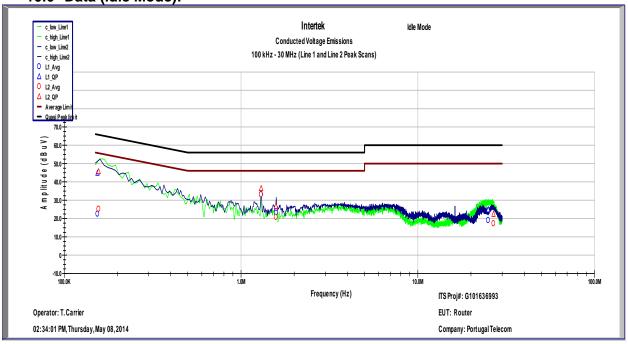
10.5 Data (802.11 Transmitting):



		Co	nducted Volt	age Emissio	ns on Powe	r Lines		
Test Engineer:	Toby Carrier		Start Date:	5/8/2014		End Date:	5/8/2014	
Temperature:	25.9℃		Humidity:	39.00%		Pressure:	984 mbar	
Specification:	FCC Part 15B		Test Limit:	Class B		RBW:	9kHz	
Notes:	Transmitting							
		Quasi-	Quasi-Peak	Quasi-		Average		
	Frequency	Peak	Limit	Peak Delta	Average	Limit	Average	
Line	(MHz)	(dBuV)	(dBuV)	(dB)	(dBuV)	(dBuV)	Delta (dB)	Results
	150.0 KHz	52.31	66	-13.69	33.98	56	-22.02	Compliant
	154.7 KHz	48.79	65.74	-16.95	28.83	55.74	-26.91	Compliant
L1	1.2996 MHz	34.61	56	-21.39	32.96	46	-13.04	Compliant
L1	1.2990 WITZ	34.01	90	-21.39	32.90	40	-13.04	Compilant
LI	153.8 KHz	49.92	65.79	-21.39	32.96	55.79	-13.04	Compliant
LI								

Deviations, Additions, or Exclusions: None

10.6 Data (Idle Mode):



		Co	nducted Volt	age Emission	ns on Powe	r Lines		
Test Engineer:	Toby Carrier		Start Date:	5/8/2014		End Date:	5/8/2014	
Temperature:	25.9℃		Humidity:	39.00%		Pressure:	984 mbar	
Specification:	FCC Part 15		Test Limit:	Class B		RBW:		
Notes:	ldle Mode							
_		Quasi-	Quasi-Peak	Quasi-		Average		
	Frequency	Peak	Limit	Peak Delta	Average	Limit	Average	
Line	(MHz)	(dBuV)	(dBuV)	(dB)	(dBuV)	(dBuV)	Delta (dB)	Results
	154.2 KHz	44.8	65.77	-20.97	22.43	55.77	-33.34	Compliant
	1.2998 MHz	34.1	56	-21.9	32.98	46	-13.02	Compliant
	1.5791 MHz	25.72	56	-30.28	23	46	-23	Compliant
L1	25.015 MHz	24.79	60	-35.21	18.98	50	-31.02	Compliant
	156.4 KHz	45.63	65.65	-20.02	25.13	55.65	-30.52	Compliant
	1.2996 MHz	36.35	56	-19.65	32.99	46	-13.01	Compliant
	1.5763 MHz	26.73	56	-29.27	20.68	46	-25.32	Compliant
L2	26.808 MHz	22.3	60	-37.7	17.19	50	-32.81	Compliant

Deviations, Additions, or Exclusions: None

11 Antenna Requirement per FCC Part 15.203

11.1 Test Limits

§ 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. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, §15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

11.2 Results:

The sample tested met the antenna requirement. The antenna used a unique non-standard RF connector.

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12 Measurement Uncertainty

The measured value related to the corresponding limit will be used to decide whether the equipment meets the requirements.

The measurement uncertainty figures were calculated and correspond to a coverage factor of k = 2, providing a confidence level of respectively 95.45 % in the case where the distributions characterizing the actual measurement uncertainties are normal (Gaussian).

Measurement uncertainty Table

Parameter	Uncertainty	Notes
Radiated emissions, 30 to 1000 MHz	<u>+</u> 3.9dB	
Radiated emissions, 1 to 18 GHz	<u>+</u> 4.2dB	
Radiated emissions, 18 to 40 GHz	<u>+</u> 4.3dB	
Power Port Conducted emissions, 150kHz to 30	<u>+</u> 2.8dB	
MHz	_	

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13 Revision History

Revision Level	Date	Report Number	Notes
0	5/22/2014	101646993LEX-001	Original Issue