RADIO TEST REPORT

According to

47 CFR FCC Part 15 Subpart C § 15.247

Equipment	:	**Cable Modem**
Model Name	:	**TC8305C** **PKE1331BP-D49 (US-Dory-RoHS)**
Frequency Range	:	**2400 MHz – 2483.5 MHz**
Applicant	:	**Askey Computer Corporation** 10F, NO. 119, CHIENKANG RD., CHUNG-HO, TAIPEI, TAIWAN, 23585 R.O.C.
FCC ID	:	**H8N-PKE1331BP**

The product sample received on May 30, 2012 and completely tested on Jul. 30, 2012. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2009 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Reviewed by:

Wayne Hsu / Assistant Manager

Testing Laboratory
1190

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Summary of Test Result

Conformance Test Specifications					
Report Clause	**Ref. Std. Clause**	**Description**	**Measured**	**Limit**	**Result**
1.1.2	15.203	Antenna Requirement	Antenna connector mechanism complied	FCC 15.203	Complied
3.1	15.207	AC Power-line Conducted Emissions	0.15485MHz: 23.89dBuV (31.85dB) - AV 50.60dBuV (15.14dB) - QP	FCC 15.207	Complied
3.2	15.247(a)	6dB Bandwidth	6dB Bandwidth Unit [MHz] 11B-20M: 8.24 11G-20M: 16.72 11N2.4G-20M: 17.84	≥500kHz	Complied
3.3	15.247(b)	RF Output Power (Maximum Conducted (Average) Output Power)	Power [dBm] 11B-20M: 24.36 11G-20M: 24.51 11N2.4G-20M: 24.60	Power [dBm] 11B-20M: 28.5 11G-20M: 29.1 11N2.4G-20M: 30	Complied
3.4	15.247(d)	Power Spectral Density	PSD [dBm/3kHz] 11B-20M: -6.54 11G-20M: -10.13 11N2.4G-20M: -10.41	PSD [dBm/3kHz] 8	Complied
3.5	15.247(c)	Transmitter Radiated Bandedge Emissions	Non-Restricted Bands: 2399.50 MHz: 30.22dB Restricted Bands [dBuV/m at 3m]: 2484.56MHz: 69.86 (Margin 4.14dB) - PK 53.43 (Margin 0.57dB) - AV	Non-Restricted Bands: > 30 dB Restricted Bands: FCC 15.209	Complied
3.5.6	15.247(c)	Transmitter Radiated Unwanted Emissions	Restricted Bands [dBuV/m at 3m]: 3732.77MHz: 53.45 (Margin 20.55dB) - PK 50.71 (Margin 3.29dB) - AV	Non-Restricted Bands: > 30 dB Restricted Bands: FCC 15.209	Complied

Revision History

Report No.	Version	Description	Issued Date
FR253104	Rev. 01	Initial issue of report	Aug. 01, 2012

1 General Description

1.1 Information

1.1.1 RF General Information

RF General Information				
Frequency Range (MHz)	**IEEE Std. 802.11 Protocol**	**Ch. Frequency (MHz)**	**Channel Number**	**RF Output Power (dBm)**
2400-2483.5	b	2412-2462	1-11 [11]	24.36
2400-2483.5	g	2412-2462	1-11 [11]	24.51
2400-2483.5	n (HT20)	2412-2462	1-11 [11]	24.60

Note 1: IEEE Std. 802.11-2007 modulation consists of IEEE Std. 802.11g-2003 and IEEE Std. 802.11b-1999.
Note 2: IEEE Std. 802.11n-2009 modulation consists of HT20 and HT40 (HT: High Throughput). The EUT supports HT20 only.
Note 3: RF output power specifies that Maximum Conducted (Average) Output Power.

Transmitter Chains & Receiver Chains Information					
IEEE Std. 802.11 Protocol	**Number of Transmit Chains (N_{TX})**	**Number of Receive Chains (N_{RX})**	**Correlation Signals with Multiple N_{TX}**	**99% Emission Bandwidth (MHz)**	**Co-location**
b	3	3	Correlated	10.40	N/A
g	3	3	Correlated	17.52	N/A
n (HT20)	3	3	Uncorrelated	18.32	N/A

Note 1: Co-location, Co-location is generally defined as simultaneously transmitting (co-transmitting) antennas within 20 cm of each other. (i.e., EUT has simultaneously co-transmitting that operating 2.4GHz and 5GHz.)

1.1.2 Antenna Information

Antenna Category	
☐	Equipment placed on the market without antennas
☒	Integral antenna (antenna permanently attached)
	☒ Temporary RF connector provided
	☐ No temporary RF connector provided Transmit chains bypass antenna and soldered temporary RF connector provided for connected measurement. In case of conducted measurements the transmitter shall be connected to the measuring equipment via a suitable attenuator and correct for all losses in the RF path.

Antenna Information for Single Transmit Chain (1 N_{TX})					
Worst Antenna Port (Total 3 Port)				3	
RF Output Power Level (PL)				1	
Transmit Chains Power Distribution				☒ symmetrical distribution ☐ asymmetrical distribution	
Ant. No.	**Ant. Port** [Ant No. *X* connect to Ant. Port *Y*]	**Ant. Cat.**	**Ant. Type**	**Frequency (MHz)**	**G_{ANT} (dBi)**
3	3	Integral	PIFA	2412	2.95
				2437	2.22
				2462	1.36
Note 1: The EUT supports diversity transmitting, and the results on antenna port 3 is the worst case.					

Antenna Information for Two Transmit Chains (2 N_{TX})							
Worst Antenna Port (Total 3 Port)				2,3			
RF Output Power Level (PL)				2			
Transmit Chains Power Distribution				☒ symmetrical distribution ☐ asymmetrical distribution			
Ant. No.	**Ant. Port** [Ant No. *X* connect to Ant. Port *Y*]	**Ant. Cat.**	**Ant. Type**	**Frequency (MHz)**	**G_{ANT} (dBi)**	**DG (dBi)** [correlated] **N_{TX} = 2**	**DG (dBi)** [uncorrelated] **N_{TX} = 2**
2	2	Integral	PIFA	2412	2.32	2412MHz: 5.7 2437MHz: 4.8 2462MHz: 4.6	2412MHz: 2.6 2437MHz: 1.8 2462MHz: 1.6
				2437	1.24		
				2462	1.86		
3	3	Integral	PIFA	2412	2.95		
				2437	2.22		
				2462	1.36		
Note 1: The EUT supports two transmit chains and transmit chains port 2 and port 3 are the worst transmit chains.							

Antenna Information for Three Transmit Chains (3 N_{TX})							
Worst Antenna Port (Total 3 Port)				1,2,3			
RF Output Power Level (PL)				3			
Transmit Chains Power Distribution				☒ symmetrical distribution ☐ asymmetrical distribution			
Ant. No.	**Ant. Port** [Ant No. *X* connect to Ant. Port *Y*]	**Ant. Cat.**	**Ant. Type**	**Frequency (MHz)**	**G_{ANT} (dBi)**	**DG (dBi)** [correlated] **N_{TX} = 3**	**DG (dBi)** [uncorrelated] **N_{TX} = 3**
1	1	Integral	PIFA	2412	2.98	2412MHz: 7.5 2437MHz: 6.9 2462MHz: 6.7	2412MHz: 2.8 2437MHz: 2.2 2462MHz: 2.0
				2437	2.90		
				2462	2.59		
2	2	Integral	PIFA	2412	2.32		
				2437	1.24		
				2462	1.86		
3	3	Integral	PIFA	2412	2.95		
				2437	2.22		
				2462	1.36		

System Information	
☒	Different target RF output power levels are used depending on the multiple transmit chains. The test should be performed all power levels.
☒	The equipment is normally installed and point-to-point or point-to-multipoint systems

Note 1: For all transmitter outputs with equal antenna gains, directional gain is to be computed as follows:
Any transmit signals are correlated, Directional Gain (DG) = G_{ANT} + 10 log(N) dBi
All transmit signals are completely uncorrelated, Directional Gain (DG)= G_{ANT}

Note 2: For all transmitter outputs with unequal antenna gains, directional gain is to be computed as follows:
Any transmit signals are correlated, Directional Gain (DG) =
$10 \log[(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N]$ dBi
All transmit signals are completely uncorrelated, Directional Gain (DG) =
$10 \log[(10^{G1/10} + 10^{G2/10} + \ldots + 10^{GN/10}) / N]$ dBi

1.1.3 Type of EUT

Identify EUT	
HW Version	PEM3
SW Version	0.0.15
Presentation of Equipment	☐ Production ; ☒ Pre-Production ; ☐ Prototype
Type of EUT	
☒	Stand-alone
☐	Combined (EUT where the radio part is fully integrated within another device) Combined Equipment - Brand Name / Model No.: …
☐	Plug-in radio (EUT intended for a variety of host systems) Host System - Brand Name / Model No.: …
☐	Other:

1.1.4 Test Signal Duty Cycle

Operated Mode for Worst Duty Cycle		
☐ Operated normally mode for worst duty cycle		
☒ Operated test mode for worst duty cycle		
Test Signal Duty Cycle (x)	**Power Duty Factor [dB] – (10 log 1/x)**	**Voltage Duty Factor [dB] – (20 log 1/x)**
☒ 100% - IEEE 802.11b	0	0
☒ 99.03% - IEEE 802.11g	0.04	0.08
☒ 98.97% - IEEE 802.11n (HT20)	0.04	0.09

1.1.5 EUT Operational Condition

Supply Voltage	☒ AC mains	☐ DC	
Type of DC Source	☐ Internal DC supply	☒ External DC adapter	☐ Battery

1.1.6 Manufacturer

1.	**ASKEY COMPUTER CORPORATION** 10F, NO. 119, CHIENKANG RD., CHUNG-HO, TAIPEI, TAIWAN, 23585 R.O.C.
2.	**ASKEY TECHNOLOGY (JIANG SU)** No.1388, Jiao Tong Road, Wujiang Economic-Technological Development Area, Jiangsu Province, P.R.China

1.2 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR FCC Part 15
- ANSI C63.10-2009
- FCC KDB 558074 D01 - Guidance for Performing Compliance Measurements on DTS
- FCC KDB 662911 - Emissions Testing of Transmitters with Multiple Outputs
- FCC KDB 412172 - Guidelines for Determining the ERP and EIRP

1.3 Testing Location Information

Testing Location					
☐	HWA YA	ADD : No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.			
		TEL : 886-3-327-3456 FAX : 886-3-318-0055			
☒	JHUBEI	ADD : No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C.			
		TEL : 886-3-656-9065 FAX : 886-3-656-9085			
Test Condition		**Test Site No.**	**Test Engineer**	**Test Environment**	**Test Date**
RF Conducted		TH01-CB	Benson Peng	25°C / 61%	04-Jul-12 ~ 06-Jul-12
AC Conduction		CO01-CB	Ryo Fan	25°C / 65%	30-May-12
Radiated Emission		03CH01-CB	Benson Peng	25°C / 63%	29-Jun-12 ~ 10-Jul-12

1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)

Measurement Uncertainty			
Test Item		**Uncertainty**	**Limit**
AC power-line conducted emissions		±2.26 dB	N/A
Emission bandwidth, 6dB bandwidth		±1.42 %	N/A
RF output power, conducted		±0.63 dB	N/A
Power density, conducted		±0.81 dB	N/A
Unwanted emissions, conducted	30 – 1000 MHz	±0.51 dB	N/A
	1 – 18 GHz	±0.67 dB	N/A
	18 – 40 GHz	±0.83 dB	N/A
	40 – 200 GHz	N/A	N/A
All emissions, radiated	30 – 1000 MHz	±2.56 dB	N/A
	1 – 18 GHz	±3.59 dB	N/A
	18 – 40 GHz	±3.82 dB	N/A
	40 – 200 GHz	N/A	N/A
Temperature		±0.8 °C	N/A
Humidity		±3 %	N/A
DC and low frequency voltages		±3 %	N/A
Time		±1.42 %	N/A
Duty Cycle		±1.42 %	N/A

2 Test Configuration of EUT

2.1 The Worst Case Modulation Configuration

Worst Modulation Used for Conformance Testing						
Power Level		1				
IEEE 802.11 Protocol	**Number of Transmit Chains (N_{TX})**	**Data Rate / MCS**	**Worst Data Rate / MCS**	**Worst Modulation Mode**	**RF Output Power (dBm)**	**Power Spectral Density (dBm/3kHz)**
b	1	1-11 Mbps	1 Mbps	11B-20M	23.00	-8.66
g	1	6-54 Mbps	6 Mbps	11G-20M	22.82	-12.72
n (HT20)	1	MCS 0-7	MCS 0	11N2.4G-20M	22.86	-12.94
Power Level		2				
IEEE 802.11 Protocol	**Number of Transmit Chains (N_{TX})**	**Data Rate / MCS**	**Worst Data Rate / MCS**	**Worst Modulation Mode**	**RF Output Power (dBm)**	**Power Spectral Density (dBm/3kHz)**
b	2	1-11 Mbps	1 Mbps	11B-20M	23.52	-8.41
g	2	6-54 Mbps	6 Mbps	11G-20M	23.56	-11.91
n (HT20)	2	MCS 0-15	MCS 0	11N2.4G-20M	23.81	-12.13
Power Level		3				
IEEE 802.11 Protocol	**Number of Transmit Chains (N_{TX})**	**Data Rate / MCS**	**Worst Data Rate / MCS**	**Worst Modulation Mode**	**RF Output Power (dBm)**	**Power Spectral Density (dBm/3kHz)**
b	3	1-11 Mbps	1 Mbps	11B-20M	24.36	-6.54
g	3	6-54 Mbps	6 Mbps	11G-20M	24.51	-10.13
n (HT20)	3	MCS 0-23	MCS 0	11N2.4G-20M	24.60	-10.41

Note 1: IEEE Std. 802.11n-2009 modulation consists of HT20 and HT40 (HT: High Throughput). Then EUT support HT20. Worst modulation mode of Guard Interval (GI) is 400ns.
Note 2: Modulation modes consist of 11B-20M, 11G-20M, 11N2.4G-20M:
11B: IEEE 802.11b, 11G: IEEE 802.11g, 11N2.4G: IEEE 802.11n (2.4GHz Band)
20M: Channel Bandwidth 20MHz
Note 3: RF output power specifies that Maximum Conducted (Average) Output Power.

2.2 Test Channel Frequencies Configuration

Test Channel Frequencies Configuration		
IEEE 802.11 Protocol	**Worst Modulation Mode**	**Test Channel Frequencies (MHz) – FX (Frequencies Abbreviations)**
b	11B-20M	2412-(F1), 2437-(F2), 2462-(F3)
g	11G-20M	2412-(F1), 2437-(F2), 2462-(F3)
n (HT20)	11N2.4G-20M	2412-(F1), 2437-(F2), 2462-(F3)

2.3 The Worst Case Power Setting Parameter

The Worst Case Power Setting Parameter					
Power Level		1			
Test Software Version		Atheros Radio Test 2 (ART2-GUI)			
Worst Modulation Mode	**Number of Transmit Chains (N_{TX})**	**Frequency (MHz)**	**Power Setting**	**Worst Data Rate / MCS**	**Maximum Conducted (Average) Output Power (dBm)**
11B-20M	1	2412	23	1 Mbps	22.93
11B-20M	1	2437	23	1 Mbps	23.00
11B-20M	1	2462	22	1 Mbps	22.24
11G-20M	1	2412	16	6 Mbps	16.68
11G-20M	1	2437	23	6 Mbps	22.82
11G-20M	1	2462	16	6 Mbps	16.84
11N2.4G-20M	1	2412	15	MCS 0	16.11
11N2.4G-20M	1	2437	23	MCS 0	22.86
11N2.4G-20M	1	2462	14	MCS 0	15.20

The Worst Case Power Setting Parameter					
Power Level		2			
Test Software Version		Atheros Radio Test 2 (ART2-GUI)			
Worst Modulation Mode	**Number of Transmit Chains (N_{TX})**	**Frequency (MHz)**	**Power Setting**	**Worst Data Rate / MCS**	**Maximum Conducted (Average) Output Power (dBm)**
11B-20M	2	2412	20	1 Mbps	23.52
11B-20M	2	2437	20	1 Mbps	23.49
11B-20M	2	2462	20	1 Mbps	23.33
11G-20M	2	2412	15	6 Mbps	18.82
11G-20M	2	2437	20	6 Mbps	23.56
11G-20M	2	2462	17	6 Mbps	21.13
11N2.4G-20M	2	2412	14	MCS 0	18.10
11N2.4G-20M	2	2437	20	MCS 0	23.81
11N2.4G-20M	2	2462	14	MCS 0	18.40

The Worst Case Power Setting Parameter					
Power Level		3			
Test Software Version		Atheros Radio Test 2 (ART2-GUI)			
Worst Modulation Mode	**Number of Transmit Chains (N_{TX})**	**Frequency (MHz)**	**Power Setting**	**Worst Data Rate / MCS**	**Maximum Conducted (Average) Output Power (dBm)**
11B-20M	3	2412	20	1 Mbps	24.36
11B-20M	3	2437	20	1 Mbps	24.26
11B-20M	3	2462	20	1 Mbps	24.17
11G-20M	3	2412	15	6 Mbps	18.92
11G-20M	3	2437	20	6 Mbps	24.51
11G-20M	3	2462	17	6 Mbps	19.10
11N2.4G-20M	3	2412	14	MCS 0	18.23
11N2.4G-20M	3	2437	20	MCS 0	24.60
11N2.4G-20M	3	2462	14	MCS 0	17.12

2.4 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests				
Tests Item	AC power-line conducted emissions			
Condition	AC power-line conducted measurement for line and neutral Test Voltage: 120V/60 Hz			
Operating Mode	**Operating Mode Description**	**Worst Modulation Mode**	**Test Freq.**	**Power Level**
1	Normal Link	11N2.4G-20M	F2	3

The Worst Case Mode for Following Conformance Tests				
Tests Item	RF Output Power Power Spectral Density 6 dB Bandwidth			
Test Condition	Conducted measurement at transmit chains			
Worst Modulation Mode	**Number of Transmit Chains (N_{TX})**	**Worst Data Rate / MCS**	**Test Frequency**	**Power Level**
11B-20M	1	11Mbps	F1, F2, F3	1
11G-20M	1	6Mbps	F1, F2, F3	1
11N2.4G-20M	1	MCS 0	F1, F2, F3	1
11B-20M	2	11Mbps	F1, F2, F3	2
11G-20M	2	6Mbps	F1, F2, F3	2
11N2.4G-20M	2	MCS 0	F1, F2, F3	2
11B-20M	3	11Mbps	F1, F2, F3	3
11G-20M	3	6Mbps	F1, F2, F3	3
11N2.4G-20M	3	MCS 0	F1, F2, F3	3

The Worst Case Mode for Following Conformance Tests				
Tests Item	Transmitter Radiated Bandedge Emissions			
Test Condition	Radiated measurement			
Worst Modulation Mode	**Number of Transmit Chains (N_{TX})**	**Worst Data Rate / MCS**	**Test Frequency**	**Power Level**
11B-20M	1	11Mbps	F1, F3	1
11G-20M	1	6Mbps	F1, F3	1
11N2.4G-20M	1	MCS 0	F1, F3	1
11B-20M	2	11Mbps	F1, F3	2
11G-20M	2	6Mbps	F1, F3	2
11N2.4G-20M	2	MCS 0	F1, F3	2
11B-20M	3	11Mbps	F1, F3	3
11G-20M	3	6Mbps	F1, F3	3
11N2.4G-20M	3	MCS 0	F1, F3	3

The Worst Case Mode for Following Conformance Tests					
Tests Item	Transmitter Radiated Unwanted Emissions				
Test Condition	Radiated measurement				
User Position	☒ EUT will be placed in fixed position.				
	☐ EUT will be placed in mobile position and operating multiple positions. EUT shall be performed two or three orthogonal planes.				
	☐ EUT will be a hand-held or body-worn battery-powered devices and operating multiple positions. EUT shall be performed two or three orthogonal planes.				
Operating Mode < 1GHz	☒ 1. Normal Link				
Worst Modulation Mode	**Number of Transmit Chains (N_{TX})**	**Worst Data Rate / MCS**	**Test Frequency**	**Power Level**	**Ant No.**
11B-20M	1	11Mbps	F1, F2, F3	1	3
11G-20M	1	6Mbps	F1, F2, F3	1	3
11N2.4G-20M	1	MCS 0	F1, F2, F3	1	3
11B-20M	2	11Mbps	F1, F2, F3	2	2,3
11G-20M	2	6Mbps	F1, F2, F3	2	2,3
11N2.4G-20M	2	MCS 0	F1, F2, F3	2	2,3
11B-20M	3	11Mbps	F1, F2, F3	3	1,2,3
11G-20M	3	6Mbps	F1, F2, F3	3	1,2,3
11N2.4G-20M	3	MCS 0	F1, F2, F3	3	1,2,3

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	**Quasi-Peak**	**Average**
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50
Note 1: * Decreases with the logarithm of the frequency.		

3.1.2 Measuring Instruments

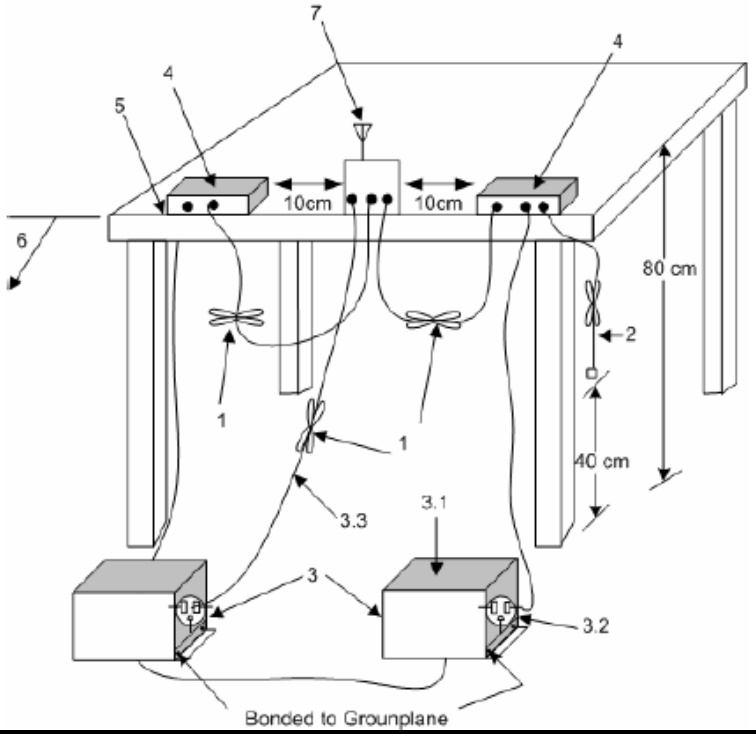
Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

Test Method
☒ Refer as ANSI C63.10-2009, clause 6.2 for AC power-line conducted emissions.

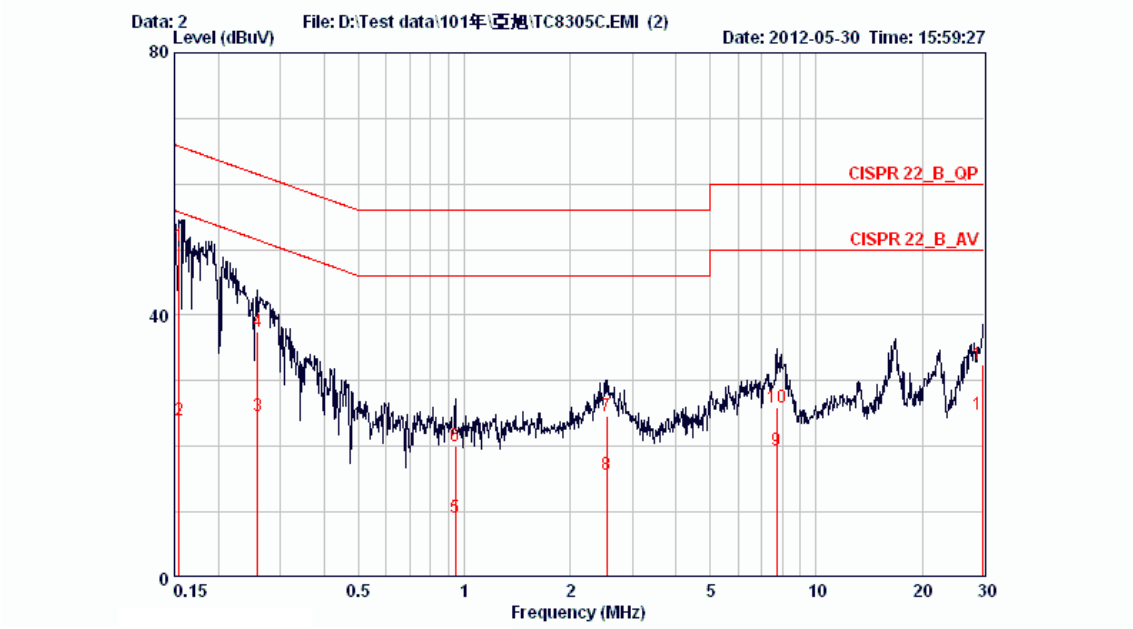
3.1.4 Test Setup

AC Power-line Conducted Emissions



3.1.5 Test Result of AC Power-line Conducted Emissions

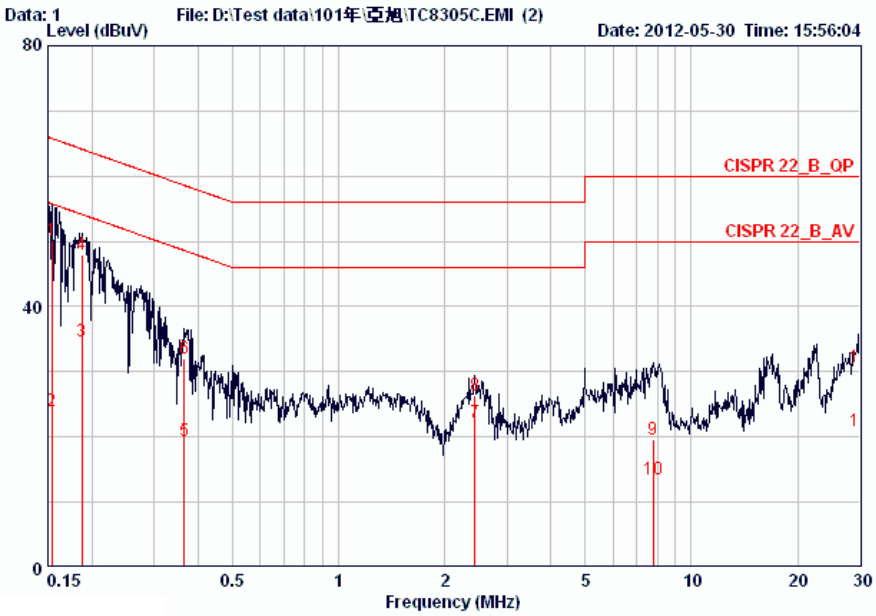
AC Power-line Conducted Emissions Result					
Modulation Mode	11N2.4G-20M	**Power Level**	1	**Test Freq. (FX)**	F2
Operating Mode	1	**Ant. No.**	1	**Power Phase**	Neutral
Operating Function	Normal Link				



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1 @	0.15485	50.60	-15.14	65.74	50.34	0.06	0.20	QP
2	0.15485	23.89	-31.85	55.74	23.63	0.06	0.20	AVERAGE
3	0.25888	24.56	-26.91	51.47	24.31	0.05	0.20	AVERAGE
4	0.25888	37.45	-24.02	61.47	37.20	0.05	0.20	QP
5	0.94308	9.23	-36.77	46.00	8.96	0.07	0.20	AVERAGE
6	0.94308	20.12	-35.88	56.00	19.85	0.07	0.20	QP
7	2.540	24.66	-31.34	56.00	24.36	0.10	0.20	QP
8	2.540	15.70	-30.30	46.00	15.40	0.10	0.20	AVERAGE
9	7.728	19.35	-30.65	50.00	18.75	0.20	0.40	AVERAGE
10	7.728	25.85	-34.15	60.00	25.25	0.20	0.40	QP
11	29.841	32.56	-27.44	60.00	31.50	0.46	0.60	QP
12	29.841	24.94	-25.06	50.00	23.88	0.46	0.60	AVERAGE

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)

AC Power-line Conducted Emissions Result					
Modulation Mode	11N2.4G-20M	**Power Level**	1	**Test Freq. (FX)**	F2
Operating Mode	1	**Ant. No.**	1	**Power Phase**	Line
Operating Function	Normal Link				



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.15403	50.09	-15.69	65.78	49.83	0.06	0.20	QP
2	0.15403	23.96	-31.82	55.78	23.70	0.06	0.20	AVERAGE
3	0.18739	34.68	-19.47	54.15	34.43	0.05	0.20	AVERAGE
4	0.18739	47.86	-16.29	64.15	47.61	0.05	0.20	QP
5	0.36531	19.33	-29.28	48.61	19.11	0.02	0.20	AVERAGE
6	0.36531	32.07	-26.54	58.61	31.85	0.02	0.20	QP
7	2.435	22.14	-23.86	46.00	21.85	0.09	0.20	AVERAGE
8	2.435	26.28	-29.72	56.00	25.99	0.09	0.20	QP
9	7.810	19.57	-40.43	60.00	19.01	0.16	0.40	QP
10	7.810	13.47	-36.53	50.00	12.91	0.16	0.40	AVERAGE
11	30.000	30.80	-29.20	60.00	29.84	0.36	0.60	QP
12	30.000	20.85	-29.15	50.00	19.89	0.36	0.60	AVERAGE

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)

3.2 6dB Bandwidth

3.2.1 6dB Bandwidth Limit

6dB Bandwidth Limit
Systems using digital modulation techniques:
☒ 6 dB bandwidth ≥ 500 kHz.

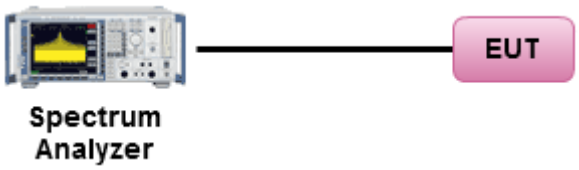
3.2.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

Test Method			
☒	For the emission bandwidth shall be measured using one of the options below:		
	☒	Refer as FCC KDB 558074, clause 5.1.1 Option 1 for 6 dB bandwidth measurement.	
	☐	Refer as FCC KDB 558074, clause 5.1.2 Option 2 for 6 dB bandwidth measurement.	
	☐	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.	
☒	For conducted measurement.		
	☒	For conducted measurements on devices with multiple transmit chains using options given below:	
		☐	Option 1: Multiple transmit chains measurements need to be performed on one of the active transmit chains (antenna outputs). All measurement had be performed on transmit chains 3.
		☐	Option 2: Multiple transmit chains measurements need to be performed on each transmit chains individually (antenna outputs). All measurement had be performed on all transmit chains.
		☒	Option 3: A power splitter/combiner shall be used to combine all the transmit chains (antenna outputs) into a single test point and record a single test point EBW.
☐	For radiated measurement. The equipment to be measured and the test antenna shall be oriented to obtain the maximum emitted power level.		

3.2.4 Test Setup

Emission Bandwidth


3.2.5 Test Result of Emission Bandwidth

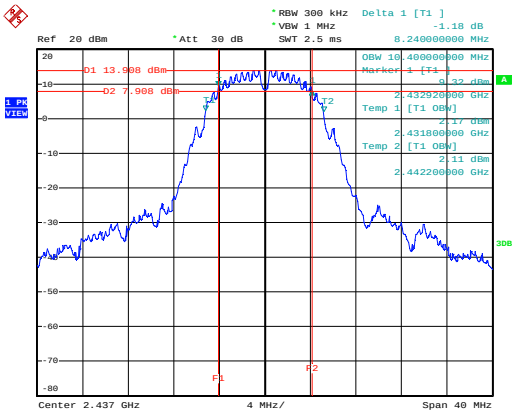
Emission Bandwidth Result				
Power Level	1		**Emission Bandwidth (MHz)**	
Modulation Mode	**N_{TX}**	**Freq. (MHz)**	**99% Bandwidth**	**6dB Bandwidth**
11B-20M	1	2412	10.40	8.24
11B-20M	1	2437	10.40	8.24
11B-20M	1	2462	10.40	8.16
11G-20M	1	2412	17.20	16.64
11G-20M	1	2437	17.52	16.72
11G-20M	1	2462	17.20	16.56
11N2.4G-20M	1	2412	18.08	17.76
11N2.4G-20M	1	2437	18.32	17.84
11N2.4G-20M	1	2462	18.08	17.76
Limit			**N/A**	**≥500 kHz**
Result			**Complied**	
Note 1: N_{TX} = Number of Transmit Chains				

Emission Bandwidth Result				
Power Level	2		**Emission Bandwidth (MHz)**	
Modulation Mode	**N_{TX}**	**Freq. (MHz)**	**99% Bandwidth**	**6dB Bandwidth**
11B-20M	2	2412	10.32	8.16
11B-20M	2	2437	10.32	8.24
11B-20M	2	2462	10.32	8.16
11G-20M	2	2412	16.40	13.04
11G-20M	2	2437	16.64	13.52
11G-20M	2	2462	16.48	13.28
11N2.4G-20M	2	2412	17.52	16.56
11N2.4G-20M	2	2437	17.52	16.64
11N2.4G-20M	2	2462	17.44	16.56
Limit			**N/A**	**≥500 kHz**
Result			**Complied**	
Note 1: N_{TX} = Number of Transmit Chains				

Emission Bandwidth Result				
Power Level	3		**Emission Bandwidth (MHz)**	
Modulation Mode	**N_{TX}**	**Freq. (MHz)**	**99% Bandwidth**	**6dB Bandwidth**
11B-20M	3	2412	10.32	8.24
11B-20M	3	2437	10.24	8.24
11B-20M	3	2462	10.32	8.16
11G-20M	3	2412	16.88	11.28
11G-20M	3	2437	16.96	10.96
11G-20M	3	2462	17.04	11.20
11N2.4G-20M	3	2412	17.68	13.76
11N2.4G-20M	3	2437	17.68	13.84
11N2.4G-20M	3	2462	17.68	14.32
Limit			**N/A**	**≥500 kHz**
Result			**Complied**	
Note 1: N_{TX} = Number of Transmit Chains				

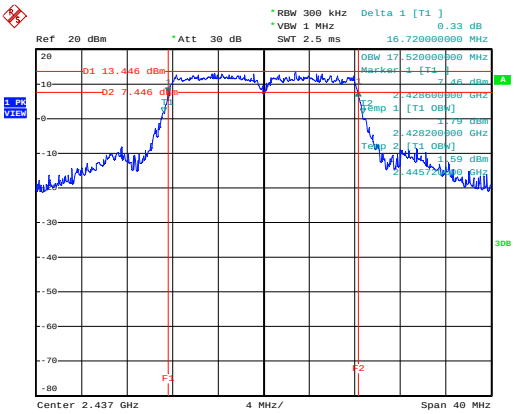
Worst Emission Bandwidth Plots

11B-20M – F2 – Power Level 1



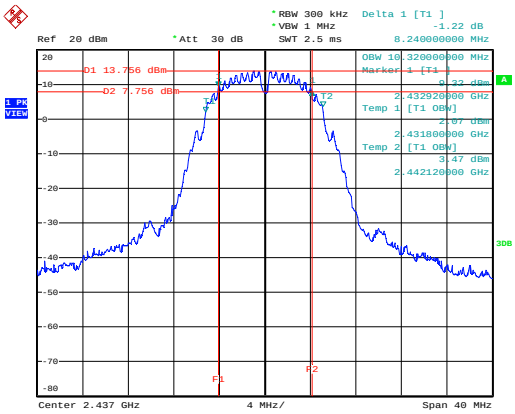
Date: 4.JUL.2012 21:11:29

11G-20M – F2 – Power Level 1



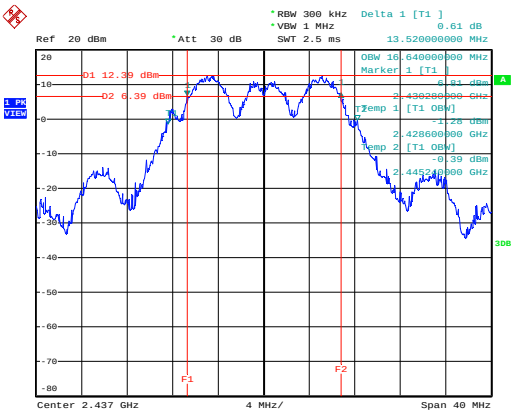
Date: 4.JUL.2012 21:16:47

11B-20M – F2 – Power Level 2



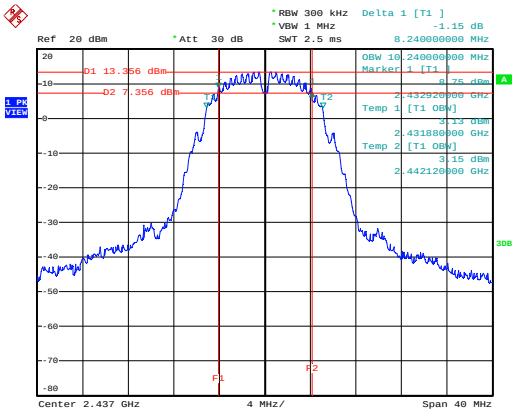
Date: 4.JUL.2012 22:22:11

11G-20M – F2 – Power Level 2



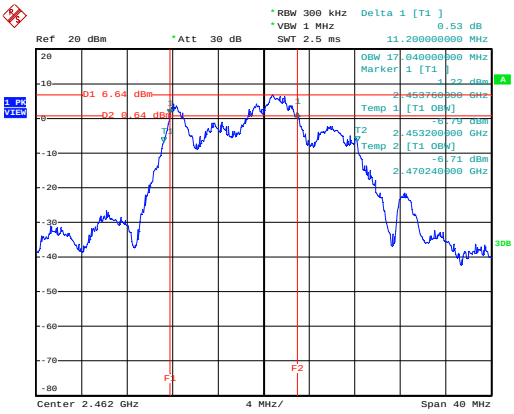
Date: 4.JUL.2012 22:24:10

11B-20M – F2 – Power Level 3



Date: 5.JUL.2012 23:21:04

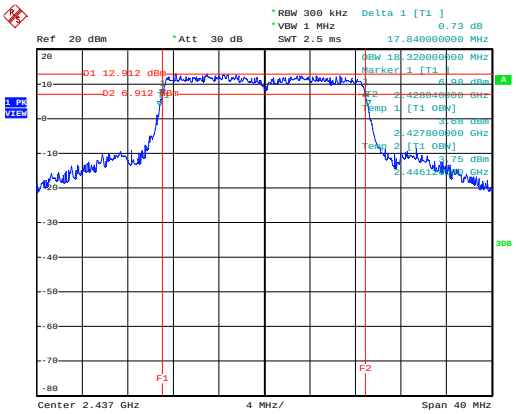
11G-20M – F3 – Power Level 3



Date: 5.JUL.2012 23:23:31

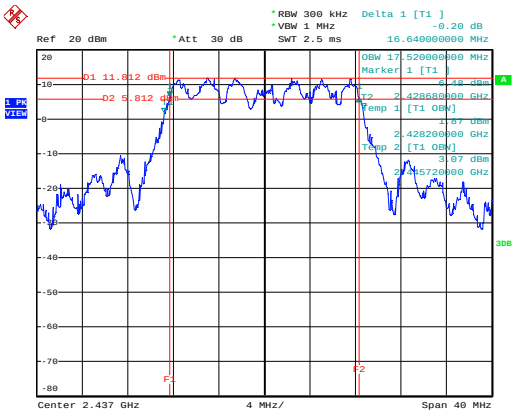
Worst Emission Bandwidth Plots

11N2.4G-20M – F2 – Power Level 1



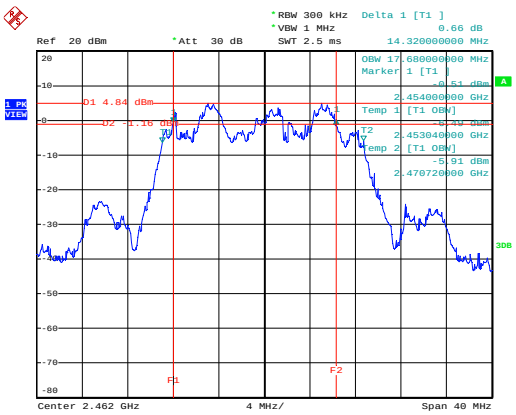
Date: 4.JUL.2012 21:18:10

11N2.4G-20M – F2 – Power Level 2



Date: 4.JUL.2012 22:26:34

11N2.4G-20M – F3 – Power Level 3



Date: 5.JUL.2012 23:26:56

3.3 RF Output Power

3.3.1 RF Output Power Limit

RF Output Power Limit			
Maximum Peak Conducted Output Power or Maximum Conducted Output Power Limit			
☒	2400-2483.5 MHz Band:		
	☒	If G_{TX} ≤ 6 dBi, then P_{Out} ≤ 30 dBm (1 W)	
	☒	Point-to-multipoint systems (P2M): If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6) dBm	
	☐	Point-to-point systems (P2P): If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6)/3 dBm	
	☐	Smart antenna system (SAS):	
		☐	Single beam: If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6)/3 dBm
		☐	Overlap beam: If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6)/3 dBm
		☐	Aggregate power on all beams: If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6)/3 + 8dB dBm
e.i.r.p. Power Limit:			
☒	2400-2483.5 MHz Band		
	☒	Point-to-multipoint systems (P2M): P_{eirp} ≤ 36 dBm (4 W)	
	☐	Point-to-point systems (P2P): P_{eirp} ≤ MAX(36, [P_{Out} + G_{TX}]) dBm	
	☐	Smart antenna system (SAS)	
		☐	Single beam: P_{eirp} ≤ MAX(36, P_{Out} + G_{TX}) dBm
		☐	Overlap beam: P_{eirp} ≤ MAX(36, P_{Out} + G_{TX}) dBm
		☐	Aggregate power on all beams: P_{eirp} ≤ MAX(36, [P_{Out} + G_{TX} + 8]) dBm
P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, **G_{TX}** = the maximum transmitting antenna directional gain in dBi. **P_{eirp}** = e.i.r.p. Power in dBm.			

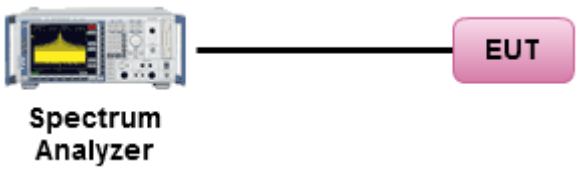
3.3.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

Test Method	
☐	Maximum Peak Conducted Output Power
☐	Refer as FCC KDB 558074, clause 5.2.1.1 Option 1 (RBW > EBW method).
☐	Refer as FCC KDB 558074, clause 5.2.1.2 Option 2 (integrated band power method).
☐	Refer as ANSI C63.10, clause 6.10.2.1 a) for peak power meter.
☐	Refer as ANSI C63.10, clause 6.10.2.1 a) for spectrum analyzer - (RBW ≥ EBW).
☐	Refer as ANSI C63.10, clause 6.10.2.1 b) for spectrum analyzer - BW correction factor.
☒	Maximum Conducted Output Power
☐	Refer as FCC KDB 558074, clause 5.2.2.1 Option 1 (RMS detection with slow sweep speed).
☒	Refer as FCC KDB 558074, clause 5.2.2.2 Option 2 (spectral trace averaging).
☐	Refer as ANSI C63.10, clause 6.10.3.1 for spectrum analyzer - Method 1 (trace averaging).
☐	Refer as ANSI C63.10, clause 6.10.3.2 for spectrum analyzer - Method 2 (zero-span averaging).
☐	Refer as ANSI C63.10, clause 6.10.3.2 for spectrum analyzer - Method 3 (band power max-hold).
☒	Refer as FCC KDB 558074, clause 2 for conducted measurement.
☒	For conducted measurements on devices with multiple transmit chains: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
☒	If multiple transmit chains, EIRP calculation could be following as methods:
☐	Method 1: $EIRP_1 = P_1 + G_{ANT1}$; $EIRP_2 = P_2 + G_{ANT2}$; … $EIRP_n = Pn + G_{ANTn}$ $EIRP_{total} = EIRP_1 + EIRP_2 + … + EIRP_n$ (calculated in linear unit [mW] and transfer to log unit [dBm])
☒	Method 2: $P_{total} = P_1 + P_2 + … + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$
☐	Refer as FCC KDB 558074, clause 2 for radiated measurement.

3.3.4 Test Setup

RF Output Power (Spectrum Analyzer)


3.3.5 Test Result of Maximum Conducted Output Power

Maximum Conducted Output Power Result										
Power Level		1	**RF Output Power (dBm)**							
$G_{ANT\ (dBi)-2412MHz}$		2.95								
$G_{ANT\ (dBi)-2437MHz}$		2.22								
$G_{ANT\ (dBi)-2462MHz}$		1.36								
Modulation Mode	**N_{TX}**	**Freq. (MHz)**	**Chain-Port 3**	**-**	**-**	**-**	**Sum Chain**	**Power Limit**	**EIRP Power**	**EIRP Limit**
11B-20M	1	2412	22.93				22.93	30	25.88	36
11B-20M	1	2437	23.00				23.00	30	25.22	36
11B-20M	1	2462	22.24				22.24	30	23.60	36
Result			**Complied**							

Maximum Conducted Output Power Result										
Power Level		1	**RF Output Power (dBm)**							
$G_{ANT\ (dBi)-2412MHz}$		2.95								
$G_{ANT\ (dBi)-2437MHz}$		2.22								
$G_{ANT\ (dBi)-2462MHz}$		1.36								
Modulation Mode	**N_{TX}**	**Freq. (MHz)**	**Chain-Port 3**	**-**	**-**	**-**	**Sum Chain**	**Power Limit**	**EIRP Power**	**EIRP Limit**
11G-20M	1	2412	16.68				16.68	30	19.63	36
11G-20M	1	2437	22.82				22.82	30	25.04	36
11G-20M	1	2462	16.84				16.84	30	18.20	36
Result			**Complied**							

Maximum Conducted Output Power Result										
Power Level		1	**RF Output Power (dBm)**							
$G_{ANT\ (dBi)-2412MHz}$		2.95								
$G_{ANT\ (dBi)-2437MHz}$		2.22								
$G_{ANT\ (dBi)-2462MHz}$		1.36								
Modulation Mode	**N_{TX}**	**Freq. (MHz)**	**Chain-Port 3**	**-**	**-**	**-**	**Sum Chain**	**Power Limit**	**EIRP Power**	**EIRP Limit**
11N2.4G-20M	1	2412	16.11				16.11	30	19.06	36
11N2.4G-20M	1	2437	22.86				22.86	30	25.08	36
11N2.4G-20M	1	2462	15.20				15.20	30	16.56	36
Result			**Complied**							

Maximum Conducted Output Power Result										
Power Level		2	**RF Output Power (dBm)**							
$DG_{(dBi)\ [correlated]-2412MHz}$		5.7								
$DG_{(dBi)\ [correlated]-2437MHz}$		4.8								
$DG_{(dBi)\ [correlated]-2462MHz}$		4.6								
Modulation Mode	**N_{TX}**	**Freq. (MHz)**	**Chain-Port 2**	**Chain-Port 3**	**-**	**-**	**Sum Chain**	**Power Limit**	**EIRP Power**	**EIRP Limit**
11B-20M	2	2412	20.22	20.79	-	-	23.52	30	29.18	36
11B-20M	2	2437	20.07	20.85	-	-	23.49	30	28.24	36
11B-20M	2	2462	20.09	20.54	-	-	23.33	30	27.96	36
Result			**Complied**							

Maximum Conducted Output Power Result										
Power Level		2	**RF Output Power (dBm)**							
$DG_{(dBi)\ [correlated]-2412MHz}$		5.7								
$DG_{(dBi)\ [correlated]-2437MHz}$		4.8								
$DG_{(dBi)\ [correlated]-2462MHz}$		4.6								
Modulation Mode	**N_{TX}**	**Freq. (MHz)**	**Chain-Port 2**	**Chain-Port 3**	**-**	**-**	**Sum Chain**	**Power Limit**	**EIRP Power**	**EIRP Limit**
11G-20M	2	2412	15.59	16.02	-	-	18.82	30	24.51	36
11G-20M	2	2437	20.30	20.79	-	-	23.56	30	28.36	36
11G-20M	2	2462	18.08	18.16	-	-	21.13	30	25.80	36
Result			**Complied**							

Maximum Conducted Output Power Result										
Power Level		2	**RF Output Power (dBm)**							
$DG_{(dBi)\ [uncorrelated]-2412MHz}$		2.6								
$DG_{(dBi)\ [uncorrelated]-2437MHz}$		1.8								
$DG_{(dBi)\ [uncorrelated]-2462MHz}$		1.6								
Modulation Mode	**N_{TX}**	**Freq. (MHz)**	**Chain-Port 2**	**Chain-Port 3**	**-**	**-**	**Sum Chain**	**Power Limit**	**EIRP Power**	**EIRP Limit**
11N2.4G-20M	2	2412	14.87	15.28	-	-	18.10	30	23.79	36
11N2.4G-20M	2	2437	20.53	21.05	-	-	23.81	30	28.61	36
11N2.4G-20M	2	2462	15.12	15.63	-	-	18.40	30	23.06	36
Result			**Complied**							

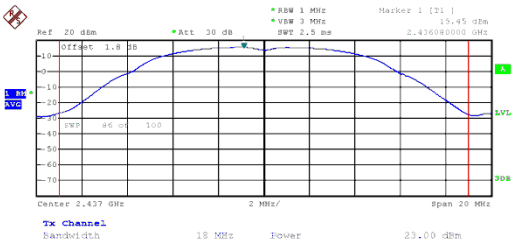
Maximum Conducted Output Power Result										
Power Level		3	**RF Output Power (dBm)**							
$DG_{(dBi)\ [correlated]-2412MHz}$		7.5								
$DG_{(dBi)\ [correlated]-2437MHz}$		6.9								
$DG_{(dBi)\ [correlated]-2462MHz}$		6.7								
Modulation Mode	**N_{TX}**	**Freq. (MHz)**	**Chain-Port 1**	**Chain-Port 2**	**Chain-Port 3**	**-**	**Sum Chain**	**Power Limit**	**EIRP Power**	**EIRP Limit**
11B-20M	3	2412	19.23	19.51	19.99	-	24.36	30	31.89	36
11B-20M	3	2437	18.64	19.57	20.13	-	24.26	30	31.18	36
11B-20M	3	2462	18.40	19.59	20.04	-	24.17	30	30.89	36
Result			**Complied**							

Maximum Conducted Output Power Result										
Power Level		3	**RF Output Power (dBm)**							
$DG_{(dBi)\ [correlated]-2412MHz}$		7.5								
$DG_{(dBi)\ [correlated]-2437MHz}$		6.9								
$DG_{(dBi)\ [correlated]-2462MHz}$		6.7								
Modulation Mode	**N_{TX}**	**Freq. (MHz)**	**Chain-Port 1**	**Chain-Port 2**	**Chain-Port 3**	**-**	**Sum Chain**	**Power Limit**	**EIRP Power**	**EIRP Limit**
11G-20M	3	2412	13.28	14.25	14.77	-	18.92	30	26.48	36
11G-20M	3	2437	18.95	19.80	20.34	-	24.51	30	31.47	36
11G-20M	3	2462	13.00	14.44	15.25	-	19.10	30	25.86	36
Result			**Complied**							

Maximum Conducted Output Power Result										
Power Level		3	**RF Output Power (dBm)**							
$DG_{(dBi)\ [uncorrelated]-2412MHz}$		2.8								
$DG_{(dBi)\ [uncorrelated]-2437MHz}$		2.2								
$DG_{(dBi)\ [uncorrelated]-2462MHz}$		2.0								
Modulation Mode	**N_{TX}**	**Freq. (MHz)**	**Chain-Port 1**	**Chain-Port 2**	**Chain-Port 3**	**-**	**Sum Chain**	**Power Limit**	**EIRP Power**	**EIRP Limit**
11N2.4G-20M	3	2412	12.73	13.70	13.85	-	18.23	30	25.80	36
11N2.4G-20M	3	2437	19.20	19.68	20.50	-	24.60	30	31.56	36
11N2.4G-20M	3	2462	10.64	12.88	13.11	-	17.12	30	23.88	36
Result			**Complied**							

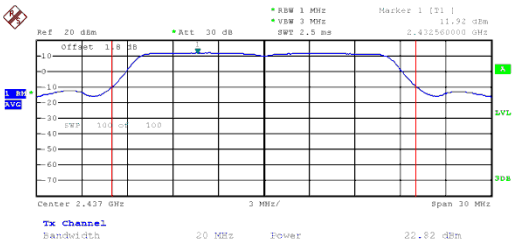
Worst Maximum Conducted Output Power Plots

11B-20M – F2 [Port 3] – Power Level 1



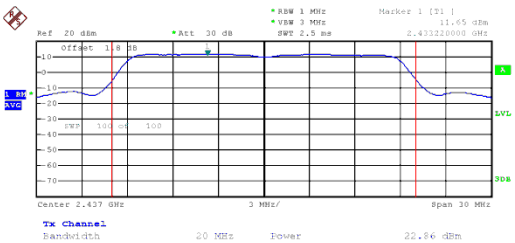
Date: 30.JUL.2012 17:45:24

11G-20M – F2 [Port 3] – Power Level 1



Date: 30.JUL.2012 18:31:26

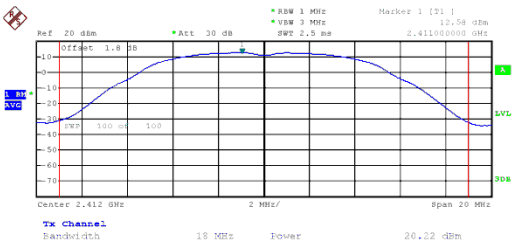
11N2.4G-20M – F2 [Port 3] – Power Level 1



Date: 30.JUL.2012 18:42:07

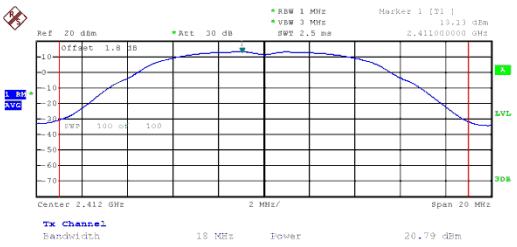
Worst Maximum Conducted Output Power Plots

11B-20M – F1 [Port 2] – Power Level 2



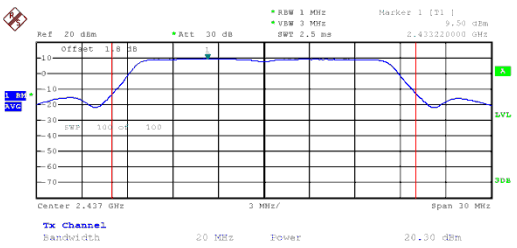
Date: 30.JUL.2012 17:53:46

11B-20M – F1 [Port 3] – Power Level 2



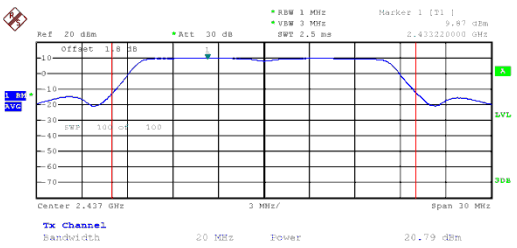
Date: 30.JUL.2012 17:58:21

11G-20M – F2 [Port 2] – Power Level 2



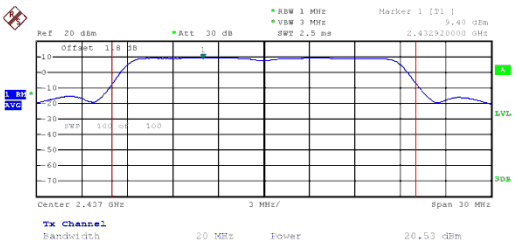
Date: 30.JUL.2012 18:25:59

11G-20M – F2 [Port 3] – Power Level 2



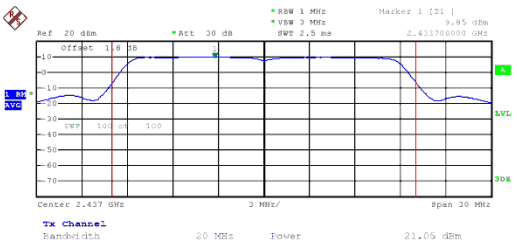
Date: 30.JUL.2012 18:25:43

11N2.4G-20M – F2 [Port 2] – Power Level 2



Date: 30.JUL.2012 18:45:35

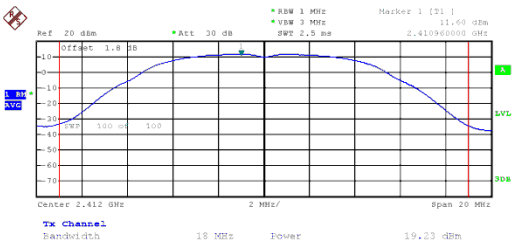
11N2.4G-20M – F2 [Port 3] – Power Level 2



Date: 30.JUL.2012 18:45:53

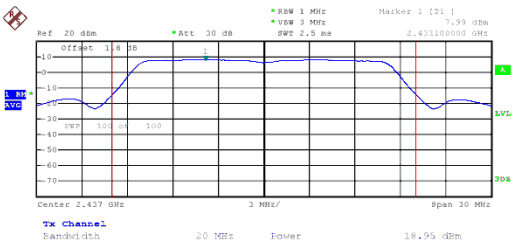
Worst Maximum Conducted Output Power Plots

11B-20M – F1 [Port 1] – Power Level 3



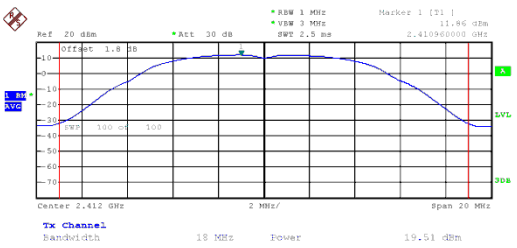
Date: 30.JUL.2012 18:11:12

11G-20M – F1 [Port 1] – Power Level 3



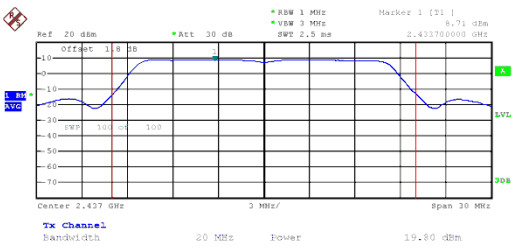
Date: 30.JUL.2012 18:19:27

11B-20M – F1 [Port 2] – Power Level 3



Date: 30.JUL.2012 18:11:35

11G-20M – F1 [Port 2] – Power Level 3



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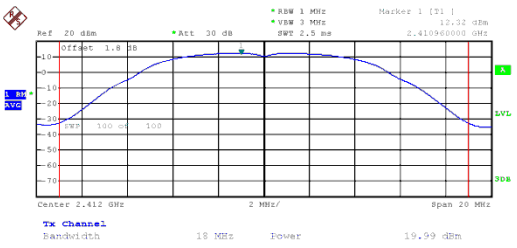
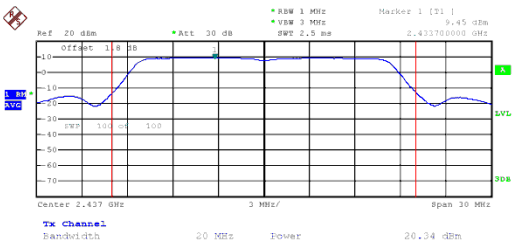
11B-20M – F1 [Port 3] – Power Level 3



Date: 30.JUL.2012 18:11:55

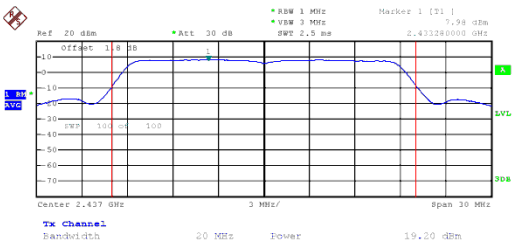
11G-20M – F1 [Port 3] – Power Level 3



Date: 30.JUL.2012 18:20:09

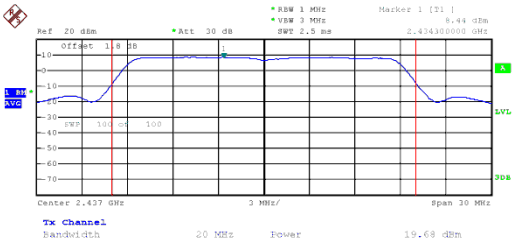
Worst Maximum Conducted Output Power Plots

11N2.4G-20M – F2 [Port 1] – Power Level 3



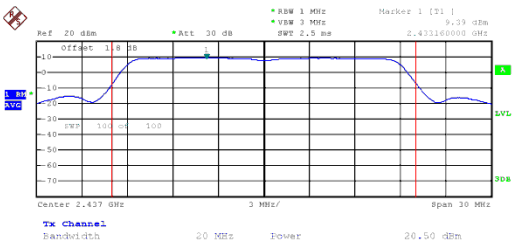
Date: 30.JUL.2012 18:58:54

11N2.4G-20M – F2 [Port 2] – Power Level 3



Date: 30.JUL.2012 18:58:30

11N2.4G-20M – F2 [Port 3] – Power Level 3



Date: 30.JUL.2012 18:58:14

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

Power Spectral Density Limit
☒ Power Spectral Density (PSD) ≤ 8 dBm/3kHz

3.4.2 Measuring Instruments

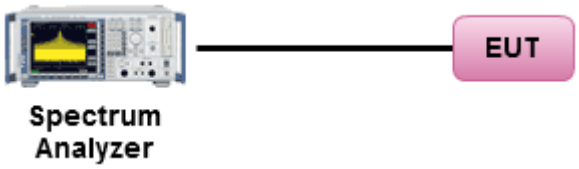
Refer a test equipment and calibration data table in this test report.

3.4.3 Test Procedures

Test Method			
☒	Power spectral density procedures that the same method as used to determine the conducted output power shall be used to determine the power spectral density. In addition, the use of a peak PSD procedure will always result in a “worst-case” measured level for comparison to the limit. Therefore, whenever the DTS bandwidth exceeds 500 kHz, it is acceptable to utilize the peak PSD procedure to demonstrate compliance to the PSD limit, regardless of how the fundamental output power was measured. For the power spectral density shall be measured using below options:		
	☐	Refer as FCC KDB 558074, clause 5.3.1 Option 1 (peak PSD; BWCF=-15.2dB).	
	☒	Refer as FCC KDB 558074, clause 5.3.2 Option 2 (average PSD; BWCF=-15.2dB).	
	☐	Refer as ANSI C63.10, clause 6.11.2.3 for PSD for DTS - (RBW=3kHz; sweep=100s).	
	☐	Refer as ANSI C63.10, clause 6.11.2.4 for Alternative PSD for DTS - (RBW=3kHz; average=100)	
☒	Refer as FCC KDB 558074, clause 2 for conducted measurement.		
	☒	For conducted measurements on devices with multiple transmit chains using options given below:	
		☐	Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the N_{TX} output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace. The new data trace samples added 100 kHz segment and found the highest value of each 100 kHz segments. Add the bandwidth correction factor (BWCF) [-15.2 dB] adjusting in power spectral density per 3kHz.
		☒	Option 2: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.
☐	Refer as FCC KDB 558074, clause 2 for radiated measurement.		

3.4.4 Test Setup

Power Spectral Density



3.4.5 Test Result of Power Spectral Density

Power Spectral Density Result				
Power Level		1	**Power Spectral Density (dBm/3kHz)**	
Modulation Mode	**N_{TX}**	**Freq. (MHz)**	**Chain- Port 3**	**PSD Limit**
11B-20M	1	2412	-8.84	8
11B-20M	1	2437	-8.66	8
11B-20M	1	2462	-9.51	8
Result			**Complied**	
Note 1: PSD [dBm/3kHz] = each transmit chains PSD [dBm/100kHz] + BWFC [-15.2 dB] + 10logN_{TX}				

Power Spectral Density Result				
Power Level		1	**Power Spectral Density (dBm/3kHz)**	
Modulation Mode	**N_{TX}**	**Freq. (MHz)**	**Chain- Port 3**	**PSD Limit**
11G-20M	1	2412	-18.75	8
11G-20M	1	2437	-12.72	8
11G-20M	1	2462	-18.63	8
Result			**Complied**	
Note 1: PSD [dBm/3kHz] = each transmit chains PSD [dBm/100kHz] + BWFC [-15.2 dB] + 10logN_{TX}				

Power Spectral Density Result				
Power Level		1	**Power Spectral Density (dBm/3kHz)**	
Modulation Mode	**N_{TX}**	**Freq. (MHz)**	**Chain- Port 3**	**PSD Limit**
11N2.4G-20M	1	2412	-19.98	8
11N2.4G-20M	1	2437	-12.94	8
11N2.4G-20M	1	2462	-20.57	8
Result			**Complied**	
Note 1: PSD [dBm/3kHz] = each transmit chains PSD [dBm/100kHz] + BWFC [-15.2 dB] + 10logN_{TX}				

Power Spectral Density Result					
Power Level		2	**Power Spectral Density (dBm/3kHz)**		
Modulation Mode	**N_{TX}**	**Freq. (MHz)**	**Chain- Port 2**	**Chain- Port 3**	**PSD Limit**
11B-20M	2	2412	-9.04	-8.76	8
11B-20M	2	2437	-9.01	-8.62	8
11B-20M	2	2462	-8.87	-8.41	8
Result			**Complied**		
Note 1: PSD [dBm/3kHz] = each transmit chains PSD [dBm/100kHz] + BWFC [-15.2 dB] + 10logN_{TX}					

Power Spectral Density Result					
Power Level		2	**Power Spectral Density (dBm/3kHz)**		
Modulation Mode	**N_{TX}**	**Freq. (MHz)**	**Chain- Port 2**	**Chain- Port 3**	**PSD Limit**
11G-20M	2	2412	-17.25	-16.49	8
11G-20M	2	2437	-12.20	-11.91	8
11G-20M	2	2462	-15.12	-14.66	8
Result			**Complied**		
Note 1: PSD [dBm/3kHz] = each transmit chains PSD [dBm/100kHz] + BWFC [-15.2 dB] + 10logN_{TX}					

Power Spectral Density Result					
Power Level		2	**Power Spectral Density (dBm/3kHz)**		
Modulation Mode	**N_{TX}**	**Freq. (MHz)**	**Chain- Port 2**	**Chain- Port 3**	**PSD Limit**
11N2.4G-20M	2	2412	-18.11	-17.94	8
11N2.4G-20M	2	2437	-12.71	-12.13	8
11N2.4G-20M	2	2462	-18.34	-17.71	8
Result			**Complied**		
Note 1: PSD [dBm/3kHz] = each transmit chains PSD [dBm/100kHz] + BWFC [-15.2 dB] + 10logN_{TX}					

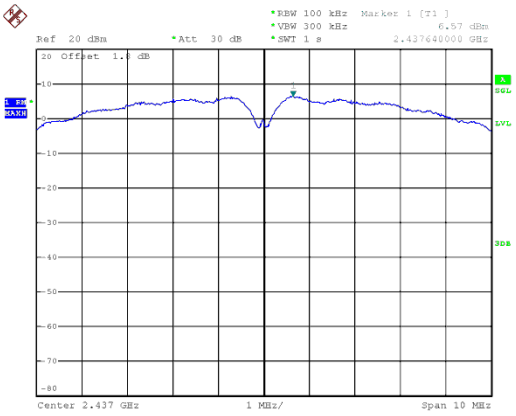
Power Spectral Density Result						
Power Level		3	**Power Spectral Density (dBm/3kHz)**			
Modulation Mode	**N_{TX}**	**Freq. (MHz)**	**Chain- Port 1**	**Chain- Port 2**	**Chain- Port 3**	**PSD Limit**
11B-20M	3	2412	-7.83	-7.14	-6.54	8
11B-20M	3	2437	-7.62	-6.87	-6.67	8
11B-20M	3	2462	-8.19	-7.13	-6.61	8
Result			**Complied**			
Note 1: PSD [dBm/3kHz] = each transmit chains PSD [dBm/100kHz] + BWFC [-15.2 dB] + 10logN_{TX}						

Power Spectral Density Result						
Power Level		3	**Power Spectral Density (dBm/3kHz)**			
Modulation Mode	**N_{TX}**	**Freq. (MHz)**	**Chain- Port 1**	**Chain- Port 2**	**Chain- Port 3**	**PSD Limit**
11G-20M	3	2412	-17.23	-16.09	-15.64	8
11G-20M	3	2437	-11.63	-10.93	-10.13	8
11G-20M	3	2462	-17.50	-16.02	-15.52	8
Result			**Complied**			
Note 1: PSD [dBm/3kHz] = each transmit chains PSD [dBm/100kHz] + BWFC [-15.2 dB] + 10logN_{TX}						

Power Spectral Density Result						
Power Level		3	**Power Spectral Density (dBm/3kHz)**			
Modulation Mode	**N_{TX}**	**Freq. (MHz)**	**Chain- Port 1**	**Chain- Port 2**	**Chain- Port 3**	**PSD Limit**
11N2.4G-20M	3	2412	-18.36	-17.15	-16.51	8
11N2.4G-20M	3	2437	-11.72	-10.82	-10.41	8
11N2.4G-20M	3	2462	-18.79	-17.92	-17.40	8
Result			**Complied**			
Note 1: PSD [dBm/3kHz] = each transmit chains PSD [dBm/100kHz] + BWFC [-15.2 dB] + 10logN_{TX}						

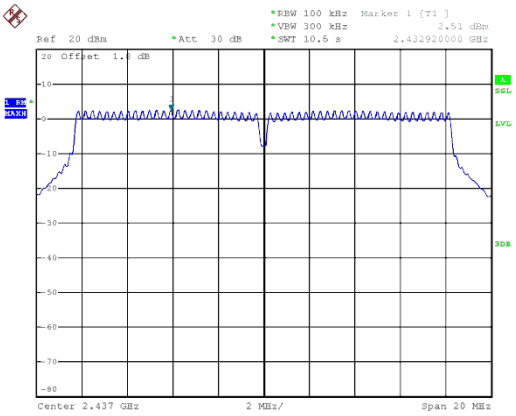
Worst Power Spectral Density Plots w/o BWFC

11B-20M – F2 [Port 3] – Power Level 1



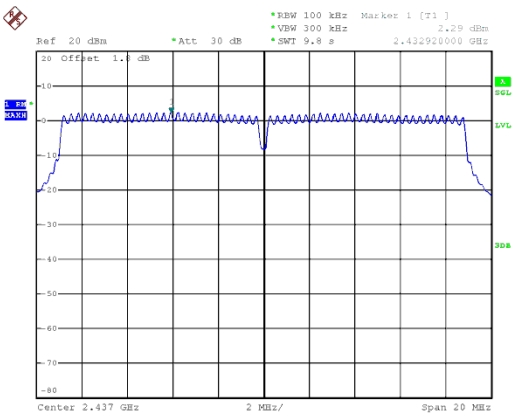
Date: 30.JUL.2012 20:00:36

11G-20M – F2 [Port 3] – Power Level 1



Date: 30.JUL.2012 20:40:06

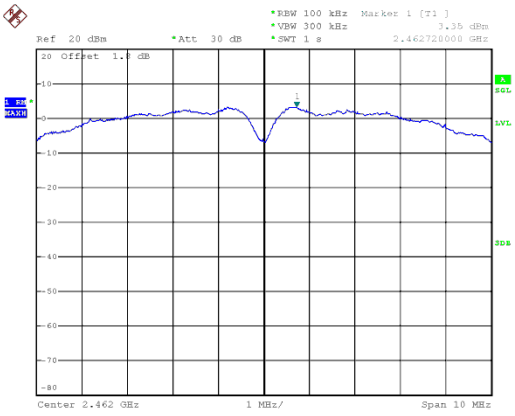
11N2.4G-20M – F2 [Port 3] – Power Level 1



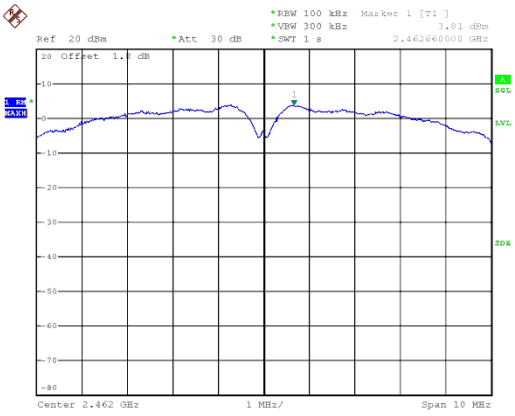
Date: 30.JUL.2012 20:42:54

Worst Power Spectral Density Plots w/o BWFC and 10logN_{TX}

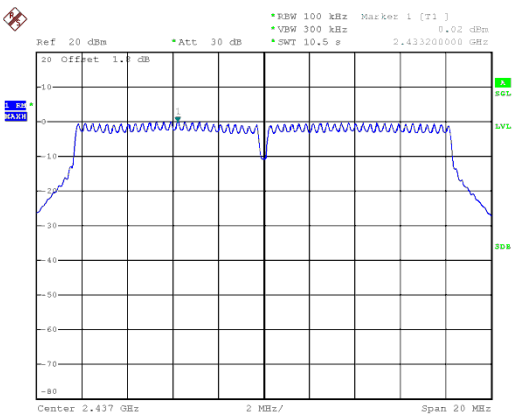
11B-20M – F3 [Port 2] – Power Level 2



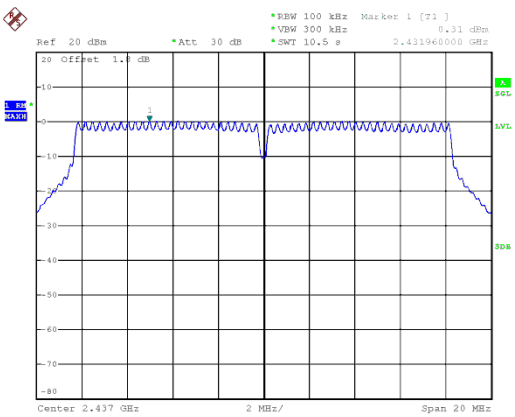
11B-20M – F3 [Port 3] – Power Level 2



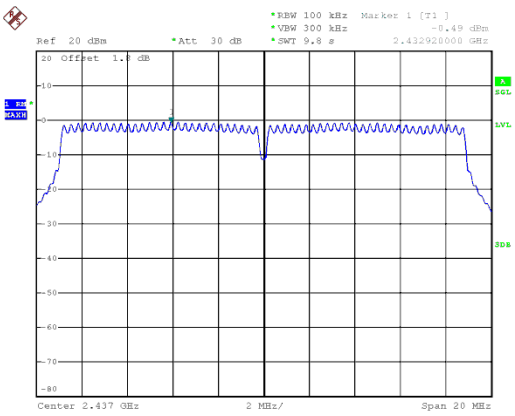
11G-20M – F2 [Port 2] – Power Level 2



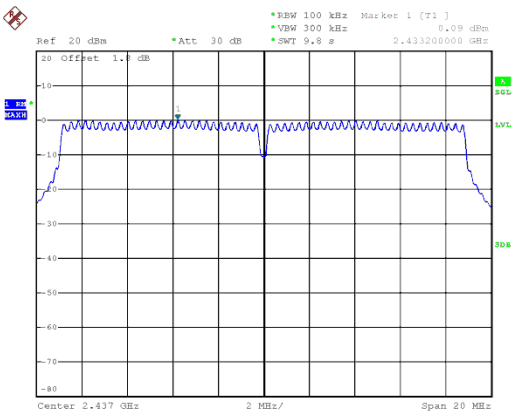
11G-20M – F2 [Port 3] – Power Level 2



11N2.4G-20M – F2 [Port 2] – Power Level 2

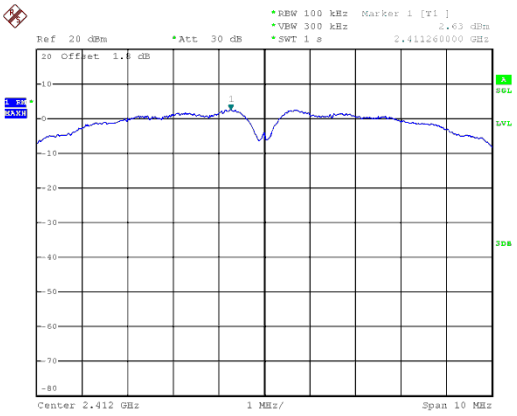


11N2.4G-20M – F2 [Port 3] – Power Level 2

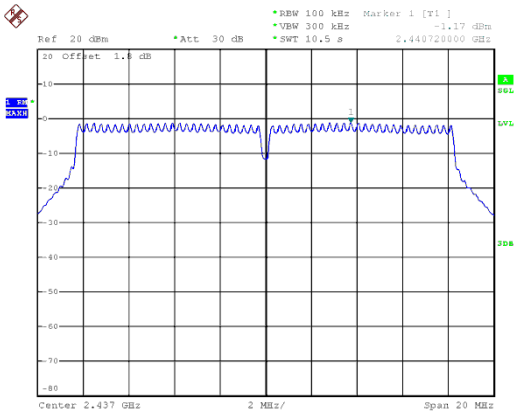


Worst Power Spectral Density Plots w/o BWFC and 10logN$_{TX}$

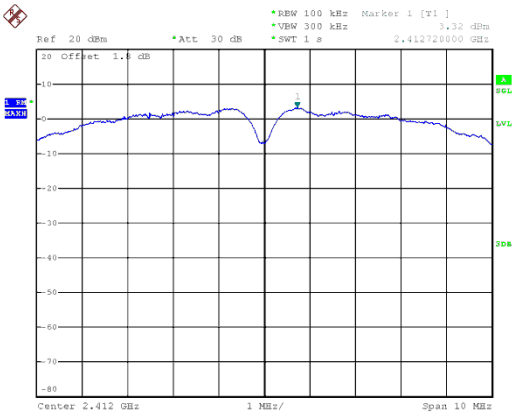
11B-20M – F1 [Port 1] – Power Level 3



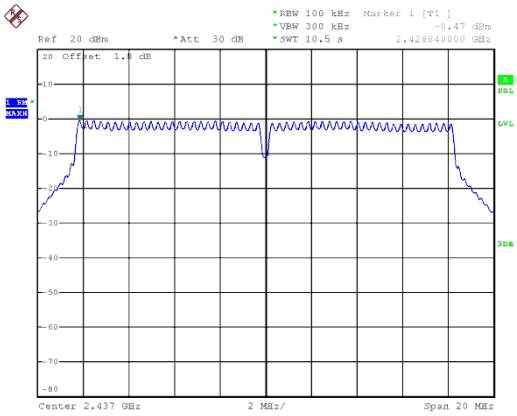
11G-20M – F2 [Port 1] – Power Level 3



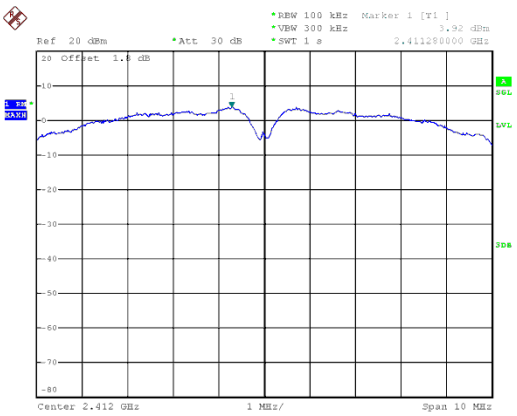
11B-20M – F1 [Port 2] – Power Level 3



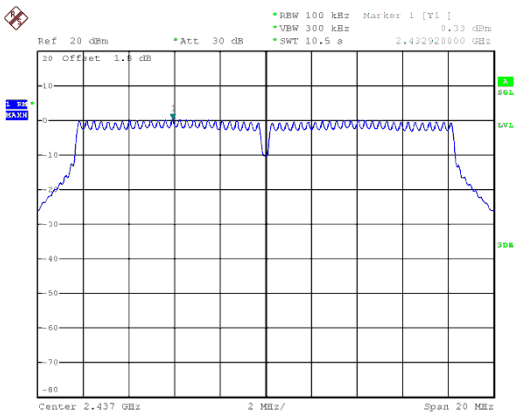
11G-20M – F2 [Port 2] – Power Level 3



11B-20M – F1 [Port 3] – Power Level 3

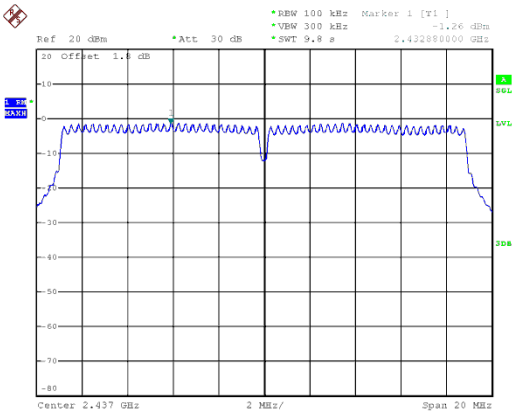


11G-20M – F2 [Port 3] – Power Level 3



Worst Power Spectral Density Plots w/o BWFC and 10logN_{TX}

11N2.4G-20M – F2 [Port 1] – Power Level 3



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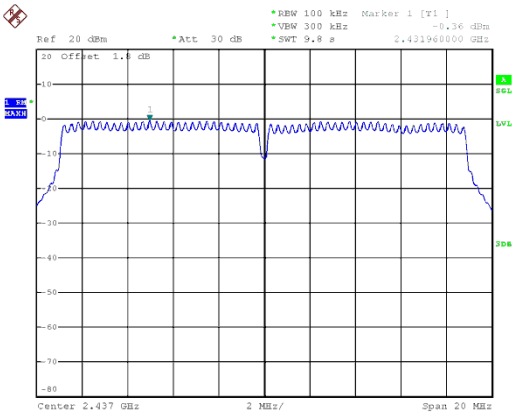
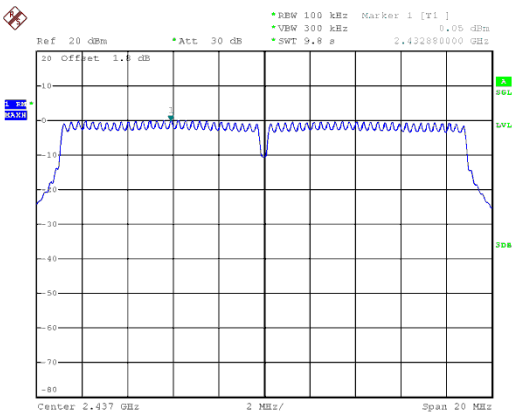
11N2.4G-20M – F2 [Port 2] – Power Level 3



Date: 30.JUL.2012 20:58:06

11N2.4G-20M – F2 [Port 3] – Power Level 3



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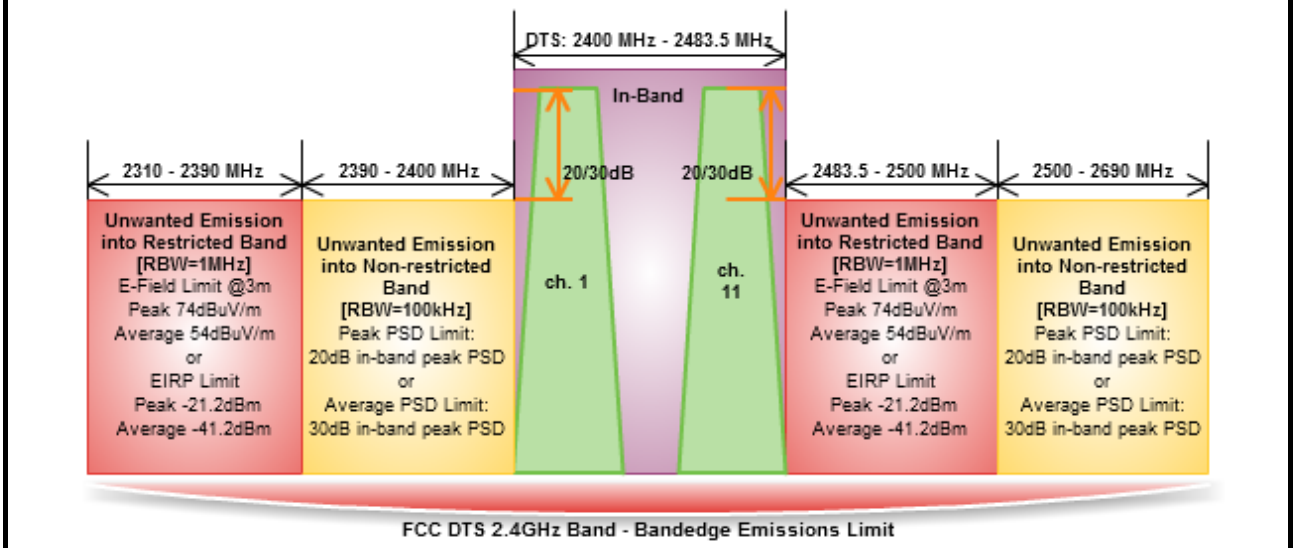
3.5 Transmitter Radiated Bandedge Emissions

3.5.1 Transmitter Radiated Bandedge Emissions Limit

Transmitter Radiated Bandedge Emissions Limit



3.5.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

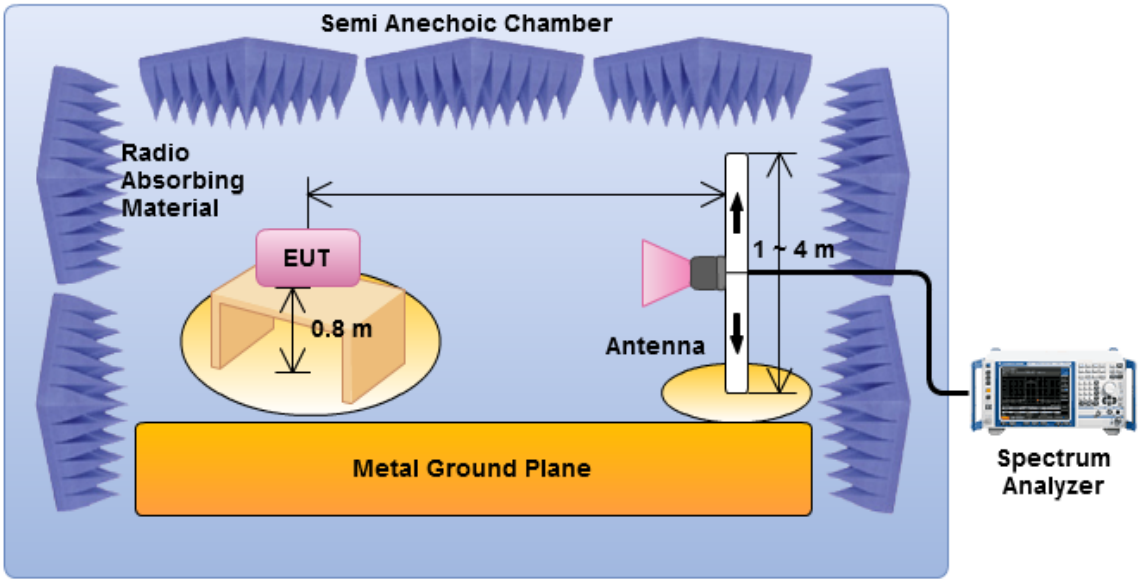
3.5.3 Test Procedures

Test Method – General Information		
☒	The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].	
☒	Refer as ANSI C63.10, clause 6.9.2.2 bandedge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.	
☒	For the transmitter unwanted emissions shall be measured using following options below:	
	☒	Refer as FCC KDB 558074, clause 5.4.1 for unwanted emissions into non-restricted bands.
	☒	Refer as FCC KDB 558074, clause 5.4.2 for unwanted emissions into restricted bands.
		☐ Refer as FCC KDB 558074, clause 5.4.2.2.2.1 Option 1 (Power Averaging).
		☐ Refer as FCC KDB 558074, clause 5.4.2.2.2.2 Option 2 (Trace Averaging).
		☒ Refer as ANSI C63.10, clause 4.2.3.2.3 (Reduced VBW). – Duty cycle ≥ 98%.
		☐ Refer as ANSI C63.10, clause 4.2.3.2.4 average value of pulsed emissions.
		☒ Refer as FCC KDB 558074, clause 5.4.2.2.3 measurement procedure peak limit.
		☐ Refer as ANSI C63.10, clause 4.2.3.2.2 measurement procedure peak limit.
☒	For the transmitter bandedge emissions shall be measured using following options below:	
	☒	Refer as ANSI C63.10, clause 6.9.2 for band-edge testing.
	☐	Refer as ANSI C63.10, clause 6.9.3 for marker-delta method for band-edge measurements.

Test Method
☐ Refer as FCC KDB 558074, clause 2 for conducted measurement.
☐ For unwanted emissions into non-restricted bands (relative emission limits).
☐ For conducted measurements on devices with multiple transmit chains: Refer as FCC KDB 662911, when testing out-of-band and spurious emissions against relative emission limits, tests may be performed on each output individually without summing or adding 10 log(N) if the measurements are made relative to the in-band emissions on the individual outputs.
☐ For unwanted emissions into restricted bands. Test conducted spurious emissions and radiated by the cabinet with the antenna connector(s) terminated by a specified load (cabinet radiation).
☐ Refer as FCC KDB 558074, clause 5.4.2.2.1 unwanted emissions in restricted bands on frequencies ≤ 1000 MHz
☐ Refer as FCC KDB 558074, clause 5.4.2.2.2 unwanted emissions in restricted bands on frequencies > 1000 MHz
☐ For conducted measurements on devices with multiple transmit chains using options given below:
☐ Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, out-of-band and spurious emission measurement. The trace data for each transmit chain has to be individually recorded and each transmit chain trace data shall be added and compared with the limit.
☐ Option 2: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.
☒ Refer as FCC KDB 558074, clause 2 for radiated measurement.
☒ Refer as ANSI C63.10, clause 6.5 for radiated emissions from above 1 GHz.

3.5.4 Test Setup

Transmitter Radiated Bandedge Emissions

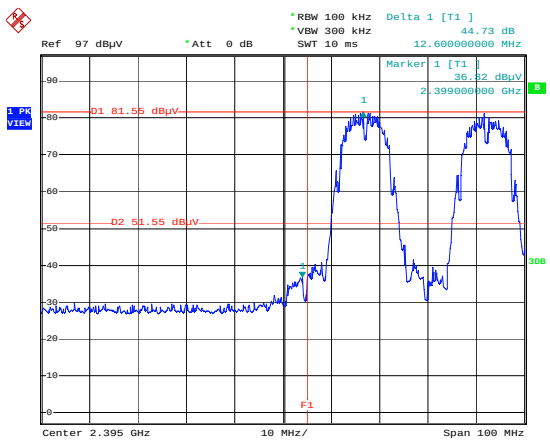


Electric field tests shall be performed in transmitter bandedge emissions using a calibrated horn antenna.

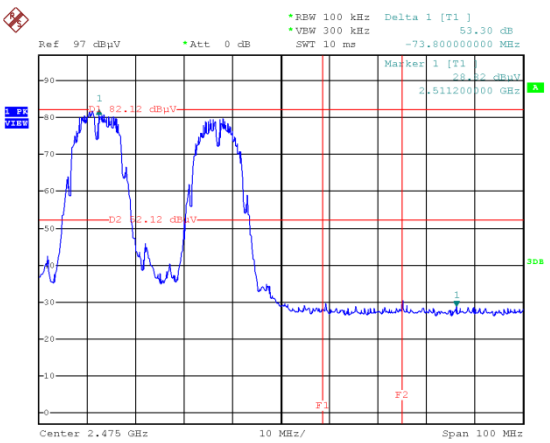
3.5.5 Test Result of Transmitter Radiated Bandedge Emissions

Transmitter Radiated Bandedge Emissions Result									
Power Level	1	**Ant. No.**	3	**Non-restricted Band Emissions**					
Modulation	11B-20M								
Non-restricted Band (MHz)	**N_{TX}**	**Test Ch. Freq. (MHz)**	**In-band PSD [i] (dBuV/100kHz)**	**NBE Freq. (MHz)**	**Out-band PSD [o] (dBuV/100kHz)**	**[i] – [o] (dB)**	**Limit (dB)**	**Level Type**	**Pol. note 1**
2390-2400	1	2412	81.55	2399.00	36.82	44.73	30	PK	H
2500-2690	1	2462	82.12	2511.20	28.82	53.30	30	PK	H

Low Band



Up Band



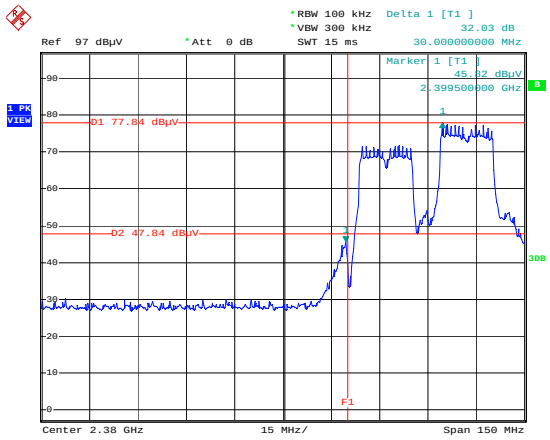
Note 1: Measurement worst emissions of receive antenna polarization: H (Horizontal) or V (Vertical)

Transmitter Radiated Bandedge Emissions Result									
Power Level	1	**Ant. No.**	3	**Restricted Band Emissions**					
Modulation	11B-20M								
Restricted Band (MHz)	**N_{TX}**	**Test Ch. Freq. (MHz)**	**In-band PSD [i] (dBuV/1MHz)**	**RBE Freq. (MHz)**	**Measure Distance (m)**	**Out-Band Level (dBuV/m)**	**Limit (dBuV/m)**	**Level Type**	**Pol. note 1**
2310-2390	1	2412	117.04	2390.00	3	63.89	74	PK	H
2310-2390	1	2412	113.26	2390.00	3	52.04	54	AV	H
2483.5-2500	1	2462	115.71	2483.82	3	62.59	74	PK	H
2483.5-2500	1	2462	111.92	2483.50	3	52.83	54	AV	H

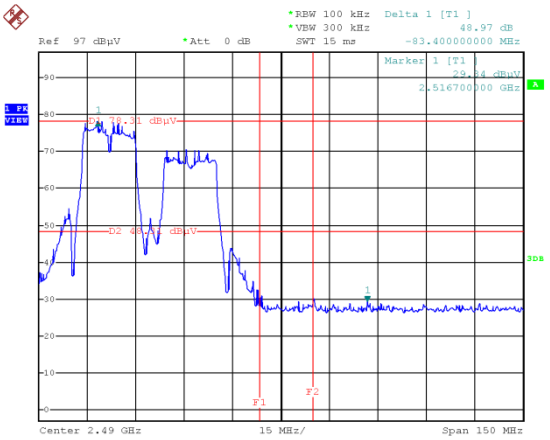
Note 1: Measurement worst emissions of receive antenna polarization: H (Horizontal) or V (Vertical).

Transmitter Radiated Bandedge Emissions Result									
Power Level	1	**Ant. No.**	3	**Non-restricted Band Emissions**					
Modulation	11G-20M								
Non-restricted Band (MHz)	**N_{TX}**	**Test Ch. Freq. (MHz)**	**In-band PSD [i] (dBuV/100kHz)**	**NBE Freq. (MHz)**	**Out-band PSD [o] (dBuV/100kHz)**	**[i] – [o] (dB)**	**Limit (dB)**	**Level Type**	**Pol. note 1**
2390-2400	1	2412	77.84	2399.50	45.82	32.03	30	PK	H
2500-2690	1	2462	78.31	2516.70	29.34	48.97	30	PK	H

Low Band



Up Band



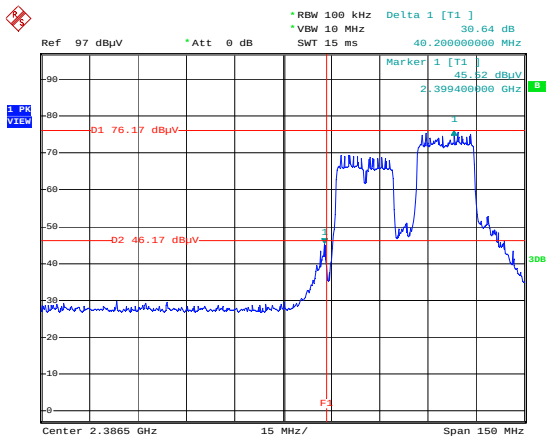
Note 1: Measurement worst emissions of receive antenna polarization: H (Horizontal) or V (Vertical)

Transmitter Radiated Bandedge Emissions Result									
Power Level	1	**Ant. No.**	3	**Restricted Band Emissions**					
Modulation	11G-20M								
Restricted Band (MHz)	**N_{TX}**	**Test Ch. Freq. (MHz)**	**In-band PSD [i] (dBuV/1MHz)**	**RBE Freq. (MHz)**	**Measure Distance (m)**	**Out-Band Level (dBuV/m)**	**Limit (dBuV/m)**	**Level Type**	**Pol. note 1**
2310-2390	1	2412	112.76	2388.08	3	66.47	74	PK	H
2310-2390	1	2412	100.96	2390.00	3	52.74	54	AV	H
2483.5-2500	1	2462	111.64	2483.82	3	67.24	74	PK	H
2483.5-2500	1	2462	100.48	2483.50	3	53.19	54	AV	H

Note 1: Measurement worst emissions of receive antenna polarization: H (Horizontal) or V (Vertical).

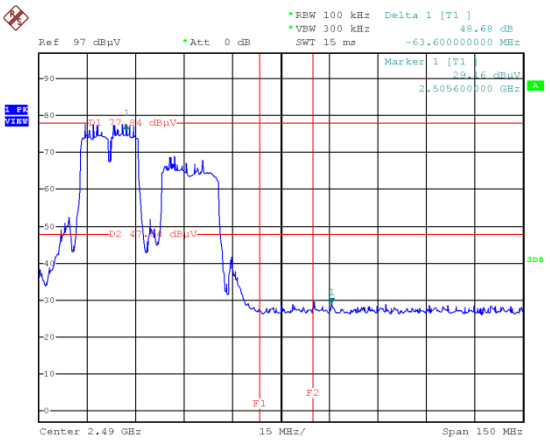
Transmitter Radiated Bandedge Emissions Result									
Power Level	1	**Ant. No.**	3	**Non-restricted Band Emissions**					
Modulation	11N2.4G-20M								
Non-restricted Band (MHz)	**N_{TX}**	**Test Ch. Freq. (MHz)**	**In-band PSD [i] (dBuV/100kHz)**	**NBE Freq. (MHz)**	**Out-band PSD [o] (dBuV/100kHz)**	**[i] – [o] (dB)**	**Limit (dB)**	**Level Type**	**Pol. note 1**
2390-2400	1	2412	76.17	2399.40	45.52	30.64	30	PK	H
2500-2690	1	2462	77.84	2505.60	29.16	48.68	30	PK	H

Low Band



Date: 6.JUL.2012 01:32:10

Up Band



Date: 10.JUL.2012 18:06:37

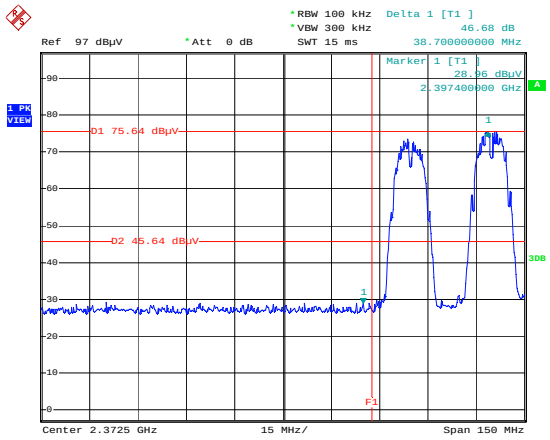
Note 1: Measurement worst emissions of receive antenna polarization: H (Horizontal) or V (Vertical)

Transmitter Radiated Bandedge Emissions Result									
Power Level	1	**Ant. No.**	3	**Restricted Band Emissions**					
Modulation	11N2.4G-20M								
Restricted Band (MHz)	**N_{TX}**	**Test Ch. Freq. (MHz)**	**In-band PSD [i] (dBuV/1MHz)**	**RBE Freq. (MHz)**	**Measure Distance (m)**	**Out-Band Level (dBuV/m)**	**Limit (dBuV/m)**	**Level Type**	**Pol. note 1**
2310-2390	1	2412	110.92	2390.00	3	69.19	74	PK	H
2310-2390	1	2412	99.80	2390.00	3	52.55	54	AV	H
2483.5-2500	1	2462	110.11	2484.14	3	67.67	74	PK	H
2483.5-2500	1	2462	99.03	2483.50	3	52.94	54	AV	H

Note 1: Measurement worst emissions of receive antenna polarization: H (Horizontal) or V (Vertical).

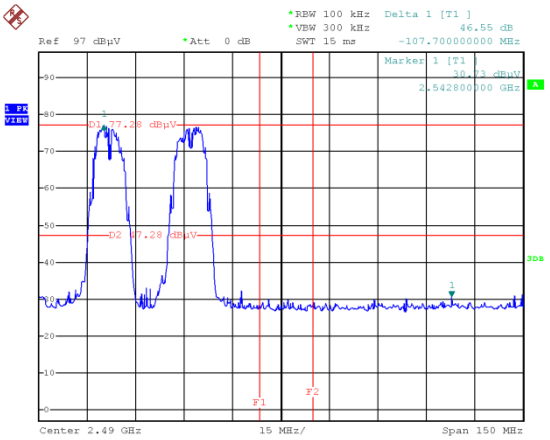
Transmitter Radiated Bandedge Emissions Result									
Power Level	2	**Ant. No.**	2,3	**Non-restricted Band Emissions**					
Modulation	11B-20M								
Non-restricted Band (MHz)	**N_{TX}**	**Test Ch. Freq. (MHz)**	**In-band PSD [i] (dBuV/100kHz)**	**NBE Freq. (MHz)**	**Out-band PSD [o] (dBuV/100kHz)**	**[i] – [o] (dB)**	**Limit (dB)**	**Level Type**	**Pol. note 1**
2390-2400	2	2412	75.64	2397.40	28.96	46.68	30	PK	H
2500-2690	2	2462	77.28	2542.80	30.73	46.55	30	PK	H

Low Band



Date: 6.JUL.2012 01:44:26

Up Band



Date: 10.JUL.2012 17:35:41

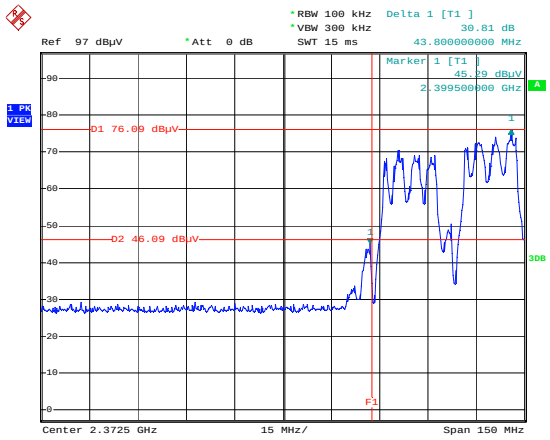
Note 1: Measurement worst emissions of receive antenna polarization: H (Horizontal) or V (Vertical)

Transmitter Radiated Bandedge Emissions Result									
Power Level	2	**Ant. No.**	2,3	**Restricted Band Emissions**					
Modulation	11B-20M								
Restricted Band (MHz)	**N_{TX}**	**Test Ch. Freq. (MHz)**	**In-band PSD [i] (dBuV/1MHz)**	**RBE Freq. (MHz)**	**Measure Distance (m)**	**Out-Band Level (dBuV/m)**	**Limit (dBuV/m)**	**Level Type**	**Pol. note 1**
2310-2390	2	2412	115.67	2390.00	3	61.67	74	PK	H
2310-2390	2	2412	111.79	2390.00	3	51.36	54	AV	H
2483.5-2500	2	2462	116.06	2483.50	3	58.95	74	PK	H
2483.5-2500	2	2462	112.30	2500.00	3	49.10	54	AV	H

Note 1: Measurement worst emissions of receive antenna polarization: H (Horizontal) or V (Vertical).

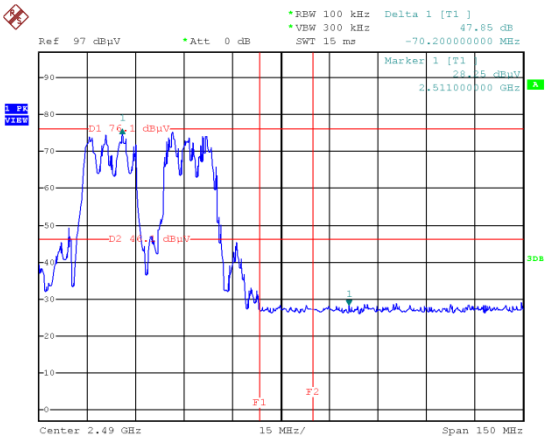
Transmitter Radiated Bandedge Emissions Result									
Power Level	2	**Ant. No.**	2,3	**Non-restricted Band Emissions**					
Modulation	11G-20M								
Non-restricted Band (MHz)	**N_{TX}**	**Test Ch. Freq. (MHz)**	**In-band PSD [i] (dBuV/100kHz)**	**NBE Freq. (MHz)**	**Out-band PSD [o] (dBuV/100kHz)**	**[i] – [o] (dB)**	**Limit (dB)**	**Level Type**	**Pol. note 1**
2390-2400	2	2412	76.09	2399.50	45.29	30.81	30	PK	H
2500-2690	2	2462	76.10	2511.00	28.25	47.85	30	PK	H

Low Band



Date: 6.JUL.2012 01:47:54

Up Band



Date: 10.JUL.2012 18:10:46

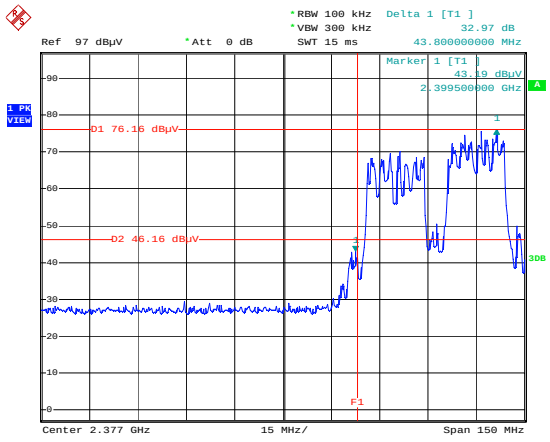
Note 1: Measurement worst emissions of receive antenna polarization: H (Horizontal) or V (Vertical)

Transmitter Radiated Bandedge Emissions Result									
Power Level	2	**Ant. No.**	2,3	**Restricted Band Emissions**					
Modulation	11G-20M								
Restricted Band (MHz)	**N_{TX}**	**Test Ch. Freq. (MHz)**	**In-band PSD [i] (dBuV/1MHz)**	**RBE Freq. (MHz)**	**Measure Distance (m)**	**Out-Band Level (dBuV/m)**	**Limit (dBuV/m)**	**Level Type**	**Pol. note 1**
2310-2390	2	2412	114.07	2389.84	3	66.49	74	PK	H
2310-2390	2	2412	103.40	2390.00	3	52.65	54	AV	H
2483.5-2500	2	2462	114.05	2484.30	3	69.86	74	PK	H
2483.5-2500	2	2462	103.54	2484.50	3	53.43	54	AV	H

Note 1: Measurement worst emissions of receive antenna polarization: H (Horizontal) or V (Vertical).

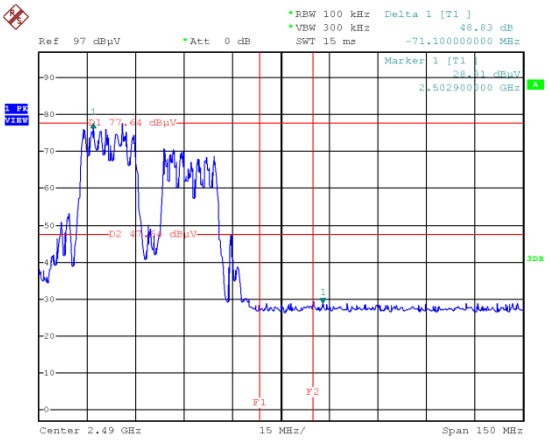
Transmitter Radiated Bandedge Emissions Result									
Power Level	2	**Ant. No.**	2,3	**Non-restricted Band Emissions**					
Modulation	11N2.4G-20M								
Non-restricted Band (MHz)	**N_{TX}**	**Test Ch. Freq. (MHz)**	**In-band PSD [i] (dBuV/100kHz)**	**NBE Freq. (MHz)**	**Out-band PSD [o] (dBuV/100kHz)**	**[i] – [o] (dB)**	**Limit (dB)**	**Level Type**	**Pol. note 1**
2390-2400	2	2412	76.16	2399.50	43.19	32.97	30	PK	H
2500-2690	2	2462	77.64	2502.90	28.81	48.83	30	PK	H

Low Band



Date: 6.JUL.2012 01:51:26

Up Band



Date: 10.JUL.2012 18:13:06

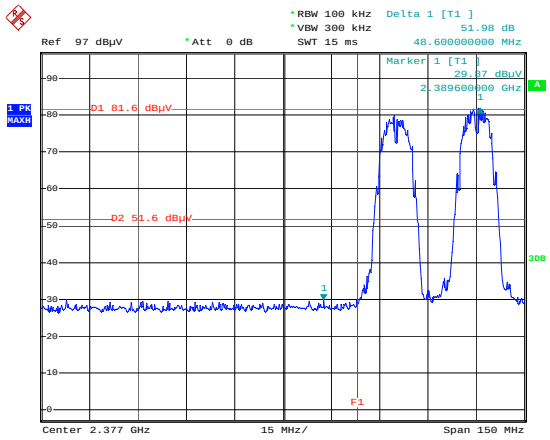
Note 1: Measurement worst emissions of receive antenna polarization: H (Horizontal) or V (Vertical)

Transmitter Radiated Bandedge Emissions Result									
Power Level	2	**Ant. No.**	2,3	**Restricted Band Emissions**					
Modulation	11N2.4G-20M								
Restricted Band (MHz)	**N_{TX}**	**Test Ch. Freq. (MHz)**	**In-band PSD [i] (dBuV/1MHz)**	**RBE Freq. (MHz)**	**Measure Distance (m)**	**Out-Band Level (dBuV/m)**	**Limit (dBuV/m)**	**Level Type**	**Pol. note 1**
2310-2390	2	2412	112.47	2390.00	3	66.08	74	PK	H
2310-2390	2	2412	101.58	2390.00	3	52.50	54	AV	H
2483.5-2500	2	2462	112.38	2485.58	3	68.72	74	PK	H
2483.5-2500	2	2462	101.51	2483.50	3	53.19	54	AV	H

Note 1: Measurement worst emissions of receive antenna polarization: H (Horizontal) or V (Vertical).

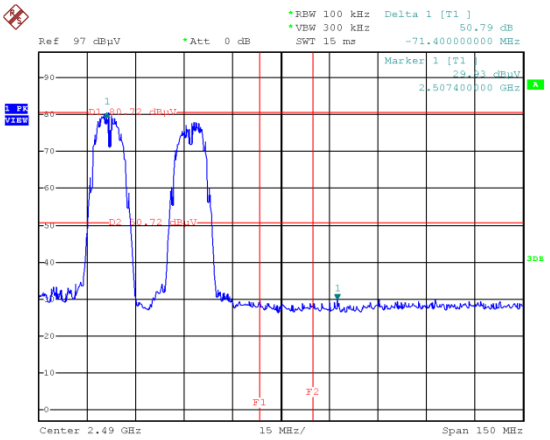
Transmitter Radiated Bandedge Emissions Result									
Power Level	3	**Ant. No.**	1,2,3	**Non-restricted Band Emissions**					
Modulation	11B-20M								
Non-restricted Band (MHz)	**N_{TX}**	**Test Ch. Freq. (MHz)**	**In-band PSD [i] (dBuV/100kHz)**	**NBE Freq. (MHz)**	**Out-band PSD [o] (dBuV/100kHz)**	**[i] – [o] (dB)**	**Limit (dB)**	**Level Type**	**Pol. note 1**
2390-2400	3	2412	81.60	2389.60	29.87	51.98	30	PK	H
2500-2690	3	2462	80.72	2507.40	29.93	50.79	30	PK	H

Low Band



Date: 6.JUL.2012 01:59:02

Up Band



Date: 10.JUL.2012 17:42:02

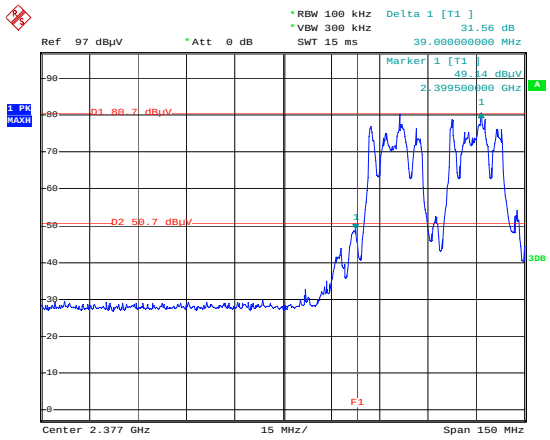
Note 1: Measurement worst emissions of receive antenna polarization: H (Horizontal) or V (Vertical)

Transmitter Radiated Bandedge Emissions Result									
Power Level	3	**Ant. No.**	1,2,3	**Restricted Band Emissions**					
Modulation	11B-20M								
Restricted Band (MHz)	**N_{TX}**	**Test Ch. Freq. (MHz)**	**In-band PSD [i] (dBuV/1MHz)**	**RBE Freq. (MHz)**	**Measure Distance (m)**	**Out-Band Level (dBuV/m)**	**Limit (dBuV/m)**	**Level Type**	**Pol. note 1**
2310-2390	3	2412	118.23	2390.00	3	62.31	74	PK	H
2310-2390	3	2412	114.50	2390.00	3	53.14	54	AV	H
2483.5-2500	3	2462	120.05	2483.82	3	63.69	74	PK	H
2483.5-2500	3	2462	116.27	2483.50	3	53.37	54	AV	H

Note 1: Measurement worst emissions of receive antenna polarization: H (Horizontal) or V (Vertical).

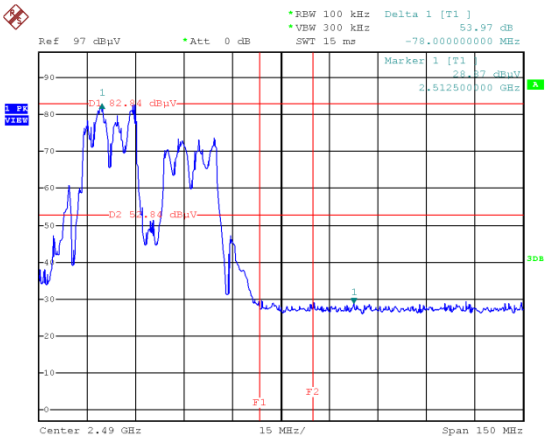
Transmitter Radiated Bandedge Emissions Result									
Power Level	3	**Ant. No.**	1,2,3	**Non-restricted Band Emissions**					
Modulation	11G-20M								
Non-restricted Band (MHz)	**N_{TX}**	**Test Ch. Freq. (MHz)**	**In-band PSD [i] (dBuV/100kHz)**	**NBE Freq. (MHz)**	**Out-band PSD [o] (dBuV/100kHz)**	**[i] – [o] (dB)**	**Limit (dB)**	**Level Type**	**Pol. note 1**
2390-2400	1	2412	80.70	2399.50	49.14	31.56	30	PK	H
2500-2690	1	2462	82.84	2512.50	28.87	53.97	30	PK	H

Low Band



Date: 6.JUL.2012 02:02:20

Up Band



Date: 10.JUL.2012 18:18:57

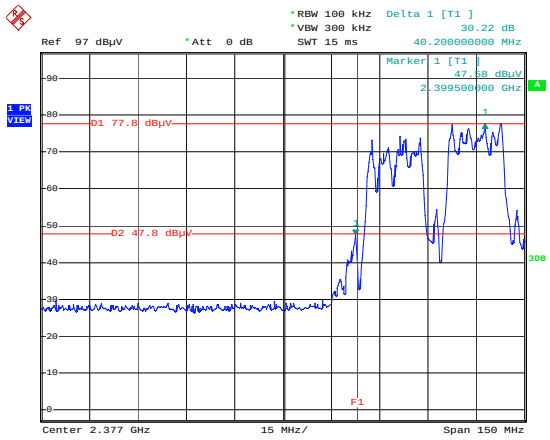
Note 1: Measurement worst emissions of receive antenna polarization: H (Horizontal) or V (Vertical)

Transmitter Radiated Bandedge Emissions Result									
Power Level	3	**Ant. No.**	1,2,3	**Restricted Band Emissions**					
Modulation	11G-20M								
Restricted Band (MHz)	**N_{TX}**	**Test Ch. Freq. (MHz)**	**In-band PSD [i] (dBuV/1MHz)**	**RBE Freq. (MHz)**	**Measure Distance (m)**	**Out-Band Level (dBuV/m)**	**Limit (dBuV/m)**	**Level Type**	**Pol. note 1**
2310-2390	3	2412	114.42	2388.24	3	68.79	74	PK	H
2310-2390	3	2412	104.20	2390.00	3	52.56	54	AV	H
2483.5-2500	3	2462	116.02	2488.47	3	64.90	74	PK	H
2483.5-2500	3	2462	105.33	2483.50	3	52.75	54	AV	H

Note 1: Measurement worst emissions of receive antenna polarization: H (Horizontal) or V (Vertical).

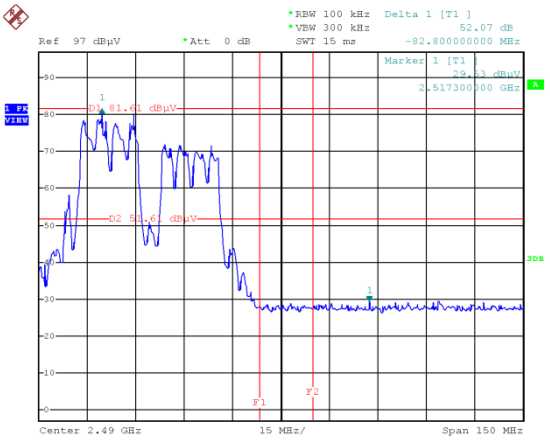
Transmitter Radiated Bandedge Emissions Result									
Power Level	3	**Ant. No.**	1,2,3	**Non-restricted Band Emissions**					
Modulation	11N2.4G-20M								
Non-restricted Band (MHz)	**N_{TX}**	**Test Ch. Freq. (MHz)**	**In-band PSD [i] (dBuV/100kHz)**	**NBE Freq. (MHz)**	**Out-band PSD [o] (dBuV/100kHz)**	**[i] – [o] (dB)**	**Limit (dB)**	**Level Type**	**Pol. note 1**
2390-2400	3	2412	77.80	2399.50	47.58	30.22	30	PK	H
2500-2690	3	2462	81.61	2517.30	29.63	52.07	30	PK	H

Low Band



Date: 6.JUL.2012 02:07:43

Up Band



Date: 10.JUL.2012 18:21:00

Note 1: Measurement worst emissions of receive antenna polarization: H (Horizontal) or V (Vertical)

Transmitter Radiated Bandedge Emissions Result									
Power Level	3	**Ant. No.**	1,2,3	**Restricted Band Emissions**					
Modulation	11N2.4G-20M								
Restricted Band (MHz)	**N_{TX}**	**Test Ch. Freq. (MHz)**	**In-band PSD [i] (dBuV/1MHz)**	**RBE Freq. (MHz)**	**Measure Distance (m)**	**Out-Band Level (dBuV/m)**	**Limit (dBuV/m)**	**Level Type**	**Pol. note 1**
2310-2390	3	2412	113.25	2389.04	3	66.95	74	PK	H
2310-2390	3	2412	102.87	2388.56	3	52.71	54	AV	H
2483.5-2500	3	2462	112.47	2483.66	3	67.54	74	PK	H
2483.5-2500	3	2462	101.48	2483.50	3	53.16	54	AV	H

Note 1: Measurement worst emissions of receive antenna polarization: H (Horizontal) or V (Vertical).

3.5.6 Transmitter Radiated Unwanted Emissions

3.5.7 Transmitter Radiated Unwanted Emissions Limit

Restricted Band Emissions Limit			
Frequency Range (MHz)	**Field Strength (uV/m)**	**Field Strength (dBuV/m)**	**Measure Distance (m)**
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

Un-restricted Band Emissions Limit	
RF output power procedure	**Limit (dB)**
Peak output power procedure	20
Average output power procedure	30

Note 1: If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak PSD level.

Note 2: If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average PSD level.

3.5.8 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

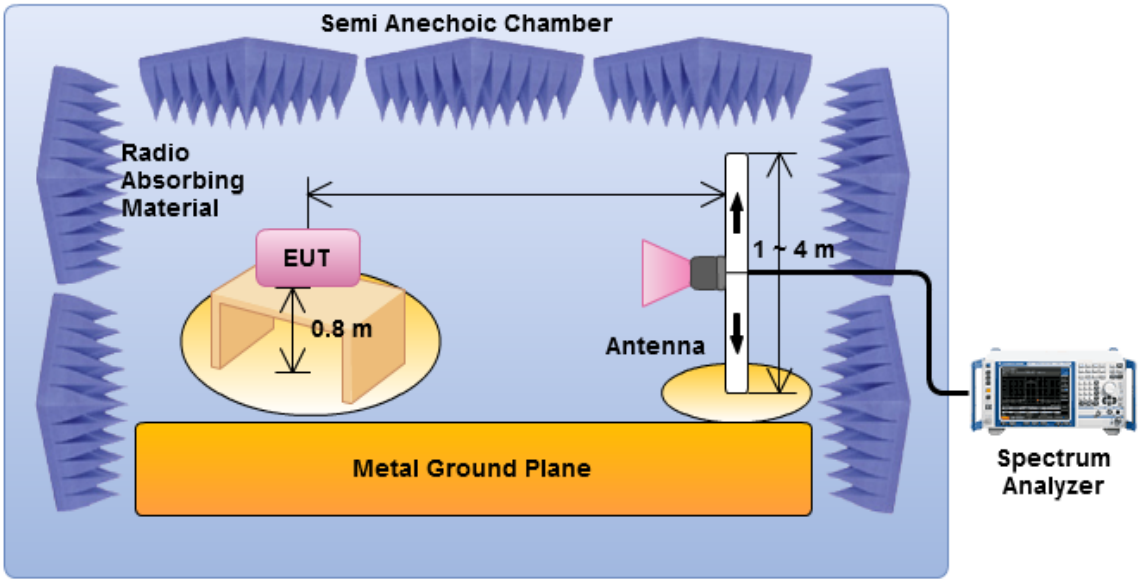
3.5.9 Test Procedures

Test Method – General Information			
☒	Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).		
	☒	Measurements in the frequency range 10 GHz - 18GHz are typically made at a closer distance 1m, because the instrumentation noise floor is typically close to the radiated emission limit.	
	☒	Measurements in the frequency range above 18 GHz - 25GHz are typically made at a closer distance 0.5m, because the instrumentation noise floor is typically close to the radiated emission limit.	
☒	The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].		
☒	For the transmitter unwanted emissions shall be measured using following options below:		
	☒	Refer as FCC KDB 558074, clause 5.4.1 for unwanted emissions into non-restricted bands.	
	☒	Refer as FCC KDB 558074, clause 5.4.2 for unwanted emissions into restricted bands.	
		☐	Refer as FCC KDB 558074, clause 5.4.2.2.2.1 Option 1 (Power Averaging).
		☐	Refer as FCC KDB 558074, clause 5.4.2.2.2.2 Option 2 (Trace Averaging).
		☒	Refer as ANSI C63.10, clause 4.2.3.2.3 (Reduced VBW) – Duty cycle ≥ 98%.
		☐	Refer as ANSI C63.10, clause 4.2.3.2.4 average value of pulsed emissions.
		☒	Refer as FCC KDB 558074, clause 5.4.2.2.3 measurement procedure peak limit.
		☐	Refer as ANSI C63.10, clause 4.2.3.2.2 measurement procedure peak limit.

Test Method				
☐ Refer as FCC KDB 558074, clause 2 for conducted measurement.				
	☐ For unwanted emissions into non-restricted bands (relative emission limits).			
		☐ For conducted measurements on devices with multiple transmit chains: Refer as FCC KDB 662911, when testing out-of-band and spurious emissions against relative emission limits, tests may be performed on each output individually without summing or adding 10 log(N) if the measurements are made relative to the in-band emissions on the individual outputs.		
	☐ For unwanted emissions into restricted bands. Test conducted spurious emissions and radiated by the cabinet with the antenna connector(s) terminated by a specified load (cabinet radiation).			
		☐ Refer as FCC KDB 558074, clause 5.4.2.2.1 unwanted emissions in restricted bands on frequencies ≤ 1000 MHz		
		☐ Refer as FCC KDB 558074, clause 5.4.2.2.2 unwanted emissions in restricted bands on frequencies > 1000 MHz		
		☐ For conducted measurements on devices with multiple transmit chains using options given below:		
			☐ Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, out-of-band and spurious emission measurement. The trace data for each transmit chain has to be individually recorded and each transmit chain trace data shall be added and compared with the limit.	
			☐ Option 2: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.	
☒ For radiated measurement.				
	☒ Refer as ANSI C63.10, clause 6.4 for radiated emissions from below 30 MHz.			
	☒ Refer as ANSI C63.10, clause 6.5 for radiated emissions from 30 MHz to 1000 MHz.			
	☒ Refer as ANSI C63.10, clause 6.5 for radiated emissions from above 1 GHz.			

3.5.10 Test Setup

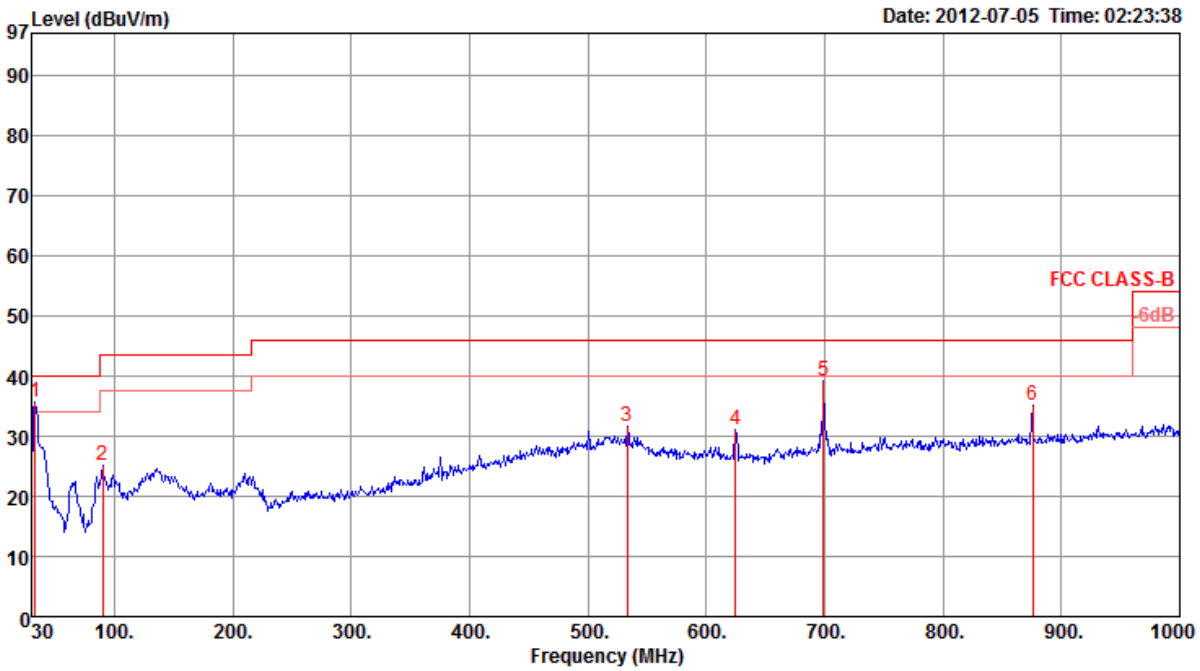
Transmitter Radiated Unwanted Emissions



Magnetic field tests shall be performed in the frequency range of 9 kHz to 30 MHz using a calibrated loop antenna. Electric field tests shall be performed in the frequency range of 30 MHz to 1000 MHz using a calibrated bi-log antenna and the frequency range of 1 GHz to 40 GHz using a calibrated horn antenna.

3.5.11 Test Result of Transmitter Radiated Unwanted Emissions (Below 1GHz)

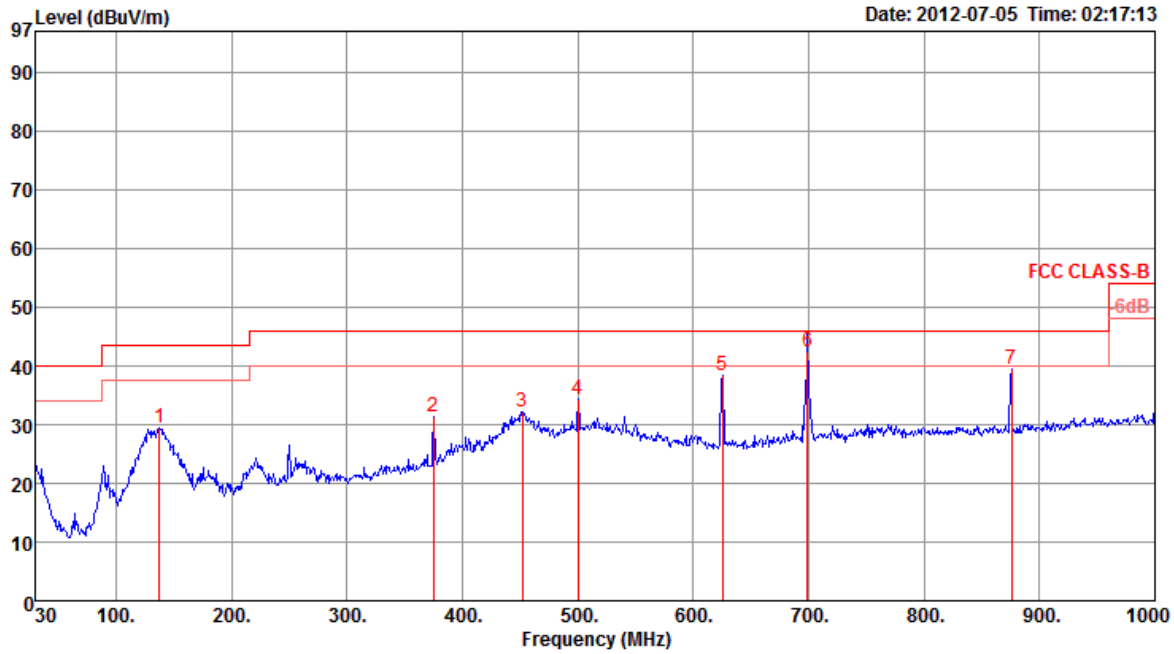
Transmitter Radiated Unwanted Emissions (Below 1GHz)					
Modulation Mode	11N2.4G-20M	**Power Level**	3	**Test Freq. (FX)**	F2
Operating Mode	1	**Ant. No.**	1,2,3	**Polarization**	V
Operating Function	Normal Link				



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	Remark	Pol/Phase	A/Pos	T/Pos
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m			cm	deg
1 p	32.91	35.75	40.00	-4.25	44.76	0.88	27.99	18.10	Peak	VERTICAL	100	0
2	90.14	25.07	43.50	-18.43	42.23	1.41	27.87	9.30	Peak	VERTICAL	100	0
3	533.43	31.53	46.00	-14.47	37.47	3.49	27.90	18.47	Peak	VERTICAL	100	0
4	624.61	30.95	46.00	-15.05	35.27	3.81	27.58	19.45	Peak	VERTICAL	100	0
5	699.30	39.14	46.00	-6.86	42.08	4.16	27.09	19.99	Peak	VERTICAL	100	0
6	875.84	35.16	46.00	-10.84	36.15	4.51	26.86	21.36	Peak	VERTICAL	100	0

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Transmitter Radiated Unwanted Emissions (Below 1GHz)					
Modulation Mode	2.4G-20M	**Power Level**	3	**Test Freq. (FX)**	F2
Operating Mode	1	**Ant. No.**	1,2,3	**Polarization**	H
Operating Function	Normal Link				

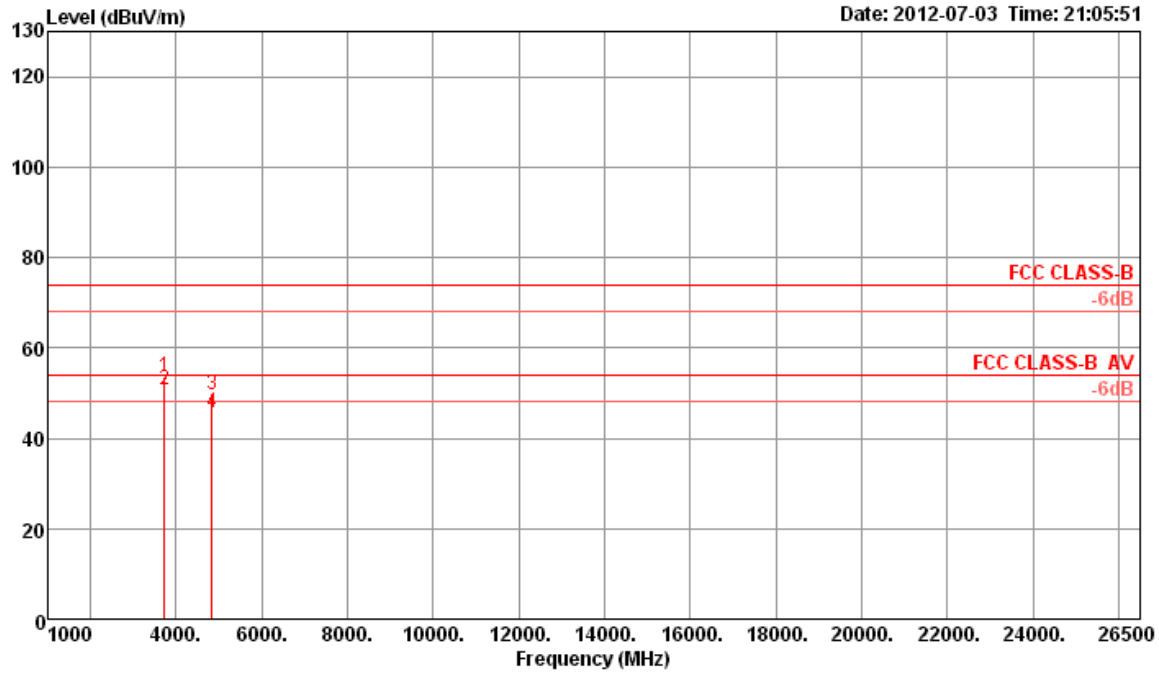


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	Remark	Pol/Phase	A/Pos	T/Pos
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m			cm	deg
1	137.67	29.59	43.50	-13.91	43.22	1.70	27.57	12.24	Peak	HORIZONTAL	400	0
2	375.32	31.30	46.00	-14.70	39.76	2.89	27.26	15.91	Peak	HORIZONTAL	400	0
3	451.95	32.28	46.00	-13.72	39.80	3.25	27.80	17.03	Peak	HORIZONTAL	400	0
4	500.45	34.30	46.00	-11.70	41.05	3.38	27.93	17.80	Peak	HORIZONTAL	400	0
5	625.58	38.49	46.00	-7.51	42.80	3.82	27.58	19.45	Peak	HORIZONTAL	400	0
6 q	699.30	42.38	46.00	-3.62	45.32	4.16	27.09	19.99	QP	HORIZONTAL	128	46
7 p	875.84	39.43	46.00	-6.57	40.42	4.51	26.86	21.36	Peak	HORIZONTAL	400	0

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

3.5.12 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 11B-20M

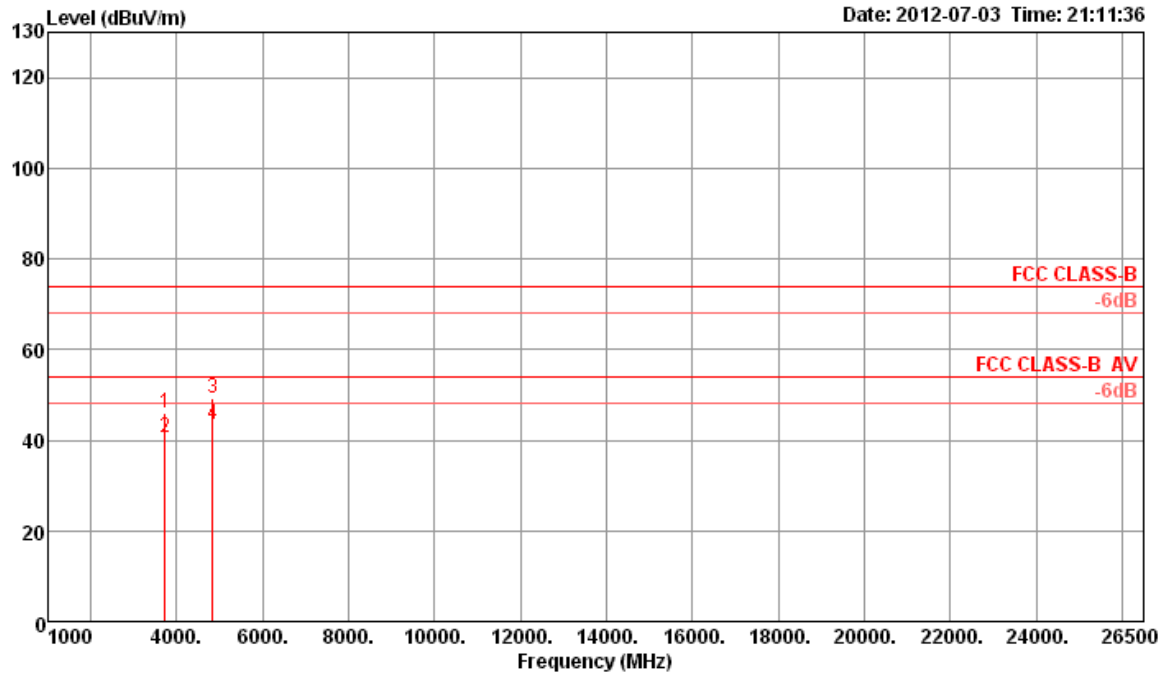
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11B-20M	**Power Level**	1	**Test Freq. (FX)**	F1
Operating Function	Transmit	**Ant. No.**	3	**Polarization**	V



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3732.67	53.45	74.00	-20.55	54.63	2.82	31.21	35.21	Peak	117	71	VERTICAL
2	3732.77	50.71	54.00	-3.29	51.89	2.82	31.21	35.21	Average	117	71	VERTICAL
3	4823.86	49.55	74.00	-24.45	48.21	3.31	33.06	35.03	Peak	134	260	VERTICAL
4	4823.96	45.57	54.00	-8.43	44.23	3.31	33.06	35.03	Average	134	260	VERTICAL

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

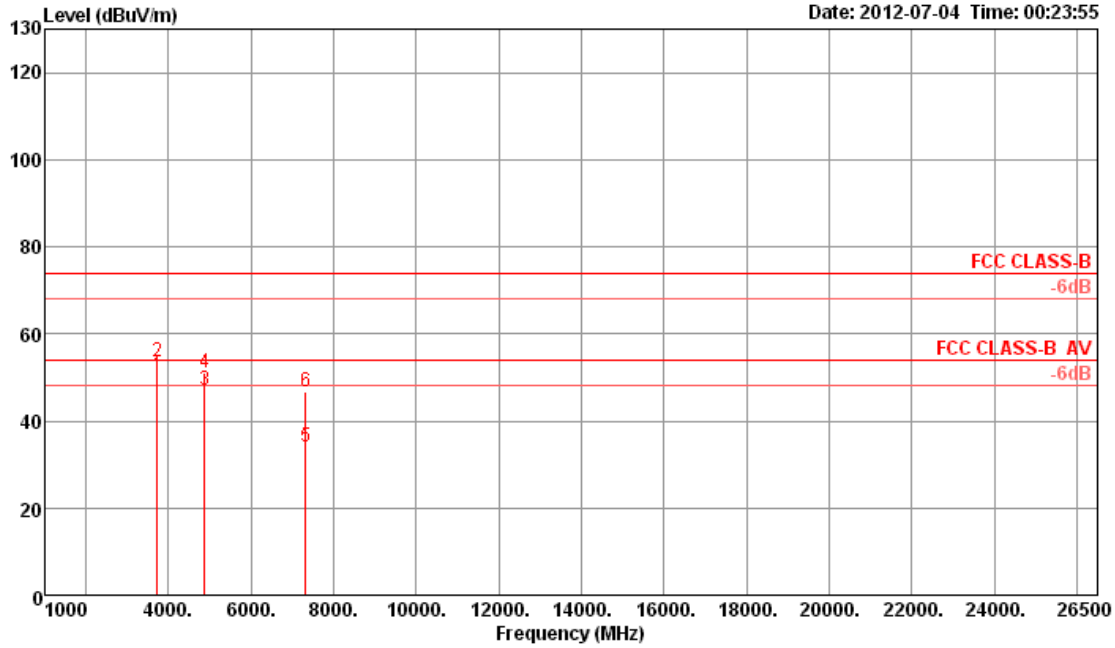
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11B-20M	**Power Level**	1	**Test Freq. (FX)**	F1
Operating Function	Transmit	**Ant. No.**	3	**Polarization**	H



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3732.67	45.95	74.00	-28.05	47.13	2.82	31.21	35.21	Peak	148	34	HORIZONTAL
2	3732.74	40.44	54.00	-13.56	41.62	2.82	31.21	35.21	Average	148	34	HORIZONTAL
3	4823.81	49.42	74.00	-24.58	48.08	3.31	33.06	35.03	Peak	100	72	HORIZONTAL
4	4823.96	43.36	54.00	-10.64	42.02	3.31	33.06	35.03	Average	100	72	HORIZONTAL

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

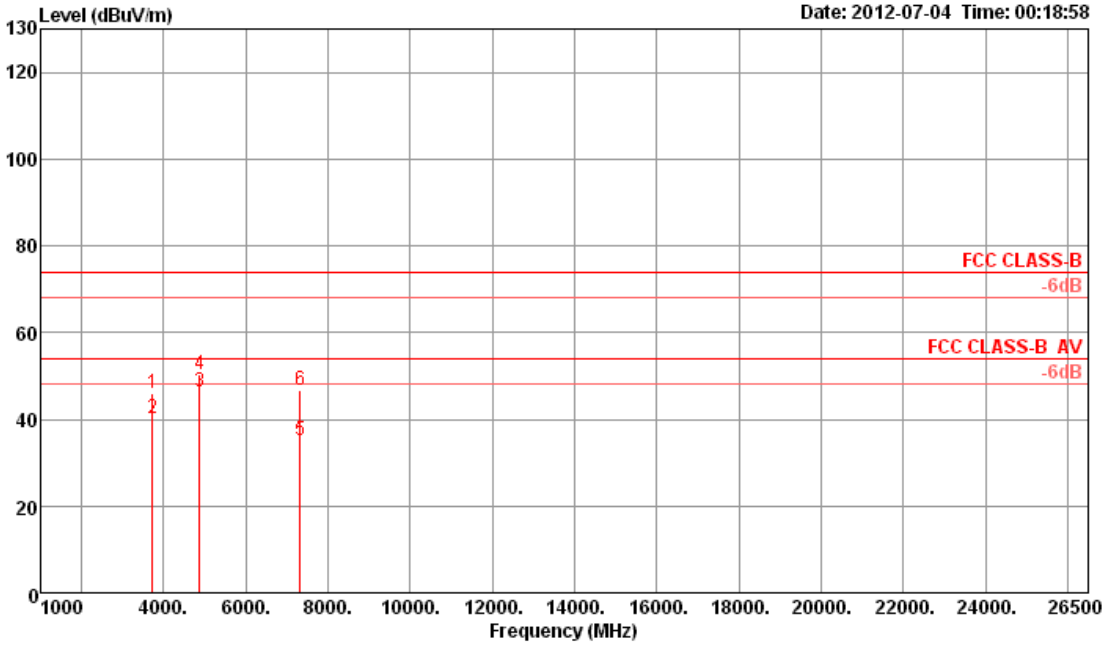
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11B-20M	**Power Level**	1	**Test Freq. (FX)**	F2
Operating Function	Transmit	**Ant. No.**	3	**Polarization**	V



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3732.75	50.30	54.00	-3.70	51.48	2.82	31.21	35.21	Average	113	65	VERTICAL
2	3732.86	53.53	74.00	-20.47	54.71	2.82	31.21	35.21	Peak	113	65	VERTICAL
3	4873.97	47.22	54.00	-6.78	45.76	3.33	33.16	35.03	Average	100	251	VERTICAL
4	4874.03	51.19	74.00	-22.81	49.73	3.33	33.16	35.03	Peak	100	251	VERTICAL
5	7310.15	34.15	54.00	-19.85	29.53	4.06	35.96	35.40	Average	100	256	VERTICAL
6	7311.75	46.66	74.00	-27.34	42.04	4.06	35.96	35.40	Peak	100	256	VERTICAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

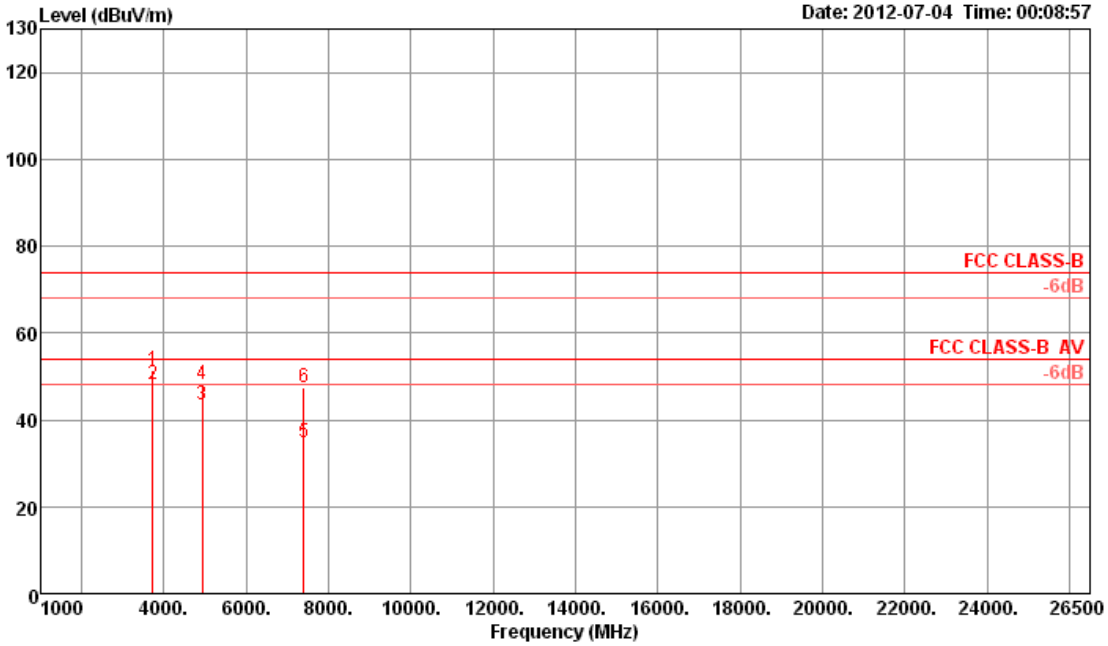
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11B-20M	**Power Level**	1	**Test Freq. (FX)**	F2
Operating Function	Transmit	**Ant. No.**	3	**Polarization**	H



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3732.60	46.08	74.00	-27.92	47.26	2.82	31.21	35.21	Peak	148	40	HORIZONTAL
2	3732.73	40.22	54.00	-13.78	41.40	2.82	31.21	35.21	Average	148	40	HORIZONTAL
3	4873.96	46.28	54.00	-7.72	44.82	3.33	33.16	35.03	Average	108	259	HORIZONTAL
4	4874.01	50.19	74.00	-23.81	48.73	3.33	33.16	35.03	Peak	108	259	HORIZONTAL
5	7311.60	35.05	54.00	-18.95	30.43	4.06	35.96	35.40	Average	100	241	HORIZONTAL
6	7312.39	46.54	74.00	-27.46	41.92	4.06	35.96	35.40	Peak	100	241	HORIZONTAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

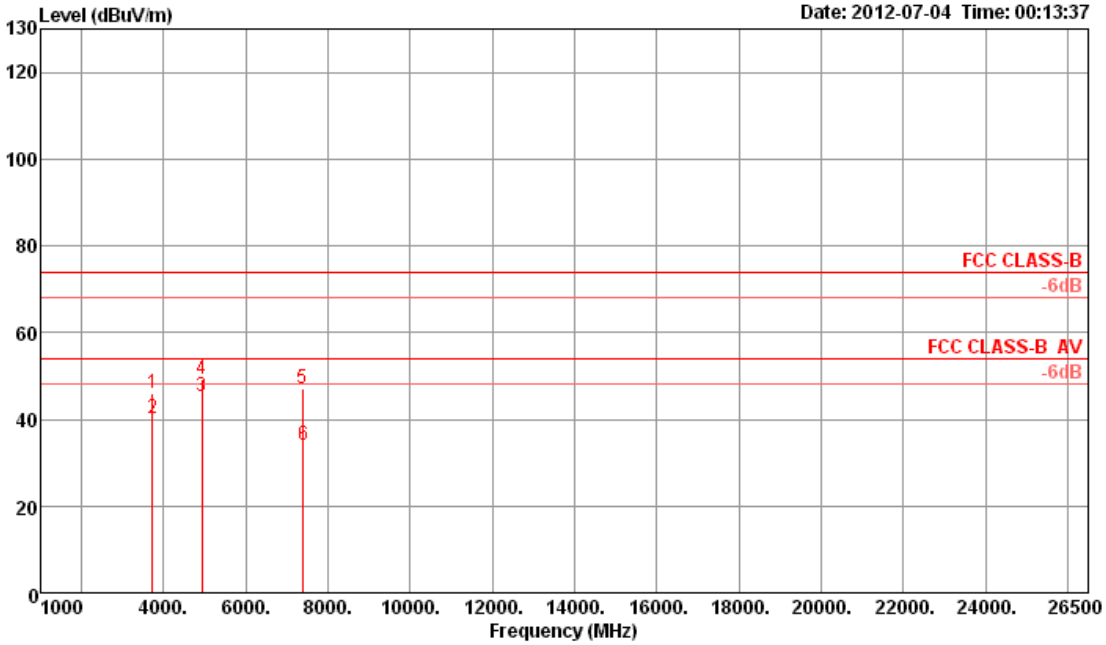
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11B-20M	**Power Level**	1	**Test Freq. (FX)**	F3
Operating Function	Transmit	**Ant. No.**	3	**Polarization**	V



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3732.64	51.27	74.00	-22.73	52.45	2.82	31.21	35.21	Peak	100	61	VERTICAL
2	3732.73	48.07	54.00	-5.93	49.25	2.82	31.21	35.21	Average	100	61	VERTICAL
3	4923.96	43.48	54.00	-10.52	41.88	3.35	33.26	35.01	Average	100	251	VERTICAL
4	4923.98	48.15	74.00	-25.85	46.55	3.35	33.26	35.01	Peak	100	251	VERTICAL
5	7385.19	34.79	54.00	-19.21	30.04	4.06	36.09	35.40	Average	142	256	VERTICAL
6	7387.11	47.47	74.00	-26.53	42.72	4.06	36.09	35.40	Peak	142	256	VERTICAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

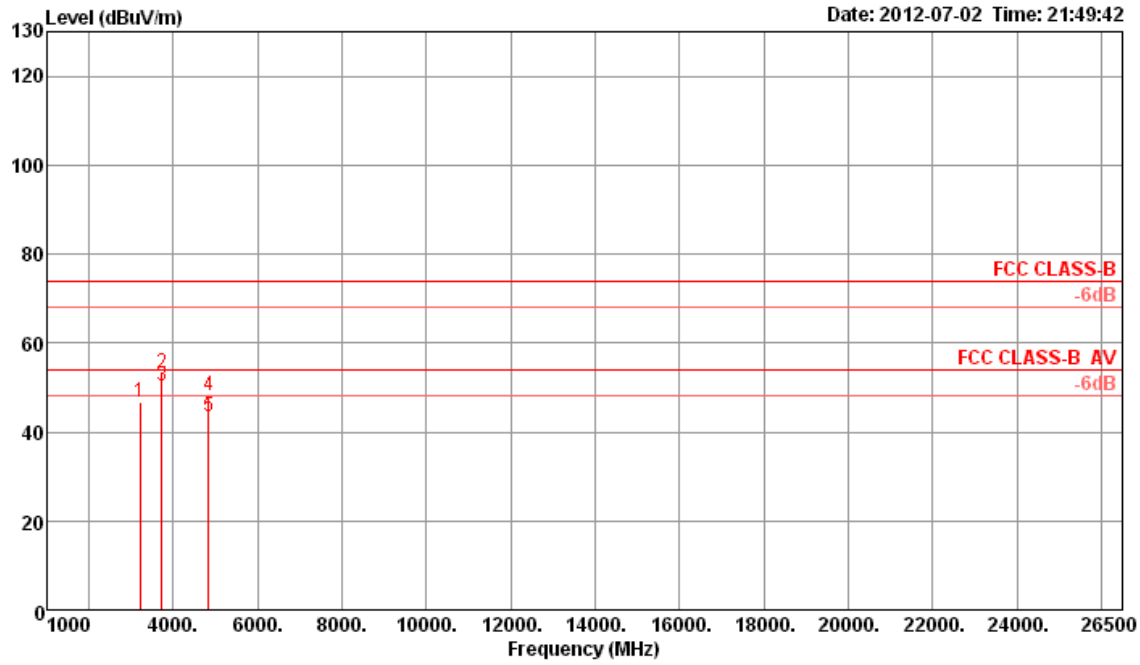
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11B-20M	**Power Level**	1	**Test Freq. (FX)**	F3
Operating Function	Transmit	**Ant. No.**	3	**Polarization**	H



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3732.74	45.92	74.00	-28.08	47.10	2.82	31.21	35.21	Peak	147	40	HORIZONTAL
2	3732.75	40.17	54.00	-13.83	41.35	2.82	31.21	35.21	Average	147	40	HORIZONTAL
3	4923.96	45.43	54.00	-8.57	43.83	3.35	33.26	35.01	Average	101	258	HORIZONTAL
4	4924.01	49.36	74.00	-24.64	47.76	3.35	33.26	35.01	Peak	101	258	HORIZONTAL
5	7384.46	47.02	74.00	-26.98	42.27	4.06	36.09	35.40	Peak	100	247	HORIZONTAL
6	7385.14	34.11	54.00	-19.89	29.36	4.06	36.09	35.40	Average	100	247	HORIZONTAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

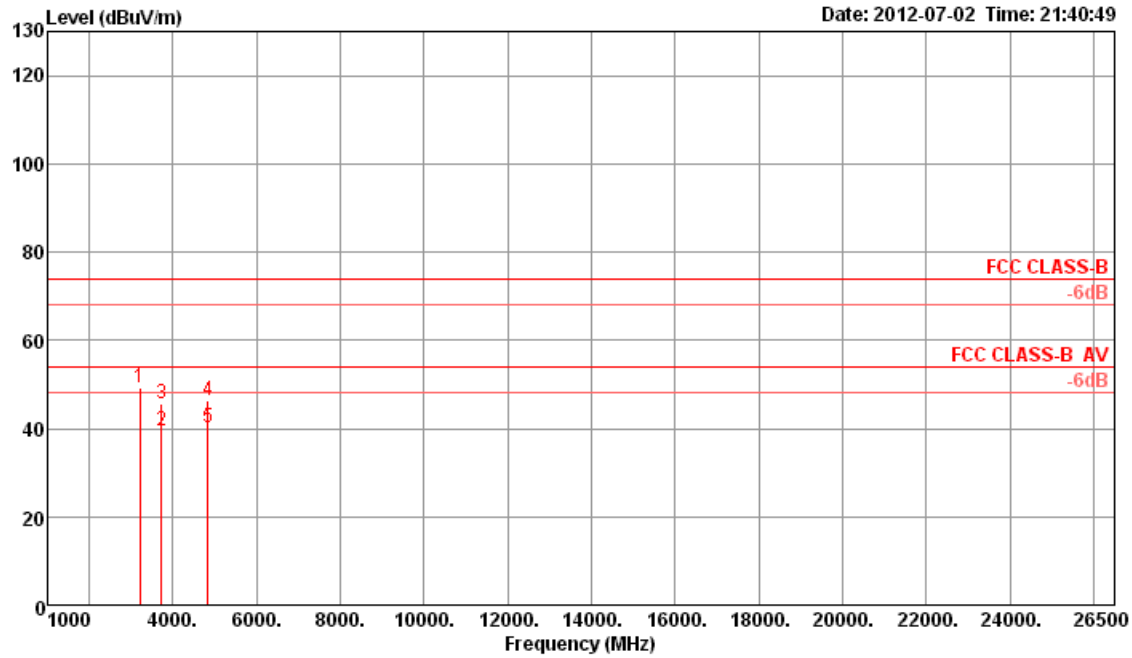
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11B-20M	**Power Level**	2	**Test Freq. (FX)**	F1
Operating Function	Transmit	**Ant. No.**	2,3	**Polarization**	V



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3216.04	46.79	74.00	-27.21	49.49	2.65	30.00	35.35	Peak	102	360	VERTICAL
2	3732.68	53.14	74.00	-20.86	54.32	2.82	31.21	35.21	Peak	117	66	VERTICAL
3	3732.72	50.29	54.00	-3.71	51.47	2.82	31.21	35.21	Average	117	66	VERTICAL
4	4823.82	48.03	74.00	-25.97	46.69	3.31	33.06	35.03	Peak	132	272	VERTICAL
5	4823.95	43.37	54.00	-10.63	42.03	3.31	33.06	35.03	Average	132	272	VERTICAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

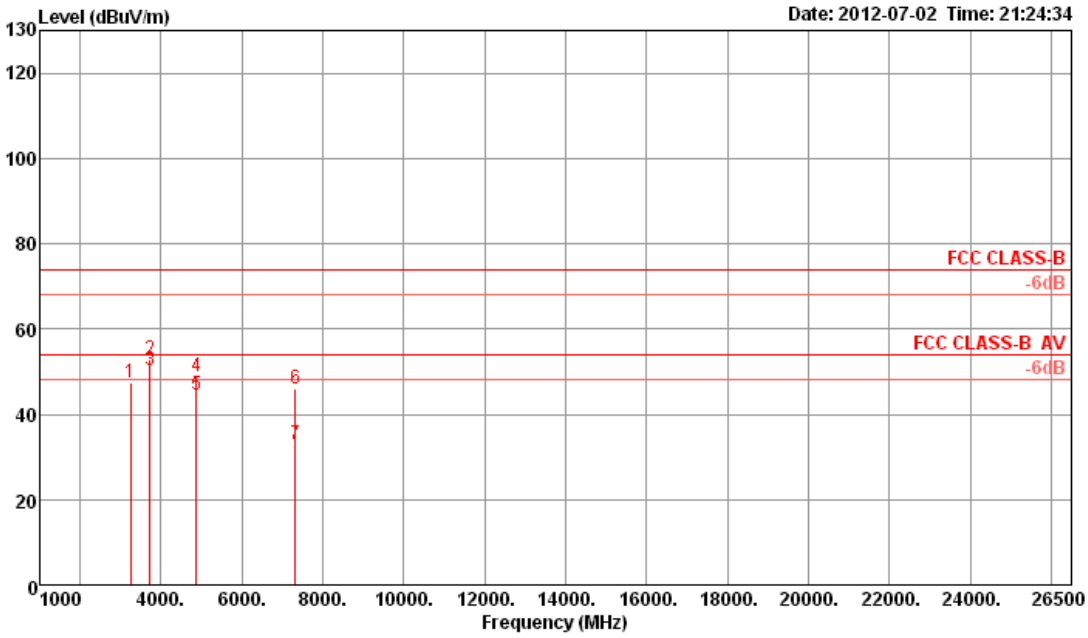
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11B-20M	**Power Level**	2	**Test Freq. (FX)**	F1
Operating Function	Transmit	**Ant. No.**	2,3	**Polarization**	H



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3216.05	49.43	74.00	-24.57	52.13	2.65	30.00	35.35	Peak	100	143	HORIZONTAL
2	3732.74	39.56	54.00	-14.44	40.74	2.82	31.21	35.21	Average	170	126	HORIZONTAL
3	3732.75	45.67	74.00	-28.33	46.85	2.82	31.21	35.21	Peak	170	126	HORIZONTAL
4	4823.84	46.45	74.00	-27.55	45.11	3.31	33.06	35.03	Peak	100	290	HORIZONTAL
5	4823.95	40.12	54.00	-13.88	38.78	3.31	33.06	35.03	Average	100	290	HORIZONTAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

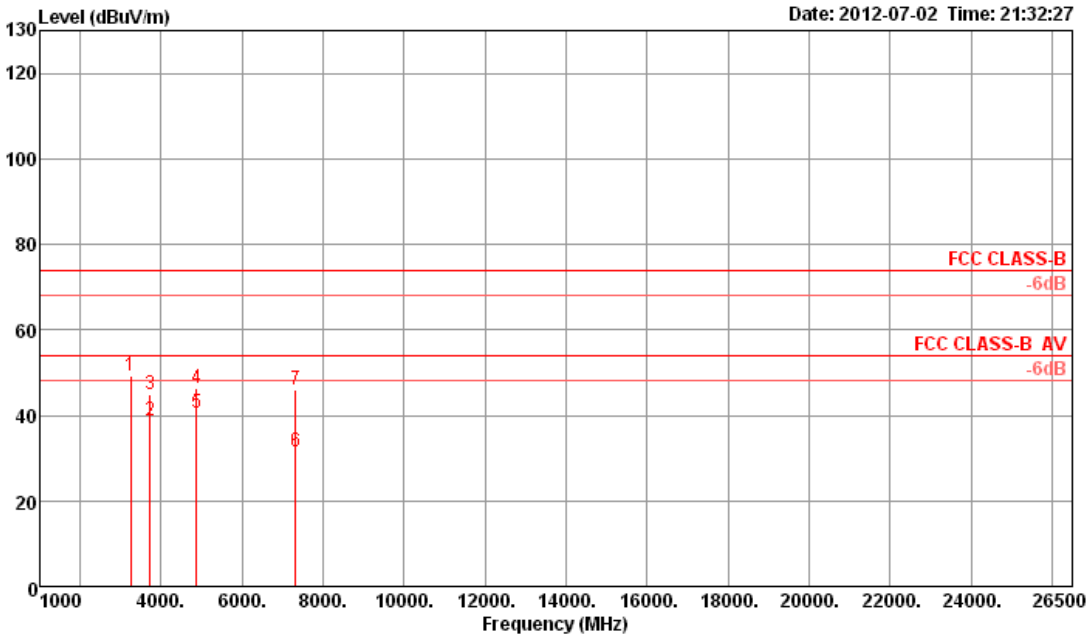
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11B-20M	**Power Level**	2	**Test Freq. (FX)**	F2
Operating Function	Transmit	**Ant. No.**	2,3	**Polarization**	V



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3249.30	47.29	74.00	-26.71	49.98	2.66	30.00	35.35	Peak	100	345	VERTICAL
2	3732.65	52.99	74.00	-21.01	54.17	2.82	31.21	35.21	Peak	116	69	VERTICAL
3	3732.73	50.35	54.00	-3.65	51.53	2.82	31.21	35.21	Average	116	69	VERTICAL
4	4873.91	48.89	74.00	-25.11	47.43	3.33	33.16	35.03	Peak	120	274	VERTICAL
5	4873.94	44.60	54.00	-9.40	43.14	3.33	33.16	35.03	Average	120	274	VERTICAL
6	7308.52	46.09	74.00	-27.91	41.47	4.06	35.96	35.40	Peak	100	257	VERTICAL
7	7310.05	32.92	54.00	-21.08	28.30	4.06	35.96	35.40	Average	100	257	VERTICAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

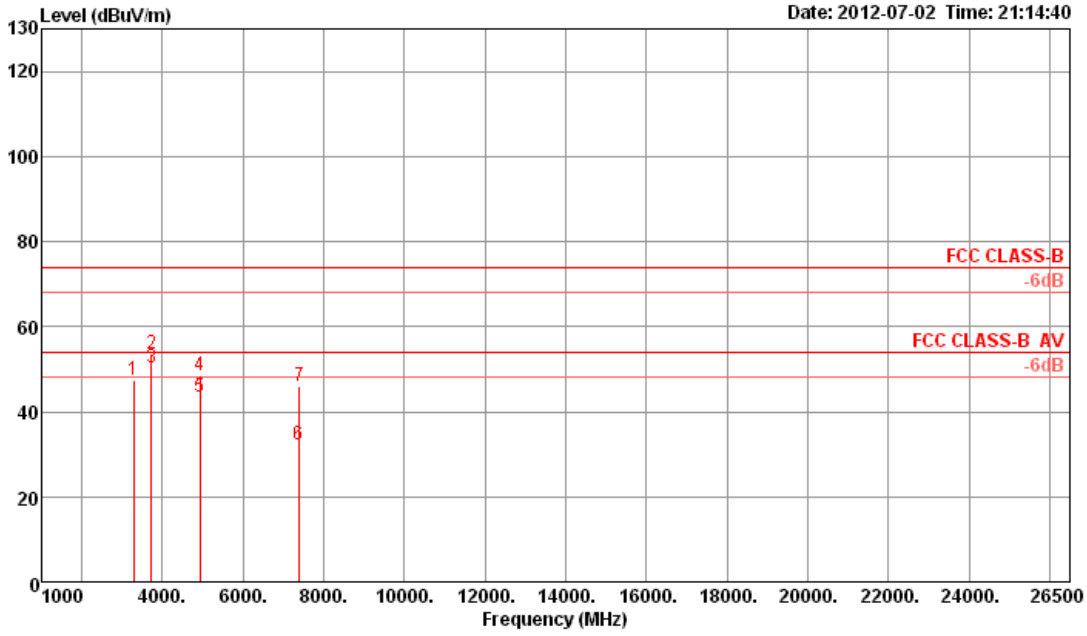
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11B-20M	**Power Level**	2	**Test Freq. (FX)**	F2
Operating Function	Transmit	**Ant. No.**	2,3	**Polarization**	H



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3249.37	49.24	74.00	-24.76	51.93	2.66	30.00	35.35	Peak	100	145	HORIZONTAL
2	3732.74	38.59	54.00	-15.41	39.77	2.82	31.21	35.21	Average	168	130	HORIZONTAL
3	3732.82	44.80	74.00	-29.20	45.98	2.82	31.21	35.21	Peak	168	130	HORIZONTAL
4	4873.84	46.52	74.00	-27.48	45.06	3.33	33.16	35.03	Peak	100	66	HORIZONTAL
5	4873.96	40.46	54.00	-13.54	39.00	3.33	33.16	35.03	Average	100	66	HORIZONTAL
6	7309.07	31.44	54.00	-22.56	26.82	4.06	35.96	35.40	Average	100	152	HORIZONTAL
7	7315.91	45.96	74.00	-28.04	41.34	4.06	35.96	35.40	Peak	100	152	HORIZONTAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

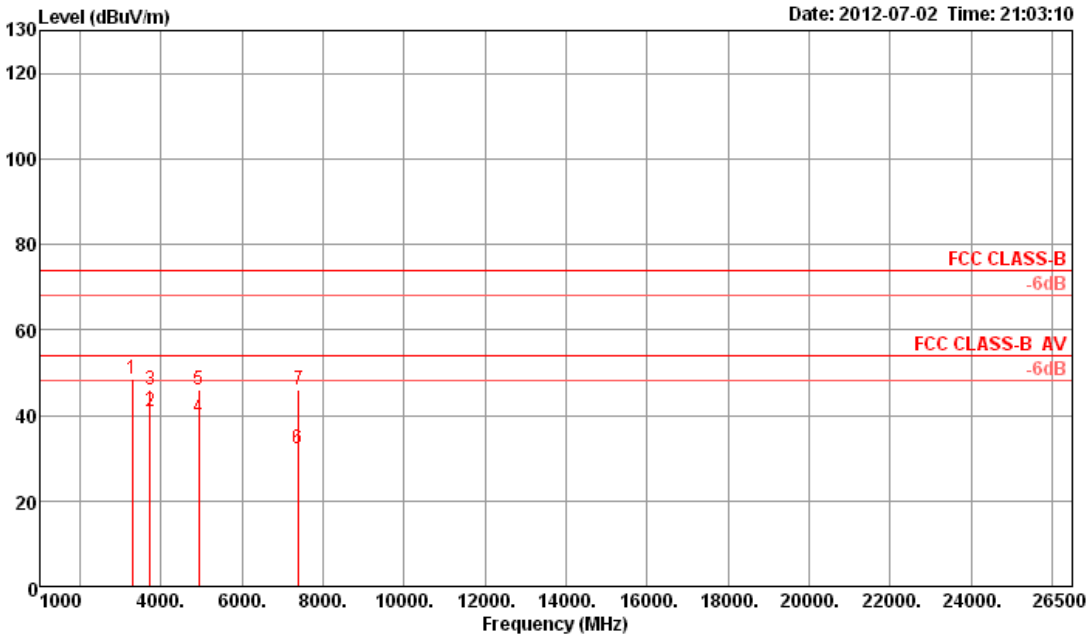
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11B-20M	**Power Level**	2	**Test Freq. (FX)**	F3
Operating Function	Transmit	**Ant. No.**	2,3	**Polarization**	V



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3282.68	47.26	74.00	-26.74	49.91	2.69	30.00	35.34	Peak	172	333	VERTICAL
2	3732.58	53.45	74.00	-20.55	54.63	2.82	31.21	35.21	Peak	116	73	VERTICAL
3	3732.75	50.44	54.00	-3.56	51.62	2.82	31.21	35.21	Average	116	73	VERTICAL
4	4923.80	48.43	74.00	-25.57	46.83	3.35	33.26	35.01	Peak	109	281	VERTICAL
5	4923.96	43.41	54.00	-10.59	41.81	3.35	33.26	35.01	Average	109	281	VERTICAL
6	7383.02	32.05	54.00	-21.95	27.30	4.06	36.09	35.40	Average	100	145	VERTICAL
7	7389.31	45.99	74.00	-28.01	41.24	4.06	36.09	35.40	Peak	100	145	VERTICAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

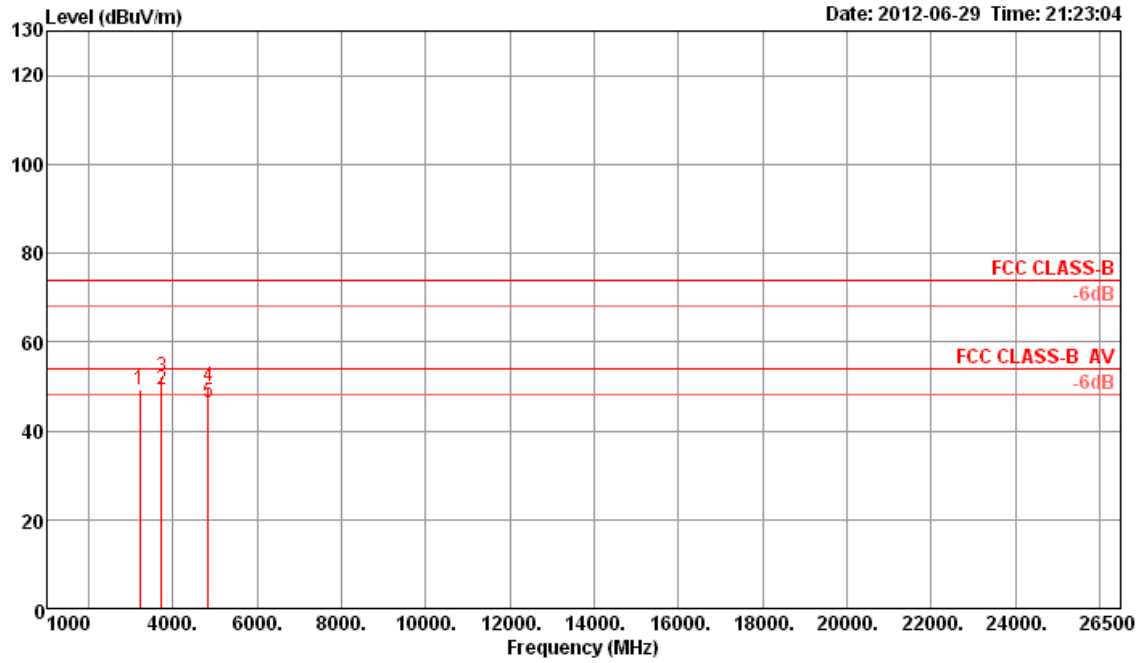
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11B-20M	**Power Level**	2	**Test Freq. (FX)**	F3
Operating Function	Transmit	**Ant. No.**	2,3	**Polarization**	H



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3282.57	48.43	74.00	-25.57	51.08	2.69	30.00	35.34	Peak	100	150	HORIZONTAL
2	3732.75	40.85	54.00	-13.15	42.03	2.82	31.21	35.21	Average	171	143	HORIZONTAL
3	3732.94	46.16	74.00	-27.84	47.34	2.82	31.21	35.21	Peak	171	143	HORIZONTAL
4	4923.94	39.39	54.00	-14.61	37.79	3.35	33.26	35.01	Average	113	354	HORIZONTAL
5	4924.03	46.02	74.00	-27.98	44.42	3.35	33.26	35.01	Peak	113	354	HORIZONTAL
6	7381.19	32.18	54.00	-21.82	27.43	4.06	36.09	35.40	Average	100	204	HORIZONTAL
7	7387.06	46.09	74.00	-27.91	41.34	4.06	36.09	35.40	Peak	100	204	HORIZONTAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

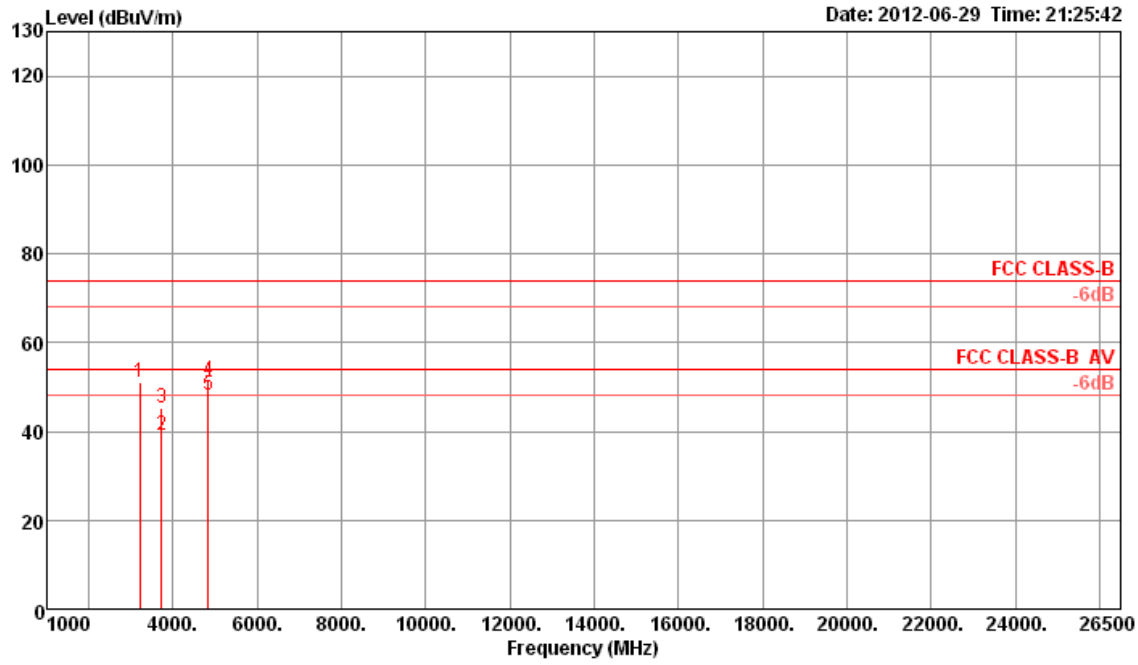
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11B-20M	**Power Level**	3	**Test Freq. (FX)**	F1
Operating Function	Transmit	**Ant. No.**	1,2,3	**Polarization**	V



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3215.89	49.18	74.00	-24.82	51.88	2.65	30.00	35.35	Peak	103	34	VERTICAL
2	3732.76	49.22	54.00	-4.78	50.40	2.82	31.21	35.21	Average	117	60	VERTICAL
3	3732.77	52.18	74.00	-21.82	53.36	2.82	31.21	35.21	Peak	117	60	VERTICAL
4	4823.92	49.91	74.00	-24.09	48.57	3.31	33.06	35.03	Peak	100	271	VERTICAL
5	4823.96	46.51	54.00	-7.49	45.17	3.31	33.06	35.03	Average	100	271	VERTICAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

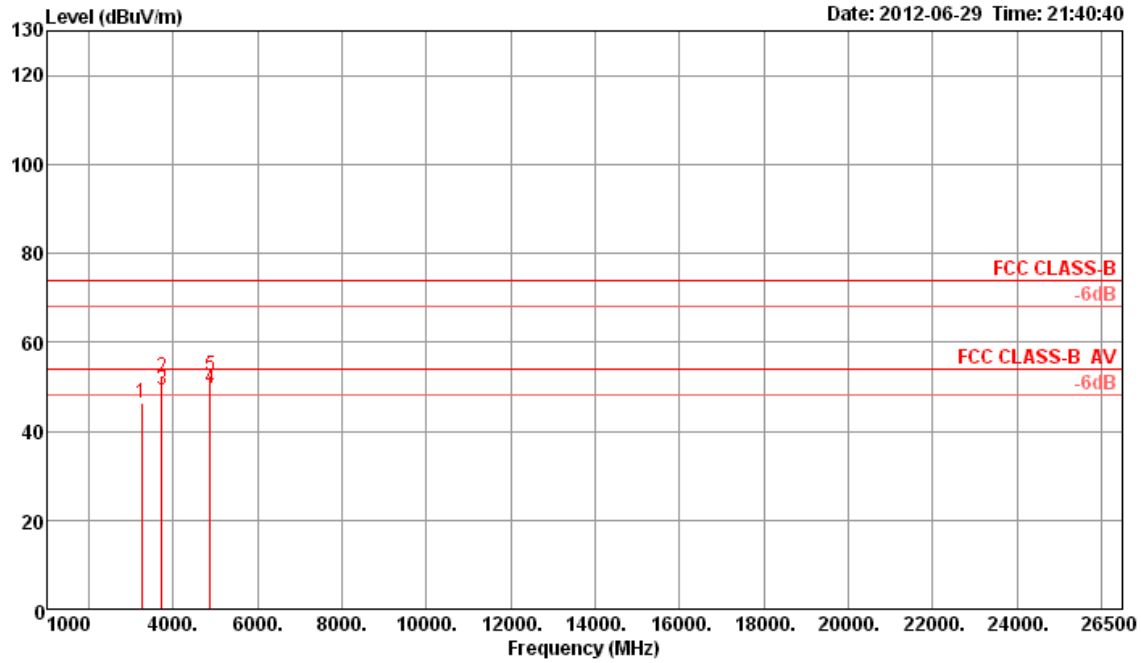
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11B-20M	**Power Level**	3	**Test Freq. (FX)**	F1
Operating Function	Transmit	**Ant. No.**	1,2,3	**Polarization**	H



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3215.96	51.22	74.00	-22.78	53.92	2.65	30.00	35.35	Peak	100	48	HORIZONTAL
2	3732.73	39.20	54.00	-14.80	40.38	2.82	31.21	35.21	Average	102	34	HORIZONTAL
3	3732.80	45.30	74.00	-28.70	46.48	2.82	31.21	35.21	Peak	102	34	HORIZONTAL
4	4823.84	51.37	74.00	-22.63	50.03	3.31	33.06	35.03	Peak	163	286	HORIZONTAL
5	4823.94	48.13	54.00	-5.87	46.79	3.31	33.06	35.03	Average	163	286	HORIZONTAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

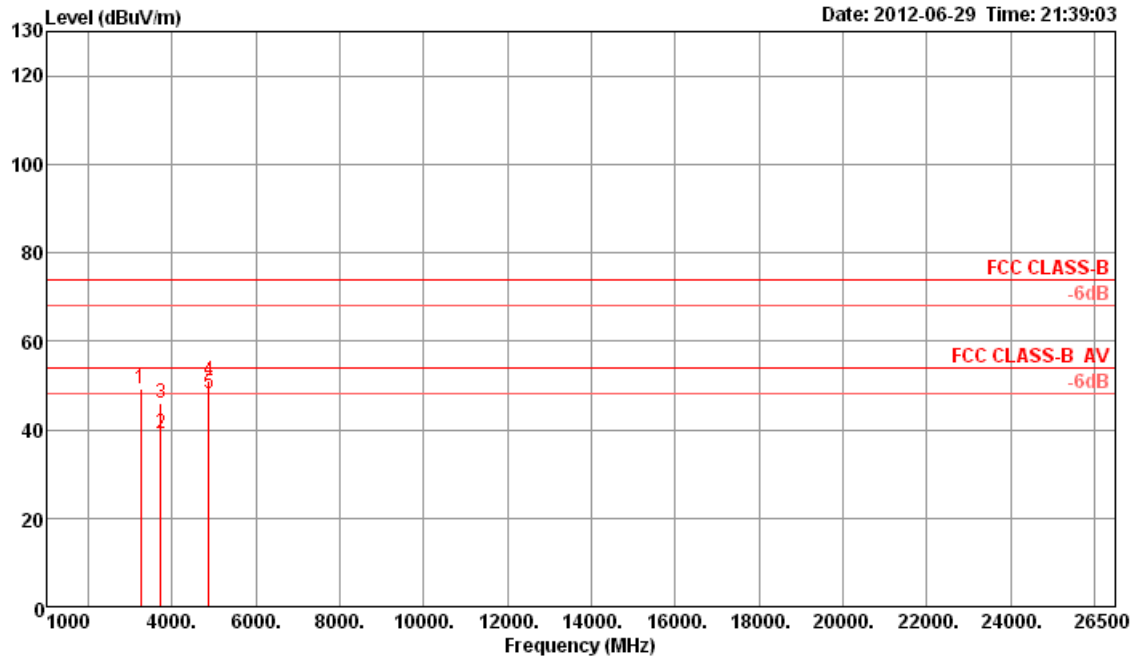
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11B-20M	**Power Level**	3	**Test Freq. (FX)**	F2
Operating Function	Transmit	**Ant. No.**	1,2,3	**Polarization**	V



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3249.37	46.31	74.00	-27.69	49.00	2.66	30.00	35.35	Peak	103	43	VERTICAL
2	3732.60	52.14	74.00	-21.86	53.32	2.82	31.21	35.21	Peak	117	60	VERTICAL
3	3732.72	49.25	54.00	-4.75	50.43	2.82	31.21	35.21	Average	117	60	VERTICAL
4	4873.96	49.67	54.00	-4.33	48.21	3.33	33.16	35.03	Average	109	269	VERTICAL
5	4874.01	52.54	74.00	-21.46	51.08	3.33	33.16	35.03	Peak	109	269	VERTICAL

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

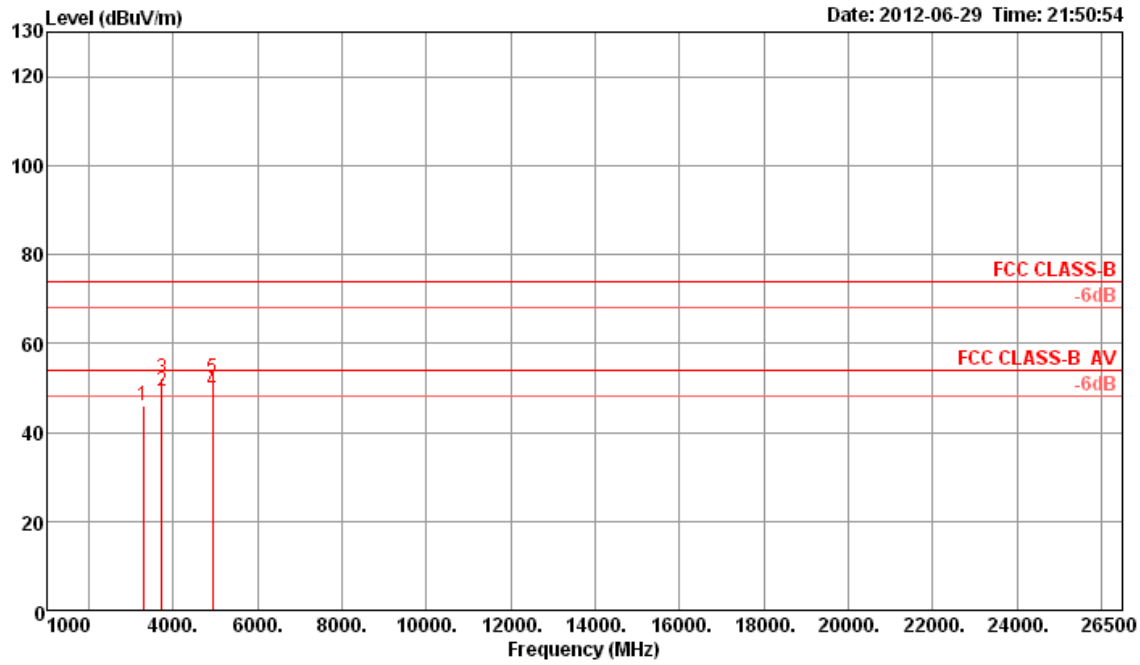
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11B-20M	**Power Level**	3	**Test Freq. (FX)**	F2
Operating Function	Transmit	**Ant. No.**	1,2,3	**Polarization**	H



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3249.18	49.37	74.00	-24.63	52.06	2.66	30.00	35.35	Peak	100	48	HORIZONTAL
2	3732.74	39.26	54.00	-14.74	40.44	2.82	31.21	35.21	Average	102	34	HORIZONTAL
3	3732.80	46.04	74.00	-27.96	47.22	2.82	31.21	35.21	Peak	102	34	HORIZONTAL
4	4873.93	51.11	74.00	-22.89	49.65	3.33	33.16	35.03	Peak	112	276	HORIZONTAL
5	4873.97	48.14	54.00	-5.86	46.68	3.33	33.16	35.03	Average	112	276	HORIZONTAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

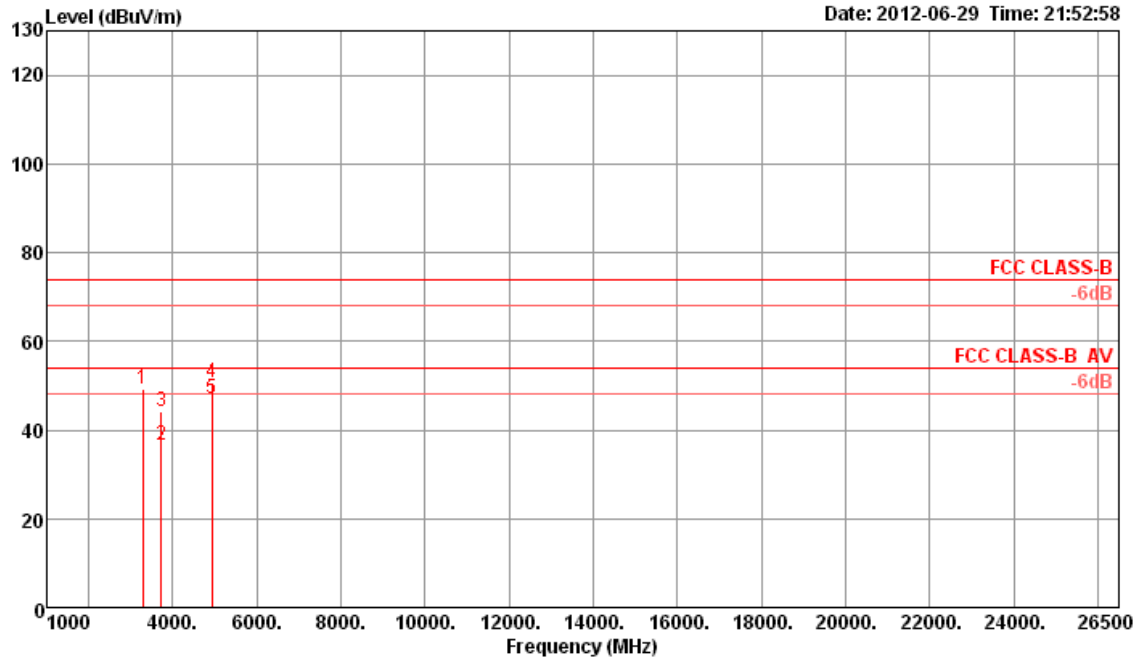
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11B-20M	**Power Level**	3	**Test Freq. (FX)**	F3
Operating Function	Transmit	**Ant. No.**	1,2,3	**Polarization**	V



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3282.59	46.02	74.00	-27.98	48.67	2.69	30.00	35.34	Peak	101	72	VERTICAL
2	3732.74	49.28	54.00	-4.72	50.46	2.82	31.21	35.21	Average	116	45	VERTICAL
3	3732.81	52.23	74.00	-21.77	53.41	2.82	31.21	35.21	Peak	116	45	VERTICAL
4	4923.96	49.09	54.00	-4.91	47.49	3.35	33.26	35.01	Average	119	258	VERTICAL
5	4923.98	51.99	74.00	-22.01	50.39	3.35	33.26	35.01	Peak	119	258	VERTICAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11B-20M	**Power Level**	3	**Test Freq. (FX)**	F3
Operating Function	Transmit	**Ant. No.**	1,2,3	**Polarization**	H

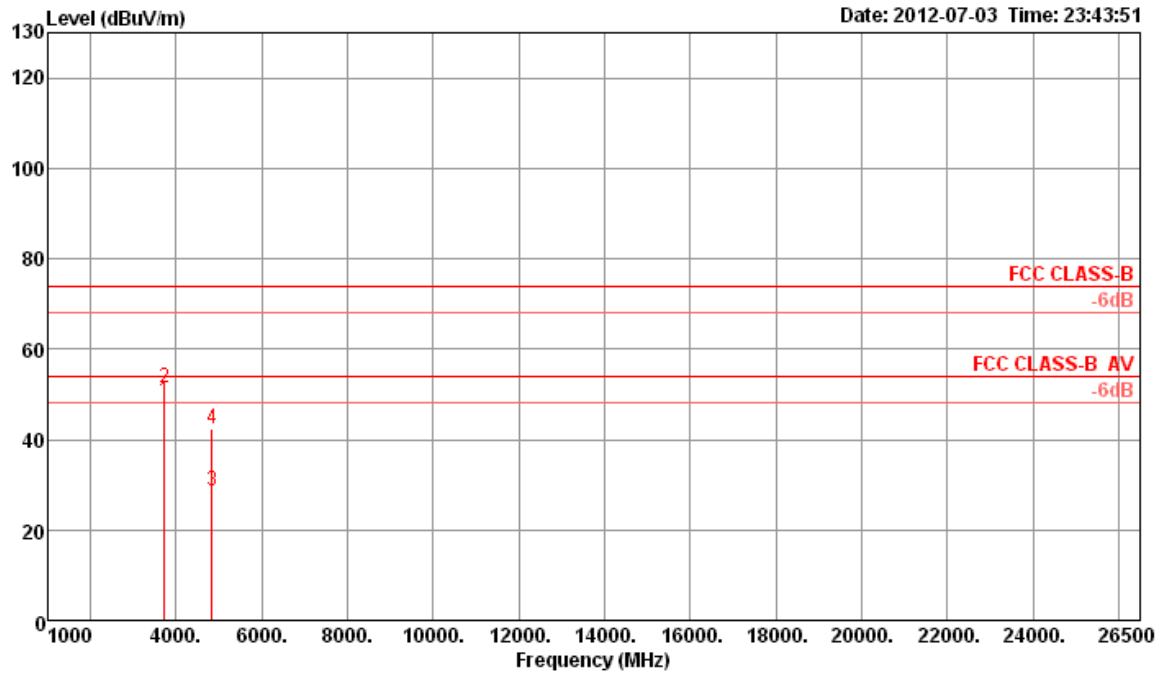


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3282.64	49.28	74.00	-24.72	51.93	2.69	30.00	35.34	Peak	113	43	HORIZONTAL
2	3732.76	36.69	54.00	-17.31	37.87	2.82	31.21	35.21	Average	100	18	HORIZONTAL
3	3732.87	44.15	74.00	-29.85	45.33	2.82	31.21	35.21	Peak	100	18	HORIZONTAL
4	4923.89	50.65	74.00	-23.35	49.05	3.35	33.26	35.01	Peak	100	271	HORIZONTAL
5	4923.94	47.12	54.00	-6.88	45.52	3.35	33.26	35.01	Average	100	271	HORIZONTAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

3.5.13 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 11G-20M

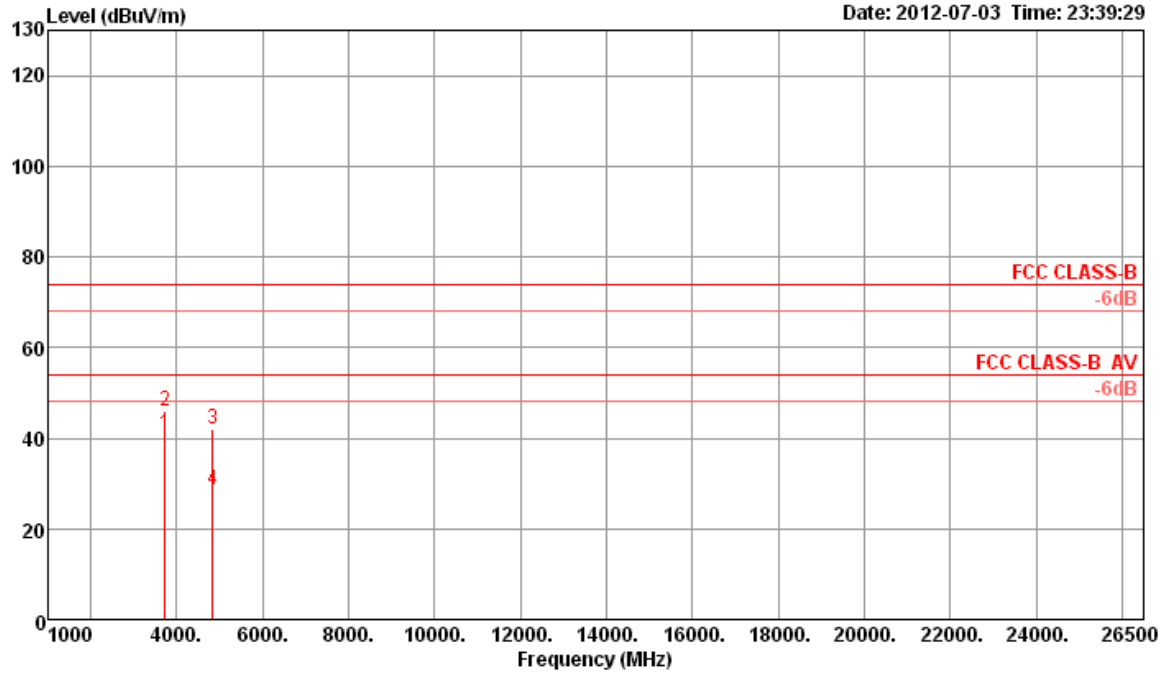
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11G-20M	**Power Level**	1	**Test Freq. (FX)**	F1
Operating Function	Transmit	**Ant. No.**	3	**Polarization**	V



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3732.73	48.39	54.00	-5.61	49.57	2.82	31.21	35.21	Average	100	62	VERTICAL
2	3732.79	51.39	74.00	-22.61	52.57	2.82	31.21	35.21	Peak	100	62	VERTICAL
3	4823.76	28.48	54.00	-25.52	27.14	3.31	33.06	35.03	Average	100	123	VERTICAL
4	4824.35	42.53	74.00	-31.47	41.19	3.31	33.06	35.03	Peak	100	123	VERTICAL

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

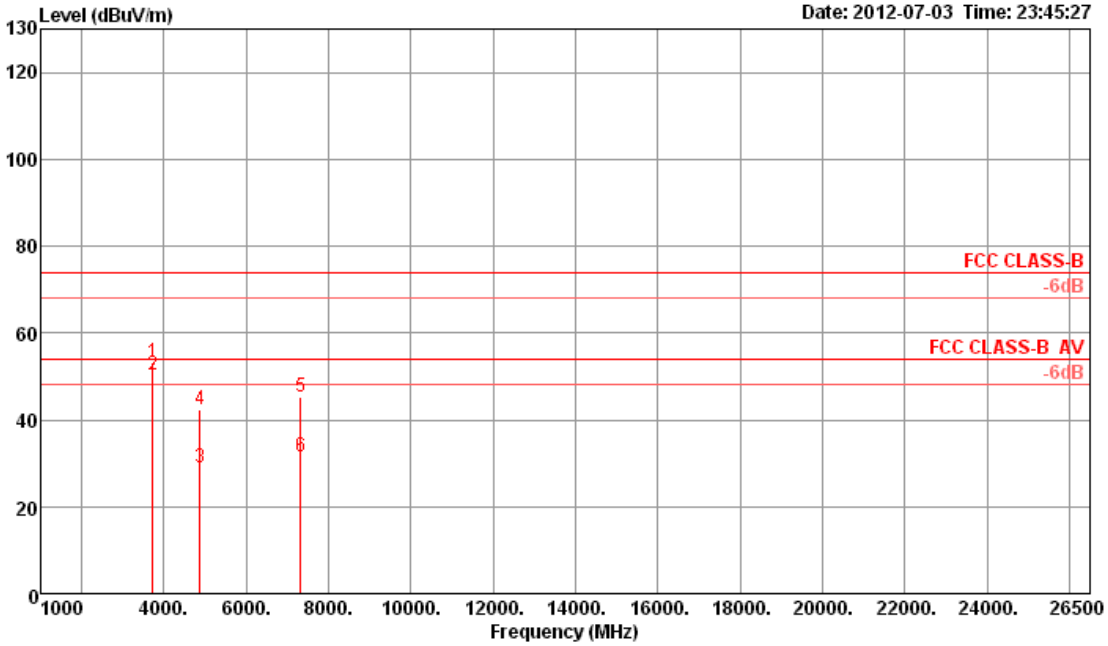
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11G-20M	**Power Level**	1	**Test Freq. (FX)**	F1
Operating Function	Transmit	**Ant. No.**	3	**Polarization**	H



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3732.76	40.75	54.00	-13.25	41.93	2.82	31.21	35.21	Average	146	38	HORIZONTAL
2	3732.76	46.13	74.00	-27.87	47.31	2.82	31.21	35.21	Peak	146	38	HORIZONTAL
3	4823.68	42.01	74.00	-31.99	40.67	3.31	33.06	35.03	Peak	100	252	HORIZONTAL
4	4823.80	28.58	54.00	-25.42	27.24	3.31	33.06	35.03	Average	100	252	HORIZONTAL

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

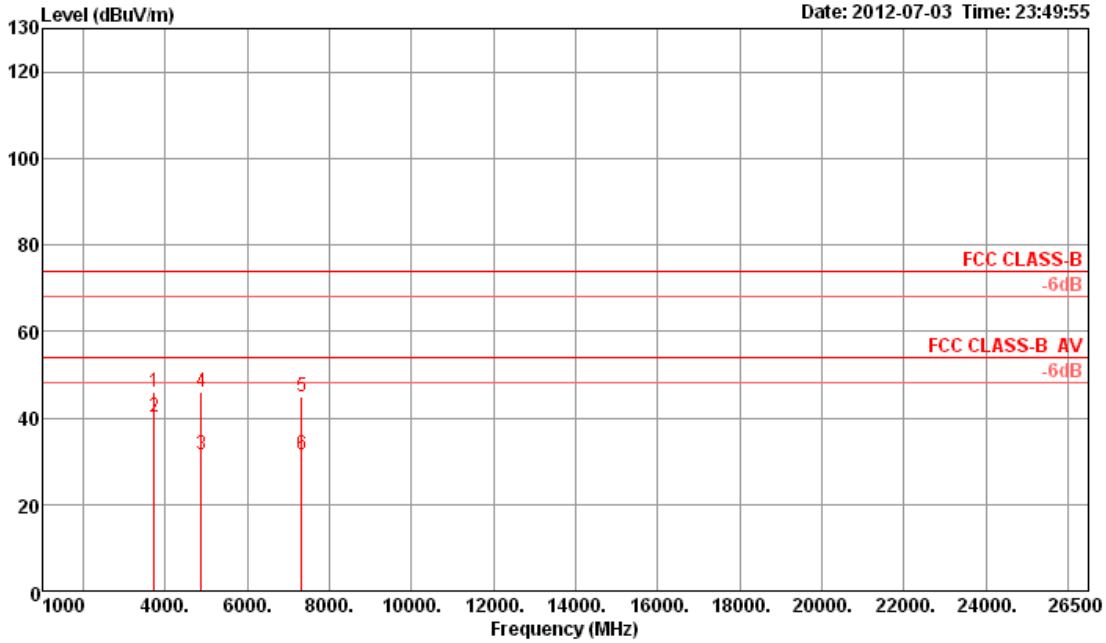
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11G-20M	**Power Level**	1	**Test Freq. (FX)**	F2
Operating Function	Transmit	**Ant. No.**	3	**Polarization**	V



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3732.55	53.33	74.00	-20.67	54.51	2.82	31.21	35.21	Peak	113	65	VERTICAL
2	3732.74	50.46	54.00	-3.54	51.64	2.82	31.21	35.21	Average	113	65	VERTICAL
3	4874.34	29.10	54.00	-24.90	27.64	3.33	33.16	35.03	Average	100	201	VERTICAL
4	4874.35	42.35	74.00	-31.65	40.89	3.33	33.16	35.03	Peak	100	201	VERTICAL
5	7311.05	45.37	74.00	-28.63	40.75	4.06	35.96	35.40	Peak	100	276	VERTICAL
6	7311.43	31.54	54.00	-22.46	26.92	4.06	35.96	35.40	Average	100	276	VERTICAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

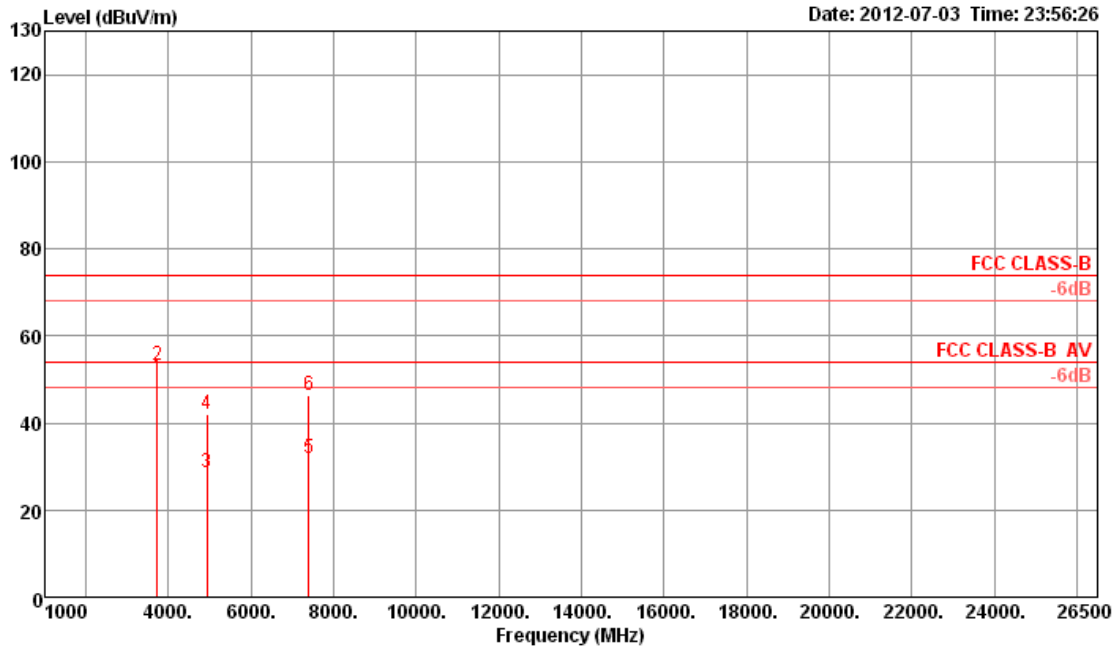
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11G-20M	**Power Level**	1	**Test Freq. (FX)**	F2
Operating Function	Transmit	**Ant. No.**	3	**Polarization**	H



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3732.74	45.92	74.00	-28.08	47.10	2.82	31.21	35.21	Peak	148	40	HORIZONTAL
2	3732.76	40.17	54.00	-13.83	41.35	2.82	31.21	35.21	Average	148	40	HORIZONTAL
3	4874.43	31.62	54.00	-22.38	30.16	3.33	33.16	35.03	Average	100	70	HORIZONTAL
4	4874.49	45.93	74.00	-28.07	44.47	3.33	33.16	35.03	Peak	100	70	HORIZONTAL
5	7310.70	45.04	74.00	-28.96	40.42	4.06	35.96	35.40	Peak	100	134	HORIZONTAL
6	7311.47	31.48	54.00	-22.52	26.86	4.06	35.96	35.40	Average	100	134	HORIZONTAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

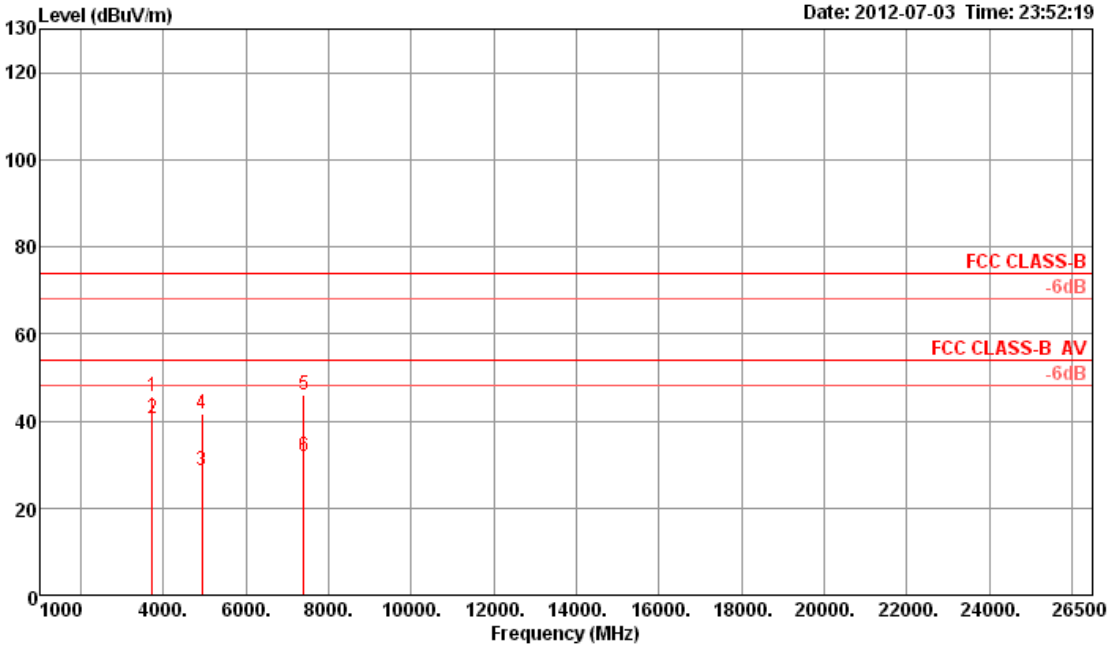
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11G-20M	**Power Level**	1	**Test Freq. (FX)**	F3
Operating Function	Transmit	**Ant. No.**	3	**Polarization**	V



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3732.75	50.46	54.00	-3.54	51.64	2.82	31.21	35.21	Average	112	64	VERTICAL
2	3732.82	53.23	74.00	-20.77	54.41	2.82	31.21	35.21	Peak	112	64	VERTICAL
3	4923.66	28.52	54.00	-25.48	26.92	3.35	33.26	35.01	Average	100	177	VERTICAL
4	4923.79	41.96	74.00	-32.04	40.36	3.35	33.26	35.01	Peak	100	177	VERTICAL
5	7385.61	32.03	54.00	-21.97	27.28	4.06	36.09	35.40	Average	100	253	VERTICAL
6	7385.84	46.39	74.00	-27.61	41.64	4.06	36.09	35.40	Peak	100	253	VERTICAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

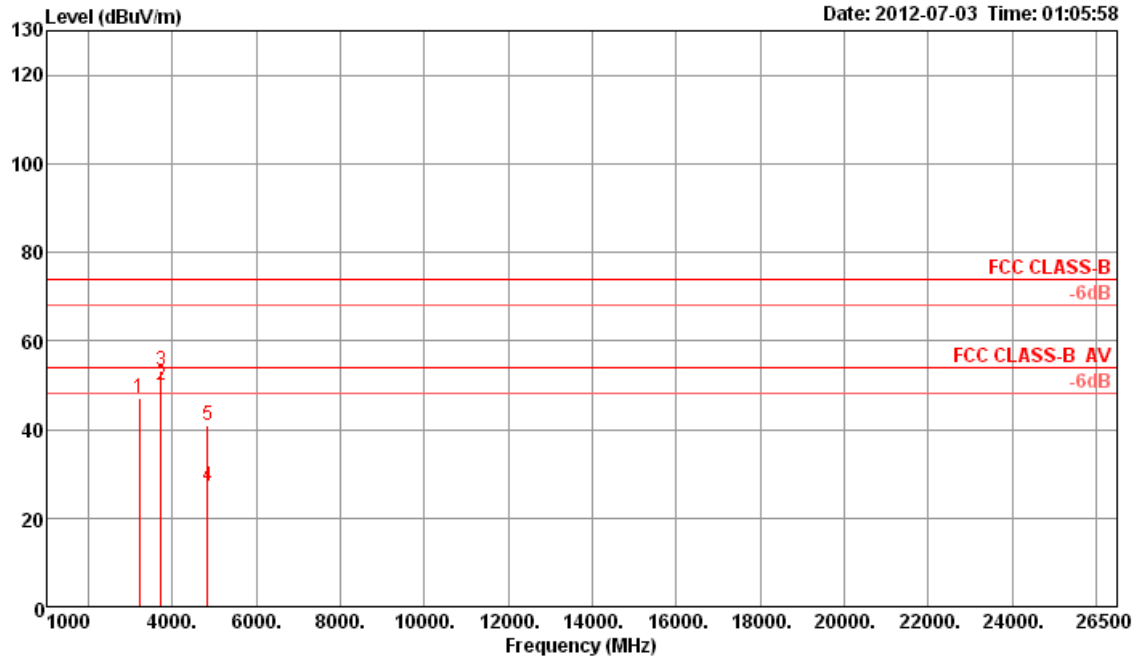
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11G-20M	**Power Level**	1	**Test Freq. (FX)**	F3
Operating Function	Transmit	**Ant. No.**	3	**Polarization**	H



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3732.58	45.77	74.00	-28.23	46.95	2.82	31.21	35.21	Peak	148	40	HORIZONTAL
2	3732.75	40.50	54.00	-13.50	41.68	2.82	31.21	35.21	Average	148	40	HORIZONTAL
3	4923.57	28.51	54.00	-25.49	26.91	3.35	33.26	35.01	Average	100	328	HORIZONTAL
4	4924.19	41.61	74.00	-32.39	40.01	3.35	33.26	35.01	Peak	100	328	HORIZONTAL
5	7386.12	45.88	74.00	-28.12	41.13	4.06	36.09	35.40	Peak	100	262	HORIZONTAL
6	7386.17	31.95	54.00	-22.05	27.20	4.06	36.09	35.40	Average	100	262	HORIZONTAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

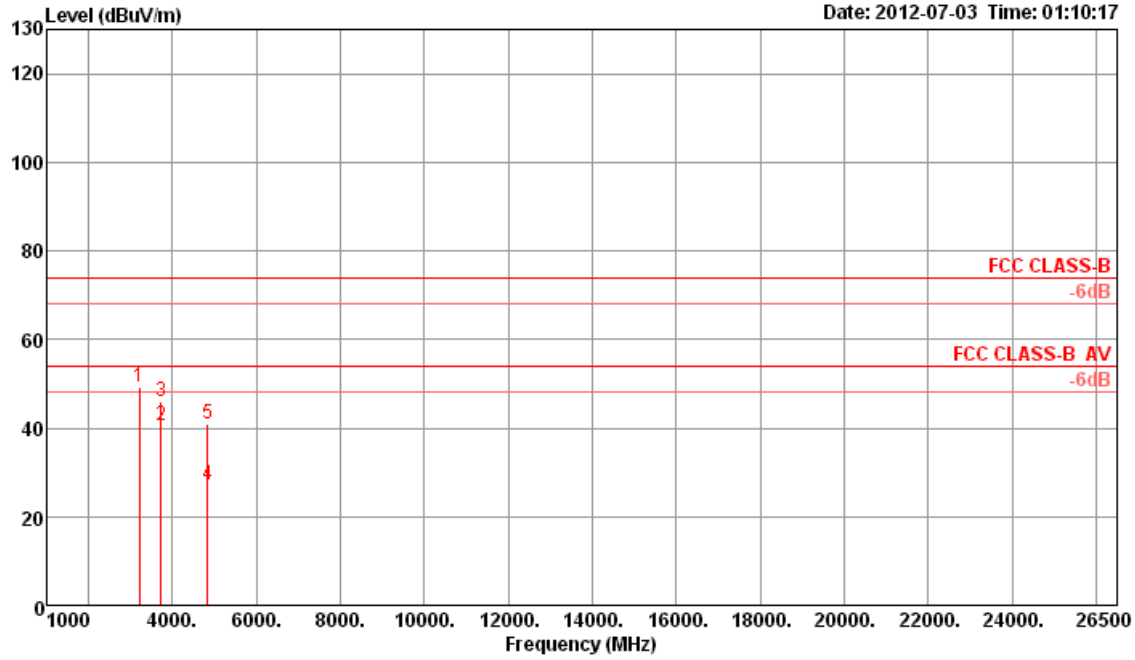
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11G-20M	**Power Level**	2	**Test Freq. (FX)**	F1
Operating Function	Transmit	**Ant. No.**	2,3	**Polarization**	V



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3215.84	47.17	74.00	-26.83	49.87	2.65	30.00	35.35	Peak	100	321	VERTICAL
2	3732.72	50.12	54.00	-3.88	51.30	2.82	31.21	35.21	Average	118	27	VERTICAL
3	3732.80	53.10	74.00	-20.90	54.28	2.82	31.21	35.21	Peak	118	27	VERTICAL
4	4823.61	27.02	54.00	-26.98	25.68	3.31	33.06	35.03	Average	100	150	VERTICAL
5	4824.43	40.93	74.00	-33.07	39.59	3.31	33.06	35.03	Peak	100	150	VERTICAL

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

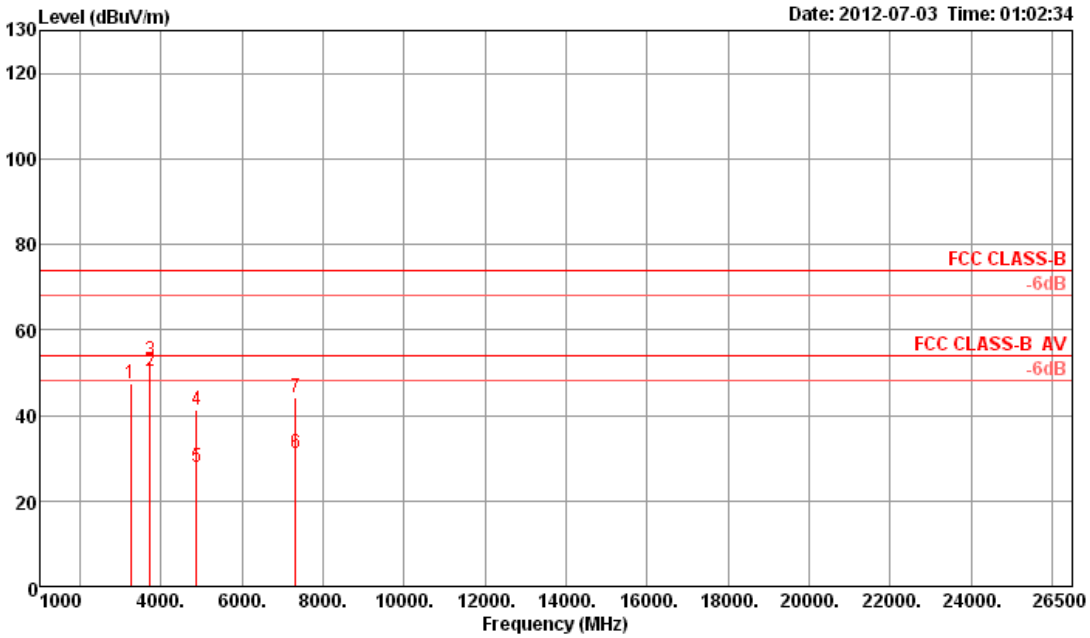
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11G-20M	**Power Level**	2	**Test Freq. (FX)**	F1
Operating Function	Transmit	**Ant. No.**	2,3	**Polarization**	H



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3215.89	49.08	74.00	-24.92	51.78	2.65	30.00	35.35	Peak	100	107	HORIZONTAL
2	3732.75	40.50	54.00	-13.50	41.68	2.82	31.21	35.21	Average	171	95	HORIZONTAL
3	3732.79	46.13	74.00	-27.87	47.31	2.82	31.21	35.21	Peak	171	95	HORIZONTAL
4	4823.79	27.08	54.00	-26.92	25.74	3.31	33.06	35.03	Average	100	47	HORIZONTAL
5	4824.45	41.01	74.00	-32.99	39.67	3.31	33.06	35.03	Peak	100	47	HORIZONTAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

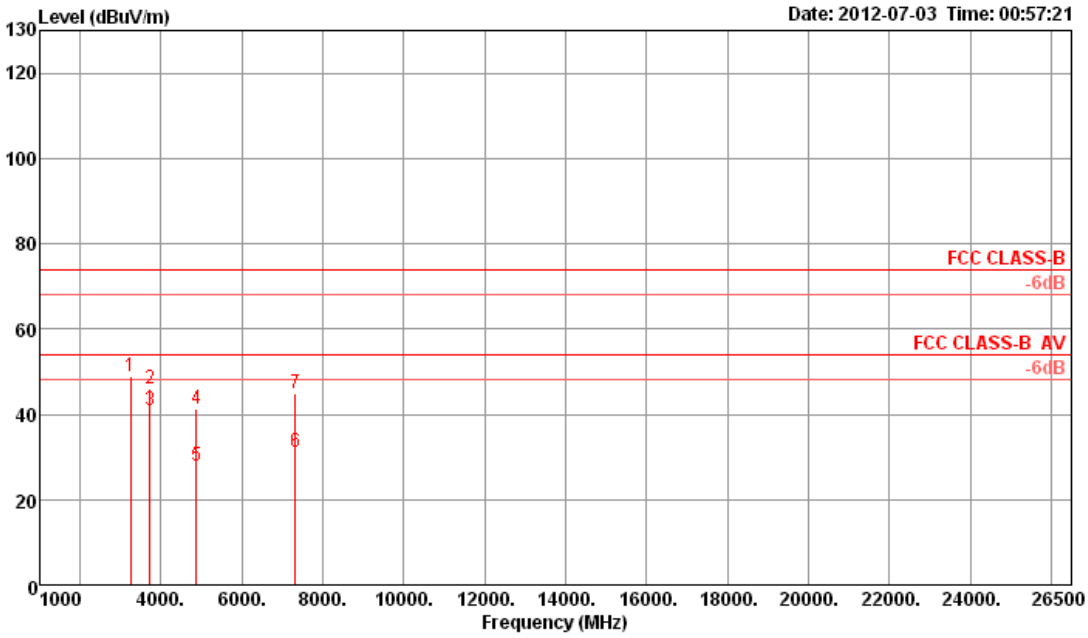
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11G-20M	**Power Level**	2	**Test Freq. (FX)**	F2
Operating Function	Transmit	**Ant. No.**	2,3	**Polarization**	V



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3249.33	47.43	74.00	-26.57	50.12	2.66	30.00	35.35	Peak	100	302	VERTICAL
2	3732.75	50.19	54.00	-3.81	51.37	2.82	31.21	35.21	Average	117	27	VERTICAL
3	3732.87	52.97	74.00	-21.03	54.15	2.82	31.21	35.21	Peak	117	27	VERTICAL
4	4873.98	41.34	74.00	-32.66	39.88	3.33	33.16	35.03	Peak	100	107	VERTICAL
5	4874.34	27.96	54.00	-26.04	26.50	3.33	33.16	35.03	Average	100	107	VERTICAL
6	7311.02	31.25	54.00	-22.75	26.63	4.06	35.96	35.40	Average	100	183	VERTICAL
7	7311.05	44.12	74.00	-29.88	39.50	4.06	35.96	35.40	Peak	100	183	VERTICAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

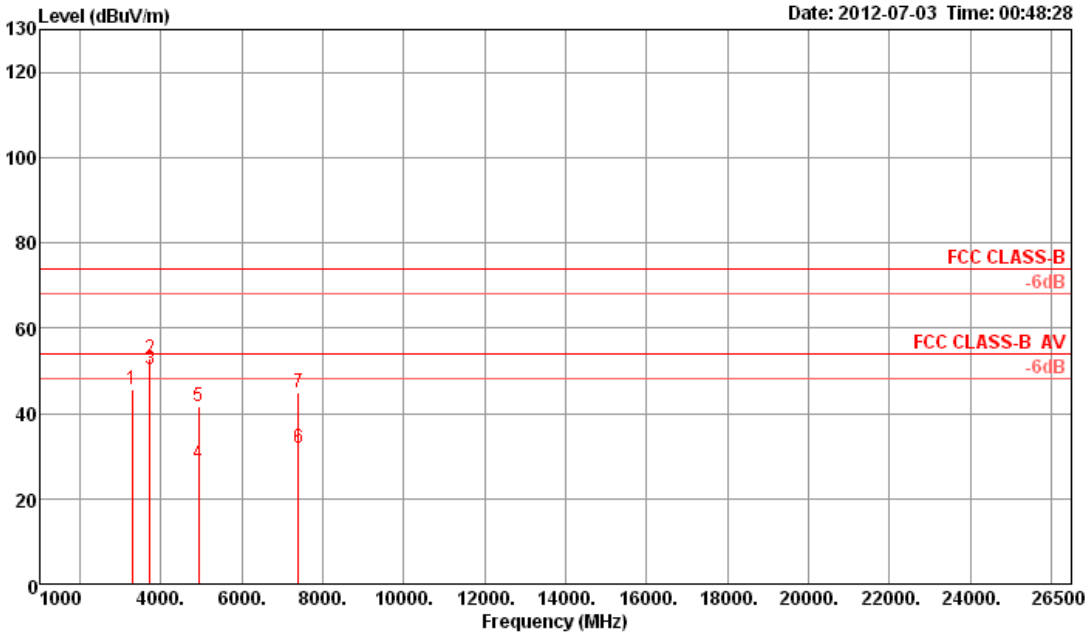
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11G-20M	**Power Level**	2	**Test Freq. (FX)**	F2
Operating Function	Transmit	**Ant. No.**	2,3	**Polarization**	H



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3249.32	49.05	74.00	-24.95	51.74	2.66	30.00	35.35	Peak	100	105	HORIZONTAL
2	3732.69	45.97	74.00	-28.03	47.15	2.82	31.21	35.21	Peak	153	112	HORIZONTAL
3	3732.75	40.74	54.00	-13.26	41.92	2.82	31.21	35.21	Average	153	112	HORIZONTAL
4	4873.53	41.43	74.00	-32.57	39.97	3.33	33.16	35.03	Peak	100	216	HORIZONTAL
5	4873.54	27.93	54.00	-26.07	26.47	3.33	33.16	35.03	Average	100	216	HORIZONTAL
6	7311.14	31.28	54.00	-22.72	26.66	4.06	35.96	35.40	Average	100	159	HORIZONTAL
7	7311.22	44.98	74.00	-29.02	40.36	4.06	35.96	35.40	Peak	100	159	HORIZONTAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

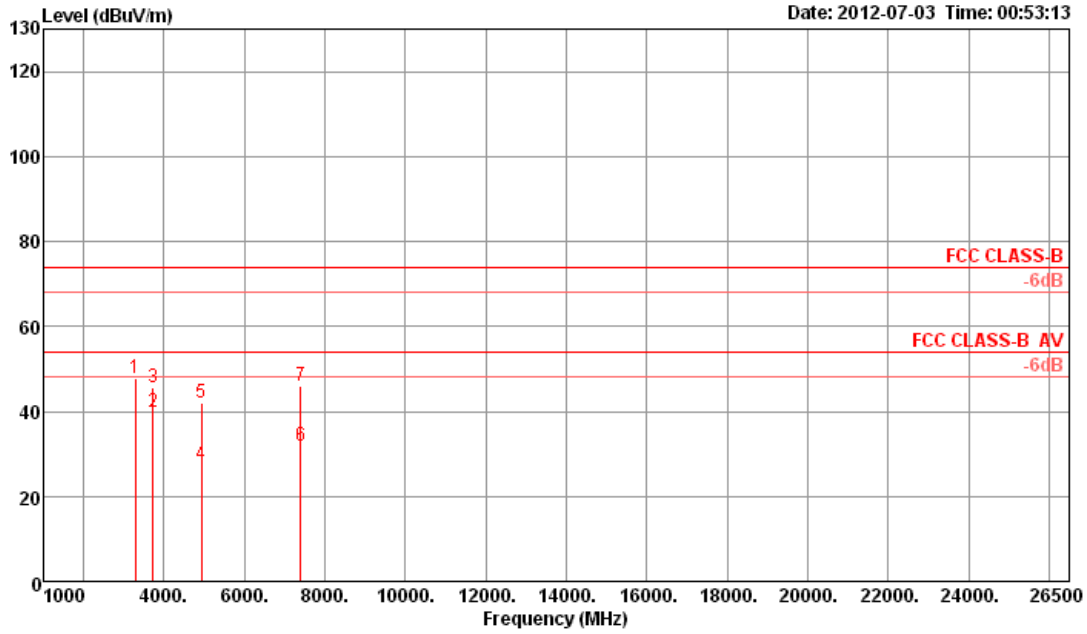
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11G-20M	**Power Level**	2	**Test Freq. (FX)**	F3
Operating Function	Transmit	**Ant. No.**	2,3	**Polarization**	V



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3282.46	45.75	74.00	-28.25	48.40	2.69	30.00	35.34	Peak	100	298	VERTICAL
2	3732.63	52.85	74.00	-21.15	54.03	2.82	31.21	35.21	Peak	115	33	VERTICAL
3	3732.74	50.22	54.00	-3.78	51.40	2.82	31.21	35.21	Average	115	33	VERTICAL
4	4923.50	28.16	54.00	-25.84	26.56	3.35	33.26	35.01	Average	100	221	VERTICAL
5	4923.69	41.76	74.00	-32.24	40.16	3.35	33.26	35.01	Peak	100	221	VERTICAL
6	7385.50	31.83	54.00	-22.17	27.08	4.06	36.09	35.40	Average	100	129	VERTICAL
7	7386.26	44.99	74.00	-29.01	40.24	4.06	36.09	35.40	Peak	100	129	VERTICAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

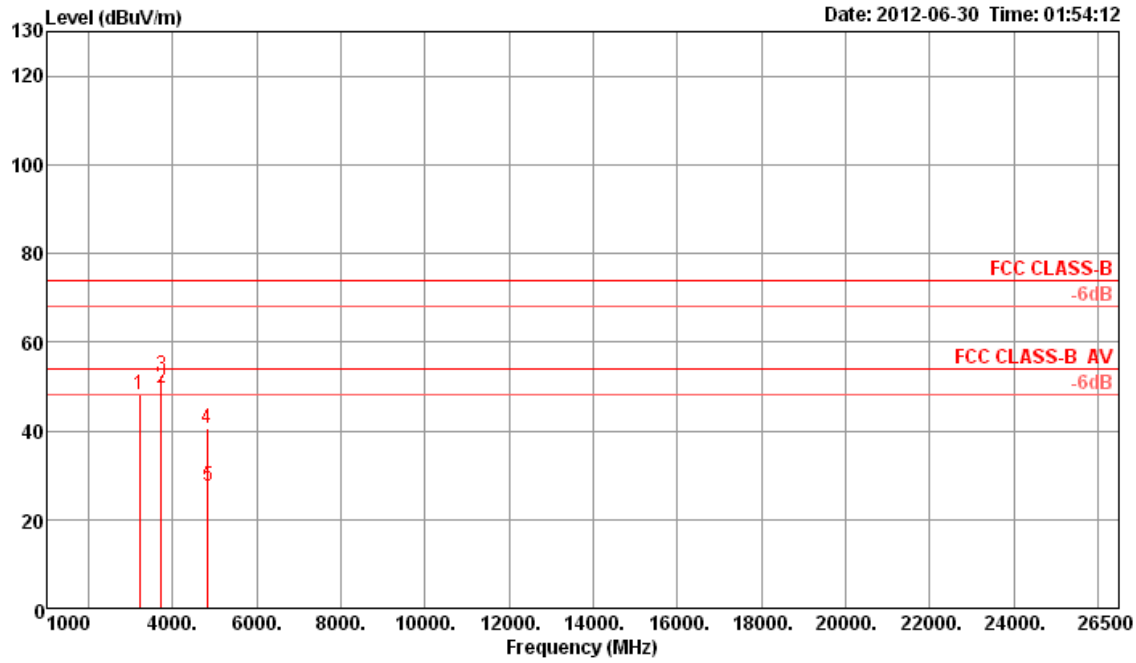
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11G-20M	**Power Level**	2	**Test Freq. (FX)**	F3
Operating Function	Transmit	**Ant. No.**	2,3	**Polarization**	H



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3282.58	47.87	74.00	-26.13	50.52	2.69	30.00	35.34	Peak	100	108	HORIZONTAL
2	3732.71	39.99	54.00	-14.01	41.17	2.82	31.21	35.21	Average	167	109	HORIZONTAL
3	3732.73	45.55	74.00	-28.45	46.73	2.82	31.21	35.21	Peak	167	109	HORIZONTAL
4	4923.74	27.69	54.00	-26.31	26.09	3.35	33.26	35.01	Average	100	134	HORIZONTAL
5	4923.96	42.16	74.00	-31.84	40.56	3.35	33.26	35.01	Peak	100	134	HORIZONTAL
6	7385.60	31.99	54.00	-22.01	27.24	4.06	36.09	35.40	Average	100	201	HORIZONTAL
7	7385.91	46.09	74.00	-27.91	41.34	4.06	36.09	35.40	Peak	100	201	HORIZONTAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

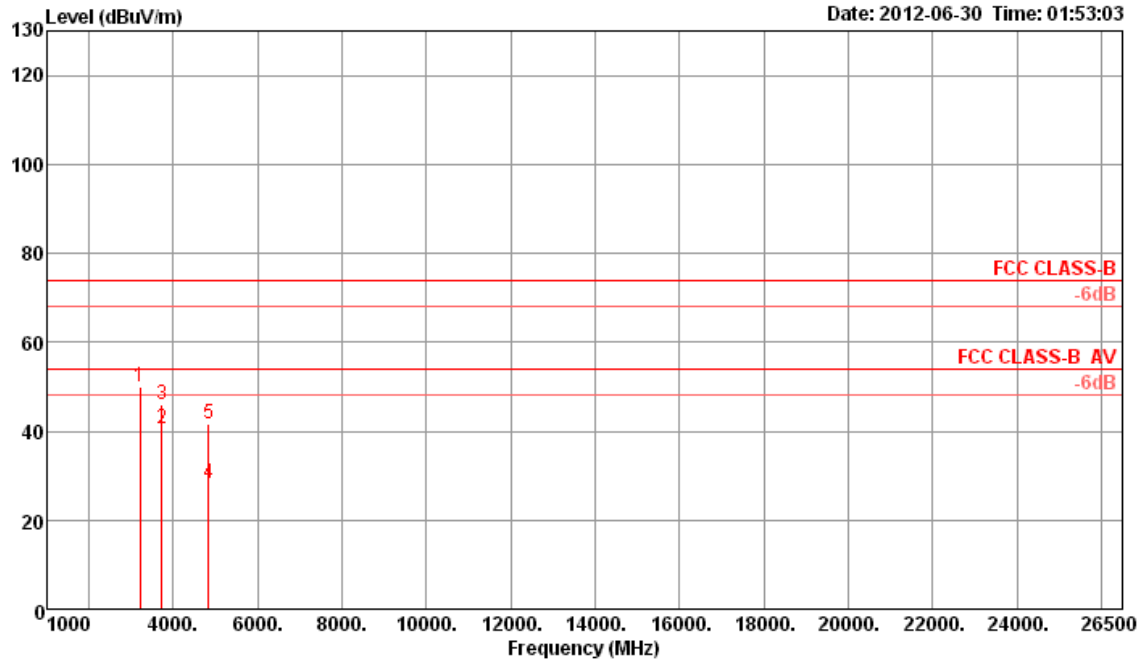
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11G-20M	**Power Level**	3	**Test Freq. (FX)**	F1
Operating Function	Transmit	**Ant. No.**	1,2,3	**Polarization**	V



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3215.99	48.06	74.00	-25.94	50.76	2.65	30.00	35.35	Peak	102	32	VERTICAL
2	3732.73	49.66	54.00	-4.34	50.84	2.82	31.21	35.21	Average	117	59	VERTICAL
3	3732.94	52.43	74.00	-21.57	53.61	2.82	31.21	35.21	Peak	117	59	VERTICAL
4	4820.36	40.45	74.00	-33.55	39.11	3.31	33.06	35.03	Peak	100	289	VERTICAL
5	4824.71	27.68	54.00	-26.32	26.34	3.31	33.06	35.03	Average	100	289	VERTICAL

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

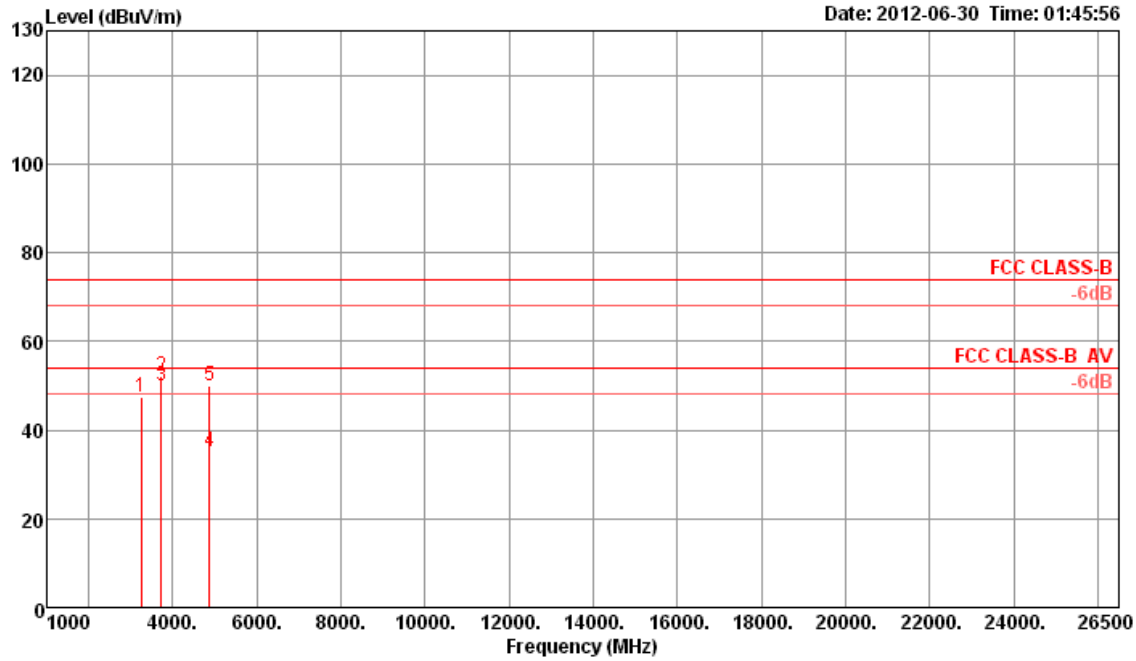
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11G-20M	**Power Level**	3	**Test Freq. (FX)**	F1
Operating Function	Transmit	**Ant. No.**	1,2,3	**Polarization**	H



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3215.98	49.83	74.00	-24.17	52.53	2.65	30.00	35.35	Peak	100	60	HORIZONTAL
2	3732.72	40.70	54.00	-13.30	41.88	2.82	31.21	35.21	Average	103	33	HORIZONTAL
3	3732.80	45.96	74.00	-28.04	47.14	2.82	31.21	35.21	Peak	103	33	HORIZONTAL
4	4823.57	28.42	54.00	-25.58	27.08	3.31	33.06	35.03	Average	100	239	HORIZONTAL
5	4826.29	41.74	74.00	-32.26	40.40	3.31	33.06	35.03	Peak	100	239	HORIZONTAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

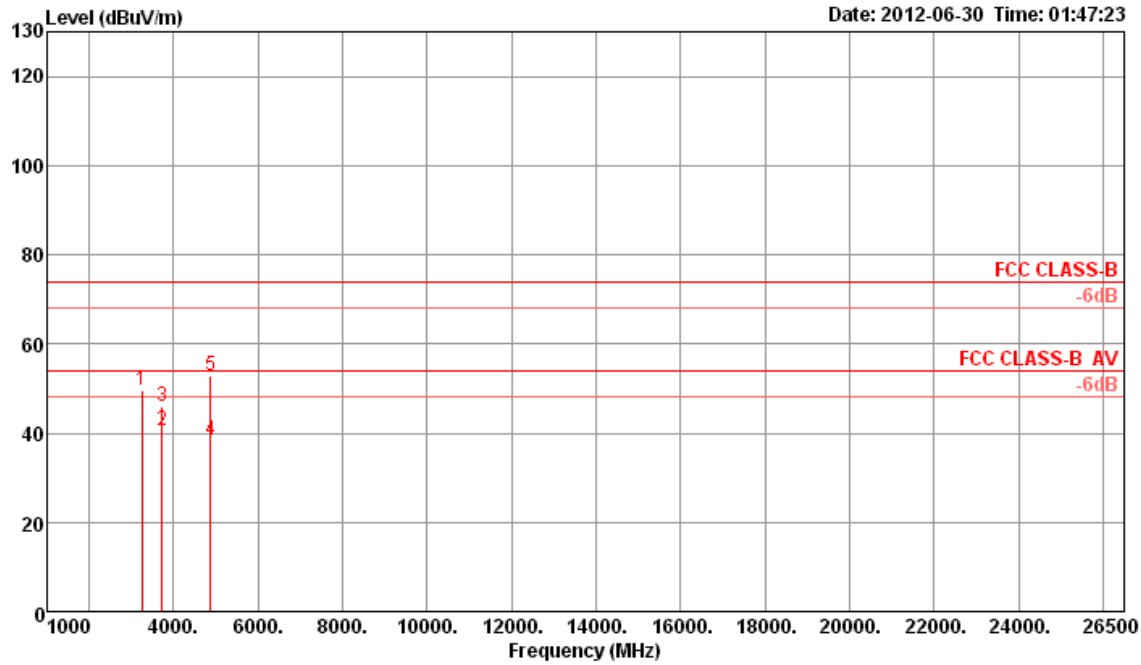
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11G-20M	**Power Level**	3	**Test Freq. (FX)**	F2
Operating Function	Transmit	**Ant. No.**	1,2,3	**Polarization**	V



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3249.38	47.33	74.00	-26.67	50.02	2.66	30.00	35.35	Peak	103	85	VERTICAL
2	3732.74	52.31	74.00	-21.69	53.49	2.82	31.21	35.21	Peak	116	60	VERTICAL
3	3732.74	49.86	54.00	-4.14	51.04	2.82	31.21	35.21	Average	116	60	VERTICAL
4	4872.65	34.96	54.00	-19.04	33.50	3.33	33.16	35.03	Average	122	236	VERTICAL
5	4876.21	49.91	74.00	-24.09	48.45	3.33	33.16	35.03	Peak	122	236	VERTICAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

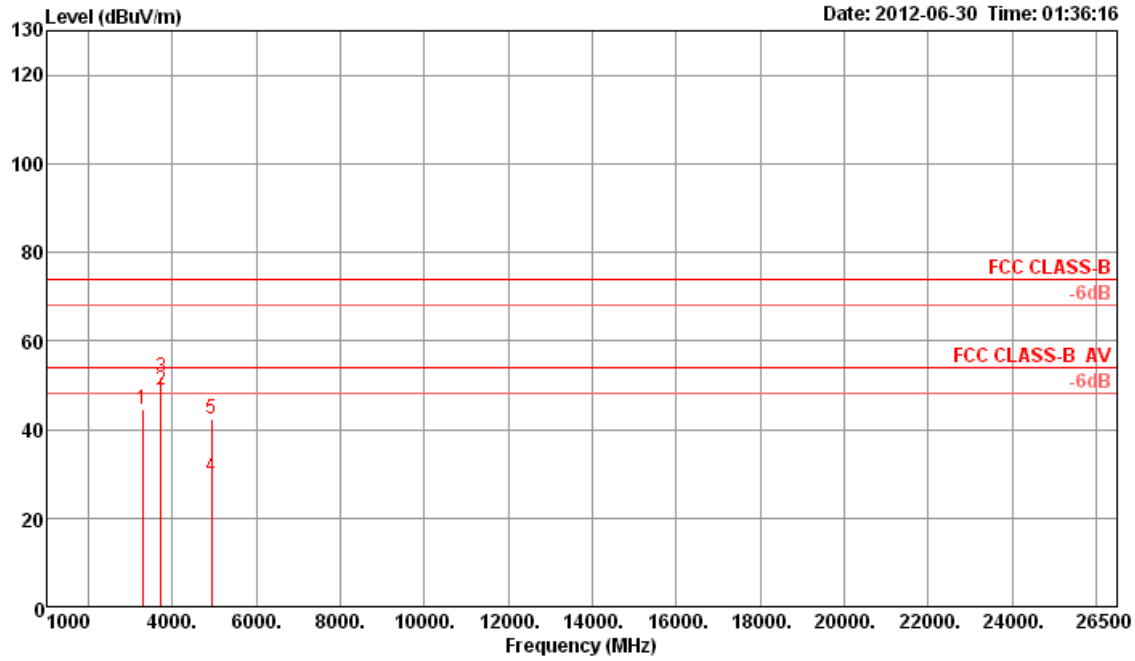
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11G-20M	**Power Level**	3	**Test Freq. (FX)**	F2
Operating Function	Transmit	**Ant. No.**	1,2,3	**Polarization**	H



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3249.20	49.78	74.00	-24.22	52.47	2.66	30.00	35.35	Peak	100	60	HORIZONTAL
2	3732.73	40.68	54.00	-13.32	41.86	2.82	31.21	35.21	Average	103	33	HORIZONTAL
3	3732.84	46.02	74.00	-27.98	47.20	2.82	31.21	35.21	Peak	103	33	HORIZONTAL
4	4873.87	38.52	54.00	-15.48	37.06	3.33	33.16	35.03	Average	100	286	HORIZONTAL
5	4874.91	52.73	74.00	-21.27	51.27	3.33	33.16	35.03	Peak	100	286	HORIZONTAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

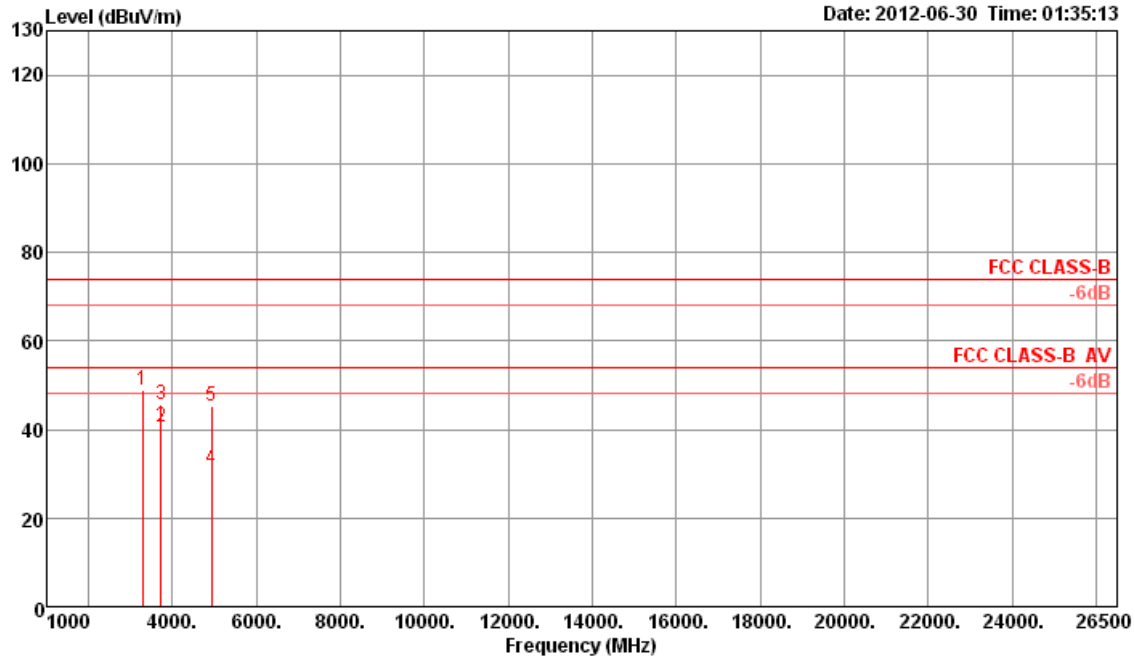
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11G-20M	**Power Level**	3	**Test Freq. (FX)**	F3
Operating Function	Transmit	**Ant. No.**	1,2,3	**Polarization**	V



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3282.61	44.70	74.00	-29.30	47.35	2.69	30.00	35.34	Peak	104	103	VERTICAL
2	3732.74	48.93	54.00	-5.07	50.11	2.82	31.21	35.21	Average	117	60	VERTICAL
3	3732.87	51.92	74.00	-22.08	53.10	2.82	31.21	35.21	Peak	117	60	VERTICAL
4	4922.30	29.22	54.00	-24.78	27.62	3.35	33.26	35.01	Average	100	251	VERTICAL
5	4925.72	42.43	74.00	-31.57	40.83	3.35	33.26	35.01	Peak	100	251	VERTICAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11G-20M	**Power Level**	3	**Test Freq. (FX)**	F3
Operating Function	Transmit	**Ant. No.**	1,2,3	**Polarization**	H

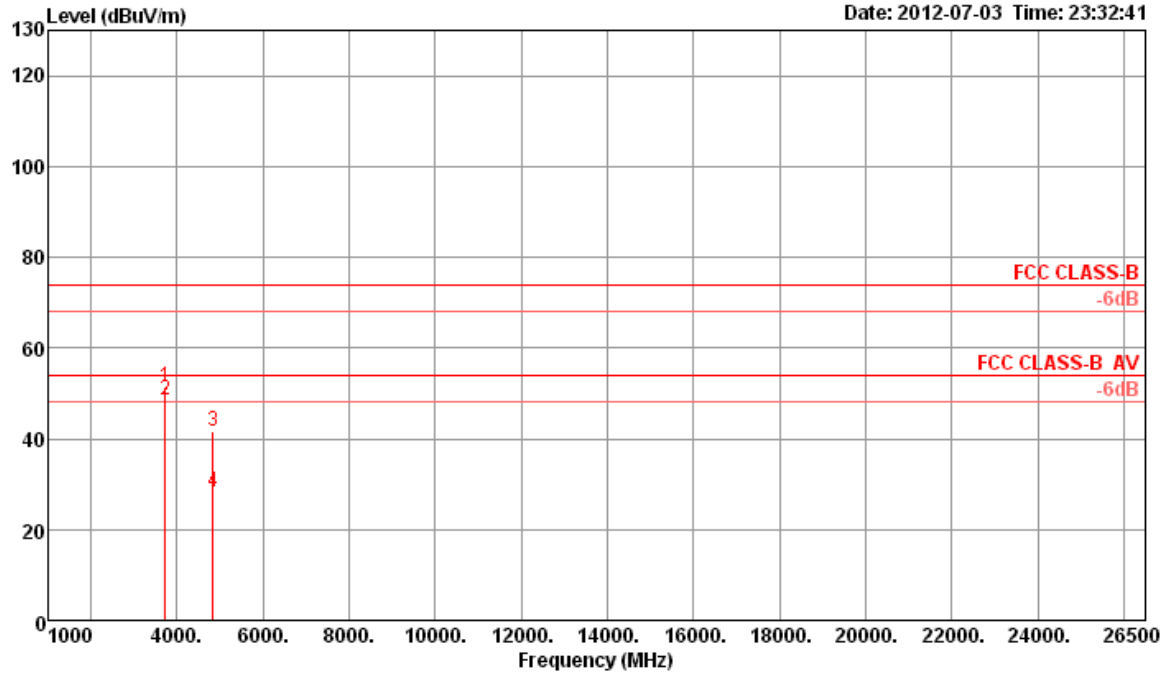


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3282.69	48.72	74.00	-25.28	51.37	2.69	30.00	35.34	Peak	114	50	HORIZONTAL
2	3732.77	40.68	54.00	-13.32	41.86	2.82	31.21	35.21	Average	104	36	HORIZONTAL
3	3732.81	45.68	74.00	-28.32	46.86	2.82	31.21	35.21	Peak	104	36	HORIZONTAL
4	4924.08	31.03	54.00	-22.97	29.43	3.35	33.26	35.01	Average	100	279	HORIZONTAL
5	4924.58	45.29	74.00	-28.71	43.69	3.35	33.26	35.01	Peak	100	279	HORIZONTAL

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

3.5.14 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 11N2.4G-20M

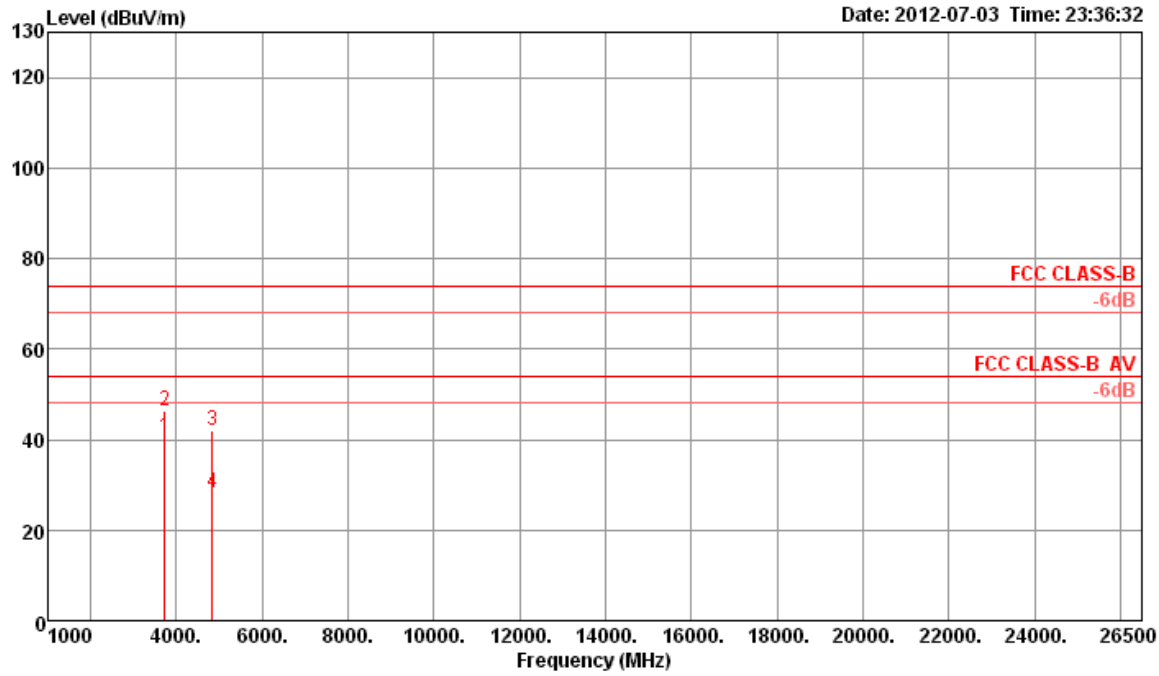
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11N2.4G-20M	**Power Level**	1	**Test Freq. (FX)**	F1
Operating Function	Transmit	**Ant. No.**	3	**Polarization**	V



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3732.46	51.50	74.00	-22.50	52.68	2.82	31.21	35.21	Peak	100	61	VERTICAL
2	3732.74	48.37	54.00	-5.63	49.55	2.82	31.21	35.21	Average	100	61	VERTICAL
3	4823.68	41.76	74.00	-32.24	40.42	3.31	33.06	35.03	Peak	100	195	VERTICAL
4	4823.76	28.31	54.00	-25.69	26.97	3.31	33.06	35.03	Average	100	195	VERTICAL

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

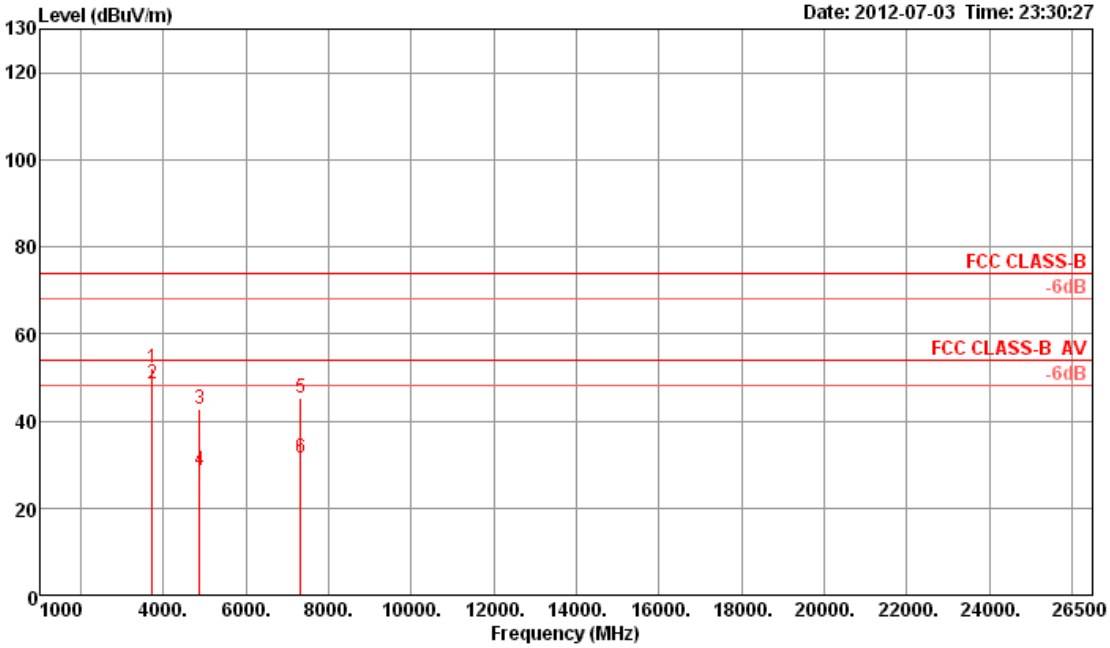
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11N2.4G-20M	**Power Level**	1	**Test Freq. (FX)**	F1
Operating Function	Transmit	**Ant. No.**	3	**Polarization**	H



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3732.73	40.40	54.00	-13.60	41.58	2.82	31.21	35.21	Average	147	40	HORIZONTAL
2	3733.06	46.39	74.00	-27.61	47.57	2.82	31.21	35.21	Peak	147	40	HORIZONTAL
3	4823.56	42.13	74.00	-31.87	40.79	3.31	33.06	35.03	Peak	100	163	HORIZONTAL
4	4823.79	28.39	54.00	-25.61	27.05	3.31	33.06	35.03	Average	100	163	HORIZONTAL

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

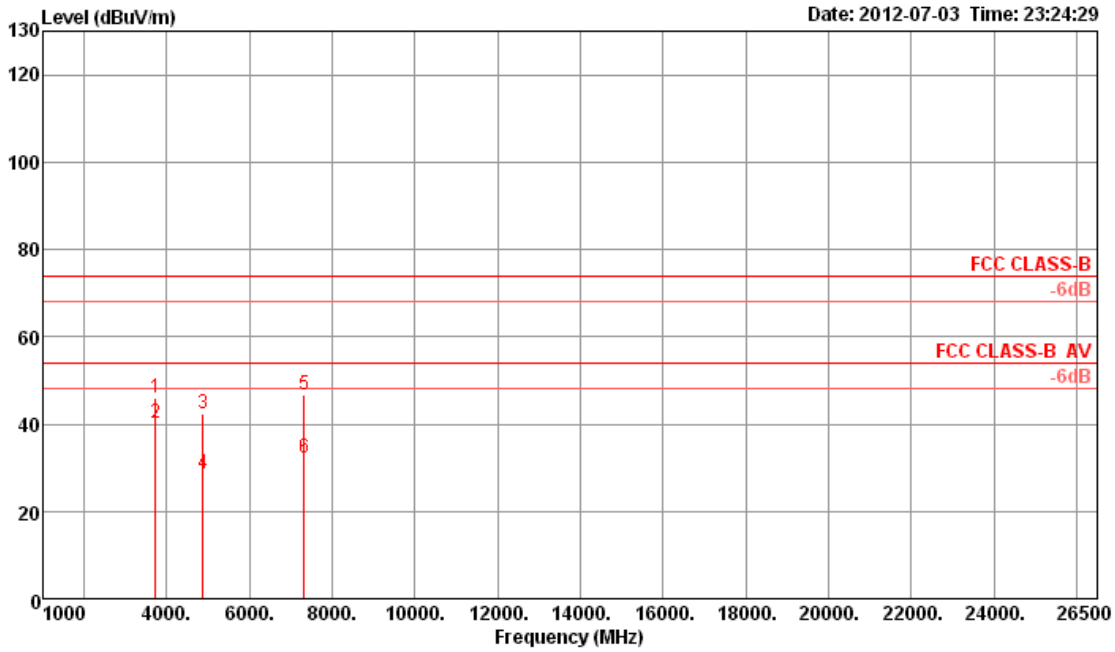
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11N2.4G-20M	**Power Level**	1	**Test Freq. (FX)**	F2
Operating Function	Transmit	**Ant. No.**	3	**Polarization**	V



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3732.68	52.07	74.00	-21.93	53.25	2.82	31.21	35.21	Peak	100	62	VERTICAL
2	3732.73	48.59	54.00	-5.41	49.77	2.82	31.21	35.21	Average	100	62	VERTICAL
3	4873.57	42.56	74.00	-31.44	41.10	3.33	33.16	35.03	Peak	100	116	VERTICAL
4	4874.50	28.49	54.00	-25.51	27.03	3.33	33.16	35.03	Average	100	116	VERTICAL
5	7310.52	45.28	74.00	-28.72	40.66	4.06	35.96	35.40	Peak	100	195	VERTICAL
6	7311.47	31.59	54.00	-22.41	26.97	4.06	35.96	35.40	Average	100	195	VERTICAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

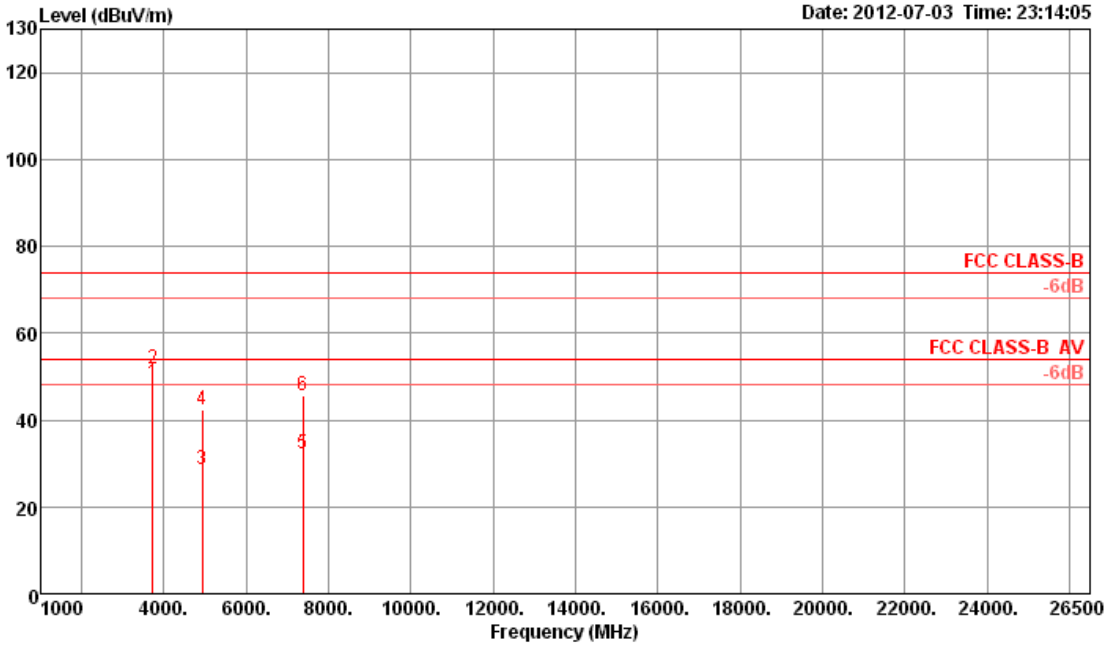
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11N2.4G-20M	**Power Level**	1	**Test Freq. (FX)**	F2
Operating Function	Transmit	**Ant. No.**	3	**Polarization**	H



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3732.60	46.01	74.00	-27.99	47.19	2.82	31.21	35.21	Peak	157	145	HORIZONTAL
2	3732.72	40.09	54.00	-13.91	41.27	2.82	31.21	35.21	Average	157	145	HORIZONTAL
3	4873.75	42.20	74.00	-31.80	40.74	3.33	33.16	35.03	Peak	100	135	HORIZONTAL
4	4874.43	28.62	54.00	-25.38	27.16	3.33	33.16	35.03	Average	100	135	HORIZONTAL
5	7310.75	46.54	74.00	-27.46	41.92	4.06	35.96	35.40	Peak	100	237	HORIZONTAL
6	7311.46	32.37	54.00	-21.63	27.75	4.06	35.96	35.40	Average	100	237	HORIZONTAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

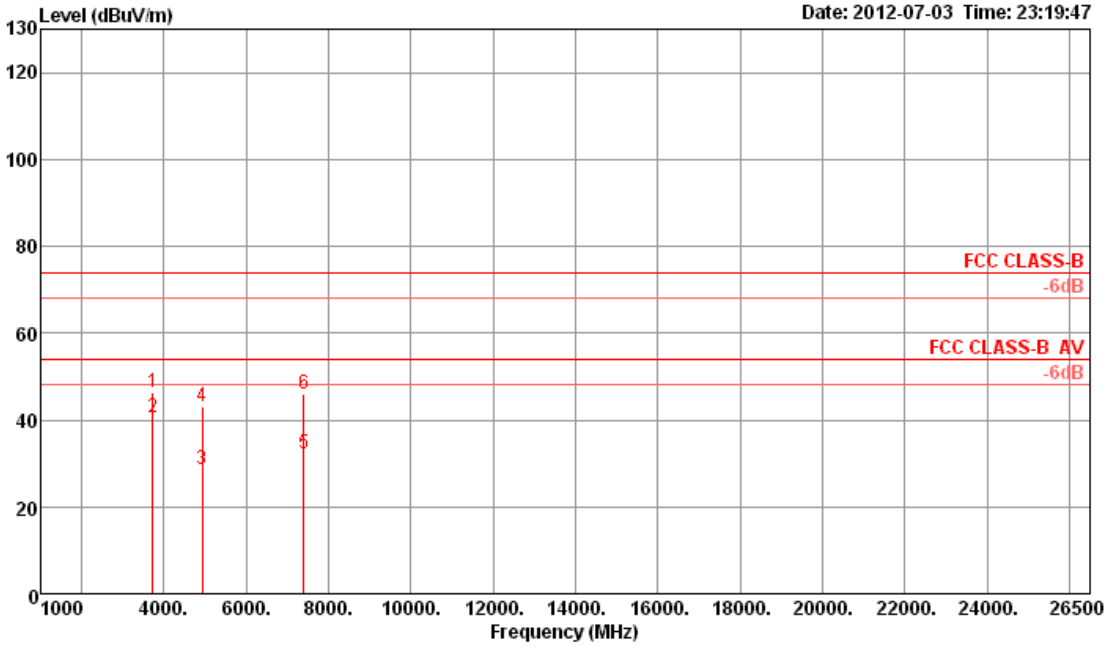
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11N2.4G-20M	**Power Level**	1	**Test Freq. (FX)**	F3
Operating Function	Transmit	**Ant. No.**	3	**Polarization**	V



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3732.74	48.65	54.00	-5.35	49.83	2.82	31.21	35.21	Average	100	62	VERTICAL
2	3732.83	51.93	74.00	-22.07	53.11	2.82	31.21	35.21	Peak	100	62	VERTICAL
3	4923.24	28.70	54.00	-25.30	27.10	3.35	33.26	35.01	Average	100	180	VERTICAL
4	4926.32	42.41	74.00	-31.59	40.81	3.35	33.26	35.01	Peak	100	180	VERTICAL
5	7383.74	32.25	54.00	-21.75	27.50	4.06	36.09	35.40	Average	100	252	VERTICAL
6	7383.92	45.65	74.00	-28.35	40.90	4.06	36.09	35.40	Peak	100	252	VERTICAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

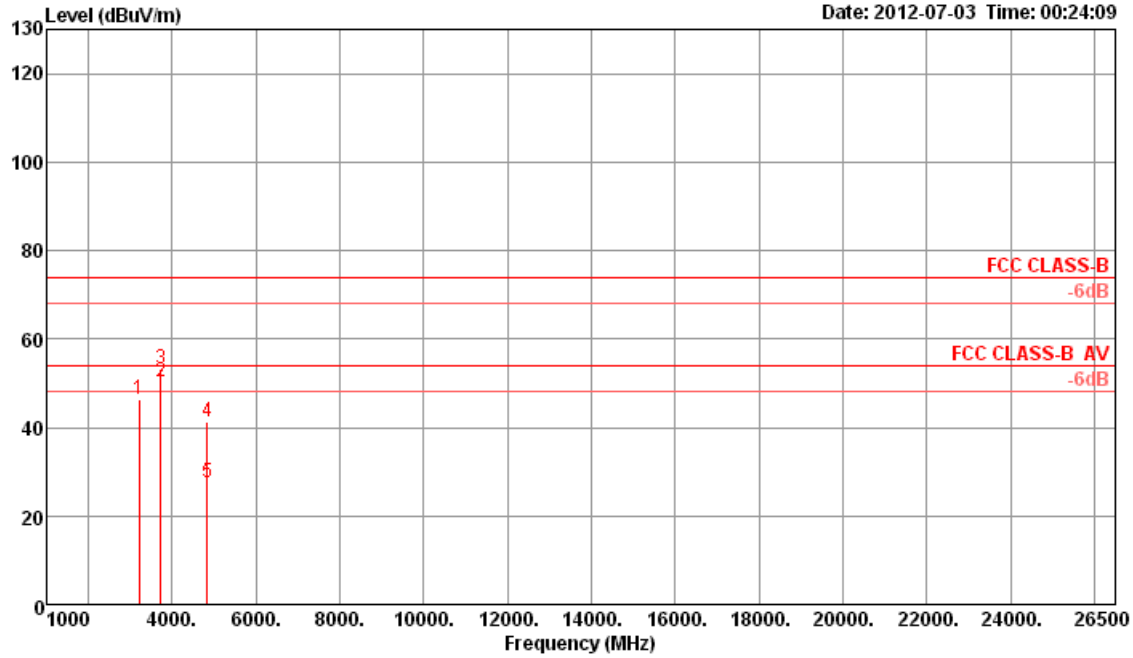
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11N2.4G-20M	**Power Level**	1	**Test Freq. (FX)**	F3
Operating Function	Transmit	**Ant. No.**	3	**Polarization**	H



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3732.72	46.28	74.00	-27.72	47.46	2.82	31.21	35.21	Peak	149	40	HORIZONTAL
2	3732.76	40.56	54.00	-13.44	41.74	2.82	31.21	35.21	Average	149	40	HORIZONTAL
3	4923.72	28.67	54.00	-25.33	27.07	3.35	33.26	35.01	Average	100	63	HORIZONTAL
4	4923.75	43.08	74.00	-30.92	41.48	3.35	33.26	35.01	Peak	100	63	HORIZONTAL
5	7385.54	32.15	54.00	-21.85	27.40	4.06	36.09	35.40	Average	100	157	HORIZONTAL
6	7385.74	45.90	74.00	-28.10	41.15	4.06	36.09	35.40	Peak	100	157	HORIZONTAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

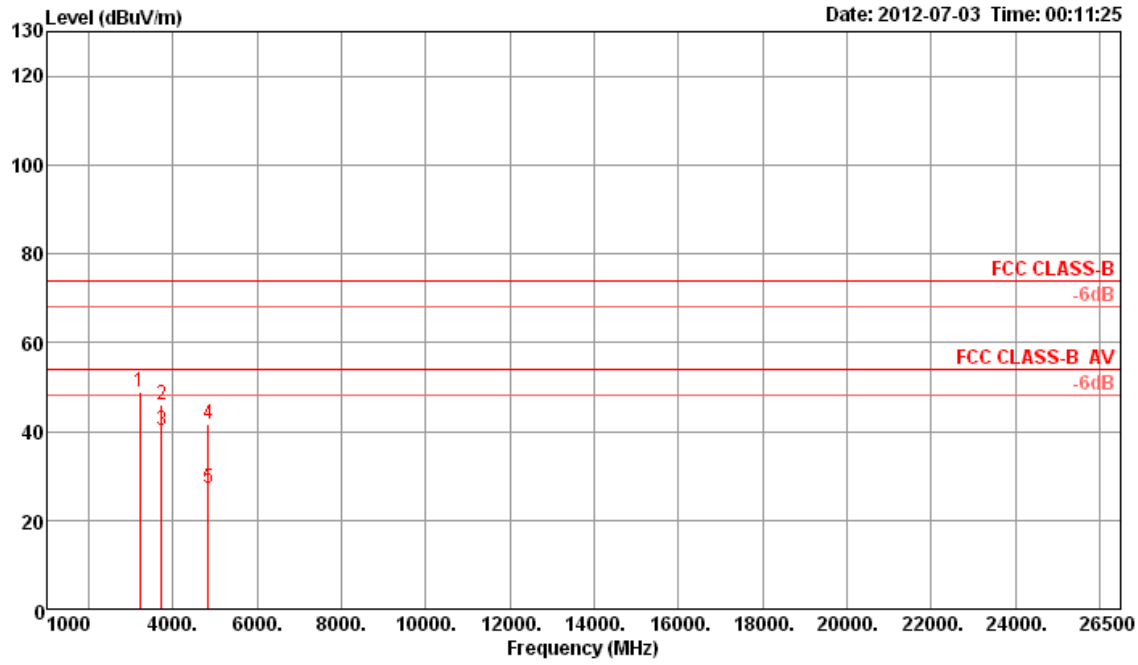
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11N2.4G-20M	**Power Level**	2	**Test Freq. (FX)**	F1
Operating Function	Transmit	**Ant. No.**	2,3	**Polarization**	V



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3216.08	46.25	74.00	-27.75	48.95	2.65	30.00	35.35	Peak	100	334	VERTICAL
2	3732.74	50.41	54.00	-3.59	51.59	2.82	31.21	35.21	Average	116	41	VERTICAL
3	3732.85	53.10	74.00	-20.90	54.28	2.82	31.21	35.21	Peak	116	41	VERTICAL
4	4823.60	41.16	74.00	-32.84	39.82	3.31	33.06	35.03	Peak	100	140	VERTICAL
5	4823.80	27.35	54.00	-26.65	26.01	3.31	33.06	35.03	Average	100	140	VERTICAL

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

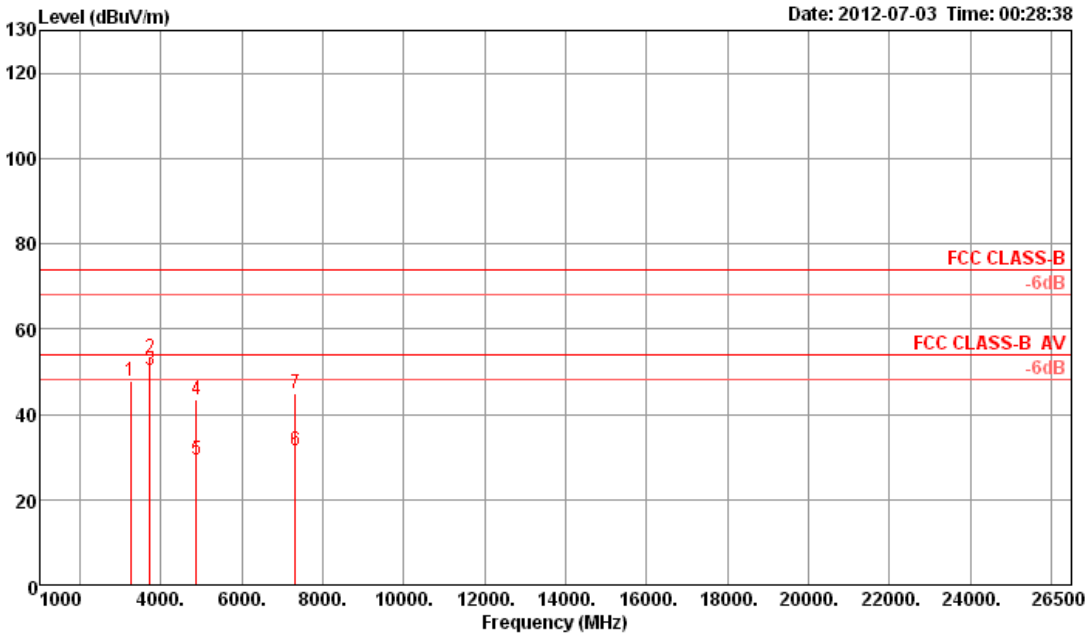
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11N2.4G-20M	**Power Level**	2	**Test Freq. (FX)**	F1
Operating Function	Transmit	**Ant. No.**	2,3	**Polarization**	H



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3215.90	48.72	74.00	-25.28	51.42	2.65	30.00	35.35	Peak	100	126	HORIZONTAL
2	3732.57	46.16	74.00	-27.84	47.34	2.82	31.21	35.21	Peak	169	121	HORIZONTAL
3	3732.75	40.36	54.00	-13.64	41.54	2.82	31.21	35.21	Average	169	121	HORIZONTAL
4	4823.63	41.47	74.00	-32.53	40.13	3.31	33.06	35.03	Peak	100	180	HORIZONTAL
5	4823.72	27.18	54.00	-26.82	25.84	3.31	33.06	35.03	Average	100	180	HORIZONTAL

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

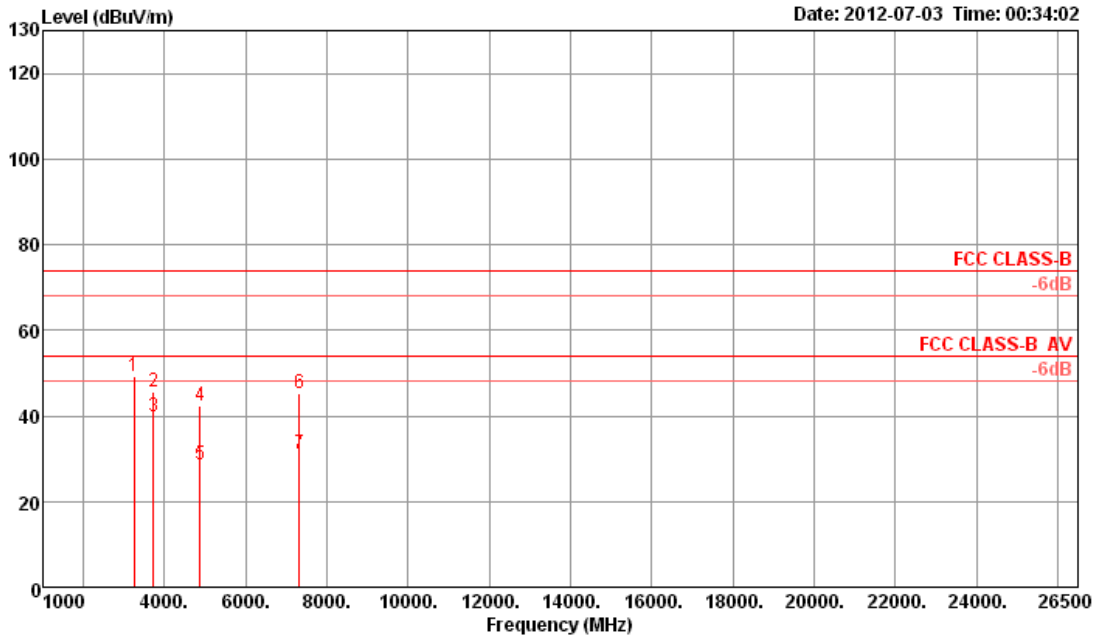
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11N2.4G-20M	**Power Level**	2	**Test Freq. (FX)**	F2
Operating Function	Transmit	**Ant. No.**	2,3	**Polarization**	V



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3249.29	47.76	74.00	-26.24	50.45	2.66	30.00	35.35	Peak	100	316	VERTICAL
2	3732.68	53.22	74.00	-20.78	54.40	2.82	31.21	35.21	Peak	116	40	VERTICAL
3	3732.74	50.25	54.00	-3.75	51.43	2.82	31.21	35.21	Average	116	40	VERTICAL
4	4874.80	43.31	74.00	-30.69	41.85	3.33	33.16	35.03	Peak	118	271	VERTICAL
5	4874.88	29.18	54.00	-24.82	27.72	3.33	33.16	35.03	Average	118	271	VERTICAL
6	7311.90	31.41	54.00	-22.59	26.79	4.06	35.96	35.40	Average	100	263	VERTICAL
7	7315.66	44.89	74.00	-29.11	40.27	4.06	35.96	35.40	Peak	100	263	VERTICAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

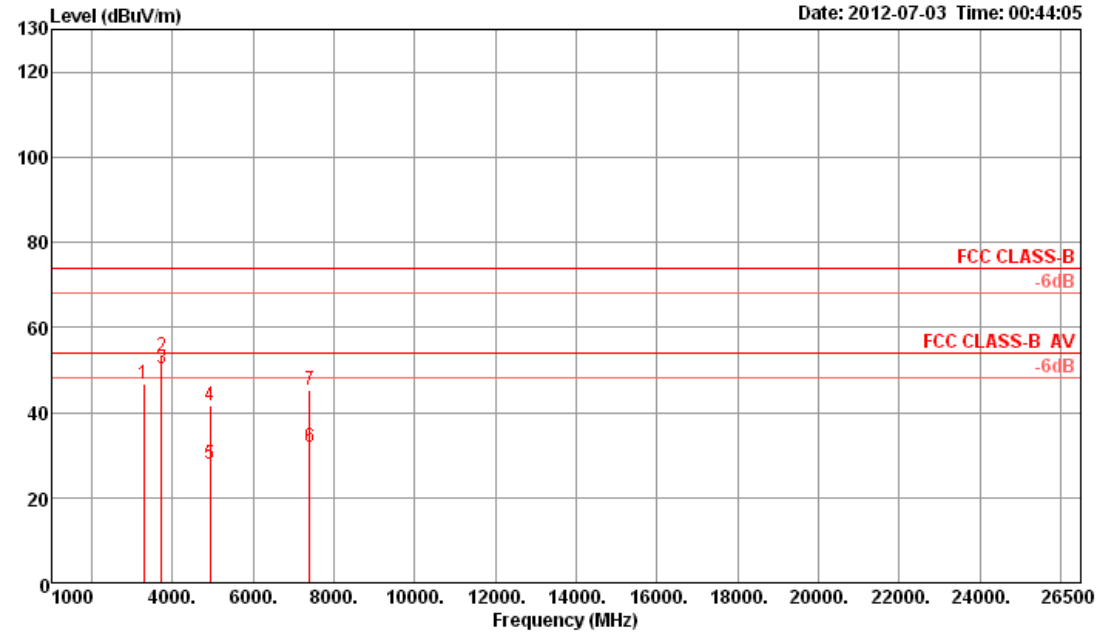
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11N2.4G-20M	**Power Level**	2	**Test Freq. (FX)**	F2
Operating Function	Transmit	**Ant. No.**	2,3	**Polarization**	H



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3249.33	49.31	74.00	-24.69	52.00	2.66	30.00	35.35	Peak	100	115	HORIZONTAL
2	3732.66	45.46	74.00	-28.54	46.64	2.82	31.21	35.21	Peak	167	117	HORIZONTAL
3	3732.73	39.89	54.00	-14.11	41.07	2.82	31.21	35.21	Average	167	117	HORIZONTAL
4	4874.01	42.29	74.00	-31.71	40.83	3.33	33.16	35.03	Peak	100	30	HORIZONTAL
5	4874.47	28.58	54.00	-25.42	27.12	3.33	33.16	35.03	Average	100	30	HORIZONTAL
6	7310.79	45.22	74.00	-28.78	40.60	4.06	35.96	35.40	Peak	100	126	HORIZONTAL
7	7311.08	31.22	54.00	-22.78	26.60	4.06	35.96	35.40	Average	100	126	HORIZONTAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

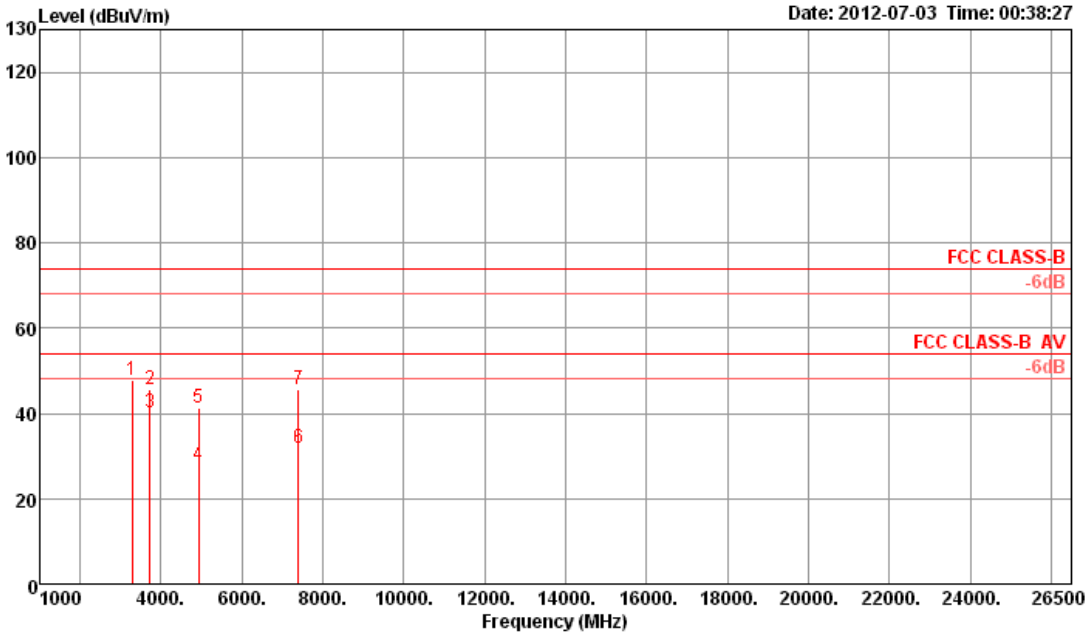
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11N2.4G-20M	**Power Level**	2	**Test Freq. (FX)**	F3
Operating Function	Transmit	**Ant. No.**	2,3	**Polarization**	V



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3282.60	46.85	74.00	-27.15	49.50	2.69	30.00	35.34	Peak	149	303	VERTICAL
2	3732.62	53.11	74.00	-20.89	54.29	2.82	31.21	35.21	Peak	116	34	VERTICAL
3	3732.74	50.27	54.00	-3.73	51.45	2.82	31.21	35.21	Average	116	34	VERTICAL
4	4923.53	41.82	74.00	-32.18	40.22	3.35	33.26	35.01	Peak	100	133	VERTICAL
5	4923.63	27.71	54.00	-26.29	26.11	3.35	33.26	35.01	Average	100	133	VERTICAL
6	7385.59	31.83	54.00	-22.17	27.08	4.06	36.09	35.40	Average	100	205	VERTICAL
7	7385.89	45.35	74.00	-28.65	40.60	4.06	36.09	35.40	Peak	100	205	VERTICAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

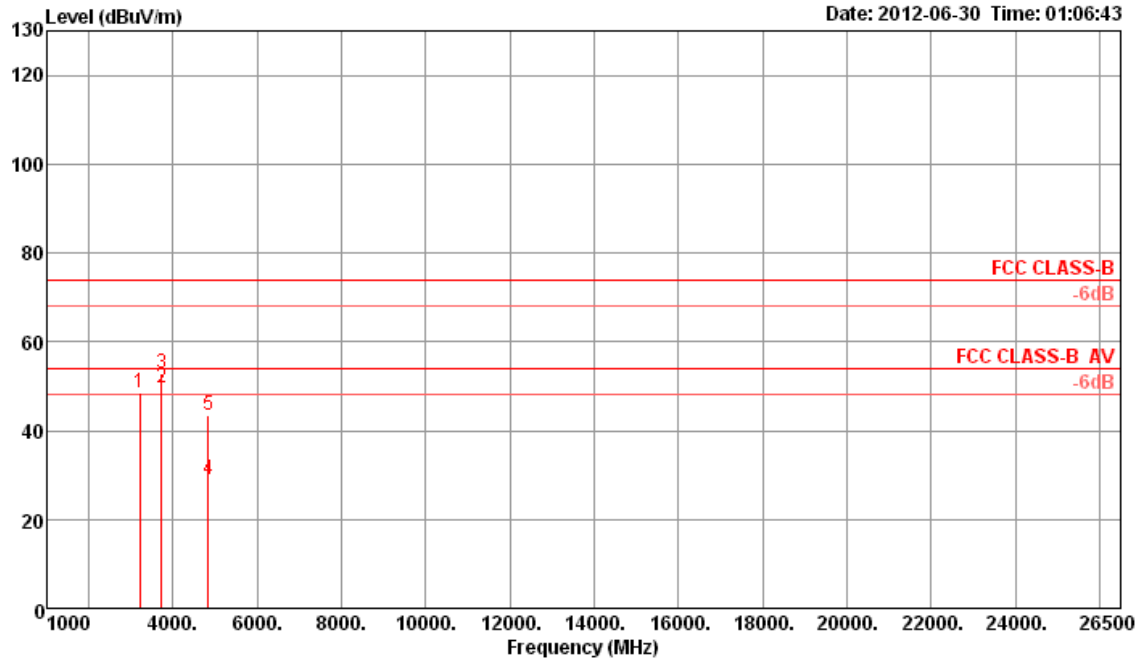
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11N2.4G-20M	**Power Level**	2	**Test Freq. (FX)**	F3
Operating Function	Transmit	**Ant. No.**	2,3	**Polarization**	H



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3282.67	47.82	74.00	-26.18	50.47	2.69	30.00	35.34	Peak	100	113	HORIZONTAL
2	3732.71	45.52	74.00	-28.48	46.70	2.82	31.21	35.21	Peak	169	105	HORIZONTAL
3	3732.74	40.28	54.00	-13.72	41.46	2.82	31.21	35.21	Average	169	105	HORIZONTAL
4	4923.25	27.75	54.00	-26.25	26.15	3.35	33.26	35.01	Average	100	190	HORIZONTAL
5	4924.42	41.31	74.00	-32.69	39.71	3.35	33.26	35.01	Peak	100	190	HORIZONTAL
6	7385.37	31.89	54.00	-22.11	27.14	4.06	36.09	35.40	Average	100	259	HORIZONTAL
7	7386.68	45.52	74.00	-28.48	40.77	4.06	36.09	35.40	Peak	100	259	HORIZONTAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

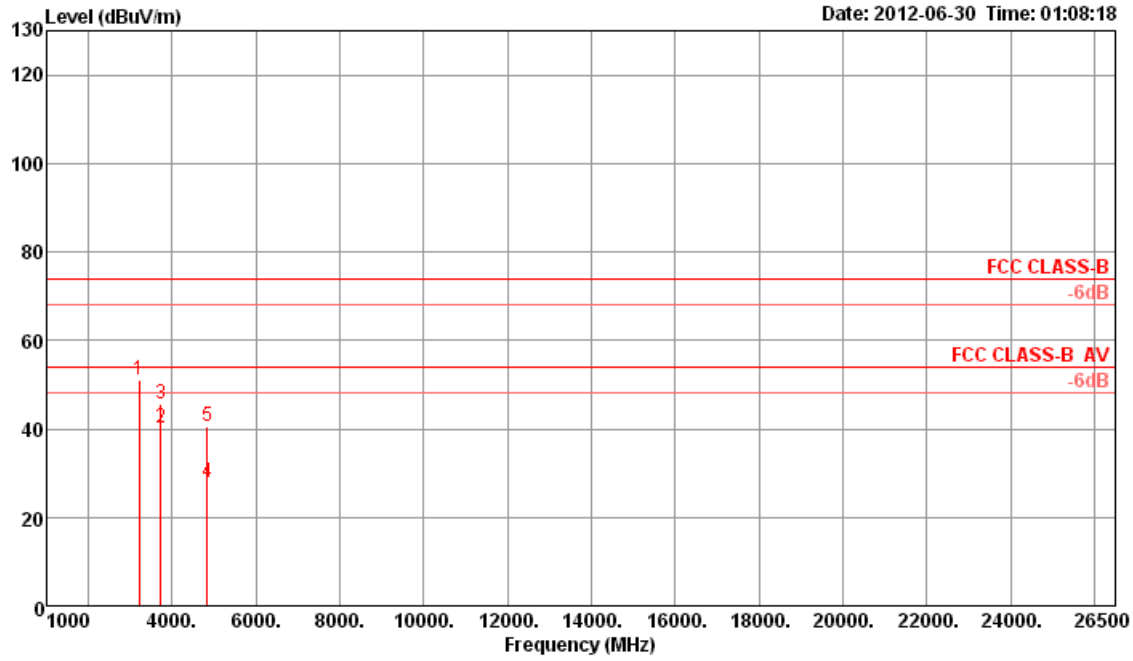
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11N2.4G-20M	**Power Level**	3	**Test Freq. (FX)**	F1
Operating Function	Transmit	**Ant. No.**	1,2,3	**Polarization**	V



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3215.93	48.40	74.00	-25.60	51.10	2.65	30.00	35.35	Peak	102	40	VERTICAL
2	3732.74	49.79	54.00	-4.21	50.97	2.82	31.21	35.21	Average	116	68	VERTICAL
3	3732.76	52.71	74.00	-21.29	53.89	2.82	31.21	35.21	Peak	116	68	VERTICAL
4	4823.75	29.12	54.00	-24.88	27.78	3.31	33.06	35.03	Average	100	288	VERTICAL
5	4824.05	43.60	74.00	-30.40	42.26	3.31	33.06	35.03	Peak	100	288	VERTICAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

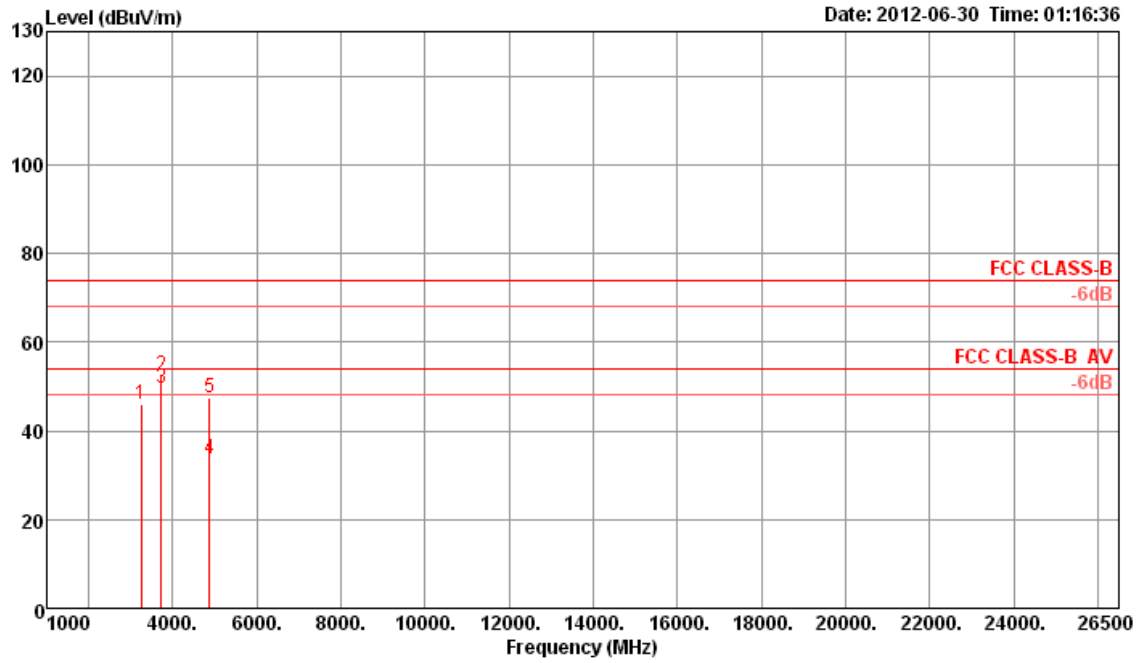
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11N2.4G-20M	**Power Level**	3	**Test Freq. (FX)**	F1
Operating Function	Transmit	**Ant. No.**	1,2,3	**Polarization**	H



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3215.98	50.90	74.00	-23.10	53.60	2.65	30.00	35.35	Peak	100	54	HORIZONTAL
2	3732.74	40.32	54.00	-13.68	41.50	2.82	31.21	35.21	Average	103	41	HORIZONTAL
3	3732.90	45.69	74.00	-28.31	46.87	2.82	31.21	35.21	Peak	103	41	HORIZONTAL
4	4823.77	27.84	54.00	-26.16	26.50	3.31	33.06	35.03	Average	100	285	HORIZONTAL
5	4823.91	40.59	74.00	-33.41	39.25	3.31	33.06	35.03	Peak	100	285	HORIZONTAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

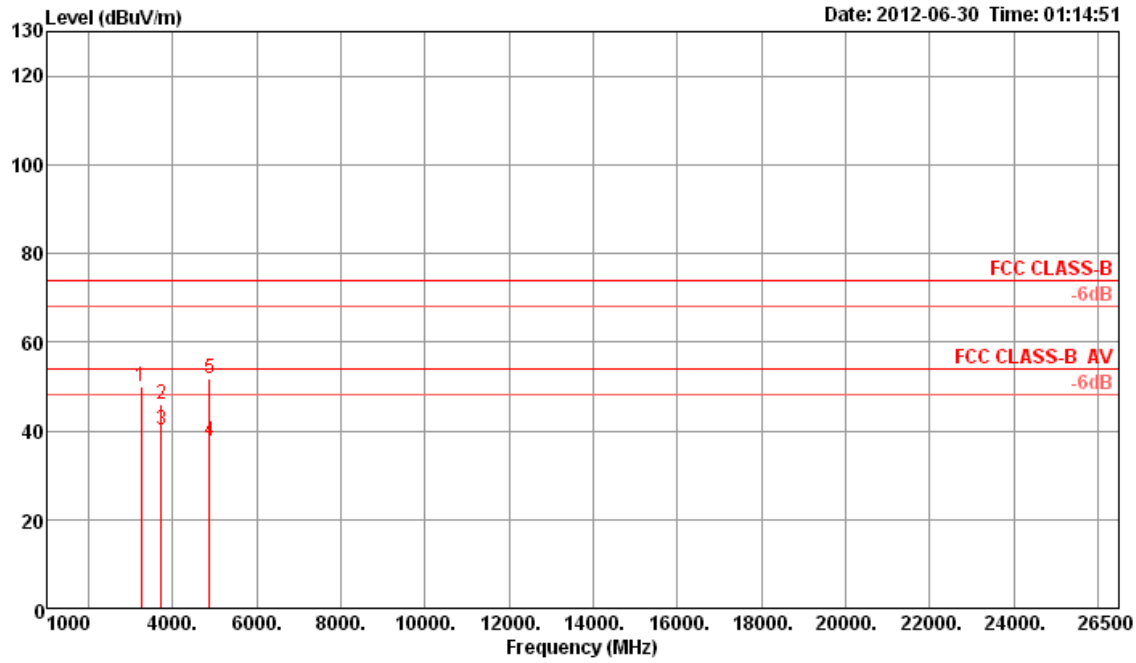
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11N2.4G-20M	**Power Level**	3	**Test Freq. (FX)**	F2
Operating Function	Transmit	**Ant. No.**	1,2,3	**Polarization**	V



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3249.28	46.15	74.00	-27.85	48.84	2.66	30.00	35.35	Peak	102	38	VERTICAL
2	3732.51	52.55	74.00	-21.45	53.73	2.82	31.21	35.21	Peak	116	65	VERTICAL
3	3732.73	49.60	54.00	-4.40	50.78	2.82	31.21	35.21	Average	116	65	VERTICAL
4	4876.61	33.53	54.00	-20.47	32.07	3.33	33.16	35.03	Average	100	242	VERTICAL
5	4877.38	47.36	74.00	-26.64	45.90	3.33	33.16	35.03	Peak	100	242	VERTICAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

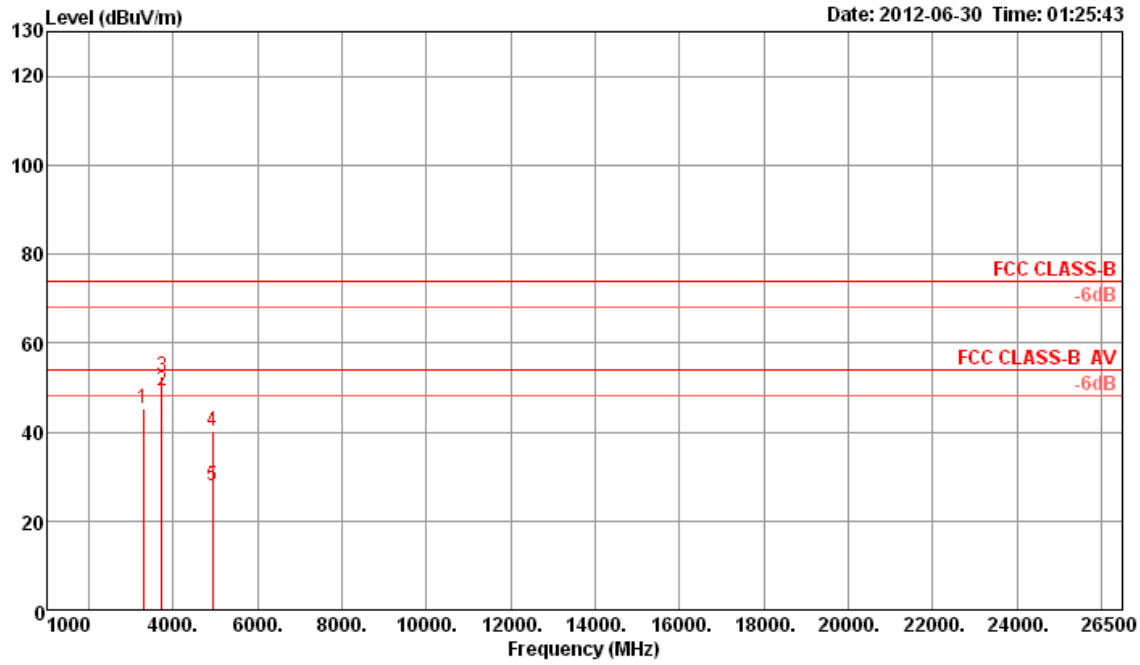
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11N2.4G-20M	**Power Level**	3	**Test Freq. (FX)**	F2
Operating Function	Transmit	**Ant. No.**	1,2,3	**Polarization**	H



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3249.27	49.81	74.00	-24.19	52.50	2.66	30.00	35.35	Peak	100	64	HORIZONTAL
2	3732.40	46.04	74.00	-27.96	47.22	2.82	31.21	35.21	Peak	103	39	HORIZONTAL
3	3732.76	40.37	54.00	-13.63	41.55	2.82	31.21	35.21	Average	103	39	HORIZONTAL
4	4874.14	37.74	54.00	-16.26	36.28	3.33	33.16	35.03	Average	100	289	HORIZONTAL
5	4874.24	51.96	74.00	-22.04	50.50	3.33	33.16	35.03	Peak	100	289	HORIZONTAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

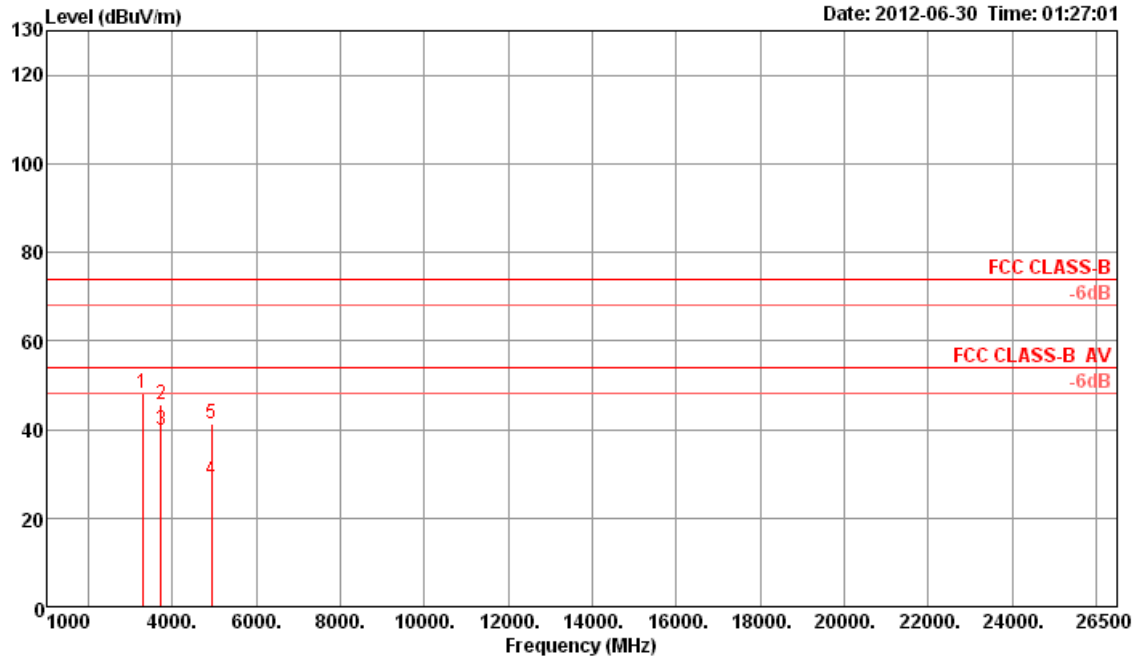
Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11N2.4G-20M	**Power Level**	3	**Test Freq. (FX)**	F3
Operating Function	Transmit	**Ant. No.**	1,2,3	**Polarization**	V



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3282.51	45.31	74.00	-28.69	47.96	2.69	30.00	35.34	Peak	103	95	VERTICAL
2	3732.74	49.34	54.00	-4.66	50.52	2.82	31.21	35.21	Average	118	64	VERTICAL
3	3732.83	52.37	74.00	-21.63	53.55	2.82	31.21	35.21	Peak	118	64	VERTICAL
4	4923.33	40.31	74.00	-33.69	38.71	3.35	33.26	35.01	Peak	100	325	VERTICAL
5	4923.65	27.86	54.00	-26.14	26.26	3.35	33.26	35.01	Average	100	325	VERTICAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

Transmitter Radiated Unwanted Emissions (Above 1GHz)					
Modulation Mode	11N2.4G-20M	**Power Level**	3	**Test Freq. (FX)**	F3
Operating Function	Transmit	**Ant. No.**	1,2,3	**Polarization**	H



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	Remark	A/Pos	T/Pos	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB		cm	deg	
1	3282.67	48.22	74.00	-25.78	50.87	2.69	30.00	35.34	Peak	112	60	HORIZONTAL
2	3732.36	45.70	74.00	-28.30	46.88	2.82	31.21	35.21	Peak	104	38	HORIZONTAL
3	3732.74	39.78	54.00	-14.22	40.96	2.82	31.21	35.21	Average	104	38	HORIZONTAL
4	4923.95	28.62	54.00	-25.38	27.02	3.35	33.26	35.01	Average	100	163	HORIZONTAL
5	4926.77	41.23	74.00	-32.77	39.63	3.35	33.26	35.01	Peak	100	163	HORIZONTAL

Note 1: “>20dB” means spurious emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found spurious emissions (No spurious emissions were detected.)
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 30 dB relative to the maximum measured in-band level.

4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMI Test Receiver	R&S	ESCS 30	100377	9kHz ~ 2.75GHz	Sep. 14, 2011	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Nov. 14, 2011	Conduction (CO01-CB)
V- LISN	Schwarzbeck	NSLK 8127	8127-478	9K ~ 30MHz	Nov. 30, 2011	Conduction (CO01-CB)
PULSE LIMITER	R&S	ESH3-Z2	100430	9K~30MHz	Feb. 03, 2012	Conduction (CO01-CB)
COND Cable	Woken	Cable	01	0.15MHz~30MHz	Dec. 04, 2011	Conduction (CO01-CB)

Note: Calibration Interval of instruments listed above is one year.

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Signal analyzer	R&S	FSV40	100979	9kHz ~ 40GHz	Sep. 26, 2011	Conducted (TH01-CB)
RF Cable-high	Woken	High Cable-7	-	1GHz ~ 26.5GHz	Nov. 17, 2011	Conducted (TH01-CB)
RF Cable-high	Woken	High Cable-8	-	1GHz ~ 26.5GHz	Nov. 17, 2011	Conducted (TH01-CB)
RF Cable-high	Woken	High Cable-9	-	1GHz ~ 26.5GHz	Nov. 17, 2011	Conducted (TH01-CB)
RF Cable-high	Woken	High Cable-10	-	1GHz ~ 26.5GHz	Nov. 17, 2011	Conducted (TH01-CB)
RF Cable-high	Woken	High Cable-11	-	1GHz ~ 26.5GHz	Nov. 17, 2011	Conducted (TH01-CB)
RF Cable-high	Woken	High Cable-12	-	1GHz ~ 26.5GHz	Nov. 17, 2011	Conducted (TH01-CB)
RF Cable-high	Woken	High Cable-13	-	1GHz ~ 26.5GHz	Nov. 17, 2011	Conducted (TH01-CB)
Power Sensor	Anritsu	MA2411B	0917223	300MHz ~ 40GHz	Nov. 01, 2011	Conducted (TH01-CB)
Power Meter	Anritsu	ML2495A	1035008	300MHz ~ 40GHz	Nov. 01, 2011	Conducted (TH01-CB)

Note: Calibration Interval of instruments listed above is one year.

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
BILOG ANTENNA	Schaffner	CBL6112D	22021	20MHz ~ 2GHz	Jan. 11, 2012	Radiation (03CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Nov. 25, 2011	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8447D	2944A10991	0.1MHz ~ 1.3GHz	Dec. 22, 2011	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Nov. 29, 2011	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Nov. 03, 2011	Radiation (03CH01-CB)
EMI Test Receiver	R&S	ESCS 30	100355	9kHz ~ 2.75GHz	Mar. 20, 2012	Radiation (03CH01-CB)
Turn Table	INN CO	CO 2000	N/A	0 ~ 360 degree	N/A	Radiation (03CH01-CB)
Antenna Mast	INN CO	CO2000	N/A	1 m - 4 m	N/A	Radiation (03CH01-CB)
RF Cable-low	Woken	Low Cable-1	N/A	30MHz ~ 1GHz	Nov. 17, 2011	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-1	N/A	1GHz ~ 26.5GHz	Nov. 17, 2011	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-2	N/A	1GHz ~ 26.5GHz	Nov. 17, 2011	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-3	N/A	1GHz ~ 40GHz	Nov. 17, 2011	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-4	N/A	1GHz ~ 40GHz	Nov. 17, 2011	Radiation (03CH01-CB)

Note: Calibration Interval of instruments listed above is one year.

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Loop Antenna	Teseq	HLA 6120	24155	9 kHz - 30 MHz	Sep. 09, 2010*	Radiation (03CH01-CB)

Note: Calibration Interval of instruments listed above is two year.

5 Certification of TAF Accreditation

Certificate No. : L1190-120405

財團法人全國認證基金會
Taiwan Accreditation Foundation

Certificate of Accreditation

This is to certify that

Sporton International Inc.
EMC & Wireless Communications Laboratory
No.52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.

is accredited in respect of laboratory

Accreditation Criteria	:	ISO/IEC 17025:2005
Accreditation Number	:	1190
Originally Accredited	:	December 15, 2003
Effective Period	:	January 10, 2010 to January 09, 2013
Accredited Scope	:	Testing Field, see described in the Appendix
Specific Accreditation Program	:	Accreditation Program for Designated Testing Laboratory for Commodities Inspection Accreditation Program for Telecommunication Equipment Testing Laboratory Accreditation Program for BSMI Mutual Recognition Arrangment with Foreign Authorities

Jay-San Chen
President, Taiwan Accreditation Foundation
Date:April 05, 2012

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