FCC Test Report

Equipment	:	**Wireless 802.11 ac/a/b/g/n Access Point**
Brand Name	:	**Senao Networks**
Model No.	:	**CAP7252AG, CAP7253AG**
FCC ID	:	**U2M-CAP7252AG**
Standard	:	**47 CFR FCC Part 15.247**
Operating Band	:	**2400 MHz – 2483.5 MHz**
FCC Classification	:	**DTS**
Applicant	:	**Senao Networks, Inc.** **3F, No. 529, Chung Cheng Rd., Hsintien, Taipei, Taiwan, R.O.C**

The product sample received on Apr. 16, 2014 and completely tested on Aug. 27, 2014. 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:

James Fan / Assistant Manager

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APPENDIX A. TEST PHOTOS A1-A12

Summary of Test Result

Conformance Test Specifications					
Report Clause	**Ref. Std. Clause**	**Description**	**Measured**	**Limit**	**Result**
1.1.3	15.203	Antenna Requirement	Antenna connector mechanism complied	FCC 15.203	Complied
3.1	15.207	AC Power-line Conducted Emissions	[dBuV]: 0.379MHz 47.27 (Margin 1.03dB) – AV 54.49 (Margin 3.81dB) – QP	FCC 15.207	Complied
3.2	15.247(a)	6dB Bandwidth	6dB Bandwidth [MHz] 20M: 6.61 / 40M: 35.71	≥500kHz	Complied
3.3	15.247(b)	RF Output Power (Maximum Peak Conducted Output Power)	Power [dBm]: 29.91	Power [dBm]: 30	Complied
3.4	15.247(e)	Power Spectral Density	PSD [dBm/3kHz]: 4.49	PSD [dBm/3kHz]: 8	Complied
3.5	15.247(d)	Emissions in non-restricted frequency bands	Out-of -band emissions are 20dB below the highest power	Non-Restricted Bands: > 20 dBc Restricted Bands: FCC 15.209	Complied
3.6	15.247(d)	Transmitter Radiated Unwanted Emissions	Restricted Bands [dBuV/m at 3m]: 4874.00MHz 53.00 (Margin 1.00dB) – AV	Non-Restricted Bands: > 20 dBc Restricted Bands: FCC 15.209	Complied

Revision History

Report No.	Version	Description	Issued Date
FR441605AC	Rev. 01	Initial issue of report	Oct. 03, 2014

1 General Description

1.1 Information

1.1.1 Feature of Equipment under Test

The following models are provided to this EUT.

Brand Name	Model Name	Product Name	Description
Senao Networks	CAP7252AG	Wireless 802.11 ac/a/b/g/n Access Point	Internal PIFA antenna
	CAP7253AG		External Dipole antenna

1.1.2 RF General Information

RF General Information					
Internal antenna					
Frequency Range (MHz)	**IEEE Std. 802.11**	**Ch. Freq. (MHz)**	**Channel Number**	**Transmit Chains (N_{TX})**	**RF Output Power (dBm)**
2400-2483.5	b	2412-2462	1-11 [11]	2	29.33
2400-2483.5	g	2412-2462	1-11 [11]	2	29.75
2400-2483.5	HT20	2412-2462	1-11 [11]	2	29.84
2400-2483.5	HT40	2422-2452	3-9 [7]	2	28.80
External antenna					
Frequency Range (MHz)	**IEEE Std. 802.11**	**Ch. Freq. (MHz)**	**Channel Number**	**Transmit Chains (N_{TX})**	**RF Output Power (dBm)**
2400-2483.5	b	2412-2462	1-11 [11]	2	28.77
2400-2483.5	g	2412-2462	1-11 [11]	2	29.91
2400-2483.5	HT20	2412-2462	1-11 [11]	2	29.79
2400-2483.5	HT40	2422-2452	3-9 [7]	2	28.38
Note 1: RF output power specifies that Maximum Peak Conducted Output Power. Note 2: 802.11b uses a combination of DSSS-DBPSK, DQPSK, CCK modulation. Note 3: 802.11g/n uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.					

1.1.3 Antenna Information

Antenna Category			
☒	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.	
☒	External antenna (dedicated antennas)		
	☐	Single power level with corresponding antenna(s).	
	☒	Multiple power level and corresponding antenna(s).	
	☒	RF connector provided	
		☒	Unique antenna connector. (e.g., MMCX, U.FL, IPX, and RP-SMA, RP-N type…)
		☐	Standard antenna connector. (e.g., SMA, N, BNC, and TNC type…)

Antenna General Information						
No.	Model	Type	Connector	Operating Frequencies (MHz) / Antenna Gain (dBi)		
				2400~2483.5	5150~5250	5725~5850
1	5718A0075300	PIFA	I-Pex	3.52	---	
2	5718A0074300	PIFA	I-Pex	3.16	---	
3	5718A0077300	PIFA	I-Pex	---	5.40	5.23
4	5718A0076300	PIFA	I-Pex	---	4.08	5.68
5	7102A0300000	Dipole	R SMA	4.42	---	---
6	7102A0300000	Dipole	R SMA	4.42	---	---
7	7102A0301000	Dipole	R SMA	---	3.18	2.95
8	7102A0301000	Dipole	R SMA	---	3.18	2.95

1.1.4 Type of EUT

Identify EUT	
EUT Serial Number	N/A
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.: …

1.1.5 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)**
☒ 100.00% - IEEE 802.11b	0.00
☒ 99.30% - IEEE 802.11g	0.03
☒ 99.25% - IEEE 802.11n (HT20)	0.03
☒ 98.52% - IEEE 802.11n (HT40)	0.06

1.1.6 EUT Operational Condition

Power Supply Type	12Vdc from adapter, 48Vdc from POE

1.2 Accessories and Support Equipment

Accessories		
No.	**Equipment**	**Description**
1	Power Supply Type 1 Adapter	Brand: Powertron Electronics Corp. Model: PA1015-2I I/P: 100-240Vac, 50-60Hz, 0.4A O/P: 12Vdc, 1.25A, 15W Power line: 1.2m non-shielded with one core
2	Power Supply Type 2 With POE injector (Model: NPE-5818) **Support unit only	Brand: Powertron Electronics Corp. Model: PA1040-480IB080 I/P: 100-240Vac, 50-60Hz, 1.5A O/P: 48Vdc, 0.8A, 38.4W max Power line: 1.5m non-shielded with one core

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	Notebook	DELL	E6440	DoC
2	POE	Ruckus	NPE-5818	---

1.3 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 v03r02
- FCC KDB 662911 v02r01
- FCC KDB 412172 v01

1.4 Testing Location Information

Testing Location							
☒	HWA YA	ADD :	No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.				
		TEL :	886-3-327-3456	FAX :	886-3-327-0973		
☒	ICC Lab	ADD :	No. 14-1, Lane 19, Wen San 3rd St., Kwei Shan Hsiang, Tao Yuan Hsien 333, Taiwan, R.O.C.				
		TEL :	886-3-271-8640	FAX :	886-3-327-0973		

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-HY	Mark Liao	23°C / 64%	Aug. 27, 2014
AC Conduction	*CO01-WS	Skys Huang	22°C / 63%	Jul. 24, 2014
Radiated Emission	*03CH01-WS	Anderson Hung	20-23°C / 65-68%	Jun. 10 ~ Jul. 17, 2014
Test site registered number [657002] with FCC Test site registered number [10807A-1] with IC				

Note: * Sporton Lab subcontracts this test item to ICC lab (TAF:2732).
ICC lab is a TAF accreditation test firm and also is an approved provider of Sporton Lab.

1.5 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		±2.92 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
All emissions, radiated	30 – 1000 MHz	±3.26 dB	N/A
	Above 1 GHz	±4.94 dB	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			
Modulation Mode	**Transmit Chains (N_{TX})**	**Data Rate / MCS**	**Worst Data Rate / MCS**
11b	2	1-11 Mbps	1 Mbps
11g	2	6-54 Mbps	6 Mbps
HT20	2	MCS 0-15	MCS 0
HT40	2	MCS 0-15	MCS 0

2.2 Test Channel Frequencies Configuration

Test Channel Frequencies Configuration	
IEEE Std. 802.11	**Test Channel Frequencies (MHz)**
b, g, n (HT-20)	2412-(F1), 2437-(F2), 2462-(F3)
n (HT-40)	2422-(F4), 2437-(F5), 2452-(F6)

2.3 The Worst Case Power Setting Parameter

The Worst Case Power Setting Parameter (2400-2483.5MHz band)							
Test Software	ART2-GUI, Version: 4_9_575_5_CS_U3						
Internal antenna							
Modulation Mode	**N_{TX}**	**Test Frequency (MHz)**					
		NCB: 20MHz			**NCB: 40MHz**		
		2412	**2437**	**2462**	**2422**	**2437**	**2452**
11b,1-11Mbps	2	23	22	21.5	--	--	--
11g,6-54Mbps	2	16.5	18	16.5	--	--	--
HT20,M0-15	2	15.5	18	16	--	--	--
HT40,M0-15	2	--	--	--	12.5	16	13.5
External antenna							
Modulation Mode	**N_{TX}**	**Test Frequency (MHz)**					
		NCB: 20MHz			**NCB: 40MHz**		
		2412	**2437**	**2462**	**2422**	**2437**	**2452**
11b,1-11Mbps	2	22.5	16.5	15	--	--	--
11g,6-54Mbps	2	15.5	18	16	--	--	--
HT20,M0-15	2	15	17.5	15	--	--	--
HT40,M0-15	2	--	--	--	12.5	15.5	13.5

2.4 The Worst Case Measurement Configuration

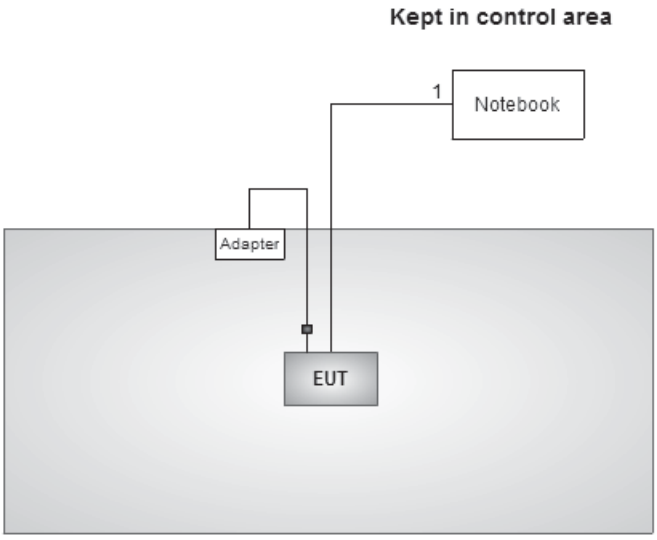
The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral Test Voltage: 120Vac / 60Hz
Operating Mode	Operating Mode Description
	1. Internal antenna with adapter mode
	2. Internal antenna with POE mode
	3. External antenna with adapter mode
	4. External antenna with POE mode

The Worst Case Mode for Following Conformance Tests	
Tests Item	RF Output Power,6dB bandwidth, Power Spectral Density
Test Condition	Conducted measurement at transmit chains
Modulation Mode	11b,11g, HT20, HT40
Operating Mode	Operating Mode Description
	1. Internal antenna with adapter mode
	2. External antenna with adapter mode

The Worst Case Mode for Following Conformance Tests			
Tests Item	Transmitter Radiated Unwanted Emissions Transmitter Radiated Bandedge Emissions		
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.		
User Position	☐ EUT will be placed in fixed position.		
	☒ EUT will be placed in mobile position and operating multiple positions. EUT shall be performed three orthogonal planes. The worst planes are X-plane for internal antenna and Y-plane for external antenna.		
	☐ 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. The worst planes is X.		
Operating Mode	☒ 1. Internal antenna with adapter mode		
	☒ 2. Internal antenna with POE mode		
	☒ 3. External antenna with adapter mode		
	☒ 4. External antenna with POE mode		
Modulation Mode	11b,11g, HT20, HT40		
Orthogonal Planes of EUT	**X Plane**	**Y Plane**	**Z Plane**

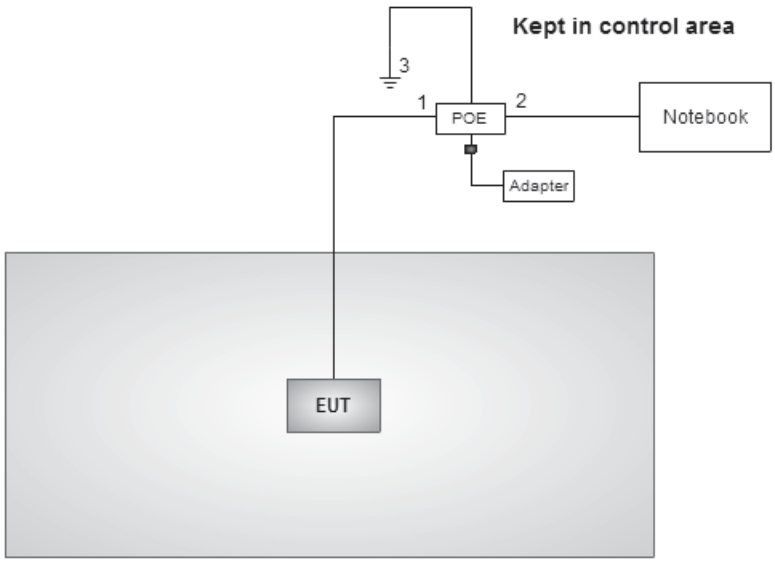
2.5 Test Setup Diagram

Test Setup Diagram - Radiated Test - adapter mode



1. RJ45, 10m non-shielded

Test Setup Diagram - Radiated Test - POE mode



1. RJ45, 10m non-shielded
2. RJ45, 1m non-shielded
3. 2m ground cable

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

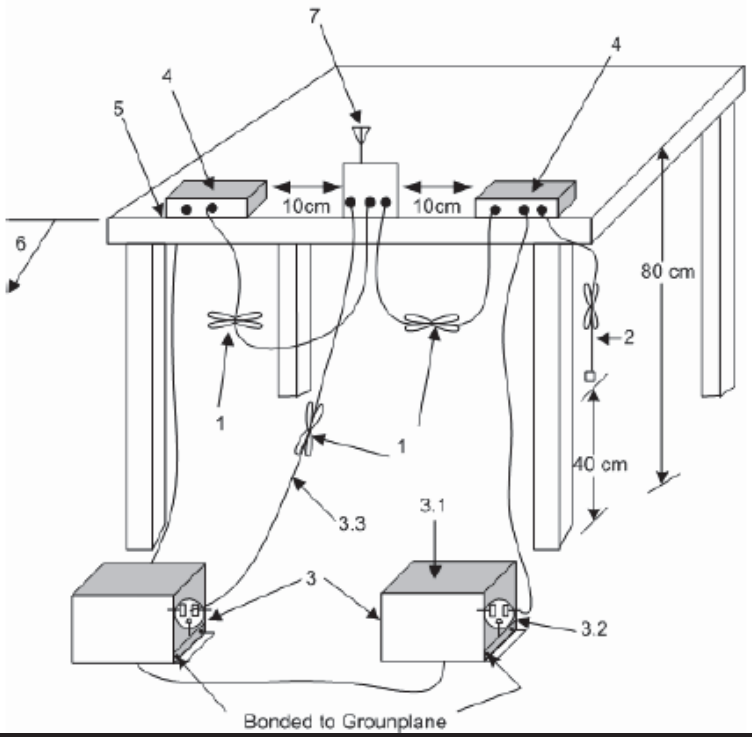
Refer a test equipment and calibration data table in this test report.

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

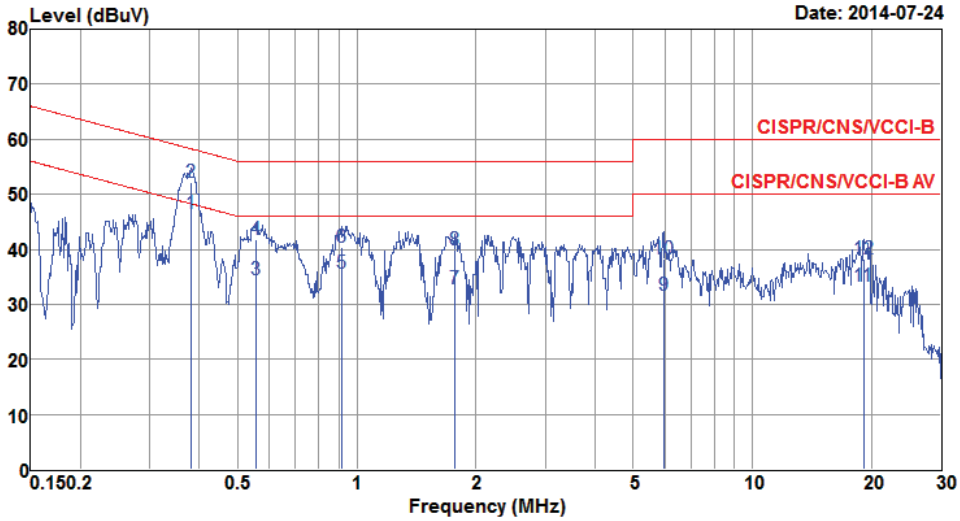
AC Power-line Conducted Emissions



3.1.5 Test Result of AC Power-line Conducted Emissions

Mode 1: Internal antenna with adapter mode

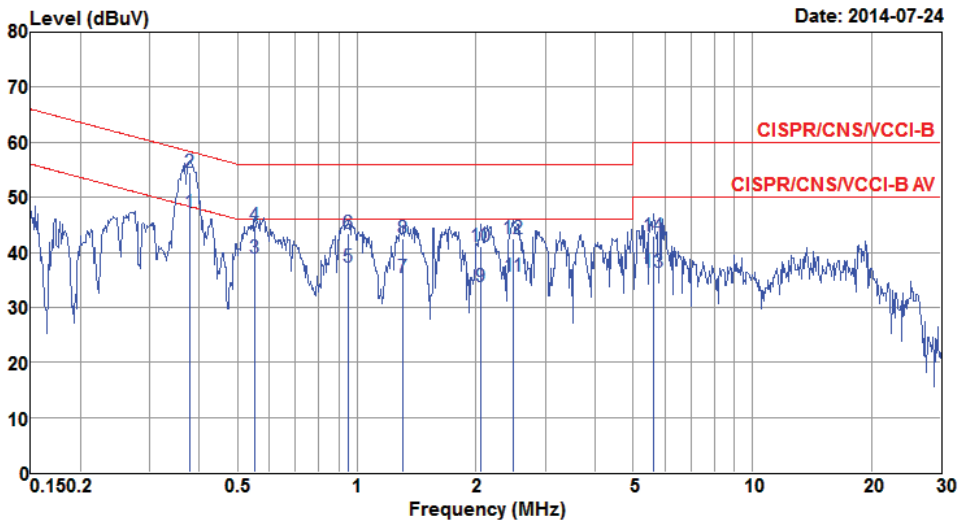
AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Neutral



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1*	0.381	46.60	48.25	-1.65	45.98	0.60	0.02	Average
2	0.381	52.14	58.25	-6.11	51.52	0.60	0.02	QP
3	0.558	34.57	46.00	-11.43	33.80	0.68	0.09	Average
4	0.558	41.67	56.00	-14.33	40.90	0.68	0.09	QP
5	0.914	35.59	46.00	-10.41	34.63	0.78	0.18	Average
6	0.914	40.38	56.00	-15.62	39.42	0.78	0.18	QP
7	1.772	32.74	46.00	-13.26	31.65	1.04	0.05	Average
8	1.772	39.98	56.00	-16.02	38.89	1.04	0.05	QP
9	5.961	31.64	50.00	-18.36	30.06	1.39	0.19	Average
10	5.961	38.29	60.00	-21.71	36.71	1.39	0.19	QP
11	19.122	33.17	50.00	-16.83	30.25	2.54	0.38	Average
12	19.122	38.26	60.00	-21.74	35.34	2.54	0.38	QP

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

AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Line

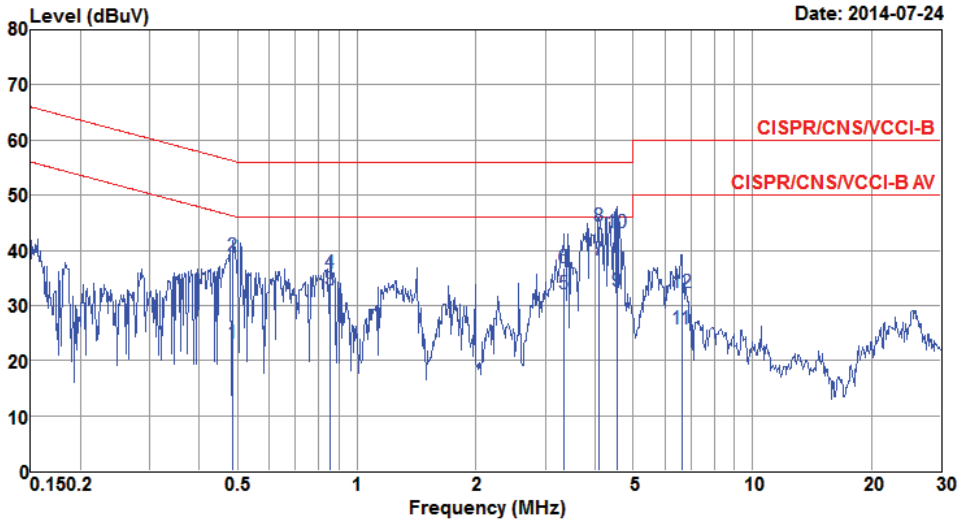


	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1*	0.379	47.27	48.30	-1.03	46.73	0.52	0.02	Average
2	0.379	54.49	58.30	-3.81	53.95	0.52	0.02	QP
3	0.552	39.06	46.00	-6.94	38.38	0.60	0.08	Average
4	0.552	44.77	56.00	-11.23	44.09	0.60	0.08	QP
5	0.948	37.27	46.00	-8.73	36.36	0.72	0.19	Average
6	0.948	43.52	56.00	-12.48	42.61	0.72	0.19	QP
7	1.310	35.31	46.00	-10.69	34.34	0.84	0.13	Average
8	1.310	42.59	56.00	-13.41	41.62	0.84	0.13	QP
9	2.055	33.80	46.00	-12.20	32.77	1.01	0.02	Average
10	2.055	41.17	56.00	-14.83	40.14	1.01	0.02	QP
11	2.487	35.55	46.00	-10.45	34.46	1.03	0.06	Average
12	2.487	42.59	56.00	-13.41	41.50	1.03	0.06	QP
13	5.623	36.24	50.00	-13.76	34.75	1.30	0.19	Average
14	5.623	43.02	60.00	-16.98	41.53	1.30	0.19	QP

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

Mode 2: Internal antenna with POE mode

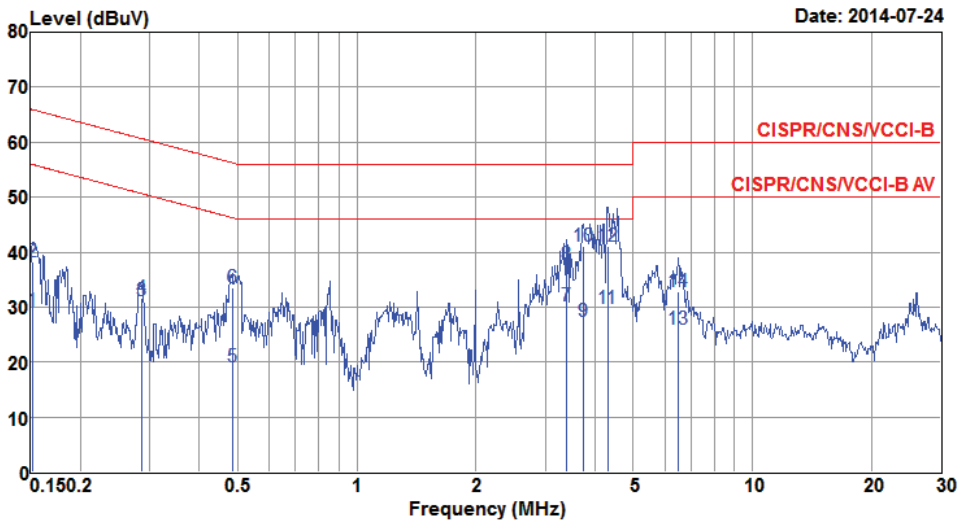
AC Power-line Conducted Emissions Result			
Operating Mode	2	**Power Phase**	Neutral



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.486	23.12	46.23	-23.11	22.41	0.65	0.06	Average
2	0.486	39.00	56.23	-17.23	38.29	0.65	0.06	QP
3	0.853	32.79	46.00	-13.21	31.85	0.77	0.17	Average
4	0.853	35.86	56.00	-20.14	34.92	0.77	0.17	QP
5	3.346	32.09	46.00	-13.91	30.85	1.12	0.12	Average
6	3.346	36.86	56.00	-19.14	35.62	1.12	0.12	QP
7*	4.092	38.23	46.00	-7.77	36.94	1.14	0.15	Average
8	4.092	44.39	56.00	-11.61	43.10	1.14	0.15	QP
9	4.549	32.62	46.00	-13.38	31.25	1.21	0.16	Average
10	4.549	43.27	56.00	-12.73	41.90	1.21	0.16	QP
11	6.627	25.76	50.00	-24.24	24.11	1.45	0.20	Average
12	6.627	32.24	60.00	-27.76	30.59	1.45	0.20	QP

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

AC Power-line Conducted Emissions Result			
Operating Mode	2	**Power Phase**	Line

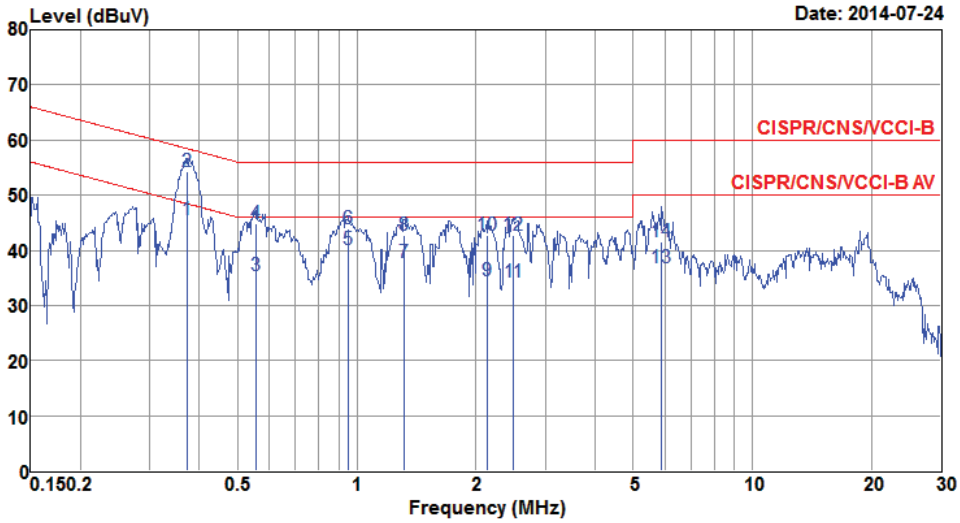


	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.152	29.39	55.91	-26.52	28.96	0.41	0.02	Average
2	0.152	38.30	65.91	-27.61	37.87	0.41	0.02	QP
3	0.286	31.27	50.63	-19.36	30.77	0.48	0.02	Average
4	0.286	31.73	60.63	-28.90	31.23	0.48	0.02	QP
5	0.484	19.21	46.27	-27.06	18.58	0.57	0.06	Average
6	0.484	33.51	56.27	-22.76	32.88	0.57	0.06	QP
7	3.381	30.21	46.00	-15.79	29.03	1.06	0.12	Average
8	3.381	37.86	56.00	-18.14	36.68	1.06	0.12	QP
9	3.740	27.38	46.00	-18.62	26.18	1.06	0.14	Average
10*	3.740	41.04	56.00	-14.96	39.84	1.06	0.14	QP
11	4.315	29.63	46.00	-16.37	28.35	1.12	0.16	Average
12	4.315	41.02	56.00	-14.98	39.74	1.12	0.16	QP
13	6.488	26.07	50.00	-23.93	24.47	1.40	0.20	Average
14	6.488	32.91	60.00	-27.09	31.31	1.40	0.20	QP

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

Mode 3: External antenna with adapter mode

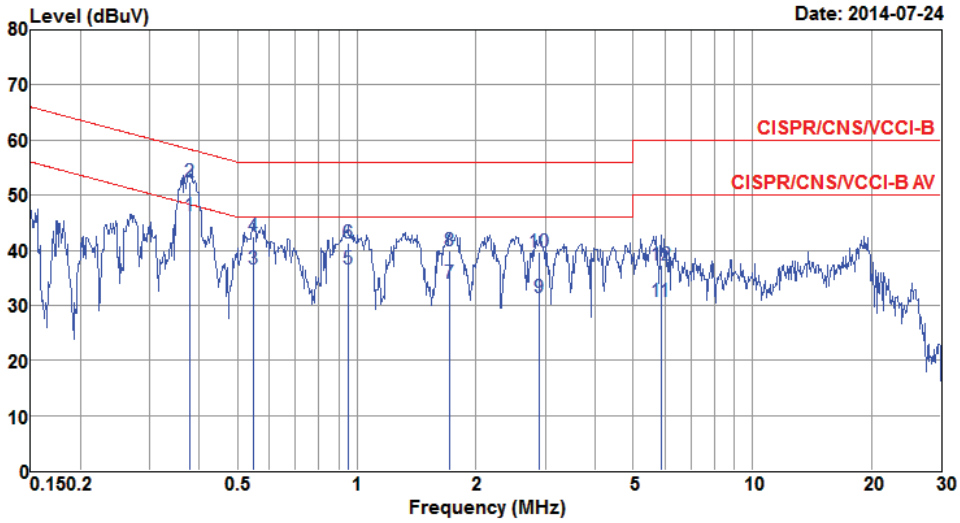
AC Power-line Conducted Emissions Result			
Operating Mode	3	**Power Phase**	Neutral



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1*	0.373	45.54	48.43	-2.89	44.92	0.60	0.02	Average
2	0.373	54.26	58.43	-4.17	53.64	0.60	0.02	QP
3	0.555	35.47	46.00	-10.53	34.71	0.68	0.08	Average
4	0.555	44.93	56.00	-11.07	44.17	0.68	0.08	QP
5	0.953	40.20	46.00	-5.80	39.22	0.79	0.19	Average
6	0.953	43.81	56.00	-12.19	42.83	0.79	0.19	QP
7	1.317	37.65	46.00	-8.35	36.60	0.92	0.13	Average
8	1.317	42.77	56.00	-13.23	41.72	0.92	0.13	QP
9	2.133	34.41	46.00	-11.59	33.29	1.09	0.03	Average
10	2.133	42.81	56.00	-13.19	41.69	1.09	0.03	QP
11	2.487	34.13	46.00	-11.87	32.97	1.10	0.06	Average
12	2.487	42.64	56.00	-13.36	41.48	1.10	0.06	QP
13	5.898	36.93	50.00	-13.07	35.36	1.38	0.19	Average
14	5.898	41.65	60.00	-18.35	40.08	1.38	0.19	QP

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

AC Power-line Conducted Emissions Result			
Operating Mode	3	**Power Phase**	Line

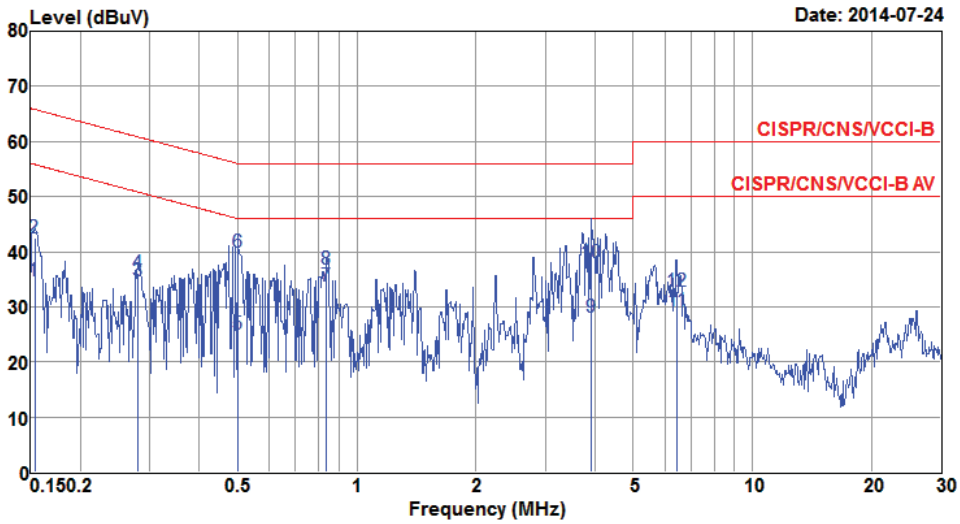


	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1*	0.379	46.18	48.30	-2.12	45.64	0.52	0.02	Average
2	0.379	52.29	58.30	-6.01	51.75	0.52	0.02	QP
3	0.549	36.57	46.00	-9.43	35.89	0.60	0.08	Average
4	0.549	42.54	56.00	-13.46	41.86	0.60	0.08	QP
5	0.948	36.64	46.00	-9.36	35.73	0.72	0.19	Average
6	0.948	41.36	56.00	-14.64	40.45	0.72	0.19	QP
7	1.716	33.95	46.00	-12.05	32.94	0.95	0.06	Average
8	1.716	39.91	56.00	-16.09	38.90	0.95	0.06	QP
9	2.900	31.38	46.00	-14.62	30.25	1.04	0.09	Average
10	2.900	39.62	56.00	-16.38	38.49	1.04	0.09	QP
11	5.867	30.57	50.00	-19.43	29.05	1.33	0.19	Average
12	5.867	37.24	60.00	-22.76	35.72	1.33	0.19	QP

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

Mode 4: External antenna with POE mode

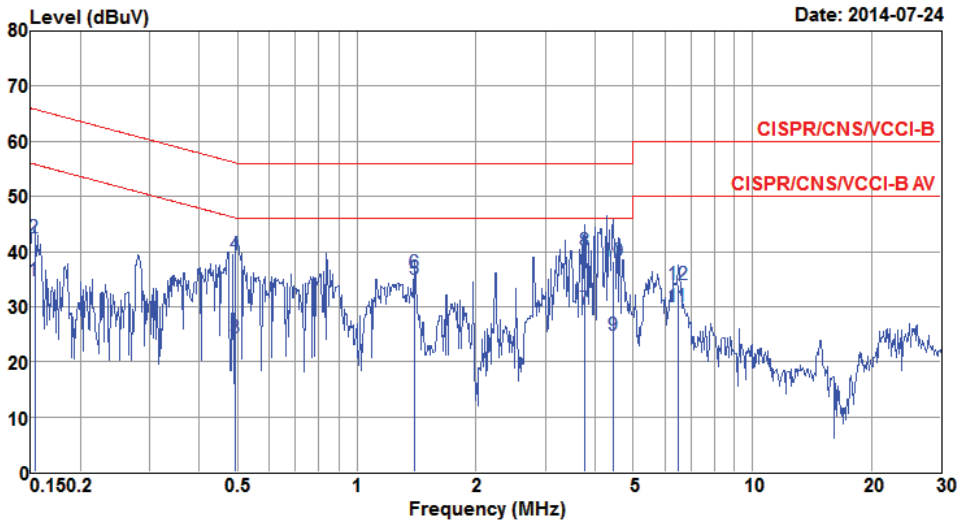
AC Power-line Conducted Emissions Result			
Operating Mode	4	**Power Phase**	Neutral



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.153	34.75	55.82	-21.07	34.24	0.49	0.02	Average
2	0.153	42.46	65.82	-23.36	41.95	0.49	0.02	QP
3	0.279	34.69	50.85	-16.16	34.12	0.56	0.01	Average
4	0.279	36.10	60.85	-24.75	35.53	0.56	0.01	QP
5	0.499	25.12	46.01	-20.89	24.40	0.66	0.06	Average
6	0.499	39.88	56.01	-16.13	39.16	0.66	0.06	QP
7*	0.839	33.82	46.00	-12.18	32.90	0.76	0.16	Average
8	0.839	36.78	56.00	-19.22	35.86	0.76	0.16	QP
9	3.922	28.19	46.00	-17.81	26.91	1.13	0.15	Average
10	3.922	37.96	56.00	-18.04	36.68	1.13	0.15	QP
11	6.454	29.19	50.00	-20.81	27.55	1.44	0.20	Average
12	6.454	32.86	60.00	-27.14	31.22	1.44	0.20	QP

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

AC Power-line Conducted Emissions Result			
Operating Mode	4	**Power Phase**	Line



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1	0.153	34.67	55.82	-21.15	34.24	0.41	0.02	Average
2	0.153	42.42	65.82	-23.40	41.99	0.41	0.02	QP
3	0.494	24.24	46.10	-21.86	23.60	0.58	0.06	Average
4	0.494	39.54	56.10	-16.56	38.90	0.58	0.06	QP
5*	1.403	34.88	46.00	-11.12	33.90	0.87	0.11	Average
6	1.403	36.01	56.00	-19.99	35.03	0.87	0.11	QP
7	3.759	29.40	46.00	-16.60	28.20	1.06	0.14	Average
8	3.759	40.04	56.00	-15.96	38.84	1.06	0.14	QP
9	4.454	24.75	46.00	-21.25	23.45	1.14	0.16	Average
10	4.454	38.19	56.00	-17.81	36.89	1.14	0.16	QP
11	6.488	30.02	50.00	-19.98	28.42	1.40	0.20	Average
12	6.488	34.09	60.00	-25.91	32.49	1.40	0.20	QP

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

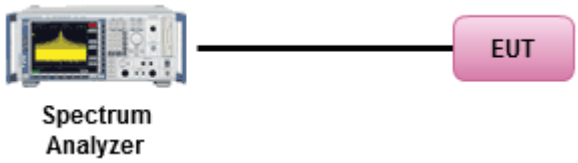
Refer a test equipment and calibration data table in this test report.

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 v03r02, clause 8.1 Option 1 for 6 dB bandwidth measurement.	
	☐	Refer as FCC KDB 558074 v03r02, clause 8.2 Option 2 for 6 dB bandwidth measurement.	
	☐	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.	
☒	For conducted measurement.		
	☐	The EUT supports single transmit chain and measurements performed on this transmit chain.	
	☐	The EUT supports diversity transmitting and the results on transmit chain port 1 is the worst case.	
	☒	The EUT supports 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 1.
		☒	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.

3.2.4 Test Setup

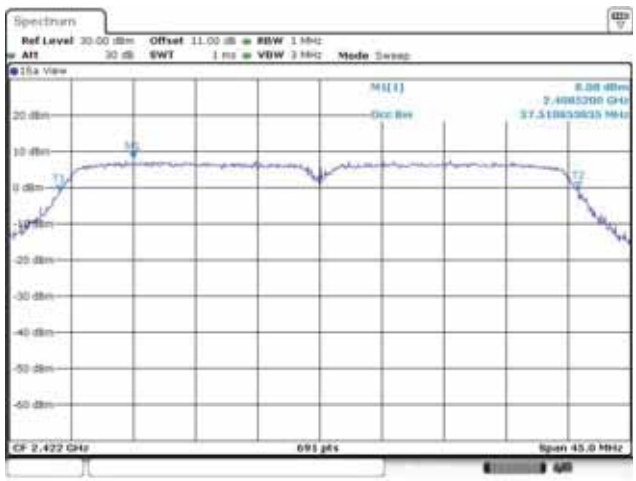
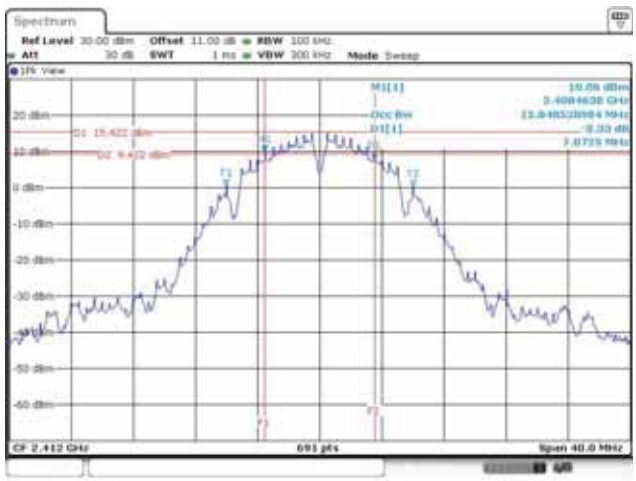
Emission Bandwidth



3.2.5 Test Result of Emission Bandwidth

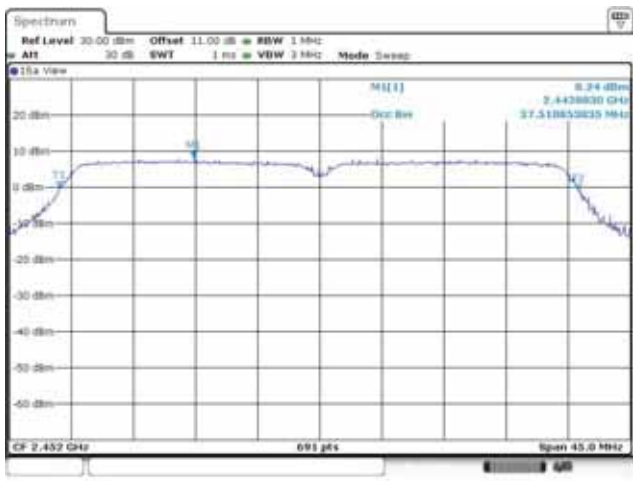
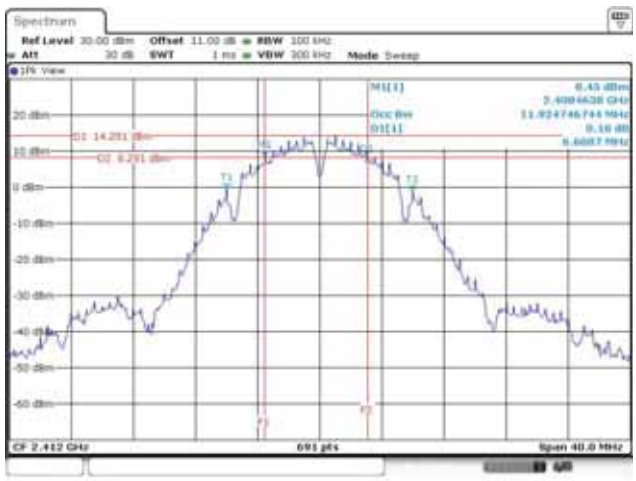
Mode 1: Internal antenna with adapter mode

Emission Bandwidth Result										
Condition			Emission Bandwidth (MHz)							
Modulation Mode	N_{TX}	Freq. (MHz)	99% Bandwidth				6dB Bandwidth			
			Chain-Port 1	Chain-Port 2	Chain-Port 3	Chain-Port 4	Chain-Port 1	Chain-Port 2	Chain-Port 3	Chain-Port 4
11b	2	2412	12.08	12.08	--	--	7.07	7.07	--	--
11b	2	2437	12.16	11.79	--	--	7.07	7.07	--	--
11b	2	2462	12.01	11.98	--	--	7.54	6.55	--	--
11g	2	2412	17.15	16.90	--	--	16.35	16.35	--	--
11g	2	2437	17.19	16.90	--	--	16.35	16.35	--	--
11g	2	2462	17.19	16.90	--	--	16.35	16.35	--	--
HT-20	2	2412	18.23	18.13	--	--	17.62	17.57	--	--
HT-20	2	2437	18.20	18.02	--	--	17.62	17.62	--	--
HT-20	2	2462	18.20	17.98	--	--	17.62	17.62	--	--
HT-40	2	2422	37.51	37.12	--	--	36.41	35.71	--	--
HT-40	2	2437	37.45	37.05	--	--	36.41	35.83	--	--
HT-40	2	2452	37.38	37.38	--	--	36.29	36.06	--	--
Limit			N/A				≥500 kHz			
Result			Complied							
Note 1: N_{TX} = Number of Transmit Chains										

Worst Emission Bandwidth Plots	
99% Bandwidth	6dB Bandwidth
	

Mode 2: External antenna with adapter mode

Emission Bandwidth Result										
Condition			Emission Bandwidth (MHz)							
Modulation Mode	N_{TX}	Freq. (MHz)	99% Bandwidth				6dB Bandwidth			
			Chain-Port 1	Chain-Port 2	Chain-Port 3	Chain-Port 4	Chain-Port 1	Chain-Port 2	Chain-Port 3	Chain-Port 4
11b	2	2412	11.87	11.79	--	--	6.61	7.07	--	--
11b	2	2437	11.61	11.51	--	--	6.61	6.61	--	--
11b	2	2462	11.76	11.83	--	--	7.07	7.07	--	--
11g	2	2412	17.08	16.86	--	--	16.35	16.35	--	--
11g	2	2437	17.15	16.90	--	--	16.35	16.35	--	--
11g	2	2462	17.08	16.86	--	--	16.35	16.35	--	--
HT-20	2	2412	18.16	18.02	--	--	17.62	17.62	--	--
HT-20	2	2437	18.20	18.02	--	--	17.62	17.57	--	--
HT-20	2	2462	18.20	18.02	--	--	17.62	17.57	--	--
HT-40	2	2422	37.38	37.19	--	--	36.41	35.94	--	--
HT-40	2	2437	37.38	37.12	--	--	36.17	36.41	--	--
HT-40	2	2452	37.51	37.12	--	--	36.41	36.29	--	--
Limit			N/A				≥500 kHz			
Result			Complied							
Note 1: N_{TX} = Number of Transmit Chains										

Worst Emission Bandwidth Plots	
99% Bandwidth	6dB Bandwidth
	

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 $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ 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 $P_{Out} = 30 – (G_{TX} – 6)/3 + 8$dB dBm
e.i.r.p. Power Limit:			
☒	2400-2483.5 MHz Band		
	☒	Point-to-multipoint systems (P2M): $P_{eirp} \leq 36$ dBm (4 W)	
	☐	Point-to-point systems (P2P): $P_{eirp} \leq MAX(36, [P_{Out} + G_{TX}])$ dBm	
	☐	Smart antenna system (SAS)	
		☐	Single beam: $P_{eirp} \leq MAX(36, P_{Out} + G_{TX})$ dBm
		☐	Overlap beam: $P_{eirp} \leq MAX(36, P_{Out} + G_{TX})$ dBm
		☐	Aggregate power on all beams: $P_{eirp} \leq MAX(36, [P_{Out} + G_{TX} + 8])$ 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 v03r02, clause 9.1.1 (RBW ≥ DTS BW).
	☒	Refer as FCC KDB 558074 v03r02, clause 9.1.2 (Peak power meter)
☒	Maximum Conducted Output Power (Reference only)	
	☐	Refer as FCC KDB 558074 v03r02, clause 9.2.2.2 Method AVGSA-1 (spectral trace averaging).
	☐	Refer as FCC KDB 558074 v03r02, clause 9.2.2.3 Method AVGSA-1 Alt. (slow sweep speed)
	☐	Refer as FCC KDB 558074 v03r02, clause 9.2.2.4 Method AVGSA-2 (spectral trace averaging).
	☐	Refer as FCC KDB 558074 v03r02, clause 9.2.2.5 Method AVGSA-2 Alt. (slow sweep speed)
	RF power meter and average over on/off periods with duty factor or gated trigger	
	☒	Refer as FCC KDB 558074 v03r02, clause 9.2.3.2 Method AVGPM-G (using a gated RF average power meter)
☒	For conducted measurement.	
	☐	The EUT supports single transmit chain and measurements performed on this transmit chain.
	☐	The EUT supports diversity transmitting and the results on transmit chain port 1 is the worst case.
	☒	The EUT supports multiple transmit chains using options given below: 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: $P_{total} = P_1 + P_2 + \ldots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.3.4 Test Setup

RF Output Power (Power Meter)

3.3.5 Directional Gain for Power Measurement

Mode 1: Internal antenna with adapter mode

Directional Gain (DG) Result					
Transmit Chains No.		1	2	-	-
Maximum G_{ANT} (dBi)		3.52	3.16	-	-
Modulation Mode	**DG (dBi)**	**N_{TX}**	**N_{SS}**	**STBC**	**Array Gain (dB)**
11b,1-11Mbps	3.52	2	1	-	-
11g,6-54Mbps	3.52	2	1	-	-
HT20,M0-15	3.52	2	1	-	-
HT40,M0-15	3.52	2	1	-	-

Note: Directional gain may be calculated by using the formulas applicable to equal gain antennas with G_{ANT} set equal to the gain of the antenna having the highest gain

Mode 2: External antenna with adapter mode

Directional Gain (DG) Result					
Transmit Chains No.		1	2	-	-
Maximum G_{ANT} (dBi)		4.42	4.42	-	-
Modulation Mode	**DG (dBi)**	**N_{TX}**	**N_{SS}**	**STBC**	**Array Gain (dB)**
11b,1-11Mbps	4.42	2	1	-	-
11g,6-54Mbps	4.42	2	1	-	-
HT20,M0-15	4.42	2	1	-	-
HT40,M0-15	4.42	2	1	-	-

3.3.6 Test Result of Maximum Conducted Output Power

Mode 1: Internal antenna with adapter mode

Maximum Peak Conducted Output Power											
Condition			RF Output Power (dBm)								
Modulation Mode	N_{TX}	Freq. (MHz)	Chain Port 1	Chain Port 2	Chain Port 3	Chain Port 4	Sum Chain	Power Limit	DG (dBi)	EIRP Power	EIRP Limit
11b	2	2412	26.68	25.92	--	--	29.33	30.00	3.52	32.85	36.00
11b	2	2437	26.13	25.18	--	--	28.69	30.00	3.52	32.21	36.00
11b	2	2462	25.72	24.41	--	--	28.12	30.00	3.52	31.64	36.00
11g	2	2412	26.72	25.66	--	--	29.23	30.00	3.52	32.75	36.00
11g	2	2437	27.22	26.20	--	--	29.75	30.00	3.52	33.27	36.00
11g	2	2462	26.41	25.74	--	--	29.10	30.00	3.52	32.62	36.00
HT-20	2	2412	25.98	24.94	--	--	28.50	30.00	3.52	32.02	36.00
HT-20	2	2437	27.44	26.11	--	--	29.84	30.00	3.52	33.36	36.00
HT-20	2	2462	26.32	25.31	--	--	28.85	30.00	3.52	32.37	36.00
HT-40	2	2422	22.87	22.14	--	--	25.53	30.00	3.52	29.05	36.00
HT-40	2	2437	26.34	25.17	--	--	28.80	30.00	3.52	32.32	36.00
HT-40	2	2452	24.09	22.73	--	--	26.47	30.00	3.52	29.99	36.00
Result			Complied								

Maximum Conducted (Average) Output Power											
Condition			RF Output Power (dBm)								
Modulation Mode	N_{TX}	Freq. (MHz)	Chain Port 1	Chain Port 2	Chain Port 3	Chain Port 4	Sum Chain	Power Limit	DG (dBi)	EIRP Power	EIRP Limit
11b	2	2412	23.84	23.17	--	--	26.53	30.00	3.52	30.05	36.00
11b	2	2437	23.24	22.25	--	--	25.78	30.00	3.52	29.30	36.00
11b	2	2462	22.28	21.55	--	--	24.94	30.00	3.52	28.46	36.00
11g	2	2412	18.19	16.92	--	--	20.61	30.00	3.52	24.13	36.00
11g	2	2437	19.45	18.63	--	--	22.07	30.00	3.52	25.59	36.00
11g	2	2462	18.04	17.03	--	--	20.57	30.00	3.52	24.09	36.00
HT-20	2	2412	17.06	15.93	--	--	19.54	30.00	3.52	23.06	36.00
HT-20	2	2437	19.52	18.38	--	--	22.00	30.00	3.52	25.52	36.00
HT-20	2	2462	17.78	16.52	--	--	20.21	30.00	3.52	23.73	36.00
HT-40	2	2422	13.49	12.82	--	--	16.18	30.00	3.52	19.70	36.00
HT-40	2	2437	17.53	16.24	--	--	19.94	30.00	3.52	23.46	36.00
HT-40	2	2452	14.75	13.39	--	--	17.13	30.00	3.52	20.65	36.00
Result			Complied								

Note: AV power is for reference only.

Mode 2: External antenna with adapter mode

Maximum Peak Conducted Output Power											
Condition			RF Output Power (dBm)								
Modulation Mode	N_{TX}	Freq. (MHz)	Chain Port 1	Chain Port 2	Chain Port 3	Chain Port 4	Sum Chain	Power Limit	DG (dBi)	EIRP Power	EIRP Limit
11b	2	2412	25.75	25.76	--	--	28.77	30.00	4.42	33.19	36.00
11b	2	2437	19.77	20.48	--	--	23.15	30.00	4.42	27.57	36.00
11b	2	2462	18.82	18.93	--	--	21.89	30.00	4.42	26.31	36.00
11g	2	2412	24.88	24.22	--	--	27.57	30.00	4.42	31.99	36.00
11g	**2**	**2437**	**26.75**	**27.04**	**--**	**--**	**29.91**	**30.00**	**4.42**	**34.33**	**36.00**
11g	2	2462	26.22	25.66	--	--	28.96	30.00	4.42	33.38	36.00
HT-20	2	2412	24.72	24.77	--	--	27.76	30.00	4.42	32.18	36.00
HT-20	2	2437	26.61	26.94	--	--	29.79	30.00	4.42	34.21	36.00
HT-20	2	2462	25.31	24.73	--	--	28.04	30.00	4.42	32.46	36.00
HT-40	2	2422	22.45	22.27	--	--	25.37	30.00	4.42	29.79	36.00
HT-40	2	2437	25.50	25.24	--	--	28.38	30.00	4.42	32.80	36.00
HT-40	2	2452	23.38	23.44	--	--	26.42	30.00	4.42	30.84	36.00
Result			Complied								

Maximum Conducted (Average) Output Power											
Condition			RF Output Power (dBm)								
Modulation Mode	N_{TX}	Freq. (MHz)	Chain Port 1	Chain Port 2	Chain Port 3	Chain Port 4	Sum Chain	Power Limit	DG (dBi)	EIRP Power	EIRP Limit
11b	2	2412	22.79	22.88	--	--	25.85	30.00	4.42	30.27	36.00
11b	2	2437	16.67	17.55	--	--	20.14	30.00	4.42	24.56	36.00
11b	2	2462	15.77	15.99	--	--	18.89	30.00	4.42	23.31	36.00
11g	2	2412	16.08	15.85	--	--	18.98	30.00	4.42	23.40	36.00
11g	2	2437	18.51	19.12	--	--	21.84	30.00	4.42	26.26	36.00
11g	2	2462	17.41	16.88	--	--	20.16	30.00	4.42	24.58	36.00
HT-20	2	2412	15.62	15.68	--	--	18.66	30.00	4.42	23.08	36.00
HT-20	2	2437	18.10	18.71	--	--	21.43	30.00	4.42	25.85	36.00
HT-20	2	2462	16.28	15.74	--	--	19.03	30.00	4.42	23.45	36.00
HT-40	2	2422	13.05	12.78	--	--	15.93	30.00	4.42	20.35	36.00
HT-40	2	2437	16.25	16.10	--	--	19.19	30.00	4.42	23.61	36.00
HT-40	2	2452	13.96	14.12	--	--	17.05	30.00	4.42	21.47	36.00
Result			Complied								

Note: AV power is for reference only.

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

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

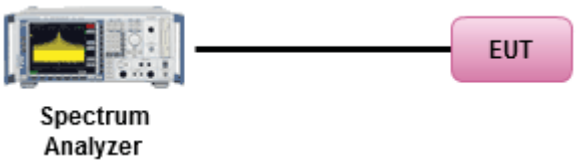
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method			
☒	Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option).		
	☒	Refer as FCC KDB 558074 v03r02, clause 10.2 Method PKPSD (RBW=3kHz; detector=peak)..	
	☐	Refer as FCC KDB 558074 v03r02, clause 10.3 Method AVGPSD-1 (spectral trace averaging).	
	☐	Refer as FCC KDB 558074 v03r02, clause 10.4 Method AVGPSD-1 Alt. (slow sweep speed)	
	☐	Refer as FCC KDB 558074 v03r02, clause 10.5 Method AVGPSD-2 (spectral trace averaging).	
	☐	Refer as FCC KDB 558074 v03r02, clause 10.6 Method AVGPSD-2 Alt. (slow sweep speed)	
☒	For conducted measurement.		
	☐	The EUT supports single transmit chain and measurements performed on this transmit chain.	
	☐	The EUT supports diversity transmitting and the results on transmit chain port 1 is the worst case.	
	☒	The EUT supports 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.
		☐	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.

3.4.4 Test Setup

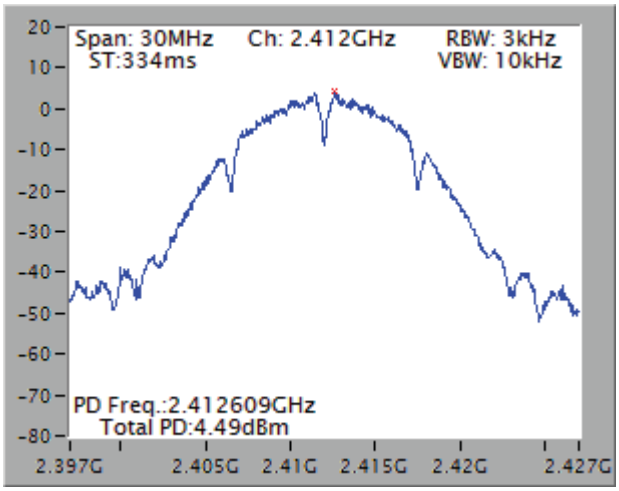
Power Spectral Density


3.4.5 Test Result of Power Spectral Density

Mode 1: Internal antenna with adapter mode

Power Spectral Density Result				
Condition			Power Spectral Density (dBm/3kHz)	
Modulation Mode	N_{TX}	Freq. (MHz)	Sum Chain	Power Limit
11b	2	2412	4.49	7.65
11b	2	2437	4.07	7.65
11b	2	2462	2.63	7.65
11g	2	2412	-4.09	7.65
11g	2	2437	-4.49	7.65
11g	2	2462	-5.43	7.65
HT-20	2	2412	-6.00	7.65
HT-20	2	2437	-4.38	7.65
HT-20	2	2462	-6.37	7.65
HT-40	2	2422	-13.02	7.65
HT-40	2	2437	-8.29	7.65
HT-40	2	2452	-12.41	7.65
Result			Complied	

Worst Power Spectral Density Plots



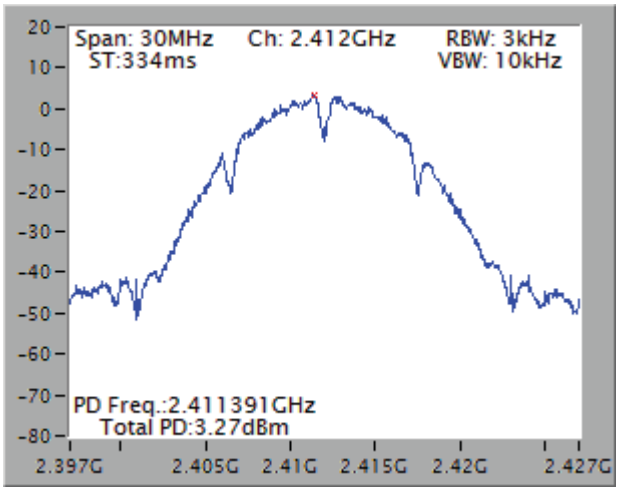
Note:

1. Peak Power Spectral Density w/o Duty Factor.
2. Test results are bin-by-bin summing measured value of each TX port.
   Directional gain = $10 * \log((10^{3.52/20}+10^{3.16/20})^2/2)$ = 6.35 dBi > 6 dBi
   Limit shall be reduced to 8 dBm – (6.35 dBi – 6 dBi) = 7.65 dBm

Mode 2: External antenna with adapter mode

Power Spectral Density Result				
Condition			Power Spectral Density (dBm/3kHz)	
Modulation Mode	N_{TX}	Freq. (MHz)	Sum Chain	Power Limit
11b	2	2412	3.27	6.57
11b	2	2437	-1.88	6.57
11b	2	2462	-4.37	6.57
11g	2	2412	-7.10	6.57
11g	2	2437	-5.01	6.57
11g	2	2462	-7.09	6.57
HT-20	2	2412	-7.03	6.57
HT-20	2	2437	-4.54	6.57
HT-20	2	2462	-6.29	6.57
HT-40	2	2422	-12.62	6.57
HT-40	2	2437	-9.79	6.57
HT-40	2	2452	-12.12	6.57
Result			Complied	

Worst Power Spectral Density Plots



Note:

1. Peak Power Spectral Density w/o Duty Factor.
2. Test results are bin-by-bin summing measured value of each TX port.
   Directional gain = 4.42+10* log(2/1) = 7.43 dBi > 6 dBi.
   Limit shall be reduced to 8 dBm – (7.43 dBi – 6 dBi) = 6.57 dBm

3.5 Emissions in non-restricted frequency bands

3.5.1 Emissions in non-restricted frequency bands limit

Peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz

3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Reference level measurement

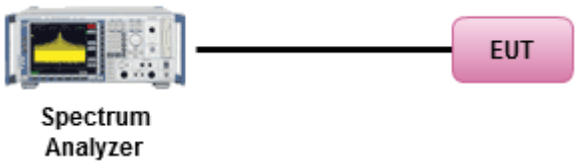
1. Set RBW=100kHz, VBW = 300kHz , Detector = Peak, Sweep time = Auto
2. Trace = max hold , Allow Trace to fully stabilize
3. Use the peak marker function to determine the maximum PSD level

Emission level measurement

1. Set RBW=100kHz, VBW = 300kHz , Detector = Peak, Sweep time = Auto
2. Trace = max hold , Allow Trace to fully stabilize
3. Scan Frequency range is up to 25GHz
4. Use the peak marker function to determine the maximum amplitude level

3.5.4 Test Setup

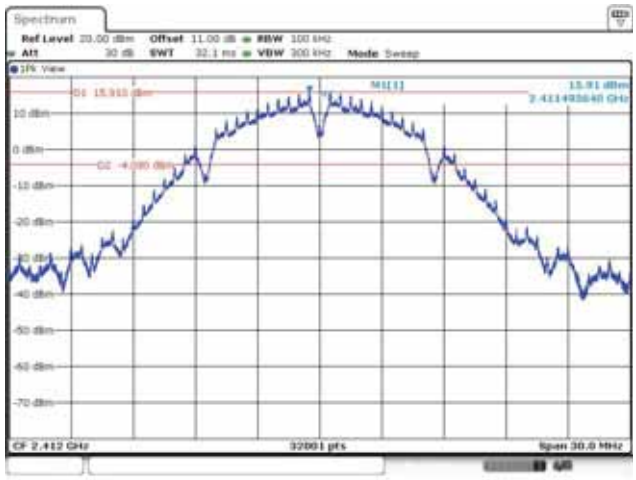
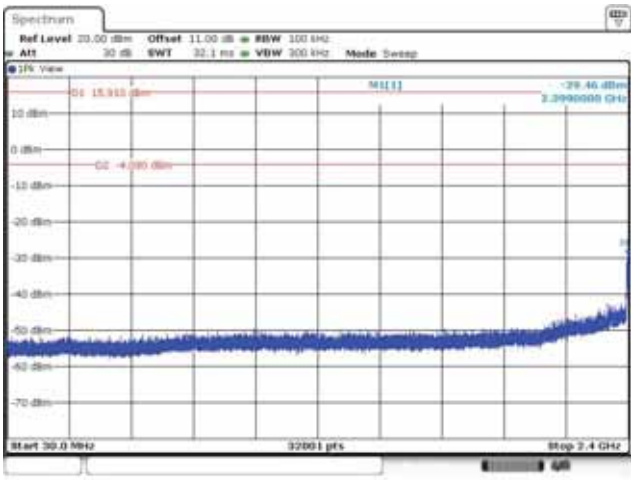
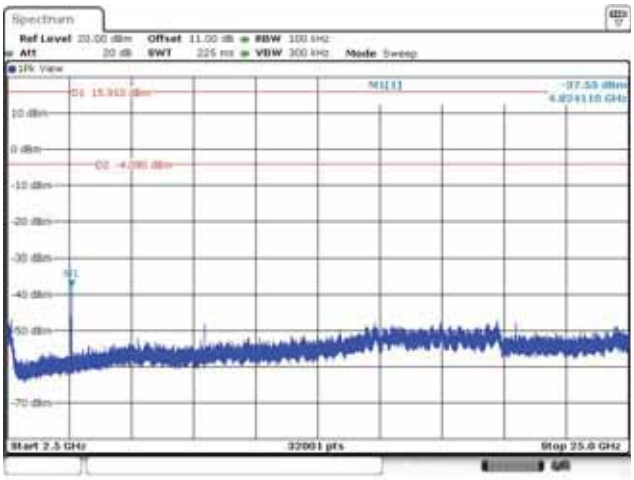
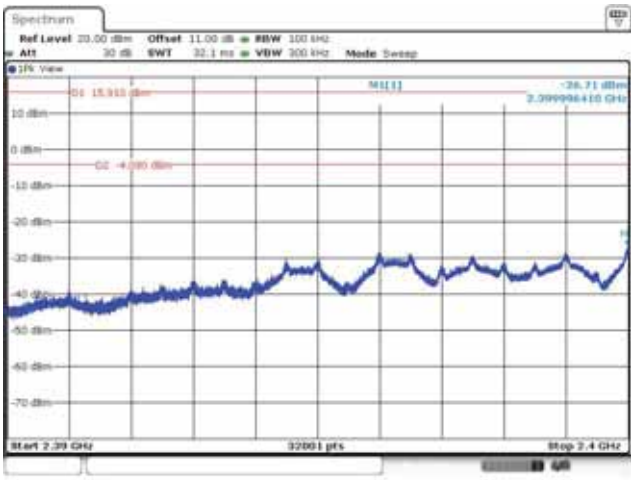
Transmitter Radiated Bandedge Emissions

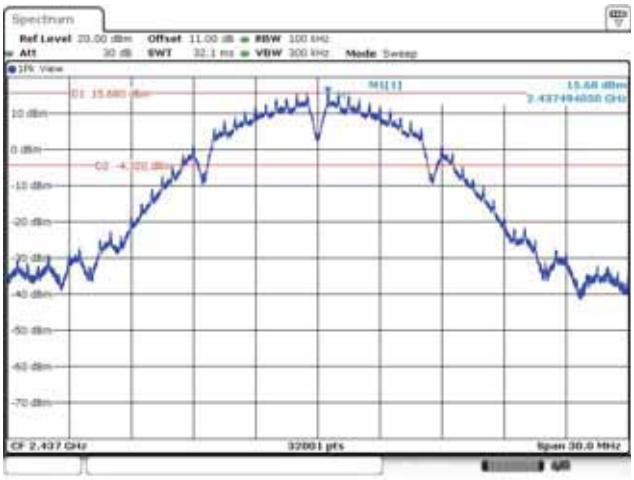
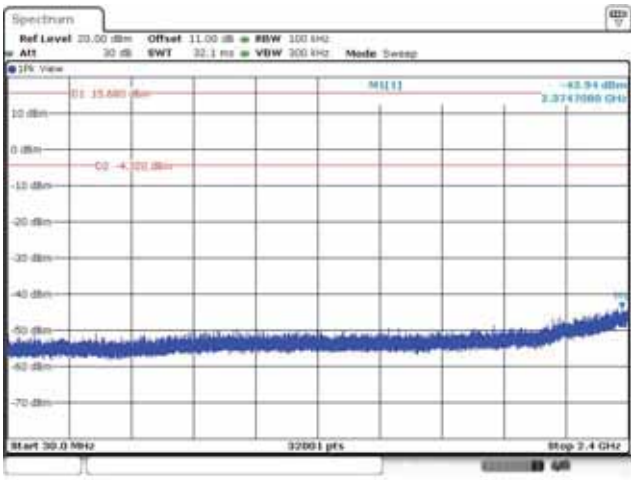
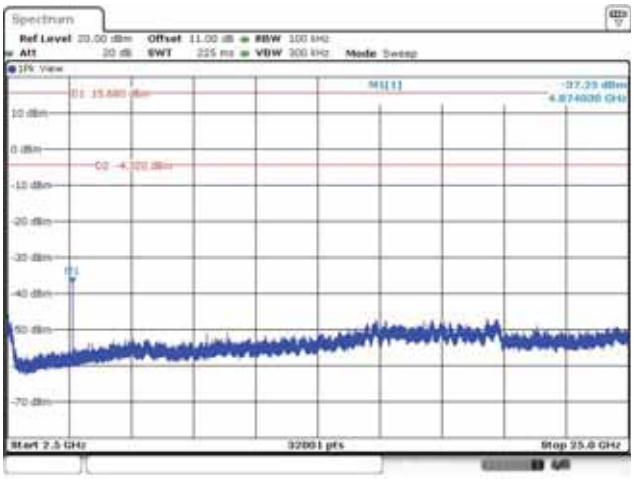
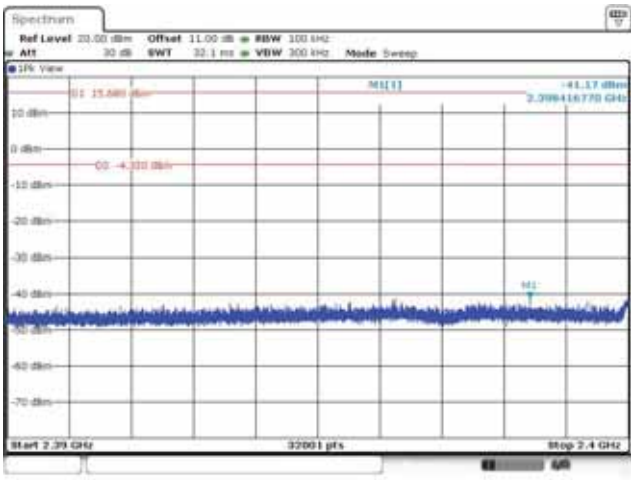


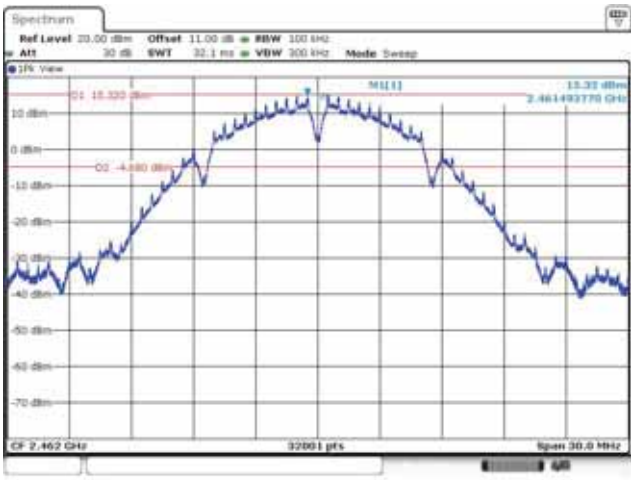
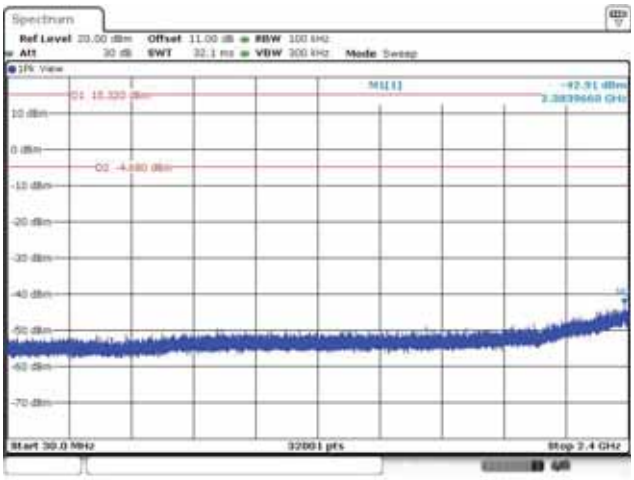
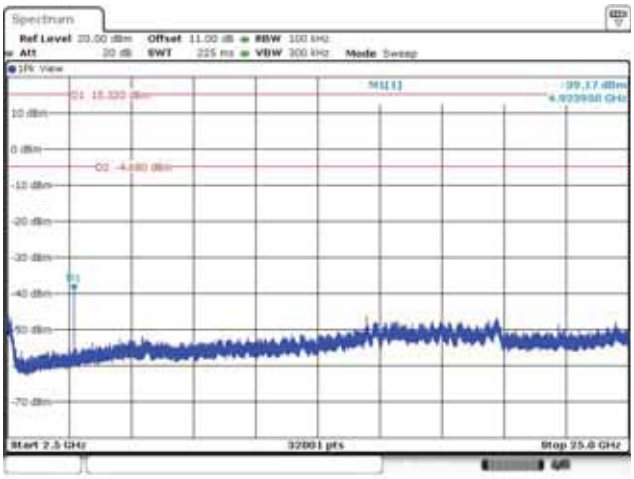
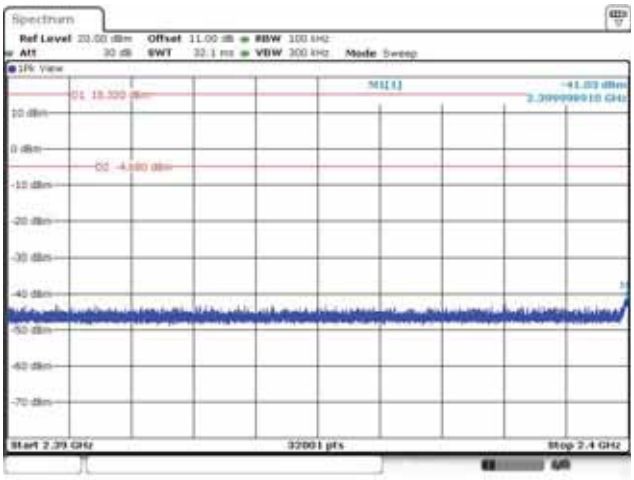
3.5.5 Test Result of Emissions in non-restricted frequency bands

Mode 1: Internal antenna with adapter mode

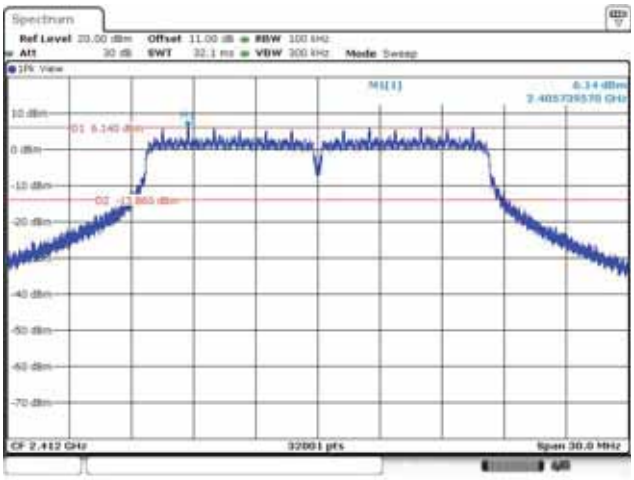
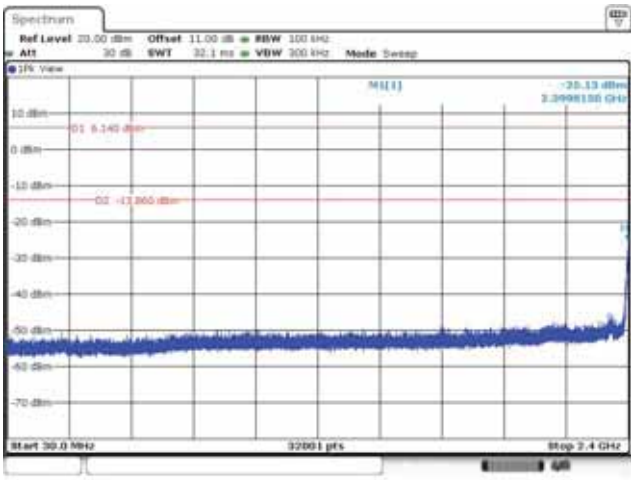
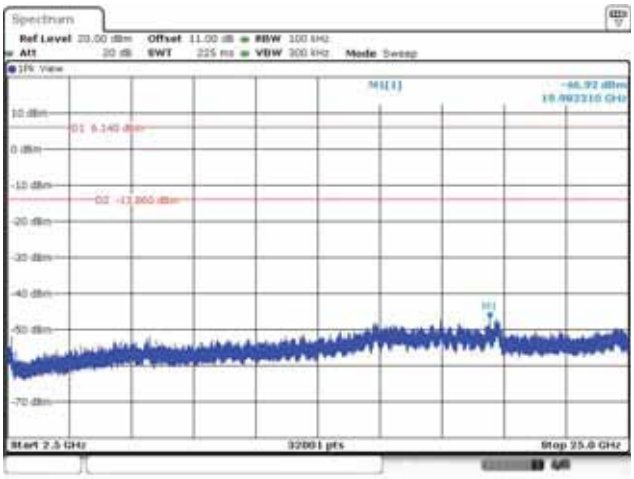
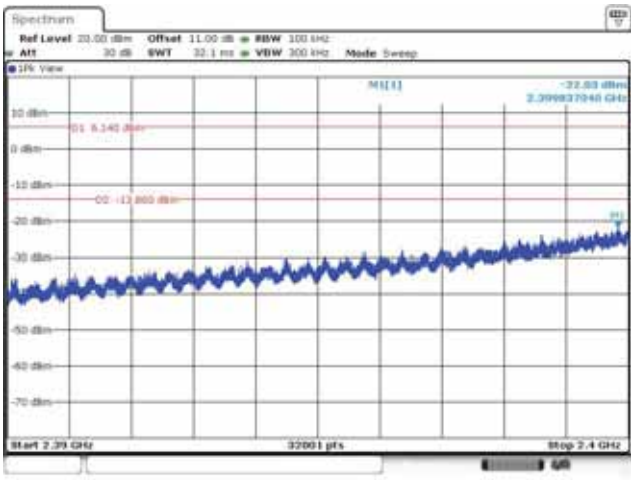
802.11b

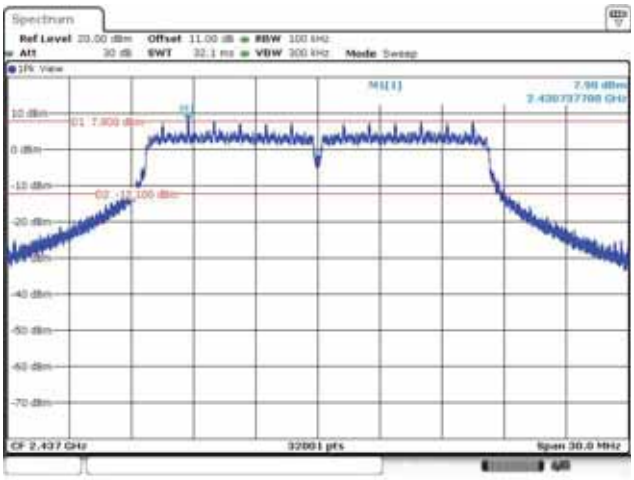
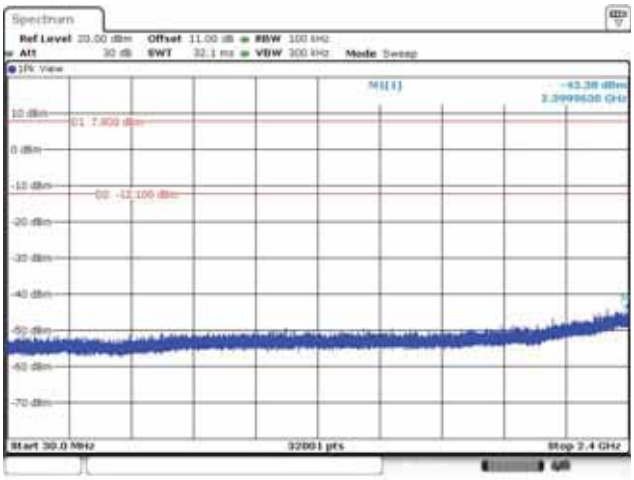
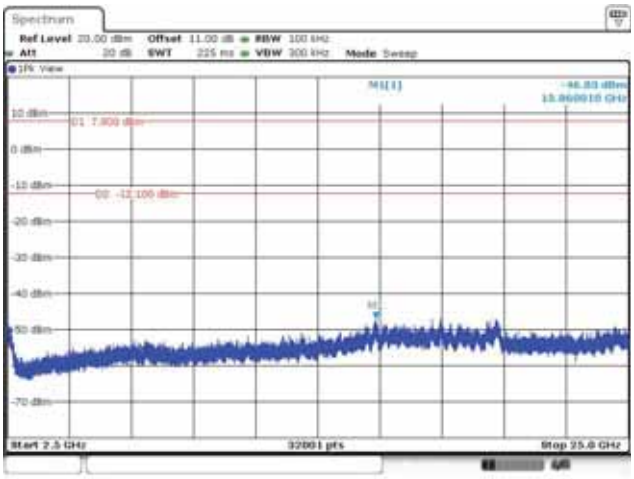
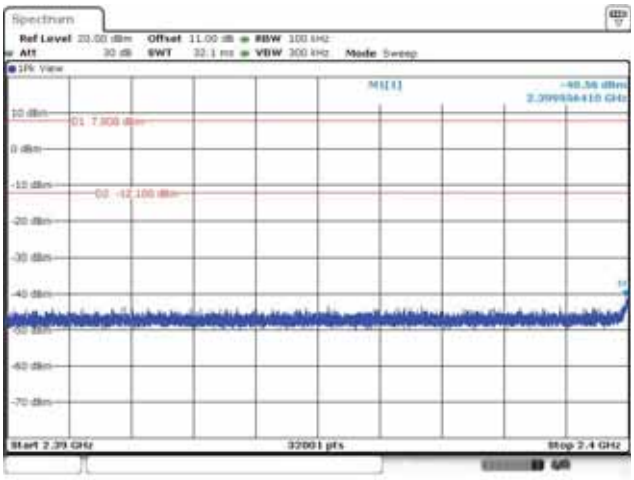
Reference Level	Tx 2412MHz / 30MHz~25GHz (down 20dBc)
	
---	
---	

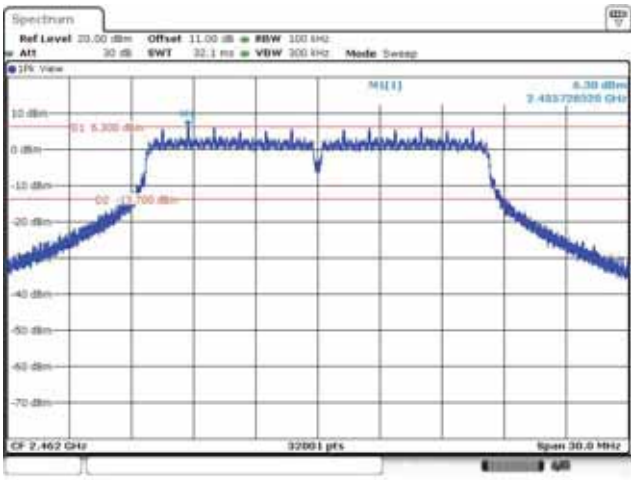
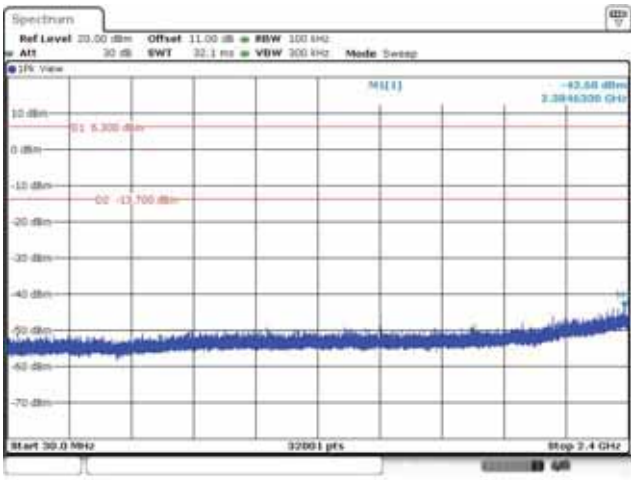
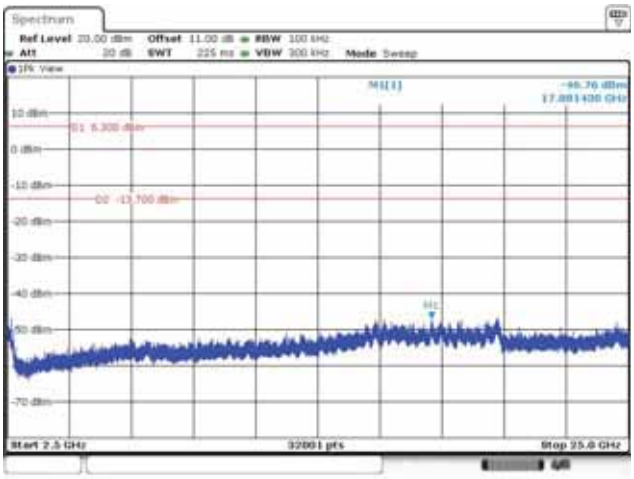
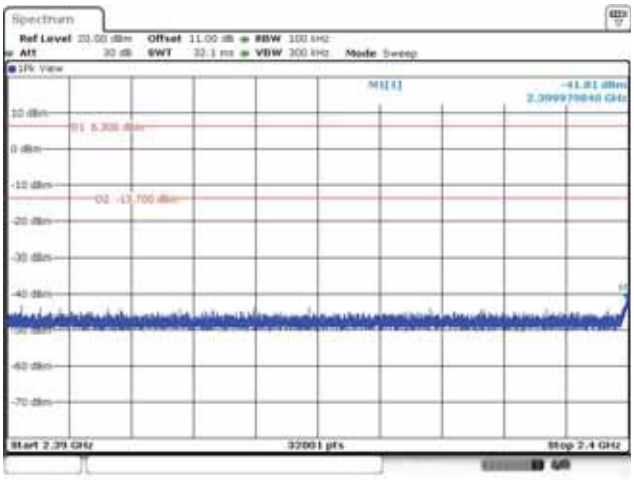
Reference Level	Tx 2437MHz / 30MHz~25GHz (down 20dBc)
	
---	
---	

Reference Level	Tx 2462MHz / 30MHz~25GHz (down 20dBc)
	
---	
---	

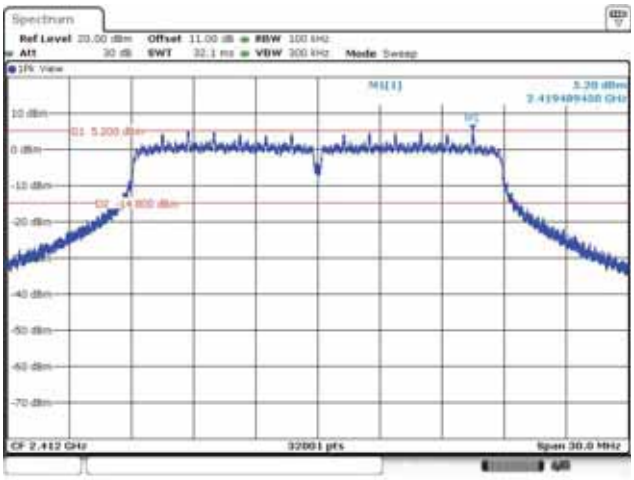
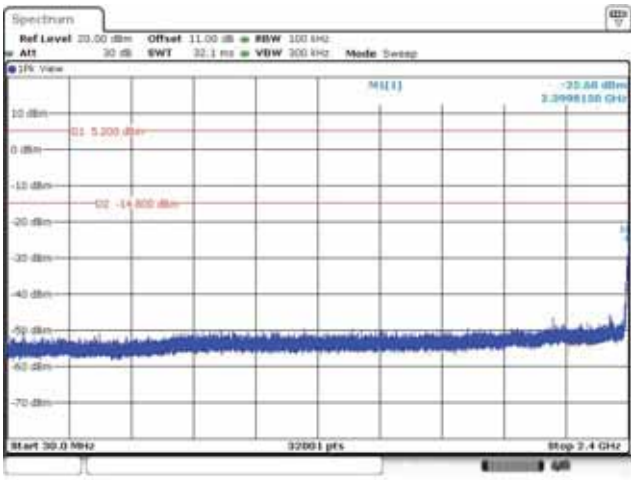
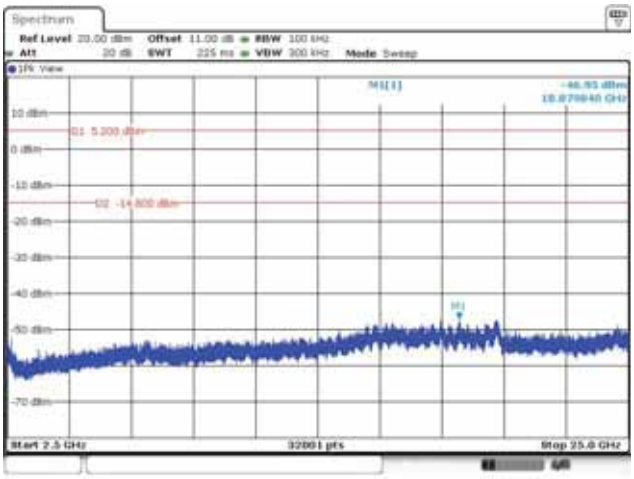
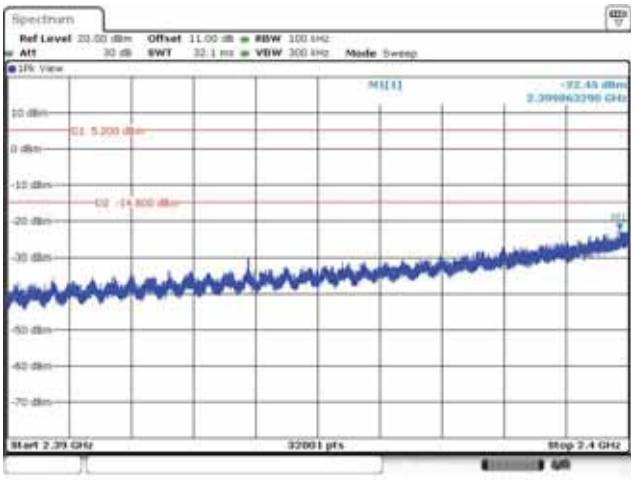
802.11g

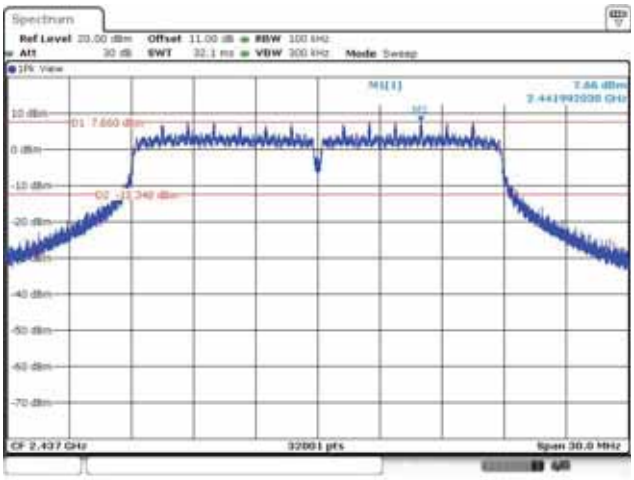
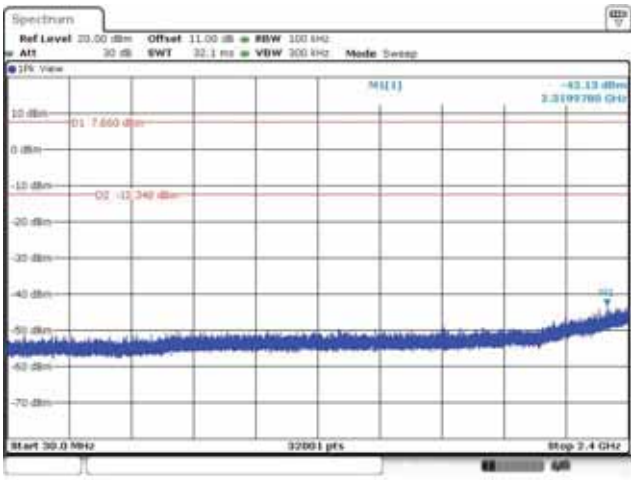
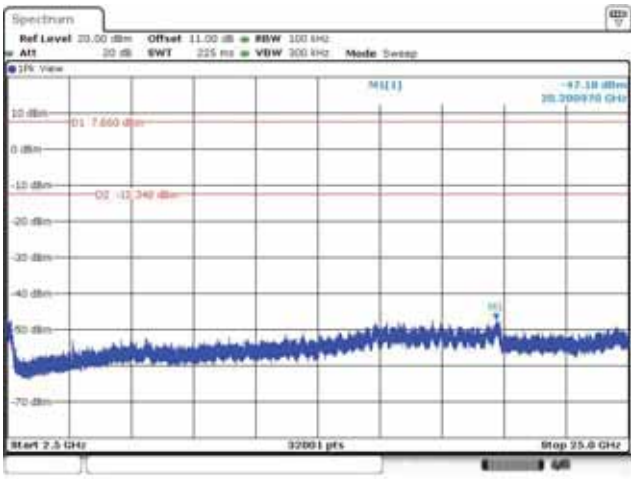
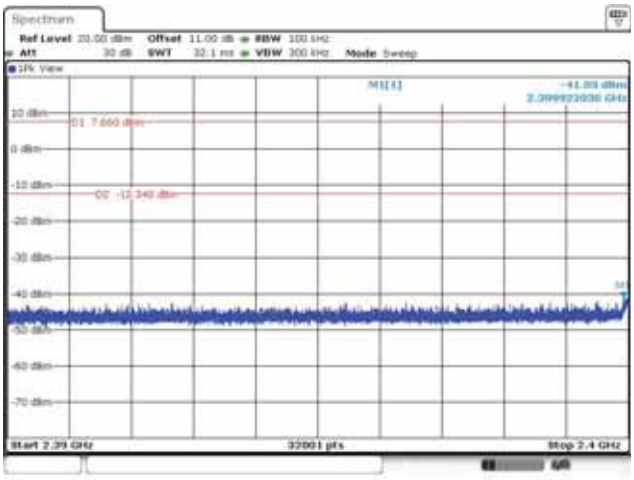
Reference Level	Tx 2412MHz / 30MHz~25GHz (down 20dBc)
	
---	
---	

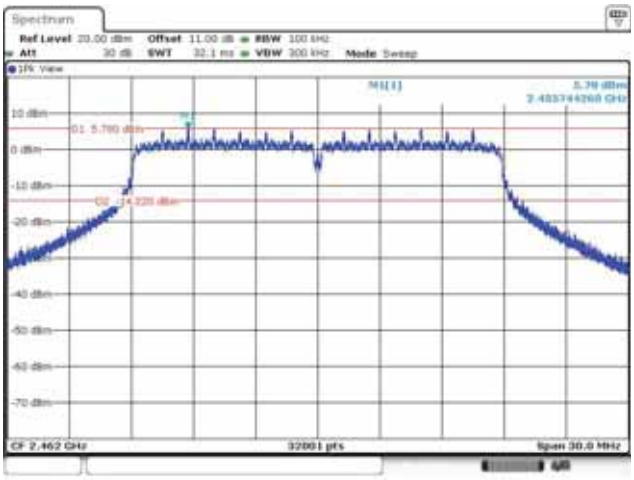
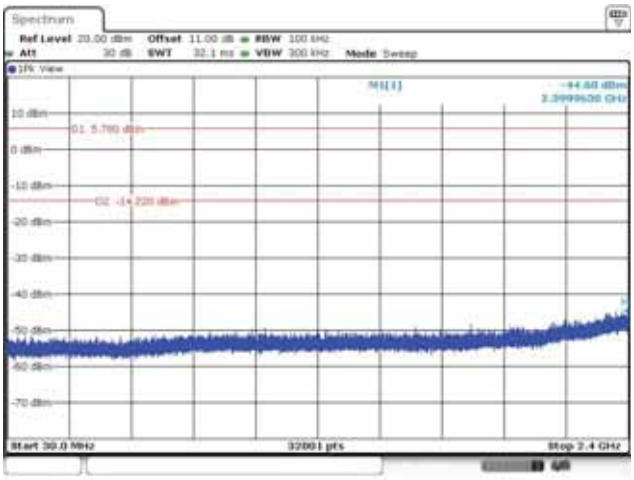
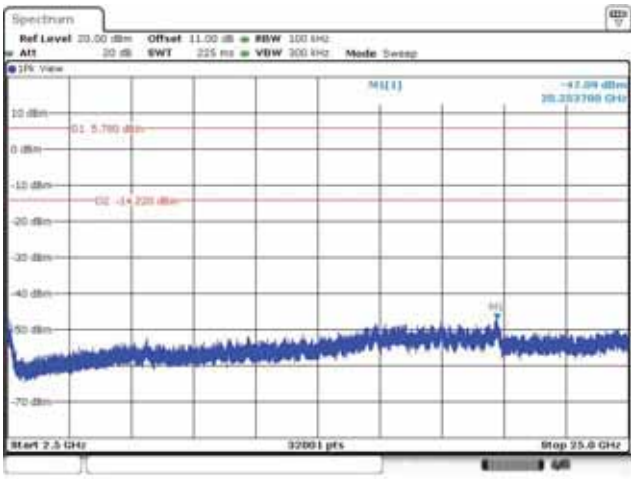
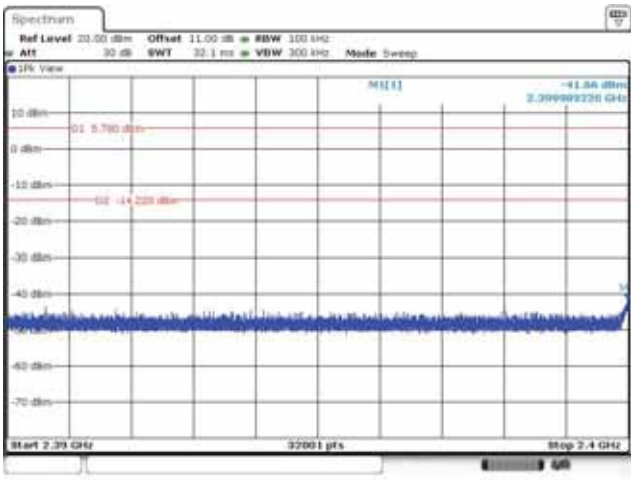
Reference Level	Tx 2437MHz / 30MHz~25GHz (down 20dBc)
	
---	
---	

Reference Level	Tx 2462MHz / 30MHz~25GHz (down 20dBc)
	
---	
---	

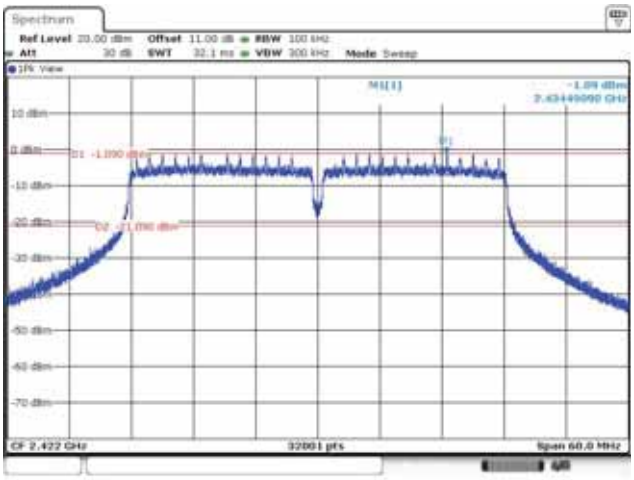
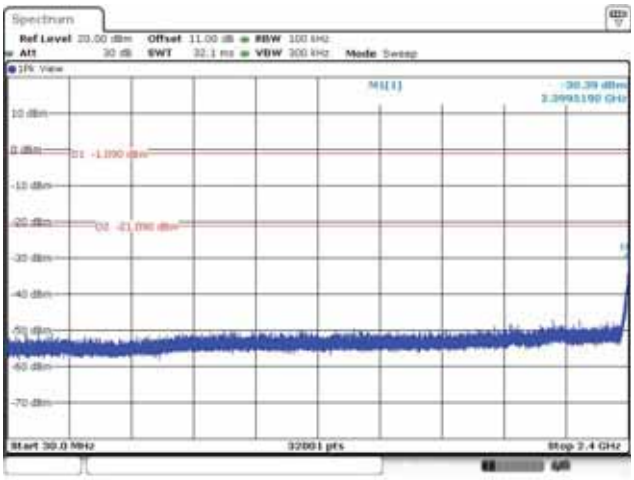
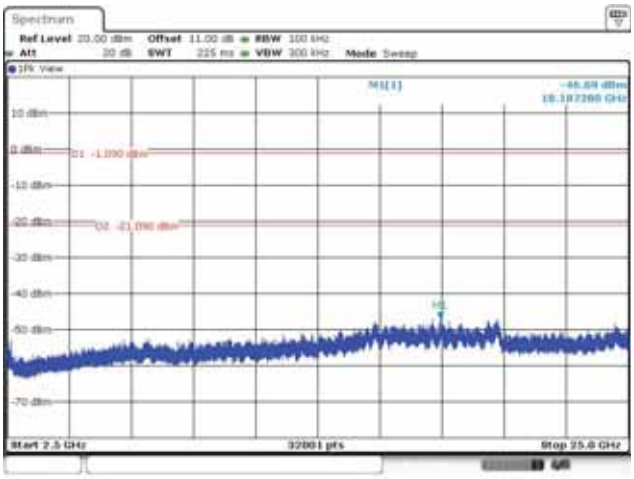
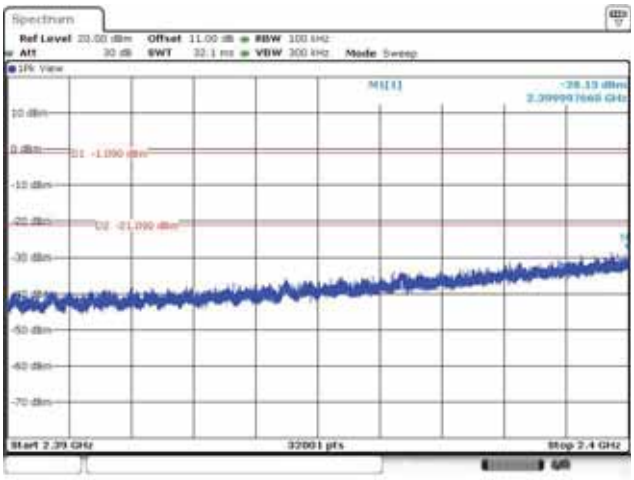
802.11n HT20

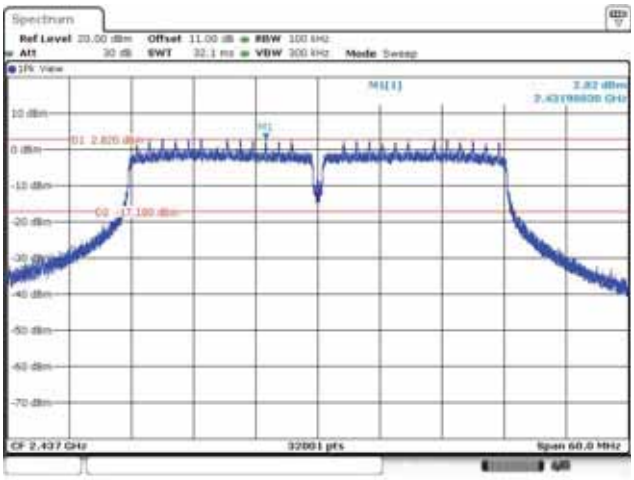
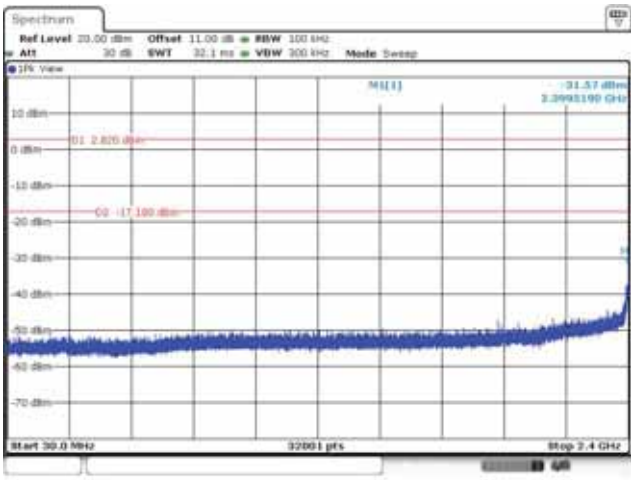
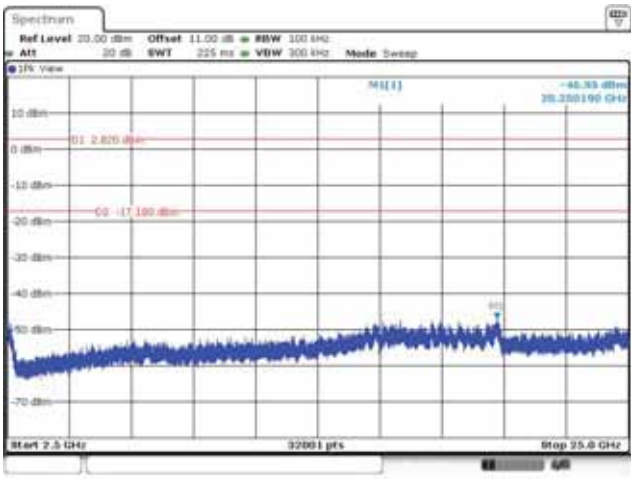
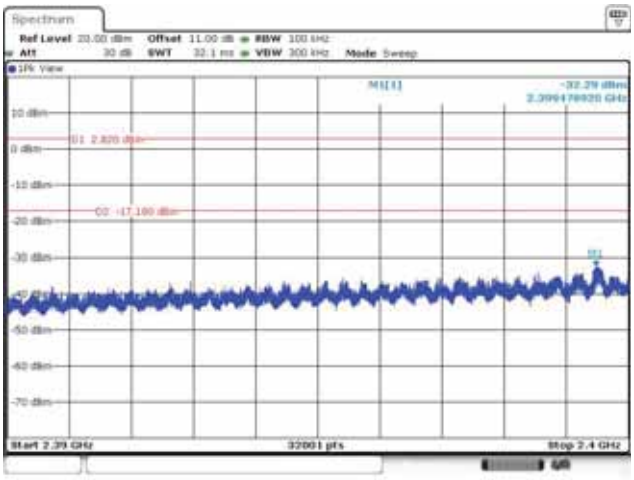
Reference Level	Tx 2412MHz / 30MHz~25GHz (down 20dBc)
	
---	
---	

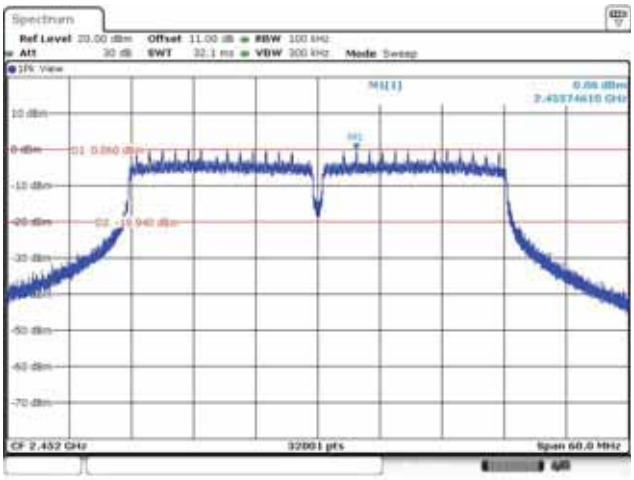
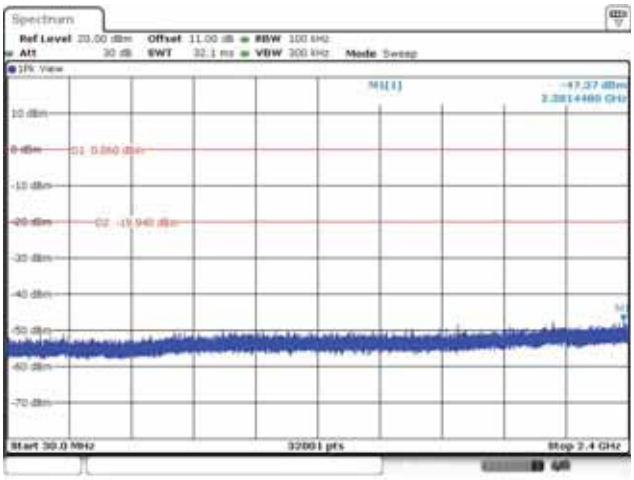
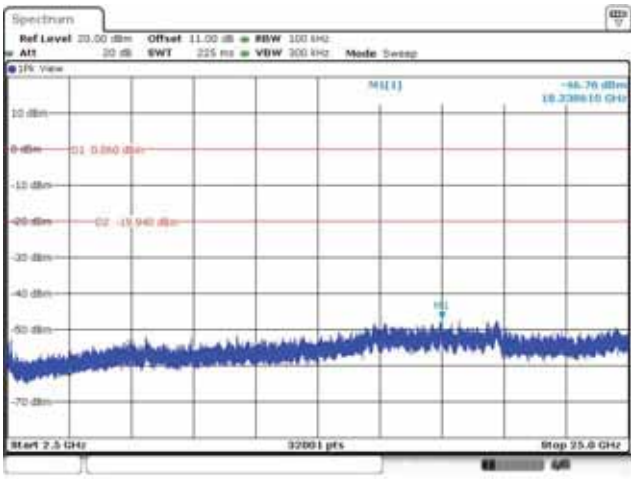
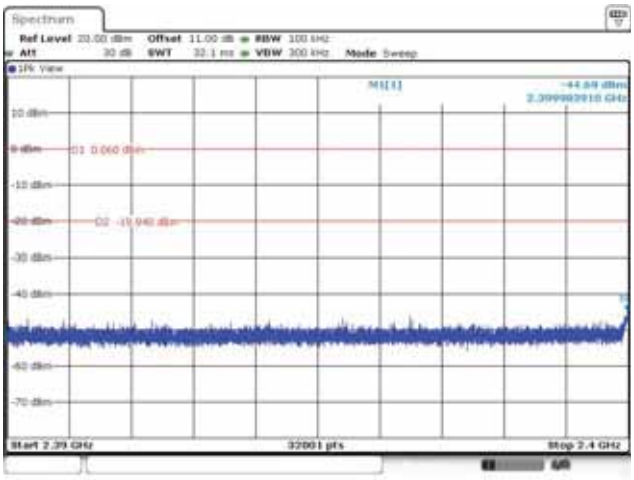
Reference Level	Tx 2437MHz / 30MHz~25GHz (down 20dBc)
	
---	
---	

Reference Level	Tx 2462MHz / 30MHz~25GHz (down 20dBc)
	
---	
---	

802.11n HT40

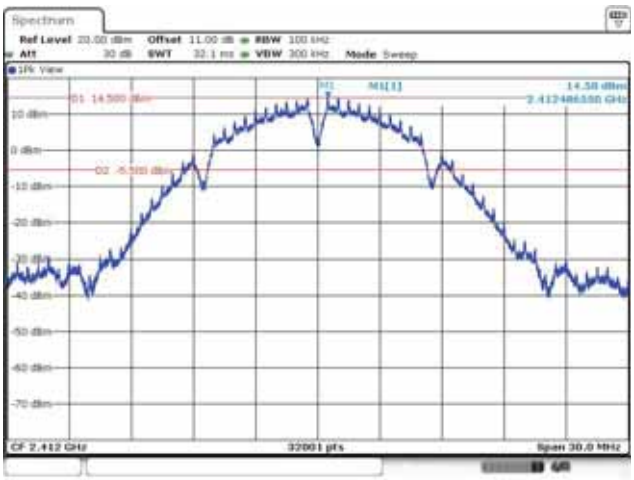
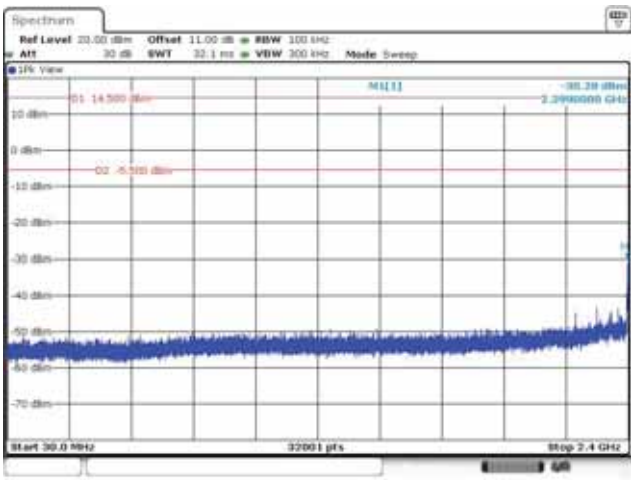
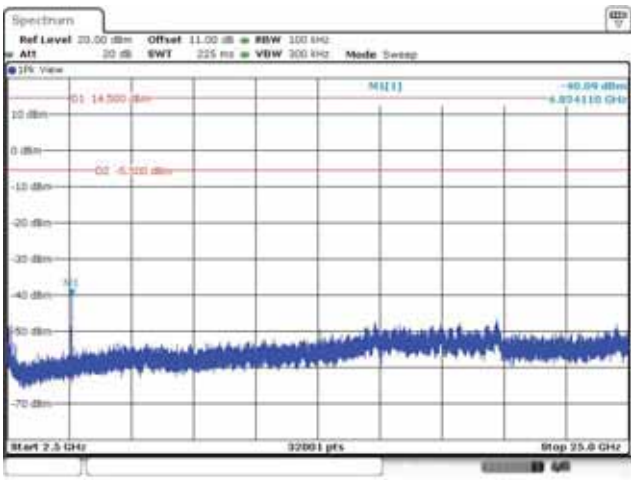
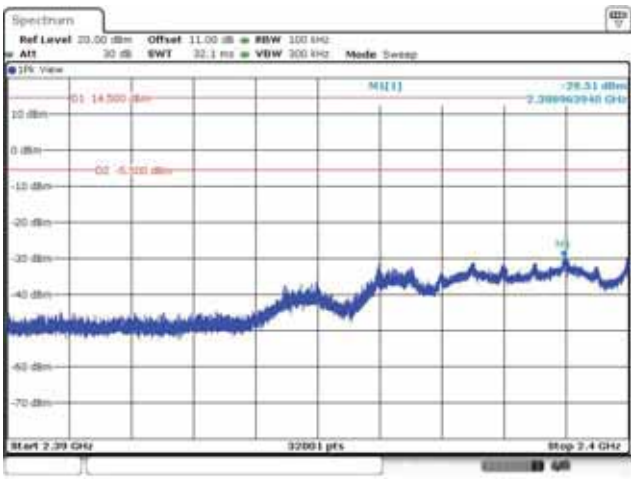
Reference Level	Tx 2422MHz / 30MHz~25GHz (down 20dBc)
	
---	
---	

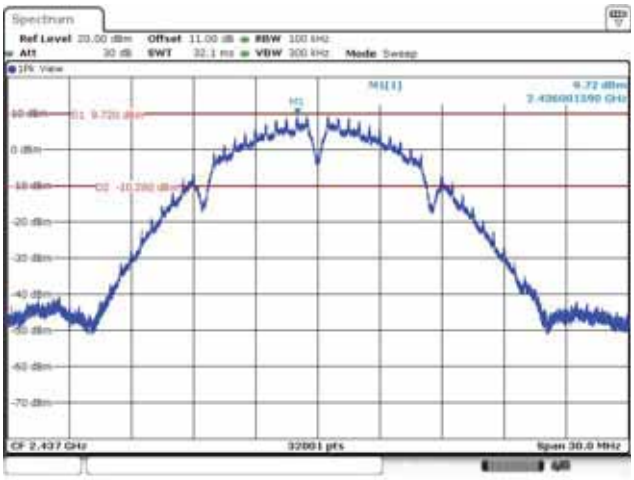
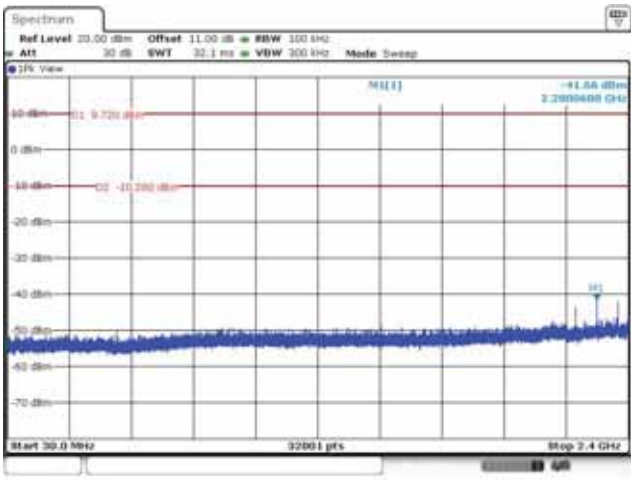
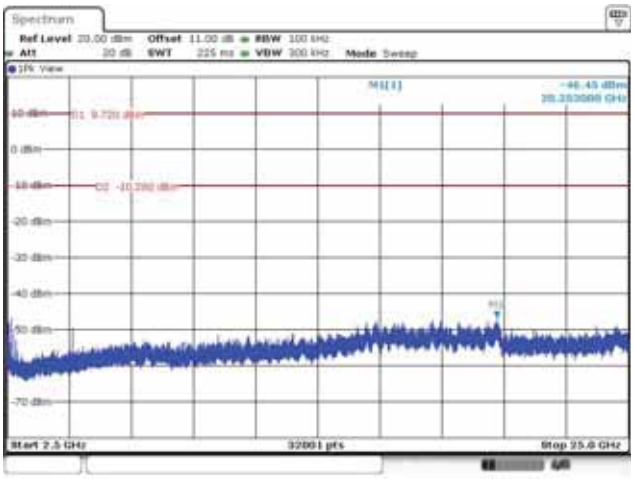
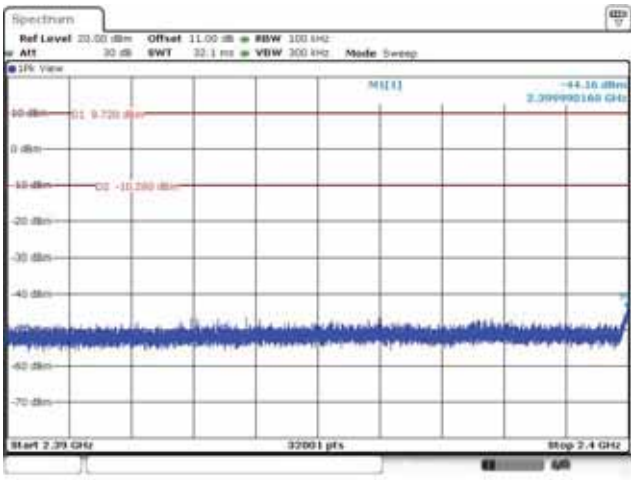
Reference Level	Tx 2437MHz / 30MHz~25GHz (down 20dBc)
	
---	
---	

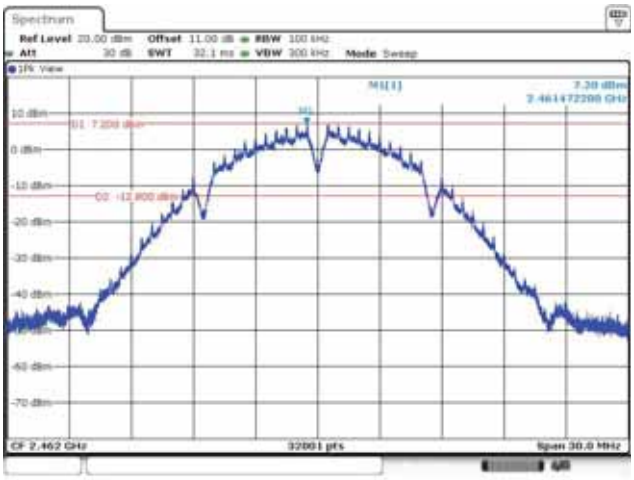
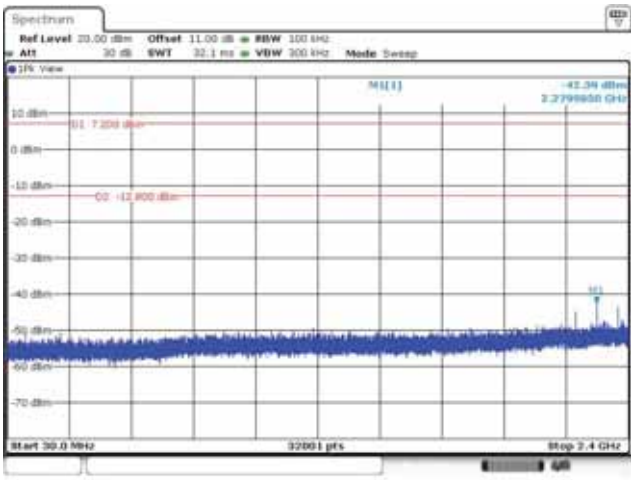
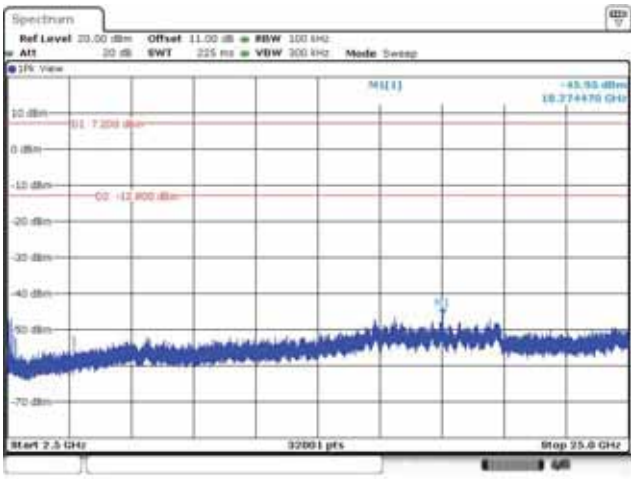
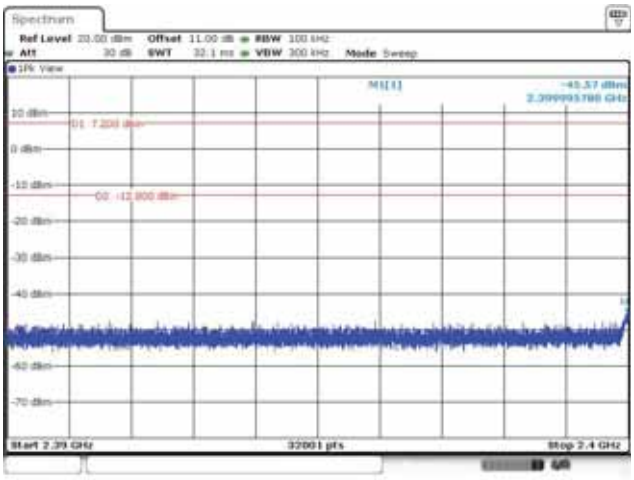
Reference Level	Tx 2452MHz / 30MHz~25GHz (down 20dBc)
	
---	
---	

Mode 3: External antenna with adapter mode

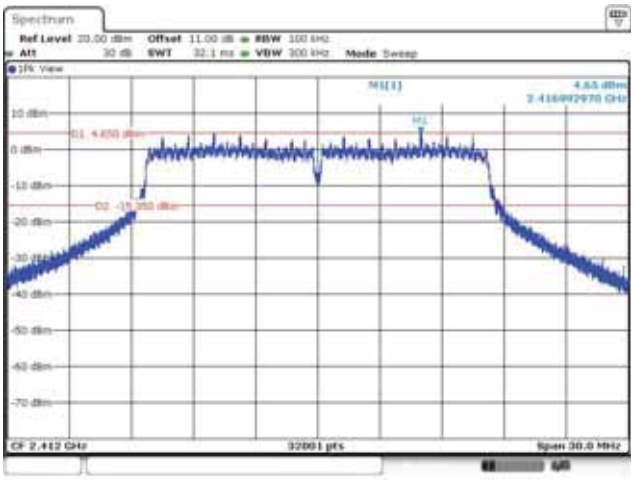
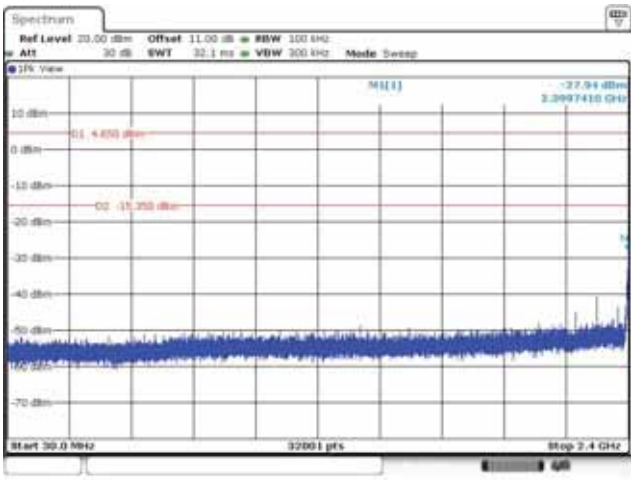
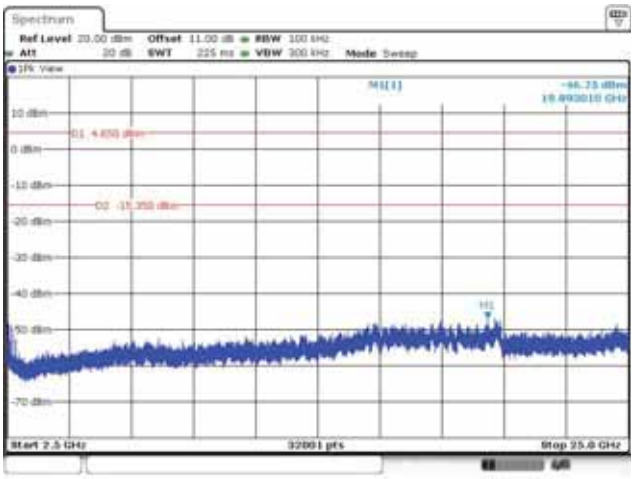
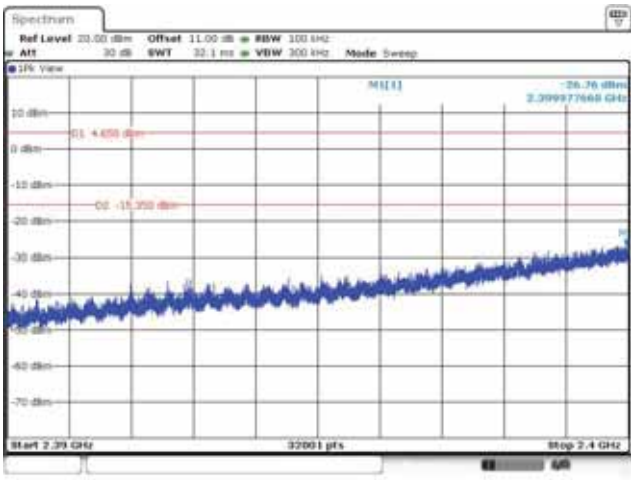
802.11b

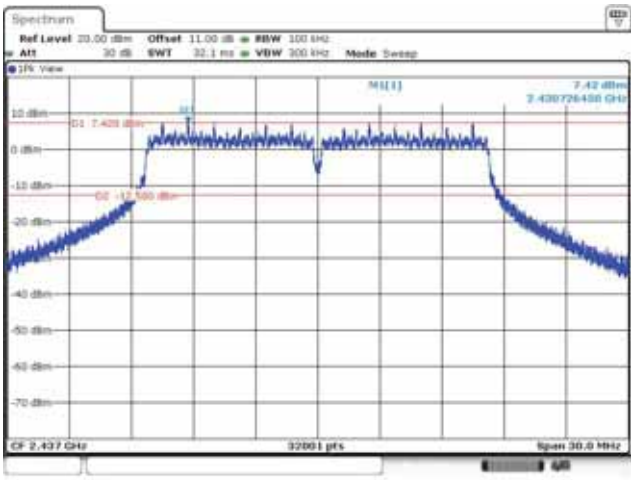
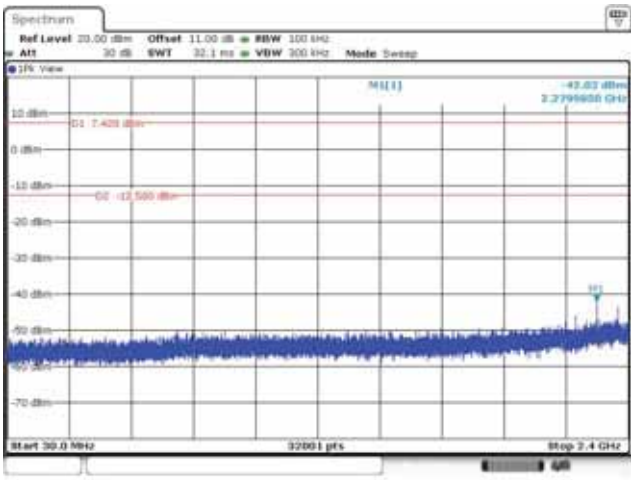
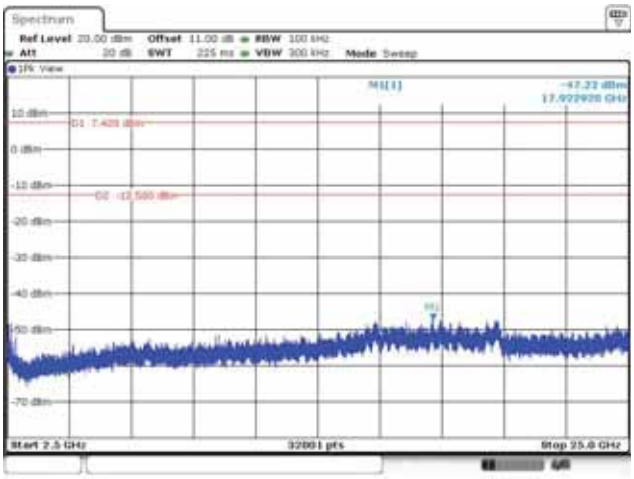
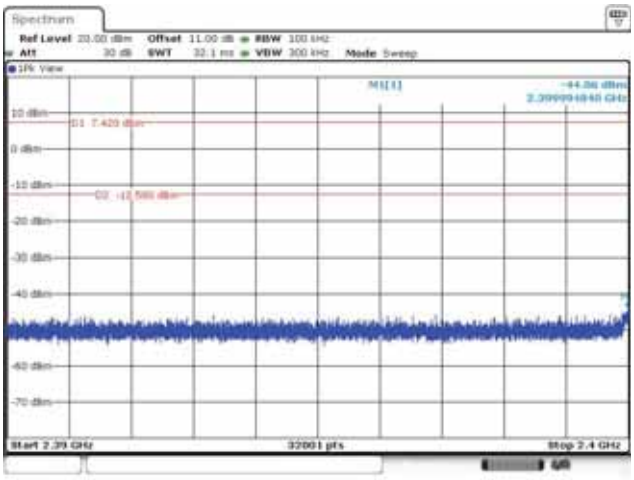
Reference Level	Tx 2412MHz / 30MHz~25GHz (down 20dBc)
	
---	
---	

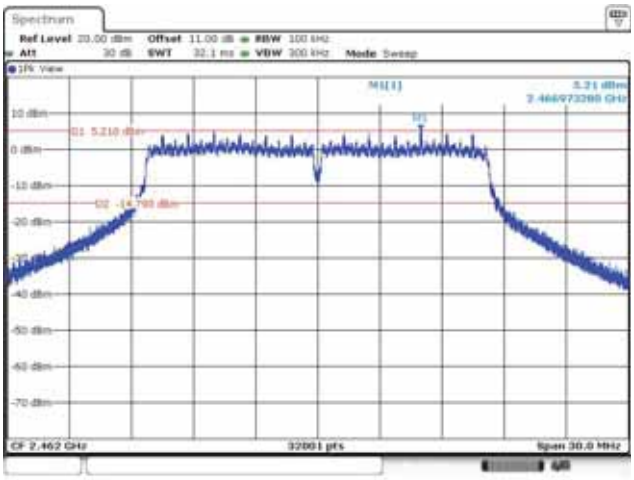
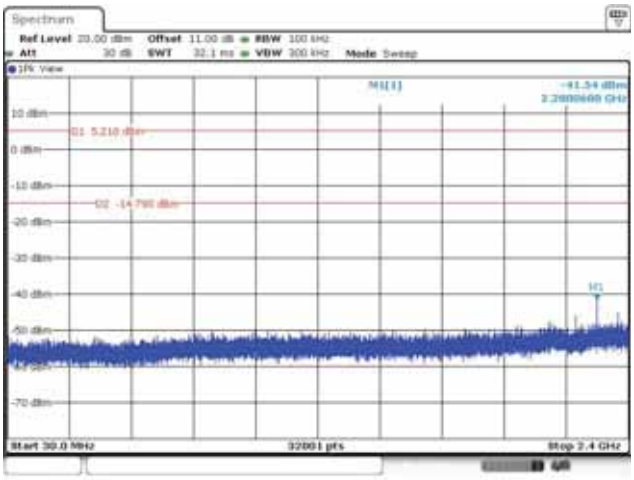
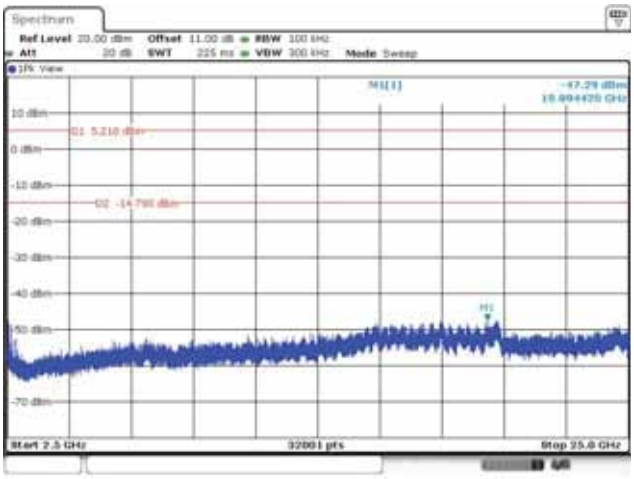
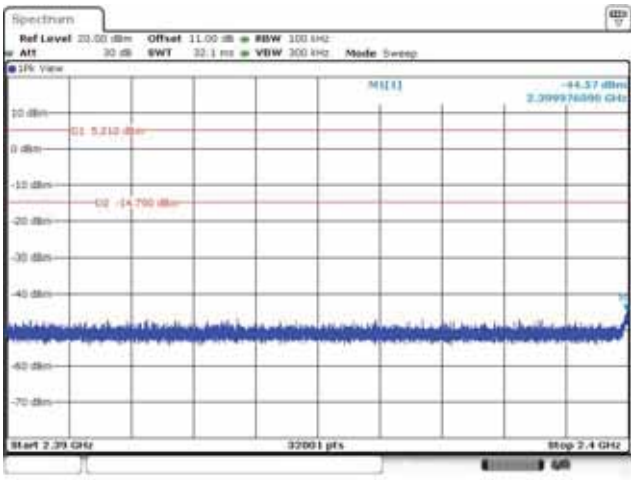
Reference Level	Tx 2437MHz / 30MHz~25GHz (down 20dBc)
	
---	
---	

Reference Level	Tx 2462MHz / 30MHz~25GHz (down 20dBc)
	
---	
---	

802.11g

Reference Level	Tx 2412MHz / 30MHz~25GHz (down 20dBc)
	
---	
---	

Reference Level	Tx 2437MHz / 30MHz~25GHz (down 20dBc)
	
---	
---	

Reference Level	Tx 2462MHz / 30MHz~25GHz (down 20dBc)
	
---	
---	

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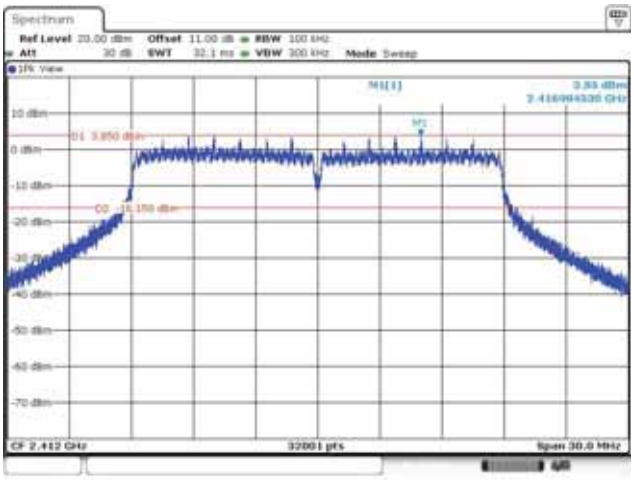
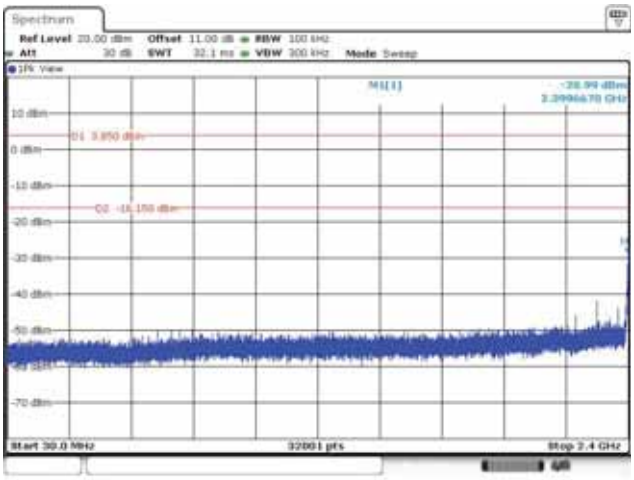
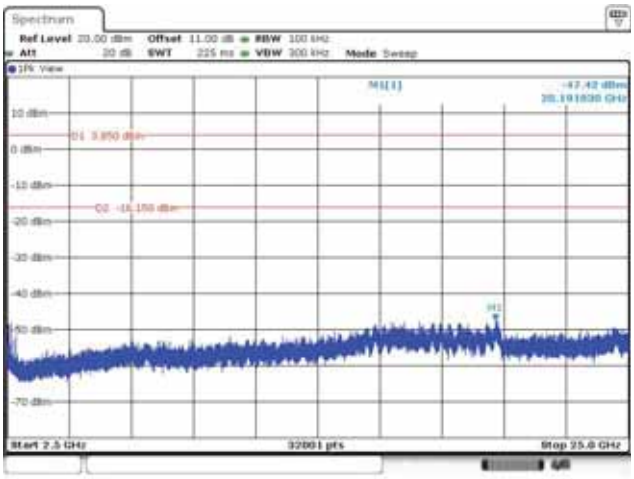
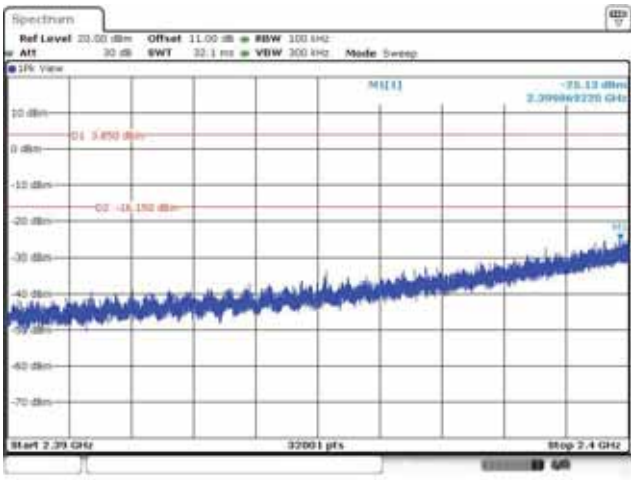
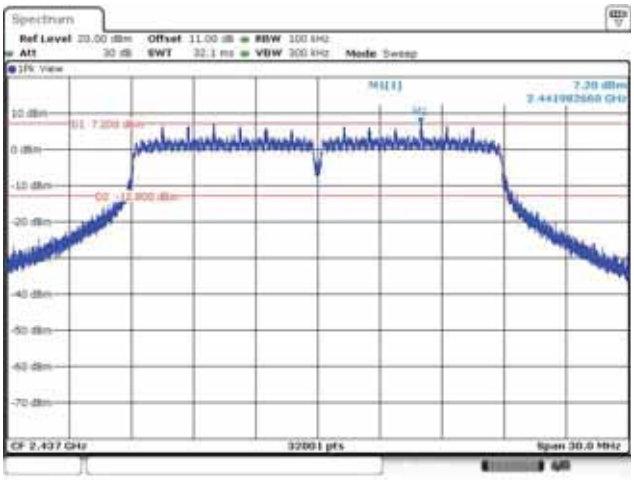
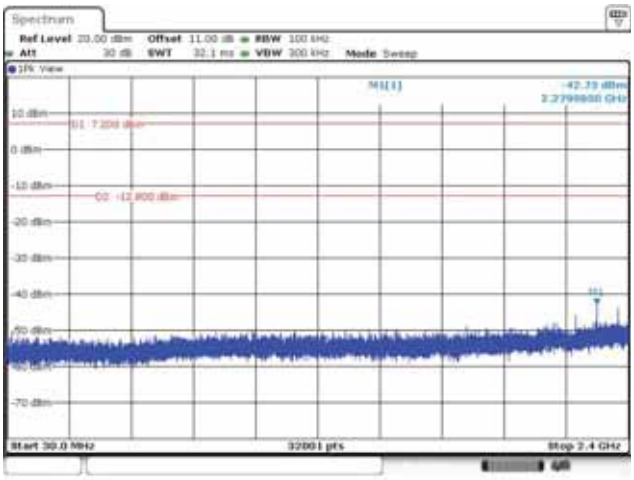
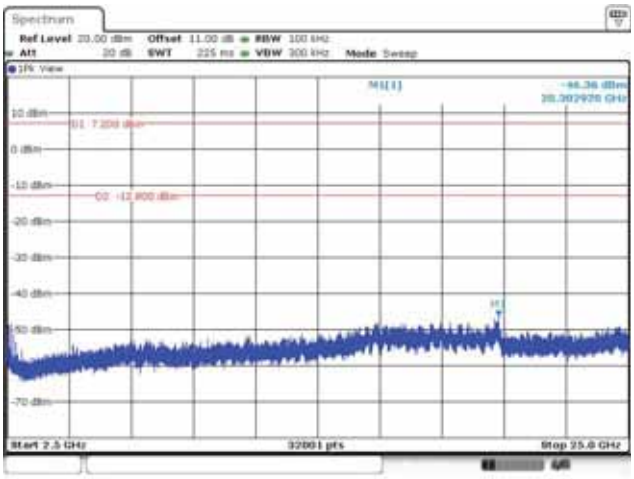
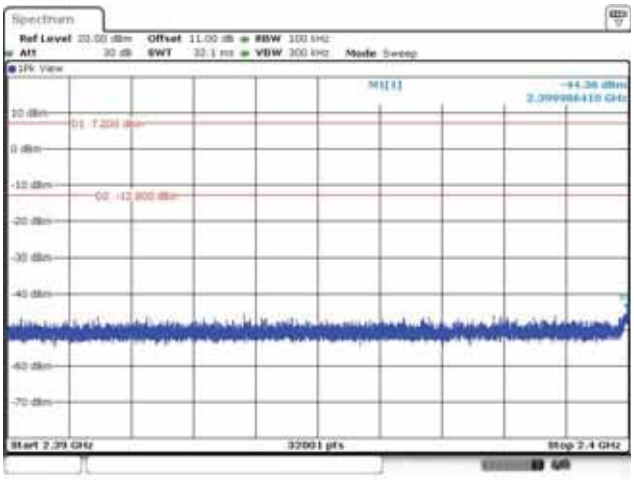
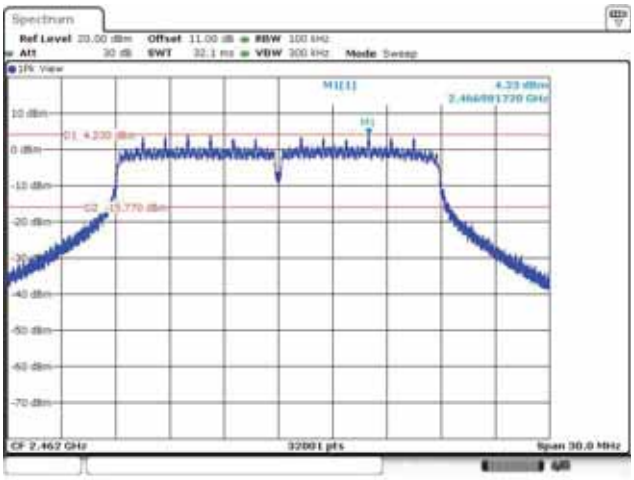
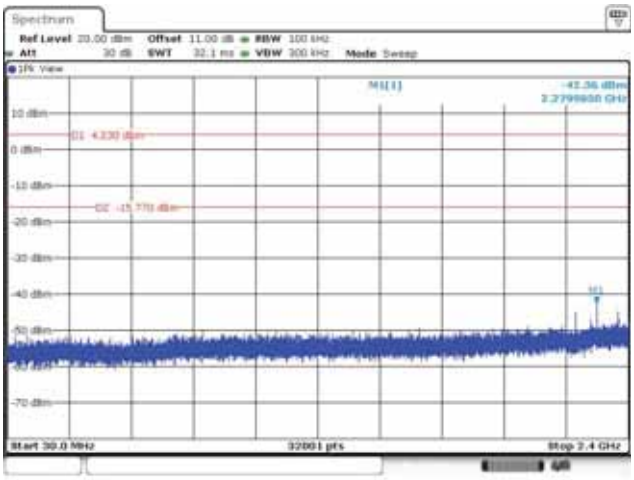
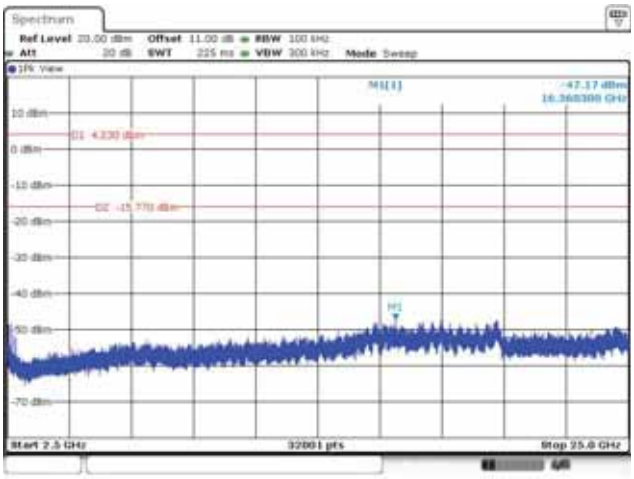
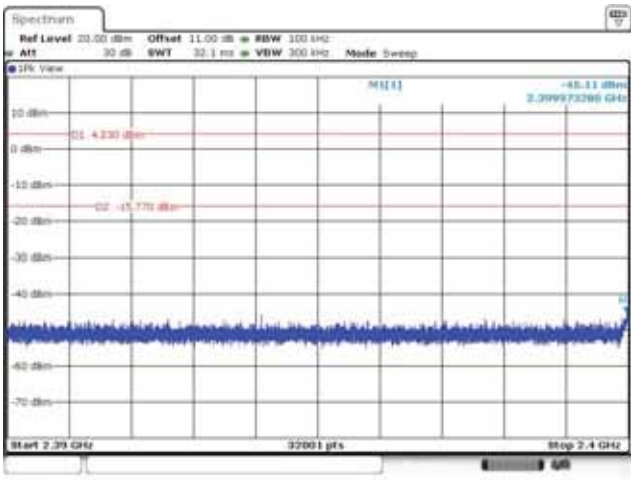
Reference Level	Tx 2412MHz / 30MHz~25GHz (down 20dBc)
	
---	
---	

Reference Level	Tx 2437MHz / 30MHz~25GHz (down 20dBc)
	
---	
---	

Reference Level	Tx 2462MHz / 30MHz~25GHz (down 20dBc)
	
---	
---	

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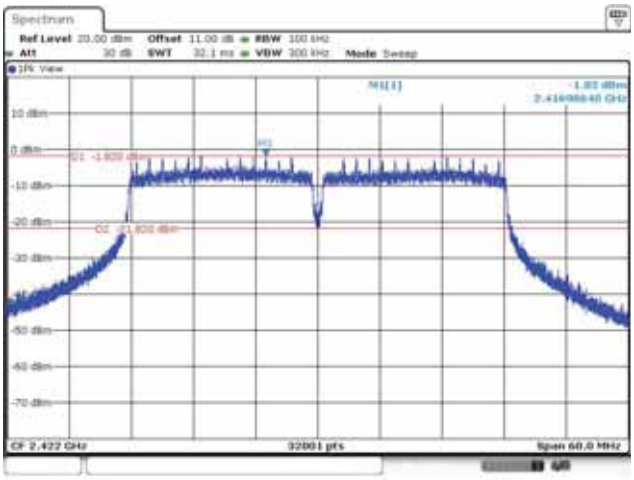
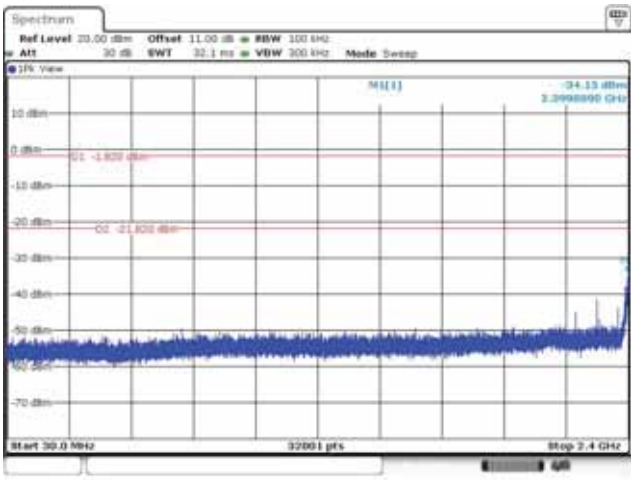
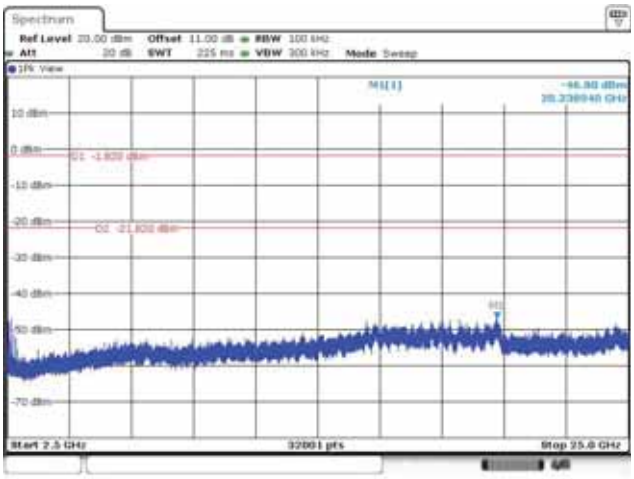
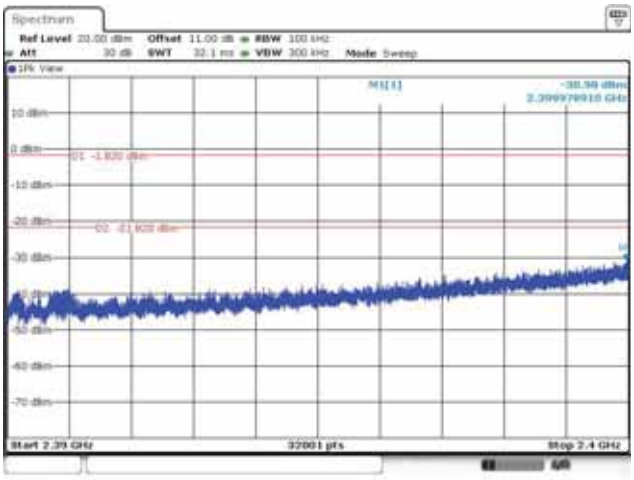
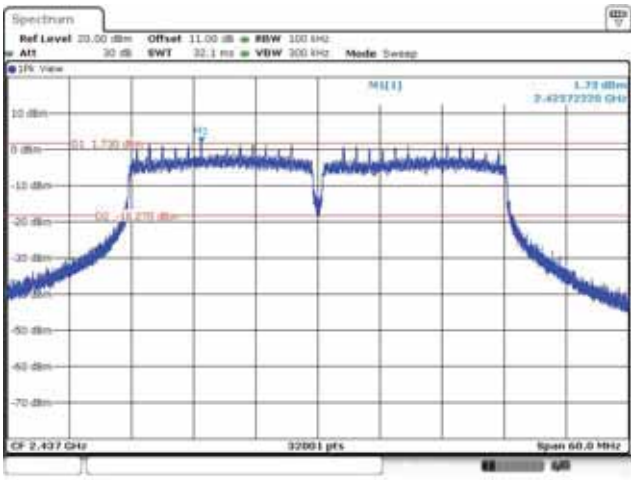
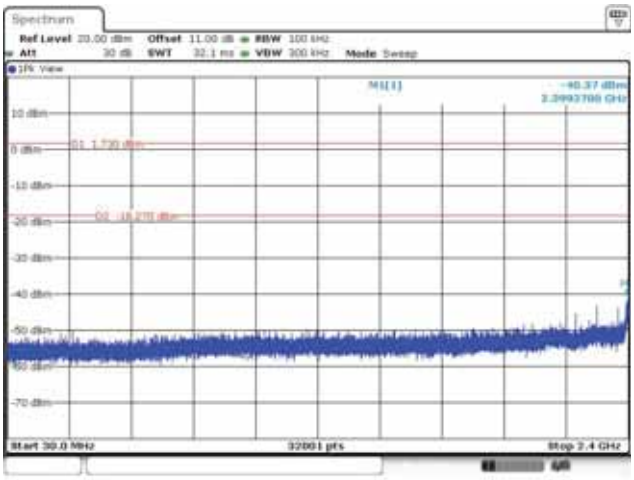
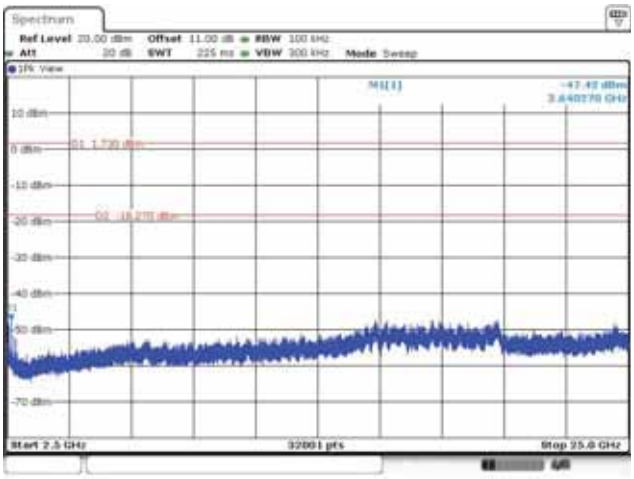
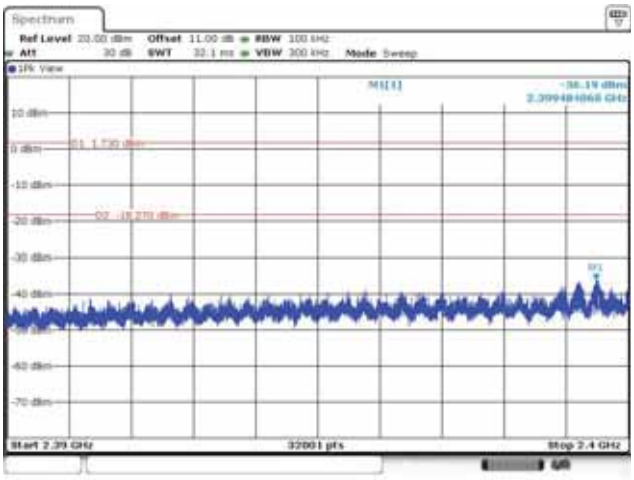
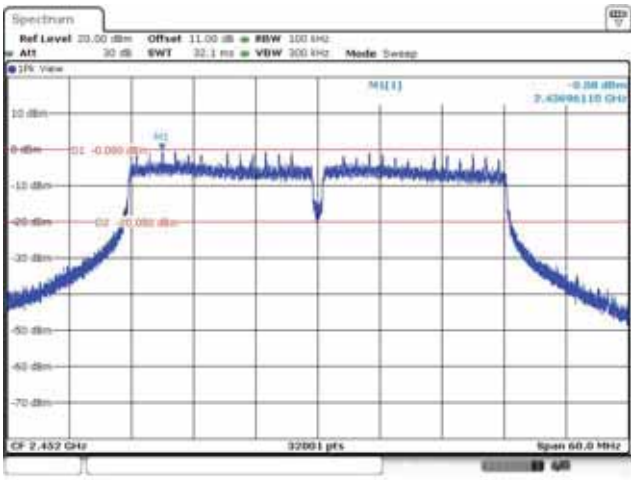
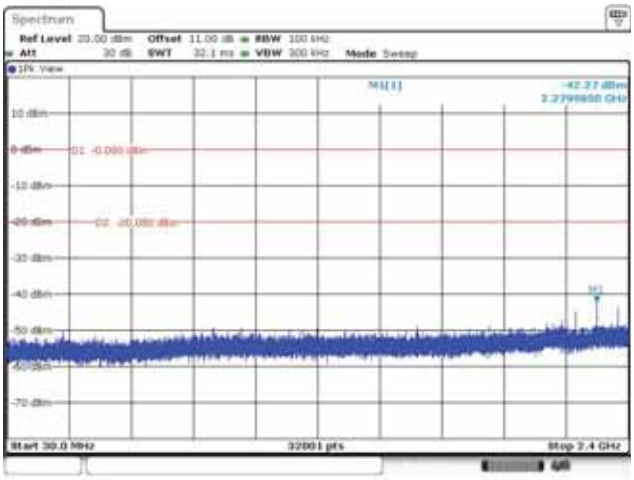
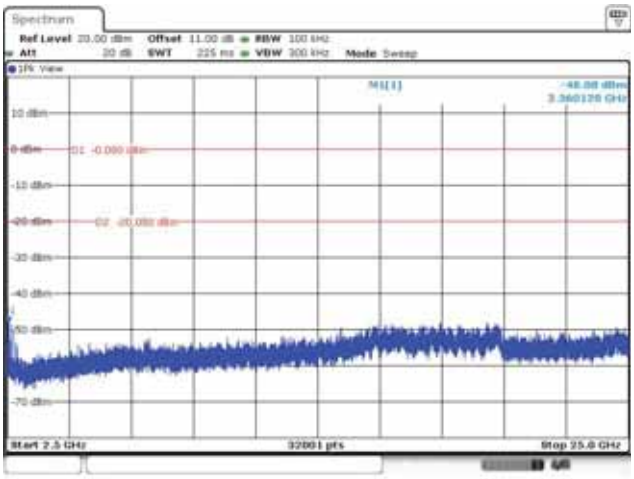
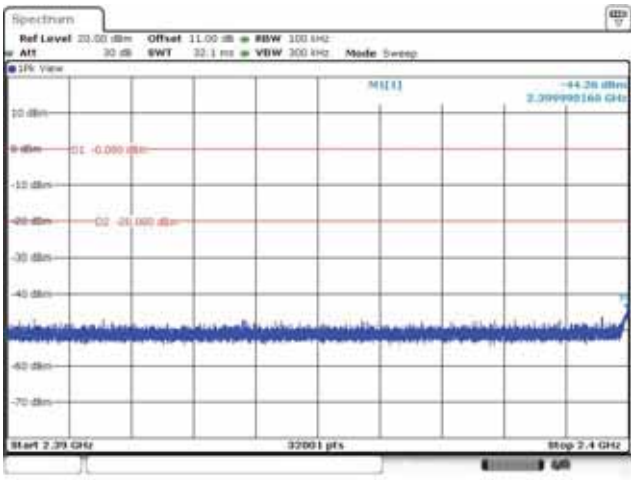
Reference Level	Tx 2422MHz / 30MHz~25GHz (down 20dBc)
	
---	
---	

Reference Level	Tx 2437MHz / 30MHz~25GHz (down 20dBc)
	
---	
---	

Reference Level	Tx 2452MHz / 30MHz~25GHz (down 20dBc)
	
---	
---	

3.6 Transmitter Radiated Unwanted Emissions

3.6.1 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.

3.6.2 Measuring Instruments

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

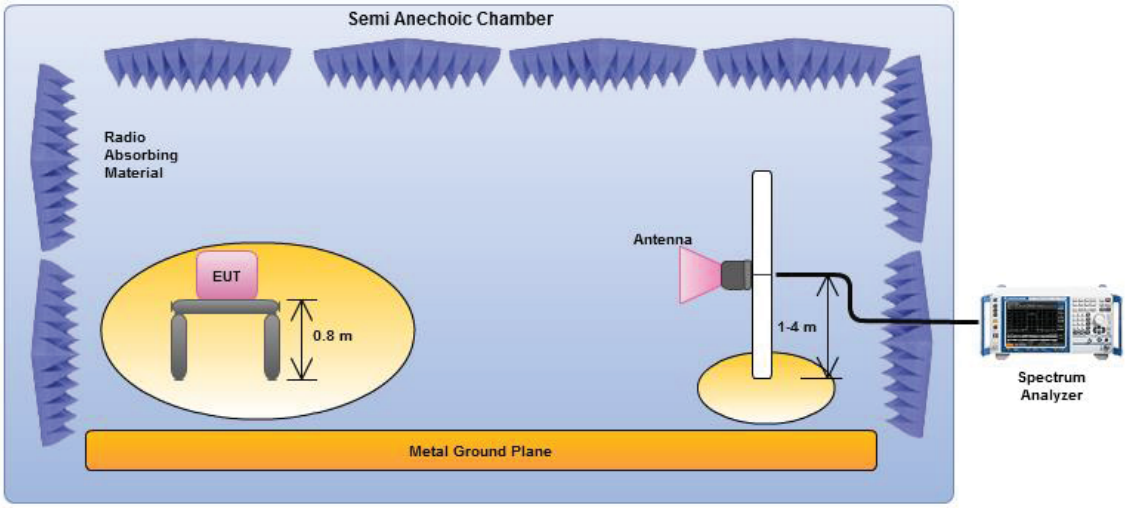
3.6.3 Test Procedures

Test Method			
☒	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).		
☒	For the transmitter unwanted emissions shall be measured using following options below:		
	☒	Refer as FCC KDB 558074 v03r02, clause 11 for unwanted emissions into non-restricted bands.	
	☒	Refer as FCC KDB 558074 v03r02, clause 12 for unwanted emissions into restricted bands.	
		☐	Refer as FCC KDB 558074 v03r02, clause 12.2.5.1 Option 1 (trace averaging for duty cycle ≥98%)
		☐	Refer as FCC KDB 558074 v03r02, clause 12.2.5.2 Option 2 (trace averaging + duty factor).
		☒	Refer as FCC KDB 558074 v03r02, clause 12.2.5.3 Option 3 (Reduced VBW≥1/T).
		☐	Refer as ANSI C63.10, clause 4.2.3.2.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time
		☐	Refer as ANSI C63.10, clause 4.2.3.2.4 average value of pulsed emissions.
		☒	Refer as FCC KDB 558074 v03r02, clause 12.2.4 measurement procedure peak limit.
		☒	Refer as FCC KDB 558074 v03r02, clause 12.2.3 measurement procedure Quasi-Peak limit.
☒	For radiated measurement, refer as FCC KDB 558074 v03r02, clause 12.2.7		
	☒	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 6.6 for radiated emissions from above 1 GHz.	

Test Method		
☐	For conducted and cabinet radiation measurement, refer as FCC KDB 558074 v03r02, clause 12.2	
	☐	For conducted unwanted emissions into non-restricted bands (relative emission limits). 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 conducted unwanted emissions into restricted bands (absolute emission limits). Devices with multiple transmit chains using options given below: (1) Measure and sum the spectra across the outputs or (2) Measure and add 10 log(N) dB

3.6.4 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.

Note: Test distance is 3m.

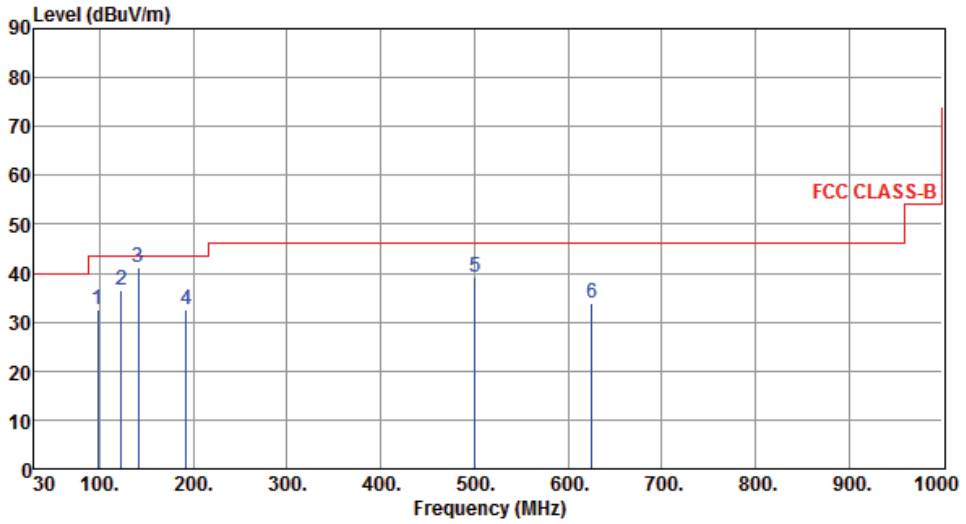
3.6.5 Transmitter Radiated Unwanted Emissions (Below 30MHz)

All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

3.6.6 Transmitter Radiated Unwanted Emissions (Below 1GHz)

Mode 1: Internal antenna with adapter mode

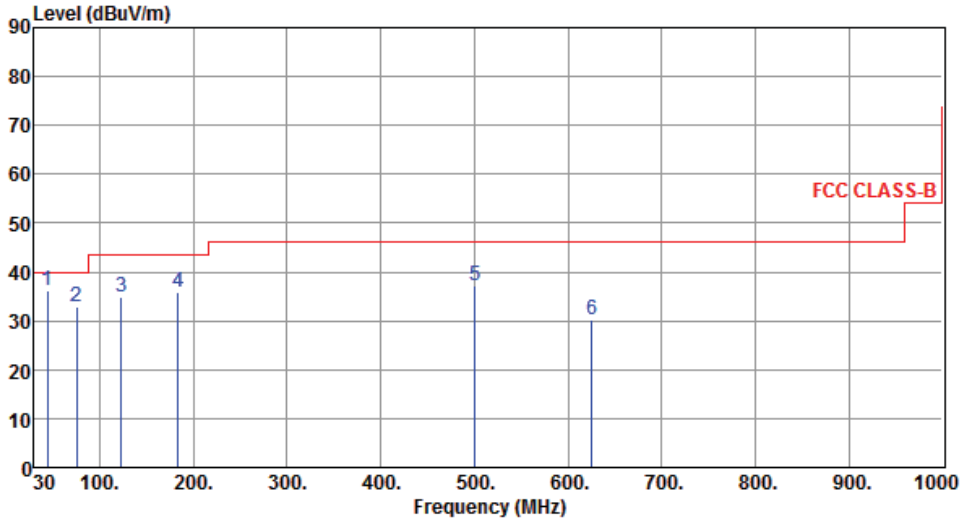
Transmitter Radiated Unwanted Emissions (Below 1GHz)			
Modulation Mode	HT20	**Test Freq. (MHz)**	2437
Polarization	H	**Operating Mode**	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	97.90	32.42	43.50	-11.08	54.50	-22.08	Peak	---	---
2	123.12	36.51	43.50	-6.99	55.38	-18.87	Peak	---	---
3	141.55	41.28	43.50	-2.22	58.47	-17.19	Peak	---	---
4	191.99	32.50	43.50	-11.00	52.11	-19.61	Peak	---	---
5	500.45	39.03	46.00	-6.97	50.57	-11.54	Peak	---	---
6	625.58	33.81	46.00	-12.19	42.99	-9.18	Peak	---	---

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	HT20	**Test Freq. (MHz)**	2437
Polarization	V	**Operating Mode**	1

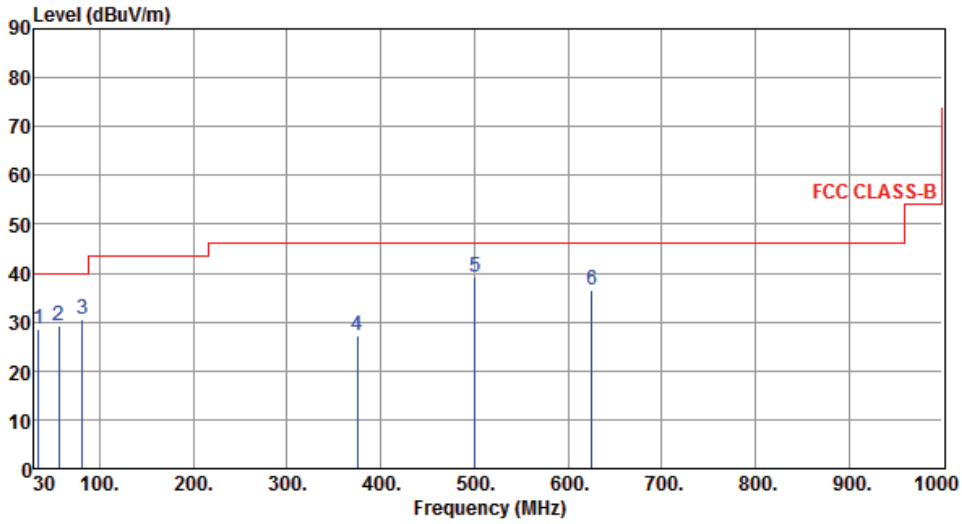


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	44.55	36.29	40.00	-3.71	53.11	-16.82	Peak	---	---
2	75.64	32.82	40.00	-7.18	53.51	-20.69	QP	---	---
3	123.12	34.85	43.50	-8.65	53.72	-18.87	Peak	---	---
4	183.26	35.72	43.50	-7.78	54.59	-18.87	Peak	---	---
5	500.45	37.20	46.00	-8.80	48.74	-11.54	Peak	---	---
6	625.58	30.38	46.00	-15.62	39.56	-9.18	Peak	---	---

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)

Mode 2: Internal antenna with POE mode

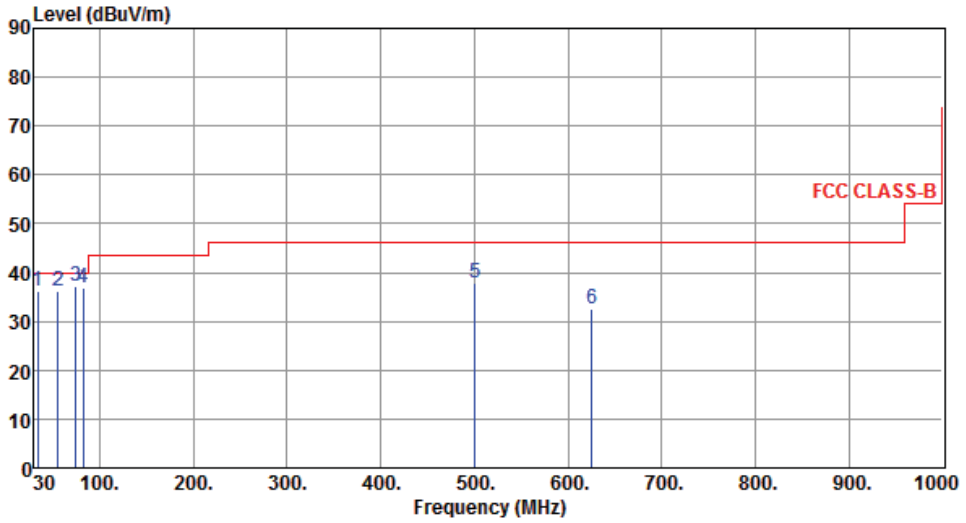
Transmitter Radiated Unwanted Emissions (Below 1GHz)			
Modulation Mode	HT20	**Test Freq. (MHz)**	2437
Polarization	H	**Operating Mode**	2



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	34.85	28.69	40.00	-11.31	46.07	-17.38	Peak	---	---
2	56.19	29.14	40.00	-10.86	46.05	-16.91	Peak	---	---
3	81.41	30.48	40.00	-9.52	52.31	-21.83	Peak	---	---
4	375.32	27.08	46.00	-18.92	41.42	-14.34	Peak	---	---
5	500.45	39.03	46.00	-6.97	50.57	-11.54	Peak	---	---
6	625.58	36.41	46.00	-9.59	45.59	-9.18	Peak	---	---

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	HT20	**Test Freq. (MHz)**	2437
Polarization	V	**Operating Mode**	2

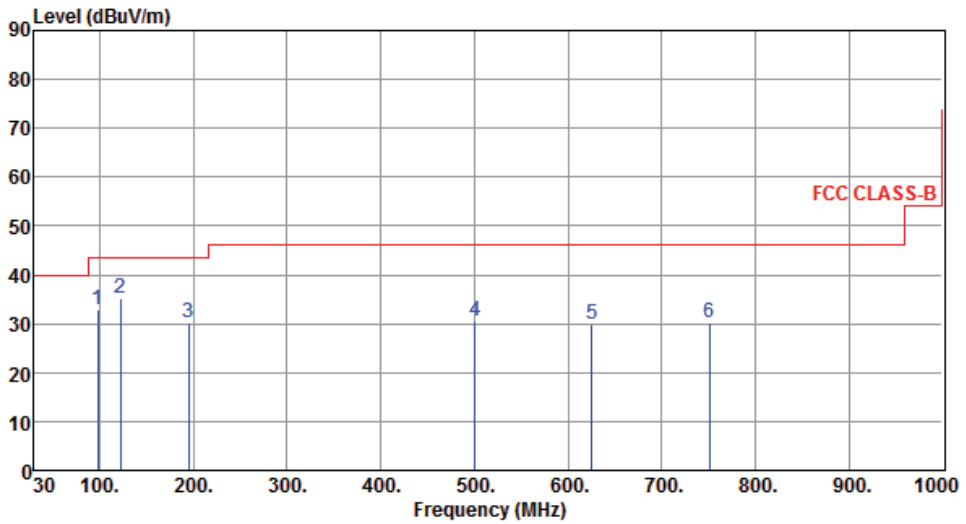


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	33.88	36.20	40.00	-3.80	53.65	-17.45	Peak	---	---
2	55.35	36.11	40.00	-3.89	52.97	-16.86	QP	---	---
3	74.62	37.35	40.00	-2.65	57.82	-20.47	Peak	---	---
4	82.38	36.74	40.00	-3.26	58.69	-21.95	Peak	---	---
5	500.45	37.92	46.00	-8.08	49.46	-11.54	Peak	---	---
6	625.58	32.51	46.00	-13.49	41.69	-9.18	Peak	---	---

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)

Mode 3: External antenna with adapter mode

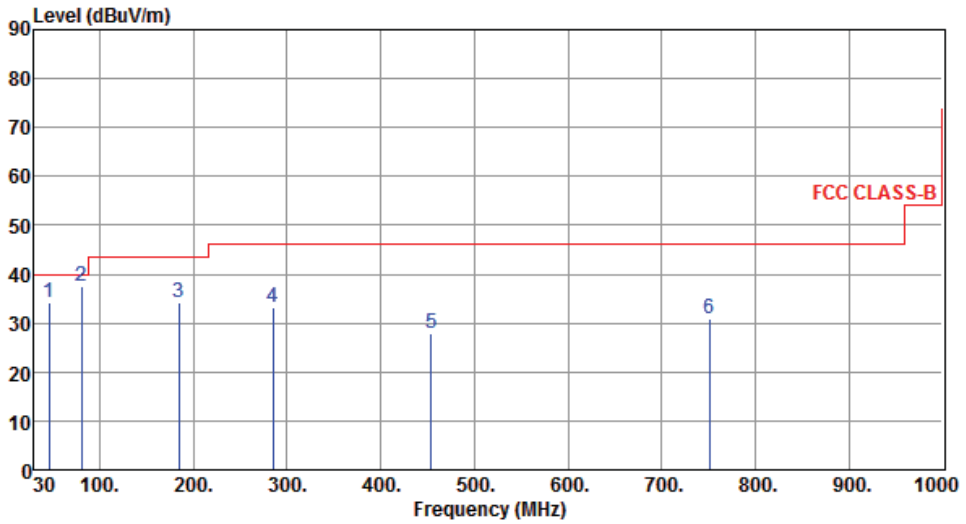
Transmitter Radiated Unwanted Emissions (Below 1GHz)			
Modulation Mode	11g	**Test Freq. (MHz)**	2437
Polarization	H	**Operating Mode**	3



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	97.90	32.72	43.50	-10.78	54.80	-22.08	Peak	---	---
2	122.15	35.22	43.50	-8.28	54.17	-18.95	Peak	---	---
3	194.90	30.12	43.50	-13.38	49.74	-19.62	Peak	---	---
4	500.45	30.60	46.00	-15.40	42.14	-11.54	Peak	---	---
5	625.58	29.92	46.00	-16.08	39.10	-9.18	Peak	---	---
6	750.71	30.34	46.00	-15.66	37.57	-7.23	Peak	---	---

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	11g	**Test Freq. (MHz)**	2437
Polarization	V	**Operating Mode**	3

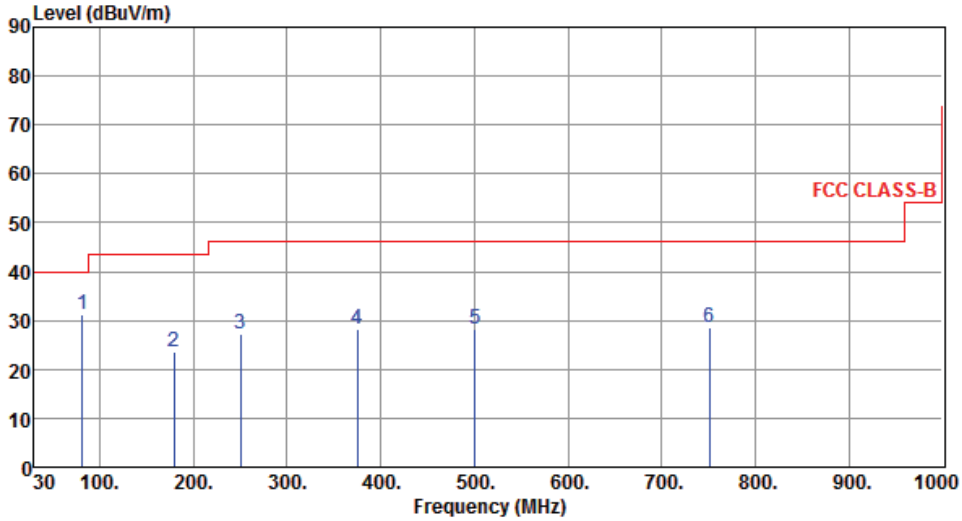


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	46.25	34.18	40.00	-5.82	50.91	-16.73	QP	---	---
2	80.44	37.65	40.00	-2.35	59.35	-21.70	Peak	---	---
3	184.23	34.07	43.50	-9.43	53.05	-18.98	Peak	---	---
4	285.11	33.25	46.00	-12.75	49.80	-16.55	Peak	---	---
5	453.89	27.76	46.00	-18.24	40.21	-12.45	Peak	---	---
6	750.71	31.05	46.00	-14.95	38.28	-7.23	Peak	---	---

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)

Mode 4: External antenna with POE mode

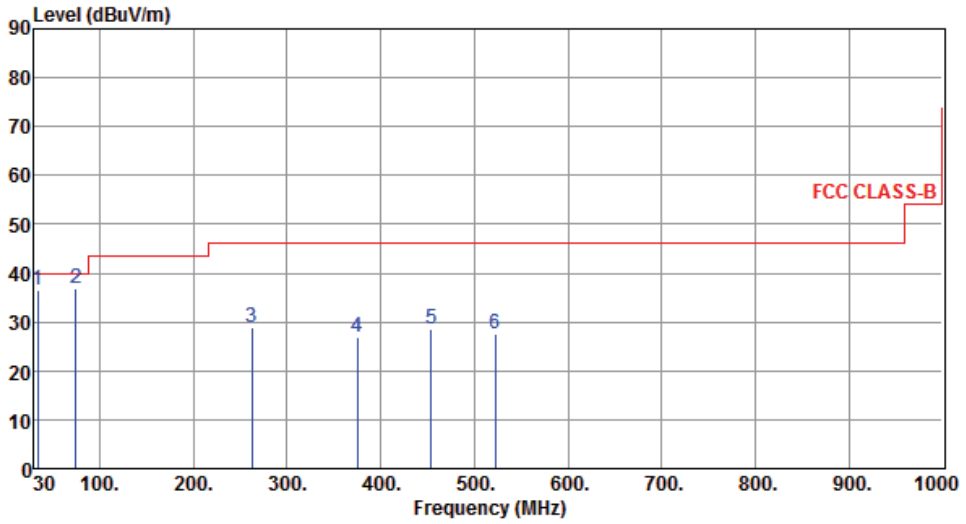
Transmitter Radiated Unwanted Emissions (Below 1GHz)			
Modulation Mode	11g	**Test Freq. (MHz)**	2437
Polarization	H	**Operating Mode**	4



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	81.41	31.07	40.00	-8.93	52.90	-21.83	Peak	---	---
2	179.38	23.59	43.50	-19.91	42.03	-18.44	Peak	---	---
3	250.19	27.10	46.00	-18.90	45.02	-17.92	Peak	---	---
4	375.32	28.30	46.00	-17.70	42.64	-14.34	Peak	---	---
5	500.45	28.12	46.00	-17.88	39.66	-11.54	Peak	---	---
6	750.71	28.48	46.00	-17.52	35.71	-7.23	Peak	---	---

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	11g	**Test Freq. (MHz)**	2437
Polarization	V	**Operating Mode**	4



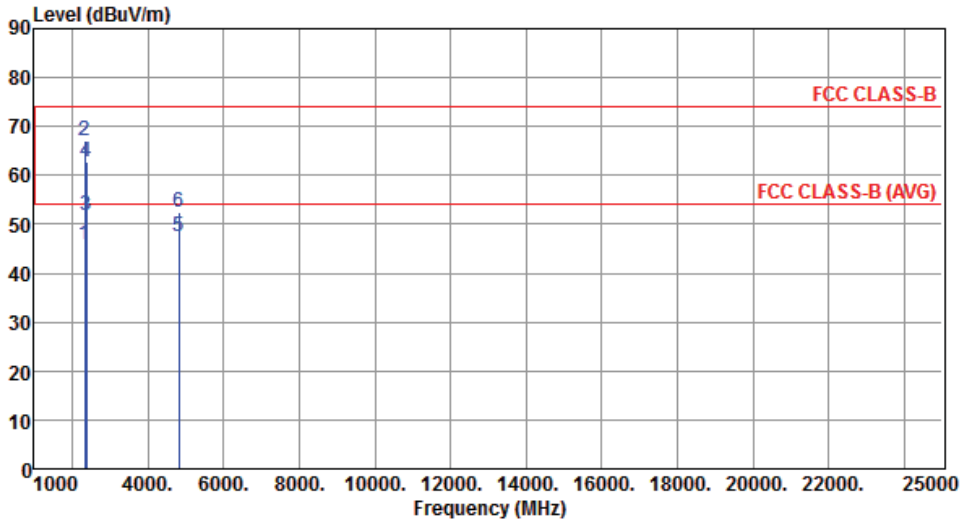
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	33.88	36.60	40.00	-3.40	54.05	-17.45	Peak	---	---
2	74.62	36.89	40.00	-3.11	57.36	-20.47	Peak	---	---
3	262.80	28.82	46.00	-17.18	46.29	-17.47	Peak	---	---
4	375.32	27.02	46.00	-18.98	41.36	-14.34	Peak	---	---
5	453.89	28.56	46.00	-17.44	41.01	-12.45	Peak	---	---
6	522.76	27.70	46.00	-18.30	38.87	-11.17	Peak	---	---

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)

3.6.7 Transmitter Radiated Unwanted Emissions (Above 1GHz)

Mode 1: Internal antenna with adapter mode

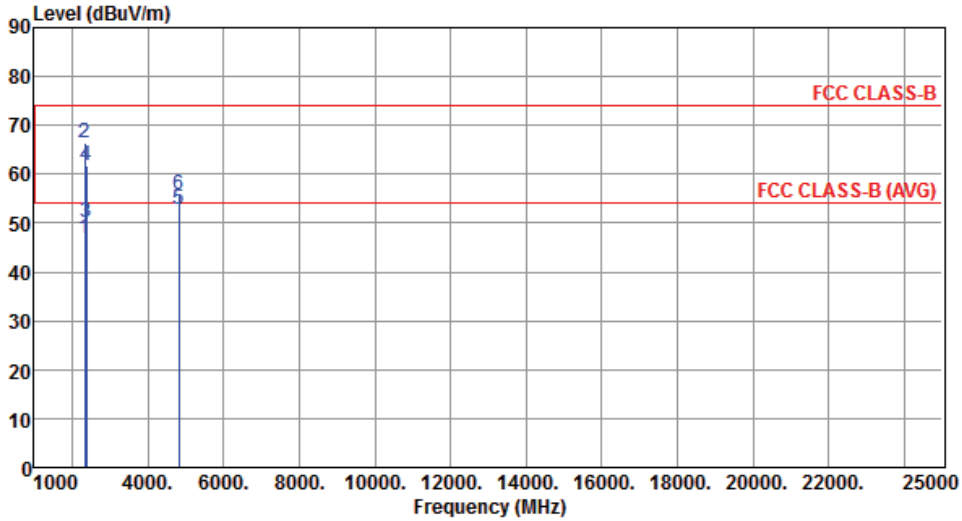
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11b	**Test Freq. (MHz)**	2412
N_{TX}	2	**Polarization**	H



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2332.00	45.96	54.00	-8.04	49.87	-3.91	Average	---	---
2	2332.00	67.17	74.00	-6.83	71.08	-3.91	Peak	---	---
3	2390.00	51.73	54.00	-2.27	55.41	-3.68	Average	---	---
4	2390.00	62.81	74.00	-11.19	66.49	-3.68	Peak	---	---
5	4824.00	47.46	54.00	-6.54	42.47	4.99	Average	---	---
6	4824.00	52.33	74.00	-21.67	47.34	4.99	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

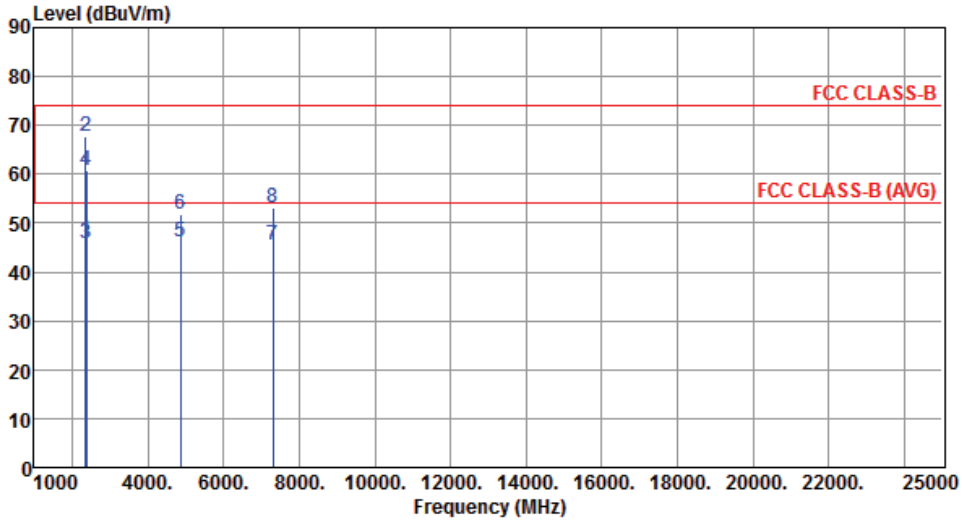
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11b	**Test Freq. (MHz)**	2412
N_{TX}	2	**Polarization**	V



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2332.00	46.85	54.00	-7.15	50.76	-3.91	Average	---	---
2	2332.00	66.58	74.00	-7.42	70.49	-3.91	Peak	---	---
3	2390.00	50.05	54.00	-3.95	53.73	-3.68	Average	---	---
4	2390.00	61.69	74.00	-12.31	65.37	-3.68	Peak	---	---
5	4824.00	52.74	54.00	-1.26	47.75	4.99	Average	---	---
6	4824.00	55.88	74.00	-18.12	50.89	4.99	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

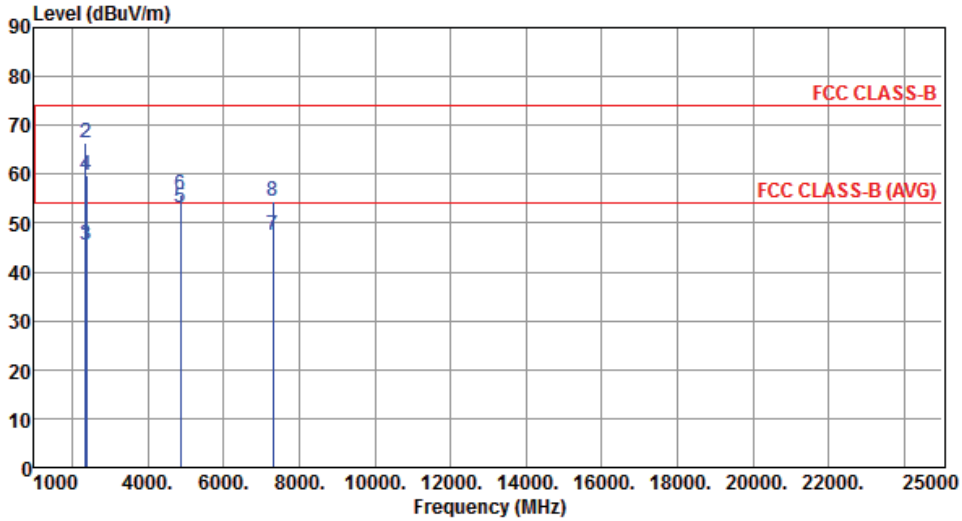
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11b	**Test Freq. (MHz)**	2437
N_{TX}	2	**Polarization**	H



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2357.00	46.46	54.00	-7.54	50.27	-3.81	Average	---	---
2	2357.00	67.60	74.00	-6.40	71.41	-3.81	Peak	---	---
3	2390.00	45.95	54.00	-8.05	49.63	-3.68	Average	---	---
4	2390.00	60.90	74.00	-13.10	64.58	-3.68	Peak	---	---
5	4874.00	46.13	54.00	-7.87	41.03	5.10	Average	---	---
6	4874.00	51.97	74.00	-22.03	46.87	5.10	Peak	---	---
7	7311.00	45.56	54.00	-8.44	36.23	9.33	Average	---	---
8	7311.00	53.09	74.00	-20.91	43.76	9.33	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

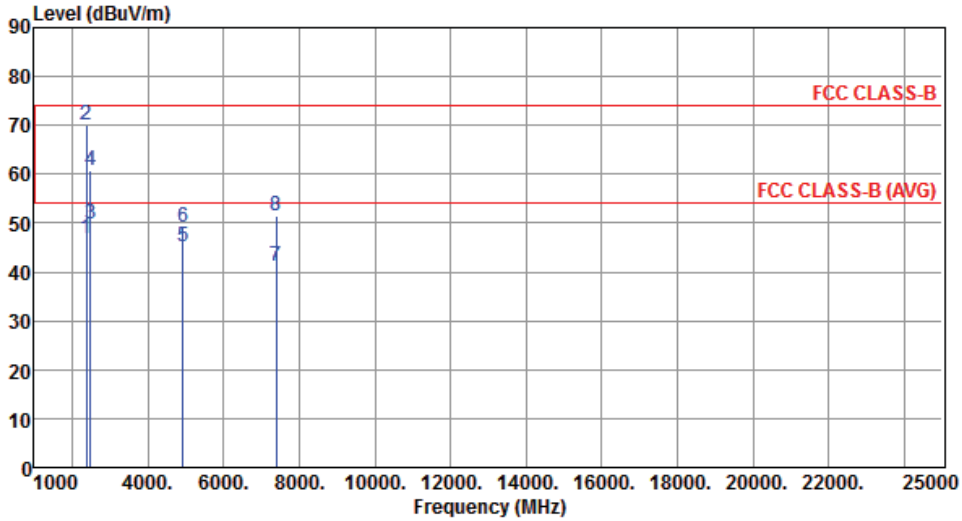
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11b	**Test Freq. (MHz)**	2437
N_{TX}	2	**Polarization**	V



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2357.00	45.39	54.00	-8.61	49.20	-3.81	Average	---	---
2	2357.00	66.56	74.00	-7.44	70.37	-3.81	Peak	---	---
3	2390.00	45.49	54.00	-8.51	49.17	-3.68	Average	---	---
4	2390.00	59.90	74.00	-14.10	63.58	-3.68	Peak	---	---
5	4874.00	53.00	54.00	-1.00	47.90	5.10	Average	---	---
6	4874.00	55.86	74.00	-18.14	50.76	5.10	Peak	---	---
7	7311.00	47.57	54.00	-6.43	38.24	9.33	Average	---	---
8	7311.00	54.39	74.00	-19.61	45.06	9.33	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

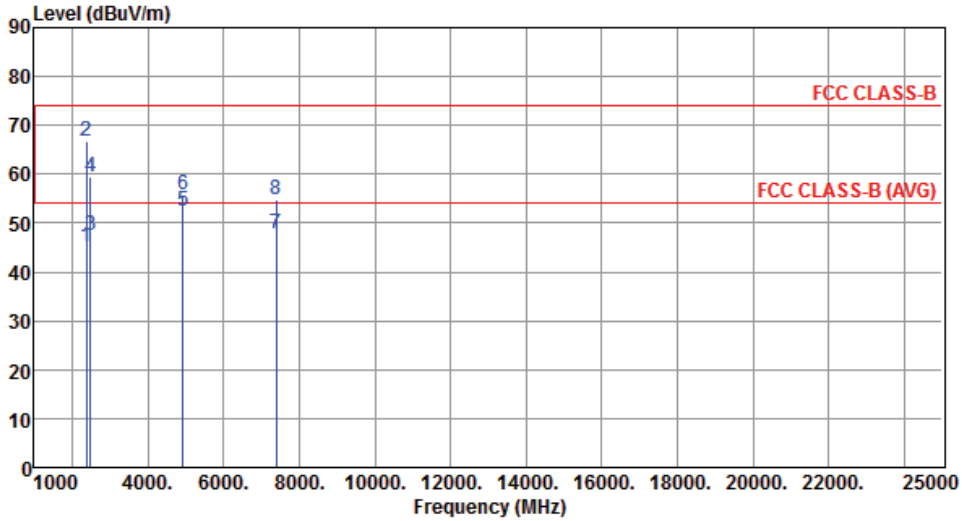
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11b	**Test Freq. (MHz)**	2462
N_{TX}	2	**Polarization**	H



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2382.00	46.87	54.00	-7.13	50.59	-3.72	Average	---	---
2	2382.00	69.91	74.00	-4.09	73.63	-3.72	Peak	---	---
3	2483.50	49.85	54.00	-4.15	53.15	-3.30	Average	---	---
4	2483.50	60.81	74.00	-13.19	64.11	-3.30	Peak	---	---
5	4924.00	45.14	54.00	-8.86	39.94	5.20	Average	---	---
6	4924.00	49.29	74.00	-24.71	44.09	5.20	Peak	---	---
7	7386.00	41.06	54.00	-12.94	31.67	9.39	Average	---	---
8	7386.00	51.53	74.00	-22.47	42.14	9.39	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

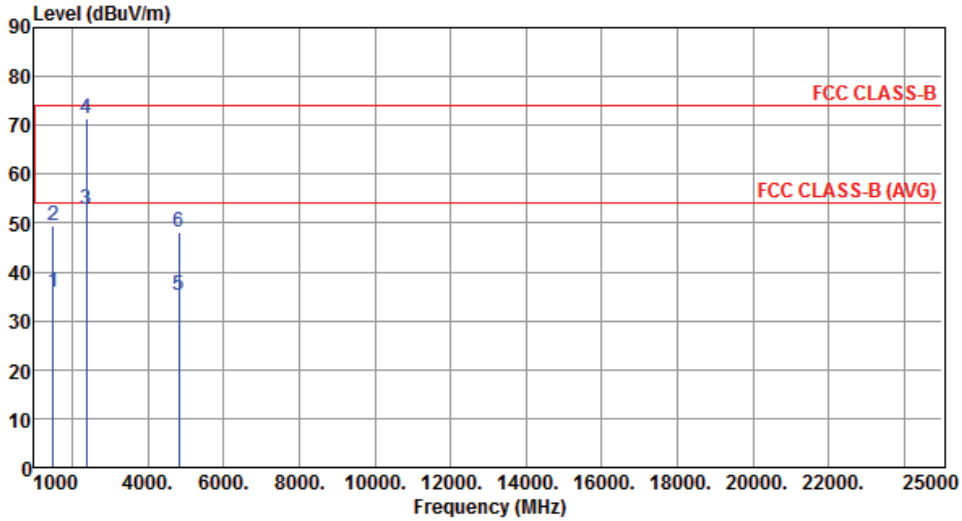
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11b	**Test Freq. (MHz)**	2462
N_{TX}	2	**Polarization**	V



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2382.00	45.05	54.00	-8.95	48.77	-3.72	Average	---	---
2	2382.00	66.82	74.00	-7.18	70.54	-3.72	Peak	---	---
3	2483.50	47.34	54.00	-6.66	50.64	-3.30	Average	---	---
4	2483.50	59.53	74.00	-14.47	62.83	-3.30	Peak	---	---
5	4924.00	52.55	54.00	-1.45	47.35	5.20	Average	---	---
6	4924.00	55.92	74.00	-18.08	50.72	5.20	Peak	---	---
7	7386.00	47.81	54.00	-6.19	38.42	9.39	Average	---	---
8	7386.00	54.74	74.00	-19.26	45.35	9.39	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

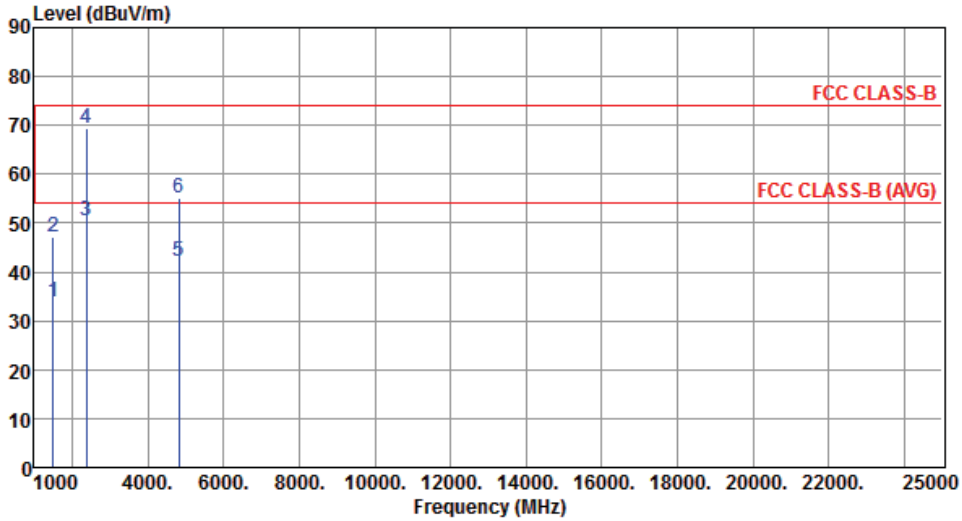
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11g	**Test Freq. (MHz)**	2412
N_{TX}	2	**Polarization**	H



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	35.85	54.00	-18.15	42.98	-7.13	Average	---	---
2	1500.00	49.62	74.00	-24.38	56.75	-7.13	Peak	---	---
3	2390.00	52.74	54.00	-1.26	56.42	-3.68	Average	---	---
4	2390.00	71.50	74.00	-2.50	75.18	-3.68	Peak	---	---
5	4824.00	35.24	54.00	-18.76	30.25	4.99	Average	---	---
6	4824.00	48.15	74.00	-25.85	43.16	4.99	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

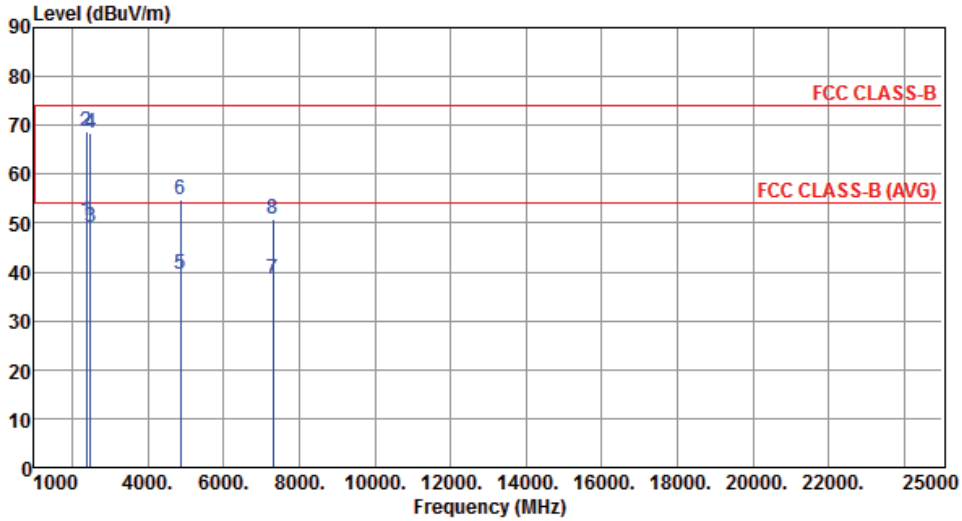
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11g	**Test Freq. (MHz)**	2412
N_{TX}	2	**Polarization**	V



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	33.78	54.00	-20.22	40.91	-7.13	Average	---	---
2	1500.00	47.07	74.00	-26.93	54.20	-7.13	Peak	---	---
3	2390.00	50.62	54.00	-3.38	54.30	-3.68	Average	---	---
4	2390.00	69.41	74.00	-4.59	73.09	-3.68	Peak	---	---
5	4824.00	42.02	54.00	-11.98	37.03	4.99	Average	---	---
6	4824.00	55.26	74.00	-18.74	50.27	4.99	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

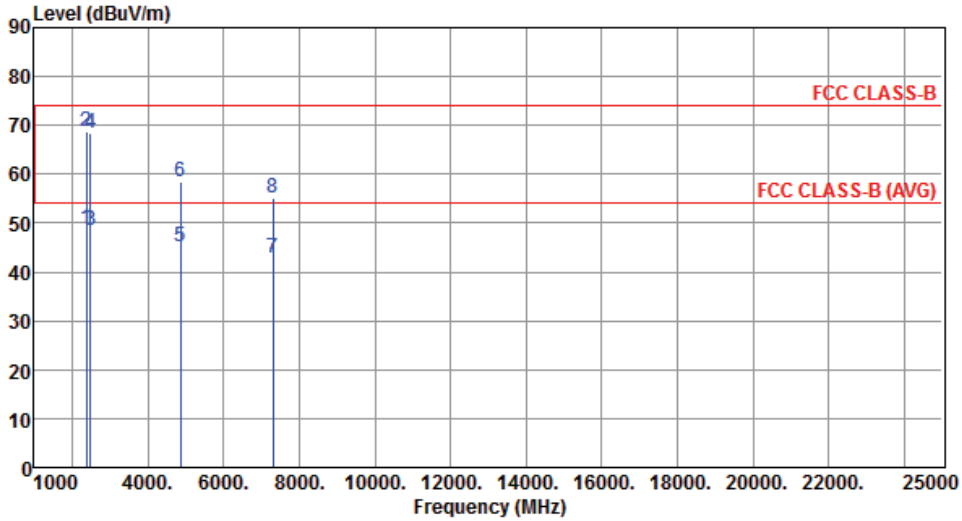
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11g	**Test Freq. (MHz)**	2437
N_{TX}	2	**Polarization**	H



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	50.63	54.00	-3.37	54.31	-3.68	Average	---	---
2	2390.00	68.85	74.00	-5.15	72.53	-3.68	Peak	---	---
3	2483.50	49.01	54.00	-4.99	52.31	-3.30	Average	---	---
4	2483.50	68.37	74.00	-5.63	71.67	-3.30	Peak	---	---
5	4874.00	39.56	54.00	-14.44	34.46	5.10	Average	---	---
6	4874.00	54.89	74.00	-19.11	49.79	5.10	Peak	---	---
7	7311.00	38.68	54.00	-15.32	29.35	9.33	Average	---	---
8	7311.00	50.91	74.00	-23.09	41.58	9.33	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

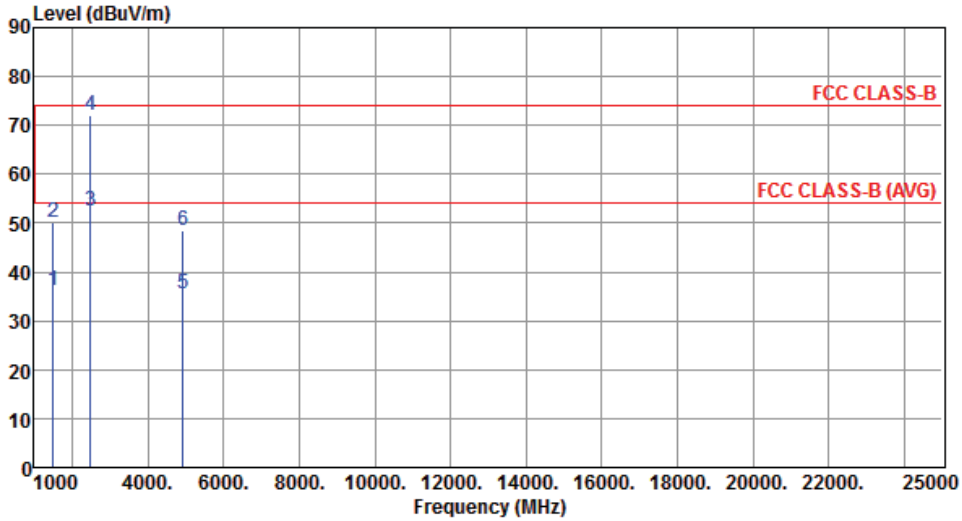
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11g	**Test Freq. (MHz)**	2437
N_{TX}	2	**Polarization**	V



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	48.97	54.00	-5.03	52.65	-3.68	Average	---	---
2	2390.00	68.59	74.00	-5.41	72.27	-3.68	Peak	---	---
3	2483.50	48.55	54.00	-5.45	51.85	-3.30	Average	---	---
4	2483.50	68.46	74.00	-5.54	71.76	-3.30	Peak	---	---
5	4874.00	45.12	54.00	-8.88	40.02	5.10	Average	---	---
6	4874.00	58.47	74.00	-15.53	53.37	5.10	Peak	---	---
7	7311.00	42.92	54.00	-11.08	33.59	9.33	Average	---	---
8	7311.00	55.26	74.00	-18.74	45.93	9.33	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

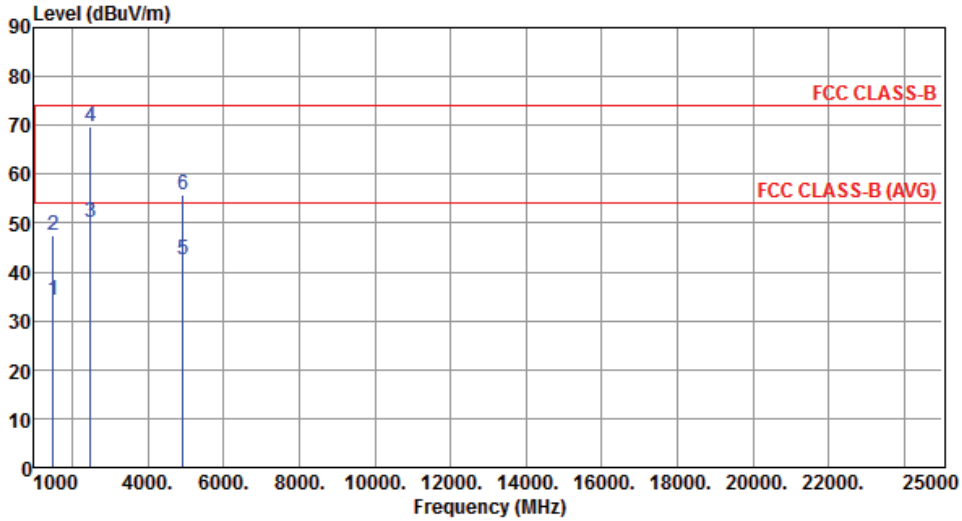
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11g	**Test Freq. (MHz)**	2462
N_{TX}	2	**Polarization**	H



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	36.21	54.00	-17.79	43.34	-7.13	Average	---	---
2	1500.00	50.02	74.00	-23.98	57.15	-7.13	Peak	---	---
3	2483.50	52.47	54.00	-1.53	55.77	-3.30	Average	---	---
4	2483.50	71.93	74.00	-2.07	75.23	-3.30	Peak	---	---
5	4924.00	35.63	54.00	-18.37	30.43	5.20	Average	---	---
6	4924.00	48.52	74.00	-25.48	43.32	5.20	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

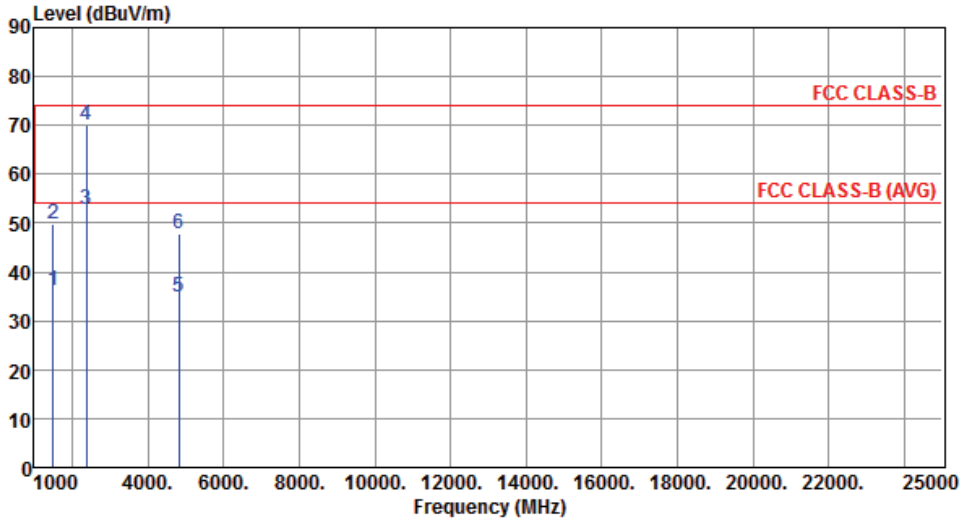
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11g	**Test Freq. (MHz)**	2462
N_{TX}	2	**Polarization**	V



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	34.12	54.00	-19.88	41.25	-7.13	Average	---	---
2	1500.00	47.46	74.00	-26.54	54.59	-7.13	Peak	---	---
3	2483.50	50.24	54.00	-3.76	53.54	-3.30	Average	---	---
4	2483.50	69.88	74.00	-4.12	73.18	-3.30	Peak	---	---
5	4924.00	42.43	54.00	-11.57	37.23	5.20	Average	---	---
6	4924.00	55.80	74.00	-18.20	50.60	5.20	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

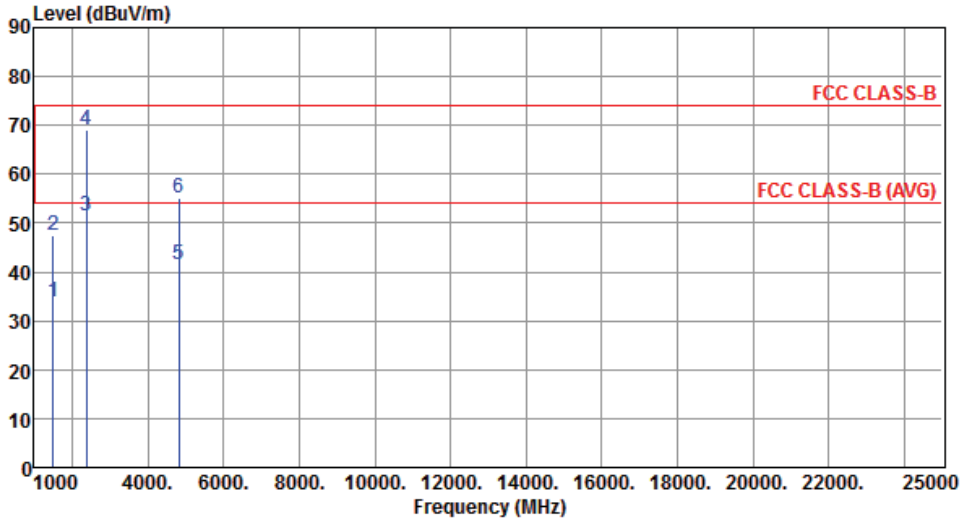
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT20	**Test Freq. (MHz)**	2412
N_{TX}	2	**Polarization**	H



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	36.13	54.00	-17.87	43.26	-7.13	Average	---	---
2	1500.00	49.95	74.00	-24.05	57.08	-7.13	Peak	---	---
3	2390.00	52.79	54.00	-1.21	56.47	-3.68	Average	---	---
4	2390.00	70.11	74.00	-3.89	73.79	-3.68	Peak	---	---
5	4824.00	34.91	54.00	-19.09	29.92	4.99	Average	---	---
6	4824.00	47.96	74.00	-26.04	42.97	4.99	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

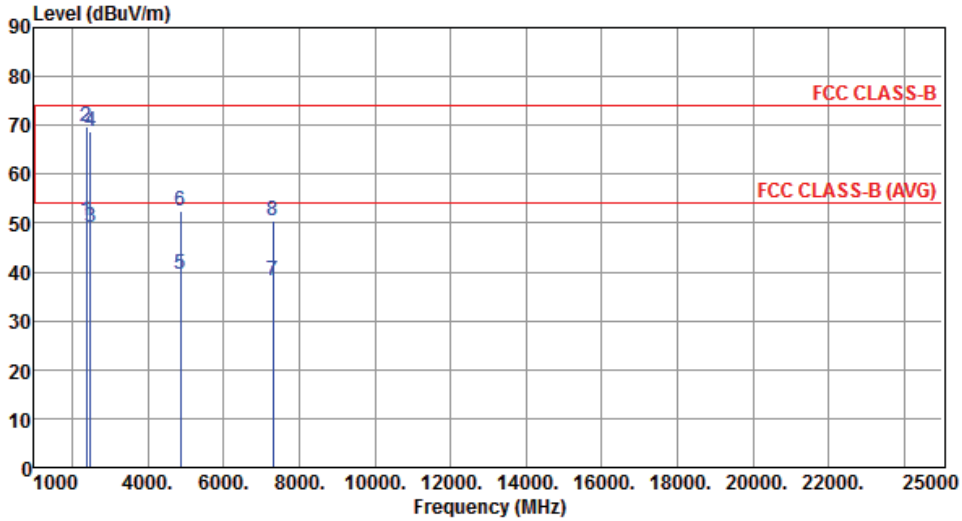
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT20	**Test Freq. (MHz)**	2412
N_{TX}	2	**Polarization**	V



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	34.02	54.00	-19.98	41.15	-7.13	Average	---	---
2	1500.00	47.43	74.00	-26.57	54.56	-7.13	Peak	---	---
3	2390.00	51.60	54.00	-2.40	55.28	-3.68	Average	---	---
4	2390.00	69.02	74.00	-4.98	72.70	-3.68	Peak	---	---
5	4824.00	41.55	54.00	-12.45	36.56	4.99	Average	---	---
6	4824.00	54.97	74.00	-19.03	49.98	4.99	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

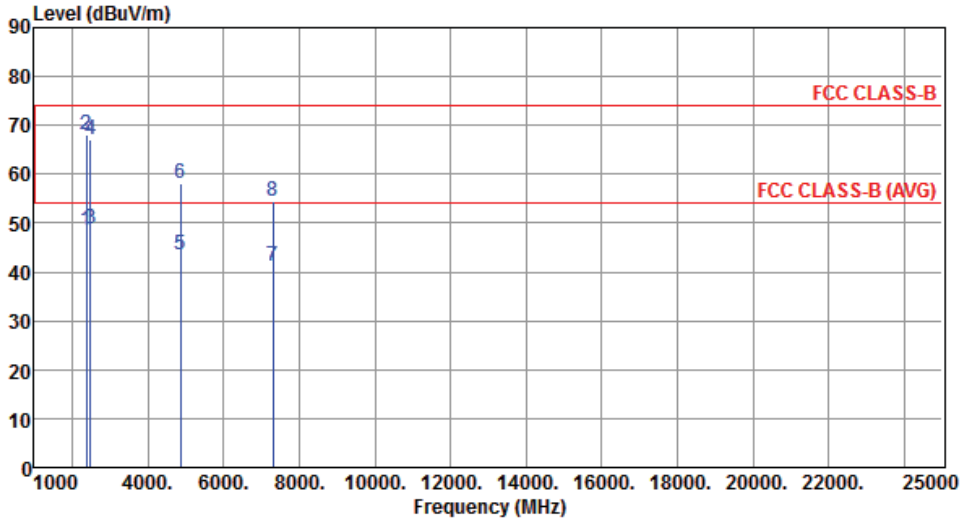
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT20	**Test Freq. (MHz)**	2437
N_{TX}	2	**Polarization**	H



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	50.45	54.00	-3.55	54.13	-3.68	Average	---	---
2	2390.00	69.65	74.00	-4.35	73.33	-3.68	Peak	---	---
3	2483.50	49.31	54.00	-4.69	52.61	-3.30	Average	---	---
4	2483.50	68.86	74.00	-5.14	72.16	-3.30	Peak	---	---
5	4874.00	39.44	54.00	-14.56	34.34	5.10	Average	---	---
6	4874.00	52.58	74.00	-21.42	47.48	5.10	Peak	---	---
7	7311.00	38.03	54.00	-15.97	28.70	9.33	Average	---	---
8	7311.00	50.43	74.00	-23.57	41.10	9.33	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

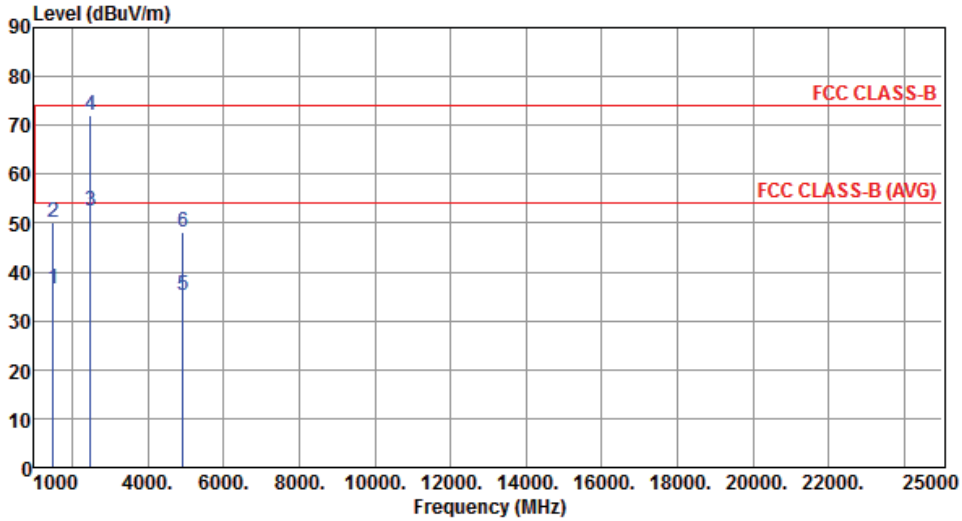
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT20	**Test Freq. (MHz)**	2437
N_{TX}	2	**Polarization**	V



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	48.41	54.00	-5.59	52.09	-3.68	Average	---	---
2	2390.00	67.94	74.00	-6.06	71.62	-3.68	Peak	---	---
3	2483.50	48.81	54.00	-5.19	52.11	-3.30	Average	---	---
4	2483.50	67.22	74.00	-6.78	70.52	-3.30	Peak	---	---
5	4874.00	43.35	54.00	-10.65	38.25	5.10	Average	---	---
6	4874.00	58.05	74.00	-15.95	52.95	5.10	Peak	---	---
7	7311.00	41.34	54.00	-12.66	32.01	9.33	Average	---	---
8	7311.00	54.34	74.00	-19.66	45.01	9.33	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

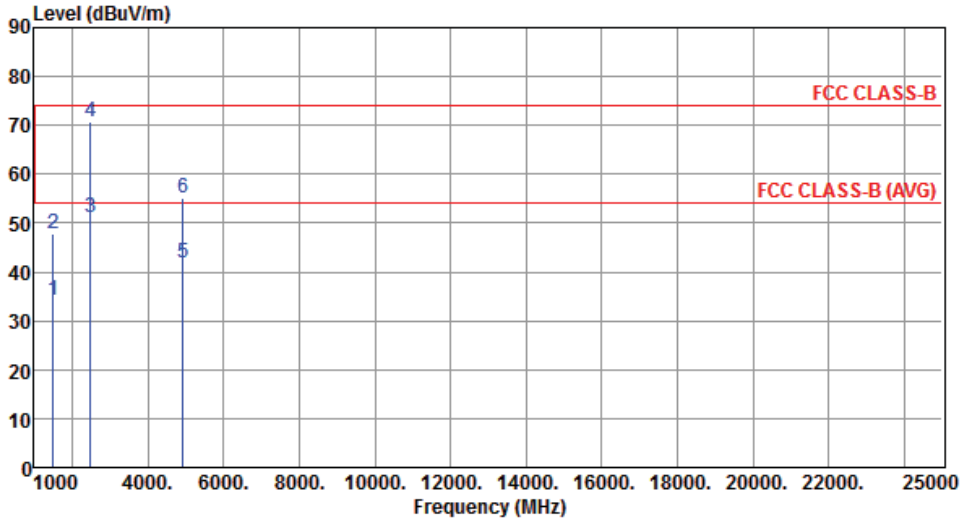
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT20	**Test Freq. (MHz)**	2462
N_{TX}	2	**Polarization**	H



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	36.43	54.00	-17.57	43.56	-7.13	Average	---	---
2	1500.00	50.21	74.00	-23.79	57.34	-7.13	Peak	---	---
3	2483.50	52.39	54.00	-1.61	55.69	-3.30	Average	---	---
4	2483.50	72.09	74.00	-1.91	75.39	-3.30	Peak	---	---
5	4924.00	35.17	54.00	-18.83	29.97	5.20	Average	---	---
6	4924.00	48.24	74.00	-25.76	43.04	5.20	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

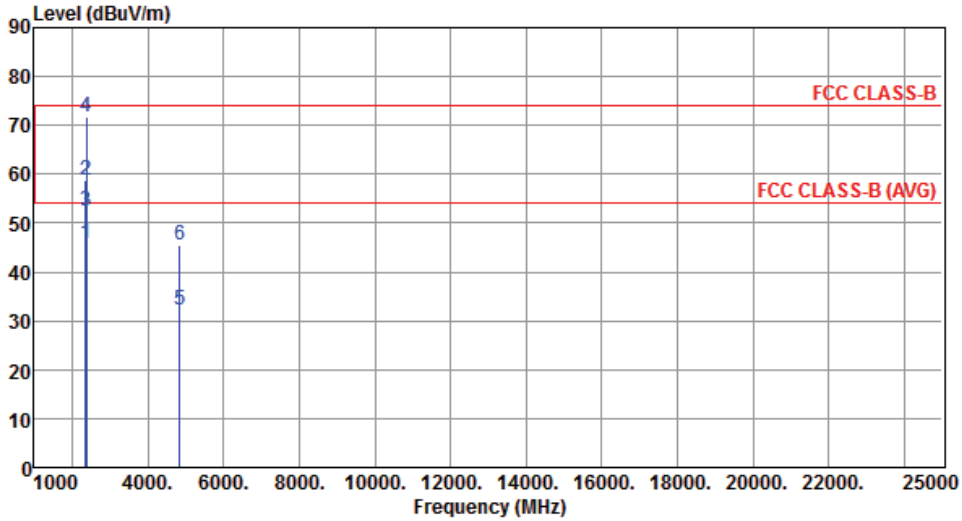
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT20	**Test Freq. (MHz)**	2462
N_{TX}	2	**Polarization**	V



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1500.00	34.27	54.00	-19.73	41.40	-7.13	Average	---	---
2	1500.00	47.80	74.00	-26.20	54.93	-7.13	Peak	---	---
3	2483.50	51.12	54.00	-2.88	54.42	-3.30	Average	---	---
4	2483.50	70.85	74.00	-3.15	74.15	-3.30	Peak	---	---
5	4924.00	41.86	54.00	-12.14	36.66	5.20	Average	---	---
6	4924.00	55.22	74.00	-18.78	50.02	5.20	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

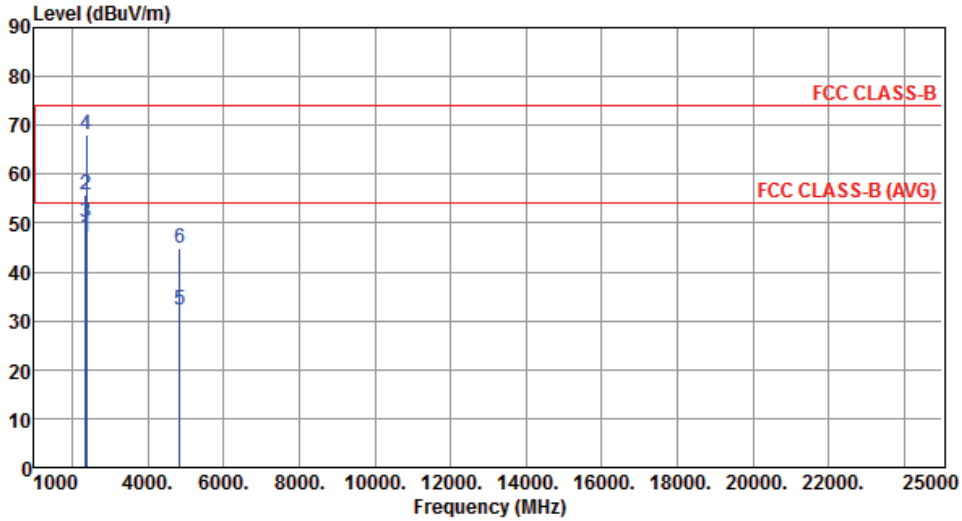
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT40	**Test Freq. (MHz)**	2422
N_{TX}	2	**Polarization**	H



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2360.00	45.76	54.00	-8.24	49.57	-3.81	Average	---	---
2	2360.00	58.92	74.00	-15.08	62.73	-3.81	Peak	---	---
3	2390.00	52.44	54.00	-1.56	56.12	-3.68	Average	---	---
4	2390.00	71.59	74.00	-2.41	75.27	-3.68	Peak	---	---
5	4844.00	32.23	54.00	-21.77	27.20	5.03	Average	---	---
6	4844.00	45.44	74.00	-28.56	40.41	5.03	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

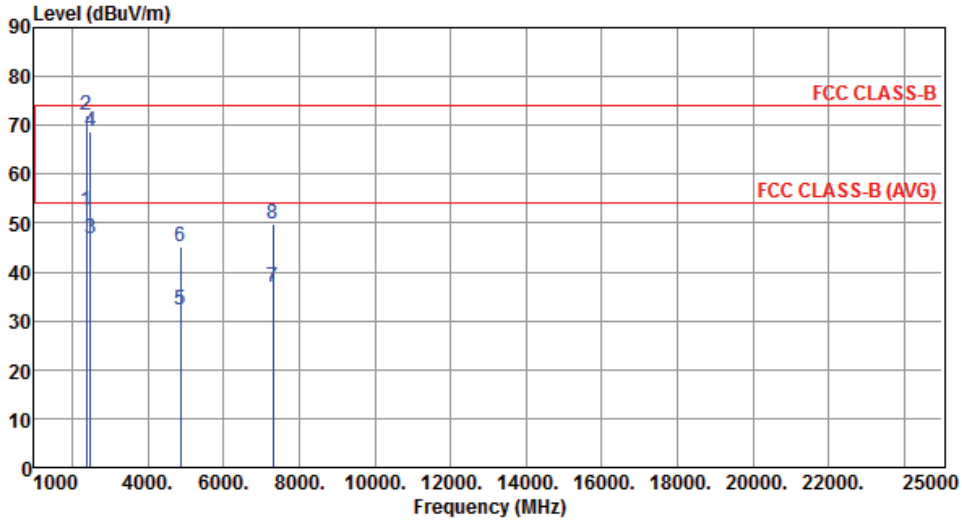
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT40	**Test Freq. (MHz)**	2422
N_{TX}	2	**Polarization**	V



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2360.00	47.18	54.00	-6.82	50.99	-3.81	Average	---	---
2	2360.00	55.93	74.00	-18.07	59.74	-3.81	Peak	---	---
3	2390.00	50.25	54.00	-3.75	53.93	-3.68	Average	---	---
4	2390.00	67.93	74.00	-6.07	71.61	-3.68	Peak	---	---
5	4844.00	32.12	54.00	-21.88	27.09	5.03	Average	---	---
6	4844.00	44.68	74.00	-29.32	39.65	5.03	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

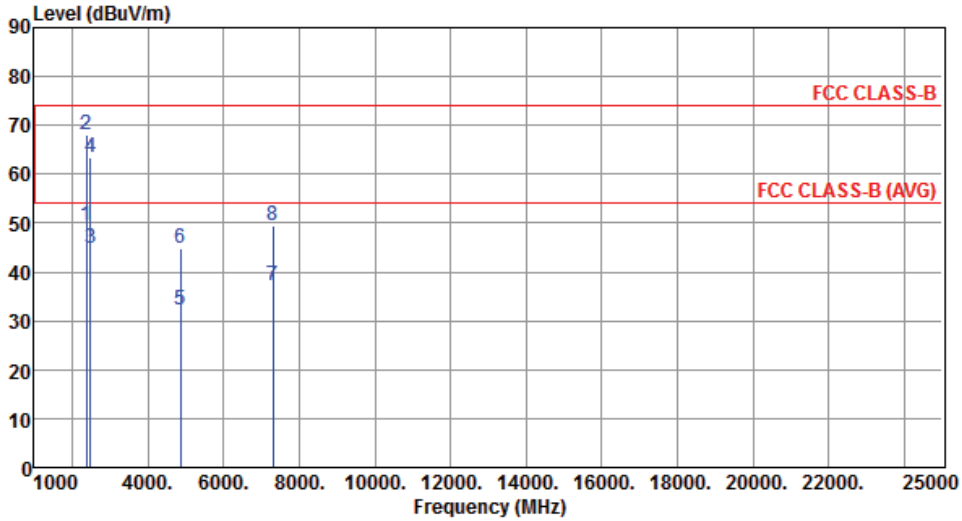
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT40	**Test Freq. (MHz)**	2437
N_{TX}	2	**Polarization**	H



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	52.45	54.00	-1.55	56.13	-3.68	Average	---	---
2	2390.00	71.98	74.00	-2.02	75.66	-3.68	Peak	---	---
3	2483.50	46.78	54.00	-7.22	50.08	-3.30	Average	---	---
4	2483.50	68.80	74.00	-5.20	72.10	-3.30	Peak	---	---
5	4874.00	32.18	54.00	-21.82	27.08	5.10	Average	---	---
6	4874.00	45.27	74.00	-28.73	40.17	5.10	Peak	---	---
7	7311.00	37.00	54.00	-17.00	27.67	9.33	Average	---	---
8	7311.00	49.69	74.00	-24.31	40.36	9.33	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

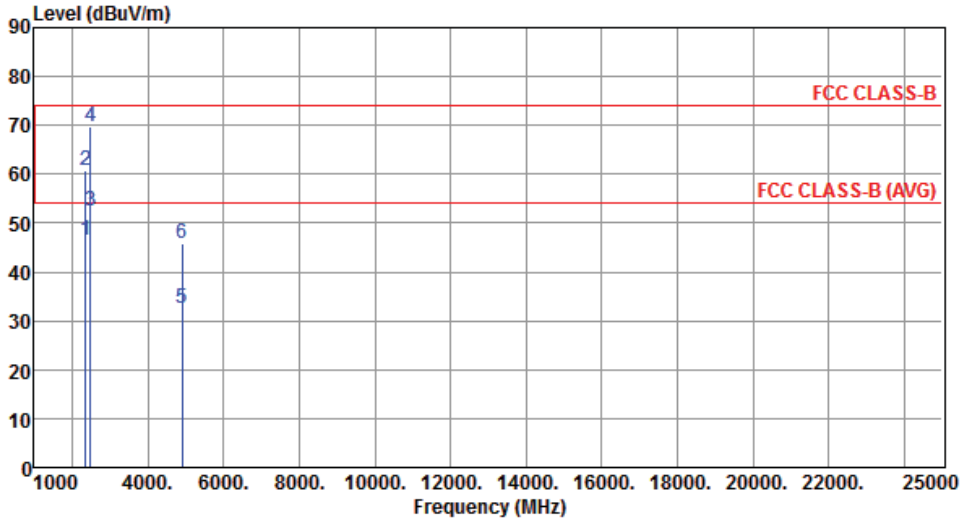
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT40	**Test Freq. (MHz)**	2437
N_{TX}	2	**Polarization**	V



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2390.00	49.41	54.00	-4.59	53.09	-3.68	Average	---	---
2	2390.00	67.97	74.00	-6.03	71.65	-3.68	Peak	---	---
3	2483.50	44.91	54.00	-9.09	48.21	-3.30	Average	---	---
4	2483.50	63.43	74.00	-10.57	66.73	-3.30	Peak	---	---
5	4874.00	32.16	54.00	-21.84	27.06	5.10	Average	---	---
6	4874.00	44.92	74.00	-29.08	39.82	5.10	Peak	---	---
7	7311.00	37.06	54.00	-16.94	27.73	9.33	Average	---	---
8	7311.00	49.59	74.00	-24.41	40.26	9.33	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

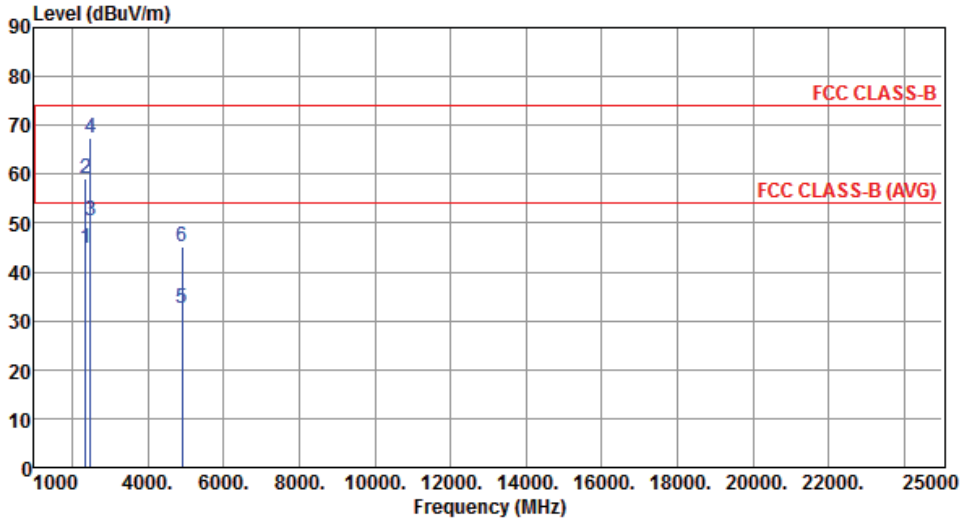
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT40	**Test Freq. (MHz)**	2452
N_{TX}	2	**Polarization**	H



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2360.00	46.62	54.00	-7.38	50.43	-3.81	Average	---	---
2	2360.00	60.74	74.00	-13.26	64.55	-3.81	Peak	---	---
3	2483.50	52.58	54.00	-1.42	55.88	-3.30	Average	---	---
4	2483.50	69.74	74.00	-4.26	73.04	-3.30	Peak	---	---
5	4904.00	32.43	54.00	-21.57	27.27	5.16	Average	---	---
6	4904.00	45.70	74.00	-28.30	40.54	5.16	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT40	**Test Freq. (MHz)**	2452
N_{TX}	2	**Polarization**	V

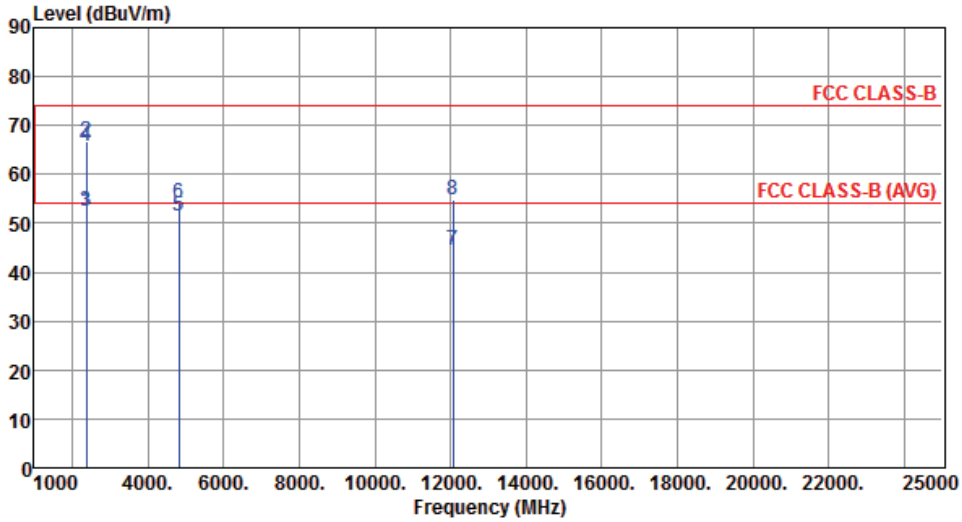


	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2360.00	44.85	54.00	-9.15	48.66	-3.81	Average	---	---
2	2360.00	58.96	74.00	-15.04	62.77	-3.81	Peak	---	---
3	2483.50	50.43	54.00	-3.57	53.73	-3.30	Average	---	---
4	2483.50	67.48	74.00	-6.52	70.78	-3.30	Peak	---	---
5	4904.00	32.50	54.00	-21.50	27.34	5.16	Average	---	---
6	4904.00	45.17	74.00	-28.83	40.01	5.16	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

Mode 3: External antenna with adapter mode

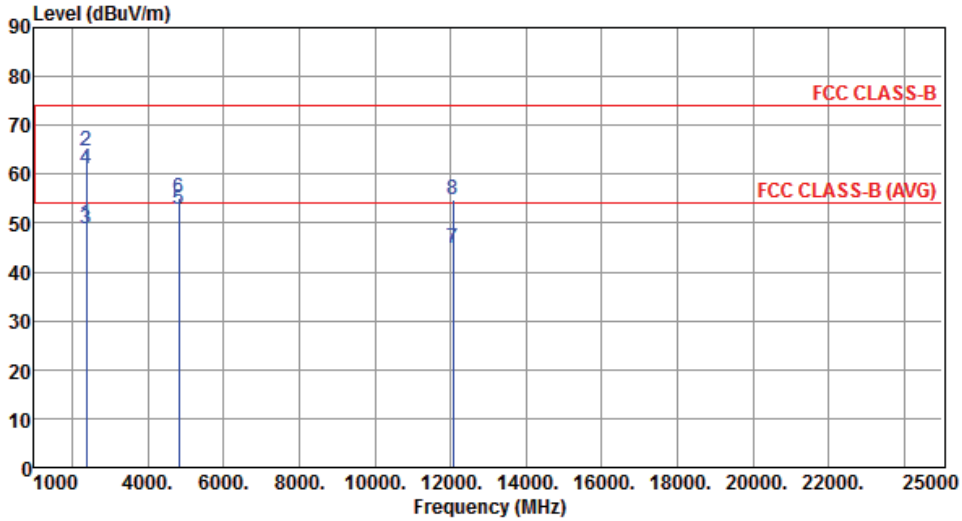
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11b	**Test Freq. (MHz)**	2412
N_{TX}	2	**Polarization**	H



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2371.00	52.38	54.00	-1.62	56.14	-3.76	Average	---	---
2	2371.00	66.72	74.00	-7.28	70.48	-3.76	Peak	---	---
3	2390.00	52.59	54.00	-1.41	56.27	-3.68	Average	---	---
4	2390.00	65.86	74.00	-8.14	69.54	-3.68	Peak	---	---
5	4824.00	51.49	54.00	-2.51	46.50	4.99	Average	---	---
6	4824.00	54.13	74.00	-19.87	49.14	4.99	Peak	---	---
7	12060.00	44.53	54.00	-9.47	30.56	13.97	Average	---	---
8	12060.00	54.70	74.00	-19.30	40.73	13.97	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

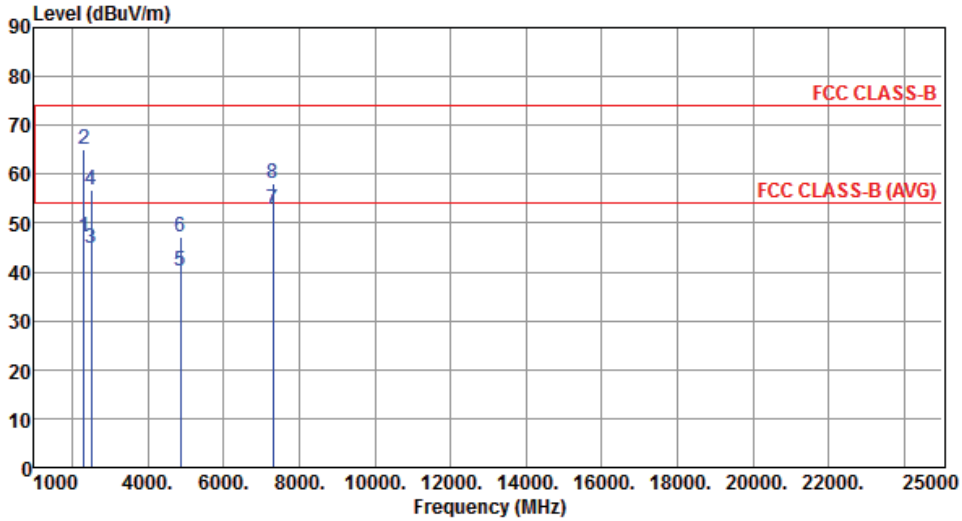
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11b	**Test Freq. (MHz)**	2412
N_{TX}	2	**Polarization**	V



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2371.00	49.77	54.00	-4.23	53.53	-3.76	Average	---	---
2	2371.00	64.72	74.00	-9.28	68.48	-3.76	Peak	---	---
3	2390.00	48.84	54.00	-5.16	52.52	-3.68	Average	---	---
4	2390.00	61.22	74.00	-12.78	64.90	-3.68	Peak	---	---
5	4824.00	52.70	54.00	-1.30	47.71	4.99	Average	---	---
6	4824.00	55.16	74.00	-18.84	50.17	4.99	Peak	---	---
7	12060.00	44.68	54.00	-9.32	30.71	13.97	Average	---	---
8	12060.00	54.76	74.00	-19.24	40.79	13.97	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

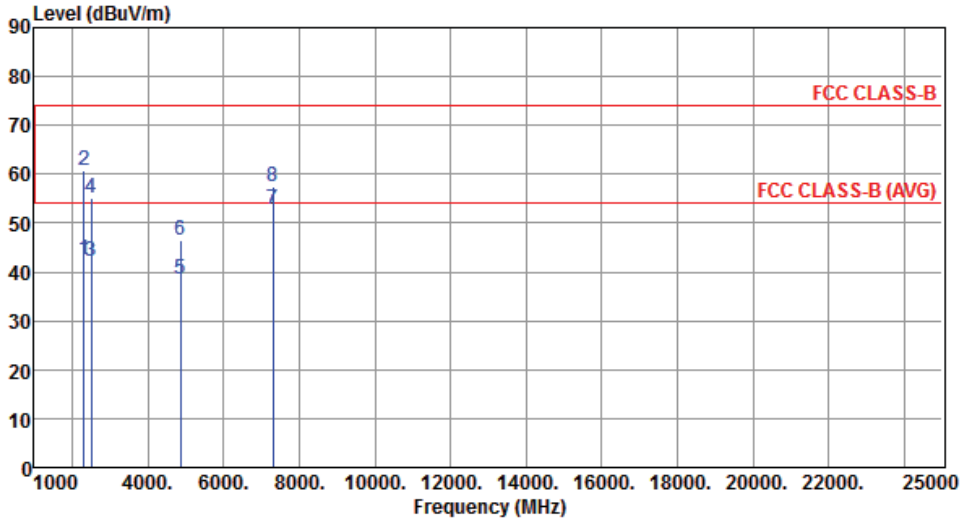
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11b	**Test Freq. (MHz)**	2437
N_{TX}	2	**Polarization**	H



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2320.00	47.27	54.00	-6.73	51.23	-3.96	Average	---	---
2	2320.00	65.17	74.00	-8.83	69.13	-3.96	Peak	---	---
3	2500.00	44.97	54.00	-9.03	48.20	-3.23	Average	---	---
4	2500.00	56.65	74.00	-17.35	59.88	-3.23	Peak	---	---
5	4874.00	40.11	54.00	-13.89	35.01	5.10	Average	---	---
6	4874.00	47.15	74.00	-26.85	42.05	5.10	Peak	---	---
7	7311.00	52.96	54.00	-1.04	43.63	9.33	Average	---	---
8	7311.00	58.16	74.00	-15.84	48.83	9.33	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

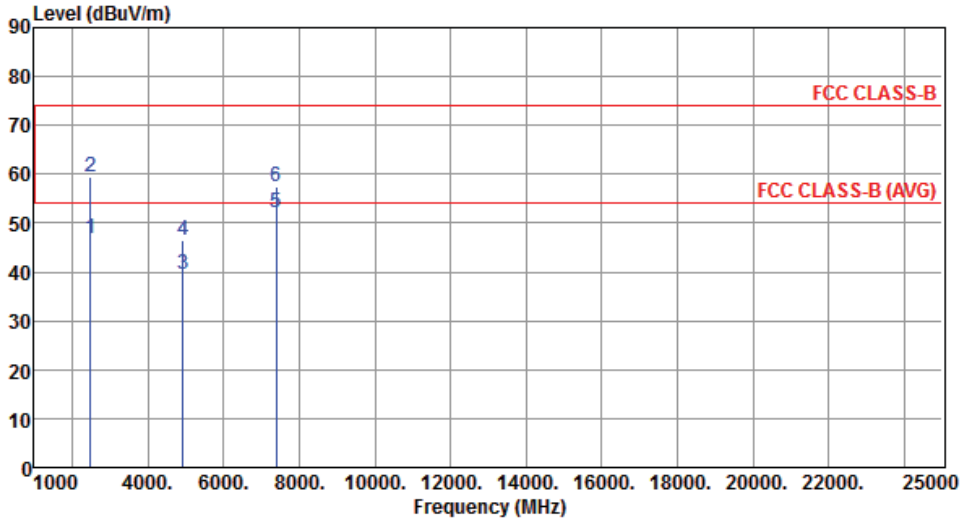
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11b	**Test Freq. (MHz)**	2437
N_{TX}	2	**Polarization**	V



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2320.00	42.38	54.00	-11.62	46.34	-3.96	Average	---	---
2	2320.00	60.68	74.00	-13.32	64.64	-3.96	Peak	---	---
3	2500.00	42.02	54.00	-11.98	45.25	-3.23	Average	---	---
4	2500.00	55.15	74.00	-18.85	58.38	-3.23	Peak	---	---
5	4874.00	38.47	54.00	-15.53	33.37	5.10	Average	---	---
6	4874.00	46.57	74.00	-27.43	41.47	5.10	Peak	---	---
7	7311.00	52.71	54.00	-1.29	43.38	9.33	Average	---	---
8	7311.00	57.57	74.00	-16.43	48.24	9.33	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

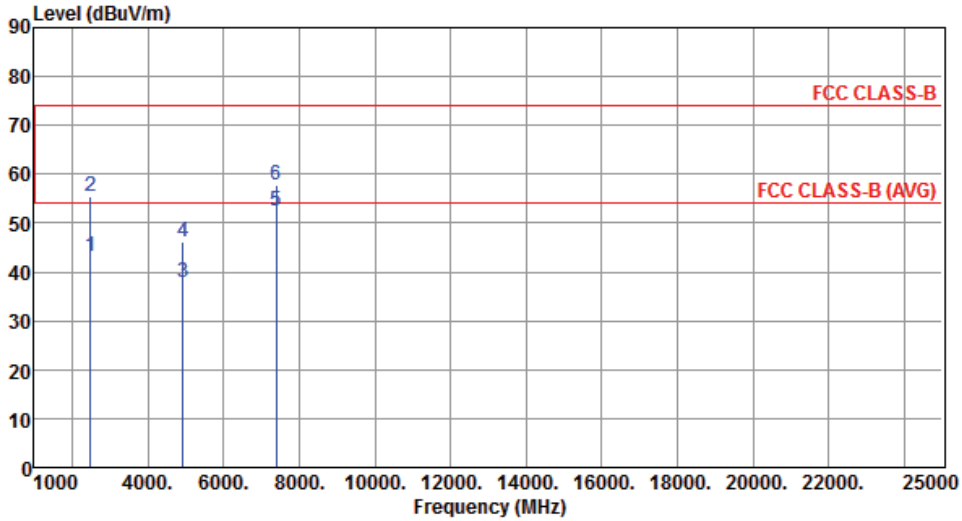
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11b	**Test Freq. (MHz)**	2462
N_{TX}	2	**Polarization**	H



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2483.50	46.80	54.00	-7.20	50.10	-3.30	Average	---	---
2	2483.50	59.32	74.00	-14.68	62.62	-3.30	Peak	---	---
3	4924.00	39.61	54.00	-14.39	34.41	5.20	Average	---	---
4	4924.00	46.58	74.00	-27.42	41.38	5.20	Peak	---	---
5	7386.00	52.24	54.00	-1.76	42.85	9.39	Average	---	---
6	7386.00	57.55	74.00	-16.45	48.16	9.39	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

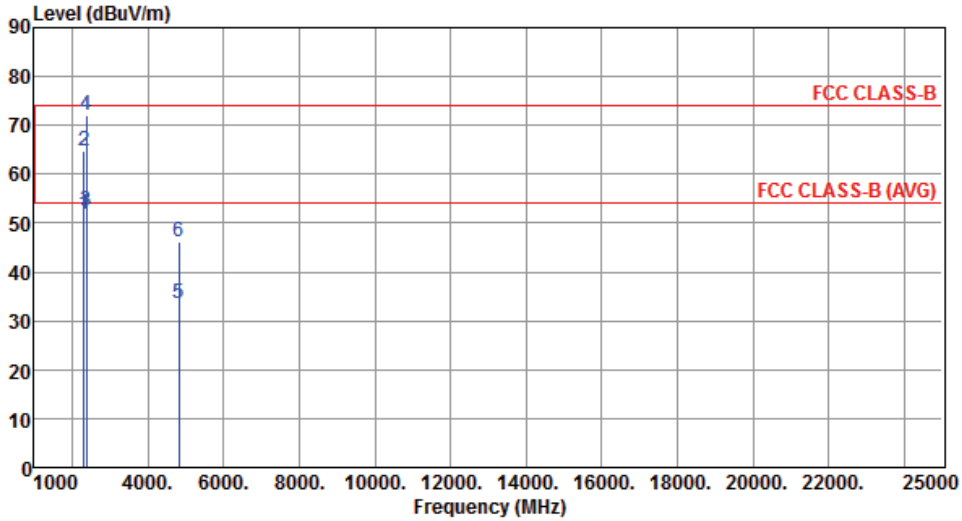
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11b	**Test Freq. (MHz)**	2462
N_{TX}	2	**Polarization**	V



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2483.50	43.11	54.00	-10.89	46.41	-3.30	Average	---	---
2	2483.50	55.55	74.00	-18.45	58.85	-3.30	Peak	---	---
3	4924.00	37.88	54.00	-16.12	32.68	5.20	Average	---	---
4	4924.00	46.03	74.00	-27.97	40.83	5.20	Peak	---	---
5	7386.00	52.33	54.00	-1.67	42.94	9.39	Average	---	---
6	7386.00	57.81	74.00	-16.19	48.42	9.39	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

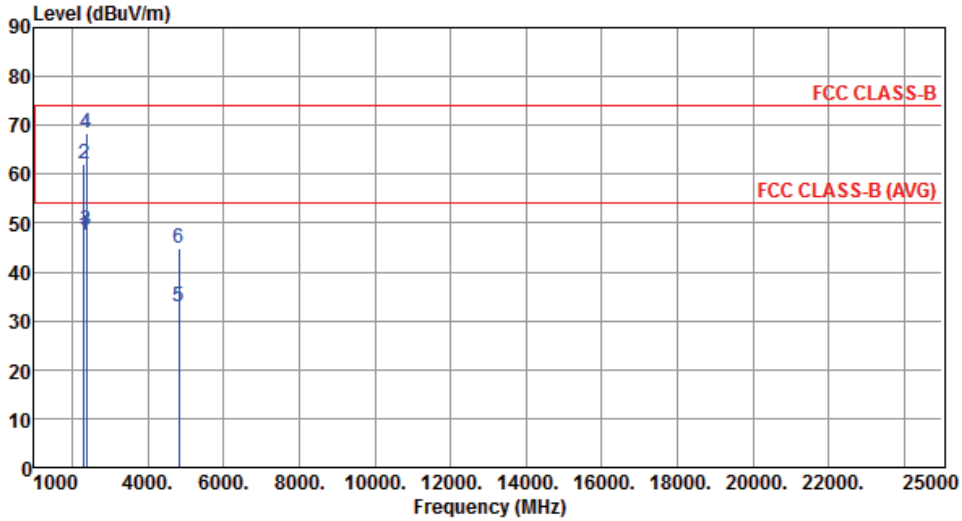
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11g	**Test Freq. (MHz)**	2412
N_{TX}	2	**Polarization**	H



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2320.00	51.94	54.00	-2.06	55.90	-3.96	Average	---	---
2	2320.00	64.80	74.00	-9.20	68.76	-3.96	Peak	---	---
3	2390.00	52.39	54.00	-1.61	56.07	-3.68	Average	---	---
4	2390.00	71.94	74.00	-2.06	75.62	-3.68	Peak	---	---
5	4824.00	33.42	54.00	-20.58	28.43	4.99	Average	---	---
6	4824.00	46.11	74.00	-27.89	41.12	4.99	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

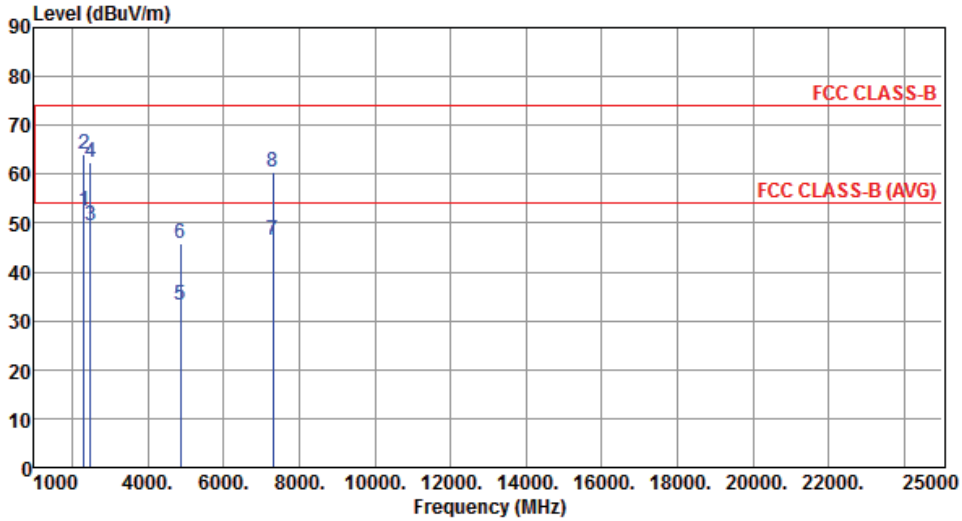
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11g	**Test Freq. (MHz)**	2412
N_{TX}	2	**Polarization**	V



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2320.00	47.54	54.00	-6.46	51.50	-3.96	Average	---	---
2	2320.00	62.03	74.00	-11.97	65.99	-3.96	Peak	---	---
3	2390.00	48.50	54.00	-5.50	52.18	-3.68	Average	---	---
4	2390.00	68.47	74.00	-5.53	72.15	-3.68	Peak	---	---
5	4824.00	32.97	54.00	-21.03	27.98	4.99	Average	---	---
6	4824.00	44.68	74.00	-29.32	39.69	4.99	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

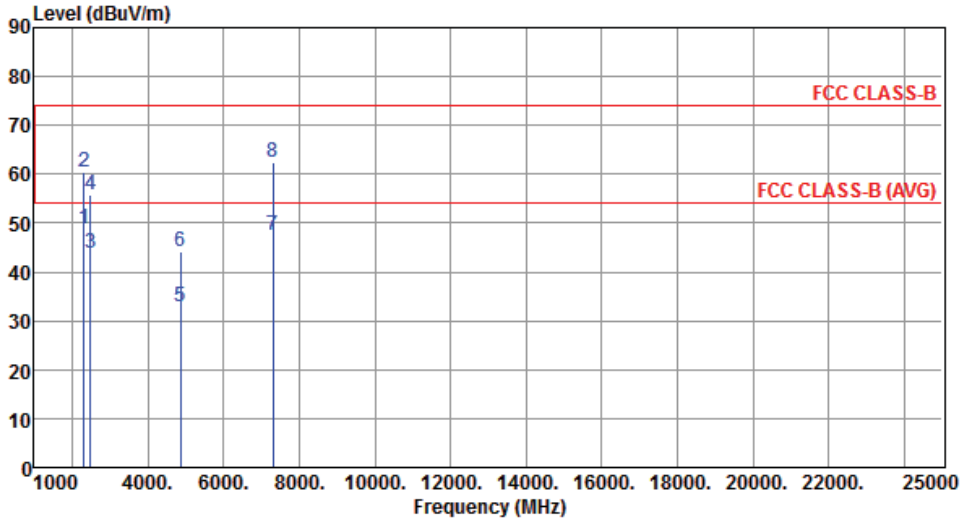
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11g	**Test Freq. (MHz)**	2437
N_{TX}	2	**Polarization**	H



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2320.00	52.36	54.00	-1.64	56.32	-3.96	Average	---	---
2	2320.00	64.24	74.00	-9.76	68.20	-3.96	Peak	---	---
3	2483.50	49.54	54.00	-4.46	52.84	-3.30	Average	---	---
4	2483.50	62.37	74.00	-11.63	65.67	-3.30	Peak	---	---
5	4874.00	33.09	54.00	-20.91	27.99	5.10	Average	---	---
6	4874.00	45.72	74.00	-28.28	40.62	5.10	Peak	---	---
7	7311.00	46.44	54.00	-7.56	37.11	9.33	Average	---	---
8	7311.00	60.33	74.00	-13.67	51.00	9.33	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

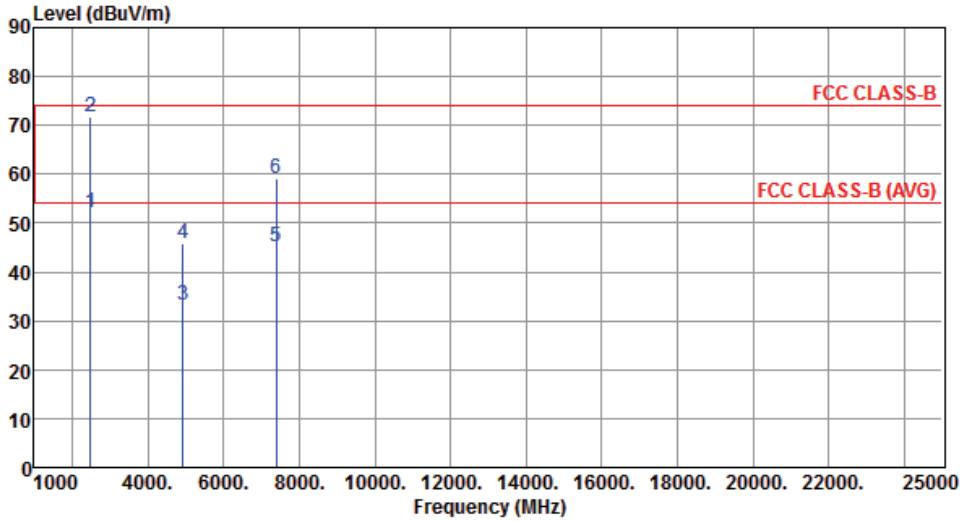
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11g	**Test Freq. (MHz)**	2437
N_{TX}	2	**Polarization**	V



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2320.00	48.91	54.00	-5.09	52.87	-3.96	Average	---	---
2	2320.00	60.37	74.00	-13.63	64.33	-3.96	Peak	---	---
3	2483.50	43.68	54.00	-10.32	46.98	-3.30	Average	---	---
4	2483.50	55.89	74.00	-18.11	59.19	-3.30	Peak	---	---
5	4874.00	32.72	54.00	-21.28	27.62	5.10	Average	---	---
6	4874.00	44.25	74.00	-29.75	39.15	5.10	Peak	---	---
7	7311.00	47.63	54.00	-6.37	38.30	9.33	Average	---	---
8	7311.00	62.34	74.00	-11.66	53.01	9.33	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

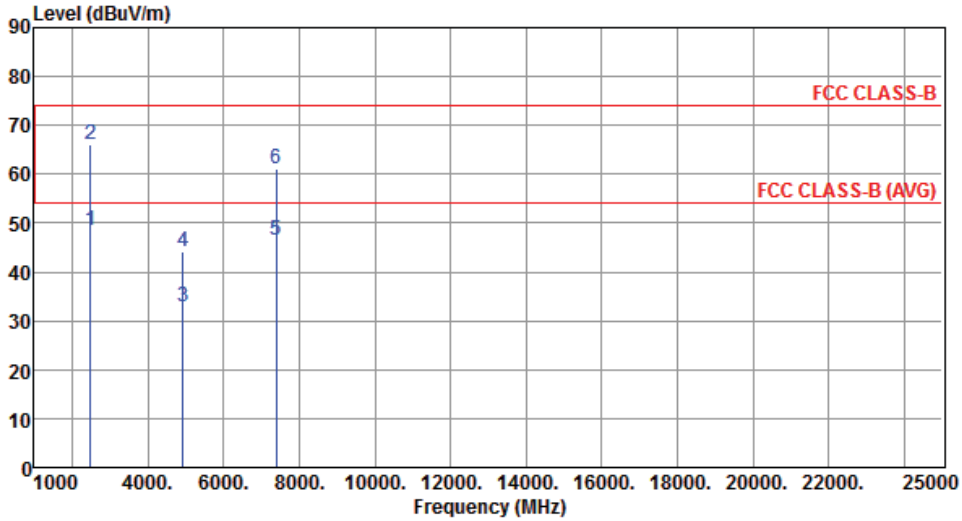
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11g	**Test Freq. (MHz)**	2462
N_{TX}	2	**Polarization**	H



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2483.50	52.21	54.00	-1.79	55.51	-3.30	Average	---	---
2	2483.50	71.68	74.00	-2.32	74.98	-3.30	Peak	---	---
3	4924.00	33.17	54.00	-20.83	27.97	5.20	Average	---	---
4	4924.00	45.88	74.00	-28.12	40.68	5.20	Peak	---	---
5	7386.00	45.28	54.00	-8.72	35.89	9.39	Average	---	---
6	7386.00	59.17	74.00	-14.83	49.78	9.39	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

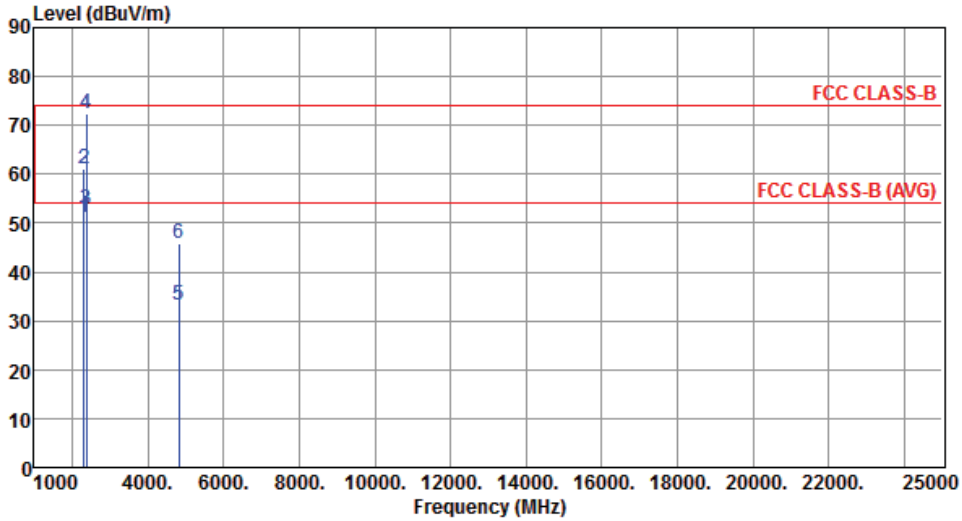
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11g	**Test Freq. (MHz)**	2462
N_{TX}	2	**Polarization**	V



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2483.50	48.54	54.00	-5.46	51.84	-3.30	Average	---	---
2	2483.50	66.12	74.00	-7.88	69.42	-3.30	Peak	---	---
3	4924.00	32.72	54.00	-21.28	27.52	5.20	Average	---	---
4	4924.00	44.01	74.00	-29.99	38.81	5.20	Peak	---	---
5	7386.00	46.38	54.00	-7.62	36.99	9.39	Average	---	---
6	7386.00	61.27	74.00	-12.73	51.88	9.39	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

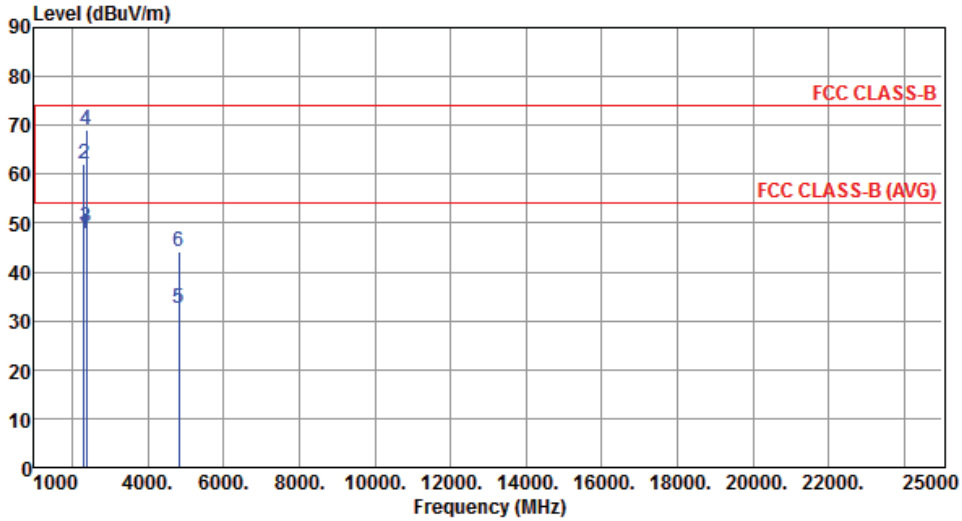
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT20	**Test Freq. (MHz)**	2412
N_{TX}	2	**Polarization**	H



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2320.00	51.28	54.00	-2.72	55.24	-3.96	Average	---	---
2	2320.00	61.14	74.00	-12.86	65.10	-3.96	Peak	---	---
3	2390.00	52.79	54.00	-1.21	56.47	-3.68	Average	---	---
4	2390.00	72.26	74.00	-1.74	75.94	-3.68	Peak	---	---
5	4824.00	33.18	54.00	-20.82	28.19	4.99	Average	---	---
6	4824.00	45.97	74.00	-28.03	40.98	4.99	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

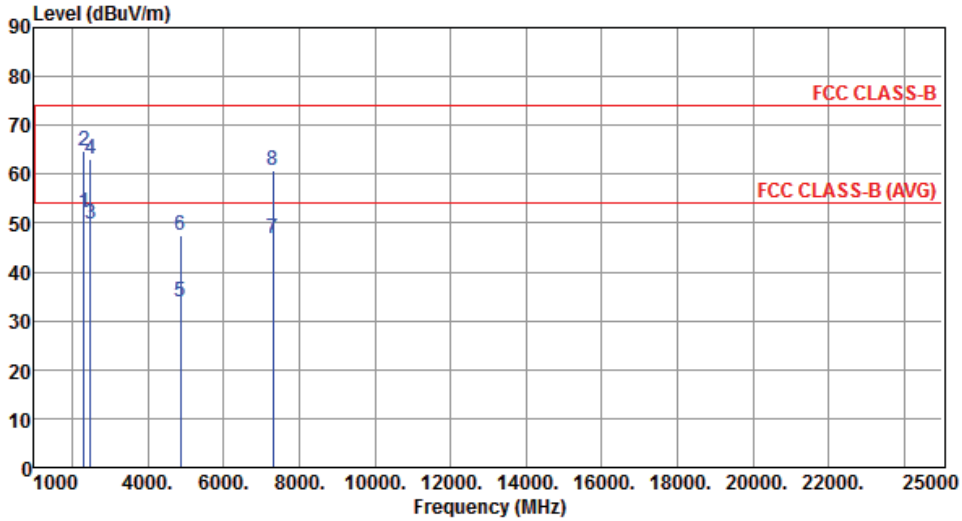
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT20	**Test Freq. (MHz)**	2412
N_{TX}	2	**Polarization**	V



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2320.00	47.91	54.00	-6.09	51.87	-3.96	Average	---	---
2	2320.00	62.25	74.00	-11.75	66.21	-3.96	Peak	---	---
3	2390.00	49.04	54.00	-4.96	52.72	-3.68	Average	---	---
4	2390.00	69.01	74.00	-4.99	72.69	-3.68	Peak	---	---
5	4824.00	32.69	54.00	-21.31	27.70	4.99	Average	---	---
6	4824.00	44.28	74.00	-29.72	39.29	4.99	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

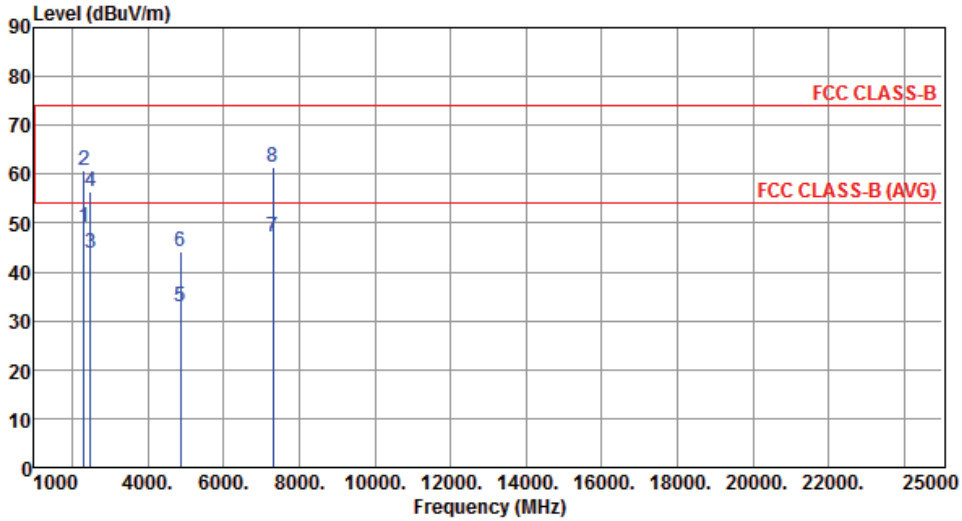
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT20	**Test Freq. (MHz)**	2437
N_{TX}	2	**Polarization**	H



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2320.00	52.16	54.00	-1.84	56.12	-3.96	Average	---	---
2	2320.00	64.65	74.00	-9.35	68.61	-3.96	Peak	---	---
3	2483.50	49.78	54.00	-4.22	53.08	-3.30	Average	---	---
4	2483.50	63.17	74.00	-10.83	66.47	-3.30	Peak	---	---
5	4874.00	33.76	54.00	-20.24	28.66	5.10	Average	---	---
6	4874.00	47.58	74.00	-26.42	42.48	5.10	Peak	---	---
7	7311.00	46.73	54.00	-7.27	37.40	9.33	Average	---	---
8	7311.00	60.67	74.00	-13.33	51.34	9.33	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

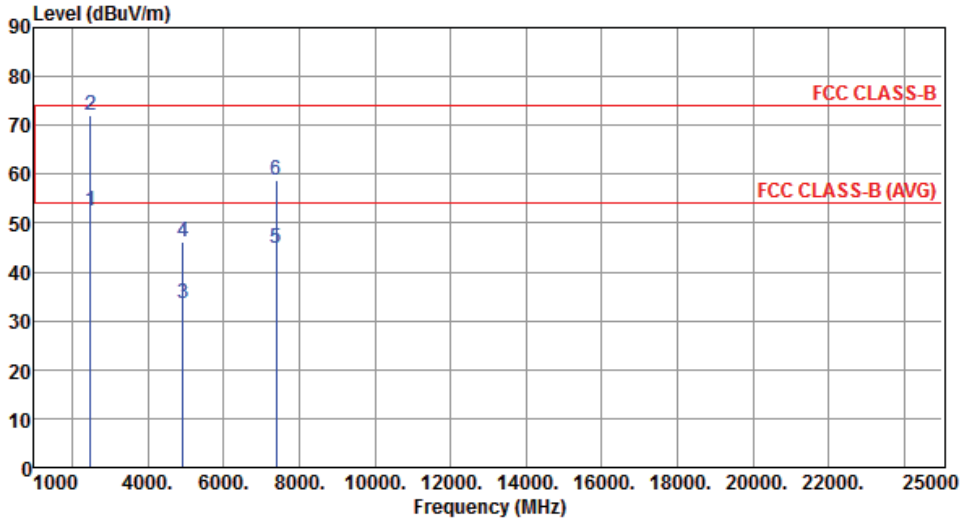
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT20	**Test Freq. (MHz)**	2437
N_{TX}	2	**Polarization**	V



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2320.00	49.31	54.00	-4.69	53.27	-3.96	Average	---	---
2	2320.00	60.76	74.00	-13.24	64.72	-3.96	Peak	---	---
3	2483.50	43.97	54.00	-10.03	47.27	-3.30	Average	---	---
4	2483.50	56.55	74.00	-17.45	59.85	-3.30	Peak	---	---
5	4874.00	32.72	54.00	-21.28	27.62	5.10	Average	---	---
6	4874.00	44.25	74.00	-29.75	39.15	5.10	Peak	---	---
7	7311.00	47.30	54.00	-6.70	37.97	9.33	Average	---	---
8	7311.00	61.42	74.00	-12.58	52.09	9.33	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

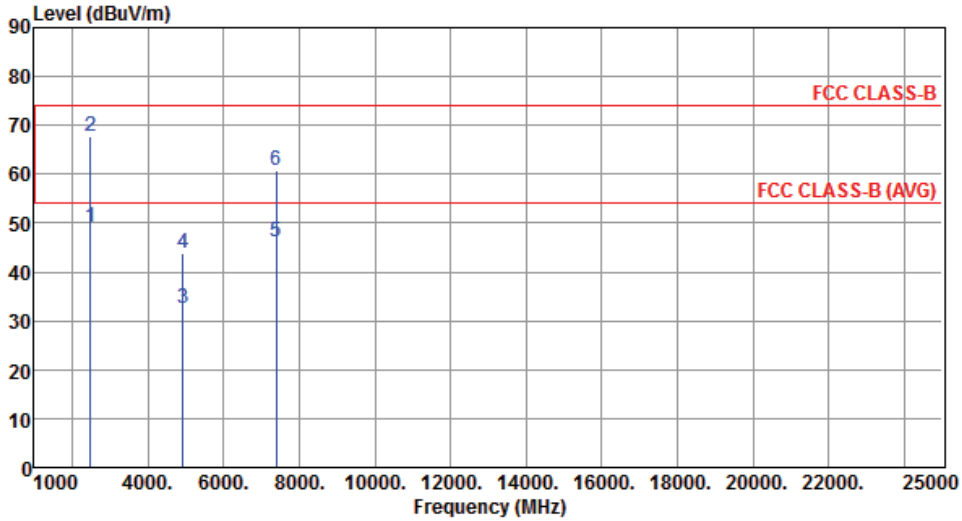
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT20	**Test Freq. (MHz)**	2462
N_{TX}	2	**Polarization**	H



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2483.50	52.39	54.00	-1.61	55.69	-3.30	Average	---	---
2	2483.50	71.98	74.00	-2.02	75.28	-3.30	Peak	---	---
3	4924.00	33.53	54.00	-20.47	28.33	5.20	Average	---	---
4	4924.00	46.08	74.00	-27.92	40.88	5.20	Peak	---	---
5	7386.00	44.94	54.00	-9.06	35.55	9.39	Average	---	---
6	7386.00	58.78	74.00	-15.22	49.39	9.39	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

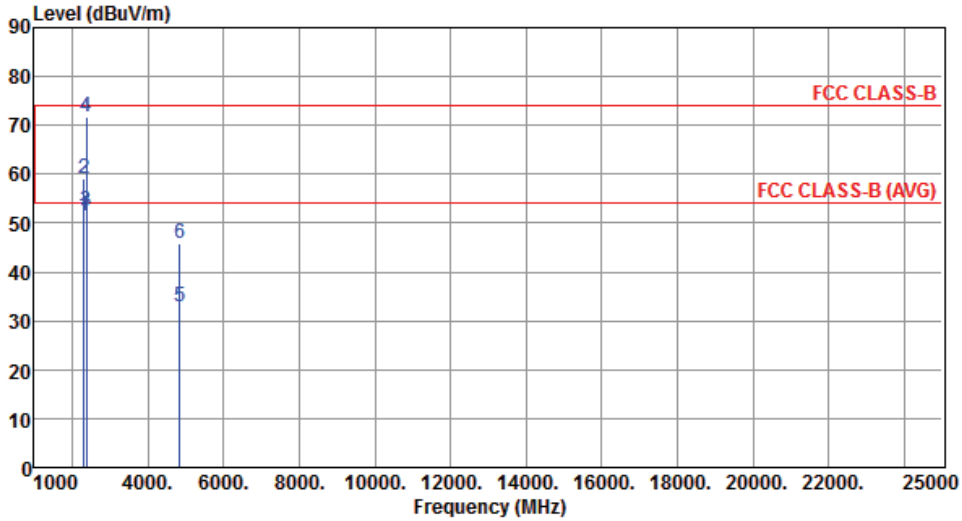
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT20	**Test Freq. (MHz)**	2462
N_{TX}	2	**Polarization**	V



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2483.50	49.20	54.00	-4.80	52.50	-3.30	Average	---	---
2	2483.50	67.61	74.00	-6.39	70.91	-3.30	Peak	---	---
3	4924.00	32.58	54.00	-21.42	27.38	5.20	Average	---	---
4	4924.00	43.79	74.00	-30.21	38.59	5.20	Peak	---	---
5	7386.00	46.02	54.00	-7.98	36.63	9.39	Average	---	---
6	7386.00	60.94	74.00	-13.06	51.55	9.39	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

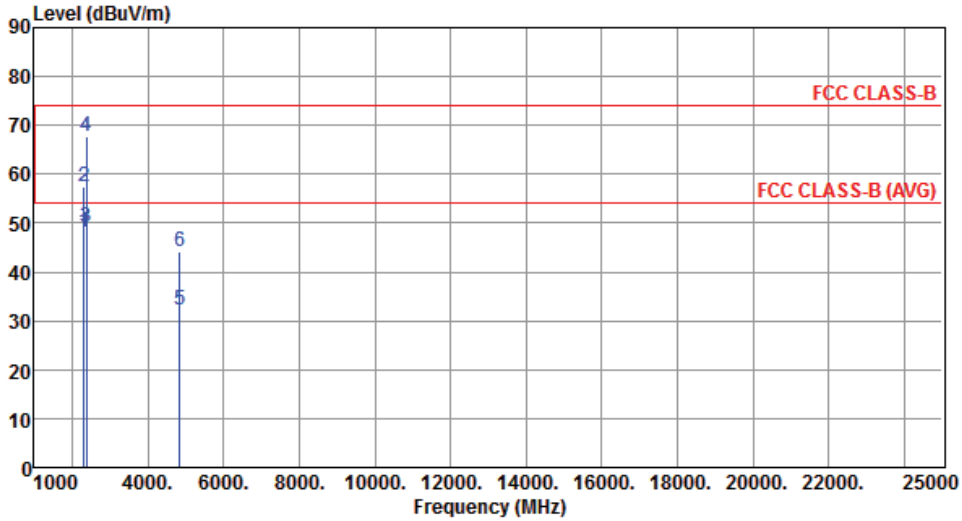
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT40	**Test Freq. (MHz)**	2422
N_{TX}	2	**Polarization**	H



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2320.00	51.38	54.00	-2.62	55.34	-3.96	Average	---	---
2	2320.00	59.24	74.00	-14.76	63.20	-3.96	Peak	---	---
3	2390.00	52.47	54.00	-1.53	56.15	-3.68	Average	---	---
4	2390.00	71.57	74.00	-2.43	75.25	-3.68	Peak	---	---
5	4844.00	32.98	54.00	-21.02	27.95	5.03	Average	---	---
6	4844.00	45.69	74.00	-28.31	40.66	5.03	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

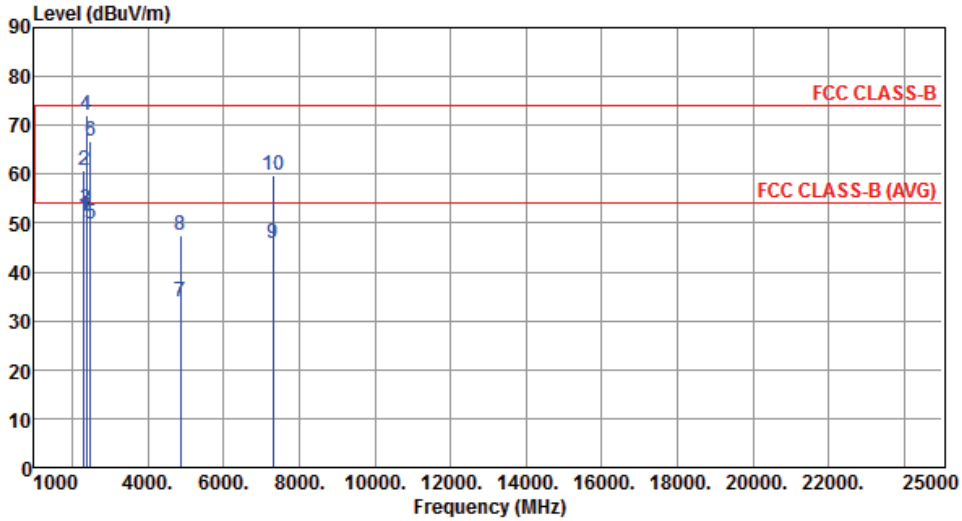
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT40	**Test Freq. (MHz)**	2422
N_{TX}	2	**Polarization**	V



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2320.00	48.14	54.00	-5.86	52.10	-3.96	Average	---	---
2	2320.00	57.57	74.00	-16.43	61.53	-3.96	Peak	---	---
3	2390.00	49.14	54.00	-4.86	52.82	-3.68	Average	---	---
4	2390.00	67.71	74.00	-6.29	71.39	-3.68	Peak	---	---
5	4844.00	32.36	54.00	-21.64	27.33	5.03	Average	---	---
6	4844.00	44.27	74.00	-29.73	39.24	5.03	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

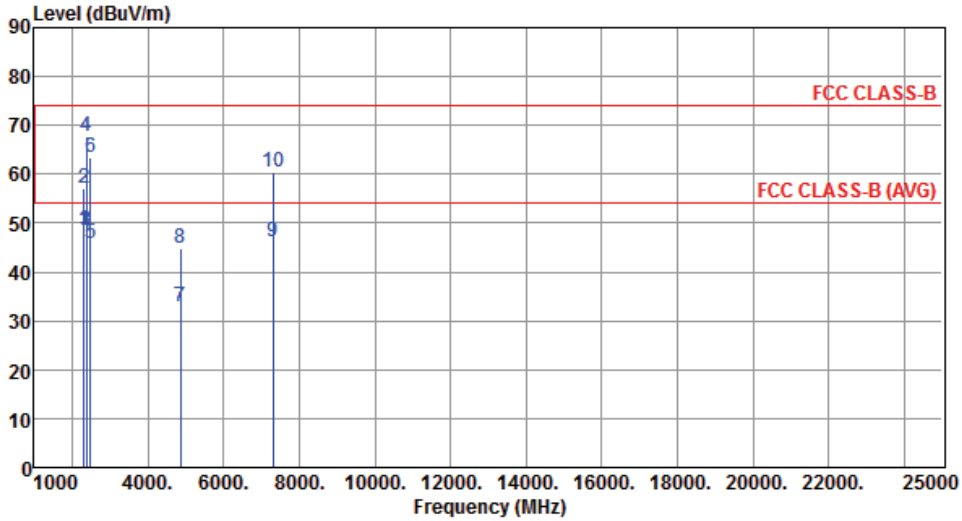
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT40	**Test Freq. (MHz)**	2437
N_{TX}	2	**Polarization**	H



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2320.00	51.61	54.00	-2.39	55.57	-3.96	Average	---	---
2	2320.00	60.62	74.00	-13.38	64.58	-3.96	Peak	---	---
3	2390.00	52.70	54.00	-1.30	56.38	-3.68	Average	---	---
4	2390.00	72.16	74.00	-1.84	75.84	-3.68	Peak	---	---
5	2483.50	49.91	54.00	-4.09	53.21	-3.30	Average	---	---
6	2483.50	66.91	74.00	-7.09	70.21	-3.30	Peak	---	---
7	4874.00	33.76	54.00	-20.24	28.66	5.10	Average	---	---
8	4874.00	47.58	74.00	-26.42	42.48	5.10	Peak	---	---
9	7311.00	45.73	54.00	-8.27	36.40	9.33	Average	---	---
10	7311.00	59.67	74.00	-14.33	50.34	9.33	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

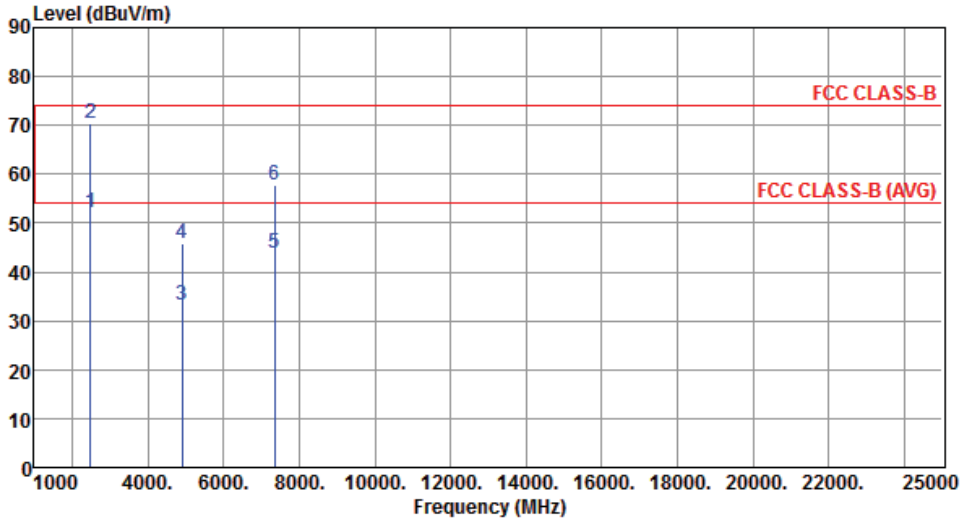
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT40	**Test Freq. (MHz)**	2437
N_{TX}	2	**Polarization**	V



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2320.00	48.42	54.00	-5.58	52.38	-3.96	Average	---	---
2	2320.00	57.12	74.00	-16.88	61.08	-3.96	Peak	---	---
3	2390.00	48.65	54.00	-5.35	52.33	-3.68	Average	---	---
4	2390.00	67.69	74.00	-6.31	71.37	-3.68	Peak	---	---
5	2483.50	45.77	54.00	-8.23	49.07	-3.30	Average	---	---
6	2483.50	63.47	74.00	-10.53	66.77	-3.30	Peak	---	---
7	4874.00	32.94	54.00	-21.06	27.84	5.10	Average	---	---
8	4874.00	44.80	74.00	-29.20	39.70	5.10	Peak	---	---
9	7311.00	46.12	54.00	-7.88	36.79	9.33	Average	---	---
10	7311.00	60.38	74.00	-13.62	51.05	9.33	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

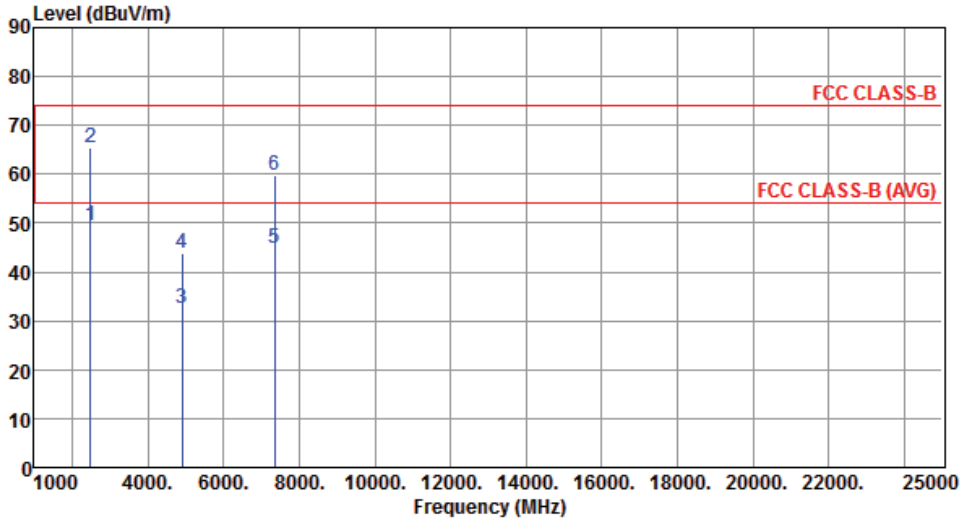
Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT40	**Test Freq. (MHz)**	2452
N_{TX}	2	**Polarization**	H



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2483.50	52.27	54.00	-1.73	55.57	-3.30	Average	---	---
2	2483.50	70.57	74.00	-3.43	73.87	-3.30	Peak	---	---
3	4904.00	33.24	54.00	-20.76	28.08	5.16	Average	---	---
4	4904.00	45.88	74.00	-28.12	40.72	5.16	Peak	---	---
5	7356.00	43.71	54.00	-10.29	34.35	9.36	Average	---	---
6	7356.00	57.66	74.00	-16.34	48.30	9.36	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	HT40	**Test Freq. (MHz)**	2452
N_{TX}	2	**Polarization**	V



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2483.50	49.43	54.00	-4.57	52.73	-3.30	Average	---	---
2	2483.50	65.42	74.00	-8.58	68.72	-3.30	Peak	---	---
3	4904.00	32.64	54.00	-21.36	27.48	5.16	Average	---	---
4	4904.00	43.97	74.00	-30.03	38.81	5.16	Peak	---	---
5	7356.00	44.92	54.00	-9.08	35.56	9.36	Average	---	---
6	7356.00	59.87	74.00	-14.13	50.51	9.36	Peak	---	---

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 20 dB relative to the maximum measured in-band level.

4 Test Equipment and Calibration Data

Test Item	Radiated Emissions				
Test Site	966 chamber1 / (03CH01-WS)				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101498	Jan. 25, 2014	Jan. 24, 2015
Receiver	R&S	ESR3	101658	Jan. 10, 2014	Jan. 09, 2015
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Jan. 02, 2014	Jan. 01, 2015
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1096	Feb. 13, 2014	Feb. 12, 2015
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Dec. 27, 2013	Dec. 26, 2014
Preamplifier	Burgeon	BPA-530	SN:100219	Nov. 28, 2013	Nov. 27, 2014
Preamplifier	Agilent	83017A	MY39501308	Dec. 16, 2013	Dec. 15, 2014
Preamplifier	WM	TF-130N-R1	923365	Oct. 23, 2013	Oct. 22, 2014
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16014/4	Dec. 16, 2013	Dec. 15, 2014
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16019/4	Dec. 16, 2013	Dec. 15, 2014
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16139/4	Dec. 16, 2013	Dec. 15, 2014
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-001	Dec. 16, 2013	Dec. 15, 2014
LF cable 10M	Woken	CFD400NL-LW	CFD400NL-002	Dec. 16, 2013	Dec. 15, 2014
Note: Calibration Interval of instruments listed above is one year.					

Loop Antenna	R&S	HFH2-Z2	100330	Nov. 15, 2012	Nov. 14, 2014
Note: Calibration Interval of instruments listed above is two year.					

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
EMC Receiver	R&S	ESCS 30	100169	Oct. 15, 2013	Oct. 14, 2014
LISN	SCHWARZBECK	Schwarzbeck 8127	8127-667	Nov. 23, 2013	Nov. 22, 2014
LISN (Support Unit)	SCHWARZBECK	Schwarzbeck 8127	8127-666	Dec. 04, 2013	Dec. 03, 2014
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Apr. 23, 2014	Apr. 22, 2015
50 ohm terminal (Support Unit)	NA	50	04	Apr. 18, 2014	Apr. 17, 2015
Note: Calibration Interval of instruments listed above is one year.					

Test Item	RF Conducted				
Test Site	TH01-HY				
Instrument	**Manufacturer**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV 40	101063	Feb. 17, 2014	Feb. 16, 2015
Temp. and Humidity Chamber	Giant Force	GTH-225-20-SP-SD	MAA1112-007	Nov. 21, 2013	Nov. 20, 2014
Signal Generator	R&S	SMB100A	175727	Jan. 07, 2014	Jan. 06, 2015
Power Sensor	Anritsu	MA2411B	1207366	Oct. 24, 2013	Oct. 23, 2014
Power Meter	Anritsu	ML2495A	1241002	Oct. 24, 2013	Oct. 23, 2014
DC Power Source	G.W.	GPS-3030DD	GEN865896	Nov. 21, 2013	Nov. 20, 2014
AC Power Source	G.W	APS-9102	EL920581	Jul. 15, 2014	Jul. 14, 2015
Note: Calibration Interval of instruments listed above is one year.					