

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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Summary of Test Result

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	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		

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Revision History

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

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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

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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	l						
Frequency Range (MHz)	· · · I I I I I I I I I I I I I I I I I						
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.

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1.1.3 Antenna Information

<u> </u>	Antenna Category					
⊠ I	Inte	ntegral antenna (antenna permanently attached)				
]	\boxtimes	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.				
	Exte	ernal antenna (dedicated antennas)				
[Single power level with corresponding antenna(s).				
	\boxtimes	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	Туре	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			
Pre	sentation of Equipment	☐ Production ; ☐ Prototype			
	Type of EUT				
\boxtimes	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.:				

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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			

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1.1.6 EUT Operational Condition

Power Supply Type

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

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1.3 Testing Applied Standards

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

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- 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				
\boxtimes	HWA YA	ADD	:	No. 52, Hwa Ya 1 st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.					
		TEL	:	886-3-327-345	6 FAX : 886	6-3-327-0973			
\boxtimes	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 Si			Т	est 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, 201					Jul. 24, 2014				
Ra	Radiated Emission *03CH01-WS Anderson Hung 20-23°C / 65-68% Jun. 10 ~ Jul. 17, 201.					Jun. 10 ~ Jul. 17, 2014			
				r [657002] with F r [10807A-1] with					

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.

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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)

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Meas	urement 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

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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 W	orst C	ase Power	Setting Para	meter (2400	-2483.5MHz	band)	
Test Software	ART2	2-GUI, Versi	on: 4_9_575 _.	_5_CS_U3			
Internal antenna	•						
				Test Frequ	ency (MHz)		
Modulation Mode	N _{TX}		NCB: 20MH	Z		NCB: 40MH	Z
		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							
				Test Frequ	ency (MHz)		
Modulation Mode	N _{TX}	NCB: 20MHz				NCB: 40MH	Z
		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

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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						
	Internal antenna with adapter mode						
	2. Internal antenna with POE mode						
3. External antenna with adapter mode							
	4. External antenna with POE mode						

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Th	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					
	Internal antenna with adapter mode					
	2. External antenna with adapter mode					

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Th	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.						
	☐ EUT will be placed in	fixed position.					
User 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							
Operating Mode							
Modulation Mode	11b,11g, HT20, HT40						
	X Plane	Y Plane	Z Plane				
Orthogonal Planes of EUT							

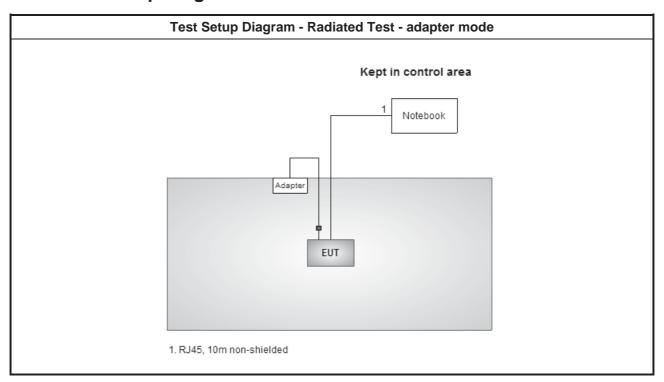
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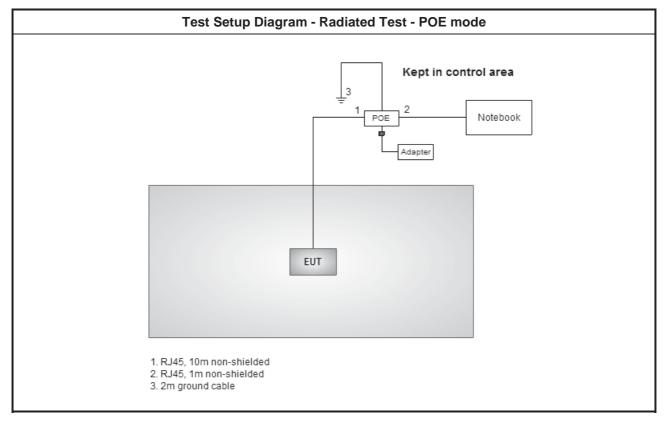
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2.5 **Test Setup Diagram**





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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 o	of the frequency.					

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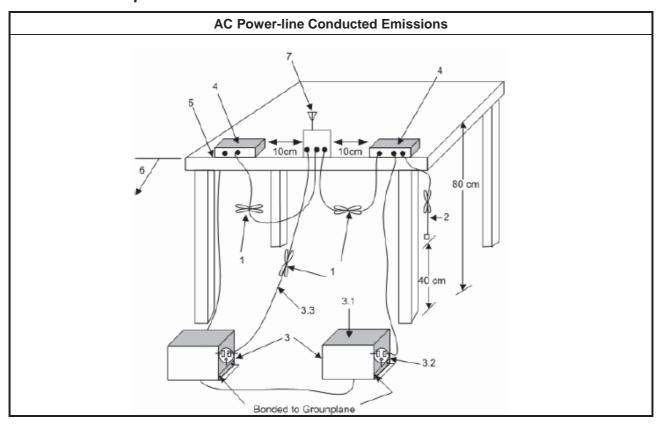
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

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

3.1.4 Test Setup

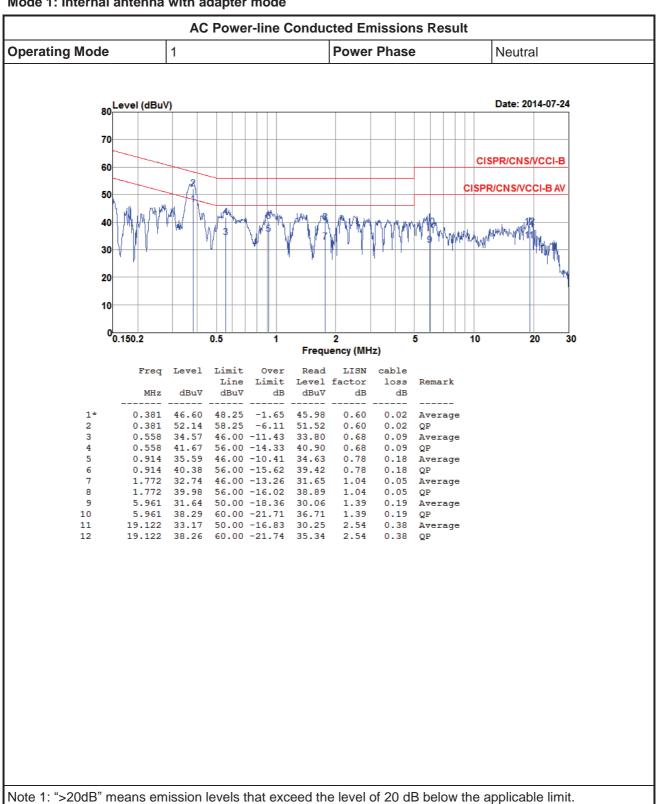


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Test Result of AC Power-line Conducted Emissions

Mode 1: Internal antenna with adapter mode



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Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

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AC Power-line Conducted Emissions Result Operating Mode Power Phase Line 80 Level (dBuV) Date: 2014-07-24 70 CISPR/CNS/VCCI-B CISPR/CNS/VCCI-B AV 50 40 30 20 10 0.150.2 0.5 2 10 20 30 Frequency (MHz) Freq Level Limit Read LISN cable Over Level factor Line Limit loss Remark dBu∀ dBu∀ dBu∀ dB dB 0.379 47.27 48.30 -1.03 46.73 0.52 0.02 Average

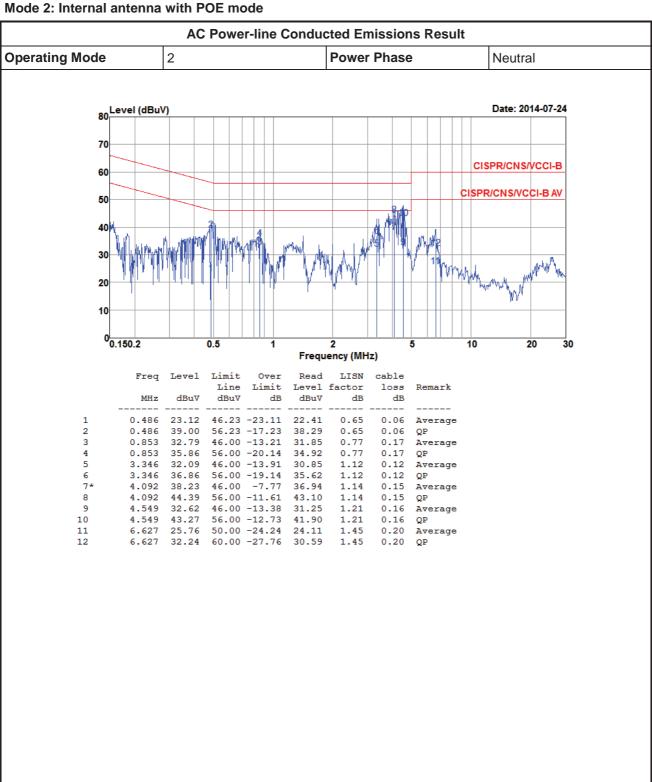
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2	0.379	54.49	58.30	-3.81	53.95	0.52	0.02	QP
3	0.552	39.06	46.00	-6.94	38.38	0.60	0.08	Average
4	0.552	44.77	56.00	-11.23	44.09	0.60	0.08	QP
5	0.948	37.27	46.00	-8.73	36.36	0.72	0.19	Average
6	0.948	43.52	56.00	-12.48	42.61	0.72	0.19	QP
7	1.310	35.31	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.)

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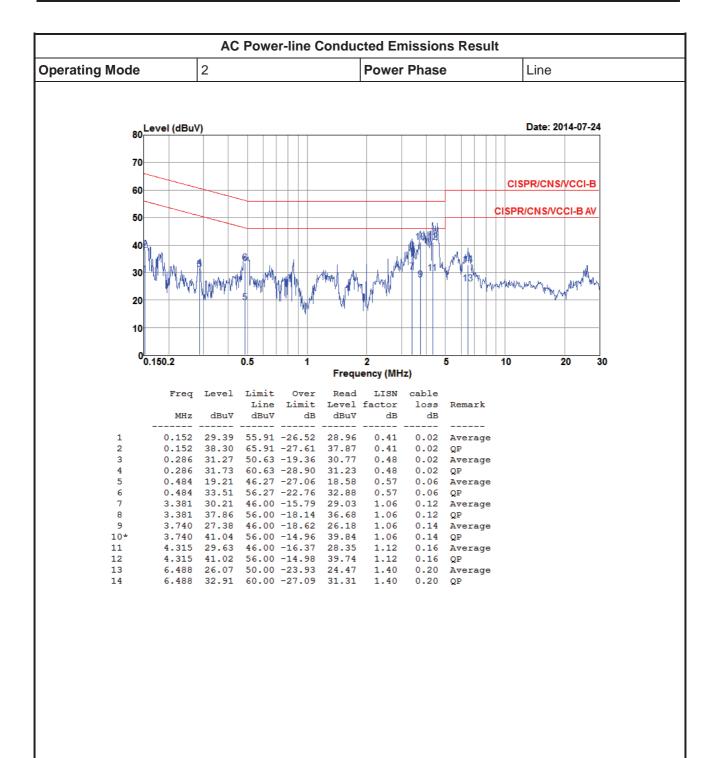


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Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

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Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.

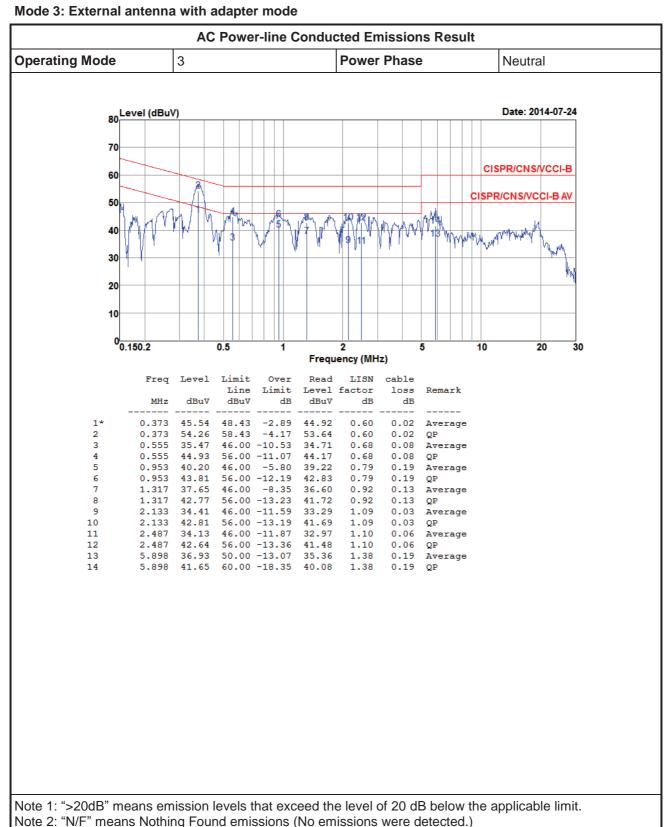
Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

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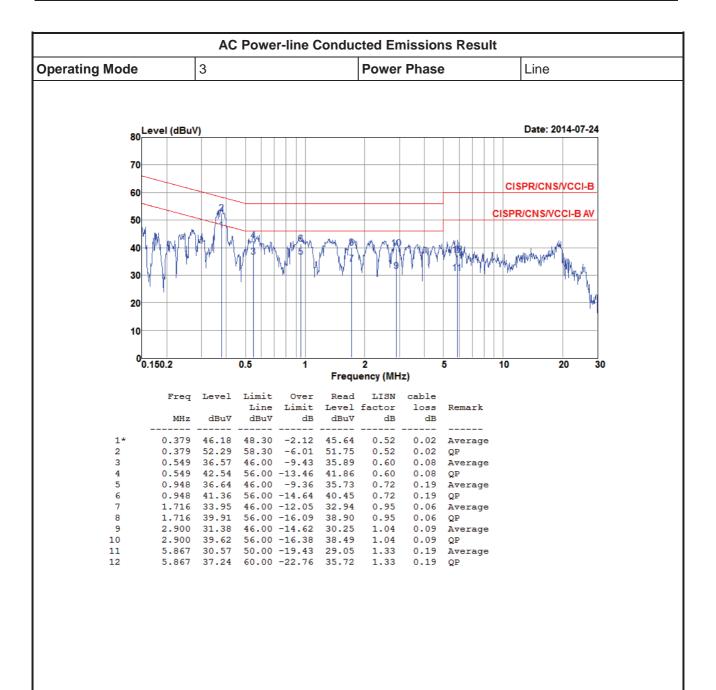
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Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.

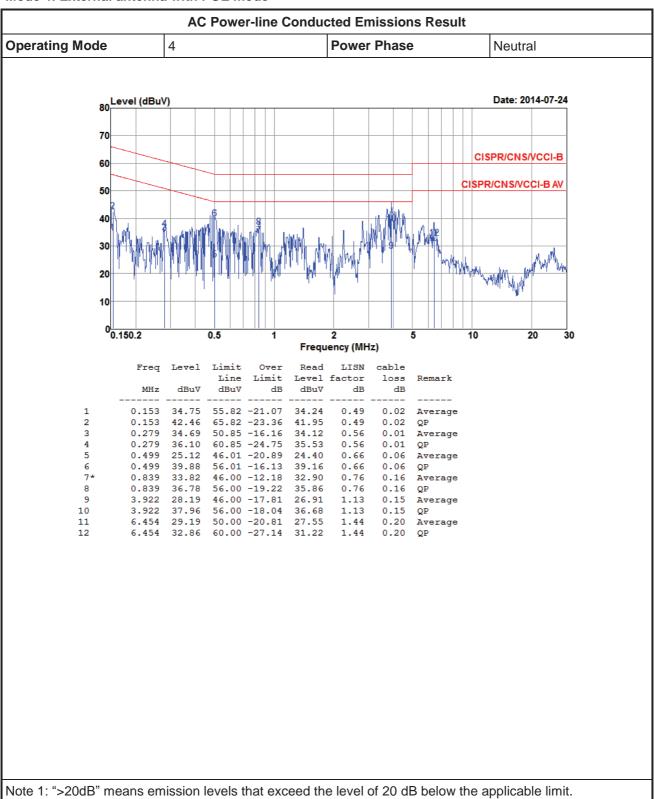
Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

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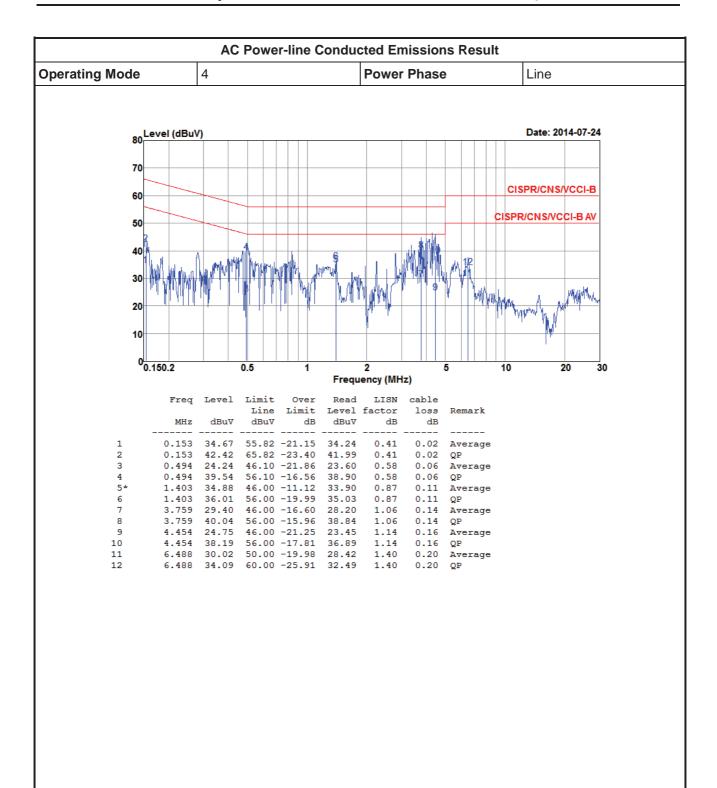


Mode 4: External antenna with POE mode



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Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)



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.)

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3.2 6dB Bandwidth

3.2.1 6dB Bandwidth Limit

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

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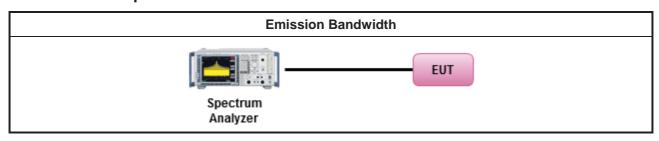
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

			Test Method
\boxtimes	For	the e	mission bandwidth shall be measured using one of the options below:
	\boxtimes	Ref	er as FCC KDB 558074 v03r02, clause 8.1 Option 1 for 6 dB bandwidth measurement.
		Ref	er as FCC KDB 558074 v03r02, clause 8.2 Option 2 for 6 dB bandwidth measurement.
		Ref	er as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.
\boxtimes	For	cond	ucted 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.
	\boxtimes	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



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3.2.5 Test Result of Emission Bandwidth

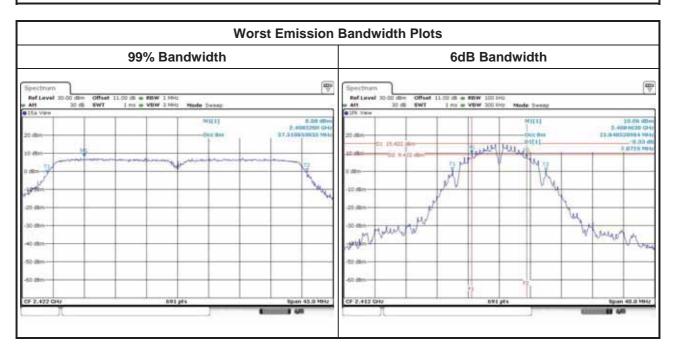
Mode 1: Internal antenna with adapter mode

			En	nission B	andwidth	Result							
Condi	tion				Emis	sion Bar	ndwidth (MHz)					
Marilada.	Modulation , Freq.			99% Ba	ndwidth			6dB Ba	ndwidth				
Mode Mode	N _{TX}	Freq. (MHz)	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					
Lim	Limit				N/A ≥500 kHz								
Res	ult		Complied										
Note 1: N _{TX} = Nu	mber o	of Transm	it Chains										

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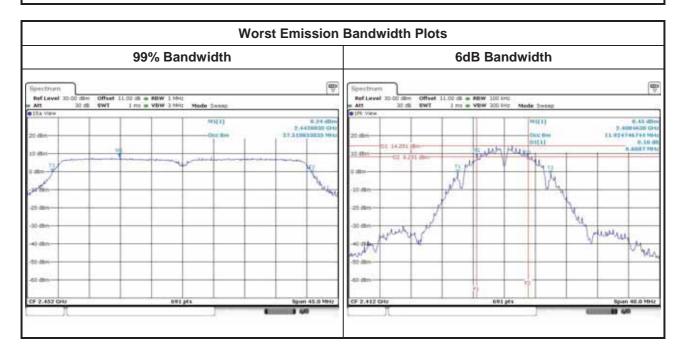
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Mode 2: External antenna with adapter mode

			Em	ission Ba	andwidth	Result							
Cond	ition				Emis	ssion Bar	ndwidth (MHz)					
Madulation		Freq. (MHz)		99% Ba	ndwidth			6dB Ba	ndwidth				
Modulation Mode	N _{TX}		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					
Lim		N/A ≥500 kHz											
Res	ult			Complied									
lote 1: N _{TX} = Nu	mber o	of Transm	it Chains										

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3.3 RF Output Power

3.3.1 RF Output Power Limit

		RF Output Power Limit
Мах	imu	m Peak Conducted Output Power or Maximum Conducted Output Power Limit
\boxtimes	240	0-2483.5 MHz Band:
	\boxtimes	If $G_{TX} \le 6$ dBi, then $P_{Out} \le 30$ dBm (1 W)
	\boxtimes	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
		\square 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. P	ower Limit:
\boxtimes	240	0-2483.5 MHz Band
	\boxtimes	Point-to-multipoint systems (P2M): $P_{eirp} \le 36 \text{ dBm } (4 \text{ W})$
		Point-to-point systems (P2P): $P_{eirp} \le MAX(36, [P_{Out} + G_{TX}]) dBm$
		Smart antenna system (SAS)
		☐ Single beam: $P_{eirp} \le MAX(36, P_{Out} + G_{TX}) dBm$
		☐ Overlap beam: $P_{eirp} \le MAX(36, P_{Out} + G_{TX}) dBm$
		☐ Aggregate power on all beams: $P_{eirp} \le MAX(36, [P_{Out} + G_{TX} + 8]) dBm$
G_{TX}	= the	aximum peak conducted output power or maximum conducted output power in dBm, e maximum transmitting antenna directional gain in dBi. i.r.p. Power in dBm.

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3.3.2 Measuring Instruments

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

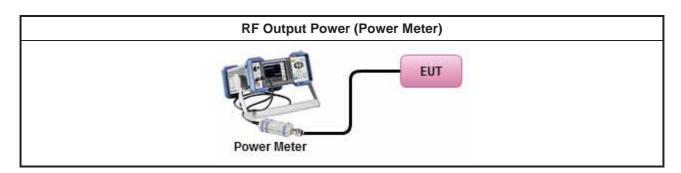
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3.3.3 Test Procedures

		Test Method
\boxtimes	Max	rimum Peak Conducted Output Power
		Refer as FCC KDB 558074 v03r02, clause 9.1.1 (RBW ≥ DTS BW).
	\boxtimes	Refer as FCC KDB 558074 v03r02, clause 9.1.2 (Peak power meter)
\boxtimes	Max	rimum 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 _l	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)
\boxtimes	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]) $EIRP_{total} = P_{total} + DG$

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3.3.4 Test Setup



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3.3.5 Directional Gain for Power Measurement

Mode 1: Internal antenna with adapter mode

	Dire	ectional Gain (D	G) 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	-	-

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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

	Dire	ectional Gain (D	G) 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	-	-

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3.3.6 Test Result of Maximum Conducted Output Power

Mode 1: Internal antenna with adapter mode

		Ма	aximum	Peak Co	onducte	d Outpu	ıt Powe	r					
Condi	tion		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		
Resu	ult					C	omplie	d			_		

		Maxi	imum C	onducte	d (Aver	age) Ou	tput Po	wer					
Condi	tion		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		
Resu	ılt					C	Complie	d					

Note: AV power is for reference only.

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Mode 2: External antenna with adapter mode

		Ма	aximum	Peak Co	onducte	d Outpu	ıt Powe	r					
Condi	tion		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		
Resi	ult					C	Complie	d					

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	Maximum Conducted (Average) Output Power												
Condi	tion		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		
Resu	ult			Complied									

Note: AV power is for reference only.

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3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

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

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3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

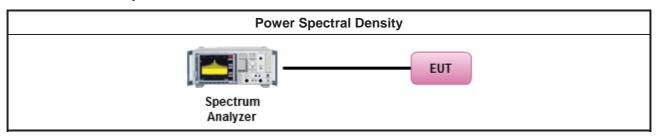
Test Method										
	Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. 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).									
	\boxtimes	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)								
		☐ 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.								

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3.4.4 Test Setup



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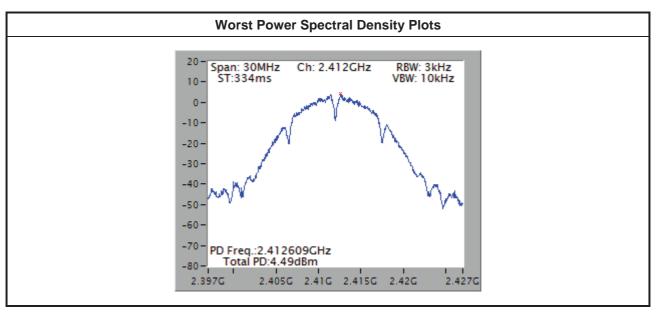


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3.4.5 **Test Result of Power Spectral Density**

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			
Res	sult		Complied				



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

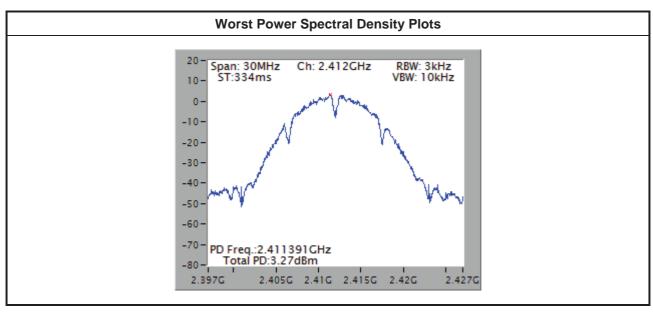
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Mode 2: External antenna with adapter mode

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			Com	plied		

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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

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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

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3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

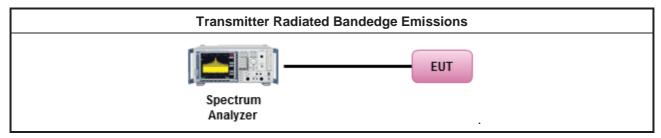
Reference level measurement

- 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



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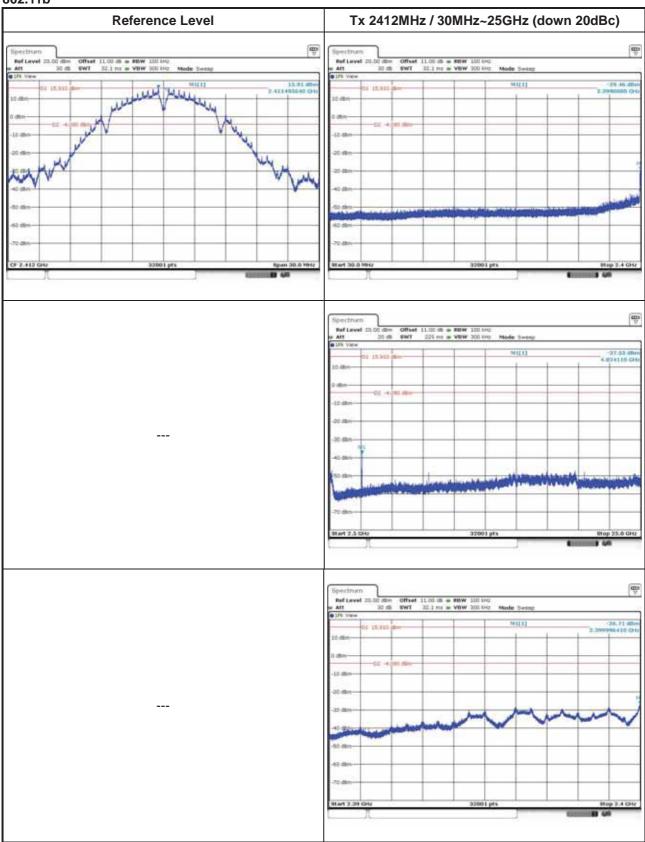




3.5.5 Test Result of Emissions in non-restricted frequency bands

Mode 1: Internal antenna with adapter mode

802.11b

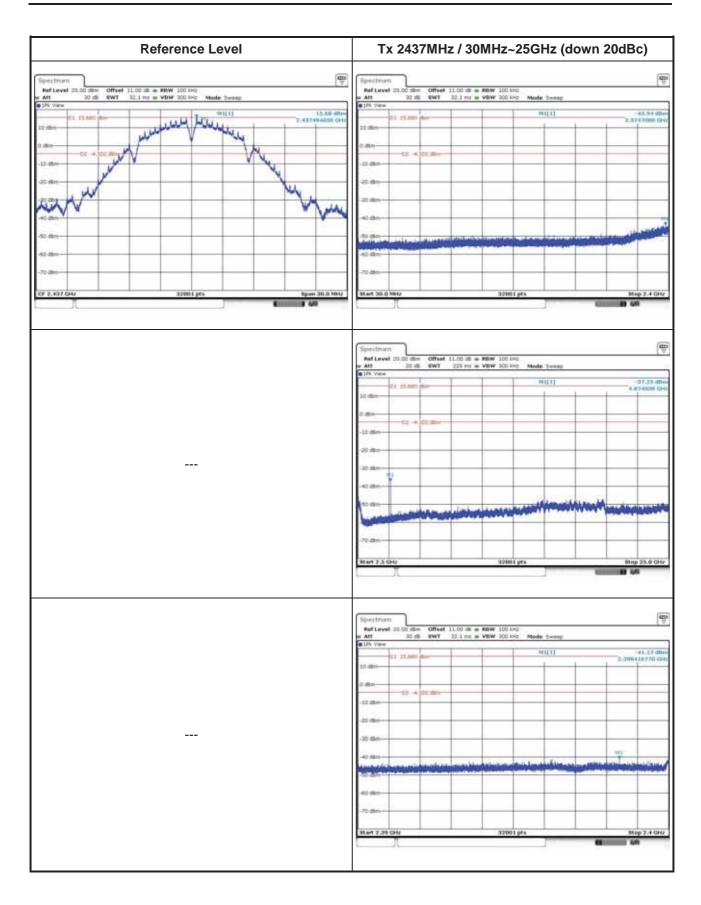


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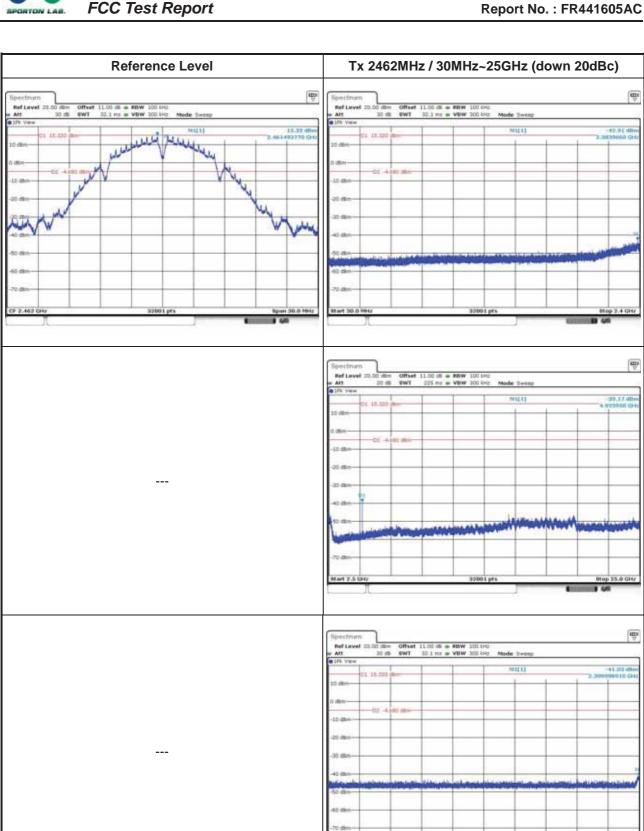
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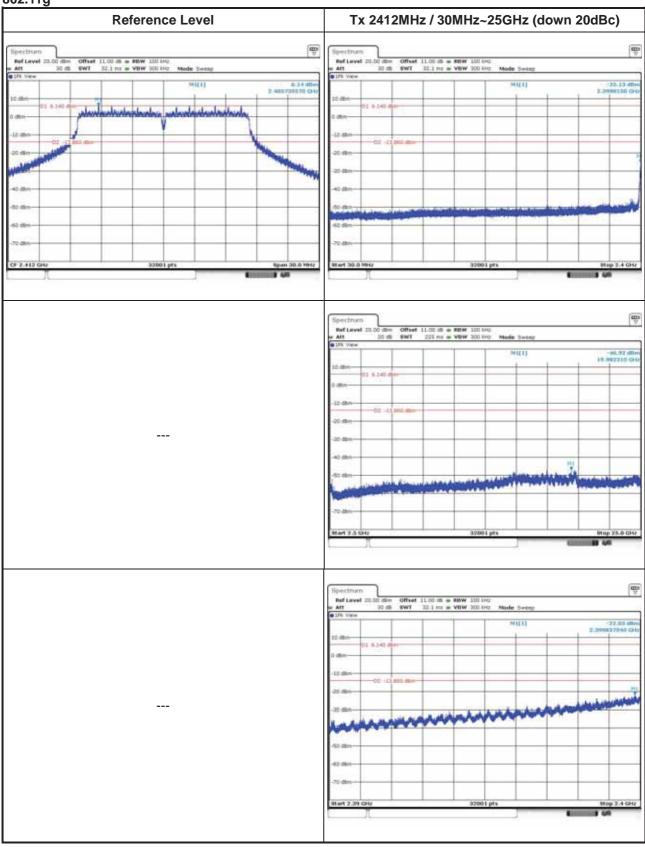
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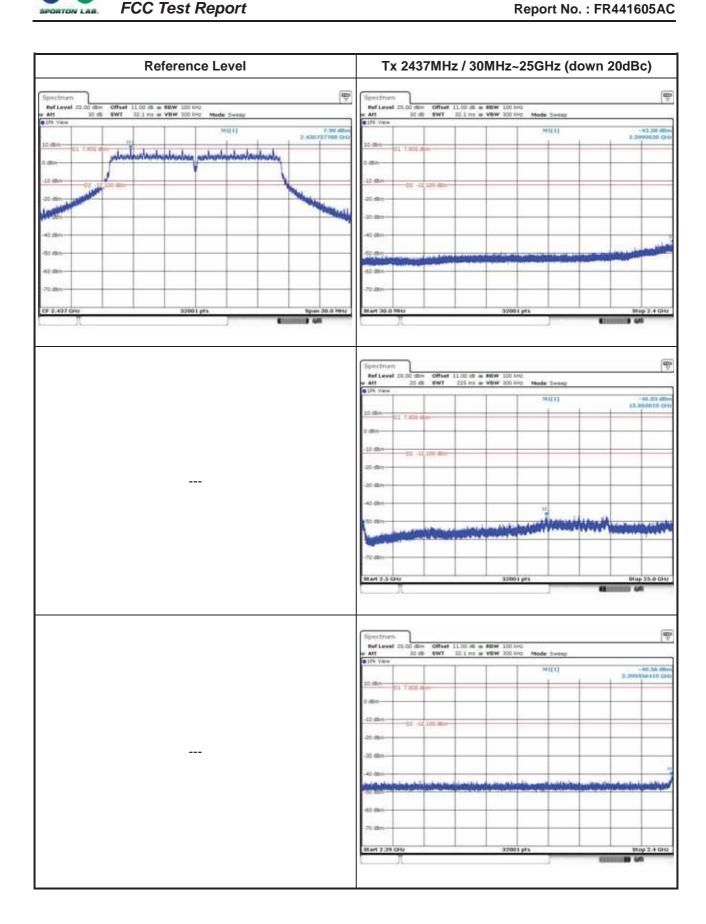




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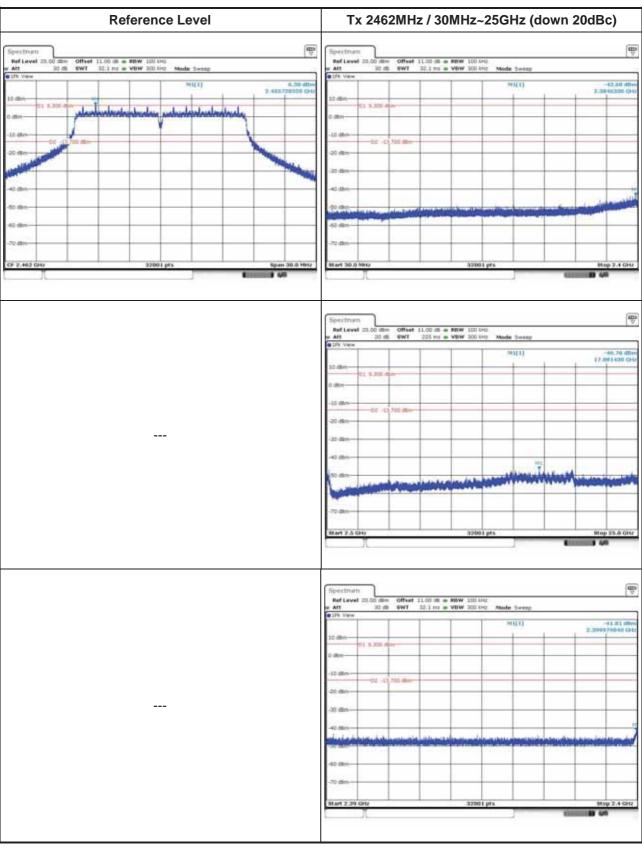
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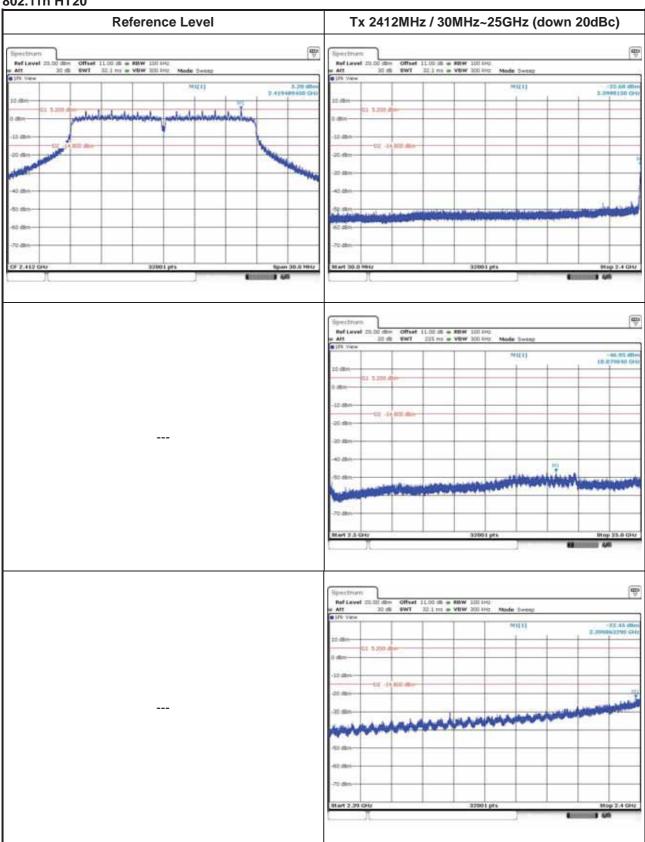
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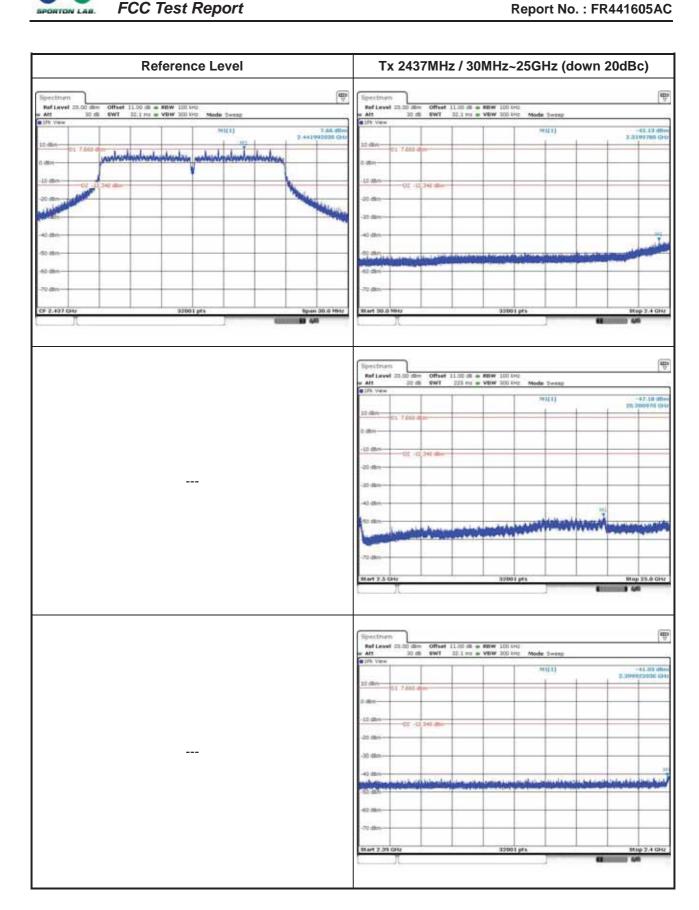
802.11n HT20



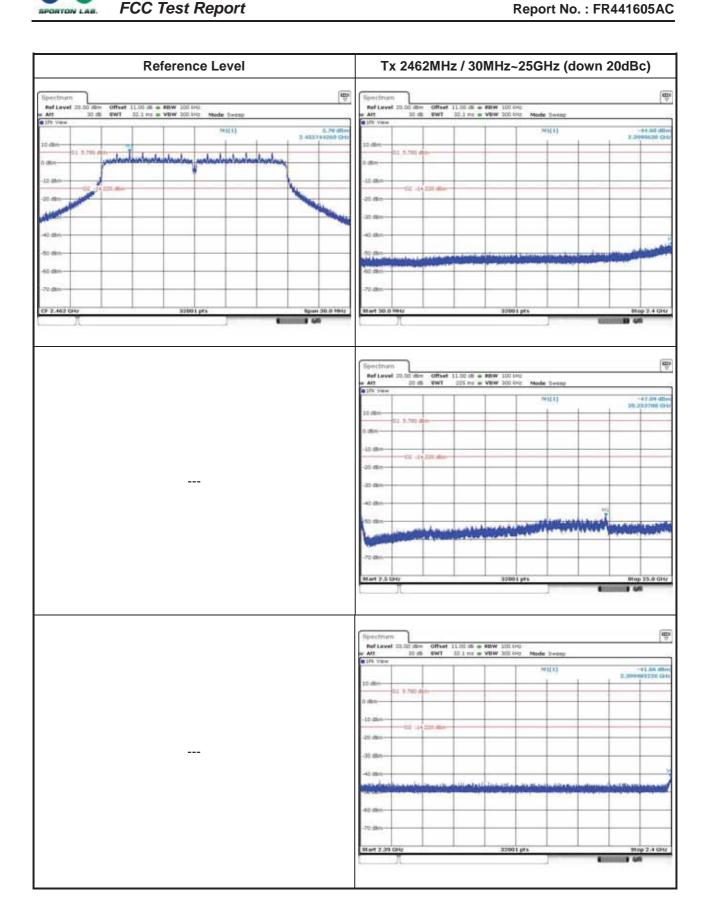
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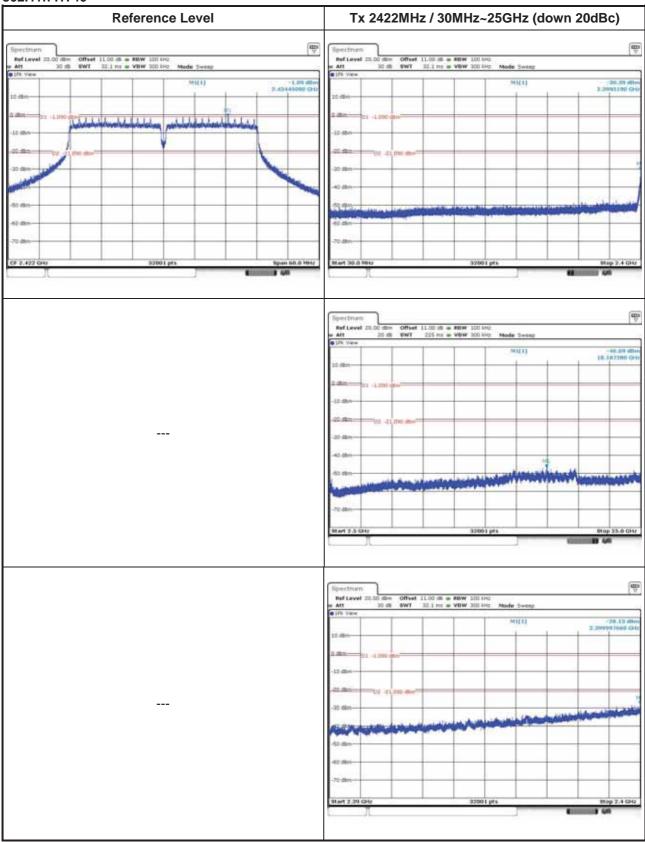
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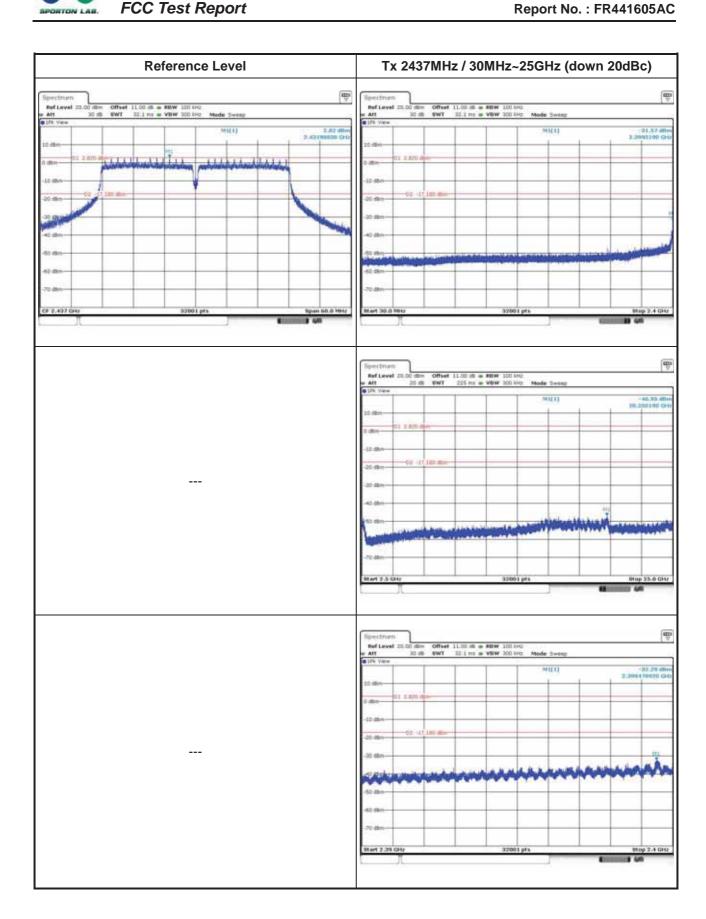
Report No.: FR441605AC

802.11n HT40

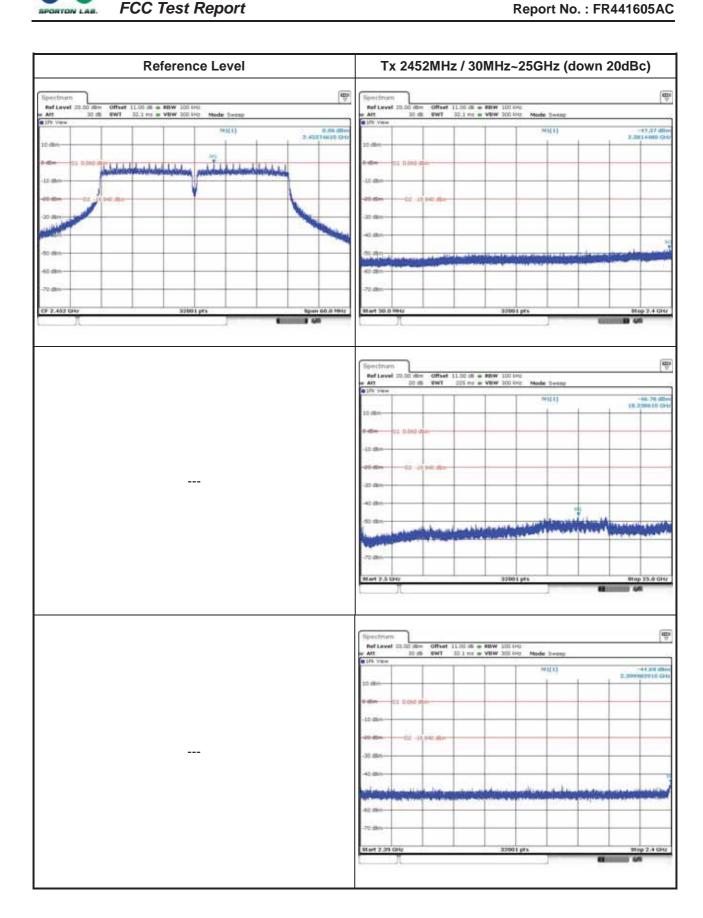


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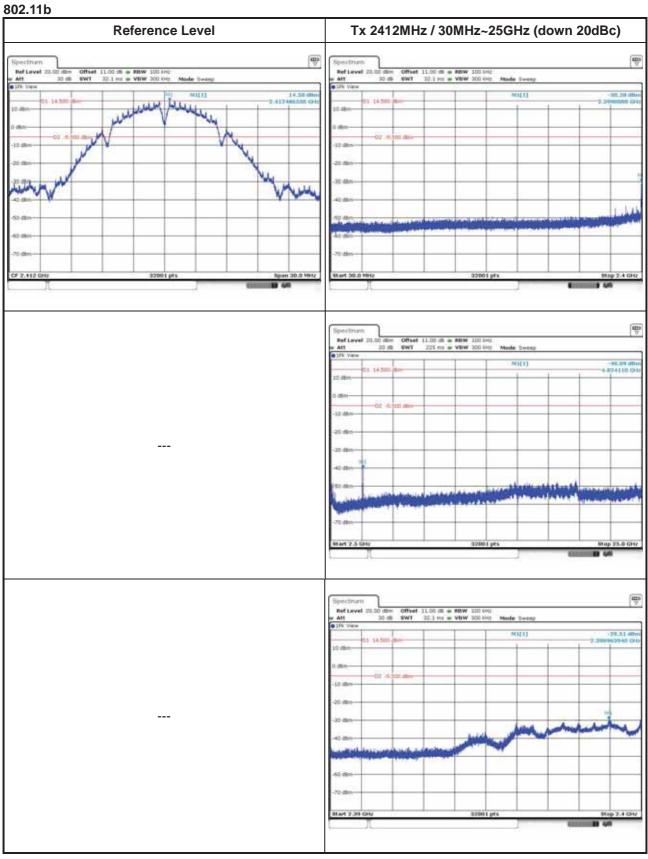
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Report No.: FR441605AC

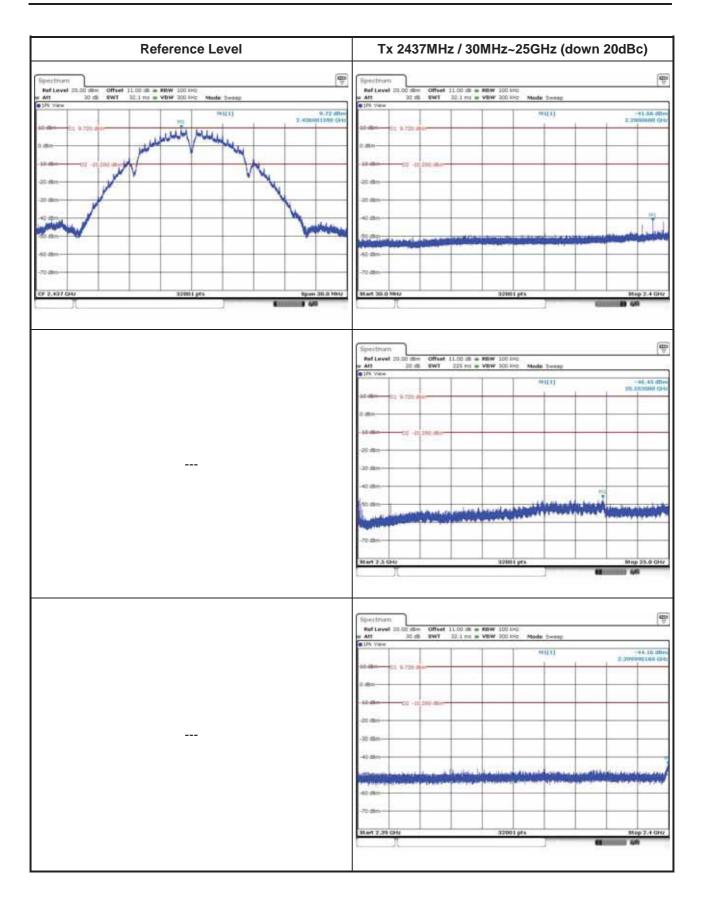
Mode 3: External antenna with adapter mode



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Tx 2462MHz / 30MHz~25GHz (down 20dBc) **Reference Level** 7.20 dB 7.461472290 G Ref Level 30.00 :0m Att 30 :0

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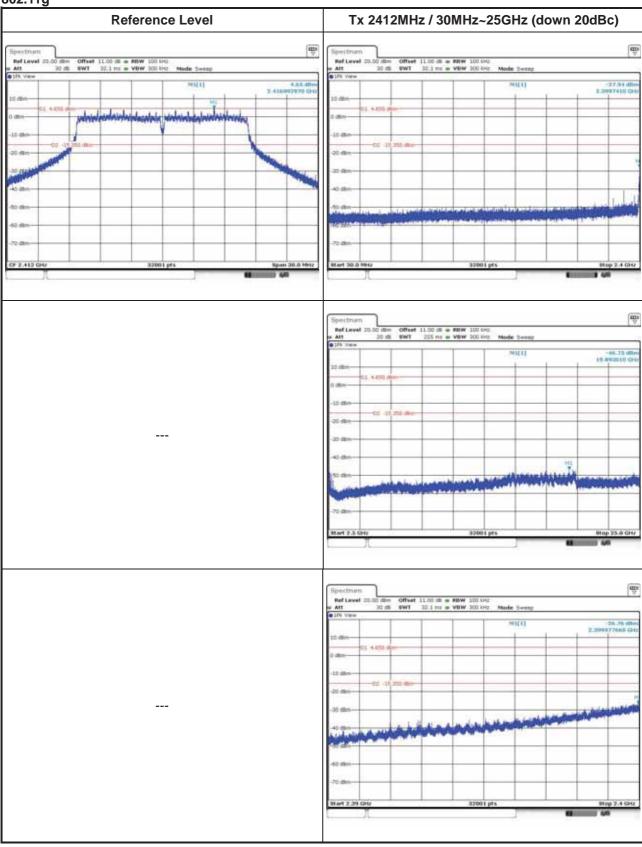
SPORTON INTERNATIONAL INC. Page No.
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FCC Test Report

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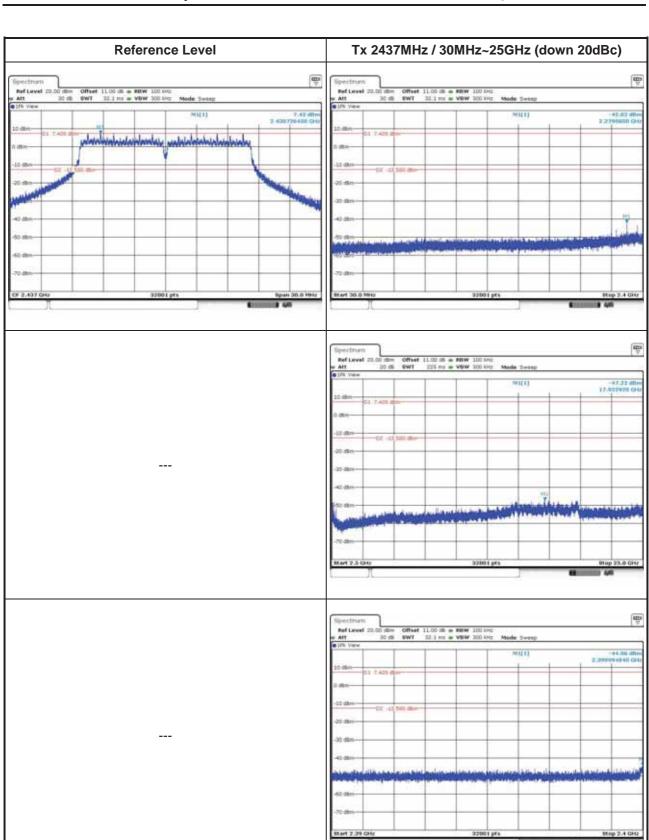




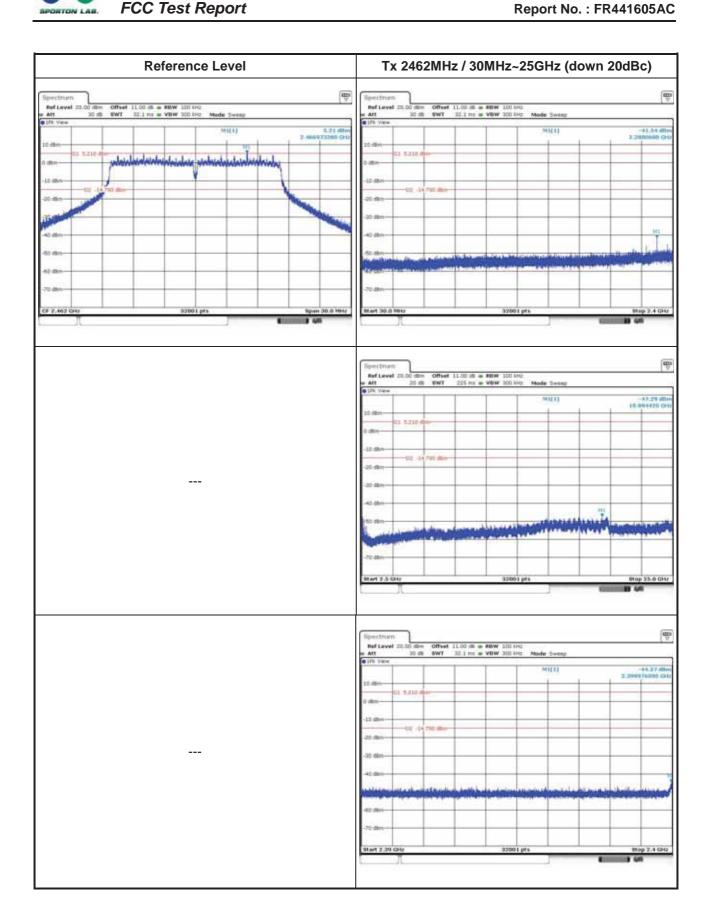
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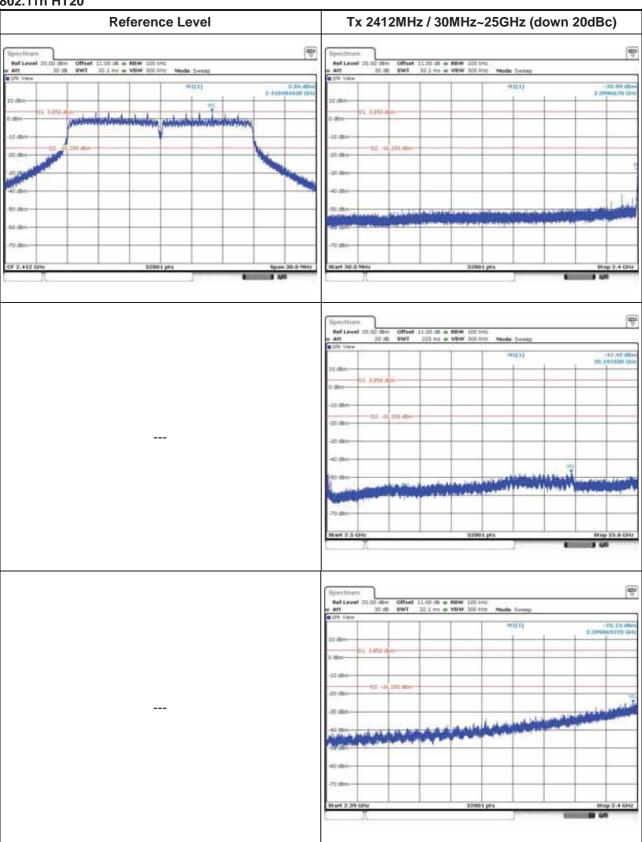


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FCC Test Report

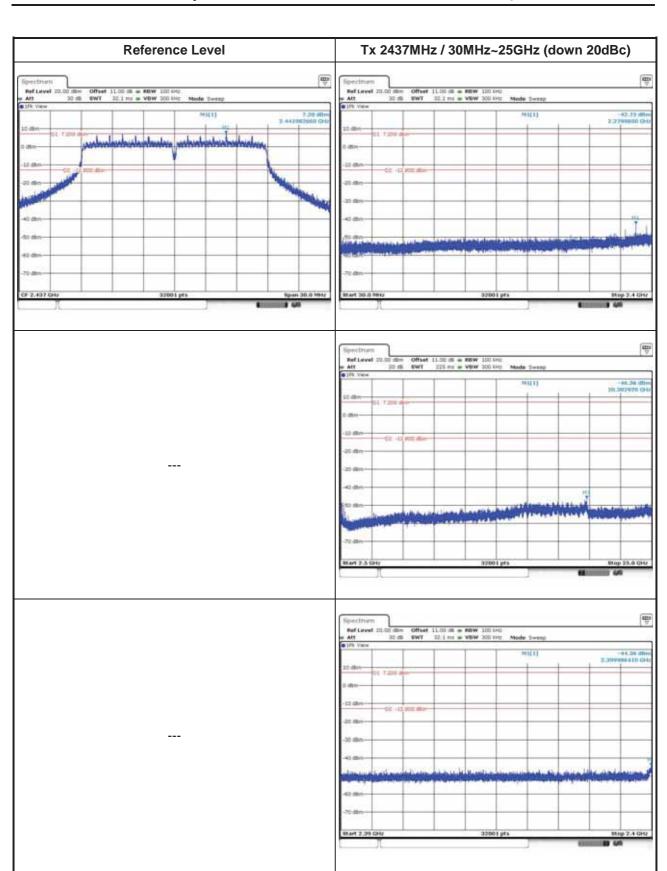
802.11n HT20



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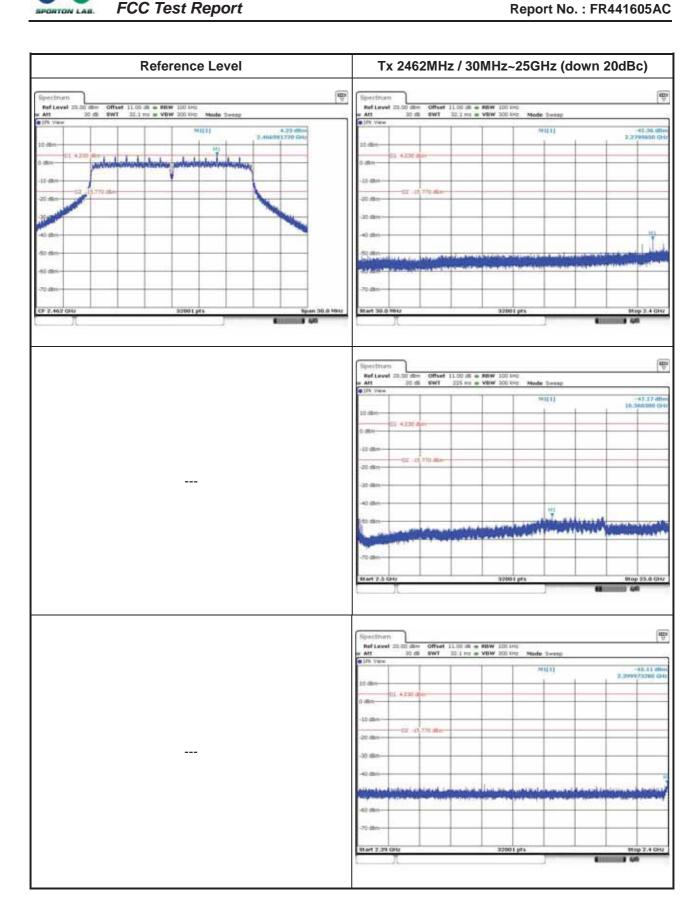
Report \

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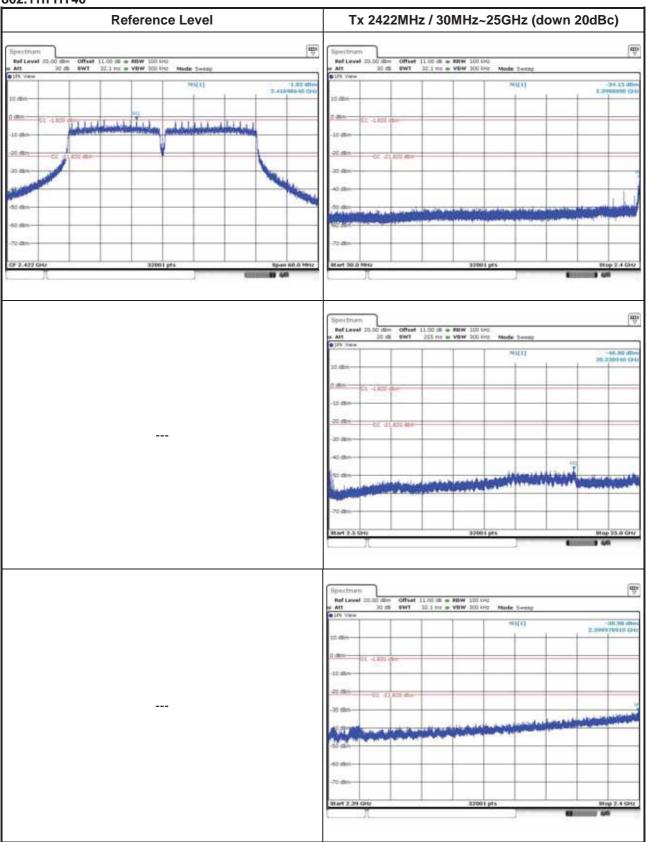


TEL: 886-3-3273456 FAX: 886-3-3270973



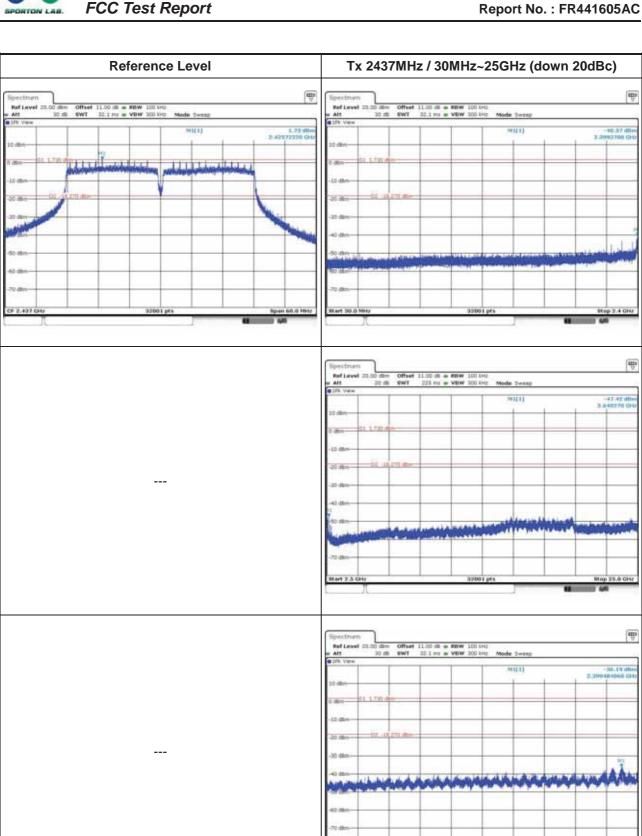
FCC Test Report

802.11n HT40

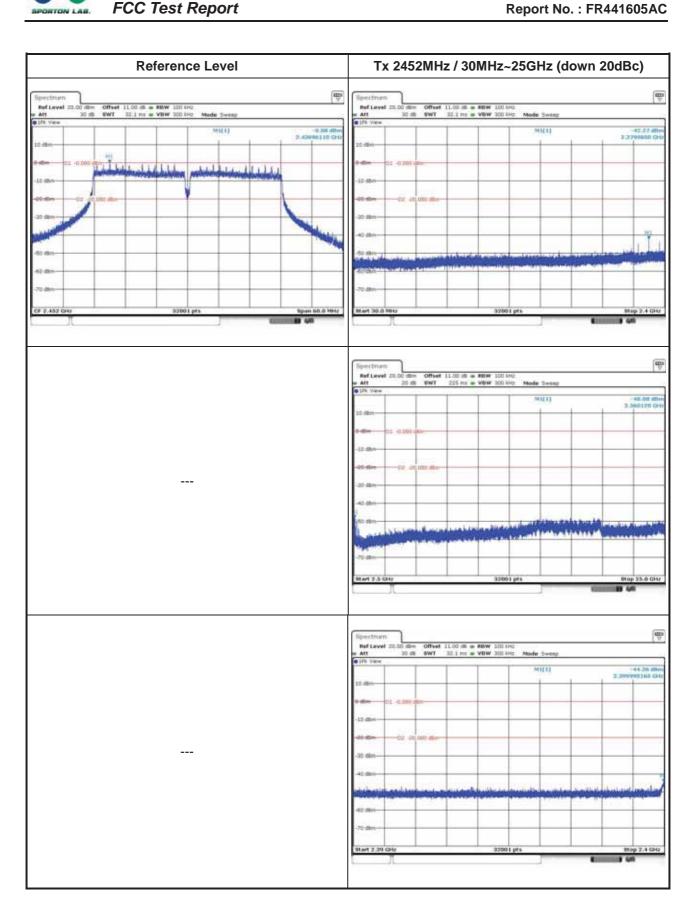


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3.6 Transmitter Radiated Unwanted Emissions

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					

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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.

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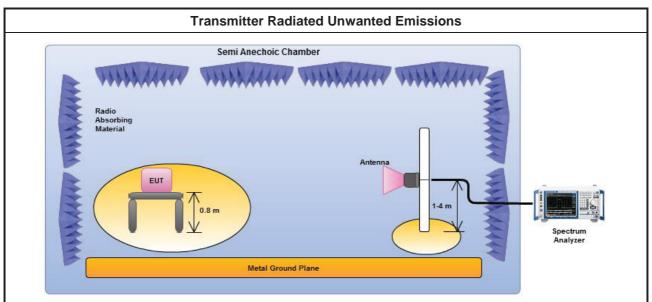
3.6.3 Test Procedures

		Test Method
	perfe equi extra dista	isurements may be performed at a distance other than the limit distance provided they are not formed in the near field and the emissions to be measured can be detected by the measurement pment. When performing measurements at a distance other than that specified, the results shall be applied to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear ance for field-strength measurements, inverse of linear distance-squared for power-density issurements).
	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.
	\boxtimes	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
Ш	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 add 10 log(N) dB

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3.6.4 Test Setup



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.

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Transmitter Radiated Unwanted Emissions (Below 1GHz)

Mode 1: Internal antenna with adapter mode

	Tra	ansm	itter Ra	diated	Unwant	ed Emis	sions (Be	elow 1GH	lz)		
Modulation Mode	lode HT20				Test Fre	q. (MHz)		2437	7		
Polarization		Н				Operatin	ng Mode		1		
90 <mark>Le</mark>	vel (dBu\	//m)			I					1	7
80—											
00											
70											
60											
50									FCC	CLASS-E	3
50		2									
40	2					5	6				-
30		4					1				_
20											
10	\dashv										-
0 30	400		0 20	0 44		00 00	200	000		00 44	
30	100.	20	0. 30	U. 40		00. 60 ency (MHz)	0. 700.	800.	90	00. 10	000
	Fr	ea. E	mission	Limit		n SA	Factor	Remark	_	ANT T	urn
		-4.	level			reading					able
	M	1Hz	dBuV/m	dBuV/r	n dB	dBuV	dB		C	m d	eg
1		7 00	32 42	<u> </u>	11 00	54.50	22.00	Peak			
2						55.38		Peak			
_						50.50		D 1			

58.47 -17.19 52.11 -19.61 50.57 -11.54

Peak

Peak

Peak

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

625.58 33.81 46.00 -12.19 42.99 -9.18 Peak

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

141.55 41.28 43.50 -2.22

191.99 32.50 43.50 -11.00 500.45 39.03 46.00 -6.97

39.03 46.00 -6.97

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3

4

5

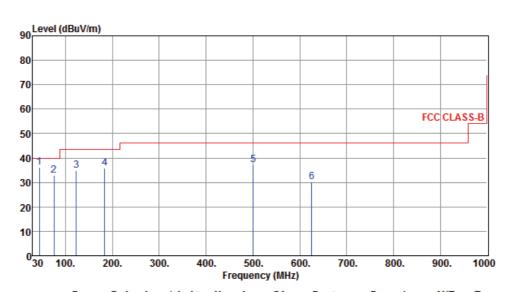


Transmitter Radiated Unwanted Emissions (Below 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 2437

Polarization V Operating Mode 1

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	Freq.	Emission	Limit	Margin	SA	Factor	Remark	ANI	lurn
		level			reading			High	Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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)

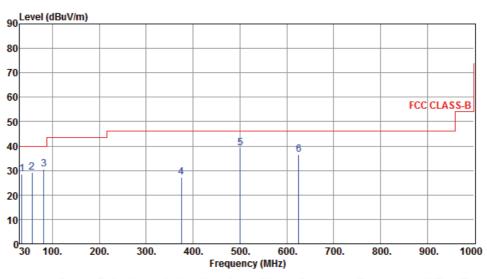
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Mode 2: Internal antenna with POE mode

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



	Freq. MHz	Emission level dBuV/m		Ū	SA reading dBuV		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.

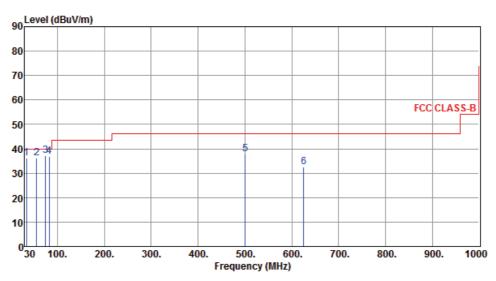
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.) Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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



	Freq.	Emission level	Limit	Margin	SA reading		Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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)

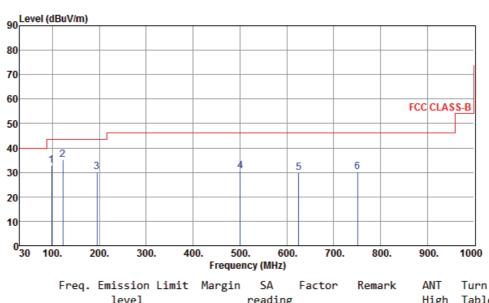
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Mode 3: External antenna with adapter mode

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



		level		reading			High	Table
	MHz	dBuV/m	dBuV/m dB	dBuV	dB		cm	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.

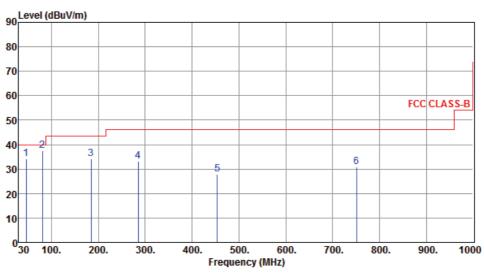
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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

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		Emission level		Ū	reading		Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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)

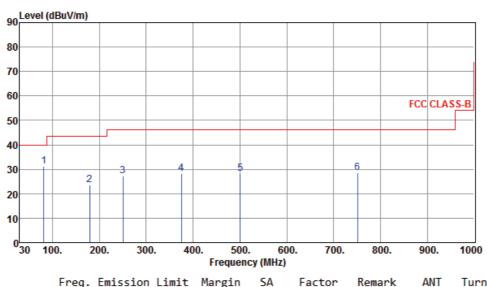
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Mode 4: External antenna with POE mode

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



	Freq.	Emission	Limit	Margin	SA	Factor	Remark	ANT	Turn
		level			reading			High	Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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)

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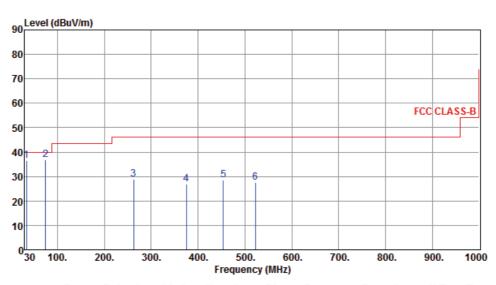


Transmitter Radiated Unwanted Emissions (Below 1GHz)

Modulation Mode 11g Test Freq. (MHz) 2437

Polarization V Operating Mode 4

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	Freq.	Emission level	Limit	Margin	SA reading		Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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)

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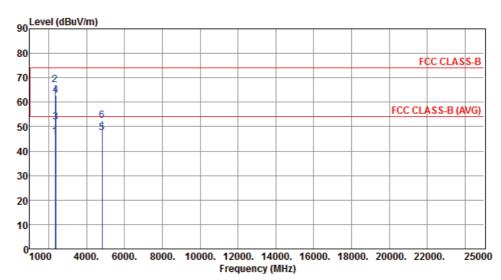


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Transmitter Radiated Unwanted Emissions (Above 1GHz)

Mode 1: Internal antenna with adapter mode

Transmitter Radiated Unwanted Emissions (Above 1GHz)						
Modulation Mode	11b	Test Freq. (MHz)	2412			
N _{TX}	2	Polarization	Н			



		Emission level			SA reading		Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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 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.

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Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)



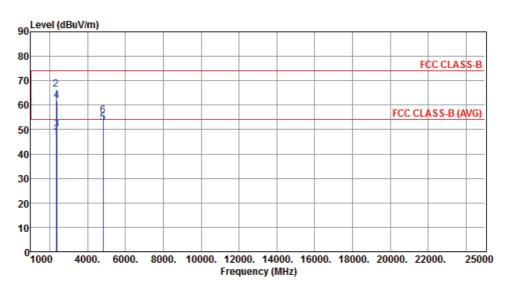
FCC Test Report

Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11b Test Freq. (MHz) 2412

N_{TX} 2 Polarization V

Report No.: FR441605AC



	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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.

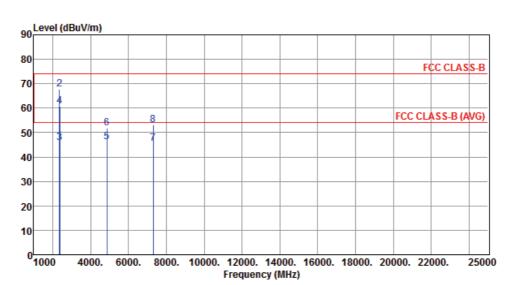
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level.

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Tra	ansmitter Radiated Unwan	ted Emissions (Above 1G	Hz)
Modulation Mode	11b	Test Freq. (MHz)	2437
N _{TX}	2	Polarization	Н

Report No.: FR441605AC



	Freq.	Emission	Limit	Margin	SA	Factor	Remark	ANT	Turn
		level			reading			High	Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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)

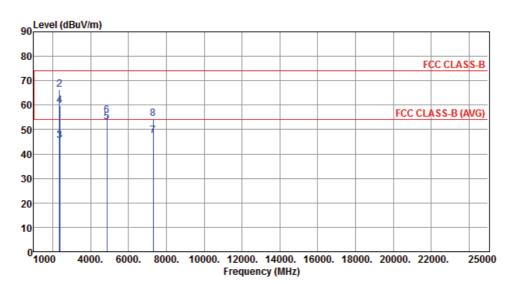
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level.

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TEL: 886-3-3273456 Report Version : Rev. 01



Report No.: FR441605AC



	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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)

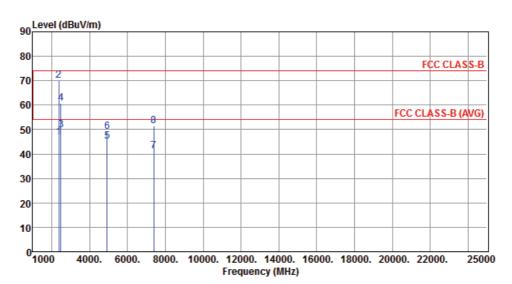
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level.

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Report No.: FR441605AC



	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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.

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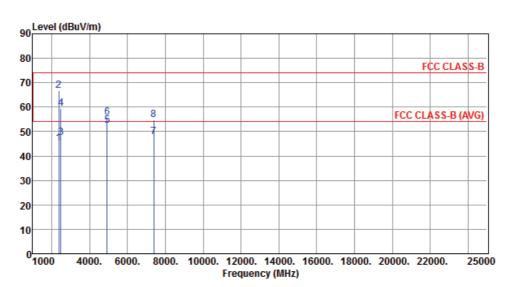


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11b Test Freq. (MHz) 2462

N_{TX} 2 Polarization V

Report No.: FR441605AC



	Freq.	Emission	Limit	Margin	SA	Factor	Remark	ANT	Turn
		level			reading			High	Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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.

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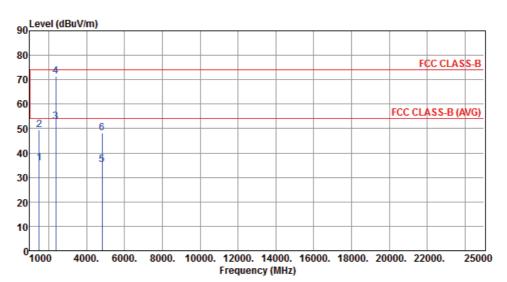


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11g Test Freq. (MHz) 2412

N_{TX} 2 Polarization H

Report No.: FR441605AC



	Freq. MHz	Emission level dBuV/m		Ü	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.

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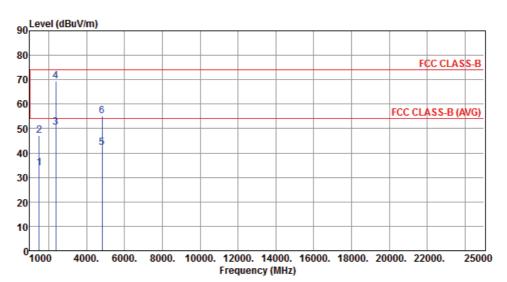


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11g Test Freq. (MHz) 2412

N_{TX} 2 Polarization V

Report No.: FR441605AC



	Freq. MHz	Emission level dBuV/m		Ü	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.

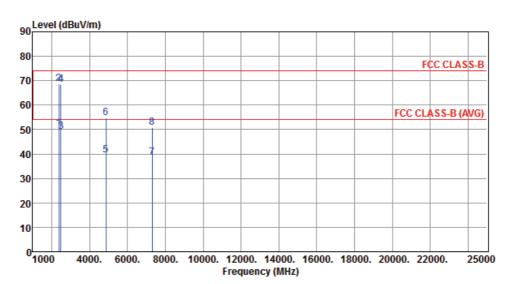
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level.

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Tra	ansmitter Radiated Unwan	ted Emissions (Above 1G	Hz)
Modulation Mode	11g	Test Freq. (MHz)	2437
N _{TX}	2	Polarization	Н

Report No.: FR441605AC



	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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.

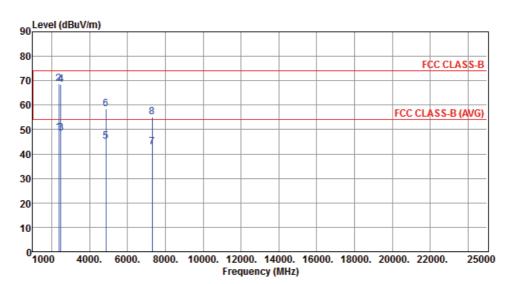
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level.

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

Report No.: FR441605AC



	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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.

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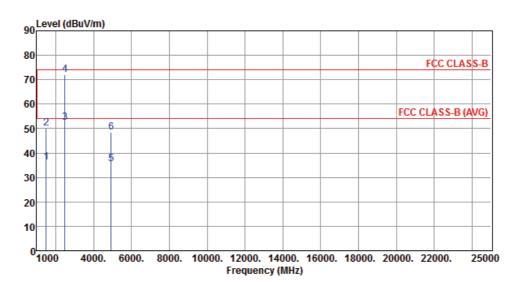


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11g Test Freq. (MHz) 2462

N_{TX} 2 Polarization H

Report No.: FR441605AC



	Freq.	Emission	Limit	Margin			Remark	ANT	Turn
		level			reading			High	Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		CM	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.

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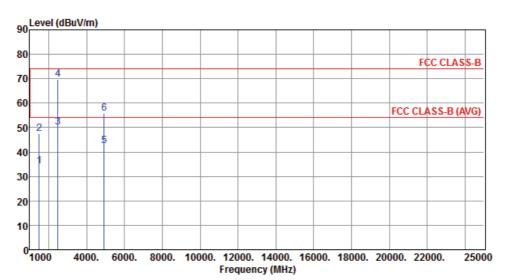


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11g Test Freq. (MHz) 2462

N_{TX} 2 Polarization V

Report No.: FR441605AC



	Freq. MHz	Emission level dBuV/m		Ü	SA reading dBuV		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.

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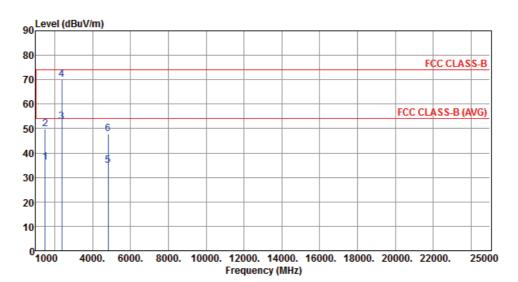


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 2412

N_{TX} 2 Polarization H

Report No.: FR441605AC



	Freq.	Emission	Limit	Margin	SA	Factor	Remark	ANT	Turn
		level			reading			High	Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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.

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TEL: 886-3-3273456 Report Version : Rev. 01

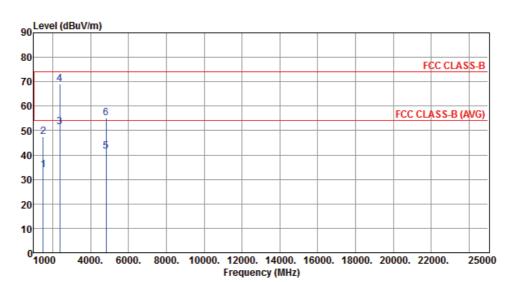


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 2412

N_{TX} 2 Polarization V

Report No.: FR441605AC



	Freq. MHz	Emission level dBuV/m		Ū	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.

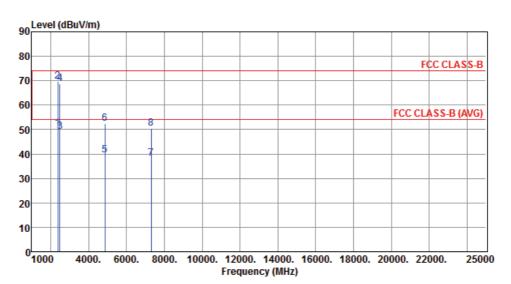
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level.

SPORTON INTERNATIONAL INC. Page No. : 84 of 120 TEL: 886-3-3273456 Report Version : Rev. 01



Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT20	Test Freq. (MHz)	2437							
N _{TX}	2	Polarization	Н							

Report No.: FR441605AC



	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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.

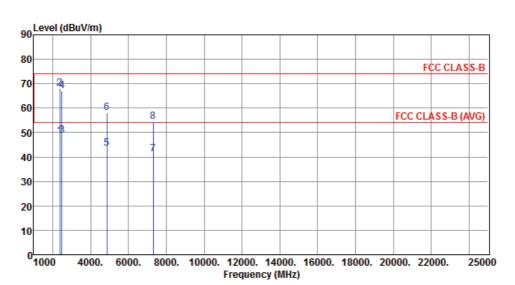
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level.

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

Report No.: FR441605AC



	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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.

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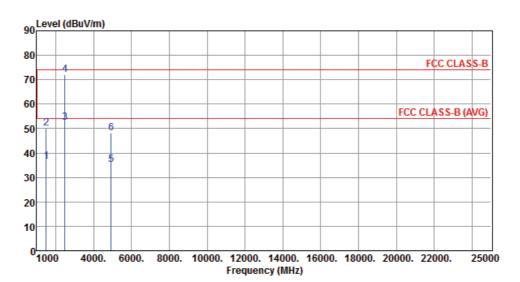


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 2462

N_{TX} 2 Polarization H

Report No.: FR441605AC



	Freq.	Emission	Limit	Margin	SA	Factor	Remark	ANT	Turn
		level			reading			High	Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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.

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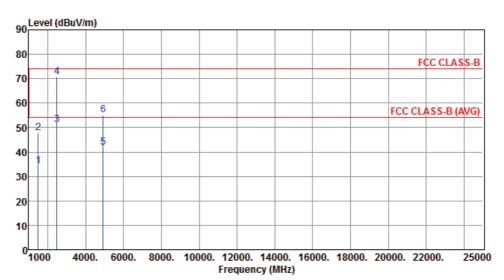


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 2462

N_{TX} 2 Polarization V

Report No.: FR441605AC



	Freq. MHz	Emission level dBuV/m		Ü	SA reading dBuV		Remark	ANT High cm	Turn Table deg
1	1500.00	34.27	54.00	-19.73	41.40	-7.13	Average		
2	1500.00				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.

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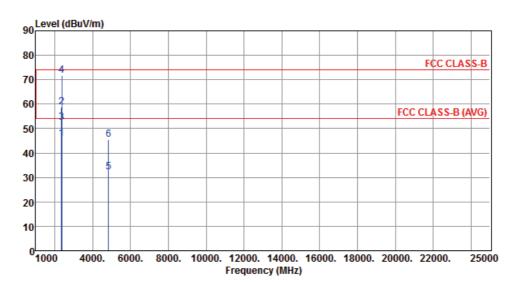


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT40 Test Freq. (MHz) 2422

N_{TX} 2 Polarization H

Report No.: FR441605AC



	Freq.	Emission	Limit	Margin		Factor	Remark	ANT	Turn
		level			reading			High	Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		CM	deg
	2260 00	45.76			40. 57				
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.

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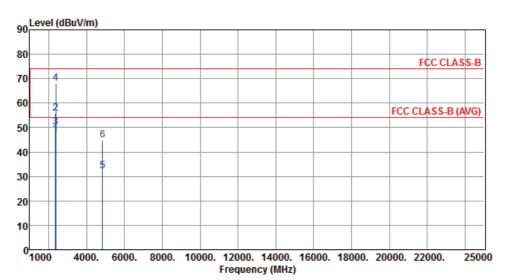


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT40 Test Freq. (MHz) 2422

N_{TX} 2 Polarization V

Report No.: FR441605AC



	Freq. MHz	Emission level dBuV/m		Ū	SA reading dBuV		Remark	ANT High cm	Turn Table deg
1	2360.00	47.18	54.00	-6.82	50.99	-3.81	Average		
2		55.93			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.

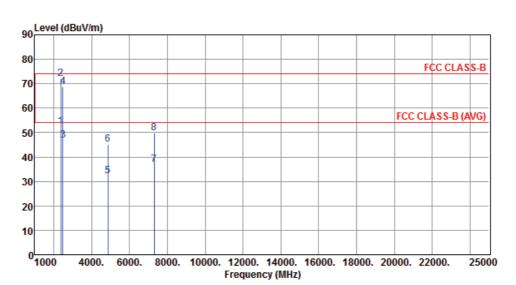
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level.

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Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT40	Test Freq. (MHz)	2437							
N _{TX}	2	Polarization	Н							

Report No.: FR441605AC



	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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.

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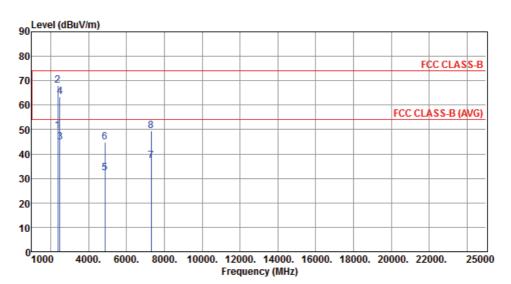


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT40 Test Freq. (MHz) 2437

N_{TX} 2 Polarization V

Report No.: FR441605AC



	Freq.	Emission	Limit	Margin	SA	Factor	Remark	ANT	Turn
		level			reading			High	Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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.

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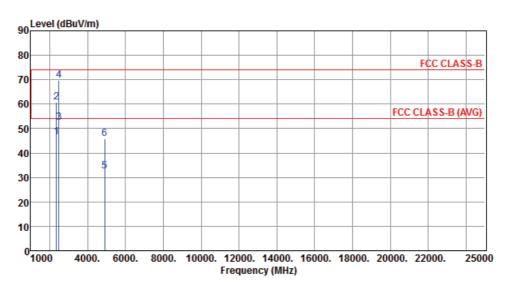


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT40 Test Freq. (MHz) 2452

N_{TX} 2 Polarization H

Report No.: FR441605AC



	Freq. MHz	Emission level dBuV/m		Ū	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	2360.00	46.62	54.00	-/.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.

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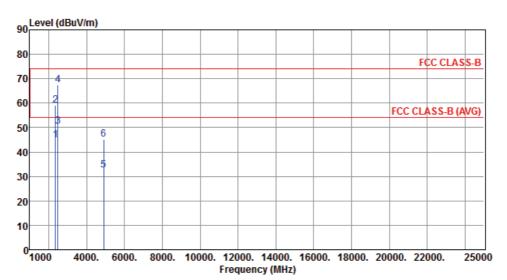


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT40 Test Freq. (MHz) 2452

N_{TX} 2 Polarization V

Report No.: FR441605AC



	Freq. MHz	Emission level dBuV/m			SA reading dBuV		Remark	ANT High cm	Turn Table deg
1	2360.00	44.85	54.00	-9.15	48.66	-3.81	Average		
2	2360.00		74.00		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.

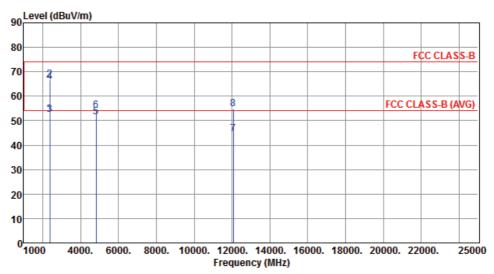
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level.

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Mode 3: External antenna with adapter mode

Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	11b	Test Freq. (MHz)	2412							
N _{TX}	2	Polarization	Н							

Report No.: FR441605AC



	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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		

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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.)

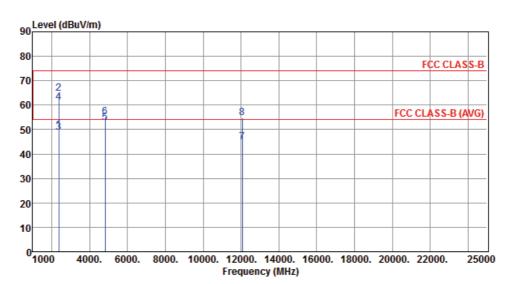
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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.



Report No.: FR441605AC



	Freq.	Emission	Limit	Margin	SA	Factor	Remark	ANT	Turn
		level			reading			High	Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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.

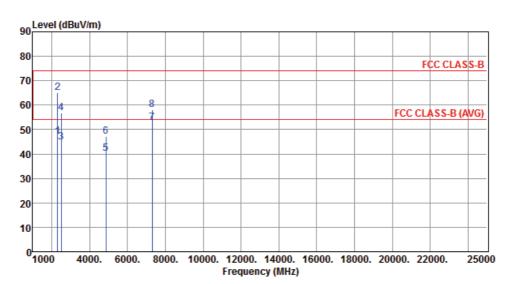
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level.

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Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	11b	Test Freq. (MHz)	2437								
N _{TX}											

Report No.: FR441605AC



	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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.

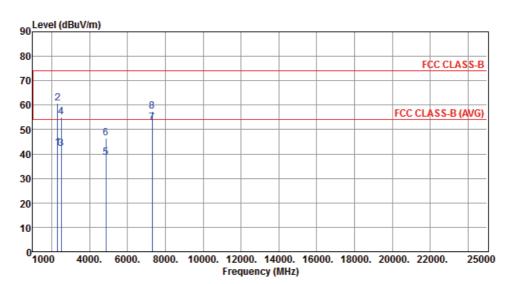
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level.

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Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	11b	Test Freq. (MHz)	2437							
N _{TX}										

Report No.: FR441605AC



	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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.

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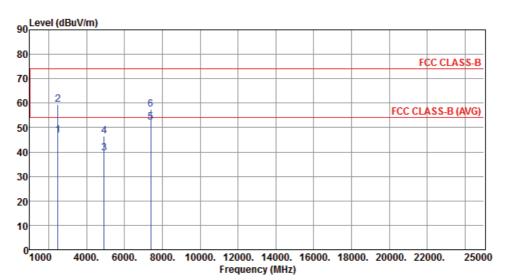


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11b Test Freq. (MHz) 2462

N_{TX} 2 Polarization H

Report No.: FR441605AC



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Ū	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)

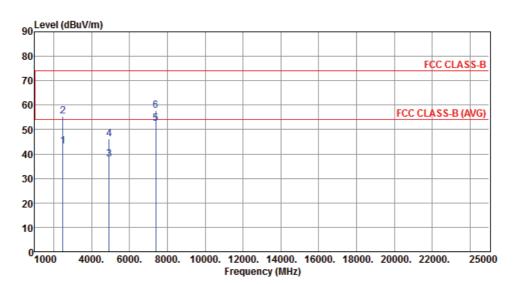
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level.

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TEL: 886-3-3273456 Report Version : Rev. 01



Report No.: FR441605AC



	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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.

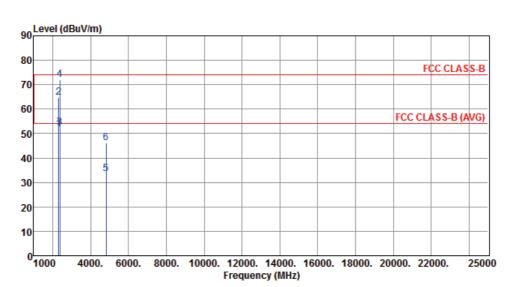
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level.

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

Report No.: FR441605AC



	Freq.	Emission	Limit	Margin	SA	Factor	Remark	ANT	Turn
		level			reading			High	Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	2220 00		<u></u>	2.00		- 2.06	A		
_	2320.00	51.94	54.00	-2.00	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.

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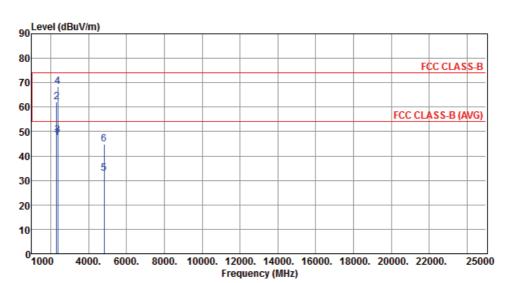


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11g Test Freq. (MHz) 2412

N_{TX} 2 Polarization V

Report No.: FR441605AC



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m		SA reading dBuV		Remark	ANT High cm	Turn Table deg
1	2320.00	47.54	54.00	-6.46	51.50	-3.96	Average		
2	2320.00		74.00		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.

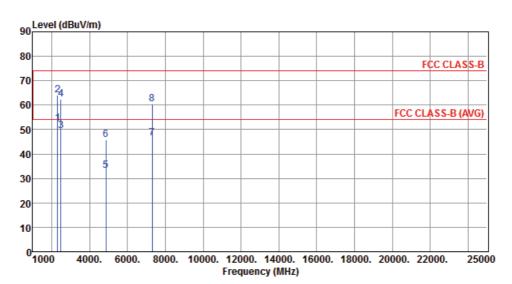
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level.

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Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	11g	Test Freq. (MHz)	2437							
N _{TX}	N Polosiadas II									

Report No.: FR441605AC



	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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.

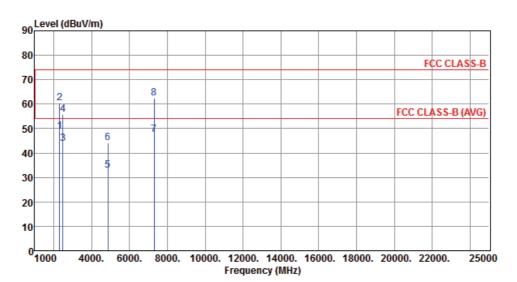
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level.

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

Report No.: FR441605AC



	Freq.	Emission	Limit	Margin	SA	Factor	Remark	ANT	Turn
		level			reading			High	Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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.

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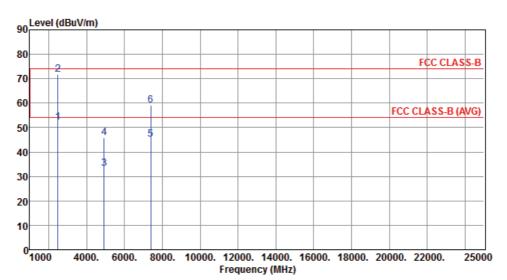


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11g Test Freq. (MHz) 2462

N_{TX} 2 Polarization H

Report No.: FR441605AC



	Freq. MHz	Emission level dBuV/m		Ū	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		71.68			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.

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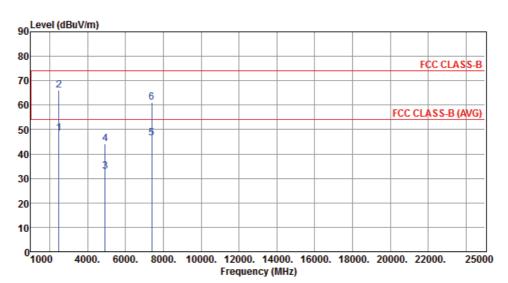


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11g Test Freq. (MHz) 2462

N_{TX} 2 Polarization V

Report No.: FR441605AC



	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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.

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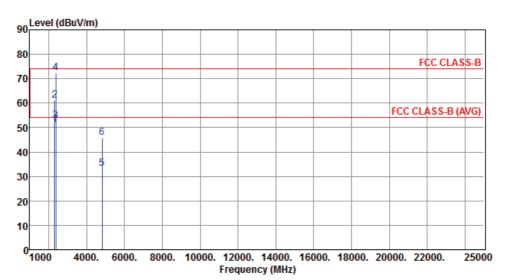


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 2412

N_{TX} 2 Polarization H

Report No.: FR441605AC



	Freq. MHz	Emission level dBuV/m		Ū	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		74.00		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.

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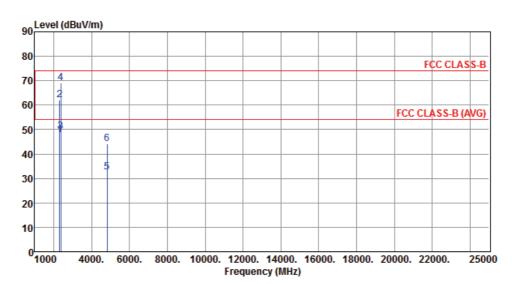


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 2412

N_{TX} 2 Polarization V

Report No.: FR441605AC



	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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.

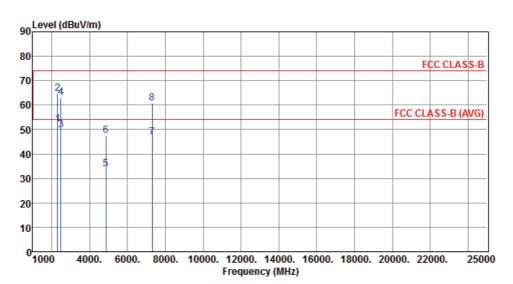
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level.

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

Report No.: FR441605AC



	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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.

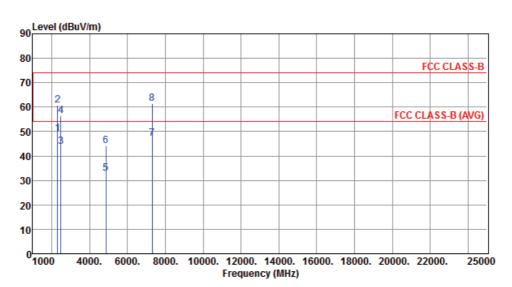
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level.

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

Report No.: FR441605AC



	Freq.	Emission	Limit	Margin	SA	Factor	Remark	ANT	Turn
		level			reading			High	Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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.

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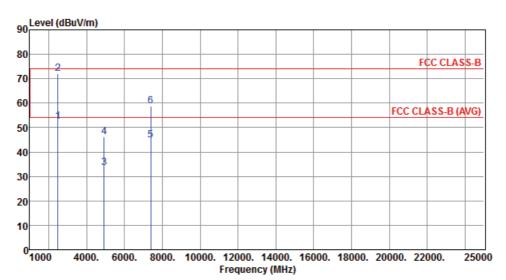


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 2462

N_{TX} 2 Polarization H

Report No.: FR441605AC



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Ū	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.

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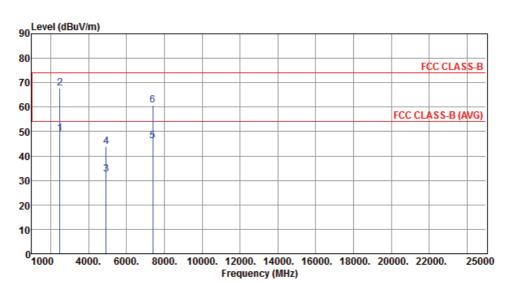


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 2462

N_{TX} 2 Polarization V

Report No.: FR441605AC



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Ū	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				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.

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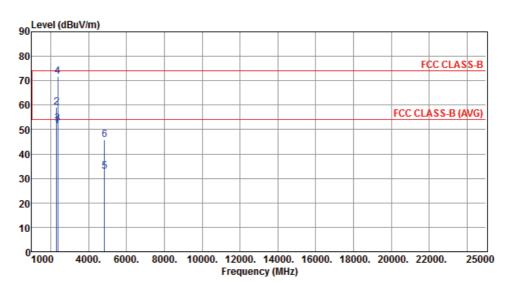


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT40 Test Freq. (MHz) 2422

N_{TX} 2 Polarization H

Report No.: FR441605AC



	Freq. MHz	Emission level		Ū	SA reading dBuV	Factor dB	Remark	ANT High	Turn Table
	МПΖ	dBuV/m	ubuv/m	ub	abuv	ub		CM	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.

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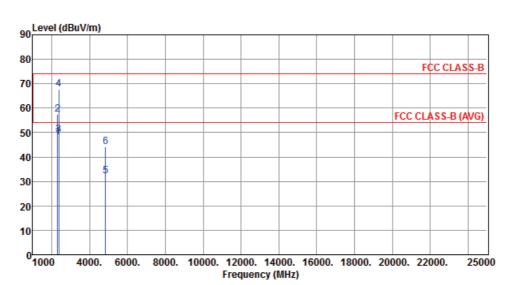


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT40 Test Freq. (MHz) 2422

N_{TX} 2 Polarization V

Report No.: FR441605AC



	Freq. MHz	Emission level dBuV/m		Ū	SA reading dBuV	Factor dB	Remark	ANT High	Turn Table deg
	PHIZ	ubuv/III	ubuv/III	ub	ubuv	ub		CM	ueg
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.

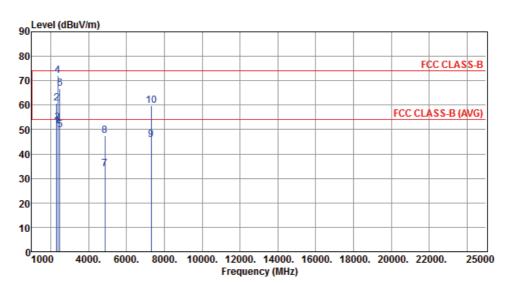
Note 5: For un-restricted bands, unwanted emissions shall be attenuated by at least 20 dB relative to the maximum measured in-band level.

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

Report No.: FR441605AC



	Freq.	Emission	Limit	Margin	SA	Factor	Remark	ANT	Turn
		level			reading			High	Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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		

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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)

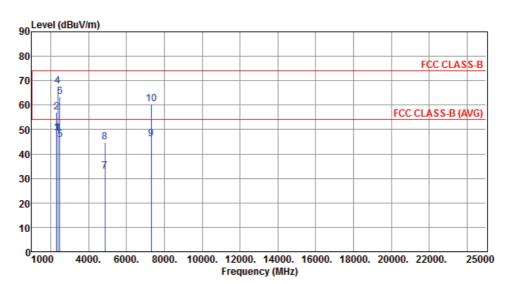
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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	Modulation Mode HT40 Test Freq. (MHz) 2437								
N _{TX} 2 Polarization V									

Report No.: FR441605AC



	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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		

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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.

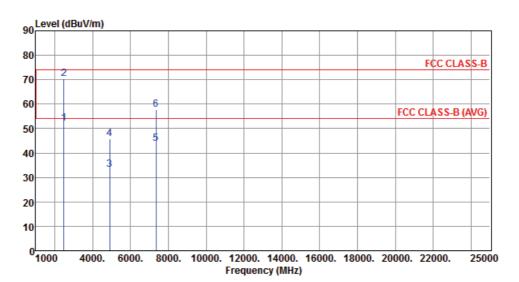


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT40 Test Freq. (MHz) 2452

N_{TX} 2 Polarization H

Report No.: FR441605AC



	Freq.	Emission	Limit	Margin	SA	Factor	Remark	ANT	Turn
		level			reading			High	Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	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.

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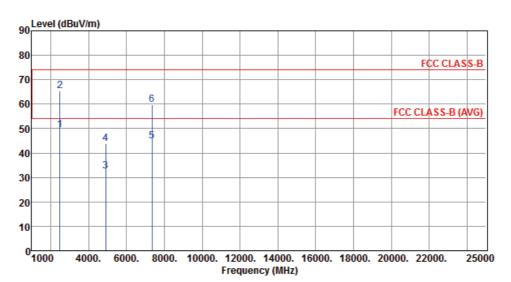


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT40 Test Freq. (MHz) 2452

N_{TX} 2 Polarization V

Report No.: FR441605AC



	Freq.	Emission level	Limit	Margin	SA reading		Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	2/83 50	49.43	54 00	-1 57	52.73	-3.30	Average		
2		65.42			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.

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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 Int	erval of instruments lis	sted above is one year.							

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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.									

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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 Inte	rval of instruments liste	d above is one year.		•				

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