FCC Test Report

s Point AP55
S

Brand Name : Sophos Model No. : AP 55

FCC ID : 2ACTO-AP55

Standard : 47 CFR FCC Part 15.407

Operating Band : 5250 MHz - 5350 MHz

5470 MHz - 5725 MHz

FCC Classification: NII

Applicant : Sophos Ltd

The Pentagon, Abingdon, OX14 3YP, United Kingdom

Manufacturer : Edimax Technology Co., Ltd.

No.3, Wu-Chuan 3rd Road, Wu-Ku Industrial Park,

New Taipei City 24891, Taiwan R.O.C.

Function : ☐ Outdoor AP; ☐ Indoor AP; ☐ Fixed P2P AP

Portable Client

The product sample received on Dec. 27, 2014 and completely tested on Jan. 10, 2015. 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:

Vic Hsiao / Supervisor

Testing Laboratory 1190

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Report Version

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APPENDIX A. TEST PHOTOS

APPENDIX B. PHOTOGRAPHS OF EUT

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Summary of Test Result

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	Conformance Test Specifications					
Report Clause	· I I I I I I I I I I I I I I I I I I I					
1.1.2	15.203	Antenna Requirement	Complied			
3.1	15.207	AC Power-line Conducted Emissions	Complied			
3.2	15.407(a)	Emission Bandwidth	Complied			
3.3	15.407(a)	RF Output Power (Maximum Conducted Output Power)	Complied			
3.4	15.407(a)	Peak Power Spectral Density	Complied			
3.5	15.407(b)	Transmitter Bandedge Emissions	Complied			
3.6	15.407(b)	Transmitter Unwanted Emissions	Complied			
3.7	15.407(g)	Frequency Stability	Complied			

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Revision History

Report No.	Version	Description	Issued Date
FR462324AN	Rev. 01	Initial issue of report	Sep. 25, 2014
FR462324-02AN	Rev. 01	Update information as below: 1. Change Equipment name. 2. Change model name. 3. Change the FCC ID. 4. Change Antenna number to two Antenna.	Jan. 19, 2015
FR462324-03AN	Rev. 01	Update information as below: 1. Add Band 2 and band 3	Feb. 02, 2015

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1 General Description

1.1 Information

1.1.1 RF General Information

RF General Information					
Frequency Range (MHz)	IEEE Std. 802.11	Ch. Freq. (MHz)	Channel Number	Transmit Chains (N _{TX})	RF Output Power (dBm)
5250-5350	а	5260-5320	52-64 [4]	1	20.58
5470-5725		5500-5700	100-140 [8]	1	20.99
5250-5350	n (HT20)	5260-5320	52-64 [4]	2/2	22.49 / 22.37
5470-5725	ac (VHT20)	5500-5700	100-140 [8]	2/2	21.56 / 21.64
5250-5350	n (HT40)	5270-5310	54-62 [2]	2/2	23.25 / 23.78
5470-5725	ac (VHT40)	5510-5670	102-134 [3]	2/2	22.44 / 22.64
5250-5350	ac (VHT80)	5290	58 [1]	2	15.92
5470-5725		5530	106 [1]	2	16.12

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Note 1: RF output power specifies that Maximum Conducted Output Power.

Note 2: 802.11a/n uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.

Note 3: 802.11ac uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.

1.1.2 Antenna Information

	Antenna Category			
\boxtimes	External antenna (antenna permanently attached)			
	☐ Temporary RF connector provided			
	No temporary RF connector provided Transmit chains bypass antenna and soldered temporary RF connector provided for connected measurement. In case of conducted measurements the transmitter shall be connected to the measuring equipment via a suitable attenuator and correct for all losses in the RF path.			

	Antenna General Information					
No.	Ant. Cat.	Ant. Type	Gain (dBi)			
1	Evitornal	Dinala	2.58			
2	External	Dipole	2.58			

Remark:

- 1. 11a only include 1TX and Port1 for emission.
- 2. HT20 and HT40 only include 2TX and Data Rate are MCS0 ~ MCS15.
- 3. VHT20 only include 2TX and Data Rate are MCS0 ~ MCS8.
- 4. VHT40 and VHT80 only include 2TX and Data Rate are MCS0 ~ MCS9.

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1.1.3 Type of EUT

	Identify EUT					
EU.	EUT Serial Number N/A					
Pre	sentation of Equipment	☐ Production ; ☐ P	re-Production; ⊠ Prototy	ре		
		Туре	of EUT			
\boxtimes	Stand-alone					
	Combined (EUT where	e the radio part is fully inte	grated within another device	e)		
	Combined Equipment	- Brand Name / Model No	.:			
	Plug-in radio (EUT inte	ended for a variety of host	systems)			
	Host System - Brand N	Name / Model No.:				
	Other:					
1.1.	.4 Test Signal Du	ty Cycle				
		Operated Mode for	or Worst Duty Cycle			
	Operated normally mo	de for worst duty cycle				
\boxtimes	Operated test mode for	or worst duty cycle				
	Test Signal Duty Cycle (x) Power Duty Factor [dB] – (10 log 1/x)					
\boxtimes	100% - IEEE 802.11a			0		
\boxtimes	100% - IEEE 802.11n	(HT20)		0		
\boxtimes	100% - IEEE 802.11n	(HT40)		0		
\boxtimes	100% - IEEE 802.11a	c (VHT20)		0		
	100% - IEEE 802.11a	c (VHT40)		0		
\boxtimes	100% - IEEE 802.11a	c (VHT80)		0		
1.1.5 EUT Operational Condition						
Sup	oply Voltage		□ DC	System		
Тур	e of DC Source		☐ From Host System			
Tes	st Voltage			∨min (93.5V)		
Tes	t Climatic	☐ Tnom (20°C)	☐ Tmax (50°C)	☐ Tmin (-20°C)		
			-			

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1.1.6 DFS and TPC Information

The DFS Related Operating Mode(s) of the Equipment				
☐ Slave with radar detec	etion			
☐ Slave without radar de	etection			
Software / Firmware Version 9.203-3				
Power-on Cycle. (Master)	Power-on Cycle. (Master) 100.5 sec			
Communication Mode			☐ Frame Based	
IEEE Std. 802.11 Frequency Range (MHz)		TPC (Transmit Power Control)	Active Scan	
a / n (HT20) / ac (VHT20) 🗵 5250-5350		Yes	Yes	
n (HT40) / ac (VHT40)	∑ 5470-5725	Yes	Yes	
ac (VHT80)	5600-5650	-	-	

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1.2 Support Equipment

	Support Equipment - AC Conducted					
No.	Equipment	Brand Name	Model Name	FCC ID		
1	PoE	Bothhand	SA06L48-V	-		
2	Adapter	APD	DA-48T12	-		
3	Notebook (Remote)	DELL	E5530	DoC		
4	HUB (Remote)	DELL	Power Connect 2816	DoC		
5	UTM (Remote)	SOPHOS	UTM110/120	DoC		

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	Support Equipment - RF Conducted					
No.	Equipment	Brand Name	Model Name	FCC ID		
1	Notebook	DELL	E5520	-		

	Support Equipment - Radiated Emission					
No.	Equipment	Brand Name	Model Name	FCC ID		
1	PoE	Bothhand	SA06L48-V	-		
2	Adapter	APD	DA-48T12	-		
3	Notebook (Remote)	DELL	E5530	DoC		
4	HUB (Remote)	DELL	Power Connect 2816	DoC		
5	UTM (Remote)	SOPHOS	UTM110/120	DoC		

1.3 Testing Applied Standards

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

- 47 CFR FCC Part 15
- ANSI C63.10-2009
- FCC KDB 789033 D02 v01
- FCC KDB 644545 D03 v01
- FCC KDB 662911 v02r01
- FCC-14-30A1-UNII

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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	TEL : 886-3-327-3456 FAX : 886-3-327-0973						
Test Condition				Test Site No.	Test Engineer	Test Environment			
AC Conduction				CO04-HY	Zeus	26°C / 39%			
RF Conducted				TH01-HY	22.4°C / 60%				
Radiated Emission				03CH03-HY	Daniel	24.5°C / 58%			

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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)

Measurement Uncertainty				
Test Item		Uncertainty		
AC power-line conducted emissions		±2.3 dB		
Emission bandwidth, 26dB bandwidth		±1.4 %		
RF output power, conducted		±0.6 dB		
Power density, conducted		±0.8 dB		
Unwanted emissions, conducted	9 – 150 kHz	±0.4 dB		
	0.15 – 30 MHz	±0.4 dB		
	30 – 1000 MHz	±0.5 dB		
	1 – 18 GHz	±0.7 dB		
	18 – 40 GHz	±0.8 dB		
	40 – 200 GHz	N/A		
All emissions, radiated	9 – 150 kHz	±2.5 dB		
	0.15 – 30 MHz	±2.3 dB		
	30 – 1000 MHz	±2.6 dB		
	1 – 18 GHz	±3.6 dB		
	18 – 40 GHz	±3.8 dB		
	40 – 200 GHz	N/A		
Temperature		±0.8 °C		
Humidity		±3 %		
DC and low frequency voltages		±3 %		
Time		±1.4 %		
Duty Cycle		±1.4 %		

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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 / MC						
11a	1	6-54Mbps	6 Mbps			
HT20	2	MCS 0-15	MCS 0			
HT40	2	MCS 0-15	MCS 0			
VHT20	2	MCS 0-8	MCS 0			
VHT40	2	MCS 0-9	MCS 0			
VHT80	2	MCS 0-9	MCS 0			

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2.2 The Worst Case Power Setting Parameter

The Worst Case Power Setting Parameter (5250-5350MHz band)								
Test Software Version		DOS Command						
		Test Frequency (MHz)						
Modulation Mode	N _{TX}		NCB: 20MHz		NCB: 40MHz		NCB: 80MHz	
		5260	5300	5320	5270	5310	5290	
11a	1	21	20.5	21	-	-	-	
HT20	2	21	19.5	20	-	-	-	
HT40	2	-	-	-	21	14.5	-	
VHT20	2	19.5	19.5	20	-	-	-	
VHT40	2	-	-	-	21.5	14.5	-	
VHT80	2	-	-	-	-	-	14	

The Worst Case Power Setting Parameter (5470-5725MHz band)								
Test Software Version		DOS Command						
				Tes	t Frequer	ncy (MHz)		
Modulation Mode	N _{TX}	N	NCB: 20MHz			CB: 40MH	NCB: 80MHz	
		5500	5580	5700	5510	5550	5670	5530
11a	1	19	19	20.5	-	-	-	-
HT20	2	17	19	14.5	-	-	-	-
HT40	2	-	-	-	13	20	18	-
VHT20	2	17	19	14.5	-	-	-	-
VHT40	2	-	-	-	13	20	18	-
VHT80	2	-	-	-	-	-	-	14

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2.3 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					
1	EUT with AC power (Transmitter)				
2 EUT with PoE (Transmitter)					
For operating mode 2 is the worst case and it was record in this test report.					

The Worst Case Mode for Following Conformance Tests			
Tests Item RF Output Power, Peak Power Spectral Density, Emission Bandwidth, Peak Excursion, Transmitter Conducted Unwanted Emissions Transmitter Conducted Bandedge Emissions			
Test Condition Conducted measurement at transmit chains			
Modulation Mode	11a, HT20, HT40, VHT20, VHT40, VHT80		

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.				
	EUT will be a hand-held or body-worn battery-powered devices and operating multiple positions.				
Operating Mode < 1GHz	Operating Mode Description				
1	EUT with AC power (Transmitter)				
2	EUT with PoE (Transmitter)				
The operatir	ng mode 1 is the worst case and it was record in this test report.				
Operating Mode > 1GHz	Operating Mode Description				
1	EUT with AC power (Trans	smitter)			
Modulation Mode	11a, HT20, HT40, VHT20, VHT40, VHT80				
	X Plane	Y Plane	Z Plane		
Orthogonal Planes of EUT					
Worst Planes of EUT			V		

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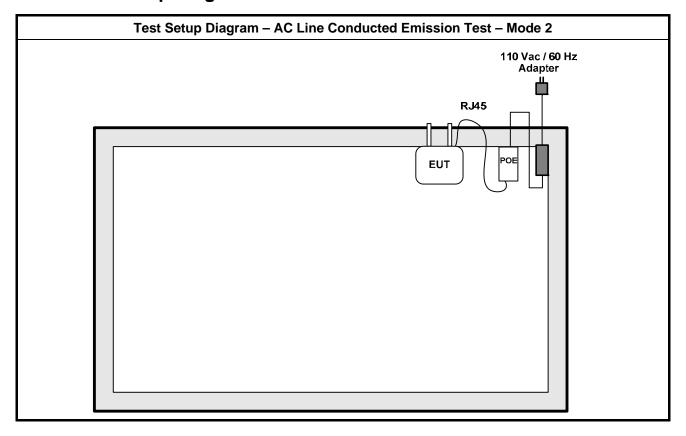
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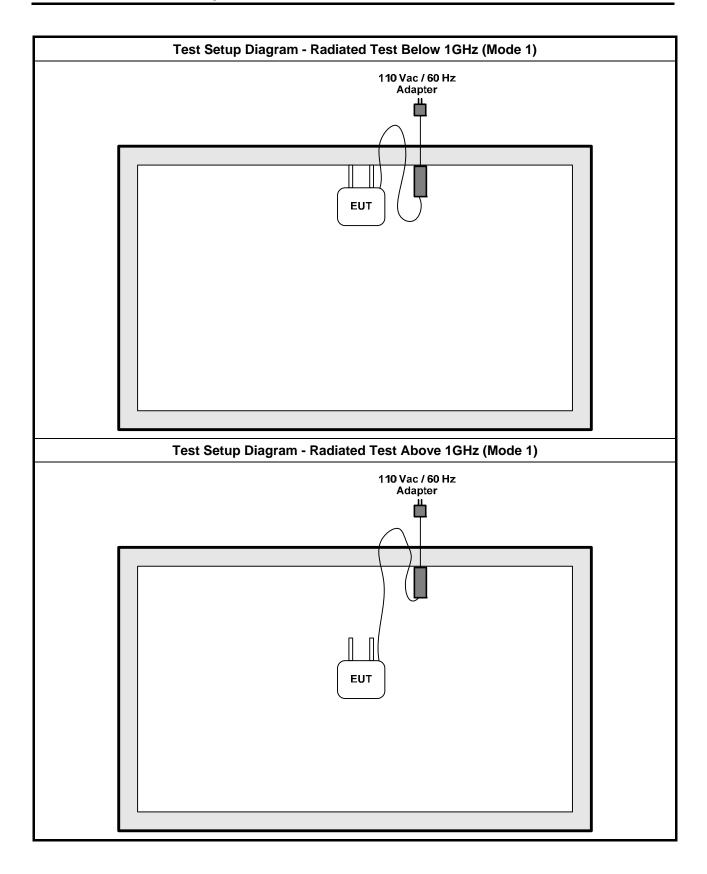
Test Setup Diagram 2.4



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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

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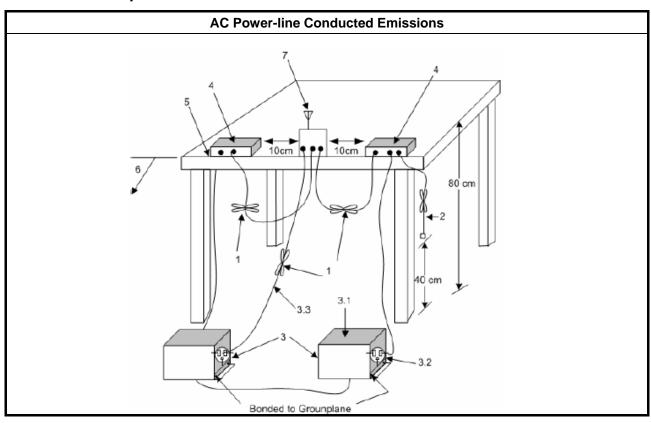
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

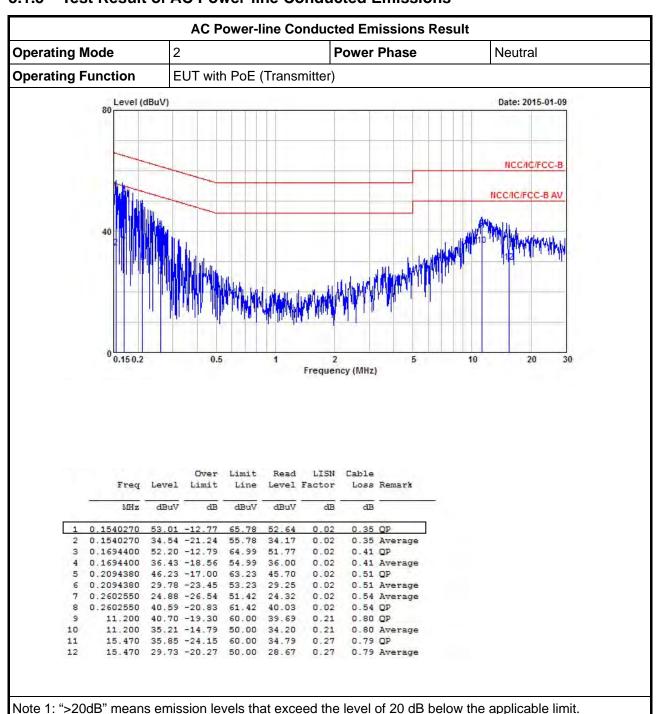
	Test Method
\boxtimes	Refer as ANSI C63.10-2009, clause 6.2 for AC power-line conducted emissions.

3.1.4 Test Setup



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3.1.5 Test Result of AC Power-line Conducted Emissions



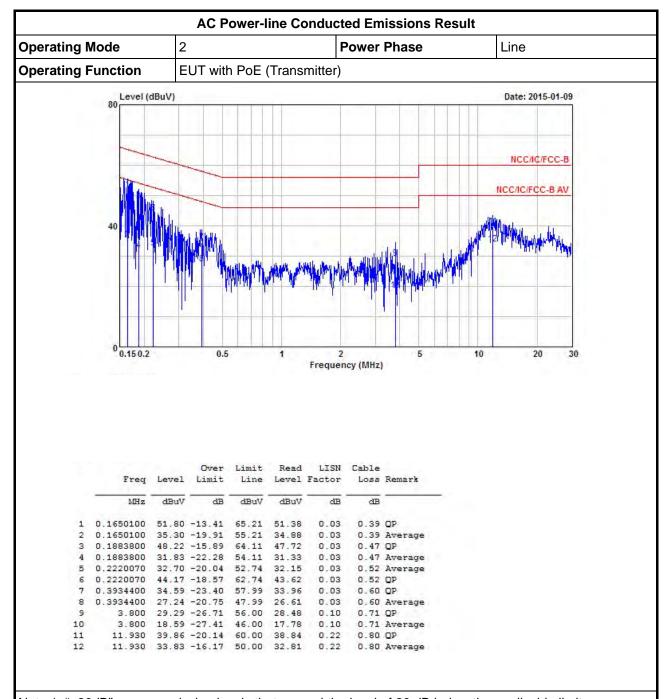
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Note 1. >2000 Theat's ethission levels that exceed the level of 20 ub below the applicable lithit.

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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3.2 Emission Bandwidth

3.2.1 Emission Bandwidth Limit

	Emission Bandwidth Limit				
UN	JNII Devices				
	For the 5.15-5.25 GHz band, N/A				
\boxtimes	For the 5.25-5.35 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.				
\boxtimes	For the 5.47-5.725 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.				
	For the 5.725-5.85 GHz band, 6 dB emission bandwidth ≥ 500kHz.				

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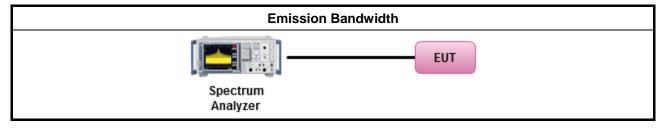
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

		Test Method
\boxtimes	For	the emission bandwidth shall be measured using one of the options below:
	\boxtimes	Refer as FCC KDB 789033 D02 v01, clause C for EBW and clause D for OBW measurement.
		Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.
		Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.
\boxtimes	For	conducted measurement.
	\boxtimes	The EUT supports single transmit chain and measurements performed on this transmit chain port 1.
		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

Condit	tion		Emission Bandwidth (MHz)				
		From	99% Ba	ndwidth	26dB Ba	ndwidth	
Modulation Mode	N _{TX}	Freq. (MHz)	Chain Port 1	Chain Port 2	Chain Port 1	Chain Port 2	
11a	1	5260	16.59	-	24.72	-	
11a	1	5300	16.59	-	23.15	-	
11a	1	5320	16.64	-	23.15	-	
HT20	2	5260	17.69	17.71	20.57	20.72	
HT20	2	5300	17.74	17.74	21.75	21.42	
HT20	2	5320	17.84	17.81	21.25	21.87	
HT40	2	5270	36.58	36.70	41.48	41.84	
HT40	2	5310	37.14	36.86	45.96	44.44	
VHT20	2	5260	17.96	17.74	21.22	21.40	
VHT20	2	5300	17.76	17.99	21.80	21.40	
VHT20	2	5320	18.04	17.96	21.60	21.40	
VHT40	2	5270	36.46	36.62	42.36	42.96	
VHT40	2	5310	36.46	36.46	40.68	40.64	
VHT80	2	5290	75.64	75.56	81.84	81.36	
Resu	ılt			Com	plied		

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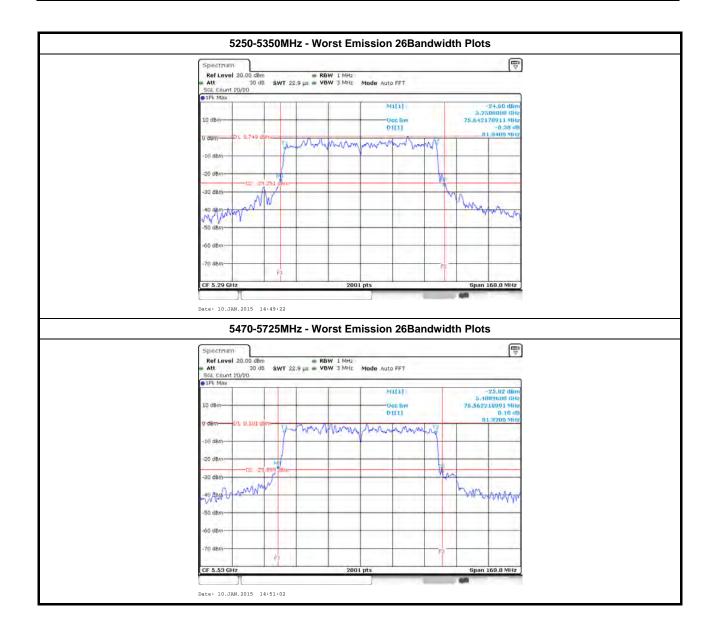
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Condit	ion		Emission Bandwidth (MHz)				
		F=0.4	99% Ba	ndwidth	26dB Ba	ndwidth	
Modulation Mode	N _{TX}	Freq. (MHz)	Chain Port 1	Chain Port 2	Chain Port 1	Chain Port 2	
11a	1	5500	16.71	-	20.75	-	
11a	1	5580	16.56	-	20.52	-	
11a	1	5700	16.49	-	21.30	-	
HT20	2	5500	17.79	17.79	21.67	21.35	
HT20	2	5580	17.71	17.71	20.95	20.12	
HT20	2	5700	17.86	17.76	21.65	21.25	
HT40	2	5510	36.50	36.26	41.88	41.04	
HT40	2	5550	36.46	36.46	41.60	41.12	
HT40	2	5670	36.58	36.78	43.24	43.40	
VHT20	2	5500	17.84	17.91	21.80	21.27	
VHT20	2	5580	17.66	17.76	20.67	20.95	
VHT20	2	5700	17.76	17.84	21.35	21.40	
VHT40	2	5510	36.70	36.70	42.04	42.44	
VHT40	2	5550	36.74	36.54	42.12	42.92	
VHT40	2	5670	36.70	36.62	42.08	42.36	
VHT80	2	5530	75.56	75.56	81.92	81.04	

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3.3 RF Output Power

3.3.1 RF Output Power Limit

	Maximum Conducted Output Power Limit
UNI	Il Devices
	For the 5.15-5.25 GHz band:
	Outdoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then P_{Out} = 30 - (G_{TX} - 6). e.i.r.p. at any elevation angle above 30 degrees \leq 125mW [21dBm]
	Indoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$
	Point-to-point AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W If $G_{TX} > 23$ dBi, then $P_{Out} = 30 - (G_{TX} - 23)$.
	Mobile or Portable Client: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.
\boxtimes	For the 5.25-5.35 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.
\boxtimes	For the 5.47-5.725 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.
	For the 5.725-5.85 GHz band:
	Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$.
	Point-to-point systems (P2P): the maximum conducted output power (P _{Out}) shall not exceed the lesser of 1 W.
	t = maximum conducted output power in dBm, = the maximum transmitting antenna directional gain in dBi.

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3.3.2 Measuring Instruments

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

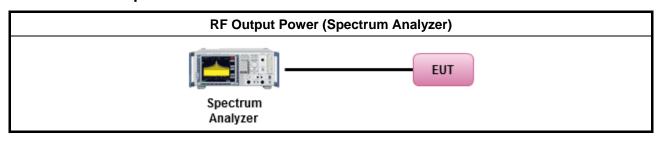
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3.3.3 Test Procedures

		Test Method
	Max	rimum Conducted Output Power
	[dut	y cycle ≥ 98% or external video / power trigger]
	\boxtimes	Refer as FCC KDB 789033 D02 v01, clause E Method SA-1 (spectral trace averaging).
		Refer as FCC KDB 789033 D02 v01, clause E Method SA-1 Alt. (RMS detection with slow sweep speed)
	duty	cycle < 98% and average over on/off periods with duty factor
		Refer as FCC KDB 789033 D02 v01, clause E Method SA-2 (spectral trace averaging).
		Refer as FCC KDB 789033 D02 v01, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wid	eband RF power meter and average over on/off periods with duty factor
		Refer as FCC KDB 789033 D02 v01, clause E Method PM (using an RF average power meter).
\boxtimes	For	conducted measurement.
		The EUT supports single transmit chain and measurements performed on this transmit chain port 1.
		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: 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

	Directional Gain (DG) Result						
Transmit Chai	ns No.	1	2	-	-		
Maximum G _{AN}	r (dBi)	2.58	2.58	-	-		
Modulation Mode	DG (dBi) (See the Note 3)	N _{TX}	N _{ss} (Min.)	STBC	Array Gain (dB)		
11a	2.58	1	1	-	-		
HT20	5.59	2	1/2	-	3.01		
HT40	5.59	2	1/2	-	3.01		
VHT20	5.59	2	1/2	-	3.01		
VHT40	5.59	2	1/2	-	3.01		
VHT80	5.59	2	1/2	-	3.01		

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- Note 1: For all transmitter outputs with equal antenna gains, directional gain is to be computed as follows: Any transmit signals are correlated, Directional Gain = G_{ANT} + 10 log(N_{TX}) All transmit signals are completely uncorrelated, Directional Gain = G_{ANT}
- Note 2: For all transmitter outputs with unequal antenna gains, directional gain is to be computed as follows: Any transmit signals are correlated, Directional Gain = 10 log[(10^{G1/20} +... + 10^{GN/20})² /N_{TX}] All transmit signals are completely uncorrelated, Directional Gain = 10 log[(10^{G1/10} +... + 10^{GN/10)}/N_{TX}]

Note 3: For Spatial Multiplexing, Directional Gain (DG) = G_{ANT} + 10 log(N_{TX}/N_{SS}), where Nss = the number of independent spatial streams data.

Note 4: For CDD transmissions, directional gain is calculated as power measurements: Directional Gain (DG) = G_{ANT} + Array Gain, where Array Gain is as follows: Array Gain = 0 dB (i.e., no array gain) for $N_{TX} \le 4$;

Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{TX}

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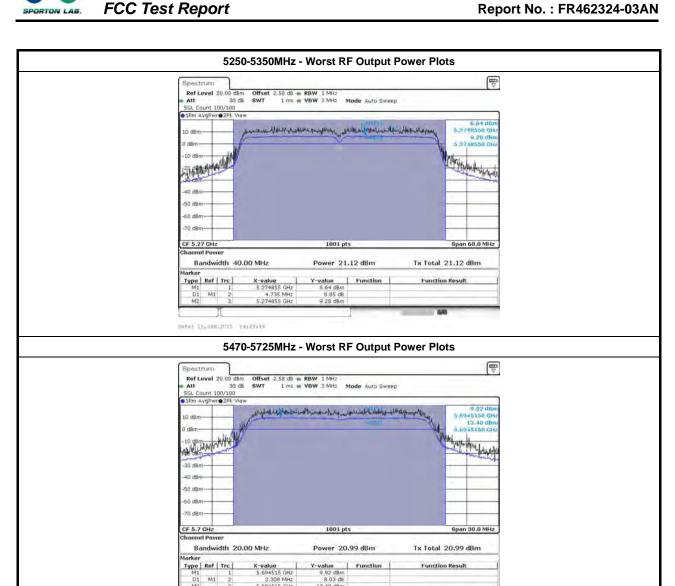
3.3.6 Test Result of Maximum Conducted Output Power

Maximum Conducted Output Power (5250-5350MHz band)							
		F	С	output Power (dBi	m)	Antonno Coin	
Modulation Mode	N _{TX}	Freq. (MHz)	Chain Port 1	Chain Port 2	Sum Chain	Antenna Gain (dBi)	Power Limit
11a	1	5260	20.58	-	20.58	2.58	24.00
11a	1	5300	20.10	-	20.10	2.58	24.00
11a	1	5320	20.33	-	20.33	2.58	24.00
HT20	2	5260	18.41	18.86	21.65	5.59	24.00
HT20	2	5300	18.84	19.19	22.03	5.59	24.00
HT20	2	5320	19.34	19.61	22.49	5.59	24.00
HT40	2	5270	19.95	20.52	23.25	5.59	24.00
HT40	2	5310	13.41	13.85	16.65	5.59	24.00
VHT20	2	5260	19.13	19.58	22.37	5.59	24.00
VHT20	2	5300	19.18	19.29	22.25	5.59	24.00
VHT20	2	5320	18.71	19.19	21.97	5.59	24.00
VHT40	2	5270	20.39	21.12	23.78	5.59	24.00
VHT40	2	5310	13.45	13.89	16.69	5.59	24.00
VHT80	2	5290	12.61	13.19	15.92	5.59	24.00
Resu	ılt			•	Complied	•	

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	Maximum Conducted Output Power (5470-5725MHz band)							
		F	C	Output Power (dB	m)	A		
Modulation Mode	N _{TX}	Freq. (MHz)	Chain Port 1	Sum Chain		- Antenna Gain (dBi)	Power Limit	
11a	1	5500	18.50	-	18.50	2.58	24.00	
11a	1	5580	18.67	-	18.67	2.58	24.00	
11a	1	5700	20.99	-	20.99	2.58	24.00	
HT20	2	5500	16.55	16.54	19.56	5.59	24.00	
HT20	2	5580	18.80	18.29	21.56	5.59	24.00	
HT20	2	5700	14.67	14.39	17.54	5.59	24.00	
HT40	2	5510	12.34	12.29	15.33	5.59	24.00	
HT40	2	5550	19.41	19.45	22.44	5.59	24.00	
HT40	2	5670	17.75	17.74	20.76	5.59	24.00	
VHT20	2	5500	16.64	16.56	19.61	5.59	24.00	
VHT20	2	5580	18.88	18.37	21.64	5.59	24.00	
VHT20	2	5700	14.67	14.47	17.58	5.59	24.00	
VHT40	2	5510	12.45	12.63	15.55	5.59	24.00	
VHT40	2	5550	19.54	19.71	22.64	5.59	24.00	
VHT40,	2	5670	17.77	17.94	20.87	5.59	24.00	
VHT80	2	5530	13.04	13.18	16.12	5.59	24.00	
Resi	ult				Complied	•		

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3.4 Peak Power Spectral Density

3.4.1 Peak Power Spectral Density Limit

		Peak Power Spectral Density Limit
UNI	I Dev	rices
	For t	the 5.15-5.25 GHz band:
		Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$.
		Indoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$.
		Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 23$ dBi, then $P_{Out} = 17 - (G_{TX} - 23)$.
		Mobile or Portable Client: the peak power spectral density (PPSD) \leq 11 dBm/MHz. If $G_{TX} > 6$ dBi, then PPSD= 11 – $(G_{TX} - 6)$
\boxtimes		the 5.25-5.35 GHz band, the peak power spectral density (PPSD) \leq 11 dBm/MHz. If $G_{TX} > 6$ dBi, PPSD= 11 – ($G_{TX} - 6$).
\boxtimes		the 5.47-5.725 GHz band, the peak power spectral density (PPSD) \leq 11 dBm/MHz. If $G_{TX} > 6$ dBi, PPSD= 11 – ($G_{TX} - 6$).
	Fort	the 5.725-5.85 GHz band:
		Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) \leq 30 dBm/500kHz. If $G_{TX} > 6$ dBi, then PPSD= $30 - (G_{TX} - 6)$.
		Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
pow	er sh	peak power spectral density that he same method as used to determine the conducted output leall be used to determine the power spectral density. And power spectral density in dBm/MHz amaximum transmitting antenna directional gain in dBi.

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3.4.2 Measuring Instruments

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

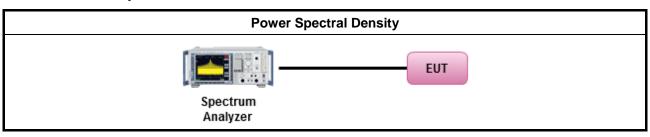
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3.4.3 Test Procedures

		Test Method
\boxtimes	outp func	s power spectral density procedures that the same method as used to determine the conducted out power shall be used to determine the peak power spectral density and use the peak search cition on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density be measured using below options:
	\boxtimes	Refer as FCC KDB 789033 D02 v01, F)5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth
	[duty	cycle ≥ 98% or external video / power trigger]
	\boxtimes	Refer as FCC KDB 789033 D02 v01, clause E Method SA-1 (spectral trace averaging).
		Refer as FCC KDB 789033 D02 v01, clause E Method SA-1 Alt. (RMS detection with slow sweep speed)
	duty	cycle < 98% and average over on/off periods with duty factor
		Refer as FCC KDB 789033 D02 v01, clause E Method SA-2 (spectral trace averaging).
		Refer as FCC KDB 789033 D02 v01, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
\boxtimes	For	conducted measurement.
	\boxtimes	The EUT supports single transmit chain and measurements performed on this transmit chain port 1.
		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 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.
		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.
		If multiple transmit chains, EIRP PPSD calculation could be following as methods: $ PPSD_{total} = PPSD_1 + PPSD_2 + \ldots + PPSD_n \\ (calculated in linear unit [mW] and transfer to log unit [dBm]) \\ EIRP_{total} = PPSD_{total} + DG $
		Each individually PPSD plots refer as test report clause 3.3.5 with each individually PPSD plots.

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3.4.4 Test Setup



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3.4.5 Test Result of Peak Power Spectral Density

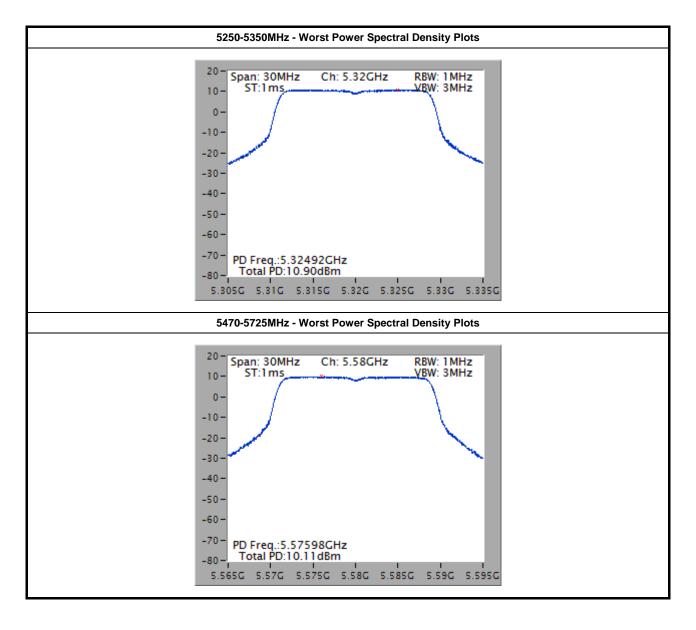
	Peak Power Spectral Density Result (5250-5350MHz band)						
Modulation Mode	N _{TX}	Freq. (MHz)	Peak Power Spectral Density (dBm/1MHz)	PSD Limit	Antenna Gain (dBi)		
11a	1	5260	9.49	11.00	2.58		
11a	1	5300	9.00	11.00	2.58		
11a	1	5320	9.25	11.00	2.58		
HT20	2	5260	10.28	11.00	5.59		
HT20	2	5300	10.52	11.00	5.59		
HT20	2	5320	10.90	11.00	5.59		
HT40	2	5270	8.61	11.00	5.59		
HT40	2	5310	2.01	11.00	5.59		
VHT20	2	5260	10.85	11.00	5.59		
VHT20	2	5300	10.71	11.00	5.59		
VHT20	2	5320	10.47	11.00	5.59		
VHT40	2	5270	9.25	11.00	5.59		
VHT40	2	5310	2.03	11.00	5.59		
VHT80	2	5290	-1.67	11.00	5.59		
Resu	ılt			Complied			

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		Peak P	ower Spectral Density Result (5470-5725MHz band)	
Modulation Mode	N _{TX}	Freq. (MHz)	Peak Power Spectral Density (dBm/1MHz)	PSD Limit	Antenna Gain (dBi)
11a	1	5500	7.42	11.00	2.58
11a	1	5580	7.52	11.00	2.58
11a	1	5700	9.92	11.00	2.58
HT20	2	5500	8.18	11.00	5.59
HT20	2	5580	10.11	11.00	5.59
HT20	2	5700	6.12	11.00	5.59
HT40	2	5510	0.70	11.00	5.59
HT40	2	5550	7.93	11.00	5.59
HT40	2	5670	6.18	11.00	5.59
VHT20	2	5500	8.16	11.00	5.59
VHT20	2	5580	10.09	11.00	5.59
VHT20	2	5700	6.04	11.00	5.59
VHT40	2	5510	0.94	11.00	5.59
VHT40	2	5550	8.25	11.00	5.59
VHT40	2	5670	6.33	11.00	5.59
VHT80	2	5530	-1.16	11.00	5.59
Resu	ılt		•	Complied	

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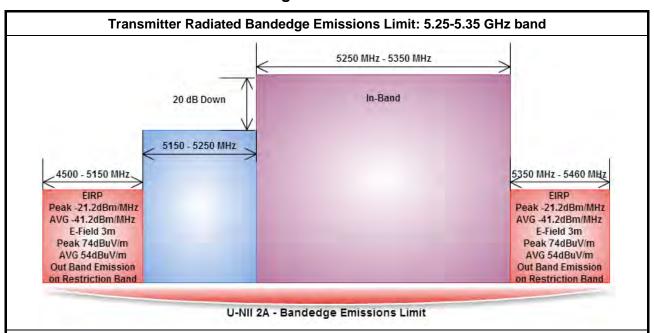




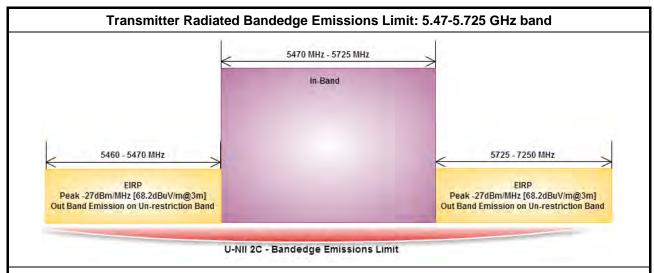
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3.5 Transmitter Bandedge Emissions

3.5.1 **Transmitter Radiated Bandedge Emissions Limit**



Refer as FCC KDB 789033 D02 v01, G)2)c)(i) specifying that if a non-restricted-band out-of-band emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm or -17 dBm peak emission limit. Reason for change: to ensure that emission requirements in the non-restricted bands are not more stringent than those in the restricted bands.



Refer as FCC KDB 789033 D02 v01, G)2)c)(i) specifying that if a non-restricted-band out-of-band emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm or -17 dBm peak emission limit. Reason for change: to ensure that emission requirements in the non-restricted bands are not more stringent than those in the restricted bands.

3.5.2 **Measuring Instruments**

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

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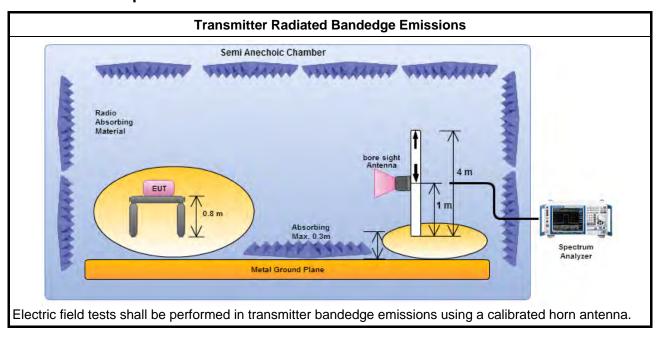
3.5.3 Test Procedures

		Test Method
	The	average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].
\boxtimes		er as ANSI C63.10, clause 6.9.2.2 bandedge testing shall be performed at the lowest frequency nnel and highest frequency channel within the allowed operating band.
	chan will c at lo	UT operate in adjacent contiguous bands, bandedge testing performed at the lowest frequency need at lower-band and highest frequency channel at higher-band. Transmitter in-band emissions consist of adjacent contiguous bands (e.g., IEEE 802.11ac VHT160 The lowest frequency channel ower-band and highest frequency channel at higher-band in-band emissions will consist of two identication contiguous bands.)
		Operating in 5.15-5.25 GHz band (lower-band) and 5.25-5.35 GHz band (higher-band).
		Operating in 5.47-5.725 GHz band (lower-band) and 5.725-5.85 GHz band (higher-band).
	chan	JT operate in individual non-contiguous bands, bandedge testing performed at the lowest frequency neel and highest frequency channel within lower-band and higher-band. (e.g., (e.g., IEEE 802.11ac 160)
		Operating in 5.25-5.35 GHz band (lower-band) and 5.47-5.725 GHz band (higher-band).
		Operating in 5.15-5.25 GHz band (lower-band) and 5.725-5.85 GHz band (higher-band).
	For t	the transmitter unwanted emissions shall be measured using following options below:
	\boxtimes	Refer as FCC KDB 789033 D02 v01, clause H)2) for unwanted emissions into non-restricted bands.
		Refer as FCC KDB 789033 D02 v01, clause H)1) for unwanted emissions into restricted bands.
		Refer as FCC KDB 789033 D02 v01, H)6) Method AD (Trace Averaging).
		Refer as FCC KDB 789033 D02 v01, H)6) Method VB (Reduced VBW).
		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 789033 D02 v01, clause H)5) measurement procedure peak limit.
		Refer as ANSI C63.10, clause 4.2.3.2.2 measurement procedure peak limit.
\boxtimes	For t	the transmitter bandedge emissions shall be measured using following options below:
		Refer as FCC KDB 789033 D02 v01, clause H)3)d) for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).
		Refer as ANSI C63.10, clause 6.9.2 for band-edge testing.
		Refer as ANSI C63.10, clause 6.9.3 for marker-delta method for band-edge measurements.
	For r	radiated measurement, refer as ANSI C63.10, clause 6.6. Test distance is 3m.
	perfo equip extra dista meas	issurements 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 ipment. When performing measurements at a distance other than that specified, the results shall be appolated 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). Measurements in the bandedge are typically made at a closer distance 3m, because instrumentation noise floor is typically close to the radiated emission limit.

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3.5.4 Test Setup



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3.5.5 Transmitter Radiated Bandedge Emissions (with Antenna)

Modulation Mode	N _{TX}	Freq. (MHz)	Measure Distance (m)	Freq. (MHz) PK	Level (dBuV/m) PK	Limit (dBuV/m) PK	Freq. (MHz) AV	Level (dBuV/m) AV	Limit (dBuV/m) AV	Pol.
11a	1	5260	3	5388.60	59.71	74	5388.00	46.61	54	V
11a	1	5320	3	5350.88	68.55	74	5350.04	52.78	54	V
HT20	2	5260	3	5384.40	60.27	74	5395.80	47.11	54	V
HT20	2	5320	3	5350.60	68.21	74	5350.74	52.96	54	V
HT40	2	5270	3	5351.40	62.94	74	5351.40	49.15	54	V
HT40	2	5310	3	5350.30	67.62	74	5350.03	52.73	54	V
VHT20	2	5260	3	5350.20	60.26	74	5394.00	47.24	54	V
VHT20	2	5320	3	5352.70	68.37	74	5351.16	52.80	54	V
VHT40	2	5270	3	5350.80	63.83	74	5352.00	49.25	54	V
VHT40	2	5310	3	5351.02	68.85	74	5350.00	52.75	54	V
VHT80	2	5290	3	5107.80	59.12	74	5122.80	45.11	54	V
VHT80	2	5290	3	5353.80	69.20	74	5353.80	52.92	54	V

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				_	l		_			
Modulation Mode	N _{TX}	Freq. (MHz)	Measure Distance (m)	Freq. (MHz) PK	Level (dBuV/m) PK	Limit (dBuV/m) PK	Freq. (MHz) AV	Level (dBuV/m) AV	Limit (dBuV/m) AV	Pol.
11a	1	5500	3	5468.56	66.88	68.2	5460.00	48.08	54	V
11a	1	5700	3	5725.28	66.60	68.2	-	-	-	V
HT20	2	5500	3	5470.00	66.38	68.2	5430.96	47.72	54	V
HT20	2	5700	3	5725.40	66.75	68.2	-	-	-	V
HT40	2	5510	3	5469.80	66.40	68.2	5457.60	46.68	54	V
HT40	2	5670	3	5727.00	67.00	68.2	-	-	-	V
VHT20	2	5500	3	5469.68	67.04	68.2	5437.52	47.77	54	V
VHT20	2	5700	3	5725.16	66.68	68.2	-	-	-	V
VHT40	2	5510	3	5469.70	66.93	68.2	5454.60	46.62	54	V
VHT40	2	5670	3	5726.20	66.92	68.2	-	-	-	V
VHT80	2	5530	3	5461.36	67.16	68.2	5459.76	52.33	54	V
VHT80	2	5530	3	5742.96	59.18	68.2	-	-	-	V

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3.6 Transmitter Unwanted Emissions

3.6.1 Transmitter Radiated Unwanted Emissions Limit

Unwanted emissions below 1 GHz and restricted band emissions above 1GHz 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 above 1GHz Limit				
Operating Band	Limit			
5.15 - 5.25 GHz	e.i.r.p27 dBm [68.2 dBuV/m@3m]			
5.25 - 5.35 GHz	e.i.r.p27 dBm [68.2 dBuV/m@3m]			
5.47 - 5.725 GHz	e.i.r.p27 dBm [68.2 dBuV/m@3m]			
5.725 - 5.85 GHz	5.715 5.725 GHz: e.i.r.p17 dBm [78.2 dBuV/m@3m] 5.85 5.86 GHz: e.i.r.p17 dBm [78.2 dBuV/m@3m] Other un-restricted band: e.i.r.p27 dBm [68.2 dBuV/m@3m]			

Note 1: 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).

3.6.2 Measuring Instruments

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

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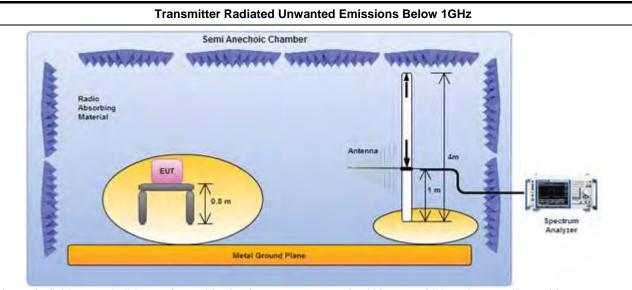
FCC Test Report Report No.: FR462324-03AN

3.6.3 Test Procedures

		i est method
	perfe equi abov are be e dista	asurements may be performed at a distance other than the limit distance provided they are not ormed in the near field and the emissions to be measured can be detected by the measurement ipment. Measurements shall not be performed at a distance greater than 30 m for frequencies we 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less impractical. When performing measurements at a distance other than that specified, the results shall extrapolated 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 asurements).
	The	average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].
	For	the transmitter unwanted emissions shall be measured using following options below:
		Refer as FCC KDB 789033 D02 v01, clause G)2) for unwanted emissions into non-restricted bands.
		Refer as FCC KDB 789033 D02 v01, clause G)1) for unwanted emissions into restricted bands.
		Refer as FCC KDB 789033 D02 v01, G)6) Method AD (Trace Averaging).
		Refer as FCC KDB 789033 D02 v01, G)6) Method VB (Reduced VBW).
		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 789033 D02 v01, clause G)5) measurement procedure peak limit.
		Refer as ANSI C63.10, clause 4.2.3.2.2 measurement procedure peak limit.
\boxtimes	For	radiated measurement.
	\boxtimes	Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.
	\boxtimes	Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.
	\boxtimes	Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz. For 1 GHz to 40 GHz, test distance is 3m.
\boxtimes	The	any unwanted emissions level shall not exceed the fundamental emission level.
\boxtimes		amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value no need to be reported.

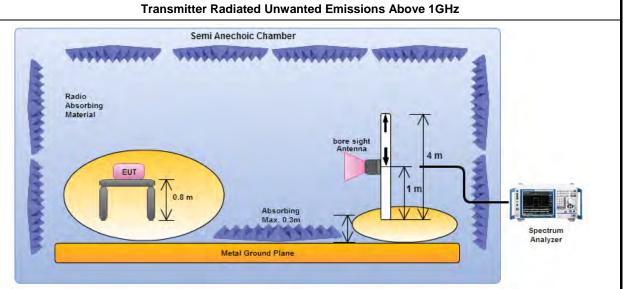
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3.6.4 Test Setup



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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.



Electric field tests shall be performed in the frequency range of 1 GHz to 10th harmonic of highest fundamental frequency or 40 GHz using a calibrated horn antenna.

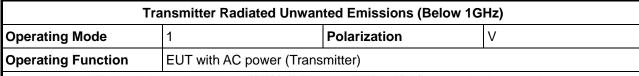
3.6.5 Transmitter Radiated Unwanted Emissions-with Antenna (Below 30MHz)

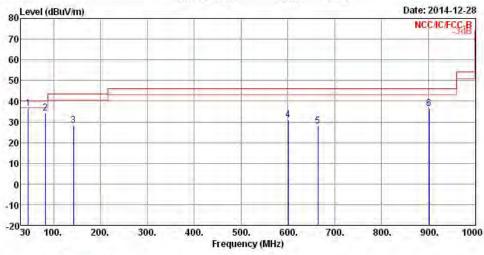
All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

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3.6.6 Transmitter Radiated Unwanted Emissions (Below 1GHz)





	Freq	Level	0∨er Limit	0.000		Antenna Factor		Preamp Factor	Remark	A/Pos	T/Pos
-		dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	_		deg
1	45.520	36.52	-3.48	40.00	52.83	9.96	1.09	27.36	Peak	1224	224
2	82.380	34.34	-5.66	40.00	52.69	7.56	1.47	27.38	Peak		****
3	142.520	28.33	-15.17	43.50	42.53	10.98	1.98	27.16	Peak	222	
4	600.360	30.89	-15.11	46.00	36.04	18.46	4.15	27.76	Peak		1777
5	664.380	27.95	-18.05	46.00	32.56	18.76	4.41	27.78	Peak	1224	224
6	901.060	36.63	-9.37	46.00	38.20	20.53	5.19	27.29	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.)

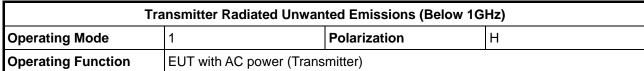
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical).

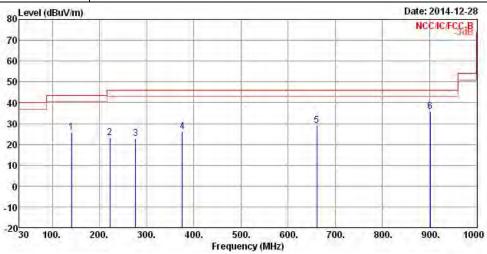
Note 4: No level of unwanted emissions exceeds the level of the fundamental emission.

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			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	140.580	25.81	-17.69	43.50	39.83	11.18	1.97	27.17	Peak	+++	
2	222.060	23.19	-22.81	46.00	38.01	9.76	2.45	27.03	Peak		444
3	276.380	22.71	-23.29	46.00	33.87	12.87	2.76	26.79	Peak		
4	375.320	26.01	-19.99	46.00	35.13	14.81	3.23	27.16	Peak	1444	224
5	660.500	29.06	-16.94	46.00	33.66	18.79	4.39	27.78	Peak	555	
6	901.060	35.89	-10.11	46.00	37.46	20.53	5.19	27.29	Peak		444

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.)

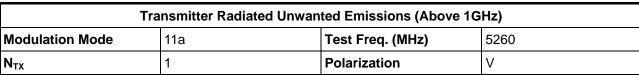
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical).

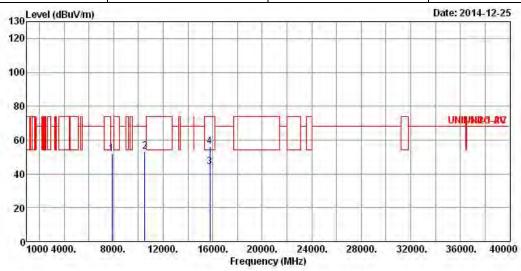
Note 4: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz) for 5250-5350MHz

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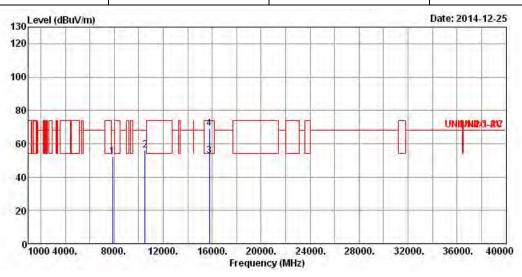


			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	cm	deg
1	7876.000	51.96	-16.24	68.20	41.89	36.97	5.95	32.85	Peak	444	
2	10520.000	53.17	-15.03	68.20	39.84	38.99	7.01	32.67	Peak		
3	15780.000	44.02	-9.98	54.00	30.21	37.26	8.87	32.32	Average	1.666	1446
4	15780.000	56.22	-17.78	74.00	42.41	37.26	8.87	32.32	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 emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	11a	Test Freq. (MHz)	5260						
N _{TX} 1 Polarization H									

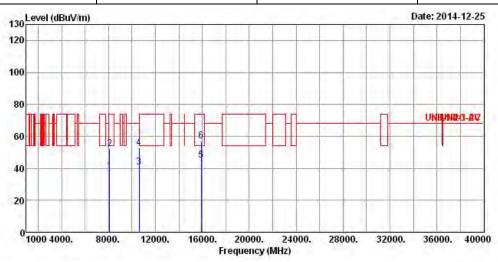


			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Lîne	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	cm	deg
1	7884.000	52.43	-15.77	68.20	42.33	36.98	5.97	32.85	Peak	1,566	1566
2	10520.000	56.25	-11.95	68.20	42.92	38.99	7.01	32.67	Peak		
3	15780.000	52.67	-1.33	54.00	38.86	37.26	8.87	32.32	Average		
4	15780.000	69.08	-4.92	74.00	55.27	37.26	8.87	32.32	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 emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode 11a Test Freq. (MHz) 5300									
N _{TX}	1	Polarization	V						



			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8088.000	38.59	-15.41	54.00	28.16	37.27	6.05	32.89	Average	777	
2	8088.000	52.52	-21.48	74.00	42.09	37.27	6.05	32.89	Peak	1444	1444
3	10600.000	40.59	-13.41	54.00	27.21	38.96	7.05	32.63	Average	+++	
4	10600.000	52.64	-21.36	74.00	39.26	38.96	7.05	32.63	Peak		444
5	15900.000	44.96	-9.04	54.00	31.36	37.07	8.89	32.36	Average		227
6	15900.000	57.20	-16.80	74.00	43.60	37.07	8.89	32.36	Peak	444	444

- 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 emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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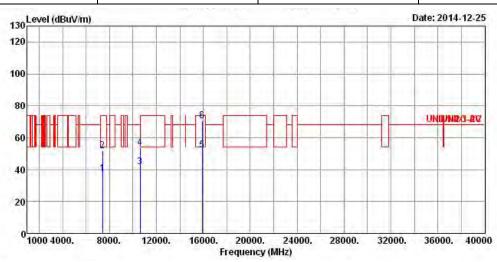
FCC Test Report

Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5300

N_{TX} 1 Polarization H

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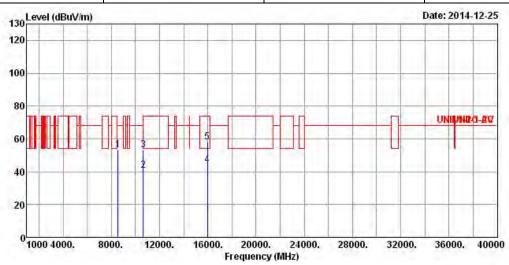


			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7424.000	37.57	-16.43	54.00	28.08	36.42	5.79	32.72	Average	1222	1222
2	7424.000	51.85	-22.15	74.00	42.36	36.42	5.79	32.72	Peak	+++	
3	10600.000	41.68	-12.32	54.00	28.30	38.96	7.05	32.63	Average		
4	10600.000	53.50	-20.50	74.00	40.12	38.96	7.05	32.63	Peak	777	1777
5	15900.000	52.11	-1.89	54.00	38.51	37.07	8.89	32.36	Average	222	224
6	15900.000	70.41	-3.59	74.00	56.81	37.07	8.89	32.36	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 emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode11aTest Freq. (MHz)5320									
N_{TX}	1	Polarization	V						



			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8548.000	53.47	-14.73	68.20	42.02	38.12	6.26	32.93	Peak		
2	10640.000	40.62	-13.38	54.00	27.20	38.94	7.08	32.60	Average	444	خخخا
3	10640.000	53.25	-20.75	74.00	39.83	38.94	7.08	32.60	Peak		
4	15960.000	44.32	-9.68	54.00	30.85	36.96	8.90	32.39	Average	222	222
5	15960.000	57.88	-16.12	74.00	44.41	36.96	8.90	32.39	Peak	333	337

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)

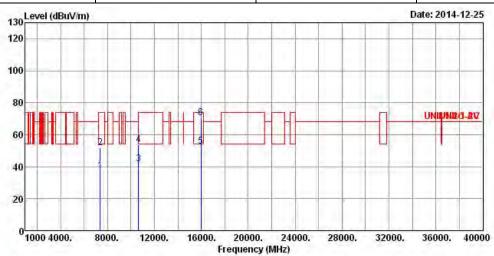
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	11a	Test Freq. (MHz)	5320						
N_{TX}	1	Polarization	Н						



			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7380.000	37.43	-16.57	54.00	28.06	36.29	5.78	32.70	Average		
2	7380.000	51.69	-22.31	74.00	42.32	36.29	5.78	32.70	Peak	1.666	
3	10640.000	41.78	-12.22	54.00	28.36	38.94	7.08	32.60	Average		
4	10640.000	53.50	-20.50	74.00	40.08	38.94	7.08	32.60	Peak		
5	15960.000	52.83	-1.17	54.00	39.36	36.96	8.90	32.39	Average		
6	15960.000	70.36	-3.64	74.00	56.89	36.96	8.90	32.39	Peak	1.444	

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)

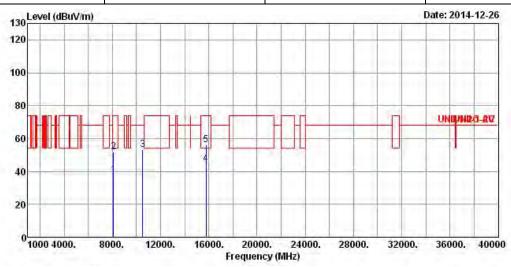
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT20	Test Freq. (MHz)	5260							
N _{TX}	2	Polarization	V							



			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8094.000	38.10	-15.90	54.00	27.67	37.27	6.05	32.89	Average	222	222
2	8094.000	51.97	-22.03	74.00	41.54	37.27	6.05	32.89	Peak	777	227
3	10520.000	53.41	-14.79	68.20	40.08	38.99	7.01	32.67	Peak	222	222
4	15780.000	44.66	-9.34	54.00	30.85	37.26	8.87	32.32	Average		
5	15780.000	56.19	-17.81	74.00	42.38	37.26	8.87	32.32	Peak	222	444

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)

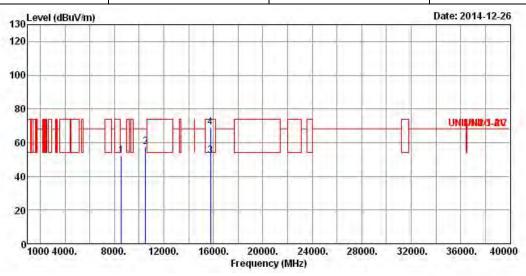
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT20	Test Freq. (MHz)	5260							
N _{TX}	2	Polarization	Н							

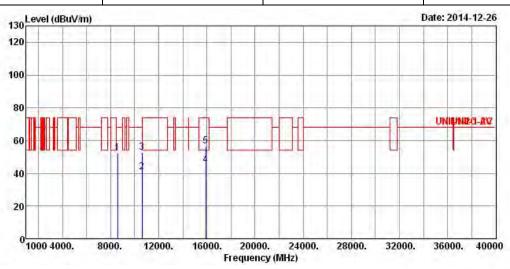


	Freq	Level	0∨er Limit	Limit Line		Antenna Factor				A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8567.000	52.47	-15.73	68.20	41.01	38.13	6.26	32.93	Peak		
2	10520.000	57.63	-10.57	68.20	44.30	38.99	7.01	32.67	Peak	1.666	
3	15780.000	52.40	-1.60	54.00	38.59	37.26	8.87	32.32	Average		
4	15780.000	68.92	-5.08	74.00	55.11	37.26	8.87	32.32	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 emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT20	Test Freq. (MHz)	5300						
N_{TX} 2 Polarization \vee									



			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8584.000	52.51	- 15.69	68.20	41.06	38.13	6.26	32.94	Peak		
2	10600.000	40.86	-13.14	54.00	27.48	38.96	7.05	32.63	Average	1222	1222
3	10600.000	52.81	-21.19	74.00	39.43	38.96	7.05	32.63	Peak		
4	15900.000	44.91	-9.09	54.00	31.31	37.07	8.89	32.36	Average	222	222
5	15900.000	56.82	-17.18	74.00	43.22	37.07	8.89	32.36	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)

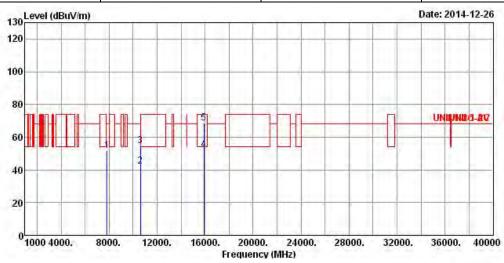
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT20	Test Freq. (MHz)	5300							
N_{TX}	2	Polarization	Н							



			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		****
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7828.000	51.64	-16.56	68.20	41.61	36.93	5.94	32.84	Peak		
2	10600.000	42.02	-11.98	54.00	28.64	38.96	7.05	32.63	Average	1.666	
3	10600.000	54.81	-19.19	74.00	41.43	38.96	7.05	32.63	Peak		
4	15900.000	52.14	-1.86	54.00	38.54	37.07	8.89	32.36	Average		
5	15900.000	68.80	-5.20	74.00	55.20	37.07	8.89	32.36	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)

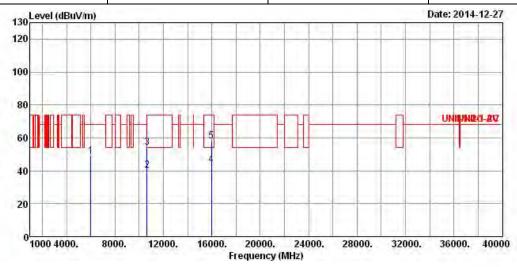
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT20	Test Freq. (MHz)	5320							
N_{TX}	2	Polarization	V							



			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	cm	deg
1	6006.000	49.16	-19.04	68.20	42.25	34.30	5.07	32.46	Peak	0	0
2	10640.000	40.49	-13.51	54.00	27.07	38.94	7.08	32.60	Average	0	0
3	10640.000	54.34	-19.66	74.00	40.92	38.94	7.08	32.60	Peak	0	0
4	15960.000	43.77	-10.23	54.00	30.30	36.96	8.90	32.39	Average	0	0
5	15960,000	57.98	-16.02	74.00	44.51	36.96	8.90	32.39	Peak	0	0

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

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

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

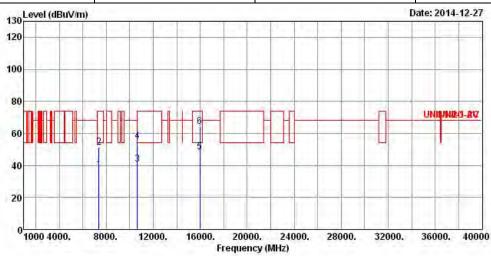
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT20	Test Freq. (MHz)	5320						
N_{TX}	2	Polarization	Н						



	Freq	Level	0∨er Limit			Antenna Factor		and the second		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg
1	7380.000	37.42	-16.58	54.00	28.05	36.29	5.78	32.70	Average	0	0
2	7380.000	51.46	-22.54	74.00	42.09	36.29	5.78	32.70	Peak	0	0
3	10640.000	40.71	-13.29	54.00	27.29	38.94	7.08	32.60	Average	0	0
4	10640.000	54.94	-19.06	74.00	41.52	38.94	7.08	32.60	Peak	0	0
5	15960.000	48.39	-5.61	54.00	34.92	36.96	8.90	32.39	Average	0	0
6	15960.000	64.48	-9.52	74.00	51.01	36.96	8.90	32.39	Peak	0	0

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

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

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

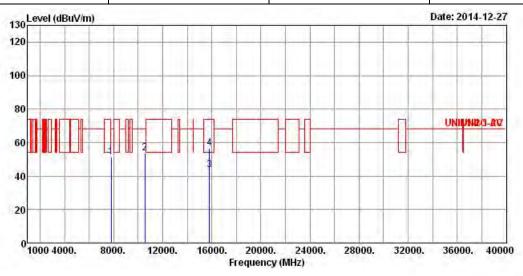
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)											
Modulation Mode	Modulation Mode HT40 Test Freq. (MHz) 5270										
N_{TX}	T _{TX} 2 Polarization V										

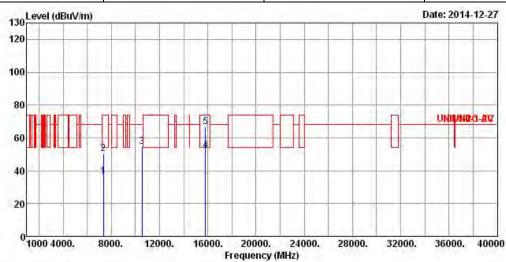


	Freq	Level	0∨er Limit			Antenna Factor		Preamp Factor		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg
1	7808.000	51.51	-16.69	68.20	41.50	36.90	5.94	32.83	Peak		
2	10540.000	53.81	-14.39	68.20	40.45	38.99	7.03	32.66	Peak	1222	444
3	15810.000	43.79	-10.21	54.00	30.04	37.20	8.88	32.33	Average		
4	15810.000	56.39	-17.61	74.00	42.64	37.20	8.88	32.33	Peak		222

- 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 emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT40	Test Freq. (MHz)	5270							
N _{TX}	2	Polarization	Н							



			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		Cm	deg
1	7340.000	36.47	-17.53	54.00	27.19	36.20	5.76	32.68	Average	1555	
2	7340.000	50.46	-23.54	74.00	41.18	36.20	5.76	32.68	Peak	1222	444
3	10540.000	54.79	-13.41	68.20	41.43	38.99	7.03	32.66	Peak		
4	15810.000	52.21	-1.79	54.00	38.46	37.20	8.88	32.33	Average	222	222
5	15810.000	66.88	-7.12	74.00	53.13	37.20	8.88	32.33	Peak	333	337

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)

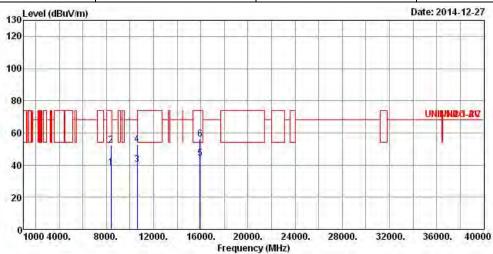
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode HT40 Test Freq. (MHz) 5310									
N_{TX}	2	Polarization	V						



	Post	1 32 44 7	0ver			Antenna		and the second		A/Pos	T/Pos
	Freq	Level	Limit	Line	rever	Factor	LOSS	Factor	Kemark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8380.000	38.23	-15.77	54.00	27.11	37.86	6.17	32.91	Average	444	
2	8380.000	52.10	-21.90	74.00	40.98	37.86	6.17	32.91	Peak		
3	10620.000	40.43	-13.57	54.00	27.02	38.95	7.08	32.62	Average	444	1888
4	10620.000	52.91	-21.09	74.00	39.50	38.95	7.08	32.62	Peak		
5	15930.000	43.98	-10.02	54.00	30.45	37.01	8.89	32.37	Average		
6	15930.000	56.35	-17.65	74.00	42.82	37.01	8.89	32.37	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 emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

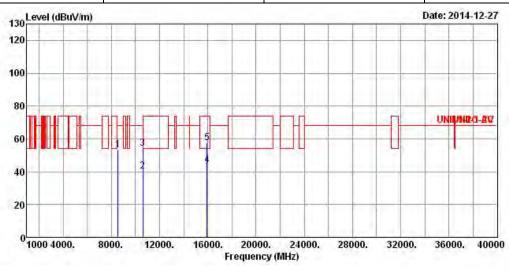
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FCC Test Report

Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT40	Test Freq. (MHz)	5310							
N_{TX}	2	Polarization	Н							

Report No.: FR462324-03AN

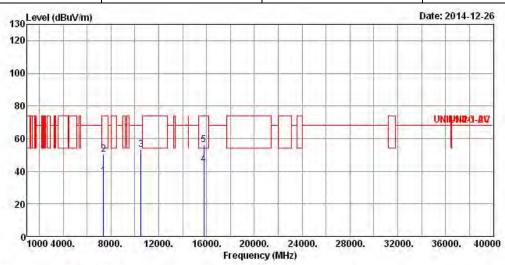


			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		Cm	deg
1	8572.000	53.05	-15.15	68.20	41.59	38.13	6.26	32.93	Peak		
2	10620.000	40.38	-13.62	54.00	26.97	38.95	7.08	32.62	Average	1222	1222
3	10620.000	54.21	-19.79	74.00	40.80	38.95	7.08	32.62	Peak		
4	15930.000	44.02	-9.98	54.00	30.49	37.01	8.89	32.37	Average	222	
5	15930.000	57.48	-16.52	74.00	43.95	37.01	8.89	32.37	Peak	332	337

- 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 emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode VHT20 Test Freq. (MHz) 5260									
N_{TX}	2	Polarization	V						

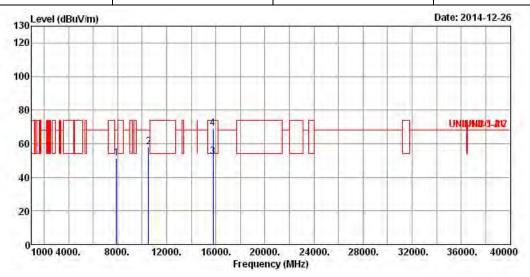


			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7392.000	36.99	-17.01	54.00	27.58	36.33	5.78	32.70	Average		
2	7392.000	50.52	-23.48	74.00	41.11	36.33	5.78	32.70	Peak	444	1222
3	10520.000	53.27	-14.93	68.20	39.94	38.99	7.01	32.67	Peak	***	
4	15780.000	44.36	-9.64	54.00	30.55	37.26	8.87	32.32	Average		222
5	15780.000	56.10	-17.90	74.00	42.29	37.26	8.87	32.32	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 emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)											
Modulation Mode VHT20 Test Freq. (MHz) 5260											
N_{TX}	N _{TX} 2 Polarization H										



			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7916.000	51.47	-16.73	68.20	41.34	37.02	5.97	32.86	Peak		
2	10520.000	58.08	-10.12	68.20	44.75	38.99	7.01	32.67	Peak	1.666	
3	15780.000	52.42	-1.58	54.00	38.61	37.26	8.87	32.32	Average		
4	15780.000	69.13	-4.87	74.00	55.32	37.26	8.87	32.32	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)

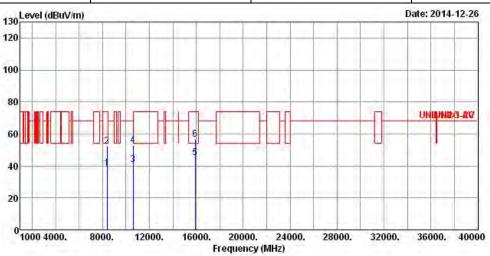
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	VHT20	Test Freq. (MHz)	5300						
N_{TX}	2	Polarization	V						

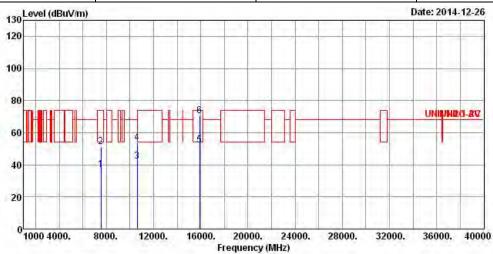


			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	_	cm	deg
1	8382.000	38.18	-15.82	54.00	27.06	37.86	6.17	32.91	Average	222	222
2	8382.000	52.24	-21.76	74.00	41.12	37.86	6.17	32.91	Peak	777	777
3	10600.000	40.56	-13.44	54.00	27.18	38.96	7.05	32.63	Average	244	244
4	10600.000	52.56	-21.44	74.00	39.18	38.96	7.05	32.63	Peak	+++	
5	15900.000	45.17	-8.83	54.00	31.57	37.07	8.89	32.36	Average	444	1444
6	15900.000	56.49	-17.51	74.00	42.89	37.07	8.89	32.36	Peak	777	777

- 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 emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	VHT20	Test Freq. (MHz)	5300						
N_{TX}	2	Polarization	Н						

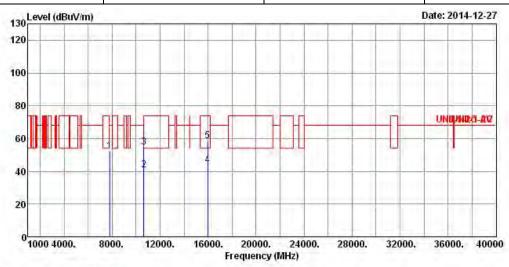


			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7548.000	36.98	-17.02	54.00	27.25	36.65	5.84	32.76	Average	-555	-555
2	7548.000	51.44	-22.56	74.00	41.71	36.65	5.84	32.76	Peak		
3	10600.000	42.04	-11.96	54.00	28.66	38.96	7.05	32.63	Average	1.886	1.666
4	10600.000	53.59	-20.41	74.00	40.21	38.96	7.05	32.63	Peak		
5	15900.000	52.35	-1.65	54.00	38.75	37.07	8.89	32.36	Average		
6	15900.000	70.62	-3.38	74.00	57.02	37.07	8.89	32.36	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 emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	VHT20	Test Freq. (MHz)	5320						
N _{TX}	2	Polarization	V						



			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7800.000	52.06	-16.14	68.20	42.06	36.90	5.93	32.83	Peak	0	0
2	10640.000	40.63	-13.37	54.00	27.21	38.94	7.08	32.60	Average	0	0
3	10640.000	54.52	-19.48	74.00	41.10	38.94	7.08	32.60	Peak	0	0
4	15960.000	43.86	-10.14	54.00	30.39	36.96	8.90	32.39	Average	0	0
5	15960.000	58.34	-15.66	74.00	44.87	36.96	8.90	32.39	Peak	0	0

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

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

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

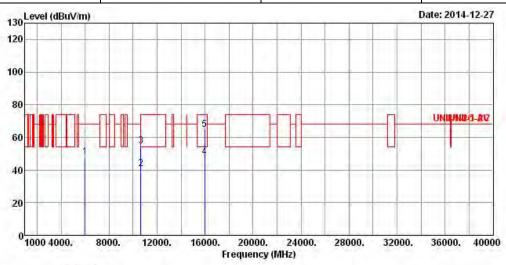
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	VHT20	Test Freq. (MHz)	5320						
N_{TX}	2	Polarization	Н						



			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		Cm	deg
1	6018.000	48.20	-20.00	68.20	41.27	34.30	5.09	32.46	Peak	0	0
2	10640.000	40.77	-13.23	54.00	27.35	38.94	7.08	32.60	Average	0	0
3	10640.000	54.68	-19.32	74.00	41.26	38.94	7.08	32.60	Peak	0	0
4	15960.000	48.19	-5.81	54.00	34.72	36.96	8.90	32.39	Average	0	0
5	15960.000	64.98	-9.02	74.00	51.51	36.96	8.90	32.39	Peak	0	0

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

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

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

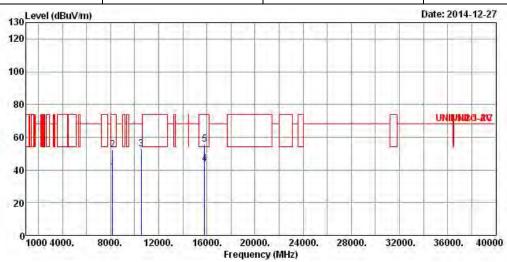
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	VHT40	Test Freq. (MHz)	5270						
N _{TX}	2	Polarization	V						



	Freq	Level	O∨er Limit	Limit Line		Antenna Factor		and the second		A/Pos	T/Pos
		- ID 121		- ID 121	- 15.17				_		
	MHZ	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8166.000	38.30	-15.70	54.00	27.67	37.44	6.08	32.89	Average	-555	-555
2	8166.000	52.23	-21.77	74.00	41.60	37.44	6.08	32.89	Peak		
3	10540.000	52.76	-15.44	68.20	39.40	38.99	7.03	32.66	Peak	1.886	
4	15810.000	43.82	-10.18	54.00	30.07	37.20	8.88	32.33	Average		
5	15810.000	55.58	-18.42	74.00	41.83	37.20	8.88	32.33	Peak	1994	

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)

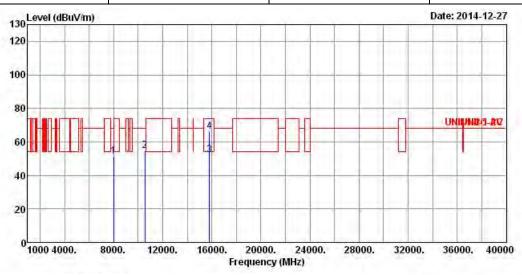
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	Modulation Mode VHT40 Test Freq. (MHz) 5270									
N_{TX}	Polarization	Н								

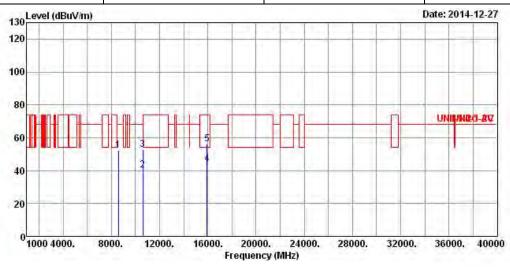


			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8012.000	51.45	-16.75	68.20	41.21	37.10	6.02	32.88	Peak		
2	10540.000	54.57	-13.63	68.20	41.21	38.99	7.03	32.66	Peak	1.666	1666
3	15810.000	52.19	-1.81	54.00	38.44	37.20	8.88	32.33	Average		
4	15810.000	66.26	-7.74	74.00	52.51	37.20	8.88	32.33	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 emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Tra	nsmitter Radiated Unwan	Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode	Modulation Mode VHT40 Test Freq. (MHz) 5310									
N _{TX} 2 Polarization V										



			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	Cm	deg
1	8592.000	52.51	-15.69	68.20	41.03	38.14	6.28	32.94	Peak		
2	10620.000	40.18	-13.82	54.00	26.77	38.95	7.08	32.62	Average		
3	10620.000	52.91	-21.09	74.00	39.50	38.95	7.08	32.62	Peak	1.666	1444
4	15930.000	44.00	-10.00	54.00	30.47	37.01	8.89	32.37	Average		
5	15930,000	56.36	-17-64	74.00	42.83	37.01	8.89	32.37	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)

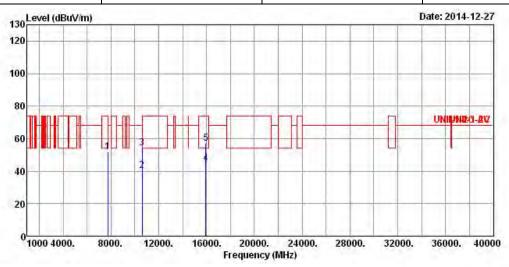
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode	Modulation Mode VHT40 Test Freq. (MHz) 5310								
N _{TX} 2 Polarization H									

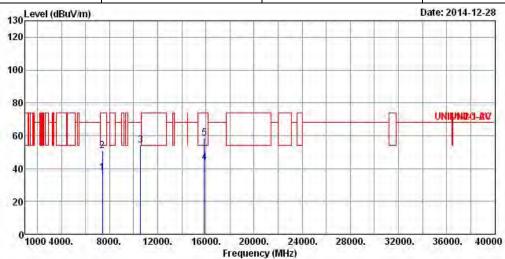


			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7756.000	51.75	-16.45	68.20	41.81	36.85	5.91	32.82	Peak	1999	1995
2	10620.000	40.46	-13.54	54.00	27.05	38.95	7.08	32.62	Average	0	0
3	10620.000	54.02	-19.98	74.00	40.61	38.95	7.08	32.62	Peak	0	0
4	15930.000	44.38	-9.62	54.00	30.85	37.01	8.89	32.37	Average	0	0
5	15930.000	56.86	-17.14	74.00	43.33	37.01	8.89	32.37	Peak	0	0

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- 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 emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation ModeVHT80Test Freq. (MHz)5290									
N _{TX} 2 Polarization V									



	Freq	Level	0∨er Limit	Limit Line		Antenna Factor		Preamp Factor	Remark	A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7404.000	37.28	-16.72	54.00	27.83	36.38	5.78	32.71	Average		
2	7404.000	50.92	-23.08	74.00	41.47	36.38	5.78	32.71	Peak	444	444
3	10580.000	54.18	-14.02	68.20	40.80	38.97	7.05	32.64	Peak		
4	15870.000	43.44	-10.56	54.00	29.82	37.09	8.88	32.35	Average	1222	(222
5	15870.000	58.49	-15.51	74.00	44.87	37.09	8.88	32.35	Peak	555	

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)

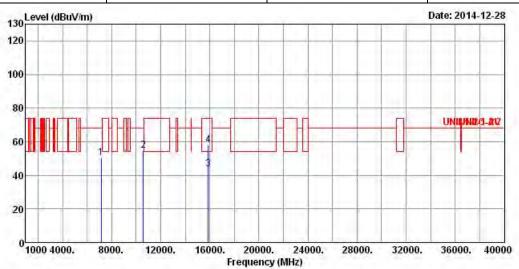
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	Modulation ModeVHT80Test Freq. (MHz)5290									
N _{TX} 2 Polarization H										



			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7140.000	50.18	-18.02	68.20	41.44	35.66	5.68	32.60	Peak		
2	10580.000	54.66	-13.54	68.20	41.28	38.97	7.05	32.64	Peak	1.666	
3	15870.000	43.50	-10.50	54.00	29.88	37.09	8.88	32.35	Average		
4	15870.000	58.08	-15.92	74.00	44.46	37.09	8.88	32.35	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.

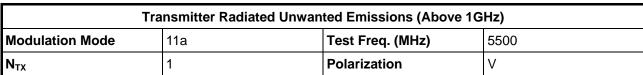
Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

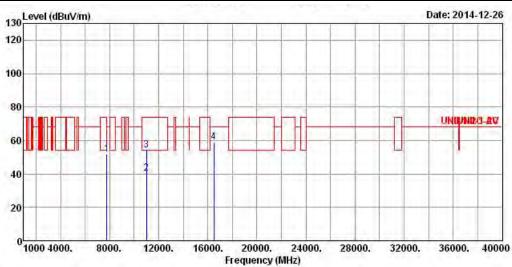
Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz) for 5470-5725MHz

Report No.: FR462324-03AN





			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7758.000	51.67	-16.53	68.20	41.71	36.87	5.91	32.82	Peak	0	0
2	11000.000	40.36	-13.64	54.00	26.70	38.80	7.27	32.41	Average	0	0
3	11000.000	54.10	-19.90	74.00	40.44	38.80	7.27	32.41	Peak	0	0
4	16500.000	59.07	-9.13	68.20	44.40	37.40	9.24	31.97	Peak	0	0

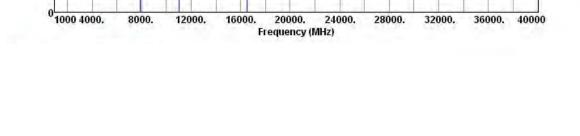
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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 emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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TEL: 886-3-327-3456 Report Version : Rev. 01

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20

Modulation Mode	11a	Test Fre	q. (MHz)	5500)
N _{TX}	1	Polariza	tion	Н	
130 Level (dBuV/	m)			Date:	2014-12-20
120					
100					
80				100	18/8/19/7 - 217



			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		Cm	deg
1	7884.000	51.63	-16.57	68.20	41.53	36.98	5.97	32.85	Peak	0	0
2	11000.000	41.57	-12.43	54.00	27.91	38.80	7.27	32.41	Average	0	0
3	11000.000	55.19	-18.81	74.00	41.53	38.80	7.27	32.41	Peak	0	0
4	16500.000	65.36	-2.84	68.20	50.69	37.40	9.24	31.97	Peak	0	0

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

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

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

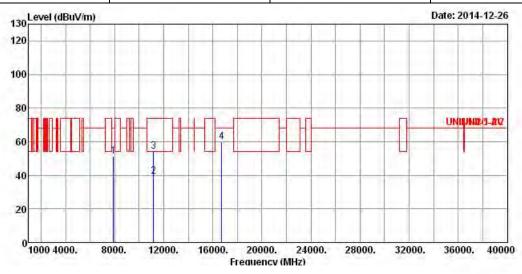
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode	Modulation Mode 11a Test Freq. (MHz) 5580								
N _{TX} 1 Polarization V									



		Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos	
Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark			
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		Cm	deg	
7896.000	51.16	-17.04	68.20	41.04	37.00	5.97	32.85	Peak	0	0	
11160.000	39.55	-14.45	54.00	25.62	38.97	7.37	32.41	Average	0	0	
11160.000	54.13	-19.87	74.00	40.20	38.97	7.37	32.41	Peak	0	0	
16740.000	59.75	-8.45	68.20	43.34	38.80	9.32	31.71	Peak	0	0	
	7896.000 11160.000 11160.000	7896.000 51.16 11160.000 39.55 11160.000 54.13	Freq Level Limit MHz dBuV/m dB 7896.000 51.16 -17.04 11160.000 39.55 -14.45 11160.000 54.13 -19.87	Freq Level Limit Line MHz dBuV/m dB dBuV/m 7896.000 51.16 -17.04 68.20 11160.000 39.55 -14.45 54.00 11160.000 54.13 -19.87 74.00	Freq Level Limit Line Level MHz dBuV/m dB dBuV/m dBuV 7896.000 51.16 -17.04 68.20 41.04 11160.000 39.55 -14.45 54.00 25.62 11160.000 54.13 -19.87 74.00 40.20	Freq Level Limit Line Level Factor MHz dBuV/m dB dBuV/m dBuV dBuV 7896.000 51.16 -17.04 68.20 41.04 37.00 11160.000 39.55 -14.45 54.00 25.62 38.97 11160.000 54.13 -19.87 74.00 40.20 38.97	Freq Level Limit Line Level Factor Loss MHz dBuV/m dB dBuV/m dBuV dB/m dB	Freq Level Limit Line Level Factor Loss Factor MHz dBuV/m dB dBuV/m dBuV dB/m dB dB 7896.000 51.16 -17.04 68.20 41.04 37.00 5.97 32.85 11160.000 39.55 -14.45 54.00 25.62 38.97 7.37 32.41 11160.000 54.13 -19.87 74.00 40.20 38.97 7.37 32.41	Freq Level Limit Line Level Factor Loss Factor Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB 7896.000 51.16 -17.04 68.20 41.04 37.00 5.97 32.85 Peak 11160.000 39.55 -14.45 54.00 25.62 38.97 7.37 32.41 Average 11160.000 54.13 -19.87 74.00 40.20 38.97 7.37 32.41 Peak	Freq Level Limit Line Level Factor Loss Factor Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB dB cm 7896.000 51.16 -17.04 68.20 41.04 37.00 5.97 32.85 Peak 0 11160.000 39.55 -14.45 54.00 25.62 38.97 7.37 32.41 Average 0 11160.000 54.13 -19.87 74.00 40.20 38.97 7.37 32.41 Peak 0	Freq Level Limit Line Level Factor Loss Factor Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 7896.000 51.16 -17.04 68.20 41.04 37.00 5.97 32.85 Peak 0 011160.000 39.55 -14.45 54.00 25.62 38.97 7.37 32.41 Average 0 011160.000 54.13 -19.87 74.00 40.20 38.97 7.37 32.41 Peak 0 0

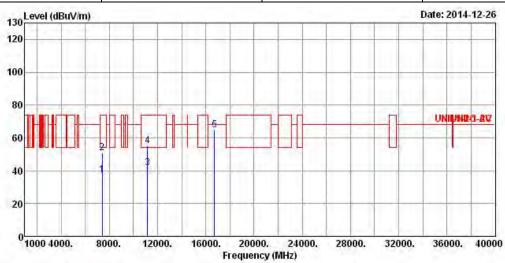
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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 emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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FCC Test Report

Report No.: FR462324-03AN

Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode	11a	Test Freq. (MHz)	5580					
N _{TX}	1	Polarization	Н					



			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7398.000	37.45	-16.55	54.00	28.05	36.33	5.78	32.71	Average	0	0
2	7398.000	51.01	-22.99	74.00	41.61	36.33	5.78	32.71	Peak	0	0
3	11160.000	41.60	-12.40	54.00	27.67	38.97	7.37	32.41	Average	0	0
4	11160.000	55.40	-18.60	74.00	41.47	38.97	7.37	32.41	Peak	0	0
5	16740.000	64.88	-3.32	68.20	48.47	38.80	9.32	31.71	Peak	0	0

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

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

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

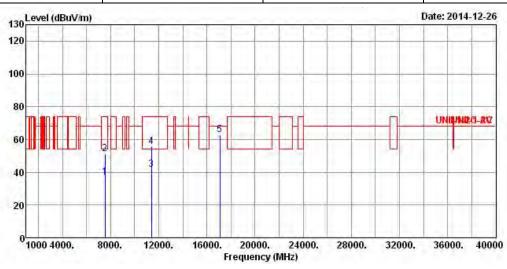
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode	11a	Test Freq. (MHz)	5700					
N _{TX}	1	Polarization	V					

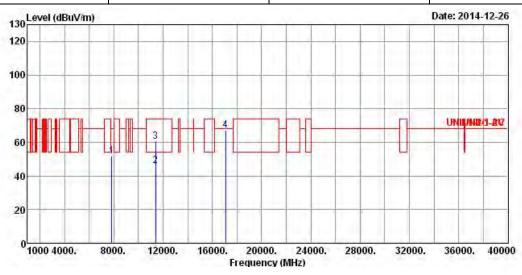


			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	Cm	deg
1	7554.000	37.11	-16.89	54.00	27.36	36.67	5.84	32.76	Average	0	0
2	7554.000	51.30	-22.70	74.00	41.55	36.67	5.84	32.76	Peak	0	0
3	11400.000	41.72	-12.28	54.00	27.46	39.20	7.48	32.42	Average	0	0
4	11400.000	55.79	-18.21	74.00	41.53	39.20	7.48	32.42	Peak	0	0
5	17100.000	62.83	-5.37	68.20	43.75	41.08	9.44	31.44	Peak	0	0

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- 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 emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode	11a	Test Freq. (MHz)	5700					
N _{TX}	1	Polarization	Н					



			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7842.000	51.93	-16.27	68.20	41.90	36.93	5.94	32.84	Peak	0	0
2	11400.000	46.25	-7.75	54.00	31.99	39.20	7.48	32.42	Average	0	0
3	11400.000	60.34	-13.66	74.00	46.08	39.20	7.48	32.42	Peak	0	0
4	17100.000	67.14	-1.06	68.20	48.06	41.08	9.44	31.44	Peak	0	0

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

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

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

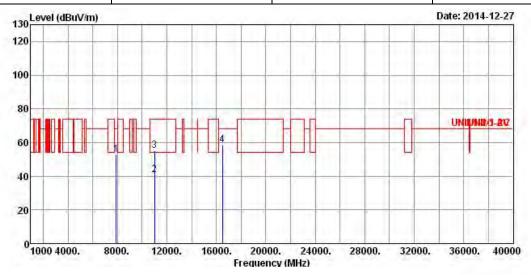
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT20	Test Freq. (MHz)	5500						
N _{TX}	2	Polarization	V						



	Freq	Level	0∨er Limit	Limit Line		Antenna Factor				A/Pos	T/Pos	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		- :	deg	
1	7914.000	52.73	-15.47	68.20	42.60	37.02	5.97	32.86	Peak	0	0	
2	11000.000	40.83	-13.17	54.00	27.17	38.80	7.27	32.41	Average	0	0	
3	11000.000	55.30	-18.70	74.00	41.64	38.80	7.27	32.41	Peak	0	0	
4	16500.000	58.75	-9.45	68.20	44.08	37.40	9.24	31.97	Peak	0	0	

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

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

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

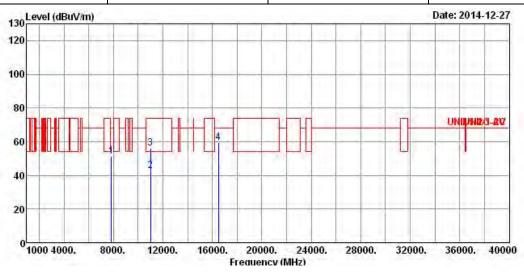
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT20	Test Freq. (MHz)	5500						
N_{TX}	2	Polarization	Н						

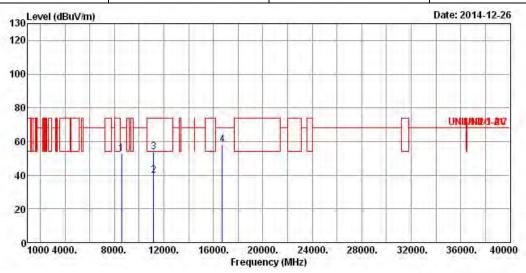


			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7854.000	51.22	-16.98	68.20	41.16	36.95	5.95	32.84	Peak	0	0
2	11000.000	42.50	-11.50	54.00	28.84	38.80	7.27	32.41	Average	0	0
3	11000.000	56.33	-17.67	74.00	42.67	38.80	7.27	32.41	Peak	0	0
4	16500.000	59.51	-8.69	68.20	44.84	37.40	9.24	31.97	Peak	0	0

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- 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 emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT20	Test Freq. (MHz)	5580						
N _{TX}	2	Polarization	V						



			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8600.000	52.75	-15.45	68.20	41.27	38.14	6.28	32.94	Peak		
2	11160.000	39.63	-14.37	54.00	25.70	38.97	7.37	32.41	Average	1.666	1.666
3	11160.000	53.64	-20.36	74.00	39.71	38.97	7.37	32.41	Peak		
4	16740.000	57.82	-10.38	68.20	41.41	38.80	9.32	31.71	Peak		444

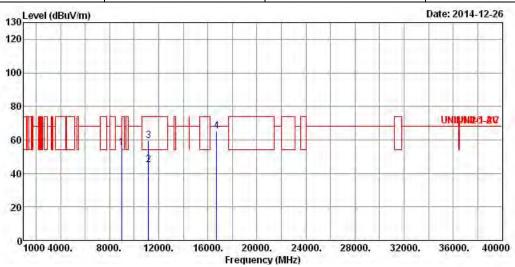
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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 emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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FCC Test Report

Report No.: FR462324-03AN

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT20	Test Freq. (MHz)	5580						
N _{TX}	2	Polarization	Н						



			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		4.00
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8988.000	54.97	-13.23	68.20	43.20	38.29	6.50	33.02	Peak		
2	11160.000	44.94	-9.06	54.00	31.01	38.97	7.37	32.41	Average	1.666	
3	11160.000	59.54	-14.46	74.00	45.61	38.97	7.37	32.41	Peak		
4	16740.000	65.36	-2.84	68.20	48.95	38.80	9.32	31.71	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)

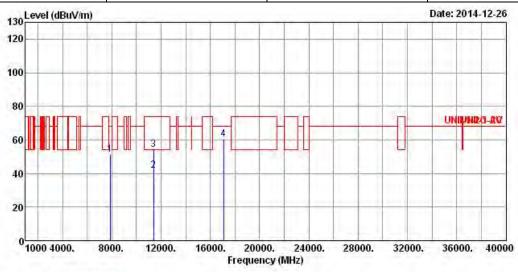
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT20	Test Freq. (MHz)	5700							
N_{TX}	2	Polarization	V							



			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	200	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7860.000	51.36	-16.84	68.20	41.28	36.97	5.95	32.84	Peak	222	222
2	11400.000	41.76	-12.24	54.00	27.50	39.20	7.48	32.42	Average		
3	11400.000	54.39	-19.61	74.00	40.13	39.20	7.48	32.42	Peak	1222	222
4	17100.000	60.30	-7.90	68.20	41.22	41.08	9.44	31.44	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)

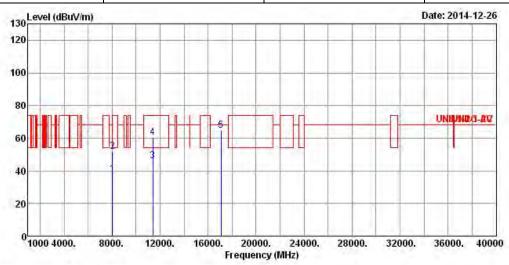
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT20	Test Freq. (MHz)	5700						
N _{TX}	2	Polarization	Н						



			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8048.000	37.67	-16.33	54.00	27.32	37.20	6.03	32.88	Average		
2	8048.000	51.61	-22.39	74.00	41.26	37.20	6.03	32.88	Peak	1222	غرطرطوا
3	11400.000	46.03	-7.97	54.00	31.77	39.20	7.48	32.42	Average		
4	11400.000	60.38	-13.62	74.00	46.12	39.20	7.48	32.42	Peak	222	222
5	17100.000	64.62	-3.58	68.20	45.54	41.08	9.44	31.44	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)

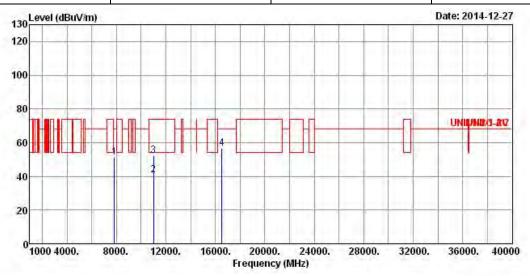
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	Modulation Mode HT40 Test Freq. (MHz) 5510									
N_{TX}	N _{TX} 2 Polarization V									



			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		4.4
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		- Cm	deg
1	7824.000	51.38	-16.82	68.20	41.35	36.92	5.94	32.83	Peak		
2	11020.000	41.00	-13.00	54.00	27.30	38.82	7.29	32.41	Average	1.666	1.666
3	11020.000	52.44	-21.56	74.00	38.74	38.82	7.29	32.41	Peak		
4	16530.000	56.77	-11.43	68.20	41.86	37.60	9.25	31.94	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)

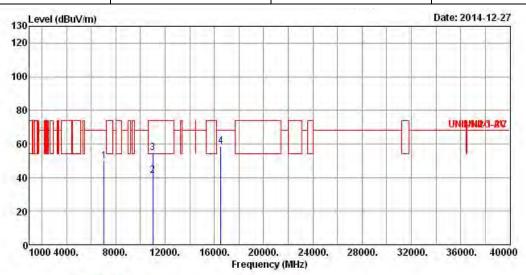
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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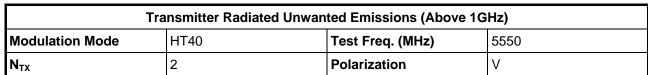
Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	Modulation Mode HT40 Test Freq. (MHz) 5510								
N_{TX}	N _{TX} 2 Polarization H								

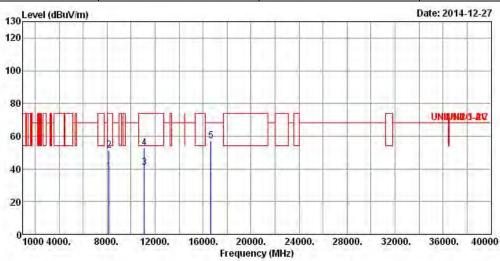


			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	cm	deg
1	7068.000	49.80	-18.40	68.20	41.22	35.48	5.67	32.57	Peak	1.666	1566
2	11020.000	41.23	-12.77	54.00	27.53	38.82	7.29	32.41	Average		
3	11020.000	54.76	-19.24	74.00	41.06	38.82	7.29	32.41	Peak		
4	16530.000	58.42	-9.78	68.20	43.51	37.60	9.25	31.94	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 emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		40.00
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	cm	deg
1	8180.000	38.25	-15.75	54.00	27.62	37.44	6.08	32.89	Average		
2	8180.000	51.40	-22.60	74.00	40.77	37.44	6.08	32.89	Peak		
3	11100.000	40.62	-13.38	54.00	26.80	38.90	7.33	32.41	Average		
4	11100.000	52.78	-21.22	74.00	38.96	38.90	7.33	32.41	Peak	444	
5	16650.000	57.19	-11.01	68.20	41.41	38.30	9.29	31.81	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)

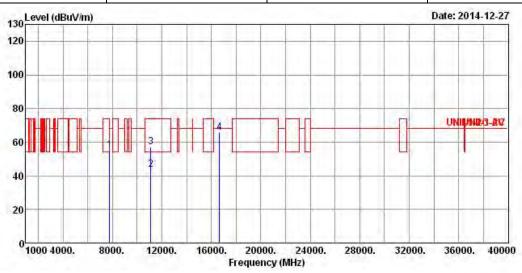
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation ModeHT40Test Freq. (MHz)5550								
N _{TX} 2 Polarization H								

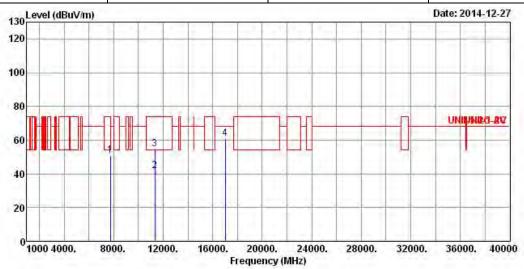


	Freq	Level	Over Limit		1000	Antenna Factor				A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7760.000	54.93	-13.27	68.20	44.97	36.87	5.91	32.82	Peak	344	
2	11100.000	43.61	-10.39	54.00	29.79	38.90	7.33	32.41	Average	444	1,2,2,2
3	11100.000	56.91	-17.09	74.00	43.09	38.90	7.33	32.41	Peak	***	
4	16650.000	65.75	-2.45	68.20	49.97	38.30	9.29	31.81	Peak		222

- 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 emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode HT40 Test Freq. (MHz) 5670								
N _{TX} 2 Polarization V								



	Freq	Level		Limit Line				and the second		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	- Cm	deg
1	7752.000	50.78	-17.42	68.20	40.84	36.85	5.91	32.82	Peak	444	
2	11340.000	41.69	-12.31	54.00	27.54	39.13	7.44	32.42	Average		
3	11340.000	54.46	-19.54	74.00	40.31	39.13	7.44	32.42	Peak	1.444	
4	17010.000	60.81	-7.39	68.20	42.40	40.43	9.41	31.43	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)

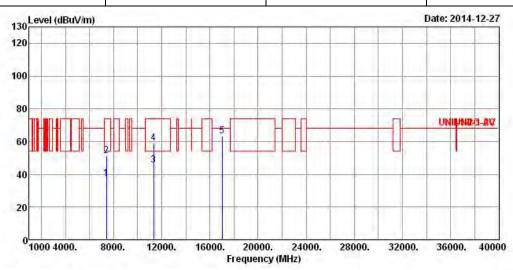
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	Modulation Mode HT40 Test Freq. (MHz) 5670									
N_{TX}	N _{TX} 2 Polarization H									



			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7412.000	37.26	-16.74	54.00	27.81	36.38	5.78	32.71	Average		
2	7412.000	51.29	-22.71	74.00	41.84	36.38	5.78	32.71	Peak	1222	1222
3	11340.000	45.34	-8.66	54.00	31.19	39.13	7.44	32.42	Average		
4	11340.000	58.94	-15.06	74.00	44.79	39.13	7.44	32.42	Peak	222	222
5	17010.000	63.25	-4.95	68.20	44.84	40.43	9.41	31.43	Peak	(555	(555

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)

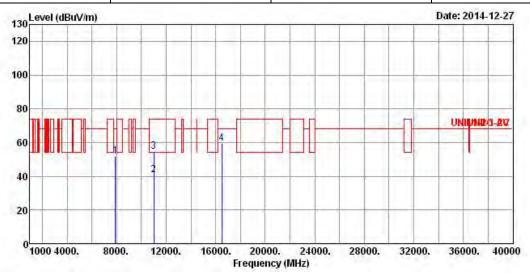
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation ModeVHT20Test Freq. (MHz)5500									
N _{TX} 2 Polarization V									

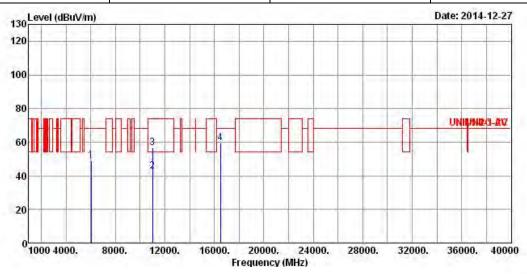


	Freq	Level	0√er Limit			Antenna Factor		Preamp Factor		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg
1	7902.000	51.71	-16.49	68.20	41.59	37.00	5.97	32.85	Peak	0	0
2	11000.000	40.62	-13.38	54.00	26.96	38.80	7.27	32.41	Average	0	0
3	11000.000	54.87	-19.13	74.00	41.21	38.80	7.27	32.41	Peak	0	0
4	16500.000	59.35	-8.85	68.20	44.68	37.40	9.24	31.97	Peak	0	0

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- 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 emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode VHT20 Test Freq. (MHz) 5500										
N _{TX}	2	Polarization	Н							

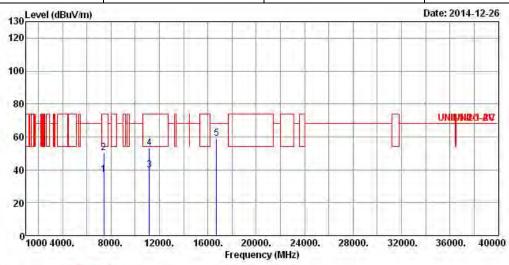


			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	6054.000	48.86	-19.34	68.20	41.90	34.31	5.11	32.46	Peak	0	0
2	11000.000	42.53	-11.47	54.00	28.87	38.80	7.27	32.41	Average	0	0
3	11000.000	56.37	-17.63	74.00	42.71	38.80	7.27	32.41	Peak	0	0
4	16500.000	59.54	-8.66	68.20	44.87	37.40	9.24	31.97	Peak	0	0

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- 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 emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	VHT20	Test Freq. (MHz)	5580						
N_{TX}	2	Polarization	V						



	-		0ver			Antenna		and the second		A/Pos	T/Pos
	Freq	rever	Limit	Line	rever	Factor	Loss	Factor	Kemark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7400.000	37.09	-16.91	54.00	27.69	36.33	5.78	32.71	Average		
2	7400.000	50.39	-23.61	74.00	40.99	36.33	5.78	32.71	Peak		
3	11160.000	39.79	-14.21	54.00	25.86	38.97	7.37	32.41	Average	1.444	1446
4	11160.000	53.28	-20.72	74.00	39.35	38.97	7.37	32.41	Peak		
5	16740,000	59.06	-9.14	68.20	42.65	38.80	9.32	31.71	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)

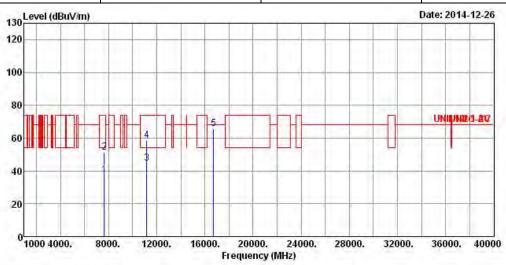
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	VHT20	Test Freq. (MHz)	5580						
N_{TX}	2	Polarization	Н						



			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	29,223	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7650.000	37.25	-16.75	54.00	27.41	36.75	5.88	32.79	Average		
2	7650.000	51.52	-22.48	74.00	41.68	36.75	5.88	32.79	Peak	1.666	
3	11160.000	44.81	-9.19	54.00	30.88	38.97	7.37	32.41	Average		
4	11160.000	58.40	-15.60	74.00	44.47	38.97	7.37	32.41	Peak		
5	16740.000	65.90	-2.30	68.20	49.49	38.80	9.32	31.71	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)

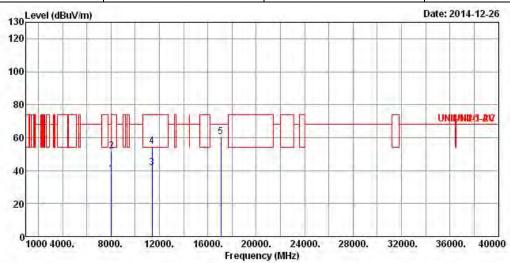
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode	VHT20	Test Freq. (MHz)	5700						
N_{TX}	2	Polarization	V						

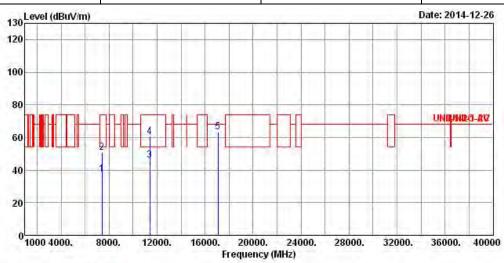


			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	cm	deg
1	8050.000	37.79	-16.21	54.00	27.44	37.20	6.03	32.88	Average		
2	8050.000	51.83	-22.17	74.00	41.48	37.20	6.03	32.88	Peak	1.666	
3	11400.000	41.83	-12.17	54.00	27.57	39.20	7.48	32.42	Average		
4	11400.000	54.91	-19.09	74.00	40.65	39.20	7.48	32.42	Peak		
5	17100.000	60.61	-7.59	68.20	41.53	41.08	9.44	31.44	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 emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode VHT20 Test Freq. (MHz) 5700										
N _{TX} 2 Polarization H										



			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	_	cm	deg
1	7404.000	37.23	-16.77	54.00	27.78	36.38	5.78	32.71	Average	222	222
2	7404.000	50.86	-23.14	74.00	41.41	36.38	5.78	32.71	Peak	777	777
3	11400.000	46.00	-8.00	54.00	31.74	39.20	7.48	32.42	Average	222	244
4	11400.000	60.28	-13.72	74.00	46.02	39.20	7.48	32.42	Peak	+++	
5	17100.000	63.41	-4.79	68.20	44.33	41.08	9.44	31.44	Peak	-224	1000

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)

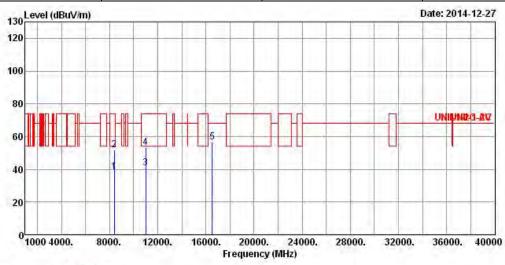
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	VHT40	Test Freq. (MHz)	5510						
N_{TX}	2	Polarization	V						



			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8400.000	38.24	- 15.76	54.00	27.07	37.89	6.19	32.91	Average	222	337
2	8400.000	51.77	-22.23	74.00	40.60	37.89	6.19	32.91	Peak	1222	خخجا
3	11020.000	40.77	-13.23	54.00	27.07	38.82	7.29	32.41	Average		
4	11020.000	53.43	-20.57	74.00	39.73	38.82	7.29	32.41	Peak	222	222
5	16530 000	56 73	-11 47	68 20	41 82	37 60	9 25	31 94	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)

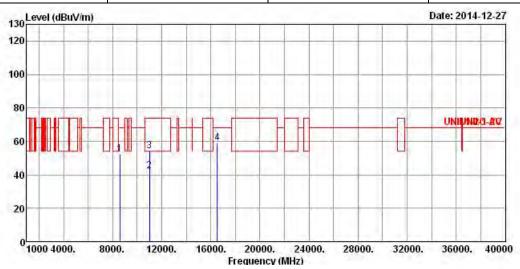
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	VHT40	Test Freq. (MHz)	5510								
N _{TX}	2	Polarization	Н								



	Freq			Over Limit ReadAntenr Freq Level Limit Line Level Facto				Preamp Factor		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8580.000	52.24	-15.96	68.20	40.79	38.13	6.26	32.94	Peak	444	
2	11020.000	42.31	-11.69	54.00	28.61	38.82	7.29	32.41	Average	2.2.2	14.44
3	11020.000	54.35	-19.65	74.00	40.65	38.82	7.29	32.41	Peak		
4	16530.000	59.01	-9.19	68.20	44.10	37.60	9.25	31.94	Peak	442	

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)

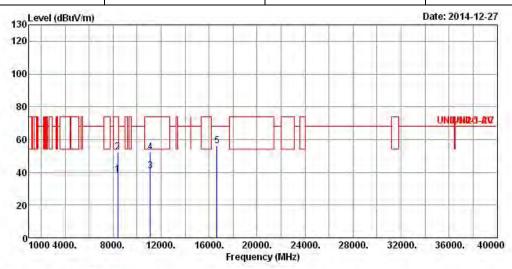
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	VHT40	Test Freq. (MHz)	5550								
N_{TX}	2	Polarization	V								



			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8400.000	38.22	-15.78	54.00	27.05	37.89	6.19	32.91	Average	222	
2	8400.000	52.23	-21.77	74.00	41.06	37.89	6.19	32.91	Peak	777	777
3	11100.000	40.72	-13.28	54.00	26.90	38.90	7.33	32.41	Average	242	244
4	11100.000	52.26	-21.74	74.00	38.44	38.90	7.33	32.41	Peak	+++	
5	16650 000	56.25	-11.95	68.20	49.47	38.30	9.29	31.81	Peak	222	222

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.)

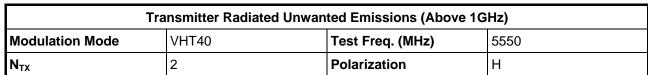
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

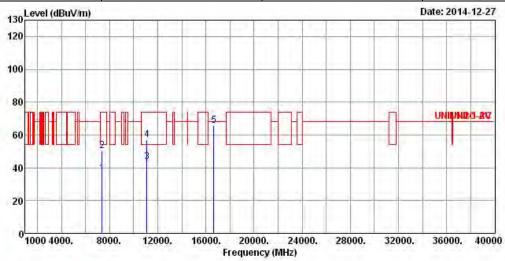
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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	Freq	Level				Antenna Factor		and the second		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg
1	7384.000	36.63	-17.37	54.00	27.22	36.33	5.78	32.70	Average	444	
2	7384.000	50.26	-23.74	74.00	40.85	36.33	5.78	32.70	Peak		
3	11100.000	43.65	-10.35	54.00	29.83	38.90	7.33	32.41	Average	1.666	
4	11100.000	56.89	-17.11	74.00	43.07	38.90	7.33	32.41	Peak		
5	16650.000	65.63	-2.57	68.20	49.85	38.30	9.29	31.81	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)

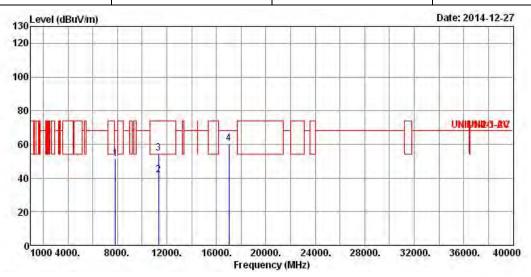
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	VHT40	Test Freq. (MHz)	5670								
N_{TX}	2	Polarization	V								



				Over Limit ReadAntenna Limit Line Level Factor						T/Pos	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7852.000	51.31	-16.89	68.20	41.25	36.95	5.95	32.84	Peak		
2	11340.000	41.72	-12.28	54.00	27.57	39.13	7.44	32.42	Average	444	444
3	11340.000	54.51	-19.49	74.00	40.36	39.13	7.44	32.42	Peak	***	
4	17010.000	60.53	-7.67	68.20	42.12	40.43	9.41	31.43	Peak	222	222

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)

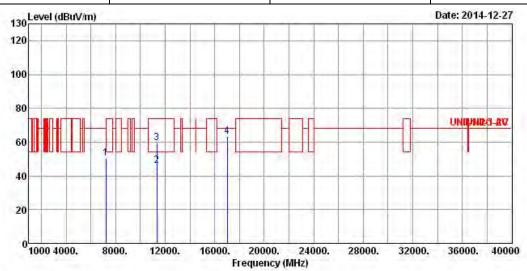
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	VHT40	Test Freq. (MHz)	5670								
N _{TX}	2	Polarization	Н								

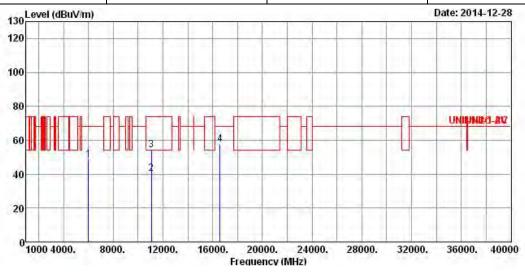


	Freq	Level	0∨er Limit			Antenna Factor		Section 1		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		Cm	deg
1	7212.000	50.30	-17.90	68.20	41.38	35.84	5.71	32.63	Peak	222	
2	11340.000	46.02	-7.98	54.00	31.87	39.13	7.44	32.42	Average	777	
3	11340.000	59.71	-14.29	74.00	45.56	39.13	7.44	32.42	Peak	222	222
4	17010.000	63.53	-4.67	68.20	45.12	40.43	9.41	31.43	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 emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	VHT80	Test Freq. (MHz)	5530								
N_{TX}	2	Polarization	V								



	Freq	Level	Over Limit			Antenna Factor				A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		Cm	deg
1	6024.000	48.40	-19.80	68.20	41.46	34.31	5.09	32.46	Peak		
2	11060.000	40.06	-13.94	54.00	26.29	38.87	7.31	32.41	Average		
3	11060.000	54.27	-19.73	74.00	40.50	38.87	7.31	32.41	Peak		
4	16590.000	57.44	-10.76	68.20	42.14	37.90	9.27	31.87	Peak	1.44	1444

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)

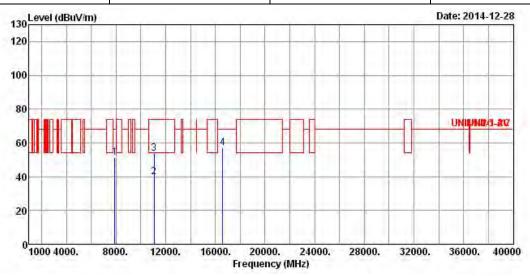
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)						
Modulation Mode	VHT80	Test Freq. (MHz)	5530			
N _{TX}	2	Polarization	Н			



	Freq	Level	0∨er Limit			Antenna Factor				A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg
1	7898.000	51.15	-17.05	68.20	41.03	37.00	5.97	32.85	Peak		
2	11060.000	39.90	-14.10	54.00	26.13	38.87	7.31	32.41	Average	1.666	1.666
3	11060.000	53.63	-20.37	74.00	39.86	38.87	7.31	32.41	Peak		
4	16590.000	57.18	-11.02	68.20	41.88	37.90	9.27	31.87	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 emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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3.7 Frequency Stability

3.7.1 Frequency Stability Limit

Frequency Stability Limit UNII Devices In-band emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual. ### IEEE Std. 802.11n-2009 | The transmitter center frequency tolerance shall be ± 20 ppm maximum for the 5 GHz band and ± 25 ppm maximum for the 2.4 GHz band.

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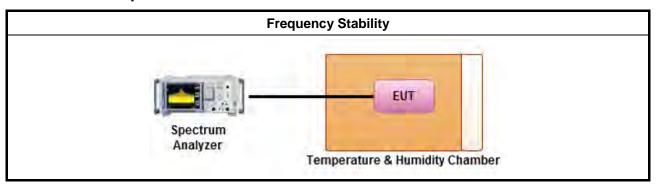
3.7.2 Measuring Instruments

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

3.7.3 Test Procedures

	Test Method							
\boxtimes	☐ Refer as ANSI C63.10, clause 6.8 for frequency stability tests ☐ Refer as ANSI C63.10, clause 6.8 for frequency stability tests ☐ Refer as ANSI C63.10, clause 6.8 for frequency stability tests ☐ Refer as ANSI C63.10, clause 6.8 for frequency stability tests ☐ Refer as ANSI C63.10, clause 6.8 for frequency stability tests ☐ Refer as ANSI C63.10, clause 6.8 for frequency stability tests ☐ Refer as ANSI C63.10, clause 6.8 for frequency stability tests ☐ Refer as ANSI C63.10, clause 6.8 for frequency stability tests ☐ Refer as ANSI C63.10, clause 6.8 for frequency stability tests ☐ Refer as ANSI C63.10, clause 6.8 for frequency stability tests ☐ Refer as ANSI C63.10, clause 6.8 for frequency stability tests ☐ Refer as ANSI C63.10, clause 6.8 for frequency stability tests ☐ Refer as ANSI C63.10, clause 6.8 for frequency stability tests ☐ Refer as ANSI C63.10, clause 6.8 for frequency stability tests ☐ Refer as ANSI C63.10, clause 6.8 for frequency stability tests ☐ Refer as ANSI C63.10, clause 6.8 for frequency stability tests ☐ Refer as ANSI C63.10, clause 6.8 for frequency							
	\boxtimes	Frequency stability with respect to ambient temperature						
	\boxtimes	Frequency stability when varying supply voltage						
\boxtimes	For	conducted measurement.						
	\boxtimes	For conducted measurements on devices with multiple transmit chains: Measurements need only to be performed on one of the active transmit chains (antenna outputs)						
	For radiated measurement. The equipment to be measured and the test antenna shall be oriented to obtain the maximum emitted power level.							

3.7.4 Test Setup



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3.7.5 Test Result of Frequency Stability

	Frequency Stability Result							
Мо	de	Frequency Stability (ppm)						
Condition Freq. (MHz)		Test Frequency (MHz)	Frequency Stability (ppm)					
T _{20°C} Vmax	5300	5299.99696	-0.5736					
T _{20°C} Vmin	5300	5299.99566	-0.8189					
T _{50°C} Vnom	5300	5299.98437	-2.9491					
T _{40°C} Vnom	5300	5299.98524	-2.7849					
T _{30°C} Vnom	5300	5299.98611	-2.6208					
T _{20°C} Vnom	5300	5299.99606	-0.7434					
T _{10°C} Vnom	5300	5300.01954	3.6868					
T _{0°C} Vnom	5300	5300.03039	5.7340					
T _{-10°C} Vnom	5300	5300.03603	6.7981					
T _{-20°C} Vnom	5300	5300.04342	8.1925					
Limit ((ppm)		20					
Res	sult	Cor	nplied					

Note 1: Measure at 85 % [Vmin] and 115 % [Vmax] of the nominal voltage [Vnom]. Note 2: The nominal voltage refer test report clause 1.1.5 for EUT operational condition.

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4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMC Receiver	R&S	ESCS 30	100174	9kHz ~ 2.75GHz	Apr. 14. 2014	AC Conducted
LISN	SCHWARZBECK MESS-ELEKTRONIK	NSLK 8127	8127-477	9kHz ~ 30MHz	Jan. 22, 2014	AC Conducted
RF Cable-CON	HUBER+SUHNER	RG213/U	07611832020001	9kHz ~ 30MHz	Oct. 31, 2014	AC Conducted
EMI Filter	LINDGREN	LRE-2030	2651	< 450 Hz	N/A	AC Conducted

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

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Spectrum Analyzer	R&S	FSV 40	101013	9kHz ~ 40GHz	Jan. 25, 2014	RF Conducted
AC Power Source	G.W	APS-9102	EL920581	AC 0V ~ 300V	Jul. 15, 2014	RF Conducted
Temp. and Humidity Chamber	Giant Force	GTH-225-20-SP-SD	MAA1112-007	-20 ~ 100℃	Nov. 25, 2014	RF Conducted
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	Jul. 31, 2014	RF Conducted

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

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz ~ 1GHz 3m	Nov. 29, 2014	Radiation
Amplifier	HP	8447D	2944A08033	10kHz ~ 1.3GHz	May 05, 2014	Radiation
Amplifier	Agilent	8449B	3008A02120	1GHz ~ 26.5GHz	Sep. 01, 2014	Radiation
Spectrum	R&S	FSP40	100004	9kHz ~ 40GHz	Mar. 27, 2014	Radiation
Bilog Antenna	SCHAFFNER	CBL 6112D	22237	30MHz ~ 1GHz	Sep. 20, 2014	Radiation
Horn Antenna	ETS · LINDGREN	3115	6741	1GHz ~ 18GHz	Jul. 11, 2014	Radiation
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	18GHz ~ 40GHz	Jan. 10, 2014	Radiation
RF Cable-R03m	Jye Bao	RG142	CB021	9kHz ~ 1GHz	Nov. 15, 2014	Radiation
RF Cable-high	SUHNER	SUCOFLEX 106	03CH03-HY	1GHz ~ 40GHz	Dec. 12, 2014	Radiation
Turn Table	EM Electronics	EM Electronics	060615	0 ~ 360 degree	N/A	Radiation
Antenna Mast	MF	MF-7802	MF780208179	1 ~ 4 m	N/A	Radiation

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

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Amplifier	EM	EM18G40G	060604	18GHz ~ 40GHz	Oct. 17.2013	Radiation
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9kHz ~ 30MHz	Jul. 28, 2014	Radiation

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

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