

Equipment	:	Hardened Wireless Access Point
<b>Brand Name</b>	:	Xirrus
Model No.	:	XH2120
FCC ID	:	SK6-XH2120
Standard	:	47 CFR FCC Part 15.407
Operating Band	:	5250 MHz – 5350 MHz 5470 MHz – 5725 MHz
FCC Classification	:	UNII
Applicant Manufacturer	:	Xirrus, INC. 2101 Corporate Center Drive Thousand Oaks, California 91320
Function	:	<ul><li>☐ Outdoor AP;</li><li>☐ Indoor AP;</li><li>☐ Fixed P2P AP;</li><li>☐ Portable Client</li></ul>
SPORTON, would like to d	lecl	d on Jul. 02, 2015 and completely tested on Oct. 21, 2015. We, are that the tested sample has been evaluated in accordance with C63.10-2013 and shown compliance with the applicable technical

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:

Testing Laboratory
1190

Report No.: FR570330-01

Kevin Liang / Assistant Manager

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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	Ref. Std. Clause	Description	Result		
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
FR570330	Rev. 01	Initial issue of report	Aug. 25, 2015
FR570330-01	Rev. 01	Add 5GHz band 2 and band 3	Sep. 07, 2015
FR570330-01	Rev. 02	Update RF Conducted test items	Nov. 02, 2015

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## 1 General Description

#### 1.1 Information

#### 1.1.1 RF General Information

There are two RF 2x2 modules in the EUT. They are the same RF module type. RF information is for one RF module. RF chip is " QCA 9882-BR4A"

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	RF General Information (5250-5350MHz band)					
Frequency Range (MHz)	IEEE Std. 802.11	Ch. Freq. (MHz)	Channel Number	Transmit Chains (N <sub>TX</sub> )	RF Output Power (dBm)	Co-location
5250-5350	а	5260-5320	52-64 [4]	2	17.96	Yes
5250-5350	n (HT20)	5260-5320	52-64 [4]	2	17.92	Yes
5250-5350	n (HT40)	5270-5310	54-62 [2]	2	17.74	Yes
5250-5350	ac (VHT20)	5260-5320	52-64 [4]	2	17.76	Yes
5250-5350	ac (VHT40)	5270-5310	54-62 [2]	2	17.47	Yes
5250-5350	ac (VHT80)	5290	58 [1]	2	16.50	Yes

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.

Note 4: Co-location, Co-location is generally defined as simultaneously transmitting (co-transmitting) antennas within 20 cm of each other. (i.e., EUT has simultaneously co-transmitting that operating 2.4GHz and 5GHz.)

	RF General Information (5470-5725MHz band)					
Frequency Range (MHz)	IEEE Std. 802.11	Ch. Freq. (MHz)	Channel Number	Transmit Chains (N <sub>TX</sub> )	RF Output Power (dBm)	Co-location
5470-5725	а	5500-5700	100-140 [8]	2	16.41	Yes
5470-5725	n (HT20)	5500-5700	100-140 [8]	2	16.33	Yes
5470-5725	n (HT40)	5510-5670	102-134 [3]	2	16.32	Yes
5470-5725	ac (VHT20)	5500-5700	100-140 [8]	2	16.34	Yes
5470-5725	ac (VHT40)	5510-5670	102-134 [3]	2	16.69	Yes
5470-5725	ac (VHT80)	5530	106 [1]	2	16.14	Yes

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.

Note 4: Co-location, Co-location is generally defined as simultaneously transmitting (co-transmitting) antennas within 20 cm of each other. (i.e., EUT has simultaneously co-transmitting that operating 2.4GHz and 5GHz.)

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	RF General Information (for band 3 straddle)					
Frequency Range (MHz)	IEEE Std. 802.11	Ch. Freq. (MHz)	Channel Number	Transmit Chains (N <sub>TX</sub> )	RF Output Power (dBm)	Co-location
straddle 5725	а	5720	144 [1]	2	15.93	Yes
straddle 5725	n (HT20)	5720	144 [1]	2	15.58	Yes
straddle 5725	n (HT40)	5710	142 [1]	2	15.92	Yes
straddle 5725	ac (VHT20)	5720	144 [1]	2	15.57	Yes
straddle 5725	ac (VHT40)	5710	142 [1]	2	15.99	Yes
straddle 5725	ac (VHT80)	5690	138 [1]	2	15.96	Yes

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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.
- Note 4: Co-location, Co-location is generally defined as simultaneously transmitting (co-transmitting) antennas within 20 cm of each other. (i.e., EUT has simultaneously co-transmitting that operating 2.4GHz and 5GHz.)
- Note 5: Straddle 5725 means that straddle the boundary between 5470-5725MHz band and 5725-5825MHz band. The maximum conducted output power within each band of operation shall comply with the limits for that band.
- Note 6: 802.11ac support straddle channel between 5470-5725MHz band and 5725-5825MHz band.

	RF General Information (for band 4 straddle)					
Frequency Range (MHz)	IEEE Std. 802.11	Ch. Freq. (MHz)	Channel Number	Transmit Chains (N <sub>TX</sub> )	RF Output Power (dBm)	Co-location
straddle 5725	а	5720	144 [1]	2	12.57	Yes
straddle 5725	n (HT20)	5720	144 [1]	2	13.09	Yes
straddle 5725	n (HT40)	5710	142 [1]	2	8.62	Yes
straddle 5725	ac (VHT20)	5720	144 [1]	2	14.10	Yes
straddle 5725	ac (VHT40)	5710	142 [1]	2	9.51	Yes
straddle 5725	ac (VHT80)	5690	138 [1]	2	4.21	Yes

- 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.
- Note 4: Co-location, Co-location is generally defined as simultaneously transmitting (co-transmitting) antennas within 20 cm of each other. (i.e., EUT has simultaneously co-transmitting that operating 2.4GHz and 5GHz.)
- Note 5: Straddle 5725 means that straddle the boundary between 5470-5725MHz band and 5725-5825MHz band. The maximum conducted output power within each band of operation shall comply with the limits for that band.
- Note 6: 802.11ac support straddle channel between 5470-5725MHz band and 5725-5825MHz band.

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#### 1.1.2 Antenna Information

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

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	Antenna General Information					
No.	Ant. Cat.	Ant. Type	Gain <sub>(dBi)</sub>	Cable Length (m)		
1	External	OMNI	4	-		
2	External	OMNI	5	0.8		
3	External	OMNI	3.5	3.1		

Note 1: The following test Antenna was referring to 2.4GHz pretested worst case "Antenna 2" for 5GHz final test.

Note 2: 11a/n/ac only includes 2TX/2RX to emission. IEEE 802.11a/n/ac has the CDD function.

## 1.1.3 Type of EUT

	Identify EUT				
EUΊ	Serial Number	N/A			
Pre	sentation of Equipment	☐ Production ; ☐ Pre-Production ; ☐ Prototype			
	Type of EUT				
$\boxtimes$	Stand-alone				
	Combined (EUT where the radio part is fully integrated within another device)				
	Combined Equipment - Brand Name / Model No.:				
	Plug-in radio (EUT intended for a variety of host systems)				
	Host System - Brand Name / Model No.:				
	Other:				

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# 1.1.4 Test Signal Duty Cycle

	Operated Mode for Worst Duty Cycle			
	Operated normally mode for worst duty cycle			
$\boxtimes$	Operated test mode for 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 802.11ac (VHT20)	0		
$\boxtimes$	100% - IEEE 802.11ac (VHT40)	0		
$\boxtimes$	100% - IEEE 802.11ac (VHT80)	0		

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# 1.1.5 EUT Operational Condition

Supply Voltage	☐ AC mains	□ DC	
Type of DC Source		☐ External AC adapter	☐ Li-ion Battery

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## 1.2 Support Equipment

Support Equipment - RF Conducted						
No.	No. Equipment Brand Name Model Name FCC ID					
1	Notebook	DELL	E5540	DoC		
2	NB Adapter	DELL	HA65NM130	DoC		

Support Equipment - AC Conduction and Radiated Emission						
No.	o. Equipment Brand Name Model Name FCC ID					
1	1 PoE DNI DPSN-80DB A-R 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 C63.10-2013
- FCC KDB 789033 D02 v01
- FCC KDB 644545 D03 v01
- FCC KDB 662911 v02r01
- FCC-14-30A1-UNII

## 1.4 Testing Location Information

	Testing Location						
	HWA YA	ADD	:	No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.			
		TEL: 886-3-327-3456 FAX: 886-3-327-0973					
	Test Condition Test Site No.				Test Engineer	Test Environment	
	AC Conduction CO04-HY		Zeus	21°C / 60%			
RF Conducted TH01-HY		Jason	22.3℃ / 60.8%				
Radiated Emission 03CH03-HY			03CH03-HY	Terry	24.3°C / 64.6%		

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1.5 Measurement Uncertainty

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

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Measurement Uncertainty					
Test Item		Uncertainty			
AC power-line conducted emissions		±2.3 dB			
Emission bandwidth, 26dB bandwidth		±0.5 %			
RF output power, conducted		±0.1 dB			
Power density, conducted		±0.5 dB			
Unwanted emissions, conducted	9 – 150 kHz	±0.4 dB			
	0.15 – 30 MHz	±0.4 dB			
	30 – 1000 MHz	±0.6 dB			
	1 – 18 GHz	±0.5 dB			
	18 – 40 GHz	±0.5 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 ℃			
Humidity		±5 %			
DC and low frequency voltages		±0.9 %			
Time		±1.4 %			
Duty Cycle		±0.5 %			

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# 2 Test Configuration of EUT

# 2.1 The Worst Case Modulation Configuration

We select one module to test because power of only one module is maximum.

Two modules can work in 2.4GHz or 5GHz together, but they never work at the same channel.

Worst Modulation Used for Conformance Testing						
Modulation Mode Transmit Chains (N <sub>TX</sub> ) Data Rate / MCS Worst Data Rate / M						
11a	2	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				Ca	art		
				Test Free	quency (MH	z)	
<b>Modulation Mode</b>	N <sub>TX</sub>	NCB: 20MHz			NCB:	40MHz	NCB: 80MHz
		5260	5300	5320	5270	5310	5290
11a	2	14.5	14	14	-	-	-
HT20	2	14.5	14	13.5	-	-	-
HT40	2	-	-	-	16	15.5	-
VHT20	2	14	14	14	-	-	-
VHT40	2	-	-	-	16	16	-
VHT80	2	-	-	-	-	-	15

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The Worst Case Power Setting Parameter (5470-5725MHz band)								
<b>Test Software Version</b>					Cart			
				Tes	t Frequer	ncy (MHz)		
<b>Modulation Mode</b>	N <sub>TX</sub>	NCB: 20MHz NCB: 40MHz NC				NCB: 80MHz		
		5500	5580	5700	5510	5550	5670	5530
11a	2	13	12	12	-	-	-	-
HT20	2	12	12	12	-	-	-	-
HT40	2	-	-	-	14.5	13.5	13.5	-
VHT20	2	12.5	12	12	-	-	-	-
VHT40	2	-	-	-	14.5	14	14	-
VHT80	2	-	-	-	-	-	-	14.5

Test Software Version		Cart			
			Test Frequency (MHz)		
<b>Modulation Mode</b>	N <sub>TX</sub>	NCB: 20MHz	NCB: 40MHz	NCB: 80MHz 5690	
		5720	5710		
11a	2	12.5	-	-	
HT20	2	12	-	-	
HT40	2	-	13.5	-	
VHT20	2	12	-	-	
VHT40	2	-	13.5	-	
VHT80	2	-	-	13.5	

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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	Operating Mode Description			
1	PoE Mode			

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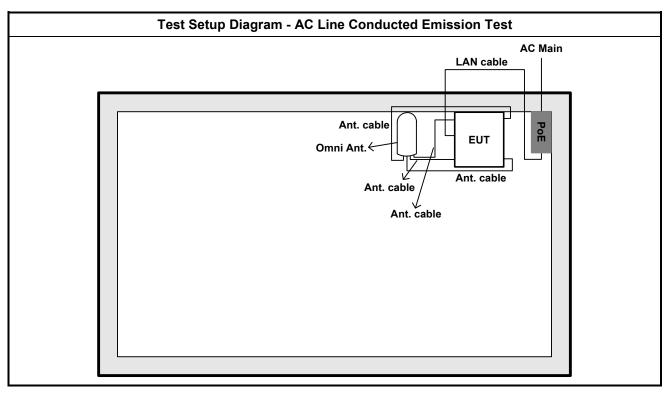
Th	The Worst Case Mode for Following Conformance Tests				
Tests Item	RF Output Power, Peak Power Spectral Density, Emission Bandwidth, Transmitter Conducted Unwanted Emissions Transmitter Conducted Bandedge Emissions				
Test Condition Conducted measurement at transmit chains					
Modulation Mode	11a,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

Th	e Worst Case Mode for Following Con	formance 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. EUT shall be performed three orthogonal planes.			
Operating Mode	Operating Mode Description			
1	PoE Mode			
Modulation Mode	11a, HT20, HT40, VHT20, VHT40, VHT8	30		
	X Plane	Y Plane		
Orthogonal Planes of EUT				
Worst Planes of EUT	V			

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2.4 Test Setup Diagram



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Test Setup Diagram - Radiated Below 1GHz Test AC Main LAN cable Ant. cable EUT Ant. cable Omni Ant. Ant. cable Ant. cable Test Setup Diagram - Radiated Above 1GHz Test AC Main LAN cable **EUT** Ant. cable Ant. cable Ant. cable Ant. cable Omni Ant.

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3 Transmitter Test Result

### 3.1 AC Power-line Conducted Emissions

#### 3.1.1 AC Power-line Conducted Emissions Limit

Fraguency Emission (MHz) Quasi Book Average							
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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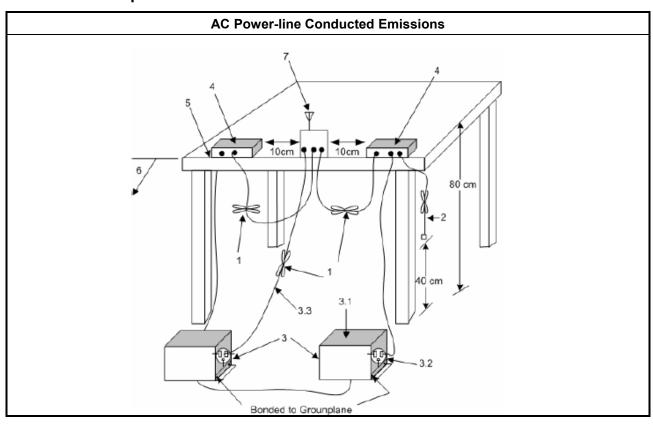
### 3.1.2 Measuring Instruments

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

#### 3.1.3 Test Procedures

Test Method	
Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.	

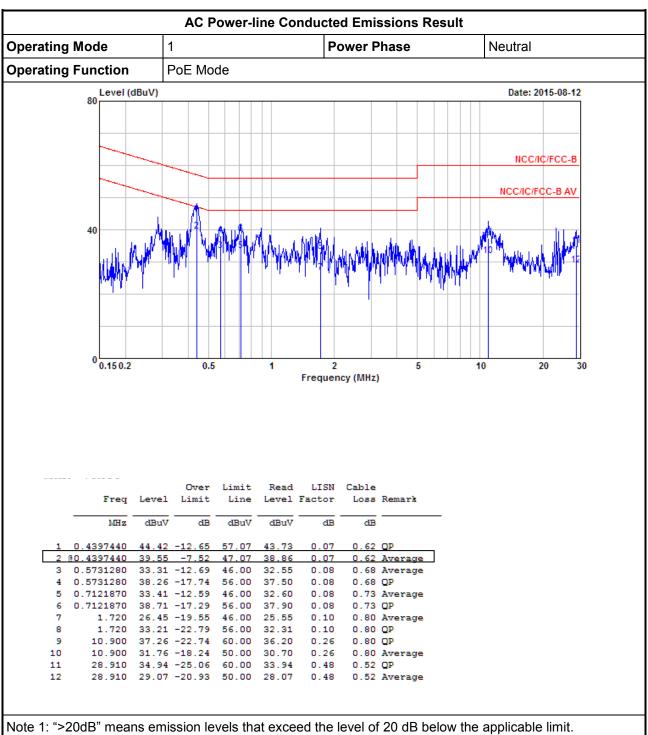
### 3.1.4 Test Setup



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# **Test Result of AC Power-line Conducted Emissions**

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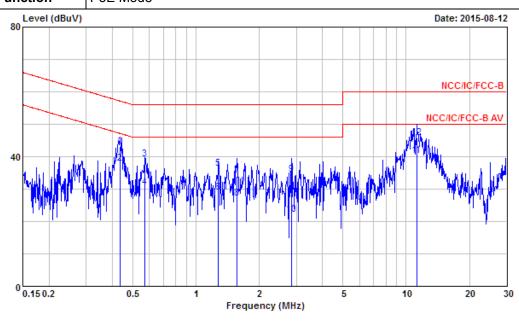
Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

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AC Power-line Conducted Emissions Result

Operating Mode 1 Power Phase Line

Operating Function PoE Mode



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.4351090	43.28	-13.87	57.15	42.59	0.07	0.62	QP
2	@0.4351090	37.80	-9.35	47.15	37.11	0.07	0.62	Average
3	0.5701000	39.21	-16.79	56.00	38.46	0.07	0.68	QP
4	0.5701000	30.49	-15.51	46.00	29.74	0.07	0.68	Average
5	1.280	36.43	-19.57	56.00	35.54	0.09	0.80	QP
6	1.280	28.82	-17.18	46.00	27.93	0.09	0.80	Average
7	1.570	33.88	-22.12	56.00	32.99	0.09	0.80	QP
8	1.570	27.21	-18.79	46.00	26.32	0.09	0.80	Average
9	2.850	34.38	-21.62	56.00	33.51	0.12	0.75	QP
10	2.850	22.19	-23.81	46.00	21.32	0.12	0.75	Average
11	11.200	40.18	-9.82	50.00	39.13	0.25	0.80	Average
12	11.200	45.82	-14.18	60.00	44.77	0.25	0.80	QP

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

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

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## 3.2 Emission Bandwidth

### 3.2.1 Emission Bandwidth Limit

	Emission Bandwidth (EBW) Limit
UNI	I Devices
	For the $5.15-5.25$ GHz band, the maximum conducted output power shall not exceed the lesser of $50$ mW or $4 \text{ dBm} + 10 \log B$ , where B is the $26 \text{ dB}$ emission bandwidth in MHz.
$\boxtimes$	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 $5.725$ - $5.825$ GHz band, the maximum conducted output power shall not exceed the lesser of 1 W or 17 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz
LE-	LAN Devices
	For the band 5.15-5.25 GHz, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
$\boxtimes$	For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
$\boxtimes$	For the $5.47$ - $5.6$ GHz band and $5.65$ - $5.725$ GHz band, the maximum e.i.r.p. shall not exceed $1.0$ W or $17 + 10 \log B$ , dBm, whichever power is less. B is the $99\%$ emission bandwidth in MHz
	For the 5.725-5.825 GHz band, the maximum e.i.r.p. shall not exceed 4.0 W or 23 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.

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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

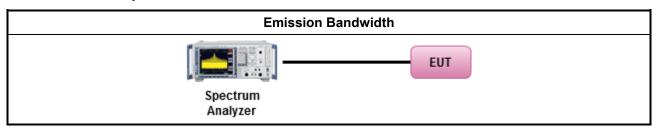
	Test Method										
$\boxtimes$	For	the emission bandwidth shall be measured using one of the options below:									
	$\boxtimes$	Refer as FCC KDB 789033 D02 v01, clause C for EBW and clause D for OBW measurement.									
		Ref	er as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.								
		Ref	er as IC RSS-Gen, clause 6.6 for bandwidth testing.								
$\boxtimes$	For	cond	ucted measurement.								
		The	EUT supports single transmit chain and measurements performed on this transmit.								
		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 a transmit chains (antenna outputs). All measurement had be performed on transmit chain									
		$\boxtimes$	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.								

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## 3.2.4 Test Setup



### 3.2.5 Test Result of Emission Bandwidth

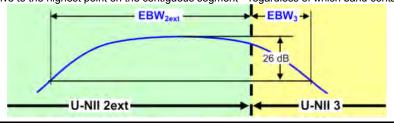
	UNII Emission Bandwidth Result (5250-5350MHz band)									
Condi	tion		Emission Bandwidth (MHz)							
Modulation		Freq.	99% Bar	ndwidth	26dB Bar	ndwidth				
Mode	N <sub>TX</sub>	(MHz)	Chain- Port 1	Chain- Port 2	Chain- Port 1	Chain- Port 2				
11a	2	5260	17.84	19.24	34.67	35.10				
11a	2	5300	19.11	19.31	30.97	36.05				
11a	2	5320	19.84	19.49	36.12	34.87				
HT20	2	5260	19.46	19.64	36.55	37.95				
HT20	2	5300	18.01	19.76	29.40	39.20				
HT20	2	5320	18.86	19.44	32.20	36.65				
HT40	2	5270	37.90	37.82	78.40	73.00				
HT40	2	5310	37.82	38.06	77.56	75.40				
VHT20	2	5260	18.36	19.04	35.87	35.92				
VHT20	2	5300	18.24	19.31	29.50	41.40				
VHT20	2	5320	18.41	19.99	30.67	38.17				
VHT40	2	2 5270 37.86	37.82	78.44	77.00					
VHT40	2	5310	37.90	37.90	75.88	75.72				
VHT80	2	5290	76.76	76.52	138.40	143.20				
Resu	ult			Com	plied					

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UNII Emission Bandwidth Result (5470-5725MHz band)								
Condit	tion			Emission Bar	ndwidth (MHz)			
Modulation		Freq.	99% Bar	ndwidth	26dB Ba	andwidth		
Mode	N <sub>TX</sub>	(MHz)	Chain- Port 1	Chain- Port 2	Chain- Port 1	Chain- Port 2		
11a	2	5500	17.31	19.69	32.55	37.02		
11a	2	5580	16.71	19.44	26.90	36.10		
11a	2	5700	16.94	19.56	24.22	34.55		
11a	2	5720*	17.14	19.36	29.07	36.85		
HT20	2	5500	18.01	19.96	26.57	35.42		
HT20	2	5580	17.89	19.74	28.50	38.17		
HT20	2	5700	18.11	19.39	28.25	36.20		
HT20	2	5720*	17.91	19.46	28.75	36.75		
HT40	2	5510	37.38	37.94	73.92	78.32		
HT40	2	5550	37.22	37.86	69.88	78.00		
HT40	2	5670	37.26	38.38	58.72	76.80		
HT40	2	5710*	37.34	38.66	58.16	78.80		
VHT20	2	5500	17.89	19.59	29.75	33.80		
VHT20	2	5580	17.86	19.39	25.22	36.55		
VHT20	2	5700	18.11	19.56	28.97	36.25		
VHT20	2	5720*	17.99	18.69	29.17	32.45		
VHT40	2	5510	37.90	38.50	76.56	77.96		
VHT40	2	5550	37.18	37.98	69.52	76.60		
VHT40	2	5670	37.62	38.38	63.76	76.36		
VHT40	2	5710*	37.10	38.22	67.44	78.12		
VHT80	2	5530	76.60	77.88	139.36	154.56		
VHT80	2	5690*	76.28	76.92	110.56	151.84		
Resu	ılt			Com	plied			

<sup>\* =</sup> Band-crossing channel. For an emission that crosses the boundary between two adjacent U-NII bands, the boundary frequency between the bands serves as one edge for defining the portion of the EBW that falls within a particular U-NII band; however, the -26 dB points are measured relative to the highest point on the contiguous segment—regardless of which band contains that highest point.



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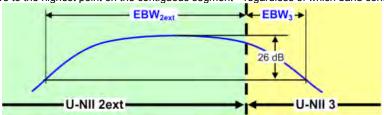
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UNII Emission Bandwidth Result (for band 4 straddle)								
Cond	ition			Emission Bandwidth (MHz)				
Modulation		Freq.	99% Bai	ndwidth	6dB Bandwidth			
Mode	N <sub>TX</sub>	(MHz)	Chain- Port 1	Chain- Port 2	Chain- Port 1	Chain- Port 2		
11a	2	5720*	27.19	27.00	3.06	3.22		
HT20	2	5720*	27.73	27.19	3.84	3.84		
HT40	2	5710*	81.15	87.75	3.15	3.60		
VHT20	2	5720*	27.51	27.30	3.88	3.87		
VHT40	2	5710*	65.92	68.52	3.20	3.18		
VHT80	2	5690*	102.26	119.06	2.92	3.20		
Res	ult			Com	plied			

<sup>\* =</sup> Band-crossing channel. For an emission that crosses the boundary between two adjacent U-NII bands, the boundary frequency between the bands serves as one edge for defining the portion of the EBW that falls within a particular U-NII band; however, the -26 dB points are measured relative to the highest point on the contiguous segment—regardless of which band contains that highest point.



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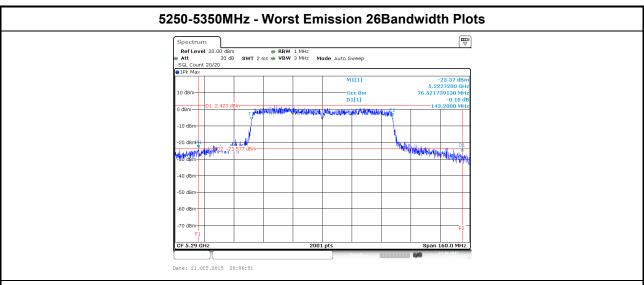
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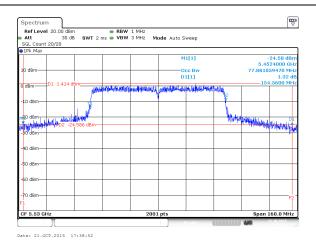
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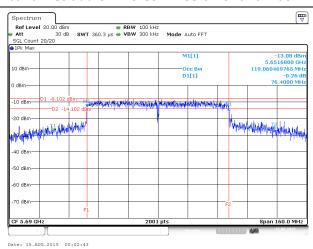


5470-5725MHz - Worst Emission 26Bandwidth Plots



Note: Band-crossing data = 5725-( Frequency-26dB data /2)





Note: Band-crossing data = (Frequency +( 26dB data /2))-5725

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## 3.3 RF Output Power

### 3.3.1 RF Output Power Limit

	Maximum Conducted Output Power Limit
UN	Il Devices
	For the 5.15-5.25 GHz band, the maximum conducted output power ( $P_{Out}$ ) shall not exceed the lesser of 50 mW or 4 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$ .
$\boxtimes$	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).
	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 5.725-5.825 GHz band:
	Point-to-multipoint systems (P2M): the maximum conducted output power ( $P_{Out}$ ) shall not exceed the lesser of 1 W or 17 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. 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 or 17 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 23$ dBi, then $P_{Out} = 30 - (G_{TX} - 23)$ .
LE-	LAN Devices
	For the 5.15-5.25 GHz band, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
	For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
	For the 5.725-5.825 GHz band, the maximum e.i.r.p. shall not exceed 4.0 W or 23 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
	Point-to-multipoint systems (P2M): the maximum e.i.r.p. shall not exceed 4.0 W or 23 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
	Point-to-point systems (P2P): the maximum e.i.r.p. shall not exceed 4.0 W or 23 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. If e.i.r.p. > 36 dBm, G <sub>TX</sub> ≤ P <sub>Out</sub>
	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.

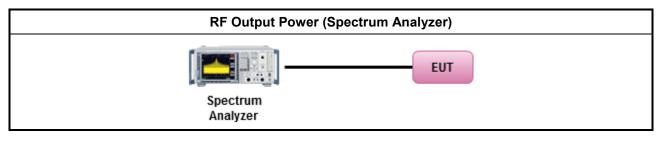
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## 3.3.3 Test Procedures

		Test Method						
$\boxtimes$	Max	imum Conducted Output Power						
	[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)						
	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						
		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: $P_{total} = P_1 + P_2 + + P_n$ (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 Test Result of Maximum Conducted Output Power

	M	aximum (	Conducted Ou	ıtput Power (	5250-5350MHz	band)	
Modulation Mode	N <sub>TX</sub>	Freq. (MHz)	Chain Port 1	Chain Port 2	Sum Chain	Antenna Gain (dBi)	Power Limit
11a	2	5260	14.88	15.02	17.96	5.00	24.00
11a	2	5300	14.36	14.37	17.38	5.00	24.00
11a	2	5320	14.54	14.28	17.42	5.00	24.00
HT20	2	5260	14.85	14.97	17.92	5.00	24.00
HT20	2	5300	13.40	14.47	16.98	5.00	24.00
HT20	2	5320	14.35	14.40	17.39	5.00	24.00
HT40	2	5270	14.79	14.67	17.74	5.00	24.00
HT40	2	5310	14.38	14.09	17.25	5.00	24.00
VHT20	2	5260	14.64	14.86	17.76	5.00	24.00
VHT20	2	5300	13.56	14.57	17.10	5.00	24.00
VHT20	2	5320	14.37	14.15	17.27	5.00	24.00
VHT40	2	5270	14.56	14.36	17.47	5.00	24.00
VHT40	2	5310	14.37	14.07	17.23	5.00	24.00
VHT80	2	5290	13.58	13.39	16.50	5.00	24.00
Res	ult				Complied		

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	Maximum Conducted Output Power (5470-5725MHz band)								
Modulation Mode	N <sub>TX</sub>	Freq. (MHz)	Chain Port 1	Chain Port 2	Sum Chain	Antenna Gain (dBi)	Power Limit		
11a	2	5500	12.85	13.55	16.22	5.00	24.00		
11a	2	5580	12.76	13.95	16.41	5.00	24.00		
11a	2	5700	12.62	13.09	15.87	5.00	24.00		
11a	2	5720*	12.78	13.05	15.93	5.00	24.00		
HT20	2	5500	12.47	13.27	15.90	5.00	24.00		
HT20	2	5580	12.73	13.84	16.33	5.00	24.00		
HT20	2	5700	12.51	13.03	15.79	5.00	24.00		
HT20	2	5720*	12.41	12.72	15.58	5.00	24.00		
HT40	2	5510	13.14	13.25	16.21	5.00	24.00		
HT40	2	5550	12.76	12.99	15.89	5.00	24.00		
HT40	2	5670	13.16	13.45	16.32	5.00	24.00		
HT40	2	5710*	12.83	12.99	15.92	5.00	24.00		
VHT20	2	5500	12.49	13.30	15.92	5.00	24.00		
VHT20	2	5580	12.74	13.85	16.34	5.00	24.00		
VHT20	2	5700	12.52	12.98	15.77	5.00	24.00		
VHT20	2	5720*	12.42	12.70	15.57	5.00	24.00		
VHT40	2	5510	13.14	13.21	16.19	5.00	24.00		
VHT40	2	5550	13.17	13.35	16.27	5.00	24.00		
VHT40	2	5670	13.59	13.76	16.69	5.00	24.00		
VHT40	2	5710*	12.93	13.03	15.99	5.00	24.00		
VHT80	2	5530	13.04	13.22	16.14	5.00	24.00		
VHT80	2	5690*	12.82	13.08	15.96	5.00	24.00		
Res	ult		_		Complied				

<sup>\* =</sup> Band-crossing channel. The conducted output power within each band of operation shall comply with the limits for that band.

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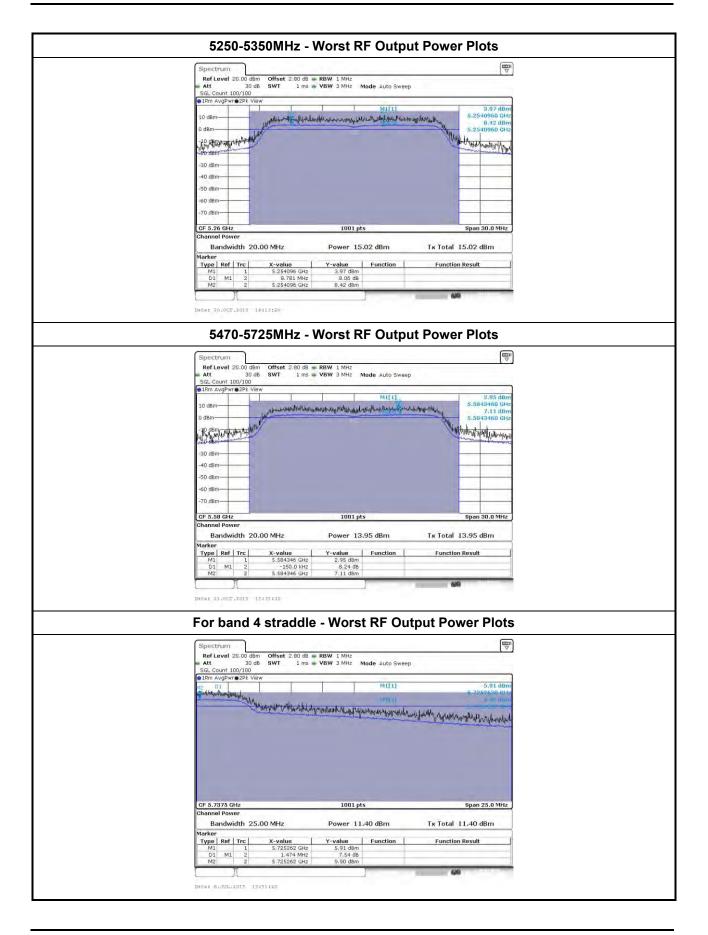
Modulation Mode	N <sub>TX</sub>	Freq. (MHz)	Chain Port 1	Chain Port 2	Sum Chain	Antenna Gain (dBi)	Power Limit
11a	2	5720*	9.23	9.86	12.57	5.00	30.00
HT20	2	5720*	9.77	10.37	13.09	5.00	30.00
HT40	2	5710*	5.48	5.73	8.62	5.00	30.00
VHT20	2	5720*	11.40	10.76	14.10	5.00	30.00
VHT40	2	5710*	6.54	6.46	9.51	5.00	30.00
VHT80	2	5690*	0.46	1.83	4.21	5.00	30.00
Res	ult	1		•	Complied		•

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<sup>\* =</sup> Band-crossing channel. The conducted output power within each band of operation shall comply with the limits for that band.





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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 Devices
	For the 5.15-5.25 GHz band, the peak power spectral density (PPSD) $\leq$ 4 dBm/MHz. If $G_{TX} >$ 6 dBi, then PPSD = 4 – ( $G_{TX} -$ 6).
$\boxtimes$	For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) $\leq$ 11 dBm/MHz. If $G_{TX} >$ 6 dBi, then PPSD= 11 – ( $G_{TX} -$ 6).
$\boxtimes$	For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) $\leq$ 11 dBm/MHz. If $G_{TX} >$ 6 dBi, then PPSD= 11 – ( $G_{TX} -$ 6).
	For the 5.725-5.825 GHz band:
	Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) $\leq$ 17 dBm/MHz. If $G_{TX} > 6$ dBi, then PPSD= 17 – ( $G_{TX} - 6$ ).
	Point-to-point systems (P2P): the peak power spectral density (PPSD) $\leq$ 17 dBm/MHz. If $G_{TX} > 23$ dBi, then PPSD = 17 – ( $G_{TX} - 23$ ).
LE-	LAN Devices
	For the 5.15-5.25 GHz band, the peak power spectral density (PPSD) $\leq$ 4 dBm/MHz and the e.i.r.p. peak power spectral density (PPSD) $\leq$ 10 dBm/MHz.
$\boxtimes$	For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) $\leq$ 11 dBm/MHz and the e.i.r.p. peak power spectral density (PPSD) $\leq$ 17 dBm/MHz.
$\boxtimes$	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the peak power spectral density (PPSD) $\leq$ 11 dBm/MHz and the e.i.r.p. peak power spectral density (PPSD) $\leq$ 17 dBm/MHz.
	For the 5.725-5.825 GHz band, the peak power spectral density (PPSD) $\leq$ 17 dBm/MHz and the e.i.r.p. peak power spectral density (PPSD) $\leq$ 23 dBm/MHz.
pow	<b>SD</b> = peak power spectral density that he same method as used to determine the conducted output ver shall be used to determine the power spectral density. And power spectral density in dBm/MHz = the maximum 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.

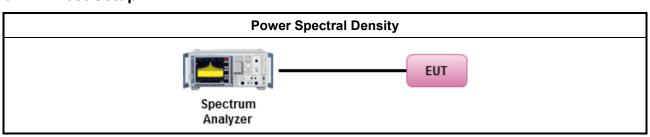
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## 3.4.3 Test Procedures

	Test Method
outp func	c 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 tion on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density be measured using below options:
	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)
For	conducted measurement.
	The EUT supports single transmit chain and measurements performed on this transmit
	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: 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 + + 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 <sub>TX</sub>	Freq. (MHz)	Peak Power Spectral Density (dBm)	PSD Limit	PSD-DG (dBi)	
11a	2	5260	6.77	8.99	8.01	
11a	2	5300	6.15	8.99	8.01	
11a	2	5320	6.24	8.99	8.01	
HT20	2	5260	6.60	8.99	8.01	
HT20	2	5300	5.73	8.99	8.01	
HT20	2	5320	5.80	8.99	8.01	
HT40	2	5270	3.34	8.99	8.01	
HT40	2	5310	2.74	8.99	8.01	
VHT20	2	5260	6.30	8.99	8.01	
VHT20	2	5300	5.70	8.99	8.01	
VHT20	2	5320	5.83	8.99	8.01	
VHT40	2	5270	3.08	8.99	8.01	
VHT40	2	5310	2.72	8.99	8.01	
VHT80	2	5290	-1.20	8.99	8.01	
Result				Complied		

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	Peak Power Spectral Density Result (5470-5725MHz band)				
Modulation Mode	N <sub>TX</sub>	Freq. (MHz)	Peak Power Spectral Density (dBm)	PSD Limit (500kHz)	PSD-DG (dBi)
11a	2	5500	5.13	8.99	8.01
11a	2	5580	5.28	8.99	8.01
11a	2	5700	4.74	8.99	8.01
11a	2	5720*	4.96	8.99	8.01
HT20	2	5500	4.40	8.99	8.01
HT20	2	5580	4.96	8.99	8.01
HT20	2	5700	4.43	8.99	8.01
HT20	2	5720*	4.40	8.99	8.01
HT40	2	5510	1.57	8.99	8.01
HT40	2	5550	1.54	8.99	8.01
HT40	2	5670	1.85	8.99	8.01
HT40	2	5710*	1.61	8.99	8.01
VHT20	2	5500	4.37	8.99	8.01
VHT20	2	5580	4.93	8.99	8.01
VHT20	2	5700	4.38	8.99	8.01
VHT20	2	5720*	4.33	8.99	8.01
VHT40	2	5510	1.66	8.99	8.01
VHT40	2	5550	1.85	8.99	8.01
VHT40	2	5670	2.34	8.99	8.01
VHT40	2	5710*	1.76	8.99	8.01
VHT80	2	5530	-1.55	8.99	8.01
VHT80	2	5690*	-1.20	8.99	8.01
Res	ult			Complied	

\* = Band-crossing channel. The PSD within each band of operation shall comply with the limits for that band.

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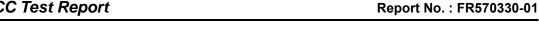


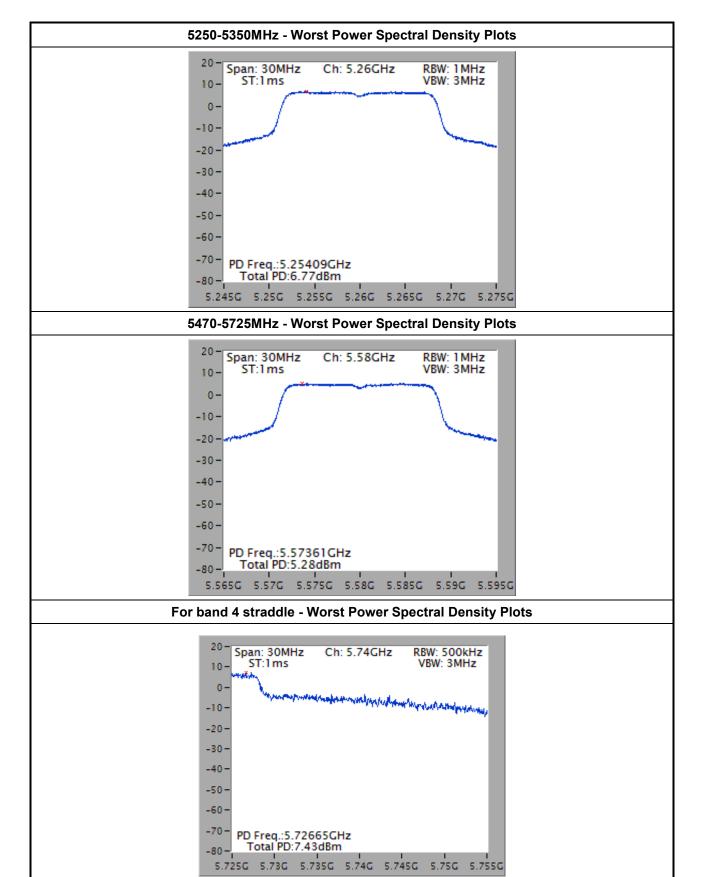
Peak Power Spectral Density Result (for band 4 straddle)					
Modulation Mode	N <sub>TX</sub>	Freq. (MHz)	Peak Power Spectral Density (dBm)	PSD Limit (500kHz)	PSD-DG (dBi)
11a	2	5720*	5.18	27.99	8.01
HT20	2	5720*	4.81	27.99	8.01
HT40	2	5710*	7.43	27.99	8.01
VHT20	2	5720*	5.08	27.99	8.01
VHT40	2	5710*	7.27	27.99	8.01
VHT80	2	5690*	2.41	27.99	8.01
Result				Complied	•

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<sup>=</sup> Band-crossing channel. The PSD within each band of operation shall comply with the limits for that band.



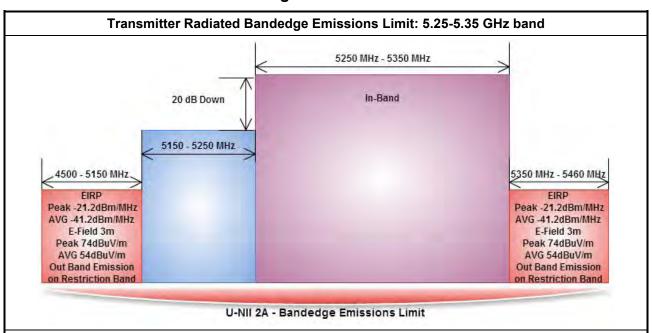


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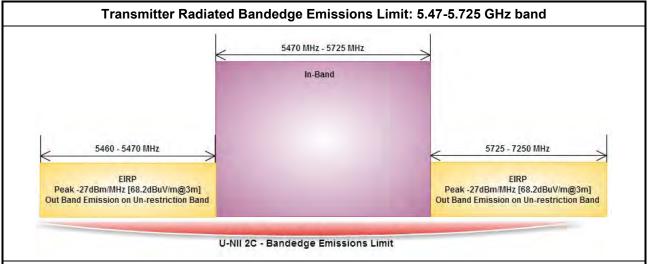
3.5 Transmitter Bandedge Emissions

#### 3.5.1 Transmitter Radiated Bandedge Emissions Limit



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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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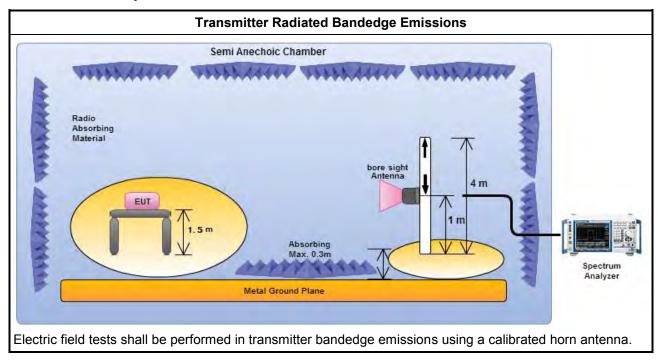
## 3.5.3 Test Procedures

		Test Method
$\boxtimes$	The	average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].
$\boxtimes$		er as ANSI C63.10, clause 6.10 bandedge testing shall be performed at the lowest frequency nnel and highest frequency channel within the allowed operating band.
	char will d at lo	UT operate in adjacent contiguous bands, bandedge testing performed at the lowest frequency nnel 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 acent 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).
	char	JT operate in individual non-contiguous bands, bandedge testing performed at the lowest frequency nnel 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	the transmitter unwanted emissions shall be measured using following options below:
		Refer as FCC KDB 789033 D02 v01, clause H)2) for unwanted emissions into non-restricted bands.
	$\boxtimes$	Refer as FCC KDB 789033 D02 v01, clause H)1) for unwanted emissions into restricted bands.
	Ī	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 4.1.4.2.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.
		Refer as ANSI C63.10, clause 4.1.4.2.4 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 4.1.4.2.2 measurement procedure peak limit.
$\boxtimes$	For	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 6.10 for band-edge testing.
		Refer as ANSI C63.10, clause 6.10.6.2 for marker-delta method for band-edge measurements.
$\boxtimes$	For	radiated measurement, refer as ANSI C63.10, clause 6.6. Test distance is 3m.
	perfo equi extra dista mea	asurements 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 asurements). 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)

U-NII 5250-5350MHz Transmitter Radiated Bandedge (with Antenna)											
Modulation Mode	N <sub>TX</sub>	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	2	5260	3	5350.800	71.54	74	5350.200	52.40	54	V	
11a	2	5320	3	5350.040	66.88	74	5350.040	51.33	54	V	
HT20	2	5260	3	5351.400	70.79	74	5350.800	52.41	54	V	
HT20	2	5320	3	5351.300	67.05	74	5350.180	51.65	54	V	
HT40	2	5270	3	5350.200	67.08	74	5351.400	52.85	54	V	
HT40	2	5310	3	5350.300	69.21	74	5350.300	52.87	54	V	
VHT20	2	5260	3	5352.000	71.95	74	5350.200	52.69	54	V	
VHT20	2	5320	3	5350.740	67.04	74	5350.040	51.49	54	V	
VHT40	2	5270	3	5350.800	67.24	74	5351.400	52.86	54	V	
VHT40	2	5310	3	5350.120	69.23	74	5350.000	52.88	54	V	
VHT80	2	5290	3	5350.200	68.82	74	5351.400	52.46	54	V	

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	U-NII 5470-5725MHz Transmitter Radiated Bandedge (with Antenna)										
Modulation Mode	N <sub>TX</sub>	Freq. (MHz)	Measure Distance (m)	Freq. (MHz) PK	Level (dBuV/m) PK	Limit (dBuV/m) PK	Pol.				
11a	2	5500	3	5459.920	62.72	74.0	V				
11a	2	5720	3	5826.000	65.93	68.2	V				
HT20	2	5500	3	5452.560	62.74	74.0	V				
HT20	2	5720	3	5825.120	65.74	68.2	V				
HT40	2	5510	3	5443.600	60.09	74.0	V				
HT40	2	5710	3	5827.760	65.62	68.2	V				
VHT20	2	5500	3	5450.640	62.93	74.0	V				
VHT20	2	5720	3	5825.120	65.95	68.2	V				
VHT40	2	5510	3	5453.600	60.21	74.0	V				
VHT40	2	5710	3	5827.760	65.71	68.2	V				
VHT80	2	5530	3	5454.320	62.43	74.0	V				
VHT80	2	5690	3	5825.120	67.15	68.2	V				
Note 1: Meas	urem	ent worst e	missions of	receive antenna po	olarization	•					

Note 1: Measurement worst emissions of receive antenna polarization.

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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)	Frequency Range (MHz) Field Strength (uV/m) Field Strength (dBuV/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							
5.25 - 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]							

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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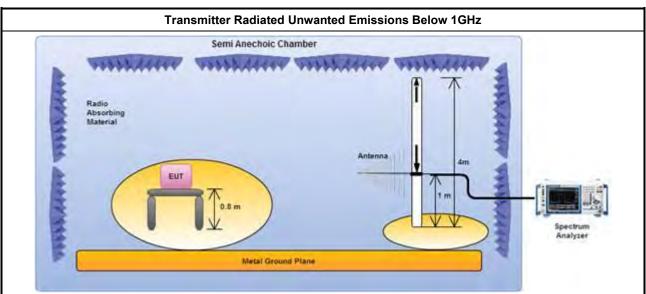
# 3.6.3 Test Procedures

## **Test Method** Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. 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). 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. X 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 4.1.4.2.2 measurement procedure peak limit. For radiated measurement. 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. Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz. For 1 GHz to 5 GHz, test distance is 3m; For 5 GHz to 40 GHz, test distance is 3m. The any unwanted emissions level shall not exceed the fundamental emission level. 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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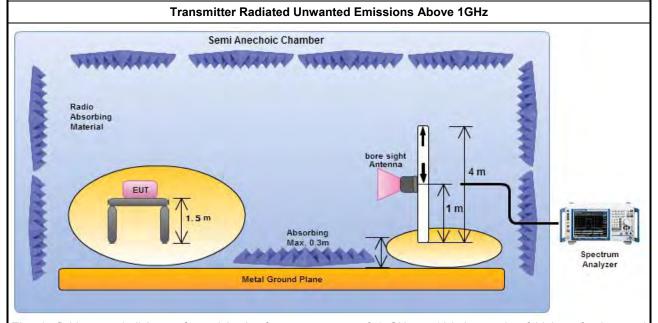
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#### 3.6.4 Test Setup



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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)

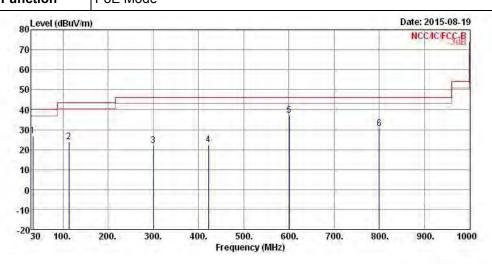
All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

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3.6.6 Transmitter Radiated Unwanted Emissions (Below 1GHz)

# Transmitter Radiated Unwanted Emissions (Below 1GHz) Operating Mode 1 Polarization V Operating Function PoE Mode

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	Freq	Level	0∨er Limit			Antenna Factor		Preamp Factor	
-	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	33.880	26.93	-13.07	40.00	37.72	15.85	0.92	27.56	Peak
2	113.420	23.87	-19.63	43.50	37.54	11.90	1.72	27.29	Peak
3	299.660	22.25	-23.75	46.00	33.14	12.87	2.90	26.66	Peak
4	421.880	22.35	-23.65	46.00	30.41	15.97	3.41	27.44	Peak
5	600.360	37.21	-8.79	46.00	42.87	18.18	4.15	27.99	Peak
6	800 180	30 41	-15 59	46 00	33 84	19 44	4 92	27 79	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.

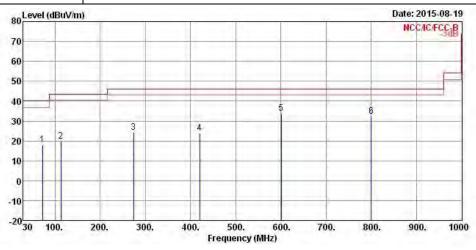
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Transmitter Radiated Unwanted Emissions (Below 1GHz)

Operating Mode 1 Polarization H

Operating Function PoE Mode

Report No.: FR570330-01



			Over	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level.	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	72.680	18.02	-21.98	40.00	37.76	6.34	1.36	27.44	Peak
2	113.420	19.78	-23.72	43.50	33.45	11.90	1.72	27.29	Peak
3	274.440	24.14	-21.86	46.00	35.70	12.43	2.75	26.74	Peak
4	419.940	23.78	-22.22	46.00	31.84	15.97	3.40	27.43	Peak
5	600.360	33.89	-12.11	46.00	39.55	18.18	4.15	27.99	Peak
6	800.180	32.45	-13.55	46.00	35.88	19.44	4.92	27.79	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.)

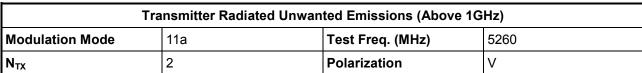
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical).

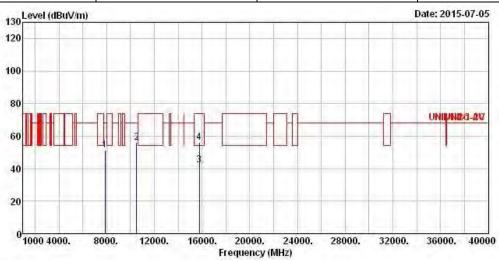
Note 4: No level of unwanted emissions exceeds the level of the fundamental emission.

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

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			Over	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	фB	dB	
1	7884.000	51.13	-17.07	68.20	41.03	36.98	5.97	32.85	Peak
2	10520.000	55.90	-12.30	68.20	42.57	38.99	7.01	32.67	Peak
3	15780.000	42.21	-11.79	54.00	28.40	37.26	8.87	32.32	Average
4	15780.000	56.15	-17.85	74.00	42.34	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.

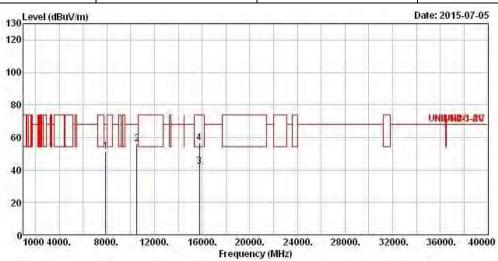
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Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5260

N<sub>TX</sub> 2 Polarization H

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			Over	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7890.000	51.49	-16.71	68.20	41.39	36.98	5.97	32.85	Peak
2	10520.000	56.35	-11.85	68.20	43.02	38.99	7.01	32.67	Peak
3	15780.000	42.13	-11.87	54.00	28.32	37.26	8.87	32.32	Average
4	15780.000	56.37	-17.63	74.00	42.56	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.

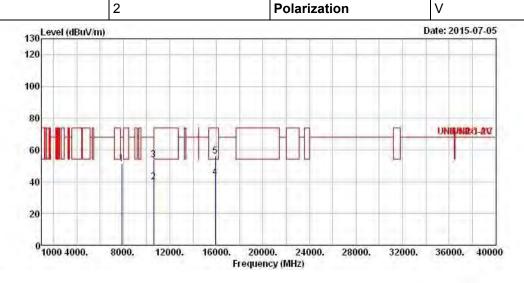
SPORTON INTERNATIONAL INC. Page No. : 46 of 120 TEL: 886-3-327-3456 Report Version : Rev. 02

 $N_{TX}$ 

Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5300

Report No.: FR570330-01



	Freq	Level	0∨er Limit			Antenna Factor	2 40 4 14 14	Part of the Part o	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7866.000	51.57	-16.63	68.20	41.50	36.97	5.95	32.85	Peak
2	10600.000	39.78	-14.22	54.00	26.40	38.96	7.05	32.63	Average
3	10600.000	53.52	-20.48	74.00	40.14	38.96	7.05	32.63	Peak
4	15900.000	42.82	-11.18	54.00	29.22	37.07	8.89	32.36	Average
5	15900.000	56.12	-17.88	74.00	42.52	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.

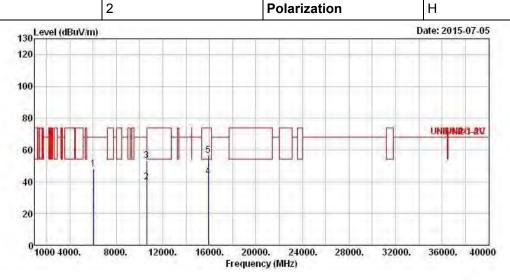
SPORTON INTERNATIONAL INC. Page No. : 47 of 120 TEL: 886-3-327-3456 Report Version : Rev. 02

Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5300

N<sub>TX</sub> 2 Polarization H

Report No.: FR570330-01



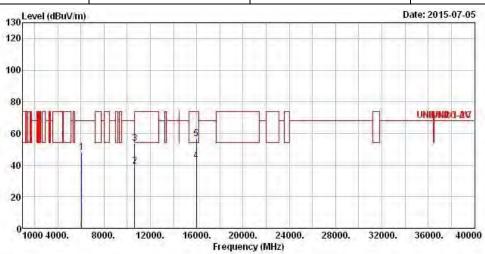
	Freq	Level	Over Limit			Antenna Factor		A STATE OF THE PARTY OF THE PAR	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	6042.000	48.05	-20.15	68.20	41.11	34.31	5.09	32.46	Peak
2	10600.000	39.70	-14.30	54.00	26.32	38.96	7.05	32.63	Average
3	10600.000	53.42	-20.58	74.00	40.04	38.96	7.05	32.63	Peak
4	15900.000	42.96	-11.04	54.00	29.36	37.07	8.89	32.36	Average
5	15900.000	56.80	-17.20	74.00	43.20	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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Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode	11a	Test Freq. (MHz)	5320					
N <sub>TX</sub>	2	Polarization	V					

Report No.: FR570330-01



			Over	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	6078.000	48.02	-20.18	68.20	41.05	34.32	5.11	32.46	Peak
2	10640.000	39.47	-14.53	54.00	26.05	38.94	7.08	32.60	Average
3	10640.000	53.55	-20.45	74.00	40.13	38.94	7.08	32.60	Peak
4	15960.000	42.55	-11.45	54.00	29.08	36.96	8.90	32.39	Average
5	15960.000	56.79	-17.21	74.00	43.32	36.96	8.90	32.39	Peak

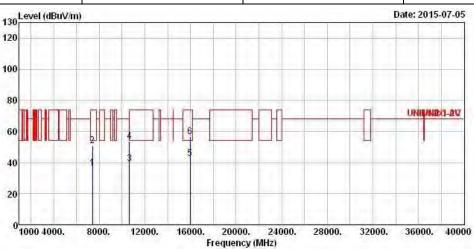
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted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

Report No.: FR570330-01



		0ver	Limit	Read	Antenna	Cable	Preamp	
Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
7404.000	36.56	-17.44	54.00	27.11	36.38	5.78	32.71	Average
7404.000	51.05	-22.95	74.00	41.60	36.38	5.78	32.71	Peak
10640.000	39.38	-14.62	54.00	25.96	38.94	7.08	32.60	Average
10640.000	53.63	-20.37	74.00	40.21	38.94	7.08	32.60	Peak
15960.000	42.54	-11.46	54.00	29.07	36.96	8.90	32.39	Average
15960.000	56.39	-17.61	74.00	42.92	36.96	8.90	32.39	Peak
	7404.000 7404.000 10640.000 10640.000 15960.000	MHz dBuV/m 7404.000 36.56 7404.000 51.05 10640.000 39.38 10640.000 53.63 15960.000 42.54	Freq Level Limit  MHz dBuV/m dB  7404.000 36.56 -17.44 7404.000 51.05 -22.95 10640.000 39.38 -14.62 10640.000 53.63 -20.37 15960.000 42.54 -11.46	Freq         Level         Limit         Line           MHz         dBuV/m         dB dBuV/m         dB uV/m           7404.000         36.56 -17.44         54.00           7404.000         51.05 -22.95         74.00           10640.000         39.38 -14.62         54.00           10640.000         53.63 -20.37         74.00           15960.000         42.54 -11.46         54.00	Freq         Level         Limit         Line         Level           MHz         dBuV/m         dB dBuV/m         dBuV/m         dBuV           7404.000         36.56 -17.44         54.00         27.11           7404.000         51.05 -22.95         74.00         41.60           10640.000         39.38 -14.62         54.00         25.96           10640.000         53.63 -20.37         74.00         40.21           15960.000         42.54 -11.46         54.00         29.07	Freq         Level         Limit         Line         Level         Factor           MHz         dBuV/m         dB uV/m         dBuV/m         dBuV         dB/m           7404.000         36.56         -17.44         54.00         27.11         36.38           7404.000         51.05         -22.95         74.00         41.60         36.38           10640.000         39.38         -14.62         54.00         25.96         38.94           10640.000         53.63         -20.37         74.00         40.21         38.94	Freq         Level         Limit         Line         Level         Factor         Loss           MHz         dBuV/m         dB dBuV/m         dBuV         dB/m         dB           7404.000         36.56 -17.44         54.00         27.11         36.38         5.78           7404.000         51.05 -22.95         74.00         41.60         36.38         5.78           10640.000         39.38 -14.62         54.00         25.96         38.94         7.08           10640.000         53.63 -20.37         74.00         40.21         38.94         7.08           15960.000         42.54 -11.46         54.00         29.07         36.96         8.90	Freq         Level         Limit         Line         Level         Factor         Loss         Factor           MHz         dBuV/m         dB         dBuV/m         dBuV         dB/m         dB         dB           7404.000         36.56         -17.44         54.00         27.11         36.38         5.78         32.71           7404.000         51.05         -22.95         74.00         41.60         36.38         5.78         32.71           10640.000         39.38         -14.62         54.00         25.96         38.94         7.08         32.60           10640.000         53.63         -20.37         74.00         40.21         38.94         7.08         32.60           15960.000         42.54         -11.46         54.00         29.07         36.96         8.90         32.39

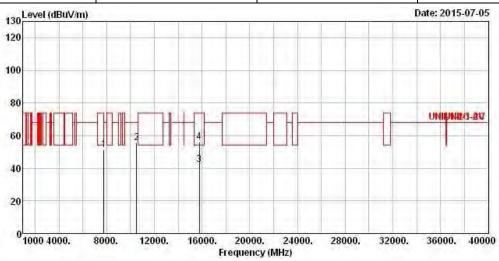
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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)	5260				
N <sub>TX</sub>	2	Polarization	V				

Report No.: FR570330-01



			0ver	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	$\overline{dBuV/m}$	dBuV	dB/m	dB	dB	
1	7779.000	51.28	-16.92	68.20	41.29	36.88	5.93	32.82	Peak
2	10520.000	55.75	-12.45	68.20	42.42	38.99	7.01	32.67	Peak
3	15780.000	42.07	-11.93	54.00	28.26	37.26	8.87	32.32	Average
4	15780.000	56.18	-17.82	74.00	42.37	37.26	8.87	32.32	Peak

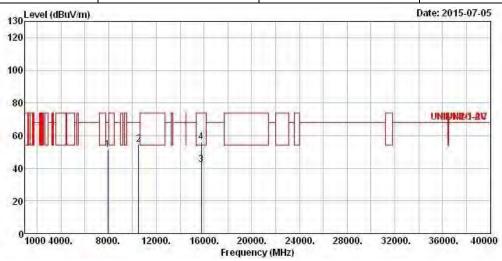
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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)	5260				
N <sub>TX</sub>	2	Polarization	Н				

Report No.: FR570330-01



			0ver	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7934.000	51.39	-16.81	68.20	41.23	37.03	5.99	32.86	Peak
2	10520.000	54.92	-13.28	68.20	41.59	38.99	7.01	32.67	Peak
3	15780.000	42.14	-11.86	54.00	28.33	37.26	8.87	32.32	Average
4	15780.000	56.20	-17.80	74.00	42.39	37.26	8.87	32.32	Peak
4									Charles and the Control of the Contr

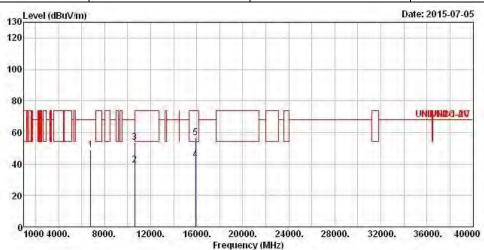
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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	V					

Report No.: FR570330-01



	Frea	Level	Over Limit	Limit Line		Antenna			
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	6794.000	48.96	-19.24	68.20	41.03	34.93	5.51	32.51	Peak
2	10600.000	39.52	-14.48	54.00	26.14	38.96	7.05	32.63	Average
3	10600.000	53.51	-20.49	74.00	40.13	38.96	7.05	32.63	Peak
4	15900.000	42.65	-11.35	54.00	29.05	37.07	8.89	32.36	Average
5	15900.000	56.84	-17.16	74.00	43.24	37.07	8.89	32.36	Peak

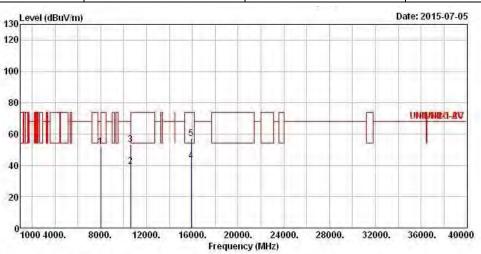
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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					

Report No.: FR570330-01



			Over	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8000.000	51.77	-16.43	68.20	41.55	37.10	6.00	32.88	Peak
2	10600.000	39.42	-14.58	54.00	26.04	38.96	7.05	32.63	Average
3	10600.000	53.26	-20.74	74.00	39.88	38.96	7.05	32.63	Peak
4	15900.000	42.73	-11.27	54.00	29.13	37.07	8.89	32.36	Average
5	15900.000	57.03	-16.97	74.00	43.43	37.07	8.89	32.36	Peak

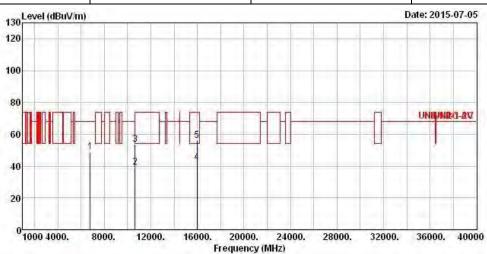
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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	HT20	Test Freq. (MHz)	5320				
$N_{TX}$	2	Polarization	V				

Report No.: FR570330-01



			Over	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	6788.000	48.96	-19.24	68.20	41.08	34.90	5.49	32.51	Peak
2	10640.000	39.34	-14.66	54.00	25.92	38.94	7.08	32.60	Average
3	10640.000	53.75	-20.25	74.00	40.33	38.94	7.08	32.60	Peak
4	15960.000	42.34	-11.66	54.00	28.87	36.96	8.90	32.39	Average
5	15960.000	56.06	-17.94	74.00	42.59	36.96	8.90	32.39	Peak

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

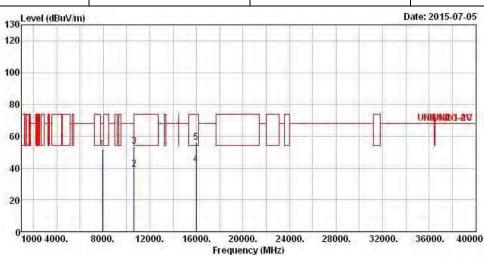
SPORTON INTERNATIONAL INC. Page No. : 55 of 120 TEL: 886-3-327-3456 Report Version : Rev. 02

Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 5320

N<sub>TX</sub> 2 Polarization H

Report No.: FR570330-01



			Over	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7944.000	51.79	-16.41	68.20	41.64	37.03	5.99	32.87	Peak
2	10640.000	39.26	-14.74	54.00	25.84	38.94	7.08	32.60	Average
3	10640.000	53.64	-20.36	74.00	40.22	38.94	7.08	32.60	Peak
4	15960.000	42.25	-11.75	54.00	28.78	36.96	8.90	32.39	Average
5	15960.000	56.13	-17.87	74.00	42.66	36.96	8.90	32.39	Peak

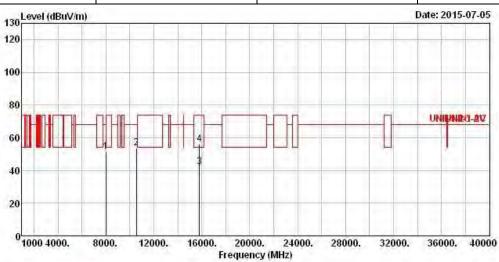
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands 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)	5270					
$N_{TX}$	2	Polarization	V					

Report No.: FR570330-01



			Over	Limit	Read	Antenna	Cable	Preamp		
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		-
1	8004.000	51.43	-16.77	68.20	41.19	37.10	6.02	32.88	Peak	
2	10540.000	53.69	-14.51	68.20	40.33	38.99	7.03	32.66	Peak	
3	15810.000	42.00	-12.00	54.00	28.25	37.20	8.88	32.33	Average	
4	15810.000	56.09	-17.91	74.00	42.34	37.20	8.88	32.33	Peak	

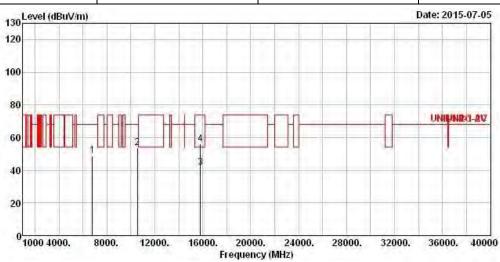
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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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Transmitter Radiated Unwanted Emissions (Above 1GHz)							
Modulation Mode	HT40	Test Freq. (MHz)	5270				
N <sub>TX</sub>	2	Polarization	Н				

Report No.: FR570330-01



			Over	Limit	Read	Antenna	Cable	Preamp		
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		-
1	6784.000	48.90	-19.30	68.20	41.02	34.90	5.49	32.51	Peak	
2	10540.000	53.91	-14.29	68.20	40.55	38.99	7.03	32.66	Peak	
3	15810.000	41.88	-12.12	54.00	28.13	37.20	8.88	32.33	Average	
4	15810.000	56.36	-17.64	74.00	42.61	37.20	8.88	32.33	Peak	

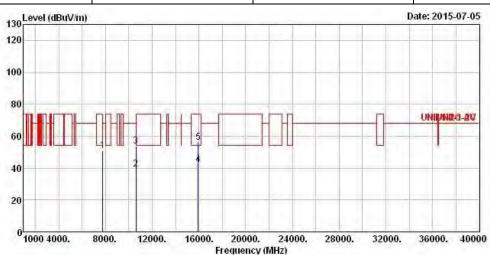
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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	Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode	HT40	Test Freq. (MHz)	5310						
$N_{TX}$	2	Polarization	V						

Report No.: FR570330-01



			Over	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit			Factor		and the second second	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	фB	dB	
1	7779.000	50.96	-17.24	68.20	40.97	36.88	5.93	32.82	Peak
2	10620.000	39.14	-14.86	54.00	25.73	38.95	7.08	32.62	Average
3	10620.000	53.53	-20.47	74.00	40.12	38.95	7.08	32.62	Peak
4	15930.000	42.28	-11.72	54.00	28.75	37.01	8.89	32.37	Average
5	15930.000	56.04	-17.96	74.00	42.51	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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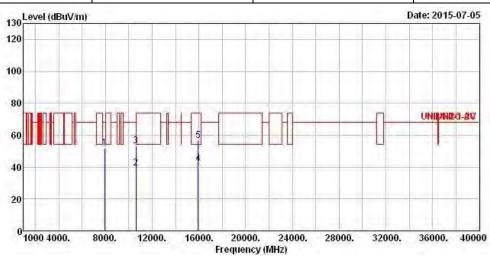


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT40 Test Freq. (MHz) 5310

N<sub>TX</sub> 2 Polarization H

Report No.: FR570330-01



	Freq	Level	0∨er Limit	Limit Line		Antenna Factor			Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	фB	dB	
1	7922.000	51.75	-16.45	68.20	41.62	37.02	5.97	32.86	Peak
2	10620.000	39.21	-14.79	54.00	25.80	38.95	7.08	32.62	Average
3	10620.000	53.44	-20.56	74.00	40.03	38.95	7.08	32.62	Peak
4	15930.000	42.34	-11.66	54.00	28.81	37.01	8.89	32.37	Average
5	15930.000	56.56	-17.44	74.00	43.03	37.01	8.89	32.37	Peak

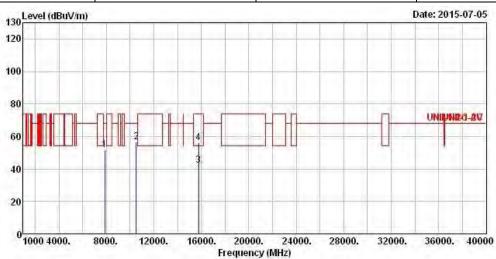
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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	VHT20	Test Freq. (MHz)	5260						
$N_{TX}$	2	Polarization	V						

Report No.: FR570330-01



			0ver	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7868.000	51.79	-16.41	68.20	41.72	36.97	5.95	32.85	Peak
2	10520.000	56.52	-11.68	68.20	43.19	38.99	7.01	32.67	Peak
3	15780.000	42.09	-11.91	54.00	28.28	37.26	8.87	32.32	Average
4	15780.000	56.35	-17.65	74.00	42.54	37.26	8.87	32.32	Peak

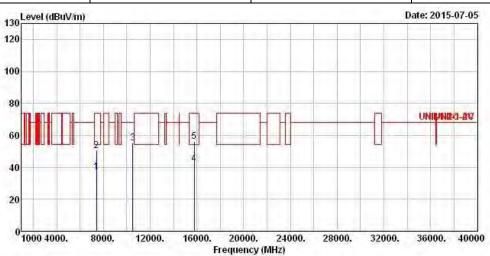
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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					
$N_{TX}$	2	Polarization	Н					

Report No.: FR570330-01



	Freq	Level	0∨er Limit	Limit Line		Antenna Factor		and the same of th	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7422.000	37.00	-17.00	54.00	27.51	36.42	5.79	32.72	Average
2	7422.000	50.34	-23.66	74.00	40.85	36.42	5.79	32.72	Peak
3	10520.000	54.99	-13.21	68.20	41.66	38.99	7.01	32.67	Peak
4	15780.000	42.05	-11.95	54.00	28.24	37.26	8.87	32.32	Average
5	15780.000	56.13	-17.87	74.00	42.32	37.26	8.87	32.32	Peak

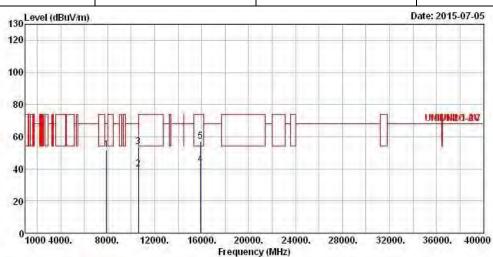
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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 <sub>TX</sub>	2	Polarization	V					

Report No.: FR570330-01



			Over	Limit	Read	Antenna	Cable	Preamp	
	Freq	Le∨el	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	_
1	7898.000	51.69	-16.51	68.20	41.57	37.00	5.97	32.85	Peak
2	10600.000	39.62	-14.38	54.00	26.24	38.96	7.05	32.63	Average
3	10600.000	53.72	-20.28	74.00	40.34	38.96	7.05	32.63	Peak
4	15900.000	42.80	-11.20	54.00	29.20	37.07	8.89	32.36	Average
5	15900.000	57.06	-16.94	74.00	43.46	37.07	8.89	32.36	Peak

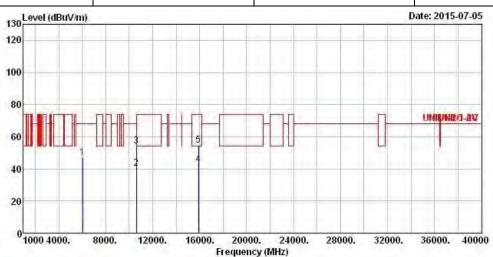
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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)	5300					
N <sub>TX</sub>	2	Polarization	Н					

Report No.: FR570330-01



			0ver	Limit	Read	Antenna	Cable	Preamp	
	Freq MHz	Freq Level L	√el Limit	Line	Level	Factor dB/m	Loss	Factor	Remark
			dB	dBuV/m	dBuV		dB	dB	
1	6048.000	47.25	-20.95	68.20	40.31	34.31	5.09	32.46	Peak
2	10600.000	40.28	-13.72	54.00	26.90	38.96	7.05	32.63	Average
3	10600.000	53.97	-20.03	74.00	40.59	38.96	7.05	32.63	Peak
4	15900.000	42.92	-11.08	54.00	29.32	37.07	8.89	32.36	Average
5	15900.000	54.81	-19.19	74.00	41.21	37.07	8.89	32.36	Peak

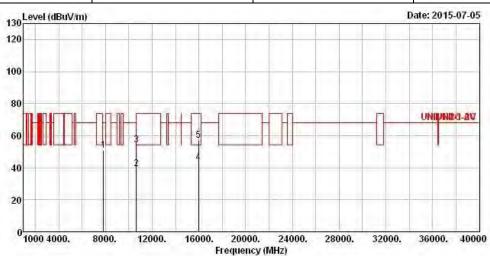
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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					

Report No.: FR570330-01



				Limit	Read	ReadAntenna		Preamp	
		Level	el Limit	Line	Level	Factor	Loss	Factor	Remark
		MHz dBuV/m dB	dBuV/m	dBuV/m dBuV	dB/m	dB	dB		
1	7854.000	50.69	-17.51	68.20	40.63	36.95	5.95	32.84	Peak
2	10640.000	39.44	-14.56	54.00	26.02	38.94	7.08	32.60	Average
3	10640.000	54.18	-19.82	74.00	40.76	38.94	7.08	32.60	Peak
4	15960.000	43.02	-10.98	54.00	29.55	36.96	8.90	32.39	Average
5	15960.000	57.00	-17.00	74.00	43.53	36.96	8.90	32.39	Peak

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

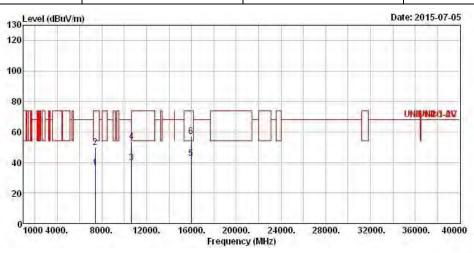
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Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode VHT20 Test Freq. (MHz) 5320

N<sub>TX</sub> 2 Polarization H

Report No.: FR570330-01



	Freq	Level	0∨er Limit	Limit Line		Antenna Factor		Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
ī	7422.000	36.38	-17.62	54.00	26.89	36.42	5.79	32.72	Average
2	7422.000	49.90	-24.10	74.00	40.41	36.42	5.79	32.72	Peak
3	10640.000	39.76	-14.24	54.00	26.34	38.94	7.08	32.60	Average
4	10640.000	53.86	-20.14	74.00	40.44	38.94	7.08	32.60	Peak
5	15960.000	42.68	-11.32	54.00	29.21	36.96	8.90	32.39	Average
6	15960.000	57.15	-16.85	74.00	43.68	36.96	8.90	32.39	Peak

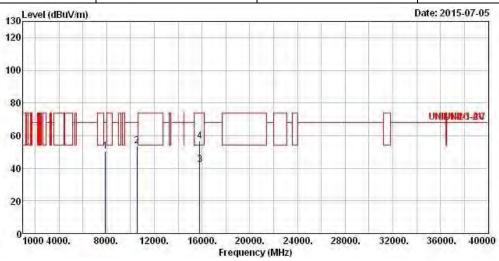
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted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

Report No.: FR570330-01



			0∨er Limit		ReadAntenna		Cable	Preamp	
	Freq	Level			Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	$\overline{dBuV/m}$	dBuV	dB/m	dB	dB	
1	7920.000	50.45	-17.75	68.20	40.32	37.02	5.97	32.86	Peak
2	10540.000	53.71	-14.49	68.20	40.35	38.99	7.03	32.66	Peak
3	15810.000	42.42	-11.58	54.00	28.67	37.20	8.88	32.33	Average
4	15810.000	56.70	-17.30	74.00	42.95	37.20	8.88	32.33	Peak

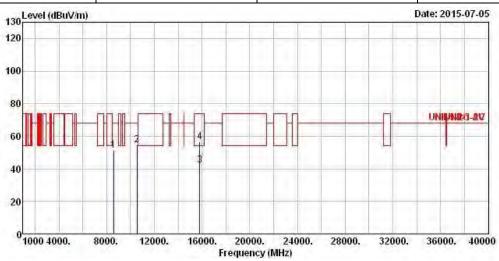
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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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Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode	VHT40	5270						
N <sub>TX</sub>	2	Polarization	Н					

Report No.: FR570330-01



			Over	Limit	ReadAntenna		Cable	Preamp	
	Freq	Freq Level Limit		Line	Level	L Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8604.000	51.41	-16.79	68.20	39.93	38.14	6.28	32.94	Peak
2	10540.000	54.49	-13.71	68.20	41.13	38.99	7.03	32.66	Peak
3	15810.000	42.43	-11.57	54.00	28.68	37.20	8.88	32.33	Average
4	15810.000	56.67	-17.33	74.00	42.92	37.20	8.88	32.33	Peak

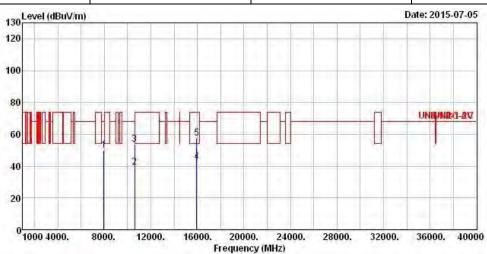
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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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Transmitter Radiated Unwanted Emissions (Above 1GHz)						
Modulation Mode	VHT40	Test Freq. (MHz)	5310			
N <sub>TX</sub>	2	Polarization	V			

Report No.: FR570330-01



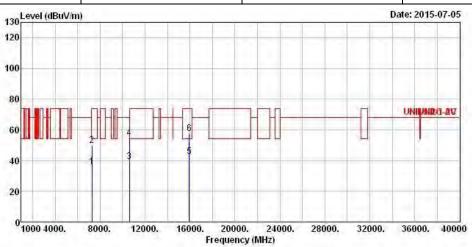
			Over	Limit	Read	Antenna	Cable	Preamp		
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		-
1	7968.000	50.07	-18.13	68.20	39.87	37.07	6.00	32.87	Peak	
2	10620.000	39.34	-14.66	54.00	25.93	38.95	7.08	32.62	Average	
3	10620.000	53.75	-20.25	74.00	40.34	38.95	7.08	32.62	Peak	
4	15930.000	42.91	-11.09	54.00	29.38	37.01	8.89	32.37	Average	
5	15930.000	57.44	-16.56	74.00	43.91	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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Transmitter Radiated Unwanted Emissions (Above 1GHz)							
Modulation Mode	VHT40	Test Freq. (MHz)	5310				
N <sub>TX</sub>	2	Polarization	Н				

Report No.: FR570330-01



	Freq	Le∨el	0∨er Limit	200,000,00		Antenna Factor		Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7272.000	36.20	-17.80	54.00	27.09	36.02	5.74	32.65	Average
2	7272.000	50.11	-23.89	74.00	41.00	36.02	5.74	32.65	Peak
3	10620.000	39.28	-14.72	54.00	25.87	38.95	7.08	32.62	Average
4	10620.000	54.50	-19.50	74.00	41.09	38.95	7.08	32.62	Peak
5	15930.000	42.93	-11.07	54.00	29.40	37.01	8.89	32.37	Average
6	15930.000	57.80	-16.20	74.00	44.27	37.01	8.89	32.37	Peak

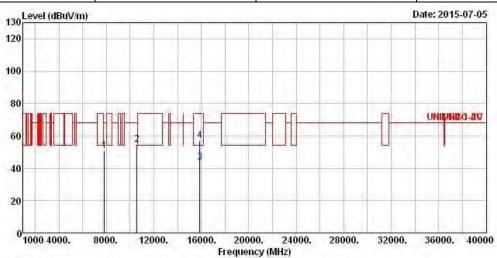
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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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Transmitter Radiated Unwanted Emissions (Above 1GHz)							
Modulation Mode VHT80 Test Freq. (MHz) 5290							
N <sub>TX</sub>	2	Polarization	V				

Report No.: FR570330-01



	Freq	Level	Over Limit	Limit Line		Antenna Factor			Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7846.000	50.78	-17.42	68.20	40.72	36.95	5.95	32.84	Peak
2	10580.000	54.89	-13.31	68.20	41.51	38.97	7.05	32.64	Peak
3	15870.000	43.72	-10.28	54.00	30.10	37.09	8.88	32.35	Average
4	15870.000	57.26	-16.74	74.00	43.64	37.09	8.88	32.35	Peak

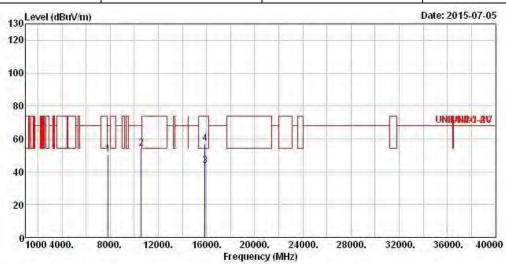
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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)						
Modulation Mode	VHT80	Test Freq. (MHz)	5290			
N <sub>TX</sub>	2	Polarization	Н			

Report No.: FR570330-01



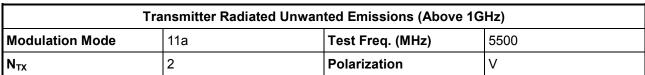
			Over	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7848.000	50.24	-17.96	68.20	40.18	36.95	5.95	32.84	Peak
2	10580.000	54.41	-13.79	68.20	41.03	38.97	7.05	32.64	Peak
3	15870.000	43.63	-10.37	54.00	30.01	37.09	8.88	32.35	Average
4	15870.000	56.86	-17.14	74.00	43.24	37.09	8.88	32.35	Peak

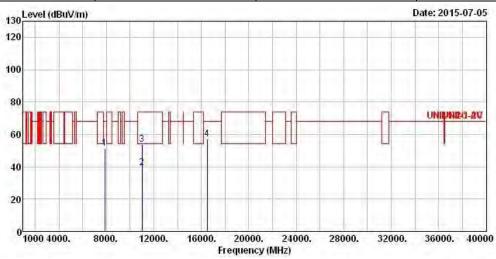
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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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#### .6.8 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 5470-5725MHz

Report No.: FR570330-01





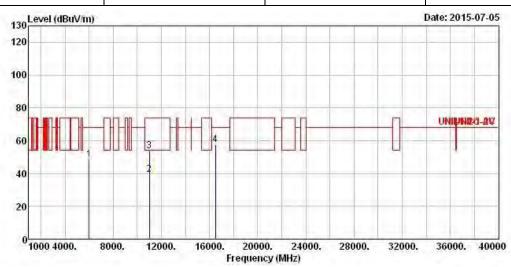
			Over	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7872.000	51.20	-17.00	68.20	41.13	36.97	5.95	32.85	Peak
2	11000.000	39.35	-14.65	54.00	25.69	38.80	7.27	32.41	Average
3	11000.000	53.53	-20.47	74.00	39.87	38.80	7.27	32.41	Peak
4	16500.000	57.21	-10.99	68.20	42.54	37.40	9.24	31.97	Peak

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands 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	11a	Test Freq. (MHz)	5500						
N <sub>TX</sub>	2	Polarization	Н						

Report No.: FR570330-01



	Freq	Level	0∨er Limit			Antenna Factor			
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	6018.000	48.37	-19.83	68.20	41.44	34.30	5.09	32.46	Peak
2	11000.000	39.39	-14.61	54.00	25.73	38.80	7.27	32.41	Average
3	11000.000	53.63	-20.37	74.00	39.97	38.80	7.27	32.41	Peak
4	16500.000	57.68	-10.52	68.20	43.01	37.40	9.24	31.97	Peak

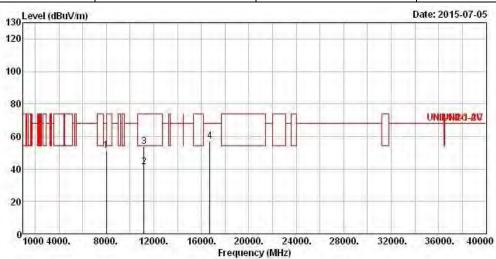
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands 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)	5580					
N <sub>TX</sub>	2	Polarization	V					

Report No.: FR570330-01



			Over	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
-	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
	8000.000	51.11	-17.09	68.20	40.89	37.10	6.00	32.88	Peak
	11160.000	41.33	-12.67	54.00	27.40	38.97	7.37	32.41	Average
	11160.000	53.89	-20.11	74.00	39.96	38.97	7.37	32.41	Peak
	16740.000	57.04	-11.16	68.20	40.63	38.80	9.32	31.71	Peak
	8000.000 11160.000 11160.000	51.11 41.33 53.89	-17.09 -12.67 -20.11	68.20 54.00 74.00	40.89 27.40 39.96	37.10 38.97 38.97	6.00 7.37 7.37	32.88 32.41 32.41	

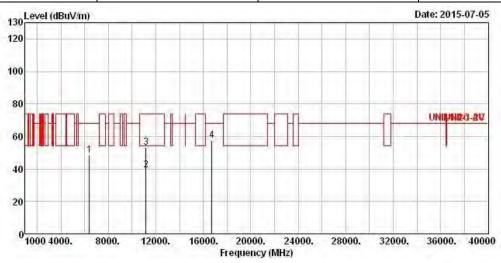
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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)	5580				
N <sub>TX</sub>	2	Polarization	Н				

Report No.: FR570330-01



		Over	Limit	Read	Antenna	Cable	Preamp	
Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
6403.000	48.22	-19.98	68.20	41.04	34.38	5.27	32.47	Peak
11160.000	39.22	-14.78	54.00	25.29	38.97	7.37	32.41	Average
11160.000	53.26	-20.74	74.00	39.33	38.97	7.37	32.41	Peak
16740.000	57.62	-10.58	68.20	41.21	38.80	9.32	31.71	Peak
	MHz 6403.000 11160.000	MHz dBuV/m 6403.000 48.22 11160.000 39.22 11160.000 53.26	Freq Level Limit  MHz dBuV/m dB  6403.000 48.22 -19.98 11160.000 39.22 -14.78 11160.000 53.26 -20.74	Freq Level Limit Line    MHz   dBuV/m   dB   dBuV/m     6403.000   48.22   -19.98   68.20     11160.000   39.22   -14.78   54.00     11160.000   53.26   -20.74   74.00	Freq Level Limit Line Level  MHz dBuV/m dB dBuV/m dBuV  6403.000 48.22 -19.98 68.20 41.04 11160.000 39.22 -14.78 54.00 25.29 11160.000 53.26 -20.74 74.00 39.33	Freq         Level         Limit         Line         Level         Factor           MHz         dBuV/m         dB         dBuV/m         dBuV         dB/m           6403.000         48.22         -19.98         68.20         41.04         34.38           11160.000         39.22         -14.78         54.00         25.29         38.97           11160.000         53.26         -20.74         74.00         39.33         38.97	Freq         Level         Limit         Line         Level         Factor         Loss           MHz         dBuV/m         dB         dBuV/m         dBuV         dB/m         dB           6403.000         48.22         -19.98         68.20         41.04         34.38         5.27           11160.000         39.22         -14.78         54.00         25.29         38.97         7.37           11160.000         53.26         -20.74         74.00         39.33         38.97         7.37	Freq         Level         Limit         Line         Level         Factor         Loss         Factor           MHz         dBuV/m         dB         dBuV/m         dBuV/m         dBuV         dB/m         dB         dB           6403.000         48.22         -19.98         68.20         41.04         34.38         5.27         32.47           11160.000         39.22         -14.78         54.00         25.29         38.97         7.37         32.41

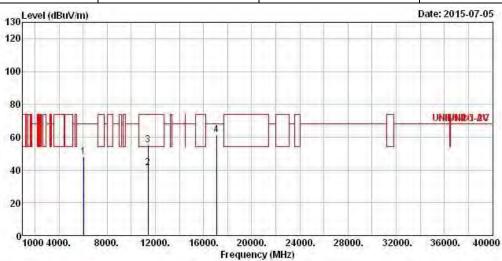
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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	11a	Test Freq. (MHz)	5700						
N <sub>TX</sub>	2	Polarization	V						

Report No.: FR570330-01



			Over	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	6044.000	48.07	-20.13	68.20	41.13	34.31	5.09	32.46	Peak
2	11400.000	41.20	-12.80	54.00	26.94	39.20	7.48	32.42	Average
3	11400.000	55.15	-18.85	74.00	40.89	39.20	7.48	32.42	Peak
4	17100.000	61.17	-7.03	68.20	42.09	41.08	9.44	31.44	Peak

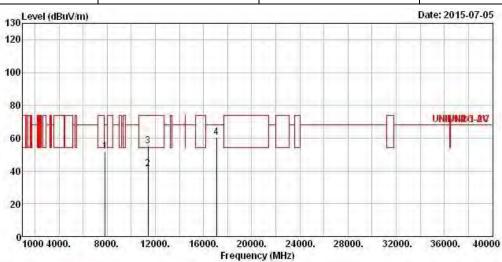
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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	11a	Test Freq. (MHz)	5700				
N <sub>TX</sub>	2	Polarization	Н				

Report No.: FR570330-01



			Over	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7846.000	51.68	-16.52	68.20	41.62	36.95	5.95	32.84	Peak
2	11400.000	41.07	-12.93	54.00	26.81	39.20	7.48	32.42	Average
3	11400.000	55.29	-18.71	74.00	41.03	39.20	7.48	32.42	Peak
4	17100.000	60.67	-7.53	68.20	41.59	41.08	9.44	31.44	Peak

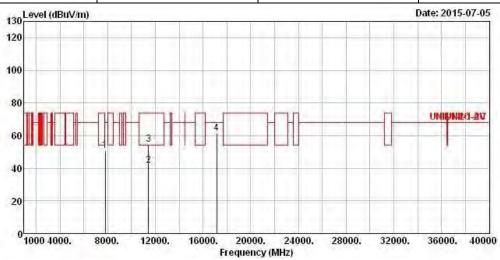
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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	11a	Test Freq. (MHz)	5720				
$N_{TX}$	2	Polarization	V				

Report No.: FR570330-01



			0ver	Limit	Read	Antenna	Cable	Preamp		
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		
1	7799.000	50.88	-17.32	68.20	40.88	36.90	5.93	32.83	Peak	
2	11440.000	41.83	-12.17	54.00	27.52	39.23	7.50	32.42	Average	
3	11440.000	54.85	-19.15	74.00	40.54	39.23	7.50	32.42	Peak	
4	17160.000	61.64	-6.56	68.20	42.03	41.60	9.45	31.44	Peak	

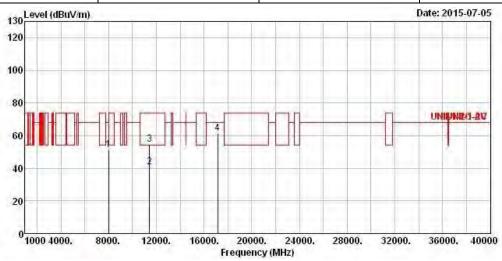
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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	11a	Test Freq. (MHz)	5720				
N <sub>TX</sub>	2	Polarization	Н				

Report No.: FR570330-01



			0ver	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8000.000	51.48	-16.72	68.20	41.26	37.10	6.00	32.88	Peak
2	11440.000	40.82	-13.18	54.00	26.51	39.23	7.50	32.42	Average
3	11440.000	54.93	-19.07	74.00	40.62	39.23	7.50	32.42	Peak
4	17160.000	61.44	-6.76	68.20	41.83	41.60	9.45	31.44	Peak

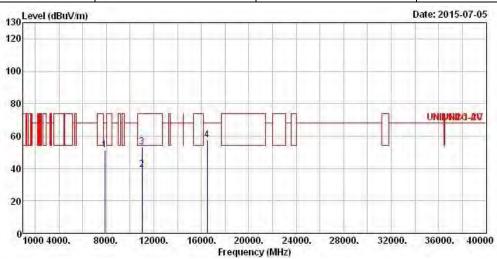
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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)	5500				
$N_{TX}$	2	Polarization	V				

Report No.: FR570330-01



			0ver	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7884.000	51.33	-16.87	68.20	41.23	36.98	5.97	32.85	Peak
2	11000.000	39.40	-14.60	54.00	25.74	38.80	7.27	32.41	Average
3	11000.000	53.15	-20.85	74.00	39.49	38.80	7.27	32.41	Peak
4	16500.000	57.43	-10.77	68.20	42.76	37.40	9.24	31.97	Peak

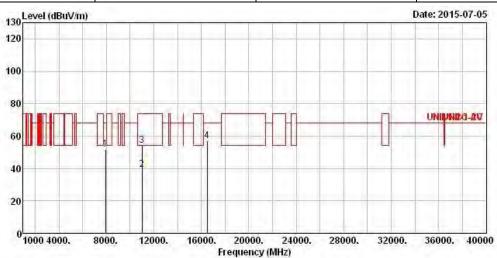
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands 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) 5500									
$N_{TX}$	2	Polarization	Н						

Report No.: FR570330-01



		Over	Limit	Read	Antenna	Cable	Preamp	
Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
7922.000	51.74	-16.46	68.20	41.61	37.02	5.97	32.86	Peak
11000.000	39.30	-14.70	54.00	25.64	38.80	7.27	32.41	Average
11000.000	54.05	-19.95	74.00	40.39	38.80	7.27	32.41	Peak
16500.000	57.11	-11.09	68.20	42.44	37.40	9.24	31.97	Peak
	7922.000 11000.000 11000.000	MHz dBuV/m 7922.000 51.74 11000.000 39.30 11000.000 54.05	Freq Level Limit  MHz dBuV/m dB  7922.000 51.74 -16.46 11000.000 39.30 -14.70 11000.000 54.05 -19.95	Freq Level Limit Line    MHz   dBuV/m   dB   dBuV/m     7922.000   51.74   -16.46   68.20     11000.000   39.30   -14.70   54.00     11000.000   54.05   -19.95   74.00	Freq Level Limit Line Level  MHz dBuV/m dB dBuV/m dBuV  7922.000 51.74 -16.46 68.20 41.61 11000.000 39.30 -14.70 54.00 25.64 11000.000 54.05 -19.95 74.00 40.39	Freq         Level         Limit         Line         Level         Factor           MHz         dBuV/m         dB         dBuV/m         dBuV/m         dBuV         dB/m           7922.000         51.74         -16.46         68.20         41.61         37.02           11000.000         39.30         -14.70         54.00         25.64         38.80           11000.000         54.05         -19.95         74.00         40.39         38.80	Freq         Level         Limit         Line         Level         Factor         Loss           MHz         dBuV/m         dB         dBuV/m         dBuV         dB/m         dB           7922.000         51.74 -16.46         68.20         41.61         37.02         5.97           11000.000         39.30 -14.70         54.00         25.64         38.80         7.27           11000.000         54.05 -19.95         74.00         40.39         38.80         7.27	Freq Level Limit Line Level Factor Loss Factor  MHz dBuV/m dB dBuV/m dBuV dB/m dB dB  7922.000 51.74 -16.46 68.20 41.61 37.02 5.97 32.86 11000.000 39.30 -14.70 54.00 25.64 38.80 7.27 32.41

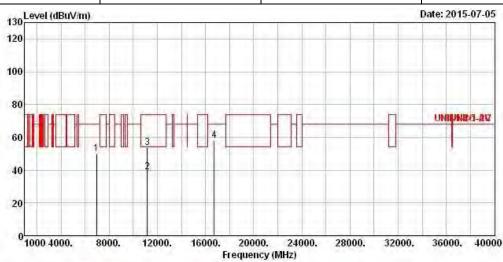
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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 <sub>TX</sub>	2	Polarization	V					

Report No.: FR570330-01



			Over	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	6943.000	49.90	-18.30	68.20	41.63	35.21	5.59	32.53	Peak
2	11160.000	39.08	-14.92	54.00	25.15	38.97	7.37	32.41	Average
3	11160.000	53.70	-20.30	74.00	39.77	38.97	7.37	32.41	Peak
4	16740.000	58.00	-10.20	68.20	41.59	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.

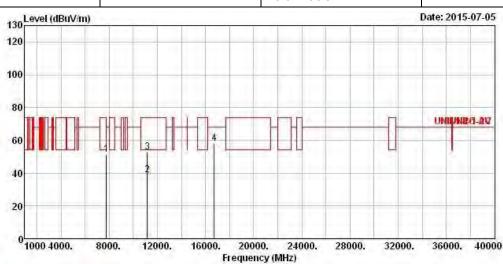
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Transmitter Radiated Unwanted Emissions (Above 1GHz)

Report No.: FR570330-01

Modulation ModeHT20Test Freq. (MHz)5580N<sub>TX</sub>2PolarizationH



			Over	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7779.000	51.11	-17.09	68.20	41.12	36.88	5.93	32.82	Peak
2	11160.000	39.02	-14.98	54.00	25.09	38.97	7.37	32.41	Average
3	11160.000	52.95	-21.05	74.00	39.02	38.97	7.37	32.41	Peak
4	16740.000	58.08	-10.12	68.20	41.67	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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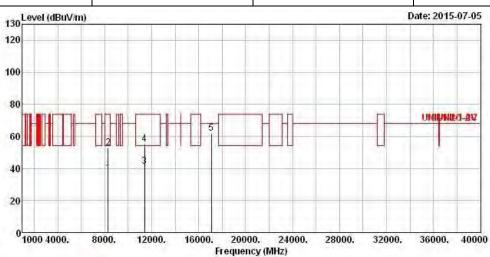


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 5700

N<sub>TX</sub> 2 Polarization V

Report No.: FR570330-01



	Freq	Level	Over Limit	Limit Line		Antenna Factor	40,000	Preamp Factor	Remark
	MHz	dBuV/m	——dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8310.000	37.07	-16.93	54.00	26.11	37.72	6.14	32.90	Average
2	8310.000	52.84	-21.16	74.00	41.88	37.72	6.14	32.90	Peak
3	11400.000	41.12	-12.88	54.00	26.86	39.20	7.48	32.42	Average
4	11400.000	55.05	-18.95	74.00	40.79	39.20	7.48	32.42	Peak
5	17100.000	61.66	-6.54	68.20	42.58	41.08	9.44	31.44	Peak

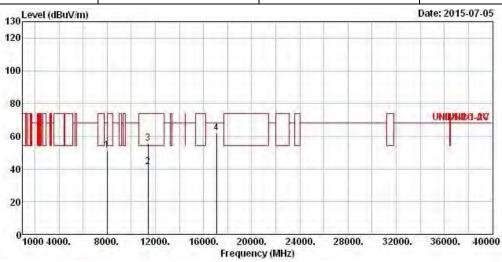
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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 <sub>TX</sub>	2	Polarization	Н				

Report No.: FR570330-01



Freq	Level						Office and the second	Remark
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
8000.000	51.48	-16.72	68.20	41.26	37.10	6.00	32.88	Peak
11400.000	41.19	-12.81	54.00	26.93	39.20	7.48	32.42	Average
11400.000	55.82	-18.18	74.00	41.56	39.20	7.48	32.42	Peak
17100.000	61.69	-6.51	68.20	42.61	41.08	9.44	31.44	Peak
	MHz 8000.000 11400.000 11400.000	MHz dBuV/m 8000.000 51.48 11400.000 41.19 11400.000 55.82	Freq Level Limit  MHz dBuV/m dB  8000.000 51.48 -16.72 11400.000 41.19 -12.81 11400.000 55.82 -18.18	Freq         Level         Limit         Line           MHz         dBuV/m         dB dBuV/m         dB dBuV/m           8000.000         51.48 -16.72         68.20           11400.000         41.19 -12.81         54.00           11400.000         55.82 -18.18         74.00	Freq         Level         Limit         Line         Level           MHz         dBuV/m         dB dBuV/m         dBuV/m         dBuV           8000.000         51.48 -16.72         68.20         41.26           11400.000         41.19 -12.81         54.00         26.93           11400.000         55.82 -18.18         74.00         41.56	Freq         Level         Limit         Line         Level         Factor           MHz         dBuV/m         dB uV/m         dBuV/m         dBuV         dBuV         dB/m           8000.000         51.48 -16.72         68.20         41.26         37.10           11400.000         41.19 -12.81         54.00         26.93         39.20           11400.000         55.82 -18.18         74.00         41.56         39.20	Freq         Level         Limit         Line         Level         Factor         Loss           MHz         dBuV/m         dB         dBuV/m         dBuV         dB/m         dB           8000.000         51.48 -16.72         68.20         41.26         37.10         6.00           11400.000         41.19 -12.81         54.00         26.93         39.20         7.48           11400.000         55.82 -18.18         74.00         41.56         39.20         7.48	NHz   NHZ

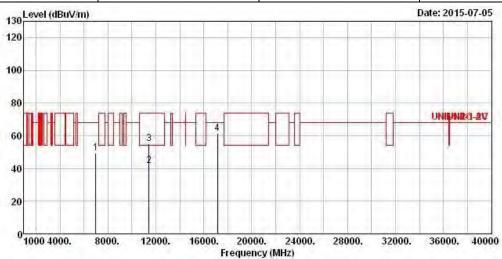
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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 ModeHT20Test Freq. (MHz)5720							
$N_{TX}$	2	Polarization	V				

Report No.: FR570330-01



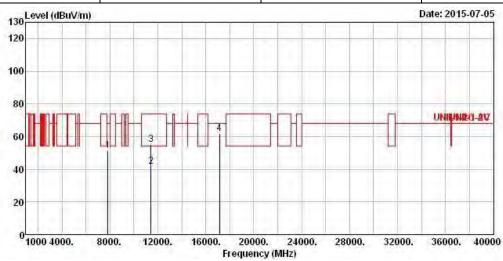
			Over	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	6973.000	49.42	-18.78	68.20	41.11	35.24	5.61	32.54	Peak
2	11440.000	41.63	-12.37	54.00	27.32	39.23	7.50	32.42	Average
3	11440.000	54.99	-19.01	74.00	40.68	39.23	7.50	32.42	Peak
4	17160.000	61.56	-6.64	68.20	41.95	41.60	9.45	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) 5720							
N <sub>TX</sub>	N <sub>TX</sub> 2 Polarization						

Report No.: FR570330-01



	Freq	Level	0∨er Limit	Limit Line		Antenna Factor			
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7844.000	51.28	-16.92	68.20	41.23	36.95	5.94	32.84	Peak
2	11440.000	41.82	-12.18	54.00	27.51	39.23	7.50	32.42	Average
3	11440.000	55.01	-18.99	74.00	40.70	39.23	7.50	32.42	Peak
4	17160.000	61.77	-6.43	68.20	42.16	41.60	9.45	31.44	Peak

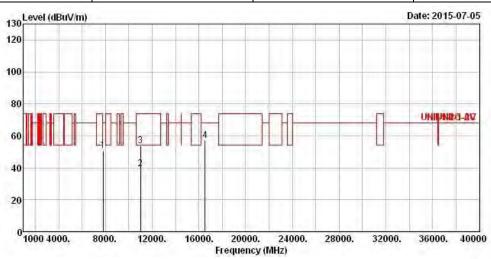
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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 HT40 Test Freq. (MHz) 5510							
N <sub>TX</sub>	2	Polarization	V				

Report No.: FR570330-01



			Over	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7796.000	51.09	-17.11	68.20	41.09	36.90	5.93	32.83	Peak
2	11020.000	39.41	-14.59	54.00	25.71	38.82	7.29	32.41	Average
3	11020.000	53.67	-20.33	74.00	39.97	38.82	7.29	32.41	Peak
4	16530.000	57.30	-10.90	68.20	42.39	37.60	9.25	31.94	Peak

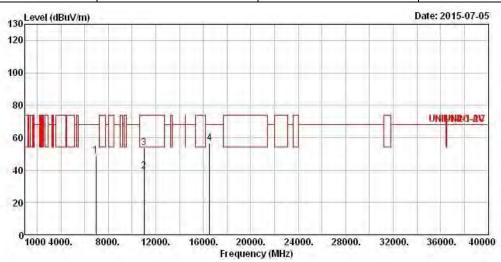
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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 HT40 Test Freq. (MHz) 5510							
N <sub>TX</sub>	2	Polarization	Н				

Report No.: FR570330-01



	Freq	Level	0∨er Limit	Limit Line		Antenna Factor			Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	6944.000	49.13	-19.07	68.20	40.86	35.21	5.59	32.53	Peak
2	11020.000	39.24	-14.76	54.00	25.54	38.82	7.29	32.41	Average
3	11020.000	53.67	-20.33	74.00	39.97	38.82	7.29	32.41	Peak
4	16530.000	56.64	-11.56	68.20	41.73	37.60	9.25	31.94	Peak

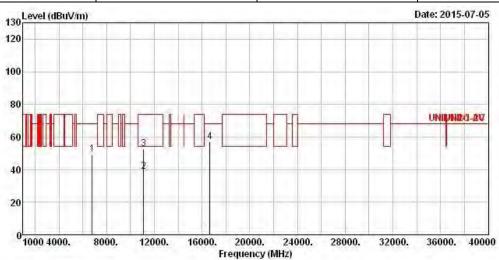
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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 HT40 Test Freq. (MHz) 5550							
$N_{TX}$	2	Polarization	V				

Report No.: FR570330-01



			Over	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	фB	dB	
1	6784.000	49.55	-18.65	68.20	41.67	34.90	5.49	32.51	Peak
2	11100.000	38.98	-15.02	54.00	25.16	38.90	7.33	32.41	Average
3	11100.000	52.83	-21.17	74.00	39.01	38.90	7.33	32.41	Peak
4	16650.000	57.32	-10.88	68.20	41.54	38.30	9.29	31.81	Peak

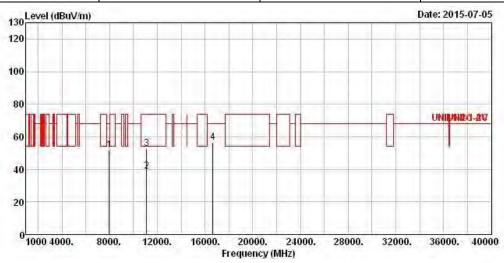
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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 Mode HT40 Test Freq. (MHz) 5550							
N <sub>TX</sub>	2	Polarization	Н				

Report No.: FR570330-01



	Freq	Level	Over Limit			Antenna Factor			Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7984.000	51.61	-16.59	68.20	41.41	37.08	6.00	32.88	Peak
2	11100.000	38.77	-15.23	54.00	24.95	38.90	7.33	32.41	Average
3	11100.000	52.88	-21.12	74.00	39.06	38.90	7.33	32.41	Peak
4	16650.000	56.58	-11.62	68.20	40.80	38.30	9.29	31.81	Peak

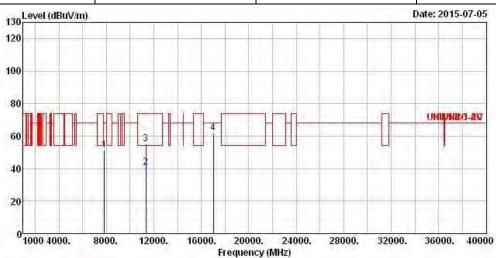
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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 Mode	HT40	Test Freq. (MHz)	5670				
N <sub>TX</sub>	2	Polarization	V				

Report No.: FR570330-01



			0ver	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7848.000	51.32	-16.88	68.20	41.26	36.95	5.95	32.84	Peak
2	11340.000	40.90	-13.10	54.00	26.75	39.13	7.44	32.42	Average
3	11340.000	55.14	-18.86	74.00	40.99	39.13	7.44	32.42	Peak
4	17010.000	62.01	-6.19	68.20	43.60	40.43	9.41	31.43	Peak

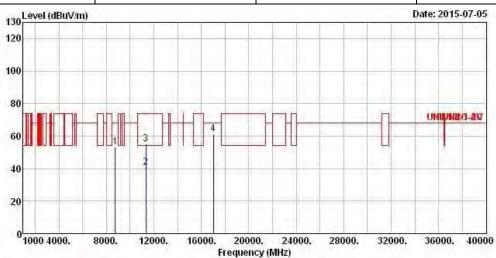
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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	HT40	Test Freq. (MHz)	5670				
N <sub>TX</sub>	2	Polarization	Н				

Report No.: FR570330-01



			0ver	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8741.000	53.27	-14.93	68.20	41.70	38.19	6.35	32.97	Peak
2	11340.000	40.91	-13.09	54.00	26.76	39.13	7.44	32.42	Average
3	11340.000	55.37	-18.63	74.00	41.22	39.13	7.44	32.42	Peak
4	17010.000	61.55	-6.65	68.20	43.14	40.43	9.41	31.43	Peak

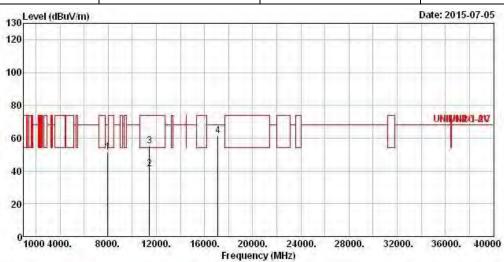
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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	HT40	Test Freq. (MHz)	5710				
N <sub>TX</sub>	2	Polarization	V				

Report No.: FR570330-01



			Over	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	_
1	7984.000	51.47	-16.73	68.20	41.27	37.08	6.00	32.88	Peak
2	11420.000	41.31	-12.69	54.00	27.03	39.22	7.48	32.42	Average
3	11420.000	55.07	-18.93	74.00	40.79	39.22	7.48	32.42	Peak
4	17130.000	61.51	-6.69	68.20	42.16	41.34	9.45	31.44	Peak

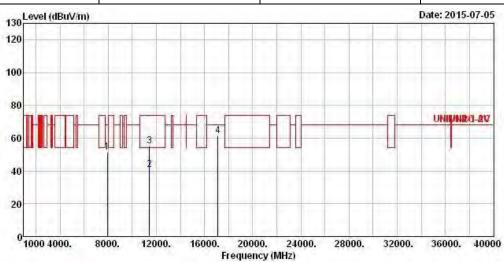
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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	HT40	Test Freq. (MHz)	5710					
N <sub>TX</sub>	2	Polarization	Н					

Report No.: FR570330-01



			Over	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7943.000	51.39	-16.81	68.20	41.24	37.03	5.99	32.87	Peak
2	11420.000	40.89	-13.11	54.00	26.61	39.22	7.48	32.42	Average
3	11420.000	55.15	-18.85	74.00	40.87	39.22	7.48	32.42	Peak
4	17130.000	61.38	-6.82	68.20	42.03	41.34	9.45	31.44	Peak

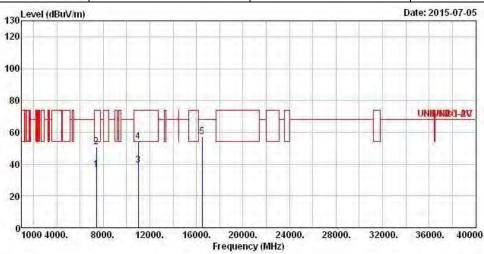
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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)	5500					
$N_{TX}$	2	Polarization	V					

Report No.: FR570330-01



			Over	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7398.000	36.39	-17.61	54.00	26.99	36.33	5.78	32.71	Average
2	7398.000	50.94	-23.06	74.00	41.54	36.33	5.78	32.71	Peak
3	11000.000	39.51	-14.49	54.00	25.85	38.80	7.27	32.41	Average
4	11000.000	54.15	-19.85	74.00	40.49	38.80	7.27	32.41	Peak
5	16500.000	57.18	-11.02	68.20	42.51	37.40	9.24	31.97	Peak

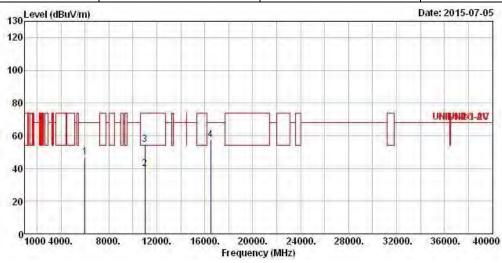
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands 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)	5500					
N <sub>TX</sub>	2	2	Н					

Report No.: FR570330-01



	Freq	Le∨el	0∨er Limit	Limit Line		Antenna Factor			Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	6012.000	47.02	-21.18	68.20	40.09	34.30	5.09	32.46	Peak
2	11000.000	39.75	-14.25	54.00	26.09	38.80	7.27	32.41	Average
3	11000.000	54.79	-19.21	74.00	41.13	38.80	7.27	32.41	Peak
4	16500.000	57.41	-10.79	68.20	42.74	37.40	9.24	31.97	Peak

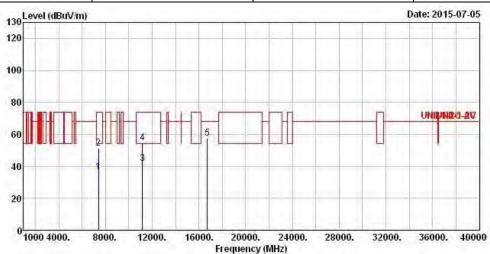
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands 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)	5580						
$N_{TX}$	2	Polarization	V						

Report No.: FR570330-01



	Freq	Level	Over Limit	Limit Line		Antenna Factor		the second secon	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7422.000	36.39	-17.61	54.00	26.90	36.42	5.79	32.72	Average
2	7422.000	51.25	-22.75	74.00	41.76	36.42	5.79	32.72	Peak
3	11160.000	41.66	-12.34	54.00	27.73	38.97	7.37	32.41	Average
4	11160.000	54.50	-19.50	74.00	40.57	38.97	7.37	32.41	Peak
5	16740.000	57.39	-10.81	68.20	40.98	38.80	9.32	31.71	Peak

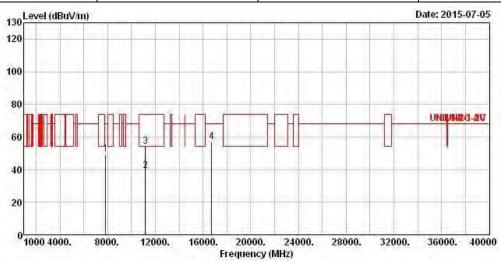
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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 <sub>TX</sub>	2	Polarization	Н					

Report No.: FR570330-01



	Frage	Laval	Over			Antenna Factor			Domarde
	Freq	rever	LIMIT	rrue	rever	ractor	LOSS	ractor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7848.000	49.57	-18.63	68.20	39.51	36.95	5.95	32.84	Peak
2	11160.000	39.35	-14.65	54.00	25.42	38.97	7.37	32.41	Average
3	11160.000	54.14	-19.86	74.00	40.21	38.97	7.37	32.41	Peak
4	16740.000	57.29	-10.91	68.20	40.88	38.80	9.32	31.71	Peak

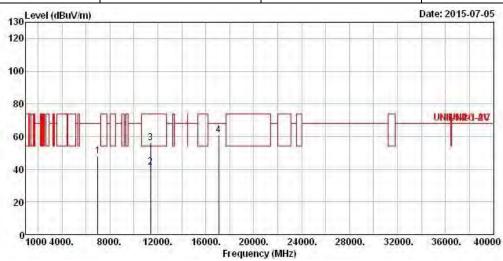
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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)	5700					
N <sub>TX</sub>	2	Polarization	V					

Report No.: FR570330-01



	Freq	Level	0∨er Limit	200000000000000000000000000000000000000		Antenna Factor			Remark
	MHz	dBuV/m	-dB	dBuV/m	dBuV	dB/m	dB	dB	
1	6990.000	48.12	-20.08	68.20	39.75	35.27	5.64	32.54	Peak
2	11400.000	41.14	-12.86	54.00	26.88	39.20	7.48	32.42	Average
3	11400.000	56.03	-17.97	74.00	41.77	39.20	7.48	32.42	Peak
4	17100.000	60.93	-7.27	68.20	41.85	41.08	9.44	31.44	Peak

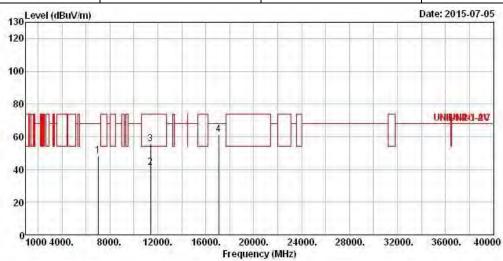
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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	VHT20	Test Freq. (MHz)	5700					
N <sub>TX</sub>	2	Polarization	Н					

Report No.: FR570330-01



			Over	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7038.000	48.47	-19.73	68.20	39.99	35.39	5.65	32.56	Peak
2	11400.000	41.20	-12.80	54.00	26.94	39.20	7.48	32.42	Average
3	11400.000	55.74	-18.26	74.00	41.48	39.20	7.48	32.42	Peak
4	17100.000	61.19	-7.01	68.20	42.11	41.08	9.44	31.44	Peak

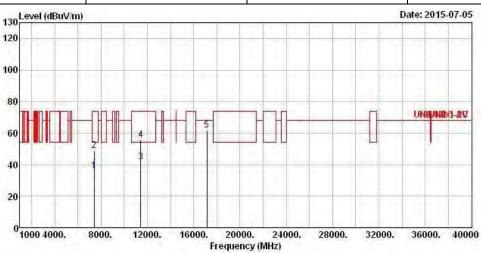
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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	VHT20	Test Freq. (MHz)	5720					
$N_{TX}$	2	Polarization	V					

Report No.: FR570330-01



			Over	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7404.000	36.10	-17.90	54.00	26.65	36.38	5.78	32.71	Average
2	7404.000	48.94	-25.06	74.00	39.49	36.38	5.78	32.71	Peak
3	11440.000	41.50	-12.50	54.00	27.19	39.23	7.50	32.42	Average
4	11440.000	55.66	-18.34	74.00	41.35	39.23	7.50	32.42	Peak
5	17160.000	62.01	-6.19	68.20	42.40	41.60	9.45	31.44	Peak

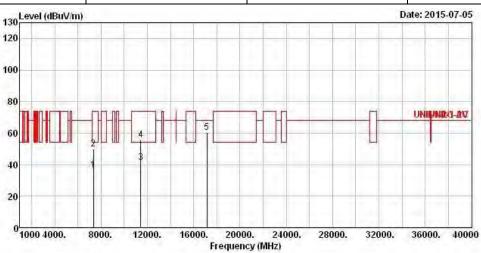
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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) 5720							
$N_{TX}$	2	Polarization	Н						

Report No.: FR570330-01



	Freq	Level	Over Limit	Limit Line		Antenna Factor		Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7362.000	36.53	-17.47	54.00	27.22	36.24	5.76	32.69	Average
2	7362.000	49.85	-24.15	74.00	40.54	36.24	5.76	32.69	Peak
3	11440.000	41.16	-12.84	54.00	26.85	39.23	7.50	32.42	Average
4	11440.000	55.89	-18.11	74.00	41.58	39.23	7.50	32.42	Peak
5	17160.000	60.34	-7.86	68.20	40.73	41.60	9.45	31.44	Peak

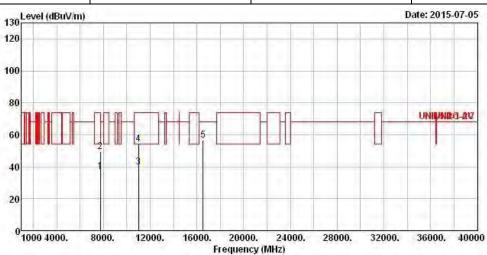
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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	VHT40	Test Freq. (MHz)	5510				
$N_{TX}$	2	Polarization	V				

Report No.: FR570330-01



			0ver	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7728.000	36.80	-17.20	54.00	26.87	36.83	5.91	32.81	Average
2	7728.000	49.55	-24.45	74.00	39.62	36.83	5.91	32.81	Peak
3	11020.000	39.67	-14.33	54.00	25.97	38.82	7.29	32.41	Average
4	11020.000	54.03	-19.97	74.00	40.33	38.82	7.29	32.41	Peak
5	16530.000	56.51	-11.69	68.20	41.60	37.60	9.25	31.94	Peak

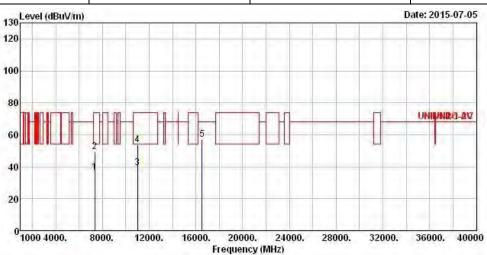
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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	VHT40	Test Freq. (MHz)	5510			
$N_{TX}$	2	Polarization	Н			

Report No.: FR570330-01



	Freq	Level	Over l Limit	1.4	ReadAntenna Level Factor				Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-
1	7362.000	36.64	-17.36	54.00	27.33	36.24	5.76	32.69	Average
2	7362.000	49.38	-24.62	74.00	40.07	36.24	5.76	32.69	Peak
3	11020.000	39.58	-14.42	54.00	25.88	38.82	7.29	32.41	Average
4	11020.000	53.79	-20.21	74.00	40.09	38.82	7.29	32.41	Peak
5	16530.000	57.24	-10.96	68.20	42.33	37.60	9.25	31.94	Peak

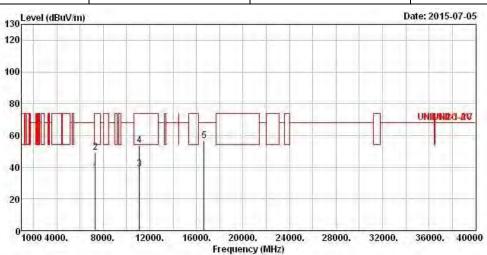
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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	VHT40	Test Freq. (MHz)	5550			
$N_{TX}$	2	Polarization	V			

Report No.: FR570330-01



			Over	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7326.000	36.35	-17.65	54.00	27.13	36.15	5.75	32.68	Average
2	7326.000	49.47	-24.53	74.00	40.25	36.15	5.75	32.68	Peak
3	11100.000	39.08	-14.92	54.00	25.26	38.90	7.33	32.41	Average
4	11100.000	53.57	-20.43	74.00	39.75	38.90	7.33	32.41	Peak
5	16650.000	56.77	-11.43	68.20	40.99	38.30	9.29	31.81	Peak

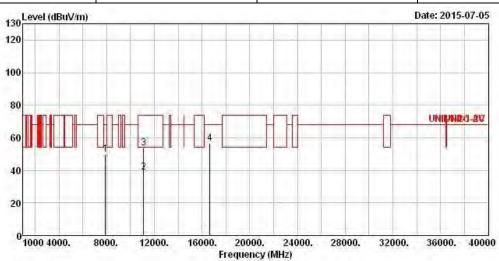
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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 Mode	VHT40	Test Freq. (MHz)	5550				
$N_{TX}$	2	Polarization	Н				

Report No.: FR570330-01



			Over	Limit	Read	Antenna	Cable	Preamp		
	Freq	Level	l Limit	Line	Level	Factor	Loss	Factor	Remark	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		
1	7898.000	50.09	-18.11	68.20	39.97	37.00	5.97	32.85	Peak	
2	11100.000	38.87	-15.13	54.00	25.05	38.90	7.33	32.41	Average	
3	11100.000	53.81	-20.19	74.00	39.99	38.90	7.33	32.41	Peak	
4	16650.000	56.65	-11.55	68.20	40.87	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.

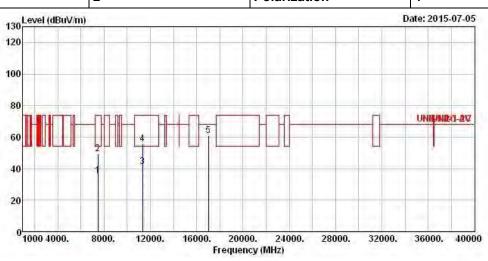
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Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode VHT40 Test Freq. (MHz) 5670

N<sub>TX</sub> 2 Polarization V

Report No.: FR570330-01



			Over	Limit	ReadA	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7476.000	35.42	-18.58	54.00	25.79	36.56	5.81	32.74	Average
2	7476.000	49.35	-24.65	74.00	39.72	36.56	5.81	32.74	Peak
3	11340.000	41.02	-12.98	54.00	26.87	39.13	7.44	32.42	Average
4	11340.000	55.84	-18.16	74.00	41.69	39.13	7.44	32.42	Peak
5	17010.000	60.73	-7.47	68.20	42.32	40.43	9.41	31.43	Peak

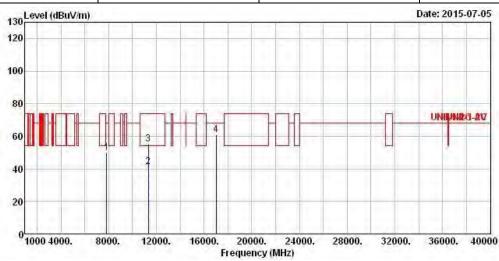
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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	VHT40	Test Freq. (MHz)							
N <sub>TX</sub>	2	Polarization	Н						

Report No.: FR570330-01



			Over	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7836.000	49.92	-18.28	68.20	39.89	36.93	5.94	32.84	Peak
2	11340.000	41.14	-12.86	54.00	26.99	39.13	7.44	32.42	Average
3	11340.000	55.14	-18.86	74.00	40.99	39.13	7.44	32.42	Peak
4	17010.000	60.95	-7.25	68.20	42.54	40.43	9.41	31.43	Peak

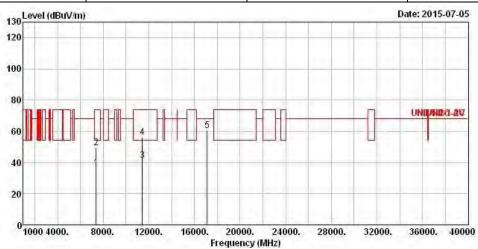
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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	VHT40	Test Freq. (MHz)	5710						
$N_{TX}$	2	Polarization	V						

Report No.: FR570330-01



			Over	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7380.000	36.24	-17.76	54.00	26.87	36.29	5.78	32.70	Average
2	7380.000	49.19	-24.81	74.00	39.82	36.29	5.78	32.70	Peak
3	11420.000	41.43	-12.57	54.00	27.15	39.22	7.48	32.42	Average
4	11420.000	55.91	-18.09	74.00	41.63	39.22	7.48	32.42	Peak
5	17130.000	60.57	-7.63	68.20	41.22	41.34	9.45	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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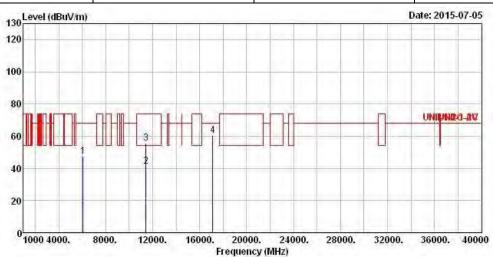


Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode VHT40 Test Freq. (MHz) 5710

N<sub>TX</sub> 2 Polarization H

Report No.: FR570330-01



			Over	Limit	Read	Antenna	Cable	Preamp		
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	
	MHz	dBuV/m	dBuV/m	dB	$\overline{dBuV/m}$	dBuV	dB/m	dB	dB	
1	6072.000	47.61	-20.59	68.20	40.65	34.31	5.11	32.46	Peak	
2	11420.000	41.14	-12.86	54.00	26.86	39.22	7.48	32.42	Average	
3	11420.000	55.80	-18.20	74.00	41.52	39.22	7.48	32.42	Peak	
4	17130.000	60.32	-7.88	68.20	40.97	41.34	9.45	31.44	Peak	

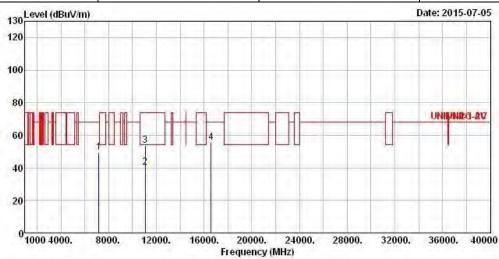
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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	VHT80	Test Freq. (MHz)	5530				
$N_{TX}$	2	Polarization	V				

Report No.: FR570330-01



	Freq	Level	Over Limit	Limit Line		Antenna Factor			
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7188.000	49.42	-18.78	68.20	40.54	35.79	5.71	32.62	Peak
2	11060.000	40.29	-13.71	54.00	26.52	38.87	7.31	32.41	Average
3	11060.000	53.75	-20.25	74.00	39.98	38.87	7.31	32.41	Peak
4	16590.000	55.51	-12.69	68.20	40.21	37.90	9.27	31.87	Peak

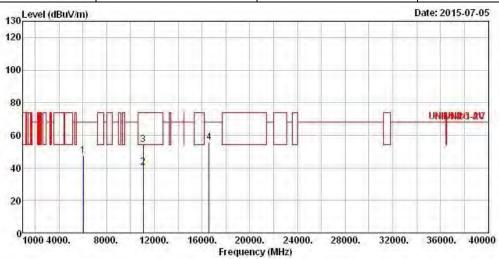
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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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Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode	VHT80	Test Freq. (MHz)						
$N_{TX}$	2	Polarization	Н					

Report No.: FR570330-01



			Over	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	6054.000	47.45	-20.75	68.20	40.49	34.31	5.11	32.46	Peak
2	11060.000	40.47	-13.53	54.00	26.70	38.87	7.31	32.41	Average
3	11060.000	54.34	-19.66	74.00	40.57	38.87	7.31	32.41	Peak
4	16590.000	55.54	-12.66	68.20	40.24	37.90	9.27	31.87	Peak

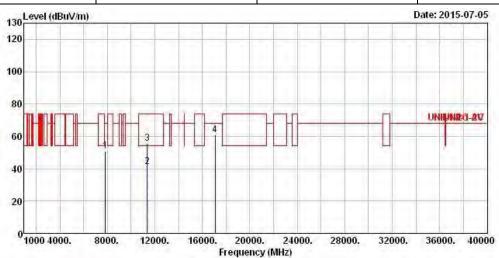
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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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Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)							
Modulation Mode	VHT80	Test Freq. (MHz)	5690					
N <sub>TX</sub> 2		Polarization	V					

Report No.: FR570330-01



	Freq	Over Freq Level Limit					Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7830.000	50.87	-17.33	68.20	40.84	36.93	5.94	32.84	Peak
2	11380.000	41.34	-12.66	54.00	27.12	39.18	7.46	32.42	Average
3	11380.000	55.56	-18.44	74.00	41.34	39.18	7.46	32.42	Peak
4	17070.000	60.91	-7.29	68.20	42.11	40.82	9.42	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.

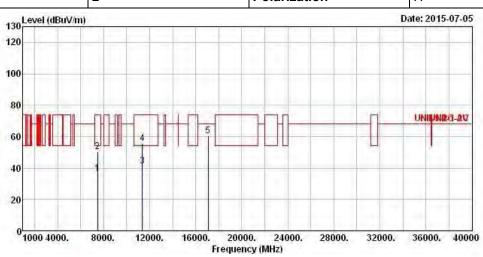
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Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode VHT80 Test Freq. (MHz) 5690

N<sub>TX</sub> 2 Polarization H

Report No.: FR570330-01



			Over	Limit	Read	Antenna	Cable	Preamp	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7464.000	36.47	-17.53	54.00	26.88	36.51	5.81	32.73	Average
2	7464.000	50.16	-23.84	74.00	40.57	36.51	5.81	32.73	Peak
3	11380.000	41.10	-12.90	54.00	26.88	39.18	7.46	32.42	Average
4	11380.000	55.43	-18.57	74.00	41.21	39.18	7.46	32.42	Peak
5	17070.000	60.68	-7.52	68.20	41.88	40.82	9.42	31.44	Average
5	17070.000	60.68	-7.52	68.20	41.88	40.82	9.42	31.44	A١

- 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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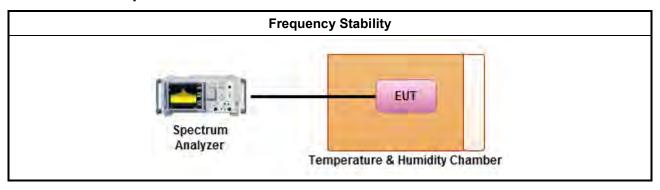
### 3.7.2 Measuring Instruments

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							
	$\boxtimes$	Frequency stability with respect to ambient temperature						
	$\boxtimes$	Frequency stability when varying supply voltage						
$\boxtimes$	For	conducted measurement.						
		For conducted measurements on devices with multiple transmit chains:  Measurements need only to be performed on one of the active transmit chains (antenna outputs)						
		radiated measurement. The equipment to be measured and the test antenna shall be oriented to in 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							
Mod	le	Frequency Stability (ppm)					
Condition	Condition Freq. (MHz)		2 min	5 min	10 min		
T <sub>20°C</sub> Vmax	5300	-4.4981	-4.4226	-4.2943	-4.1358		
T <sub>20°C</sub> Vmin	5300	-4.5642	-4.4962	-4.3811	-4.2038		
T <sub>50°C</sub> Vnom	5300	-10.2396	-10.1717	-10.0604	-9.8698		
T <sub>40°C</sub> Vnom	5300	-9.8491	-9.7340	-9.6189	-9.4453		
T <sub>30°C</sub> Vnom	5300	-7.6830	-7.6170	-7.5057	-7.2943		
T <sub>20°C</sub> Vnom	5300	-4.1000	-4.0189	-3.9132	-3.7679		
T <sub>10°C</sub> Vnom	5300	-2.4679	-2.3849	-2.2868	-2.2415		
$T_{0^{\circ}C}Vnom$	5300	-0.1623	-0.0906	0.0302	2.1245		
T <sub>-10°C</sub> Vnom	5300	2.3736	2.4377	2.5623	2.8264		
T <sub>-20°C</sub> Vnom 5300		3.3623	3.4340	3.5358	3.8528		
Limit (յ	Limit (ppm)		±20				
Resi	ult	Complied					

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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. 15, 2015	AC Conduction
LISN	SCHWARZBECK MESS-ELEKTRONIK	NSLK 8127	8127-477	9kHz ~ 30MHz	Jan. 22, 2015	AC Conduction
RF Cable-CON	HUBER+SUHNER	RG213/U	07611832020001	9kHz ~ 30MHz	Oct. 31, 2014	AC Conduction
EMI Filter	LINDGREN	LRE-2030	2651	< 450 Hz	NCR	AC Conduction

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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	101500	9KHz~40GHz	May. 05, 2015	RF Conducted
Temp. and Humidity Chamber	Giant Force	GTH-225-20-SP-SD	MAA1112-007	-20 ~ 100°C	Apr. 07, 2015	RF Conducted
Power Sensor	Anritsu	MA2411B	0917017	300MHz ~ 40GHz	Feb. 17, 2015	RF Conducted
Power Meter	Anritsu	ML2495A	0949003	300MHz ~ 40GHz	Feb. 17, 2015	RF Conducted
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	Jul. 28, 2015	RF Conducted

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

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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 Emission
Amplifier	HP	8447D	2944A08033	10kHz ~ 1.3GHz	May 11, 2015	Radiation Emission
Amplifier	Agilent	8449B	3008A02120	1GHz ~ 26.5GHz	Sep. 01, 2014	Radiation Emission
Spectrum	R&S	FSP40	100004	9kHz ~ 40GHz	Apr. 02, 2015	Radiation Emission
Bilog Antenna	SCHAFFNER	CBL 6112D	22237	30MHz ~ 1GHz	Sep. 20, 2014	Radiation Emission
Horn Antenna	ETS · LINDGREN	3115	6741	1GHz ~ 18GHz	Jul. 11, 2014	Radiation Emission
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	18GHz ~ 40GHz	Jan. 27, 2015	Radiation Emission
RF Cable-R03m	Jye Bao	RG142	CB021	9kHz ~ 1GHz	Nov. 15, 2014	Radiation Emission
RF Cable-high	SUHNER	SUCOFLEX 106	03CH03-HY	1GHz ~ 40GHz	Dec. 12, 2014	Radiation Emission
Turn Table	EM Electronics	EM Electronics	060615	0 ~ 360 degree	N/A	Radiation Emission
Antenna Mast	MF	MF-7802	MF780208179	1 ~ 4 m	N/A	Radiation Emission

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

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Amplifier	EMC INSTRUMENTS	EMC184045B	980192	18GHz ~ 40GHz	Aug. 25, 2014	Radiation Emission
Loop Antenna	TESEQ	HLA 6120	31244	9 kHz~30 MHz	Feb. 02, 2015	Radiation Emission

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

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