

Report No.: FR461801AN

FCC Test Report

-	2		
	uı	pm	ent

Wireless module

Brand Name

: PEGATRON

Model No.

: UPWL6028F

FCC ID

: VUIUPWL6028F

Standard

47 CFR FCC Part 15.407

Operating Band

: 5150 MHz - 5250 MHz

5725 MHz - 5850 MHz

FCC Classification: NII

Applicant

: PEGATRON CORPORATION

Manufacturer

5F., NO. 76, LIGONG ST., BEITOU DISTRICT,

TAIPEI CITY 112 Taiwan

Function

Outdoor AP; Indoor AP; Fixed P2P AP

Portable Client

The product sample received on Jun. 25, 2014 and completely tested on Jul. 25, 2014. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2009 and shown compliance with the applicable technical standards.

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

Reviewed by:

Wayne Hsu / Assistant Manager

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Summary of Test Result

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Conformance Test Specifications					
Report Clause	· I DESCRIPTION				
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

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Report No.	Version	Description	Issued Date
FR461801AN	Rev. 01	Initial issue of report	Sep. 04, 2014

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General Description 1

Information 1.1

1.1.1 **RF General Information**

RF General Information					
Frequency Range (MHz)	IEEE Std. 802.11	Ch. Freq. (MHz)	Channel Number	Transmit Chains (N _{TX})	RF Output Power (dBm)
5150-5250		5180-5240	36-48 [4]	2	20.80
5725-5850	а	5745-5825	149-165 [5]	2	20.50
5150-5250		5180-5240	36-48 [4]	1	18.57
	n (HT20)	5180-5240	36-48 [4]	2	20.83
E70E E0E0		5745-5825	149-165 [5]	1	17.54
5725-5850		5745-5825	149-165 [5]	2	20.54
E4E0 E0E0	(17.40)	5190-5230	38-46 [2]	1	18.27
5150-5250		5190-5230	38-46 [2]	2	20.64
E70E E0E0	n (HT40)	5755-5795	151-159 [2]	1	16.87
5725-5850		5755-5795	151-159 [2]	2	18.39

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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.

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1.1.2 Antenna Information

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

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	Antenna General Information						
No. Ant. Cat. Ant. Type Vendor name Model name Gain (dBi)							
1	Internal	PCB	Wanshih	UC3WFI0064	2.73		
2	Internal	PCB	Wanshih	UC3WFI0073	3.13		

Remark:

- 1. When 11n is 1Tx: The EUT was pre-tested Antenna Port 1 and Antenna Port 2 for single chain, and the worst case was Antenna Port 2. Therefore only the test data(Port 2) was recorded in this report. The EUT has CDD function.

1.1.3 Type of EUT

	Identify EUT				
EU	Γ Serial Number	N/A			
Pre	sentation of Equipment				
		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				
○ Operated test mode for worst duty cycle				
Test Signal Duty Cycle (x) Power Duty Factor [dB] – (10 log 1/x)				
	0.00			
	0.00			
	0.00			

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1.1.5 EUT Operational Condition

Supply Voltage	☐ AC mains	□ DC	
Type of DC Source	☐ Externa DC supply		☐ From Adapter
Test Voltage	⊠ Vnom (5 V)		
Test Climatic	☐ Tnom (20°C)		☐ Tmin (-20°C)

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1.2 Accessories And Support Equipment

Accessories					
Antenna	Brand Name	Part Number	Gain _(dBi)	TYPE	
Antenna 1	Wanshih	UC3WFI0064	2.73	PCB	
Antenna 2	Wanshih	UC3WFI0073	3.13	PCB	
Antenna 3	Honglin	260-23396	2.00	PCB	
Antenna 4	Honglin	260-23397	1.90	PCB	
Antenna 5	Honglin	260-23402	2.00	PCB	
Antenna 6	Honglin	260-23403	1.93	PCB	
Antenna 7	Honglin	260-23433	1.86	PCB	
Antenna 8	Honglin	260-23435	2.00	PCB	
Antenna 9	ACON	APP6P-701244	2.00	PCB	
Antenna 10	ACON	APP6P-701246	1.21	PCB	
Antenna 11	Honglin	290-30180	1.90	PCB	
Antenna 12	Honglin	290-30181	2.00	PCB	
Antenna 13	Honglin	260-26031	2.29	PCB	
Antenna 14	Honglin	260-26030	2.29	PCB	
Antenna 15	Honglin	260-26036	2.62	PCB	
Antenna 16	Honglin	290-30012	2.62	PCB	
Antenna 17	Honglin	260-26037	2.62	PCB	

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Note: Regarding to more detail and other information, please refer to user manual.

Support Equipment							
No.	No. Equipment Brand Name Model Name FCC ID						
1	Notebook	DELL	Inspiron6400	DoC			
2	Test Fixture	-	-	-			

1.3 Testing Applied Standards

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

- 47 CFR FCC Part 15
- ANSI C63.10-2009
- FCC KDB 789033 D02 v01
- FCC KDB 644545 D01 v01r01
- FCC KDB 644545 D02 v01
- FCC KDB 662911 v02r01
- FCC-14-30A1-UNII

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1.4 Testing Location Information

	Testing Location						
\boxtimes	HWA YA	ADD	:	No. 52, Hwa Ya 1 st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.			
	TEL: 886-3-327-3456 FAX: 886-3-327-0973						
Test Condition				Test Site No.	Test Engineer	Test Environment	
AC Conduction				CO04-HY	Zeus	26°C / 60%	
RF Conducted				TH01-HY lan		23.5°C / 65%	
Radiated Emission				03CH03-HY	Allen	24.4°C / 51%	

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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)

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

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2 Test Configuration of EUT

2.1 The Worst Case Modulation Configuration

Worst Modulation Used for Conformance Testing					
Modulation Mode	Transmit Chains (N _{TX})	Data Rate / MCS	Worst Data Rate / MCS		
11a	2	6-54Mbps	6 Mbps		
HT20	1	M0-7	MO		
HT20	2	M0-15	MO		
HT40	1	M0-7	MO		
HT40	2	M0-15	MO		

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2.2 The Worst Case Power Setting Parameter

The Worst Case Power Setting Parameter (5150-5250MHz band)								
Test Software Version		Mtool_2.0.0.7						
			Test Frequency (MHz)					
Modulation Mode	N _{TX}		NCB: 20MHz			40MHz		
		5180	5200	5240	5190	5230		
11a	2	66	73	73	-	-		
HT20	1	69	73	74	-			
HT20	2	65	73	73	-	-		
HT40	1	-	-	-	52	73		
HT40	2	-	-	-	48	73		

The Worst Case Power Setting Parameter (5725-5850MHz band)							
Test Software Version		Mtool_2.0.0.7					
			Test Frequency (MHz)				
Modulation Mode	N_{TX}	NCB: 20MHz			NCB:	40MHz	
	-	5745	5785	5825	5755	5795	
11a	2	54	73	64	-	-	
HT20	1	56	72	67	-	-	
HT20	2	54	73	63	-	-	
HT40	1	-	-	-	40	70	
HT40	2	-	-	-	40	65	

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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	Wi Fi Transmit	

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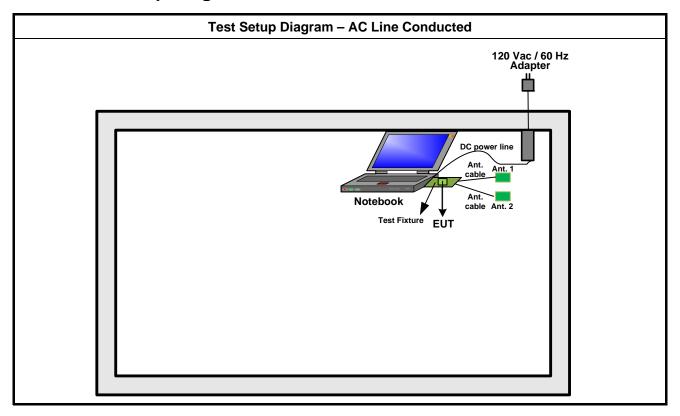
Th	The Worst Case Mode for Following Conformance Tests		
Tests Item	RF Output Power, Peak Power Spectral Density, Emission Bandwidth, Peak Excursion, Transmitter Conducted Unwanted Emissions Transmitter Conducted Bandedge Emissions		
Test Condition	Conducted measurement at transmit chains		
Modulation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

Т	he Worst Case Mode for Fo	ollowing Conformance Te	sts	
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 EU 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. The planes is	s Y.	
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 two or three orthogonal planes.			
Operating Mode (Below 1GHz)	Wi Fi Transmit			
Operating Mode (Above 1GHZ)	Wi Fi Transmit			
Modulation Mode	11a, HT20, HT40			
	X Plane	Y Plane	Z Plane	
Orthogonal Planes of EUT				

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2.4 Test Setup Diagram



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Test Setup Diagram - Radiated Test (Below 1GHz) 120 Vac / 60 Hz Adapter DC power line Notebook cable Ant. 2 Test Fixture EUT **Test Setup Diagram - Radiated Test (Above 1GHz)** 120 Vac / 60 Hz Adapter DC power line Ant. 1 Ant. cable Ant. 2 Notebook Test Fixture EUT

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3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

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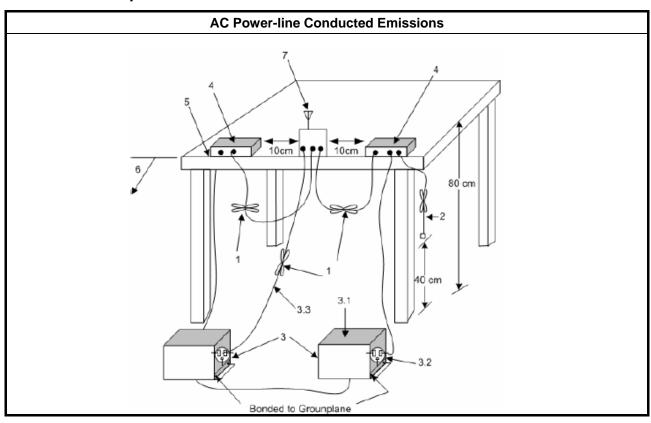
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

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

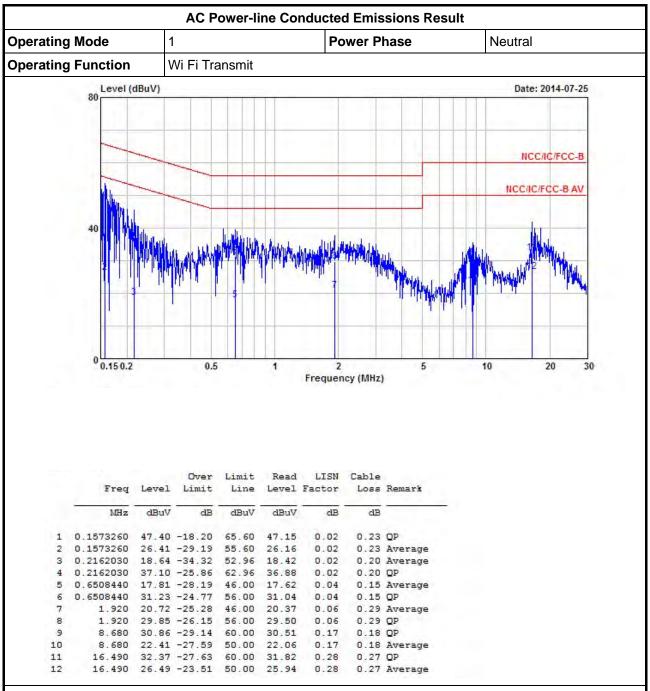
3.1.4 Test Setup



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3.1.5 Test Result of AC Power-line Conducted Emissions



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Note 1: ">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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AC Power-line Conducted Emissions Result Operating Mode Power Phase Line **Operating Function** Wi Fi Transmit Level (dBuV) Date: 2014-07-25 NCC/IC/FCC-B NCC/IC/FCC-B AV 0.15 0.2 10 30 Frequency (MHz) Over Limit Read LISN Cable Freq Level Limit Line Level Factor Loss Remark MHz dBuV dB dBuV dBuV dB dB 1 80.1615500 48.76 -16.62 65.38 48.50 0.03 0.23 QP 0.23 Average 0.1615500 27.35 -28.03 55.38 27.09 0.03 0.6304790 34.22 -21.78 56.00 34.03 0.04 0.15 QP 0.6304790 18.41 -27.59 46.00 18.22 0.04 0.15 Average 0.9683980 29.38 -26.62 56.00 29.22 0.06 0.10 QP 0.9683980 18.35 -27.65 46.00 18.19 0.06 0.10 Average 2.710 28.33 -27.67 56.00 28.04 0.08 0.21 QP

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

0.18

0.18

0.29

0.29

0.21 Average

0.18 Average

0.23 Average

0.18 OP

0.23 QP

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

2.710 20.43 -25.57 46.00 20.14 0.08

8.680 30.68 -29.32 60.00 30.32

8.680 22.67 -27.33 50.00 22.31

18.330 26.03 -23.97 50.00 25.51

18.330 32.47 -27.53 60.00 31.95

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3.2 Emission Bandwidth

3.2.1 Emission Bandwidth Limit

	Emission Bandwidth Limit				
UN	JNII Devices				
\boxtimes	For the 5.15-5.25 GHz band, N/A				
	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.				
	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.				
\boxtimes	For the 5.725-5.85 GHz band, 6 dB emission bandwidth ≥ 500kHz.				

3.2.2 Measuring Instruments

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

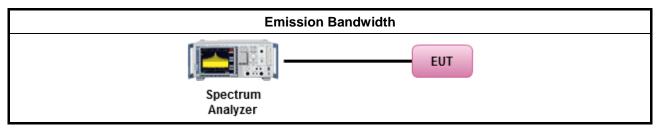
3.2.3 Test Procedures

	Test Method						
\boxtimes	For	the e	mission bandwidth shall be measured using one of the options below:				
	\boxtimes	Ref	er as FCC KDB 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 4.6 for bandwidth testing.				
\boxtimes	For	cond	ucted measurement.				
		The	EUT supports single transmit chain and measurements performed on this transmit chain.				
	\boxtimes	The	EUT supports diversity transmitting and the results on transmit chain port 2 is the worst case.				
	\boxtimes	The	EUT supports multiple transmit chains using options given below:				
			Option 1: Multiple transmit chains measurements need to be performed on one of the active transmit chains (antenna outputs). All measurement had be performed on transmit chains 2.				
			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

		UN	II Emission Bandwidtl	n Result (5150-5250MH	lz band)			
Condit	ion		Emission Bandwidth (MHz)					
Modulation Mode		Freq.	99% Ba	ndwidth	26dB Ba	ındwidth		
Modulation Mode	N _{TX}	(MHz)	Chain- Port 1	Chain- Port 2	Chain- Port 1	Chain- Port 2		
11a	2	5180	16.44	16.76	19.67	20.92		
11a	2	5200	16.76	17.19	25.70	26.62		
11a	2	5240	16.66	16.76	28.32	29.00 21.55		
HT20	1	5180	-	17.84	-			
HT20	1	5200	-	17.71	-	25.05		
HT20	1	5240	-	18.19	-	33.20		
HT20	2	5180	17.64	17.66	20.70	19.80		
HT20	2	5200	17.89	18.01	31.47	31.10		
HT20	2	5240	17.79	18.04	27.15	28.07		
HT40	1	5190	-	36.50	-	44.08		
HT40	1	5230	-	42.33	-	87.96		
HT40	2	5190	36.46	36.46	39.96	39.92		
HT40	2	5230	38.02	45.57	87.96	87.84		
Resu	ılt			Com	plied			

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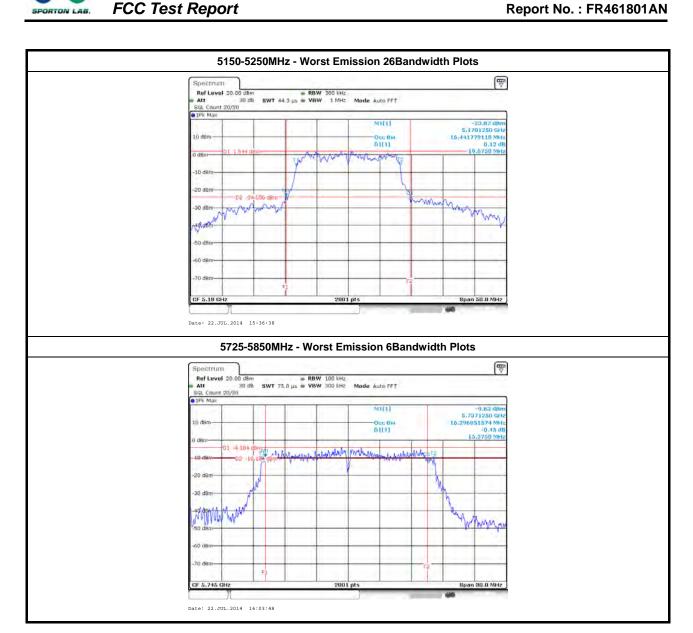


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		UN	II Emission Bandwidth	Result (5725-5850MH	z band)			
Condit	tion		Emission Bandwidth (MHz)					
Modulation Mode		Freq.	99% Bar	ndwidth	6dB Ba	ndwidth		
wiodulation wiode	N _{TX}	(MHz)	Chain- Port 1	Chain- Port 2	Chain- Port 1	Chain- Port 2		
11a	2	5745	16.31	16.29	15.73	15.37		
11a	2	5785	16.50	16.50	16.03	16.29		
11a	2	5825	16.32	16.34	16.30	16.32		
HT20	1	5745	-	17.55	-	17.55		
HT20	1	5785	-	17.60	-	17.55		
HT20	1	5825	-	17.58	-	16.66		
HT20	2	5745	17.51	17.54	17.19	17.56		
HT20	2	5785	17.64	17.67	17.53	17.55		
HT20	2	5825	17.57	17.51	17.14	16.93		
HT40	1	5755	-	36.22	-	36.32		
HT40	1	5795	-	36.54	-	36.32		
HT40	2	5755	36.18	36.18	35.68	35.68		
HT40	2	5795	36.34	36.34	36.32	36.32		
Limi	it		- ≥ 500 kHz					
Result				Com	plied			

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3.3 RF Output Power

3.3.1 RF Output Power Limit

		Maximum Conducted Output Power Limit
UNI	I Dev	vices
\boxtimes	For	the 5.15-5.25 GHz band:
		Outdoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then P_{Out} = 30 - (G_{TX} - 6). e.i.r.p. at any elevation angle above 30 degrees \leq 125mW [21dBm]
	\boxtimes	Indoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$
		Point-to-point AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W If $G_{TX} > 23$ dBi, then $P_{Out} = 30 - (G_{TX} - 23)$.
		Mobile or Portable Client: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.
	250	the 5.25-5.35 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then = $24 - (G_{TX} - 6)$.
	of 2	the 5.47-5.725 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser 50 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then = $24 - (G_{TX} - 6)$.
\boxtimes	For	the 5.725-5.85 GHz band:
		Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$.
		Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
		aximum conducted output power in dBm, e maximum transmitting antenna directional gain in dBi.

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3.3.2 Measuring Instruments

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

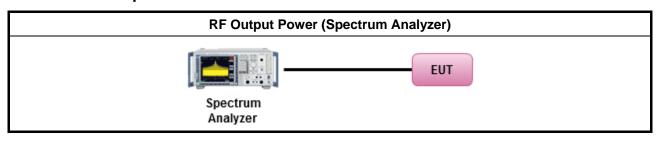
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3.3.3 Test Procedures

		Test Method
	Max	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)
	Wide	eband RF power meter and average over on/off periods with duty factor
		Refer as FCC KDB 789033 D02 v01, clause E Method PM (using an RF average power meter).
\boxtimes	For	conducted measurement.
		The EUT supports single transmit chain and measurements performed on this transmit chain.
	\boxtimes	The EUT supports diversity transmitting and the results on transmit chain port 2 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.
	\boxtimes	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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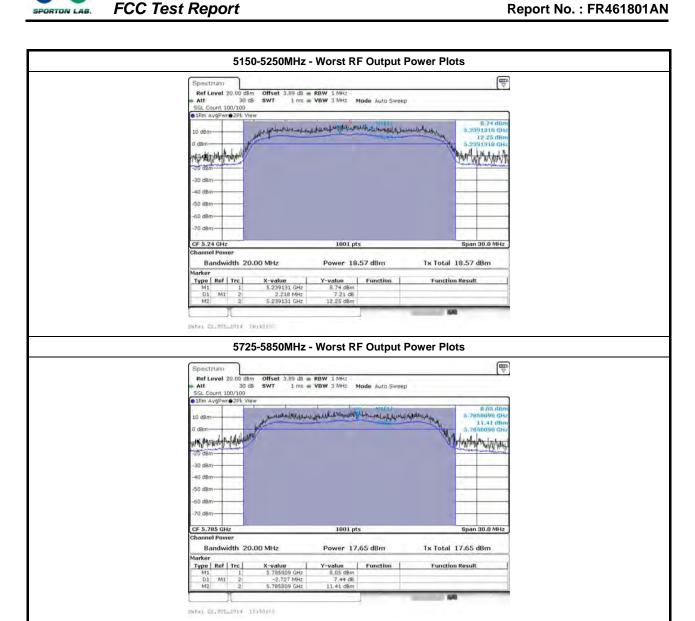
3.3.5 Test Result of Maximum Conducted Output Power

		Maxim	num Conducted O	utput Power (5150	-5250MHz band)		
Modulation Mode	N	Freq.	C	Output Power (dBm	Antenna Gain	D	
Modulation Wode	N _{TX}	(MHz)	Chain Port 1	Chain Port 2	Sum Chain	(dBi)	Power Limit
11a	2	5180	16.60	16.88	19.75	2.93	30.00
11a	2	5200	17.35	18.19	20.80	2.93	30.00
11a	2	5240	17.05	17.88	20.50	2.93	30.00
HT20	1	5180	-	17.73	17.73	3.13	30.00
HT20	1	5200	-	18.27	18.27	3.13	30.00
HT20	1	5240	-	18.57	18.57	3.13	30.00
HT20	2	5180	16.08	16.57	19.34	2.93	30.00
HT20	2	5200	17.63	18.00	20.83	2.93	30.00
HT20	2	5240	17.22	17.99	20.63	2.93	30.00
HT40	1	5190	-	12.63	12.63	3.13	30.00
HT40	1	5230	-	18.27	18.27	3.13	30.00
HT40	2	5190	11.57	12.06	14.83	2.93	30.00
HT40	2	5230	17.16	18.06	20.64	2.93	30.00
Resu	ılt				Complied	•	

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	Maximum Conducted Output Power (5725-5850MHz band)								
Modulation Mode	N	Freq.	(Output Power (dBn	1)	Antenna Gain	Power Limit		
Modulation Mode	N _{TX}	(MHz)	Chain Port 1	Chain Port 2	Sum Chain	(dBi)	Power Limit		
11a	2	5745	12.48	12.56	15.53	2.93	30.00		
11a	2	5785	17.33	17.65	20.50	2.93	30.00		
11a	2	5825	15.40	15.38	18.40	2.93	30.00		
HT20	1	5745	-	13.21	13.21	3.13	30.00		
HT20	1	5785	-	17.54	17.54	3.13	30.00		
HT20	1	5825	-	16.49	16.49	3.13	30.00		
HT20	2	5745	12.55	12.49	15.53	2.93	30.00		
HT20	2	5785	17.58	17.48	20.54	2.93	30.00		
HT20	2	5825	15.09	15.10	18.11	2.93	30.00		
HT40	1	5755	-	9.16	9.16	3.13	30.00		
HT40	1	5795	-	16.87	16.87	3.13	30.00		
HT40	2	5755	8.82	9.38	12.12	2.93	30.00		
HT40	2	5795	15.37	15.39	18.39	2.93	30.00		
Resu	ılt				Complied	•			

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3.4 Peak Power Spectral Density

3.4.1 Peak Power Spectral Density Limit

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

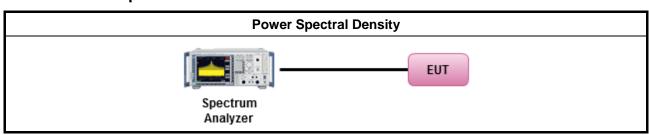
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3.4.3 Test Procedures

		Test Method
	outp func	k power spectral density procedures that the same method as used to determine the conducted ut 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) $$
	duty	cycle < 98% and average over on/off periods with duty factor
		Refer as FCC KDB 789033 D02 v01, clause E Method SA-2 (spectral trace averaging).
		Refer as FCC KDB 789033 D02 v01, clause E Method SA-2 Alt. (RMS detection with slow sweep speed) $$
\boxtimes	For	conducted measurement.
		The EUT supports single transmit chain and measurements performed on this transmit chain.
	\boxtimes	The EUT supports diversity transmitting and the results on transmit chain port 2 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 P	ower Spectral Density Result	(5150-5250MHz band)	
Modulation Mode	N _{TX}	Freq. (MHz)	Peak Power Spectral Density (dBm)	PSD Limit	Antenna Gain (dBi)
11a	2	5180	9.80	10.86	2.93
11a	2	5200	10.76	10.86	2.93
11a	2	5240	10.41	10.86	2.93
HT20	1	5180	7.56	11.00	3.13
HT20	1	5200	8.32	11.00	3.13
HT20	1	5240	8.74	11.00	3.13
HT20	2	5180	9.23	10.86	2.93
HT20	2	5200	10.68	10.86	2.93
HT20	2	5240	10.52	10.86	2.93
HT40	1	5190	-0.12	11.00	3.13
HT40	1	5230	5.69	11.00	3.13
HT40	2	5190	1.62	10.86	2.93
HT40	2	5230	7.49	10.86	2.93
Resu	ılt			Complied	•

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		Peak P	Ower Spectral Density Result	(5725-5850MHz band)	
Modulation Mode	N _{TX}	Freq. (MHz)	Peak Power Spectral Density (dBm)	PSD Limit (500kHz)	Antenna Gain (dBi)
11a	2	5745	10.05	29.86	2.93
11a	2	5785	14.56	29.86	2.93
11a	2	5825	12.13	29.86	2.93
HT20	1	5745	6.68	30.00	3.13
HT20	1	5785	10.99	30.00	3.13
HT20	1	5825	10.23	30.00	3.13
HT20	2	5745	10.24	29.86	2.93
HT20	2	5785	14.95	29.86	2.93
HT20	2	5825	11.32	29.86	2.93
HT40	1	5755	-0.51	30.00	3.13
HT40	1	5795	7.71	30.00	3.13
HT40	2	5755	2.52	29.86	2.93
HT40	2	5795	9.28	29.86	2.93
Resu	ılt	•		Complied	•

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5150-5250MHz - Worst Power Spectral Density Plots 20-Span: 30MHz ST:1.01ms RBW: 1MHz VBW: 3MHz Ch: 5.2GHz 10-0--10--20--30--40 --50 --60--70 - PD Freq.:5.19922GHz Total PD:10.76dBm 5.185G 5.19G 5.195G 5.2G 5.205G 5.21G 5.215G 5725-5850MHz - Worst Power Spectral Density Plots 20-Span: 30MHz ST:1 ms RBW: 500kHz Ch: 5,785GHz 10-0--10--20--30 --40 --50 --60--70 -PD Freq.:5.7839GHz Total PD:14.95dBm

5.77G 5.775G 5.78G 5.785G 5.79G 5.795G 5.8G

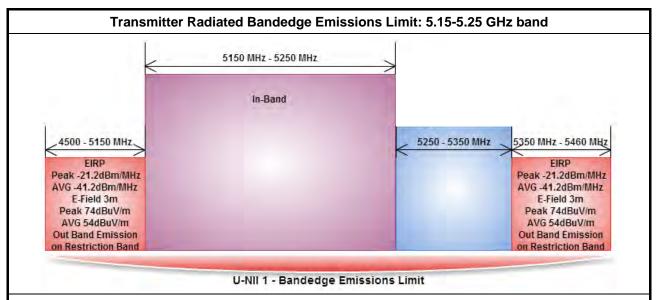
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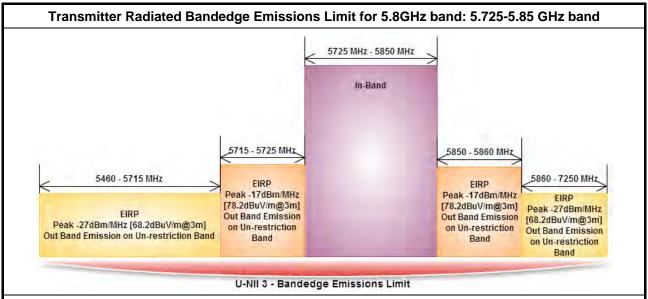
3.5 Transmitter Bandedge Emissions

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

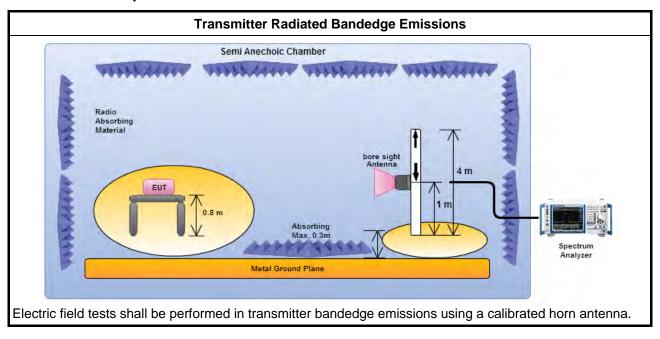
		Test Method
\boxtimes	The	average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].
\boxtimes		er as ANSI C63.10, clause 6.9.2.2 bandedge testing shall be performed at the lowest frequency nnel and highest frequency channel within the allowed operating band.
	chan will c at lo	UT operate in adjacent contiguous bands, bandedge testing performed at the lowest frequency need at lower-band and highest frequency channel at higher-band. Transmitter in-band emissions consist of adjacent contiguous bands (e.g., IEEE 802.11ac VHT160 The lowest frequency channel ower-band and highest frequency channel at higher-band in-band emissions will consist of two identicant contiguous bands.)
		Operating in 5.15-5.25 GHz band (lower-band) and 5.25-5.35 GHz band (higher-band).
		Operating in 5.47-5.725 GHz band (lower-band) and 5.725-5.85 GHz band (higher-band).
	chan	JT operate in individual non-contiguous bands, bandedge testing performed at the lowest frequency 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 t	the transmitter unwanted emissions shall be measured using following options below:
	\boxtimes	Refer as FCC KDB 789033 D02 v01, clause G)2) for unwanted emissions into non-restricted bands.
		Refer as FCC KDB 789033 D02 v01, clause G)1) for unwanted emissions into restricted bands.
		Refer as FCC KDB 789033 D02 v01, G)6) Method AD (Trace Averaging).
		Refer as FCC KDB 789033 D02 v01, G)6) Method VB (Reduced VBW).
		Refer as ANSI C63.10, clause 4.2.3.2.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.
		Refer as ANSI C63.10, clause 4.2.3.2.4 average value of pulsed emissions.
		Refer as FCC KDB 789033 D02 v01, clause G)5) measurement procedure peak limit.
		Refer as ANSI C63.10, clause 4.2.3.2.2 measurement procedure peak limit.
\boxtimes	For t	the transmitter bandedge emissions shall be measured using following options below:
		Refer as FCC KDB 789033 D02 v01, clause G)3)d) for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).
		Refer as ANSI C63.10, clause 6.9.2 for band-edge testing.
		Refer as ANSI C63.10, clause 6.9.3 for marker-delta method for band-edge measurements.
	For r	radiated measurement, refer as ANSI C63.10, clause 6.6. Test distance is 3m.
	perfo equip extra dista meas	issurements may be performed at a distance other than the limit distance provided they are not formed in the near field and the emissions to be measured can be detected by the measurement ipment. When performing measurements at a distance other than that specified, the results shall be appolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear ance for field-strength measurements, inverse of linear distance-squared for power-density issurements). Measurements in the bandedge are typically made at a closer distance 3m, because instrumentation noise floor is typically close to the radiated emission limit.

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3.5.4 Test Setup



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3.5.5 Transmitter Radiated Bandedge Emissions (with Antenna)

Modulation Mode	N _{TX}	Freq. (MHz)	Measure Distance (m)	Freq. (MHz) PK	Level (dBuV/m) PK	Limit (dBuV/m) PK	Freq. (MHz) AV	Level (dBuV/m) AV	Limit (dBuV/m) AV	Pol.
11a	2	5180	3	5149.60	73.00	74	5149.40	51.82	54	V
11a	2	5240	3	5353.20	66.17	74	5350.80	49.22	54	V
HT20	1	5180	3	5149.40	72.22	74	5151.00	52.77	54	V
HT20	1	5240	3	5354.40	67.19	74	5350.20	48.61	54	V
HT20	2	5180	3	5149.40	72.38	74	5148.80	52.76	54	V
HT20	2	5240	3	5353.20	63.33	74	5351.40	47.69	54	V
HT40	1	5190	3	5149.72	71.06	74	5150.00	52.08	54	V
HT40	1	5230	3	5350.01	61.15	74	5397.00	46.64	54	V
HT40	2	5190	3	5146.86	71.01	74	5149.50	52.13	54	V
HT40	2	5230	3	5148.60	67.63	74	5148.60	48.38	54	V

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U-NII 5725-5850MHz Transmitter Radiated Bandedge (with Antenna)									
Modulation Mode	N _{TX}	Freq. (MHz)	Measure Distance (m)	Freq. (MHz) PK	Level (dBuV/m) PK	Limit (dBuV/m) PK	Pol.		
11a	2	5745	3	5724.55	76.11	78.2	V		
11a	2	5825	3	5850.91	73.84	78.2	V		
HT20 1 5745 3			5724.76	74.53	78.2	V			
HT20	1	5825	3	5857.84	71.63	78.2	V		
HT20 2 5745 3		5724.76	75.07	78.2	V				
HT20	2	5825	3	5857.21	72.09	78.2	V		
HT40	1	5755	3	5721.24	68.50	78.2	V		
HT40	1	5795	3	5850.40	69.37	78.2	V		
HT20	2	5745	3	5719.16	67.44	78.2	V		
HT20	2	5825	3	5850.70	68.15	78.2	V		
Note 1: Measure	ment wo	rst emission	s of receive	antenna polarization.			•		

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3.6 Transmitter Unwanted Emissions

3.6.1 Transmitter Radiated Unwanted Emissions Limit

Unwanted emiss	emissions below 1 GHz and restricted band emissions above 1GHz limit					
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)			
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300			
0.490~1.705	24000/F(kHz)	33.8 - 23	30			
1.705~30.0	30	29	30			
30~88	100	40	3			
88~216	150	43.5	3			
216~960	200	46	3			
Above 960	500	54	3			

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

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

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

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

3.6.2 Measuring Instruments

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

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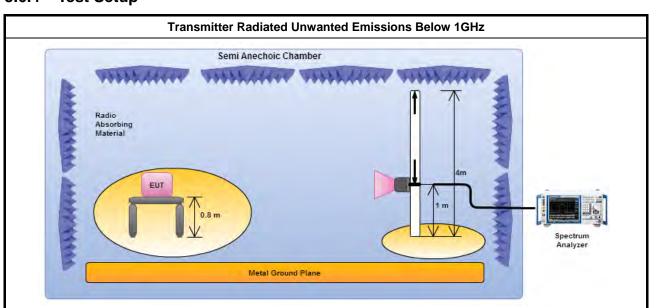
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3.6.3 Test Procedures

Test Method								
perf equi abor are be e dista	surements may be performed at a distance other than the limit distance provided they are not ormed in the near field and the emissions to be measured can be detected by the measurement pment. Measurements shall not be performed at a distance greater than 30 m for frequencies we 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less impractical. When performing measurements at a distance other than that specified, the results shall extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance-squared for power-density issurements).							
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.							
\boxtimes	Refer as FCC KDB 789033 D02 v01, clause G)1) for unwanted emissions into restricted bands.							
	Refer as FCC KDB 789033 D02 v01, G)6) Method AD (Trace Averaging).							
	Refer as FCC KDB 789033 D02 v01, G)6) Method VB (Reduced VBW).							
	Refer as ANSI C63.10, clause 4.2.3.2.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.							
	Refer as ANSI C63.10, clause 4.2.3.2.4 average value of pulsed emissions.							
	Refer as FCC KDB 789033 D02 v01, clause G)5) measurement procedure peak limit.							
	Refer as ANSI C63.10, clause 4.2.3.2.2 measurement procedure peak limit.							
For	For radiated measurement.							
	Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.							
	Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.							
\boxtimes	Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz. For 1 GHz to 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.							
	mplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value no need to be reported.							

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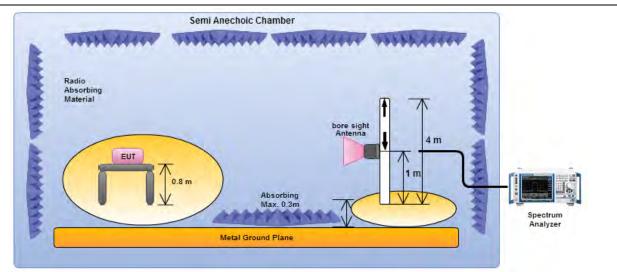
3.6.4 Test Setup



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

Transmitter Radiated Unwanted Emissions Above 1GHz



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.

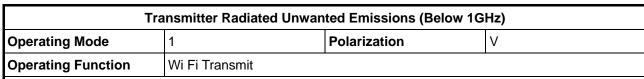
3.6.5 Transmitter Radiated Unwanted Emissions-with Antenna (Below 30MHz)

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

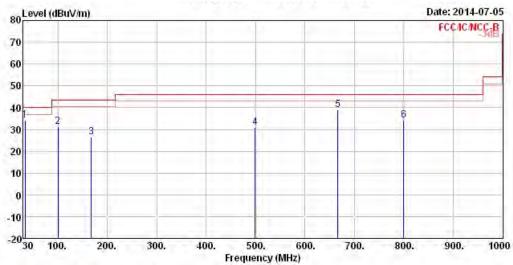
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3.6.6 Transmitter Radiated Unwanted Emissions (Below 1GHz)



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			Over	Limit	Reada	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	l Limit	Line	Level	Factor	Loss	Factor	Remark		
-	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		CIII	deg
1	33.88	34.35	-5.65	40.00	44.04	16.67	0.92	27.28	Peak	1222	1224
2	99.84	31.39	-12.11	43.50	46.11	10.88	1.59	27.19	Peak	1.555	1/993
3	167.74	26.43	-17.07	43.50	41.67	9.78	2.13	27.15	Peak	757	1.552
4	499.48	30.89	-15.11	46.00	37.94	17.14	3.77	27.96	Peak		
5	666.32	38.98	-7.02	46.00	43.59	18.75	4.42	27.78	Peak	224	1224
6	800.18	34.08	-11.92	46.00	37.15	19.64	4.92	27.63	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.)

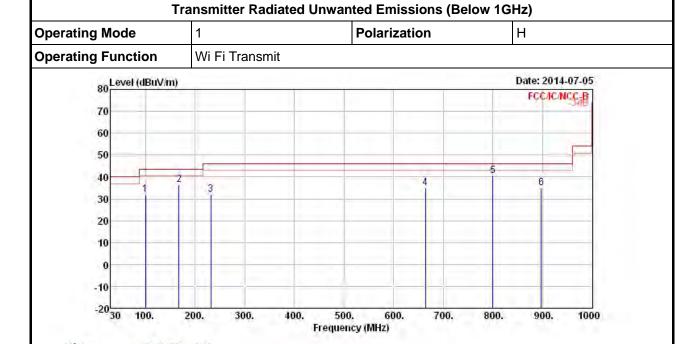
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical).

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

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	Freq	Level	0∨er Limit		1000	Antenna Factor		Preamp Factor		A/Pos	T/Pos
-	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	99.84	32.09	-11.41	43.50	46.81	10.88	1.59	27.19	Peak	1444	1444
2	167.74	36.37	-7.13	43.50	51.61	9.78	2.13	27.15	Peak	1444	1224
3	231.76	32.09	-13.91	46.00	45.84	10.73	2.51	26.99	Peak		1.555
4	664.38	35.01	-10.99	46.00	39.62	18.76	4.41	27.78	Peak	1.222	222
5	800.18	40.40	-5.60	46.00	43.47	19.64	4.92	27.63	Peak		
6	897.18	34.95	-11.05	46.00	36.59	20.49	5.17	27.30	Peak	1224	1224

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

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

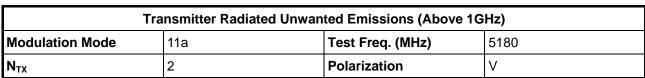
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical).

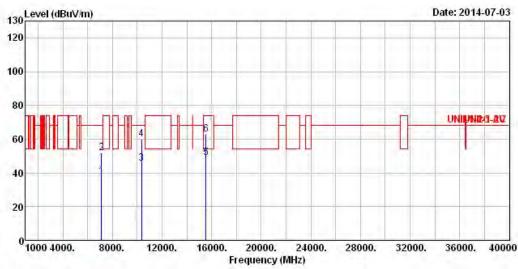
Note 4: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz) for 5150-5250MHz

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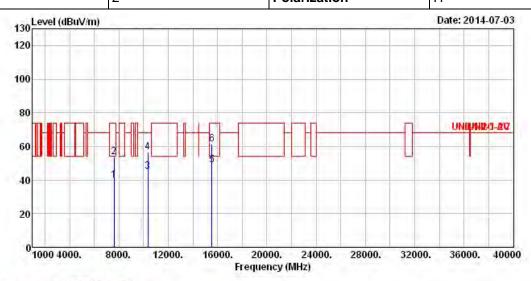


			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	$\overline{\text{dBuV/m}}$	dBuV	dB/m	dB	dB		Cm	deg
1	7128.00	38.02	-30.18	68.20	28.03	35.47	7.14	32.62	Peak	0	0
2	7128.00	51.76	-16.44	68.20	41.77	35.47	7.14	32.62	Peak	0	0
3	10360.00	45.42	-22.78	68.20	31.20	38.07	8.92	32.77	Average	0	0
4	10360.00	60.14	-8.06	68.20	45.92	38.07	8.92	32.77	Peak	0	0
5	15540.00	49.15	-4.85	54.00	31.89	37.87	11.59	32.20	Average	0	0
6	15540.00	62.98	-11.02	74.00	45.72	37.87	11.59	32.20	Peak	0	0

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	11a	Test Freq. (MHz)	5180							
N _{TV}	2	Polarization	Н							



(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	$\overline{dBuV/m}$	dBuV	dB/m	dB	dB		cm	deg
1	7626.00	40.00	-14.00	54.00	28.75	36.35	7.64	32.74	Average	0	0
2	7626.00	53.67	-20.33	74.00	42.42	36.35	7.64	32.74	Peak	0	0
3	10360.00	44.98	-23.22	68.20	30.76	38.07	8.92	32.77	Average	0	0
4	10360.00	56.84	-11.36	68.20	42.62	38.07	8.92	32.77	Peak	0	0
5	15540.00	48.82	-5.18	54.00	31.56	37.87	11.59	32.20	Average	0	0
6	15540.00	61.24	-12.76	74.00	43.98	37.87	11.59	32.20	Peak	0	0

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

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

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

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

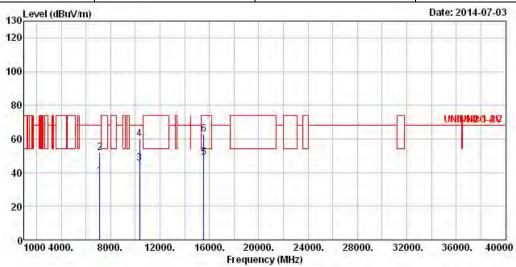
Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

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

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FCC Test Report Report No.: FR461801AN

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	Modulation Mode 11a Test Freq. (MHz) 5200								
N _{TX} 2 Polarization V									



	Freq	Level		Limit Line				Death Children		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg
1	7128.00	38.02	-30.18	68.20	28.03	35.47	7.14	32.62	Peak	0	0
2	7128.00	51.76	-16.44	68.20	41.77	35.47	7.14	32.62	Peak	0	0
3	10360.00	45.42	-22.78	68.20	31.20	38.07	8.92	32.77	Average	0	0
4	10360.00	60.14	-8.06	68.20	45.92	38.07	8.92	32.77	Peak	0	0
5	15540.00	49.15	-4.85	54.00	31.89	37.87	11.59	32.20	Average	0	0
6	15540.00	62.98	-11.02	74.00	45.72	37.87	11.59	32.20	Peak	0	0

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

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

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

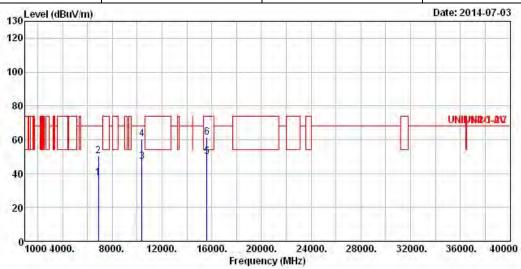
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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

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

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Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	Modulation Mode 11a Test Freq. (MHz) 5200								
N _{TX} 2 Polarization H									



	Freq	Level	Over Limit	Limit Line		Antenna Factor		Preamp Factor		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		Cm	deg
1	6888.00	37.25	-30.95	68.20	27.89	34.96	6.96	32.56	Average	0	0
2	6888.00	50.23	-17.97	68.20	40.87	34.96	6.96	32.56	Peak	0	0
3	10400.00	47.15	-21.05	68.20	32.86	38.08	8.94	32.73	Average	0	0
4	10400.00	60.47	-7.73	68.20	46.18	38.08	8.94	32.73	Peak	0	0
5	15600.00	49.73	-4.27	54.00	32.54	37.82	11.59	32.22	Average	0	0
6	15600.00	61.64	-12.36	74.00	44.45	37.82	11.59	32.22	Peak	0	0

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

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

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

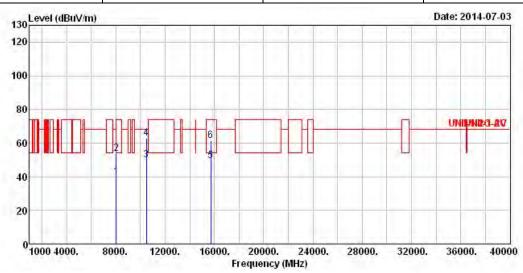
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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

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

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Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode11aTest Freq. (MHz)5240									
N _{TX} 2 Polarization V									



			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		Cm	deg
1	8028.00	39.73	-14.27	54.00	27.74	36.53	8.26	32.80	Average	0	0
2	8028.00	53.56	-20.44	74.00	41.57	36.53	8.26	32.80	Peak	0	0
3	10480.00	49.80	-18.40	68.20	35.38	38.10	8.99	32.67	Average	0	0
4	10480.00	63.00	-5.20	68.20	48.58	38.10	8.99	32.67	Peak	0	0
5	15720.00	49.63	-4.37	54.00	32.57	37.72	11.59	32.25	Average	0	0
6	15720.00	61.44	-12.56	74.00	44.38	37.72	11.59	32.25	Peak	0	0

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

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

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

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

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

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

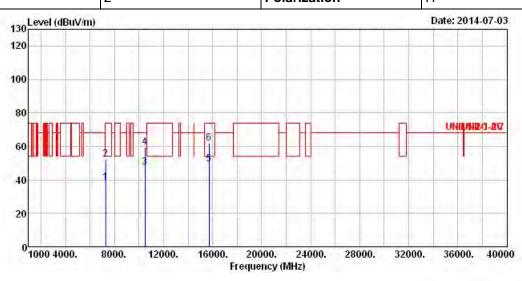
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Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5240

N_{TX} 2 Polarization H

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			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	- 4000	7.50.5
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7284.00	38.48	-15.52	54.00	28.05	35.84	7.25	32.66	Average	0	0
2	7284.00	52.08	-21.92	74.00	41.65	35.84	7.25	32.66	Peak	0	0
3	10480.00	47.40	-20.80	68.20	32.98	38.10	8.99	32.67	Average	0	0
4	10480.00	59.26	-8.94	68.20	44.84	38.10	8.99	32.67	Peak	0	0
5	15720.00	49.48	-4.52	54.00	32.42	37.72	11.59	32.25	Average	0	0
6	15720.00	61.73	-12.27	74.00	44.67	37.72	11.59	32.25	Peak	0	0

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

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

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

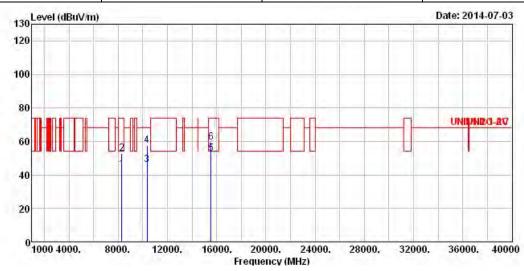
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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

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

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Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	Modulation Mode HT20 Test Freq. (MHz) 5180								
N _{TX} 1 Polarization V									



			0ver	Limit		Antenna				A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
-	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8292.00	42.98	-11.02	54.00	30.71	36.97	8.11	32.81	Average		
2	8292.00	52.81	-21.19	74.00	40.54	36.97	8.11	32.81	Peak		
3	10360.00	46.02	-22.18	68.20	31.80	38.07	8.92	32.77	Average		
4	10360.00	57.54	-10.66	68.20	43.32	38.07	8.92	32.77	Peak		
5	15540.00	52.89	-1.11	54.00	35.63	37.87	11.59	32.20	Average	1.44	
6	15540.00	59.47	-14.53	74.00	42.21	37.87	11.59	32.20	Peak		

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

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

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

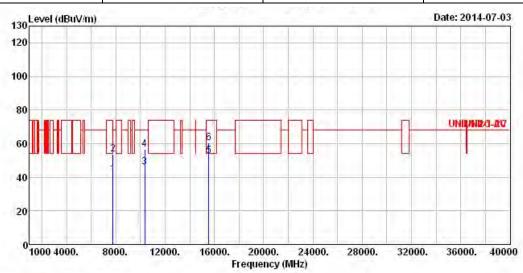
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Note 5: For un-restricted bands 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) 5180									
N_{TX}	1	Polarization	Н						



	Freq	Le∨el	Over Limit			Antenna Factor		Preamp Factor	Remark	A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7770.00	41.77	-26.43	68.20	30.19	36.41	7.93	32.76	Average	222	222
2	7770.00	53.87	-14.33	68.20	42.29	36.41	7.93	32.76	Peak		1664
3	10360.00	46.02	-22.18	68.20	31.80	38.07	8.92	32.77	Average	444	222
4	10360.00	56.42	-11.78	68.20	42.20	38.07	8.92	32.77	Peak	227	
5	15540.00	52.97	-1.03	54.00	35.71	37.87	11.59	32.20	Average	1224	224
6	15540.00	60.47	-13.53	74.00	43.21	37.87	11.59	32.20	Peak		444

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

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

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

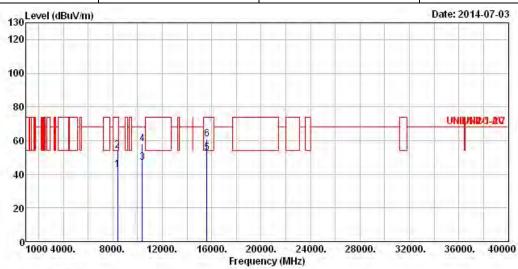
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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

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

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Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode	HT20	Test Freq. (MHz)	5200					
N _{TX}	1	Polarization	V					
and the second s								



	Freq	Level	Over Limit	Limit Line		Antenna Factor		F. S. S. S. S. S.		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	_	cm	deg
1	8394.00	42.58	-11.42	54.00	30.21	37.13	8.05	32.81	Average	442	1222
2	8394.00	54.18	-19.82	74.00	41.81	37.13	8.05	32.81	Peak		
3	10400.00	46.99	-21.21	68.20	32.70	38.08	8.94	32.73	Average	422	224
4	10400.00	57.89	-10.31	68.20	43.60	38.08	8.94	32.73	Peak		Lese
5	15600.00	52.79	-1.21	54.00	35.60	37.82	11.59	32.22	Average	222	1000
6	15600.00	61.09	-12.91	74.00	43.90	37.82	11.59	32.22	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)

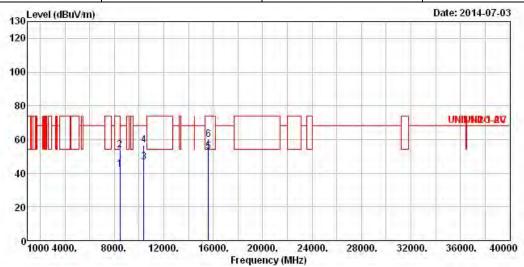
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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) 5200									
N _{TX}	1	Polarization	Н						



	Freq	Level	Over Limit			Antenna Factor		the state of the s		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		Cm	deg
1	8472.00	42.37	-11.63	54.00	29.90	37.27	8.01	32.81	Average	999	994
2	8472.00	53.67	-20.33	74.00	41.20	37.27	8.01	32.81	Peak		
3	10400.00	46.39	-21.81	68.20	32.10	38.08	8.94	32.73	Average		
4	10400.00	56.59	-11.61	68.20	42.30	38.08	8.94	32.73	Peak		
5	15600.00	52.79	-1.21	54.00	35.60	37.82	11.59	32.22	Average		
6	15600.00	59.89	-14.11	74.00	42.70	37.82	11.59	32.22	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)

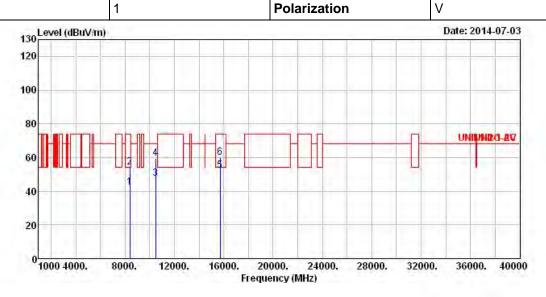
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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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т	ransmitter Radiated Unwar	nted Emissions (Above 1G	iHz)
Modulation Mode	HT20	Test Freq. (MHz)	5240
N _{TX}	1	Polarization	V



	Freq	Level				Antenna Factor		The state of the s		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		CM	deg
1	8400.00	42.29	-11.71	54.00	29.92	37.13	8.05	32.81	Average	644	
2	8400.00	54.28	-19.72	74.00	41.91	37.13	8.05	32.81	Peak		
3	10480.00	47.63	-20.57	68.20	33.21	38.10	8.99	32.67	Average	1.666	
4	10480.00	59.62	-8.58	68.20	45.20	38.10	8.99	32.67	Peak		
5	15720.00	52.26	-1.74	54.00	35.20	37.72	11.59	32.25	Average		
6	15720.00	60.16	-13.84	74.00	43.10	37.72	11.59	32.25	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)

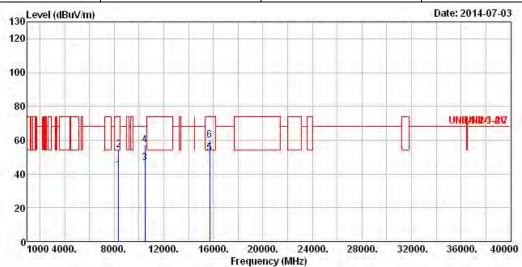
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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) 5240									
N _{TX}	1	Polarization	Н						
Date: 2014.07.03									



Freq	Level	Over Limit	Limit Line				A STATE OF THE STA		A/Pos	T/Pos
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
8352.00	42.12	-11.88	54.00	29.81	37.05	8.07	32.81	Average	442	222
8352.00	54.22	-19.78	74.00	41.91	37.05	8.07	32.81	Peak	1555	***
10480.00	46.52	-21.68	68.20	32.10	38.10	8.99	32.67	Average	444	1222
10480.00	57.12	-11.08	68.20	42.70	38.10	8.99	32.67	Peak		1.555
15720.00	52.26	-1.74	54.00	35.20	37.72	11.59	32.25	Average	444	1222
15720.00	59.96	-14.04	74.00	42.90	37.72	11.59	32.25	Peak	***	337
	8352.00 8352.00 10480.00 10480.00 15720.00	MHz dBuV/m 8352.00 42.12 8352.00 54.22 10480.00 46.52 10480.00 57.12 15720.00 52.26	Freq Level Limit MHz dBuV/m dB 8352.00 42.12 -11.88 8352.00 54.22 -19.78 10480.00 46.52 -21.68 10480.00 57.12 -11.08 15720.00 52.26 -1.74	Freq Level Limit Line MHz dBuV/m dB dBuV/m 8352.00 42.12 -11.88 54.00 8352.00 54.22 -19.78 74.00 10480.00 46.52 -21.68 68.20 10480.00 57.12 -11.08 68.20 15720.00 52.26 -1.74 54.00	Freq Level Limit Line Level MHz dBuV/m dB dBuV/m dBuV 8352.00 42.12 -11.88 54.00 29.81 8352.00 54.22 -19.78 74.00 41.91 10480.00 46.52 -21.68 68.20 32.10 10480.00 57.12 -11.08 68.20 42.70 15720.00 52.26 -1.74 54.00 35.20	Freq Level Limit Line Level Factor MHz dBuV/m dB dBuV/m dBuV dBuV dB/m 8352.00 42.12 -11.88 54.00 29.81 37.05 8352.00 54.22 -19.78 74.00 41.91 37.05 10480.00 46.52 -21.68 68.20 32.10 38.10 10480.00 57.12 -11.08 68.20 42.70 38.10 15720.00 52.26 -1.74 54.00 35.20 37.72	Freq Level Limit Line Level Factor Loss MHz dBuV/m dB dBuV/m dBuV dB/m dB 8352.00 42.12 -11.88 54.00 29.81 37.05 8.07 8352.00 54.22 -19.78 74.00 41.91 37.05 8.07 10480.00 46.52 -21.68 68.20 32.10 38.10 8.99 10480.00 57.12 -11.08 68.20 42.70 38.10 8.99 15720.00 52.26 -1.74 54.00 35.20 37.72 11.59	Freq Level Limit Line Level Factor Loss Factor MHz dBuV/m dB dBuV/m dBuV dB/m dB dB 8352.00 42.12 -11.88 54.00 29.81 37.05 8.07 32.81 8352.00 54.22 -19.78 74.00 41.91 37.05 8.07 32.81 10480.00 46.52 -21.68 68.20 32.10 38.10 8.99 32.67 10480.00 57.12 -11.08 68.20 42.70 38.10 8.99 32.67 15720.00 52.26 -1.74 54.00 35.20 37.72 11.59 32.25	Freq Level Limit Line Level Factor Loss Factor Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB 8352.00 42.12 - 11.88 54.00 29.81 37.05 8.07 32.81 Average 8352.00 54.22 - 19.78 74.00 41.91 37.05 8.07 32.81 Peak 10480.00 46.52 - 21.68 68.20 32.10 38.10 8.99 32.67 Average 10480.00 57.12 - 11.08 68.20 42.70 38.10 8.99 32.67 Peak 15720.00 52.26 -1.74 54.00 35.20 37.72 11.59 32.25 Average	Freq Level Limit Line Level Factor Loss Factor Remark MHz dBuV/m dB dB/m dB dB dB cm 8352.00 42.12 - 11.88 54.00 29.81 37.05 8.07 32.81 Average 8352.00 54.22 - 19.78 74.00 41.91 37.05 8.07 32.81 Peak 10480.00 46.52 - 21.68 68.20 32.10 38.10 8.99 32.67 Average 10480.00 57.12 - 11.08 68.20 42.70 38.10 8.99 32.67 Peak 15720.00 52.26 -1.74 54.00 35.20 37.72 11.59 32.25 Average

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

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

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

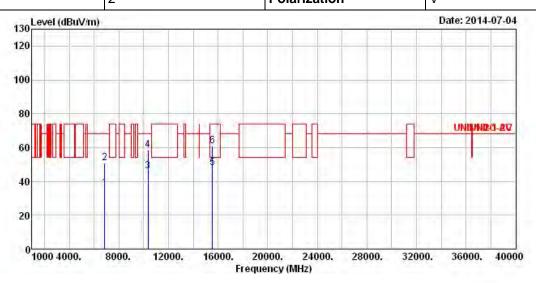
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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)	5180							
N _{TV}	2	Polarization	V							



	Freq	Level	0∨er Limit	Limit Line		Antenna Factor		The same of the sa		A/Pos	T/Pos
S	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		- Cm	deg
1	6848.00	36.13	-32.07	68.20	26.87	34.89	6.92	32.55	Average	0	0
2	6848.00	50.96	-17.24	68.20	41.70	34.89	6.92	32.55	Peak	0	0
3	10360.00	45.94	-22.26	68.20	31.72	38.07	8.92	32.77	Average	0	0
4	10360.00	58.46	-9.74	68.20	44.24	38.07	8.92	32.77	Peak	0	0
5	15540.00	48.07	-5.93	54.00	30.81	37.87	11.59	32.20	Average	0	0
6	15540.00	61.12	-12.88	74.00	43.86	37.87	11.59	32.20	Peak	0	0

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

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

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

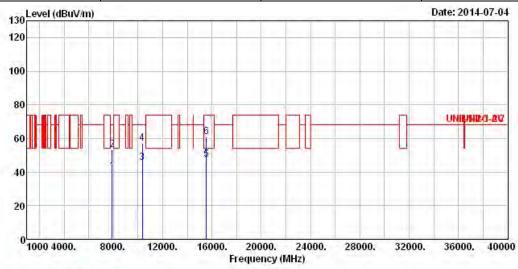
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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

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

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Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT20	Test Freq. (MHz)	5180						
N _{TX}	2	Polarization	Н						



		V	0ver	Limit				Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7890.00	40.08	-28.12	68.20	28.27	36.45	8.14	32.78	Average	0	0
2	7890.00	53.43	-14.77	68.20	41.62	36.45	8.14	32.78	Peak	0	0
3	10360.00	45.72	-22.48	68.20	31.50	38.07	8.92	32.77	Average	0	0
4	10360.00	57.29	-10.91	68.20	43.07	38.07	8.92	32.77	Peak	0	0
5	15540.00	47.51	-6.49	54.00	30.25	37.87	11.59	32.20	Average	0	0
6	15540.00	60.96	-13.04	74.00	43.70	37.87	11.59	32.20	Peak	0	0

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

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

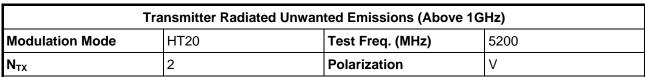
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

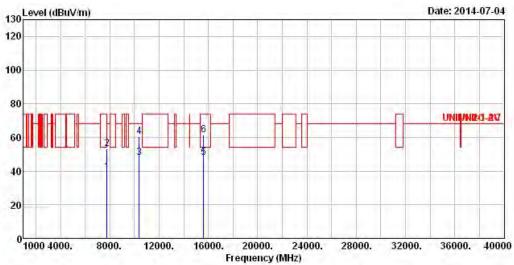
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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

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

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	Freq	Le∨el	0∨er Limit	Limit Line		Antenna Factor		and the second s		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
i	7758.00	39.39	-28.81	68.20	27.88	36.41	7.86	32.76	Average	0	0
2	7758.00	53.02	-15.18	68.20	41.51	36.41	7.86	32.76	Peak	0	0
3	10400.00	47.90	-20.30	68.20	33.61	38.08	8.94	32.73	Average	0	0
4	10400.00	60.60	-7.60	68.20	46.31	38.08	8.94	32.73	Peak	0	0
5	15600.00	48.06	-5.94	54.00	30.87	37.82	11.59	32.22	Average	Ø	0
6	15600.00	61.18	-12.82	74.00	43.99	37.82	11.59	32.22	Peak	0	0

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

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

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

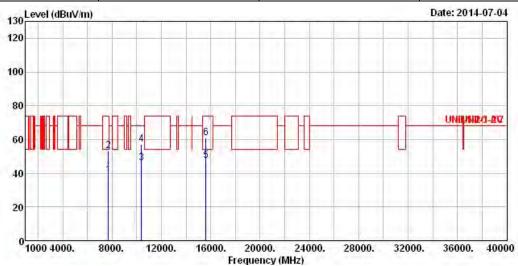
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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

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

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Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT20	Test Freq. (MHz)	5200						
N _{TX}	2	Polarization	Н						



	Freq	Level	Over Limit	Limit Line		Antenna Factor		Section of the sectio		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7692.00	38.92	-15.08	54.00	27.51	36.38	7.78	32.75	Average	0	0
2	7692.00	53.04	-20.96	74.00	41.63	36.38	7.78	32.75	Peak	0	0
3	10400.00	46.06	-22.14	68.20	31.77	38.08	8.94	32.73	Average	0	0
4	10400.00	57.09	-11.11	68.20	42.80	38.08	8.94	32.73	Peak	0	0
5	15600.00	47.69	-6.31	54.00	30.50	37.82	11.59	32.22	Average	0	0
6	15600.00	60.86	-13.14	74.00	43.67	37.82	11.59	32.22	Peak	0	0

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

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

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

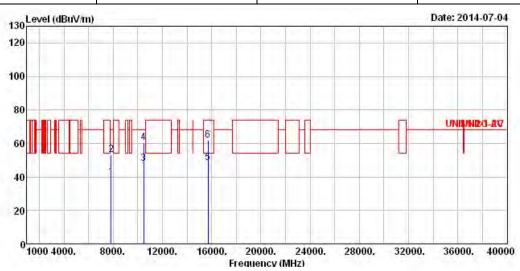
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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

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

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Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	HT20	Test Freq. (MHz)	5240							
N _{TX}	N _{TX} 2 Polarization V									



			0ver			Antenna		(market 1) (1) (1)		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	$\overline{\text{dBuV/m}}$	dBuV	dB/m	dB	dB		cm	deg
1	7830.00	39.83	-28.37	68.20	28.17	36.43	8.00	32.77	Average	0	0
2	7830.00	53.13	-15.07	68.20	41.47	36.43	8.00	32.77	Peak	0	0
3	10480.00	47.84	-20.36	68.20	33.42	38.10	8.99	32.67	Average	0	0
4	10480.00	60.34	-7.86	68.20	45.92	38.10	8.99	32.67	Peak	0	0
5	15720.00	48.50	-5.50	54.00	31.44	37.72	11.59	32.25	Average	0	0
6	15720.00	61.72	-12.28	74.00	44.66	37.72	11.59	32.25	Peak	0	0

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

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

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

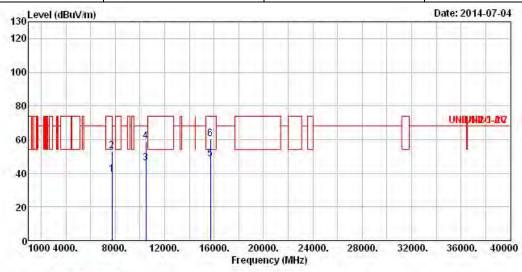
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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

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

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Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT20	Test Freq. (MHz)	5240							
N_{TX}	2	Polarization	Н							



	Freq	Level	Over Limit	Limit Line		Antenna Factor		State State of		A/Pos	T/Pos	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	7734.00	39.36	-14.64	54.00	27.87	36.39	7.86	32.76	Average	0	0	
2	7734.00	53.42	-20.58	74.00	41.93	36.39	7.86	32.76	Peak	0	0	
3	10480.00	46.19	-22.01	68.20	31.77	38.10	8.99	32.67	Average	0	0	
4	10480.00	59.04	-9.16	68.20	44.62	38.10	8.99	32.67	Peak	0	0	
5	15720.00	48.38	-5.62	54.00	31.32	37.72	11.59	32.25	Average	0	0	
6	15720.00	60.52	-13.48	74.00	43.46	37.72	11.59	32.25	Peak	0	0	

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

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

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

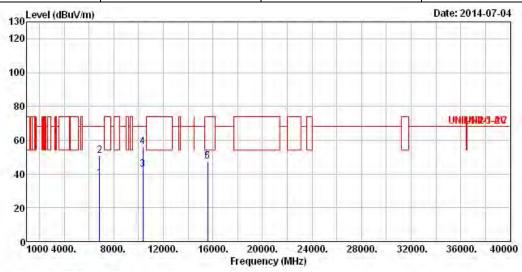
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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

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

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Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	HT40	Test Freq. (MHz)	5190							
N _{TX}	1	Polarization	V							



	Freq	Level	Over Limit			Antenna Factor		Preamp Factor		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	6858.00	37.31	-30.89	68.20	28.02	34.92	6.92	32.55	Average	0	0
2	6858.00	50.67	-17.53	68.20	41.38	34.92	6.92	32.55	Peak	0	0
3	10360.00	42.85	-25.35	68.20	28.63	38.07	8.92	32.77	Average	0	0
4	10360.00	55.95	-12.25	68.20	41.73	38.07	8.92	32.77	Peak	0	0
5	15570.00	47.44	-6.56	54.00	30.21	37.84	11.59	32.20	Average	0	0
6	15570.00	47.45	-26.55	74.00	30.22	37.84	11.59	32.20	Peak	0	0

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

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

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

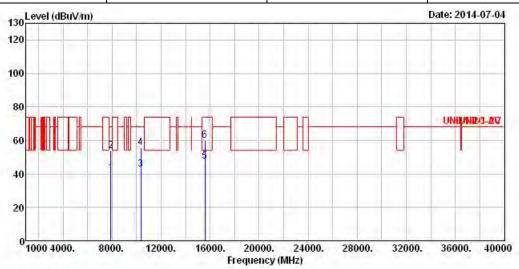
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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

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

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Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode HT40 Test Freq. (MHz) 5190									
N _{TX} 1 Polarization H									



			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	$\overline{\text{dBuV/m}}$	dBuV	dB/m	dB	dB		cm	deg
1	7902.00	40.34	-27.86	68.20	28.52	36.46	8.14	32.78	Average	0	0
2	7902.00	53.50	-14.70	68.20	41.68	36.46	8.14	32.78	Peak	0	0
3	10360.00	42.60	-25.60	68.20	28.38	38.07	8.92	32.77	Average	0	0
4	10360.00	55.86	-12.34	68.20	41.64	38.07	8.92	32.77	Peak	0	0
5	15570.00	47.45	-6.55	54.00	30.22	37.84	11.59	32.20	Average	0	0
6	15570.00	60.11	-13.89	74.00	42.88	37.84	11.59	32.20	Peak	0	0

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

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

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

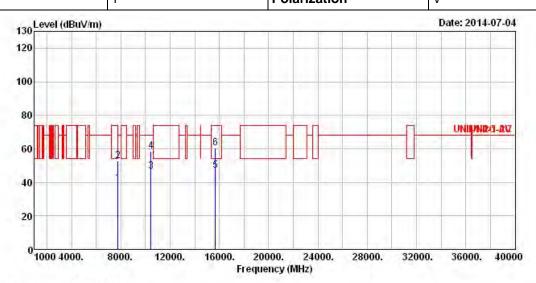
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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

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

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Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT40	Test Freq. (MHz)	5230						
N _{+v}	1	Polarization	V						



	9	4.00	0ver	Limit		Antenna		1000		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Kemark		
	MHz	dBuV/m	dB	$\overline{\text{dBuV/m}}$	dBuV	dB/m	dB	dB		cm	deg
1	7758.00	39.55	-28.65	68.20	28.04	36.41	7.86	32.76	Average	0	0
2	7758.00	52.98	-15.22	68.20	41.47	36.41	7.86	32.76	Peak	0	0
3	10460.00	46.66	-21.54	68.20	32.27	38.09	8.99	32.69	Average	0	0
4	10460.00	58.34	-9.86	68.20	43.95	38.09	8.99	32.69	Peak	0	0
5	15690.00	47.08	-6.92	54.00	29.98	37.75	11.59	32.24	Average	0	0
6	15690.00	60.50	-13.50	74.00	43.40	37.75	11.59	32.24	Peak	0	0

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

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

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

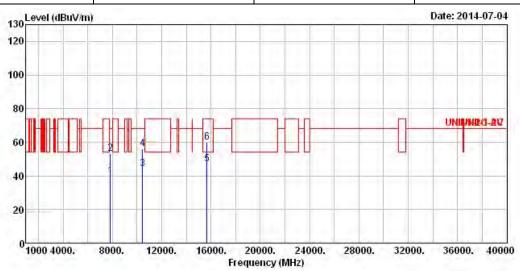
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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

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

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Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode HT40 Test Freq. (MHz) 5230									
N _{TX} 1 Polarization H									



	1400	4.50	0ver			Antenna		A CONTRACTOR OF THE PARTY OF TH		A/Pos	T/Pos
	Freq	rever	Limit	Line	rever	Factor	Loss	Factor	Kemark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
i	7842.00	39.86	-28.34	68.20	28.20	36.43	8.00	32.77	Average	0	0
2	7842.00	53.25	-14.95	68.20	41.59	36.43	8.00	32.77	Peak	0	0
3	10460.00	44.21	-23.99	68.20	29.82	38.09	8.99	32.69	Average	0	0
4	10460.00	56.03	-12.17	68.20	41.64	38.09	8.99	32.69	Peak	0	0
5	15690.00	46.99	-7.01	54.00	29.89	37.75	11.59	32.24	Average	0	0
6	15690.00	59.89	-14.11	74.00	42.79	37.75	11.59	32.24	Peak	0	0

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

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

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

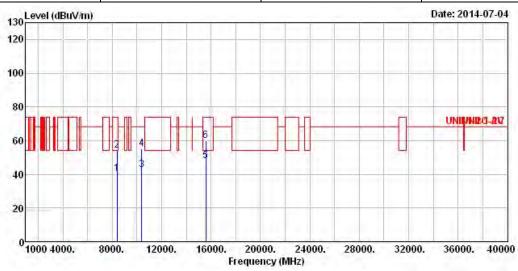
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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

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

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Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode	5190							
N _{TX}	2	Polarization	V					



	Freq	Level	Over Limit			Antenna Factor		A CONTRACTOR OF THE PARTY OF TH		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8388.00	40.51	-13.49	54.00	28.12	37.13	8.07	32.81	Average		
2	8388.00	54.03	-19.97	74.00	41.64	37.13	8.07	32.81	Peak	1.666	1.666
3	10380.00	42.89	-25.31	68.20	28.62	38.08	8.94	32.75	Average		
4	10380.00	54.97	-13.23	68.20	40.70	38.08	8.94	32.75	Peak	5.55	9.55
5	15570.00	48.11	-5.89	54.00	30.88	37.84	11.59	32.20	Average		
6	15570.00	59.80	-14.20	74.00	42.57	37.84	11.59	32.20	Peak	1.666	1.00

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

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

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

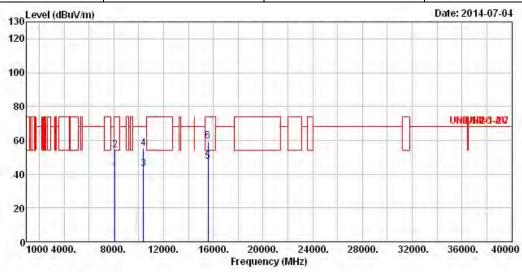
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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) 5190									
N _{TX} 2 Polarization H									



Freq	Level	Over Limit							A/Pos	T/Pos	
MHz	dBuV/m	dB	$\overline{\text{dBuV/m}}$	dBuV	dB/m	dB	dB	_	cm	deg	
8100.00	41.41	-12.59	54.00	29.32	36.67	8.22	32.80	Average	-222	1222	
8100.00	54.37	-19.63	74.00	42.28	36.67	8.22	32.80	Peak			
10380.00	43.02	-25.18	68.20	28.75	38.08	8.94	32.75	Average	222	444	
10380.00	54.97	-13.23	68.20	40.70	38.08	8.94	32.75	Peak	.555	1.555	
15570.00	47.49	-6.51	54.00	30.26	37.84	11.59	32.20	Average	444	1222	
15570.00	59.44	-14.56	74.00	42.21	37.84	11.59	32.20	Peak	222	227	
	MHz 8100.00 8100.00 10380.00 10380.00 15570.00	MHz dBuV/m 8100.00 41.41 8100.00 54.37 10380.00 43.02 10380.00 54.97 15570.00 47.49	Freq Level Limit MHz dBuV/m dB 8100.00 41.41 -12.59 8100.00 54.37 -19.63 10380.00 43.02 -25.18 10380.00 54.97 -13.23 15570.00 47.49 -6.51	Freq Level Limit Line MHz dBuV/m dB dBuV/m 8100.00 41.41 -12.59 54.00 8100.00 54.37 -19.63 74.00 10380.00 43.02 -25.18 68.20 10380.00 54.97 -13.23 68.20 15570.00 47.49 -6.51 54.00	Freq Level Limit Line Level MHz dBuV/m dB dBuV/m dBuV 8100.00 41.41 -12.59 54.00 29.32 8100.00 54.37 -19.63 74.00 42.28 10380.00 43.02 -25.18 68.20 28.75 10380.00 54.97 -13.23 68.20 40.70 15570.00 47.49 -6.51 54.00 30.26	Freq Level Limit Line Level Factor MHz dBuV/m dB dBuV/m dBuV dBuV dB/m 8100.00 41.41 - 12.59 54.00 29.32 36.67 8100.00 54.37 - 19.63 74.00 42.28 36.67 10380.00 43.02 - 25.18 68.20 28.75 38.08 10380.00 54.97 - 13.23 68.20 40.70 38.08 15570.00 47.49 - 6.51 54.00 30.26 37.84	Freq Level Limit Line Level Factor Loss MHz dBuV/m dB dBuV/m dBuV dB/m dB/m dB 8100.00 41.41 - 12.59 54.00 29.32 36.67 8.22 8100.00 54.37 - 19.63 74.00 42.28 36.67 8.22 10380.00 43.02 - 25.18 68.20 28.75 38.08 8.94 10380.00 54.97 - 13.23 68.20 40.70 38.08 8.94 15570.00 47.49 - 6.51 54.00 30.26 37.84 11.59	Freq Level Limit Line Level Factor Loss Factor MHz dBuV/m dB dBuV/m dBuV dB/m dB dB 8100.00 41.41 -12.59 54.00 29.32 36.67 8.22 32.80 8100.00 54.37 -19.63 74.00 42.28 36.67 8.22 32.80 10380.00 43.02 -25.18 68.20 28.75 38.08 8.94 32.75 10380.00 54.97 -13.23 68.20 40.70 38.08 8.94 32.75 15570.00 47.49 -6.51 54.00 30.26 37.84 11.59 32.20	Freq Level Limit Line Level Factor Loss Factor Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB 8100.00 41.41 - 12.59 54.00 29.32 36.67 8.22 32.80 Average 8100.00 54.37 - 19.63 74.00 42.28 36.67 8.22 32.80 Peak 10380.00 43.02 - 25.18 68.20 28.75 38.08 8.94 32.75 Average 10380.00 54.97 - 13.23 68.20 40.70 38.08 8.94 32.75 Peak 15570.00 47.49 - 6.51 54.00 30.26 37.84 11.59 32.20 Average	Freq Level Limit Line Level Factor Loss Factor Remark MHz dBuV/m dB dB/m dB dB dB cm 8100.00 41.41 - 12.59 54.00 29.32 36.67 8.22 32.80 Average 8100.00 54.37 - 19.63 74.00 42.28 36.67 8.22 32.80 Peak 10380.00 43.02 - 25.18 68.20 28.75 38.08 8.94 32.75 Average 10380.00 54.97 - 13.23 68.20 40.70 38.08 8.94 32.75 Peak 15570.00 47.49 - 6.51 54.00 30.26 37.84 11.59 32.20 Average	Freq Level Limit Line Level Factor Loss Factor Remark MHz dBuV/m dB dB/m dB dB cm deg 8100.00 41.41 - 12.59 54.00 29.32 36.67 8.22 32.80 Average 8100.00 54.37 - 19.63 74.00 42.28 36.67 8.22 32.80 Peak 10380.00 43.02 - 25.18 68.20 28.75 38.08 8.94 32.75 Average 10380.00 54.97 - 13.23 68.20 40.70 38.08 8.94 32.75 Peak 15570.00 47.49 -6.51 54.00 30.26 37.84 11.59 32.20 Average

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

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

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

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-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.

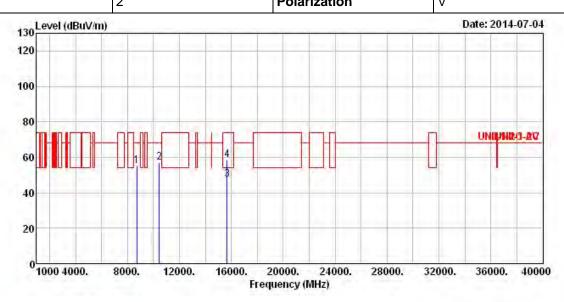
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Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT40 Test Freq. (MHz) 5230

N_{TX} 2 Polarization V

Report No.: FR461801AN



	Freq	Level	Over Limit			Antenna Factor				A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8736.00	55.29	-12.91	68.20	42.80	37.49	7.89	32.89	Peak	442	222
2	10460.00	57.30	-10.90	68.20	42.91	38.09	8.99	32.69	Peak		
3	15690.00	47.57	-6.43	54.00	30.47	37.75	11.59	32.24	Average	1222	224
4	15690.00	58.62	-15.38	74.00	41.52	37.75	11.59	32.24	Peak		1.554

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

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

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

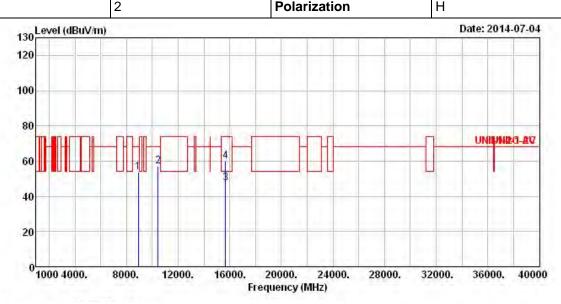
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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)	5230						
N _{TX}	2	Polarization	Н						



	Freq	Level		Limit Line				the second second second		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		CIII	deg
1	8910.00	53.55	-14.65	68.20	41.08	37.62	7.80	32.95	Peak	444	
2	10460.00	56.92	-11.28	68.20	42.53	38.09	8.99	32.69	Peak		
3	15690.00	47.61	-6.39	54.00	30.51	37.75	11.59	32.24	Average	1.666	1.666
4	15690.00	59.99	-14.01	74.00	42.89	37.75	11.59	32.24	Peak		

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

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

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

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

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

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

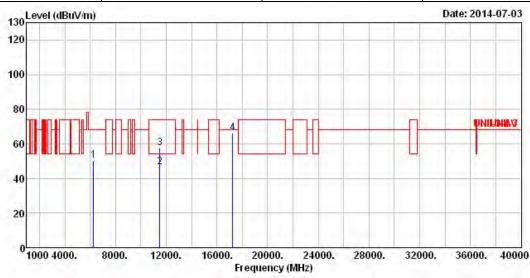
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3.6.8 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 5725-5850MHz

Report No.: FR461801AN

Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)											
Modulation Mode	11a	Test Freq. (MHz)	5745									
N _{TX}	2	Polarization	V									



	Freq	Le∨el				Antenna Factor		a contract of		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	6270.00	50.54	-17.66	68.20	42.22	34.15	6.63	32.46	Peak	0	0
2	11490.00	46.65	-7.35	54.00	30.17	38.78	10.04	32.34	Average	0	0
3	11490.00	57.34	-16.66	74.00	40.86	38.78	10.04	32.34	Peak	0	0
4	17235.00	66.43	-1.77	68.20	43.54	42.68	11.59	31.38	Peak	0	0

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

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

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

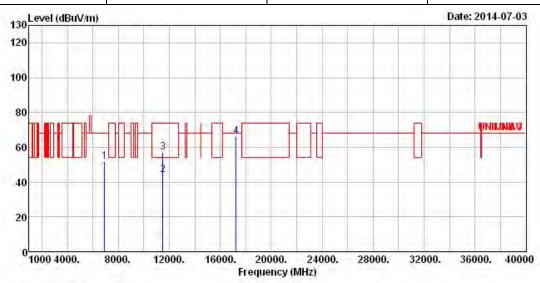
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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.

FCC Test Report No.: FR461801AN

Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)											
Modulation Mode	11a	Test Freq. (MHz)	5745									
N _{TX}	2	Polarization	Н									



	Freq	Level	0∨er Limit	Limit Line		Antenna Factor				A/Pos	T/Pos	
	MHz	dBuV/m	——dB	dBuV/m	dBuV	dB/m	dB	dB			deg	
1	6936.00	51.71	-16.49	68.20	42.23	35.06	6.99	32.57	Peak	0	0	
2	11490.00	43.91	-10.09	54.00	27.43	38.78	10.04	32.34	Average	0	0	
3	11490.00	56.91	-17.09	74.00	40.43	38.78	10.04	32.34	Peak	0	0	
4	17235.00	66.40	-1.80	68.20	43.51	42.68	11.59	31.38	Peak	0	0	

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

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

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

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

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

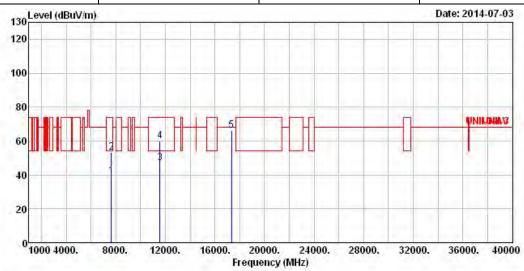
Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5785

N_{TX} 2 Polarization V



	Freq	Level	Over Limit			Antenna Factor				A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	cm	deg
1	7650.00	39.40	-14.60	54.00	28.07	36.36	7.71	32.74	Average	0	0
2	7650.00	53.12	-20.88	74.00	41.79	36.36	7.71	32.74	Peak	0	0
3	11570.00	47.24	-6.76	54.00	30.71	38.84	10.04	32.35	Average	0	0
4	11570.00	60.06	-13.94	74.00	43.53	38.84	10.04	32.35	Peak	0	0
5	17355.00	66.27	-1.93	68.20	42.31	43.52	11.85	31.41	Peak	0	0

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

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

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

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

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

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

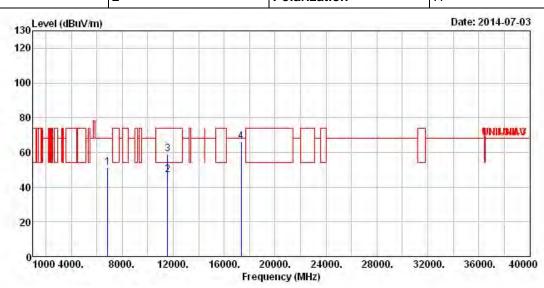
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Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5785

N_{TX} 2 Polarization H

Report No.: FR461801AN



				0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos	
		Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark			
	0	MHz	dBuV/m	dB	$\overline{\text{dBuV/m}}$	dBuV	dB/m	dB	dB	-	cm	deg	
1		6864.00	51.14	-17.06	68.20	41.85	34.92	6.92	32.55	Peak	0	0	
2	2	11570.00	47.22	-6.78	54.00	30.69	38.84	10.04	32.35	Average	0	0	
3		11570.00	58.97	-15.03	74.00	42.44	38.84	10.04	32.35	Peak	0	0	
4		17355.00	66.32	-1.88	68.20	42.36	43.52	11.85	31.41	Peak	0	0	

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

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

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

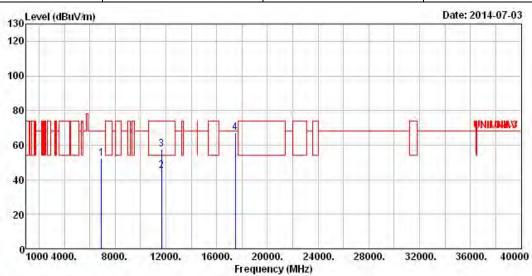
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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

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

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Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)											
Modulation Mode	11a	Test Freq. (MHz)	5825									
N _{TX}	2	Polarization	V									



	Freq	Level	Over Limit			Antenna Factor		Preamp Factor		A/Pos	T/Pos
	MHz	dBuV/m	dB	$\overline{\text{dBuV/m}}$	dBuV	dB/m	dB	dB		cm	deg
1	6930.00	52.37	- 15 . 83	68.20	42.89	35.06	6.99	32.57	Peak	0	0
2	11650.00	45.02	-8.98	54.00	28.47	38.88	10.03	32.36	Average	0	0
3	11650.00	57.68	-16.32	74.00	41.13	38.88	10.03	32.36	Peak	0	0
4	17475.00	67.07	-1.13	68.20	42.05	44.36	12.11	31.45	Peak	0	0

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

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

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

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

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

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

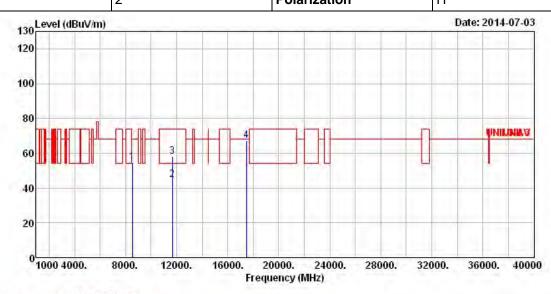
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Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5825

N_{TX} 2 Polarization H

Report No.: FR461801AN



			0ver	Limit	ReadA	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8538.00	54.62	-13.58	68.20	42.13	37.33	7.99	32.83	Peak	0	0
2	11650.00	44.78	-9.22	54.00	28.23	38.88	10.03	32.36	Average	0	0
3	11650.00	58.18	-15.82	74.00	41.63	38.88	10.03	32.36	Peak	0	0
4	17475.00	67.13	-1.07	68.20	42.11	44.36	12.11	31.45	Peak	0	0

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

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

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

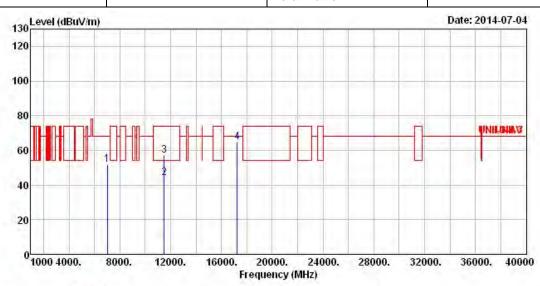
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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

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

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	Transmitter Radiated Unwanted Emissions (Above 1GHz)											
Modulation Mode	HT20	Test Freq. (MHz)	5745									
N _{TX}	1	Polarization	V									

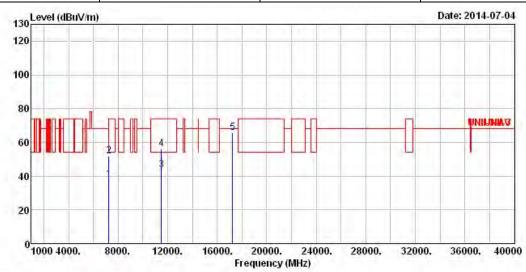


	Freq	Le∨el	Over Limit			Antenna Factor		Preamp Factor	Remark	A/Pos	T/Pos
	MHz	dBuV/m	— dB	dBuV/m	dBuV	dB/m	dB	dB	_	cm	deg
1	7020.00	51.67	-16.53	68.20	41.97	35.24	7.05	32.59	Peak	0	0
2	11490.00	44.05	-9.95	54.00	27.57	38.78	10.04	32.34	Average	0	0
3	11490.00	57.00	-17.00	74.00	40.52	38.78	10.04	32.34	Peak	0	0
4	17235.00	64.86	-3.34	68.20	41.97	42.68	11.59	31.38	Peak	0	0

- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
- Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.
- Note 6: No level of unwanted emissions exceeds the level of the fundamental emission.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode	HT20	Test Freq. (MHz)	5745					
N_{TX}	1	Polarization	Н					



	Freq	Level	Over evel Limit	t Line Lev		el Factor		Factor	Remark	A/Pos	T/Pos deg
	MHz	MHz dBuV/m	dBuV/m dB		dBuV						
1	7260.00	38.11	- 15 . 89	54.00	27.74	35.77	7.25	32.65	Average	0	0
2	7260.00									0	0
3	11490.00	43.83	-10.17	54.00	27.35	38.78	10.04	32.34	Average	0	0
4	11490.00	56.28	-17.72	74.00	39.80	38.78	10.04	32.34	Peak	0	0
5	17235.00	65.75	-2.45	68.20	42.86	42.68	11.59	31.38	Peak	0	0

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

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

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

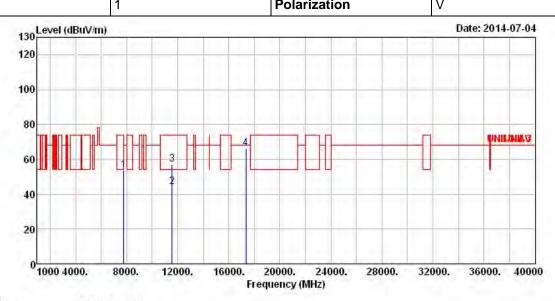
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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

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

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Transmitter Radiated Unwanted Emissions (Above 1GHz)								
Modulation Mode	HT20	Test Freq. (MHz)	5785					
N _{TX}	1	Polarization	V					



			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level L	Limit	Line	Level	Level Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7782.00	53.63	-14.57	68.20	42.05	36.41	7.93	32.76	Peak	0	0
2	11570.00	44.32	-9.68	54.00	27.79	38.84	10.04	32.35	Average	0	0
3	11570.00	57.22	-16.78	74.00	40.69	38.84	10.04	32.35	Peak	0	0
4	17355.00	66.14	-2.06	68.20	42.18	43.52	11.85	31.41	Peak	0	0

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

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

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

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

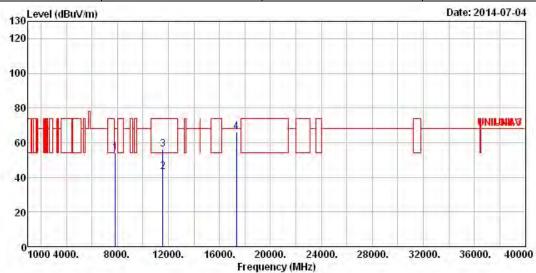
Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

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

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	Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode HT20 Test Freq. (MHz) 5785										
N _{TX}	1	Polarization	Н							
A POST OF THE PARTY OF THE PART			ACRES AND ACRES AND ACRES							



			0ver		Read/	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7854.00	54.15	-14.05	68.20	42.42	36.44	8.07	32.78	Peak	0	0
2	11570.00	43.23	-10.77	54.00	26.70	38.84	10.04	32.35	Average	0	0
3	11570.00	56.26	-17.74	74.00	39.73	38.84	10.04	32.35	Peak	0	0
4	17355.00	66.06	-2.14	68.20	42.10	43.52	11.85	31.41	Peak	0	0

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

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

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

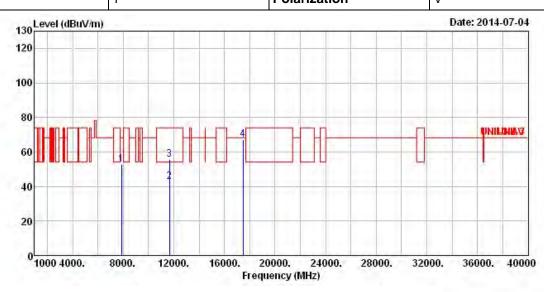
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 5825

N_{TX} 1 Polarization V

Report No.: FR461801AN



			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		Cm	deg
1	7860.00	53.00	-15.20	68.20	41.26	36.45	8.07	32.78	Peak	0	0
2	11650.00	42.54	-11.46	54.00	25.99	38.88	10.03	32.36	Average	0	0
3	11650.00	55.51	-18.49	74.00	38.96	38.88	10.03	32.36	Peak	0	0
4	17475.00	66.98	-1.22	68.20	41.96	44.36	12.11	31.45	Peak	0	0

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

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

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

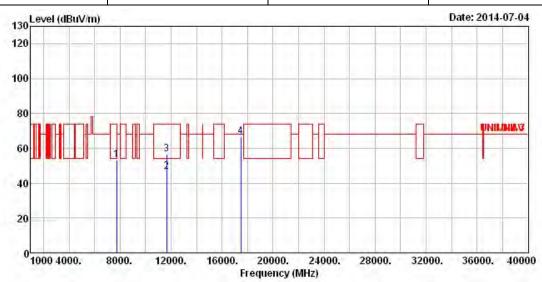
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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

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

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	Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	HT20	Test Freq. (MHz)	5825								
N _{TX}	1	Polarization	Н								



	Enga	Loval	Over			Antenna Factor		and the second second second		A/Pos	T/Pos
	rreq	rever	LIMIL	Line	rever	ractor	L033	ractor	Kellark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7746.00	53.22	-20.78	74.00	41.72	36.40	7.86	32.76	Peak	0	0
2	11650.00	46.61	-7.39	54.00	30.06	38.88	10.03	32.36	Average	0	0
3	11650.00	56.79	-17.21	74.00	40.24	38.88	10.03	32.36	Peak	0	0
4	17475.00	66.48	-1.72	68.20	41.46	44.36	12.11	31.45	Peak	0	0

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

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

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

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

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

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

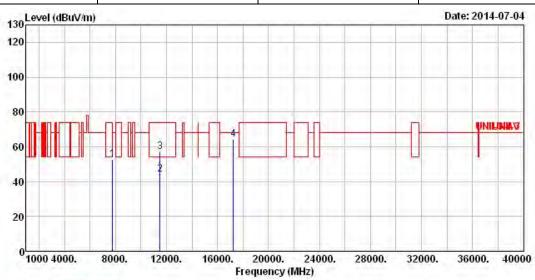
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Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT20	Test Freq. (MHz)	5745							
N _{TX}	2	Polarization	V							

Report No.: FR461801AN



			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	$\overline{\text{dBuV/m}}$	dBuV	dB/m	dB	dB		cm	deg
1	7764.00	52.62	-15.58	68.20	41.11	36.41	7.86	32.76	Peak	0	0
2	11490.00	44.15	-9.85	54.00	27.67	38.78	10.04	32.34	Average	0	0
3	11490.00	56.87	-17.13	74.00	40.39	38.78	10.04	32.34	Peak	0	0
4	17235.00	64.52	-3.68	68.20	41.63	42.68	11.59	31.38	Peak	0	0

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

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

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

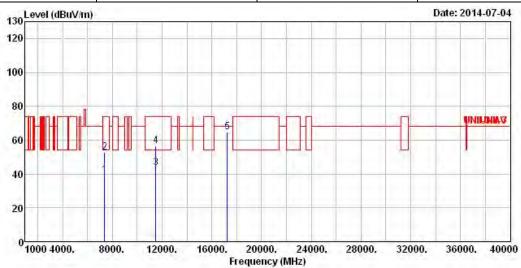
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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

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

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Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	Modulation Mode HT20 Test Freq. (MHz) 5745									
N _{TX}										



	Freq	Level	Over Limit			Antenna Factor		And the second second		A/Pos	T/Pos	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB			deg	
i	7374.00	39.15	- 14.85	54.00	28.50	36.03	7.31	32.69	Average	0	0	
)	7374.00	52.66	-21.34	74.00	42.01	36.03	7.31	32.69	Peak	0	0	
3	11490.00	43.78	-10.22	54.00	27.30	38.78	10.04	32.34	Average	0	0	
1	11490.00	56.59	-17.41	74.00	40.11	38.78	10.04	32.34	Peak	0	0	
,	17235.00	64.93	-3.27	68.20	43.22	41.72	11.33	31.34	Peak	0	0	

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

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

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

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

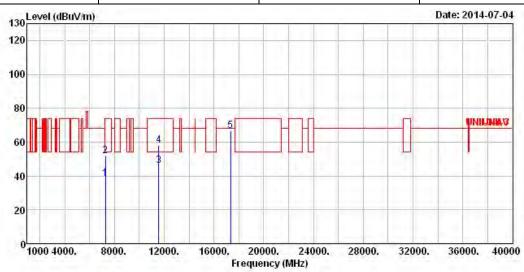
Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

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

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FAX: 886-3-327-0973

Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT20	Test Freq. (MHz)	5785							
N _{TX}	2	Polarization	V							



			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		Cm	deg
1	7278.00	38.14	-15.86	54.00	27.74	35.81	7.25	32.66	Average	0	0
2	7278.00	51.93	-22.07	74.00	41.53	35.81	7.25	32.66	Peak	0	0
3	11570.00	45.99	-8.01	54.00	29.46	38.84	10.04	32.35	Average	0	0
4	11570.00	58.23	-15.77	74.00	41.70	38.84	10.04	32.35	Peak	0	0
5	17355.00	66.75	-1.45	68.20	42.79	43.52	11.85	31.41	Peak	0	0

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

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

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

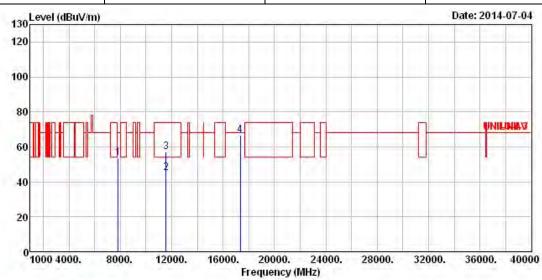
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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

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

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Tra	nsmitter Radiated Unwan	ted Emissions (Above 1G	Hz)								
Modulation Mode	Modulation ModeHT20Test Freq. (MHz)5785										
N_{TX}	Polarization H										



	. Dono		0ver			Antenna		Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7848.00	53.78	-14.42	68.20	42.05	36.44	8.07	32.78	Peak	0	0
2	11570.00	45.14	-8.86	54.00	28.61	38.84	10.04	32.35	Average	0	0
3	11570.00	56.85	-17.15	74.00	40.32	38.84	10.04	32.35	Peak	0	0
4	17355.00	66.50	-1.70	68.20	42.54	43.52	11.85	31.41	Peak	0	0

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

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

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

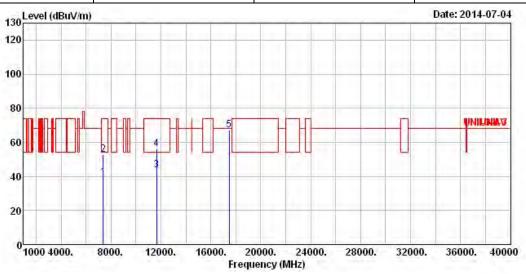
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.



FCC Test Report

Tra	ınsmitter Radiated Unwan	ted Emissions (Above 1G	Hz)
Modulation Mode	HT20	Test Freq. (MHz)	5825
N _{TX}	2	Polarization	V

Report No.: FR461801AN



	Freq	Level	Over Limit	Limit Line		Antenna Factor		Preamp Factor		A/Pos	T/Pos
	MHz	dBuV/m	——dB	dBuV/m	dBuV	dB/m	dB	dB			deg
1	7380.00	39.15	-14.85	54.00	28.47	36.03	7.34	32.69	Average	0	0
2	7380.00	52.61	-21.39	74.00	41.93	36.03	7.34	32.69	Peak	0	0
3	11650.00	43.46	-10.54	54.00	26.91	38.88	10.03	32.36	Average	0	0
4	11650.00	55.93	-18.07	74.00	39.38	38.88	10.03	32.36	Peak	0	0
5	17475.00	67.17	-1.03	68.20	42.15	44.36	12.11	31.45	Peak	0	0

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

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

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

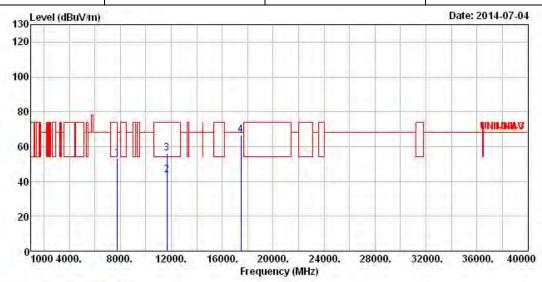
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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

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

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Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation ModeHT20Test Freq. (MHz)5825											
N_{TX}	N _{TX} 2 Polarization H										



			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		CIII	deg
1	7758.00	53.23	-14.97	68.20	41.72	36.41	7.86	32.76	Peak	0	0
2	11650.00	43.58	-10.42	54.00	27.03	38.88	10.03	32.36	Average	0	0
3	11650.00	56.35	-17.65	74.00	39.80	38.88	10.03	32.36	Peak	0	0
4	17475.00	66.75	-1.45	68.20	41.73	44.36	12.11	31.45	Peak	0	0

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

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

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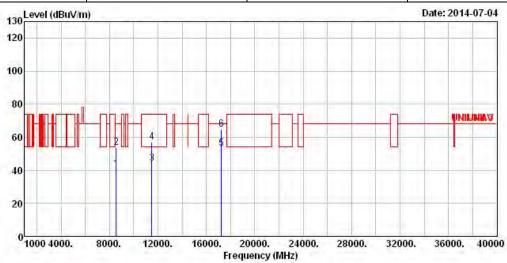
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

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

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-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.

Tra	nsmitter Radiated Unwan	ted Emissions (Above 1G	Hz)						
Modulation Mode	Modulation ModeHT40Test Freq. (MHz)5755								
N_{TX}	1	Polarization	V						



	Freq	Level	Over Limit	Limit Line		Antenna Factor		Preamp Factor		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8556.00	40.96	-27.24	68.20	28.48	37.34	7.97	32.83	Average	222	-222
2	8556.00	53.85	-14.35	68.20	41.37	37.34	7.97	32.83	Peak		
3	11510.00	44.36	-9.64	54.00	27.86	38.80	10.04	32.34	Average	222	1224
4	11510.00	57.27	-16.73	74.00	40.77	38.80	10.04	32.34	Peak		
5	17265.00	53.17	-15.03	68.20	29.96	42.92	11.68	31.39	Average	222	1444
6	17265.00	64.79	-3.41	68.20	41.58	42.92	11.68	31.39	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.

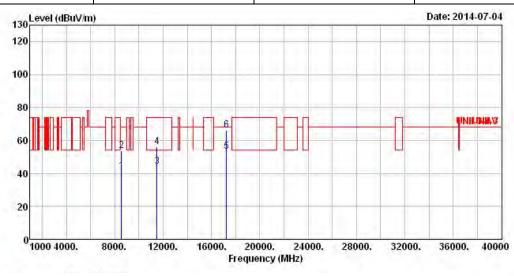
Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

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

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FCC Test Report Report No.: FR461801AN

Tra	nsmitter Radiated Unwan	ted Emissions (Above 1G	Hz)								
Modulation ModeHT40Test Freq. (MHz)5755											
N_{TX}	N _{TX} 1 Polarization H										



			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		Cm	deg
1	8568.00	41.18	-27.02	68.20	28.70	37.35	7.97	32.84	Average		
2	8568.00	53.67	-14.53	68.20	41.19	37.35	7.97	32.84	Peak	1222	1224
3	11510.00	44.23	-9.77	54.00	27.73	38.80	10.04	32.34	Average	1.55	1.555
4	11510.00	55.89	-18.11	74.00	39.39	38.80	10.04	32.34	Peak	222	1000
5	17265.00	53.10	-15.10	68.20	29.89	42.92	11.68	31.39	Average		
6	17265.00	66.00	-2.20	68.20	42.79	42.92	11.68	31.39	Peak	222	1222

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

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

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

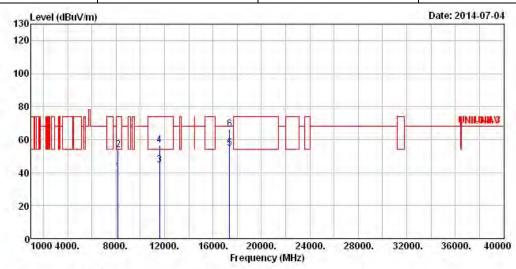
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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

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

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Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	Modulation ModeHT40Test Freq. (MHz)5795										
N_{TX}	N _{TX} 1 Polarization V										



	Freq	Level	0∨er Limit	Limit Line		Antenna Factor		70 12 C 30 PC		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		Ċm	deg
1	8172.00	40.38	-13.62	54.00	28.22	36.78	8.18	32.80	Average		
2	8172.00	53.84	-20.16	74.00	41.68	36.78	8.18	32.80	Peak	444	224
3	11590.00	44.52	-9.48	54.00	27.99	38.85	10.03	32.35	Average		1000
4	11590.00	56.39	-17.61	74.00	39.86	38.85	10.03	32.35	Peak	222	1000
5	17385.00	54.51	-13.69	68.20	30.24	43.76	11.94	31.43	Average		***
6	17385.00	66.35	-1.85	68.20	42.08	43.76	11.94	31.43	Peak	1222	1224

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

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

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

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

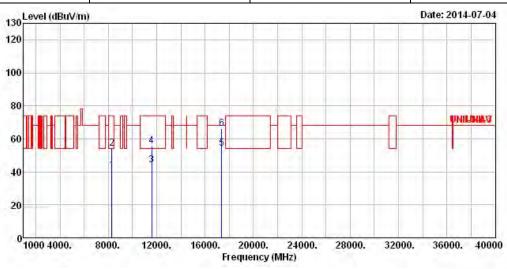
Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

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

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FCC Test Report Report No.: FR461801AN

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT40	Test Freq. (MHz)	5795						
N_{TX}	1	Polarization	Н						



			0ver	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		CIII	deg
1	8310.00	40.80	-13.20	54.00	28.50	37.00	8.11	32.81	Average		
2	8310.00	54.14	-19.86	74.00	41.84	37.00	8.11	32.81	Peak	1.666	
3	11590.00	44.32	-9.68	54.00	27.79	38.85	10.03	32.35	Average		
4	11590.00	55.66	-18.34	74.00	39.13	38.85	10.03	32.35	Peak	5.55	4.55
5	17385.00	54.39	-13.81	68.20	30.12	43.76	11.94	31.43	Average		
6	17385.00	66.21	-1.99	68.20	41.94	43.76	11.94	31.43	Peak	1.666	1.666

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

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

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

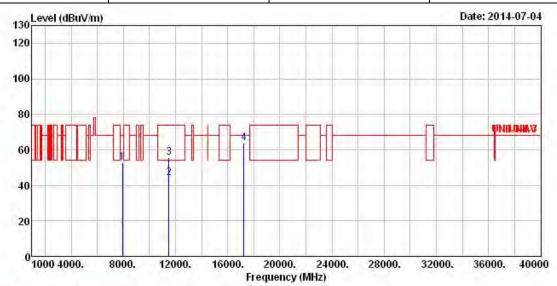
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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)	5755						
N _{TX}	2	Polarization	V						



			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
	MHz	dBuV/m	dB	$\overline{\text{dBuV/m}}$	dBuV	dB/m	dB	dB		cm	deg
1	7926.00	52.64	- 15 . 56	68.20	40.75	36.47	8.21	32.79	Peak		
2	11510.00	44.05	-9.95	54.00	27.55	38.80	10.04	32.34	Average	1222	1222
3	11510.00	55.41	-18.59	74.00	38.91	38.80	10.04	32.34	Peak	555	1,555
4	17265.00	63.91	-4.29	68.20	40.70	42.92	11.68	31.39	Peak	222	222

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

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

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

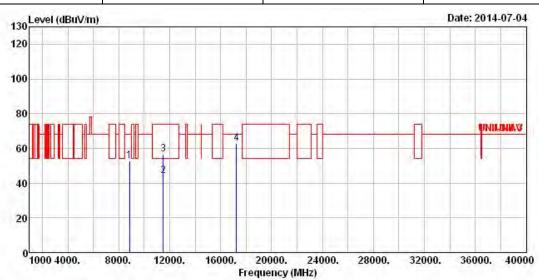
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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

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

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Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT40	Test Freq. (MHz)	5755						
N _{TX}	2	Polarization	Н						



			Over	Limit	Read	Antenna	Cable	Preamp		A/Pos	T/Pos
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark		
08	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	-	cm	deg
1	8853.00	52.53	-15.67	68.20	40.04	37.58	7.84	32.93	Peak	1,566	1 566
2	11510.00	43.94	-10.06	54.00	27.44	38.80	10.04	32.34	Average		
3	11510.00	56.42	-17.58	74.00	39.92	38.80	10.04	32.34	Peak		
4	17265.00	62.97	-5.23	68.20	39.76	42.92	11.68	31.39	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.

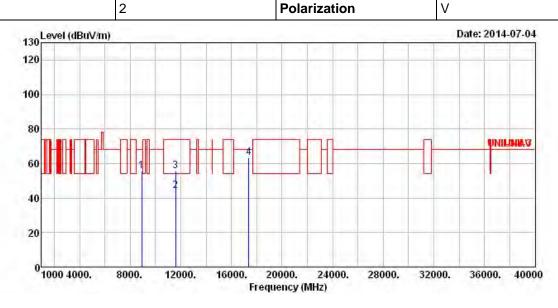
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Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT40 Test Freq. (MHz) 5795

N_{TX} 2 Polarization V

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	Freq	Level				Antenna Factor				A/Pos	T/Pos
0	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		CM	deg
1	8904.00	55.51	-12.69	68.20	43.04	37.62	7.80	32.95	Peak	1.566	
2	11590.00	44.05	-9.95	54.00	27.52	38.85	10.03	32.35	Average		
3	11590.00	55.62	-18.38	74.00	39.09	38.85	10.03	32.35	Peak		
4	17385.00	63.44	-4.76	68.20	39.17	43.76	11.94	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.

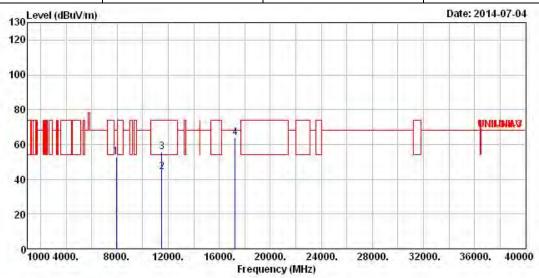
Note 5: For un-restricted bands emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm peak emission limit of 15.407.

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)	5795						
N_{TX}	2	Polarization	Н						



	Freq	Level		Limit Line				the second second second		A/Pos	T/Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	_	CIII	deg
1	7926.00	52.64	-15.56	68.20	40.75	36.47	8.21	32.79	Peak	444	
2	11510.00	44.05	-9.95	54.00	27.55	38.80	10.04	32.34	Average		
3	11510.00	55.41	-18.59	74.00	38.91	38.80	10.04	32.34	Peak	1.666	
4	17265.00	63.91	-4.29	68.20	40.70	42.92	11.68	31.39	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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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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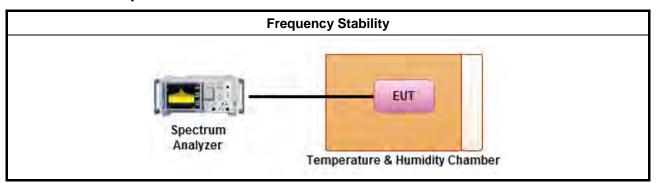
3.7.2 Measuring Instruments

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

3.7.3 Test Procedures

		Test Method
\boxtimes	Refe	er as ANSI C63.10, clause 6.8 for frequency stability tests
		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										
Мо	de	Frequency S	Stability (ppm)							
Condition	Freq. (MHz)	Test Frequency (MHz)	Frequency Stability (ppm)							
T _{20°C} Vmax	5180	5179.98741	-2.4305							
T _{20°C} Vmin	5180	5179.98741	-2.4305							
T _{50°C} Vnom	5180	5179.97286	-5.2394							
T _{40°C} Vnom	5180	5179.97438	-4.9459							
T _{30°C} Vnom	5180	5179.97786	-4.2741							
T _{20°C} Vnom	5180	5179.98741	-2.4305							
T _{10°C} Vnom	5180	5179.99913	-0.1680							
T _{0°C} Vnom	5180	5180.01129	2.1795							
T _{-10°C} Vnom	5180	5180.01910	3.6873							
T _{-20°C} Vnom	5180	5180.02041	3.9402							
Limit (ppm)	20								
Res	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	Mar. 26, 2014	AC Conduction
LISN	SCHWARZBECK MESS-ELEKTRONIK	NSLK 8127	8127-477	9kHz ~ 30MHz	Jan. 21, 2014	AC Conduction
RF Cable	HUBER+SUHNER	RG213/U	7.61183201e+012	9kHz ~ 30MHz	Oct. 30, 2013	AC Conduction
EMI Filter	LINDGREN	LRE-2030	2651	< 450 Hz	N/A	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	101013	9KHz~40GHz	Jan. 25, 2014	RF Conducted
Temp. and Humidity Chamber	Giant Force	GTH-225-20-SP- SD	MAA1112-007	-20 ~ 100°C	Nov. 20, 2013	RF Conducted
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	Jun. 26, 2014	RF Conducted

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

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz ~ 1GHz 3m	Nov. 30, 2013	Radiation
Amplifier	HP	8447D	2944A08033	10kHz ~ 1.3GHz	May. 05, 2014	Radiation
Amplifier	Agilent	8449B	3008A02120	1GHz ~ 26.5GHz	Aug. 20, 2013	Radiation
Spectrum	R&S	FSP40	100004	9kHz ~ 40GHz	Mar. 27, 2014	Radiation
Bilog Antenna	SCHAFFNER	CBL 6112D	22237	30MHz ~ 1GHz	Sep. 21, 2013	Radiation
Horn Antenna	ETS · LINDGREN	3115	6744	1GHz ~ 18GHz	May 05, 2014	Radiation
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	15GHz ~ 40GHz	Jan. 10, 2014	Radiation
RF Cable-R03m	Jye Bao	RG142	CB021	9kHz ~ 1GHz	Nov. 16, 2013	Radiation
RF Cable-high	SUHNER	SUCOFLEX 106	03CH03-HY	1GHz ~ 40GHz	Dec. 11, 2013	Radiation
Turn Table	EM Electronics	EM Electronics	060615	0 ~ 360 degree	N/A	Radiation
Antenna Mast	MF	MF-7802	MF780208179	1 ~ 4 m	N/A	Radiation

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

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Amplifier	EM	EM18G40G	060604	18GHz ~ 40GHz	Oct. 17. 2013	Radiation
Loop Antenna	TESEQ	HLA 6120	31244	9kHz ~ 30MHz	Dec. 02, 2012	Radiation

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

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