FCC Test Report

Equipment	:	**High Power Plug-In AC2600 Wi-Fi Range Extender**
Brand Name	:	**AMPED WIRELESS**
Model No.	:	**REC44M**
FCC ID	:	**ZTT-REC44M**
Standard	:	**47 CFR FCC Part 15.407**
Operating Band	:	**5150 MHz – 5250 MHz** **5725 MHz – 5850 MHz**
FCC Classification	:	**UNII**
Applicant	:	**AMPED WIRELESS** 13089 Peyton Dr. #C307, Chino Hills, CA 91709
Manufacturer	:	**EDIMAX TECHNOLOGY CO., LTD.** 1F., No.3, Wu-Ghuan 3rd Rd., Wu-Gu, New Taipei City, Taiwan 24891
Function	:	☐ **Outdoor;** ☒ **Indoor;** ☐ **Fixed P2P;** ☐ **Portable Client**

The product sample received on Mar. 22, 2016 and completely tested on May 19, 2016. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 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:

Kevin Liang / Assistant Manager

TAF Testing Laboratory 1190

Table of Contents

Summary of Test Result

Conformance Test Specifications			
Report Clause	**Ref. Std. Clause**	**Description**	**Result**
1.1.2	15.203	Antenna Requirement	Complied
3.1	15.207	AC Power-line Conducted Emissions	Complied
3.2	15.407(a)	Emission Bandwidth	Complied
3.3	15.407(a)	RF Output Power (Maximum Average 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

Revision History

Report No.	Version	Description	Issued Date
FR632202AN	Rev. 01	Initial issue of report	Jun. 01, 2016

1 General Description

1.1 Information

1.1.1 RF General Information

RF General Information (5150-5250MHz band)_non-beamforming						
Frequency Range (MHz)	**IEEE Std. 802.11**	**Ch. Freq. (MHz)**	**Channel Number**	**Transmit Chains (N_{TX})**	**RF Output Power (dBm)**	**Co-location**
5150-5250	a	5180-5240	36-48 [4]	4	23.44	Yes
5150-5250	n(HT20)	5180-5240	36-48 [4]	4	23.45	Yes
5150-5250	n(HT40)	5190-5230	38-46 [2]	4	25.60	Yes
5150-5250	ac (VHT20)	5180-5240	36-48 [4]	4	23.42	Yes
5150-5250	ac (VHT40)	5190-5230	38-46 [2]	4	25.42	Yes
5150-5250	ac (VHT80)	5210	42 [1]	4	14.62	Yes
Note 1: RF output power specifies that Maximum Average Conducted Output Power. Note 2: 802.11a/n uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation. Note 3: 802.11ac uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation. Note 4: Co-location, Co-location is generally defined as simultaneously transmitting (co-transmitting) antennas within 20 cm of each other. (i.e., EUT has simultaneously co-transmitting that operating 2.4GHz and 5GHz.)						

RF General Information (5150-5250MHz band)_beamforming					
Frequency Range (MHz)	**IEEE Std. 802.11**	**Ch. Freq. (MHz)**	**Channel Number**	**Transmit Chains (N_{TX})**	**RF Output Power (dBm)**
5150-5250	n(HT20)	5180-5240	36-48 [4]	4	23.35
5150-5250	n(HT40)	5190-5230	38-46 [2]	4	25.90
5150-5250	ac (VHT20)	5180-5240	36-48 [4]	4	22.91
5150-5250	ac (VHT40)	5190-5230	38-46 [2]	4	25.80
5150-5250	ac (VHT80)	5210	42 [1]	4	16.31
Note 1: RF output power specifies that Maximum Average Conducted Output Power. Note 2: 802.11a/n uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation. Note 3: 802.11ac uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.					

RF General Information (5725-5850MHz band)_non-beamforming						
Frequency Range (MHz)	IEEE Std. 802.11	Ch. Freq. (MHz)	Channel Number	Transmit Chains (N_{TX})	RF Output Power (dBm)	Co-location
5725-5850	a	5745-5825	149-165 [5]	4	24.73	Yes
5725-5850	n (HT20)	5745-5825	149-165 [5]	4	25.56	Yes
5725-5850	n (HT40)	5755-5795	151-159 [2]	4	28.00	Yes
5725-5850	ac (VHT20)	5745-5825	149-165 [5]	4	25.29	Yes
5725-5850	ac (VHT40)	5755-5795	151-159 [2]	4	27.72	Yes
5725-5850	ac (VHT80)	5775	155 [1]	4	23.85	Yes

Note 1: RF output power specifies that Maximum Average Conducted Output Power.
Note 2: 802.11a/n uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
Note 3: 802.11ac uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
Note 4: Co-location, Co-location is generally defined as simultaneously transmitting (co-transmitting) antennas within 20 cm of each other. (i.e., EUT has simultaneously co-transmitting that operating 2.4GHz and 5GHz.)

RF General Information (5725-5850MHz band)_beamforming					
Frequency Range (MHz)	IEEE Std. 802.11	Ch. Freq. (MHz)	Channel Number	Transmit Chains (N_{TX})	RF Output Power (dBm)
5725-5850	n (HT20)	5745-5825	149-165 [5]	4	23.67
5725-5850	n (HT40)	5755-5795	151-159 [2]	4	25.20
5725-5850	ac (VHT20)	5745-5825	149-165 [5]	4	23.20
5725-5850	ac (VHT40)	5755-5795	151-159 [2]	4	25.08
5725-5850	ac (VHT80)	5775	155 [1]	4	22.05

Note 1: RF output power specifies that Maximum Average Conducted Output Power.
Note 2: 802.11a/n uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
Note 3: 802.11ac uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.

1.1.2 Antenna Information

Antenna Category	
☒	Integral antenna (antenna permanently attached)
	☒ Temporary RF connector provided
	☐ No temporary RF connector provided Transmit chains bypass antenna and soldered temporary RF connector provided for connected measurement. In case of conducted measurements the transmitter shall be connected to the measuring equipment via a suitable attenuator and correct for all losses in the RF path.
☒	External antenna (dedicated antennas)
	☒ Single power level with corresponding antenna(s).
	☐ Multiple power level and corresponding antenna(s).

Antenna General Information					
No.	**Ant. Cat.**	**Ant. Type**	**Connector Type**	**Ant. Model**	**Gain (dBi)**
1	External	Dipole	I-Pex	98619PRSX009	3.49
2	External	Dipole	I-Pex	98619PRSX009	3.49
3	Integral	PCB	I-Pex	ALA160-222031-000000	3.87
4	Integral	PAB	I-Pex	ALA160-222032-000000	4.68

1.1.3 Type of EUT

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

1.1.4 Test Signal Duty Cycle

Operated Mode for Worst Duty Cycle (non-beamforming)	
☐ 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)**
☒ 82.66% - IEEE 802.11a	0.83
☒ 82.10% - IEEE 802.11n (HT20)	0.86
☒ 68.84% - IEEE 802.11n (HT40)	1.62
☒ 56.15% - IEEE 802.11ac (VHT20)	2.51
☒ 42.30% - IEEE 802.11ac (VHT40)	3.74
☒ 29.62% - IEEE 802.11ac (VHT80)	5.28

Operated Mode for Worst Duty Cycle (beamforming)	
☐ 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)**
☒ 99.33% - IEEE 802.11n (HT20)	0.03
☒ 99.34% - IEEE 802.11n (HT40)	0.03
☒ 99.67% - IEEE 802.11ac (VHT20)	0.01
☒ 99.34% - IEEE 802.11ac (VHT40)	0.03
☒ 98.33% - IEEE 802.11ac (VHT80)	0.07

1.1.5 EUT Operational Condition

Supply Voltage	☒ AC mains	☐ DC	
Type of DC Source	☒ From Switching Power Supply	☐ From PoE	☐ From Battery

1.2 Testing Applied Standards

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

- 47 CFR FCC Part 15
- ANSI C63.10-2013
- FCC KDB 789033 D02 v01r02
- FCC KDB 644545 D03 v01
- FCC KDB 662911 D01 v02r01
- FCC-16-24-UNII

1.3 Testing Location Information

Testing Location							
☒	HWA YA	ADD : No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.					
		TEL : 886-3-327-3456		FAX : 886-3-327-0973			
Test Site Registration Number: 553509							
Test Condition		**Test Site No.**		**Test Engineer**		**Test Environment**	
AC Conduction		CO04-HY		Ryan		23℃ / 58%	
RF Conducted		TH01-HY		Howard		23.5℃ / 63%	
Radiated Emission		03CH03-HY		Jeff		21.2℃ / 60%	

1.4 Measurement Uncertainty

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

Measurement Uncertainty		
Test Item		**Uncertainty**
AC power-line conducted emissions		±2.26 dB
Emission bandwidth, 26dB bandwidth		±1.42 %
RF output power, conducted		±0.63 dB
Power density, conducted		±0.81 dB
Unwanted emissions, conducted	9 – 150 kHz	±0.38 dB
	0.15 – 30 MHz	±0.42 dB
	30 – 1000 MHz	±0.51 dB
	1 – 18 GHz	±0.67 dB
	18 – 40 GHz	±0.83 dB
	40 – 200 GHz	N/A
All emissions, radiated	9 – 150 kHz	±2.49 dB
	0.15 – 30 MHz	±2.28 dB
	30 – 1000 MHz	±2.56 dB
	1 – 18 GHz	±3.59 dB
	18 – 40 GHz	±3.82 dB
	40 – 200 GHz	N/A
Temperature		±0.8 ℃
Humidity		±3 %
DC and low frequency voltages		±3 %
Time		±1.42 %
Duty Cycle		±1.42 %

2 Test Configuration of EUT

2.1 The Worst Case Modulation Configuration

Worst Modulation Used for Conformance Testing (non-beamforming)			
Modulation Mode	**Transmit Chains (N_{TX})**	**Data Rate / MCS**	**Worst Data Rate / MCS**
11a	4	6-54Mbps	6 Mbps
HT20	4	MCS 0-31	MCS 0
HT40	4	MCS 0-31	MCS 0
VHT20	4	MCS 0-8	MCS 0
VHT40	4	MCS 0-9	MCS 0
VHT80	4	MCS 0-9	MCS 0

Worst Modulation Used for Conformance Testing (beamforming)			
Modulation Mode	**Transmit Chains (N_{TX})**	**Data Rate / MCS**	**Worst Data Rate / MCS**
HT20	4	MCS 0-31	MCS 0
HT40	4	MCS 0-31	MCS 0
VHT20	4	MCS 0-8	MCS 0
VHT40	4	MCS 0-9	MCS 0
VHT80	4	MCS 0-9	MCS 0

2.2 The Worst Case Power Setting Parameter

The Worst Case Power Setting Parameter (5150-5250MHz band) (non-beamforming)							
Test Software Version	MT7615 QA_0.0.1.67						
Modulation Mode	**N_{TX}**	**Test Frequency (MHz)**					
		NCB: 20MHz			**NCB: 40MHz**		**NCB: 80MHz**
		5180	**5200**	**5240**	**5190**	**5230**	**5210**
11a	4	1A	1C	1C	-	-	-
HT20	4	1E	1E	1E	-	-	-
HT40	4	-	-	-	15	22	-
VHT20	4	1E	1E	1E	-	-	-
VHT40	4	-	-	-	15	22	-
VHT80	4	-	-	-	-	-	0C

The Worst Case Power Setting Parameter (5150-5250MHz band) (beamforming)							
Test Software	DOS						
Modulation Mode	**N_{TX}**	**Test Frequency (MHz)**					
		NCB: 20MHz			**NCB: 40MHz**		**NCB: 80MHz**
		5180	**5200**	**5240**	**5190**	**5230**	**5210**
HT20	4	25	28	28	-	-	-
HT40	4	-	-	-	20	34	-
VHT20	4	25	28	28	-	-	-
VHT40	4	-	-	-	20	34	-
VHT80	4	-	-	-	-	-	14

The Worst Case Power Setting Parameter (5725-5850MHz band) (non-beamforming)							
Test Software Version	MT7615 QA_0.0.1.67						
Modulation Mode	N_{TX}	Test Frequency (MHz)					
		NCB: 20MHz			NCB: 40MHz		NCB: 80MHz
		5745	5785	5825	5755	5795	5775
11a	4	1F	1E	1E	-	-	-
HT20	4	23	22	21	-	-	-
HT40	4	-	-	-	26	26	-
VHT20	4	22	21	20	-	-	-
VHT40	4	-	-	-	26	26	-
VHT80	4	-	-	-	-	-	1F

The Worst Case Power Setting Parameter (5725-5850MHz band) (beamforming)							
Test Software	DOS						
Modulation Mode	N_{TX}	Test Frequency (MHz)					
		NCB: 20MHz			NCB: 40MHz		NCB: 80MHz
		5745	5785	5825	5755	5795	5775
HT20	4	29	30	30	-	-	-
HT40	4	-	-	-	33	33	-
VHT20	4	29	30	30	-	-	-
VHT40	4	-	-	-	33	33	-
VHT80	4	-	-	-	-	-	27

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	Transmit Mode

The Worst Case Mode for Following Conformance Tests	
Tests Item	RF Output Power
Test Condition	Conducted measurement at transmit chains
Modulation Mode	11a, HT20, HT40, VHT20, VHT40, VHT80 (non-beamforming) HT20, HT40, VHT20, VHT40, VHT80 (beamforming)

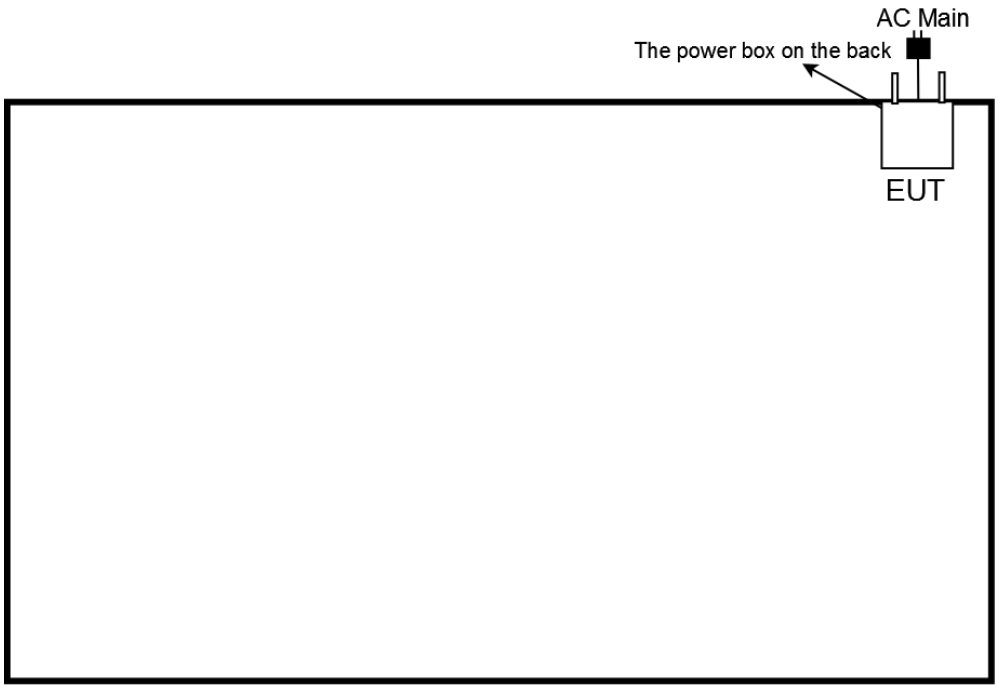
The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth, Peak Power Spectral Density
Test Condition	Conducted measurement at transmit chains
Modulation Mode	11a, HT20, HT40, VHT80(non-beamforming) HT20, HT40, VHT80 (beamforming)

Note 1: Based on 802.11n EIRP power was the worst case. Therefore only 802.11n was tested.

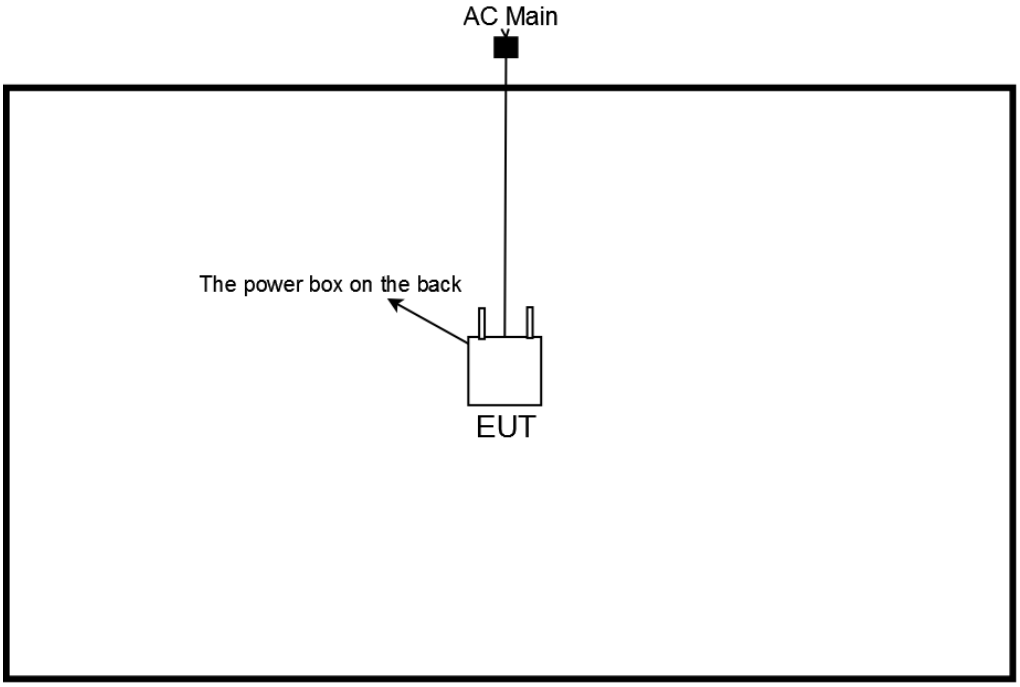
The Worst Case Mode for Following Conformance Tests			
Tests Item	Transmitter Radiated Unwanted Emissions Transmitter Radiated Bandedge Emissions		
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.		
User Position	☐ EUT will be placed in fixed position.		
	☒ EUT will be placed in mobile position and operating multiple positions. EUT shall be performed three orthogonal planes.		
	☐ 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	☒ Transmit Mode		
Modulation Mode	11a, HT20, HT40, VHT80		
Orthogonal Planes of EUT	**X Plane**	**Y Plane**	**Z Plane**
			
Worst Planes of EUT	V		
Worst Planes of Antenna	V		

2.4 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Test Setup Diagram - Radiated Emission Test



3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	**Quasi-Peak**	**Average**
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50
Note 1: * Decreases with the logarithm of the frequency.		

3.1.2 Measuring Instruments

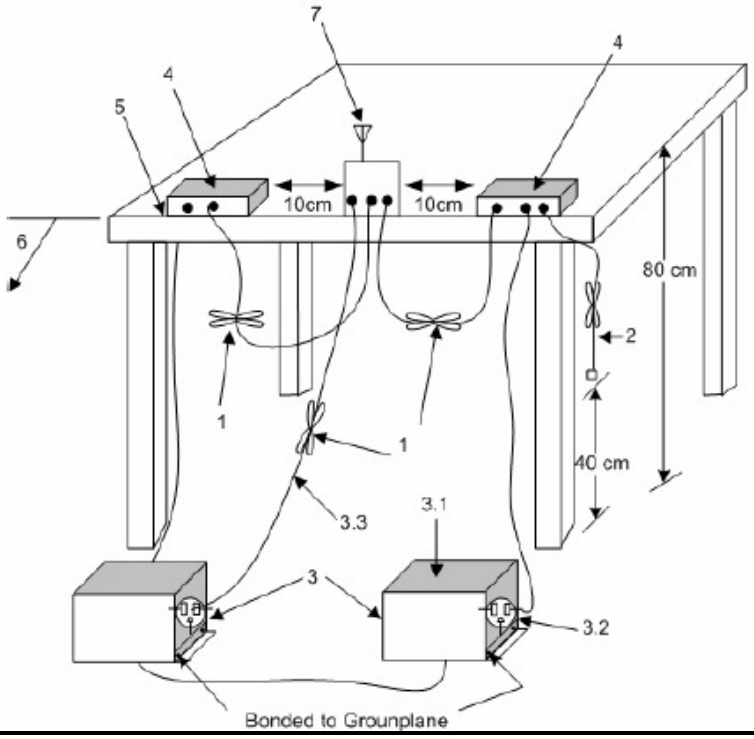
Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

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

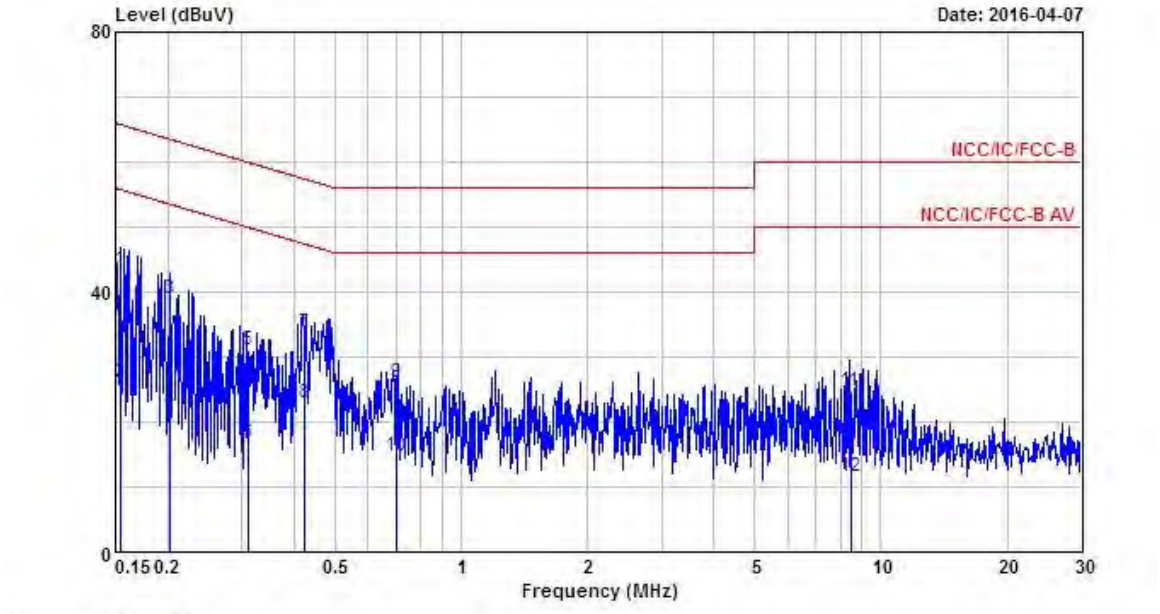
3.1.4 Test Setup

AC Power-line Conducted Emissions



3.1.5 Test Result of AC Power-line Conducted Emissions

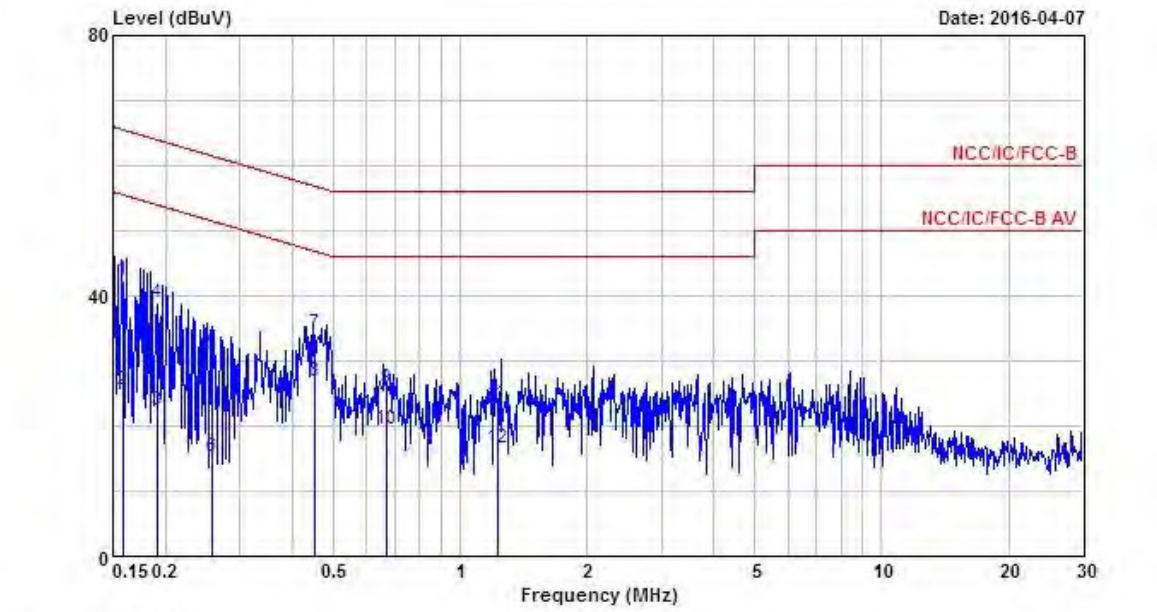
AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Neutral
Operating Function	Transmit Mode		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.1548450	43.46	-22.28	65.74	43.13	0.10	0.23	QP
2	0.1548450	26.04	-29.70	55.74	25.71	0.10	0.23	Average
3	0.2018130	38.98	-24.56	63.54	38.57	0.11	0.30	QP
4	0.2018130	21.87	-31.67	53.54	21.46	0.11	0.30	Average
5	0.3111150	31.08	-28.86	59.94	30.79	0.12	0.17	QP
6	0.3111150	16.91	-33.03	49.94	16.62	0.12	0.17	Average
7	0.4242670	33.74	-23.62	57.36	33.52	0.12	0.10	QP
8	0.4242670	22.91	-24.45	47.36	22.69	0.12	0.10	Average
9	0.7034240	26.09	-29.91	56.00	25.86	0.13	0.10	QP
10	0.7034240	14.85	-31.15	46.00	14.62	0.13	0.10	Average
11	8.478	24.85	-35.15	60.00	24.41	0.26	0.18	QP
12	8.478	11.60	-38.40	50.00	11.16	0.26	0.18	Average

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

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



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.1585980	42.30	-23.24	65.54	41.96	0.11	0.23	QP
2	0.1585980	25.59	-29.95	55.54	25.25	0.11	0.23	Average
3	0.1904300	22.41	-31.61	54.02	22.01	0.11	0.29	Average
4	0.1904300	38.97	-25.05	64.02	38.57	0.11	0.29	QP
5	0.2588790	31.15	-30.32	61.47	30.81	0.11	0.23	QP
6	0.2588790	15.35	-36.12	51.47	15.01	0.11	0.23	Average
7	0.4521640	34.12	-22.72	56.84	33.90	0.12	0.10	QP
8	0.4521640	26.73	-20.11	46.84	26.51	0.12	0.10	Average
9	0.6687770	25.83	-30.17	56.00	25.60	0.13	0.10	QP
10	0.6687770	19.35	-26.65	46.00	19.12	0.13	0.10	Average
11	1.226	23.33	-32.67	56.00	23.03	0.14	0.16	QP
12	1.226	16.56	-29.44	46.00	16.26	0.14	0.16	Average

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

3.2 Emission Bandwidth

3.2.1 Emission Bandwidth (EBW) Limit

Emission Bandwidth Limit
UNII Devices
☒ 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.
☒ For the 5.725-5.85 GHz band, 6 dB emission bandwidth ≥ 500kHz.

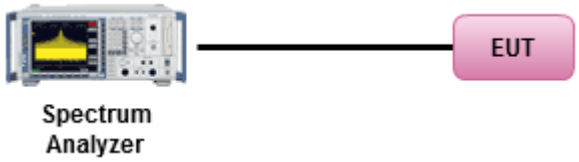
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

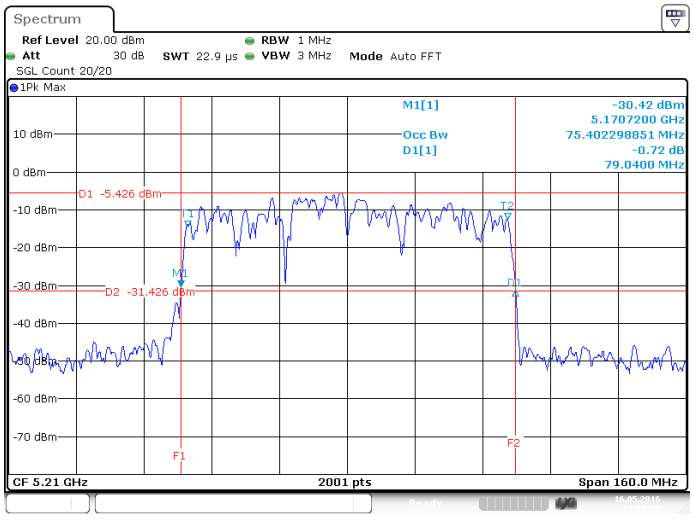
Test Method		
☒	For the emission bandwidth shall be measured using one of the options below:	
	☒	Refer as FCC KDB 789033, clause C for EBW and clause D for OBW measurement.
	☐	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.
	☐	Refer as IC RSS-Gen, clause 6.6 for bandwidth testing.
☒	For conducted measurement.	
	☐	The EUT supports single transmit chain and measurements performed on this transmit chain.
	☐	The EUT supports diversity transmitting. The worst case are in the table below.
	☒	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.
		☒ Option 2: Multiple transmit chains measurements need to be performed on each transmit chains individually (antenna outputs). All measurement had be performed on all transmit chains.

3.2.4 Test Setup

Emission Bandwidth


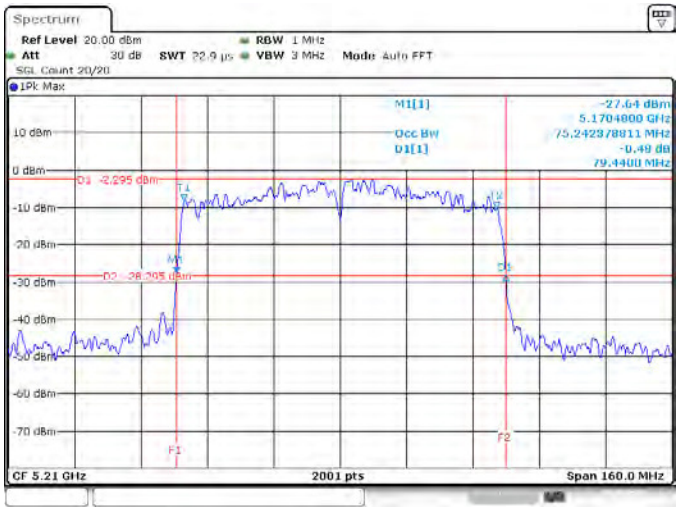
3.2.5 Test Result of Emission Bandwidth

UNII Emission Bandwidth Result (5150-5250MHz band) (non-beamforming)										
Condition			Emission Bandwidth (MHz)							
Modulation Mode	N_{TX}	Freq. (MHz)	99% Bandwidth				26dB Bandwidth			
			Chain Port 1	Chain Port 2	Chain Port 3	Chain Port 4	Chain Port 1	Chain Port 2	Chain Port 3	Chain Port 4
11a	4	5180	16.54	16.49	16.31	16.39	19.75	19.77	19.07	20.10
11a	4	5200	16.54	16.36	16.41	16.59	19.37	19.40	19.70	19.37
11a	4	5240	16.46	16.41	16.31	16.56	19.75	19.07	18.75	20.42
HT20	4	5180	17.81	17.56	17.56	17.61	20.35	19.45	20.27	21.00
HT20	4	5200	17.64	17.71	17.54	17.64	20.22	20.00	19.52	20.22
HT20	4	5240	17.54	17.66	17.61	17.71	19.77	20.02	19.55	19.40
HT40	4	5190	36.02	35.86	35.90	36.10	39.64	38.40	39.04	39.84
HT40	4	5230	36.26	36.30	36.22	36.46	39.40	39.56	41.00	40.24
VHT80	4	5210	75.48	75.08	75.40	75.48	78.64	78.16	79.04	78.32
Result			Complied							

5150-5250MHz - Worst Emission Bandwidth Plots (non-beamforming)


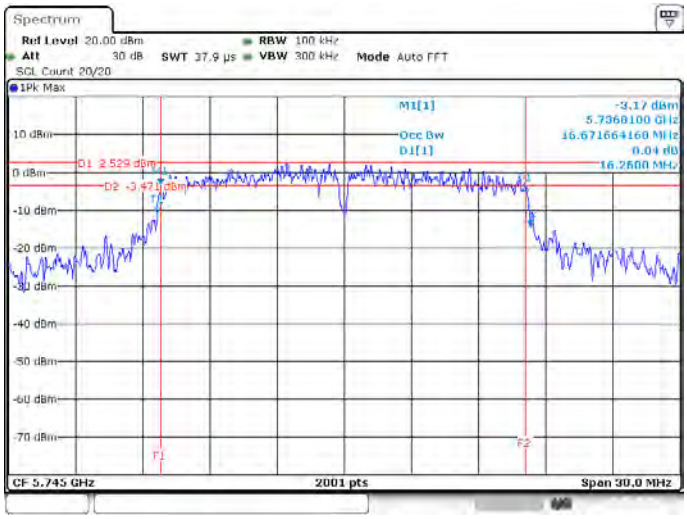
UNII Emission Bandwidth Result (5150-5250MHz band) (beamforming)										
Condition			Emission Bandwidth (MHz)							
Modulation Mode	N_{TX}	Freq. (MHz)	99% Bandwidth				26dB Bandwidth			
			Chain Port 1	Chain Port 2	Chain Port 3	Chain Port 4	Chain Port 1	Chain Port 2	Chain Port 3	Chain Port 4
HT20	4	5180	17.49	17.76	17.54	17.64	19.32	20.22	19.35	19.72
HT20	4	5200	17.71	17.49	17.69	17.56	20.05	19.37	20.10	19.87
HT20	4	5240	17.54	17.71	17.69	17.61	20.15	19.62	19.65	19.75
HT40	4	5190	35.82	36.38	36.18	36.22	39.04	40.04	40.36	40.60
HT40	4	5230	36.90	36.34	36.58	36.58	62.60	44.52	43.96	58.36
VHT80	4	5210	75.24	75.24	75.00	75.00	79.20	79.44	79.28	78.88
Result			Complied							

5150-5250MHz - Worst Emission Bandwidth Plots (beamforming)



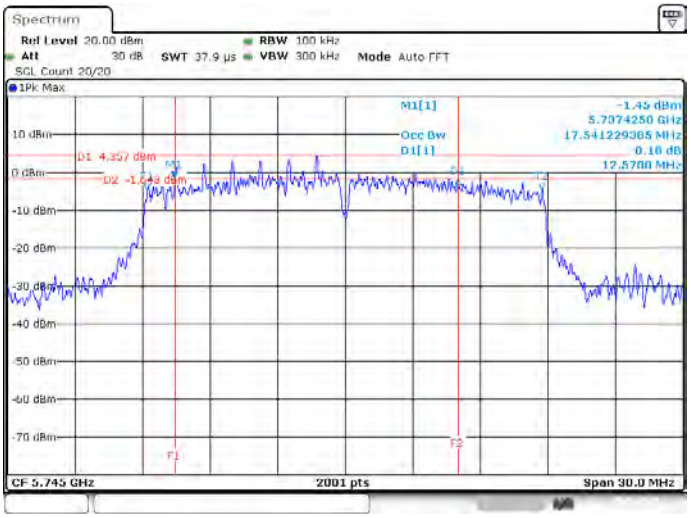
UNII Emission Bandwidth Result (5725-5850MHz band) (non-beamforming)										
Condition			Emission Bandwidth (MHz)							
Modulation Mode	N_{TX}	Freq. (MHz)	99% Bandwidth				6dB Bandwidth			
			Chain Port 1	Chain Port 2	Chain Port 3	Chain Port 4	Chain Port 1	Chain Port 2	Chain Port 3	Chain Port 4
11a	4	5745	16.46	16.41	16.37	16.67	16.32	16.33	16.33	16.26
11a	4	5785	16.43	16.38	16.32	16.43	16.33	16.33	16.33	16.32
11a	4	5825	16.34	16.38	16.34	16.47	16.33	16.36	16.32	16.35
HT20	4	5745	17.61	17.67	17.66	18.03	17.59	17.56	17.43	17.58
HT20	4	5785	17.73	17.61	17.55	17.82	17.58	17.58	17.56	17.56
HT20	4	5825	17.61	17.57	17.60	17.75	17.32	17.53	17.58	17.58
HT40	4	5755	41.33	44.37	38.26	51.97	35.68	33.80	28.76	35.96
HT40	4	5795	43.73	45.77	36.98	50.73	36.36	34.44	22.56	36.28
VHT80	4	5775	74.84	75.00	75.24	75.40	56.16	71.28	62.48	75.04
Result			Complied							

5725-5850MHz - Worst Emission 6Bandwidth Plots (non-beamforming)



UNII Emission Bandwidth Result (5725-5850MHz band) (beamforming)										
Condition			Emission Bandwidth (MHz)							
Modulation Mode	N_{TX}	Freq. (MHz)	99% Bandwidth				6dB Bandwidth			
			Chain Port 1	Chain Port 2	Chain Port 3	Chain Port 4	Chain Port 1	Chain Port 2	Chain Port 3	Chain Port 4
HT20	4	5745	17.54	17.58	17.58	17.63	12.57	13.42	17.29	17.56
HT20	4	5785	17.51	17.57	17.52	17.63	15.12	16.27	13.18	17.55
HT20	4	5825	17.60	17.54	17.60	17.64	17.53	14.46	17.58	17.19
HT40	4	5755	36.06	35.98	35.94	36.18	33.48	26.92	31.24	35.44
HT40	4	5795	36.38	36.22	36.10	41.21	35.48	35.08	35.68	35.44
VHT80	4	5775	75.08	75.32	74.92	75.24	60.16	75.68	65.12	75.12
Result			Complied							

5725-5850MHz - Worst Emission 6Bandwidth Plots (beamforming)



3.3 RF Output Power

3.3.1 RF Output Power Limit

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

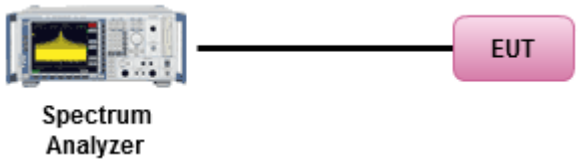
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
☒	Maximum Conducted Output Power
	[duty cycle ≥ 98% or external video / power trigger]
	☐ Refer as FCC KDB 789033, clause E Method SA-1 (spectral trace averaging).
	☒ Refer as FCC KDB 789033, 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, clause E Method SA-2 (spectral trace averaging).
	☒ Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband RF power meter and average over on/off periods with duty factor
	☐ Refer as FCC KDB 789033, clause E Method PM (using an RF average power meter).
☒	For conducted measurement.
	☐ The EUT supports single transmit chain and measurements performed on this transmit chain.
	☐ The EUT supports diversity transmitting. The worst case is in the table below.
	☒ The EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
	☒ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \ldots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.3.4 Test Setup

RF Output Power (Spectrum Analyzer)


3.3.5 Directional Gain for Power Measurement

Directional Gain (DG) Result (non-beamforming)					
Transmit Chains No.		1	2	3	4
Maximum G_{ANT} (dBi)		3.49	3.49	3.87	4.68
Modulation Mode	**DG (dBi)**	**N_{TX}**	**N_{SS}**	**STBC**	**Array Gain (dB)**
11a	3.91	4	1	-	-
HT20	3.91	4	1	-	-
HT40	3.91	4	1	-	-
VHT20	3.91	4	1	-	-
VHT40	3.91	4	1	-	-
VHT80	3.91	4	1	-	-

Note 1: For all transmitter outputs with equal antenna gains, directional gain is to be computed as follows:
Any transmit signals are correlated, Directional Gain = $G_{ANT} + 10 \log(N_{TX})$
All transmit signals are completely uncorrelated, Directional Gain = G_{ANT}
Note 2: For all transmitter outputs with unequal antenna gains, directional gain is to be computed as follows:
Any transmit signals are correlated, Directional Gain =$10 \log[(10^{G1/20} + \ldots + 10^{GN/20})^2 / N_{TX}]$
All transmit signals are completely uncorrelated, Directional Gain = $10 \log[(10^{G1/10} + \ldots + 10^{GN/10})/N_{TX}]$
Note 3: For Spatial Multiplexing, Directional Gain (DG) = $G_{ANT} + 10 \log(N_{TX}/N_{SS})$,
where Nss = the number of independent spatial streams data.
Note 4: For CDD transmissions, directional gain is calculated as power measurements:
Directional Gain (DG) = G_{ANT} + Array Gain, where Array Gain is as follows:
Array Gain = 0 dB (i.e., no array gain) for $N_{TX} \leq 4$;
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{TX};

Directional Gain (DG) Result (beamforming)					
Transmit Chains No.		1	2	3	4
Maximum G_{ANT} (dBi)		3.49	3.49	3.87	4.68
Modulation Mode	**DG (dBi)**	**N_{TX}**	**N_{SS}**	**STBC**	**Array Gain (dB)**
HT20	9.93	4	1		
HT40	9.93	4	1		
VHT20	9.93	4	1	-	-
VHT40	9.93	4	1	-	-
VHT80	9.93	4	1	-	-

Note 1: For all transmitter outputs with equal antenna gains, directional gain is to be computed as follows:
Any transmit signals are correlated, Directional Gain = $G_{ANT} + 10 \log(N_{TX})$
All transmit signals are completely uncorrelated, Directional Gain = G_{ANT}

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

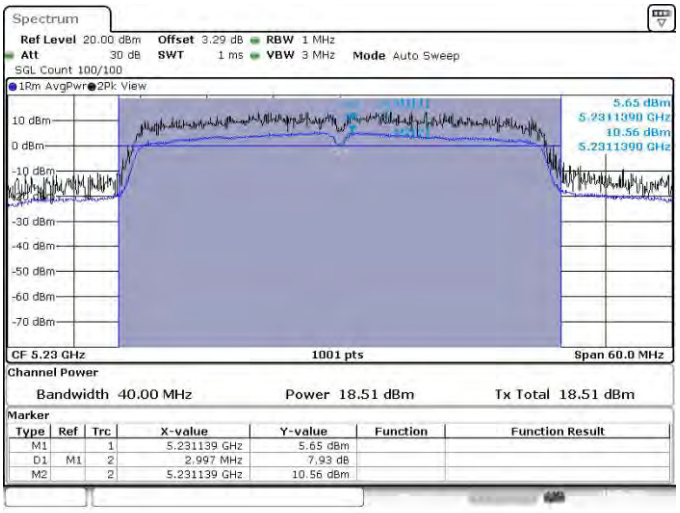
Note 3: For Spatial Multiplexing, Directional Gain (DG) = $G_{ANT} + 10 \log(N_{TX}/N_{SS})$,
where Nss = the number of independent spatial streams data.

Note 4: For CDD transmissions, directional gain is calculated as power measurements:
Directional Gain (DG) = G_{ANT} + Array Gain, where Array Gain is as follows:
Array Gain = 0 dB (i.e., no array gain) for $N_{TX} \leq 4$;
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{TX};

3.3.6 Test Result of Maximum Average Conducted Output Power

Maximum Average Conducted Output Power (5150-5250MHz band) (non-beamforming)									
Modulation Mode	N_{TX}	Freq. (MHz)	Output Power (dBm)					Antenna Gain (dBi)	Power Limit
			Chain Port 1	Chain Port 2	Chain Port 3	Chain Port 4	Sum Chain		
11a	4	5180	16.33	15.51	16.04	16.81	22.22	3.91	30.00
11a	4	5200	17.78	16.77	16.88	18.00	23.41	3.91	30.00
11a	4	5240	17.63	16.98	16.87	18.08	23.44	3.91	30.00
HT20	4	5180	17.48	16.98	16.98	17.92	23.38	3.91	30.00
HT20	4	5200	17.63	16.80	17.13	17.89	23.40	3.91	30.00
HT20	4	5240	17.51	17.04	17.31	17.83	23.45	3.91	30.00
HT40	4	5190	13.88	12.70	12.97	14.28	19.53	3.91	30.00
HT40	4	5230	19.95	18.99	19.11	20.13	25.60	3.91	30.00
VHT20	4	5180	17.66	16.64	16.91	17.89	23.32	3.91	30.00
VHT20	4	5200	17.78	16.70	17.06	17.85	23.39	3.91	30.00
VHT20	4	5240	17.61	16.85	17.19	17.90	23.42	3.91	30.00
VHT40	4	5190	13.85	12.46	12.77	13.87	19.30	3.91	30.00
VHT40	4	5230	19.75	18.90	19.05	19.85	25.42	3.91	30.00
VHT80	4	5210	9.03	8.19	7.90	9.15	14.62	3.91	30.00
Result			Complied						

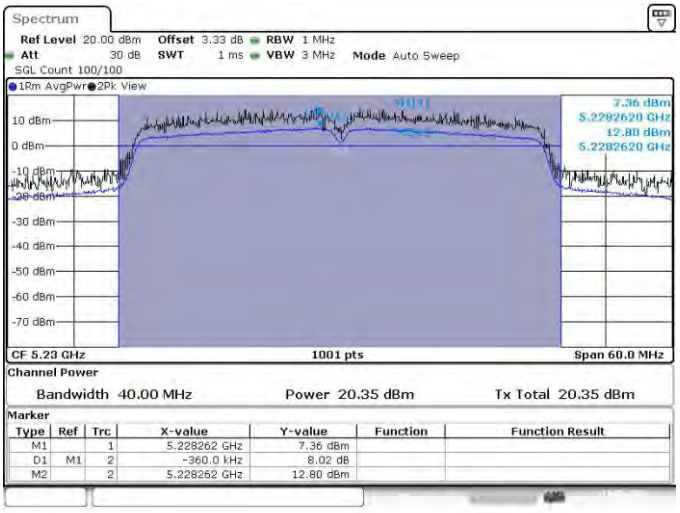
5150-5250MHz - Worst RF Output Power Plots (non-beamforming)



Note 1: RF Output Power Plots w/o Duty Factor

Maximum Average Conducted Output Power (5150-5250MHz band) (beamforming)									
Modulation Mode	N_{TX}	Freq. (MHz)	Output Power (dBm)					Antenna Gain (dBi)	Power Limit
			Chain Port 1	Chain Port 2	Chain Port 3	Chain Port 4	Sum Chain		
HT20	4	5180	15.89	15.10	14.73	16.30	21.57	9.93	26.07
HT20	4	5200	17.53	17.12	16.78	17.83	23.35	9.93	26.07
HT20	4	5240	17.34	17.23	16.94	17.73	23.34	9.93	26.07
HT40	4	5190	13.56	13.01	12.82	13.71	19.31	9.93	26.07
HT40	4	5230	20.00	19.66	19.44	20.38	25.90	9.93	26.07
VHT20	4	5180	15.54	15.27	15.01	16.02	21.50	9.93	26.07
VHT20	4	5200	17.03	16.64	16.40	17.40	22.91	9.93	26.07
VHT20	4	5240	16.83	16.68	16.41	17.23	22.82	9.93	26.07
VHT40	4	5190	13.36	12.87	12.61	13.79	19.20	9.93	26.07
VHT40	4	5230	20.00	19.62	19.24	20.19	25.80	9.93	26.07
VHT80	4	5210	10.15	10.28	9.64	10.96	16.31	9.93	26.07
Result			Complied						

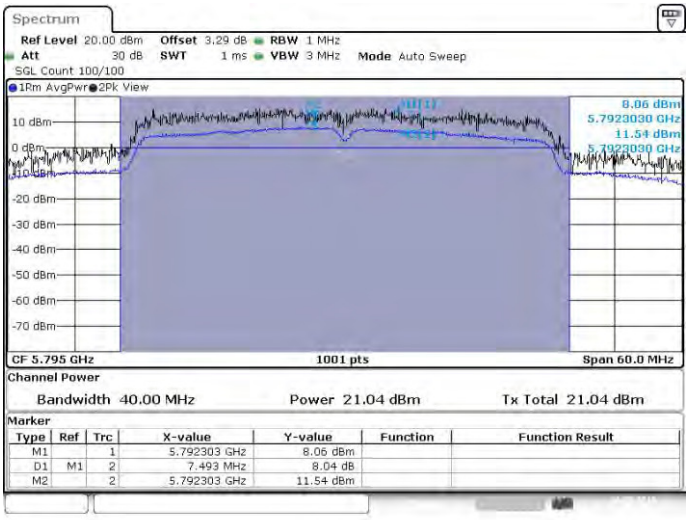
5150-5250MHz - Worst RF Output Power Plots (beamforming)



Note 1: RF Output Power Plots w/o Duty Factor

Maximum Average Conducted Output Power (5725-5850MHz band) (non-beamforming)									
Modulation Mode	N_{TX}	Freq. (MHz)	Output Power (dBm)					Antenna Gain (dBi)	Power Limit
			Chain Port 1	Chain Port 2	Chain Port 3	Chain Port 4	Sum Chain		
11a	4	5745	18.71	18.53	17.98	19.49	24.73	3.91	30.00
11a	4	5785	18.33	17.97	17.76	18.76	24.24	3.91	30.00
11a	4	5825	18.52	17.68	17.45	18.43	24.06	3.91	30.00
HT20	4	5745	19.59	19.37	18.85	20.24	25.56	3.91	30.00
HT20	4	5785	18.96	19.03	18.61	19.70	25.11	3.91	30.00
HT20	4	5825	18.99	18.22	17.77	18.81	24.49	3.91	30.00
HT40	4	5755	22.12	21.74	20.94	22.27	27.82	3.91	30.00
HT40	4	5795	22.16	21.81	21.16	22.66	28.00	3.91	30.00
VHT20	4	5745	19.41	18.88	18.68	20.01	25.29	3.91	30.00
VHT20	4	5785	18.72	18.55	18.20	19.41	24.76	3.91	30.00
VHT20	4	5825	18.58	17.42	17.34	18.59	24.04	3.91	30.00
VHT40	4	5755	21.95	21.46	20.92	22.36	27.72	3.91	30.00
VHT40	4	5795	21.86	21.37	20.85	22.18	27.61	3.91	30.00
VHT80	4	5775	18.00	17.55	17.12	18.51	23.85	3.91	30.00
Result			Complied						

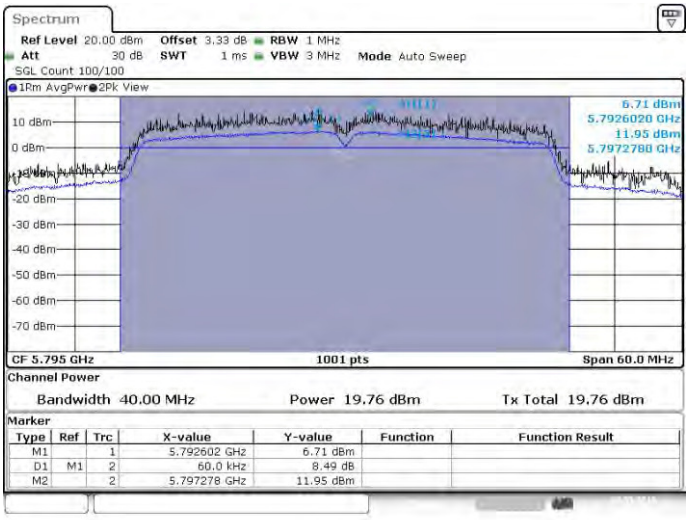
5725-5850MHz - Worst RF Output Power Plots (non-beamforming)



Note 1: RF Output Power Plots w/o Duty Factor

Maximum Average Conducted Output Power (5725-5850MHz band) (beamforming)									
Modulation Mode	N_{TX}	Freq. (MHz)	Output Power (dBm)					Antenna Gain (dBi)	Power Limit
			Chain Port 1	Chain Port 2	Chain Port 3	Chain Port 4	Sum Chain		
HT20	4	5745	16.96	17.04	16.58	17.32	23.00	9.93	26.07
HT20	4	5785	17.36	17.38	16.99	17.75	23.40	9.93	26.07
HT20	4	5825	17.89	17.27	17.20	18.16	23.67	9.93	26.07
HT40	4	5755	19.30	19.15	18.48	19.69	25.20	9.93	26.07
HT40	4	5795	19.29	18.95	18.51	19.79	25.18	9.93	26.07
VHT20	4	5745	16.65	16.77	16.39	17.08	22.75	9.93	26.07
VHT20	4	5785	17.20	17.15	16.70	17.60	23.20	9.93	26.07
VHT20	4	5825	17.50	16.80	16.65	17.63	23.19	9.93	26.07
VHT40	4	5755	19.11	19.07	18.40	19.56	25.07	9.93	26.07
VHT40	4	5795	19.20	18.85	18.36	19.73	25.08	9.93	26.07
VHT80	4	5775	16.08	15.92	15.47	16.56	22.05	9.93	26.07
Result			Complied						

5725-5850MHz - Worst RF Output Power Plots (beamforming)



Note 1: RF Output Power Plots w/o Duty Factor

3.4 Peak Power Spectral Density

3.4.1 Peak Power Spectral Density Limit

Peak Power Spectral Density Limit	
UNII Devices	
☒	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).
☒	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) ≤ 11 dBm/MHz. If G_{TX} > 6 dBi, then PPSD= 11 – (G_{TX} – 6)..
☐	For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If G_{TX} > 6 dBi, then PPSD= 11 – (G_{TX} – 6).
☐	For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If G_{TX} > 6 dBi, then PPSD= 11 – (G_{TX} – 6).
☒	For the 5.725-5.85 GHz band:
☒	Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 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.
PPSD = peak power spectral density that he same method as used to determine the conducted output power shall be used to determine the power spectral density. And power spectral density in dBm/MHz **G_{TX}** = the maximum transmitting antenna directional gain in dBi.	

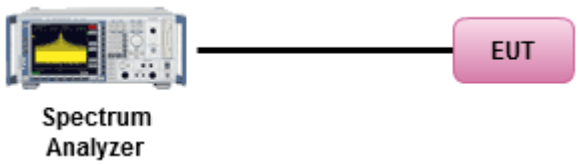
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method		
☒	Peak power spectral density procedures that the same method as used to determine the conducted output power shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall be measured using below options:	
	[duty cycle ≥ 98% or external video / power trigger]	
	☒	Refer as FCC KDB 789033, clause F Method SA-1 (spectral trace averaging).
	☐	Refer as FCC KDB 789033, clause F 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, clause F Method SA-2 (spectral trace averaging).
	☐	Refer as FCC KDB 789033, clause F Method SA-2 Alt. (RMS detection with slow sweep speed)
☒	For conducted measurement.	
	☐	The EUT supports single transmit chain and measurements performed on this transmit chain.
	☐	The EUT supports diversity transmitting. The worst case is in the table below.
	☒	The EUT supports multiple transmit chains using options given below:
		☒ Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
		☐ Option 2: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.
	☒	If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + \ldots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$
	☒	Each individually PPSD plots refer as test report clause 3.3.5 with each individually PPSD plots.

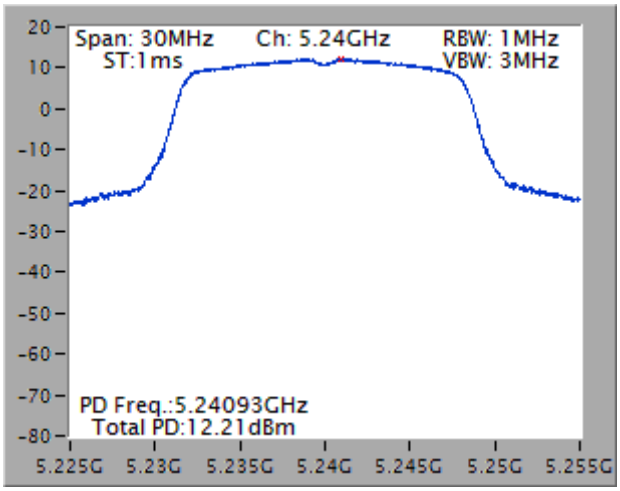
3.4.4 Test Setup

Power Spectral Density


3.4.5 Test Result of Peak Power Spectral Density

Peak Power Spectral Density Result (5150-5250MHz band) (non-beamforming)					
Modulation Mode	**N_{TX}**	**Freq. (MHz)**	**Peak Power Spectral Density (dBm)**	**PSD Limit**	**Antenna Gain (dBi)**
11a	4	5180	11.90	13.07	9.93
11a	4	5200	12.93	13.07	9.93
11a	4	5240	13.04	13.07	9.93
HT20	4	5180	12.90	13.07	9.93
HT20	4	5200	13.00	13.07	9.93
HT20	4	5240	13.01	13.07	9.93
HT40	4	5190	6.20	13.07	9.93
HT40	4	5230	12.20	13.07	9.93
VHT80	4	5210	-0.90	13.07	9.93
Result			**Complied**		

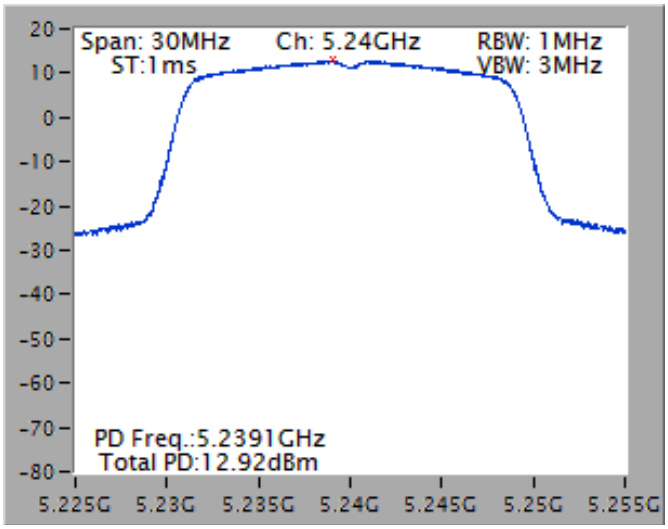
5150-5250MHz - Worst Power Spectral Density Plots (non-beamforming)



Note 1: Power Density Plots w/o Duty Factor

Peak Power Spectral Density Result (5150-5250MHz band) (beamforming)					
Modulation Mode	**N_{TX}**	**Freq. (MHz)**	**Peak Power Spectral Density (dBm)**	**PSD Limit**	**Antenna Gain (dBi)**
HT20	4	5180	11.01	13.07	9.93
HT20	4	5200	12.87	13.07	9.93
HT20	4	5240	12.95	13.07	9.93
HT40	4	5190	5.84	13.07	9.93
HT40	4	5230	12.49	13.07	9.93
VHT80	4	5210	0.08	13.07	9.93
Result			**Complied**		

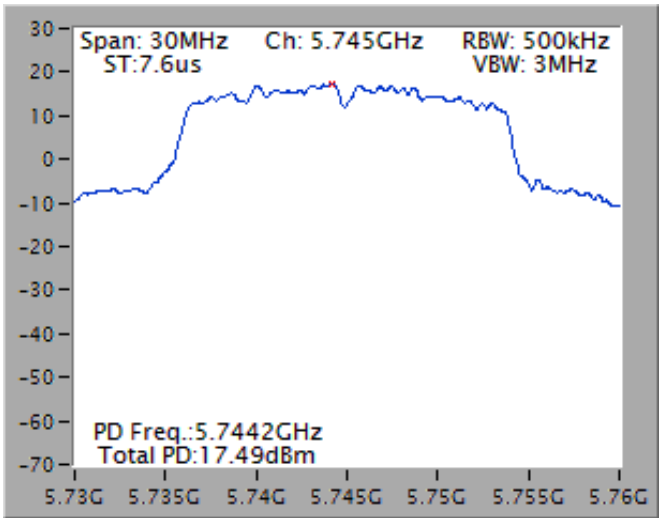
5150-5250MHz - Worst Power Spectral Density Plots (beamforming)



Note 1: Power Density Plots w/o Duty Factor

Peak Power Spectral Density Result (5725-5850MHz band) (non-beamforming)					
Modulation Mode	**N_{TX}**	**Freq. (MHz)**	**Peak Power Spectral Density (dBm/500kHz)**	**PSD Limit**	**Antenna Gain (dBi)**
11a	4	5745	17.05	26.07	9.93
11a	4	5785	16.39	26.07	9.93
11a	4	5825	16.70	26.07	9.93
HT20	4	5745	18.35	26.07	9.93
HT20	4	5785	17.81	26.07	9.93
HT20	4	5825	17.29	26.07	9.93
HT40	4	5755	17.99	26.07	9.93
HT40	4	5795	18.17	26.07	9.93
VHT80	4	5775	15.61	26.07	9.93
Result			**Complied**		

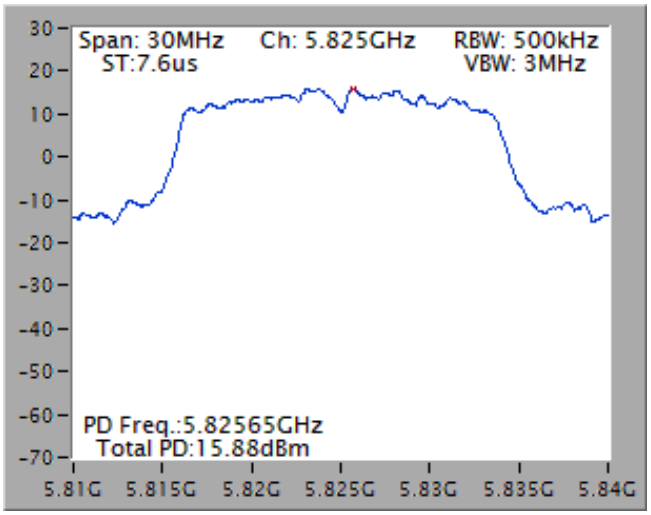
5725-5850MHz - Worst Power Spectral Density Plots (non-beamforming)



Note 1: Power Density Plots w/o Duty Factor

Peak Power Spectral Density Result (5725-5850MHz band) (beamforming)					
Modulation Mode	**N_{TX}**	**Freq. (MHz)**	**Peak Power Spectral Density (dBm/500kHz)**	**PSD Limit**	**Antenna Gain (dBi)**
HT20	4	5745	14.64	26.07	9.93
HT20	4	5785	15.28	26.07	9.93
HT20	4	5825	15.91	26.07	9.93
HT40	4	5755	14.20	26.07	9.93
HT40	4	5795	13.98	26.07	9.93
VHT80	4	5775	9.13	26.07	9.93
Result			**Complied**		

5725-5850MHz - Worst Power Spectral Density Plots (beamforming)

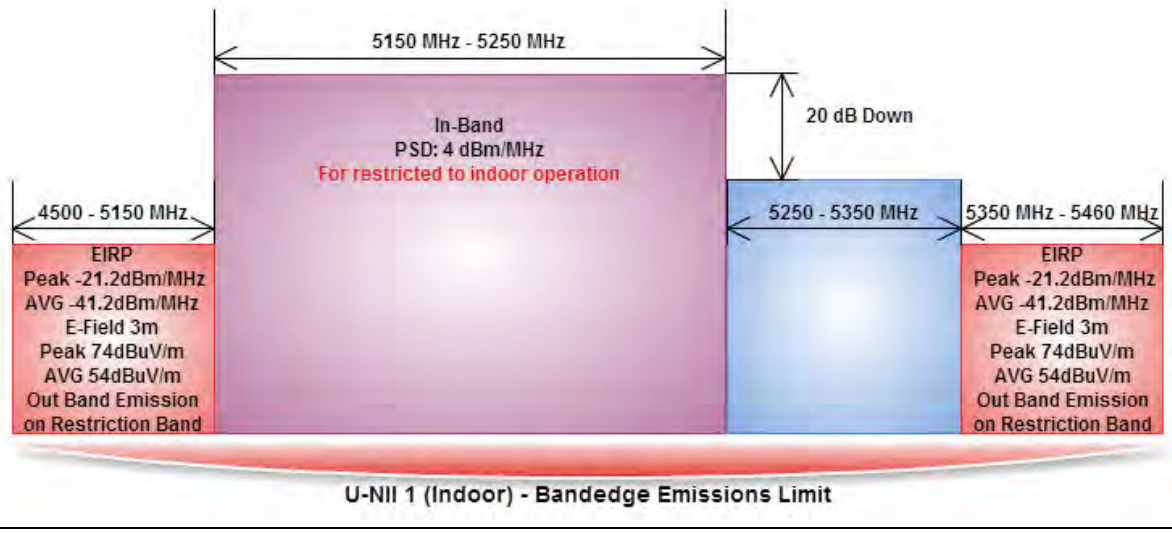


Note 1: Power Density Plots w/o Duty Factor

3.5 Transmitter Radiated Bandedge Emissions

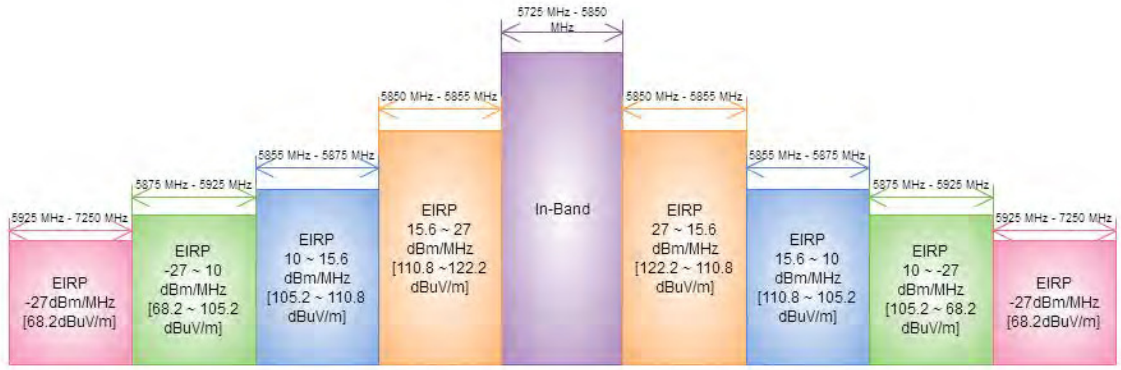
3.5.1 Transmitter Radiated Bandedge Emissions Limit

Transmitter Radiated Bandedge Emissions Limit for Indoor: 5.15-5.25 GHz band



Refer as FCC KDB 789033, 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.

Transmitter Radiated Bandedge Emissions Limit for 5.8GHz band: 5.725-5.85 GHz band



Refer as FCC KDB 789033, G)2)c) 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 FCC 16-24 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

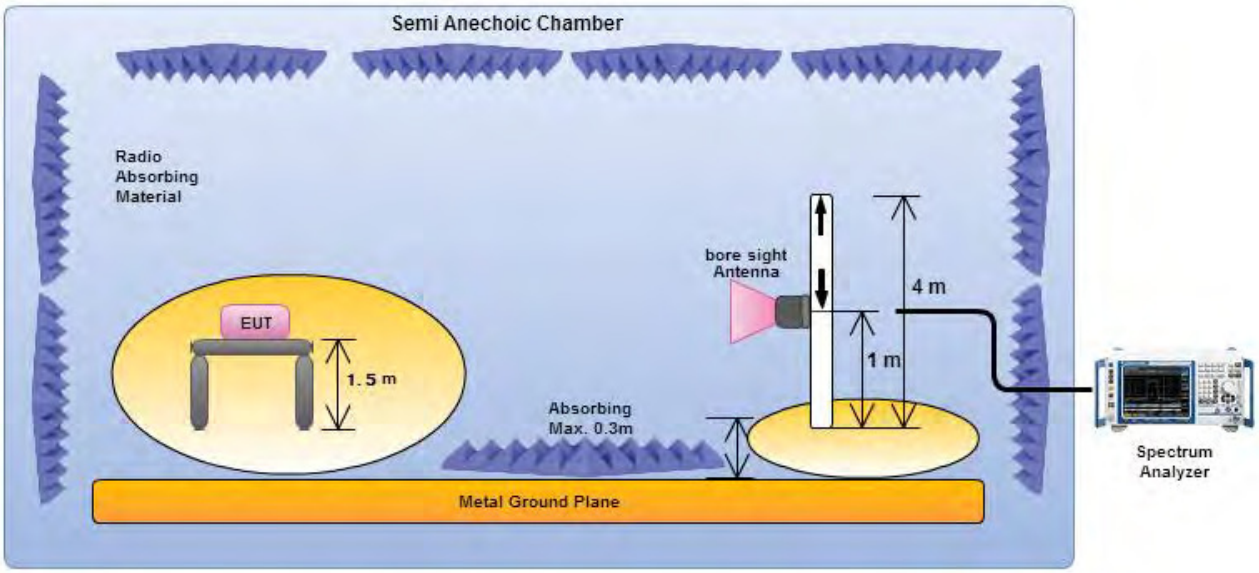
Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

Test Method	
☒	The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].
☒	Refer as ANSI C63.10, clause 6.10 bandedge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.
☐	If EUT operate in adjacent contiguous bands, bandedge testing performed at the lowest frequency channel at lower-band and highest frequency channel at higher-band. Transmitter in-band emissions will consist of adjacent contiguous bands (e.g., IEEE 802.11ac VHT160 The lowest frequency channel at lower-band and highest frequency channel at higher-band in-band emissions will consist of two adjacent 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).
☐	If EUT operate in individual non-contiguous bands, bandedge testing performed at the lowest frequency channel and highest frequency channel within lower-band and higher-band. (e.g., (e.g., IEEE 802.11ac VHT160)
	☐ Operating in 5.25-5.35 GHz band (lower-band) and 5.47-5.725 GHz band (higher-band).
	☐ Operating in 5.15-5.25 GHz band (lower-band) and 5.725-5.85 GHz band (higher-band).
☒	For the transmitter unwanted emissions shall be measured using following options below:
	☒ Refer as FCC KDB 789033, clause G)2) for unwanted emissions into non-restricted bands.
	☒ Refer as FCC KDB 789033, clause G)1) for unwanted emissions into restricted bands.
	☐ Refer as FCC KDB 789033, G)6) Method AD (Trace Averaging).
	☐ Refer as FCC KDB 789033, G)6) Method VB (Reduced VBW).
	☒ Refer as ANSI C63.10, clause 4.1.4.2.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.
	☐ Refer as ANSI C63.10, clause 4.1.4.2.4 average value of pulsed emissions.
	☒ Refer as FCC KDB 789033, clause G)5) measurement procedure peak limit.
	☐ Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.
☒	For the transmitter bandedge emissions shall be measured using following options below:
	☐ Refer as FCC KDB 789033, 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 6.10 for band-edge testing.
	☐ Refer as ANSI C63.10, clause 6.10.6.2 for marker-delta method for band-edge measurements.
☒	For radiated measurement, refer as ANSI C63.10, clause 6.6. Test distance is 3m.
☒	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). Measurements in the bandedge are typically made at a closer distance 3m, because the instrumentation noise floor is typically close to the radiated emission limit.

3.5.4 Test Setup

Transmitter Radiated Bandedge Emissions



Electric field tests shall be performed in transmitter bandedge emissions using a calibrated horn antenna.

3.5.5 Transmitter Radiated Bandedge Emissions (with Antenna)_non-beamforming

U-NII 5150-5250MHz Transmitter Radiated Bandedge (with Antenna)_non-beamforming

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	4	5180	3	5149.800	70.76	74	5150.000	52.93	54	H
11a	4	5240	3	5390.400	63.08	74	5118.600	49.13	54	H
HT20	4	5180	3	5149.500	68.48	74	5149.800	52.80	54	H
HT20	4	5240	3	5124.000	64.08	74	5128.200	48.81	54	H
HT40	4	5190	3	5149.940	70.08	74	5149.940	52.80	54	H
HT40	4	5230	3	5149.800	67.20	74	5149.800	52.69	54	H
VHT80	4	5210	3	5141.400	63.26	74	5149.800	52.86	54	H

Note 1: Measurement worst emissions of receive antenna polarization.

5725-5850MHz Transmitter Radiated Bandedge (with Antenna)_non-beamforming

Modulation Mode	N_{TX}	Freq. (MHz)	Measure Distance (m)	Freq. (MHz) PK	Level (dBuV/m) PK	Limit (dBuV/m) PK	Pol.
11a	4	5745	3	5631.310	64.37	68.2	H
11a	4	5825	3	5927.960	62.51	68.2	H
HT20	4	5745	3	5632.550	63.62	68.2	H
HT20	4	5825	3	5936.600	62.39	68.2	H
HT40	4	5755	3	5640.320	65.90	68.2	H
HT40	4	5795	3	5939.740	62.81	68.2	H
VHT80	4	5775	3	5649.500	66.94	68.2	H

Note 1: Measurement worst emissions of receive antenna polarization.

3.5.6 Transmitter Radiated Bandedge Emissions (with Antenna)_beamforming

U-NII 5150-5250MHz Transmitter Radiated Bandedge (with Antenna)_beamforming										
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.
HT20	4	5180	3	5149.800	69.47	74	5150.00	52.27	54	H
HT20	4	5240	3	5119.200	64.31	74	5127.600	49.80	54	H
HT40	4	5190	3	5146.860	72.16	74	5149.720	52.90	54	H
HT40	4	5230	3	5145.000	68.31	74	5149.800	52.06	54	H
VHT80	4	5210	3	5145.600	67.76	74	5149.200	52.92	54	H
Note 1: Measurement worst emissions of receive antenna polarization.										

5725-5850MHz Transmitter Radiated Bandedge (with Antenna)_beamforming							
Modulation Mode	N_{TX}	Freq. (MHz)	Measure Distance (m)	Freq. (MHz) PK	Level (dBuV/m) PK	Limit (dBuV/m) PK	Pol.
HT20	4	5745	3	5625.730	65.17	68.2	H
HT20	4	5825	3	5943.000	63.91	68.2	H
HT40	4	5755	3	5647.520	64.99	68.2	H
HT40	4	5795	3	5958.190	63.29	68.2	H
VHT80	4	5775	3	5637.500	66.90	68.2	H
Note 1: Measurement worst emissions of receive antenna polarization.							

3.6 Transmitter Radiated Unwanted Emissions

3.6.1 Transmitter Radiated Unwanted Emissions Limit

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

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.p. -27 dBm [68.2 dBuV/m@3m]
5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.725 - 5.85 GHz	5.650-5700 GHz: e.i.r.p. -27 ~ 10 dBm [68.2 ~ 105.2 dBuV/m@3m] 5.700-5720 GHz: e.i.r.p. 10 ~ 15.6 dBm [105.2 ~ 110.8 dBuV/m@3m] 5.720-5725 GHz: e.i.r.p. 15.6 ~ 27 dBm [110.8 ~ 122.2 dBuV/m@3m] 5.850-5.855 GHz: e.i.r.p. 27 ~ 15.6 dBm [122.2 ~ 110.8 dBuV/m@3m] 5.855-5.875 GHz: e.i.r.p. 15.6 ~ 10 dBm [110.8 ~ 105.2 dBuV/m@3m] 5.875-5.925 GHz: e.i.r.p. 10 ~ -27 dBm [105.2 ~ 68.2dBuV/m@3m] Other un-restricted band: e.i.r.p. -27 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

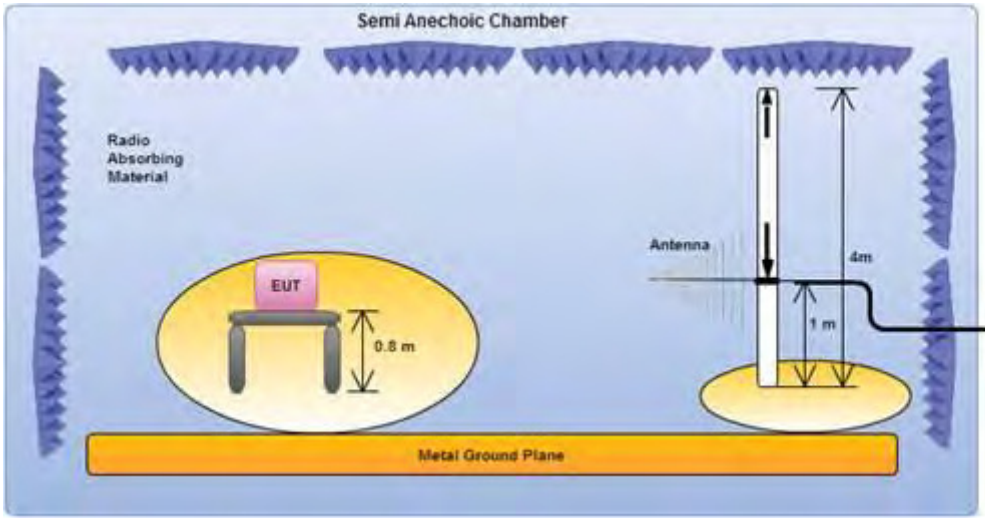
Refer a test equipment and calibration data table in this test report.

3.6.3 Test Procedures

Test Method		
☒	Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).	
☒	The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].	
☒	For the transmitter unwanted emissions shall be measured using following options below:	
	☒	Refer as FCC KDB 789033, clause G)2) for unwanted emissions into non-restricted bands.
	☒	Refer as FCC KDB 789033, clause G)1) for unwanted emissions into restricted bands.
		☐ Refer as FCC KDB 789033, G)6) Method AD (Trace Averaging).
		☐ Refer as FCC KDB 789033, 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, clause G)5) measurement procedure peak limit.
		☐ Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.
☒	For radiated measurement.	
	☒	Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.
	☒	Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.
	☒	Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz. For 1 GHz to 5 GHz, test distance is 3m; For 5 GHz to 40 GHz, test distance is 3m.
☒	The any unwanted emissions level shall not exceed the fundamental emission level.	
☒	All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.	

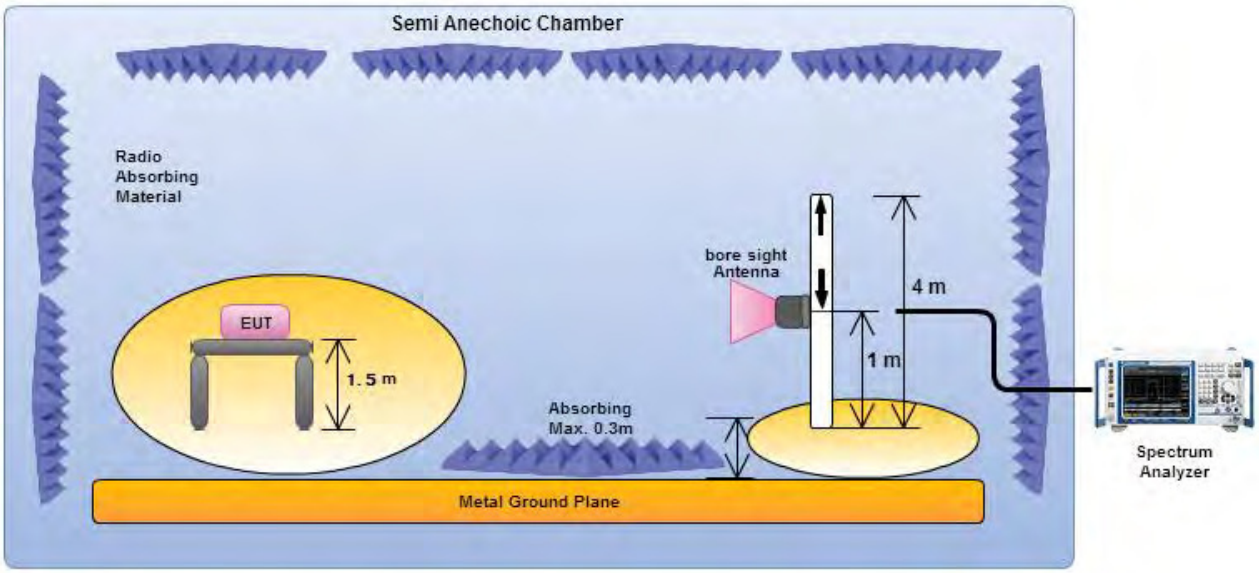
3.6.4 Test Setup

Transmitter Radiated Unwanted Emissions Below 1GHz



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



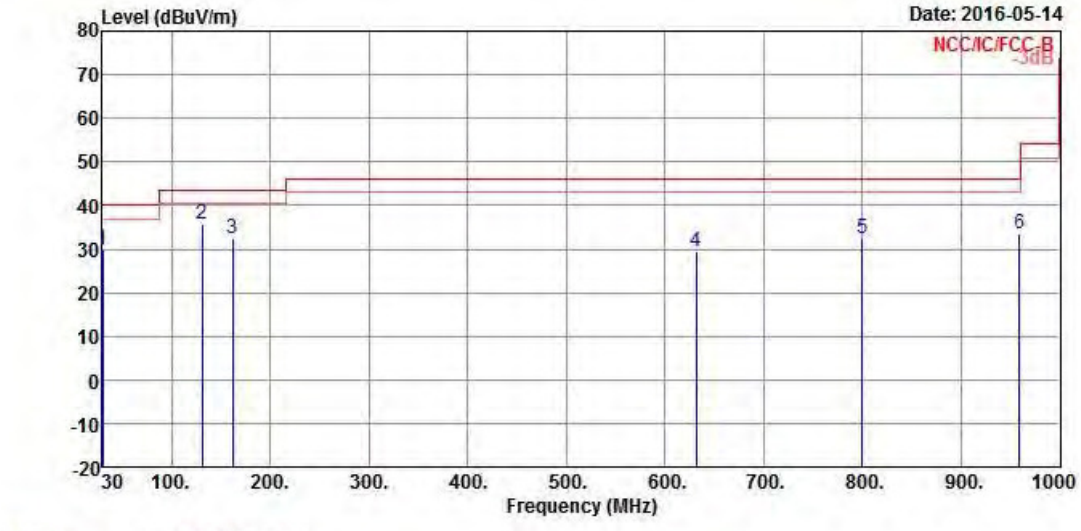
Electric field tests shall be performed in the frequency range of 1 GHz to 10th harmonic of highest fundamental frequency or 40 GHz using a calibrated horn antenna.

3.6.5 Transmitter Radiated Unwanted Emissions (Below 30MHz)

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

3.6.6 Transmitter Radiated Unwanted Emissions (Below 1GHz)

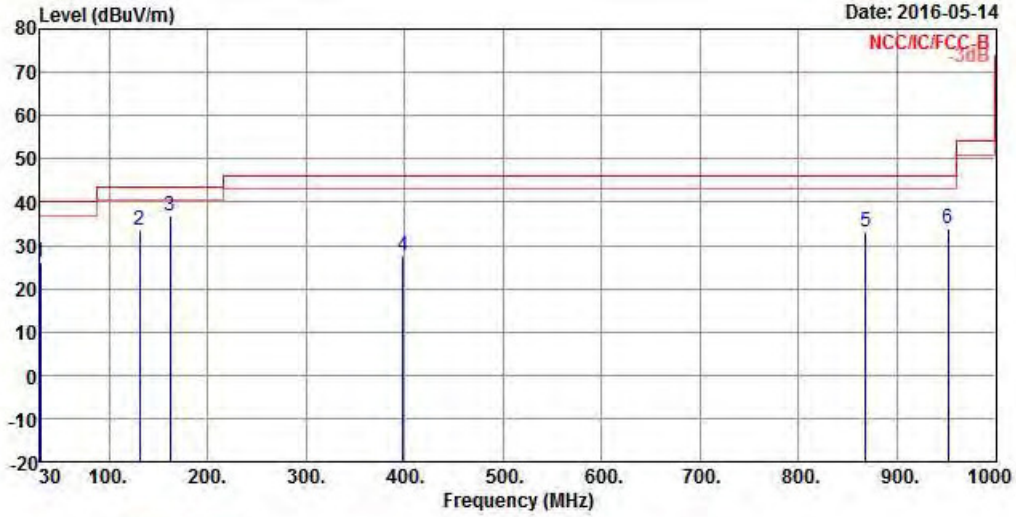
Transmitter Radiated Unwanted Emissions (Below 1GHz)_non-beamforming			
Operating Mode	Transmit Mode	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	30.000	29.86	-10.14	40.00	31.34	25.62	0.78	27.88	Peak
2	130.880	35.54	-7.96	43.50	42.87	18.56	1.77	27.66	Peak
3	161.920	32.58	-10.92	43.50	41.80	16.34	2.00	27.56	Peak
4	631.400	29.56	-16.44	46.00	28.61	25.16	4.18	28.39	Peak
5	800.180	32.31	-13.69	46.00	29.14	26.59	4.56	27.98	Peak
6	959.260	33.61	-12.39	46.00	27.89	27.98	5.19	27.45	Peak

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

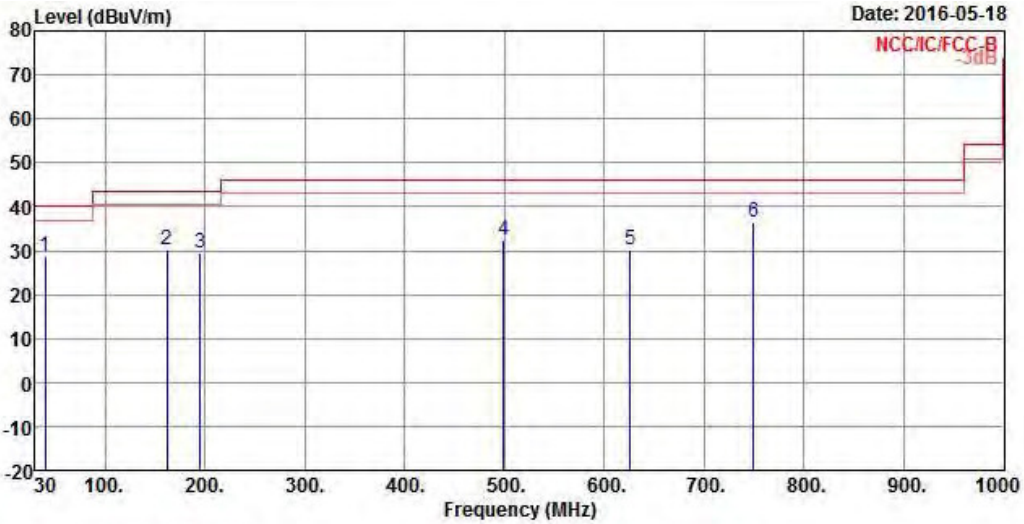
Transmitter Radiated Unwanted Emissions (Below 1GHz)_non-beamforming			
Operating Mode	Transmit Mode	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	30.000	26.29	-13.71	40.00	27.77	25.62	0.78	27.88	Peak
2	130.880	33.42	-10.08	43.50	40.75	18.56	1.77	27.66	Peak
3	161.920	36.97	-6.53	43.50	46.19	16.34	2.00	27.56	Peak
4	398.600	27.61	-18.39	46.00	29.93	22.33	3.24	27.89	Peak
5	868.080	33.09	-12.91	46.00	28.74	27.29	4.78	27.72	Peak
6	951.500	33.73	-12.27	46.00	28.06	27.96	5.18	27.47	Peak

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

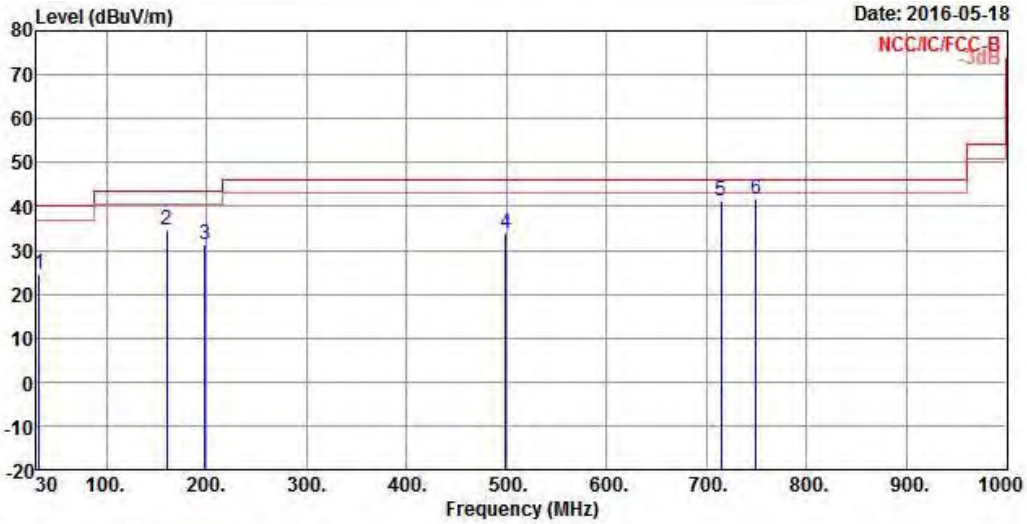
Transmitter Radiated Unwanted Emissions (Below 1GHz)_beamforming			
Operating Mode	Transmit Mode	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	39.700	28.88	-11.12	40.00	35.82	19.69	0.90	27.53	Peak
2	161.920	30.34	-13.16	43.50	39.10	16.34	2.00	27.10	Peak
3	194.900	29.41	-14.09	43.50	38.17	15.94	2.24	26.94	Peak
4	499.480	32.51	-13.49	46.00	32.94	23.80	3.56	27.79	Peak
5	625.580	30.35	-15.65	46.00	29.08	25.11	4.16	28.00	Peak
6	749.740	36.35	-9.65	46.00	33.41	26.27	4.53	27.86	Peak

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

Transmitter Radiated Unwanted Emissions (Below 1GHz)_beamforming			
Operating Mode	Transmit Mode	**Polarization**	H

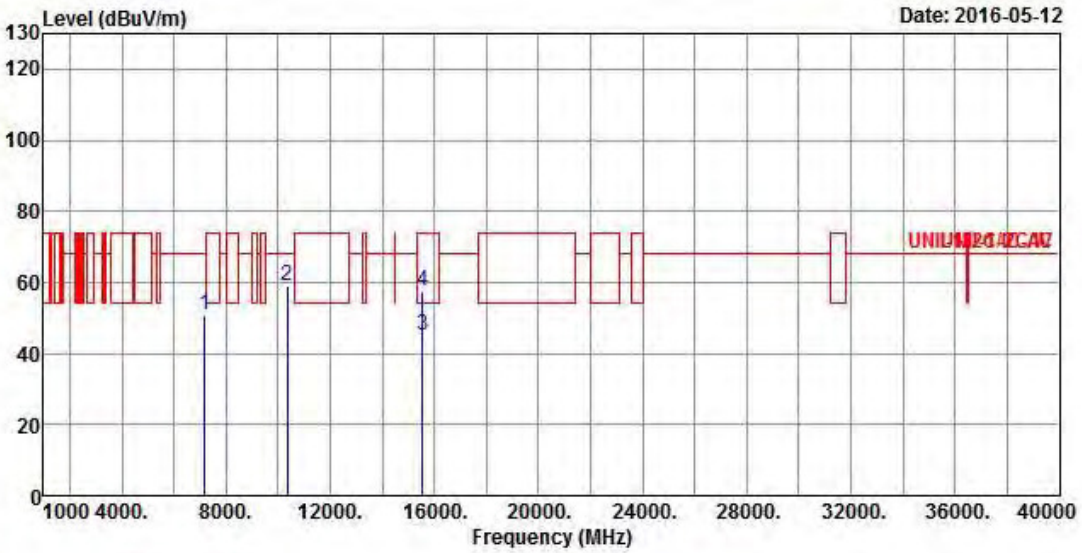


	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	32.910	24.77	-15.23	40.00	27.27	24.22	0.82	27.54	Peak
2	159.980	34.72	-8.78	43.50	43.42	16.43	1.98	27.11	Peak
3	198.780	31.22	-12.28	43.50	39.64	16.24	2.27	26.93	Peak
4	499.480	33.89	-12.11	46.00	34.32	23.80	3.56	27.79	Peak
5	714.820	41.27	-4.73	46.00	39.04	25.70	4.44	27.91	Peak
6	749.740	41.55	-4.45	46.00	38.61	26.27	4.53	27.86	QP

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

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

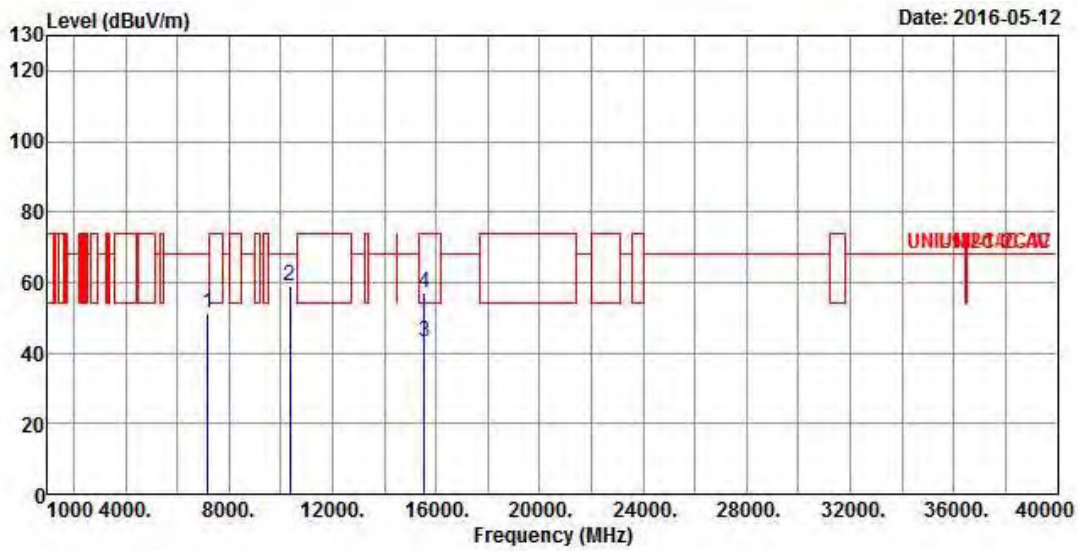
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	11a	**Test Freq. (MHz)**	5180
N_{TX}	4	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7176.000	50.85	-17.35	68.20	40.91	35.65	7.05	32.76	Peak
2	10360.000	58.82	-9.38	68.20	44.34	38.90	8.47	32.89	Peak
3	15540.000	45.02	-8.98	54.00	29.12	37.83	10.41	32.34	Average
4	15540.000	57.39	-16.61	74.00	41.49	37.83	10.41	32.34	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.

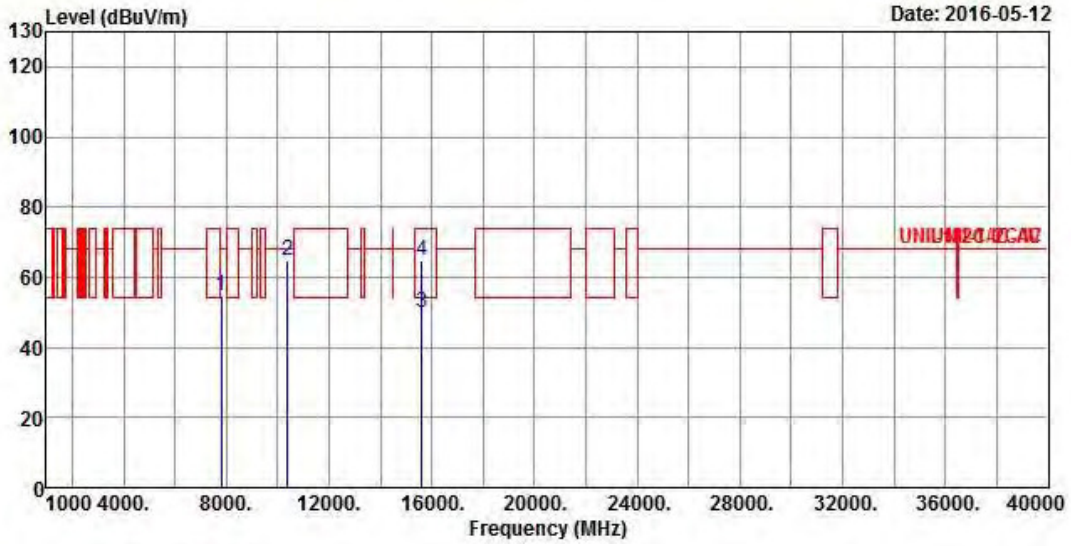
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	11a	**Test Freq. (MHz)**	5180
N_{TX}	4	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7180.000	51.29	-16.91	68.20	41.31	35.69	7.05	32.76	Peak
2	10360.000	59.23	-8.97	68.20	44.75	38.90	8.47	32.89	Peak
3	15540.000	43.10	-10.90	54.00	27.20	37.83	10.41	32.34	Average
4	15540.000	57.13	-16.87	74.00	41.23	37.83	10.41	32.34	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.

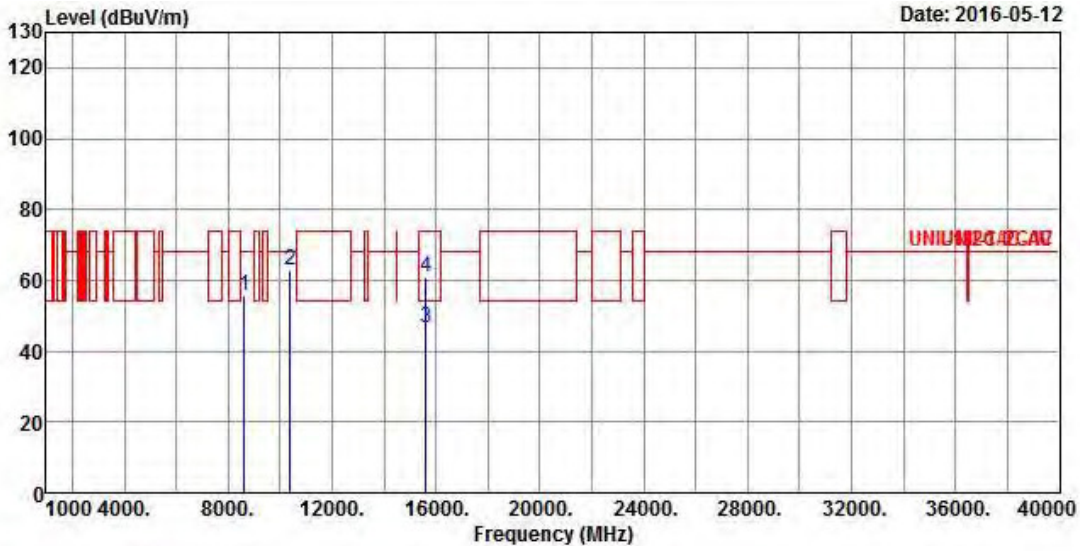
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	11a	**Test Freq. (MHz)**	5200
N_{TX}	4	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7822.000	54.61	-13.59	68.20	43.49	36.88	7.15	32.91	Peak
2	10400.000	64.89	-3.31	68.20	50.35	38.90	8.49	32.85	Peak
3	15600.000	49.98	-4.02	54.00	34.13	37.69	10.52	32.36	Average
4	15600.000	64.53	-9.47	74.00	48.68	37.69	10.52	32.36	Peak

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

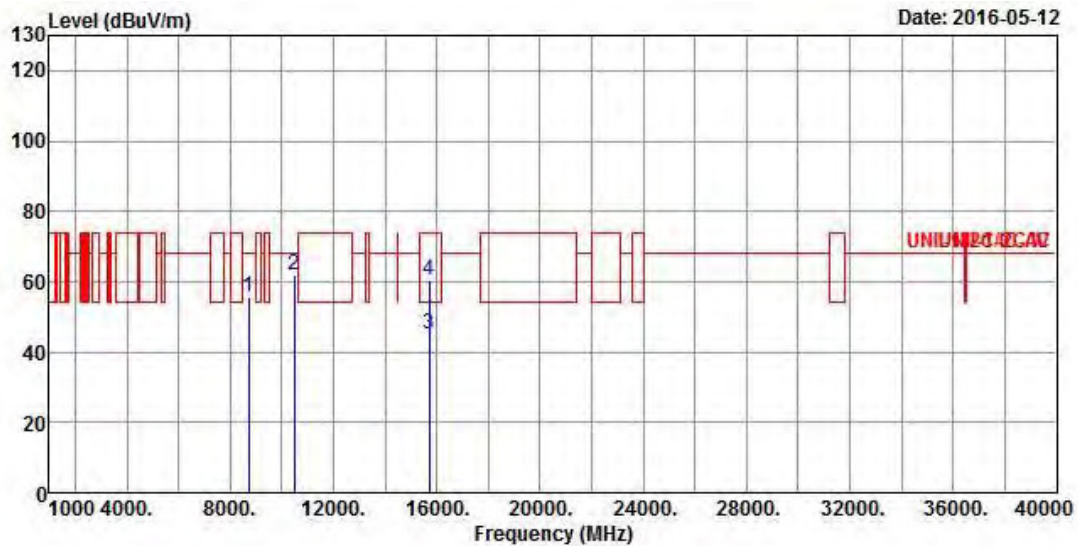
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	11a	**Test Freq. (MHz)**	5200
N_{TX}	4	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8616.000	55.78	-12.42	68.20	43.28	37.72	7.76	32.98	Peak
2	10400.000	62.64	-5.56	68.20	48.10	38.90	8.49	32.85	Peak
3	15600.000	46.69	-7.31	54.00	30.84	37.69	10.52	32.36	Average
4	15600.000	60.97	-13.03	74.00	45.12	37.69	10.52	32.36	Peak

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

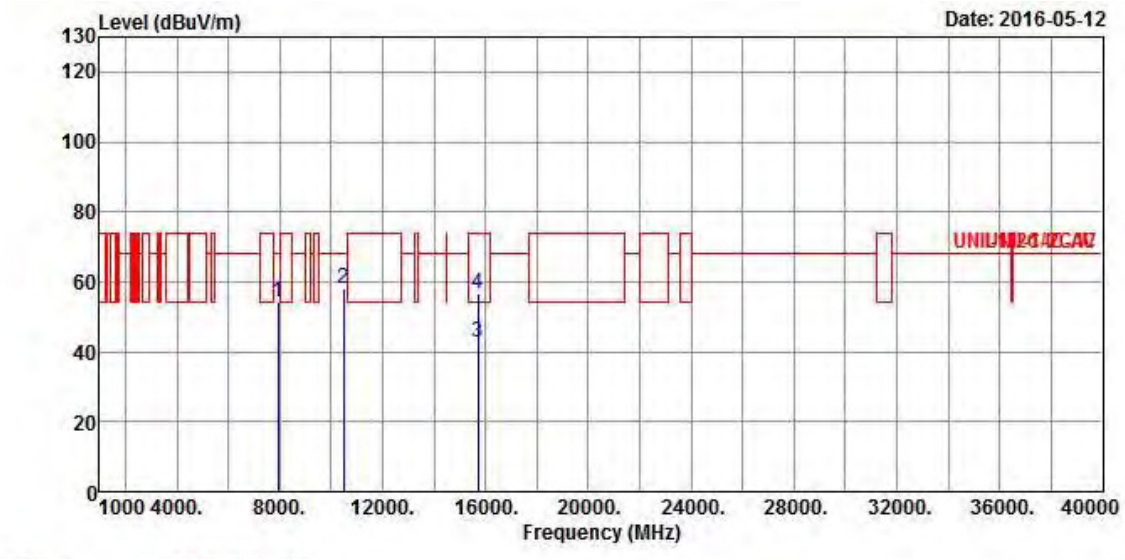
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	11a	**Test Freq. (MHz)**	5240
N_{TX}	4	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8714.000	55.61	-12.59	68.20	43.06	37.74	7.83	33.02	Peak
2	10480.000	61.79	-6.41	68.20	47.12	38.90	8.55	32.78	Peak
3	15720.000	45.31	-8.69	54.00	29.50	37.45	10.75	32.39	Average
4	15720.000	60.37	-13.63	74.00	44.56	37.45	10.75	32.39	Peak

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

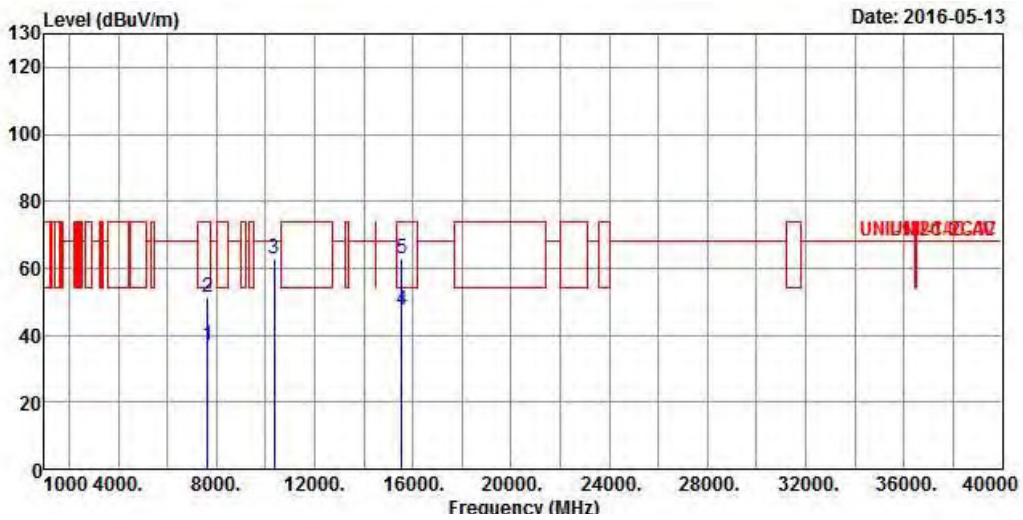
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	11a	**Test Freq. (MHz)**	5240
N_{TX}	4	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7951.000	54.42	-13.78	68.20	43.02	37.04	7.29	32.93	Peak
2	10480.000	57.98	-10.22	68.20	43.31	38.90	8.55	32.78	Peak
3	15720.000	42.69	-11.31	54.00	26.88	37.45	10.75	32.39	Average
4	15720.000	56.77	-17.23	74.00	40.96	37.45	10.75	32.39	Peak

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

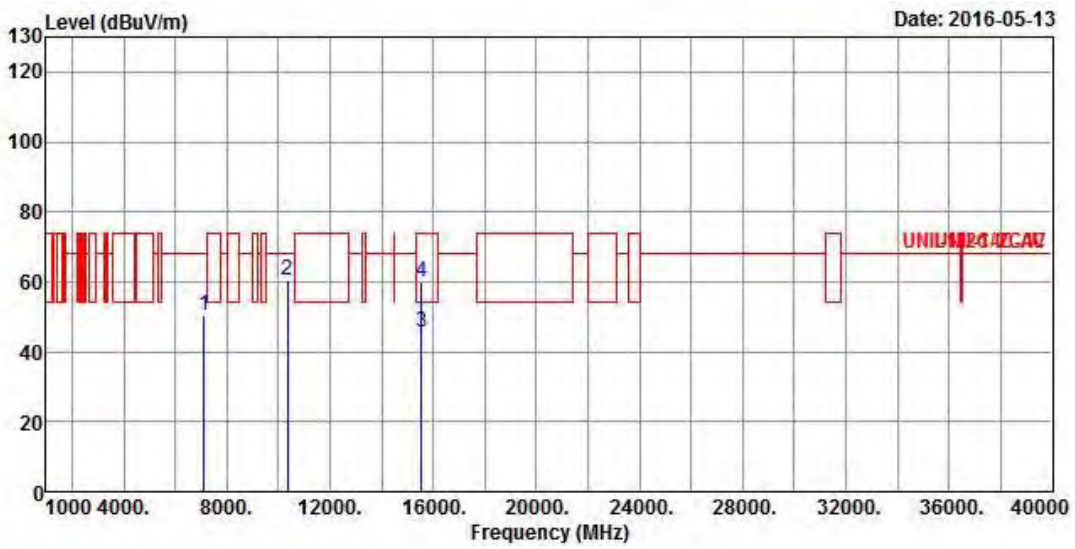
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	HT20	**Test Freq. (MHz)**	5180
N_{TX}	4	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7640.000	37.11	-16.89	54.00	26.16	36.68	7.15	32.88	Average
2	7640.000	51.54	-22.46	74.00	40.59	36.68	7.15	32.88	Peak
3	10360.000	62.73	-5.47	68.20	48.25	38.90	8.47	32.89	Peak
4	15540.000	47.52	-6.48	54.00	31.62	37.83	10.41	32.34	Average
5	15540.000	62.69	-11.31	74.00	46.79	37.83	10.41	32.34	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.

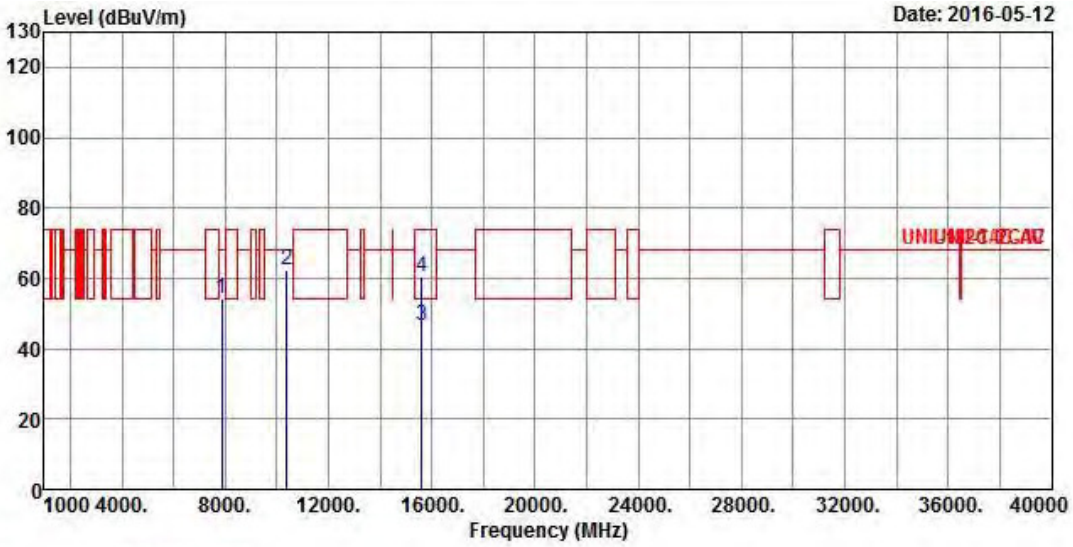
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	HT20	**Test Freq. (MHz)**	5180
N_{TX}	4	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7128.000	50.26	-17.94	68.20	40.42	35.51	7.08	32.75	Peak
2	10360.000	60.42	-7.78	68.20	45.94	38.90	8.47	32.89	Peak
3	15540.000	45.56	-8.44	54.00	29.66	37.83	10.41	32.34	Average
4	15540.000	60.03	-13.97	74.00	44.13	37.83	10.41	32.34	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.

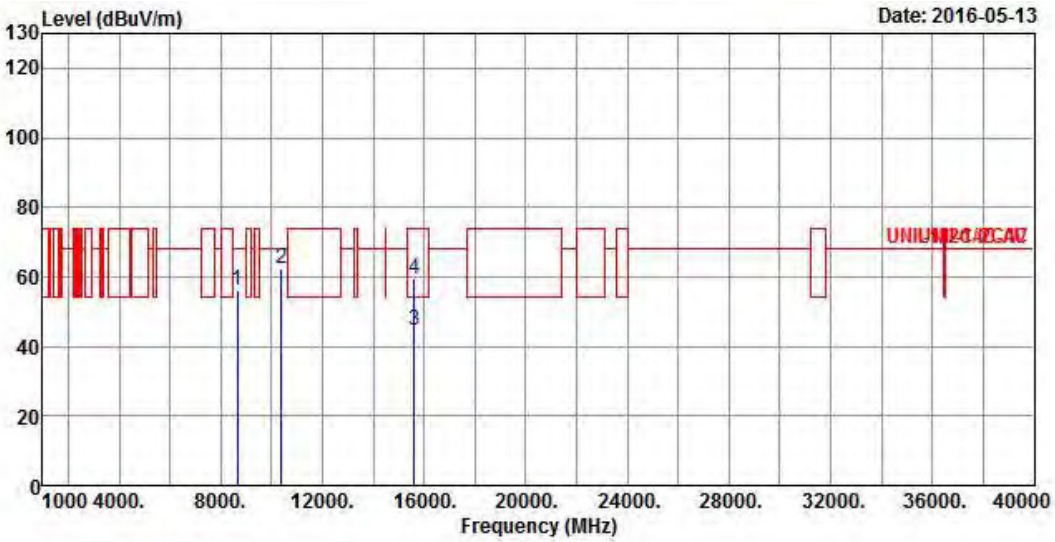
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	HT20	**Test Freq. (MHz)**	5200
N_{TX}	4	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7884.000	54.23	-13.97	68.20	42.97	36.96	7.22	32.92	Peak
2	10400.000	62.38	-5.82	68.20	47.84	38.90	8.49	32.85	Peak
3	15600.000	46.34	-7.66	54.00	30.49	37.69	10.52	32.36	Average
4	15600.000	60.27	-13.73	74.00	44.42	37.69	10.52	32.36	Peak

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

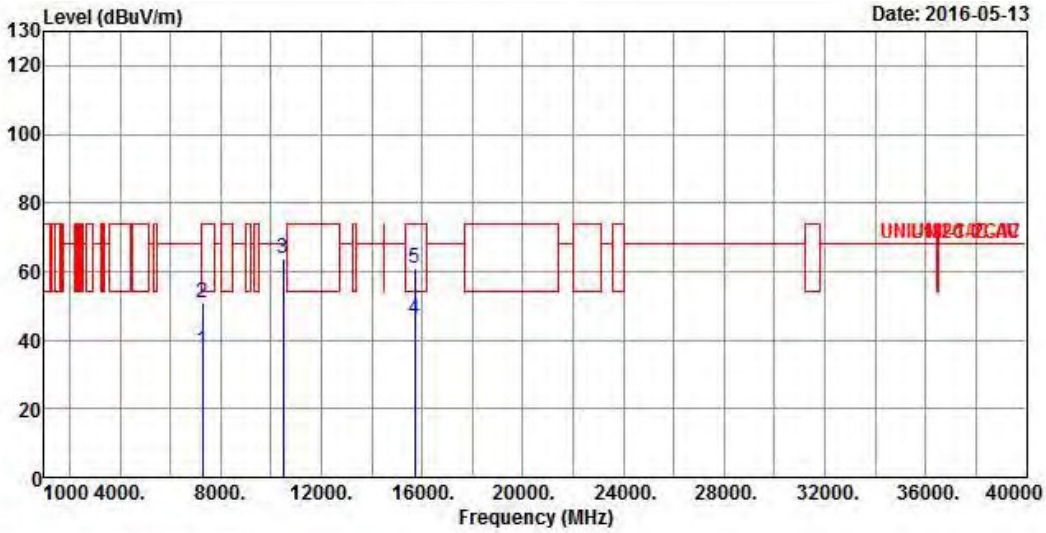
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	HT20	**Test Freq. (MHz)**	5200
N_{TX}	4	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8655.000	56.04	-12.16	68.20	43.51	37.73	7.79	32.99	Peak
2	10400.000	62.37	-5.83	68.20	47.83	38.90	8.49	32.85	Peak
3	15600.000	44.42	-9.58	54.00	28.57	37.69	10.52	32.36	Average
4	15600.000	59.37	-14.63	74.00	43.52	37.69	10.52	32.36	Peak

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

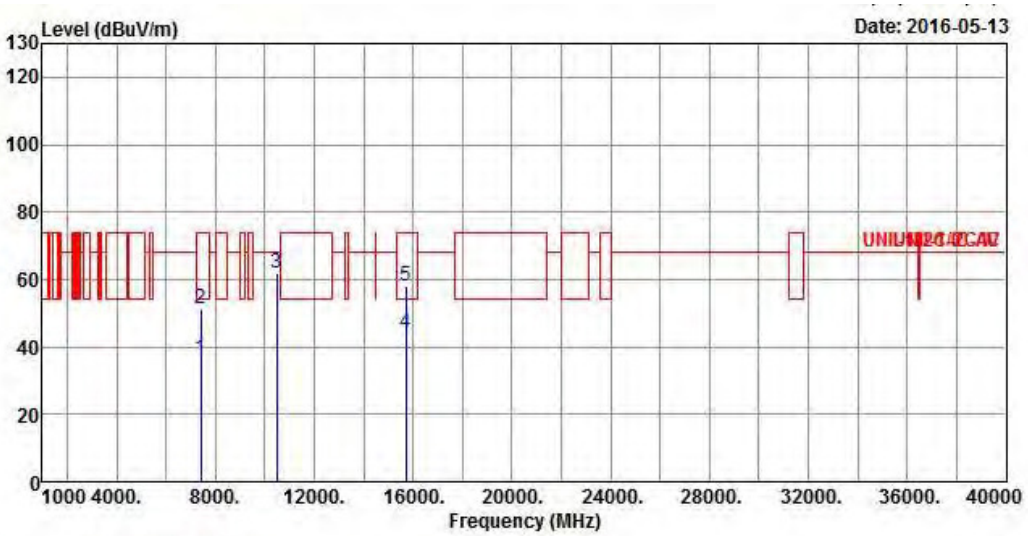
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	HT20	**Test Freq. (MHz)**	5240
N_{TX}	4	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7280.000	36.74	-17.26	54.00	26.58	35.92	7.03	32.79	Average
2	7280.000	50.99	-23.01	74.00	40.83	35.92	7.03	32.79	Peak
3	10480.000	63.77	-4.43	68.20	49.10	38.90	8.55	32.78	Peak
4	15720.000	45.93	-8.07	54.00	30.12	37.45	10.75	32.39	Average
5	15720.000	61.07	-12.93	74.00	45.26	37.45	10.75	32.39	Peak

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

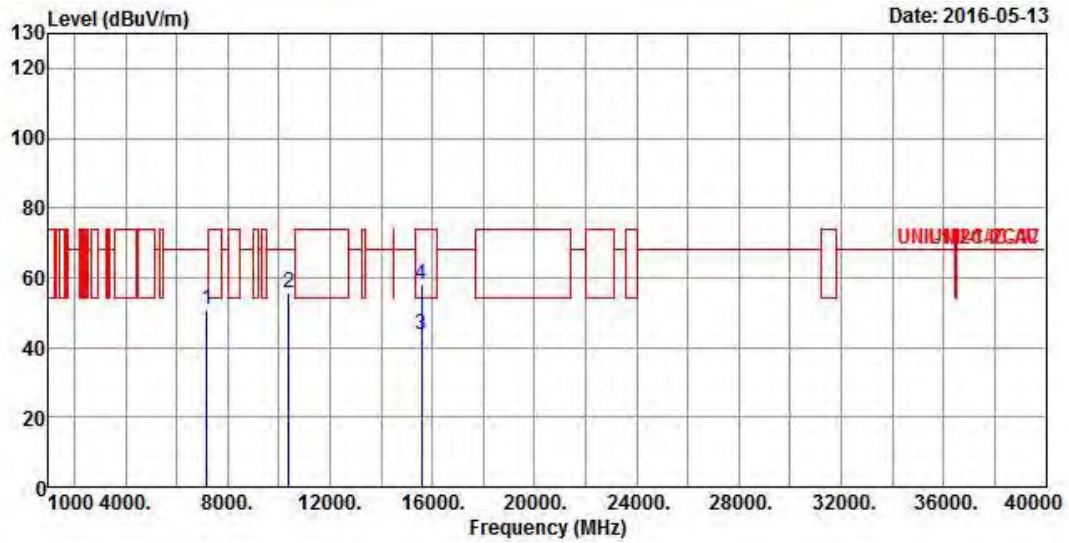
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	HT20	**Test Freq. (MHz)**	5240
N_{TX}	4	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7412.000	36.58	-17.42	54.00	26.11	36.28	7.02	32.83	Average
2	7412.000	51.22	-22.78	74.00	40.75	36.28	7.02	32.83	Peak
3	10480.000	61.95	-6.25	68.20	47.28	38.90	8.55	32.78	Peak
4	15720.000	43.93	-10.07	54.00	28.12	37.45	10.75	32.39	Average
5	15720.000	57.95	-16.05	74.00	42.14	37.45	10.75	32.39	Peak

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

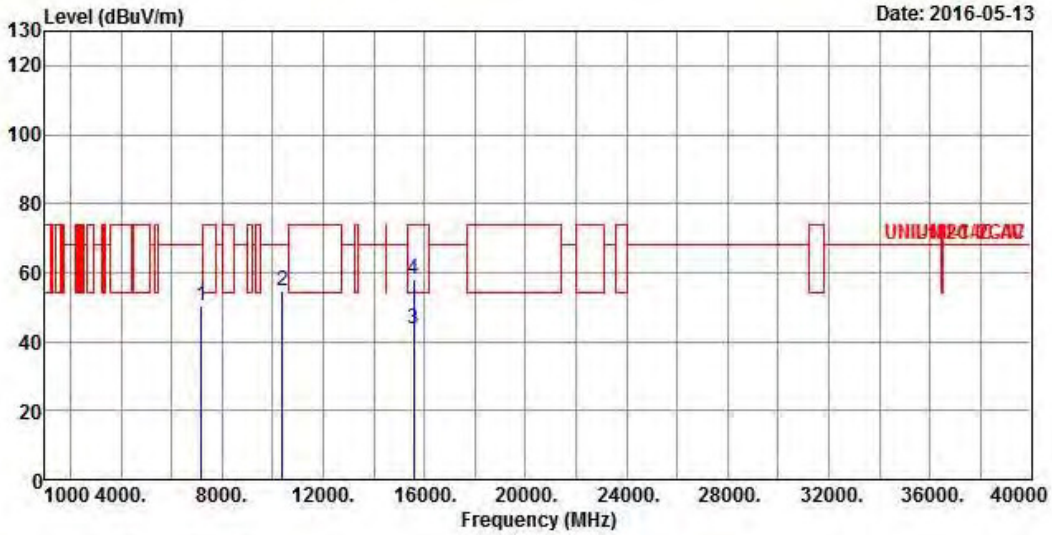
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	HT40	**Test Freq. (MHz)**	5190
N_{TX}	4	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7184.000	50.81	-17.39	68.20	40.84	35.69	7.05	32.77	Peak
2	10380.000	55.43	-12.77	68.20	40.92	38.90	8.48	32.87	Peak
3	15570.000	43.83	-10.17	54.00	27.96	37.76	10.46	32.35	Average
4	15570.000	58.14	-15.86	74.00	42.27	37.76	10.46	32.35	Peak

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

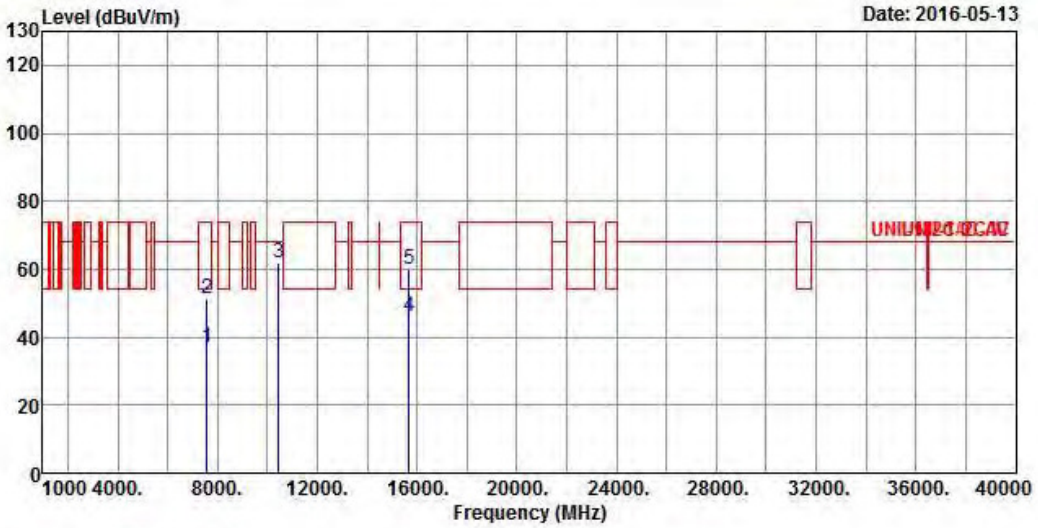
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	HT40	**Test Freq. (MHz)**	5190
N_{TX}	4	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7192.000	50.51	-17.69	68.20	40.55	35.69	7.04	32.77	Peak
2	10380.000	54.84	-13.36	68.20	40.33	38.90	8.48	32.87	Peak
3	15570.000	43.85	-10.15	54.00	27.98	37.76	10.46	32.35	Average
4	15570.000	57.96	-16.04	74.00	42.09	37.76	10.46	32.35	Peak

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

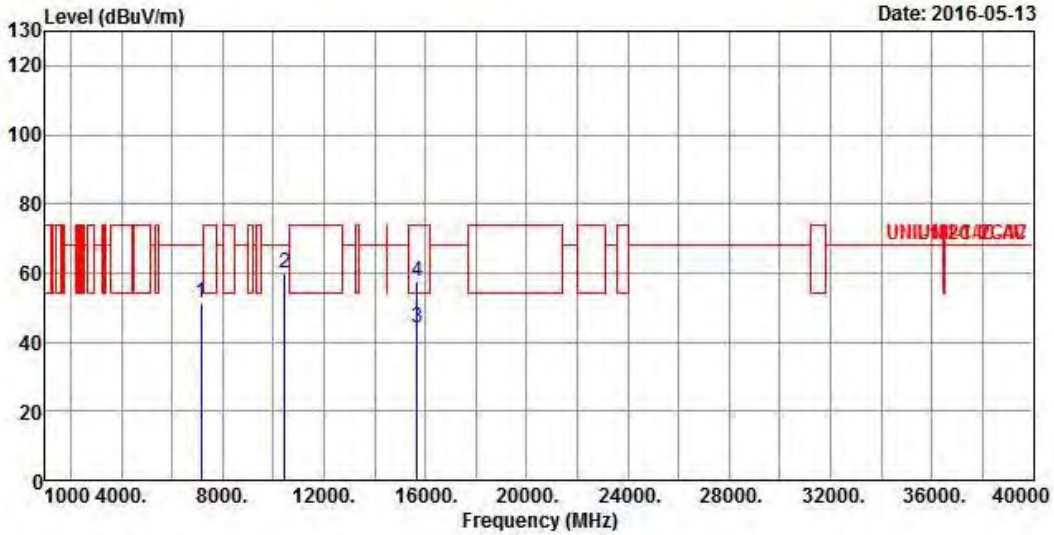
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	HT40	**Test Freq. (MHz)**	5230
N_{TX}	4	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7580.000	37.14	-16.86	54.00	26.27	36.60	7.14	32.87	Average
2	7580.000	51.47	-22.53	74.00	40.60	36.60	7.14	32.87	Peak
3	10460.000	61.78	-6.42	68.20	47.15	38.90	8.53	32.80	Peak
4	15690.000	45.95	-8.05	54.00	30.13	37.52	10.69	32.39	Average
5	15690.000	59.76	-14.24	74.00	43.94	37.52	10.69	32.39	Peak

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

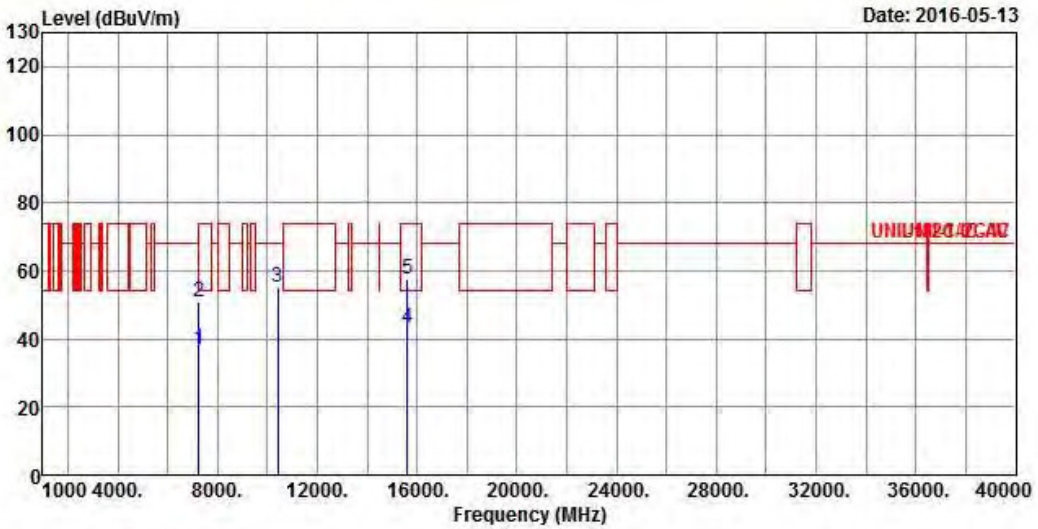
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	HT40	**Test Freq. (MHz)**	5230
N_{TX}	4	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7168.000	51.34	-16.86	68.20	41.39	35.65	7.06	32.76	Peak
2	10460.000	60.16	-8.04	68.20	45.53	38.90	8.53	32.80	Peak
3	15690.000	44.11	-9.89	54.00	28.29	37.52	10.69	32.39	Average
4	15690.000	57.72	-16.28	74.00	41.90	37.52	10.69	32.39	Peak

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

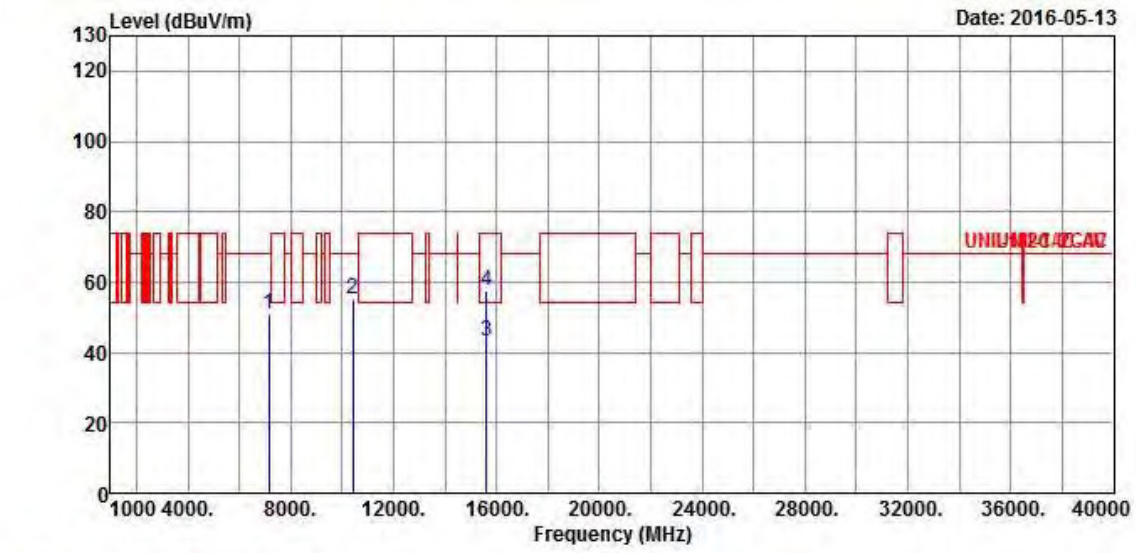
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	VHT80	**Test Freq. (MHz)**	5210
N_{TX}	4	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7252.000	36.75	-17.25	54.00	26.63	35.87	7.03	32.78	Average
2	7252.000	50.87	-23.13	74.00	40.75	35.87	7.03	32.78	Peak
3	10420.000	55.00	-13.20	68.20	40.44	38.90	8.51	32.85	Peak
4	15630.000	43.06	-10.94	54.00	27.23	37.62	10.58	32.37	Average
5	15630.000	57.53	-16.47	74.00	41.70	37.62	10.58	32.37	Peak

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

Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	VHT80	**Test Freq. (MHz)**	5210
N_{TX}	4	**Polarization**	H

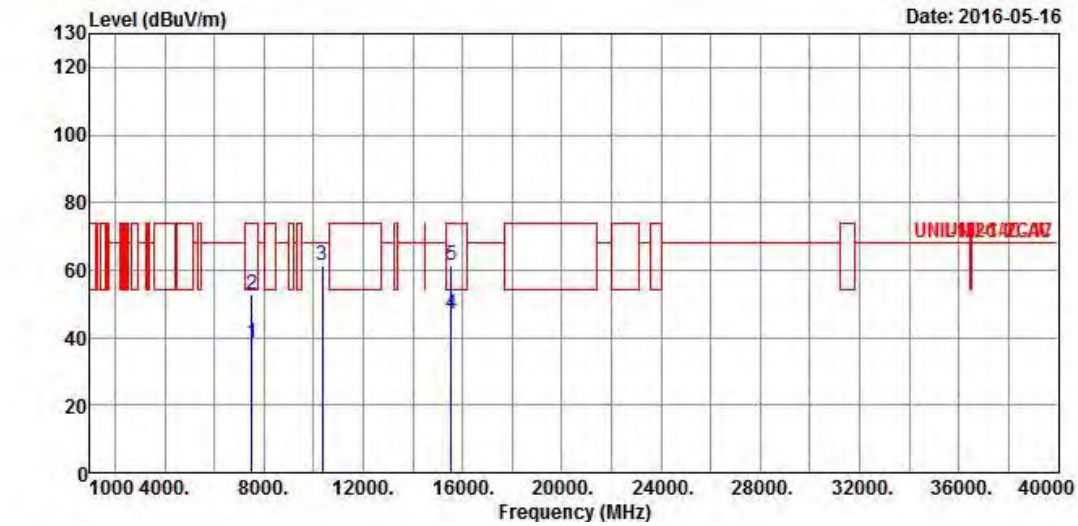


	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7140.000	50.67	-17.53	68.20	40.80	35.56	7.07	32.76	Peak
2	10420.000	54.95	-13.25	68.20	40.39	38.90	8.51	32.85	Peak
3	15630.000	43.13	-10.87	54.00	27.30	37.62	10.58	32.37	Average
4	15630.000	57.76	-16.24	74.00	41.93	37.62	10.58	32.37	Peak

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

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

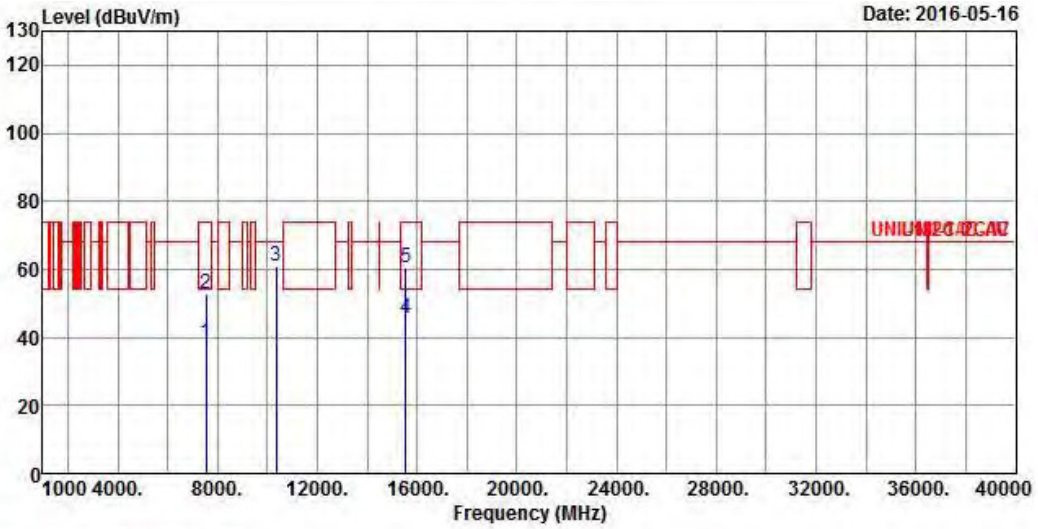
Transmitter Radiated Unwanted Emissions (Above 1GHz)_beamforming			
Modulation Mode	HT20	**Test Freq. (MHz)**	5180
N_{TX}	4	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7508.000	38.55	-15.45	54.00	27.80	36.52	7.09	32.86	Average
2	7508.000	52.82	-21.18	74.00	42.07	36.52	7.09	32.86	Peak
3	10360.000	61.25	-6.95	68.20	46.77	38.90	8.47	32.89	Peak
4	15540.000	47.04	-6.96	54.00	31.14	37.83	10.41	32.34	Average
5	15540.000	61.26	-12.74	74.00	45.36	37.83	10.41	32.34	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.

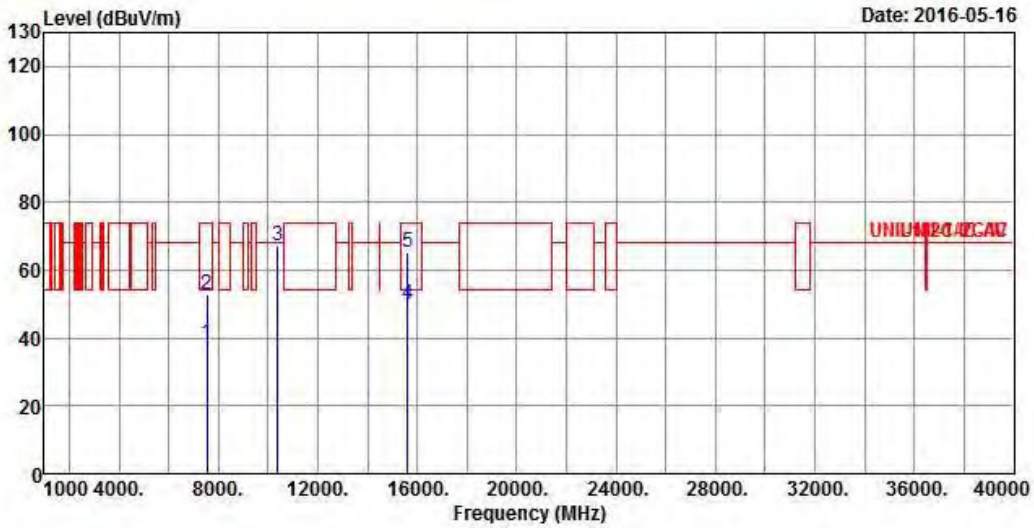
Transmitter Radiated Unwanted Emissions (Above 1GHz)_beamforming			
Modulation Mode	HT20	**Test Freq. (MHz)**	5180
N_{TX}	4	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7536.000	38.48	-15.52	54.00	27.69	36.54	7.11	32.86	Average
2	7536.000	52.98	-21.02	74.00	42.19	36.54	7.11	32.86	Peak
3	10360.000	60.81	-7.39	68.20	46.33	38.90	8.47	32.89	Peak
4	15540.000	45.73	-8.27	54.00	29.83	37.83	10.41	32.34	Average
5	15540.000	60.23	-13.77	74.00	44.33	37.83	10.41	32.34	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.

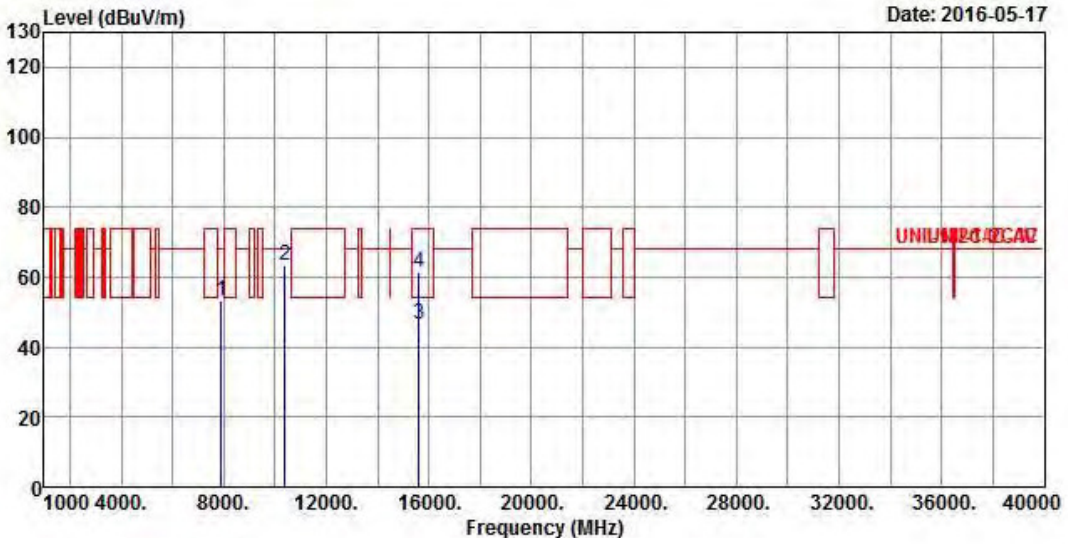
Transmitter Radiated Unwanted Emissions (Above 1GHz)_beamforming			
Modulation Mode	HT20	**Test Freq. (MHz)**	5200
N_{TX}	4	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7544.000	38.49	-15.51	54.00	27.69	36.56	7.11	32.87	Average
2	7544.000	52.99	-21.01	74.00	42.19	36.56	7.11	32.87	Peak
3	10400.000	67.10	-1.10	68.20	52.56	38.90	8.49	32.85	Peak
4	15600.000	49.73	-4.27	54.00	33.88	37.69	10.52	32.36	Average
5	15600.000	65.25	-8.75	74.00	49.40	37.69	10.52	32.36	Peak

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

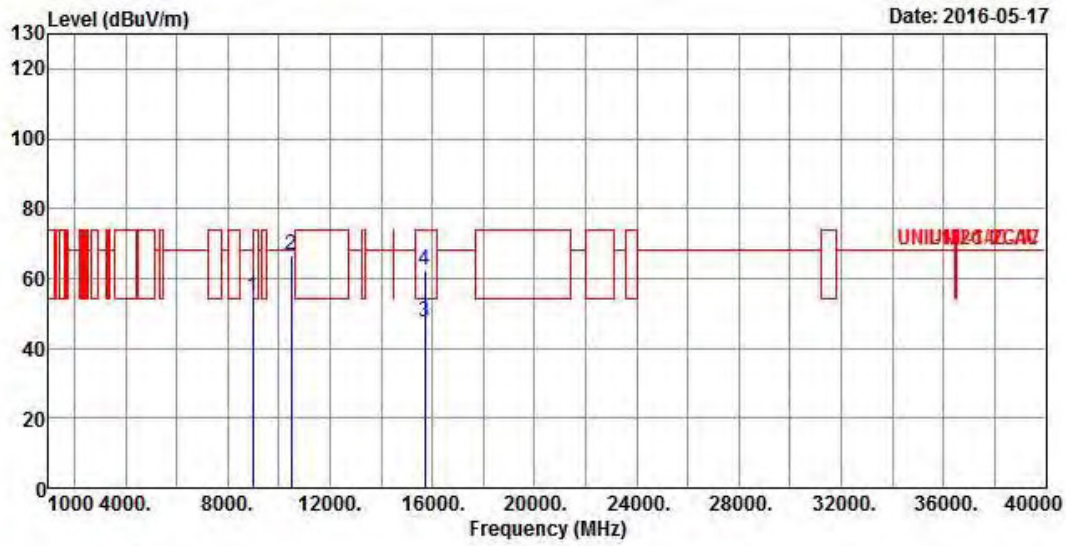
Transmitter Radiated Unwanted Emissions (Above 1GHz)_beamforming			
Modulation Mode	HT20	**Test Freq. (MHz)**	5200
N_{TX}	4	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7900.000	53.05	-15.15	68.20	41.75	36.98	7.24	32.92	Peak
2	10400.000	63.36	-4.84	68.20	48.82	38.90	8.49	32.85	Peak
3	15600.000	46.61	-7.39	54.00	30.76	37.69	10.52	32.36	Average
4	15600.000	61.51	-12.49	74.00	45.66	37.69	10.52	32.36	Peak

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

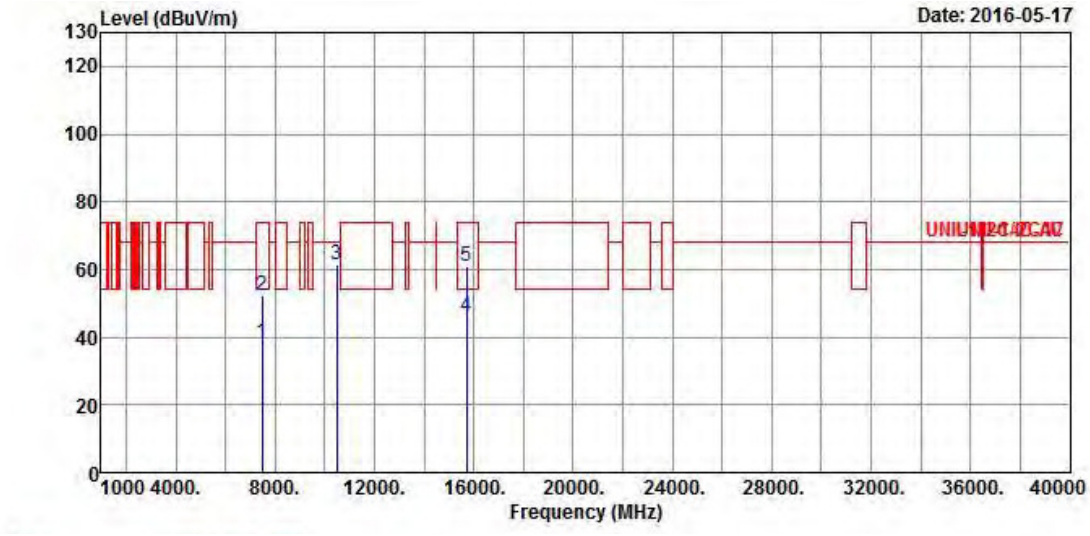
Transmitter Radiated Unwanted Emissions (Above 1GHz)_beamforming			
Modulation Mode	HT20	**Test Freq. (MHz)**	5240
N_{TX}	4	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8998.000	54.76	-13.44	68.20	42.03	37.80	8.04	33.11	Peak
2	10480.000	66.91	-1.29	68.20	52.24	38.90	8.55	32.78	Peak
3	15720.000	47.67	-6.33	54.00	31.86	37.45	10.75	32.39	Average
4	15720.000	62.30	-11.70	74.00	46.49	37.45	10.75	32.39	Peak

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

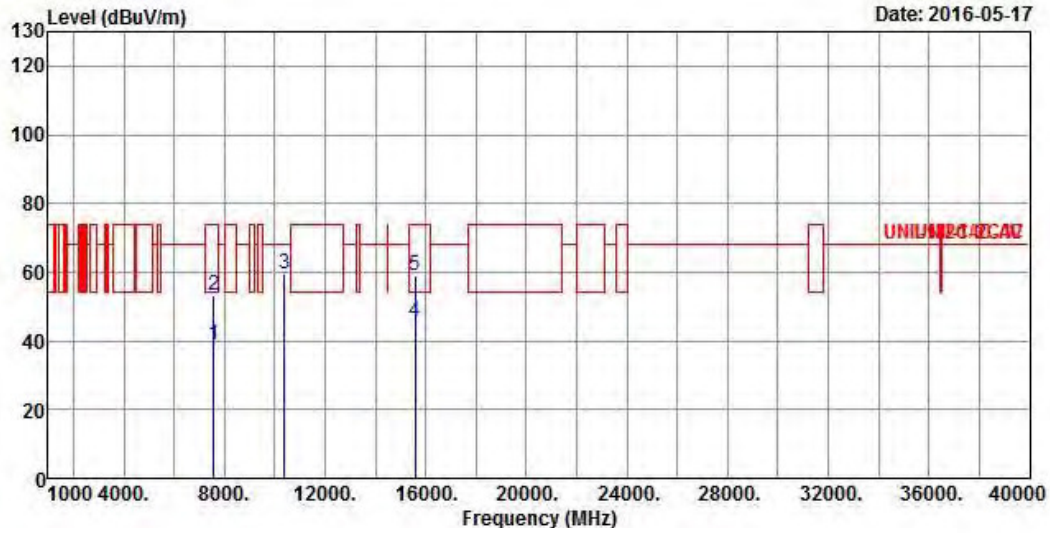
Transmitter Radiated Unwanted Emissions (Above 1GHz)_beamforming			
Modulation Mode	HT20	**Test Freq. (MHz)**	5240
N_{TX}	4	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7465.000	38.38	-15.62	54.00	27.76	36.41	7.06	32.85	Average
2	7465.000	52.52	-21.48	74.00	41.90	36.41	7.06	32.85	Peak
3	10480.000	61.19	-7.01	68.20	46.52	38.90	8.55	32.78	Peak
4	15720.000	46.05	-7.95	54.00	30.24	37.45	10.75	32.39	Average
5	15720.000	60.97	-13.03	74.00	45.16	37.45	10.75	32.39	Peak

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

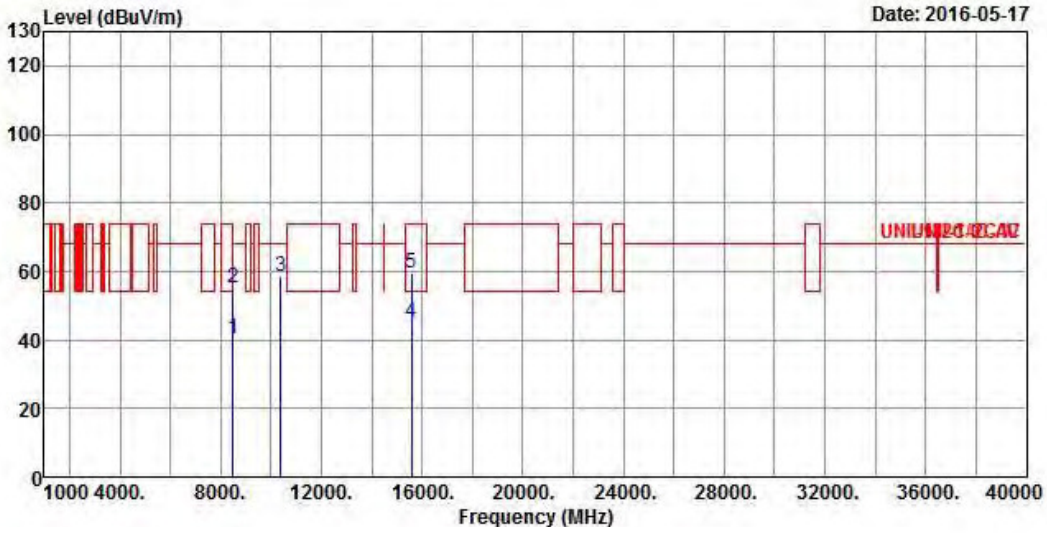
Transmitter Radiated Unwanted Emissions (Above 1GHz)_beamforming			
Modulation Mode	HT40	**Test Freq. (MHz)**	5190
N_{TX}	4	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7592.000	38.63	-15.37	54.00	27.75	36.62	7.14	32.88	Average
2	7592.000	53.03	-20.97	74.00	42.15	36.62	7.14	32.88	Peak
3	10380.000	59.58	-8.62	68.20	45.07	38.90	8.48	32.87	Peak
4	15570.000	45.66	-8.34	54.00	29.79	37.76	10.46	32.35	Average
5	15570.000	59.15	-14.85	74.00	43.28	37.76	10.46	32.35	Peak

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

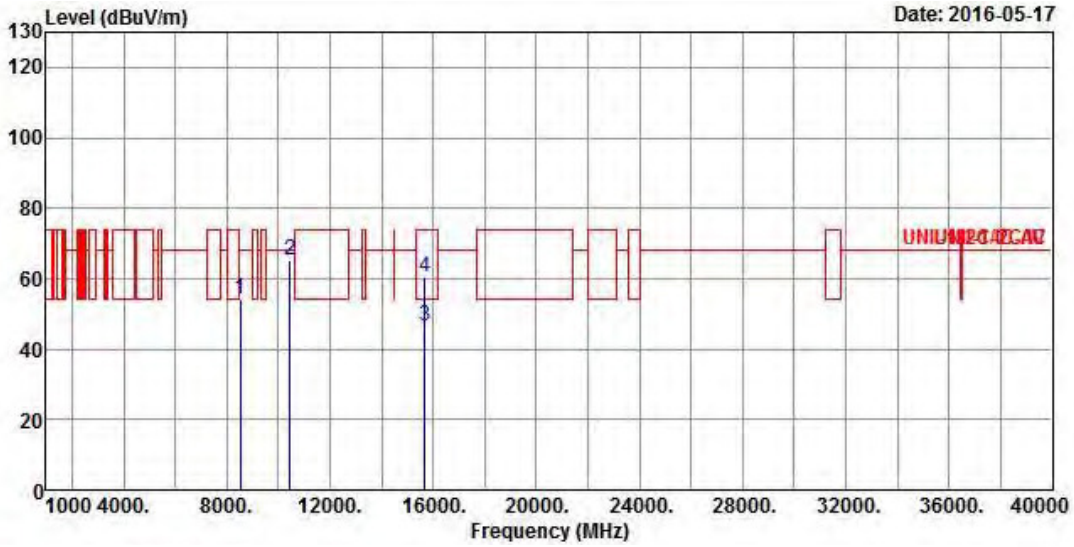
Transmitter Radiated Unwanted Emissions (Above 1GHz)_beamforming			
Modulation Mode	HT40	**Test Freq. (MHz)**	5190
N_{TX}	4	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8479.000	40.27	-13.73	54.00	27.78	37.68	7.75	32.94	Average
2	8479.000	55.30	-18.70	74.00	42.81	37.68	7.75	32.94	Peak
3	10380.000	58.72	-9.48	68.20	44.21	38.90	8.48	32.87	Peak
4	15570.000	45.28	-8.72	54.00	29.41	37.76	10.46	32.35	Average
5	15570.000	59.65	-14.35	74.00	43.78	37.76	10.46	32.35	Peak

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

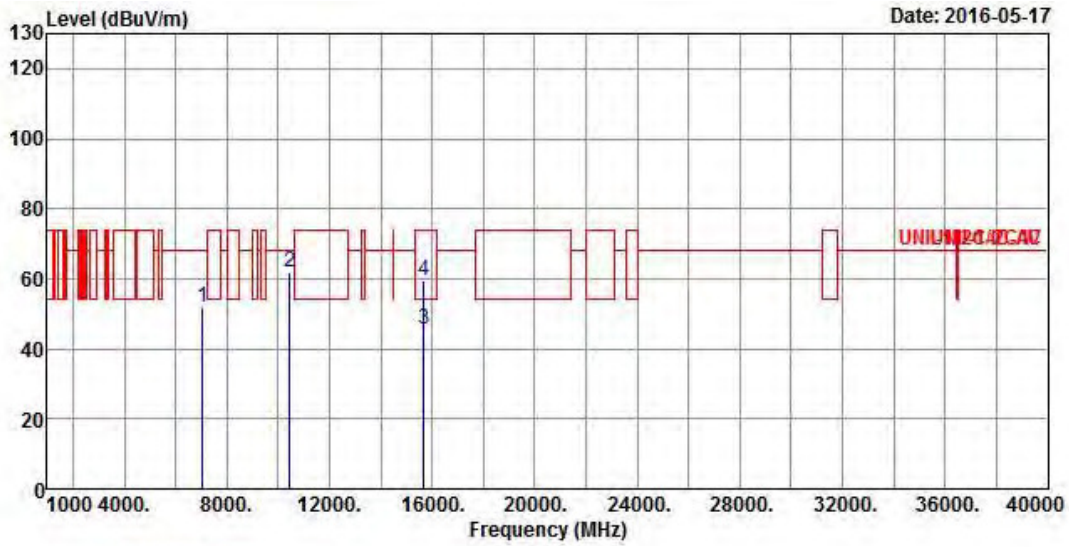
Transmitter Radiated Unwanted Emissions (Above 1GHz)_beamforming			
Modulation Mode	HT40	**Test Freq. (MHz)**	5230
N_{TX}	4	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8522.000	54.43	-13.77	68.20	41.93	37.70	7.75	32.95	Peak
2	10460.000	65.44	-2.76	68.20	50.81	38.90	8.53	32.80	Peak
3	15690.000	46.56	-7.44	54.00	30.74	37.52	10.69	32.39	Average
4	15690.000	60.67	-13.33	74.00	44.85	37.52	10.69	32.39	Peak

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

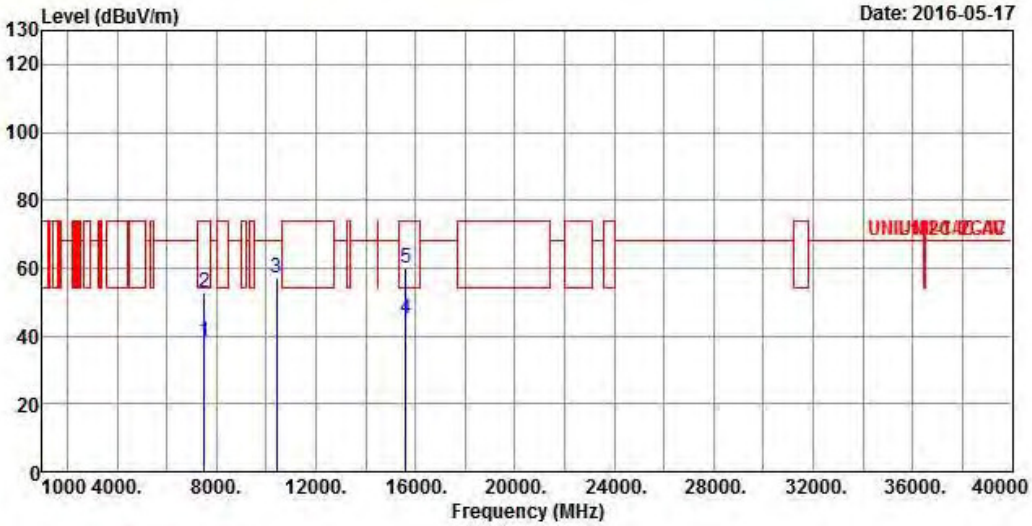
Transmitter Radiated Unwanted Emissions (Above 1GHz)_beamforming			
Modulation Mode	HT40	**Test Freq. (MHz)**	5230
N_{TX}	4	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7049.000	51.62	-16.58	68.20	41.89	35.33	7.12	32.72	Peak
2	10460.000	61.93	-6.27	68.20	47.30	38.90	8.53	32.80	Peak
3	15690.000	45.43	-8.57	54.00	29.61	37.52	10.69	32.39	Average
4	15690.000	59.66	-14.34	74.00	43.84	37.52	10.69	32.39	Peak

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

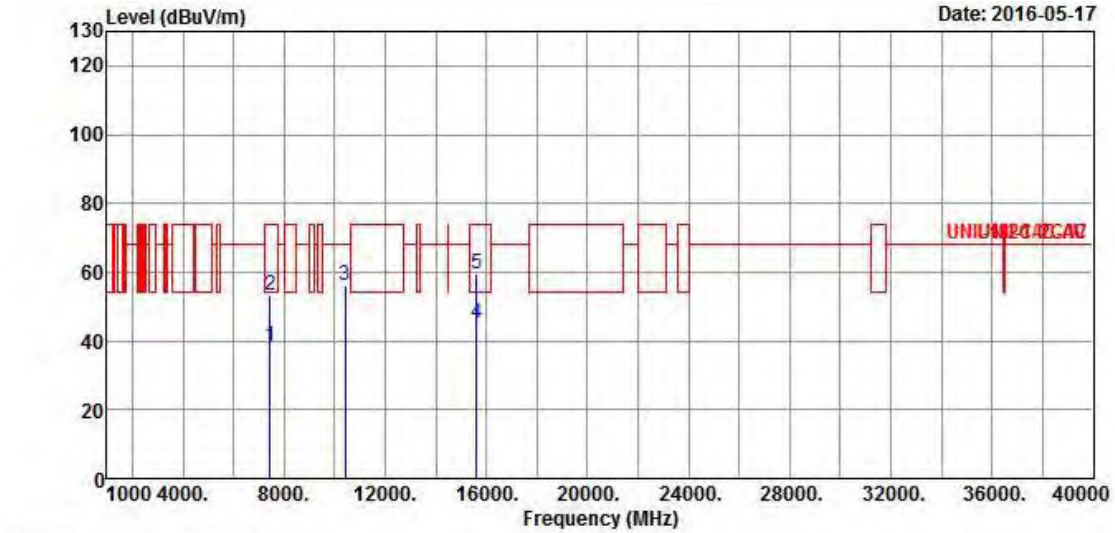
Transmitter Radiated Unwanted Emissions (Above 1GHz)_beamforming			
Modulation Mode	VHT80	**Test Freq. (MHz)**	5210
N_{TX}	4	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7516.000	38.52	-15.48	54.00	27.77	36.52	7.09	32.86	Average
2	7516.000	52.83	-21.17	74.00	42.08	36.52	7.09	32.86	Peak
3	10420.000	56.89	-11.31	68.20	42.33	38.90	8.51	32.85	Peak
4	15630.000	44.99	-9.01	54.00	29.16	37.62	10.58	32.37	Average
5	15630.000	59.74	-14.26	74.00	43.91	37.62	10.58	32.37	Peak

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

Transmitter Radiated Unwanted Emissions (Above 1GHz)_beamforming			
Modulation Mode	VHT80	**Test Freq. (MHz)**	5210
N_{TX}	4	**Polarization**	H

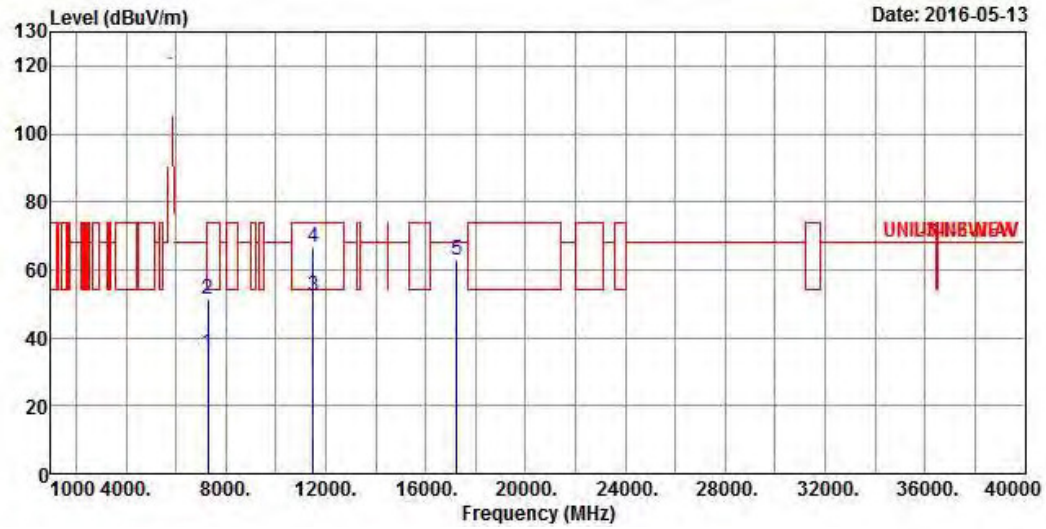


	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7453.000	38.33	-15.67	54.00	27.72	36.41	7.05	32.85	Average
2	7453.000	53.37	-20.63	74.00	42.76	36.41	7.05	32.85	Peak
3	10420.000	56.31	-11.89	68.20	41.75	38.90	8.51	32.85	Peak
4	15630.000	44.92	-9.08	54.00	29.09	37.62	10.58	32.37	Average
5	15630.000	59.50	-14.50	74.00	43.67	37.62	10.58	32.37	Peak

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

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

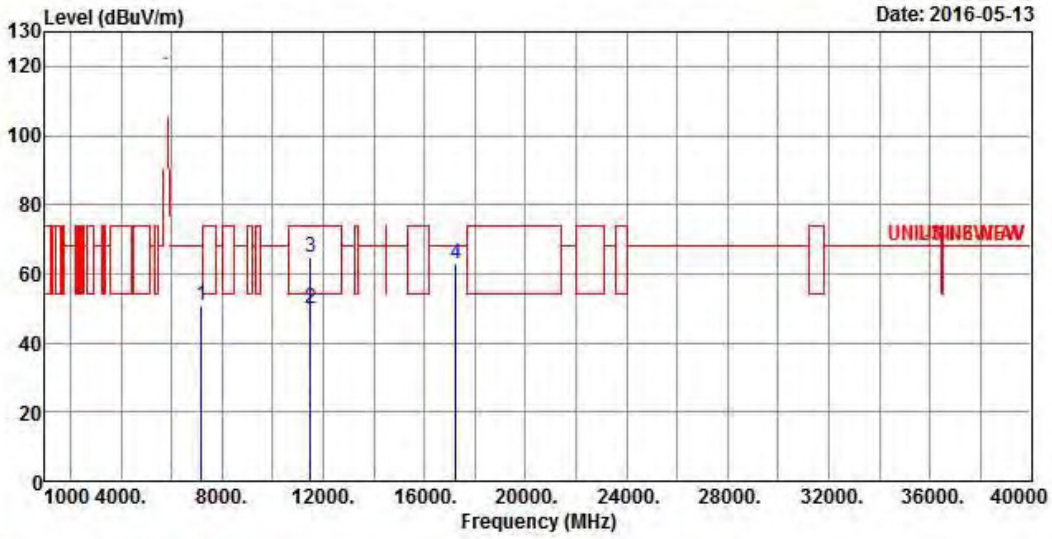
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	11a	**Test Freq. (MHz)**	5745
N_{TX}	4	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7272.000	35.45	-18.55	54.00	25.29	35.92	7.03	32.79	Average
2	7272.000	51.25	-22.75	74.00	41.09	35.92	7.03	32.79	Peak
3	11490.000	52.25	-1.75	54.00	36.74	39.18	8.79	32.46	Average
4	11490.000	66.82	-7.18	74.00	51.31	39.18	8.79	32.46	Peak
5	17235.000	62.70	-5.50	68.20	41.63	41.72	10.89	31.54	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.

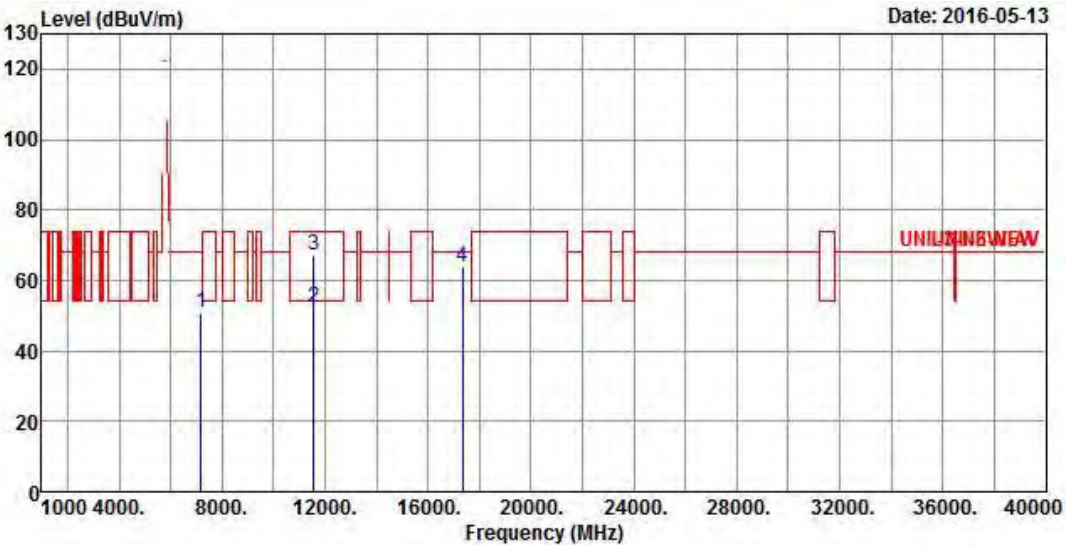
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	11a	**Test Freq. (MHz)**	5745
N_{TX}	4	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7180.000	50.67	-17.53	68.20	40.69	35.69	7.05	32.76	Peak
2	11490.000	49.81	-4.19	54.00	34.30	39.18	8.79	32.46	Average
3	11490.000	64.85	-9.15	74.00	49.34	39.18	8.79	32.46	Peak
4	17235.000	62.73	-5.47	68.20	41.66	41.72	10.89	31.54	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.

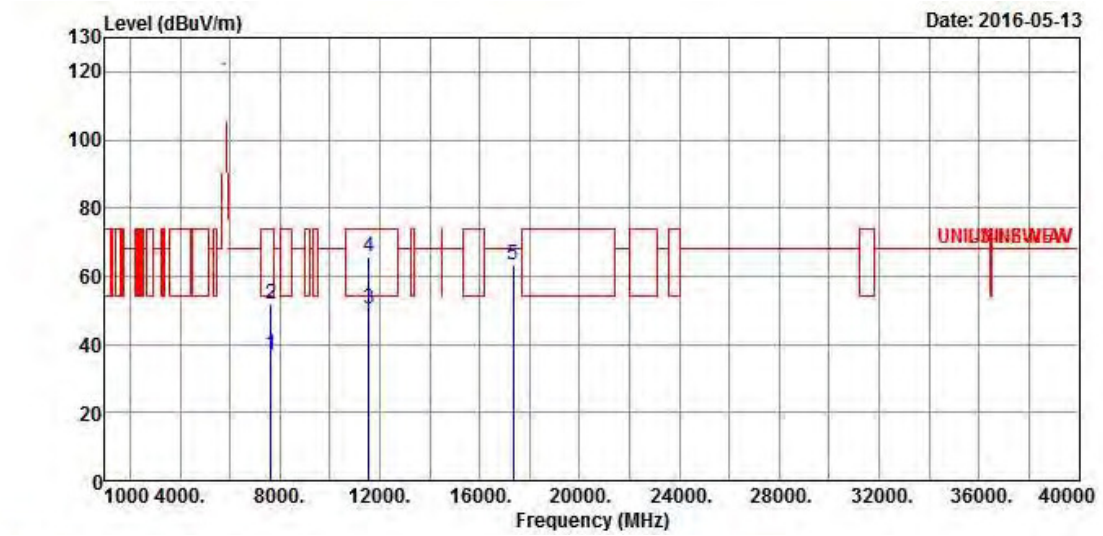
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	11a	**Test Freq. (MHz)**	5785
N_{TX}	4	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7196.000	50.66	-17.54	68.20	40.70	35.69	7.04	32.77	Peak
2	11570.000	52.23	-1.77	54.00	36.58	39.23	8.89	32.47	Average
3	11570.000	67.36	-6.64	74.00	51.71	39.23	8.89	32.47	Peak
4	17355.000	63.66	-4.54	68.20	41.66	42.63	10.94	31.57	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.

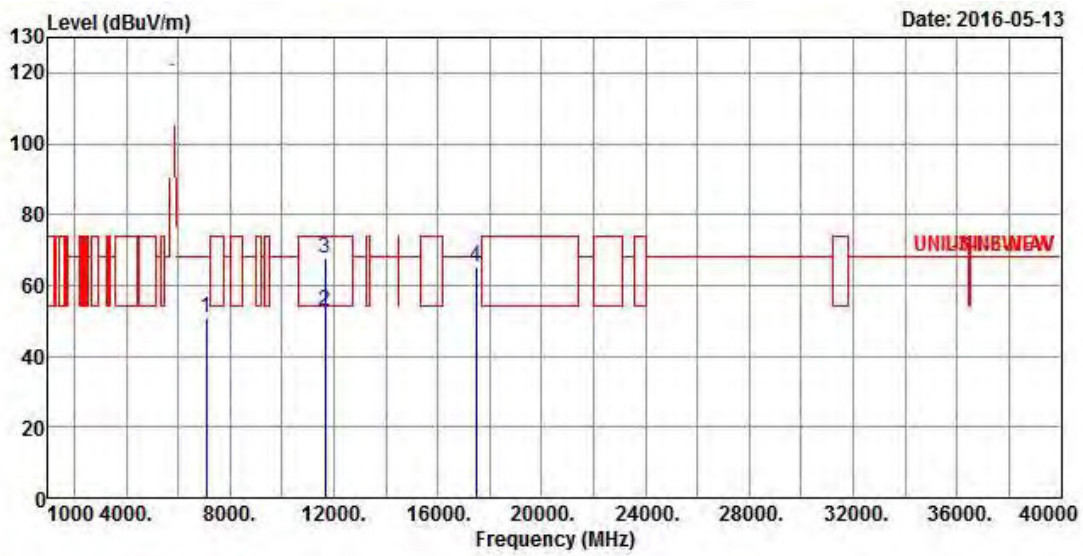
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	11a	**Test Freq. (MHz)**	5785
N_{TX}	4	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7640.000	37.16	-16.84	54.00	26.21	36.68	7.15	32.88	Average
2	7640.000	51.85	-22.15	74.00	40.90	36.68	7.15	32.88	Peak
3	11570.000	50.55	-3.45	54.00	34.90	39.23	8.89	32.47	Average
4	11570.000	65.62	-8.38	74.00	49.97	39.23	8.89	32.47	Peak
5	17355.000	63.39	-4.81	68.20	41.39	42.63	10.94	31.57	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.

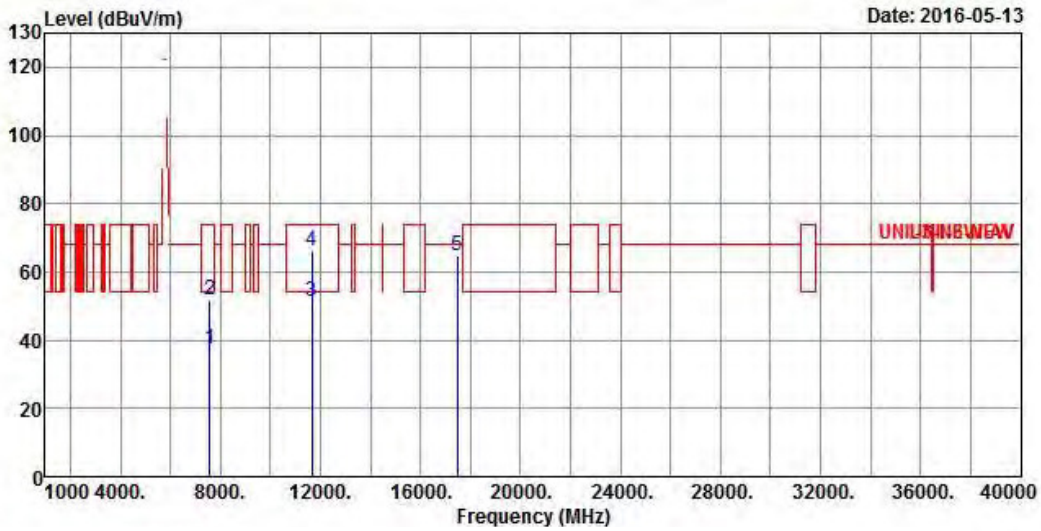
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	11a	**Test Freq. (MHz)**	5825
N_{TX}	4	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7088.000	50.80	-17.40	68.20	41.02	35.42	7.10	32.74	Peak
2	11650.000	52.54	-1.46	54.00	36.75	39.26	9.01	32.48	Average
3	11650.000	67.65	-6.35	74.00	51.86	39.26	9.01	32.48	Peak
4	17475.000	65.35	-2.85	68.20	42.43	43.54	10.99	31.61	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.

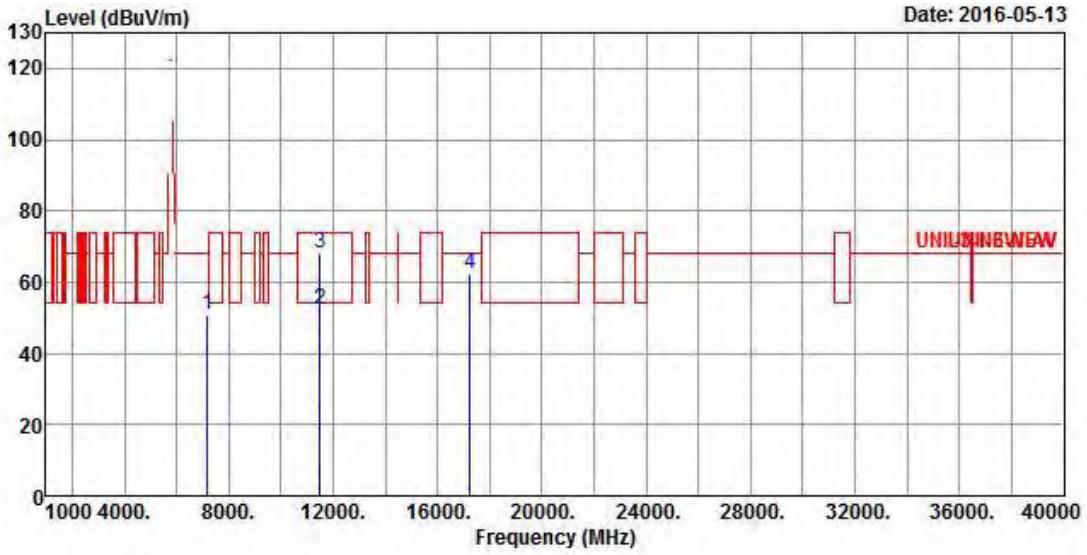
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	11a	**Test Freq. (MHz)**	5825
N_{TX}	4	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7592.000	37.20	-16.80	54.00	26.32	36.62	7.14	32.88	Average
2	7592.000	51.78	-22.22	74.00	40.90	36.62	7.14	32.88	Peak
3	11650.000	51.31	-2.69	54.00	35.52	39.26	9.01	32.48	Average
4	11650.000	66.33	-7.67	74.00	50.54	39.26	9.01	32.48	Peak
5	17475.000	64.78	-3.42	68.20	41.86	43.54	10.99	31.61	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.

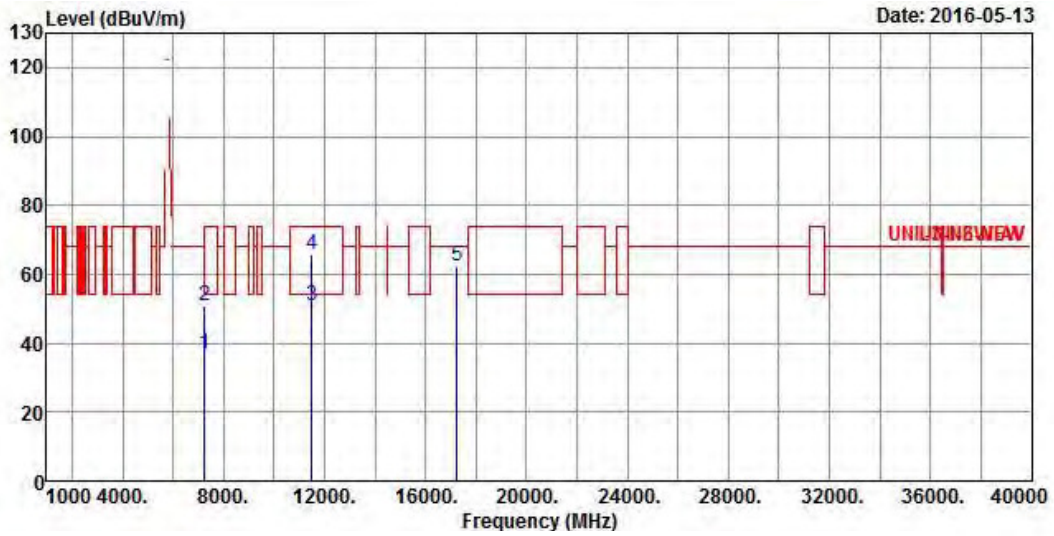
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	HT20	**Test Freq. (MHz)**	5745
N_{TX}	4	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7184.000	51.00	-17.20	68.20	41.03	35.69	7.05	32.77	Peak
2	11490.000	52.53	-1.47	54.00	37.02	39.18	8.79	32.46	Average
3	11490.000	67.90	-6.10	74.00	52.39	39.18	8.79	32.46	Peak
4	17235.000	62.58	-5.62	68.20	41.51	41.72	10.89	31.54	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.

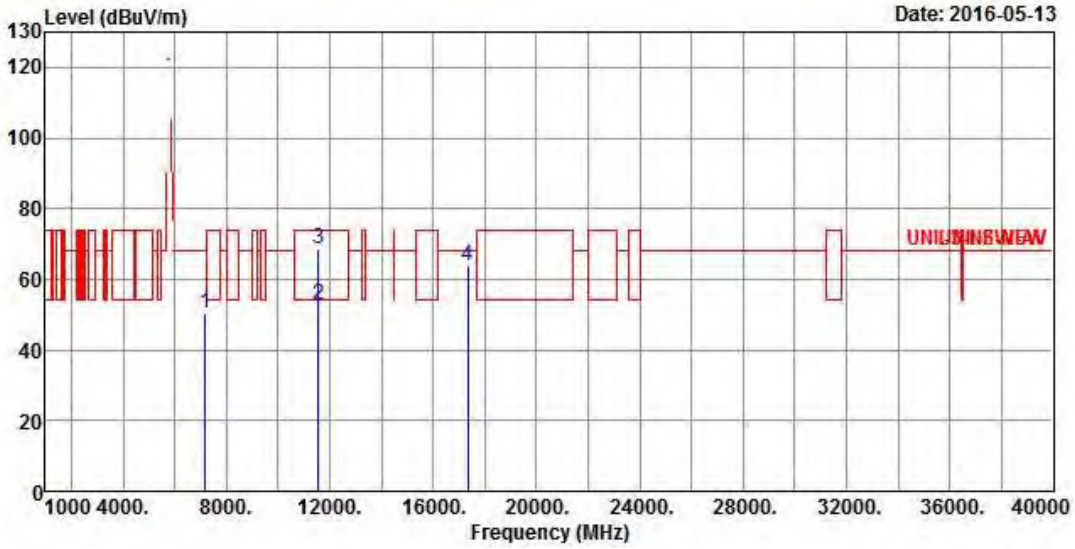
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	HT20	**Test Freq. (MHz)**	5745
N_{TX}	4	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7260.000	36.86	-17.14	54.00	26.74	35.87	7.03	32.78	Average
2	7260.000	50.85	-23.15	74.00	40.73	35.87	7.03	32.78	Peak
3	11490.000	50.91	-3.09	54.00	35.40	39.18	8.79	32.46	Average
4	11490.000	65.69	-8.31	74.00	50.18	39.18	8.79	32.46	Peak
5	17235.000	62.34	-5.86	68.20	41.27	41.72	10.89	31.54	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.

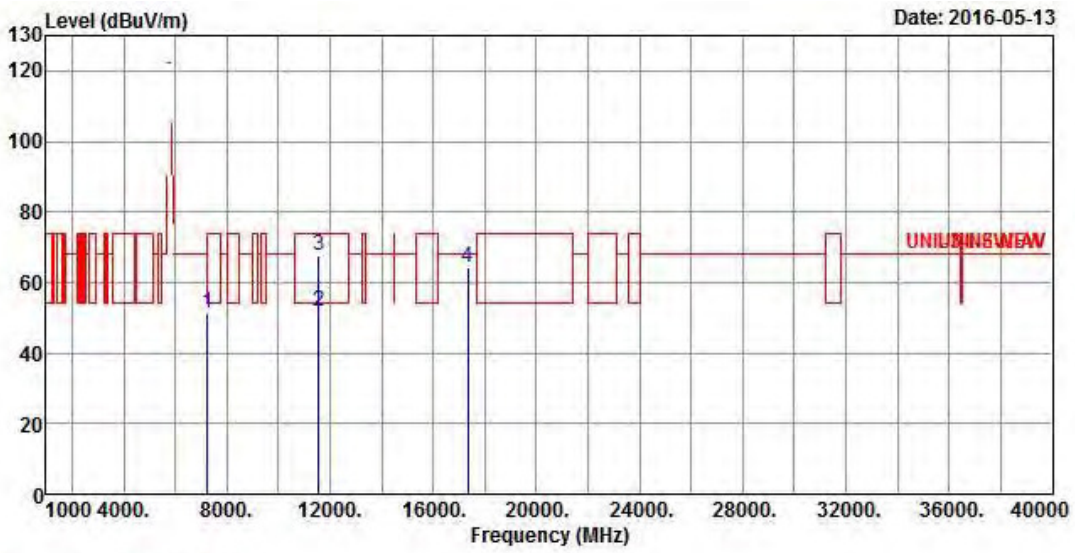
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	HT20	**Test Freq. (MHz)**	5785
N_{TX}	4	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7188.000	50.18	-18.02	68.20	40.21	35.69	7.05	32.77	Peak
2	11570.000	52.93	-1.07	54.00	37.28	39.23	8.89	32.47	Average
3	11570.000	68.74	-5.26	74.00	53.09	39.23	8.89	32.47	Peak
4	17355.000	63.99	-4.21	68.20	41.99	42.63	10.94	31.57	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.

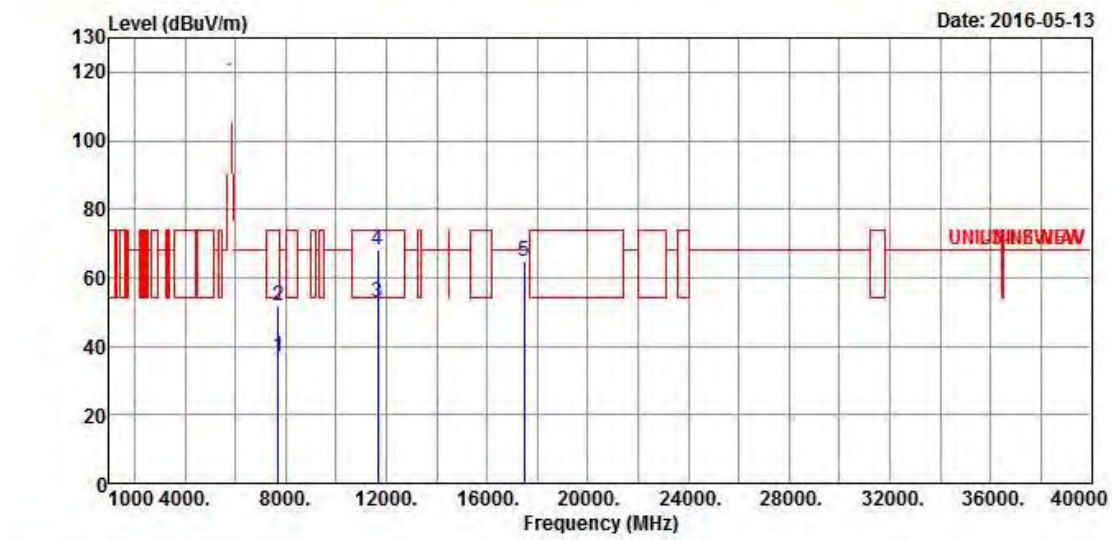
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	HT20	**Test Freq. (MHz)**	5785
N_{TX}	4	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7240.000	51.49	-16.71	68.20	41.41	35.83	7.03	32.78	Peak
2	11570.000	52.04	-1.96	54.00	36.39	39.23	8.89	32.47	Average
3	11570.000	67.79	-6.21	74.00	52.14	39.23	8.89	32.47	Peak
4	17355.000	64.28	-3.92	68.20	42.28	42.63	10.94	31.57	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.

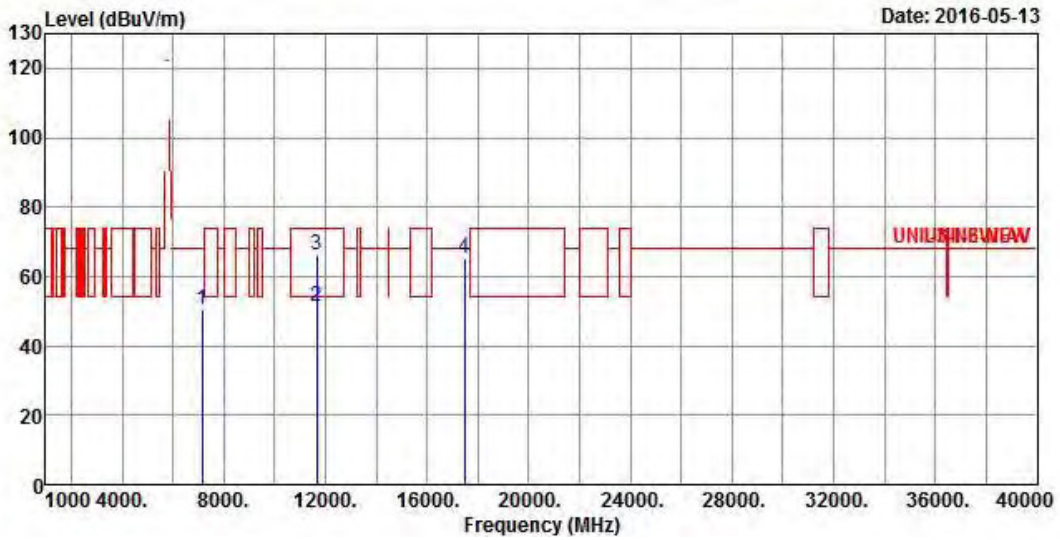
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	HT20	**Test Freq. (MHz)**	5825
N_{TX}	4	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7712.000	36.97	-17.03	54.00	25.96	36.76	7.14	32.89	Average
2	7712.000	51.60	-22.40	74.00	40.59	36.76	7.14	32.89	Peak
3	11650.000	52.73	-1.27	54.00	36.94	39.26	9.01	32.48	Average
4	11650.000	68.15	-5.85	74.00	52.36	39.26	9.01	32.48	Peak
5	17475.000	64.60	-3.60	68.20	41.68	43.54	10.99	31.61	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.

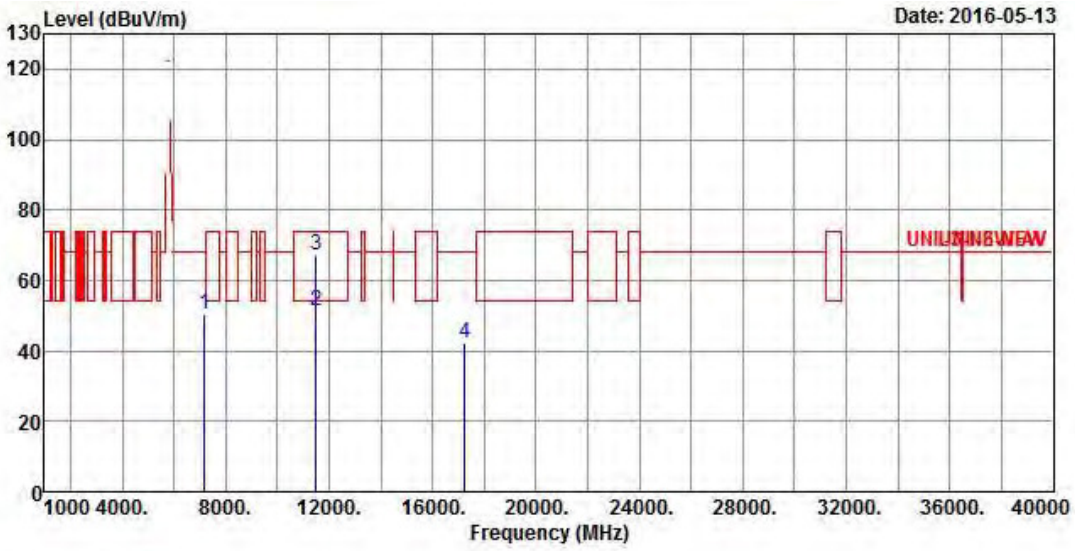
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	HT20	**Test Freq. (MHz)**	5825
N_{TX}	4	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7140.000	50.36	-17.84	68.20	40.49	35.56	7.07	32.76	Peak
2	11650.000	51.39	-2.61	54.00	35.60	39.26	9.01	32.48	Average
3	11650.000	66.31	-7.69	74.00	50.52	39.26	9.01	32.48	Peak
4	17475.000	65.15	-3.05	68.20	42.23	43.54	10.99	31.61	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.

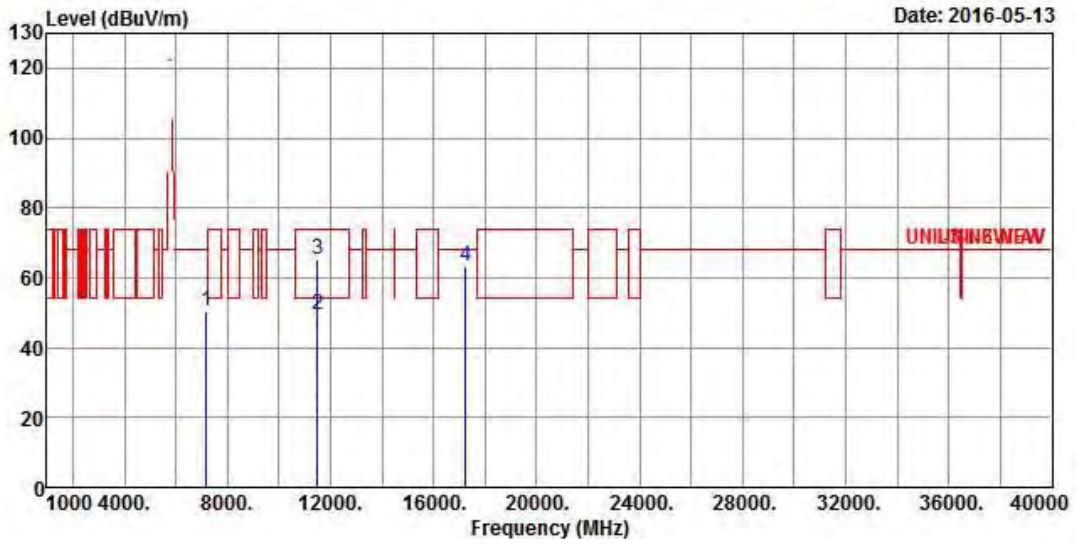
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	HT40	**Test Freq. (MHz)**	5755
N_{TX}	4	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7184.000	50.50	-17.70	68.20	40.53	35.69	7.05	32.77	Peak
2	11510.000	51.21	-2.79	54.00	35.67	39.20	8.80	32.46	Average
3	11510.000	67.31	-6.69	74.00	51.77	39.20	8.80	32.46	Peak
4	17265.000	42.17	-26.03	68.20	20.84	41.98	10.90	31.55	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.

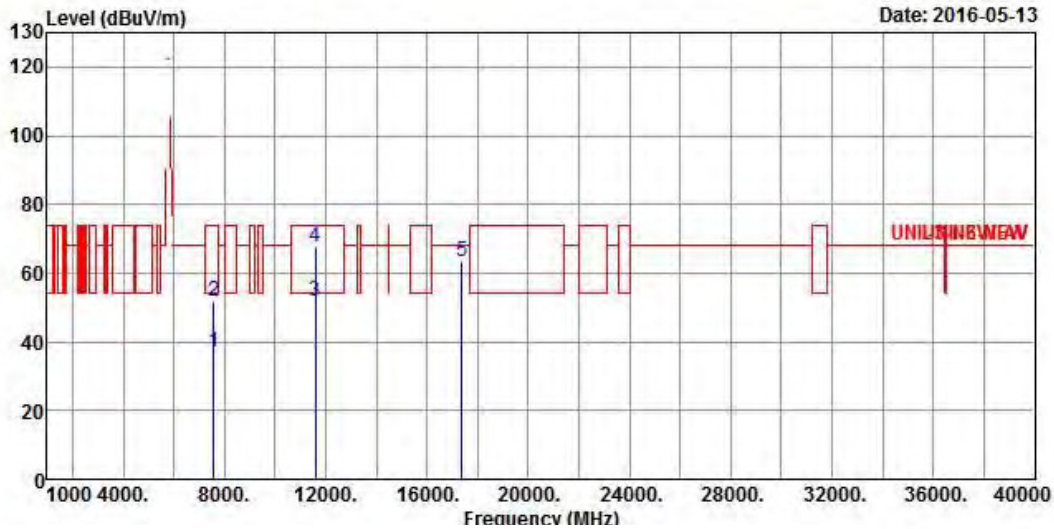
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	HT40	**Test Freq. (MHz)**	5755
N_{TX}	4	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7176.000	50.48	-17.72	68.20	40.54	35.65	7.05	32.76	Peak
2	11510.000	49.54	-4.46	54.00	34.00	39.20	8.80	32.46	Average
3	11510.000	65.28	-8.72	74.00	49.74	39.20	8.80	32.46	Peak
4	17265.000	63.13	-5.07	68.20	41.80	41.98	10.90	31.55	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.

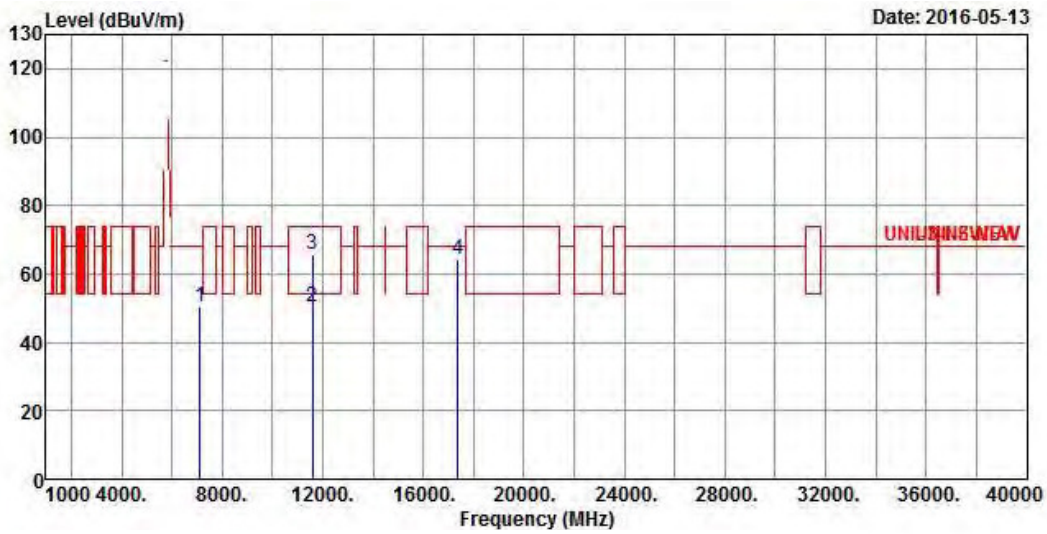
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	HT40	**Test Freq. (MHz)**	5795
N_{TX}	4	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7580.000	36.83	-17.17	54.00	25.96	36.60	7.14	32.87	Average
2	7580.000	51.64	-22.36	74.00	40.77	36.60	7.14	32.87	Peak
3	11590.000	52.02	-1.98	54.00	36.34	39.23	8.92	32.47	Average
4	11590.000	67.86	-6.14	74.00	52.18	39.23	8.92	32.47	Peak
5	17385.000	63.54	-4.66	68.20	41.29	42.89	10.95	31.59	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.

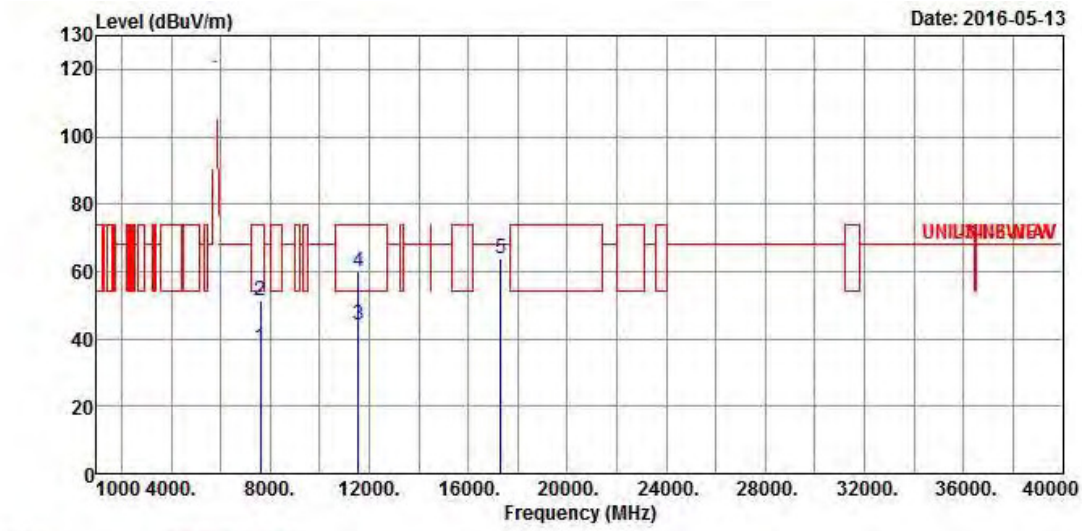
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	HT40	**Test Freq. (MHz)**	5795
N_{TX}	4	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7132.000	50.33	-17.87	68.20	40.44	35.56	7.08	32.75	Peak
2	11590.000	50.20	-3.80	54.00	34.52	39.23	8.92	32.47	Average
3	11590.000	65.84	-8.16	74.00	50.16	39.23	8.92	32.47	Peak
4	17385.000	64.47	-3.73	68.20	42.22	42.89	10.95	31.59	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.

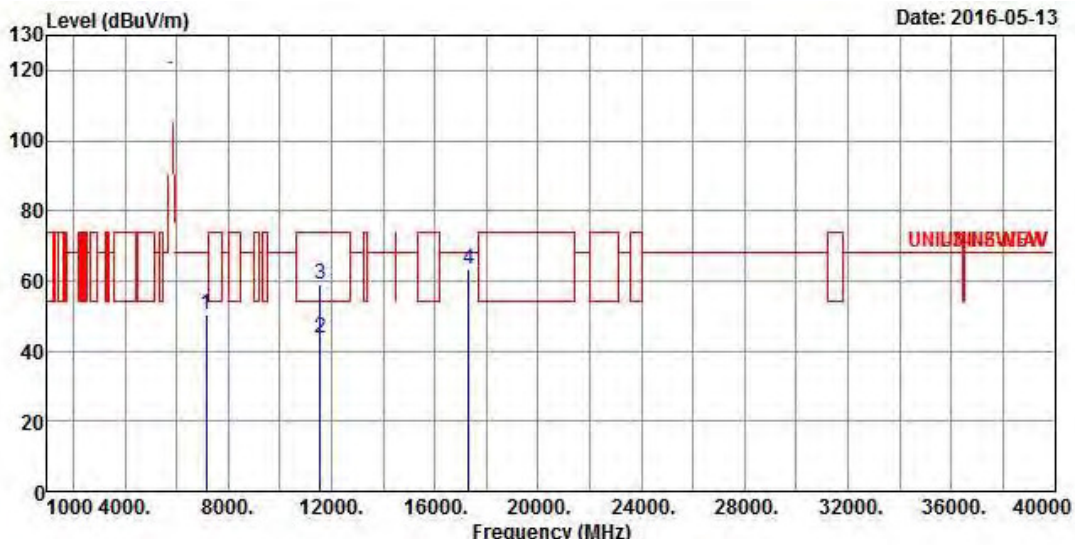
Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	VHT80	**Test Freq. (MHz)**	5775
N_{TX}	4	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7624.000	37.25	-16.75	54.00	26.32	36.66	7.15	32.88	Average
2	7624.000	51.51	-22.49	74.00	40.58	36.66	7.15	32.88	Peak
3	11550.000	44.33	-9.67	54.00	28.72	39.22	8.86	32.47	Average
4	11550.000	59.88	-14.12	74.00	44.27	39.22	8.86	32.47	Peak
5	17325.000	63.75	-4.45	68.20	42.01	42.37	10.93	31.56	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.

Transmitter Radiated Unwanted Emissions (Above 1GHz)_non-beamforming			
Modulation Mode	VHT80	**Test Freq. (MHz)**	5775
N_{TX}	4	**Polarization**	H

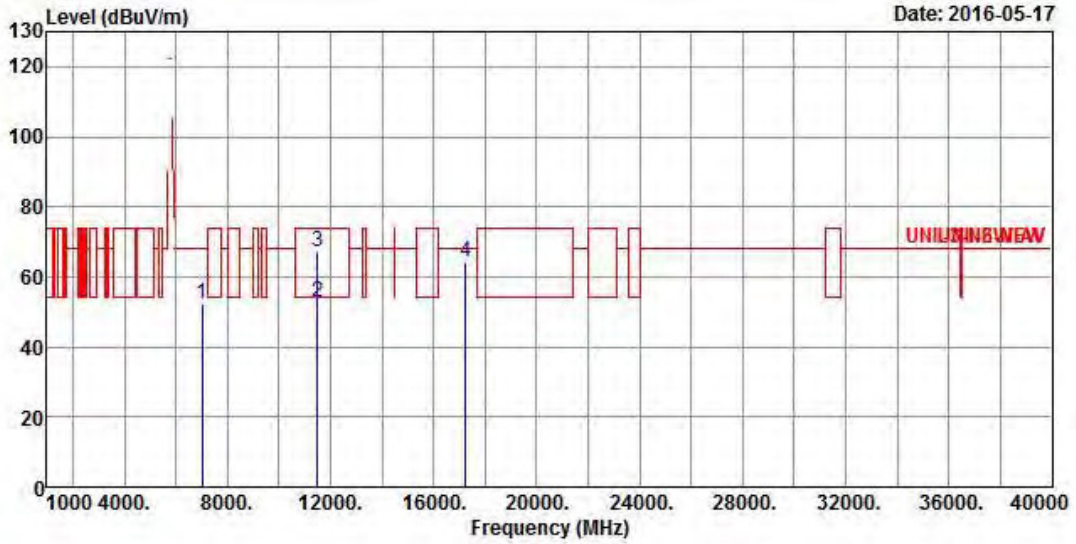


	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7160.000	50.36	-17.84	68.20	40.46	35.60	7.06	32.76	Peak
2	11550.000	43.86	-10.14	54.00	28.25	39.22	8.86	32.47	Average
3	11550.000	59.12	-14.88	74.00	43.51	39.22	8.86	32.47	Peak
4	17325.000	63.51	-4.69	68.20	41.77	42.37	10.93	31.56	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.

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

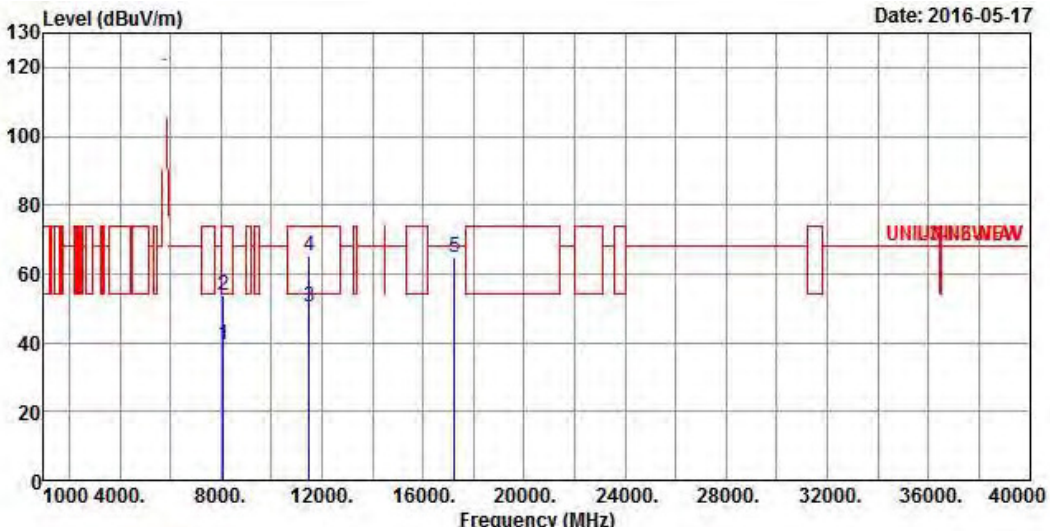
Transmitter Radiated Unwanted Emissions (Above 1GHz)_beamforming			
Modulation Mode	HT20	**Test Freq. (MHz)**	5745
N_{TX}	4	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7037.000	52.20	-16.00	68.20	42.50	35.29	7.13	32.72	Peak
2	11490.000	52.65	-1.35	54.00	37.14	39.18	8.79	32.46	Average
3	11490.000	67.07	-6.93	74.00	51.56	39.18	8.79	32.46	Peak
4	17235.000	64.29	-3.91	68.20	43.22	41.72	10.89	31.54	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.

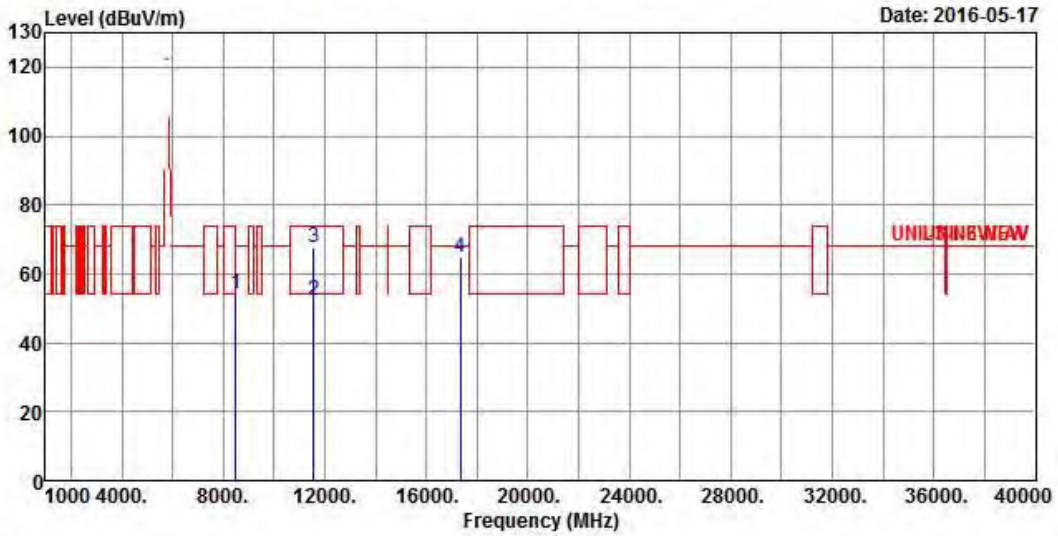
Transmitter Radiated Unwanted Emissions (Above 1GHz)_beamforming			
Modulation Mode	HT20	**Test Freq. (MHz)**	5745
N_{TX}	4	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8095.000	39.43	-14.57	54.00	27.71	37.20	7.46	32.94	Average
2	8095.000	53.86	-20.14	74.00	42.14	37.20	7.46	32.94	Peak
3	11490.000	50.32	-3.68	54.00	34.81	39.18	8.79	32.46	Average
4	11490.000	65.04	-8.96	74.00	49.53	39.18	8.79	32.46	Peak
5	17235.000	64.76	-3.44	68.20	43.69	41.72	10.89	31.54	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.

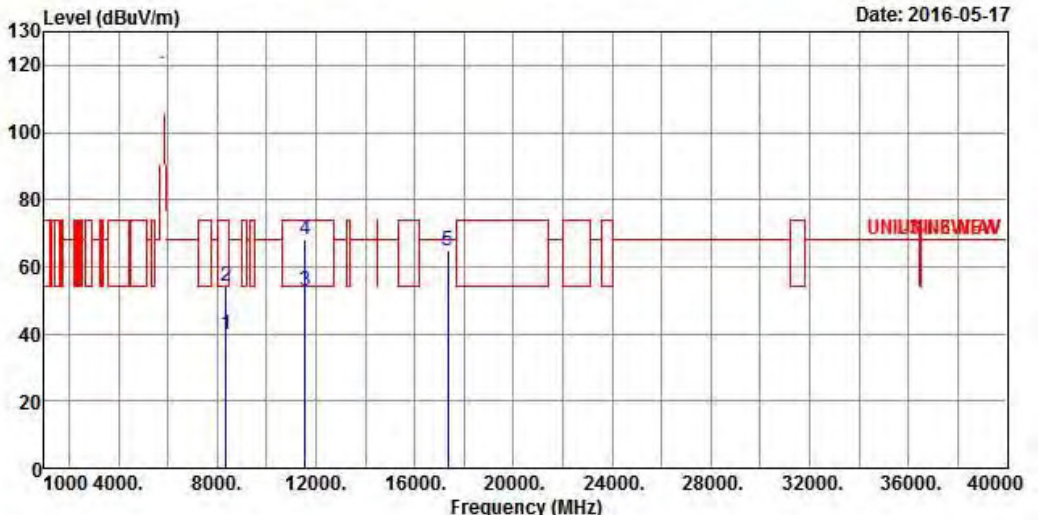
Transmitter Radiated Unwanted Emissions (Above 1GHz)_beamforming			
Modulation Mode	HT20	**Test Freq. (MHz)**	5785
N_{TX}	4	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8506.000	54.40	-13.80	68.20	41.89	37.70	7.75	32.94	Peak
2	11570.000	52.32	-1.68	54.00	36.67	39.23	8.89	32.47	Average
3	11570.000	67.44	-6.56	74.00	51.79	39.23	8.89	32.47	Peak
4	17355.000	64.66	-3.54	68.20	42.66	42.63	10.94	31.57	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.

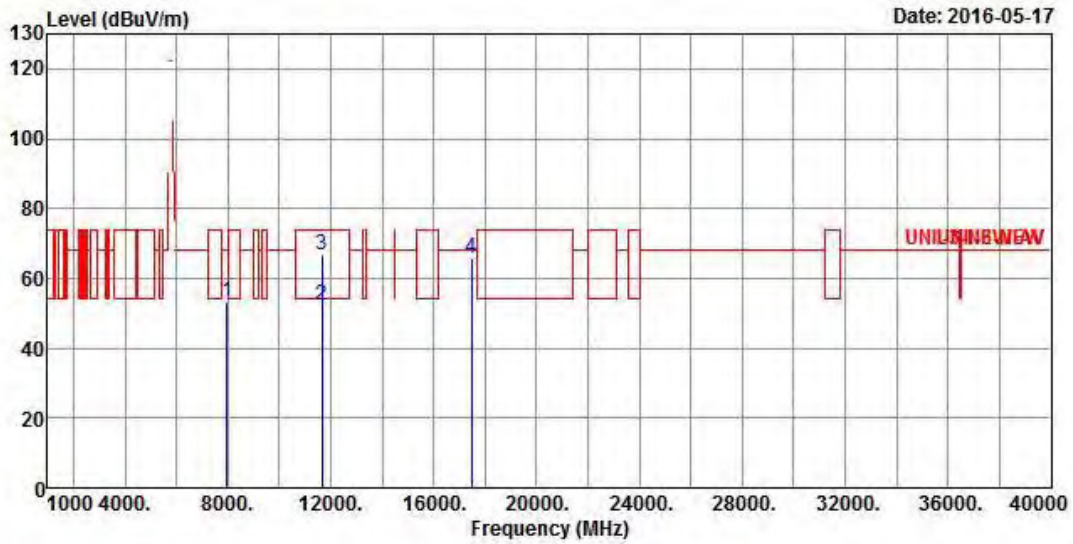
Transmitter Radiated Unwanted Emissions (Above 1GHz)_beamforming			
Modulation Mode	HT20	**Test Freq. (MHz)**	5785
N_{TX}	4	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8375.000	39.85	-14.15	54.00	27.50	37.56	7.73	32.94	Average
2	8375.000	54.39	-19.61	74.00	42.04	37.56	7.73	32.94	Peak
3	11570.000	52.89	-1.11	54.00	37.24	39.23	8.89	32.47	Average
4	11570.000	68.04	-5.96	74.00	52.39	39.23	8.89	32.47	Peak
5	17355.000	64.95	-3.25	68.20	42.95	42.63	10.94	31.57	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.

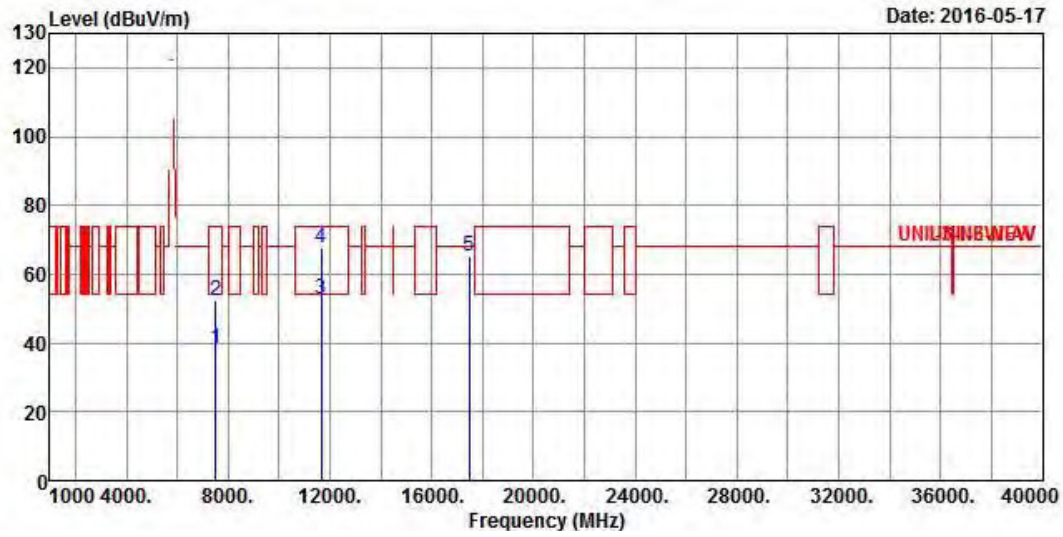
Transmitter Radiated Unwanted Emissions (Above 1GHz)_beamforming			
Modulation Mode	HT20	**Test Freq. (MHz)**	5825
N_{TX}	4	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7960.000	53.27	-14.93	68.20	41.86	37.04	7.30	32.93	Peak
2	11650.000	52.29	-1.71	54.00	36.50	39.26	9.01	32.48	Average
3	11650.000	66.48	-7.52	74.00	50.69	39.26	9.01	32.48	Peak
4	17475.000	65.61	-2.59	68.20	42.69	43.54	10.99	31.61	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.

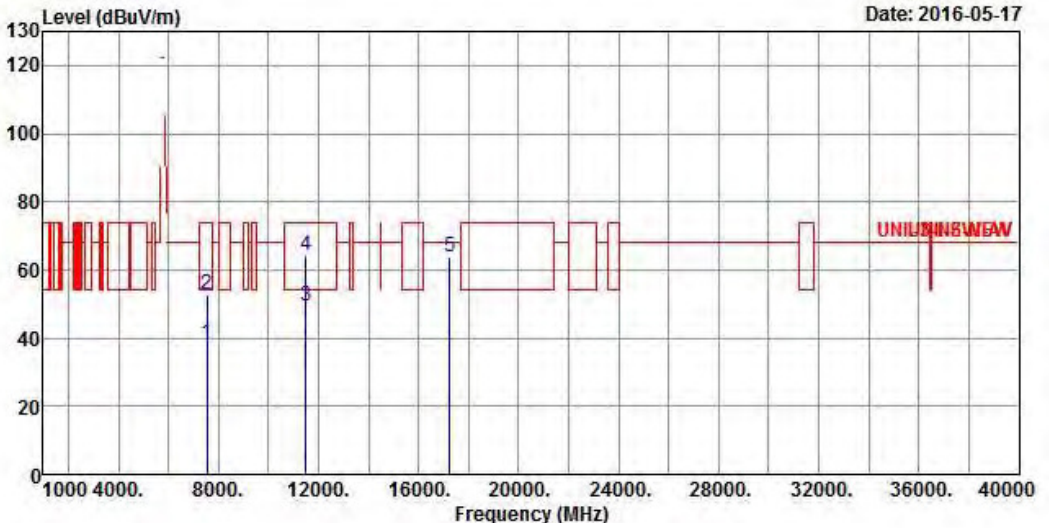
Transmitter Radiated Unwanted Emissions (Above 1GHz)_beamforming			
Modulation Mode	HT20	**Test Freq. (MHz)**	5825
N_{TX}	4	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7520.000	38.46	-15.54	54.00	27.69	36.54	7.09	32.86	Average
2	7520.000	52.41	-21.59	74.00	41.64	36.54	7.09	32.86	Peak
3	11650.000	52.78	-1.22	54.00	36.99	39.26	9.01	32.48	Average
4	11650.000	67.43	-6.57	74.00	51.64	39.26	9.01	32.48	Peak
5	17475.000	65.15	-3.05	68.20	42.23	43.54	10.99	31.61	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.

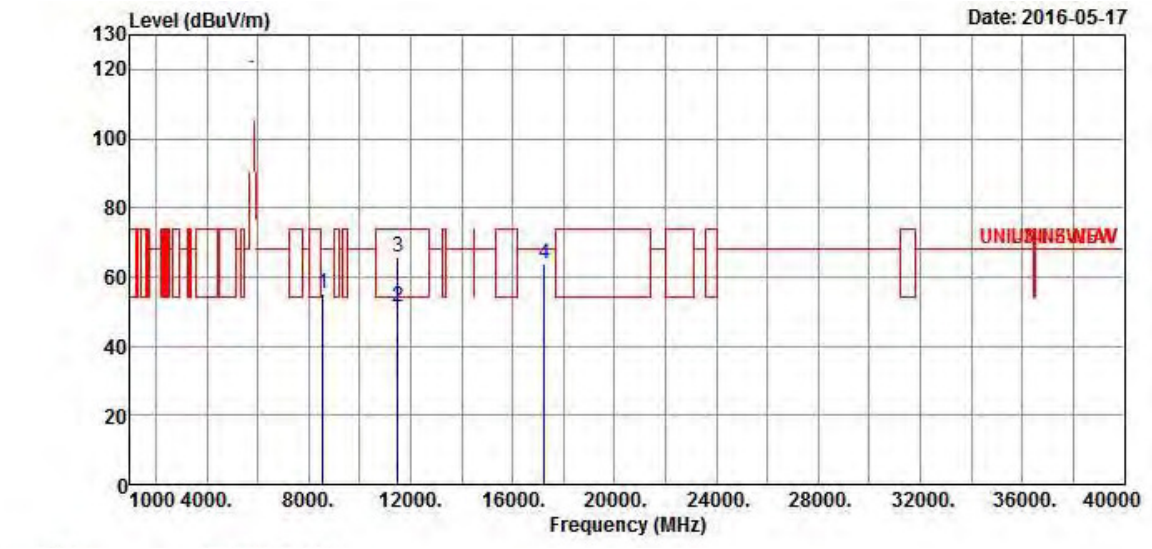
Transmitter Radiated Unwanted Emissions (Above 1GHz)_beamforming			
Modulation Mode	HT40	**Test Freq. (MHz)**	5755
N_{TX}	4	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7548.000	38.45	-15.55	54.00	27.65	36.56	7.11	32.87	Average
2	7548.000	52.66	-21.34	74.00	41.86	36.56	7.11	32.87	Peak
3	11510.000	49.40	-4.60	54.00	33.86	39.20	8.80	32.46	Average
4	11510.000	64.12	-9.88	74.00	48.58	39.20	8.80	32.46	Peak
5	17265.000	63.78	-4.42	68.20	42.45	41.98	10.90	31.55	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.

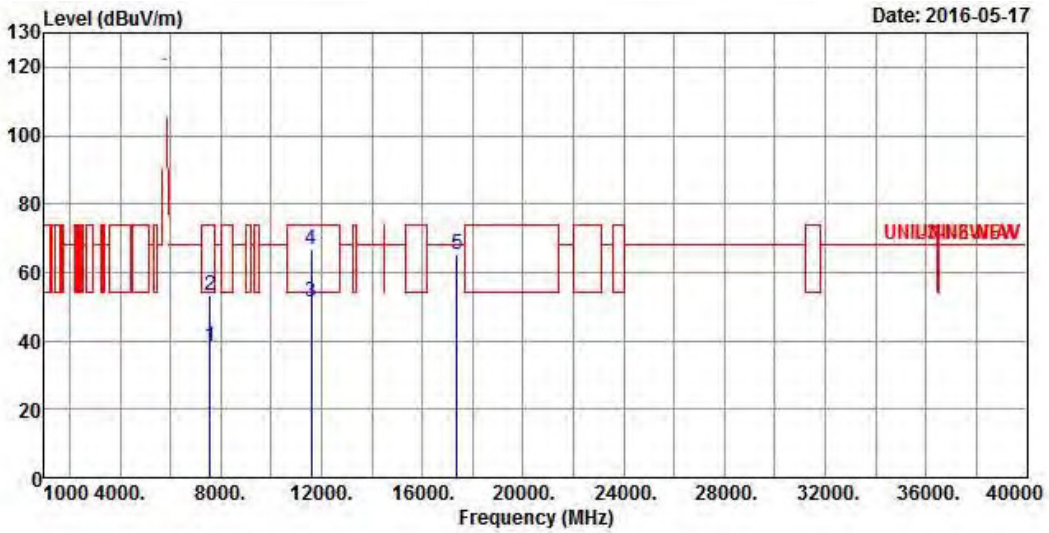
Transmitter Radiated Unwanted Emissions (Above 1GHz)_beamforming			
Modulation Mode	HT40	**Test Freq. (MHz)**	5755
N_{TX}	4	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8550.000	55.14	-13.06	68.20	42.64	37.71	7.75	32.96	Peak
2	11510.000	51.50	-2.50	54.00	35.96	39.20	8.80	32.46	Average
3	11510.000	65.87	-8.13	74.00	50.33	39.20	8.80	32.46	Peak
4	17265.000	63.99	-4.21	68.20	42.66	41.98	10.90	31.55	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.

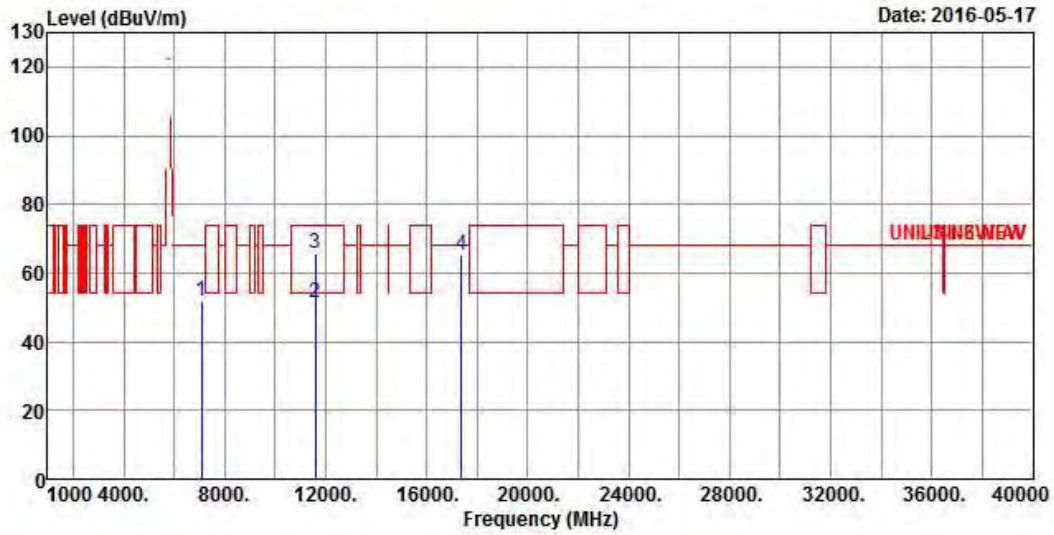
Transmitter Radiated Unwanted Emissions (Above 1GHz)_beamforming			
Modulation Mode	HT40	**Test Freq. (MHz)**	5795
N_{TX}	4	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7576.000	38.58	-15.42	54.00	27.72	36.60	7.13	32.87	Average
2	7576.000	53.14	-20.86	74.00	42.28	36.60	7.13	32.87	Peak
3	11590.000	51.29	-2.71	54.00	35.61	39.23	8.92	32.47	Average
4	11590.000	66.48	-7.52	74.00	50.80	39.23	8.92	32.47	Peak
5	17385.000	65.24	-2.96	68.20	42.99	42.89	10.95	31.59	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.

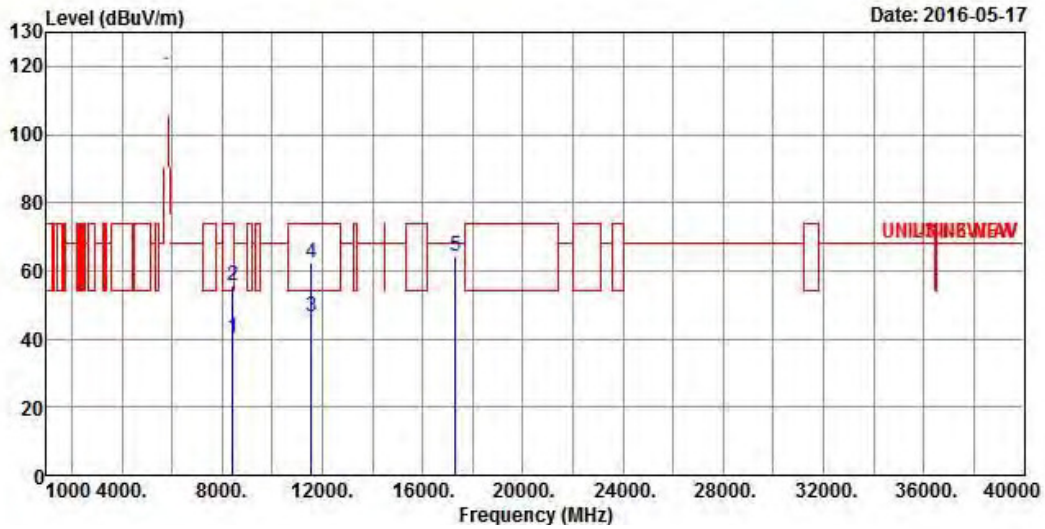
Transmitter Radiated Unwanted Emissions (Above 1GHz)_beamforming			
Modulation Mode	HT40	**Test Freq. (MHz)**	5795
N_{TX}	4	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7085.000	51.70	-16.50	68.20	41.92	35.42	7.10	32.74	Peak
2	11590.000	51.20	-2.80	54.00	35.52	39.23	8.92	32.47	Average
3	11590.000	65.92	-8.08	74.00	50.24	39.23	8.92	32.47	Peak
4	17385.000	65.15	-3.05	68.20	42.90	42.89	10.95	31.59	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.

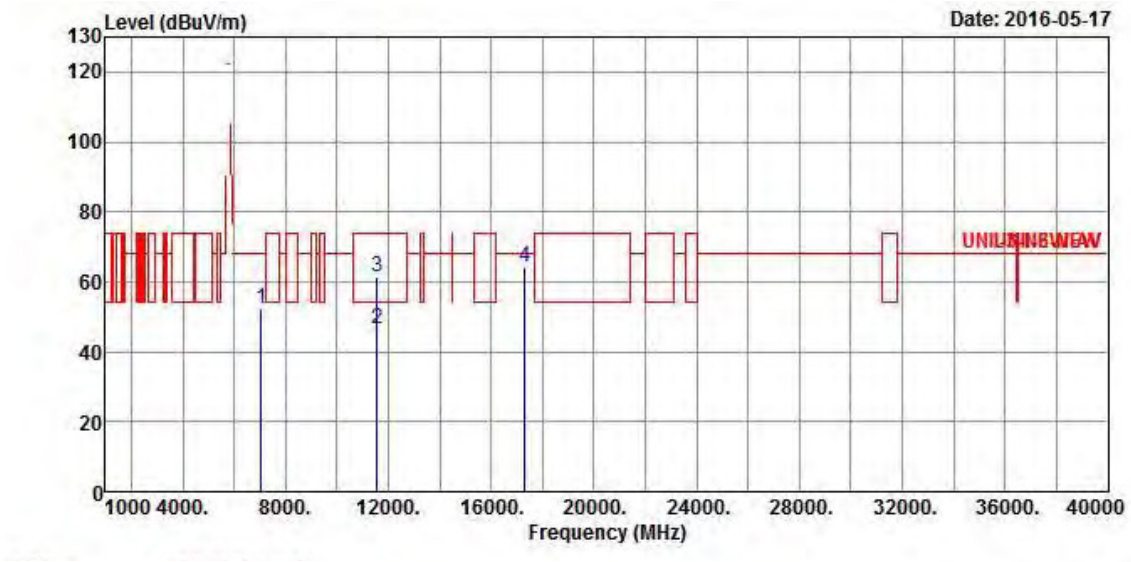
Transmitter Radiated Unwanted Emissions (Above 1GHz)_beamforming			
Modulation Mode	VHT80	**Test Freq. (MHz)**	5775
N_{TX}	4	**Polarization**	V



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8415.000	40.21	-13.79	54.00	27.80	37.60	7.75	32.94	Average
2	8415.000	55.70	-18.30	74.00	43.29	37.60	7.75	32.94	Peak
3	11550.000	46.65	-7.35	54.00	31.04	39.22	8.86	32.47	Average
4	11550.000	62.36	-11.64	74.00	46.75	39.22	8.86	32.47	Peak
5	17325.000	64.39	-3.81	68.20	42.65	42.37	10.93	31.56	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.

Transmitter Radiated Unwanted Emissions (Above 1GHz)_beamforming			
Modulation Mode	VHT80	**Test Freq. (MHz)**	5775
N_{TX}	4	**Polarization**	H



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7042.000	52.38	-15.82	68.20	42.68	35.29	7.13	32.72	Peak
2	11550.000	46.43	-7.57	54.00	30.82	39.22	8.86	32.47	Average
3	11550.000	61.59	-12.41	74.00	45.98	39.22	8.86	32.47	Peak
4	17325.000	64.27	-3.93	68.20	42.53	42.37	10.93	31.56	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.

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.
LE-LAN Devices
☒ N/A
IEEE Std. 802.11n-2009
☒ The transmitter center frequency tolerance shall be ± 20 ppm maximum for the 5 GHz band.

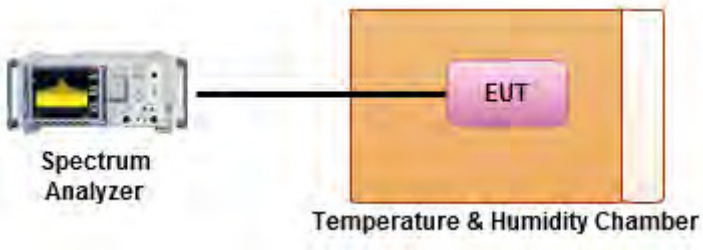
3.7.2 Measuring Instruments

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

3.7.3 Test Procedures

Test Method	
☒	Refer as ANSI C63.10, clause 6.8 for frequency stability tests
	☒ Frequency stability with respect to ambient temperature
	☒ Frequency stability when varying supply voltage
☒	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)
☐	For radiated measurement. The equipment to be measured and the test antenna shall be oriented to obtain the maximum emitted power level.

3.7.4 Test Setup

Frequency Stability


3.7.5 Test Result of Frequency Stability

Frequency Stability Result									
Mode		Frequency Stability (ppm)							
Condition	Freq. (MHz)	Test Frequency (MHz)				Frequency Stability (ppm)			
		0 min	2 min	5 min	10 min	0 min	2 min	5 min	10 min
T20°CVmax	5180	5179.99219	5179.99219	5179.99175	5179.99088	-1.5077	-1.5077	-1.5927	-1.7606
T20°CVmin	5180	5179.99349	5179.99349	5179.99262	5179.99262	-1.2568	-1.2568	-1.4247	-1.4247
T50°CVnom	5180	5179.99566	5179.99609	5179.99653	5179.99653	-0.8378	-0.7548	-0.6699	-0.6699
T40°CVnom	5180	5179.98958	5179.98958	5179.99001	5179.99001	-2.0116	-2.0116	-1.9286	-1.9286
T30°CVnom	5180	5179.99436	5179.99175	5179.98958	5179.98784	-1.0888	-1.5927	-2.0116	-2.3475
T20°CVnom	5180	5179.99262	5179.99262	5179.99219	5179.99175	-1.4247	-1.4247	-1.5077	-1.5927
T10°CVnom	5180	5180.00347	5180.00260	5180.00174	5180.00130	0.6699	0.5019	0.3359	0.2510
T0°CVnom	5180	5180.01389	5180.01389	5180.01433	5180.01433	2.6815	2.6815	2.7664	2.7664
T-10°CVnom	5180	5180.02344	5180.02388	5180.02475	5180.02562	4.5251	4.6100	4.7780	4.9459
T-20°CVnom	5180	5180.03473	5180.03473	5180.03517	5180.03560	6.7046	6.7046	6.7896	6.8726
Limit (ppm)		-				± 20			
Result		Complied							

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.

4 Test Equipment and Calibration Data

< AC Conduction >

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Last Cal.	Calibration Due Date
EMC Receiver	KETSIGHT	N9038A	MY54130031	20Hz ~ 8.4GHz	Apr. 08, 2015	Apr. 07, 2016
LISN	SCHWARZBECK MESS-ELEKTRONIK	NSLK 8127	8127-477	9kHz ~ 30MHz	Jan. 26, 2016	Jan. 25, 2017
RF Cable-CON	HUBER+SUHNER	RG213/U	07611832020001	9kHz ~ 30MHz	Oct. 30, 2015	Oct. 29, 2016
EMI Filter	LINDGREN	LRE-2030	2651	< 450 Hz	N/A	N/A

< RF Conducted >

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Last Cal.	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101013	9KHz~40GHz	Feb 16, 2016	Feb 15, 2017
AC Power Source	G.W	APS-9102	EL920581	AC 0V ~ 300V	Jun. 22, 2015	Jun. 21, 2016
Temp. and Humidity Chamber	Giant Force	GTH-225-20-SP-SD	MAA1112-007	-20 ~ 100℃	Apr. 25, 2016	Apr. 24, 2017
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	Jul. 28, 2015	Jul. 27, 2016

< Radiated Emission >

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Last Cal.	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz ~ 1GHz 3m	Nov. 28, 2015	Nov. 27, 2016
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	1GHz ~ 18GHz 3m	Dec. 16, 2015	Dec. 15, 2016
Amplifier	HP	8447D	2944A08033	10kHz ~ 1.3GHz	May 10, 2016	May 09, 2017
Amplifier	Agilent	8449B	3008A02120	1GHz ~ 26.5GHz	Sep. 02, 2015	Sep. 01, 2016
Spectrum	R&S	FSV40	101513	9kHz ~ 40GHz	Feb. 16, 2016	Feb. 15, 2017
Bilog Antenna	SCHAFFNER	CBL 6112D	22237	30MHz ~ 1GHz	Sep. 18, 2015	Sep. 17, 2016
Horn Antenna	SCHWARZBECK	BBHA9120D	1531	1GHz ~ 18GHz	Apr. 22, 2016	Apr. 21, 2017
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	18GHz ~ 40GHz	Jan. 29, 2016	Jan. 28, 2017

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Last Cal.	Calibration Due Date
Amplifier	MITEQ	JS44-18004000-33-8P	1840917	18GHz ~ 40GHz	Jun. 02, 2015	Jun. 01, 2017
Loop Antenna	TESEQ	HLA 6120	31244	9 kHz~30 MHz	Feb. 02, 2015	Feb. 01, 2017