

FCC Test Report

Equipment : 11ac Dual Band Concurrent Wall-mount AP
Brand Name : EDIMAX
Model No. : EW-7679WAC / GAP-679WAC / WAP1750 / WAP1750H /
WAP1750S / WAP1750L / WAP1750i
FCC ID : NDD9576791401
Standard : 47 CFR FCC Part 15.407
Operating Band : 5250 MHz – 5350 MHz
5470 MHz – 5725 MHz
FCC Classification : NII
Applicant : EDIMAX TECHNOLOGY CO., LTD.
Manufacturer : No.3,Wu-Chuan 3rd Road,Wu-Ku Industrial Park,
New Taipei City, Taiwan
Function : Outdoor AP; Indoor AP;
 Fixed P2P AP Portable Client

The product sample received on Apr. 10, 2014 and completely tested on Nov. 17, 2015. 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





Table of Contents

1	GENERAL DESCRIPTION	5
1.1	Information.....	5
1.2	Accessories and Support Equipment	8
1.3	Testing Applied Standards	8
1.4	Testing Location Information	9
1.5	Measurement Uncertainty	10
2	TEST CONFIGURATION OF EUT.....	11
2.1	The Worst Case Modulation Configuration	11
2.2	The Worst Case Power Setting Parameter	11
2.3	The Worst Case Measurement Configuration	12
2.4	Test Setup Diagram	14
3	TRANSMITTER TEST RESULT	16
3.1	AC Power-line Conducted Emissions	16
3.2	Emission Bandwidth	19
3.3	RF Output Power.....	22
3.4	Peak Power Spectral Density.....	27
3.5	Transmitter Bandedge Emissions	31
3.6	Transmitter Unwanted Emissions.....	35
3.7	Frequency Stability.....	102
4	TEST EQUIPMENT AND CALIBRATION DATA	104

APPENDIX A. TEST PHOTOS

APPENDIX B. PHOTOGRAPHS OF EUT



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 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

1 General Description

1.1 Information

1.1.1 RF General Information

RF General Information					
Frequency Range (MHz)	IEEE Std. 802.11	Ch. Freq. (MHz)	Channel Number	Transmit Chains (N _{TX})	RF Output Power (dBm)
5250-5350	a	5260-5320	52-64 [4]	1	21.89
5470-5725		5500-5700	100-140 [11]	1	20.50
5250-5350	n (HT20)	5260-5320	52-64 [4]	3 / 3	21.20 / 21.23
5470-5725	ac (VHT20)	5500-5700	100-140 [11]	3 / 3	20.81 / 20.68
5250-5350	n (HT40)	5270-5310	54-62 [2]	3 / 3	23.93 / 23.90
5470-5725	ac (VHT40)	5510-5670	102-134 [3]	3 / 3	23.59 / 23.71
5250-5350	ac (VHT80)	5290	58 [1]	3	16.88
5470-5725		5530	106 [2]	3	20.65

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

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

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

1.1.2 Antenna Information

Antenna Category	
<input checked="" type="checkbox"/>	External antenna (dedicated antennas)
<input checked="" type="checkbox"/>	Single power level with corresponding antenna(s).
<input type="checkbox"/>	Multiple power level and corresponding antenna(s).

Antenna General Information				
Port No.	Ant. Cat.	Ant. Type	Model No.	Gain (dBi)
1	External	Dipole	98610PRSX002	2.58
2				2.58
3				2.58

Note: 1: The EUT supported CDD function.

Note: 2: 802.11a only includes 1TX and Port1 for emission.

Note: 3: 802.11n/ac used three antennas are for signal transmitting and receiving. (3T3R Spatial Multiplexing MIMO configuration)



1.1.3 Type of EUT

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

1.1.4 Test Signal Duty Cycle

Operated Mode for Worst Duty Cycle	
<input type="checkbox"/> Operated normally mode for worst duty cycle	
<input checked="" type="checkbox"/> Operated test mode for worst duty cycle	
Test Signal Duty Cycle (x)	Power Duty Factor [dB] – (10 log 1/x)
<input checked="" type="checkbox"/> 98.44% - IEEE 802.11a	0.07
<input checked="" type="checkbox"/> 100% - IEEE 802.11n (HT20)	0.00
<input checked="" type="checkbox"/> 100% - IEEE 802.11n (HT40)	0.00
<input checked="" type="checkbox"/> 100% - IEEE 802.11ac (VHT20)	0.00
<input checked="" type="checkbox"/> 100% - IEEE 802.11ac (VHT40)	0.00
<input checked="" type="checkbox"/> 93.48% - IEEE 802.11ac (VHT80)	0.29

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

1.1.5 EUT Operational Condition

Supply Voltage	<input checked="" type="checkbox"/> AC mains	<input checked="" type="checkbox"/> DC	<input type="checkbox"/> System
Type of DC Source	<input type="checkbox"/> Internal DC supply	<input checked="" type="checkbox"/> External DC from PoE	<input checked="" type="checkbox"/> External AC Adapter



1.1.6 DFS and TPC Information

The DFS Related Operating Mode(s) of the Equipment			
<input checked="" type="checkbox"/> Master			
<input type="checkbox"/> Slave with radar detection			
<input type="checkbox"/> Slave without radar detection			
Software / Firmware Version		1.3.0	
Power-on Cycle. (Master VHT80)		90.3375 sec	
Communication Mode		<input checked="" type="checkbox"/> IP Based	<input type="checkbox"/> Frame Based
IEEE Std. 802.11	Frequency Range (MHz)	TPC (Transmit Power Control)	Active Scan
a / n (HT20) / ac (VHT20) n (HT40) / ac (VHT40) ac (VHT80)	<input checked="" type="checkbox"/> 5250-5350	No	Yes
	<input checked="" type="checkbox"/> 5470-5725	No	Yes
	<input checked="" type="checkbox"/> 5600-5650	No	Yes

1.2 Accessories and Support Equipment

Accessories				
AC Adapter 1	Brand Name	APD	Model Name	WA-30B12
	Power Rating	I/P: 100-240Vac 0.8A ; O/P: 12V $\overline{=}$ 2.5A		
	Power cord	1.8m, non-shielded cable, w/o ferrite core		
AC Adapter 2	Brand Name	APD	Model Name	DA-48T12
	Power Rating	I/P: 100-240Vac 1.2A ; O/P: 12V $\overline{=}$ 4A		
	Power Cord	AC: 1.4m, non-shielded cable, w/o ferrite core DC: 1.5m, non-shielded cable, with one ferrite core		
AC Adapter 3 (Level VI)	Brand Name	APD	Model Name	DA-48T12
	Power Rating	I/P: 100-240Vac 1.4A ; O/P: 12V $\overline{=}$ 4A		
	Power Cord	AC: 1.4m, non-shielded cable, w/o ferrite core DC: 1.5m, non-shielded cable, w/o ferrite core		

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

Support Equipment - AC Conduction and Radiated Emission				
No.	Equipment	Brand Name	Model Name	FCC ID
1	PoE	Acelink	PI-1000PT	DoC

Note: The PoE provided by the customer.

Support Equipment - RF Conducted				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E5540	-

1.3 Testing Applied Standards

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

- ◆ 47 CFR FCC Part 15
- ◆ ANSI C63.10-2013
- ◆ FCC KDB 789033 D02 v01
- ◆ FCC KDB 644545 D03 v01
- ◆ FCC KDB 662911 v02r01
- ◆ FCC-14-30A1-UNII



1.4 Testing Location Information

Testing Location			
<input checked="" type="checkbox"/>	HWA YA	ADD : No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.	
		TEL : 886-3-327-3456	FAX : 886-3-327-0973
Test Condition	Test Site No.	Test Engineer	Test Environment
AC Conduction	CO04-HY	Zeus	23°C / 51%
RF Conducted	TH01-HY	Shiming	23.5°C / 62%
Radiated Emission (Below 1GHz)	03CH03-HY	Joe	23.6°C / 62%
Radiated Emission (Above 1GHz)	03CH03-HY	Terry	21.1°C / 50.9%



1.5 Measurement Uncertainty

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

Measurement Uncertainty		
Test Item		Uncertainty
AC power-line conducted emissions		±2.3 dB
Emission bandwidth, 26dB bandwidth		±0.5%
RF output power, conducted		±0.1 dB
Power density, conducted		±0.5 dB
Unwanted emissions, conducted	9 – 150 kHz	±0.4 dB
	0.15 – 30 MHz	±0.4 dB
	30 – 1000 MHz	±0.6 dB
	1 – 18 GHz	±0.5 dB
	18 – 40 GHz	±0.5 dB
	40 – 200 GHz	N/A
All emissions, radiated	9 – 150 kHz	±2.5 dB
	0.15 – 30 MHz	±2.3 dB
	30 – 1000 MHz	±2.6 dB
	1 – 18 GHz	±3.6 dB
	18 – 40 GHz	±3.8 dB
	40 – 200 GHz	N/A
Temperature		±0.8 °C
Humidity		±5 %
DC and low frequency voltages		±0.9%
Time		±1.4 %
Duty Cycle		±0.5 %

2 Test Configuration of EUT

2.1 The Worst Case Modulation Configuration

Worst Modulation Used for Conformance Testing			
Modulation Mode	Transmit Chains (N _{TX})	Data Rate / MCS	Worst Data Rate / MCS
11a	1	6-54Mbps	6 Mbps
HT20	3	MCS 0-23	MCS 0
HT40	3	MCS 0-23	MCS 0
VHT20	3	MCS 0-8	MCS 0
VHT40	3	MCS 0-9	MCS 0
VHT80	3	MCS 0-9	MCS 0

2.2 The Worst Case Power Setting Parameter

The Worst Case Power Setting Parameter (5250-5350MHz band)							
Test Software Version	Cart						
Modulation Mode	N _{TX}	Test Frequency (MHz)					
		NCB: 20MHz			NCB: 40MHz		NCB: 80MHz
		5260	5300	5320	5270	5310	5290
11a	1	22	23	21.5	-	-	-
HT20	3	16.5	16.5	16	-	-	-
HT40	3	-	-	-	20	14	-
VHT20	3	16.5	16.5	16	-	-	-
VHT40	3	-	-	-	20	14	-
VHT80	3	-	-	-	-	-	13

The Worst Case Power Setting Parameter (5470-5725MHz band)									
Test Software Version	Cart								
Modulation Mode	N _{TX}	Test Frequency (MHz)							
		NCB: 20MHz			NCB: 40MHz			NCB: 80MHz	
		5500	5580	5700	5510	5550	5670	5530	5610
11a	1	20	20.5	17	-	-	-	-	-
HT20	3	16	16	12	-	-	-	-	-
HT40	3	-	-	-	12	19.5	17	-	-
VHT20	3	16.5	16.5	13	-	-	-	-	-
VHT40	3	-	-	-	12	19.5	17	-	-
VHT80	3	-	-	-	-	-	-	8	17

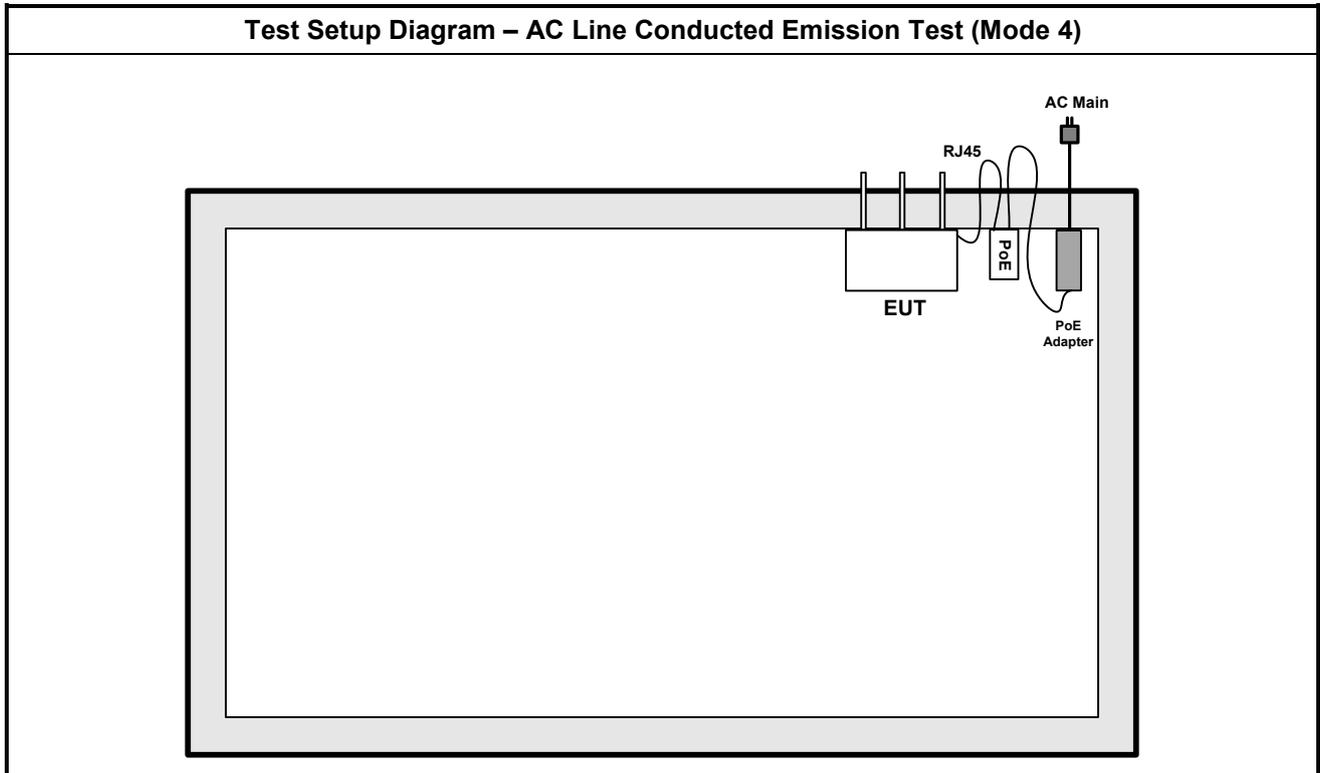
2.3 The Worst Case Measurement Configuration

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	EUT with Adapter 1
2	EUT with Adapter 2
3	EUT with Adapter 3
4	EUT with PoE
For operating mode 4 is the worst case and it was record in this test report.	

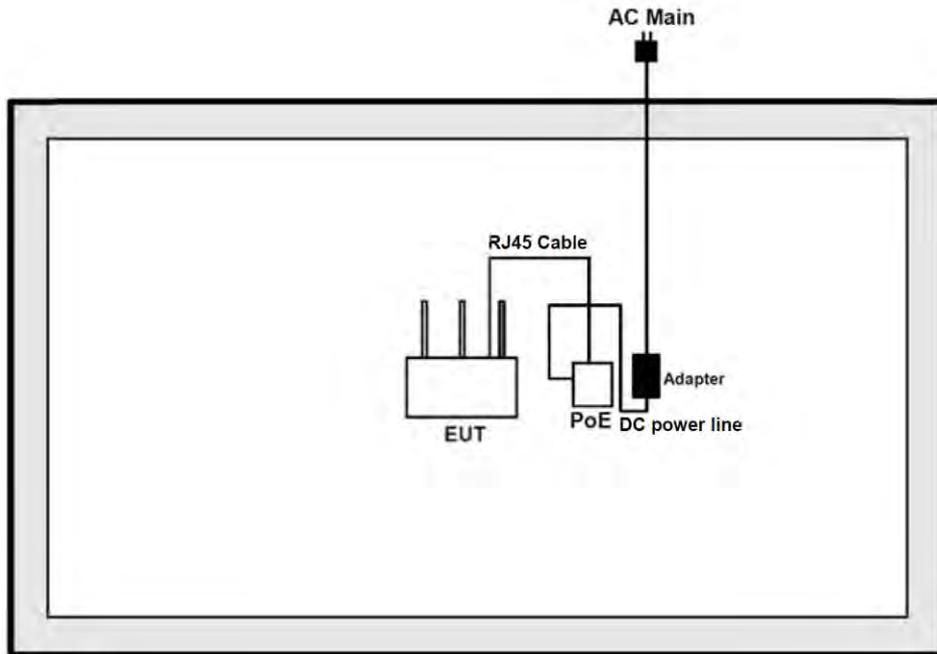
The Worst Case Mode for Following Conformance Tests	
Tests Item	RF Output Power, Peak Power Spectral Density, Emission Bandwidth, Transmitter Conducted Unwanted Emissions Transmitter Conducted Bandedge Emissions
Test Condition	Conducted measurement at transmit chains
Modulation Mode	11a, HT20, HT40,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

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	<input type="checkbox"/> EUT will be placed in fixed position.
	<input checked="" type="checkbox"/> EUT will be placed in mobile position and operating multiple positions. EUT shall be performed two orthogonal planes.
	<input type="checkbox"/> EUT will be a hand-held or body-worn battery-powered devices and operating multiple positions.
Operating Mode < 1GHz	Operating Mode Description
1	EUT with Adapter 1
2	EUT with Adapter 2
3	EUT with Adapter 3
4	EUT with PoE
For operating mode 4 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	EUT with Adapter 2
Modulation Mode	11a, HT20, HT40, VHT20, VHT40, VHT80
Orthogonal Planes of EUT	X Plane
	
Orthogonal Planes of EUT	Z Plane
	
Worst Planes of EUT	V

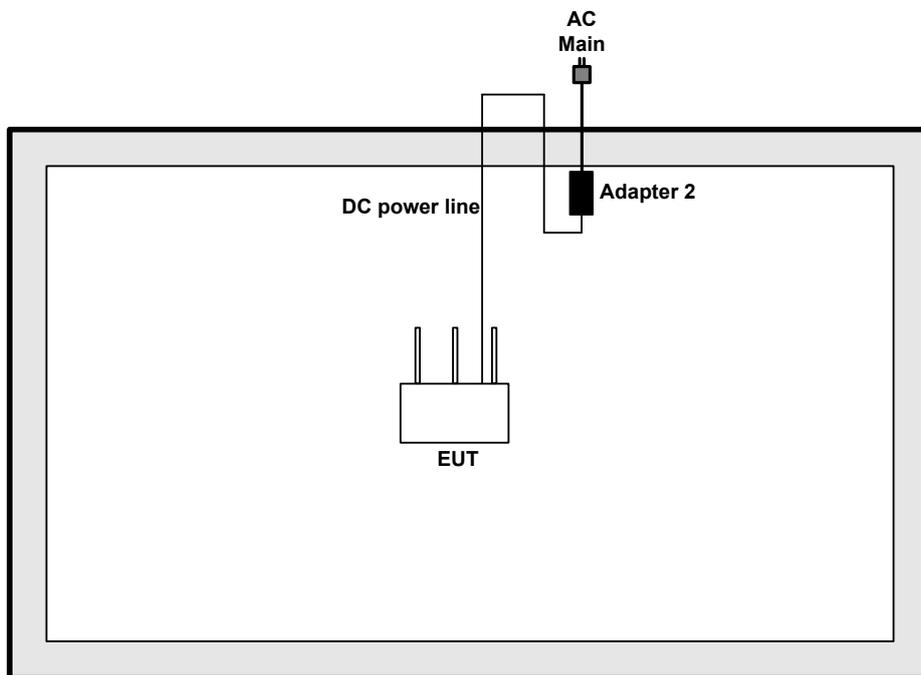
2.4 Test Setup Diagram



Test Setup Diagram - Radiated Emission (Below 1GHz) - Mode 4



Test Setup Diagram - Radiated Emission (Above 1GHz) - Mode 2



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.

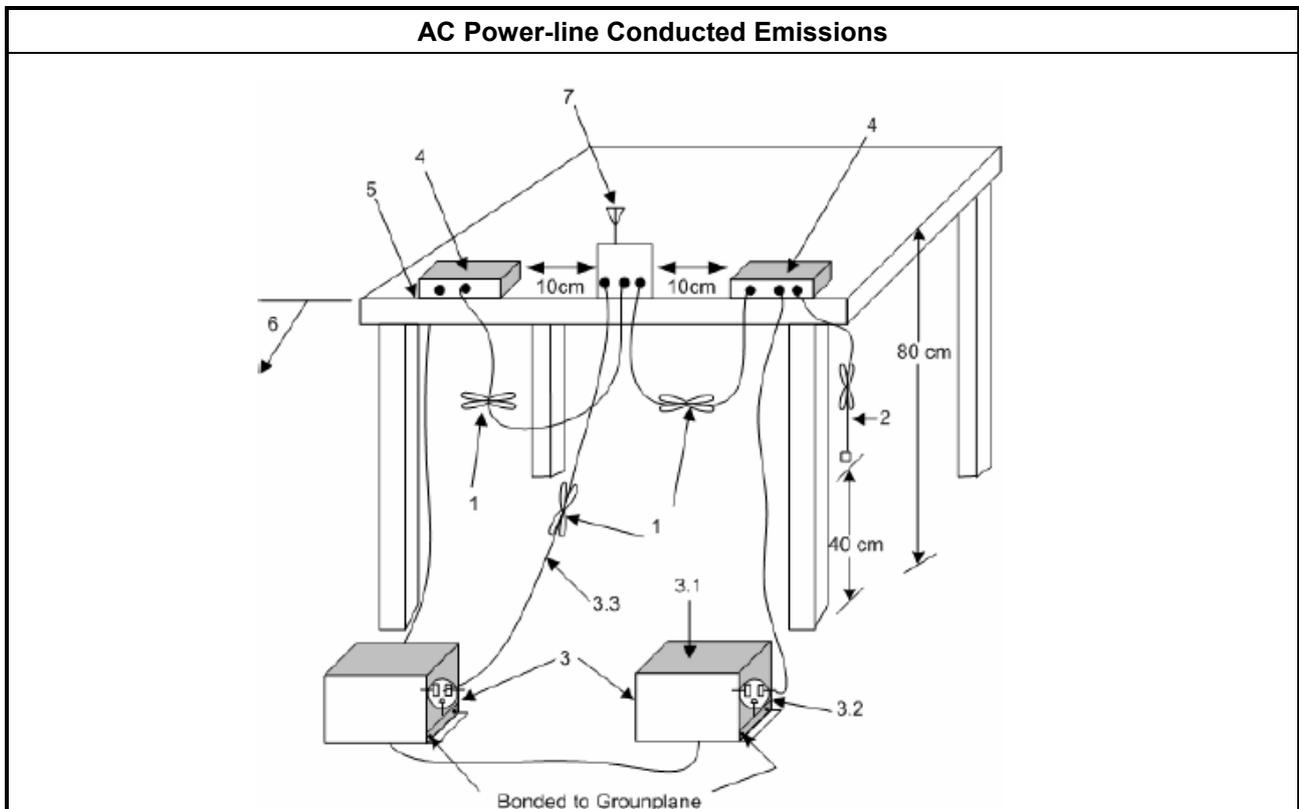
3.1.2 Measuring Instruments

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

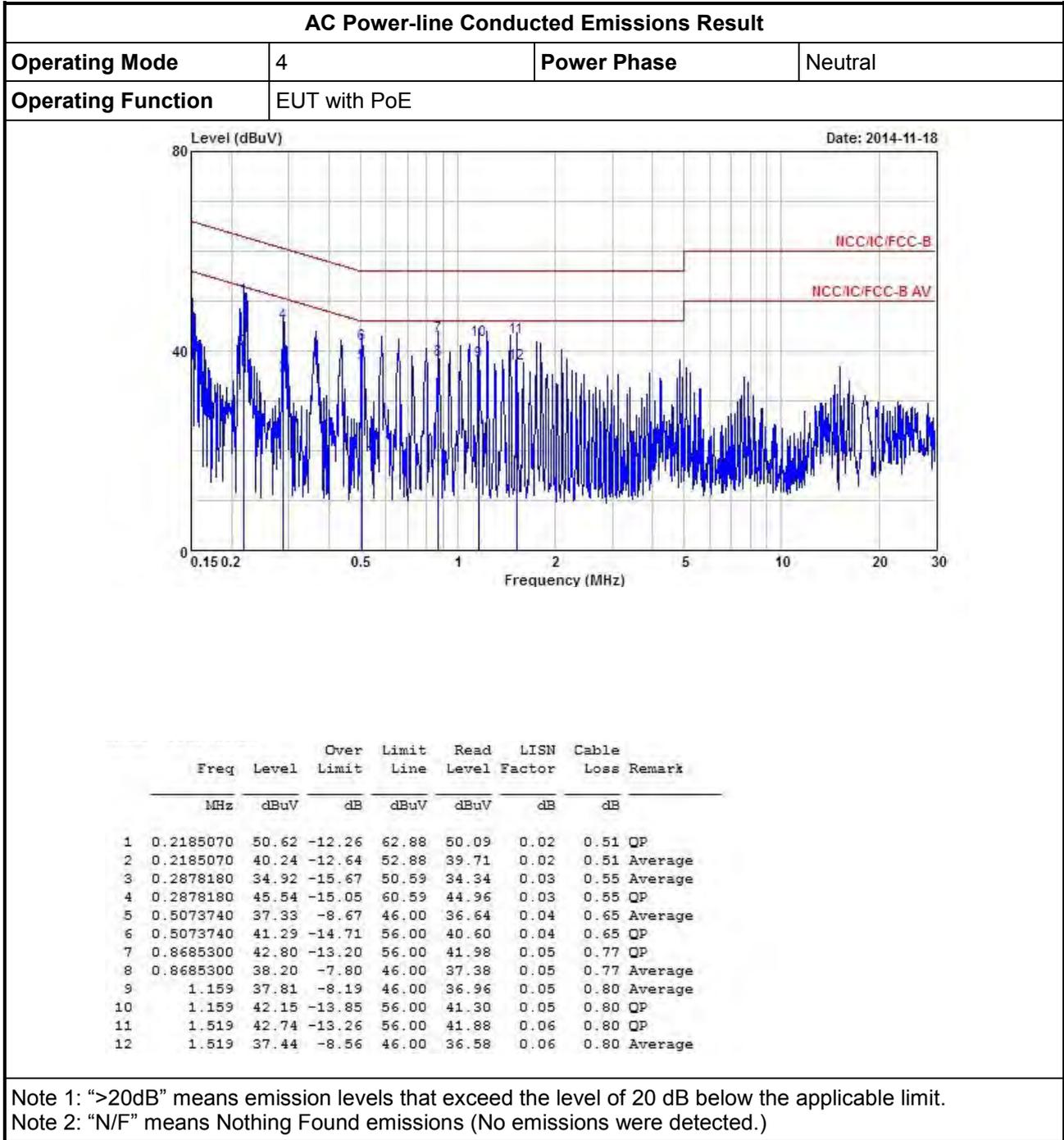
3.1.3 Test Procedures

Test Method
<input checked="" type="checkbox"/> Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Test Setup

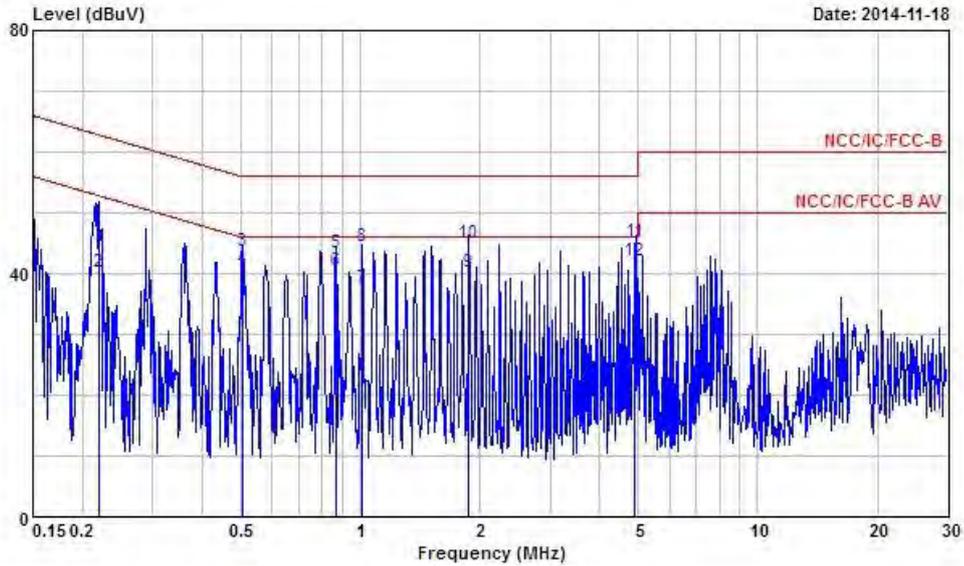


3.1.5 Test Result of AC Power-line Conducted Emissions



AC Power-line Conducted Emissions Result

Operating Mode	4	Power Phase	Line
Operating Function	EUT with PoE		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.2196670	47.90	-14.93	62.83	47.36	0.03	0.51	QP
2	0.2196670	40.16	-12.67	52.83	39.62	0.03	0.51	Average
3	0.5056930	43.62	-12.38	56.00	42.93	0.04	0.65	QP
4	0.5056930	40.83	-5.17	46.00	40.14	0.04	0.65	Average
5	0.8664270	43.36	-12.64	56.00	42.53	0.06	0.77	QP
6	0.8664270	40.62	-5.38	46.00	39.79	0.06	0.77	Average
7	1.013	37.54	-8.46	46.00	36.68	0.06	0.80	Average
8	1.013	44.43	-11.57	56.00	43.57	0.06	0.80	QP
9	1.877	40.25	-5.75	46.00	39.38	0.07	0.80	Average
10	1.877	45.06	-10.94	56.00	44.19	0.07	0.80	QP
11	4.911	45.21	-10.79	56.00	44.37	0.12	0.72	QP
12	4.911	42.13	-3.87	46.00	41.29	0.12	0.72	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 Limit

Emission Bandwidth Limit	
UNII Devices	
<input type="checkbox"/>	For the 5.15-5.25 GHz band, N/A
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	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.
<input type="checkbox"/>	For the 5.725-5.85 GHz band, 6 dB emission bandwidth \geq 500kHz.

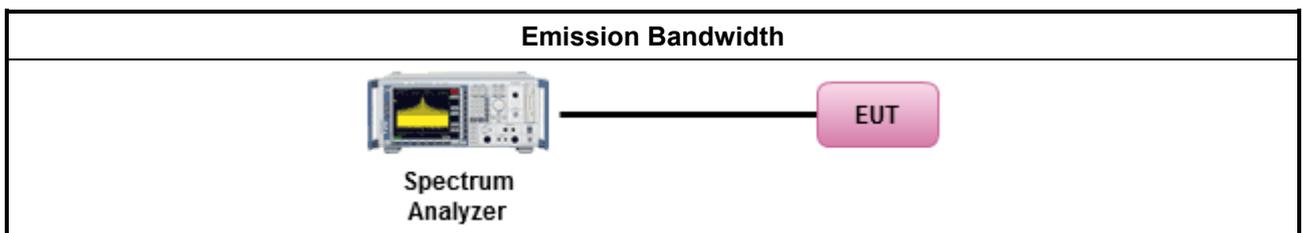
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
<input checked="" type="checkbox"/>	For the emission bandwidth shall be measured using one of the options below:
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033, clause C for EBW and clause D for OBW measurement.
<input type="checkbox"/>	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.
<input type="checkbox"/>	Refer as IC RSS-Gen, clause 6.6 for bandwidth testing.
<input checked="" type="checkbox"/>	For conducted measurement.
<input checked="" type="checkbox"/>	The EUT supports single transmit chain and measurements performed on this transmit chain port 1.
<input type="checkbox"/>	The EUT supports diversity transmitting and the results on transmit chain port 1 is the worst case.
<input checked="" type="checkbox"/>	The EUT supports multiple transmit chains using options given below:
<input type="checkbox"/>	Option 1: Multiple transmit chains measurements need to be performed on one of the active transmit chains (antenna outputs). All measurement had be performed on transmit chains 1.
<input checked="" type="checkbox"/>	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.

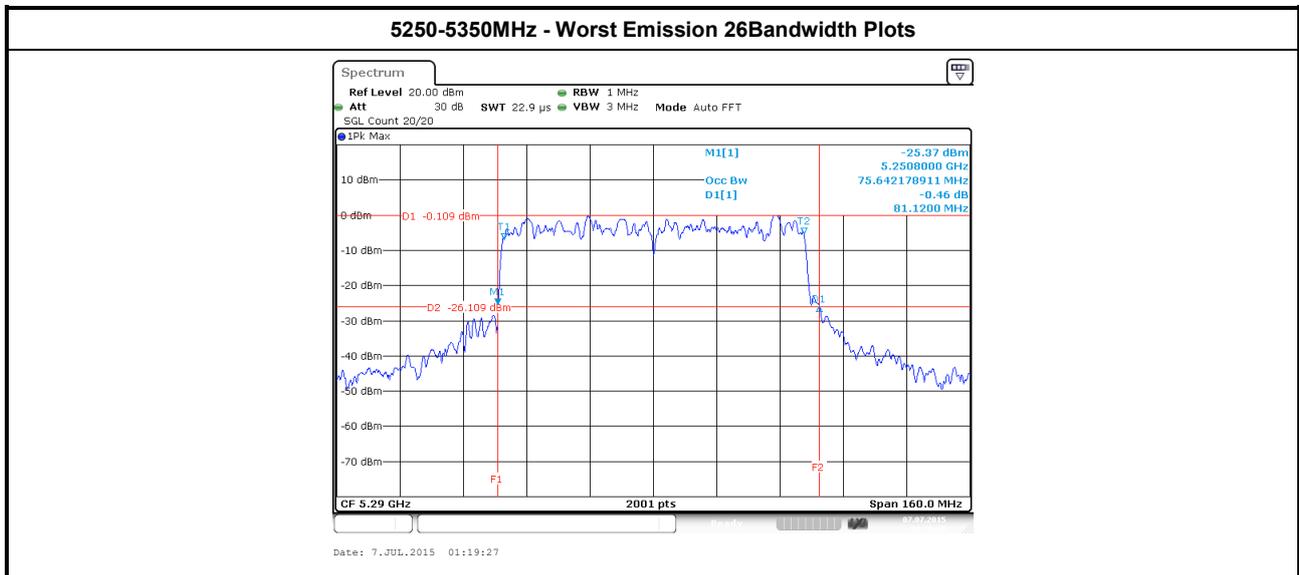
3.2.4 Test Setup





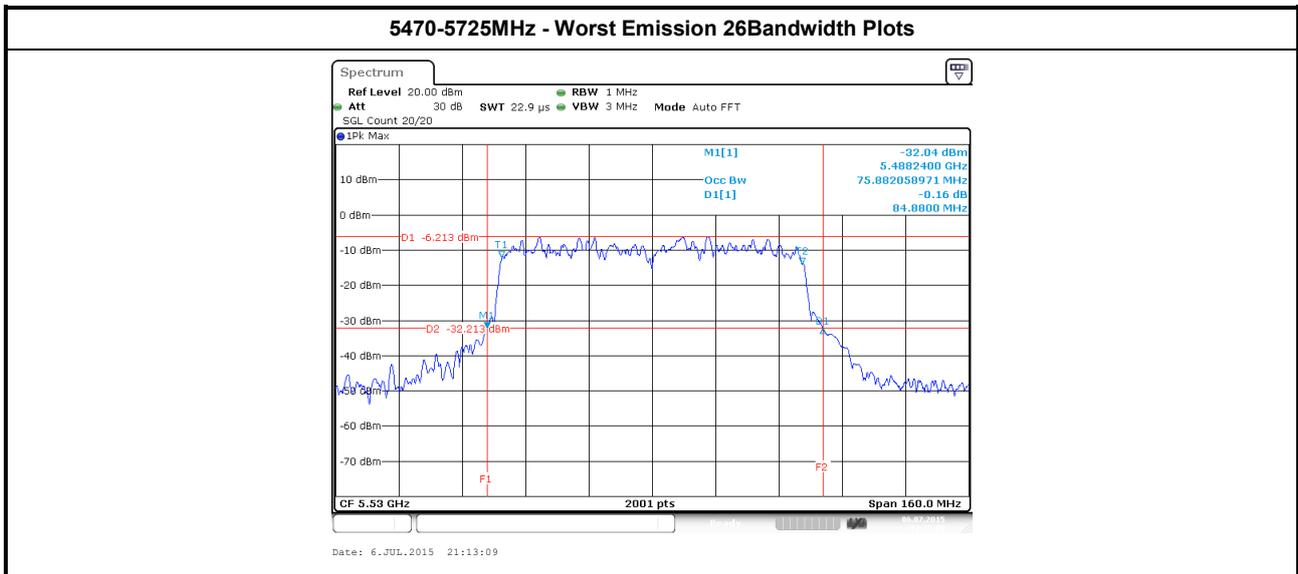
3.2.5 Test Result of Emission Bandwidth

UNII Emission Bandwidth Result (5250-5350MHz band)								
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 1	Chain Port 2	Chain Port 3
11a	1	5260	16.74	-	-	22.30	-	-
11a	1	5300	16.46	-	-	23.22	-	-
11a	1	5320	16.56	-	-	21.35	-	-
HT20	3	5260	17.91	17.76	17.71	20.97	21.87	21.45
HT20	3	5300	17.59	17.84	17.71	20.27	21.52	20.40
HT20	3	5320	17.69	17.84	17.66	21.42	21.32	20.32
HT40	3	5270	36.78	36.70	36.46	40.16	40.60	40.64
HT40	3	5310	36.38	36.66	36.62	40.32	40.76	41.24
VHT20	3	5260	17.76	17.96	17.96	21.57	21.37	22.27
VHT20	3	5300	18.14	18.01	17.91	21.77	22.42	22.00
VHT20	3	5320	17.74	17.84	17.61	21.27	21.50	21.12
VHT40	3	5270	36.42	36.18	36.42	40.36	40.52	41.56
VHT40	3	5310	36.74	36.58	36.26	41.80	41.88	41.16
VHT80	3	5290	75.48	75.64	75.72	80.72	81.12	80.96
Result			Complied					





UNII Emission Bandwidth Result (5470-5725MHz band)								
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 1	Chain Port 2	Chain Port 3
11a	1	5500	16.54	-	-	20.30	-	-
11a	1	5580	16.69	-	-	20.10	-	-
11a	1	5700	16.41	-	-	19.55	-	-
HT20	3	5500	17.84	18.01	17.69	21.55	21.75	20.70
HT20	3	5580	17.69	17.86	17.86	21.15	21.25	20.77
HT20	3	5700	17.61	18.11	17.69	20.42	21.72	20.10
HT40	3	5510	36.54	36.66	36.78	42.48	42.96	41.68
HT40	3	5550	36.58	36.78	36.94	42.36	42.04	41.80
HT40	3	5670	36.34	36.54	36.46	41.32	41.64	41.12
VHT20	3	5500	17.61	17.99	17.84	20.10	21.22	20.82
VHT20	3	5580	17.71	17.89	17.64	21.40	21.37	20.25
VHT20	3	5700	17.74	17.71	17.69	20.57	20.17	20.62
VHT40	3	5510	36.70	36.70	36.98	43.92	42.20	43.92
VHT40	3	5550	36.78	36.54	36.58	42.28	42.36	42.92
VHT40	3	5670	36.58	36.46	36.50	41.32	41.48	41.72
VHT80	3	5530	75.88	75.96	76.12	84.88	83.44	83.76
VHT80	3	5610	75.64	75.96	75.56	83.12	83.76	83.68
Result			Complied					





3.3 RF Output Power

3.3.1 RF Output Power Limit

Maximum Conducted Output Power Limit	
UNII Devices	
<input type="checkbox"/> For the 5.15-5.25 GHz band:	
<input type="checkbox"/>	Outdoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. e.i.r.p. at any elevation angle above 30 degrees $\leq 125mW$ [21dBm]
<input type="checkbox"/>	Indoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$
<input type="checkbox"/>	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 $P_{Out} = 30 - (G_{TX} - 23)$.
<input type="checkbox"/>	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 $P_{Out} = 24 - (G_{TX} - 6)$.
<input checked="" type="checkbox"/> For the 5.25-5.35 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.	
<input checked="" type="checkbox"/> For the 5.47-5.725 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.	
<input type="checkbox"/> For the 5.725-5.85 GHz band:	
<input type="checkbox"/>	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 $P_{Out} = 30 - (G_{TX} - 6)$.
<input type="checkbox"/>	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.	

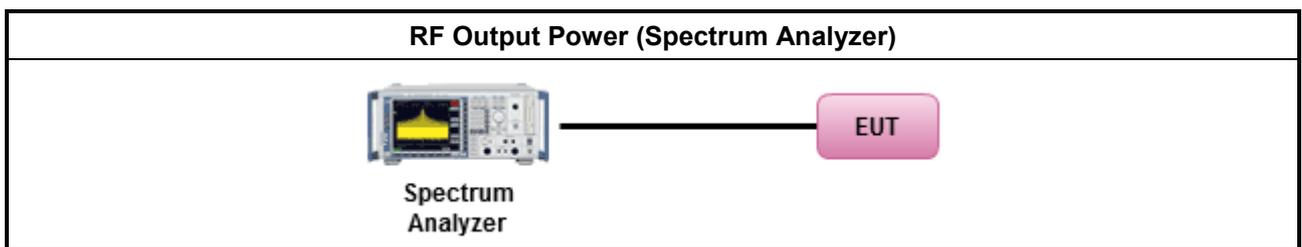
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
<input checked="" type="checkbox"/>	Maximum Conducted Output Power
	[duty cycle ≥ 98% or external video / power trigger]
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033, clause E Method SA-1 (spectral trace averaging).
<input type="checkbox"/>	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
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
<input type="checkbox"/>	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
<input type="checkbox"/>	Refer as FCC KDB 789033, clause E Method PM (using an RF average power meter).
<input checked="" type="checkbox"/>	For conducted measurement.
<input checked="" type="checkbox"/>	The EUT supports single transmit chain and measurements performed on this transmit chain port 1.
<input type="checkbox"/>	The EUT supports diversity transmitting and the results on transmit chain port 1 is the worst case.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.3.4 Test Setup





3.3.5 Directional Gain for Power Measurement

Directional Gain (DG) Result					
Transmit Chains No.		1	2	3	-
Maximum G _{ANT} (dBi)		2.58	2.58	2.58	-
Modulation Mode	DG (dBi) (See the Note 4)	N _{TX}	N _{SS} (Min.)	STBC	Array Gain (dB)
11a	2.58	1	1	-	-
HT20	2.58	3	1 / 2 / 3	-	4.77
HT40	2.58	3	1 / 2 / 3	-	4.77
VHT20	2.58	3	1 / 2 / 3	-	4.77
VHT40	2.58	3	1 / 2 / 3	-	4.77
VHT80	2.58	3	1 / 2 / 3	-	4.77

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

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

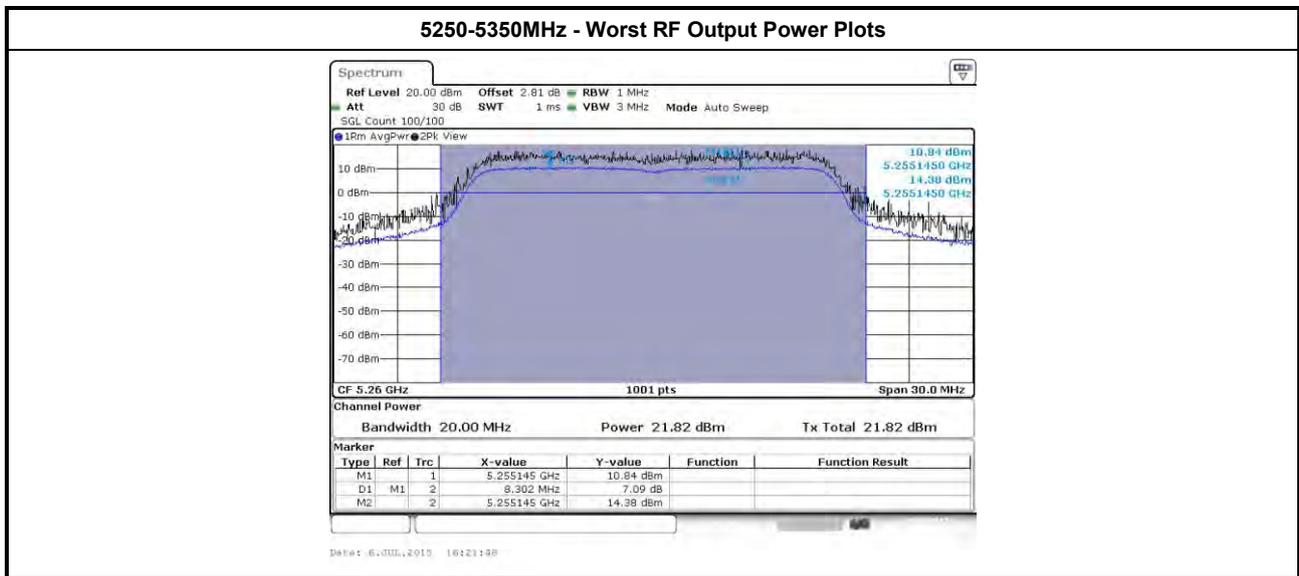
Note 3: For Spatial Multiplexing, Directional Gain (DG) = G_{ANT} + 10 log(N_{TX}/N_{SS}),
where N_{SS} = the number of independent spatial streams data.

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} ≤ 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 Conducted Output Power

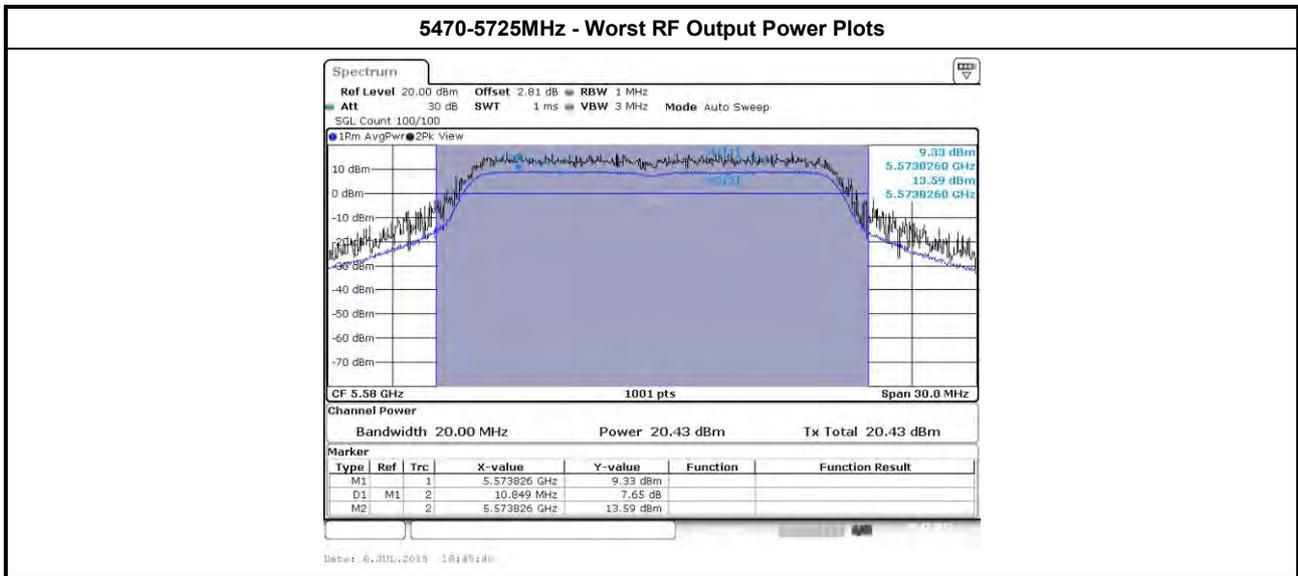
Maximum Conducted Output Power (5250-5350MHz band)								
Modulation Mode	N _{Tx}	Freq. (MHz)	Output Power (dBm)				Antenna Gain (dBi)	Power Limit
			Chain Port 1	Chain Port 2	Chain Port 3	Sum Chain		
11a	1	5260	21.89	-	-	21.89	2.58	24.00
11a	1	5300	21.89	-	-	21.89	2.58	24.00
11a	1	5320	21.44	-	-	21.44	2.58	24.00
HT20	3	5260	16.22	16.67	15.85	21.03	2.58	24.00
HT20	3	5300	16.18	16.64	16.46	21.20	2.58	24.00
HT20	3	5320	15.60	16.22	16.15	20.77	2.58	24.00
HT40	3	5270	19.13	19.43	18.91	23.93	2.58	24.00
HT40	3	5310	13.12	13.89	13.49	18.28	2.58	24.00
VHT20	3	5260	16.22	16.56	15.80	20.98	2.58	24.00
VHT20	3	5300	16.22	16.66	16.48	21.23	2.58	24.00
VHT20	3	5320	15.71	16.17	16.20	20.80	2.58	24.00
VHT40	3	5270	19.02	19.41	18.93	23.90	2.58	24.00
VHT40	3	5310	13.03	13.64	13.51	18.17	2.58	24.00
VHT80	3	5290	11.92	12.43	11.94	16.88	2.58	24.00
Result			Complied					



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



Maximum Conducted Output Power (5470-5725MHz band)								
Modulation Mode	N _{TX}	Freq. (MHz)	Output Power (dBm)				Antenna Gain (dBi)	Power Limit
			Chain Port 1	Chain Port 2	Chain Port 3	Sum Chain		
11a	1	5500	19.77	-	-	19.77	2.58	24.00
11a	1	5580	20.50	-	-	20.50	2.58	24.00
11a	1	5700	17.20	-	-	17.20	2.58	24.00
HT20	3	5500	15.94	16.31	15.85	20.81	2.58	24.00
HT20	3	5580	15.91	16.07	15.72	20.67	2.58	24.00
HT20	3	5700	13.17	13.07	11.92	17.53	2.58	24.00
HT40	3	5510	11.21	11.78	11.53	16.28	2.58	24.00
HT40	3	5550	18.92	18.97	18.57	23.59	2.58	24.00
HT40	3	5670	16.44	16.86	16.08	21.24	2.58	24.00
VHT20	3	5500	15.78	16.17	15.76	20.68	2.58	24.00
VHT20	3	5580	15.60	15.91	15.56	20.46	2.58	24.00
VHT20	3	5700	13.05	12.85	11.93	17.41	2.58	24.00
VHT40	3	5510	10.96	11.51	11.23	16.01	2.58	24.00
VHT40	3	5550	19.02	19.10	18.67	23.71	2.58	24.00
VHT40	3	5670	16.56	16.82	16.10	21.27	2.58	24.00
VHT80	3	5530	6.49	6.94	6.50	11.42	2.58	24.00
VHT80	3	5530	15.95	16.11	15.54	20.65	2.58	21.00
Result			Complied					



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	
<input type="checkbox"/> For the 5.15-5.25 GHz band:	
<input type="checkbox"/>	Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$.
<input type="checkbox"/>	Indoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$.
<input type="checkbox"/>	Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 23$ dBi, then $P_{Out} = 17 - (G_{TX} - 23)$.
<input type="checkbox"/>	Mobile or Portable Client: the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.
<input checked="" type="checkbox"/> For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.	
<input checked="" type="checkbox"/> For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.	
<input type="checkbox"/> For the 5.725-5.85 GHz band:	
<input type="checkbox"/>	Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If $G_{TX} > 6$ dBi, then $PPSD = 30 - (G_{TX} - 6)$.
<input type="checkbox"/>	Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
<p>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</p> <p>G_{TX} = the maximum transmitting antenna directional gain in dBi.</p>	

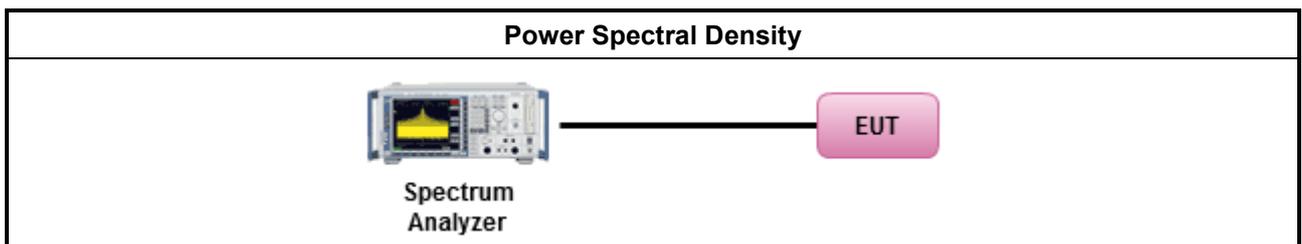
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method	
<input checked="" type="checkbox"/> 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:	
<input type="checkbox"/> Refer as FCC KDB 789033, F)5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth	
[duty cycle ≥ 98% or external video / power trigger]	
<input checked="" type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-1 (spectral trace averaging).	
<input type="checkbox"/> 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	
<input checked="" type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).	
<input type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)	
<input checked="" type="checkbox"/> For conducted measurement.	
<input checked="" type="checkbox"/> The EUT supports single transmit chain and measurements performed on this transmit chain port 1.	
<input type="checkbox"/> The EUT supports diversity transmitting and the results on transmit chain port 1 is the worst case.	
<input checked="" type="checkbox"/> The EUT supports multiple transmit chains using options given below:	
<input checked="" type="checkbox"/> 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.	
<input type="checkbox"/> 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.	
<input checked="" type="checkbox"/> If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + \dots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$	
<input checked="" type="checkbox"/> Each individually PPSD plots refer as test report clause 3.3.5 with each individually PPSD plots.	

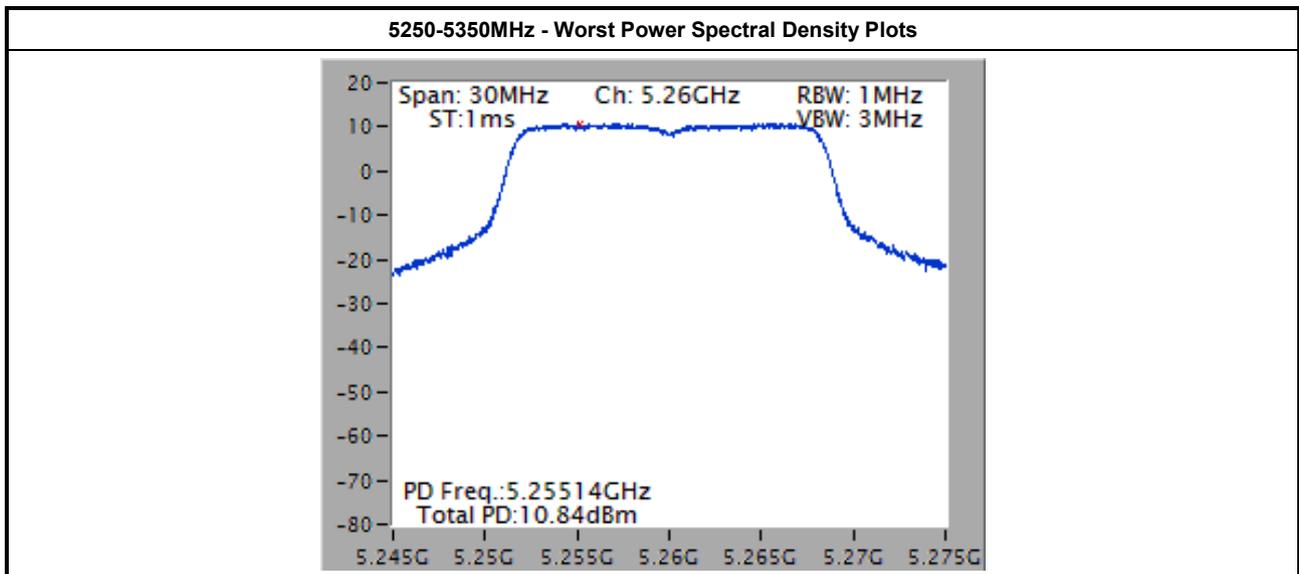
3.4.4 Test Setup





3.4.5 Test Result of Peak Power Spectral Density

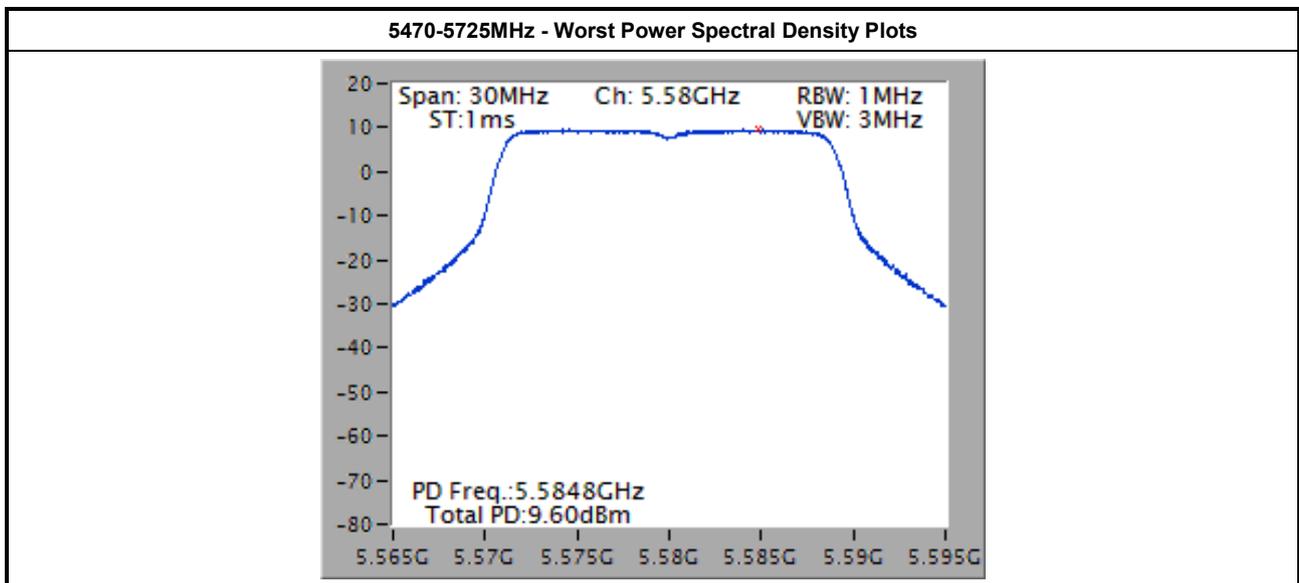
Peak Power Spectral Density Result (5250-5350MHz band)					
Modulation Mode	N _{TX}	Freq. (MHz)	Peak Power Spectral Density (dBm)	PSD Limit	Antenna Gain (dBi)
11a	1	5260	10.91	11.00	2.58
11a	1	5300	10.78	11.00	2.58
11a	1	5320	10.49	11.00	2.58
HT20	3	5260	9.39	9.65	7.35
HT20	3	5300	9.62	9.65	7.35
HT20	3	5320	9.05	9.65	7.35
HT40	3	5270	9.33	9.65	7.35
HT40	3	5310	3.66	9.65	7.35
VHT20	3	5260	9.28	9.65	7.35
VHT20	3	5300	9.62	9.65	7.35
VHT20	3	5320	9.35	9.65	7.35
VHT40	3	5270	9.29	9.65	7.35
VHT40	3	5310	3.48	9.65	7.35
VHT80	3	5290	-0.90	9.65	7.35
Result			Complied		



Note 1: Power Density Plots w/o Duty Factor.

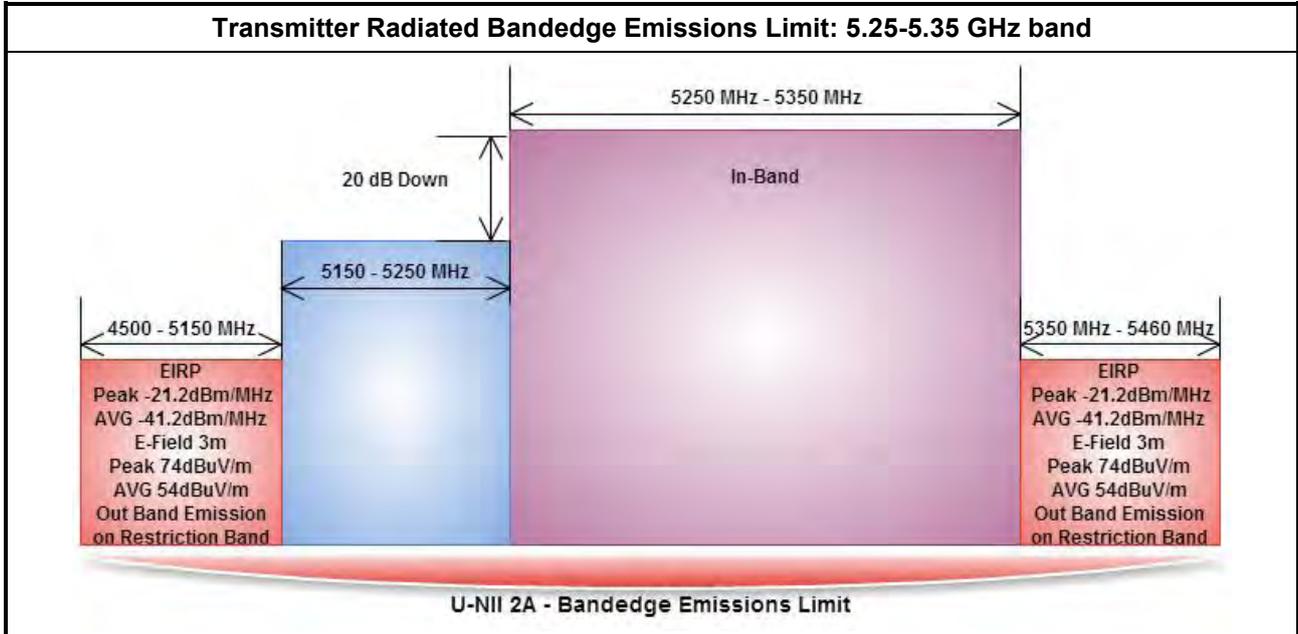


Peak Power Spectral Density Result (5470-5725MHz band)					
Modulation Mode	N _{TX}	Freq. (MHz)	Peak Power Spectral Density (dBm)	PSD Limit	Antenna Gain (dBi)
11a	1	5500	8.64	11.00	2.58
11a	1	5580	9.40	11.00	2.58
11a	1	5700	6.08	11.00	2.58
HT20	3	5500	9.11	9.65	7.35
HT20	3	5580	9.06	9.65	7.35
HT20	3	5700	6.00	9.65	7.35
HT40	3	5510	1.65	9.65	7.35
HT40	3	5550	8.97	9.65	7.35
HT40	3	5670	6.68	9.65	7.35
VHT20	3	5500	9.10	9.65	2.58
VHT20	3	5580	9.60	9.65	2.58
VHT20	3	5700	5.74	9.65	2.58
VHT40	3	5510	1.34	9.65	2.58
VHT40	3	5550	9.06	9.65	2.58
VHT40	3	5670	6.69	9.65	2.58
VHT80	3	5530	-6.12	9.65	7.35
VHT80	3	5610	3.23	9.65	7.35
Result			Complied		

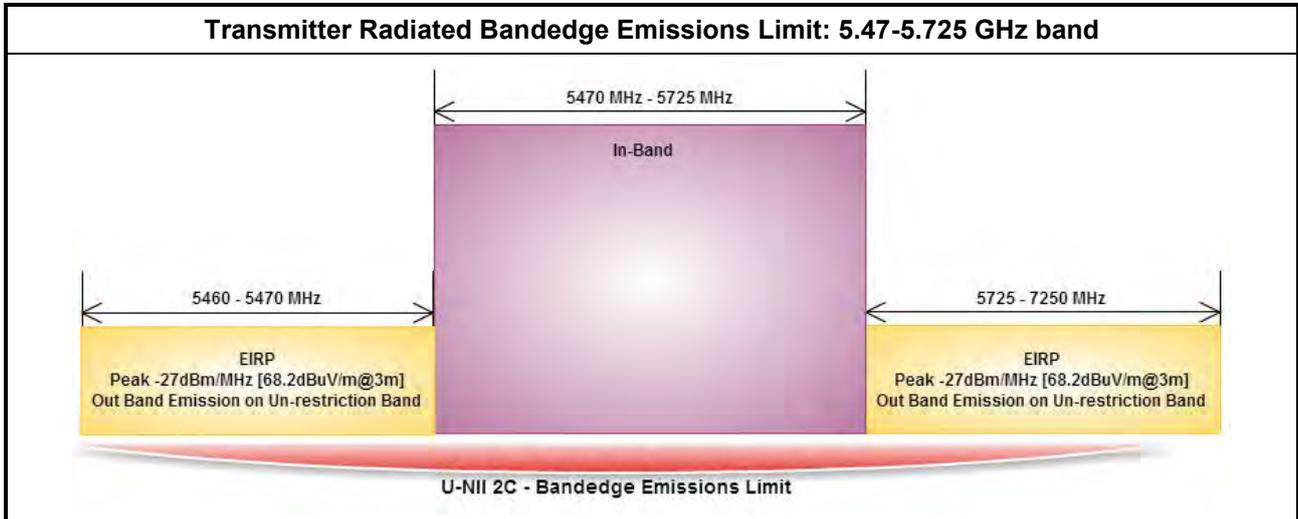


3.5 Transmitter Bandedge Emissions

3.5.1 Transmitter Radiated Bandedge Emissions Limit



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.



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.

3.5.2 Measuring Instruments

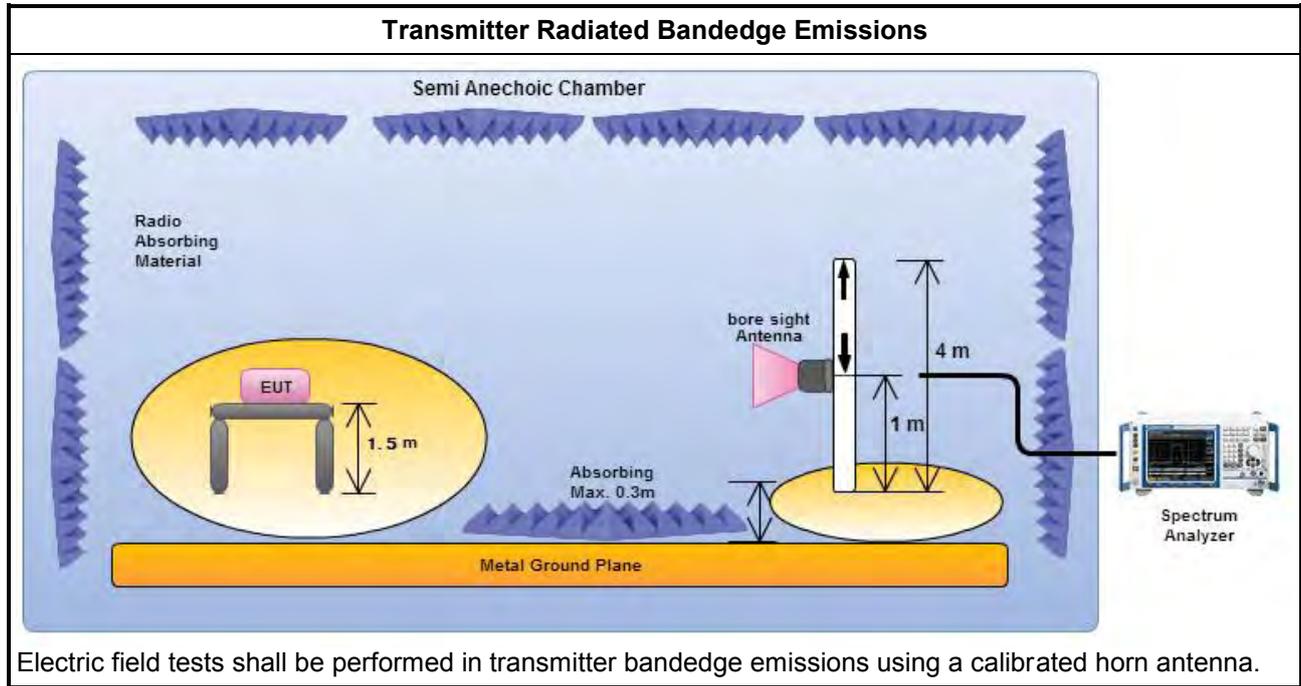
Refer a test equipment and calibration data table in this test report.



3.5.3 Test Procedures

Test Method	
<input checked="" type="checkbox"/>	The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].
<input checked="" type="checkbox"/>	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.
<input type="checkbox"/>	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.)
<input type="checkbox"/>	Operating in 5.15-5.25 GHz band (lower-band) and 5.25-5.35 GHz band (higher-band).
<input type="checkbox"/>	Operating in 5.47-5.725 GHz band (lower-band) and 5.725-5.85 GHz band (higher-band).
<input type="checkbox"/>	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)
<input type="checkbox"/>	Operating in 5.25-5.35 GHz band (lower-band) and 5.47-5.725 GHz band (higher-band).
<input type="checkbox"/>	Operating in 5.15-5.25 GHz band (lower-band) and 5.725-5.85 GHz band (higher-band).
<input checked="" type="checkbox"/>	For the transmitter unwanted emissions shall be measured using following options below:
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033, clause H)2) for unwanted emissions into non-restricted bands.
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033, clause H)1) for unwanted emissions into restricted bands.
<input type="checkbox"/>	Refer as FCC KDB 789033, H)6) Method AD (Trace Averaging).
<input type="checkbox"/>	Refer as FCC KDB 789033, H)6) Method VB (Reduced VBW).
<input checked="" type="checkbox"/>	Refer as ANSI C63.10, clause 4.1.4.2.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.
<input type="checkbox"/>	Refer as ANSI C63.10, clause 4.1.4.2.4 average value of pulsed emissions.
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033, clause H)5) measurement procedure peak limit.
<input type="checkbox"/>	Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.
<input checked="" type="checkbox"/>	For the transmitter bandedge emissions shall be measured using following options below:
<input type="checkbox"/>	Refer as FCC KDB 789033, clause H)3)d) for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).
<input checked="" type="checkbox"/>	Refer as ANSI C63.10, clause 6.10 for band-edge testing.
<input type="checkbox"/>	Refer as ANSI C63.10, clause 6.10.6.2 for marker-delta method for band-edge measurements.
<input checked="" type="checkbox"/>	For radiated measurement, refer as ANSI C63.10, clause 6.6. Test distance is 3m.
<input checked="" type="checkbox"/>	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





3.5.5 Transmitter Radiated Bandedge Emissions (with Antenna)

U-NII 5250-5350MHz Transmitter Radiated Bandedge (with Antenna)										
Modulation Mode	N _{TX}	Freq. (MHz)	Measure Distance (m)	Freq. (MHz) PK	Level (dBuV/m) PK	Limit (dBuV/m) PK	Freq. (MHz) AV	Level (dBuV/m) AV	Limit (dBuV/m) AV	Pol.
11a	1	5260	3	5128.200	60.29	74	5124.000	46.33	54	V
11a	1	5320	3	5350.600	67.63	74	5350.040	52.53	54	V
HT20	3	5260	3	5133.000	61.11	74	5106.000	47.55	54	V
HT20	3	5320	3	5352.600	67.60	74	5350.000	52.40	54	V
HT40	3	5270	3	5107.800	59.82	74	5108.400	46.95	54	V
HT40	3	5310	3	5350.120	67.10	74	5350.100	52.54	54	V
VHT20	3	5260	3	5125.200	60.94	74	5106.000	47.71	54	V
VHT20	3	5320	3	5351.860	67.94	74	5350.040	52.48	54	V
VHT40	3	5270	3	5109.000	60.86	74	5109.000	46.99	54	V
VHT40	3	5310	3	5433.000	60.40	74	5459.000	46.89	54	V
VHT80	3	5290	3	5105.400	59.62	74	5101.800	45.84	54	V
VHT80	3	5290	3	5355.600	69.78	74	5354.400	52.52	54	V

Note 1: Measurement worst emissions of receive antenna polarization.

U-NII 5470-5725MHz Transmitter Radiated Bandedge (with Antenna)							
Modulation Mode	N _{TX}	Freq. (MHz)	Measure Distance (m)	Freq. (MHz) PK	Level (dBuV/m) PK	Limit (dBuV/m) PK	Pol.
11a	1	5500	3	5469.840	66.74	68.2	V
11a	1	5700	3	5725.280	66.92	68.2	V
HT20	3	5500	3	5469.040	66.43	68.2	V
HT20	3	5700	3	5725.040	66.36	68.2	V
HT40	3	5510	3	5469.600	66.46	68.2	V
HT40	3	5670	3	5725.600	66.88	68.2	V
VHT20	3	5500	3	5468.880	66.59	68.2	V
VHT20	3	5700	3	5725.160	66.37	68.2	V
VHT40	3	5510	3	5470.000	66.87	68.2	V
VHT40	3	5670	3	5726.200	66.91	68.2	V
VHT80	3	5530	3	5470.000	66.83	68.2	V
VHT80	3	5610	3	5727.600	66.46	68.2	V

Note 1: Measurement worst emissions of receive antenna polarization.

3.6 Transmitter Unwanted Emissions

3.6.1 Transmitter Radiated Unwanted Emissions Limit

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

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	5.715 5.725 GHz: e.i.r.p. -17 dBm [78.2 dBuV/m@3m] 5.85 5.86 GHz: e.i.r.p. -17 dBm [78.2 dBuV/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).

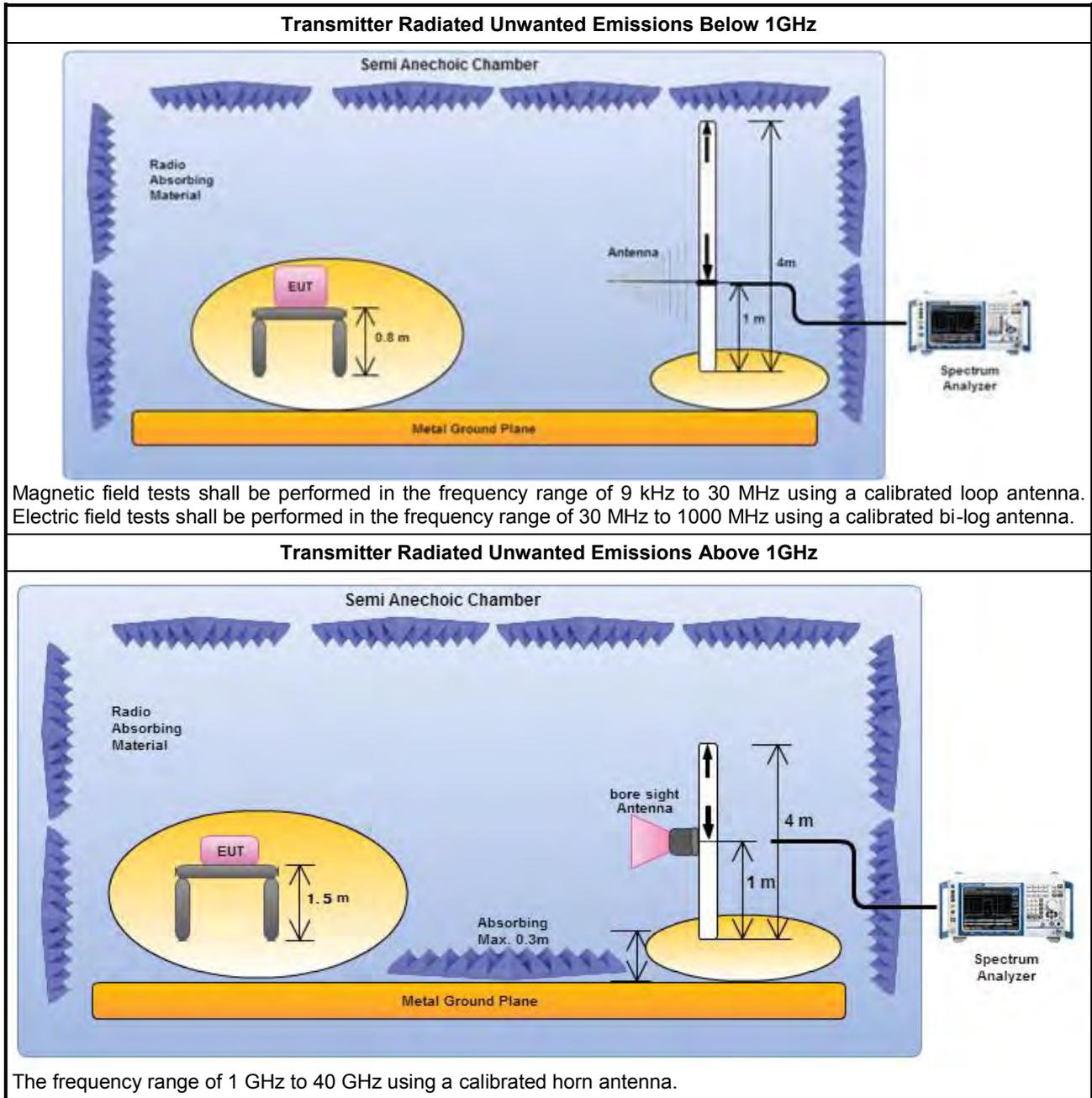
3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

Test Method	
<input checked="" type="checkbox"/>	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).
<input checked="" type="checkbox"/>	The average emission levels shall be measured in [duty cycle \geq 98 or duty factor].
<input checked="" type="checkbox"/>	For the transmitter unwanted emissions shall be measured using following options below:
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033, clause G)2) for unwanted emissions into non-restricted bands.
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033, clause G)1) for unwanted emissions into restricted bands.
<input type="checkbox"/>	Refer as FCC KDB 789033, G)6) Method AD (Trace Averaging).
<input type="checkbox"/>	Refer as FCC KDB 789033, G)6) Method VB (Reduced VBW).
<input checked="" type="checkbox"/>	Refer as ANSI C63.10, clause 4.1.4.2.3 (Reduced VBW). VBW \geq 1/T, where T is pulse time.
<input type="checkbox"/>	Refer as ANSI C63.10, clause 4.1.4.2.4 average value of pulsed emissions.
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033, clause G)5) measurement procedure peak limit.
<input type="checkbox"/>	Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.
<input checked="" type="checkbox"/>	For radiated measurement.
<input checked="" type="checkbox"/>	Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.
<input checked="" type="checkbox"/>	Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	The any unwanted emissions level shall not exceed the fundamental emission level.
<input checked="" type="checkbox"/>	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



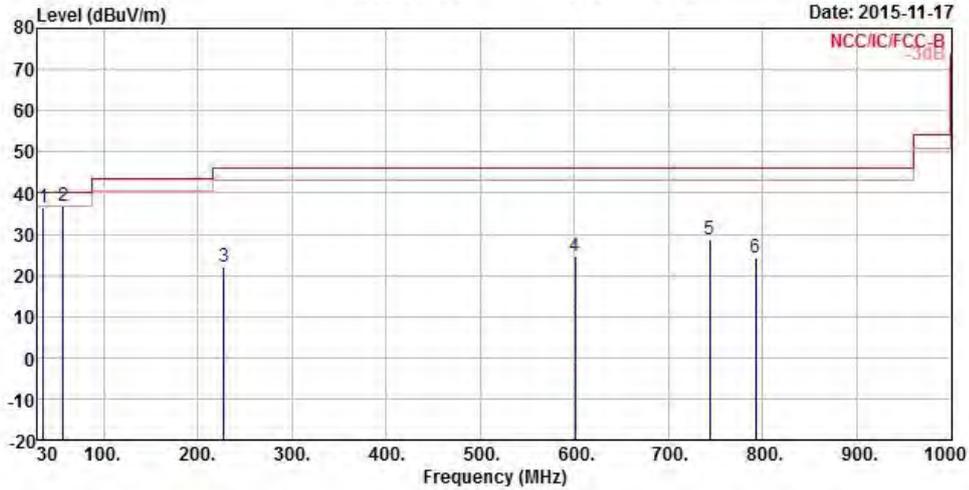
3.6.5 Transmitter Radiated Unwanted Emissions-with Antenna (Below 30MHz)

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



3.6.6 Transmitter Radiated Unwanted Emissions (Below 1GHz)

Transmitter Radiated Unwanted Emissions (Below 1GHz)			
Operating Mode	4	Polarization	V
Operating Function	EUT with PoE		



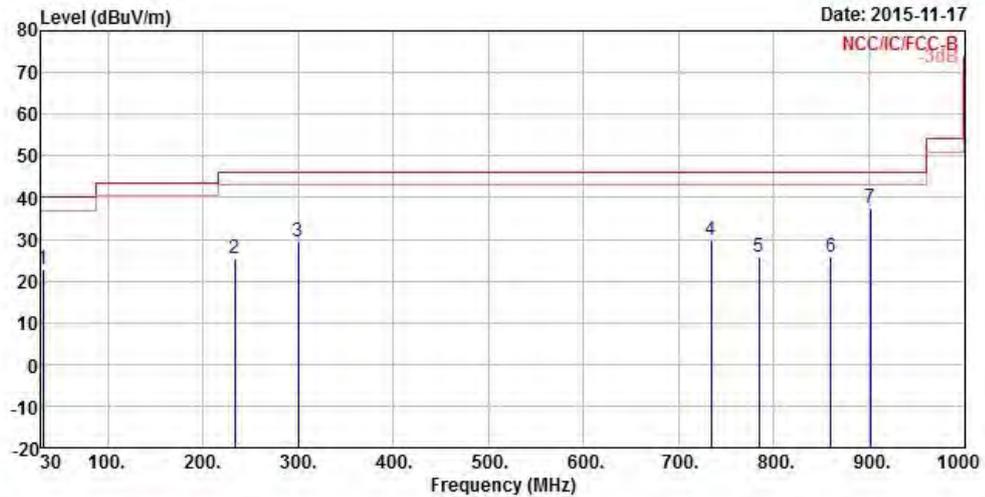
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Gain	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	35.820	36.52	-3.48	40.00	47.01	16.10	0.96	27.55	QP
2	57.160	36.90	-3.10	40.00	55.75	7.43	1.21	27.49	QP
3	227.880	21.90	-24.10	46.00	35.23	11.06	2.49	26.88	Peak
4	600.360	24.61	-21.39	46.00	29.45	19.00	4.15	27.99	Peak
5	743.920	28.89	-17.11	46.00	31.79	20.31	4.65	27.86	Peak
6	792.420	24.44	-21.56	46.00	26.71	20.65	4.88	27.80	Peak

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



Transmitter Radiated Unwanted Emissions (Below 1GHz)

Operating Mode	4	Polarization	H
Operating Function	EUT with PoE		

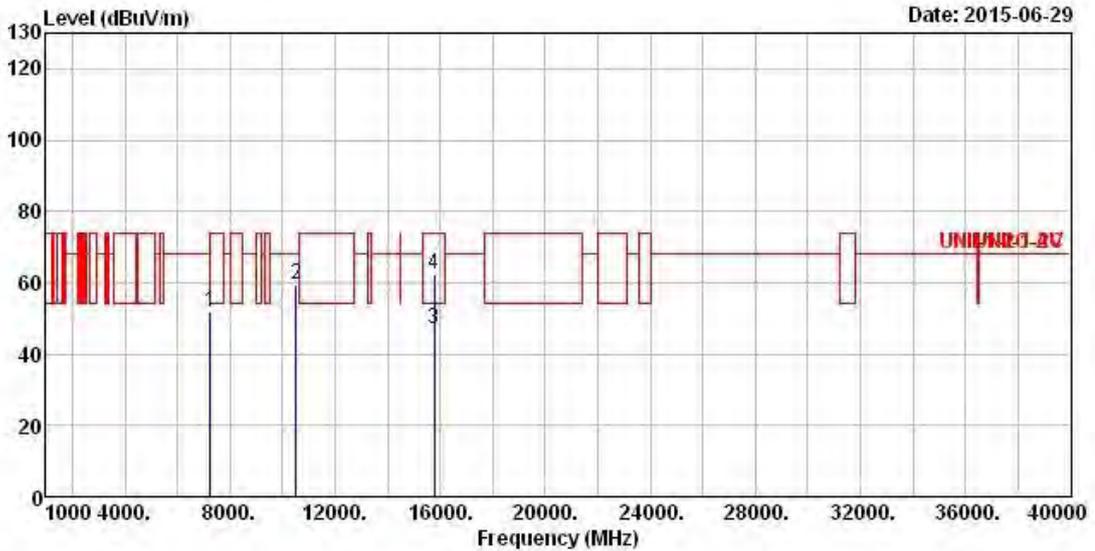


	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	31.940	22.70	-17.30	40.00	30.83	18.56	0.87	27.56	Peak
2	233.700	25.32	-20.68	46.00	38.06	11.60	2.52	26.86	Peak
3	299.660	29.44	-16.56	46.00	39.30	13.90	2.90	26.66	Peak
4	734.220	29.83	-16.17	46.00	32.92	20.15	4.63	27.87	Peak
5	784.660	25.89	-20.11	46.00	28.25	20.61	4.84	27.81	Peak
6	860.320	25.93	-20.07	46.00	27.37	21.26	4.98	27.68	Peak
7	901.060	37.64	-8.36	46.00	38.55	21.51	5.19	27.61	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: No level of unwanted emissions exceeds the level of the fundamental emission.

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

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



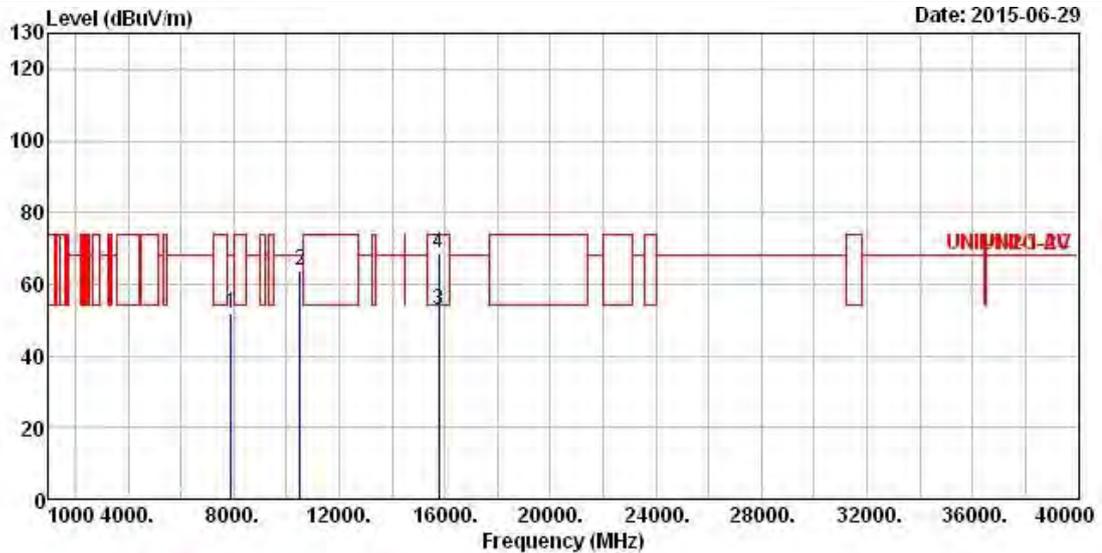
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7236.000	51.91	-16.29	68.20	42.90	35.93	5.72	32.64	Peak
2	10520.000	59.42	-8.78	68.20	46.09	38.99	7.01	32.67	Peak
3	15780.000	47.20	-6.80	54.00	33.39	37.26	8.87	32.32	Average
4	15780.000	62.27	-11.73	74.00	48.46	37.26	8.87	32.32	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	11a	Test Freq. (MHz)	5260
N _{TX}	1	Polarization	H



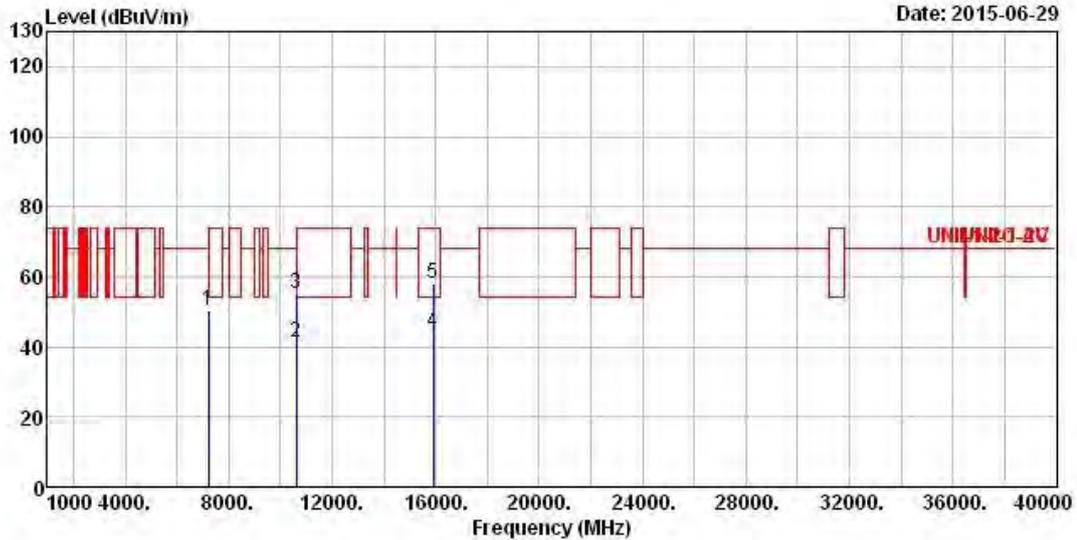
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Factor	Preamp Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7889.000	51.69	-16.51	68.20	41.59	36.98	5.97	32.85	Peak
2	10520.000	63.60	-4.60	68.20	50.27	38.99	7.01	32.67	Peak
3	15780.000	52.95	-1.05	54.00	39.14	37.26	8.87	32.32	Average
4	15780.000	68.42	-5.58	74.00	54.61	37.26	8.87	32.32	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	11a	Test Freq. (MHz)	5300
N _{TX}	1	Polarization	V



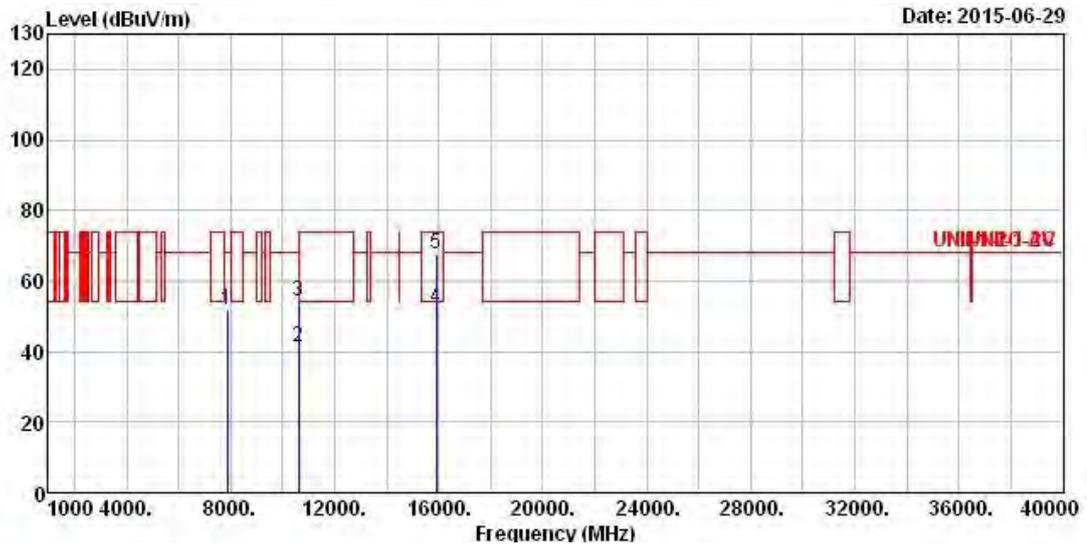
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Remark
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	
			dB	dBuV/m	dBuV	dB	dB	
1	7212.000	50.46	-17.74	68.20	41.54	35.84	5.71	32.63 Peak
2	10600.000	41.02	-12.98	54.00	27.64	38.96	7.05	32.63 Average
3	10600.000	55.05	-18.95	74.00	41.67	38.96	7.05	32.63 Peak
4	15900.000	44.18	-9.82	54.00	30.58	37.07	8.89	32.36 Average
5	15900.000	57.94	-16.06	74.00	44.34	37.07	8.89	32.36 Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	11a	Test Freq. (MHz)	5300
N _{TX}	1	Polarization	H



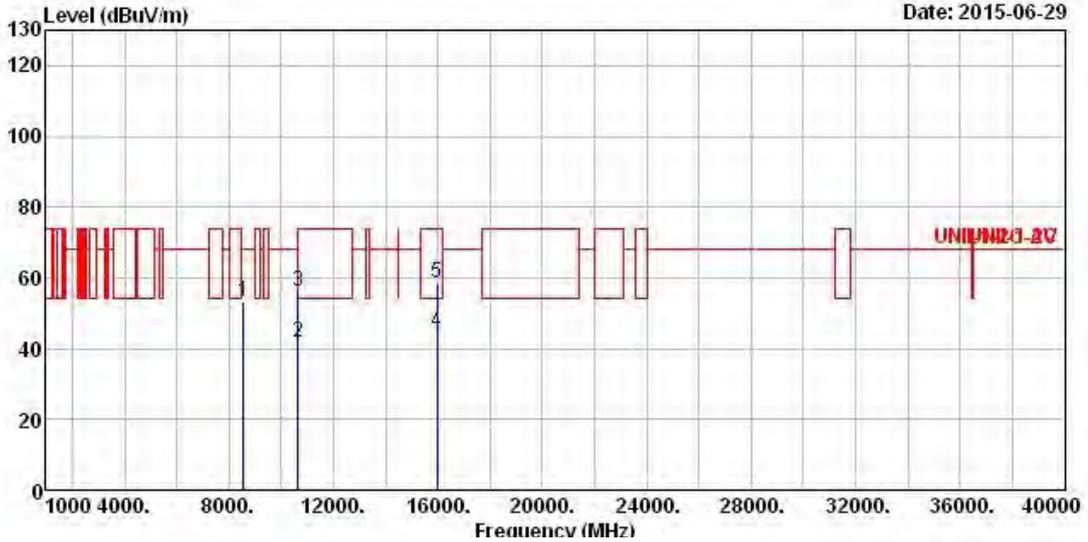
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Factor	Preamp Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7878.000	51.76	-16.44	68.20	41.68	36.98	5.95	32.85	Peak
2	10600.000	41.46	-12.54	54.00	28.08	38.96	7.05	32.63	Average
3	10600.000	54.36	-19.64	74.00	40.98	38.96	7.05	32.63	Peak
4	15900.000	52.49	-1.51	54.00	38.89	37.07	8.89	32.36	Average
5	15900.000	67.81	-6.19	74.00	54.21	37.07	8.89	32.36	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	11a	Test Freq. (MHz)	5320
N _{TX}	1	Polarization	V



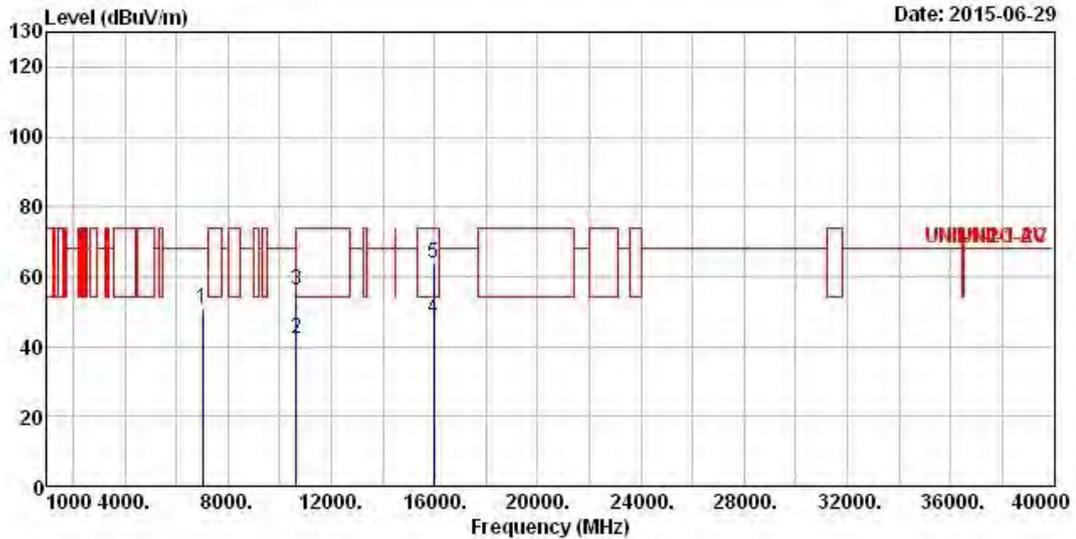
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Factor	Preamp Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8550.000	53.43	-14.77	68.20	41.98	38.12	6.26	32.93	Peak
2	10640.000	41.70	-12.30	54.00	28.28	38.94	7.08	32.60	Average
3	10640.000	55.91	-18.09	74.00	42.49	38.94	7.08	32.60	Peak
4	15960.000	44.66	-9.34	54.00	31.19	36.96	8.90	32.39	Average
5	15960.000	58.57	-15.43	74.00	45.10	36.96	8.90	32.39	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	11a	Test Freq. (MHz)	5320
N _{TX}	1	Polarization	H



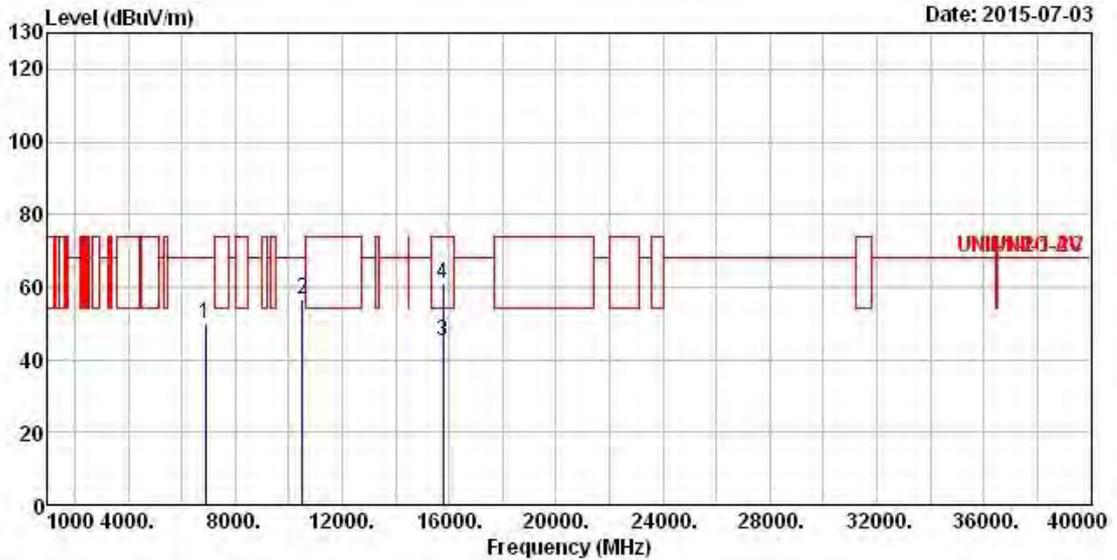
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7032.000	50.66	-17.54	68.20	42.17	35.39	5.65	32.55	Peak
2	10640.000	42.08	-11.92	54.00	28.66	38.94	7.08	32.60	Average
3	10640.000	56.14	-17.86	74.00	42.72	38.94	7.08	32.60	Peak
4	15960.000	47.77	-6.23	54.00	34.30	36.96	8.90	32.39	Average
5	15960.000	63.95	-10.05	74.00	50.48	36.96	8.90	32.39	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	HT20	Test Freq. (MHz)	5260
N _{TX}	3	Polarization	V



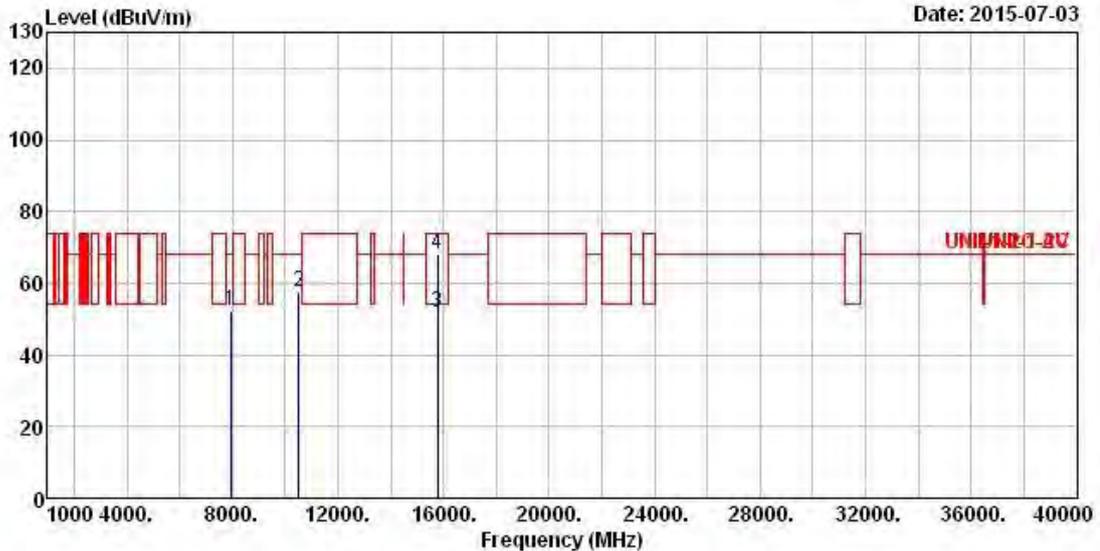
	Freq	Level	Over Limit	Limit	ReadAntenna	Cable	Preamp	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB
1	6884.000	49.86	-18.34	68.20	41.74	35.08	5.56	32.52 Peak
2	10520.000	56.49	-11.71	68.20	43.16	38.99	7.01	32.67 Peak
3	15780.000	45.27	-8.73	54.00	31.46	37.26	8.87	32.32 Average
4	15780.000	60.94	-13.06	74.00	47.13	37.26	8.87	32.32 Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	HT20	Test Freq. (MHz)	5260
N _{TX}	3	Polarization	H



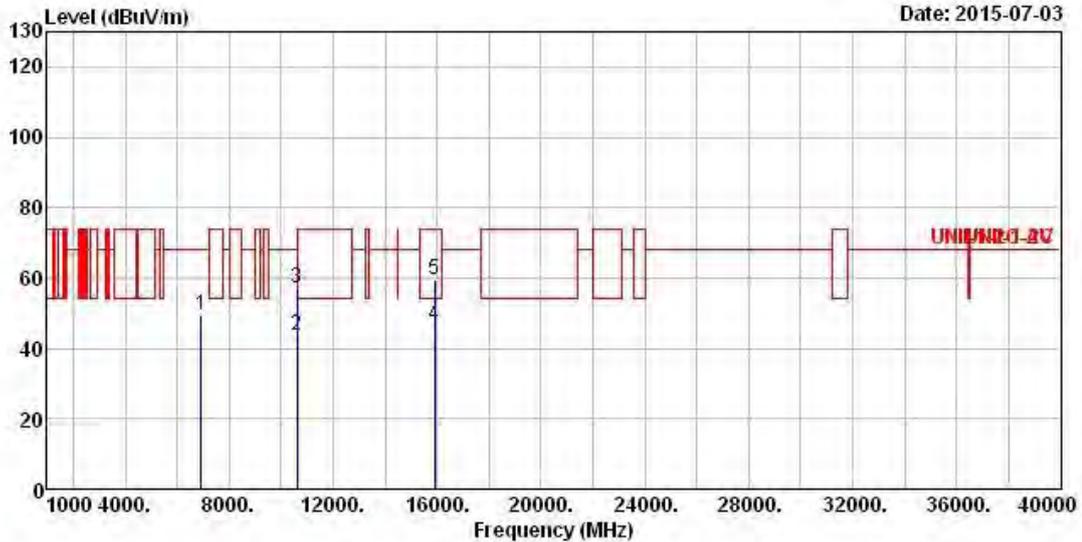
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7941.000	52.18	-16.02	68.20	42.02	37.03	5.99	32.86	Peak
2	10520.000	57.59	-10.61	68.20	44.26	38.99	7.01	32.67	Peak
3	15780.000	52.02	-1.98	54.00	38.21	37.26	8.87	32.32	Average
4	15780.000	67.90	-6.10	74.00	54.09	37.26	8.87	32.32	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	HT20	Test Freq. (MHz)	5300
N _{TX}	3	Polarization	V



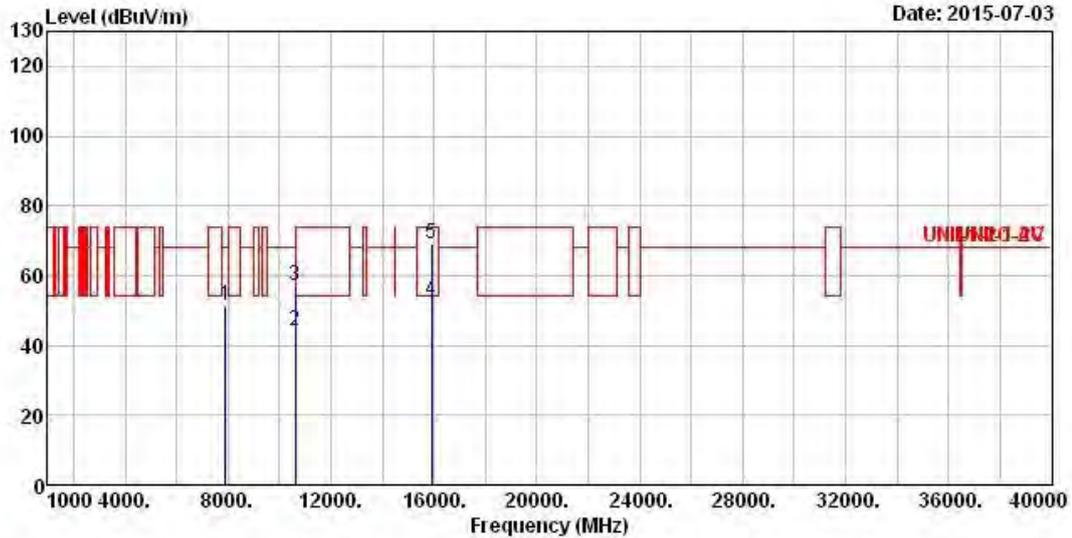
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	6913.000	49.44	-18.76	68.20	41.24	35.14	5.59	32.53	Peak
2	10600.000	43.56	-10.44	54.00	30.18	38.96	7.05	32.63	Average
3	10600.000	57.23	-16.77	74.00	43.85	38.96	7.05	32.63	Peak
4	15900.000	46.47	-7.53	54.00	32.87	37.07	8.89	32.36	Average
5	15900.000	59.44	-14.56	74.00	45.84	37.07	8.89	32.36	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	HT20	Test Freq. (MHz)	5300
N _{TX}	3	Polarization	H



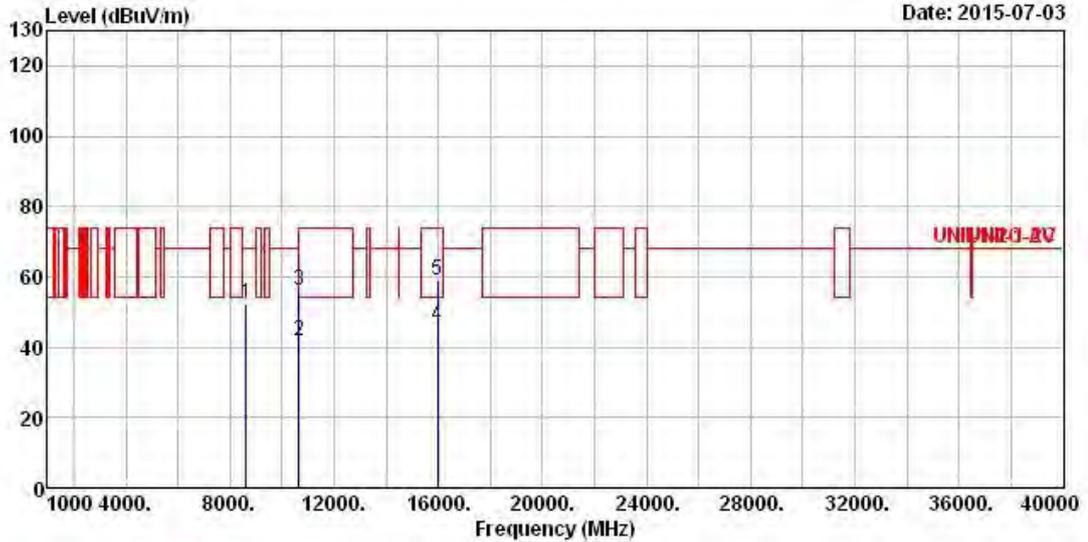
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7908.000	51.19	-17.01	68.20	41.08	37.00	5.97	32.86	Peak
2	10600.000	44.02	-9.98	54.00	30.64	38.96	7.05	32.63	Average
3	10600.000	57.21	-16.79	74.00	43.83	38.96	7.05	32.63	Peak
4	15900.000	52.67	-1.33	54.00	39.07	37.07	8.89	32.36	Average
5	15900.000	68.95	-5.05	74.00	55.35	37.07	8.89	32.36	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	HT20	Test Freq. (MHz)	5320
N _{TX}	3	Polarization	V



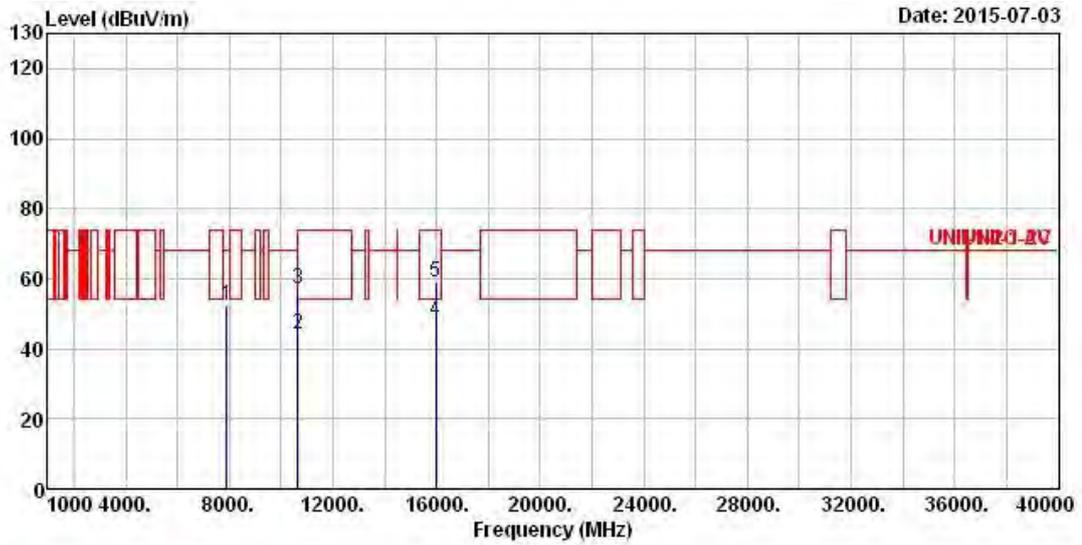
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Factor	Preamp Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8633.000	52.12	-16.08	68.20	40.61	38.15	6.31	32.95	Peak
2	10640.000	41.97	-12.03	54.00	28.55	38.94	7.08	32.60	Average
3	10640.000	56.21	-17.79	74.00	42.79	38.94	7.08	32.60	Peak
4	15960.000	46.24	-7.76	54.00	32.77	36.96	8.90	32.39	Average
5	15960.000	59.09	-14.91	74.00	45.62	36.96	8.90	32.39	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	HT20	Test Freq. (MHz)	5320
N _{TX}	3	Polarization	H



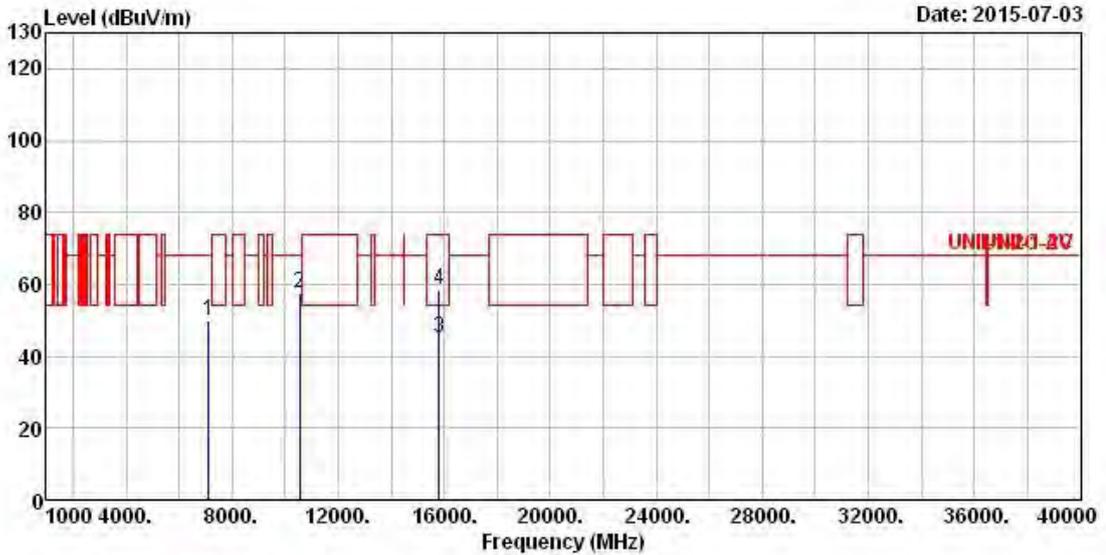
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB
1	7890.000	52.21	-15.99	68.20	42.11	36.98	5.97	32.85 Peak
2	10640.000	44.35	-9.65	54.00	30.93	38.94	7.08	32.60 Average
3	10640.000	57.30	-16.70	74.00	43.88	38.94	7.08	32.60 Peak
4	15960.000	47.77	-6.23	54.00	34.30	36.96	8.90	32.39 Average
5	15960.000	59.22	-14.78	74.00	45.75	36.96	8.90	32.39 Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	HT40	Test Freq. (MHz)	5270
N _{TX}	3	Polarization	V



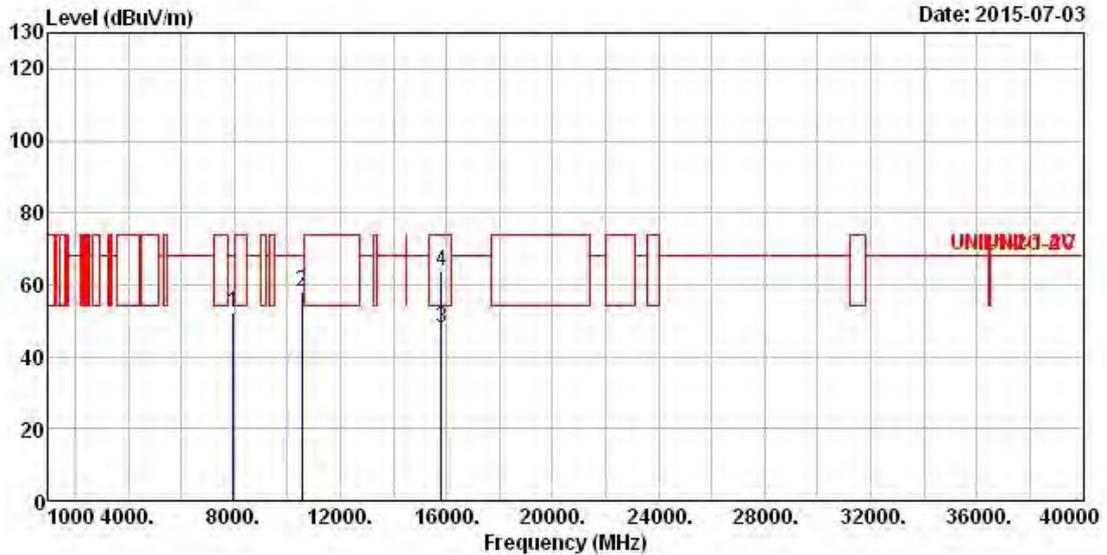
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7105.000	49.69	-18.51	68.20	41.02	35.57	5.68	32.58	Peak
2	10540.000	57.38	-10.82	68.20	44.02	38.99	7.03	32.66	Peak
3	15810.000	45.28	-8.72	54.00	31.53	37.20	8.88	32.33	Average
4	15810.000	58.29	-15.71	74.00	44.54	37.20	8.88	32.33	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	HT40	Test Freq. (MHz)	5270
N _{TX}	3	Polarization	H



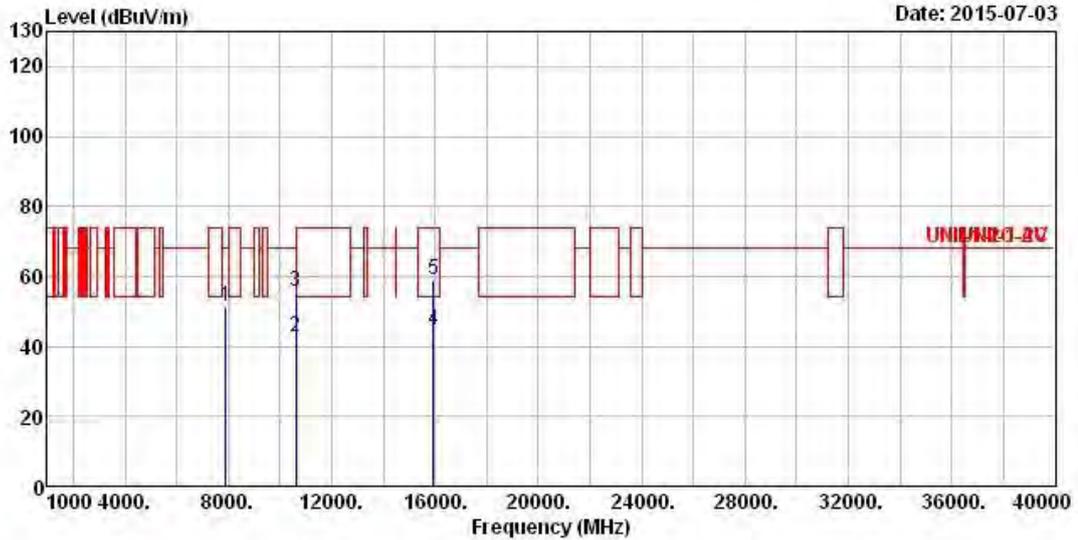
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7965.000	52.12	-16.08	68.20	41.92	37.07	6.00	32.87	Peak
2	10540.000	58.25	-9.95	68.20	44.89	38.99	7.03	32.66	Peak
3	15810.000	47.83	-6.17	54.00	34.08	37.20	8.88	32.33	Average
4	15810.000	63.73	-10.27	74.00	49.98	37.20	8.88	32.33	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	HT40	Test Freq. (MHz)	5310
N _{TX}	3	Polarization	V



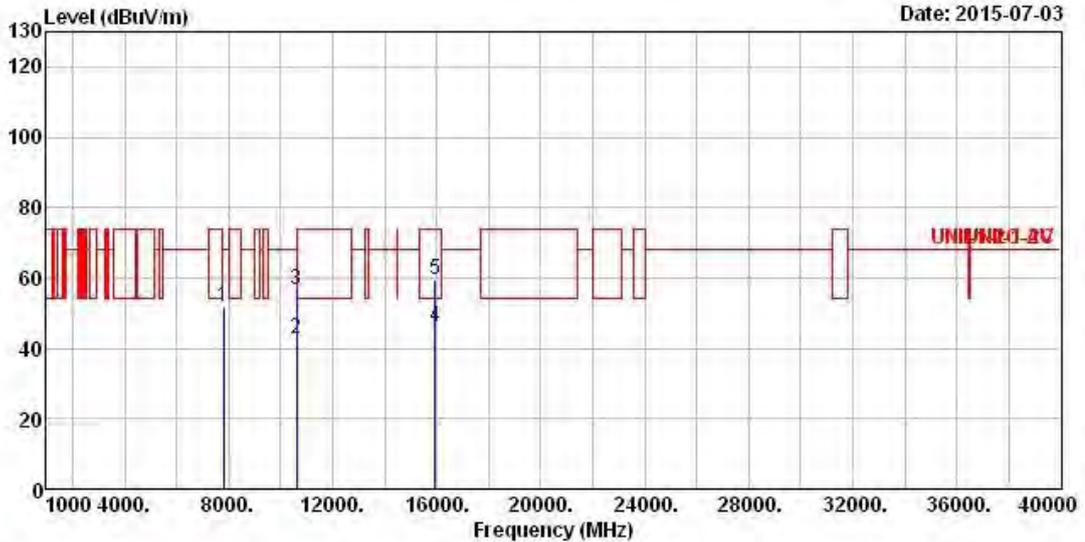
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7903.000	51.35	-16.85	68.20	41.23	37.00	5.97	32.85	Peak
2	10620.000	42.50	-11.50	54.00	29.09	38.95	7.08	32.62	Average
3	10620.000	55.77	-18.23	74.00	42.36	38.95	7.08	32.62	Peak
4	15930.000	44.82	-9.18	54.00	31.29	37.01	8.89	32.37	Average
5	15930.000	58.94	-15.06	74.00	45.41	37.01	8.89	32.37	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	HT40	Test Freq. (MHz)	5310
N _{TX}	3	Polarization	H



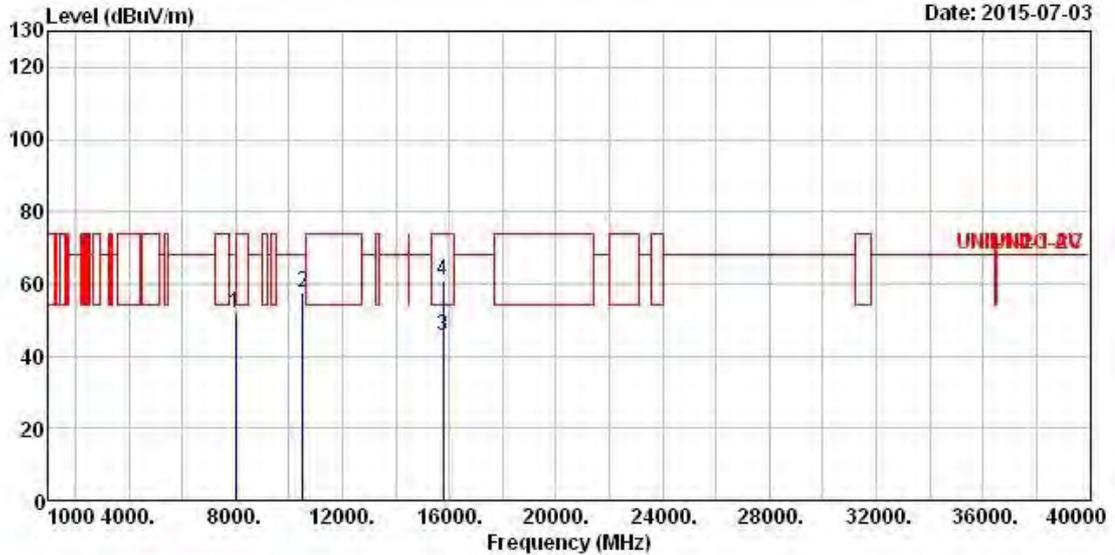
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Factor	Preamp Loss	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB
1	7806.000	51.61	-16.59	68.20	41.60	36.90	5.94	32.83 Peak
2	10620.000	42.89	-11.11	54.00	29.48	38.95	7.08	32.62 Average
3	10620.000	56.67	-17.33	74.00	43.26	38.95	7.08	32.62 Peak
4	15930.000	45.82	-8.18	54.00	32.29	37.01	8.89	32.37 Average
5	15930.000	59.48	-14.52	74.00	45.95	37.01	8.89	32.37 Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	VHT20	Test Freq. (MHz)	5260
N _{TX}	3	Polarization	V



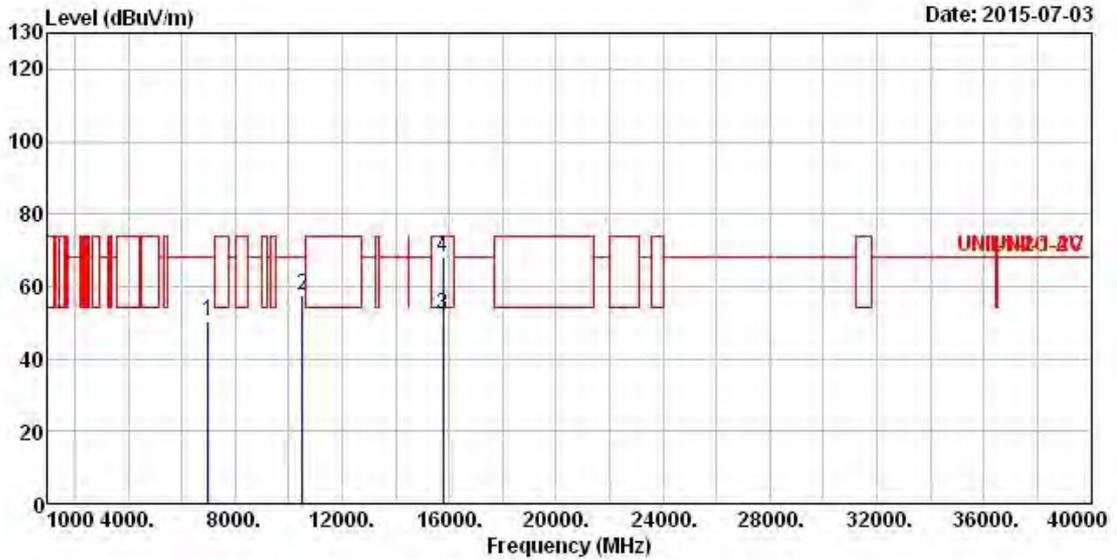
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Preamp	Preamp	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB
1	8000.000	51.78	-16.42	68.20	41.56	37.10	6.00	32.88 Peak
2	10520.000	57.43	-10.77	68.20	44.10	38.99	7.01	32.67 Peak
3	15780.000	45.49	-8.51	54.00	31.68	37.26	8.87	32.32 Average
4	15780.000	60.78	-13.22	74.00	46.97	37.26	8.87	32.32 Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	VHT20	Test Freq. (MHz)	5260
N _{TX}	3	Polarization	H



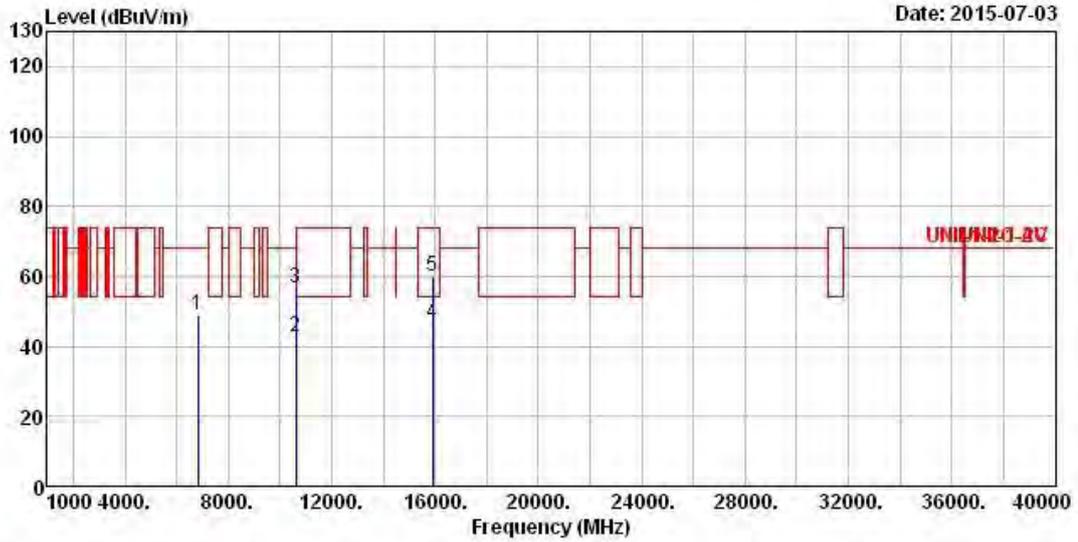
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	6974.000	50.29	-17.91	68.20	41.98	35.24	5.61	32.54	Peak
2	10520.000	57.55	-10.65	68.20	44.22	38.99	7.01	32.67	Peak
3	15780.000	52.25	-1.75	54.00	38.44	37.26	8.87	32.32	Average
4	15780.000	68.13	-5.87	74.00	54.32	37.26	8.87	32.32	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	VHT20	Test Freq. (MHz)	5300
N _{TX}	3	Polarization	V



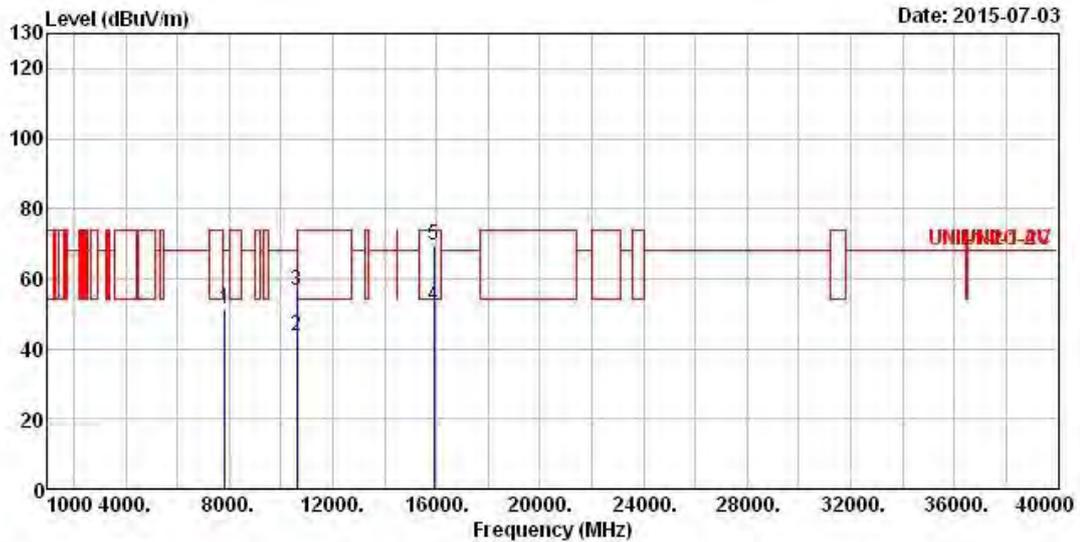
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Factor	Preamp Loss	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB
1	6812.000	49.12	-19.08	68.20	41.16	34.96	5.51	32.51 Peak
2	10600.000	42.82	-11.18	54.00	29.44	38.96	7.05	32.63 Average
3	10600.000	56.80	-17.20	74.00	43.42	38.96	7.05	32.63 Peak
4	15900.000	46.52	-7.48	54.00	32.92	37.07	8.89	32.36 Average
5	15900.000	59.88	-14.12	74.00	46.28	37.07	8.89	32.36 Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	VHT20	Test Freq. (MHz)	5300
N _{TX}	3	Polarization	H



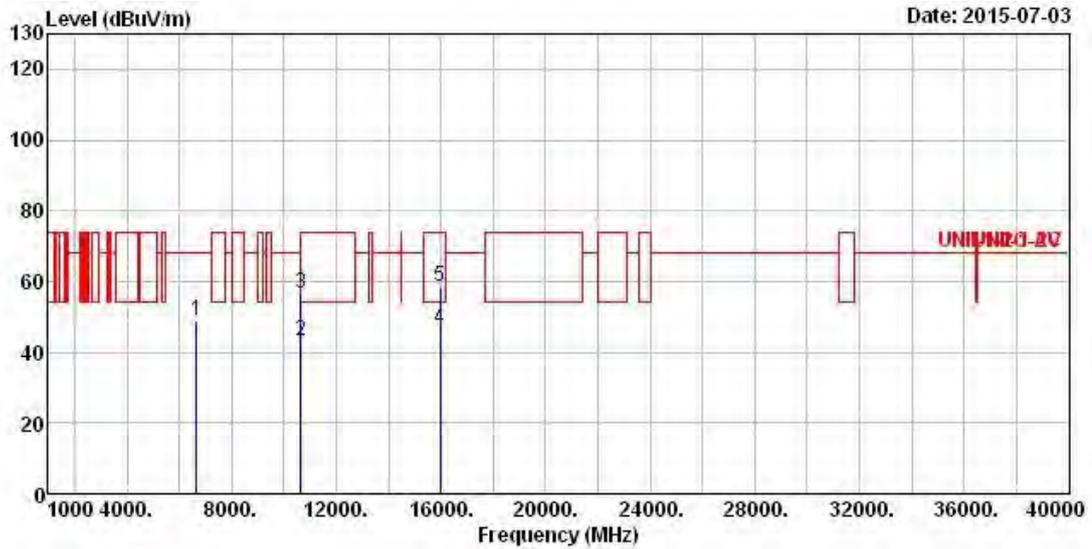
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7835.000	51.24	-16.96	68.20	41.21	36.93	5.94	32.84	Peak
2	10600.000	43.76	-10.24	54.00	30.38	38.96	7.05	32.63	Average
3	10600.000	56.58	-11.62	68.20	43.20	38.96	7.05	32.63	Peak
4	15900.000	52.35	-1.65	54.00	38.75	37.07	8.89	32.36	Average
5	15900.000	69.37	-4.63	74.00	55.77	37.07	8.89	32.36	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	VHT20	Test Freq. (MHz)	5320
N _{TX}	3	Polarization	V



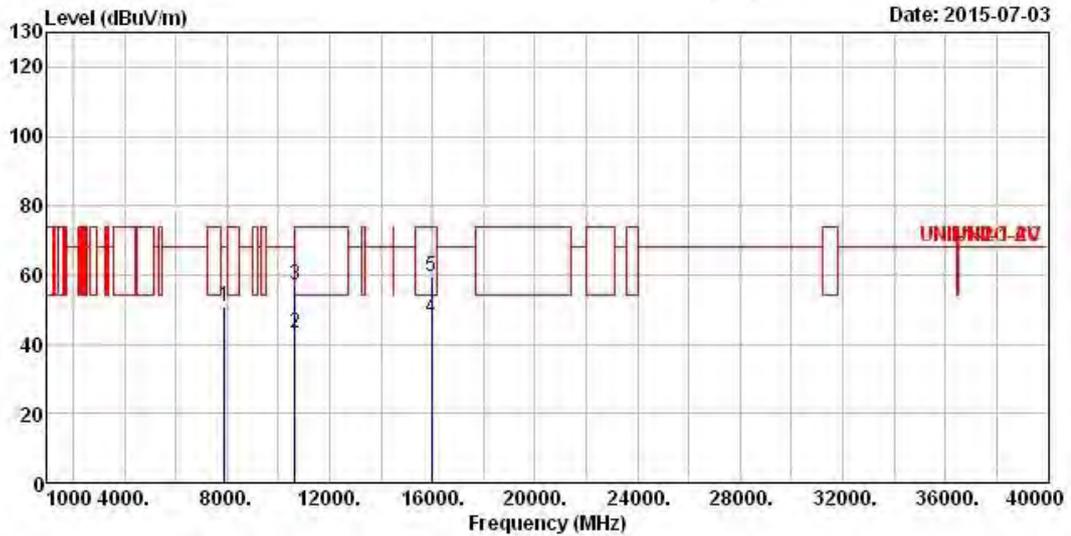
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Factor	Preamp Loss	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB
1	6654.000	48.99	-19.21	68.20	41.39	34.68	5.41	32.49 Peak
2	10640.000	43.01	-10.99	54.00	29.59	38.94	7.08	32.60 Average
3	10640.000	56.59	-17.41	74.00	43.17	38.94	7.08	32.60 Peak
4	15960.000	46.69	-7.31	54.00	33.22	36.96	8.90	32.39 Average
5	15960.000	58.43	-15.57	74.00	44.96	36.96	8.90	32.39 Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	VHT20	Test Freq. (MHz)	5320
N _{TX}	3	Polarization	H



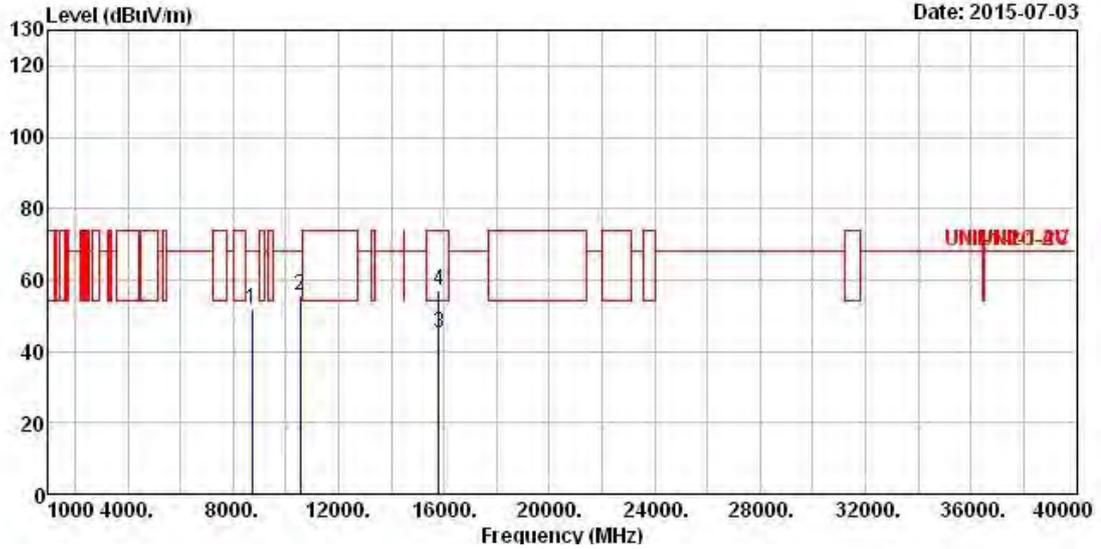
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Preamp	Loss	Preamp	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7902.000	50.92	-17.28	68.20	40.80	37.00	5.97	32.85	Peak
2	10640.000	43.36	-10.64	54.00	29.94	38.94	7.08	32.60	Average
3	10640.000	56.90	-17.10	74.00	43.48	38.94	7.08	32.60	Peak
4	15960.000	47.26	-6.74	54.00	33.79	36.96	8.90	32.39	Average
5	15960.000	59.30	-14.70	74.00	45.83	36.96	8.90	32.39	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	VHT40	Test Freq. (MHz)	5270
N _{TX}	3	Polarization	V



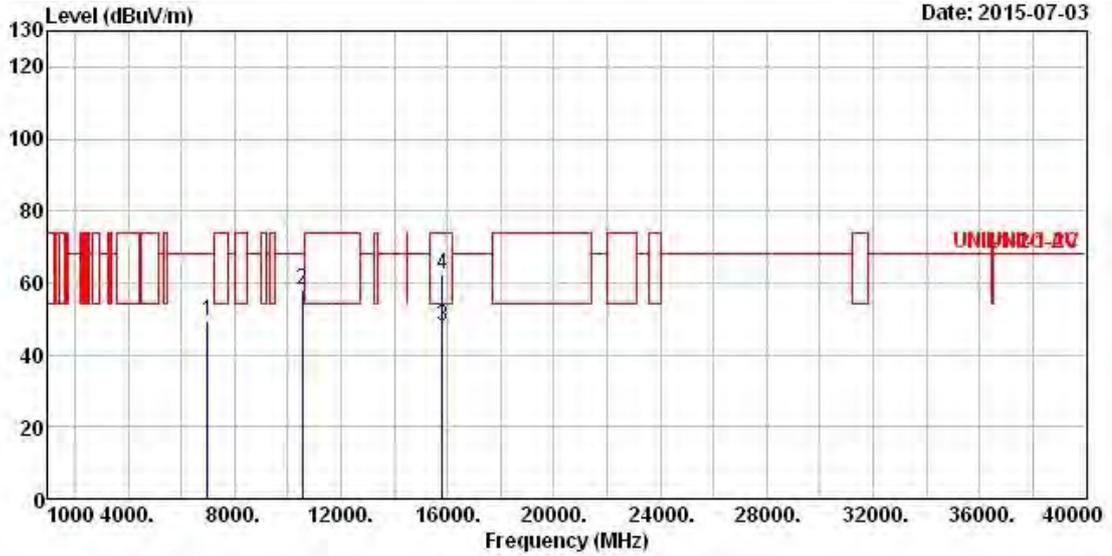
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8711.000	51.90	-16.30	68.20	40.32	38.19	6.35	32.96	Peak
2	10540.000	55.49	-12.71	68.20	42.13	38.99	7.03	32.66	Peak
3	15810.000	45.18	-8.82	54.00	31.43	37.20	8.88	32.33	Average
4	15810.000	56.98	-17.02	74.00	43.23	37.20	8.88	32.33	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	VHT40	Test Freq. (MHz)	5270
N _{TX}	3	Polarization	H



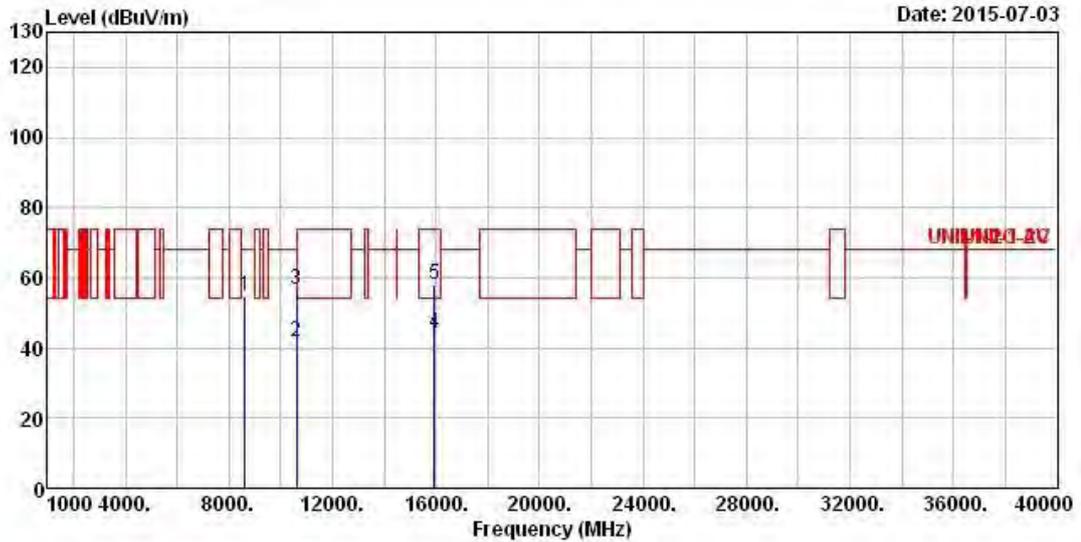
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Remark
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	
			dB	dBuV/m	dBuV	dB	dB	
1	6982.000	49.21	-18.99	68.20	40.87	35.27	5.61	32.54 Peak
2	10540.000	58.14	-10.06	68.20	44.78	38.99	7.03	32.66 Peak
3	15810.000	47.97	-6.03	54.00	34.22	37.20	8.88	32.33 Average
4	15810.000	62.40	-11.60	74.00	48.65	37.20	8.88	32.33 Peak

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



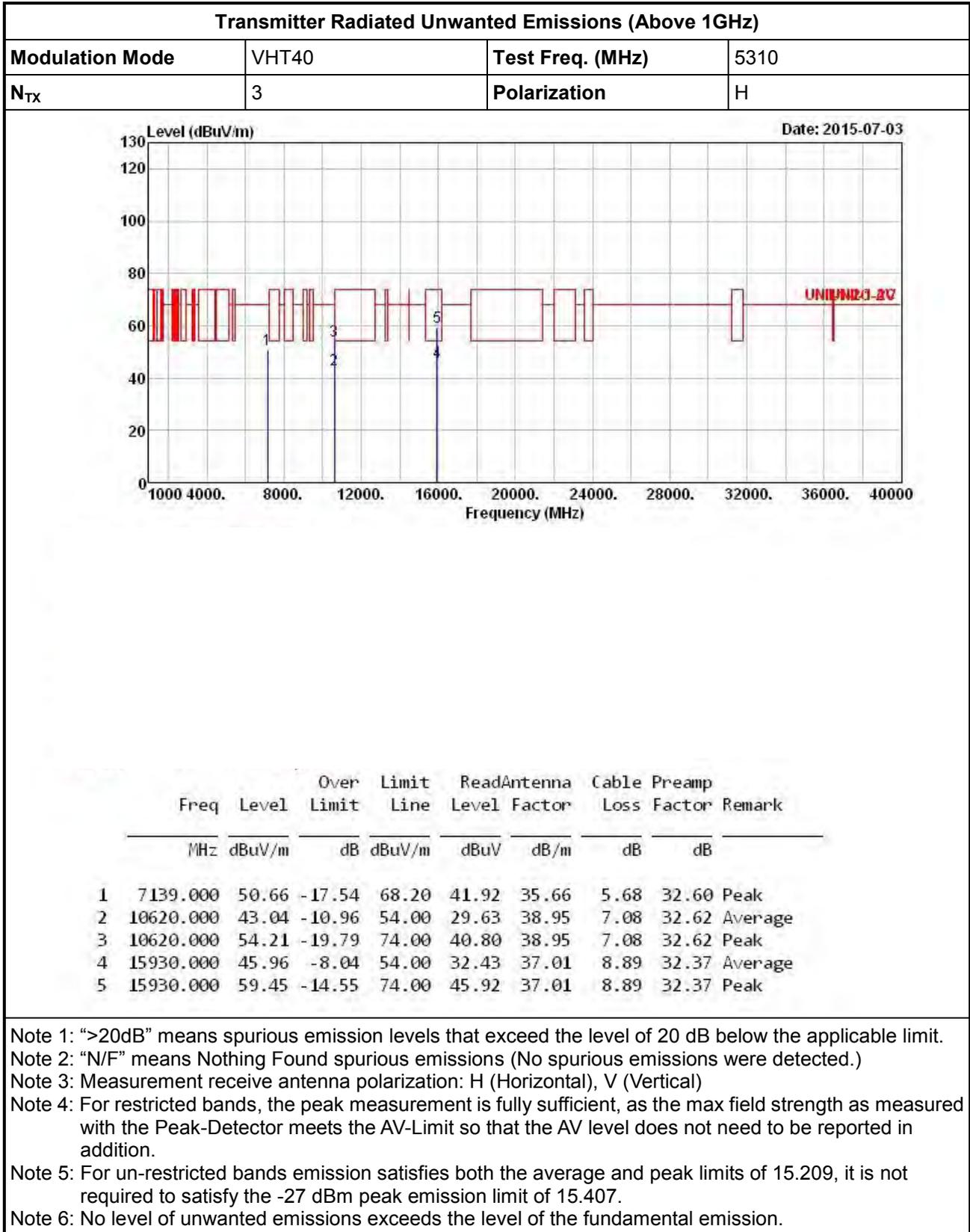
Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	VHT40	Test Freq. (MHz)	5310
N _{TX}	3	Polarization	V



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Factor	Preamp Loss	Remark
	MHz	dBUV/m	dB	dBUV/m	dBuV	dB/m	dB	dB
1	8632.000	54.69	-13.51	68.20	43.18	38.15	6.31	32.95 Peak
2	10620.000	41.97	-12.03	54.00	28.56	38.95	7.08	32.62 Average
3	10620.000	56.59	-17.41	74.00	43.18	38.95	7.08	32.62 Peak
4	15930.000	44.35	-9.65	54.00	30.82	37.01	8.89	32.37 Average
5	15930.000	58.25	-15.75	74.00	44.72	37.01	8.89	32.37 Peak

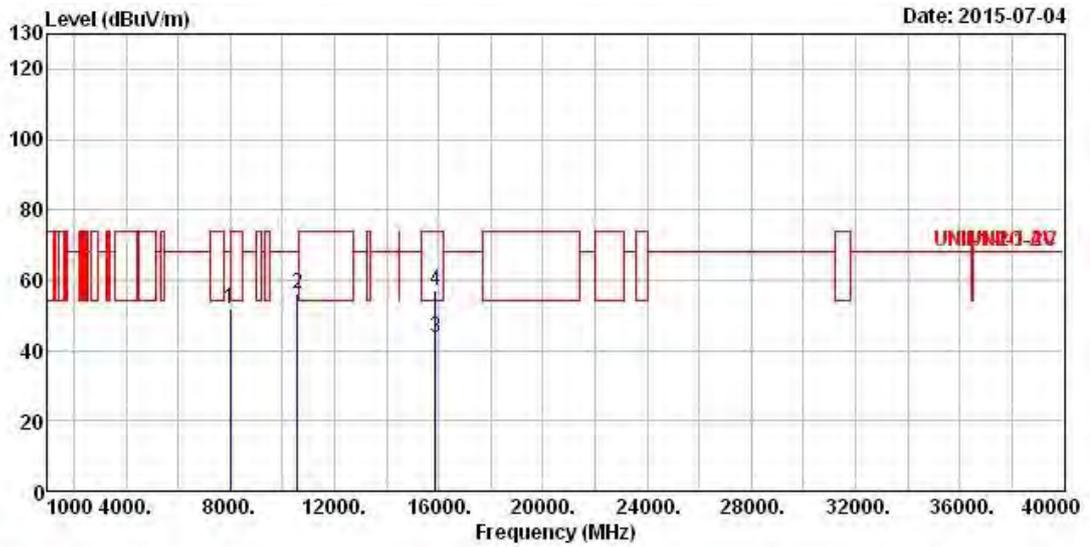
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted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





Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	VHT80	Test Freq. (MHz)	5290
N _{TX}	3	Polarization	V



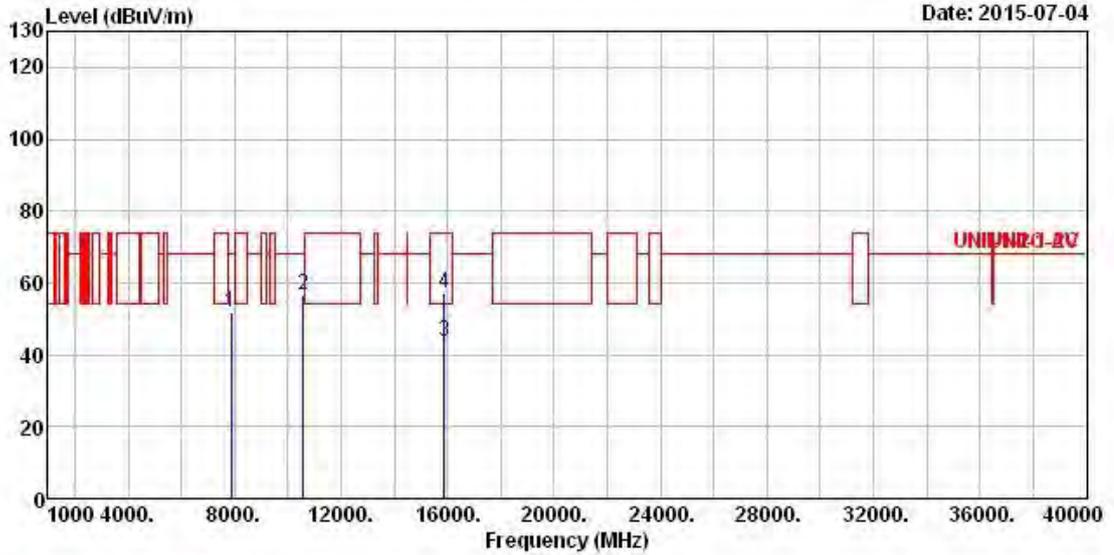
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8004.000	51.79	-16.41	68.20	41.55	37.10	6.02	32.88	Peak
2	10580.000	55.95	-12.25	68.20	42.57	38.97	7.05	32.64	Peak
3	15870.000	43.65	-10.35	54.00	30.03	37.09	8.88	32.35	Average
4	15870.000	57.26	-16.74	74.00	43.64	37.09	8.88	32.35	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	VHT80	Test Freq. (MHz)	5290
N _{TX}	3	Polarization	H



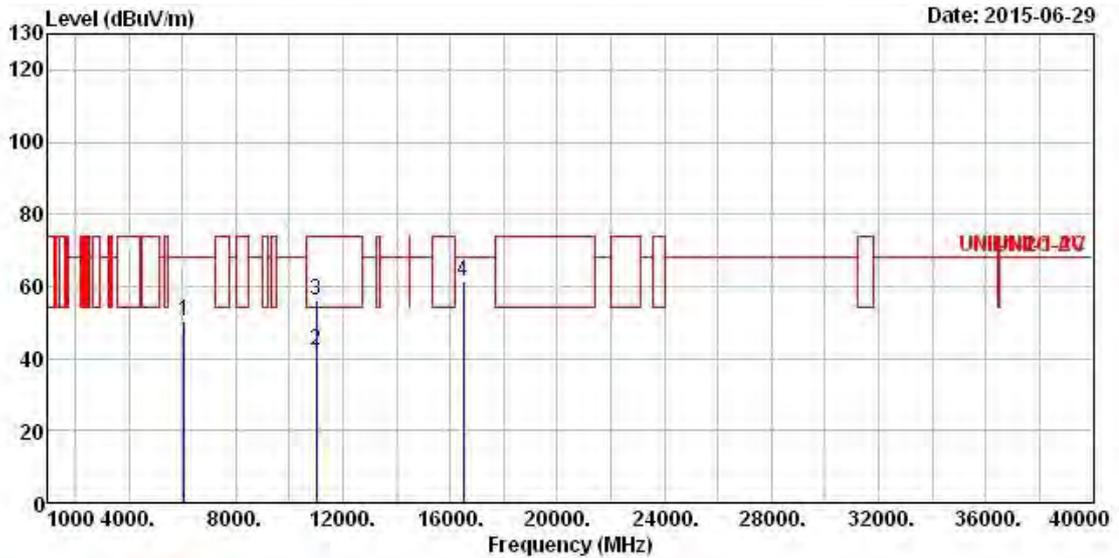
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7884.000	51.69	-16.51	68.20	41.59	36.98	5.97	32.85	Peak
2	10580.000	56.54	-11.66	68.20	43.16	38.97	7.05	32.64	Peak
3	15870.000	43.71	-10.29	54.00	30.09	37.09	8.88	32.35	Average
4	15870.000	57.06	-16.94	74.00	43.44	37.09	8.88	32.35	Peak

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



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

Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11a	Test Freq. (MHz)	5500
N _{TX}	1	Polarization	V



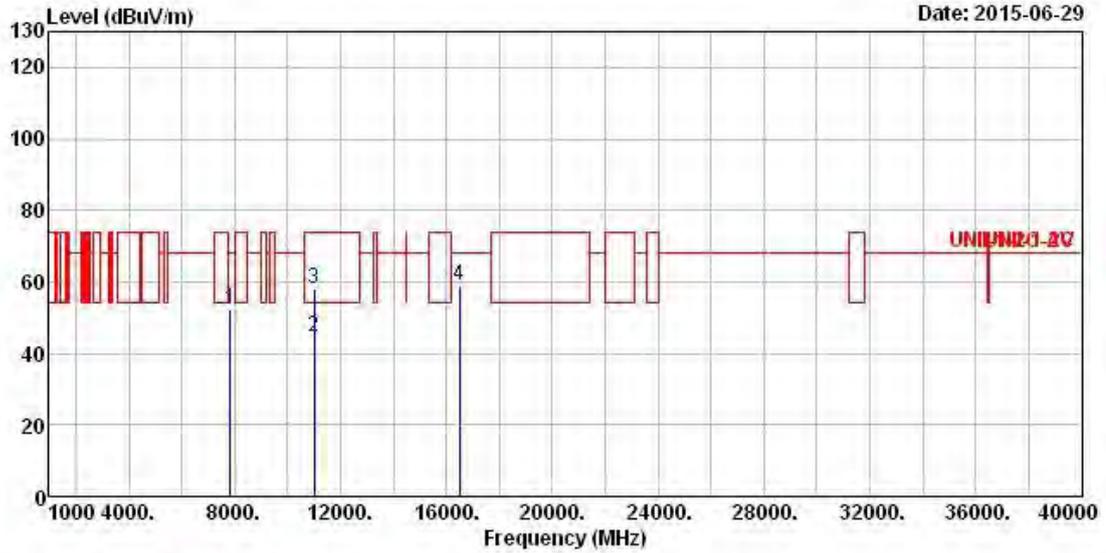
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Factor	Preamp Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	6060.000	50.15	-18.05	68.20	43.19	34.31	5.11	32.46	Peak
2	11000.000	42.33	-11.67	54.00	28.67	38.80	7.27	32.41	Average
3	11000.000	55.95	-18.05	74.00	42.29	38.80	7.27	32.41	Peak
4	16500.000	61.29	-6.91	68.20	46.62	37.40	9.24	31.97	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	11a	Test Freq. (MHz)	5500
N _{TX}	1	Polarization	H



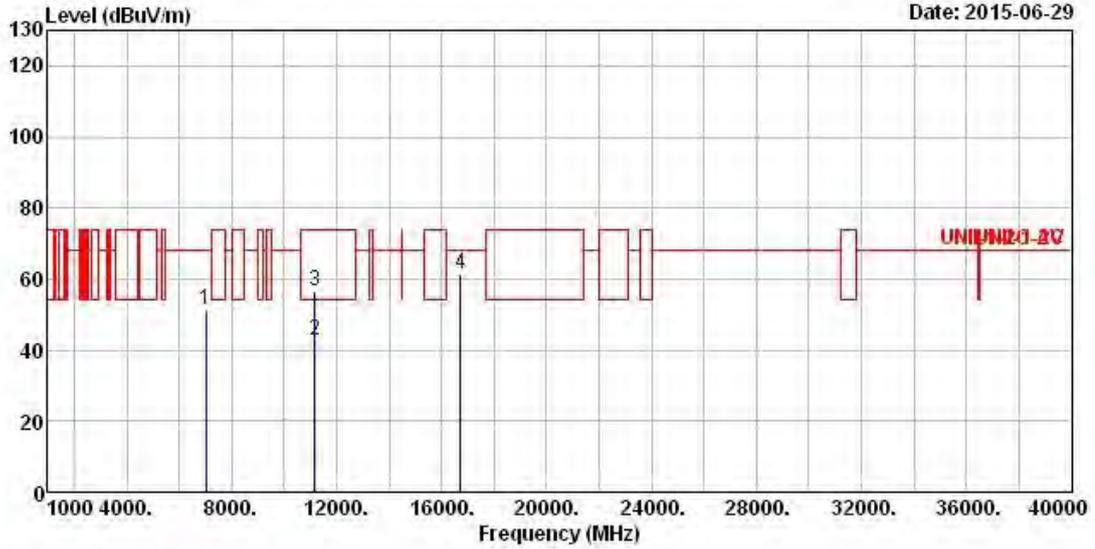
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7842.000	52.34	-15.86	68.20	42.31	36.93	5.94	32.84	Peak
2	11000.000	44.38	-9.62	54.00	30.72	38.80	7.27	32.41	Average
3	11000.000	58.22	-15.78	74.00	44.56	38.80	7.27	32.41	Peak
4	16500.000	59.07	-9.13	68.20	44.40	37.40	9.24	31.97	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	11a	Test Freq. (MHz)	5580
N _{TX}	1	Polarization	V



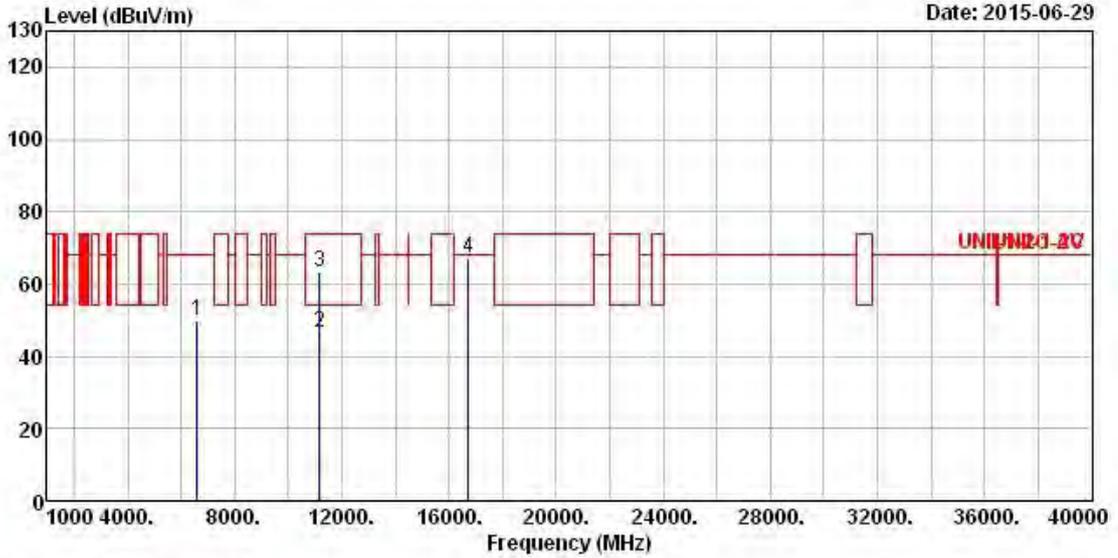
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB
1	7020.000	51.43	-16.77	68.20	43.00	35.34	5.64	32.55 Peak
2	11160.000	42.88	-11.12	54.00	28.95	38.97	7.37	32.41 Average
3	11160.000	56.40	-17.60	74.00	42.47	38.97	7.37	32.41 Peak
4	16740.000	61.27	-6.93	68.20	44.86	38.80	9.32	31.71 Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	11a	Test Freq. (MHz)	5580
N _{TX}	1	Polarization	H



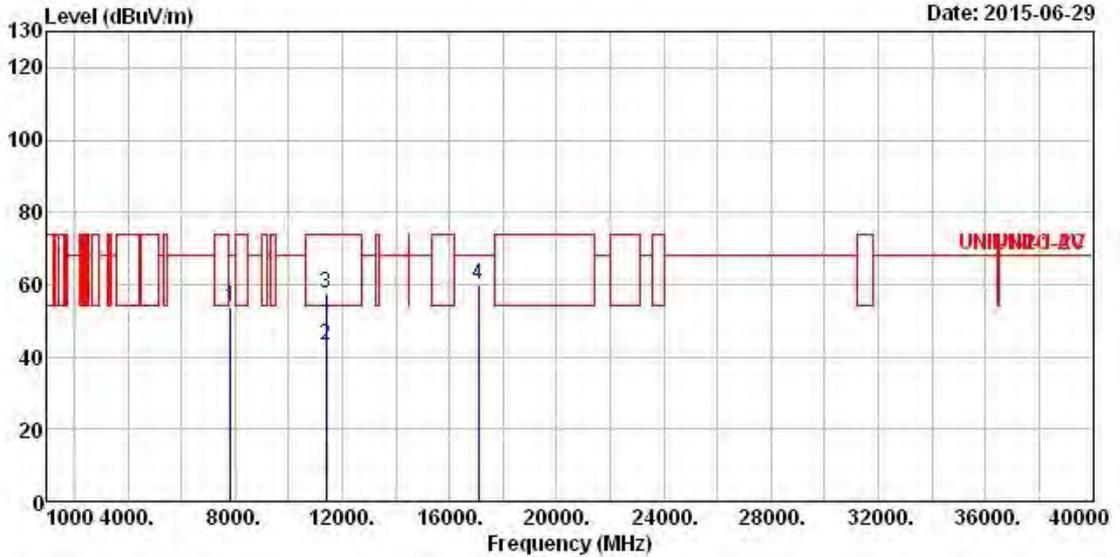
	Freq	Level	Over Limit	Limit	ReadAntenna	Cable	Preamp	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB
1	6582.000	49.99	-18.21	68.20	42.59	34.52	5.36	32.48 Peak
2	11160.000	46.37	-7.63	54.00	32.44	38.97	7.37	32.41 Average
3	11160.000	63.20	-10.80	74.00	49.27	38.97	7.37	32.41 Peak
4	16740.000	66.99	-1.21	68.20	50.58	38.80	9.32	31.71 Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	11a	Test Freq. (MHz)	5700
N _{TX}	1	Polarization	V



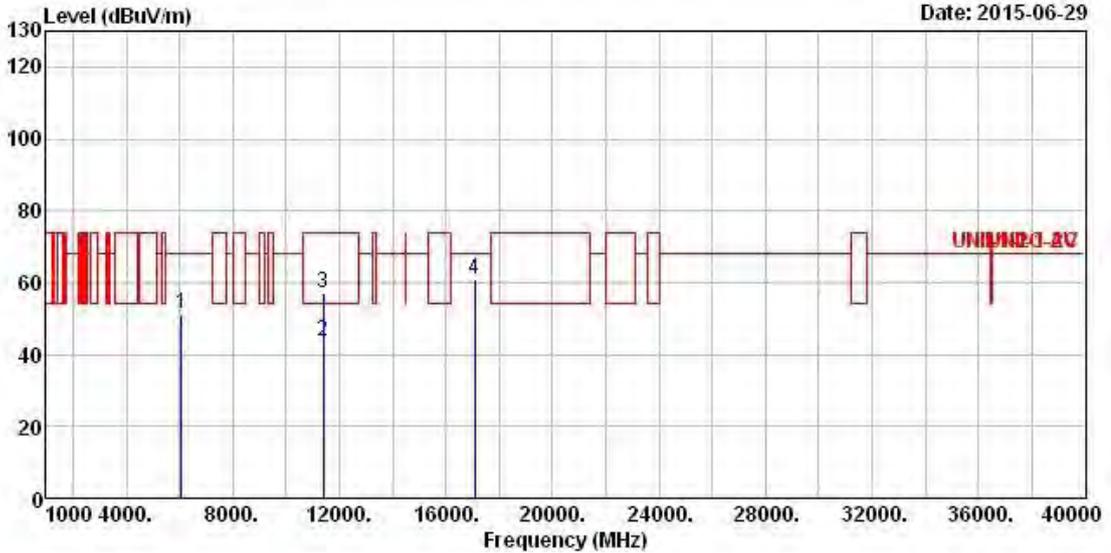
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB
1	7852.000	53.50	-14.70	68.20	43.44	36.95	5.95	32.84 Peak
2	11400.000	42.96	-11.04	54.00	28.70	39.20	7.48	32.42 Average
3	11400.000	57.63	-16.37	74.00	43.37	39.20	7.48	32.42 Peak
4	17100.000	60.04	-8.16	68.20	40.96	41.08	9.44	31.44 Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	11a	Test Freq. (MHz)	5700
N _{TX}	1	Polarization	H



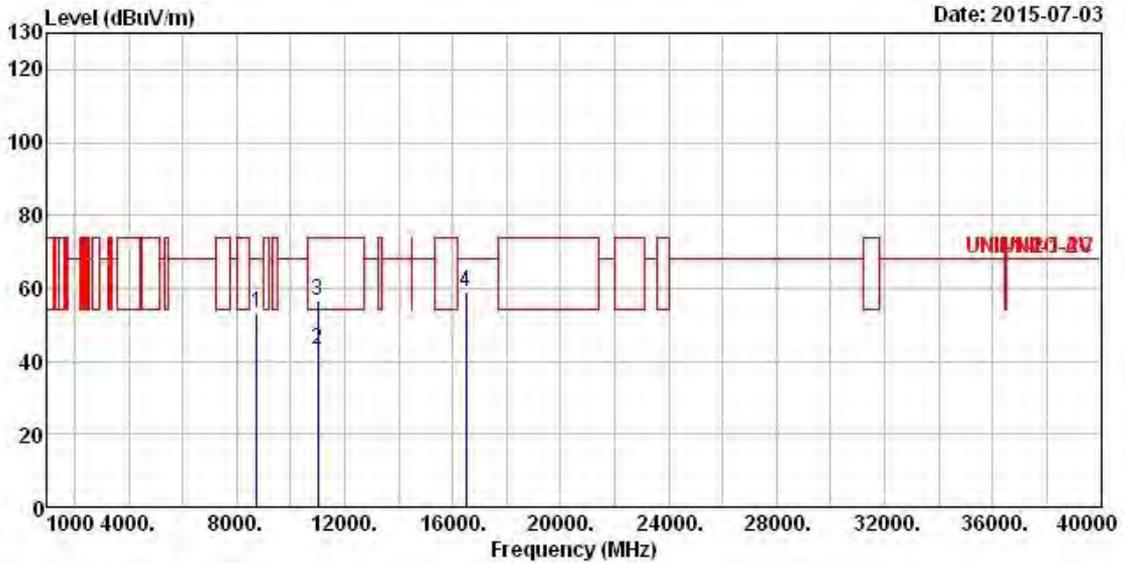
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	6066.000	51.28	-16.92	68.20	44.32	34.31	5.11	32.46	Peak
2	11400.000	43.53	-10.47	54.00	29.27	39.20	7.48	32.42	Average
3	11400.000	56.97	-17.03	74.00	42.71	39.20	7.48	32.42	Peak
4	17100.000	61.09	-7.11	68.20	42.01	41.08	9.44	31.44	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	HT20	Test Freq. (MHz)	5500
N _{TX}	3	Polarization	V



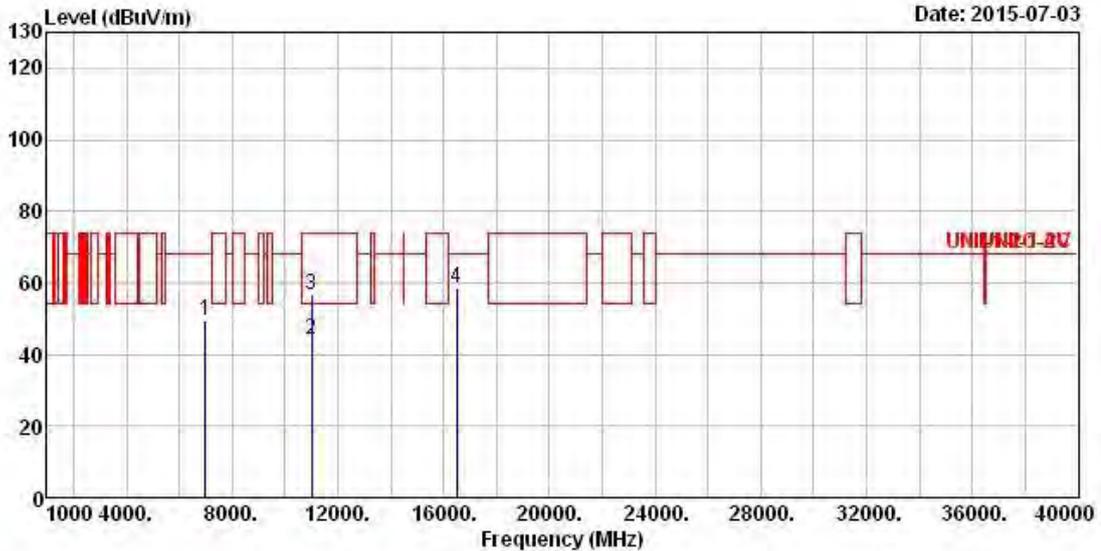
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8763.000	53.46	-14.74	68.20	41.85	38.21	6.37	32.97	Peak
2	11000.000	43.07	-10.93	54.00	29.41	38.80	7.27	32.41	Average
3	11000.000	56.65	-17.35	74.00	42.99	38.80	7.27	32.41	Peak
4	16500.000	59.10	-9.10	68.20	44.43	37.40	9.24	31.97	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	HT20	Test Freq. (MHz)	5500
N _{TX}	3	Polarization	H



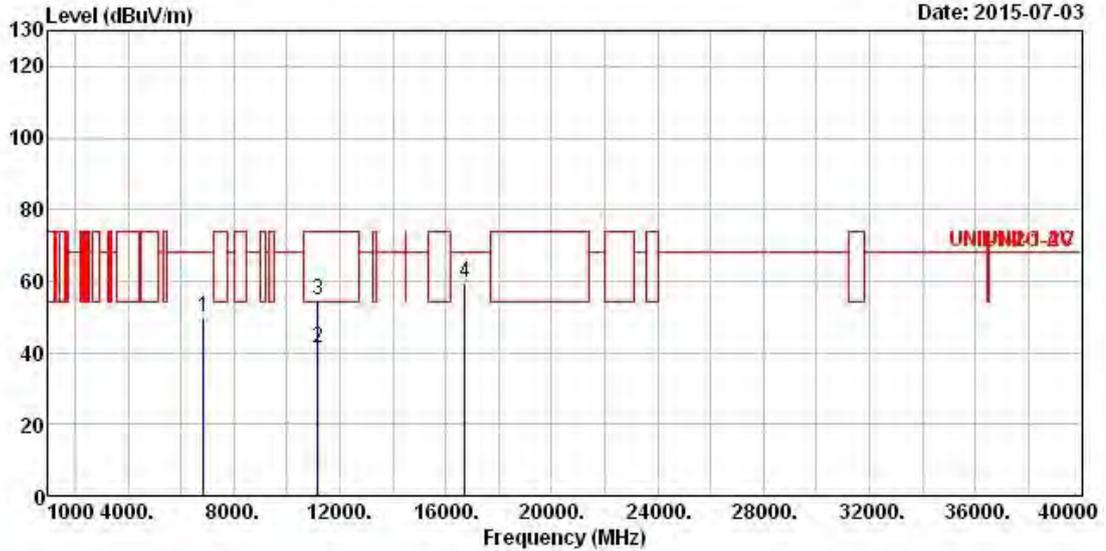
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	6986.000	49.56	-18.64	68.20	41.22	35.27	5.61	32.54	Peak
2	11000.000	43.95	-10.05	54.00	30.29	38.80	7.27	32.41	Average
3	11000.000	56.81	-17.19	74.00	43.15	38.80	7.27	32.41	Peak
4	16500.000	58.68	-9.52	68.20	44.01	37.40	9.24	31.97	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	HT20	Test Freq. (MHz)	5580
N _{TX}	3	Polarization	V



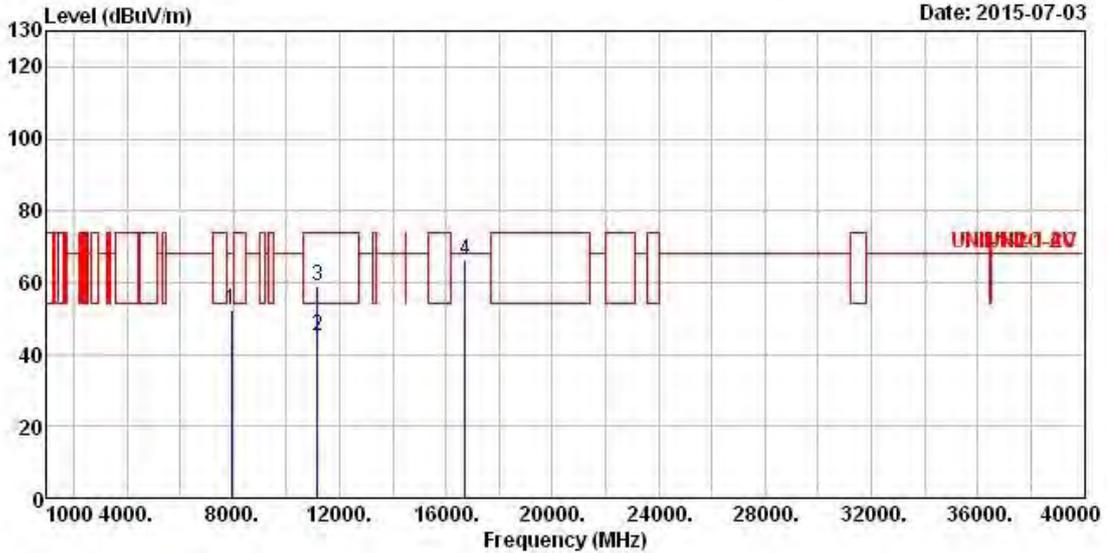
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	6847.000	49.98	-18.22	68.20	41.94	35.02	5.54	32.52	Peak
2	11160.000	41.05	-12.95	54.00	27.12	38.97	7.37	32.41	Average
3	11160.000	54.81	-19.19	74.00	40.88	38.97	7.37	32.41	Peak
4	16740.000	59.58	-8.62	68.20	43.17	38.80	9.32	31.71	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	HT20	Test Freq. (MHz)	5580
N _{TX}	3	Polarization	H



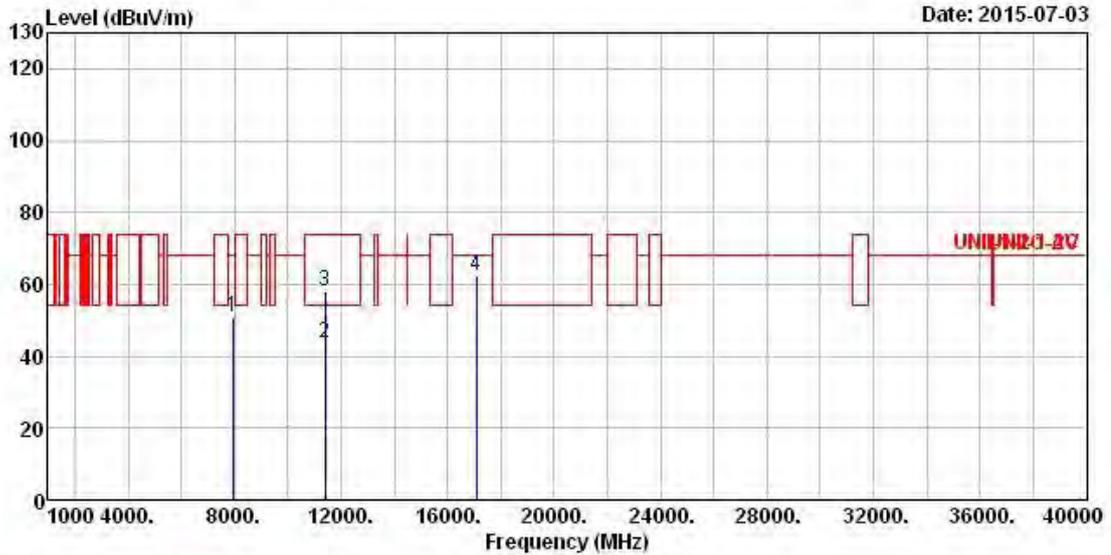
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB
1	7922.000	52.07	-16.13	68.20	41.94	37.02	5.97	32.86 Peak
2	11160.000	45.22	-8.78	54.00	31.29	38.97	7.37	32.41 Average
3	11160.000	59.12	-14.88	74.00	45.19	38.97	7.37	32.41 Peak
4	16740.000	66.14	-2.06	68.20	49.73	38.80	9.32	31.71 Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	HT20	Test Freq. (MHz)	5700
N _{TX}	3	Polarization	V



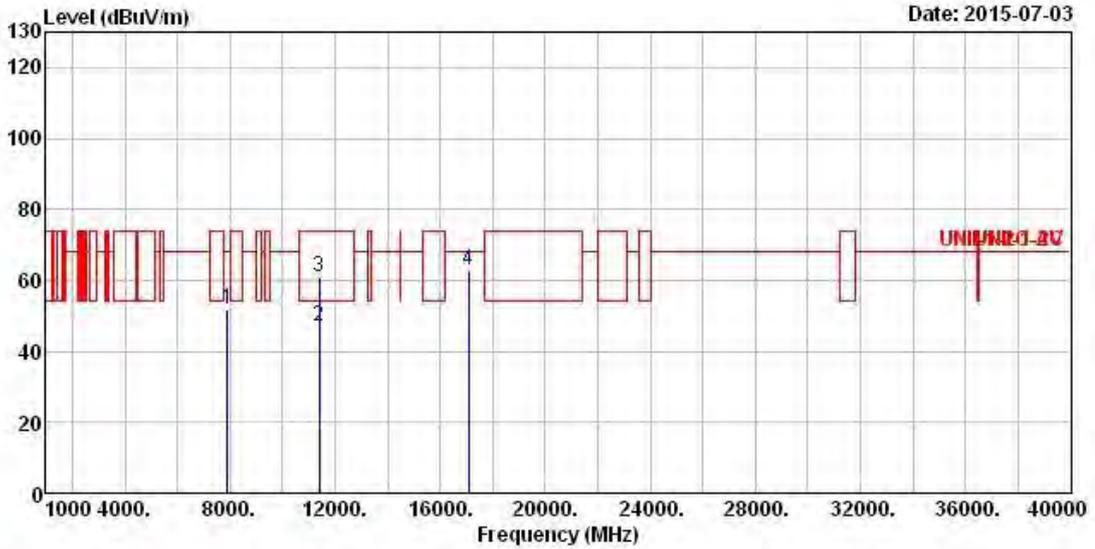
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7923.000	50.69	-17.51	68.20	40.54	37.02	5.99	32.86	Peak
2	11400.000	43.88	-10.12	54.00	29.62	39.20	7.48	32.42	Average
3	11400.000	58.19	-15.81	74.00	43.93	39.20	7.48	32.42	Peak
4	17100.000	62.34	-5.86	68.20	43.26	41.08	9.44	31.44	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	HT20	Test Freq. (MHz)	5700
N _{TX}	3	Polarization	H



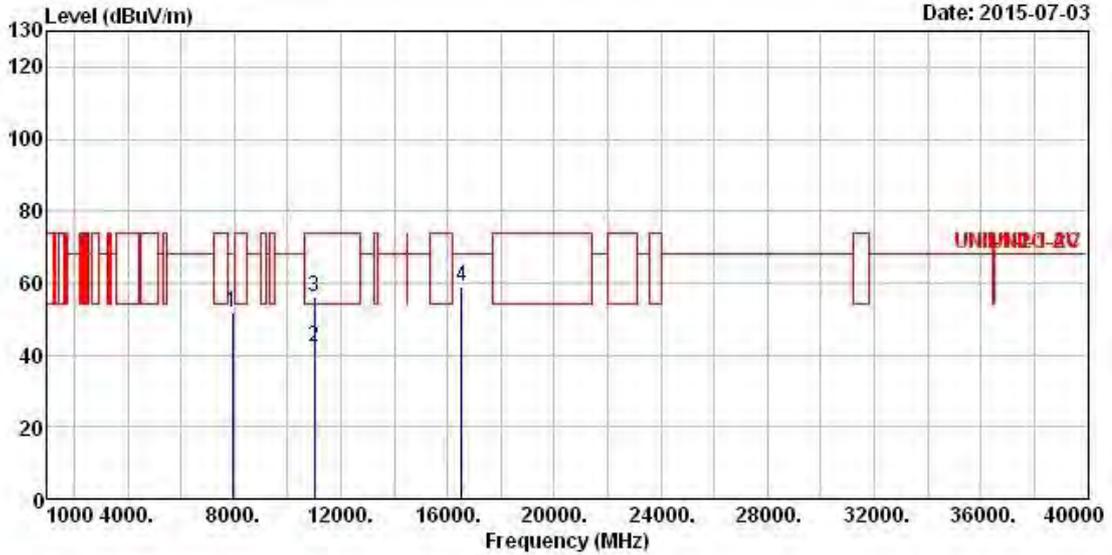
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB
1	7896.000	51.90	-16.30	68.20	41.78	37.00	5.97	32.85 Peak
2	11400.000	47.22	-6.78	54.00	32.96	39.20	7.48	32.42 Average
3	11400.000	60.96	-13.04	74.00	46.70	39.20	7.48	32.42 Peak
4	17100.000	62.86	-5.34	68.20	43.78	41.08	9.44	31.44 Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	HT40	Test Freq. (MHz)	5510
N _{TX}	3	Polarization	V



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Remark
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	
			dB	dBuV/m	dBuV	dB	dB	
1	7933.000	51.64	-16.56	68.20	41.48	37.03	5.99	32.86 Peak
2	11020.000	41.99	-12.01	54.00	28.29	38.82	7.29	32.41 Average
3	11020.000	56.19	-17.81	74.00	42.49	38.82	7.29	32.41 Peak
4	16530.000	59.19	-9.01	68.20	44.28	37.60	9.25	31.94 Peak

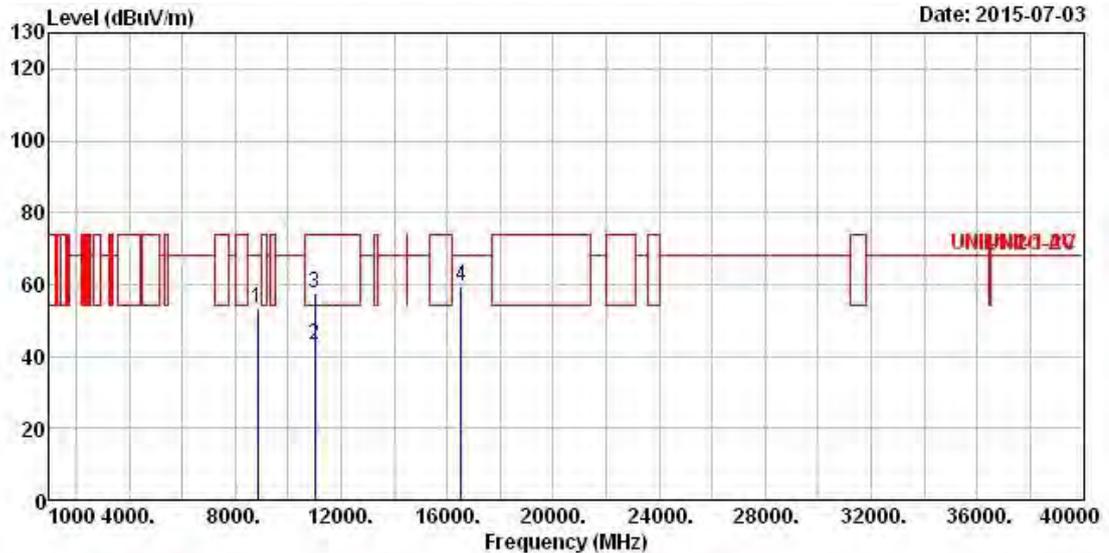
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	HT40	Test Freq. (MHz)	5510
N _{TX}	3	Polarization	H

Date: 2015-07-03



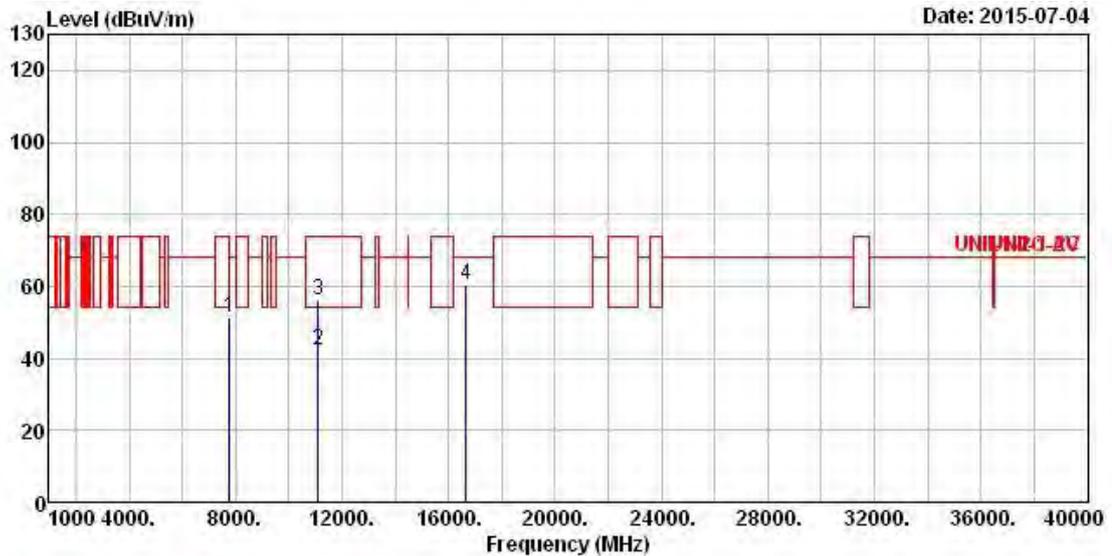
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Remark
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	
			dB	dBuV/m	dBuV	dB	dB	
1	8850.000	53.11	-15.09	68.20	41.45	38.24	6.41	32.99 Peak
2	11020.000	43.24	-10.76	54.00	29.54	38.82	7.29	32.41 Average
3	11020.000	57.35	-16.65	74.00	43.65	38.82	7.29	32.41 Peak
4	16530.000	59.50	-8.70	68.20	44.59	37.60	9.25	31.94 Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	HT40	Test Freq. (MHz)	5550
N _{TX}	3	Polarization	V



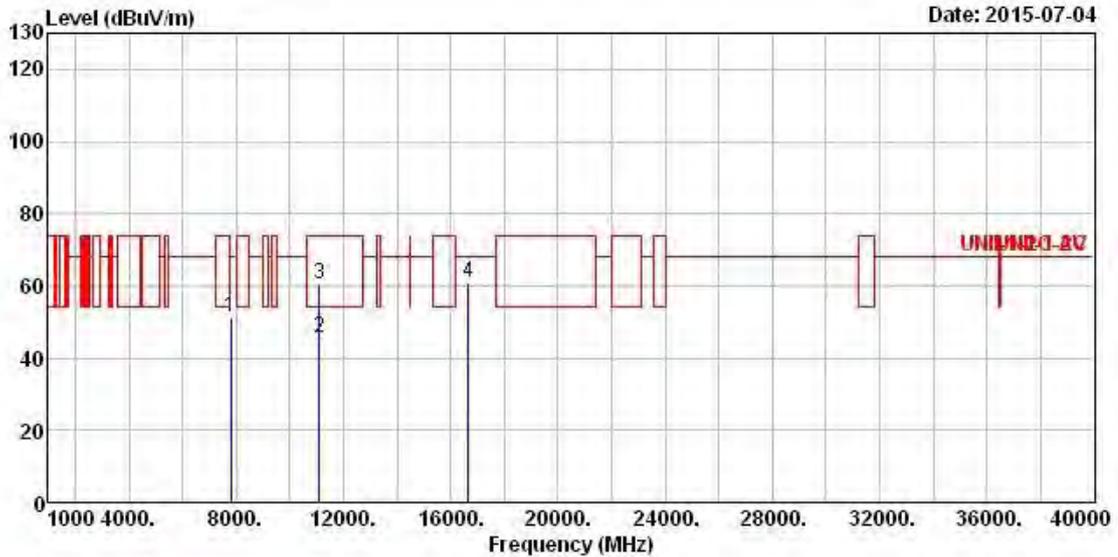
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB
1	7764.000	51.22	-16.98	68.20	41.26	36.87	5.91	32.82 Peak
2	11100.000	42.43	-11.57	54.00	28.61	38.90	7.33	32.41 Average
3	11100.000	56.25	-17.75	74.00	42.43	38.90	7.33	32.41 Peak
4	16650.000	60.41	-7.79	68.20	44.63	38.30	9.29	31.81 Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	HT40	Test Freq. (MHz)	5550
N _{TX}	3	Polarization	H



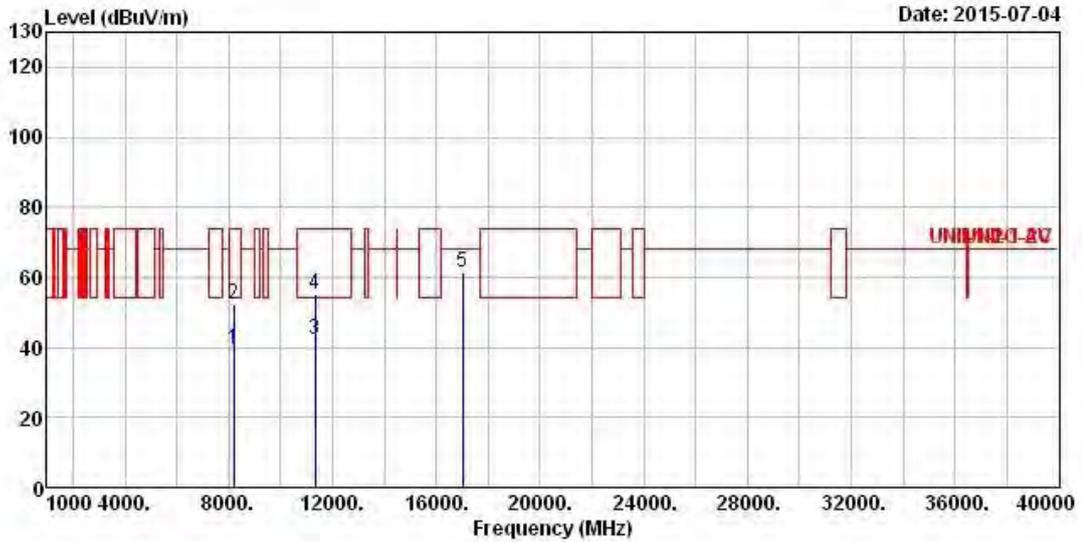
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7818.000	51.37	-16.83	68.20	41.34	36.92	5.94	32.83	Peak
2	11100.000	45.74	-8.26	54.00	31.92	38.90	7.33	32.41	Average
3	11100.000	60.40	-13.60	74.00	46.58	38.90	7.33	32.41	Peak
4	16650.000	61.14	-7.06	68.20	45.36	38.30	9.29	31.81	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	HT40	Test Freq. (MHz)	5670
N _{TX}	3	Polarization	V



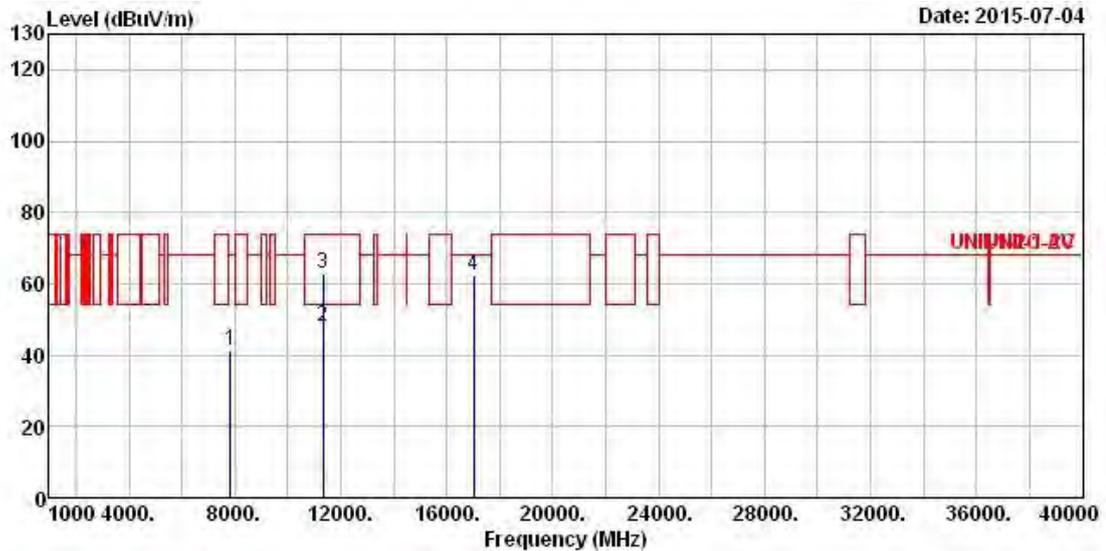
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8190.000	39.27	-14.73	54.00	28.61	37.48	6.08	32.90	Average
2	8190.000	52.30	-21.70	74.00	41.64	37.48	6.08	32.90	Peak
3	11340.000	42.41	-11.59	54.00	28.26	39.13	7.44	32.42	Average
4	11340.000	55.18	-18.82	74.00	41.03	39.13	7.44	32.42	Peak
5	17010.000	61.63	-6.57	68.20	43.22	40.43	9.41	31.43	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	HT40	Test Freq. (MHz)	5670
N _{TX}	3	Polarization	H



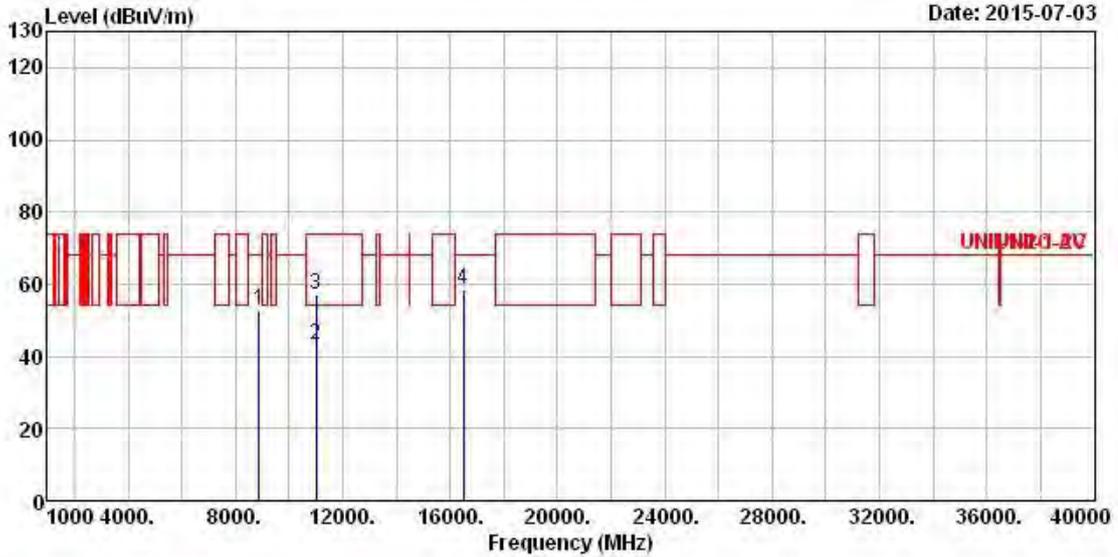
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Factor	Preamp Loss	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB
1	7836.000	41.16	-27.04	68.20	31.13	36.93	5.94	32.84 Peak
2	11340.000	47.98	-6.02	54.00	33.83	39.13	7.44	32.42 Average
3	11340.000	62.68	-11.32	74.00	48.53	39.13	7.44	32.42 Peak
4	17010.000	62.14	-6.06	68.20	43.73	40.43	9.41	31.43 Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	VHT20	Test Freq. (MHz)	5500
N _{TX}	3	Polarization	V



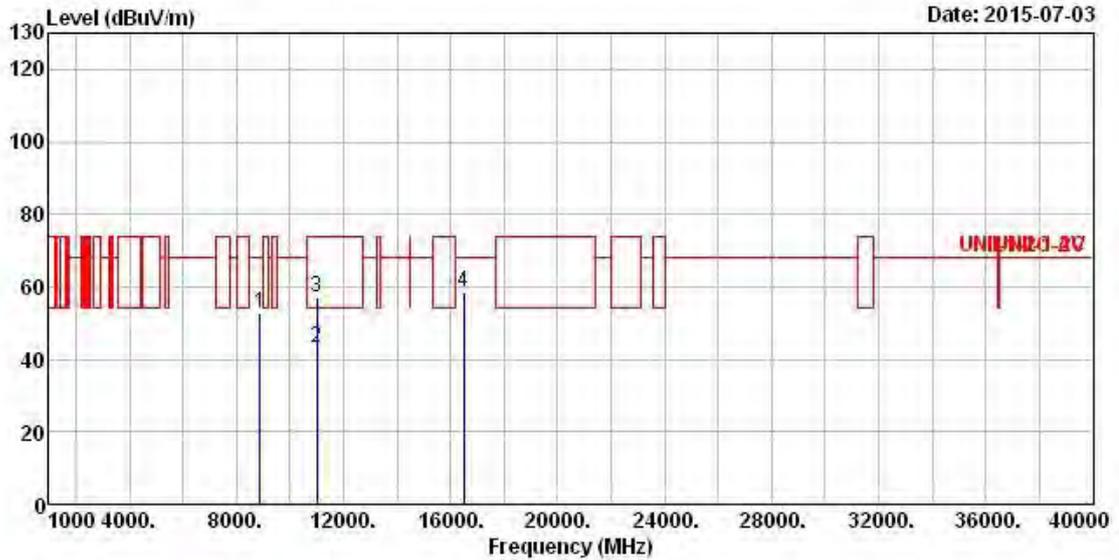
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8892.000	52.92	-15.28	68.20	41.23	38.25	6.44	33.00	Peak
2	11000.000	43.38	-10.62	54.00	29.72	38.80	7.27	32.41	Average
3	11000.000	57.23	-16.77	74.00	43.57	38.80	7.27	32.41	Peak
4	16500.000	58.75	-9.45	68.20	44.08	37.40	9.24	31.97	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	VHT20	Test Freq. (MHz)	5500
N _{TX}	3	Polarization	H



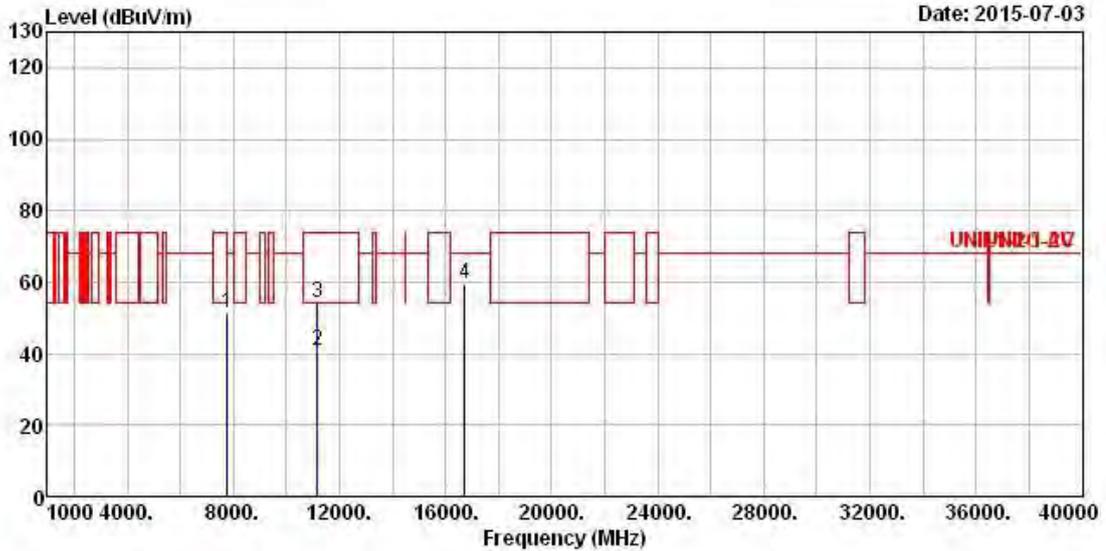
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	
1	8892.000	52.92	-15.28	68.20	41.23	38.25	6.44	33.00 Peak
2	11000.000	43.38	-10.62	54.00	29.72	38.80	7.27	32.41 Average
3	11000.000	57.23	-16.77	74.00	43.57	38.80	7.27	32.41 Peak
4	16500.000	58.75	-9.45	68.20	44.08	37.40	9.24	31.97 Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	VHT20	Test Freq. (MHz)	5580
N _{TX}	3	Polarization	V



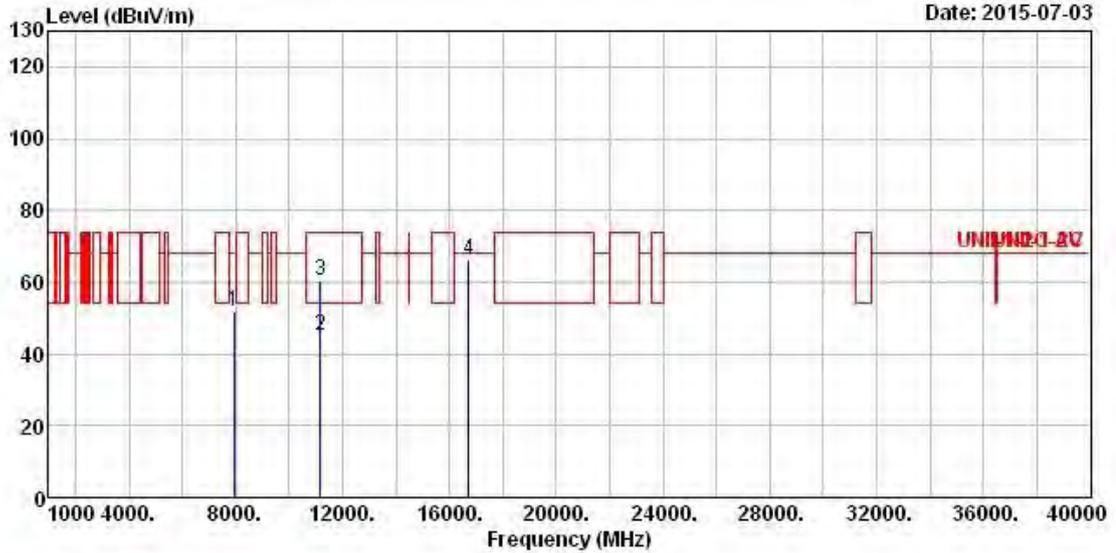
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	
1	7789.000	51.50	-16.70	68.20	41.52	36.88	5.93	32.83 Peak
2	11160.000	40.77	-13.23	54.00	26.84	38.97	7.37	32.41 Average
3	11160.000	54.11	-19.89	74.00	40.18	38.97	7.37	32.41 Peak
4	16740.000	59.25	-8.95	68.20	42.84	38.80	9.32	31.71 Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	VHT20	Test Freq. (MHz)	5580
N _{TX}	3	Polarization	H



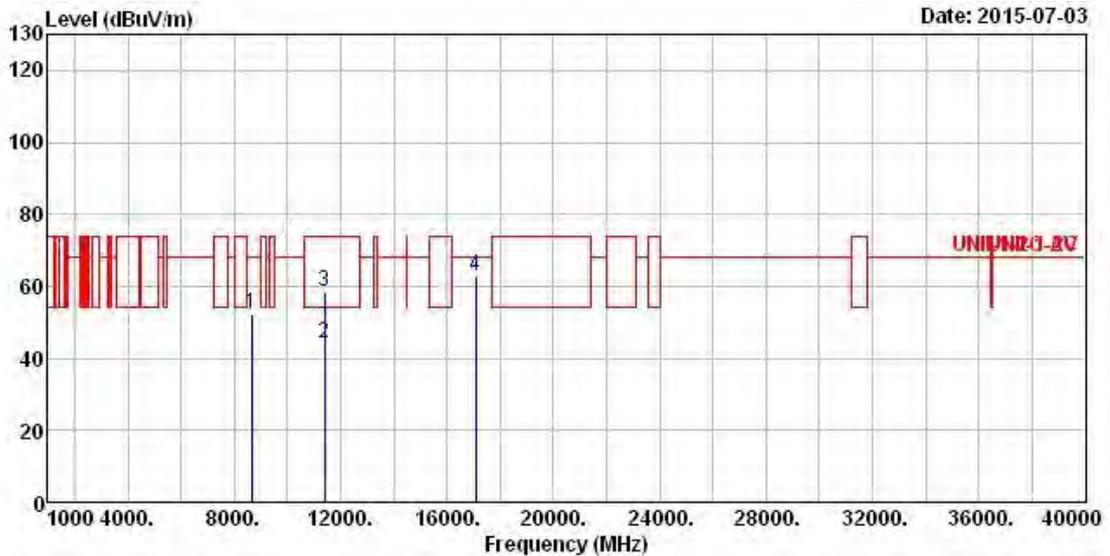
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7933.000	51.72	-16.48	68.20	41.56	37.03	5.99	32.86	Peak
2	11160.000	45.16	-8.84	54.00	31.23	38.97	7.37	32.41	Average
3	11160.000	60.24	-13.76	74.00	46.31	38.97	7.37	32.41	Peak
4	16740.000	66.27	-1.93	68.20	49.86	38.80	9.32	31.71	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	VHT20	Test Freq. (MHz)	5700
N _{TX}	3	Polarization	V



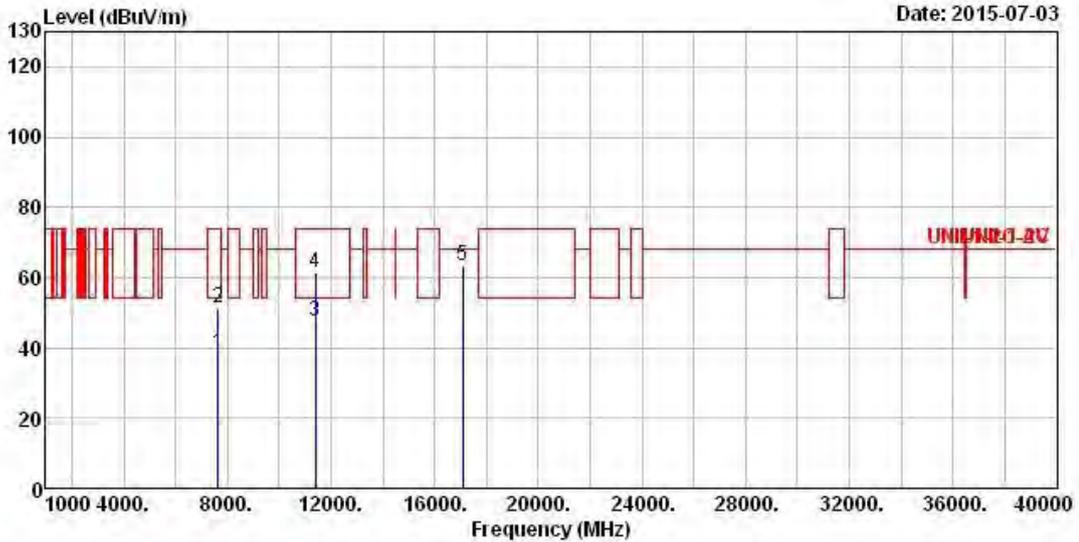
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8655.000	52.07	-16.13	68.20	40.55	38.16	6.31	32.95	Peak
2	11400.000	44.18	-9.82	54.00	29.92	39.20	7.48	32.42	Average
3	11400.000	58.43	-15.57	74.00	44.17	39.20	7.48	32.42	Peak
4	17100.000	62.66	-5.54	68.20	43.58	41.08	9.44	31.44	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	VHT20	Test Freq. (MHz)	5700
N _{TX}	3	Polarization	H



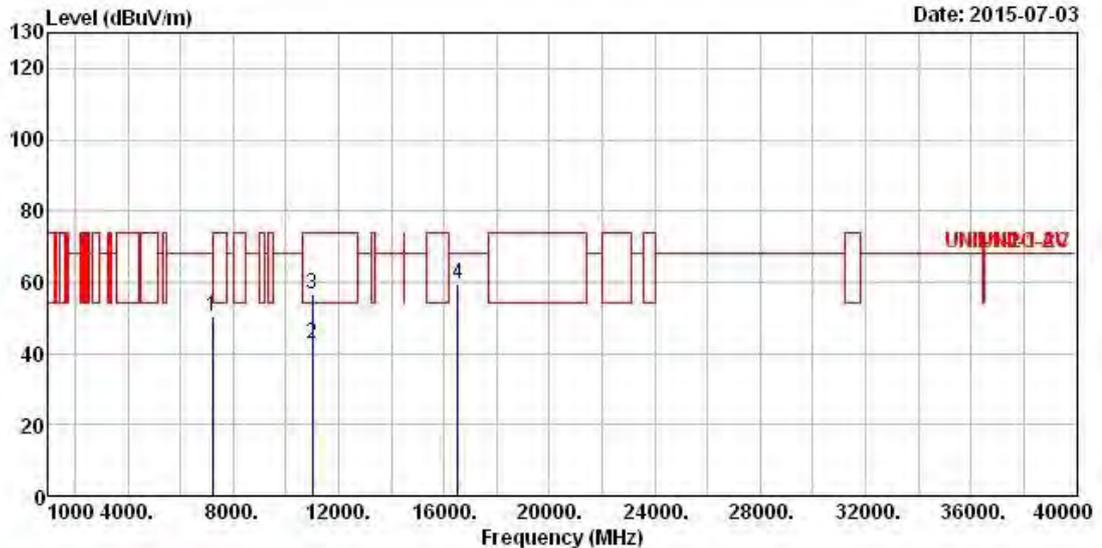
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Factor	Preamp Loss	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	
1	7654.000	38.24	-15.76	54.00	28.40	36.75	5.88	32.79 Average
2	7654.000	51.37	-22.63	74.00	41.53	36.75	5.88	32.79 Peak
3	11400.000	47.38	-6.62	54.00	33.12	39.20	7.48	32.42 Average
4	11400.000	61.20	-12.80	74.00	46.94	39.20	7.48	32.42 Peak
5	17100.000	63.12	-5.08	68.20	44.04	41.08	9.44	31.44 Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	VHT40	Test Freq. (MHz)	5510
N _{TX}	3	Polarization	V



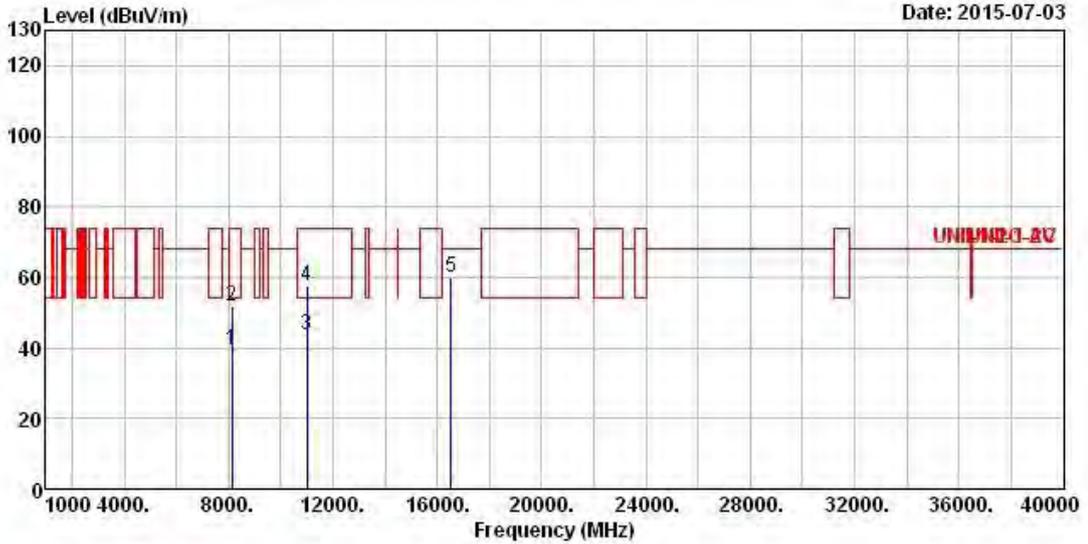
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7206.000	50.48	-17.72	68.20	41.56	35.84	5.71	32.63	Peak
2	11020.000	42.46	-11.54	54.00	28.76	38.82	7.29	32.41	Average
3	11020.000	56.64	-17.36	74.00	42.94	38.82	7.29	32.41	Peak
4	16530.000	59.46	-8.74	68.20	44.55	37.60	9.25	31.94	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	VHT40	Test Freq. (MHz)	5510
N _{TX}	3	Polarization	H



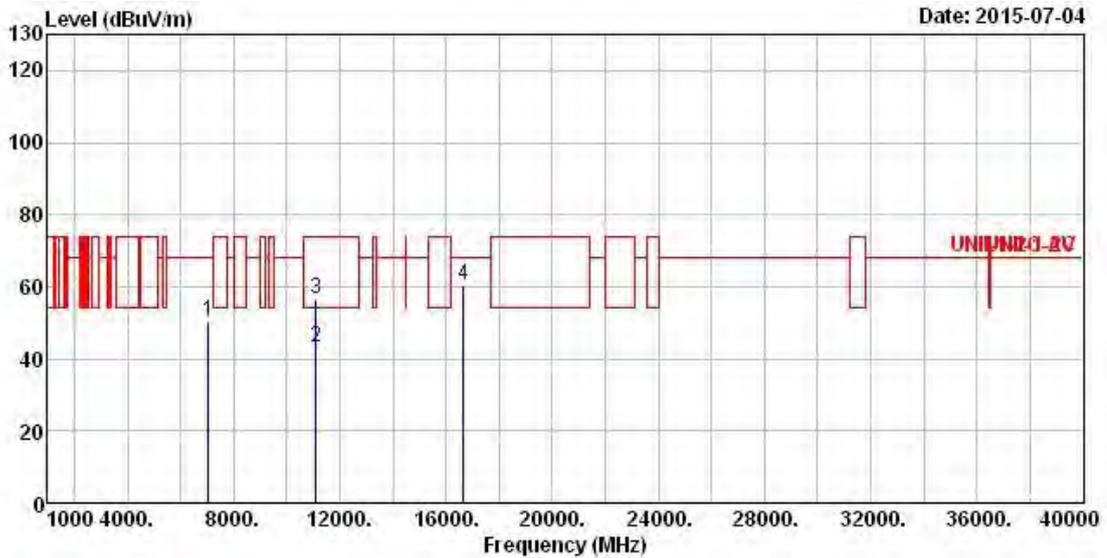
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Factor	Preamp Loss	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	
1	8118.000	39.33	-14.67	54.00	28.81	37.34	6.07	32.89 Average
2	8118.000	52.00	-22.00	74.00	41.48	37.34	6.07	32.89 Peak
3	11020.000	43.71	-10.29	54.00	30.01	38.82	7.29	32.41 Average
4	11020.000	57.65	-16.35	74.00	43.95	38.82	7.29	32.41 Peak
5	16530.000	59.87	-8.33	68.20	44.96	37.60	9.25	31.94 Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	VHT40	Test Freq. (MHz)	5550
N _{TX}	3	Polarization	V



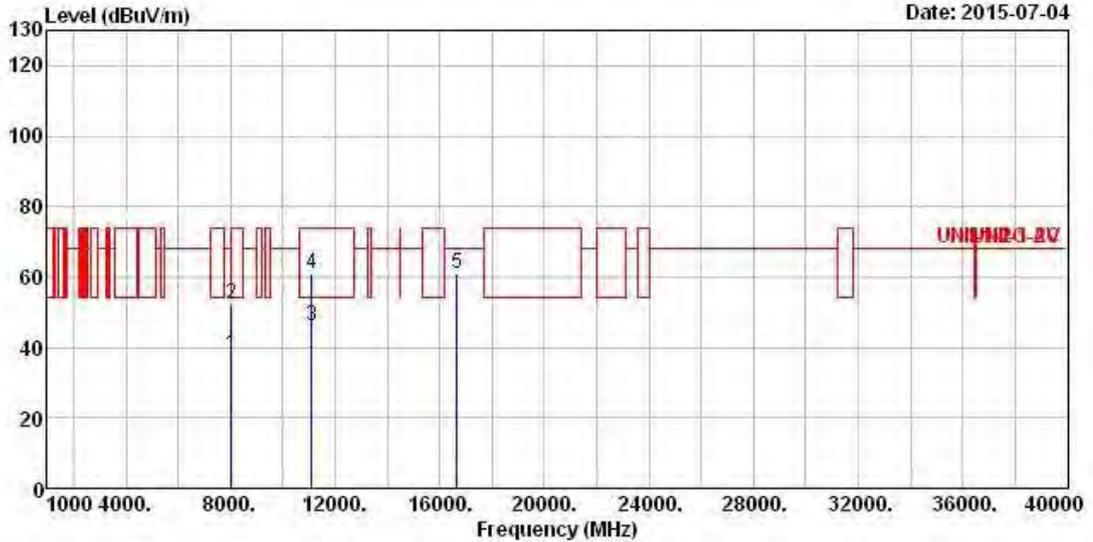
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7064.000	50.47	-17.73	68.20	41.91	35.48	5.65	32.57	Peak
2	11100.000	42.97	-11.03	54.00	29.15	38.90	7.33	32.41	Average
3	11100.000	56.52	-17.48	74.00	42.70	38.90	7.33	32.41	Peak
4	16650.000	60.26	-7.94	68.20	44.48	38.30	9.29	31.81	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	VHT40	Test Freq. (MHz)	5550
N _{TX}	3	Polarization	H



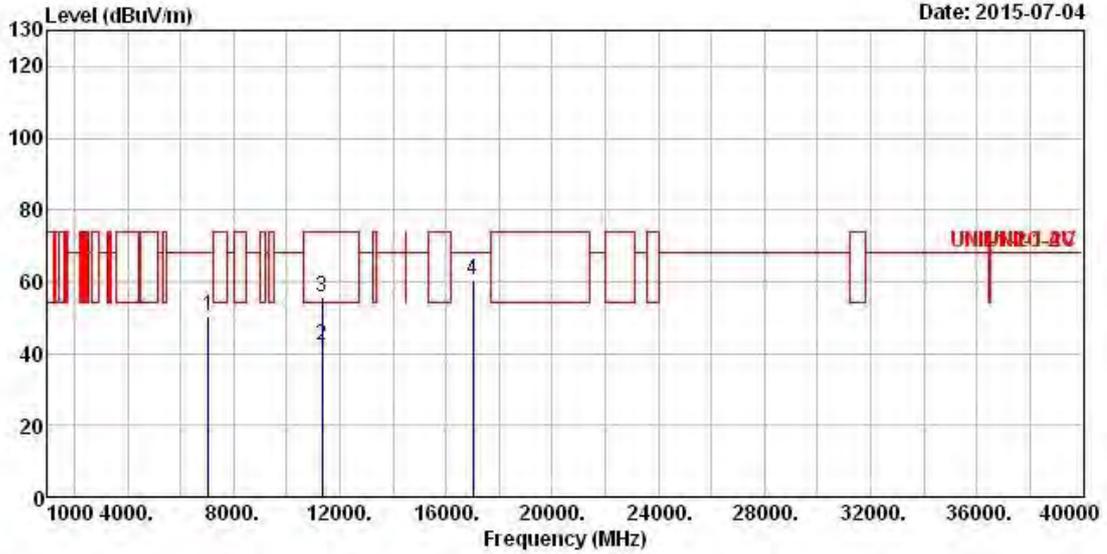
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Factor	Preamp Loss	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB
1	8040.000	37.98	-16.02	54.00	27.66	37.17	6.03	32.88 Average
2	8040.000	52.26	-21.74	74.00	41.94	37.17	6.03	32.88 Peak
3	11100.000	46.08	-7.92	54.00	32.26	38.90	7.33	32.41 Average
4	11100.000	60.71	-13.29	74.00	46.89	38.90	7.33	32.41 Peak
5	16650.000	60.94	-7.26	68.20	45.16	38.30	9.29	31.81 Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	VHT40	Test Freq. (MHz)	5670
N _{TX}	3	Polarization	V



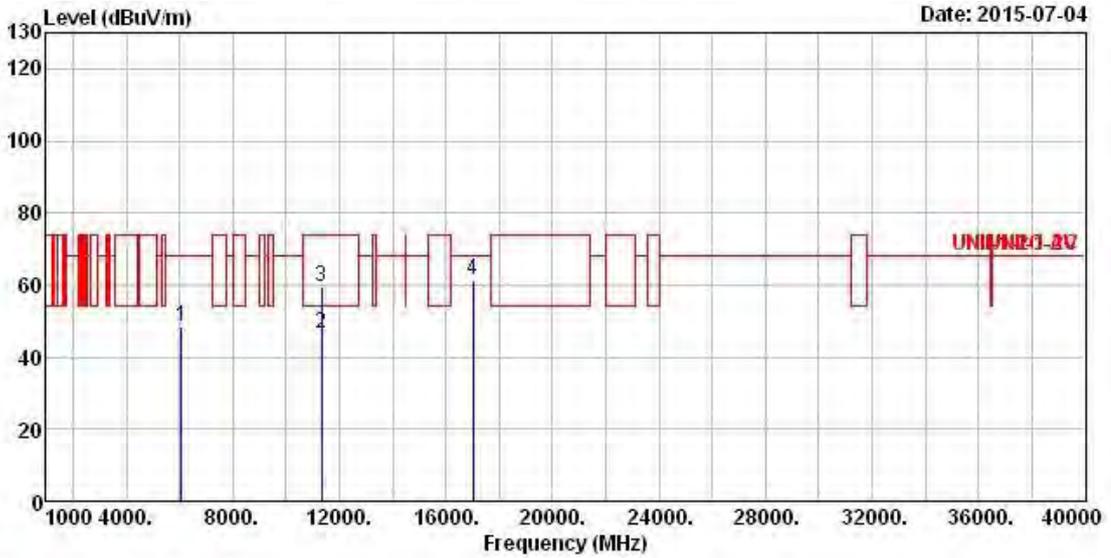
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7044.000	50.35	-17.85	68.20	41.83	35.43	5.65	32.56	Peak
2	11340.000	42.01	-11.99	54.00	27.86	39.13	7.44	32.42	Average
3	11340.000	55.81	-18.19	74.00	41.66	39.13	7.44	32.42	Peak
4	17010.000	60.50	-7.70	68.20	42.09	40.43	9.41	31.43	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	VHT40	Test Freq. (MHz)	5670
N _{TX}	3	Polarization	H



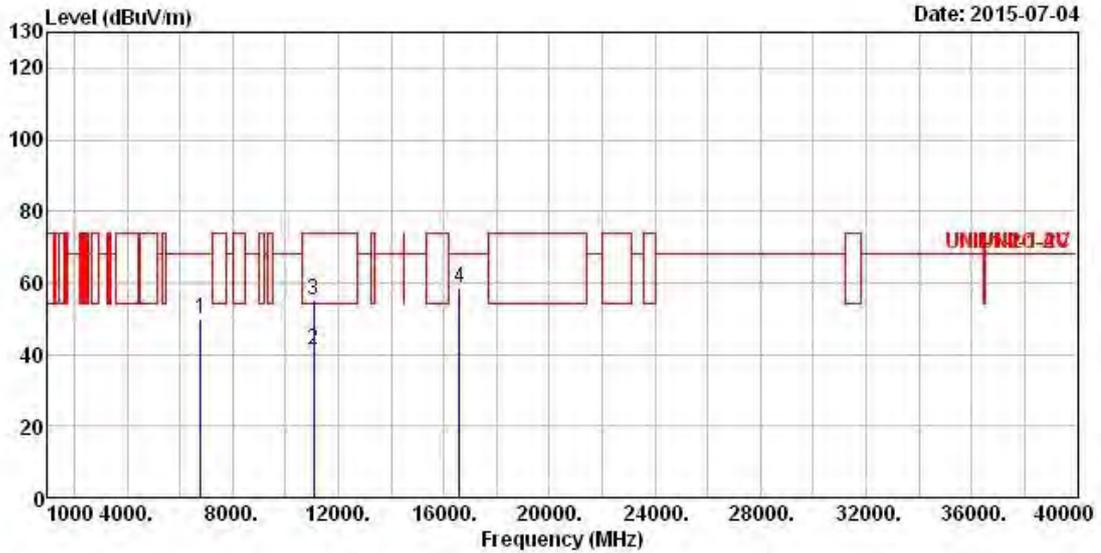
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Factor	Preamp Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	6072.000	48.53	-19.67	68.20	41.57	34.31	5.11	32.46	Peak
2	11340.000	46.66	-7.34	54.00	32.51	39.13	7.44	32.42	Average
3	11340.000	59.61	-14.39	74.00	45.46	39.13	7.44	32.42	Peak
4	17010.000	61.39	-6.81	68.20	42.98	40.43	9.41	31.43	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	VHT80	Test Freq. (MHz)	5530
N _{TX}	3	Polarization	V



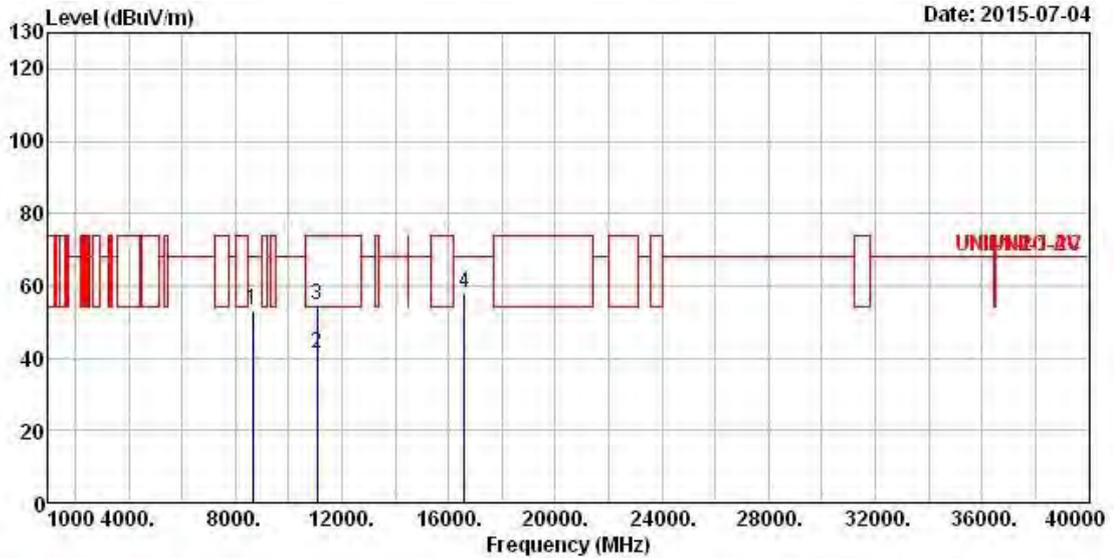
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	6794.000	49.99	-18.21	68.20	42.06	34.93	5.51	32.51	Peak
2	11060.000	41.08	-12.92	54.00	27.31	38.87	7.31	32.41	Average
3	11060.000	55.05	-18.95	74.00	41.28	38.87	7.31	32.41	Peak
4	16590.000	58.33	-9.87	68.20	43.03	37.90	9.27	31.87	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	VHT80	Test Freq. (MHz)	5530
N _{TX}	3	Polarization	H



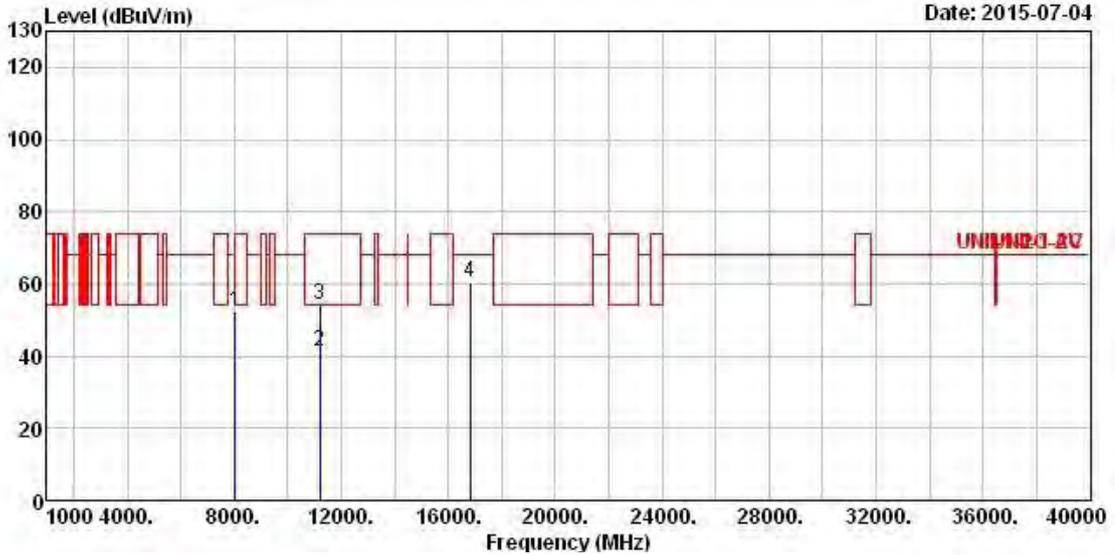
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8642.000	53.29	-14.91	68.20	41.77	38.16	6.31	32.95	Peak
2	11060.000	41.03	-12.97	54.00	27.26	38.87	7.31	32.41	Average
3	11060.000	54.65	-19.35	74.00	40.88	38.87	7.31	32.41	Peak
4	16590.000	58.08	-10.12	68.20	42.78	37.90	9.27	31.87	Peak

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



Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	VHT80	Test Freq. (MHz)	5610
N _{TX}	3	Polarization	V



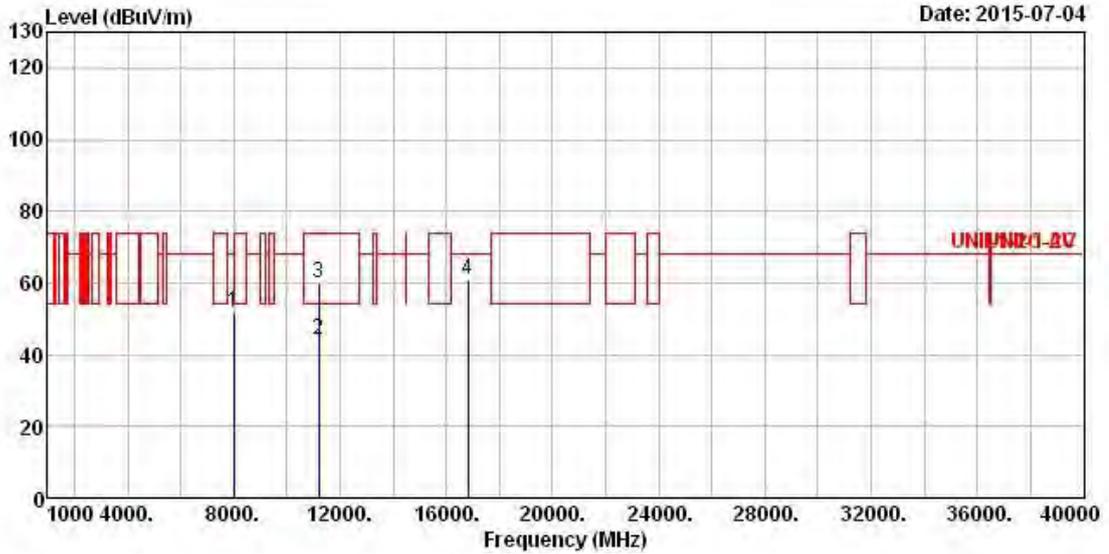
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8021.000	52.24	-15.96	68.20	41.97	37.13	6.02	32.88	Peak
2	11220.000	41.40	-12.60	54.00	27.40	39.02	7.39	32.41	Average
3	11220.000	54.36	-19.64	74.00	40.36	39.02	7.39	32.41	Peak
4	16830.000	60.67	-7.53	68.20	43.64	39.30	9.34	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)

Modulation Mode	VHT80	Test Freq. (MHz)	5610
N _{TX}	3	Polarization	H



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7994.000	51.87	-16.33	68.20	41.67	37.08	6.00	32.88	Peak
2	11220.000	44.28	-9.72	54.00	30.28	39.02	7.39	32.41	Average
3	11220.000	59.90	-14.10	74.00	45.90	39.02	7.39	32.41	Peak
4	16830.000	61.06	-7.14	68.20	44.03	39.30	9.34	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.

3.7 Frequency Stability

3.7.1 Frequency Stability Limit

Frequency Stability Limit	
UNII Devices	
<input checked="" type="checkbox"/>	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	
<input checked="" type="checkbox"/>	N/A
IEEE Std. 802.11n-2009	
<input checked="" type="checkbox"/>	The transmitter center frequency tolerance shall be ± 20 ppm maximum for the 5 GHz band and ± 25 ppm maximum for the 2.4 GHz band.

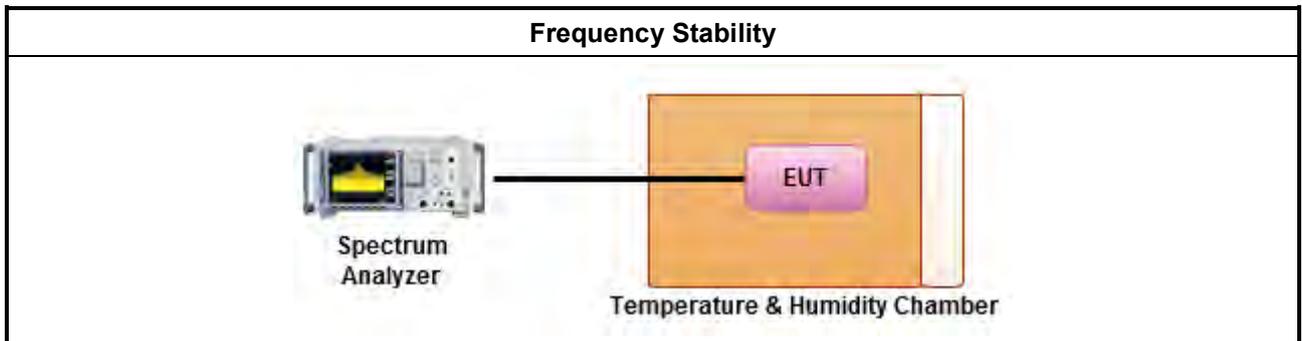
3.7.2 Measuring Instruments

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

3.7.3 Test Procedures

Test Method	
<input checked="" type="checkbox"/>	Refer as ANSI C63.10, clause 6.8 for frequency stability tests
<input checked="" type="checkbox"/>	Frequency stability with respect to ambient temperature
<input checked="" type="checkbox"/>	Frequency stability when varying supply voltage
<input checked="" type="checkbox"/>	For conducted measurement.
<input checked="" type="checkbox"/>	For conducted measurements on devices with multiple transmit chains: Measurements need only to be performed on one of the active transmit chains (antenna outputs)
<input type="checkbox"/>	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



3.7.5 Test Result of Frequency Stability

Frequency Stability Result					
Mode		Frequency Stability (ppm)			
Condition	Freq. (MHz)	0 min	2 min	5 min	10 min
T _{20°C} V _{max}	5300	-5.1604	-5.0792	-5.0792	-3.1132
T _{20°C} V _{min}	5300	-5.2434	-5.1604	-5.1604	-3.0302
T _{50°C} V _{nom}	5300	-2.1302	-1.4736	-0.8189	-3.6226
T _{40°C} V _{nom}	5300	-4.3415	-4.0962	-3.4396	-4.8679
T _{30°C} V _{nom}	5300	-5.2434	-5.3245	-4.9962	-4.4226
T _{20°C} V _{nom}	5300	-4.6698	-4.7509	-4.5868	-3.1132
T _{10°C} V _{nom}	5300	-2.3962	-3.2264	-2.9811	-1.1472
T _{0°C} V _{nom}	5300	-3.0302	-3.2774	-3.3585	-0.6547
T _{-10°C} V _{nom}	5300	-0.7377	-0.8189	-1.1472	-0.0849
T _{-20°C} V _{nom}	5300	0.1642	0.0811	0.4094	-0.0811
Limit (ppm)		20			
Result		Complied			
Note 1: Measure at 85 % [V _{min}] and 115 % [V _{max}] of the nominal voltage [V _{nom}]. Note 2: The nominal voltage refer test report clause 1.1.5 for EUT operational condition.					



4 Test Equipment and Calibration Data

AC Power-line Conducted Emissions

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMC Receiver	R&S	ESCS 30	100174	9kHz ~ 2.75GHz	Mar. 26, 2014	AC Conduction
LISN	SCHWARZBECK MESS-ELEKTRONIK	NSLK 8127	8127-477	9kHz ~ 30MHz	Jan. 21, 2014	AC Conduction
RF Cable-CON	HUBER+SUHNER	RG213/U	7.61183201e+012	9kHz ~ 30MHz	Oct. 31, 2014	AC Conduction
EMI Filter	LINDGREN	LRE-2030	2651	< 450 Hz	NCR	AC Conduction

Note: Calibration Interval of instruments listed above is one year. NCR: No calibration request.

RF Conducted

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Spectrum Analyzer	R&S	FSV 40	101500	9KHz~40GHz	May. 06, 2015	RF Conducted
AC Power Source	G.W	APS-9102	EL920581	AC 0V ~ 300V	Jun. 25, 2015	RF Conducted
Temp. and Humidity Chamber	Giant Force	GTH-225-20-SP-SD	MAA1112-007	-20 ~ 100°C	Apr. 07, 2015	RF Conducted
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	Jul. 31, 2014	RF Conducted

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

Radiated Emission(Below 1GHz)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz ~ 1GHz 3m	Nov. 29, 2014	Radiated Emission
Amplifier	HP	8447D	2944A08033	10kHz ~ 1.3GHz	May 11, 2015	Radiated Emission
Spectrum	R&S	FSP40	100004	9kHz ~ 40GHz	Apr. 02, 2015	Radiated Emission
Bilog Antenna	SCHAFFNER	CBL 6112D	22237	30MHz ~ 1GHz	Sep. 18, 2015	Radiated Emission
RF Cable-R03m	Jye Bao	RG142	CB021	9kHz ~ 1GHz	Nov. 06, 2015	Radiated Emission
Turn Table	EM Electronics	EM Electronics	060615	0 ~ 360 degree	NCR	Radiated Emission
Antenna Mast	MF	MF-7802	MF780208179	1 ~ 4 m	NCR	Radiated Emission

Note: Calibration Interval of instruments listed above is one year. NCR: No calibration request.

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Loop Antenna *(note 1)	TESEQ	HLA6120	24155	9 kHz~30 MHz	Mar. 12, 2015	Radiated Emission

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



Radiated Emission(Above 1GHz)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz ~ 1GHz 3m	Nov. 29, 2014	Radiation Emissions
Amplifier	HP	8447D	2944A08033	10kHz ~ 1.3GHz	May 11, 2015	Radiation Emissions
Amplifier	Agilent	8449B	3008A02120	1GHz ~ 26.5GHz	Sep. 01, 2014	Radiation Emissions
Spectrum	R&S	FSP40	100004	9kHz ~ 40GHz	Apr. 02, 2015	Radiation Emissions
Horn Antenna	ETS · LINDGREN	3115	6741	1GHz ~ 18GHz	Jul. 11, 2014	Radiation Emissions
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	18GHz ~ 40GHz	Jan. 27, 2015	Radiation Emissions
RF Cable-high	SUHNER	SUCOFLEX 106	03CH03-HY	1GHz ~ 40GHz	Dec. 12, 2014	Radiation Emissions
Turn Table	EM Electronics	EM Electronics	060615	0 ~ 360 degree	NCR	Radiation Emissions
Antenna Mast	MF	MF-7802	MF780208179	1 ~ 4 m	NCR	Radiation Emissions

Note: Calibration Interval of instruments listed above is one year. NCR: No calibration request.

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Amplifier	EMC INSTRUMENTS	EMC184045B	980192	18GHz ~ 40GHz	Aug. 25.2014	Radiation Emissions

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