

FCC Test Report

Equipment : Wireless-AC1300 Dual Band Gigabit Router
Brand Name : ASUS
Model No. : RT-AC58U, RT-AC58MU, RT-ACRH00, RT-AC1300X
(for marketing, X=0~9 , A-Z, or blank), RT-AC1200X
(for marketing, X=0~9 , A-Z, or blank), RT-AC1300G+,
RT-AC1300GPLUS, RT-AC1300G PLUS,
RT-AC1300UHP, RT-AC1300HP, RT-AC58UHP,
RT-AC58HP, RT-AC53HP, RT-ACRH13,
RT-AC1300GPLUS_B1, RT-AC1200G+ B1
FCC ID : MSQ-RTACRH00
Standard : 47 CFR FCC Part 15.407
Frequency : 5150 MHz – 5250 MHz
5725 MHz – 5850 MHz
FCC Classification : NII
**Applicant /
Manufacturer** : ASUSTeK Computer Inc
4F, No. 150, Li-Te Rd., Peitou, Taipei 112, Taiwan
Operate Mode : Master; TPC

The product sample received on Jan. 28, 2016 and completely tested on Jul. 25, 2016. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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

Reviewed by:

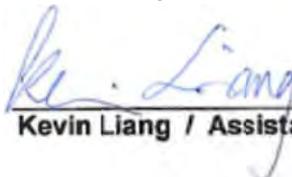

Kevin Liang / Assistant Manager





Table of Contents

1	GENERAL DESCRIPTION	5
1.1	Information.....	5
1.2	Testing Applied Standards	8
1.3	Testing Location Information	8
1.4	Measurement Uncertainty	9
2	TEST CONFIGURATION OF EUT	10
2.1	The Worst Case Modulation Configuration	10
2.2	Test Channel Mode	10
2.3	The Worst Case Measurement Configuration.....	12
2.4	Accessories and Support Equipment	13
2.5	Test Setup Diagram	14
3	TRANSMITTER TEST RESULT	15
3.1	AC Power-line Conducted Emissions	15
3.2	Emission Bandwidth	17
3.3	Maximum Conducted Output Power	18
3.4	Peak Power Spectral Density.....	20
3.5	Transmitter Bandedge Emissions	23
3.6	Transmitter Unwanted Emissions.....	26
3.7	Frequency Stability.....	30
4	TEST EQUIPMENT AND CALIBRATION DATA	31

Appendix I. Test Result of AC Power-line Conducted Emissions

Appendix A. Test Result of Emission Bandwidth

Appendix B. Test Result of Maximum Conducted Output Power

Appendix C. Test Result of Power Spectral Density

Appendix D. Transmitter Bandedge Emissions

Appendix E. Transmitter Unwanted Emissions

Appendix F. Frequency Stability

Appendix G. Test Photos

Appendix H. 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)	Maximum Conducted Output Power	Complied
3.4	15.407(a)	Peak Power Spectral Density	Complied
3.5	15.407(b)	Unwanted Emissions	Complied
3.7	15.407(g)	Frequency Stability	Complied



1 General Description

1.1 Information

1.1.1 RF General Information

Band	Mode	BWch (MHz)	Nss-Min	Nant
5.2G	11a	20	1	2
5.2G	HT20	20	1,(M0-15)	2
5.2G	HT40	40	1,(M0-15)	2
5.2G	VHT20	20	1,(M0-8)	2
5.2G	VHT40	40	1,(M0-9)	2
5.2G	VHT80	80	1,(M0-9)	2
5.8G	11a	20	1	2
5.8G	HT20	20	1,(M0-15)	2
5.8G	HT40	40	1,(M0-15)	2
5.8G	VHT20	20	1,(M0-8)	2
5.8G	VHT40	40	1,(M0-9)	2
5.8G	VHT80	80	1,(M0-9)	2

Note:

- ◆ 5.2G is the 5.2GHz Band (5.15-5.25GHz).
- ◆ 5.8G is the 5.8GHz Band (5.725-5.850GHz).
- ◆ 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ◆ VHT20, VHT40 and VHT80 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- ◆ BWch is the nominal channel bandwidth.
- ◆ Nss-Min is the minimum number of spatial streams.
- ◆ Nant is the number of outputs. e.g., 2(2,3) means have 2 outputs for port 2 and port 3. 2 means have 2 outputs for port 1 and port 2.



1.1.2 Antenna Information

Antenna Category	
<input type="checkbox"/>	Equipment placed on the market without antennas
<input type="checkbox"/>	Integral antenna (antenna permanently attached)
<input type="checkbox"/>	Temporary RF connector provided
<input type="checkbox"/>	No temporary RF connector provided Transmit chains bypass antenna and soldered temporary RF connector provided for connected measurement. In case of conducted measurements the transmitter shall be connected to the measuring equipment via a suitable attenuator and correct for all losses in the RF path.
<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			
No.	Ant. Cat.	Ant. Type	Gain (dBi)
1	External	Dipole	5.41
2	External	Dipole	5.12

1.1.3 Type of EUT

Identify EUT	
EUT Serial Number	N/A
Presentation of Equipment	<input type="checkbox"/> Production ; <input checked="" type="checkbox"/> Pre-Production ; <input 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 Mode Test Duty Cycle

Operated 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"/> 96.6% - IEEE 802.11a (HT20)	0.15
<input checked="" type="checkbox"/> 98.6% - IEEE 802.11 n (HT20)	0.06
<input checked="" type="checkbox"/> 96.9% - IEEE 802.11 n (HT40)	0.15
<input checked="" type="checkbox"/> 98.5% - IEEE 802.11ac (VHT20)	0.07
<input checked="" type="checkbox"/> 96.9% - IEEE 802.11ac (VHT40)	0.14
<input checked="" type="checkbox"/> 94.0% - IEEE 802.11ac (VHT80)	0.27

1.1.5 EUT Operational Condition

Supply Voltage	<input checked="" type="checkbox"/> AC mains	<input type="checkbox"/> DC	
Type of DC Source	<input checked="" type="checkbox"/> External AC adapter	<input type="checkbox"/> From Host System	<input type="checkbox"/> Battery
Test Voltage	<input checked="" type="checkbox"/> Vnom (110 V)	<input checked="" type="checkbox"/> Vmax (126.5 V)	<input checked="" type="checkbox"/> Vmin (93.5 V)
Test Climatic	<input checked="" type="checkbox"/> Tnom (20°C)	<input checked="" type="checkbox"/> Tmax (50°C)	<input checked="" type="checkbox"/> Tmin (-20°C)



1.2 Testing Applied Standards

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

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

1.3 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 : 886-3-327-6973
Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Ryan	22°C / 53%	02/06/2016
RF Conducted	TH01-HY	Gary	23.5°C / 65%	26/07/2016
Radiated	03CH03-HY	Thor	24.3°C / 55%	26/07/2016

Test site registered number [553509] with FCC.

1.4 Measurement Uncertainty

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

Measurement Uncertainty		
Test Item		Uncertainty
AC power-line conducted emissions		±2.3 dB
Emission bandwidth, 6dB bandwidth		±0.6 %
RF output power, conducted		±0.1 dB
Power density, conducted		±0.6 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		±0.6 %



2 Test Configuration of EUT

2.1 The Worst Case Modulation Configuration

Worst Modulation Used for Conformance Testing			
Modulation Mode	Transmit Chains (N _{TX})	Data Rate / MCS	Worst Data Rate / MCS
11a	2	6-54Mbps	6 Mbps
HT20	2	MCS 0-15	MCS 0
HT40	2	MCS 0-15	MCS 0
VHT20	2	MCS 0-8	MCS 0
VHT40	2	MCS 0-9	MCS 0
VHT80	2	MCS 0-9	MCS 0

2.2 Test Channel Mode

Test Software Version	QRCT V3.0.174.0
-----------------------	-----------------

Band	Mode	BWch (MHz)	Ch. (MHz)	Power Setting
5.2G	11a	20	5180	18.5
5.2G	11a	20	5200	23.5
5.2G	11a	20	5240	23.5
5.2G	HT20	20	5180	16.5
5.2G	HT20	20	5200	23
5.2G	HT20	20	5240	23
5.2G	HT40	40	5190	12.5
5.2G	HT40	40	5230	22.5
5.2G	VHT20	20	5180	16.5
5.2G	VHT20	20	5200	23
5.2G	VHT20	20	5240	23
5.2G	VHT40	40	5190	12.5
5.2G	VHT40	40	5230	22.5
5.2G	VHT80	80	5210	12.5



Band	Mode	BWch (MHz)	Ch. (MHz)	Power Setting
5.8G	11a	20	5745	23
5.8G	11a	20	5785	23.5
5.8G	11a	20	5825	20
5.8G	HT20	20	5745	23.5
5.8G	HT20	20	5785	23.5
5.8G	HT20	20	5825	22
5.8G	HT40	40	5755	24.5
5.8G	HT40	40	5795	24.5
5.8G	VHT20	20	5745	23.5
5.8G	VHT20	20	5785	23.5
5.8G	VHT20	20	5825	22
5.8G	VHT40	40	5755	24.5
5.8G	VHT40	40	5795	24.5
5.8G	VHT80	80	5775	20

Abbreviation Explanation

Band	Mode	BWch (MHz)	Nss-Min	Nant	Ch. (MHz)	Range	Test Cond.	Abbreviation
5.2G	VHT40	40	1,(M0-9)	2	5190	L	TN,VN	5.2G;VHT40;40;1,(M0-9);2;5190;L;TN,VN
5.2G	VHT80	80	1,(M0-9)	2	5210	S	TN,VN	5.2G;VHT80;80;1,(M0-9);2;5210;S;TN,VN

Note:

- ♦ Test range channel consist of L (Low Ch.), M (Middle Ch.), H (High Ch.), S (Single Ch. or Intra- band Ch.) and C (Inter-band Ch.).

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

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth, Maximum Conducted Output Power, Peak Power Spectral Density, Frequency Stability
Test Condition	Conducted measurement at transmit chains

The Worst Case Mode for Following Conformance Tests	
Tests Item	Transmitter Bandedge Emissions , Transmitter Unwanted 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 three orthogonal planes. <input type="checkbox"/> EUT will be a hand-held or body-worn battery-powered devices and operating multiple positions.
Operating Mode < 1GHz	<input checked="" type="checkbox"/> 1. EUT with AC Adapter 1 <input checked="" type="checkbox"/> 2. EUT with AC Adapter 2 <input checked="" type="checkbox"/> 3. EUT with AC Adapter 3

For operating mode 1 is the worst case and it was record in this test report.

	X Plane	Y Plane	Z Plane
Orthogonal Planes of EUT			
Worst Planes of EUT		V	
Worst Planes of ANT			V

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



2.4 Accessories and Support Equipment

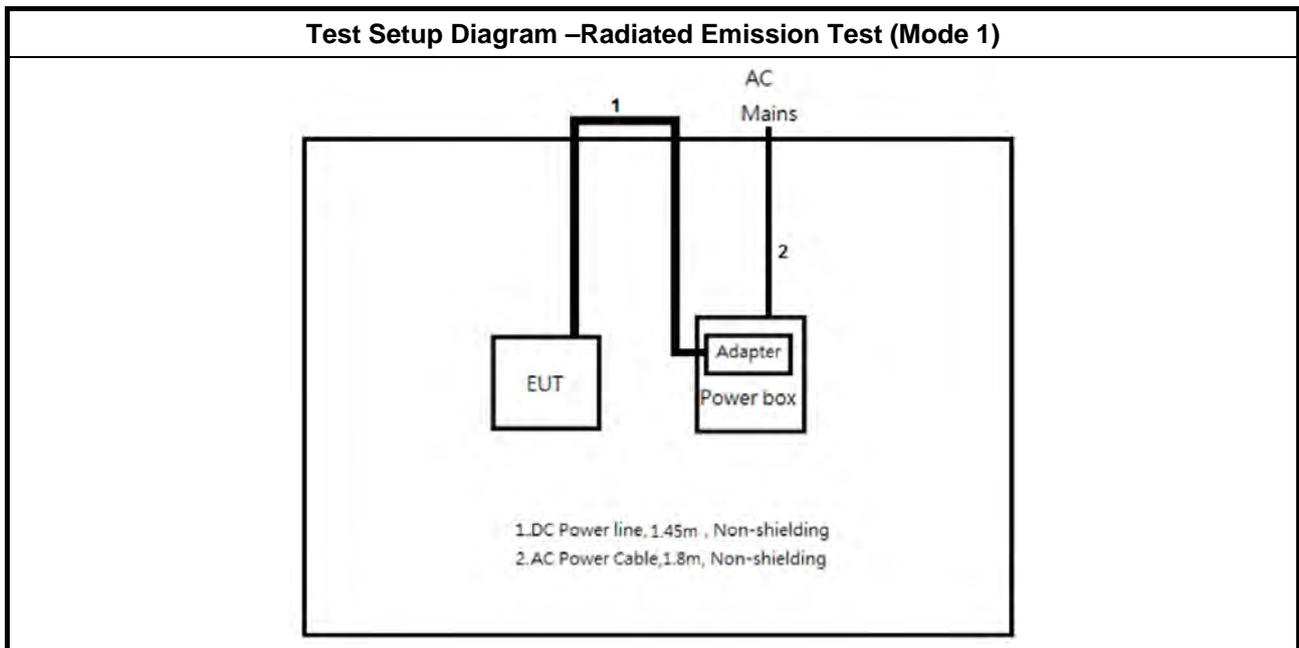
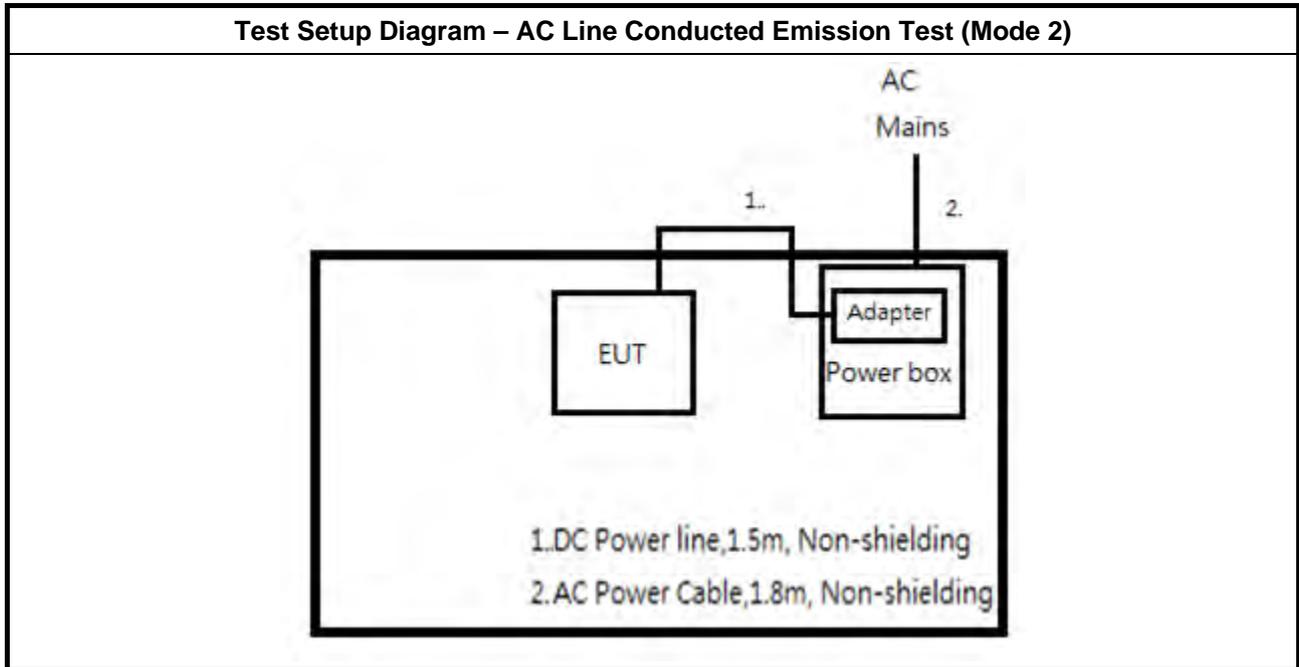
Accessories				
AC Adapter 1	Brand Name	DVE	Model Name	DSA-18PFM-12 FUS
	Part Number	4720-01600018-50Z		
	Power Rating	I/P: 100 - 240Vac, 0.6A, O/P: 12Vdc, 1.5A		
	Power Cord	1.45 meter, non-shielded cable, w/o ferrite core		
AC Adapter 2	Brand Name	APD	Model Name	WB-18D12R
	Part Number	4750-02600000-50U		
	Power Rating	I/P: 100 - 240Vac, 0.5A, O/P: 12Vdc, 1.5A		
	Power Cord	1.5 meter, non-shielded cable, w/o ferrite core		
AC Adapter 3	Brand Name	DVE	Model Name	DSA-18CB-12 FCA
	Part Number	-		
	Power Rating	I/P: 100 - 240Vac, 0.6A, O/P: 12Vdc, 1.5A		
	Power Cord	1.45 meter, non-shielded cable, w/o ferrite core		
RJ45 Cable	Power Cord	1 meter, non-shielded cable		

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

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

Support Equipment - AC Conduction and Radiated Emission			
No.	Equipment	Brand Name	Model Name
1	-	-	-
2	-	-	-

2.5 Test Setup Diagram





3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix I.

3.2 Emission Bandwidth

3.2.1 Emission Bandwidth Limit

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

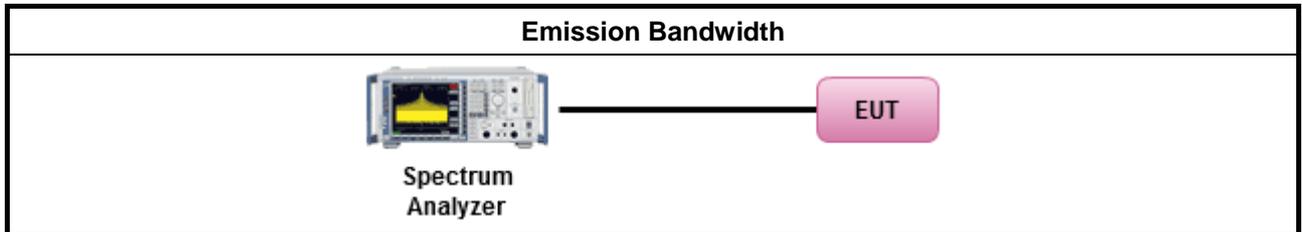
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ 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 4.6 for bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix A.



3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit					
UNII Devices					
<ul style="list-style-type: none"> ▪ For the 5.15-5.25 GHz band: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"></td> <td> <ul style="list-style-type: none"> ▪ Outdoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. e.i.r.p. at any elevation angle above 30 degrees $\leq 125mW$ [21dBm] ▪ Indoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ ▪ Point-to-point AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 23$ dBi, then $P_{Out} = 30 - (G_{TX} - 23)$. ▪ Mobile or Portable Client: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$. </td> </tr> </table> ▪ 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 $P_{Out} = 24 - (G_{TX} - 6)$. ▪ 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 $P_{Out} = 24 - (G_{TX} - 6)$. ▪ For the 5.725-5.85 GHz band: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"></td> <td> <ul style="list-style-type: none"> ▪ Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. ▪ Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. </td> </tr> </table> 			<ul style="list-style-type: none"> ▪ Outdoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. e.i.r.p. at any elevation angle above 30 degrees $\leq 125mW$ [21dBm] ▪ Indoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ ▪ Point-to-point AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 23$ dBi, then $P_{Out} = 30 - (G_{TX} - 23)$. ▪ Mobile or Portable Client: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$. 		<ul style="list-style-type: none"> ▪ Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. ▪ Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
	<ul style="list-style-type: none"> ▪ Outdoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. e.i.r.p. at any elevation angle above 30 degrees $\leq 125mW$ [21dBm] ▪ Indoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ ▪ Point-to-point AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 23$ dBi, then $P_{Out} = 30 - (G_{TX} - 23)$. ▪ Mobile or Portable Client: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$. 				
	<ul style="list-style-type: none"> ▪ Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. ▪ Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. 				
P_{Out} = maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.					

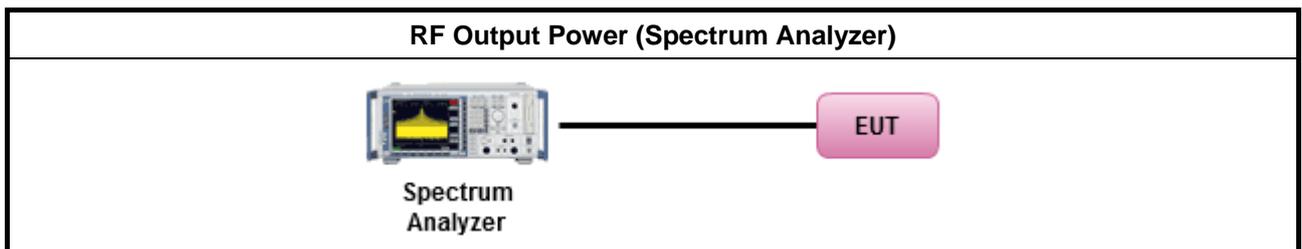
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> 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-2 (spectral trace averaging).
<input type="checkbox"/>	Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
duty cycle < 98% and average over on/off periods with duty factor	
<input type="checkbox"/>	Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
<input checked="" 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).
<ul style="list-style-type: none"> For conducted measurement. 	
<ul style="list-style-type: none"> If 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. 	
<ul style="list-style-type: none"> 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 Test Result of Maximum Conducted Output Power

Refer as Appendix B.

3.4 Peak Power Spectral Density

3.4.1 Peak Power Spectral Density Limit

Peak Power Spectral Density Limit													
UNII Devices													
<ul style="list-style-type: none"> ▪ For the 5.15-5.25 GHz band: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20px;">▪</td> <td>Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$.</td> </tr> <tr> <td>▪</td> <td>Indoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$.</td> </tr> <tr> <td>▪</td> <td>Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 23$ dBi, then $P_{Out} = 17 - (G_{TX} - 23)$.</td> </tr> <tr> <td>▪</td> <td>Mobile or Portable Client: the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.</td> </tr> </table> ▪ For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$. ▪ For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$. ▪ For the 5.725-5.85 GHz band: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20px;">▪</td> <td>Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If $G_{TX} > 6$ dBi, then $PPSD = 30 - (G_{TX} - 6)$.</td> </tr> <tr> <td>▪</td> <td>Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.</td> </tr> </table> 		▪	Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$.	▪	Indoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$.	▪	Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 23$ dBi, then $P_{Out} = 17 - (G_{TX} - 23)$.	▪	Mobile or Portable Client: the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.	▪	Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If $G_{TX} > 6$ dBi, then $PPSD = 30 - (G_{TX} - 6)$.	▪	Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
▪	Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$.												
▪	Indoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$.												
▪	Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 23$ dBi, then $P_{Out} = 17 - (G_{TX} - 23)$.												
▪	Mobile or Portable Client: the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.												
▪	Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If $G_{TX} > 6$ dBi, then $PPSD = 30 - (G_{TX} - 6)$.												
▪	Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.												
<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 G_{TX} = the maximum transmitting antenna directional gain in dBi.</p>													

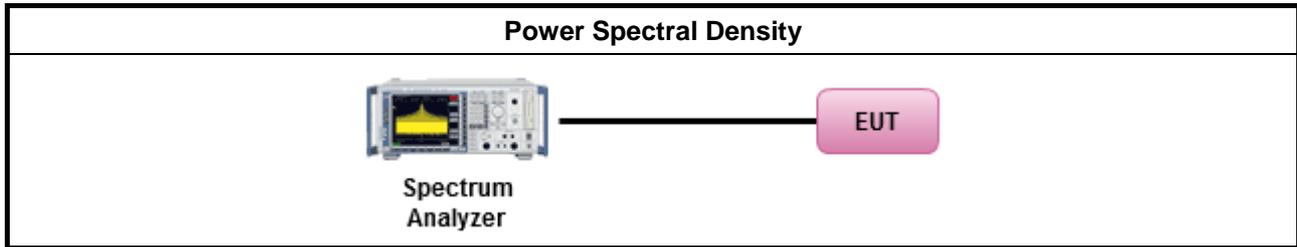
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ 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, F5) 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-2 (spectral trace averaging).
	<input type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
duty cycle < 98% and average over on/off periods with duty factor	
	<input type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
	<input checked="" type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
<ul style="list-style-type: none"> ▪ For conducted measurement. 	
<ul style="list-style-type: none"> ▪ If 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 spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the N _{TX} output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.
	<input type="checkbox"/> Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,
	<input type="checkbox"/> Option 3: 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.
<ul style="list-style-type: none"> ▪ 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]) $EIRP_{total} = PPSD_{total} + DG$ 	

3.4.4 Test Setup

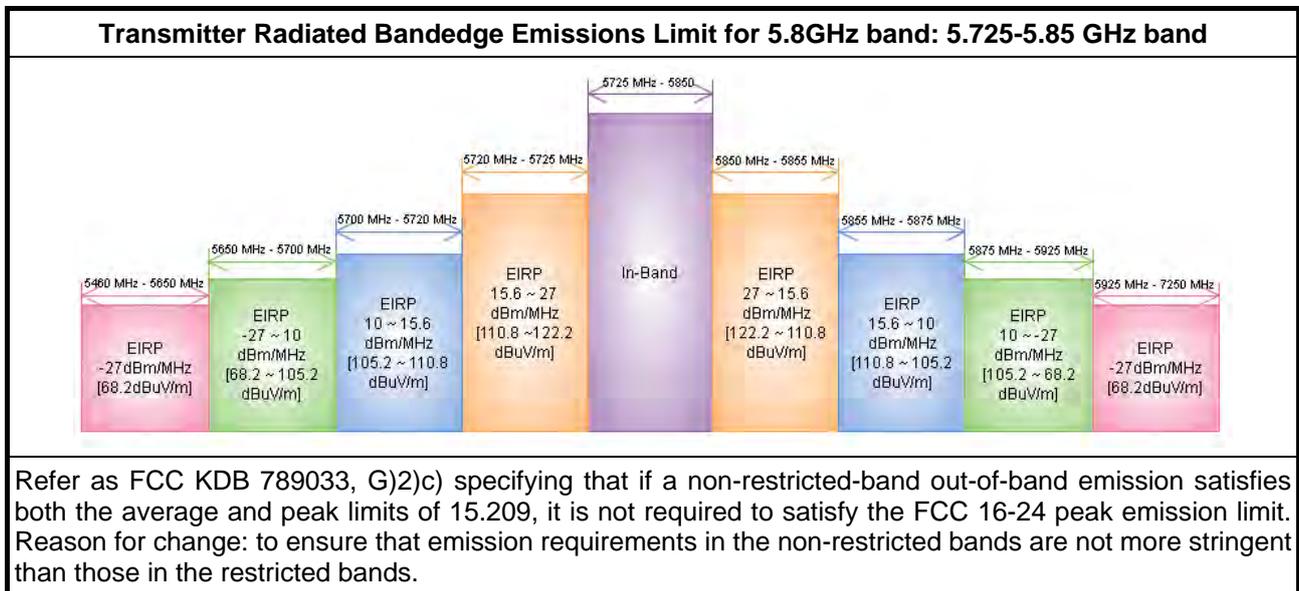
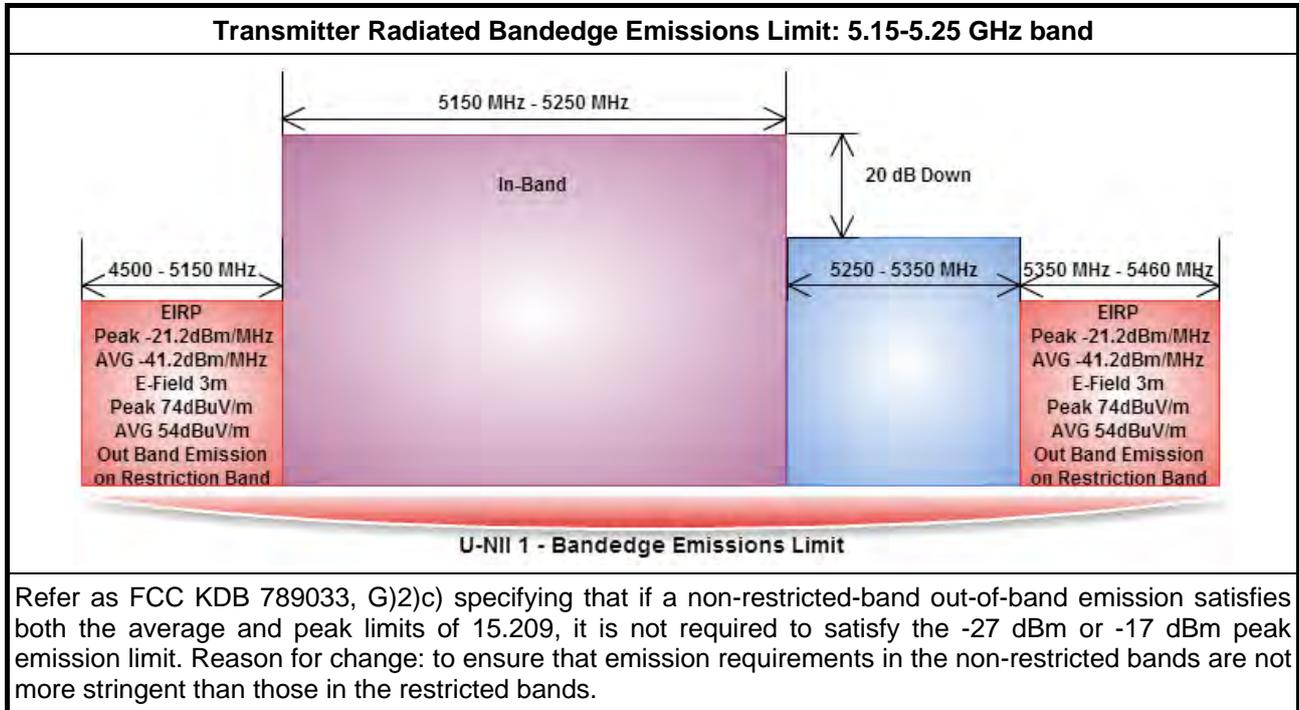


3.4.5 Test Result of Peak Power Spectral Density

Refer as Appendix C.

3.5 Transmitter Bandedge Emissions

3.5.1 Transmitter Radiated Bandedge Emissions Limit



3.5.2 Measuring Instruments

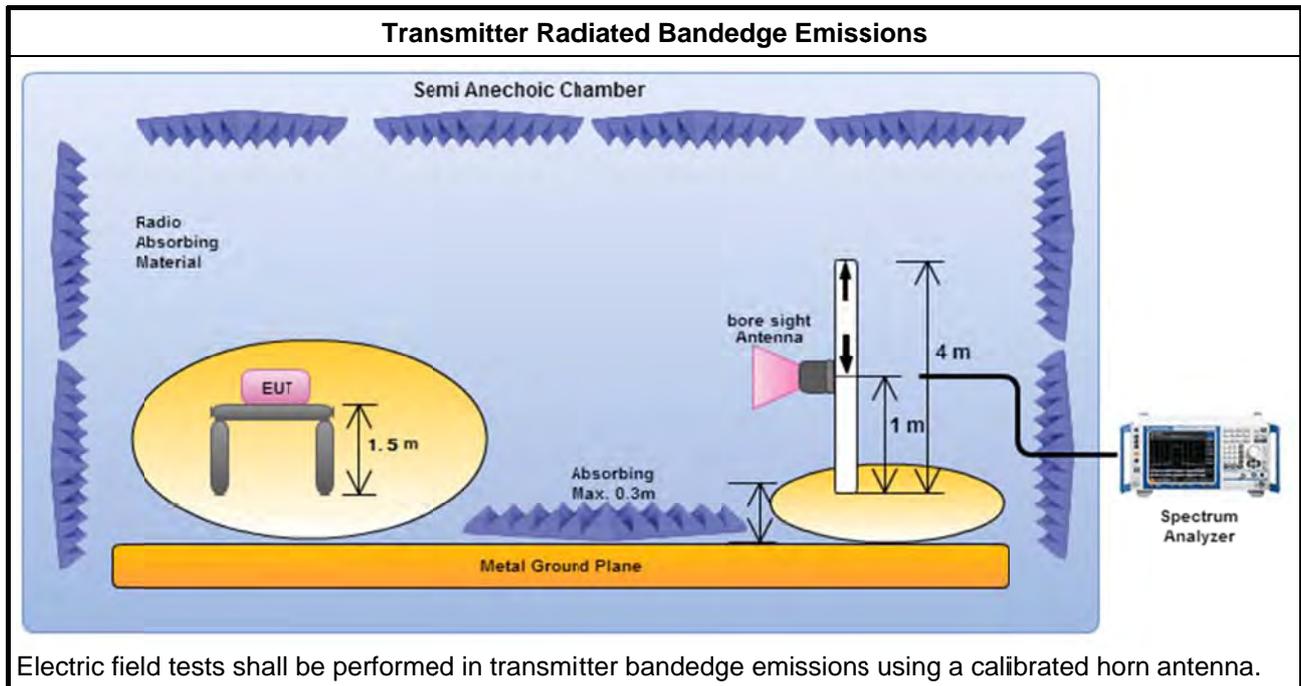
Refer a test equipment and calibration data table in this test report.



3.5.3 Test Procedures

Test Method	
<input checked="" type="checkbox"/>	The average emission levels shall be measured in [duty cycle \geq 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 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 the transmitter bandedge emissions shall be measured using following options below:
<input type="checkbox"/>	Refer as FCC KDB 789033, clause G)3)d) for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).
<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



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

3.5.5 Transmitter Radiated Bandedge Emissions

Refer as Appendix D.

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

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



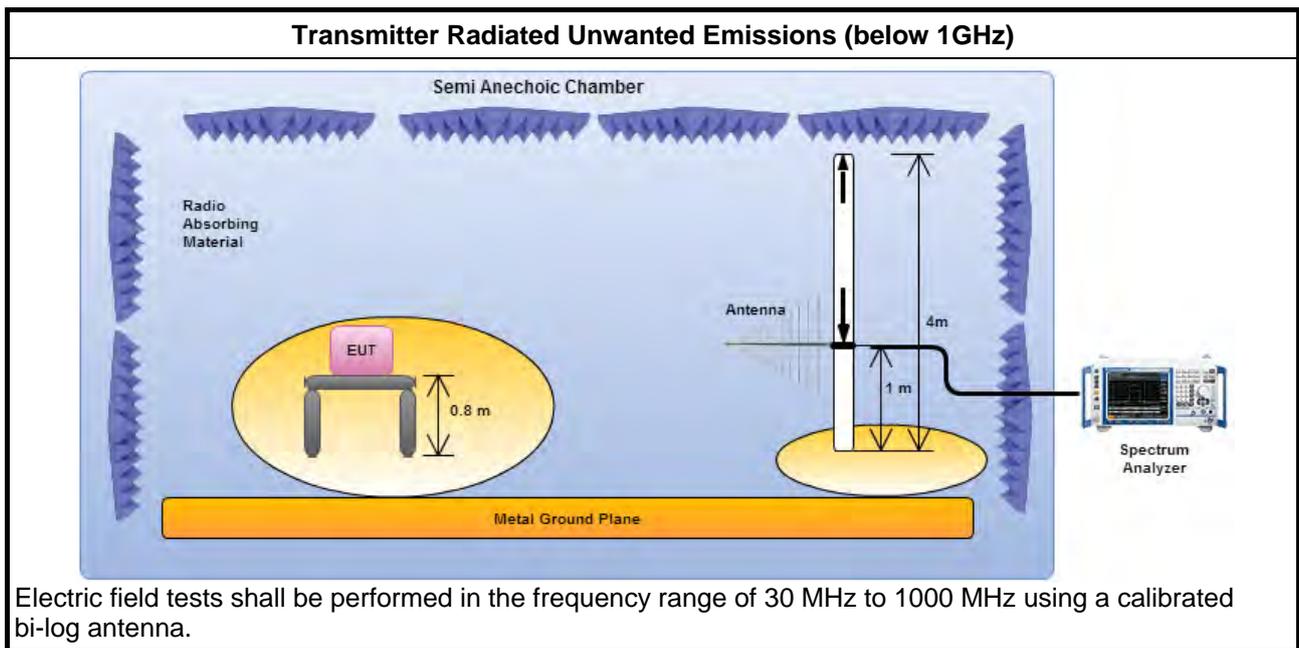
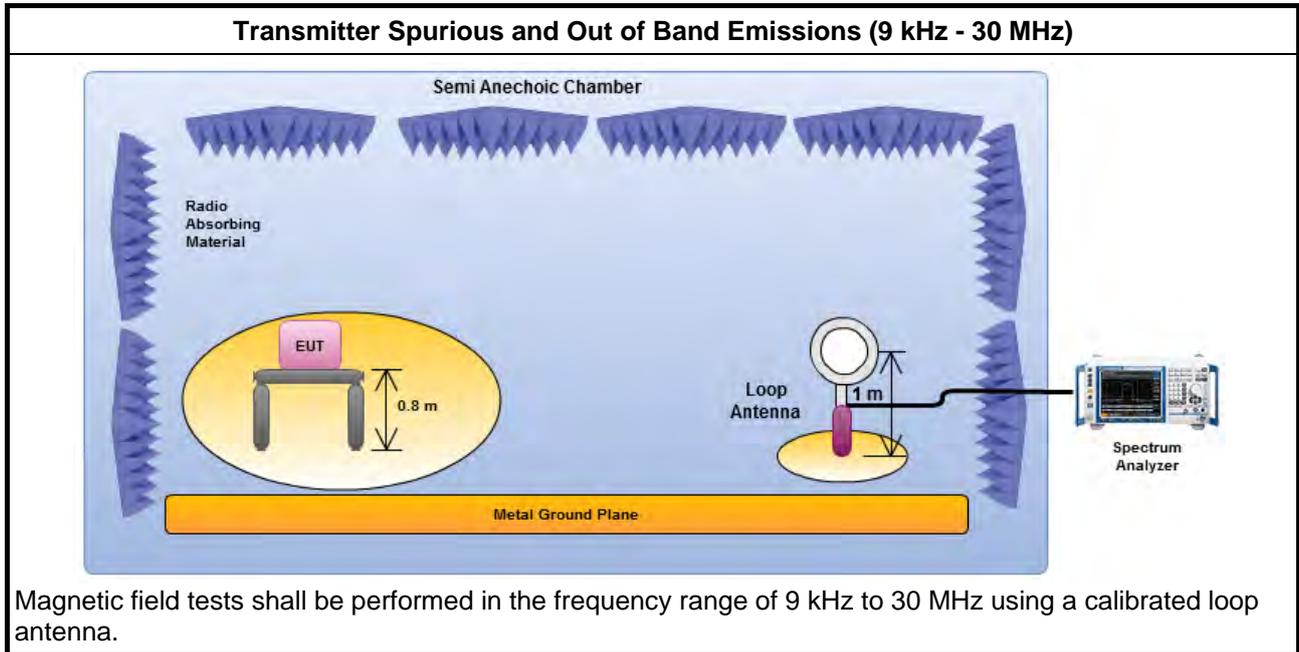
3.6.2 Measuring Instruments

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

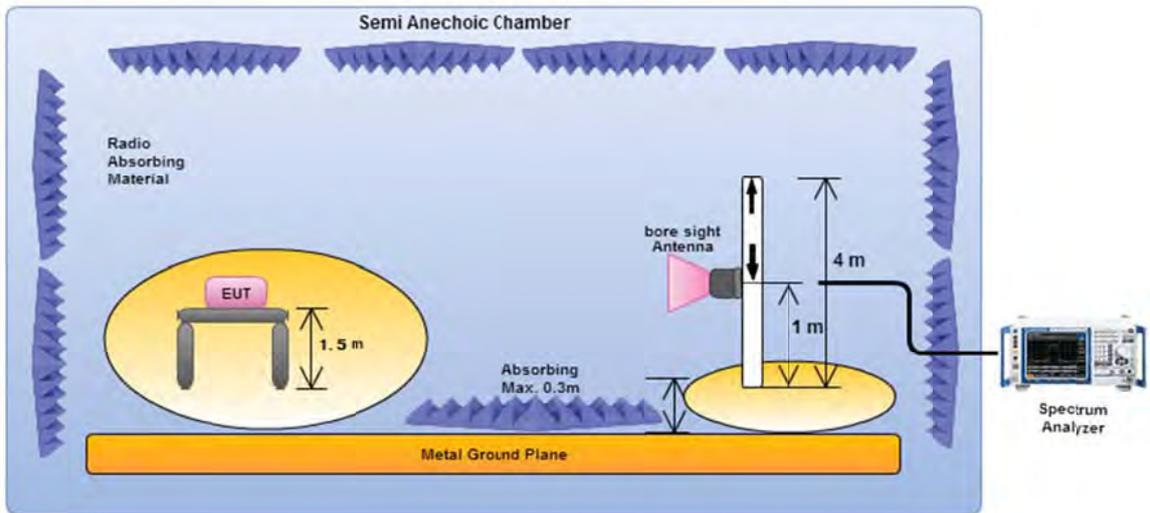
3.6.3 Test Procedures

Test Method	
<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 ≥ 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 ≥ 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



Transmitter Radiated Unwanted Emissions (above 1GHz)



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

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

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported. Any spurious which has more than 20 dB of margin compared to the applicable limit is not necessarily reported.

3.6.6 Test Result of Transmitter Radiated Unwanted Emissions

Refer as Appendix E.

3.7 Frequency Stability

3.7.1 Frequency Stability Limit

Frequency Stability Limit	
UNII Devices	
<ul style="list-style-type: none"> In-band emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual. 	
IEEE Std. 802.11	
<ul style="list-style-type: none"> The transmitter center frequency tolerance shall be ± 20 ppm maximum for the 5 GHz. 	

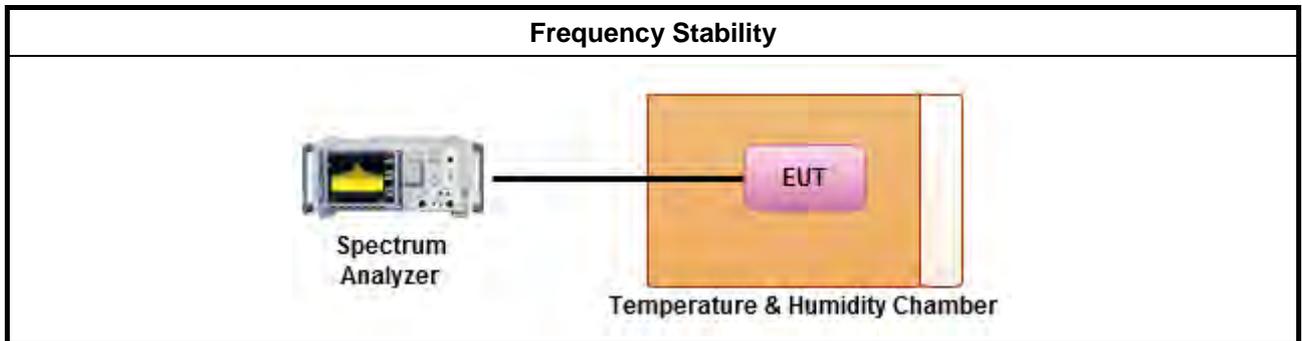
3.7.2 Measuring Instruments

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

3.7.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> Refer as ANSI C63.10, clause 6.8 for frequency stability tests 	
	<ul style="list-style-type: none"> Frequency stability with respect to ambient temperature
	<ul style="list-style-type: none"> Frequency stability when varying supply voltage

3.7.4 Test Setup



3.7.5 Test Result of Frequency Stability

Refer as Appendix F.



4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Last Cal.	Calibration Due Date
EMC Receiver	KEYSIGHT	N9038A	MY54130031	20Hz ~ 8.4GHz	14/04/2016	13/04/2017
LISN	SCHWARZBECK MESS-ELEKTRONIK	NSLK 8127	8127-477	9kHz ~ 30MHz	26/01/2016	25/01/2017
LISN (Support Unit)	R&S	ENV216	101295	9kHz ~ 30MHz	04/11/2015	03/11/2016
RF Cable-CON	HUBER+SUHNER	RG213/U	07611832020001	9kHz ~ 30MHz	30/10/2015	29/10/2016
EMI Filter	LINDGREN	LRE-2030	2651	< 450 Hz	NCR	NCR

Instrument for Conducted Test

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Last Cal.	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101013	9KHz~40GHz	16/02/2016	15/02/ 2017
Power Sensor	Anritsu	MA2411B	1027452	300MHz ~ 40GHz	22/02/2016	21/02/2017
Power Meter	Anritsu	ML2495A	1124009	300MHz ~ 40GHz	22/02/2016	21/02/2017
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	28/07/2015	27/07/2016
Temp. and Humidity Chamber	Giant Force	GTH-225-20-S	MAB0103-001	-20 ~ 100°C	12/06/2015	11/06/2016

Instrument for Radiated Test

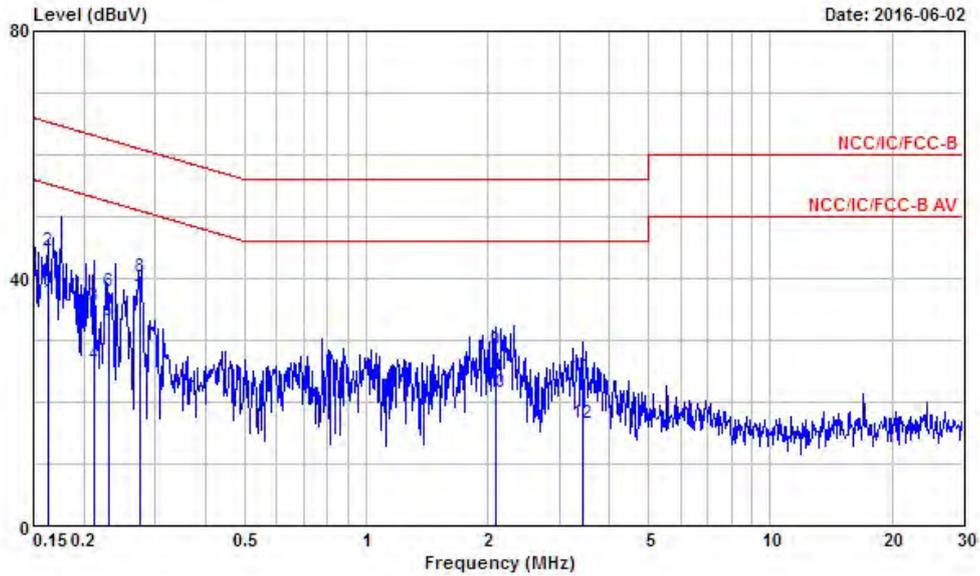
Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Last Cal.	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	30MHz ~ 1GHz 3m	25/04/2016	24/04/2017
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	1GHz ~ 18GHz 3m	30/06/2016	29/06/2017
Amplifier	EMC	EMC9135	980232	9kHz ~ 1.0GHz	29/01/2016	28/01/2017
Amplifier	Agilent	8449B	3008A02096	1GHz ~ 26.5GHz	11/04/2016	10/04/2017
Spectrum	KEYSIGHT	N9010A	MY54200885	10Hz ~ 44GHz	04/07/2016	03/07/2017
Bilog Antenna & 5dB Attenuator	TESEQ & MTJ	CBL 6111D & MTJ6102	35418	30MHz ~ 1GHz	31/03/2016	30/03/2017
Horn Antenna	SCHWARZBECK	BBHA 9120D	BBHA 9120D 1534	1GHz ~ 18GHz	22/04/2016	21/04/2017
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170614	18GHz ~ 40GHz	04/01/2016	03/01/2017
Amplifier	MITEQ	JS44-18004000-33-8P	1840917	18GHz ~ 40GHz	02/06/2015	01/06/2017
Loop Antenna	ROHDE&SCHWARZ	HFH2-Z2	100330	9 kHz~30 MHz	10/11/2014	09/11/2016



AC Power-line Conducted Emissions Result																																																																																																																																										
Operating Mode	2	Power Phase	Neutral																																																																																																																																							
Operating Function	EUT with AC Adapter 2																																																																																																																																									
<div style="display: flex; justify-content: space-between;"> Level (dBuV) Date: 2016-06-02 </div>																																																																																																																																										
<table border="1" style="width:100%; border-collapse: collapse; font-size: small;"> <thead> <tr> <th></th> <th>Freq</th> <th>Level</th> <th>Over</th> <th>Limit</th> <th>Read</th> <th>LISN</th> <th>Cable</th> <th></th> </tr> <tr> <th></th> <th>MHz</th> <th>dBuV</th> <th>Limit</th> <th>Line</th> <th>Level</th> <th>Factor</th> <th>Loss</th> <th>Remark</th> </tr> <tr> <th></th> <th></th> <th></th> <th>dB</th> <th>dBuV</th> <th>dBuV</th> <th>dB</th> <th>dB</th> <th></th> </tr> </thead> <tbody> <tr><td>1</td><td>0.1618020</td><td>36.21</td><td>-19.16</td><td>55.37</td><td>35.87</td><td>0.10</td><td>0.24</td><td>Average</td></tr> <tr><td>2</td><td>0.1618020</td><td>45.09</td><td>-20.28</td><td>65.37</td><td>44.75</td><td>0.10</td><td>0.24</td><td>QP</td></tr> <tr><td>3</td><td>0.1842550</td><td>39.48</td><td>-24.81</td><td>64.29</td><td>39.09</td><td>0.11</td><td>0.28</td><td>QP</td></tr> <tr><td>4</td><td>0.1842550</td><td>32.92</td><td>-21.37</td><td>54.29</td><td>32.53</td><td>0.11</td><td>0.28</td><td>Average</td></tr> <tr><td>5</td><td>0.2757650</td><td>39.20</td><td>-21.74</td><td>60.94</td><td>38.88</td><td>0.11</td><td>0.21</td><td>QP</td></tr> <tr><td>6</td><td>0.2757650</td><td>34.60</td><td>-16.34</td><td>50.94</td><td>34.28</td><td>0.11</td><td>0.21</td><td>Average</td></tr> <tr><td>7</td><td>1.120</td><td>16.97</td><td>-29.03</td><td>46.00</td><td>16.71</td><td>0.13</td><td>0.13</td><td>Average</td></tr> <tr><td>8</td><td>1.120</td><td>24.20</td><td>-31.80</td><td>56.00</td><td>23.94</td><td>0.13</td><td>0.13</td><td>QP</td></tr> <tr><td>9</td><td>1.370</td><td>25.33</td><td>-30.67</td><td>56.00</td><td>25.00</td><td>0.14</td><td>0.19</td><td>QP</td></tr> <tr><td>10</td><td>1.370</td><td>18.51</td><td>-27.49</td><td>46.00</td><td>18.18</td><td>0.14</td><td>0.19</td><td>Average</td></tr> <tr><td>11</td><td>2.160</td><td>26.12</td><td>-29.88</td><td>56.00</td><td>25.69</td><td>0.15</td><td>0.28</td><td>QP</td></tr> <tr><td>12</td><td>2.160</td><td>20.19</td><td>-25.81</td><td>46.00</td><td>19.76</td><td>0.15</td><td>0.28</td><td>Average</td></tr> </tbody> </table>					Freq	Level	Over	Limit	Read	LISN	Cable			MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark				dB	dBuV	dBuV	dB	dB		1	0.1618020	36.21	-19.16	55.37	35.87	0.10	0.24	Average	2	0.1618020	45.09	-20.28	65.37	44.75	0.10	0.24	QP	3	0.1842550	39.48	-24.81	64.29	39.09	0.11	0.28	QP	4	0.1842550	32.92	-21.37	54.29	32.53	0.11	0.28	Average	5	0.2757650	39.20	-21.74	60.94	38.88	0.11	0.21	QP	6	0.2757650	34.60	-16.34	50.94	34.28	0.11	0.21	Average	7	1.120	16.97	-29.03	46.00	16.71	0.13	0.13	Average	8	1.120	24.20	-31.80	56.00	23.94	0.13	0.13	QP	9	1.370	25.33	-30.67	56.00	25.00	0.14	0.19	QP	10	1.370	18.51	-27.49	46.00	18.18	0.14	0.19	Average	11	2.160	26.12	-29.88	56.00	25.69	0.15	0.28	QP	12	2.160	20.19	-25.81	46.00	19.76	0.15	0.28	Average
	Freq	Level	Over	Limit	Read	LISN	Cable																																																																																																																																			
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark																																																																																																																																		
			dB	dBuV	dBuV	dB	dB																																																																																																																																			
1	0.1618020	36.21	-19.16	55.37	35.87	0.10	0.24	Average																																																																																																																																		
2	0.1618020	45.09	-20.28	65.37	44.75	0.10	0.24	QP																																																																																																																																		
3	0.1842550	39.48	-24.81	64.29	39.09	0.11	0.28	QP																																																																																																																																		
4	0.1842550	32.92	-21.37	54.29	32.53	0.11	0.28	Average																																																																																																																																		
5	0.2757650	39.20	-21.74	60.94	38.88	0.11	0.21	QP																																																																																																																																		
6	0.2757650	34.60	-16.34	50.94	34.28	0.11	0.21	Average																																																																																																																																		
7	1.120	16.97	-29.03	46.00	16.71	0.13	0.13	Average																																																																																																																																		
8	1.120	24.20	-31.80	56.00	23.94	0.13	0.13	QP																																																																																																																																		
9	1.370	25.33	-30.67	56.00	25.00	0.14	0.19	QP																																																																																																																																		
10	1.370	18.51	-27.49	46.00	18.18	0.14	0.19	Average																																																																																																																																		
11	2.160	26.12	-29.88	56.00	25.69	0.15	0.28	QP																																																																																																																																		
12	2.160	20.19	-25.81	46.00	19.76	0.15	0.28	Average																																																																																																																																		
<p>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.)</p>																																																																																																																																										



AC Power-line Conducted Emissions Result			
Operating Mode	2	Power Phase	Line
Operating Function	EUT with AC Adapter 2		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.1626420	36.28	-19.05	55.33	35.93	0.11	0.24	Average
2	0.1626420	44.35	-20.98	65.33	44.00	0.11	0.24	QP
3	0.2127940	35.48	-27.62	63.10	35.09	0.11	0.28	QP
4	0.2127940	26.00	-27.10	53.10	25.61	0.11	0.28	Average
5	0.2299720	33.07	-19.38	52.45	32.70	0.11	0.26	Average
6	0.2299720	37.90	-24.55	62.45	37.53	0.11	0.26	QP
7	0.2753390	36.72	-14.24	50.96	36.40	0.11	0.21	Average
8	0.2753390	40.18	-20.78	60.96	39.86	0.11	0.21	QP
9	2.090	28.43	-27.57	56.00	27.99	0.15	0.29	QP
10	2.090	21.45	-24.55	46.00	21.01	0.15	0.29	Average
11	3.420	24.12	-31.88	56.00	23.80	0.17	0.15	QP
12	3.420	16.45	-29.55	46.00	16.13	0.17	0.15	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.)

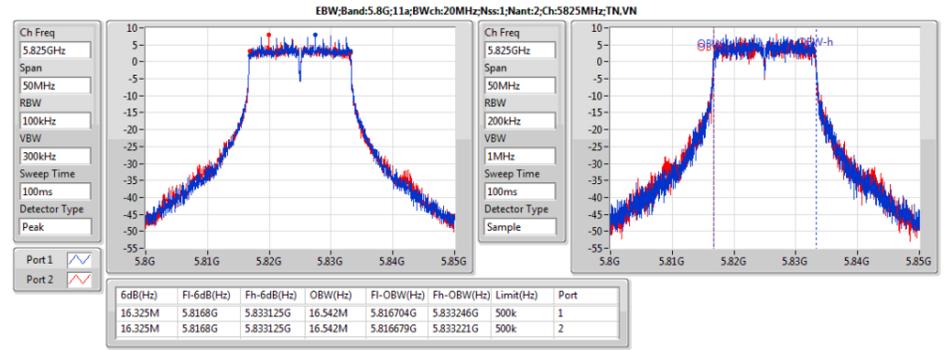
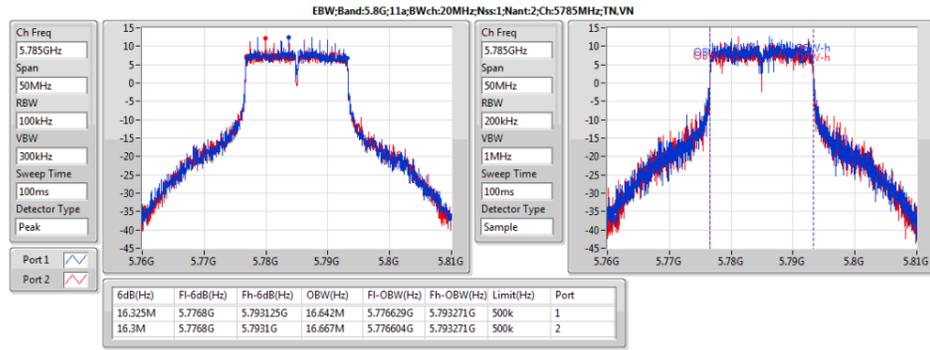
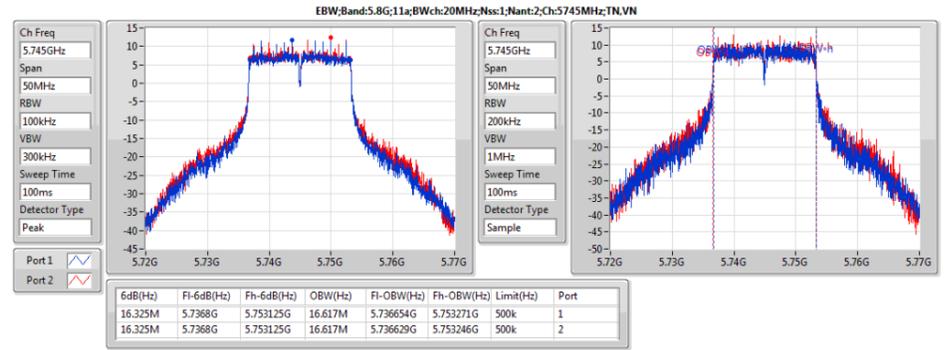
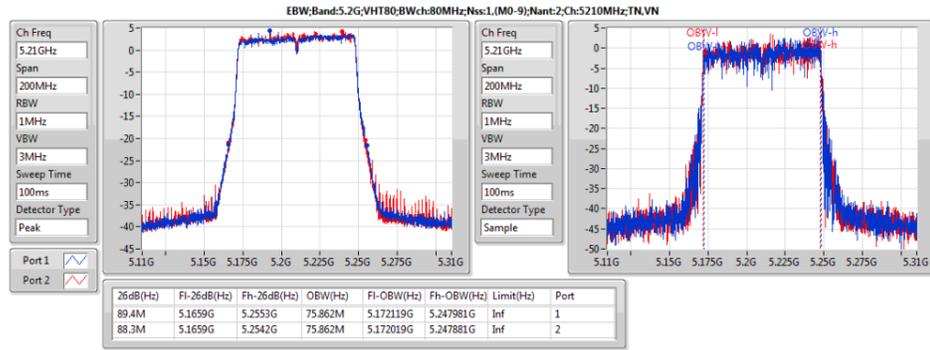
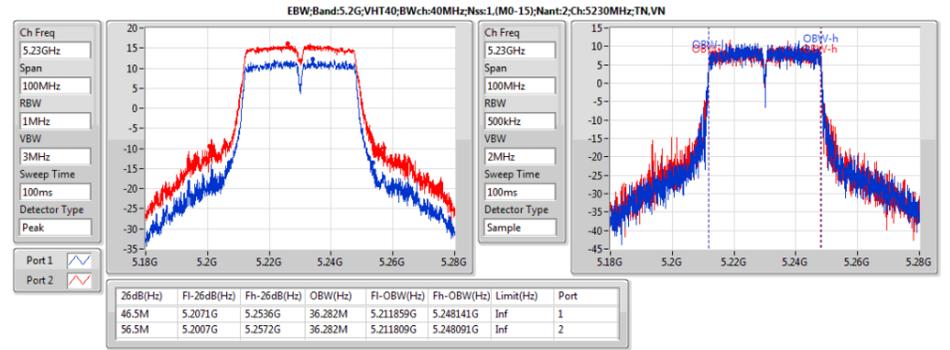
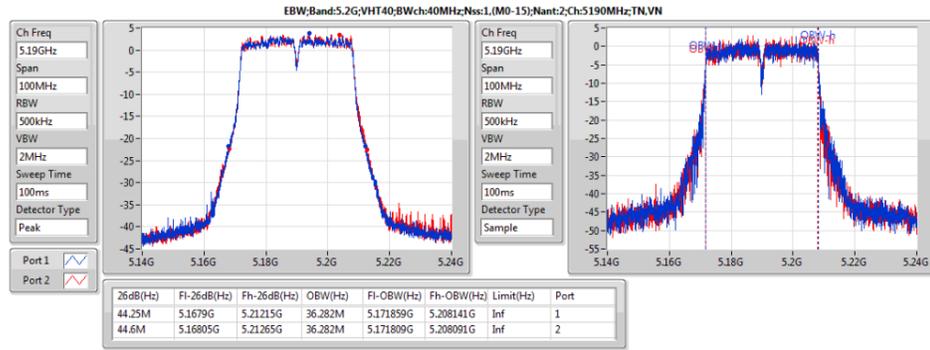
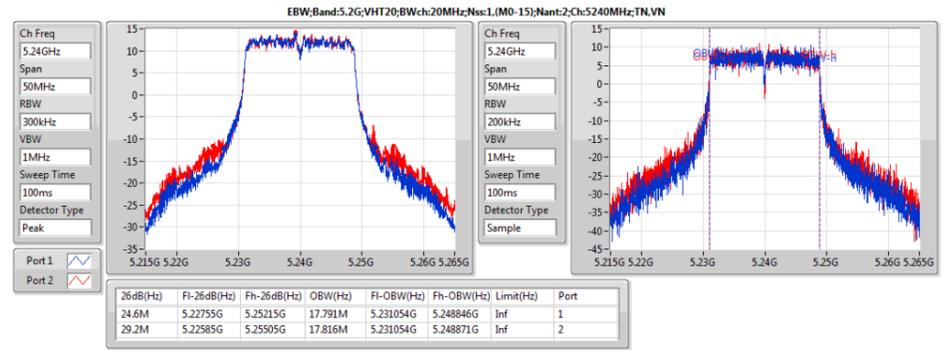
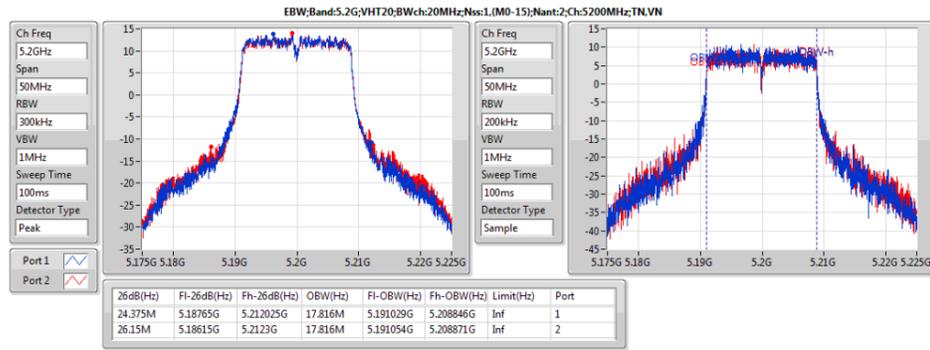
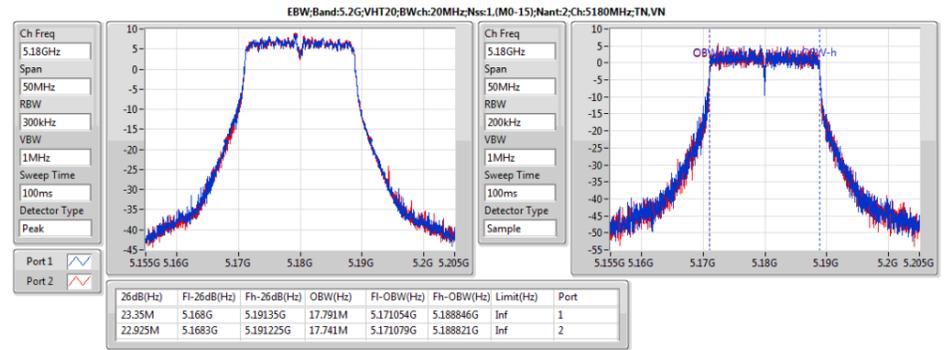
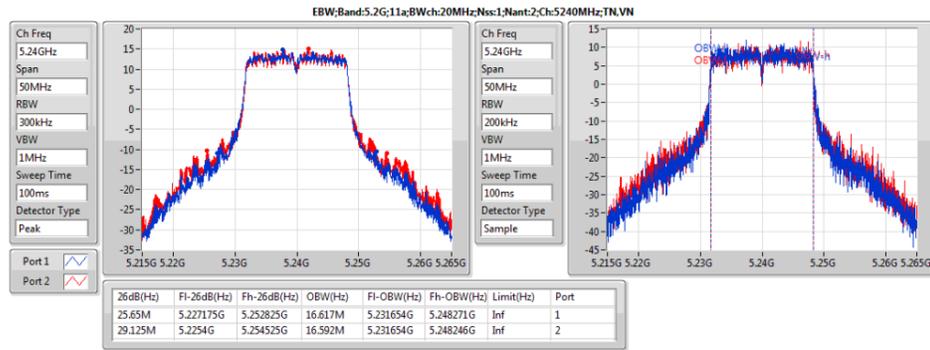
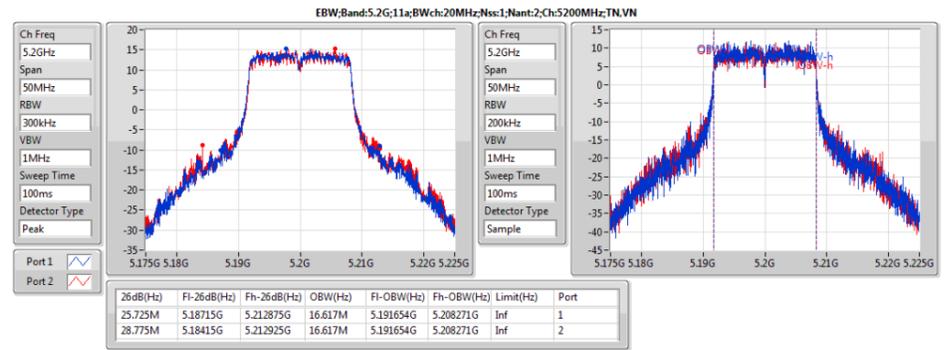
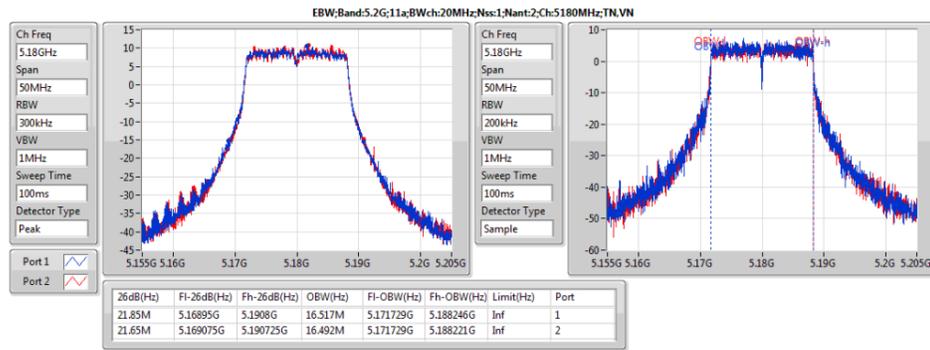


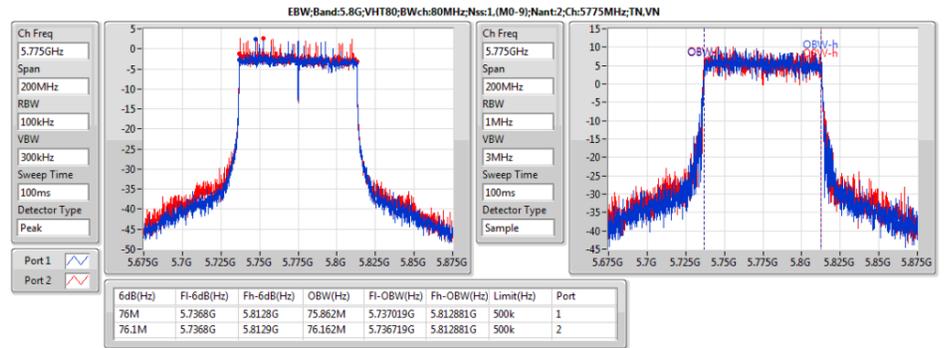
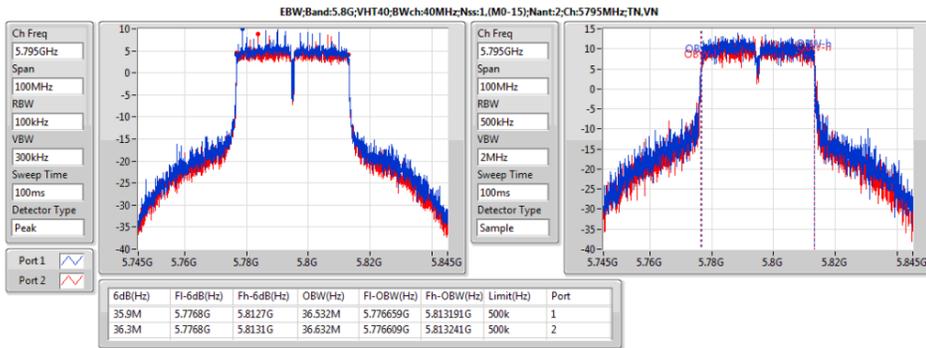
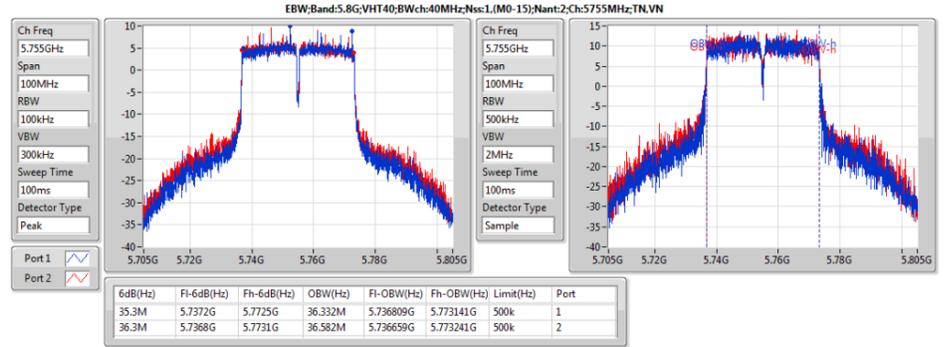
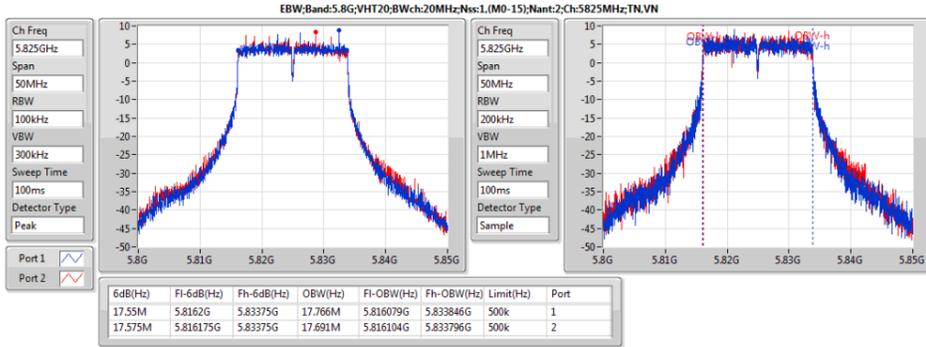
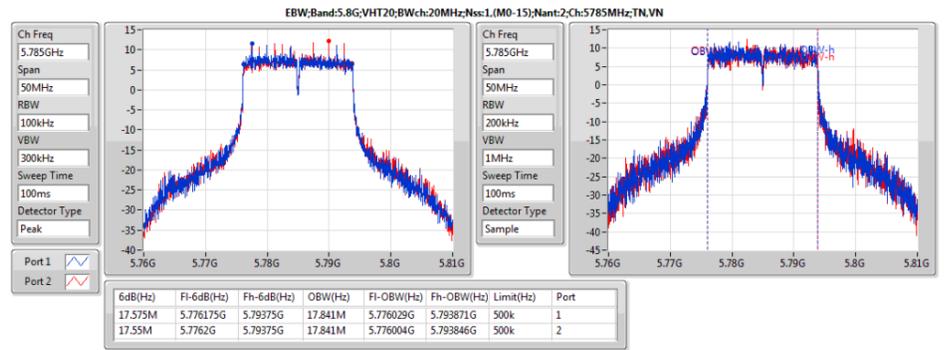
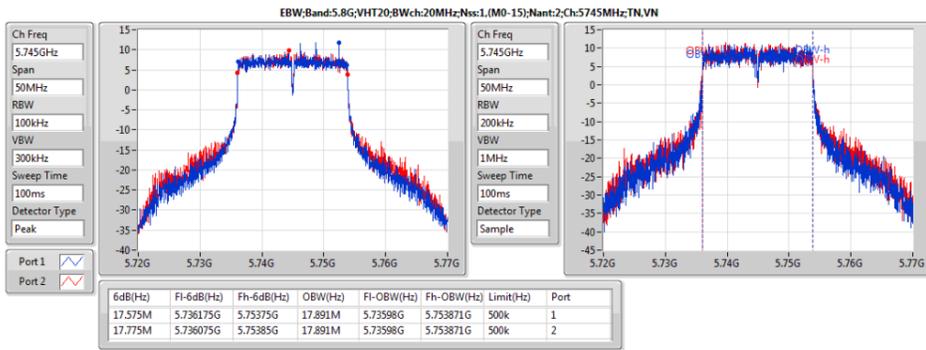
Summary

Mode	N dB (Hz)	OBW (Hz)	ITU-Code
5.2G;11a;20;1;2	29.125M	16.617M	16M6D1D
5.2G;VHT20;20;1,(M0-8);2	29.2M	17.816M	17M8D1D
5.2G;VHT40;40;1,(M0-9);2	56.5M	36.282M	36M3D1D
5.2G;VHT80;80;1,(M0-9);2	89.4M	75.862M	75M9D1D
5.8G;11a;20;1;2	16.325M	16.667M	16M7D1D
5.8G;VHT20;20;1,(M0-8);2	17.775M	17.891M	17M9D1D
5.8G;VHT40;40;1,(M0-9);2	36.3M	36.632M	36M6D1D
5.8G;VHT80;80;1,(M0-9);2	76.1M	76.162M	76M2D1D

Result

Mode	Result	Limit	P1-N dB (Hz)	P1-OBW (Hz)	P2-N dB (Hz)	P2-OBW (Hz)
5.2G:11a:20:1:2:5180:L;TN,VN	Pass	Inf	21.85M	16.517M	21.65M	16.492M
5.2G:11a:20:1:2:5200:M;TN,VN	Pass	Inf	25.725M	16.617M	28.775M	16.617M
5.2G:11a:20:1:2:5240:H;TN,VN	Pass	Inf	25.65M	16.617M	29.125M	16.592M
5.2G:VHT20:20:1,(M0-8);2:5180:L;TN,VN	Pass	Inf	23.35M	17.791M	22.925M	17.741M
5.2G:VHT20:20:1,(M0-8);2:5200:M;TN,VN	Pass	Inf	24.375M	17.816M	26.15M	17.816M
5.2G:VHT20:20:1,(M0-8);2:5240:H;TN,VN	Pass	Inf	24.6M	17.791M	29.2M	17.816M
5.2G:VHT40:40:1,(M0-9);2:5190:L;TN,VN	Pass	Inf	44.25M	36.282M	44.6M	36.282M
5.2G:VHT40:40:1,(M0-9);2:5230:H;TN,VN	Pass	Inf	46.5M	36.282M	56.5M	36.282M
5.2G:VHT80:80:1,(M0-9);2:5210:S;TN,VN	Pass	Inf	89.4M	75.862M	88.3M	75.862M
5.8G:11a:20:1:2:5745:L;TN,VN	Pass	500k	16.325M	16.617M	16.325M	16.617M
5.8G:11a:20:1:2:5785:M;TN,VN	Pass	500k	16.325M	16.642M	16.3M	16.667M
5.8G:11a:20:1:2:5825:H;TN,VN	Pass	500k	16.325M	16.542M	16.325M	16.542M
5.8G:VHT20:20:1,(M0-8);2:5745:L;TN,VN	Pass	500k	17.575M	17.891M	17.775M	17.891M
5.8G:VHT20:20:1,(M0-8);2:5785:M;TN,VN	Pass	500k	17.575M	17.841M	17.55M	17.841M
5.8G:VHT20:20:1,(M0-8);2:5825:H;TN,VN	Pass	500k	17.55M	17.766M	17.575M	17.691M
5.8G:VHT40:40:1,(M0-9);2:5755:L;TN,VN	Pass	500k	35.3M	36.332M	36.3M	36.582M
5.8G:VHT40:40:1,(M0-9);2:5795:H;TN,VN	Pass	500k	35.9M	36.532M	36.3M	36.632M
5.8G:VHT80:80:1,(M0-9);2:5775:S;TN,VN	Pass	500k	76M	75.862M	76.1M	76.162M







Summary

Mode	Sum (dBm)	Sum (W)	EIRP (dBm)	EIRP (W)
5.2G:11a:20:1;2	25.76	0.3767	31.17	1.30918
5.2G:HT20:20:1,(M0-15);2	25.58	0.36141	30.99	1.25603
5.2G:HT40:40:1,(M0-15);2	24.71	0.2958	30.12	1.02802
5.2G:VHT20:20:1,(M0-8);2	25.77	0.37757	31.18	1.3122
5.2G:VHT40:40:1,(M0-9);2	24.84	0.30479	30.25	1.05925
5.2G:VHT80:80:1,(M0-9);2	15.49	0.0354	20.90	0.12303
5.8G:11a:20:1;2	26.35	0.43152	31.76	1.49968
5.8G:HT20:20:1,(M0-15);2	26.23	0.41976	31.64	1.45881
5.8G:HT40:40:1,(M0-15);2	26.81	0.47973	32.22	1.66725
5.8G:VHT20:20:1,(M0-8);2	26.65	0.46238	32.06	1.60694
5.8G:VHT40:40:1,(M0-9);2	27.1	0.51286	32.51	1.78238
5.8G:VHT80:80:1,(M0-9);2	22.75	0.18836	28.16	0.65464

Result

Mode	Result	DG (dBi)	EIRP (dBm)	EIRP Lim. (dBm)	Sum (dBm)	Sum Lim. (dBm)	P1 (dBm)	P2 (dBm)
5.2G:11a:20:1;2:5180:L;TN,VN	Pass	5.41	27.16	36.00	21.75	30.00	18.73	18.75
5.2G:11a:20:1;2:5200:M;TN,VN	Pass	5.41	31.17	36.00	25.76	30.00	22.88	22.62
5.2G:11a:20:1;2:5240:H;TN,VN	Pass	5.41	31.08	36.00	25.67	30.00	22.69	22.62
5.2G:HT20:20:1,(M0-15);2:5180:L;TN,VN	Pass	5.41	25.24	36.00	19.83	30.00	16.76	16.88
5.2G:HT20:20:1,(M0-15);2:5200:M;TN,VN	Pass	5.41	30.83	36.00	25.42	30.00	22.49	22.32
5.2G:HT20:20:1,(M0-15);2:5240:H;TN,VN	Pass	5.41	30.99	36.00	25.58	30.00	22.54	22.60
5.2G:HT40:40:1,(M0-15);2:5190:L;TN,VN	Pass	5.41	21.24	36.00	15.83	30.00	12.85	12.79
5.2G:HT40:40:1,(M0-15);2:5230:H;TN,VN	Pass	5.41	30.12	36.00	24.71	30.00	21.74	21.66
5.2G:VHT20:20:1,(M0-8);2:5180:L;TN,VN	Pass	5.41	25.47	36.00	20.06	30.00	16.95	17.14
5.2G:VHT20:20:1,(M0-8);2:5200:M;TN,VN	Pass	5.41	30.88	36.00	25.47	30.00	22.58	22.34
5.2G:VHT20:20:1,(M0-9);2:5240:H;TN,VN	Pass	5.41	31.18	36.00	25.77	30.00	22.73	22.78
5.2G:VHT40:40:1,(M0-9);2:5190:L;TN,VN	Pass	5.41	21.39	36.00	15.98	30.00	13.03	12.91
5.2G:VHT40:40:1,(M0-9);2:5230:H;TN,VN	Pass	5.41	30.25	36.00	24.84	30.00	21.86	21.79
5.2G:VHT80:80:1,(M0-9);2:5210:S;TN,VN	Pass	5.41	20.90	36.00	15.49	30.00	12.51	12.44
5.8G:11a:20:1;2:5745:L;TN,VN	Pass	5.41	31.53	36.00	26.12	30.00	23.14	23.08
5.8G:11a:20:1;2:5785:M;TN,VN	Pass	5.41	31.76	36.00	26.35	30.00	23.43	23.25
5.8G:11a:20:1;2:5825:H;TN,VN	Pass	5.41	28.72	36.00	23.31	30.00	20.39	20.21
5.8G:HT20:20:1,(M0-15);2:5745:L;TN,VN	Pass	5.41	31.64	36.00	26.23	30.00	23.04	23.39
5.8G:HT20:20:1,(M0-15);2:5785:M;TN,VN	Pass	5.41	31.55	36.00	26.14	30.00	23.33	22.92
5.8G:HT20:20:1,(M0-15);2:5825:H;TN,VN	Pass	5.41	30.10	36.00	24.69	30.00	21.51	21.85
5.8G:HT40:40:1,(M0-15);2:5755:L;TN,VN	Pass	5.41	32.22	36.00	26.81	30.00	23.61	23.98
5.8G:HT40:40:1,(M0-15);2:5795:H;TN,VN	Pass	5.41	32.09	36.00	26.68	30.00	23.76	23.57
5.8G:VHT20:20:1,(M0-8);2:5745:L;TN,VN	Pass	5.41	32.06	36.00	26.65	30.00	23.58	23.69
5.8G:VHT20:20:1,(M0-8);2:5785:M;TN,VN	Pass	5.41	31.91	36.00	26.5	30.00	23.51	23.46
5.8G:VHT20:20:1,(M0-9);2:5825:H;TN,VN	Pass	5.41	30.34	36.00	24.93	30.00	21.79	22.04
5.8G:VHT40:40:1,(M0-9);2:5755:L;TN,VN	Pass	5.41	32.51	36.00	27.1	30.00	24.16	24.01
5.8G:VHT40:40:1,(M0-9);2:5795:H;TN,VN	Pass	5.41	32.44	36.00	27.03	30.00	24.00	24.03
5.8G:VHT80:80:1,(M0-9);2:5775:S;TN,VN	Pass	5.41	28.16	36.00	22.75	30.00	19.61	19.86

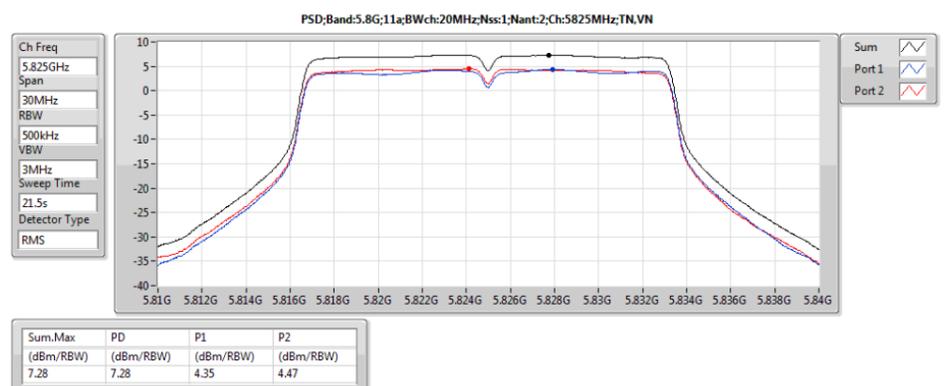
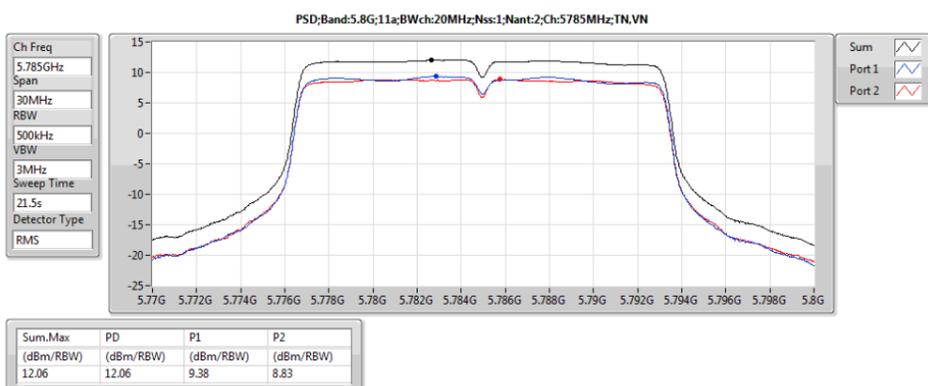
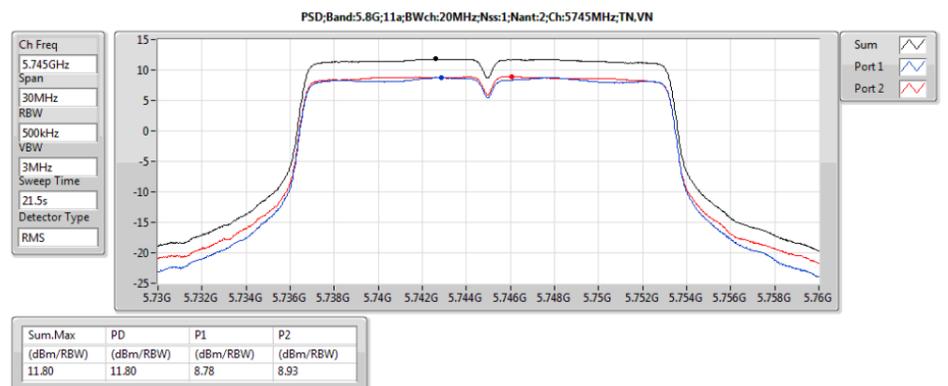
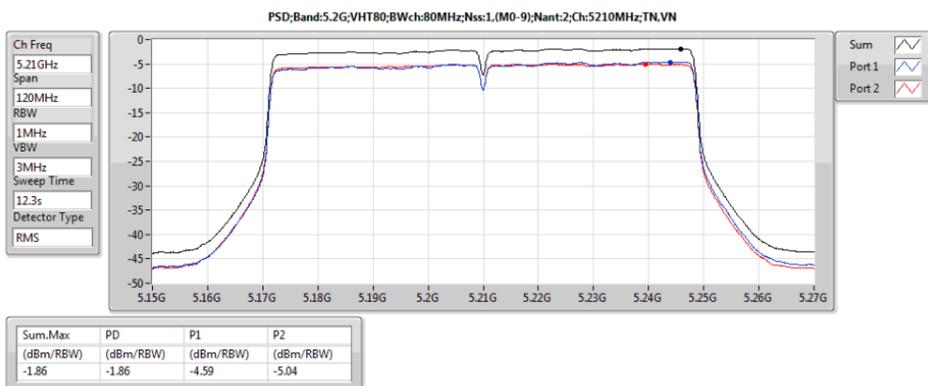
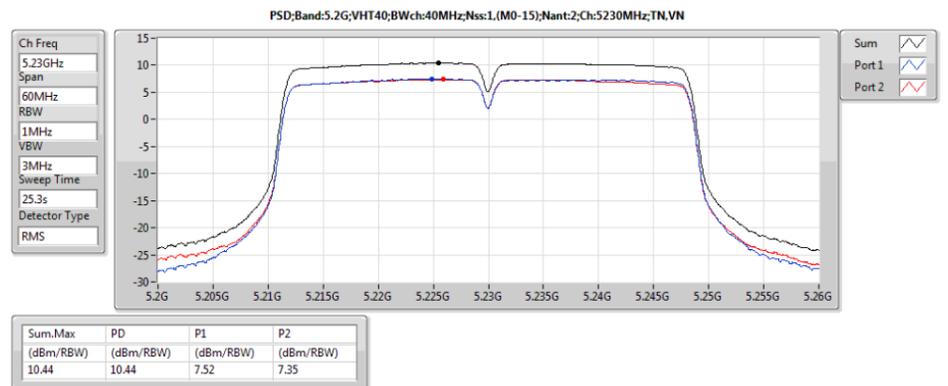
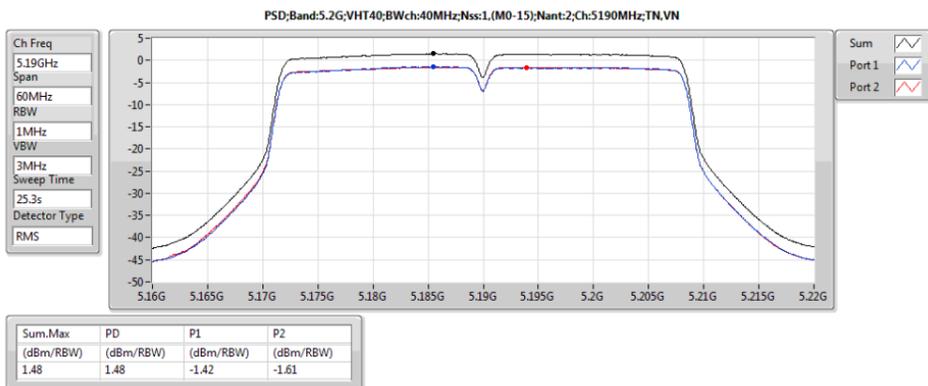
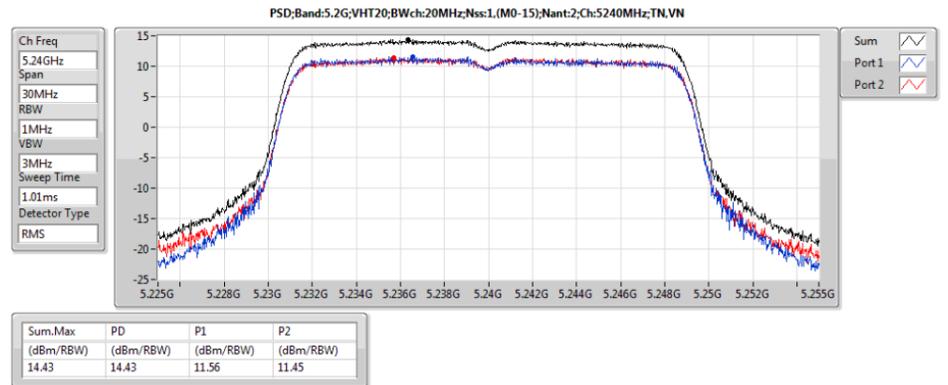
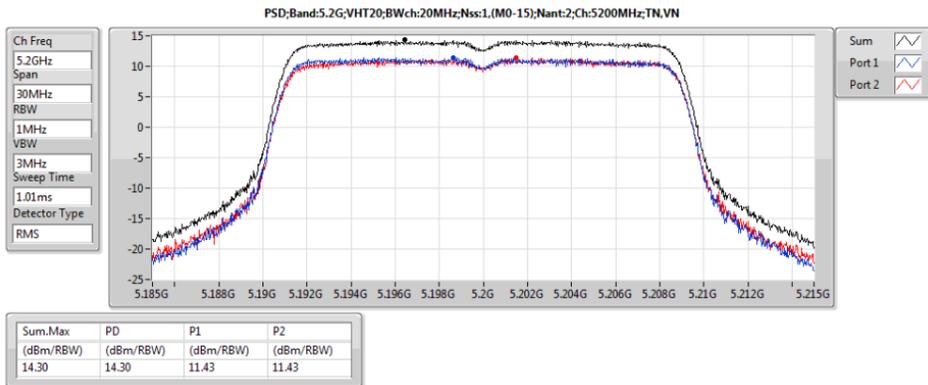
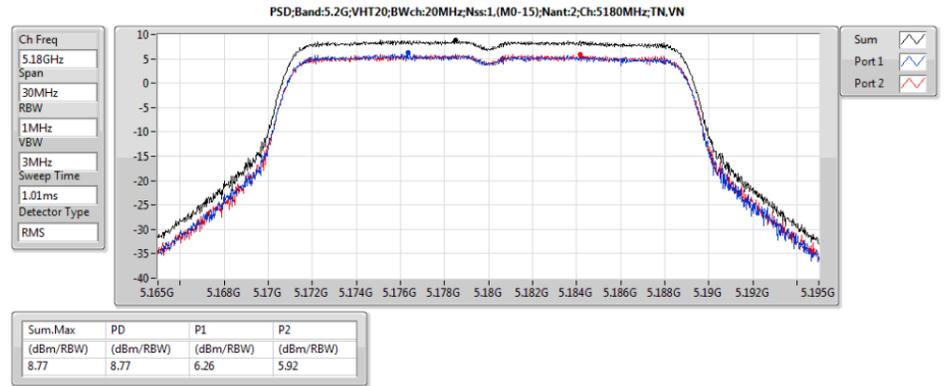
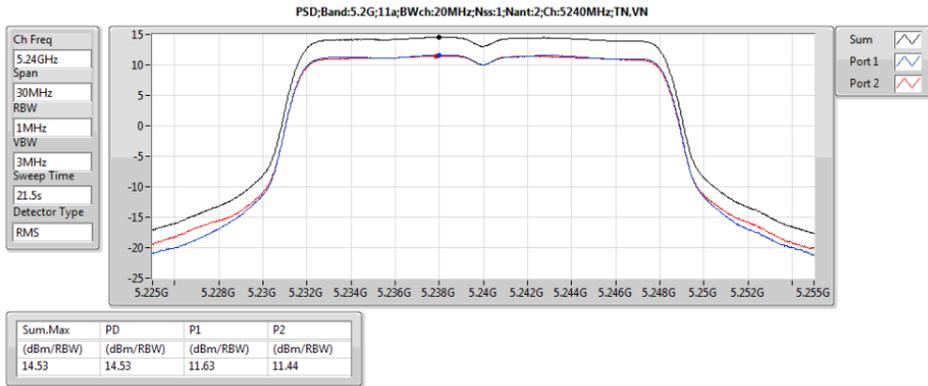
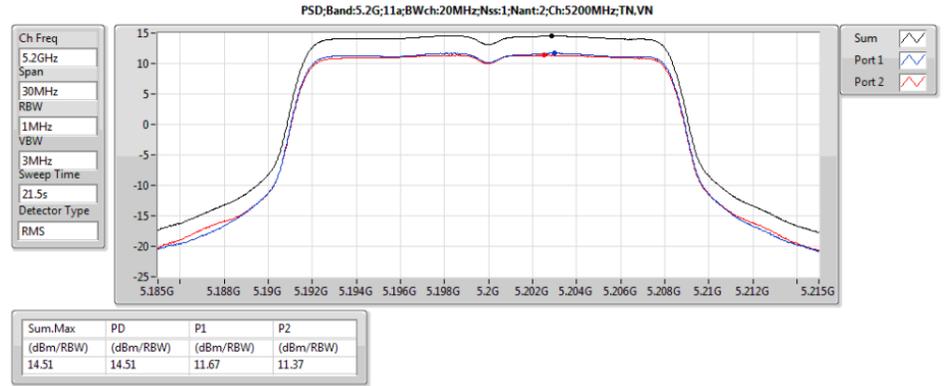
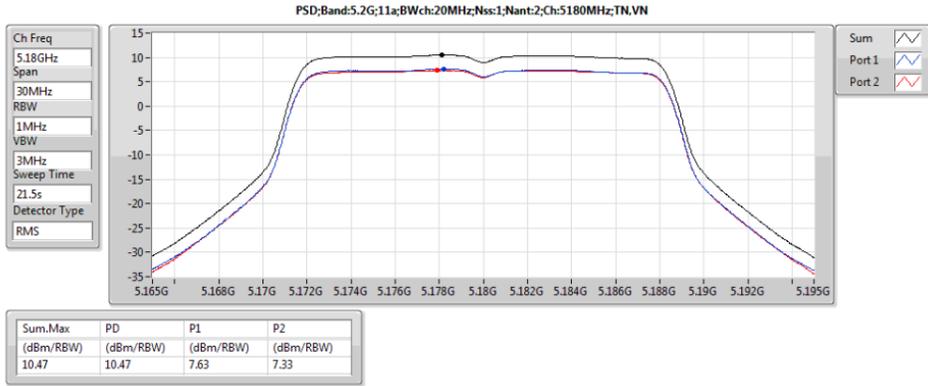


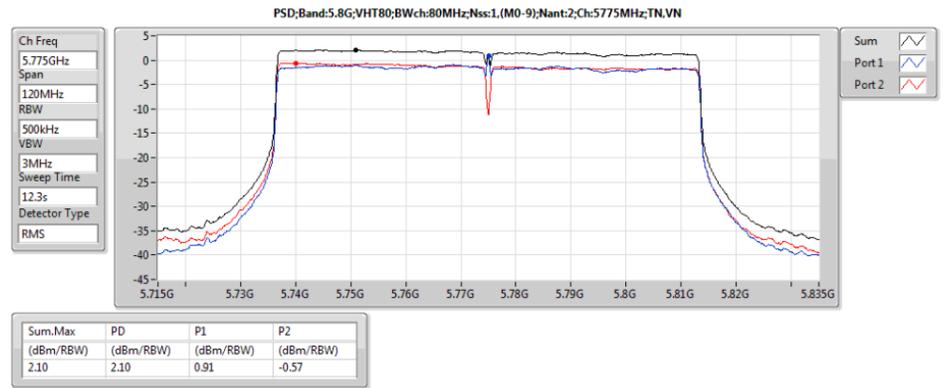
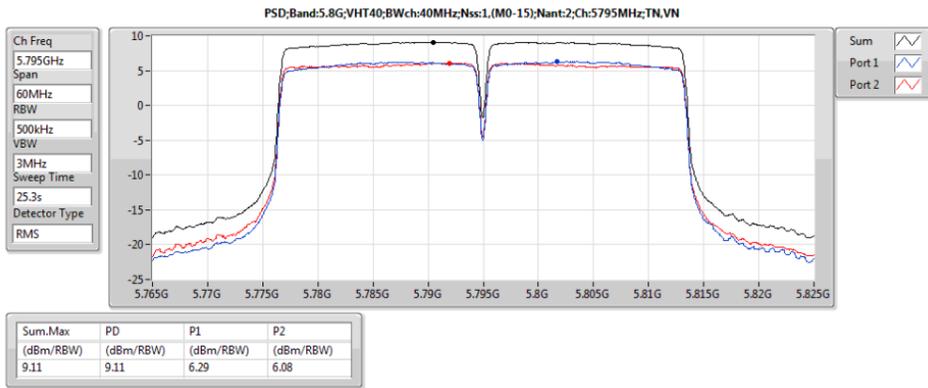
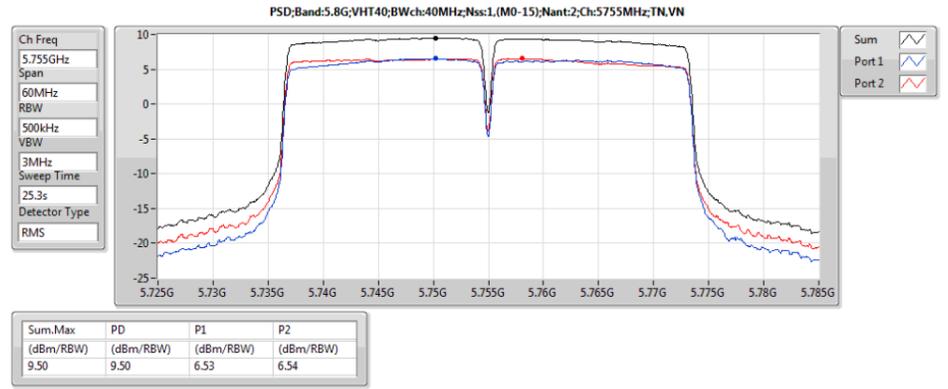
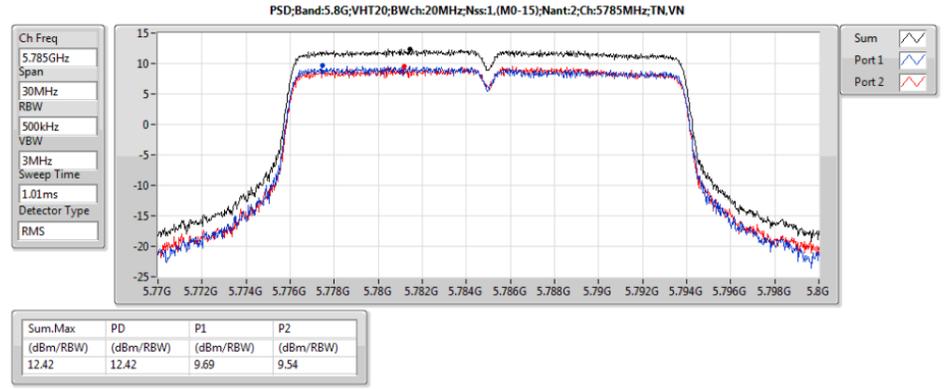
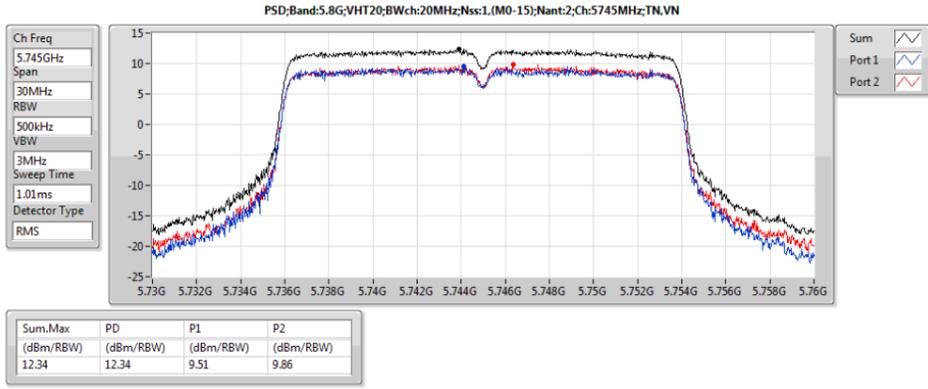
Summary

Mode	PD (dBm/RBW)	EIRP.PD (dBm/RBW)
5.2G;11a;20;1;2	14.53	22.95
5.2G;VHT20;20;1,(M0-8);2	14.43	22.85
5.2G;VHT40;40;1,(M0-9);2	10.44	18.86
5.2G;VHT80;80;1,(M0-9);2	-1.86	6.56
5.8G;11a;20;1;2	12.06	20.48
5.8G;VHT20;20;1,(M0-8);2	12.42	20.84
5.8G;VHT40;40;1,(M0-9);2	9.50	17.92
5.8G;VHT80;80;1,(M0-9);2	2.10	10.52

Result

Mode	Result	Meas.RBW (Hz)	Lim.RBW (Hz)	BWCF (dB)	DG (dBi)	Sum.Max (dBm/RBW)	PD (dBm/RBW)	PD.Limit (dBm/RBW)	EIRP.PD (dBm/RBW)	EIRP.PD.Li m (dBm/RBW)	P1 (dBm/RBW)	P2 (dBm/RBW)
5.2G:11a:20:1:2:5180:L;TN,VN	Pass	1M	1M	0.00	8.42	10.47	10.47	14.58	18.89	Inf	7.63	7.33
5.2G:11a:20:1:2:5200:M;TN,VN	Pass	1M	1M	0.00	8.42	14.51	14.51	14.58	22.93	Inf	11.67	11.37
5.2G:11a:20:1:2:5240:H;TN,VN	Pass	1M	1M	0.00	8.42	14.53	14.53	14.58	22.95	Inf	11.63	11.44
5.2G:VHT20:20:1,(M0-8):2:5180:L;TN,VN	Pass	1M	1M	0.00	8.42	8.77	8.77	14.58	17.19	Inf	6.26	5.92
5.2G:VHT20:20:1,(M0-8):2:5200:M;TN,VN	Pass	1M	1M	0.00	8.42	14.30	14.30	14.58	22.72	Inf	11.43	11.43
5.2G:VHT20:20:1,(M0-8):2:5240:H;TN,VN	Pass	1M	1M	0.00	8.42	14.43	14.43	14.58	22.85	Inf	11.56	11.45
5.2G:VHT40:40:1,(M0-9):2:5190:L;TN,VN	Pass	1M	1M	0.00	8.42	1.48	1.48	14.58	9.90	Inf	-1.42	-1.61
5.2G:VHT40:40:1,(M0-9):2:5230:H;TN,VN	Pass	1M	1M	0.00	8.42	10.44	10.44	14.58	18.86	Inf	7.52	7.35
5.2G:VHT80:80:1,(M0-9):2:5210:S;TN,VN	Pass	1M	1M	0.00	8.42	-1.86	-1.86	14.58	6.56	Inf	-4.59	-5.04
5.8G:11a:20:1:2:5745:L;TN,VN	Pass	500k	500k	0.00	8.42	11.80	11.80	27.58	20.22	33.58	8.78	8.93
5.8G:11a:20:1:2:5785:M;TN,VN	Pass	500k	500k	0.00	8.42	12.06	12.06	27.58	20.48	33.58	9.38	8.83
5.8G:11a:20:1:2:5825:H;TN,VN	Pass	500k	500k	0.00	8.42	9.35	9.35	27.58	17.77	33.58	6.37	6.49
5.8G:VHT20:20:1,(M0-8):2:5745:L;TN,VN	Pass	500k	500k	0.00	8.42	12.34	12.34	27.58	20.76	33.58	9.51	9.86
5.8G:VHT20:20:1,(M0-8):2:5785:M;TN,VN	Pass	500k	500k	0.00	8.42	12.42	12.42	27.58	20.84	33.58	9.69	9.54
5.8G:VHT20:20:1,(M0-8):2:5825:H;TN,VN	Pass	500k	500k	0.00	8.42	11.10	11.10	27.58	19.52	33.58	8.14	8.59
5.8G:VHT40:40:1,(M0-9):2:5755:L;TN,VN	Pass	500k	500k	0.00	8.42	9.50	9.50	27.58	17.92	33.58	6.53	6.54
5.8G:VHT40:40:1,(M0-9):2:5795:H;TN,VN	Pass	500k	500k	0.00	8.42	9.11	9.11	27.58	17.53	33.58	6.29	6.08
5.8G:VHT80:80:1,(M0-9):2:5775:S;TN,VN	Pass	500k	500k	0.00	8.42	2.10	2.10	27.58	10.52	33.58	0.91	-0.57







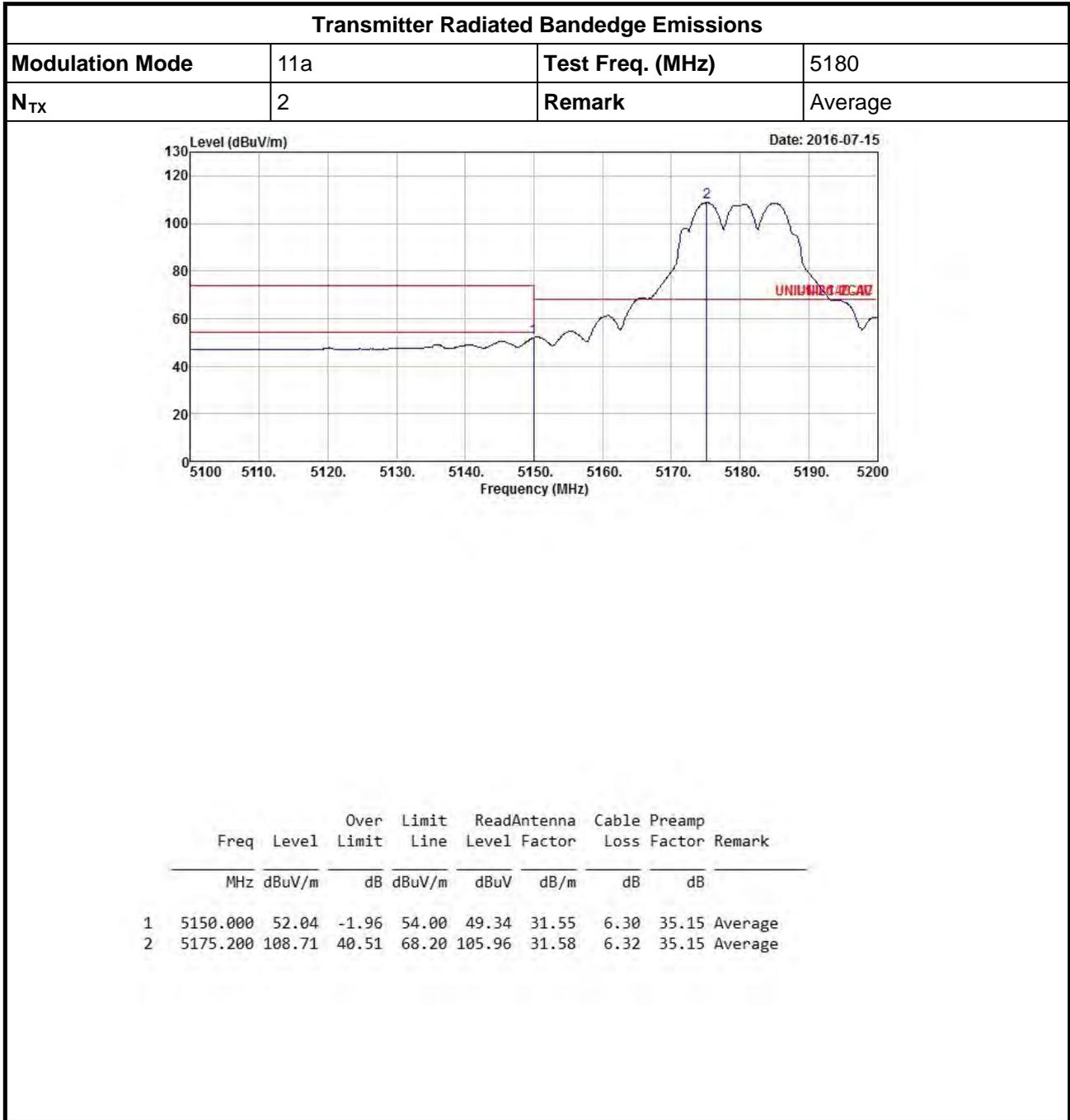
Transmitter Radiated Bandedge Emissions (with Antenna)

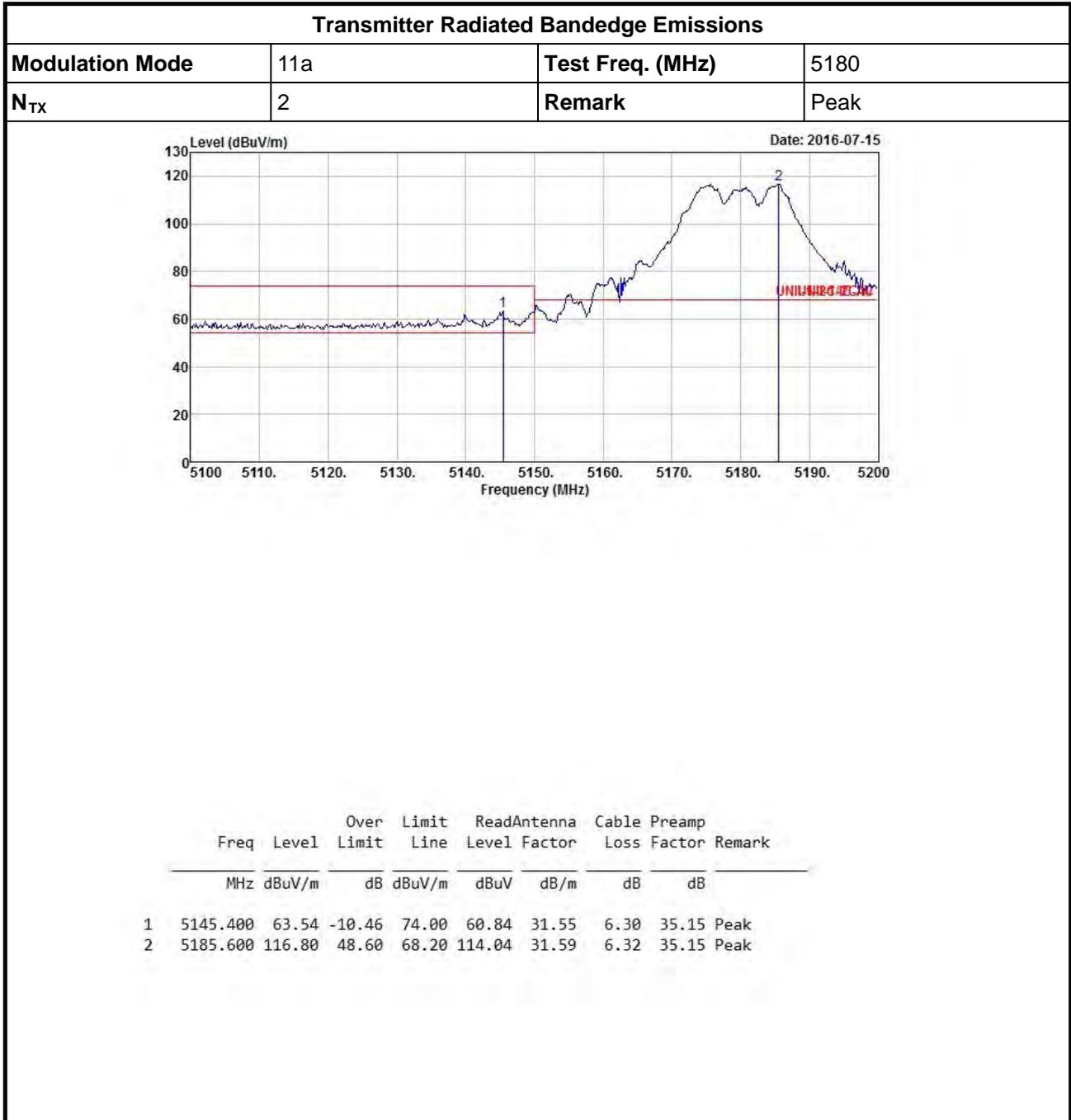
U-NII 5150-5250MHz Transmitter Radiated Bandedge (with Antenna)										
Modulation Mode	N _{TX}	Freq. (MHz)	Measure Distance (m)	Freq. (MHz) PK	Level (dBuV/m) PK	Limit (dBuV/m) PK	Freq. (MHz) AV	Level (dBuV/m) AV	Limit (dBuV/m) AV	Pol.
11a	2	5180	3	5145.400	63.54	74	5150.000	52.04	54	V
11a	2	5240	3	5145.000	67.36	74	5135.400	49.27	54	V
VHT20	2	5180	3	5146.200	64.86	74	5150.000	51.15	54	V
VHT20	2	5240	3	5133.000	64.34	74	5119.800	48.87	54	V
VHT40	2	5190	3	5149.280	64.48	74	5149.940	52.45	54	V
VHT40	2	5230	3	5149.800	63.22	74	5149.800	52.56	54	V
VHT80	2	5210	3	5149.200	63.29	74	5,149.800	52.94	54	V

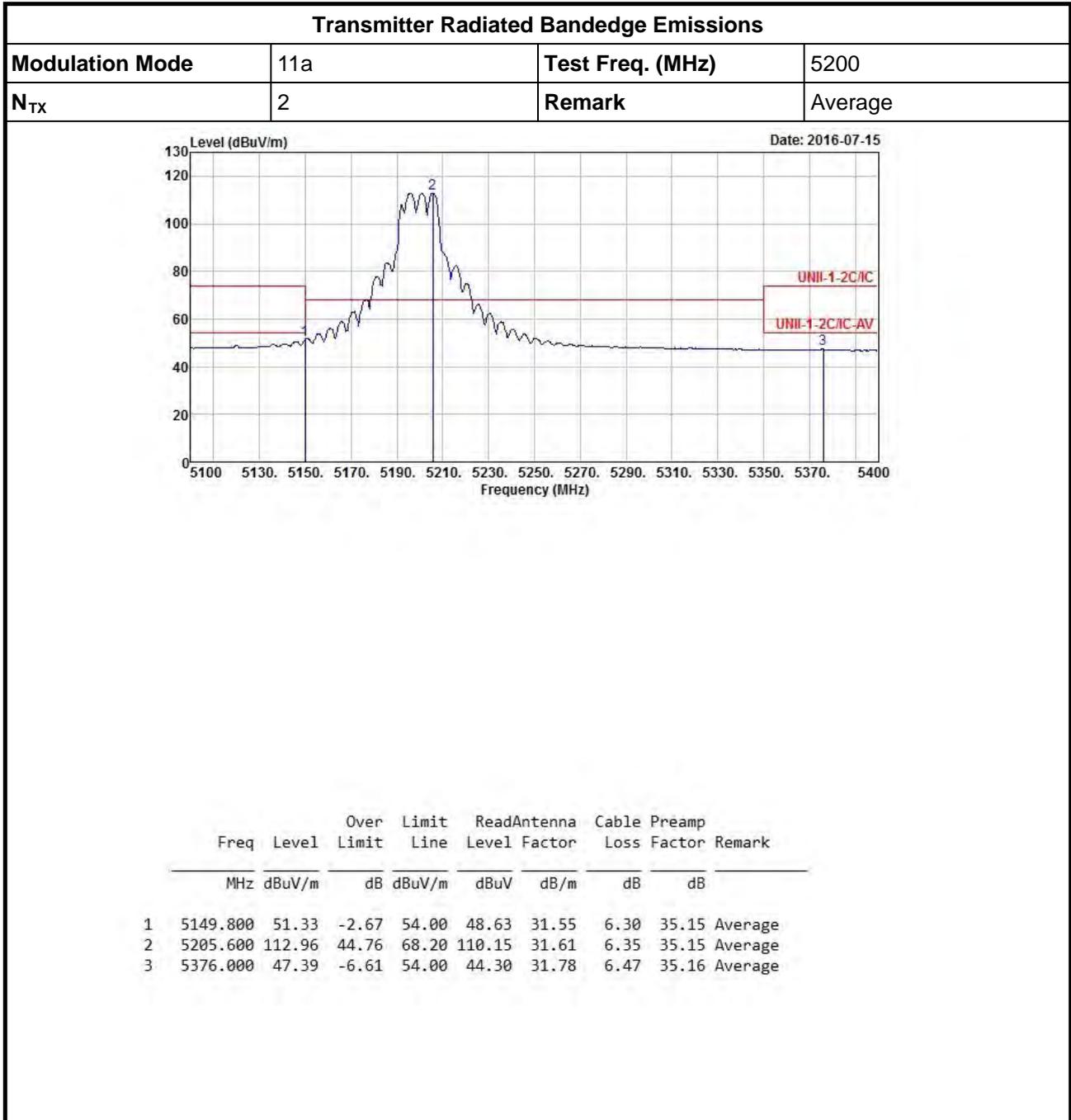
Note 1: Measurement worst emissions of receive antenna polarization.

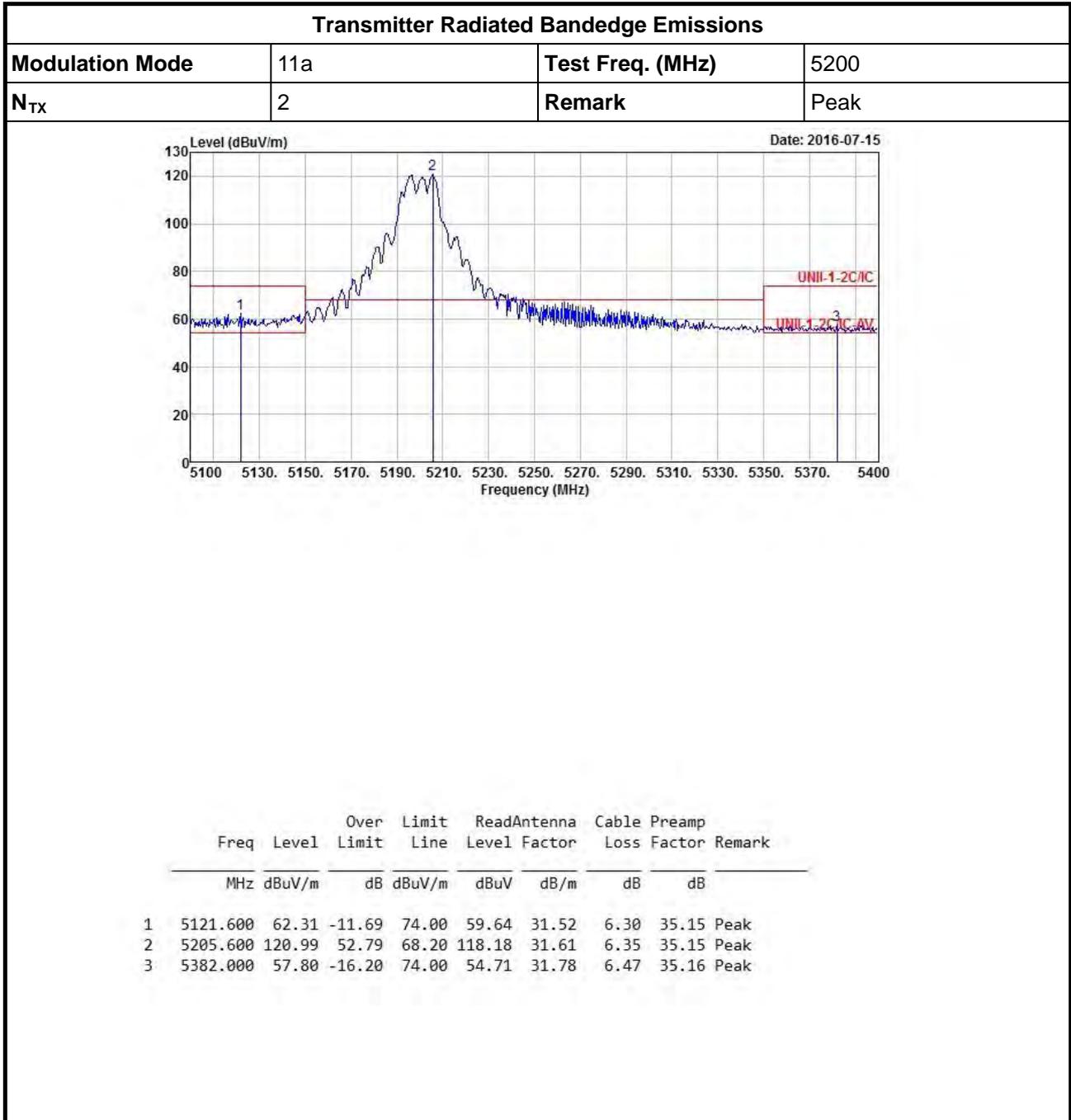
U-NII 5725-5850MHz Transmitter Radiated Bandedge (with Antenna)							
Modulation Mode	N _{TX}	Freq. (MHz)	Measure Distance (m)	Freq. (MHz) PK	Level (dBuV/m) PK	Limit (dBuV/m) PK	Pol.
11a	2	5745	3	5645.540	64.64	68.2	V
11a	2	5825	3	5931.910	61.09	68.2	V
VHT20	2	5745	3	5630.460	66.11	68.2	V
VHT20	2	5825	3	5944.330	59.42	68.2	V
VHT40	2	5755	3	5630.270	64.37	68.2	V
VHT40	2	5795	3	5931.280	61.54	68.2	V
VHT80	2	5775	3	5647.750	67.01	68.2	V

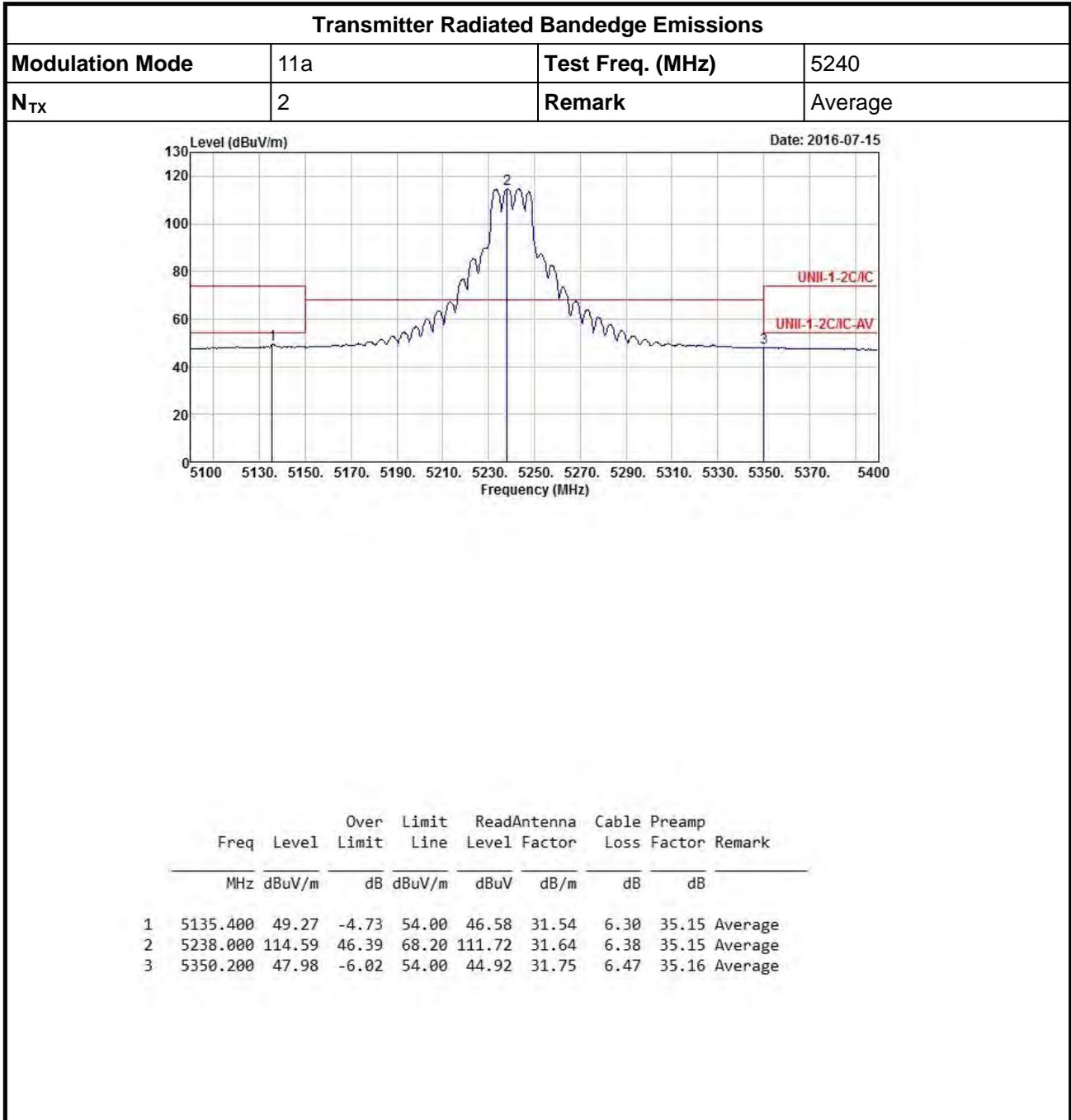
Note 1: Measurement worst emissions of receive antenna polarization.

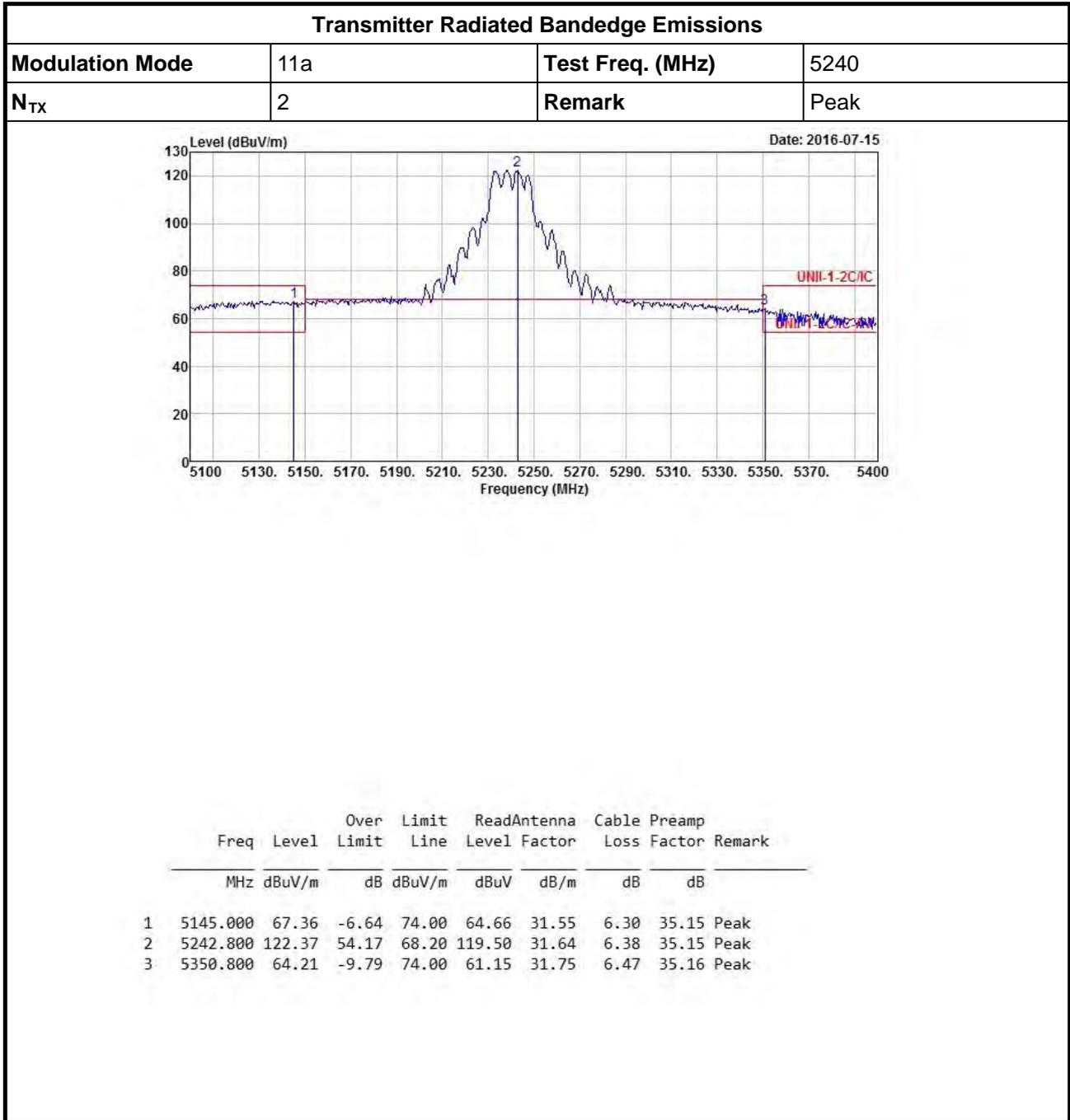


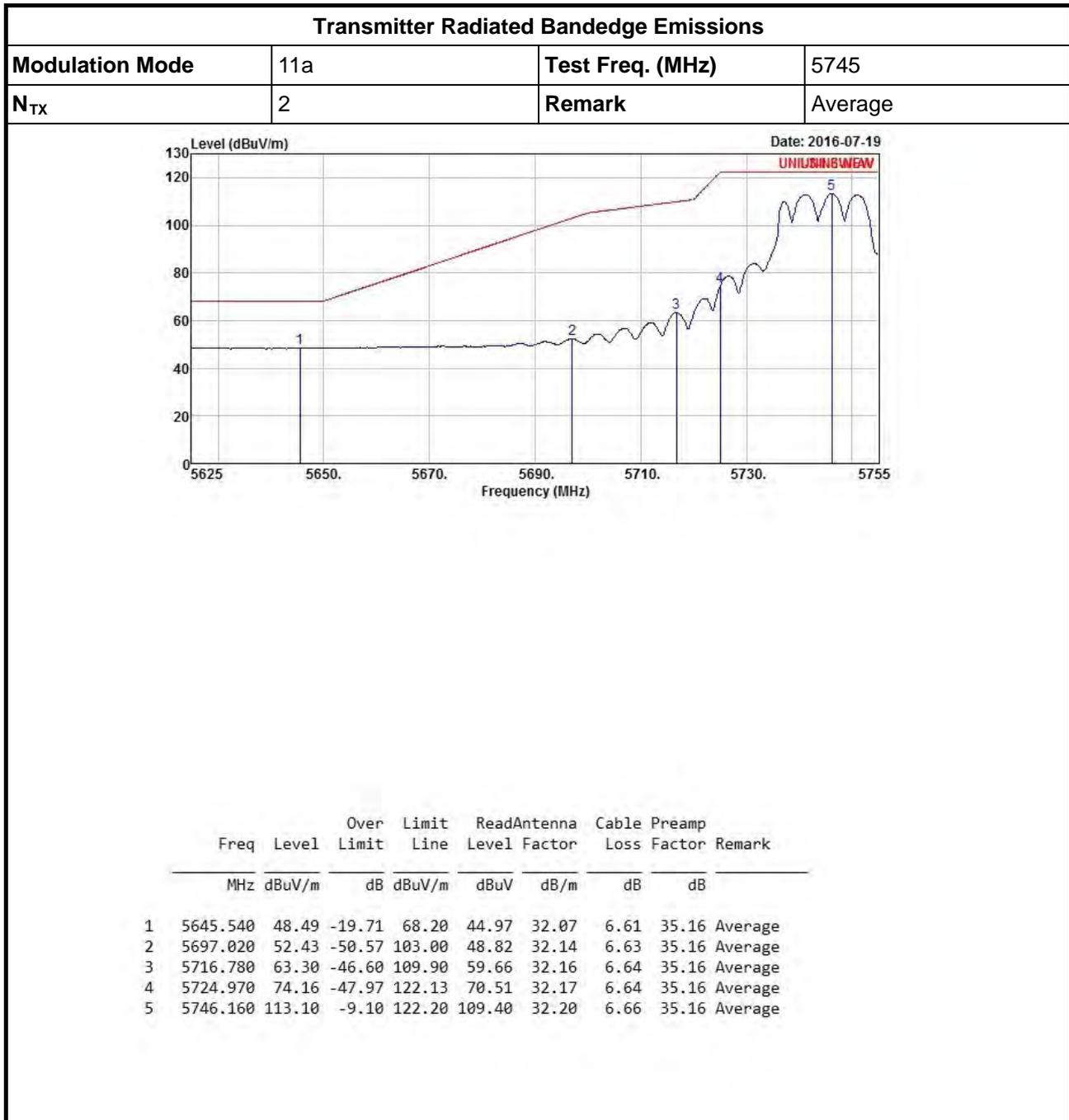


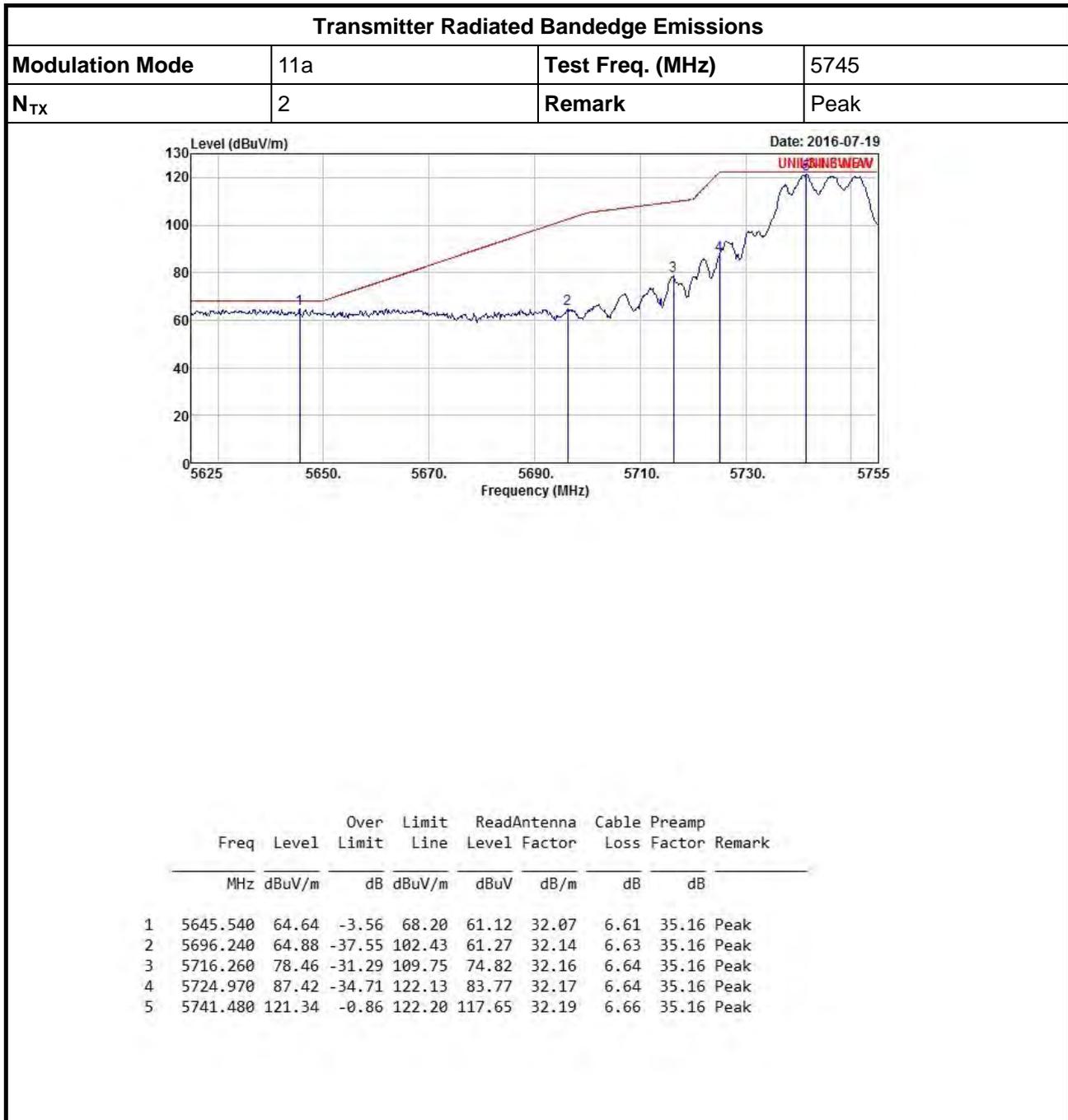


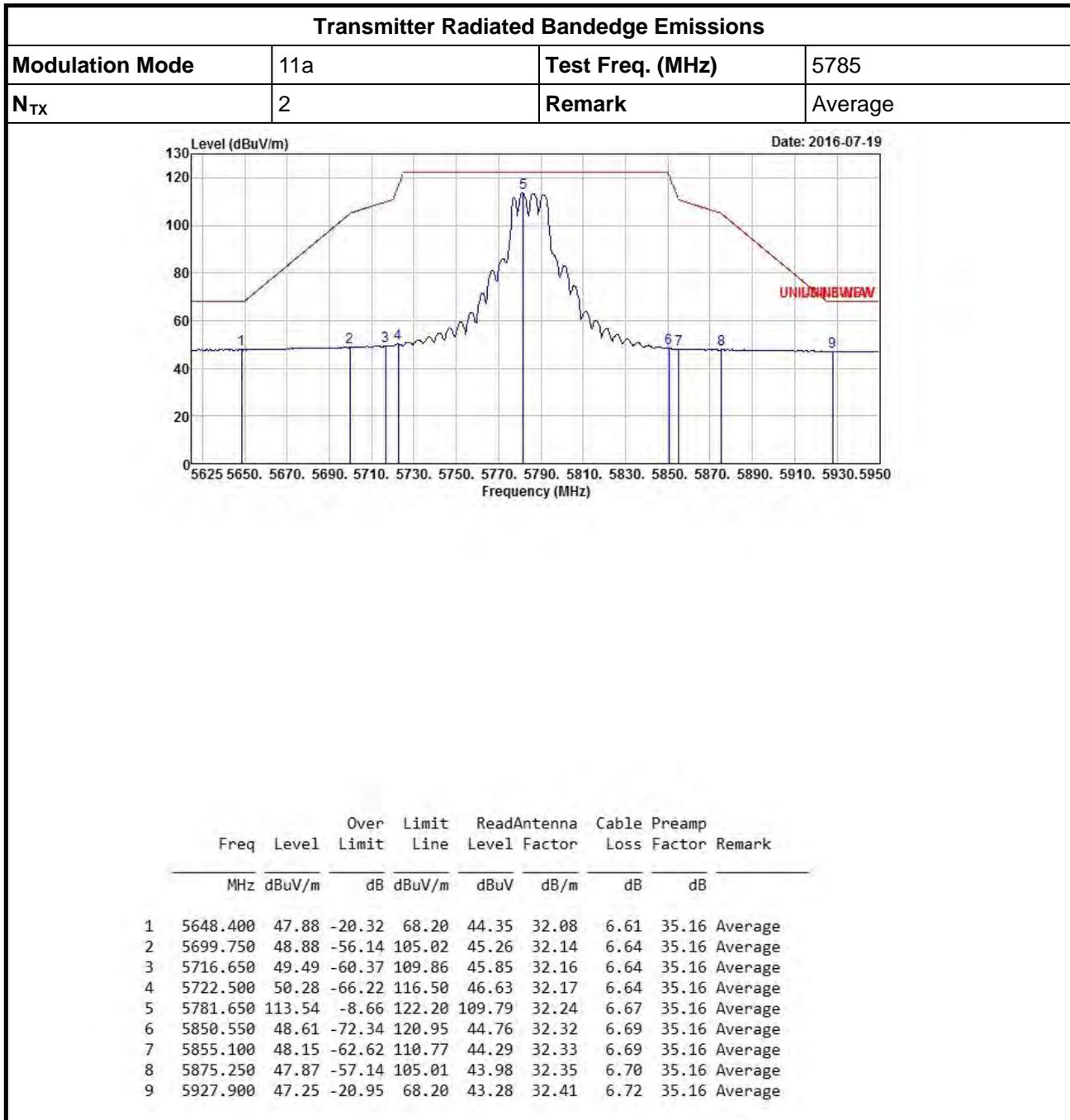


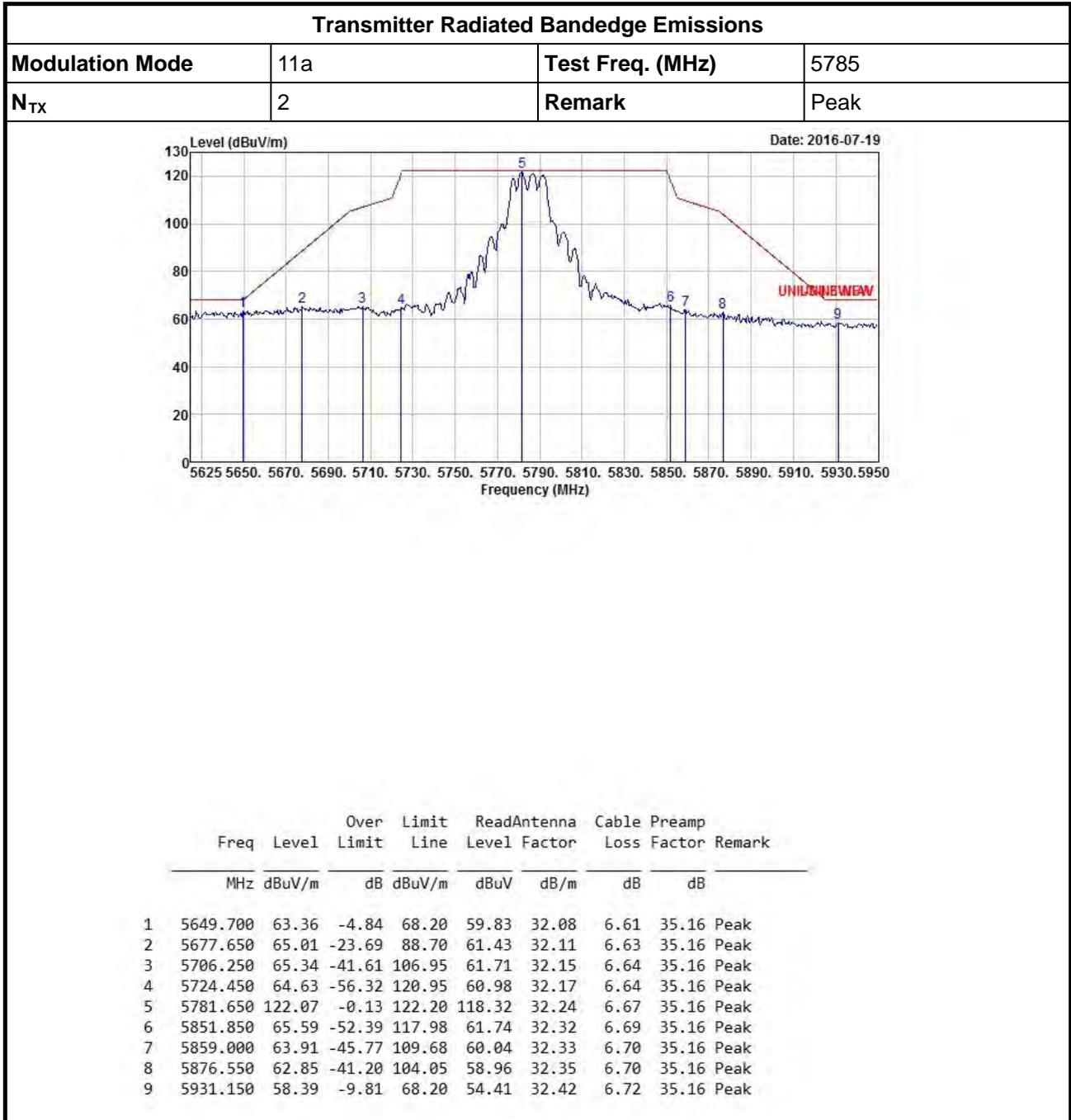


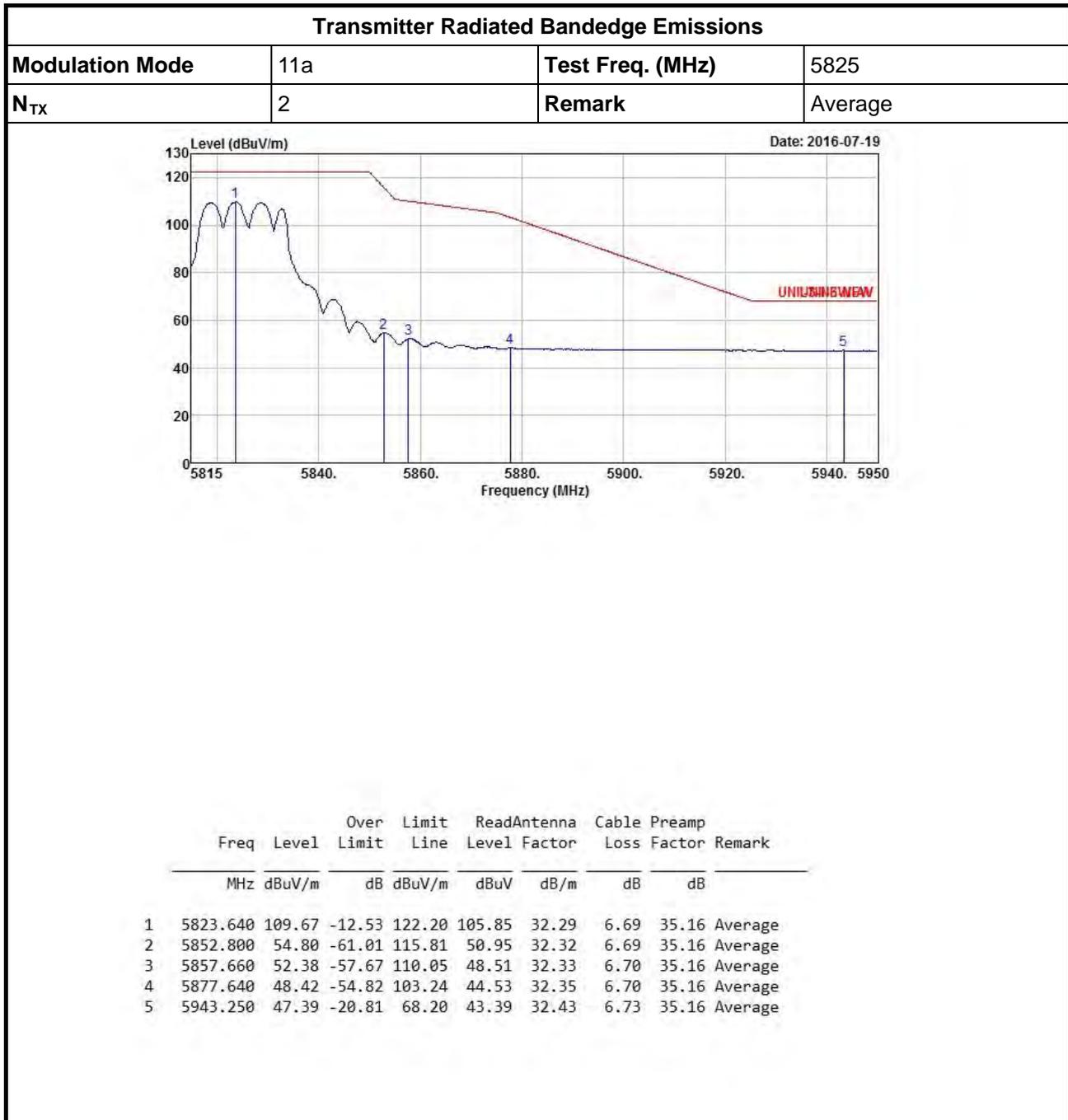


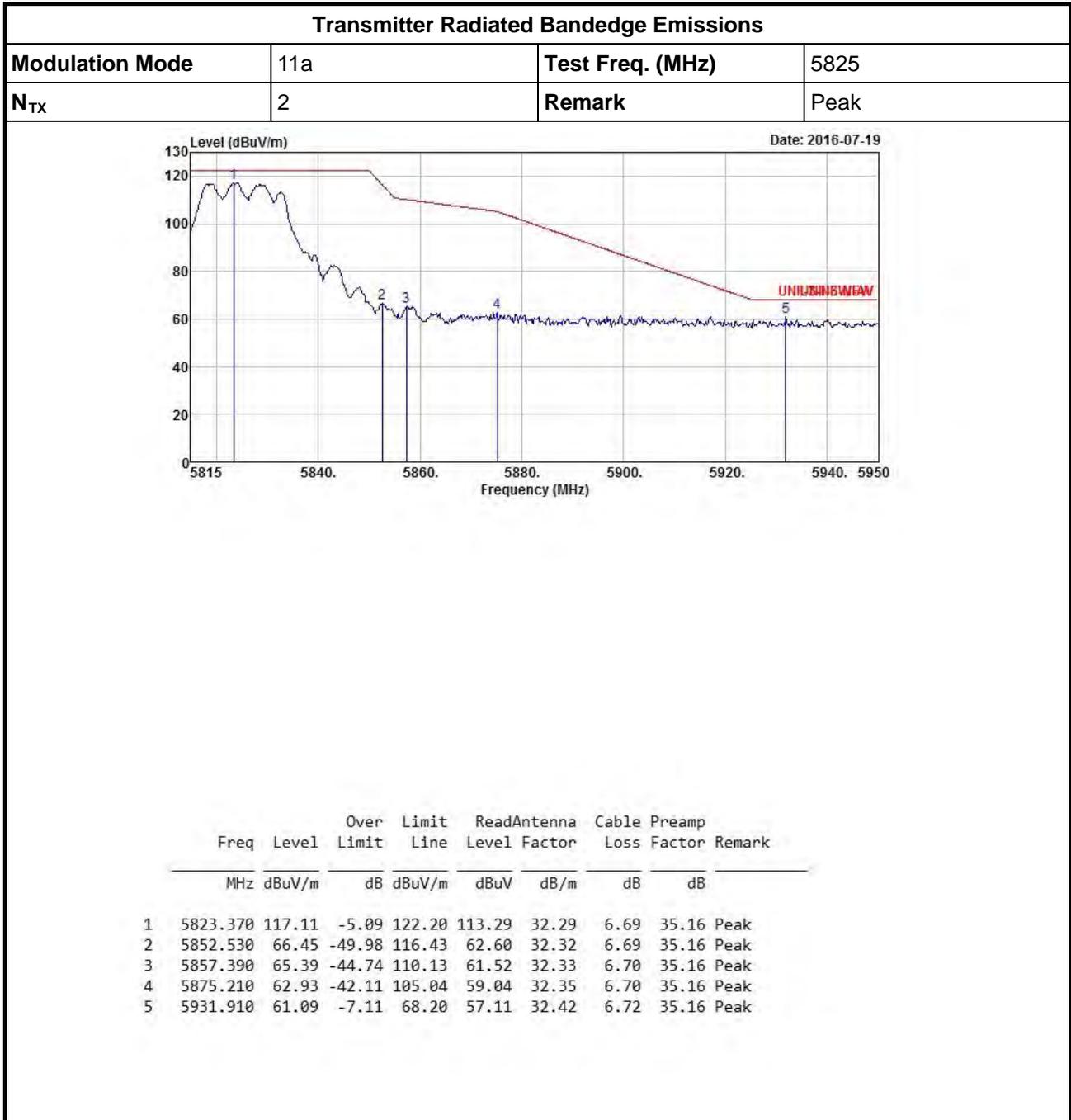


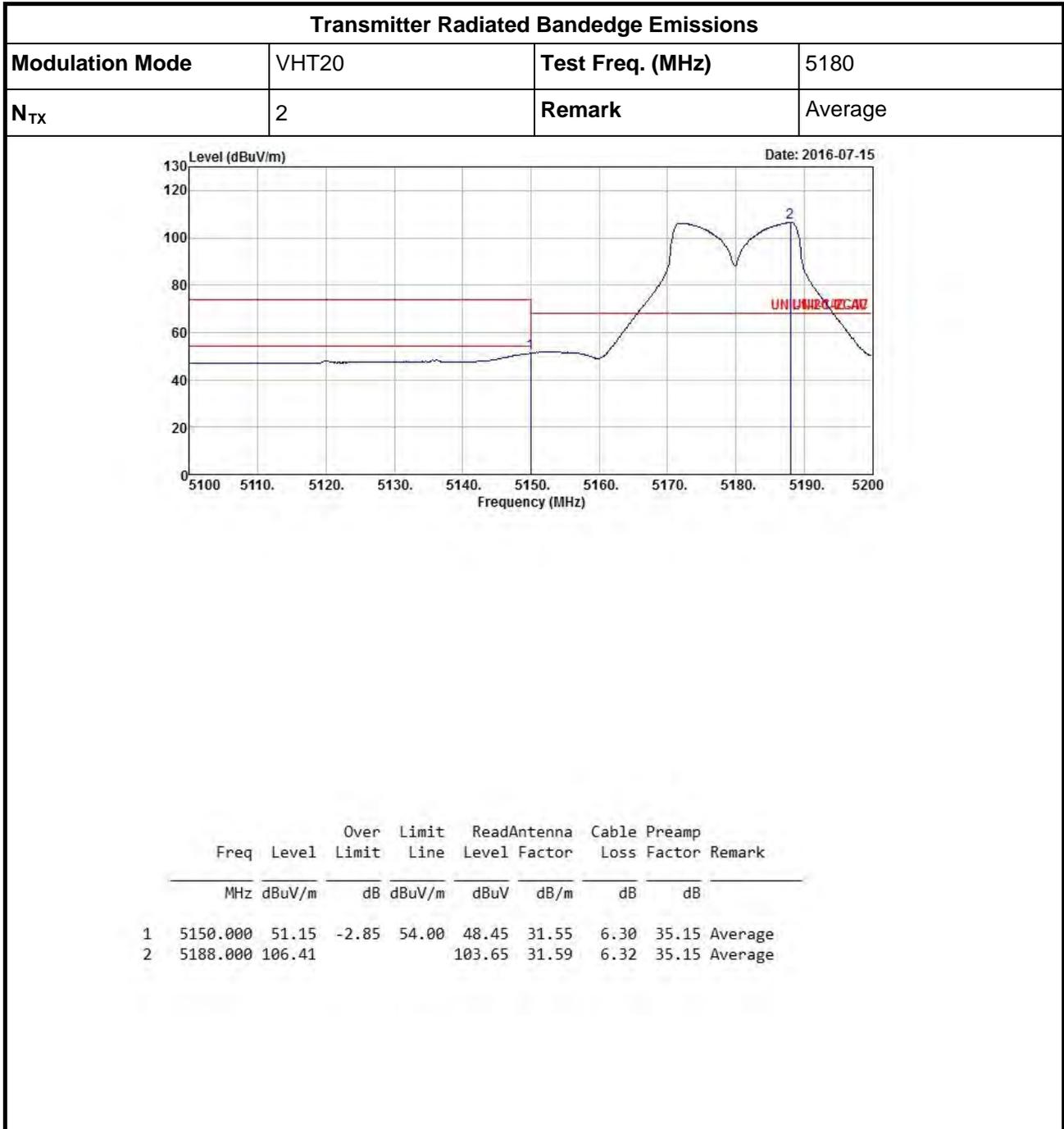


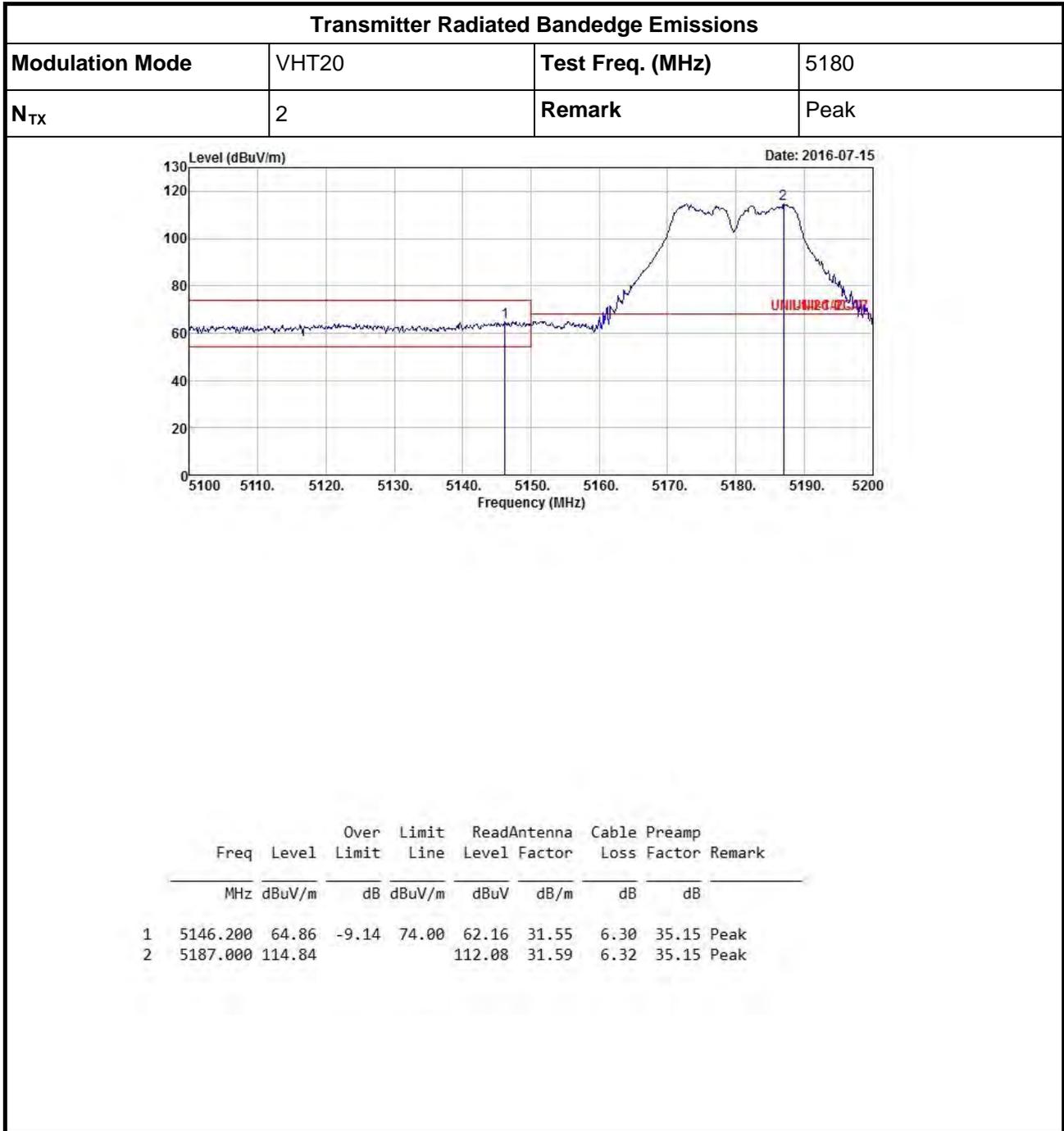


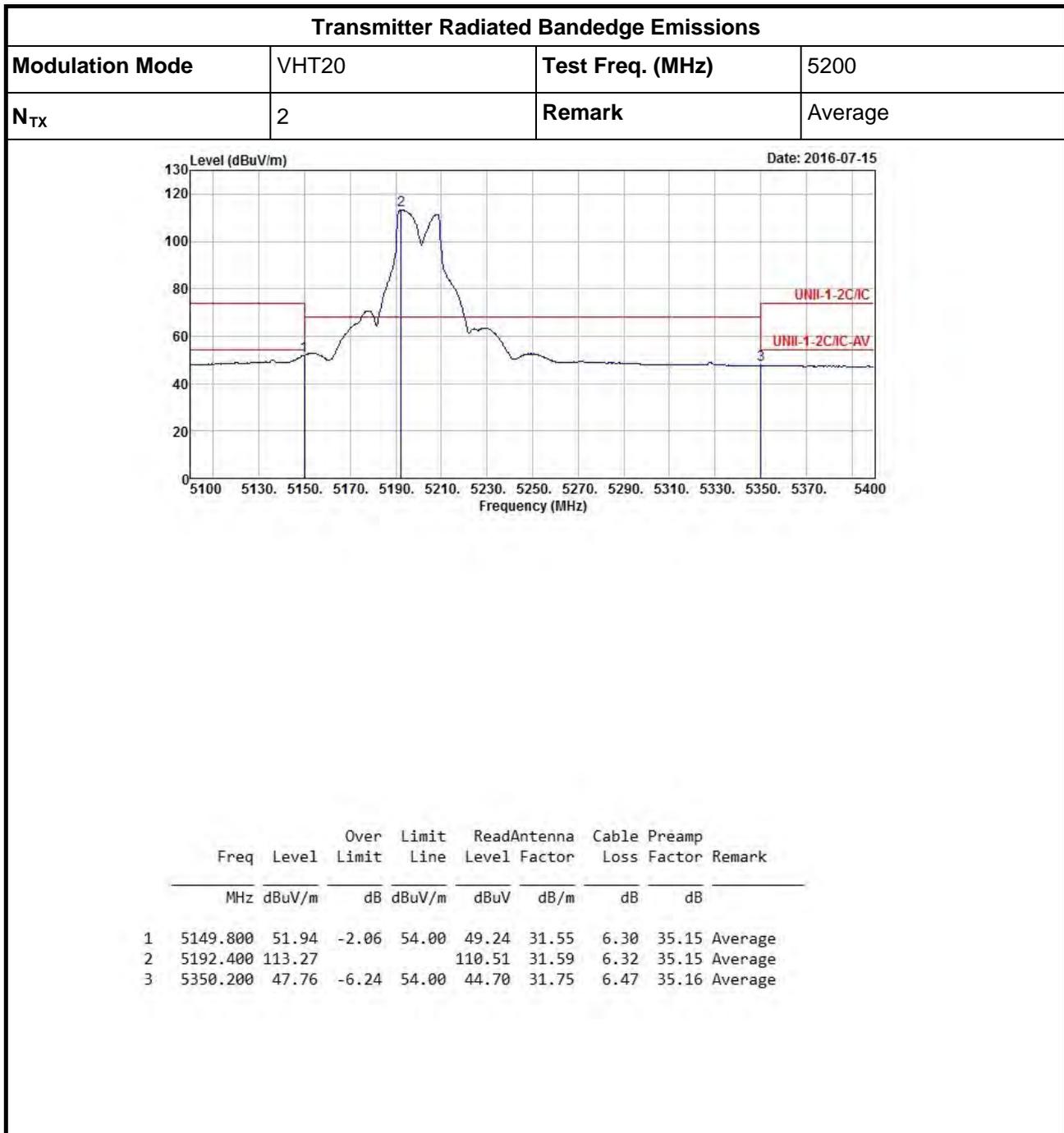


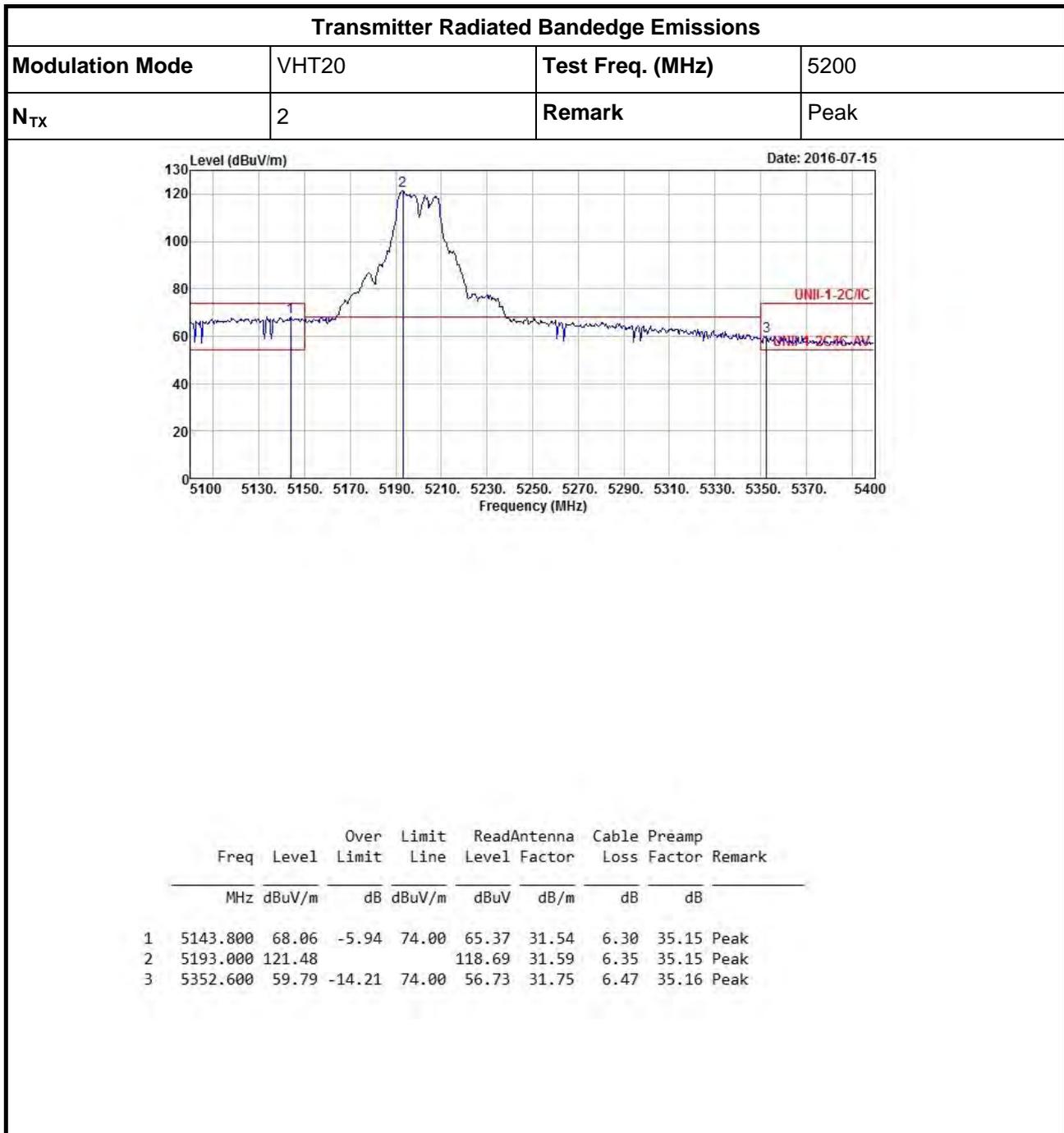


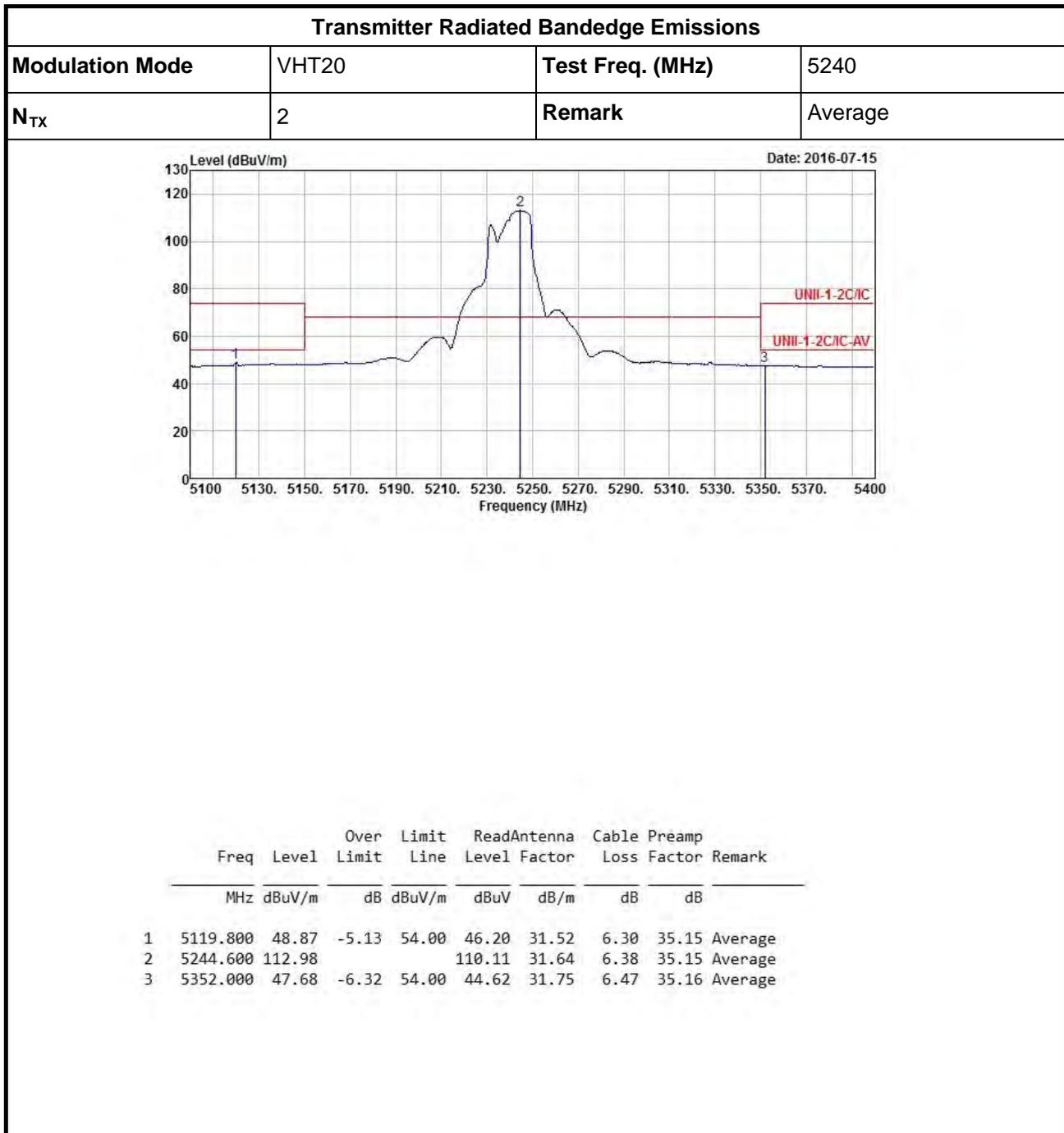


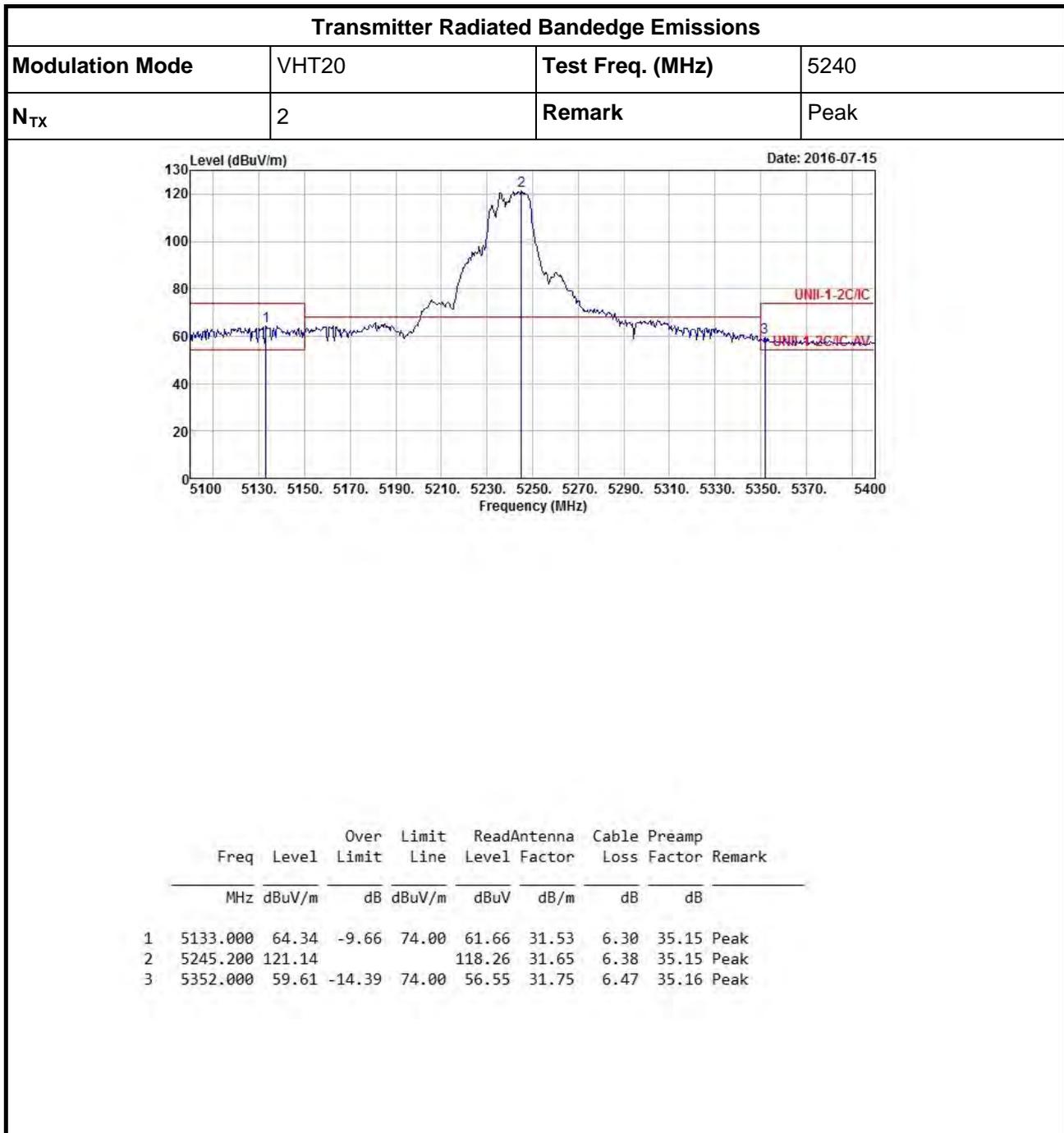


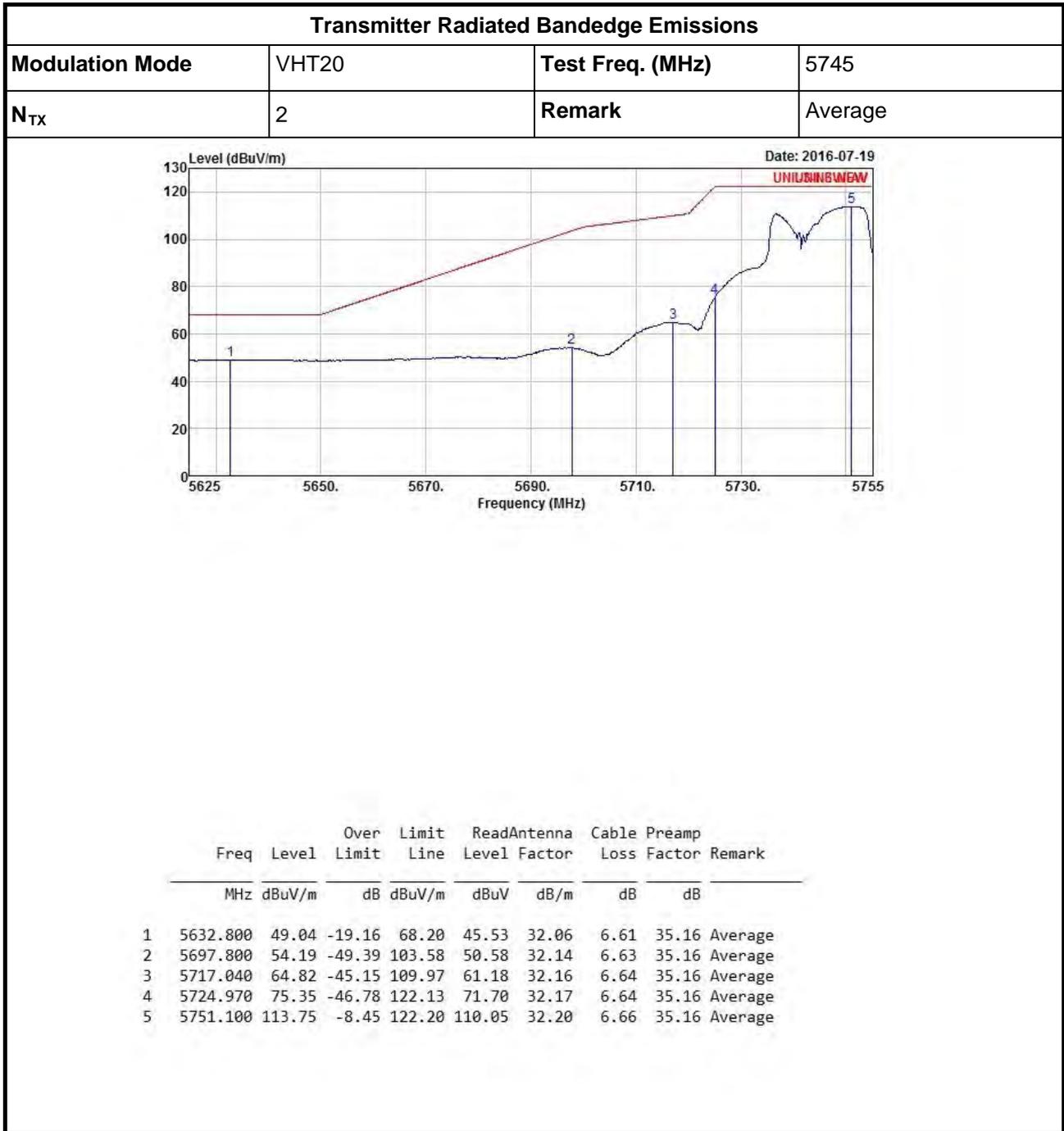


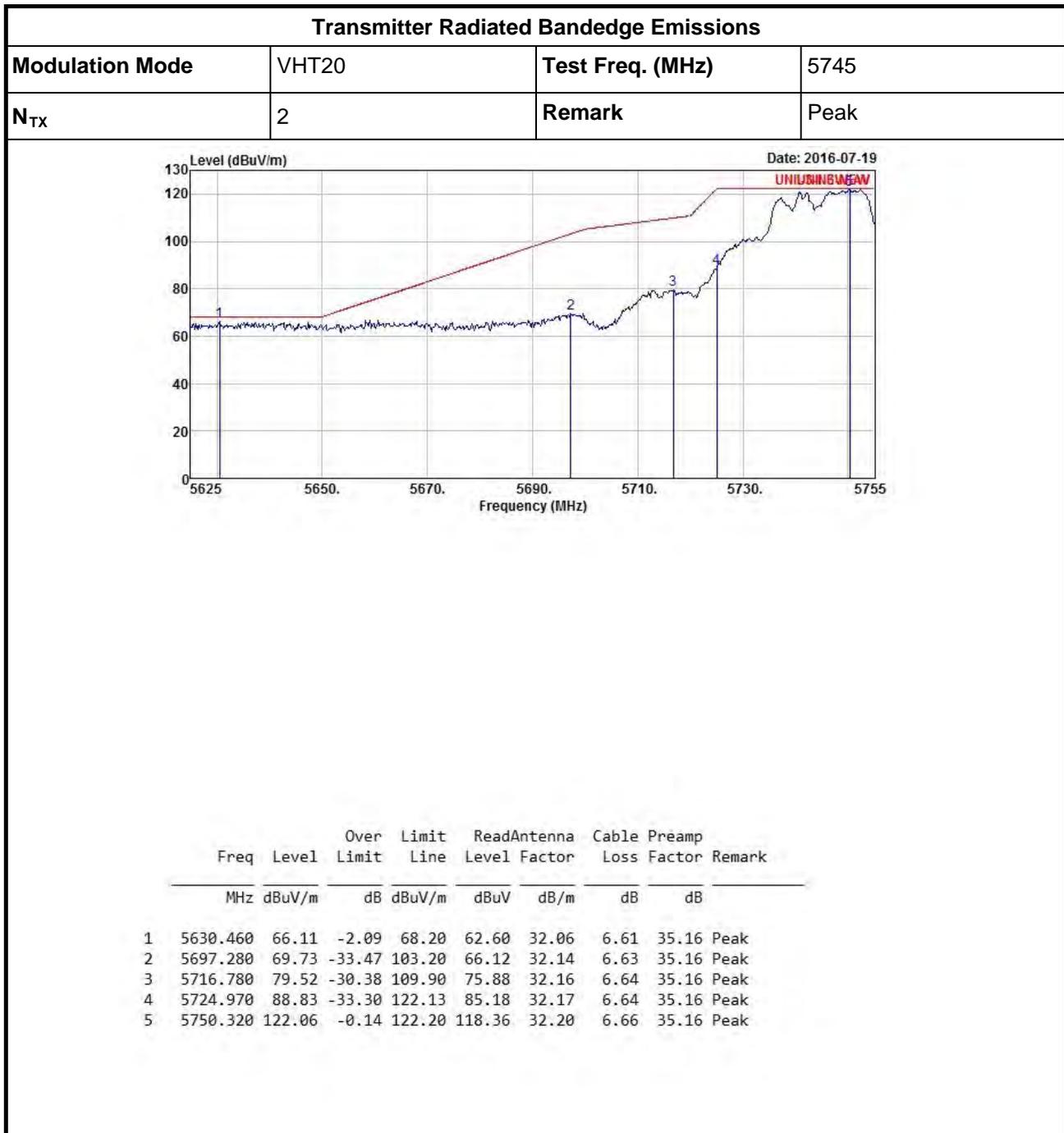


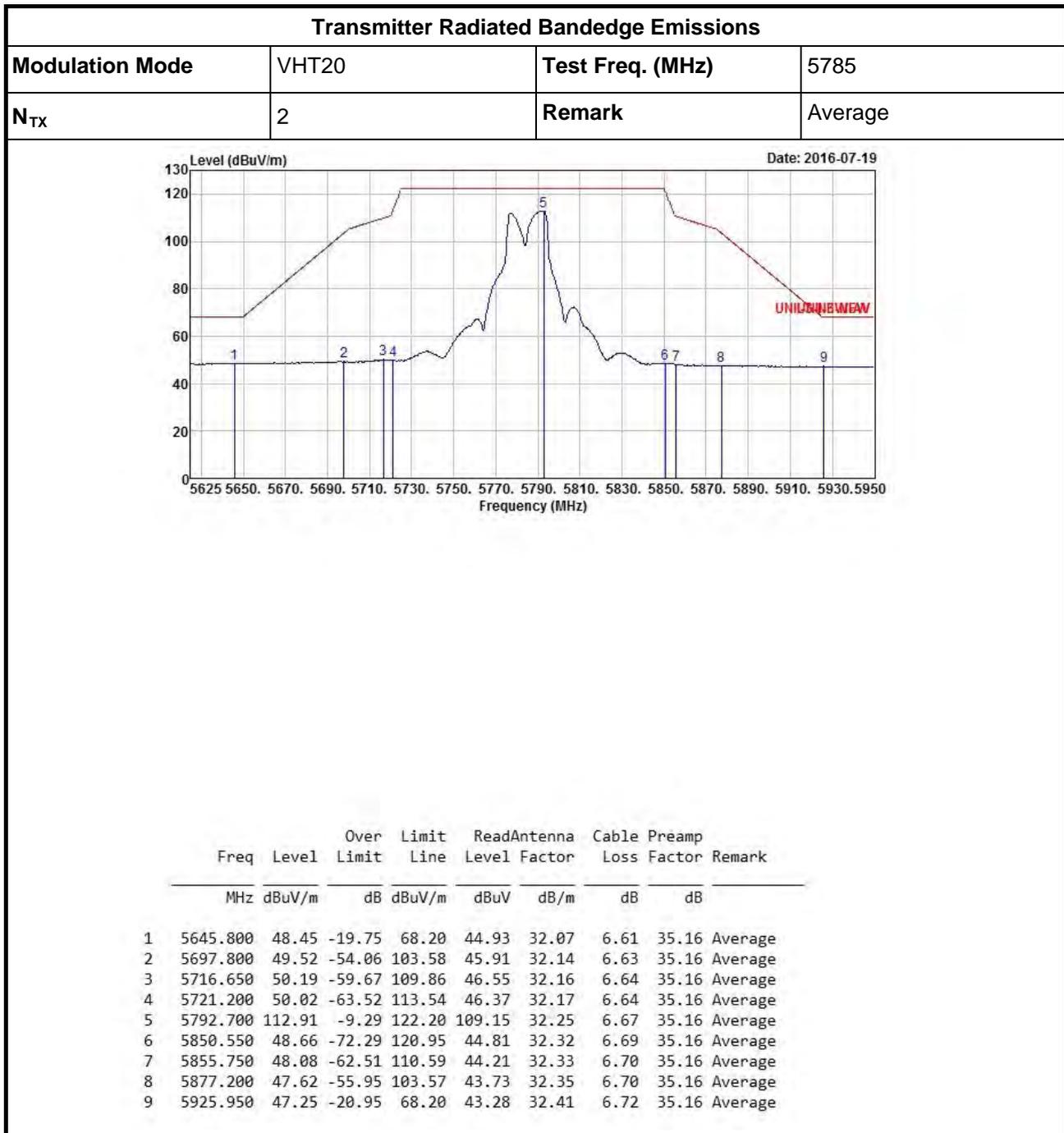


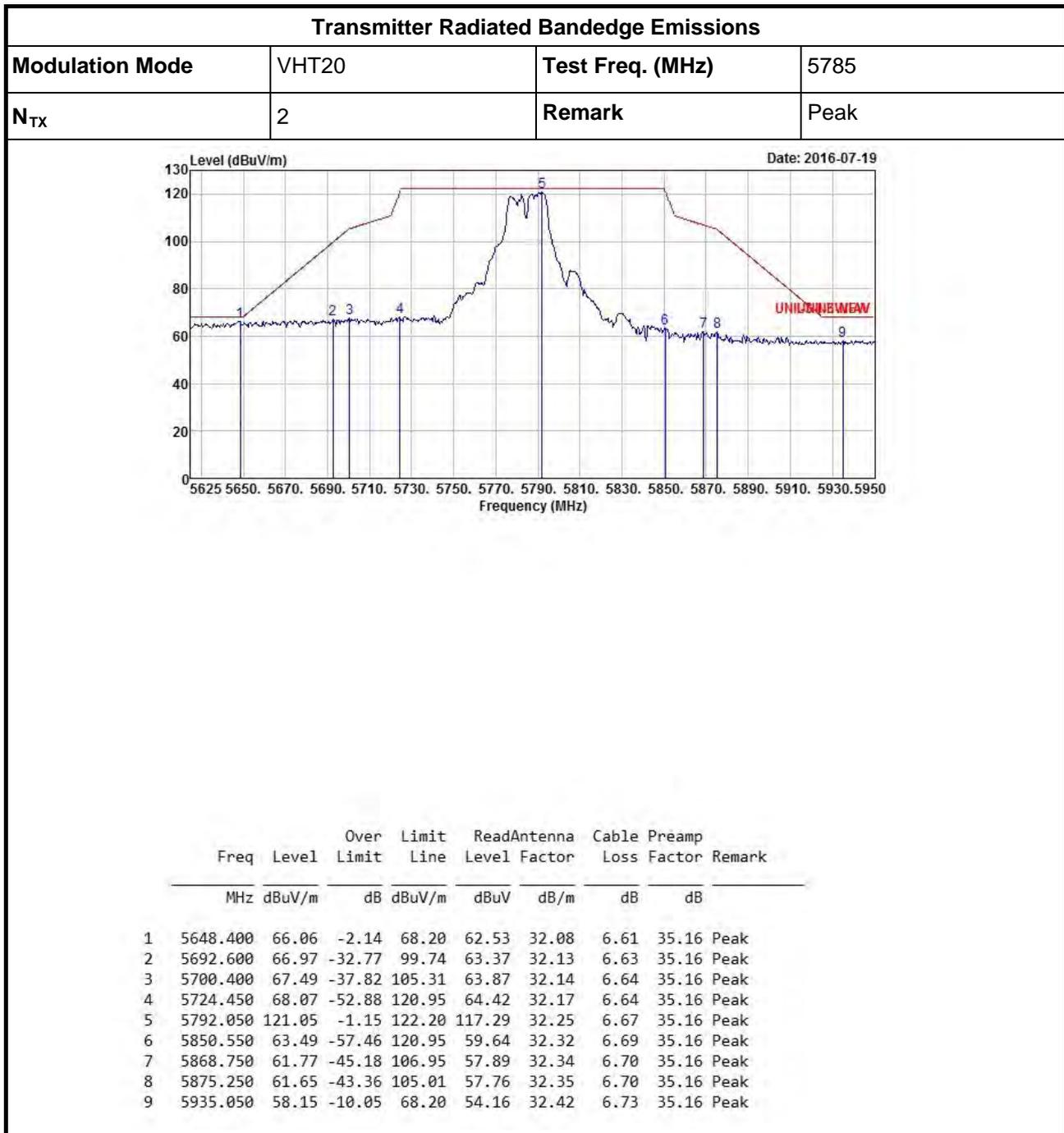


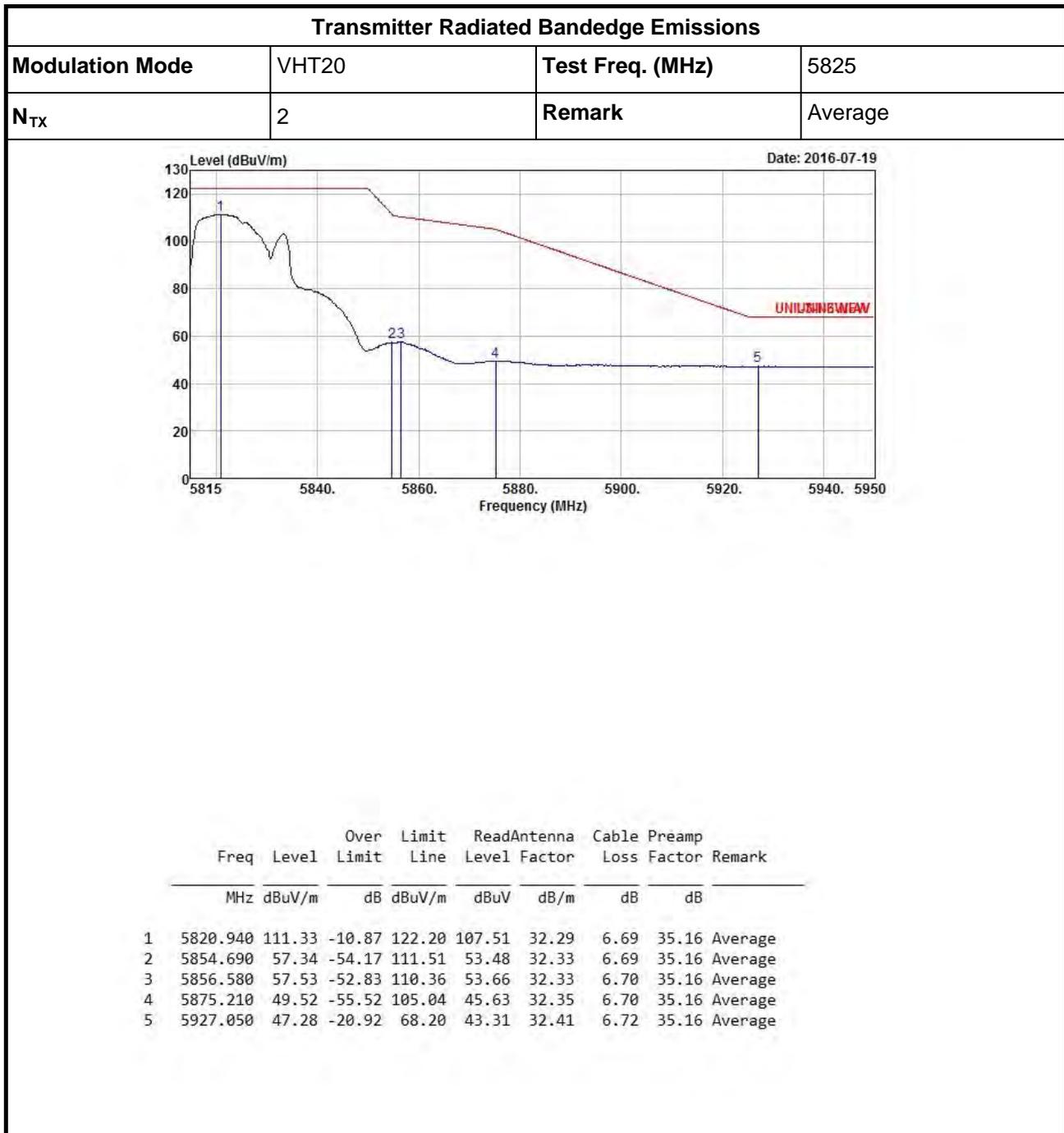


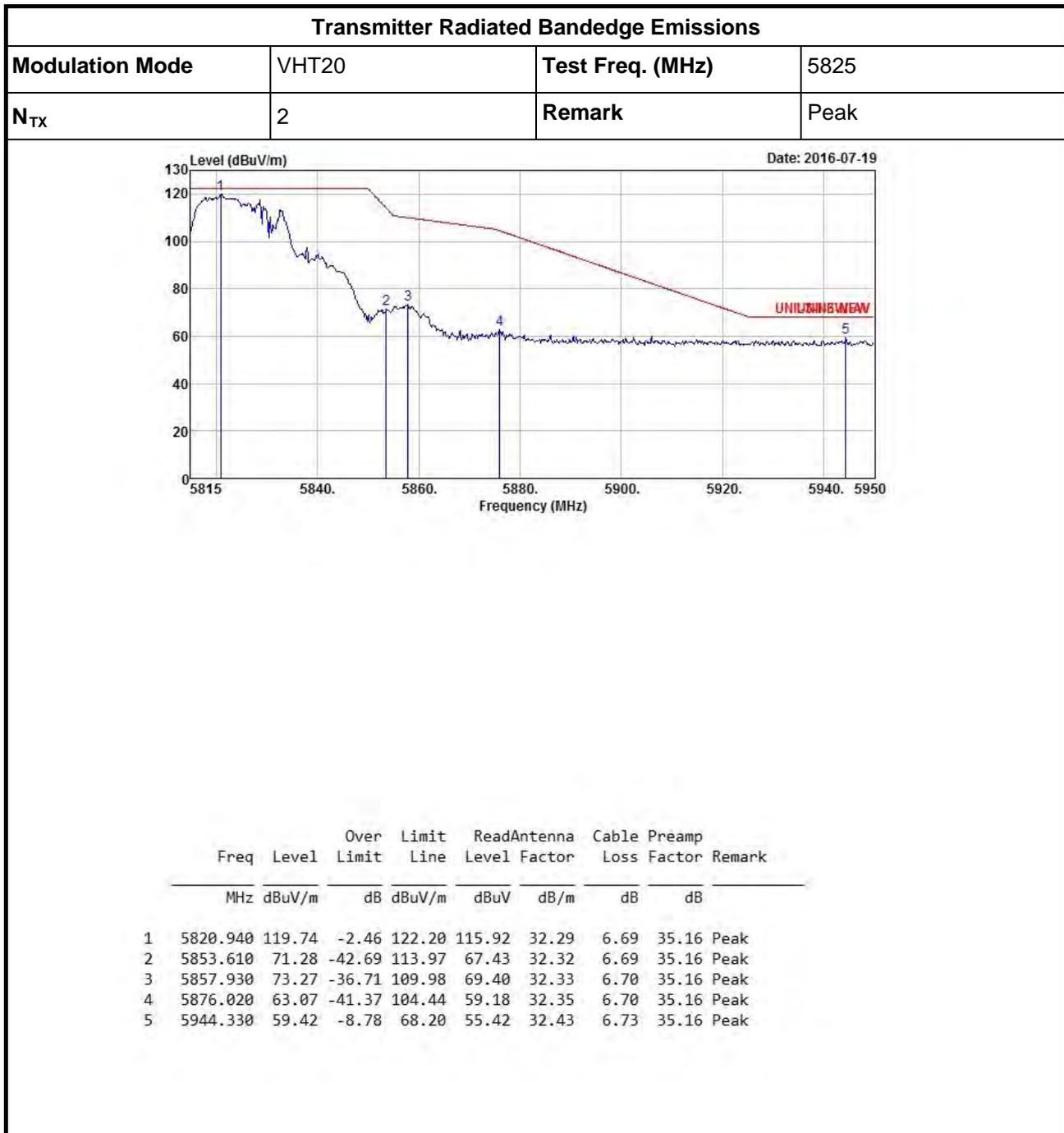


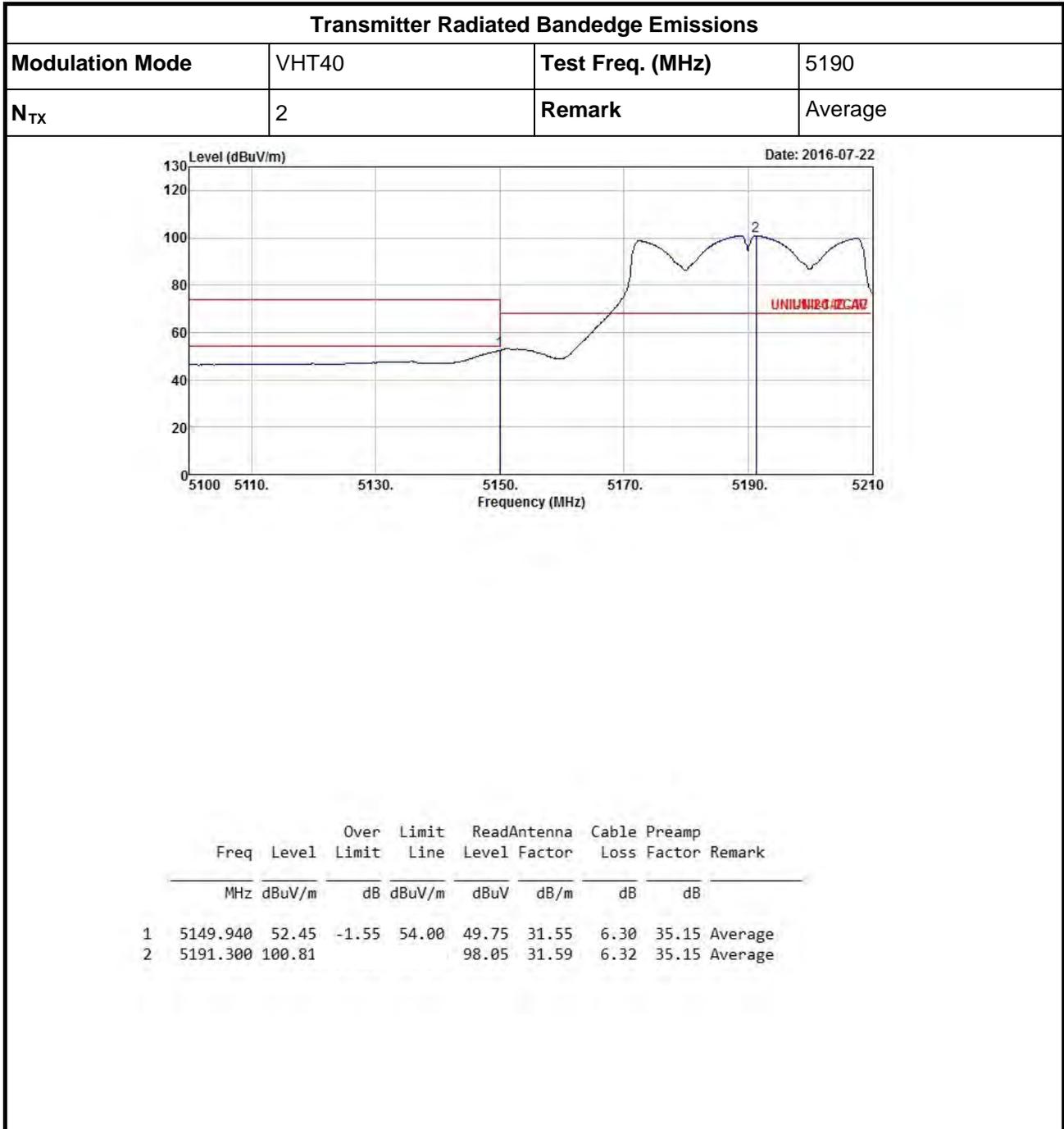


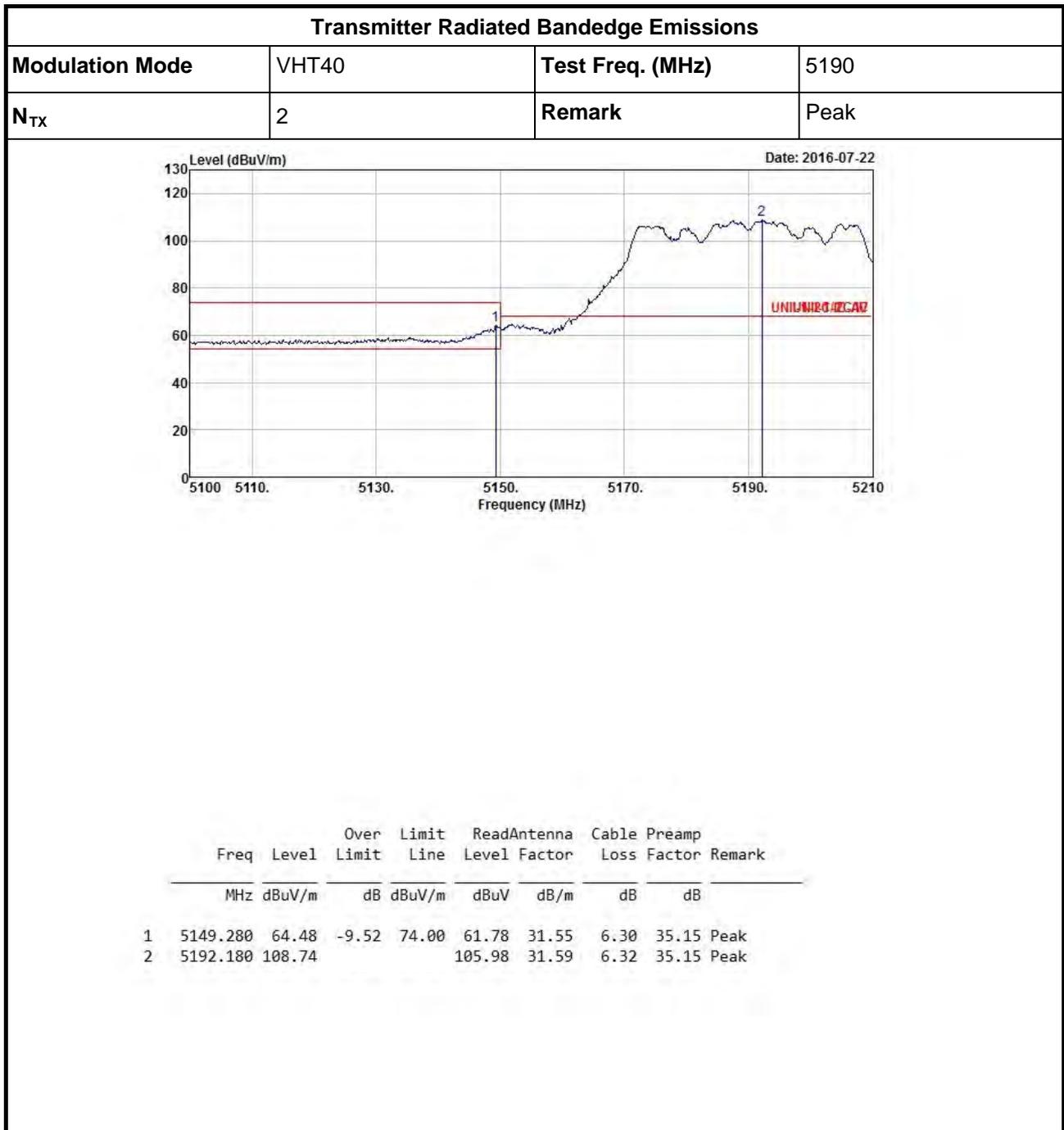


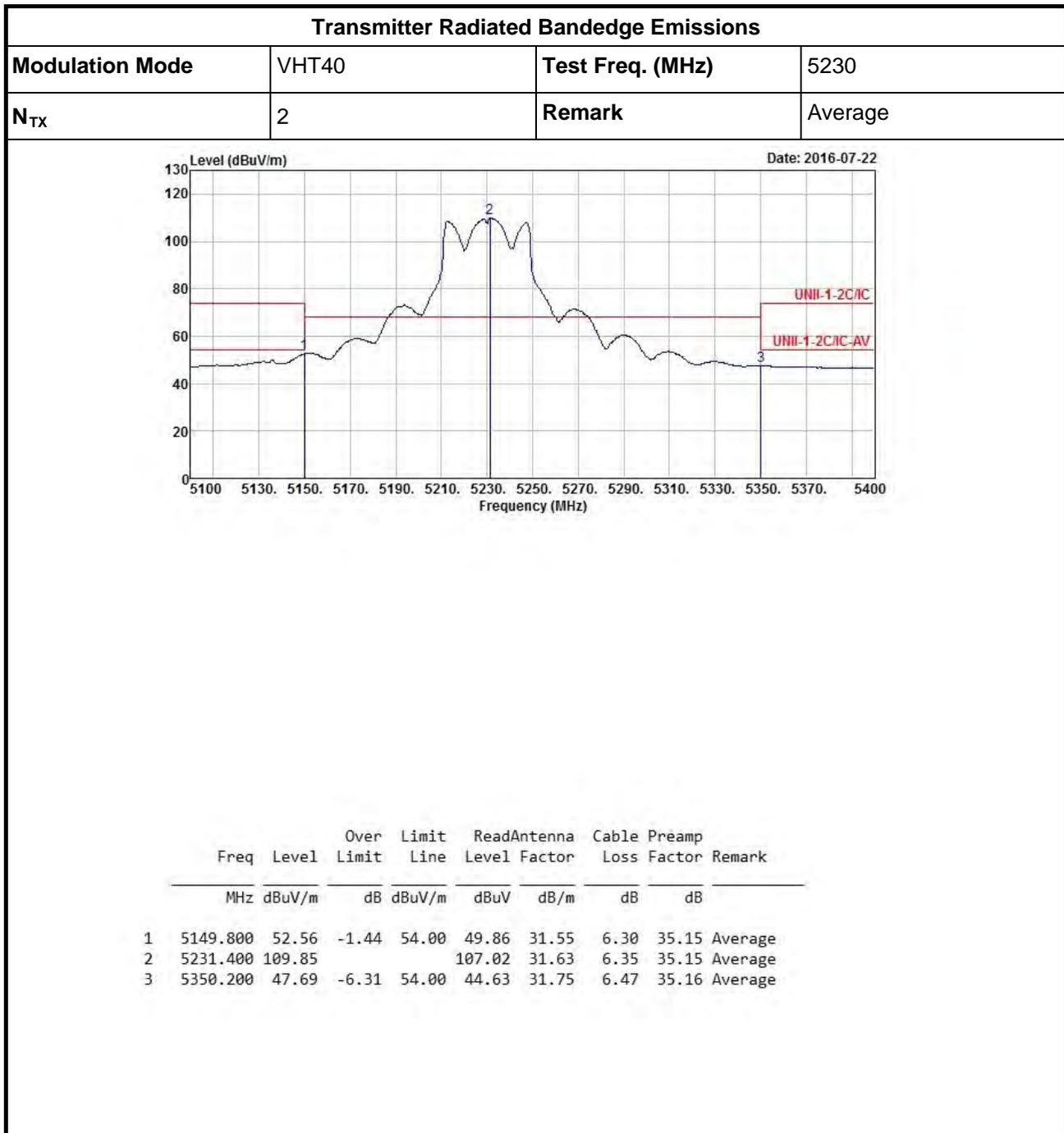


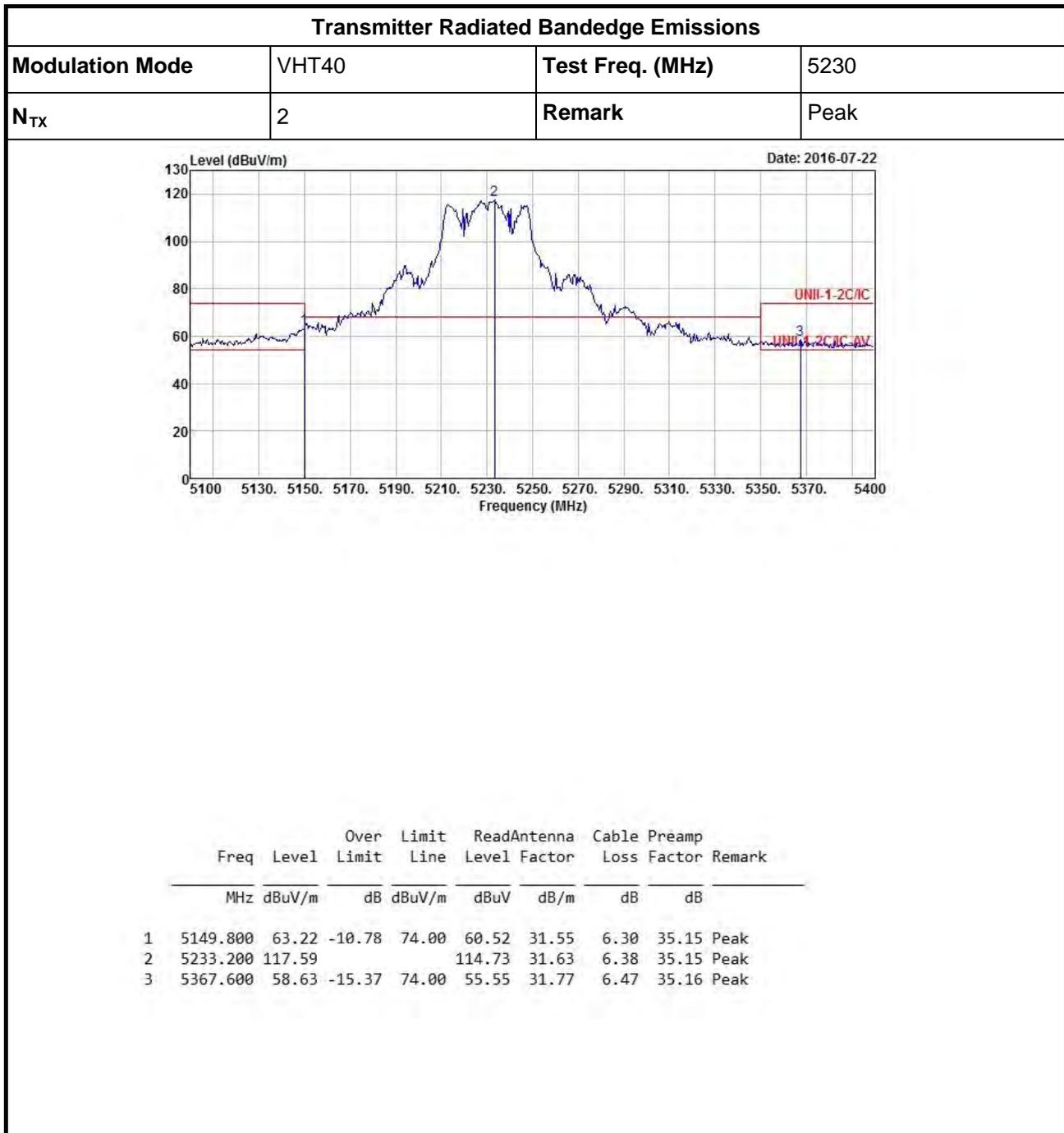


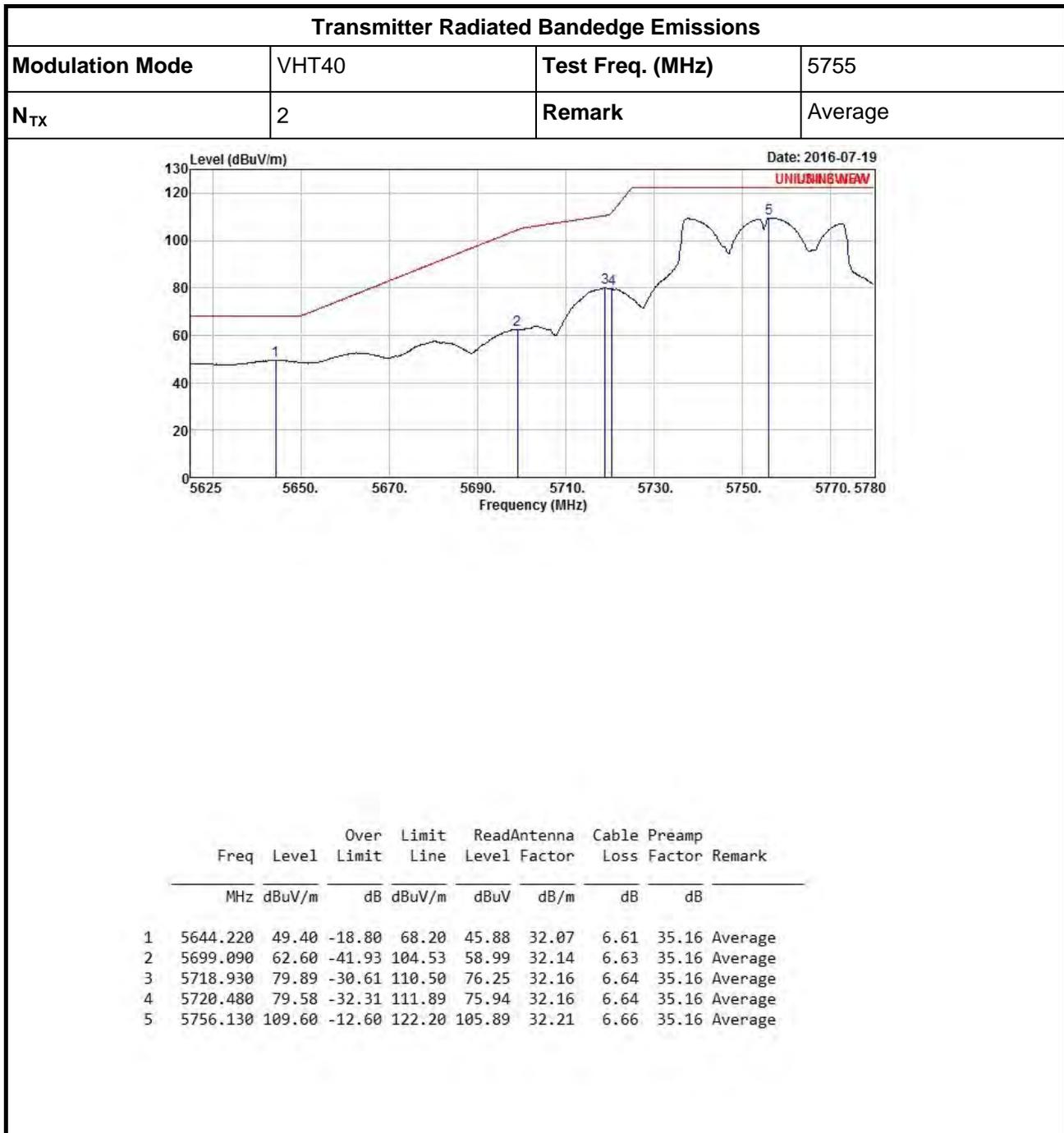


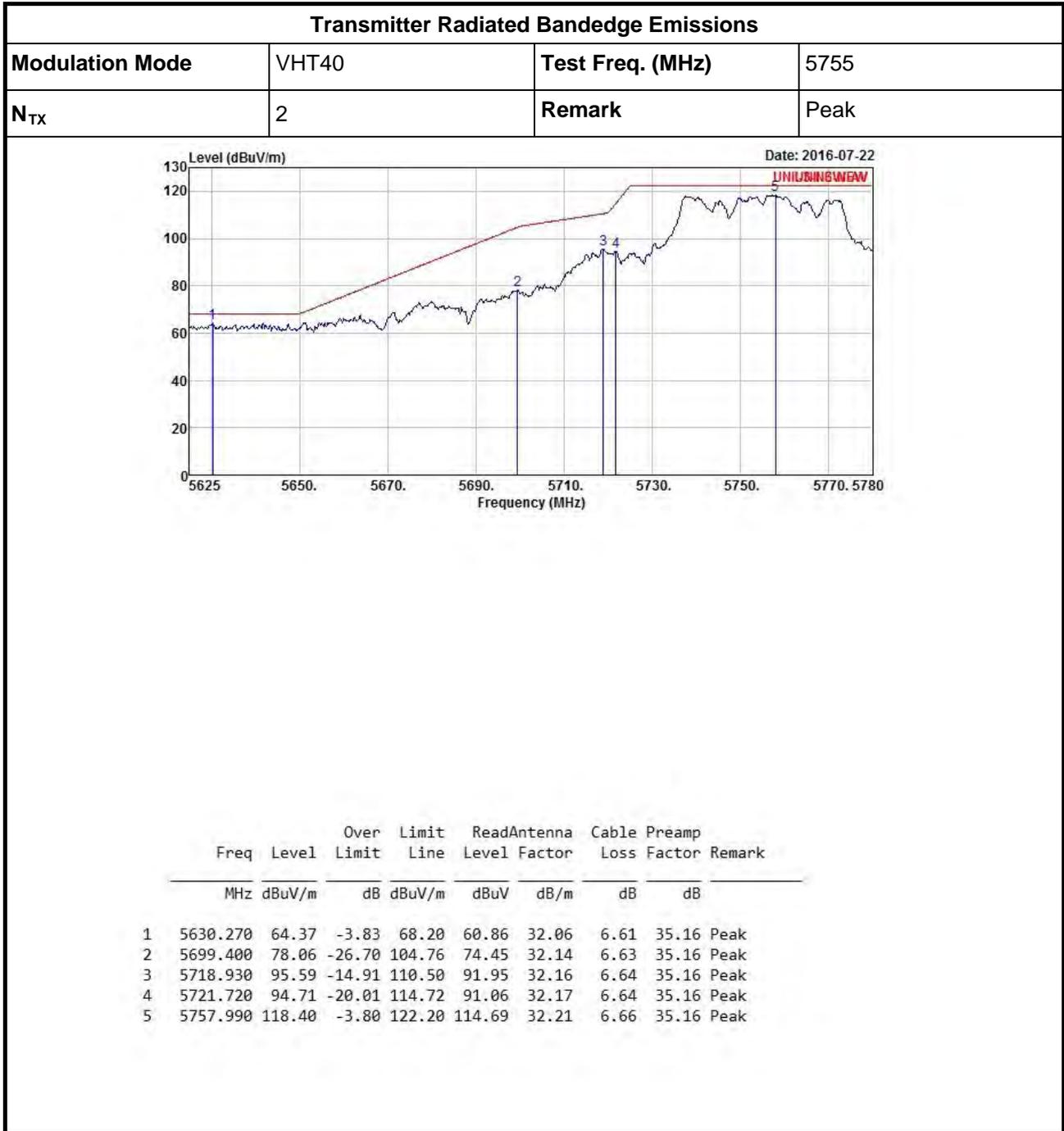


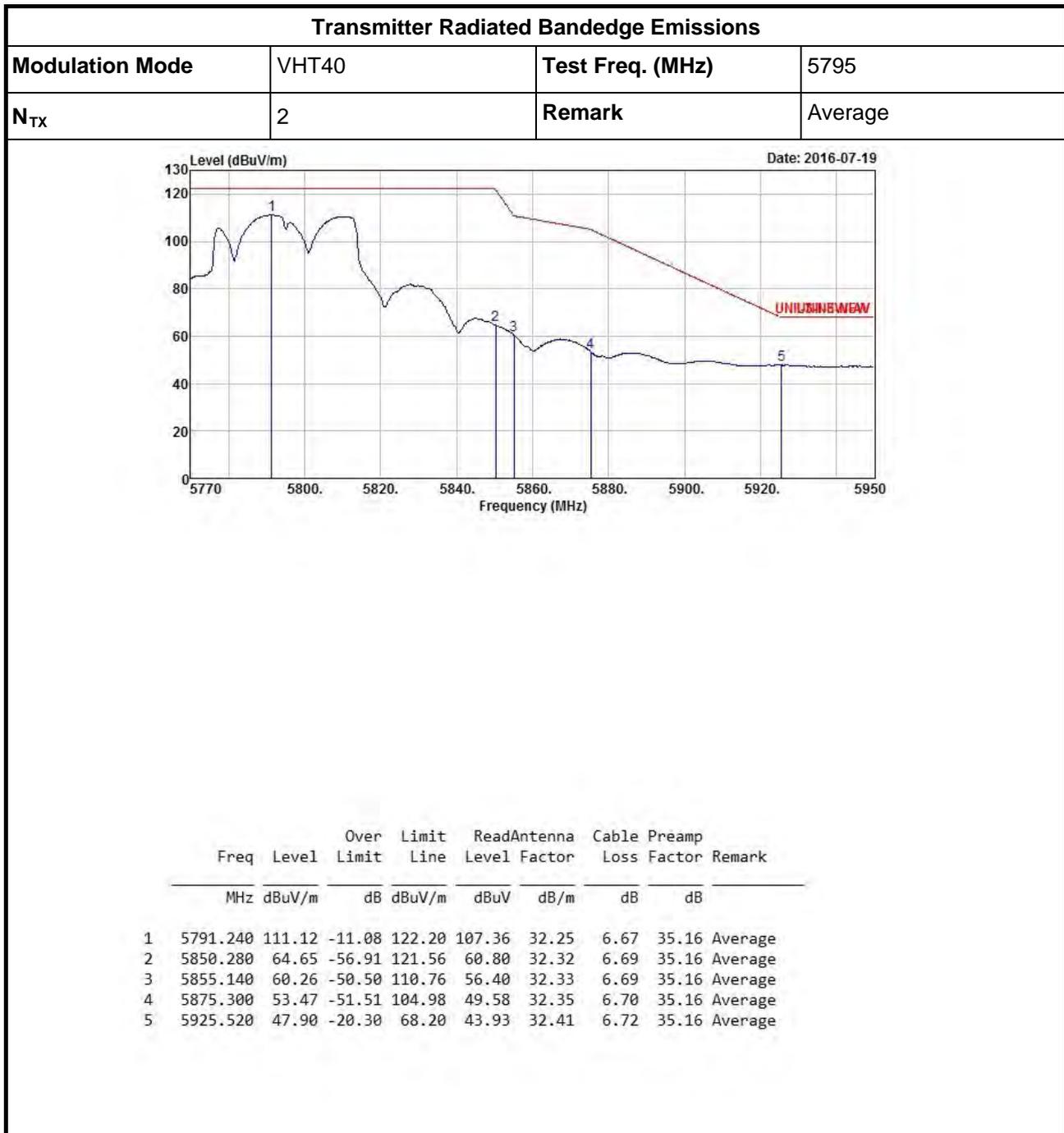


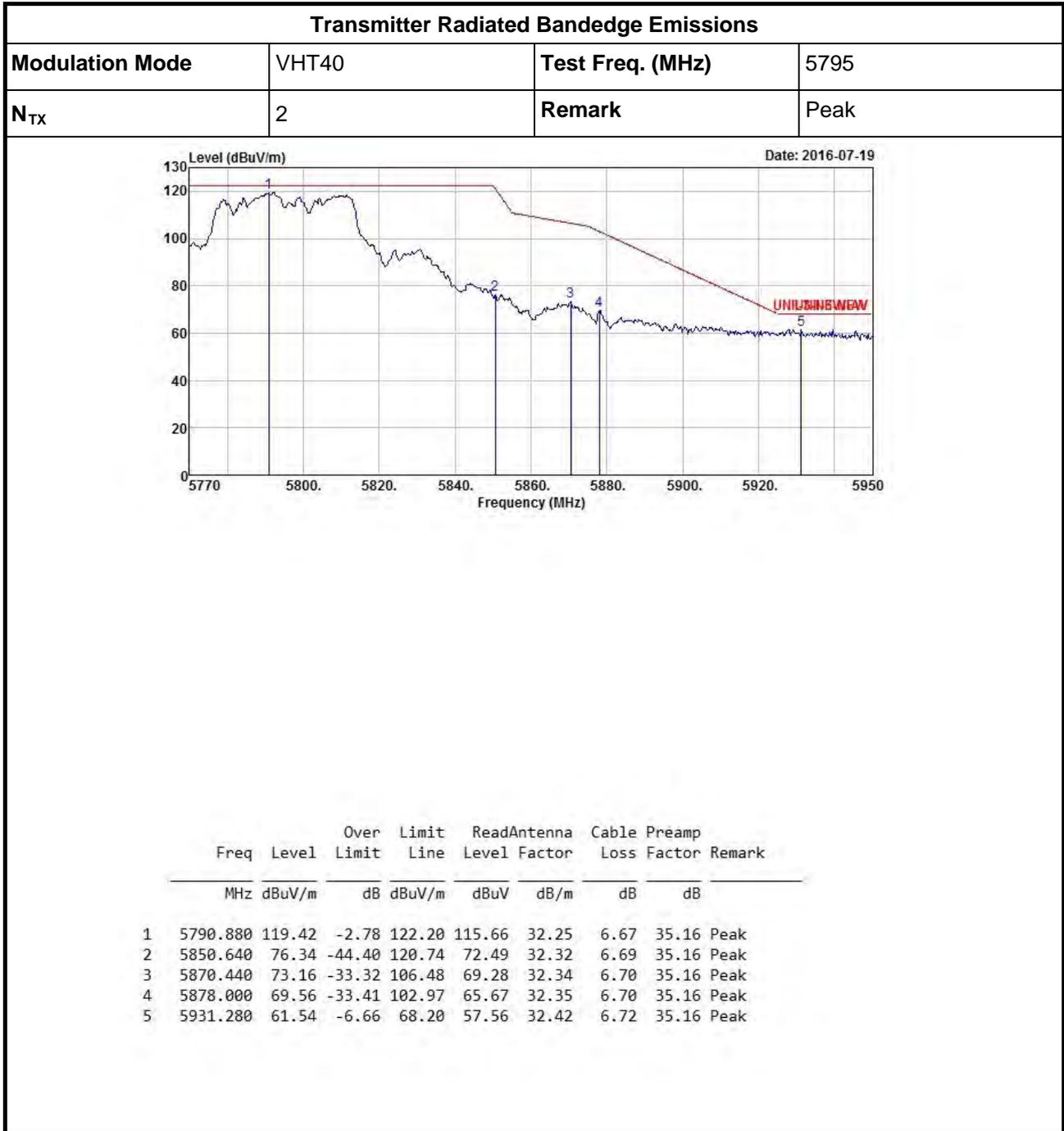


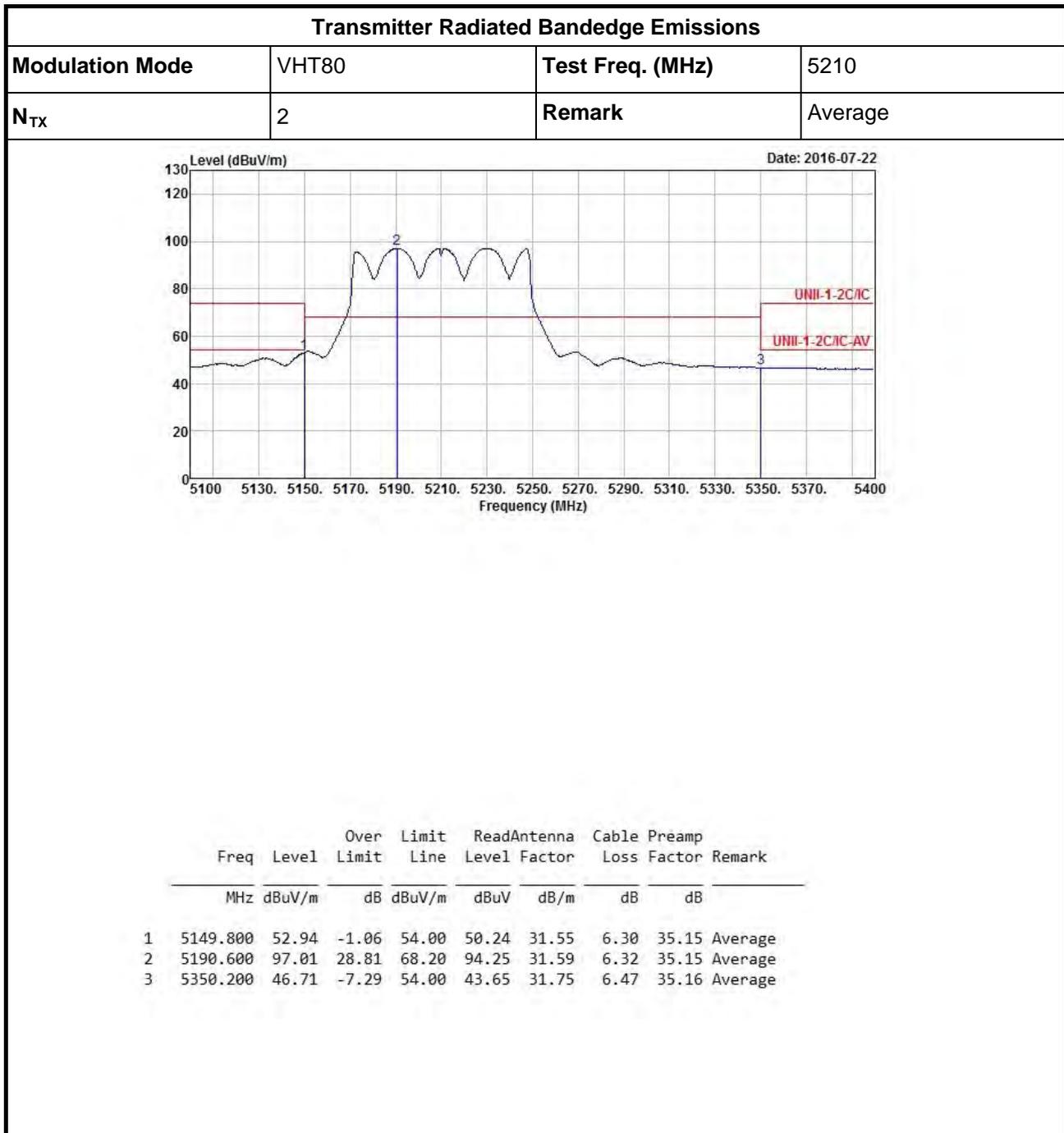


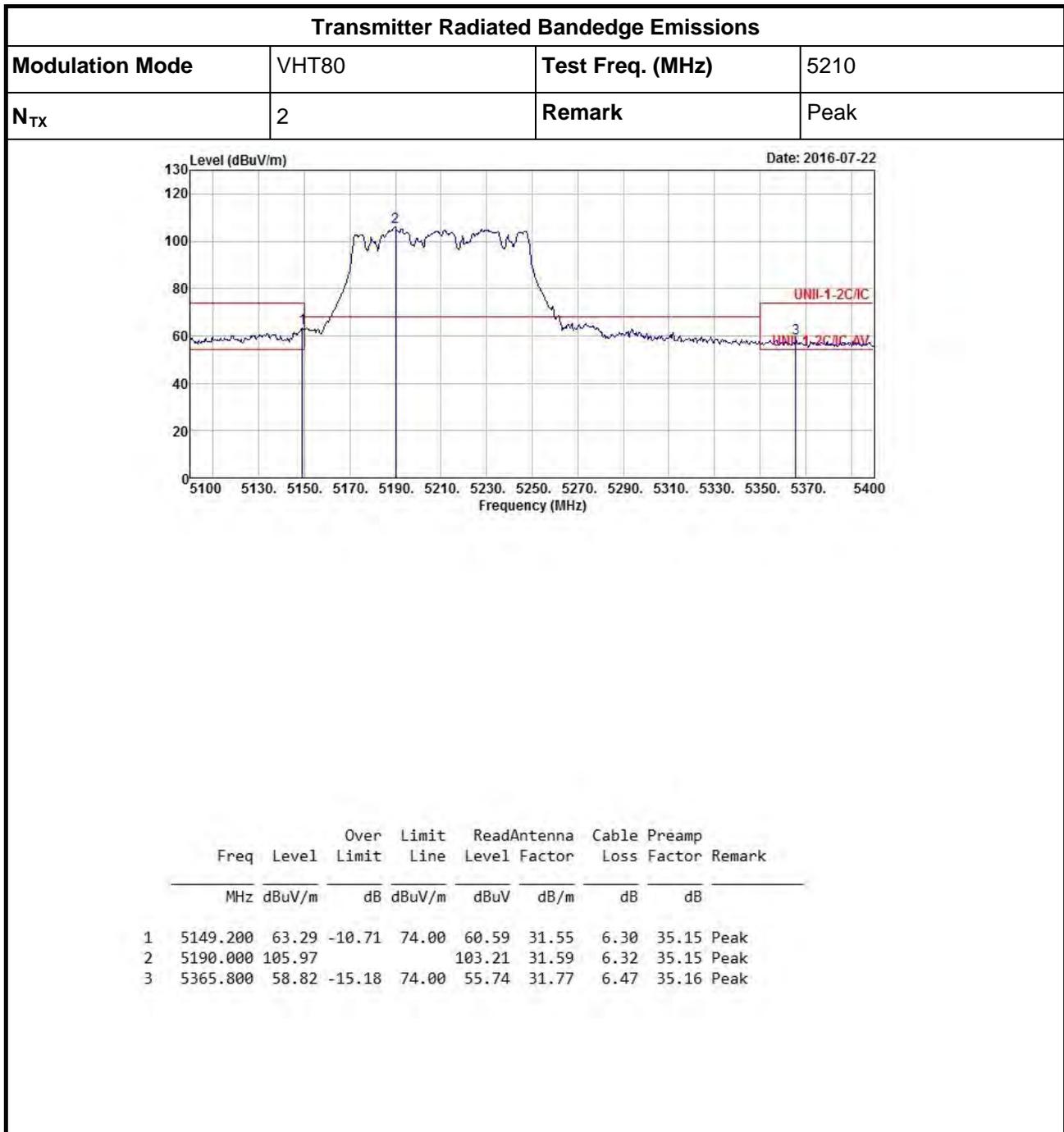


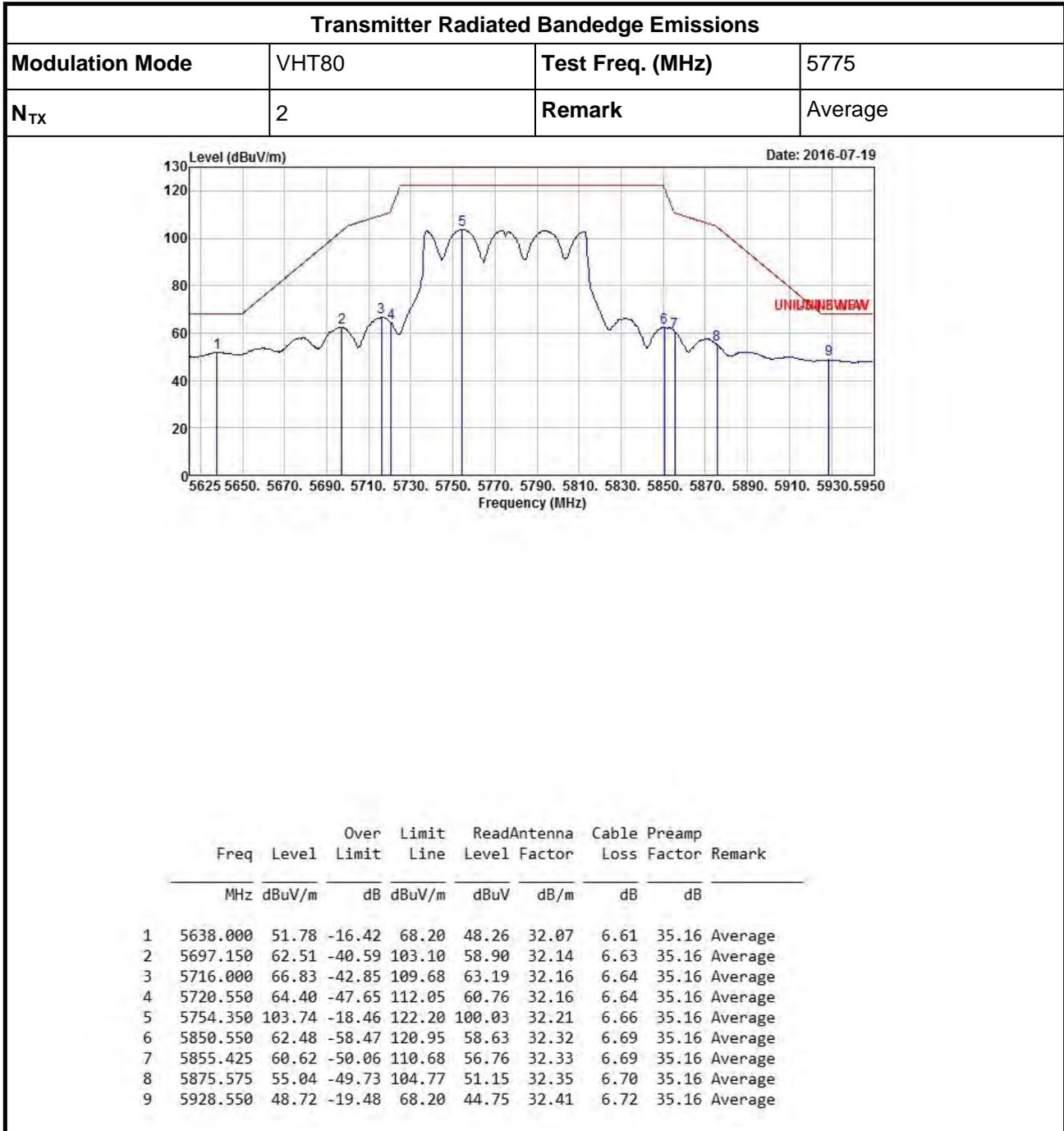


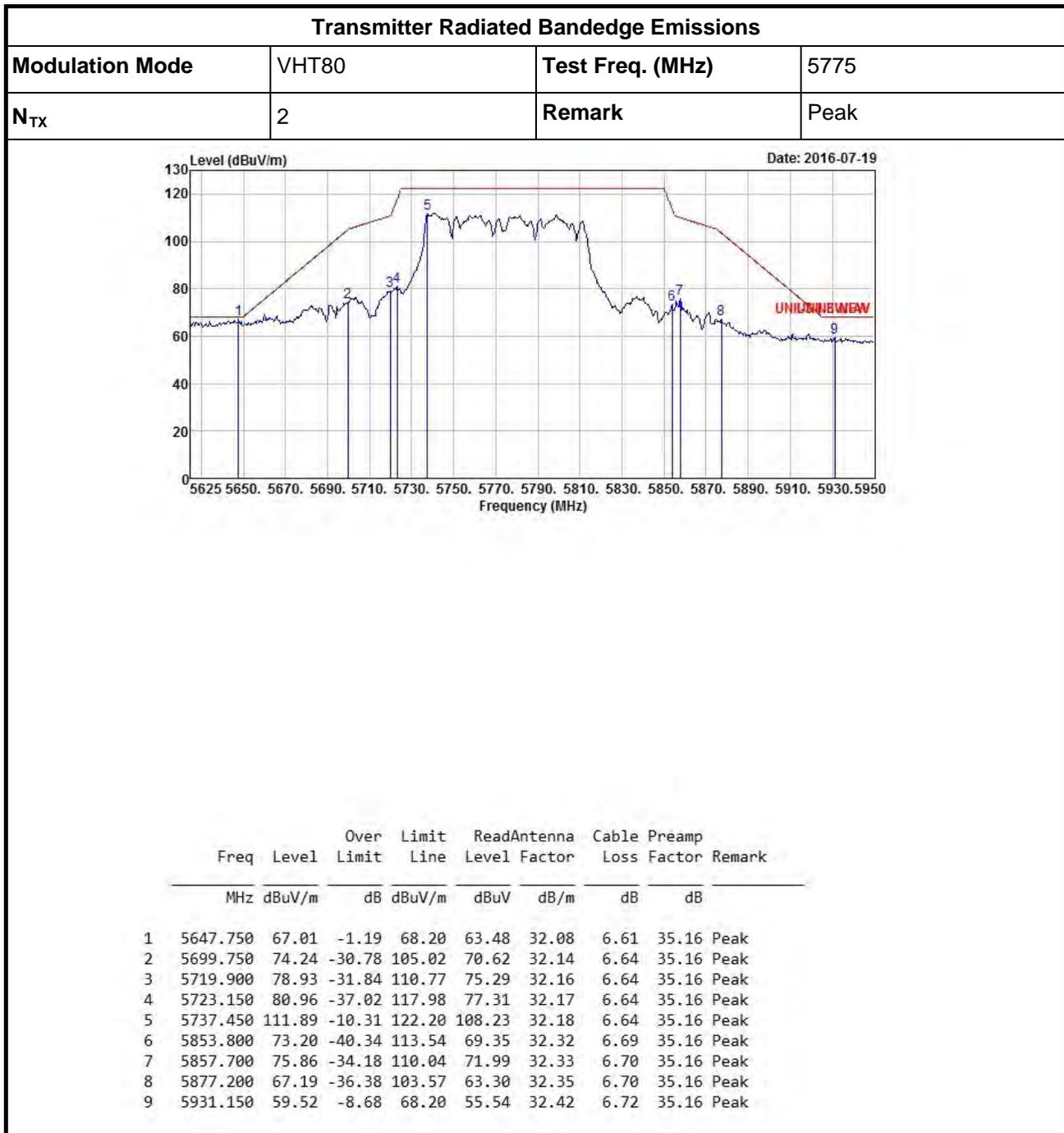








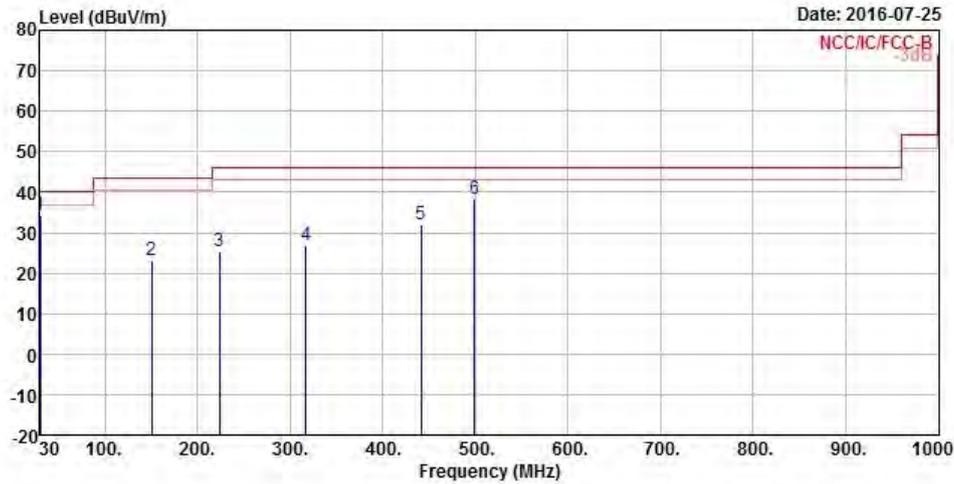






Transmitter Radiated Unwanted Emissions (Below 1GHz)

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

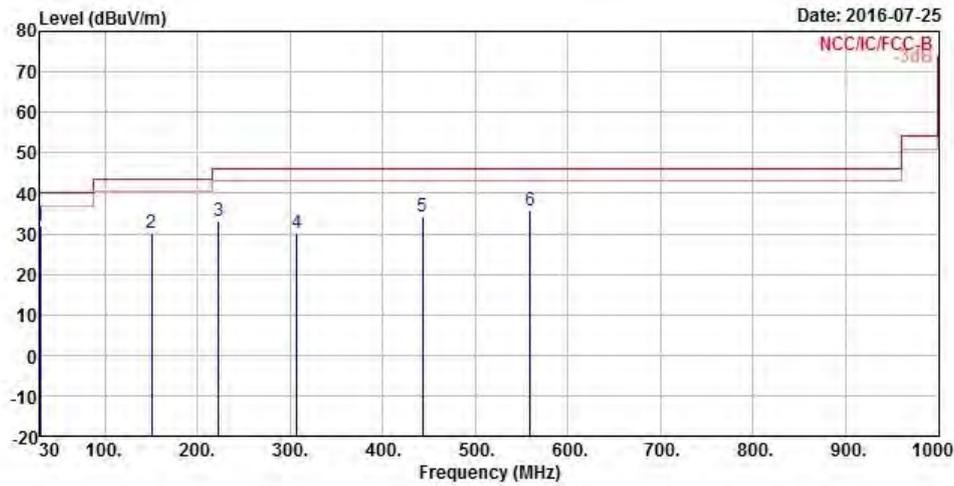


	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	30.000	34.23	-5.77	40.00	46.43	24.90	0.32	37.42	Peak
2	150.280	23.02	-20.48	43.50	42.34	16.59	0.69	36.60	Peak
3	224.000	25.41	-20.59	46.00	45.41	15.56	0.83	36.39	Peak
4	317.120	26.70	-19.30	46.00	42.83	19.31	1.00	36.44	Peak
5	441.280	32.11	-13.89	46.00	45.47	22.24	1.19	36.79	Peak
6	499.480	38.15	-7.85	46.00	50.55	23.29	1.29	36.98	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	1	Polarization	H
Operating Function	EUT with AC Adapter 1		



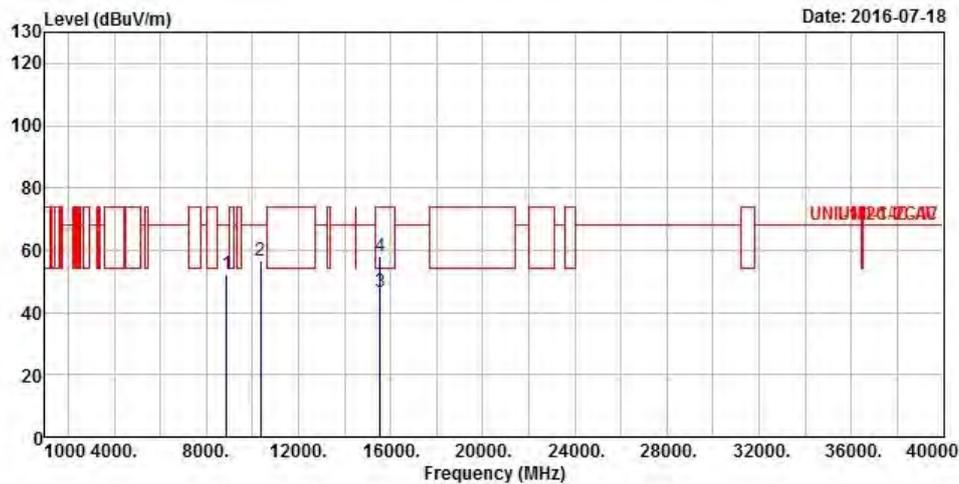
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	30.000	32.00	-8.00	40.00	44.20	24.90	0.32	37.42	Peak
2	150.280	30.01	-13.49	43.50	49.33	16.59	0.69	36.60	Peak
3	223.030	33.22	-12.78	46.00	53.31	15.47	0.83	36.39	Peak
4	307.420	30.31	-15.69	46.00	46.73	19.02	0.98	36.42	Peak
5	443.220	34.09	-11.91	46.00	47.42	22.28	1.19	36.80	Peak
6	559.620	35.63	-10.37	46.00	47.39	24.03	1.36	37.15	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.



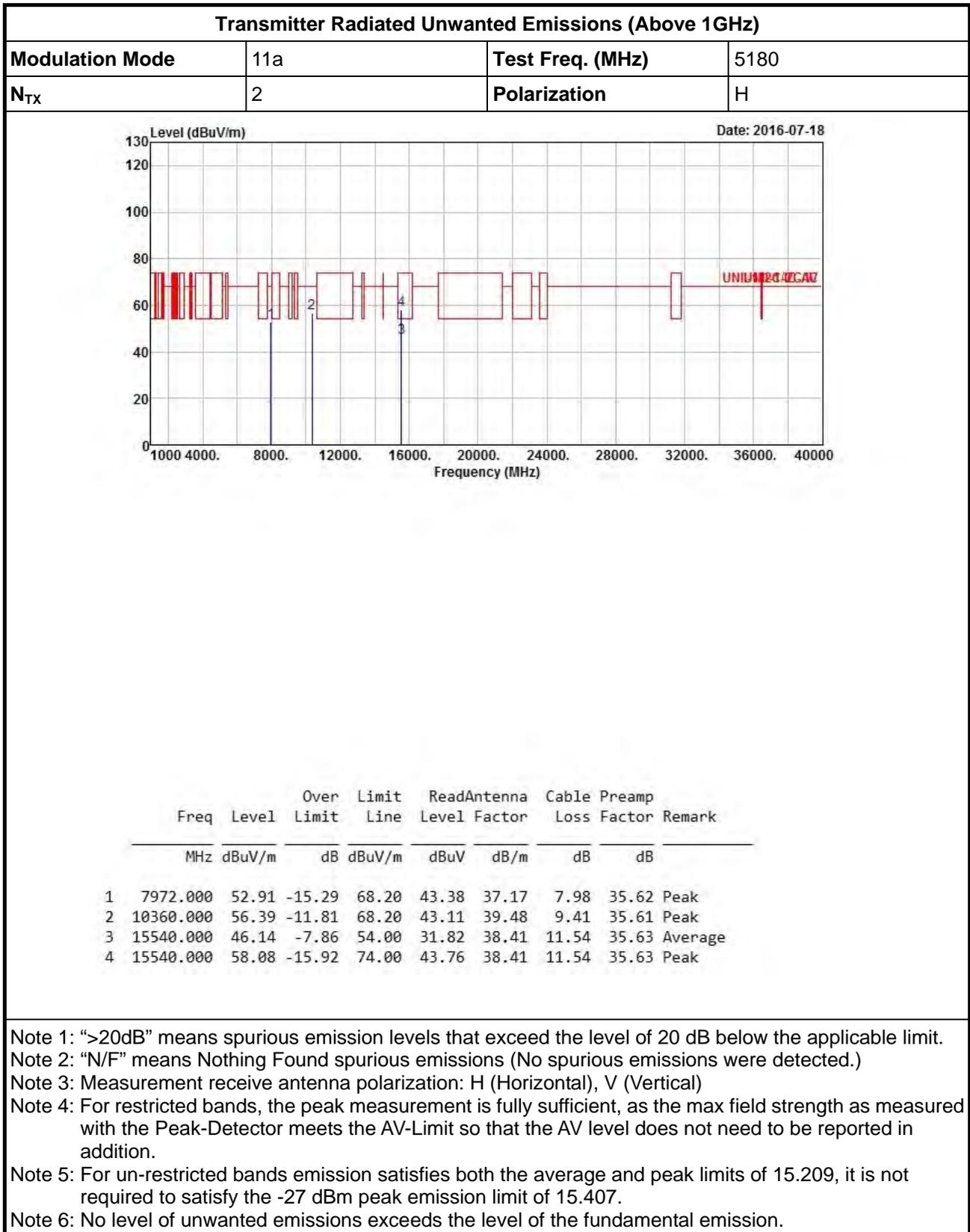
Transmitter Radiated Unwanted Emissions (Above 1GHz) for 5150-5250MHz

Transmitter Radiated Unwanted Emissions (Above 1GHz)			
Modulation Mode	11a	Test Freq. (MHz)	5180
N _{TX}	2	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	8888.000	52.28	-15.92	68.20	42.44	37.27	8.30	35.73	Peak
2	10360.000	56.49	-11.71	68.20	43.21	39.48	9.41	35.61	Peak
3	15540.000	46.35	-7.65	54.00	32.03	38.41	11.54	35.63	Average
4	15540.000	58.24	-15.76	74.00	43.92	38.41	11.54	35.63	Peak

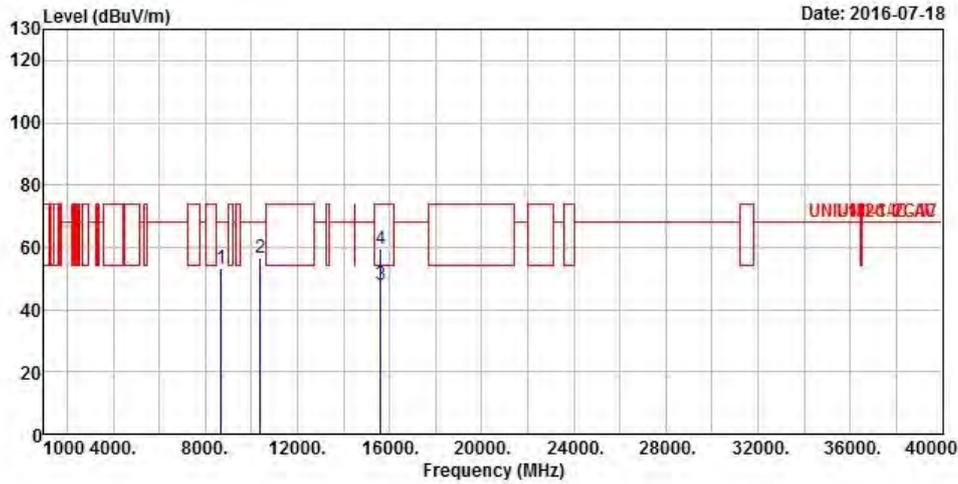
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted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





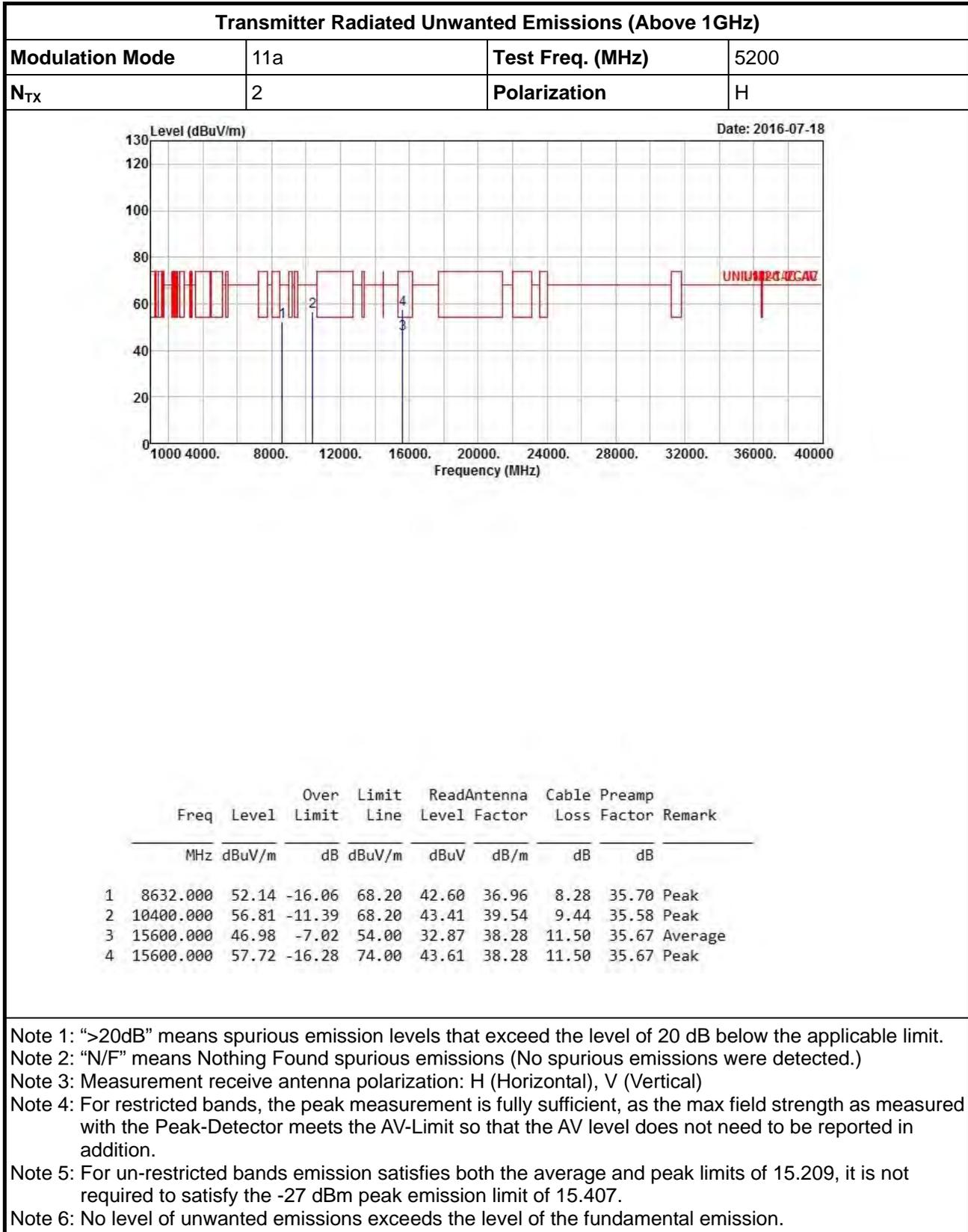
Transmitter Radiated Unwanted Emissions (Above 1GHz)

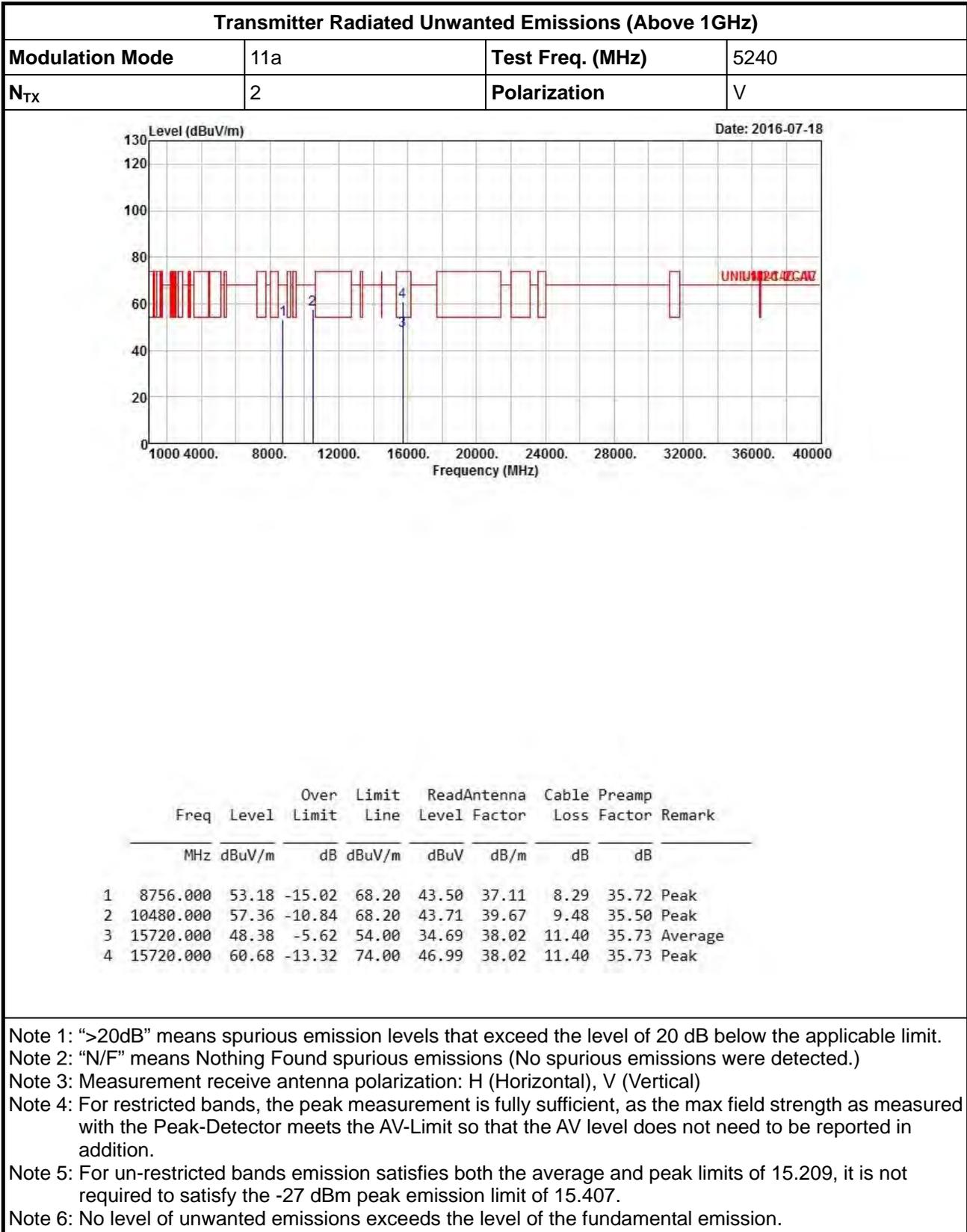
Modulation Mode	11a	Test Freq. (MHz)	5200
N _{TX}	2	Polarization	V

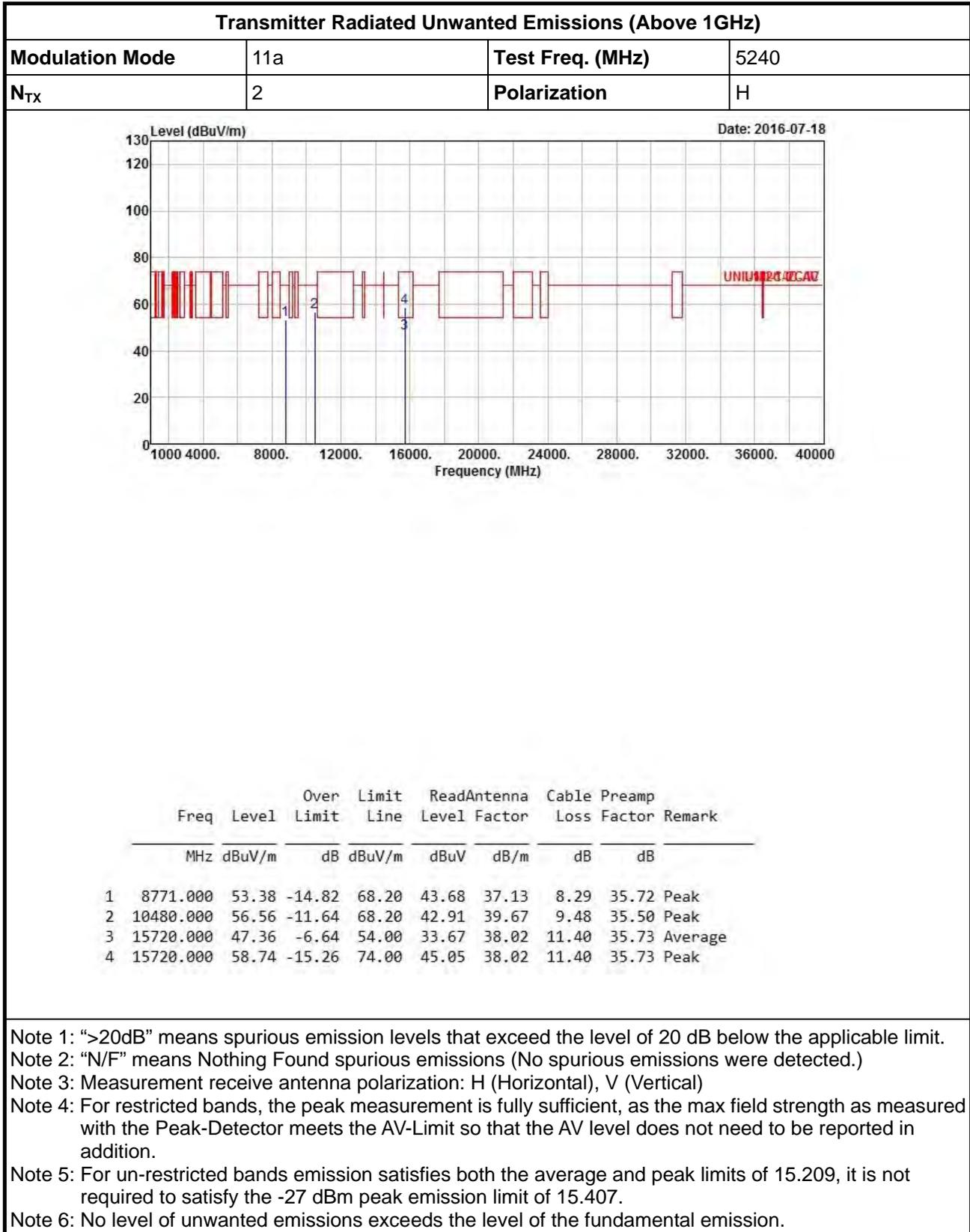


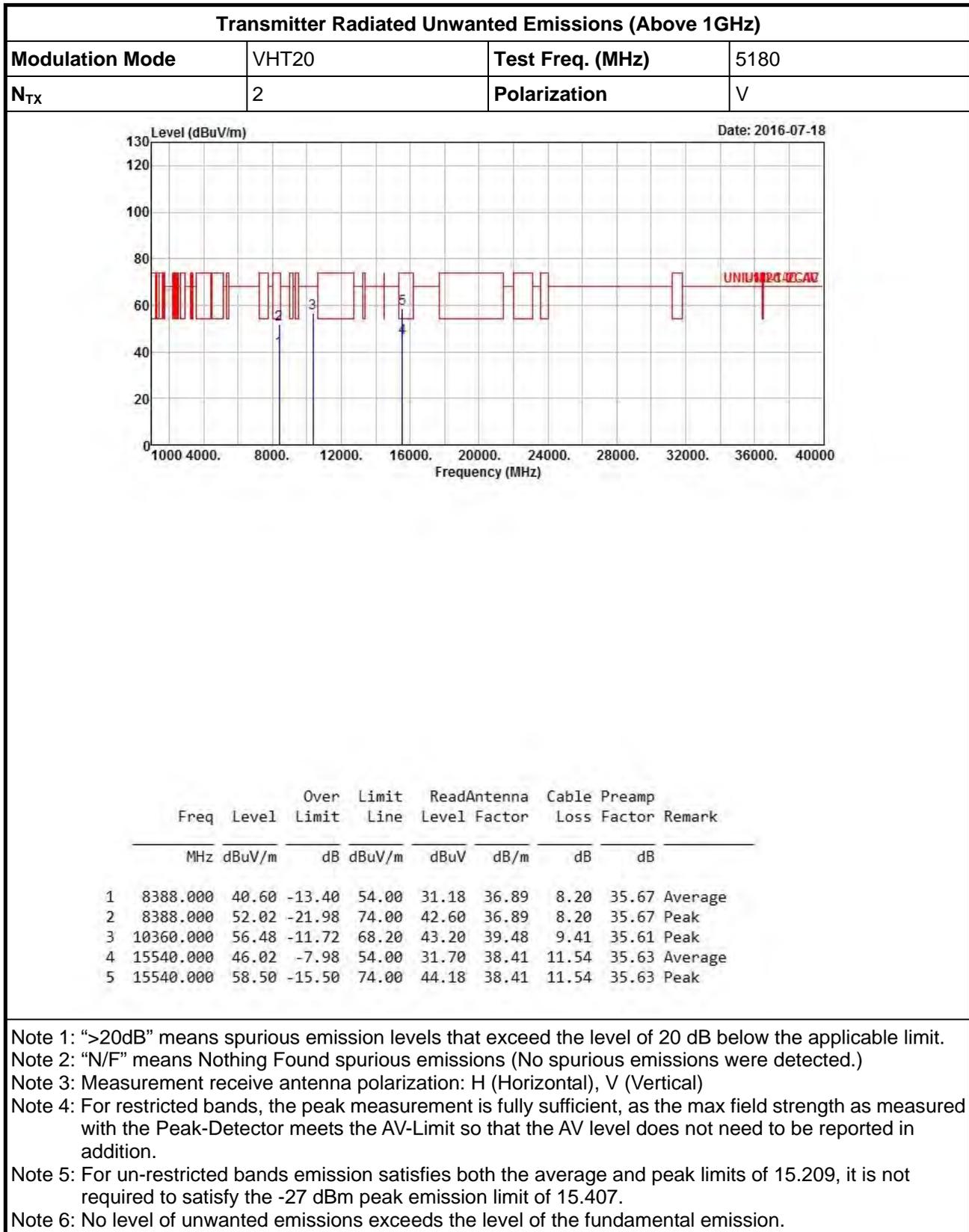
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8680.000	53.10	-15.10	68.20	43.50	37.02	8.29	35.71	Peak
2	10400.000	56.71	-11.49	68.20	43.31	39.54	9.44	35.58	Peak
3	15600.000	47.79	-6.21	54.00	33.68	38.28	11.50	35.67	Average
4	15600.000	59.53	-14.47	74.00	45.42	38.28	11.50	35.67	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.





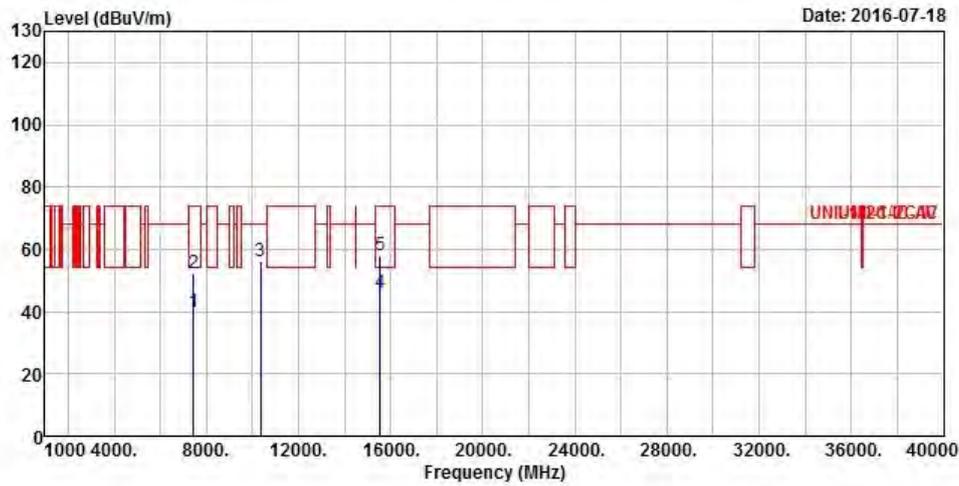






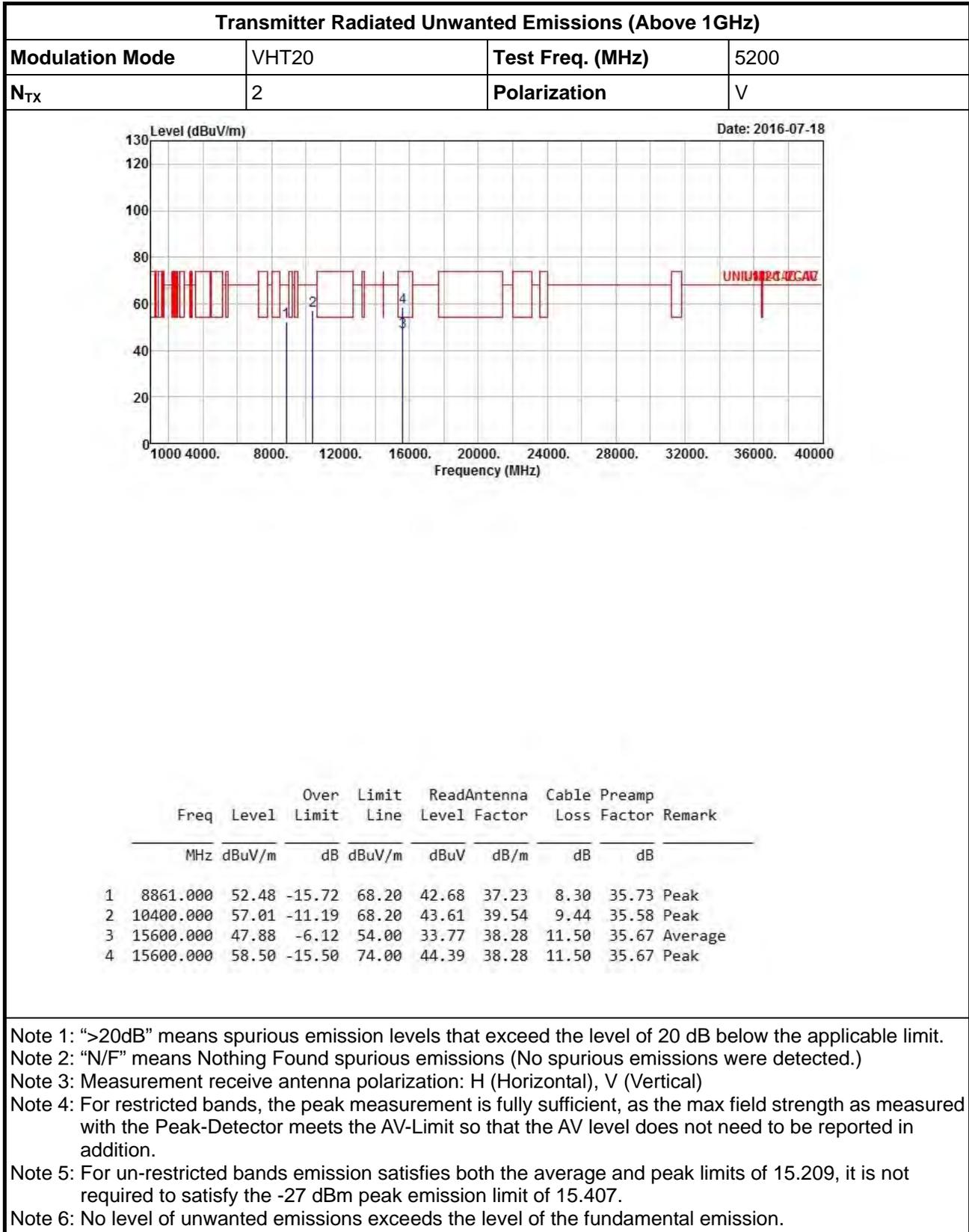
Transmitter Radiated Unwanted Emissions (Above 1GHz)

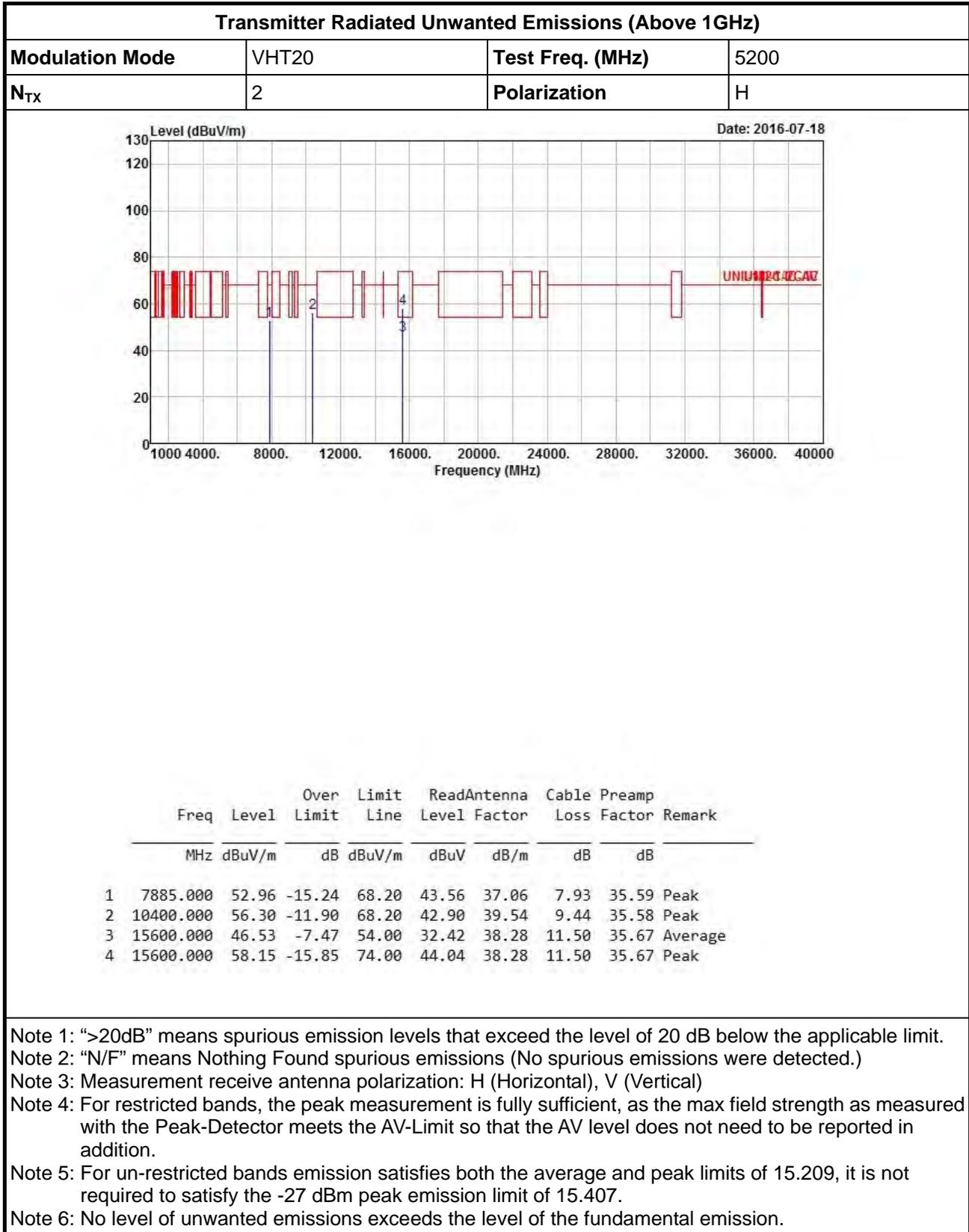
Modulation Mode	VHT20	Test Freq. (MHz)	5180
N _{TX}	2	Polarization	H



	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	7439.000	39.94	-14.06	54.00	31.29	36.44	7.64	35.43	Average
2	7439.000	52.24	-21.76	74.00	43.59	36.44	7.64	35.43	Peak
3	10360.000	56.17	-12.03	68.20	42.89	39.48	9.41	35.61	Peak
4	15540.000	45.87	-8.13	54.00	31.55	38.41	11.54	35.63	Average
5	15540.000	58.00	-16.00	74.00	43.68	38.41	11.54	35.63	Peak

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

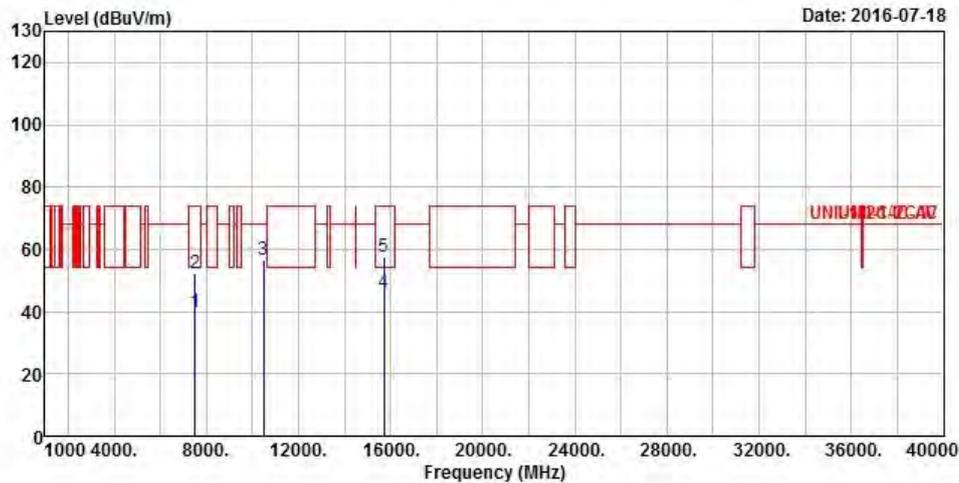






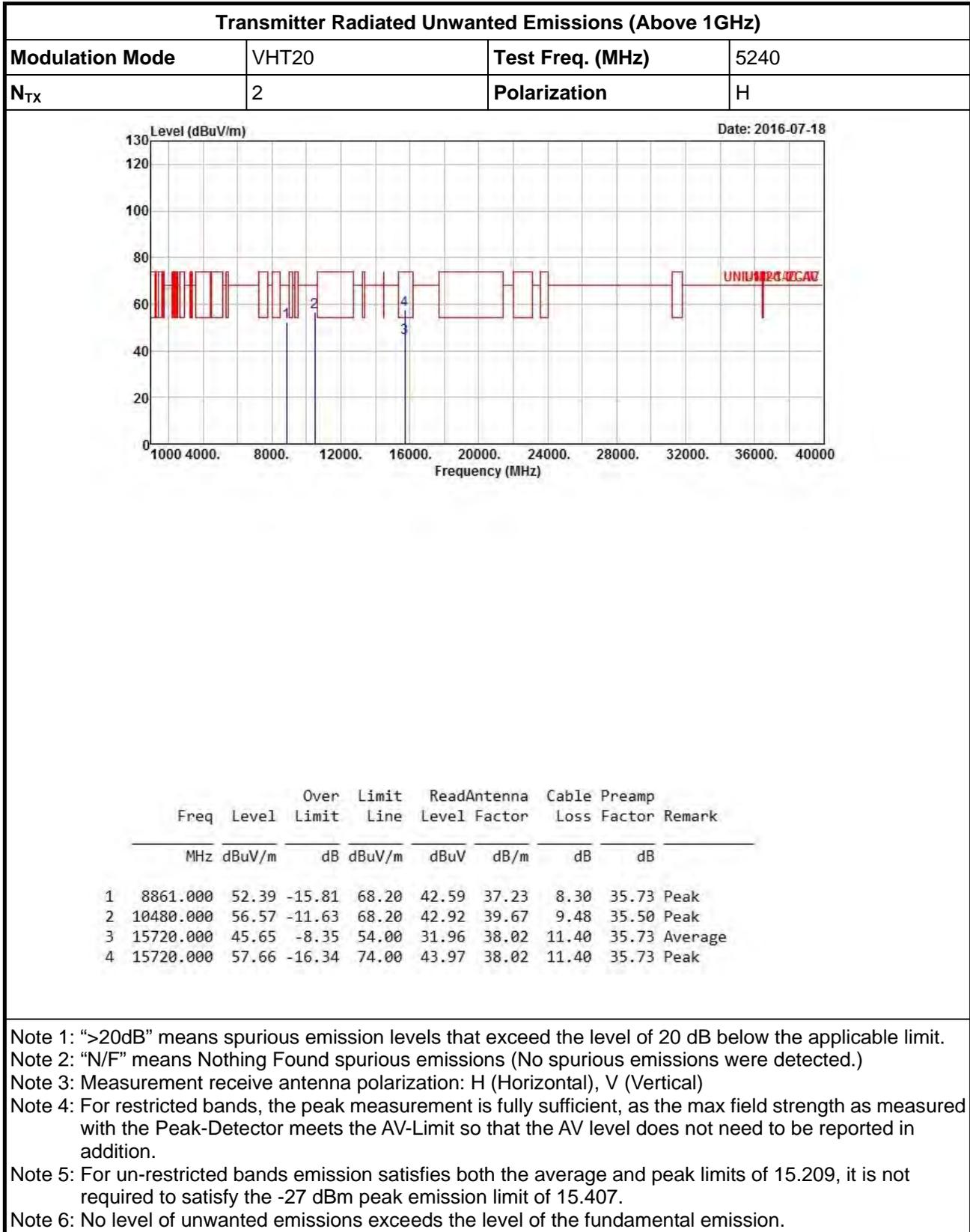
Transmitter Radiated Unwanted Emissions (Above 1GHz)

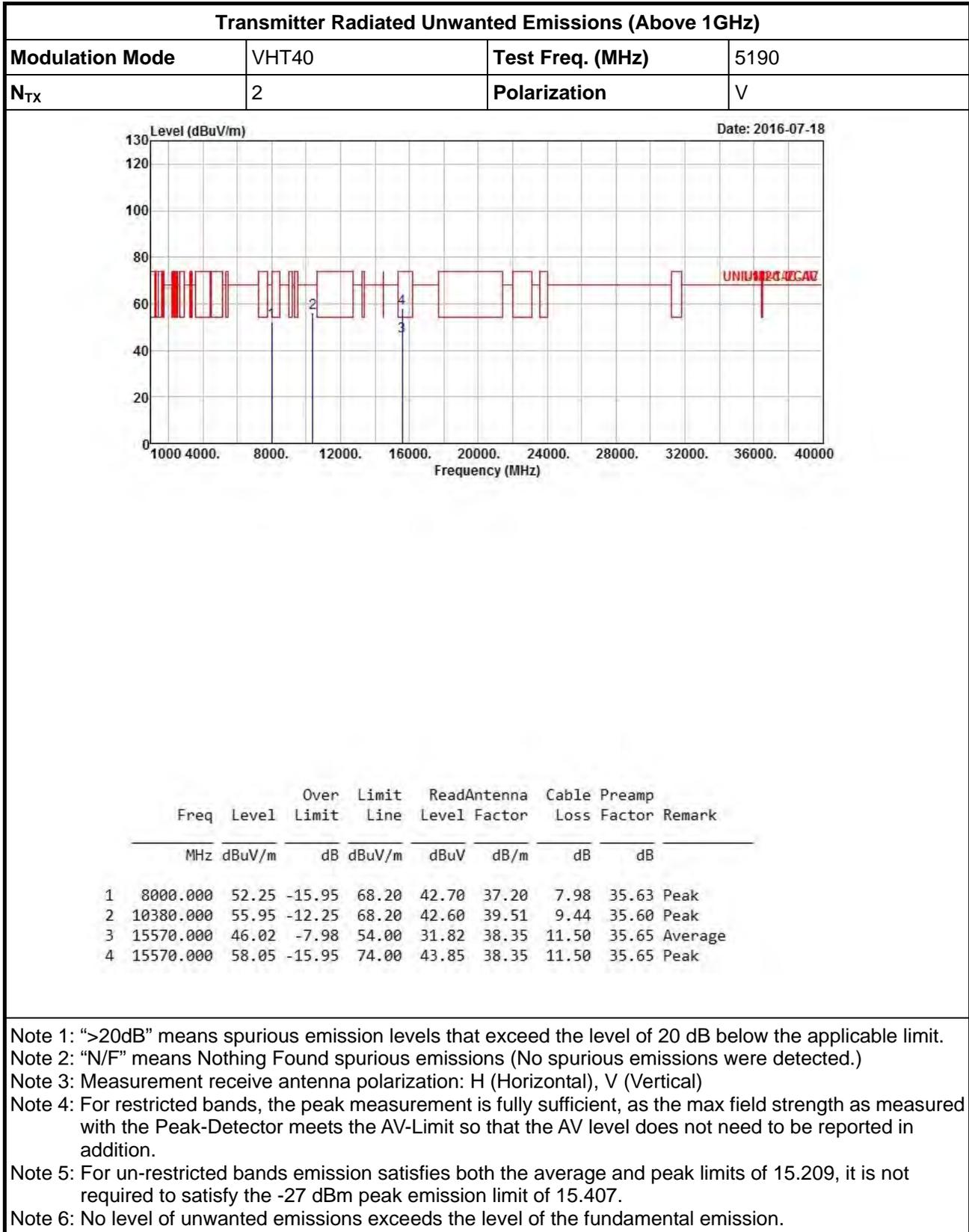
Modulation Mode	VHT20	Test Freq. (MHz)	5240
N _{TX}	2	Polarization	V



	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	7522.000	40.04	-13.96	54.00	31.19	36.63	7.67	35.45	Average
2	7522.000	52.34	-21.66	74.00	43.49	36.63	7.67	35.45	Peak
3	10480.000	56.53	-11.67	68.20	42.88	39.67	9.48	35.50	Peak
4	15720.000	45.88	-8.12	54.00	32.19	38.02	11.40	35.73	Average
5	15720.000	57.44	-16.56	74.00	43.75	38.02	11.40	35.73	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.

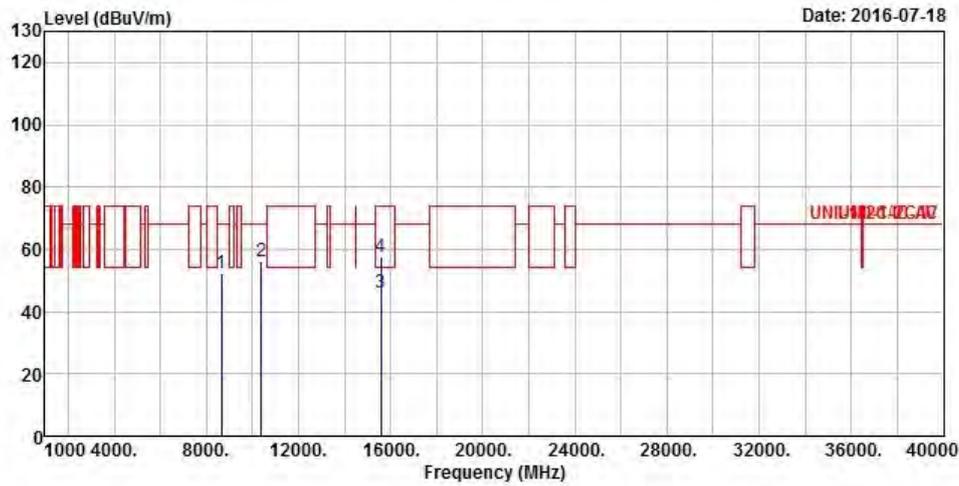






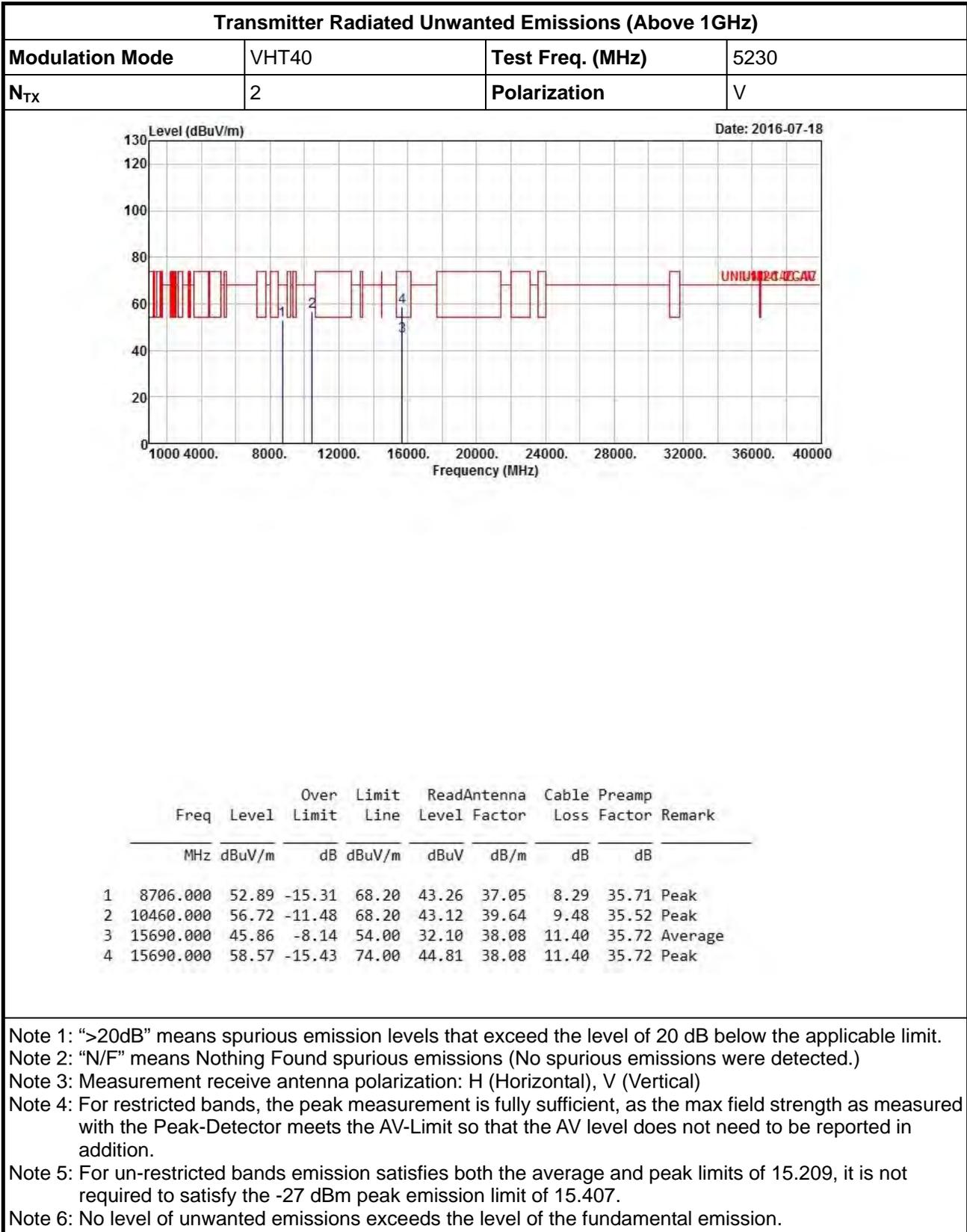
Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	VHT40	Test Freq. (MHz)	5190
N _{TX}	2	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	8664.000	52.18	-16.02	68.20	42.59	37.00	8.29	35.70	Peak
2	10380.000	56.06	-12.14	68.20	42.71	39.51	9.44	35.60	Peak
3	15570.000	45.95	-8.05	54.00	31.75	38.35	11.50	35.65	Average
4	15570.000	57.75	-16.25	74.00	43.55	38.35	11.50	35.65	Peak

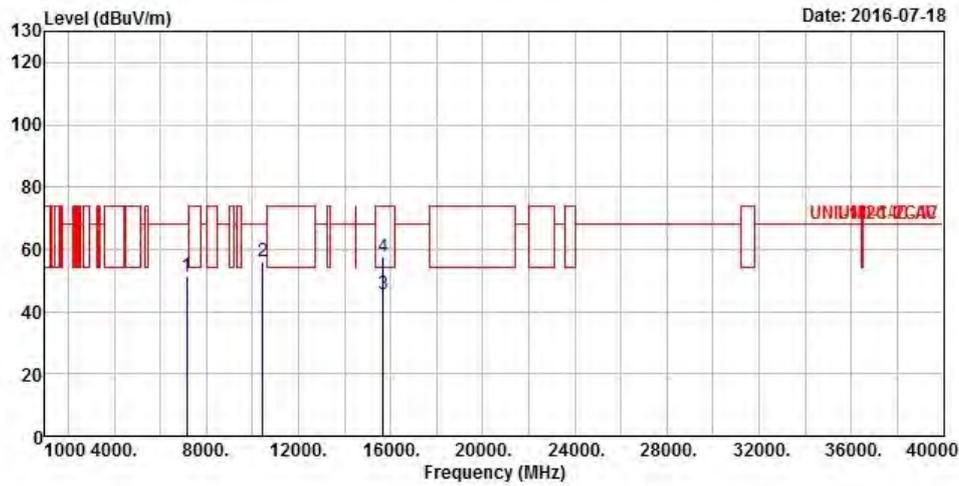
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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)	5230
N _{TX}	2	Polarization	H



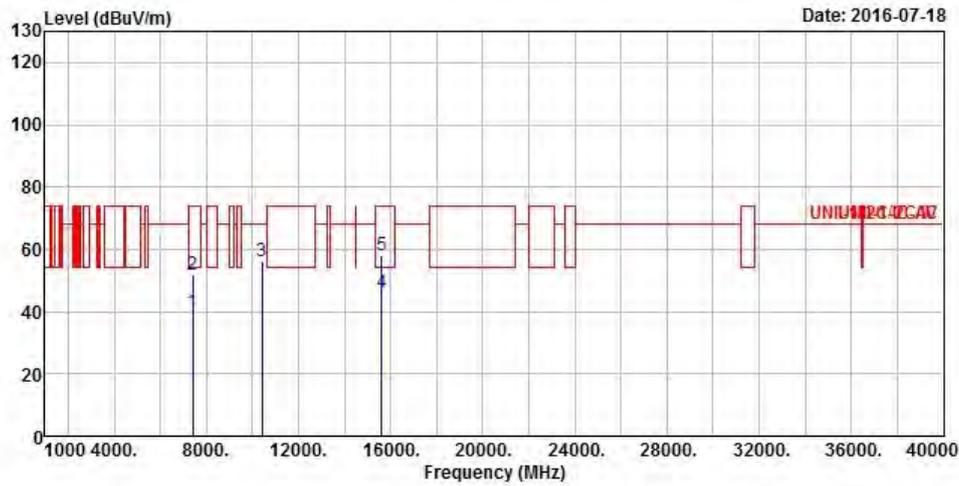
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Loss	Preamp Factor	Remark
	MHz	dBUV/m	dB	dBUV/m	dBuV	dB/m	dB	dB
1	7158.000	51.54	-16.66	68.20	43.69	35.71	7.55	35.41 Peak
2	10460.000	56.36	-11.84	68.20	42.76	39.64	9.48	35.52 Peak
3	15690.000	45.57	-8.43	54.00	31.81	38.08	11.40	35.72 Average
4	15690.000	57.78	-16.22	74.00	44.02	38.08	11.40	35.72 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.



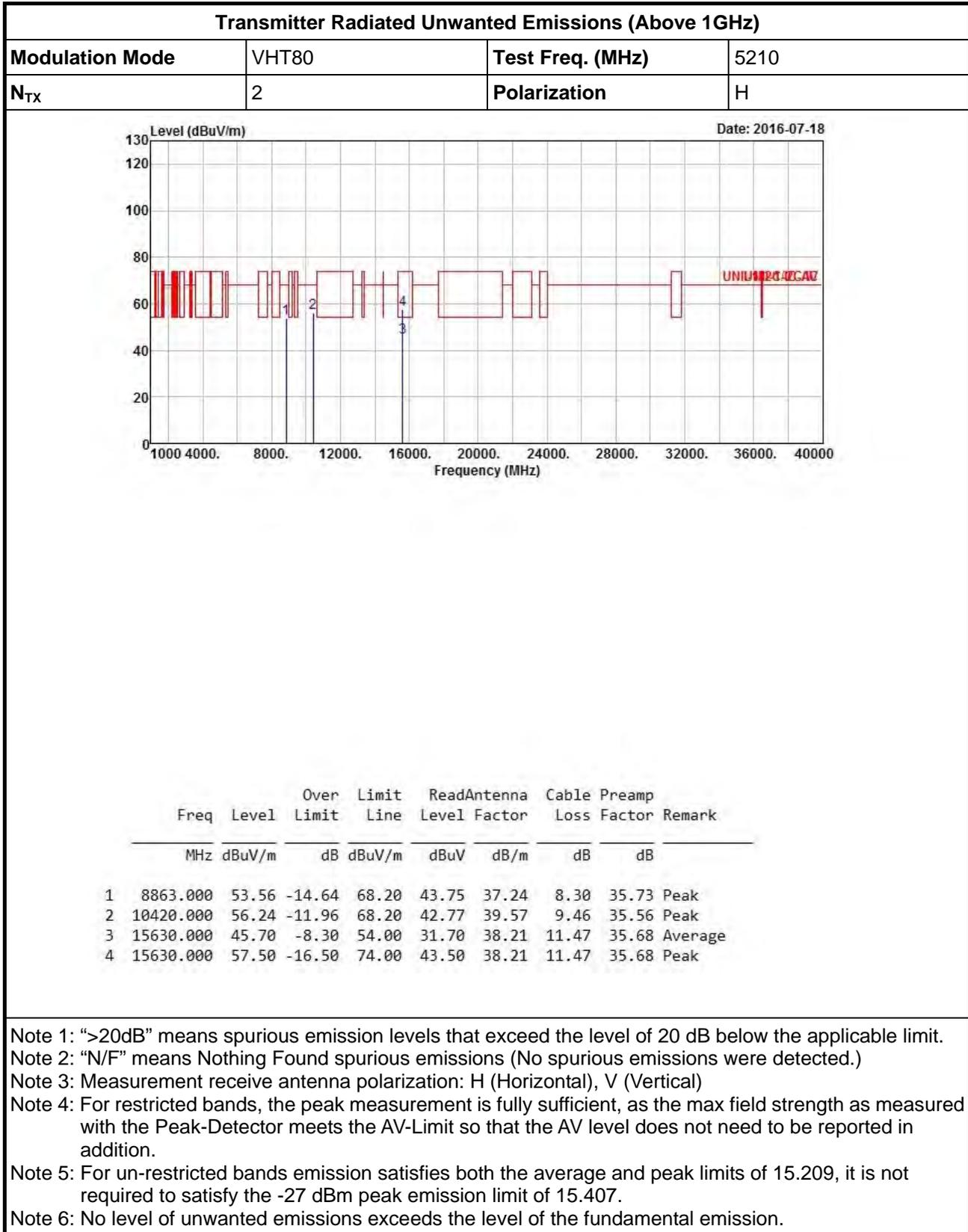
Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	VHT80	Test Freq. (MHz)	5210
N _{TX}	2	Polarization	V



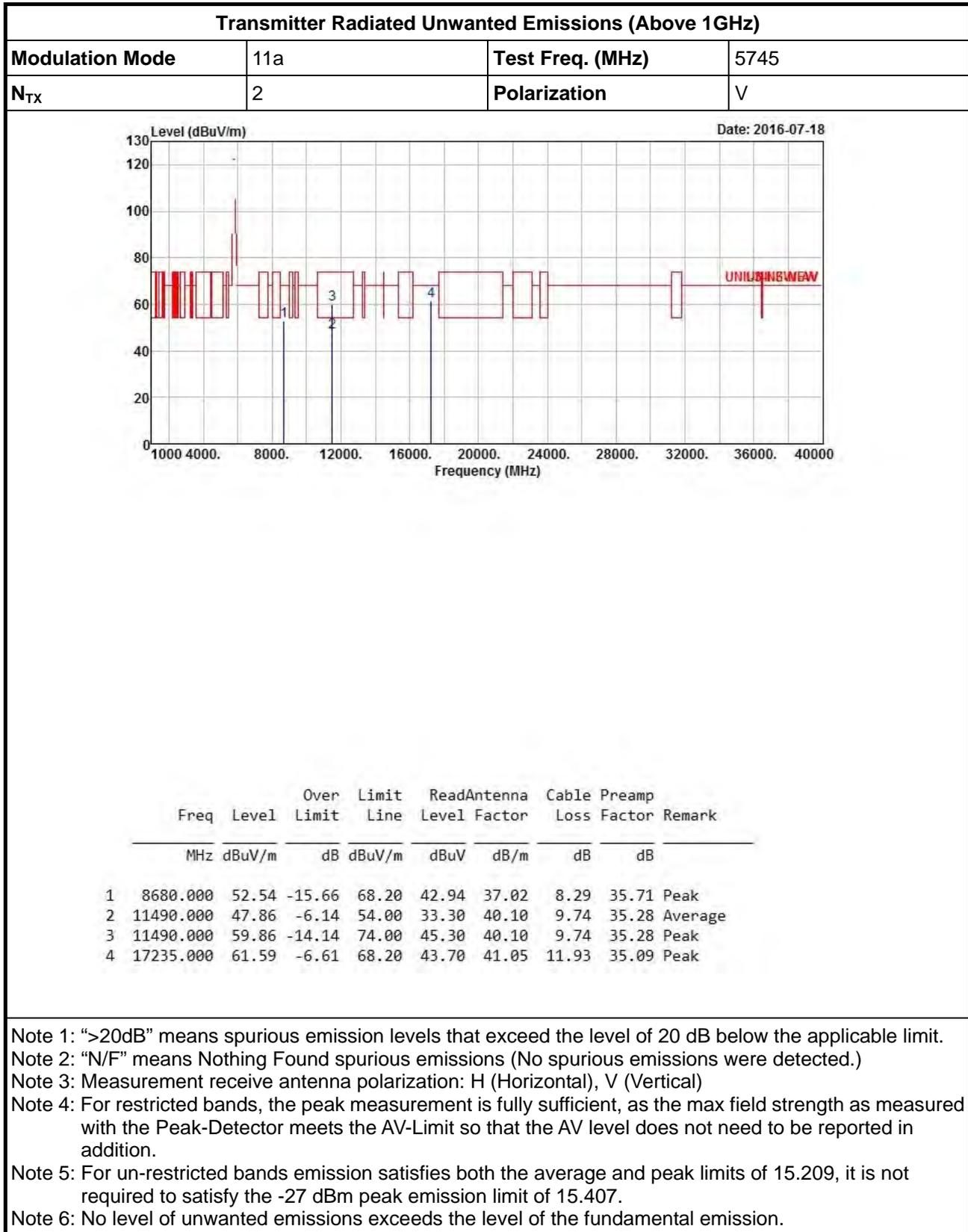
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7419.000	39.86	-14.14	54.00	31.26	36.39	7.64	35.43	Average
2	7419.000	51.96	-22.04	74.00	43.36	36.39	7.64	35.43	Peak
3	10420.000	56.14	-12.06	68.20	42.67	39.57	9.46	35.56	Peak
4	15630.000	46.07	-7.93	54.00	32.07	38.21	11.47	35.68	Average
5	15630.000	58.18	-15.82	74.00	44.18	38.21	11.47	35.68	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.





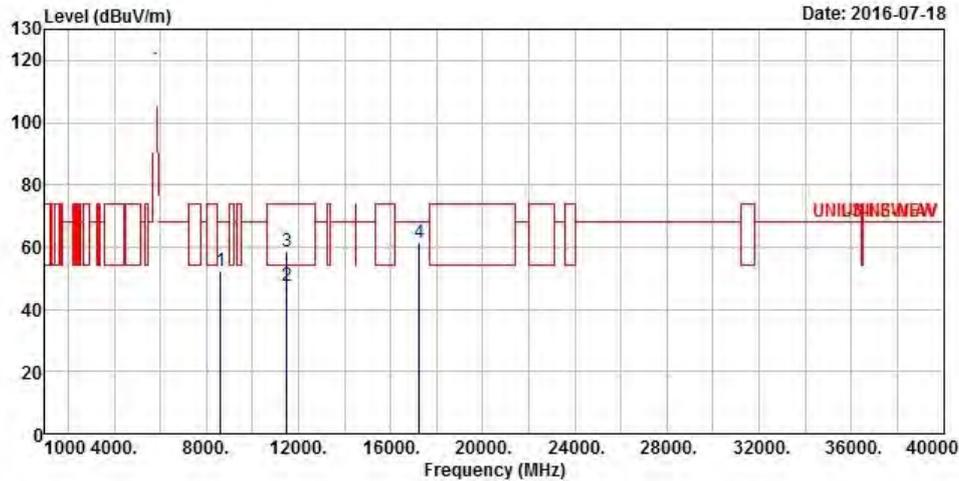
Transmitter Radiated Unwanted Emissions (Above 1GHz) for 5725-5850MHz





Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	11a	Test Freq. (MHz)	5745
N _{TX}	2	Polarization	H



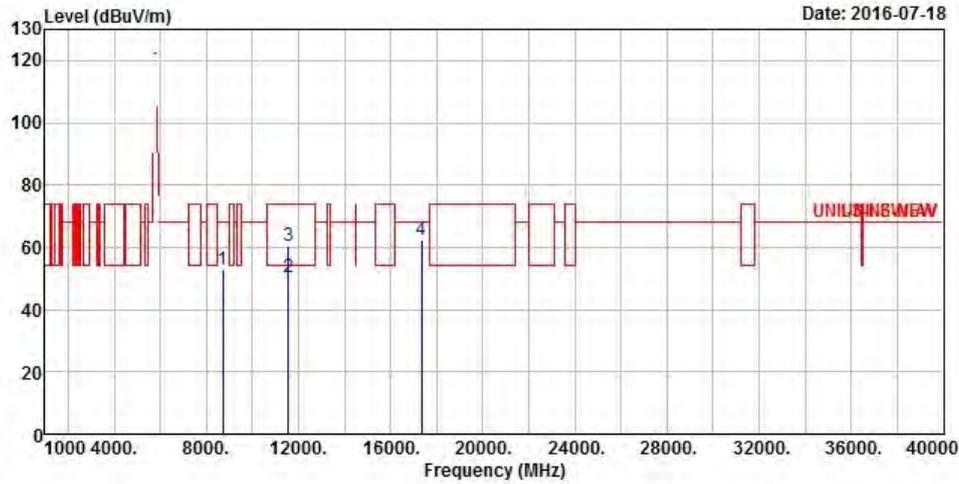
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8632.000	52.44	-15.76	68.20	42.90	36.96	8.28	35.70	Peak
2	11490.000	47.46	-6.54	54.00	32.90	40.10	9.74	35.28	Average
3	11490.000	58.66	-15.34	74.00	44.10	40.10	9.74	35.28	Peak
4	17235.000	61.48	-6.72	68.20	43.59	41.05	11.93	35.09	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)	5785
N _{TX}	2	Polarization	V



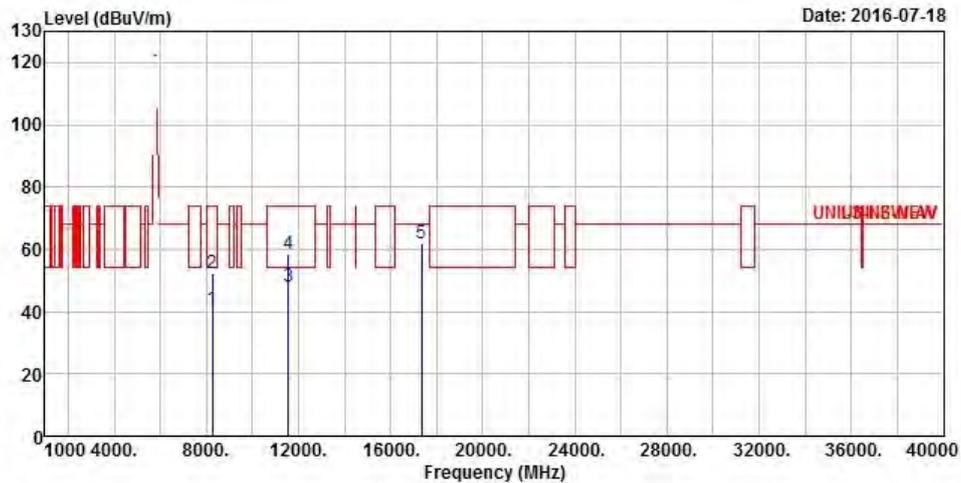
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBUV/m	dB	dBUV/m	dBuV	dB/m	dB	dB	
1	8708.000	52.75	-15.45	68.20	43.12	37.05	8.29	35.71	Peak
2	11570.000	50.26	-3.74	54.00	35.85	39.93	9.79	35.31	Average
3	11570.000	60.31	-13.69	74.00	45.90	39.93	9.79	35.31	Peak
4	17355.000	62.21	-5.99	68.20	43.99	41.44	11.92	35.14	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)	5785
N _{TX}	2	Polarization	H



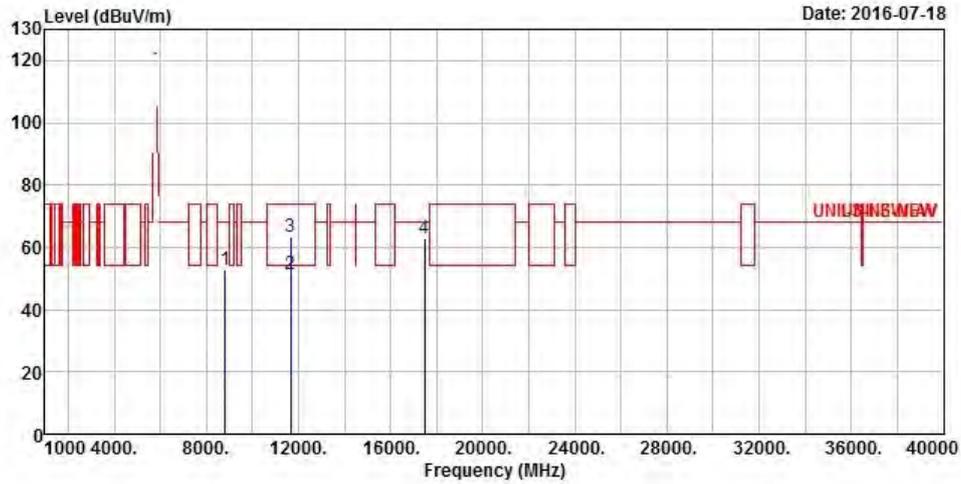
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Loss	Preamp Factor	Remark
	MHz	dBUV/m	dB	dBUV/m	dBuV	dB/m	dB	
1	8249.000	40.64	-13.36	54.00	31.15	37.00	8.14	Average
2	8249.000	52.37	-21.63	74.00	42.88	37.00	8.14	Peak
3	11570.000	47.76	-6.24	54.00	33.35	39.93	9.79	Average
4	11570.000	58.63	-15.37	74.00	44.22	39.93	9.79	Peak
5	17355.000	61.81	-6.39	68.20	43.59	41.44	11.92	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)	5825
N _{TX}	2	Polarization	V



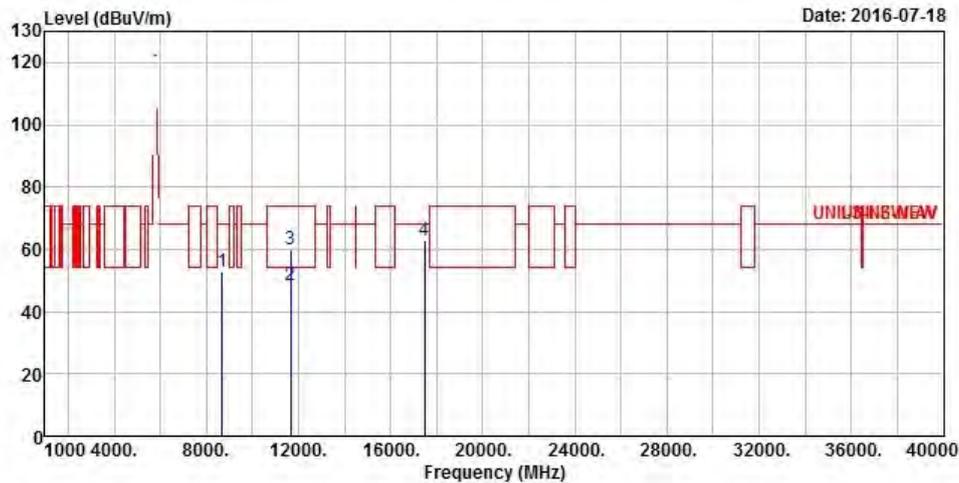
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8826.000	52.72	-15.48	68.20	42.96	37.19	8.30	35.73	Peak
2	11650.000	51.44	-2.56	54.00	37.20	39.74	9.84	35.34	Average
3	11650.000	63.25	-10.75	74.00	49.01	39.74	9.84	35.34	Peak
4	17475.000	62.89	-5.31	68.20	44.35	41.82	11.90	35.18	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)	5825
N _{TX}	2	Polarization	H



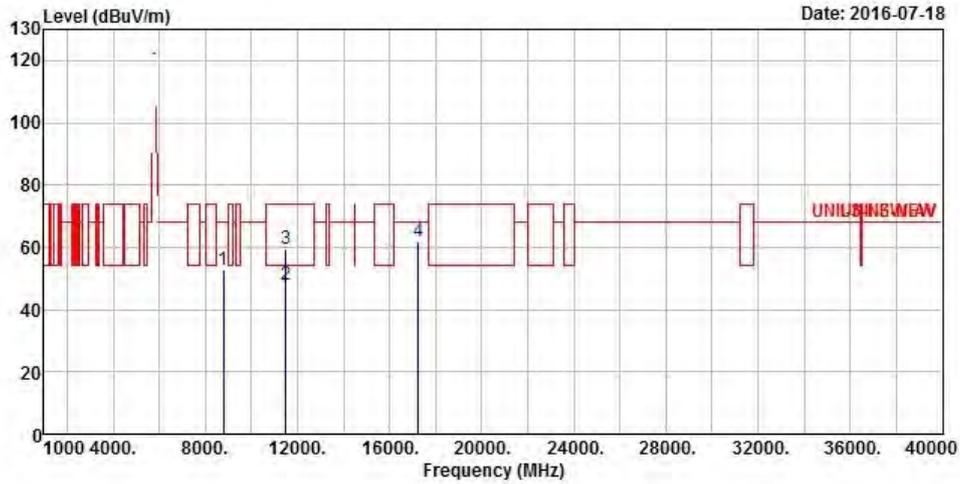
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8677.000	52.85	-15.35	68.20	43.25	37.01	8.29	35.70	Peak
2	11650.000	48.24	-5.76	54.00	34.00	39.74	9.84	35.34	Average
3	11650.000	59.74	-14.26	74.00	45.50	39.74	9.84	35.34	Peak
4	17475.000	63.02	-5.18	68.20	44.48	41.82	11.90	35.18	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.



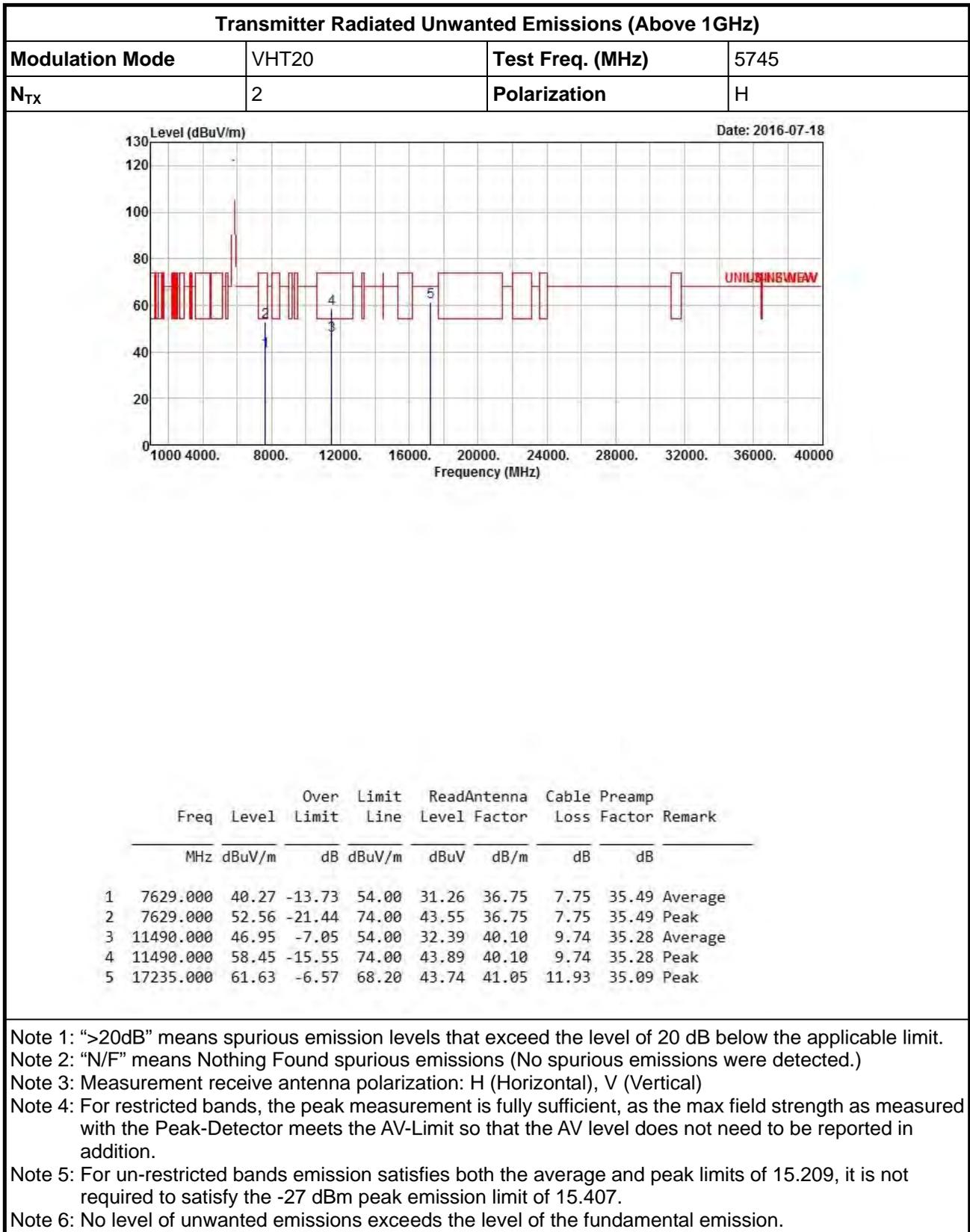
Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	VHT20	Test Freq. (MHz)	5745
N _{TX}	2	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	8772.000	52.96	-15.24	68.20	43.26	37.13	8.29	35.72	Peak
2	11490.000	47.76	-6.24	54.00	33.20	40.10	9.74	35.28	Average
3	11490.000	59.46	-14.54	74.00	44.90	40.10	9.74	35.28	Peak
4	17235.000	61.78	-6.42	68.20	43.89	41.05	11.93	35.09	Peak

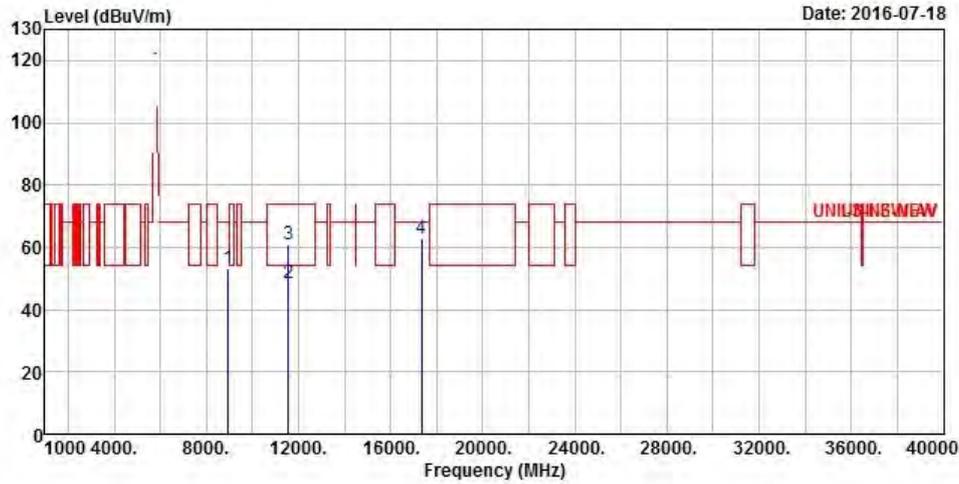
- Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.
- Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)
- Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)
- Note 4: For restricted 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)	5785
N _{TX}	2	Polarization	V



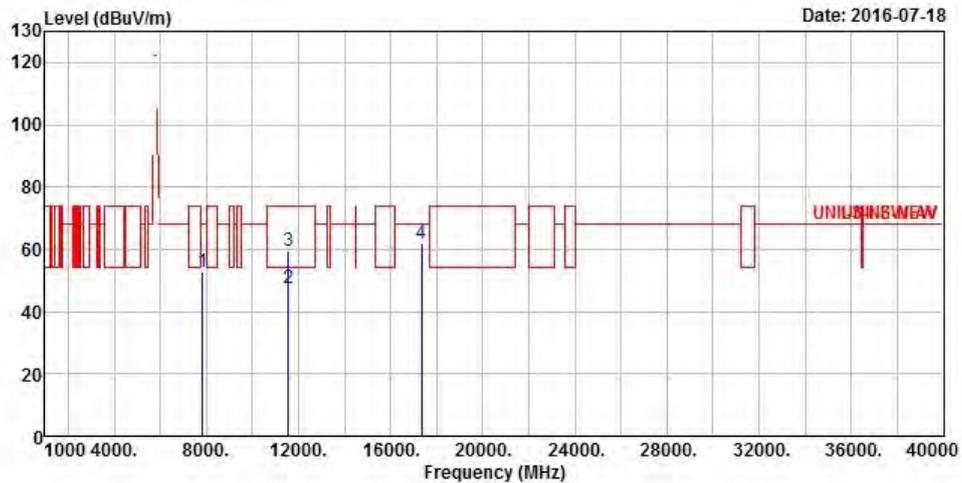
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8937.000	53.08	-15.12	68.20	43.19	37.32	8.31	35.74	Peak
2	11570.000	48.57	-5.43	54.00	34.16	39.93	9.79	35.31	Average
3	11570.000	60.70	-13.30	74.00	46.29	39.93	9.79	35.31	Peak
4	17355.000	62.62	-5.58	68.20	44.40	41.44	11.92	35.14	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)	5785
N _{TX}	2	Polarization	H



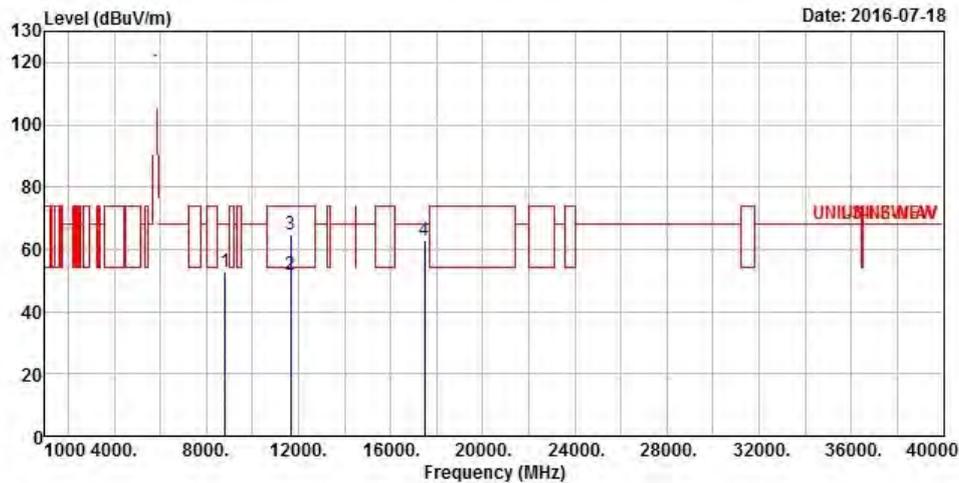
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7827.000	52.56	-15.64	68.20	43.25	36.99	7.88	35.56	Peak
2	11570.000	47.67	-6.33	54.00	33.26	39.93	9.79	35.31	Average
3	11570.000	59.31	-14.69	74.00	44.90	39.93	9.79	35.31	Peak
4	17355.000	61.87	-6.33	68.20	43.65	41.44	11.92	35.14	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)	5825
N _{TX}	2	Polarization	V



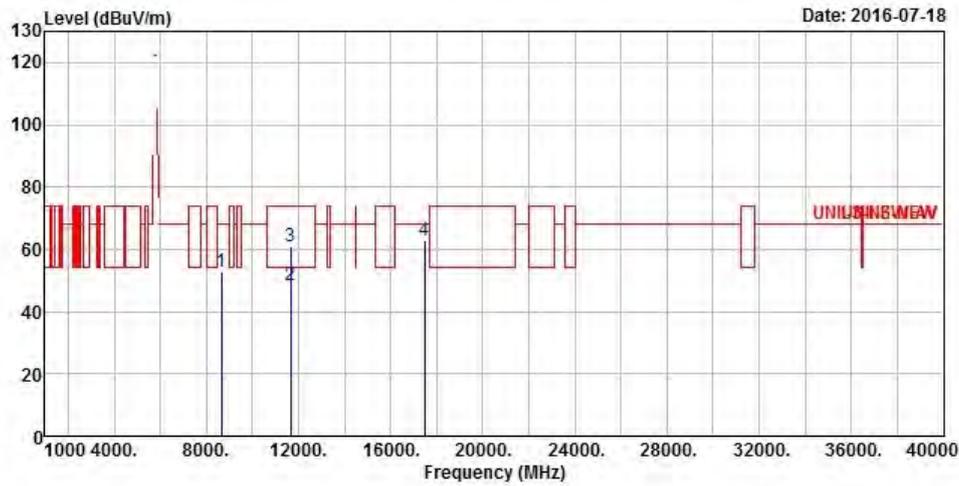
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8809.000	52.70	-15.50	68.20	42.96	37.17	8.29	35.72	Peak
2	11650.000	51.74	-2.26	54.00	37.50	39.74	9.84	35.34	Average
3	11650.000	64.54	-9.46	74.00	50.30	39.74	9.84	35.34	Peak
4	17475.000	62.95	-5.25	68.20	44.41	41.82	11.90	35.18	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)	5825
N _{TX}	2	Polarization	H



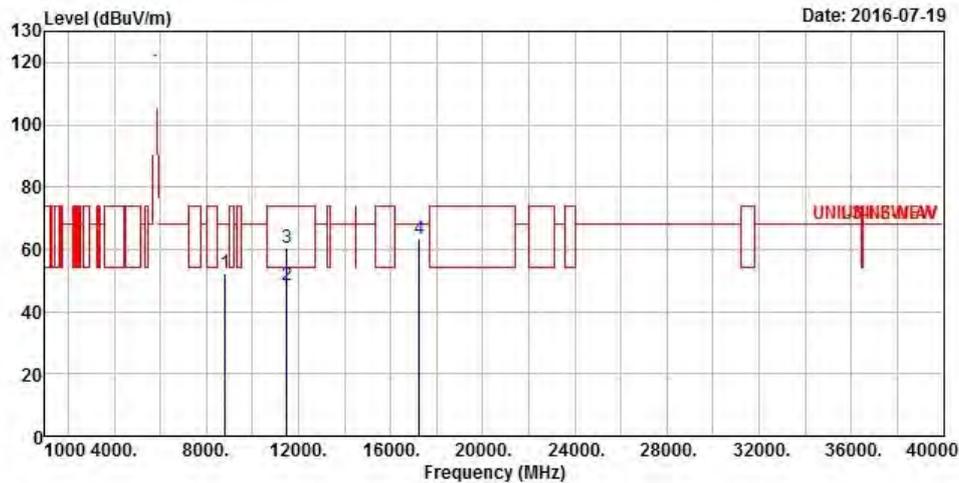
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8647.000	52.82	-15.38	68.20	43.26	36.98	8.28	35.70	Peak
2	11650.000	48.26	-5.74	54.00	34.02	39.74	9.84	35.34	Average
3	11650.000	60.84	-13.16	74.00	46.60	39.74	9.84	35.34	Peak
4	17475.000	62.73	-5.47	68.20	44.19	41.82	11.90	35.18	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)	5755
N _{TX}	2	Polarization	V



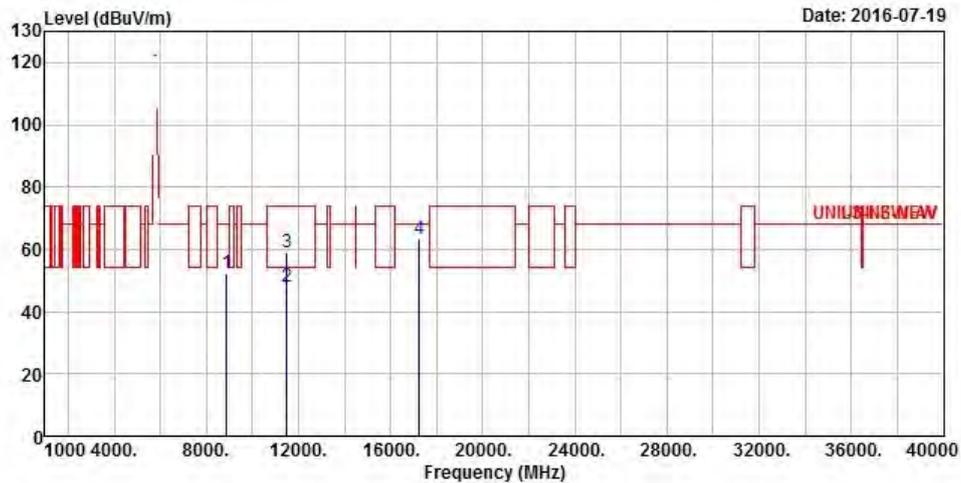
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBUV/m	dB	dBUV/m	dBuV	dB/m	dB	dB	
1	8809.000	52.25	-15.95	68.20	42.51	37.17	8.29	35.72	Peak
2	11510.000	48.61	-5.39	54.00	34.07	40.08	9.74	35.28	Average
3	11510.000	60.63	-13.37	74.00	46.09	40.08	9.74	35.28	Peak
4	17265.000	63.15	-5.05	68.20	45.19	41.15	11.92	35.11	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)	5755
N _{TX}	2	Polarization	H



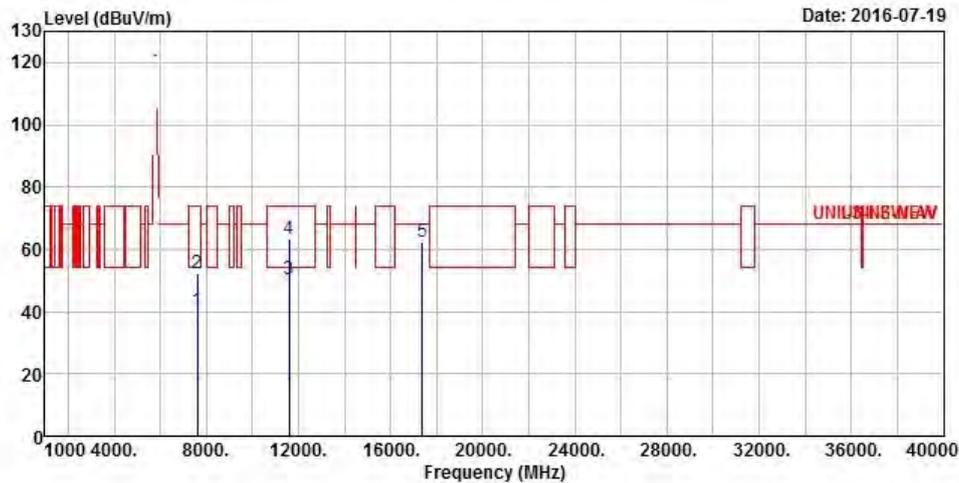
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBUV/m	dB	dBUV/m	dBuV	dB/m	dB	dB	
1	8879.000	52.21	-15.99	68.20	42.39	37.25	8.30	35.73	Peak
2	11510.000	47.93	-6.07	54.00	33.39	40.08	9.74	35.28	Average
3	11510.000	58.93	-15.07	74.00	44.39	40.08	9.74	35.28	Peak
4	17265.000	63.47	-4.73	68.20	45.51	41.15	11.92	35.11	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)	5795
N _{TX}	2	Polarization	V



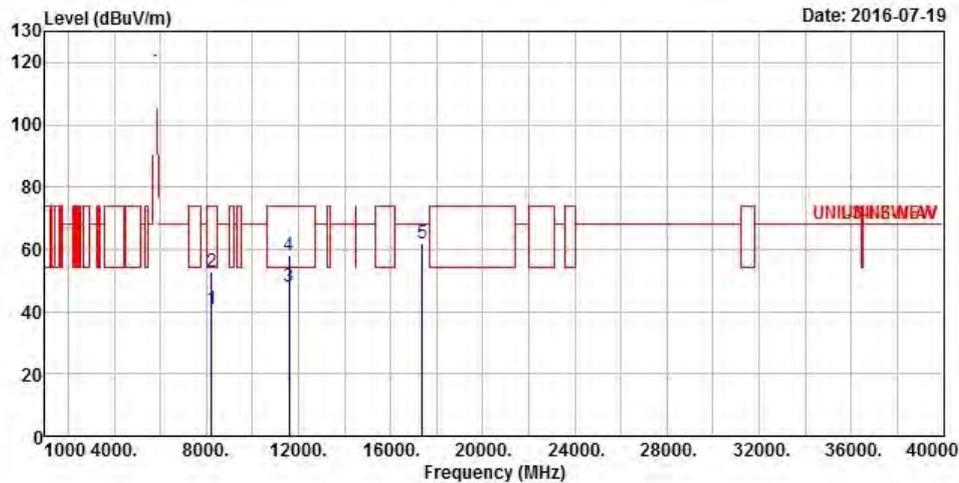
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7622.000	40.27	-13.73	54.00	31.26	36.75	7.75	35.49	Average
2	7622.000	52.42	-21.58	74.00	43.41	36.75	7.75	35.49	Peak
3	11590.000	50.42	-3.58	54.00	36.04	39.88	9.82	35.32	Average
4	11590.000	63.08	-10.92	74.00	48.70	39.88	9.82	35.32	Peak
5	17385.000	62.32	-5.88	68.20	44.03	41.53	11.91	35.15	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)	5795
N _{TX}	2	Polarization	H



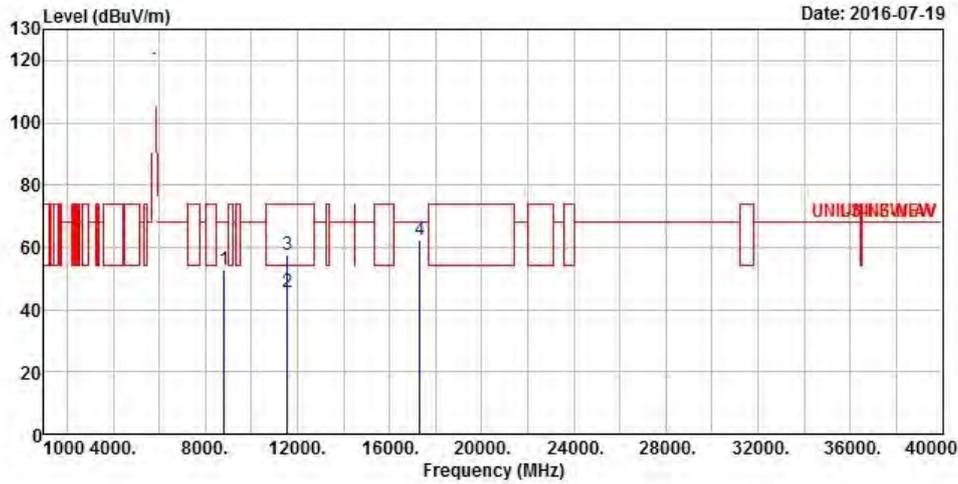
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBUV/m	dB	dBUV/m	dBuV	dB/m	dB	dB	
1	8229.000	40.59	-13.41	54.00	31.11	37.02	8.11	35.65	Average
2	8229.000	52.87	-21.13	74.00	43.39	37.02	8.11	35.65	Peak
3	11590.000	47.94	-6.06	54.00	33.56	39.88	9.82	35.32	Average
4	11590.000	58.06	-15.94	74.00	43.68	39.88	9.82	35.32	Peak
5	17385.000	62.09	-6.11	68.20	43.80	41.53	11.91	35.15	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.



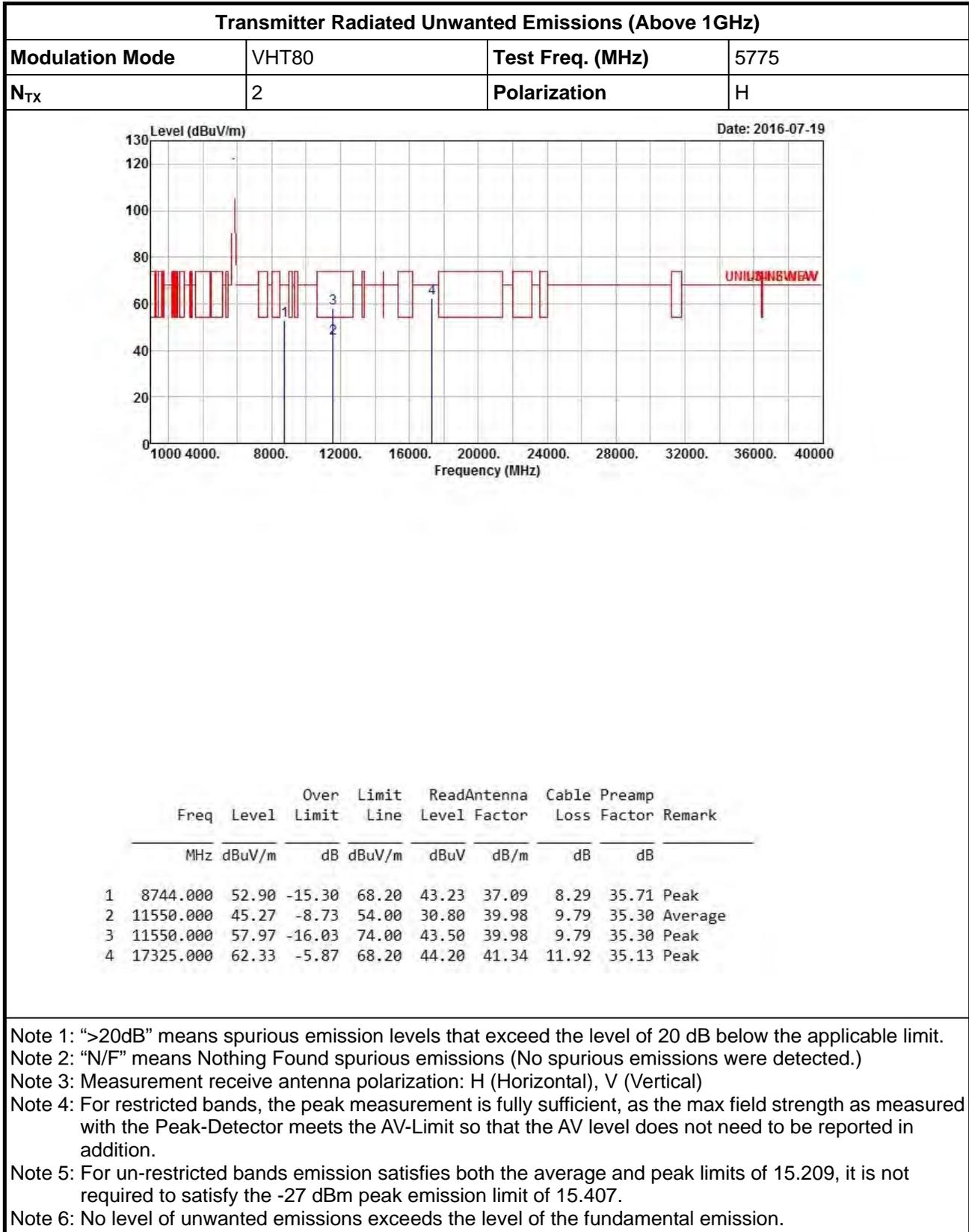
Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode	VHT80	Test Freq. (MHz)	5775
N _{TX}	2	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	8829.000	52.96	-15.24	68.20	43.20	37.19	8.30	35.73	Peak
2	11550.000	45.73	-8.27	54.00	31.26	39.98	9.79	35.30	Average
3	11550.000	57.33	-16.67	74.00	42.86	39.98	9.79	35.30	Peak
4	17325.000	62.23	-5.97	68.20	44.10	41.34	11.92	35.13	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.





Summary

Mode	Result	Ch (Hz)	Center (Hz)	FI (Hz)	Fh (Hz)	ppm	Limit (ppm)	Port	Remark
5.2G;11a;20;1;2;5200;M;T30,VN	Pass	5.2G	5.19997064G	NaN	NaN	5.646	20	1	0 min

Result

Mode	Result	Ch (Hz)	Center (Hz)	FI (Hz)	Fh (Hz)	ppm	Limit (ppm)	Port	Remark
5.2G;11a;20;1;2;5200;M;TN,VL	Pass	5.2G	5.19997576G	NaN	NaN	4.661	20	1	0 min
5.2G;11a;20;1;2;5200;M;TN,VL	Pass	5.2G	5.19997602G	NaN	NaN	4.612	20	1	2 min
5.2G;11a;20;1;2;5200;M;TN,VL	Pass	5.2G	5.1999762G	NaN	NaN	4.576	20	1	5 min
5.2G;11a;20;1;2;5200;M;TN,VL	Pass	5.2G	5.1999764G	NaN	NaN	4.539	20	1	10 min
5.2G;11a;20;1;2;5200;M;TN,VH	Pass	5.2G	5.19997447G	NaN	NaN	4.909	20	1	0 min
5.2G;11a;20;1;2;5200;M;TN,VH	Pass	5.2G	5.19997388G	NaN	NaN	5.024	20	1	2 min
5.2G;11a;20;1;2;5200;M;TN,VH	Pass	5.2G	5.19997352G	NaN	NaN	5.092	20	1	5 min
5.2G;11a;20;1;2;5200;M;TN,VH	Pass	5.2G	5.19997307G	NaN	NaN	5.178	20	1	10 min
5.2G;11a;20;1;2;5200;M;T40,VN	Pass	5.2G	5.1999749G	NaN	NaN	4.826	20	1	0 min
5.2G;11a;20;1;2;5200;M;T40,VN	Pass	5.2G	5.19997652G	NaN	NaN	4.516	20	1	2 min
5.2G;11a;20;1;2;5200;M;T40,VN	Pass	5.2G	5.19997856G	NaN	NaN	4.123	20	1	5 min
5.2G;11a;20;1;2;5200;M;T40,VN	Pass	5.2G	5.19997948G	NaN	NaN	3.946	20	1	10 min
5.2G;11a;20;1;2;5200;M;T30,VN	Pass	5.2G	5.19997064G	NaN	NaN	5.646	20	1	0 min
5.2G;11a;20;1;2;5200;M;T30,VN	Pass	5.2G	5.1999707G	NaN	NaN	5.635	20	1	2 min
5.2G;11a;20;1;2;5200;M;T30,VN	Pass	5.2G	5.19997081G	NaN	NaN	5.614	20	1	5 min
5.2G;11a;20;1;2;5200;M;T30,VN	Pass	5.2G	5.19997087G	NaN	NaN	5.602	20	1	10 min
5.2G;11a;20;1;2;5200;M;T20,VN	Pass	5.2G	5.19997891G	NaN	NaN	4.056	20	1	0 min
5.2G;11a;20;1;2;5200;M;T20,VN	Pass	5.2G	5.19997776G	NaN	NaN	4.277	20	1	2 min
5.2G;11a;20;1;2;5200;M;T20,VN	Pass	5.2G	5.19997646G	NaN	NaN	4.527	20	1	5 min
5.2G;11a;20;1;2;5200;M;T20,VN	Pass	5.2G	5.19997563G	NaN	NaN	4.687	20	1	10 min
5.2G;11a;20;1;2;5200;M;T10,VN	Pass	5.2G	5.19998119G	NaN	NaN	3.617	20	1	0 min
5.2G;11a;20;1;2;5200;M;T10,VN	Pass	5.2G	5.19998141G	NaN	NaN	3.574	20	1	2 min
5.2G;11a;20;1;2;5200;M;T10,VN	Pass	5.2G	5.19998167G	NaN	NaN	3.526	20	1	5 min
5.2G;11a;20;1;2;5200;M;T10,VN	Pass	5.2G	5.19998181G	NaN	NaN	3.498	20	1	10 min
5.2G;11a;20;1;2;5200;M;T0,VN	Pass	5.2G	5.19998311G	NaN	NaN	3.247	20	1	0 min
5.2G;11a;20;1;2;5200;M;T0,VN	Pass	5.2G	5.19998587G	NaN	NaN	2.717	20	1	2 min
5.2G;11a;20;1;2;5200;M;T0,VN	Pass	5.2G	5.19998686G	NaN	NaN	2.527	20	1	5 min
5.2G;11a;20;1;2;5200;M;T0,VN	Pass	5.2G	5.19998705G	NaN	NaN	2.49	20	1	10 min