

FCC Test Report

Equipment : AC750 Wireless Gigabit Access Point
Brand Name : TP-LINK
Model No. : AP200
FCC ID : TE7AP200
Standard : 47 CFR FCC Part 15.247
Frequency : 2400 MHz – 2483.5 MHz
FCC Classification : DTS
Function : ☒ Point-to-multipoint; ☐ Point-to-point
Applicant / Manufacturer : TP-LINK TECHNOLOGIES CO., LTD.
Building 24 (floors 1, 3, 4, 5) and 28 (floors1-4) Central
Science and Technology Park, Shennan Rd, Nanshan,
Shenzhen, China

The product sample received on Jul. 04, 2016 and completely tested on Oct. 24, 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:

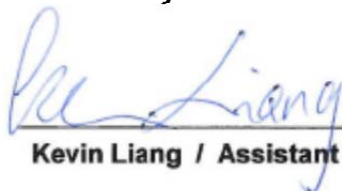

Kevin Liang / Assistant Manager

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

Appendix A. Test Result of Emission Bandwidth

Appendix B.1~B.2 Test Result of Maximum Conducted Output Power

Appendix C. Test Result of Power Spectral Density

Appendix D. Test Result of Emissions in Non-restricted Frequency Bands

Appendix E.1~E.3 Test Result of Emissions in Restricted Frequency Bands

Appendix F. Test Photos

Appendix G. Photographs of EUT

Summary of Test Result

Conformance Test Specifications				
Report Clause	Ref. Std. Clause	Description	Limit	Result
1.1.2	15.203	Antenna Requirement	FCC 15.203	Complied
3.1	15.207	AC Power-line Conducted Emissions	FCC 15.207	Complied
3.2	15.247(a)	DTS Bandwidth	≥500kHz	Complied
3.3	15.247(b)	Fundamental Emission Output Power	Power [dBm]:30	Complied
3.4	15.247(e)	Power Spectral Density	PSD [dBm/3kHz]:8	Complied
3.5	15.247(d)	Emissions in Non-restricted Frequency Bands	Non-Restricted Bands: > 20 dBc	Complied
3.6	15.247(d)	Emissions in Restricted Frequency Bands	Restricted Bands: FCC 15.209	Complied



Revision History

Report No.	Version	Description	Issued Date
FR652422AC	Rev. 01	Initial issue of report	Aug. 15, 2016
FR652422AC	Rev. 02	Add Appendix E.3 Bandedge Emissions in Restricted Frequency Bands for other channels	Oct. 26, 2016
FR652422AC	Rev. 03	Remove data as below: 20M : CH3, 4, 5, 7, 8, 9 / 40M : CH5, 7	Oct. 28, 2016

1 General Description

1.1 Information

1.1.1 RF General Information

Band	Mode	BWch (MHz)	Channel Number	Nss-Min	Nant
2.4G	11b	20	1-11[11]	1	2
2.4G	11g	20	1-11[11]	1	2
2.4G	HT20	20	1-11[11]	1,(M0-15)	2
2.4G	HT40	40	3-9[7]	1,(M0-15)	2

Note:

- ♦ 2.4G is the 2.4GHz Band (2.4-2.4835GHz).
- ♦ 11b mode uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
- ♦ 11g, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM 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	
☐	Integral antenna (antenna permanently attached)
☐	Temporary RF connector provided
☐	No temporary RF connector provided Transmit chains bypass antenna and soldered temporary RF connector provided for connected measurement. In case of conducted measurements the transmitter shall be connected to the measuring equipment via a suitable attenuator and correct for all losses in the RF path.
☒	External antenna (dedicated antennas)
☒	Single power level with corresponding antenna(s).
☐	Multiple power level and corresponding antenna(s).

Antenna General Information			
No.	Ant. Cat.	Ant. Type	Gain (dBi)
1	External	dipole	1.52
2	External	dipole	1.52

1.1.3 Type of EUT

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

1.1.4 Mode Test Duty Cycle

Operated Mode for Worst Duty Cycle	
Test Signal Duty Cycle (x)	Power Duty Factor [dB] – (10 log 1/x)
☒ 99.6% - IEEE 802.11b	0.02
☒ 97.8%- IEEE 802.11g	0.10
☒ 97.5%- IEEE 802.11n (HT20)	0.11
☒ 96.1%- IEEE 802.11n (HT40)	0.17

Mode	DC	T(s)	VBW(Hz) ≥ 1/T
11b	0.996	n/a (DC≥0.98)	n/a (DC≥0.98)
11g	0.978	2.025m	1k
HT20	0.975	1.889m	1k
HT40	0.961	928.75u	3k

1.1.5 EUT Operational Condition

Supply Voltage	☒ AC mains	☐ DC	
Type of DC Source	☐ Internal DC supply	☒ External AC adapter	☐ Battery

1.2 Testing Applied Standards

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

- ◆ 47 CFR FCC Part 15
- ◆ ANSI C63.10-2013
- ◆ FCC KDB 558074 D01 v03r05
- ◆ FCC KDB 662911 D01v02r01

1.3 Testing Location Information

Testing Location				
☒	HWA YA	ADD : No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.		
		TEL : 886-3-327-3456 FAX : 886-3-327-0973		
Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Ray	24°C / 55%	26/07/2016
RF Conducted	TH01-HY	Gary	23.5°C / 65%	22/07/2016
Radiated	03CH09-HY	Terry	27.3°C / 60%	28/07/2016
Radiated <Bandedge>	03CH09-HY	Terry	24.3°C / 60%	24/10/2016

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 Channel Table

Band	BWch (MHz)	Channel Freq. (MHz)	Range
2.4G	20	2412	L
2.4G	20	2417	-
2.4G	20	2437	M
2.4G	20	2457	-
2.4G	20	2462	H
2.4G	40	2422	L
2.4G	40	2427	-
2.4G	40	2437	M
2.4G	40	2447	-
2.4G	40	2452	H

Note:

- ♦ Test range channel consist of L (Low Ch.), M (Middle Ch.), H (High Ch.), S (Single Ch.) and C (Straddle Band Ch.).

2.2 Test Condition

Condition Item	Abbreviation/Remark	Remark
RF Conducted	Abbreviation	Remark
TN,VN	TN	20°C
-	VN	110V
Radiated EMI	Remark	-
AC Adapter	-	-
-	-	-
Radiated RF	Remark	-
TX	-	-
Radiated Cabinet	Remark	-
Radiated Cabinet	Antenna Terminal	-
PAR	Abbreviation	Remark
-	-	-
Freq. Stability	Abbreviation	Remark
-	-	-

2.3 Test Channel Mode

Test Software Version	ART2_4_9_575_10_CS1
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Band	Mode	BWch (MHz)	Nss-Min	Nant	Ch. (MHz)	Range	Power Setting
2.4G	11b	20	1	2	2412	L	18.5
2.4G	11b	20	1	2	2417	-	20
2.4G	11b	20	1	2	2437	M	23.5
2.4G	11b	20	1	2	2457	-	19.5
2.4G	11b	20	1	2	2462	H	18.5
2.4G	11g	20	1	2	2412	L	14
2.4G	11g	20	1	2	2417	-	16
2.4G	11g	20	1	2	2437	M	20
2.4G	11g	20	1	2	2457	-	14
2.4G	11g	20	1	2	2462	H	12
2.4G	HT20	20	1,(M0-15)	2	2412	L	13.5
2.4G	HT20	20	1,(M0-15)	2	2417	-	16
2.4G	HT20	20	1,(M0-15)	2	2437	M	20
2.4G	HT20	20	1,(M0-15)	2	2457	-	14
2.4G	HT20	20	1,(M0-15)	2	2462	H	13
2.4G	HT40	40	1,(M0-15)	2	2422	L	11
2.4G	HT40	40	1,(M0-15)	2	2427	-	12.5
2.4G	HT40	40	1,(M0-15)	2	2437	M	15.5
2.4G	HT40	40	1,(M0-15)	2	2447	-	14
2.4G	HT40	40	1,(M0-15)	2	2452	H	12

Abbreviation Explanation

Band	Mode	BWch (MHz)	Nss-Min	Nant	Ch. (MHz)	Range	Test Cond.	Abbreviation
2.4G	HT20	20	1,(M0-15)	2	2412	L	TN,VN	2.4G;HT20;20;1,(M0-15);2;2412;L;TN,VN
2.4G	HT40	40	1,(M0-15)	2	2437	M	TN,VN	2.4G;HT40;40;1,(M0-15);2;2437;M;TN,VN

Note:

- ♦ Test range channel consist of L (Low Ch.), M (Middle Ch.), H (High Ch.), S (Single Ch).

2.4 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	Adapter Mode

The Worst Case Mode for Following Conformance Tests	
Tests Item	DTS Bandwidth, Fundamental Emission Output Power, Power Spectral Density, Emissions in Non-restricted Frequency Bands
Test Condition	Conducted measurement at transmit chains Output power : all channel Other : L/M/H channel

The Worst Case Mode for Following Conformance Tests			
Tests Item	Emissions in Restricted Frequency Bands		
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.		
User Position	☐ EUT will be placed in fixed position.		
	☒ EUT will be placed in mobile position and operating multiple positions. EUT shall be performed three orthogonal planes.		
	☐ EUT will be a hand-held or body-worn battery-powered devices and operating multiple positions.		
Operating Mode < 1GHz	☒ 1. Adapter Mode		
Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			
Worst Planes of EUT	V		
Worst Planes of Ant.			V

Note: Power table has pretest and confirm by bandedge test.

2.5 Accessories and Support Equipment

Accessories Information				
AC Adapter	Brand Name	TP-LINK	Model Name	T120100-2B1
	Power Rating	I/P: 100-240Vac, 300mA, O/P: 12Vdc, 1000mA		

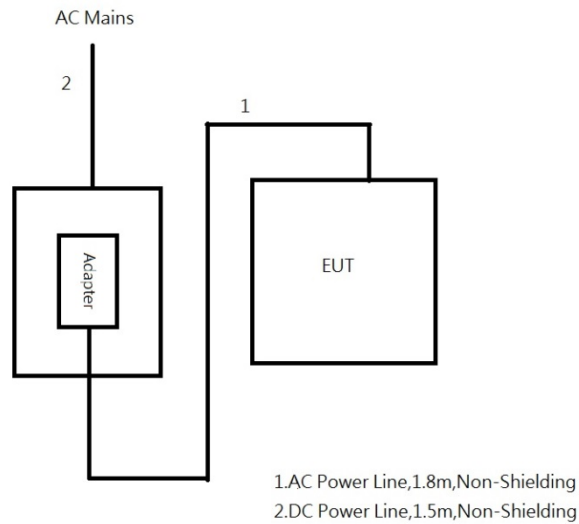
Reminder: Regarding to more detail and other information, please refer to user manual.

Support Equipment - RF Conducted			
No.	Equipment	Brand Name	Model Name
1	Notebook	DELL	E6400
2	AC Adapter for Notebook	DELL	HA65NM130

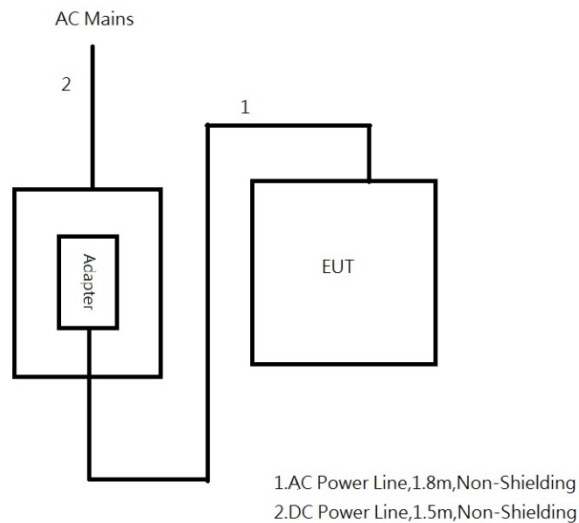
Support Equipment - AC Conduction and Radiated Emission			
No.	Equipment	Brand Name	Model Name
-	-	-	-

2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Test Setup Diagram - Radiated Test



3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

Note 1: * Decreases with the logarithm of the frequency.

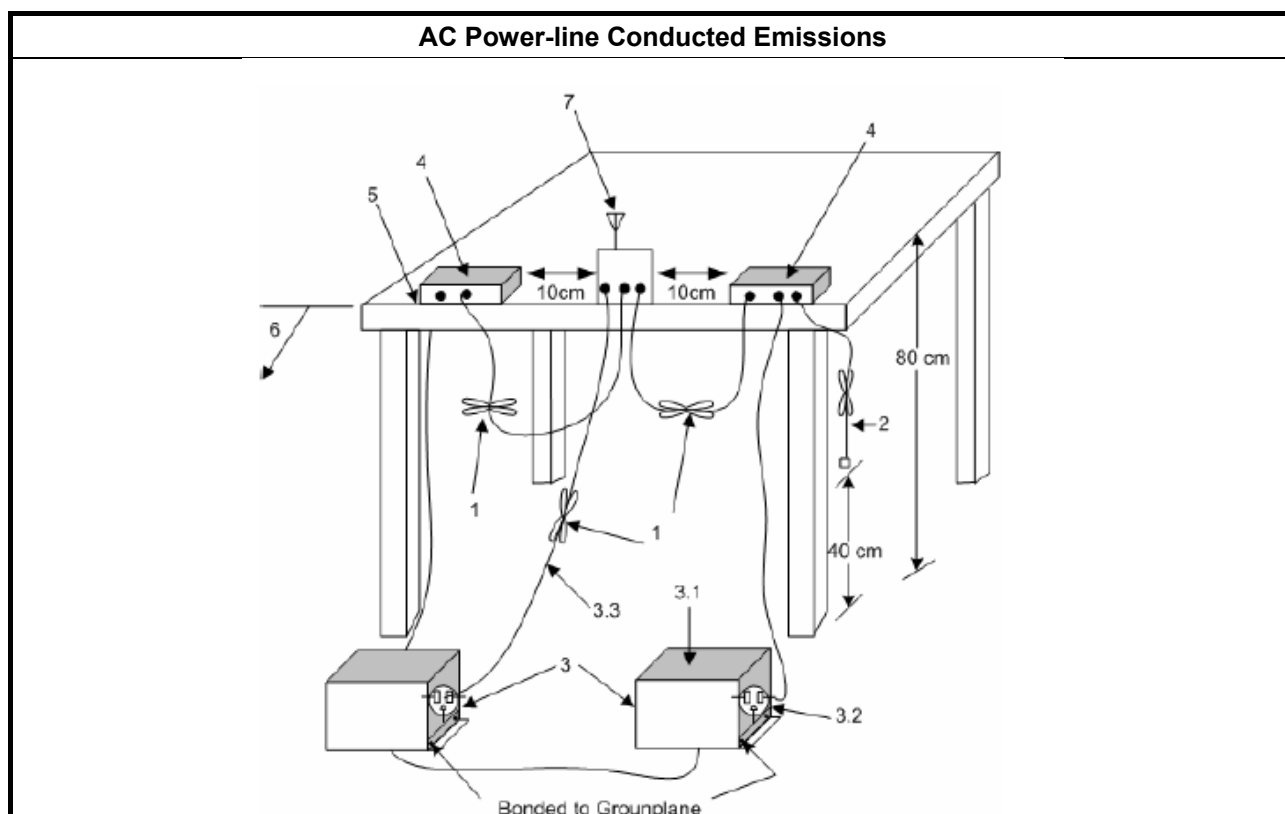
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

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

3.1.4 Test Setup



3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix I

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

6dB Bandwidth Limit
Systems using digital modulation techniques:
6 dB bandwidth $\geq$ 500 kHz.

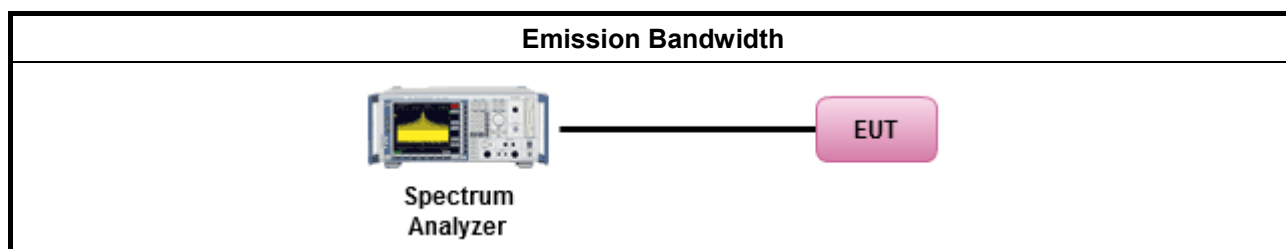
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method
For the emission bandwidth shall be measured using one of the options below:
☒ Refer as FCC KDB 558074, clause 8.1 Option 1 for 6 dB bandwidth measurement.
☐ Refer as FCC KDB 558074, clause 8.2 Option 2 for 6 dB bandwidth measurement.
☐ Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix A

3.3 Fundamental Emission Output Power

3.3.1 Fundamental Emission Output Power Limit

Maximum Peak Conducted Output Power or Maximum Conducted Output Power Limit	
2400-2483.5 MHz Band:	
	If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W)
	Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ dBm
	Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	Smart antenna system (SAS):
	- Single beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	- Overlap beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	- Aggregate power on all beams: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3 + 8$ dB dBm
e.i.r.p. Power Limit:	
2400-2483.5 MHz Band	
	Point-to-multipoint systems (P2M): $P_{eirp} \leq 36$ dBm (4 W)
	Point-to-point systems (P2P): $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX}])$ dBm
	Smart antenna system (SAS)
	- Single beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	- Overlap beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	- Aggregate power on all beams: $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX} + 8])$ dBm
P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi. P_{eirp} = e.i.r.p. Power in dBm.	

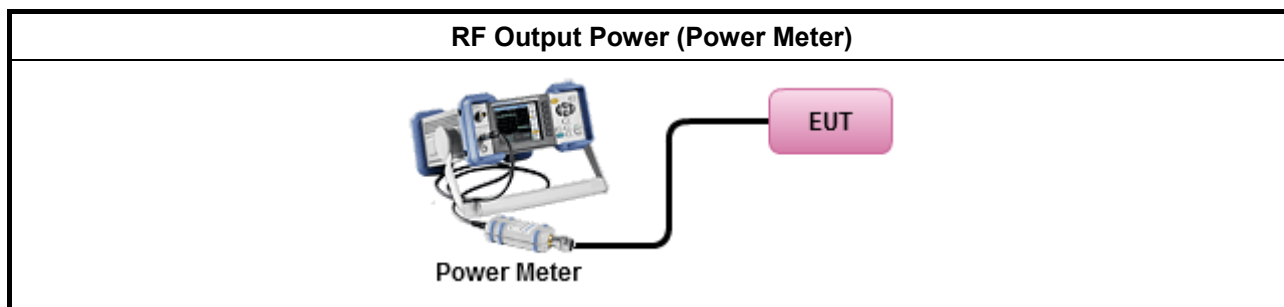
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
Maximum Peak Conducted Output Power	
☐	Refer as FCC KDB 558074, clause 9.1.1 Option 1 (RBW ≥ EBW method).
☒	Refer as FCC KDB 558074, clause 9.1.2 Option 2 (peak power meter for VBW ≥ DTS BW)
Maximum Conducted Output Power	
[duty cycle ≥ 98% or external video / power trigger]	
☐	Refer as FCC KDB 558074, clause 9.2.2.2 Method AVGSA-1 (spectral trace averaging).
☐	Refer as FCC KDB 558074, clause 9.2.2.3 Method AVGSA-1 Alt. (slow sweep speed)
duty cycle < 98% and average over on/off periods with duty factor	
☐	Refer as FCC KDB 558074, clause 9.2.2.4 Method AVGSA-2 (spectral trace averaging).
☐	Refer as FCC KDB 558074, clause 9.2.2.5 Method AVGSA-2 Alt. (slow sweep speed)
RF power meter and average over on/off periods with duty factor or gated trigger	
☒	Refer as FCC KDB 558074, clause 9.2.3 Method AVGPM (using an RF average power meter).
For conducted measurement.	
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.	
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 Peak Conducted Output Power

Refer as Appendix B.1

3.3.6 Test Result of Maximum Average Conducted Output Power

Refer as Appendix B.2

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

Power Spectral Density Limit
Power Spectral Density (PSD) ≤ 8 dBm/3kHz

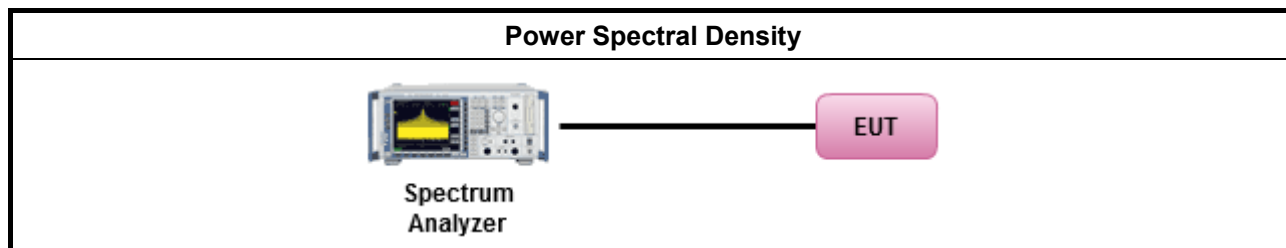
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method
Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option).
☒ Refer as FCC KDB 558074, clause 10.2 Method PKPSD (RBW=3-100kHz; Detector=peak). [duty cycle $\geq 98\%$ or external video / power trigger]
☐ Refer as FCC KDB 558074, clause 10.3 Method AVGPS-1 (spectral trace averaging).
☐ Refer as FCC KDB 558074, clause 10.4 Method AVGPS-2 (slow sweep speed)
duty cycle $< 98\%$ and average over on/off periods with duty factor
☐ Refer as FCC KDB 558074, clause 10.5 Method AVGPS-1 Alt (spectral trace averaging).
☐ Refer as FCC KDB 558074, clause 10.6 Method AVGPS-2 Alt. (slow sweep speed)
For conducted measurement.
If The EUT supports multiple transmit chains using options given below:
☒ Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power 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.
☐ 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,
☐ 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.

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix C

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	Limit (dB)
Peak output power procedure	20
Average output power procedure	30
Note 1: If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak PSD level. Note 2: If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average PSD level.	

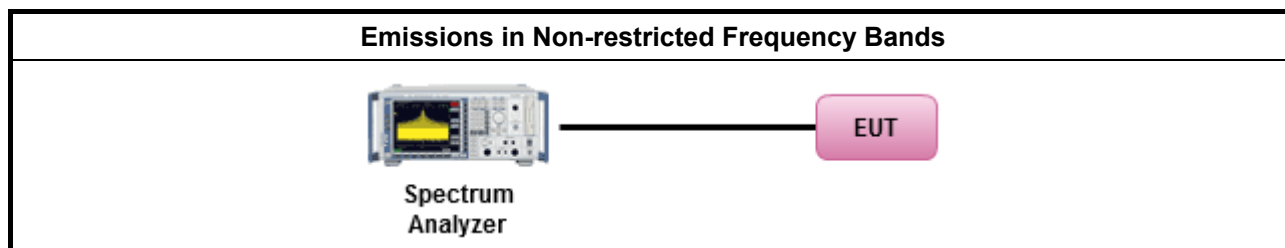
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method
Refer as FCC KDB 558074, clause 11 for unwanted emissions into non-restricted bands.

3.5.4 Test Setup



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix D

3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

Restricted Band Emissions 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.

3.6.2 Measuring Instruments

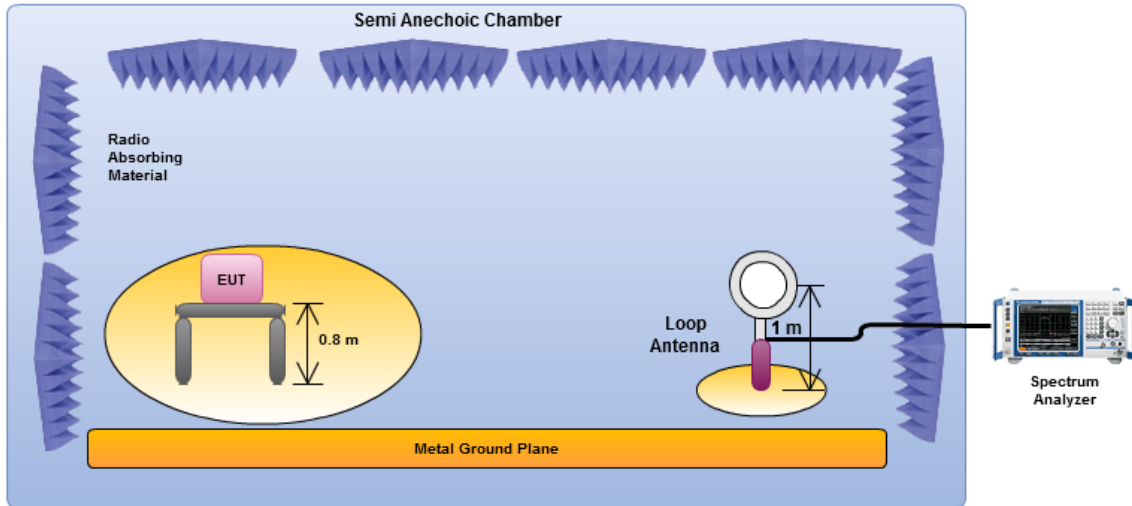
Refer a test equipment and calibration data table in this test report.

3.6.3 Test Procedures

Test Method	
The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].	
Refer as ANSI C63.10, clause 6.9.2.2 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.	
For the transmitter unwanted emissions shall be measured using following options below:	
	Refer as FCC KDB 558074, clause 12 for unwanted emissions into restricted bands.
	☐ Refer as FCC KDB 558074, clause 12.2.5.1 Option 1 (trace averaging for duty cycle $\geq 98\%$)
	☐ Refer as FCC KDB 558074, clause 12.2.5.2 Option 2 (trace averaging + duty factor).
	☒ Refer as FCC KDB 558074, clause 12.2.5.3 Option 3 (Reduced VBW $\geq 1/T$).
	☐ Refer as ANSI C63.10, clause 4.2.3.2.3 (Reduced VBW). VBW $\geq 1/T$, where T is pulse time.
	☐ Refer as ANSI C63.10, clause 4.2.3.2.4 average value of pulsed emissions.
	☒ Refer as FCC KDB 558074, clause 12.2.4 measurement procedure peak limit.
For the transmitter band-edge emissions shall be measured using following options below:	
	Refer as FCC KDB 558074 clause 13.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below.
	Refer as FCC KDB 558074, clause 13.2 (ANSI C63.10, clause 6.9.3) for marker-delta method for band-edge measurements.
	Refer as FCC KDB 558074, clause 13.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).
For conducted and cabinet radiation measurement, refer as FCC KDB 558074, clause 12.2.2.	
	For conducted unwanted emissions into restricted bands (absolute emission limits). Devices with multiple transmit chains using options given below: (1) Measure and sum the spectra across the outputs or (2) Measure and add $10 \log(N)$ dB
	For FCC KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.

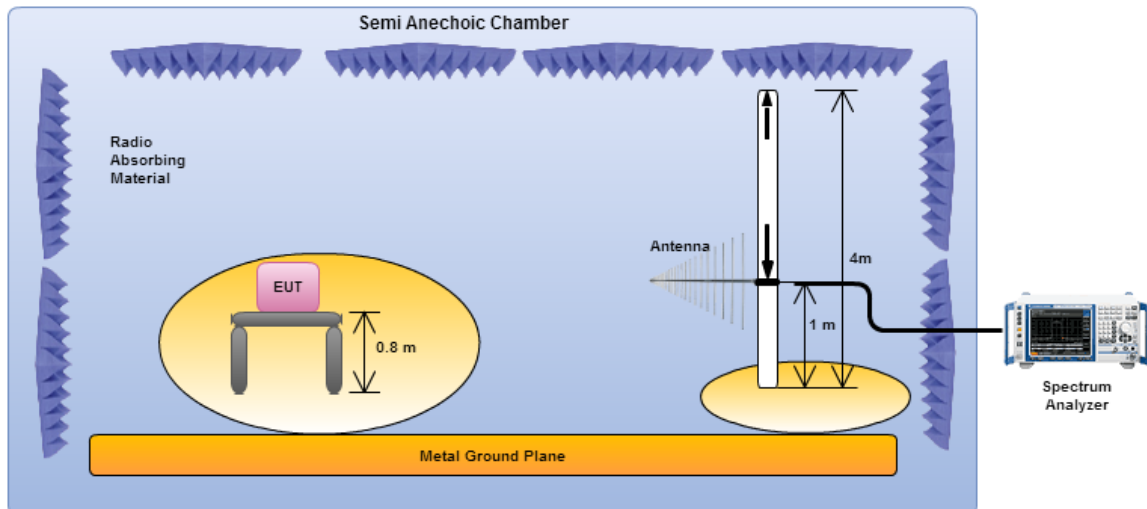
3.6.4 Test Setup

Transmitter Spurious and Out of Band Emissions (9 kHz - 30 MHz)



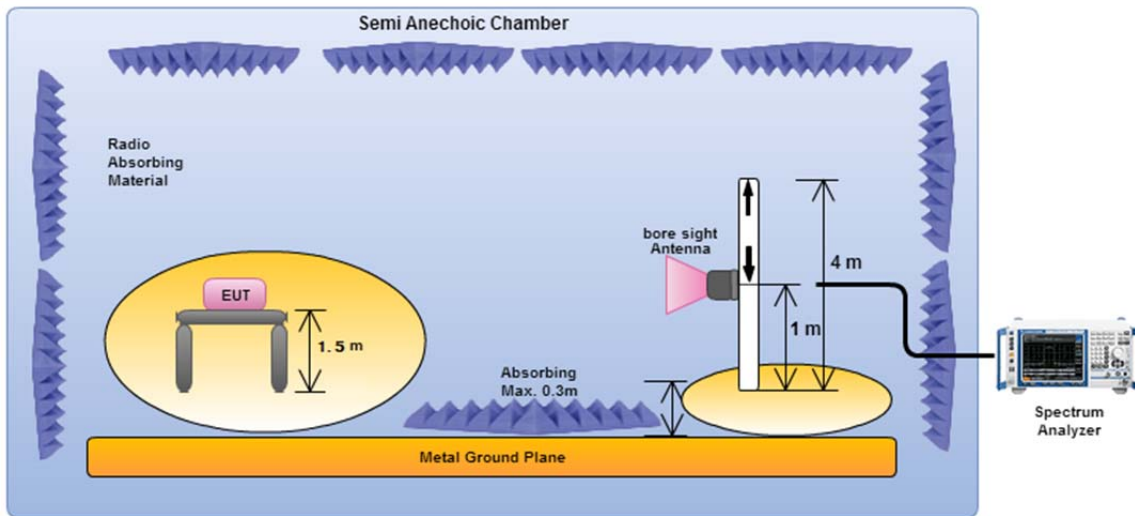
Magnetic field tests shall be performed in the frequency range of 9 kHz to 30 MHz using a calibrated loop antenna.

Transmitter Radiated Unwanted Emissions (below 1GHz)



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

Transmitter Radiated Unwanted Emissions (above 1GHz)



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

3.6.5 Transmitter Radiated Unwanted Emissions (Below 30MHz)

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 Transmitter Radiated Unwanted Emissions

Refer as Appendix E.1~E.3

4 Test Equipment and Calibration Data

Instrument for Conducted Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Until	Remark
Spectrum Analyzer	R&S	FSV 40	101500	9KHz~40GHz	12/05/2016	11/05/ 2017	TH01-HY
Power Sensor	Anritsu	MA2411B	917017	300MHz ~ 40GHz	04/02/2016	03/02/2017	TH01-HY
Power Meter	Anritsu	ML2495A	949003	300MHz ~ 40GHz	04/02/2016	03/02/2017	TH01-HY
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	28/07/2015	27/07/2016	TH01-HY
Spectrum Analyzer	R&S	FSV 40	101500	9KHz~40GHz	12/05/2016	11/05/ 2017	TH01-HY
Power Sensor	Anritsu	MA2411B	917017	300MHz ~ 40GHz	04/02/2016	03/02/2017	TH01-HY

Instrument for Radiated Test

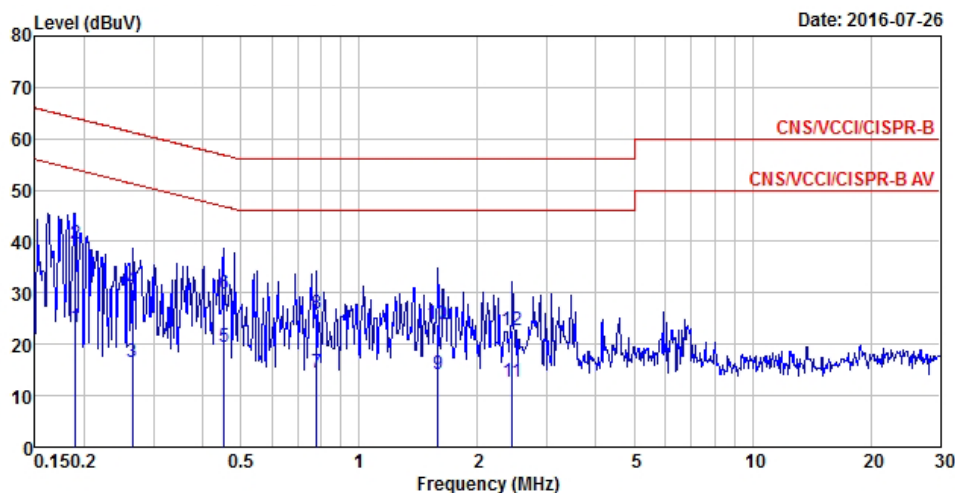
Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Until	Remark
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz ~ 1GHz	28/11/2015	27/11/2016	03CH03-HY
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	1GHz ~ 18GHz	16/12/2015	15/12/2016	03CH03-HY
Amplifier	HP	8447D	2944A08033	10kHz ~ 1.3GHz	10/05/2016	09/05/2017	03CH03-HY
Amplifier	Agilent	8449B	3008A02120	1GHz ~ 26.5GHz	02/09/2015	01/09/2016	03CH03-HY
Spectrum	R&S	FSV40	101513	9kHz ~ 40GHz	16/02/2016	15/02/2017	03CH03-HY
Bilog Antenna	SCHAFFNER	CBL 6112D	22237	30MHz ~ 1GHz	18/09/2015	17/09/2016	03CH03-HY
Horn Antenna	ETS • LINDGREN	3115	6741	1GHz ~ 18GHz	15/07/2015	20/09/2016	03CH03-HY
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	18GHz ~ 40GHz	29/01/2016	28/01/2017	03CH03-HY
Amplifier	MITEQ	JS44-1800400 0-33-8P	1840917	18GHz ~ 40GHz	02/06/2015	31/08/2016	03CH03-HY
Loop Antenna	TESTQ	HLA 6120	31244	9 kHz~30 MHz	02/02/2015	01/02/2017	03CH03-HY

Instrument for AC Conduction

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Until	Remark
EMC Receiver	KEYSIGHT	N9038A	MY54130031	20Hz ~ 8.4GHz	14/04/2016	13/04/2017	CO04-HY
LISN	MessTec	NNB-2/16Z	2001/009	9kHz ~ 30MHz	21/10/2015	20/10/2016	CO04-HY
RF Cable-CON	HUBER+SUHNER	RG213/U	076118320100 01	9kHz ~ 30MHz	26/02/2016	25/02/2017	CO04-HY
EMI Filter	LINDGREN	LRE-2060	1004	< 450 Hz	N/A	N/A	CO04-HY

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Neutral
Operating Function	Adapter Mode		



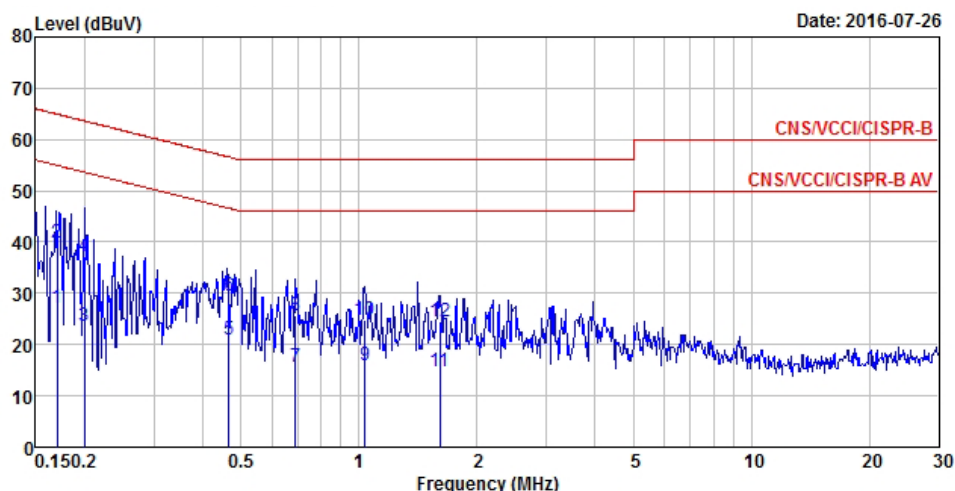
	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Aux Factor	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	dB	
1	0.19	23.32	-30.72	54.04	13.27	0.09	0.10	9.86	Average
2	0.19	39.50	-24.54	64.04	29.45	0.09	0.10	9.86	QP
3	0.27	16.58	-34.69	51.27	6.53	0.09	0.10	9.86	Average
4	0.27	30.74	-30.53	61.27	20.69	0.09	0.10	9.86	QP
5	0.45	19.36	-27.44	46.80	9.30	0.10	0.10	9.86	Average
6	0.45	29.83	-26.97	56.80	19.77	0.10	0.10	9.86	QP
7	0.78	14.56	-31.44	46.00	4.49	0.11	0.10	9.86	Average
8	0.78	25.93	-30.07	56.00	15.86	0.11	0.10	9.86	QP
9	1.59	14.10	-31.90	46.00	3.99	0.14	0.10	9.87	Average
10	1.59	24.06	-31.94	56.00	13.95	0.14	0.10	9.87	QP
11	2.45	12.84	-33.16	46.00	2.71	0.16	0.10	9.87	Average
12	2.45	22.62	-33.38	56.00	12.49	0.16	0.10	9.87	QP

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

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

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Line
Operating Function	Adapter Mode		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Aux Factor	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	dB	
1	0.17	27.03	-27.93	54.96	16.95	0.12	0.10	9.86	Average
2	0.17	39.98	-24.98	64.96	29.90	0.12	0.10	9.86	QP
3	0.20	23.49	-30.14	53.63	13.41	0.12	0.10	9.86	Average
4	0.20	37.31	-26.32	63.63	27.23	0.12	0.10	9.86	QP
5	0.47	20.83	-25.77	46.60	10.73	0.14	0.10	9.86	Average
6	0.47	29.50	-27.10	56.60	19.40	0.14	0.10	9.86	QP
7	0.69	15.77	-30.23	46.00	5.66	0.15	0.10	9.86	Average
8	0.69	25.80	-30.20	56.00	15.69	0.15	0.10	9.86	QP
9	1.04	16.01	-29.99	46.00	5.89	0.16	0.10	9.86	Average
10	1.04	24.87	-31.13	56.00	14.75	0.16	0.10	9.86	QP
11	1.61	14.64	-31.36	46.00	4.49	0.18	0.10	9.87	Average
12	1.61	24.45	-31.55	56.00	14.30	0.18	0.10	9.87	QP

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



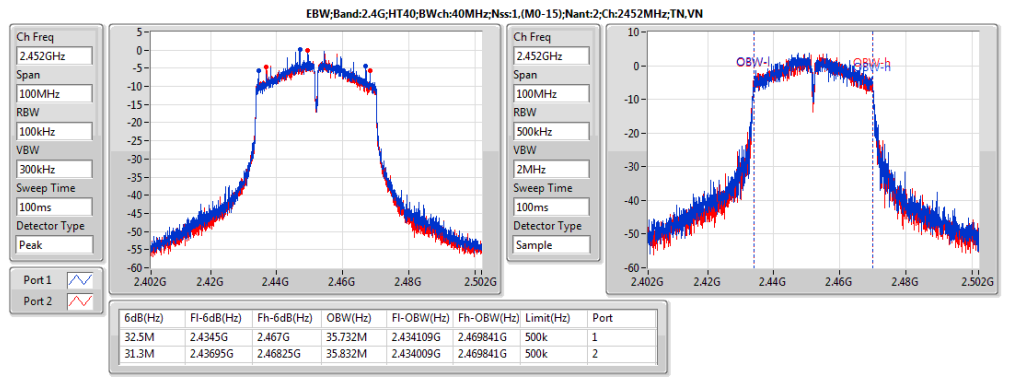
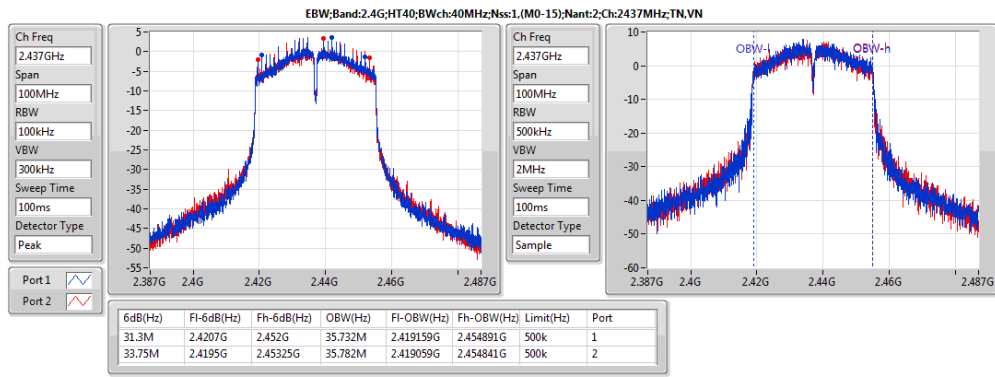
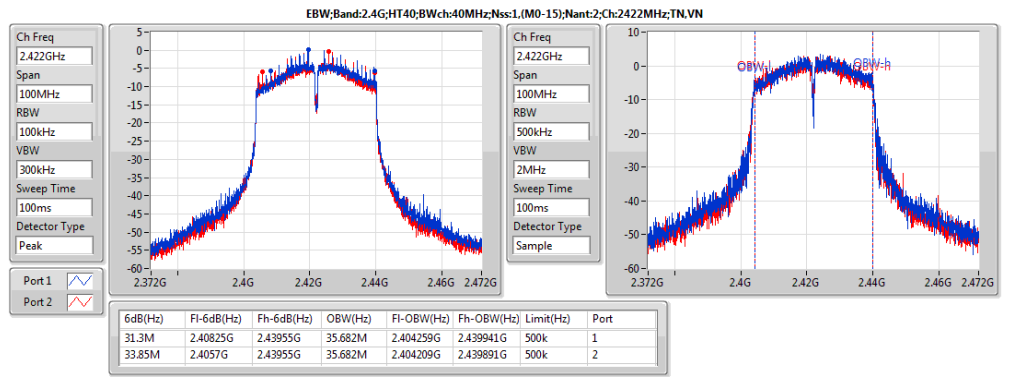
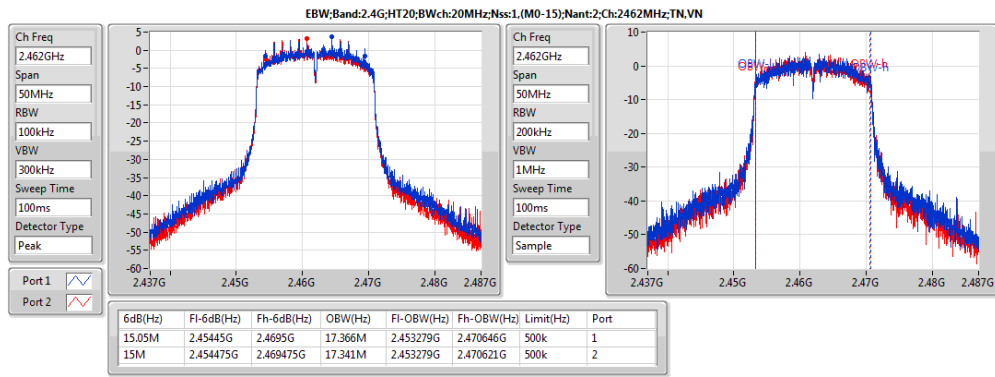
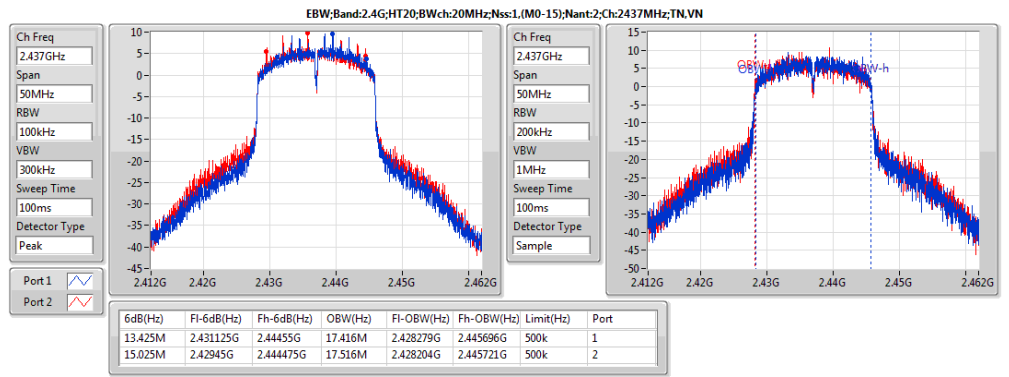
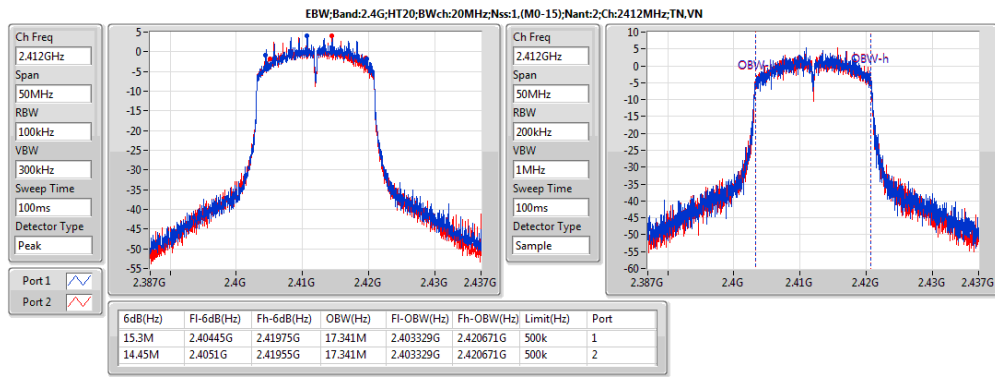
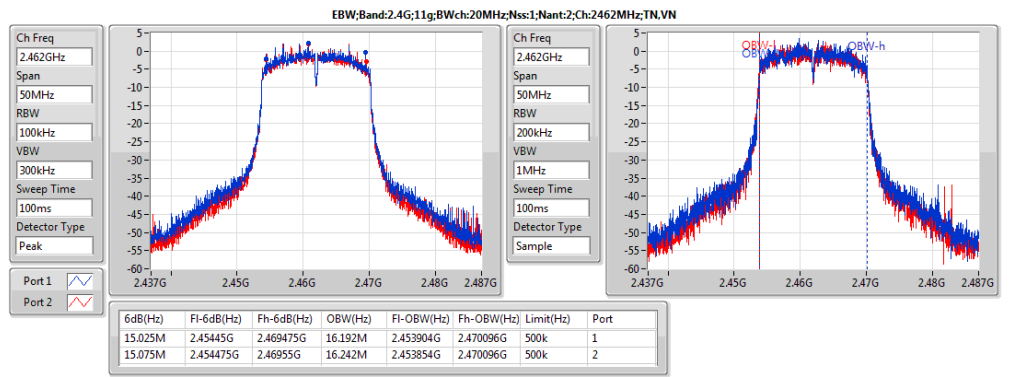
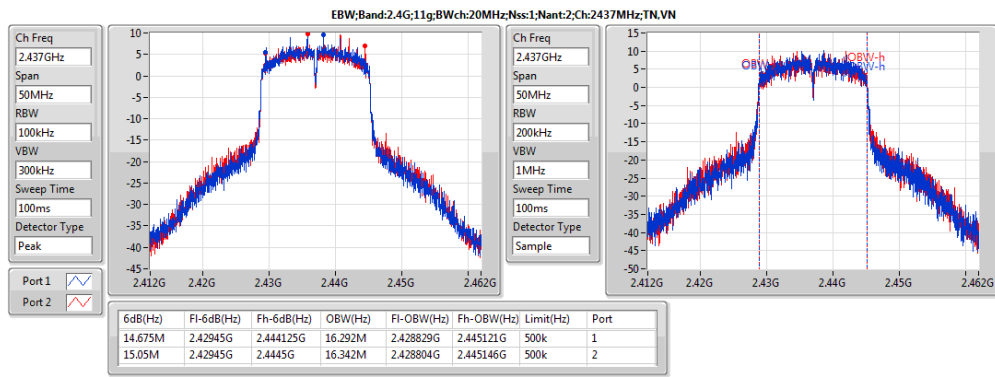
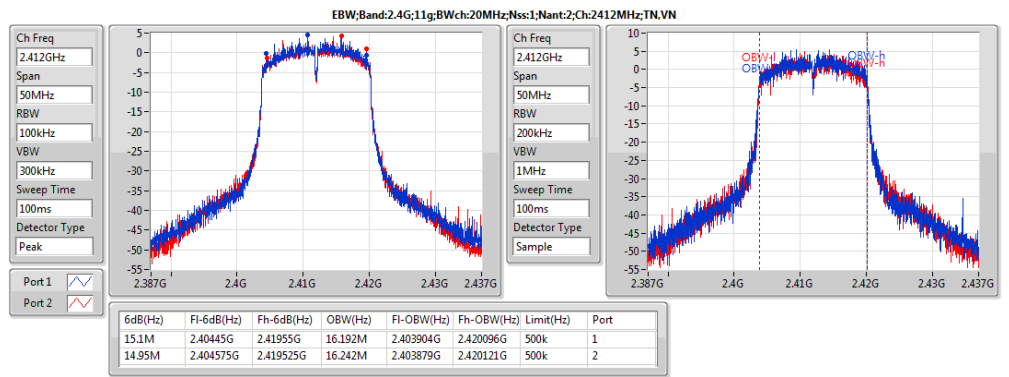
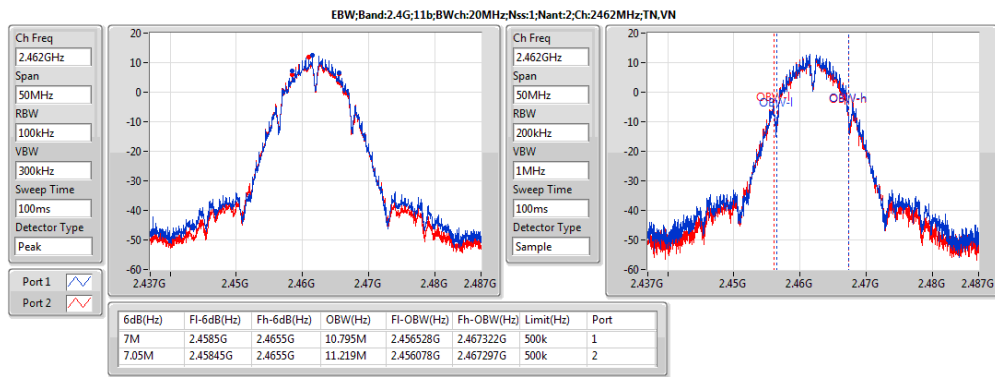
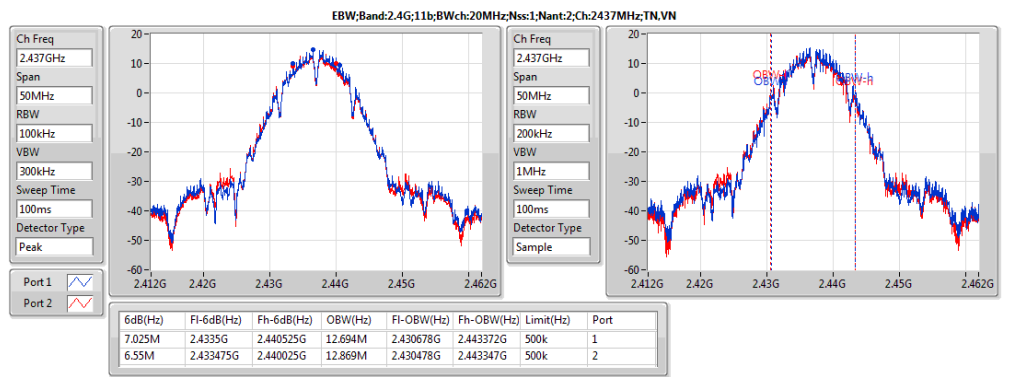
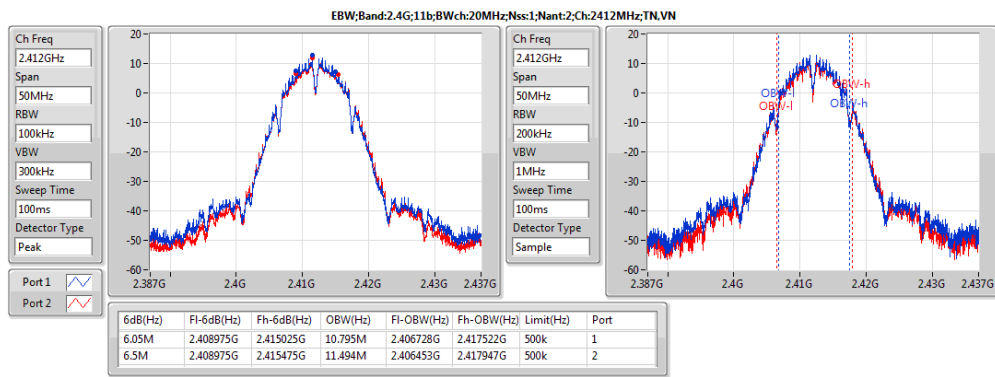
Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4G;11b;20;1;2	7.05M	12.869M	12M9G1D	6.05M	10.795M
2.4G;11g;20;1;2	15.1M	16.342M	16M3D1D	14.675M	16.192M
2.4G;HT20;20;1,(M0-15);2	15.3M	17.516M	17M5D1D	13.425M	17.341M
2.4G;HT40;40;1,(M0-15);2	33.85M	35.832M	35M8D1D	31.3M	35.682M



Result

Mode	Result	Limit	P1-N dB (Hz)	P1-OBW (Hz)	P2-N dB (Hz)	P2-OBW (Hz)
2.4G;11b;20;1;2;2412;L;TN,VN	Pass	500k	6.05M	10.795M	6.5M	11.494M
2.4G;11b;20;1;2;2437;M;TN,VN	Pass	500k	7.025M	12.694M	6.55M	12.869M
2.4G;11b;20;1;2;2462;H;TN,VN	Pass	500k	7M	10.795M	7.05M	11.219M
2.4G;11g;20;1;2;2412;L;TN,VN	Pass	500k	15.1M	16.192M	14.95M	16.242M
2.4G;11g;20;1;2;2437;M;TN,VN	Pass	500k	14.675M	16.292M	15.05M	16.342M
2.4G;11g;20;1;2;2462;H;TN,VN	Pass	500k	15.025M	16.192M	15.075M	16.242M
2.4G;HT20;20;1;(M0-15);2;2412;L;TN,VN	Pass	500k	15.3M	17.341M	14.45M	17.341M
2.4G;HT20;20;1;(M0-15);2;2437;M;TN,VN	Pass	500k	13.425M	17.416M	15.025M	17.516M
2.4G;HT20;20;1;(M0-15);2;2462;H;TN,VN	Pass	500k	15.05M	17.366M	15M	17.341M
2.4G;HT40;40;1;(M0-15);2;2422;L;TN,VN	Pass	500k	31.3M	35.682M	33.85M	35.682M
2.4G;HT40;40;1;(M0-15);2;2437;M;TN,VN	Pass	500k	31.3M	35.732M	33.75M	35.782M
2.4G;HT40;40;1;(M0-15);2;2452;H;TN,VN	Pass	500k	32.5M	35.732M	31.3M	35.832M





Summary

Mode	Sum (dBm)	Sum (W)	EIRP (dBm)	EIRP (W)
2.4G;11b;20;1;2	28.23	0.66527	29.75	0.94406
2.4G;11g;20;1;2	29.04	0.80168	30.56	1.13763
2.4G;HT20;20;1,(M0-15);2	29.17	0.82604	30.69	1.1722
2.4G;HT40;40;1,(M0-15);2	27.38	0.54702	28.90	0.77625



Result

Mode	Result	DG (dBi)	EIRP (dBm)	EIRP Lim. (dBm)	Sum (dBm)	Sum Lim. (dBm)	P1 (dBm)	P2 (dBm)
2.4G;11b;20;1;2;2412;L;TN,VN	Pass	1.52	27.46	36.00	25.94	30.00	23.20	22.65
2.4G;11b;20;1;2;2417;L;TN,VN	Pass	1.52	28.00	36.00	26.48	30.00	23.06	23.85
2.4G;11b;20;1;2;2437;M;TN,VN	Pass	1.52	29.75	36.00	28.23	30.00	25.52	24.89
2.4G;11b;20;1;2;2457;M;TN,VN	Pass	1.52	27.86	36.00	26.34	30.00	22.92	23.71
2.4G;11b;20;1;2;2462;H;TN,VN	Pass	1.52	27.40	36.00	25.88	30.00	23.15	22.57
2.4G;11g;20;1;2;2412;L;TN,VN	Pass	1.52	28.11	36.00	26.59	30.00	23.75	23.40
2.4G;11g;20;1;2;2417;L;TN,VN	Pass	1.52	29.13	36.00	27.61	30.00	24.08	25.07
2.4G;11g;20;1;2;2437;M;TN,VN	Pass	1.52	30.56	36.00	29.04	30.00	26.38	25.65
2.4G;11g;20;1;2;2457;M;TN,VN	Pass	1.52	27.89	36.00	26.37	30.00	23.10	23.60
2.4G;11g;20;1;2;2462;H;TN,VN	Pass	1.52	26.65	36.00	25.13	30.00	22.39	21.82
2.4G;HT20;20;1;(M0-15);2;2412;L;TN,VN	Pass	1.52	27.63	36.00	26.11	30.00	23.30	22.89
2.4G;HT20;20;1;(M0-15);2;2417;L;TN,VN	Pass	1.52	28.93	36.00	27.41	30.00	23.60	25.08
2.4G;HT20;20;1;(M0-15);2;2437;M;TN,VN	Pass	1.52	30.69	36.00	29.17	30.00	26.48	25.82
2.4G;HT20;20;1;(M0-15);2;2457;M;TN,VN	Pass	1.52	28.08	36.00	26.56	30.00	23.31	23.78
2.4G;HT20;20;1;(M0-15);2;2462;H;TN,VN	Pass	1.52	27.36	36.00	25.84	30.00	23.14	22.49
2.4G;HT40;40;1;(M0-15);2;2422;L;TN,VN	Pass	1.52	25.72	36.00	24.20	30.00	21.38	21.00
2.4G;HT40;40;1;(M0-15);2;2427;L;TN,VN	Pass	1.52	26.73	36.00	25.21	30.00	21.78	22.58
2.4G;HT40;40;1;(M0-15);2;2437;M;TN,VN	Pass	1.52	28.90	36.00	27.38	30.00	24.60	24.12
2.4G;HT40;40;1;(M0-15);2;2447;M;TN,VN	Pass	1.52	27.60	36.00	26.08	30.00	22.82	23.30
2.4G;HT40;40;1;(M0-15);2;2452;H;TN,VN	Pass	1.52	26.26	36.00	24.74	30.00	22.13	21.29



Summary

Mode	Sum (dBm)	Sum (W)	EIRP (dBm)	EIRP (W)
2.4G;11b;20;1;2	25.65	0.36728	27.17	0.52119
2.4G;11g;20;1;2	23.23	0.21038	24.75	0.29854
2.4G;HT20;20;1,(M0-15);2	23.08	0.20324	24.60	0.2884
2.4G;HT40;40;1,(M0-15);2	19.44	0.0879	20.96	0.12474



Result

Mode	Result	DG (dBi)	EIRP (dBm)	EIRP Lim. (dBm)	Sum (dBm)	Sum Lim. (dBm)	P1 (dBm)	P2 (dBm)
2.4G;11b;20;1;2;2412;L;TN,VN	Pass	1.52	24.40	36.00	22.88	30.00	20.06	19.67
2.4G;11b;20;1;2;2417;L;TN,VN	Pass	1.52	25.03	36.00	23.51	30.00	20.09	20.87
2.4G;11b;20;1;2;2437;M;TN,VN	Pass	1.52	27.17	36.00	25.65	30.00	22.81	22.45
2.4G;11b;20;1;2;2457;M;TN,VN	Pass	1.52	24.77	36.00	23.25	30.00	19.88	20.58
2.4G;11b;20;1;2;2462;H;TN,VN	Pass	1.52	24.27	36.00	22.75	30.00	19.98	19.47
2.4G;11g;20;1;2;2412;L;TN,VN	Pass	1.52	20.19	36.00	18.67	30.00	15.87	15.43
2.4G;11g;20;1;2;2417;L;TN,VN	Pass	1.52	21.50	36.00	19.98	30.00	16.57	17.34
2.4G;11g;20;1;2;2437;M;TN,VN	Pass	1.52	24.75	36.00	23.23	30.00	20.42	20.01
2.4G;11g;20;1;2;2457;M;TN,VN	Pass	1.52	19.75	36.00	18.23	30.00	14.71	15.68
2.4G;11g;20;1;2;2462;H;TN,VN	Pass	1.52	17.84	36.00	16.32	30.00	13.46	13.16
2.4G;HT20;20;1;(M0-15);2;2412;L;TN,VN	Pass	1.52	19.45	36.00	17.93	30.00	15.07	14.77
2.4G;HT20;20;1;(M0-15);2;2417;L;TN,VN	Pass	1.52	21.49	36.00	19.97	30.00	16.48	17.39
2.4G;HT20;20;1;(M0-15);2;2437;M;TN,VN	Pass	1.52	24.60	36.00	23.08	30.00	20.25	19.89
2.4G;HT20;20;1;(M0-15);2;2457;M;TN,VN	Pass	1.52	19.68	36.00	18.16	30.00	14.82	15.45
2.4G;HT20;20;1;(M0-15);2;2462;H;TN,VN	Pass	1.52	18.53	36.00	17.01	30.00	14.18	13.81
2.4G;HT40;40;1;(M0-15);2;2422;L;TN,VN	Pass	1.52	16.99	36.00	15.47	30.00	12.64	12.26
2.4G;HT40;40;1;(M0-15);2;2427;L;TN,VN	Pass	1.52	18.32	36.00	16.80	30.00	13.15	14.34
2.4G;HT40;40;1;(M0-15);2;2437;M;TN,VN	Pass	1.52	20.96	36.00	19.44	30.00	16.53	16.33
2.4G;HT40;40;1;(M0-15);2;2447;M;TN,VN	Pass	1.52	19.47	36.00	17.95	30.00	14.74	15.13
2.4G;HT40;40;1;(M0-15);2;2452;H;TN,VN	Pass	1.52	17.09	36.00	15.57	30.00	12.67	12.43



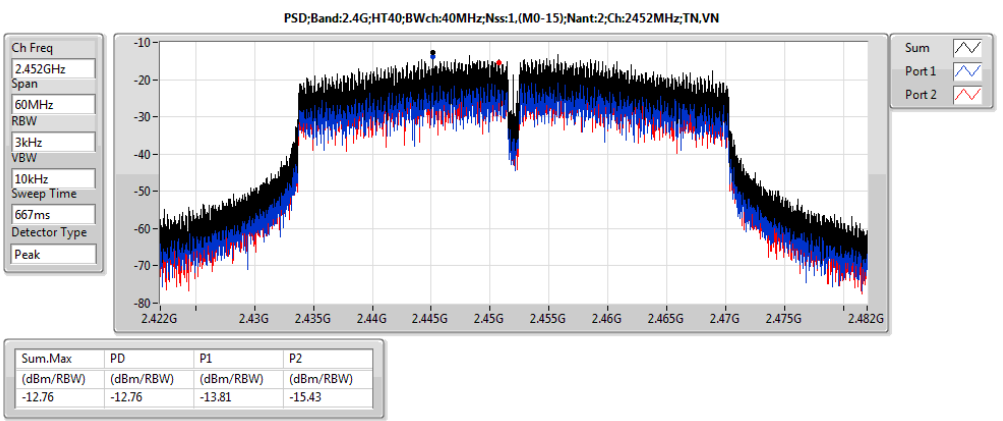
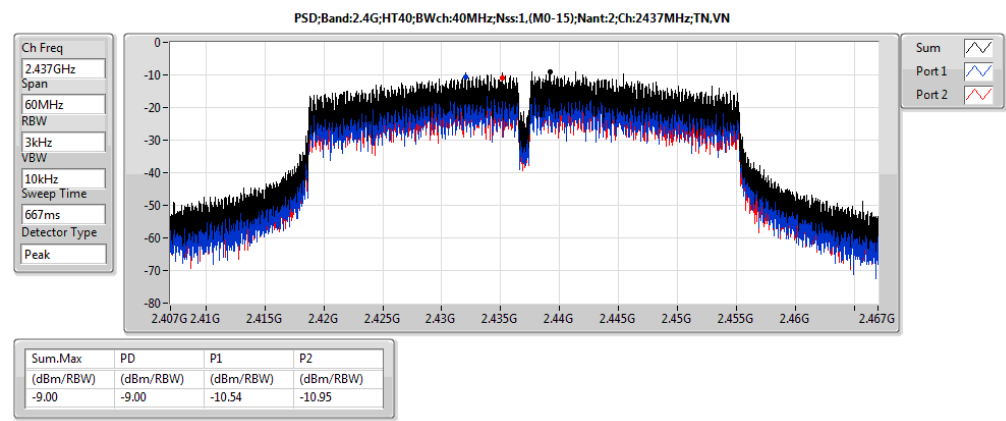
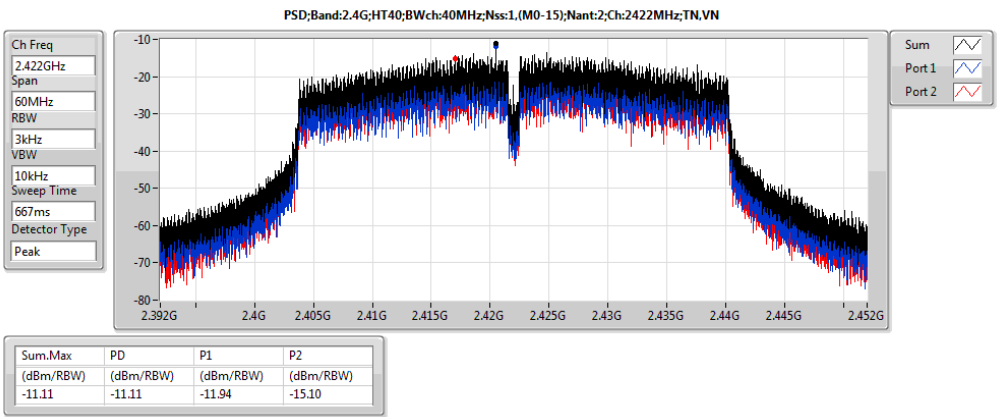
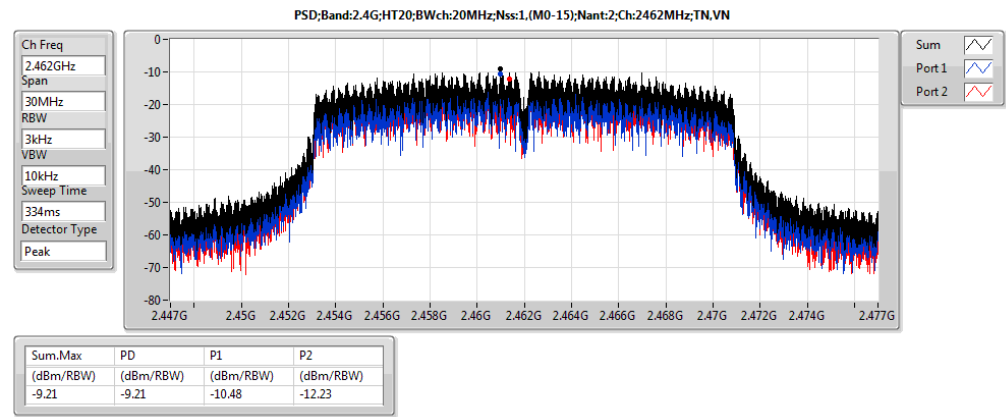
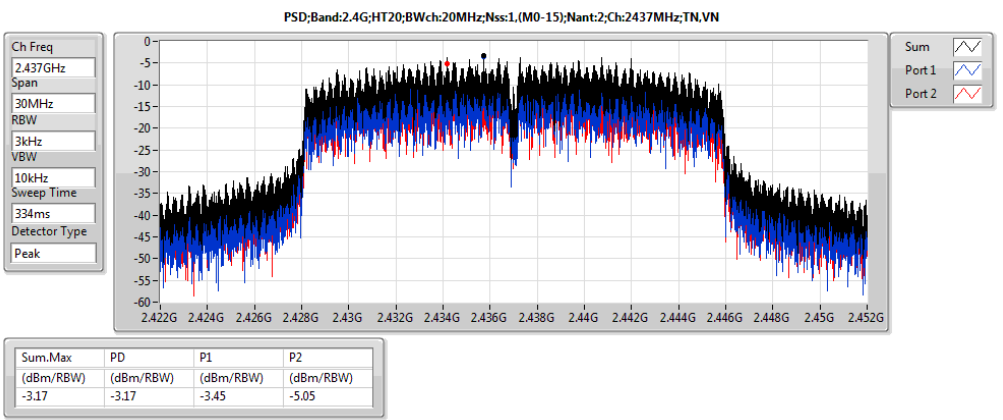
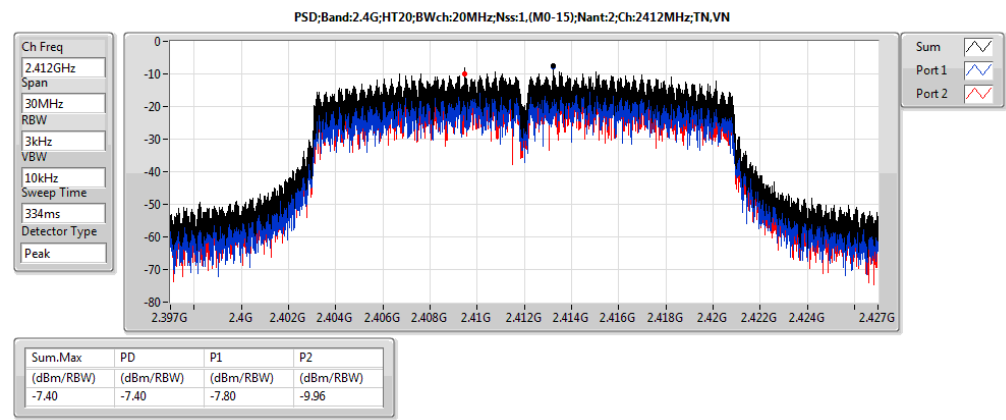
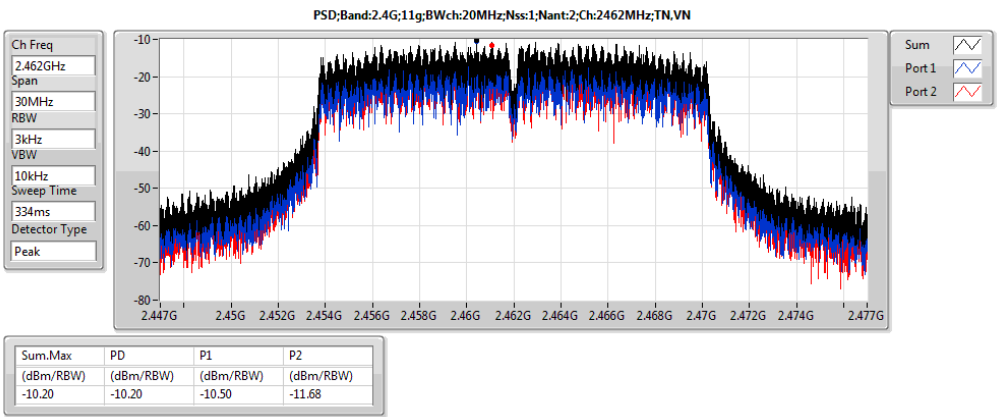
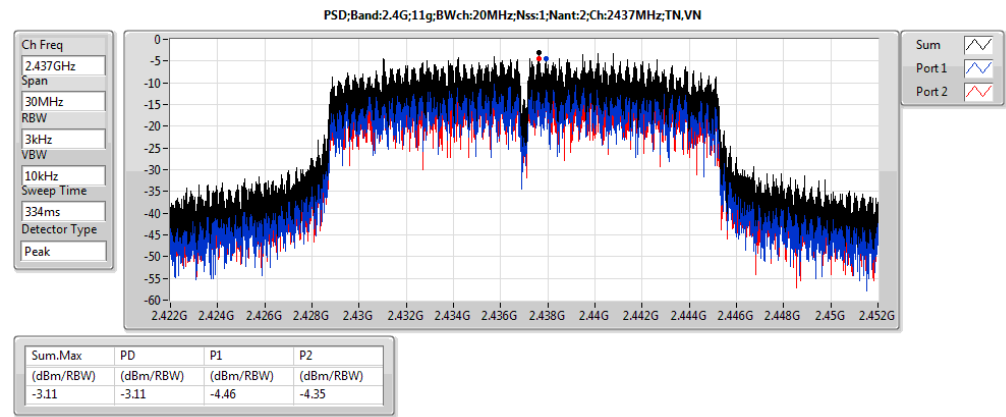
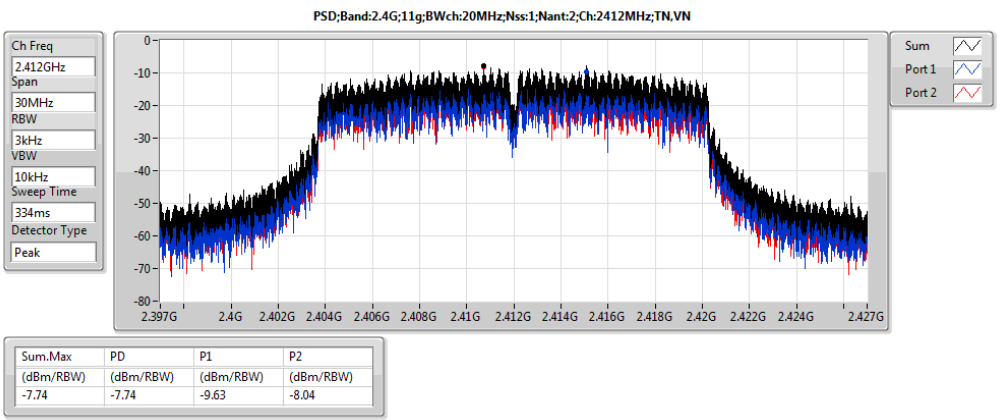
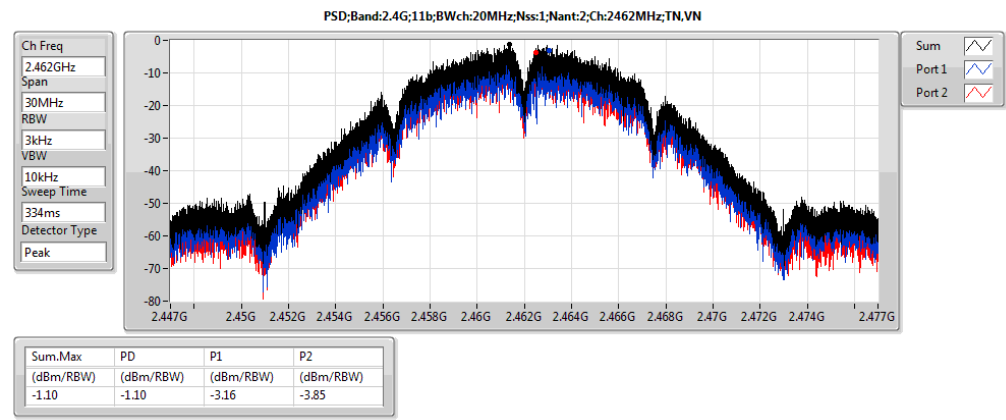
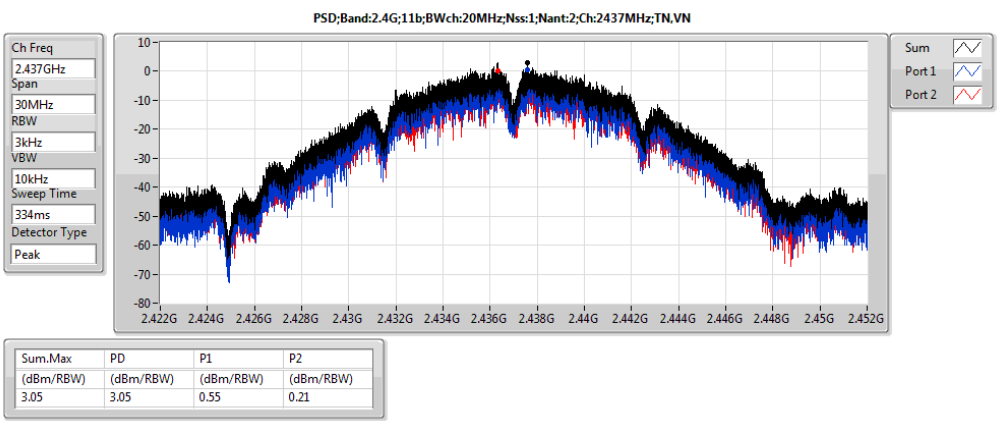
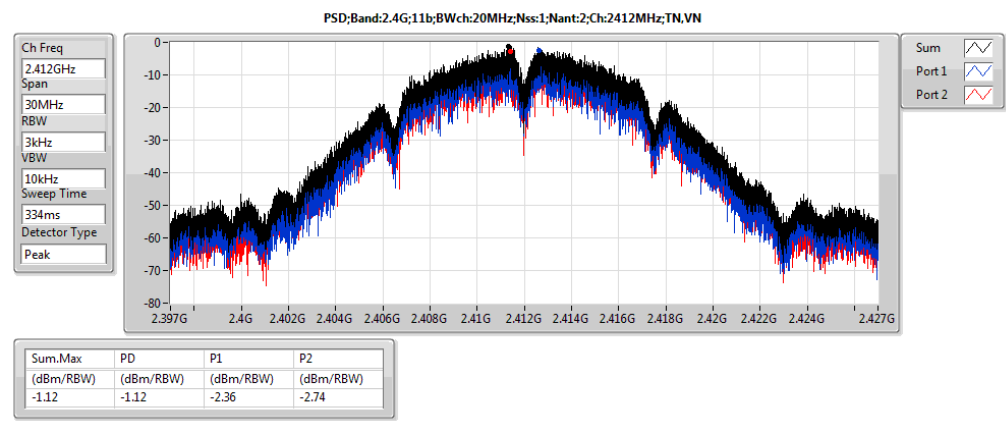
Summary

Mode	PD (dBm/RBW)	EIRP.PD (dBm/RBW)
2.4G;11b;20;1;2	3.05	7.58
2.4G;11g;20;1;2	-3.11	1.42
2.4G;HT20;20;1;(M0-15);2	-3.17	1.36
2.4G;HT40;40;1;(M0-15);2	-9.00	-4.47



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)
2.4G;11b;20;1;2;2412;L;TN,VN	Pass	3k	3k	0.00	4.53	-1.12	-1.12	8.00	3.41	Inf	-2.36	-2.74
2.4G;11b;20;1;2;2437;M;TN,VN	Pass	3k	3k	0.00	4.53	3.05	3.05	8.00	7.58	Inf	0.55	0.21
2.4G;11b;20;1;2;2462;H;TN,VN	Pass	3k	3k	0.00	4.53	-1.10	-1.10	8.00	3.43	Inf	-3.16	-3.85
2.4G;11g;20;1;2;2412;L;TN,VN	Pass	3k	3k	0.00	4.53	-7.74	-7.74	8.00	-3.21	Inf	-9.63	-8.04
2.4G;11g;20;1;2;2437;M;TN,VN	Pass	3k	3k	0.00	4.53	-3.11	-3.11	8.00	1.42	Inf	-4.46	-4.35
2.4G;11g;20;1;2;2462;H;TN,VN	Pass	3k	3k	0.00	4.53	-10.20	-10.20	8.00	-5.67	Inf	-10.50	-11.68
2.4G;HT20;20;1,(M0-15);2;2412;L;TN,VN	Pass	3k	3k	0.00	4.53	-7.40	-7.40	8.00	-2.87	Inf	-7.80	-9.96
2.4G;HT20;20;1,(M0-15);2;2437;M;TN,VN	Pass	3k	3k	0.00	4.53	-3.17	-3.17	8.00	1.36	Inf	-3.45	-5.05
2.4G;HT20;20;1,(M0-15);2;2462;H;TN,VN	Pass	3k	3k	0.00	4.53	-9.21	-9.21	8.00	-4.68	Inf	-10.48	-12.23
2.4G;HT40;40;1,(M0-15);2;2422;L;TN,VN	Pass	3k	3k	0.00	4.53	-11.11	-11.11	8.00	-6.58	Inf	-11.94	-15.10
2.4G;HT40;40;1,(M0-15);2;2437;M;TN,VN	Pass	3k	3k	0.00	4.53	-9.00	-9.00	8.00	-4.47	Inf	-10.54	-10.95
2.4G;HT40;40;1,(M0-15);2;2452;H;TN,VN	Pass	3k	3k	0.00	4.53	-12.76	-12.76	8.00	-8.23	Inf	-13.81	-15.43





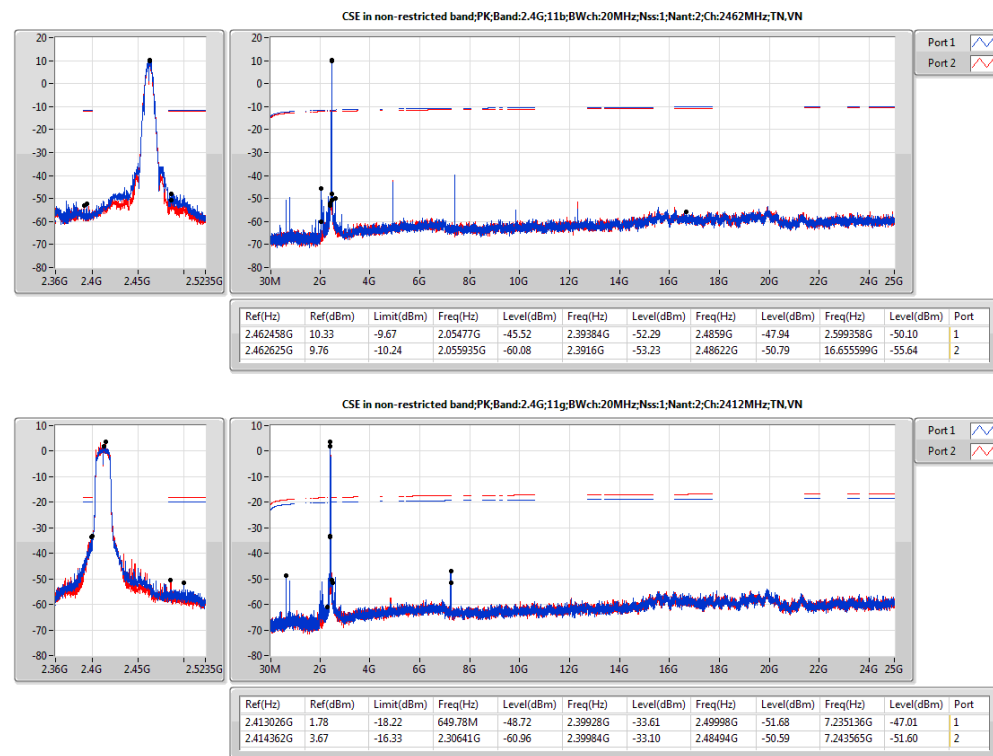
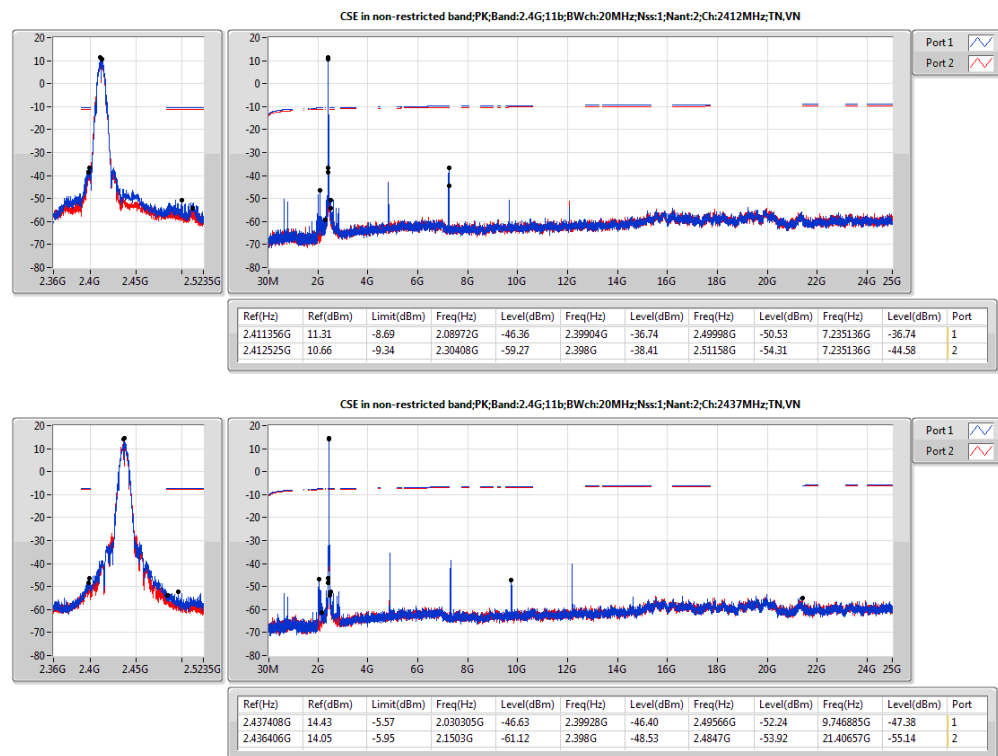
Summary

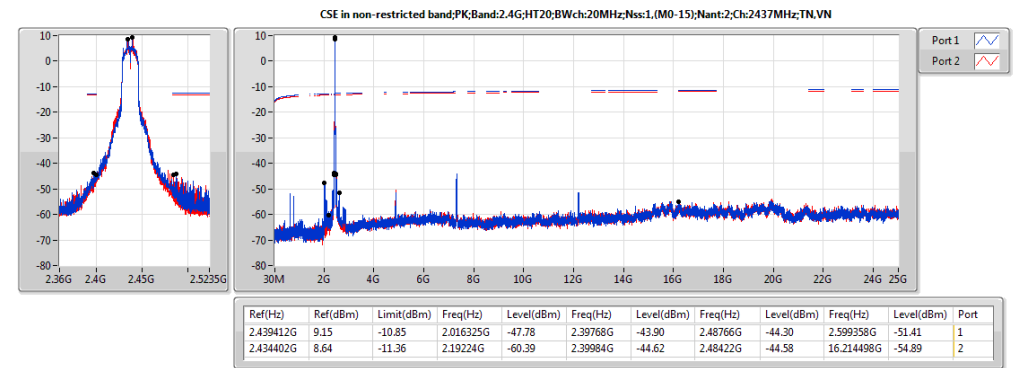
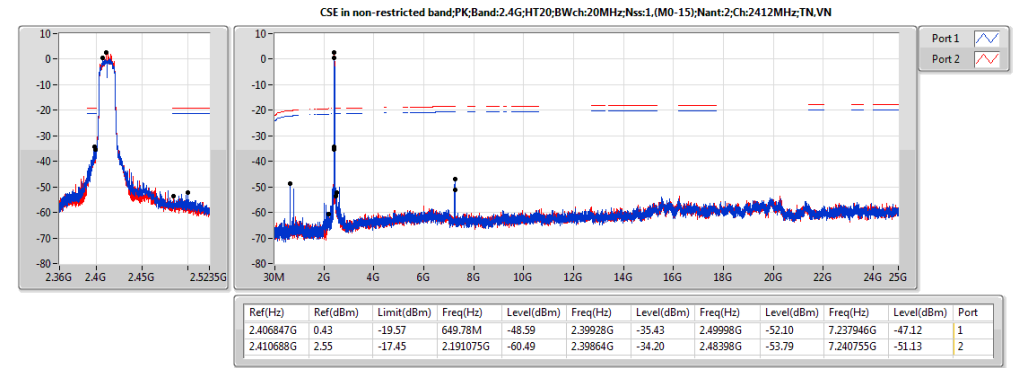
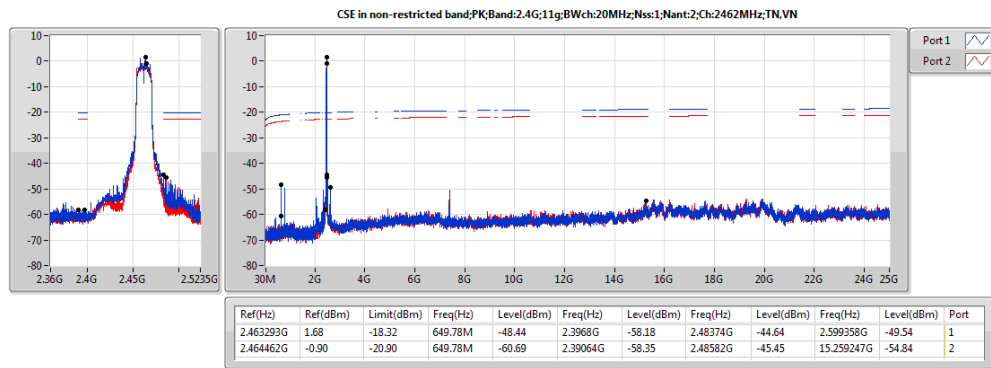
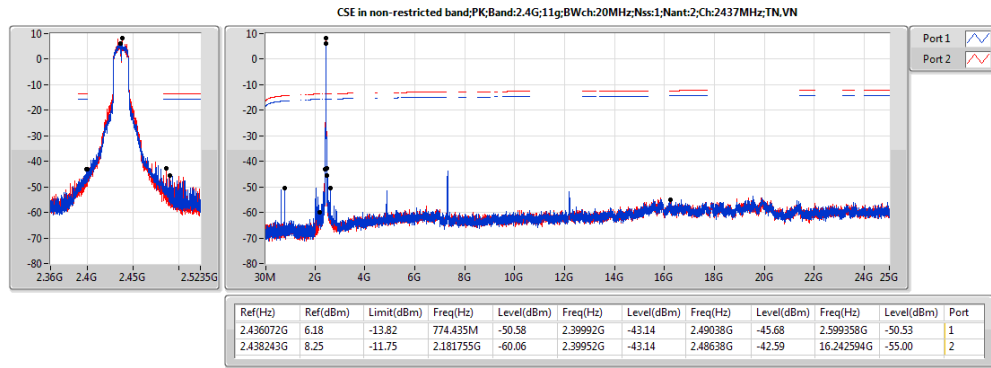
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4G;HT40;40;1,(M0-15);2;2422;L;TN,VN	Pass	2.430728G	-1.85	-21.85	649.445M	-47.51	2.3992G	-36.77	2.50638G	-57.59	2.599959G	-49.11	1

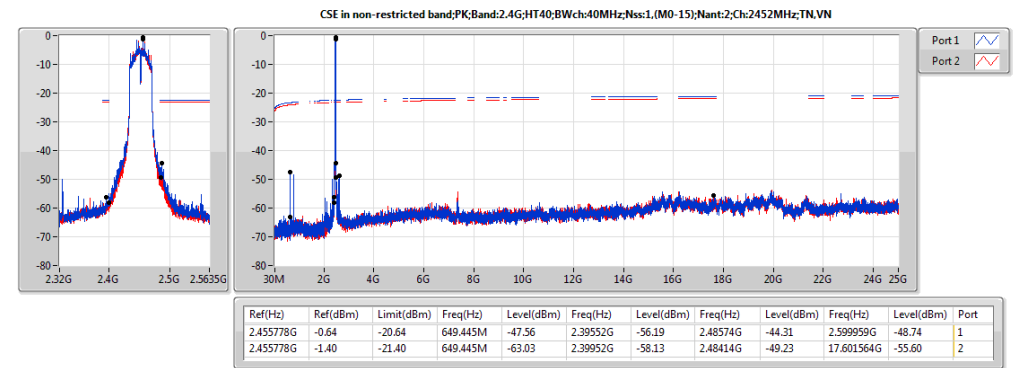
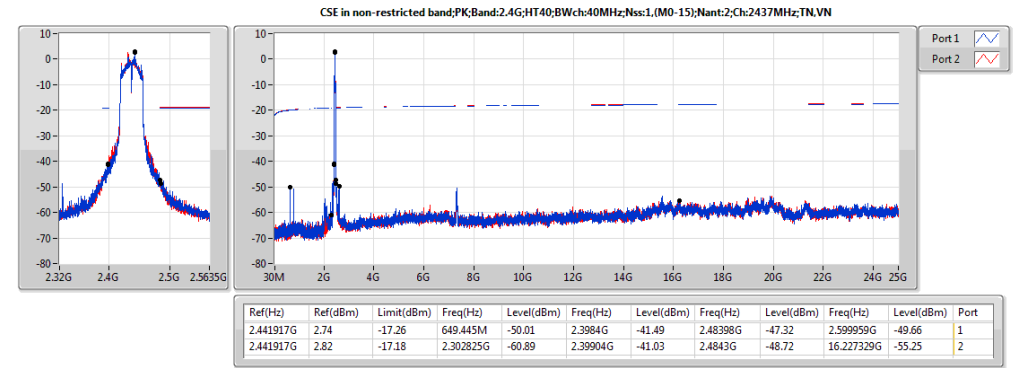
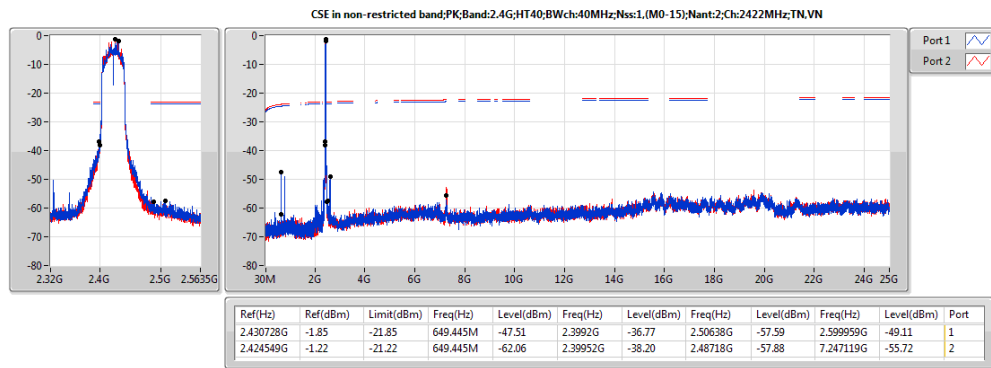
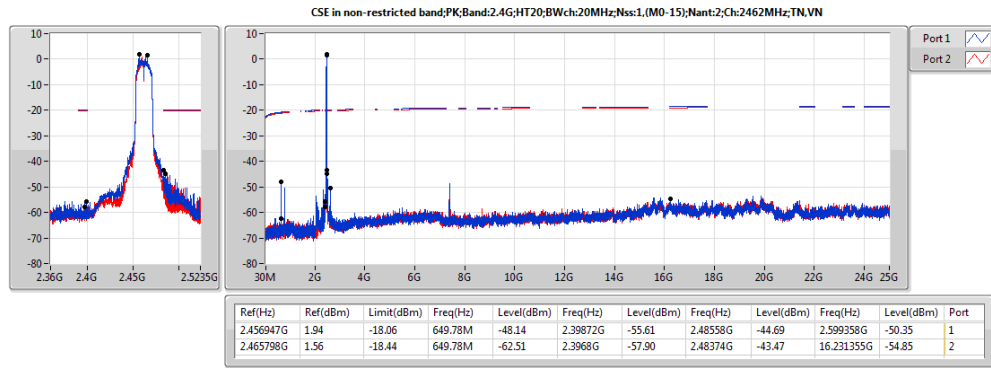


Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4G;11b;20;1;2;2412;L;TN,VN	Pass	2.411356G	11.31	-8.69	2.08972G	-46.36	2.39904G	-36.74	2.49998G	-50.53	7.235136G	-36.74	1
2.4G;11b;20;1;2;2412;L;TN,VN	Pass	2.412525G	10.66	-9.34	2.30408G	-59.27	2.398G	-38.41	2.51158G	-54.31	7.235136G	-44.58	2
2.4G;11b;20;1;2;2437;M;TN,VN	Pass	2.437408G	14.43	-5.57	2.030305G	-46.63	2.39928G	-46.40	2.49566G	-52.24	9.746885G	-47.38	1
2.4G;11b;20;1;2;2437;M;TN,VN	Pass	2.436406G	14.05	-5.95	2.1503G	-61.12	2.398G	-48.53	2.4847G	-53.92	21.40657G	-55.14	2
2.4G;11b;20;1;2;2462;H;TN,VN	Pass	2.462458G	10.33	-9.67	2.05477G	-45.52	2.39384G	-52.29	2.4859G	-47.94	2.599358G	-50.10	1
2.4G;11b;20;1;2;2462;H;TN,VN	Pass	2.462625G	9.76	-10.24	2.055935G	-60.08	2.3916G	-53.23	2.48622G	-50.79	16.655599G	-55.64	2
2.4G;11g;20;1;2;2412;L;TN,VN	Pass	2.413026G	1.78	-18.22	649.78M	-48.72	2.39928G	-33.61	2.49998G	-51.68	7.235136G	-47.01	1
2.4G;11g;20;1;2;2412;L;TN,VN	Pass	2.414362G	3.67	-16.33	2.30641G	-60.96	2.39984G	-33.10	2.48494G	-50.59	7.243565G	-51.60	2
2.4G;11g;20;1;2;2437;M;TN,VN	Pass	2.436072G	6.18	-13.82	774.435M	-50.58	2.39992G	-43.14	2.49038G	-45.68	2.599358G	-50.53	1
2.4G;11g;20;1;2;2437;M;TN,VN	Pass	2.438243G	8.25	-11.75	2.181755G	-60.06	2.39952G	-43.14	2.48638G	-42.59	16.242594G	-55.00	2
2.4G;11g;20;1;2;2462;H;TN,VN	Pass	2.463293G	1.68	-18.32	649.78M	-48.44	2.3968G	-58.18	2.48374G	-44.64	2.599358G	-49.54	1
2.4G;11g;20;1;2;2462;H;TN,VN	Pass	2.464462G	-0.90	-20.90	649.78M	-60.69	2.39064G	-58.35	2.48582G	-45.45	15.259247G	-54.84	2
2.4G;HT20;20;1;(M0-15);2;2412;L;TN,VN	Pass	2.406847G	0.43	-19.57	649.78M	-48.59	2.39928G	-35.43	2.49998G	-52.10	7.237946G	-47.12	1
2.4G;HT20;20;1;(M0-15);2;2412;L;TN,VN	Pass	2.410688G	2.55	-17.45	2.191075G	-60.49	2.39864G	-34.20	2.48398G	-53.79	7.240755G	-51.13	2
2.4G;HT20;20;1;(M0-15);2;2437;M;TN,VN	Pass	2.439412G	9.15	-10.85	2.016325G	-47.78	2.39768G	-43.90	2.48766G	-44.30	2.599358G	-51.41	1
2.4G;HT20;20;1;(M0-15);2;2437;M;TN,VN	Pass	2.434402G	8.64	-11.36	2.192224G	-60.39	2.39984G	-44.62	2.48422G	-44.58	16.214498G	-54.89	2
2.4G;HT20;20;1;(M0-15);2;2462;H;TN,VN	Pass	2.456947G	1.94	-18.06	649.78M	-48.14	2.39872G	-55.61	2.48558G	-44.69	2.599358G	-50.35	1
2.4G;HT20;20;1;(M0-15);2;2462;H;TN,VN	Pass	2.465798G	1.56	-18.44	649.78M	-62.51	2.3968G	-57.90	2.48374G	-43.47	16.231355G	-54.85	2
2.4G;HT40;40;1;(M0-15);2;2422;L;TN,VN	Pass	2.430728G	-1.85	-21.85	649.445M	-47.51	2.3992G	-36.77	2.50638G	-57.59	2.599959G	-49.11	1
2.4G;HT40;40;1;(M0-15);2;2422;L;TN,VN	Pass	2.424549G	-1.22	-21.22	649.445M	-62.06	2.39952G	-38.20	2.48718G	-57.88	7.247119G	-55.72	2
2.4G;HT40;40;1;(M0-15);2;2437;M;TN,VN	Pass	2.441917G	2.74	-17.26	649.445M	-50.01	2.3984G	-41.49	2.48398G	-47.32	2.599959G	-49.66	1
2.4G;HT40;40;1;(M0-15);2;2437;M;TN,VN	Pass	2.441917G	2.82	-17.18	2.302825G	-60.89	2.39904G	-41.03	2.4843G	-48.72	16.227329G	-55.25	2
2.4G;HT40;40;1;(M0-15);2;2452;H;TN,VN	Pass	2.455778G	-0.64	-20.64	649.445M	-47.56	2.39552G	-56.19	2.48574G	-44.31	2.599959G	-48.74	1
2.4G;HT40;40;1;(M0-15);2;2452;H;TN,VN	Pass	2.455778G	-1.40	-21.40	649.445M	-63.03	2.39952G	-58.13	2.48414G	-49.23	17.601564G	-55.60	2









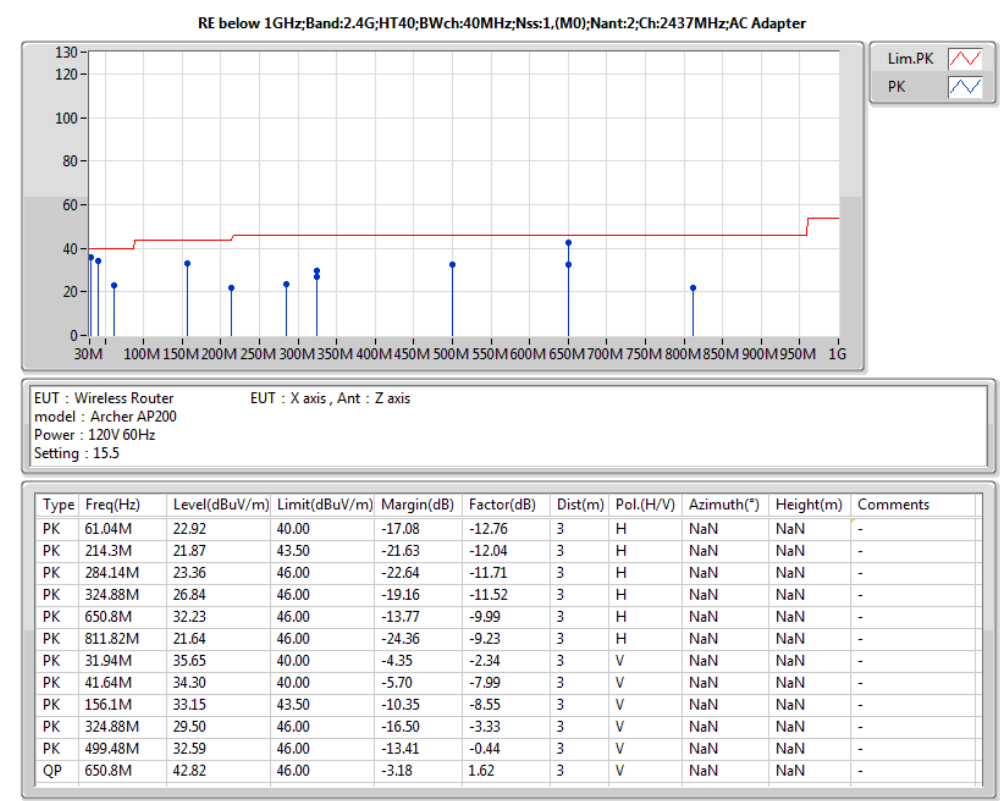
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
2.4G;HT40;40;1,(M0);2;2437;M;AC Adapter	Pass	QP	650.8M	42.82	46.00	-3.18	1.62	3	V	NaN	NaN	-



Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
2.4G;HT40;40;1,(M0);2;2437;M;AC Adapter	Pass	PK	61.04M	22.92	40.00	-17.08	-12.76	3	H	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2437;M;AC Adapter	Pass	PK	214.3M	21.87	43.50	-21.63	-12.04	3	H	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2437;M;AC Adapter	Pass	PK	284.14M	23.36	46.00	-22.64	-11.71	3	H	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2437;M;AC Adapter	Pass	PK	324.88M	26.84	46.00	-19.16	-11.52	3	H	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2437;M;AC Adapter	Pass	PK	650.8M	32.23	46.00	-13.77	-9.99	3	H	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2437;M;AC Adapter	Pass	PK	811.82M	21.64	46.00	-24.36	-9.23	3	H	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2437;M;AC Adapter	Pass	PK	31.94M	35.65	40.00	-4.35	-2.34	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2437;M;AC Adapter	Pass	PK	41.64M	34.30	40.00	-5.70	-7.99	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2437;M;AC Adapter	Pass	PK	156.1M	33.15	43.50	-10.35	-8.55	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2437;M;AC Adapter	Pass	PK	324.88M	29.50	46.00	-16.50	-3.33	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2437;M;AC Adapter	Pass	PK	499.48M	32.59	46.00	-13.41	-0.44	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2437;M;AC Adapter	Pass	QP	650.8M	42.82	46.00	-3.18	1.62	3	V	NaN	NaN	-





Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
2.4G;11g;20;1;2;2412;L;TX	Pass	AV	2.389968G	53.82	54.00	-0.18	30.99	3	V	NaN	NaN	-



Result

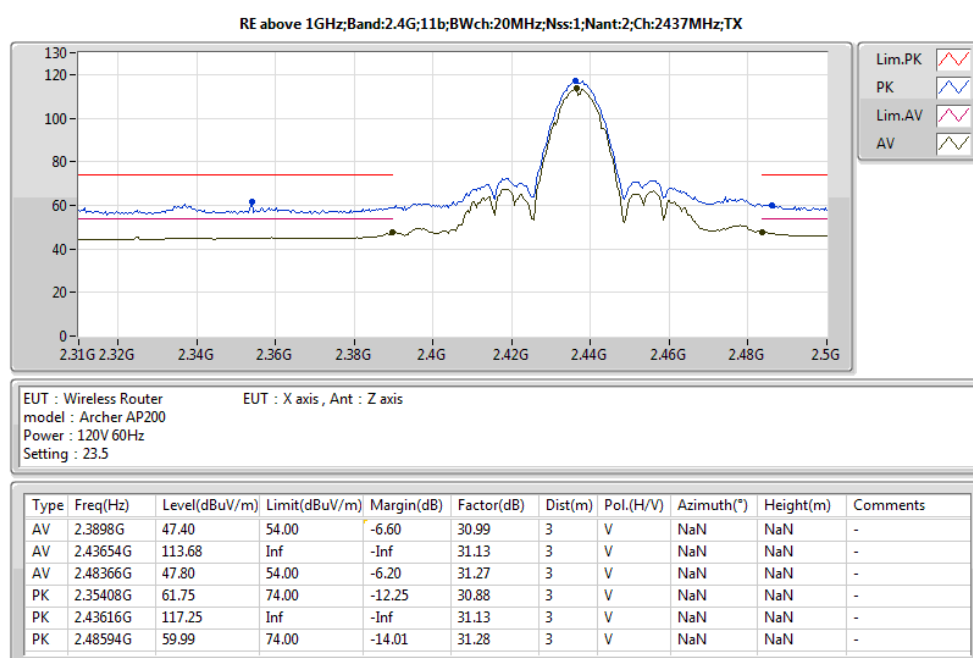
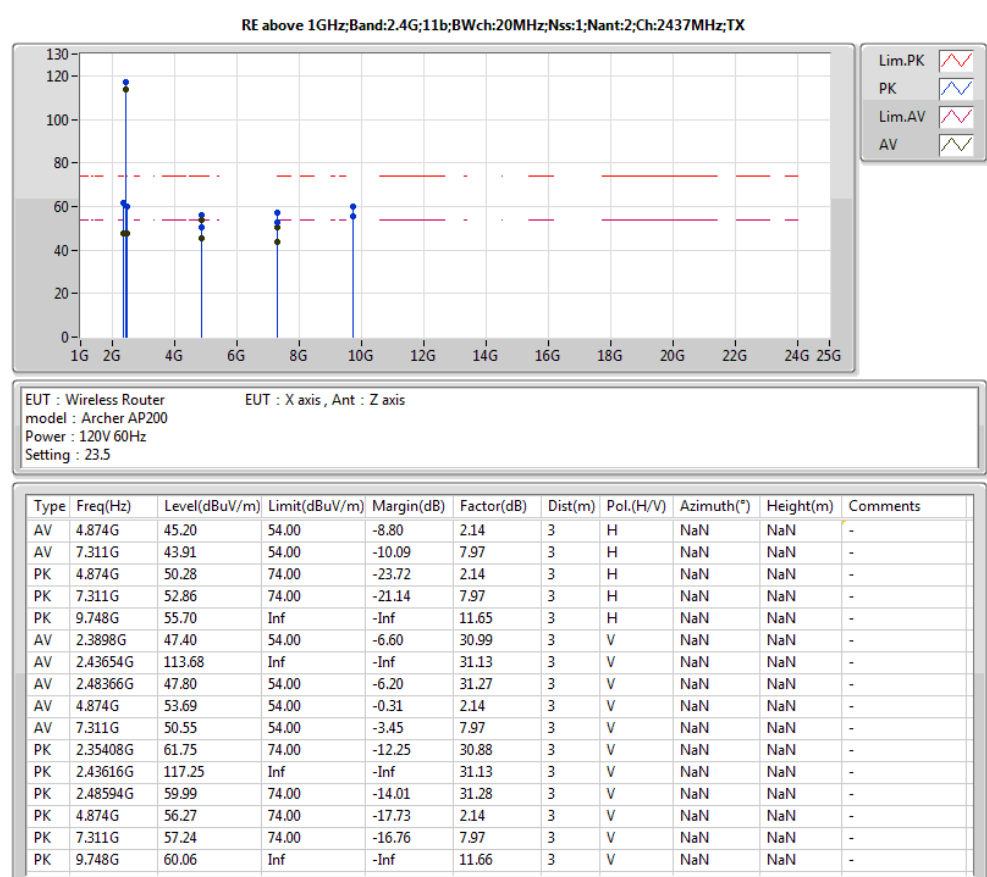
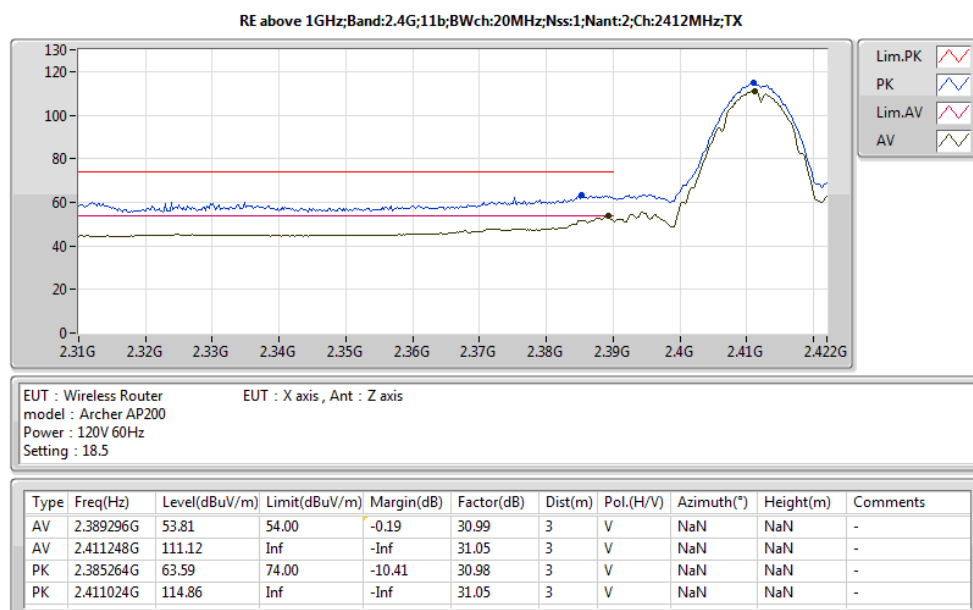
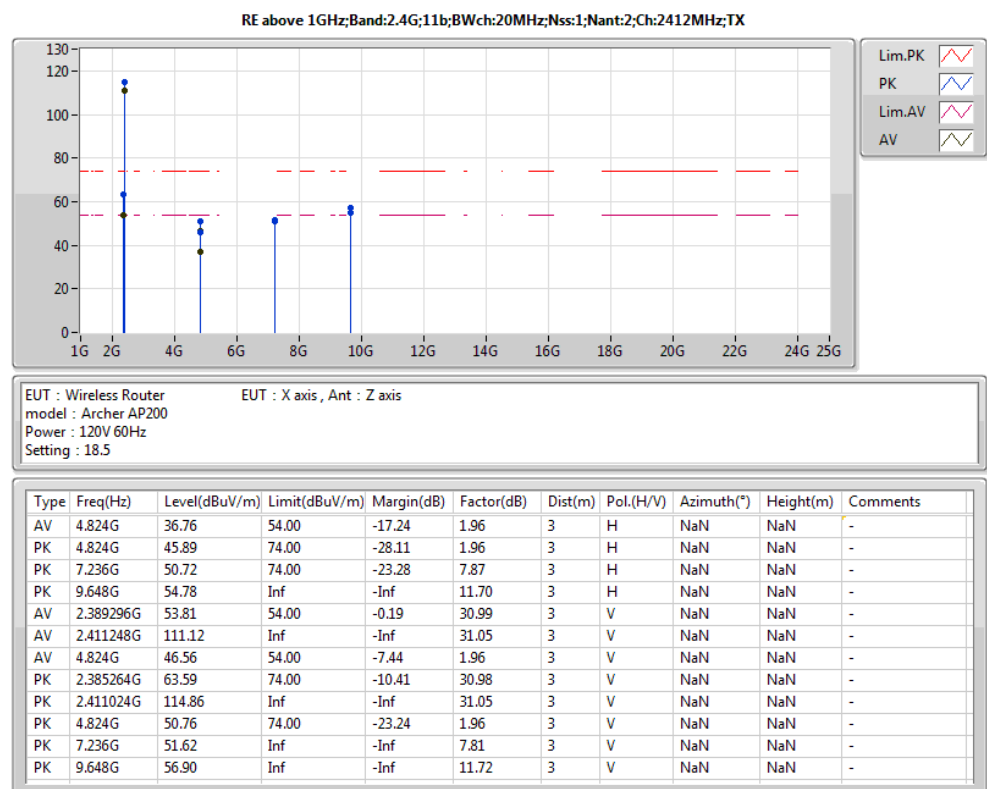
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
2.4G;11b;20;1;2;2412;L;TX	Pass	AV	4.824G	36.76	54.00	-17.24	1.96	3	H	NaN	NaN	-
2.4G;11b;20;1;2;2412;L;TX	Pass	PK	4.824G	45.89	74.00	-28.11	1.96	3	H	NaN	NaN	-
2.4G;11b;20;1;2;2412;L;TX	Pass	PK	7.236G	50.72	74.00	-23.28	7.87	3	H	NaN	NaN	-
2.4G;11b;20;1;2;2412;L;TX	Pass	PK	9.648G	54.78	Inf	-Inf	11.70	3	H	NaN	NaN	-
2.4G;11b;20;1;2;2412;L;TX	Pass	AV	2.389296G	53.81	54.00	-0.19	30.99	3	V	NaN	NaN	-
2.4G;11b;20;1;2;2412;L;TX	Pass	AV	2.411248G	111.12	Inf	-Inf	31.05	3	V	NaN	NaN	-
2.4G;11b;20;1;2;2412;L;TX	Pass	AV	4.824G	46.56	54.00	-7.44	1.96	3	V	NaN	NaN	-
2.4G;11b;20;1;2;2412;L;TX	Pass	PK	2.385264G	63.59	74.00	-10.41	30.98	3	V	NaN	NaN	-
2.4G;11b;20;1;2;2412;L;TX	Pass	PK	2.411024G	114.86	Inf	-Inf	31.05	3	V	NaN	NaN	-
2.4G;11b;20;1;2;2412;L;TX	Pass	PK	4.824G	50.76	74.00	-23.24	1.96	3	V	NaN	NaN	-
2.4G;11b;20;1;2;2412;L;TX	Pass	PK	7.236G	51.62	Inf	-Inf	7.81	3	V	NaN	NaN	-
2.4G;11b;20;1;2;2412;L;TX	Pass	PK	9.648G	56.90	Inf	-Inf	11.72	3	V	NaN	NaN	-
2.4G;11b;20;1;2;2437;M;TX	Pass	AV	4.874G	45.20	54.00	-8.80	2.14	3	H	NaN	NaN	-
2.4G;11b;20;1;2;2437;M;TX	Pass	AV	7.311G	43.91	54.00	-10.09	7.97	3	H	NaN	NaN	-
2.4G;11b;20;1;2;2437;M;TX	Pass	PK	4.874G	50.28	74.00	-23.72	2.14	3	H	NaN	NaN	-
2.4G;11b;20;1;2;2437;M;TX	Pass	PK	7.311G	52.86	74.00	-21.14	7.97	3	H	NaN	NaN	-
2.4G;11b;20;1;2;2437;M;TX	Pass	PK	9.748G	55.70	Inf	-Inf	11.65	3	H	NaN	NaN	-
2.4G;11b;20;1;2;2437;M;TX	Pass	AV	2.3898G	47.40	54.00	-6.60	30.99	3	V	NaN	NaN	-
2.4G;11b;20;1;2;2437;M;TX	Pass	AV	2.43654G	113.68	Inf	-Inf	31.13	3	V	NaN	NaN	-
2.4G;11b;20;1;2;2437;M;TX	Pass	AV	2.48366G	47.80	54.00	-6.20	31.27	3	V	NaN	NaN	-
2.4G;11b;20;1;2;2437;M;TX	Pass	AV	4.874G	53.69	54.00	-0.31	2.14	3	V	NaN	NaN	-
2.4G;11b;20;1;2;2437;M;TX	Pass	AV	7.311G	50.55	54.00	-3.45	7.97	3	V	NaN	NaN	-
2.4G;11b;20;1;2;2437;M;TX	Pass	PK	2.35408G	61.75	74.00	-12.25	30.88	3	V	NaN	NaN	-
2.4G;11b;20;1;2;2437;M;TX	Pass	PK	2.43616G	117.25	Inf	-Inf	31.13	3	V	NaN	NaN	-
2.4G;11b;20;1;2;2437;M;TX	Pass	PK	2.48594G	59.99	74.00	-14.01	31.28	3	V	NaN	NaN	-
2.4G;11b;20;1;2;2437;M;TX	Pass	PK	4.874G	56.27	74.00	-17.73	2.14	3	V	NaN	NaN	-
2.4G;11b;20;1;2;2437;M;TX	Pass	PK	7.311G	57.24	74.00	-16.76	7.97	3	V	NaN	NaN	-
2.4G;11b;20;1;2;2437;M;TX	Pass	PK	9.748G	60.06	Inf	-Inf	11.66	3	V	NaN	NaN	-
2.4G;11b;20;1;2;2462;H;TX	Pass	AV	4.924G	35.36	54.00	-18.64	2.32	3	H	NaN	NaN	-
2.4G;11b;20;1;2;2462;H;TX	Pass	AV	7.386G	39.24	54.00	-14.76	8.12	3	H	NaN	NaN	-
2.4G;11b;20;1;2;2462;H;TX	Pass	PK	4.924G	45.49	74.00	-28.51	2.31	3	H	NaN	NaN	-
2.4G;11b;20;1;2;2462;H;TX	Pass	PK	7.386G	51.31	74.00	-22.69	8.12	3	H	NaN	NaN	-
2.4G;11b;20;1;2;2462;H;TX	Pass	PK	9.848G	54.57	Inf	-Inf	11.64	3	H	NaN	NaN	-
2.4G;11b;20;1;2;2462;H;TX	Pass	AV	2.4612G	112.44	Inf	-Inf	31.20	3	V	NaN	NaN	-
2.4G;11b;20;1;2;2462;H;TX	Pass	AV	2.4862G	53.53	54.00	-0.47	31.28	3	V	NaN	NaN	-
2.4G;11b;20;1;2;2462;H;TX	Pass	AV	4.924G	43.84	54.00	-10.16	2.32	3	V	NaN	NaN	-
2.4G;11b;20;1;2;2462;H;TX	Pass	AV	7.386G	43.76	54.00	-10.24	8.11	3	V	NaN	NaN	-
2.4G;11b;20;1;2;2462;H;TX	Pass	PK	2.4628G	116.25	Inf	-Inf	31.21	3	V	NaN	NaN	-
2.4G;11b;20;1;2;2462;H;TX	Pass	PK	2.4874G	63.64	74.00	-10.36	31.28	3	V	NaN	NaN	-
2.4G;11b;20;1;2;2462;H;TX	Pass	PK	4.924G	49.35	74.00	-24.65	2.32	3	V	NaN	NaN	-
2.4G;11b;20;1;2;2462;H;TX	Pass	PK	7.386G	53.31	74.00	-20.69	8.11	3	V	NaN	NaN	-
2.4G;11b;20;1;2;2462;H;TX	Pass	PK	9.848G	55.45	Inf	-Inf	11.65	3	V	NaN	NaN	-
2.4G;11g;20;1;2;2412;L;TX	Pass	AV	4.824G	29.81	54.00	-24.19	1.87	3	H	NaN	NaN	-
2.4G;11g;20;1;2;2412;L;TX	Pass	PK	4.824G	45.60	74.00	-28.40	1.96	3	H	NaN	NaN	-
2.4G;11g;20;1;2;2412;L;TX	Pass	PK	7.236G	51.30	Inf	-Inf	7.82	3	H	NaN	NaN	-
2.4G;11g;20;1;2;2412;L;TX	Pass	PK	9.648G	55.96	Inf	-Inf	11.72	3	H	NaN	NaN	-
2.4G;11g;20;1;2;2412;L;TX	Pass	AV	2.389968G	53.82	54.00	-0.18	30.99	3	V	NaN	NaN	-
2.4G;11g;20;1;2;2412;L;TX	Pass	AV	2.410352G	102.95	Inf	-Inf	31.05	3	V	NaN	NaN	-
2.4G;11g;20;1;2;2412;L;TX	Pass	AV	4.824G	30.42	54.00	-23.58	1.96	3	V	NaN	NaN	-
2.4G;11g;20;1;2;2412;L;TX	Pass	PK	2.389072G	73.56	74.00	-0.44	30.99	3	V	NaN	NaN	-
2.4G;11g;20;1;2;2412;L;TX	Pass	PK	2.410128G	113.41	Inf	-Inf	31.05	3	V	NaN	NaN	-
2.4G;11g;20;1;2;2412;L;TX	Pass	PK	4.824G	45.12	74.00	-28.88	1.96	3	V	NaN	NaN	-
2.4G;11g;20;1;2;2412;L;TX	Pass	PK	7.236G	51.53	Inf	-Inf	7.81	3	V	NaN	NaN	-
2.4G;11g;20;1;2;2412;L;TX	Pass	PK	9.648G	55.47	Inf	-Inf	11.72	3	V	NaN	NaN	-
2.4G;11g;20;1;2;2437;M;TX	Pass	AV	4.874G	32.10	54.00	-22.90	2.14	3	H	NaN	NaN	-
2.4G;11g;20;1;2;2437;M;TX	Pass	AV	7.311G	36.84	54.00	-17.16	7.97	3	H	NaN	NaN	-
2.4G;11g;20;1;2;2437;M;TX	Pass	PK	4.874G	45.95	74.00	-29.05	2.12	3	H	NaN	NaN	-
2.4G;11g;20;1;2;2437;M;TX	Pass	PK	7.311G	53.61	74.00	-20.39	7.98	3	H	NaN	NaN	-
2.4G;11g;20;1;2;2437;M;TX	Pass	PK	9.748G	55.54	Inf	-Inf	11.67	3	H	NaN	NaN	-
2.4G;11g;20;1;2;2437;M;TX	Pass	AV	2.3898G	49.94	54.00	-4.06	30.99	3	V	NaN	NaN	-
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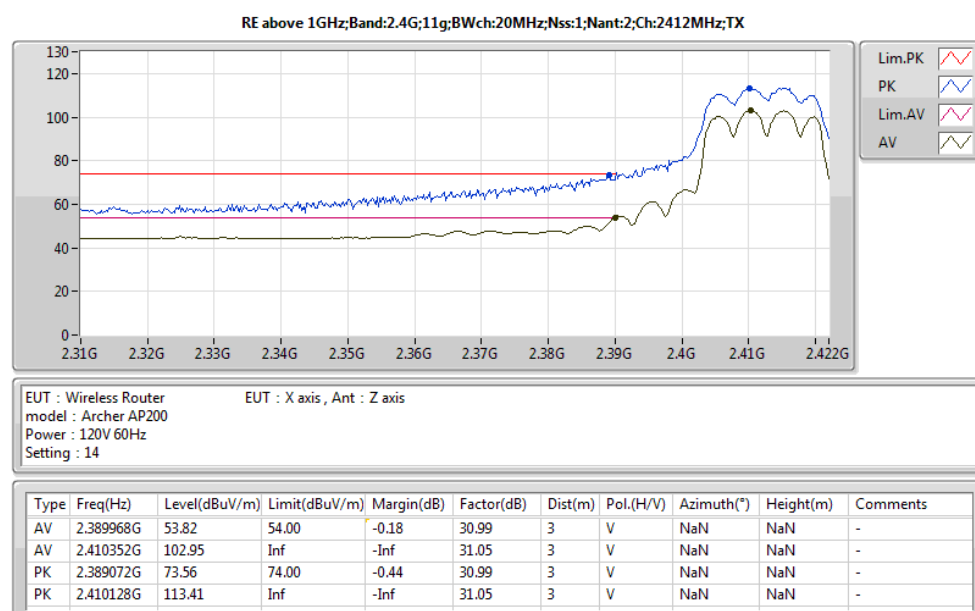
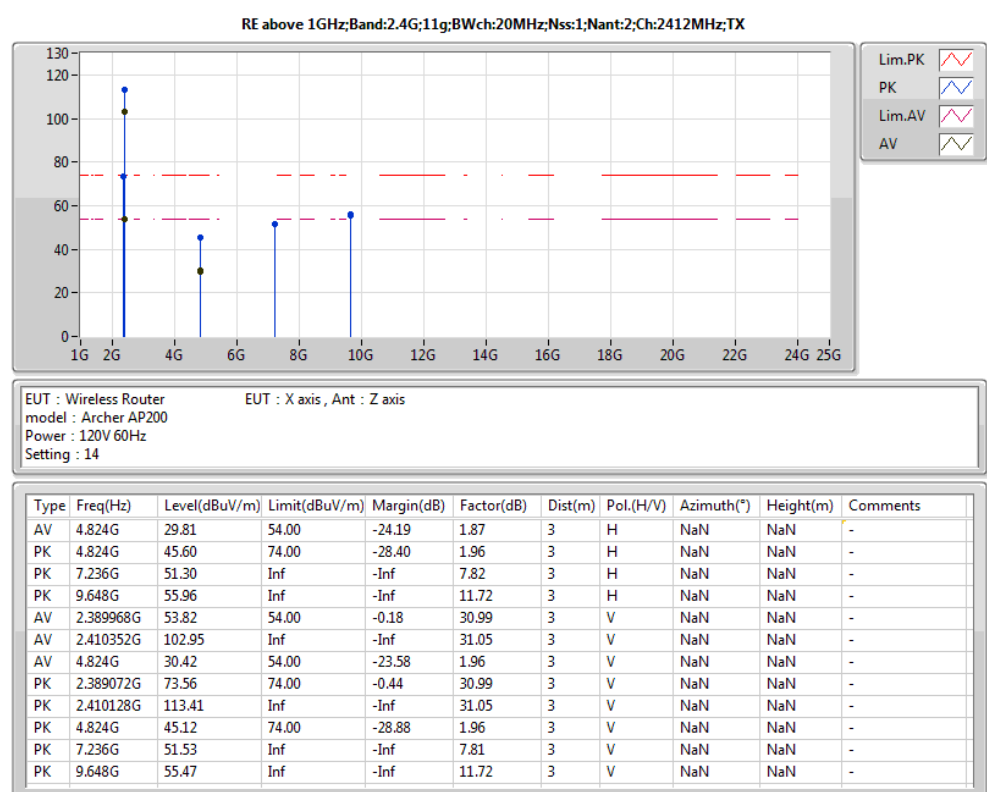
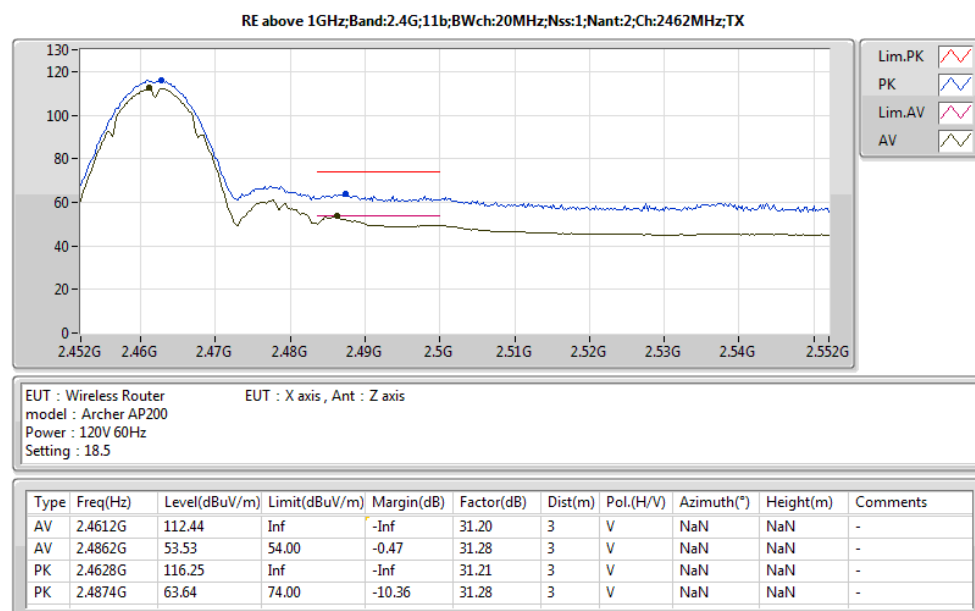
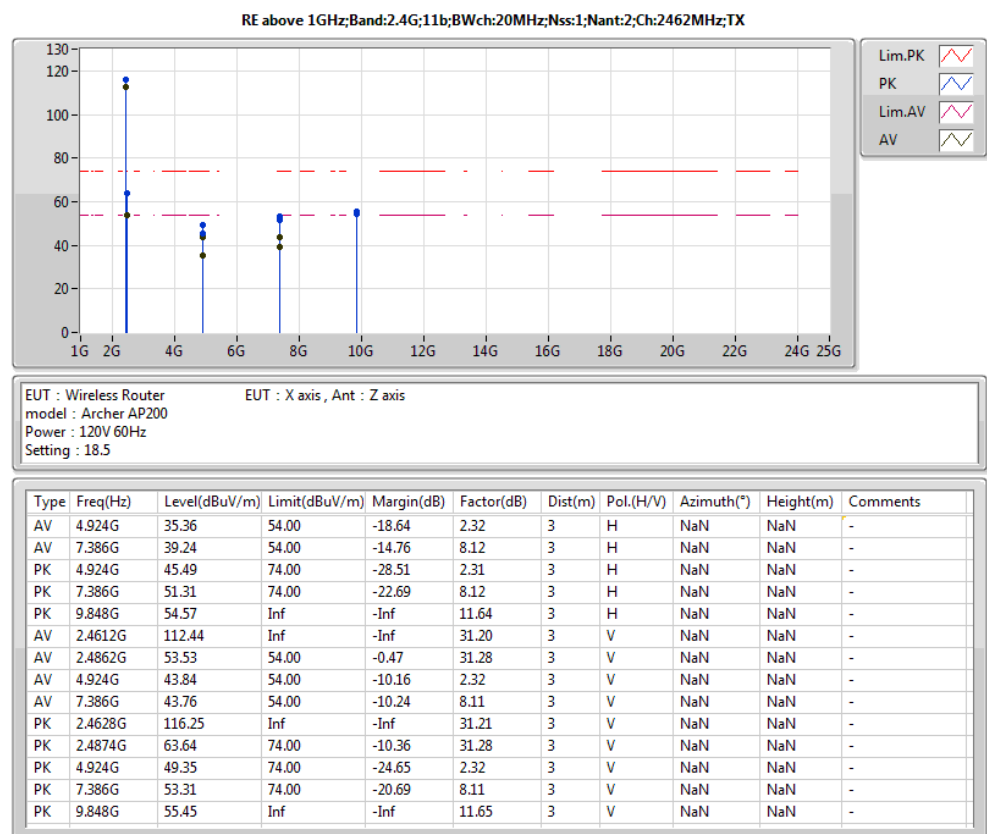


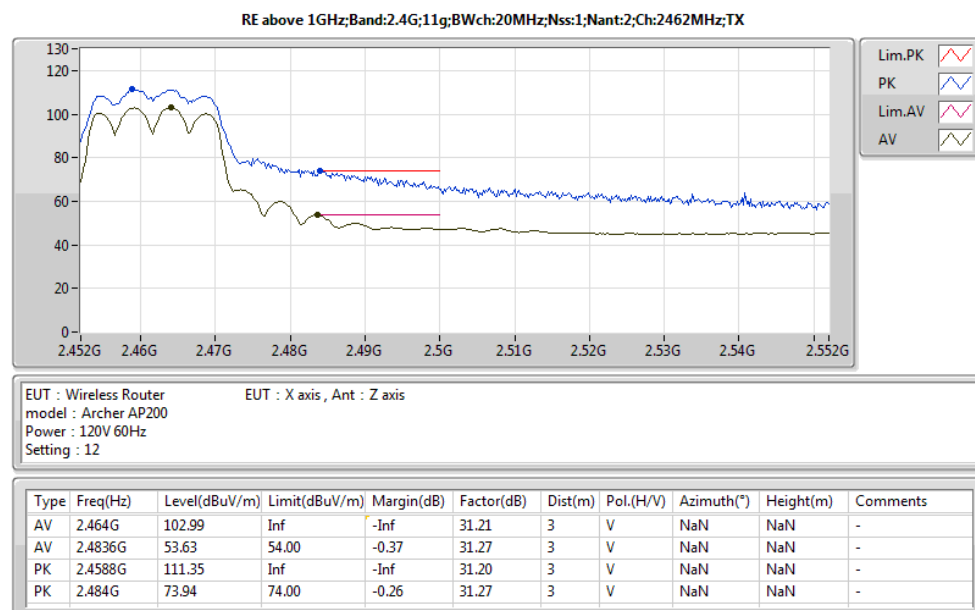
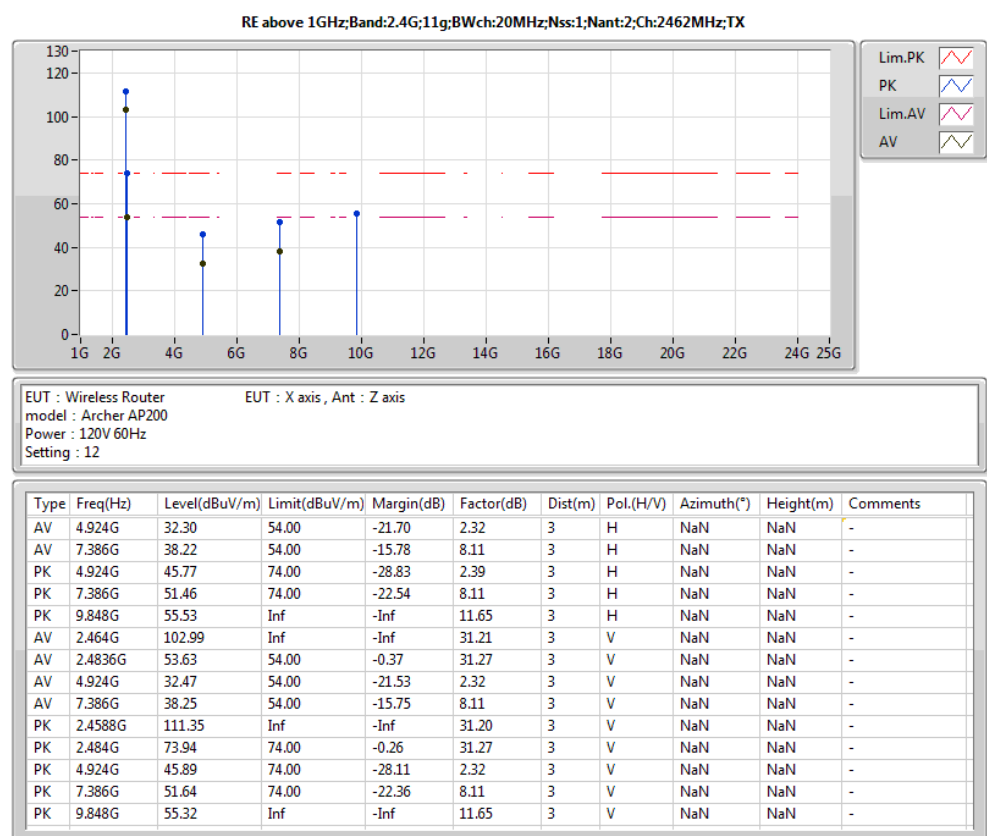
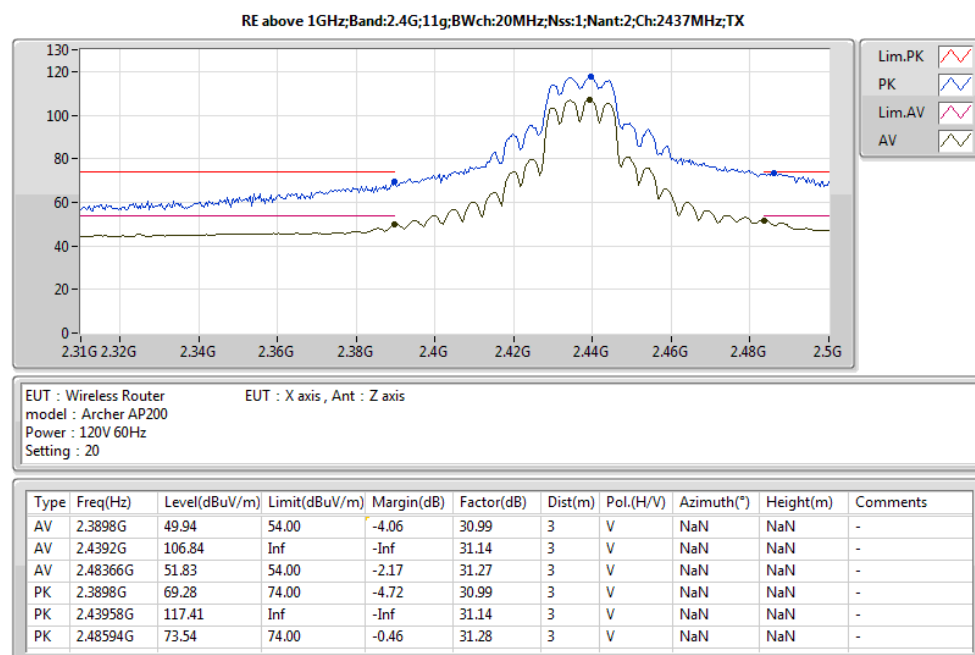
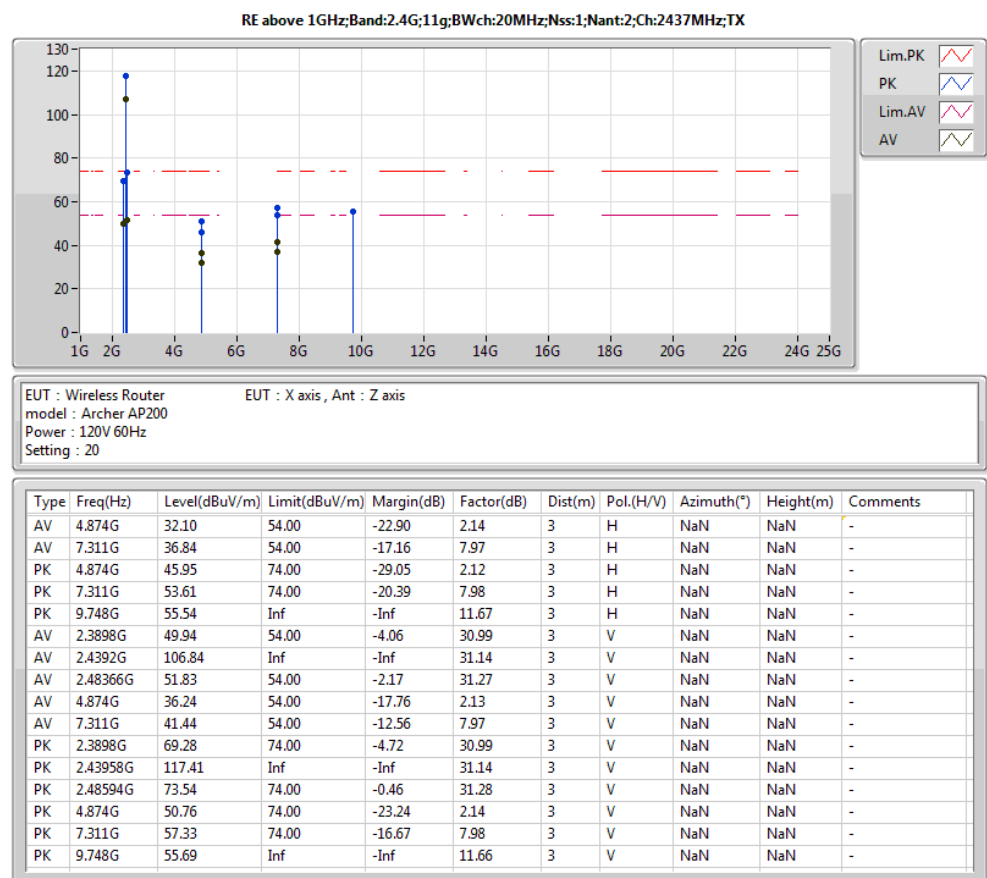
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
2.4G;11g;20;1;2;2437;M;TX	Pass	AV	2.48366G	51.83	54.00	-2.17	31.27	3	V	NaN	NaN	-
2.4G;11g;20;1;2;2437;M;TX	Pass	AV	4.874G	36.24	54.00	-17.76	2.13	3	V	NaN	NaN	-
2.4G;11g;20;1;2;2437;M;TX	Pass	AV	7.311G	41.44	54.00	-12.56	7.97	3	V	NaN	NaN	-
2.4G;11g;20;1;2;2437;M;TX	Pass	PK	2.3898G	69.28	74.00	-4.72	30.99	3	V	NaN	NaN	-
2.4G;11g;20;1;2;2437;M;TX	Pass	PK	2.43958G	117.41	Inf	-Inf	31.14	3	V	NaN	NaN	-
2.4G;11g;20;1;2;2437;M;TX	Pass	PK	2.48594G	73.54	74.00	-0.46	31.28	3	V	NaN	NaN	-
2.4G;11g;20;1;2;2437;M;TX	Pass	PK	4.874G	50.76	74.00	-23.24	2.14	3	V	NaN	NaN	-
2.4G;11g;20;1;2;2437;M;TX	Pass	PK	7.311G	57.33	74.00	-16.67	7.98	3	V	NaN	NaN	-
2.4G;11g;20;1;2;2437;M;TX	Pass	PK	9.748G	55.69	Inf	-Inf	11.66	3	V	NaN	NaN	-
2.4G;11g;20;1;2;2462;H;TX	Pass	AV	4.924G	32.30	54.00	-21.70	2.32	3	H	NaN	NaN	-
2.4G;11g;20;1;2;2462;H;TX	Pass	AV	7.386G	38.22	54.00	-15.78	8.11	3	H	NaN	NaN	-
2.4G;11g;20;1;2;2462;H;TX	Pass	PK	4.924G	45.77	74.00	-28.83	2.39	3	H	NaN	NaN	-
2.4G;11g;20;1;2;2462;H;TX	Pass	PK	7.386G	51.46	74.00	-22.54	8.11	3	H	NaN	NaN	-
2.4G;11g;20;1;2;2462;H;TX	Pass	PK	9.848G	55.53	Inf	-Inf	11.65	3	H	NaN	NaN	-
2.4G;11g;20;1;2;2462;H;TX	Pass	AV	2.464G	102.99	Inf	-Inf	31.21	3	V	NaN	NaN	-
2.4G;11g;20;1;2;2462;H;TX	Pass	AV	2.4836G	53.63	54.00	-0.37	31.27	3	V	NaN	NaN	-
2.4G;11g;20;1;2;2462;H;TX	Pass	AV	4.924G	32.47	54.00	-21.53	2.32	3	V	NaN	NaN	-
2.4G;11g;20;1;2;2462;H;TX	Pass	AV	7.386G	38.25	54.00	-15.75	8.11	3	V	NaN	NaN	-
2.4G;11g;20;1;2;2462;H;TX	Pass	PK	2.4588G	111.35	Inf	-Inf	31.20	3	V	NaN	NaN	-
2.4G;11g;20;1;2;2462;H;TX	Pass	PK	2.484G	73.94	74.00	-0.26	31.27	3	V	NaN	NaN	-
2.4G;11g;20;1;2;2462;H;TX	Pass	PK	4.924G	45.89	74.00	-28.11	2.32	3	V	NaN	NaN	-
2.4G;11g;20;1;2;2462;H;TX	Pass	PK	7.386G	51.64	74.00	-22.36	8.11	3	V	NaN	NaN	-
2.4G;11g;20;1;2;2462;H;TX	Pass	PK	9.848G	55.32	Inf	-Inf	11.65	3	V	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2412;L;TX	Pass	AV	4.824G	31.12	54.00	-22.88	1.96	3	H	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2412;L;TX	Pass	PK	4.824G	45.41	74.00	-28.59	1.96	3	H	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2412;L;TX	Pass	PK	7.236G	50.75	Inf	-Inf	7.82	3	H	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2412;L;TX	Pass	PK	9.648G	54.75	Inf	-Inf	11.72	3	H	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2412;L;TX	Pass	AV	2.389968G	53.69	54.00	-0.31	30.99	3	V	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2412;L;TX	Pass	AV	2.409456G	102.34	Inf	-Inf	31.05	3	V	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2412;L;TX	Pass	AV	4.824G	31.38	54.00	-22.62	1.96	3	V	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2412;L;TX	Pass	PK	2.389968G	73.66	74.00	-0.34	30.99	3	V	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2412;L;TX	Pass	PK	2.410128G	113.25	Inf	-Inf	31.05	3	V	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2412;L;TX	Pass	PK	4.824G	44.25	74.00	-29.75	1.96	3	V	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2412;L;TX	Pass	PK	7.236G	51.03	Inf	-Inf	7.82	3	V	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2412;L;TX	Pass	PK	9.648G	55.37	Inf	-Inf	11.72	3	V	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2437;M;TX	Pass	AV	4.874G	31.67	54.00	-22.33	2.14	3	H	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2437;M;TX	Pass	AV	7.311G	38.52	54.00	-15.48	7.97	3	H	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2437;M;TX	Pass	PK	4.874G	45.66	74.00	-28.34	2.14	3	H	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2437;M;TX	Pass	PK	7.311G	54.99	74.00	-19.01	7.97	3	H	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2437;M;TX	Pass	PK	9.748G	55.85	Inf	-Inf	11.66	3	H	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2437;M;TX	Pass	AV	2.38714G	47.42	54.00	-6.58	30.98	3	V	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2437;M;TX	Pass	AV	2.44224G	106.33	Inf	-Inf	31.15	3	V	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2437;M;TX	Pass	AV	2.48366G	51.18	54.00	-2.82	31.27	3	V	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2437;M;TX	Pass	AV	4.874G	35.31	54.00	-18.69	2.14	3	V	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2437;M;TX	Pass	AV	7.311G	41.15	54.00	-12.85	7.97	3	V	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2437;M;TX	Pass	PK	2.3898G	67.99	74.00	-6.01	30.99	3	V	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2437;M;TX	Pass	PK	2.44338G	117.14	Inf	-Inf	31.15	3	V	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2437;M;TX	Pass	PK	2.48936G	73.44	74.00	-0.56	31.29	3	V	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2437;M;TX	Pass	PK	4.874G	50.47	74.00	-23.53	2.14	3	V	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2437;M;TX	Pass	PK	7.311G	57.67	74.00	-16.33	7.97	3	V	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2437;M;TX	Pass	PK	9.748G	55.62	Inf	-Inf	11.66	3	V	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2462;H;TX	Pass	AV	4.924G	31.52	54.00	-22.48	2.32	3	H	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2462;H;TX	Pass	AV	7.386G	37.73	54.00	-16.27	8.11	3	H	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2462;H;TX	Pass	PK	4.924G	45.52	74.00	-28.48	2.32	3	H	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2462;H;TX	Pass	PK	7.386G	51.80	74.00	-22.20	8.11	3	H	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2462;H;TX	Pass	PK	9.848G	54.95	Inf	-Inf	11.65	3	H	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2462;H;TX	Pass	AV	2.464G	101.51	Inf	-Inf	31.21	3	V	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2462;H;TX	Pass	AV	2.4836G	51.62	54.00	-2.38	31.27	3	V	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2462;H;TX	Pass	AV	4.924G	31.52	54.00	-22.48	2.32	3	V	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2462;H;TX	Pass	AV	7.386G	37.46	54.00	-16.54	8.11	3	V	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2462;H;TX	Pass	PK	2.4642G	111.98	Inf	-Inf	31.21	3	V	NaN	NaN	-
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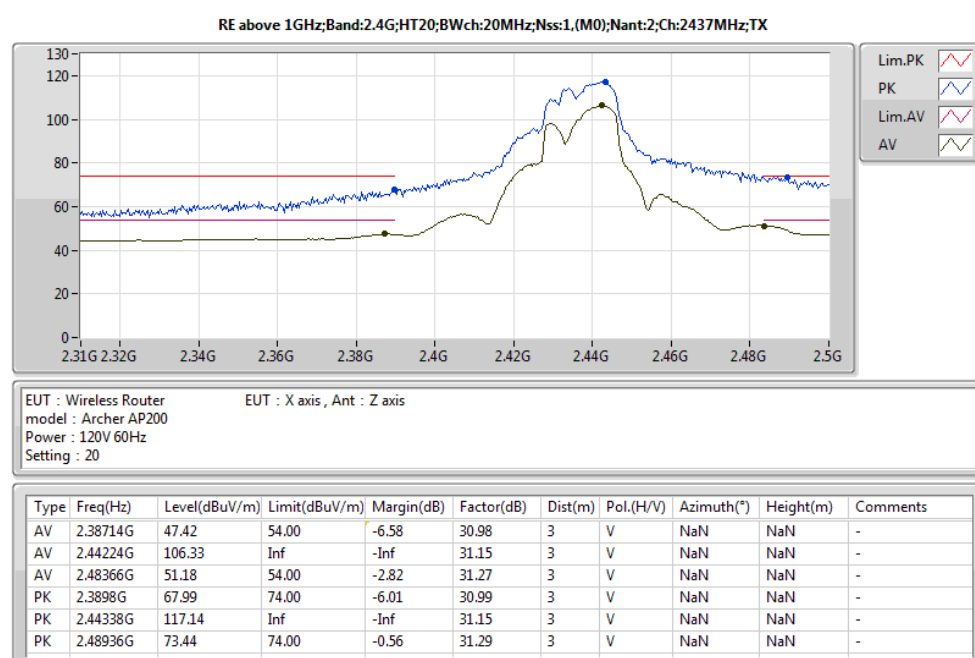
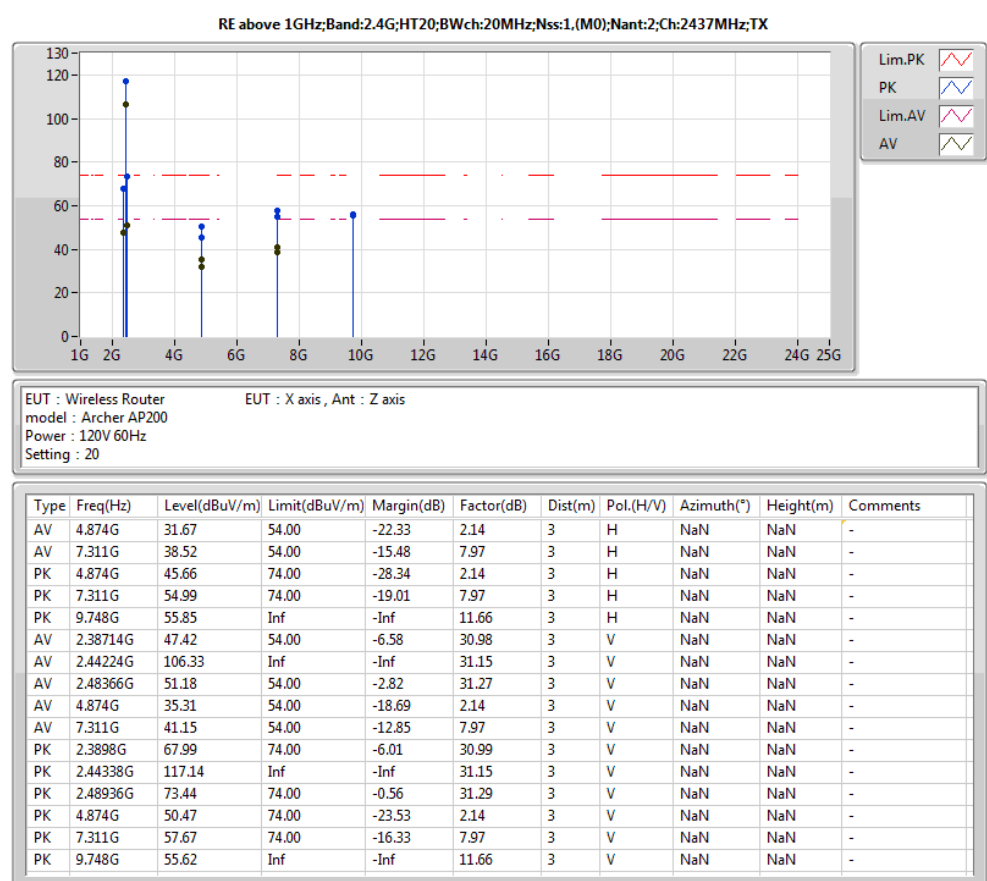
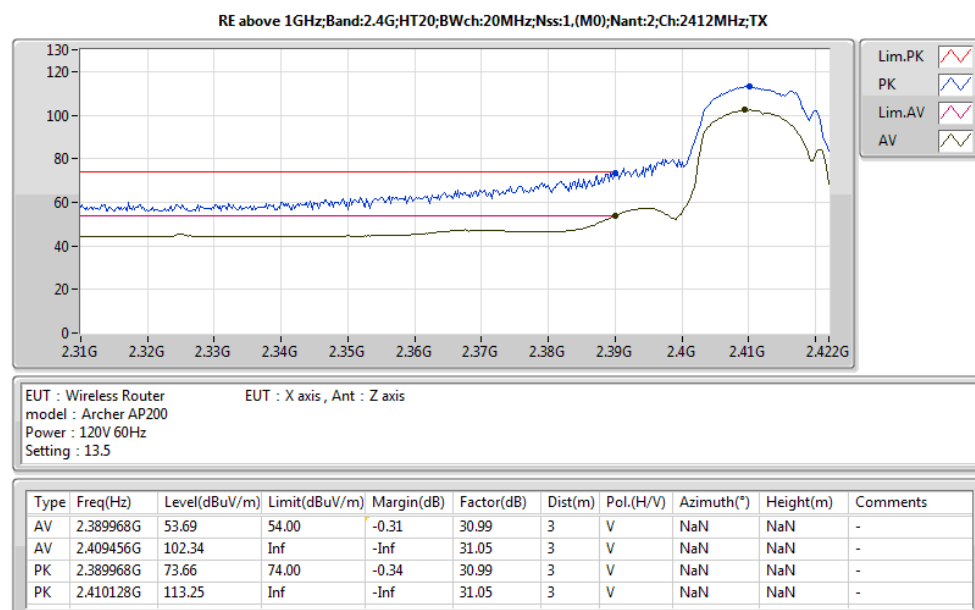


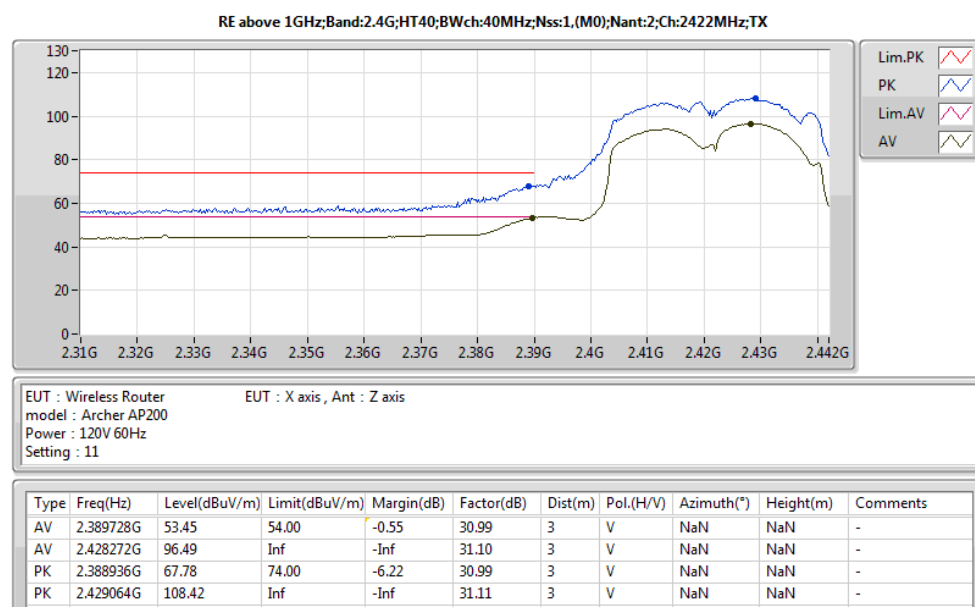
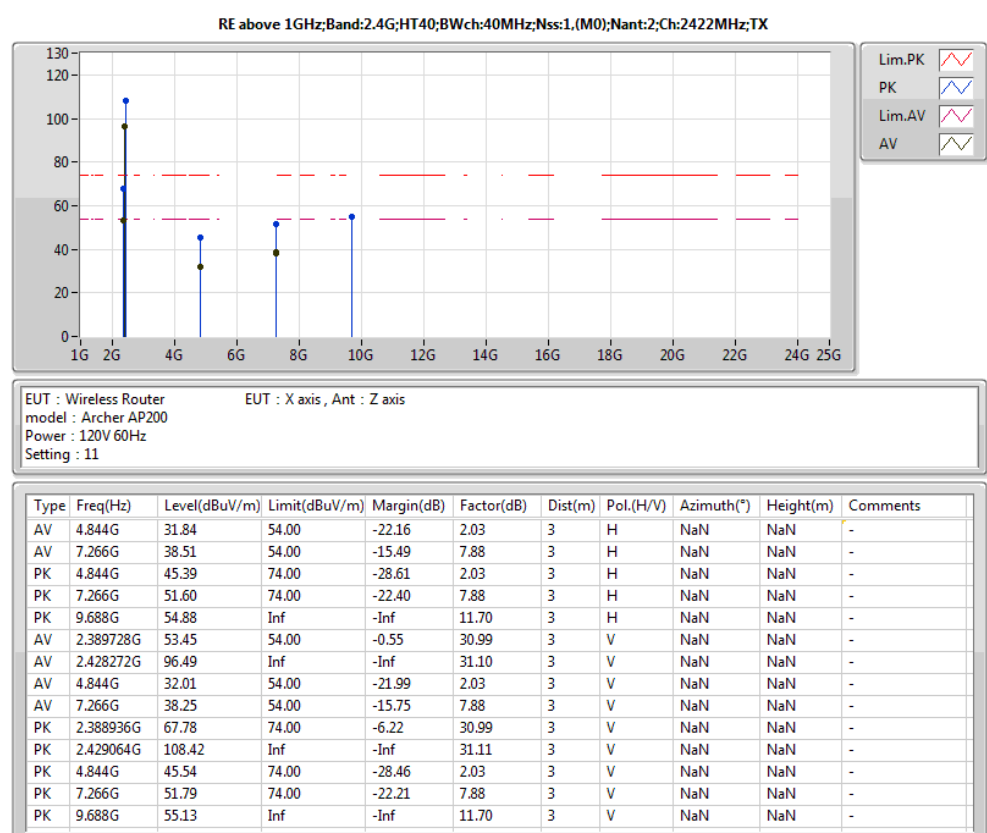
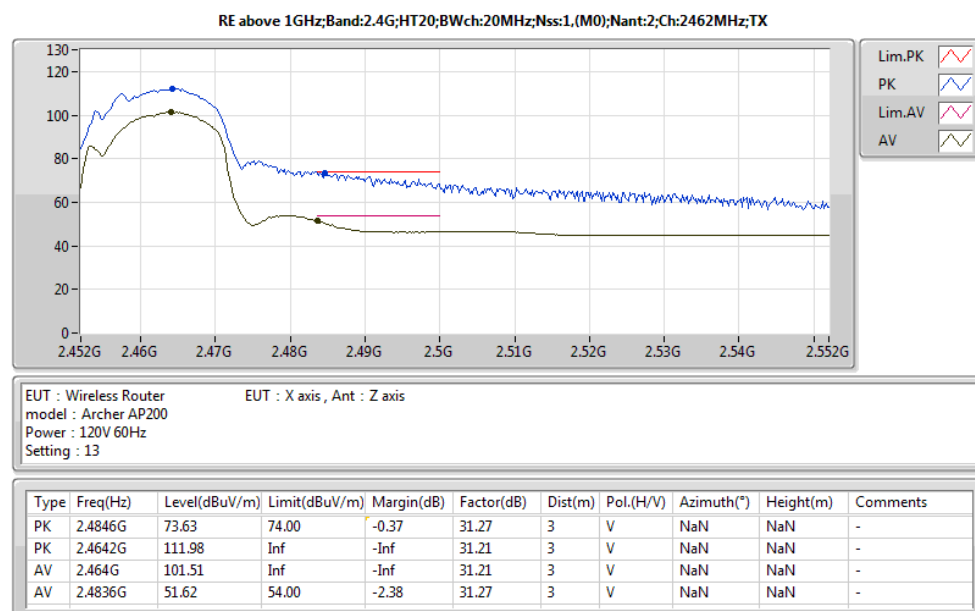
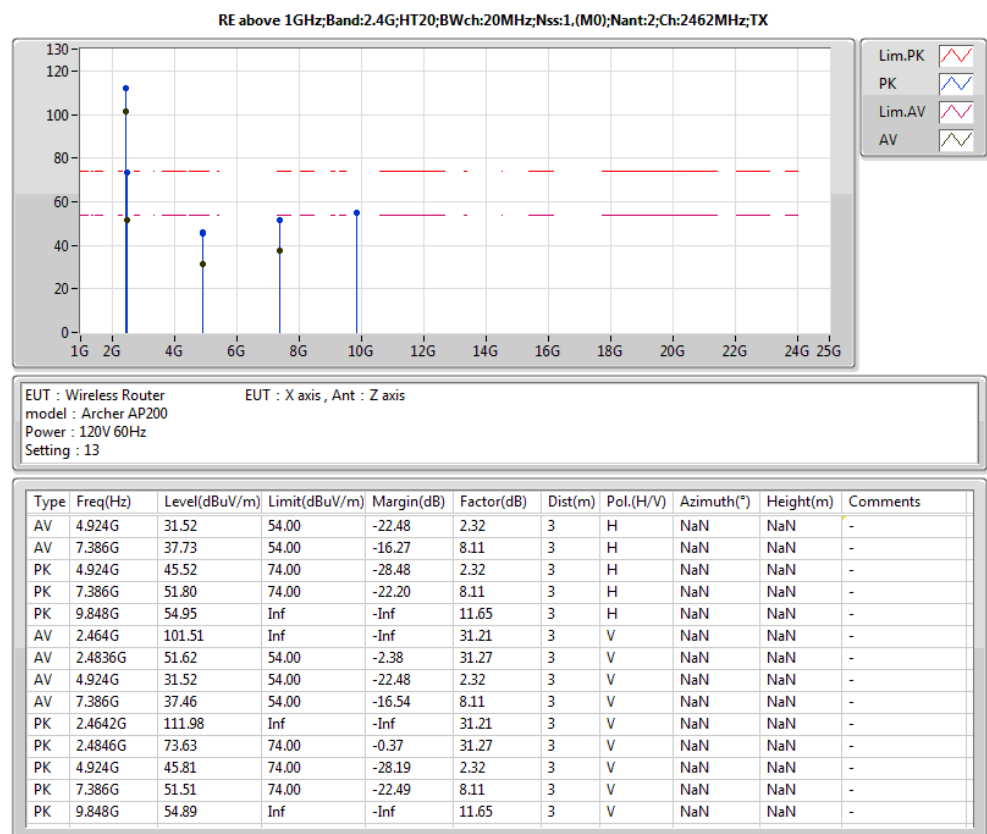
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
2.4G;HT20;20;1,(M0);2;2462;H;TX	Pass	PK	4.924G	45.81	74.00	-28.19	2.32	3	V	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2462;H;TX	Pass	PK	7.386G	51.51	74.00	-22.49	8.11	3	V	NaN	NaN	-
2.4G;HT20;20;1,(M0);2;2462;H;TX	Pass	PK	9.848G	54.89	Inf	-Inf	11.65	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2422;L;TX	Pass	AV	4.844G	31.84	54.00	-22.16	2.03	3	H	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2422;L;TX	Pass	AV	7.266G	38.51	54.00	-15.49	7.88	3	H	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2422;L;TX	Pass	PK	4.844G	45.39	74.00	-28.61	2.03	3	H	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2422;L;TX	Pass	PK	7.266G	51.60	74.00	-22.40	7.88	3	H	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2422;L;TX	Pass	PK	9.688G	54.88	Inf	-Inf	11.70	3	H	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2422;L;TX	Pass	AV	2.389728G	53.45	54.00	-0.55	30.99	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2422;L;TX	Pass	AV	2.428272G	96.49	Inf	-Inf	31.10	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2422;L;TX	Pass	AV	4.844G	32.01	54.00	-21.99	2.03	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2422;L;TX	Pass	AV	7.266G	38.25	54.00	-15.75	7.88	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2422;L;TX	Pass	PK	2.388936G	67.78	74.00	-6.22	30.99	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2422;L;TX	Pass	PK	2.429064G	108.42	Inf	-Inf	31.11	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2422;L;TX	Pass	PK	4.844G	45.54	74.00	-28.46	2.03	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2422;L;TX	Pass	PK	7.266G	51.79	74.00	-22.21	7.88	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2422;L;TX	Pass	PK	9.688G	55.13	Inf	-Inf	11.70	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2437;M;TX	Pass	AV	4.874G	31.95	54.00	-22.05	2.14	3	H	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2437;M;TX	Pass	AV	7.311G	37.77	54.00	-16.23	7.97	3	H	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2437;M;TX	Pass	PK	4.874G	45.89	74.00	-28.11	2.14	3	H	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2437;M;TX	Pass	PK	7.311G	51.20	74.00	-22.80	7.97	3	H	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2437;M;TX	Pass	PK	9.748G	55.65	Inf	-Inf	11.66	3	H	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2437;M;TX	Pass	AV	2.3898G	53.13	54.00	-0.87	30.99	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2437;M;TX	Pass	AV	2.43274G	99.73	Inf	-Inf	31.12	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2437;M;TX	Pass	AV	2.48594G	50.65	54.00	-3.35	31.28	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2437;M;TX	Pass	AV	4.874G	32.62	54.00	-21.38	2.14	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2437;M;TX	Pass	AV	7.311G	38.40	54.00	-15.60	7.97	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2437;M;TX	Pass	PK	2.38904G	68.92	74.00	-5.08	30.99	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2437;M;TX	Pass	PK	2.43198G	112.12	Inf	-Inf	31.12	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2437;M;TX	Pass	PK	2.48784G	65.14	74.00	-8.86	31.28	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2437;M;TX	Pass	PK	4.874G	45.43	74.00	-28.57	2.14	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2437;M;TX	Pass	PK	7.311G	51.81	74.00	-22.19	7.97	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2437;M;TX	Pass	PK	9.748G	55.22	Inf	-Inf	11.66	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2452;H;TX	Pass	AV	4.904G	32.14	54.00	-21.86	2.24	3	H	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2452;H;TX	Pass	AV	7.356G	37.62	54.00	-16.38	8.06	3	H	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2452;H;TX	Pass	PK	4.904G	45.41	74.00	-28.59	2.24	3	H	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2452;H;TX	Pass	PK	7.356G	51.29	74.00	-22.71	8.06	3	H	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2452;H;TX	Pass	PK	9.808G	55.58	Inf	-Inf	11.63	3	H	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2452;H;TX	Pass	AV	2.44496G	96.89	Inf	-Inf	31.15	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2452;H;TX	Pass	AV	2.4836G	53.16	54.00	-0.84	31.27	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2452;H;TX	Pass	AV	4.904G	30.39	54.00	-23.61	2.32	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2452;H;TX	Pass	AV	7.356G	37.67	54.00	-16.33	8.06	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2452;H;TX	Pass	PK	2.44568G	108.62	Inf	-Inf	31.16	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2452;H;TX	Pass	PK	2.48672G	69.68	74.00	-4.32	31.28	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2452;H;TX	Pass	PK	4.904G	44.86	74.00	-29.64	2.28	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2452;H;TX	Pass	PK	7.356G	50.87	74.00	-23.13	8.06	3	V	NaN	NaN	-
2.4G;HT40;40;1,(M0);2;2452;H;TX	Pass	PK	9.808G	55.60	Inf	-Inf	11.63	3	V	NaN	NaN	-

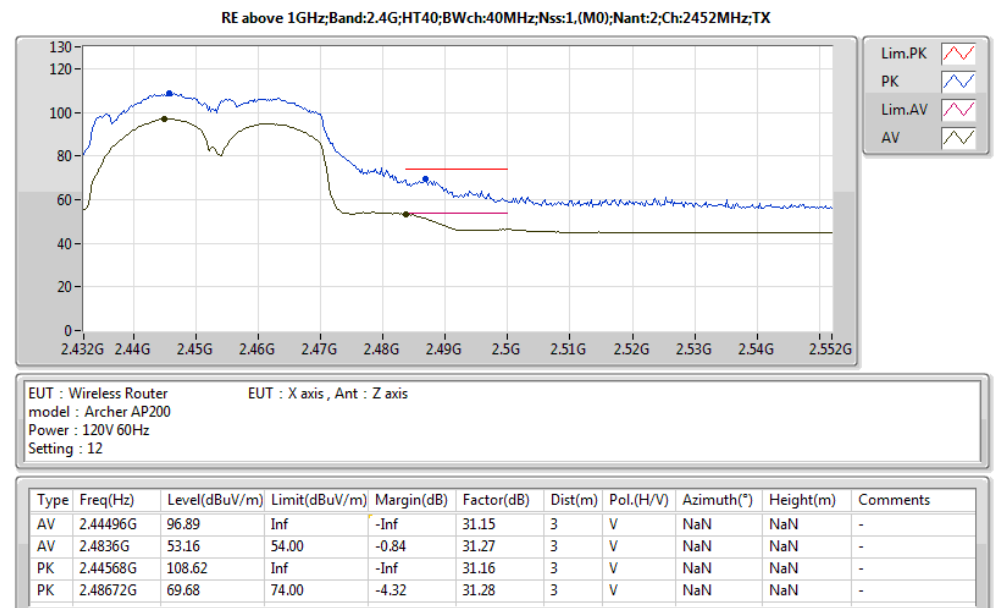
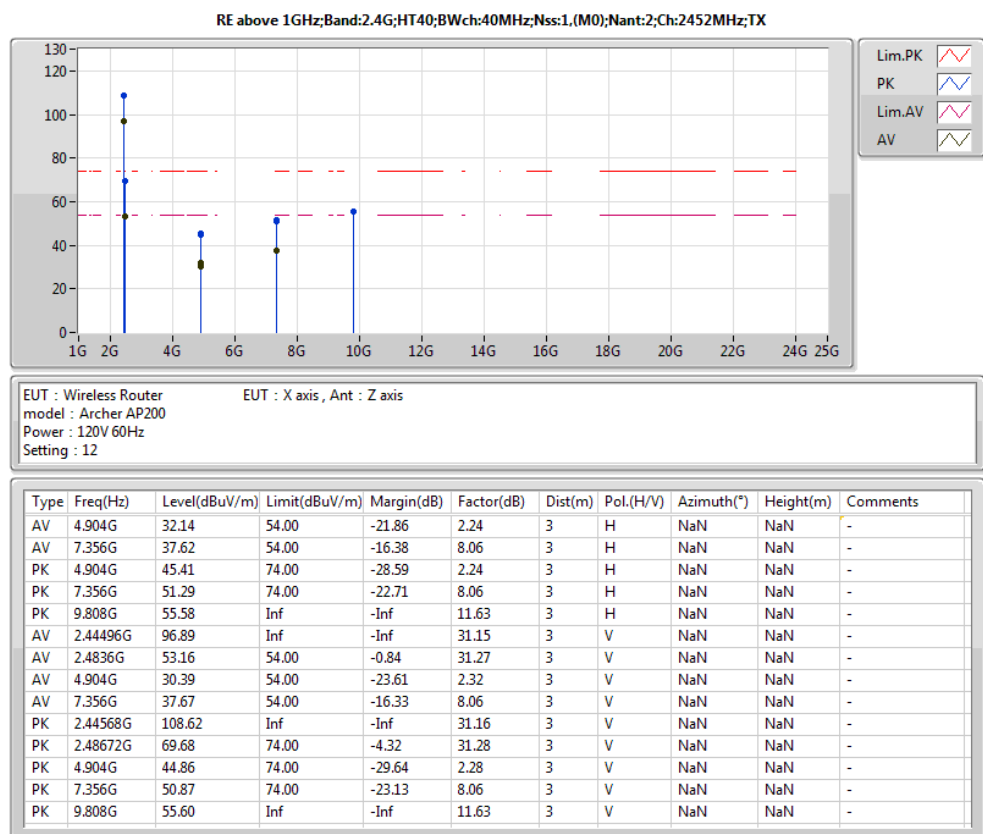
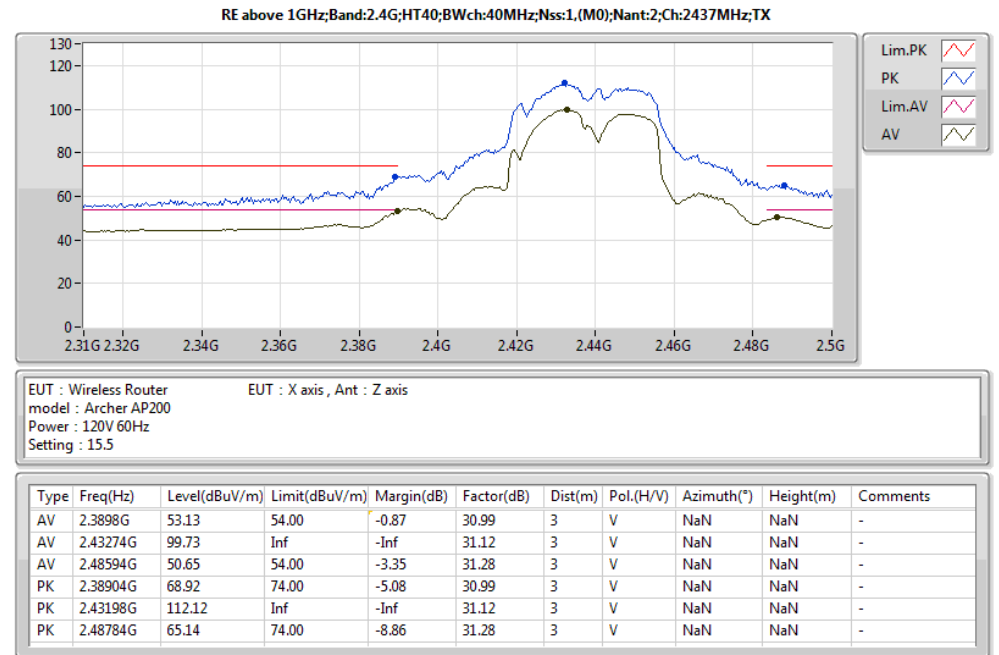
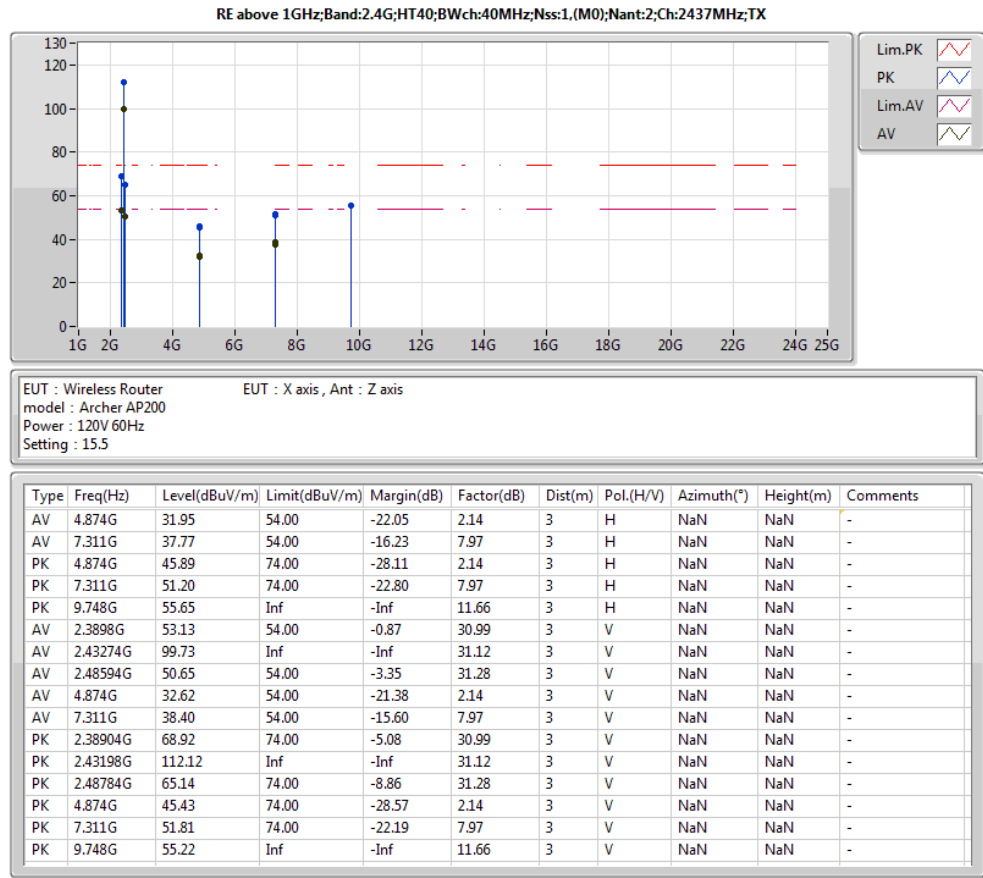














Bandedge Emissions in Restricted Frequency Bands for other channels

Appendix E.3

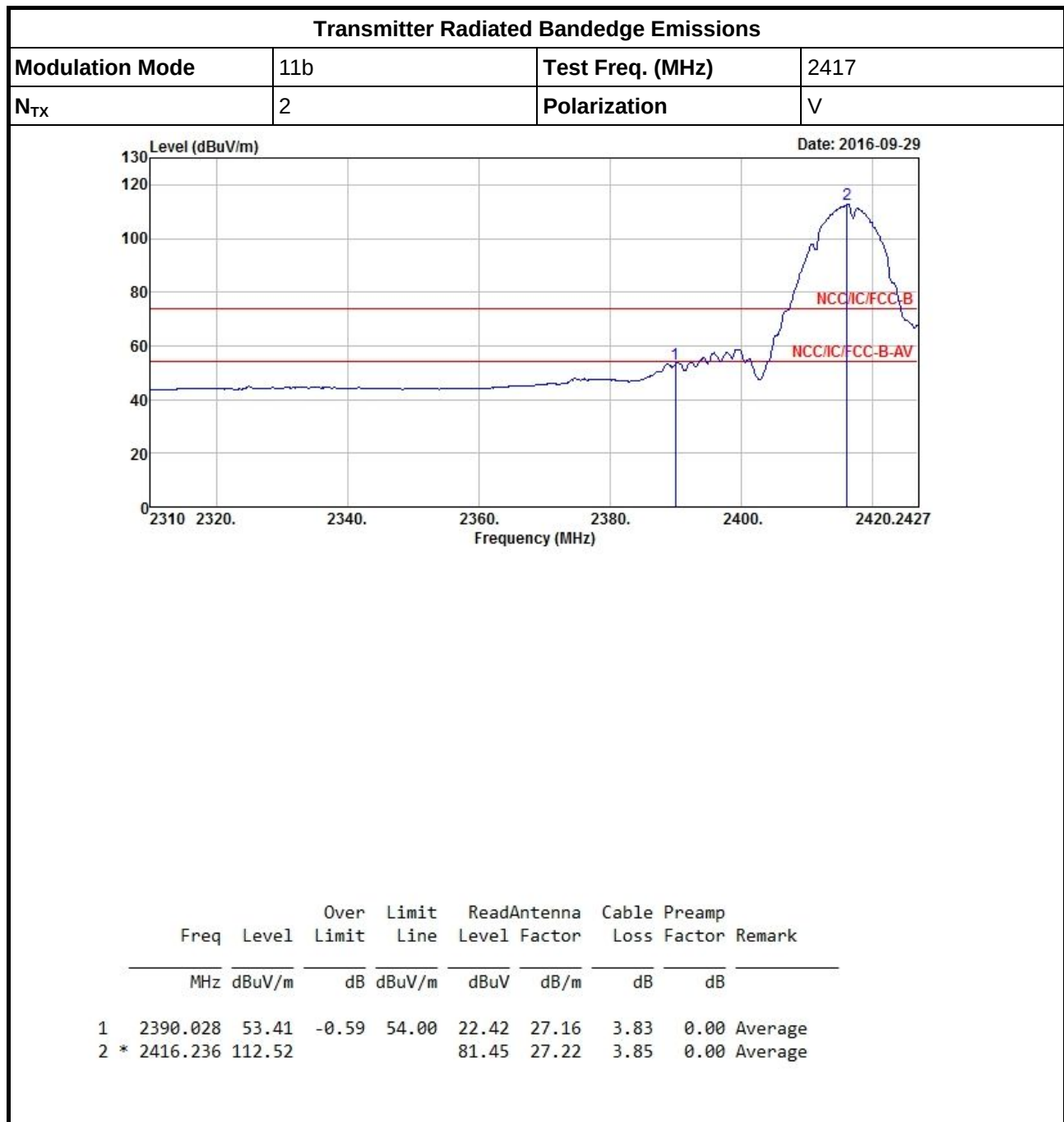
2400-2483.5MHz Transmitter Radiated Bandedge Emissions (Restricted Band)										
Modulation Mode	N _{TX}	Freq. (MHz)	Measure Distance (m)	Freq. (MHz) PK	Level (dBuV/m) PK	Limit (dBuV/m) PK	Freq. (MHz) AV	Level (dBuV/m) AV	Limit (dBuV/m) AV	Pol.
11b	2	2417	3	2388.390	62.22	74	2390.028	53.41	54	V
11b	2	2457	3	2484.800	63.07	74	2483.750	53.79	54	V
11g	2	2417	3	2389.560	72.56	74	2390.028	53.24	54	V
11g	2	2457	3	2484.170	73.40	74	2484.380	49.35	54	V
HT20	2	2417	3	2389.092	73.16	74	2390.028	53.31	54	V
HT20	2	2457	3	2487.980	73.60	74	2484.020	51.69	54	V
HT40	2	2427	3	2389.871	68.83	74	2389.871	53.33	54	V
HT40	2	2447	3	2483.750	72.47	74	2485.250	53.67	54	V
Note 1: Measurement worst emissions of receive antenna polarization.										

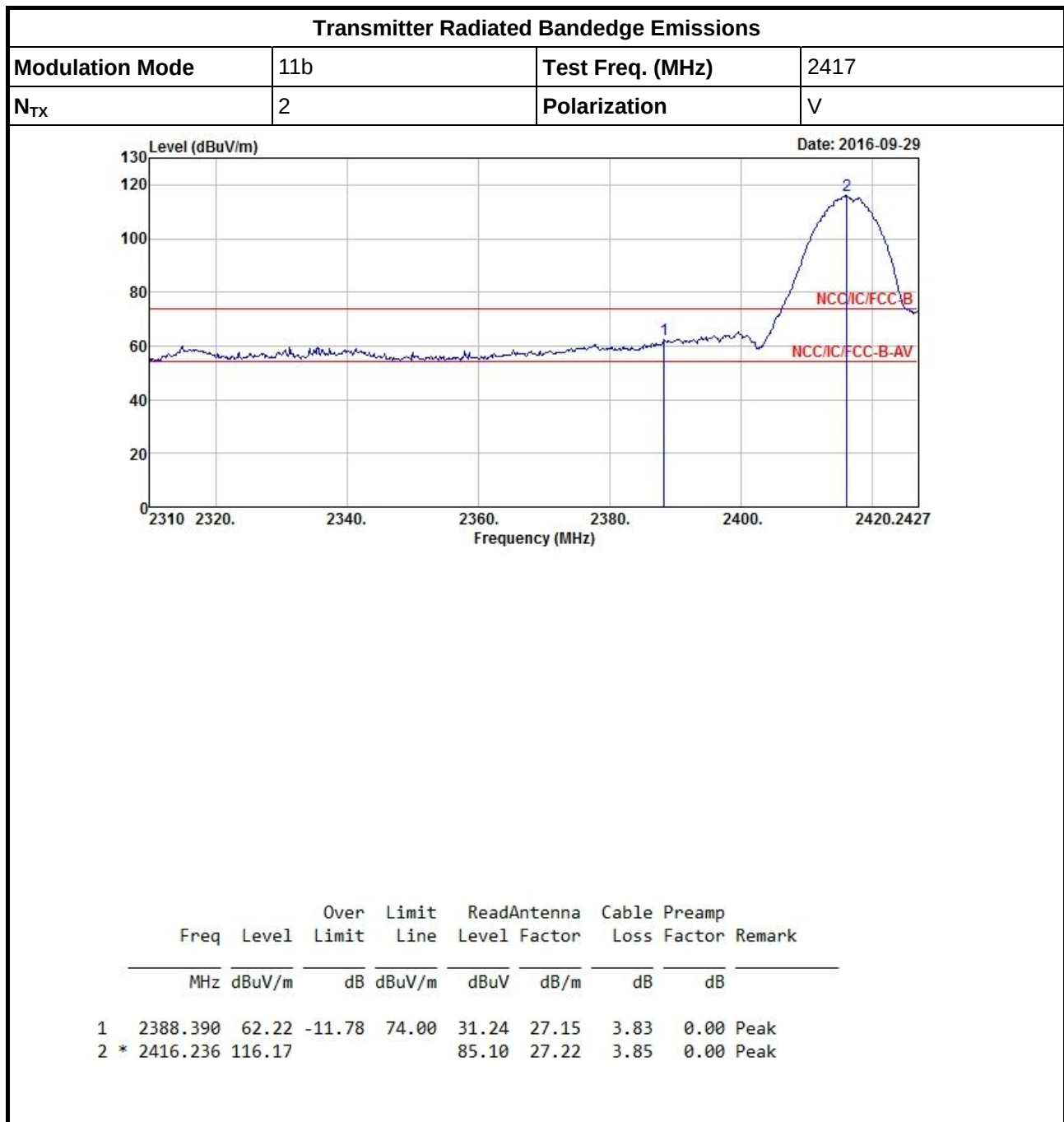


Bandedge Emissions in Restricted Frequency Bands for other channels

Appendix E.3

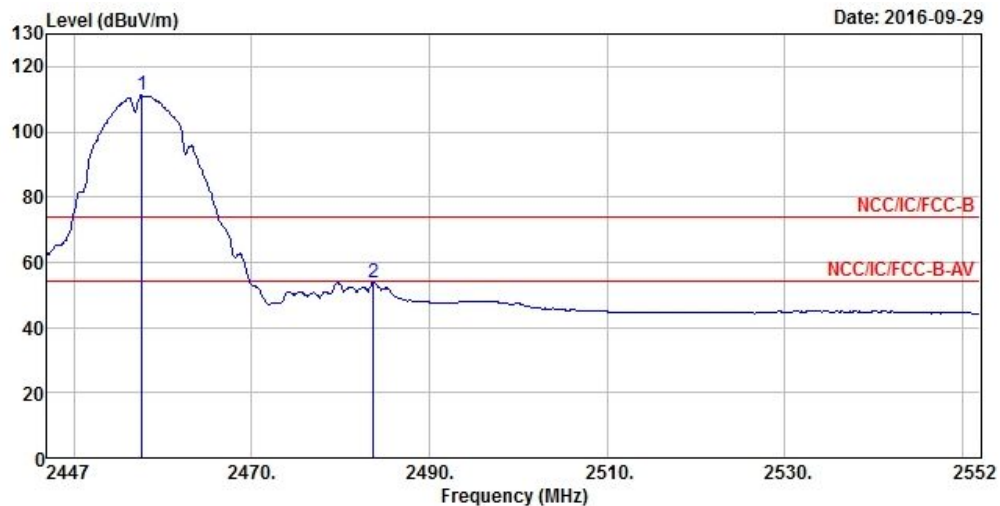
Transmitter Radiated Bandedge Emissions (Restricted Band)





Transmitter Radiated Bandedge Emissions

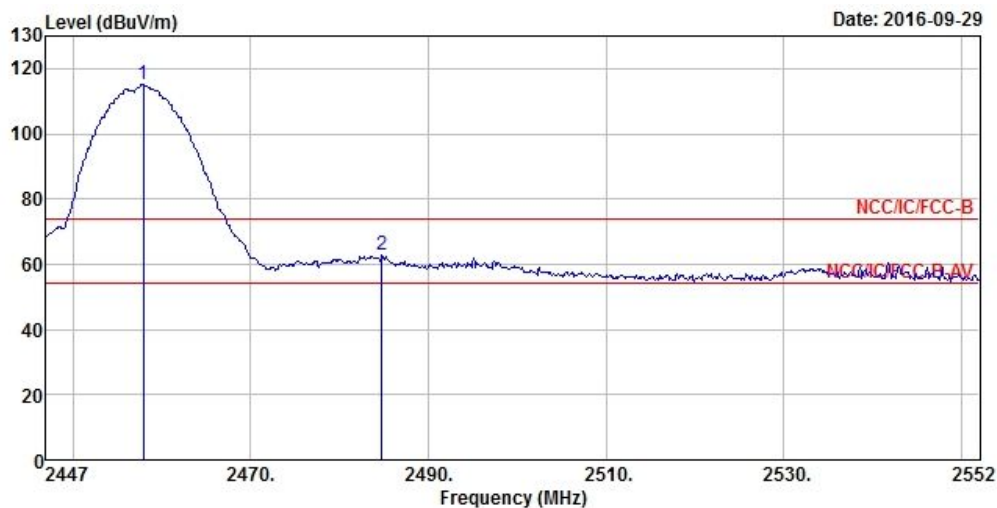
Modulation Mode	11b	Test Freq. (MHz)	2457
N _{TX}	2	Polarization	V



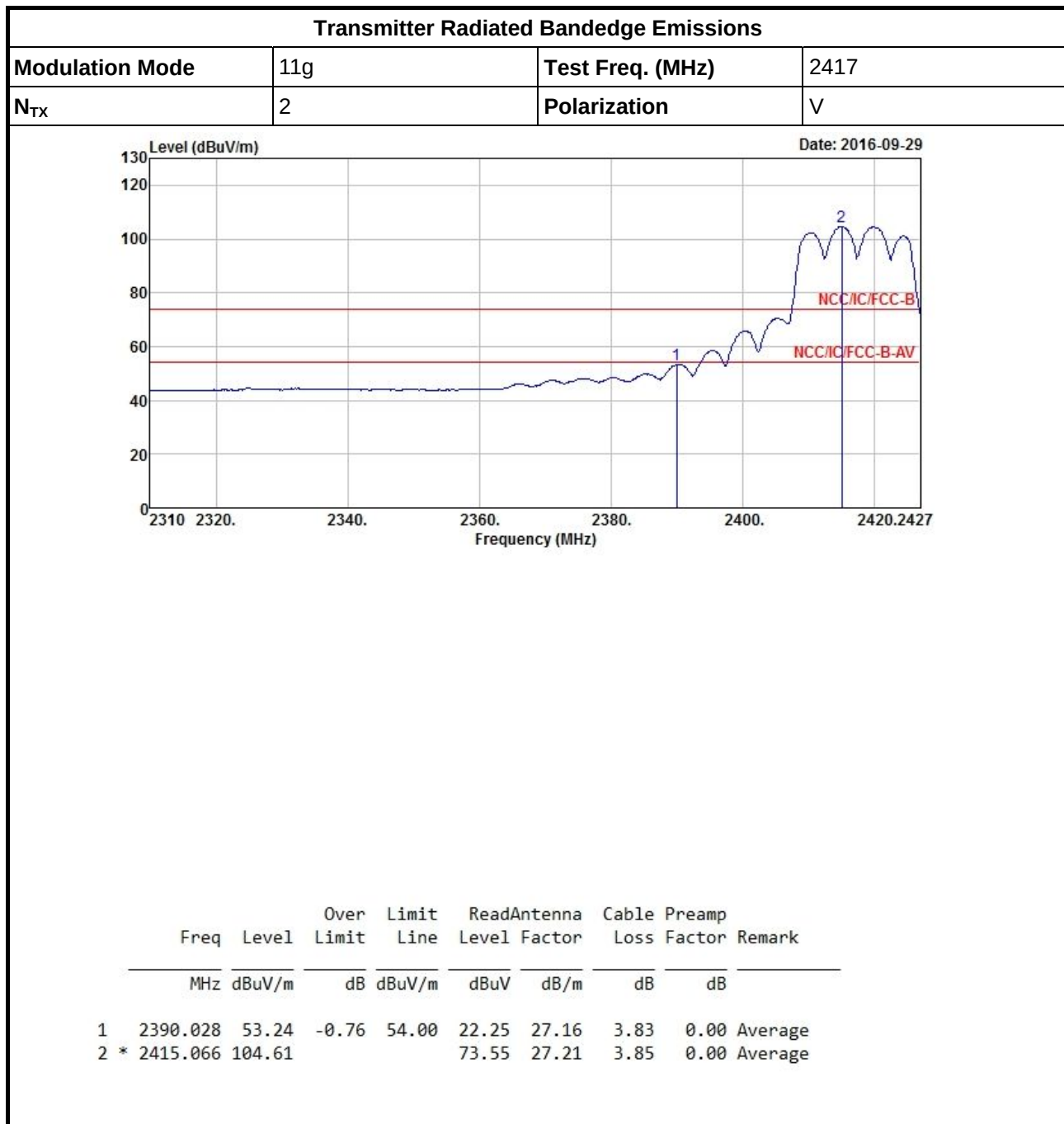
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB
1 *	2457.710	111.28			80.08	27.31	3.89	0.00 Average
2	2483.750	53.79	-0.21	54.00	22.52	27.36	3.91	0.00 Average

Transmitter Radiated Bandedge Emissions

Modulation Mode	11b	Test Freq. (MHz)	2457
N _{TX}	2	Polarization	V

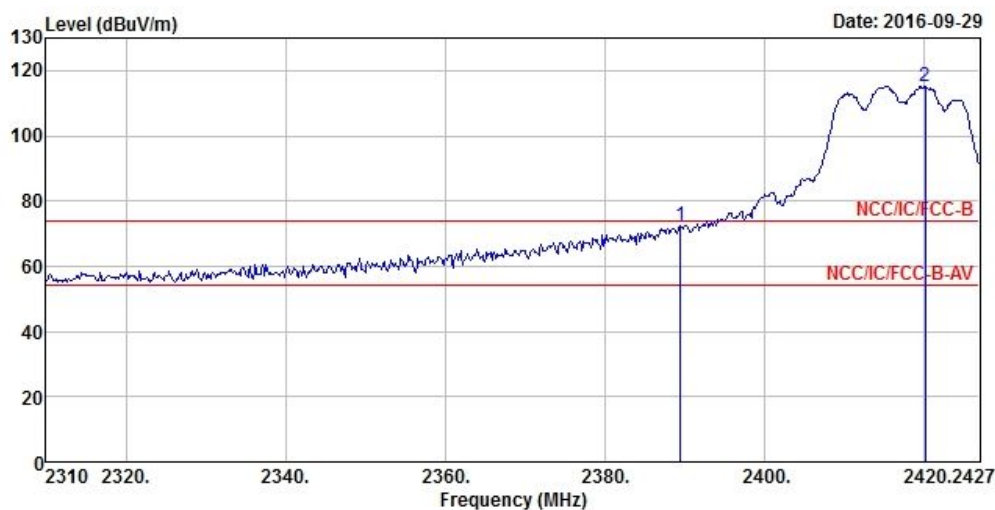


	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB
1 *	2457.920	115.15			83.95	27.31	3.89	0.00 Peak
2	2484.800	63.07	-10.93	74.00	31.79	27.37	3.91	0.00 Peak



Transmitter Radiated Bandedge Emissions

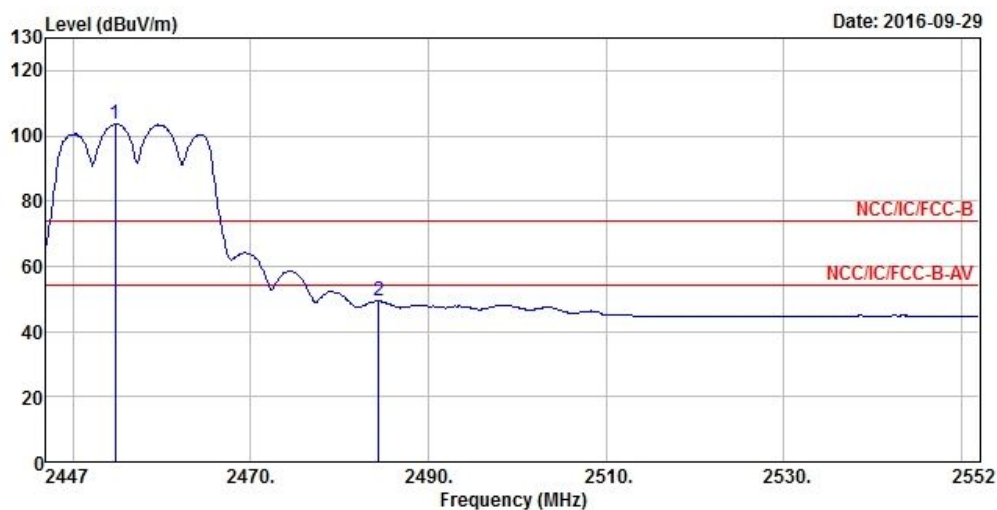
Modulation Mode	11g	Test Freq. (MHz)	2417
N _{TX}	2	Polarization	V



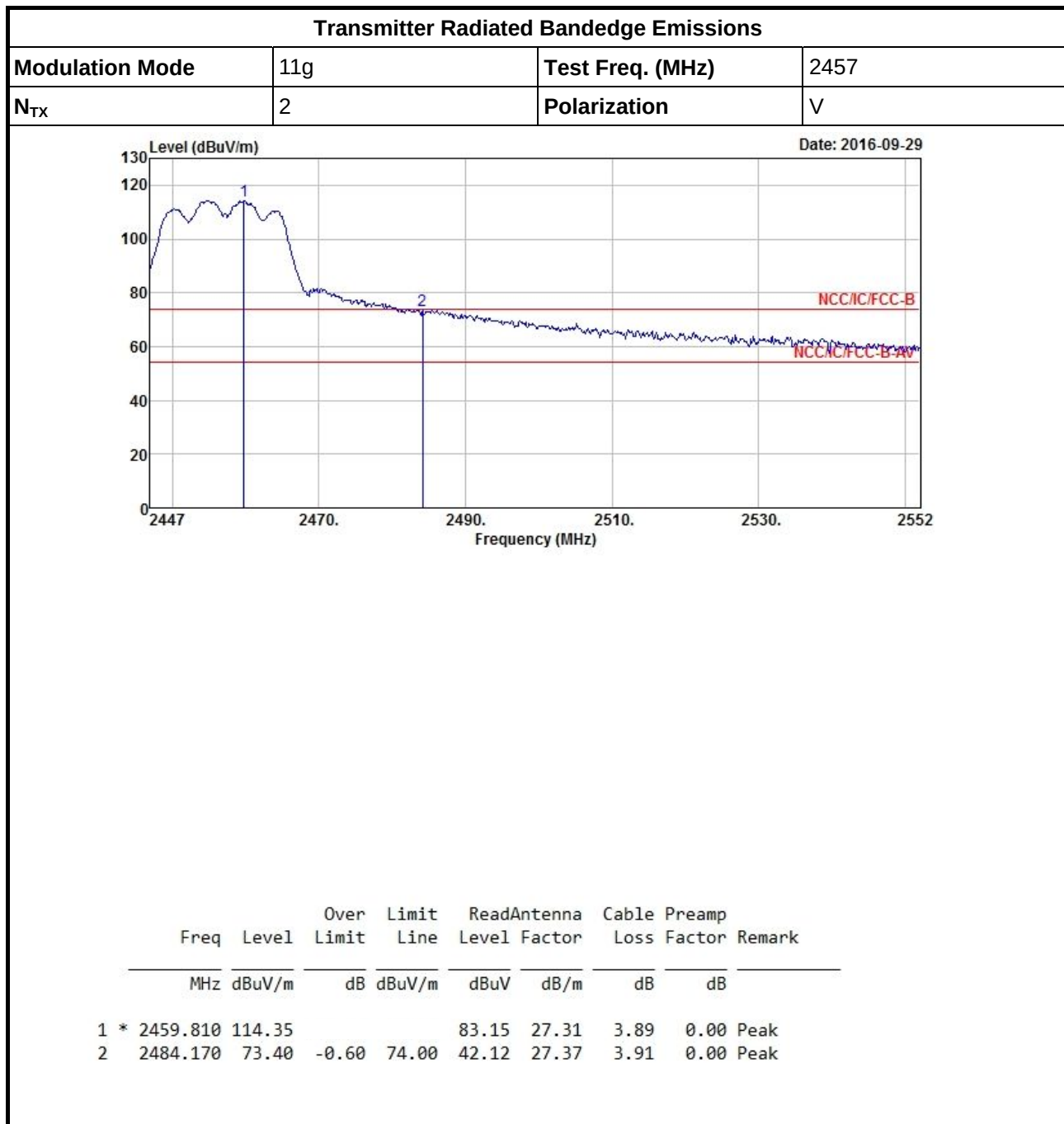
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB
1	2389.560	72.56	-1.44	74.00	41.57	27.16	3.83	0.00 Peak
2 *	2420.214	115.22			84.14	27.22	3.86	0.00 Peak

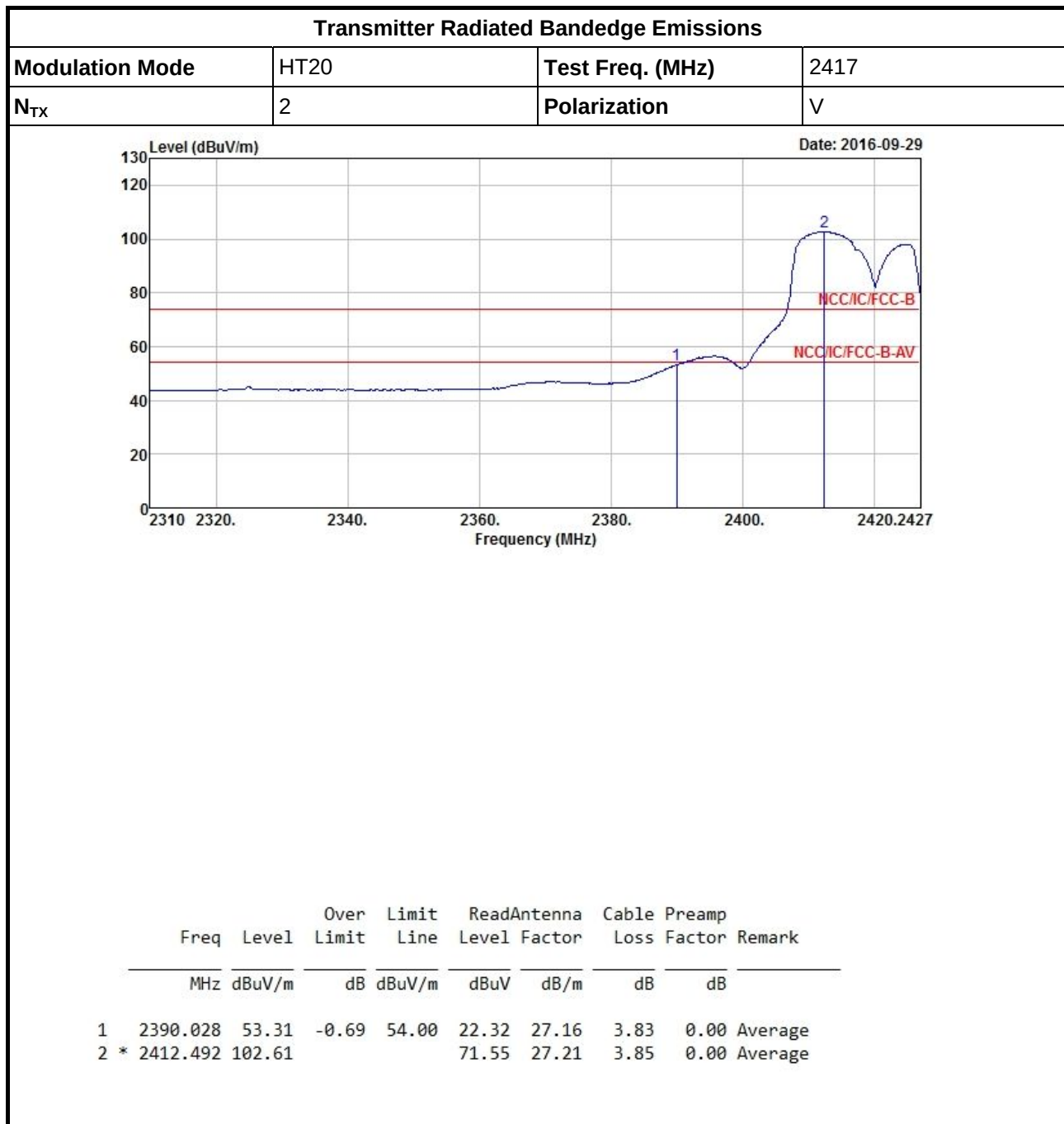
Transmitter Radiated Bandedge Emissions

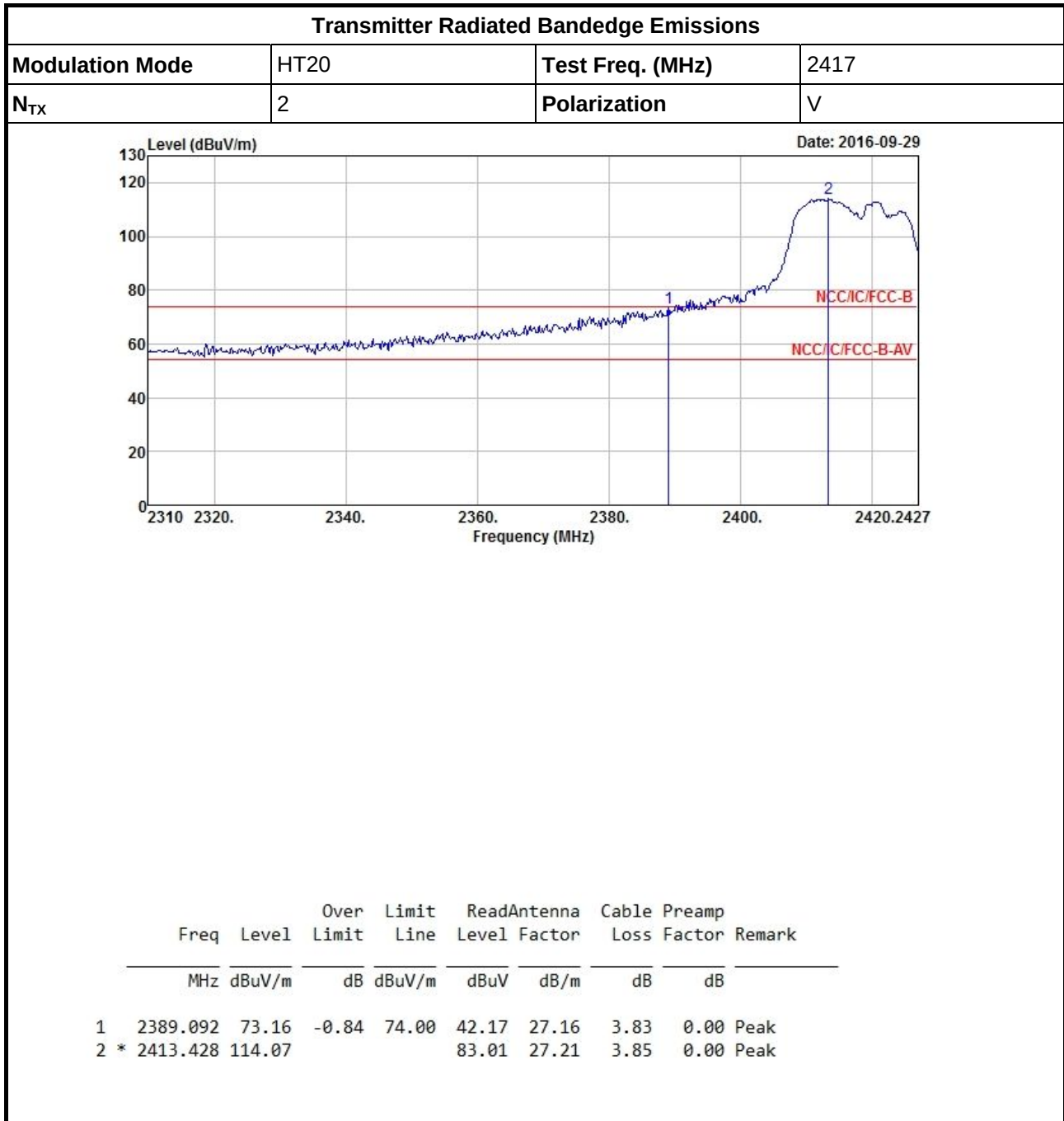
Modulation Mode	11g	Test Freq. (MHz)	2457
N_{TX}	2	Polarization	V



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB
1 *	2454.770	103.52			72.34	27.30	3.88	0.00 Average
2	2484.380	49.35	-4.65	54.00	18.07	27.37	3.91	0.00 Average

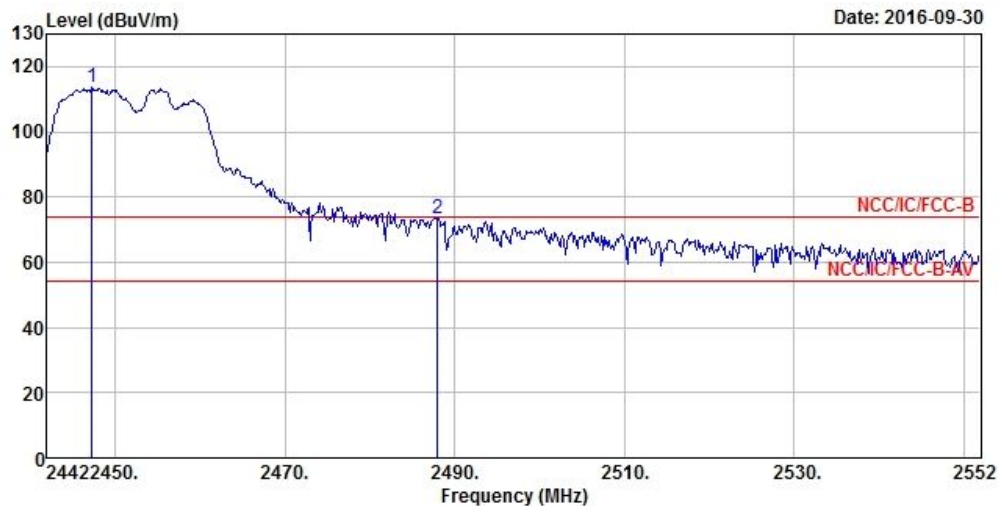






Transmitter Radiated Bandedge Emissions

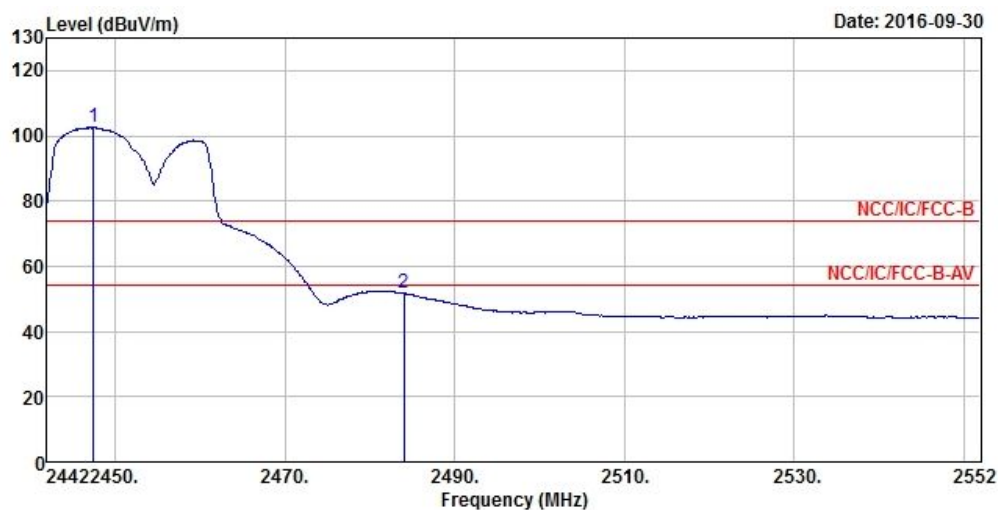
Modulation Mode	HT20	Test Freq. (MHz)	2457
N_{TX}	2	Polarization	V



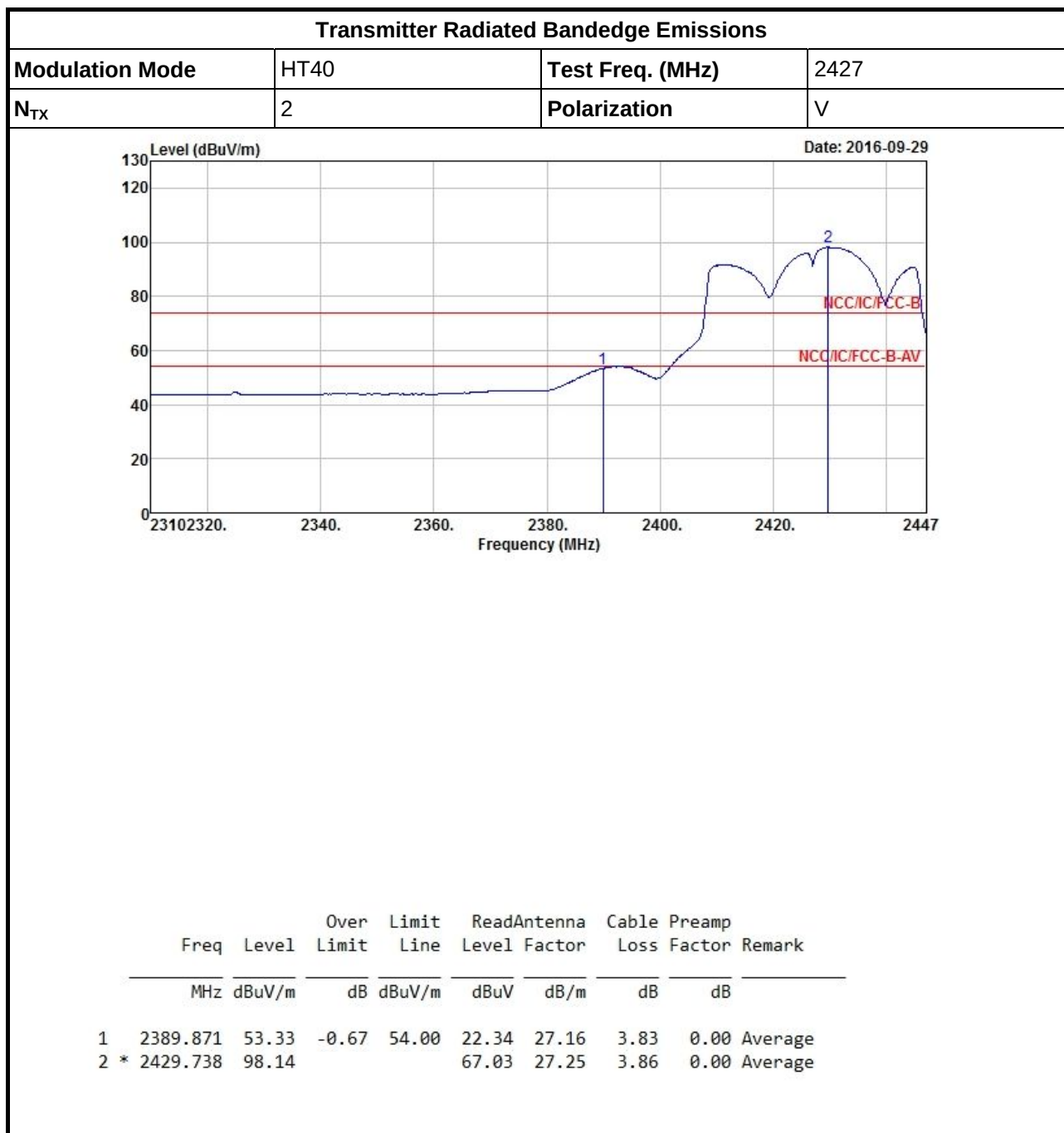
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB
1 *	2447.280	113.70			82.54	27.28	3.88	0.00 Peak
2	2487.980	73.60	-0.40	74.00	42.32	27.37	3.91	0.00 Peak

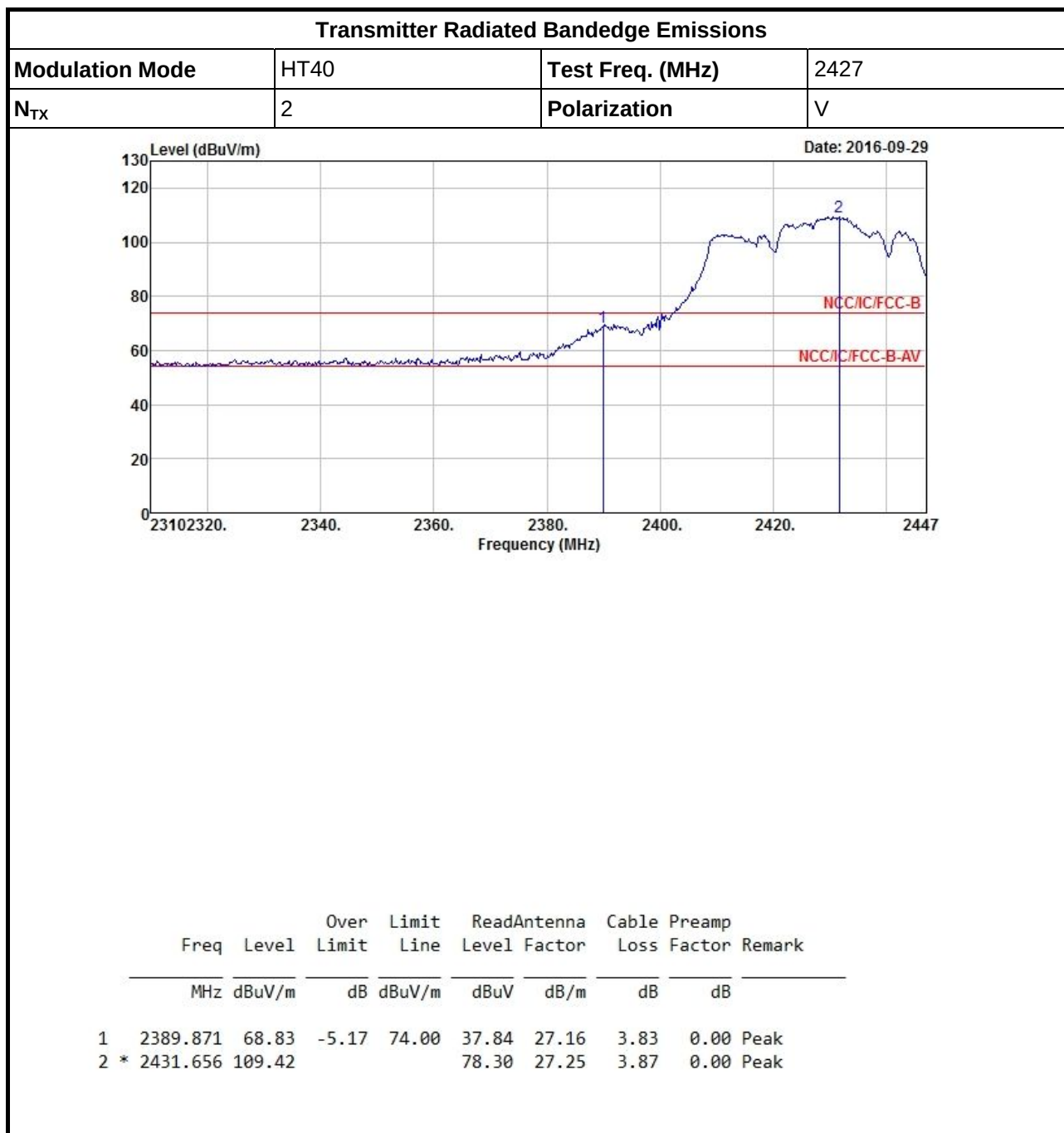
Transmitter Radiated Bandedge Emissions

Modulation Mode	HT20	Test Freq. (MHz)	2457
N _{TX}	2	Polarization	V



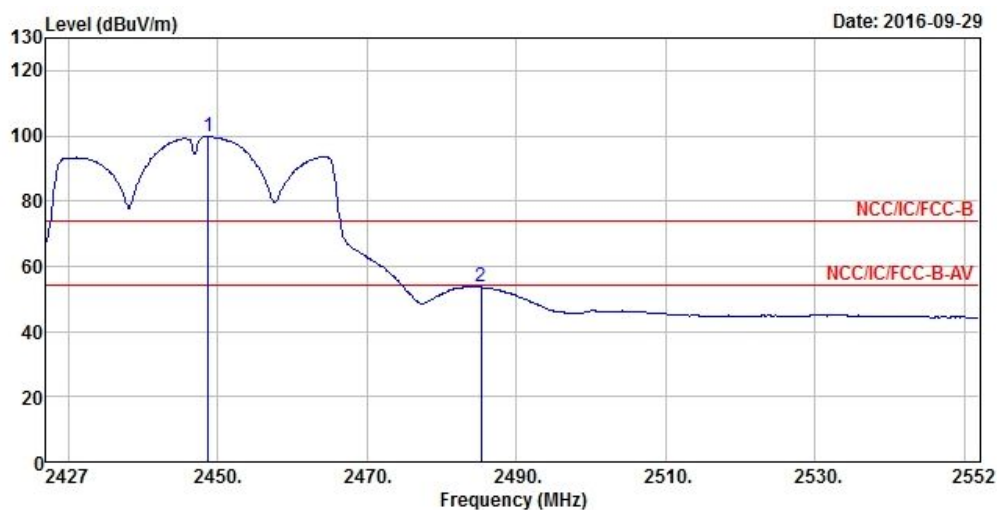
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Factor	Preamp Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 *	2447.500	102.51			71.35	27.28	3.88	0.00	Average
2	2484.020	51.69	-2.31	54.00	20.42	27.36	3.91	0.00	Average





Transmitter Radiated Bandedge Emissions

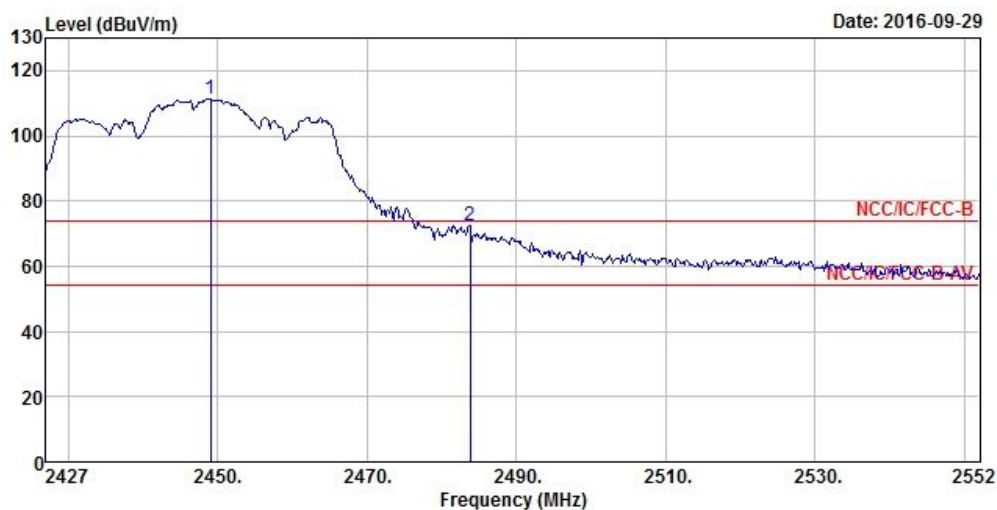
Modulation Mode	HT40	Test Freq. (MHz)	2447
N _{TX}	2	Polarization	V



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Factor	Preamp Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 *	2448.750	99.86			68.69	27.29	3.88	0.00	Average
2	2485.250	53.67	-0.33	54.00	22.39	27.37	3.91	0.00	Average

Transmitter Radiated Bandedge Emissions

Modulation Mode	HT40	Test Freq. (MHz)	2447
N _{TX}	2	Polarization	V



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB
1 *	2449.000	111.28			80.11	27.29	3.88	0.00 Peak
2	2483.750	72.47	-1.53	74.00	41.20	27.36	3.91	0.00 Peak