



FCC Test Report

Equipment : C110 Access Point
Brand Name : Ruckus
Model No. : C110
FCC ID : S9GC110
Standard : 47 CFR FCC Part 15.247
Operating Band : 2400 MHz – 2483.5 MHz
Function : ☒ Point-to-multipoint; ☐ Point-to-point
Applicant : Ruckus Wireless, Inc.
350 West Java Drive, Sunnyvale, California 94089 USA
Manufacturer : MAINTEK COMPUTER (SUZHOU) CO., LTD
Bldg. 6 NB, 233 Jin Feng Rd, Suzhou District Jiangsu
China

The product sample received on Sep. 26, 2016 and completely tested on Oct. 19, 2016. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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

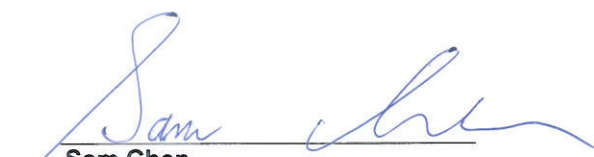

Sam Chen
SPORTON INTERNATIONAL INC.



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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)	Maximum Conducted 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: > 30 dBc	Complied
3.6	15.247(d)	Emissions in Restricted Frequency Bands	Restricted Bands: FCC 15.209	Complied



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FCC ID: S9GC110

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
2400-2483.5	b, g, n (HT20), ac (VHT20)	2412-2462	1-11 [11]
2400-2483.5	n (HT40), ac (VHT40)	2422-2452	3-9 [7]

Band	Mode	BWch (MHz)	Nant
2.4G	11b	20	2
2.4G	11g	20	2
2.4G	HT20	20	2
2.4G	VHT20	20	2
2.4G	HT40	40	2
2.4G	VHT40	40	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.
- VHT20, VHT40 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

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	
					2.4GHz	5GHz
1	-	J23001	Printed Antenna	N/A	0	1
2	-	J23004	Printed Antenna	N/A	0	1

Note: The EUT has two antennas. (2TX/2RX)

Ant. 1 and Ant. 2 could transmit/receive simultaneously.

1.1.3 Mode Test Duty Cycle

Mode	DC	T(s)	VBW(Hz) $\geq 1/T$
11b	0.996	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
11g	0.961	2.065m	1k
VHT20	0.983	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
VHT40	0.965	2.437m	1k

1.1.4 EUT Operational Condition

EUT Power Type	From power adapter		
Beamforming Function	☐ With beamforming	☒ Without beamforming	

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 D01 v02r01
- ◆ FCC KDB 644545 D01 v01r02

1.3 Testing Location Information

Testing Location		
☐	HWA YA	ADD : No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. TEL : 886-3-327-3456 FAX : 886-3-318-0055
☒	JHUBEI	ADD : No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C. TEL : 886-3-656-9065 FAX : 886-3-656-9085

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-CB	Gary Chu	25°C / 57%	Oct. 15, 2016
Radiated	03CH01-CB	Welson Chen	22°C / 54%	Sep. 26, 2016~Oct. 19, 2016
AC Conduction	CO01-CB	Hank Yang	24°C / 55%	Oct. 11, 2016

Test site Designation No. TW0006 with FCC.

Test site registered number IC 4086D with Industry Canada.

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))

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.2 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.7 dB	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Band	Mode	BWch (MHz)	Nss-Min	Nant	Ch. (MHz)	Range	Power Setting
2.4G	11b	20	1	2	2412	L	23
2.4G	11b	20	1	2	2437	M	23
2.4G	11b	20	1	2	2462	H	22
2.4G	11g	20	1	2	2412	L	18
2.4G	11g	20	1	2	2437	M	23
2.4G	11g	20	1	2	2462	H	17.5
2.4G	VHT20	20	1,(M0)	2	2412	L	18
2.4G	VHT20	20	1,(M0)	2	2437	M	23
2.4G	VHT20	20	1,(M0)	2	2462	H	17.5
2.4G	VHT40	40	1,(M0)	2	2422	L	17
2.4G	VHT40	40	1,(M0)	2	2437	M	18.5
2.4G	VHT40	40	1,(M0)	2	2452	H	16.5

Note:

- ♦ Test range channel consist of L (Low Ch.), M (Middle Ch.), H (High Ch.), S (Single Ch.) and C (Straddle Band Ch.).
- ♦ VHT20/VHT40 covers HT20/HT40, due to same modulation. The power setting for 802.11n HT20 and HT40 are the same or lower than 802.11ac VHT20 and VHT40.

2.2 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
Operating Mode	CTX
1	WLAN 2.4GHz
2	WLAN 5GHz
For operating mode 1 is the worst case and it was record in this test report.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	DTS Bandwidth Maximum Conducted Output Power Power Spectral Density
Test Condition	Conducted measurement at transmit chains

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emissions in Non-restricted Frequency Bands 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.
Operating Mode < 1GHz	CTX
1	WLAN 2.4GHz
2	WLAN 5GHz
For operating mode 2 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Test Condition	Radiated measurement
Operating Mode	Normal Link
1	WLAN 2.4GHz + WLAN 5GHz
Refer to Sporton Test Report No.: FA690805 for Co-location RF Exposure Evaluation and Appendix G for Radiated Emission Co-location.	

Note: The EUT can only be used at Y axis position.

2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.4 Accessories

Accessories				
No.	Equipment Name	Brand Holder	Model No.	Rating
1	Adapter	Mass Power Electronic Limited	NBS24J120200D5	INPUT: 100-240Vac, 50/60Hz, 0.6A OUTPUT: 12Vdc, 2.0A
No.	Description			
2	Wall-mounted rack*1			
3	Plug*1			

2.5 Support Equipment

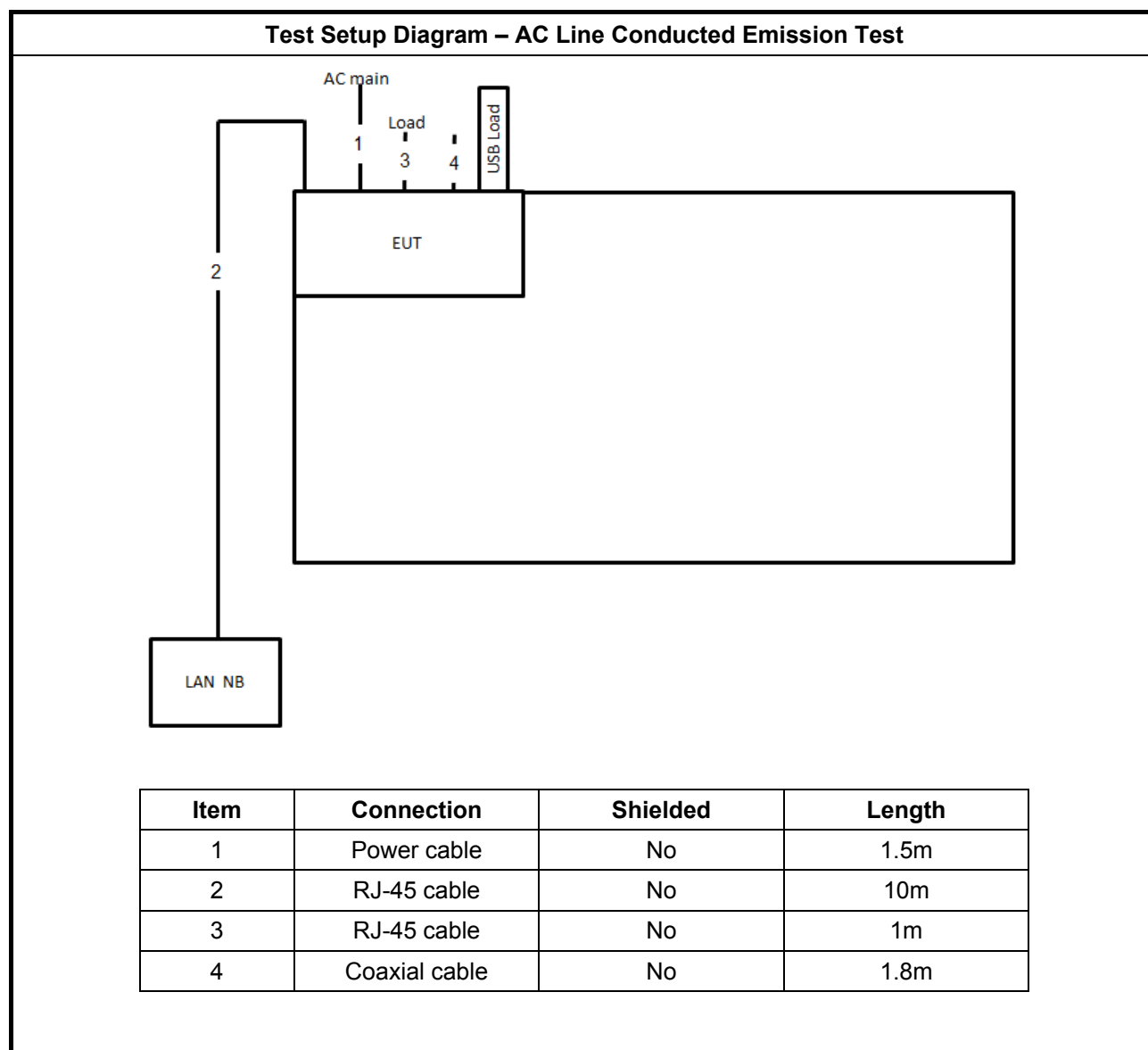
For Test Site No: CO01-CB

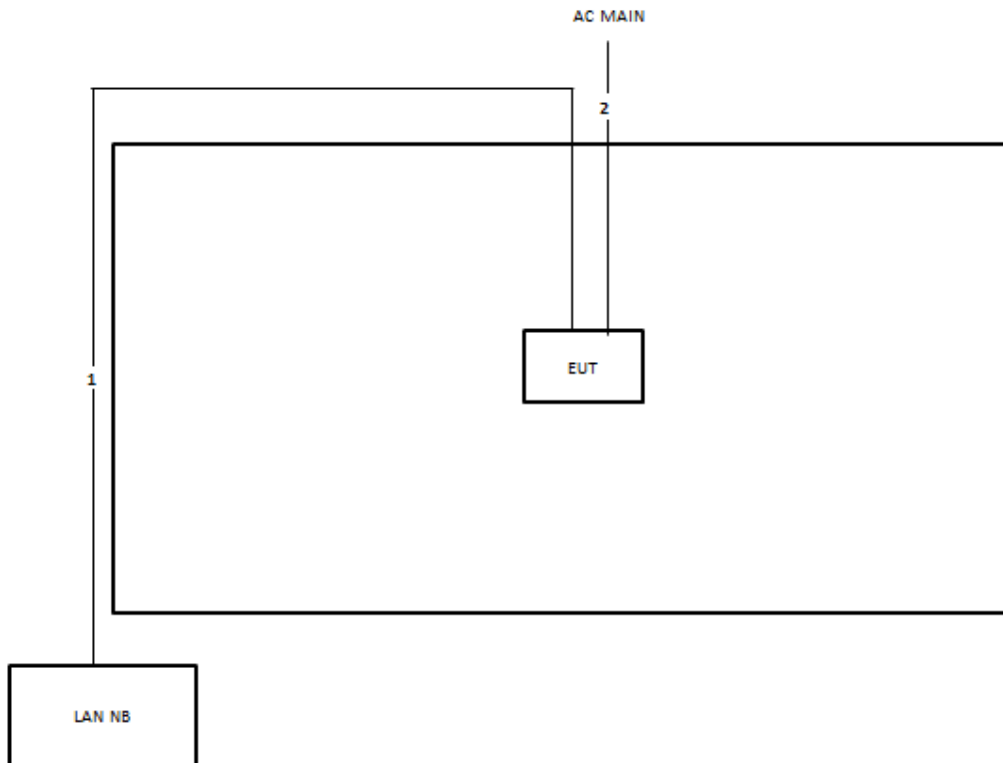
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB	DELL	E6430	DoC
2	Flash disk3.0	Transcend	639205 7755	DoC

For Test Site No: 03CH01-CB and TH01-CB

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB	DELL	E4300	DoC

2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test


Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	Power cable	No	1.5m

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.

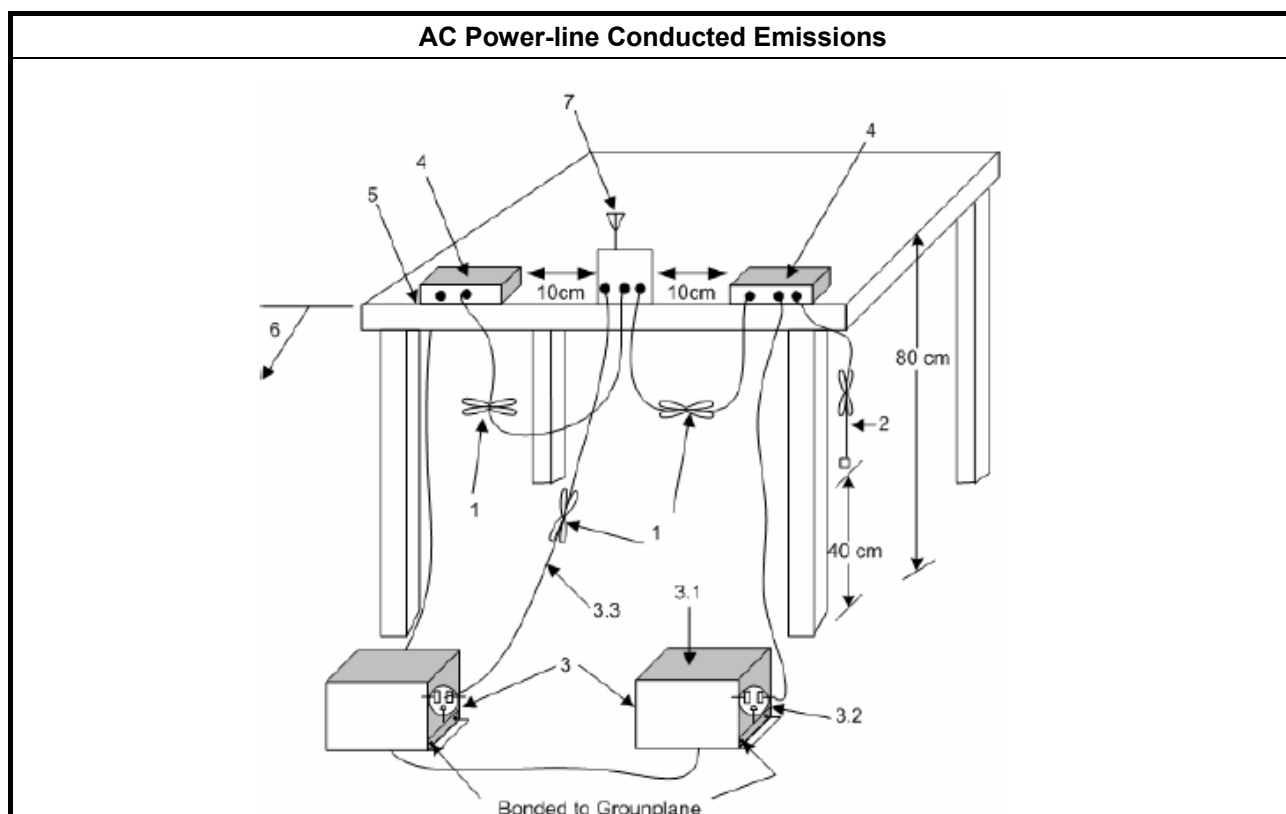
3.1.2 Measuring Instruments

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 A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

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

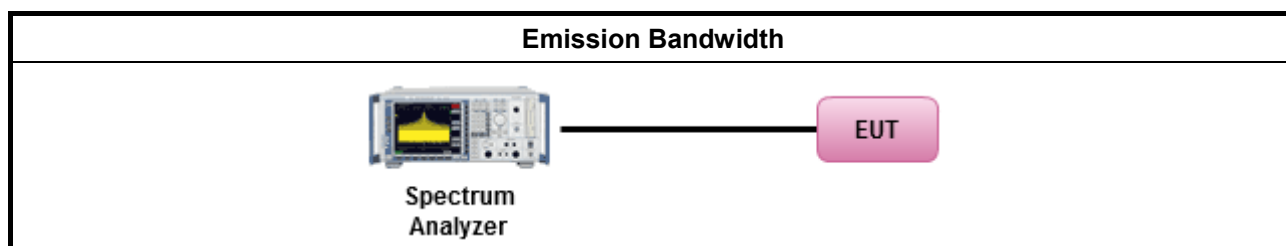
3.2.2 Measuring Instruments

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 B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
	▪ 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
P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.	

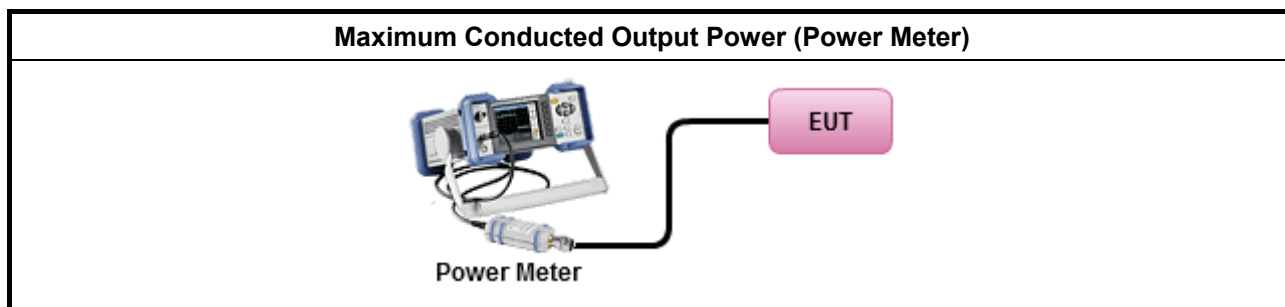
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
Maximum 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-G (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 Conducted Output Power

Refer as Appendix C

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

Power Spectral Density Limit	
▪	Power Spectral Density (PSD) $\leq$ 8 dBm/3kHz

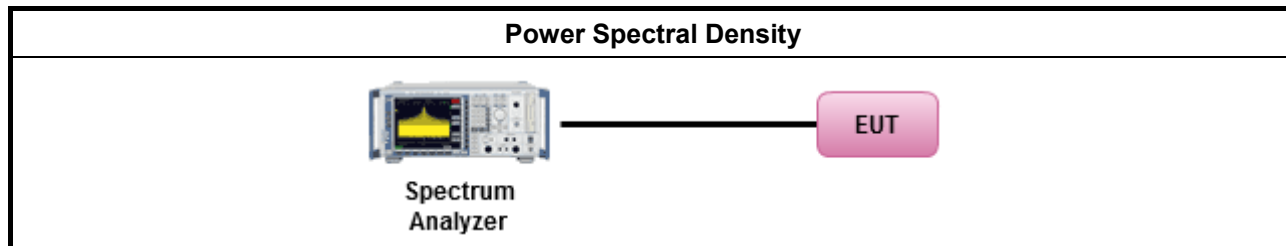
3.4.2 Measuring Instruments

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 NTX 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 D

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.	

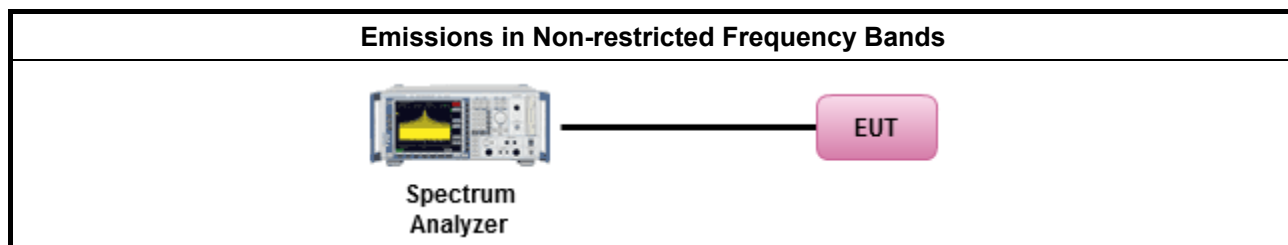
3.5.2 Measuring Instruments

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 E

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.

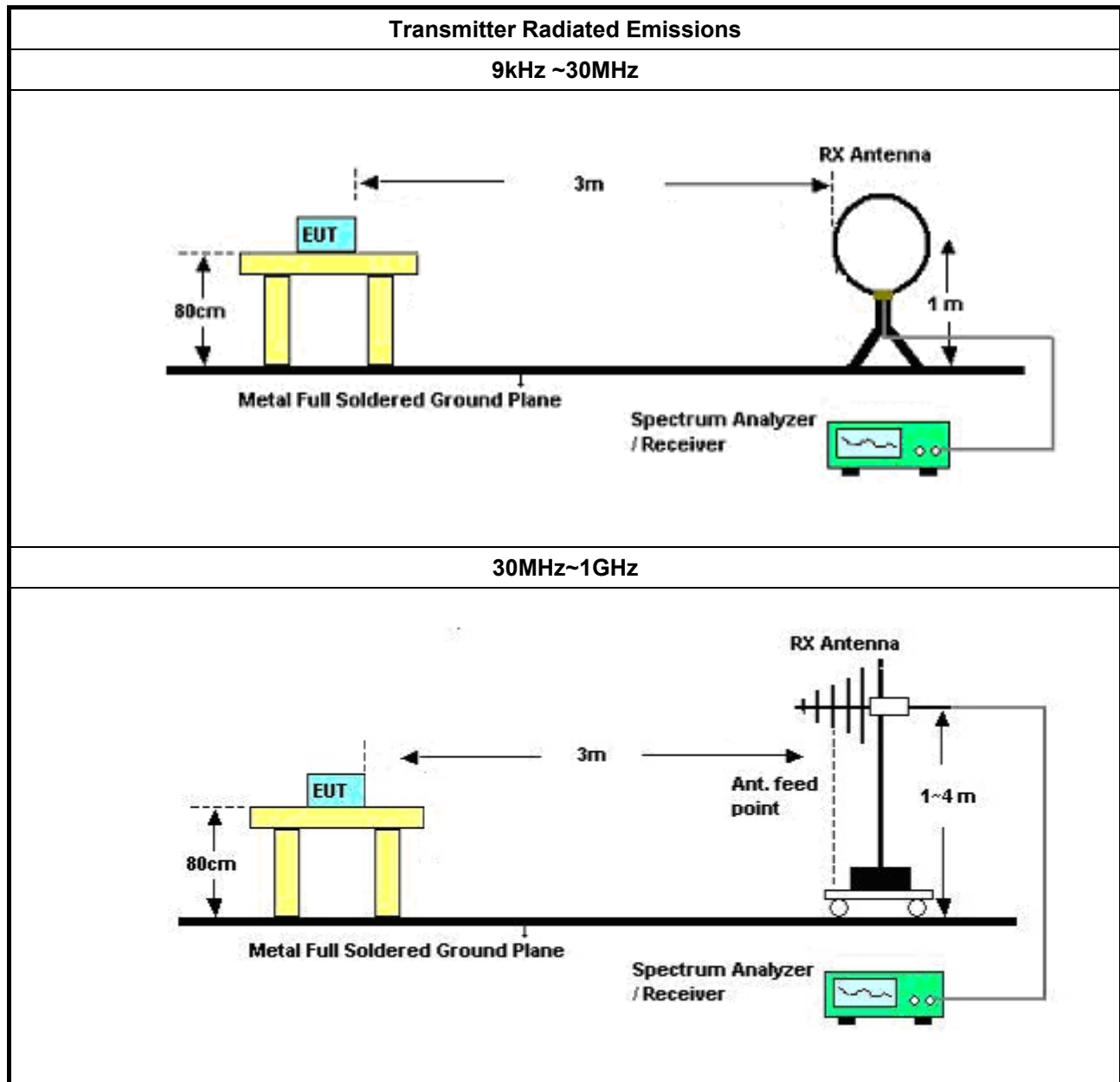
3.6.2 Measuring Instruments

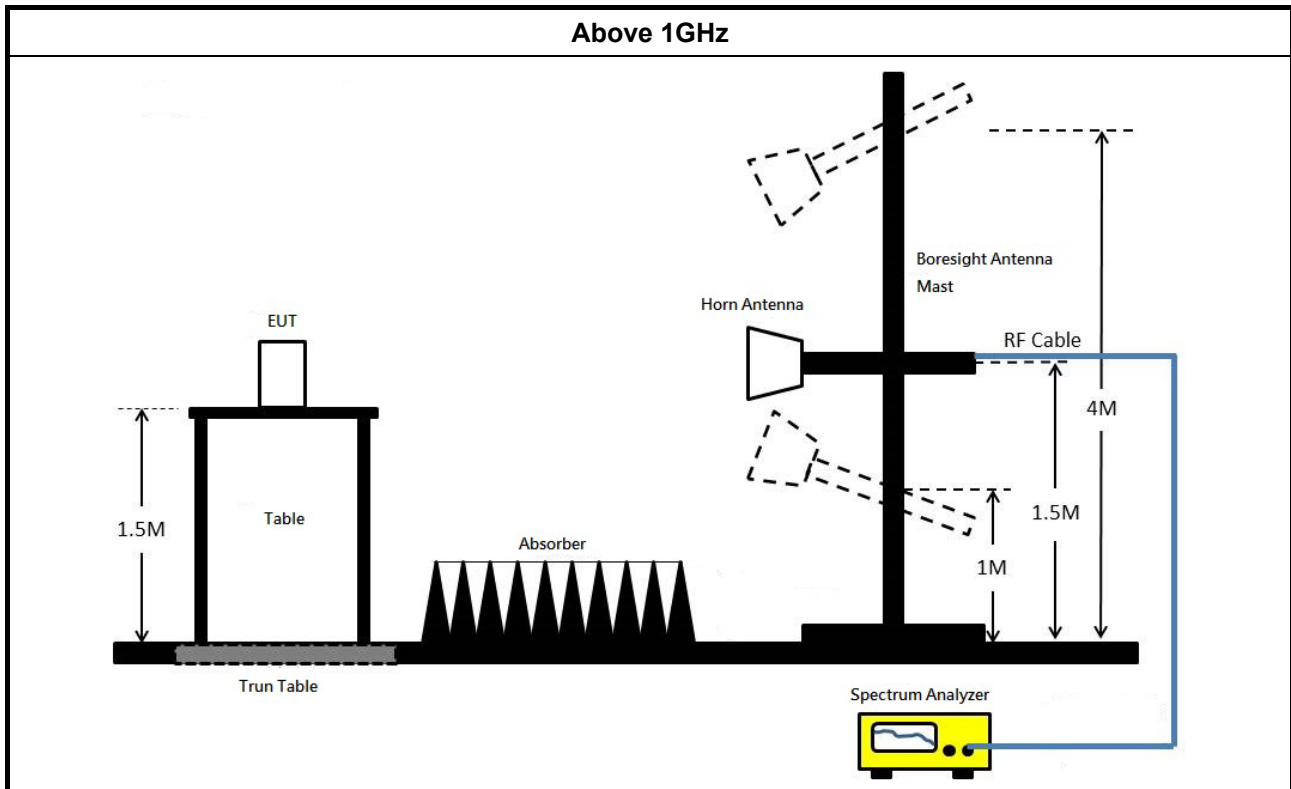
Refer a test equipment and calibration data table in this test report.

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





3.6.5 Transmitter Radiated Unwanted Emissions (Below 30MHz)

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

3.6.6 Test Result of Transmitter Radiated Unwanted Emissions

Refer as Appendix F

4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Jan. 27, 2016	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 08, 2015	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Dec. 23, 2015	Conduction (CO01-CB)
COND Cable	Woken	Cable	01	150kHz ~ 30MHz	May 24, 2016	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	Conduction (CO01-CB)
BILOG ANTENNA	TESEQ	CBL6112D	37880	20MHz ~ 2GHz	Aug. 30, 2016	Radiation (03CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Oct. 22, 2015	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 25, 2016	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8447D	2944A10991	0.1MHz ~ 1.3GHz	Mar. 15, 2016	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 18, 2016	Radiation (03CH01-CB)
Pre-Amplifier	WM	TF-130N-R1	923365	26GHz ~ 40GHz	Nov. 13, 2015	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Oct. 27, 2015	Radiation (03CH01-CB)
EMI Test	R&S	ESCS	100355	9kHz ~ 2.75GHz	May 16, 2016	Radiation (03CH01-CB)
RF Cable-low	Woken	Low Cable-1	N/A	30 MHz ~ 1 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16	N/A	1 GHz ~ 18 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-17	N/A	1 GHz ~ 18 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G-1	N/A	18GHz ~ 40 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G-2	N/A	18GHz ~ 40 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
Test Software	Audix	E3	6.2009-10-7	N/A	N/A	Radiation (03CH01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 16, 2016*	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 09, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-6	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-7	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-8	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)



FCC Test Report

Report No. : FR690805AA

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
RF Cable-high	Woken	RG402	High Cable-9	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz~18GHz	Nov. 02, 2015	Conducted (TH01-CB)

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

“*” Calibration Interval of instruments listed above is two years.

N.C.R. means Non-Calibration required.



AC Power-line Conducted Emissions Result									
Operating Mode	1			Power Phase			Neutral		
Operating Function	CTX								
Level (dBuV) Date: 2016-10-11 Time: 20:55:50									
	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Pol/Phase	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1500	43.06	-12.94	56.00	32.88	10.02	0.16	NEUTRAL	Average
2	0.1500	57.79	-8.21	66.00	47.61	10.02	0.16	NEUTRAL	QP
3	0.1712	40.35	-14.55	54.90	30.16	10.02	0.17	NEUTRAL	Average
4	0.1712	49.72	-15.18	64.90	39.53	10.02	0.17	NEUTRAL	QP
5	0.5074	31.79	-14.21	46.00	21.67	9.92	0.20	NEUTRAL	Average
6	0.5074	41.01	-14.99	56.00	30.89	9.92	0.20	NEUTRAL	QP
7	1.5518	28.07	-17.93	46.00	17.81	9.95	0.31	NEUTRAL	Average
8	1.5518	36.61	-19.39	56.00	26.35	9.95	0.31	NEUTRAL	QP
9	4.3146	24.75	-21.25	46.00	14.66	10.00	0.09	NEUTRAL	Average
10	4.3146	33.10	-22.90	56.00	23.01	10.00	0.09	NEUTRAL	QP
11	8.5463	25.57	-24.43	50.00	15.32	10.11	0.14	NEUTRAL	Average
12	8.5463	32.90	-27.10	60.00	22.65	10.11	0.14	NEUTRAL	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	CTX		

Level (dBuV) Date: 2016-10-11 Time: 20:53:49

Frequency (MHz)

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Pol/Phase	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1500	42.63	-13.37	56.00	32.45	10.02	0.16	LINE	Average
2	0.1500	58.62	-7.38	66.00	48.44	10.02	0.16	LINE	QP
3	0.1590	43.03	-12.49	55.52	32.84	10.02	0.17	LINE	Average
4	0.1590	55.43	-10.09	65.52	45.24	10.02	0.17	LINE	QP
5	0.1844	38.19	-16.09	54.28	28.09	9.92	0.18	LINE	Average
6	0.1844	51.42	-12.86	64.28	41.32	9.92	0.18	LINE	QP
7	0.5074	32.80	-13.20	46.00	22.68	9.92	0.20	LINE	Average
8	0.5074	42.82	-13.18	56.00	32.70	9.92	0.20	LINE	QP
9	2.5535	26.25	-19.75	46.00	16.21	9.97	0.07	LINE	Average
10	2.5535	34.15	-21.85	56.00	24.11	9.97	0.07	LINE	QP
11	15.3070	29.10	-20.90	50.00	18.65	10.23	0.22	LINE	Average
12	15.3070	36.01	-23.99	60.00	25.56	10.23	0.22	LINE	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.)



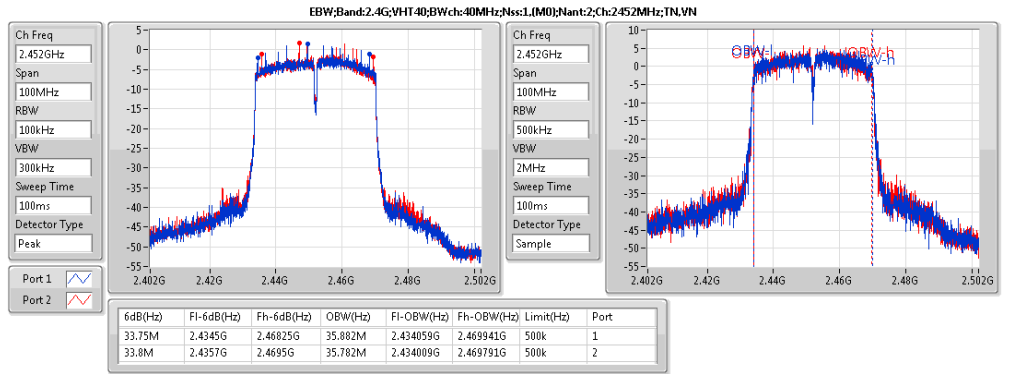
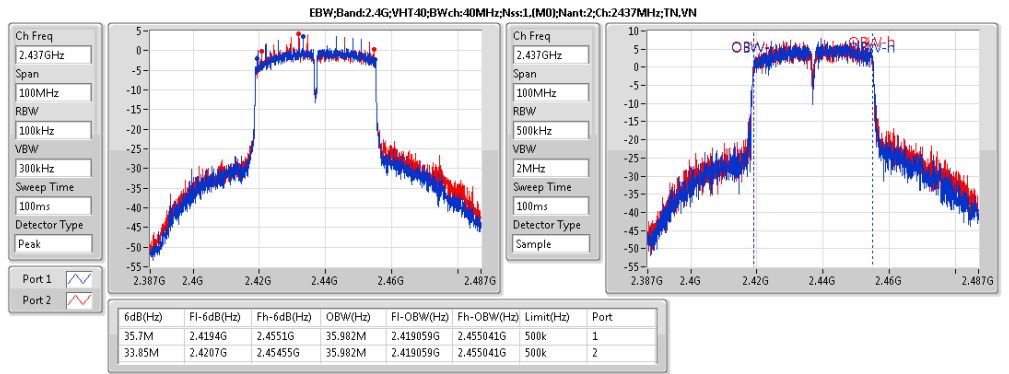
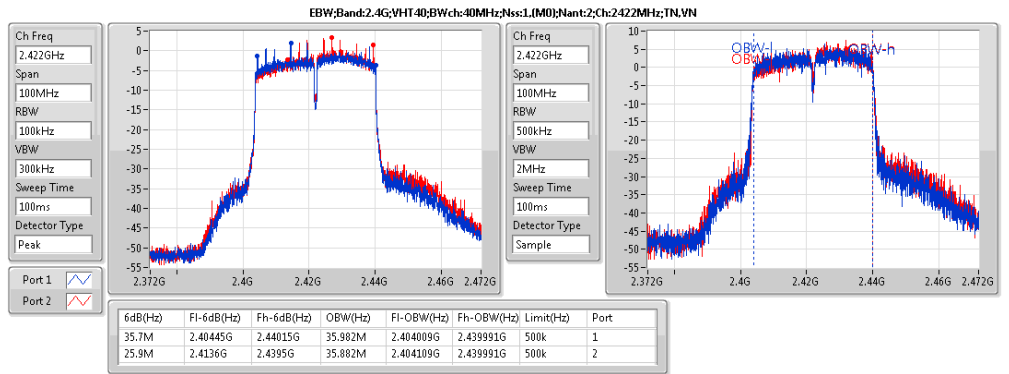
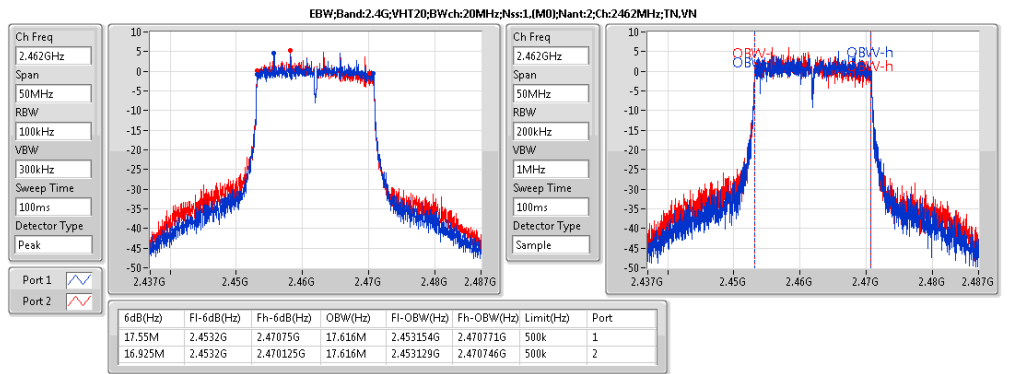
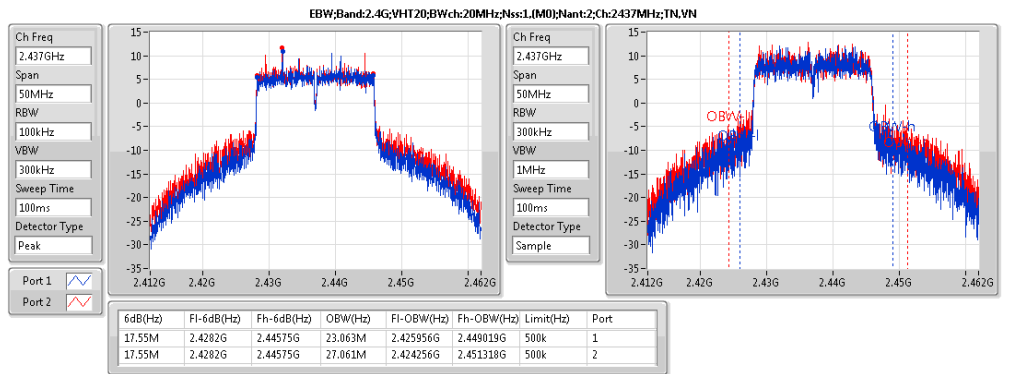
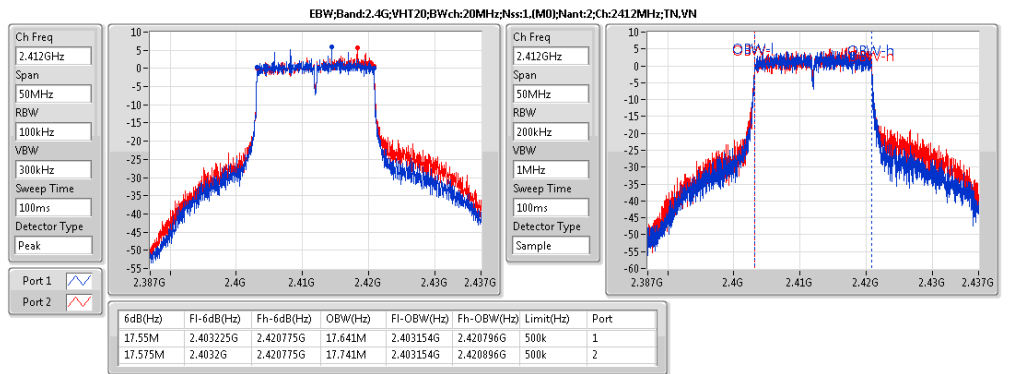
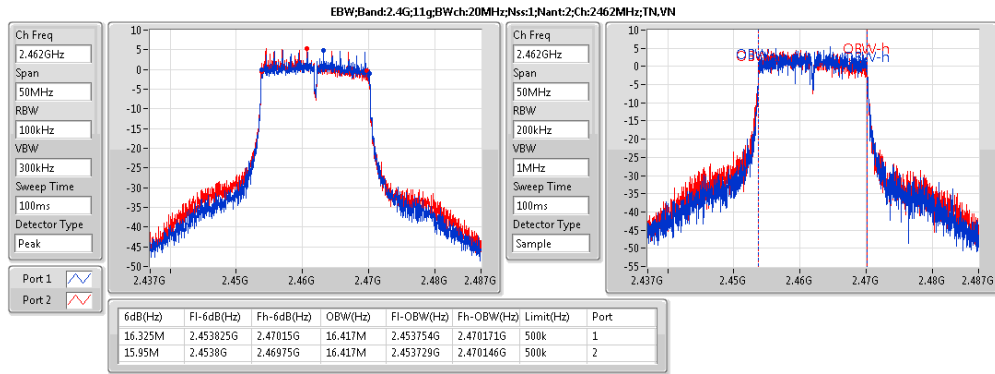
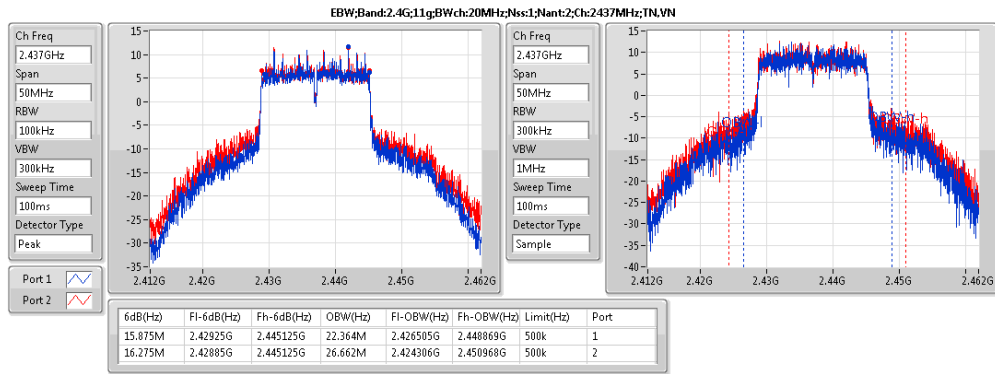
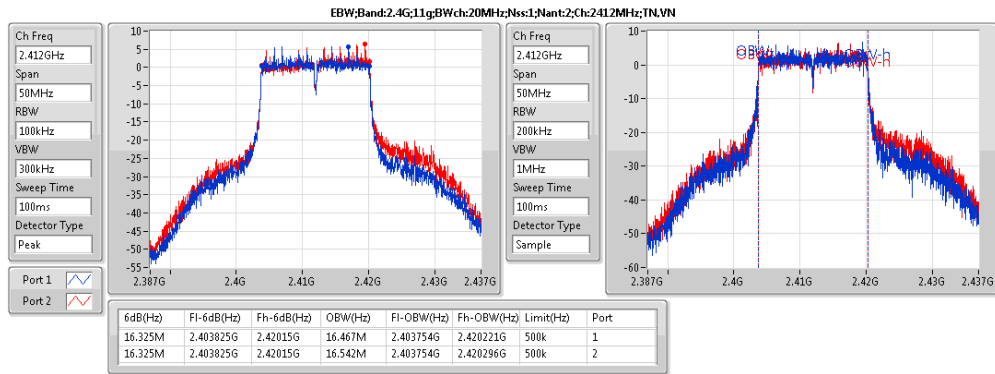
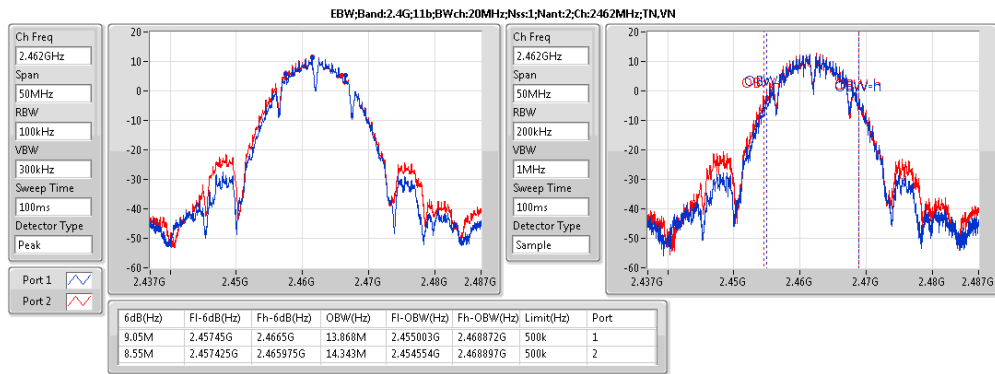
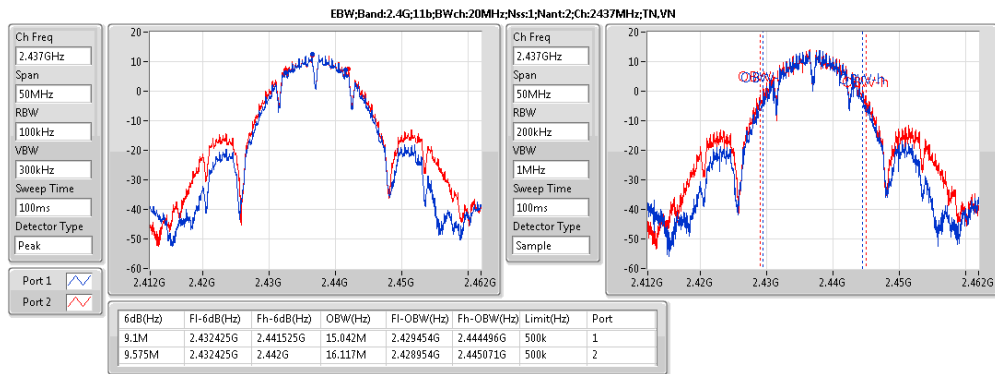
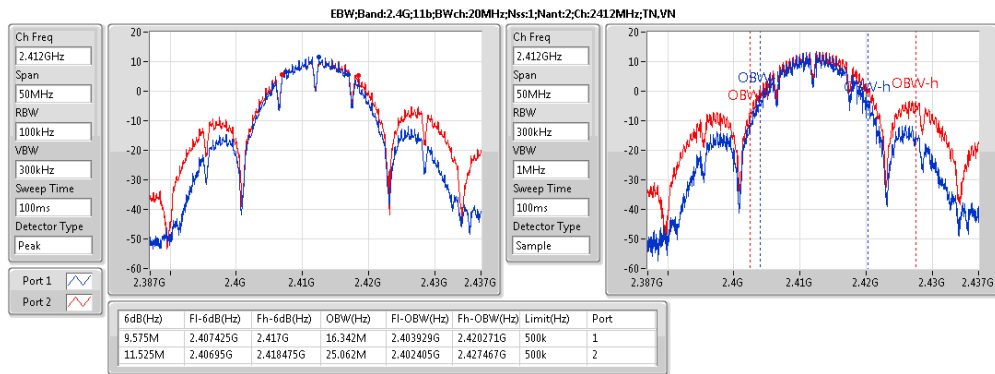
Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4G;11b;Nss1;Ntx2	11.525M	25.062M	25M1G1D	8.55M	13.868M
2.4G;11g;Nss1;Ntx2	16.325M	26.662M	26M7D1D	15.875M	16.417M
2.4G;VHT20;Nss1,(M0);Ntx2	17.575M	27.061M	27M1D1D	16.925M	17.616M
2.4G;VHT40;Nss1,(M0);Ntx2	35.7M	35.982M	36M0D1D	25.9M	35.782M



Result

Mode	Result	Limit (Hz)	P1-N dB (Hz)	P1-OBW (Hz)	P2-N dB (Hz)	P2-OBW (Hz)
2.4G;11b;Nss1;Ntx2;2412	Pass	500k	9.575M	16.342M	11.525M	25.062M
2.4G;11b;Nss1;Ntx2;2437	Pass	500k	9.1M	15.042M	9.575M	16.117M
2.4G;11b;Nss1;Ntx2;2462	Pass	500k	9.05M	13.868M	8.55M	14.343M
2.4G;11g;Nss1;Ntx2;2412	Pass	500k	16.325M	16.467M	16.325M	16.542M
2.4G;11g;Nss1;Ntx2;2437	Pass	500k	15.875M	22.364M	16.275M	26.662M
2.4G;11g;Nss1;Ntx2;2462	Pass	500k	16.325M	16.417M	15.95M	16.417M
2.4G;VHT20;Nss1,(M0);Ntx2;2412	Pass	500k	17.55M	17.641M	17.575M	17.741M
2.4G;VHT20;Nss1,(M0);Ntx2;2437	Pass	500k	17.55M	23.063M	17.55M	27.061M
2.4G;VHT20;Nss1,(M0);Ntx2;2462	Pass	500k	17.55M	17.616M	16.925M	17.616M
2.4G;VHT40;Nss1,(M0);Ntx2;2422	Pass	500k	35.7M	35.982M	25.9M	35.882M
2.4G;VHT40;Nss1,(M0);Ntx2;2437	Pass	500k	35.7M	35.982M	33.85M	35.982M
2.4G;VHT40;Nss1,(M0);Ntx2;2452	Pass	500k	33.75M	35.882M	33.8M	35.782M





Summary

Mode	Sum (dBm)	Sum (W)	EIRP (dBm)	EIRP (W)
2.4G;11b;Nss1;Ntx2	26.33	0.42954	26.33	0.42954
2.4G;11g;Nss1;Ntx2	25.57	0.36058	25.57	0.36058
2.4G;VHT20;Nss1,(M0);Ntx2	25.56	0.35975	25.56	0.35975
2.4G;VHT40;Nss1,(M0);Ntx2	21.72	0.14859	21.72	0.14859



Result

Mode	Result	DG (dBi)	Sum (dBm)	Sum Lim. (dBm)	EIRP (dBm)	EIRP Lim. (dBm)	P1 (dBm)	P2 (dBm)
2.4G;11b;Nss1;Ntx2;2412	Pass	0.00	25.84	30.00	25.84	36.00	22.92	22.74
2.4G;11b;Nss1;Ntx2;2437	Pass	0.00	26.33	30.00	26.33	36.00	23.44	23.2
2.4G;11b;Nss1;Ntx2;2462	Pass	0.00	25.14	30.00	25.14	36.00	22.21	22.04
2.4G;11g;Nss1;Ntx2;2412	Pass	0.00	20.50	30.00	20.50	36.00	17.45	17.53
2.4G;11g;Nss1;Ntx2;2437	Pass	0.00	25.57	30.00	25.57	36.00	22.65	22.47
2.4G;11g;Nss1;Ntx2;2462	Pass	0.00	20.32	30.00	20.32	36.00	17.29	17.32
2.4G;VHT20;Nss1,(M0);Ntx2;2412	Pass	0.00	20.73	30.00	20.73	36.00	17.71	17.73
2.4G;VHT20;Nss1,(M0);Ntx2;2437	Pass	0.00	25.56	30.00	25.56	36.00	22.7	22.39
2.4G;VHT20;Nss1,(M0);Ntx2;2462	Pass	0.00	20.34	30.00	20.34	36.00	17.39	17.27
2.4G;VHT40;Nss1,(M0);Ntx2;2422	Pass	0.00	20.21	30.00	20.21	36.00	17.19	17.21
2.4G;VHT40;Nss1,(M0);Ntx2;2437	Pass	0.00	21.72	30.00	21.72	36.00	18.62	18.8
2.4G;VHT40;Nss1,(M0);Ntx2;2452	Pass	0.00	19.45	30.00	19.45	36.00	16.26	16.61



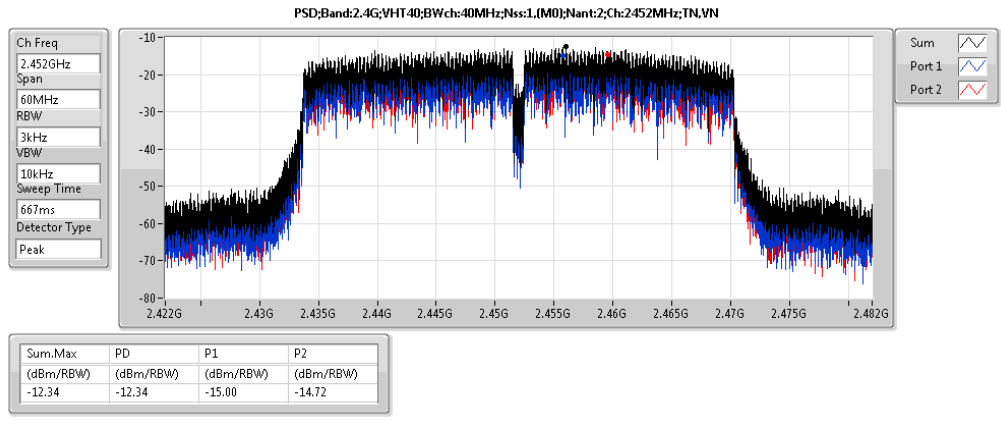
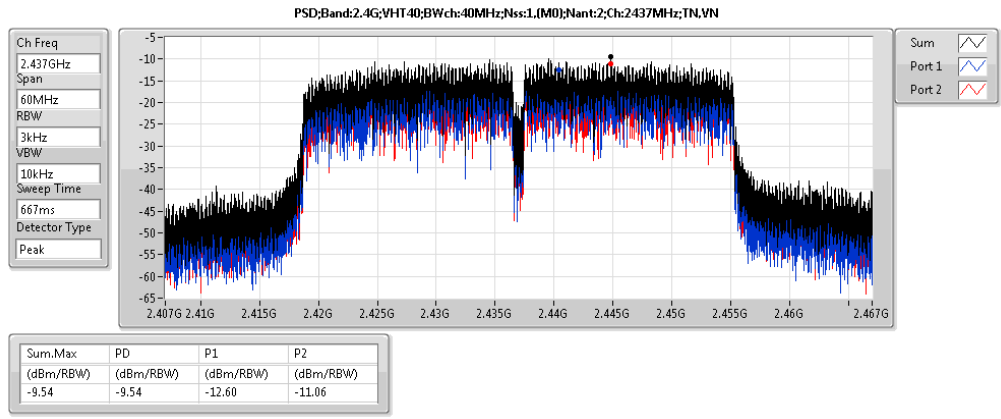
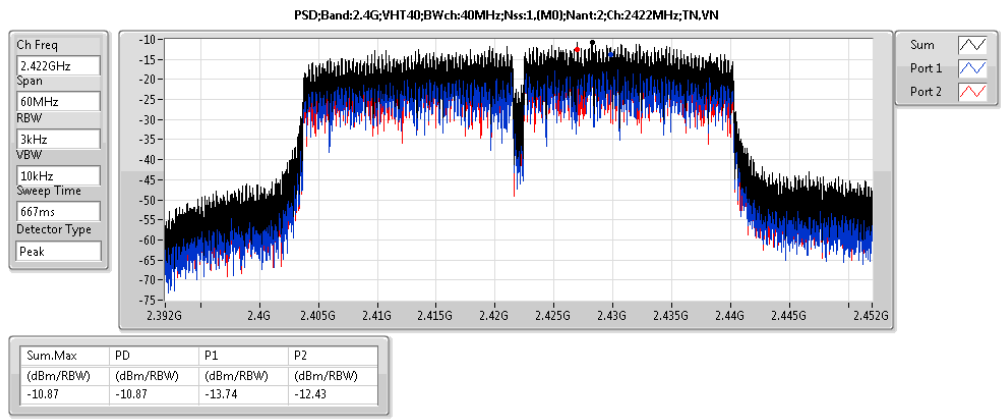
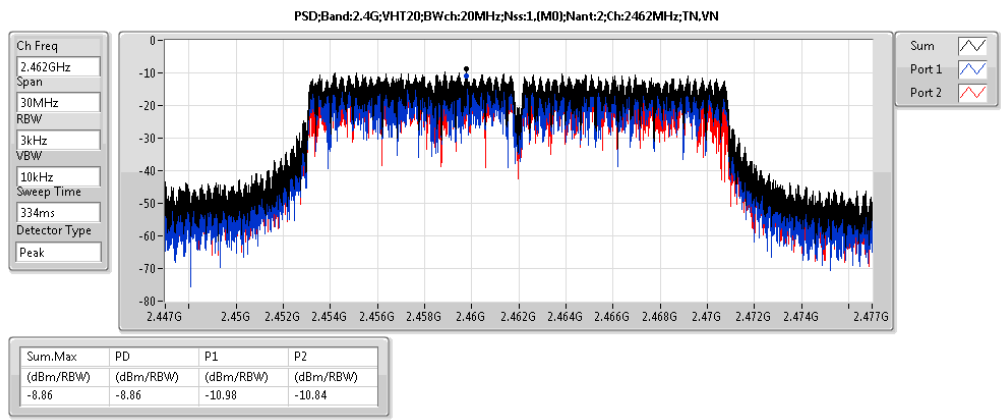
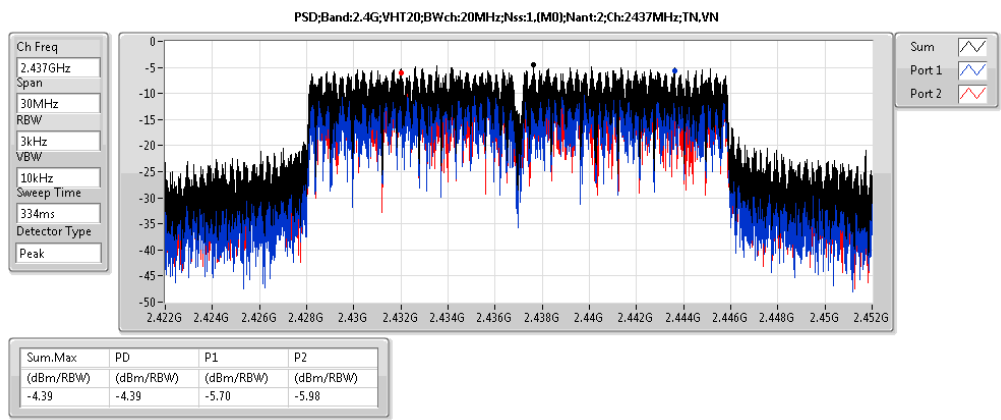
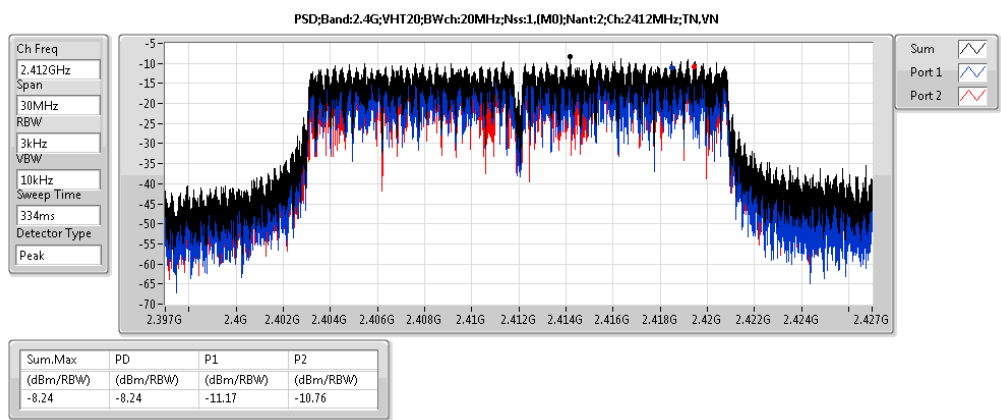
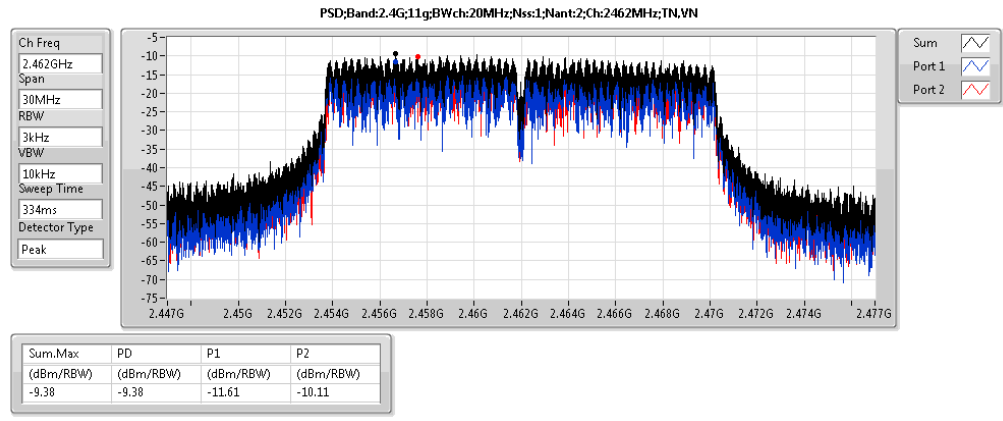
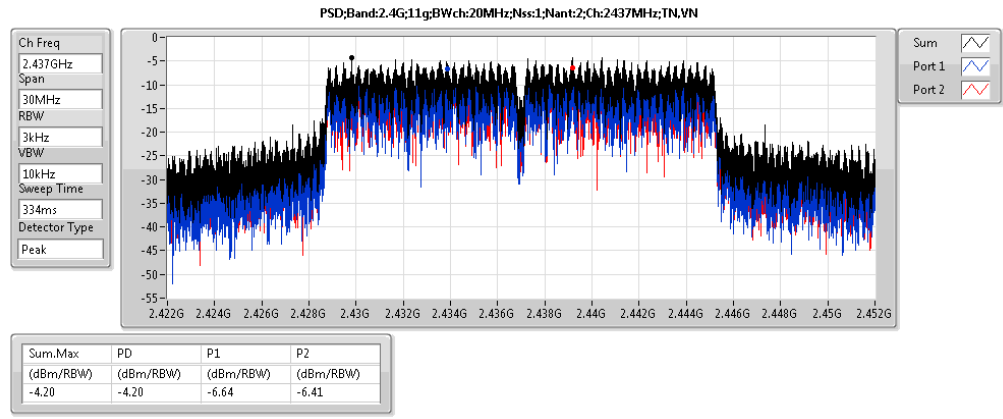
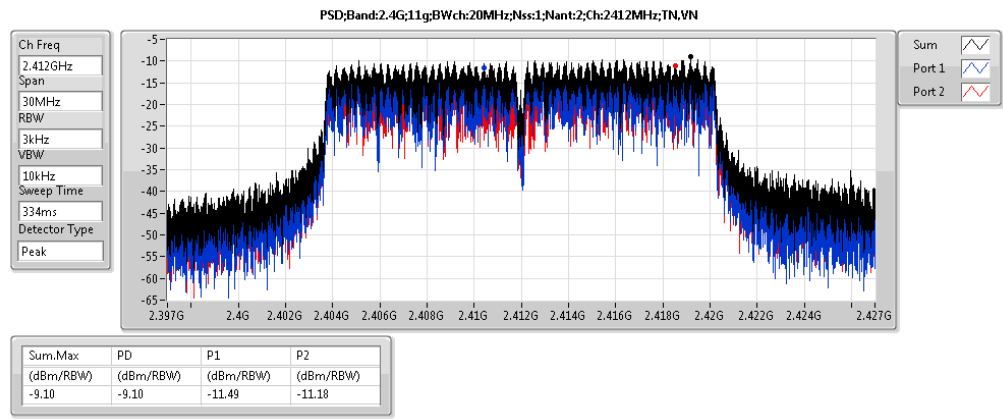
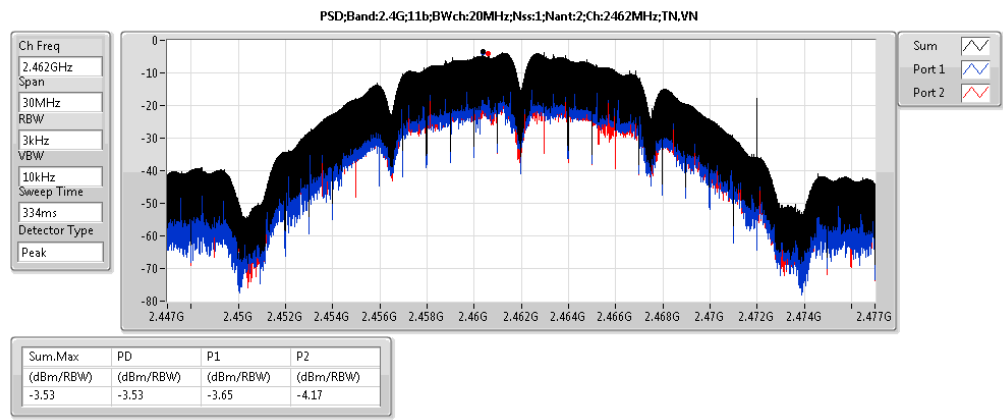
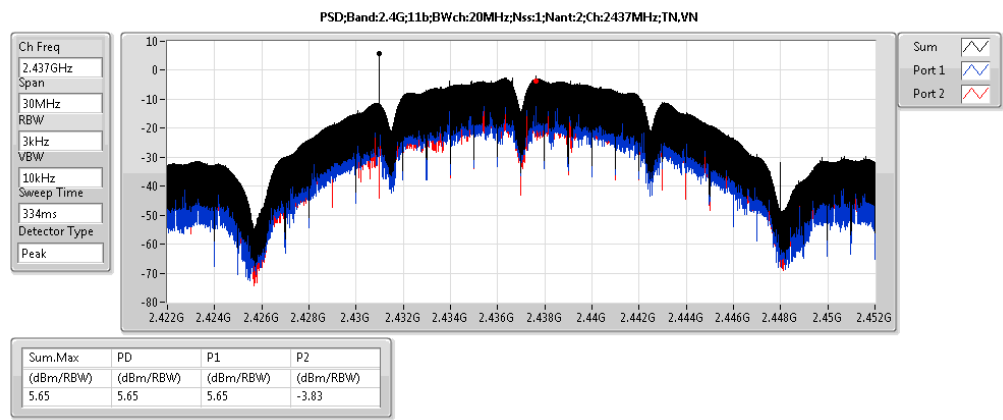
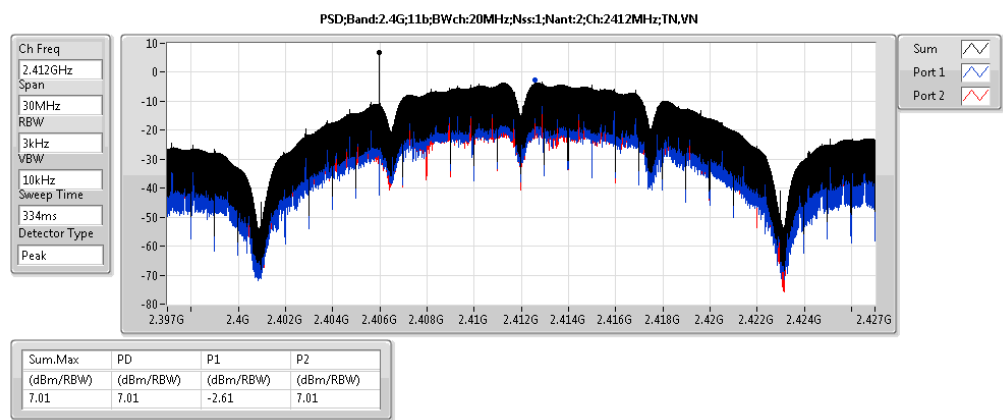
Summary

Mode	PD (dBm/RBW)	EIRP.PD (dBm/RBW)
2.4G;11b;Nss1;Ntx2	7.01	10.02
2.4G;11g;Nss1;Ntx2	-4.20	-1.19
2.4G;VHT20;Nss1,(M0);Ntx2	-4.39	-1.38
2.4G;VHT40;Nss1,(M0);Ntx2	-9.54	-6.53



Result

Mode	Result	Meas.RBW (Hz)	Lim.RBW (Hz)	BWCF (dB)	DG (dBi)	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;Nss1;Ntx2;2412	Pass	3k	3k	0.00	3.01	7.01	8.00	10.02	Inf	-2.61	7.01
2.4G;11b;Nss1;Ntx2;2437	Pass	3k	3k	0.00	3.01	5.65	8.00	8.66	Inf	5.65	-3.83
2.4G;11b;Nss1;Ntx2;2462	Pass	3k	3k	0.00	3.01	-3.53	8.00	-0.52	Inf	-3.65	-4.17
2.4G;11g;Nss1;Ntx2;2412	Pass	3k	3k	0.00	3.01	-9.10	8.00	-6.09	Inf	-11.49	-11.18
2.4G;11g;Nss1;Ntx2;2437	Pass	3k	3k	0.00	3.01	-4.20	8.00	-1.19	Inf	-6.64	-6.41
2.4G;11g;Nss1;Ntx2;2462	Pass	3k	3k	0.00	3.01	-9.38	8.00	-6.37	Inf	-11.61	-10.11
2.4G;VHT20;Nss1;(M0);Ntx2;2412	Pass	3k	3k	0.00	3.01	-8.24	8.00	-5.23	Inf	-11.17	-10.76
2.4G;VHT20;Nss1;(M0);Ntx2;2437	Pass	3k	3k	0.00	3.01	-4.39	8.00	-1.38	Inf	-5.70	-5.98
2.4G;VHT20;Nss1;(M0);Ntx2;2462	Pass	3k	3k	0.00	3.01	-8.86	8.00	-5.85	Inf	-10.98	-10.84
2.4G;VHT40;Nss1;(M0);Ntx2;2422	Pass	3k	3k	0.00	3.01	-10.87	8.00	-7.86	Inf	-13.74	-12.43
2.4G;VHT40;Nss1;(M0);Ntx2;2437	Pass	3k	3k	0.00	3.01	-9.54	8.00	-6.53	Inf	-12.60	-11.06
2.4G;VHT40;Nss1;(M0);Ntx2;2452	Pass	3k	3k	0.00	3.01	-12.34	8.00	-9.33	Inf	-15.00	-14.72





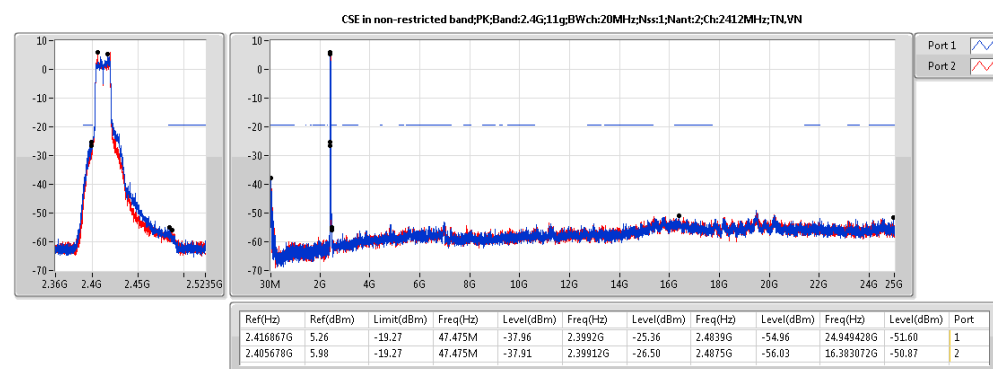
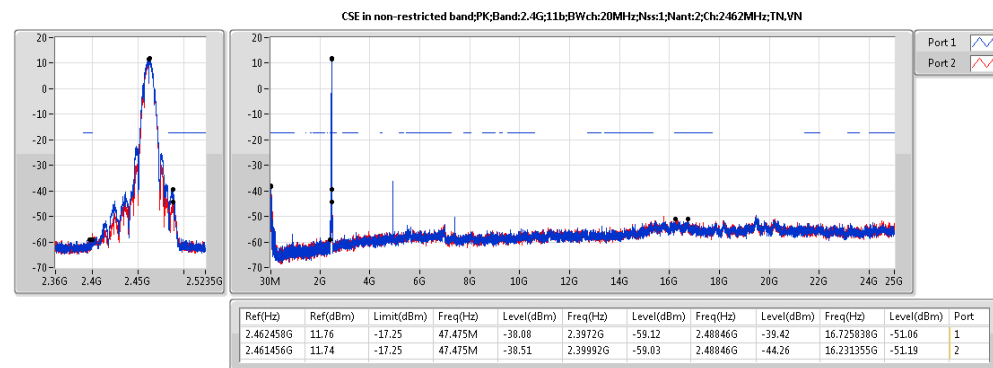
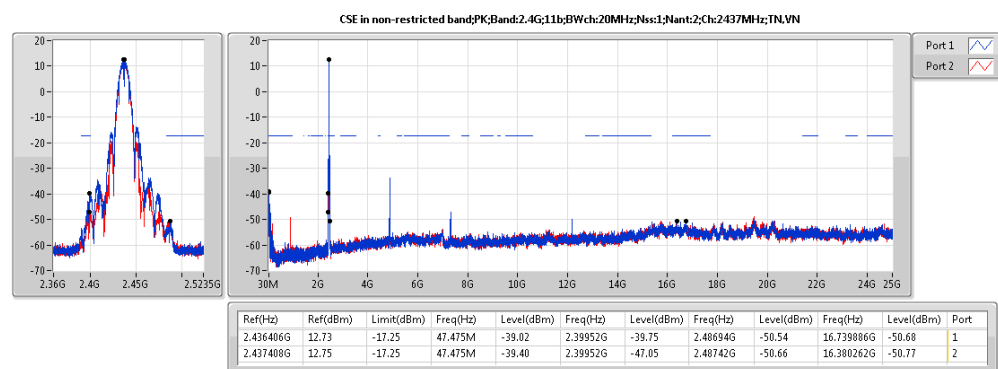
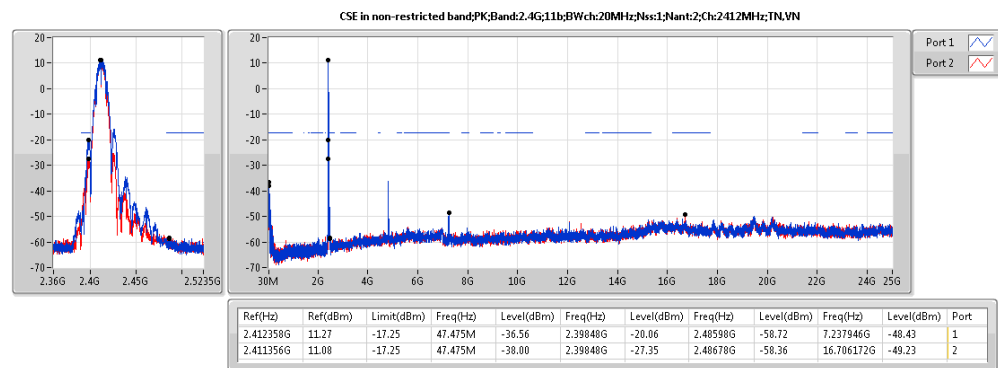
Summary

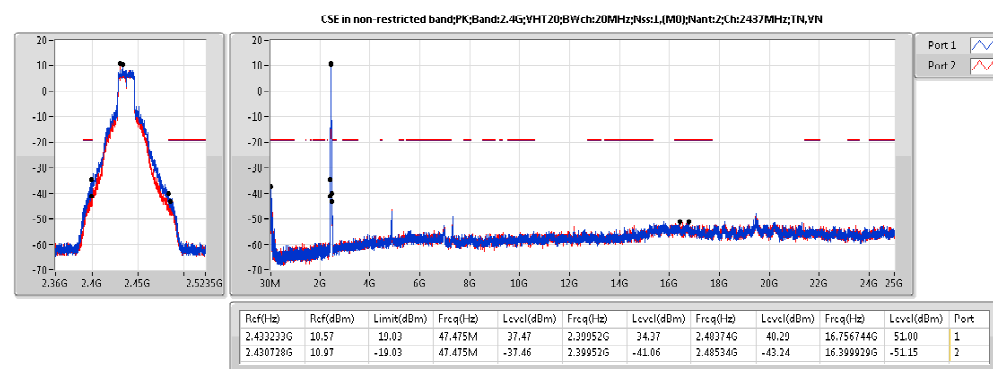
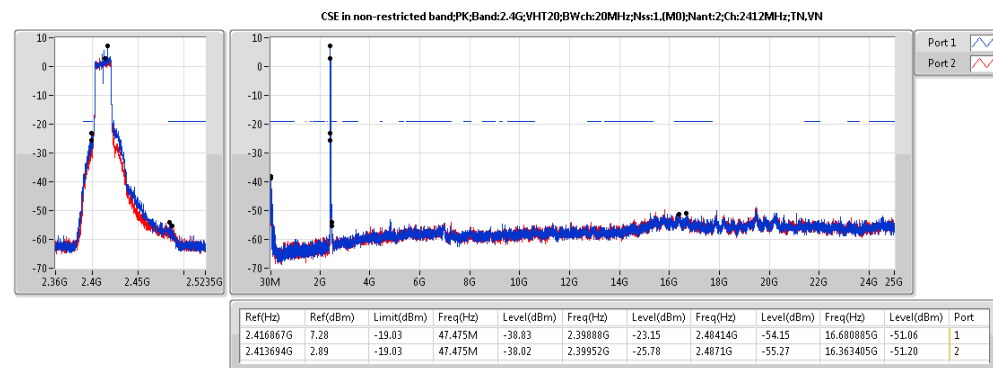
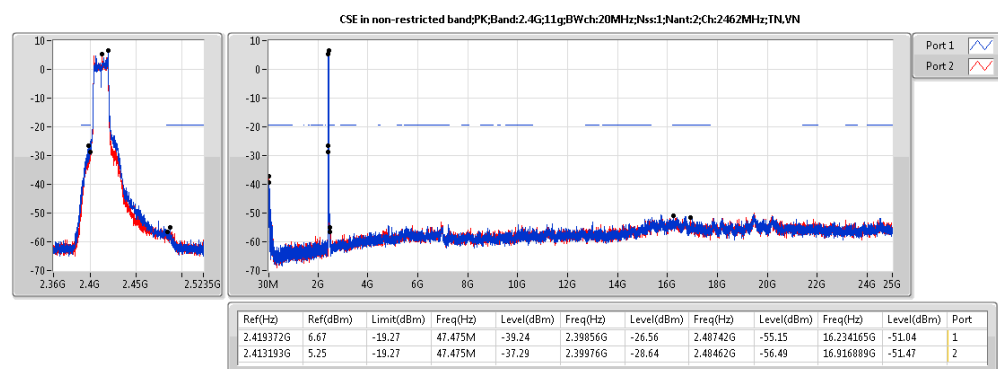
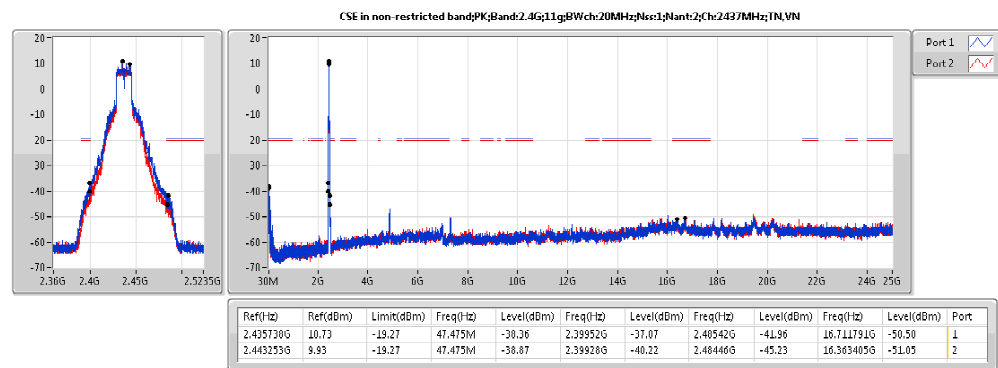
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4G;11b;Nss1;Ntx2;2412	Pass	2.412358G	11.27	-17.25	47.475M	-36.56	2.39848G	-20.06	2.48598G	-58.72	7.237946G	-48.43	1

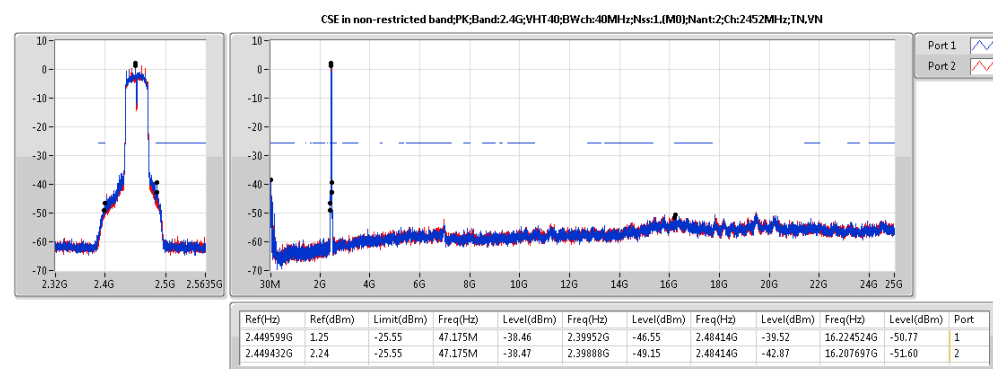
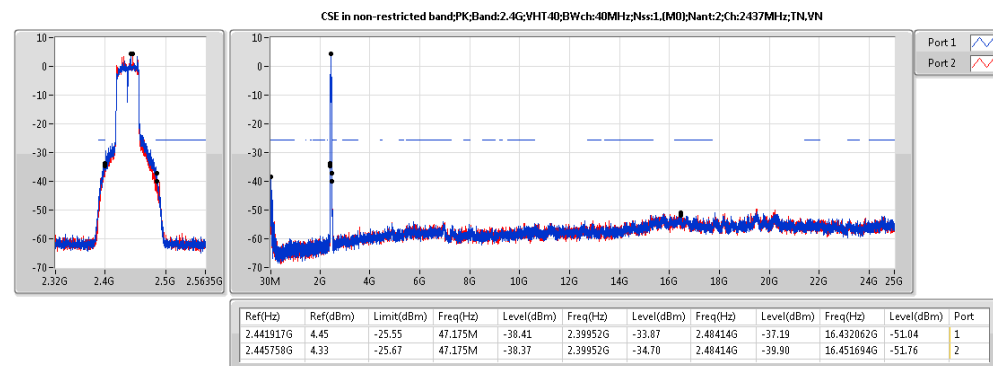
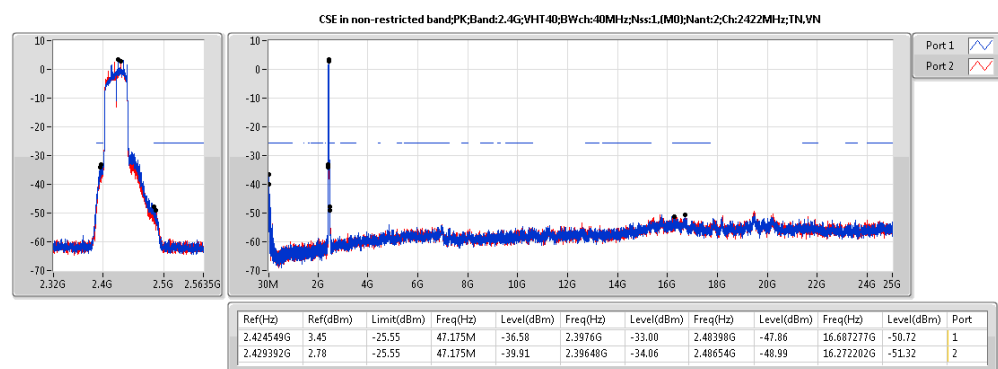
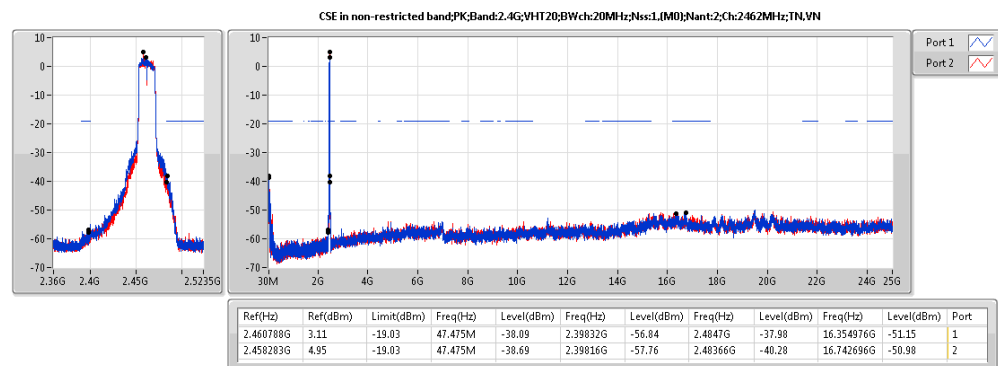


Result

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;Nss1;Ntx2;2412	Pass	2.412358G	11.27	-17.25	47.475M	-36.56	2.39848G	-20.06	2.48598G	-58.72	7.237946G	-48.43	1
2.4G;11b;Nss1;Ntx2;2412	Pass	2.411356G	11.08	-17.25	47.475M	-38.00	2.39848G	-27.35	2.48678G	-58.36	16.706172G	-49.23	2
2.4G;11b;Nss1;Ntx2;2437	Pass	2.436406G	12.73	-17.25	47.475M	-39.02	2.39952G	-39.75	2.48694G	-50.54	16.739886G	-50.68	1
2.4G;11b;Nss1;Ntx2;2437	Pass	2.437408G	12.75	-17.25	47.475M	-39.40	2.39952G	-47.05	2.48742G	-50.66	16.380262G	-50.77	2
2.4G;11b;Nss1;Ntx2;2462	Pass	2.462458G	11.76	-17.25	47.475M	-38.08	2.3972G	-59.12	2.48846G	-39.42	16.725838G	-51.06	1
2.4G;11b;Nss1;Ntx2;2462	Pass	2.461456G	11.74	-17.25	47.475M	-38.51	2.39992G	-59.03	2.48846G	-44.26	16.231355G	-51.19	2
2.4G;11g;Nss1;Ntx2;2412	Pass	2.416867G	5.26	-19.27	47.475M	-37.96	2.3992G	-25.36	2.4839G	-54.96	24.949428G	-51.60	1
2.4G;11g;Nss1;Ntx2;2412	Pass	2.405678G	5.98	-19.27	47.475M	-37.91	2.39912G	-26.50	2.4875G	-56.03	16.383072G	-50.87	2
2.4G;11g;Nss1;Ntx2;2437	Pass	2.435738G	10.73	-19.27	47.475M	-38.36	2.39952G	-37.07	2.48542G	-41.96	16.711791G	-50.50	1
2.4G;11g;Nss1;Ntx2;2437	Pass	2.443253G	9.93	-19.27	47.475M	-38.87	2.39928G	-40.22	2.48446G	-45.23	16.363405G	-51.05	2
2.4G;11g;Nss1;Ntx2;2462	Pass	2.419372G	6.67	-19.27	47.475M	-39.24	2.39856G	-26.56	2.48742G	-55.15	16.234165G	-51.04	1
2.4G;11g;Nss1;Ntx2;2462	Pass	2.413193G	5.25	-19.27	47.475M	-37.29	2.39976G	-28.64	2.48462G	-56.49	16.916889G	-51.47	2
2.4G;VHT20;Nss1,(M0);Ntx2;2412	Pass	2.416867G	7.28	-19.03	47.475M	-38.83	2.39888G	-23.15	2.48414G	-54.15	16.680885G	-51.06	1
2.4G;VHT20;Nss1,(M0);Ntx2;2412	Pass	2.413694G	2.89	-19.03	47.475M	-38.02	2.39952G	-25.78	2.4871G	-55.27	16.363405G	-51.20	2
2.4G;VHT20;Nss1,(M0);Ntx2;2437	Pass	2.433233G	10.57	-19.03	47.475M	-37.47	2.39952G	-34.37	2.48374G	-40.29	16.756744G	-51.00	1
2.4G;VHT20;Nss1,(M0);Ntx2;2437	Pass	2.430728G	10.97	-19.03	47.475M	-37.46	2.39952G	-41.06	2.48534G	-43.24	16.399929G	-51.15	2
2.4G;VHT20;Nss1,(M0);Ntx2;2462	Pass	2.460788G	3.11	-19.03	47.475M	-38.09	2.39832G	-56.84	2.4847G	-37.98	16.354976G	-51.15	1
2.4G;VHT20;Nss1,(M0);Ntx2;2462	Pass	2.458283G	4.95	-19.03	47.475M	-38.69	2.39816G	-57.76	2.48366G	-40.28	16.742696G	-50.98	2
2.4G;VHT40;Nss1,(M0);Ntx2;2422	Pass	2.424549G	3.45	-25.55	47.175M	-36.58	2.3976G	-33.00	2.48398G	-47.86	16.687277G	-50.72	1
2.4G;VHT40;Nss1,(M0);Ntx2;2422	Pass	2.429392G	2.78	-25.55	47.175M	-39.91	2.39648G	-34.06	2.48654G	-48.99	16.272202G	-51.32	2
2.4G;VHT40;Nss1,(M0);Ntx2;2437	Pass	2.441917G	4.45	-25.55	47.175M	-38.41	2.39952G	-33.87	2.48414G	-37.19	16.432062G	-51.04	1
2.4G;VHT40;Nss1,(M0);Ntx2;2437	Pass	2.445758G	4.33	-25.55	47.175M	-38.37	2.39952G	-34.70	2.48414G	-39.90	16.451694G	-51.76	2
2.4G;VHT40;Nss1,(M0);Ntx2;2452	Pass	2.449599G	1.25	-25.55	47.175M	-38.46	2.39952G	-46.55	2.48414G	-39.52	16.224524G	-50.77	1
2.4G;VHT40;Nss1,(M0);Ntx2;2452	Pass	2.449432G	2.24	-25.55	47.175M	-38.47	2.39888G	-49.15	2.48414G	-42.87	16.207697G	-51.60	2









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Operating Mode	2				Polarization			Horizontal																																																																																																	
Operating Function	CTX																																																																																																								
Level (dBuV/m) Date: 2016-10-19 Time: 11:46:11 <table><tr><th>Freq</th><th>Level</th><th>Limit</th><th>Over</th><th>Read</th><th>CableAntenna</th><th>Preamp</th><th>A/Pos</th><th>T/Pos</th><th>Remark</th><th>Pol/Phase</th></tr><tr><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB</th><th>dB/m</th><th>dB</th><th>cm</th><th>deg</th><th></th></tr><tr><td>1</td><td>35.82</td><td>34.47</td><td>40.00</td><td>-5.53</td><td>43.97</td><td>0.57</td><td>22.73</td><td>32.80</td><td>300</td><td>233 Peak</td><td>HORIZONTAL</td></tr><tr><td>2</td><td>74.62</td><td>32.32</td><td>40.00</td><td>-7.68</td><td>50.69</td><td>0.82</td><td>13.23</td><td>32.42</td><td>200</td><td>286 Peak</td><td>HORIZONTAL</td></tr><tr><td>3</td><td>119.24</td><td>27.93</td><td>43.50</td><td>-15.57</td><td>40.21</td><td>1.05</td><td>19.09</td><td>32.42</td><td>300</td><td>115 Peak</td><td>HORIZONTAL</td></tr><tr><td>4</td><td>134.76</td><td>26.41</td><td>43.50</td><td>-17.09</td><td>39.19</td><td>1.11</td><td>18.51</td><td>32.40</td><td>200</td><td>129 Peak</td><td>HORIZONTAL</td></tr><tr><td>5</td><td>628.49</td><td>28.89</td><td>46.00</td><td>-17.11</td><td>33.02</td><td>2.44</td><td>25.83</td><td>32.40</td><td>300</td><td>354 Peak</td><td>HORIZONTAL</td></tr><tr><td>6</td><td>707.06</td><td>31.70</td><td>46.00</td><td>-14.30</td><td>35.52</td><td>2.57</td><td>25.98</td><td>32.37</td><td>125</td><td>285 Peak</td><td>HORIZONTAL</td></tr></table>												Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		1	35.82	34.47	40.00	-5.53	43.97	0.57	22.73	32.80	300	233 Peak	HORIZONTAL	2	74.62	32.32	40.00	-7.68	50.69	0.82	13.23	32.42	200	286 Peak	HORIZONTAL	3	119.24	27.93	43.50	-15.57	40.21	1.05	19.09	32.42	300	115 Peak	HORIZONTAL	4	134.76	26.41	43.50	-17.09	39.19	1.11	18.51	32.40	200	129 Peak	HORIZONTAL	5	628.49	28.89	46.00	-17.11	33.02	2.44	25.83	32.40	300	354 Peak	HORIZONTAL	6	707.06	31.70	46.00	-14.30	35.52	2.57	25.98	32.37	125	285 Peak	HORIZONTAL
Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase																																																																																															
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg																																																																																																
1	35.82	34.47	40.00	-5.53	43.97	0.57	22.73	32.80	300	233 Peak	HORIZONTAL																																																																																														
2	74.62	32.32	40.00	-7.68	50.69	0.82	13.23	32.42	200	286 Peak	HORIZONTAL																																																																																														
3	119.24	27.93	43.50	-15.57	40.21	1.05	19.09	32.42	300	115 Peak	HORIZONTAL																																																																																														
4	134.76	26.41	43.50	-17.09	39.19	1.11	18.51	32.40	200	129 Peak	HORIZONTAL																																																																																														
5	628.49	28.89	46.00	-17.11	33.02	2.44	25.83	32.40	300	354 Peak	HORIZONTAL																																																																																														
6	707.06	31.70	46.00	-14.30	35.52	2.57	25.98	32.37	125	285 Peak	HORIZONTAL																																																																																														
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Operating Mode	2				Power Phase				Vertical																																																																																																	
Operating Function	CTX																																																																																																									
Level (dBuV/m) Date: 2016-10-19 Time: 11:44:55 <table><tr><th>Freq</th><th>Level</th><th>Limit</th><th>Over</th><th>Read</th><th>CableAntenna</th><th>Preamp</th><th>A/Pos</th><th>T/Pos</th><th>Remark</th><th>Pol/Phase</th></tr><tr><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB</th><th>dB/m</th><th>dB</th><th>cm</th><th>deg</th><th></th></tr><tr><td>1</td><td>37.76</td><td>34.10</td><td>40.00</td><td>-5.90</td><td>44.74</td><td>0.58</td><td>21.51</td><td>32.73</td><td>100</td><td>113 Peak</td><td>VERTICAL</td></tr><tr><td>2</td><td>42.61</td><td>33.55</td><td>40.00</td><td>-6.45</td><td>46.96</td><td>0.61</td><td>18.56</td><td>32.58</td><td>100</td><td>14 Peak</td><td>VERTICAL</td></tr><tr><td>3</td><td>70.74</td><td>28.87</td><td>40.00</td><td>-11.13</td><td>47.53</td><td>0.80</td><td>12.96</td><td>32.42</td><td>200</td><td>128 Peak</td><td>VERTICAL</td></tr><tr><td>4</td><td>84.32</td><td>28.00</td><td>40.00</td><td>-12.00</td><td>45.06</td><td>0.91</td><td>14.46</td><td>32.43</td><td>125</td><td>287 Peak</td><td>VERTICAL</td></tr><tr><td>5</td><td>123.12</td><td>31.23</td><td>43.50</td><td>-12.27</td><td>43.57</td><td>1.07</td><td>19.00</td><td>32.41</td><td>100</td><td>194 Peak</td><td>VERTICAL</td></tr><tr><td>6</td><td>942.77</td><td>31.23</td><td>46.00</td><td>-14.77</td><td>31.50</td><td>2.97</td><td>28.05</td><td>31.29</td><td>150</td><td>108 Peak</td><td>VERTICAL</td></tr></table>													Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		1	37.76	34.10	40.00	-5.90	44.74	0.58	21.51	32.73	100	113 Peak	VERTICAL	2	42.61	33.55	40.00	-6.45	46.96	0.61	18.56	32.58	100	14 Peak	VERTICAL	3	70.74	28.87	40.00	-11.13	47.53	0.80	12.96	32.42	200	128 Peak	VERTICAL	4	84.32	28.00	40.00	-12.00	45.06	0.91	14.46	32.43	125	287 Peak	VERTICAL	5	123.12	31.23	43.50	-12.27	43.57	1.07	19.00	32.41	100	194 Peak	VERTICAL	6	942.77	31.23	46.00	-14.77	31.50	2.97	28.05	31.29	150	108 Peak	VERTICAL
Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase																																																																																																
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg																																																																																																	
1	37.76	34.10	40.00	-5.90	44.74	0.58	21.51	32.73	100	113 Peak	VERTICAL																																																																																															
2	42.61	33.55	40.00	-6.45	46.96	0.61	18.56	32.58	100	14 Peak	VERTICAL																																																																																															
3	70.74	28.87	40.00	-11.13	47.53	0.80	12.96	32.42	200	128 Peak	VERTICAL																																																																																															
4	84.32	28.00	40.00	-12.00	45.06	0.91	14.46	32.43	125	287 Peak	VERTICAL																																																																																															
5	123.12	31.23	43.50	-12.27	43.57	1.07	19.00	32.41	100	194 Peak	VERTICAL																																																																																															
6	942.77	31.23	46.00	-14.77	31.50	2.97	28.05	31.29	150	108 Peak	VERTICAL																																																																																															
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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;VHT40;Nss1,(M0);Ntx2;2422;TX	Pass	AV	2.39G	53.99	54.00	-0.01	30.89	3	V	273	2.51	-



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;Nss1;Ntx2;2412;TX	Pass	AV	2.39G	49.84	54.00	-4.16	30.89	3	H	344	2.31	-
2.4G;11b;Nss1;Ntx2;2412;TX	Pass	AV	2.4112G	111.64	Inf	-Inf	30.88	3	H	344	2.31	-
2.4G;11b;Nss1;Ntx2;2412;TX	Pass	AV	4.82395G	49.07	54.00	-4.93	3.25	3	H	14	1.74	-
2.4G;11b;Nss1;Ntx2;2412;TX	Pass	PK	2.3894G	60.31	74.00	-13.69	30.89	3	H	344	2.31	-
2.4G;11b;Nss1;Ntx2;2412;TX	Pass	PK	2.411G	115.34	Inf	-Inf	30.88	3	H	344	2.31	-
2.4G;11b;Nss1;Ntx2;2412;TX	Pass	PK	4.82404G	52.58	74.00	-21.42	3.25	3	H	14	1.74	-
2.4G;11b;Nss1;Ntx2;2412;TX	Pass	AV	2.39G	51.14	54.00	-2.86	30.89	3	V	100	2.63	-
2.4G;11b;Nss1;Ntx2;2412;TX	Pass	AV	2.4128G	107.98	Inf	-Inf	30.87	3	V	100	2.63	-
2.4G;11b;Nss1;Ntx2;2412;TX	Pass	AV	4.82397G	44.51	54.00	-9.49	2.56	3	V	10	2.85	-
2.4G;11b;Nss1;Ntx2;2412;TX	Pass	PK	2.3898G	60.10	74.00	-13.90	30.89	3	V	100	2.63	-
2.4G;11b;Nss1;Ntx2;2412;TX	Pass	PK	2.413G	112.02	Inf	-Inf	30.87	3	V	100	2.63	-
2.4G;11b;Nss1;Ntx2;2412;TX	Pass	PK	4.82386G	49.83	74.00	-24.17	2.56	3	V	10	2.85	-
2.4G;11b;Nss1;Ntx2;2437;TX	Pass	AV	2.3898G	46.16	54.00	-7.84	30.89	3	H	10	2.50	-
2.4G;11b;Nss1;Ntx2;2437;TX	Pass	AV	2.4386G	110.60	Inf	-Inf	30.86	3	H	10	2.50	-
2.4G;11b;Nss1;Ntx2;2437;TX	Pass	AV	2.4858G	49.57	54.00	-4.43	30.85	3	H	10	2.50	-
2.4G;11b;Nss1;Ntx2;2437;TX	Pass	AV	4.87394G	50.52	54.00	-3.48	3.34	3	H	19	1.91	-
2.4G;11b;Nss1;Ntx2;2437;TX	Pass	PK	2.3562G	58.90	74.00	-15.10	30.91	3	H	10	2.50	-
2.4G;11b;Nss1;Ntx2;2437;TX	Pass	PK	2.4378G	114.60	Inf	-Inf	30.86	3	H	10	2.50	-
2.4G;11b;Nss1;Ntx2;2437;TX	Pass	PK	2.4854G	59.71	74.00	-14.29	30.85	3	H	10	2.50	-
2.4G;11b;Nss1;Ntx2;2437;TX	Pass	PK	4.87399G	53.60	74.00	-20.40	3.34	3	H	19	1.91	-
2.4G;11b;Nss1;Ntx2;2437;TX	Pass	AV	2.3898G	47.57	54.00	-6.43	30.89	3	V	249	2.53	-
2.4G;11b;Nss1;Ntx2;2437;TX	Pass	AV	2.4378G	111.88	Inf	-Inf	30.86	3	V	249	2.53	-
2.4G;11b;Nss1;Ntx2;2437;TX	Pass	AV	2.4846G	49.03	54.00	-4.97	30.85	3	V	249	2.53	-
2.4G;11b;Nss1;Ntx2;2437;TX	Pass	AV	4.874G	45.17	54.00	-8.83	3.34	3	V	193	1.50	-
2.4G;11b;Nss1;Ntx2;2437;TX	Pass	PK	2.3898G	58.34	74.00	-15.66	30.89	3	V	249	2.53	-
2.4G;11b;Nss1;Ntx2;2437;TX	Pass	PK	2.4378G	115.86	Inf	-Inf	30.86	3	V	249	2.53	-
2.4G;11b;Nss1;Ntx2;2437;TX	Pass	PK	2.4858G	60.05	74.00	-13.95	30.85	3	V	249	2.53	-
2.4G;11b;Nss1;Ntx2;2437;TX	Pass	PK	4.87408G	50.40	74.00	-23.60	3.34	3	V	193	1.50	-
2.4G;11b;Nss1;Ntx2;2462;TX	Pass	AV	2.4612G	109.76	Inf	-Inf	30.86	3	H	340	1.93	-
2.4G;11b;Nss1;Ntx2;2462;TX	Pass	AV	2.4872G	52.86	54.00	-1.14	30.85	3	H	340	1.93	-
2.4G;11b;Nss1;Ntx2;2462;TX	Pass	AV	4.92391G	50.93	54.00	-3.07	3.43	3	H	18	1.94	-
2.4G;11b;Nss1;Ntx2;2462;TX	Pass	PK	2.463G	113.60	Inf	-Inf	30.85	3	H	340	1.93	-
2.4G;11b;Nss1;Ntx2;2462;TX	Pass	PK	2.4874G	62.24	74.00	-11.76	30.85	3	H	340	1.93	-
2.4G;11b;Nss1;Ntx2;2462;TX	Pass	PK	4.92396G	54.36	74.00	-19.64	3.43	3	H	18	1.94	-
2.4G;11b;Nss1;Ntx2;2462;TX	Pass	AV	2.4628G	106.95	Inf	-Inf	30.85	3	V	350	1.50	-
2.4G;11b;Nss1;Ntx2;2462;TX	Pass	AV	2.4872G	53.33	54.00	-0.67	30.85	3	V	350	1.50	-
2.4G;11b;Nss1;Ntx2;2462;TX	Pass	AV	4.92398G	45.48	54.00	-8.52	3.43	3	V	195	2.54	-
2.4G;11b;Nss1;Ntx2;2462;TX	Pass	PK	2.463G	110.89	Inf	-Inf	30.85	3	V	350	1.50	-
2.4G;11b;Nss1;Ntx2;2462;TX	Pass	PK	2.4886G	62.18	74.00	-11.82	30.84	3	V	350	1.50	-
2.4G;11b;Nss1;Ntx2;2462;TX	Pass	PK	4.92393G	50.63	74.00	-23.37	3.43	3	V	195	2.54	-
2.4G;11g;Nss1;Ntx2;2412;TX	Pass	AV	2.39G	51.72	54.00	-2.28	30.89	3	H	309	2.01	-
2.4G;11g;Nss1;Ntx2;2412;TX	Pass	AV	2.4144G	102.46	Inf	-Inf	30.87	3	H	309	2.01	-
2.4G;11g;Nss1;Ntx2;2412;TX	Pass	AV	4.82724G	33.98	54.00	-20.02	3.26	3	H	13	1.83	-
2.4G;11g;Nss1;Ntx2;2412;TX	Pass	PK	2.3892G	65.96	74.00	-8.04	30.89	3	H	309	2.01	-
2.4G;11g;Nss1;Ntx2;2412;TX	Pass	PK	2.4136G	112.32	Inf	-Inf	30.87	3	H	309	2.01	-
2.4G;11g;Nss1;Ntx2;2412;TX	Pass	PK	4.82718G	47.46	74.00	-26.54	3.26	3	H	13	1.83	-
2.4G;11g;Nss1;Ntx2;2412;TX	Pass	AV	2.39G	53.83	54.00	-0.17	30.89	3	V	272	2.84	-
2.4G;11g;Nss1;Ntx2;2412;TX	Pass	AV	2.4144G	102.21	Inf	-Inf	30.87	3	V	272	2.84	-
2.4G;11g;Nss1;Ntx2;2412;TX	Pass	AV	4.82198G	32.25	54.00	-21.75	3.25	3	V	193	1.58	-
2.4G;11g;Nss1;Ntx2;2412;TX	Pass	PK	2.3898G	68.68	74.00	-5.32	30.89	3	V	272	2.84	-
2.4G;11g;Nss1;Ntx2;2412;TX	Pass	PK	2.4146G	112.51	Inf	-Inf	30.87	3	V	272	2.84	-
2.4G;11g;Nss1;Ntx2;2412;TX	Pass	PK	4.82244G	45.63	74.00	-28.37	3.25	3	V	193	1.58	-
2.4G;11g;Nss1;Ntx2;2412;TX	Pass	AV	2.39G	51.72	54.00	-2.28	30.89	3	H	309	2.01	-
2.4G;11g;Nss1;Ntx2;2412;TX	Pass	AV	2.4144G	102.46	Inf	-Inf	30.87	3	H	309	2.01	-
2.4G;11g;Nss1;Ntx2;2412;TX	Pass	AV	4.82724G	33.98	54.00	-20.02	3.26	3	H	13	1.83	-
2.4G;11g;Nss1;Ntx2;2412;TX	Pass	PK	2.3892G	65.96	74.00	-8.04	30.89	3	H	309	2.01	-
2.4G;11g;Nss1;Ntx2;2412;TX	Pass	PK	2.4136G	112.32	Inf	-Inf	30.87	3	H	309	2.01	-
2.4G;11g;Nss1;Ntx2;2412;TX	Pass	PK	4.82718G	47.46	74.00	-26.54	3.26	3	H	13	1.83	-
2.4G;11g;Nss1;Ntx2;2412;TX	Pass	AV	2.39G	53.83	54.00	-0.17	30.89	3	V	272	2.84	-
2.4G;11g;Nss1;Ntx2;2412;TX	Pass	AV	2.4144G	102.21	Inf	-Inf	30.87	3	V	272	2.84	-



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;Nss1;Ntx2;2412;TX	Pass	AV	4.82198G	32.25	54.00	-21.75	3.25	3	V	193	1.58	-
2.4G;11g;Nss1;Ntx2;2412;TX	Pass	PK	2.3898G	68.68	74.00	-5.32	30.89	3	V	272	2.84	-
2.4G;11g;Nss1;Ntx2;2412;TX	Pass	PK	2.4146G	112.51	Inf	-Inf	30.87	3	V	272	2.84	-
2.4G;11g;Nss1;Ntx2;2412;TX	Pass	PK	4.82244G	45.63	74.00	-28.37	3.25	3	V	193	1.58	-
2.4G;11g;Nss1;Ntx2;2437;TX	Pass	AV	2.3898G	48.39	54.00	-5.61	30.89	3	H	312	2.22	-
2.4G;11g;Nss1;Ntx2;2437;TX	Pass	AV	2.4394G	107.03	Inf	-Inf	30.86	3	H	312	2.22	-
2.4G;11g;Nss1;Ntx2;2437;TX	Pass	AV	2.4854G	51.10	54.00	-2.90	30.85	3	H	312	2.22	-
2.4G;11g;Nss1;Ntx2;2437;TX	Pass	AV	4.87216G	36.51	54.00	-17.49	2.64	3	H	15	1.69	-
2.4G;11g;Nss1;Ntx2;2437;TX	Pass	PK	2.3898G	60.64	74.00	-13.36	30.89	3	H	312	2.22	-
2.4G;11g;Nss1;Ntx2;2437;TX	Pass	PK	2.4446G	116.91	Inf	-Inf	30.86	3	H	312	2.22	-
2.4G;11g;Nss1;Ntx2;2437;TX	Pass	PK	2.4854G	65.20	74.00	-8.80	30.85	3	H	312	2.22	-
2.4G;11g;Nss1;Ntx2;2437;TX	Pass	PK	4.8725G	49.52	74.00	-24.48	2.64	3	H	15	1.69	-
2.4G;11g;Nss1;Ntx2;2437;TX	Pass	AV	2.3898G	49.38	54.00	-4.62	30.89	3	V	258	2.31	-
2.4G;11g;Nss1;Ntx2;2437;TX	Pass	AV	2.4394G	106.83	Inf	-Inf	30.86	3	V	258	2.31	-
2.4G;11g;Nss1;Ntx2;2437;TX	Pass	AV	2.4854G	50.94	54.00	-3.06	30.85	3	V	258	2.31	-
2.4G;11g;Nss1;Ntx2;2437;TX	Pass	AV	4.87236G	33.89	54.00	-20.11	3.34	3	V	195	1.49	-
2.4G;11g;Nss1;Ntx2;2437;TX	Pass	PK	2.3898G	61.60	74.00	-12.40	30.89	3	V	258	2.31	-
2.4G;11g;Nss1;Ntx2;2437;TX	Pass	PK	2.4394G	117.07	Inf	-Inf	30.86	3	V	258	2.31	-
2.4G;11g;Nss1;Ntx2;2437;TX	Pass	PK	2.4854G	65.10	74.00	-8.90	30.85	3	V	258	2.31	-
2.4G;11g;Nss1;Ntx2;2437;TX	Pass	PK	4.8717G	47.63	74.00	-26.37	3.34	3	V	195	1.49	-
2.4G;11g;Nss1;Ntx2;2437;TX	Pass	AV	2.3898G	48.39	54.00	-5.61	30.89	3	H	312	2.22	-
2.4G;11g;Nss1;Ntx2;2437;TX	Pass	AV	2.4394G	107.03	Inf	-Inf	30.86	3	H	312	2.22	-
2.4G;11g;Nss1;Ntx2;2437;TX	Pass	AV	2.4854G	51.10	54.00	-2.90	30.85	3	H	312	2.22	-
2.4G;11g;Nss1;Ntx2;2437;TX	Pass	AV	4.87216G	36.51	54.00	-17.49	2.64	3	H	15	1.69	-
2.4G;11g;Nss1;Ntx2;2437;TX	Pass	PK	2.3898G	60.64	74.00	-13.36	30.89	3	H	312	2.22	-
2.4G;11g;Nss1;Ntx2;2437;TX	Pass	PK	2.4446G	116.91	Inf	-Inf	30.86	3	H	312	2.22	-
2.4G;11g;Nss1;Ntx2;2437;TX	Pass	PK	2.4854G	65.20	74.00	-8.80	30.85	3	H	312	2.22	-
2.4G;11g;Nss1;Ntx2;2437;TX	Pass	PK	4.8725G	49.52	74.00	-24.48	2.64	3	H	15	1.69	-
2.4G;11g;Nss1;Ntx2;2437;TX	Pass	AV	2.3898G	49.38	54.00	-4.62	30.89	3	V	258	2.31	-
2.4G;11g;Nss1;Ntx2;2437;TX	Pass	AV	2.4394G	106.83	Inf	-Inf	30.86	3	V	258	2.31	-
2.4G;11g;Nss1;Ntx2;2437;TX	Pass	AV	2.4854G	50.94	54.00	-3.06	30.85	3	V	258	2.31	-
2.4G;11g;Nss1;Ntx2;2437;TX	Pass	AV	4.87236G	33.89	54.00	-20.11	3.34	3	V	195	1.49	-
2.4G;11g;Nss1;Ntx2;2437;TX	Pass	PK	2.3898G	61.60	74.00	-12.40	30.89	3	V	258	2.31	-
2.4G;11g;Nss1;Ntx2;2437;TX	Pass	PK	2.4394G	117.07	Inf	-Inf	30.86	3	V	258	2.31	-
2.4G;11g;Nss1;Ntx2;2437;TX	Pass	PK	2.4854G	65.10	74.00	-8.90	30.85	3	V	258	2.31	-
2.4G;11g;Nss1;Ntx2;2437;TX	Pass	PK	4.8717G	47.63	74.00	-26.37	3.34	3	V	195	1.49	-
2.4G;11g;Nss1;Ntx2;2462;TX	Pass	AV	2.4568G	101.55	Inf	-Inf	30.86	3	H	351	2.25	-
2.4G;11g;Nss1;Ntx2;2462;TX	Pass	AV	2.4836G	52.94	54.00	-1.06	30.85	3	H	351	2.25	-
2.4G;11g;Nss1;Ntx2;2462;TX	Pass	AV	4.92388G	32.90	54.00	-21.10	3.43	3	H	19	1.98	-
2.4G;11g;Nss1;Ntx2;2462;TX	Pass	PK	2.4562G	111.10	Inf	-Inf	30.86	3	H	351	2.25	-
2.4G;11g;Nss1;Ntx2;2462;TX	Pass	PK	2.4836G	66.96	74.00	-7.04	30.85	3	H	351	2.25	-
2.4G;11g;Nss1;Ntx2;2462;TX	Pass	PK	4.92396G	46.34	74.00	-27.66	3.43	3	H	19	1.98	-
2.4G;11g;Nss1;Ntx2;2462;TX	Pass	AV	2.4678G	98.20	Inf	-Inf	30.85	3	V	344	1.75	-
2.4G;11g;Nss1;Ntx2;2462;TX	Pass	AV	2.4836G	52.86	54.00	-1.14	30.85	3	V	344	1.75	-
2.4G;11g;Nss1;Ntx2;2462;TX	Pass	AV	4.92384G	31.34	54.00	-22.66	3.43	3	V	186	1.15	-
2.4G;11g;Nss1;Ntx2;2462;TX	Pass	PK	2.4676G	109.04	Inf	-Inf	30.85	3	V	344	1.75	-
2.4G;11g;Nss1;Ntx2;2462;TX	Pass	PK	2.4836G	66.75	74.00	-7.25	30.85	3	V	344	1.75	-
2.4G;11g;Nss1;Ntx2;2462;TX	Pass	PK	4.92356G	44.97	74.00	-29.03	3.43	3	V	186	1.15	-
2.4G;11g;Nss1;Ntx2;2462;TX	Pass	AV	2.4568G	101.55	Inf	-Inf	30.86	3	H	351	2.25	-
2.4G;11g;Nss1;Ntx2;2462;TX	Pass	AV	2.4836G	52.94	54.00	-1.06	30.85	3	H	351	2.25	-
2.4G;11g;Nss1;Ntx2;2462;TX	Pass	AV	4.92388G	32.90	54.00	-21.10	3.43	3	H	19	1.98	-
2.4G;11g;Nss1;Ntx2;2462;TX	Pass	PK	2.4562G	111.10	Inf	-Inf	30.86	3	H	351	2.25	-
2.4G;11g;Nss1;Ntx2;2462;TX	Pass	PK	2.4836G	66.96	74.00	-7.04	30.85	3	H	351	2.25	-
2.4G;11g;Nss1;Ntx2;2462;TX	Pass	PK	4.92396G	46.34	74.00	-27.66	3.43	3	H	19	1.98	-
2.4G;11g;Nss1;Ntx2;2462;TX	Pass	AV	2.4678G	98.20	Inf	-Inf	30.85	3	V	344	1.75	-
2.4G;11g;Nss1;Ntx2;2462;TX	Pass	AV	2.4836G	52.86	54.00	-1.14	30.85	3	V	344	1.75	-
2.4G;11g;Nss1;Ntx2;2462;TX	Pass	AV	4.92384G	31.34	54.00	-22.66	3.43	3	V	186	1.15	-
2.4G;11g;Nss1;Ntx2;2462;TX	Pass	PK	2.4676G	109.04	Inf	-Inf	30.85	3	V	344	1.75	-
2.4G;11g;Nss1;Ntx2;2462;TX	Pass	PK	2.4836G	66.75	74.00	-7.25	30.85	3	V	344	1.75	-
2.4G;11g;Nss1;Ntx2;2462;TX	Pass	PK	4.92356G	44.97	74.00	-29.03	3.43	3	V	186	1.15	-
2.4G;VHT20;Nss1,(M0);Ntx2;2412;TX	Pass	AV	2.39G	52.41	54.00	-1.59	30.89	3	H	358	2.13	-
2.4G;VHT20;Nss1,(M0);Ntx2;2412;TX	Pass	AV	2.4066G	101.65	Inf	-Inf	30.88	3	H	358	2.13	-



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;VHT20;Nss1,(MO);Ntx2;2412;TX	Pass	AV	4.8182G	32.79	54.00	-21.21	3.24	3	H	12	1.62	-
2.4G;VHT20;Nss1,(MO);Ntx2;2412;TX	Pass	PK	2.3898G	67.77	74.00	-6.23	30.89	3	H	358	2.13	-
2.4G;VHT20;Nss1,(MO);Ntx2;2412;TX	Pass	PK	2.4056G	112.48	Inf	-Inf	30.88	3	H	358	2.13	-
2.4G;VHT20;Nss1,(MO);Ntx2;2412;TX	Pass	PK	4.8196G	46.99	74.00	-27.01	3.25	3	H	12	1.62	-
2.4G;VHT20;Nss1,(MO);Ntx2;2412;TX	Pass	AV	2.39G	52.87	54.00	-1.13	30.89	3	V	83	2.65	-
2.4G;VHT20;Nss1,(MO);Ntx2;2412;TX	Pass	AV	2.4144G	98.30	Inf	-Inf	30.87	3	V	83	2.65	-
2.4G;VHT20;Nss1,(MO);Ntx2;2412;TX	Pass	AV	4.81844G	31.62	54.00	-22.38	3.24	3	V	71	2.98	-
2.4G;VHT20;Nss1,(MO);Ntx2;2412;TX	Pass	PK	2.39G	70.58	74.00	-3.42	30.89	3	V	83	2.65	-
2.4G;VHT20;Nss1,(MO);Ntx2;2412;TX	Pass	PK	2.4136G	109.76	Inf	-Inf	30.87	3	V	83	2.65	-
2.4G;VHT20;Nss1,(MO);Ntx2;2412;TX	Pass	PK	4.81588G	45.06	74.00	-28.94	3.24	3	V	71	2.98	-
2.4G;VHT20;Nss1,(MO);Ntx2;2437;TX	Pass	AV	2.3898G	47.22	54.00	-6.78	30.89	3	H	350	2.09	-
2.4G;VHT20;Nss1,(MO);Ntx2;2437;TX	Pass	AV	2.4346G	106.15	Inf	-Inf	30.87	3	H	350	2.09	-
2.4G;VHT20;Nss1,(MO);Ntx2;2437;TX	Pass	AV	2.4838G	50.95	54.00	-3.05	30.85	3	H	350	2.09	-
2.4G;VHT20;Nss1,(MO);Ntx2;2437;TX	Pass	AV	4.8708G	36.97	54.00	-17.03	3.34	3	H	14	1.71	-
2.4G;VHT20;Nss1,(MO);Ntx2;2437;TX	Pass	PK	2.3898G	58.81	74.00	-15.19	30.89	3	H	350	2.09	-
2.4G;VHT20;Nss1,(MO);Ntx2;2437;TX	Pass	PK	2.433G	117.02	Inf	-Inf	30.87	3	H	350	2.09	-
2.4G;VHT20;Nss1,(MO);Ntx2;2437;TX	Pass	PK	2.485G	65.54	74.00	-8.46	30.85	3	H	350	2.09	-
2.4G;VHT20;Nss1,(MO);Ntx2;2437;TX	Pass	PK	4.87052G	50.99	74.00	-23.01	3.34	3	H	14	1.71	-
2.4G;VHT20;Nss1,(MO);Ntx2;2437;TX	Pass	AV	2.3898G	45.81	54.00	-8.19	30.89	3	V	195	1.49	-
2.4G;VHT20;Nss1,(MO);Ntx2;2437;TX	Pass	AV	2.4402G	103.08	Inf	-Inf	30.86	3	V	195	1.49	-
2.4G;VHT20;Nss1,(MO);Ntx2;2437;TX	Pass	AV	2.4838G	49.89	54.00	-4.11	30.85	3	V	195	1.49	-
2.4G;VHT20;Nss1,(MO);Ntx2;2437;TX	Pass	AV	4.86904G	34.01	54.00	-19.99	3.33	3	V	194	1.50	-
2.4G;VHT20;Nss1,(MO);Ntx2;2437;TX	Pass	PK	2.3474G	58.13	74.00	-15.87	30.91	3	V	195	1.49	-
2.4G;VHT20;Nss1,(MO);Ntx2;2437;TX	Pass	PK	2.4386G	114.01	Inf	-Inf	30.86	3	V	195	1.49	-
2.4G;VHT20;Nss1,(MO);Ntx2;2437;TX	Pass	PK	2.4842G	64.36	74.00	-9.64	30.85	3	V	195	1.49	-
2.4G;VHT20;Nss1,(MO);Ntx2;2437;TX	Pass	PK	4.87124G	47.58	74.00	-26.42	3.34	3	V	194	1.50	-
2.4G;VHT20;Nss1,(MO);Ntx2;2462;TX	Pass	AV	2.4606G	100.67	Inf	-Inf	30.86	3	H	349	2.24	-
2.4G;VHT20;Nss1,(MO);Ntx2;2462;TX	Pass	AV	2.4836G	53.95	54.00	-0.05	30.85	3	H	349	2.24	-
2.4G;VHT20;Nss1,(MO);Ntx2;2462;TX	Pass	AV	4.92028G	32.90	54.00	-21.10	3.43	3	H	19	1.99	-
2.4G;VHT20;Nss1,(MO);Ntx2;2462;TX	Pass	PK	2.458G	111.74	Inf	-Inf	30.86	3	H	349	2.24	-
2.4G;VHT20;Nss1,(MO);Ntx2;2462;TX	Pass	PK	2.484G	69.85	74.00	-4.15	30.85	3	H	349	2.24	-
2.4G;VHT20;Nss1,(MO);Ntx2;2462;TX	Pass	PK	4.92356G	47.53	74.00	-26.47	3.43	3	H	19	1.99	-
2.4G;VHT20;Nss1,(MO);Ntx2;2462;TX	Pass	AV	2.4552G	98.71	Inf	-Inf	30.86	3	V	274	2.09	-
2.4G;VHT20;Nss1,(MO);Ntx2;2462;TX	Pass	AV	2.4838G	49.96	54.00	-4.04	30.85	3	V	274	2.09	-
2.4G;VHT20;Nss1,(MO);Ntx2;2462;TX	Pass	AV	4.922G	31.22	54.00	-22.78	3.43	3	V	187	1.50	-
2.4G;VHT20;Nss1,(MO);Ntx2;2462;TX	Pass	PK	2.4556G	109.81	Inf	-Inf	30.86	3	V	274	2.09	-
2.4G;VHT20;Nss1,(MO);Ntx2;2462;TX	Pass	PK	2.484G	65.79	74.00	-8.21	30.85	3	V	274	2.09	-
2.4G;VHT20;Nss1,(MO);Ntx2;2462;TX	Pass	PK	4.92416G	45.55	74.00	-28.45	3.43	3	V	187	1.50	-
2.4G;VHT40;Nss1,(MO);Ntx2;2422;TX	Pass	AV	2.39G	53.22	54.00	-0.78	30.89	3	H	316	2.08	-
2.4G;VHT40;Nss1,(MO);Ntx2;2422;TX	Pass	AV	2.43G	97.56	Inf	-Inf	30.87	3	H	316	2.08	-
2.4G;VHT40;Nss1,(MO);Ntx2;2422;TX	Pass	AV	2.4888G	46.73	54.00	-7.27	30.84	3	H	316	2.08	-
2.4G;VHT40;Nss1,(MO);Ntx2;2422;TX	Pass	AV	4.83856G	31.61	54.00	-22.39	2.58	3	H	16	1.88	-
2.4G;VHT40;Nss1,(MO);Ntx2;2422;TX	Pass	PK	2.39G	67.55	74.00	-6.45	30.89	3	H	316	2.08	-
2.4G;VHT40;Nss1,(MO);Ntx2;2422;TX	Pass	PK	2.4296G	108.05	Inf	-Inf	30.87	3	H	316	2.08	-
2.4G;VHT40;Nss1,(MO);Ntx2;2422;TX	Pass	PK	2.4868G	59.06	74.00	-14.94	30.85	3	H	316	2.08	-
2.4G;VHT40;Nss1,(MO);Ntx2;2422;TX	Pass	PK	4.83952G	45.39	74.00	-28.61	2.58	3	H	16	1.88	-
2.4G;VHT40;Nss1,(MO);Ntx2;2422;TX	Pass	AV	2.39G	53.99	54.00	-0.01	30.89	3	V	273	2.51	-
2.4G;VHT40;Nss1,(MO);Ntx2;2422;TX	Pass	AV	2.4312G	97.46	Inf	-Inf	30.87	3	V	273	2.51	-
2.4G;VHT40;Nss1,(MO);Ntx2;2422;TX	Pass	AV	2.484G	46.42	54.00	-7.58	30.85	3	V	273	2.51	-
2.4G;VHT40;Nss1,(MO);Ntx2;2422;TX	Pass	AV	4.83856G	30.73	54.00	-23.27	2.58	3	V	190	1.50	-
2.4G;VHT40;Nss1,(MO);Ntx2;2422;TX	Pass	PK	2.3892G	68.72	74.00	-5.28	30.89	3	V	273	2.51	-
2.4G;VHT40;Nss1,(MO);Ntx2;2422;TX	Pass	PK	2.4332G	108.54	Inf	-Inf	30.87	3	V	273	2.51	-
2.4G;VHT40;Nss1,(MO);Ntx2;2422;TX	Pass	PK	2.4844G	58.92	74.00	-15.08	30.85	3	V	273	2.51	-
2.4G;VHT40;Nss1,(MO);Ntx2;2422;TX	Pass	PK	4.85152G	44.84	74.00	-29.16	2.60	3	V	190	1.50	-
2.4G;VHT40;Nss1,(MO);Ntx2;2437;TX	Pass	AV	2.3898G	47.86	54.00	-6.14	30.89	3	H	323	2.08	-
2.4G;VHT40;Nss1,(MO);Ntx2;2437;TX	Pass	AV	2.4438G	98.83	Inf	-Inf	30.86	3	H	323	2.08	-
2.4G;VHT40;Nss1,(MO);Ntx2;2437;TX	Pass	AV	2.4842G	53.39	54.00	-0.61	30.85	3	H	323	2.08	-
2.4G;VHT40;Nss1,(MO);Ntx2;2437;TX	Pass	AV	4.86716G	32.13	54.00	-21.87	3.33	3	H	13	1.77	-
2.4G;VHT40;Nss1,(MO);Ntx2;2437;TX	Pass	PK	2.3898G	59.45	74.00	-14.55	30.89	3	H	323	2.08	-
2.4G;VHT40;Nss1,(MO);Ntx2;2437;TX	Pass	PK	2.4442G	109.45	Inf	-Inf	30.86	3	H	323	2.08	-
2.4G;VHT40;Nss1,(MO);Ntx2;2437;TX	Pass	PK	2.4842G	67.54	74.00	-6.46	30.85	3	H	323	2.08	-
2.4G;VHT40;Nss1,(MO);Ntx2;2437;TX	Pass	PK	4.87096G	46.32	74.00	-27.68	3.34	3	H	13	1.77	-



RSE above 1GHz Result

Appendix F.2

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;VHT40;Nss1,(M0);Ntx2;2437;TX	Pass	AV	2.3894G	45.76	54.00	-8.24	30.89	3	V	195	1.46	-
2.4G;VHT40;Nss1,(M0);Ntx2;2437;TX	Pass	AV	2.4386G	96.18	Inf	-Inf	30.86	3	V	195	1.46	-
2.4G;VHT40;Nss1,(M0);Ntx2;2437;TX	Pass	AV	2.4838G	50.35	54.00	-3.65	30.85	3	V	195	1.46	-
2.4G;VHT40;Nss1,(M0);Ntx2;2437;TX	Pass	AV	4.86724G	31.30	54.00	-22.70	3.33	3	V	198	2.64	-
2.4G;VHT40;Nss1,(M0);Ntx2;2437;TX	Pass	PK	2.3794G	58.52	74.00	-15.48	30.89	3	V	195	1.46	-
2.4G;VHT40;Nss1,(M0);Ntx2;2437;TX	Pass	PK	2.439G	106.93	Inf	-Inf	30.86	3	V	195	1.46	-
2.4G;VHT40;Nss1,(M0);Ntx2;2437;TX	Pass	PK	2.4842G	63.33	74.00	-10.67	30.85	3	V	195	1.46	-
2.4G;VHT40;Nss1,(M0);Ntx2;2437;TX	Pass	PK	4.86908G	45.88	74.00	-28.12	3.33	3	V	198	2.64	-
2.4G;VHT40;Nss1,(M0);Ntx2;2452;TX	Pass	AV	2.39G	45.81	54.00	-8.19	30.89	3	H	318	2.57	-
2.4G;VHT40;Nss1,(M0);Ntx2;2452;TX	Pass	AV	2.4612G	94.76	Inf	-Inf	30.86	3	H	318	2.57	-
2.4G;VHT40;Nss1,(M0);Ntx2;2452;TX	Pass	AV	2.4844G	51.50	54.00	-2.50	30.85	3	H	318	2.57	-
2.4G;VHT40;Nss1,(M0);Ntx2;2452;TX	Pass	AV	4.90872G	29.94	54.00	-24.06	2.69	3	H	37	1.50	-
2.4G;VHT40;Nss1,(M0);Ntx2;2452;TX	Pass	PK	2.354G	58.28	74.00	-15.72	30.91	3	H	318	2.57	-
2.4G;VHT40;Nss1,(M0);Ntx2;2452;TX	Pass	PK	2.4408G	105.61	Inf	-Inf	30.86	3	H	318	2.57	-
2.4G;VHT40;Nss1,(M0);Ntx2;2452;TX	Pass	PK	2.484G	66.88	74.00	-7.12	30.85	3	H	318	2.57	-
2.4G;VHT40;Nss1,(M0);Ntx2;2452;TX	Pass	PK	4.90428G	43.94	74.00	-30.06	2.69	3	H	37	1.50	-
2.4G;VHT40;Nss1,(M0);Ntx2;2452;TX	Pass	AV	2.39G	45.89	54.00	-8.11	30.89	3	V	263	2.57	-
2.4G;VHT40;Nss1,(M0);Ntx2;2452;TX	Pass	AV	2.4448G	96.82	Inf	-Inf	30.86	3	V	263	2.57	-
2.4G;VHT40;Nss1,(M0);Ntx2;2452;TX	Pass	AV	2.4852G	52.61	54.00	-1.39	30.85	3	V	263	2.57	-
2.4G;VHT40;Nss1,(M0);Ntx2;2452;TX	Pass	AV	4.90876G	30.55	54.00	-23.45	3.41	3	V	247	1.50	-
2.4G;VHT40;Nss1,(M0);Ntx2;2452;TX	Pass	PK	2.3632G	58.25	74.00	-15.75	30.90	3	V	263	2.57	-
2.4G;VHT40;Nss1,(M0);Ntx2;2452;TX	Pass	PK	2.4444G	107.77	Inf	-Inf	30.86	3	V	263	2.57	-
2.4G;VHT40;Nss1,(M0);Ntx2;2452;TX	Pass	PK	2.486G	68.68	74.00	-5.32	30.85	3	V	263	2.57	-
2.4G;VHT40;Nss1,(M0);Ntx2;2452;TX	Pass	PK	4.8948G	44.91	74.00	-29.09	3.38	3	V	247	1.50	-

