



Report No.: FR961409AC

FCC Test Report

FCC ID : 2AJ7M-MN1

Equipment : Mini

Brand Name : Molekule

Model Name : MEP1

Applicant : Molekule Inc.

1308 Folsom St San Francisco CA 94103

United States Of America

Manufacturer : Inventec Appliances(Pudong)Corporation

789 PU XING RD CAOHEJING EXPORT

PROCESSING ZONE SHANGHAI

Standard : 47 CFR FCC Part 15.247

The product was received on Jun. 19, 2019, and testing was started from Jun. 26, 2019 and completed on Jul. 05, 2019. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, 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 report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

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

Approved by: Allen Lin

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SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

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History of this test report

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Report No.	Version	Description	Issued Date
FR961409AC	01	Initial issue of report	Aug. 08, 2019
FR961409AC	02	Update Applicant's address and Manufacturer This report is the latest version replacing for the report issued on Aug. 08, 2019	Aug. 12, 2019

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Summary of Test Result

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

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and explanations:

None

Reviewed by: Jackson Tsai

Report Producer: Jenny Yang

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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)	2412-2462	1-11 [11]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	1TX
2.4-2.4835GHz	802.11g	20	1TX
2.4-2.4835GHz	802.11n HT20	20	1TX

Note:

- 11b mode uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
- ◆ 11g and HT20 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- BWch is the nominal channel bandwidth.

1.1.2 Antenna Information

Aı	nt.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
	1	-	-	PCB	murata	3.5

Note 1: The EUT has one antenna.

For 2.4GHz function:

For IEEE 802.11 b/g/n mode (1TX/1RX)

Ant. 1 (port 1) could transmit/receive simultaneously.

1.1.3 EUT Information

	Operational Condition						
EU	Γ Power Type		Fro	m Switching Powe	er Sup	ply	
EU	Γ Function		\boxtimes	Point-to-multipoi	nt [Point-to-point
Bea	mforming Fund	ction		With beamforming	ng [\boxtimes	Without beamforming
				Т	ype of	f EU	т
\boxtimes	Stand-alone						
	Combined (EU	T where	the	radio part is fully	integra	ated	within another device)
	Combined Equi	ipment -	Bra	and Name / Mode	l No.:		
	Plug-in radio (E	EUT inte	nde	d for a variety of h	nost sy	ster	ms)
Host System - Brand Name / Model No.:				e / Model No.:			
	Other:						

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1.1.4 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b	0.532	2.74	4.533m	300
802.11g	0.381	4.19	2.114m	1k
802.11n HT20	0.366	4.37	1.97m	1k

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

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
- KDB 558074 D01 v05r02

1.3 Testing Location Information

	Testing Location							
\boxtimes	HWA YA	ADD	:	No. 52, Huaya 1st Rd.,	No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)			
		TEL	:	886-3-327-3456	FAX : 886-3-327-0973			
	Test site Designation No. TW1190 with FCC.							
	JHUBEI	ADD	:	No.8, Ln. 724, Bo'ai St.	, Zhubei City, Hsinchu County, Taiwan (R.O.C.)			
	TEL: 886-3-656-9065 FAX: 886-3-656-9085							
				Test site Designation	on No. TW0006 with FCC.			

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Jeff	21.2~23.2°C / 51.8~53.6%	28/Jun/2019
RF Conducted	TH06-HY	Gary	23.2~24.8°C / 62~65%	03/Jul/2019~ 05/Jul/2019
Radiated	03CH01-HY	Edward	26.8~27.9°C / 59.4~61.8%	26/Jun/2019~ 03/Jul/2019

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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)	3.54 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	1.6 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.9 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.3 dB	Confidence levels of 95%
Temperature	0.7 °C	Confidence levels of 95%
Humidity	4 %	Confidence levels of 95%

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2 Test Configuration of EUT

2.1 Test Condition

RF Conducted	Abbreviation	Remark
TnomVnom	Tnom	20°C
-	Vnom	120V

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2.2 Test Channel Mode

Test Software	DOS
---------------	-----

Mode	Power Setting
802.11b_Nss1,(1Mbps)_1TX(Port1)	-
2412MHz	18
2437MHz	18
2462MHz	18
802.11g_Nss1,(6Mbps)_1TX(Port1)	-
2412MHz	14
2417MHz	18
2437MHz	18
2457MHz	18
2462MHz	14
802.11n HT20_Nss1,(MCS0)_1TX(Port1)	-
2412MHz	12
2417MHz	17
2437MHz	18
2457MHz	18
2462MHz	13

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2.3 **The Worst Case Measurement Configuration**

The Worst Case Mode for Following Conformance Tests		
Tests Item	AC power-line conducted emissions	
Condition AC power-line conducted measurement for line and neutral		
Operating Mode	СТХ	
1	Switching Power Supply mode	

Т	he Worst Case Mode for Following Conformance Tests
Tests Item	DTS Bandwidth Maximum Conducted Output Power Power Spectral Density Emissions in Non-restricted Frequency Bands
Test Condition	Conducted measurement at transmit chains

The Worst Case Mode for Following Conformance Tests			
Tests Item Emissions in Restricted Frequency Bands			
Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are user regardless of spatial multiplexing MIMO configuration), the radiated be performed with highest antenna gain of each antenna type.			
Operating Mode < 1GHz	СТХ		
1	Switching Power Supply mode		
Operating Mode > 1GHz	СТХ		
	Z Plane		
Orthogonal Planes of EUT			

2.4 **Support Equipment**

Support Equipment - RF Conducted				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E5410	R33002
2	Adapter for NB	DELL	HA65NM130	R35737
3	AC Power Supply	GW	APS-9102	-
4	Fixture	-	-	-

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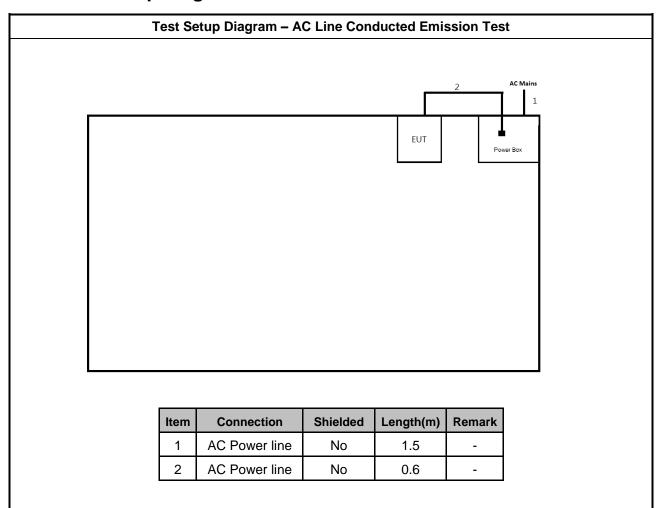
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2.5 Test Setup Diagram



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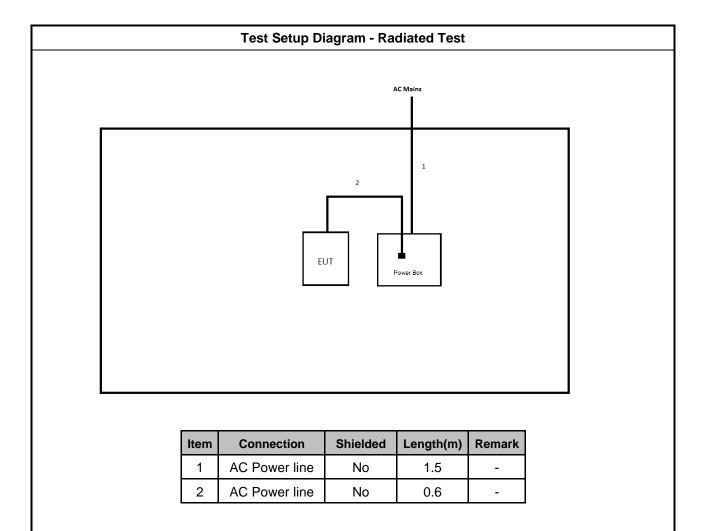
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3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

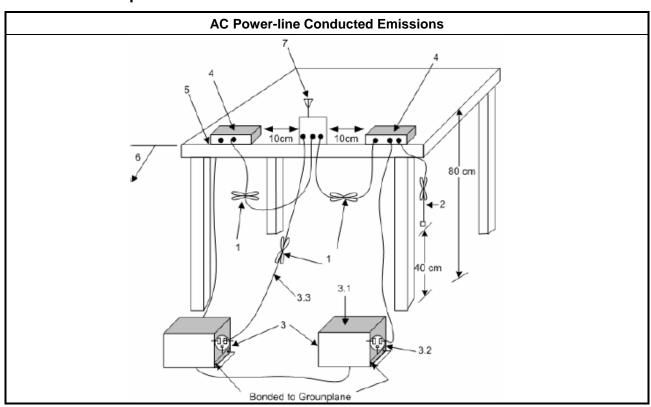
3.1.2 Measuring Instruments

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

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3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

6dB Bandwidth Limit	
Systems using digital modulation techniques:	
■ 6 dB bandwidth ≥ 500 kHz.	

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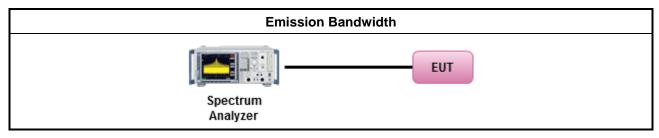
3.2.2 Measuring Instruments

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 KDB 558074. clause 8.2 (11.8 of ANSI C63.10) DTS bandwidth measuremen	t.
	Refer as RSS-Gen, clause 6.7 for occupied bandwidth testing.	
	Refer as ANSI C63.10, clause 6.9.3 for occupied bandwidth testing.	

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

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3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Max	Maximum Conducted Output Power Limit			
	If G _{TX} ≤ 6 dBi, then P _{Out} ≤ 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. P	ower Limit:		
•	240	0-2483.5 MHz Band		
	Point-to-multipoint systems (P2M): P _{eirp} ≤ 36 dBm (4 W)			
	•	Point-to-point systems (P2P): $P_{eirp} \le MAX(36, [P_{Out} + G_{TX}]) dBm$		
	•	Smart antenna system (SAS)		
		- Single beam: P _{eirp} ≤ MAX(36, P _{Out} + G _{TX}) dBm		
		- Overlap beam: $P_{eirp} \le MAX(36, P_{Out} + G_{TX}) dBm$		
		- Aggregate power on all beams: $P_{eirp} \le MAX(36, [P_{Out} + G_{TX} + 8]) dBm$		
\mathbf{P}_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, \mathbf{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.

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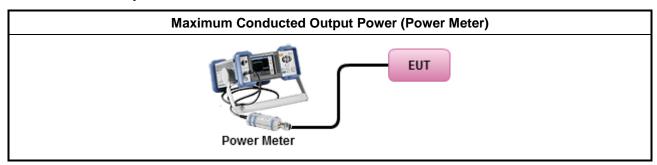
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3.3.3 Test Procedures

	Test Method			
•	Maximum Peak Conducted Output Power			
	☐ Refer as KDB 558074, clause 8.3.1.1 (11.9.1.1 of ANSI C63.10) RBW ≥ EBW method.			
	Refer as KDB 558074, clause 8.3.1.2 (11.9.1.2 of ANSI C63.10) integrated band power method.			
	Refer as KDB 558074, clause 8.3.1.3 (11.9.1.3 of ANSI C63.10) peak power meter.			
•	Maximum Average Conducted Output Power			
	Refer as KDB 558074, clause 8.3.2.2 (11.9.2.2 of ANSI C63.10) using a spectrum analyzer.			
	Refer as KDB 558074, clause 8.3.2.3 (11.9.2.3 of ANSI C63.10) using a power meter.			
•	For conducted measurement.			
	If the EUT supports multiple transmit chains using options given below: Refer as 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 + + P _n (calculated in linear unit [mW] and transfer to log unit [dBm]) EIRP _{total} = P _{total} + DG			

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3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

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3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

Power Spectral Density Limit

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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 KDB 558074, clause 8.4 (11.10 of ANSI C63.10) Method PKPSD.
- For conducted measurement.
 - If The EUT supports multiple transmit chains using options given below:
 - Measure and sum the spectra across the outputs. Refer as 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.

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

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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			

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- 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 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 level.

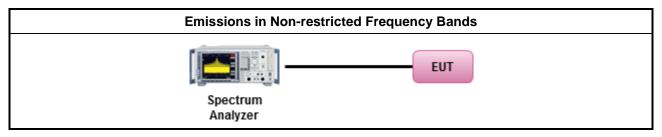
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method
 Refer as KDB 558074, clause 8.5 (11.11 of ANSI C63.10) for non-restricted frequency bands.

3.5.4 Test Setup



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E

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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)	24000/F(kHz) 33.8 - 23						
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					

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- 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.
- Note 3: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m.

3.6.2 Measuring Instruments

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

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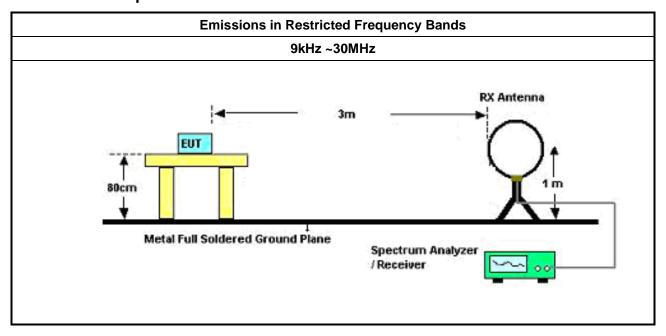
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3.6.3 Test Procedures

Test Method

- The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].
- Refer as ANSI C63.10, clause 6.10.3 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 KDB 558074, clause 8.6 (11.12 of ANSI C63.10) for restricted frequency bands.
- For the transmitter band-edge emissions shall be measured using following options below:
 - Refer as KDB 558074 clause 8.7.1, 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 KDB 558074, clause 8.7.2 (6.10.6 of ANSI C63.10) for marker-delta method for band-edge measurements.
 - Refer as KDB 558074, clause 8.7.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels.
- Use the following spectrum analyzer settings:
 - Set RBW=100 kHz for f < 1 GHz; VBW=3 * RBW; Sweep = auto; Detector function = peak; Trace = max hold.
 - Set RBW = 1 MHz, VBW= 3MHz for f ≥ 1 GHz for peak measurement. For average measurement, refer as 1.1.4.

3.6.4 Test Setup



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30MHz~1GHz **RX Antenna** Ant. feed EUT point 80cm Metal Full Soldered Ground Plane Spectrum Analyzer /Receiver **Above 1GHz** 4M 3M & 1M 1.5M Spectrum Analyzer

3.6.5 Test Result of Emissions in Restricted Frequency Bands (Below 30MHz)

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

3.6.6 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F

TEL: 886-3-3273456 Pa
FAX: 886-3-3270973 Iss

Report Template No.: HE1-C8 Ver3.5

FCC ID: 2AJ7M-MN1

Page Number : 20 of 22 Issued Date : Aug. 12, 2019

Report No.: FR961409AC

Report Version : 02

4 Test Equipment and Calibration Data

Instrument for AC Conduction

	7.0 001144011011					
Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMC Receiver	R&S	ESR3	102052	9kHz ~ 3.6GHz	09/Apr/2019	08/Apr/2020
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	08/Nov/2018	07/Nov/2019
RF Cable-CON	MTJ	RG142	CB002-CO	9kHz ~ 200MHz	17/Sep/2018	16/Sep/2019
AC POWER	APC	AFC-11005G	F310050055	47Hz~63Hz 5~300V	NCR	NCR
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9 kHz ~ 30 MHz	12/Oct/2018	11/Oct/2019

NCR : Non-Calibration Require

Instrument for Conducted Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101500	10Hz~40GHz	18/Jul/2018	17/Jul/2019
Power Sensor	Anritsu	MA2411B	1339407	300MHz ~ 40GHz	17/Nov/2018	16/Nov/2019
Power Meter	Anritsu	ML2495A	1517010	300MHz ~ 40GHz	17/Nov/2018	16/Nov/2019
Cable 0.2m	HUBER	MY10710/4	RF Cable - 01	30MHz ~18G	10/Jan/2019	09/Jan/2020
Cable 0.2m	HUBER	MY10711/4	RF Cable - 02	30MHz ~18G	10/Jan/2019	09/Jan/2020
Cable 0.5m	HUBER	MY39470/4	RF Cable - 29	30MHz ~18G	10/Jan/2019	09/Jan/2020
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz~40GHz	12/Nov/2018	10/Nov/2020

TEL: 886-3-3273456 Page Number : 21 of 22 FAX: 886-3-3270973 Issued Date : Aug. 12, 2019

Report Template No.: HE1-C8 Ver3.5

FCC ID: 2AJ7M-MN1

Report Version : 02



FCC Test Report

Instrument for Radiated Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	Riken	SAC-3M	03CH01-HY	30MHz ~ 1GHz 3m	11/Jan/2019	10/Jan/2020
3m Semi Anechoic Chamber	Riken	SAC-3M	03CH01-HY	1GHz ~ 18GHz 3m	09/Jan/2019	08/Jan/2020
PreAmplifier	COM-POWER	PA-103	161050	1 MHz ~ 1.0GHz	24/Jul/2018	23/Jul/2019
Microwave Preamplifier	Agilent	8449B	3008A02602	1GHz ~ 26.5GHz	27/Mar/2019	26/Mar/2020
Spectrum Analyzer	R&S	FSV40	101407	10Hz ~ 40GHz	16/Aug/2018	15/Aug/2019
RF Cable-R03m	Jye Bao	RG142	CB019	9kHz ~ 1GHz	14/Dec/2018	13/Dec/2019
RF Cable-HIGH	SUHNER	SUCOFLEX 104	SN805196/4+MY 39495	1 GHz ~ 18 GHz	13/Mar/2019	12/Mar/2020
Bilog Antenna & 5db Attenuator	SCHAFFNER/MTJ	CBL6112D / MTJ6102-05	2678 / 001	30MHz ~ 2GHz	07/Jul/2018	06/Jul/2019
EMI Test Receiver	R&S	ESU-26	100422	20Hz ~ 26.5GHz	25/Oct/2018	24/Oct/2019
Loop Antenna	TESEQ	HLA 6120	31244	9k-30MHz	15/Mar/2019	14/Mar/2020
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170339	18GHz ~ 40GHz	19/Apr/2019	18/Apr/2020
Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D-1130	1GHz ~ 18GHz	26/Oct/2018	25/Oct/2019

TEL: 886-3-3273456 : 22 of 22 Page Number FAX: 886-3-3270973

Report Template No.: HE1-C8 Ver3.5

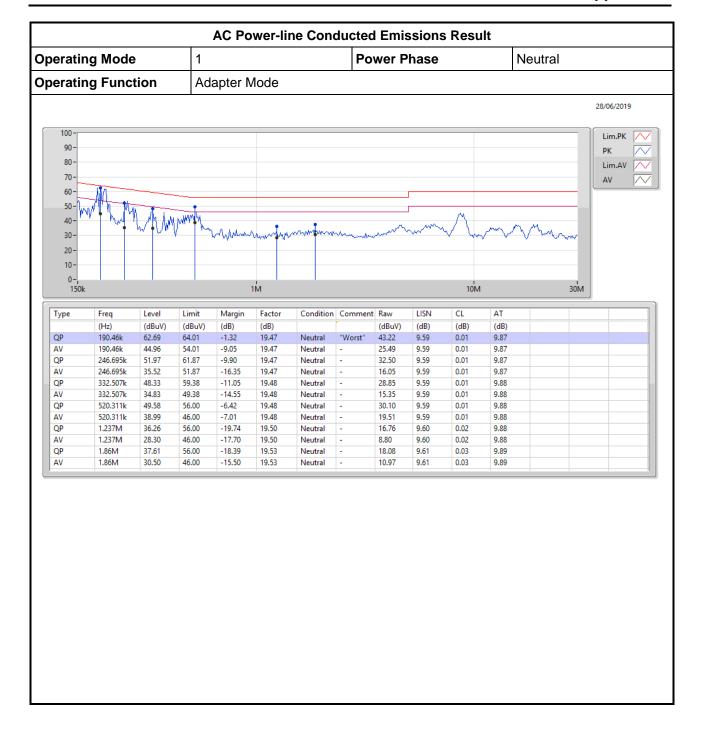
FCC ID: 2AJ7M-MN1

: Aug. 12, 2019 Issued Date

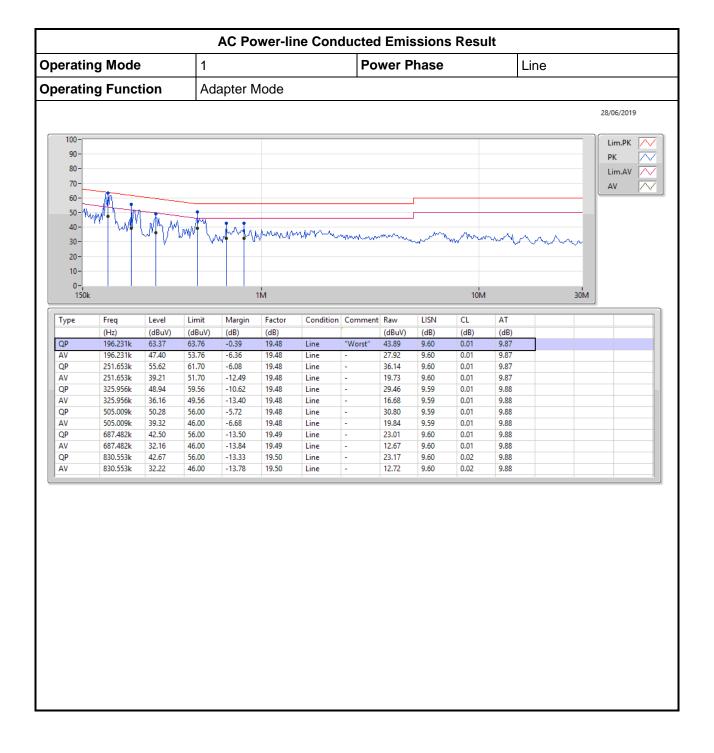
Report No.: FR961409AC

Report Version : 02

AC Power-line Conducted Emissions









EBW Appendix B

Summary

Mode	Max-N dB	Max-OBW	ITU-Code	Min-N dB	Min-OBW
	(Hz)	(Hz)		(Hz)	(Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX(Port1)	10.075M	13.768M	13M8G1D	10.075M	13.643M
802.11g_Nss1,(6Mbps)_1TX(Port1)	16.325M	16.917M	16M9D1D	16.325M	16.592M
802.11n HT20_Nss1,(MCS0)_1TX(Port1)	17.6M	17.966M	18M0D1D	17.55M	17.716M

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth; Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth;

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961409



EBW Appendix B

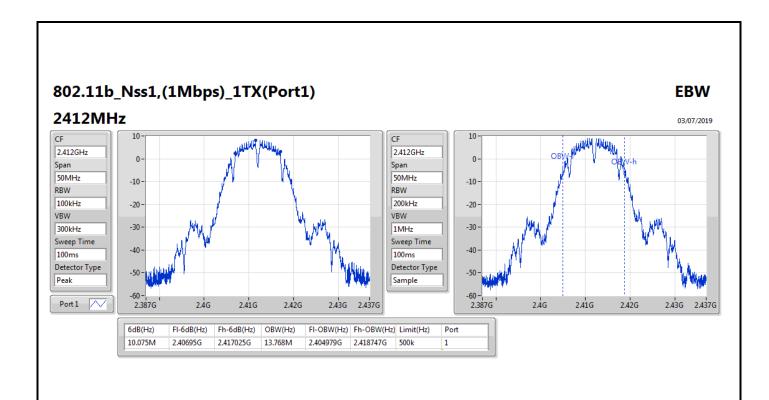
Result

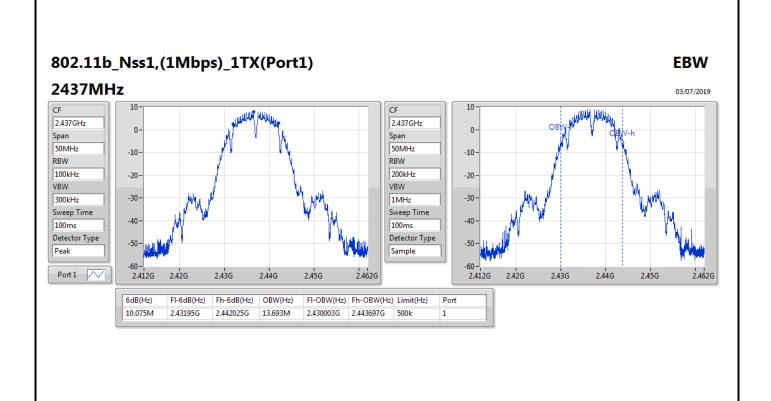
Mode	Result	Limit	Port 1-N dB	Port 1-OBW
		(Hz)	(Hz)	(Hz)
802.11b_Nss1,(1Mbps)_1TX(Port1)	-	-	-	-
2412MHz	Pass	500k	10.075M	13.768M
2437MHz	Pass	500k	10.075M	13.693M
2462MHz	Pass	500k	10.075M	13.643M
802.11g_Nss1,(6Mbps)_1TX(Port1)	-	-	-	-
2412MHz	Pass	500k	16.325M	16.592M
2437MHz	Pass	500k	16.325M	16.917M
2462MHz	Pass	500k	16.325M	16.592M
802.11n HT20_Nss1,(MCS0)_1TX(Port1)	-	-	-	-
2412MHz	Pass	500k	17.575M	17.716M
2437MHz	Pass	500k	17.55M	17.966M
2462MHz	Pass	500k	17.6M	17.716M

Port X-N dB = Port X 6dB down bandwidth; Port X-OBW = Port X 99% occupied bandwidth;

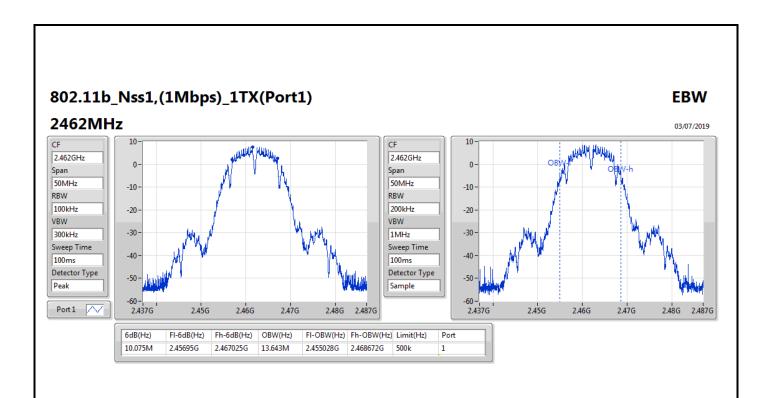
Page No. : B2 of B7

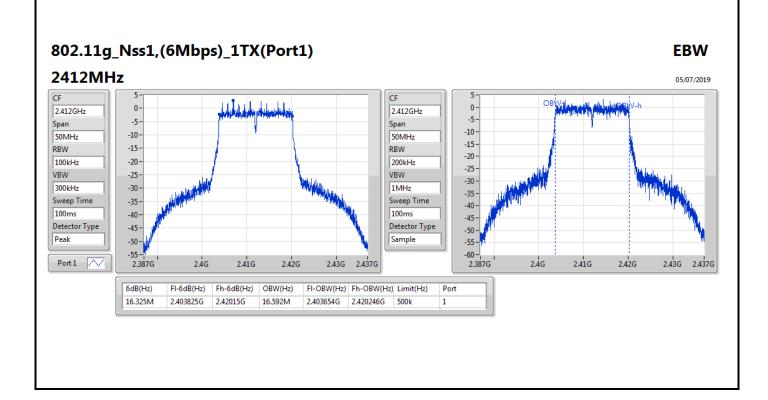
Appendix B



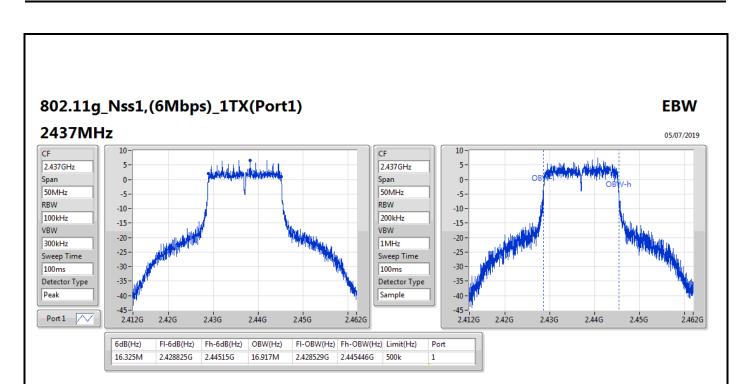


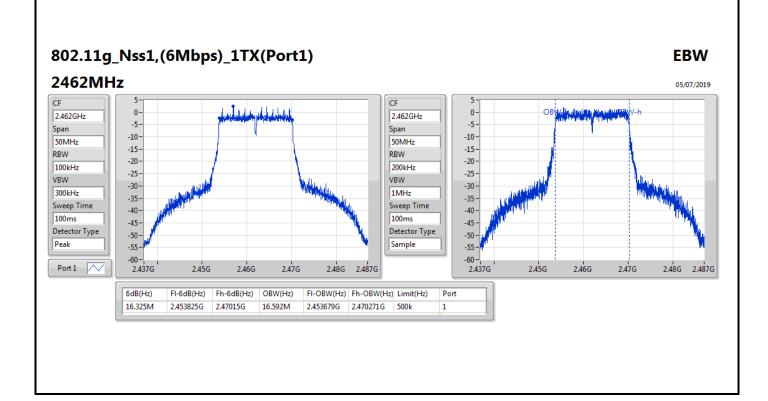
Appendix B



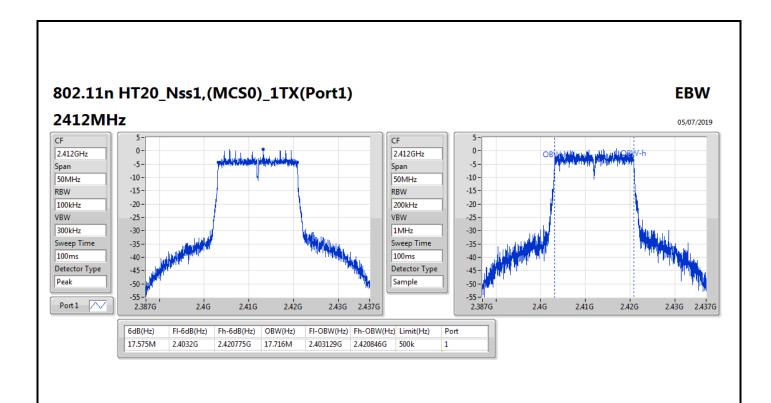


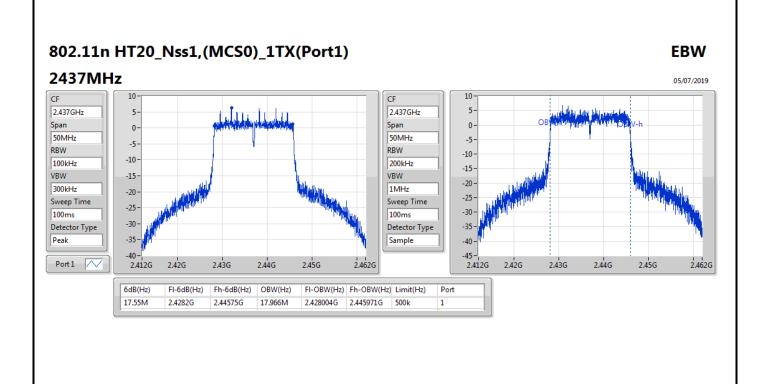
Appendix B



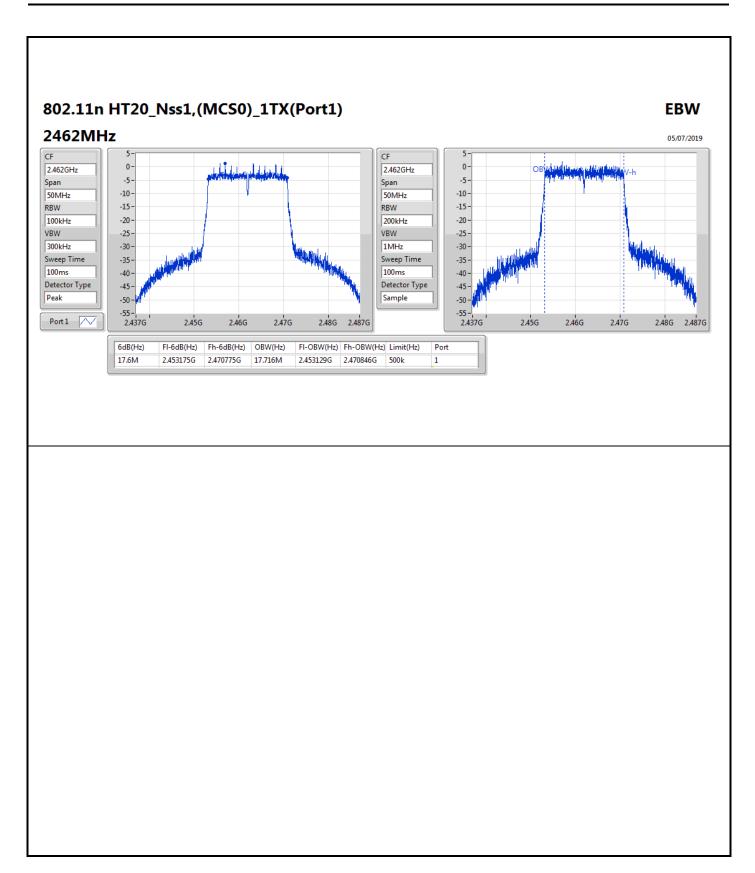


Appendix B **EBW**











Average Power Appendix C

Summary

Mode	Total Power	Total Power
	(dBm)	(W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX(Port1)	18.30	0.06761
802.11g_Nss1,(6Mbps)_1TX(Port1)	17.86	0.06109
802.11n HT20_Nss1,(MCS0)_1TX(Port1)	17.48	0.05598

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Average Power Appendix C

Result

Mode	Result	DG	Port 1	Total Power	Power Limit
		(dBi)	(dBm)	(dBm)	(dBm)
802.11b_Nss1,(1Mbps)_1TX(Port1)	-	-	-	-	-
2412MHz	Pass	3.50	18.30	18.30	30.00
2437MHz	Pass	3.50	18.02	18.02	30.00
2462MHz	Pass	3.50	17.68	17.68	30.00
802.11g_Nss1,(6Mbps)_1TX(Port1)	-	-	-	-	-
2412MHz	Pass	3.50	14.25	14.25	30.00
2417MHz	Pass	3.50	17.41	17.41	30.00
2437MHz	Pass	3.50	17.86	17.86	30.00
2457MHz	Pass	3.50	17.07	17.07	30.00
2462MHz	Pass	3.50	13.90	13.90	30.00
802.11n HT20_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-
2412MHz	Pass	3.50	12.83	12.83	30.00
2417MHz	Pass	3.50	16.88	16.88	30.00
2437MHz	Pass	3.50	17.48	17.48	30.00
2457MHz	Pass	3.50	17.10	17.10	30.00
2462MHz	Pass	3.50	13.00	13.00	30.00

DG = Directional Gain; **Port X** = Port X output power

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PSD Appendix D

Summary

Mode	PD
	(dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_1TX(Port1)	-5.56
802.11g_Nss1,(6Mbps)_1TX(Port1)	-9.37
802.11n HT20_Nss1,(MCS0)_1TX(Port1)	-8.16

RBW=3 kHz.

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Appendix D **PSD**

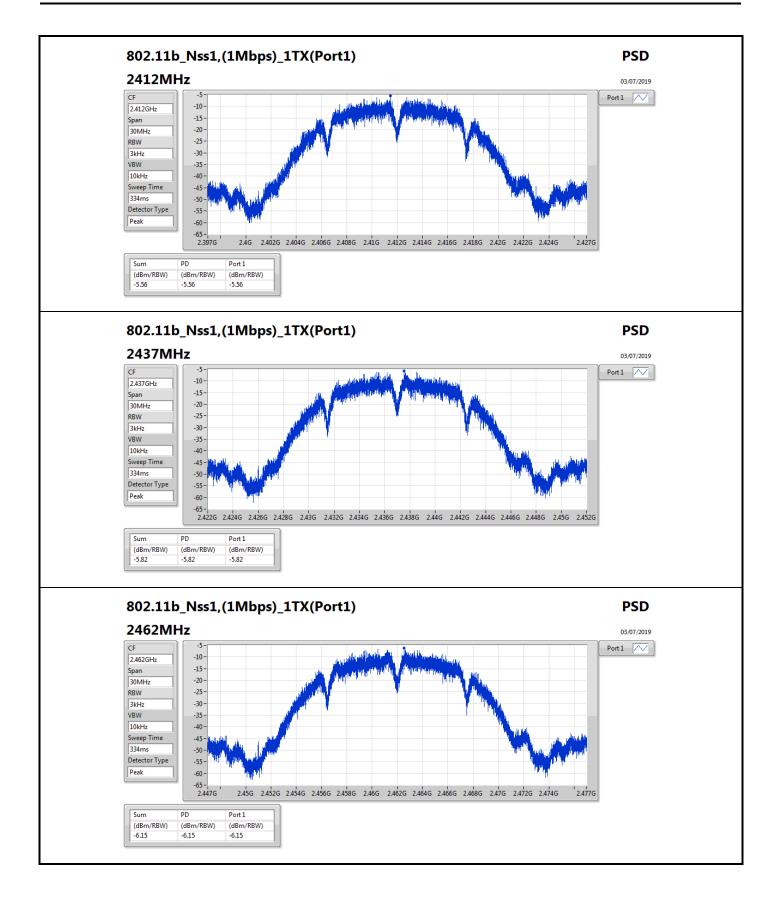
Result

Mode	Result	DG	Port 1	PD	PD Limit
		(dBi)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
802.11b_Nss1,(1Mbps)_1TX(Port1)	-	-	-	-	-
2412MHz	Pass	3.50	-5.56	-5.56	8.00
2437MHz	Pass	3.50	-5.82	-5.82	8.00
2462MHz	Pass	3.50	-6.15	-6.15	8.00
802.11g_Nss1,(6Mbps)_1TX(Port1)	-	-	-	-	-
2412MHz	Pass	3.50	-12.98	-12.98	8.00
2437MHz	Pass	3.50	-9.37	-9.37	8.00
2462MHz	Pass	3.50	-13.39	-13.39	8.00
802.11n HT20_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-
2412MHz	Pass	3.50	-13.15	-13.15	8.00
2437MHz	Pass	3.50	-8.16	-8.16	8.00
2462MHz	Pass	3.50	-13.09	-13.09	8.00

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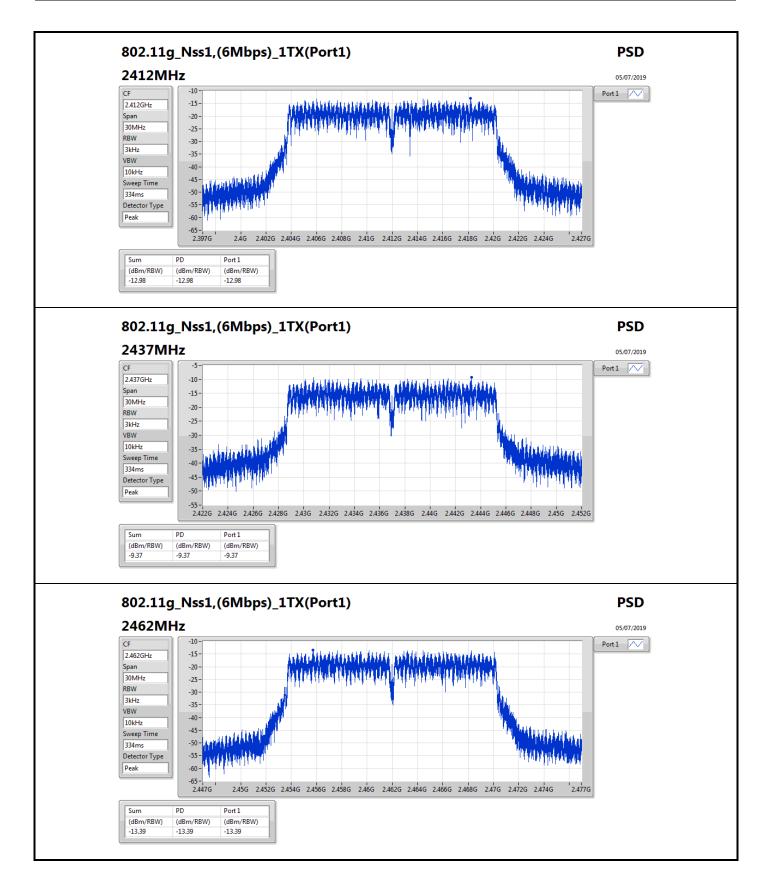
DG = Directional Gain; RBW=3 kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X power density;



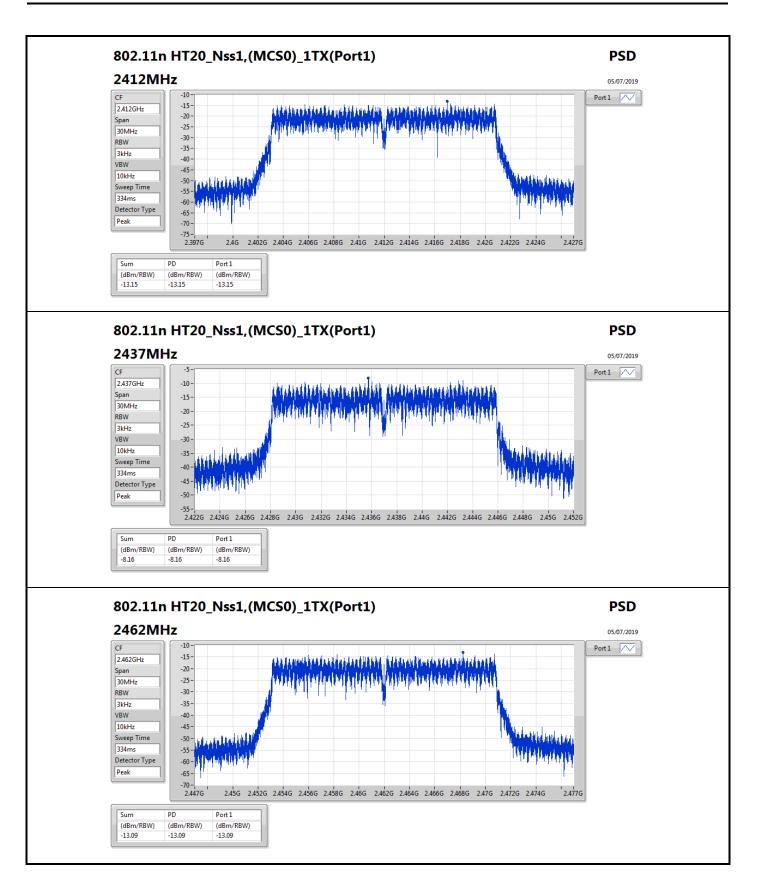




PSD



PSD Appendix D





CSE(Non-restricted Band)

Appendix E

Summary

Mode	Result	Ref	Ref	Limit	Freq	Level	Freq	Level	Freq	Level	Freq	Level	Port
		(Hz)	(dBm)	(dBm)	(Hz)	(dBm)	(Hz)	(dBm)	(Hz)	(dBm)	(Hz)	(dBm)	
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX(Port1)	Pass	2.41298G	8.26	-21.74	1.80837G	-63.56	2.397G	-26.69	2.4839G	-58.71	7.23514G	-47.84	1
802.11g_Nss1,(6Mbps)_1TX(Port1)	Pass	2.43198G	6.63	-23.37	2.30845G	-61.67	2.39952G	-27.68	2.48438G	-57.18	14.5119G	-50.70	1
802.11n HT20_Nss1,(MCS0)_1TX(Port1)	Pass	2.43574G	6.48	-23.52	2.30932G	-61.70	2.39826G	-30.60	2.4981G	-56.43	16.26507G	-51.08	1

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CSE(Non-restricted Band)

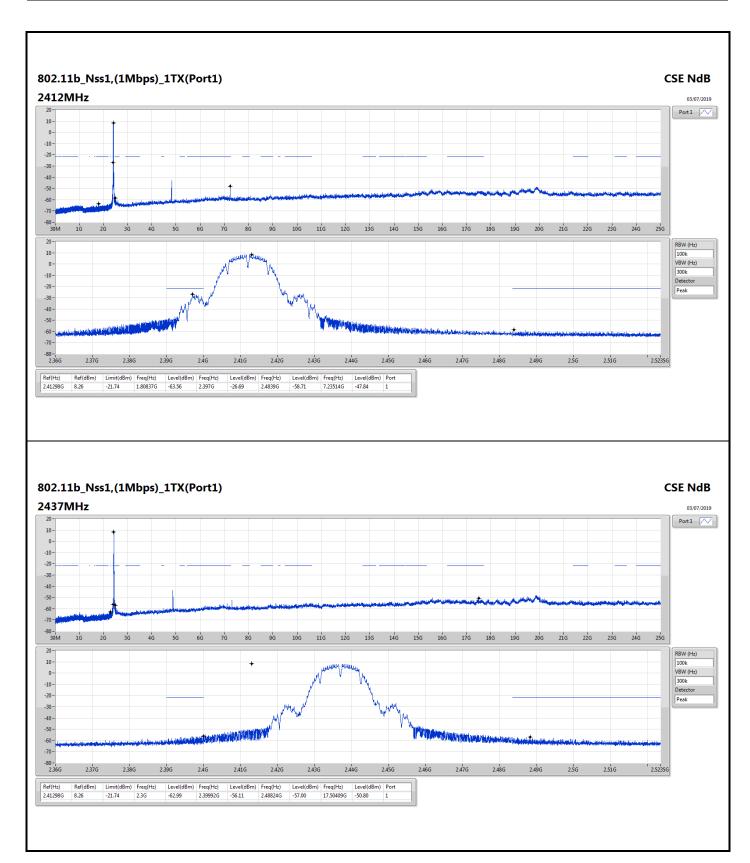
Appendix E

Result

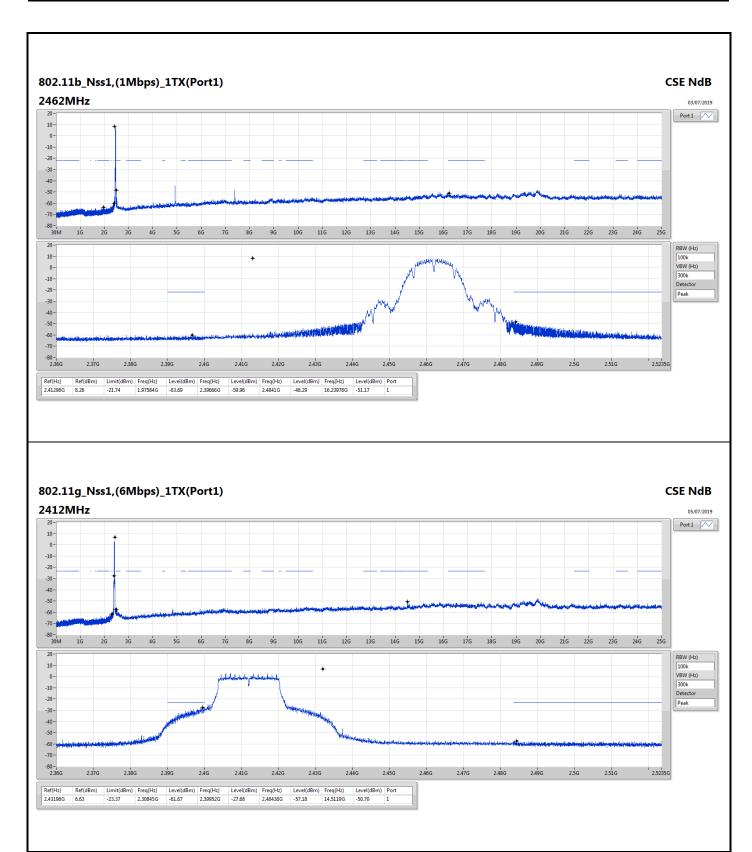
Mode	Result	Ref	Ref	Limit	Freq	Level	Freq	Level	Freq	Level	Freq	Level	Port
		(Hz)	(dBm)	(dBm)	(Hz)	(dBm)	(Hz)	(dBm)	(Hz)	(dBm)	(Hz)	(dBm)	
802.11b_Nss1,(1Mbps)_1TX(Port1)	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.41298G	8.26	-21.74	1.80837G	-63.56	2.397G	-26.69	2.4839G	-58.71	7.23514G	-47.84	1
2437MHz	Pass	2.41298G	8.26	-21.74	2.3G	-62.99	2.39992G	-56.11	2.48824G	-57.00	17.50409G	-50.80	1
2462MHz	Pass	2.41298G	8.26	-21.74	1.97584G	-63.69	2.39666G	-59.96	2.4841G	-48.29	16.23978G	-51.17	1
802.11g_Nss1,(6Mbps)_1TX(Port1)	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43198G	6.63	-23.37	2.30845G	-61.67	2.39952G	-27.68	2.48438G	-57.18	14.5119G	-50.70	1
2437MHz	Pass	2.43198G	6.63	-23.37	2.30554G	-61.17	2.3988G	-51.00	2.48452G	-56.41	17.44509G	-51.49	1
2462MHz	Pass	2.43198G	6.63	-23.37	2.30525G	-61.59	2.39192G	-57.59	2.48388G	-39.18	16.20607G	-51.74	1
802.11n HT20_Nss1,(MCS0)_1TX(Port1)	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43574G	6.48	-23.52	2.30932G	-61.70	2.39826G	-30.60	2.4981G	-56.43	16.26507G	-51.08	1
2437MHz	Pass	2.43574G	6.48	-23.52	2.30466G	-61.97	2.39982G	-48.35	2.48494G	-53.32	15.20587G	-51.96	1
2462MHz	Pass	2.43574G	6.48	-23.52	2.30961G	-61.93	2.39302G	-56.97	2.48358G	-38.29	16.85227G	-51.02	1

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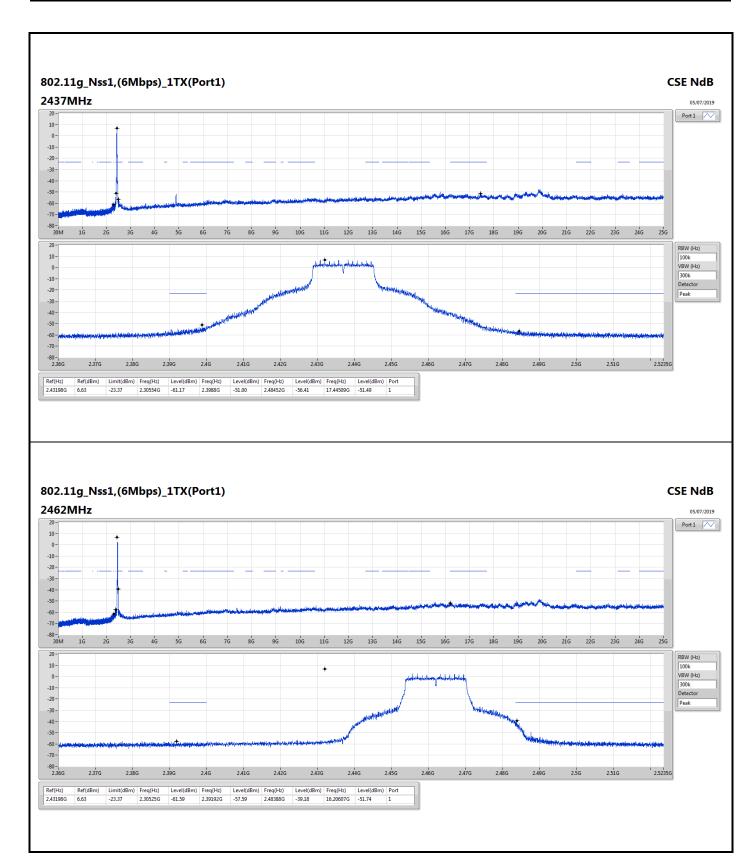




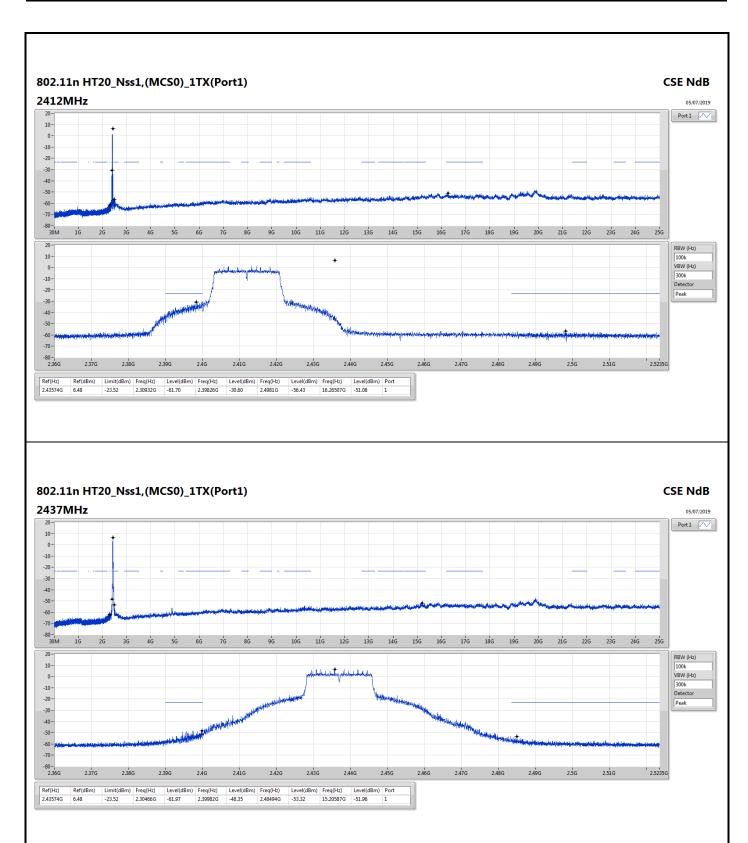




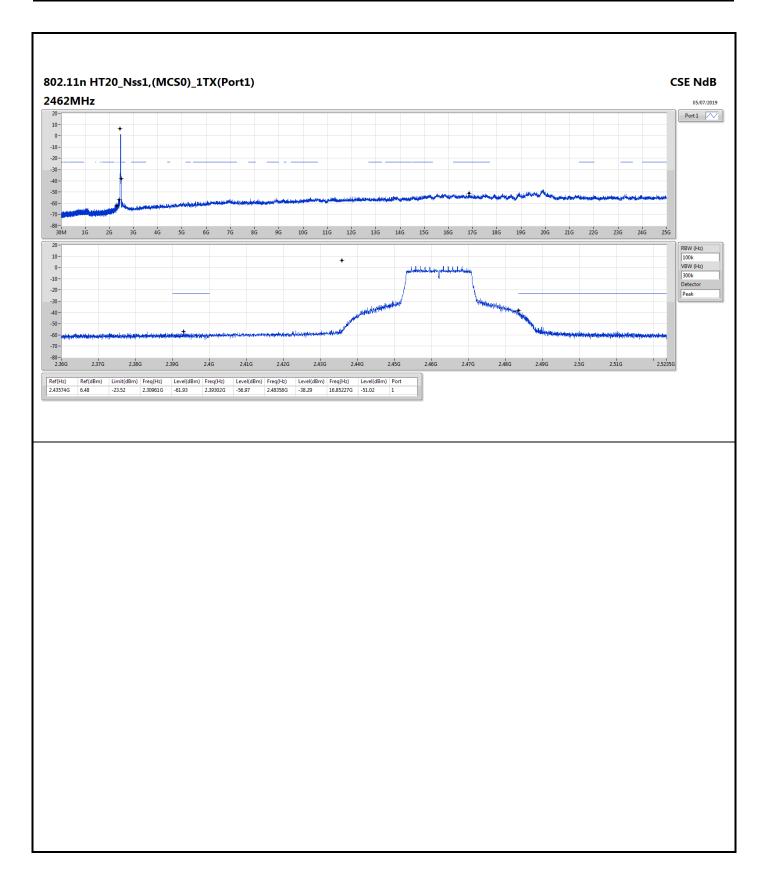














RSE TX below 1GHz Result

Appendix F.1

Summary

Mode	Result	Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
			(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11n HT20_Nss1,(MCS0)_1TX	Pass	PK	156.52M	40.28	43.50	-3.22	-15.42	3	Vertical	360	1.00	-

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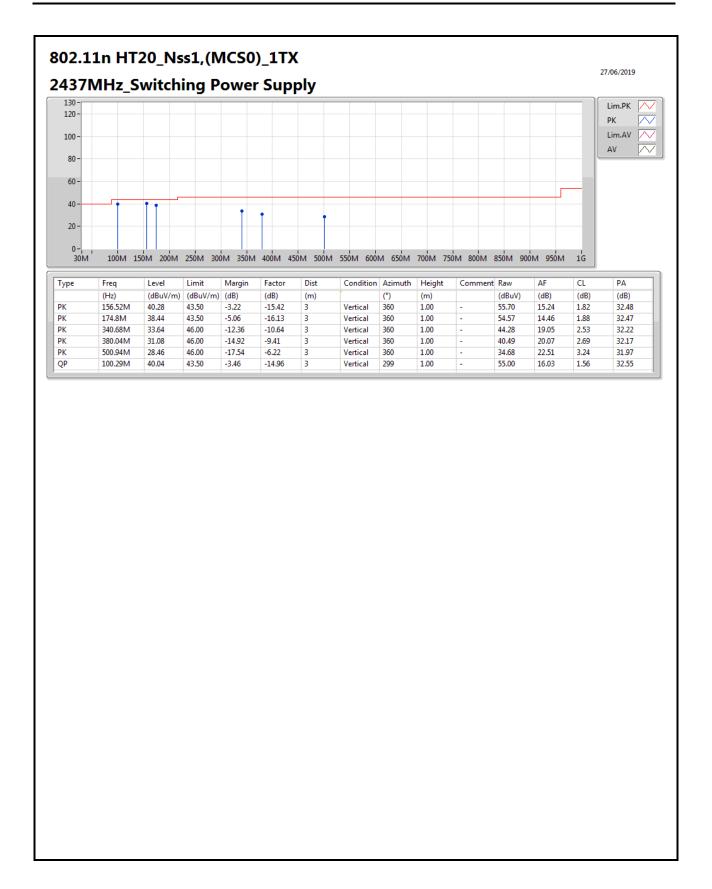
RSE TX below 1GHz Result

Result

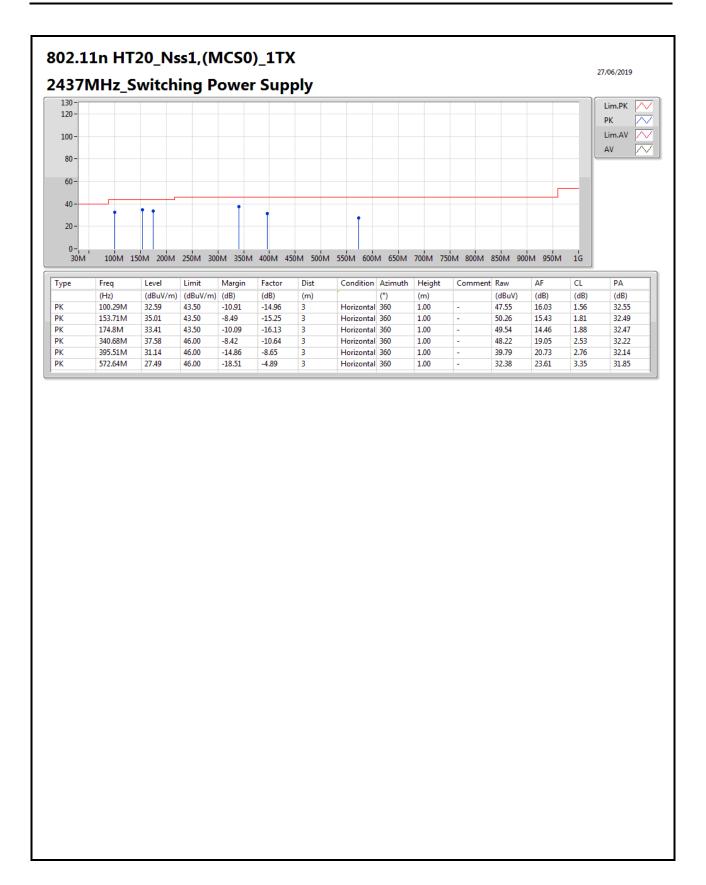
Mode	Result	Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
			(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-
2437MHz	Pass	PK	156.52M	40.28	43.50	-3.22	-15.42	3	Vertical	360	1.00	-
2437MHz	Pass	PK	174.8M	38.44	43.50	-5.06	-16.13	3	Vertical	360	1.00	-
2437MHz	Pass	PK	340.68M	33.64	46.00	-12.36	-10.64	3	Vertical	360	1.00	-
2437MHz	Pass	PK	380.04M	31.08	46.00	-14.92	-9.41	3	Vertical	360	1.00	-
2437MHz	Pass	PK	500.94M	28.46	46.00	-17.54	-6.22	3	Vertical	360	1.00	-
2437MHz	Pass	QP	100.29M	40.04	43.50	-3.46	-14.96	3	Vertical	299	1.00	-
2437MHz	Pass	PK	100.29M	32.59	43.50	-10.91	-14.96	3	Horizontal	360	1.00	-
2437MHz	Pass	PK	153.71M	35.01	43.50	-8.49	-15.25	3	Horizontal	360	1.00	-
2437MHz	Pass	PK	174.8M	33.41	43.50	-10.09	-16.13	3	Horizontal	360	1.00	-
2437MHz	Pass	PK	340.68M	37.58	46.00	-8.42	-10.64	3	Horizontal	360	1.00	-
2437MHz	Pass	PK	395.51M	31.14	46.00	-14.86	-8.65	3	Horizontal	360	1.00	-
2437MHz	Pass	PK	572.64M	27.49	46.00	-18.51	-4.89	3	Horizontal	360	1.00	-

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Appendix F.2

Summary

Mode	Result	Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
			(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	Pass	AV	2.4835G	47.68	54.00	-6.32	31.37	3	Horizontal	351	1.07	-
802.11g_Nss1,(6Mbps)_1TX	Pass	AV	2.39G	53.07	54.00	-0.93	31.38	3	Horizontal	177	1.33	-
802.11n HT20_Nss1,(MCS0)_1TX	Pass	AV	2.4836G	53.18	54.00	-0.82	31.37	3	Horizontal	196	1.50	-

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Result

Result												
Mode	Result	Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
			(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz_TX	Pass	AV	2.3634G	46.31	54.00	-7.69	31.41	3	Vertical	1	1.50	-
2412MHz_TX	Pass	AV	2.4128G	98.39	Inf	-Inf	31.37	3	Vertical	1	1.50	-
2412MHz_TX	Pass	PK	2.3624G	58.33	74.00	-15.67	31.42	3	Vertical	1	1.50	-
2412MHz_TX	Pass	PK	2.411G	100.90	Inf	-Inf	31.37	3	Vertical	1	1.50	-
2412MHz_TX	Pass	AV	2.3854G	46.78	54.00	-7.22	31.39	3	Horizontal	353	1.43	-
2412MHz_TX	Pass	AV	2.4128G	106.71	Inf	-Inf	31.37	3	Horizontal	353	1.43	-
2412MHz_TX	Pass	PK	2.3884G	65.97	74.00	-8.03	31.38	3	Horizontal	353	1.43	-
2412MHz_TX	Pass	PK	2.411G	109.30	Inf	-Inf	31.37	3	Horizontal	353	1.43	-
2412MHz_TX	Pass	AV	4.81488G	32.04	54.00	-21.96	1.69	3	Vertical	360	1.50	-
2412MHz_TX	Pass	PK	4.8273G	44.07	74.00	-29.93	1.72	3	Vertical	360	1.50	-
2412MHz_TX	Pass	AV	4.824G	32.90	54.00	-21.10	1.70	3	Horizontal	85	1.92	-
2412MHz_TX	Pass	PK	4.82772G	44.99	74.00	-29.01	1.72	3	Horizontal	85	1.92	-
2437MHz_TX	Pass	AV	2.3414G	46.44	54.00	-7.56	31.45	3	Vertical	6	1.26	-
2437MHz_TX	Pass	AV	2.4378G	99.15	Inf	-Inf	31.36	3	Vertical	6	1.26	-
2437MHz_TX	Pass	AV	2.485G	46.60	54.00	-7.40	31.37	3	Vertical	6	1.26	-
2437MHz_TX	Pass	PK	2.359G	58.34	74.00	-15.66	31.42	3	Vertical	6	1.26	-
2437MHz_TX	Pass	PK	2.4378G	101.80	Inf	-Inf	31.36	3	Vertical	6	1.26	-
2437MHz_TX	Pass	PK	2.4894G	57.99	74.00	-16.01	31.36	3	Vertical	6	1.26	_
2437MHz_TX	Pass	AV	2.337G	46.47	54.00	-7.53	31.46	3	Horizontal	349	1.32	-
2437MHz_TX	Pass	AV	2.4362G	106.13	Inf	-Inf	31.36	3	Horizontal	349	1.32	-
2437MHz_TX	Pass	AV	2.4838G	46.60	54.00	-7.40	31.37	3	Horizontal	349	1.32	_
2437MHz_TX	Pass	PK	2.3462G	58.70	74.00	-15.30	31.44	3	Horizontal	349	1.32	_
2437MHz_TX	Pass	PK	2.4362G	108.66	Inf	-Inf	31.36	3	Horizontal	349	1.32	_
2437MHz_TX	Pass	PK	2.4878G	58.07	74.00	-15.93	31.36	3	Horizontal	349	1.32	_
2437MHz_TX	Pass	AV	4.88498G	31.81	54.00	-22.19	1.81	3	Vertical	152	1.72	_
2437MHz_TX	Pass	AV	7.30758G	38.45	54.00	-15.55	8.01	3	Vertical	83	2.51	_
2437MHz_TX	Pass	PK	4.88564G	44.37	74.00	-29.63	1.82	3	Vertical	152	1.72	_
2437MHz_TX	Pass	PK	7.31388G	51.46	74.00	-22.54	8.02	3	Vertical	83	2.51	_
2437MHz TX	Pass	AV	4.874G	32.06	54.00	-21.94	1.79	3	Horizontal	10	1.50	
2437MHz TX	Pass	AV	7.30656G	38.33	54.00	-15.67	8.01	3	Horizontal	15	1.50	_
2437MHz_TX	Pass	PK	4.8737G	45.13	74.00	-28.87	1.79	3	Horizontal	10	1.50	-
2437MHz TX	Pass	PK	7.31706G	50.99	74.00	-23.01	8.01	3	Horizontal	15	1.50	_
2462MHz TX	Pass	AV	2.4628G	99.45	Inf	-Inf	31.37	3	Vertical	5	1.21	_
2462MHz_TX	Pass	AV	2.489G	46.87	54.00	-7.13	31.36	3	Vertical	5	1.21	_
2462MHz_TX	Pass	PK	2.4628G	101.94	Inf	-Inf	31.37	3	Vertical	5	1.21	_
2462MHz_TX	Pass	PK	2.4836G	60.71	74.00	-13.29	31.37	3	Vertical	5	1.21	-
2462MHz_TX	Pass	AV	2.4628G	105.94	Inf	-Inf	31.37	3	Horizontal	351	1.07	
2462MHz_TX	Pass	AV	2.4835G	47.68	54.00	-6.32	31.37	3	Horizontal	351	1.07	-
2462MHz_TX	Pass	PK	2.4628G	108.44	Inf	-Inf	31.37	3	Horizontal	351	1.07	_
2462MHz_TX	Pass	PK	2.4844G	65.81	74.00	-8.19	31.37	3	Horizontal	351	1.07	-
2462MHz_TX	Pass	AV	4.93714G	32.18	54.00	-21.82	1.94	3	Vertical	112	2.64	
2462MHz_TX	Pass	AV	7.3813G	38.03	54.00	-15.97	7.95	3	Vertical	285	1.50	
2462MHz_TX	Pass	PK	4.93762G	45.18	74.00	-15.97	1.95	3	Vertical	112	2.64	
2462MHz_TX		PK	7.38788G	51.24	74.00	-20.02	7.95	3	Vertical	285	1.50	-
2462MHz_TX	Pass		4.93372G					3			1	
	Pass	AV		32.05	54.00	-21.95 15.35	7.94		Horizontal	350	1.63	
2462MHz_TX	Pass	AV	7.38704G	38.65	54.00	-15.35 28.07	7.94	3	Horizontal	202	2.30	
2462MHz_TX	Pass	PK	4.93846G	45.03	74.00	-28.97	1.95	3	Horizontal	350	1.63	-

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Mode	Result	Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
			(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
2462MHz_TX	Pass	PK	7.38722G	51.16	74.00	-22.84	7.94	3	Horizontal	202	2.30	-
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	_	_	_	-	_	_	_
2412MHz_TX	Pass	AV	2.39G	47.58	54.00	-6.42	31.38	3	Vertical	340	2.78	-
	Pass	AV	2.4178G	90.15	Inf	-Inf	31.37	3	Vertical	340	2.78	-
2412MHz_TX	Pass	PK	2.39G	61.62	74.00	-12.38	31.38	3	Vertical	340	2.78	-
2412MHz_TX	Pass	PK	2.4182G	98.68	Inf	-Inf	31.37	3	Vertical	340	2.78	-
	Pass	AV	2.39G	53.07	54.00	-0.93	31.38	3	Horizontal	177	1.33	-
	Pass	AV	2.4178G	99.23	Inf	-Inf	31.37	3	Horizontal	177	1.33	-
	Pass	PK	2.3898G	69.42	74.00	-4.58	31.38	3	Horizontal	177	1.33	-
	Pass	PK	2.4078G	107.36	Inf	-Inf	31.37	3	Horizontal	177	1.33	_
	Pass	AV	4.82613G	32.16	54.00	-21.84	1.72	3	Vertical	311	1.07	_
2412MHz_TX	Pass	PK	4.82297G	44.42	74.00	-29.58	1.70	3	Vertical	311	1.07	_
2412MHz_TX	Pass	AV	4.82332G	32.19	54.00	-21.81	1.70	3	Horizontal	204	1.37	-
2412MHz TX	Pass	PK	4.82616G	44.63	74.00	-29.37	1.72	3	Horizontal	204	1.37	
2417MHz_TX	Pass	AV	2.3894G	48.07	54.00	-5.93	31.38	3	Vertical	337	2.50	
2417MHz_TX	Pass	AV	2.4236G	94.94	Inf	-5.95 -Inf	31.37	3	Vertical	337	2.50	
2417MHz_TX	Pass	PK	2.3898G	61.72	74.00	-12.28	31.38	3	Vertical	337	2.50	_
2417MHz_TX	Pass	PK	2.4224G	103.06	Inf	-Inf	31.37	3	Vertical	337	2.50	_
2417MHz_TX	Pass	AV	2.39G	53.07	54.00	-0.93	31.38	3	Horizontal	176	1.50	_
2417MHz_TX	Pass	AV	2.411G	102.34	Inf	-Inf	31.37	3	Horizontal	176	1.50	_
2417MHz_TX	Pass	PK	2.3892G	69.40	74.00	-4.60	31.38	3	Horizontal	176	1.50	
2417MHz_TX	Pass	PK	2.4224G	110.53	Inf	-Inf	31.37	3	Horizontal	176	1.50	
2437MHz_TX	Pass	AV	2.3506G	46.95	54.00	-7.05	31.44	3	Vertical	8	1.25	
	Pass	AV	2.443G	96.29	Inf	-7.03 -Inf	31.37	3	Vertical	8	1.25	
2437MHz_TX 2437MHz_TX	Pass	AV	2.443G 2.4846G	47.16	54.00	-6.84	31.37	3	Vertical	8	1.25	
2437MHz_TX	Pass	PK	2.4646G 2.3486G	59.02	74.00	-14.98	31.43	3	Vertical	8	1.25	-
2437MHz_TX	Pass	PK	2.4394G	104.50	Inf	-14.96 -Inf	31.43	3	Vertical	8	1.25	-
2437MHz TX	Pass	PK	2.4962G	59.15	74.00	-14.85	31.36	3	Vertical	8	1.25	
2437MHz_TX	Pass	AV	2.341G	47.27	54.00	-6.73	31.45	3	Horizontal	349	1.31	
		AV	2.4358G	102.38	Inf		31.45	3		349	1.31	
2437MHz_TX 2437MHz_TX	Pass					-Inf			Horizontal			-
	Pass	AV PK	2.4835G 2.3618G	47.16 59.09	54.00 74.00	-6.84 -14.91	31.37 31.42	3	Horizontal Horizontal	349 349	1.31	-
2437MHz_TX 2437MHz_TX	Pass	PK	2.4338G					3		349		-
	Pass			110.89	Inf	-Inf	31.37		Horizontal		1.31	-
2437MHz_TX	Pass	PK AV	2.493G 4.87628G	59.22 32.42	74.00 54.00	-14.78 -21.58	31.36	3	Horizontal	349 28	1.31	<u> </u>
2437MHz_TX 2437MHz_TX	Pass		7.31064G	39.03	54.00	-14.97	1.81		Vertical Vertical		1.06	-
2437MHz_1X 2437MHz_TX	Pass	AV					8.01	3		131	1.50	<u> </u>
	Pass	PK PK	4.87183G	44.66	74.00	-29.34	1.79	3	Vertical	28	1.06	-
2437MHz_TX	Pass		7.31166G	52.58	74.00	-21.42	8.01	3	Vertical	131	1.50	-
2437MHz_TX 2437MHz_TX	Pass	AV AV	4.87604G 7.30818G	32.16 38.95	54.00 54.00	-21.84 -15.05	1.81 8.01	3	Horizontal	11	2.15	-
2437MHz_TX 2437MHz_TX	Pass Pass	PK	4.8734G	44.98	74.00	-15.05	1.79	3	Horizontal	145	1.50 2.15	-
									Horizontal			-
2437MHz_TX	Pass	PK AV	7.31352G	51.51	74.00	-22.49	8.02	3	Horizontal	145	1.50	-
2457MHz_TX	Pass	AV AV	2.4516G	92.66	Inf	-Inf	31.37	3	Vertical	345	1.40	-
2457MHz_TX	Pass	AV	2.4835G	47.44	54.00	-6.56	31.37	3	Vertical	345	1.40	-
2457MHz_TX	Pass	PK	2.4508G	101.04	Inf	-Inf	31.37	3	Vertical	345	1.40	-
2457MHz_TX	Pass	PK	2.4842G	60.28	74.00	-13.72	31.37	3	Vertical	345	1.40	-
2457MHz_TX	Pass	AV	2.4624G	102.45	Inf	-Inf	31.37	3	Horizontal	181	1.59	-
2457MHz_TX	Pass	AV	2.4835G	51.98	54.00	-2.02	31.37	3	Horizontal	181	1.59	-
2457MHz_TX	Pass	PK	2.4612G	110.53	Inf	-Inf	31.37	3	Horizontal	181	1.59	-

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Mode	Result	Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
Mode	Nesuit	Турс	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)	Condition	(°)	(m)	Comments
	Pass	PK	2.484G	68.61	74.00	-5.39	31.37	3	Horizontal	181	1.59	_
2462MHz_TX	Pass	AV	2.461G	91.54	Inf	-Inf	31.36	3	Vertical	78	1.00	_
2462MHz TX	Pass	AV	2.4835G	48.93	54.00	-5.07	31.37	3	Vertical	78	1.00	
2462MHz_TX	Pass	PK	2.4644G	99.92	Inf	-Inf	31.37	3	Vertical	78	1.00	
2462MHz_TX	Pass	PK	2.4835G	62.59	74.00	-11.41	31.37	3	Vertical	78	1.00	_
2462MHz TX	Pass	AV	2.4608G	98.38	Inf	-Inf	31.36	3	Horizontal	196	1.50	_
2462MHz_TX	Pass	AV	2.4835G	53.04	54.00	-0.96	31.37	3	Horizontal	196	1.50	_
2462MHz_TX	Pass	PK	2.456G	106.72	Inf	-Inf	31.36	3	Horizontal	196	1.50	_
2462MHz_TX	Pass	PK	2.4838G	69.38	74.00	-4.62	31.37	3	Horizontal	196	1.50	-
			4.9354G			-4.02		3		21	2.20	-
2462MHz_TX	Pass	AV		32.33	54.00		1.94		Vertical			-
2462MHz_TX	Pass	AV	7.37988G	38.56	54.00	-15.44	7.95	3	Vertical	299	2.39	-
2462MHz_TX	Pass	PK	4.92964G	44.24	74.00	-29.76	1.92	3	Vertical	21	2.20	-
2462MHz_TX	Pass	PK	7.38708G	50.68	74.00	-23.32	7.94	3	Vertical	299	2.39	-
2462MHz_TX	Pass	AV	4.93192G	32.39	54.00	-21.61	1.93	3	Horizontal	340	1.59	-
2462MHz_TX	Pass	AV	7.38174G	38.37	54.00	-15.63	7.95	3	Horizontal	194	2.23	-
2462MHz_TX	Pass	PK	4.91152G	45.02	74.00	-28.98	1.87	3	Horizontal	340	1.59	-
2462MHz_TX	Pass	PK	7.37964G	50.56	74.00	-23.44	7.95	3	Horizontal	194	2.23	-
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz_TX	Pass	AV	2.3896G	47.58	54.00	-6.42	31.38	3	Vertical	338	2.77	-
2412MHz_TX	Pass	AV	2.4174G	88.17	Inf	-Inf	31.37	3	Vertical	338	2.77	-
2412MHz_TX	Pass	PK	2.3888G	60.37	74.00	-13.63	31.38	3	Vertical	338	2.77	-
2412MHz_TX	Pass	PK	2.4162G	97.25	Inf	-Inf	31.36	3	Vertical	338	2.77	-
2412MHz_TX	Pass	AV	2.39G	52.07	54.00	-1.93	31.38	3	Horizontal	187	1.31	-
2412MHz_TX	Pass	AV	2.4186G	97.68	Inf	-Inf	31.37	3	Horizontal	187	1.31	-
2412MHz_TX	Pass	PK	2.3896G	67.94	74.00	-6.06	31.38	3	Horizontal	187	1.31	-
2412MHz_TX	Pass	PK	2.4162G	106.67	Inf	-Inf	31.36	3	Horizontal	187	1.31	-
2412MHz_TX	Pass	AV	4.82022G	32.10	54.00	-21.90	1.70	3	Vertical	101	2.49	-
2412MHz_TX	Pass	PK	4.82628G	43.87	74.00	-30.13	1.72	3	Vertical	101	2.49	-
2412MHz_TX	Pass	AV	4.81794G	32.29	54.00	-21.71	1.70	3	Horizontal	83	1.45	-
2412MHz_TX	Pass	PK	4.83018G	44.52	74.00	-29.48	1.73	3	Horizontal	83	1.45	-
2417MHz_TX	Pass	AV	2.3884G	47.83	54.00	-6.17	31.38	3	Vertical	337	2.49	-
2417MHz_TX	Pass	AV	2.4234G	93.97	Inf	-Inf	31.37	3	Vertical	337	2.49	-
2417MHz_TX	Pass	PK	2.389G	61.62	74.00	-12.38	31.38	3	Vertical	337	2.49	-
2417MHz_TX	Pass	PK	2.4228G	102.11	Inf	-Inf	31.37	3	Vertical	337	2.49	-
2417MHz_TX	Pass	AV	2.39G	52.22	54.00	-1.78	31.38	3	Horizontal	176	1.36	-
2417MHz_TX	Pass	AV	2.4224G	101.97	Inf	-Inf	31.37	3	Horizontal	176	1.36	-
2417MHz_TX	Pass	PK	2.3896G	69.76	74.00	-4.24	31.38	3	Horizontal	176	1.36	-
2417MHz_TX	Pass	PK	2.4212G	111.15	Inf	-Inf	31.37	3	Horizontal	176	1.36	-
2437MHz_TX	Pass	AV	2.3374G	46.76	54.00	-7.24	31.46	3	Vertical	349	1.01	-
 2437MHz_TX	Pass	AV	2.4422G	95.14	Inf	-Inf	31.37	3	Vertical	349	1.01	-
 2437MHz_TX	Pass	AV	2.4842G	46.88	54.00	-7.12	31.37	3	Vertical	349	1.01	-
2437MHz_TX	Pass	PK	2.3598G	58.48	74.00	-15.52	31.42	3	Vertical	349	1.01	-
2437MHz_TX	Pass	PK	2.4402G	103.94	Inf	-Inf	31.37	3	Vertical	349	1.01	-
2437MHz_TX	Pass	PK	2.497G	58.73	74.00	-15.27	31.36	3	Vertical	349	1.01	-
2437MHz_TX	Pass	AV	2.3886G	47.04	54.00	-6.96	31.38	3	Horizontal	354	1.34	_
2437MHz_TX	Pass	AV	2.4362G	101.27	Inf	-0.90 -Inf	31.36	3	Horizontal	354	1.34	-
2437MHz_TX	Pass	AV	2.4838G	47.16	54.00	-6.84	31.37	3	Horizontal	354	1.34	
2437MHz_TX	Pass	PK	2.3502G	58.96	74.00	-15.04	31.44	3	Horizontal	354	1.34	
2437MHZ_TX 2437MHz_TX		PK PK	2.3502G 2.4306G	109.58		-15.04 -Inf		3		354	1.34	-
Z401 IVIFIZ_1 A	Pass	ΓĽ	2.40000	103.50	Inf	-1(1)	31.37	J	Horizontal	JJ4	1.34	_

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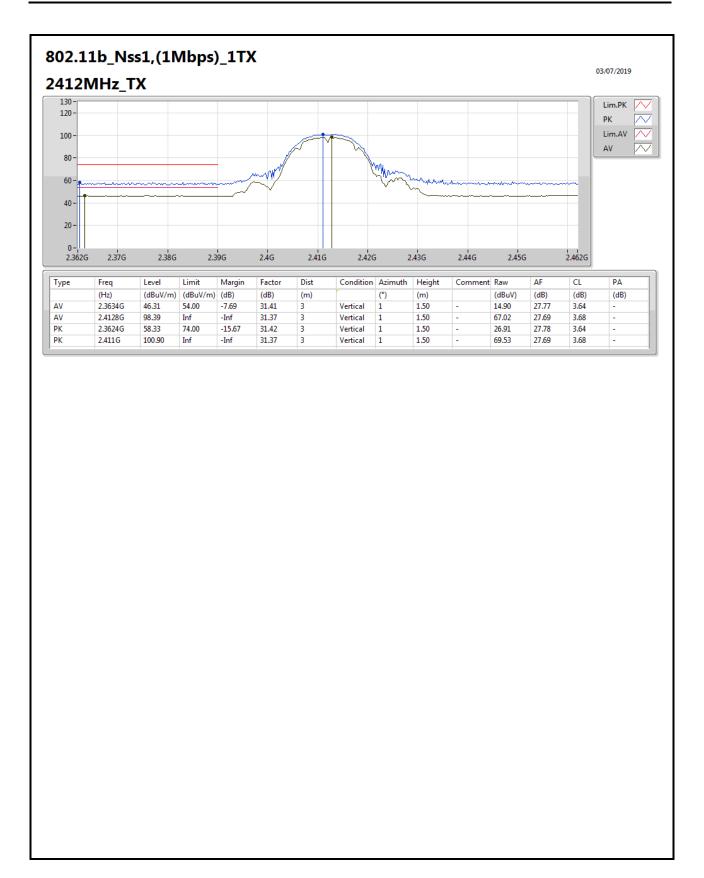




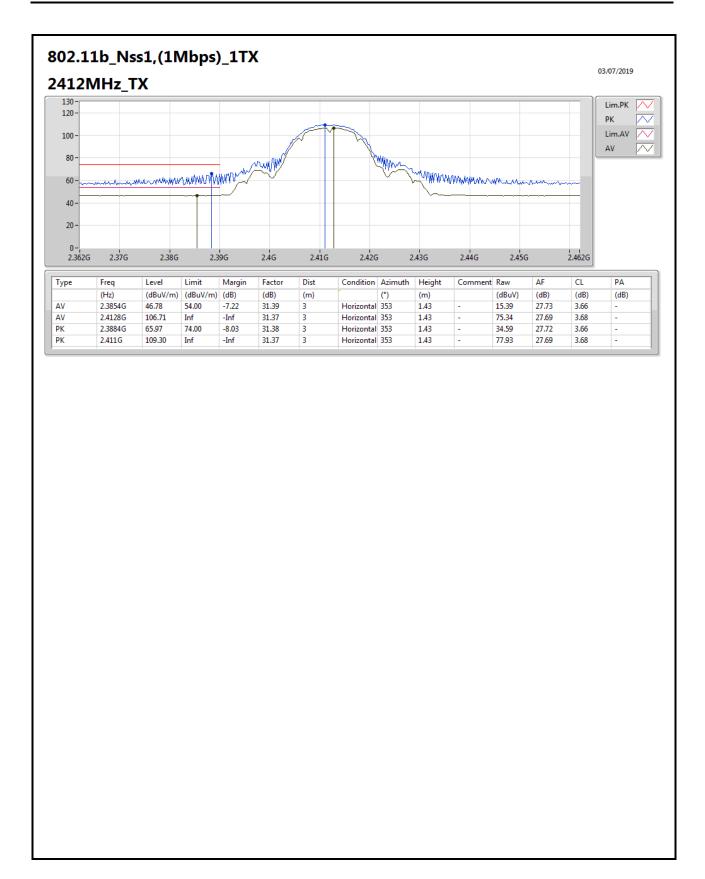
Mode	Result	Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
			(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
2437MHz_TX	Pass	PK	2.4998G	59.28	74.00	-14.72	31.36	3	Horizontal	354	1.34	-
2437MHz_TX	Pass	AV	4.87352G	32.06	54.00	-21.94	1.79	3	Vertical	19	1.50	-
2437MHz_TX	Pass	AV	7.3137G	38.88	54.00	-15.12	8.02	3	Vertical	310	1.50	-
2437MHz_TX	Pass	PK	4.86236G	44.46	74.00	-29.54	1.77	3	Vertical	19	1.50	-
2437MHz_TX	Pass	PK	7.29756G	51.28	74.00	-22.72	8.01	3	Vertical	310	1.50	-
2437MHz_TX	Pass	AV	4.88732G	32.05	54.00	-21.95	1.82	3	Horizontal	210	1.50	-
2437MHz_TX	Pass	AV	7.31268G	38.83	54.00	-15.17	8.02	3	Horizontal	134	1.50	-
2437MHz_TX	Pass	PK	4.88648G	44.59	74.00	-29.41	1.82	3	Horizontal	210	1.50	-
2437MHz_TX	Pass	PK	7.30824G	51.36	74.00	-22.64	8.01	3	Horizontal	134	1.50	-
2457MHz_TX	Pass	AV	2.4624G	94.14	Inf	-Inf	31.37	3	Vertical	189	1.14	-
2457MHz_TX	Pass	AV	2.4836G	48.93	54.00	-5.07	31.37	3	Vertical	189	1.14	-
2457MHz_TX	Pass	PK	2.463G	102.56	Inf	-Inf	31.37	3	Vertical	189	1.14	-
2457MHz_TX	Pass	PK	2.484G	68.18	74.00	-5.82	31.37	3	Vertical	189	1.14	-
2457MHz_TX	Pass	AV	2.4622G	101.66	Inf	-Inf	31.37	3	Horizontal	196	1.50	-
2457MHz_TX	Pass	AV	2.4836G	53.18	54.00	-0.82	31.37	3	Horizontal	196	1.50	-
2457MHz_TX	Pass	PK	2.461G	110.46	Inf	-Inf	31.36	3	Horizontal	196	1.50	-
2457MHz_TX	Pass	PK	2.485G	72.85	74.00	-1.15	31.37	3	Horizontal	196	1.50	-
2462MHz_TX	Pass	AV	2.461G	90.17	Inf	-Inf	31.36	3	Vertical	78	1.00	-
2462MHz_TX	Pass	AV	2.4835G	48.70	54.00	-5.30	31.37	3	Vertical	78	1.00	-
2462MHz_TX	Pass	PK	2.4564G	98.70	Inf	-Inf	31.36	3	Vertical	78	1.00	-
2462MHz_TX	Pass	PK	2.4836G	62.69	74.00	-11.31	31.37	3	Vertical	78	1.00	-
2462MHz_TX	Pass	AV	2.4608G	97.00	Inf	-Inf	31.36	3	Horizontal	197	1.48	-
2462MHz_TX	Pass	AV	2.4836G	53.04	54.00	-0.96	31.37	3	Horizontal	197	1.48	-
2462MHz_TX	Pass	PK	2.4566G	105.28	Inf	-Inf	31.36	3	Horizontal	197	1.48	-
2462MHz_TX	Pass	PK	2.484G	70.07	74.00	-3.93	31.37	3	Horizontal	197	1.48	-
2462MHz_TX	Pass	AV	4.93882G	32.59	54.00	-21.41	1.95	3	Vertical	25	1.61	-
2462MHz_TX	Pass	AV	7.40004G	38.37	54.00	-15.63	7.94	3	Vertical	310	1.99	-
2462MHz_TX	Pass	PK	4.93564G	44.42	74.00	-29.58	1.94	3	Vertical	25	1.61	-
2462MHz_TX	Pass	PK	7.37226G	50.89	74.00	-23.11	7.97	3	Vertical	310	1.99	-
2462MHz_TX	Pass	AV	4.93888G	32.38	54.00	-21.62	1.95	3	Horizontal	222	2.13	-
2462MHz_TX	Pass	AV	7.37244G	38.32	54.00	-15.68	7.97	3	Horizontal	139	1.32	-
2462MHz_TX	Pass	PK	4.9186G	44.59	74.00	-29.41	1.90	3	Horizontal	222	2.13	-
2462MHz_TX	Pass	PK	7.39152G	50.44	74.00	-23.56	7.95	3	Horizontal	139	1.32	-

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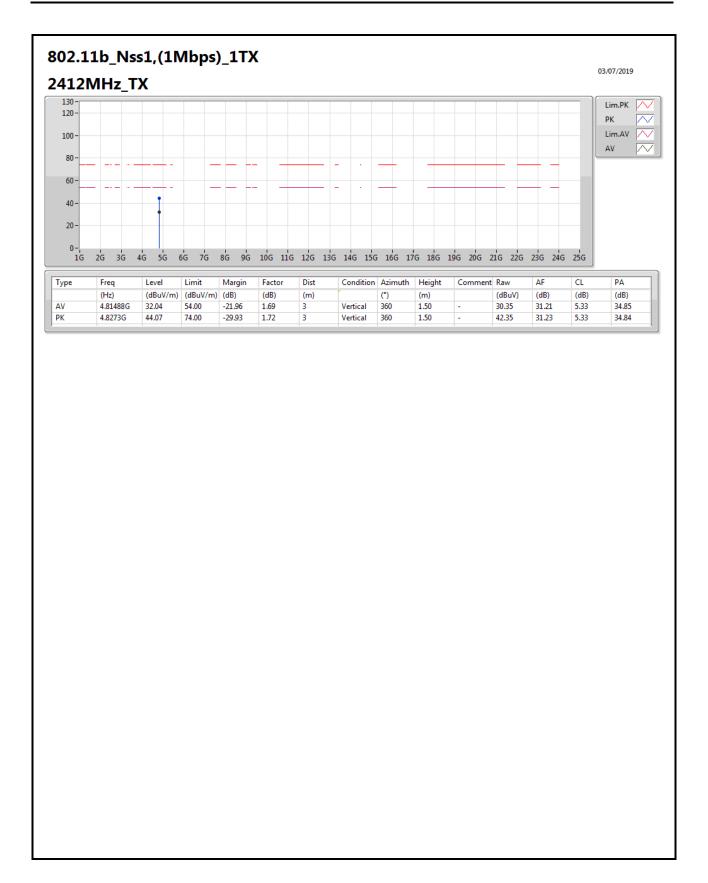




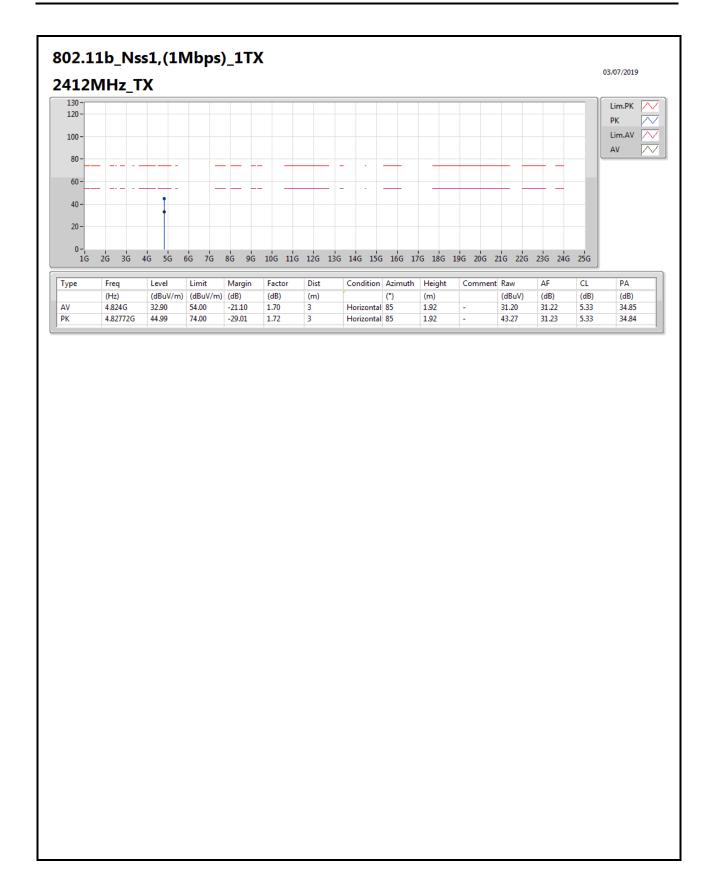




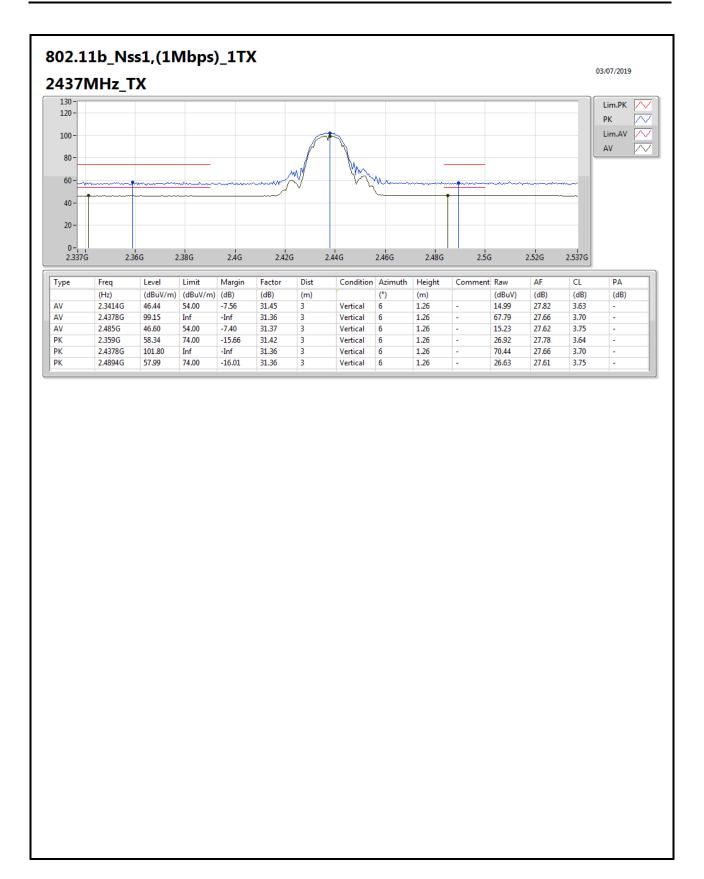




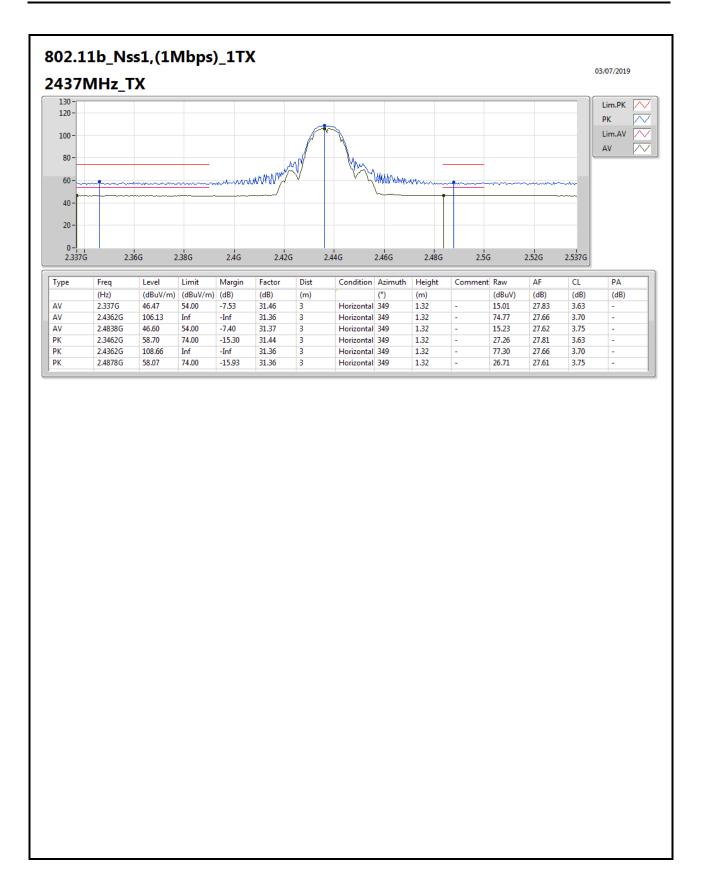






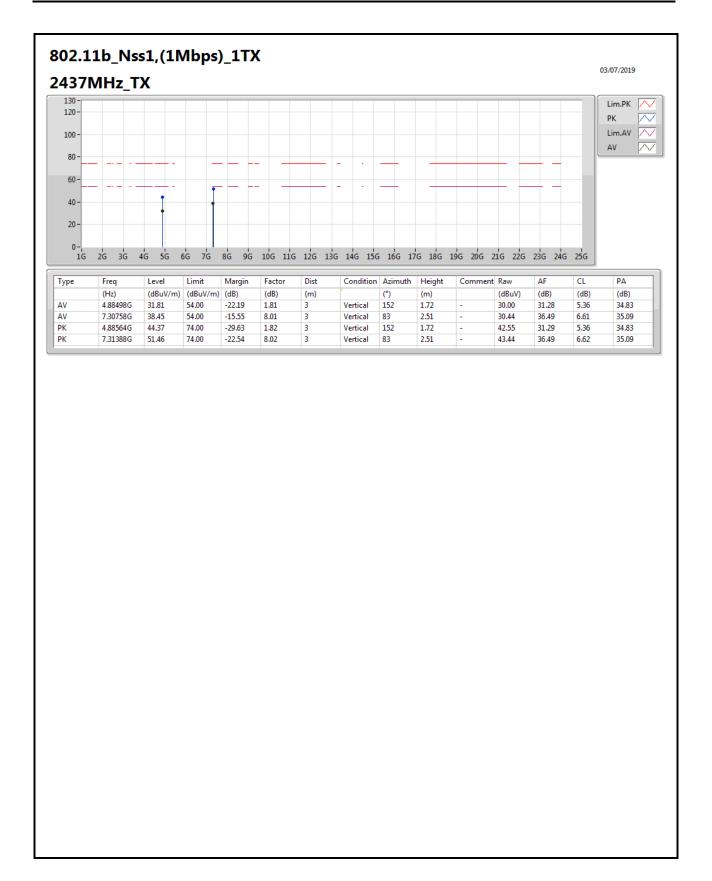






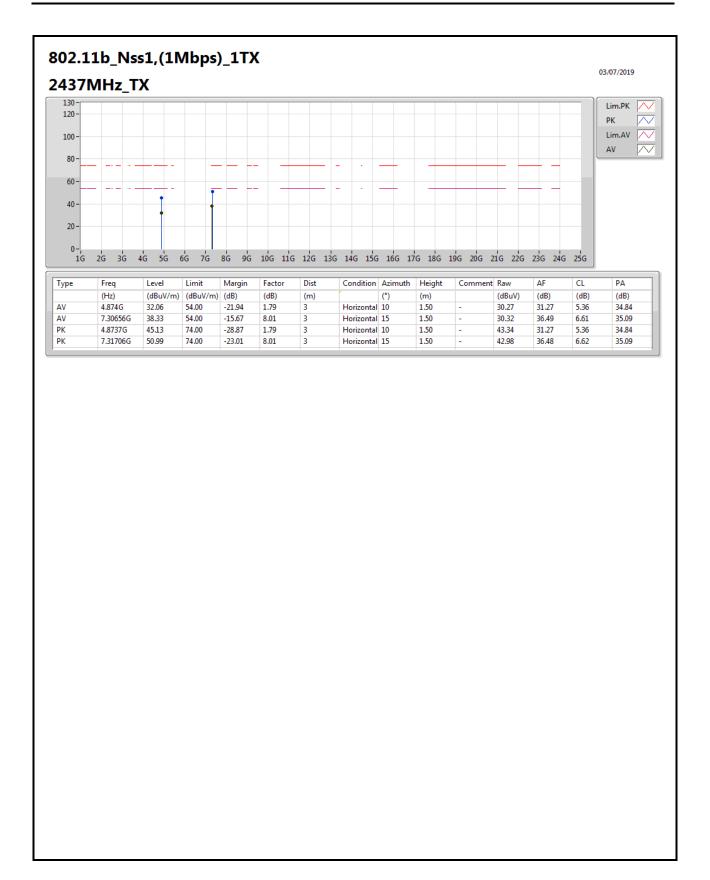
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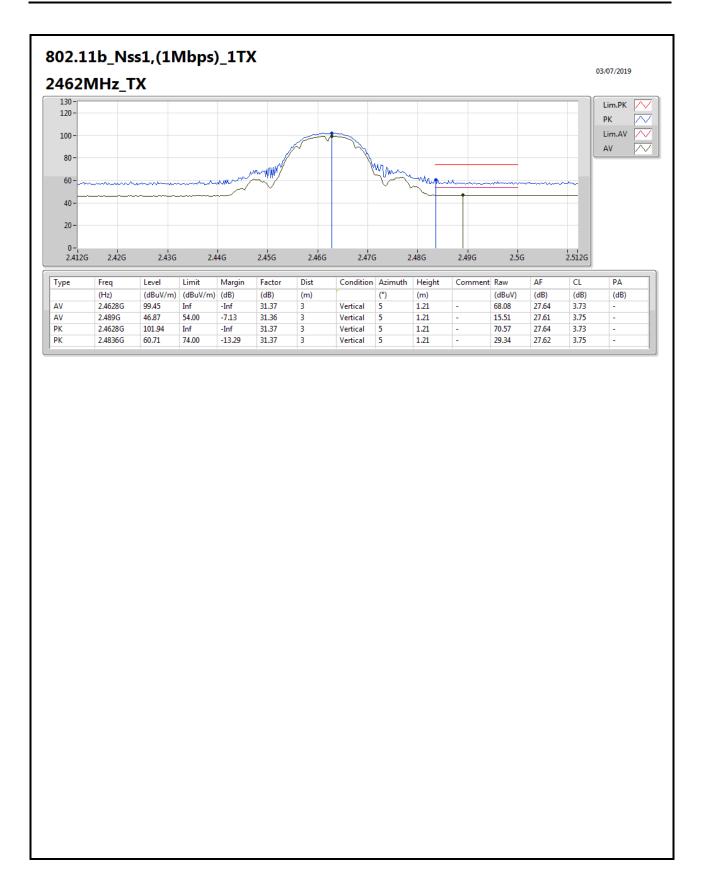
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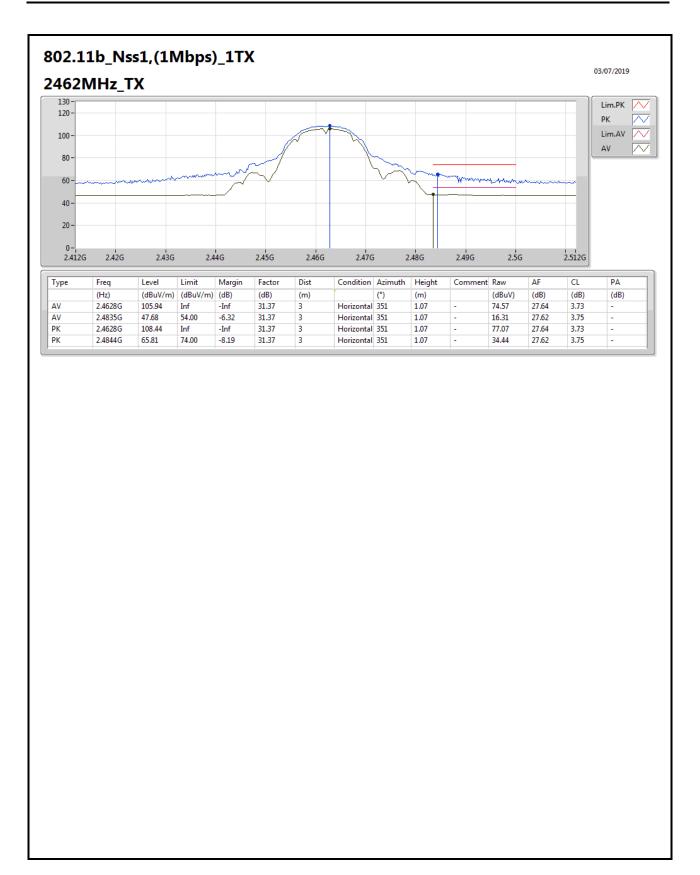
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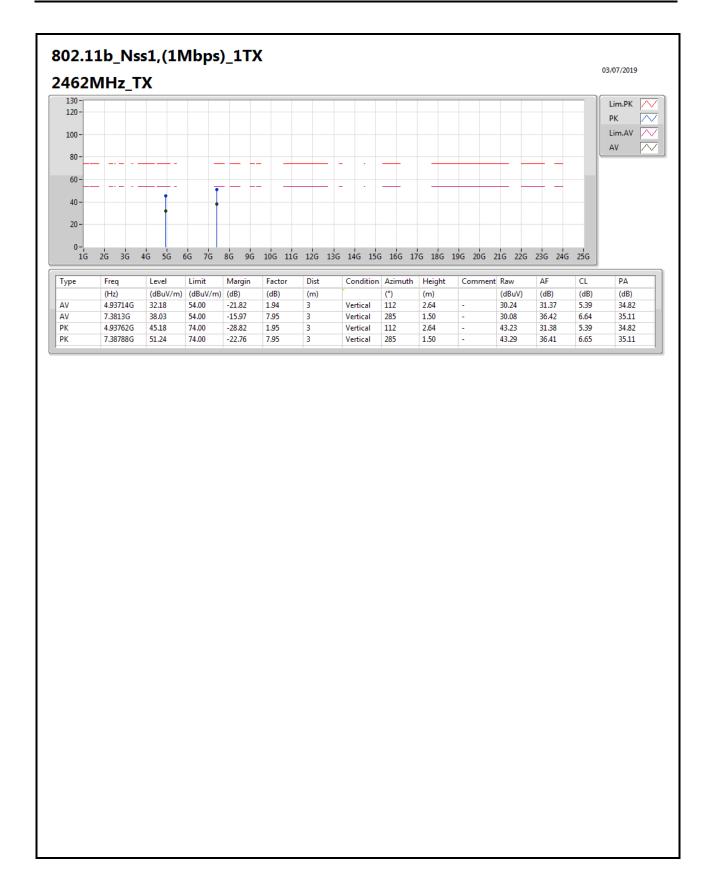


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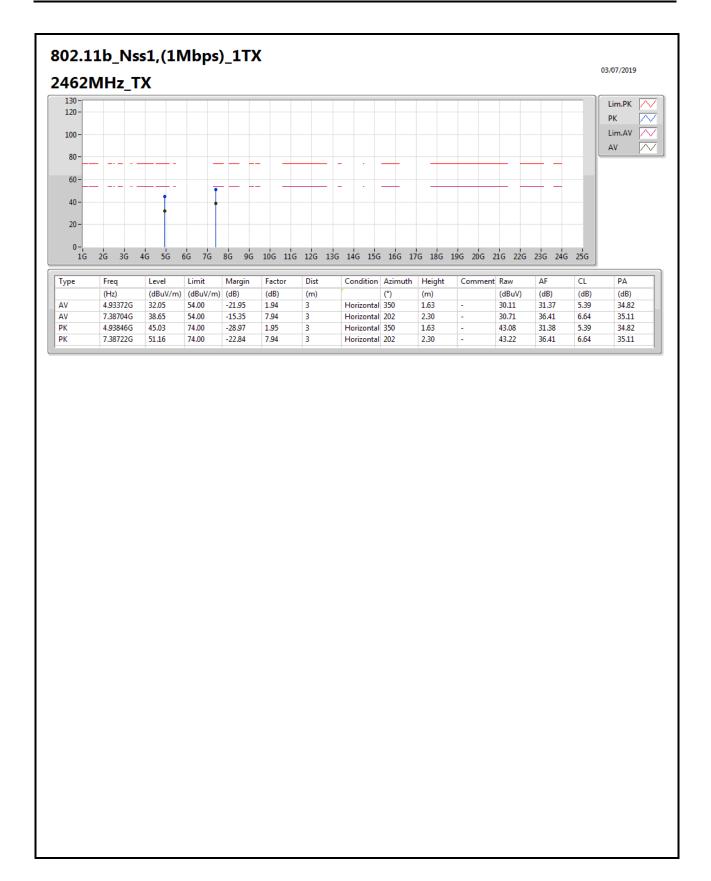






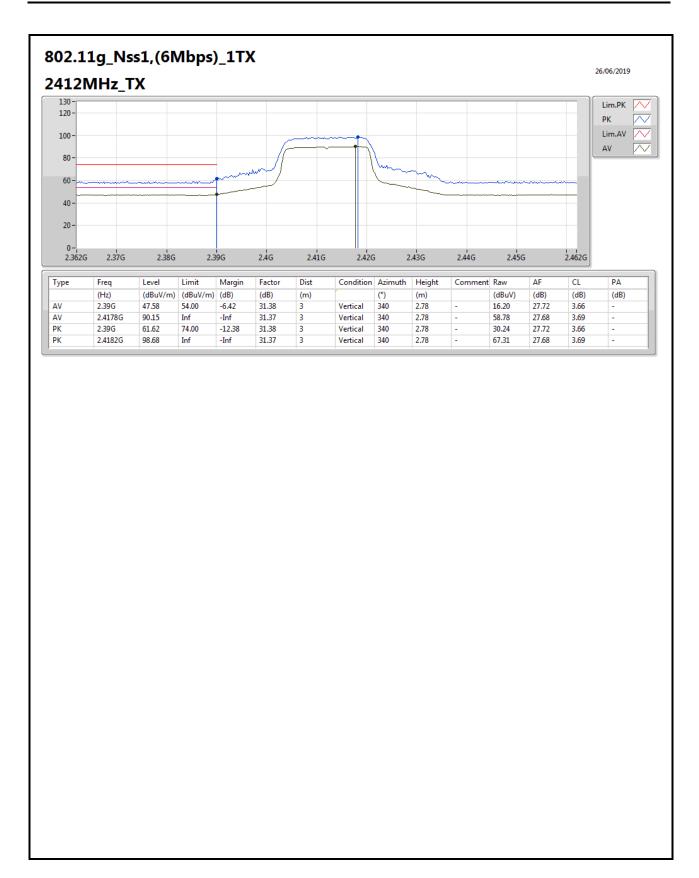




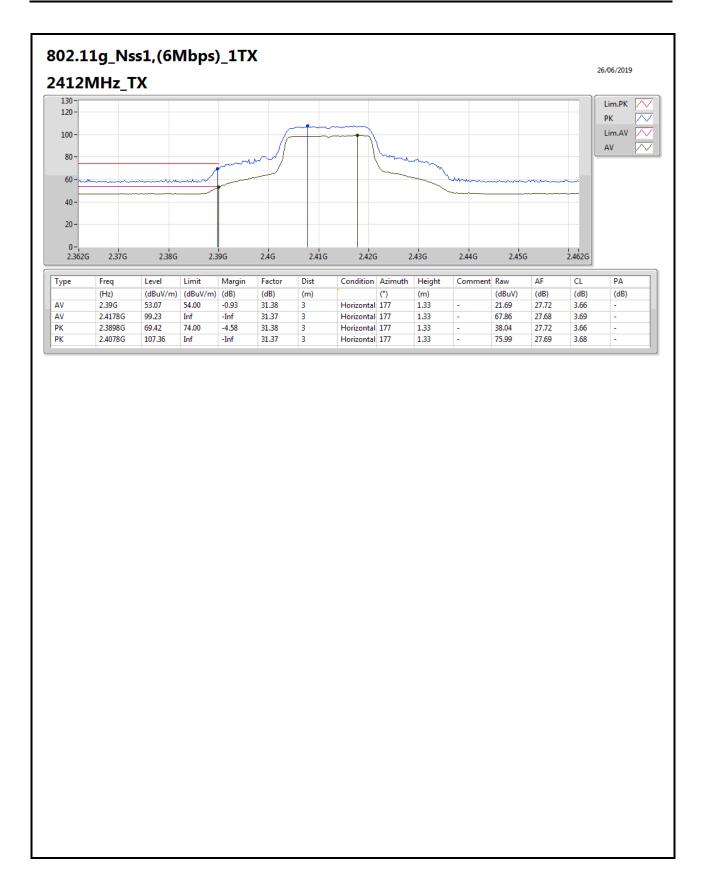


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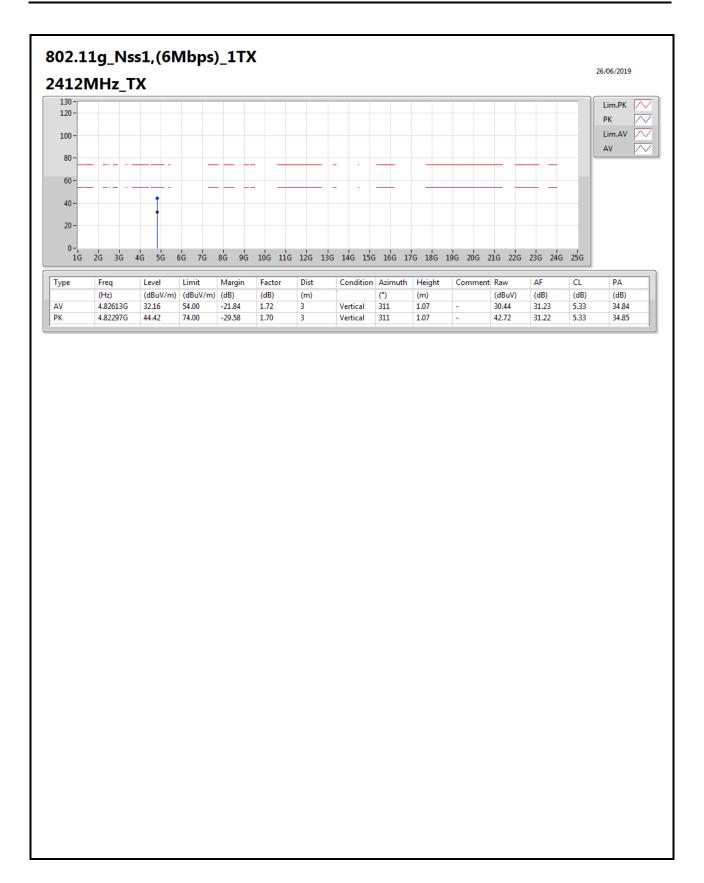




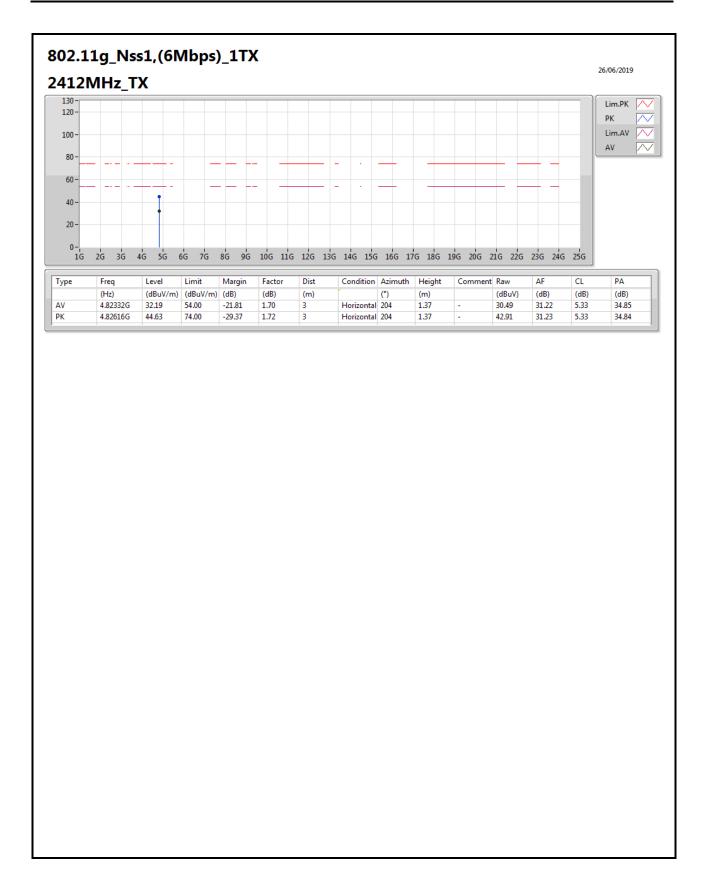




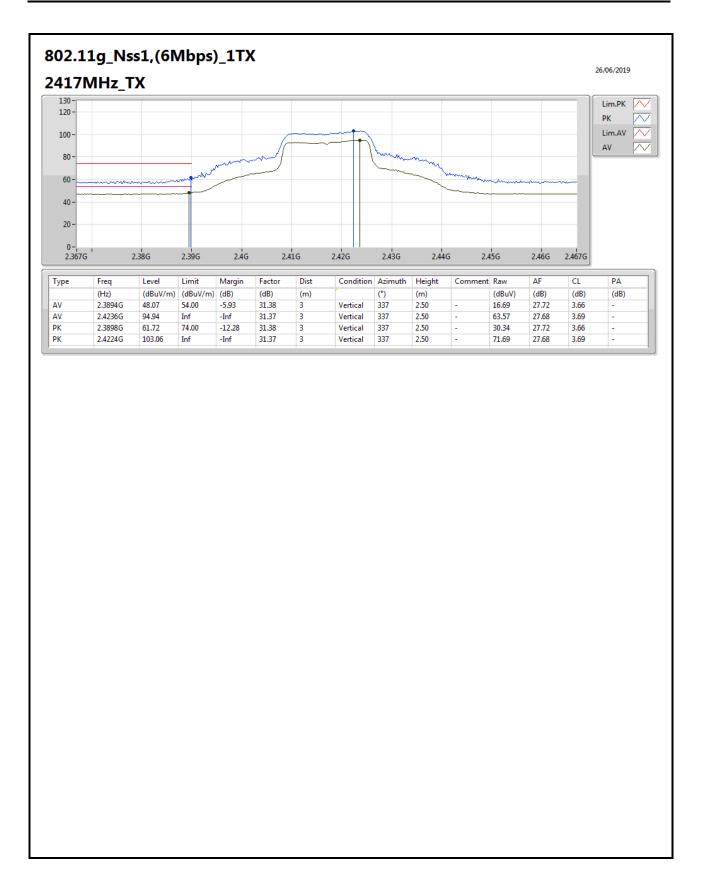




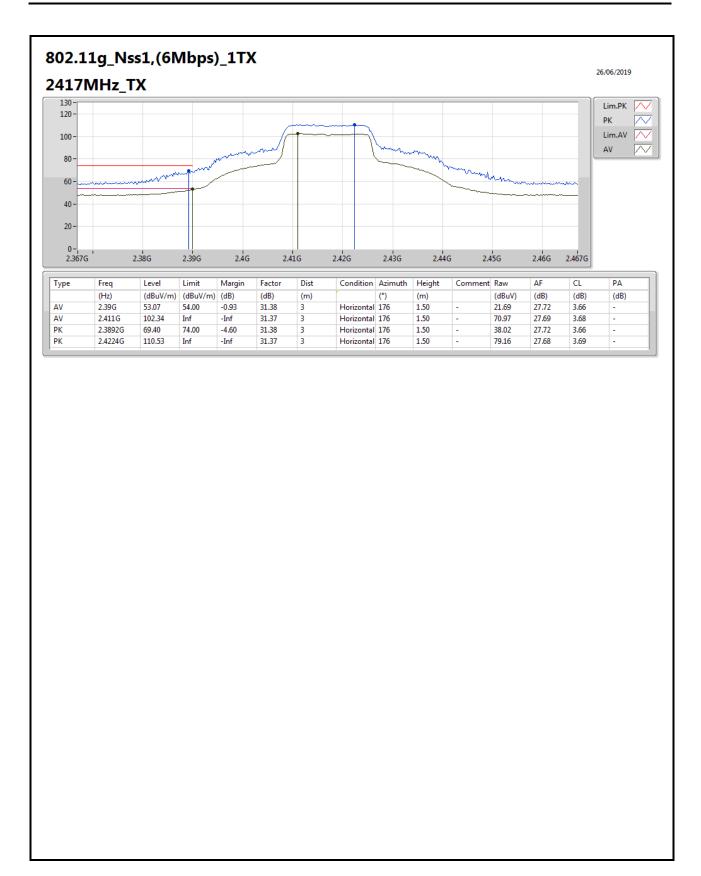




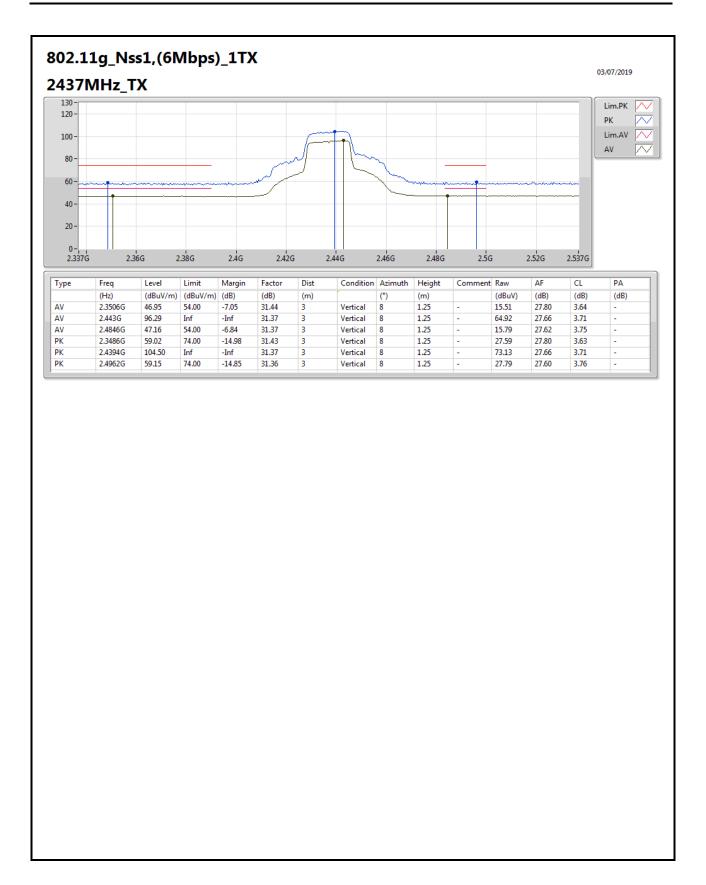




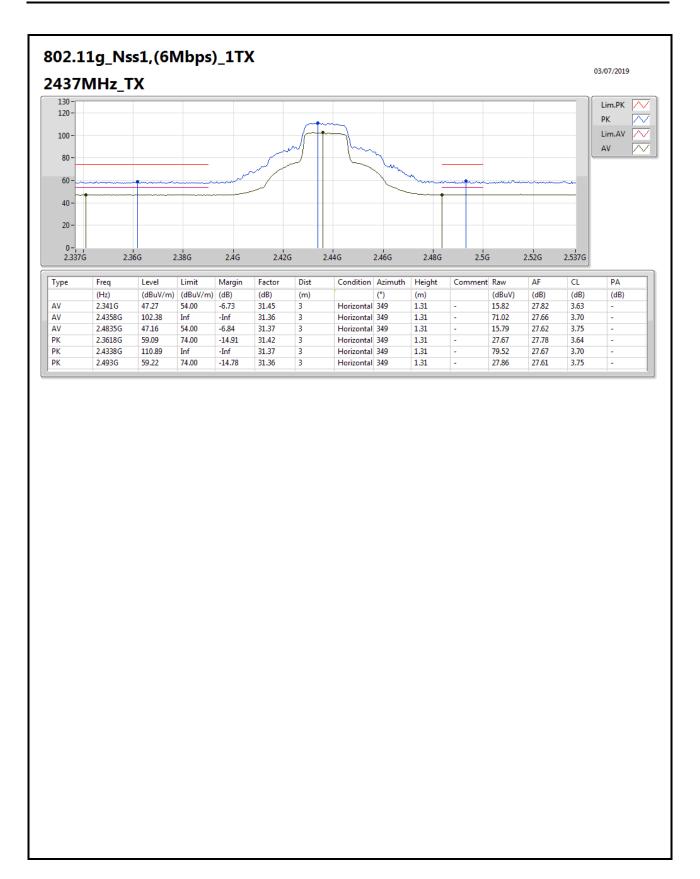




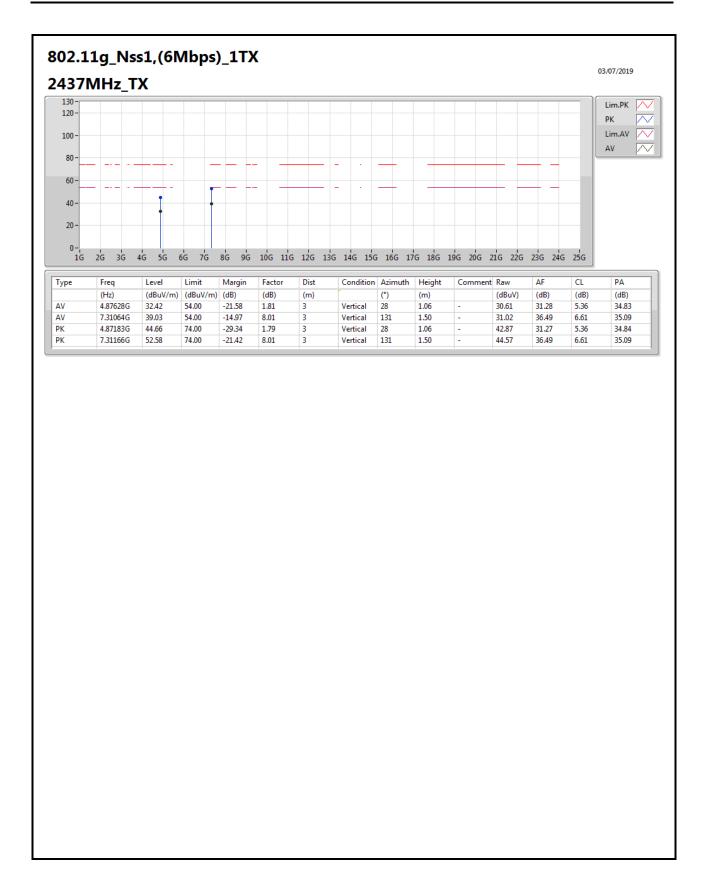




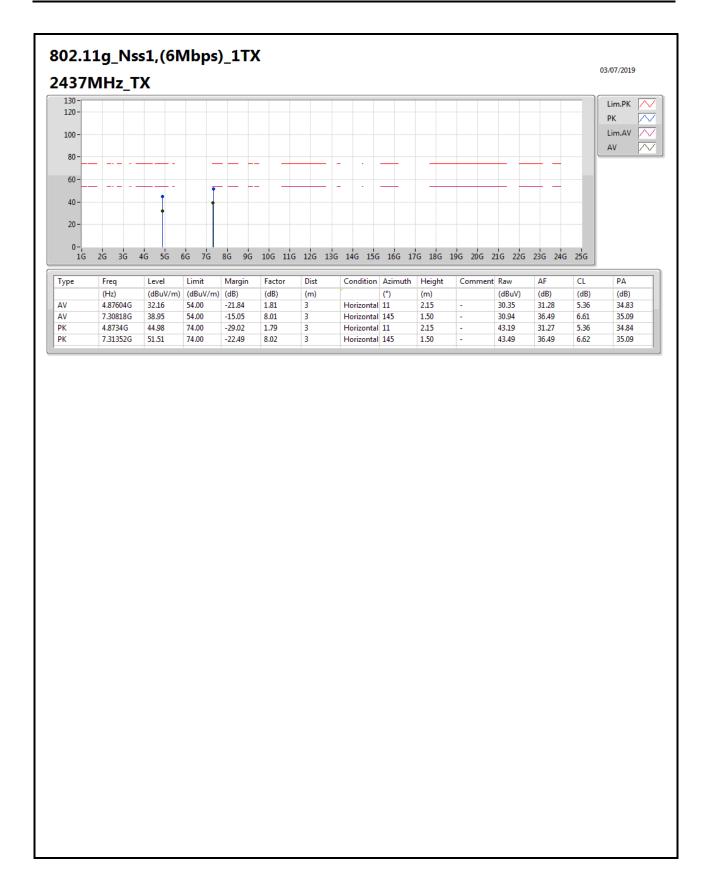






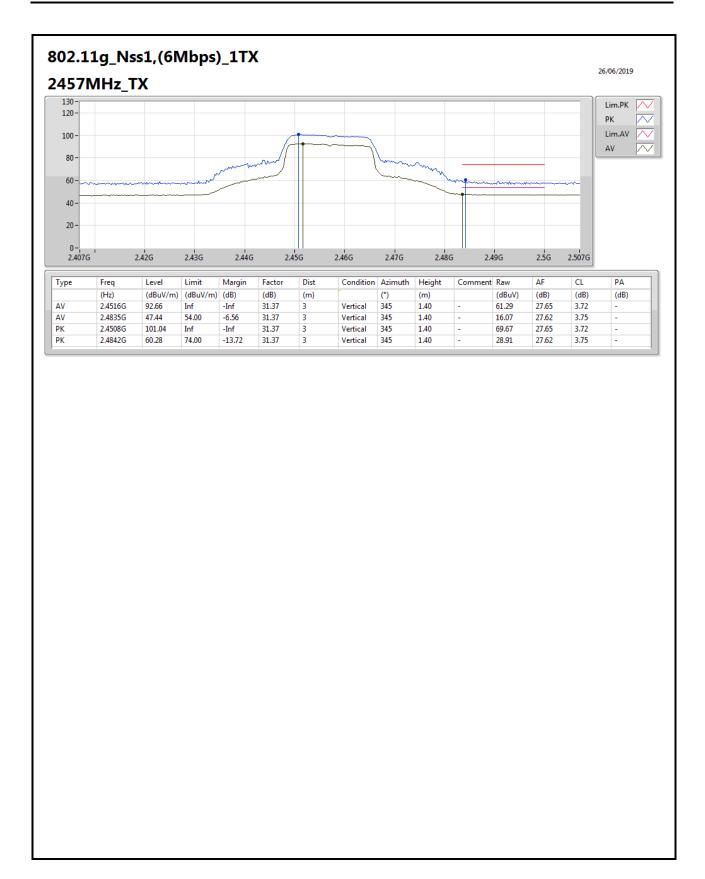




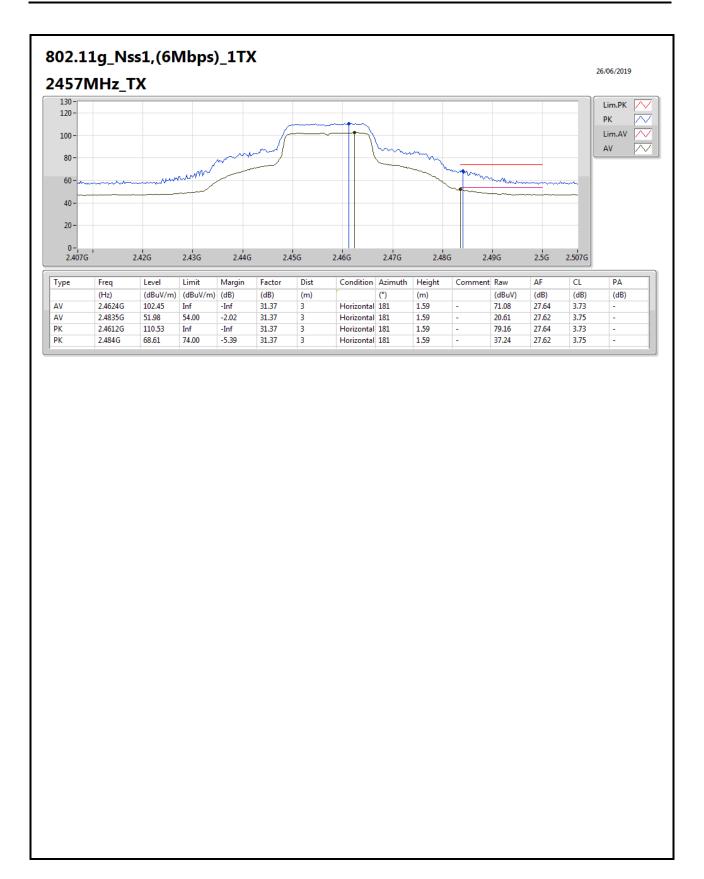


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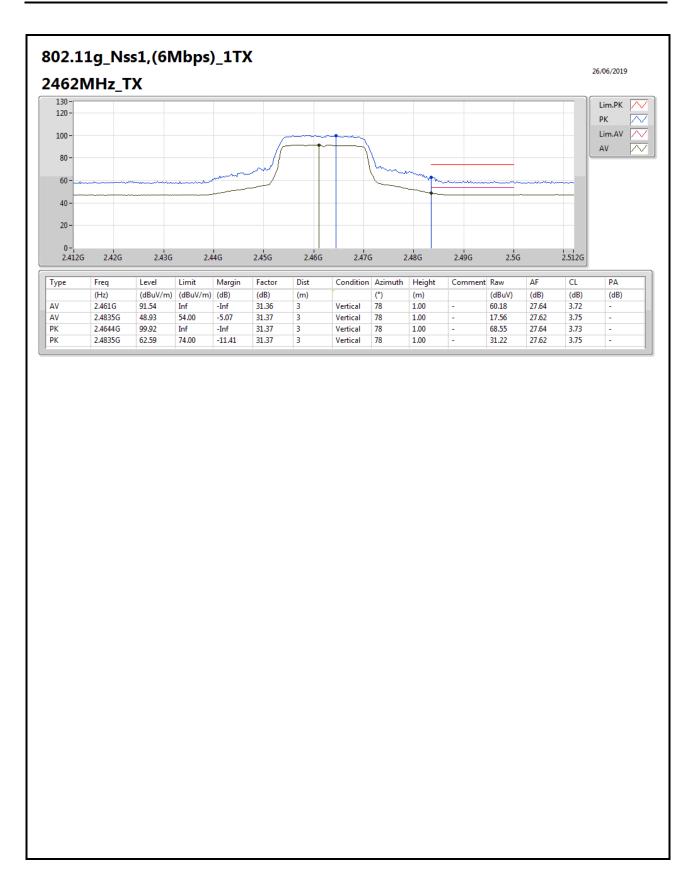




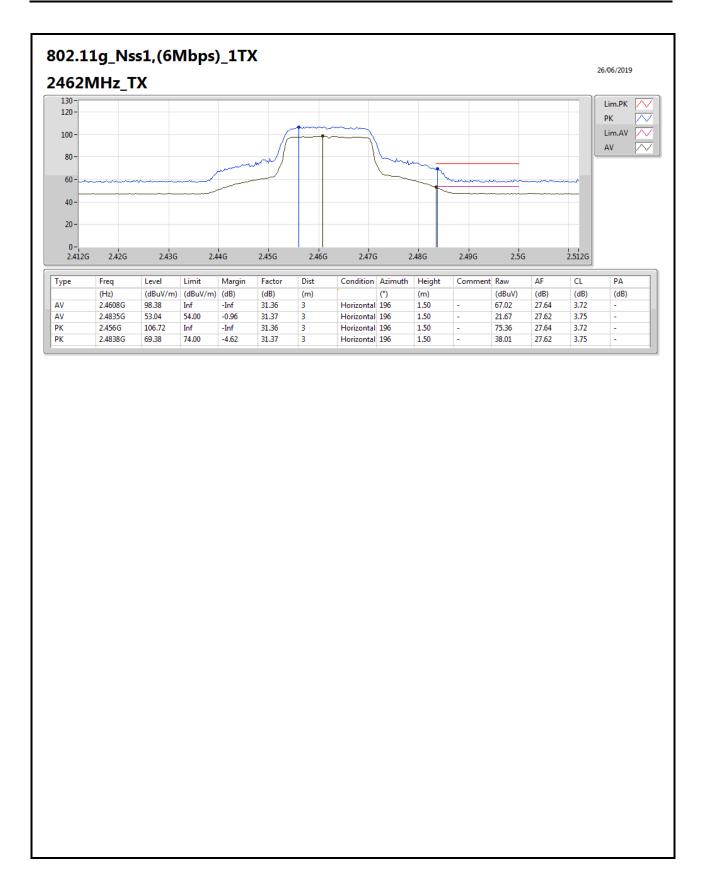




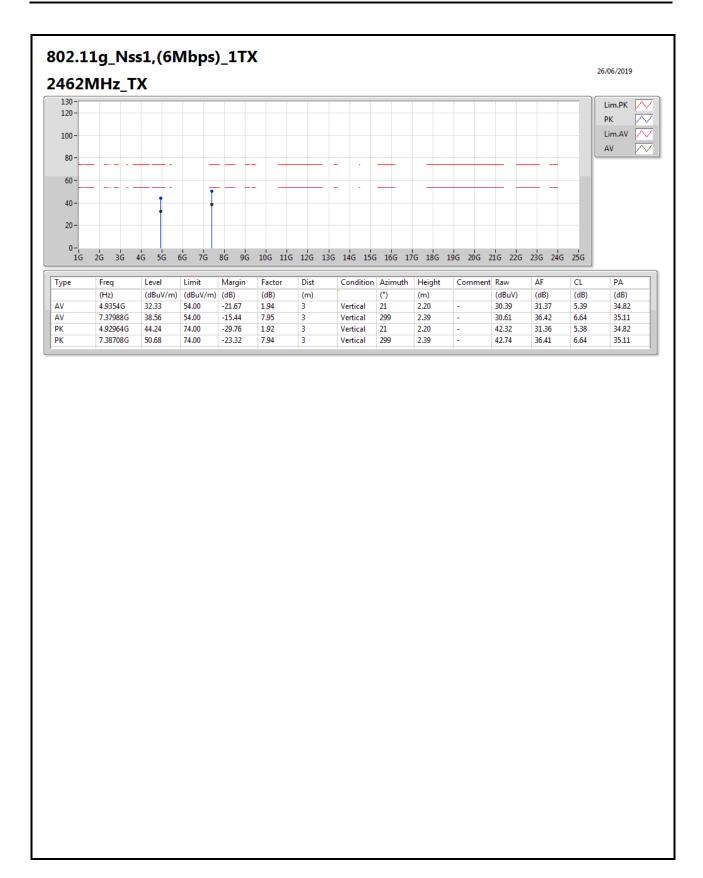




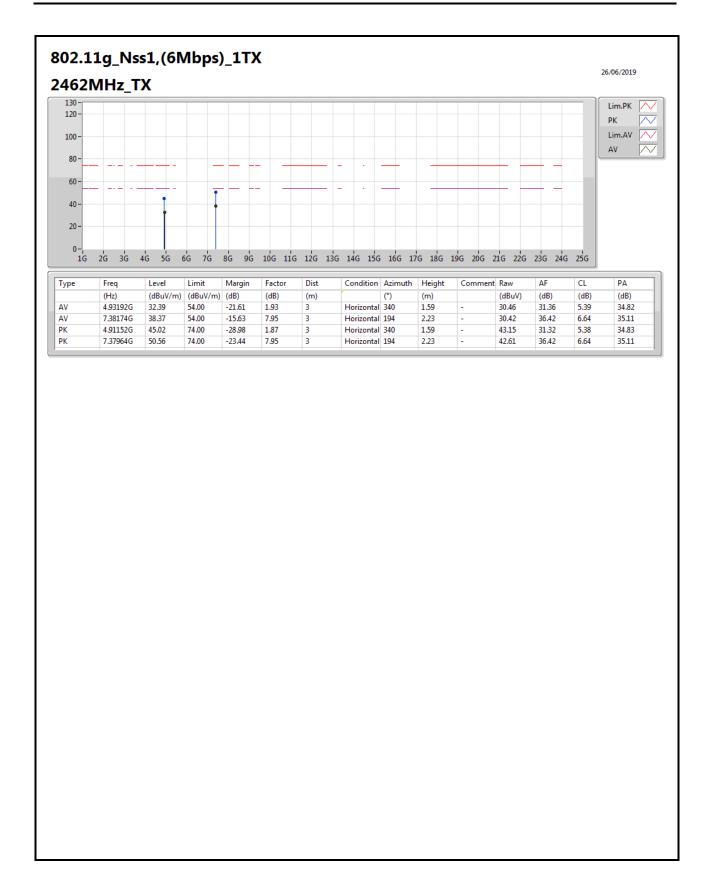






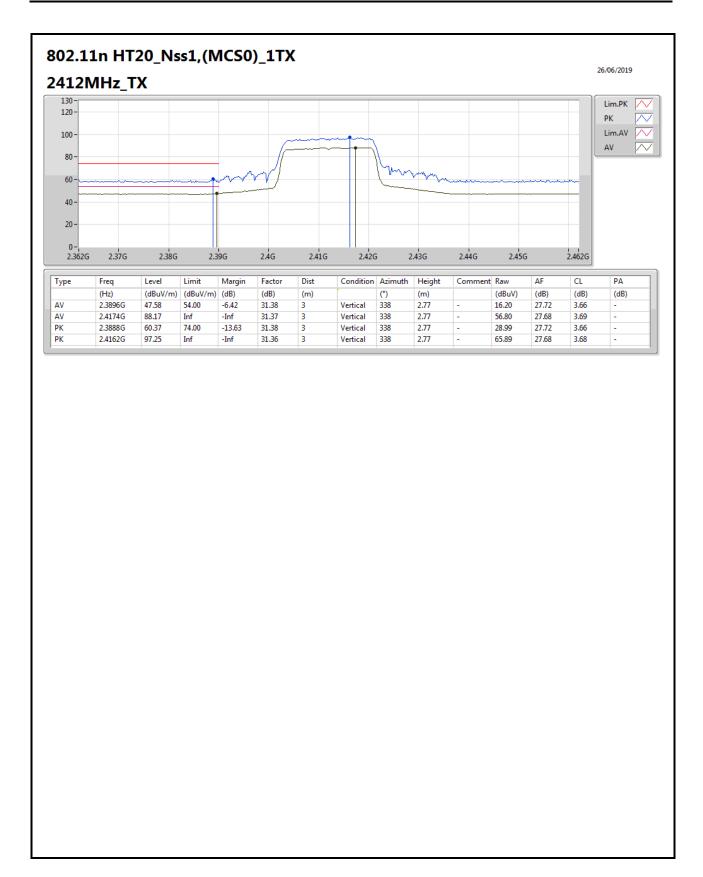




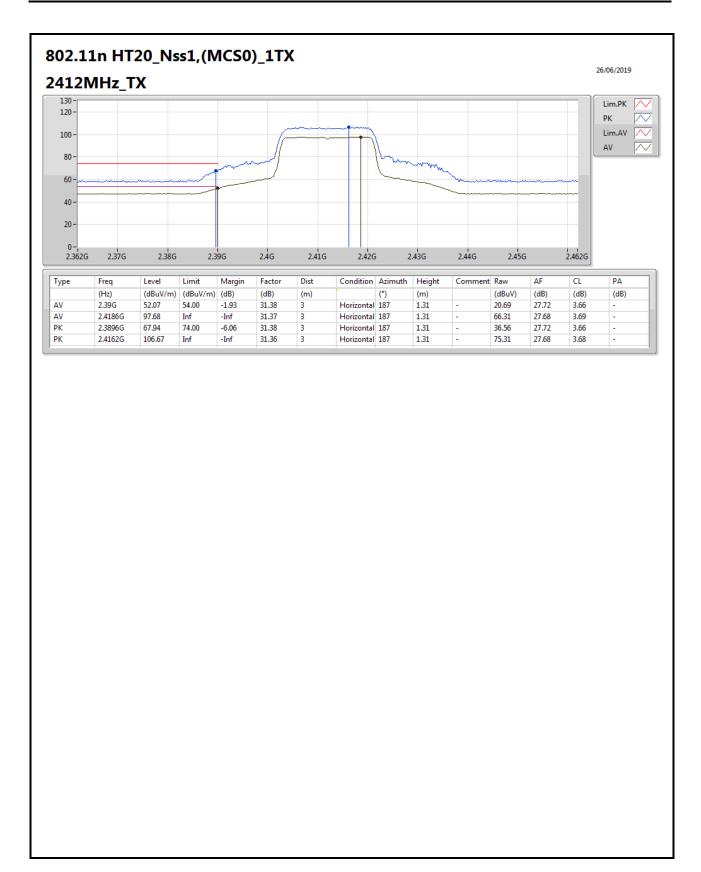


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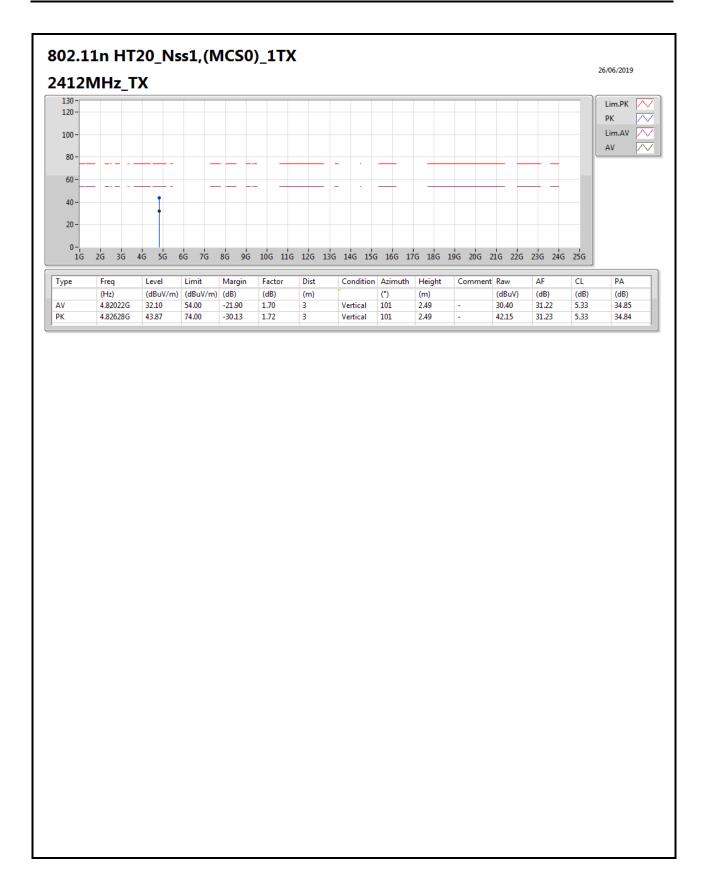






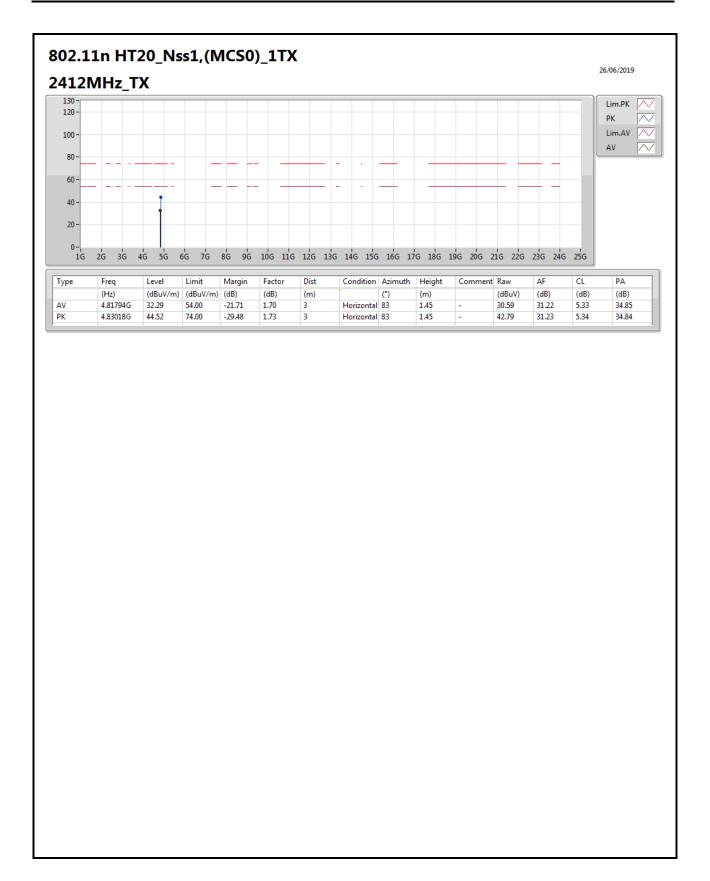




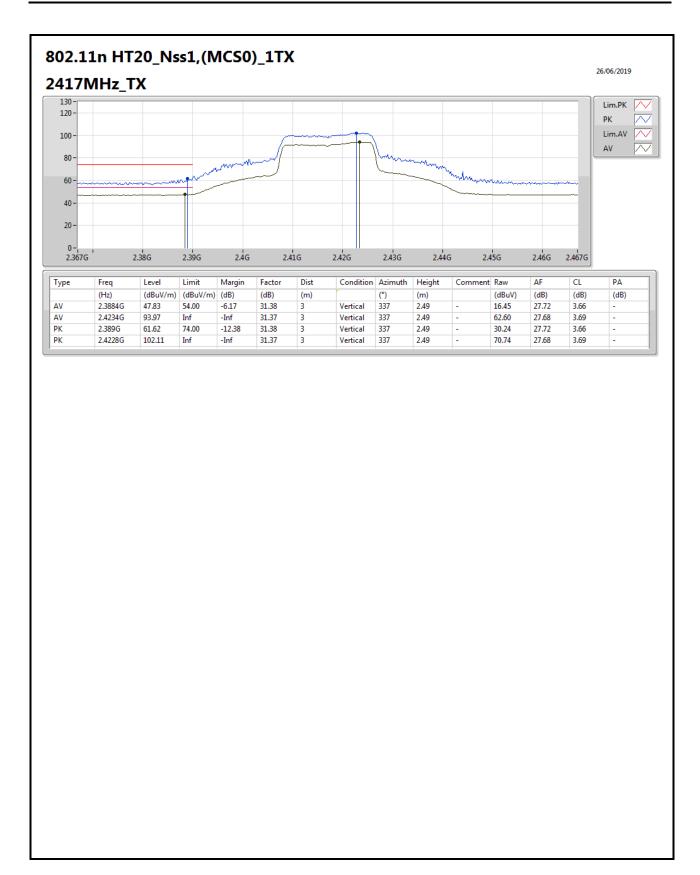


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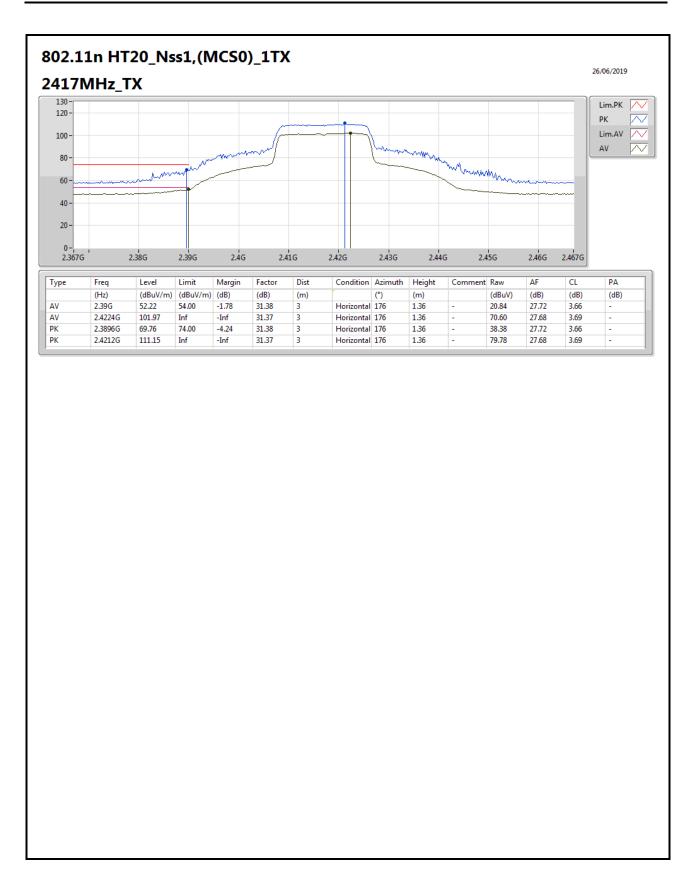




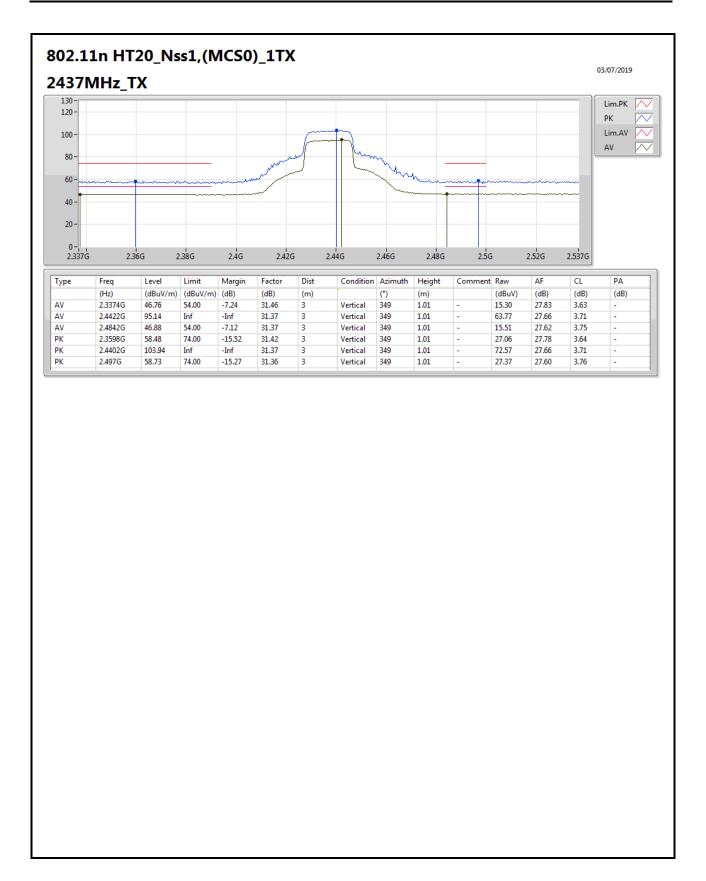




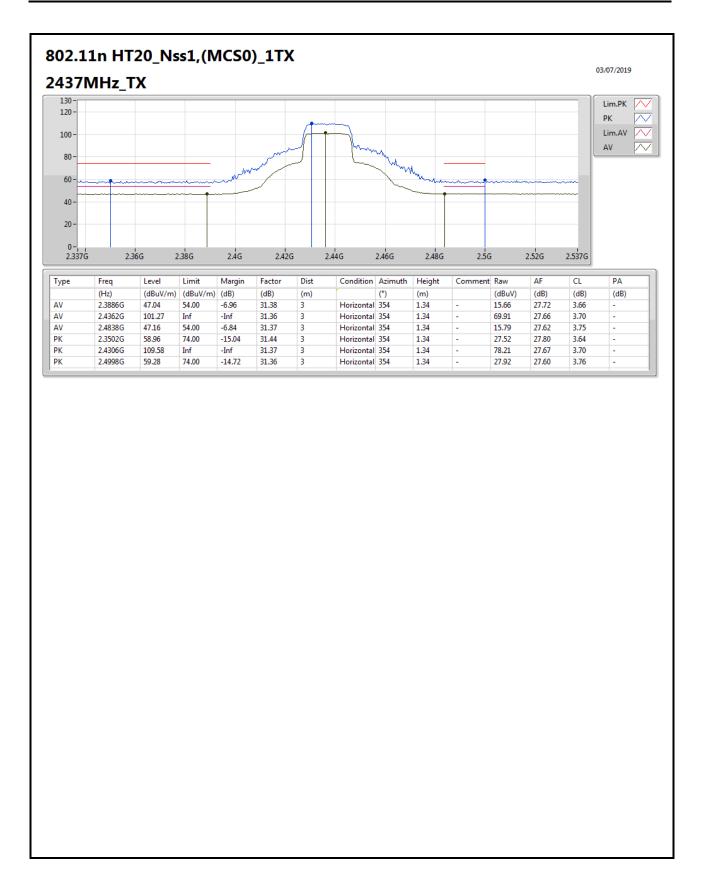




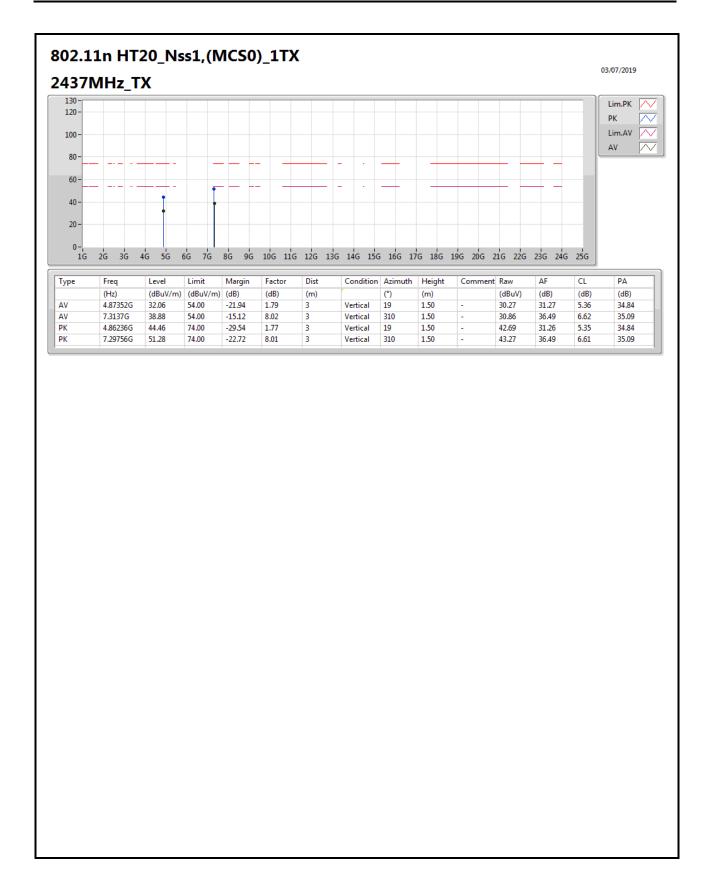






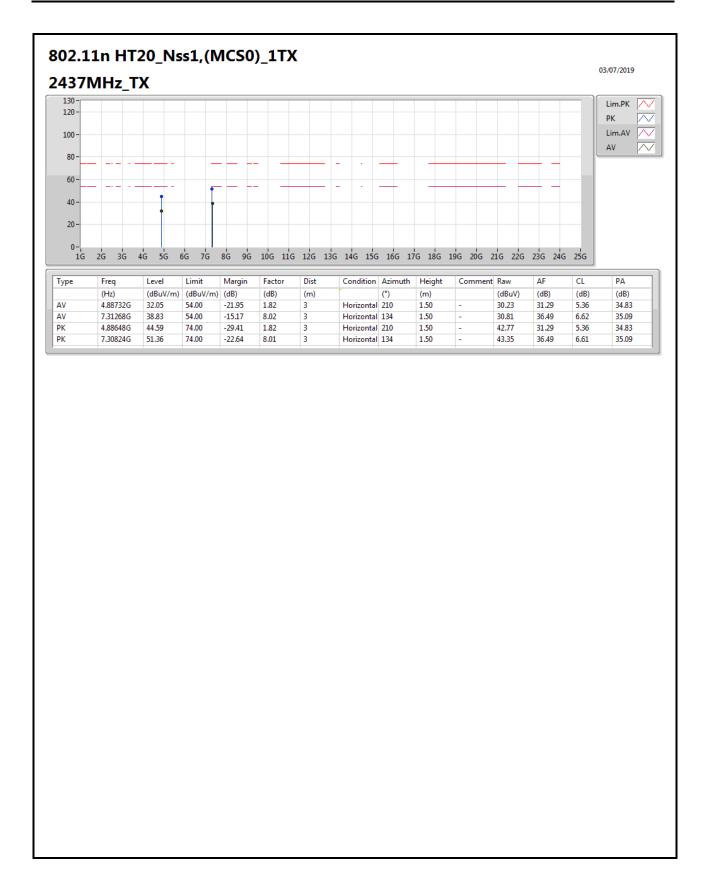






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