

Report No.: FR4O0804-02AC

# FCC Test Report

**Equipment Mobile Terminal System** 

**Brand Name POSIFLEX** 

Model No. MT-4XXXXXX(where X can be 0-9, A-Z,blank or symbol)

**FCC ID** V93MT4300W

Standard 47 CFR FCC Part 15.247

**Operating Band** : 2400 MHz - 2483.5 MHz

**Function** : Point-to-multipoint; Point-to-point

POSIFLEX TECHNOLOGY, INC. **Applicant** 

No.23, Datong St., Tucheng Dist., New Taipei City

23679, Taiwan (R.O.C.)

Manufacturer : POSIFLEX TECHNOLOGY, INC.

No.23, Datong St., Tucheng Dist., New Taipei City

23679, Taiwan (R.O.C.)

The product sample received on Mar. 06, 2017 and completely tested on Oct. 11, 2017. 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.

Phoenix Chen / Assistant Manager



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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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# **Revision History**

Rev. 01	Initial issue of report	Oct. 25, 2017
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#### **General Description** 1

#### 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]

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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, HT20 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- BWch is the nominal channel bandwidth.

### 1.1.2 Antenna Information

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	1	Unictron	HE014	PCB Antenna	I-PEX	0.6

### 1.1.3 EUT Information

	Operational Condition					
EU.	EUT Power Type From AC Adapter					
RF	Chip	AP	6255			
Bea	amforming Function	n 🗆	With beamforming	ng [	$\boxtimes$	Without beamforming
			Т	Type of	f EU	ІТ
$\boxtimes$	Stand-alone					
	Combined (EUT wh	ere the	radio part is fully	integra	atec	within another device)
	Combined Equipme	ent - Bra	and Name / Mode	l No.:		
	Plug-in radio (EUT intended for a variety of host systems)					
Host System - Brand Name / 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	0.99	0.044	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11g	0.93	0.315	1.398m	1k
802.11n HT20	0.921	0.357	1.309m	1k

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# 1.2 Testing Applied Standards

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

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- 47 CFR FCC Part 15
- ANSI C63.10-2013
- KDB 558074 D01 v04

# 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	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 No. TW0006 with FCC.							

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-HY	Ryan	24.5°C / 65%	11/Oct/2017
Radiated	03CH02-HY	Andy	23.5°C / 55%	03/Aug/2017
AC Conduction	CO04-HY	Eric	23.5°C / 55%	25/Sep/2017

# 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)	3.6 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	2.1 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	2.6 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	2.9 dB	Confidence levels of 95%
Conducted Emission	1.3 dB	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

# 2.2 Test Channel Mode

Test Software	Dos
---------------	-----

Mode	Power Setting
802.11b_Nss1,(1Mbps)_1TX	-
2412MHz	57
2437MHz	57
2462MHz	57
802.11g_Nss1,(6Mbps)_1TX	-
2412MHz	54
2437MHz	54
2462MHz	54
802.11n HT20_Nss1,(MCS0)_1TX	-
2412MHz	56
2437MHz	56
2462MHz	56

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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	Adapter mode	

Т	The 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 From	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	СТХ			
1	Adapter mode			
Operating Mode > 1GHz	СТХ			
	X Plane	Y Plane	Z Plane	
Orthogonal Planes of EUT				
Worst Planes of EUT			V	

The Worst Case Mode for Following Conformance Tests		
Simultaneous Transmission Analysis		
Radiated measurement		
СТХ		
Bluetooth+WLAN 2.4GHz		
Bluetooth+WLAN 5GHz		

Refer to Sporton Test Report No.: FA4O0804-02 for Co-location RF Exposure Evaluation and Appendix G for Radiated Emission Co-location.

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# 2.4 Accessories

Accessories				
	Brand Name	AOEM	Model Name	ADS0248T-W050300
AC Adapter	Power Rating	I/P: 100- 240 V~50-60Hz 0.6 A, O/P: 5 V===3.0 A		
Power Cord 1.19 meter, non-shielded cable, w/o ferrite core			rrite core	
USB Cable	Brand Name	-	Model Name	-
Signal Line		0.06 meter, non-shielded cable		
Rechargeable Li-ion Polymer	Brand Name	McNair	Model Name	MLP3872134
Battery	Power Rating	3.7 V===4800 mAh 17.76Wh		
Rechargeable Li-ion Battery	Brand Name	POSIFLEX	Model Name	RB-3000
Pack	Power Rating	3.7 V===5000 mAh 18	8.5Wh	

# 2.5 Support Equipment

		Support Equipment -	RF Conducted	
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E5410	DoC
2	Adapter for NB	DELL	HA65NM130	DoC
3	AC Source	G.W	APS-9102	N/A

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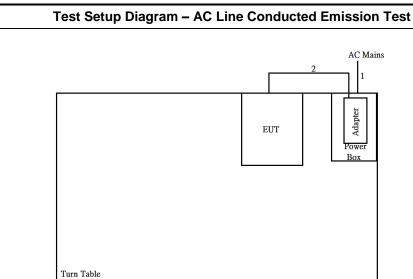
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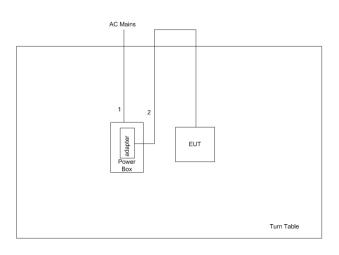
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#### **Test Setup Diagram** 2.6



Item	Connection	Shielded	Length(m)	Remark
1	AC Power line	No	1.8	-
2	DC Power line	No	1.19	-

# **Test Setup Diagram - Radiated Test**



Item	Connection	Shielded	Length(m)	Remark
1	AC Power line	No	1.8	-
2	DC Power line	No	1.19	-

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3 Transmitter Test Result

# 3.1 AC Power-line Conducted Emissions

### 3.1.1 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

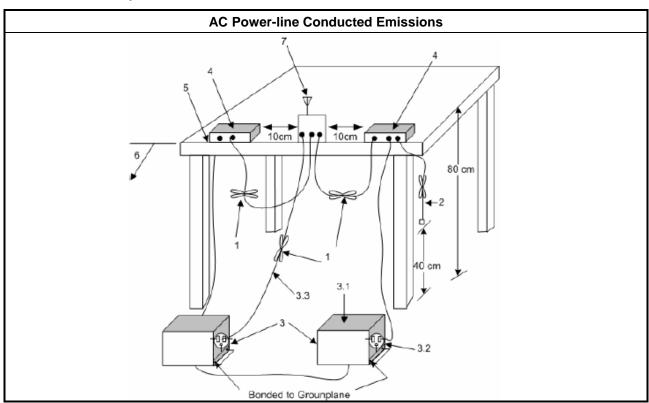
# 3.1.2 Measuring Instruments

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

### 3.1.3 Test Procedures

	Test Method
⊠ R	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.					

# 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 8.1 Option 1 for 6 dB bandwidth measurement.							
	Refer as KDB 558074, clause 8.2 Option 2 for 6 dB bandwidth measurement.							
	Refer as RSS-Gen, clause 6.6 for for occupied bandwidth testing.							
	Refer as ANSI C63.10, clause 6.9.3 for occupied bandwidth testing.							

# 3.2.4 Test Setup

Emission Bandwidth					
Spectrum Analyzer					

# 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**

ximum Conducted Output Power Limit								
•	■ If $G_{TX} \le 6$ dBi, then $P_{Out} \le 30$ 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 <sub>TX</sub> > 6 dBi, then P <sub>Out</sub> = 30 - (G <sub>TX</sub> - 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							
.r.p. l	Power Limit:							
240	2400-2483.5 MHz Band							
•	Point-to-multipoint systems (P2M): P <sub>eirp</sub> ≤ 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 <sub>eirp</sub> ≤ MAX(36, P <sub>Out</sub> + G <sub>TX</sub> ) dBm							
	- Overlap beam: P <sub>eirp</sub> ≤ MAX(36, P <sub>Out</sub> + G <sub>TX</sub> ) dBm							
$\neg$	- Aggregate power on all beams: P <sub>eirp</sub> ≤ MAX(36, [P <sub>Out</sub> + G <sub>TX</sub> + 8]) dBm							

# 3.3.2 Measuring Instruments

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

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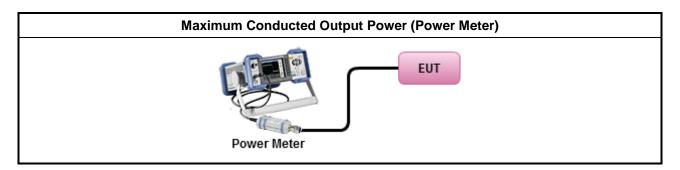
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### 3.3.3 Test Procedures

	Test Method					
•	Maximum Peak Conducted Output Power					
	☐ Refer as KDB 558074, clause 9.1.1 Option 1 (RBW ≥ EBW method).					
	Refer as KDB 558074, clause 9.1.2 Option 2 (integrated band power method)					
	☐ Refer as KDB 558074, clause 9.1.3 Option 3 (peak power meter for VBW ≥ DTS BW)					
•	Maximum Average Conducted Output Power					
	Duty cycle ≥ 98%					
	Refer as KDB 558074, clause 9.2.2.4 Method AVGSA-2 (spectral trace averaging).					
	Duty cycle < 98%					
	Refer as 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 KDB 558074, clause 9.2.3.1 Method AVGPM (using an RF average 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 <sub>total</sub> = P <sub>1</sub> + P <sub>2</sub> + + P <sub>n</sub> (calculated in linear unit [mW] and transfer to log unit [dBm])  EIRP <sub>total</sub> = P <sub>total</sub> + DG					

# 3.3.4 Test Setup



# 3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

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# 3.4 Power Spectral Density

### 3.4.1 Power Spectral Density Limit

#### **Power Spectral Density Limit**

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

### 3.4.2 Measuring Instruments

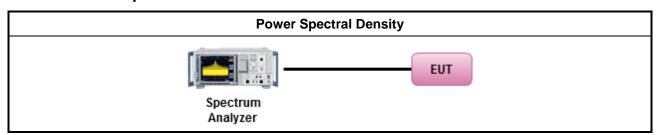
Refer a test equipment and calibration data table in this test report.

#### 3.4.3 Test Procedures

#### **Test Method**

- Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option).
  - Refer as KDB 558074, clause 10.2 Method PKPSD (RBW=3-100kHz; Detector=peak).
- 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			

- 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.

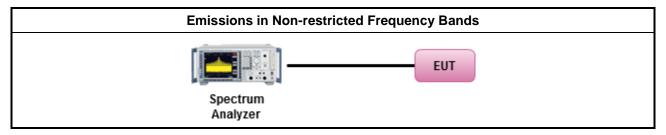
# 3.5.2 Measuring Instruments

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

#### 3.5.3 Test Procedures

Test Method	
<ul> <li>Refer as KDB 558074, clause 11 for unwanted emissions into non-restricted bands.</li> </ul>	

### 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							
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.

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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 12 for unwanted emissions into restricted bands.
    - Refer as KDB 558074, clause 12.2.5.3 (ANSI C63.10, clause 4.1.4.2.3), Reduced VBW≥1/T.
    - Refer as 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 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 KDB 558074, clause 13.2 (ANSI C63.10, clause 6.10.6) for marker-delta method for band-edge measurements.
  - Refer as 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 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 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.

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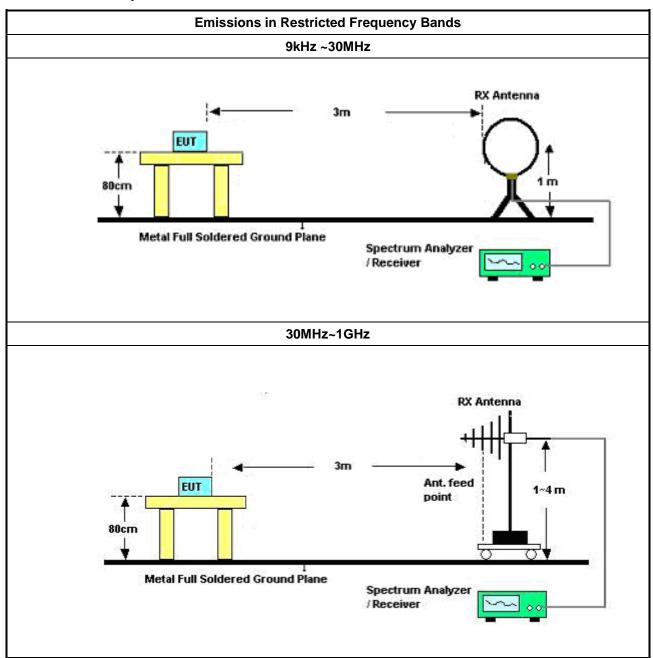
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# 3.6.4 Test Setup



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Above 1GHz

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

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4 Test Equipment and Calibration Data

### **Instrument for AC Conduction**

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMC Receiver	R&S	ESR3	102052	9KHz ~ 3.6GHz	29/Apr/2017	28/Apr/2018
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	15/Nov/2016	14/Nov/2017
RF Cable-CON	HUBER+SUHNER	RG213/U	07611832020001	9kHz ~ 30MHz	24/Oct/2016	23/Oct/2017
AC POWER	APC	AFC-11005G	F310050055	47Hz~63Hz 5~300V	NCR	NCR
Impuls Begrenzer Pulse Limiter	R&S	ESH3-Z2	100921	10 kHz ~ 30 MHz	21/Oct/2016	20/Oct/2017

NCR : Non-Calibration Require

#### **Instrument for Radiated Test**

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSP40	100593	9KHz - 40GHz	26/Oct/2016	25/Oct/2017
3m Semi Anechoic	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz-1GHz	21/Oct/2016	20/Oct/2017
3m Semi Anechoic	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz ~ 18GHz	12/Dec/2016	11/Dec/2017
Amplifier	Agilent	8447D	2944A11149	100KHz-1.3GHz	29/Jun/2017	28/Jun/2018
Amplifier	Agilent	8449B	3008A02373	1GHz-26.5GHz	02/Sep/2016	01/Sep/2017
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA9120D 01531	1GHz-18GHz	11/May/2017	10/May/2018
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	15GHz-40GHz	06/Feb/2017	05/Feb/2018
Bilog Antenna	SCHAFFNER	CBL6112B	2723	30MHz-1GHz	01/Oct/2016	30/Sep/2017
Loop Antenna	TESEQ	HLA 6120	31244	9KHz-30MHz	02/Mar/2017	01/Mar/2018
RF Cable-high	SUHNER	SUCOFLEX104	MY34918/4	1GHz ~ 40GHz	26/Jan/2017	25/Jan/2018
RF Cable-R03m	Jye Bao	RG142	CB017	9kHz ~ 1GHz	26/Jan/2017	25/Jan/2018
Receiver	R&S	ESU-26	100422/026	20Hz~26.5GHz	21/Sep/2016	20/Sep/2017

### **Instrument for Conducted Test**

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101013	9kHz~40GHz	30/Dec/2016	29/Dec/2017
Power Sensor	Anritsu	MA2411B	0917017	300MHz ~ 40GHz	10/Feb/2017	09/Feb/2018
Power Meter	Anritsu	ML2495A	0949003	300MHz ~ 40GHz	10/Feb/2017	09/Feb/2018
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	27/Jul/2017	26/Jul/2018
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10710/4	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10709/4	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018

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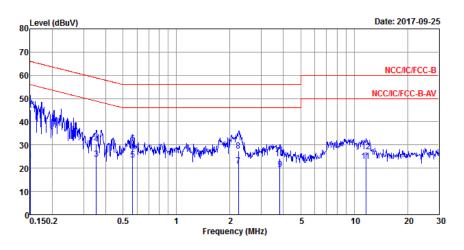
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 : Rev. 01

 Issued Date
 : Oct. 25, 2017

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# **AC Power-line Conducted Emissions**

AC Power-line Conducted Emissions Result						
Operating Mode 1 Power Phase Neutral						
Operating Function						



			Over	Limit	Kead	LISN	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
		4541		4541				
1	0.15000	23.26	-32.74	56.00	13.44	9.60	0.22	Average
2 MAX	0.15000	45.19	-20.81	66.00	35.37	9.60	0.22	OP C
3	0.35388	23.95	-24.92	48.87	14.18	9.64		Average
4	0.35388	30.44	-28.43	58.87	20.67	9.64	0.13	QP
5	0.56709	23.68	-22.32	46.00	13.97	9.61	0.10	Average
6	0.56709	30.73	-25.27	56.00	21.02	9.61	0.10	QP
7	2.23675	20.90	-25.10	46.00	10.97	9.66	0.27	Average
8	2.23675	27.51	-28.49	56.00	17.58	9.66	0.27	QP
9	3.81962	19.41	-26.59	46.00	9.59	9.71	0.11	Average
10	3.81962	24.29	-31.71	56.00	14.47	9.71	0.11	QP
11	11.62082	22.97	-27.03	50.00	13.00	9.77	0.20	Average
12	11.62082	27.22	-32.78	60.00	17.25	9.77	0.20	QP
								-

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

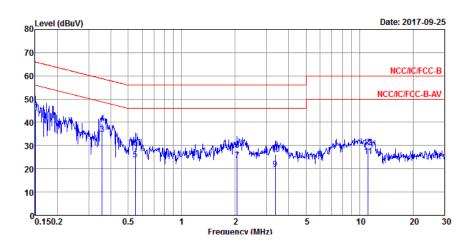
Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

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# **AC Power-line Conducted Emissions**

AC Power-line Conducted Emissions Result											
Operating Mode	Operating Mode 1 Power Phase Line										
Operating Function	Adapter mode										



			0ver	Limit	Read	LISN	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.15000	30.72	-25.28	56.00	20.84	9.66	0.22	Average
2	0.15000	45.41	-20.59	66.00	35.53	9.66	0.22	QP
3 MAX	0.35765	34.90	-13.88	48.78	25.09	9.68	0.13	Average
4	0.35765	39.55	-19.23	58.78	29.74	9.68	0.13	QP
5	0.54934	23.83	-22.17	46.00	14.07	9.66	0.10	Average
6	0.54934	28.85	-27.15	56.00	19.09	9.66	0.10	QP
7	2.05495	23.65	-22.35	46.00	13.57	9.79	0.29	Average
8	2.05495	28.15	-27.85	56.00	18.07	9.79	0.29	QP
9	3.36353	19.86	-26.14	46.00	9.93	9.78	0.15	Average
10	3.36353	26.25	-29.75	56.00	16.32	9.78	0.15	QP
11	11.19772	25.28	-24.72	50.00	15.31	9.77	0.20	Average
12	11.19772	29.10	-30.90	60.00	19.13	9.77	0.20	_
								•

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.)



EBW Result 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	8.5M	11.944M	11M9G1D	8.05M	11.794M
802.11g_Nss1,(6Mbps)_1TX	16.3M	16.492M	16M5D1D	16M	16.417M
802.11n HT20_Nss1,(MCS0)_1TX	17.25M	17.641M	17M6D1D	16.35M	17.641M

**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;

#### Result

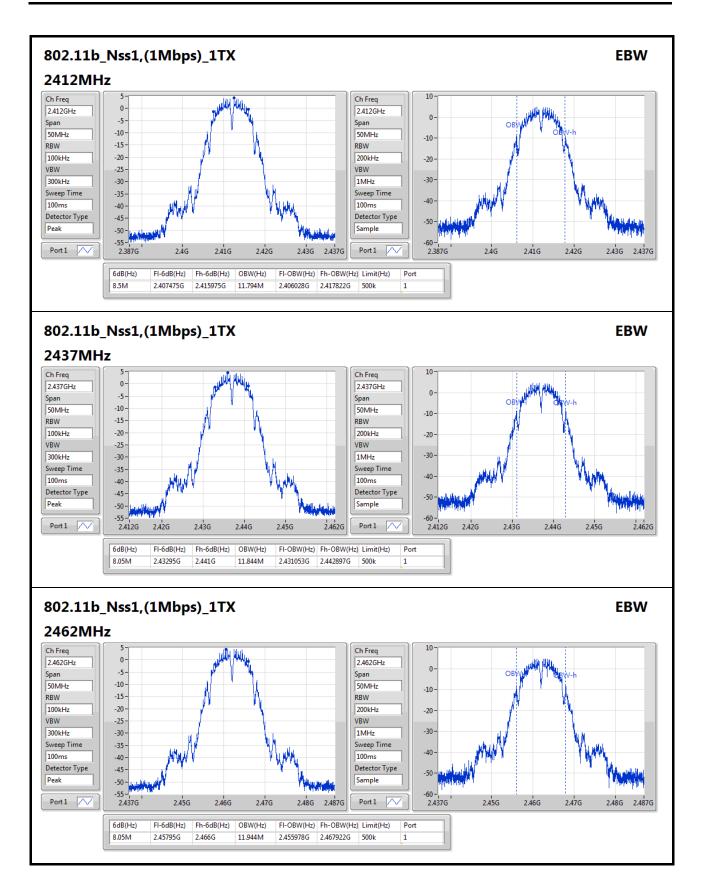
Mode	Result	Limit	Port 1-N dB	Port 1-OBW
		(Hz)	(Hz)	(Hz)
802.11b_Nss1,(1Mbps)_1TX	=	=	-	-
2412MHz_TnomVnom	Pass	500k	8.5M	11.794M
2437MHz_TnomVnom	Pass	500k	8.05M	11.844M
2462MHz_TnomVnom	Pass	500k	8.05M	11.944M
802.11g_Nss1,(6Mbps)_1TX	=	=	-	-
2412MHz_TnomVnom	Pass	500k	16.3M	16.492M
2437MHz_TnomVnom	Pass	500k	16.275M	16.467M
2462MHz_TnomVnom	Pass	500k	16M	16.417M
802.11n HT20_Nss1,(MCS0)_1TX	=	=	-	-
2412MHz_TnomVnom	Pass	500k	17.25M	17.641M
2437MHz_TnomVnom	Pass	500k	17.025M	17.641M
2462MHz_TnomVnom	Pass	500k	16.35M	17.641M

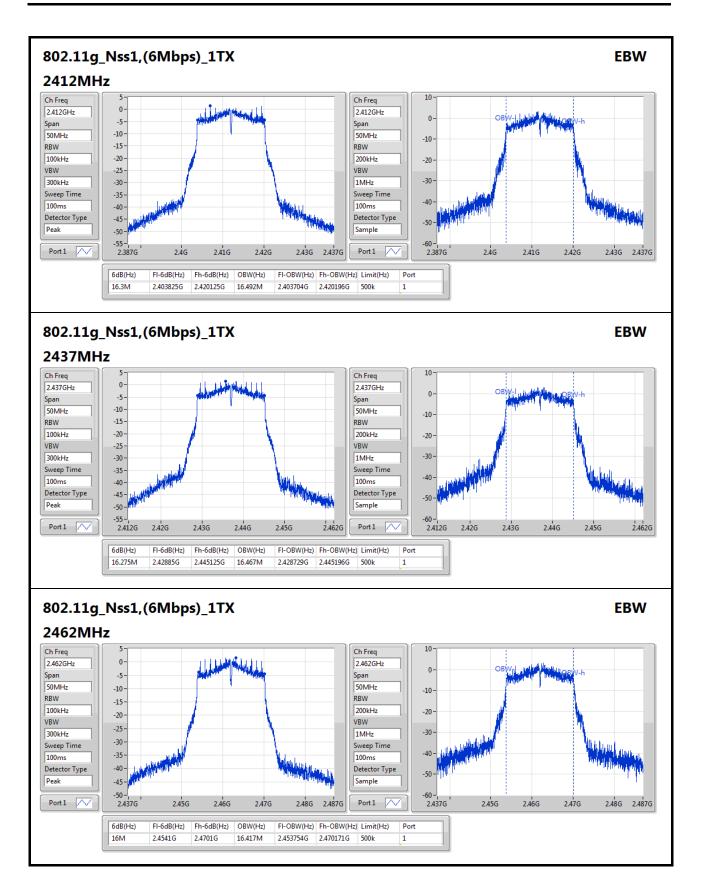
Port X-N dB = Port X 6dB down bandwidth; Port X-OBW = Port X 99% occupied bandwidth;

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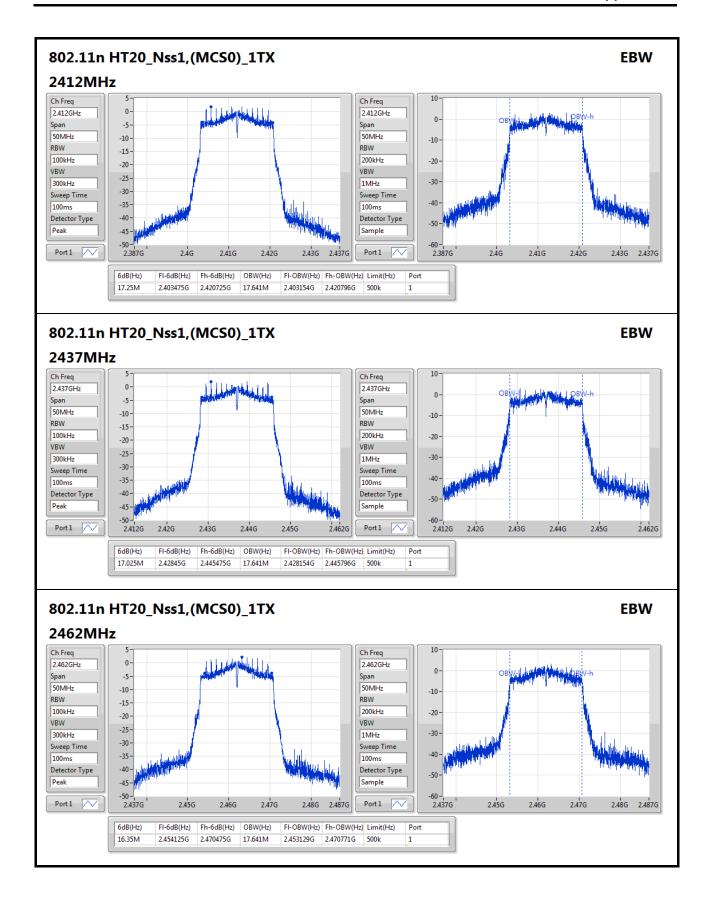
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AV Power Result Appendix C

Summary

Mode	Total Power	Total Power
	(dBm)	(W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX	12.88	0.01941
802.11g_Nss1,(6Mbps)_1TX	12.99	0.01991
802.11n HT20_Nss1,(MCS0)_1TX	12.97	0.01982

### Result

Mode	Result	DG	Port 1	Total Power	Power Limit
		(dBi)	(dBm)	(dBm)	(dBm)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz_TnomVnom	Pass	0.60	12.84	12.84	30.00
2437MHz_TnomVnom	Pass	0.60	12.88	12.88	30.00
2462MHz_TnomVnom	Pass	0.60	12.71	12.71	30.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz_TnomVnom	Pass	0.60	12.92	12.92	30.00
2437MHz_TnomVnom	Pass	0.60	12.99	12.99	30.00
2462MHz_TnomVnom	Pass	0.60	12.94	12.94	30.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz_TnomVnom	Pass	0.60	12.93	12.93	30.00
2437MHz_TnomVnom	Pass	0.60	12.97	12.97	30.00
2462MHz_TnomVnom	Pass	0.60	12.92	12.92	30.00

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

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Appendix D **PSD Result** 

**Summary** 

Mode	PD
	(dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_1TX	-9.83
802.11g_Nss1,(6Mbps)_1TX	-10.54
802.11n HT20_Nss1,(MCS0)_1TX	-10.93

RBW=3kHz.

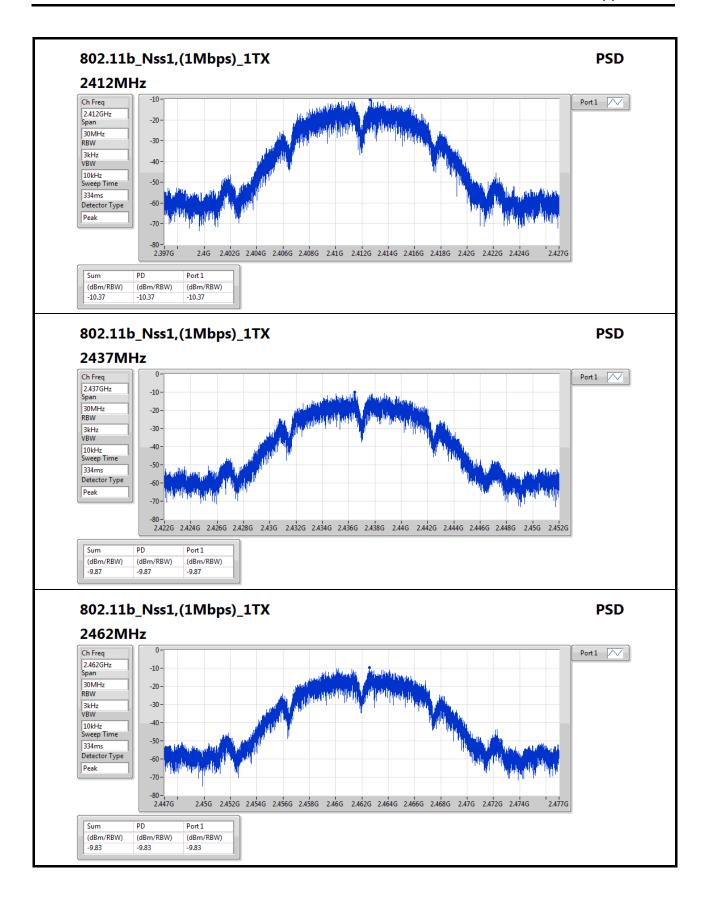
#### Result

Mode	Result	DG	Port 1	PD	PD Limit
		(dBi)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz_TnomVnom	Pass	0.60	-10.37	-10.37	8.00
2437MHz_TnomVnom	Pass	0.60	-9.87	-9.87	8.00
2462MHz_TnomVnom	Pass	0.60	-9.83	-9.83	8.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz_TnomVnom	Pass	0.60	-10.54	-10.54	8.00
2437MHz_TnomVnom	Pass	0.60	-11.53	-11.53	8.00
2462MHz_TnomVnom	Pass	0.60	-11.02	-11.02	8.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz_TnomVnom	Pass	0.60	-10.93	-10.93	8.00
2437MHz_TnomVnom	Pass	0.60	-11.27	-11.27	8.00
2462MHz_TnomVnom	Pass	0.60	-11.30	-11.30	8.00

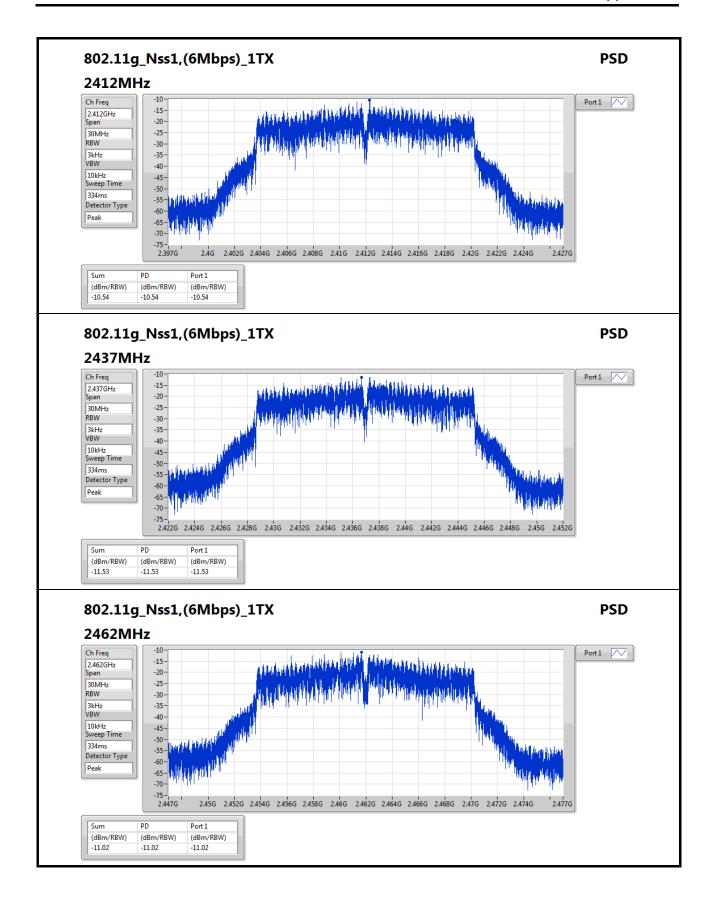
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DG = Directional Gain; RBW=3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X power density;





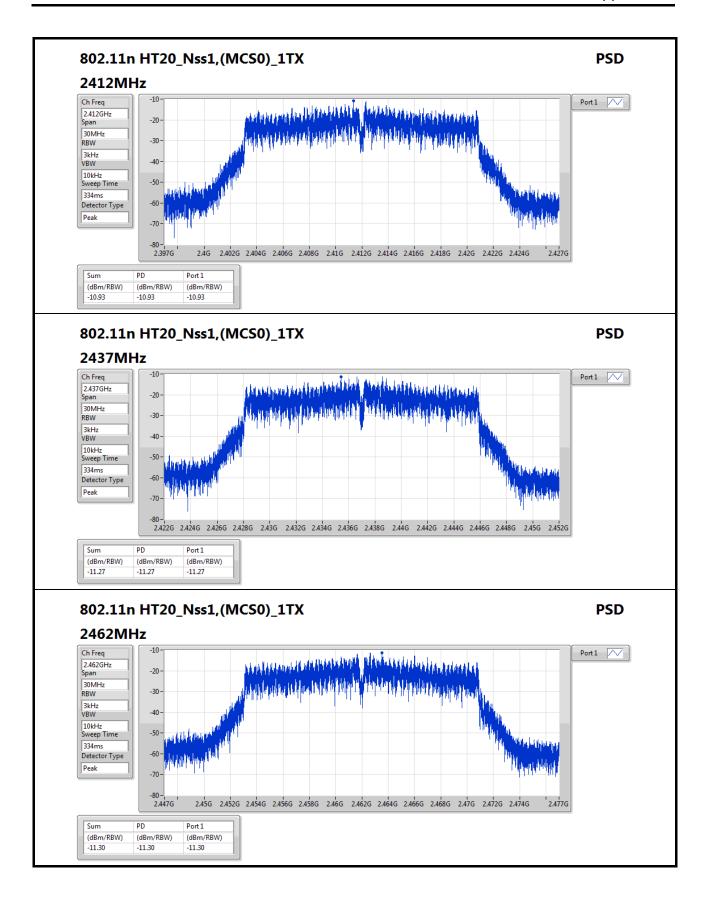




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# **CSE Non-restricted Band Result**

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	Pass	2.437909G	3.70	-26.30	1.818275G	-54.00	2.398G	-37.62	2.48982G	-52.66	6.934513G	-47.72	1
802.11g_Nss1,(6Mbps)_1TX	Pass	2.436573G	0.84	-29.16	1.79148G	-53.71	2.39952G	-34.55	2.48582G	-53.22	6.968228G	-48.04	1
802.11n HT20_Nss1,(MCS0)_1TX	Pass	2.435738G	2.06	-27.94	2.300585G	-53.05	2.39968G	-35.60	2.48366G	-52.66	6.987895G	-47.04	1

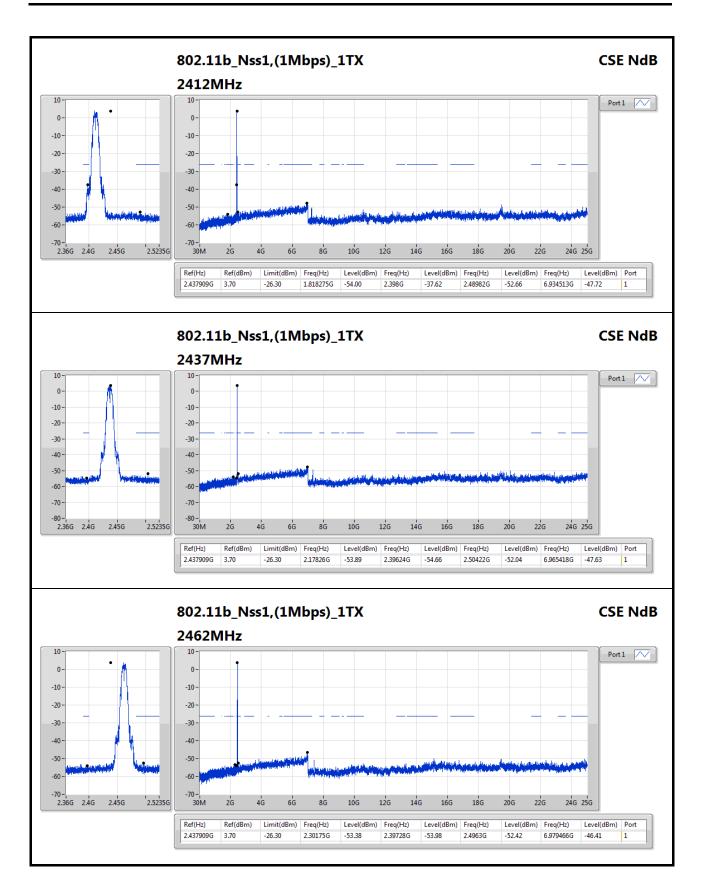
#### Result

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	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	2.437909G	3.70	-26.30	1.818275G	-54.00	2.398G	-37.62	2.48982G	-52.66	6.934513G	-47.72	1
2437MHz_TnomVnom	Pass	2.437909G	3.70	-26.30	2.17826G	-53.89	2.39624G	-54.66	2.50422G	-52.04	6.965418G	-47.63	1
2462MHz_TnomVnom	Pass	2.437909G	3.70	-26.30	2.30175G	-53.38	2.39728G	-53.98	2.4963G	-52.42	6.979466G	-46.41	1
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	2.436573G	0.84	-29.16	1.79148G	-53.71	2.39952G	-34.55	2.48582G	-53.22	6.968228G	-48.04	1
2437MHz_TnomVnom	Pass	2.436573G	0.84	-29.16	2.18059G	-53.77	2.39704G	-52.08	2.48382G	-52.44	6.926084G	-47.82	1
2462MHz_TnomVnom	Pass	2.436573G	0.84	-29.16	2.000015G	-53.60	2.39448G	-54.08	2.4839G	-41.41	6.945751G	-47.46	1
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	2.435738G	2.06	-27.94	2.300585G	-53.05	2.39968G	-35.60	2.48366G	-52.66	6.987895G	-47.04	1
2437MHz_TnomVnom	Pass	2.435738G	2.06	-27.94	1.96157G	-53.31	2.39784G	-51.96	2.48958G	-52.67	6.951371G	-47.78	1
2462MHz_TnomVnom	Pass	2.435738G	2.06	-27.94	1.64469G	-54.14	2.39064G	-54.42	2.48358G	-39.87	6.37541G	-47.95	1

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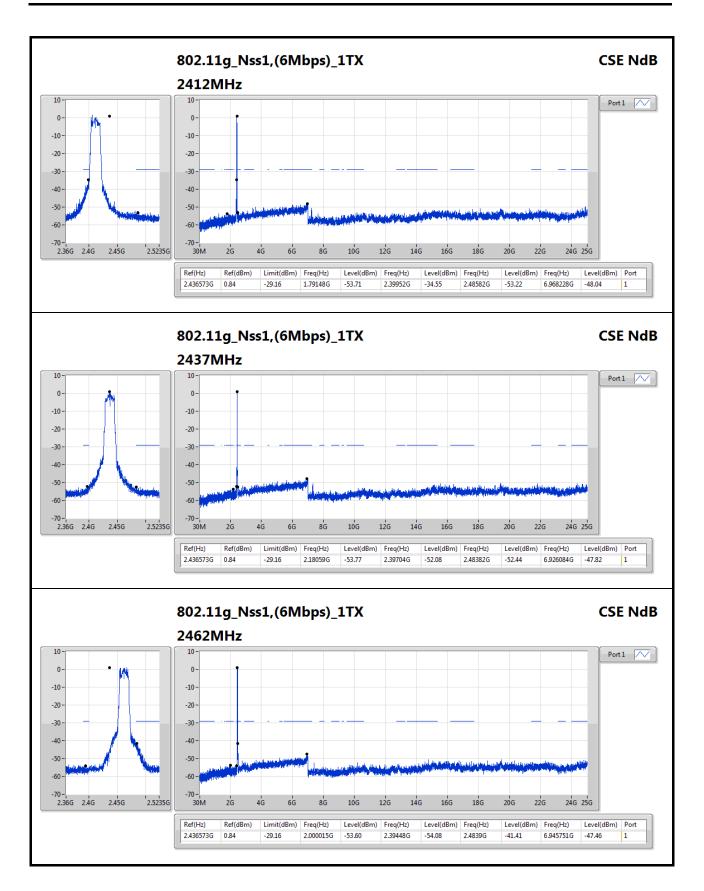




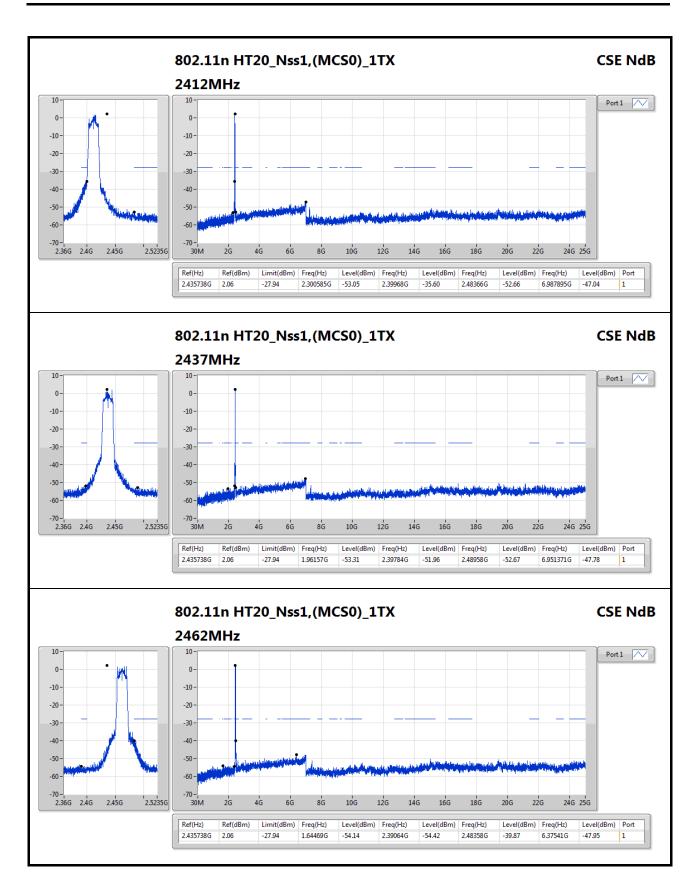
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# RSE TX below 1GHz Result

Appendix F.1

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Summary

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	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	PK	33.88M	36.13	40.00	-3.87	-6.70	3	Horizontal	0	1.00	-

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# RSE TX below 1GHz Result

# Appendix F.1

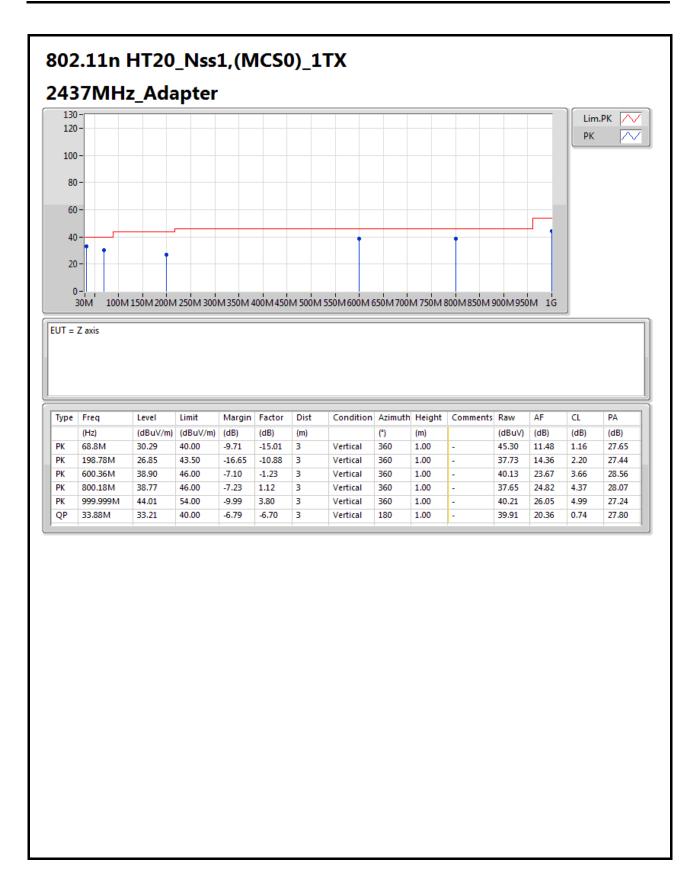
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#### Result

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	33.88M	36.13	40.00	-3.87	-6.70	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	90.14M	25.06	43.50	-18.44	-12.49	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	130.88M	27.07	43.50	-16.43	-9.10	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	600.36M	38.74	46.00	-7.26	-1.23	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	666.32M	34.15	46.00	-11.85	-0.58	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	800.18M	40.31	46.00	-5.69	1.12	3	Horizontal	0	1.00	-
2437MHz	Pass	PK	68.8M	30.29	40.00	-9.71	-15.01	3	Vertical	360	1.00	-
2437MHz	Pass	PK	198.78M	26.85	43.50	-16.65	-10.88	3	Vertical	360	1.00	-
2437MHz	Pass	PK	600.36M	38.90	46.00	-7.10	-1.23	3	Vertical	360	1.00	-
2437MHz	Pass	PK	800.18M	38.77	46.00	-7.23	1.12	3	Vertical	360	1.00	-
2437MHz	Pass	PK	999.999M	44.01	54.00	-9.99	3.80	3	Vertical	360	1.00	-
2437MHz	Pass	QP	33.88M	33.21	40.00	-6.79	-6.70	3	Vertical	180	1.00	-

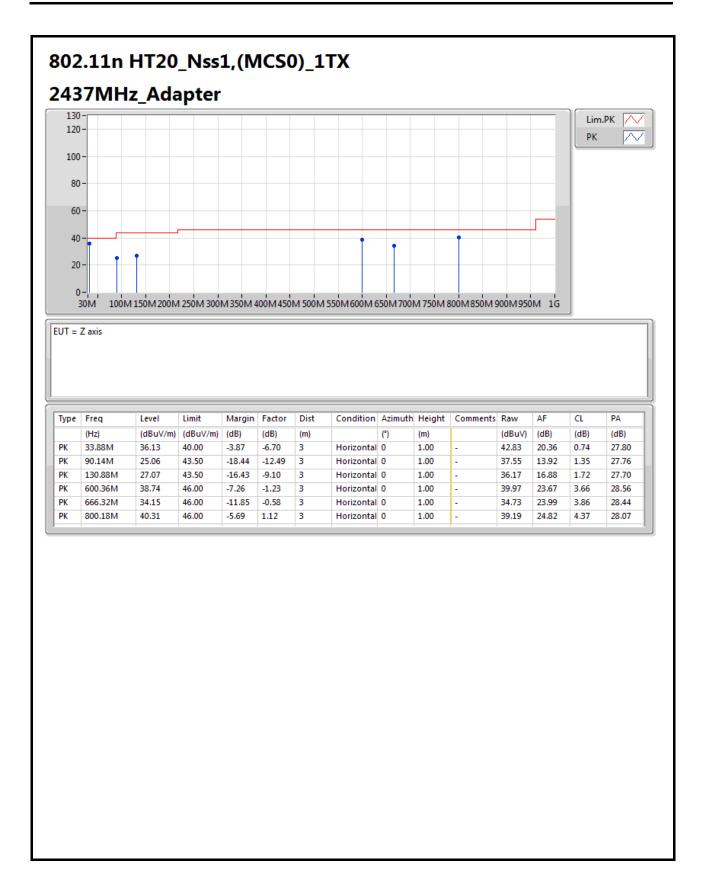
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Appendix F.2

400804-02

**Summary** 

Mode	Result	Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
			(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
802.11b_(1Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	AV	7.311G	53.78	54.00	-0.22	8.42	3	Horizontal	357	3.69	-

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#### 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_(1Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.387G	49.29	54.00	-4.71	31.16	3	Horizontal	16	1.02	-
2412MHz	Pass	AV	2.411G	87.53	Inf	-Inf	31.25	3	Horizontal	16	1.02	-
2412MHz	Pass	PK	2.3874G	59.09	74.00	-14.91	31.16	3	Horizontal	16	1.02	-
2412MHz	Pass	PK	2.411G	90.12	Inf	-Inf	31.25	3	Horizontal	16	1.02	-
2412MHz	Pass	AV	2.386G	48.85	54.00	-5.15	31.16	3	Vertical	124	3.69	-
2412MHz	Pass	AV	2.4134G	86.82	Inf	-Inf	31.26	3	Vertical	124	3.69	-
2412MHz	Pass	PK	2.3866G	59.40	74.00	-14.60	31.16	3	Vertical	124	3.69	-
2412MHz	Pass	PK	2.413G	89.73	Inf	-Inf	31.26	3	Vertical	124	3.69	-
2412MHz	Pass	AV	4.824G	33.44	54.00	-20.56	2.48	3	Horizontal	251	1.50	-
2412MHz	Pass	PK	4.824G	45.09	74.00	-28.91	2.48	3	Horizontal	251	1.50	-
2412MHz	Pass	AV	4.824G	34.83	54.00	-19.17	2.48	3	Vertical	223	2.17	-
2412MHz	Pass	PK	4.824G	45.56	74.00	-28.44	2.48	3	Vertical	223	2.17	-
2437MHz	Pass	AV	2.389998G	46.46	54.00	-7.54	31.17	3	Horizontal	18	1.01	-
2437MHz	Pass	AV	2.4358G	90.32	Inf	-Inf	31.35	3	Horizontal	18	1.01	-
2437MHz	Pass	AV	2.4878G	47.26	54.00	-6.74	31.54	3	Horizontal	18	1.01	-
2437MHz	Pass	PK	2.351G	57.75	74.00	-16.25	31.02	3	Horizontal	18	1.01	-
2437MHz	Pass	PK	2.4362G	93.14	Inf	-Inf	31.35	3	Horizontal	18	1.01	-
2437MHz	Pass	PK	2.4846G	58.25	74.00	-15.75	31.53	3	Horizontal	18	1.01	-
2437MHz	Pass	AV	2.3894G	46.44	54.00	-7.56	31.17	3	Vertical	126	3.69	-
2437MHz	Pass	AV	2.4354G	90.23	Inf	-Inf	31.34	3	Vertical	126	3.69	-
2437MHz	Pass	AV	2.499998G	47.24	54.00	-6.76	31.59	3	Vertical	126	3.69	-
2437MHz	Pass	PK	2.357G	57.77	74.00	-16.23	31.04	3	Vertical	126	3.69	-
2437MHz	Pass	PK	2.435G	93.12	Inf	-Inf	31.34	3	Vertical	126	3.69	-
2437MHz	Pass	PK	2.4878G	57.67	74.00	-16.33	31.54	3	Vertical	126	3.69	-
2437MHz	Pass	AV	4.874G	36.36	54.00	-17.64	2.55	3	Horizontal	359	3.67	-
2437MHz	Pass	AV	7.311G	53.78	54.00	-0.22	8.42	3	Horizontal	357	3.69	-
2437MHz	Pass	PK	4.874G	46.08	74.00	-27.92	2.55	3	Horizontal	359	3.67	-
2437MHz	Pass	PK	7.311G	58.72	74.00	-15.28	8.42	3	Horizontal	357	3.69	-
2437MHz	Pass	AV	4.874G	34.54	54.00	-19.46	2.55	3	Vertical	345	1.50	-
2437MHz	Pass	AV	7.311G	49.86	54.00	-4.14	8.42	3	Vertical	352	3.61	-
2437MHz	Pass	PK	4.874G	46.12	74.00	-27.88	2.55	3	Vertical	345	1.50	-
2437MHz	Pass	PK	7.311G	55.71	74.00	-18.29	8.42	3	Vertical	352	3.61	-
2462MHz	Pass	AV	2.4608G	89.76	Inf	-Inf	31.44	3	Horizontal	16	1.01	-
2462MHz	Pass	AV	2.483502G	52.27	54.00	-1.73	31.53	3	Horizontal	16	1.01	-
2462MHz	Pass	PK	2.461G	93.10	Inf	-Inf	31.44	3	Horizontal	16	1.01	-
2462MHz	Pass	PK	2.483502G	60.55	74.00	-13.45	31.53	3	Horizontal	16	1.01	-
2462MHz	Pass	AV	2.4606G	88.38	Inf	-Inf	31.44	3	Vertical	128	3.69	-
2462MHz	Pass	AV	2.483502G	51.08	54.00	-2.92	31.53	3	Vertical	128	3.69	-
2462MHz	Pass	PK	2.46G	91.43	Inf	-Inf	31.44	3	Vertical	128	3.69	-
2462MHz	Pass	PK	2.4838G	59.40	74.00	-14.60	31.53	3	Vertical	128	3.69	-
2462MHz	Pass	AV	4.924G	38.33	54.00	-15.67	2.63	3	Horizontal	42	1.05	-
2462MHz	Pass	AV	7.386G	51.49	54.00	-2.51	8.51	3	Horizontal	2	3.46	-
2462MHz	Pass	PK	4.924G	45.41	74.00	-28.59	2.63	3	Horizontal	42	1.05	-
2462MHz	Pass	PK	7.386G	56.87	74.00	-17.13	8.51	3	Horizontal	2	3.46	-
2462MHz	Pass	AV	4.924G	35.04	54.00	-18.96	2.63	3	Vertical	152	1.09	-
2462MHz	Pass	AV	7.386G	50.53	54.00	-3.47	8.51	3	Vertical	356	3.67	-
2462MHz	Pass	PK	4.924G	44.77	74.00	-29.23	2.63	3	Vertical	152	1.09	

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Mode	Result	Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	1100011	.,,,,	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
2462MHz	Pass	PK	7.386G	56.29	74.00	-17.71	8.51	3	Vertical	356	3.67	_
802.11g_(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.3898G	53.71	54.00	-0.29	31.17	3	Horizontal	16	3.66	-
2412MHz	Pass	AV	2.4126G	85.93	Inf	-Inf	31.26	3	Horizontal	16	3.66	_
2412MHz	Pass	PK	2.3874G	66.72	74.00	-7.28	31.16	3	Horizontal	16	3.66	_
2412MHz	Pass	PK	2.4128G	93.84	Inf	-Inf	31.26	3	Horizontal	16	3.66	-
2412MHz	Pass	AV	2.39G	52.06	54.00	-1.94	31.17	3	Vertical	127	3.69	-
2412MHz	Pass	AV	2.4128G	84.08	Inf	-Inf	31.26	3	Vertical	127	3.69	-
2412MHz	Pass	PK	2.3876G	63.67	74.00	-10.33	31.16	3	Vertical	127	3.69	-
2412MHz	Pass	PK	2.413G	91.91	Inf	-Inf	31.26	3	Vertical	127	3.69	-
2412MHz	Pass	AV	4.824G	32.05	54.00	-21.95	2.48	3	Horizontal	0	1.55	-
2412MHz	Pass	PK	4.824G	43.55	74.00	-30.45	2.48	3	Horizontal	0	1.55	-
2412MHz	Pass	AV	4.824G	32.17	54.00	-21.83	2.48	3	Vertical	360	1.50	-
2412MHz	Pass	PK	4.824G	43.87	74.00	-30.13	2.48	3	Vertical	360	1.50	-
2437MHz	Pass	AV	2.387G	46.38	54.00	-7.62	31.16	3	Horizontal	22	1.01	-
2437MHz	Pass	AV	2.4362G	85.37	Inf	-Inf	31.35	3	Horizontal	22	1.01	-
2437MHz	Pass	AV	2.483502G	47.46	54.00	-6.54	31.53	3	Horizontal	22	1.01	-
2437MHz	Pass	AV	4.874G	32.17	54.00	-21.83	2.55	3	Horizontal	5	3.69	-
2437MHz	Pass	AV	7.311G	47.78	54.00	-6.22	8.42	3	Horizontal	15	3.60	-
2437MHz	Pass	PK	2.3734G	57.74	74.00	-16.26	31.11	3	Horizontal	22	1.01	-
2437MHz	Pass	PK	2.4354G	93.23	Inf	-Inf	31.34	3	Horizontal	22	1.01	-
2437MHz	Pass	PK	2.4862G	59.24	74.00	-14.76	31.54	3	Horizontal	22	1.01	-
2437MHz	Pass	PK	4.874G	43.40	74.00	-30.60	2.55	3	Horizontal	5	3.69	-
2437MHz	Pass	PK	7.311G	59.98	74.00	-14.02	8.42	3	Horizontal	15	3.60	-
2437MHz	Pass	AV	2.3818G	46.28	54.00	-7.72	31.14	3	Vertical	316	1.01	-
2437MHz	Pass	AV	2.4362G	80.94	Inf	-Inf	31.35	3	Vertical	316	1.01	-
2437MHz	Pass	AV	2.483502G	47.16	54.00	-6.84	31.53	3	Vertical	316	1.01	-
2437MHz	Pass	AV	4.874G	31.91	54.00	-22.09	2.55	3	Vertical	358	3.62	-
2437MHz	Pass	AV	7.311G	45.46	54.00	-8.54	8.42	3	Vertical	355	3.61	-
2437MHz	Pass	PK	2.3686G	57.44	74.00	-16.56	31.09	3	Vertical	316	1.01	-
2437MHz	Pass	PK	2.4354G	88.90	Inf	-Inf	31.34	3	Vertical	316	1.01	-
2437MHz	Pass	PK	2.4838G	58.20	74.00	-15.80	31.53	3	Vertical	316	1.01	-
2437MHz	Pass	PK	4.874G	43.55	74.00	-30.45	2.55	3	Vertical	358	3.62	-
2437MHz	Pass	PK	7.311G	57.30	74.00	-16.70	8.42	3	Vertical	355	3.61	-
2462MHz	Pass	AV	2.4612G	86.06	Inf	-Inf	31.44	3	Horizontal	22	1.01	-
2462MHz	Pass	AV	2.483502G	53.77	54.00	-0.23	31.53	3	Horizontal	22	1.01	-
2462MHz	Pass	PK	2.4606G	93.74	Inf	-Inf	31.44	3	Horizontal	22	1.01	-
2462MHz	Pass	PK	2.4846G	67.04	74.00	-6.96	31.53	3	Horizontal	22	1.01	-
2462MHz	Pass	AV	2.4612G	86.30	Inf	-Inf	31.44	3	Vertical	134	3.69	-
2462MHz	Pass	AV	2.483502G	53.15	54.00	-0.85	31.53	3	Vertical	134	3.69	-
2462MHz	Pass	PK	2.4606G	93.97	Inf	-Inf	31.44	3	Vertical	134	3.69	-
2462MHz	Pass	PK	2.485G	65.53	74.00	-8.47	31.53	3	Vertical	134	3.69	-
2462MHz	Pass	AV	4.924G	32.53	54.00	-21.47	2.63	3	Horizontal	17	3.45	-
2462MHz	Pass	AV	7.386G	45.88	54.00	-8.12	8.51	3	Horizontal	7	3.34	-
2462MHz	Pass	PK	4.924G	44.06	74.00	-29.94	2.63	3	Horizontal	17	3.45	-
2462MHz	Pass	PK AV	7.386G	58.40	74.00	-15.60	8.51	3	Horizontal	7	3.34	-
2462MHz	Pass		4.924G	32.50	54.00	-21.50	2.63	3	Vertical		1.79	-
2462MHz	Pass	AV	7.386G	45.64	54.00 74.00	-8.36	8.51 2.63	3	Vertical	355	3.69	-
2462MHz	Pass	PK	4.924G	43.72	74.00	-30.28	2.63	3	Vertical	0	1.79	-

SPORTON INTERNATIONAL INC.

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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	Pass	PK	7.386G	57.93	74.00	-16.07	8.51	3	Vertical	355	3.69	-
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.39G	53.08	54.00	-0.92	31.17	3	Horizontal	20	3.66	-
2412MHz	Pass	AV	2.4128G	84.80	Inf	-Inf	31.26	3	Horizontal	20	3.66	-
2412MHz	Pass	PK	2.389G	67.36	74.00	-6.64	31.17	3	Horizontal	20	3.66	-
2412MHz	Pass	PK	2.4122G	93.11	Inf	-Inf	31.26	3	Horizontal	20	3.66	-
2412MHz	Pass	AV	2.39G	50.75	54.00	-3.25	31.17	3	Vertical	131	3.69	-
2412MHz	Pass	AV	2.4128G	82.96	Inf	-Inf	31.26	3	Vertical	131	3.69	-
2412MHz	Pass	PK	2.3896G	63.38	74.00	-10.62	31.17	3	Vertical	131	3.69	-
2412MHz	Pass	PK	2.413G	91.49	Inf	-Inf	31.26	3	Vertical	131	3.69	-
2412MHz	Pass	AV	4.824G	31.99	54.00	-22.01	2.48	3	Horizontal	0	1.50	-
2412MHz	Pass	PK	4.824G	44.00	74.00	-30.00	2.48	3	Horizontal	0	1.50	-
2412MHz	Pass	AV	4.824G	32.27	54.00	-21.73	2.48	3	Vertical	97	1.50	-
2412MHz	Pass	PK	4.824G	43.89	74.00	-30.11	2.48	3	Vertical	97	1.50	-
2437MHz	Pass	AV	2.3886G	46.51	54.00	-7.49	31.17	3	Horizontal	23	1.02	-
2437MHz	Pass	AV	2.4378G	85.30	Inf	-Inf	31.35	3	Horizontal	23	1.02	-
2437MHz	Pass	AV	2.4838G	47.77	54.00	-6.23	31.53	3	Horizontal	23	1.02	-
2437MHz	Pass	PK	2.347G	57.73	74.00	-16.27	31.00	3	Horizontal	23	1.02	-
2437MHz	Pass	PK	2.4362G	93.85	Inf	-Inf	31.35	3	Horizontal	23	1.02	-
2437MHz	Pass	PK	2.4894G	58.52	74.00	-15.48	31.55	3	Horizontal	23	1.02	-
2437MHz	Pass	AV	2.3882G	46.37	54.00	-7.63	31.16	3	Vertical	316	1.02	-
2437MHz	Pass	AV	2.4362G	80.81	Inf	-Inf	31.35	3	Vertical	316	1.02	-
2437MHz	Pass	AV	2.4838G	47.34	54.00	-6.66	31.53	3	Vertical	316	1.02	-
2437MHz	Pass	PK	2.3742G	56.97	74.00	-17.03	31.11	3	Vertical	316	1.02	-
2437MHz	Pass	PK	2.437G	89.37	Inf	-Inf	31.35	3	Vertical	316	1.02	-
2437MHz	Pass	PK	2.4978G	58.11	74.00	-15.89	31.58	3	Vertical	316	1.02	-
2437MHz	Pass	AV	4.874G	32.09	54.00	-21.91	2.55	3	Horizontal	360	1.50	-
2437MHz	Pass	AV	7.311G	47.55	54.00	-6.45	8.42	3	Horizontal	2	3.69	-
2437MHz	Pass	PK	4.874G	43.80	74.00	-30.20	2.55	3	Horizontal	360	1.50	-
2437MHz	Pass	PK	7.311G	59.53	74.00	-14.47	8.42	3	Horizontal	2	3.69	-
2437MHz	Pass	AV	4.874G	32.26	54.00	-21.74	2.55	3	Vertical	0	1.50	-
2437MHz	Pass	AV	7.311G	45.32	54.00	-8.68	8.42	3	Vertical	357	3.62	-
2437MHz	Pass	PK	4.874G	43.98	74.00	-30.02	2.55	3	Vertical	0	1.50	-
2437MHz	Pass	PK	7.311G	49.60	74.00	-24.40	8.42	3	Vertical	357	3.62	-
2462MHz	Pass	AV	2.4612G	85.28	Inf	-Inf	31.44	3	Horizontal	22	1.00	-
2462MHz	Pass	AV	2.483502G	53.36	54.00	-0.64	31.53	3	Horizontal	22	1.00	-
2462MHz	Pass	PK	2.462G	93.49	Inf	-Inf	31.45	3	Horizontal	22	1.00	-
2462MHz	Pass	PK	2.483502G	69.65	74.00	-4.35	31.53	3	Horizontal	22	1.00	-
2462MHz	Pass	AV	2.4612G	85.30	Inf	-Inf	31.44	3	Vertical	134	3.69	-
2462MHz	Pass	AV	2.483502G	52.84	54.00	-1.16	31.53	3	Vertical	134	3.69	
2462MHz	Pass	PK	2.4612G	93.10	Inf	-Inf	31.44	3	Vertical	134	3.69	-
2462MHz	Pass	PK	2.484G	67.33	74.00	-6.67	31.53	3	Vertical	134	3.69	-
2462MHz	Pass	AV	4.924G	32.40	54.00	-21.60	2.63	3	Horizontal	37	2.54	-
2462MHz	Pass	AV	7.386G	44.81	54.00	-9.19	8.51	3	Horizontal	4	3.37	_
2462MHz	Pass	PK	4.924G	43.93	74.00	-30.07	2.63	3	Horizontal	37	2.54	_
2462MHz	Pass	PK	7.386G	57.12	74.00	-16.88	8.51	3	Horizontal	4	3.37	-
2462MHz	Pass	AV	4.924G	32.60	54.00	-21.40	2.63	3	Vertical	0	1.50	-
2462MHz	Pass	AV	7.386G	44.87	54.00	-9.13	8.51	3	Vertical	358	3.69	-
2462MHz	Pass	PK	4.924G	44.18	74.00	-29.82	2.63	3	Vertical	0	1.50	-
ZHUZIVINZ	F 855	L.L/	4.0240	44.10	74.00	-23.02	2.00	٥	vertical	J	1.30	

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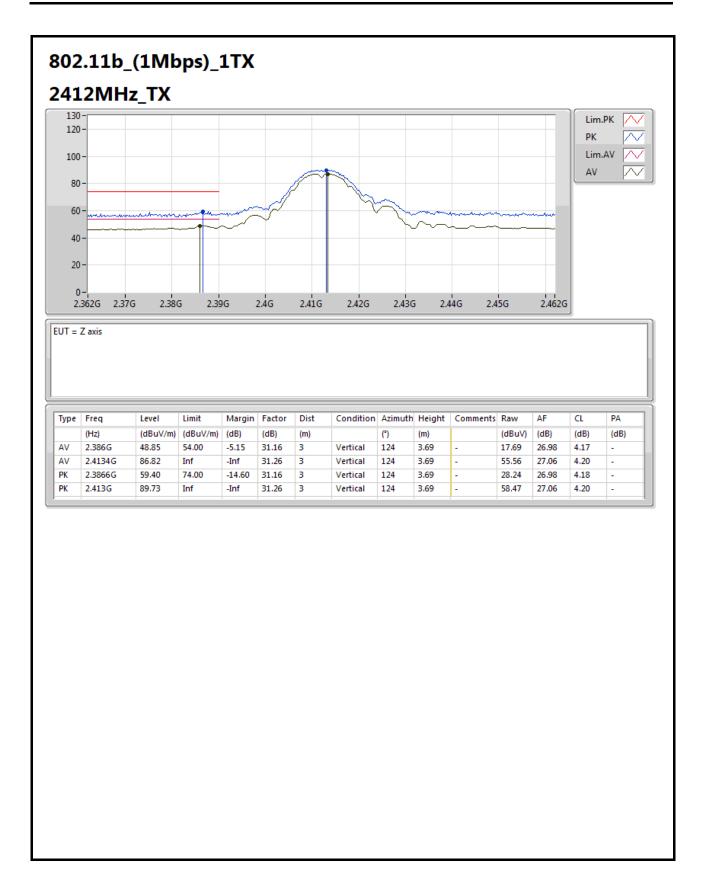


Appendix F.2

Mode	Result	Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
			(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
2462MHz	Pass	PK	7.386G	56.47	74.00	-17.53	8.51	3	Vertical	358	3.69	-

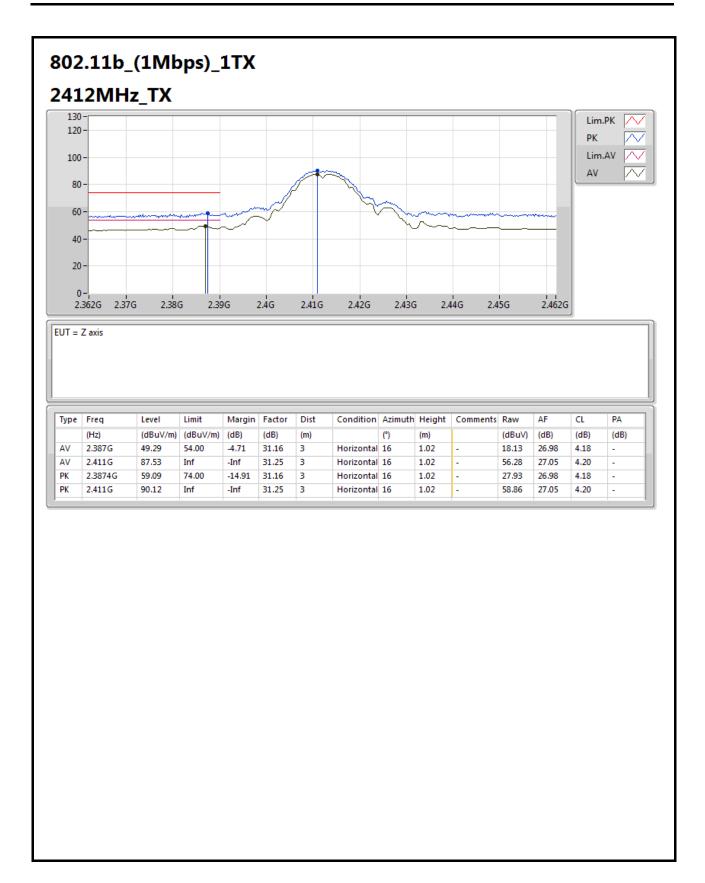
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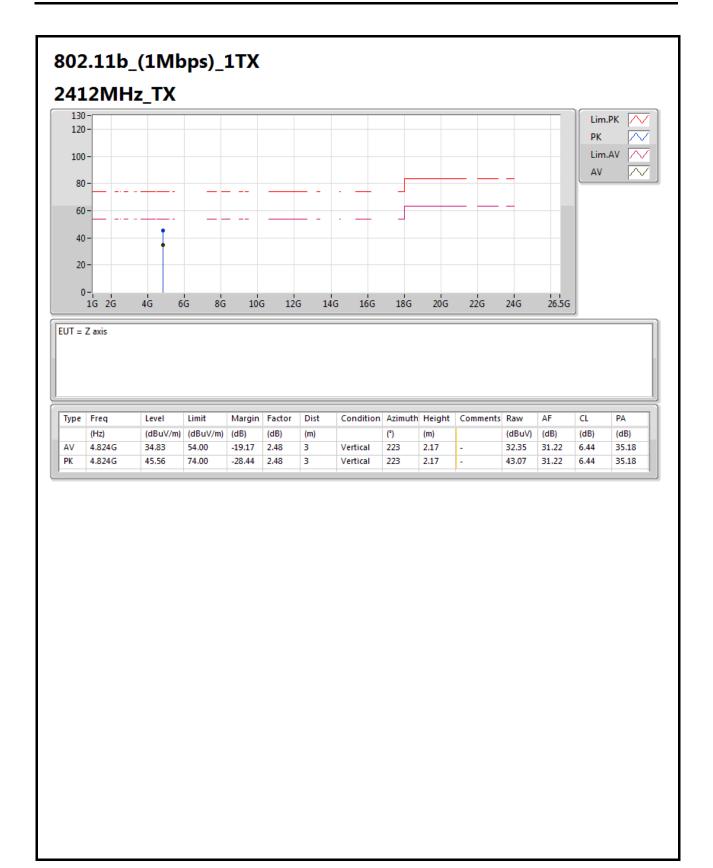
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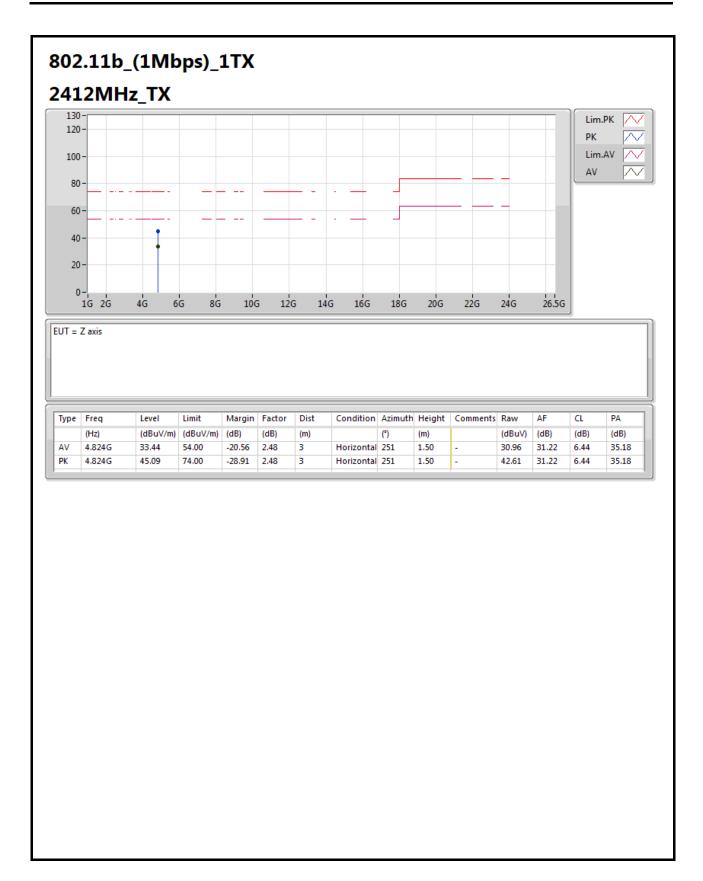


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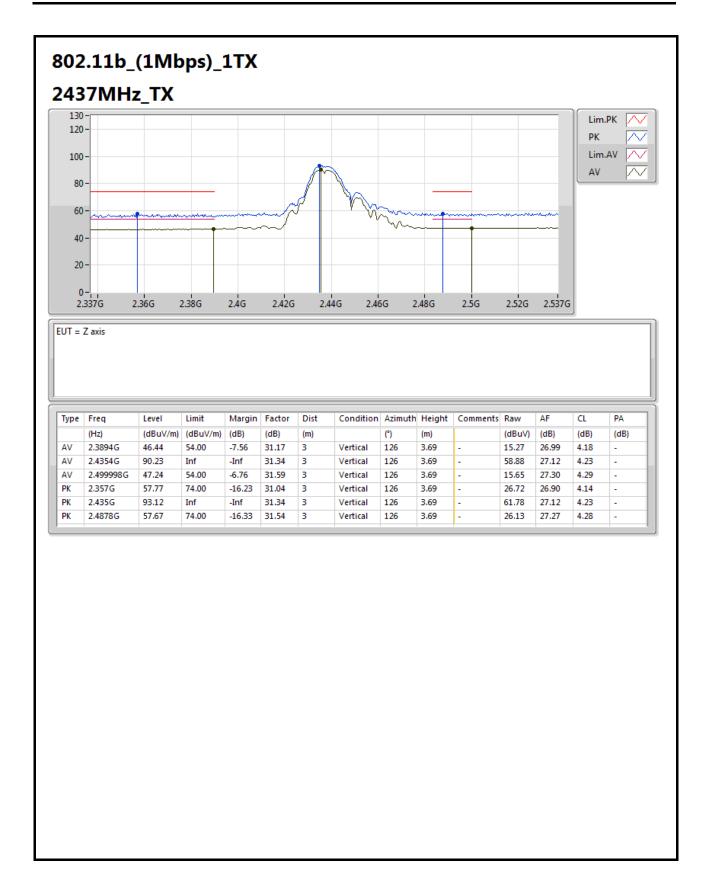






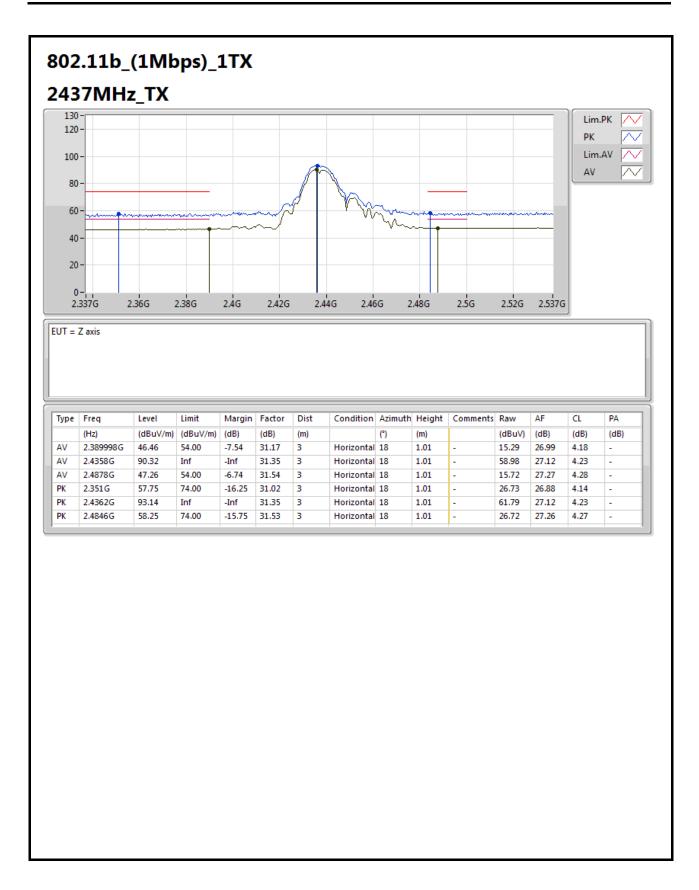




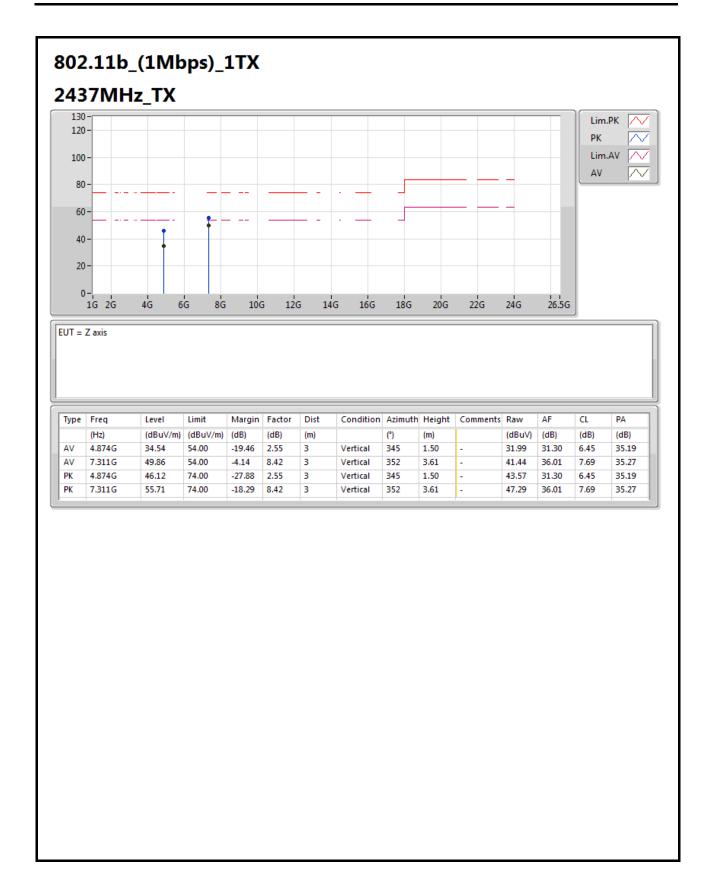


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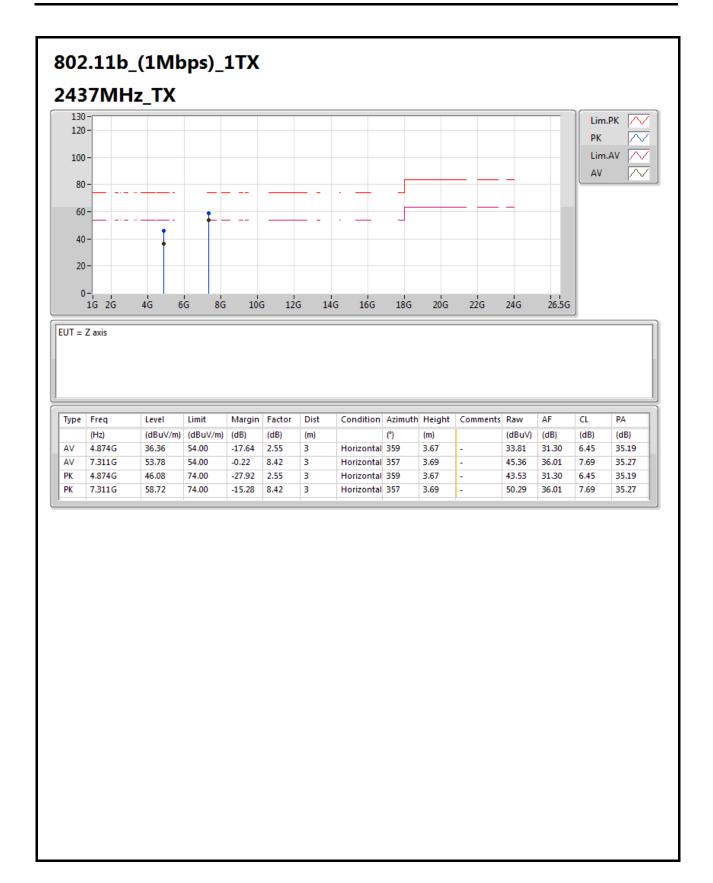






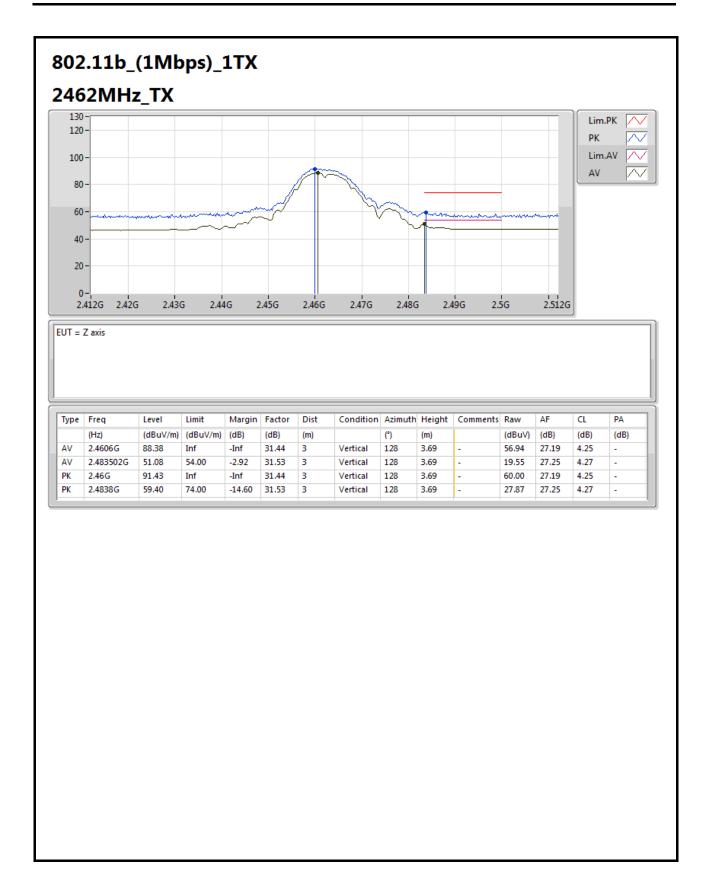
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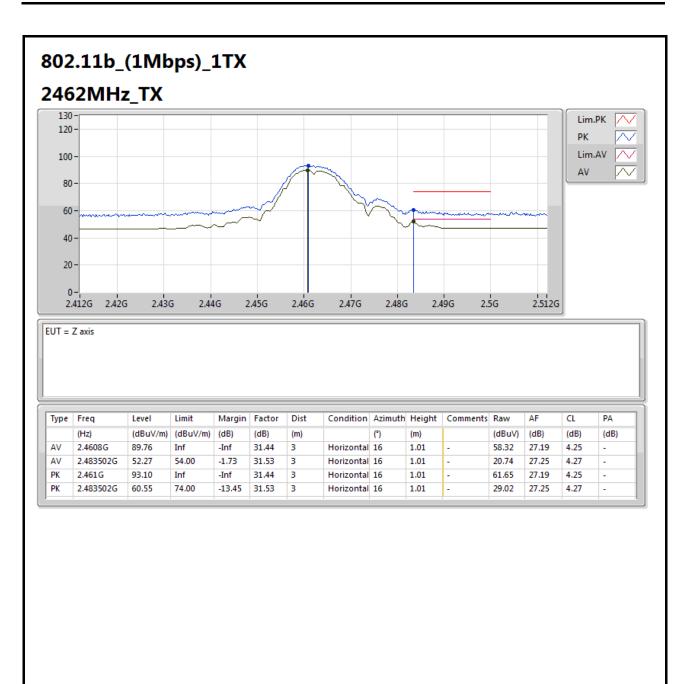


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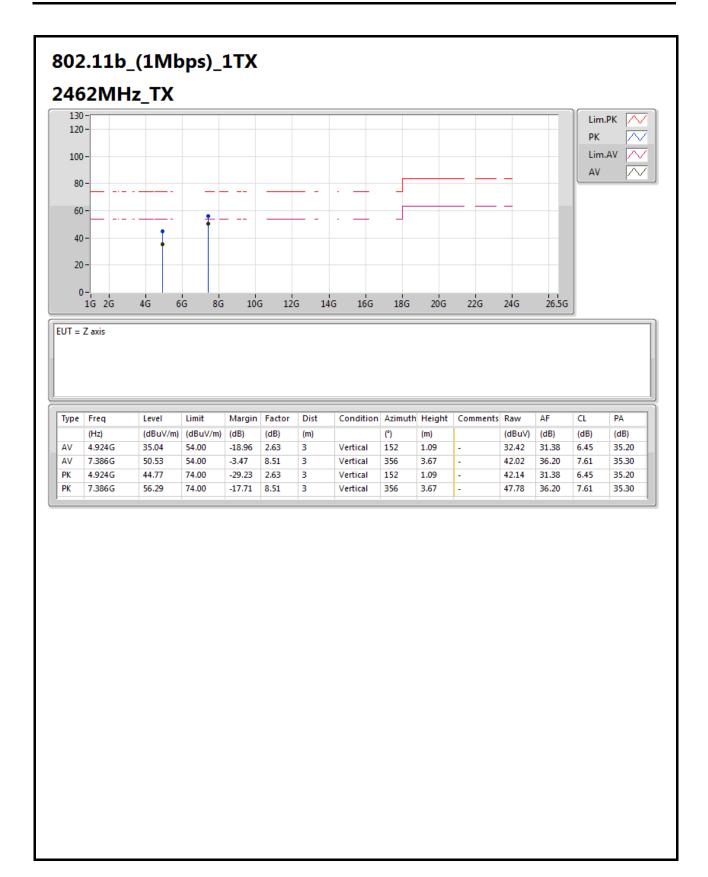




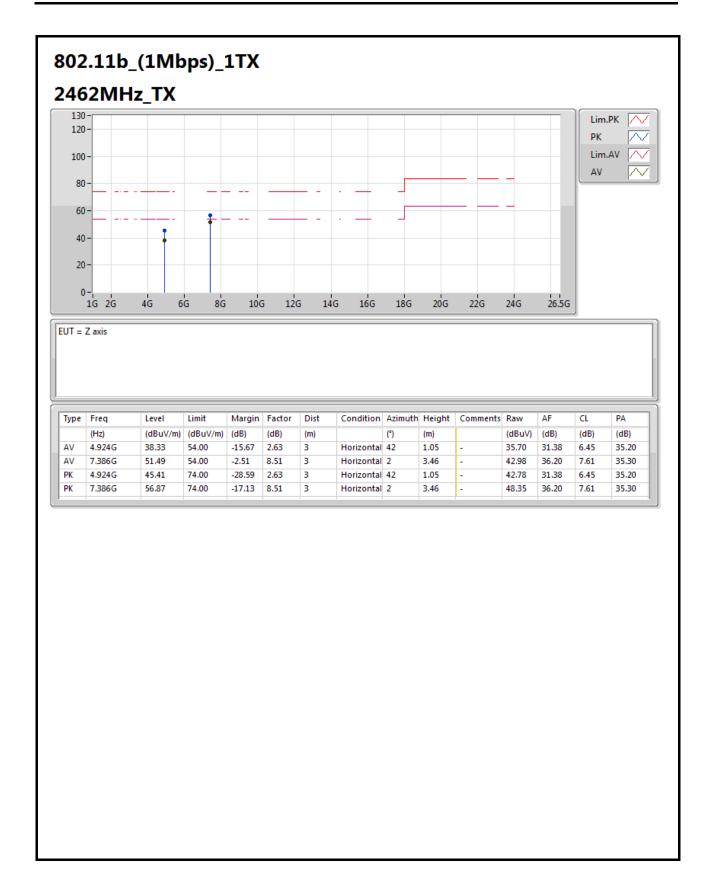












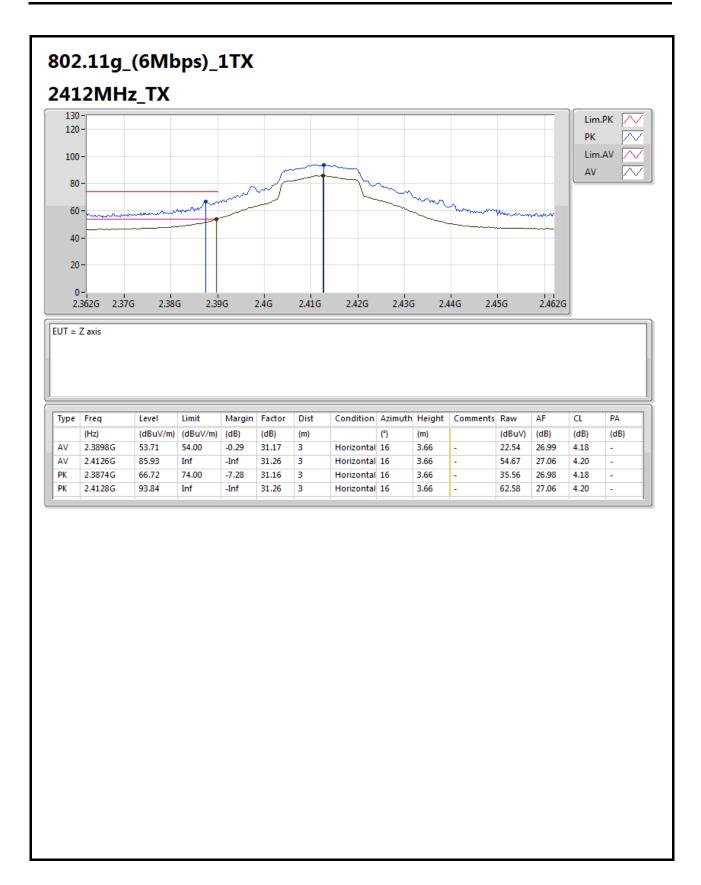
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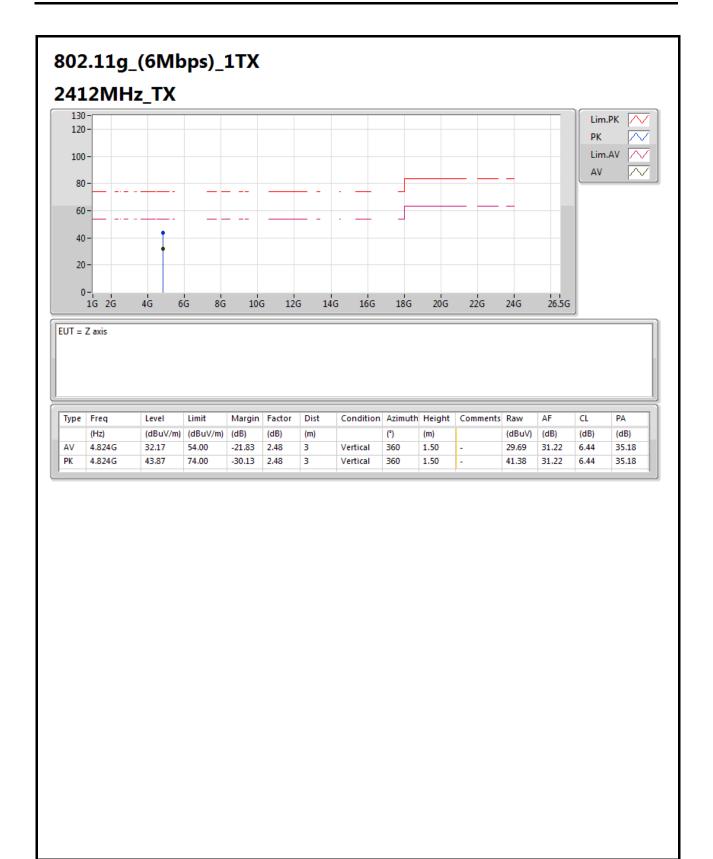
TEL: 886-3-327-3456 FAX: 886-3-327-0973 Page No. : F18 of F41





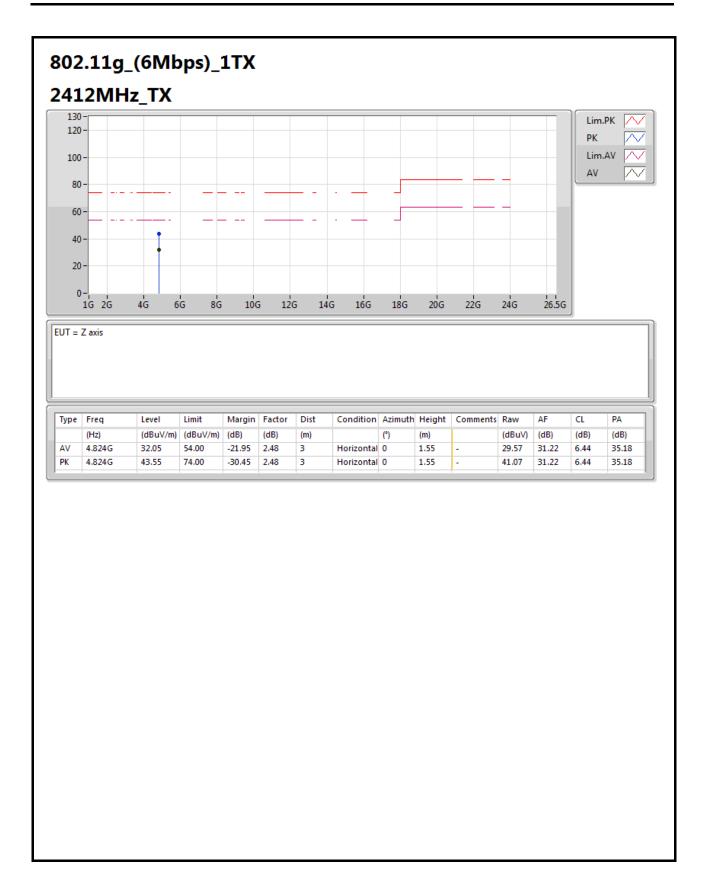
TEL: 886-3-327-3456 FAX: 886-3-327-0973 Page No. : F19 of F41





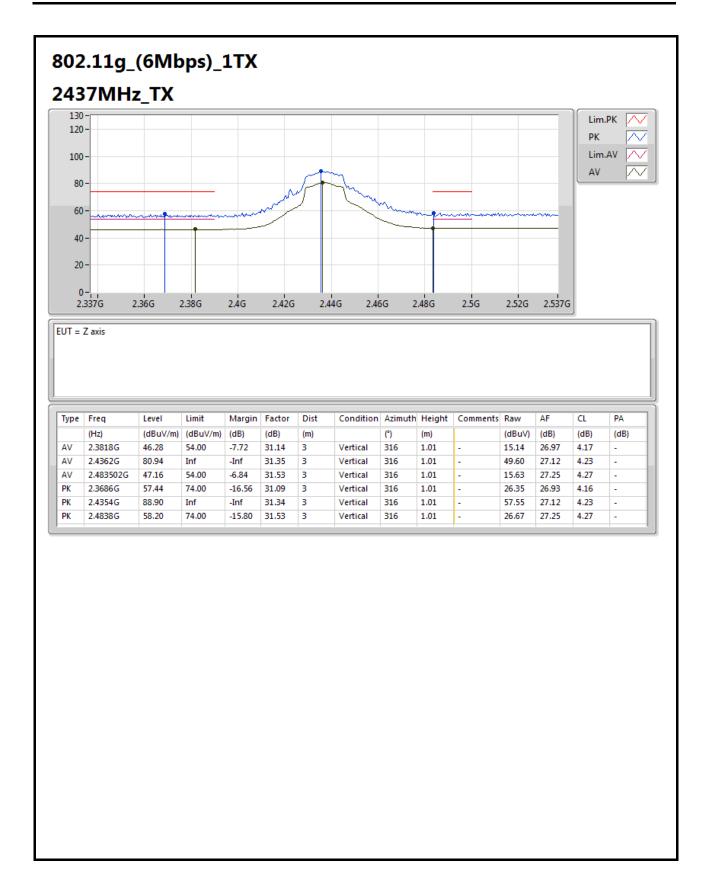
TEL: 886-3-327-3456 FAX: 886-3-327-0973 Page No. : F20 of F41



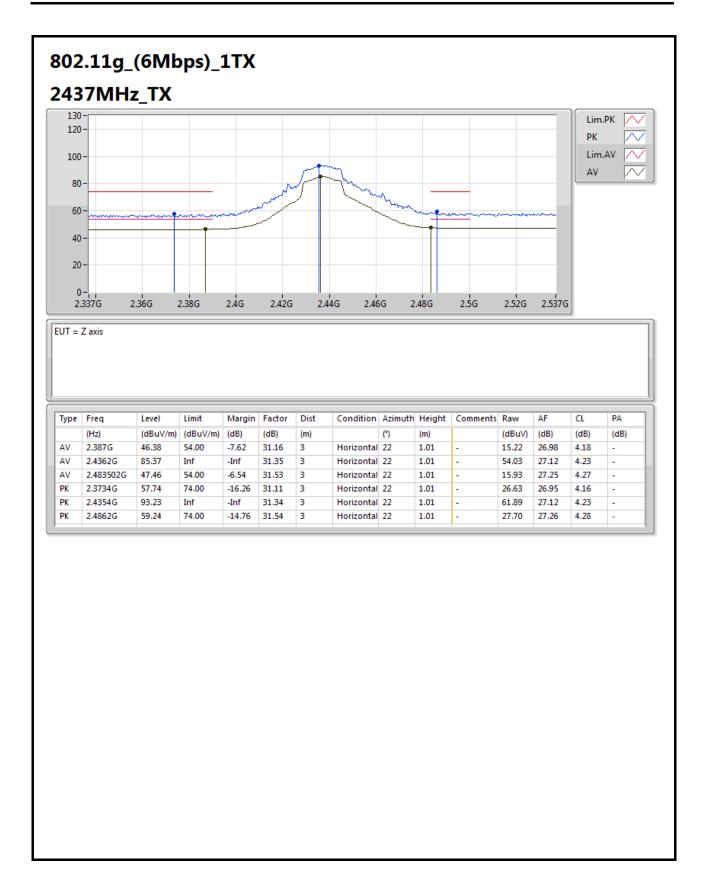


TEL: 886-3-327-3456 FAX: 886-3-327-0973 Page No. : F21 of F41



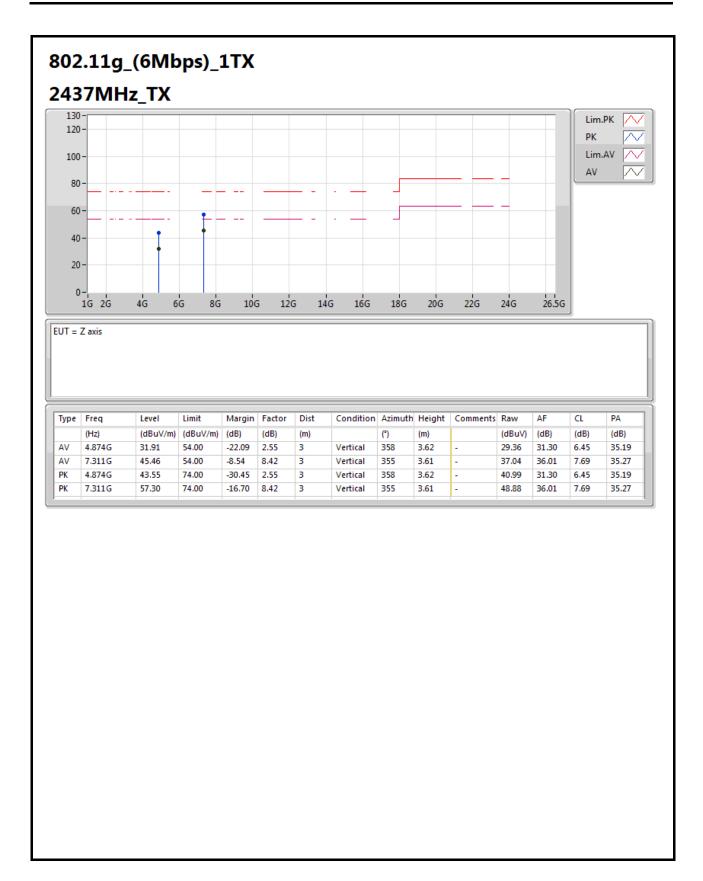




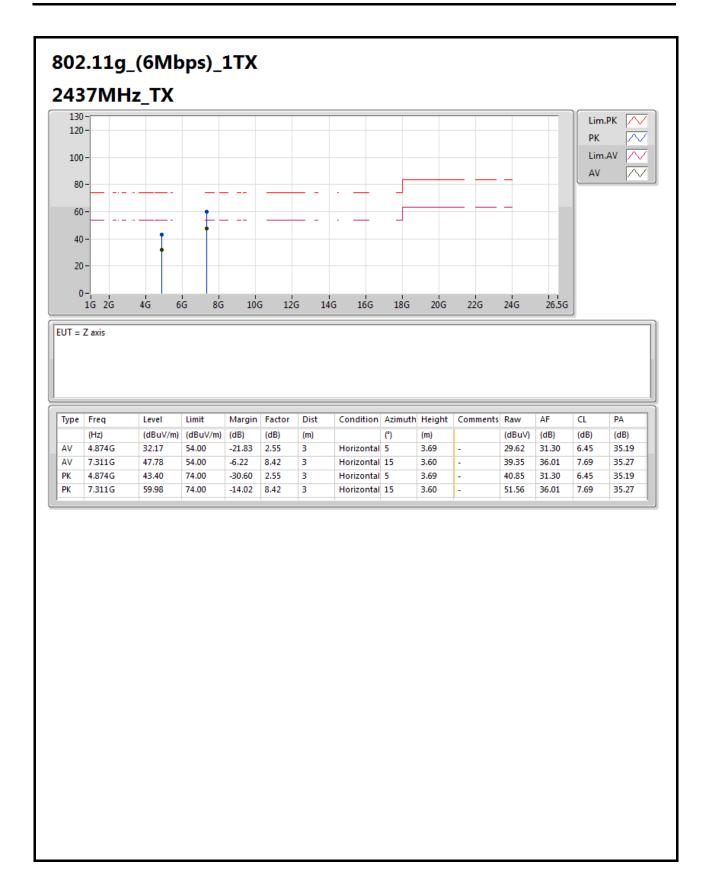


TEL: 886-3-327-3456 FAX: 886-3-327-0973 Page No. : F23 of F41



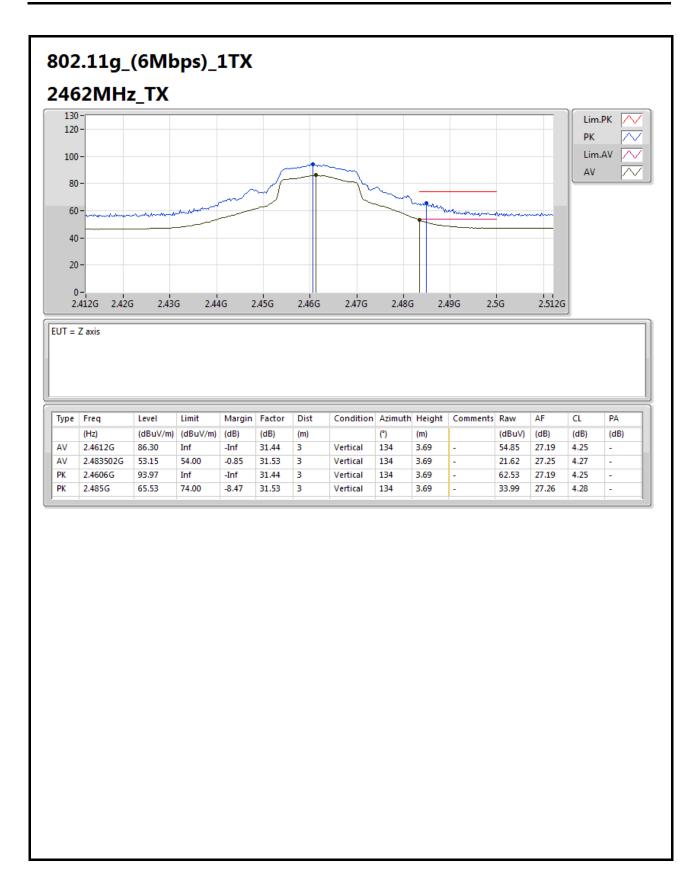






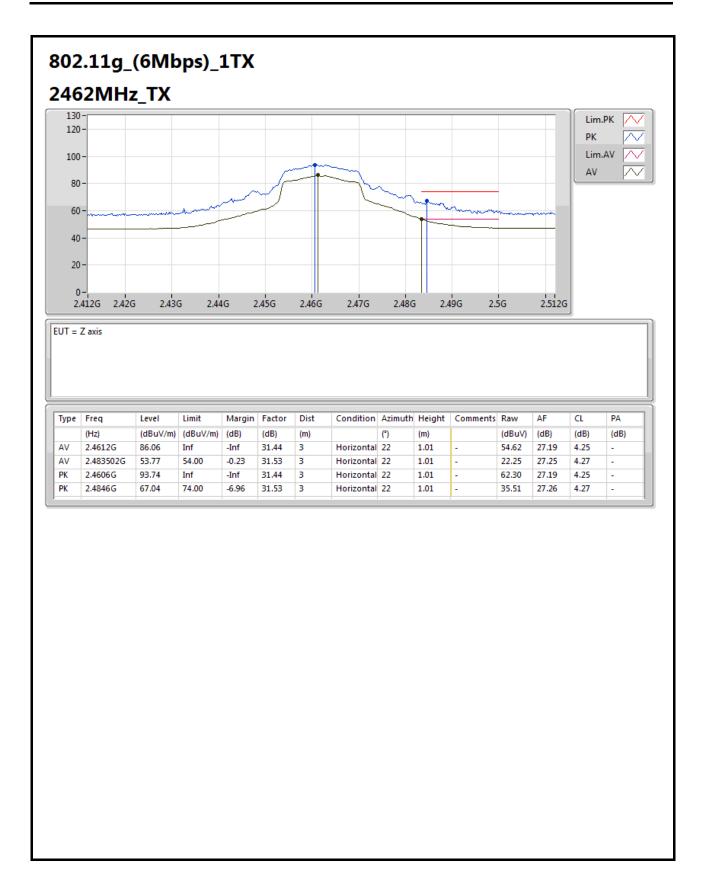
TEL: 886-3-327-3456 FAX: 886-3-327-0973 Page No. : F25 of F41



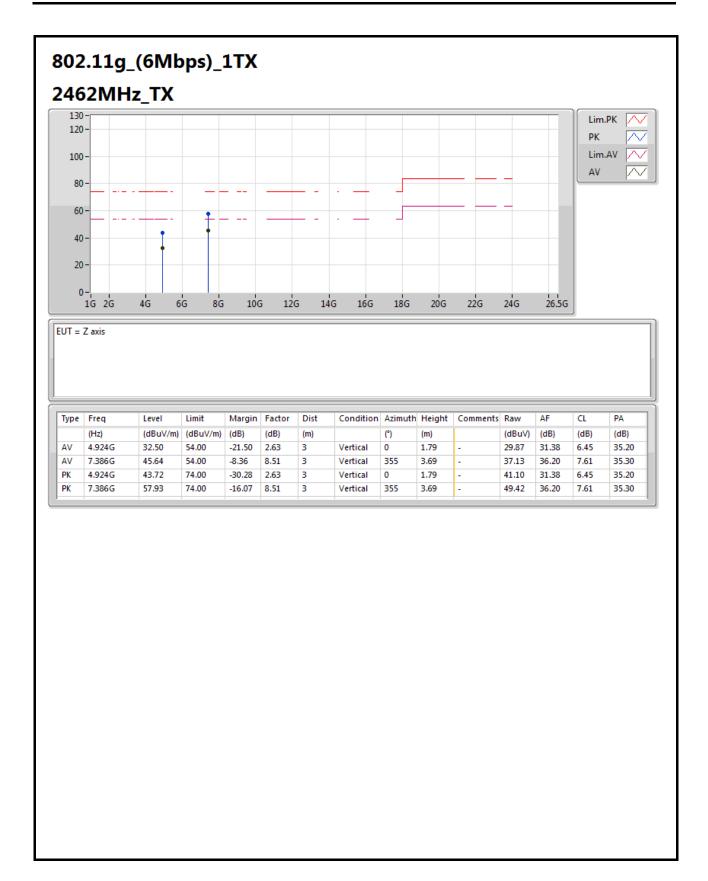


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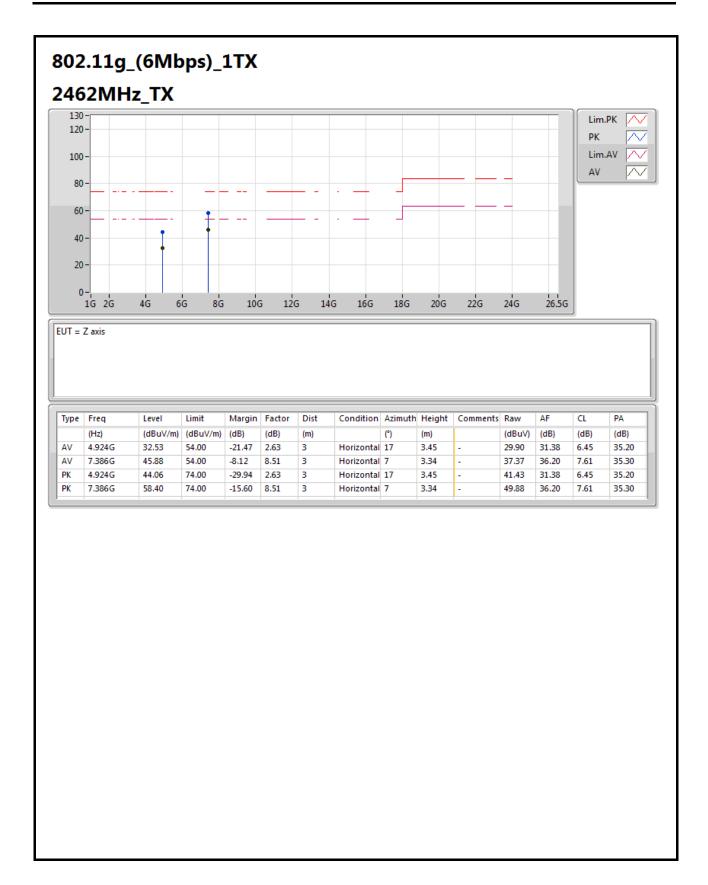






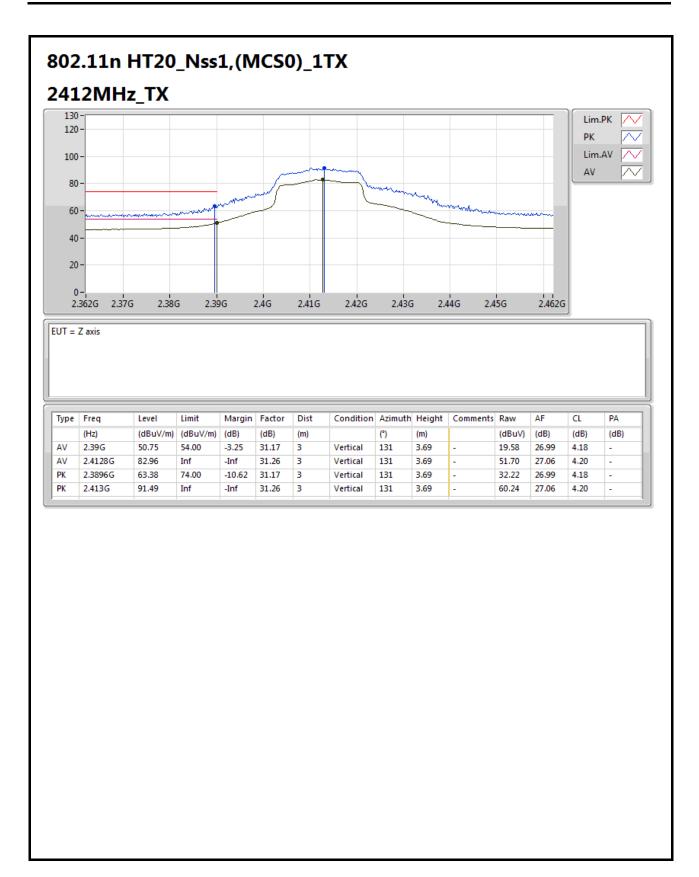






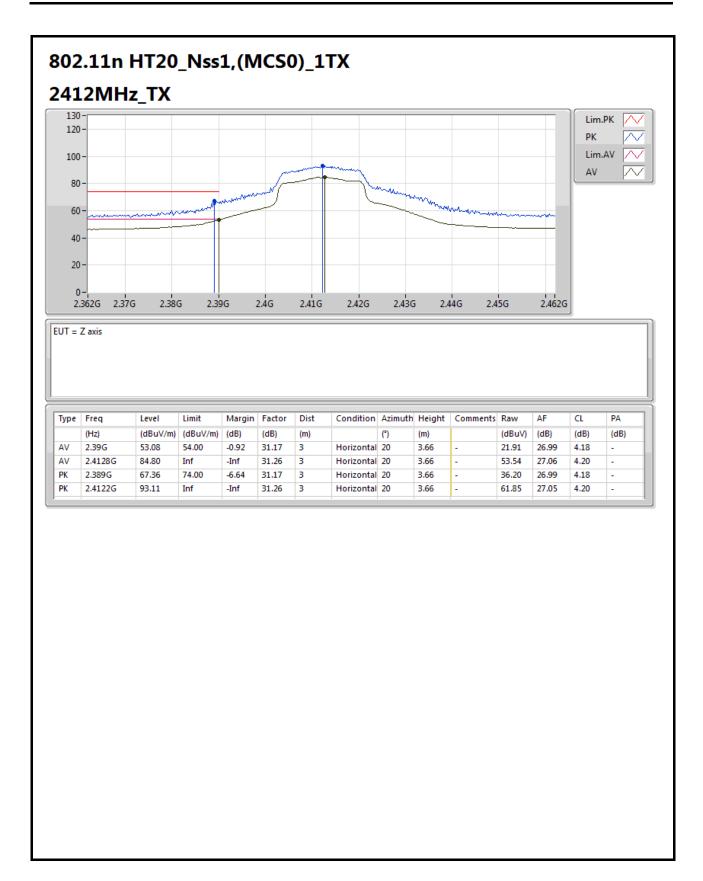
TEL: 886-3-327-3456 FAX: 886-3-327-0973 Page No. : F29 of F41



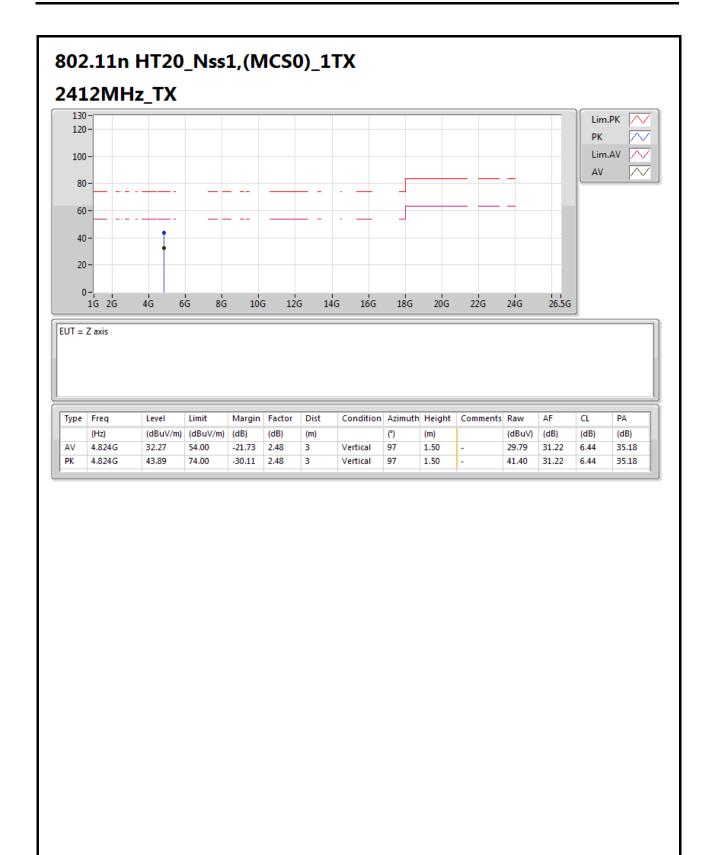


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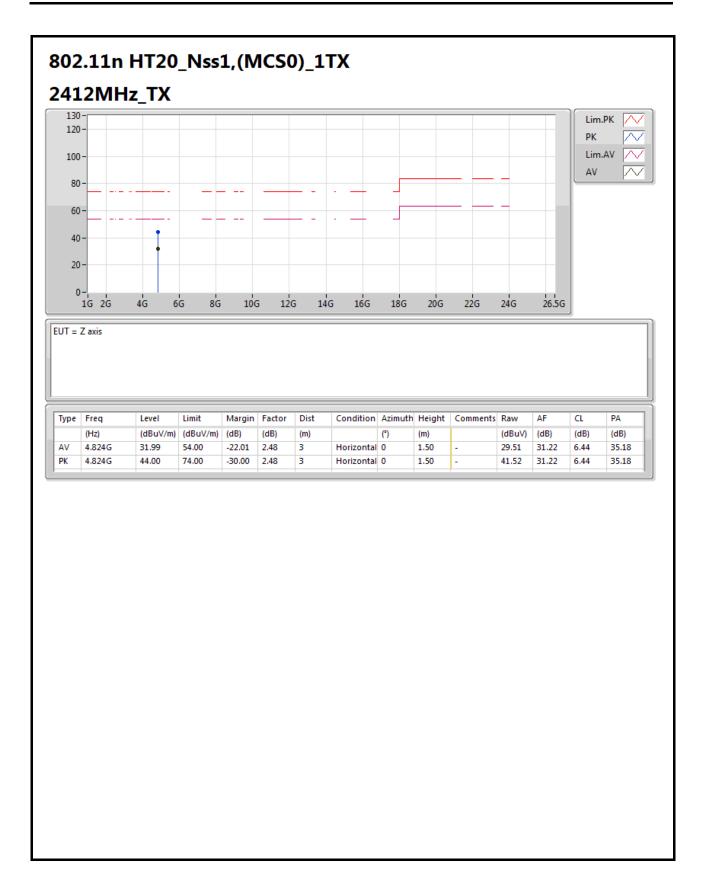






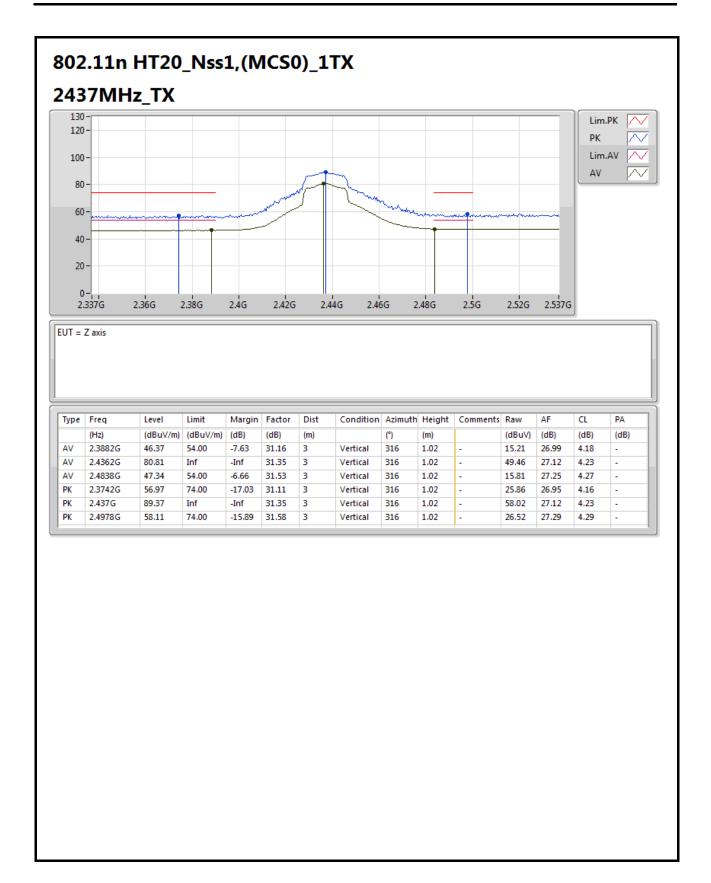
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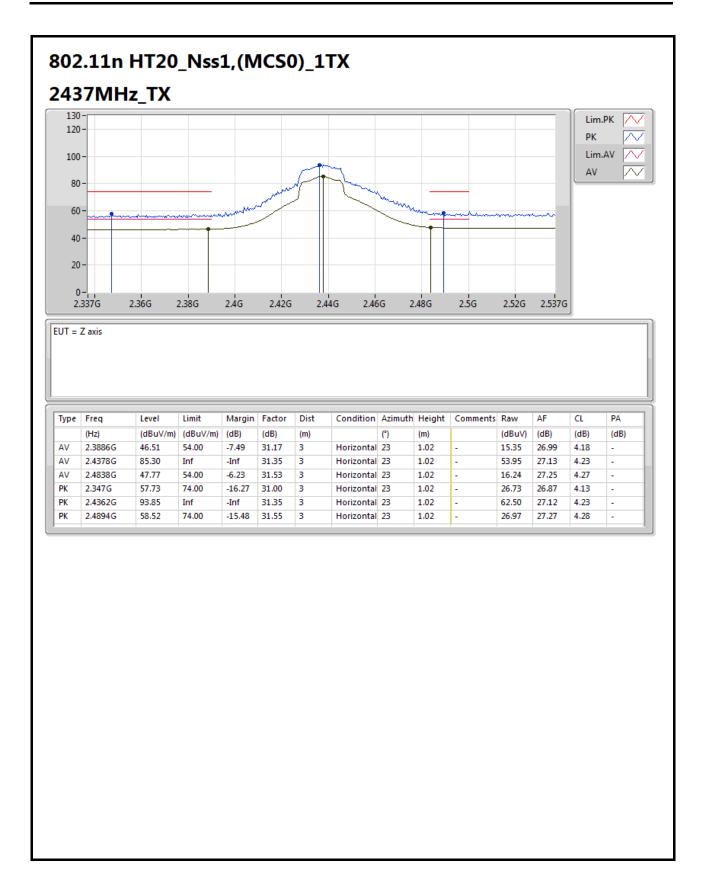
TEL: 886-3-327-3456 FAX: 886-3-327-0973 Page No. : F33 of F41





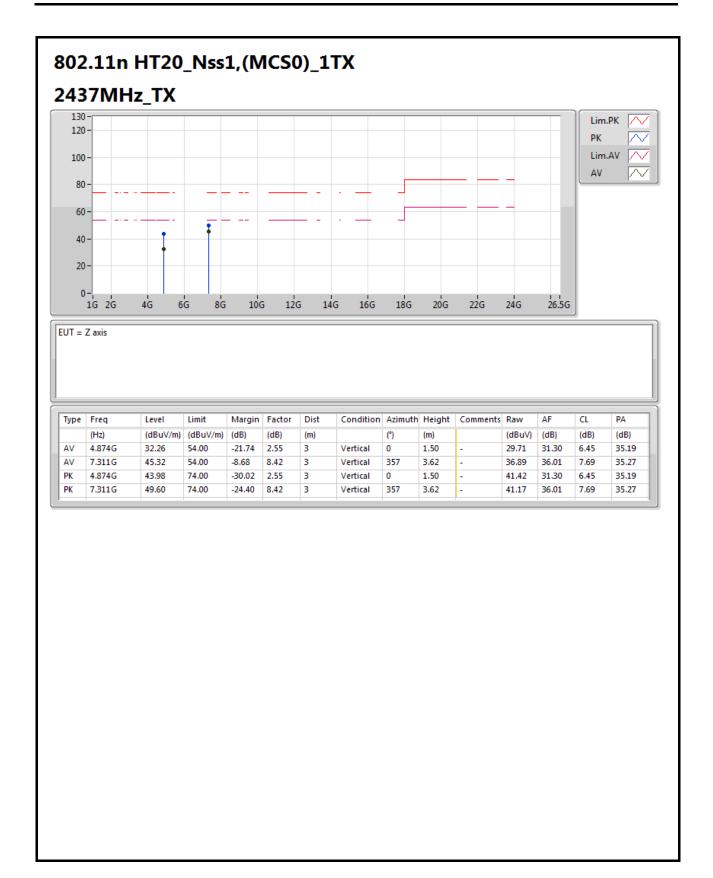
TEL: 886-3-327-3456 FAX: 886-3-327-0973 Page No. : F34 of F41





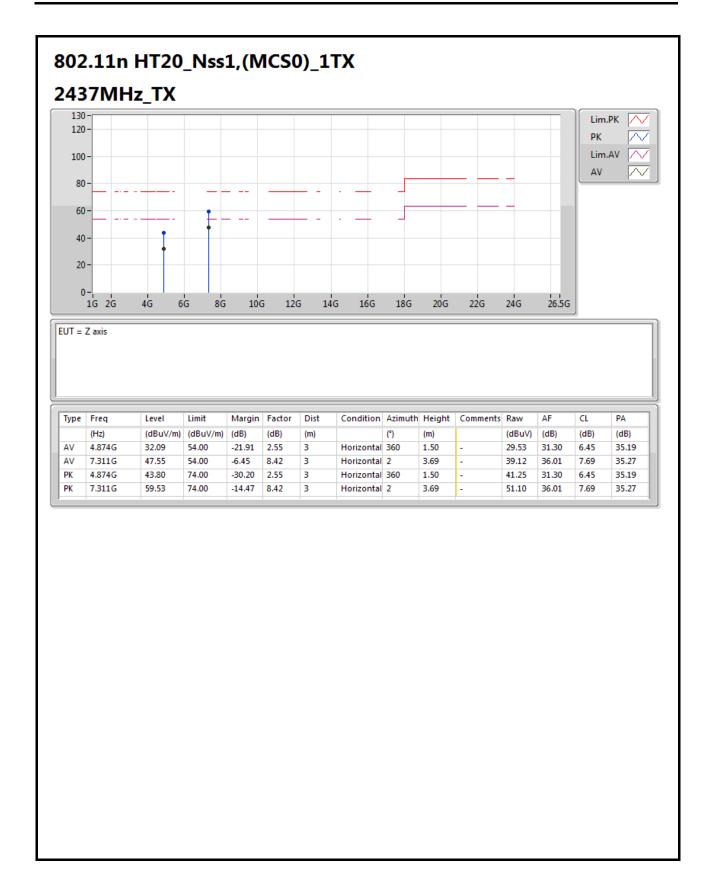
TEL: 886-3-327-3456 FAX: 886-3-327-0973 Page No. : F35 of F41





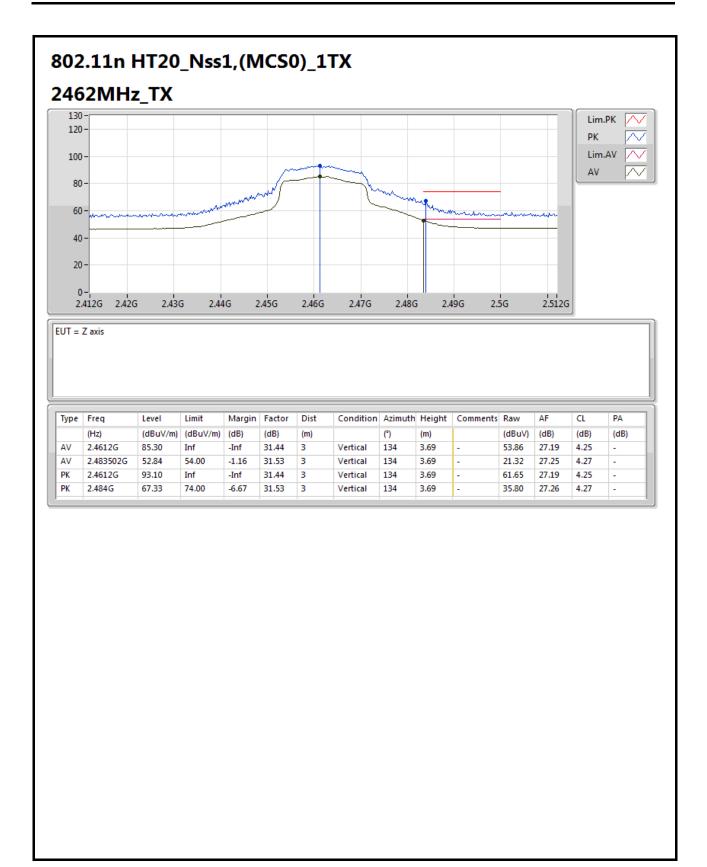
TEL: 886-3-327-3456 FAX: 886-3-327-0973 Page No. : F36 of F41



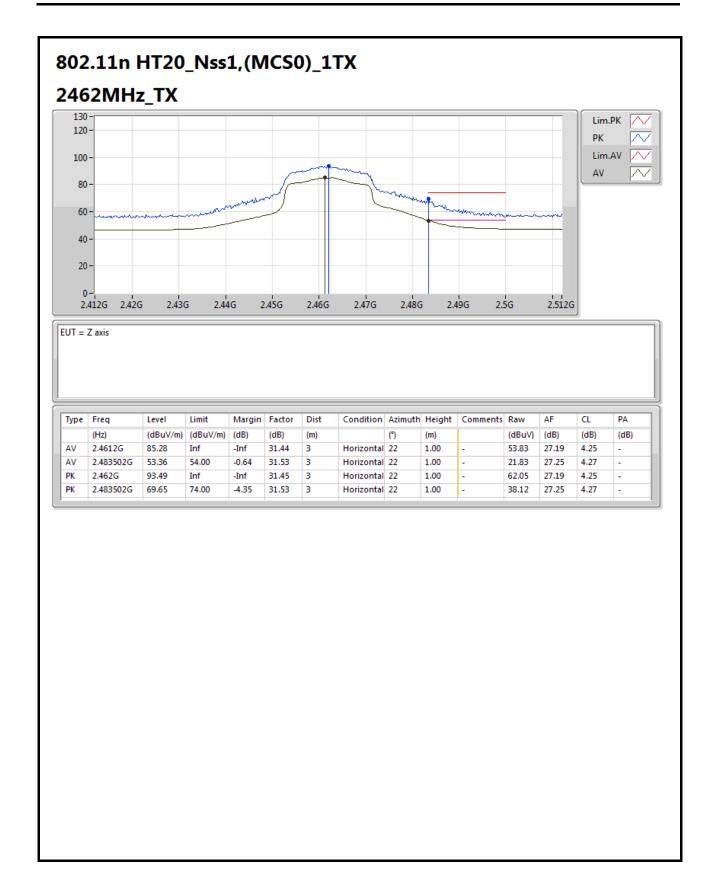


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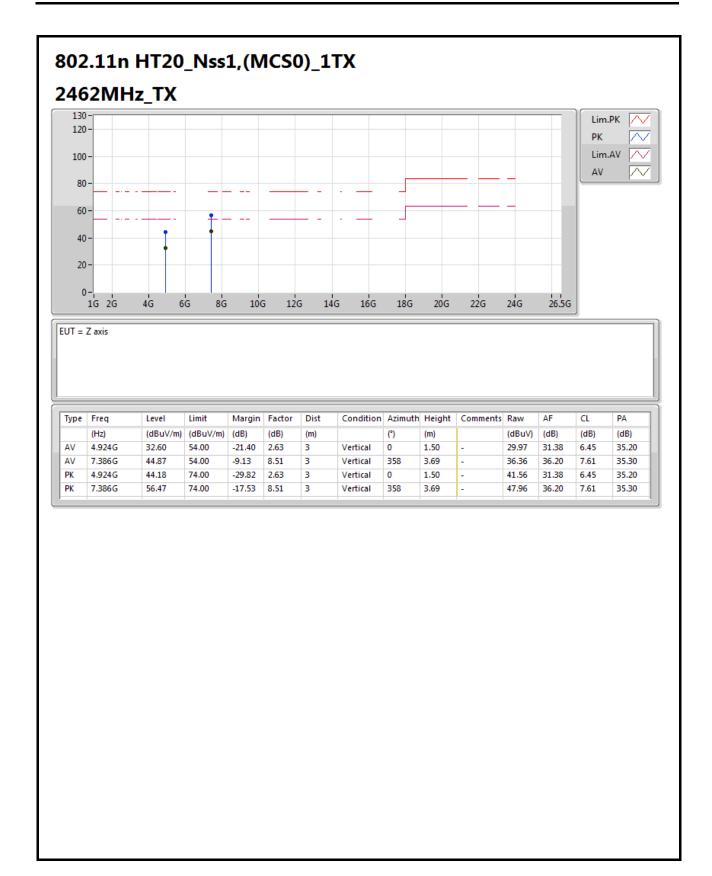




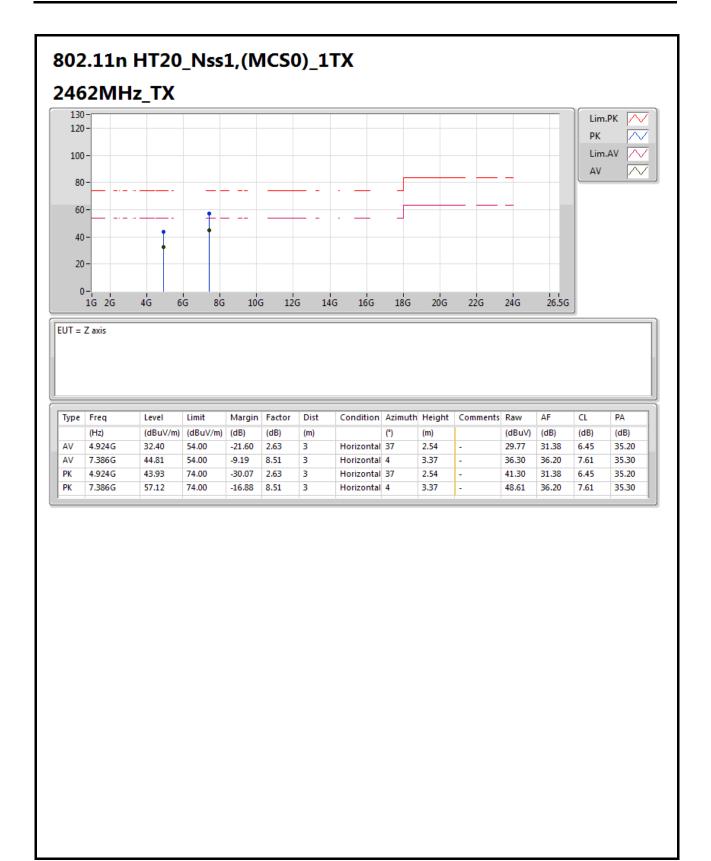












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## **RSE above 1GHz Result**

Appendix G

**Summary** 

Mode	Result	Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
			(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
Mode 1.	Pass	AV	2.232G	36.67	54.00	-17.33	-4.07	3	Vertical	0	1.50	-
Mode 2.	Pass	AV	1.6G	28.36	54.00	-25.64	-5.92	3	Vertical	360	1.50	-

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## **RSE above 1GHz Result**

Appendix G

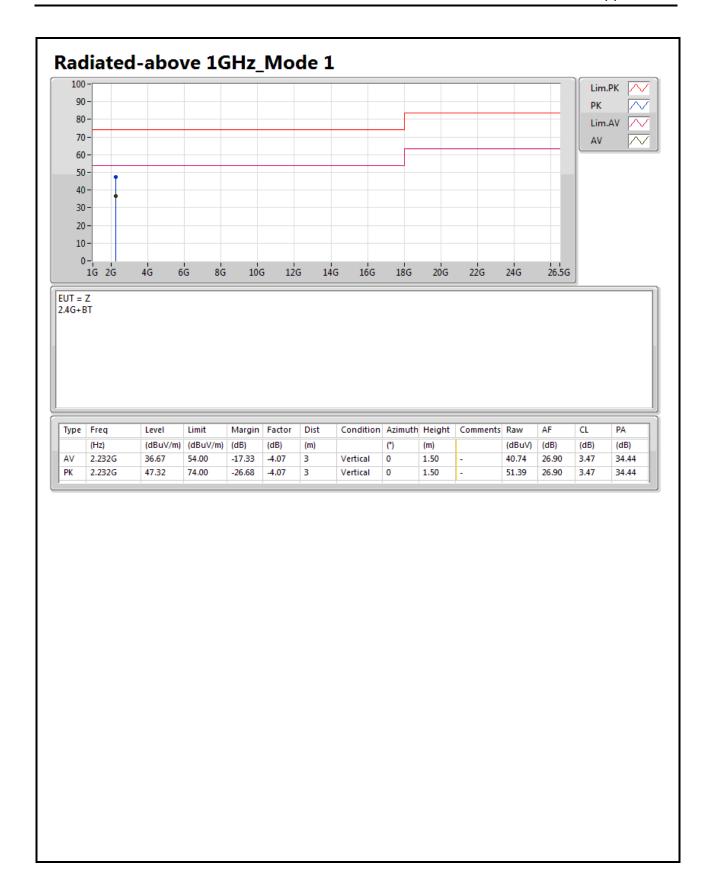
400804-02

## Result

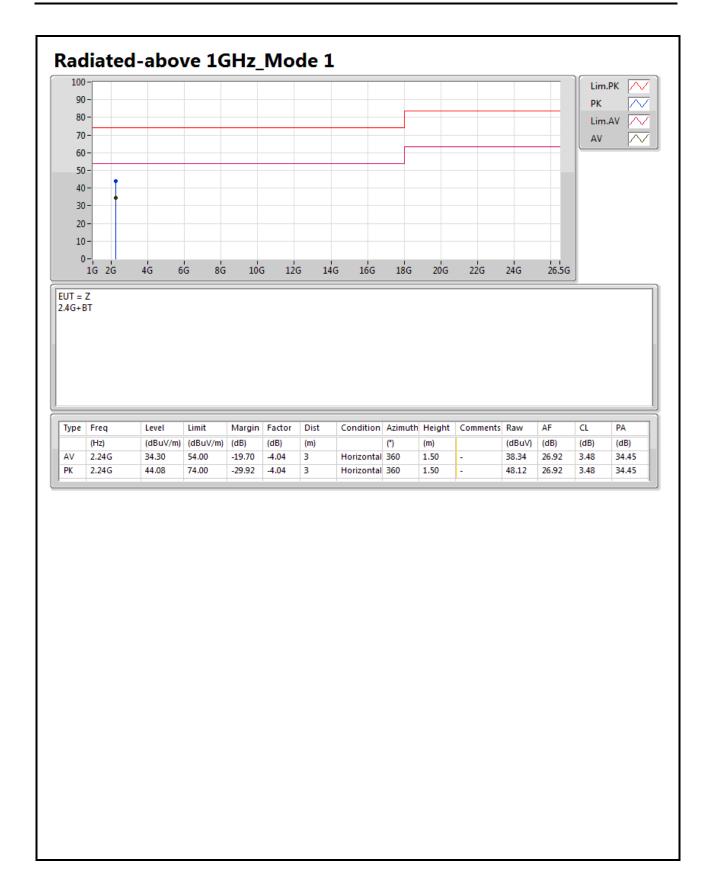
Mode	Result	Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
			(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
Mode 1.	Pass	AV	2.24G	34.30	54.00	-19.70	-4.04	3	Horizontal	360	1.50	-
Mode 1.	Pass	PK	2.24G	44.08	74.00	-29.92	-4.04	3	Horizontal	360	1.50	-
Mode 1.	Pass	AV	2.232G	36.67	54.00	-17.33	-4.07	3	Vertical	0	1.50	-
Mode 1.	Pass	PK	2.232G	47.32	74.00	-26.68	-4.07	3	Vertical	0	1.50	-
Mode 2.	Pass	AV	2.132G	24.59	54.00	-29.41	-4.37	3	Horizontal	0	1.50	-
Mode 2.	Pass	PK	2.132G	41.22	74.00	-32.78	-4.37	3	Horizontal	0	1.50	-
Mode 2.	Pass	AV	1.6G	28.36	54.00	-25.64	-5.92	3	Vertical	360	1.50	-
Mode 2.	Pass	PK	1.6G	43.94	74.00	-30.06	-5.92	3	Vertical	360	1.50	-

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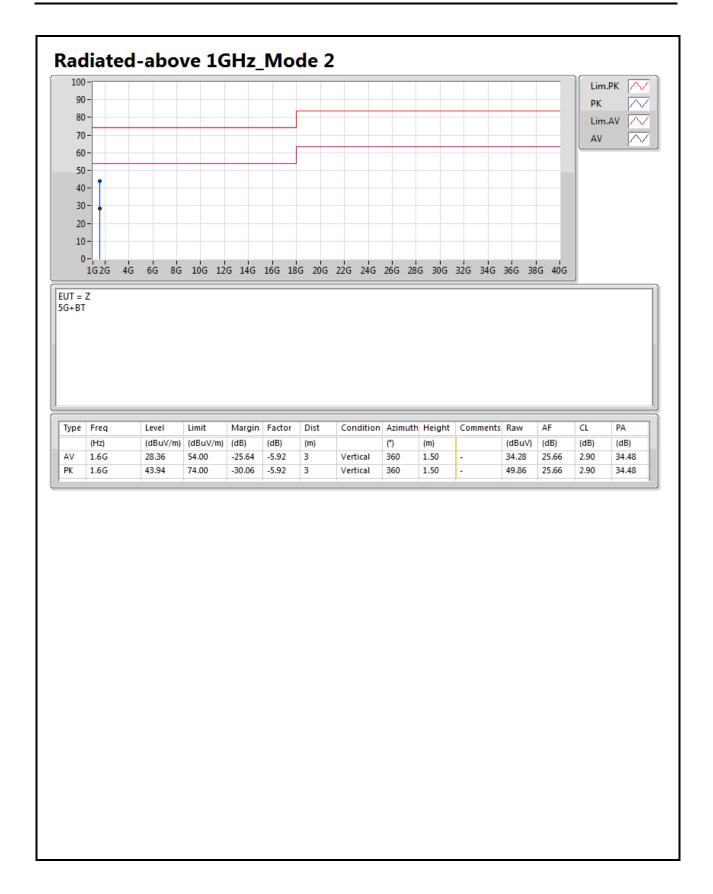




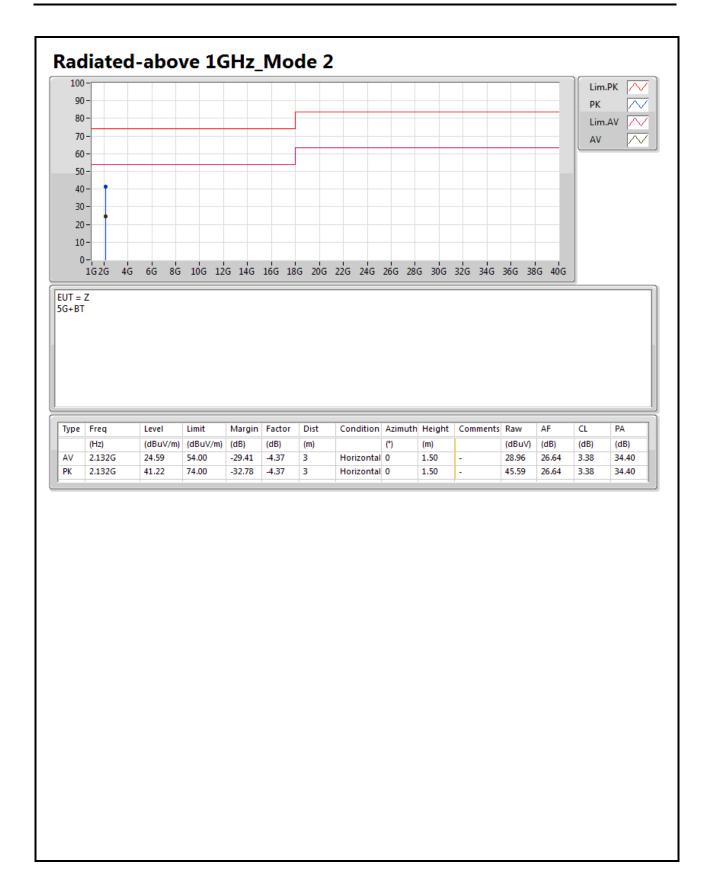












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