

Report No. : FR740630AN

# **FCC Test Report**

Equipment	:	Video Doorbell Elite
<b>Brand Name</b>	:	RING
Model No.	:	Video Doorbell Elite
FCC ID	:	2AEUPBHAJB001
Standard	:	47 CFR FCC Part 15.407
Operating Band	:	5150 MHz - 5250 MHz 5725 MHz - 5850 MHz
Applicant	:	Bot Home Automation, Inc. 1523 26th St, Santa Monica, CA 90404, USA
Manufacturer	:	Chicony Electronics (Dong Guan) Co., Ltd. San Zhong Guan Li Qu, Qingxi Town, Dongguan City Guangdong 523651 China
Function	:	<ul><li>☑ Outdoor; ☐ Indoor; ☐ Fixed P2P</li><li>☐ Client</li></ul>
<b>TPC Function</b>	:	w/o TPC

The product sample received on Apr. 11, 2017 and completely tested on Apr. 20, 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** 

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## FCC Test Report

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**PHOTOGRAPHS OF EUT v01** 

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## FCC Test Report

## **Summary of Test Result**

Conformance Test Specifications						
Report Clause	Ref. Std. Clause	Description	Result			
1.1.2	15.203	Antenna Requirement	Complied			
3.1	15.207	AC Power-line Conducted Emissions	Complied			
3.2	15.407(a)	Emission Bandwidth	Complied			
3.3	15.407(a)	Maximum Conducted Output Power	Complied			
3.4	15.407(a)	Peak Power Spectral Density	Complied			
3.5	15.407(b)	Unwanted Emissions	Complied			
3.6	15.407(g)	Frequency Stability	Complied			

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## **Revision History**

Report No.	Version	Description	Issued Date
FR740630AN	Rev. 01	Initial issue of report	May 02, 2017

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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
5150-5250	a, n (HT20)	5180-5240	36-48 [4]
5725-5850		5745-5825	149-165 [5]
5150-5250	n (HT40)	5190-5230	38-46 [2]
5725-5850		5755-5795	151-159 [2]

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	1TX
5.15-5.25GHz	802.11n HT20	20	1TX
5.15-5.25GHz	802.11n HT40	40	1TX
5.725-5.85GHz	802.11a	20	1TX
5.725-5.85GHz	802.11n HT20	20	1TX
5.725-5.85GHz	802.11n HT40	40	1TX

#### Note:

- 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- BWch is the nominal channel bandwidth.

#### 1.1.2 Antenna Information

Ant.	Port	Antenna Type	Connector	Gain (dBi)
1	1	PIFA Antenna	I-PEX	1.57

### 1.1.3 EUT Information

	Operational Condition						
EUT	EUT Power Type From POE						
Bea	mforming	g Function		With beamforming	g [	X	Without beamforming
Wea	ather Ban	d		With 5600~5650N	лНz [	X	Without 5600~5650MHz
				Ту	pe of	EU	т
$\boxtimes$	Stand-alo	ne					
	Combine	d (EUT where	e the	radio part is fully i	ntegra	ated	within another device)
	Combined Equipment - Brand Name / Model No.:						
	Plug-in ra	ndio (EUT inte	ende	d for a variety of h	ost sy	ster	ms)
	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
802.11a	0.955	0.2	2.066m	1k
802.11n HT20	0.954	0.205	1.922m	1k
802.11n HT40	0.904	0.438	945.313u	3k

## 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 789033 D02 v01r03

## 1.3 Testing Location Information

	Testing Location								
$\boxtimes$	HWA YA	ADD	:	No. 52, Hwa Ya 1st Rd	., Kwei	-Sł	nan District, Tao Yuan City, Taiwan, R.O.C.		
		TEL	:	886-3-327-3456	886-3-327-3456 FAX : 886-3-327-0973				
	Test site Designation No. 553509 with FCC.								
			Tes	t site registered number	IC 408	6B	-1 with Industry Canada.		
	JHUBEI	ADD	:	No.8, Lane 724, Bo-ai	St., Jh	ube	i City, HsinChu County 302, Taiwan, R.O.C.		
	TEL: 886-3-656-9065 FAX: 886-3-656-9085								
	Test site Designation No. TW0006 with FCC.								
			Те	st site registered numbe	r IC 40	861	with Industry Canada.		

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-HY	Ryan	24.5°C / 67%	12/Apr/2017
Radiated	03CH02-HY	Ryan	23.5°C / 65%	20/Apr/2017
AC Conduction	CO01-HY	Teddy	24°C / 55%	14/Apr/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
Freq. Stability	Abbreviation	Remark
0°C	-	-
10°C	-	-
20°C	-	-
30°C	-	-
40°C	-	-
138V	-	-
120V	-	-
102V	-	-

## 2.2 Test Channel Mode

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

Mode	Power Setting
802.11a_(6Mbps)_1TX	-
5180MHz	20
5200MHz	20
5240MHz	20
5745MHz	20
5785MHz	20
5825MHz	20
802.11n HT20_Nss1,(MCS0)_1TX	-
5180MHz	20
5200MHz	20
5240MHz	20
5745MHz	20
5785MHz	20
5825MHz	20
802.11n HT40_Nss1,(MCS0)_1TX	-
5190MHz	15.5
5230MHz	20
5755MHz	20
5795MHz	20

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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	Normal Link	
1	PoE mode	

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

Th	The Worst Case Mode for Following Conformance Tests			
Tests Item	Unwanted Emissions			
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.			
Operating Mode < 1GHz	СТХ			
1	PoE mode			
Operating Mode > 1GHz	СТХ			
	X Plane	Y Plane	Z Plane	
Orthogonal Planes of EUT				
Worst Planes of EUT		V		

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## 2.4 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	PoE	-	PSE3101DCG	-
4	Adapter for PoE	DVE	DSA-18CB-12 FCA 120150	-

Note: Support equipment No.3 was provided by customer.

	Support Equipment – Radiated Emission			
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E5410	DOC
2	PoE	-	PSE3101DCG	-
3	Adapter for PoE	DVE	DSA-18CB-12 FCA 120150	-

Note: Support equipment No.2 was provided by customer.

	Support Equipment – AC Conduction			
No.	Equipment	Brand Name	Model Name	FCC ID
1	PoE	-	PSE3101DCG	-
2	Adapter for PoE	DVE	DSA-18CB-12 FCA 120150	•
3	Notebook	DELL	Latitude E5540	DoC
4	Notebook	DELL	Latitude E5540	DoC

Note: Support equipment No.1 was provided by customer.

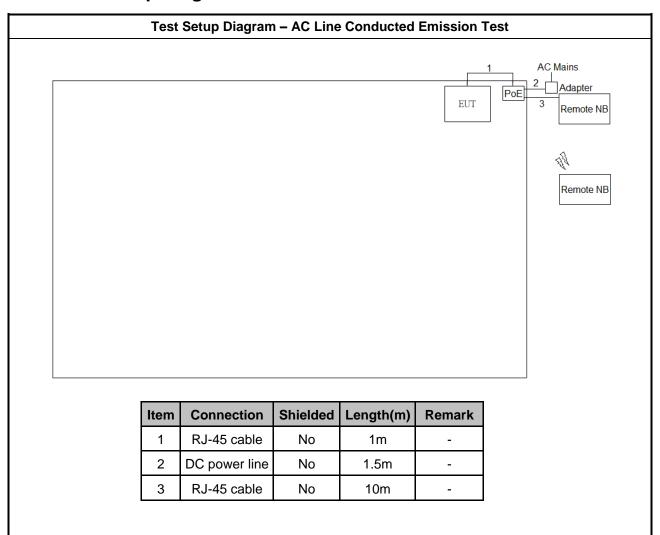
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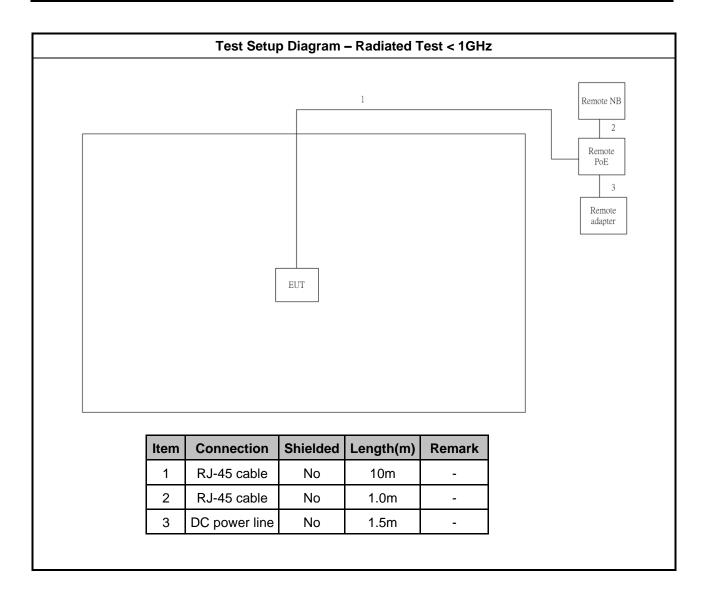
2.5 Test Setup Diagram



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

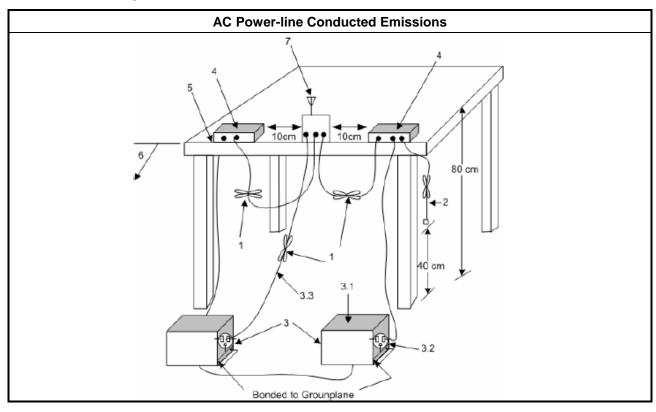
#### 3.1.2 Measuring Instruments

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 Emission Bandwidth

#### 3.2.1 Emission Bandwidth Limit

	Emission Bandwidth Limit		
UN	UNII Devices		
$\boxtimes$	For the 5.15-5.25 GHz band, N/A		
	For the 5.25-5.35 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.		
	For the $5.47-5.725$ GHz band, the maximum conducted output power shall not exceed the lesser of $250$ mW or $11$ dBm + $10$ log B, where B is the $26$ dB emission bandwidth in MHz.		
	For the 5.725-5.85 GHz band, 6 dB emission bandwidth ≥ 500kHz.		

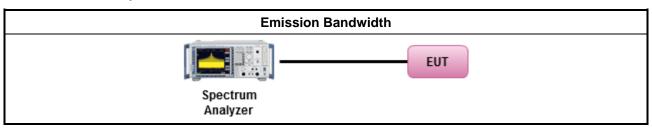
#### 3.2.2 Measuring Instruments

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

#### 3.2.3 Test Procedures

	Test Method						
-	For the emission bandwidth shall be measured using one of the options below:						
	$\boxtimes$	Refer as KDB 789033, clause C for EBW and clause D for OBW measurement.					
		Refer as ANSI C63.10, clause 6.9.3 for occupied bandwidth testing.					
	$\boxtimes$	Refer as IC RSS-Gen, clause 6.6 for 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

	Maximum Conducted Output Power Limit
UN	II Devices
$\boxtimes$	For the 5.15-5.25 GHz band:
	<ul> <li>Outdoor AP: the maximum conducted output power (P<sub>Out</sub>) shall not exceed the lesser of 1 W. If G<sub>TX</sub> &gt; 6 dBi, then P<sub>Out</sub> = 30 - (G<sub>TX</sub> - 6). e.i.r.p. at any elevation angle above 30 degrees ≤ 125mW [21dBm]</li> </ul>
	Indoor AP: the maximum conducted output power ( $P_{Out}$ ) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$
	Point-to-point AP: the maximum conducted output power ( $P_{Out}$ ) shall not exceed the lesser of 1 W If $G_{TX} > 23$ dBi, then $P_{Out} = 30 - (G_{TX} - 23)$ .
	Mobile or Portable Client: the maximum conducted output power (P <sub>Out</sub> ) shall not exceed the lesser of 250 mW. If G <sub>TX</sub> > 6 dBi, then P <sub>Out</sub> = 24 - (G <sub>TX</sub> - 6).
	For the 5.25-5.35 GHz band, the maximum conducted output power ( $P_{Out}$ ) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX}$ > 6 dBi, then $P_{Out} = 24 - (G_{TX} - 6)$ .
	For the 5.47-5.725 GHz band, the maximum conducted output power ( $P_{Out}$ ) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$ .
$\boxtimes$	For the 5.725-5.85 GHz band:
	Point-to-multipoint systems (P2M): the maximum conducted output power ( $P_{Out}$ ) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ .
	<ul> <li>Point-to-point systems (P2P): the maximum conducted output power (P<sub>Out</sub>) shall not exceed the lesser of 1 W.</li> </ul>

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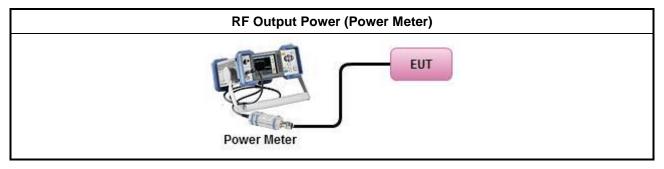
#### 3.3.2 Measuring Instruments

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

#### 3.3.3 Test Procedures

	Test Method
•	Maximum Conducted Output Power
	Duty cycle ≥ 98%
	Refer as KDB 789033, clause E Method SA-2 (spectral trace averaging).
	Duty cycle < 98%
	Refer as KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband RF power meter and average over on/off periods with duty factor
	Refer as KDB 789033, clause E Method PM (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

## 3.3.6 Test Result of max. E.I.R.P. at any elevation angle above 30 degrees.

Refer as Appendix C

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## 3.4 Peak Power Spectral Density

### 3.4.1 Peak Power Spectral Density Limit

	Peak Power Spectral Density Limit						
UNI	UNII Devices						
$\boxtimes$	For the 5.15-5.25 GHz band:						
	<ul> <li>Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If G<sub>TX</sub> &gt; 6 dBi, then P<sub>Out</sub> = 17 - (G<sub>TX</sub> - 6).</li> </ul>						
	Indoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$ .						
	Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 23$ dBi, then $P_{Out} = 17 - (G_{TX} - 23)$ .						
	Mobile or Portable Client: the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If G <sub>TX</sub> > 6 dBi, then PPSD= 11 – (G <sub>TX</sub> – 6)						
	For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) $\leq$ 11 dBm/MHz. If $G_{TX} >$ 6 dBi, then PPSD= 11 $-$ ( $G_{TX} -$ 6).						
	For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) $\leq$ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then PPSD= 11 – $(G_{TX} - 6)$ .						
$\boxtimes$	For the 5.725-5.85 GHz band:						
	Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) $\leq$ 30 dBm/500kHz. If $G_{TX} > 6$ dBi, then PPSD= $30 - (G_{TX} - 6)$ .						
	Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.						

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### 3.4.2 Measuring Instruments

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

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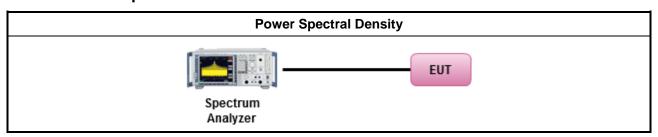
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#### 3.4.3 Test Procedures

		Test Method							
•	outp funct	Peak power spectral density procedures that the same method as used to determine the conducted utput power shall be used to determine the peak power spectral density and use the peak search unction on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density hall be measured using below options:							
		Refer as KDB 789033, F)5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth							
	Duty	cycle ≥ 98%							
		Refer as KDB 789033, clause E Method SA-2 (spectral trace averaging).							
	Duty	cycle < 98%							
	$\boxtimes$	Refer as KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)							
•	Ford	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.							
	•	If multiple transmit chains, EIRP PPSD calculation could be following as methods: $ PPSD_{total} = PPSD_1 + PPSD_2 + + PPSD_n $ (calculated in linear unit [mW] and transfer to log unit [dBm]) $ EIRP_{total} = PPSD_{total} + DG $							

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### 3.4.4 Test Setup



## 3.4.5 Test Result of Peak Power Spectral Density

Refer as Appendix D

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3.5 Unwanted Emissions

#### 3.5.1 Transmitter Radiated Unwanted Emissions Limit

Unwanted emissions below 1 GHz and restricted band emissions above 1GHz limit								
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)					
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300					
0.490~1.705	24000/F(kHz)	33.8 - 23	30					
1.705~30.0	30	29	30					
30~88	100	40	3					
88~216	150	43.5	3					
216~960	200	46	3					
Above 960	500	54	3					

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

Un-restricted band emissions above 1GHz Limit						
Operating Band	Limit					
5.15 - 5.25 GHz	e.i.r.p27 dBm [68.2 dBuV/m@3m]					
5.25 - 5.35 GHz	e.i.r.p27 dBm [68.2 dBuV/m@3m]					
5.47 - 5.725 GHz	e.i.r.p27 dBm [68.2 dBuV/m@3m]					
5.725 - 5.85 GHz	5.650-5700 GHz: e.i.r.p27 ~ 10 dBm [68.2 ~ 105.2 dBuV/m@3m] 5.700-5720 GHz: e.i.r.p. 10 ~ 15.6 dBm [105.2 ~ 110.8 dBuV/m@3m] 5.720-5725 GHz: e.i.r.p. 15.6 ~ 27 dBm [110.8 ~ 122.2 dBuV/m@3m] 5.850-5.855 GHz: e.i.r.p. 27 ~ 15.6 dBm [122.2 ~ 110.8 dBuV/m@3m] 5.855-5.875 GHz: e.i.r.p. 15.6 ~ 10 dBm [110.8 ~ 105.2 dBuV/m@3m] 5.875-5.925 GHz: e.i.r.p. 10 ~ -27 dBm [105.2 ~ 68.2dBuV/m@3m] Other un-restricted band: e.i.r.p27 dBm [68.2 dBuV/m@3m]					

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

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#### 3.5.2 Measuring Instruments

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

#### 3.5.3 Test Procedures

#### **Test Method**

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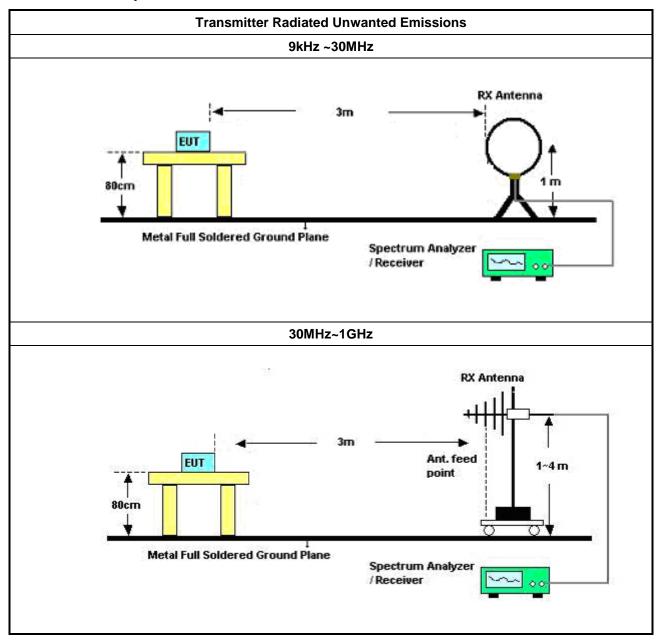
: May 02, 2017

- Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).
- The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].
- For the transmitter unwanted emissions shall be measured using following options below:
  - Refer as KDB 789033, clause G)2) for unwanted emissions into non-restricted bands.
  - Refer as KDB 789033, clause G)1) for unwanted emissions into restricted bands.
    - Refer as KDB 789033, G)6) Method VB (ANSI C63.10, clause 4.1.4.2.3), Reduced VBW.
    - Refer as KDB 789033, clause G)5) (ANSI C63.10, clause 4.1.4.2.2), measurement procedure peak limit.
- For radiated measurement.
  - Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.
  - Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.
  - Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
- The any unwanted emissions level shall not exceed the fundamental emission level.
- All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

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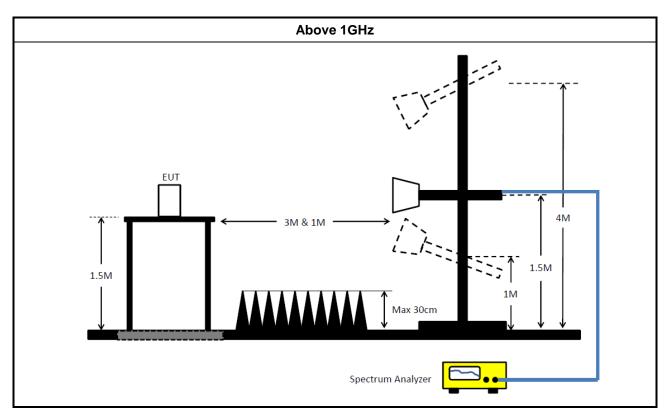


3.5.4 Test Setup



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### 3.5.5 Transmitter Unwanted Emissions (Below 30MHz)

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

#### 3.5.6 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E

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## 3.6 Frequency Stability

#### 3.6.1 Frequency Stability Limit

Frequency Stability Limit					
UNII Devices					
<ul> <li>In-band emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.</li> </ul>					
LE-LAN Devices					
■ N/A					
IEEE Std. 802.11					

The transmitter center frequency tolerance shall be  $\pm$  20 ppm maximum for the 5 GHz band.

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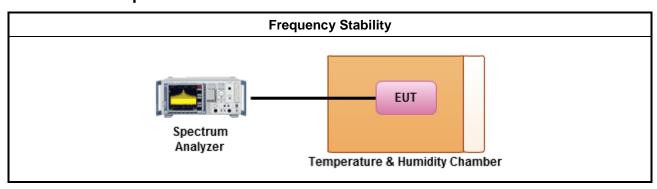
#### 3.6.2 Measuring Instruments

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

#### 3.6.3 Test Procedures

Test Method						
Refer as ANSI C63.10, clause 6.8 for frequency stability tests						
	Frequency stability with respect to ambient temperature					
	Frequency stability when varying supply voltage					

#### 3.6.4 Test Setup



### 3.6.5 Test Result of Frequency Stability

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	9 kHz ~ 3.6 GHz	18/Apr/2016	17/Apr/2017
LISN	R&S	ENV216	101295	9 kHz ~ 30 MHz	15/Nov/2016	14/Nov/2017
RF Cable-CON	HUBER+SUHNER	RG213/U	07611832010001	9 kHz ~ 30 MHz	06/Mar/2017	05/Mar/2018

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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	9 kHz – 40 GHz	26/Oct/2016	25/Oct/2017
3m Semi Anechoic	SIDT FRANKONIA	SAC-3M	03CH02-HY	30 MHz-1 GHz	03/Jun/2016	02/Jun/2017
3m Semi Anechoic	SIDT FRANKONIA	SAC-3M	03CH02-HY	1 GHz ~ 18 GHz	12/Dec/2016	11/Dec/2017
Amplifier	Agilent	8447D	2944A11149	100 kHz ~ 1.3 GHz	01/Jul/2016	30/Jun/2017
Amplifier	Agilent	8449B	3008A02373	1 GHz ~ 26.5 GHz	02/Sep/2016	01/Sep/2017
Horn Antenna	SCHWARZBEC K	BBHA9120D	BBHA9120D 01543	1 GHz ~ 18 GHz	22/Apr/2016	21/Apr/2017
Horn Antenna	SCHWARZBEC K	BBHA9170	BBHA9170154	15 GHz ~ 40 GHz	06/Feb/2017	05/Feb/2018
Bilog Antenna	SCHAFFNER	CBL6112B	2723	30 MHz ~ 1 GHz	01/Oct/2016	30/Sep/2017
Amplifier	MITEQ	JS44-18004000-3 3-8P	1840917	18 GHz ~ 40 GHz	01/Jun/2015	31/May/2017
Loop Antenna	TESEQ	HLA 6120	31244	9 kHz ~ 30 MHz	02/Mar/2017	01/Mar/2018
RF Cable-high	SUHNER	SUCOFLEX104	MY34918/4	1 GHz ~ 40 GHz	26/Jan/2017	25/Jan/2018
RF Cable-R03m	Jye Bao	RG142	CB017	9 kHz ~ 1 GHz	26/Jan/2017	25/Jan/2018

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## FCC Test Report

**Instrument for Conducted Test** 

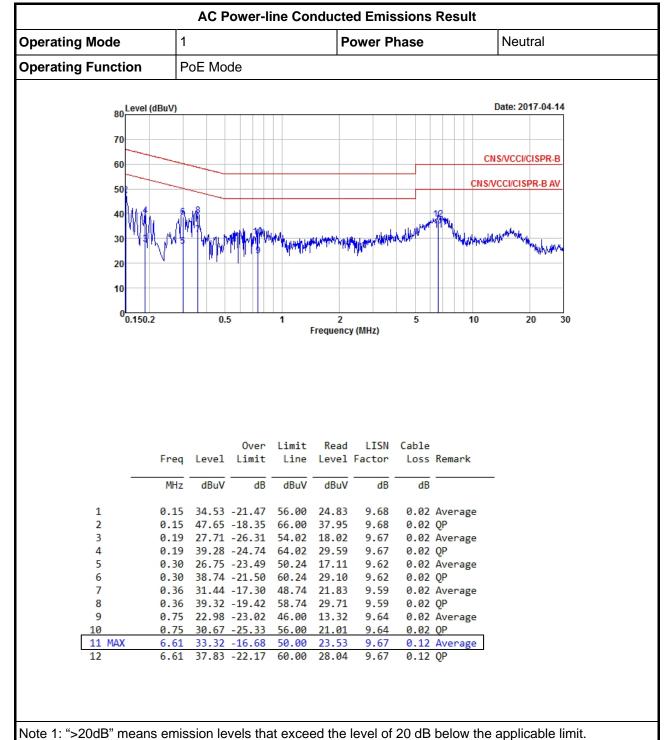
Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101013	9 kHz ~ 40 GHz	30/Dec/2016	29/Dec/2017
Power Sensor	Anritsu	MA2411B	0917017	300 MHz ~ 40 GHz	10/Feb/2017	09/Feb/2018
Power Meter	Anritsu	ML2495A	0949003	300 MHz ~ 40 GHz	10/Feb/2017	09/Feb/2018
Signal Generator	R&S	SMR40	100116	10 MHz ~ 40 GHz	21/Jul/2016	20/Jul/2017
Temp. and Humidity Chamber	Giant Force	GTH-225-20-SP- SD	MAA1112-007	-20 ~ 100℃	25/Apr/2016	24/Apr/2017
AC Power Source	G.W	APS-9102	EL920581	AC 0V ~ 300V	04/Jun/2016	03/Jun/2017
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10710/4	30 MHz ~ 26.5 GHz	02/Oct/2016	01/Oct/2017
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10709/4	30 MHz ~ 26.5 GHz	02/Oct/2016	01/Oct/2017
RF Cable-0.5m	HUBER+SUHNER	SUCOFLEX_104	MY10713/4	30 MHz ~ 26.5 GHz	02/Oct/2016	01/Oct/2017
RF Cable-1.5m	HUBER+SUHNER	SUCOFLEX_104	MY12582/4	30 MHz ~ 26.5 GHz	02/Oct/2016	01/Oct/2017

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#### AC Power-line Conducted Emissions



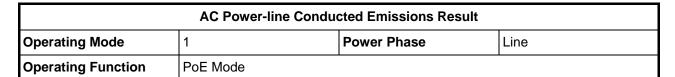
Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

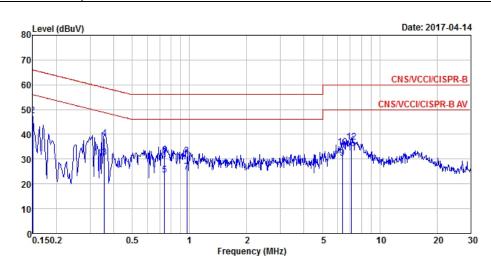
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#### **AC Power-line Conducted Emissions**





			0ver	Limit	Read	LISN	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
-	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.15	33.49	-22.51	56.00	23.83	9.64	0.02	Average
2	0.15	47.54	-18.46	66.00	37.88	9.64	0.02	QP
3	0.36	30.69	-18.09	48.78	21.03	9.64	0.02	Average
4	0.36	38.41	-20.37	58.78	28.75	9.64	0.02	QP
5	0.74	23.67	-22.33	46.00	14.02	9.63	0.02	Average
6	0.74	31.50	-24.50	56.00	21.85	9.63	0.02	QP
7	0.97	24.79	-21.21	46.00	15.14	9.63	0.02	Average
8	0.97	31.37	-24.63	56.00	21.72	9.63	0.02	QP
9	6.36	30.54	-19.46	50.00	20.69	9.73	0.12	Average
10	6.36	34.98	-25.02	60.00	25.13	9.73	0.12	QP
11 MAX	7.10	32.53	-17.47	50.00	22.65	9.75	0.13	Average
12	7.10	36.89	-23.11	60.00	27.01	9.75	0.13	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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Appendix B EBW Result

**Summary** 

Mode	Max-N dB	Max-OBW	ITU-Code	Min-N dB	Min-OBW
	(Hz)	(Hz)		(Hz)	(Hz)
802.11a_(6Mbps)_1TX	-	-	-	-	-
5.15-5.25GHz	37.75M	16.917M	16M9D1D	36.275M	16.767M
5.725-5.85GHz	15.025M	17.641M	17M6D1D	14.675M	16.617M
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-
5.15-5.25GHz	42.15M	17.841M	17M8D1D	38.75M	17.766M
5.725-5.85GHz	17.5M	18.166M	18M2D1D	15M	17.691M
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-	-
5.15-5.25GHz	76.9M	36.532M	36M5D1D	69.55M	36.132M
5.725-5.85GHz	31.35M	36.332M	36M3D1D	31.3M	36.182M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;
Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

**Min-OBW** = Minimum 99% occupied bandwidth;

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EBW Result Appendix B

#### Result

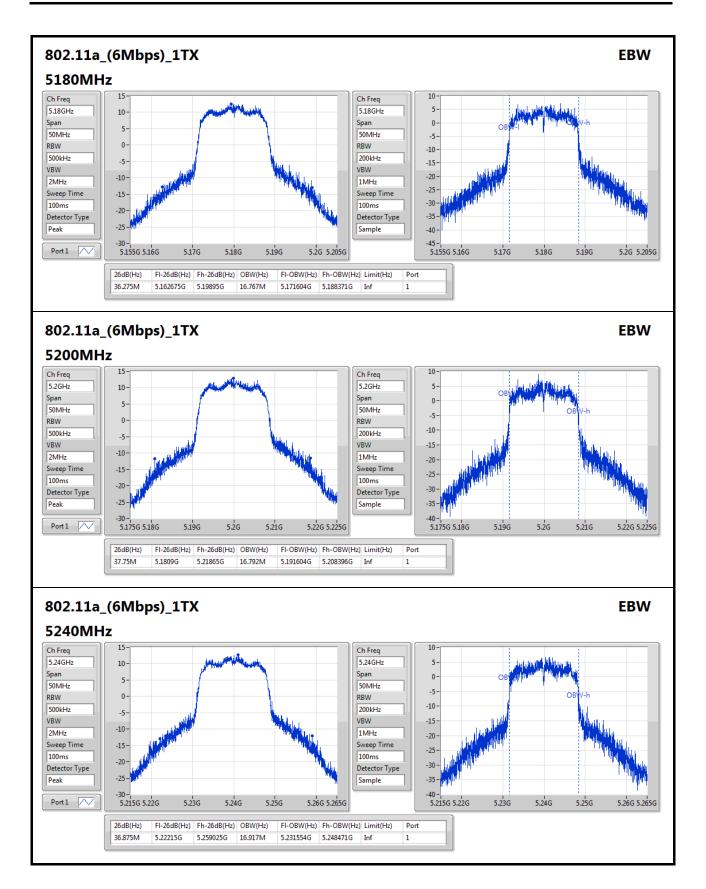
Mode	Result	Limit	Port 1-N dB	Port 1-OBW	
		(Hz)	(Hz)	(Hz)	
802.11a_(6Mbps)_1TX	-	-	-	-	
5180MHz	Pass	Inf	36.275M	16.767M	
5200MHz	Pass	Inf	37.75M	16.792M	
5240MHz	Pass	Inf	36.875M	16.917M	
5745MHz	Pass	500k	14.675M	17.641M	
5785MHz	Pass	500k	15.025M	17.041M	
5825MHz	Pass	500k	15.025M	16.617M	
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	
5180MHz	Pass	Inf	39.5M	17.766M	
5200MHz	Pass	Inf	38.75M	17.841M	
5240MHz	Pass	Inf	42.15M	17.816M	
5745MHz	Pass	500k	15M	18.166M	
5785MHz	Pass	500k	17.5M	17.966M	
5825MHz	Pass	500k	15.075M	17.691M	
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-	
5190MHz	Pass	Inf	69.55M	36.132M	
5230MHz	Pass	Inf	76.9M	36.532M	
5755MHz	Pass	500k	31.3M	36.332M	
5795MHz	Pass	500k	31.35M	36.182M	

Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band Port X-OBW = Port X 99% occupied bandwidth;

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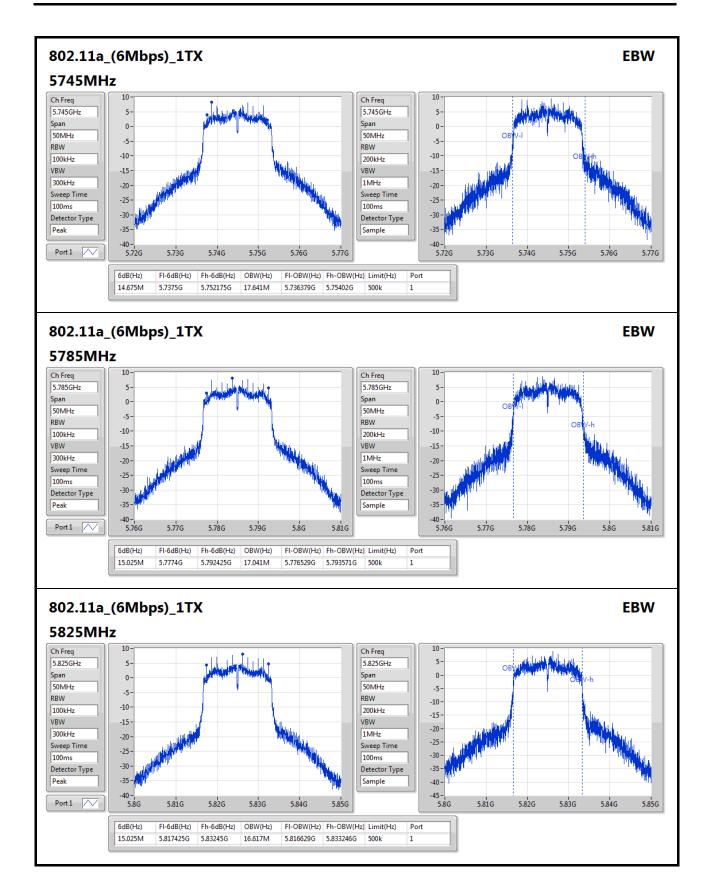




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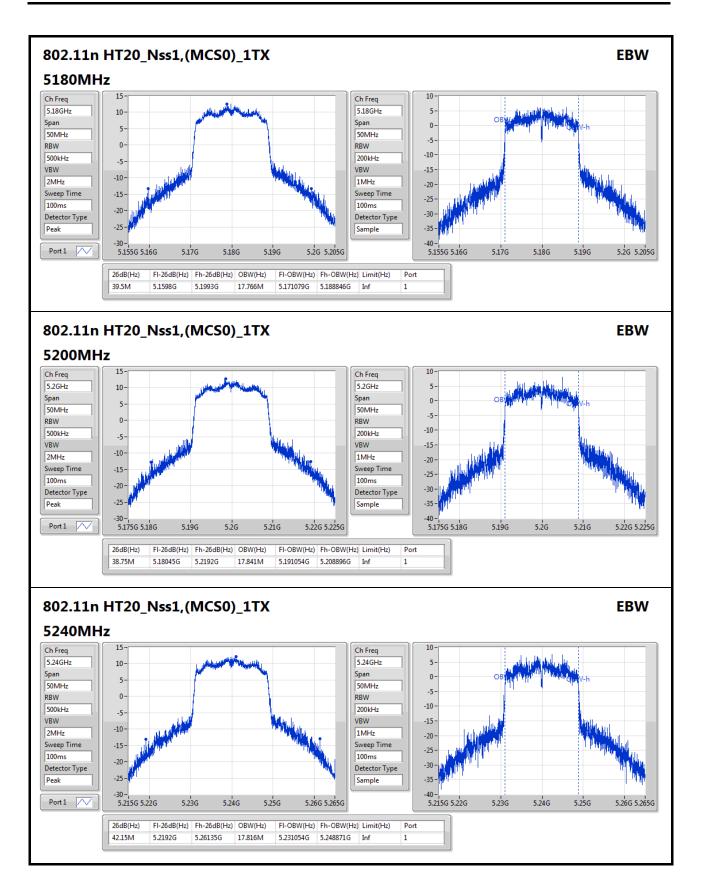
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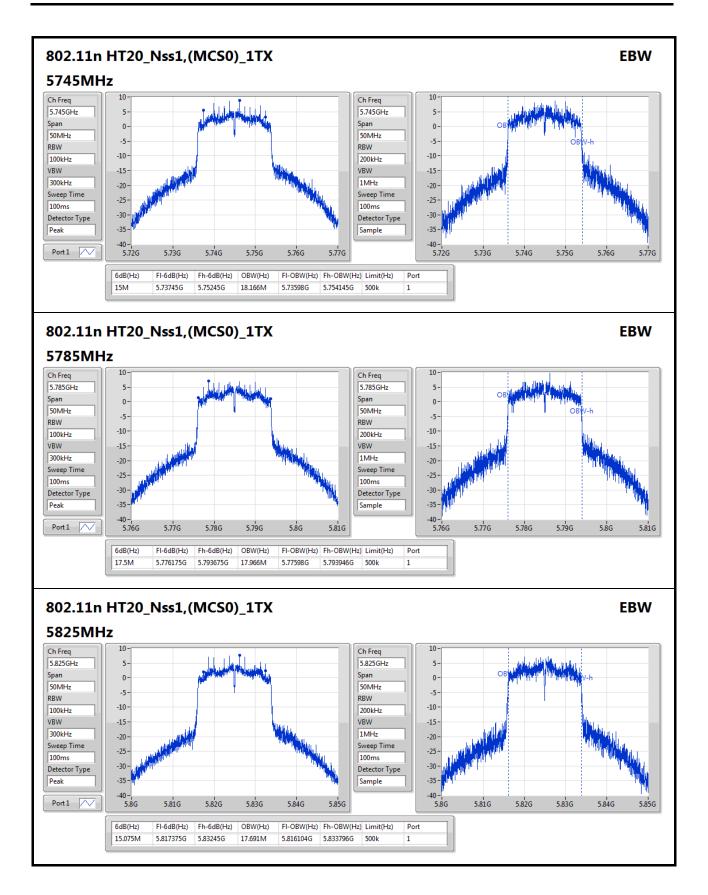




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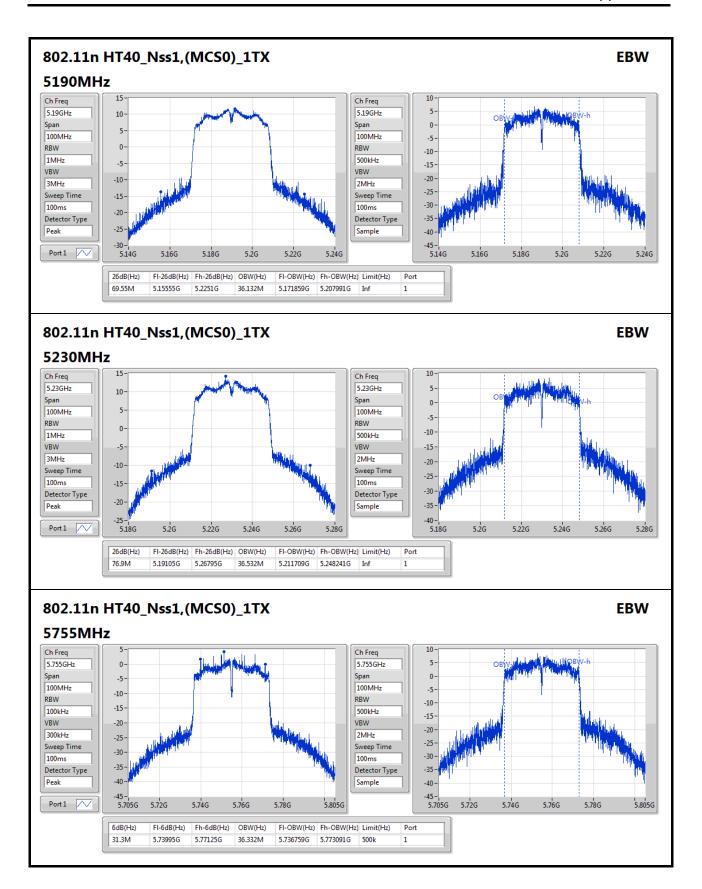




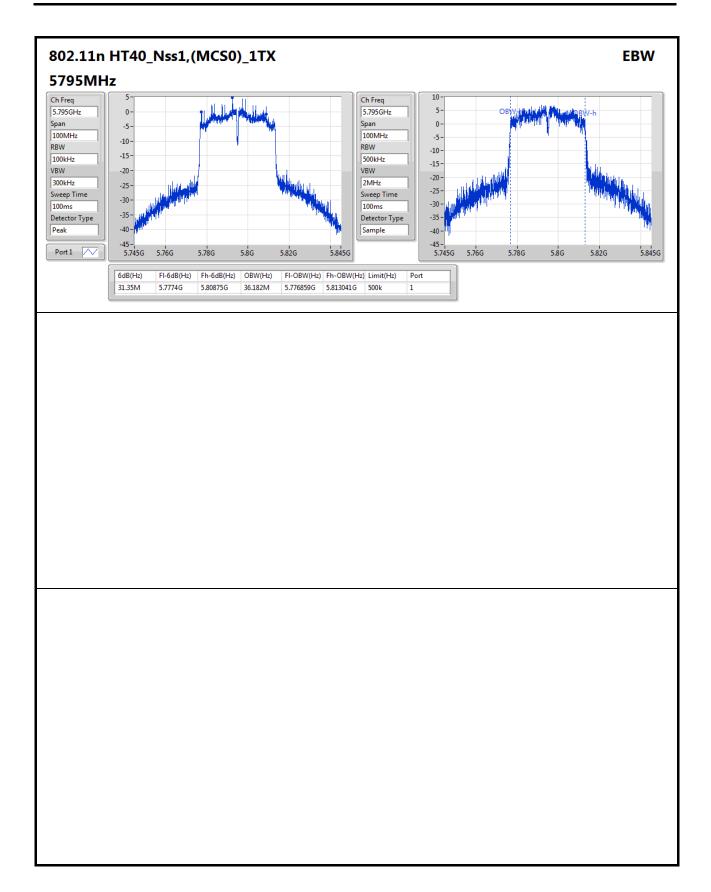
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Power Result Appendix C

Summary

Mode	Total Power	Total Power	EIRP	EIRP
	(dBm)	(W)	(dBm)	(W)
802.11a_(6Mbps)_1TX	-	-	-	-
5.15-5.25GHz	17.88	0.06138	19.45	0.08810
5.725-5.85GHz	18.83	0.07638	20.40	0.10965
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-
5.15-5.25GHz	17.76	0.05970	19.33	0.08570
5.725-5.85GHz	18.63	0.07295	20.20	0.10471
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-
5.15-5.25GHz	17.61	0.05768	19.18	0.08279
5.725-5.85GHz	17.60	0.05754	19.17	0.08260

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Power Result Appendix C

#### Result

Mode	Result	DG	Port 1	Total Power	Power Limit	EIRP	EIRP Limit
		(dBi)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)
802.11a_(6Mbps)_1TX	-	-	-	-	-	-	-
5180MHz	Pass	1.57	17.82	17.82	30.00	19.39	36.00
5200MHz	Pass	1.57	17.88	17.88	30.00	19.45	36.00
5240MHz	Pass	1.57	17.58	17.58	30.00	19.15	36.00
5745MHz	Pass	1.57	18.83	18.83	30.00	20.40	36.00
5785MHz	Pass	1.57	18.19	18.19	30.00	19.76	36.00
5825MHz	Pass	1.57	17.81	17.81	30.00	19.38	36.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-
5180MHz	Pass	1.57	17.60	17.60	30.00	19.17	36.00
5200MHz	Pass	1.57	17.76	17.76	30.00	19.33	36.00
5240MHz	Pass	1.57	17.65	17.65	30.00	19.22	36.00
5745MHz	Pass	1.57	18.63	18.63	30.00	20.20	36.00
5785MHz	Pass	1.57	18.40	18.40	30.00	19.97	36.00
5825MHz	Pass	1.57	17.88	17.88	30.00	19.45	36.00
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-
5190MHz	Pass	1.57	16.30	16.30	30.00	17.87	36.00
5230MHz	Pass	1.57	17.61	17.61	30.00	19.18	36.00
5755MHz	Pass	1.57	17.60	17.60	30.00	19.17	36.00
5795MHz	Pass	1.57	16.99	16.99	30.00	18.56	36.00

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

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## MAX. E.I.R.P. At Any Elevation Angle Above 30 Degrees Result

Appendix C

Mode	Frequency	Modulation	Channel	Data Rate	Conducted Pass Setting	Ant. 0 (dBm)	Total (dBm)	Elevation angle above 30•Max Gain(dBi)	Elevation angle above 30•Max EIRP (dBm)	EIRP Power Limit dBm	Test Result
	5180MHz	OFDM	Ch36	6M	20	17.82	17.82	1.570	19.39	21.00	Complies
	5200MHz	OFDM	Ch40	6M	20	17.88	17.88	1.570	19.45	21.00	Complies
	5240MHz	OFDM	Ch48	6M	20	17.58	17.58	1.570	19.15	21.00	Complies
	5180MHz	HT20	Ch36	MCS0	20	17.60	17.60	1.570	19.17	21.00	Complies
	5200MHz	HT20	Ch40	MCS0	20	17.76	17.76	1.570	19.33	21.00	Complies
	5240MHz	HT20	Ch48	MCS0	20	17.65	17.65	1.570	19.22	21.00	Complies
	5190MHz	HT40	Ch38	MCS0	20	16.30	16.30	1.570	17.87	21.00	Complies
	5230MHz	HT40	Ch46	MCS0	20	17.61	17.61	1.570	19.18	21.00	Complies

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PSD Result Appendix D

**Summary** 

Mode	PD	EIRP PD
	(dBm/RBW)	(dBm/RBW)
802.11a_(6Mbps)_1TX	-	-
5.15-5.25GHz	6.33	7.90
5.725-5.85GHz	5.85	7.42
802.11n HT20_Nss1,(MCS0)_1TX	-	-
5.15-5.25GHz	6.04	7.61
5.725-5.85GHz	5.47	7.04
802.11n HT40_Nss1,(MCS0)_1TX	-	-
5.15-5.25GHz	3.41	4.98
5.725-5.85GHz	1.88	3.45

RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;

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Appendix D **PSD Result** 

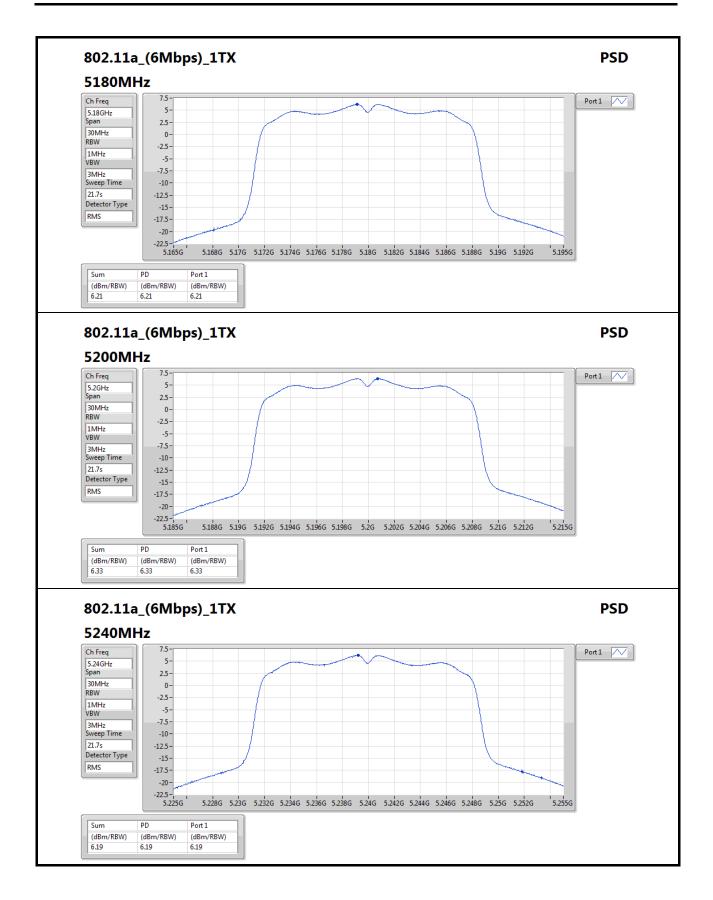
#### Result

Mode	Result	DG	Port 1	PD	PD Limit	EIRP PD	EIRP PD Limit
		(dBi)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
802.11a_(6Mbps)_1TX	-	-	-	-	-	-	-
5180MHz	Pass	1.57	6.21	6.21	17.00	7.78	Inf
5200MHz	Pass	1.57	6.33	6.33	17.00	7.90	Inf
5240MHz	Pass	1.57	6.19	6.19	17.00	7.76	Inf
5745MHz	Pass	1.57	5.85	5.85	30.00	7.42	Inf
5785MHz	Pass	1.57	5.52	5.52	30.00	7.09	Inf
5825MHz	Pass	1.57	5.02	5.02	30.00	6.59	Inf
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-
5180MHz	Pass	1.57	5.87	5.87	17.00	7.44	Inf
5200MHz	Pass	1.57	6.04	6.04	17.00	7.61	Inf
5240MHz	Pass	1.57	5.94	5.94	17.00	7.51	Inf
5745MHz	Pass	1.57	5.47	5.47	30.00	7.04	Inf
5785MHz	Pass	1.57	5.30	5.30	30.00	6.87	Inf
5825MHz	Pass	1.57	4.88	4.88	30.00	6.45	Inf
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-
5190MHz	Pass	1.57	2.13	2.13	17.00	3.70	Inf
5230MHz	Pass	1.57	3.41	3.41	17.00	4.98	Inf
5755MHz	Pass	1.57	1.88	1.88	30.00	3.45	Inf
5795MHz	Pass	1.57	1.33	1.33	30.00	2.90	Inf

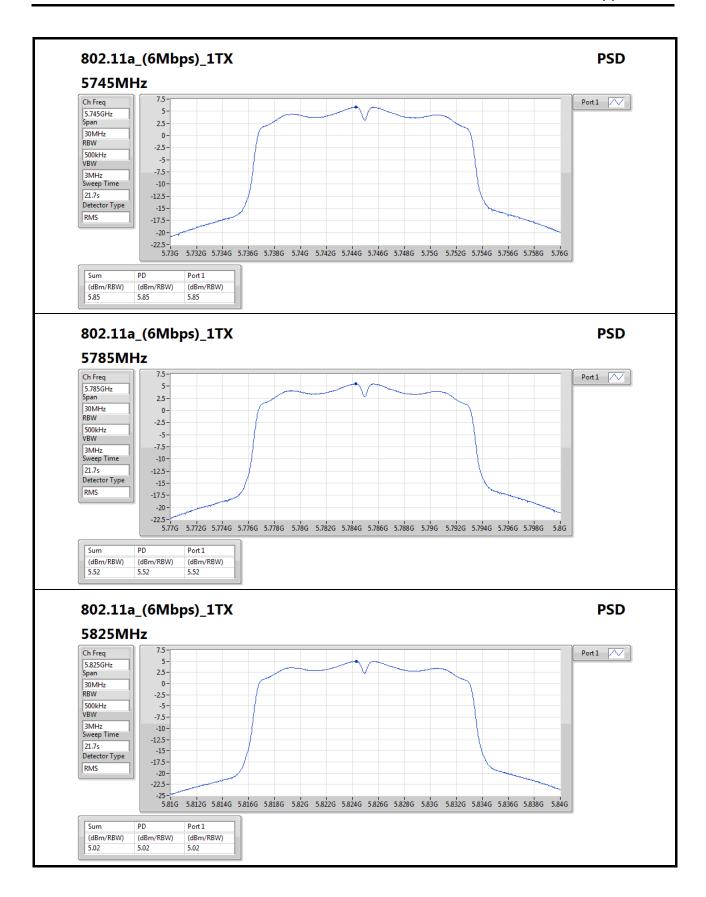
**DG** = Directional Gain; **RBW** = 500kHz for 5.725-5.85GHz band / 1MHz for other band; **PD** = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

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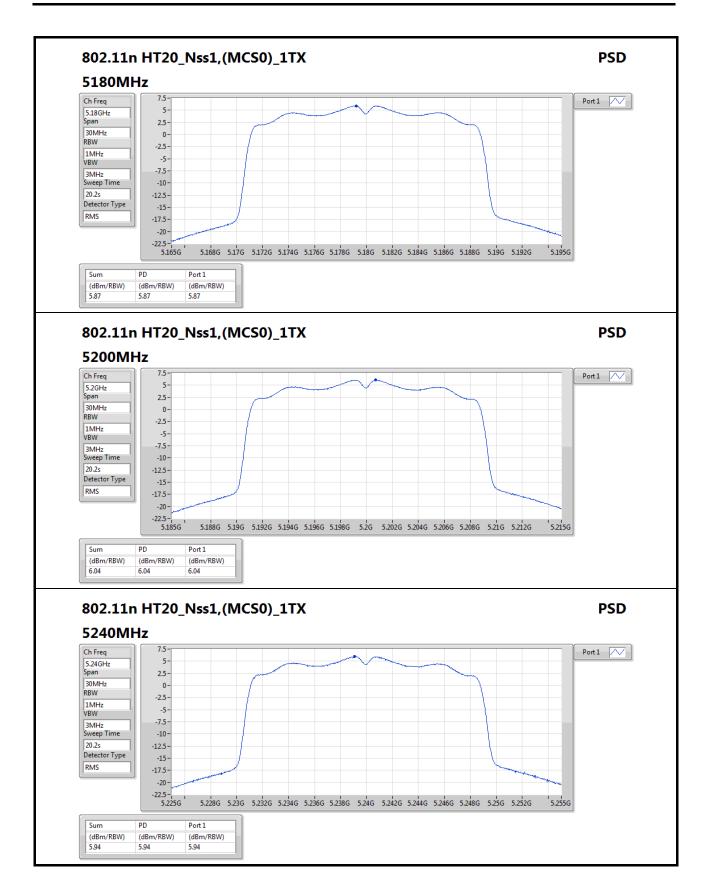




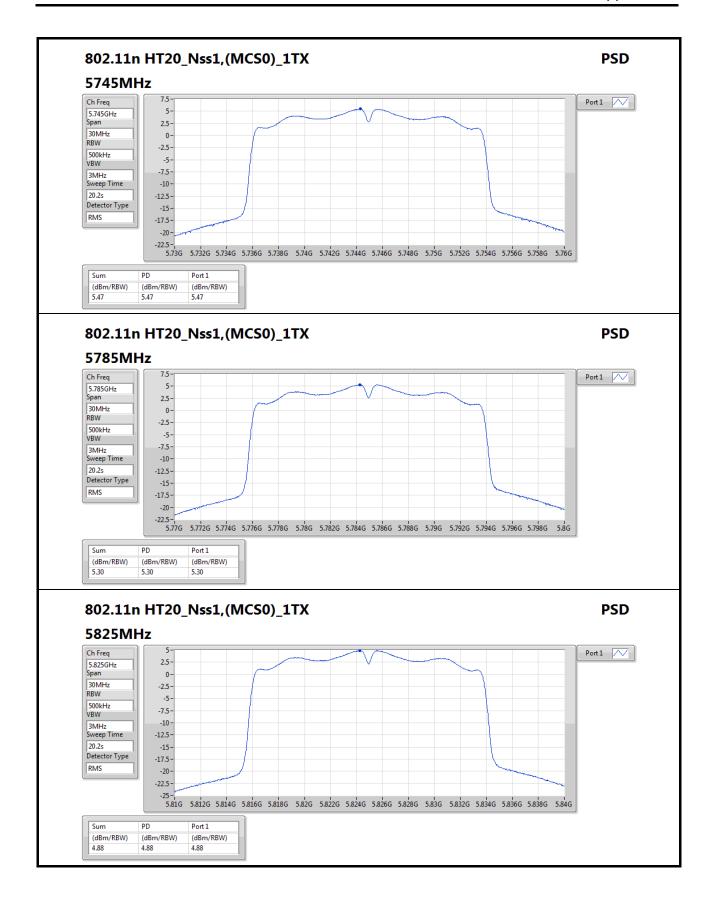






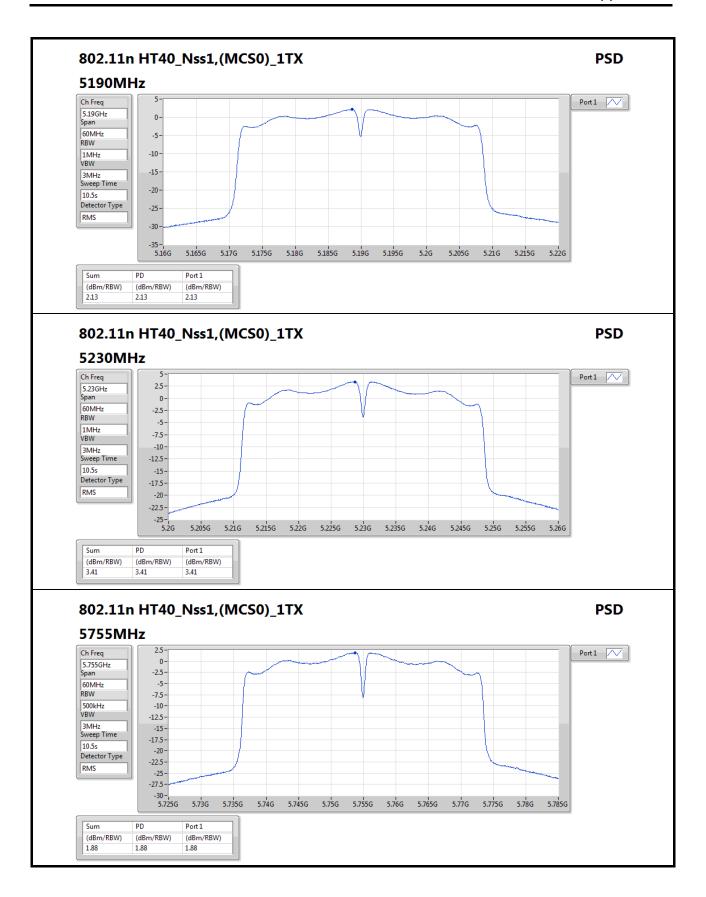


**PSD Result** 

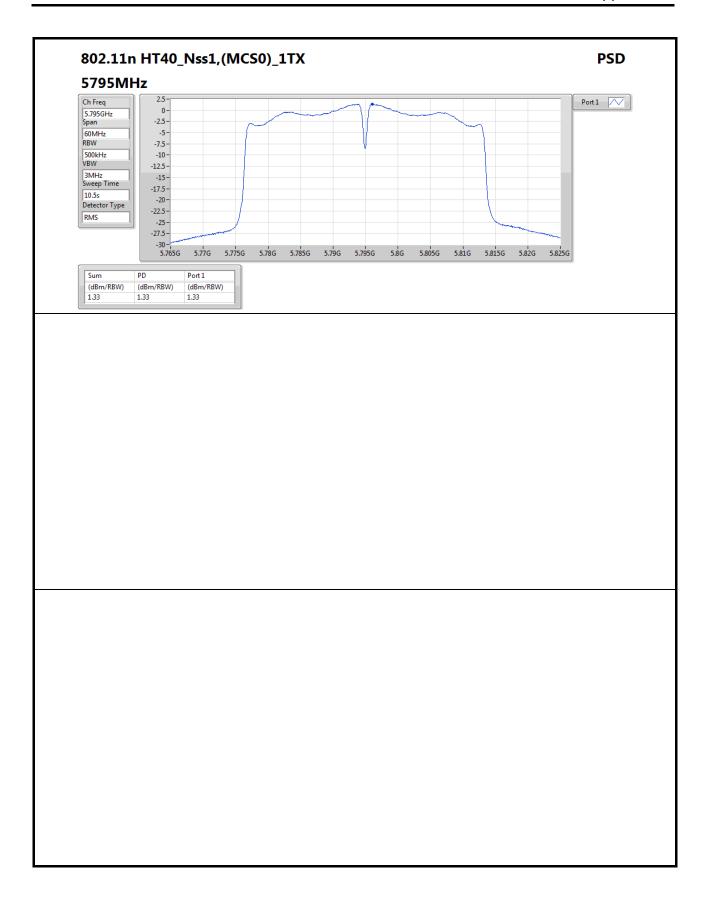


SPORTON INTERNATIONAL INC.





PSD Result Appendix D



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### RSE TX below 1GHz Result

Appendix E

**Summary** 

Mode	Result	Туре	Freq	Level	Limit	Margin	Factor	Dist	Pol.	Azimuth	Height	Comments
			(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)	(H/V)	(°)	(m)	
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-
5.725-5.85GHz	Pass	QP	51.34M	39.49	40.00	-0.51	-8.69	3	V	0	1.00	-

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### RSE TX below 1GHz Result

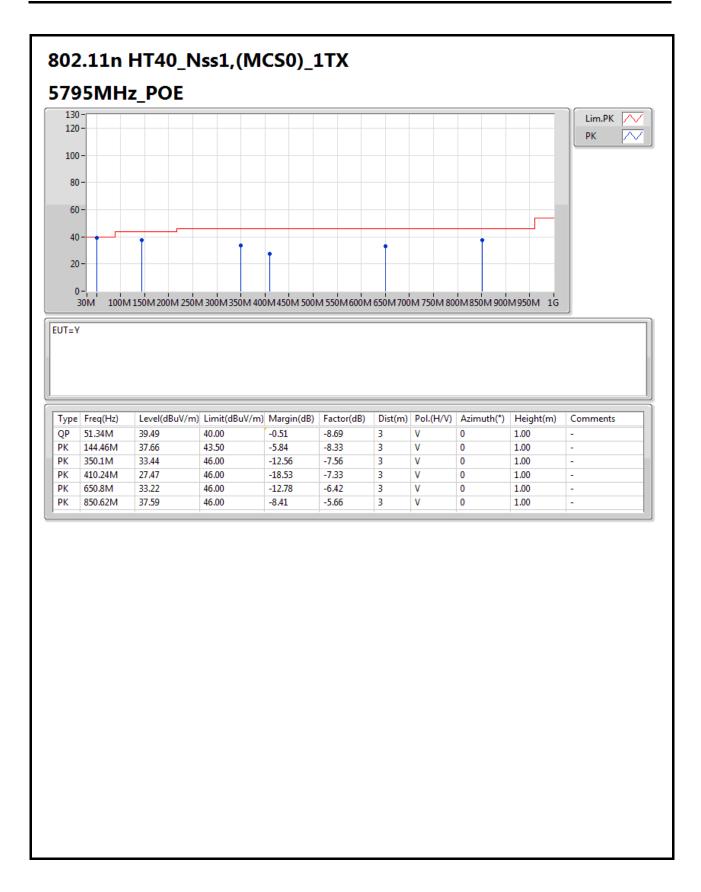
# Appendix E

#### Result

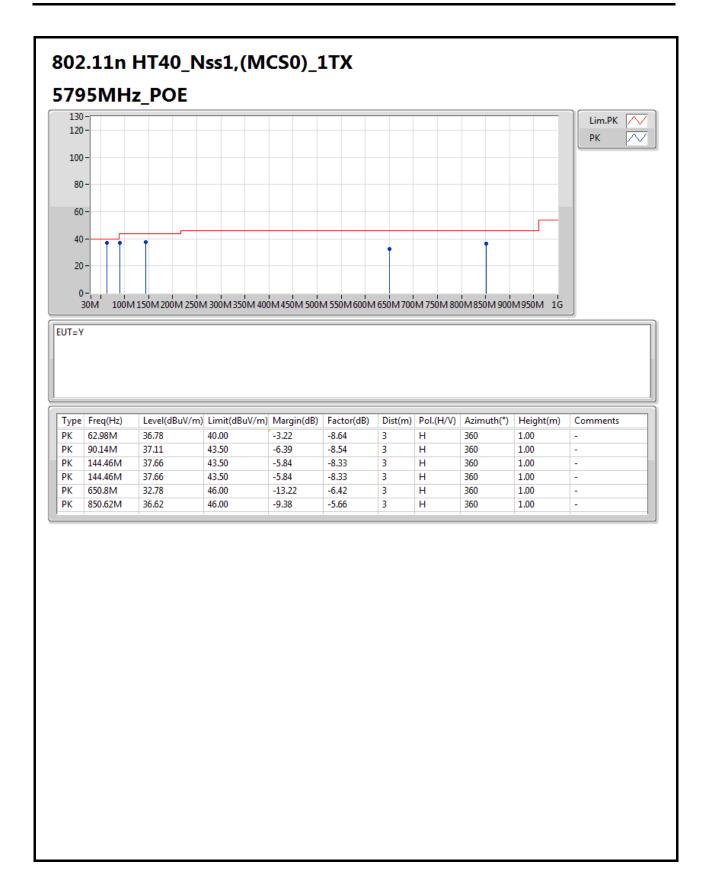
Mode	Result	Туре	Freq	Level	Limit	Margin	Factor	Dist	Pol.	Azimuth	Height	Comments
			(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)	(H/V)	(°)	(m)	
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-
5795MHz	Pass	PK	62.98M	36.78	40.00	-3.22	-8.64	3	Н	360	1.00	-
5795MHz	Pass	PK	90.14M	37.11	43.50	-6.39	-8.54	3	Н	360	1.00	-
5795MHz	Pass	PK	144.46M	37.66	43.50	-5.84	-8.33	3	Н	360	1.00	-
5795MHz	Pass	PK	144.46M	37.66	43.50	-5.84	-8.33	3	Н	360	1.00	-
5795MHz	Pass	PK	650.8M	32.78	46.00	-13.22	-6.42	3	Н	360	1.00	-
5795MHz	Pass	PK	850.62M	36.62	46.00	-9.38	-5.66	3	Н	360	1.00	-
5795MHz	Pass	QP	51.34M	39.49	40.00	-0.51	-8.69	3	V	0	1.00	-
5795MHz	Pass	PK	144.46M	37.66	43.50	-5.84	-8.33	3	V	0	1.00	-
5795MHz	Pass	PK	350.1M	33.44	46.00	-12.56	-7.56	3	V	0	1.00	-
5795MHz	Pass	PK	410.24M	27.47	46.00	-18.53	-7.33	3	V	0	1.00	-
5795MHz	Pass	PK	650.8M	33.22	46.00	-12.78	-6.42	3	V	0	1.00	-
5795MHz	Pass	PK	850.62M	37.59	46.00	-8.41	-5.66	3	V	0	1.00	-

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Appendix E

740630

**Summary** 

Mode	Result	Туре	Freq	Level	Limit	Margin	Factor	Dist	Pol.	Azimuth	Height	Comments
			(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)	(H/V)	(°)	(m)	
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-
5.15-5.25GHz	Pass	AV	5.149995G	53.04	54.00	-0.96	5.44	3	Н	59	3.36	-
802.11a_(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-
5.725-5.85GHz	Pass	PK	5.6098G	60.34	68.20	-7.86	6.24	3	Н	43	1.50	-

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Appendix E



Mode	Result	Туре	Freq	Level	Limit	Margin	Factor	Dist	Pol.	Azimuth	Height	Comments
			(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)	(H/V)	(°)	(m)	
802.11a_(6Mbps)_1TX		-	-	-	-	-	-	-	-	-	-	-
5180MHz	Pass	AV	5.1498G	51.73	54.00	-2.27	5.44	3	Н	68	3.19	-
5180MHz	Pass	AV	5.179G	93.96	Inf	-Inf	5.50	3	Н	68	3.19	-
5180MHz	Pass	PK	5.1478G	65.75	74.00	-8.25	5.44	3	Н	68	3.19	-
5180MHz	Pass	PK	5.1796G	104.48	Inf	-Inf	5.51	3	Н	68	3.19	-
5180MHz	Pass	AV	5.1482G	46.02	54.00	-7.98	5.44	3	V	269	3.63	-
5180MHz	Pass	AV	5.1808G	84.67	Inf	-Inf	5.51	3	V	269	3.63	-
5180MHz	Pass	PK	5.1322G	58.70	74.00	-15.30	5.40	3	V	269	3.63	-
5180MHz	Pass	PK	5.181G	95.98	Inf	-Inf	5.51	3	V	269	3.63	-
5180MHz	Pass	AV	10.36G	41.03	54.00	-12.97	10.25	3	Н	322	1.78	-
5180MHz	Pass	PK	10.36G	54.24	74.00	-19.76	10.25	3	Н	322	1.78	-
5180MHz	Pass	AV	10.36G	39.96	54.00	-14.04	10.25	3	V	22	3.28	-
5180MHz	Pass	PK	10.36G	54.17	74.00	-19.83	10.25	3	V	22	3.28	-
5200MHz	Pass	AV	5.1484G	48.19	54.00	-5.81	5.44	3	Н	63	2.10	-
5200MHz	Pass	AV	5.1988G	94.07	Inf	-Inf	5.55	3	Н	63	2.10	-
5200MHz	Pass	AV	10.4G	41.39	54.00	-12.61	10.32	3	Н	1	1.69	-
5200MHz	Pass	PK	5.1496G	63.02	74.00	-10.98	5.44	3	Н	63	2.10	-
5200MHz	Pass	PK	5.198G	104.10	Inf	-Inf	5.55	3	Н	63	2.10	-
5200MHz	Pass	PK	10.4G	54.89	74.00	-19.11	10.32	3	Н	1	1.69	-
5200MHz	Pass	AV	5.149995G	45.17	54.00	-8.83	5.44	3	V	290	3.59	-
5200MHz	Pass	AV	5.2004G	94.91	Inf	-Inf	5.55	3	V	290	3.59	-
5200MHz	Pass	AV	10.4G	40.82	54.00	-13.18	10.32	3	V	25	3.24	-
5200MHz	Pass	PK	5.1192G	58.08	74.00	-15.92	5.37	3	V	290	3.59	-
5200MHz	Pass	PK	5.2008G	105.73	Inf	-Inf	5.55	3	V	290	3.59	-
5200MHz	Pass	PK	10.4G	54.08	74.00	-19.92	10.32	3	V	25	3.24	-
5240MHz	Pass	AV	5.1482G	45.25	54.00	-8.75	5.44	3	Н	63	2.07	-
5240MHz	Pass	AV	5.2406G	94.40	Inf	-Inf	5.59	3	Н	63	2.07	-
5240MHz	Pass	AV	5.3858G	45.34	54.00	-8.66	5.84	3	Н	63	2.07	-
5240MHz	Pass	AV	10.48G	40.95	54.00	-13.05	10.46	3	Н	4	1.70	-
5240MHz	Pass	PK	5.1248G	58.53	74.00	-15.47	5.38	3	Н	63	2.07	-
5240MHz	Pass	PK	5.24G	104.73	Inf	-Inf	5.59	3	Н	63	2.07	-
5240MHz	Pass	PK	5.3852G	58.85	74.00	-15.15	5.84	3	Н	63	2.07	-
5240MHz	Pass	PK	10.48G	54.78	74.00	-19.22	10.46	3	Н	4	1.70	-
5240MHz	Pass	AV	5.1164G	45.25	54.00	-8.75	5.37	3	V	261	3.53	-
5240MHz	Pass	AV	5.2406G	95.91	Inf	-Inf	5.59	3	V	261	3.53	-
5240MHz	Pass	AV	5.3798G	45.38	54.00	-8.62	5.83	3	V	261	3.53	-
5240MHz	Pass	AV	10.48G	40.34	54.00	-13.66	10.46	3	V	24	3.10	-
5240MHz	Pass	PK	5.1446G	58.89	74.00	-15.11	5.43	3	V	261	3.53	-
5240MHz	Pass	PK	5.24G	106.43	Inf	-Inf	5.59	3	V	261	3.53	-
5240MHz	Pass	PK	5.3792G	58.66	74.00	-15.34	5.82	3	V	261	3.53	-
5240MHz	Pass	PK	10.48G	54.76	74.00	-19.24	10.46	3	V	24	3.10	-
802.11n HT20_Nss1,(MCS0)_1TX		-	-	-	-		-	-		-	-	
5180MHz	Pass	AV	5.149995G	50.35	54.00	-3.65	5.44	3	Н	55	3.20	
5180MHz	Pass	AV	5.1808G	92.99	Inf	-Inf	5.51	3	Н	55	3.20	-
5180MHz	Pass	AV	10.36G	40.21	54.00	-13.79	10.25	3	Н	360	1.50	-
5180MHz	Pass	PK	5.1476G	65.05	74.00	-8.95	5.43	3	Н	55	3.20	-
5180MHz	Pass	PK	5.1814G	103.03	Inf	-Inf	5.51	3	Н	55	3.20	-
5180MHz	Pass	PK	10.36G	54.64	74.00	-19.36	10.25	3	Н	360	1.50	-

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Mode	Result	Туре	Freq	Level	Limit	Margin	Factor	Dist	Pol.	Azimuth	Height	Comments
			(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)	(H/V)	(°)	(m)	
5180MHz	Pass	AV	5.149995G	51.54	54.00	-2.46	5.44	3	V	255	1.92	-
5180MHz	Pass	AV	5.1806G	92.89	Inf	-Inf	5.51	3	٧	255	1.92	-
5180MHz	Pass	AV	10.36G	39.10	54.00	-14.90	10.25	3	٧	0	1.50	-
5180MHz	Pass	PK	5.149995G	66.42	74.00	-7.58	5.44	3	V	255	1.92	-
5180MHz	Pass	PK	5.1792G	103.12	Inf	-Inf	5.50	3	V	255	1.92	-
5180MHz	Pass	PK	10.36G	52.84	74.00	-21.16	10.25	3	V	0	1.50	-
5200MHz	Pass	AV	5.1476G	46.04	54.00	-7.96	5.43	3	Н	69	3.15	-
5200MHz	Pass	AV	5.1988G	92.96	Inf	-Inf	5.55	3	Н	69	3.15	-
5200MHz	Pass	AV	10.4G	41.29	54.00	-12.71	10.32	3	Н	360	1.50	-
5200MHz	Pass	PK	5.1472G	58.85	74.00	-15.15	5.43	3	Н	69	3.15	-
5200MHz	Pass	PK	5.2004G	103.29	Inf	-Inf	5.55	3	Н	69	3.15	-
5200MHz	Pass	PK	10.4G	54.18	74.00	-19.82	10.32	3	Н	360	1.50	-
5200MHz	Pass	AV	5.1496G	46.84	54.00	-7.16	5.44	3	V	272	3.61	-
5200MHz	Pass	AV	5.1992G	94.67	Inf	-Inf	5.55	3	V	272	3.61	-
5200MHz	Pass	AV	10.4G	39.67	54.00	-14.33	10.32	3	V	0	1.50	-
5200MHz	Pass	PK	5.149995G	59.83	74.00	-14.17	5.44	3	٧	272	3.61	-
5200MHz	Pass	PK	5.1992G	104.97	Inf	-Inf	5.55	3	٧	272	3.61	-
5200MHz	Pass	PK	10.4G	53.21	74.00	-20.79	10.32	3	V	0	1.50	-
5240MHz	Pass	AV	5.1476G	45.06	54.00	-8.94	5.43	3	Н	59	2.15	-
5240MHz	Pass	AV	5.2406G	93.68	Inf	-Inf	5.59	3	Н	59	2.15	-
5240MHz	Pass	AV	5.3792G	45.27	54.00	-8.73	5.82	3	Н	59	2.15	-
5240MHz	Pass	AV	10.48G	40.47	54.00	-13.53	10.46	3	Н	360	1.50	-
5240MHz	Pass	PK	5.1212G	58.15	74.00	-15.85	5.38	3	Н	59	2.15	-
5240MHz	Pass	PK	5.24G	103.82	Inf	-Inf	5.59	3	Н	59	2.15	-
5240MHz	Pass	PK	5.369G	58.11	74.00	-15.89	5.80	3	Н	59	2.15	-
5240MHz	Pass	PK	10.48G	53.93	74.00	-20.07	10.46	3	Н	360	1.50	-
5240MHz	Pass	AV	5.12G	45.10	54.00	-8.90	5.37	3	V	276	3.54	-
5240MHz	Pass	AV	5.2406G	95.22	Inf	-Inf	5.59	3	V	276	3.54	-
5240MHz	Pass	AV	5.39G	45.29	54.00	-8.71	5.85	3	V	276	3.54	-
5240MHz	Pass	AV	10.48G	39.05	54.00	-14.95	10.46	3	V	0	1.50	-
5240MHz	Pass	PK	5.1182G	58.19	74.00	-15.81	5.37	3	V	276	3.54	-
5240MHz	Pass	PK	5.2388G	105.38	Inf	-Inf	5.59	3	V	276	3.54	-
5240MHz	Pass	PK	5.369G	57.83	74.00	-16.17	5.80	3	V	276	3.54	-
5240MHz	Pass	PK	10.48G	52.35	74.00	-21.65	10.46	3	V	0	1.50	-
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-		-	-	-	-
5190MHz	Pass	AV	5.149995G	53.04	54.00	-0.96	5.44	3	Н	59	3.36	-
5190MHz	Pass	AV	5.188G	88.37	Inf	-Inf	5.52	3	Н	59	3.36	-
5190MHz	Pass	AV	10.38G	39.22	54.00	-14.78	10.28	3	Н	360	1.50	-
5190MHz	Pass	PK	5.149995G	71.67	74.00	-2.33	5.44	3	Н	59	3.36	-
5190MHz	Pass	PK	5.188G	100.51	Inf	-Inf	5.52	3	Н	59	3.36	-
5190MHz	Pass	PK	10.38G	53.98	74.00	-20.02	10.28	3	Н	360	1.50	-
5190MHz	Pass	AV	5.149995G	46.51	54.00	-7.49	5.44	3	٧	268	3.59	-
5190MHz	Pass	AV	5.1916G	88.83	Inf	-Inf	5.53	3	٧	268	3.59	-
5190MHz	Pass	AV	10.38G	39.02	54.00	-14.98	10.28	3	٧	0	1.50	-
5190MHz	Pass	PK	5.149995G	62.70	74.00	-11.30	5.44	3	٧	268	3.59	-
5190MHz	Pass	PK	5.1912G	100.60	Inf	-Inf	5.53	3	٧	268	3.59	-
5190MHz	Pass	PK	10.38G	53.16	74.00	-20.84	10.28	3	٧	0	1.50	-
5230MHz	Pass	AV	5.1324G	45.56	54.00	-8.44	5.40	3	Н	63	3.28	-
5230MHz	Pass	AV	5.2316G	89.58	Inf	-Inf	5.58	3	Н	63	3.28	-

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Mode	Result	Type	Freq	Level	Limit	Margin	Factor	Dist	Pol.	Azimuth	Height	Comments
			(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)	(H/V)	(°)	(m)	
5230MHz	Pass	AV	10.46G	40.50	54.00	-13.50	10.42	3	Н	0	1.50	-
5230MHz	Pass	PK	5.1384G	58.70	74.00	-15.30	5.41	3	Н	63	3.28	-
5230MHz	Pass	PK	5.228G	100.97	Inf	-Inf	5.58	3	Н	63	3.28	-
5230MHz	Pass	PK	10.46G	54.16	74.00	-19.84	10.42	3	Н	0	1.50	-
5230MHz	Pass	AV	5.1304G	45.24	54.00	-8.76	5.40	3	V	266	3.37	-
5230MHz	Pass	AV	5.2284G	91.56	Inf	-Inf	5.58	3	V	266	3.37	-
5230MHz	Pass	AV	10.46G	38.96	54.00	-15.04	10.42	3	V	360	1.50	-
5230MHz	Pass	PK	5.1328G	59.07	74.00	-14.93	5.40	3	V	266	3.37	-
5230MHz	Pass	PK	5.2268G	103.64	Inf	-Inf	5.58	3	V	266	3.37	-
5230MHz	Pass	PK	10.46G	51.77	74.00	-22.23	10.42	3	V	360	1.50	-
802.11a_(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-
5745MHz	Pass	AV	5.7438G	98.38	Inf	-Inf	6.40	3	Н	347	1.00	-
5745MHz	Pass	AV	11.49G	40.97	54.00	-13.03	12.03	3	Н	360	1.50	-
5745MHz	Pass	PK	5.5422G	59.16	68.20	-9.04	6.14	3	Н	347	1.00	-
5745MHz	Pass	PK	5.7462G	109.02	Inf	-Inf	6.40	3	Н	347	1.00	-
5745MHz	Pass	PK	5.9682G	58.74	68.20	-9.46	6.67	3	Н	347	1.00	-
5745MHz	Pass	PK	11.49G	53.36	74.00	-20.64	12.03	3	Н	360	1.50	-
5745MHz	Pass	AV	5.7438G	97.04	Inf	-Inf	6.40	3	V	40	1.98	-
5745MHz	Pass	AV	11.49G	41.11	54.00	-12.89	12.03	3	٧	0	1.50	-
5745MHz	Pass	PK	5.631G	59.18	68.20	-9.02	6.27	3	٧	40	1.98	-
5745MHz	Pass	PK	5.7438G	107.16	Inf	-Inf	6.40	3	V	40	1.98	-
5745MHz	Pass	PK	5.9334G	58.21	68.20	-9.99	6.62	3	V	40	1.98	-
5745MHz	Pass	PK	11.49G	53.77	74.00	-20.23	12.03	3	V	0	1.50	-
5785MHz	Pass	AV	5.7838G	96.03	Inf	-Inf	6.42	3	Н	43	1.50	-
5785MHz	Pass	AV	11.57G	40.54	54.00	-13.46	12.14	3	Н	360	1.50	-
5785MHz	Pass	PK	5.6098G	60.34	68.20	-7.86	6.24	3	Н	43	1.50	-
5785MHz	Pass	PK	5.7838G	105.96	Inf	-Inf	6.42	3	Н	43	1.50	-
5785MHz	Pass	PK	5.9482G	58.33	68.20	-9.87	6.64	3	Н	43	1.50	-
5785MHz	Pass	PK	11.57G	53.28	74.00	-20.72	12.14	3	Н	360	1.50	-
5785MHz	Pass	AV	5.7838G	95.33	Inf	-Inf	6.42	3	V	279	3.05	-
5785MHz	Pass	AV	11.57G	39.60	54.00	-14.40	12.14	3	V	0	1.50	-
5785MHz	Pass	PK	5.5918G	59.79	68.20	-8.41	6.22	3	V	279	3.05	-
5785MHz	Pass	PK	5.7838G	105.16	Inf	-Inf	6.42	3	V	279	3.05	-
5785MHz	Pass	PK	5.9866G	58.61	68.20	-9.59	6.70	3	٧	279	3.05	
5785MHz	Pass	PK	11.57G	53.21	74.00	-20.79	12.14	3	٧	0	1.50	
5825MHz	Pass	AV	5.8238G	98.46	Inf	-Inf	6.46	3	Н	337	1.00	
5825MHz	Pass	AV	11.65G	40.54	54.00	-13.46	12.24	3	Н	360	1.50	
5825MHz	Pass	PK	5.5634G	59.52	68.20	-8.68	6.18	3	Н	337	1.00	
5825MHz	Pass	PK	5.8226G	108.51	Inf	-Inf	6.46	3	Н	337	1.00	_
5825MHz	Pass	PK	5.9366G	58.59	68.20	-9.61	6.62	3	Н	337	1.00	_
5825MHz	Pass	PK	11.65G	53.38	74.00	-20.62	12.24	3	Н	360	1.50	
5825MHz	Pass	AV	5.8238G	95.43	Inf	-20.02 -Inf	6.46	3	V	33	1.84	
5825MHz	Pass	AV	11.65G	40.59	54.00	-13.41	12.24	3	V	0	1.50	
5825MHz	Pass	PK	5.5826G	59.80	68.20	-8.40	6.20	3	V	33	1.84	-
												-
5825MHz	Pass	PK	5.8262G	105.62	Inf	-Inf	6.47	3	V	33	1.84	
5825MHz	Pass	PK	5.9414G	58.45	68.20	-9.75	6.63	3		33	1.84	-
5825MHz	Pass	PK	11.65G	54.58	74.00	-19.42	12.24	3	V	0	1.50	-
802.11n HT20_Nss1,(MCS0)_1TX		-		- 07.00	-	-	- 40	-	-	-	1.00	-
5745MHz	Pass	AV	5.7462G	97.98	Inf	-Inf	6.40	3	Н	344	1.00	-

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Mode	Result	Type	Freq	Level	Limit	Margin	Factor	Dist	Pol.	Azimuth	Height	Comments
			(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)	(H/V)	(°)	(m)	
5745MHz	Pass	AV	11.49G	40.99	54.00	-13.01	12.03	3	Н	0	1.50	-
5745MHz	Pass	PK	5.5206G	59.44	68.20	-8.76	6.11	3	Н	344	1.00	-
5745MHz	Pass	PK	5.7438G	108.50	Inf	-Inf	6.40	3	Н	344	1.00	-
5745MHz	Pass	PK	5.985G	58.57	68.20	-9.63	6.70	3	Н	344	1.00	-
5745MHz	Pass	PK	11.49G	53.41	74.00	-20.59	12.03	3	Н	0	1.50	-
5745MHz	Pass	AV	5.745G	96.51	Inf	-Inf	6.40	3	V	30	1.96	-
5745MHz	Pass	AV	11.49G	40.15	54.00	-13.85	12.03	3	V	360	1.50	-
5745MHz	Pass	PK	5.625G	59.61	68.20	-8.59	6.27	3	V	30	1.96	-
5745MHz	Pass	PK	5.7462G	106.57	Inf	-Inf	6.40	3	V	30	1.96	-
5745MHz	Pass	PK	5.9406G	58.54	68.20	-9.66	6.63	3	V	30	1.96	-
5745MHz	Pass	PK	11.49G	54.82	74.00	-19.18	12.03	3	V	360	1.50	-
5785MHz	Pass	AV	5.7838G	95.97	Inf	-Inf	6.42	3	Н	50	1.51	-
5785MHz	Pass	AV	11.57G	40.42	54.00	-13.58	12.14	3	Н	360	1.50	-
5785MHz	Pass	PK	5.593G	58.80	68.20	-9.40	6.22	3	Н	50	1.51	-
5785MHz	Pass	PK	5.785G	105.65	Inf	-Inf	6.42	3	Н	50	1.51	-
5785MHz	Pass	PK	5.9578G	58.19	68.20	-10.01	6.66	3	Н	50	1.51	-
5785MHz	Pass	PK	11.57G	53.17	74.00	-20.83	12.14	3	Н	360	1.50	-
5785MHz	Pass	AV	5.785G	95.65	Inf	-Inf	6.42	3	٧	260	1.84	-
5785MHz	Pass	AV	11.57G	40.53	54.00	-13.47	12.14	3	V	0	1.50	-
5785MHz	Pass	PK	5.569G	59.50	68.20	-8.70	6.18	3	V	260	1.84	-
5785MHz	Pass	PK	5.7838G	106.60	Inf	-Inf	6.42	3	V	260	1.84	-
5785MHz	Pass	PK	5.9878G	59.96	68.20	-8.24	6.70	3	V	260	1.84	-
5785MHz	Pass	PK	11.57G	54.03	74.00	-19.97	12.14	3	V	0	1.50	-
5825MHz	Pass	AV	5.8238G	98.03	Inf	-Inf	6.46	3	Н	337	1.01	-
5825MHz	Pass	AV	11.65G	40.37	54.00	-13.63	12.24	3	Н	360	1.50	-
5825MHz	Pass	PK	5.5706G	59.38	68.20	-8.82	6.19	3	Н	337	1.01	-
5825MHz	Pass	PK	5.8226G	109.18	Inf	-Inf	6.46	3	Н	337	1.01	-
5825MHz	Pass	PK	5.927G	59.46	68.20	-8.74	6.61	3	Н	337	1.01	-
5825MHz	Pass	PK	11.65G	53.66	74.00	-20.34	12.24	3	Н	360	1.50	-
5825MHz	Pass	AV	5.8238G	94.98	Inf	-Inf	6.46	3	V	282	1.70	-
5825MHz	Pass	AV	11.65G	39.57	54.00	-14.43	12.24	3	V	0	1.50	-
5825MHz	Pass	PK	5.5898G	59.32	68.20	-8.88	6.21	3	V	282	1.70	-
5825MHz	Pass	PK	5.8262G	104.71	Inf	-Inf	6.47	3	V	282	1.70	-
5825MHz	Pass	PK	5.9702G	58.49	68.20	-9.71	6.68	3	V	282	1.70	-
5825MHz	Pass	PK	11.65G	53.45	74.00	-20.55	12.24	3	V	0	1.50	-
802.11n HT40_Nss1,(MCS0)_1TX		-						-				
5755MHz	Pass	AV	5.7562G	92.77	Inf	-Inf	6.40	3	Н	344	1.07	
5755MHz	Pass	AV	11.51G	39.46	54.00	-14.54	12.06	3	Н	360	1.50	
5755MHz	Pass	PK	5.647G	59.56	68.20	-8.64	6.30	3	Н	344	1.07	
5755MHz	Pass	PK	5.7574G	104.73	Inf	-Inf	6.40	3	Н	344	1.07	
5755MHz	Pass	PK	5.977G	58.80	68.20	-9.40	6.69	3	н	344	1.07	
5755MHz	Pass	PK	11.51G	53.82	74.00	-20.18	12.06	3	н	360	1.50	
5755MHz	Pass	AV	5.7526G	91.49	Inf	-20.10 -Inf	6.40	3	V	26	1.62	
5755MHz	Pass	AV	11.51G	39.70	54.00	-14.30	12.06	3	V	0	1.50	
5755MHz	Pass	PK	5.629G	59.51	68.20	-8.69	6.27	3	V	26	1.62	
5755MHz	Pass	PK	5.7526G	102.92	Inf	-0.09 -Inf	6.40	3	V	26	1.62	
5755MHz	Pass	PK	5.7326G 5.9302G	58.47	68.20	-9.73	6.62	3	V	26	1.62	
5755MHz	Pass	PK PK	11.51G	53.56	74.00	-9.73	12.06	3	V	0	1.62	-
												•
5795MHz	Pass	AV	5.7974G	93.25	Inf	-Inf	6.43	3	Н	344	1.03	-

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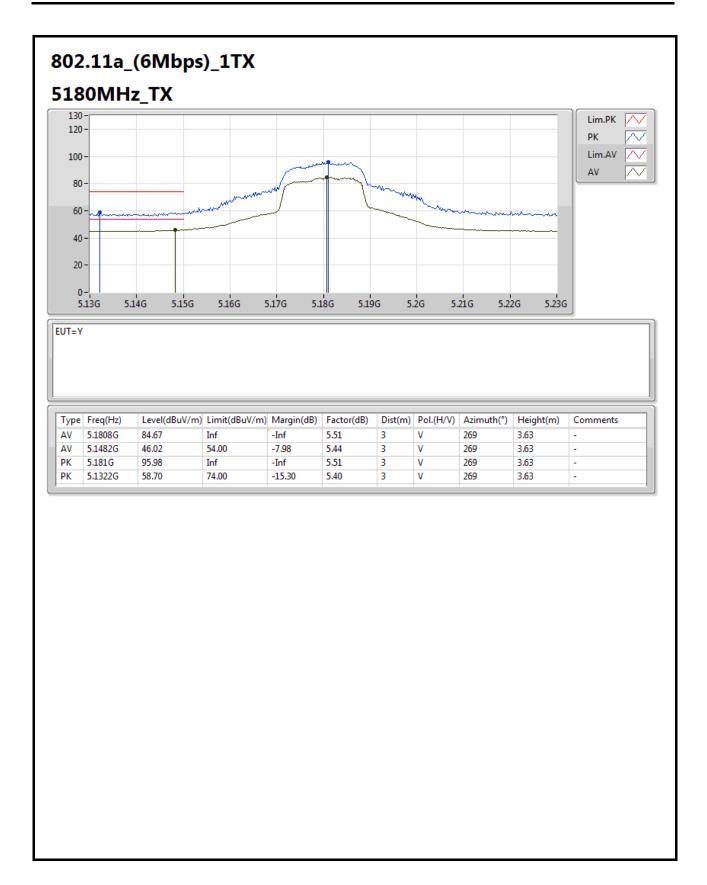


Appendix E

Mode	Result	Туре	Freq	Level	Limit	Margin	Factor	Dist	Pol.	Azimuth	Height	Comments
			(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)	(H/V)	(°)	(m)	
5795MHz	Pass	AV	11.59G	40.15	54.00	-13.85	12.16	3	Н	332	1.97	-
5795MHz	Pass	PK	5.5358G	58.89	68.20	-9.31	6.13	3	Н	344	1.03	-
5795MHz	Pass	PK	5.7962G	104.73	Inf	-Inf	6.43	3	Н	344	1.03	-
5795MHz	Pass	PK	5.9606G	59.67	68.20	-8.53	6.66	3	Н	344	1.03	-
5795MHz	Pass	PK	11.59G	54.24	74.00	-19.76	12.16	3	Н	332	1.97	-
5795MHz	Pass	AV	5.7974G	90.92	Inf	-Inf	6.43	3	V	281	1.89	-
5795MHz	Pass	AV	11.59G	39.78	54.00	-14.22	12.16	3	V	337	1.53	-
5795MHz	Pass	PK	5.6126G	59.05	68.20	-9.15	6.25	3	V	281	1.89	-
5795MHz	Pass	PK	5.7962G	103.02	Inf	-Inf	6.43	3	V	281	1.89	-
5795MHz	Pass	PK	5.987G	58.55	68.20	-9.65	6.70	3	V	281	1.89	-
5795MHz	Pass	PK	11.59G	54.18	74.00	-19.82	12.16	3	V	337	1.53	-

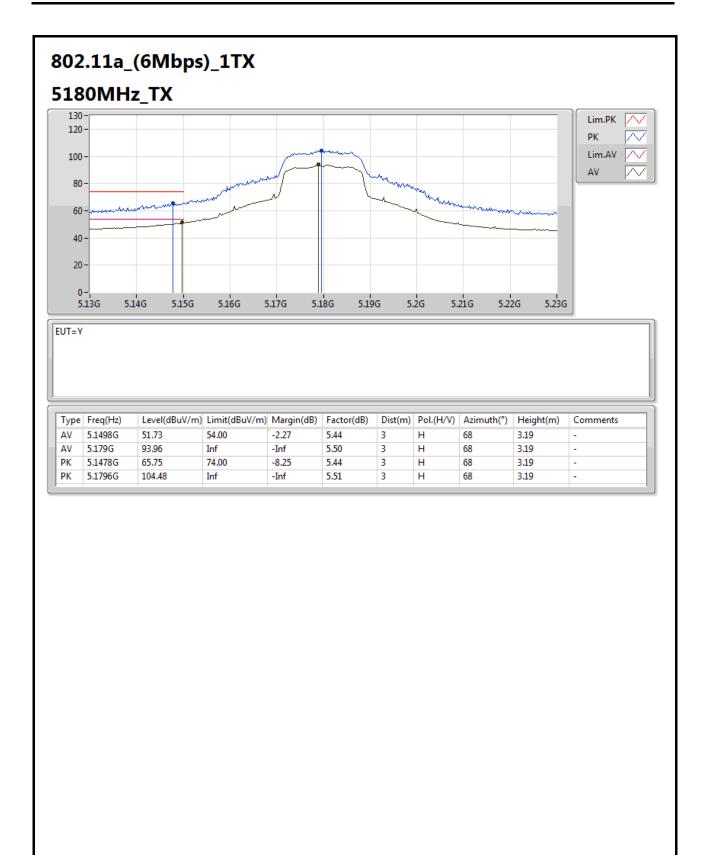
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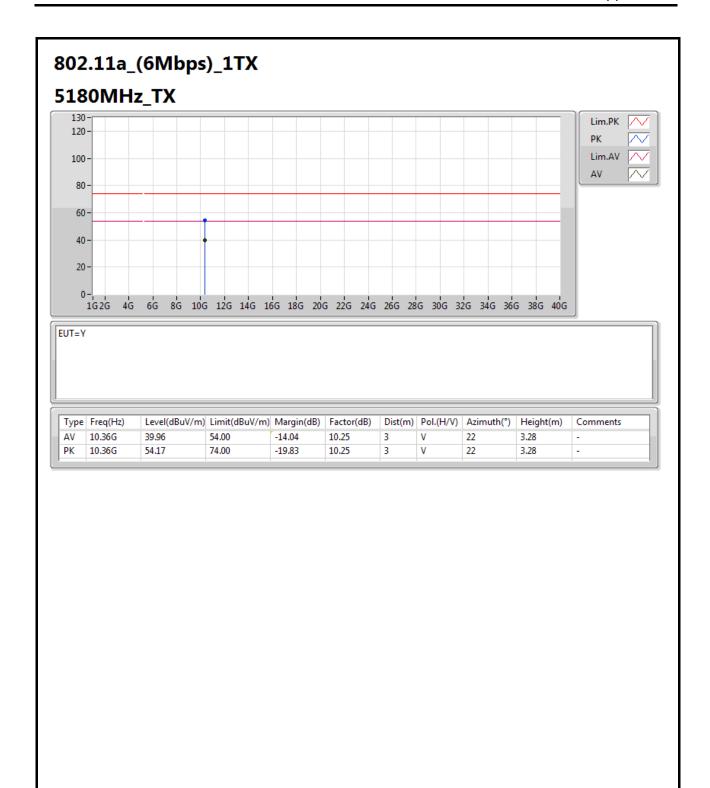
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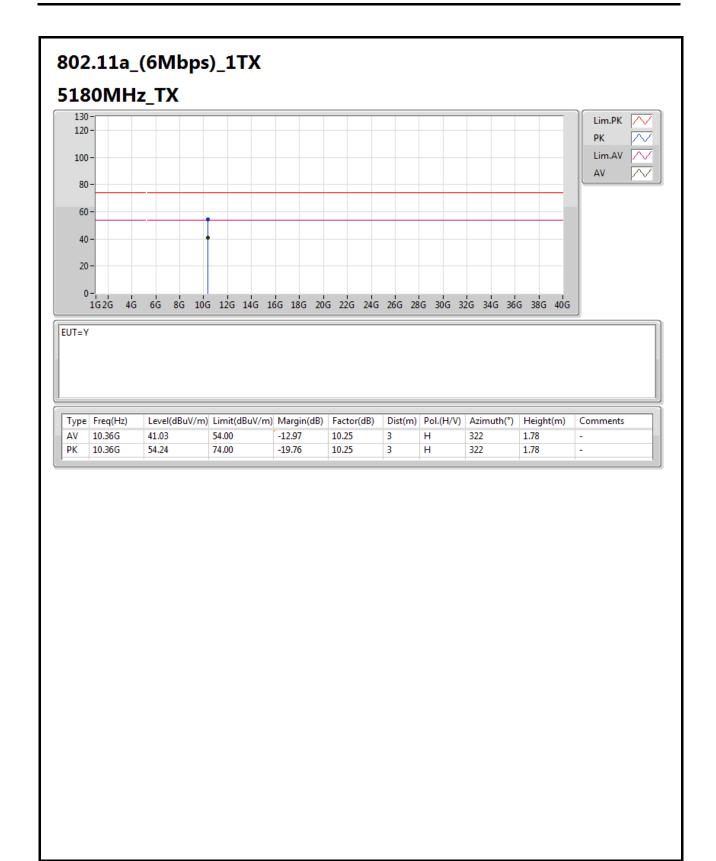


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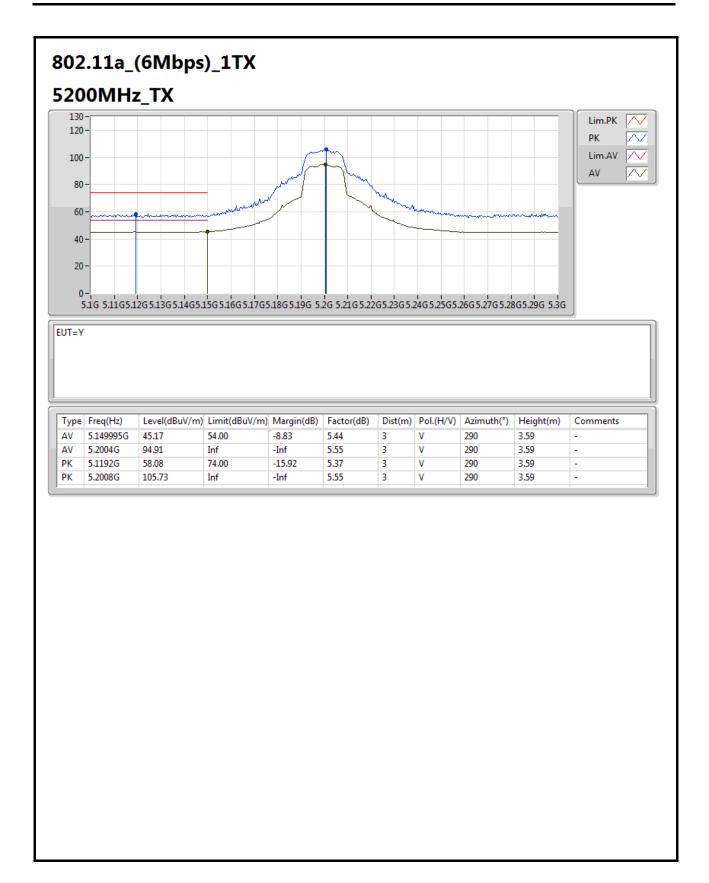






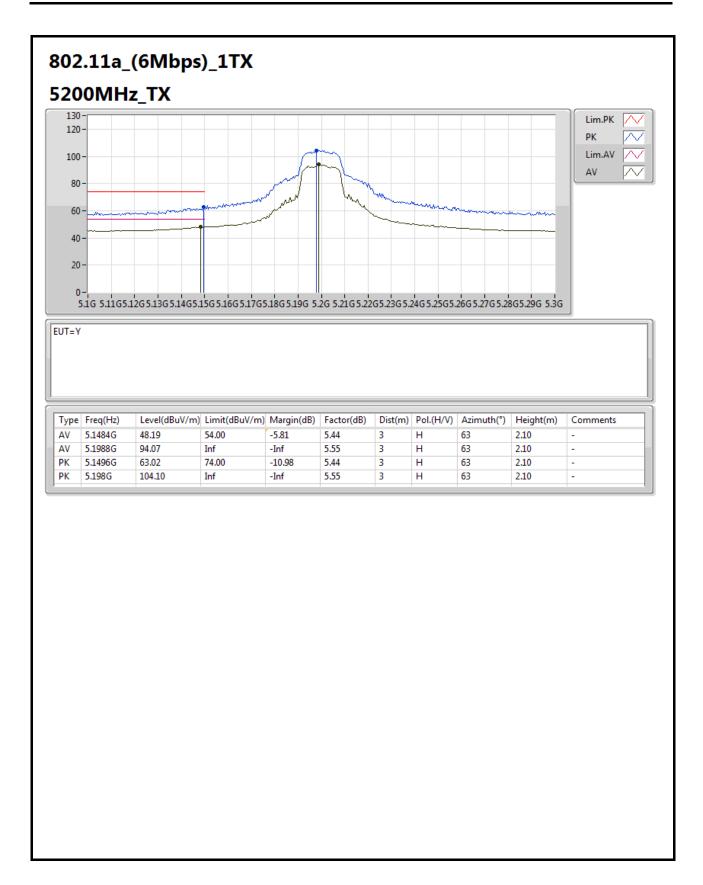
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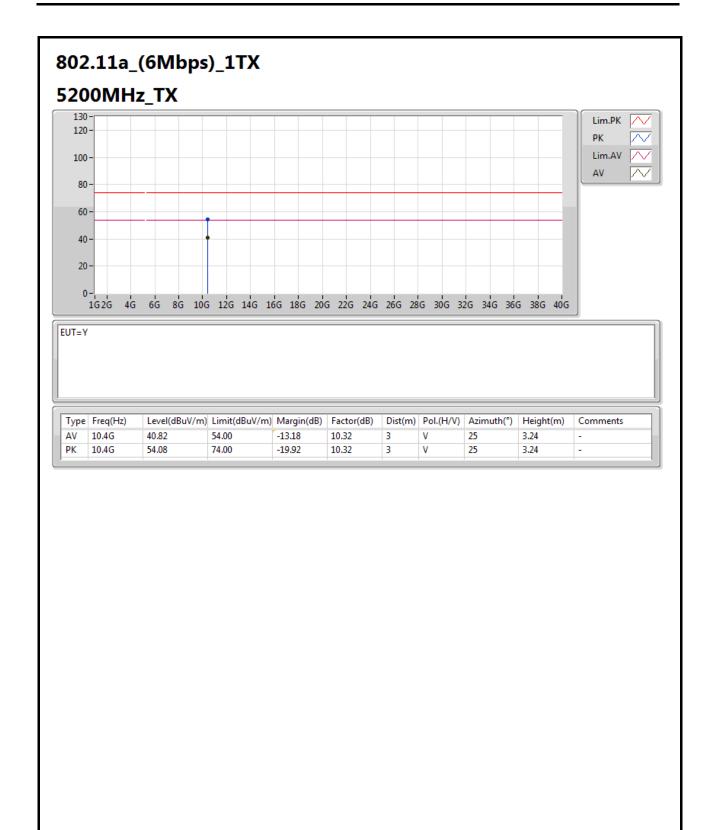
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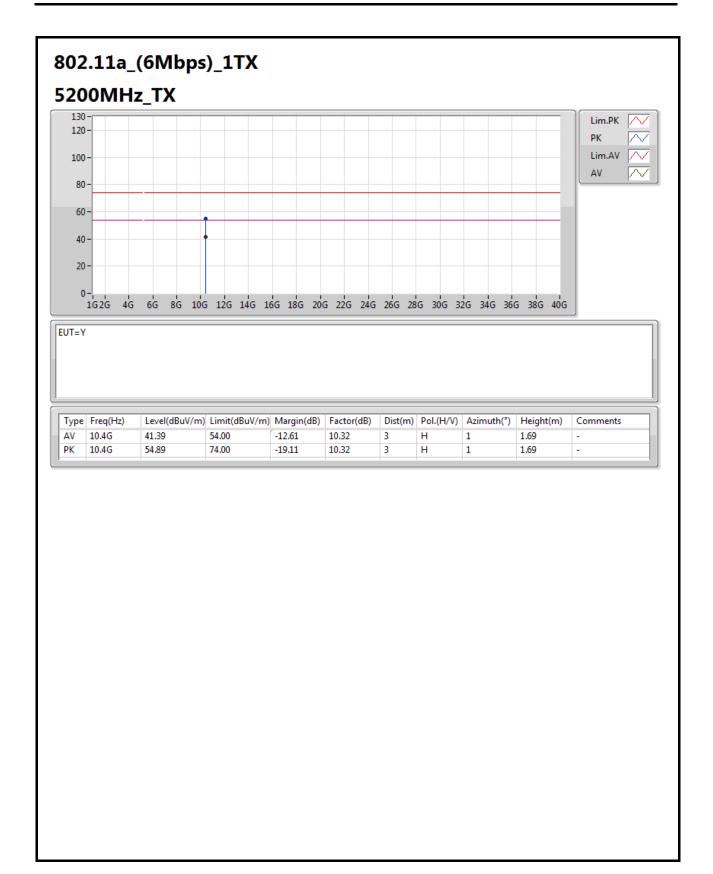


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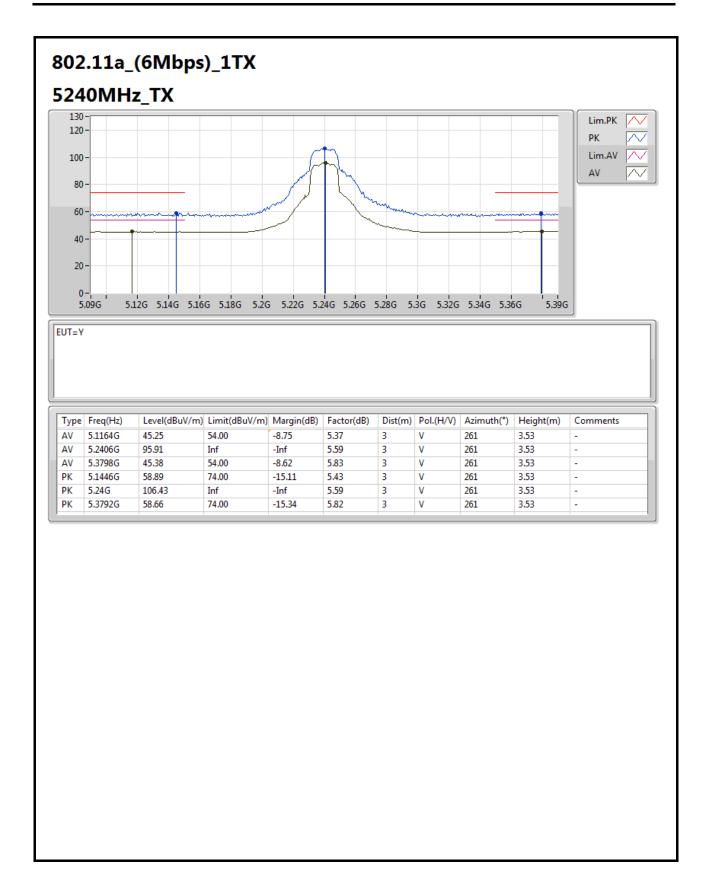






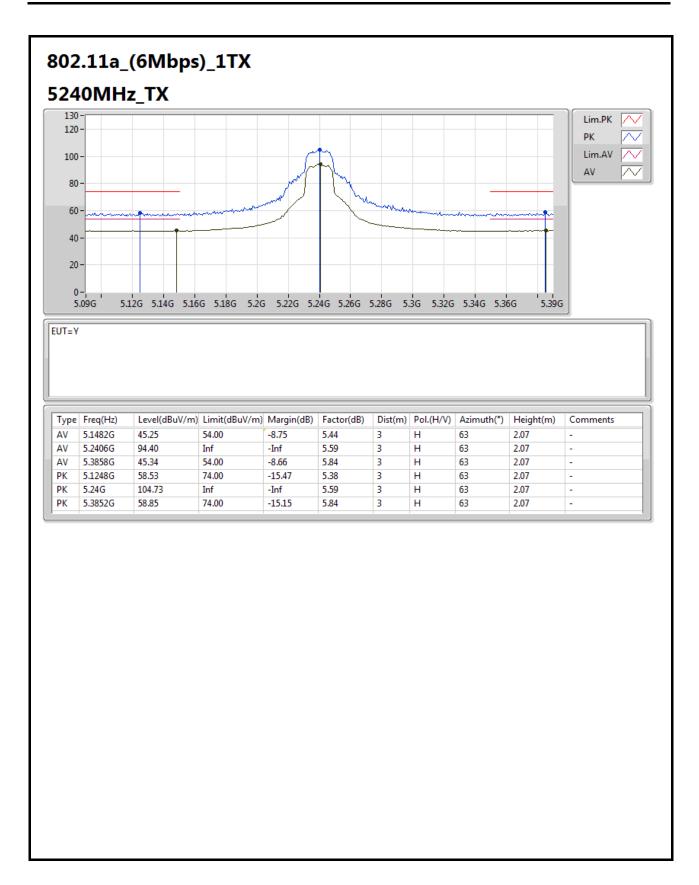
TEL: 886-3-327-3456 FAX: 886-3-327-0973 Page No. : E18 of E74





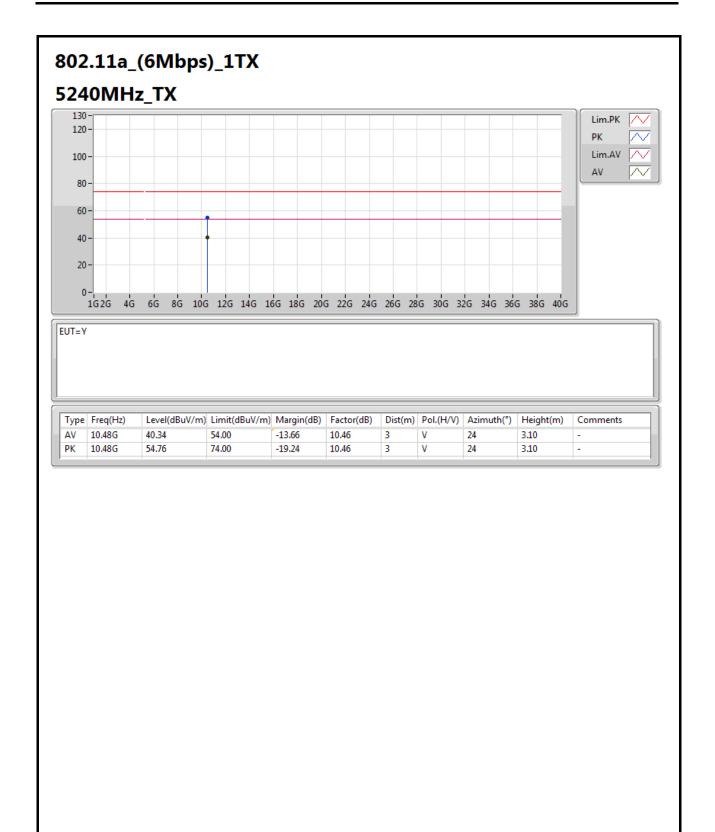
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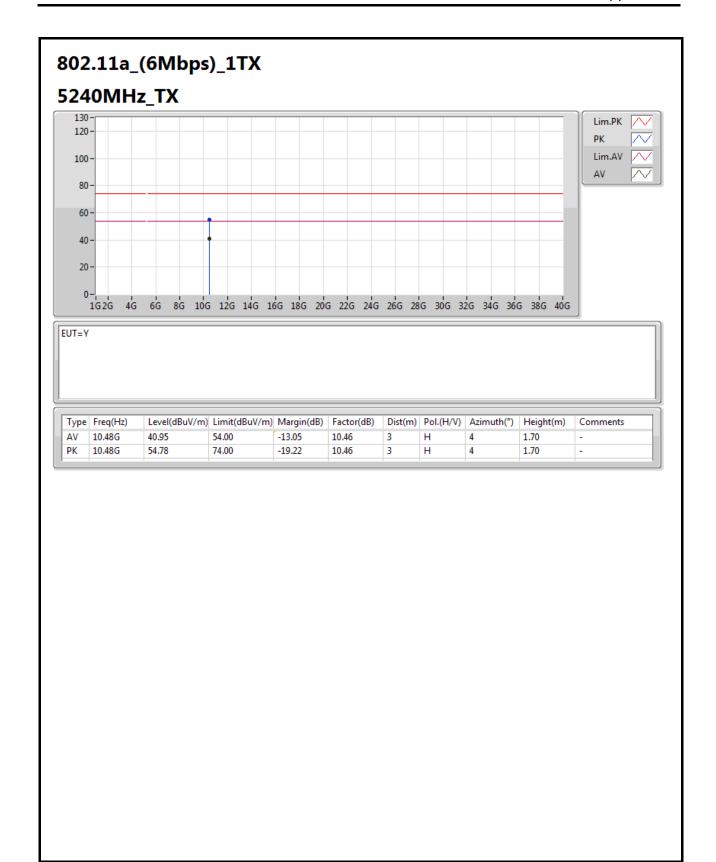
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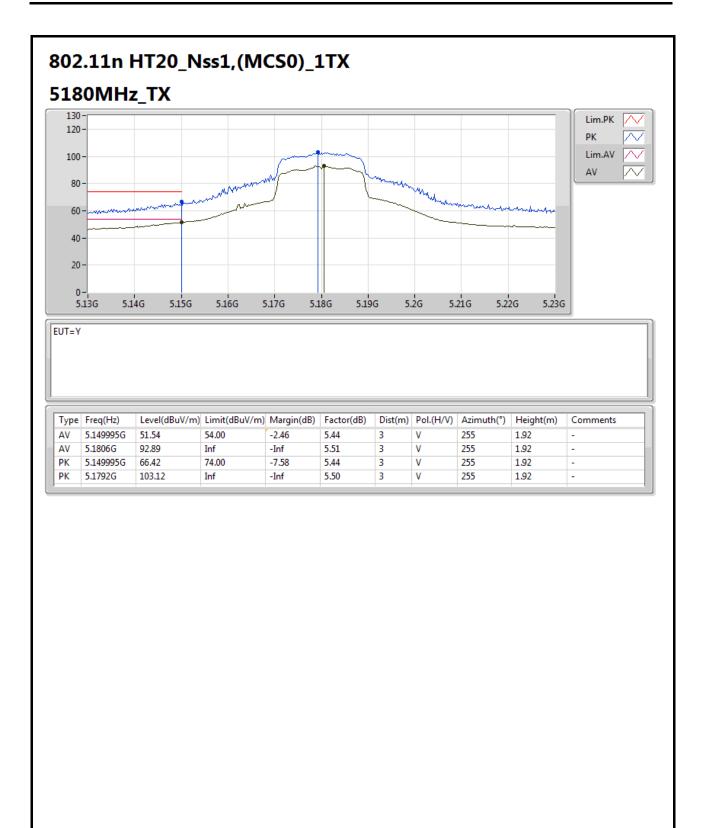
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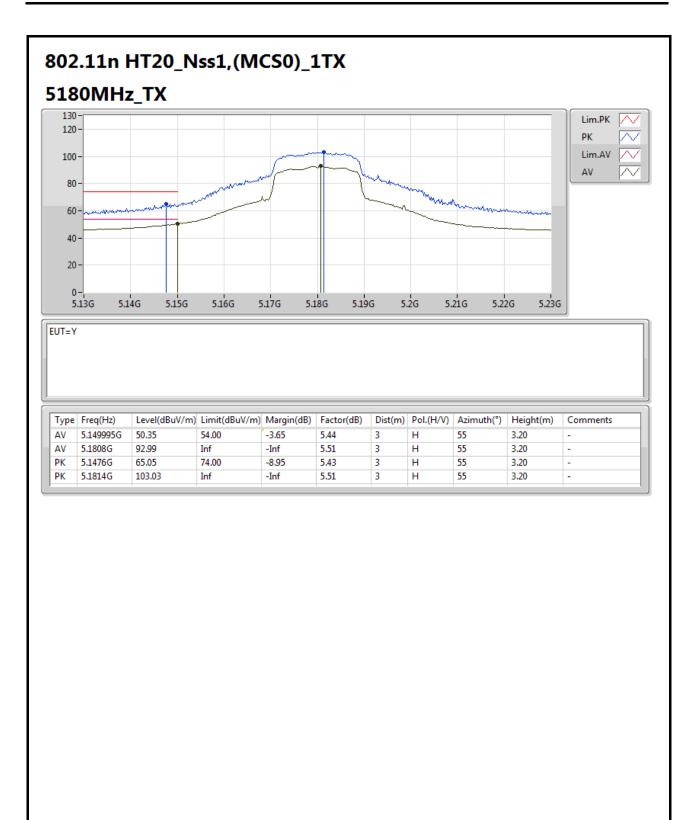
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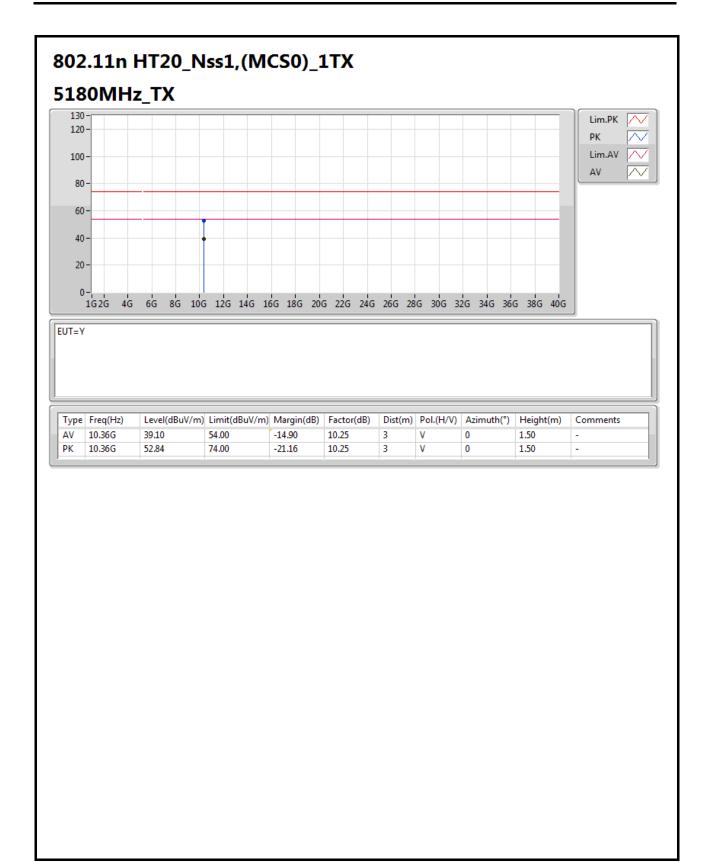
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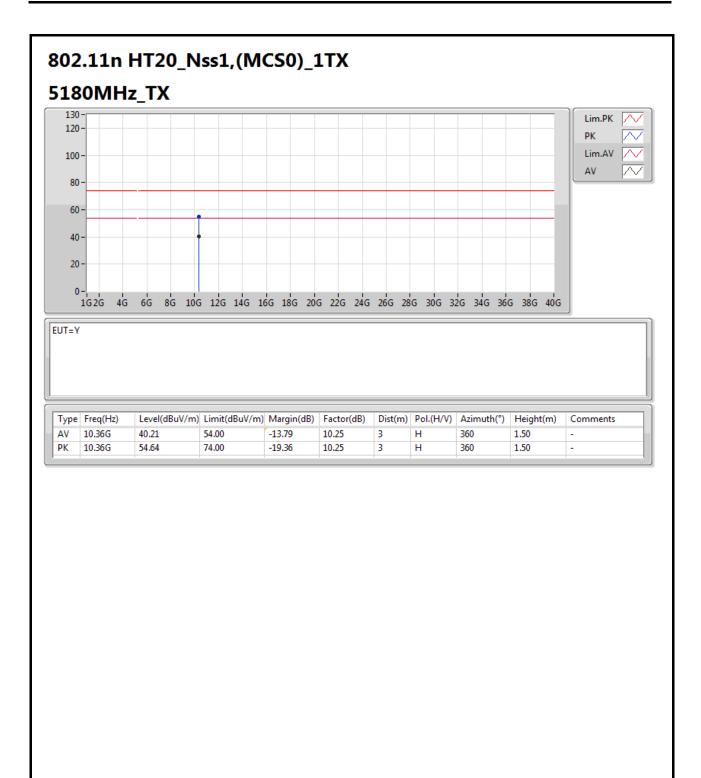
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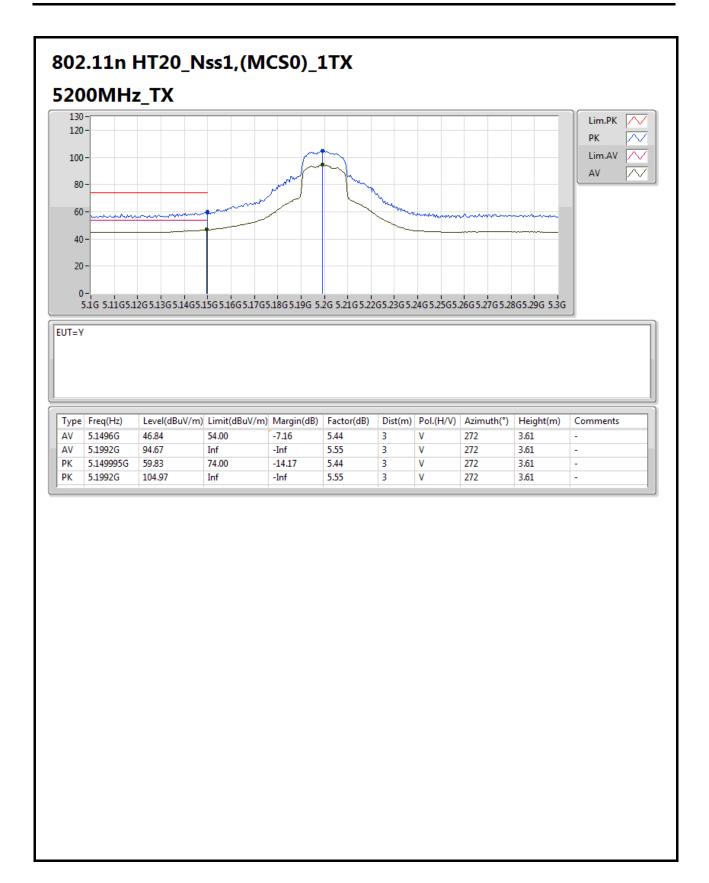


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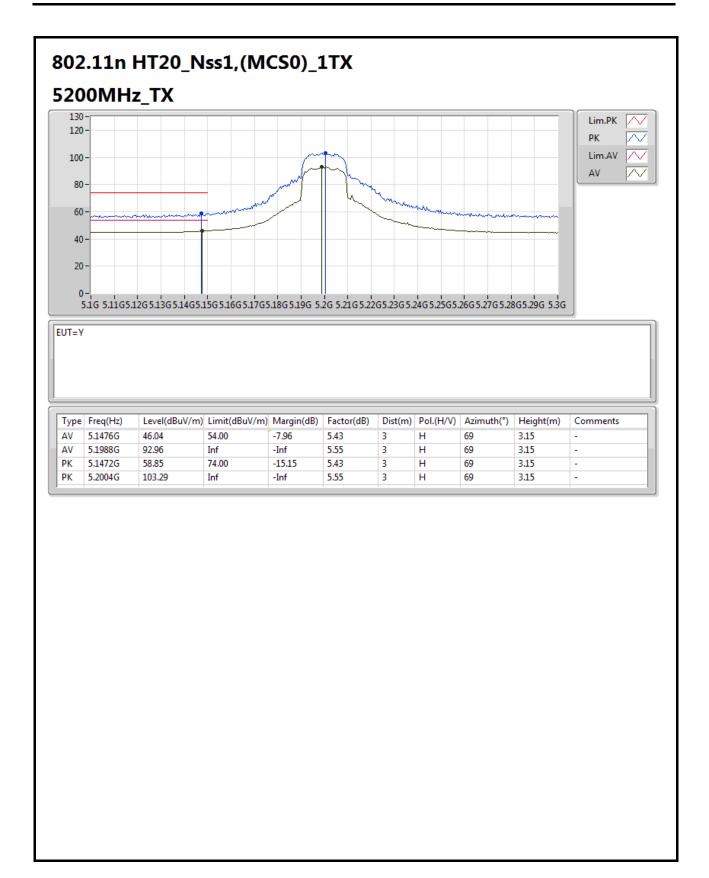






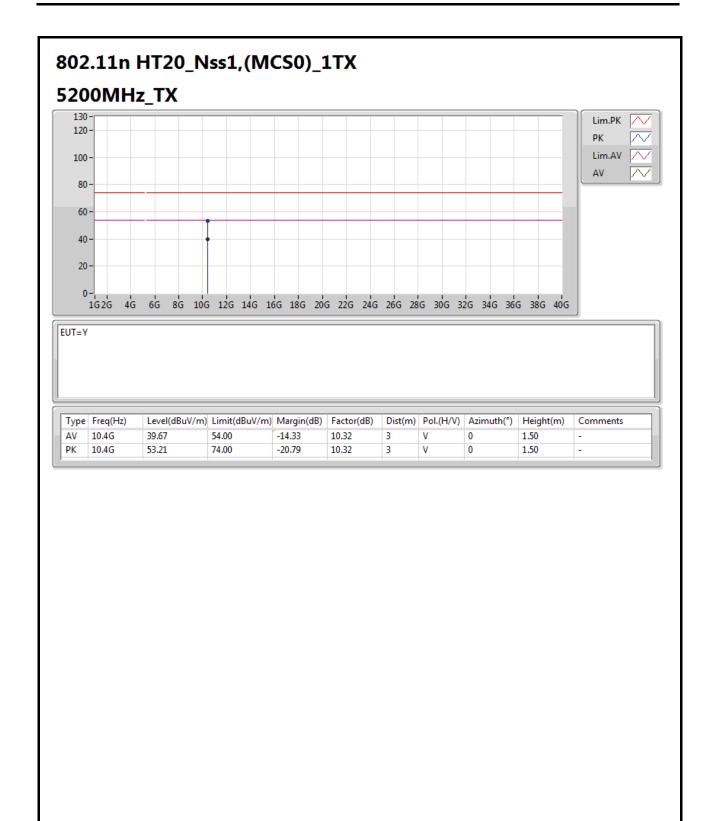
TEL: 886-3-327-3456 FAX: 886-3-327-0973 Page No. : E27 of E74





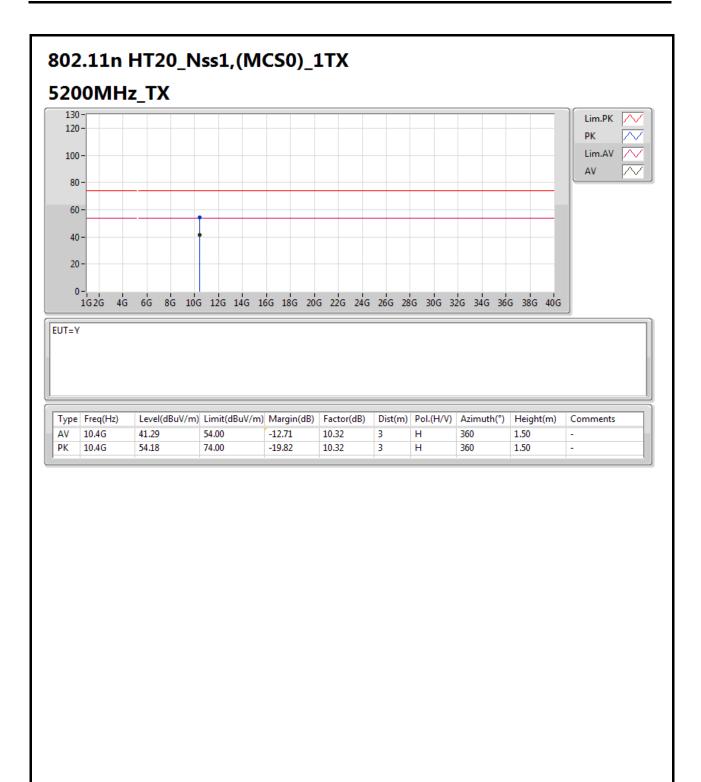
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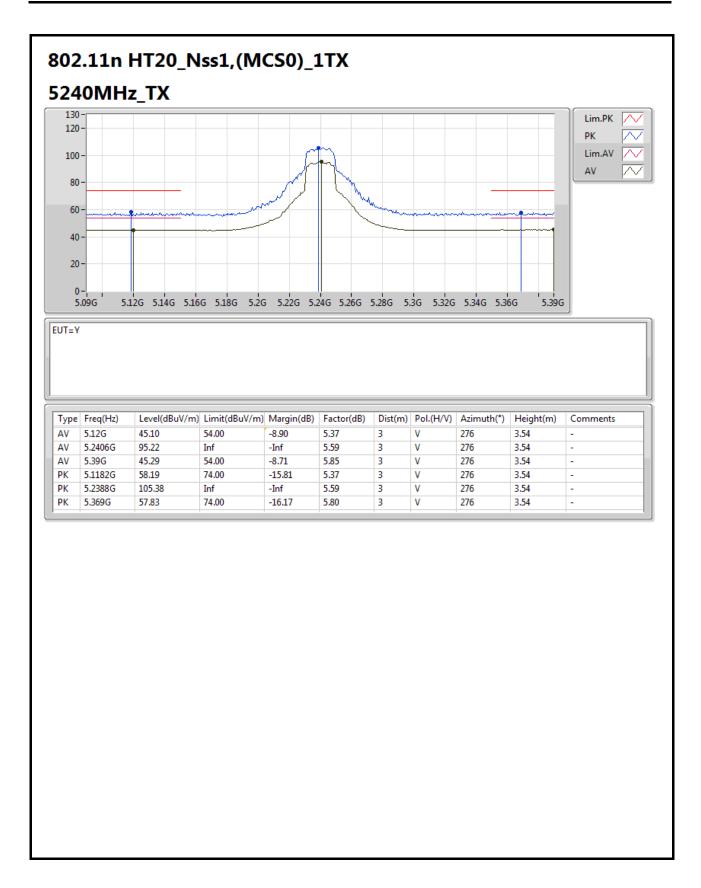
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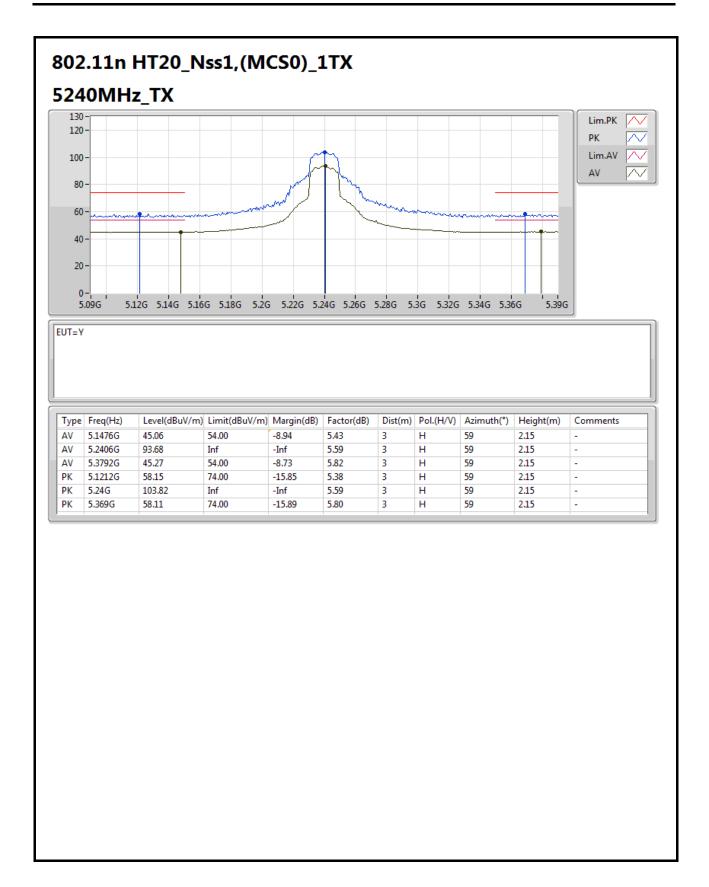


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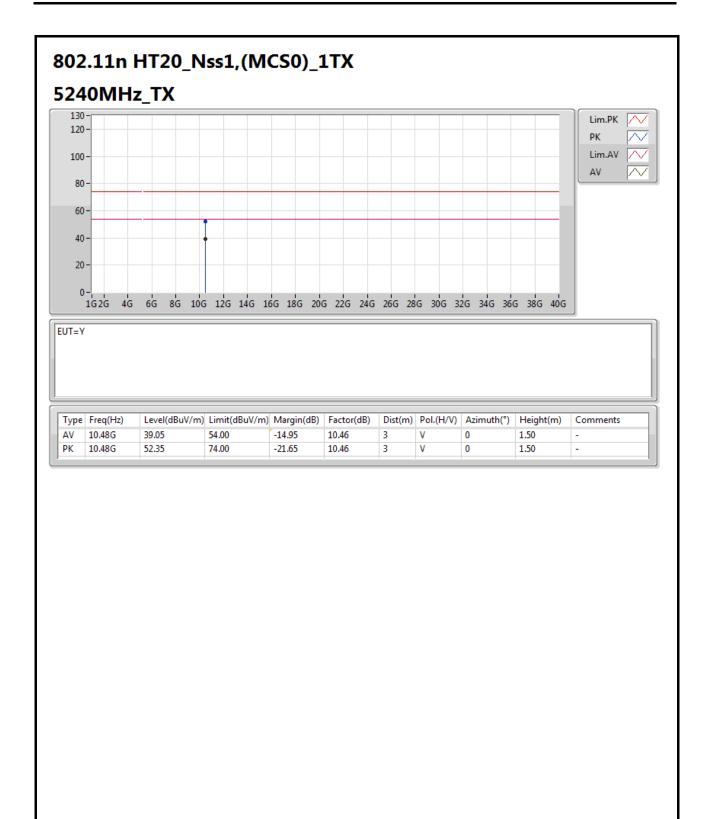






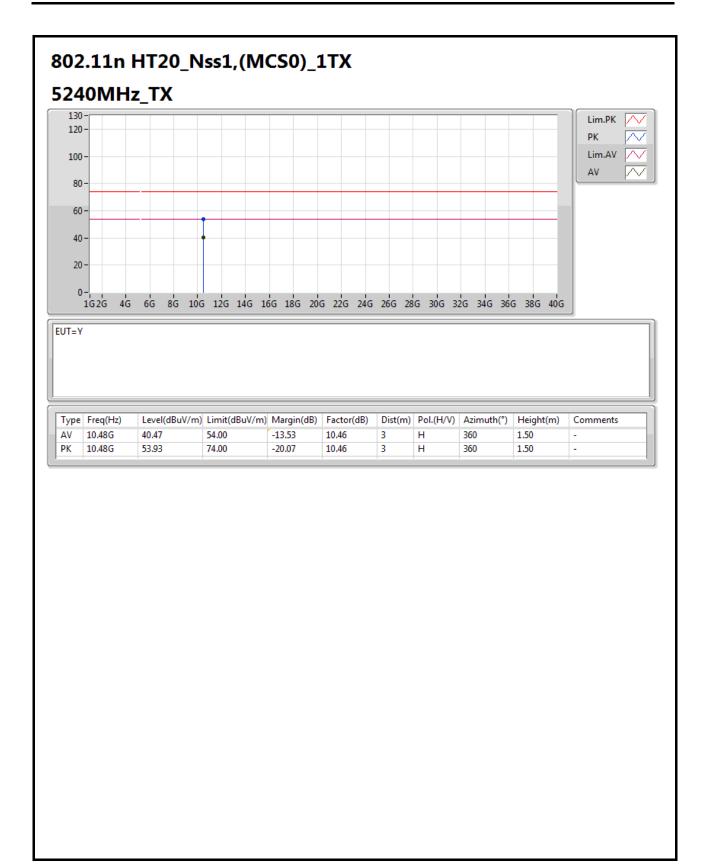
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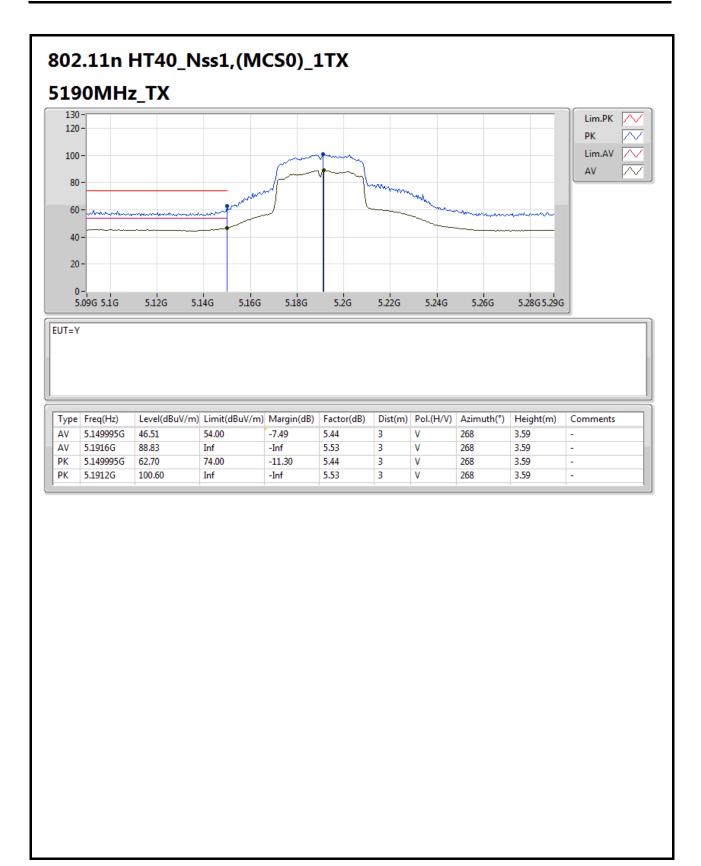
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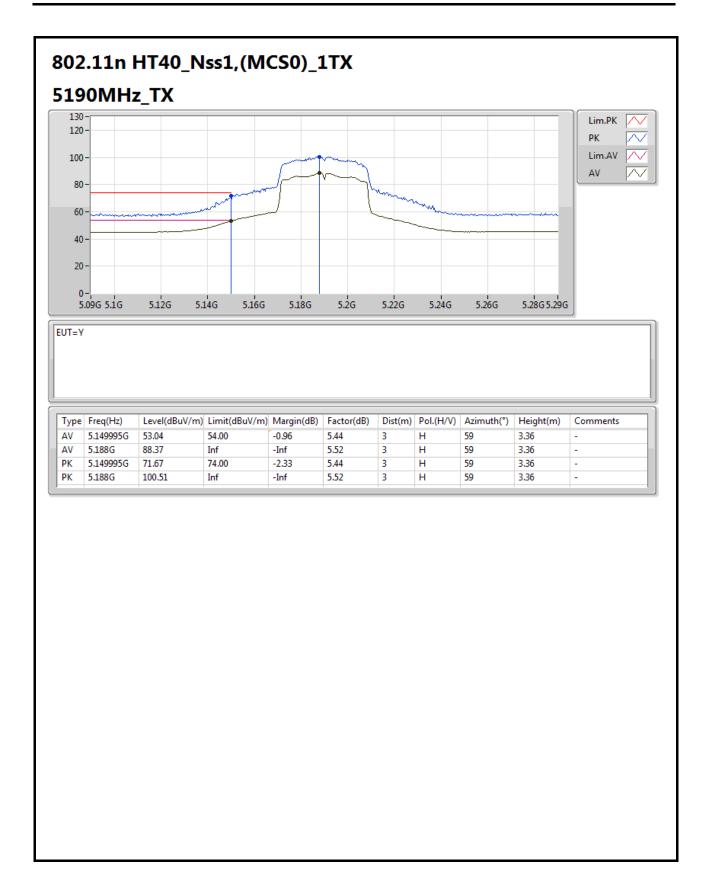


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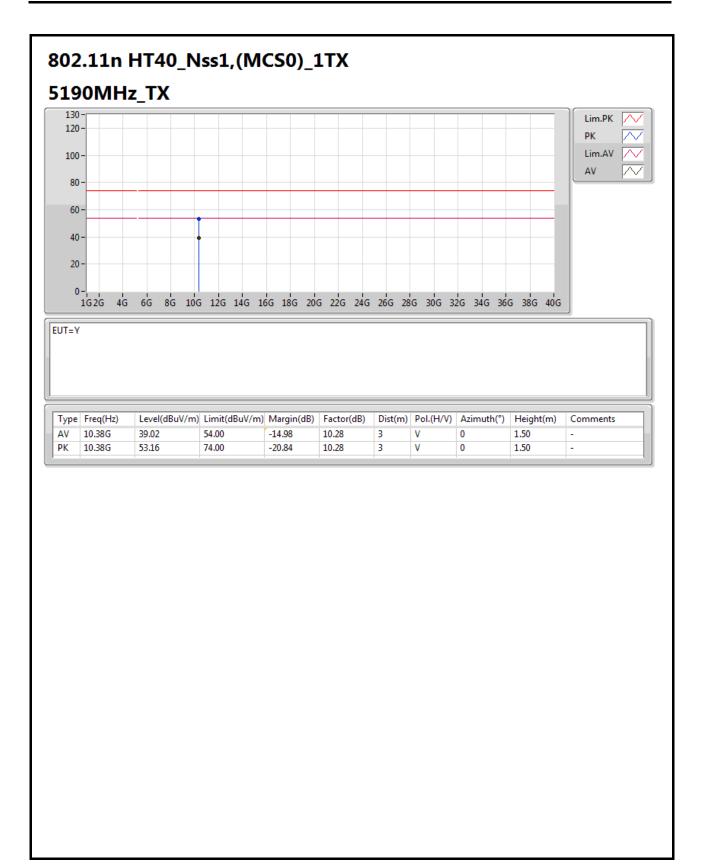






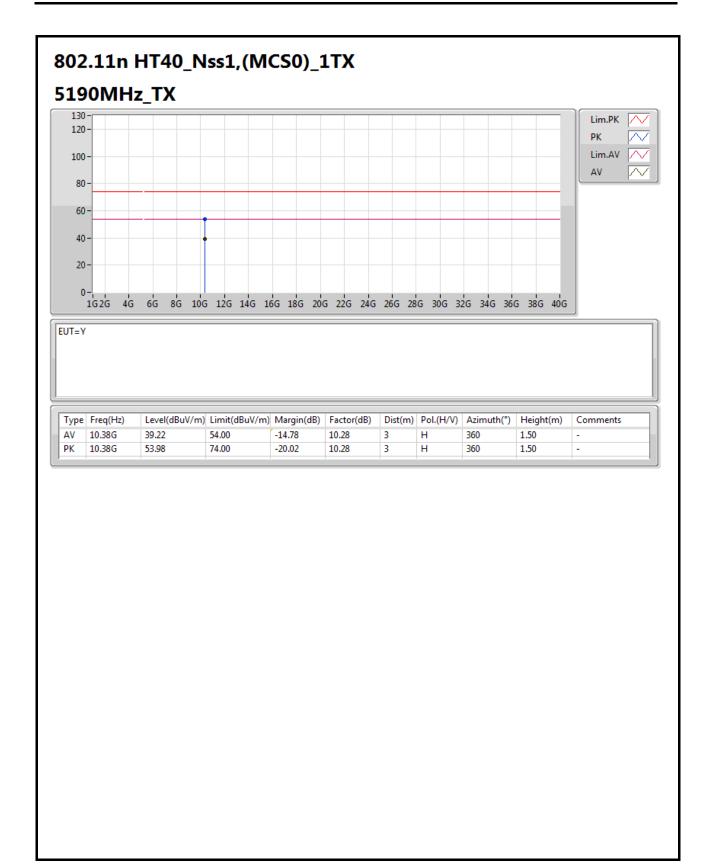
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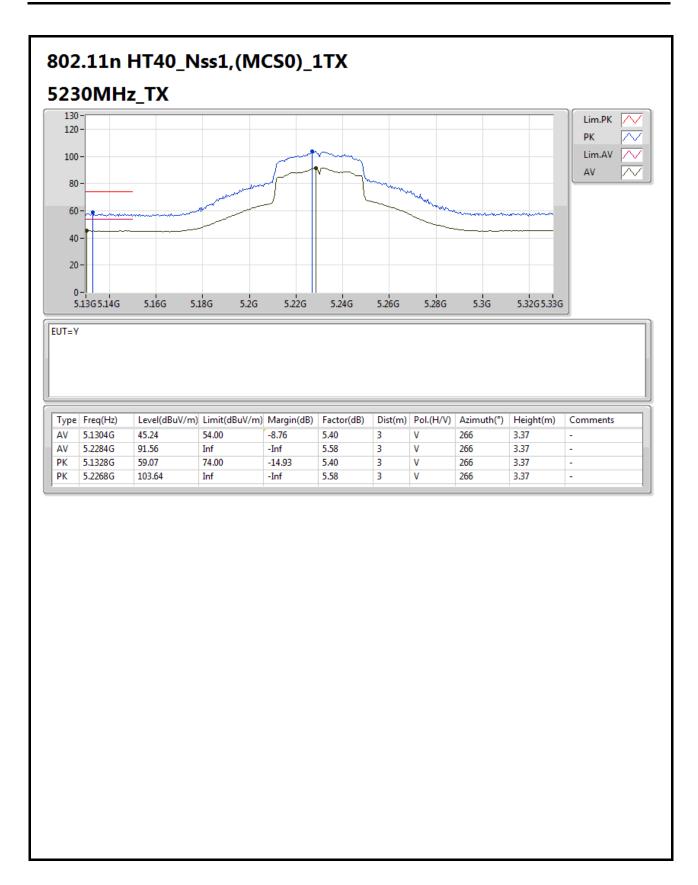
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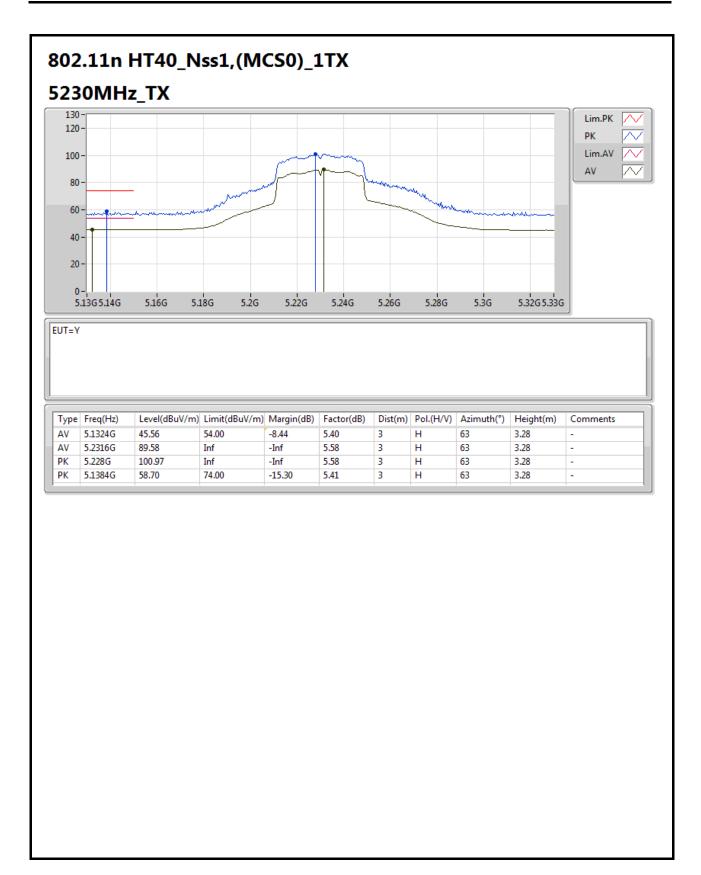
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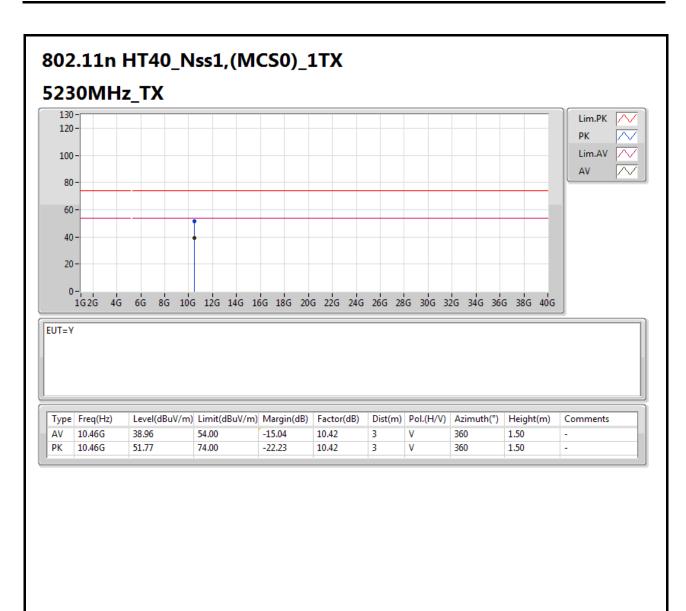
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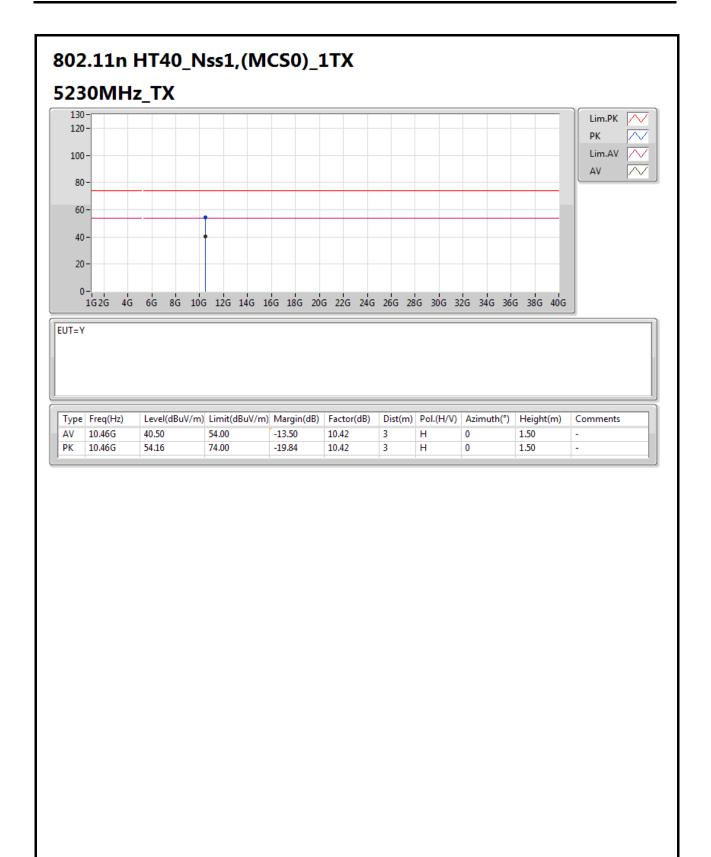


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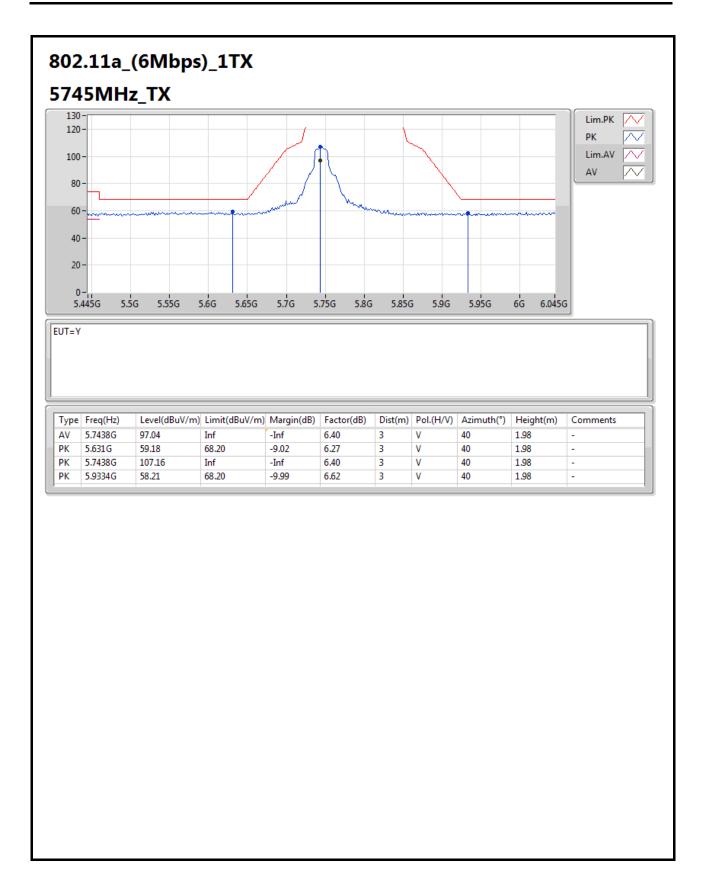






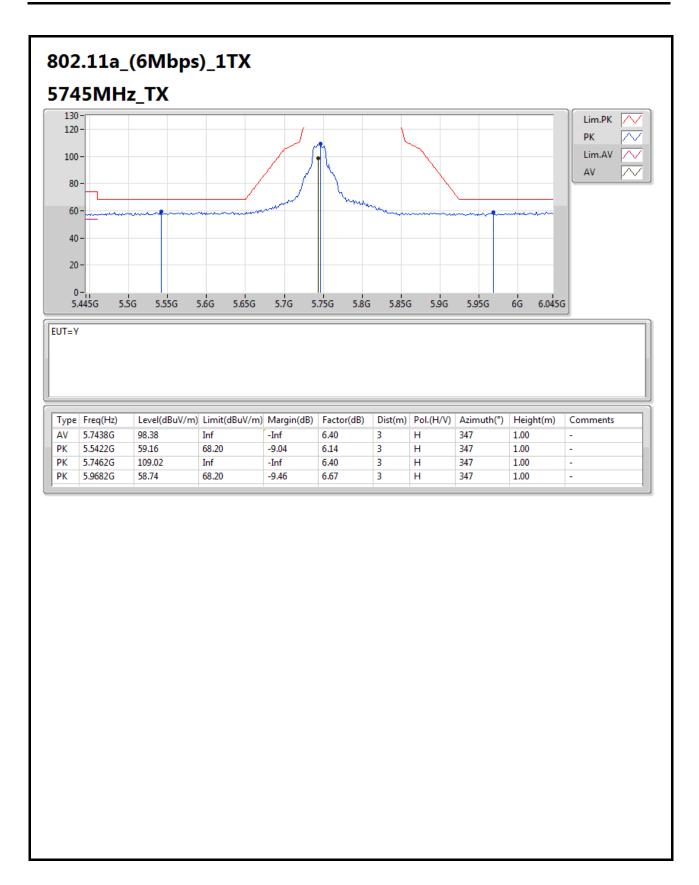
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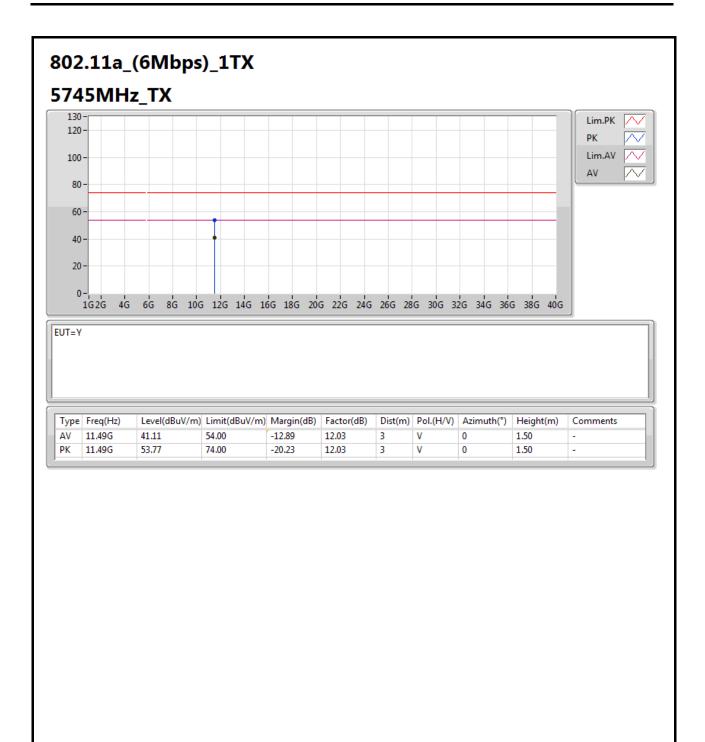
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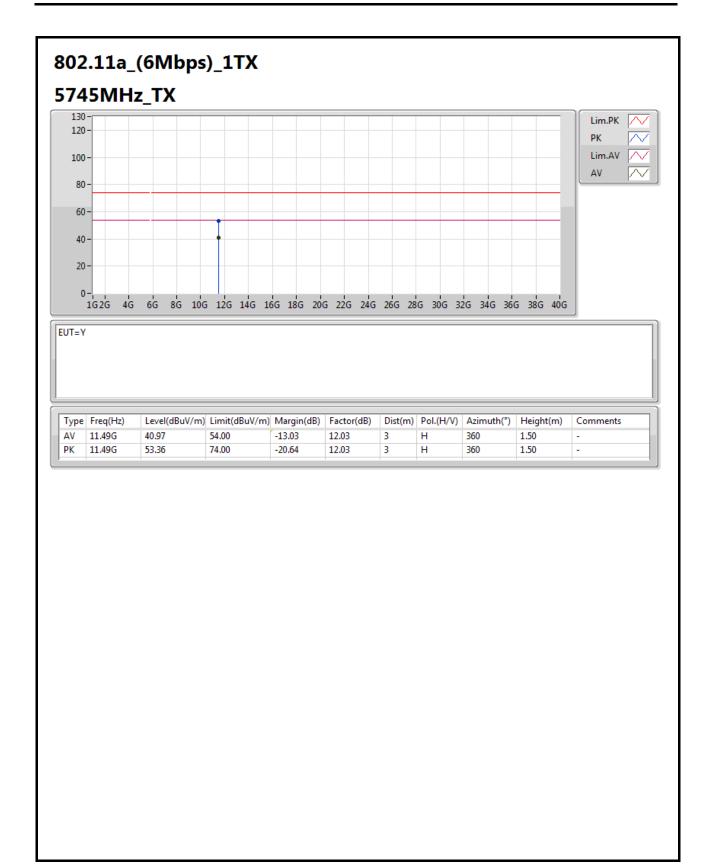


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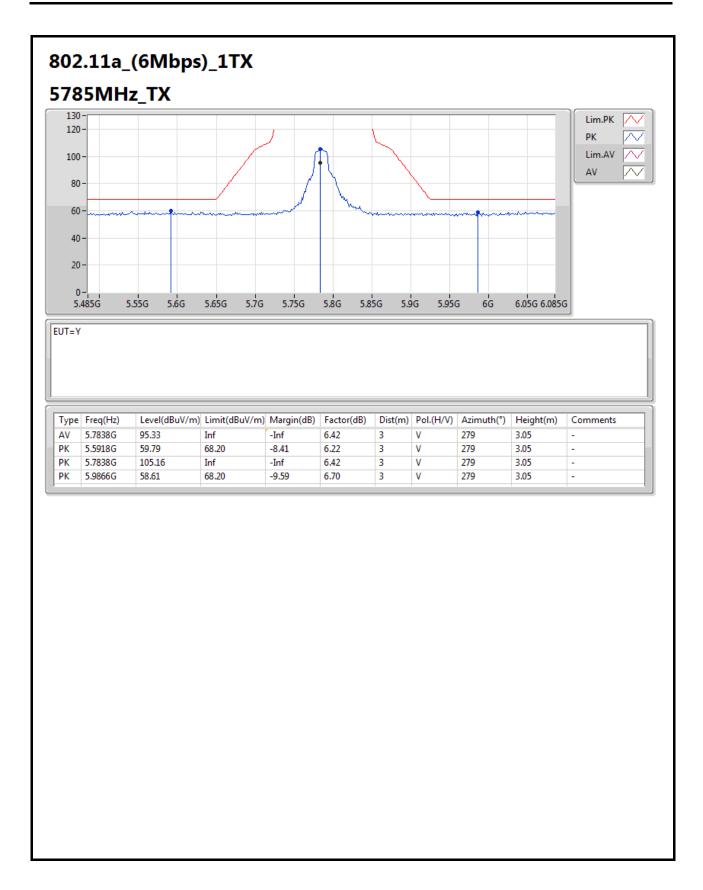




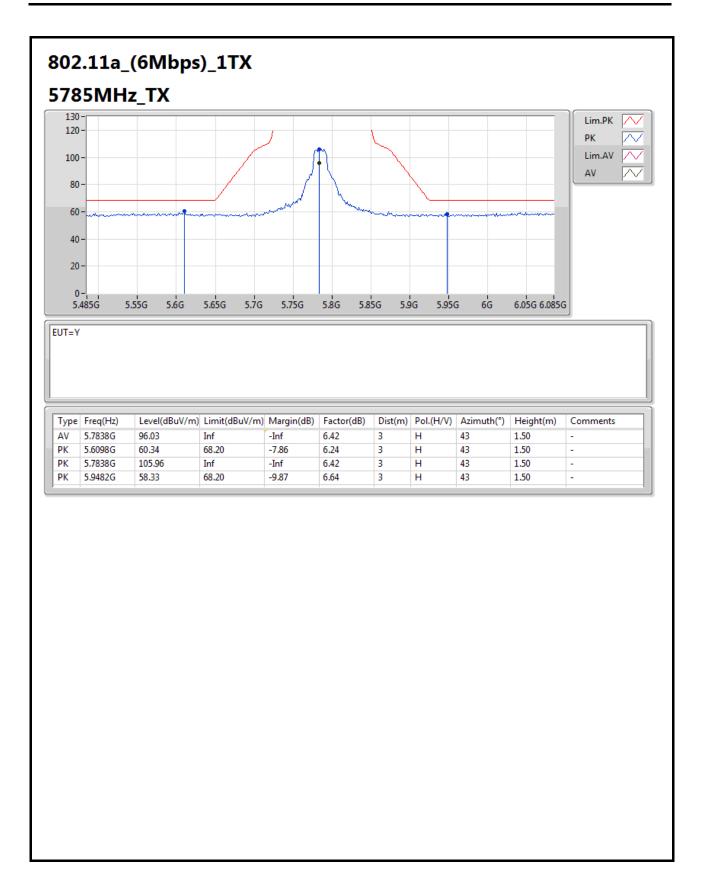


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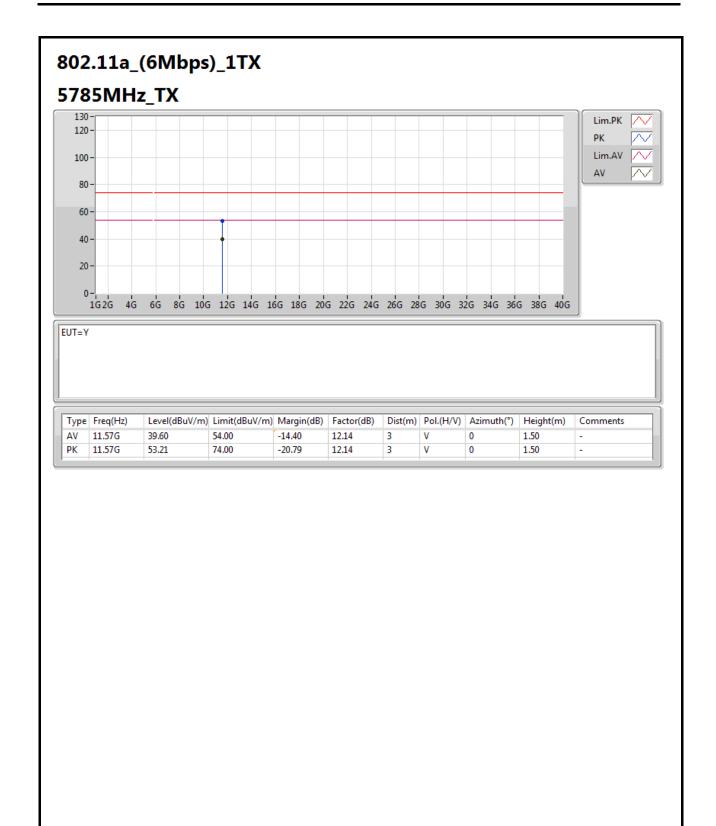




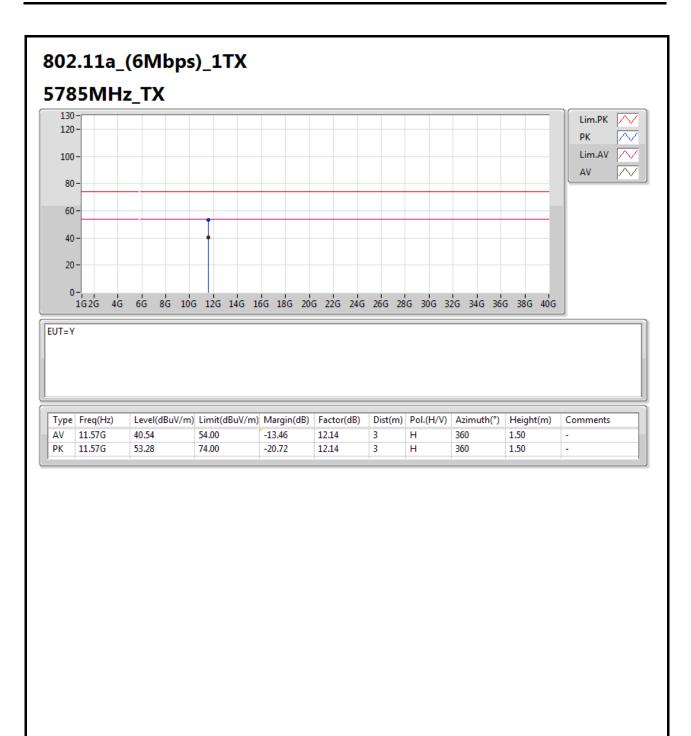


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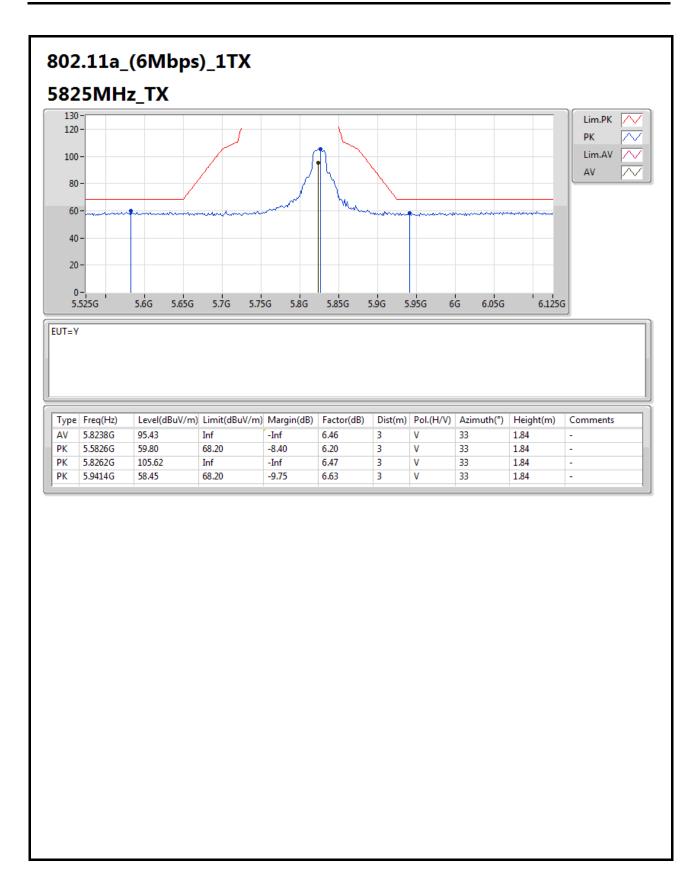






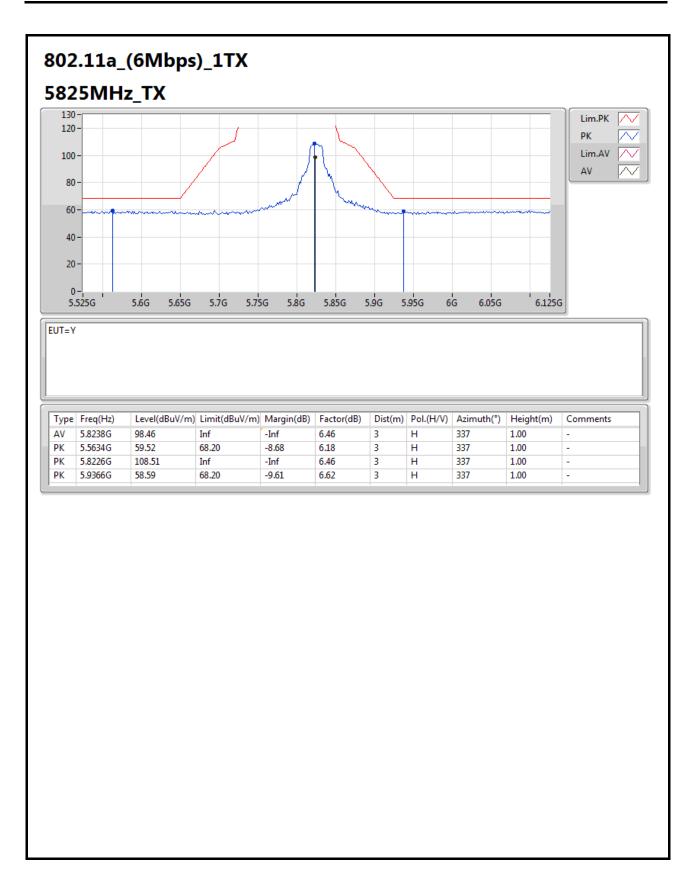






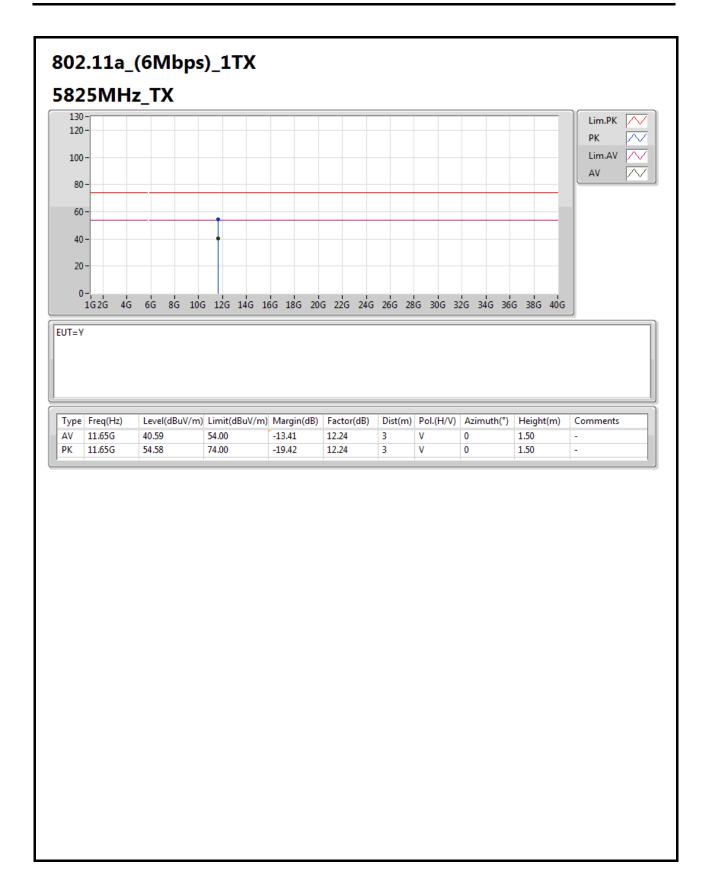
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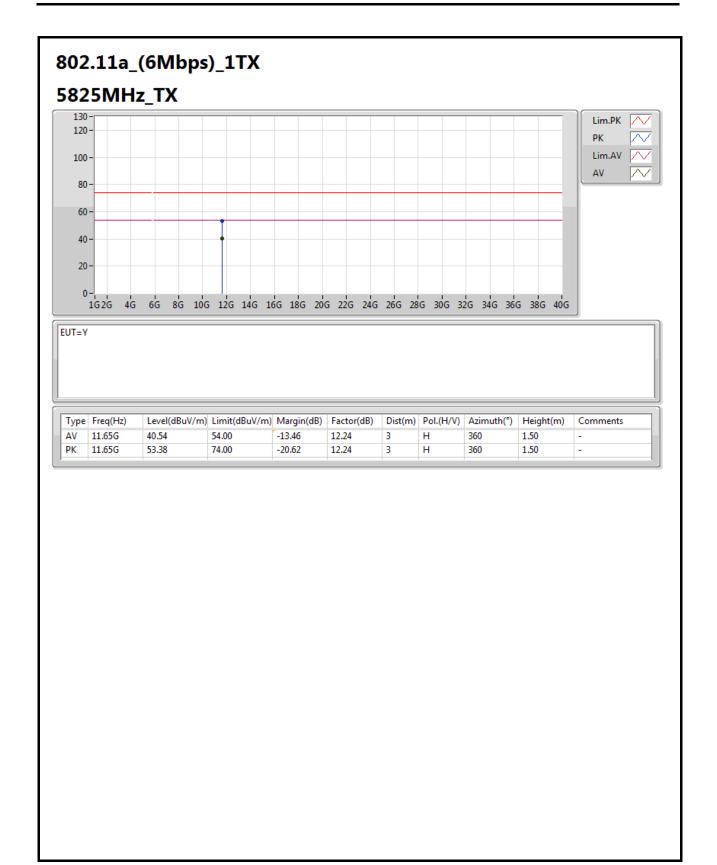
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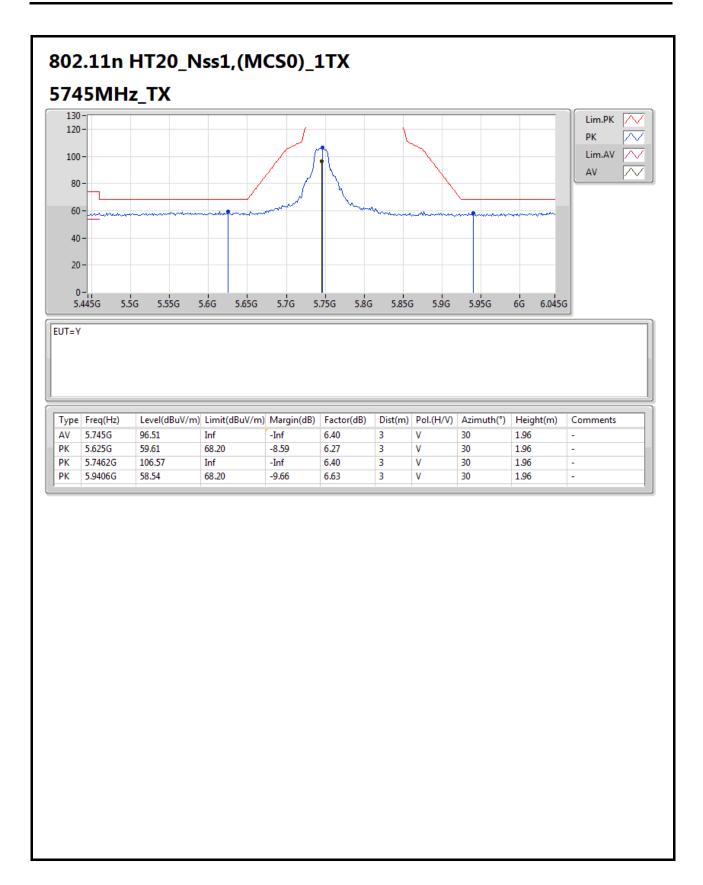
TEL: 886-3-327-3456 FAX: 886-3-327-0973 Page No. : E53 of E74



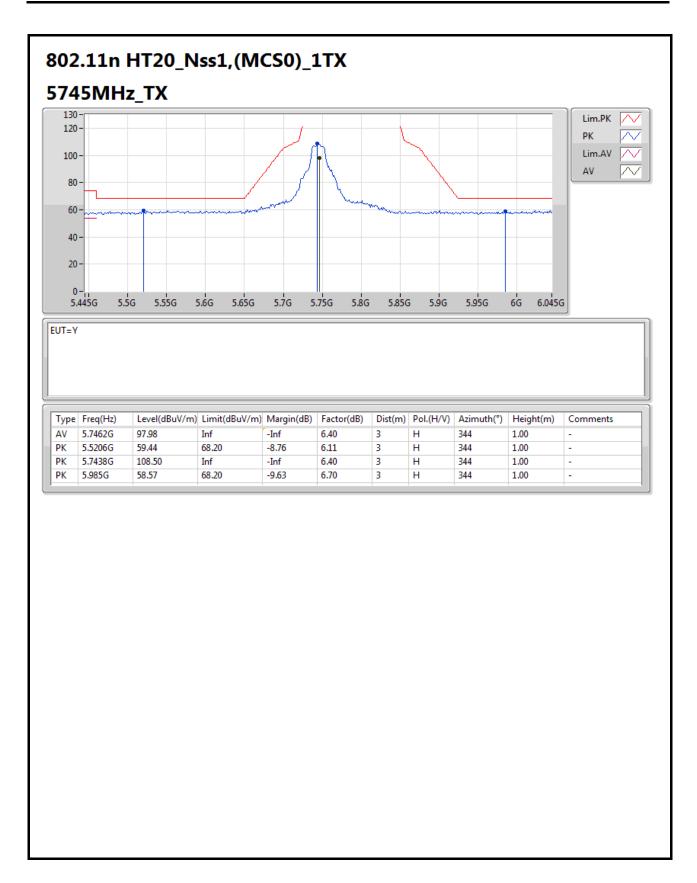


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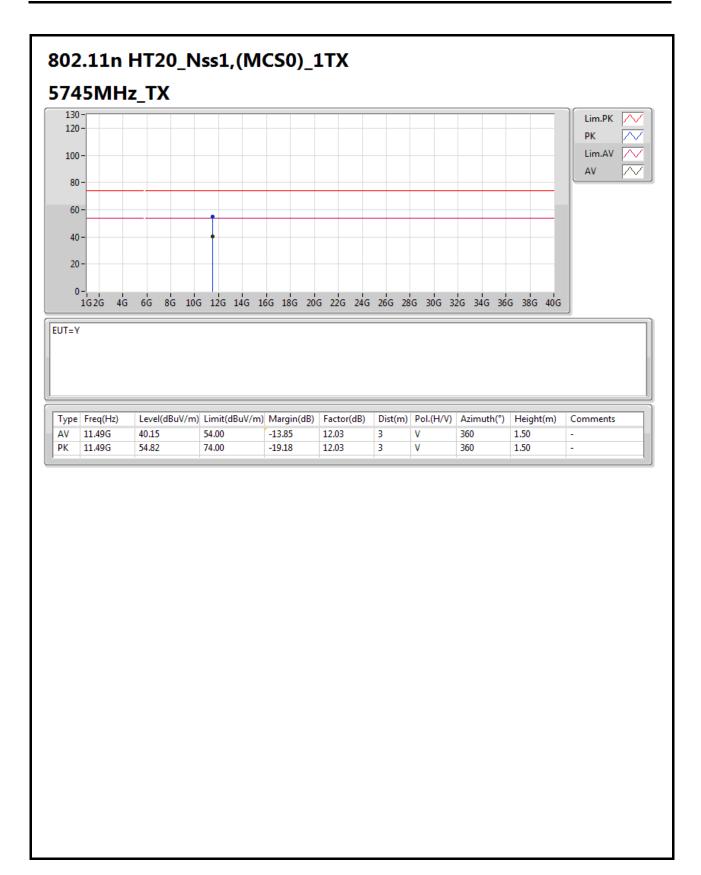






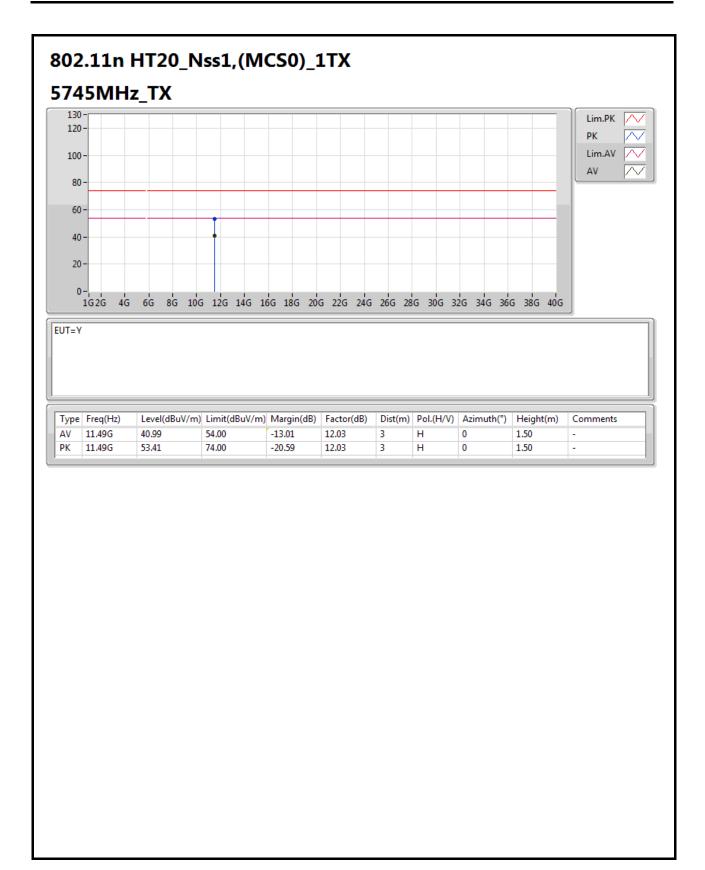
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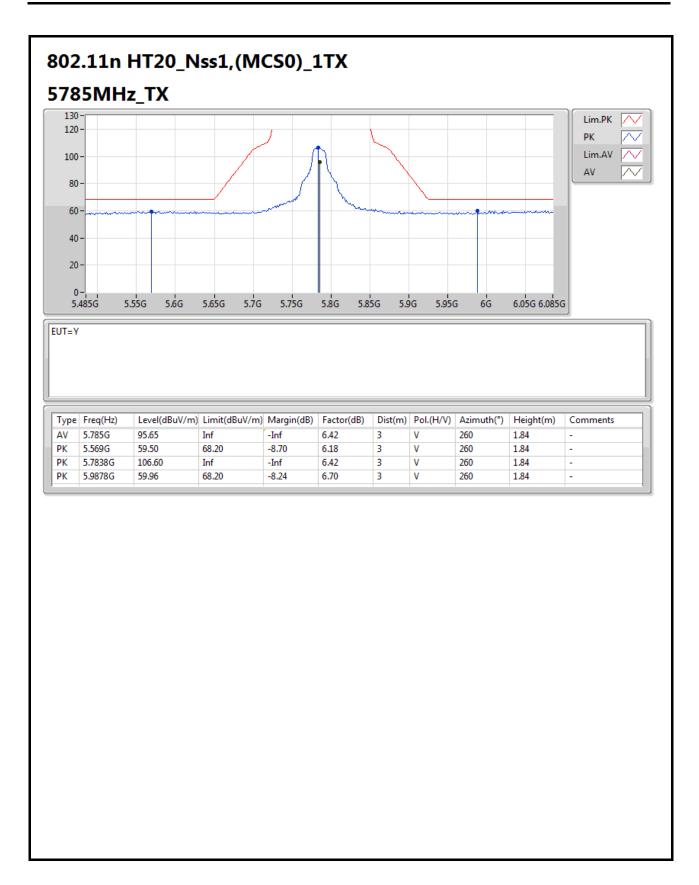
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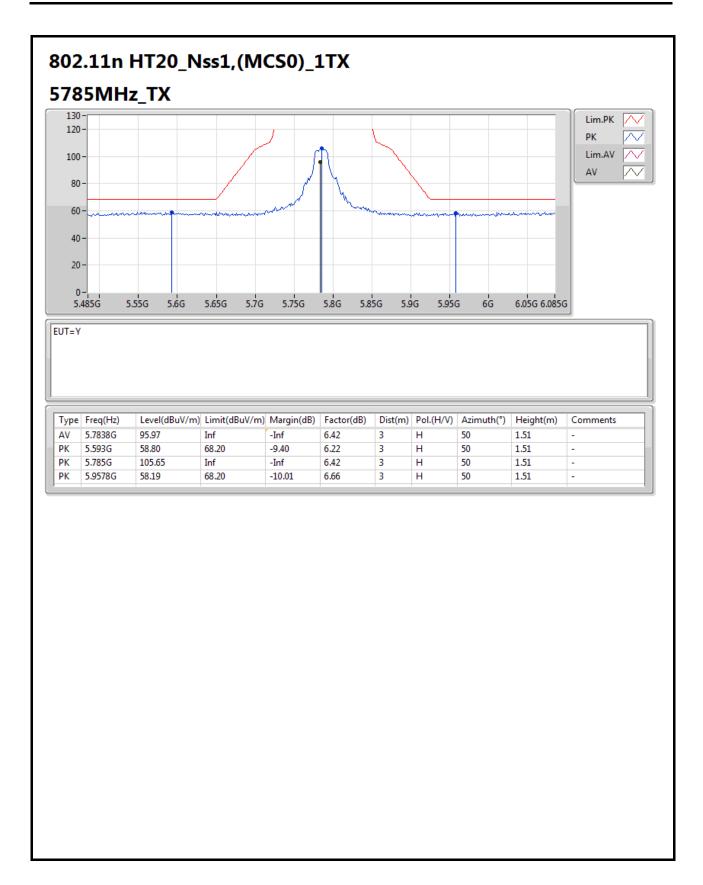
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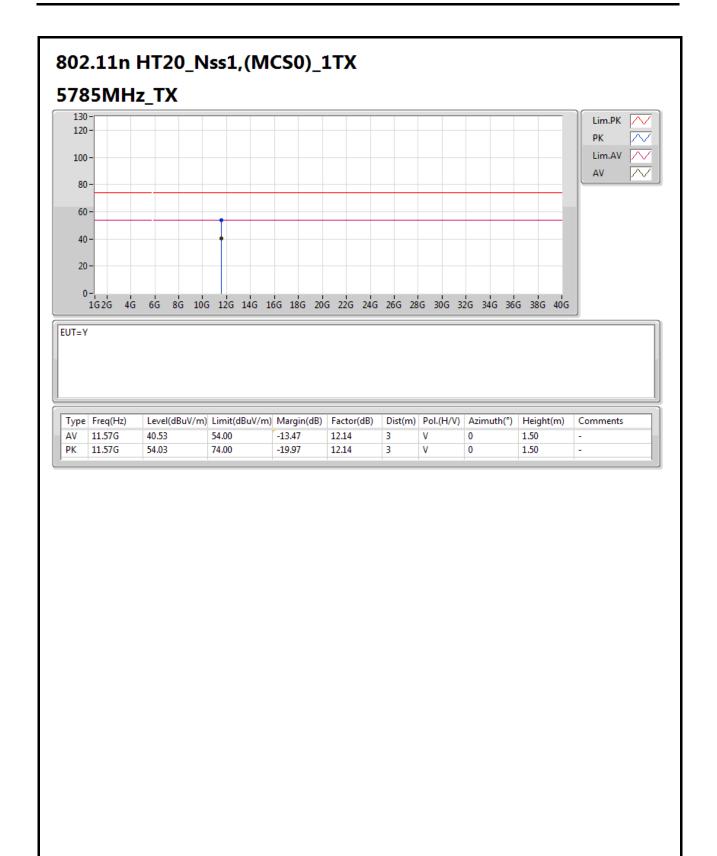
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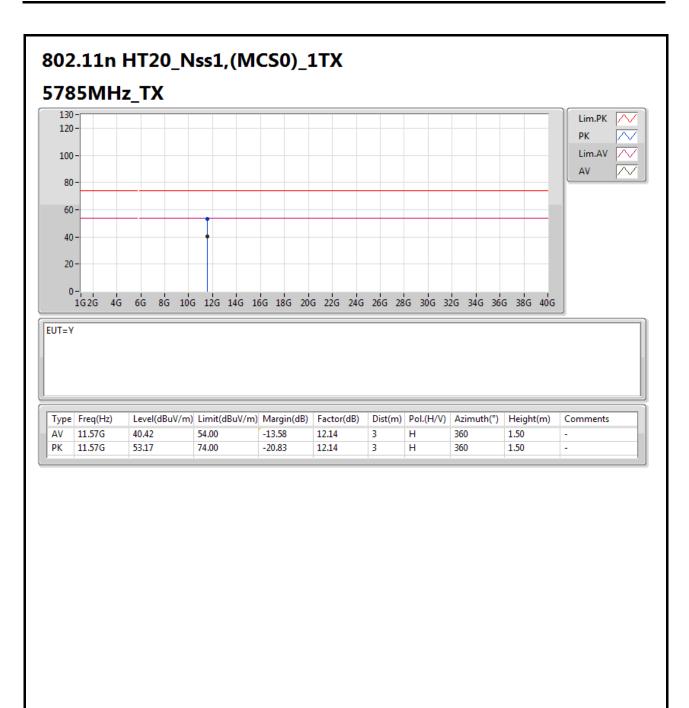


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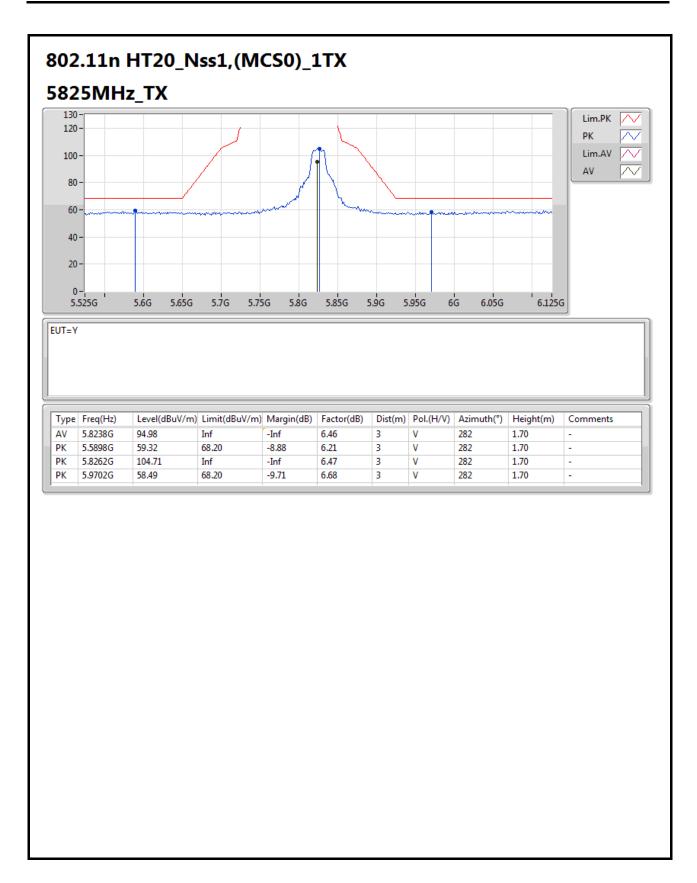






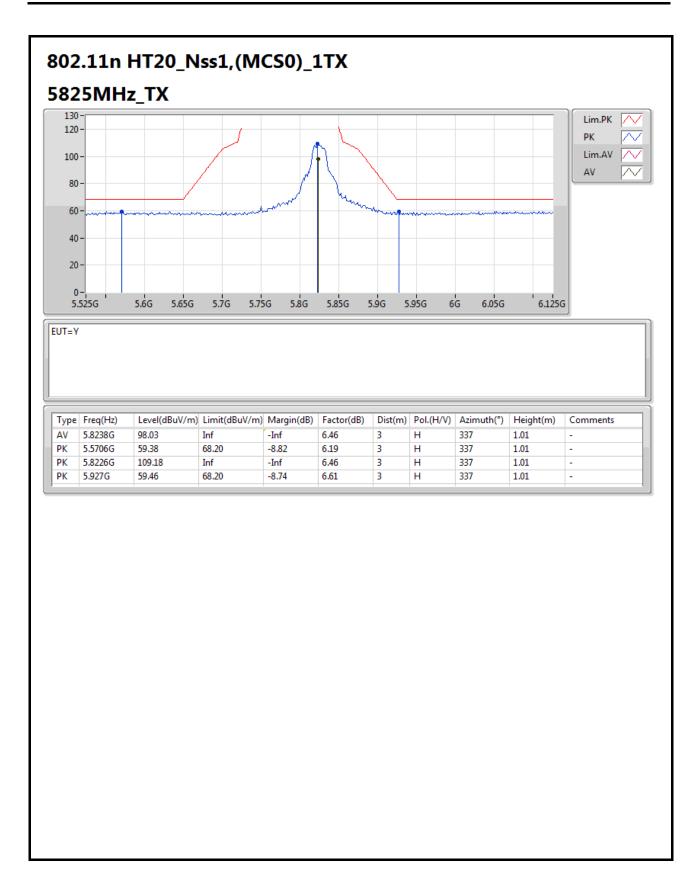
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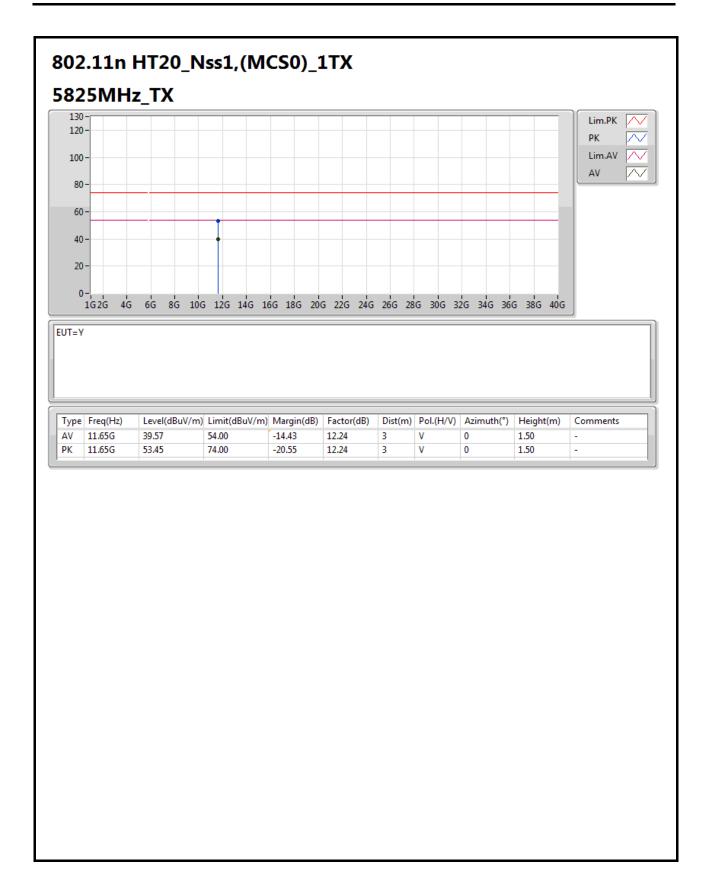
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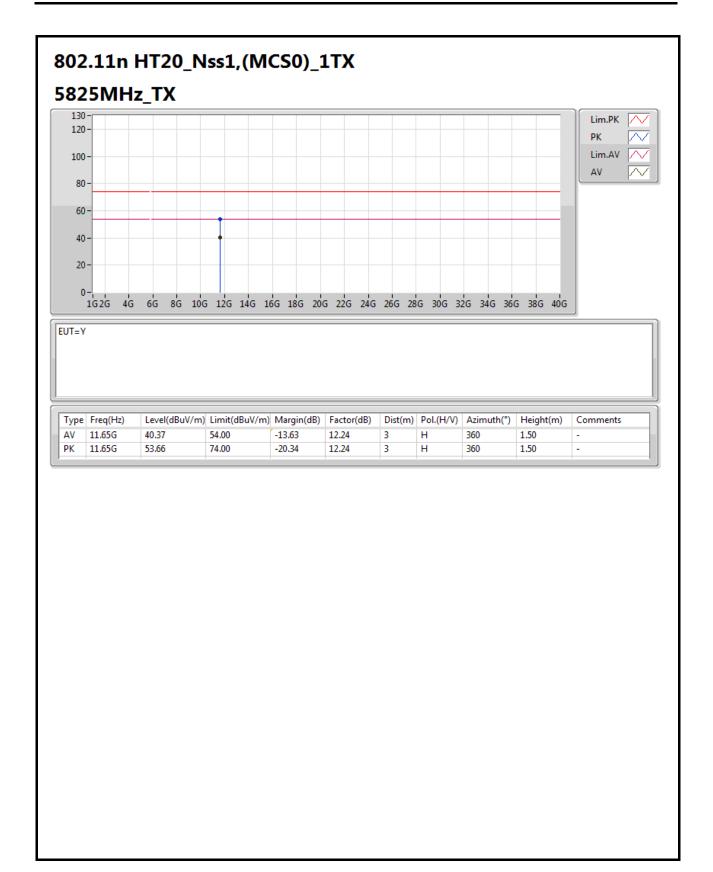
TEL: 886-3-327-3456 FAX: 886-3-327-0973 Page No. : E64 of E74





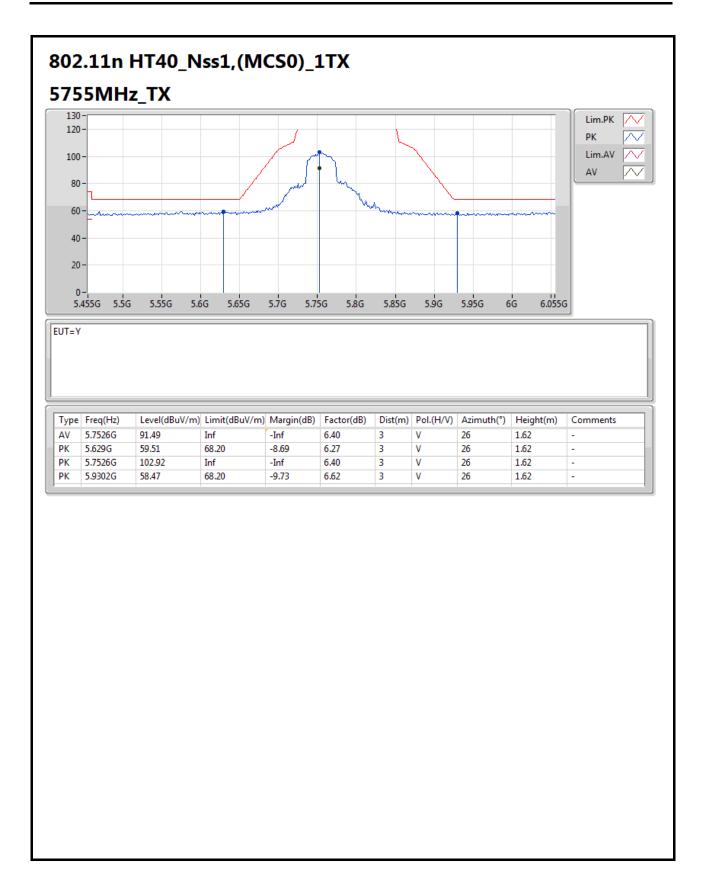
TEL: 886-3-327-3456 FAX: 886-3-327-0973 Page No. : E65 of E74





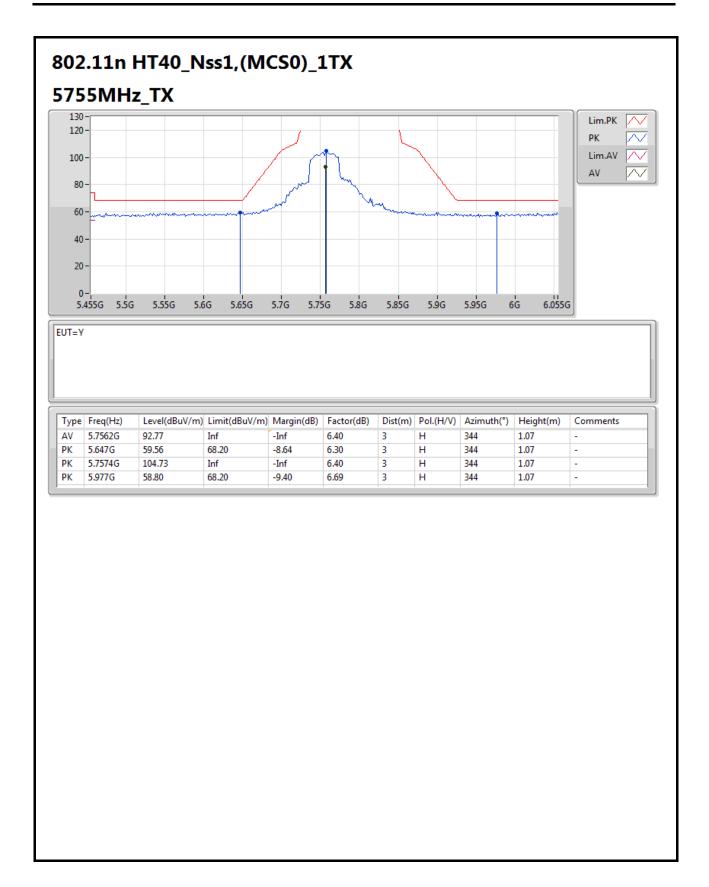
TEL: 886-3-327-3456 FAX: 886-3-327-0973 Page No. : E66 of E74





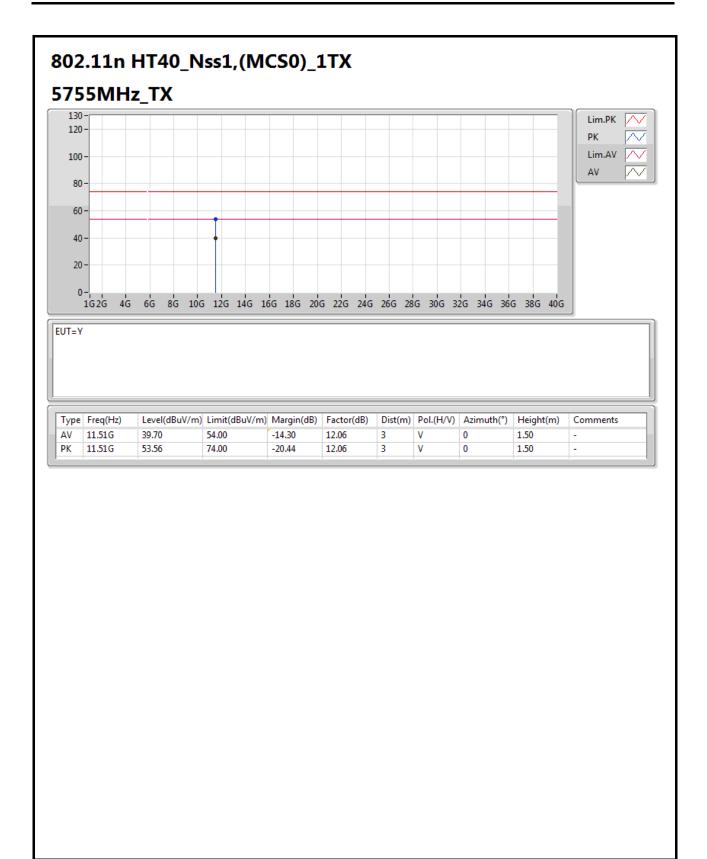
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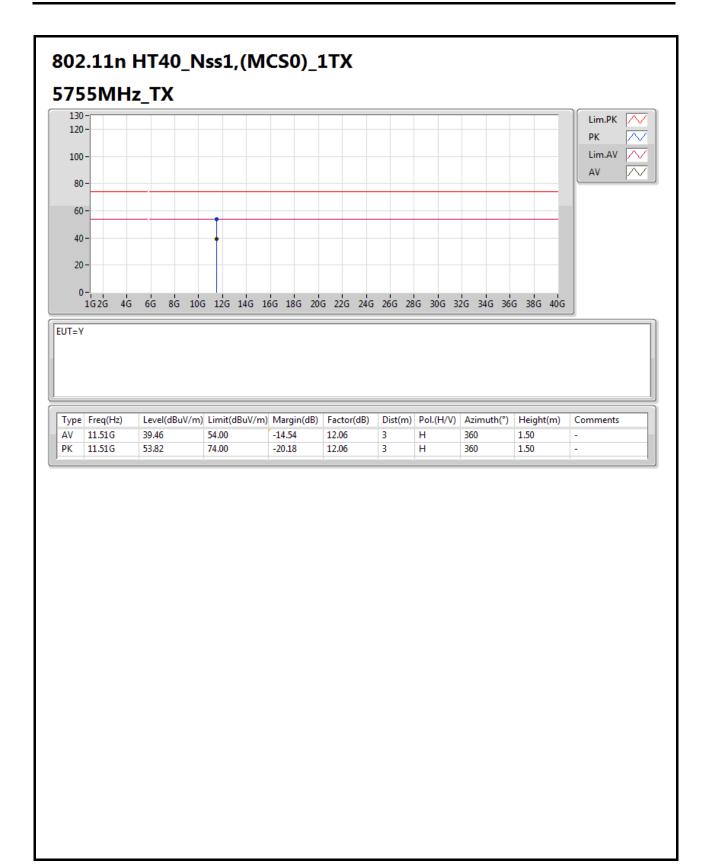
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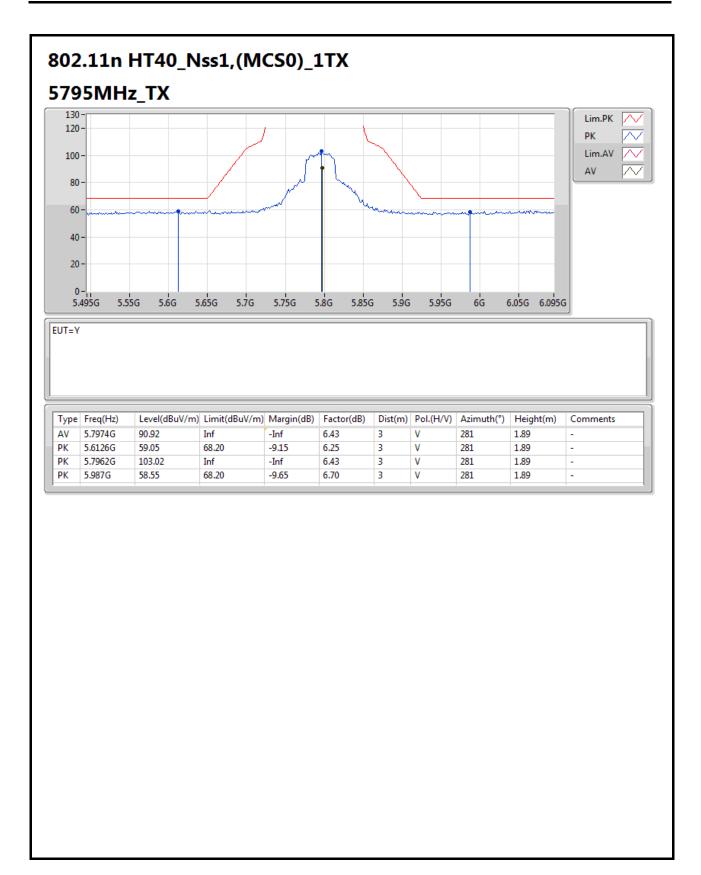
TEL: 886-3-327-3456 FAX: 886-3-327-0973 Page No. : E69 of E74





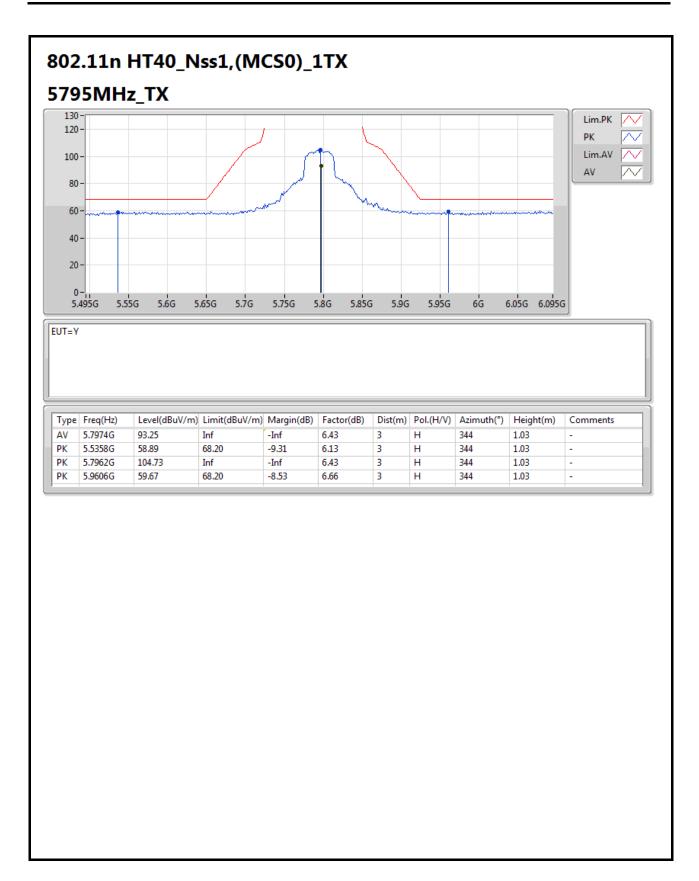
TEL: 886-3-327-3456 FAX: 886-3-327-0973 Page No. : E70 of E74





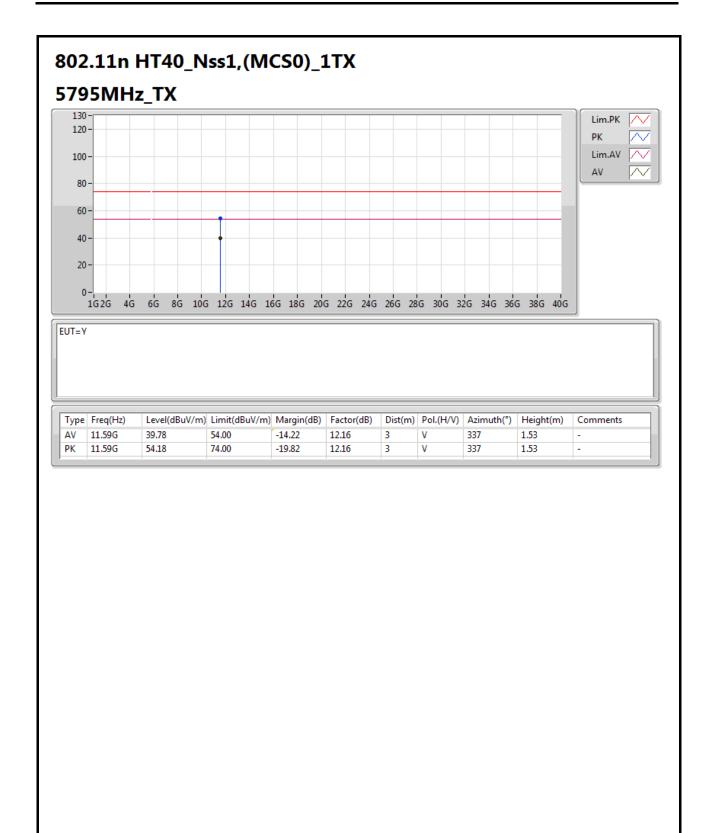
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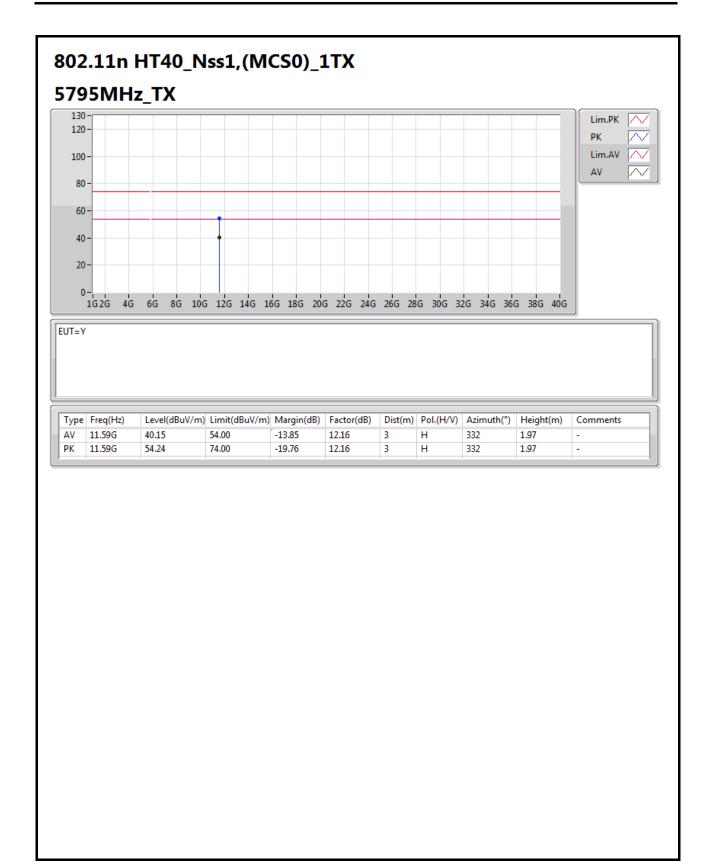
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## Frequency Stability Result

Appendix F

740630

**Summary** 

Mode	Result	Ch	Center	ppm	Limit	Port	Remark
		(Hz)	(Hz)		(ppm)		
802.11a_(6Mbps)_1TX	-	-	=	-	-	-	-
5.15-5.25GHz	Pass	5.2G	5.199906G	18.027	20	1	2 min

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## Frequency Stability Result

Appendix F

## Result

Mode	Result	Ch (Hz)	Center (Hz)	ppm	Limit (ppm)	Port	Remark
802.11a_(6Mbps)_1TX	-	-	-	-	-	-	-
5200MHz_0°C	Pass	5.2G	5.199934G	12.619	20	1	0 min
5200MHz_0°C	Pass	5.2G	5.199972G	5.408	20	1	2 min
5200MHz_0°C	Pass	5.2G	5.199951G	9.374	20	1	5 min
5200MHz_0°C	Pass	5.2G	5.199944G	10.816	20	1	10 min
5200MHz_10°C	Pass	5.2G	5.199942G	11.176	20	1	0 min
5200MHz_10°C	Pass	5.2G	5.199906G	18.027	20	1	2 min
5200MHz_10°C	Pass	5.2G	5.19994G	11.537	20	1	5 min
5200MHz_10°C	Pass	5.2G	5.199938G	11.898	20	1	10 min
5200MHz_20°C	Pass	5.2G	5.199936G	12.258	20	1	0 min
5200MHz_20°C	Pass	5.2G	5.199934G	12.619	20	1	2 min
5200MHz_20°C	Pass	5.2G	5.199942G	11.176	20	1	5 min
5200MHz_20°C	Pass	5.2G	5.199938G	11.898	20	1	10 min
5200MHz_30°C	Pass	5.2G	5.199934G	12.619	20	1	0 min
5200MHz_30°C	Pass	5.2G	5.199933G	12.979	20	1	2 min
5200MHz_30°C	Pass	5.2G	5.199933G	12.979	20	1	5 min
5200MHz_30°C	Pass	5.2G	5.199931G	13.34	20	1	10 min
5200MHz_40°C	Pass	5.2G	5.199942G	11.176	20	1	0 min
5200MHz_40°C	Pass	5.2G	5.199934G	12.619	20	1	2 min
5200MHz_40°C	Pass	5.2G	5.199923G	14.782	20	1	5 min
5200MHz_40°C	Pass	5.2G	5.19994G	11.537	20	1	10 min
5200MHz_138V	Pass	5.2G	5.199931G	13.34	20	1	0 min
5200MHz_138V	Pass	5.2G	5.199936G	12.258	20	1	2 min
5200MHz_138V	Pass	5.2G	5.199927G	14.061	20	1	5 min
5200MHz_138V	Pass	5.2G	5.199938G	11.898	20	1	10 min
5200MHz_120V	Pass	5.2G	5.19994G	11.537	20	1	0 min
5200MHz_120V	Pass	5.2G	5.199936G	12.258	20	1	2 min
5200MHz_120V	Pass	5.2G	5.199942G	11.176	20	1	5 min
5200MHz_120V	Pass	5.2G	5.199944G	10.816	20	1	10 min
5200MHz_102V	Pass	5.2G	5.199921G	15.142	20	1	0 min
5200MHz_102V	Pass	5.2G	5.199933G	12.979	20	1	2 min
5200MHz_102V	Pass	5.2G	5.199938G	11.898	20	1	5 min
5200MHz 102V	Pass	5.2G	5.199929G	13.7	20	1	10 min

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