



# **FCC Test Report**

FCC ID : Z8H89FT0041

Equipment : cnPilot e425H Indoor

Brand Name : ( Cambium Networks

Model Name : REG-PL-E425H

Applicant : Cambium Networks Inc.

3800 Golf Road, Suite 360 Rolling Meadows, IL 60008,

USA

Manufacturer : Cambium Networks Ltd.

Unit B2 Linhay Business Park Eastern Rd Ashburton,

**Devon TQ13 7UP United Kingdom** 

Standard : 47 CFR FCC Part 15.407

The product was received on Jan. 07, 2019, and testing was started from Feb. 01, 2019 and completed on Mar. 28, 2019. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

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

Approved by: Allen Lin

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

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

TEL: 886-3-3273456 Page Number: 1 of 25

FAX: 886-3-3270973 Issued Date : Jun. 18, 2019

Report Template No.: HE1-D1 Ver2.3 Report Version : 01





## **Table of Contents**

псто	IISTORY OF THIS TEST REPORT3						
11510	IISTORT OF THIS TEST REPORT						
SUMM	ARY OF TEST RESULT	4					
	OFNEDAL DECORIDATION	_					
1	GENERAL DESCRIPTION	5					
1.1	Information	5					
1.2	Testing Applied Standards	8					
1.3	Testing Location Information	8					
1.4	Measurement Uncertainty	8					
2	TEST CONFIGURATION OF EUT						
2	TEST CONFIGURATION OF EUT	9					
2.1	Test Condition	9					
2.2	Test Channel Mode	9					
2.3	The Worst Case Measurement Configuration	12					
2.4	Support Equipment	13					
2.5	Test Setup Diagram	14					
3	TRANSMITTER TEST RESULT	15					
3.1	Emission Bandwidth						
3.2	Maximum Conducted Output Power						
3.3	Peak Power Spectral Density						
3.4	Unwanted Emissions	20					
4	TEST EQUIPMENT AND CALIBRATION DATA	24					
APPEN	NDIX A. TEST RESULTS OF EMISSION BANDWIDTH						
APPENDIX B. TEST RESULTS OF MAXIMUM CONDUCTED OUTPUT POWER							
APPENDIX C. TEST RESULTS OF PEAK POWER SPECTRAL DENSITY							
· ·							

APPENDIX D. TEST RESULTS OF UNWANTED EMISSIONS

**APPENDIX E. TEST PHOTOS** 

**PHOTOGRAPHS OF EUT V01** 

TEL: 886-3-3273456 Page Number : 2 of 25

FAX: 886-3-3270973 Issued Date : Jun. 18, 2019

Report Version Report Template No.: HE1-D1 Ver2.3 : 01



# History of this test report

Report No.	Version	Description	Issued Date
FR8D2017-01AN	01	Initial issue of report	Jun. 18, 2019

TEL: 886-3-3273456 Page Number : 3 of 25

FAX: 886-3-3270973 Issued Date : Jun. 18, 2019

Report Version

: 01

FCC ID: Z8H89FT0041

Report Template No.: HE1-D1 Ver2.3



# **Summary of Test Result**

Report Clause	Ref. Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.407(a)	Emission Bandwidth	PASS	-
3.2	15.407(a)	Maximum Conducted Output Power	PASS	-
3.3	15.407(a)	Peak Power Spectral Density	PASS	-
3.4	15.407(b)	Unwanted Emissions	PASS	-

## **Declaration of Conformity:**

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

## Comments and explanations:

None

Reviewed by: Jackson Tsai

Report Producer: Debby Hung

TEL: 886-3-3273456 Page Number : 4 of 25 FAX: 886-3-3270973 Issued Date : Jun. 18, 2019

Report Template No.: HE1-D1 Ver2.3

FCC ID: Z8H89FT0041

Report Version : 01



# **General Description**

#### 1.1 Information

## 1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5250-5350	- · · · (LITOO) - · · (LITOO)	5260-5320	52-64 [4]
5470-5725	a, n (HT20), ac (VHT20)	5500-5700	100-140 [11]
5250-5350	n (UT40) oo (VUT40)	5270-5310	54-62 [2]
5470-5725	n (HT40), ac (VHT40)	5510-5670	102-134 [5]
5250-5350	20 (\/UT90\	5290	58 [1]
5470-5725	ac (VHT80)	5530-5610	106-122 [2]

<Non-Beamforming>

Band	Mode	BWch (MHz)	Nant
5.25-5.35GHz	802.11a	20	1TX(Port1)
5.25-5.35GHz	802.11a	20	1TX(Port2)
5.25-5.35GHz	802.11a	20	2TX
5.47-5.725GHz	802.11a	20	1TX(Port1)
5.47-5.725GHz	802.11a	20	1TX(Port2)
5.47-5.725GHz	802.11a	20	2TX
5.25-5.35GHz	802.11ac VHT20	20	2TX
5.47-5.725GHz	802.11ac VHT20	20	2TX
5.25-5.35GHz	802.11ac VHT40	40	2TX
5.47-5.725GHz	802.11ac VHT40	40	2TX
5.25-5.35GHz	802.11ac VHT80	80	2TX
5.47-5.725GHz	802.11ac VHT80	80	2TX

<Beamforming>

Band	Mode	BWch (MHz)	Nant
5.25-5.35GHz	802.11ac VHT20-BF	20	2TX
5.47-5.725GHz	802.11ac VHT20-BF	20	2TX
5.25-5.35GHz	802.11ac VHT40-BF	40	2TX
5.47-5.725GHz	802.11ac VHT40-BF	40	2TX
5.25-5.35GHz	802.11ac VHT80-BF	80	2TX
5.47-5.725GHz	802.11ac VHT80-BF	80	2TX

TEL: 886-3-3273456 Page Number : 5 of 25 FAX: 886-3-3270973 Issued Date : Jun. 18, 2019

Report Template No.: HE1-D1 Ver2.3

FCC ID: Z8H89FT0041

Report Version : 01 FCC Test Report No.: FR8D2017-01AN

### Note:

- 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- VHT20, VHT40, VHT80 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- BWch is the nominal channel bandwidth.

### 1.1.2 Antenna Information

Group	Ant.	Port	Brand	Model Name	Antenna Type	Connector
1	1	1	-	E425W	PCB Antenna	I-PEX
!	2	2	-	E425W	PCB Antenna	I-PEX
0	3	1	-	WPB545	PCB Antenna	I-PEX
2	4	2	-	WPB546	PCB Antenna	I-PEX

			Gain (dBi)	
Group	Ant.	2.40	50	G
		2.4G	2.40	Non-Beamforming
1	1	4.04	4.20	3.01
l	2	2.43	4.29	3.01
2	3	3.84	4.00	3.01
2	4	2.23	4.08	3.01

**Note** .The EUT can match with above group 1 or group 2 for using. Higher gain was used to perform the worst configuration and result of that was recorded as the final test result.

### For 2.4GHz function:

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

Support diversity function and pretested on each single chain, port 1(Ant. 1 or Ant. 3) and port 2(Ant. 2 or Ant. 4) could transmit/receive.

For IEEE 802.11 b/g/n mode (2TX/2RX)

Group 1 or Group 2 could transmit/receive simultaneously.

### For 5GHz function:

For IEEE 802.11 a mode (1TX/1RX)

Support diversity function and pre-tested on each single chain, the worst case was Ant. 2(port 2) and it was record in this test report.

For IEEE 802.11 a/n/ac mode (2TX/2RX)

Ant. 1(port 1) and Ant. 2 (port 2) or Ant. 3 (port 1) and Ant. 4 (port 2) can be used for both transmission and reception.

TEL: 886-3-3273456 Page Number : 6 of 25 FAX: 886-3-3270973 Issued Date : Jun. 18, 2019

Report Version

: 01

Report Template No.: HE1-D1 Ver2.3

## 1.1.3 EUT Information

	Operational Condition				
EUT Power Type From PoE					
E113			Outdoor	$\boxtimes$	Indoor
EU	Γ Function		Fixed P2P		Client
Bea	mforming Function	$\boxtimes$	With beamforming		Without beamforming
Weather Band		$\boxtimes$	With 5600~5650MHz		Without 5600~5650MHz
	Type of EUT				
$\boxtimes$	Stand-alone				
	Combined (EUT where the radio part is fully integrated within another device)				
	Combined Equipment - Brand Name / Model No.:				
	Plug-in radio (EUT intended for a variety of host systems)				
	Host System - Brand Name / Model No.:				
	Other:		·		

Report No.: FR8D2017-01AN

## 1.1.4 Mode Test Duty Cycle

### <Non-Beamforming>

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.972	0.12	2.067m	1k
802.11ac VHT20	0.987	0.06	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ac VHT40	0.972	0.12	2.439m	1k
802.11ac VHT80	0.948	0.23	1.152m	1k

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

## < Beamforming>

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ac VHT20-BF	0.823	0.85	1.9m	1k
802.11ac VHT40-BF	0.873	0.59	2.022m	1k
802.11ac VHT80-BF	0.846	0.73	1.931m	1k

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

## 1.1.5 Table for Permissive Change

This product is an extension of original one reported under Sporton project number: FR8D2017AN Below is the table for the change of the product with respect to the original one.

Modifications	Performance Checking
UNII-2A and UNII-2C was added	All RF Test item were evaluated

TEL: 886-3-3273456 Page Number : 7 of 25
FAX: 886-3-3270973 Issued Date : Jun. 18, 2019

Report Template No.: HE1-D1 Ver2.3 Report Version : 01



#### 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 v02r01
- KDB 662911 D01 v02r01

#### **Testing Location Information** 1.3

	Testing Location								
$\boxtimes$	HWA YA	ADD	:	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	n No. 1	W	1190 with FCC.		
	☐ JHUBEI ADD : No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County, Taiwan (R.O.C.)					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	TH07-HY	Gary	23.3~23.9°C / 63~65%	12/Feb/2019~28/Mar/2019
Radiated	03CH02-HY	Tim	23.9~24.5°C / 49.8~50.6%	01/Feb/2019~22/Mar/2019

#### **Measurement Uncertainty** 1.4

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.54 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	1.6 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.9 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.3 dB	Confidence levels of 95%
Temperature	0.7 ℃	Confidence levels of 95%
Humidity	4 %	Confidence levels of 95%

TEL: 886-3-3273456 : 8 of 25 Page Number : Jun. 18, 2019 FAX: 886-3-3270973 Issued Date

Report Template No.: HE1-D1 Ver2.3

FCC ID: Z8H89FT0041

Report Version : 01



### **Test Configuration of EUT** 2

#### 2.1 **Test Condition**

Condition Item	Abbreviation/Remark	Remark	
RF Conducted	Abbreviation	Remark	
TnomVnom	Tnom	20°C	
-	Vnom	56V	

#### **Test Channel Mode** 2.2

<Non-Beamforming>

Test Software	Dos

Mode	PowerSetting
802.11a_Nss1,(6Mbps)_1TX(Port1)	-
5260MHz	23.5
5300MHz	24
5320MHz	23.5
5500MHz	22.5
5580MHz	23
5700MHz	19.5
802.11a_Nss1,(6Mbps)_1TX(Port2)	-
5260MHz	24
5300MHz	24
5320MHz	22
5500MHz	22.5
5580MHz	23
5700MHz	21
802.11a_Nss1,(6Mbps)_2TX	-
5260MHz	19
5300MHz	19.5
5320MHz	19.5
5500MHz	20
5580MHz	19.5
5700MHz	17
802.11ac VHT20_Nss1,(MCS0)_2TX	-
5260MHz	20.5

: 9 of 25 TEL: 886-3-3273456 Page Number FAX: 886-3-3270973 Issued Date : Jun. 18, 2019

Report Version

: 01

Report Template No.: HE1-D1 Ver2.3



## FCC Test Report

Mode	PowerSetting
5300MHz	21
5320MHz	21.5
5500MHz	21.5
5580MHz	21.5
5700MHz	19.5
802.11ac VHT40_Nss1,(MCS0)_2TX	-
5270MHz	21.5
5310MHz	19.5
5510MHz	18.5
5550MHz	22
5670MHz	22
802.11ac VHT80_Nss1,(MCS0)_2TX	-
5290MHz	17.5
5530MHz	17.5
5610MHz	20

Report No.: FR8D2017-01AN

TEL: 886-3-3273456 Page Number : 10 of 25 FAX: 886-3-3270973 Issued Date : Jun. 18, 2019

Report Template No.: HE1-D1 Ver2.3 Report Version : 01



## FCC Test Report

Report No.: FR8D2017-01AN

## <Beamforming>

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

Mode	PowerSetting
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-
5260MHz	22
5300MHz	22
5320MHz	22
5500MHz	19
5580MHz	22
5700MHz	22
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-
5270MHz	22
5310MHz	21
5510MHz	16
5550MHz	22
5670MHz	22
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-
5290MHz	14.5
5530MHz	15
5610MHz	20

TEL: 886-3-3273456 Page Number : 11 of 25 FAX: 886-3-3270973 Issued Date : Jun. 18, 2019

Report Template No.: HE1-D1 Ver2.3 Report Version : 01



### **The Worst Case Measurement Configuration** 2.3

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

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	CTX				
1	PoE mode				
Operating Mode > 1GHz	CTX				
	Y Plane				
Orthogonal Planes of EUT					
Worst Planes of EUT	V				

TEL: 886-3-3273456 Page Number : 12 of 25 FAX: 886-3-3270973 Issued Date : Jun. 18, 2019

: 01

Report Template No.: HE1-D1 Ver2.3 Report Version



# 2.4 Support Equipment

	Support Equipment - RF Conducted						
No. Equipment		Brand Name	Model Name	FCC ID			
1	Notebook	DELL	E5410	-			
2	Adapter for NB	DELL	HA65NM130	-			
3	Notebook	ACER	-	-			
4	AC Power Source	GW	APS-9102	-			
5	PoE	Cambium Networks	NET-P30-56IN	-			

Note.Support equipment No. 3,5 was provided by customer.

	Support Equipment – Radiated Emission							
No. Equipment Brand Name Model Name FCC ID								
1	Notebook	DELL	PP13S	-				
2	Client	-	-	-				
3	Notebook	ACER	JAL90	-				
4	PoE	Cambium Networks	NET-P30-56IN	-				

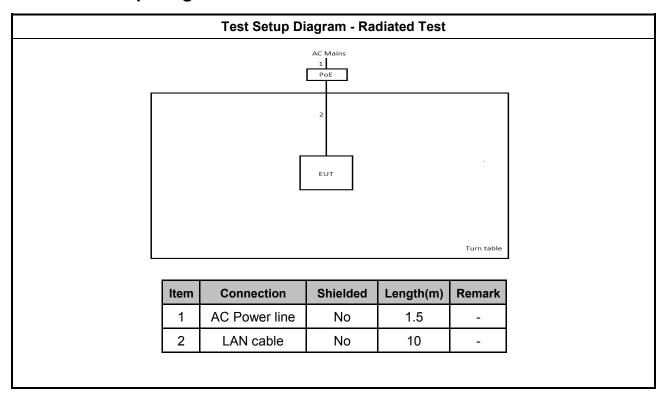
Note.Support equipment No.2,3,4 was provided by customer.

TEL: 886-3-3273456 Page Number : 13 of 25 FAX: 886-3-3270973 Issued Date : Jun. 18, 2019

Report Template No.: HE1-D1 Ver2.3 Report Version : 01



### **Test Setup Diagram** 2.5



TEL: 886-3-3273456 Page Number : 14 of 25 FAX: 886-3-3270973 Issued Date : Jun. 18, 2019

Report Version Report Template No.: HE1-D1 Ver2.3 : 01



#### 3 **Transmitter Test Result**

#### **Emission Bandwidth** 3.1

#### **Emission Bandwidth Limit** 3.1.1

Emission Bandwidth Limit				
UNII Devices				
☐ For the 5.15-5.25 GHz band, N/A				
☑ For the 5.25-5.35 GHz band, N/A				
☐ For the 5.47-5.725 GHz band, N/A				
☐ For the 5.725-5.85 GHz band, 6 dB emission bandwidth ≥ 500kHz.				

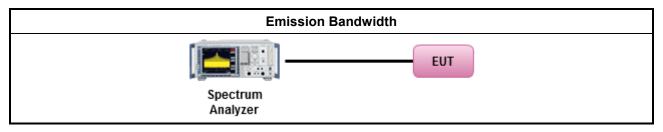
## 3.1.2 Measuring Instruments

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

#### **Test Procedures** 3.1.3

	Test Method
•	For the emission bandwidth shall be measured using one of the options below:
	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.
	Refer as IC RSS-Gen, clause 6.7 for bandwidth testing.

#### **Test Setup** 3.1.4



#### 3.1.5 **Test Result of Emission Bandwidth**

Refer as Appendix A

TEL: 886-3-3273456 Page Number : 15 of 25 FAX: 886-3-3270973 Issued Date : Jun. 18, 2019

Report Template No.: HE1-D1 Ver2.3 Report Version : 01



### **Maximum Conducted Output Power** 3.2

#### 3.2.1 **Maximum Conducted Output Power Limit**

	Maximum Conducted Output Power Limit
UN	II Devices
	For the 5.15-5.25 GHz band:
	Outdoor 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). e.i.r.p. at any elevation angle above 30 degrees $\leq$ 125mW [21dBm]
	Indoor AP: the maximum conducted output power ( $P_{Out}$ ) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$
	<ul> <li>Point-to-point AP: the maximum conducted output power (P<sub>Out</sub>) shall not exceed the lesser of 1 W If G<sub>TX</sub> &gt; 23 dBi, then P<sub>Out</sub> = 30 - (G<sub>TX</sub> - 23).</li> </ul>
	<ul> <li>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> &gt; 6 dBi, then P<sub>Out</sub> = 24 – (G<sub>TX</sub> – 6).</li> </ul>
$\boxtimes$	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).
$\boxtimes$	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).
	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>
	= maximum conducted output power in dBm, = the maximum transmitting antenna directional gain in dBi.

TEL: 886-3-3273456 Page Number : 16 of 25 FAX: 886-3-3270973 Issued Date : Jun. 18, 2019 Report Version

: 01

Report Template No.: HE1-D1 Ver2.3



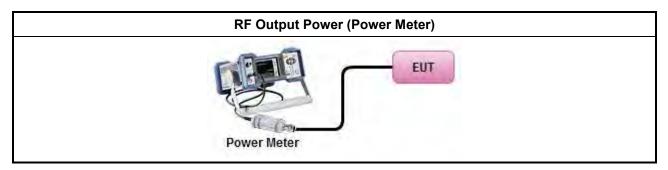
#### 3.2.2 **Measuring Instruments**

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

#### 3.2.3 **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

#### 3.2.4 Test Setup



## **Test Result of Maximum Conducted Output Power**

Refer as Appendix B

TEL: 886-3-3273456 Page Number : 17 of 25 FAX: 886-3-3270973 Issued Date : Jun. 18, 2019

Report Version Report Template No.: HE1-D1 Ver2.3 : 01



3.3 Peak Power Spectral Density

## 3.3.1 Peak Power Spectral Density Limit

## **Peak Power Spectral Density Limit UNII Devices** For the 5.15-5.25 GHz band: Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$ . 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= $11 - (G_{TX} - 6)$ .. $\boxtimes$ 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= $11 - (G_{TX} - 6)$ . $\boxtimes$ For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX}$ > 6 dBi, then PPSD= $11 - (G_{TX} - 6)$ . For the 5.725-5.85 GHz band: Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 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.

Report No.: FR8D2017-01AN

**PPSD** = peak power spectral density that he same method as used to determine the conducted output power shall be used to determine the power spectral density. And power spectral density in dBm/MHz  $G_{Tx}$  = the maximum transmitting antenna directional gain in dBi.

## 3.3.2 Measuring Instruments

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

TEL: 886-3-3273456 Page Number : 18 of 25 FAX: 886-3-3270973 Issued Date : Jun. 18, 2019

Report Version

: 01

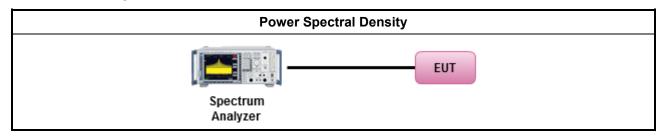
Report Template No.: HE1-D1 Ver2.3



#### 3.3.3 **Test Procedures**

	Test Method								
•	Peak power spectral density procedures that the same method as used to determine the conducted output power shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall 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%								
	Refer as KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)								
•	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.								
	If multiple transmit chains, EIRP PPSD calculation could be following as methods:  PPSD <sub>total</sub> = PPSD <sub>1</sub> + PPSD <sub>2</sub> + + PPSD <sub>n</sub> (calculated in linear unit [mW] and transfer to log unit [dBm])  EIRP <sub>total</sub> = PPSD <sub>total</sub> + DG								

#### 3.3.4 Test Setup



## **Test Result of Peak Power Spectral Density**

Refer as Appendix C

TEL: 886-3-3273456 Page Number : 19 of 25 FAX: 886-3-3270973 Issued Date : Jun. 18, 2019

Report Template No.: HE1-D1 Ver2.3

FCC ID: Z8H89FT0041

Report Version : 01



#### 3.4 **Unwanted Emissions**

#### 3.4.1 **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						
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.

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

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).

TEL: 886-3-3273456 : 20 of 25 Page Number FAX: 886-3-3270973 Issued Date : Jun. 18, 2019

Report Template No.: HE1-D1 Ver2.3 Report Version : 01

FCC Test Report No.: FR8D2017-01AN

## 3.4.2 Measuring Instruments

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

### 3.4.3 Test Procedures

#### **Test Method**

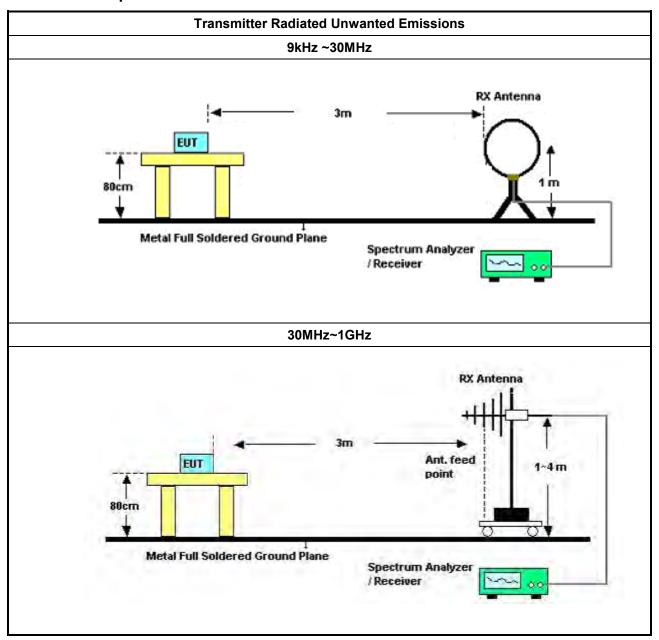
- Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, 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.

TEL: 886-3-3273456 Page Number : 21 of 25 FAX: 886-3-3270973 Issued Date : Jun. 18, 2019

Report Template No.: HE1-D1 Ver2.3 Report Version : 01



#### 3.4.4 **Test Setup**



TEL: 886-3-3273456 Page Number : 22 of 25 FAX: 886-3-3270973 Issued Date : Jun. 18, 2019

Report Version

: 01

Report Template No.: HE1-D1 Ver2.3

Above 1GHz

BUT

3M & 1M

Amay 30cm

Spectrum Analyzer

Report No.: FR8D2017-01AN

## 3.4.5 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.

## 3.4.6 Test Result of Transmitter Unwanted Emissions

Refer as Appendix D

TEL: 886-3-3273456 Page Number : 23 of 25 FAX: 886-3-3270973 Issued Date : Jun. 18, 2019

Report Version

: 01

Report Template No.: HE1-D1 Ver2.3



# **Test Equipment and Calibration Data**

### Instrument for Radiated Test

nstrument for Radiated Test							
Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date	
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz ~ 1GHz 3m	19/Oct/2018	18/Oct/2019	
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz ~ 18GHz 3m	17/Oct/2018	16/Oct/2019	
Amplifier	Agilent	8447D	2944A11149	100kHz ~ 1.3GHz	27Jul/2018	02/Jul/2019	
Microwave Preamplifier	Agilent	8449B	449B 3008A02373 1GH		23/Oct/2018	22/Oct/2019	
Signal Analyzer	Signal Analyzer R&S FSV40		101500	10Hz ~ 40GHz	18/Jul/2018	17/Jul/2019	
RF Cable-R03m	Jye Bao	RG142	CB017	9kHz ~ 1GHz	18/Jan/2019	17/Jan/2020	
RF Cable-high	F Cable-high SUHNER SUCOFLEX104 MY		MY34918/4	1GHz ~ 40GHz	18/Jan/2019	17/Jan/2020	
Bilog Antenna & 5dB Attenuator	SCHAFFNER / MTJ	CBL 6112B / MTJ6102-05	2723 / 2	30MHz ~ 1GHz	08/Sep/2018	07/Sep/2019	
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz ~ 40GHz	24/Aug/2018	23/Aug/2019	
EMI Test R&S ESR3 10205.		102052	9kHz ~ 3.6GHz	10/Apr/2018	09/Apr/2019		
Loop Antenna	TESEQ	HLA 6120	31244	9k-30MHz	29/Mar/2018	28/Mar/2019	
Broadband Horn Antenna	SCHWARZBEC K	BBHA9170	BBHA9170339	18GHz ~ 40GHz	11/Apr/2018	10/Apr/2019	
Double Ridged Guide Horn Antenna	SCHWARZBEC K	BBHA 9120 D	BBHA 9120 D 01543	1GHz ~ 18GHz	11/May/2018	10/May/2019	

TEL: 886-3-3273456 Page Number : 24 of 25 FAX: 886-3-3270973 Issued Date : Jun. 18, 2019

Report Version

: 01

Report Template No.: HE1-D1 Ver2.3



## FCC Test Report

Report No.: FR8D2017-01AN

## **Instrument for Conducted Test**

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101500	101500 10Hz~40GHz 18/Jul/2018		17/Jul/2019
Power Sensor	Anritsu	MA2411B	1339407	300MHz ~ 40GHz	17/Nov/2018	16/Nov/2019
Power Meter	Anritsu	ML2495A	1517010	300MHz ~ 40GHz	17/Nov/2018	16/Nov/2019
Cable 0.2m	HUBER	MY10710/4	RF Cable - 01	30MHz~1G	10/Jan/2019	09/Jan/2020
Cable 0.2m	HUBER	MY10710/4	MY10710/4 RF Cable - 01 1G~18		10/Jan/2019	09/Jan/2020
Cable 0.5m	.5m HUBER MY10		RF Cable – 05	1G~18G	10/Jan/2019	09/Jan/2020
Cable 0.5m	HUBER	MY10715/4	RF Cable - 06	1G~18G	10/Jan/2019	09/Jan/2020
Cable 0.5m	HUBER	MY10715/4	RF Cable - 06	1G~18G	10/Jan/2019	09/Jan/2020
Cable 0.5m	HUBER	MY10721/4	RF Cable – 07	1G~18G	10/Jan/2019	09/Jan/2020
Cable 0.5m	HUBER	MY10721/4	RF Cable - 07	1G~18G	10/Jan/2019	09/Jan/2020
Cable 1.5m	HUBER	MY37973/4	RF Cable - 16	1G~18G	10/Jan/2019	09/Jan/2020
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz~40GHz	12/Nov/2018	10/Nov/2020

TEL: 886-3-3273456 Page Number : 25 of 25 FAX: 886-3-3270973 Issued Date : Jun. 18, 2019

Report Template No.: HE1-D1 Ver2.3 Report Version : 01



## EBW Result\_Non-Beamforming

Appendix A.1

**Summary** 

Mode	Max-N dB	Max-OBW	ITU-Code	Min-N dB	Min-OBW
	(Hz)	(Hz)		(Hz)	(Hz)
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	37.7M	17.591M	17M6D1D	34.325M	16.692M
802.11a_Nss1,(6Mbps)_1TX(Port2)	39.5M	19.115M	19M1D1D	21.55M	16.492M
802.11a_Nss1,(6Mbps)_2TX	19.7M	16.442M	16M4D1D	19.55M	16.392M
802.11ac VHT20_Nss1,(MCS0)_2TX	21.6M	17.641M	17M6D1D	20.625M	17.616M
802.11ac VHT40_Nss1,(MCS0)_2TX	69.85M	36.332M	36M3D1D	39.85M	35.982M
802.11ac VHT80_Nss1,(MCS0)_2TX	84.4M	75.862M	75M9D1D	83.9M	75.862M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	33.1M	16.667M	16M7D1D	19.75M	16.442M
802.11a_Nss1,(6Mbps)_1TX(Port2)	39.3M	18.441M	18M4D1D	33.125M	16.592M
802.11a_Nss1,(6Mbps)_2TX	19.925M	16.467M	16M5D1D	19.5M	16.392M
802.11ac VHT20_Nss1,(MCS0)_2TX	25.575M	17.716M	17M7D1D	20.5M	17.616M
802.11ac VHT40_Nss1,(MCS0)_2TX	78.65M	37.931M	37M9D1D	39.9M	35.982M
802.11ac VHT80_Nss1,(MCS0)_2TX	93.4M	76.062M	76M1D1D	84.3M	75.862M

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;

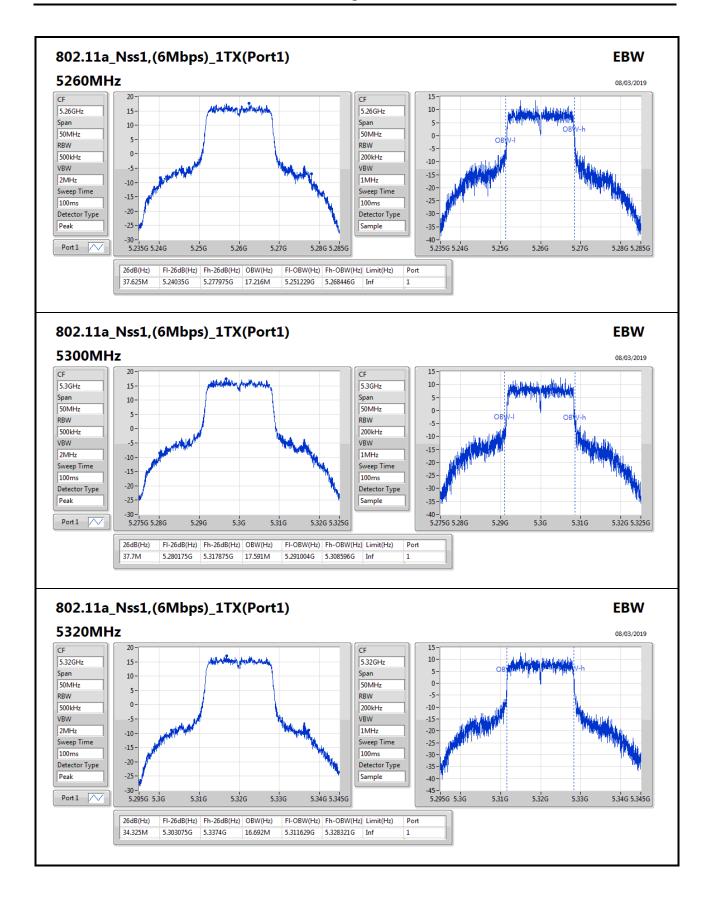
Page No. : A1 of A13

### Result

Mode	Result	Limit	Port 1-N dB	Port 1-OBW	Port 2-N dB	Port 2-OBW
		(Hz)	(Hz)	(Hz)	(Hz)	(Hz)
802.11a_Nss1,(6Mbps)_1TX(Port1)	-	-	-	-	-	-
5260MHz	Pass	Inf	37.625M	17.216M		
5300MHz	Pass	Inf	37.7M	17.591M		
5320MHz	Pass	Inf	34.325M	16.692M		
5500MHz	Pass	Inf	25.125M	16.492M		
5580MHz	Pass	Inf	33.1M	16.667M		
5700MHz	Pass	Inf	19.75M	16.442M		
802.11a_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-
5260MHz	Pass	Inf			39.5M	19.115M
5300MHz	Pass	Inf			39.425M	18.416M
5320MHz	Pass	Inf			21.55M	16.492M
5500MHz	Pass	Inf			33.425M	16.617M
5580MHz	Pass	Inf			39.3M	18.441M
5700MHz	Pass	Inf			33.125M	16.592M
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5260MHz	Pass	Inf	19.7M	16.392M	19.675M	16.442M
5300MHz	Pass	Inf	19.7M	16.417M	19.675M	16.417M
5320MHz	Pass	Inf	19.55M	16.442M	19.675M	16.442M
5500MHz	Pass	Inf	19.5M	16.467M	19.925M	16.442M
5580MHz	Pass	Inf	19.625M	16.417M	19.875M	16.417M
5700MHz	Pass	Inf	19.6M	16.417M	19.875M	16.392M
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5260MHz	Pass	Inf	21.25M	17.641M	20.65M	17.616M
5300MHz	Pass	Inf	21.475M	17.641M	20.625M	17.641M
5320MHz	Pass	Inf	21.6M	17.641M	20.675M	17.616M
5500MHz	Pass	Inf	21.4M	17.691M	21.9M	17.641M
5580MHz	Pass	Inf	22.025M	17.691M	25.575M	17.716M
5700MHz	Pass	Inf	20.5M	17.616M	21.475M	17.641M
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5270MHz	Pass	Inf	69.85M	36.332M	53.1M	36.082M
5310MHz	Pass	Inf	39.9M	35.982M	39.85M	36.032M
5510MHz	Pass	Inf	39.9M	36.032M	39.9M	35.982M
5550MHz	Pass	Inf	70.15M	36.382M	76.1M	36.532M
5670MHz	Pass	Inf	78M	37.831M	78.65M	37.931M
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5290MHz	Pass	Inf	83.9M	75.862M	84.4M	75.862M
5530MHz	Pass	Inf	84.5M	75.862M	84.3M	75.862M
5610MHz	Pass	Inf	85.7M	76.062M	93.4M	75.962M

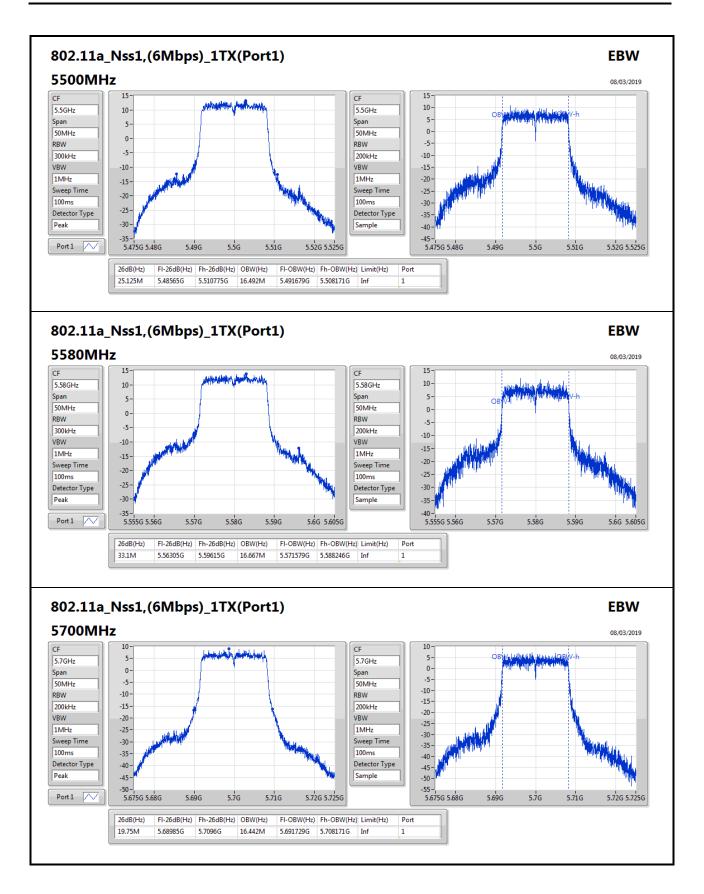
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band Port X-OBW = Port X 99% occupied bandwidth;





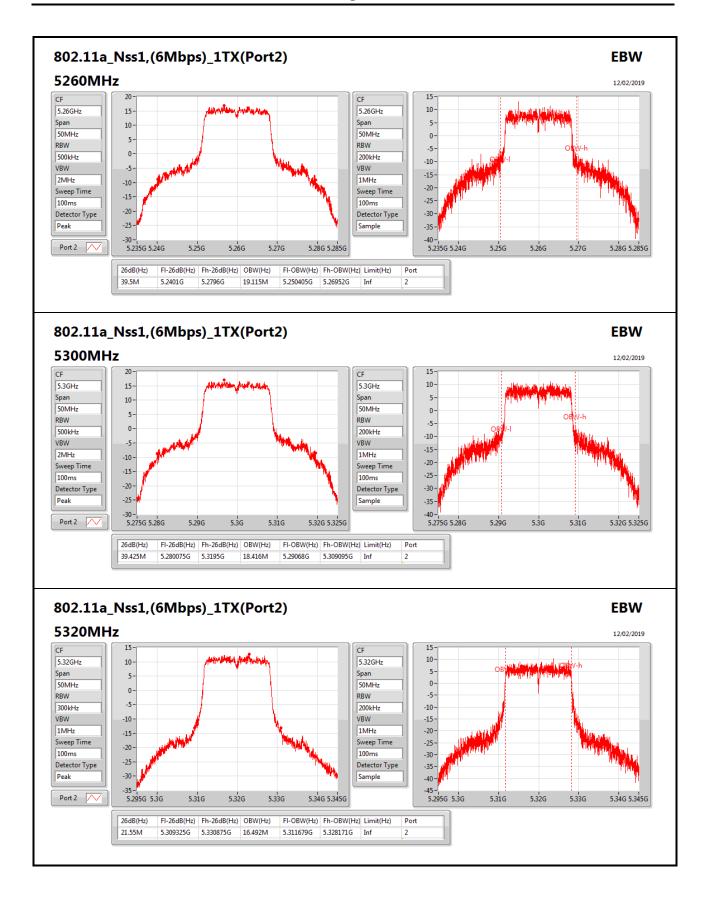
SPORTON INTERNATIONAL INC. Page No. : A3 of A13





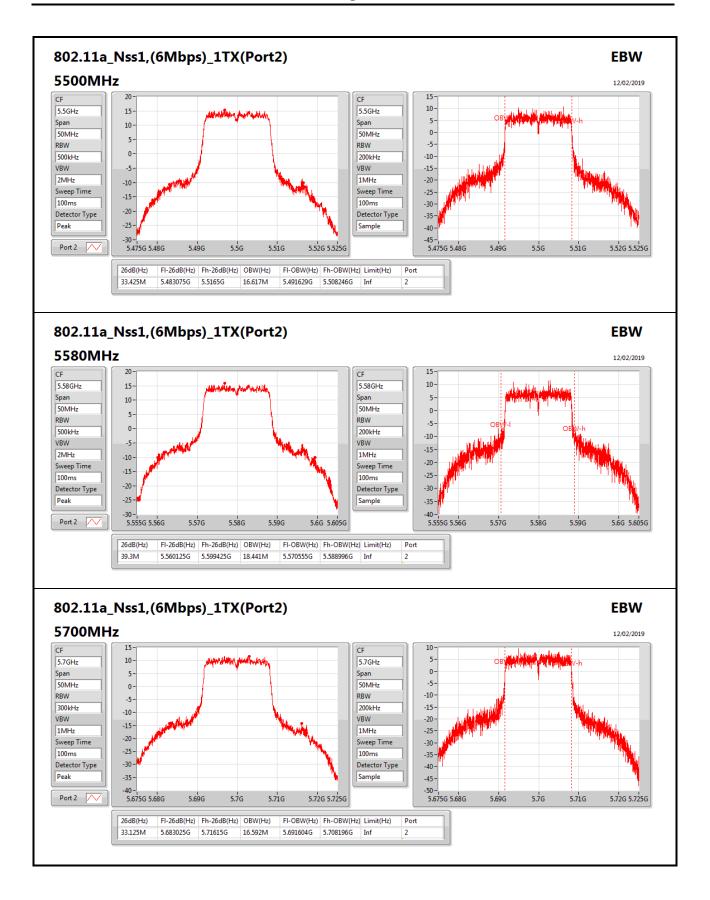
SPORTON INTERNATIONAL INC. Page No. : A4 of A13





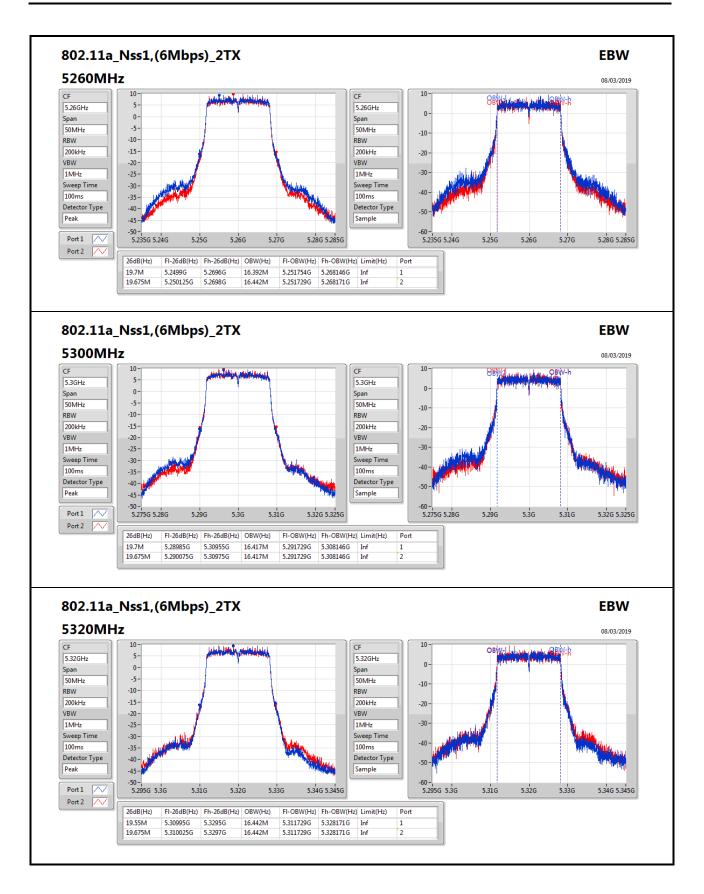
SPORTON INTERNATIONAL INC. Page No. : A5 of A13





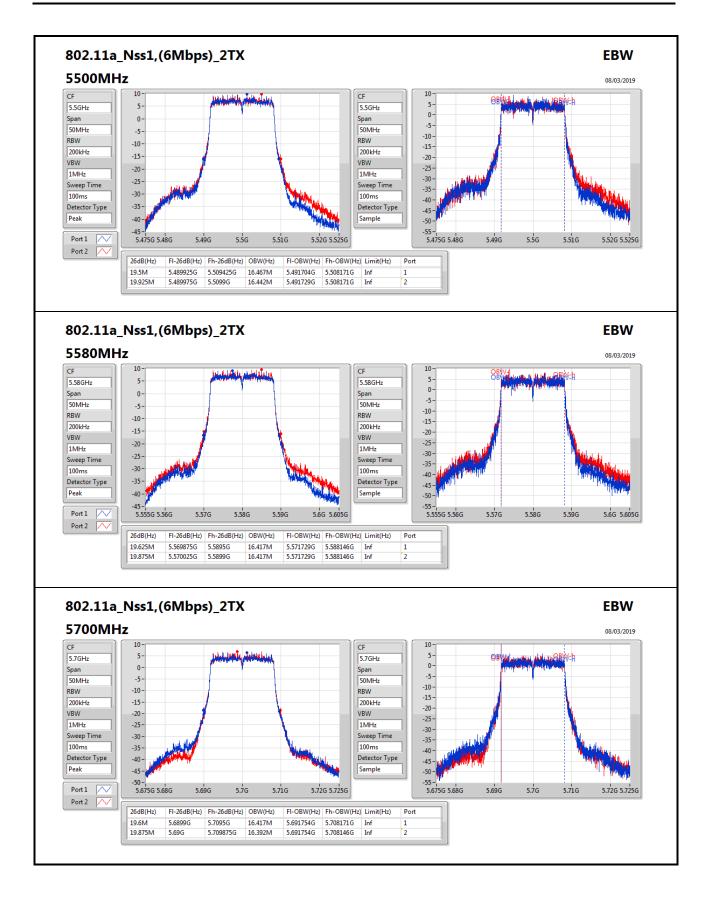
SPORTON INTERNATIONAL INC. Page No. : A6 of A13





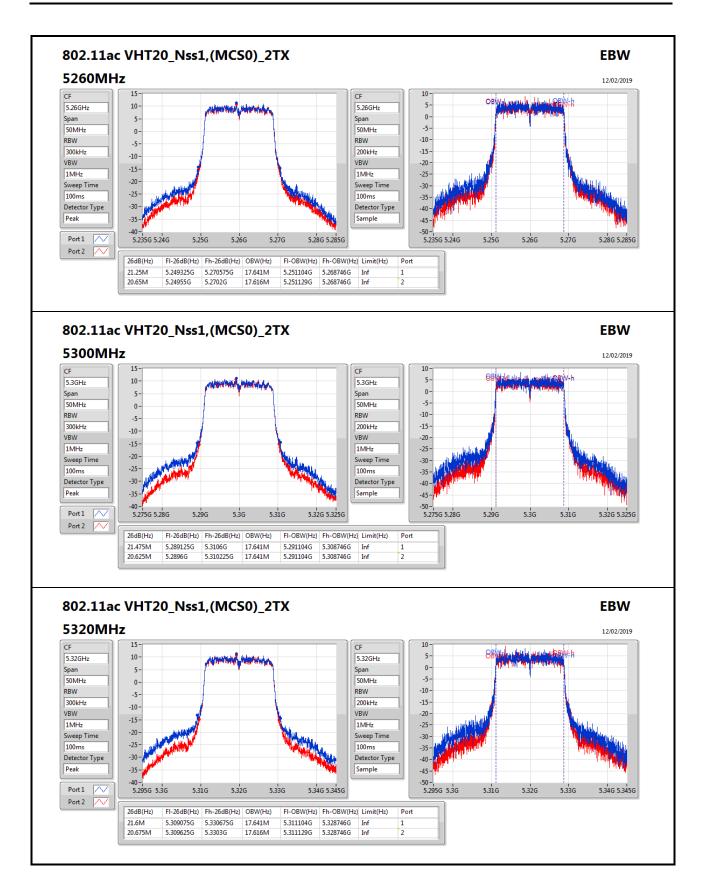
SPORTON INTERNATIONAL INC. Page No. : A7 of A13





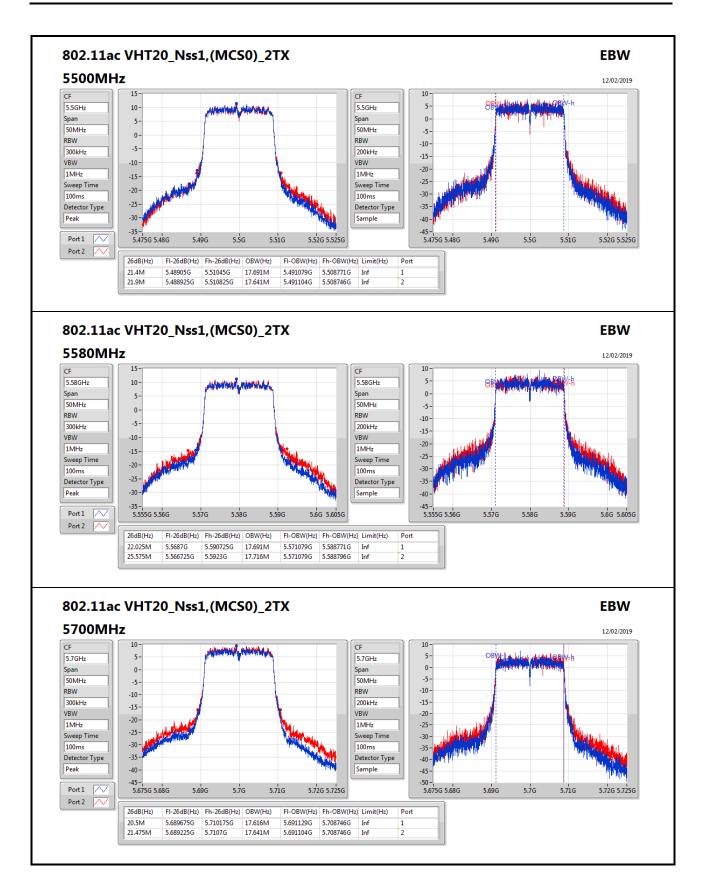
SPORTON INTERNATIONAL INC. Page No. : A8 of A13





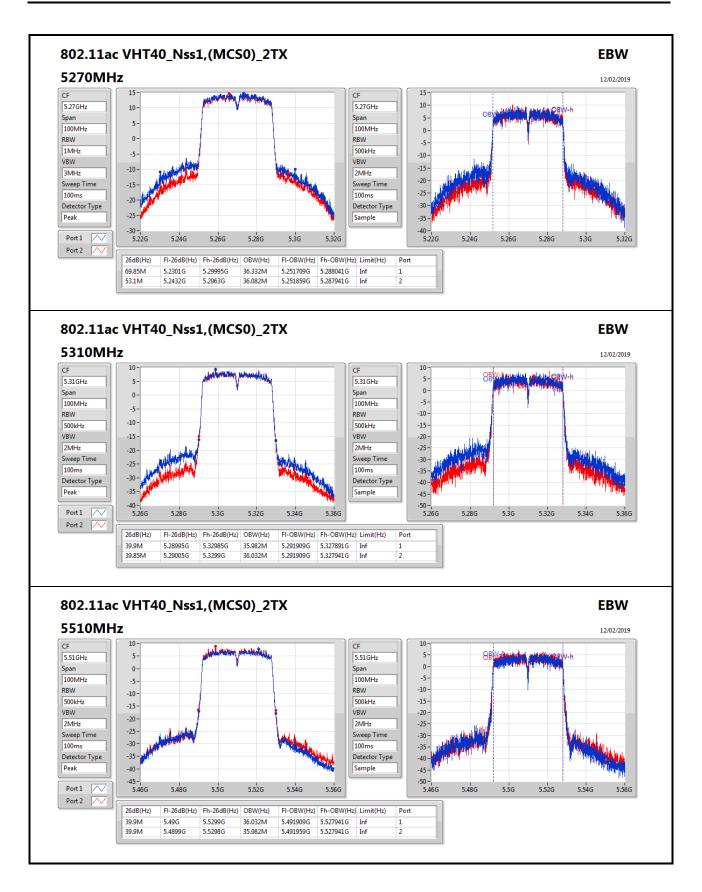
SPORTON INTERNATIONAL INC. Page No. : A9 of A13





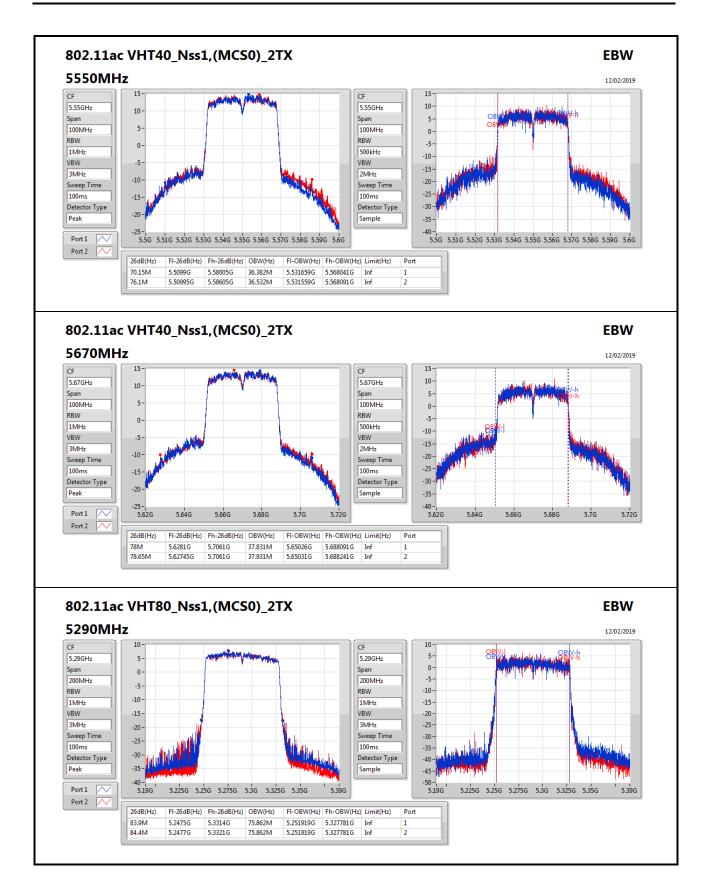
SPORTON INTERNATIONAL INC. Page No. : A10 of A13





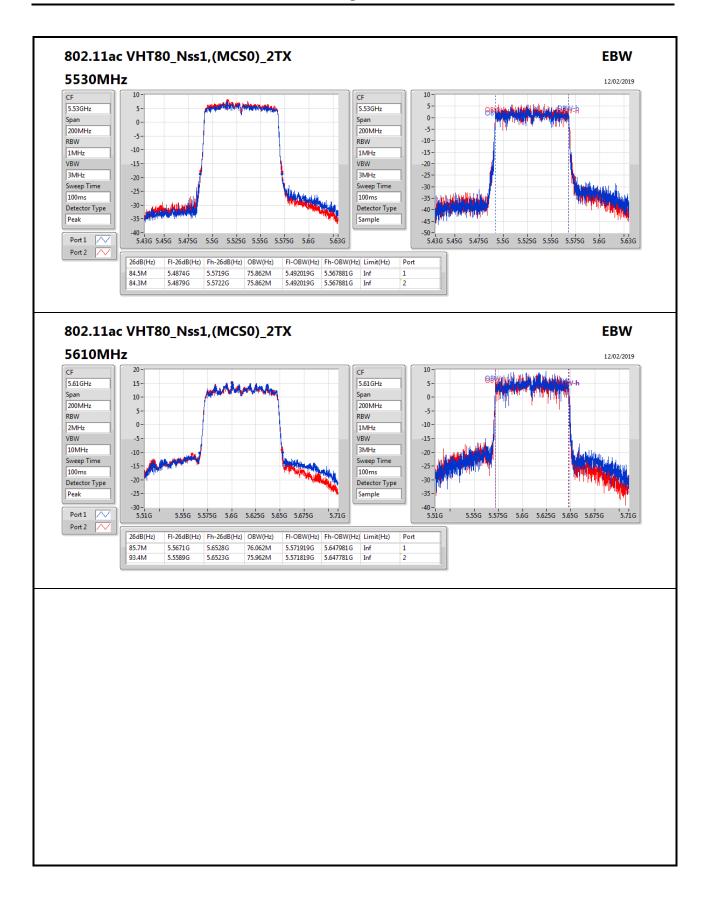
SPORTON INTERNATIONAL INC. Page No. : A11 of A13





SPORTON INTERNATIONAL INC. Page No. : A12 of A13





SPORTON INTERNATIONAL INC. Page No. : A13 of A13



Appendix A.2



**Summary** 

Mode	Max-N dB	Max-OBW	ITU-Code	Min-N dB	Min-OBW
	(Hz)	(Hz)		(Hz)	(Hz)
5.25-5.35GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	32.25M	17.716M	17M7D1D	21.775M	17.641M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	74.2M	36.632M	36M6D1D	56.35M	36.332M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	87.1M	75.862M	75M9D1D	84.2M	75.762M
5.47-5.725GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	38.175M	17.816M	17M8D1D	21.725M	17.691M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	76M	36.882M	36M9D1D	42.45M	36.182M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	150.4M	76.062M	76M1D1D	82.3M	75.862M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Max-OBW = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

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;

Page No. : A1 of A9





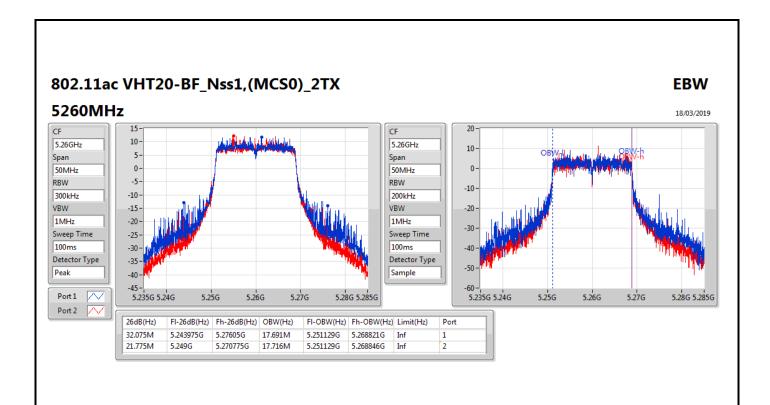
### Result

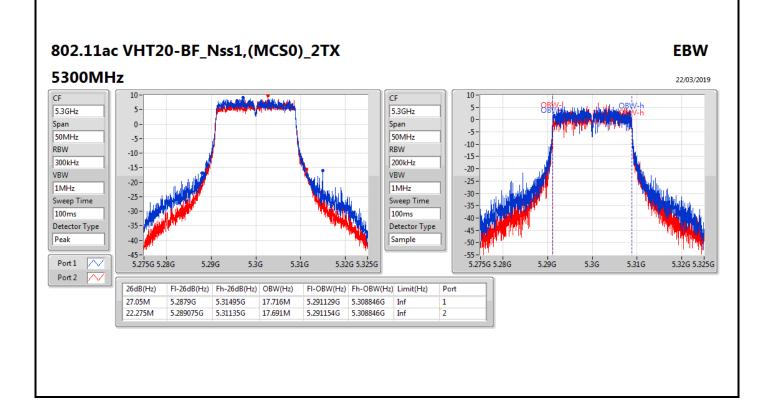
Mode	Result	Limit	Port 1-N dB	Port 1-OBW	Port 2-N dB	Port 2-OBW
		(Hz)	(Hz)	(Hz)	(Hz)	(Hz)
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5260MHz	Pass	Inf	32.075M	17.691M	21.775M	17.716M
5300MHz	Pass	Inf	27.05M	17.716M	22.275M	17.691M
5320MHz	Pass	Inf	32.25M	17.641M	21.85M	17.666M
5500MHz	Pass	Inf	36M	17.816M	26.425M	17.716M
5580MHz	Pass	Inf	38.175M	17.766M	21.725M	17.691M
5700MHz	Pass	Inf	29.25M	17.716M	31.425M	17.741M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5270MHz	Pass	Inf	71.15M	36.482M	56.35M	36.482M
5310MHz	Pass	Inf	74.2M	36.632M	67.95M	36.332M
5510MHz	Pass	Inf	46.4M	36.332M	42.45M	36.332M
5550MHz	Pass	Inf	76M	36.882M	59.4M	36.382M
5670MHz	Pass	Inf	75.1M	36.432M	72.25M	36.182M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5290MHz	Pass	Inf	84.2M	75.762M	87.1M	75.862M
5530MHz	Pass	Inf	85M	76.062M	83.8M	75.962M
5610MHz	Pass	Inf	150.4M	76.062M	82.3M	75.862M

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;

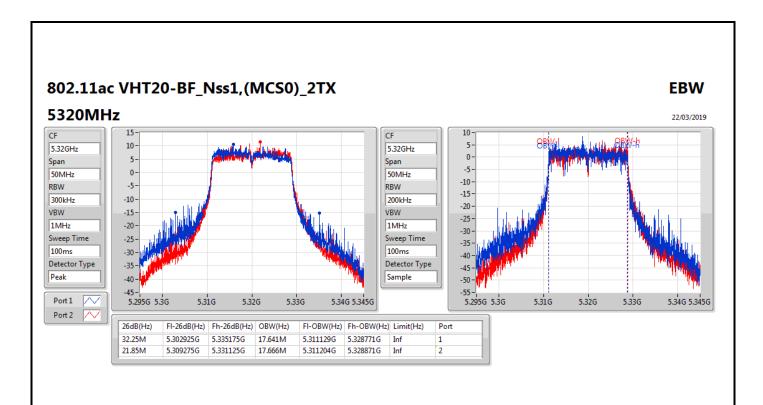
Page No. : A2 of A9

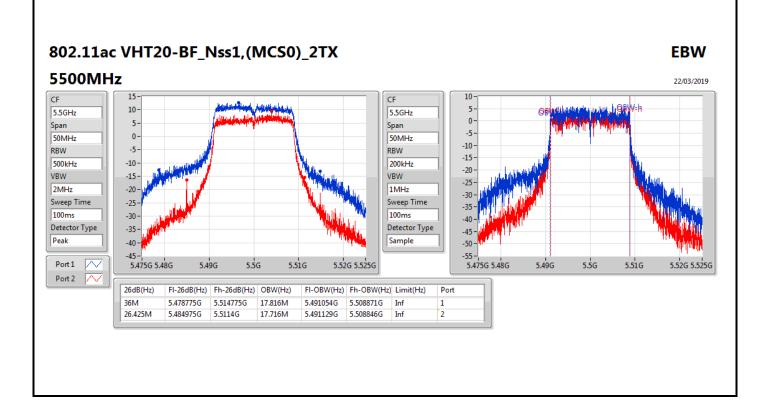




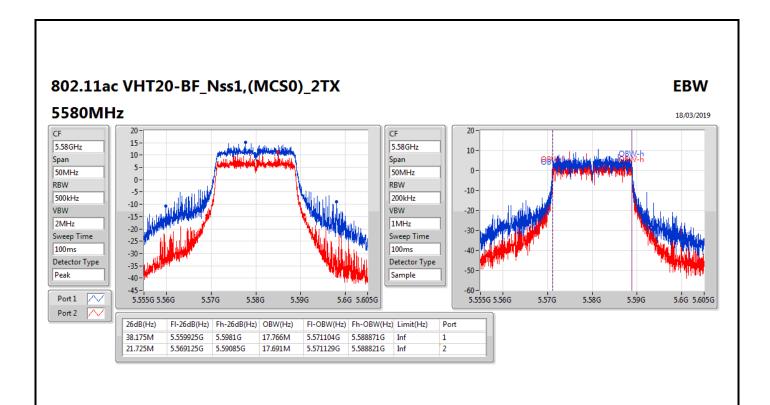


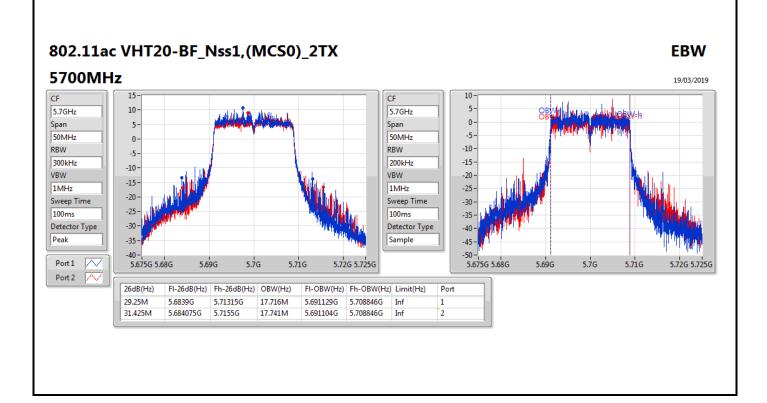




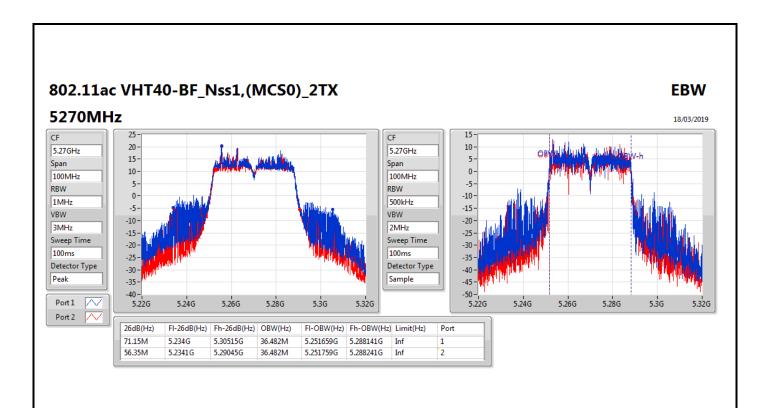


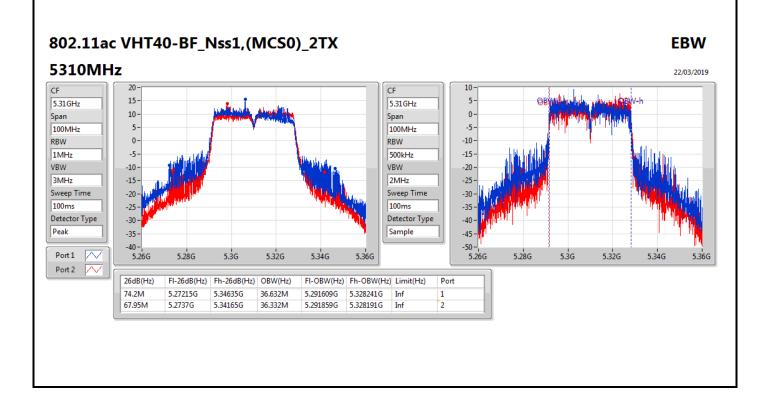




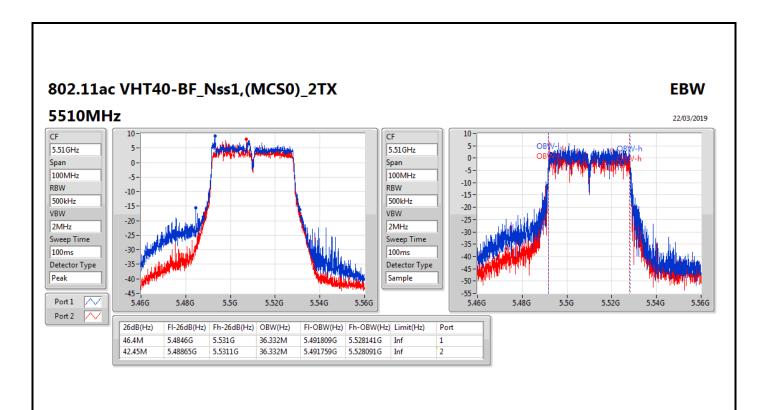


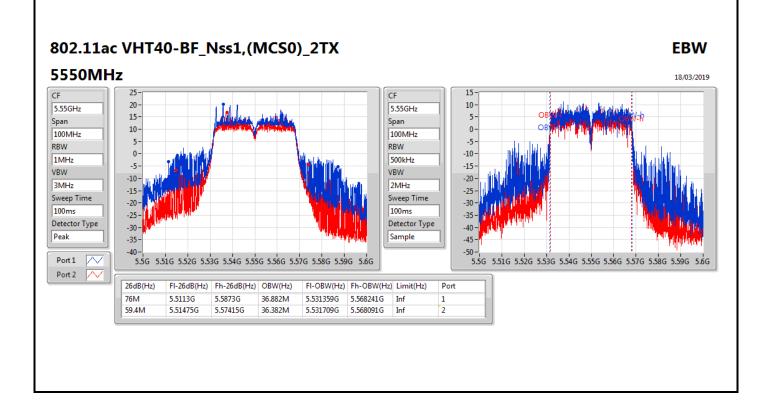




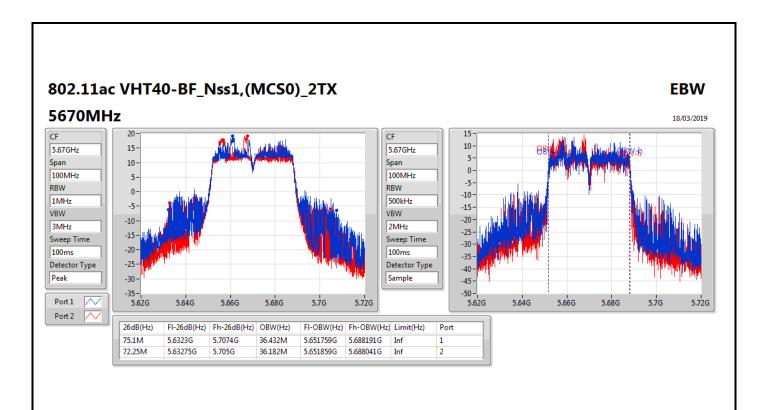


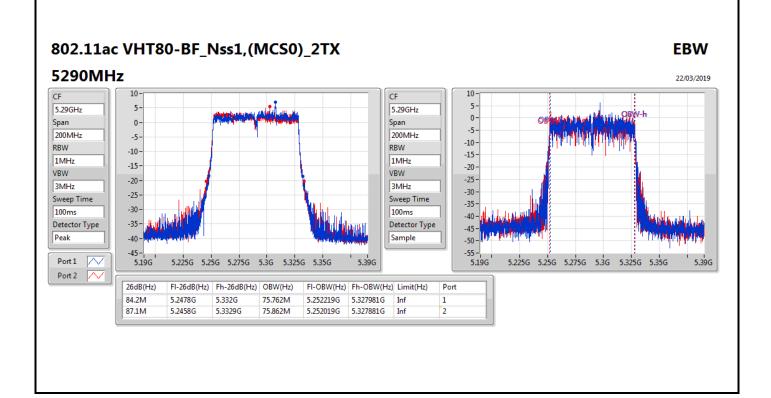




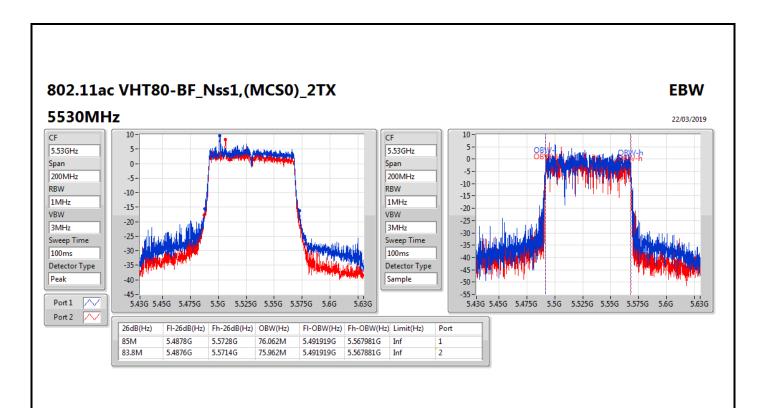


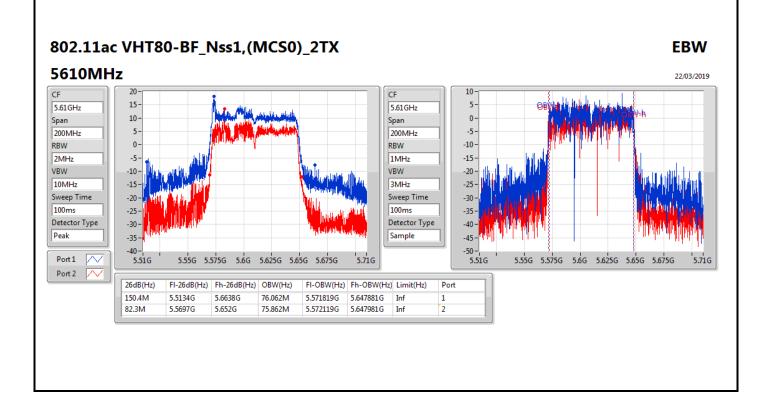














## Power Result\_Non-Beamforming

Appendix B.1

**Summary** 

Mode	Total Power	Total Power	EIRP	EIRP
	(dBm)	(W)	(dBm)	(W)
5.25-5.35GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	23.13	0.20559	27.33	0.54075
802.11a_Nss1,(6Mbps)_1TX(Port2)	23.24	0.21086	27.53	0.56624
802.11a_Nss1,(6Mbps)_2TX	22.60	0.18197	26.89	0.48865
802.11ac VHT20_Nss1,(MCS0)_2TX	23.20	0.20893	27.49	0.56105
802.11ac VHT40_Nss1,(MCS0)_2TX	23.94	0.24774	28.23	0.66527
802.11ac VHT80_Nss1,(MCS0)_2TX	19.68	0.09290	23.97	0.24946
5.47-5.725GHz	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	22.28	0.16904	26.48	0.44463
802.11a_Nss1,(6Mbps)_1TX(Port2)	22.12	0.16293	26.41	0.43752
802.11a_Nss1,(6Mbps)_2TX	22.61	0.18239	26.90	0.48978
802.11ac VHT20_Nss1,(MCS0)_2TX	23.35	0.21627	27.64	0.58076
802.11ac VHT40_Nss1,(MCS0)_2TX	23.99	0.25061	28.28	0.67298
802.11ac VHT80_Nss1,(MCS0)_2TX	22.40	0.17378	26.69	0.46666

#### Result

Mode	Result	DG	Port 1	Port 2	Total Power	Power Limit	EIRP	EIRP Limit
		(dBi)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)
802.11a_Nss1,(6Mbps)_1TX(Port1)	-	-	-	-	-	-	-	-
5260MHz	Pass	4.20	23.10		23.10	24.00	27.30	30.00
5300MHz	Pass	4.20	23.13		23.13	24.00	27.33	30.00
5320MHz	Pass	4.20	22.73		22.73	24.00	26.93	30.00
5500MHz	Pass	4.20	21.78		21.78	24.00	25.98	30.00
5580MHz	Pass	4.20	22.28		22.28	24.00	26.48	30.00
5700MHz	Pass	4.20	18.70		18.70	23.96	22.90	29.96
802.11a_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-	-	-
5260MHz	Pass	4.29		22.94	22.94	24.00	27.23	30.00
5300MHz	Pass	4.29		23.24	23.24	24.00	27.53	30.00
5320MHz	Pass	4.29		21.63	21.63	24.00	25.92	30.00
5500MHz	Pass	4.29		21.84	21.84	24.00	26.13	30.00
5580MHz	Pass	4.29		22.12	22.12	24.00	26.41	30.00
5700MHz	Pass	4.29		20.66	20.66	24.00	24.95	30.00
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
5260MHz	Pass	4.29	19.35	19.29	22.33	23.94	26.62	29.94
5300MHz	Pass	4.29	19.42	19.76	22.60	23.94	26.89	29.94
5320MHz	Pass	4.29	19.14	19.25	22.21	23.91	26.50	29.91
5500MHz	Pass	4.29	19.51	19.69	22.61	23.90	26.90	29.90
5580MHz	Pass	4.29	19.22	19.54	22.39	23.93	26.68	29.93
5700MHz	Pass	4.29	16.48	16.90	19.71	23.92	24.00	29.92
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5260MHz	Pass	4.29	20.32	19.92	23.13	24.00	27.42	30.00
5300MHz	Pass	4.29	20.24	19.97	23.12	24.00	27.41	30.00
5320MHz	Pass	4.29	20.31	20.07	23.20	24.00	27.49	30.00
5500MHz	Pass	4.29	20.36	20.31	23.35	24.00	27.64	30.00
5580MHz	Pass	4.29	20.27	20.28	23.29	24.00	27.58	30.00
5700MHz	Pass	4.29	18.28	18.84	21.58	24.00	25.87	30.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5270MHz	Pass	4.29	21.04	20.82	23.94	24.00	28.23	30.00
5310MHz	Pass	4.29	18.97	18.94	21.97	24.00	26.26	30.00
5510MHz	Pass	4.29	17.98	18.37	21.19	24.00	25.48	30.00
5550MHz	Pass	4.29	20.80	20.87	23.85	24.00	28.14	30.00
5670MHz	Pass	4.29	20.97	20.98	23.99	24.00	28.28	30.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5290MHz	Pass	4.29	16.64	16.70	19.68	24.00	23.97	30.00
5530MHz	Pass	4.29	16.37	16.79	19.60	24.00	23.89	30.00
5610MHz	Pass	4.29	19.36	19.41	22.40	24.00	26.69	30.00

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



Summary

Mode	Total Power	Total Power	EIRP	EIRP
	(dBm)	(W)	(dBm)	(W)
5.25-5.35GHz	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	21.05	0.12735	28.31	0.67764
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	21.40	0.13804	28.66	0.73451
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	15.08	0.03221	22.34	0.17140
5.47-5.725GHz	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	21.70	0.14791	28.96	0.78705
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	21.49	0.14093	28.75	0.74989
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	18.65	0.07328	25.91	0.38994

Page No. : B1 of B2



### Result

Mode	Result	DG	Port 1	Port 2	Total Power	Power Limit	EIRP	EIRP Limit
		(dBi)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5260MHz	Pass	7.26	17.94	17.64	20.80	22.74	28.06	30.00
5300MHz	Pass	7.26	18.25	17.82	21.05	22.74	28.31	30.00
5320MHz	Pass	7.26	17.72	17.50	20.62	22.74	27.88	30.00
5500MHz	Pass	7.26	17.74	16.54	20.19	22.74	27.45	30.00
5580MHz	Pass	7.26	18.54	18.84	21.70	22.74	28.96	30.00
5700MHz	Pass	7.26	19.10	18.22	21.69	22.74	28.95	30.00
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5270MHz	Pass	7.26	18.15	18.61	21.40	22.74	28.66	30.00
5310MHz	Pass	7.26	17.77	17.51	20.65	22.74	27.91	30.00
5510MHz	Pass	7.26	14.60	13.66	17.17	22.74	24.43	30.00
5550MHz	Pass	7.26	19.04	17.81	21.48	22.74	28.74	30.00
5670MHz	Pass	7.26	18.29	18.67	21.49	22.74	28.75	30.00
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5290MHz	Pass	7.26	11.95	12.18	15.08	22.74	22.34	30.00
5530MHz	Pass	7.26	12.85	12.67	15.77	22.74	23.03	30.00
5610MHz	Pass	7.26	16.15	15.06	18.65	22.74	25.91	30.00

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

Page No. : B2 of B2

**Summary** 

Mode	PD	EIRP PD
	(dBm/RBW)	(dBm/RBW)
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	10.23	14.43
802.11a_Nss1,(6Mbps)_1TX(Port2)	9.53	13.82
802.11a_Nss1,(6Mbps)_2TX	9.62	16.88
802.11ac VHT20_Nss1,(MCS0)_2TX	9.62	16.88
802.11ac VHT40_Nss1,(MCS0)_2TX	7.13	14.39
802.11ac VHT80_Nss1,(MCS0)_2TX	0.02	7.28
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	9.33	13.53
802.11a_Nss1,(6Mbps)_1TX(Port2)	8.46	12.75
802.11a_Nss1,(6Mbps)_2TX	9.55	16.81
802.11ac VHT20_Nss1,(MCS0)_2TX	9.67	16.93
802.11ac VHT40_Nss1,(MCS0)_2TX	7.12	14.38
802.11ac VHT80_Nss1,(MCS0)_2TX	2.66	9.92

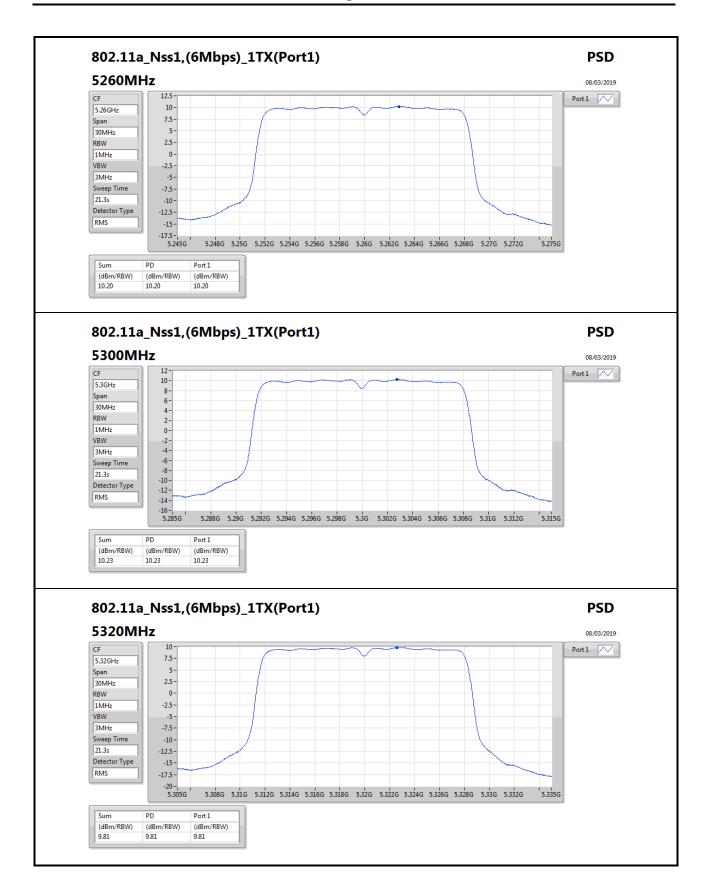
**RBW** = 500kHz for 5.725-5.85GHz band / 1MHz for other band;

#### Result

Mode	Result	DG	Port 1	Port 2	PD	PD Limit	EIRP PD	EIRP PD Limit
		(dBi)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
802.11a_Nss1,(6Mbps)_1TX(Port1)	-	-	-	-	-	-	-	-
5260MHz	Pass	4.20	10.20		10.20	11.00	14.40	17.00
5300MHz	Pass	4.20	10.23		10.23	11.00	14.43	17.00
5320MHz	Pass	4.20	9.81		9.81	11.00	14.01	17.00
5500MHz	Pass	4.20	8.80		8.80	11.00	13.00	17.00
5580MHz	Pass	4.20	9.33		9.33	11.00	13.53	17.00
5700MHz	Pass	4.20	5.84		5.84	11.00	10.04	17.00
802.11a_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-	-	-
5260MHz	Pass	4.29		9.32	9.32	11.00	13.61	17.00
5300MHz	Pass	4.29		9.53	9.53	11.00	13.82	17.00
5320MHz	Pass	4.29		7.92	7.92	11.00	12.21	17.00
5500MHz	Pass	4.29		8.18	8.18	11.00	12.47	17.00
5580MHz	Pass	4.29		8.46	8.46	11.00	12.75	17.00
5700MHz	Pass	4.29		7.06	7.06	11.00	11.35	17.00
802.11a_Nss1,(6Mbps)_2TX	-	·	1	-	٠	=	-	-
5260MHz	Pass	7.26	6.57	6.35	9.47	9.74	16.73	17.00
5300MHz	Pass	7.26	6.47	6.76	9.62	9.74	16.88	17.00
5320MHz	Pass	7.26	6.24	6.39	9.32	9.74	16.58	17.00
5500MHz	Pass	7.26	6.56	6.52	9.55	9.74	16.81	17.00
5580MHz	Pass	7.26	6.28	6.56	9.42	9.74	16.68	17.00
5700MHz	Pass	7.26	3.65	3.95	6.78	9.74	14.04	17.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	·	1	-	٠	=	-	-
5260MHz	Pass	7.26	6.81	6.44	9.44	9.74	16.70	17.00
5300MHz	Pass	7.26	6.92	6.70	9.62	9.74	16.88	17.00
5320MHz	Pass	7.26	7.04	6.70	9.61	9.74	16.87	17.00
5500MHz	Pass	7.26	7.12	6.79	9.67	9.74	16.93	17.00
5580MHz	Pass	7.26	6.77	6.80	9.53	9.74	16.79	17.00
5700MHz	Pass	7.26	5.17	5.42	8.02	9.74	15.28	17.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5270MHz	Pass	7.26	4.26	3.97	7.13	9.74	14.39	17.00
5310MHz	Pass	7.26	2.19	2.07	5.14	9.74	12.40	17.00
5510MHz	Pass	7.26	1.02	1.32	4.17	9.74	11.43	17.00
5550MHz	Pass	7.26	4.02	4.00	7.02	9.74	14.28	17.00
5670MHz	Pass	7.26	4.06	4.20	7.12	9.74	14.38	17.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5290MHz	Pass	7.26	-2.98	-2.96	0.02	9.74	7.28	17.00
5530MHz	Pass	7.26	-3.58	-3.04	-0.30	9.74	6.96	17.00
5610MHz	Pass	7.26	-0.29	-0.39	2.66	9.74	9.92	17.00

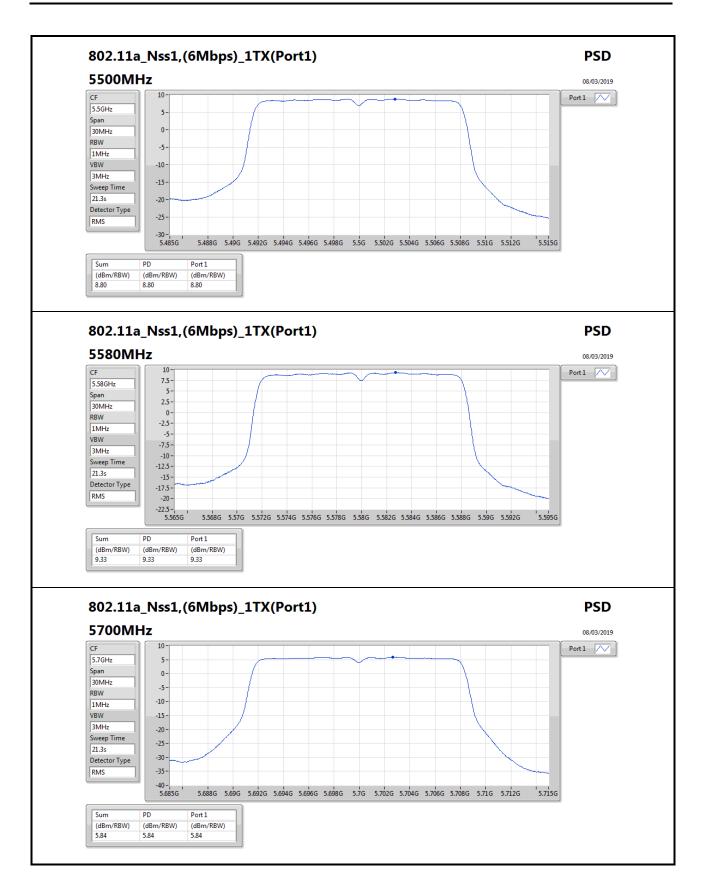
**DG** = Directional Gain; **RBW** = 500kHz for 5.725-5.85GHz band / 1MHz for other band; **PD** = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port Xpower density;





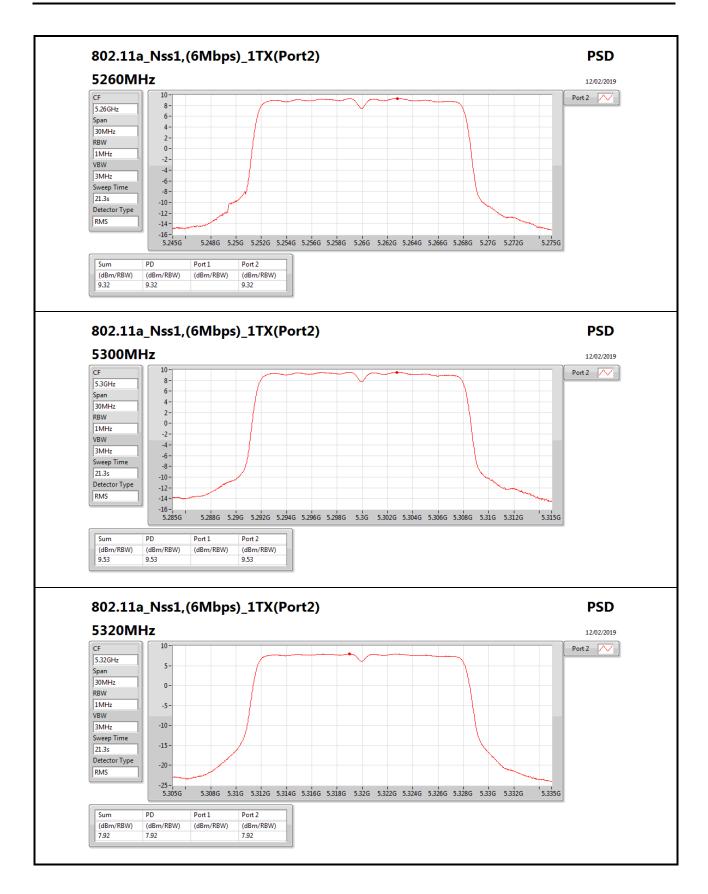
SPORTON INTERNATIONAL INC. Page No. : C3 of C13





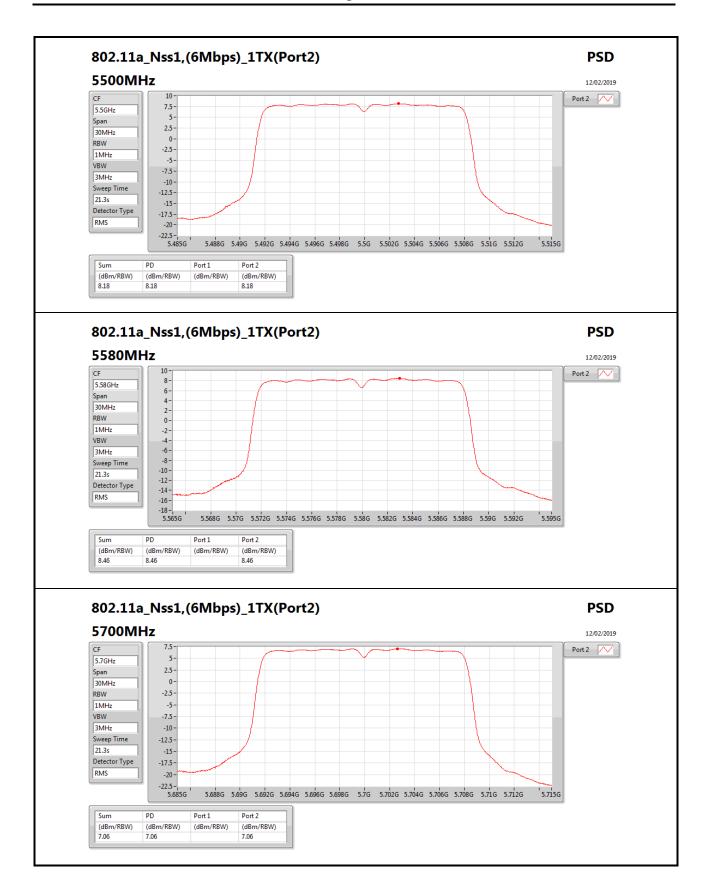
SPORTON INTERNATIONAL INC. Page No. : C4 of C13





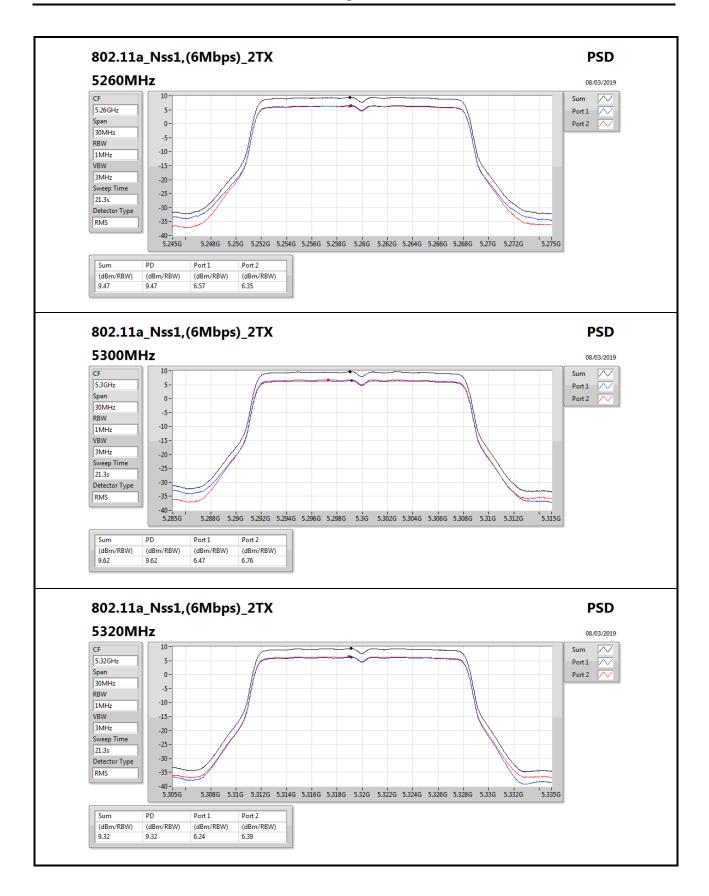
SPORTON INTERNATIONAL INC. Page No. : C5 of C13





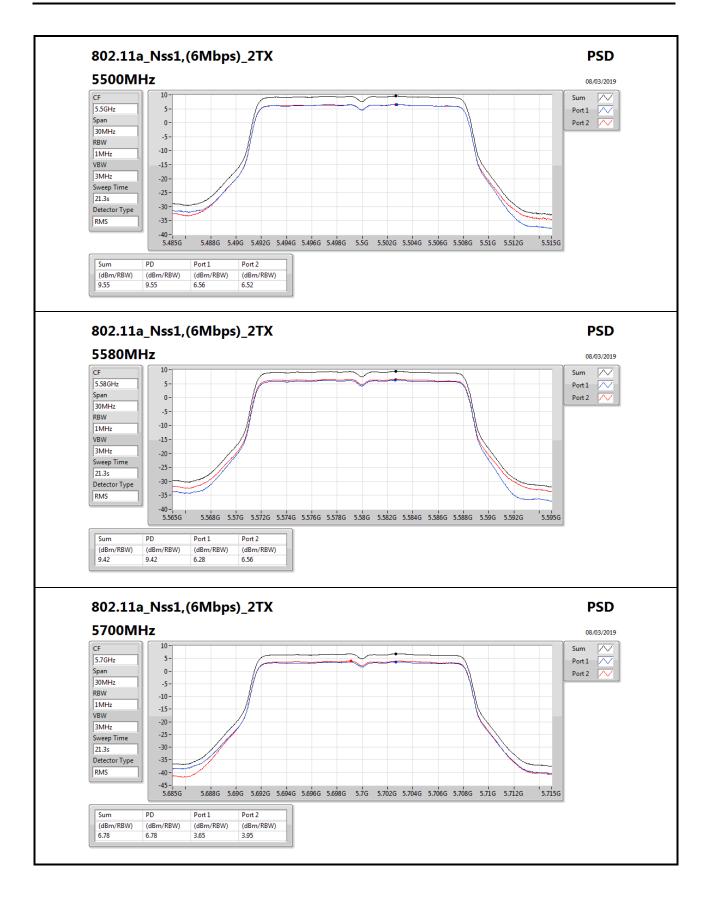
SPORTON INTERNATIONAL INC. Page No. : C6 of C13





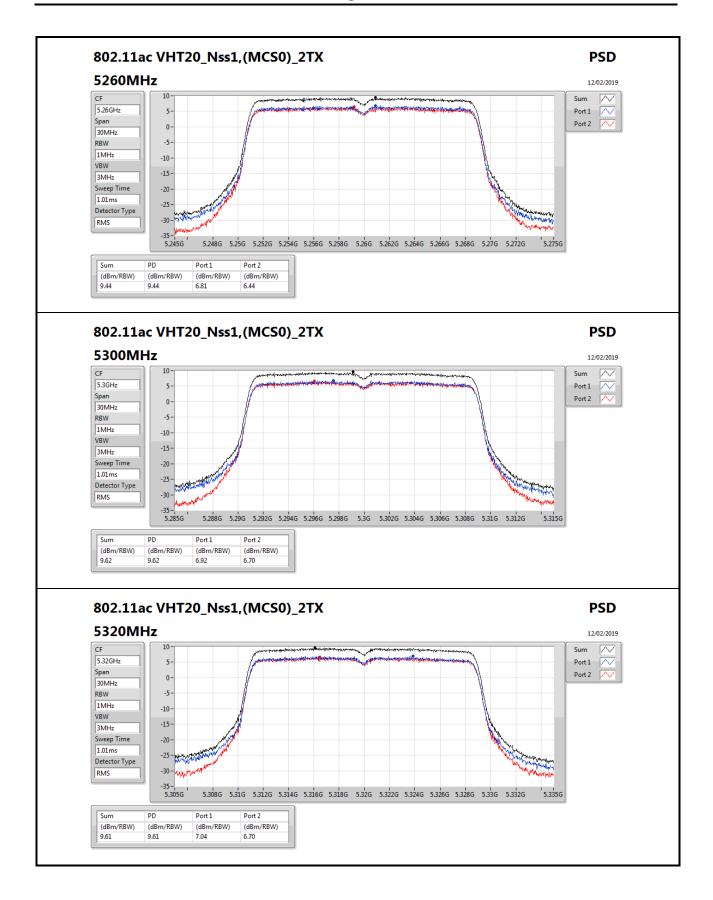
SPORTON INTERNATIONAL INC. Page No. : C7 of C13





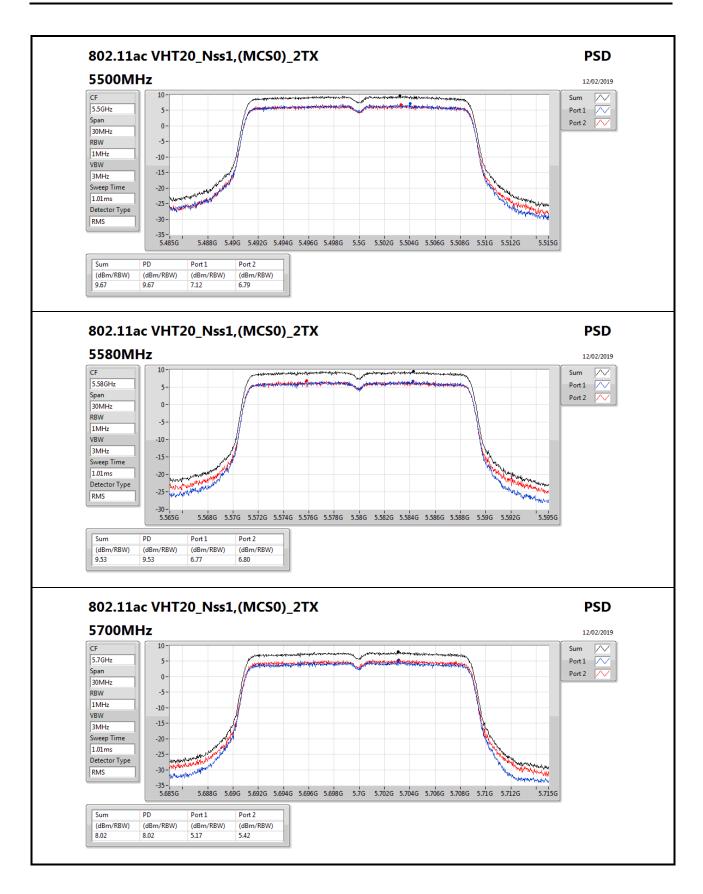
SPORTON INTERNATIONAL INC. Page No. : C8 of C13





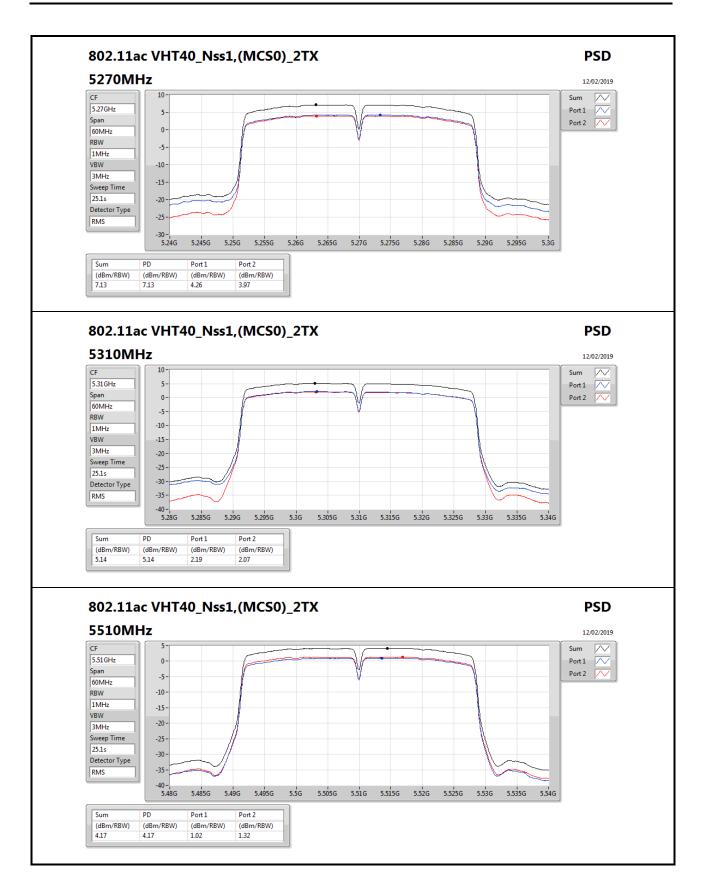
SPORTON INTERNATIONAL INC. Page No. : C9 of C13





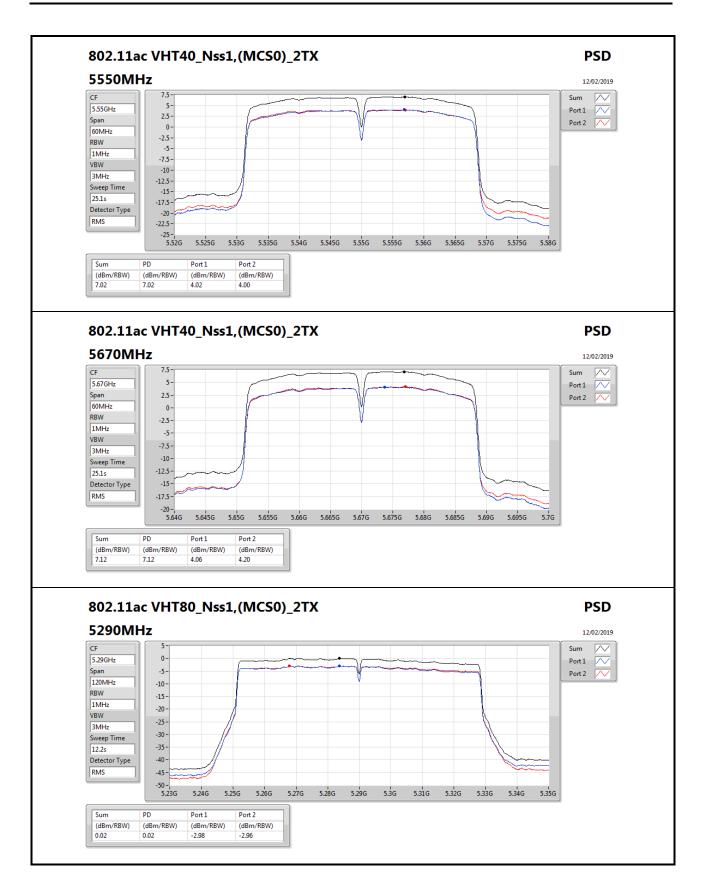
SPORTON INTERNATIONAL INC. Page No. : C10 of C13





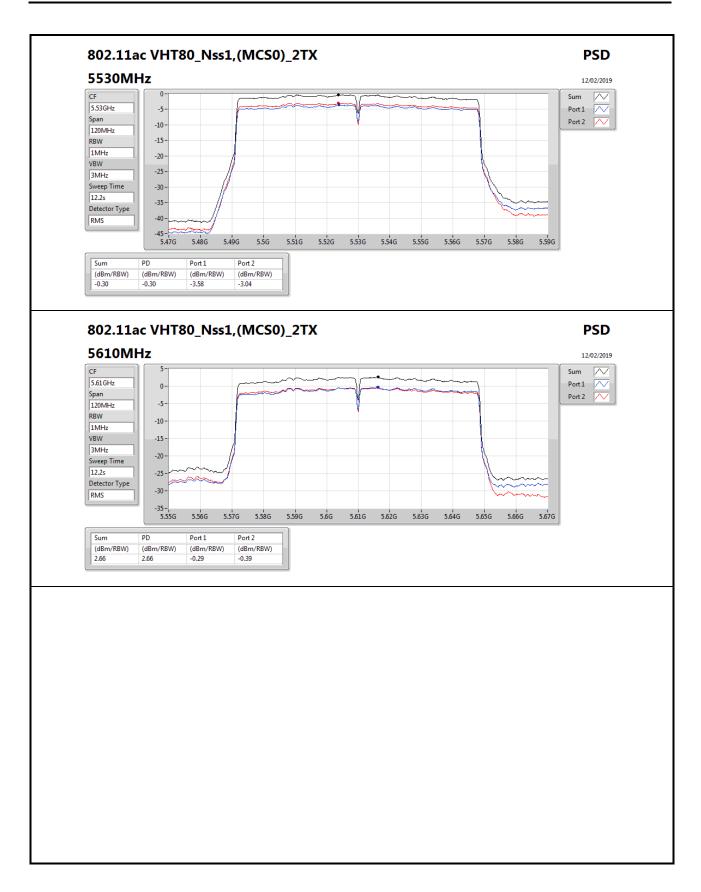
SPORTON INTERNATIONAL INC. Page No. : C11 of C13





SPORTON INTERNATIONAL INC. Page No. : C12 of C13





SPORTON INTERNATIONAL INC. Page No. : C13 of C13



### **PSD Beamforming**

Appendix C.2

Summary

Mode	PD	EIRP PD
	(dBm/RBW)	(dBm/RBW)
5.25-5.35GHz	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	7.73	14.99
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	5.82	13.08
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-5.24	2.02
5.47-5.725GHz	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	8.03	15.29
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	7.43	14.69
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-1.75	5.51

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



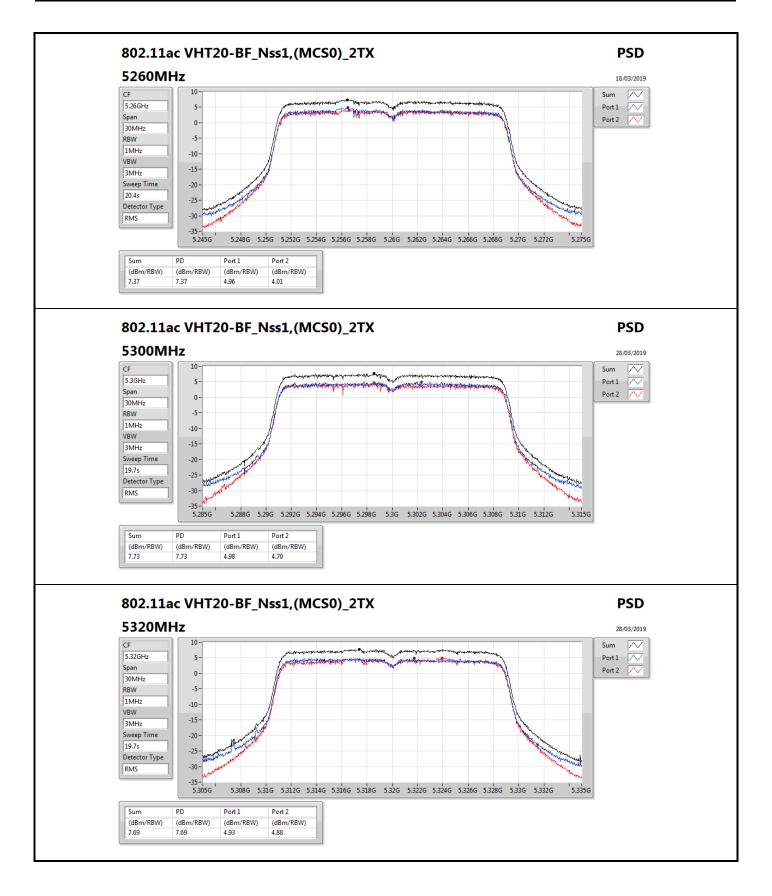
**PSD Beamforming** Appendix C.2

#### Result

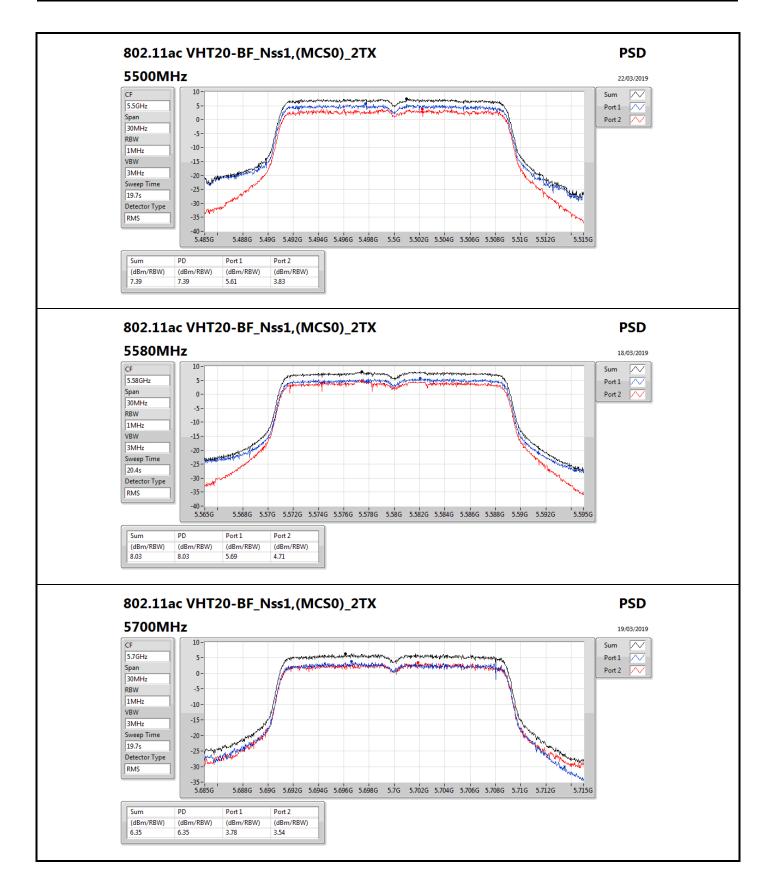
Mode	Result	DG	Port 1	Port 2	PD	PD Limit	EIRP PD	EIRP PD Limit
		(dBi)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5260MHz	Pass	7.26	4.96	4.01	7.37	9.74	14.63	17.00
5300MHz	Pass	7.26	4.98	4.70	7.73	9.74	14.99	17.00
5320MHz	Pass	7.26	4.93	4.88	7.69	9.74	14.95	17.00
5500MHz	Pass	7.26	5.61	3.83	7.39	9.74	14.65	17.00
5580MHz	Pass	7.26	5.69	4.71	8.03	9.74	15.29	17.00
5700MHz	Pass	7.26	3.78	3.54	6.35	9.74	13.61	17.00
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5270MHz	Pass	7.26	3.40	3.11	5.82	9.74	13.08	17.00
5310MHz	Pass	7.26	1.12	1.51	3.66	9.74	10.92	17.00
5510MHz	Pass	7.26	-0.32	-2.19	1.44	9.74	8.70	17.00
5550MHz	Pass	7.26	3.89	2.00	5.63	9.74	12.89	17.00
5670MHz	Pass	7.26	5.32	5.14	7.43	9.74	14.69	17.00
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5290MHz	Pass	7.26	-7.77	-7.92	-5.24	9.74	2.02	17.00
5530MHz	Pass	7.26	-6.54	-7.58	-4.22	9.74	3.04	17.00
5610MHz	Pass	7.26	-3.55	-5.56	-1.75	9.74	5.51	17.00

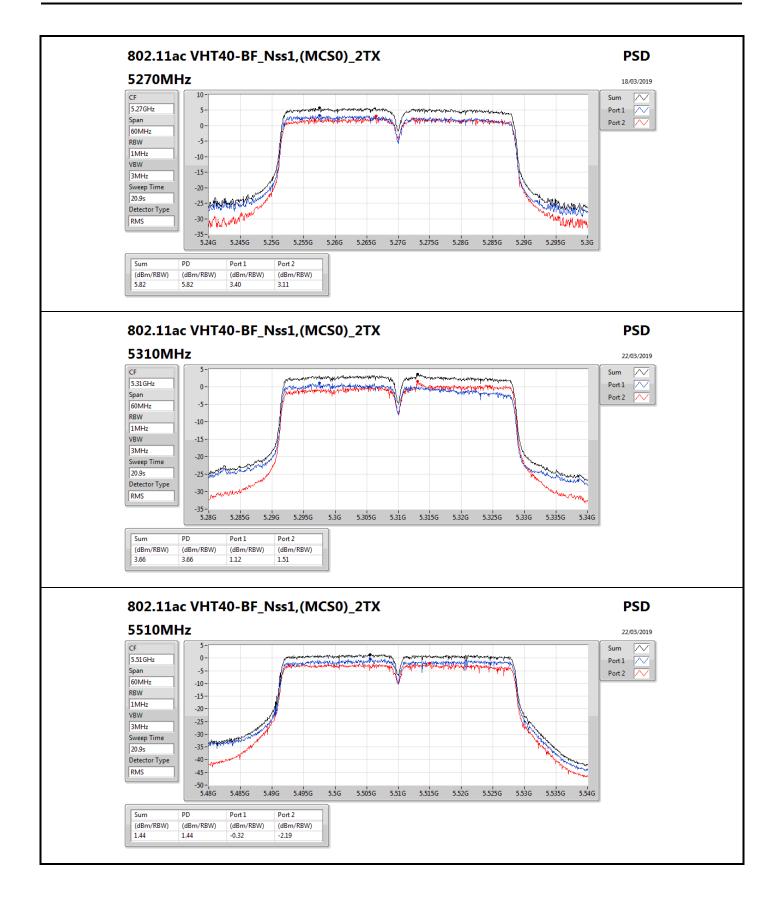
DG = Directional Gain; RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X power density;

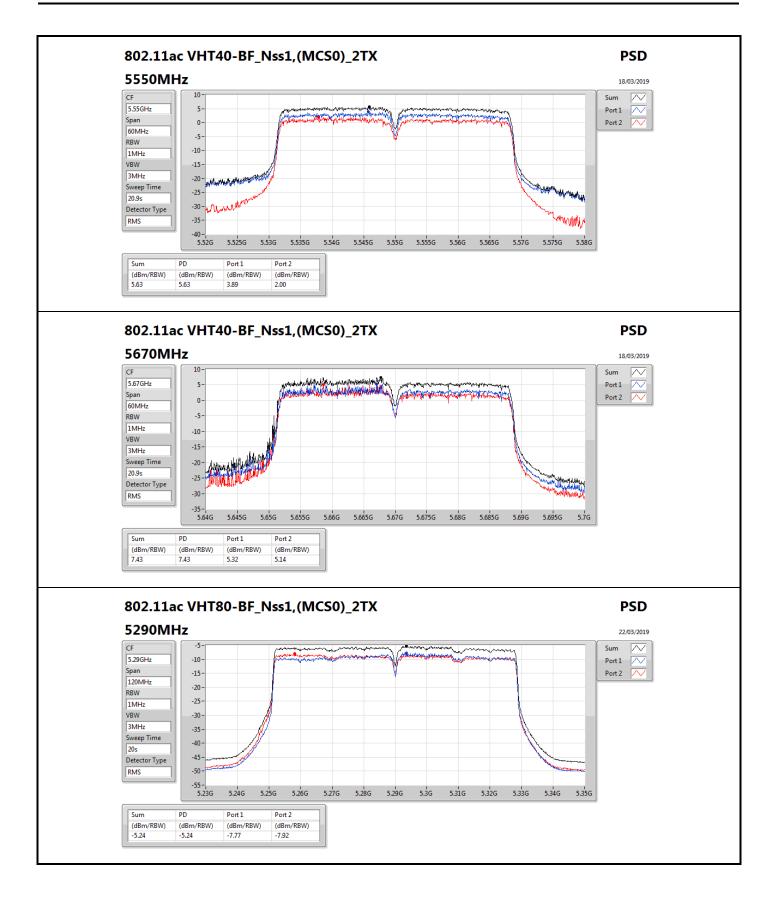


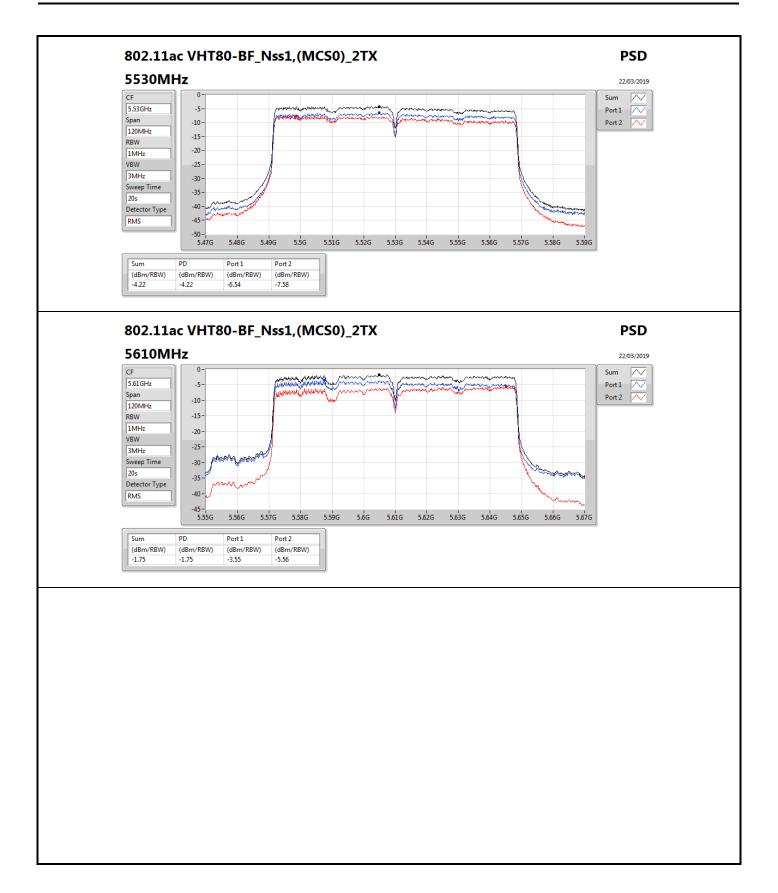














Appendix D.1

**Summary** 

Mode	Result	Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
			(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
5.25-5.35GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	Pass	AV	5.35G	53.56	54.00	-0.44	2.97	3	Vertical	225	2.05	-
802.11a_Nss1,(6Mbps)_1TX(Port2)	Pass	AV	5.3502G	53.05	54.00	-0.95	4.39	3	Horizontal	4	2.79	-
802.11a_Nss1,(6Mbps)_2TX	Pass	AV	5.35G	53.27	54.00	-0.73	2.97	3	Horizontal	349	1.50	-
802.11ac VHT20_Nss1,(MCS0)_2TX	Pass	AV	5.35G	51.12	54.00	-2.88	7.30	3	Vertical	257	1.82	-
802.11ac VHT40_Nss1,(MCS0)_2TX	Pass	AV	5.3508G	53.75	54.00	-0.25	7.30	3	Vertical	257	1.83	-
802.11ac VHT80_Nss1,(MCS0)_2TX	Pass	AV	5.356G	53.74	54.00	-0.26	7.31	3	Vertical	277	1.69	-
5.47-5.725GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11a_Nss1,(6Mbps)_1TX(Port1)	Pass	PK	17.0948G	68.12	68.20	-0.08	15.95	3	Horizontal	244	2.27	-
802.11a_Nss1,(6Mbps)_1TX(Port2)	Pass	PK	5.4694G	67.78	68.20	-0.42	7.50	3	Horizontal	354	1.50	-
802.11a_Nss1,(6Mbps)_2TX	Pass	PK	16.74216G	67.36	68.20	-0.84	16.88	3	Horizontal	246	1.35	-
802.11ac VHT20_Nss1,(MCS0)_2TX	Pass	PK	5.4698G	67.60	68.20	-0.60	7.50	3	Horizontal	353	1.12	-
802.11ac VHT40_Nss1,(MCS0)_2TX	Pass	PK	5.7264G	68.06	68.20	-0.14	7.99	3	Horizontal	8	1.30	-
802.11ac VHT80_Nss1,(MCS0)_2TX	Pass	AV	5.452G	53.76	54.00	-0.24	7.48	3	Horizontal	360	1.24	-



## Appendix D.1

#### Result

Mode	Result	Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
			(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
802.11a_Nss1,(6Mbps)_1TX(Port1)	-	-	-	-	-	-	-	-	-	-	-	-
5260MHz_TX	Pass	AV	5.15G	43.09	54.00	-10.91	2.74	3	Vertical	237	2.22	-
5260MHz_TX	Pass	AV	5.2606G	100.52	Inf	-Inf	2.87	3	Vertical	237	2.22	-
5260MHz_TX	Pass	AV	5.3518G	43.10	54.00	-10.90	2.97	3	Vertical	237	2.22	-
5260MHz_TX	Pass	PK	5.1106G	58.45	74.00	-15.55	2.70	3	Vertical	237	2.22	-
5260MHz_TX	Pass	PK	5.257G	110.60	Inf	-Inf	2.86	3	Vertical	237	2.22	-
5260MHz_TX	Pass	PK	5.3614G	55.10	74.00	-18.90	2.98	3	Vertical	237	2.22	-
5260MHz_TX	Pass	AV	5.1418G	43.34	54.00	-10.66	2.74	3	Horizontal	269	1.88	-
5260MHz_TX	Pass	AV	5.2636G	101.34	Inf	-Inf	2.87	3	Horizontal	269	1.88	-
5260MHz_TX	Pass	AV	5.374G	42.71	54.00	-11.29	2.99	3	Horizontal	269	1.88	-
5260MHz_TX	Pass	PK	5.1484G	55.29	74.00	-18.71	2.74	3	Horizontal	269	1.88	_
5260MHz_TX	Pass	PK	5.2672G	111.35	Inf	-Inf	2.88	3	Horizontal	269	1.88	-
5260MHz_TX	Pass	PK	5.3764G	55.38	74.00	-18.62	3.00	3	Horizontal	269	1.88	_
5260MHz_TX	Pass	AV	15.7772G	47.00	54.00	-7.00	12.94	3	Vertical	16	1.91	
5260MHz_TX	Pass	PK	10.5218G	62.73	68.20	-5.47	12.98	3	Vertical	130	1.44	
5260MHz_TX	Pass	PK	15.786G	60.07	74.00	-13.93	12.90	3	Vertical	16	1.91	
5260MHz_TX	Pass	AV	15.7784G	51.16	54.00	-2.84	12.94	3	Horizontal	205	1.50	
5260MHz_TX	Pass	PK	10.5201G	57.77	68.20	-10.43	12.94	3	Horizontal	289	1.53	
5260MHz TX	Pass	PK	15.7711G	64.38	74.00	-9.62	12.97	3	Horizontal	205	1.50	
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5300MHz_TX	Pass	AV	5.3032G	99.29	Inf 54.00	-Inf	2.91	3	Vertical	242	2.07	<del>-</del>
5300MHz_TX	Pass	AV	5.35G	46.96		-7.04	2.97		Vertical		2.07	<del>-</del>
5300MHz_TX	Pass	PK	5.3028G	110.76	Inf	-Inf	2.91	3	Vertical	242	2.07	-
5300MHz_TX	Pass	PK	5.3516G	61.15	74.00	-12.85	2.97	3	Vertical	242	2.07	-
5300MHz_TX	Pass	AV	5.3032G	99.23	Inf	-Inf	2.91	3	Horizontal	275	1.88	-
5300MHz_TX	Pass	AV	5.35G	46.63	54.00	-7.37	2.97	3	Horizontal	275	1.88	-
5300MHz_TX	Pass	PK	5.3028G	110.66	Inf	-Inf	2.91	3	Horizontal	275	1.88	-
5300MHz_TX	Pass	PK	5.3524G	60.08	74.00	-13.92	2.97	3	Horizontal	275	1.88	-
5300MHz_TX	Pass	AV	15.8998G	45.96	54.00	-8.04	12.35	3	Vertical	324	1.45	-
5300MHz_TX	Pass	PK	10.5944G	59.95	68.20	-8.25	13.14	3	Vertical	130	1.54	-
5300MHz_TX	Pass	PK	15.9006G	59.46	74.00	-14.54	12.35	3	Vertical	324	1.45	-
5300MHz_TX	Pass	AV	15.9042G	50.91	54.00	-3.09	12.33	3	Horizontal	198	1.53	-
5300MHz_TX	Pass	PK	10.6002G	56.47	74.00	-17.53	13.15	3	Horizontal	288	1.50	-
5300MHz_TX	Pass	PK	15.8949G	64.42	74.00	-9.58	12.38	3	Horizontal	198	1.53	-
5320MHz_TX	Pass	AV	5.3232G	100.11	Inf	-Inf	2.94	3	Vertical	225	2.05	-
5320MHz_TX	Pass	AV	5.35G	53.56	54.00	-0.44	2.97	3	Vertical	225	2.05	-
5320MHz_TX	Pass	PK	5.3226G	109.66	Inf	-Inf	2.94	3	Vertical	225	2.05	-
5320MHz_TX	Pass	PK	5.3504G	66.39	74.00	-7.61	2.97	3	Vertical	225	2.05	-
5320MHz_TX	Pass	AV	5.3232G	98.57	Inf	-Inf	2.94	3	Horizontal	261	1.60	-
5320MHz_TX	Pass	AV	5.35G	51.70	54.00	-2.30	2.97	3	Horizontal	261	1.60	-
5320MHz_TX	Pass	PK	5.323G	108.30	Inf	-Inf	2.94	3	Horizontal	261	1.60	-
5320MHz_TX	Pass	PK	5.3506G	65.24	74.00	-8.76	2.97	3	Horizontal	261	1.60	-
5320MHz_TX	Pass	AV	10.6401G	43.79	54.00	-10.21	13.25	3	Vertical	134	1.50	-
5320MHz_TX	Pass	AV	15.9617G	45.04	54.00	-8.96	12.06	3	Vertical	326	1.38	-
5320MHz_TX	Pass	PK	10.6395G	56.21	74.00	-17.79	13.25	3	Vertical	134	1.50	-
5320MHz_TX	Pass	PK	15.9662G	58.48	74.00	-15.52	12.04	3	Vertical	326	1.38	-
5320MHz_TX	Pass	AV	10.6401G	43.35	54.00	-10.65	13.25	3	Horizontal	48	1.50	-
5320MHz_TX	Pass	AV	15.9621G	48.58	54.00	-5.42	12.06	3	Horizontal	200	1.50	-
5320MHz_TX	Pass	PK	10.638G	55.11	74.00	-18.89	13.24	3	Horizontal	48	1.50	-



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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)	
5320MHz_TX	Pass	PK	15.9549G	61.90	74.00	-12.10	12.09	3	Horizontal	200	1.50	-
5500MHz_TX	Pass	AV	5.46G	49.36	54.00	-4.64	3.10	3	Vertical	222	1.94	-
5500MHz_TX	Pass	AV	5.5032G	101.20	Inf	-Inf	3.14	3	Vertical	222	1.94	-
5500MHz_TX	Pass	PK	5.4672G	68.08	68.20	-0.12	3.11	3	Vertical	222	1.94	-
5500MHz_TX	Pass	PK	5.5006G	110.33	Inf	-Inf	3.14	3	Vertical	222	1.94	-
5500MHz_TX	Pass	AV	5.46G	46.65	54.00	-7.35	3.10	3	Horizontal	265	1.86	-
5500MHz_TX	Pass	AV	5.5032G	96.12	Inf	-Inf	3.14	3	Horizontal	265	1.86	-
5500MHz_TX	Pass	PK	5.468G	64.89	68.20	-3.31	3.11	3	Horizontal	265	1.86	-
5500MHz_TX	Pass	PK	5.4968G	105.76	Inf	-Inf	3.14	3	Horizontal	265	1.86	-
5500MHz_TX	Pass	AV	11.0003G	43.76	54.00	-10.24	14.03	3	Vertical	105	1.59	-
5500MHz_TX	Pass	PK	11.0049G	56.54	74.00	-17.46	14.02	3	Vertical	105	1.59	-
5500MHz_TX	Pass	PK	16.5006G	58.11	68.20	-10.09	13.59	3	Vertical	20	2.25	-
5500MHz_TX	Pass	AV	10.9978G	43.18	54.00	-10.82	14.03	3	Horizontal	80	2.48	-
5500MHz_TX	Pass	PK	10.9971G	56.45	74.00	-17.55	14.03	3	Horizontal	113	2.48	-
5500MHz_TX	Pass	PK	16.5061G	60.87	68.20	-7.33	13.61	3	Horizontal	270	1.55	-
5580MHz_TX	Pass	AV	5.4546G	42.99	54.00	-11.01	3.09	3	Vertical	264	2.06	-
5580MHz_TX	Pass	AV	5.5836G	102.67	Inf	-Inf	3.31	3	Vertical	264	2.06	-
5580MHz_TX	Pass	PK	5.4636G	55.45	68.20	-12.75	3.10	3	Vertical	264	2.06	-
5580MHz_TX	Pass	PK	5.583G	112.28	Inf	-Inf	3.31	3	Vertical	264	2.06	-
5580MHz_TX	Pass	PK	5.7258G	56.17	68.20	-12.03	3.59	3	Vertical	264	2.06	-
5580MHz_TX	Pass	AV	5.4552G	42.51	54.00	-11.49	3.09	3	Horizontal	313	1.86	-
5580MHz_TX	Pass	AV	5.583G	93.69	Inf	-Inf	3.31	3	Horizontal	313	1.86	-
5580MHz_TX	Pass	PK	5.469G	54.35	68.20	-13.85	3.11	3	Horizontal	313	1.86	-
5580MHz_TX	Pass	PK	5.5764G	103.06	Inf	-Inf	3.29	3	Horizontal	313	1.86	-
5580MHz TX	Pass	PK	5.727G	55.63	68.20	-12.57	3.59	3	Horizontal	313	1.86	_
5580MHz TX	Pass	AV	11.1603G	43.60	54.00	-10.40	13.89	3	Vertical	129	1.29	-
5580MHz_TX	Pass	PK	11.1556G	57.08	74.00	-16.92	13.89	3	Vertical	129	1.29	_
5580MHz_TX	Pass	PK	16.7347G	60.06	68.20	-8.14	14.38	3	Vertical	45	2.12	_
5580MHz TX	Pass	AV	11.1599G	44.04	54.00	-9.96	13.89	3	Horizontal	324	1.50	_
5580MHz_TX	Pass	PK	11.1612G	56.64	74.00	-17.36	13.88	3	Horizontal	324	1.50	
5580MHz_TX	Pass	PK	16.735G	67.44	68.20	-0.76	14.38	3	Horizontal	241	1.51	<del>-</del>
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5700MHz_TX	Pass	AV	5.703G	100.40	Inf	-Inf	3.54	3	Vertical	276	2.16	-
5700MHz_TX	Pass	PK	5.694G	110.20	Inf	-Inf	3.53	3	Vertical	276	2.16	-
5700MHz_TX	Pass	PK	5.727G	61.78	68.20	-6.42	3.59	3	Vertical	276	2.16	-
5700MHz_TX	Pass	AV	5.6964G	93.40	Inf	-Inf	3.53	3	Horizontal	47	2.29	-
5700MHz_TX	Pass	PK	5.694G	103.30	Inf	-Inf	3.53	3	Horizontal	47	2.29	-
5700MHz_TX	Pass	PK	5.7414G	56.90	68.20	-11.30	3.62	3	Horizontal	47	2.29	-
5700MHz_TX	Pass	AV	11.3999G	43.72	54.00	-10.28	13.66	3	Vertical	132	2.11	-
5700MHz_TX	Pass	PK	11.3963G	57.26	74.00	-16.74	13.67	3	Vertical	132	2.11	-
5700MHz_TX	Pass	PK	17.0993G	60.38	68.20	-7.82	15.97	3	Vertical	354	1.18	-
5700MHz_TX	Pass	AV	11.4002G	45.78	54.00	-8.22	13.66	3	Horizontal	281	1.59	-
5700MHz_TX	Pass	PK	11.4019G	59.21	74.00	-14.79	13.66	3	Horizontal	281	1.59	-
5700MHz_TX	Pass	PK	17.0948G	68.12	68.20	-0.08	15.95	3	Horizontal	244	2.27	-
802.11a_Nss1,(6Mbps)_1TX(Port2)	-	-	-	-	-	-	-	-	-	-	-	-
5260MHz_TX	Pass	AV	5.1286G	45.68	54.00	-8.32	4.11	3	Vertical	101	2.96	-
5260MHz_TX	Pass	AV	5.263G	93.25	Inf	-Inf	4.28	3	Vertical	101	2.96	-
5260MHz_TX	Pass	AV	5.392G	45.47	54.00	-8.53	4.45	3	Vertical	101	2.96	-
5260MHz_TX	Pass	PK	5.1376G	57.66	74.00	-16.34	4.11	3	Vertical	101	2.96	-
5260MHz_TX	Pass	PK	5.263G	103.61	Inf	-Inf	4.28	3	Vertical	101	2.96	-



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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)	
5260MHz_TX	Pass	PK	5.3794G	58.63	74.00	-15.37	4.43	3	Vertical	101	2.96	-
5260MHz_TX	Pass	AV	5.1112G	45.64	54.00	-8.36	4.08	3	Horizontal	354	2.86	-
5260MHz_TX	Pass	AV	5.2636G	99.70	Inf	-Inf	4.28	3	Horizontal	354	2.86	-
5260MHz_TX	Pass	AV	5.3752G	45.77	54.00	-8.23	4.43	3	Horizontal	354	2.86	-
5260MHz_TX	Pass	PK	5.119G	57.96	74.00	-16.04	4.09	3	Horizontal	354	2.86	-
5260MHz_TX	Pass	PK	5.263G	110.16	Inf	-Inf	4.28	3	Horizontal	354	2.86	-
5260MHz_TX	Pass	PK	5.374G	57.79	74.00	-16.21	4.42	3	Horizontal	354	2.86	-
5260MHz_TX	Pass	AV	15.77472G	45.09	54.00	-8.91	14.80	3	Vertical	280	1.48	-
5260MHz_TX	Pass	PK	10.52426G	60.75	68.20	-7.45	16.27	3	Vertical	168	1.18	-
5260MHz_TX	Pass	PK	15.7725G	58.46	74.00	-15.54	14.81	3	Vertical	280	1.48	-
5260MHz_TX	Pass	AV	15.7791G	48.94	54.00	-5.06	14.79	3	Horizontal	298	1.49	-
5260MHz_TX	Pass	PK	10.51992G	59.47	68.20	-8.73	16.26	3	Horizontal	131	1.23	-
5260MHz_TX	Pass	PK	15.78432G	62.90	74.00	-11.10	14.77	3	Horizontal	298	1.49	-
5300MHz_TX	Pass	AV	5.3036G	92.93	Inf	-Inf	4.33	3	Vertical	101	2.91	-
5300MHz_TX	Pass	AV	5.35G	45.86	54.00	-8.14	4.39	3	Vertical	101	2.91	-
5300MHz_TX	Pass	PK	5.3032G	103.36	Inf	-Inf	4.33	3	Vertical	101	2.91	-
5300MHz_TX	Pass	PK	5.3768G	58.06	74.00	-15.94	4.43	3	Vertical	101	2.91	-
5300MHz_TX	Pass	AV	5.3032G	99.51	Inf	-Inf	4.33	3	Horizontal	3	2.99	-
5300MHz_TX	Pass	AV	5.35G	49.39	54.00	-4.61	4.39	3	Horizontal	3	2.99	-
5300MHz_TX	Pass	PK	5.3032G	110.02	Inf	-Inf	4.33	3	Horizontal	3	2.99	-
5300MHz_TX	Pass	PK	5.3524G	63.27	74.00	-10.73	4.39	3	Horizontal	3	2.99	-
5300MHz_TX	Pass	AV	10.60164G	44.68	54.00	-9.32	18.39	3	Vertical	213	1.50	-
5300MHz_TX	Pass	AV	15.89904G	48.67	54.00	-5.33	16.69	3	Vertical	354	1.18	-
5300MHz_TX	Pass	PK	10.60132G	58.25	74.00	-15.75	18.39	3	Vertical	213	1.50	-
5300MHz_TX	Pass	PK	15.90042G	62.14	74.00	-11.86	16.69	3	Vertical	354	1.18	-
5300MHz_TX	Pass	AV	10.60032G	45.79	54.00	-8.21	18.39	3	Horizontal	294	1.50	-
5300MHz_TX	Pass	AV	15.9024G	47.92	54.00	-6.08	16.68	3	Horizontal	248	1.50	-
5300MHz_TX	Pass	PK	10.60114G	59.27	74.00	-14.73	18.39	3	Horizontal	294	1.50	-
5300MHz_TX	Pass	PK	15.89124G	61.74	74.00	-12.26	16.74	3	Horizontal	248	1.50	-
5320MHz_TX	Pass	AV	5.3148G	90.49	Inf	-Inf	4.34	3	Vertical	104	2.91	-
5320MHz_TX	Pass	AV	5.3504G	47.07	54.00	-6.93	4.39	3	Vertical	104	2.91	-
5320MHz_TX	Pass	PK	5.3142G	100.32	Inf	-Inf	4.34	3	Vertical	104	2.91	_
5320MHz_TX	Pass	PK	5.35G	59.69	74.00	-14.31	4.39	3	Vertical	104	2.91	-
5320MHz_TX	Pass	AV	5.321G	96.82	Inf	-Inf	4.35	3	Horizontal	4	2.79	_
5320MHz_TX	Pass	AV	5.3502G	53.05	54.00	-0.95	4.39	3	Horizontal	4	2.79	_
5320MHz_TX	Pass	PK	5.323G	107.05	Inf	-Inf	4.35	3	Horizontal	4	2.79	_
5320MHz_TX	Pass	PK	5.3508G	66.16	74.00	-7.84	4.39	3	Horizontal	4	2.79	-
5320MHz TX	Pass	AV	10.64G	45.29	54.00	-8.71	16.44	3	Vertical	174	1.14	_
5320MHz_TX	Pass	AV	15.8964G	43.29	54.00	-10.10	14.34	3	Vertical	61	1.50	_
5320MHz_TX	Pass	PK	10.63634G	58.18	74.00	-15.82	16.44	3	Vertical	174	1.14	_
5320MHz_TX	Pass	PK	15.89256G	57.59	74.00	-16.41	14.35	3	Vertical	61	1.14	
5320MHz_TX	Pass	AV	10.6292G	44.04	54.00	-9.96	16.44	3	Horizontal	17	1.01	-
		AV	15.88842G		54.00							-
5320MHz_TX	Pass			44.20		-9.80 17.10	14.38	3	Horizontal	117	1.02	-
5320MHz_TX	Pass	PK	10.6448G	56.90	74.00	-17.10	16.46	3	Horizontal	17	1.01	-
5320MHz_TX	Pass	PK	15.90762G	57.64	74.00	-16.36	14.30	3	Horizontal	117	1.02	-
5500MHz_TX	Pass	AV	5.4588G	47.94	54.00	-6.06	7.49	3	Vertical	157	2.74	-
5500MHz_TX	Pass	AV	5.5028G	91.19	Inf	-Inf	7.54	3	Vertical	157	2.74	-
5500MHz_TX	Pass	PK	5.4584G	59.28	74.00	-14.72	7.49	3	Vertical	157	2.74	-
5500MHz_TX	Pass	PK	5.467G	60.24	68.20	-7.96	7.50	3	Vertical	157	2.74	-



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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)	
5500MHz_TX	Pass	PK	5.5026G	100.48	Inf	-Inf	7.54	3	Vertical	157	2.74	-
5500MHz_TX	Pass	AV	5.4598G	51.23	54.00	-2.77	7.49	3	Horizontal	354	1.50	-
5500MHz_TX	Pass	AV	5.5026G	102.90	Inf	-Inf	7.54	3	Horizontal	354	1.50	-
5500MHz_TX	Pass	PK	5.4598G	63.69	74.00	-10.31	7.49	3	Horizontal	354	1.50	-
5500MHz_TX	Pass	PK	5.4694G	67.78	68.20	-0.42	7.50	3	Horizontal	354	1.50	-
5500MHz_TX	Pass	PK	5.5052G	112.06	Inf	-Inf	7.55	3	Horizontal	354	1.50	-
5500MHz_TX	Pass	AV	10.99526G	44.84	54.00	-9.16	16.90	3	Vertical	289	1.74	-
5500MHz_TX	Pass	PK	11.00408G	57.43	74.00	-16.57	16.90	3	Vertical	289	1.74	-
5500MHz_TX	Pass	PK	16.49982G	58.84	68.20	-9.36	15.90	3	Vertical	184	1.82	-
5500MHz_TX	Pass	AV	11.0015G	44.92	54.00	-9.08	16.91	3	Horizontal	321	2.21	-
5500MHz_TX	Pass	PK	10.99556G	57.12	74.00	-16.88	16.90	3	Horizontal	321	2.21	-
5500MHz_TX	Pass	PK	16.50036G	60.36	68.20	-7.84	15.91	3	Horizontal	252	1.70	-
5580MHz_TX	Pass	AV	5.4342G	47.58	54.00	-6.42	7.44	3	Vertical	143	2.87	-
5580MHz_TX	Pass	AV	5.5788G	92.23	Inf	-Inf	7.69	3	Vertical	143	2.87	-
5580MHz_TX	Pass	PK	5.4618G	59.40	68.20	-8.80	7.49	3	Vertical	143	2.87	-
5580MHz_TX	Pass	PK	5.5776G	102.91	Inf	-Inf	7.68	3	Vertical	143	2.87	-
5580MHz_TX	Pass	PK	5.7294G	60.69	68.20	-7.51	8.00	3	Vertical	143	2.87	-
5580MHz_TX	Pass	AV	5.43G	47.62	54.00	-6.38	7.44	3	Horizontal	354	1.50	-
5580MHz_TX	Pass	AV	5.5746G	102.55	Inf	-Inf	7.67	3	Horizontal	354	1.50	-
5580MHz_TX	Pass	PK	5.4612G	58.93	68.20	-9.27	7.49	3	Horizontal	354	1.50	-
5580MHz_TX	Pass	PK	5.583G	113.57	Inf	-Inf	7.70	3	Horizontal	354	1.50	-
5580MHz_TX	Pass	PK	5.7294G	59.86	68.20	-8.34	8.00	3	Horizontal	354	1.50	-
5580MHz_TX	Pass	AV	11.16624G	44.22	54.00	-9.78	16.80	3	Vertical	129	2.19	-
5580MHz_TX	Pass	PK	11.17194G	56.73	74.00	-17.27	16.79	3	Vertical	129	2.19	-
5580MHz TX	Pass	PK	16.746G	61.06	68.20	-7.14	16.77	3	Vertical	360	2.85	_
5580MHz TX	Pass	AV	11.1741G	44.17	54.00	-9.83	16.79	3	Horizontal	41	2.38	-
5580MHz_TX	Pass	PK	11.14764G	56.46	74.00	-17.54	16.81	3	Horizontal	41	2.38	_
5580MHz_TX	Pass	PK	16.74456G	64.94	68.20	-3.26	16.76	3	Horizontal	249	2.09	_
5700MHz TX	Pass	AV	5.7072G	85.76	Inf	-Inf	7.95	3	Vertical	173	1.50	_
5700MHz_TX	Pass	PK	5.7028G	94.56	Inf	-Inf	7.94	3	Vertical	173	1.50	_
5700MHz_TX	Pass	PK	5.7844G	60.26	68.20	-7.94	8.11	3	Vertical	173	1.50	_
5700MHz_TX	Pass	AV	5.6992G	101.03	Inf	-Inf	7.93	3	Horizontal	359	1.50	_
5700MHz_TX	Pass	PK	5.6968G	109.89	Inf	-Inf	7.93	3	Horizontal	359	1.50	_
5700MHz_TX	Pass	PK	5.7252G	66.60	68.20	-1.60	7.99	3	Horizontal	359	1.50	
5700MHz_TX	Pass	AV	11.3958G	43.98	54.00	-10.02	15.96	3	Vertical	345	1.64	
5700MHz_TX	Pass	PK	11.3956G	56.02	74.00	-10.02	15.96	3	Vertical	345	1.64	
5700MHz_TX 5700MHz_TX		PK	17.1132G		68.20			3				_
<del></del>	Pass			61.46		-6.74	18.54		Vertical	194	1.88	-
5700MHz_TX	Pass	AV	11.39832G	44.67	54.00	-9.33	16.64	3	Horizontal	130	2.20	-
5700MHz_TX	Pass	PK	11.39694G	56.97	74.00	-17.03	16.64	3	Horizontal	130	2.20	-
5700MHz_TX	Pass	PK	17.09112G	64.91	68.20	-3.29	18.37	3	Horizontal	237	2.17	-
802.11a_Nss1,(6Mbps)_2TX	- D	-		- 42.44	- 54.00	- 40.50	- 0.74	-	- \/4:1	-	-	-
5260MHz_TX	Pass	AV	5.1466G	43.41	54.00	-10.59	2.74	3	Vertical	261	2.99	-
5260MHz_TX	Pass	AV	5.2636G	97.76	Inf	-Inf	2.87	3	Vertical	261	2.99	-
5260MHz_TX	Pass	AV	5.4034G	42.73	54.00	-11.27	3.03	3	Vertical	261	2.99	-
5260MHz_TX	Pass	PK	5.1478G	55.69	74.00	-18.31	2.74	3	Vertical	261	2.99	-
5260MHz_TX	Pass	PK	5.2582G	108.95	Inf	-Inf	2.86	3	Vertical	261	2.99	-
5260MHz_TX	Pass	PK	5.353G	55.22	74.00	-18.78	2.97	3	Vertical	261	2.99	-
5260MHz_TX	Pass	AV	5.116G	43.62	54.00	-10.38	2.70	3	Horizontal	344	1.48	-
5260MHz_TX	Pass	AV	5.2588G	102.69	Inf	-Inf	2.87	3	Horizontal	344	1.48	-



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Mode	Result	Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
			(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
5260MHz_TX	Pass	AV	5.3866G	42.81	54.00	-11.19	3.01	3	Horizontal	344	1.48	-
5260MHz_TX	Pass	PK	5.1286G	55.49	74.00	-18.51	2.72	3	Horizontal	344	1.48	-
5260MHz_TX	Pass	PK	5.2552G	114.07	Inf	-Inf	2.86	3	Horizontal	344	1.48	-
5260MHz_TX	Pass	PK	5.401G	55.44	74.00	-18.56	3.03	3	Horizontal	344	1.48	-
5260MHz_TX	Pass	AV	15.7761G	45.52	54.00	-8.48	12.95	3	Vertical	344	1.26	-
5260MHz_TX	Pass	PK	10.52192G	62.82	68.20	-5.38	12.98	3	Vertical	160	1.50	-
5260MHz_TX	Pass	PK	15.77142G	58.16	74.00	-15.84	12.97	3	Vertical	344	1.26	-
5260MHz_TX	Pass	AV	15.78294G	50.53	54.00	-3.47	12.91	3	Horizontal	240	1.57	-
5260MHz_TX	Pass	PK	10.52498G	58.86	68.20	-9.34	12.99	3	Horizontal	324	1.50	-
5260MHz_TX	Pass	PK	15.777G	63.89	74.00	-10.11	12.95	3	Horizontal	240	1.57	-
5300MHz_TX	Pass	AV	5.3028G	97.91	Inf	-Inf	2.91	3	Vertical	253	2.19	-
5300MHz_TX	Pass	AV	5.35G	43.73	54.00	-10.27	2.97	3	Vertical	253	2.19	-
5300MHz_TX	Pass	PK	5.3028G	108.98	Inf	-Inf	2.91	3	Vertical	253	2.19	-
5300MHz_TX	Pass	PK	5.3536G	56.10	74.00	-17.90	2.97	3	Vertical	253	2.19	-
5300MHz_TX	Pass	AV	5.2964G	102.94	Inf	-Inf	2.91	3	Horizontal	346	1.00	-
5300MHz_TX	Pass	AV	5.3504G	47.91	54.00	-6.09	2.97	3	Horizontal	346	1.00	-
5300MHz_TX	Pass	PK	5.2968G	115.05	Inf	-Inf	2.91	3	Horizontal	346	1.00	-
5300MHz_TX	Pass	PK	5.3516G	62.63	74.00	-11.37	2.97	3	Horizontal	346	1.00	-
5300MHz_TX	Pass	AV	10.60114G	46.63	54.00	-7.37	13.15	3	Vertical	156	1.45	-
5300MHz_TX	Pass	AV	15.89778G	45.60	54.00	-8.40	12.37	3	Vertical	345	1.27	-
5300MHz_TX	Pass	PK	10.59634G	60.07	68.20	-8.13	13.14	3	Vertical	156	1.45	-
5300MHz_TX	Pass	PK	15.89328G	58.57	74.00	-15.43	12.38	3	Vertical	345	1.27	-
5300MHz_TX	Pass	AV	10.60048G	44.77	54.00	-9.23	13.15	3	Horizontal	300	1.49	-
5300MHz_TX	Pass	AV	15.89496G	49.80	54.00	-4.20	12.38	3	Horizontal	240	1.54	-
5300MHz_TX	Pass	PK	10.59976G	56.88	68.20	-11.32	13.15	3	Horizontal	300	1.49	-
5300MHz_TX	Pass	PK	15.89484G	64.43	74.00	-9.57	12.38	3	Horizontal	240	1.54	-
5320MHz_TX	Pass	AV	5.3132G	97.96	Inf	-Inf	2.93	3	Vertical	255	2.99	-
5320MHz_TX	Pass	AV	5.35G	47.62	54.00	-6.38	2.97	3	Vertical	255	2.99	-
5320MHz_TX	Pass	PK	5.3132G	107.50	Inf	-Inf	2.93	3	Vertical	255	2.99	-
5320MHz_TX	Pass	PK	5.3534G	60.83	74.00	-13.17	2.97	3	Vertical	255	2.99	_
5320MHz_TX	Pass	AV	5.319G	102.75	Inf	-Inf	2.93	3	Horizontal	349	1.50	_
5320MHz_TX	Pass	AV	5.35G	53.27	54.00	-0.73	2.97	3	Horizontal	349	1.50	_
5320MHz TX	Pass	PK	5.3238G	113.80	Inf	-Inf	2.94	3	Horizontal	349	1.50	_
5320MHz_TX	Pass	PK	5.35G	66.83	74.00	-7.17	2.97	3	Horizontal	349	1.50	_
5320MHz_TX	Pass	AV	10.64012G	45.49	54.00	-8.51	13.25	3	Vertical	169	1.45	_
5320MHz_TX	Pass	AV	15.9666G	41.47	54.00	-12.53	12.03	3	Vertical	11	1.45	
5320MHz_TX 5320MHz_TX		PK	10.64012G	58.08	74.00	-12.53		3				_
5320MHz_TX 5320MHz_TX	Pass						13.25		Vertical	169	1.45	-
<del></del>	Pass	PK AV	15.9675G	53.68	74.00	-20.32	12.03	3	Vertical	11	1.50	-
5320MHz_TX	Pass	AV	10.64024G	45.86	54.00	-8.14	13.25	3	Horizontal	74	1.90	-
5320MHz_TX	Pass	AV	15.95754G	47.71	54.00	-6.29	12.08	3	Horizontal	236	1.56	-
5320MHz_TX	Pass	PK	10.64066G	58.78	74.00	-15.22	13.25	3	Horizontal	74	1.90	-
5320MHz_TX	Pass	PK	15.95712G	60.84	74.00	-13.16	12.08	3	Horizontal	236	1.56	-
5500MHz_TX	Pass	AV	5.4598G	48.46	54.00	-5.54	4.53	3	Vertical	237	1.50	-
5500MHz_TX	Pass	AV	5.47G	53.80	Inf	-Inf	4.54	3	Vertical	237	1.50	-
5500MHz_TX	Pass	AV	5.5052G	98.26	Inf	-Inf	4.59	3	Vertical	237	1.50	-
5500MHz_TX	Pass	PK	5.4594G	61.81	74.00	-12.19	4.53	3	Vertical	237	1.50	-
5500MHz_TX	Pass	PK	5.4698G	67.02	68.20	-1.18	4.54	3	Vertical	237	1.50	-
5500MHz_TX	Pass	PK	5.5056G	108.04	Inf	-Inf	4.59	3	Vertical	237	1.50	-
5500MHz_TX	Pass	AV	5.4594G	48.35	54.00	-5.65	4.53	3	Horizontal	359	1.50	-



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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)	
5500MHz_TX	Pass	AV	5.47G	54.36	Inf	-Inf	4.54	3	Horizontal	359	1.50	-
5500MHz_TX	Pass	AV	5.499G	101.10	Inf	-Inf	4.58	3	Horizontal	359	1.50	-
5500MHz_TX	Pass	PK	5.459G	61.68	74.00	-12.32	4.53	3	Horizontal	359	1.50	-
5500MHz_TX	Pass	PK	5.4692G	66.54	68.20	-1.66	4.54	3	Horizontal	359	1.50	-
5500MHz_TX	Pass	PK	5.4982G	111.07	Inf	-Inf	4.58	3	Horizontal	359	1.50	-
5500MHz_TX	Pass	AV	11.00012G	45.86	54.00	-8.14	15.61	3	Vertical	93	1.81	-
5500MHz_TX	Pass	PK	11.00438G	58.77	74.00	-15.23	15.60	3	Vertical	93	1.81	-
5500MHz_TX	Pass	PK	16.49508G	62.08	68.20	-6.12	15.61	3	Vertical	173	1.47	-
5500MHz_TX	Pass	AV	10.99996G	46.05	54.00	-7.95	15.61	3	Horizontal	94	1.50	-
5500MHz_TX	Pass	PK	10.99984G	60.62	74.00	-13.38	15.61	3	Horizontal	94	1.50	-
5500MHz_TX	Pass	PK	16.50224G	64.47	68.20	-3.73	15.65	3	Horizontal	252	1.47	-
5580MHz_TX	Pass	AV	5.436G	45.48	54.00	-8.52	4.50	3	Vertical	292	1.50	-
5580MHz_TX	Pass	AV	5.5812G	93.14	Inf	-Inf	4.73	3	Vertical	292	1.50	-
5580MHz_TX	Pass	PK	5.4636G	57.79	68.20	-10.41	4.53	3	Vertical	292	1.50	-
5580MHz_TX	Pass	PK	5.5824G	103.03	Inf	-Inf	4.74	3	Vertical	292	1.50	-
5580MHz_TX	Pass	PK	5.73G	57.51	68.20	-10.69	5.09	3	Vertical	292	1.50	-
5580MHz_TX	Pass	AV	5.4582G	45.55	54.00	-8.45	4.52	3	Horizontal	7	1.50	-
5580MHz_TX	Pass	AV	5.5788G	96.02	Inf	-Inf	4.73	3	Horizontal	7	1.50	-
5580MHz_TX	Pass	PK	5.469G	57.39	68.20	-10.81	4.54	3	Horizontal	7	1.50	-
5580MHz_TX	Pass	PK	5.5782G	106.19	Inf	-Inf	4.72	3	Horizontal	7	1.50	-
5580MHz_TX	Pass	PK	5.7264G	58.32	68.20	-9.88	5.08	3	Horizontal	7	1.50	-
5580MHz_TX	Pass	AV	11.16038G	44.07	54.00	-9.93	15.43	3	Vertical	30	1.42	-
5580MHz_TX	Pass	PK	11.1605G	57.53	74.00	-16.47	15.43	3	Vertical	30	1.42	-
5580MHz_TX	Pass	PK	16.74186G	64.40	68.20	-3.80	16.88	3	Vertical	342	1.59	-
5580MHz_TX	Pass	AV	11.16027G	45.36	54.00	-8.64	15.43	3	Horizontal	82	1.50	-
5580MHz_TX	Pass	PK	11.16037G	59.05	74.00	-14.95	15.43	3	Horizontal	82	1.50	-
5580MHz_TX	Pass	PK	16.74216G	67.36	68.20	-0.84	16.88	3	Horizontal	246	1.35	-
5700MHz_TX	Pass	AV	5.6968G	93.12	Inf	-Inf	5.02	3	Vertical	312	2.95	-
5700MHz_TX	Pass	PK	5.6976G	103.11	Inf	-Inf	5.02	3	Vertical	312	2.95	_
5700MHz_TX	Pass	PK	5.7644G	59.26	68.20	-8.94	5.17	3	Vertical	312	2.95	_
5700MHz TX	Pass	AV	5.6968G	93.10	Inf	-Inf	5.02	3	Horizontal	18	2.96	
5700MHz_TX	Pass	PK	5.6968G	103.71	Inf	-Inf	5.02	3	Horizontal	18	2.96	
5700MHz TX	Pass	PK	5.7252G	58.66	68.20	-9.54	5.08	3	Horizontal	18	2.96	-
5700MHz_TX	Pass	AV	11.39916G	43.60	54.00	-10.40	15.14	3	Vertical	139	2.90	
	1	PK									-	<del>-</del>
5700MHz_TX	Pass		11.4102G	57.19	74.00	-16.81	15.14	3	Vertical	139	2.21	-
5700MHz_TX	Pass	PK	17.10212G	63.87	68.20	-4.33	18.99	3	Vertical	338	1.65	-
5700MHz_TX	Pass	AV	11.39964G	44.41	54.00	-9.59	15.14	3	Horizontal	286	1.50	-
5700MHz_TX	Pass	PK	11.39594G	57.36	74.00	-16.64	15.14	3	Horizontal	286	1.50	-
5700MHz_TX	Pass	PK	17.10192G	66.56	68.20	-1.64	18.99	3	Horizontal	254	1.87	-
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-		-	- 700	-	-	-		-
5260MHz_TX	Pass	AV	5.1496G	49.39	54.00	-4.61	7.00	3	Vertical	272	1.76	-
5260MHz_TX	Pass	AV	5.257G	101.74	Inf	-Inf	7.13	3	Vertical	272	1.76	-
5260MHz_TX	Pass	AV	5.3926G	49.52	54.00	-4.48	7.39	3	Vertical	272	1.76	-
5260MHz_TX	Pass	PK	5.146G	61.14	74.00	-12.86	7.00	3	Vertical	272	1.76	-
5260MHz_TX	Pass	PK	5.2594G	111.29	Inf	-Inf	7.14	3	Vertical	272	1.76	-
5260MHz_TX	Pass	PK	5.371G	62.19	74.00	-11.81	7.34	3	Vertical	272	1.76	-
5260MHz_TX	Pass	AV	5.1466G	49.37	54.00	-4.63	7.00	3	Horizontal	53	1.72	-
5260MHz_TX	Pass	AV	5.263G	104.11	Inf	-Inf	7.14	3	Horizontal	53	1.72	-
5260MHz_TX	Pass	AV	5.3752G	49.49	54.00	-4.51	7.36	3	Horizontal	53	1.72	-



Mode	Result	Туре	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	- 100uii	.,,,,	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
5260MHz_TX	Pass	PK	5.1358G	61.08	74.00	-12.92	7.00	3	Horizontal	53	1.72	_
5260MHz_TX	Pass	PK	5.2618G	114.36	Inf	-Inf	7.14	3	Horizontal	53	1.72	_
5260MHz TX	Pass	PK	5.3524G	61.51	74.00	-12.49	7.31	3	Horizontal	53	1.72	_
5260MHz_TX	Pass	AV	15.77274G	44.93	54.00	-9.07	14.87	3	Vertical	346	1.48	_
5260MHz_TX	Pass	PK	10.52438G	63.48	68.20	-4.72	16.12	3	Vertical	120	1.55	_
5260MHz_TX	Pass	PK	15.7692G	58.54	74.00	-15.46	14.88	3	Vertical	346	1.48	_
5260MHz TX	Pass	AV	15.78036G	47.65	54.00	-6.35	14.85	3	Horizontal	224	2.85	_
5260MHz_TX	Pass	PK	10.52432G	63.78	68.20	-4.42	16.12	3	Horizontal	66	1.50	
		PK						3				-
5260MHz_TX	Pass		15.77832G	61.63	74.00	-12.37	14.86	3	Horizontal	224	2.85	-
5300MHz_TX	Pass	AV	5.2948G	99.20	Inf	-Inf	7.20		Vertical	272	1.69	-
5300MHz_TX	Pass	AV	5.3616G	48.38	54.00	-5.62	7.33	3	Vertical	272	1.69	-
5300MHz_TX	Pass	PK	5.2964G	108.33	Inf	-Inf	7.20	3	Vertical	272	1.69	-
5300MHz_TX	Pass	PK	5.3856G	59.87	74.00	-14.13	7.37	3	Vertical	272	1.69	-
5300MHz_TX	Pass	AV	5.3064G	101.24	Inf	-Inf	7.21	3	Horizontal	345	1.50	-
5300MHz_TX	Pass	AV	5.3992G	48.23	54.00	-5.77	7.40	3	Horizontal	345	1.50	-
5300MHz_TX	Pass	PK	5.3052G	110.27	Inf	-Inf	7.21	3	Horizontal	345	1.50	-
5300MHz_TX	Pass	PK	5.3628G	60.00	74.00	-14.00	7.33	3	Horizontal	345	1.50	-
5300MHz_TX	Pass	AV	10.6093G	43.26	54.00	-10.74	16.26	3	Vertical	227	1.32	-
5300MHz_TX	Pass	AV	15.89274G	43.91	54.00	-10.09	14.49	3	Vertical	348	1.42	-
5300MHz_TX	Pass	PK	10.59124G	56.42	68.20	-11.78	16.23	3	Vertical	227	1.32	-
5300MHz_TX	Pass	PK	15.9117G	58.07	74.00	-15.93	14.43	3	Vertical	348	1.42	-
5300MHz_TX	Pass	AV	10.60024G	43.42	54.00	-10.58	16.24	3	Horizontal	335	1.81	-
5300MHz_TX	Pass	AV	15.90054G	45.75	54.00	-8.25	14.47	3	Horizontal	223	2.85	-
5300MHz_TX	Pass	PK	10.60744G	56.08	74.00	-17.92	16.26	3	Horizontal	335	1.81	-
5300MHz_TX	Pass	PK	15.90174G	59.18	74.00	-14.82	14.46	3	Horizontal	223	2.85	-
5320MHz_TX	Pass	AV	5.3142G	99.61	Inf	-Inf	7.23	3	Vertical	257	1.82	-
5320MHz_TX	Pass	AV	5.35G	51.12	54.00	-2.88	7.30	3	Vertical	257	1.82	-
5320MHz_TX	Pass	PK	5.3138G	108.57	Inf	-Inf	7.23	3	Vertical	257	1.82	-
5320MHz_TX	Pass	PK	5.352G	62.38	74.00	-11.62	7.30	3	Vertical	257	1.82	-
5320MHz_TX	Pass	AV	5.3254G	101.32	Inf	-Inf	7.26	3	Horizontal	349	1.49	-
5320MHz_TX	Pass	AV	5.35G	51.12	54.00	-2.88	7.30	3	Horizontal	349	1.49	-
5320MHz_TX	Pass	PK	5.3254G	110.71	Inf	-Inf	7.26	3	Horizontal	349	1.49	-
5320MHz_TX	Pass	PK	5.3516G	62.59	74.00	-11.41	7.30	3	Horizontal	349	1.49	-
5320MHz_TX	Pass	AV	10.63496G	43.11	54.00	-10.89	16.30	3	Vertical	205	1.76	-
5320MHz_TX	Pass	AV	15.95154G	43.52	54.00	-10.48	14.30	3	Vertical	351	1.34	-
5320MHz_TX	Pass	PK	10.6352G	55.18	74.00	-18.82	16.30	3	Vertical	205	1.76	-
5320MHz_TX	Pass	PK	15.95682G	57.36	74.00	-16.64	14.29	3	Vertical	351	1.34	-
5320MHz_TX	Pass	AV	10.64636G	43.16	54.00	-10.84	16.32	3	Horizontal	77	1.96	-
5320MHz_TX	Pass	AV	15.96042G	44.46	54.00	-9.54	14.28	3	Horizontal	240	1.51	-
5320MHz_TX	Pass	PK	10.64162G	55.30	74.00	-18.70	16.31	3	Horizontal	77	1.96	-
5320MHz_TX	Pass	PK	15.95754G	58.73	74.00	-15.27	14.29	3	Horizontal	240	1.51	-
5500MHz_TX	Pass	AV	5.4596G	50.43	54.00	-3.57	7.49	3	Vertical	284	1.74	-
5500MHz_TX	Pass	AV	5.4968G	100.42	Inf	-Inf	7.54	3	Vertical	284	1.74	_
5500MHz_TX	Pass	PK	5.4574G	61.97	74.00	-12.03	7.48	3	Vertical	284	1.74	_
5500MHz_TX	Pass	PK	5.4696G	66.79	68.20	-1.41	7.50	3	Vertical	284	1.74	_
5500MHz_TX	Pass	PK	5.4992G 5.4992G	109.97	Inf	-1.41 -Inf	7.54	3	Vertical	284	1.74	-
5500MHz_TX	Pass	AV	5.454G	48.76	54.00	-5.24	7.48	3	Horizontal	353	1.12	-
												-
5500MHz_TX	Pass	AV	5.508G	102.62	Inf	-Inf	7.56	3	Horizontal	353	1.12	-
5500MHz_TX	Pass	PK	5.4576G	61.06	74.00	-12.94	7.48	3	Horizontal	353	1.12	-