

FCC 47 CFR PART 15 SUBPART E

for

802.11ac Gigabit Router Model: SR905acv, SR905ac Brand: SmartRG

> Test Report Number: C171214Z01-RP1-2

Issued Date: August 13, 2018

Issued for

SmartRG Inc.

501 SE Columbia Shores Boulevard, Suite 500 Vancouver, Washington 98661

Issued by:

Compliance Certification Services (Shenzhen) Inc.

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Revision History

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	August 13, 2018	Initial Issue	ALL	Sinphy Xie



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1. TEST CERTIFICATION

Product	802.11ac Gigabit Router
Model	SR905acv, SR905ac
Brand	SmartRG
Tested	December 14, 2017~ August 13, 2018
Applicant	SmartRG Inc. 501 SE Columbia Shores Boulevard, Suite 500 Vancouver, Washington 98661
Manufacturer	SmartRG Inc. 501 SE Columbia Shores Boulevard, Suite 500 Vancouver, Washington 98661
Factory	Taicang T&W Electronics Co., Ltd. Jiangnan Road 89, Ludu Town, Taicang SUZHOU Jiangsu

APPLICABLE STANDARDS				
STANDARD	TEST RESULT			
FCC 47 CFR Part 15 Subpart E	No non-compliance noted			

We hereby certify that:

Compliance Certification Services (Shenzhen) Inc. tested the above equipment. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in **ANSI C63.10: 2013** and the energy emitted by the sample EUT tested as described in this report is in compliance with conducted and radiated emission limits of FCC Rules Part 15.407 \sim FCC 14-30.

The TEST RESULTS of this report relate only to the tested sample identified in this report.

Approved by:

Eve. Work

Eve Wang Supervisor of EMC Dept. Compliance Certification Services (Shenzhen) Inc.

Reviewed by:

Nancy

Nancy Fu Supervisor of Report Dept. Compliance Certification Services (Shenzhen) Inc.



2. EUT DESCRIPTION

Product	802.11ac Gigabit Router					
Model Number	SR905acv, SR905ac					
Brand	SmartRG					
Model Discrepancy	The model SR905acv of product name is "802.11ac Gigabit VoIP Router", the model SR905ac of product name is "802.11ac Gigabit Router", "SR905ac" is less VOIP ports than mode "SR905acv".					
Serial Number	C171214Z01-RP1-2					
Received Date	December 14, 2017					
Power Supply	DC 12V supply by the adapter					
Adapter Specification	Shenzhen Gongjin Electronics Co., Ltd. S36B52-120A300-04 INPUT:100-240V,50/60Hz Max 1.0A OUTPUT: 12V,3A DC Cable: Unshielded, 1.50m					
RJ45 Cable	Unshielded, 2.00m					
RJ11 Cable	Unshielded, 2.00m					
Frequency Range	UNII Band I: IEEE 802.11a, 802.11n HT20 : 5180MHz ~ 5240MHz; IEEE 802.11n HT40: 5190MHz ~ 5230MHz IEEE 802.11ac 80: 5210MHz UNII Band IV 5745MHz ~ 5825MHz IEEE 802.11n HT40: 5755MHz ~ 5795MHz IEEE 802.11ac 80: 5775MHz					
Transmit Power	UNII Band I: IEEE 802.11a: IEEE 802.11a: IEEE 802.11a: IEEE 802.11a: IEEE 802.11a: IEEE 802.11n HT 20 MHz 19.25dBm(Combine with antenna 0, antenna 1, antenna 2 and antenna 3) IEEE 802.11n HT 40 MHz 19.59dBm(Combine with antenna 0, antenna 1, antenna 2 and antenna 3) IEEE 802.11ac 80: UNII Band IV IEEE 802.11a: IEEE 802.11n HT 20 MHz 24.87dBm (Combine with antenna 0, antenna 1, antenna 2 and antenna 3) IEEE 802.11n HT 20 MHz 24.87dBm (Combine with antenna 0, antenna 1, antenna 2 and antenna 3) IEEE 802.11n HT 40 MHz 25.32dBm (Combine with antenna 0, antenna 1, antenna 2 and antenna 3) IEEE 802.11n HT 40 MHz 26.35dBm (Combine with antenna 0, antenna 1, antenna 2 and antenna 3) IEEE 802.11ac 80: IEEE 802.11ac 80:					
Modulation Technique	OFDM (QPSK, BPSK, 16-QAM, 64-QAM, 256-QAM)					



Transmit Data Rate	IEEE 802.11a mode: 48, 36, 24, 18, 12, 9, 6Mbps IEEE802.11n HT20MHz mode(400ns GI): 28.8,57.6,86.8,115.6,173.2,231.2,260, 288.8Mbps IEEE802.11n HT40MHz mode(400ns GI): 60,120,180,240,360,480,540,600Mbps IEEE802.11ac 80 mode(400ns GI): 130,260,390,520,780,1040,1170,1300,1560, 1733.2Mbps				
Number of Channels	IEEE 802.11ac 80: UNII Band IV IEEE 802.11a, 802.11n HT20 : 4 IEEE 802.11n HT 40 MHz mode:	2 Channels 1 Channel 5 Channels			
Antenna Specification	Internal antenna with 4.52dBi ga	in (Max)			
Channels Spacing	IEEE 802.11a, 802.11n HT20 : 20MHz IEEE 802.11n HT40: 40MHz IEEE 802.11ac 80: 80MHz				
Temperature Range	0°C ~ +45°C				
Hardware Version	ware Version B3				
Software Version	v10.5.2.1				

Note: 1. The sample selected for test was engineering sample that approximated to production product and was provided by manufacturer.



Operation Frequency:

UNLICENSED NATIONAL INFOR	UNLICENSED NATIONAL INFORMATION INFRASTRUCTURE (U-NII)					
CHANNEL	MHz					
36	5180					
38	5190					
40	5200					
42	5210					
44	5220					
46	5230					
48	5240					
149	5745					
151	5755					
153	5765					
155	5775					
157	5785					
159	5795					
161	5805					
165	5825					

Remark:

- 1. The sample selected for test was engineering sample that approximated to production product and was provided by manufacturer.
- 2. This submittal(s) (test report) is intended for <u>FCC ID: VW7SR900</u> filing to comply with Section 15.407 of the FCC Part 15, Subpart E Rules and FCC 14-30.



3. TEST METHODOLOGY

Both conducted and radiated testing was performed according to the procedures in ANSI C63.10 Radiated testing was performed at an antenna to EUT distance 3 meters. The tests documented in this report were performed in accordance with ANSI C63.10: 2013 and FCC CFR 47 Part 15.207, 15.209, 15.407 and FCC 14-30. Radio testing was performed according to KDB DA 02-2138、KDB 789033 D02、 KDB 905462 D06;

3.1 EUT CONFIGURATION

The EUT configuration for testing is installed for RF field strength measurement to meet the Commissions requirement, and is operated in a manner intended to generate the maximum emission in a continuous normal application.

3.2 EUT EXERCISE

The EUT is operated in the engineering mode to fix the TX frequency for the purposes of measurement.

According to its specifications, the EUT must comply with the requirements of Section 15.407 under the FCC Rules Part 15 Subpart E.

3.3 GENERAL TEST PROCEDURES

Conducted Emissions

The EUT is placed on the turntable, which is positioned at 0.8 m above the ground plane. According to the requirements in Section 6.2 of ANSI C63.10, the conducted emission from the EUT is measured in the frequency range between 0.15 MHz and 30MHz, using the CISPR Quasi-Peak detector mode.

Radiated Emissions

The EUT is placed on the turntable, which is 0.8 m (below 1GHz) /1.5m (Above 1GHz) above the ground plane. The turntable is then rotated for 360 degrees to determine the proper orientation for the maximum emission level. The EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission level. And, each emission is to be maximized by changing the horizontal and vertical polarization of the receiving antenna. In order to find out the maximum emissions, exploratory radiated emission measurements were made according to the requirements in Section 6.4 to Section 6.6 of ANSI C63.10.



3.4 FCC PART 15.205 RESTRICTED BANDS OF OPERATIONS

(a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110	0.090 - 0.110 16.42 - 16.423		4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 -	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.52525	2655 - 2900	22.01 - 23.12
8.41425 - 8.41475	156.7 - 156.9	3260 - 3267	23.6 - 24.0
12.29 - 12.293	162.0125 - 167.17	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	167.72 - 173.2	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	240 - 285	3600 - 4400	(²)
13.36 - 13.41	322 - 335.4		

¹ Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

² Above 38.6

(b) Except as provided in paragraphs (d) and (e), the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.



3.5 DESCRIPTION OF TEST MODES

The EUT is a 4x4 configuration spatial MIMO (4TX & 4RX) without beam forming function. Use "Lantiq DUT" to control the EUT for staying in continuous transmitting mode was programmed.

Test Item	Test mode	Worse mode
Conducted	Mode 1: Full system (AC120V/60Hz)	\square
Emission	Mode 2: Full system (AC240V/50Hz)	\square
Radiated Emission	Mode 4: Continuously Transmitting	\square

After verification, all tests were carried out with the worst case test modes as shown below except radiated spurious emission below 1GHz, which worst case was in normal link mode only.

UNII Band I:

IEEE 802.11a for 5180 ~ 5240MHz:

Channel Low (5180MHz), Channel Mid (5200MHz) and Channel High (5240MHz) with 6Mbps data rate were chosen for full testing.

IEEE 802.11n HT 20 MHz for 5180 ~ 5240MHz:

Channel Low (5180MHz), Channel Mid (5200MHz) and Channel High (5240MHz) with 28.8Mbps data rate were chosen for full testing.

IEEE 802.11n HT 40 MHz Channel for 5190 ~ 5230MHz:

Channel Low (5190MHz) and Channel High (5230MHz) with 60Mbps data rate were chosen for full testing.

IEEE 802.11ac 80 Channel for 5210MHz:

Channel Low (5210MHz) with 130Mbps data rate were chosen for full testing.

UNII Band IV:

IEEE 802.11a for 5745 ~ 5825MHz:

Channel Low (5745MHz), Channel Mid (5785MHz) and Channel High (5825MHz) with 6Mbps data rate were chosen for full testing.

IEEE 802.11n HT 20 MHz for 5745 ~ 5825MHz:

Channel Low (5745MHz), Channel Mid (5785MHz) and Channel High (5825MHz) with 28.8Mbps data rate were chosen for full testing.

IEEE 802.11n HT 40 MHz Channel for 5755~ 5795MHz:

Channel Low (5755MHz) and Channel High (5795MHz) with 60Mbps data rate were chosen for full testing.

IEEE 802.11ac 80 Channel for 5775MHz:

Channel Low (5775MHz) with 130Mbps data rate were chosen for full testing.



4. SETUP OF EQUIPMENT UNDER TEST

4.1 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

No.	Equipment	Model No.	Serial No.	FCC ID	Brand	Data Cable	Power Cord
1	Notebook	TianYi 310-14ISK	MP18DLC6	DoC	LENOVO	N/A	N/A
2	Adapter	ADLX65NCC3A	N/A	N/A	LENOVO	Unshielded 2.00m	Unshielded 1.00m (AC Cable) Shielded 1.80m (DC Cable)

Note:

Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

4.2 CONFIGURATION OF SYSTEM UNDER TEST

See test photographs attached in Appendix II for the actual connections between EUT and support equipment.



4.3 TEST INSTRUMENTS

Conducted Emission Test Site						
Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration	
EMI TEST RECEIVER	ROHDE&SCHWARZ	ESCI	100783	01/27/2018	01/26/2019	
LISN(EUT)	ROHDE&SCHWARZ	ENV216	101543-WX	01/27/2018	01/26/2019	
LISN	EMCO	3825/2	8901-1459	01/27/2018	01/26/2019	
Temp. / Humidity Meter	VICTOR	HTC-1	N/A	01/29/2018	01/28/2019	
Test S/W	FARAD	EZ-EMC/ CCS-3A1-CE				

Radiated Emission Test Site 966 (2)							
Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration		
Spectrum Analyzer	Agilent	N9010A	MY52221469	01/27/2018	01/26/2019		
EMI TEST RECEIVER	ROHDE&SCHWARZ	ESCI	100783	01/27/2018	01/26/2019		
Amplifier	EMEC	EM330	060661	01/27/2018	01/26/2019		
High Noise Amplifier	Agilent	8449B	3008A01838	01/27/2018	01/26/2019		
Loop Antenna	COM-POWER	AL-130	121044	01/30/2018	01/29/2019		
Bilog Antenna	SCHAFFNER	CBL6143	5082	02/21/2018	02/20/2019		
Horn Antenna	SCHWARZBECK	BBHA9120	D286	01/27/2018	01/26/2019		
Board-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170-497	01/24/2018	01/23/2019		
Turn Table	N/A	N/A	N/A	N.C.R	N.C.R		
Antenna Tower	SUNOL	TLT2	N/A	N.C.R	N.C.R		
Controller	Sunol Sciences	SC104V	022310-1	N.C.R	N.C.R		
Controller	СТ	N/A	N/A	N.C.R	N.C.R		
Temp. / Humidity Meter	Anymetre	JR913	N/A	01/29/2018	01/28/2019		
Test S/W	Test S/W FARAD LZ-RF / CCS-SZ-3A2						

26dB Bandwidth						
Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration	
Spectrum Analyzer	Agilent	N9010A	MY52221469	01/27/2018	01/26/2019	

6dB Bandwidth						
Name of Equipment	Manufacturer	Model Number	Serial Number Calibration C		Due Calibration	
Spectrum Analyzer	Agilent	N9010A	MY52221469	01/27/2018	01/26/2019	



Antenna Gain						
Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration	
Spectrum Analyzer	Agilent	N9010A	MY52221469	01/27/2018	01/26/2019	

Peak Output Power						
Name of Equipment	Last Calibration	Due Calibration				
Power Meter	Anritsu	ML2495A	1204003	01/27/2018	01/26/2019	
Power Sensor	Anritsu	MA2411B	1126150	01/27/2018	01/26/2019	

Band edges						
Name of Equipment Manufacturer		Model Number	- Serial Number Last Calibration		Due Calibration	
Spectrum Analyzer	Agilent	N9010A	MY52221469	01/27/2018	01/26/2019	

Peak Power Spectral Density						
Name of Equipment Manufacturer Model Number Serial Number Last I Calibration Calibratio						
Spectrum Analyzer	Agilent	N9010A	MY52221469	01/27/2018	01/26/2019	

Antenna Conducted Spurious Emission						
Name of Equipment Manufacturer Model Number Serial Number Last Dute Calibration Calibra						
Spectrum Analyzer	Agilent	N9010A	MY52221469	01/27/2018	01/26/2019	

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

2. N.C.R = No Calibration Request.



5. FACILITIES AND ACCREDITATIONS

5.1 FACILITIES

All measurement facilities used to collect the measurement data are located at No.10-1 Mingkeda Logistics park, No.18, Huanguan South Rd., Guan Lan Town, Baoan District, Shenzhen, China

The sites are constructed in conformance with the requirements of ANSI C63.10, ANSI C63.7 and CISPR Publication 22.

5.2 EQUIPMENT

Radiated emissions are measured with one or more of the following types of linearly polarized antennas: tuned dipole, biconical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with pre-selectors and quasi-peak detectors are used to perform radiated measurements.

Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers.

Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

5.3 ACCREDITATIONS

Our laboratories are accredited and approved by the following accreditation body according to ISO/IEC 17025.

USA	A2LA
China	CNAS

The measuring facility of laboratories has been authorized or registered by the following approval agencies.

USA	FCC
Japan	VCCI(C-3478, R-3135, T-652, G-10624)
Canada	INDUSTRY CANADA

Copies of granted accreditation certificates are available for downloading from our web site, http://www.ccssz.com



5.4 MEASUREMENT UNCERTAINTY

Parameter	Uncertainty
RF frequency	+/-1 * 10-5
RF power conducted	+/- 1,5 dB
RF power radiated	+/- 6 dB
Spurious emissions, conducted	+/- 3 dB
Spurious emissions, radiated	+/- 6 dB
Humidity	+/- 5 %
Temperature	+/- 1°C
Time	+/-10 %

Remark: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.



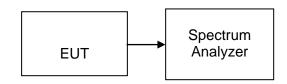
6. FCC PART 15 REQUIREMENTS

6.1 26dB EMISSION BANDWIDTH

6.1.1 LIMIT

According to §15.403(c), for purposes of this subpart the emission bandwidth shall be determined by measuring the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, that are 26 dB down relative to the maximum level of the modulated carrier. Compliance with the emissions limits is based on the use of measurement instrumentation employing a peak detector function with an instrument resolutions bandwidth approximately equal to 1.0 percent of the emission bandwidth of the device under measurement.

6.1.2 TEST CONFIGURATION



6.1.3TEST PROCEDURE

- 1. Place the EUT on the table and set it in the transmitting mode.
- 2. Remove the antenna from the EUT and then connect a low-loss RF cable from the antenna port to the spectrum analyzer.
- 3. Set the spectrum analyzer as RBW > 1%EBW, VBW > RBW, Span >26dB bandwidth, Detector = Peak, and Sweep = auto.
- 4. Mark the peak frequency and –26dB (upper and lower) frequency.
- 5. Repeat until all the rest channels were investigated.



6.1.4 TEST RESULTS

No non-compliance noted

Test Data

Test mode: IEEE 802.11a mode / 5180 ~ 5240MHz

Channel	Frequency	26dB Bandwidth(B) (MHz)					
	(MHz)	Antenna 0	Antenna 1	Antenna 2	Antenna 3		
Low	5180	22.87	21.85	22.34	22.40		
Mid	5200	22.96	22.61	22.51	23.02		
High	5240	22.32	22.51	22.81	22.51		

Test mode: IEEE 802.11n HT 20 MHz mode / 5180 ~ 5240MHz

Channel	Frequency	26dB Bandwidth(B) (MHz)				
	(MHz)	Antenna 0	Antenna 1	Antenna 2	Antenna 3	
Low	5180	23.89	23.80	23.42	23.28	
Mid	5200	23.95	23.45	22.90	23.41	
High	5240	23.80	24.08	23.15	23.66	

Test mode: IEEE 802.11n HT 40 MHz mode / 5190 ~ 5230MHz

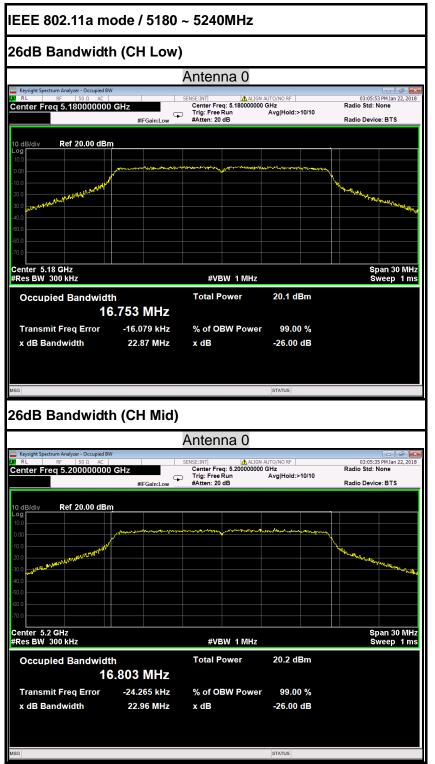
Channel	Frequency (MHz)	26dB Bandwidth(B) (MHz)				
		Antenna 0	Antenna 1	Antenna 2	Antenna 3	
Low	5190	43.05	41.98	43.13	42.57	
High	5230	43.39	42.87	43.68	42.70	

Test mode: IEEE 802.11ac 80 mode / 5210MHz

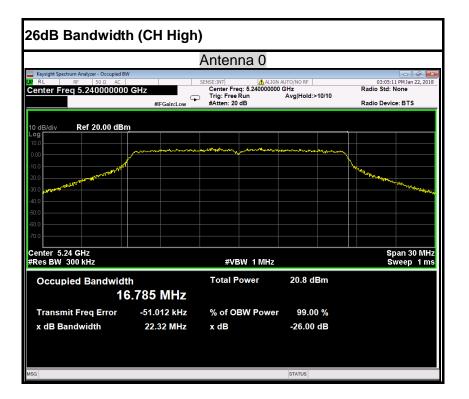
Channel	Frequency (MHz)	26dB Bandwidth(B) (MHz)			
		Antenna 0	Antenna 1	Antenna 2	Antenna 3
	5210	83.56	81.87	83.57	82.24



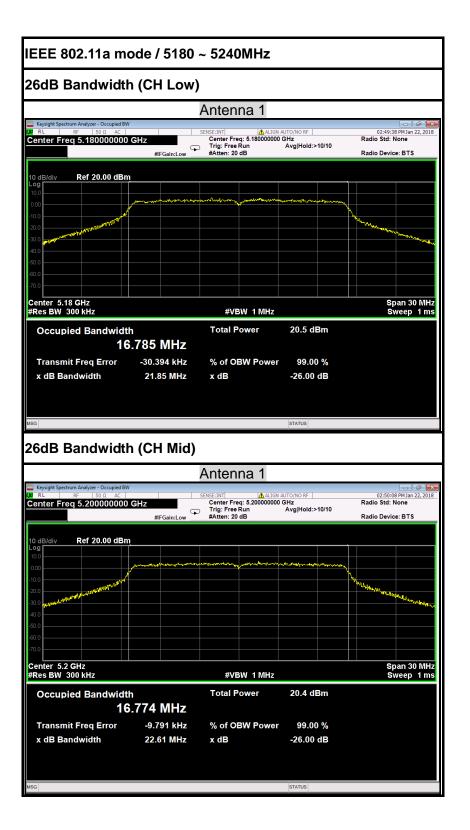
Test Plot

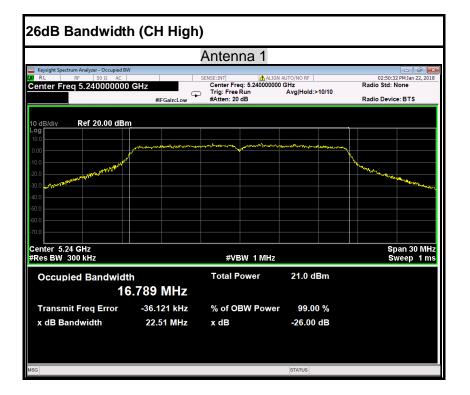






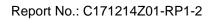




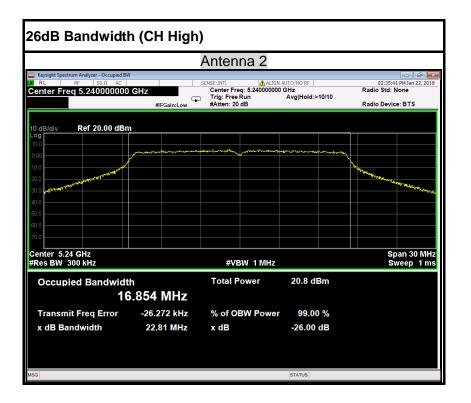




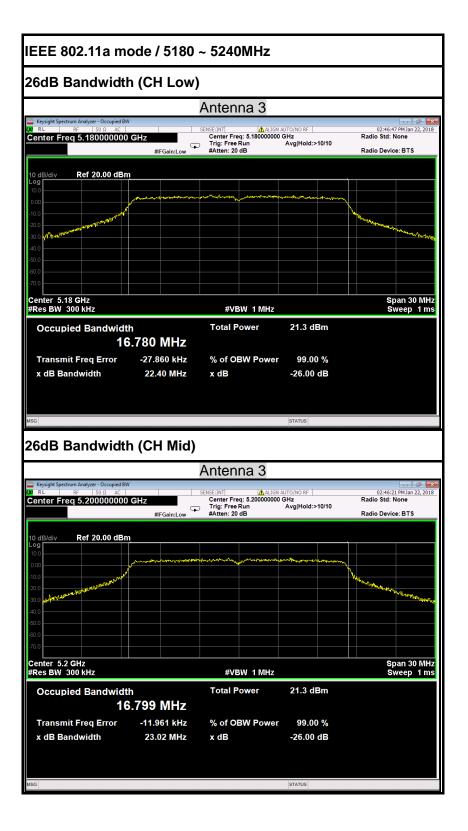
EEE 802.11a m	ode / 5180	~ 5240MHz		
26dB Bandwidth	n (CH Low)		
		Antenna 2		
Keysight Spectrum Analyzer - Occupied BW RL RF 50 Ω AC Center Freq 5.180000000	GHz	Center Freq: 5.18000000	AUTO/NO RF	02:34:45 PM Jan 22, 2018 Radio Std: None
	#IFGain:Low	#Atten: 20 dB	Avginola.>10/10	Radio Device: BTS
10 dB/div Ref 20.00 dBm				
10.0				
0.00				
20.0				Manufacture and and a second s
-30.0 Warmun production				
-40.0				
-60.0				
-70.0				
Center 5.18 GHz #Res BW 300 kHz		#VBW 1 MHz		Span 30 MHz Sweep 1 ms
		Total Power	21.0 dBm	Sweep This
Occupied Bandwidt	n 6.731 MHz	Total Power	21.0 dBm	
Transmit Freq Error	-9.267 kHz	% of OBW Power	99.00 %	
x dB Bandwidth	22.34 MHz	x dB	-26.00 dB	
			20100 42	
ISG			STATUS	
26dB Bandwidth	n (CH Mid)			
		Antenna 2		
Keysight Spectrum Analyzer - Occupied BW		SENSE:INT	AUTO/NO RF	02:35:05 PM Jan 22, 2018
Center Freq 5.20000000	GHz	Center Freq: 5.20000000 Trig: Free Run		Radio Std: None
	#IFGain:Low	#Atten: 20 dB		Radio Device: BTS
10 dB/div Ref 20.00 dBm				
Log 10.0				
0.00	American mot when me	www.alm.ll.w.autographication.com	vhententen viten and	∖
-10.0				Martin Caracity
-30.0 Harrison Martin 19				Branchen and Berlin Branch
40.0				
-50.0				
-70.0				
Center 5.2 GHz				Span 30 MHz
#Res BW 300 kHz		#VBW 1 MHz		Sweep 1 ms
		Total Power	20.6 dBm	
Occupied Bandwidt				
	6.785 MHz			
16 Transmit Freq Error	-27.405 kHz	% of OBW Power		
16		% of OBW Power x dB	99.00 % -26.00 dB	
16 Transmit Freq Error	-27.405 kHz			
16 Transmit Freq Error	-27.405 kHz			



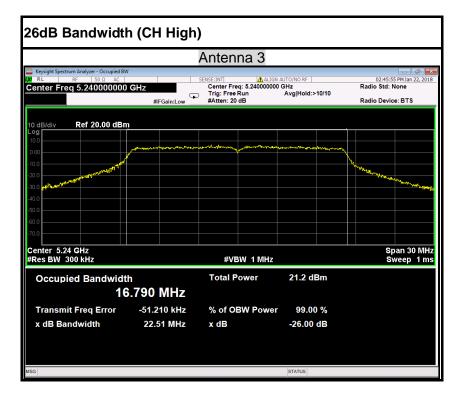


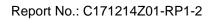




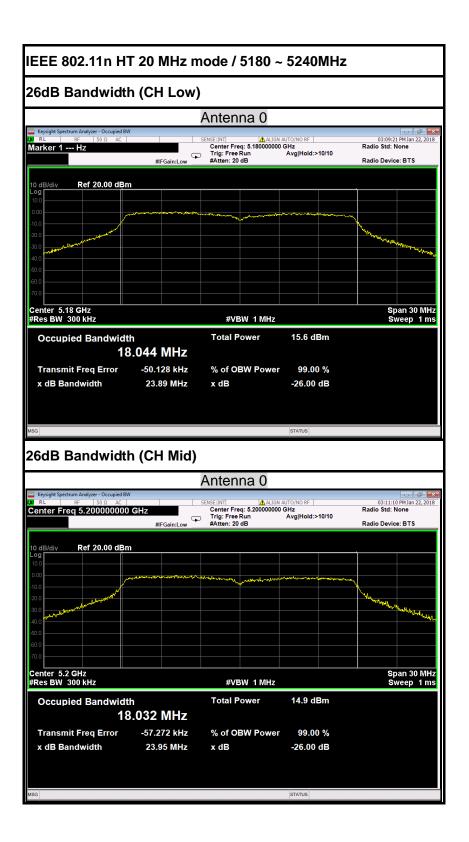


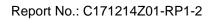




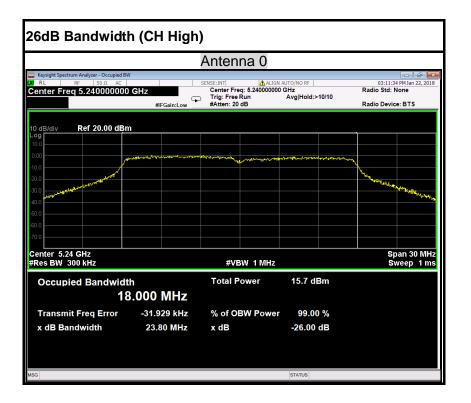






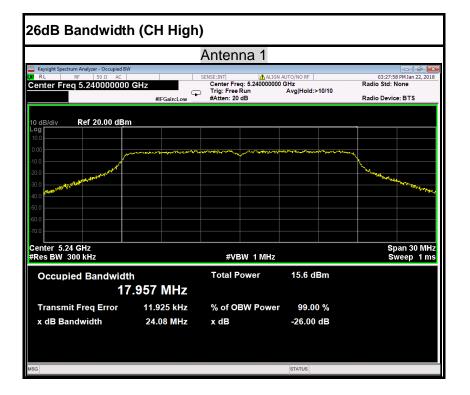




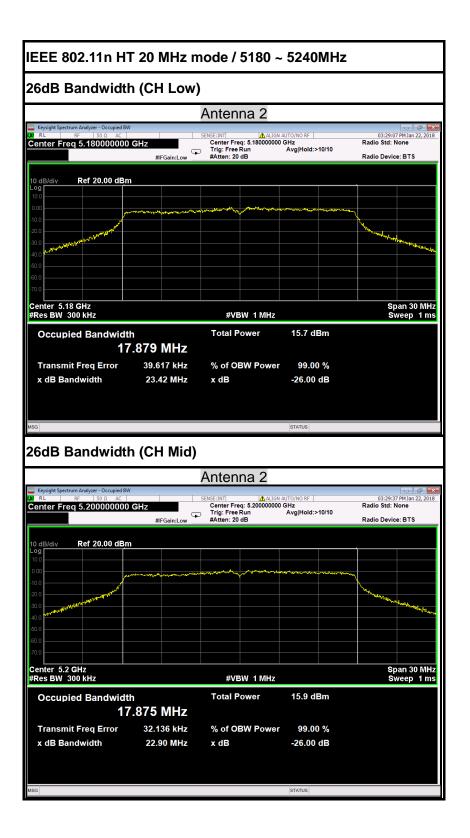


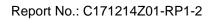


IEEE 802.11n HT 20 MHz n	node / 5180	~ 5240MHz	
26dB Bandwidth (CH Low)		
	Antenna 1		
Registing Spectrum Analyzer - Occupied BW RL S0.0 AC Center Freq 5.180000000 GHz #IFGain:Low	Center Freq: 5.180000	IGN AUTO/NO RF 1000 GHz Avg Hold:>10/10	03:28:47 PM Jan 22, 2018 Radio Std: None Radio Device: BTS
10 dB/div Ref 20.00 dBm			
10.0			
-10.0	and the second	and a construction of the second s	
-20.0			Markinker Marking States
-40.0			
-60.0			
Center 5.18 GHz #Res BW 300 kHz	#VBW 1 MH	z	Span 30 MHz Sweep 1 ms
Occupied Bandwidth	Total Power		
17.963 MHz			
Transmit Freq Error 89.127 kHz x dB Bandwidth 23.80 MHz	% of OBW Pow x dB	er 99.00 % -26.00 dB	
		-20.00 48	
MSG		STATUS	
26dB Bandwidth (CH Mid)			
	Antenna 1		
Keysight Spectrum Analyzer - Occupied BW RL RF 50 Ω AC Center Freq 5.2000000000 GHz	Center Freq: 5.200000		03:28:22 PM Jan 22, 2018 Radio Std: None
#FGain:Low	Trig: Free Run #Atten: 20 dB	Avg Hold:>10/10	Radio Device: BTS
10 dB/div Ref 20.00 dBm			
-10.0	werner and a start water		n have been a second se
-30.0			and the strategy and a second s
-40.0			
-60.0			
Center 5.2 GHz #Res BW 300 kHz	#VBW 1 MH	7	Span 30 MHz Sweep 1 ms
Occupied Bandwidth	Total Power	15.2 dBm	
17.937 MHz			
Transmit Freq Error 49.101 kHz	% of OBW Pow		
v dB Bandwidth 22.45 MU-			
x dB Bandwidth 23.45 MHz	x dB	-26.00 dB	
x dB Bandwidth 23.45 MHz	x dB	-26.00 dB	

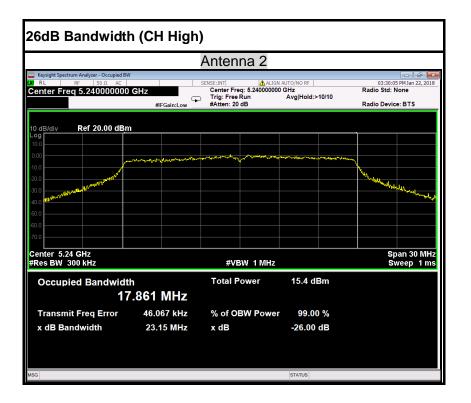




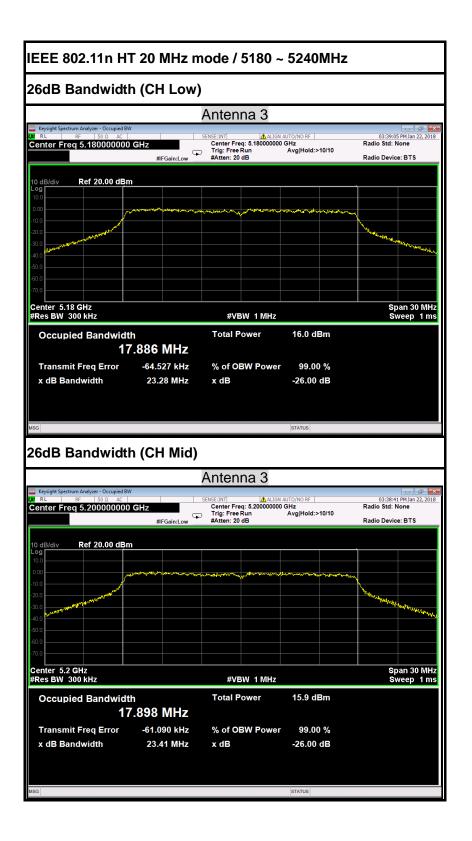




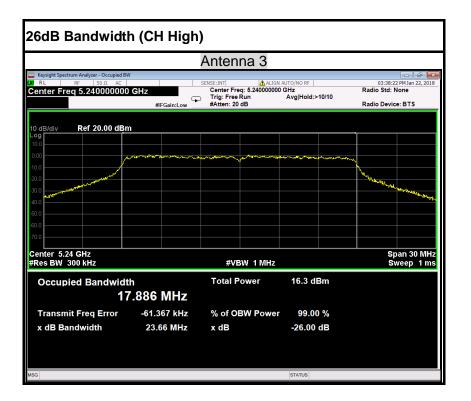




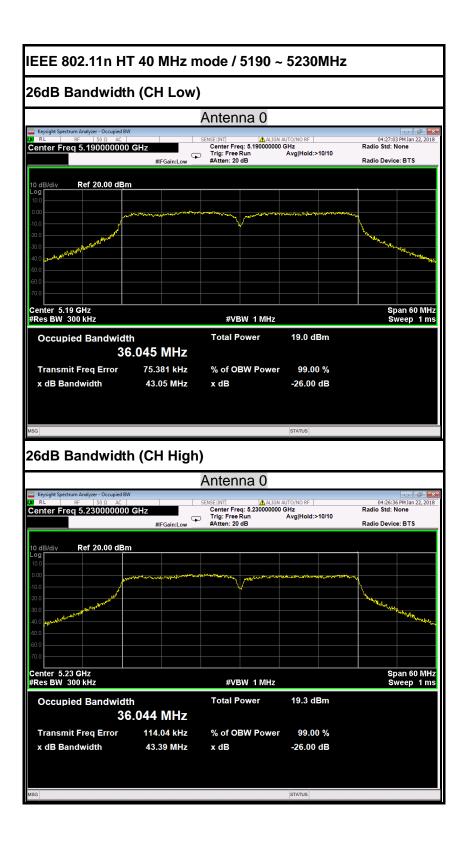




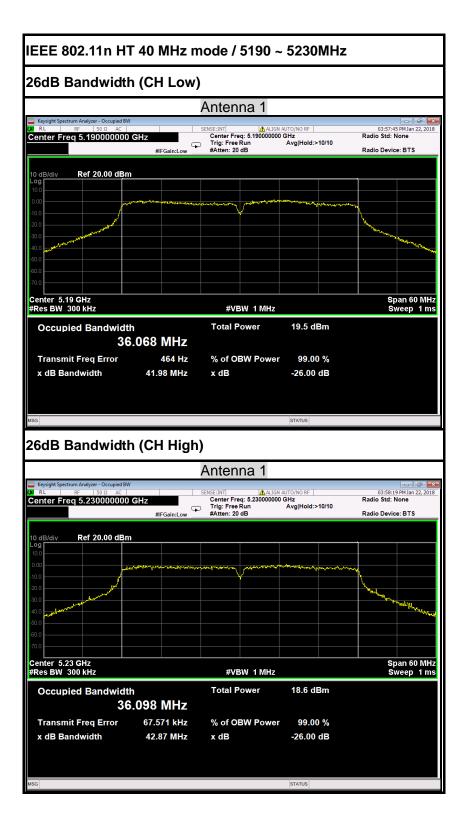








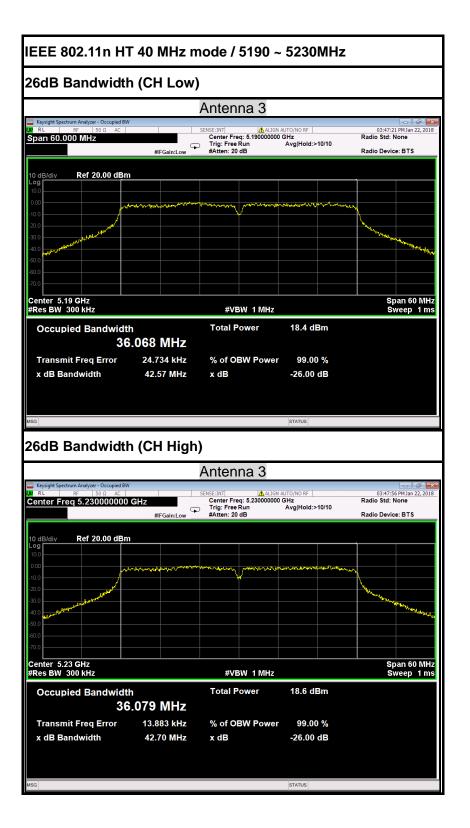




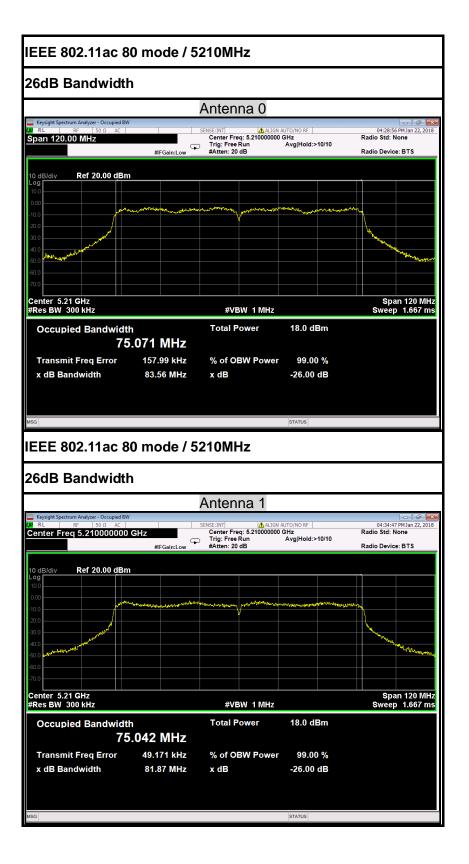


	mode / 5190 ~	[,] 5230MH	Z
26dB Bandwidth (CH Lov	w) Antenna 2		
Keysight Spectrum Analyzer - Occupied BW M RL RP 50 Ω AC Center Freq 5.190000000 GHz #/FGain:Low	SENSE:INT ALIGN AUT Center Freq: 5.190000000 GH Trig: Free Run A		03:56:39 PM Jan 22, 2018 Radio Std: None Radio Device: BTS
10 dB/div Ref 20.00 dBm			
0.00	manuschard provision		
-10.0 -20.0	₩ 		A AND AND AND AND AND AND AND AND AND AN
-30.0			more hard a start and a start a
-50.0			
-70.0 Center 5.19 GHz			Span 60 MHz
#Res BW 300 kHz Occupied Bandwidth	#VBW 1 MHz Total Power	19.5 dBm	Sweep 1 ms
x dB Bandwidth 43.13 MHz		-26.00 dB	
26dB Bandwidth (CH Hig		STATUS	
	Antenna 2		
Keysight Spectrum Analyzer - Occupied BW Rt	SENSE:INT ALIGN AUTO	z	03:56:11 PM Jan 22, 2018 Radio Std: None
#IFGain:Low	Trig: Free Run A	vg Hold:>10/10	Radio Device: BTS
#FGain:Low	Trig: Free Run A	vg Hold:>10/10	
#FGain:Low	Trig: Free Run A	vg Hold:>10/10	
#FGain:Low	Trig: Free Run A	vg Hold:>10/10	Radio Device: BTS
#FGain:Low	Trig: Free Run A	vg Hold:>10/10	
#FGainLow	Trig: Free Run A	vg Hold:>10/10	Radio Device: BTS
#FGain:Low	Trig: Free Run A #Atten: 20 dB	vg Hold:>10/10	Radio Device: BTS
#FGain:Low	Total Power	vg Hold:>10/10	Radio Device: BTS
PFGainLow 10 dB/div Ref 20.00 dBm 10 dB/div	Total Power	19.7 dBm	Radio Device: BTS
#FGain:Low	Total Power % of OBW Power		Radio Device: BTS

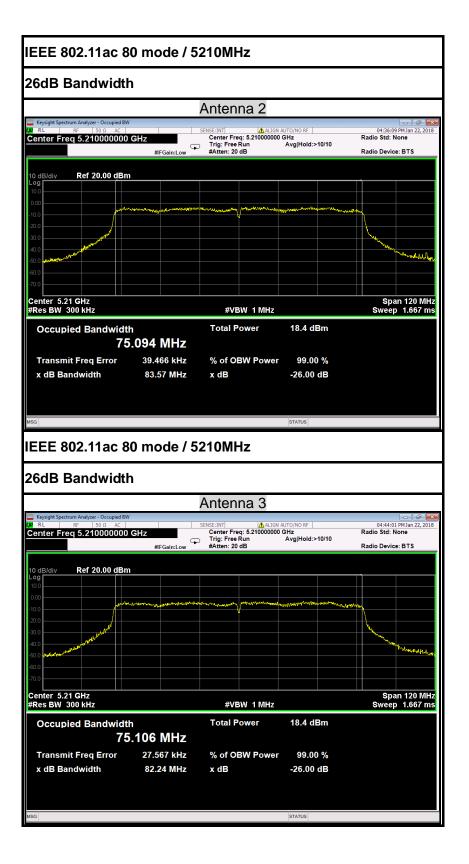














6.2 6dB BANDWIDTH MEASUREMENT

6.2.1 LIMITS

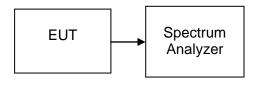
According to §15.407(e), Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

6.2.2 TEST PROCEDURES (please refer to measurement standard)

8.1 Option 2:

The automatic bandwidth measurement capability of an instrument may be employed using the X dB bandwidth mode with X set to 6 dB, if the functionality described above (i.e., RBW = 100 kHz, VBW \ge 3 RBW, peak detector with maximum hold) is implemented by the instrumentation function. When using this capability, care shall be taken so that the bandwidth measurement is not influenced by any intermediate power nulls in the fundamental emission that might be \ge 6 dB.

6.2.3 TEST SETUP





6.2.4 TEST RESULTS

No non-compliance noted

Test Data

Test mode: IEEE 802.11a mode / 5745 ~ 5825MHz

Channel	Frequency		6dB Bandv (MH	· · ·		Limit	Test Result
	(MHz)	Antenna 0	Antenna 1	Antenna 2	Antenna 3	(kHz)	
Low	5745	16.33	16.32	16.32	16.33		PASS
Mid	5785	16.31	16.32	16.32	16.33	>500	PASS
High	5825	16.31	16.31	16.32	16.33		PASS

Test mode: IEEE 802.11n HT 20 MHz mode / 5745 ~ 5825MHz

Channel	Frequency	6dB Bandwidth(B) (MHz)				Limit	Test Result
	(MHz)	Antenna 0	Antenna 1	Antenna 2	Antenna 3	(kHz)	
Low	5745	15.13	16.31	15.11	17.62		PASS
Mid	5785	15.11	16.06	17.57	17.59	>500	PASS
High	5825	15.11	16.29	16.07	17.58		PASS

Test mode: IEEE 802.11n HT 40 MHz mode / 5755 ~ 5795MHz

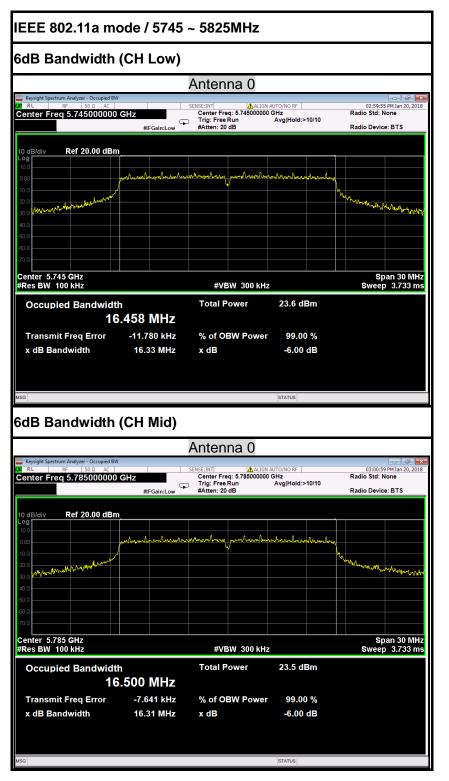
Channel	Frequency		6dB Band (MF	· · ·		Limit	Test Result
	(MHz)	Antenna 0	Antenna 1	Antenna 2	Antenna 3	(kHz)	
Low	5755	35.14	35.13	35.34	35.36	>500	PASS
High	5795	35.17	35.08	35.91	35.45	>000	PASS

Test mode: IEEE 802.11ac 80 mode / 5775MHz

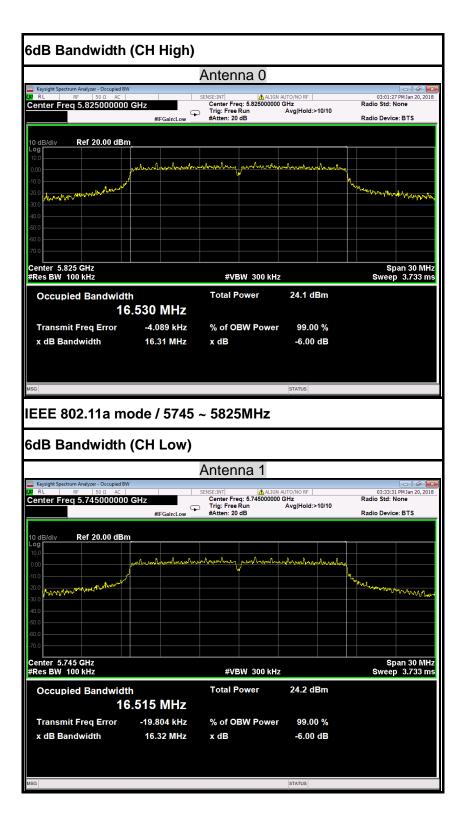
Channel	Frequency		6dB Bandwidth(B) (MHz)				Test Result
	(MHz)	Antenna 0	Antenna 1	Antenna 2	Antenna 3	(kHz)	
	5775	75.13	73.91	75.08	75.12	>500	PASS



Test Plot







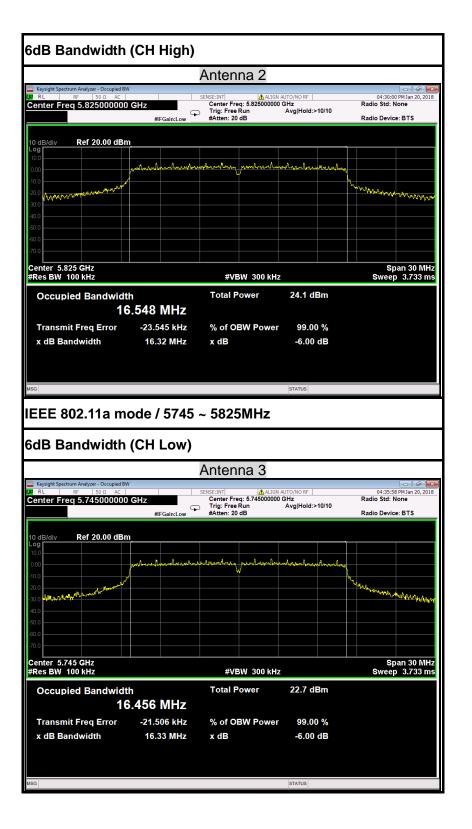


		Antenna 1		
ekeysight Spectrum Analyzer - Occupied BW RL RF 50 Ω AC Center Freq 5.7850000000		Center Freq: 5.78500000	N AUTO/NO RF 0 GHz Avg Hold:>10/10	03:34:03 PM Jan 20, 2018 Radio Std: None Radio Device: BTS
0 dB/div Ref 20.00 dBn	n			
.00	population	moundary muchant	mound	
0.0				Mark Marrid Mar 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
3.0				
0.0				
1.0				
enter 5.785 GHz Res BW 100 kHz		#VBW 300 kH	z	Span 30 MH: Sweep 3.733 m
Occupied Bandwidt	^h 5.529 MHz	Total Power	24.2 dBm	
Transmit Freq Error	-23.929 kHz	% of OBW Power	r 99.00 %	
x dB Bandwidth	16.32 MHz	x dB	-6.00 dB	
	(CH High)		STATUS	
G dB Bandwidth Keysight Spectrum Analyzer - Occupied BIX RL BF 500. AC enter Freq 5:82550000000	GHz	Center Freq: 5.82500000	N AUTO/NO RF	03:34:32 PM Jan 20, 2016 Radio Std: None
dB Bandwidth		SENSE:INT ALIG	N AUTO/NO RF	03:34:32 PM Jan 20, 2018
dB Bandwidth Keysight Spectrum Analyzer - Occupied BW RL RF 50 R AC enter Freq 5.825000000 enter Freq 5.825000000 enter Freq 5.825000000	GHz #FGain:Low	SENSE:INT ALIG Center Freq: 5.82500000 Trig: Free Run	N AUTO/NO RF	03:34:32 PM Jan 20, 2018 Radio Std: None
dB Bandwidth Keysight Spectrum Analyzer - Occupied BW RL BF 50 G AC enter Freq 5.8250000000 dB/div Ref 20.00 dBm 0	GHz #FGaint.ow	SENSE:INT ALIGI Center Freq: 5.82500000 Trig: Free Run #Atten: 20 dB	N AUTO/NO RF 0 GHz Avg Hold:>10/10	
dB Bandwidth Keysight Spectrum Analyzer - Occupied BV RL BF 500 AC enter Freq 5.825000000 dB/dlv Ref 20.00 dBm 9	GHz #FGaint.ow	SENSE:INT ALIG Center Freq: 5.82500000 Trig: Free Run	N AUTO/NO RF 0 GHz Avg Hold:>10/10	03:34:32 PM Jan 20, 2016 Radio Std: None Radio Device: BTS
dB Bandwidth Keysight Spectrum Analyzer - Occupied BW RL RF 50Ω AC enter Freq 5.8250000000	GHz #FGaint.ow	SENSE:INT ALIGI Center Freq: 5.82500000 Trig: Free Run #Atten: 20 dB	N AUTO/NO RF 0 GHz Avg Hold:>10/10	03:34:32 PM Jan 20, 2018 Radio Std: None
dB Bandwidth Reysight Spectrum Analyzer - Occupied BW RL RF 50.0 AC enter Freq 5.8250000000	GHz #FGaint.ow	SENSE:INT ALIGI Center Freq: 5.82500000 Trig: Free Run #Atten: 20 dB	N AUTO/NO RF 0 GHz Avg Hold:>10/10	03:34:32 PM Jan 20, 2016 Radio Std: None Radio Device: BTS
dB Bandwidth Keysight Spectrum Analyzer - Occupied BW RL BF 50 G AC enter Freq 5.8250000000 dB/div Ref 20.00 dBm 00 00 00 00 00 00 00 00 00 00 00 00 0	GHz #FGaint.ow	SENSE:INT ALIGY Center Freq: 5.82500000 Trig: Free Run #Atten: 20 dB	N AUTO/NO RF 0 GHz Avg Hold:>10/10	03:34:32 PM Jan 20,2018 Radio Std: None Radio Device: BTS
dB Bandwidth Keysight Spectrum Analyzer - Occupied BW RL RF 150 0. AC enter Freq 5.8250000000 dB/div Ref 20.00 dBm	GHz #FGaint.ow	SENSE:INT ALIGY Center Freq: 5.82500000 Trig: Free Run #Atten: 20 dB	N AUTO/NO RF 0 GHz Avg Hold:>10/10	03:34:32 PM Jan 20,2018 Radio Std: None Radio Device: BTS
dB Bandwidth Keysight Spectrum Analyzer - Occupied BW RLRPSO Q _ AC_ enter Freq 5.8250000000 D dB/div Ref 20.00 dBm 00 00 00 00 00 00 00 00 00 00 00 00 00	GHz #FGaint.ow	SENSE:INT ALIGY Center Freq: 5.82500000 Trig: Free Run #Atten: 20 dB	N AUTO/NO RF 0 GHz Avg Hold:>10/10	03:34:32 PM Jan 20,2018 Radio Std: None Radio Device: BTS
dB Bandwidth Keysight Spectrum Analyzer - Occupied BW RL RF 500, AC enter Freq 5.8250000000 dB/dlv Ref 20.00 dBm g g g g g g g g g	GHz #FGaint.ow	SENSE:INT ALIGY Center Freq: 5.82500000 Trig: Free Run #Atten: 20 dB	V AUTO/NO RF 0 GHz Avg Hold:>10/10	03:34:32 PM Jan 20,2018 Radio Std: None Radio Device: BTS
dB Bandwidth	GHz #IFGain:Low	SENSEJINT ALIG Center Freq: 5.8250000 Trig: Free Run #Atten: 20 dB	V AUTO/NO RF 0 GHz Avg Hold:>10/10	03:34:32 PM Jan 20, 2016 Radio Std: None Radio Device: BTS
dB Bandwidth Resignt Spectrum Analyzer - Occupied BW RL RF 50 A AC enter Freq 5.825000000 def/div Ref 20.00 dBm genter 5.825 GHz Res BW 100 kHz Occupied Bandwidtt Transmit Freq Error	GHz #FGain:Low	SENSE:INT ALIG Center Freq: 5.8250000 Trig: Free Run #Atten: 20 dB	۲ Auto/No RF 0 GHz Avg Hold:>10/10 2 24.5 dBm	03:34:32 PM Jan 20, 2016 Radio Std: None Radio Device: BTS
dB Bandwidth Revisit Spectrum Analyzer - Occupied BW RL RF 50Ω AC enter Freq 5.8250000000 D dB/div Ref 20.00 dBm 00 00 00 00 00 00 00	GHz #FGain:Low	SENSE:INT ALIG Center Freq: 5.8250000 Trig: Free Run #Atten: 20 dB	۲ 4 می TO/NO RF 0 GHz Avg Hold:>10/10 2 24.5 dBm	03:34:32 PM Jan 20, 2016 Radio Std: None Radio Device: BTS



IEEE 802.11a mo	ode / 5745	~ 5825MHz		
6dB Bandwidth	(CH Low)			
		Antenna 2		
Keysight Spectrum Analyzer - Occupied BW RL RF 50 Q AC Center Freq 5.745000000		Center Freq: 5.7450000	6N AUTO/NO RF 00 GHz Avg Hold:>10/10	04:28:59 PM Jan 20, 2018 Radio Std: None Radio Device: BTS
10 dB/div Ref 20.00 dBm				
10.0	. almenta onta on the	monthing month	monoral and monday	
0.00	ويتعيالهم ومعاليهم ومسالعة واليعط ارمين	almannan partnahil	and real of the standard and	h
-20.0				"Throw we want when the way
-40.0				
-60.0				
-70.0				
Center 5.745 GHz #Res BW 100 kHz		#VBW 300 kH	iz	Span 30 MHz Sweep 3.733 ms
Occupied Bandwidth	ı	Total Power	23.2 dBm	
16	.468 MHz			
Transmit Freq Error	-19.104 kHz	% of OBW Powe		
x dB Bandwidth	16.32 MHz	x dB	-6.00 dB	
ASG			STATUS	
6dB Bandwidth	(CH Mid)			
Keysight Spectrum Analyzer - Occupied BW		Antenna 2		
Reysign Spectrum Analyze Occupied bit RL RF 50 Ω AC Center Freq 5.7850000000	GHz	Center Freq: 5.7850000	N AUTO/NO RF 00 GHz Avg Hold:>10/10	04:29:27 PM Jan 20, 2018 Radio Std: None Radio Device: BTS
10 dB/div Ref 20.00 dBm				
0.00	mbrandarah	monentry andread	monterenterenter	
-10.0				March March 1
-30.0				and the second s
-50.0				
-60.0				
Center 5.785 GHz				Span 30 MHz
#Res BW 100 kHz		#VBW 300 kH		Sweep 3.733 ms
Occupied Bandwidth 16	י .512 MHz	Total Power	23.4 dBm	
Transmit Freq Error	-25.849 kHz	% of OBW Powe	er 99.00 %	
x dB Bandwidth	16.32 MHz	x dB	-6.00 dB	
MSG			STATUS	





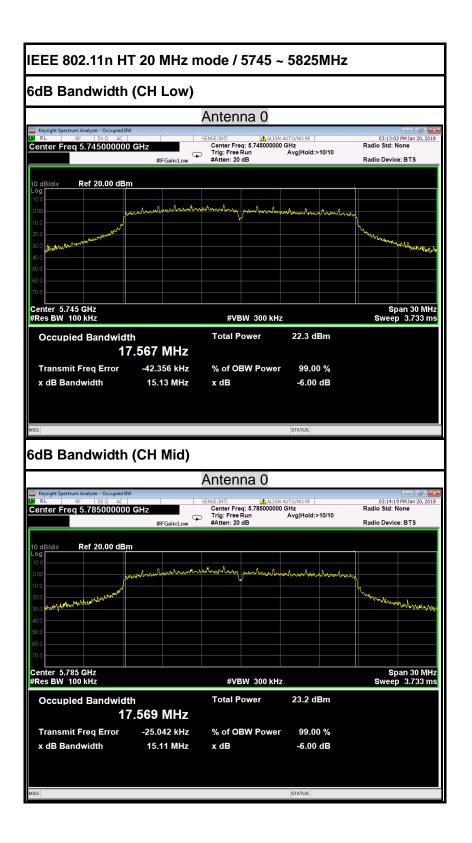


6dB Bandwidth (CH Mid) Antenna 3 Keysight Spectrum Analyzer - Occupied BW 04:36:20 PM Jan 20, 2018 Radio Std: None Center Freq: 5.78500000 GHz Trig: Free Run Avg|Hold:>10/10 #Atten: 20 dB Center Freq 5.785000000 GHz #EGain:Lov Radio Device: BTS Ref 20.00 dBm And when the Span 30 MHz Sweep 3.733 ms Center 5.785 GHz #Res BW 100 kHz #VBW 300 kHz 22.7 dBm **Occupied Bandwidth** Total Power 16.473 MHz Transmit Freq Error -28.124 kHz % of OBW Power 99.00 % x dB Bandwidth 16.33 MHz -6.00 dB x dB 6dB Bandwidth (CH High) Antenna 3 04:37:09 PM Jan 20, 2018 Radio Std: None
 SENSE:INT
 ALIGN AUTO/NO RF

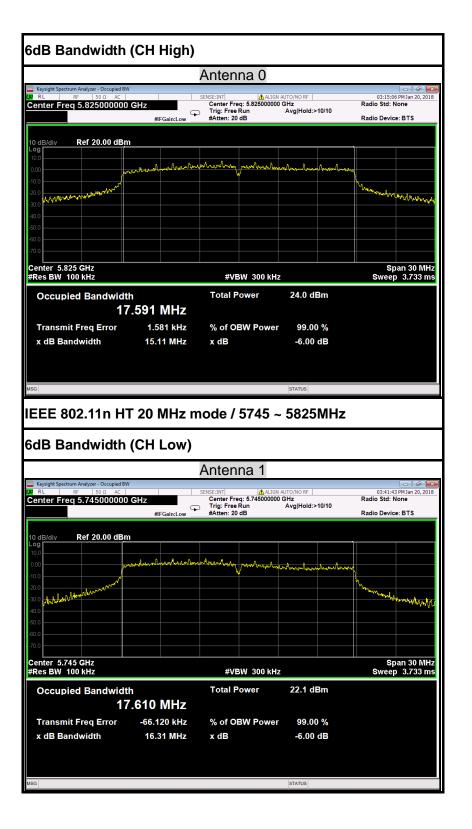
 Center Freq: 5.82500000 GHz
 Trig: Free Run Avg|Hold:>10/10

 #Atten: 20 dB
 A
 Center Freq 5.825000000 GHz ⊋ #IFGain:Low Radio Device: BTS Ref 20.00 dBm 10 dE worknown معهم المالر Center 5.825 GHz #Res BW 100 kHz Span 30 MHz Sweep 3.733 ms #VBW 300 kHz 23.3 dBm **Occupied Bandwidth** Total Power 16.478 MHz -22.583 kHz **Transmit Freq Error** % of OBW Power 99.00 % 16.33 MHz x dB Bandwidth x dB -6.00 dB STATUS

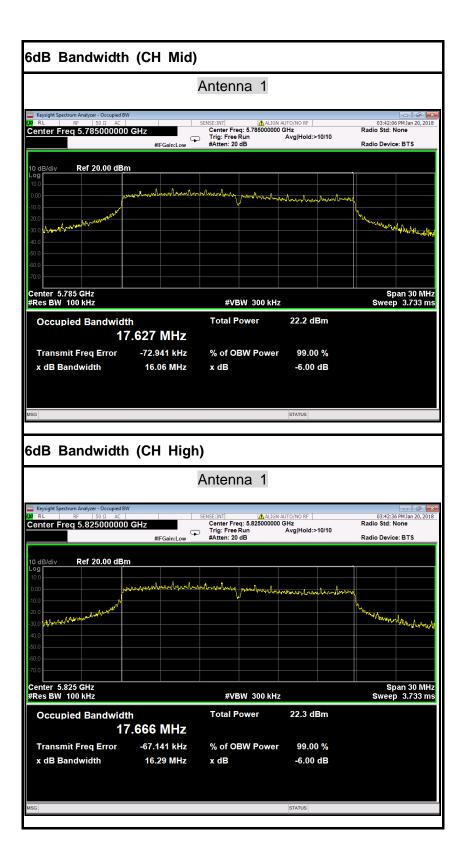




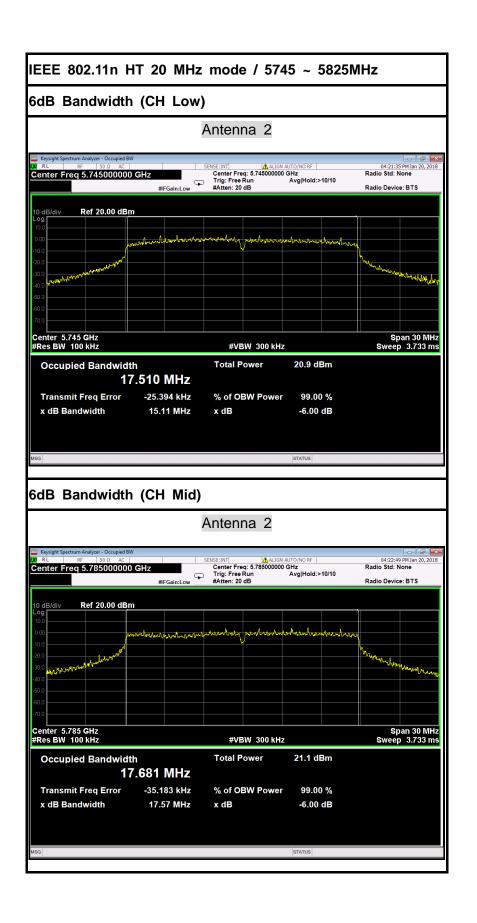














dB Bandwidth	(CH Hìgh)			
		Antenna 2		
Keysight Spectrum Analyzer - Occupied B RL RF 50 Ω AC Center Freq 5.825000000) GHz	Center Freq: 5.82500000 Trig: Free Run	AUTO/NO RF O GHz Avg Hold:>10/10	04:23:33 PM Jan 20, 2018 Radio Std: None
	#IFGain:Low	#Atten: 20 dB		Radio Device: BTS
o dB/div Ref 20.00 dBr	n			
0.00	monteman	mannal portrain	wAmonAmondana Amon	
10.0		V		
0.0 Hollow Walth warman				
0.0				
0.0				
0.0				
enter 5.825 GHz Res BW⊨100 kHz		#VBW 300 kHz	2	Span 30 MH Sweep 3.733 m
Occupied Bandwid	th	Total Power	21.9 dBm	
17	7.548 MHz			
Transmit Freq Error	-39.845 kHz	% of OBW Power		
x dB Bandwidth	16.07 MHz	x dB	-6.00 dB	
G				
su			STATUS	
EEE 802.11n H	T 20 MHz n	node / 5745 ~		
EEE 802.11n H				
EEE 802.11n H dB Bandwidth	(CH Low)	Antenna 3	- 5825MHz	
EEE 802.11n H dB Bandwidth	(CH Low)		5825MHz AUTO/NO RF	
EEE 802.11n H dB Bandwidth keysight Spectrum Analyzer-Occupied B keysight Spectrum Analyzer-Occupied AC enter Freq 5.7450000000	(CH Low)	Antenna 3	- 5825MHz	04:21:53 PM Jan 20, 201 Radio Std: None
EEE 802.11n H dB Bandwidth kextight Spectrum Analyzer - Occupied B enter Freq 5.7450000000	(CH Low)	Antenna 3	- 5825MHz	04:21:53 PM Jan 20, 201 Radio Std: None
EEE 802.11n H dB Bandwidth keynight Spectrum Analyzer - Occupied B RL BF 50.0 AC enter Freq 5.745000000	(CH Low)	Antenna 3 SENSE:INT Center Freq: 5.74500000 Trig: Freq: Run #Atten: 20 dB	- 5825MHz	04:21:53 PM Jan 20, 201 Radio Std: None
EEE 802.11n H dB Bandwidth keysight Spectrum Analyzer - Occupied B enter Freq 5.745000000	(CH Low)	Antenna 3 SENSE:INT Center Freq: 5.74500000 Trig: Freq: Run #Atten: 20 dB	- 5825MHz	04:21:53 PM Jan 20, 201 Radio Std: None Radio Device: BTS
EEE 802.11n H dB Bandwidth dB Bandwidth keyight Spectrum Analyzer - Occupied B RL BF 150 0 AC enter Freq 5.745000000	(CH Low)	Antenna 3 SENSE:INT Center Freq: 5.74500000 Trig: Freq: Run #Atten: 20 dB	- 5825MHz	04:21:53 PM Jan 20, 201 Radio Std: None
EEE 802.11n H dB Bandwidth keylight Spectrum Analyzer - Occupied B enter Freq 5.745000000	(CH Low)	Antenna 3 SENSE:INT Center Freq: 5.74500000 Trig: Freq: Run #Atten: 20 dB	- 5825MHz	04:21:53 PMJan 20, 201 Radio Std: None Radio Device: BTS
EEE 802.11n H	(CH Low)	Antenna 3 SENSE:INT Center Freq: 5.74500000 Trig: Freq: Run #Atten: 20 dB	- 5825MHz	04:21:53 PMJan 20, 201 Radio Std: None Radio Device: BTS
EEE 802.11n H dB Bandwidth dB Bandwidth keyight Spectrum Analyzer - Occupied B R B 50 0 AC enter Freq 5.745 GHz	(CH Low)	Antenna 3	- 5825MHz	Radio Device: BTS
EEE 802.11n H dB Bandwidth dB Bandwidth	(CH Low)	Antenna 3	AUTO/NO RF GHz Avg Hold:>10/10	04:21:53 PM Jan 20, 201 Radio Std: None Radio Device: BTS
EEE 802.11n H dB Bandwidth dB Bandwidth keylight Spectrum Analyzer - Occupied B R B Bandwidth R B Bandwidth R B Bandwidth Sector Freq 5.745 GHz Res EW 100 kHz Occupied Bandwidth	(CH Low)	Antenna 3	- 5825MHz	04:21:53 PM Jan 20, 201 Radio Std: None Radio Device: BTS
EEE 802.11n H dB Bandwidth dB Bandwidth kgrightSpectrum Anilyzer - Occupied B RL BP 150 0 AC enter Freq 5.745000000 d d d d d d d d d d d d d d d d d	(CH Low)	Antenna 3	20.9 dBm	04:21:53 PM Jan 20, 201 Radio Std: None Radio Device: BTS
EEE 802.11n H dB Bandwidth dB Bandwidth keysight Spectrum Analyzer - Occupied B R R PF 50.0 AC center Freq 5.745000000	(CH Low)	Antenna 3	20.9 dBm	04:21:53 PM Jan 20, 201 Radio Std: None Radio Device: BTS
EEE 802.11n H dB Bandwidth dB Bandwidth classification Analyzer - Occupied B RL 87 150 0 AC enter Freq 5.745000000 d d d d d d d d d d d d d d d d d	(CH Low)	Antenna 3	20.9 dBm 99.00 %	04:21:53 PM Jan 20, 201 Radio Std: None Radio Device: BTS
EEE 802.11n H dB Bandwidth dB Bandwidth classification Analyzer - Occupied B RL 87 150 0 AC enter Freq 5.745000000 d d d d d d d d d d d d d d d d d	(CH Low)	Antenna 3	20.9 dBm 99.00 %	04:21:53 PM Jan 20, 201 Radio Std: None Radio Device: BTS



6dB Bandwidth	(CH Mid)			
	ļ	Antenna 3		
Keysight Spectrum Analyzer - Occupied BW RL RF 50 Ω AC Center Freq 5.785000000		Center Freq: 5.78500000	AUTO/NO RF GHz Avg Hold:>10/10	04:22:29 PM Jan 20, 2018 Radio Std: None
	#IFGain:Low	#Atten: 20 dB		Radio Device: BTS
10 dB/div Ref 20.00 dBm Log 10.0				
10.0	worknown	and the second	hold ward warden	A.vun
20.0 30.0 40.0				Whow have had a some where have have had
40.0				
-60.0				
Center 5.785 GHz #Res BW 100 kHz		#VBW 300 kHz		Span 30 MHz Sweep 3.733 ms
Occupied Bandwidt		Total Power	21.1 dBm	
17 Transmit Freq Error	.689 MHz	% of OBW Power	99.00 %	
x dB Bandwidth	17.59 MHz	x dB	-6.00 dB	
			STATUS	
) Antenna 3	STATUS	
6dB Bandwidth		Antenna 3	AUTO/NO RF	04:23:14 PMJ An 20, 2018 Radio Stci None Radio Device: BTS
SdB Bandwidth	GHz #FGain:Low	Antenna 3 SENSE:INT ALIGN Center Freq: 5.825000000 Trig: Free Run	AUTO/NO RF	04:23:14 PM Jan 20, 2018 Radio Std: None
SdB Bandwidth Krysight Spectrum Analyzer - Occupied BW RL RF S0 Q AC Center Freq 5.8250000000 10 dB/div Ref 20.00 dBm 100 Ref Ref S0 Q	GHz #FGain:Low	Antenna 3 SENSE:INT ALIGN Center Freq: 5.825000000 Trig: Free Run	AUTO/NO RF	04:23:14 PM Jan 20, 2018 Radio Std: None
6dB Bandwidth Keysight Spectrum Analyzer - Occupied BW RL RF SO Q AC Center Freq 5.8250000000 100 Ref 20.00 dBm 000 AC	GHz #FGain:Low	Antenna 3 SENSE:INT ALIGN Center Freq: 5.825000000 Trig: Free Run	AUTO/NO RF	04:23:14 PM Jan 20, 2018 Radio Std: None
SodB Bandwidth Keysight Spectrum Analyzer - Occupied BW RL RF SO AC Center Freq 5.8250000000 10 dB/div Ref 20.00 dBm 0 0	GHz #FGain:Low	Antenna 3 SENSE:INT ALIGN Center Freq: 5.825000000 Trig: Free Run	AUTO/NO RF	04:23:14 PM Jan 20, 2018 Radio Std: None
RL RF 50.0 AC Center Freq 5.825000000 Ref 20.00 dBm Max 2000 dBm	GHz #FGain:Low	Antenna 3 SENSE:INT ALIGN Center Freq: 5.825000000 Trig: Free Run	AUTO/NO RF	04:23:14 PM Jan 20, 2018 Radio Std: None Radio Device: BTS
SdB Bandwidth	GHz #FGain:Low	Antenna 3 SENSE:INT ALIGN Center Freq: 5.825000000 Trig: Free Run	AUTO/NO RF	04:23:14 PM Jan 20, 2018 Radio Std: None Radio Device: BTS
SdB Bandwidth Krysight Spectrum Analyzer - Occupied BW RL RF S0 0 AC Center Freq 5.825000000 10 Ref 20.00 dBm 100 Mark Mark Mark Mark Mark Mark 100 Mark Mark Mark Mark Mark Mark Mark Mark Mark Mark 100 Mark Mark Mark Mark Mark Ref 20.00 dBm Mark Mark Mark Mark 100 Mark Mark Mark Mark Mark Mark Mark Mark	GHz #FGain:Low	Antenna 3	AUTO/NO RF GHz Avg[Hold:>10/10	04:23:14 PM Jan 20, 2018 Radio Std: None Radio Device: BTS
SodB Bandwidth Exploit Spectrum Analyzer - Occupied BW RL RF SO AC Center Freq 5.825000000 10 dB/dlv Ref 20.00 dBm Log Market Arrows 000 Market Arrows <	GHz #FGain:Low	Antenna 3	AUTO/NO RF C GHz Avg]Hold:>10/10	04:23:14 PMJan 20, 2018 Radio Std: None Radio Device: BTS
SdB Bandwidth Explicit Spectrum Analyzer - Occupied BW RL OF State State Center Freq 5.825000000 Odd/div Ref 20.00 dBm Odd Mark Odd Mark Occupied Bandwidth Transmit Freq Error	GHz #FGain:Low	Antenna 3 SENSE:INT ALLON Center Freq: 5.825000000 Trig: Freq Run #Atten: 20 dB #VBW 300 kHz Total Power % of OBW Power	AUTO/NO RF GHz Avg Hold:>10/10	04:23:14 PMJan 20, 2018 Radio Std: None Radio Device: BTS
SdB Bandwidth Edge Social Spectrum Analyzer - Occupied BW RL OF Social Spectrum Analyzer - Occupied BW Occupied Bandwidttl Total Spectrum Analyzer - Occupied Bandwidttl	GHz #FGain:Low	Antenna 3 SENSE:INT ALLON Center Freq: 5.82500000 Trig: Freq Run #Atten: 20 dB #Atten: 20 dB #VEW 300 kHz Total Power	AUTO/NO RF GHz Avg Hold:>10/10	04:23:14 PMJan 20, 2018 Radio Std: None Radio Device: BTS
SdB Bandwidth Explicit Spectrum Analyzer - Occupied BW RL OF State State Center Freq 5.825000000 Odd/div Ref 20.00 dBm Odd Mark Odd Mark Occupied Bandwidth Transmit Freq Error	GHz #FGain:Low	Antenna 3 SENSE:INT ALLON Center Freq: 5.825000000 Trig: Freq Run #Atten: 20 dB #VBW 300 kHz Total Power % of OBW Power	AUTO/NO RF GHz Avg Hold:>10/10	04:23:14 PMJan 20, 2018 Radio Std: None Radio Device: BTS



EEE 802.11n H			55 ~ 5795	MHz
	-	Antenna 0		
Keysight Spectrum Analyzer - Occupied BW RL RF 50 Ω AC Center Freq 5.755000000	GHz #FGain:Low	Center Freq: 5.755000000	AUTO/NO RF GHz Avg Hold:>10/10	03:20:15 PM Jan 20, 2018 Radio Std: None Radio Device: BTS
10 dB/div Ref 20.00 dBm				
10.0	lan markan palan	hallow water	huberturnendersturder	wh
-10.0	inen jaran eta izan geratari eta ara		adreadin risearch brief her h	
-30.0				Marcan Market Why 1000
-50.0				
Center 5.755 GHz #Res BW 100 kHz		#VBW 300 kHz		Span 60 MHz Sweep 7.467 ms
15G			STATUS	
	(CH High)	STATUS	
dB Bandwidth) Antenna 0	STATUS	
6dB Bandwidth Keysight Spectrum Analyzer - Occupied BW RL RF 50.0 AC		Antenna 0	AUTO/NO RF	03:20:43 PM Jan 20, 2018 Radio Std: None Radio Device: BTS
SodB Bandwidth Keysight Spectrum Analyzer - Occupied BW RL RF SO.Q AC Center Freq 5.795000000 In deJ/dly Ref 20.00 dBm	GHz #FGain:Low	Antenna 0 SENSE:INT ALIGN Center Freq: 5.795000000 Trig: Free Run	AUTO/NO RF	03:20:43 PM Jan 20, 2018 Radio Std: None
SdB Bandwidth Koyight Spectrum Analyzer - Occupied BW RL RF RL SO 0 AC Center Freq 5.7950000000 Io dB/div Ref 20.00 dBm 10 dB/div Ref 20.00 dBm	GHz #FGain:Low	Antenna 0 Sense:Inti Center Freq: 5.79500000 Trig: Free Run #Atten: 20 dB	AUTO/NO RF	03:20:43 PM Jan 20, 2018 Radio Std: None Radio Device: BTS
SdB Bandwidth Koyight Spectrum Analyzer - Occupied BW RL RF RL SO 0 AC Center Freq 5.7950000000 Io dB/div Ref 20.00 dBm 10 dB/div Ref 20.00 dBm	GHz #FGain:Low	Antenna 0 Sense:Inti Center Freq: 5.79500000 Trig: Free Run #Atten: 20 dB	AUTO/NO RF	03:20:43 PM Jan 20, 2018 Radio Std: None Radio Device: BTS
SodB Bandwidth Keysight Spectrum Analyzer - Occupied BW RL RF S0:0 AC Center Freq 5.7950000000 10 dB/dly Ref 20.00 dBm Log	GHz #FGain:Low	Antenna 0 Sense:Inti Center Freq: 5.79500000 Trig: Free Run #Atten: 20 dB	AUTO/NO RF	03:20:43 PM Jan 20, 2018 Radio Std: None Radio Device: BTS
SodB Bandwidth Keysight Spectrum Analyzer - Occupied BW RL OF In a B/div Ref 20.00 dBm 10 dB/div Ref 20.00 dBm 100 dB/div Ref 20.00 dBm	GHz #FGain:Low	Antenna 0 Sense:Inti Center Freq: 5.79500000 Trig: Free Run #Atten: 20 dB	AUTO/NO RF	03:20:43 PMJan 20,2018 Radio Std: None Radio Device: BTS
Center Freq 5.795000000	GHz #FGain:Low	Antenna O	AUTO/NO RF	03:20:43 PM Jan 20, 2018 Radio Std: None Radio Device: BTS
SodB Bandwidth Krysight Spectrum Analyzer - Occupied BW R L BF ISO 0 AC Center Freq 5.795000000 10 dB/div Ref 20.00 dBm 100	GHz #FGain:Low	Antenna 0 Sense:Inti Center Freq: 5.79500000 Trig: Free Run #Atten: 20 dB	AUTO/NO RF	03:20:43 PM Jan 20, 2018 Radio Std: None Radio Device: BTS
Sold B Bandwidth Keysight Spectrum Analyzer - Occupied BW RE SOL AC RE RF SOL AC Center Freq 5.7950000000 AC 10 dB/div Ref 20.00 dBm 1	GHz #FGain:Low [welgator/pelanos-/txelow]. 142 MHz	Antenna O SENSE INTI ALION Center Free: 5.78500000 Trig: Free Run #Atten: 20 dB whether the second of the sec	AUTO/NO RF GHz Avg Hold:>10/10	03:20:43 PM Jan 20, 2018 Radio Std: None Radio Device: BTS
SodB Bandwidth Kysght Spectrum Analyzer - Occupied BW RL PF Center Freq 5.795000000 00 0 <t< td=""><td>GHz #FGain:Low</td><td>Antenna O</td><td>AUTO/NO RF GHz Avg Hold:>10/10</td><td>03:20:43 PM Jan 20, 2018 Radio Std: None Radio Device: BTS</td></t<>	GHz #FGain:Low	Antenna O	AUTO/NO RF GHz Avg Hold:>10/10	03:20:43 PM Jan 20, 2018 Radio Std: None Radio Device: BTS
Sold B Bandwidth Keysight Spectrum Analyzer - Occupied BW RE RE RF SO Q RE RF SO Q RE RF SO Q In dB/div Ref 20.00 dBm In dB/div	GHz #FGain:Low /welgator/pelseuse-/taulor / .142 MHz 25.909 kHz	Antenna 0 SENSE INTI ANIAN Center Freq: 5.795000000 Trig: Free Run #Atten: 20 dB #VBW 300 kHz Total Power % of OBW Power	AUTO/NO RF GHz Avg Hold:>10/10	03:20:43 PM Jan 20, 2018 Radio Std: None Radio Device: BTS



IEEE 802.11n HT 4	0 MHz mod	le / 5755	~ 5795N	ſHz
6dB Bandwidth (C				
	Anter	nna 1		
Keysight Spectrum Analyzer - Occupied BW VM RL RF 50.0 AC Center Freq 5.7550000000 GHz	#IFGain:Low	ALIGN AUTO/NO Freq: 5.755000000 GHz ee Run Avgji 20 dB	0 RF Hold:>10/10	03:47:07 PM Jan 20, 2018 Radio Std: None Radio Device: BTS
10 dB/div Ref 20.00 dBm				
Log				
0.00	Mupelsen and and and month and	y personalisation and with	uendurbertenturte	h.,
-10.0		V		A Ma
-30.0 -40.0 W/www.llandullullandullullandullullandullullandullullandullullandullullandullullandullullandullullullullu				March and Water weld Water How
-40.0 999 - 400				
-60.0				
Center 5.755 GHz				Span 60 MHz
#Res BW 100 kHz	#\	/BW 300 kHz		Sweep 7.467 ms
x dB Bandwidth 35	5.13 MHz x dB		6.00 dB	
		-	0.00 dB	
MSG		STA1		
MSG GdB Bandwidth (C Exception Analyzer - Occupied BW RF 50 Q AC	H High) Anter	stat	rus	03:47:39 PM Jan 20, 2018
Keysight Spectrum Analyzer - Occupied BW RL RF [50.9] AC	H High) Anter	STAT	rus	034739 PM Jan 20, 2018 Radio Std: None Radio Std: None
Keysight Spectrum Analyzer - Occupied BW RL RF 50 0 AC Center Freq 5.7955000000 GHz	H High) Anter	STAT	TUS	03:47:39 PM Jan 20, 2018 Radio Std: None
Keysight Spectrum Analyzer - Occupied BW RL RF [50.9] AC	H High) Anter	STAT	TUS	03:47:39 PM Jan 20, 2018 Radio Std: None
6dB Bandwidth (C Keysight Spectrum Analyzer - Occupied BW R RL RF 50 Q. AC Center Freq 5.7950000000 GHz 10 dB/div Ref 20.00 dBm 10 0 0 00 0 0 0	H High) Anter	STAT	0 RF Hold:>10/10	034739 PM Jan 20, 2018 Radio Std: None Radio Device: BTS
Keysight Spectrum Analyzer - Occupied BW RL RF 50 Q AC Center Freq 5.795000000 GHz 10 dB/div Ref 20.00 dBm 10.0 10.0	H High) Anter	STAT	0 RF Hold:>10/10	0347:39 PM Jan 20, 2018 Radio Std: None Radio Device: BTS
MSG 6dB Bandwidth (C Keysight Spectrum Analyzer - Occupied BW R RL RF SP SD AC Center Freq 5.7950000000 GHz 10 dB/dly Ref 20.00 dBm 10 dB/dly 10 dB/dly <td>H High) Anter</td> <td>STAT</td> <td>0 RF Hold:>10/10</td> <td>0347:39 PM Jan 20, 2018 Radio Std: None Radio Device: BTS</td>	H High) Anter	STAT	0 RF Hold:>10/10	0347:39 PM Jan 20, 2018 Radio Std: None Radio Device: BTS
	H High) Anter	STAT	0 RF Hold:>10/10	0347/39 PMJan 20, 2018 Radio Std: None Radio Device: BTS
Keysight Spectrum Analyzer - Occupied BW Log Log O O O O O O O O O O O O O O O O O O O	H High) Anter	STAT	0 RF Hold:>10/10	0347239 PMJan 20, 2018 Radio Std: None Radio Device: BTS
MSG Science 6dB Bandwidth (C Keysight Spectrum Analyzer - Occupied BW RL BF [50 Q] AC Center Freq 5.795000000 GHz C C 10 BF [50 Q] AC 10 BF [50 Q] BF 10 BF [50 Q] BF 100 BF [50 Q] BF 100 BF [50 Q] BF 100 BF [50 Q] [50 Q] 100 BF [50 Q]	H High) Anter	STAT	0 RF Hold:>10/10	0.347.39 PM Jan 20, 2018 Radio Std: None Radio Device: BTS
Keysight Spectrum Analyzer - Occupied BW Log Log O O O O O O O O O O O O O O O O O O O	H High) Anter Sense intr Genter F Trig: Fr #HFGein:Low How and a sense in sented agent and a sented agent	STAT	0 RF Hold:>10/10	0347/39 PMJan 20, 2018 Radio Std: None Radio Device: BTS
Center 5.795 GHz	H High) Anter Sense:INT Trig: Fr #FGain:Low Particular data in a sense:INT Trig: Fr #Atten: data in a sense:INT Trig: Fr #Atten: # # # # # # # # # # # # # # # # # # #	STAT	0 RF Hold:>10/10	0.347.39 PMJan 20, 2018 Radio Std: None Radio Device: BTS
MSG 6dB Bandwidth (C 8 8 9 9 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100	H High) Anter Senservit Gentes Frig:Fre #Atten: #Atten	Inna 1 Anti Strasson Automatication Strass 5,755000000 GHz Se Run Avgill A	۲US D RF Hold:>10/10 .6 dBm 99.00 %	034739 PMJan 20, 2018 Radio Std: None Radio Device: BTS
MSG 6dB Bandwidth (C Kysight Spectrum Analyzer - Occupied BW R L RF S0 0 AC Center Freq 5.795000000 GHz 10 dB/div Ref 20.00 dBm 10 dB/d	H High) Anter Senter Frig:Fri #Atten:	Inna 1 Anti Strasson Automatication Strass 5,755000000 GHz Se Run Avgill A	0 که ا	0.347.39 PMJan 20, 2018 Radio Std: None Radio Device: BTS



) MHz mod	e / 5755 ~	5795MHz	
6dB Bandwidth (CH	-			
	Anten	na 2		
Keysight Spectrum Analyzer - Occupied BW R RL RF 50Ω AC Center Freq 5.7550000000 GHz #	IFGain:Low		Radi d:>10/10	04:08:30 PM Jan 20, 2018 o Std: None o Device: BTS
10 dB/div Ref 20.00 dBm				
0.00	- In an and and and and and and	periodontontautuation	whenterburkey	
20.0		V	Van	
-30.0				and a property and a second
-50.0				
70.0				
Center 5.755 GHz #Res BW 100 kHz	#VI	BW 300 kHz		Span 60 MHz Sweep 7.467 ms
Occupied Bandwidth	Total F	Power 21.1	dBm	
36.135	MHz			
			00 %	
x dB Bandwidth 35.	34 MHz x dB	-6.0	0 dB	
ASG		STATUS		
6dB Bandwidth (CH	l High)			
6dB Bandwidth (C⊦	I High) Anten	na 2		
Keysight Spectrum Analyzer - Occupied BW RL		ALIGN AUTO/NO RF		04:08:58 PMJan 20, 2018
Keysight Spectrum Analyzer - Occupied BW RL BF 50.0 AC Center Freq 5.795000000 GHz		ALIGN AUTO/NO RF eq: 5.795000000 GHz Run Avg Hol	Radi d:>10/10	
Keysight Spectrum Analyzer - Occupied BW RL SF 50.0 AC Center Freq 5.795000000 GHz		ALIGN AUTO/NO RF eq: 5.795000000 GHz Run Avg Hol	Radi d:>10/10	04:08:58 PM Jan 20, 2018 o Std: None
Keysight Spectrum Analyzer - Occupied BW RL BF 50.0 AC Center Freq 5.795000000 GHz # 10 dB/div Ref 20.00 dBm		ALIGN AUTO/NO RF eq: 5.795000000 GHz Run Avg Hol	Radi d:>10/10	04:08:58 PM Jan 20, 2018 o Std: None
Keysight Spectrum Analyzer - Occupied BW RL BF 50.0 AC Center Freq 5.795000000 GHz # 10 dB/div Ref 20.00 dBm 10.0 10.0	Anten Sense-Inti Sense-Inti Center Fr Trig: Free #Atten: 20	ALIGN AUTO/NO RF eq: 6.795000000 GHz Run Avg Hol dB	Radi d:>10/10 Radi	04:08:58 PM Jan 20, 2018 o Std: None
Keysight Spectrum Analyzer - Occupied BW Rt RF S0 0 AC Rt RF S0 0 AC to dB/div Ref 20.00 dBm to dB/div Ref 20.00 dBm to dB/div Act		ALIGN AUTO/NO RF eq: 5.795000000 GHz Run Avg Hol	Radi d:>10/10 Radi	04:08:58 PM Jan 20, 2018 o Std: None
	Anten Sense-Inti Sense-Inti Center Fr Trig: Free #Atten: 20	ALIGN AUTO/NO RF eq: 6.795000000 GHz Run Avg Hol dB	Radi d:>10/10 Radi	0 4:08:58 PMJan 20,2018 o Std: None o Device: BTS
Keysight Spectrum Analyzer - Occupied BW RL RF 50.00 AC Center Freq 5.795000000 GHz #	Anten Sense-Inti Sense-Inti Center Fr Trig: Free #Atten: 20	ALIGN AUTO/NO RF eq: 6.795000000 GHz Run Avg Hol dB	Radi d:>10/10 Radi	04:08:58 PM Jan 20, 2018 o Std: None
Reysight Spectrum Analyzer - Occupied BW RL PF 50.0 AC Center Freq 5.795000000 GHz # 10 dB/div Ref 20.00 dBm # 000	Anten Sense-Inti Sense-Inti Center Fr Trig: Free #Atten: 20	ALIGN AUTO/NO RF eq: 6.795000000 GHz Run Avg Hol dB	Radi d:>10/10 Radi	0 4:08:58 PMJan 20,2018 o Std: None o Device: BTS
Reysight Spectrum Analyzer - Occupied BW RL EF S0.0 AC Center Freq 5.795000000 GHz # 10 dB/div Ref 20.00 dBm # 20	Anten Sense-Inti Sense-Inti Center Fr Trig: Free #Atten: 20	ALIGN AUTO/NO RF eq: 6.795000000 GHz Run Avg Hol dB	Radi d:>10/10 Radi	04:08:58 PM Jan 20, 2018 o Std: None o Device: BTS
Reysight Spectrum Analyzer - Occupied BW RL PF 50.0 AC Center Freq 5.795000000 GHz # 10 dB/div Ref 20.00 dBm # 000	Anten	ALIGN AUTO/NO RF eq: 6.795000000 GHz Run Avg Hol dB	a:>10/10 Radi	0 4:08:58 PMJan 20,2018 o Std: None o Device: BTS
Reysight Spectrum Analyzer - Occupied BW RL BF 50.0 AC Center Freq 5.795000000 GHz # 10 dB/div Ref 20.00 dBm # 10 dB/div # # # <	Anten Senseinti EGain:Low RATE: 20 Anter: 20 Senseinti complete Anten: 20 Anten: 20 An	ALGN AUTO/NO RF eq: 6.79500000 GHz Run Avg Hol dB	a:>10/10 Radi	<u>۹۹:۵8:58 PMJan 20,2018</u> ه Std: None ه Device: BTS ه کورند کورند Span 60 MHz
Reysight Spectrum Analyzer - Occupied BW RL PF 50.0 AC Center Freq 5.795000000 GHz # 10 db/dl/dl/dl/dl/dl/dl/dl/dl/dl/dl/dl/dl/dl/	Anten Senseinti Gain:Low Rates 20 Professional Anten 20 Professi	ALIGN AUTO/NO RF eq: 5.79500000 GHz Run Avg Hol dB pare-fundation based of the second	di>10/10 Radi	<u>۹۹:۵8:58 PMJan 20,2018</u> ه Std: None ه Device: BTS ه کورند کورند Span 60 MHz
Reysight Spectrum Analyzer - Occupied BW RL PF SO.0 AC Center Freq 5.795000000 GHz # 10 Ref 20.00 dBm # 10 Ref 20.00 dBm # 100 Jundard and y Ref 20.00 dBm # 100 Control of the second and y Multiple and y Multiple and y Multiple and y 100 Control of the second and y Multiple and y Multiple and y Multiple and y Multiple and y 100 Center 5.795 GHz # Multiple and y Mul	Anten Sense inti FGain:Low Sense inti FGain:Low Sense inti FGain:Low Trig: Free #Atten: 20 #VI #VI Total F MHz 257 kHz % of O	ALIGN AUTO/NO RF eq: 5.79500000 GHz Run Avg Hol dB page-honlandwalkanland bage bage 3000 kHz Power 20.6 BW Power 99	di>10/10 Radi Activity of performance of the second second second	<u>۹۹:۵8:58 PMJan 20,2018</u> ه Std: None ه Device: BTS ه کورند کورند Span 60 MHz
Krysight Spectrum Analyzer - Occupied BW R L BF S0 0 AC Center Freq 5.795000000 GHz # 10 dB/div Ref 20.00 dBm # 00 dB/div # # #	Anten Senseinti Gain:Low Rates 20 Professional Anten 20 Professi	ALIGN AUTO/NO RF eq: 5.79500000 GHz Run Avg Hol dB page-honlandwalkanland bage bage 3000 kHz Power 20.6 BW Power 99	di>10/10 Radi	<u>۹۹:۵8:58 PMJan 20,2018</u> ه Std: None ه Device: BTS ه کورند کورند Span 60 MHz
Reysight Spectrum Analyzer - Occupied BW RL PF 50.0 AC Center Freq 5.795000000 GHz # 10 db/dl/dl/dl/dl/dl/dl/dl/dl/dl/dl/dl/dl/dl/	Anten Sense inti FGain:Low Sense inti FGain:Low Sense inti FGain:Low Trig: Free #Atten: 20 #VI #VI Total F MHz 257 kHz % of O	ALIGN AUTO/NO RF eq: 5.79500000 GHz Run Avg Hol dB page-honlandwalkanland bage bage 3000 kHz Power 20.6 BW Power 99	di>10/10 Radi Activity of performance of the second second second	<u>۹۹:۵8:58 PMJan 20,2018</u> ه Std: None ه Device: BTS ه کورند کورند Span 60 MHz

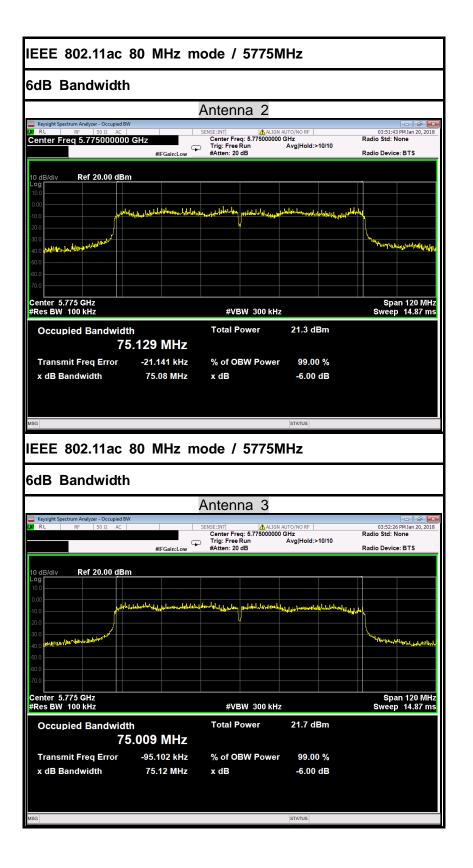


EEE 802.11n HT 40 MH 6dB Bandwidth (CH Low		5 ~ 57951	ИНz
	Antenna 3		
keysight Spectrum Analyzer - Occupied BW X RL RF 59 Ω AC Center Freq 5.7550000000 GHz #IFGain:Low	SENSE:INT ALIGN A Center Freq: 5.755000000 (Trig: Free Run #Atten: 20 dB	UTO/NO RF GHz Avg Hold:>10/10	04:06:44 PM Jan 20, 2018 Radio Std: None Radio Device: BTS
10 dB/div Ref 20.00 dBm			
000	where we have been a person and been have been been been been been been been be	when he wanter have been been been been been been been be	
40.0 44.44.44.44.44.44.44.44.44.44.44.44.44.			www.acordon_aa.coMffelaNyyb
700 Center 5.755 GHz #Res BW 100 kHz	#VBW 300 kHz		Span 60 MHz Sweep 7.467 ms
x dB Bandwidth 35.36 MHz	x dB	-6.00 dB	
ISG		STATUS	
	-	STATUS	
GdB Bandwidth (CH High Rysight Spectrum Analyzer - Occupied BW RL RC Senter Freq 5.7950000000 GHz	Antenna 3	uto/N0 RF	04:09:19 PMJan 20, 2018 Radio Std: None Radio Device: BTS
GdB Bandwidth (CH High Keysight Spectrum Analyzer - Occupied BW RL RF SD 0 AC Center Freq 5.795000000 GHz #IFGain:Low 10 dB/div Ref 20.00 dBm	Antenna 3 SENSE:INT ALIGN A Center Freq: 5.795000000 0 Trig: Free Run	UTO/NO RF 3 Hz	04:09:19 PM Jan 20, 2018 Radio Std: None
GdB Bandwidth (CH Higl Keysight Spectrum Analyzer - Occupied BW RL RF RL RF Son AC Benter Freq 5.795000000 GHz #FFGaint.cov 00	Antenna 3 SENSE:INTI ALIGN A Center Freq 5. 755000000 (Tenter Freq 5. 755000000 (#Atten: 20 dB	UTO/NO RF 3 Hz	04:09:19 PM Jan 20, 2018 Radio Std: None Radio Device: BTS
SodB Bandwidth (CH Hig) Keysight Spectrum Analyzer - Occupied BW RL RP SOD AC Center Freq 5.795000000 GHz #FGaint.low 10 dB/div Ref 20.00 dBm 00 Junite-Instant Analyzer - Occupied BW 00 Junite-Instant Analyzer - Occupied BW 00 Market Analyzer - Occupied BW	Antenna 3 SENSE:INTI ALIGN A Center Freq 5. 755000000 (Tenter Freq 5. 755000000 (#Atten: 20 dB	utro/no r⊧ 3Hz Avg Hold:>10/10	04:09:19 PM Jan 20, 2018 Radio Std: None Radio Device: BTS
RE SOQ. AC Center Freq 5.795000000 GHz #IFGaint.ow 10 dB/div Ref 20.00 dBm 00 dpwlw-lw/screekew/wellwell	Antenna 3 SENSE:INTI ALIGN A Center Freq 5. 755000000 (Tenter Freq 5. 755000000 (#Atten: 20 dB	utro/no r⊧ 3Hz Avg Hold:>10/10	04:09:19 PM Jan 20, 2018 Radio Std: None Radio Device: BTS
Conter Freq 5.795 GHz	Antenna 3	utro/no r⊧ 3Hz Avg Hold:>10/10	04:09:19 PM Jan 20, 2018 Radio Std: None Radio Device: BTS
Center 5.795 GHz Res BW 100 KHz Coccupied Bandwidth	Antenna 3	」 Hz Avg Hold:>10/10 มในสำครรณในสุ[สน[] ₁₀] ₁₀ k/N	04:09:19 PM Jan 20,2018 Radio Std: None Radio Device: BTS



	z mode / 5775MHz	
dB Bandwidth		
	Antenna 0	
Keysight Spectrum Analyzer - Occupied BW R RL RF SO Ω AC Center Freq 5.775000000 GHz #IFGain:L	SENSE:INT Center Freq: 5.775000000 GHz Center Freq: 5.775000000 GHz Trig: Freq Run Avg Hold:>10/10 Low #Atten: 20 dB	03:24:46 PMJan 20, 2018 Radio Std: None Radio Device: BTS
10 dB/div Ref 20.00 dBm		
10.0		
0.00 10.0 // http://dd.poplatable.htm	raholalainikkan kaladraholadrahoa	المالية المعادية
20.0		Million e de
40.0 4.4.1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		" " " " " " " " " " " " " " " " " " "
50.0		
70.0		
Center 5.775 GHz #Res BW 100 kHz	#VBW 300 kHz	Span 120 MHz Sweep 14.87 ms
Occupied Bandwidth 75.189 MH	Total Power 22.2 dBm	
Transmit Freg Error 36.272 k		
x dB Bandwidth 75.13 Mi	Hz x dB -6.00 dB	
ISG	STATUS	
EEE 000 44 aa 00 MU-	mada / 5775MU-	
EEE 802.11ac 80 MHz	z mode / 5775MHz	
	z mode / 5775MHz	
	z mode / 5775MHz Antenna 1	
SdB Bandwidth Keysight Spectrum Analyzer - Occupied BW RL RF SD AC	Antenna 1	03:2540 PM Jan 20, 2018 Badie Schrift March 2018
SdB Bandwidth Keysight Spectrum Analyzer - Occupied BW RL RF SD AC	Antenna 1 SENSE:INT ALIGN AUTO/NO RF Center Freq: 6.77500000 GHz Crig: Free Run AvglHold:>10/10	03:25:40 PM Jan 20, 2018 Radio Std: None
GdB Bandwidth Keysight Spectrum Analyzer - Occupied BW RL RF [50 Ω AC Center Freq 5.7750000000 GHz	Antenna 1 SENSE:INT ALIGN AUTO/NO RF Center Freq: 6.77500000 GHz Trig: Free Run Avg Hold:>10/10	03:25:40 PM Jan 20, 2018 Radio Std: None
Keysight Spectrum Analyzer - Occupied BW R.L RF 59 R AC Center Freq 5.7750000000 GHz #IFGain:1 10 db/div Ref 20.00 dBm	Antenna 1 SENSE:INT ALIGN AUTO/NO RF Center Freq: 6.77500000 GHz Trig: Free Run Avg Hold:>10/10	03:25:40 PM Jan 20, 2018 Radio Std: None
Keysight Spectrum Analyzer - Occupied BW RL RF RE ISO AC Center Freq 5.7750000000 GHz #IFGain:L 10 dB/div Ref 20.00 dBm .00 .00	Antenna 1 SENSE:INT ALIGN AUTO/NO RF Center Freq: 6.775000000 GHz Crig: Free Run Avg[Hold:>10/10 #Atten: 20 dB	03:25:40 PM Jan 20, 2018 Radio Std: None
Code Bandwidth Keysight Spectrum Analyzer - Occupied BW Ref RL RF S0 Q AC Center Freq 5.7750000000 GHz #IFGain:1 10 dB/div Ref 20.00 dBm 0 00 0 0 0	Antenna 1 SENSE:INT ALIGN AUTO/NO RF Center Freq: 6.77500000 GHz Crig: Free Run Avg[Hold:>10/10 #Atten: 20 dB	03:25:40 PM Jan 20, 2018 Radio Std: None Radio Device: BTS
Keysight Spectrum Analyzer - Occupied BW R.L RF 50 Q AC Center Freq 5.7750000000 GHz #IFGaint 10 dB/div Ref 20.00 dBm 0	Antenna 1 SENSE:INT ALIGN AUTO/NO RF Center Freq: 6.775000000 GHz Crig: Free Run Avg[Hold:>10/10 #Atten: 20 dB	03:25:40 PM Jan 20, 2018 Radio Std: None Radio Device: BTS
Kepsight Spectrum Analyzer - Occupied BW RL RF BR BS AC RF BS AC #FGain:L #FGain:L 00 BS/div Ref 20.00 dBm 00 00 B/div 00 B/	Antenna 1 SENSE:INT ALIGN AUTO/NO RF Center Freq: 6.775000000 GHz Crig: Free Run Avg[Hold:>10/10 #Atten: 20 dB	03:25:40 PM Jan 20, 2018 Radio Std: None Radio Device: BTS
Kepsight Spectrum Analyzer - Occupied BW RL RF BR BS AC RF BS AC #FGain:L #FGain:L 00 BS/div Ref 20.00 dBm 00 00 B/div 00 B/	Antenna 1 SENSE:INT ALIGN AUTO/NO RF Center Freq: 6.775000000 GHz Crig: Free Run Avg[Hold:>10/10 #Atten: 20 dB	03:25:40 PMJan 20, 2018 Radio Std: None Radio Device: BTS
CodB Bandwidth	Antenna 1 SENSE:INT ALIGN AUTO/NO RF Center Freq: 6.775000000 GHz Crig: Free Run Avg[Hold:>10/10 #Atten: 20 dB	03:25:40 PMJan 20, 2018 Radio Std: None Radio Device: BTS
CodB Bandwidth	Antenna 1	03:25:40 PMJan 20, 2018 Radio Std: None Radio Device: BTS
Conter 5.775 GHz #Res BW 100 kHz	Antenna 1 SENSEINT ALIGN AUTO/NO RF Center Freg: 6.775000000 GHz Trg: Free Run Avg Hold:>10/10 #Atten: 20 dB #VEW 300 kHz Total Power 22.3 dBm	03:25:40 PM Jan 20, 2018 Radio Std: None Radio Device: BTS
A Compared Bandwidth	Antenna 1 SENSEINT ALIGN AUTO/NO RF Center Freq: 57500000 GHz Trig: Free Run Avg Hold:>10/10 #Atten: 20 dB Vulding under database #VEW 300 kHz Total Power 22.3 dBm 1z Hz % of OBW Power 99.00 %	03:25:40 PM Jan 20, 2018 Radio Std: None Radio Device: BTS
Conter 5.775 GHz Res BW 100 KHz Concupied Bandwidth	Antenna 1 SENSE:NT ALIGN AUTO/NO RF Center Freq: 57500000 GHz Trig: Free Run Avg Hold:>10/10 #Atten: 20 dB Weld. An data and a sense Weld. An data and a sense WEW 300 kHz Total Power 22.3 dBm 12 Hz % of OBW Power 99.00 %	03:25:40 PMJan 20, 2018 Radio Std: None Radio Device: BTS
Code Bandwidth R RF S0 a AC Center Freq 5.775000000 GHz #FGaint 000 000 000	Antenna 1 SENSEINT ALIGN AUTO/NO RF Center Freq: 57500000 GHz Trig: Free Run Avg Hold:>10/10 #Atten: 20 dB Vulding under database #VEW 300 kHz Total Power 22.3 dBm 1z Hz % of OBW Power 99.00 %	03:25:40 PM Jan 20, 2018 Radio Std: None Radio Device: BTS







6.3 ANTENNA GAIN

MEASUREMENT

The antenna gain of the complete system is calculated by the difference of radiated power in EIRP and the conducted power of the module. For UNII devices, the IEEE 802.11a mode is used.

MEASUREMENT PARAMETERS

Measurement parameter					
Detector	Peak				
Sweep time	Auto				
Resolution bandwidth	3 MHz				
Video bandwidth	3 MHz				
Trace-Mode	Max hold				

<u>LIMITS</u>

FCC	IC			
Antenna Gain				
6 dBi				



TEST RESULTS

IEEE 802.11a mode

Antenna 0

IEEE 802.11a mode / 5180 ~ 5240MHz

T _{nom}	V _{nom}	Lowest channel 5180MHz	Highest channel 5240MHz			
Conducted power [dBm] Measured with OFDM modulation		5.52	5.20			
Radiated power [dBm] Measured with OFDM modulation		7.31	6.75			
Gain [dBi] Calculated		1.79	1.55			
Measurement und	certainty	± 1.5 dB (cond.) / ± 3 dB (rad.)			
Measurement und	,	± 1.5 dB (cond.) / ± 3 dB (rad.)				

<u>IEEE 802.11a mode / 5745 ~ 5825MHz</u>

T _{nom}	V _{nom}	Lowest channel 5745MHz	Highest channel 5825MHz
Conducted power [dBm] Measured with OFDM modulation			
Radiated power [dBm] Measured with OFDM modulation		11.33	11.95
Gain [dBi] Calculated		2.70	3.21
Measurement und	certainty	± 1.5 dB (cond.) / ± 3 dB (rad.)

<u>Antenna 1</u> IEEE 802.11a mode / 5180 ~ 5240MHz

Lowest channel 5180MHz	Highest channel 5240MHz			
5.22	7.11			
7.10	8.85			
1.88	1.74			
± 1.5 dB (cond.) / ± 3 dB (rad.)				
	5180MHz 5.22 7.10 1.88			

IEEE 802.11a mode / 5745 ~ 5825MHz

T _{nom}	V _{nom}	Lowest channel 5745MHz	Highest channel 5825MHz	
Conducted power [dBm] Measured with OFDM modulation		9.75	9.23	
Radiated power [dBm] Measured with OFDM modulation		12.93	12.42	
Gain [dBi] Calculated		3.18	3.19	
Measurement und	certainty	± 1.5 dB (cond.) / ± 3 dB (rad.)	

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<u>Antenna 2</u>

IEEE 802.11a mode / 5180 ~ 5240MHz

T _{nom}	V _{nom}	Lowest channel 5180MHz	Highest channel 5240MHz	
Conducted power [dBm] Measured with OFDM modulation		5.21	6.76	
Radiated power [dBm] Measured with OFDM modulation		7.60	8.42	
Gain [dBi] Calculated		1.39	1.66	
Measurement und	ertainty	± 1.5 dB (cond.) / ± 3 dB (rad.)	

IEEE 802.11a mode / 5745 ~ 5825MHz

T _{nom}	V _{nom}	Lowest channel 5745MHz	Highest channel 5825MHz	
Conducted power [dBm] Measured with OFDM modulation		8.75	8.72	
Radiated power [dBm] Measured with OFDM modulation		12.26	11.93	
Gain [dBi] Calculated		3.51	3.21	
Measurement und	certainty	± 1.5 dB (cond.) / ± 3 dB (rad.)	

Antenna 3

IEEE 802.11a mode / 5180 ~ 5240MHz

	5240MHz	
5.67	7.24	
7.47	8.95	
1.80	1.61	
± 1.5 dB (cond.) / ± 3 dB (rad.)	
<u> </u>	7.47	

IEEE 802.11a mode / 5745 ~ 5825MHz

T _{nom}	V _{nom}	Lowest channel 5745MHz	Highest channel 5825MHz
Conducted power [dBm] Measured with OFDM modulation		8.88	8.85
Radiated power [dBm] Measured with OFDM modulation		12.16	12.67
Gain [dBi] Calculated		3.28	3.82
Measurement und	certainty	± 1.5 dB (cond.) / ± 3 dB (rad.)



6.4 OUTPUT POWER

6.4.1 LIMIT

According to §15.407(a)& FCC R&O FCC 14 - 30,

(1) For the band 5.15-5.25 GHz.

(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(iv) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(2) For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.



(3) For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

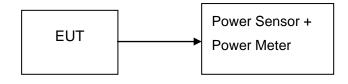
Note to paragraph (a)(3): The Commission strongly recommends that parties employing U-NII devices to provide critical communications services should determine if there are any nearby Government radar systems that could affect their operation.

Specified Limit of the Output Power

The EUT only has band I, band IV.



6.4.2 TEST CONFIGURATIONS



6.4.3 TEST PROCEDURE

The EUT was connected to a Power Meter through a 50 Ω $\,$ RF cable.

6.4.4 TEST RESULTS

No non-compliance noted



6.4.5 TEST DATA

IEEE 802.11a mode / 5180 ~ 5240MHz

Channel	Frequency (MHz)		AVG Output Power (dBm)			AVG Output Power (W)		Limit (dBm)	Result		
	(11112)	Antenna 0	Antenna 1	Antenna 2	Antenna 3	Antenna 0	Antenna 1	Antenna 2	Antenna 3	(abiii)	
Low	5180	17.27	16.67	16.63	17.34	0.05333	0.04645	0.04603	0.05420		PASS
Mid	5200	17.17	16.73	17.59	17.38	0.05212	0.04710	0.05741	0.05470	30.00	PASS
High	5240	17.56	17.70	17.27	18.23	0.05702	0.05888	0.05333	0.06653		PASS

IEEE 802.11a mode / 5745 ~ 5825MHz

Channel	Frequency (MHz)		AVG Outp (dE				AVG Outj (V		Limit (dBm)	Result	
	(11112)	Antenna 0	Antenna 1	Antenna 2	Antenna 3	Antenna 0	Antenna 1	Antenna 2	Antenna 3	(ubiii)	
Low	5745	20.80	21.93	20.92	21.04	0.12023	0.15596	0.12359	0.12706		PASS
Mid	5785	20.62	21.50	20.78	20.45	0.11535	0.14125	0.11967	0.11092	30.00	PASS
High	5825	20.93	21.41	20.91	21.02	0.12388	0.13836	0.12331	0.12647		PASS

IEEE 802.11n HT 20 MHz mode / 5180 ~ 5240MHz

Channel	Frequency (MHz)		AV	G Output Pow (dBm)	AVG Output Power (W)	Limit (dBm)	Result			
	(11112)	Antenna 0	Antenna 1	Antenna 2	Antenna 3	Total		(abiii)		
Low	5180	11.48	13.12	13.63	13.12	18.93	0.07815		PASS	
Mid	5200	13.13	13.18	12.34	12.97	18.94	0.07831	30.00	PASS	
High	5240	13.04	13.55	13.30	13.02	19.25	0.08421		PASS	

IEEE 802.11n HT 20 MHz mode / 5745 ~ 5825MHz

Channel	Frequency (MHz)		AV	G Output Pov (dBm)	AVG Output Power (W)	Limit (dBm)	Result			
	(11112)	Antenna 0	Antenna 1	Antenna 2	Antenna 3	Total		(abiii)		
Low	5745	18.26	18.35	17.73	17.94	24.10	0.25690		PASS	
Mid	5785	19.49	18.61	19.16	17.97	24.87	0.30661	30.00	PASS	
High	5825	18.17	17.96	18.61	18.52	24.34	0.27186		PASS	



IEEE 8	02.11n H I	40 MHZ MODE / 5190 ~ 5230MHZ		
Channel	Frequency	AVG Output Power (dBm)	AVG Output	

IEEE 802 11n HT 40 MHz mode / 5190 5230MH-

Channel	Frequency (MHz)		AV	G Output Pov (dBm)	AVG Output Power (W)	Limit (dBm)	Result		
		Antenna 0	Antenna 1	Antenna 2	Antenna 3	Total		(
Low	5190	13.85	13.20	13.28	13.90	19.59	0.09099	30.00	PASS
High	5230	13.85	13.17	13.39	12.60	19.30	0.08504	30.00	PASS

IEEE 802.11n HT 40 MHz mode / 5755 ~ 5795MHz

Channel	Frequency (MHz)		AV	G Output Pow (dBm)		AVG Output Power (W)	Limit (dBm)	Result	
	(Antenna 0	Antenna 1	Antenna 2	Antenna 3	Total		(aBiii)	
Low	5755	19.70	19.02	18.74	18.83	25.11	0.32433	30.00	PASS
High	5795	19.28	19.20	19.82	18.84	25.32	0.34040	30.00	PASS

IEEE 802.11ac 80 mode / 5210MHz

(Channel	Frequency (MHz)		AV	G Output Pow (dBm)	AVG Output Power (W)	Limit (dBm)	Result		
			Antenna 0	Antenna 1	Antenna 2	Antenna 3	Total		(aBiii)	
		5210	13.52	14.01	13.44	13.98	19.77	0.09475	30.00	PASS

IEEE 802.11ac 80 mode / 5775MHz

Channel	Frequency (MHz)		AVG	G Output Pow (dBm)		AVG Output Power (W)	Limit (dBm)	Result	
		Antenna 0	Antenna 1	Antenna 2	Antenna 3	Total		(aBiii)	
	5775	18.35	18.26	17.87	17.99	24.14	0.25957	30.00	PASS



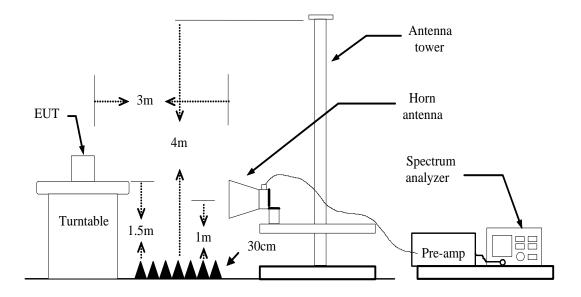
6.5 BAND EDGES MEASUREMENT

6.5.1 LIMIT

According to §15.407(b)

- (1) The provisions of Section 15.205 of this part apply to intentional radiators operating under this section.
- (2) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency block edges as the design of the equipment permits.

6.5.2 TEST CONFIGURATION



6.5.3 TEST PROCEDURE

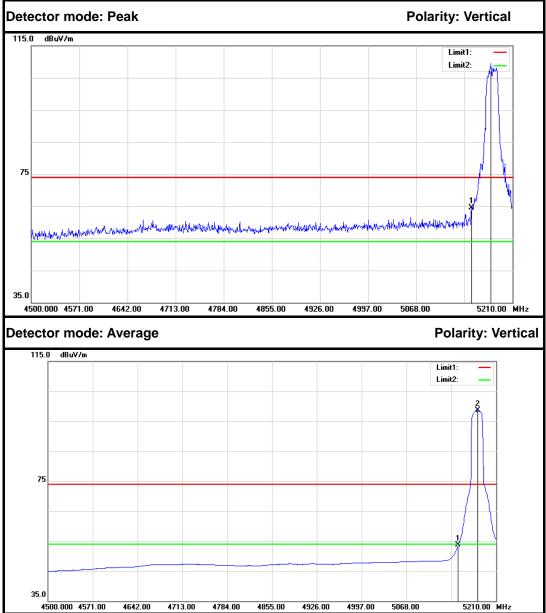
- 1. The EUT is placed on a turntable, which is 1.5m above the ground plane.
- 2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
- 3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
- 4. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:
 - (a) PEAK: RBW=1 / VBW=3MHz / Sweep=AUTO
 - (b) AVERAGE: RBW=1MHz / VBW=1/T / Sweep=AUTO / Detector=Peak
- 5. Repeat the procedures until all the PEAK and AVERAGE versus POLARIZATION are measured.



6.5.4 TEST RESULT

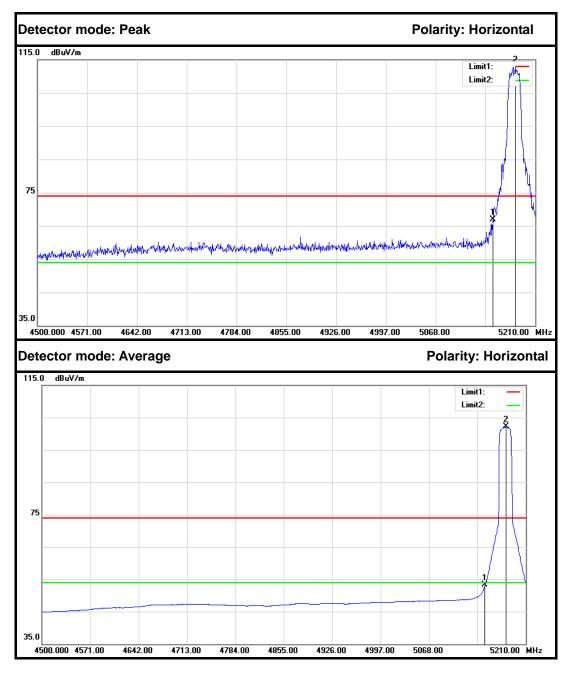
<u>Test Plot</u>

IEEE 802.11a mode / 5180MHz (Antenna 0)



No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	5150.000	59.29	5.25	64.54	74.00	-9.46	Peak	Vertical
2	5178.050	104.15	5.30	109.45			Peak	Vertical
1	5150.000	48.37	5.25	53.62	54.00	-0.38	Average	Vertical
2	5180.890	93.32	5.30	98.62			Average	Vertical





No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	5150.000	61.65	5.25	66.90	74.00	-7.10	Peak	Horizontal
2	5181.600	107.56	5.30	112.86			Peak	Horizontal
1	5150.000	48.07	5.25	53.32	54.00	-0.68	Average	Horizontal
2	5180.890	97.07	5.30	102.37			Average	Horizontal