FCC Part 15E
Measurement and Test Report

For

Smartron India Private Limited

1st Floor, Kapil Tower, Gachibowli, Hyderabad, Telangana

FCC ID:2AGCE-T1211

FCC Rule(s):	FCC Part 15E
Product Description:	Tablet PC
Tested Model:	T1211
Report No.:	STR15098043I-4
Tested Date:	2015-12-15 to 2016-02-29
Issued Date:	2016-02-29
Tested By:	Leo Lee / Engineer
Reviewed By:	Silin Chen / EMC Manager
Approved & Authorized By:	Jandy So / PSQ Manager

Prepared By:

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TABLE OF CONTENTS

1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant:	Smartron India Private Limited
Address of applicant:	1st Floor, Kapil Tower, Gachibowli, Hyderabad, Telangana
Manufacturer:	Shenzhen Wisky Technology Co., LTD.
Address of manufacturer:	5th Floor, W2-A Building, Hi-tech Park South 1st Road, Nanshan District, Shenzhen

General Description of EUT	
Product Name:	Tablet PC
Trade Name:	SMARTRON
Model No.:	T1211
Adding Model(s):	/
Rated Voltage:	DC 7.4V battery, Adapter DC 12V charging
Power Adapter Model:	PSY1203000 I/P: AC 100-240V; O/P: DC 12V/3A
Note: The test data is gathered from a production sample provided by the manufacturer.	

Technical Characteristics of EUT	
Support Standards:	802.11a(HT20),802.11n(HT20),802.11n(HT40), 802.11ac(HT80)
Frequency Range:	5150-5250MHz, 5250-5230MHz, 5470-5725MHz, 5725-5850MHz
RF Output Power:	14.85dBm (Conducted)
Type of Modulation:	OFDM, 64-QAM,16-QAM, QPSK, BPSK, 256-QAM
Data Rate:	6-54Mbps, up to 867Mbps
Channel Separation:	20/40/80MHz
Type of Antenna:	Integral
Antenna Gain:	Antenna 1:2.26dBi, Antenna 2:3.59dBi,
Lowest Internal Frequency	32.768kHz

1.2 Test Standards

The following report is prepared on behalf of the Smarton India Private Limited in accordance with FCC Part 15, Subpart C, and section 15.203, 15.205, 15.207, 15.209 and 15.407 of the Federal Communication Commissions rules.

The objective is to determine compliance with FCC Part 15, Subpart C, and section 15.203, 15.205, 15.207, 15.209 and 15.407 of the Federal Communication Commissions rules.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product, which result in lowering the emission, should be checked to ensure compliance has been maintained.

1.3 Test Methodology

All measurements contained in this report were conducted with ANSI C63.4-2014, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz. The measurement guide KDB 789033 D02 v01 for Unlicensed National Information Infrastructure (U-NII) Devices and KDB 662911 D01 v02r01 for Multiple Transmitter Output shall be performed also.

1.4 Table for parameters of Test Software setting

The test utility software used during testing was "RPTA1-71W.M4300.01.GD.2015Sep1". During testing, Channel and Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

Mode	Test Frequency (MHz)												
	NCB: 20MHz												
	5180	5200	5240	5260	5300	5320	5500	5580	5700	5720	5745	5785	5805
802.11a 6Mbps	19	19	19	18	18	18	18	18	18	18	15	15	15
802.11n-HT20 MCS0	19	19	19	18	18	18	18	18	18	18	15	15	15
Mode	NCB: 40MHz												
	5190	5230	5270	5310	5510	5550	5670	5710	5755	5795			
802.11n-HT40 MCS0	19	19	18	18	18	18	18	18	15	15			
Mode	NCB: 80MHz												
	5210		5290		5530		5610		5690		5775		
802.11ac-HT80 MCS0/Nss2	19		18		18		18		18		15		

1.5 EUT Operating during test

EUT was programmed to be in continuously transmitting mode. During the test, EUT operation to normal function and programs under WIN10 were executed.

1.6 Test Facility

FCC – Registration No.: 934118

Shenzhen SEM.Test Technology Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files and the Registration is 934118.

Industry Canada (IC) Registration No.: 11464A

The 3m Semi-anechoic chamber of Shenzhen SEM.Test Technology Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 11464A.

CNAS Registration No.: L4062

Shenzhen SEM.Test Technology Co., Ltd. is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L4062. All measurement facilities used to collect the measurement data are located at 1/F, Building A, Hongwei Industrial Park, Liuxian 2nd Road, Bao'an District, Shenzhen, P.R.C (518101).

1.7 EUT Setup and Test Mode

The EUT was operated in the engineering mode to fix the Tx frequency that was for the purpose of the measurements. All testing shall be performed under maximum output power condition, and to measure its highest possible emissions level, more detailed description as follows:

Test Mode List		
Test Mode	Description	Remark
TM1	802.11a	5180MHz,5200MHz,5240MHz,5260MHz,5300MHz,5320MHz,5500MHz,5600MHz,5700MHz, 5745MHz, 5785MHz,5805MHz
TM2	802.11n-HT20	5180MHz,5200MHz,5240MHz,5260MHz,5300MHz,5320MHz,5500MHz,5600MHz,5700MHz，5745MHz, 5785MHz,5805MHz
TM3	802.11n-HT40	5190MHz,5230MHz,5270MHz,5310MHz,5510MHz,5590MHz,5670MHz,5755MHz,5795MHz
TM4	802.11ac-HT80	5210MHz,5290MHz,5530MHz,5610MHz,5690MHz,5775MHz

EUT Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Core
Adapter Cable	1.45	Unshielded	Without Core

Special Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
USB cable	1.0	Unshielded	Without Ferrite
HDMI cable	1.0	Shielded	Without Ferrite

Auxiliary Equipment List and Details			
Description	Manufacturer	Model	Serial Number
Notebook	Lenovo	E10	/
Earphone	Sony	/	/
TF card	Kingston	/	/
Display	Dell	/	/

1.8 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Cal Date	Due Date
Spectrum Analyzer	Agilent	E4407B	MY41440400	2015-06-17	2016-06-16
Spectrum Analyzer	Rohde & Schwarz	FSP	836079/035	2015-06-17	2016-06-16
EMI Test Receiver	Rohde & Schwarz	ESVB	825471/005	2015-06-17	2016-06-16
Amplifier	Agilent	8447F	3113A06717	2015-06-17	2016-06-16
Amplifier	C&D	PAP-1G18	2002	2015-06-17	2016-06-16
Broadband Antenna	Schwarz beck	VULB9163	9163-333	2015-06-17	2016-06-16
Horn Antenna	ETS	3117	00086197	2015-06-17	2016-06-16
Horn Antenna	ETS	3116B	00088203	2015-06-17	2016-06-16
Loop Antenna	Schwarz beck	FMZB 1516	9773	2015-06-17	2016-06-16
EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2015-06-17	2016-06-16
L.I.S.N	Schwarz beck	NSLK8126	8126-224	2015-06-17	2016-06-16
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2015-06-17	2016-06-16

2. SUMMARY OF TEST RESULTS

FCC Rules	Description of Test Item	Result
§ 15.203; § 15.405	Antenna Requirement	Compliant
§ 15.207; § 15.407(b)(6)	Conducted Emission	Compliant
§ 15.407(a)(1),(2)	Power Spectral Density	Compliant
§ 15.407(e)	Emission Bandwidth and Occupied Bandwidth	Compliant
§ 15.407(a)(1),(2)	Maximum Conducted Output Power	Compliant
§ 15.407(b)(1),(2),(3)	Conducted Spurious Emission	Compliant
§ 15.205; § 15.407(b)(1),(2),(3)	Radiated Emission	Compliant
§ 15.407(g)	Frequency Stability	Compliant
§ 15.407(h)	Dynamic Frequency Selection (DFS)*	Compliant

Note: DFS report please refer to Report No. 1509RSU01502.

3. RF Exposure

3.1 Standard Applicable

According to § 1.1307 and § 2.1093, the portable transmitter must comply the RF exposure requirements.

3.2 Test Result

This product complied with the requirement of the RF exposure, please see the SAR Report.

4. Antenna Requirement

4.1 Standard Applicable

According to FCC Part 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

4.2 Evaluation Information

This product has two integral antennas, fulfill the requirement of this section.

5. Conducted Emissions

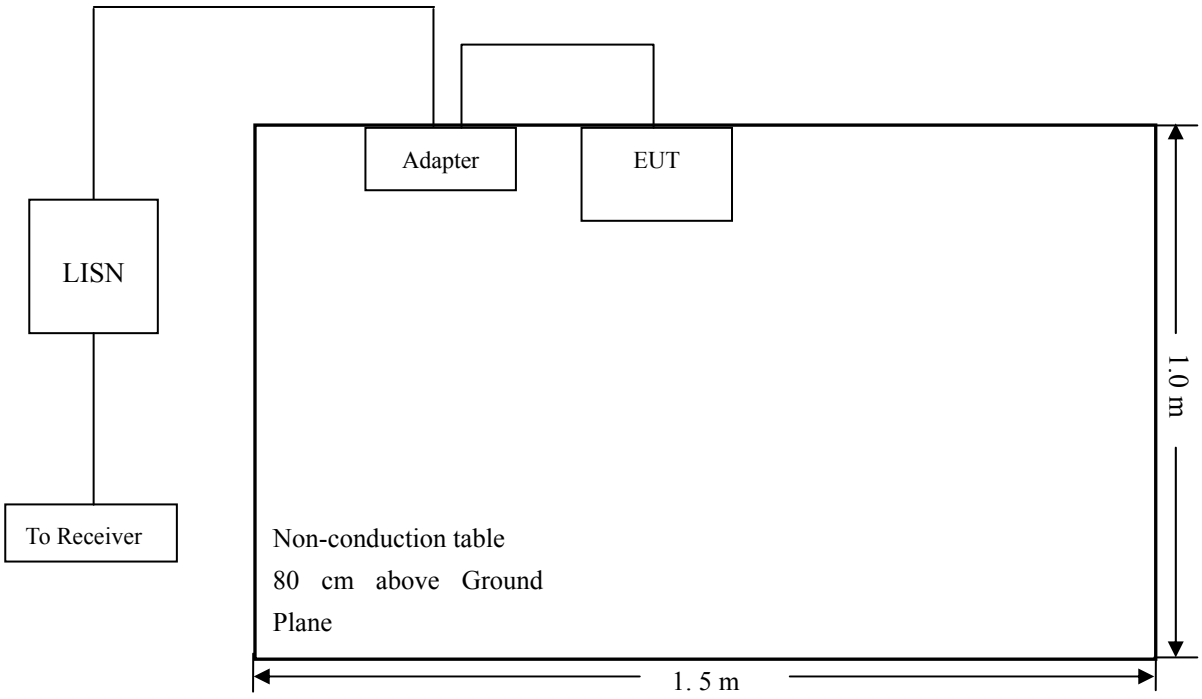
5.1 Measurement Uncertainty

Base on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any conducted emissions measurement is ± 2.88 dB.

5.2 Test Procedure

The setup of EUT is according with per ANSI C63.4-2014 measurement procedure. The specification used was with the FCC Part 15.207 Limit.
The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.
The spacing between the peripherals was 10 cm.

5.3 Basic Test Setup Block Diagram



5.4 Environmental Conditions

Temperature:	25 °C
Relative Humidity:	52%
ATM Pressure:	1012 mbar

5.5 Test Receiver Setup

During the conducted emission test, the test receiver was set with the following configurations:

Start Frequency ..... 150 kHz
Stop Frequency..... 30 MHz
Sweep Speed ..... Auto
IF Bandwidth..... 10 kHz
Quasi-Peak Adapter Bandwidth ..... 9 kHz
Quasi-Peak Adapter Mode ..... Normal

5.6 Summary of Test Results/Plots

According to the data in section 5.7, the EUT complied with the FCC Part 15.207 Conducted margin for this device, with the *worst* margin reading of:

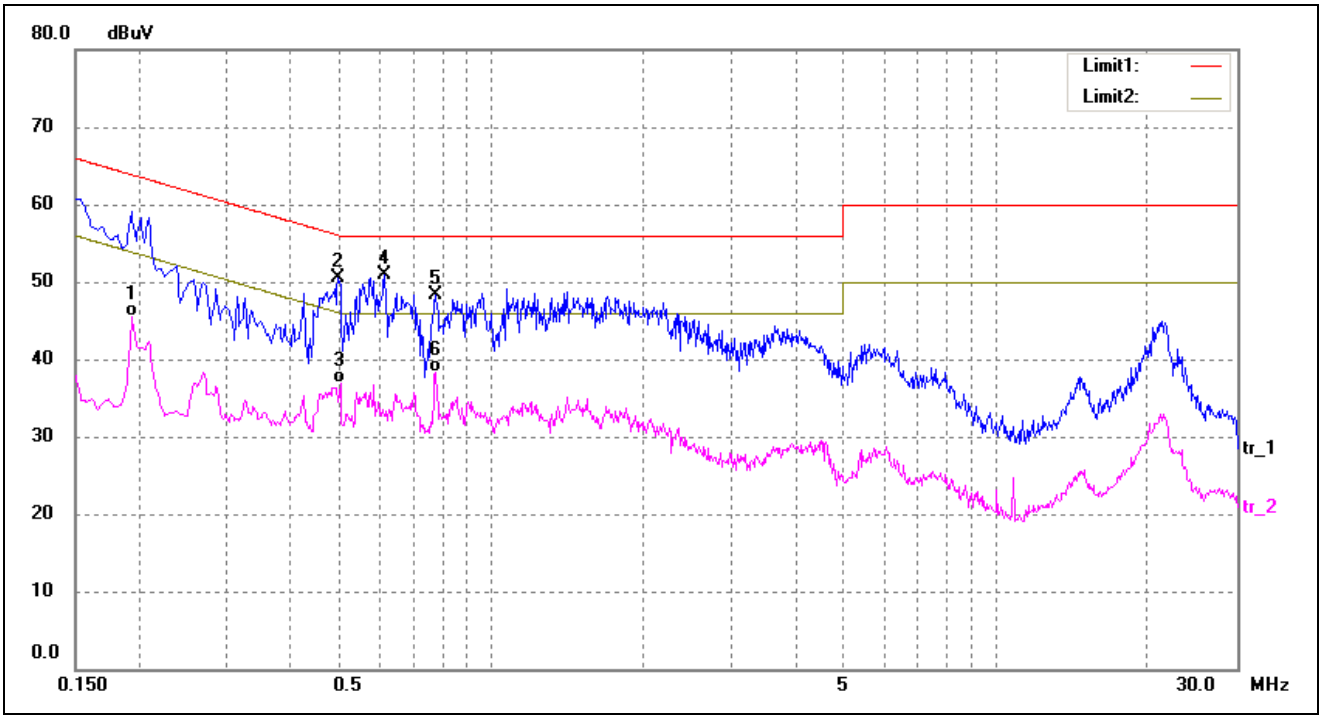
-3.19 dB at 0.4890 MHz in the **Line** mode**, peak** detector, **0.15-30MHz**

5.7 Conducted Emissions Test Data

Plot of Conducted Emissions Test Data

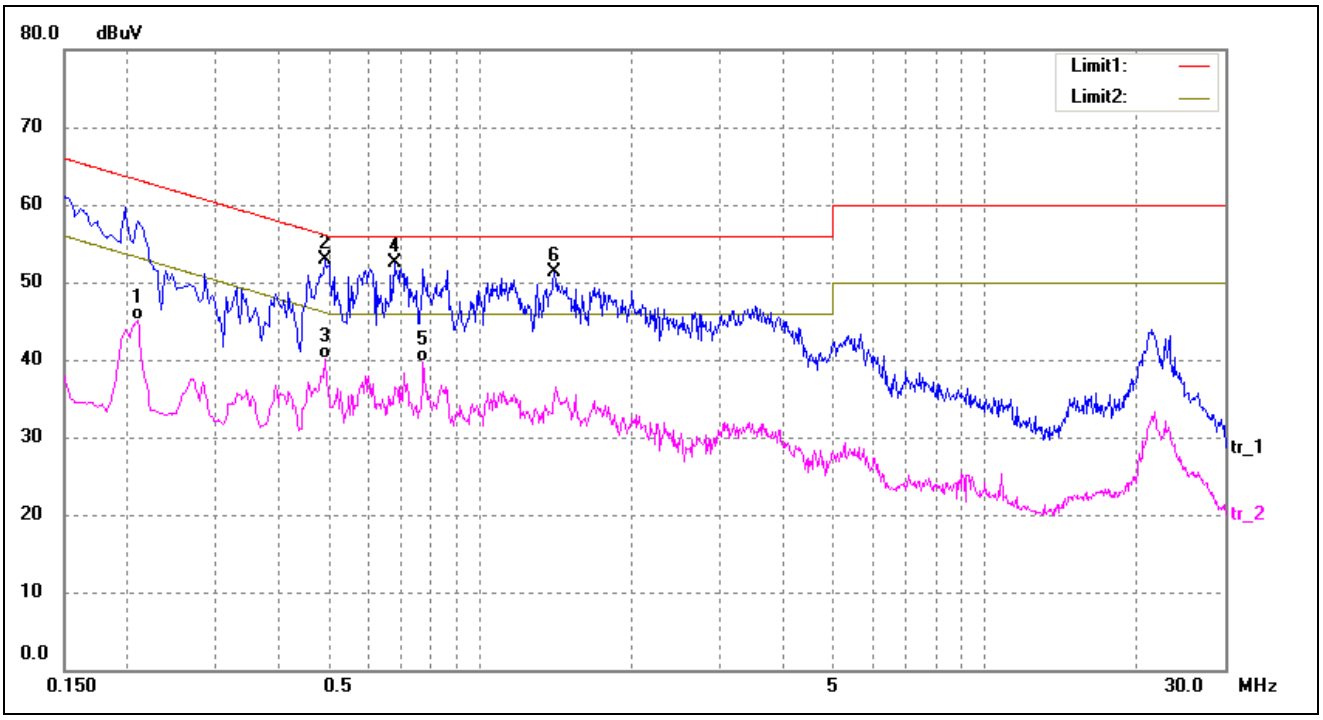
EUT: *Tablet PC*
Tested Model: *T1211*
Operating Condition: *Transmitting(Wi-Fi)（5G）*
Comment: *AC 120V/60Hz; Adapter DC 12V/3A*

Test Specification: *Neutral*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1	0.1892	33.16	12.50	45.66	53.86	-8.20	AVG
2	0.4875	37.89	12.50	50.39	56.03	-5.64	peak
3	0.5189	24.41	12.50	36.91	46.00	-9.09	AVG
4*	0.6370	38.37	12.61	50.98	56.00	-5.02	peak
5	0.7830	35.53	12.78	48.31	56.00	-7.69	peak
6	0.7830	25.52	12.78	38.30	46.00	-7.70	AVG

Test Specification: *Line*



No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1	0.2270	32.72	12.50	45.22	53.21	-7.99	AVG
2*	0.4890	40.41	12.50	52.91	56.10	-3.19	peak
3	0.4890	27.72	12.50	40.22	46.10	-5.88	AVG
4	0.6830	39.90	12.68	52.58	56.00	-3.42	peak
5	0.7810	26.96	12.77	39.73	46.00	-6.27	AVG
6	1.4240	38.20	13.00	51.20	56.00	-4.80	peak

6. Power Spectral Density

6.1 Standard Applicable

Section 15.407(a) Power limits:

(1) For the band 5.15-5.25 GHz.
(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.

6.2 Test Procedure

According to 789033 D02 v01 section F, the following is the measurement procedure.
For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, “provided that the measured power is integrated over the full reference bandwidth” to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 KHz bandwidth, the following adjustments to the procedures apply:

a) Set RBW ≥ 1/T, where T is defined in section II.B.l.a).
b) Set VBW ≥ 3 RBW.
c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add 10log(500kHz/RBW) to the measured result, whereas RBW (< 500 KHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add 10log(1MHz/RBW) to the measured result, whereas RBW (< 1 MHz) is the reduced resolution bandwidth of spectrum analyzer set during measurement.
e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

Note: As a practical matter, it is recommended to use reduced RBW of 100 KHz for the sections 5.c) and 5.d) above, since RBW=100 KHZ is available on nearly all spectrum analyzers.

6.3 Environmental Conditions

Temperature:	20° C
Relative Humidity:	54%
ATM Pressure:	1011 mbar

6.4 Summary of Test Results/Plots

5150-5250MHz

Operating mode	Test Channel	Chain 1 dBm/MHz	Chain 2 dBm/MHz	Total dBm/MHz	Limit (dBm/MHz)
802.11a	5180	1.193	1.709	4.469	11
	5200	0.508	1.006	3.774	11
	5240	0.368	0.311	3.350	11
802.11n-HT20	5180	0.911	1.140	4.037	11
	5200	0.150	0.697	3.442	11
	5240	-0.189	0.245	3.044	11
802.11n-HT40	5190	-5.036	-1.756	-0.083	11
	5230	-1.088	-2.218	1.394	11
802.11ac-HT80	5210	-6.431	-3.649	-1.811	11

5250-5350MHz

Operating mode	Test Channel	Chain 1 dBm/MHz	Chain 2 dBm/MHz	Total dBm/MHz	Limit (dBm/MHz)
802.11a	5260	1.848	-0.421	3.870	11
	5300	0.915	-0.697	3.194	11
	5320	1.183	0.360	3.801	11
802.11n-HT20	5260	-0.218	0.299	3.058	11
	5300	-0.647	-1.310	2.044	11
	5320	-0.172	-1.285	2.317	11
802.11n-HT40	5270	-1.611	-3.142	0.701	11
	5310	-0.068	-3.476	1.564	11
802.11ac-HT80	5290	-2.911	-5.524	-1.014	11

5470-5725MHz

Operating mode	Test Channel	Chain 1 dBm/MHz	Chain 2 dBm/MHz	Total dBm/MHz	Limit (dBm/MHz)
802.11a	5500	3.149	0.203	4.931	11
	5600	2.897	1.187	5.136	11
	5700	1.240	0.883	4.075	11
802.11n-HT20	5500	1.449	-0.182	3.720	11
	5600	1.849	1.229	4.560	11
	5700	0.351	0.089	3.232	11
802.11n-HT40	5510	-5.734	-2.147	-0.570	11
	5590	1.537	-1.627	3.247	11
	5670	0.842	-1.930	2.684	11
802.11ac-HT80	5530	-7.002	-4.467	-2.542	11
	5610	-1.377	-3.532	0.688	11
	5690	-2.811	-4.720	-0.651	11

5725-5850MHz

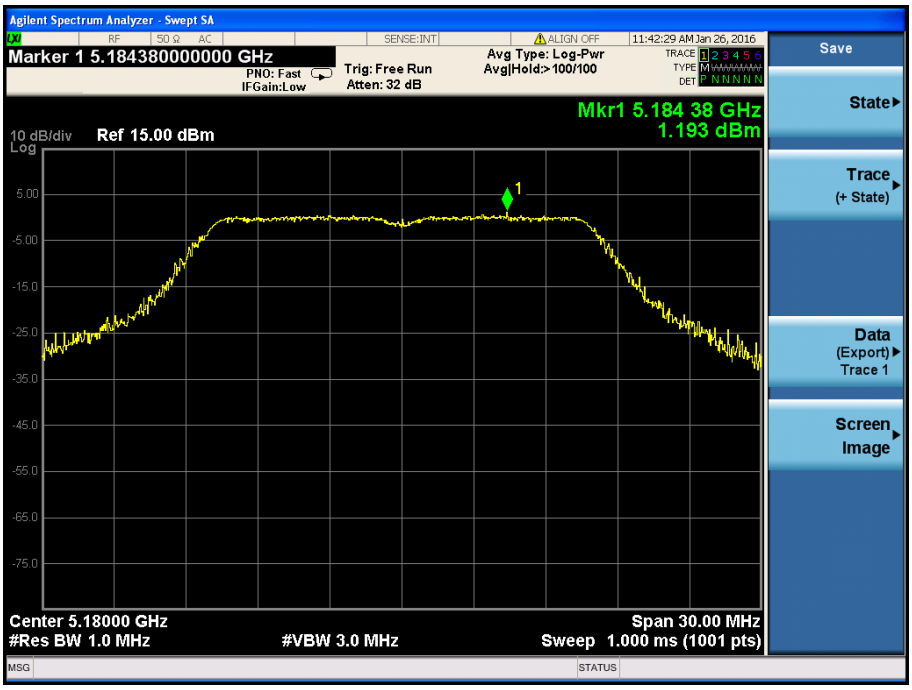
Operating mode	Test Channel	Chain 1 dBm/500kHz	Chain 2 dBm/500kHz	Total dBm/500kHz	Limit (dBm/500kHz)
802.11a	5745	1.382	0.291	3.881	30
	5785	1.109	0.088	3.639	30
	5805	1.363	-0.129	3.691	30
802.11n-HT20	5745	1.072	0.019	3.588	30
	5785	0.948	0.525	3.752	30
	5805	1.055	-0.748	3.257	30
802.11n-HT40	5755	1.269	-2.656	2.746	30
	5795	-5.716	-2.605	-0.877	30
802.11ac-HT80	5775	-5.183	-4.528	-1.833	30

Note: If measurement bandwidth of Maximum PSD is specified in 500 kHz, add 10log(500kHz/RBW) to the measured result, whereas RBW (< 500 KHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.

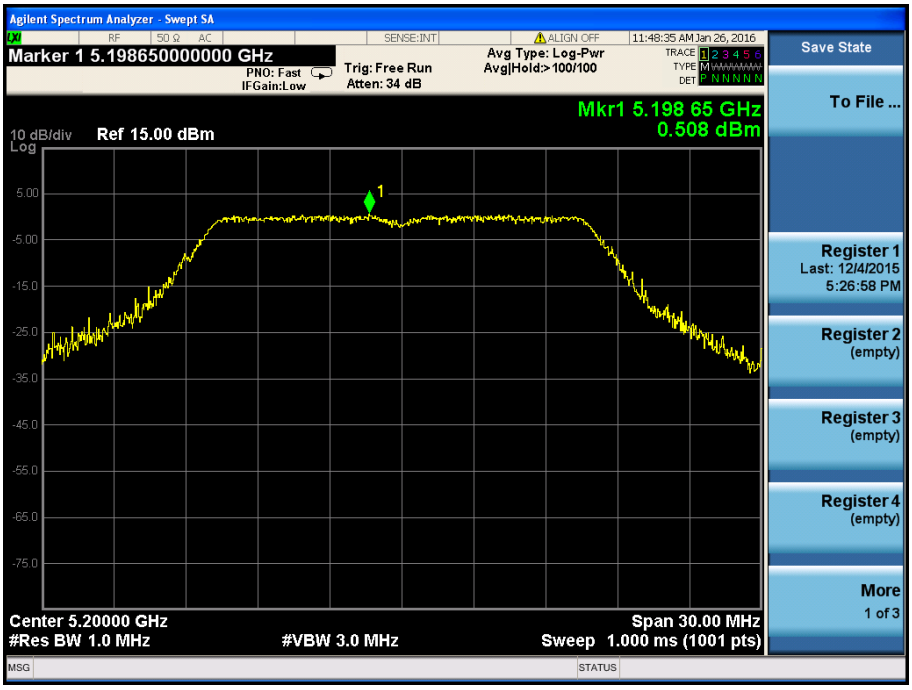
Antenna 1

Test Mode: 802.11a

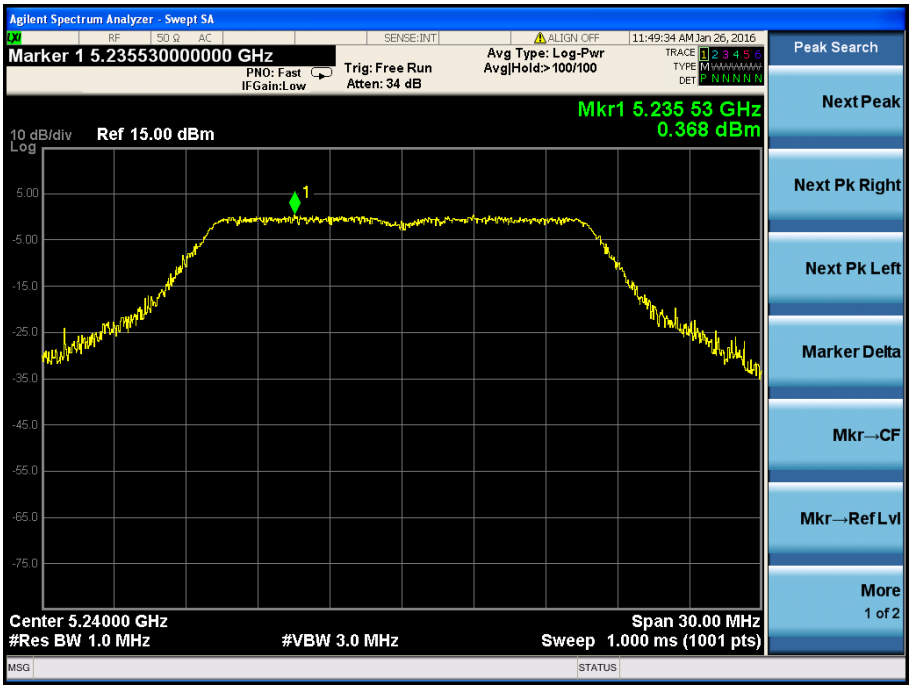
5180MHz



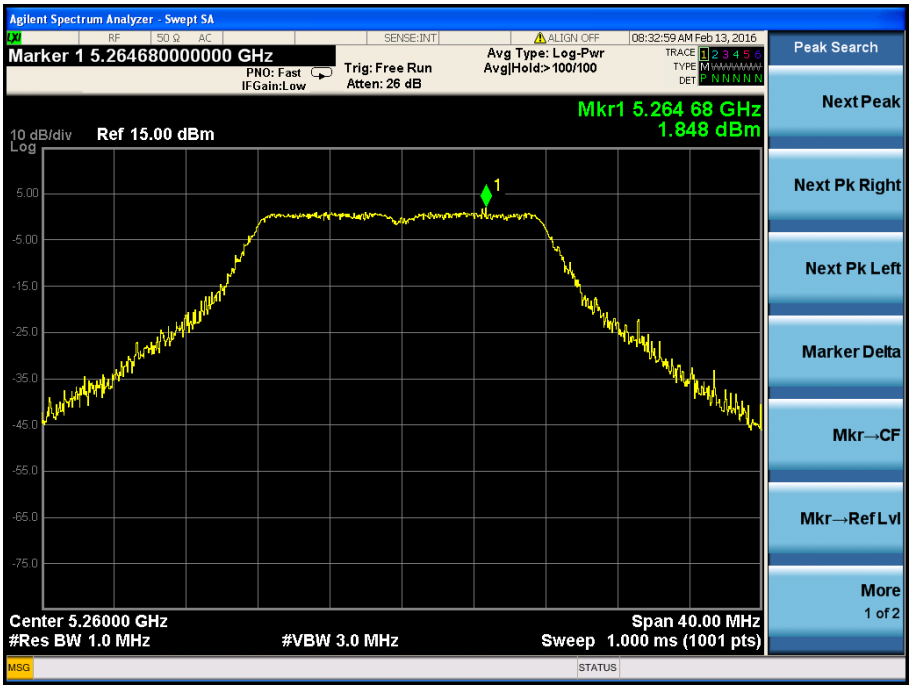
5200MHz



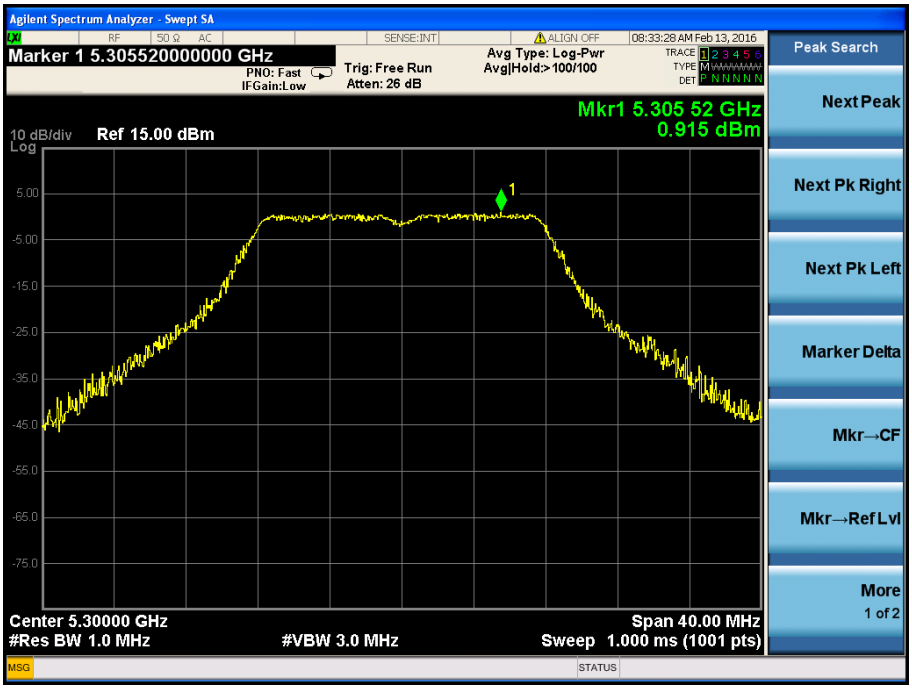
5240MHz



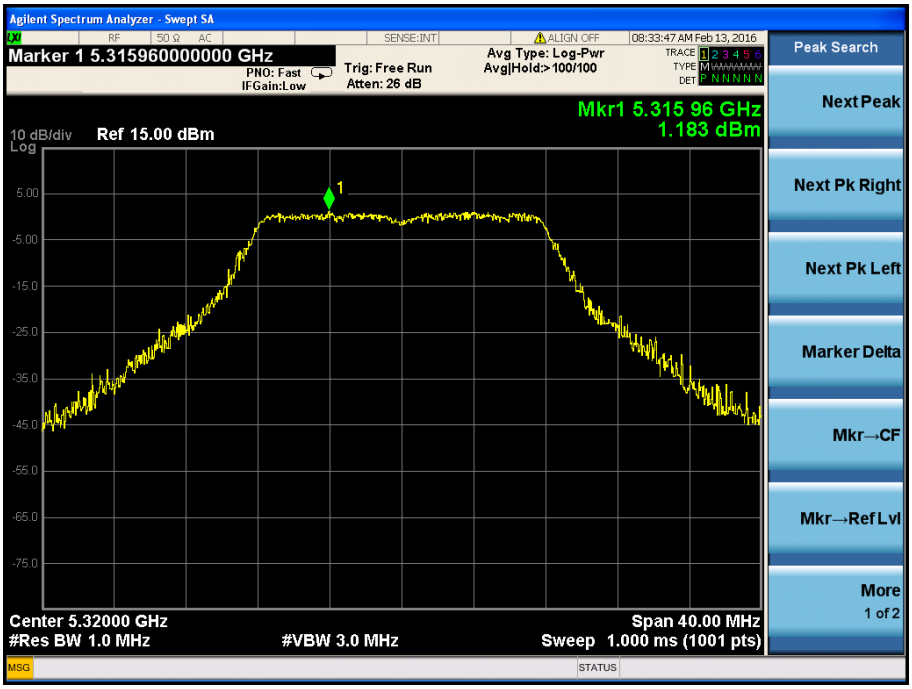
5260MHz



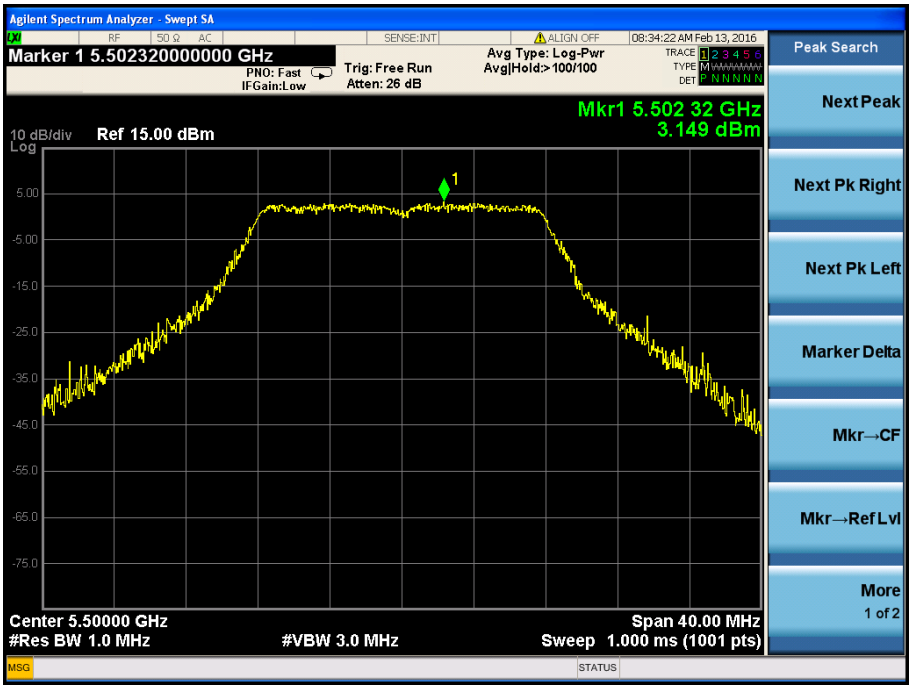
5300MHz



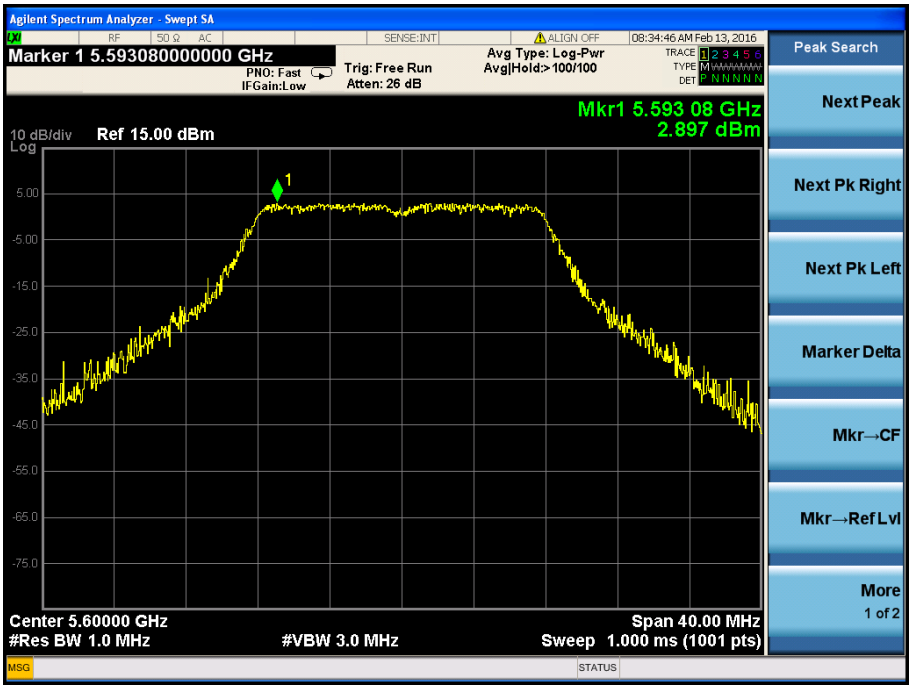
5320MHz



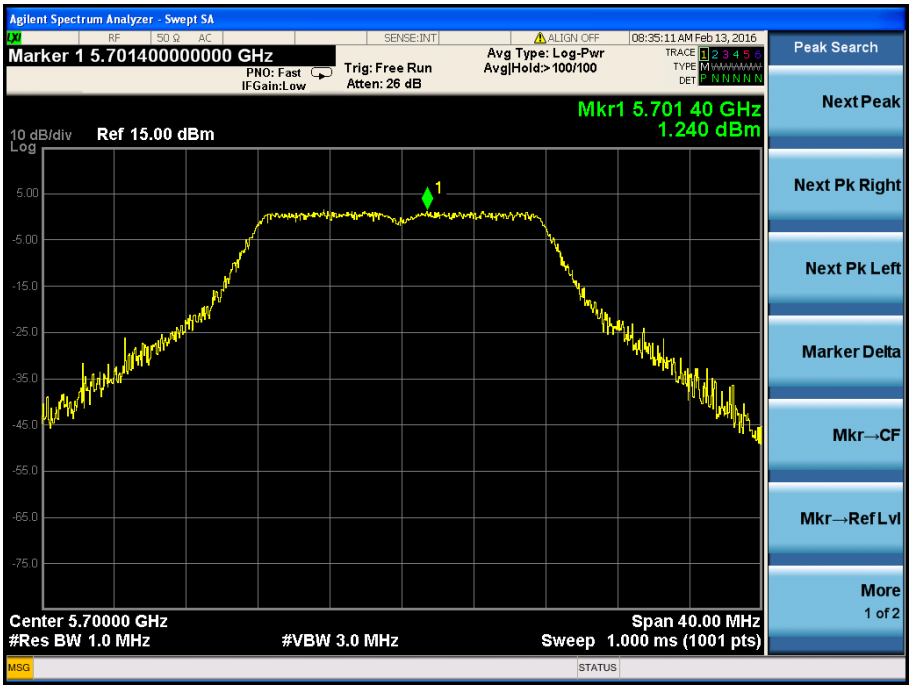
5500MHz



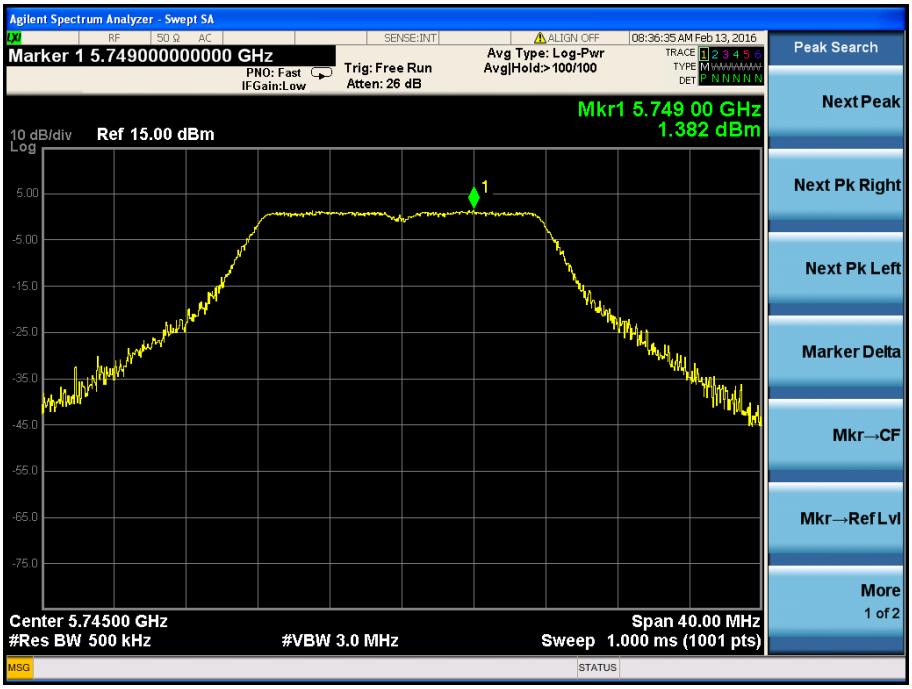
5600MHz



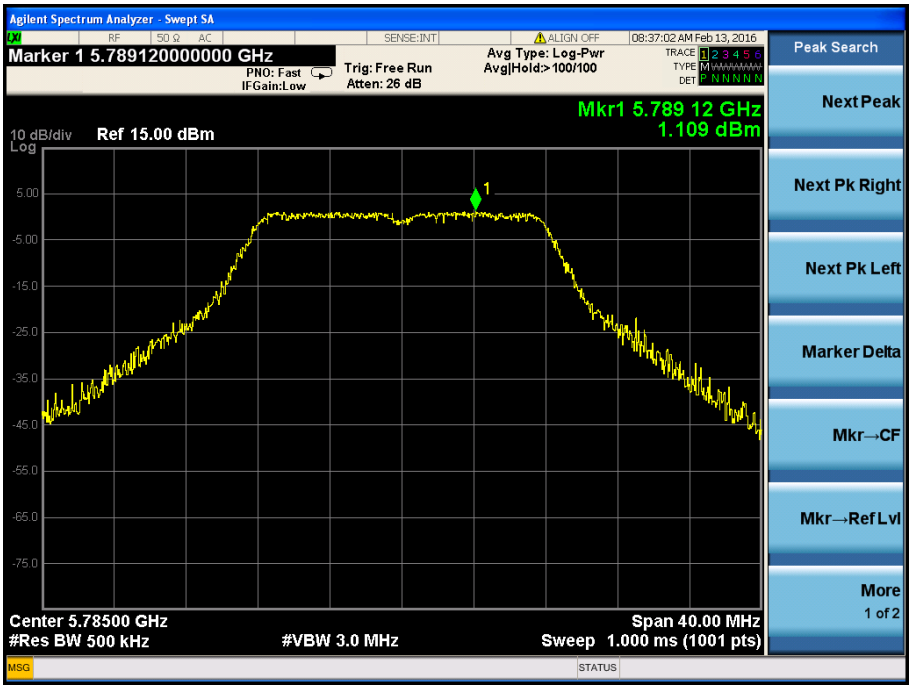
5700MHz



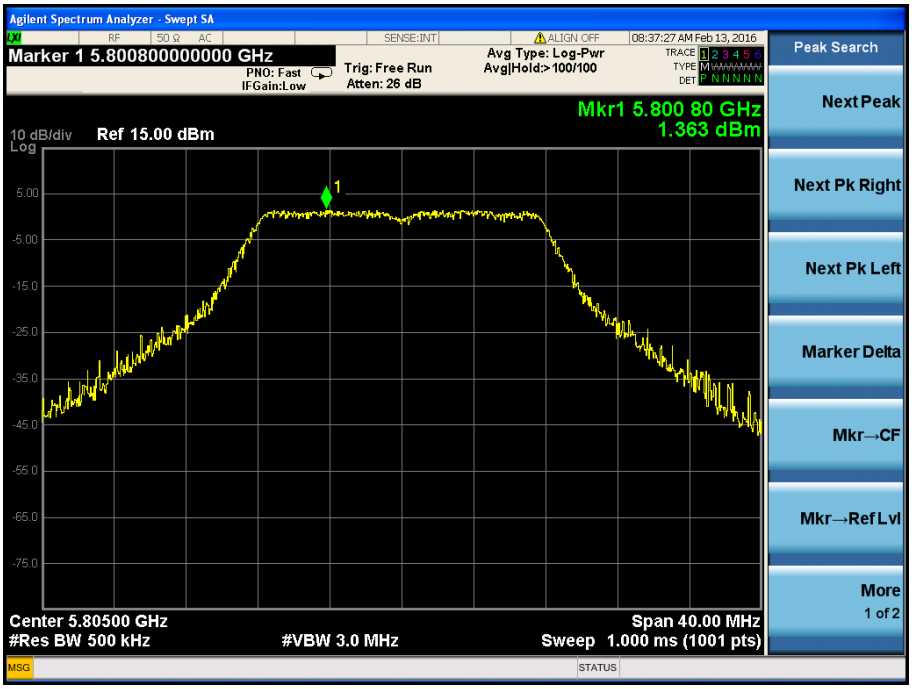
5745MHz



5785MHz

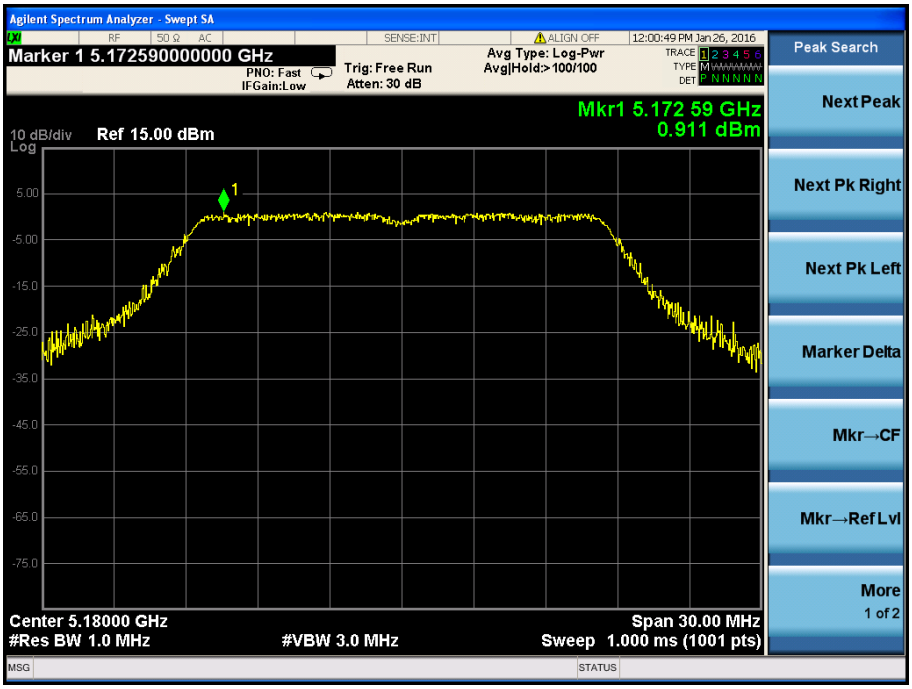


5805MHz



Test Mode: 802.11n-HT20

5180MHz



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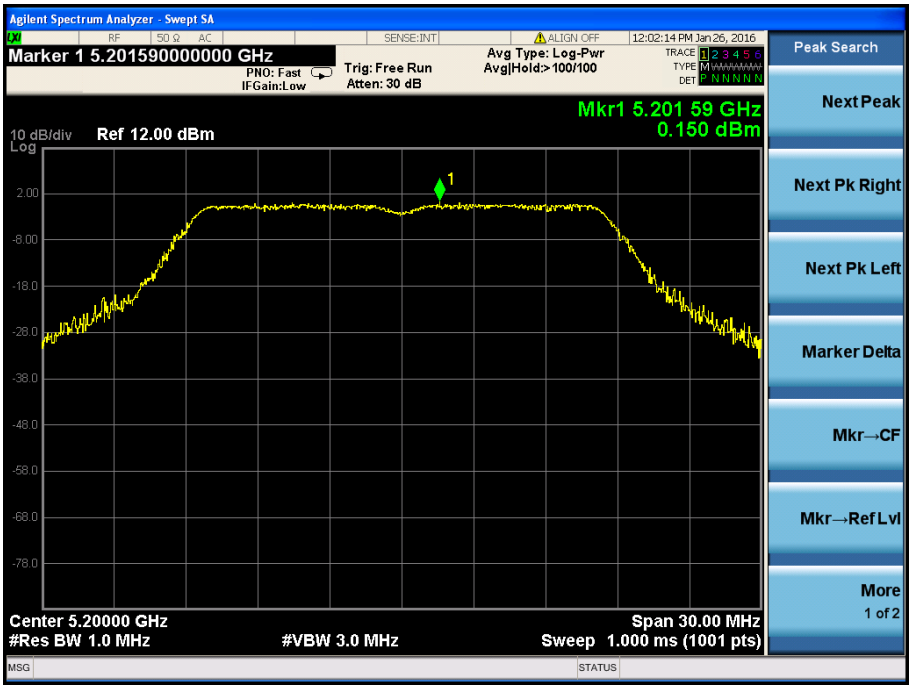

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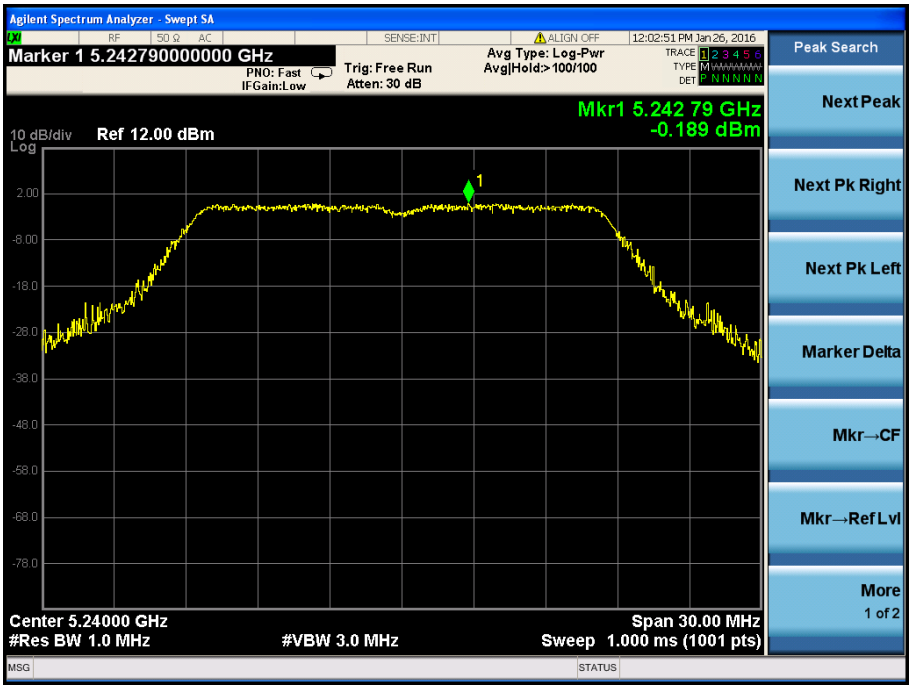

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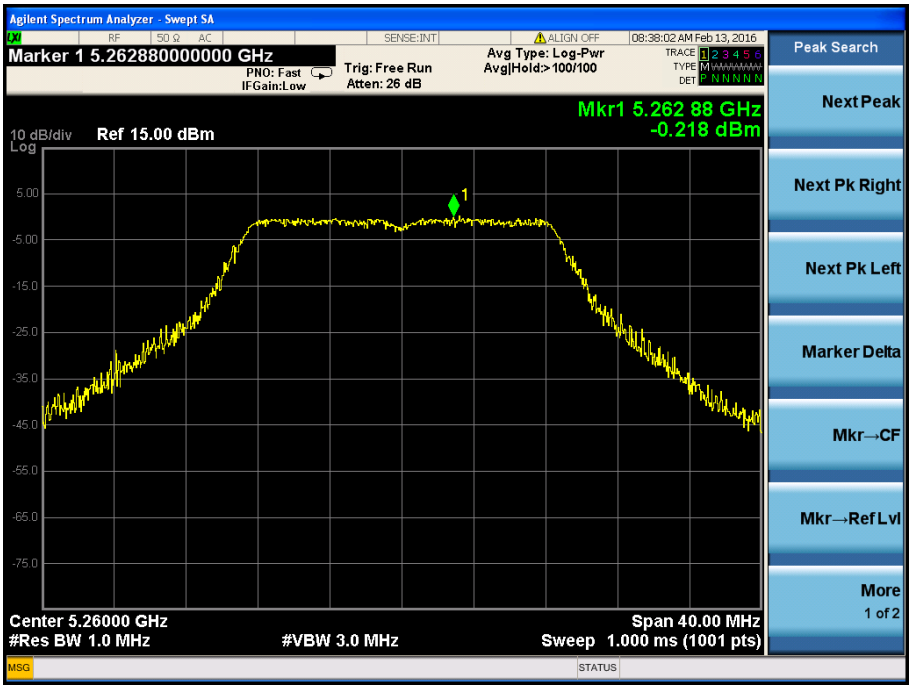

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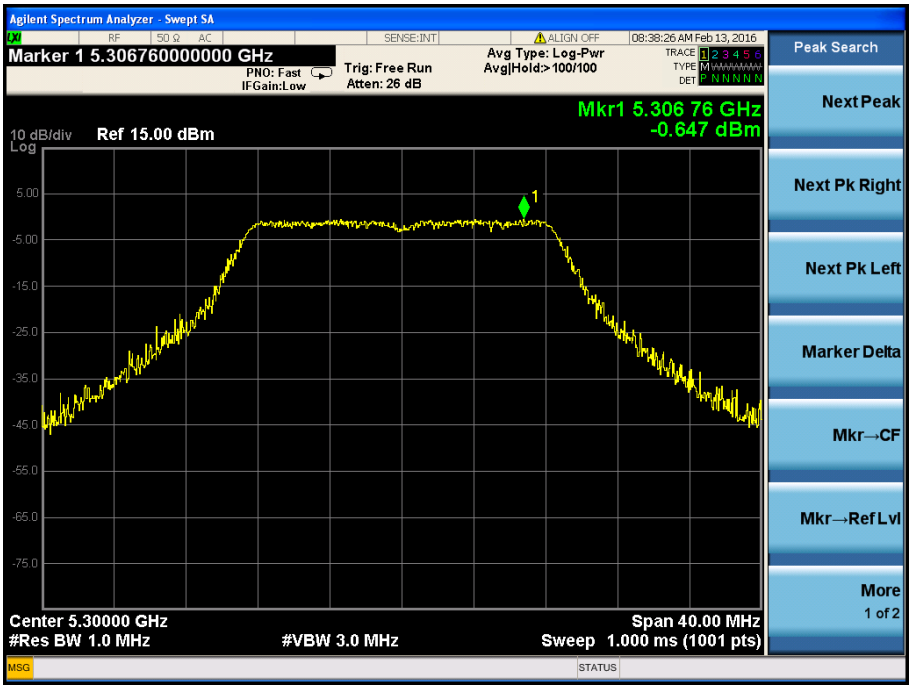

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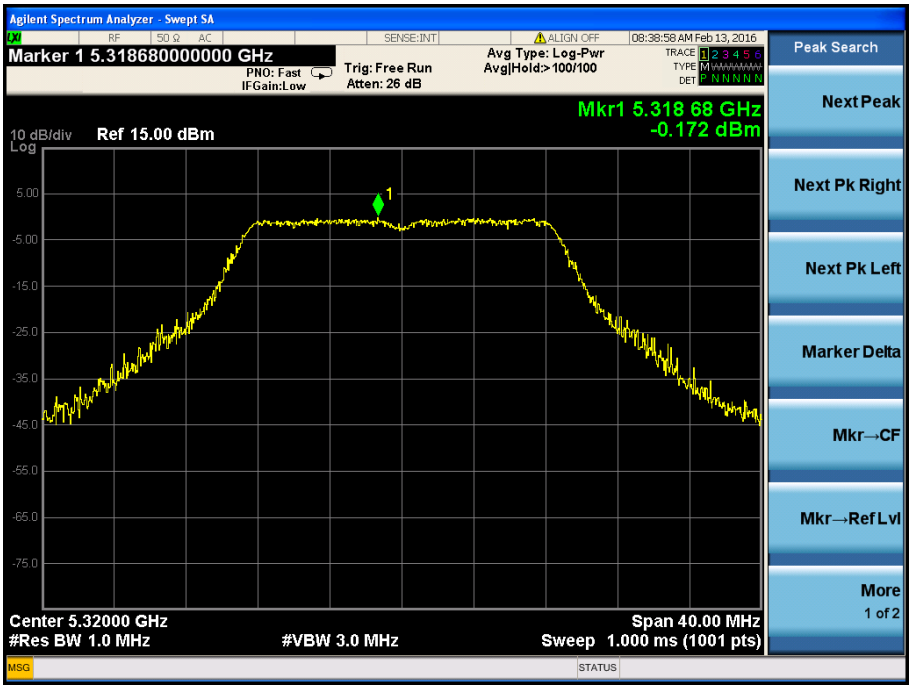
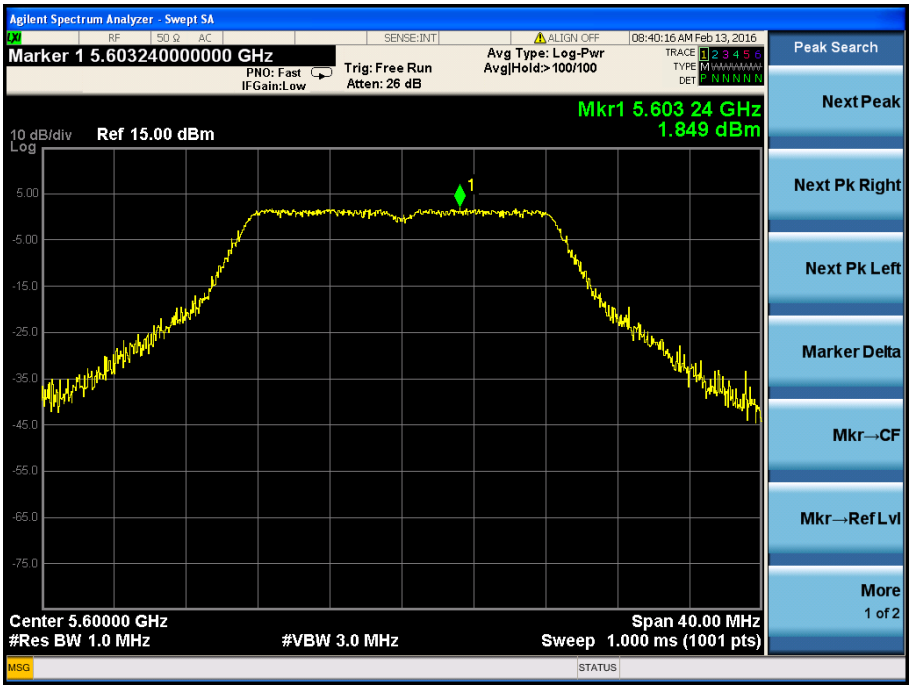


5500MHz

5600MHz



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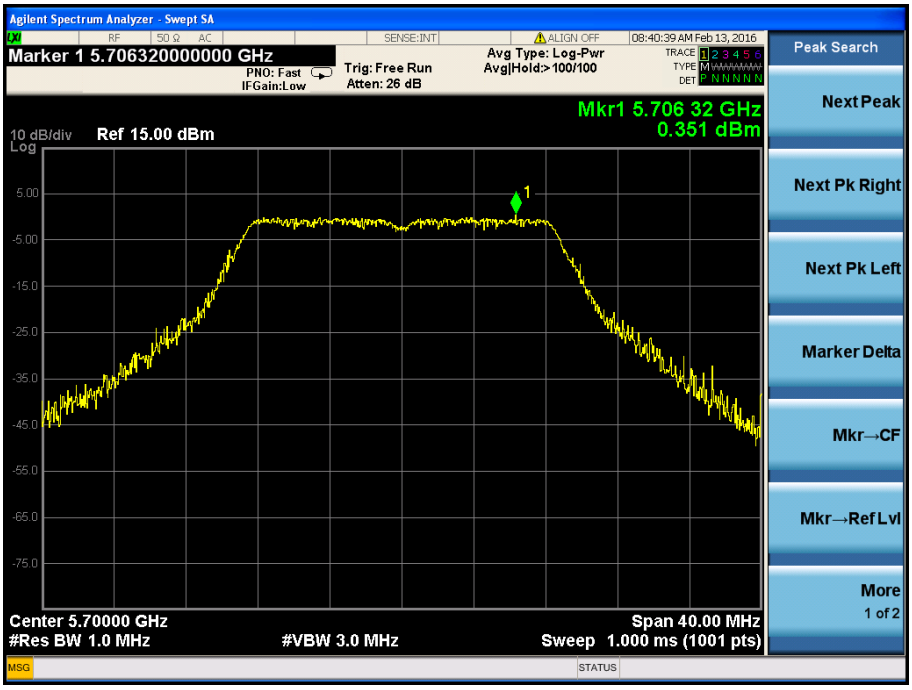

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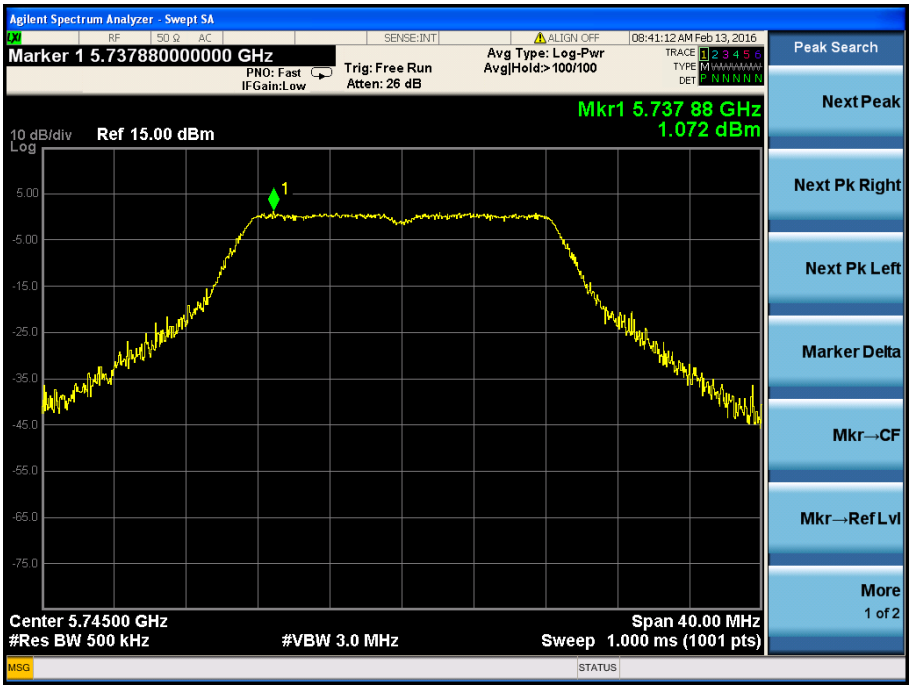

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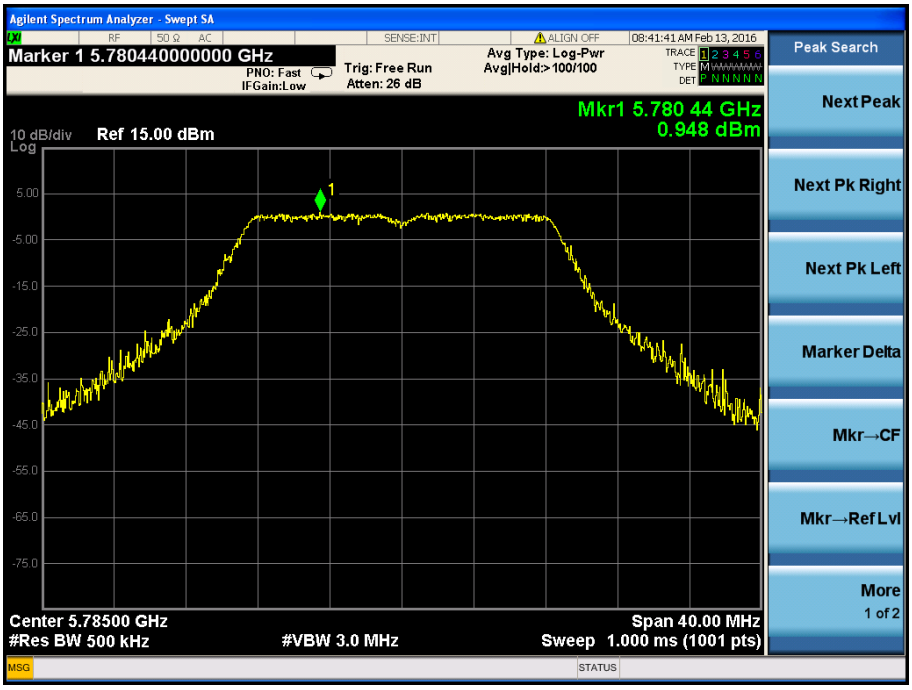

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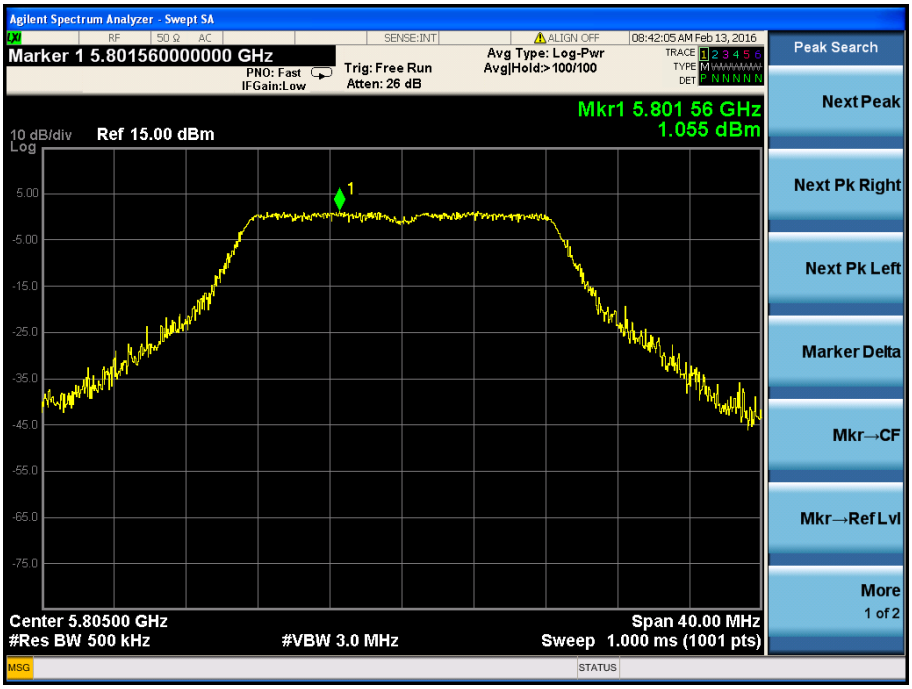

Test Mode: 802.11n-HT40

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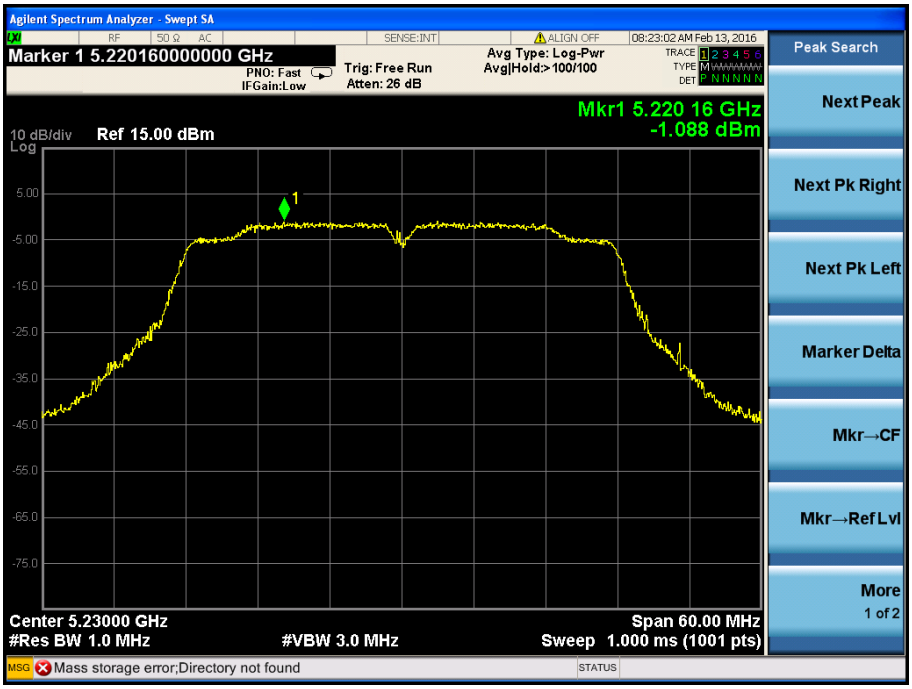
5230MHz



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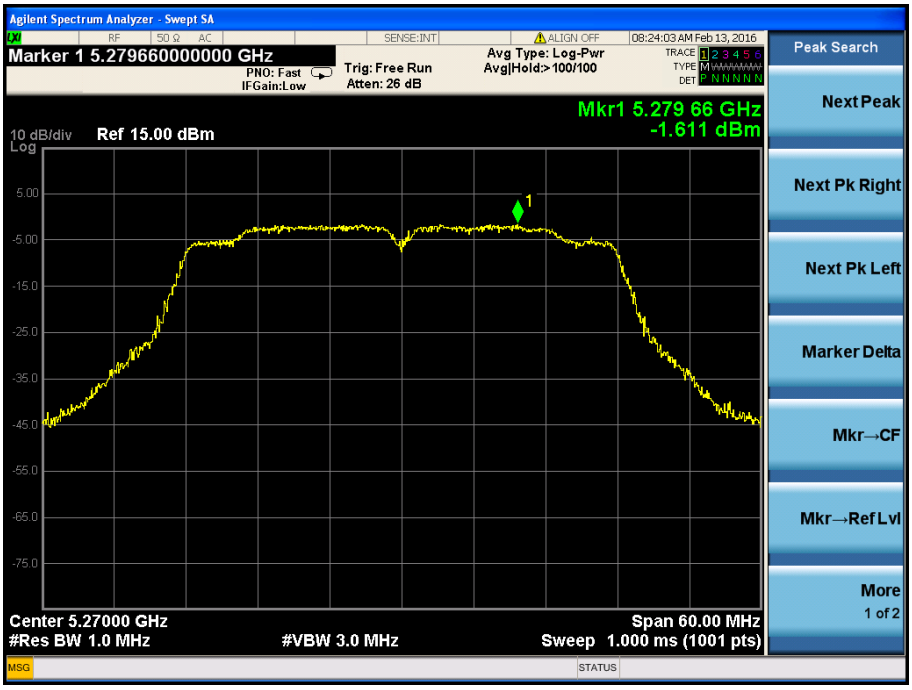

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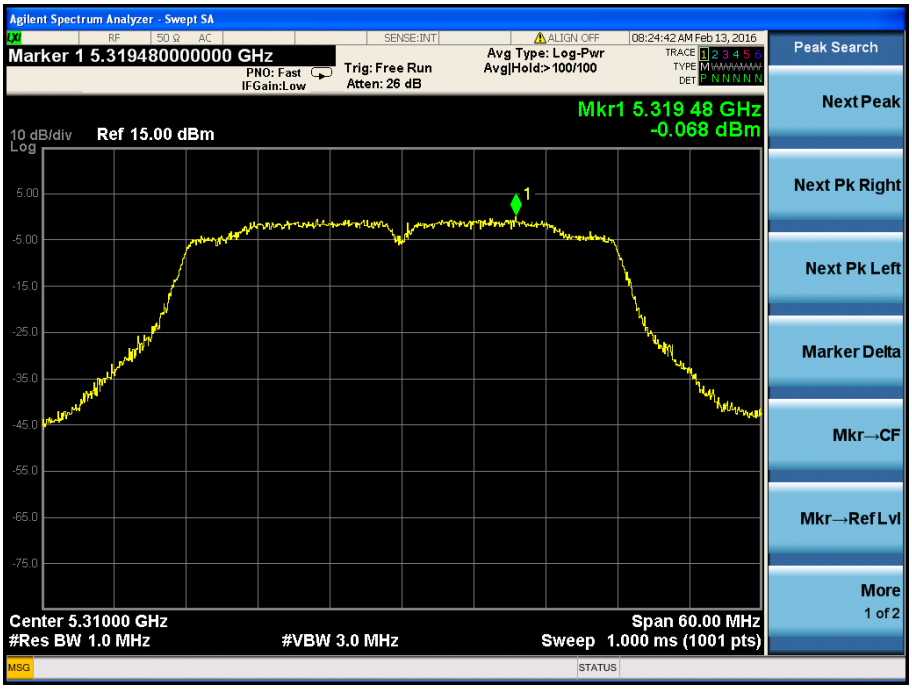

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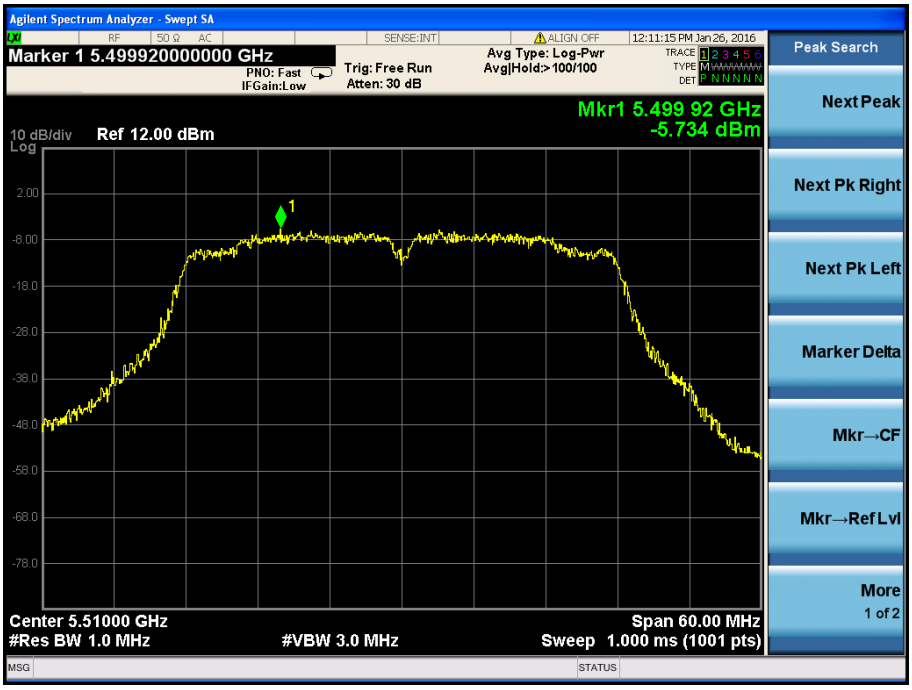

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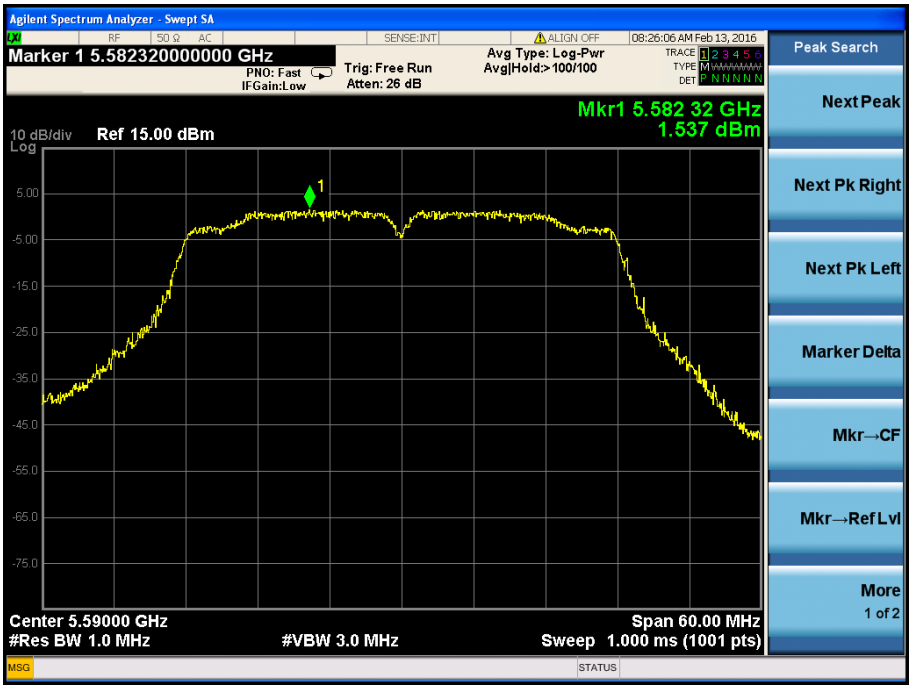

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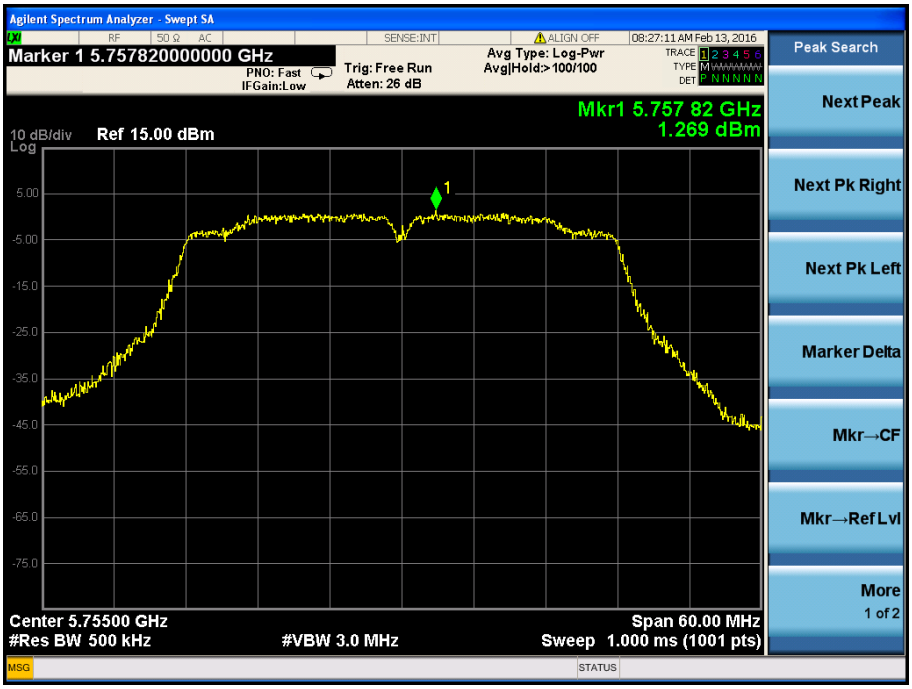

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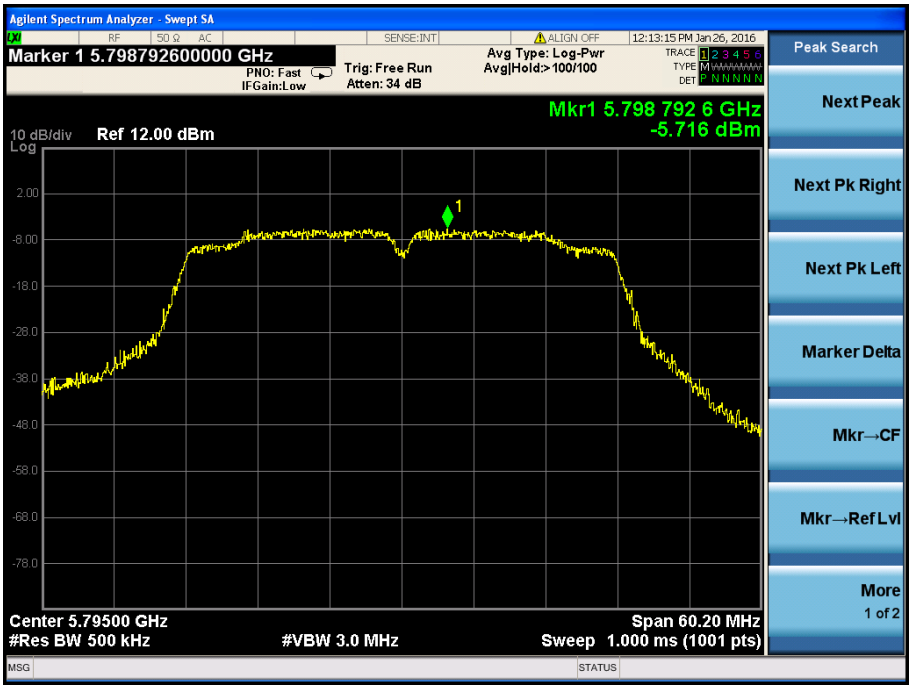
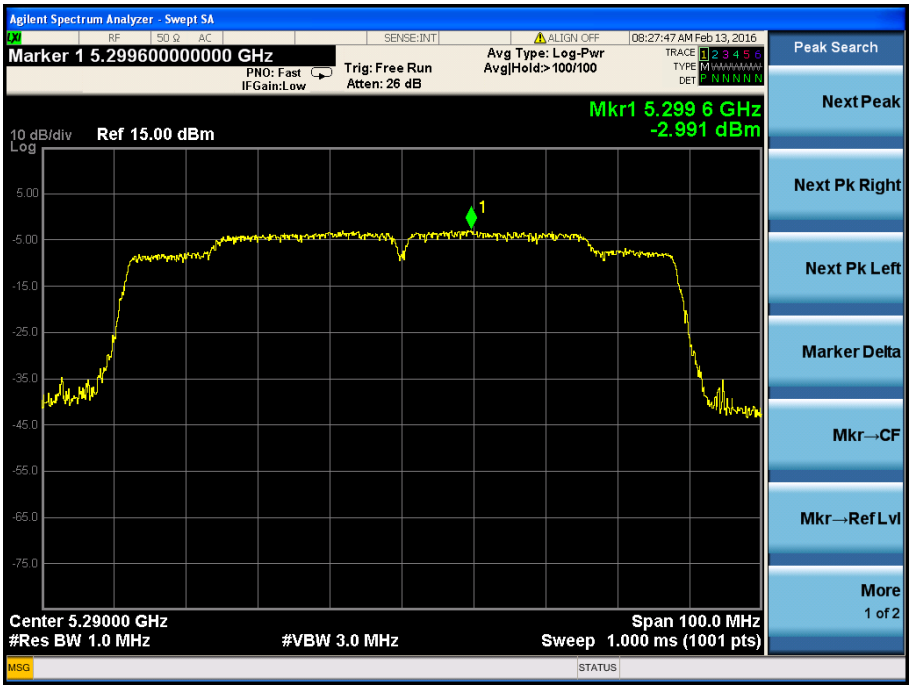


Test Mode: 802.11ac-HT80

5210MHz

5290MHz



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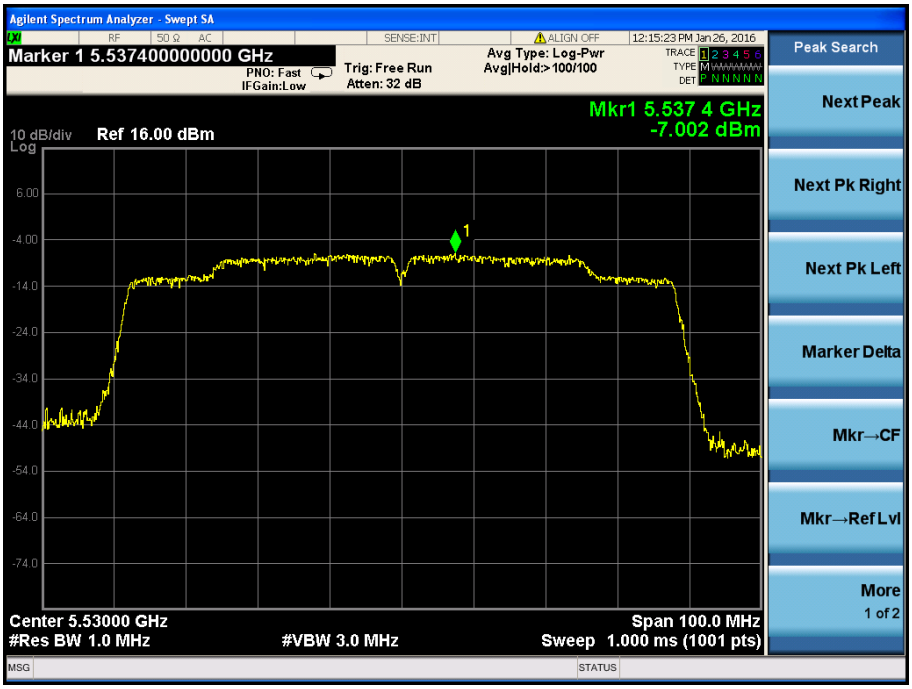

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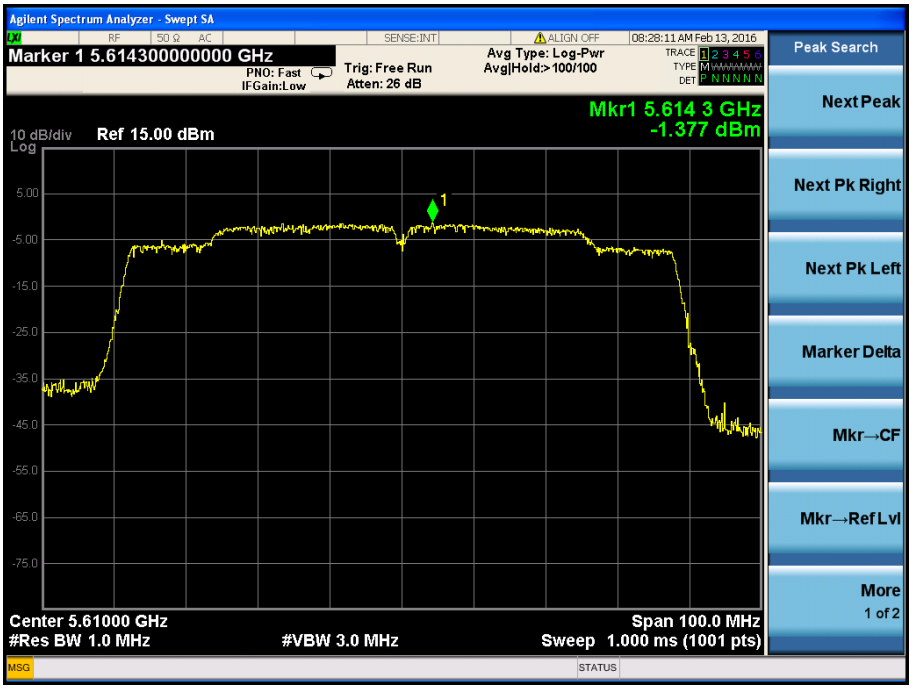

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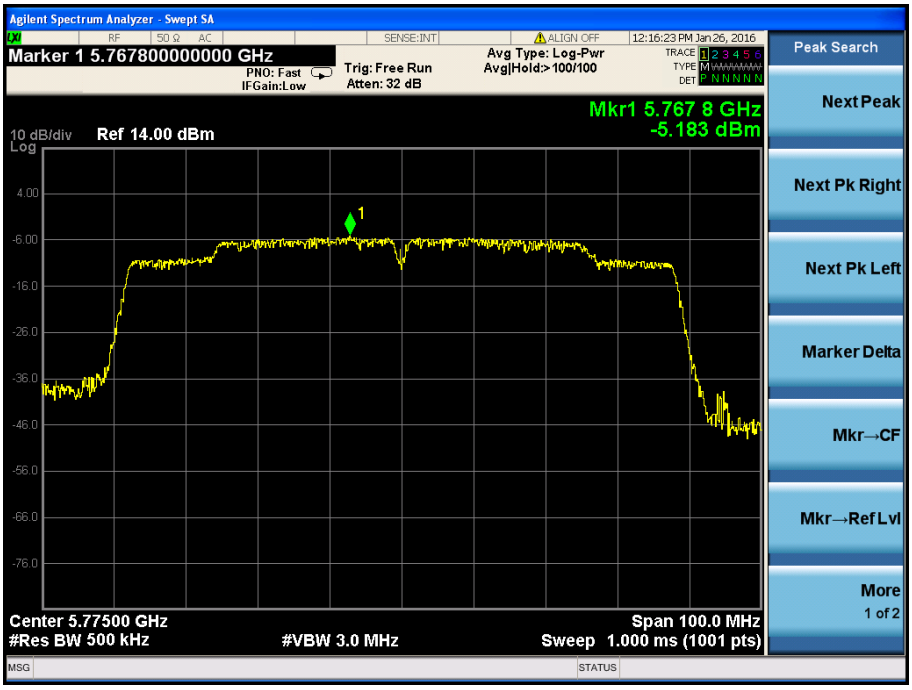
5775MHz

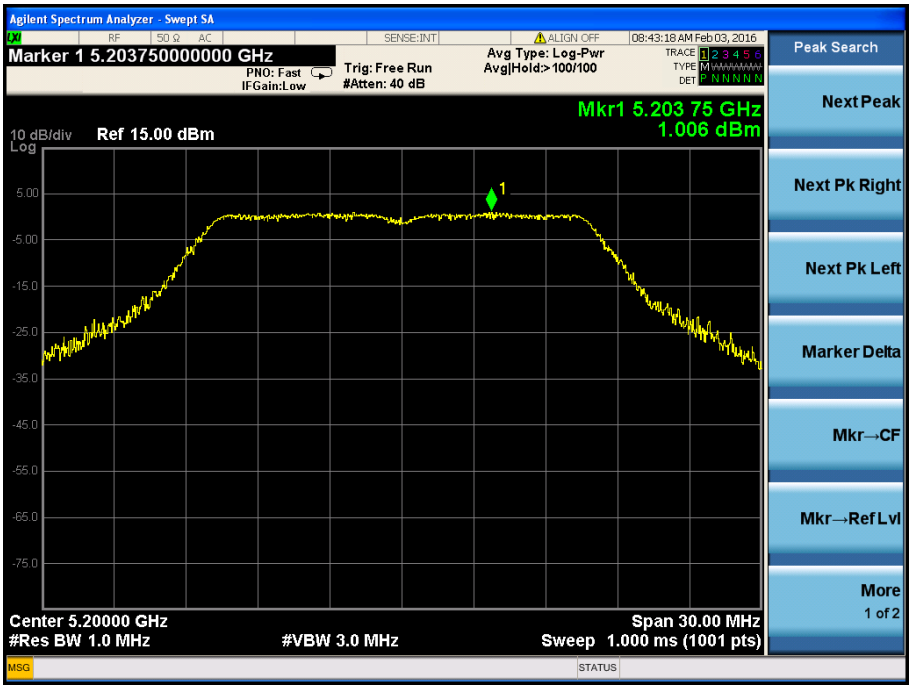


Antenna 2

Test Mode: 802.11a

5180MHz

5200MHz



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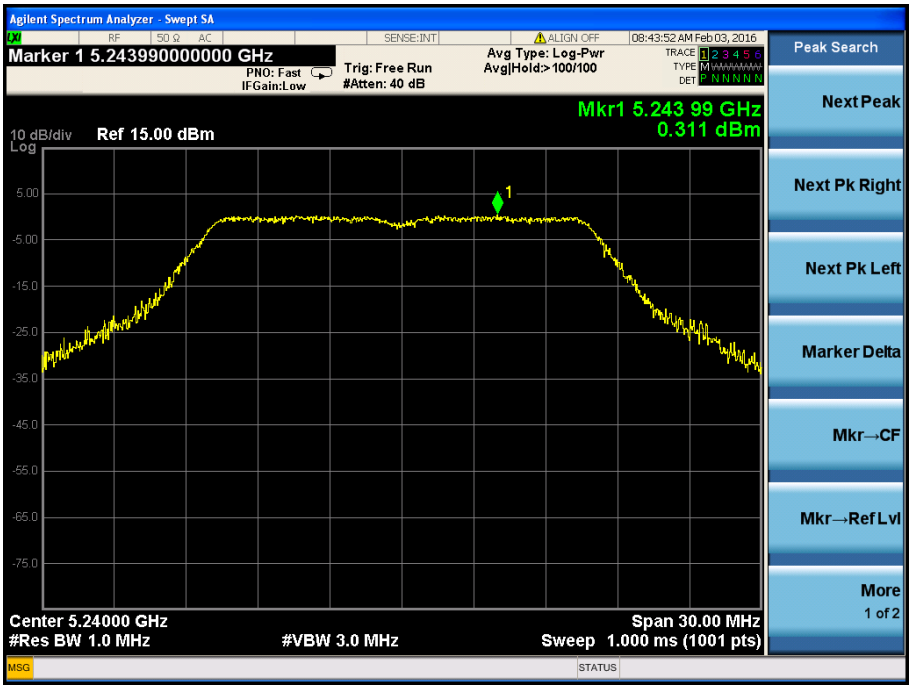

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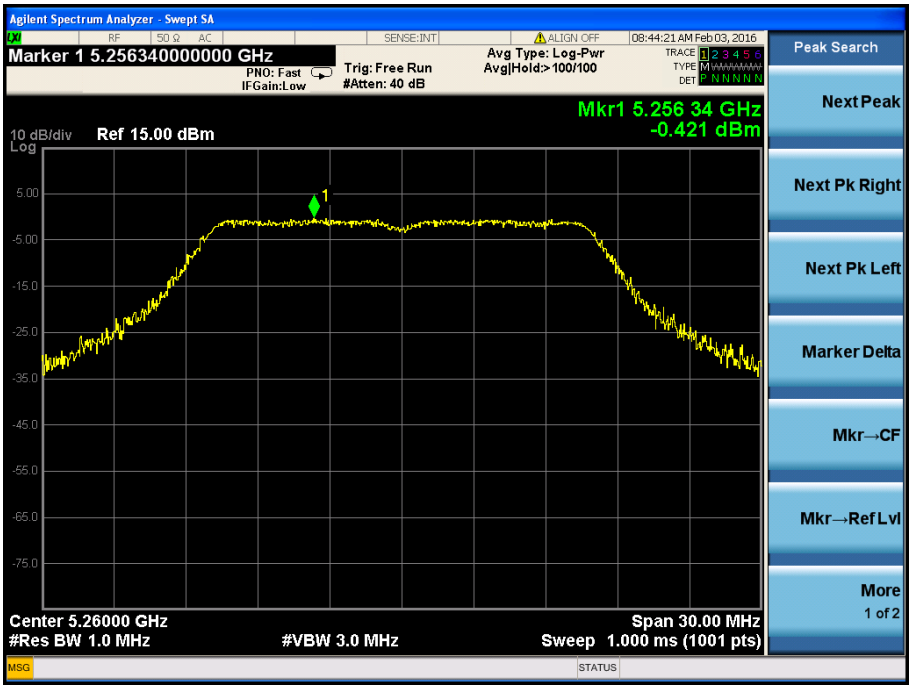

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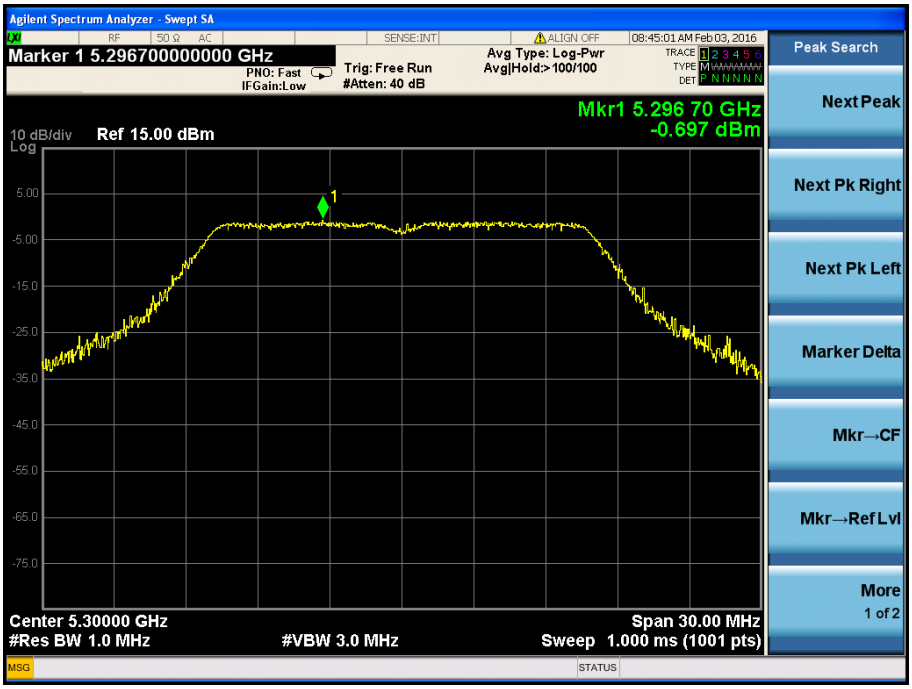

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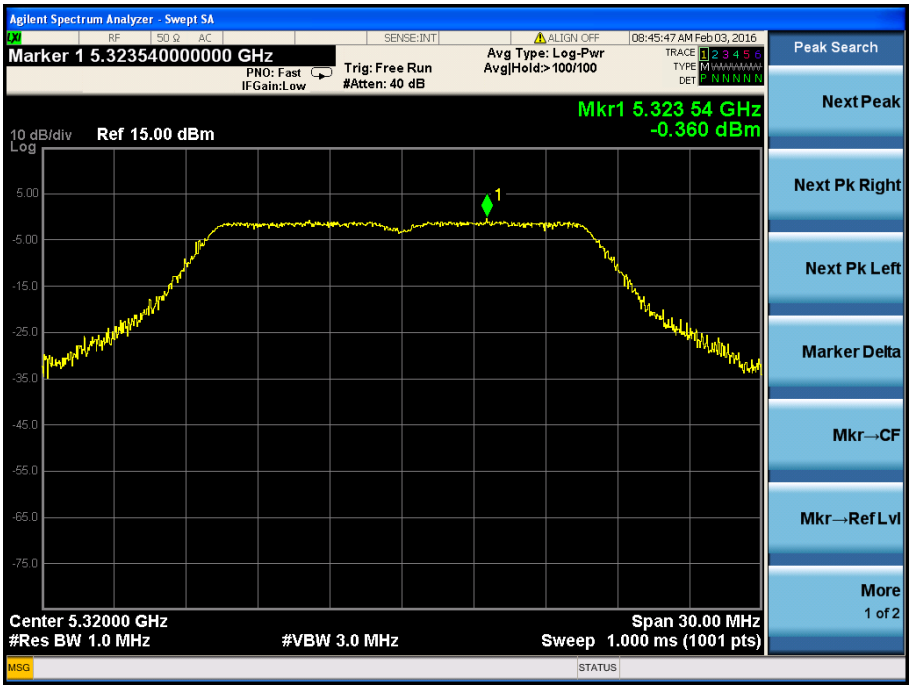

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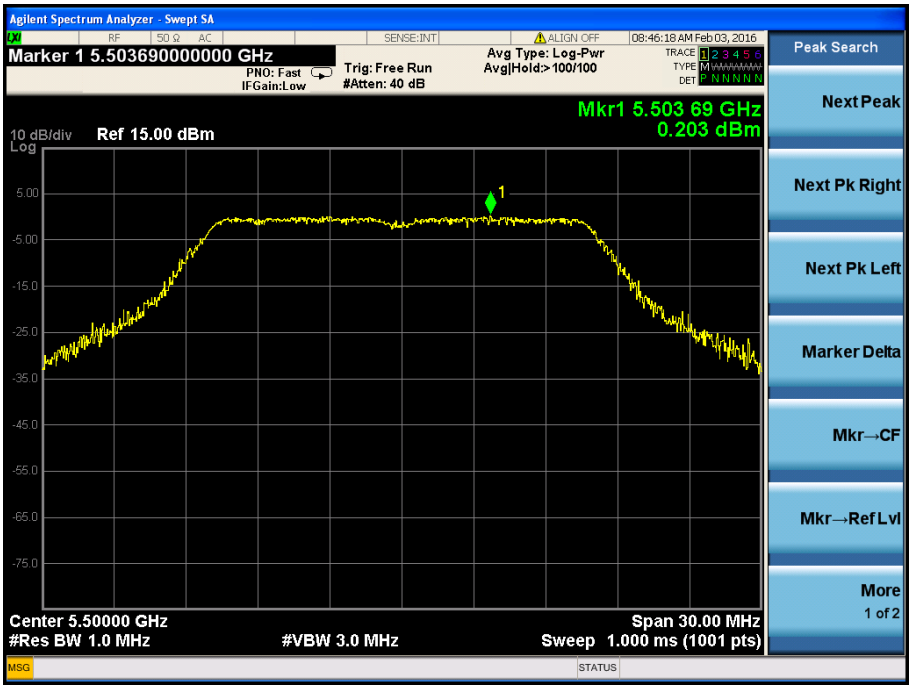

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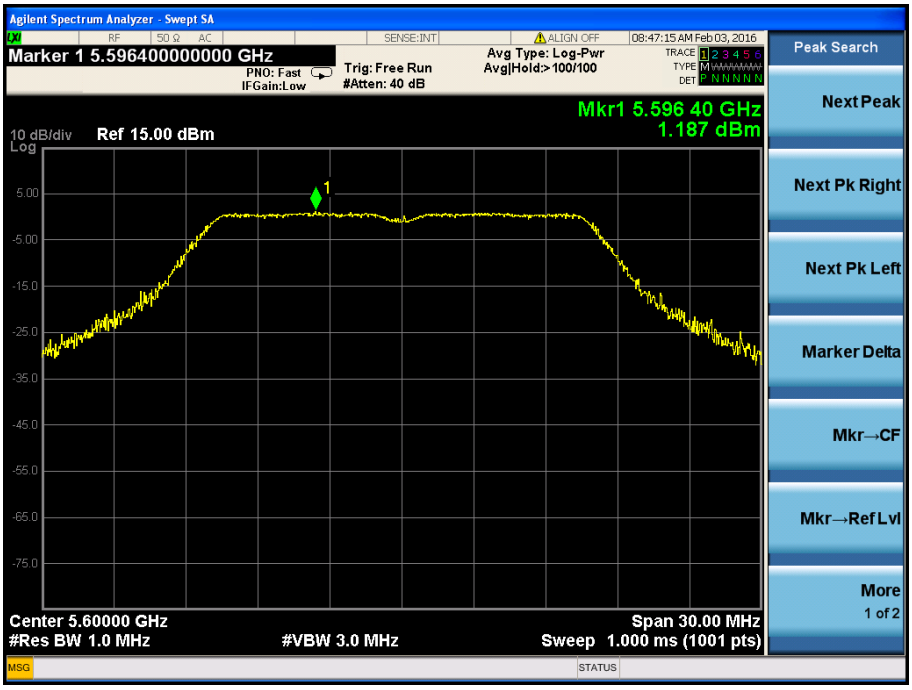

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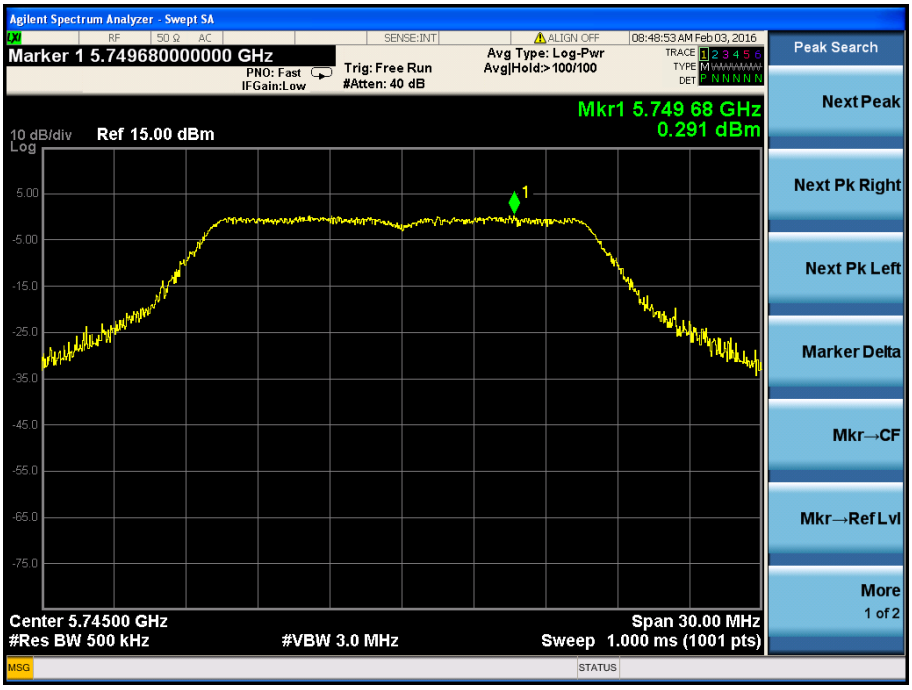

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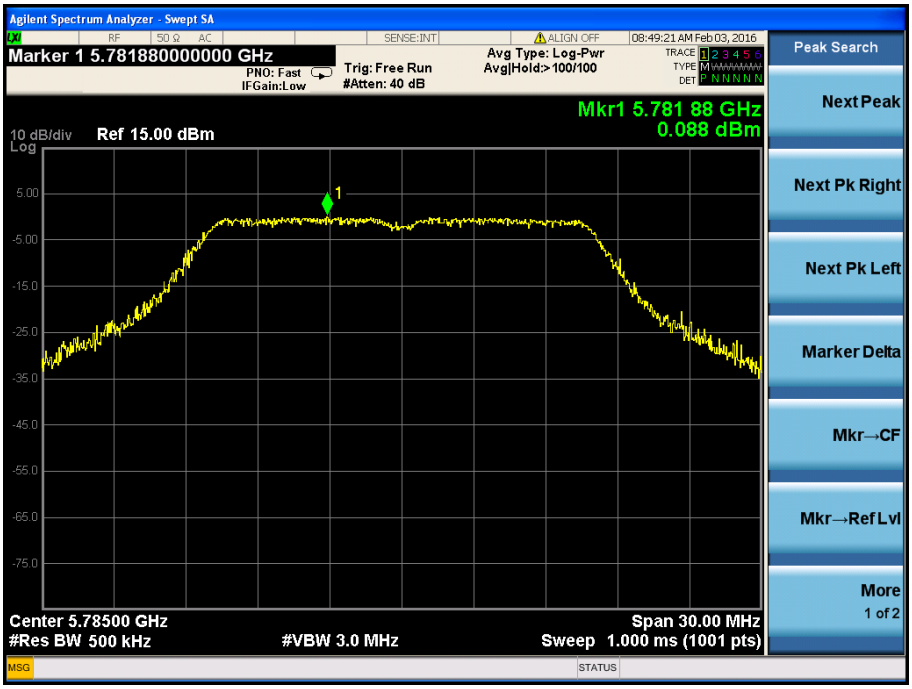

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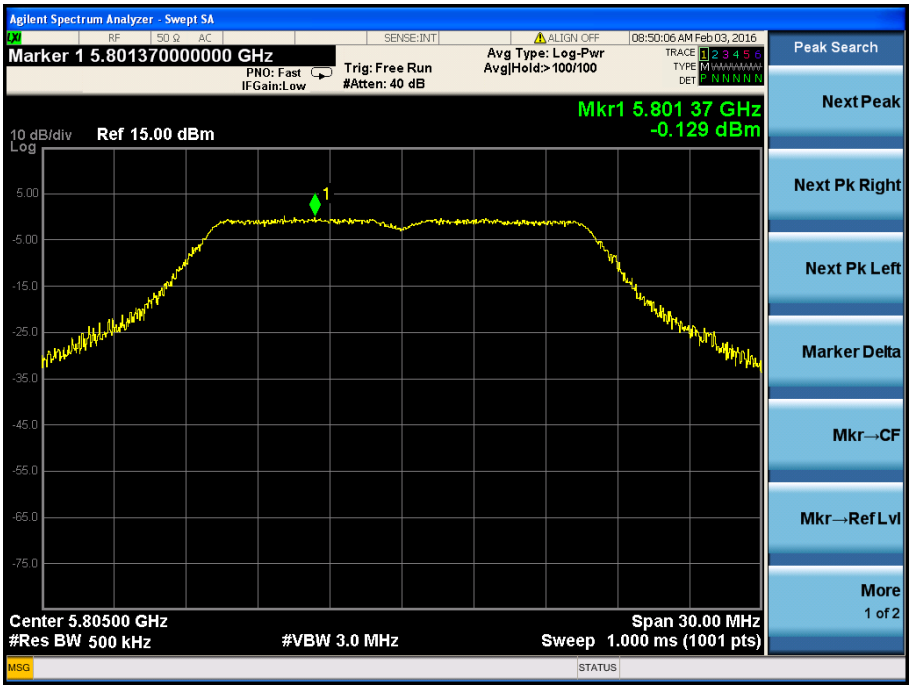

Test Mode: 802.11n-HT20

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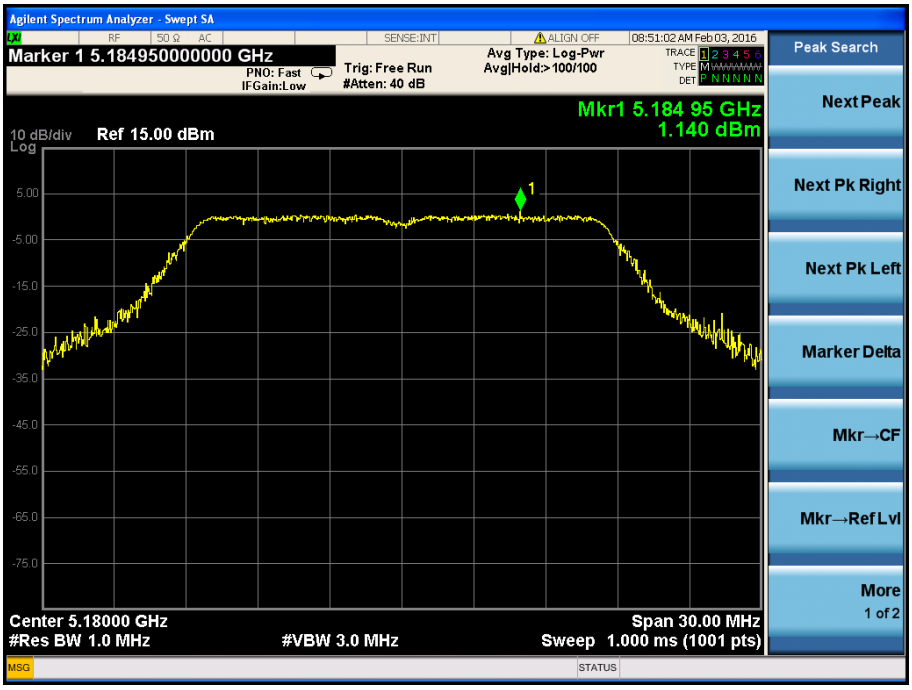

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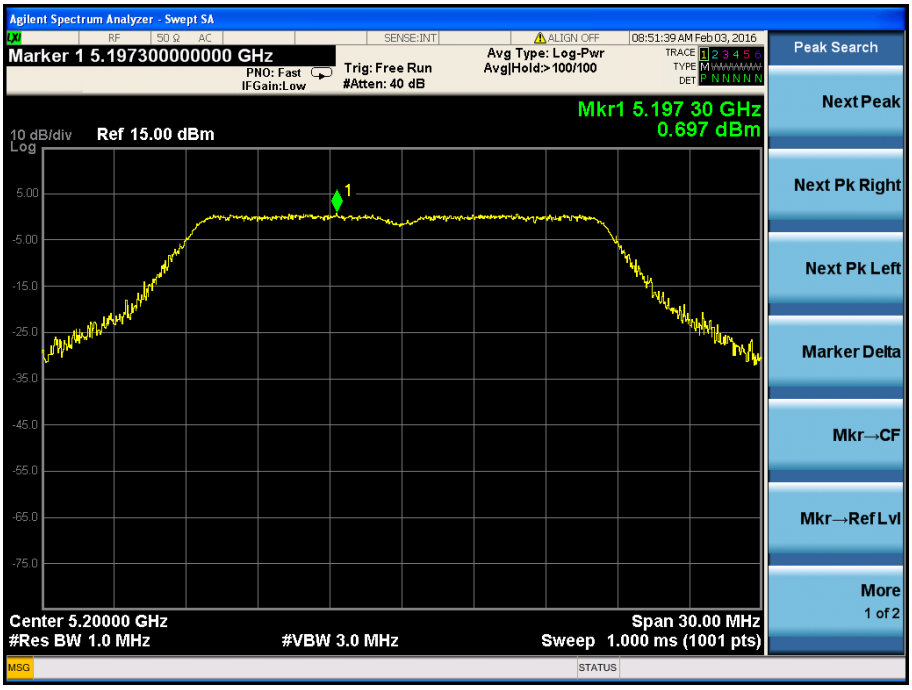

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5260MHz

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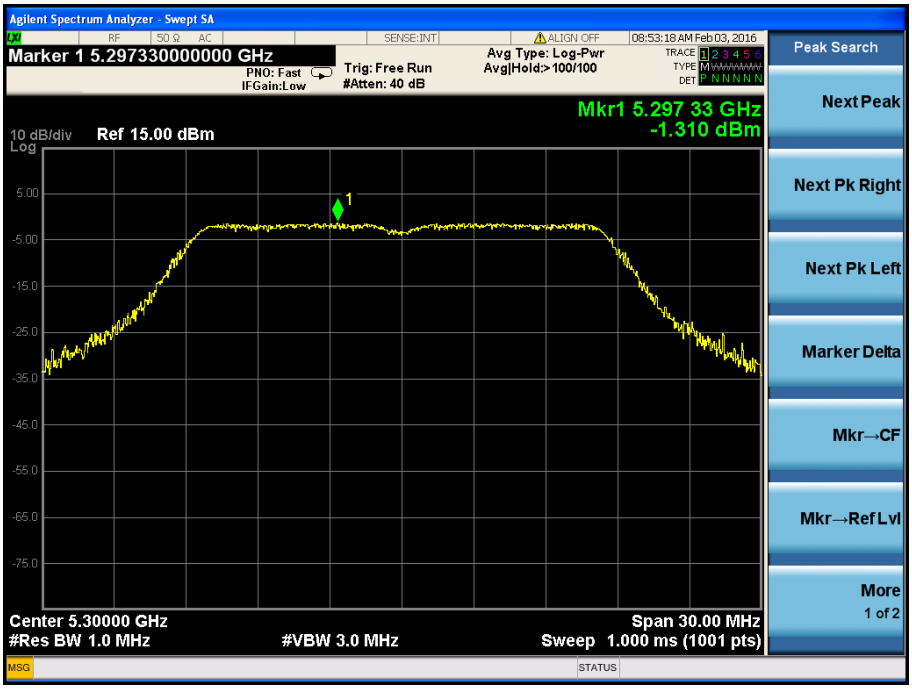

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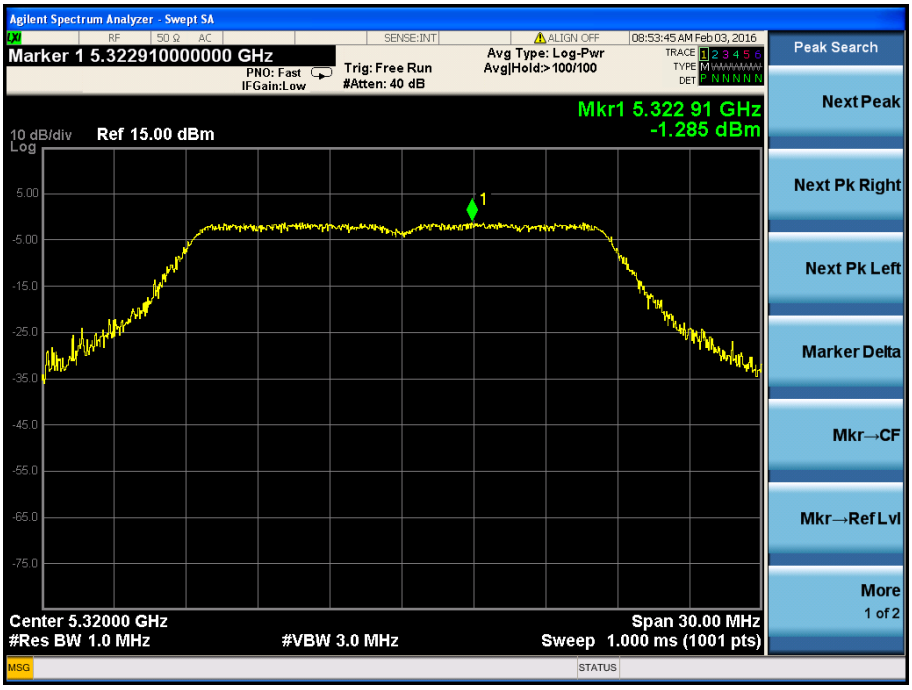

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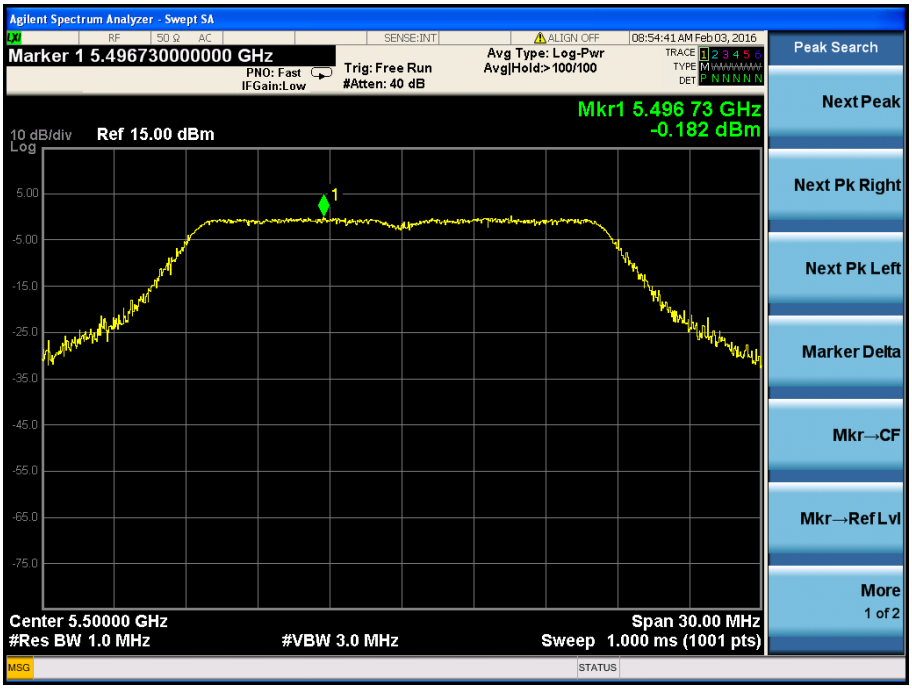

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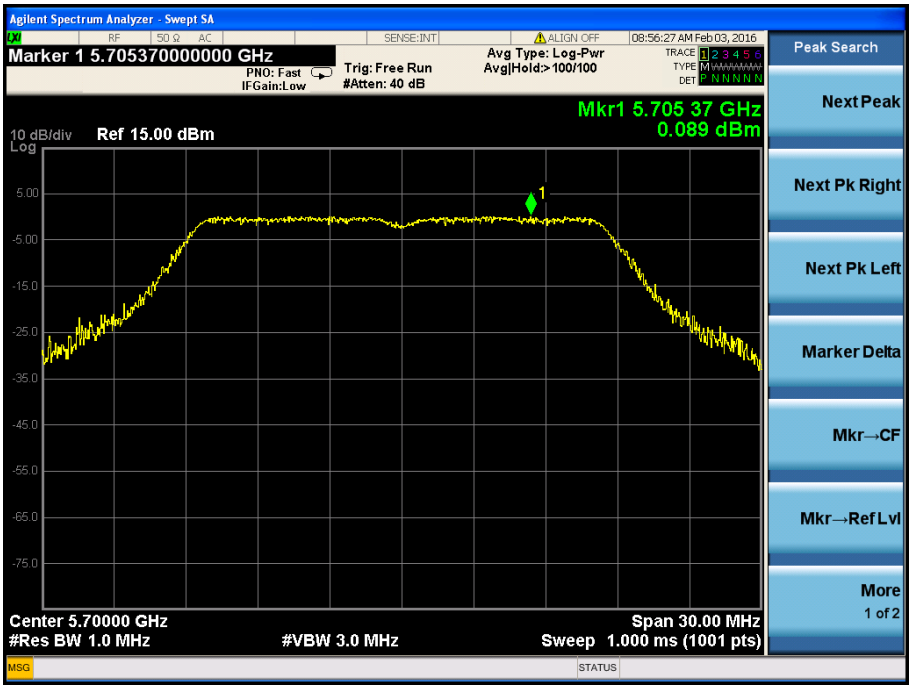
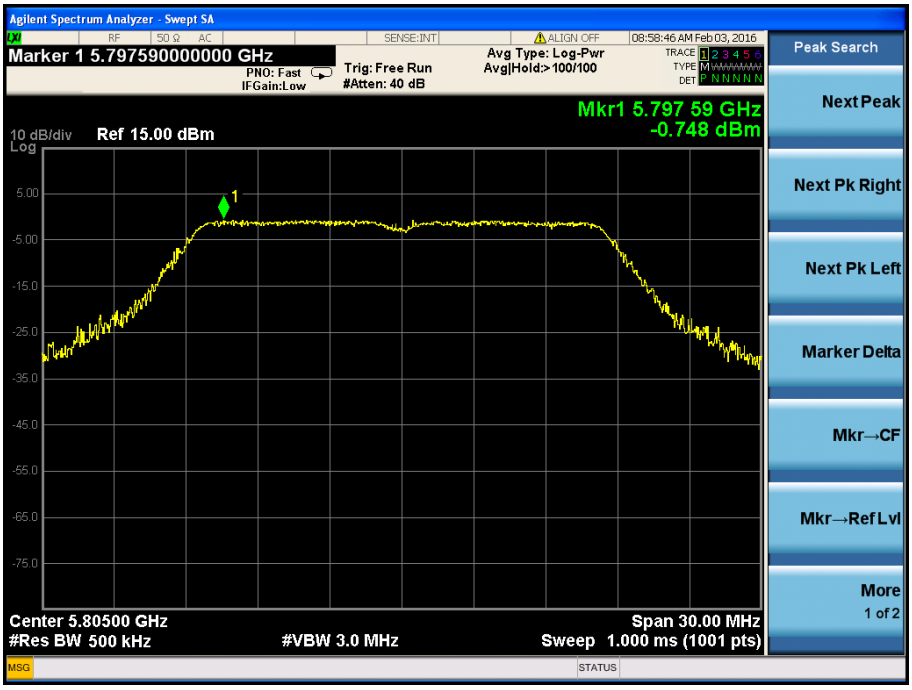


5745MHz

5785MHz

5805MHz



Test Mode: 802.11n-HT40

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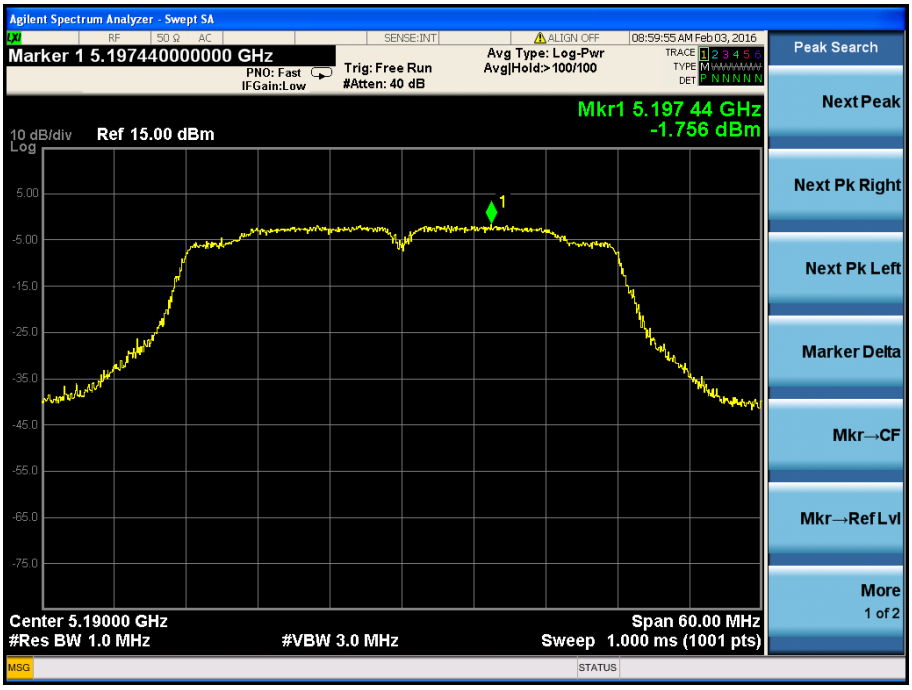

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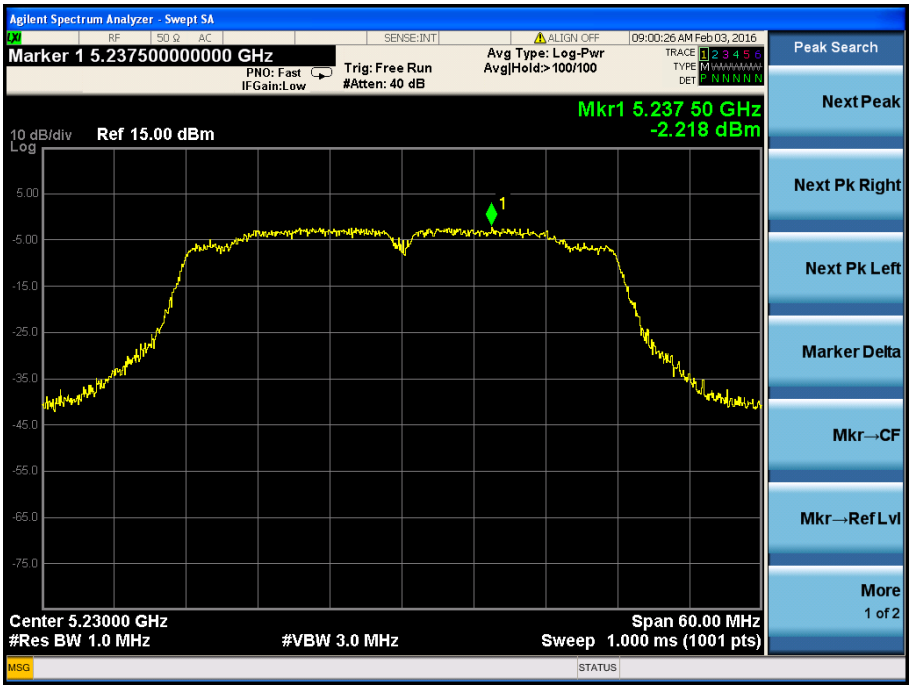

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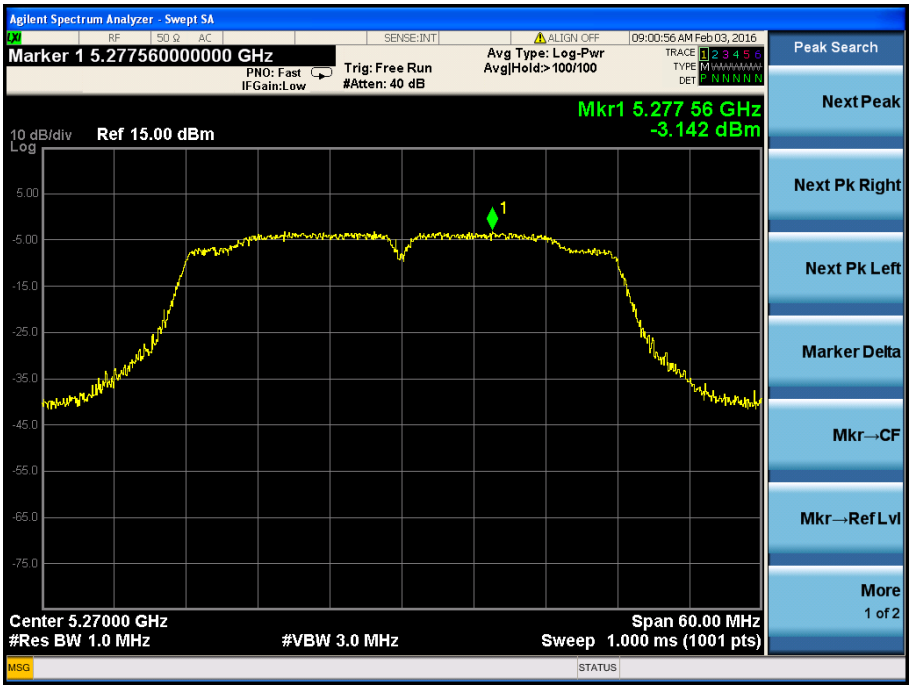
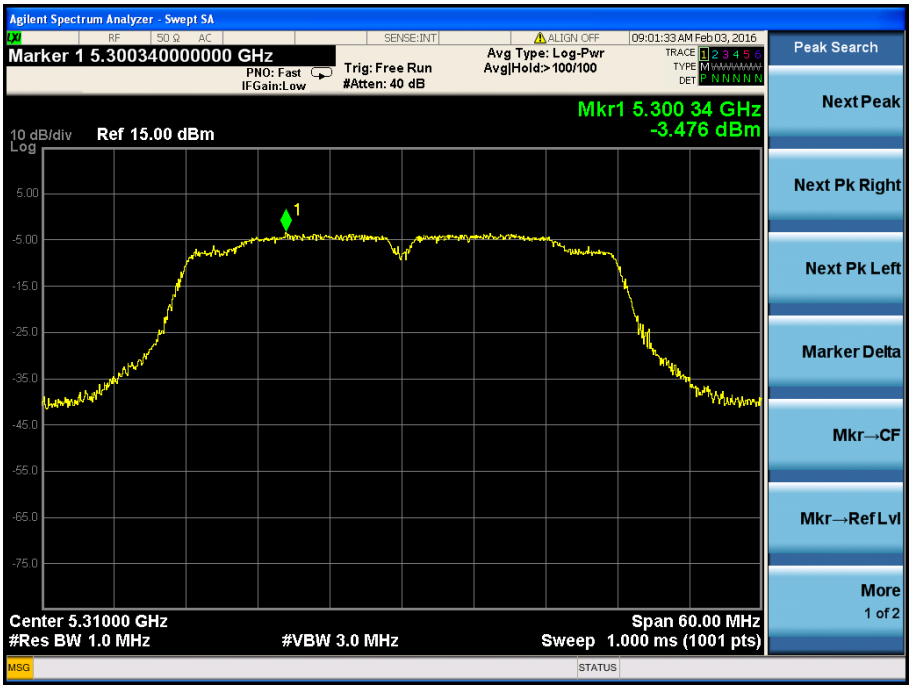
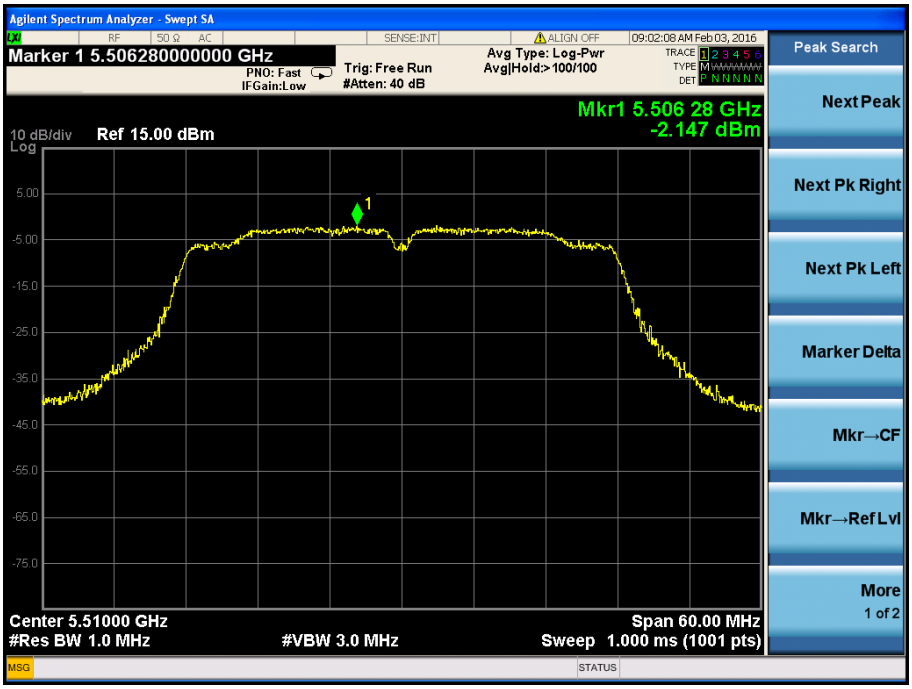


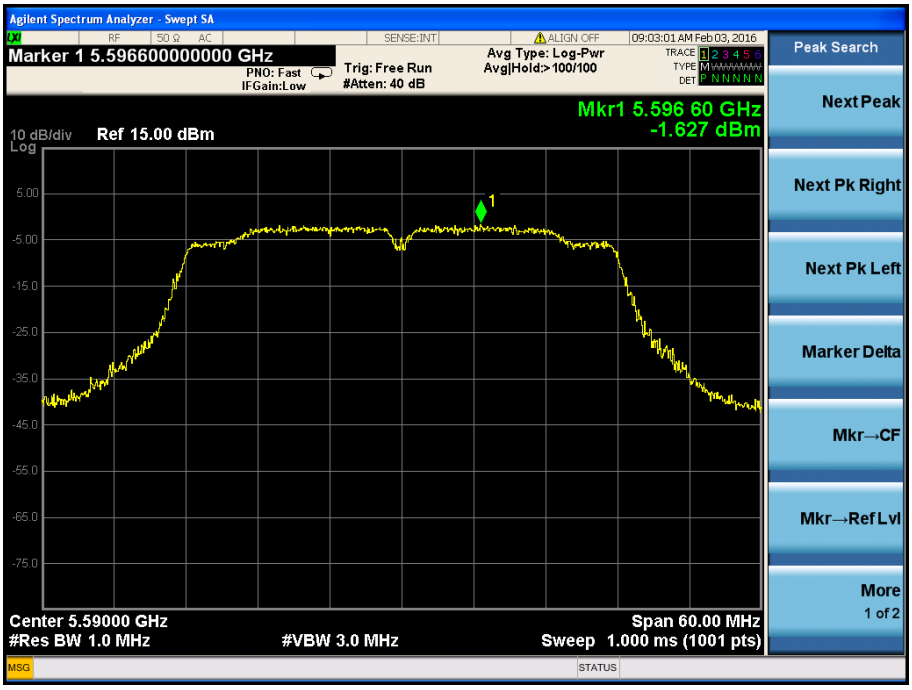
5310MHz



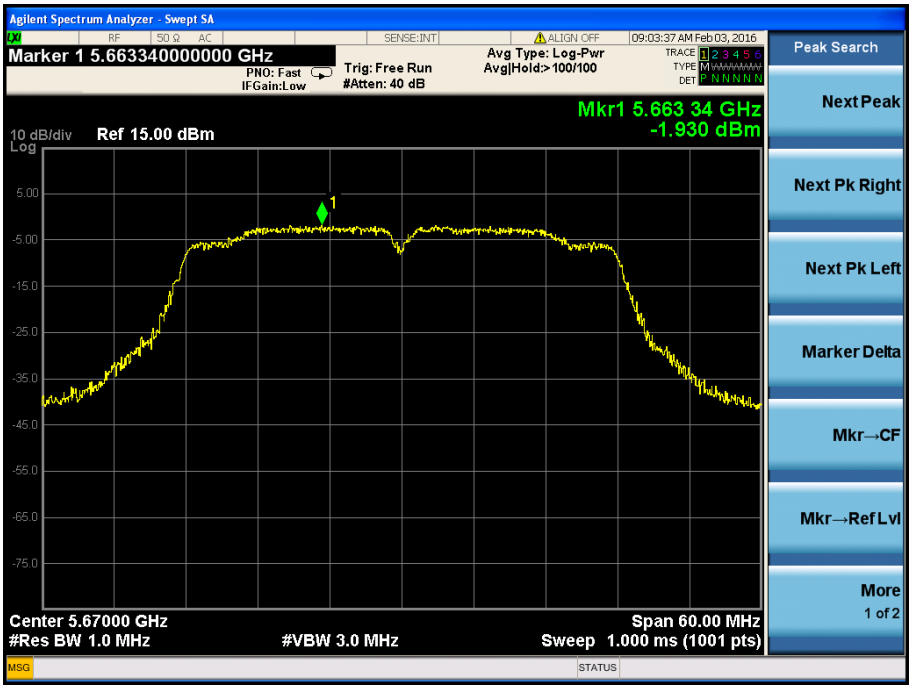
5510MHz



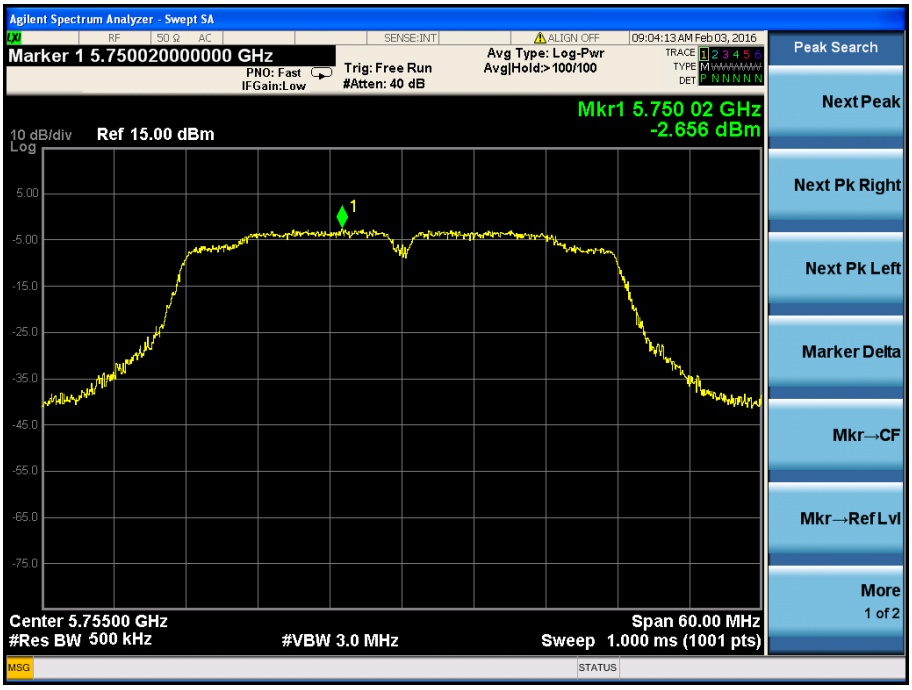
5590MHz



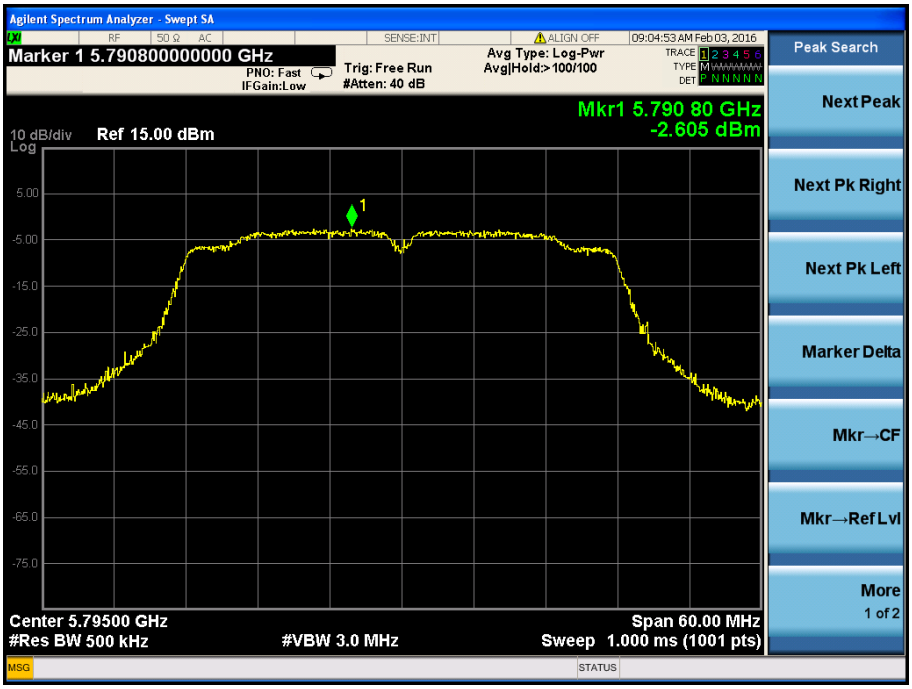
5670MHz



5755MHz



5795MHz



Test Mode: 802.11ac-HT80

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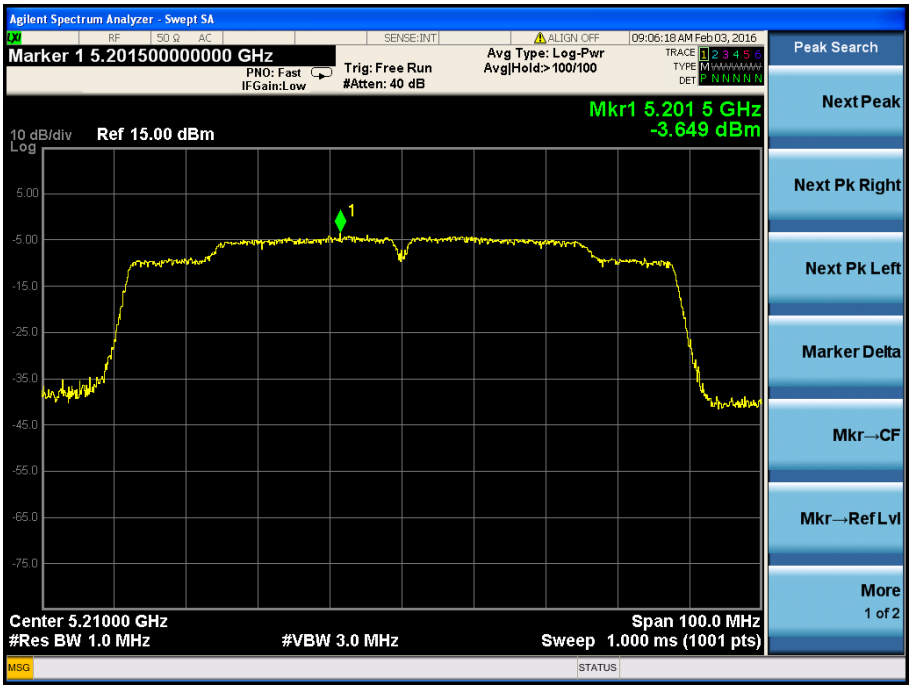
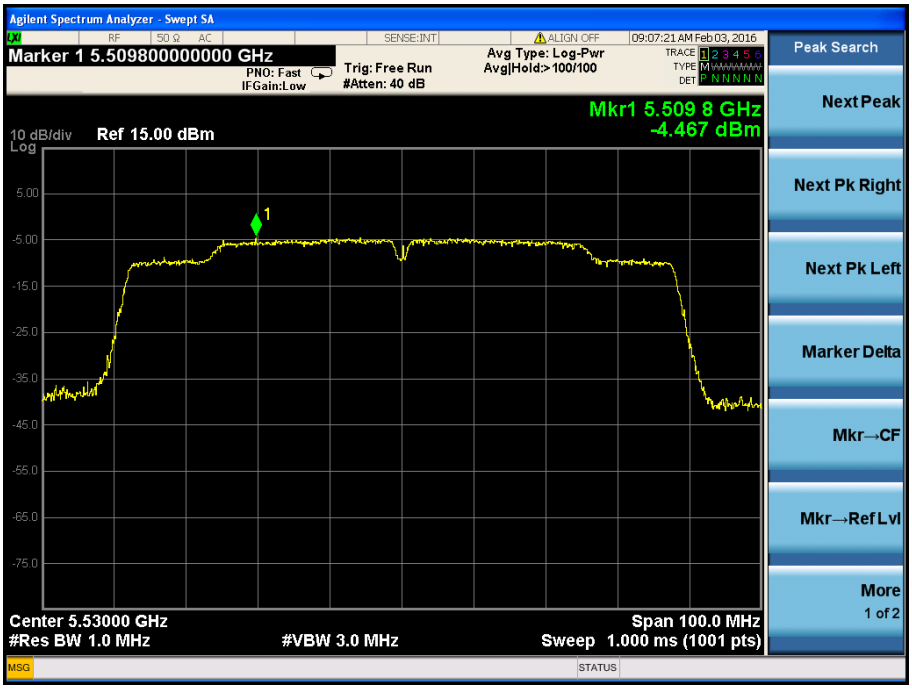
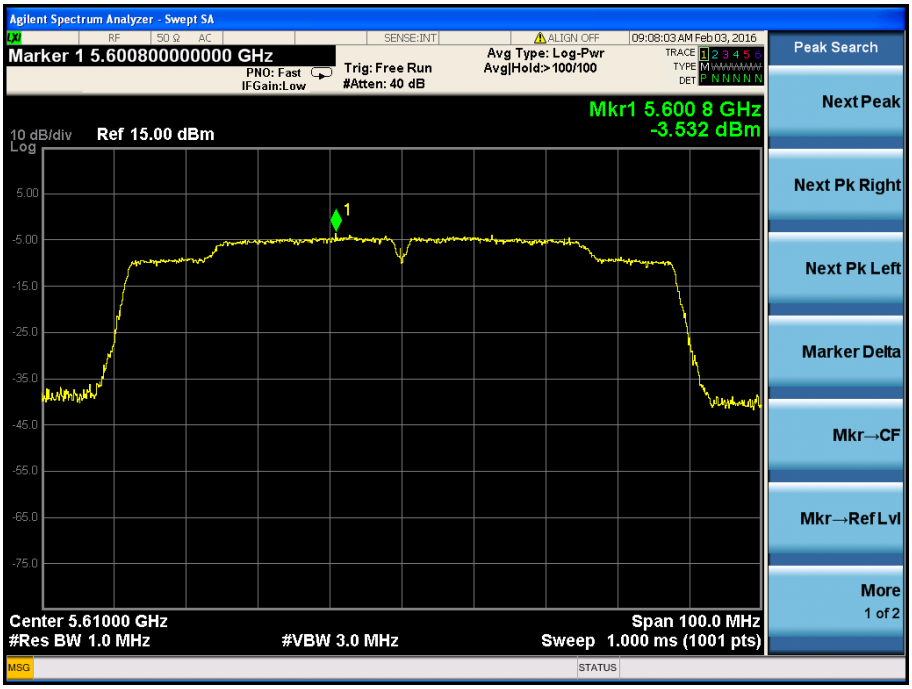


5290MHz

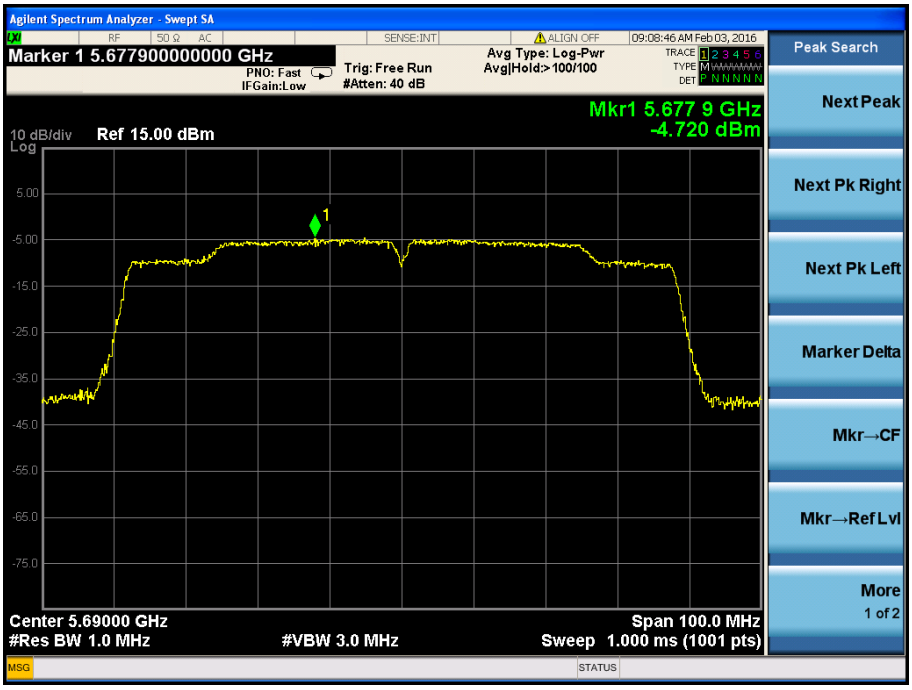
5530MHz



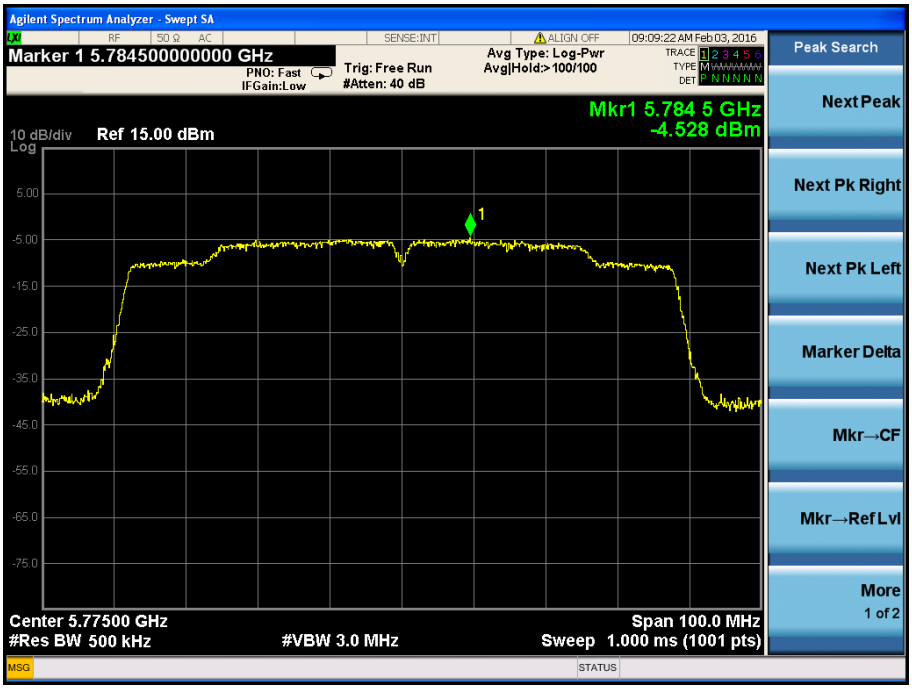
5610MHz



5690MHz



5775MHz



7. Emission Bandwidth and Occupied Bandwidth

7.1 Standard Applicable

According to 15.407 (a) and (e)

(1) For the band 5.15-5.25 GHz.
(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.

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

7.2 Test Procedure

According to 789033 D02 v01 section C&D, the following is the measurement procedure.

1. Emission Bandwidth (EBW)
a) Set RBW = approximately 1% of the emission bandwidth.
b) Set the VBW > RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare

this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

2. Minimum Emission Bandwidth for the band 5.725-5.85 GHz

Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.715-5.85 GHz. The following procedure shall be used for measuring this bandwidth:

a) Set RBW = 100 kHz.

b) Set the video bandwidth (VBW) ≥ 3 × RBW.

c) Detector = Peak.

d) Trace mode = max hold.

e) Sweep = auto couple.

f) Allow the trace to stabilize.

g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

Note: The automatic bandwidth measurement capability of a spectrum analyzer or EMI receiver may be employed if it implements the functionality described above.

D. 99 Percent Occupied Bandwidth

The 99-percent occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5 % of the total mean power of the given emission. Measurement of the 99-percent occupied bandwidth is required only as a condition for using the optional band-edge measurement techniques described in section II.G.3.d). Measurements of 99-percent occupied bandwidth may also optionally be used in lieu of the EBW to 789033 D02 General UNII Test Procedures New Rules v01 define the minimum frequency range over which the spectrum is integrated when measuring maximum conducted output power as described in section II.E. However, the EBW must be measured to determine bandwidth dependent limits on maximum conducted output power in accordance with 15.407(a).

The following procedure shall be used for measuring (99 %) power bandwidth:

1. Set center frequency to the nominal EUT channel center frequency.

2. Set span = 1.5 times to 5.0 times the OBW.

3. Set RBW = 1 % to 5 % of the OBW

4. Set VBW ≥ 3 • RBW

5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.

6. Use the 99 % power bandwidth function of the instrument (if available).

7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

7.3 Environmental Conditions

Temperature:	24° C
Relative Humidity:	53%
ATM Pressure:	1018 mbar

7.4 Summary of Test Results/Plots

Antenna 1

5150-5250MHz

Test Mode	Test Channel MHz	26 dB Bandwidth MHz	99% Bandwidth MHz	Limit MHz
802.11a	5180	25.69	17.154	--
	5200	24.76	17.079	--
	5240	24.19	17.063	--
802.11n-HT20	5180	25.52	18.188	--
	5200	25.53	18.246	--
	5240	25.14	18.164	--
802.11n-HT40	5190	43.32	36.060	--
	5230	42.49	35.986	--
802.11ac-HT80	5210	80.54	74.837	

5250-5350MHz

Test Mode	Test Channel MHz	26 dB Bandwidth MHz	99% Bandwidth MHz	Limit MHz
802.11a	5260	23.38	17.055	--
	5300	24.98	16.874	--
	5320	24.02	17.014	--
802.11n-HT20	5260	26.39	18.208	--
	5300	23.51	18.140	--
	5320	23.41	18.133	--
802.11n-HT40	5270	41.36	35.969	--
	5310	41.46	35.956	--
802.11ac-HT80	5290	80.95	75.043	

5470-5725MHz

Test Mode	Test Channel MHz	26 dB Bandwidth MHz	99% Bandwidth MHz	Limit MHz
802.11a	5500	23.93	16.875	--
	5600	23.93	16.967	--
	5700	23.61	16.948	--
802.11n-HT20	5500	23.92	18.072	--
	5600	25.21	18.137	--
	5700	24.04	18.136	--
802.11n-HT40	5510	42.05	35.999	--
	5590	41.54	35.998	--
	5670	41.30	36.021	
802.11ac-HT80	5530	80.43	74.822	
	5610	80.21	74.935	
	5690	80.67	74.913	

5725-5850MHz

Test Mode	Test Channel MHz	26 dB Bandwidth MHz	6 dB Bandwidth MHz	99% Bandwidth MHz	Limit MHz
802.11a	5745	25.19	16.47	17.124	≥500
	5785	27.00	16.45	17.128	≥500
	5805	26.18	16.49	17.055	≥500
802.11n-HT20	5745	25.92	17.65	18.147	≥500
	5785	27.63	17.73	18.260	≥500
	5805	23.80	17.72	18.162	≥500
802.11n-HT40	5755	42.70	35.77	36.028	≥500
	5795	42.34	35.77	36.034	≥500
802.11ac-HT80	5775	80.44	75.12	74.839	≥500

Antenna 2

5150-5250MHz

Test Mode	Test Channel MHz	26 dB Bandwidth MHz	99% Bandwidth MHz	Limit MHz
802.11a	5180	24.66	16.979	--
	5200	24.27	16.829	--
	5240	23.56	16.857	--
802.11n-HT20	5180	24.99	18.052	--
	5200	25.70	18.022	--
	5240	25.45	18.036	--
802.11n-HT40	5190	41.61	35.935	--
	5230	41.95	35.908	--
802.11ac-HT80	5210	80.30	74.864	

5250-5350MHz

Test Mode	Test Channel MHz	26 dB Bandwidth MHz	99% Bandwidth MHz	Limit MHz
802.11a	5260	24.93	16.874	--
	5300	24.98	16.874	--
	5320	23.17	16.881	--
802.11n-HT20	5260	24.66	18.036	--
	5300	24.59	18.014	--
	5320	24.17	18.003	--
802.11n-HT40	5270	41.32	35.974	--
	5310	42.69	35.941	--
802.11ac-HT80	5290	80.27	74.980	

5470-5725MHz

Test Mode	Test Channel MHz	26 dB Bandwidth MHz	99% Bandwidth MHz	Limit MHz
802.11a	5500	23.93	16.875	--
	5600	23.32	16.825	--
	5700	24.44	16.856	--
802.11n-HT20	5500	25.57	18.014	--
	5600	24.90	17.962	--
	5700	24.92	18.048	--
802.11n-HT40	5510	42.39	35.925	--
	5590	42.55	35.932	--
	5670	42.04	35.974	
802.11ac-HT80	5530	80.15	74.880	
	5610	79.99	74.837	
	5690	80.31	74.977	

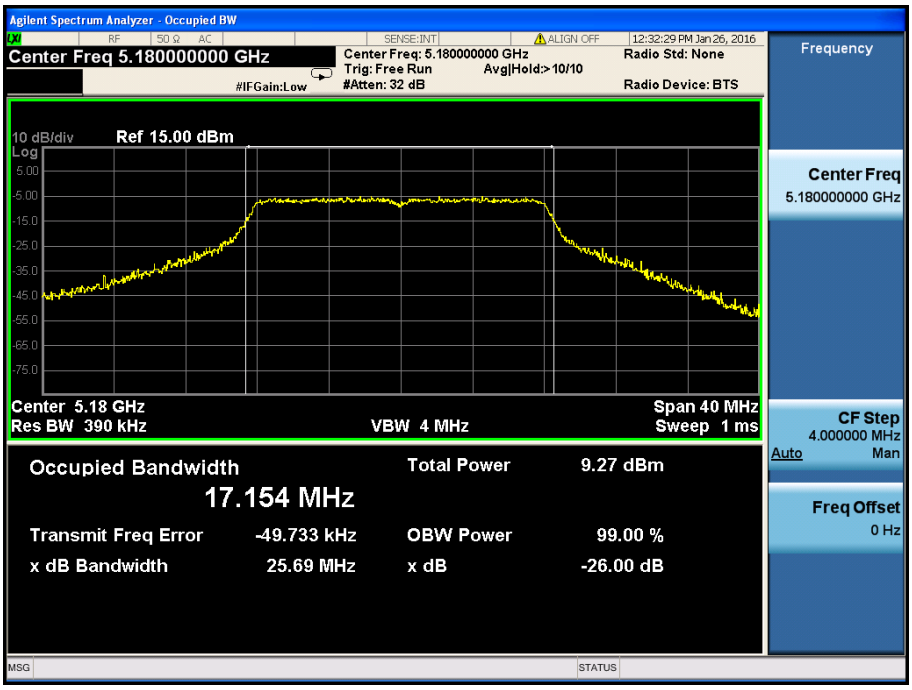
5725-5850MHz

Test Mode	Test Channel MHz	26 dB Bandwidth MHz	6 dB Bandwidth MHz	99% Bandwidth MHz	Limit MHz
802.11a	5745	24.11	16.47	16.859	≥500
	5785	24.28	16.45	16.872	≥500
	5805	25.04	16.45	16.870	≥500
802.11n-HT20	5745	24.85	17.71	18.039	≥500
	5785	24.54	17.76	18.049	≥500
	5805	24.63	17.77	18.006	≥500
802.11n-HT40	5755	42.18	36.04	35.939	≥500
	5795	41.95	35.70	35.940	≥500
802.11ac-HT80	5775	80.24	75.48	74.844	≥500

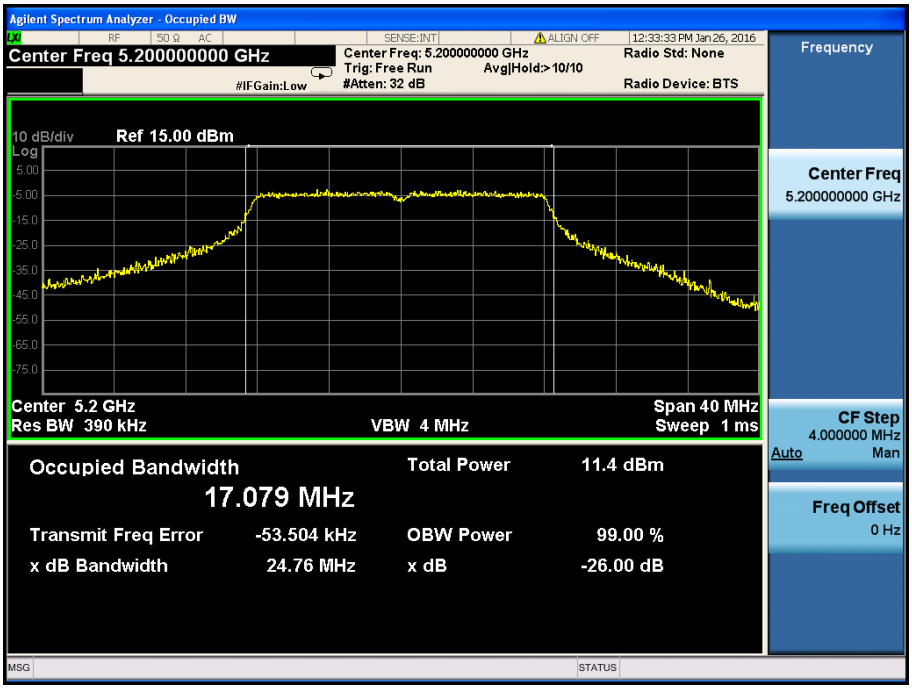
Antenna 1

Test mode：802.11a

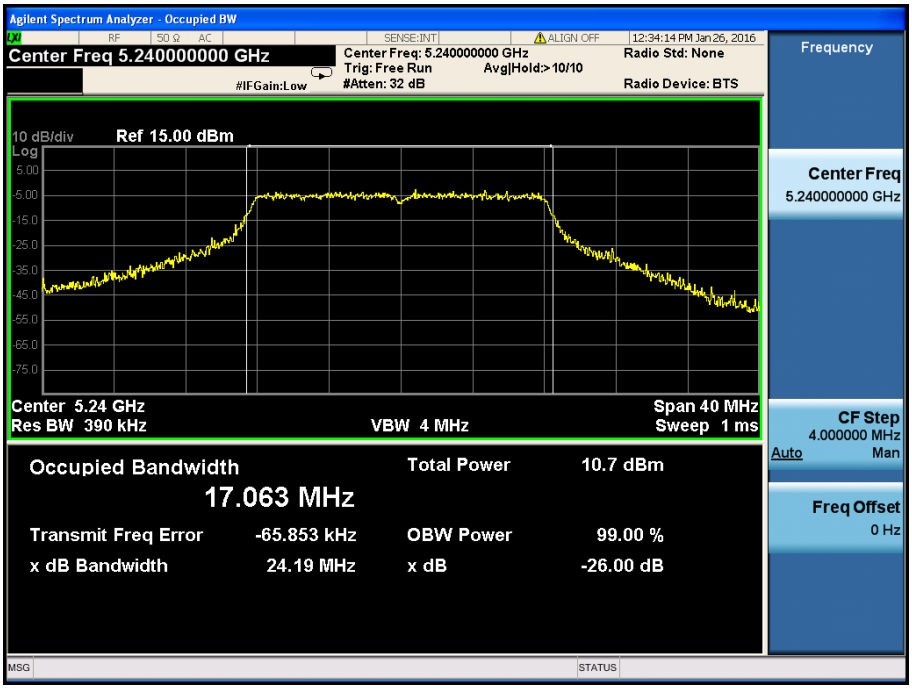
5180MHz



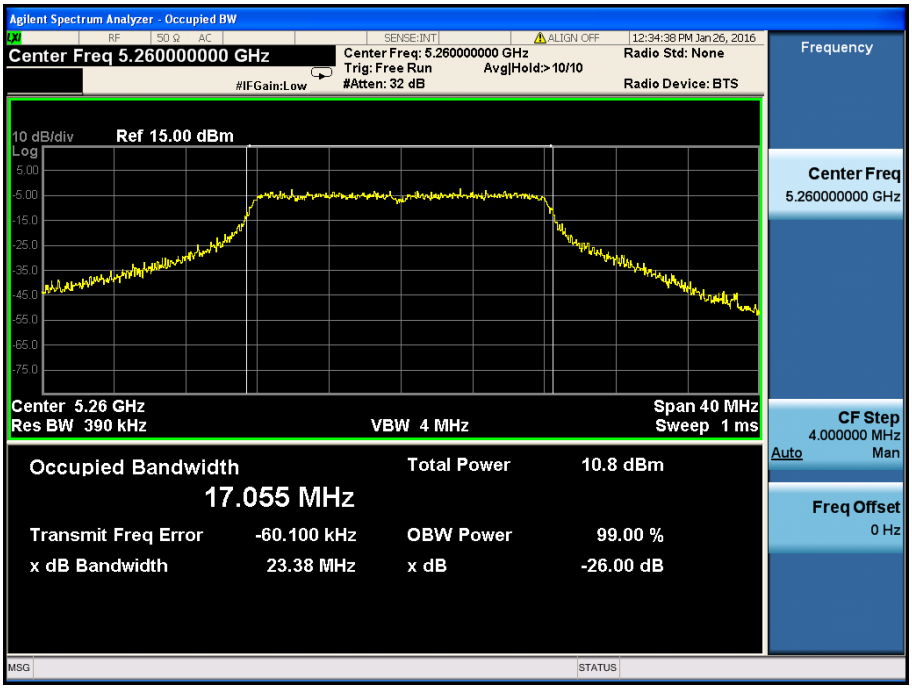
5200MHz



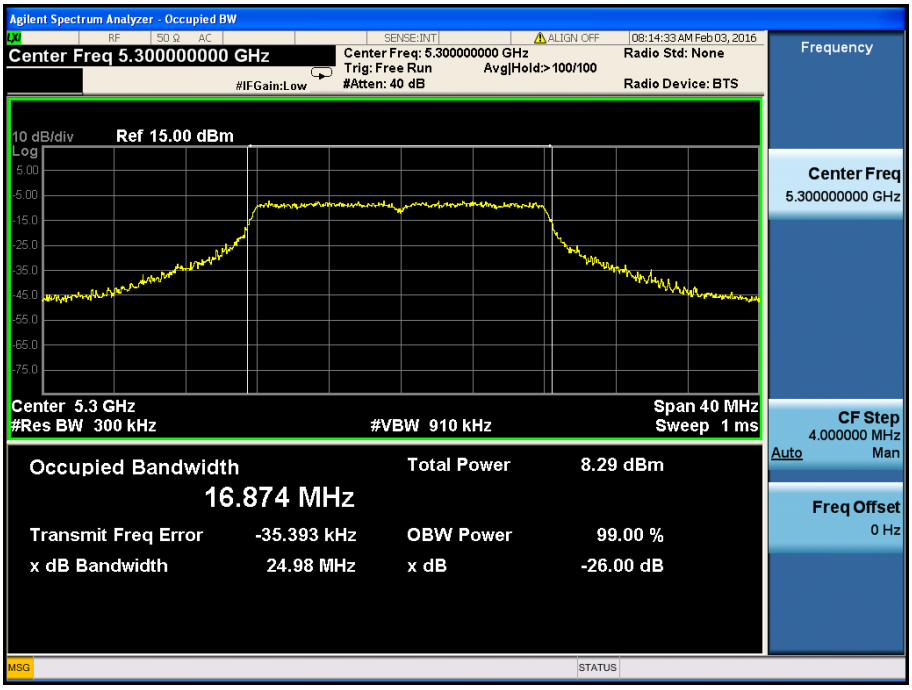
5240MHz



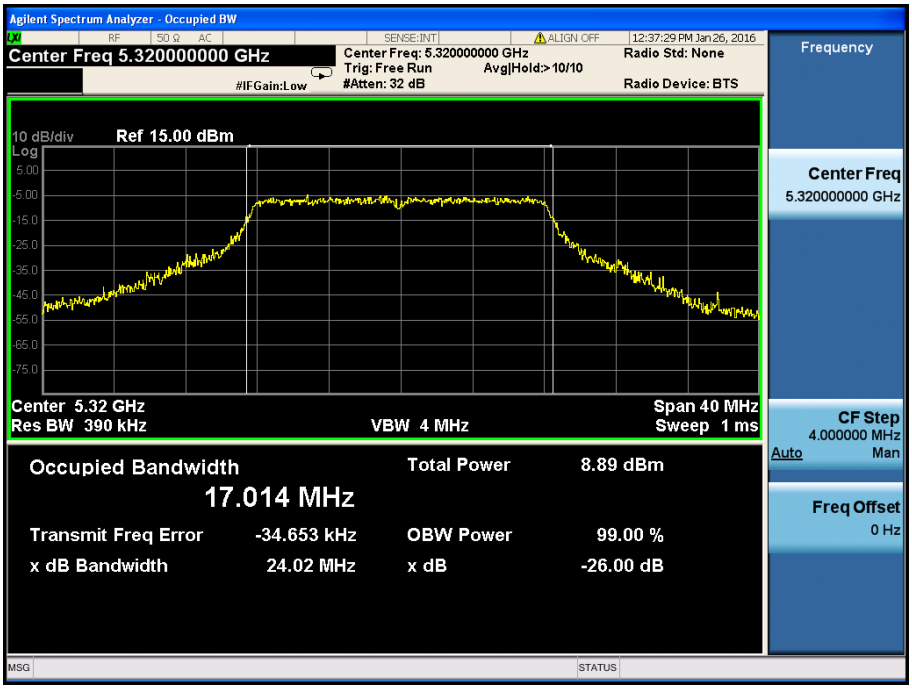
5260MHz



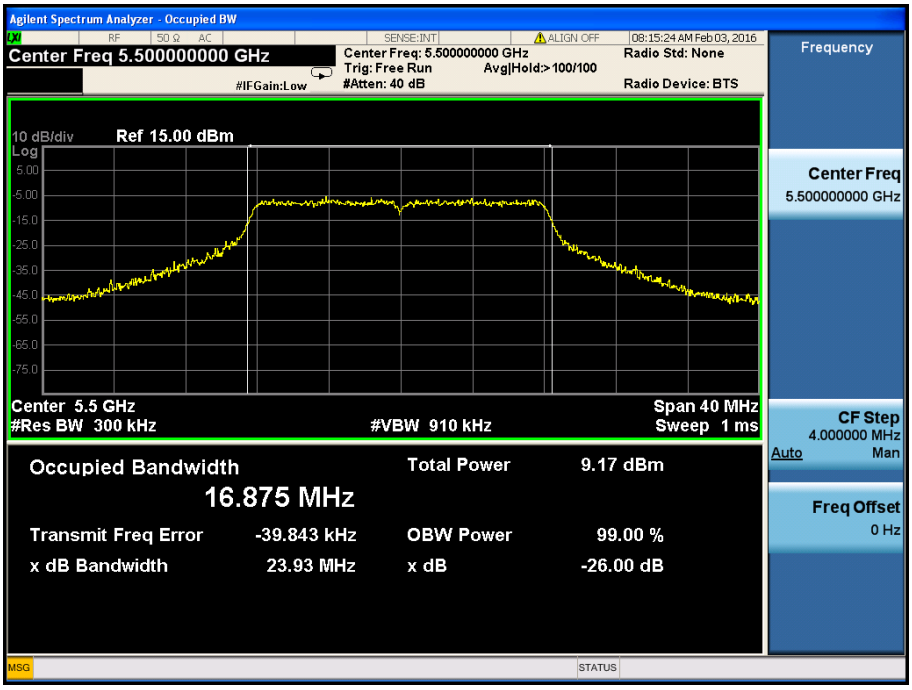
5300MHz



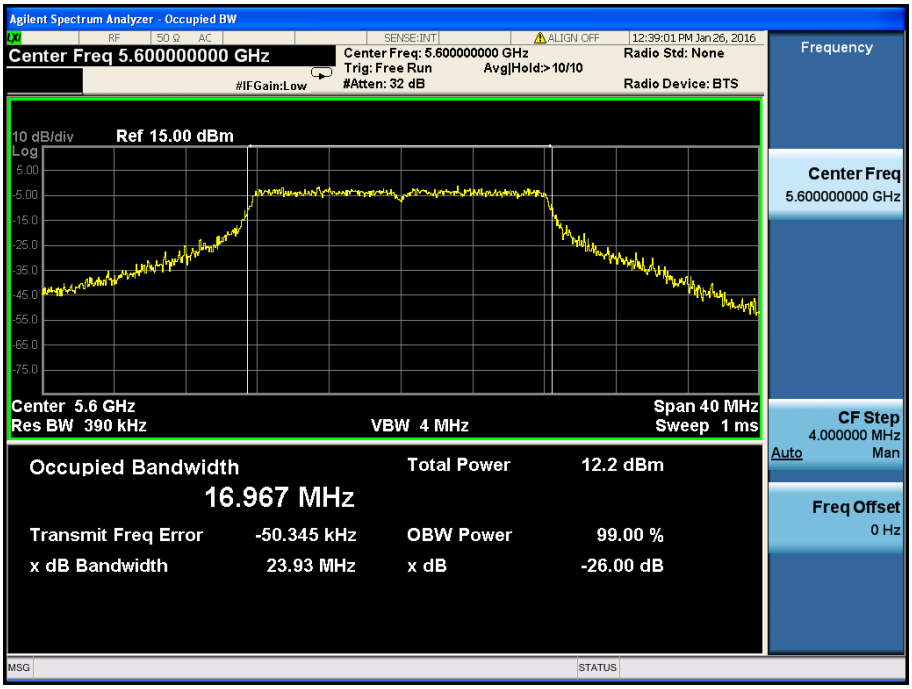
5320MHz



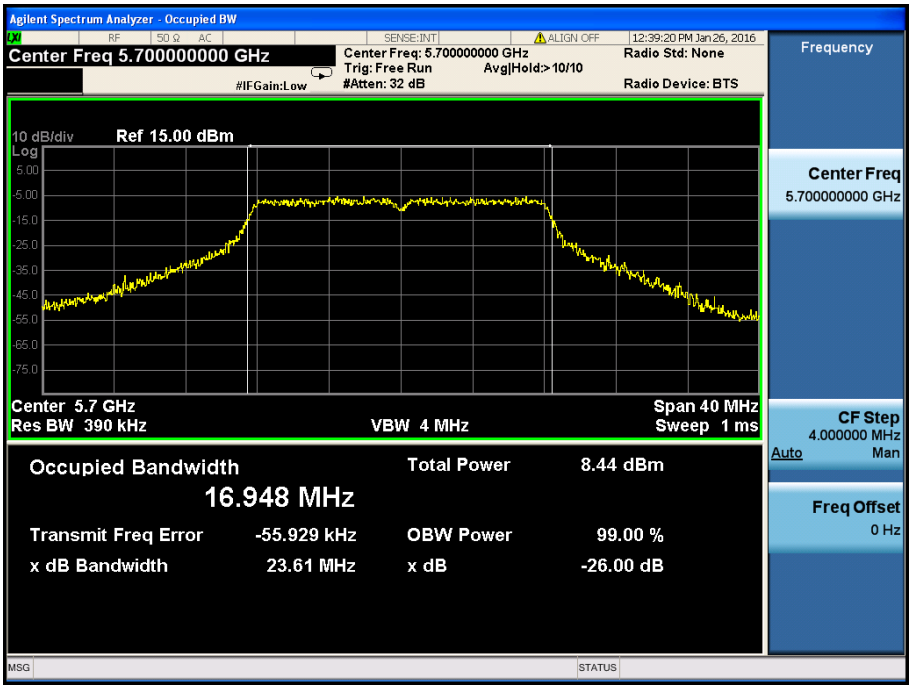
5500MHz



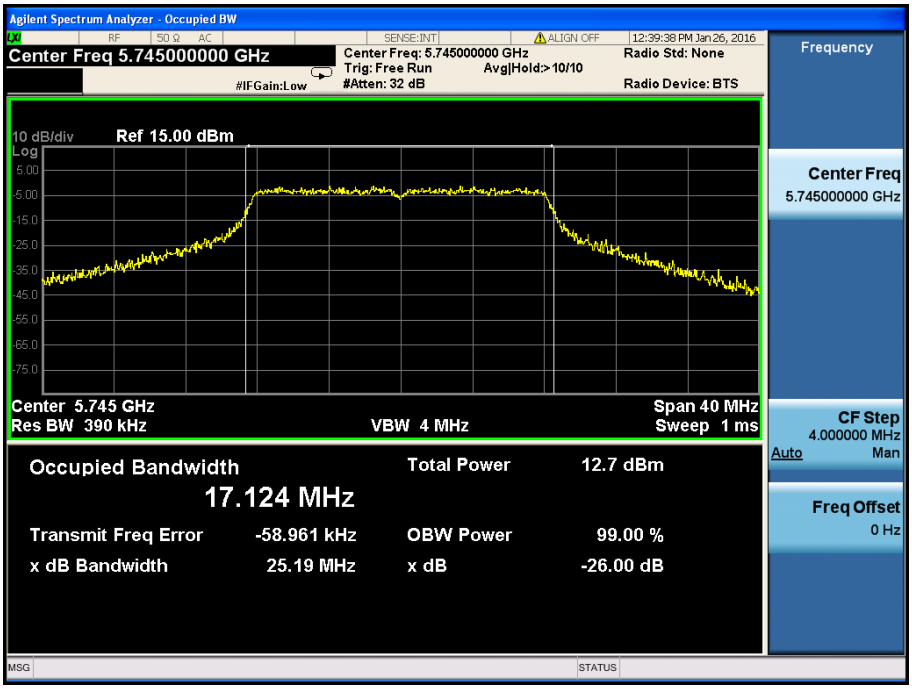
5600MHz

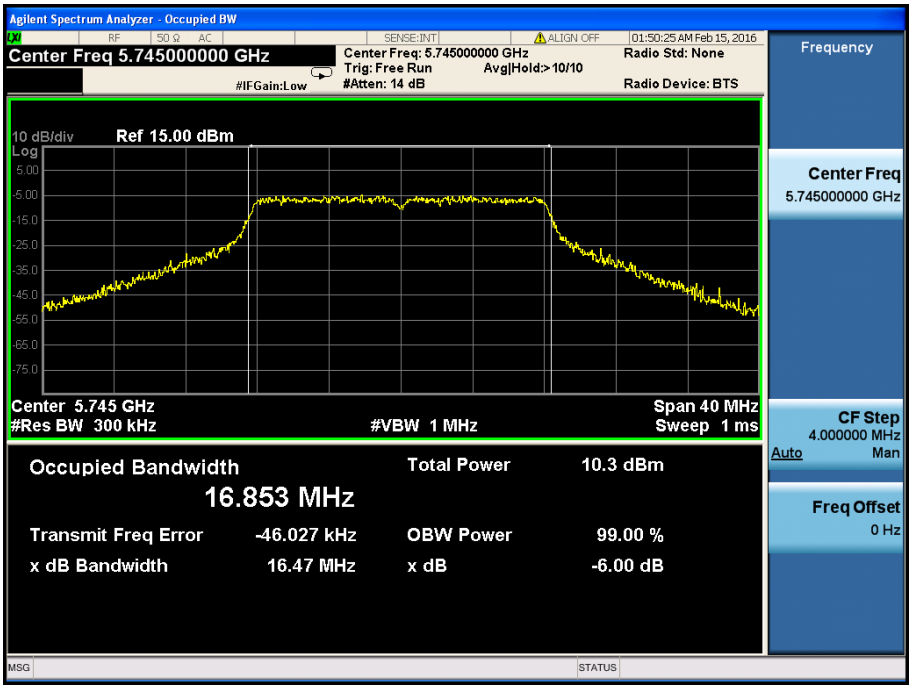


5700MHz

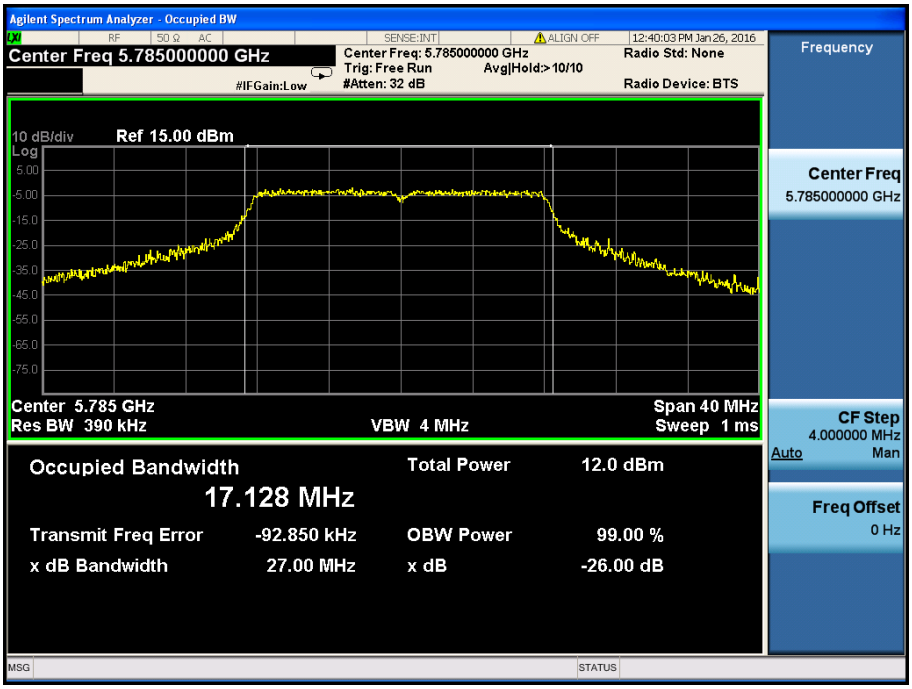


5745MHz



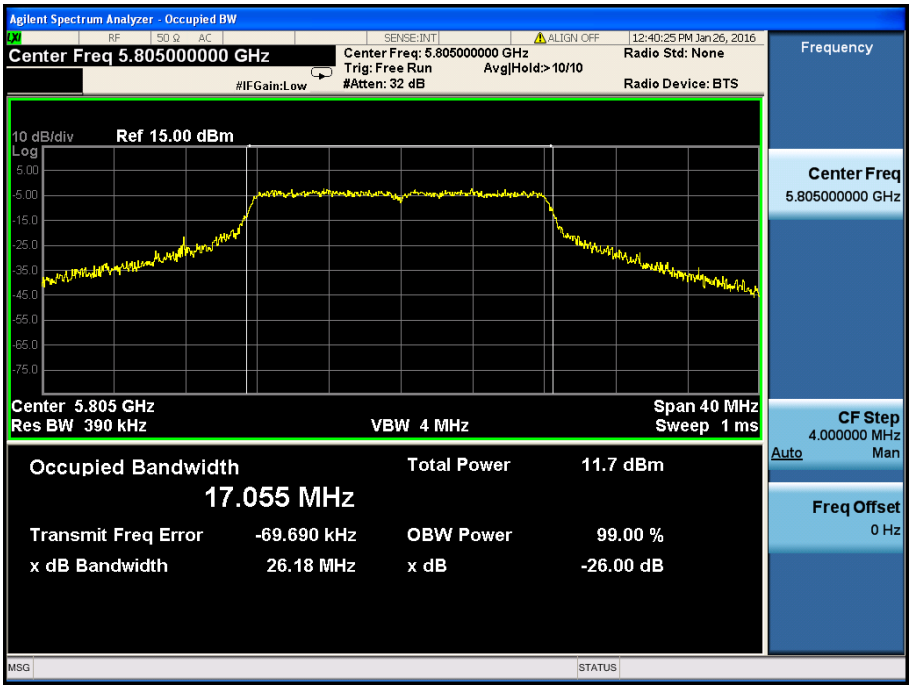

Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.745000000 GHz
Center Freq: 5.745000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 14 dB
#IFGain:Low
Radio Std: None
Radio Device: BTS
01:50:25 AM Feb 15, 2016
10 dB/div
Log
Ref 15.00 dBm
Center 5.745 GHz
#Res BW 300 kHz
#VBW 1 MHz
Span 40 MHz
Sweep 1 ms
Occupied Bandwidth
16.853 MHz
Total Power
10.3 dBm
Transmit Freq Error
-46.027 kHz
OBW Power
99.00 %
x dB Bandwidth
16.47 MHz
x dB
-6.00 dB
Frequency
Center Freq
5.745000000 GHz
CF Step
4.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

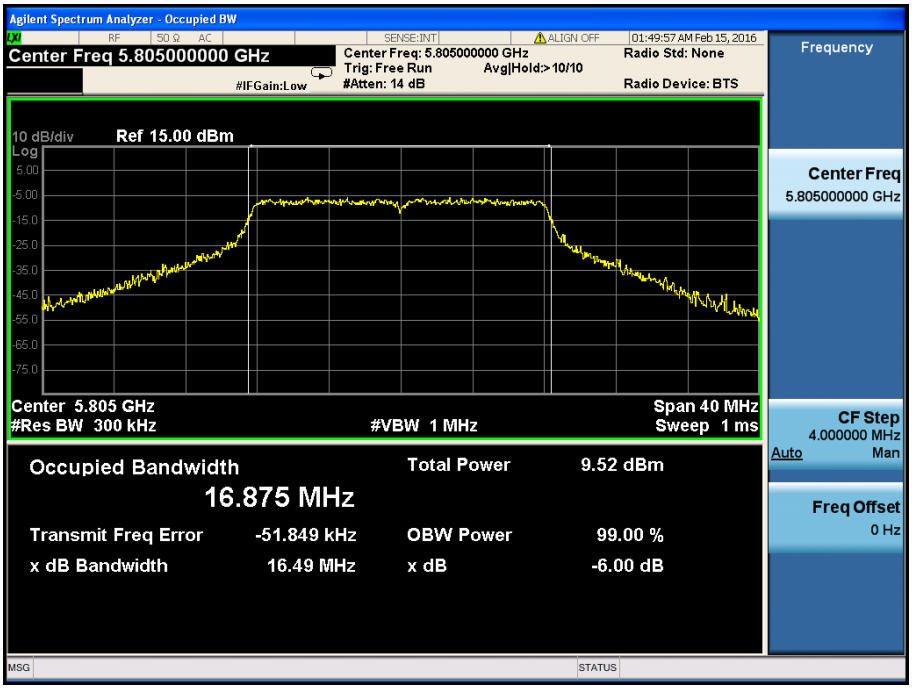
5785MHz


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.785000000 GHz
Center Freq: 5.785000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 32 dB
#IFGain:Low
Radio Std: None
Radio Device: BTS
12:40:03 PM Jan 26, 2016
10 dB/div
Log
Ref 15.00 dBm
Center 5.785 GHz
Res BW 390 kHz
VBW 4 MHz
Span 40 MHz
Sweep 1 ms
Occupied Bandwidth
17.128 MHz
Total Power
12.0 dBm
Transmit Freq Error
-92.850 kHz
OBW Power
99.00 %
x dB Bandwidth
27.00 MHz
x dB
-26.00 dB
Frequency
Center Freq
5.785000000 GHz
CF Step
4.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS


Agilent Spectrum Analyzer - Occupied BW
x dB -6.00 dB
Center Freq: 5.785012000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 14 dB
#IFGain:Low
Radio Std: None
Radio Device: BTS
01:49:16 AM Feb 15, 2016
Meas Setup
Avg/Hold Num
10
On
Off
Avg Mode
Exp
Repeat
OBW Power
99.00 %
x dB
-6.00 dB
More
1 of 2
10 dB/div
Log
Ref 15.00 dBm
Center 5.785 GHz
#Res BW 300 kHz
#VBW 1 MHz
Span 40 MHz
Sweep 1 ms
Occupied Bandwidth
16.950 MHz
Total Power
12.4 dBm
Transmit Freq Error
-75.743 kHz
OBW Power
99.00 %
x dB Bandwidth
16.45 MHz
x dB
-6.00 dB
MSG
STATUS

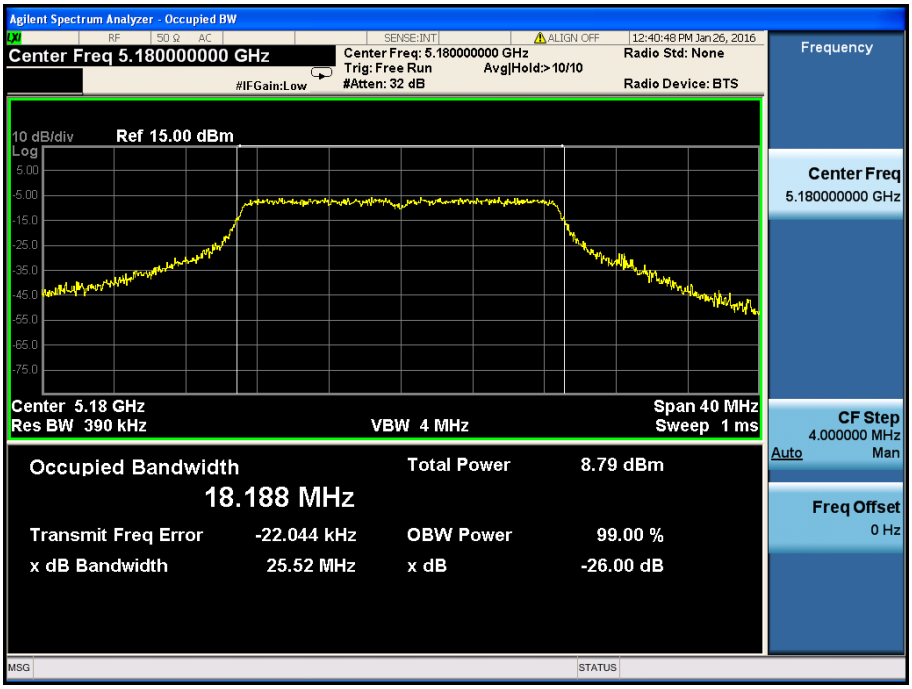
5805MHz


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.805000000 GHz
Center Freq: 5.805000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 32 dB
#IFGain:Low
Radio Std: None
Radio Device: BTS
12:40:25 PM Jan 26, 2016
Frequency
Center Freq
5.805000000 GHz
CF Step
4.000000 MHz
Auto
Man
Freq Offset
0 Hz
10 dB/div
Log
Ref 15.00 dBm
Center 5.805 GHz
Res BW 390 kHz
VBW 4 MHz
Span 40 MHz
Sweep 1 ms
Occupied Bandwidth
17.055 MHz
Total Power
11.7 dBm
Transmit Freq Error
-69.690 kHz
OBW Power
99.00 %
x dB Bandwidth
26.18 MHz
x dB
-26.00 dB
MSG
STATUS

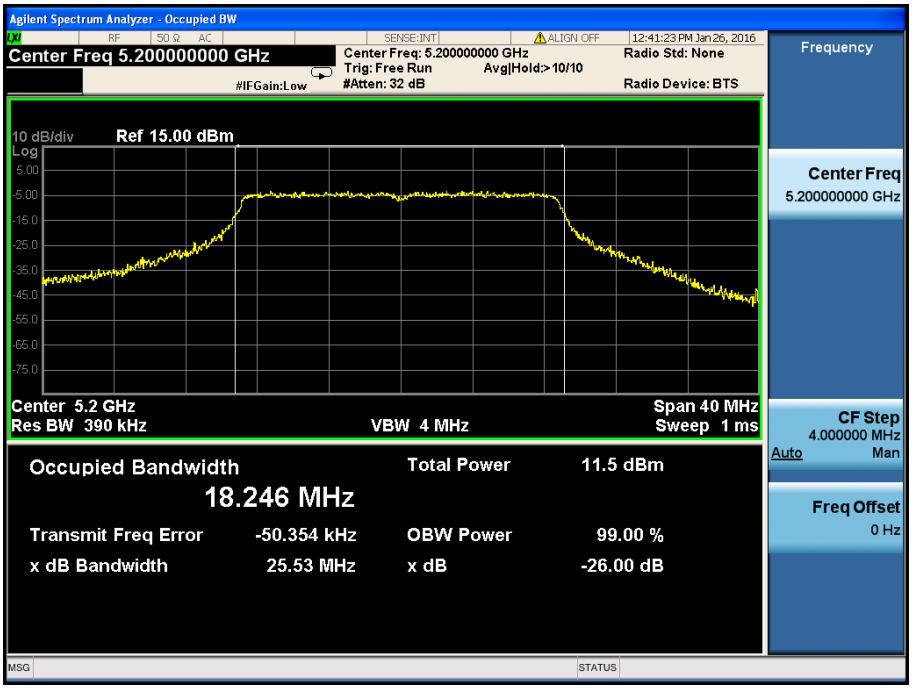


Test mode：802.11n-HT20

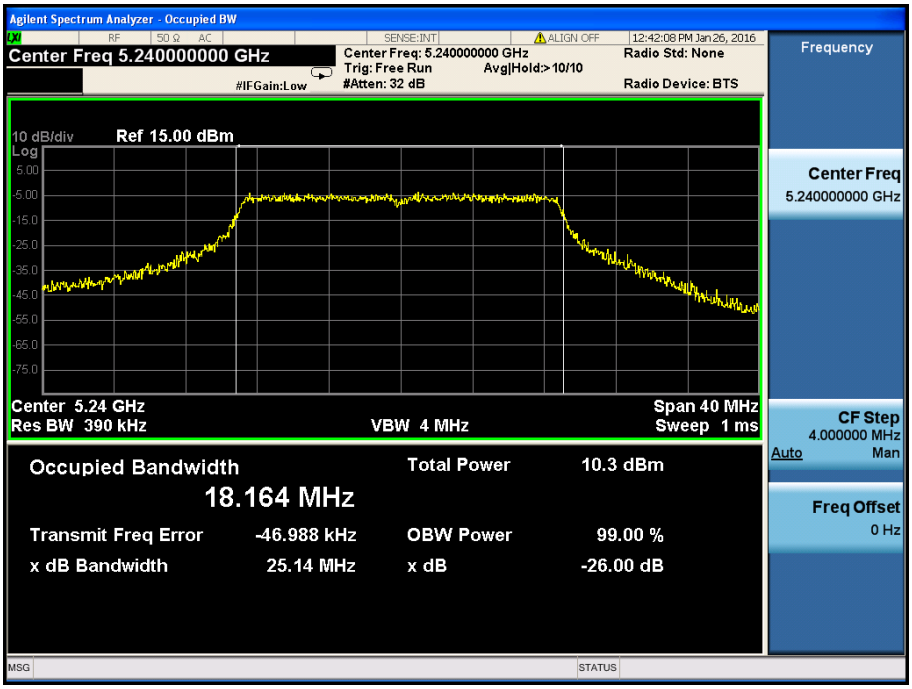
5180MHz



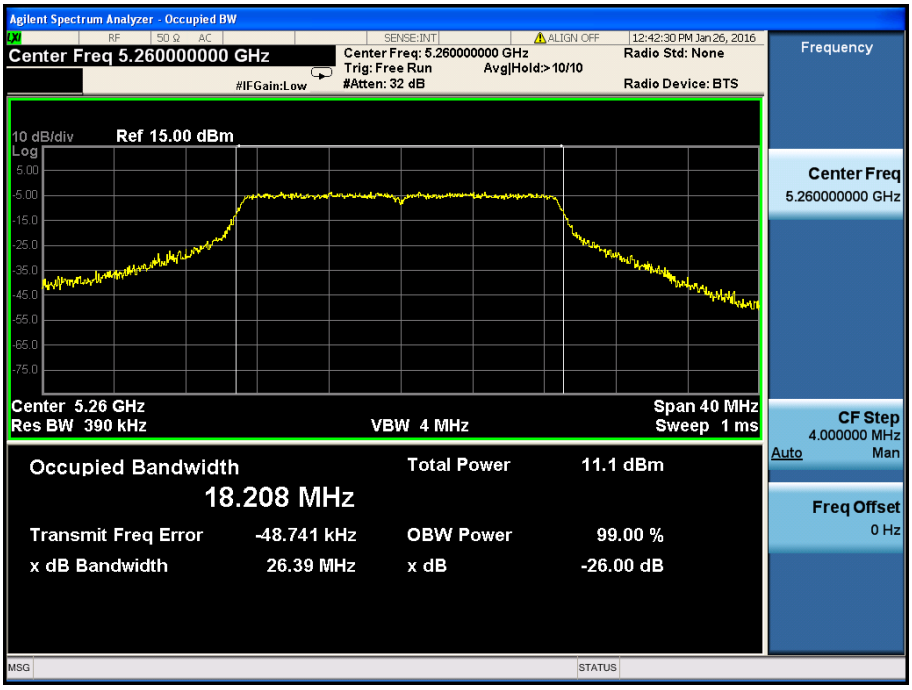
5200MHz



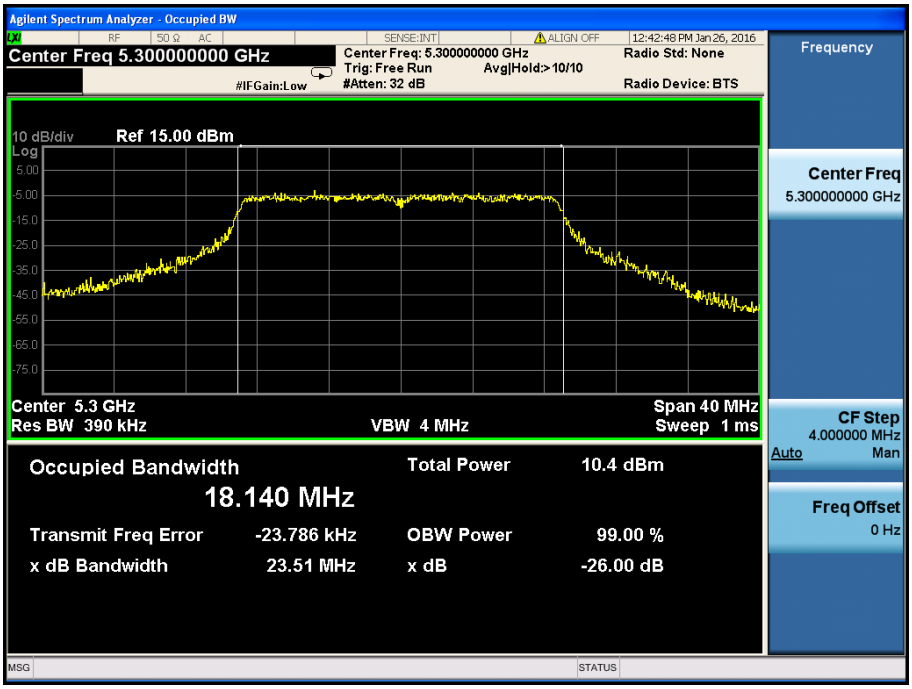
5240MHz



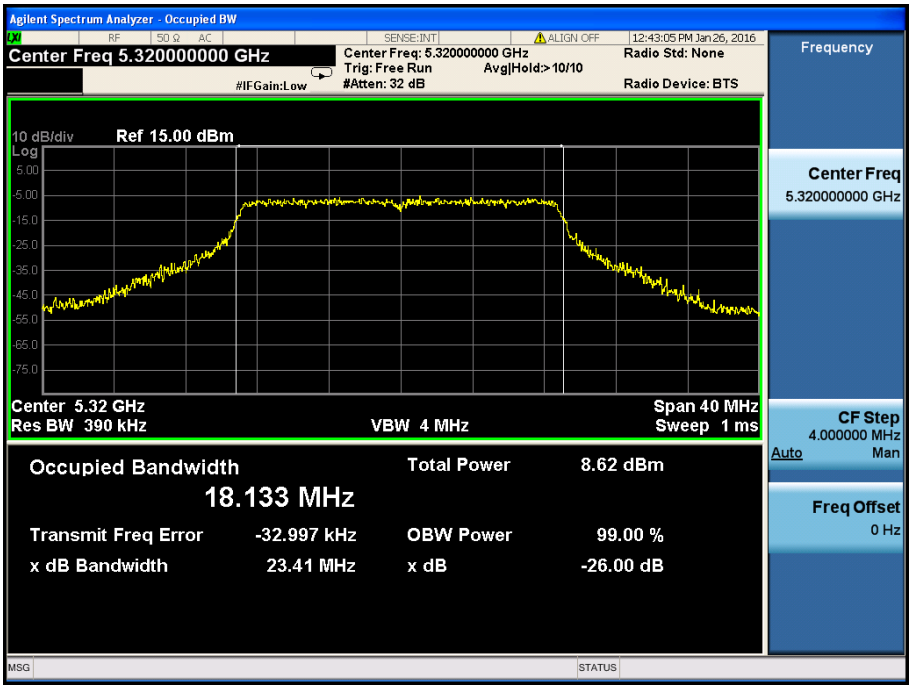
5260MHz



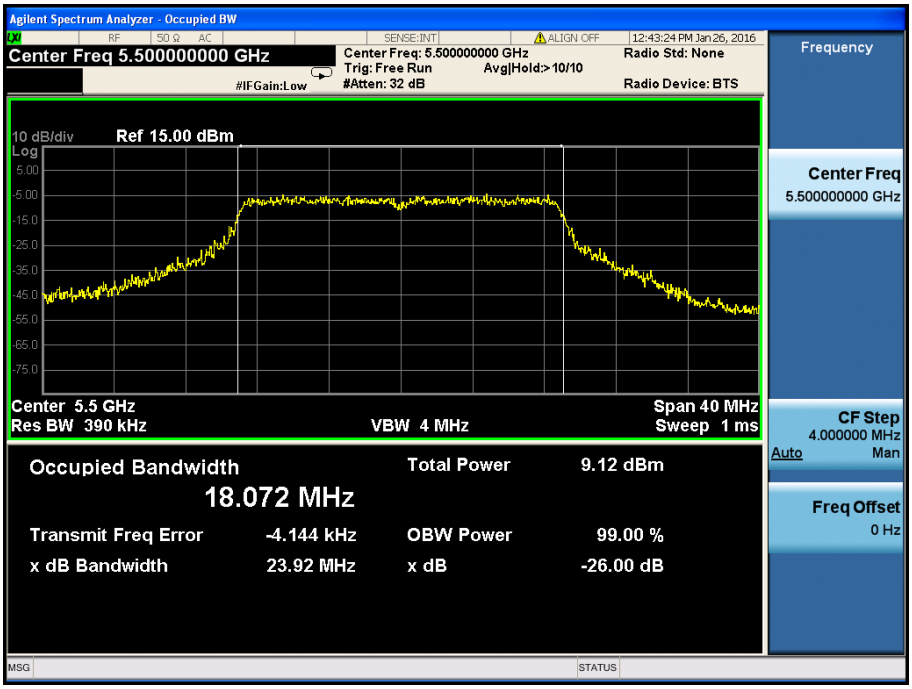
5300MHz



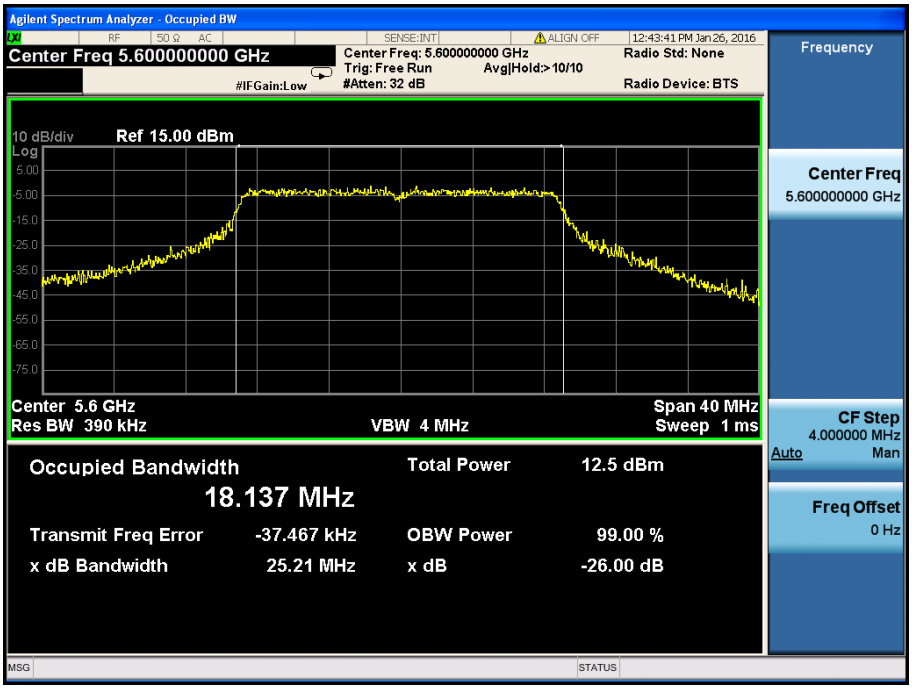
5320MHz



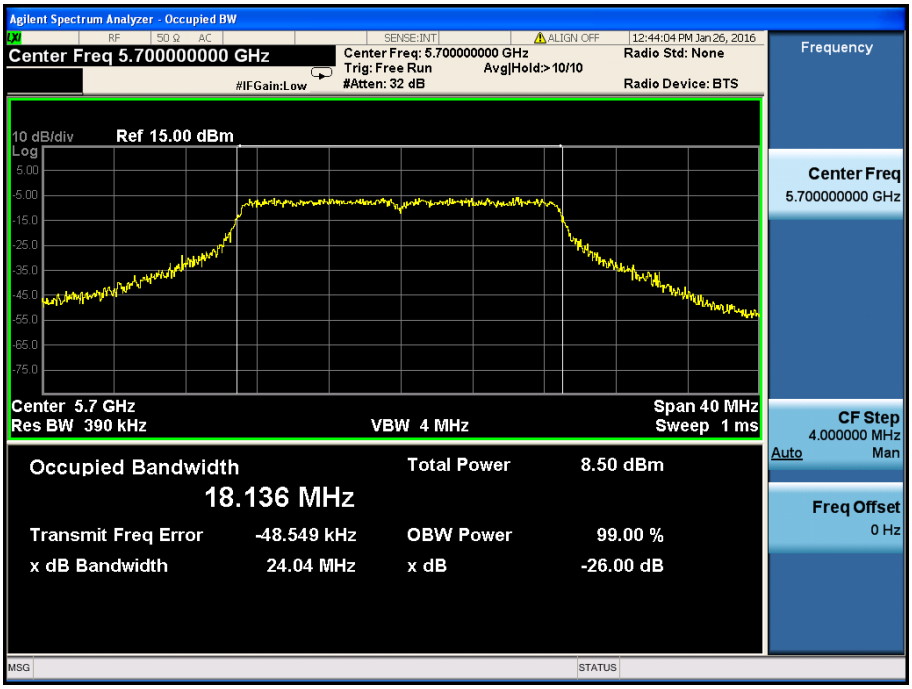
5500MHz



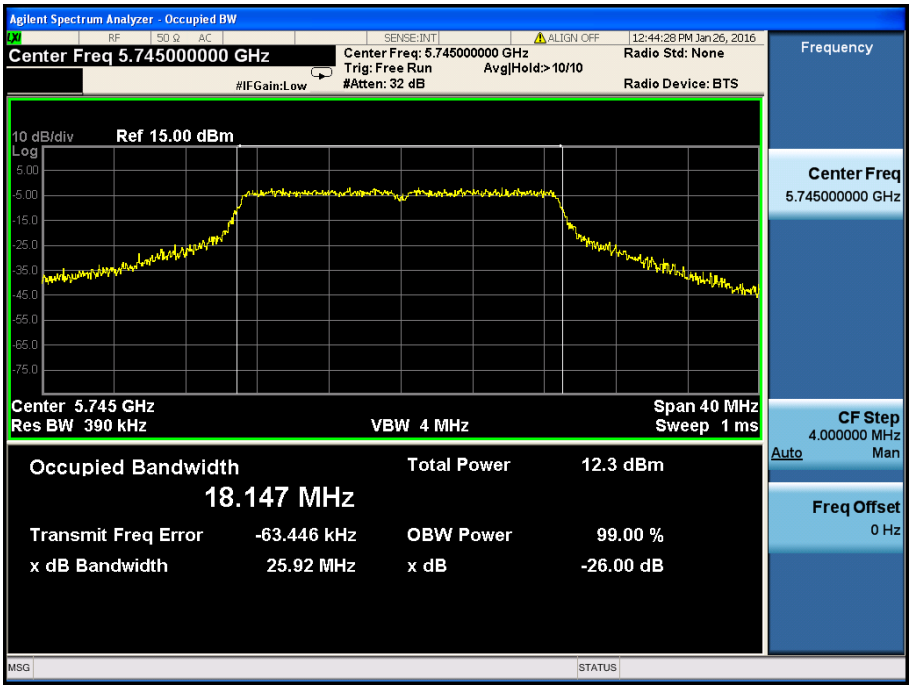
5600MHz

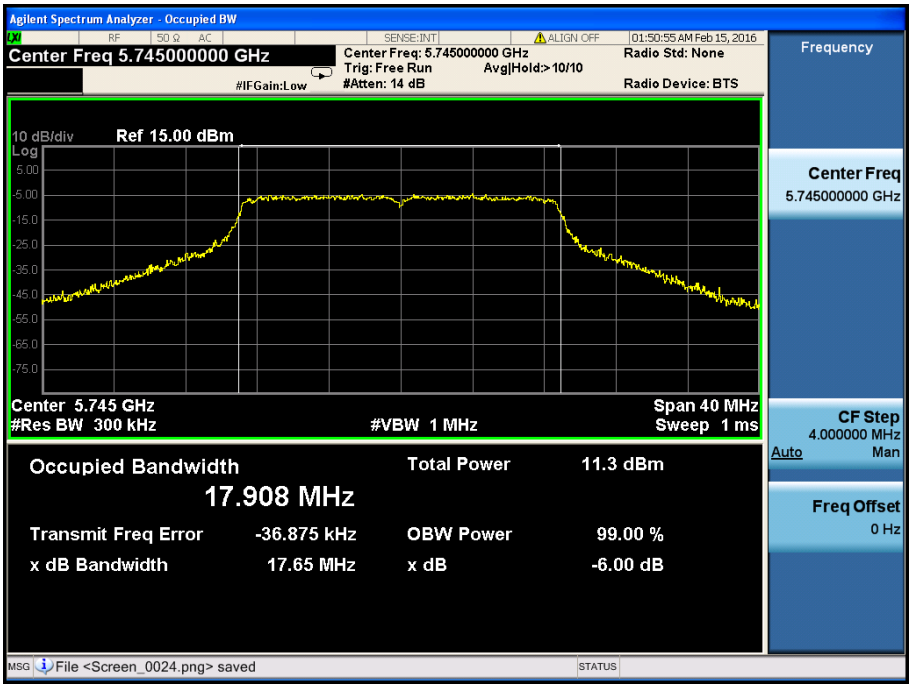


5700MHz

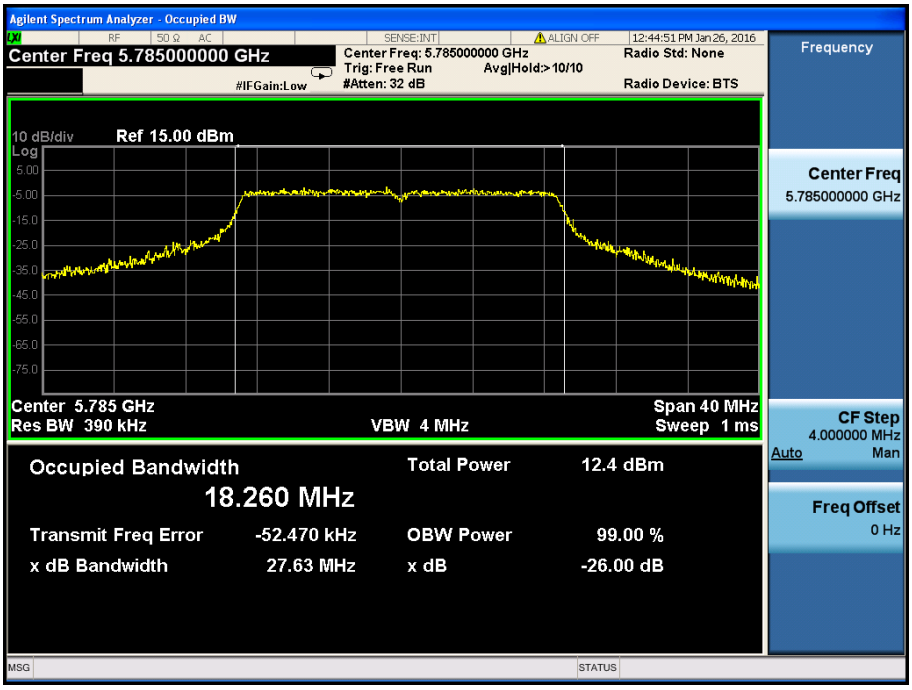


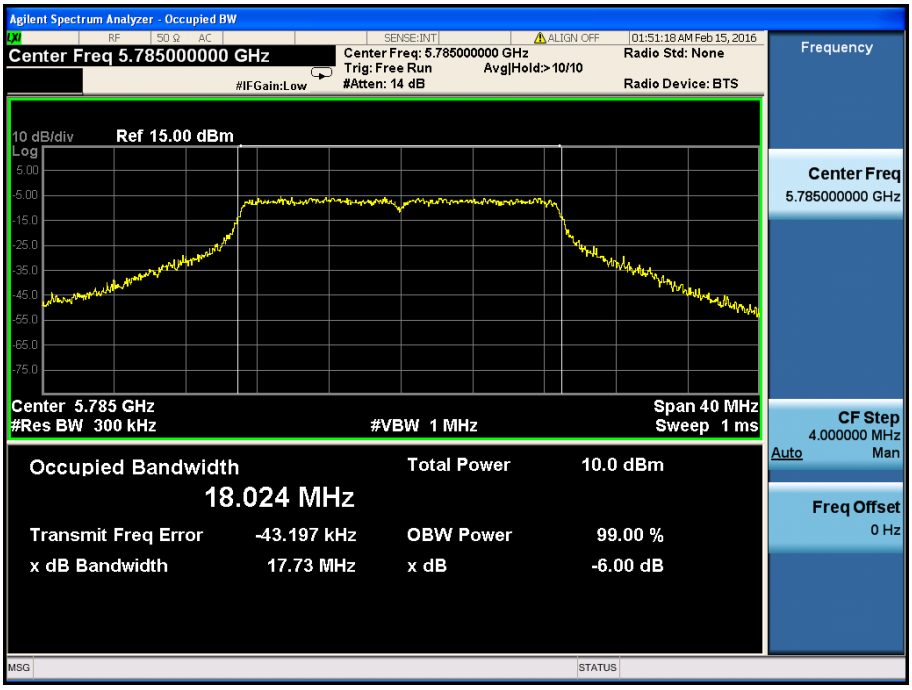
5745MHz


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.745000000 GHz
Center Freq: 5.745000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#IFGain:Low
#Atten: 32 dB
Radio Std: None
Radio Device: BTS
12:44:28 PM Jan 26, 2016
Frequency
10 dB/div
Ref 15.00 dBm
Log
Center 5.745 GHz
Res BW 390 kHz
VBW 4 MHz
Span 40 MHz
Sweep 1 ms
Occupied Bandwidth
18.147 MHz
Total Power
12.3 dBm
Transmit Freq Error
-63.446 kHz
OBW Power
99.00 %
x dB Bandwidth
25.92 MHz
x dB
-26.00 dB
Center Freq
5.745000000 GHz
CF Step
4.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

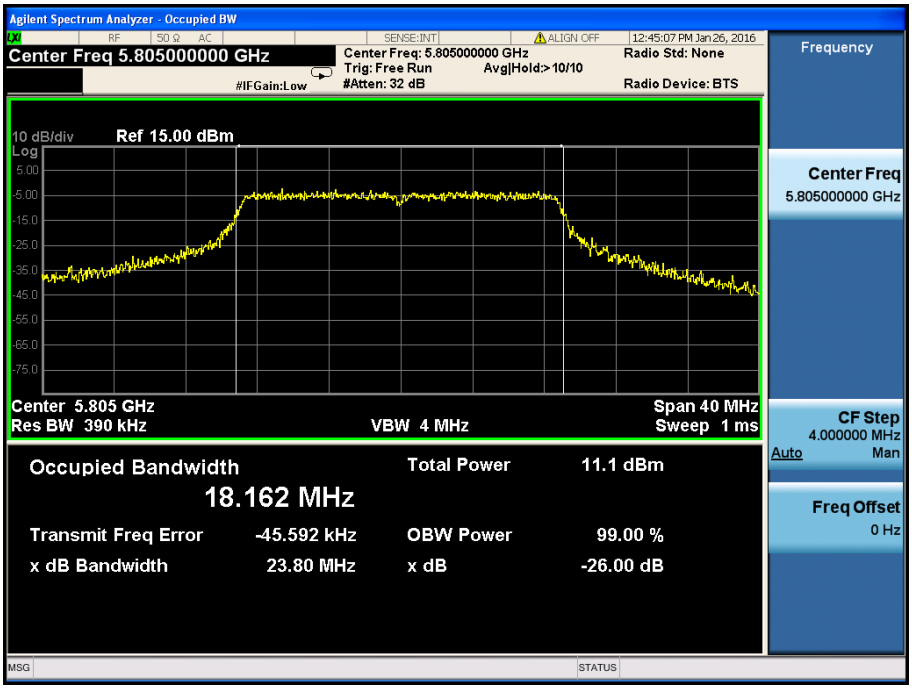

Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.745000000 GHz
Center Freq: 5.745000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#IFGain:Low
#Atten: 14 dB
Radio Std: None
Radio Device: BTS
01:50:55 AM Feb 15, 2016
Frequency
10 dB/div
Ref 15.00 dBm
Log
Center 5.745 GHz
#Res BW 300 kHz
#VBW 1 MHz
Span 40 MHz
Sweep 1 ms
Occupied Bandwidth
17.908 MHz
Total Power
11.3 dBm
Transmit Freq Error
-36.875 kHz
OBW Power
99.00 %
x dB Bandwidth
17.65 MHz
x dB
-6.00 dB
Center Freq
5.745000000 GHz
CF Step
4.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
File <Screen_0024.png> saved
STATUS

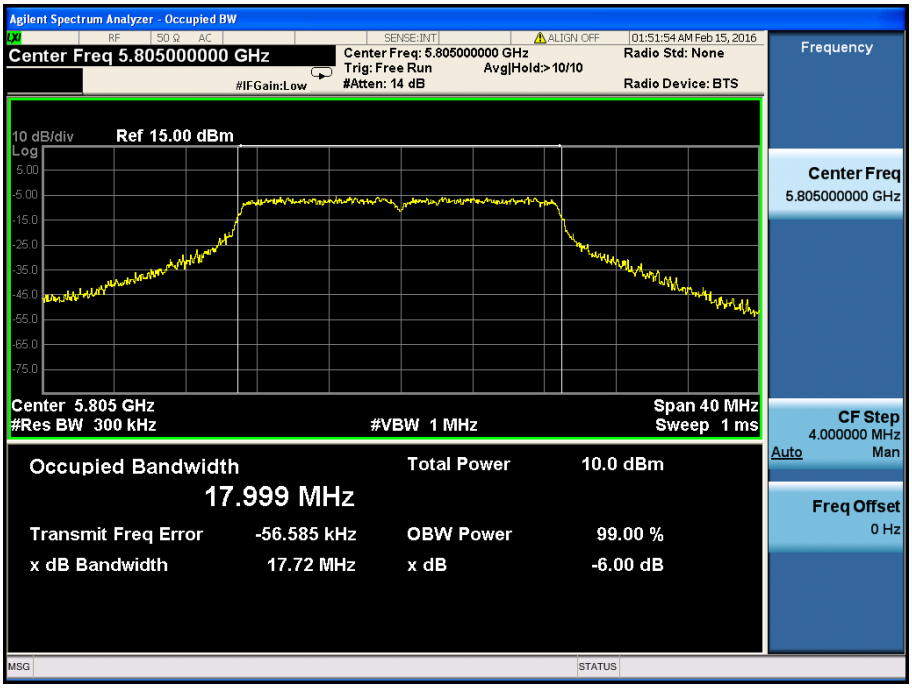
5785MHz


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.785000000 GHz
Center Freq: 5.785000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#IFGain:Low
#Atten: 32 dB
Radio Std: None
Radio Device: BTS
12:44:51 PM Jan 26, 2016
Frequency
10 dB/div
Ref 15.00 dBm
Log
Center 5.785 GHz
Res BW 390 kHz
VBW 4 MHz
Span 40 MHz
Sweep 1 ms
Occupied Bandwidth
18.260 MHz
Total Power
12.4 dBm
Transmit Freq Error
-52.470 kHz
OBW Power
99.00 %
x dB Bandwidth
27.63 MHz
x dB
-26.00 dB
Center Freq
5.785000000 GHz
CF Step
4.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.785000000 GHz
Center Freq: 5.785000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#IFGain:Low
#Atten: 14 dB
Radio Std: None
Radio Device: BTS
01:51:18 AM Feb 15, 2016
Frequency
10 dB/div
Ref 15.00 dBm
Log
Center 5.785 GHz
#Res BW 300 kHz
#VBW 1 MHz
Span 40 MHz
Sweep 1 ms
Occupied Bandwidth
18.024 MHz
Total Power
10.0 dBm
Transmit Freq Error
-43.197 kHz
OBW Power
99.00 %
x dB Bandwidth
17.73 MHz
x dB
-6.00 dB
Center Freq
5.785000000 GHz
CF Step
4.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

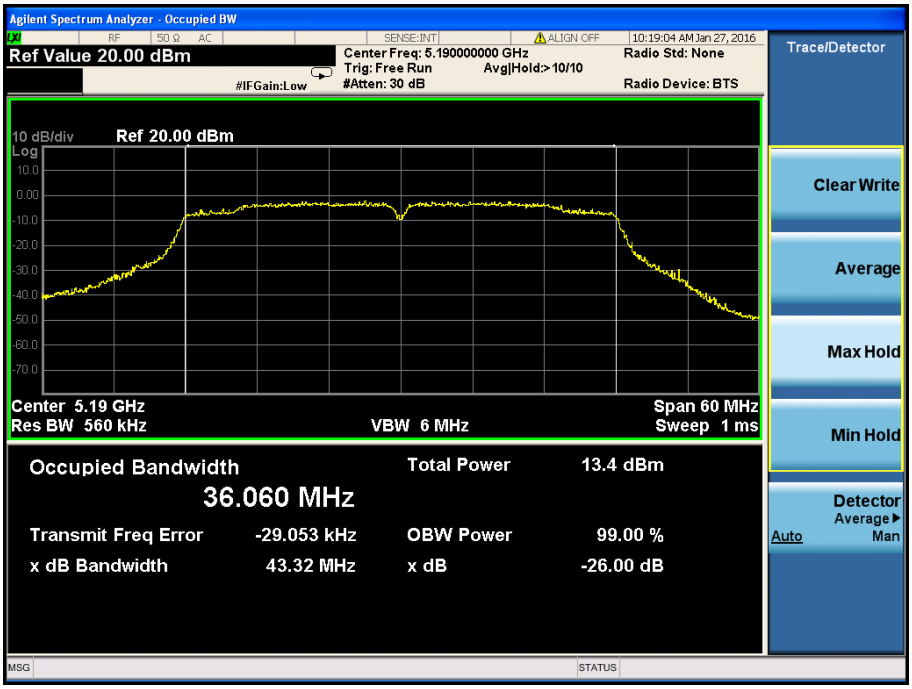
5805MHz


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.805000000 GHz
Center Freq: 5.805000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#IFGain:Low
#Atten: 32 dB
Radio Std: None
Radio Device: BTS
12:45:07 PM Jan 26, 2016
Frequency
10 dB/div
Ref 15.00 dBm
Log
Center 5.805 GHz
Res BW 390 kHz
VBW 4 MHz
Span 40 MHz
Sweep 1 ms
Occupied Bandwidth
18.162 MHz
Total Power
11.1 dBm
Transmit Freq Error
-45.592 kHz
OBW Power
99.00 %
x dB Bandwidth
23.80 MHz
x dB
-26.00 dB
Center Freq
5.805000000 GHz
CF Step
4.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

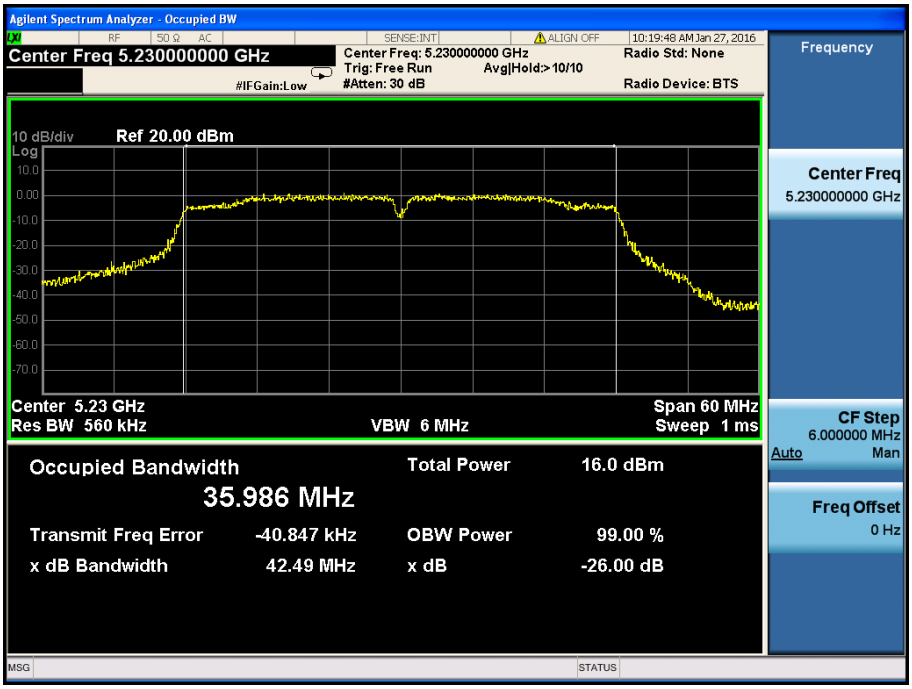

Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.805000000 GHz
Center Freq: 5.805000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#IFGain:Low
#Atten: 14 dB
Radio Std: None
Radio Device: BTS
01:51:54 AM Feb 15, 2016
Frequency
10 dB/div
Ref 15.00 dBm
Log
Center 5.805 GHz
#Res BW 300 kHz
#VBW 1 MHz
Span 40 MHz
Sweep 1 ms
Occupied Bandwidth
17.999 MHz
Total Power
10.0 dBm
Transmit Freq Error
-56.585 kHz
OBW Power
99.00 %
x dB Bandwidth
17.72 MHz
x dB
-6.00 dB
Center Freq
5.805000000 GHz
CF Step
4.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

Test mode：802.11n-HT40

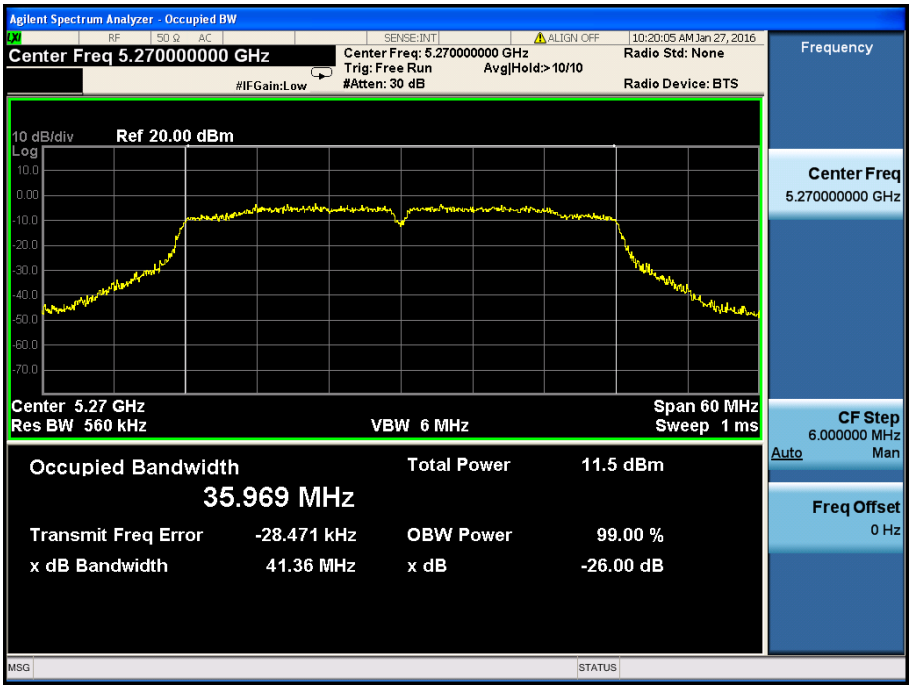
5190MHz



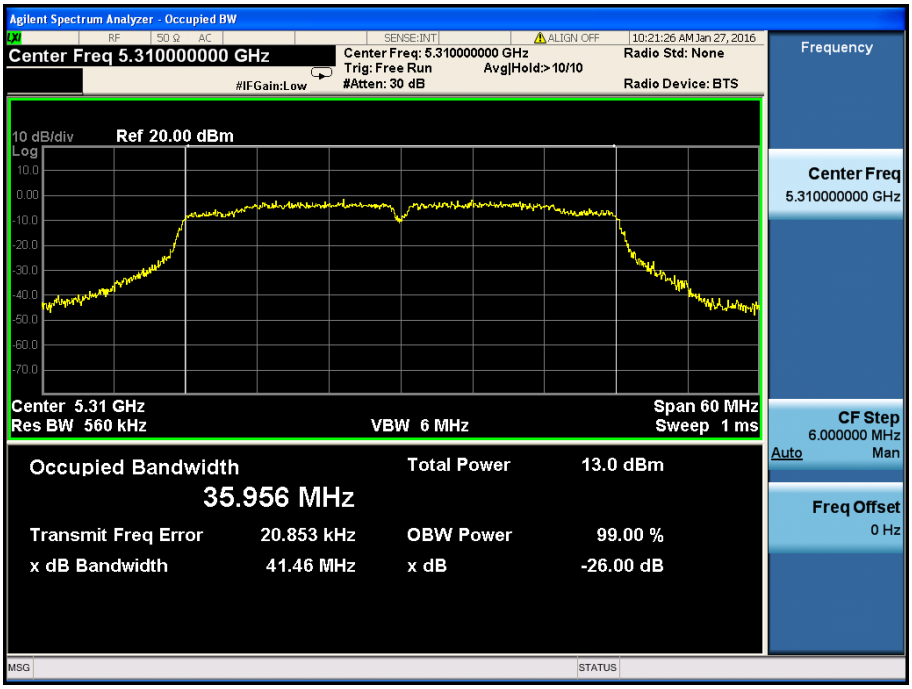
5230MHz



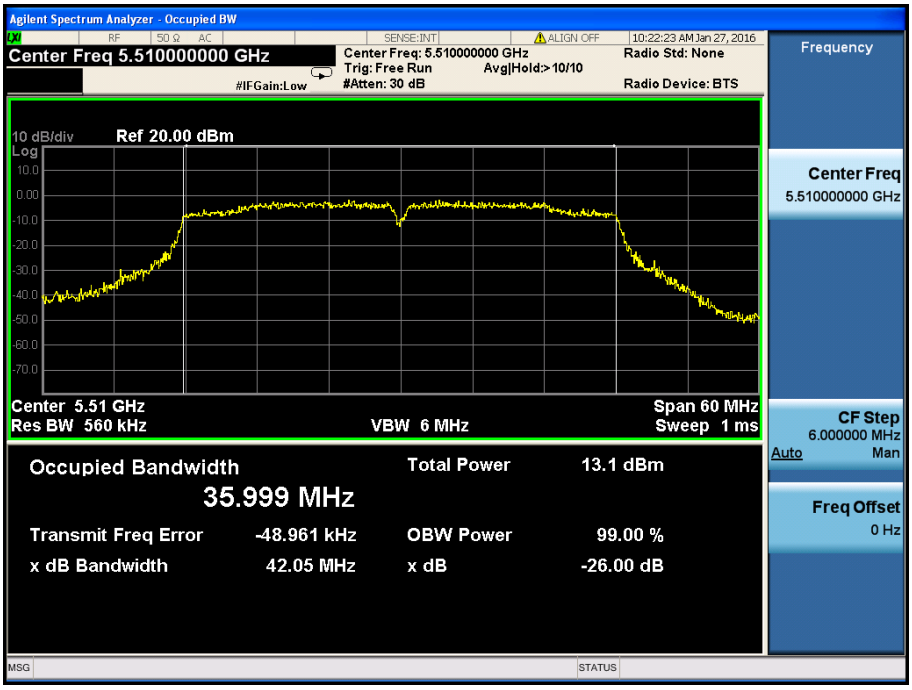
5270MHz



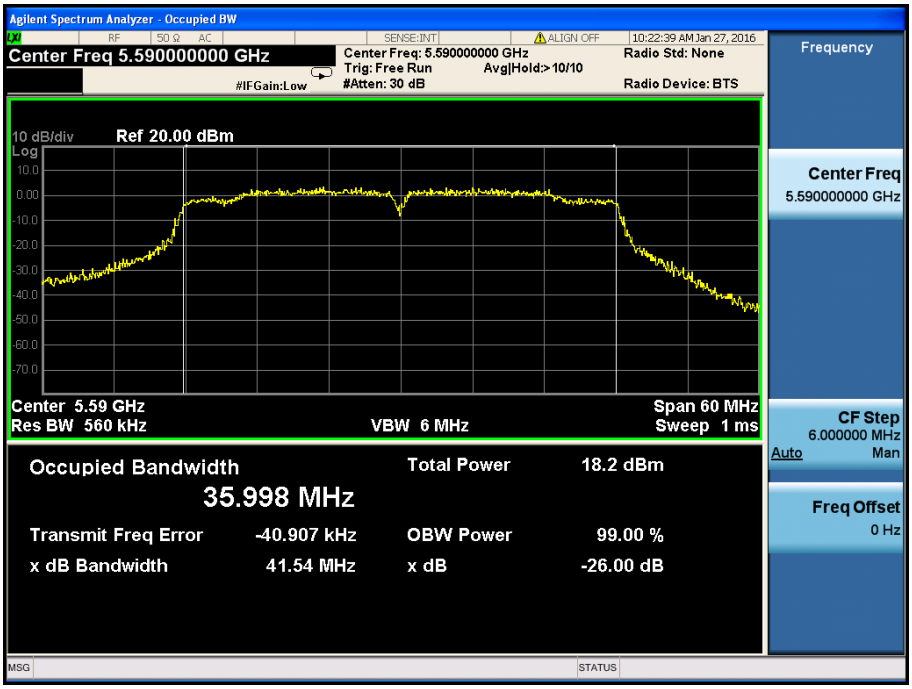
5310MHz



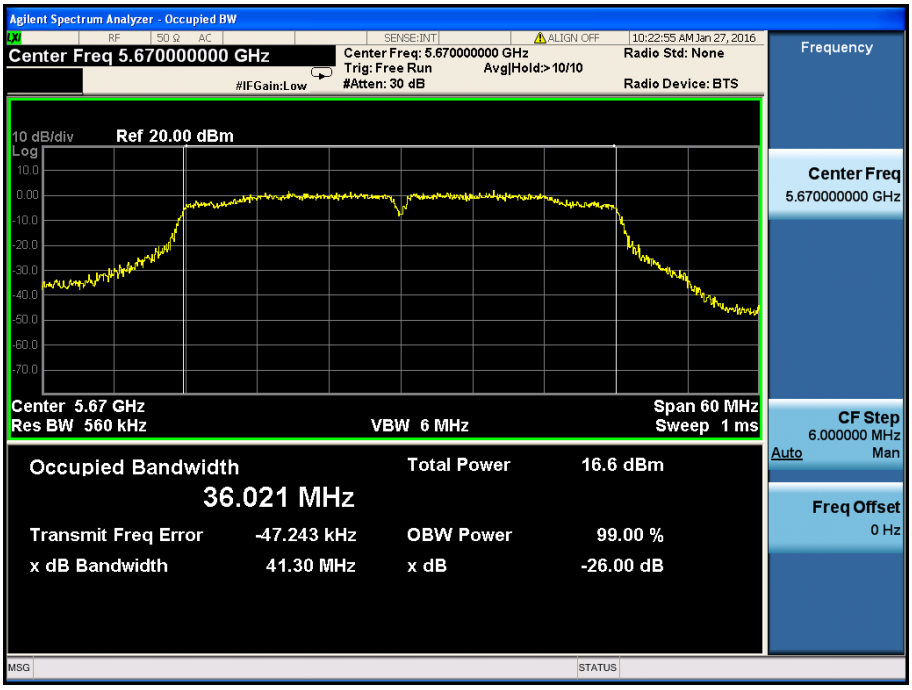
5510MHz



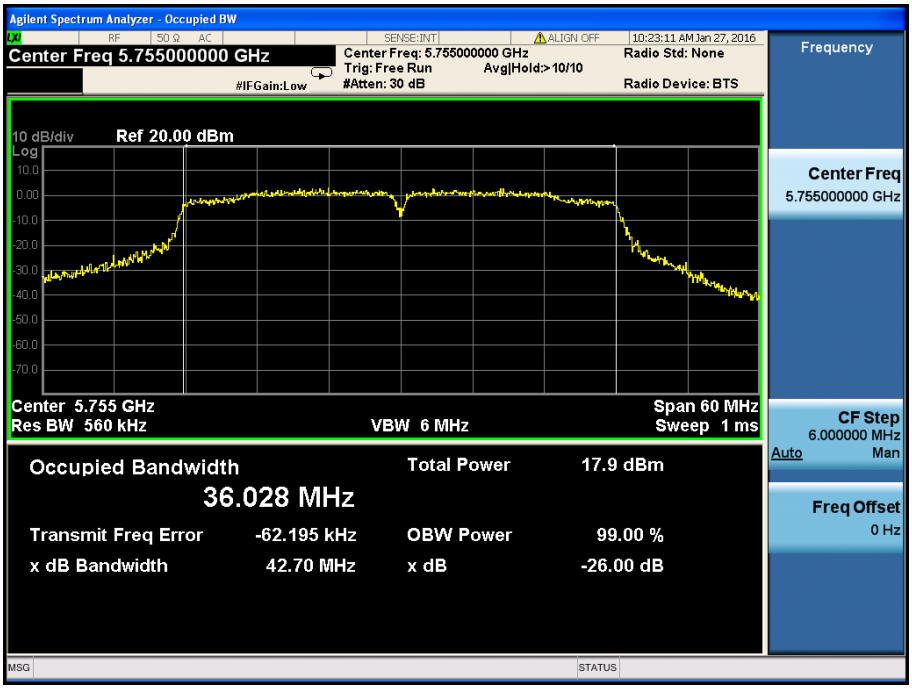
5590MHz



5670MHz

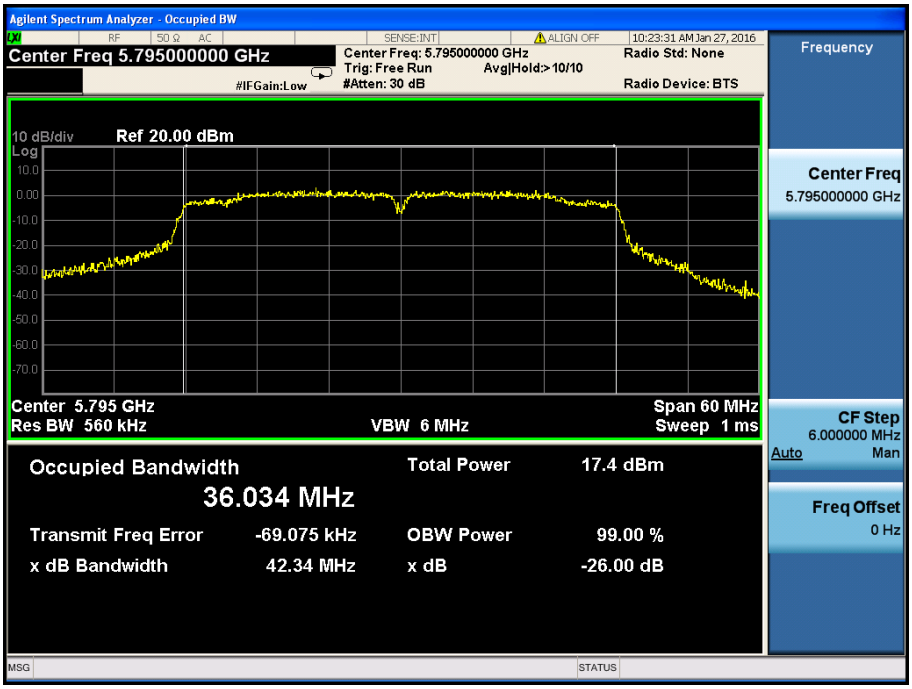


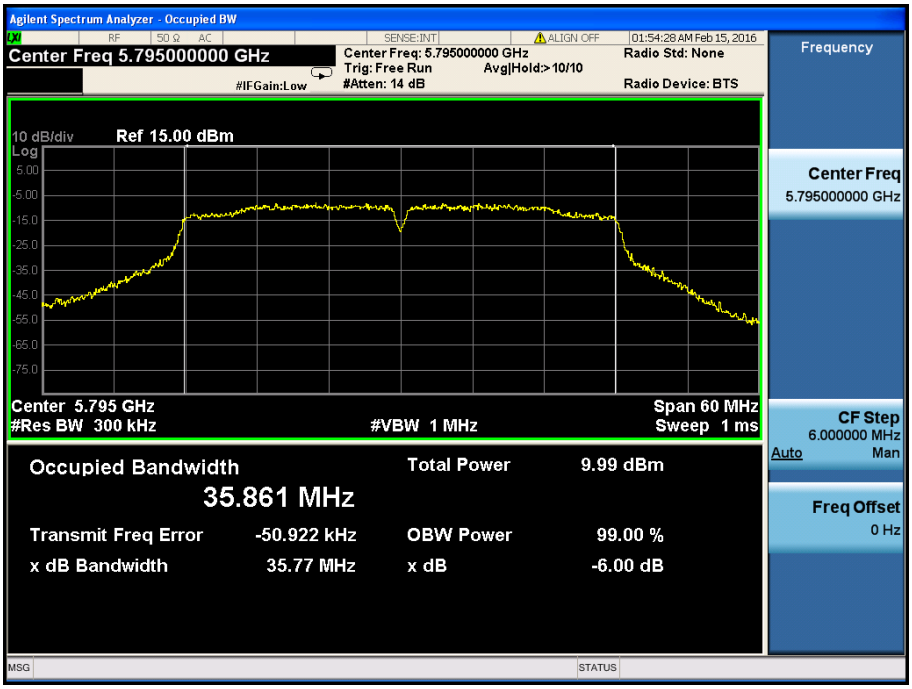
5755MHz




Agilent Spectrum Analyzer - Occupied BW
Span 60.000 MHz
Center Freq: 5.755000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 14 dB
#IFGain:Low
Radio Std: None
Radio Device: BTS
01:53:48 AM Feb 15, 2016
10 dB/div
Log
Ref 15.00 dBm
Center 5.755 GHz
#Res BW 300 kHz
#VBW 1 MHz
Span 60 MHz
Sweep 1 ms
Occupied Bandwidth
35.882 MHz
Total Power
11.0 dBm
Transmit Freq Error
-53.455 kHz
OBW Power
99.00 %
x dB Bandwidth
35.77 MHz
x dB
-6.00 dB
Span
Span
60.000 MHz
Full Span
Last Span
MSG
STATUS

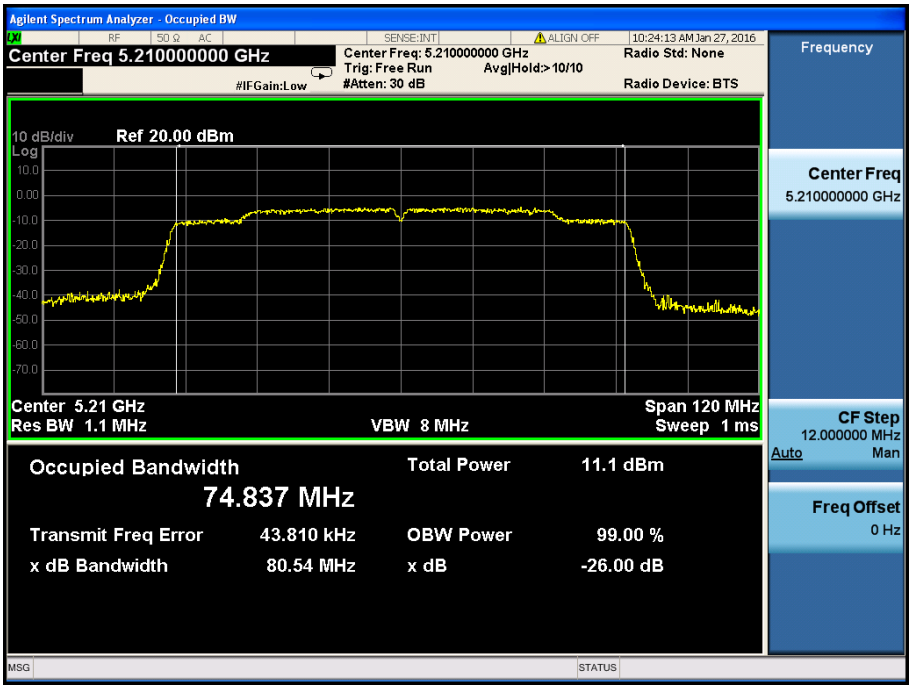
5795MHz


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.795000000 GHz
Center Freq: 5.795000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 30 dB
#IFGain:Low
Radio Std: None
Radio Device: BTS
10:23:31 AM Jan 27, 2016
10 dB/div
Log
Ref 20.00 dBm
Center 5.795 GHz
Res BW 560 kHz
VBW 6 MHz
Span 60 MHz
Sweep 1 ms
Occupied Bandwidth
36.034 MHz
Total Power
17.4 dBm
Transmit Freq Error
-69.075 kHz
OBW Power
99.00 %
x dB Bandwidth
42.34 MHz
x dB
-26.00 dB
Frequency
Center Freq
5.795000000 GHz
CF Step
6.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

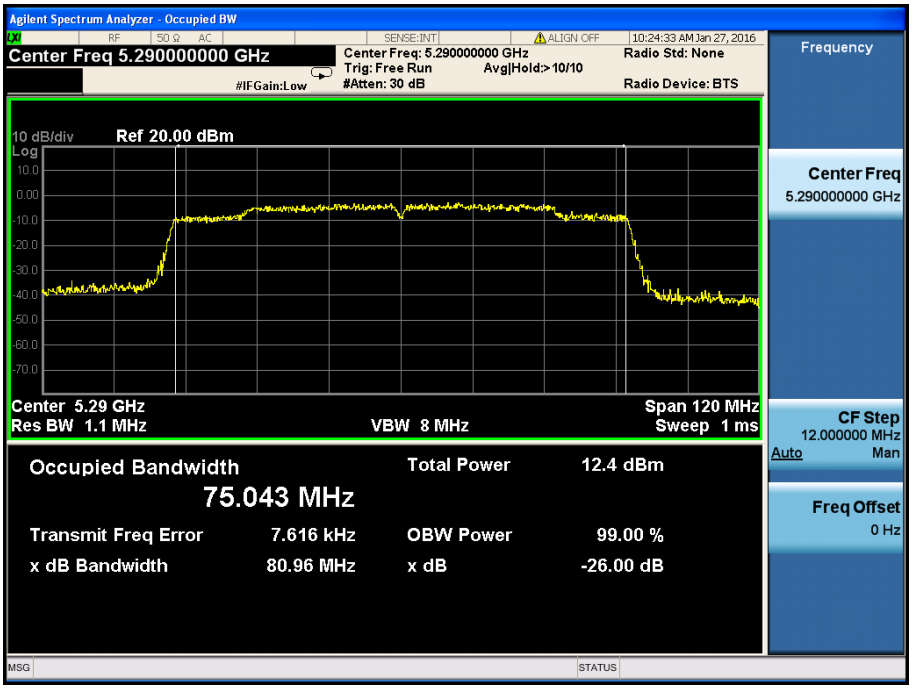


Test mode：802.11ac-HT80

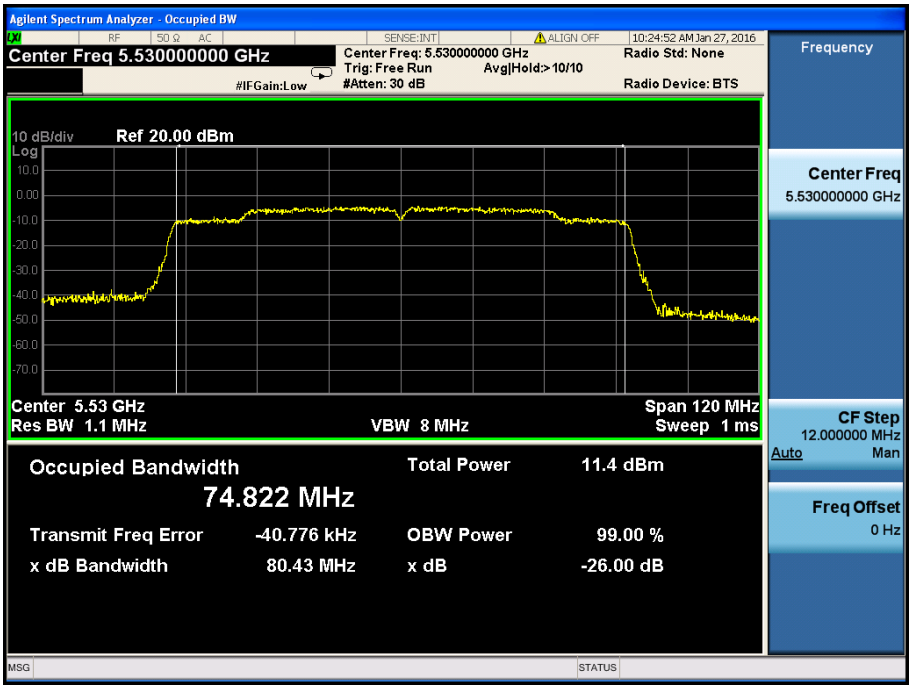
5210MHz



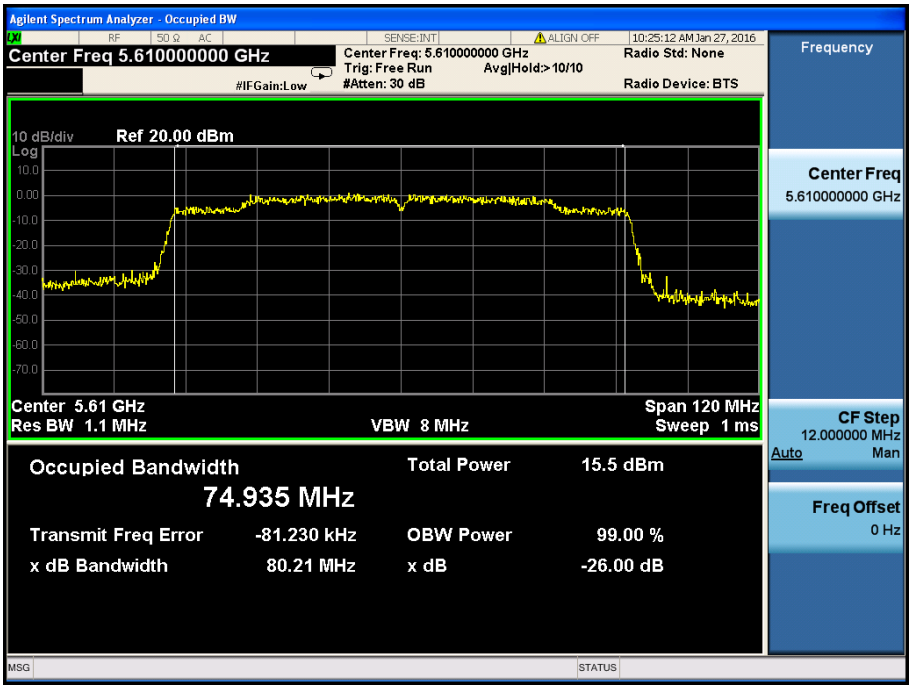
5290MHz



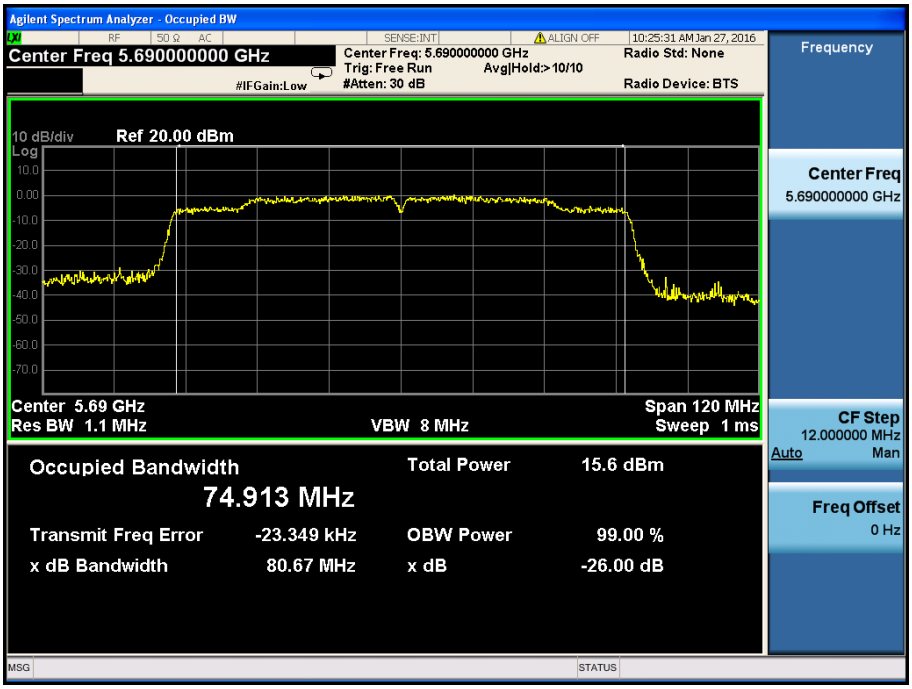
5530MHz



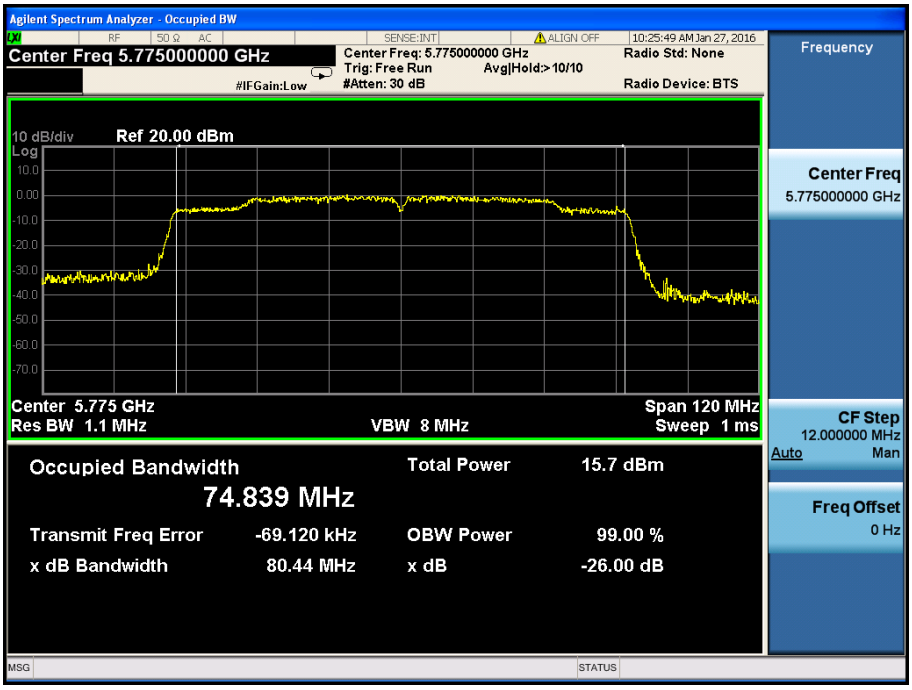
5610MHz



5690MHz



5775MHz

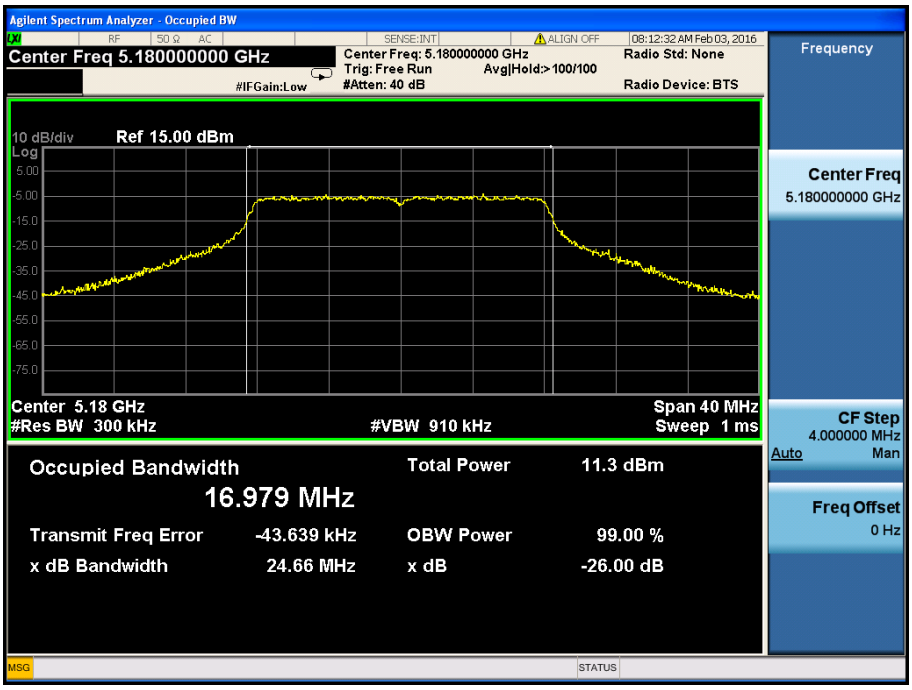

Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.775000000 GHz
Center Freq: 5.775000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 30 dB
#IFGain:Low
Radio Std: None
Radio Device: BTS
10:25:49 AM Jan 27, 2016
10 dB/div
Ref 20.00 dBm
Log
Center 5.775 GHz
Res BW 1.1 MHz
VBW 8 MHz
Span 120 MHz
Sweep 1 ms
Occupied Bandwidth
74.839 MHz
Total Power
15.7 dBm
Transmit Freq Error
-69.120 kHz
OBW Power
99.00 %
x dB Bandwidth
80.44 MHz
x dB
-26.00 dB
Frequency
Center Freq
5.775000000 GHz
CF Step
12.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS


Agilent Spectrum Analyzer - Occupied BW
Span 100.00 MHz
Center Freq: 5.775000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 14 dB
#IFGain:Low
Radio Std: None
Radio Device: BTS
01:55:13 AM Feb 15, 2016
10 dB/div
Ref 15.00 dBm
Log
Center 5.775 GHz
#Res BW 300 kHz
#VBW 1 MHz
Span 100 MHz
Sweep 1.4 ms
Occupied Bandwidth
74.783 MHz
Total Power
10.5 dBm
Transmit Freq Error
-107.97 kHz
OBW Power
99.00 %
x dB Bandwidth
75.12 MHz
x dB
-6.00 dB
Span
Span
100.00 MHz
Full Span
Last Span
MSG
STATUS

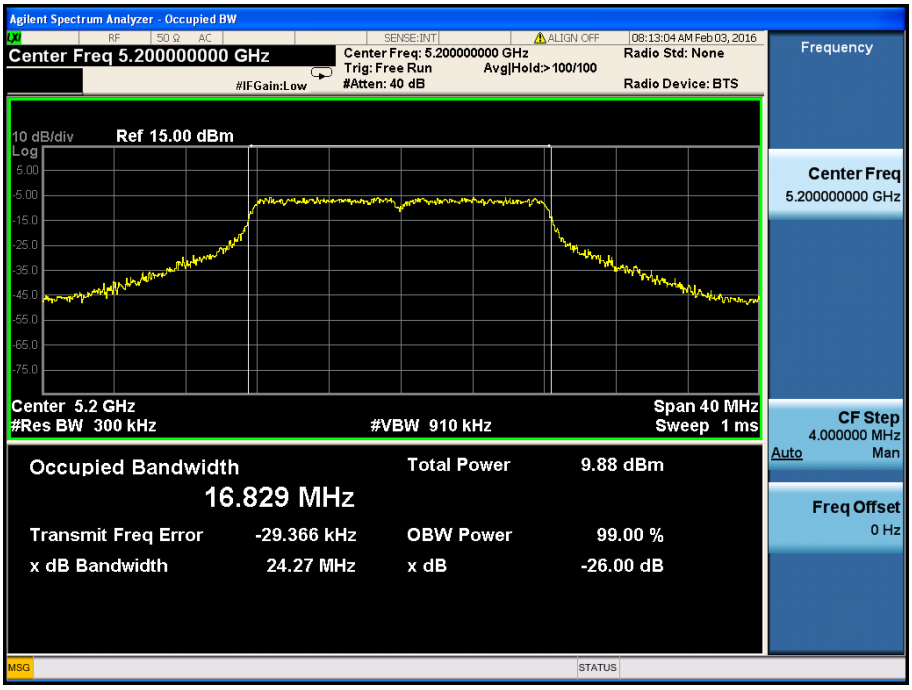
Antenna 2

Test mode：802.11a

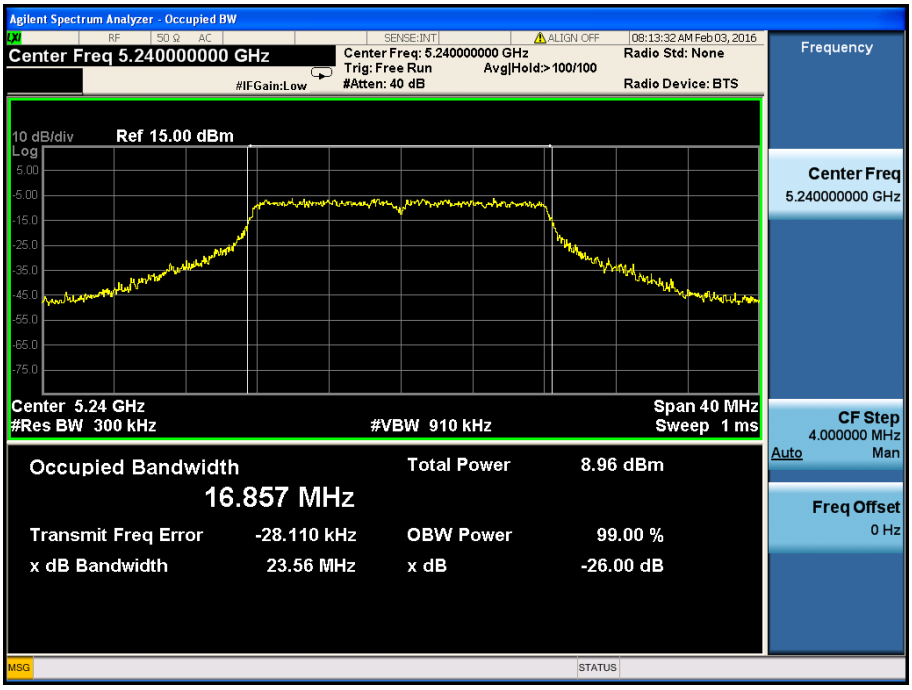
5180MHz



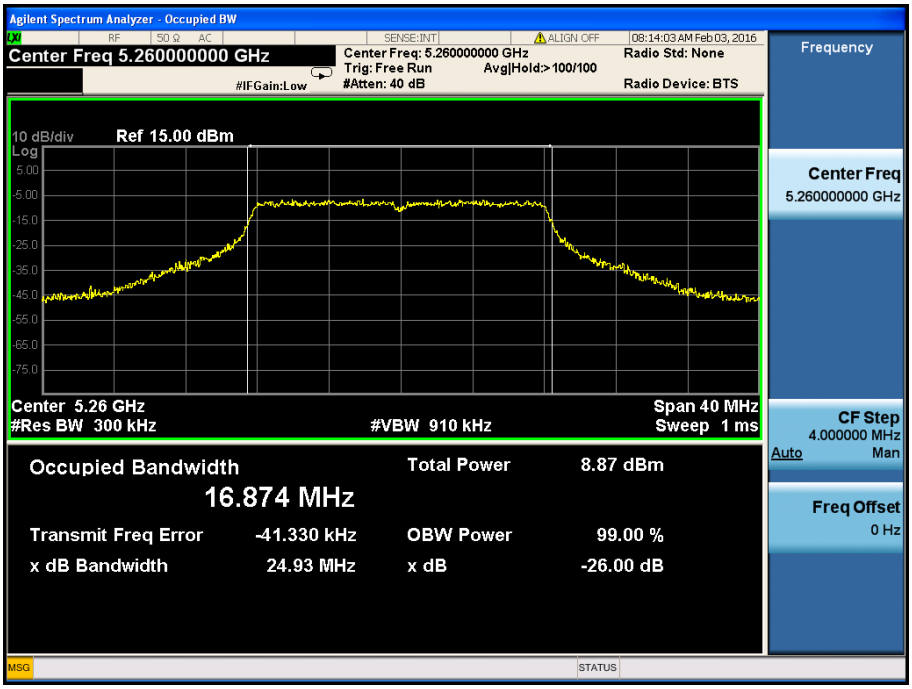
5200MHz



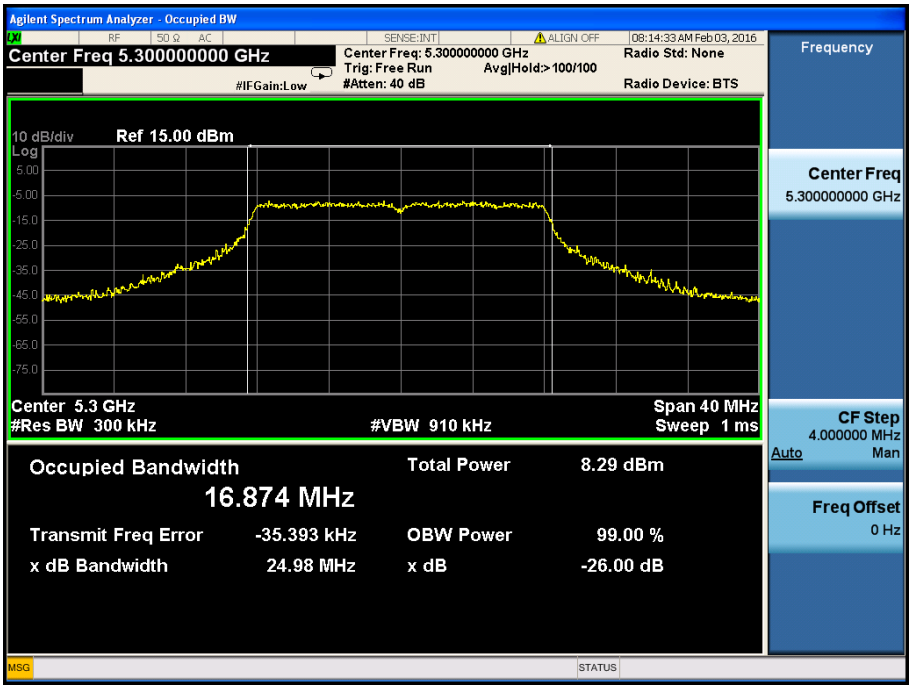
5240MHz



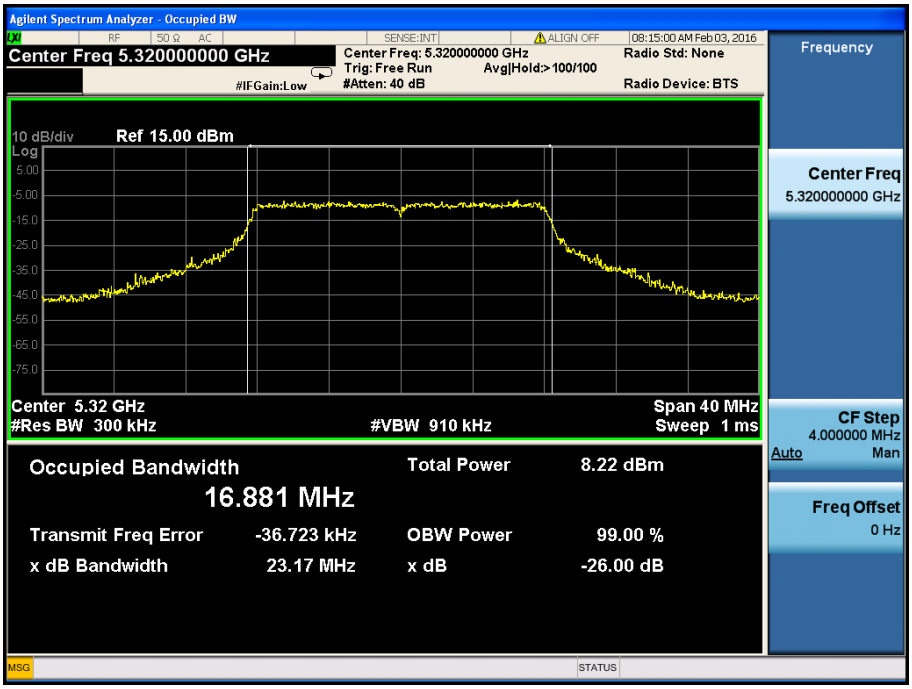
5260MHz



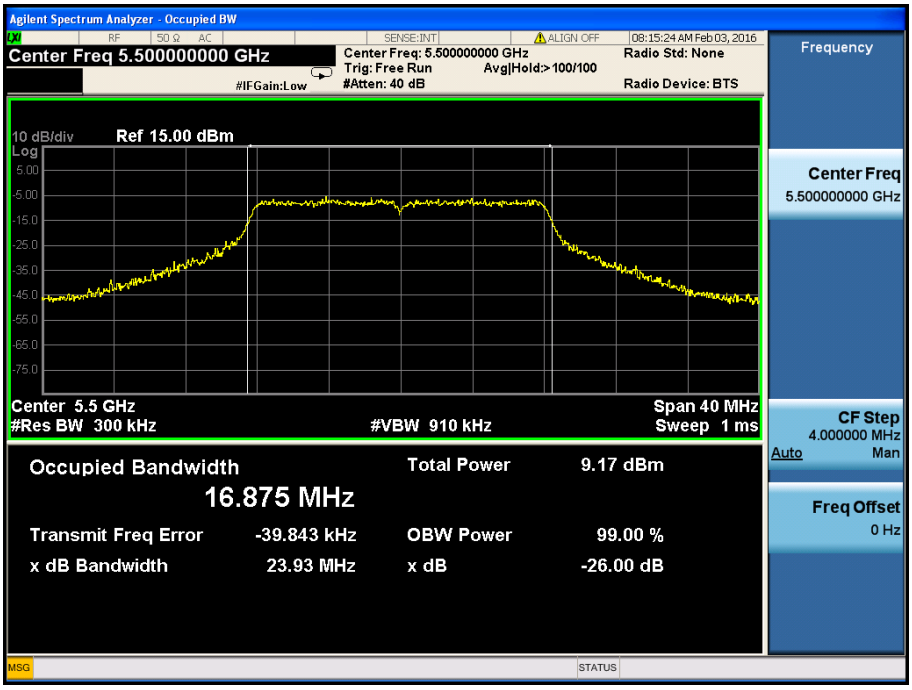
5300MHz



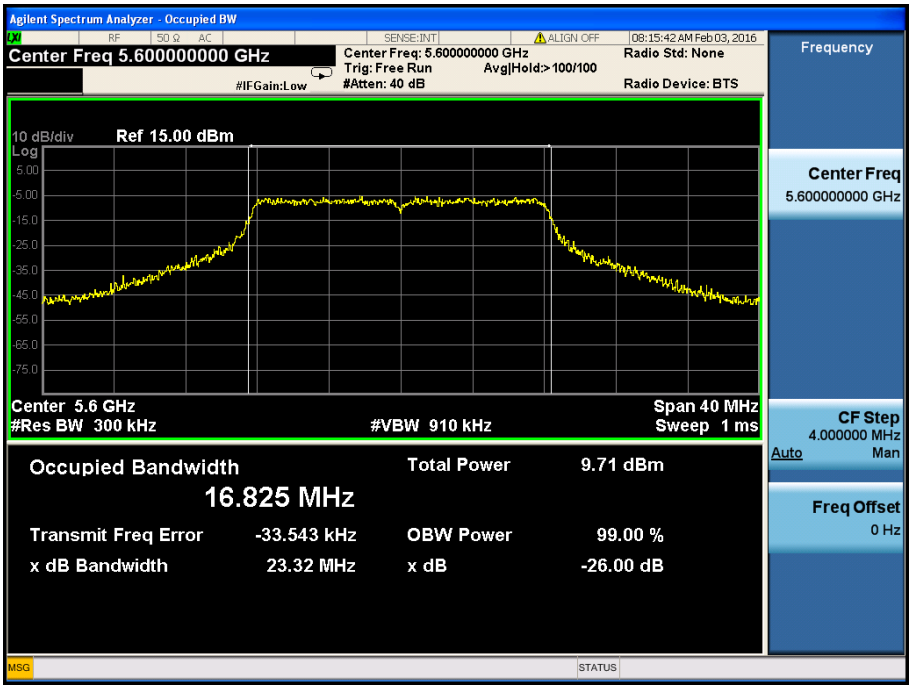
5320MHz



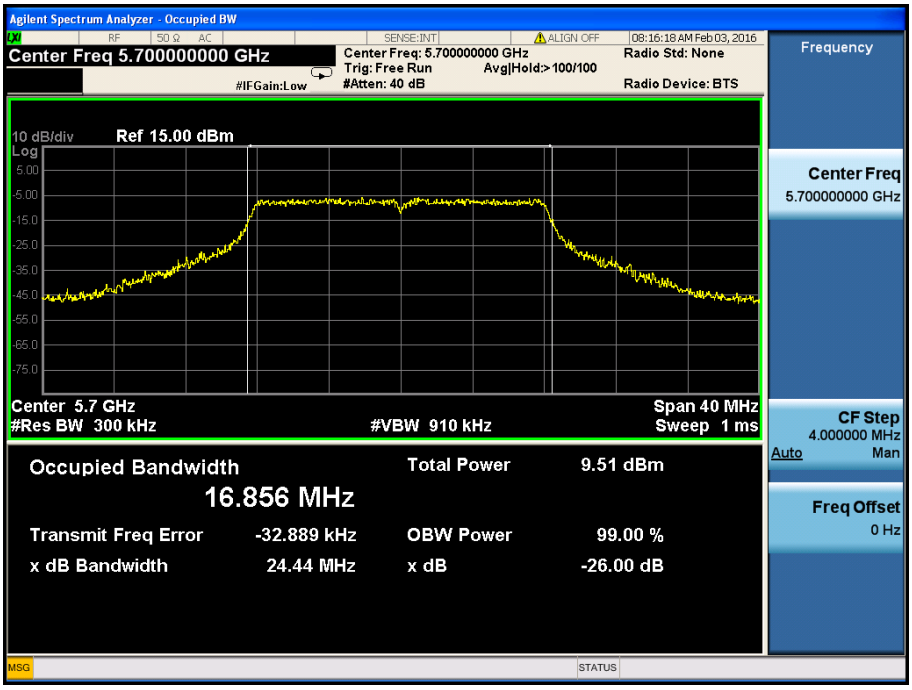
5500MHz



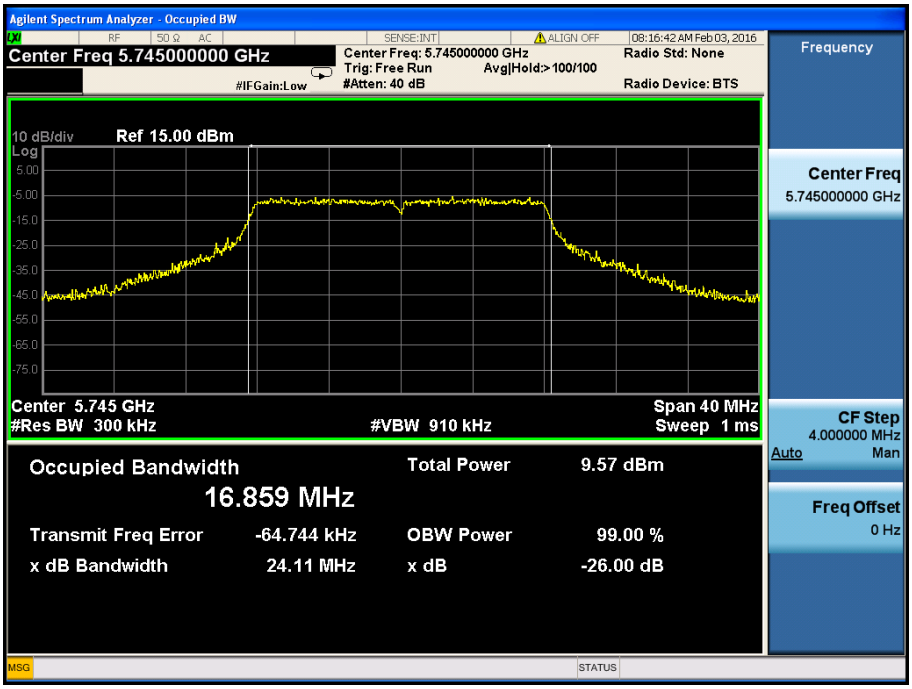
5600MHz

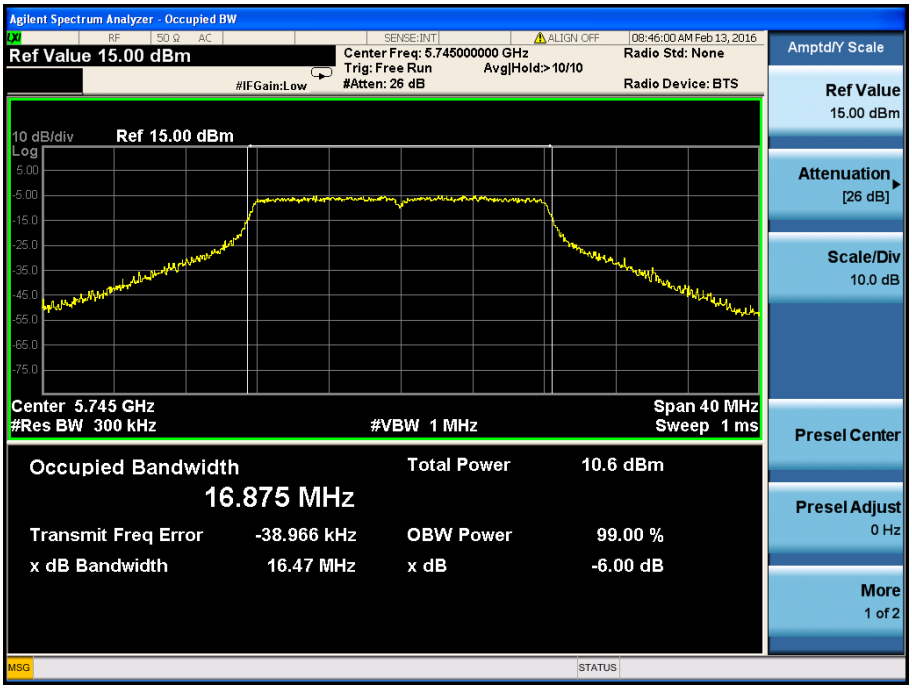


5700MHz

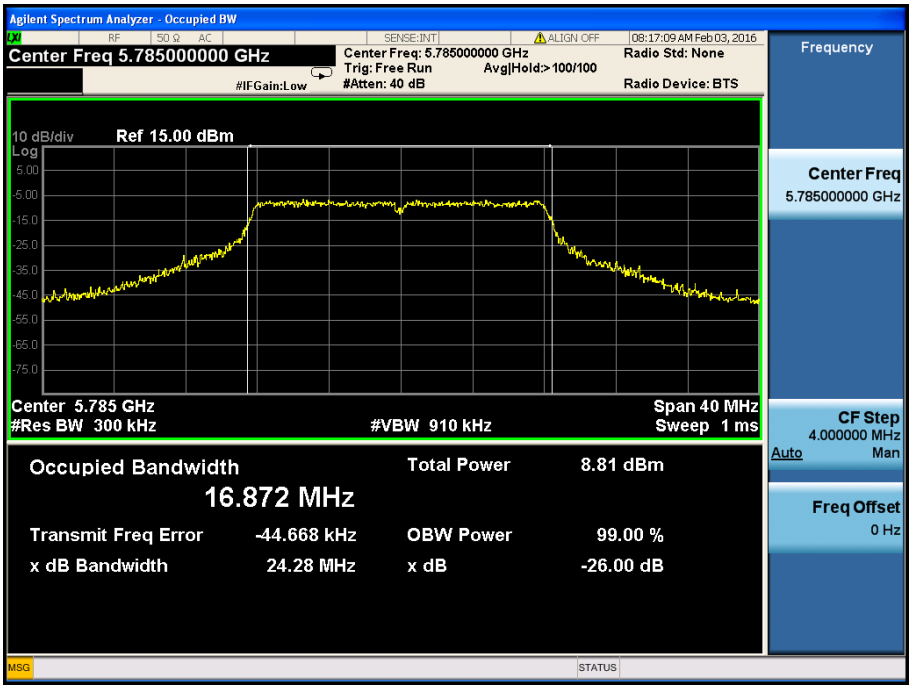


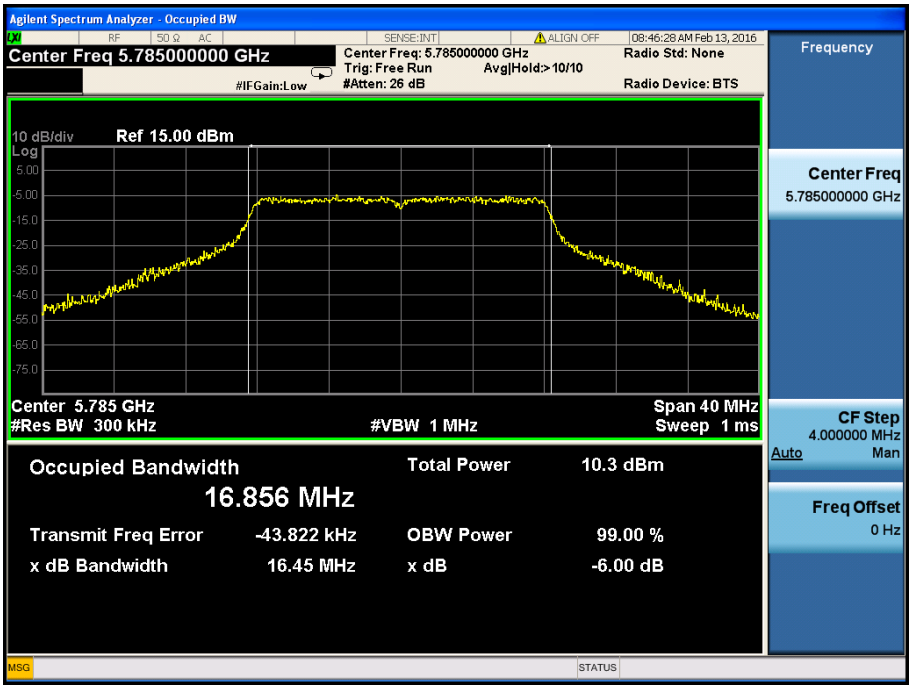
5745MHz



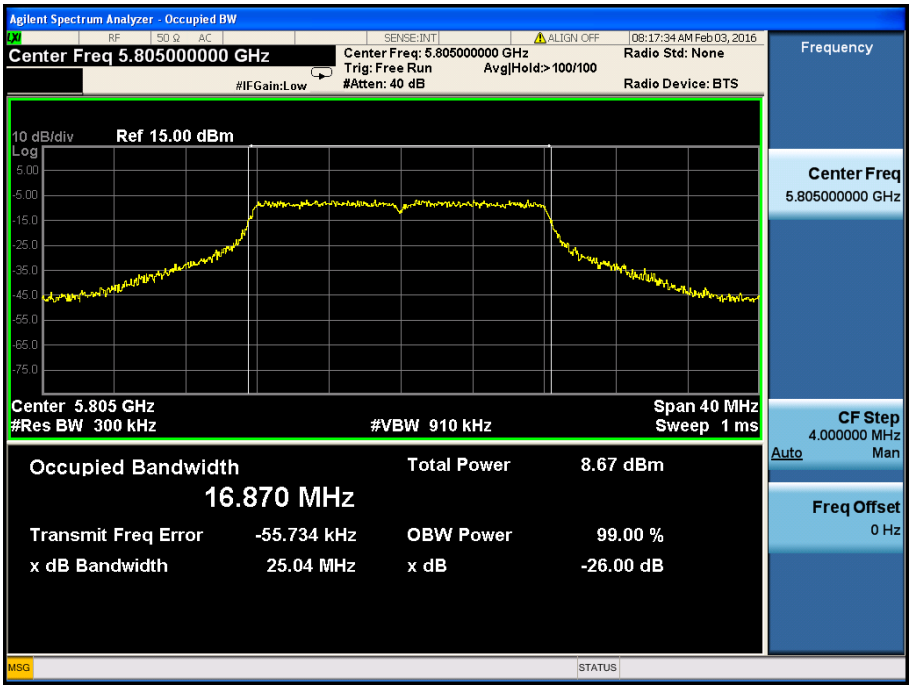

Agilent Spectrum Analyzer - Occupied BW
Ref Value 15.00 dBm
Center Freq: 5.745000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 26 dB
#IFGain:Low
Radio Std: None
Radio Device: BTS
08:46:00 AM Feb 13, 2016
10 dB/div
Log
Ref 15.00 dBm
Center 5.745 GHz
#Res BW 300 kHz
#VBW 1 MHz
Span 40 MHz
Sweep 1 ms
Occupied Bandwidth
16.875 MHz
Total Power
10.6 dBm
Transmit Freq Error
-38.966 kHz
OBW Power
99.00 %
x dB Bandwidth
16.47 MHz
x dB
-6.00 dB
Amptd/Y Scale
Ref Value
15.00 dBm
Attenuation
[26 dB]
Scale/Div
10.0 dB
Presel Center
Presel Adjust
0 Hz
More
1 of 2
MSG
STATUS

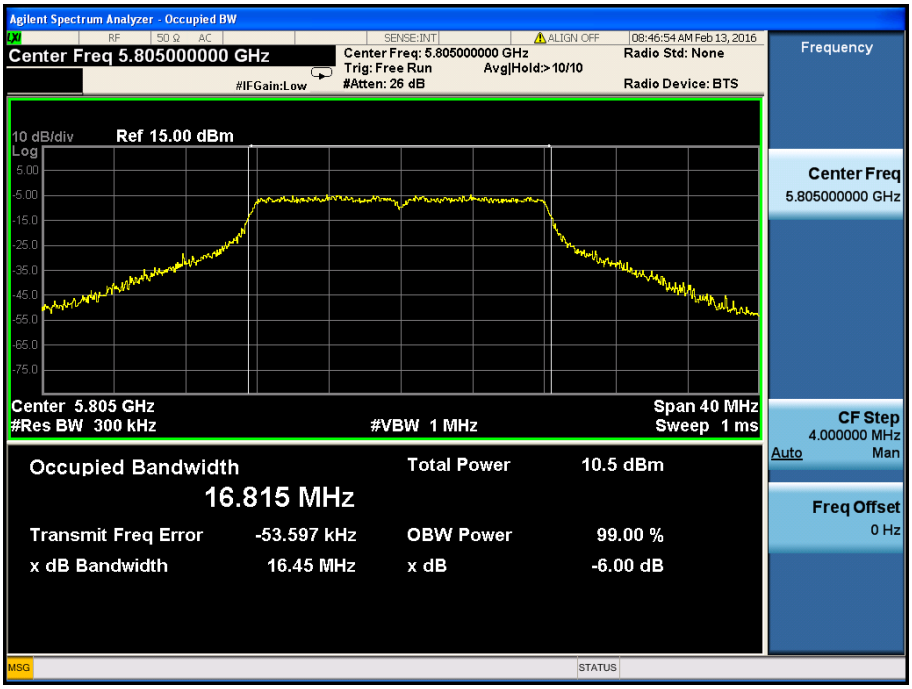
5785MHz


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.785000000 GHz
Center Freq: 5.785000000 GHz
Trig: Free Run
Avg|Hold:>100/100
#Atten: 40 dB
#IFGain:Low
Radio Std: None
Radio Device: BTS
08:17:09 AM Feb 03, 2016
10 dB/div
Log
Ref 15.00 dBm
Center 5.785 GHz
#Res BW 300 kHz
#VBW 910 kHz
Span 40 MHz
Sweep 1 ms
Occupied Bandwidth
16.872 MHz
Total Power
8.81 dBm
Transmit Freq Error
-44.668 kHz
OBW Power
99.00 %
x dB Bandwidth
24.28 MHz
x dB
-26.00 dB
Frequency
Center Freq
5.785000000 GHz
CF Step
4.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.785000000 GHz
Center Freq: 5.785000000 GHz
Trig: Free Run
Avg|Hold:>10/10
#Atten: 26 dB
#IFGain:Low
Radio Std: None
Radio Device: BTS
08:46:28 AM Feb 13, 2016
Frequency
10 dB/div
Log
Ref 15.00 dBm
Center 5.785 GHz
#Res BW 300 kHz
#VBW 1 MHz
Span 40 MHz
Sweep 1 ms
Occupied Bandwidth
16.856 MHz
Total Power
10.3 dBm
Transmit Freq Error
-43.822 kHz
OBW Power
99.00 %
x dB Bandwidth
16.45 MHz
x dB
-6.00 dB
Center Freq
5.785000000 GHz
CF Step
4.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

5805MHz


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.805000000 GHz
Center Freq: 5.805000000 GHz
Trig: Free Run
Avg|Hold:>100/100
#Atten: 40 dB
#IFGain:Low
Radio Std: None
Radio Device: BTS
08:17:34 AM Feb 03, 2016
Frequency
10 dB/div
Log
Ref 15.00 dBm
Center 5.805 GHz
#Res BW 300 kHz
#VBW 910 kHz
Span 40 MHz
Sweep 1 ms
Occupied Bandwidth
16.870 MHz
Total Power
8.67 dBm
Transmit Freq Error
-55.734 kHz
OBW Power
99.00 %
x dB Bandwidth
25.04 MHz
x dB
-26.00 dB
Center Freq
5.805000000 GHz
CF Step
4.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS



Test mode：802.11n-HT20

5180MHz