

TEST REPORT

Report No.: SHE20060042-02IE

Date: 2021-01-15

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Applicant : Sonim Technologies Inc
Address of Applicant : 6836 Bee Cave Road, Building 1, Suite 279, Austin, Texas 78746, USA

Product Name : Rugged Tablet
Model No. : RS80
Sample No. : E20060042-01#01
E20060042-01#07
FCC ID : WYPRS80
ISED Number : 8090A-RS80

Standards : FCC CFR47 Part 15, Subpart E
RSS-Gen (Issue 5, March 2019)
RSS-247 (Issue 2, February 2017)

Date of Receipt : 2020-09-27
Date of Test : 2020-10-14 ~ 2021-01-15
Date of Issue : 2021-01-15

Remark:

This report details the results of the testing carried out on one sample, the results contained in this report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

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1 General Information

1.1 Testing Laboratory

Company Name	ICAS Testing Technology Service (Shanghai) Co., Ltd.
Address	No.1298 Pingan Rd, Minhang District, Shanghai, China
Telephone	0086 21-51682999
Fax	0086 21-54711112
Homepage	www.icasiso.com

1.2 Details of Application

Company Name	Sonim Technologies Inc
Address	6836 Bee Cave Road, Building 1, Suite 279, Austin, Texas 78746, USA
Contact Person	Avena.Xu
Telephone	1-650-378-8100
Email	avena.xu@sonimtech.com

1.3 Details of EUT

Product Name	Rugged Tablet
Brand Name	Sonim
Model No.	RS80
FCC ID	WYPRS80
ISED Number	8090A-RS80
Mode of Operation	WLAN 802.11a/n(HT20/40)/ac(HT20/40/80)
Frequency Range	Band I: 5150 MHz ~ 5250 MHz Band IV: 5725 MHz ~ 5850 MHz
Modulation Type	256QAM, 64QAM, 16QAM, BPSK, QPSK
Channel Bandwidth	802.11a: 20MHz 802.11n: 20MHz, 40MHz 802.11ac: 20MHz, 40MHz, 80MHz
Antenna Type	Internal Antenna
Antenna Gain	4.11dBi
Extreme Temperature Range	-20°C ~ +55°C
Test Voltage	DC 3.8V
Extreme Voltage	Low Voltage: DC 3.7V High Voltage: DC 4.35V
Product Type	Mobile and portable for FCC standard Indoor for IC standard
Hardware version	V1.00

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Software version	80.0.0-01-10.0.0-00.35.01
Test SW Version	BL410_R;BL410_E
RF power setting in TEST SW	QRCT

1.4 Test Methodology

47 CFR Part 15, Subpart C (10-1-16 Edition)	Miscellaneous Wireless Communications Services
KDB Publication 789033 D02 v02r01	Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E
RSS-Gen (Issue 5, March 2019)	General Requirements for Compliance of Radio Apparatus
RSS-247 (Issue 2, February 2017)	Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices
ANSI C63.10-2013	American National Standard for Testing Unlicensed Wireless Devices

Note(s):

All test items were verified and recorded according to the standards and without any addition/deviation/exclusion during the test.

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2 Test Condition

2.1 Environmental conditions

Temperature (°C)	18-25
Humidity (%RH)	40-65
Barometric Pressure (mbar)	960-1060

2.2 Equipment List

Name of Equipment	Manufacturer	Model	Serial No.	Cal. Due Date
Spectrum Analyzer	Keysight	N9020B	MY59260184	2021-08-18
Spectrum Analyzer	Rohde & Schwarz	FSV40N	101450	2021-06-08
EMI Test Receiver	Rohde & Schwarz	ESPI3	100173	2021-06-08
EMI Test Receiver	Rohde & Schwarz	ESR 7	101911	2021-06-08
V-network	SCHWARZBECK	NSLK 8127	8127-902	2021-02-20
Wideband Radio Communication Tester	Rohde & Schwarz	CMW 500	100687	2021-08-18
Broadband Antenna	SCHWARZBECK	VULB9163	9163-1037	2021-06-08
Horn Antenna-18G	SCHWARZBECK	BBHA9120D	9120D-1775	2021-06-08
Loop Antenna	SCHWARZBECK	FMZB 1513	N/A	2021-03-19
Horn Antenna-40G	YINGLIAN	LB-180400-KF	N/A	2021-07-26
EMC chamber 9*6*6 (L*W*H)	CHANGNING	966	N/A	2021-06-08
Shielded Enclosure 8*5*4 (L*W*H)	CHANGNING	854	N/A	2021-06-08
Test Software	BL	BL410_E	N/A	N/A
Test Software	BL	BL410_R	N/A	N/A

2.3 Measurement Uncertainty

Parameter	Frequency	Uncertainty
Antenna Port Conducted Emission	< 1GHz	± 1.5 dB
	> 1GHz	± 1.5 dB
Radiated Emission	30 MHz – 1 GHz	± 3 dB
	> 1GHz	± 3 dB

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3 Test Set-up and Operation Modes

3.1 Details of Test Mode

Using test software was control EUT work in continuous transmitter and receiver mode. Select test channel as below:

For 802.11a/n(HT20), 802.11ac(VHT20)

Band I (5150 – 5250 MHz)		Band IV (5725 – 5850 MHz)	
Channel	Frequency	Channel	Frequency
The lowest channel(CH36)	5180MHz	The lowest channel(CH149)	5745MHz
The middle channel(CH44)	5220MHz	The middle channel(CH157)	5785MHz
The highest channel(CH48)	5240MHz	The highest channel(CH165)	5825MHz

For 802.11n(HT40), 802.11ac(VHT40)

Band I (5150 – 5250 MHz)		Band IV (5725 – 5850 MHz)	
Channel	Frequency	Channel	Frequency
The lowest channel(CH38)	5190MHz	The lowest channel(CH151)	5755MHz
The highest channel(CH46)	5230MHz	The highest channel(CH159)	5795MHz

For 802.11ac(VHT80)

Band I (5150 – 5250 MHz)		Band IV (5725 – 5850 MHz)	
Channel	Frequency	Channel	Frequency
The lowest channel(CH42)	5210MHz	The lowest channel(CH155)	5775MHz

Through Pre-scan under all rate at lowest channel, the data rate as below table described is the worst case, so we choose these data rate for test.

Type	Data rate
802.11a	6Mbps
802.11n(HT20), 802.11ac(VHT20)	MCS3
802.11n(HT40), 802.11ac(VHT40)	MCS0
802.11ac(VHT80)	MCS0

The basic operation modes are:

- A. On
 - 1. WLAN mode
 - a. Transmitting
 - b. Receiving
- B. Standby

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C. Off

3.2 Special Accessories and Auxiliary Equipment

Description	Manufacturer	Model No.	Serial No.
Laptop	Lenovo	TP00083A	N/A
Earphone	N/A	N/A	N/A

3.3 Support Software

Description	Manufacturer	Software Name
Software	Qualcomm	QRCT

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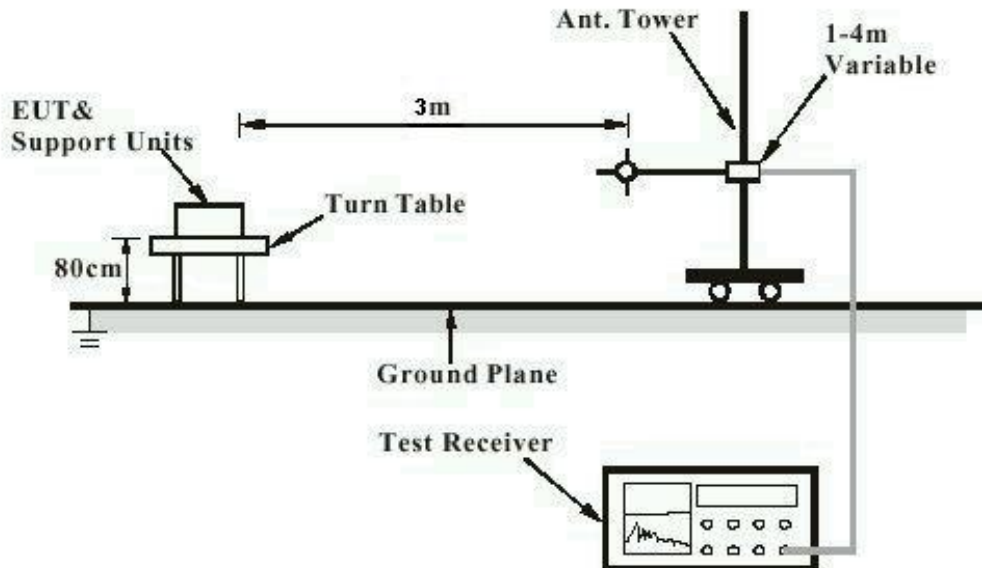
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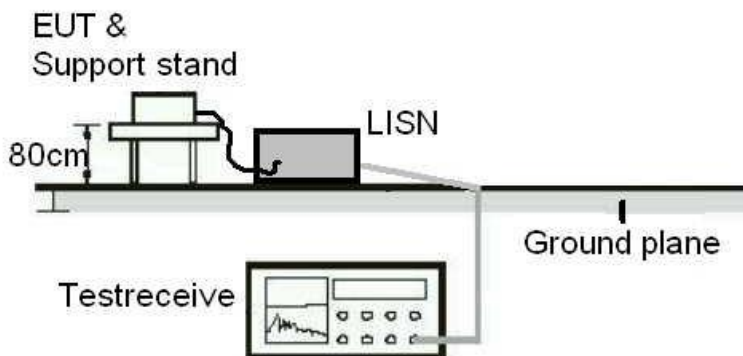
3.4 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test



Note: Measurements above 1GHz are done with a table height of 1.5m. In addition, there is RF absorbing material on the floor of the test site for above 1GHz measurement.

Diagram of Measurement Equipment Configuration for Conduction Measurement



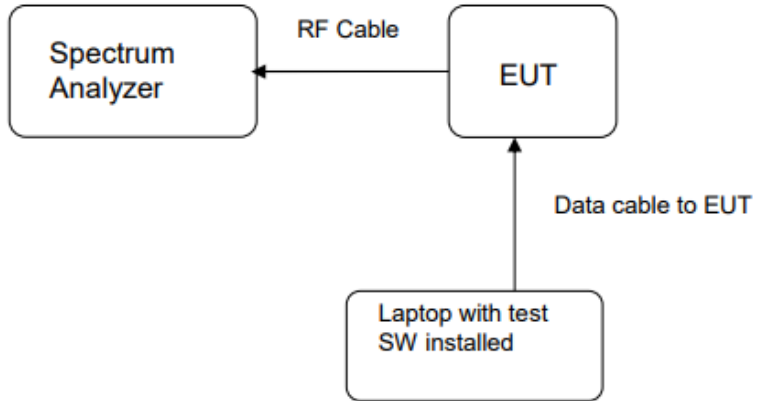
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Diagram of Measurement Equipment Configuration for Transmitter Measurement



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4 Test Results

4.1 Transmitter Requirement & Test Suites

4.1.1 Antenna Requirement

RESULT:

PASS

Test standard : FCC Part 15.407(a), 15.203
RSS-247 6.2

Requirement : The use of approved antennas only with directional gains that do not exceed 6dBi

According to the manufacturer declaration, the EUT has an antenna with a directional gain of 4.11dBi. The antenna is an internal antenna with no possibility of replacement with a non-approved antenna by the end-user.

Therefore, the EUT is considered to comply with this provision.

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4.1.2 Peak Output Power and E.I.R.P

RESULT:

PASS

Test standard : FCC Part 15.407(a)
 RSS-247 6.2

Requirement : ANSI C63.10-2013, KDB 789033

Kind of test site : Shielded room

Test setup

Test Channel : Low/Middle/High

Operation Mode : A.1.a

Ambient temperature : 25°C

Relative humidity : 52%

Table 1: Peak Output Power

Band I (5150 – 5250 MHz)

Test Mode	Test Channel (MHz)	Measured Peak Output Power		FCC Limit (mW)
		(dBm)	(mW)	
802.11a	5180	11.06	12.76	250
	5220	10.78	11.97	
	5240	10.68	11.69	
802.11n(HT20)	5180	11.10	12.88	
	5220	10.89	12.27	
	5240	10.72	11.80	
802.11ac(VHT20)	5180	10.85	12.16	
	5220	10.77	11.94	
	5240	10.99	12.56	
802.11n(HT40)	5190	9.78	9.51	
	5230	9.54	8.99	
802.11ac(VHT40)	5190	10.68	11.69	
	5230	10.72	11.80	
802.11ac(VHT80)	5210	9.88	9.73	

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Band IV (5725 – 5850 MHz)

Test Mode	Test Channel (MHz)	Measured Peak Output Power		FCC/IC Limit (W)
		(dBm)	(mW)	
802.11a	5745	11.00	12.59	1
	5785	10.96	12.47	
	5825	11.07	12.79	
802.11n(HT20)	5745	10.08	10.19	
	5785	10.07	10.16	
	5825	10.20	10.47	
802.11ac(VHT20)	5745	11.76	15.00	
	5785	11.58	14.39	
	5825	11.62	14.52	
802.11n(HT40)	5755	8.77	7.53	
	5795	8.66	7.35	
802.11ac(VHT40)	5755	10.96	12.47	
	5795	10.61	11.51	
802.11ac(VHT80)	5775	10.21	10.50	

Table 2: E.I.R.P

Band I (5150 – 5250 MHz)

Test Mode	Test Channel (MHz)	E.I.R.P		IC Limit (mW)
		(dBm)	(mW)	
802.11a	5180	15.17	32.89	200 mW or 10 dBm + 10log B, which is less
	5220	14.89	30.83	
	5240	14.79	30.13	
802.11n(HT20)	5180	15.21	33.19	
	5220	15.00	31.62	
	5240	14.83	30.41	
802.11ac(VHT20)	5180	14.96	31.33	
	5220	14.88	30.76	
	5240	15.1	32.36	
802.11n(HT40)	5190	13.89	24.49	
	5230	13.65	23.17	
802.11ac(VHT40)	5190	14.79	30.13	
	5230	14.83	30.41	
802.11ac(VHT80)	5210	13.99	25.06	

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Band IV (5725 - 5850 MHz)

Test Mode	Test Channel (MHz)	E.I.R.P		FCC Limit (mW)
		(dBm)	(mW)	
802.11a	5745	15.11	32.43	200 mW or 10 dBm + 10log B, which is less
	5785	15.07	32.14	
	5825	15.18	32.96	
802.11n(HT20)	5745	14.19	26.24	
	5785	14.18	26.18	
	5825	14.31	26.98	
802.11ac(VHT20)	5745	15.87	38.64	
	5785	15.69	37.07	
	5825	15.73	37.41	
802.11n(HT40)	5755	12.88	19.41	
	5795	12.77	18.92	
802.11ac(VHT40)	5755	15.07	32.14	
	5795	14.72	29.65	
802.11ac(VHT80)	5775	14.32	27.04	

Note: 5G antenna peak gain is 4.11dBi

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4.1.3 26dB Bandwidth and 99% Bandwidth

RESULT:

PASS

Test standard : FCC Part 15.407(a)
RSS-247 6.2
Requirement : ANSI C63.10-2013, KDB 789033
Kind of test site : Shielded room

Test setup

Test Channel : Low/Middle/High
Operation Mode : A.1.a
Ambient temperature : 25°C
Relative humidity : 52%

Notes

Test plots please refer to the annex document "WIFI5G EXHIBIT A of SHE20060042-01IE".

Table 3: 26dB Bandwidth and 99% Bandwidth

Band I (5150 – 5250 MHz)

Test Mode	Test Channel (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
802.11a	5180	21.536	17.083
	5220	21.806	17.078
	5240	21.533	17.031
802.11n(HT20)	5180	21.592	17.947
	5220	22.025	17.039
	5240	21.802	17.052
802.11ac(VHT20)	5180	22.021	18.085
	5220	21.583	18.066
	5240	22.002	18.073
802.11n(HT40)	5190	43.266	36.344
	5230	42.884	36.307
802.11ac(VHT40)	5190	42.287	36.355
	5230	42.406	36.383
802.11ac(VHT80)	5210	84.288	74.784

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Band IV (5725 – 5850 MHz)

Test Mode	Test Channel (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
802.11a	5745	22.181	17.031
	5785	21.373	17.085
	5825	21.609	17.079
802.11n(HT20)	5745	21.818	18.056
	5785	22.099	18.068
	5825	21.637	18.087
802.11ac(VHT20)	5745	21.983	18.102
	5785	21.834	18.077
	5825	21.970	18.077
802.11n(HT40)	5755	44.129	36.329
	5795	43.329	36.298
802.11ac(VHT40)	5755	43.114	36.398
	5795	41.968	36.312
802.11ac(VHT80)	5775	83.566	74.876

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4.1.4 6dB Bandwidth

RESULT:

PASS

Test standard : FCC Part 15.407(e)
RSS-247 6.2
Requirement : ANSI C63.10-2013, KDB 789033
Kind of test site : Shielded room

Test setup

Test Channel : Low/Middle/High
Operation Mode : A.1.a
Ambient temperature : 23°C
Relative humidity : 52%

Table 4: 6dB Bandwidth

Band IV (5725 – 5850 MHz)

Test Mode	Test Channel (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
802.11a	5745	16.410	>0.5
	5785	16.390	
	5825	16.420	
802.11n(HT20)	5745	17.610	
	5785	17.650	
	5825	17.610	
802.11ac(VHT20)	5745	17.630	
	5785	17.630	
	5825	17.650	
802.11n(HT40)	5755	35.180	
	5795	34.180	
802.11ac(VHT40)	5755	35.330	
	5795	34.490	
802.11ac(VHT80)	5775	75.210	

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Figure 1: 6dB Bandwidth, 802.11a, 5745MHz

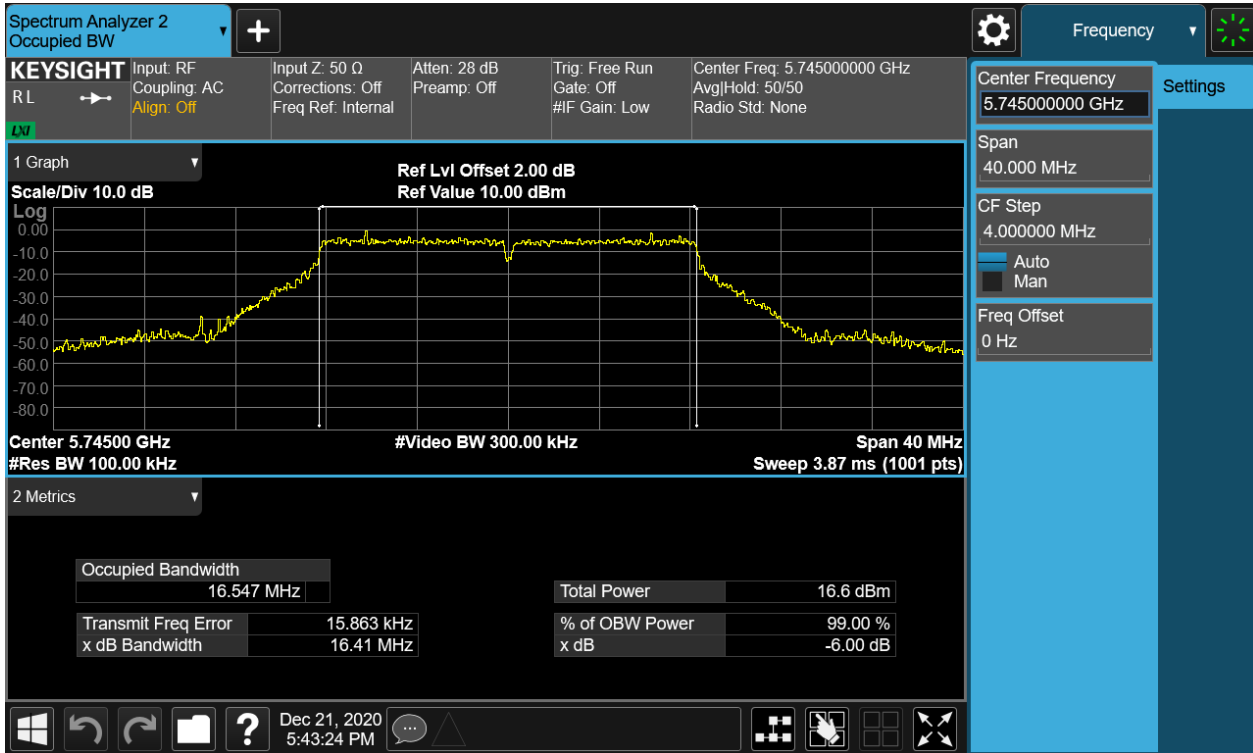
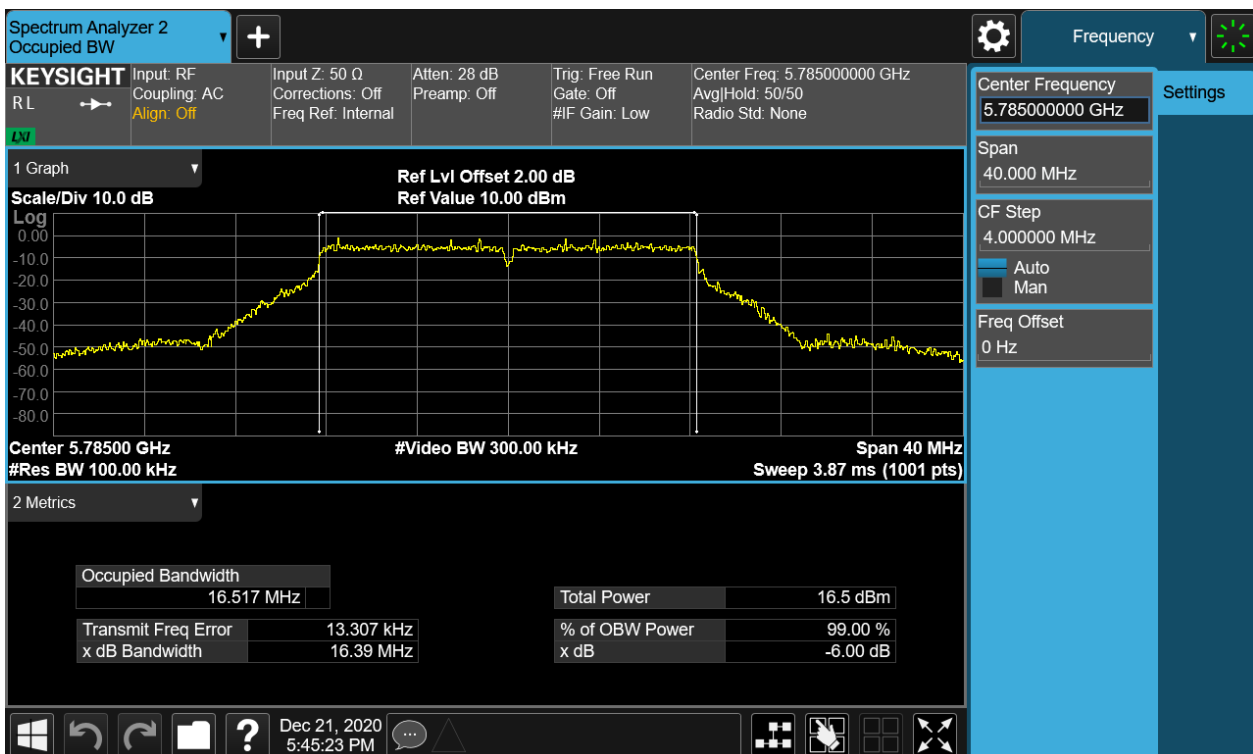


Figure 2: 6dB Bandwidth, 802.11a, 5785MHz



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Figure 3: 6dB Bandwidth, 802.11a, 5825MHz

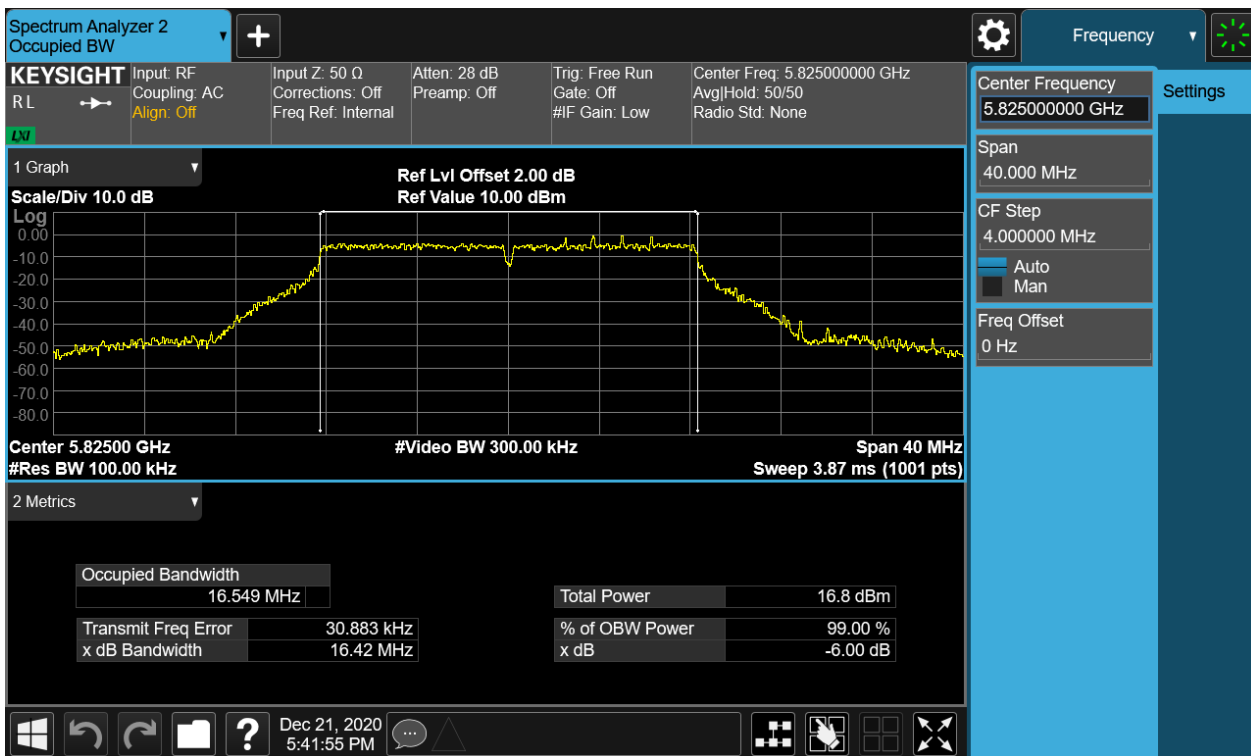


Figure 4: 6dB Bandwidth, 802.11n(HT20), 5745MHz

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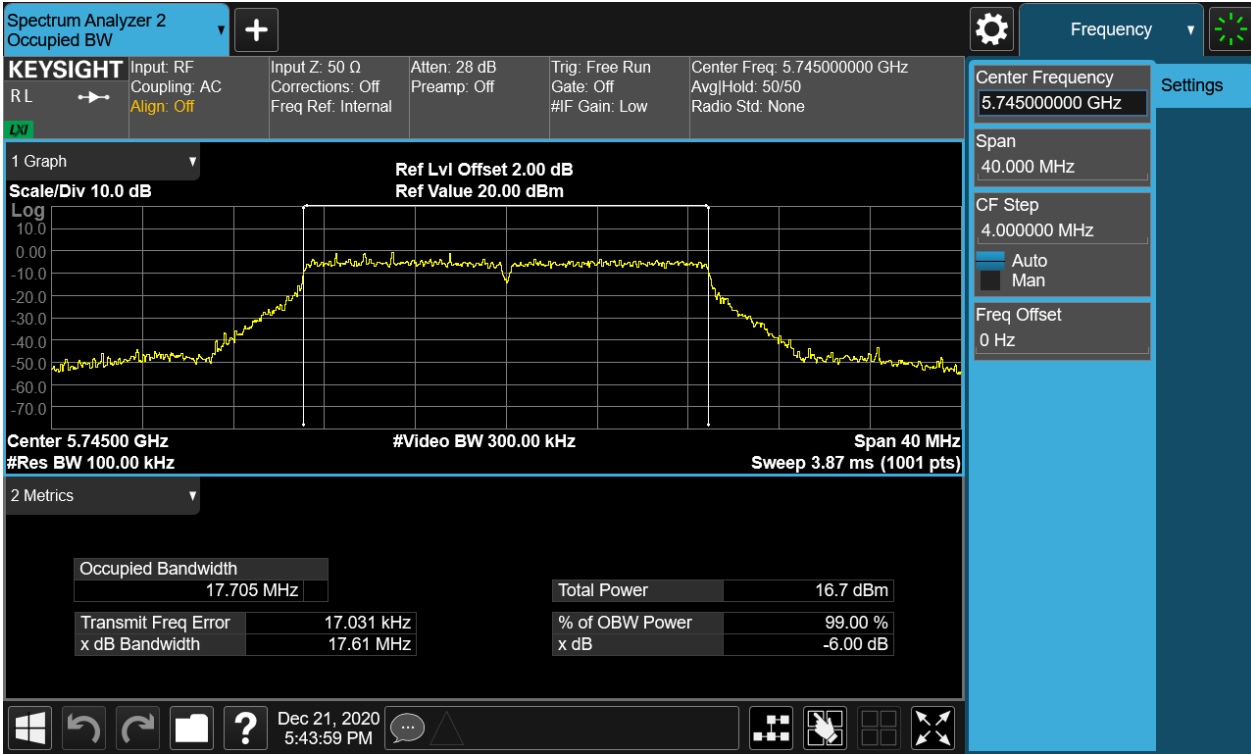


Figure 5: 6dB Bandwidth, 802.11n(HT20), 5785MHz

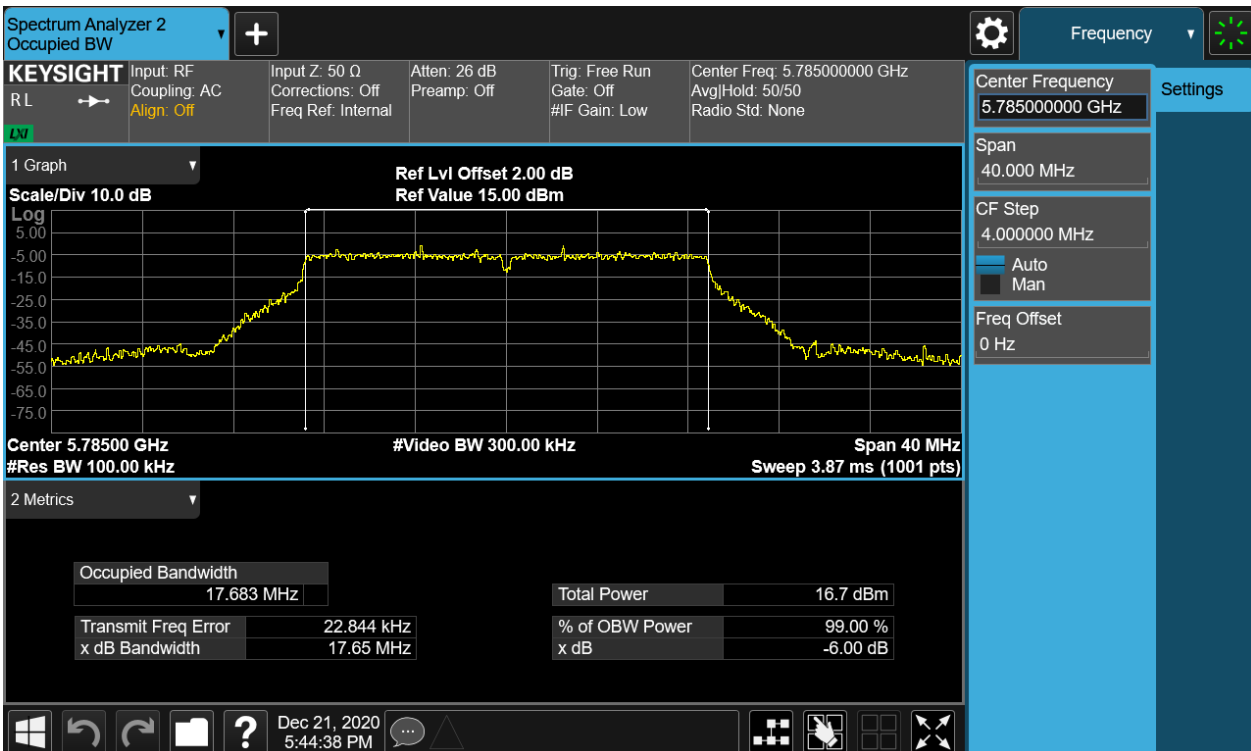


Figure 6: 6dB Bandwidth, 802.11n(HT20), 5825MHz

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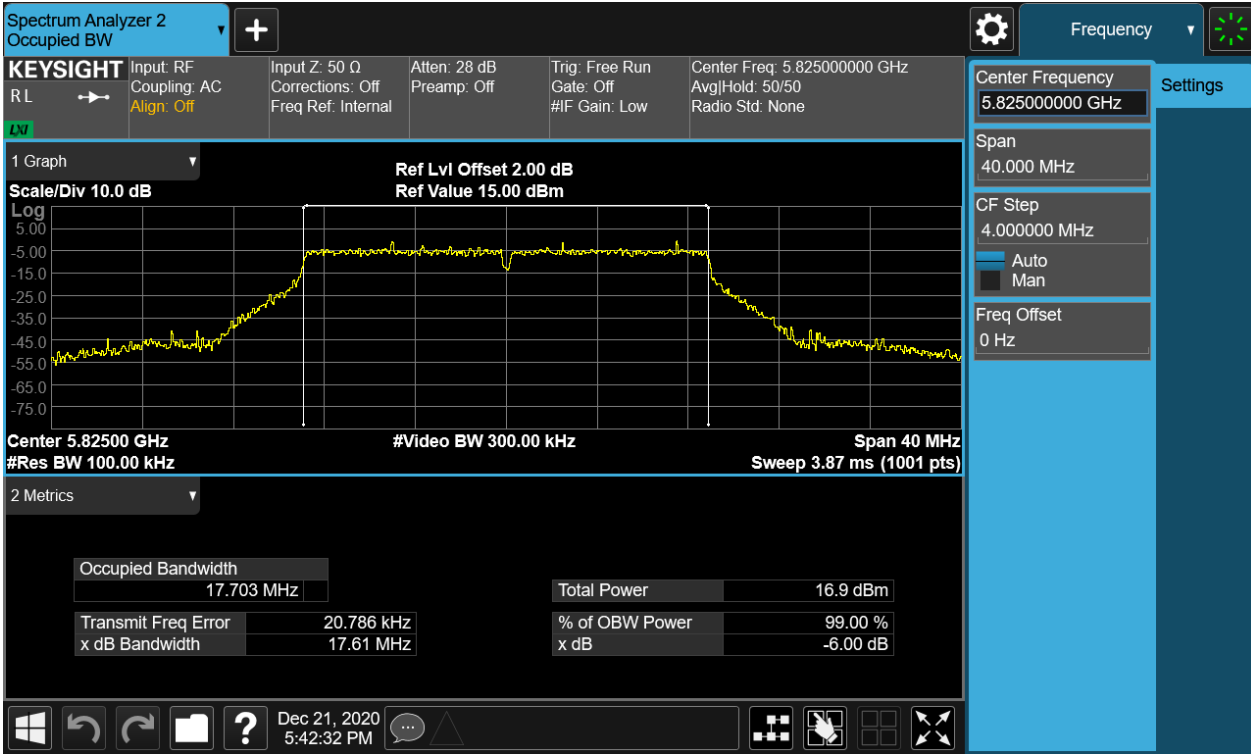


Figure 7: 6dB Bandwidth, 802.11ac(VHT20), 5745MHz

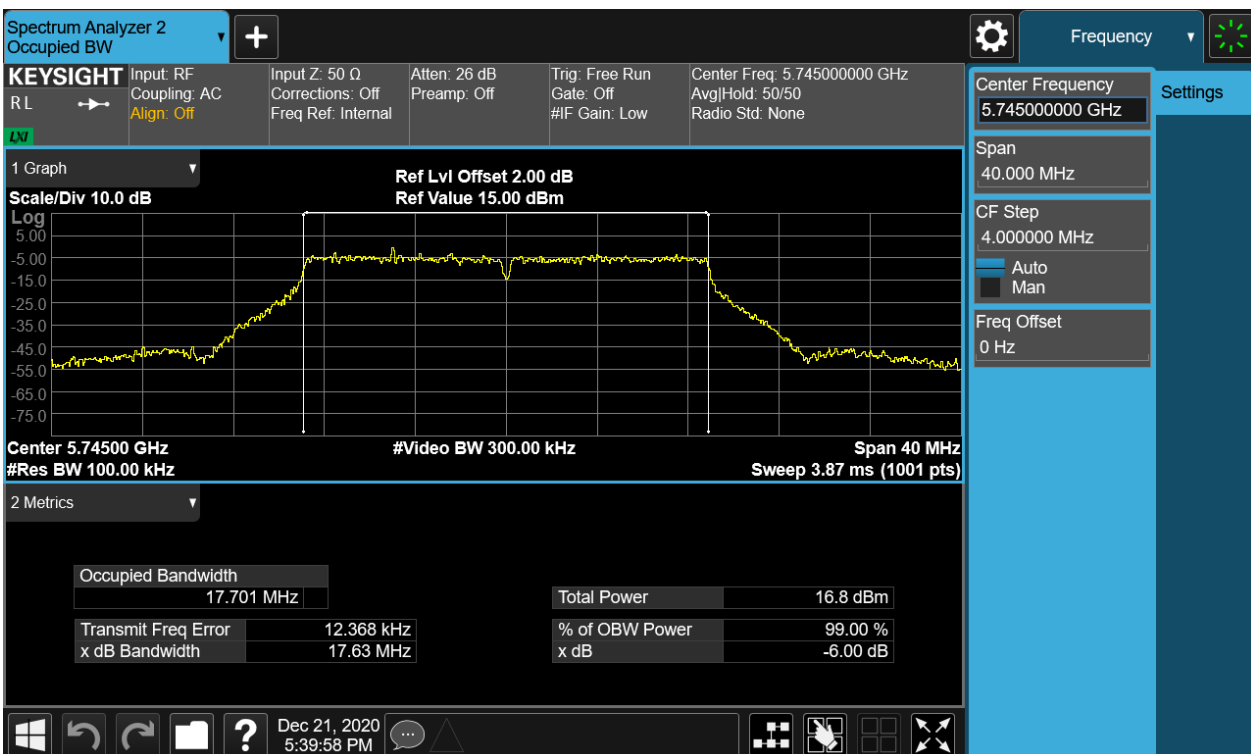


Figure 8: 6dB Bandwidth, 802.11ac(VHT20), 5785MHz

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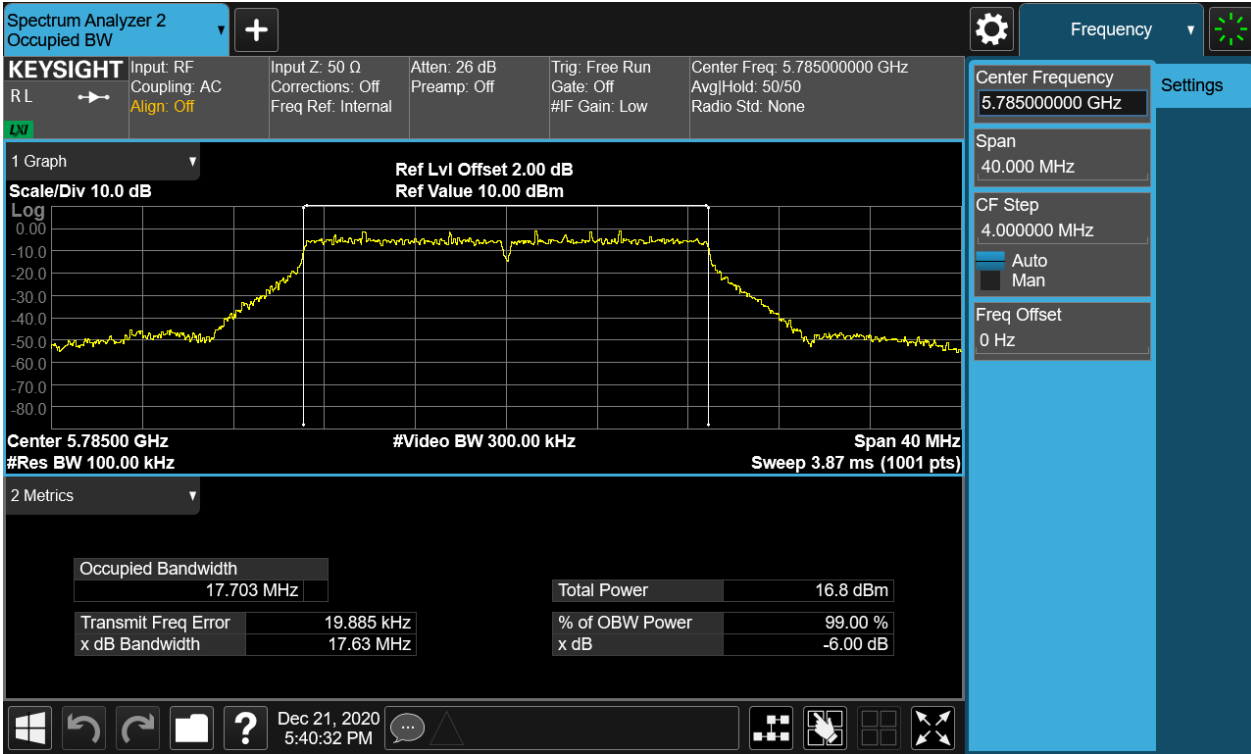
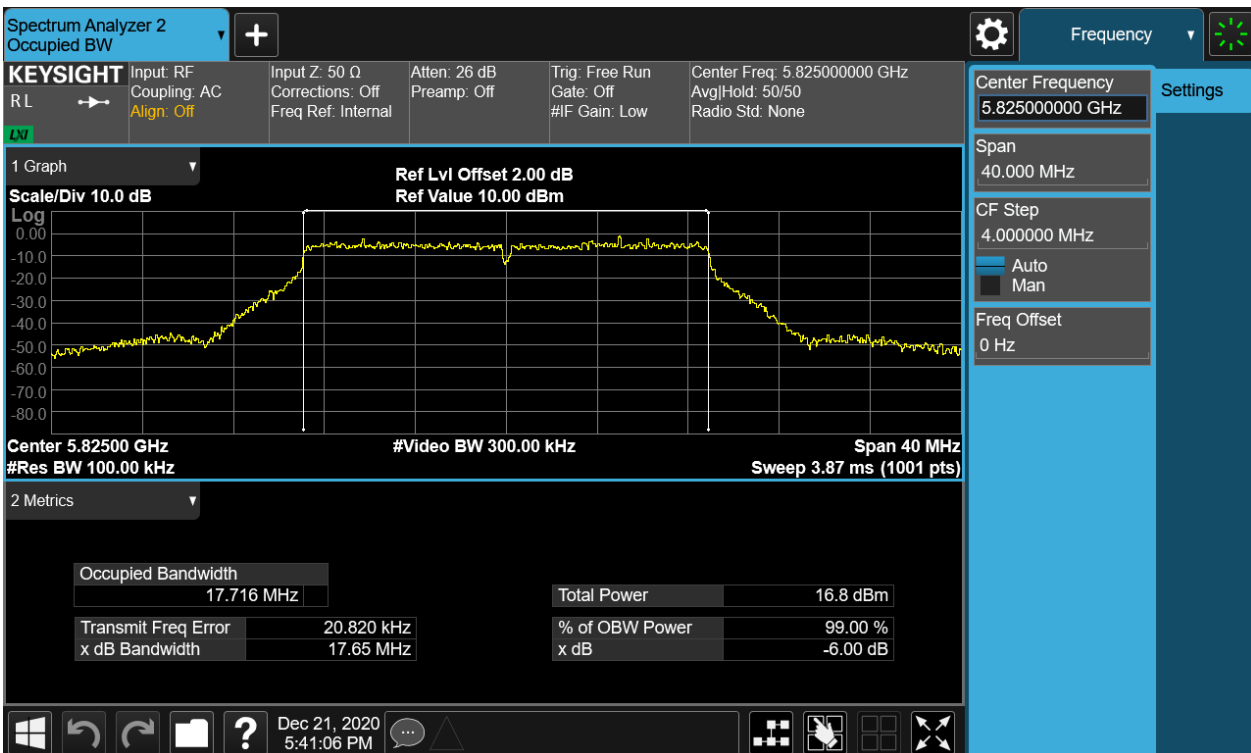


Figure 9: 6dB Bandwidth, 802.11ac(VHT20), 5825MHz



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Figure 10: 6dB Bandwidth, 802.11n(HT40), 5755MHz

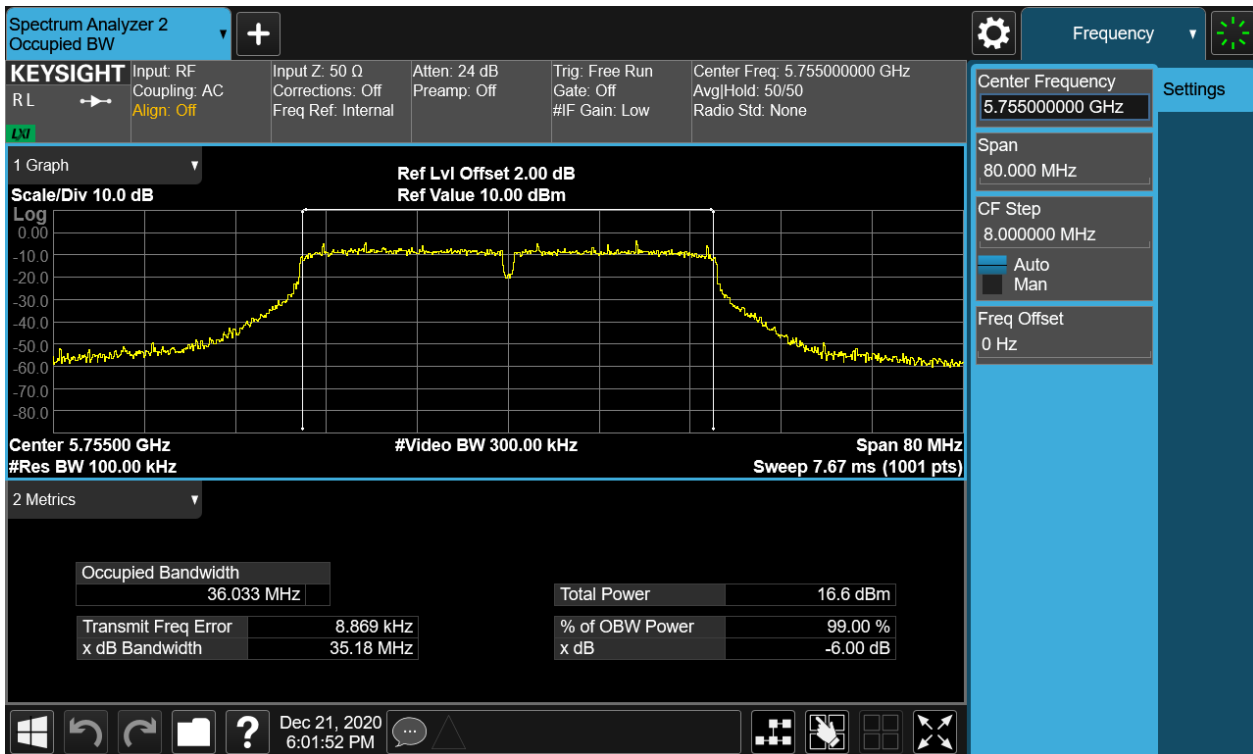


Figure 11: 6dB Bandwidth, 802.11n(HT40), 5795MHz

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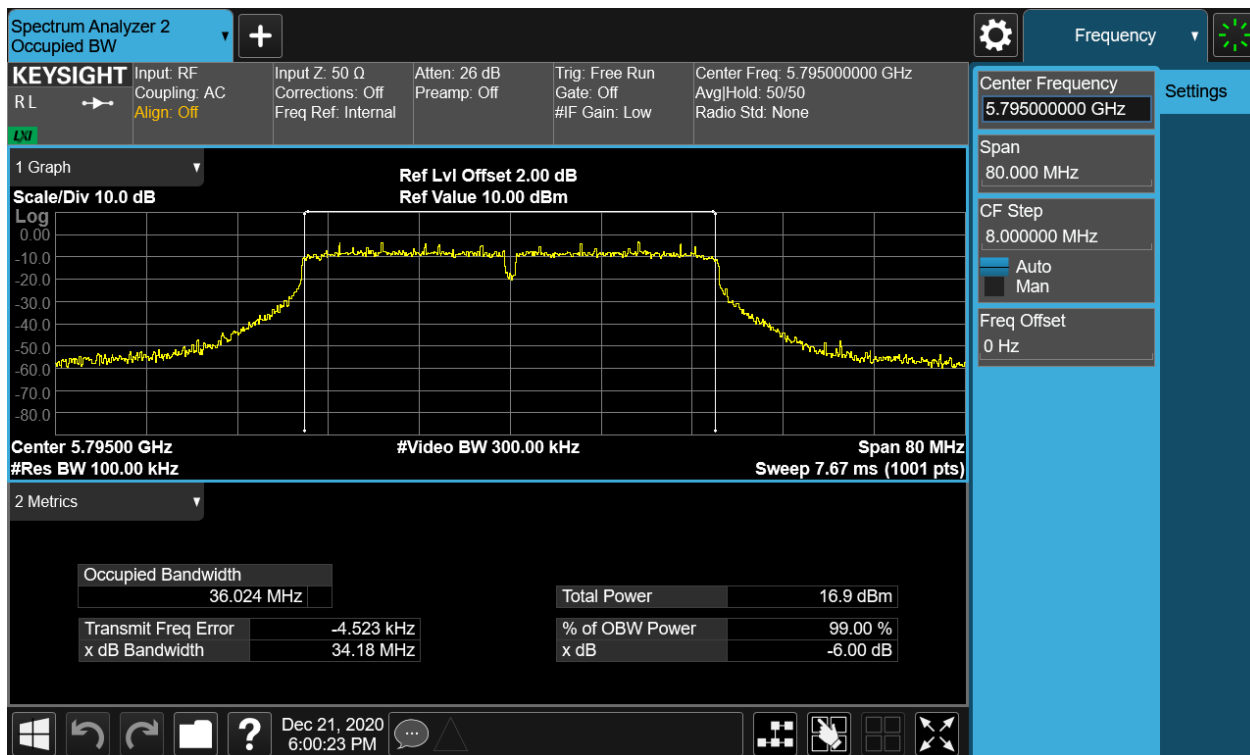
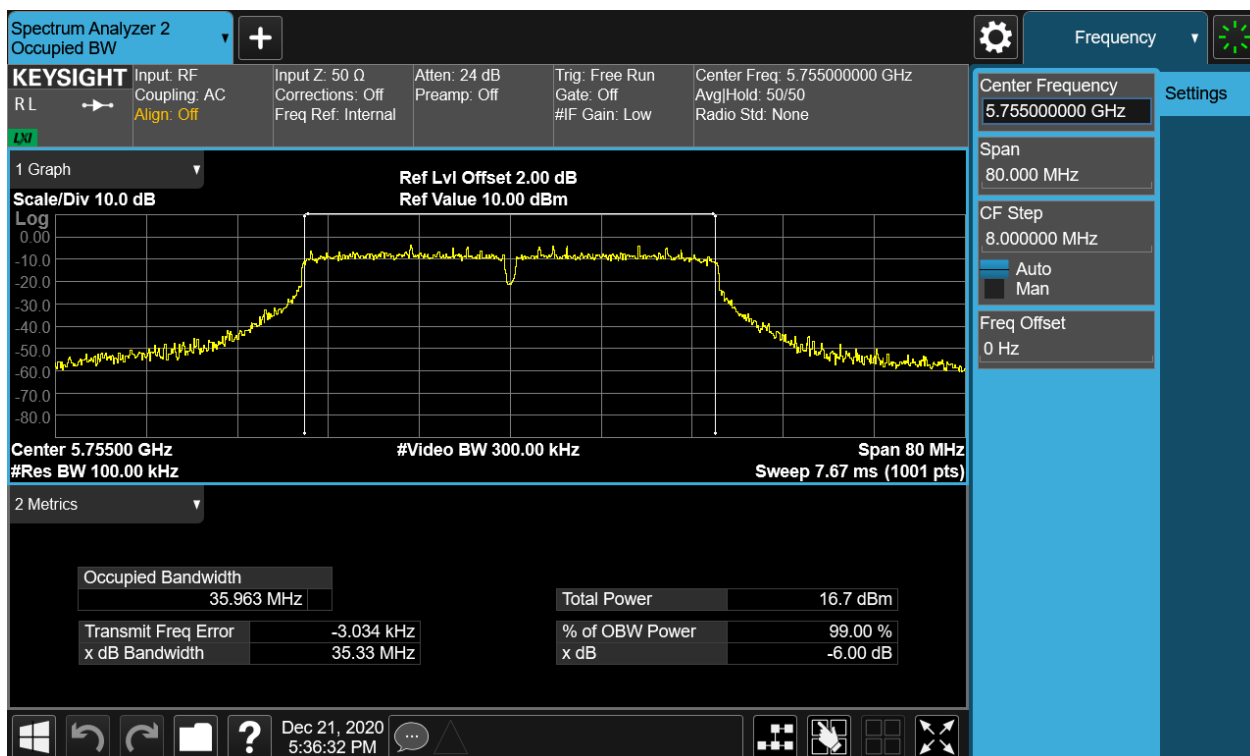


Figure 12: 6dB Bandwidth, 802.11ac(VHT40), 5755MHz



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Figure 13: 6dB Bandwidth, 802.11ac(VHT40), 5795MHz

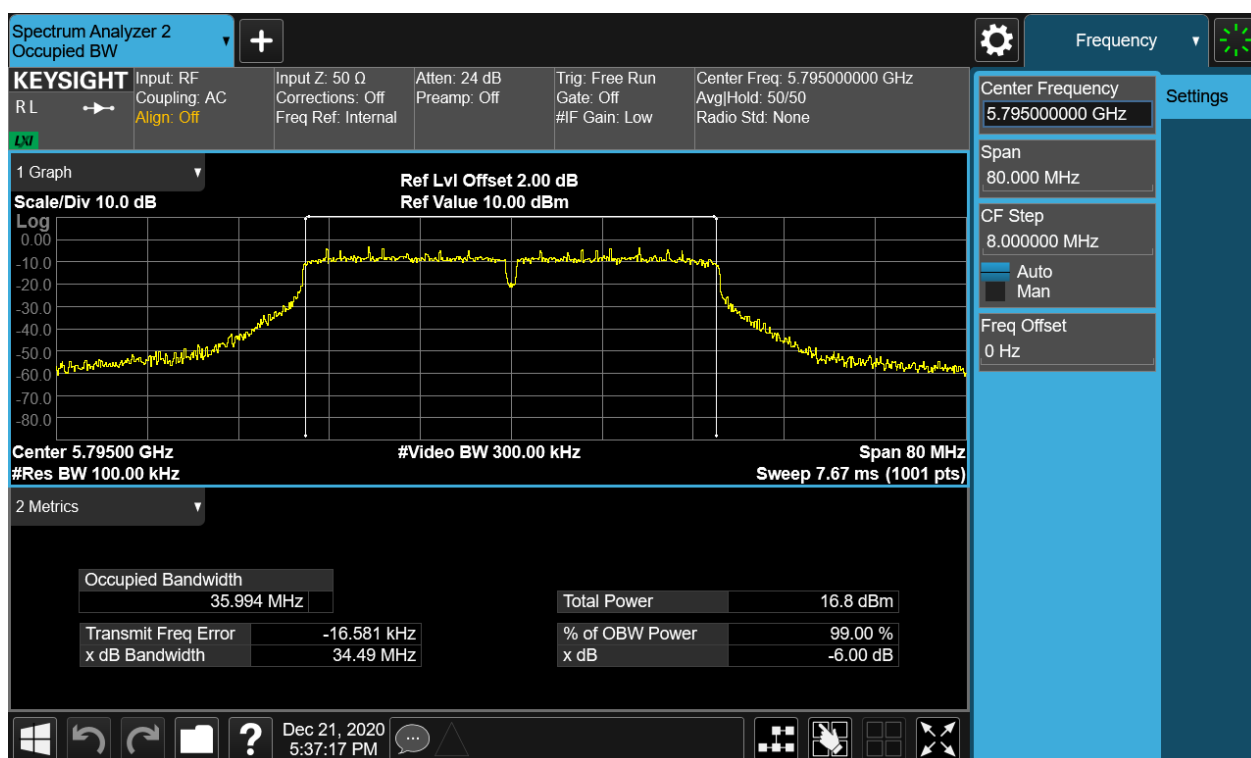
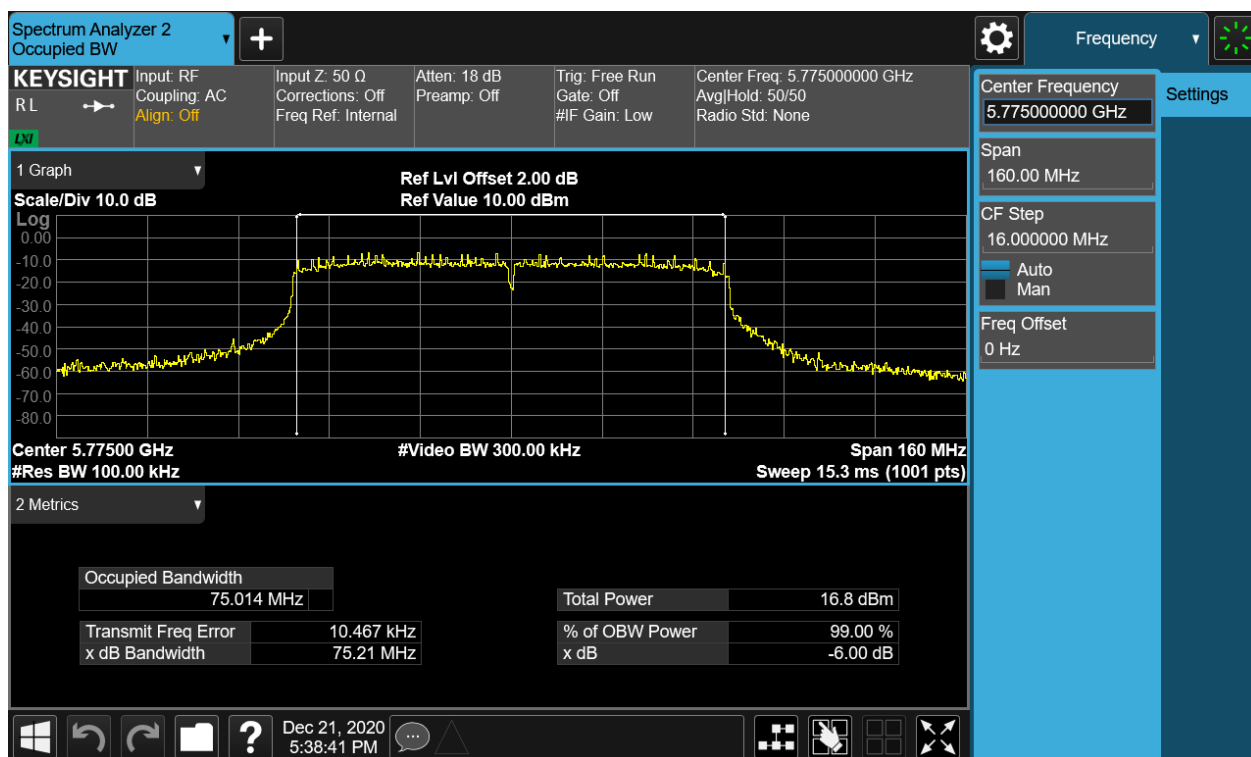


Figure 14: 6dB Bandwidth, 802.11ac(VHT80), 5775MHz



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4.1.5 Power Spectral Density

RESULT:

PASS

Test standard : FCC Part 15.407(a)
 RSS-247 6.2
 Requirement : ANSI C63.10-2013, KDB 789033
 Kind of test site : Shielded room

Test setup

Test Channel : Low/Middle/High
 Operation Mode : A.1.a
 Ambient temperature : 25°C
 Relative humidity : 52%

Notes

Test plots please refer to the annex document "WIFI5G PSD EXHIBIT A of SHE20060042-02IE".

Table 5: Power Spectral Density

Band I (5150 – 5250 MHz)

Test Mode	Test Channel (MHz)	PSD (dBm/MHz)	FCC Limit (dBm/MHz)
802.11a	5180	4.08	11
	5220	3.71	
	5240	3.87	
802.11n(HT20)	5180	3.45	
	5220	2.74	
	5240	2.48	
802.11ac(VHT20)	5180	4.15	
	5220	3.13	
	5240	3.13	
802.11n(HT40)	5190	2.23	
	5230	-0.83	
802.11ac(VHT40)	5190	0.60	
	5230	-0.22	
802.11ac(VHT80)	5210	-0.35	

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Band IV (5725 – 5850 MHz)

Test Mode	Test Channel (MHz)	PSD (dBm/500KHz)	FCC/IC Limit (dBm/500KHz)
802.11a	5745	3.36	30
	5785	2.36	
	5825	4.11	
802.11n(HT20)	5745	1.20	
	5785	1.70	
	5825	2.15	
802.11ac(VHT20)	5745	0.98	
	5785	3.84	
	5825	4.35	
802.11n(HT40)	5755	-1.78	
	5795	-1.59	
802.11ac(VHT40)	5755	-2.23	
	5795	-1.43	
802.11ac(VHT80)	5775	-5.34	

Band I (5150 – 5250 MHz)

Test Mode	Test Channel (MHz)	EIRP PSD (dBm/MHz)	IC Limit (dBm/MHz)
802.11a	5180	8.19	10
	5220	7.82	
	5240	7.98	
802.11n(HT20)	5180	7.56	
	5220	6.85	
	5240	6.59	
802.11ac(VHT20)	5180	8.26	
	5220	7.24	
	5240	7.24	
802.11n(HT40)	5190	6.34	
	5230	3.28	
802.11ac(VHT40)	5190	4.71	
	5230	3.89	
802.11ac(VHT80)	5210	3.76	

Note:5G antenna peak gain is 4.11dBi

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4.1.6 Undesirable Emission

RESULT:

PASS

Test standard : FCC Part 15.407(b), 15.209
RSS-247 6.2
Requirement : ANSI C63.10-2013, KDB 789033
Kind of test site : Shielded room

Test setup

Test Channel : Low/Middle/High
Operation Mode : A.1.a
Ambient temperature : 25°C
Relative humidity : 52%

Notes:

Test plots please refer to the annex document "WLAN 5GHz-TX CSE EXHIBIT A of SHE20060042-02IE".

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4.1.7 Spurious Emission

RESULT:

PASS

Test standard : FCC Part 15.407(b)
RSS-247 6.2
Requirement : ANSI C63.10-2013
Kind of test site : 3m Semi-Anechoic Chamber

Test setup

Test Channel : Low/Middle/High
Operation Mode : A
Ambient temperature : 25°C
Relative humidity : 52%

Notes:

Test plots please refer to the annex document "WIFI5GHz-TX EXHIBIT A of SHE20060042-02IE"

1. For 9 kHz ~ 30 MHz, the amplitude of spurious emissions that are attenuated by more than 20dB below the permissible. The value has no need to be reported.
2. The spurious above 18GHz is noise only and 20dB below the limit. The value has no need to be reported.
3. The EUT is working in the Normal link mode below 1 GHz.

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4.1.8 Band Edge (Restricted-band band-edge)

RESULT:

PASS

Test standard : FCC Part 15.407(b)
RSS-247 6.2
Requirement : ANSI C63.10-2013, KDB 789033
Kind of test site : 3m Semi-Anechoic Chamber

Test setup

Test Channel : Low/Middle/High
Operation Mode : A.1
Ambient temperature : 25°C
Relative humidity : 52%

Notes:

Test plots please refer to the annex document "WIFI5GHz-TX EXHIBIT A of SHE20060042-02IE"

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4.1.9 Frequency Stability

RESULT:

PASS

Test standard : FCC Part 15.407(g)
Kind of test site : Shielded room

Test setup

Test Channel : Low/Middle/High
Operation Mode : A.1
Ambient temperature : 25°C
Relative humidity : 52%

Table 6: Frequency Stability

Band I (5150 – 5250 MHz):

Voltage vs. Frequency Stability (5180MHz)

Test Conditions		Frequency (MHz)	Max. Deviation (ppm)	Limit (ppm)
Temp (°C)	Voltage (V)			
25	3.7V	5180.0176	3.398	±20
	3.8V	5180.0187	3.610	
	4.35V	5180.0185	3.571	

Temperature vs. Frequency Stability (5180MHz)

Test Conditions		Frequency (MHz)	Max. Deviation (ppm)	Limit (ppm)
Voltage (V)	Temp (°C)			
3.8V	-30	--	--	±20
	-20	5180.0134	2.587	
	-10	5180.0137	2.645	
	0	5180.0135	2.606	
	10	5180.0175	3.378	
	20	5180.0176	3.398	
	30	5180.0178	3.436	
	40	5180.0165	3.185	
	55	5180.0159	3.069	

Note:

The all configurations were tested respectively, but only the worst channel shown here.

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Band IV (5725 – 5850 MHz):

Voltage vs. Frequency Stability (5745MHz)

Test Conditions		Frequency (MHz)	Max. Deviation (ppm)	Limit (ppm)
Temp (°C)	Voltage (V)			
25	3.7V	5744.9400	10.444	±20
	3.8V	5744.9512	8.494	
	4.35V	5744.9538	8.042	

Temperature vs. Frequency Stability (5745MHz)

Test Conditions		Frequency (MHz)	Max. Deviation (ppm)	Limit (ppm)
Voltage (V)	Temp (°C)			
3.8V	-30	--	--	±20
	-20	5744.9563	7.607	
	-10	5744.9621	6.597	
	0	5744.9625	6.527	
	10	5744.9724	4.804	
	20	5744.9787	3.708	
	30	5744.9682	5.535	
	40	5744.9568	7.520	
	55	5744.9672	5.709	

Note:

The all configurations were tested respectively, but only the worst channel shown here.

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4.2 Mains Emissions

4.2.1 Conducted Emission on AC Mains

RESULT:

PASS

Test standard : FCC Part 15.207
RSS-Gen 8.8
Requirement : ANSI C63.10-2013
Kind of test site : Shielded room

Test setup

Input Voltage : AC 120V, 60Hz; AC 240V, 50Hz
Operation Mode : Normal Link
Earthing : Not Connected
Ambient temperature : 25°C
Relative humidity : 52%

For details refer to following test plot.

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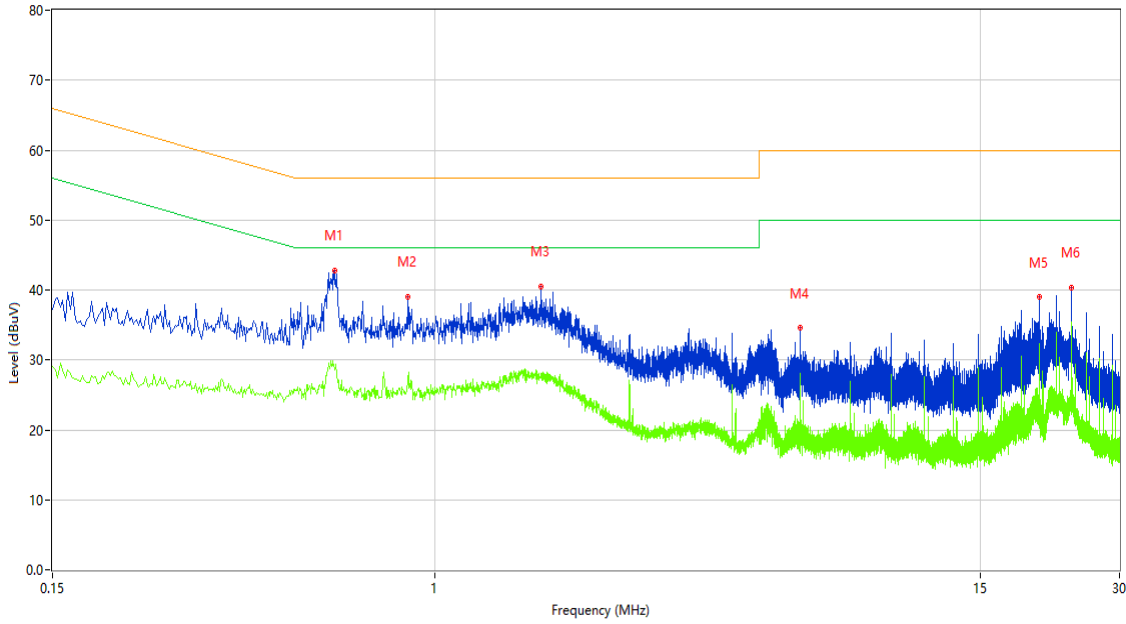
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Note:

The all configurations were tested respectively, but only the worst configuration shown here.

Figure 1: Conducted Emission on AC Mains, L Phase

C:Emission Test case_FCC_CE_FCC PART 15B_Class B



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.610	42.85	9.74	56.00	-13.15	Peak	L	Pass
1*	0.610	38.42	9.74	56.00	-17.58	QP	L	Pass
1**	0.610	28.64	9.74	46.00	-17.36	AV	L	Pass
2	0.876	37.71	9.76	56.00	-18.29	Peak	L	Pass
2*	0.876	31.91	9.76	56.00	-24.09	QP	L	Pass
2**	0.876	27.28	9.76	46.00	-18.72	AV	L	Pass
3	1.700	35.39	9.67	56.00	-20.61	Peak	L	Pass
3*	1.700	27.35	9.67	56.00	-28.65	QP	L	Pass
3**	1.700	27.39	9.67	46.00	-18.61	AV	L	Pass
4	6.140	35.29	9.69	60.00	-24.71	Peak	L	Pass
4*	6.140	30.53	9.69	60.00	-29.47	QP	L	Pass
4**	6.140	28.14	9.69	50.00	-21.86	AV	L	Pass
5	20.170	40.09	9.41	60.00	-19.91	Peak	L	Pass
5*	20.170	34.73	9.41	60.00	-25.27	QP	L	Pass
5**	20.170	30.00	9.41	50.00	-20.00	AV	L	Pass
6	23.684	40.40	9.40	60.00	-19.60	Peak	L	Pass
6*	23.684	36.99	9.40	60.00	-23.01	QP	L	Pass
6**	23.684	35.38	9.40	50.00	-14.62	AV	L	Pass

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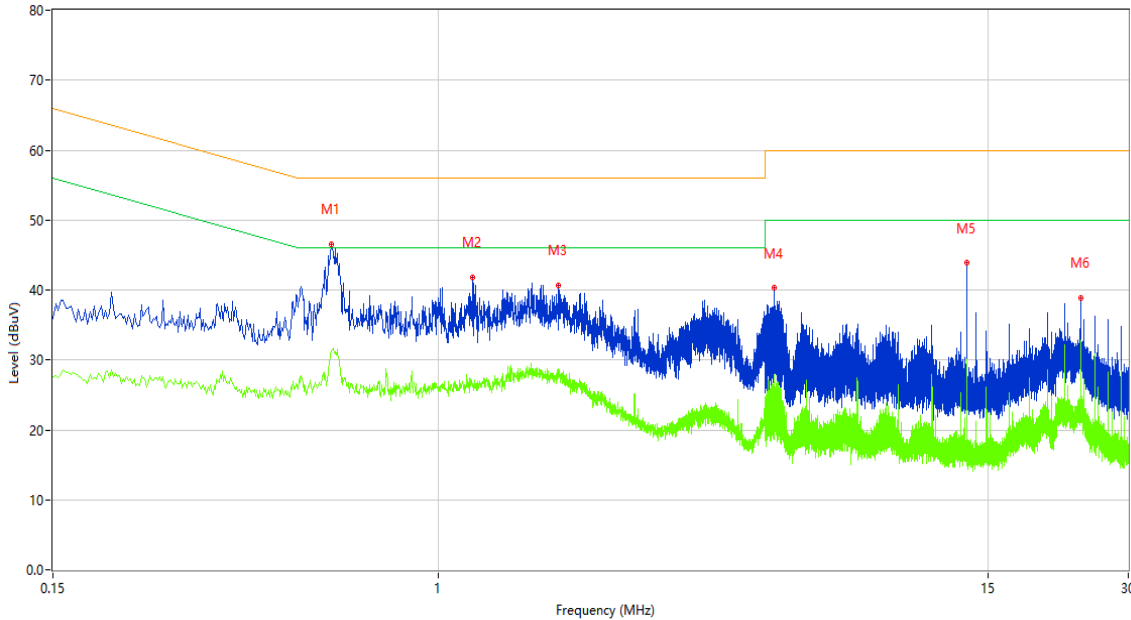
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Figure 72: Conducted Emission on AC Mains, N Phase

C:Emission Test case_FCC_CE_FCC PART 15B_Class B



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.590	46.34	9.76	56.00	-9.66	Peak	N	Pass
1*	0.590	42.78	9.76	56.00	-13.22	QP	N	Pass
1**	0.590	31.17	9.76	46.00	-14.83	AV	N	Pass
2	1.188	40.36	9.66	56.00	-15.64	Peak	N	Pass
2*	1.188	34.16	9.66	56.00	-21.84	QP	N	Pass
2**	1.188	26.43	9.66	46.00	-19.57	AV	N	Pass
3	1.810	38.57	9.68	56.00	-17.43	Peak	N	Pass
3*	1.810	32.10	9.68	56.00	-23.90	QP	N	Pass
3**	1.810	28.68	9.68	46.00	-17.32	AV	N	Pass
4	5.230	40.35	9.70	60.00	-19.65	Peak	N	Pass
4*	5.230	33.48	9.70	60.00	-26.52	QP	N	Pass
4**	5.230	26.89	9.70	50.00	-23.11	AV	N	Pass
5	13.538	44.53	9.59	60.00	-15.47	Peak	N	Pass
5*	13.538	27.78	9.59	60.00	-32.22	QP	N	Pass
5**	13.538	29.96	9.59	50.00	-20.04	AV	N	Pass
6	23.700	40.03	9.44	60.00	-19.97	Peak	N	Pass
6*	23.700	36.23	9.44	60.00	-23.77	QP	N	Pass
6**	23.700	31.52	9.44	50.00	-18.48	AV	N	Pass

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5 Appendixes

5.1 Photographs of the Sample



Front of the sample



Rear of the sample

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5.2 Set-up for Conducted Emissions



5.3 Set-up for Conducted RF test at Antenna Port



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5.4 Set-up for Spurious Emissions below 1GHz



Below 1 GHz

5.5 Set-up for Spurious Emissions above 1GHz



Above 1GHz

End of the report