

TEST REPORT

Report No.: SHE20090007-02IE

Date: 2021-04-09

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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 Smart Phone
Model No. : RS60
Sample No. : E20090007-01#01
E20090007-01#12
FCC ID : WYPRS60
ISED Number : 8090A-RS60

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

Date of Receipt : 2020-09-29
Date of Test : 2020-10-14 ~ 2021-03-04
Date of Issue : 2021-03-04

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 Smart Phone
Brand Name	Sonim
Model No.	RS60
FCC ID	WYPRS60
ISED Number	8090A-RS60
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	3.29dBi
Extreme Temperature Range	-20℃~ +55℃
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	V1.0

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Software version	60.0.0-01-10.0.0-00.01.01
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	N9020A	MY59260184	2021-08-23
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
DC Power Supply	ACPOWER	ADC-0800025-15	D215010003	2022-03-19
Temperature Chamber	SHKTEST	SHK-B101	20190819001	2021-12-22
V-network	SCHWARZBECK	NSLK 8127	8127-902	2021-07-28
Broadband Antenna	SCHWARZBECK	VULB9163	9163-1037	2021-06-08
Horn Antenna-18G	SCHWARZBECK	BBHA9120D	9120D-1775	2021-07-28
Loop Antenna	SCHWARZBECK	FMZB 1513	N/A	2021-11-22
Horn Antenna-40G	YINGLIAN	LB-180400-KF	N/A	2021-07-26
EMC chamber 9*6*6 (L*W*H)	CHANGNING	966	N/A	2023-06-08
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	24Mbps
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
- C. Off

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3.2 Special Accessories and Auxiliary Equipment

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

3.3 Support Software

Description	Manufacturer	Software Name
Software	Qualcomm	QRCT

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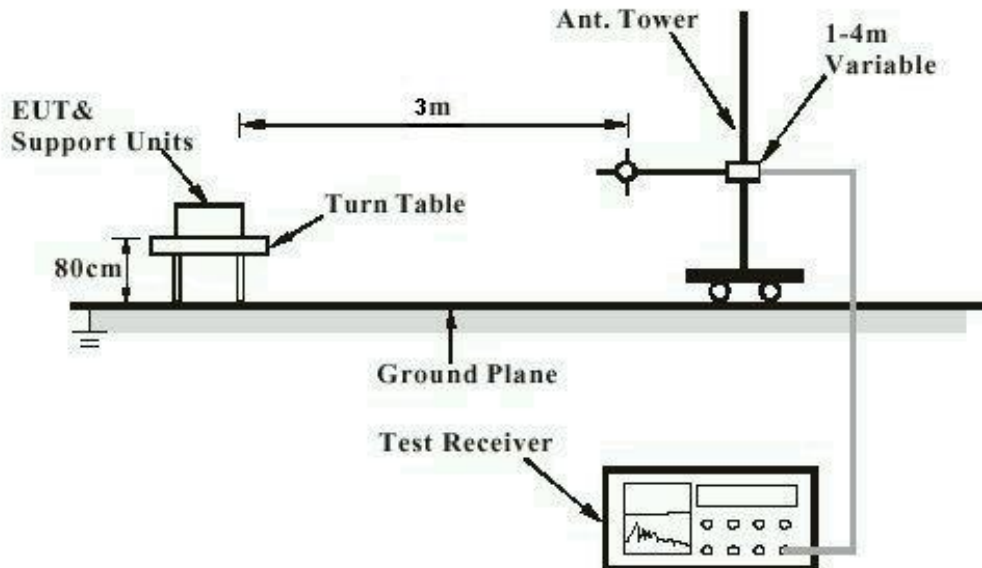
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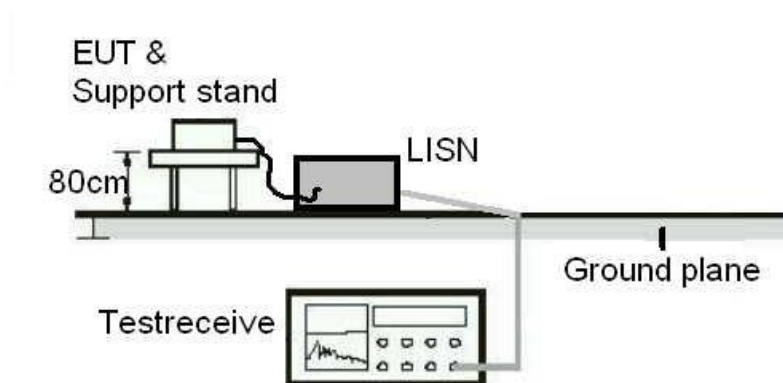
3.4 Test Setup Diagram

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



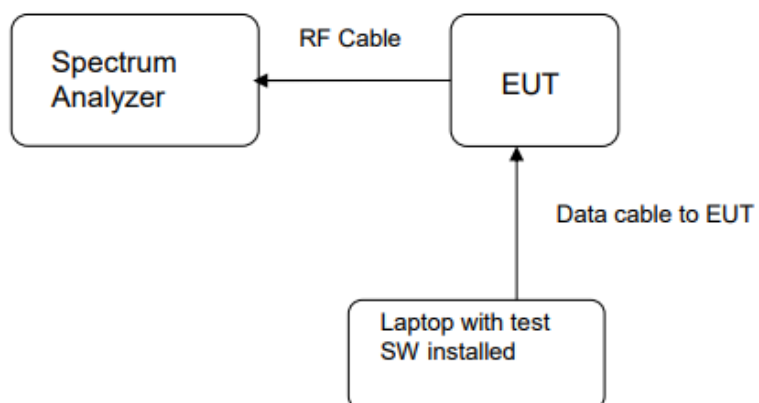
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Diagram of Measurement Equipment Configuration for Transmitter Measurement



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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 3.29dBi. 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	10.92	12.36	250
	5220	10.83	12.11	
	5240	10.77	11.94	
802.11n(HT20)	5180	10.18	10.42	
	5220	10.01	10.02	
	5240	10.09	10.21	
802.11ac(VHT20)	5180	11.59	14.42	
	5220	11.85	15.31	
	5240	11.77	15.03	
802.11n(HT40)	5190	9.46	8.83	
	5230	9.29	8.49	
802.11ac(VHT40)	5190	11.02	12.65	
	5230	10.65	11.61	
802.11ac(VHT80)	5210	10.06	10.14	

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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	10.63	11.56	1
	5785	10.66	11.64	
	5825	10.64	11.59	
802.11n(HT20)	5745	10.25	10.59	
	5785	10.34	10.81	
	5825	10.27	10.64	
802.11ac(VHT20)	5745	11.37	13.71	
	5785	11.47	14.03	
	5825	11.77	15.03	
802.11n(HT40)	5755	9.58	9.08	
	5795	9.63	9.18	
802.11ac(VHT40)	5755	11.05	12.74	
	5795	11.34	13.61	
802.11ac(VHT80)	5775	10.16	10.38	

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	14.21	26.36	200 mW or 10 dBm + 10log B, which is less
	5220	14.12	25.82	
	5240	14.06	25.47	
802.11n(HT20)	5180	13.47	22.23	
	5220	13.3	21.38	
	5240	13.38	21.78	
802.11ac(VHT20)	5180	14.88	30.76	
	5220	15.14	32.66	
	5240	15.06	32.06	
802.11n(HT40)	5190	12.75	18.84	
	5230	12.58	18.11	
802.11ac(VHT40)	5190	14.31	26.98	
	5230	13.94	24.77	
802.11ac(VHT80)	5210	13.35	21.63	

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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	13.92	24.66	200 mW or 10 dBm + 10log B, which is less
	5785	13.95	24.83	
	5825	13.93	24.72	
802.11n(HT20)	5745	13.54	22.59	
	5785	13.63	23.07	
	5825	13.56	22.70	
802.11ac(VHT20)	5745	14.66	29.24	
	5785	14.76	29.92	
	5825	15.06	32.06	
802.11n(HT40)	5755	12.87	19.36	
	5795	12.92	19.59	
802.11ac(VHT40)	5755	14.34	27.16	
	5795	14.63	29.04	
802.11ac(VHT80)	5775	13.45	22.13	

Note: 5G antenna peak gain is 3.29dBi

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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 "SHE20090007-02IE DATA WIFI5G EXHIBIT A".

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	21.212	16.685
	5220	21.664	16.763
	5240	21.173	16.692
802.11n(HT20)	5180	21.381	17.789
	5220	21.394	17.842
	5240	21.516	17.813
802.11ac(VHT20)	5180	21.577	17.971
	5220	21.909	17.944
	5240	22.023	17.915
802.11n(HT40)	5190	42.226	36.125
	5230	41.669	36.115
802.11ac(VHT40)	5190	42.769	36.194
	5230	41.244	36.148
802.11ac(VHT80)	5210	83.397	74.799

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Band IV (5725 – 5850 MHz)

Test Mode	Test Channel (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
802.11a	5745	20.924	16.685
	5785	20.931	16.659
	5825	21.210	16.662
802.11n(HT20)	5745	21.520	17.764
	5785	21.227	17.772
	5825	21.812	17.819
802.11ac(VHT20)	5745	21.425	17.799
	5785	21.383	17.760
	5825	21.718	17.867
802.11n(HT40)	5755	41.028	36.153
	5795	41.109	36.120
802.11ac(VHT40)	5755	43.288	36.272
	5795	42.384	36.131
802.11ac(VHT80)	5775	84.506	74.827

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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	16.42	>0.5
	5785	16.39	
	5825	16.40	
802.11n(HT20)	5745	17.67	
	5785	17.71	
	5825	17.68	
802.11ac(VHT20)	5745	17.60	
	5785	17.65	
	5825	17.41	
802.11n(HT40)	5755	35.52	
	5795	35.84	
802.11ac(VHT40)	5755	35.09	
	5795	35.18	
802.11ac(VHT80)	5775	71.53	

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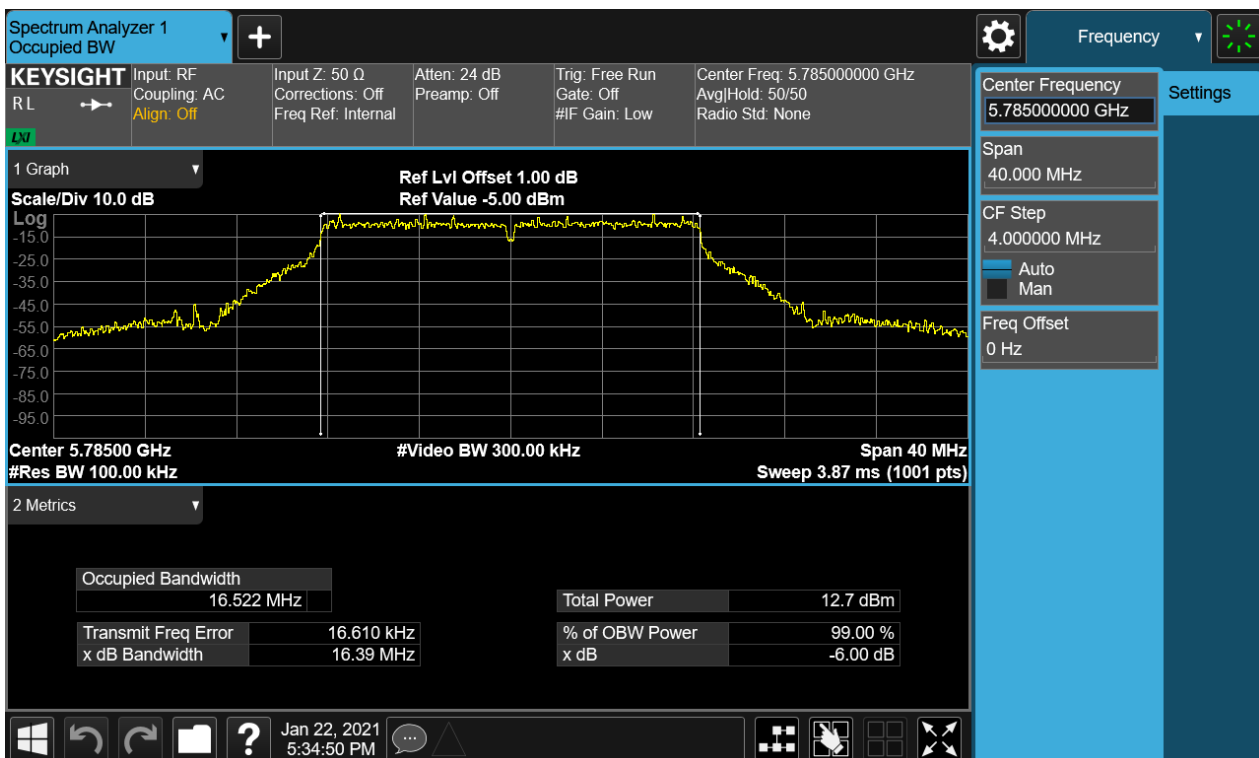
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Figure 1: 6dB Bandwidth, 802.11a, 5745MHz



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



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

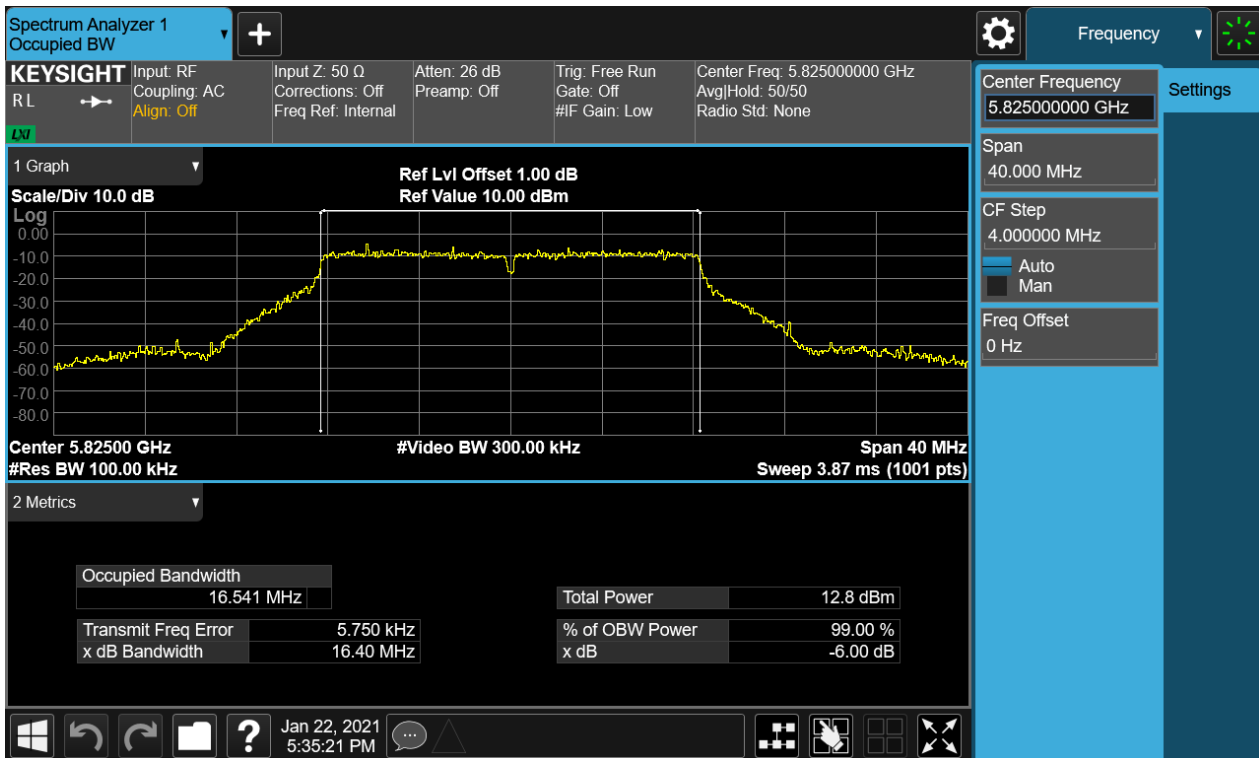
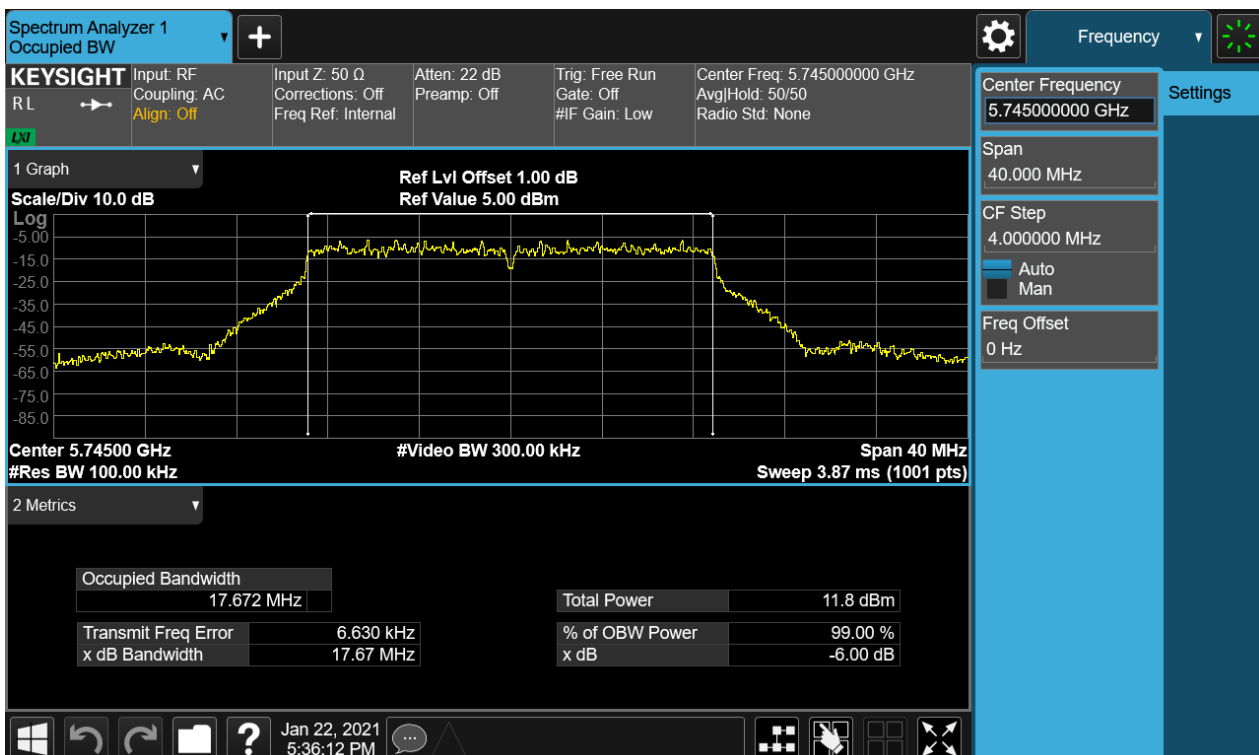


Figure 4: 6dB Bandwidth, 802.11n(HT20), 5745MHz



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

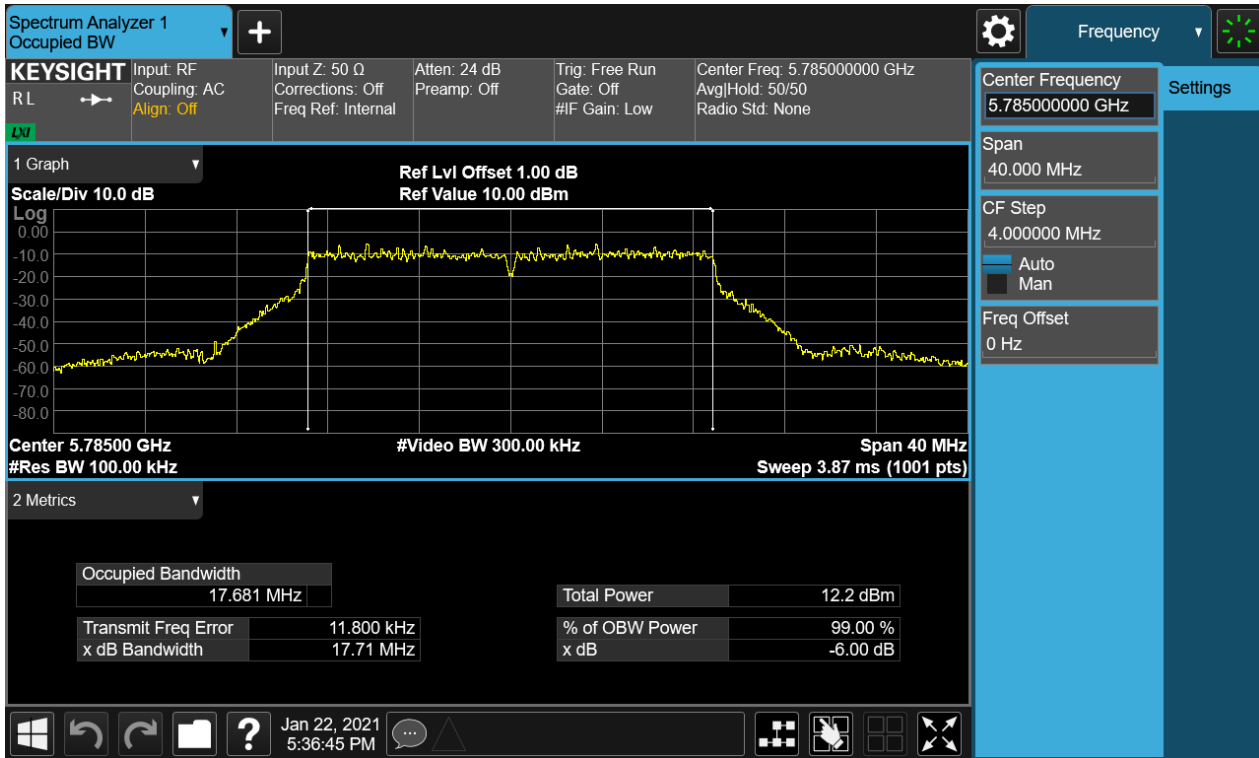
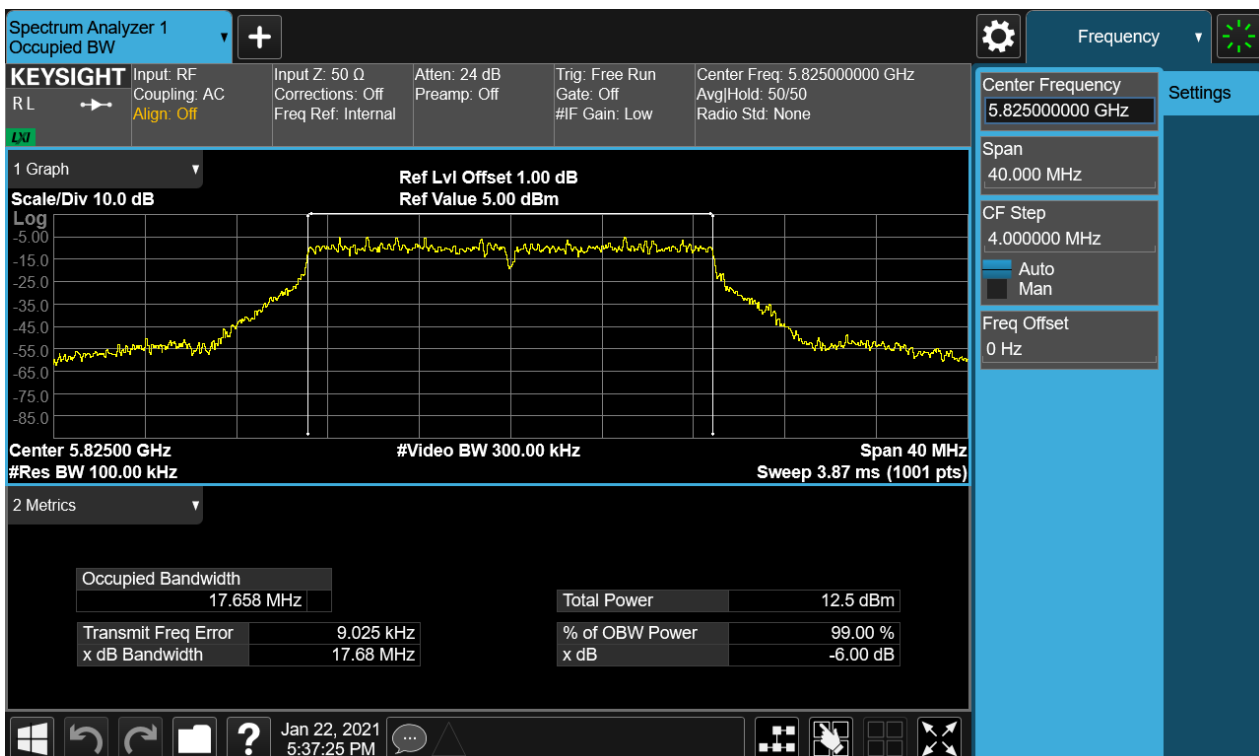


Figure 6: 6dB Bandwidth, 802.11n(HT20), 5825MHz



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

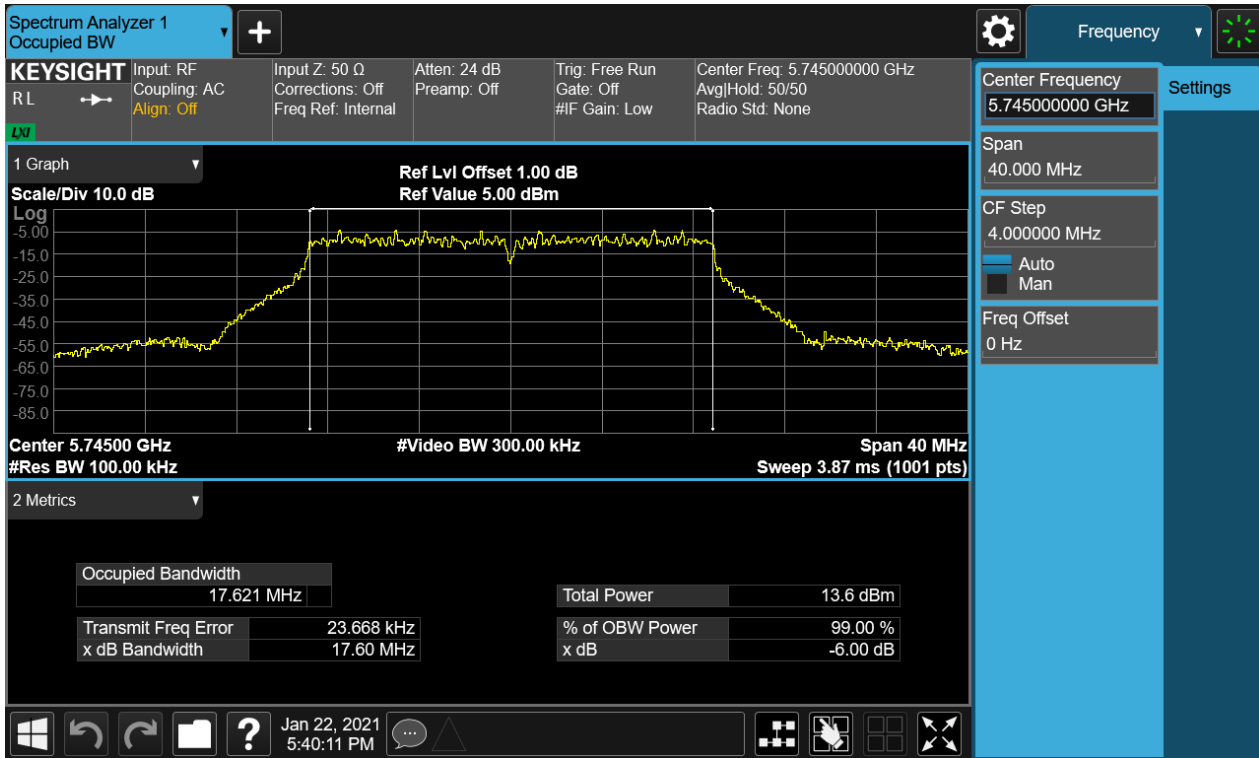
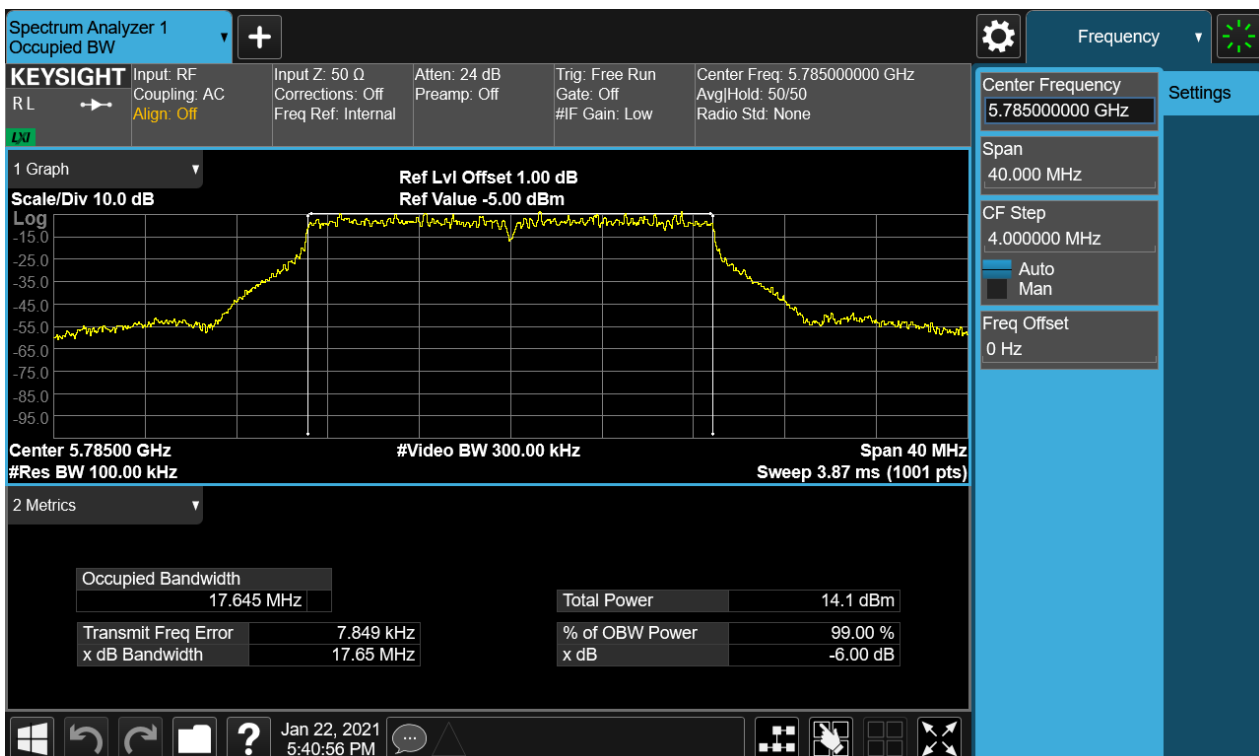


Figure 8: 6dB Bandwidth, 802.11ac(VHT20), 5785MHz



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

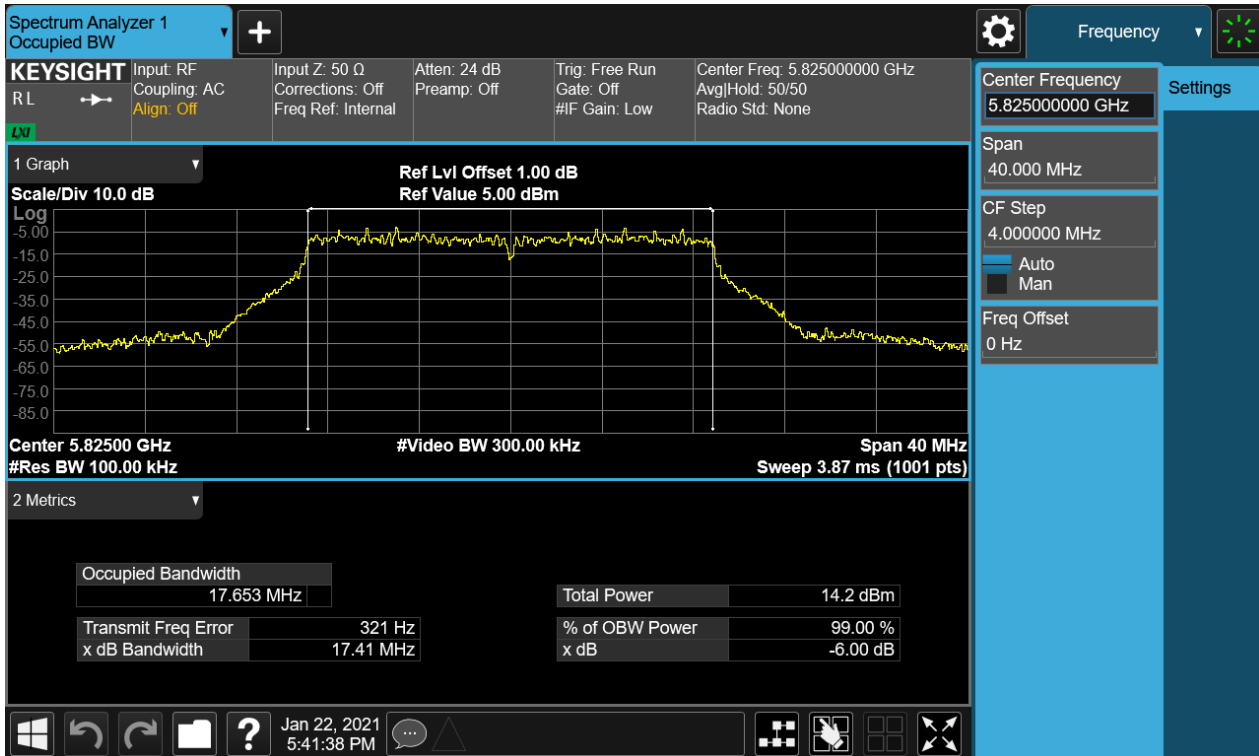
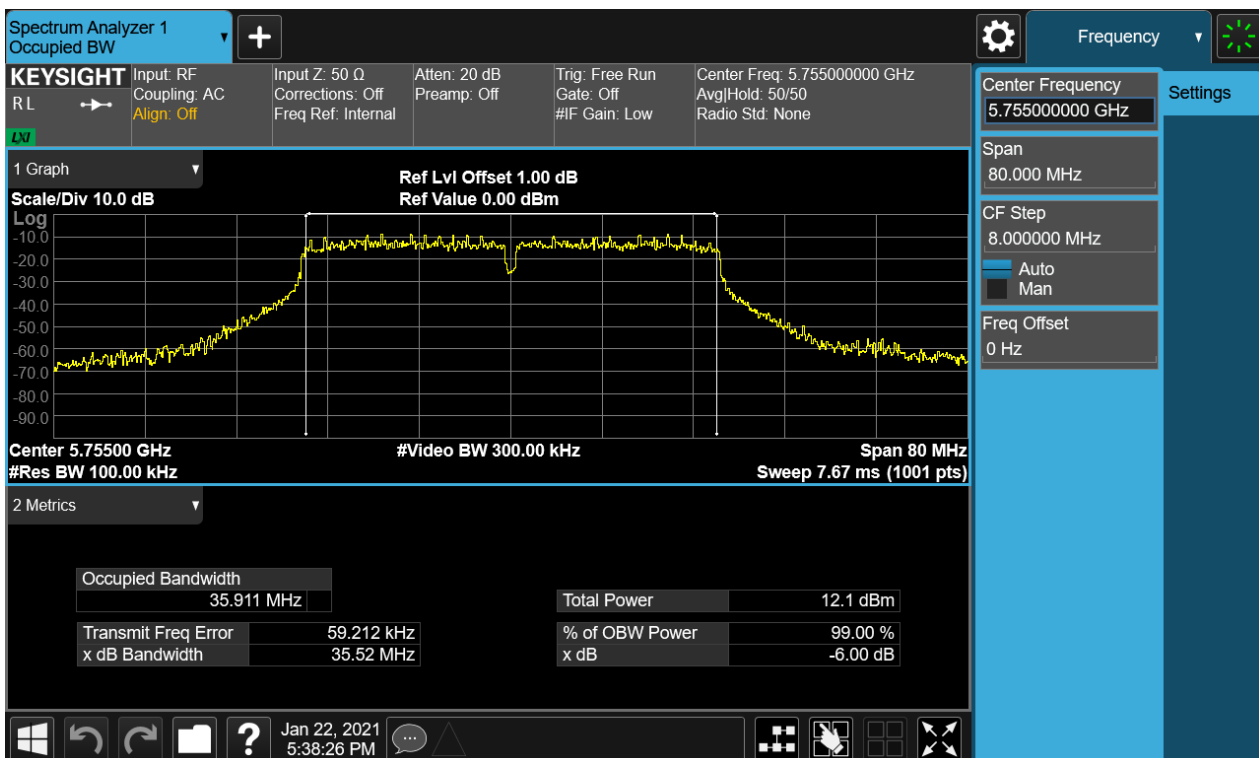


Figure 10: 6dB Bandwidth, 802.11n(HT40), 5755MHz



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

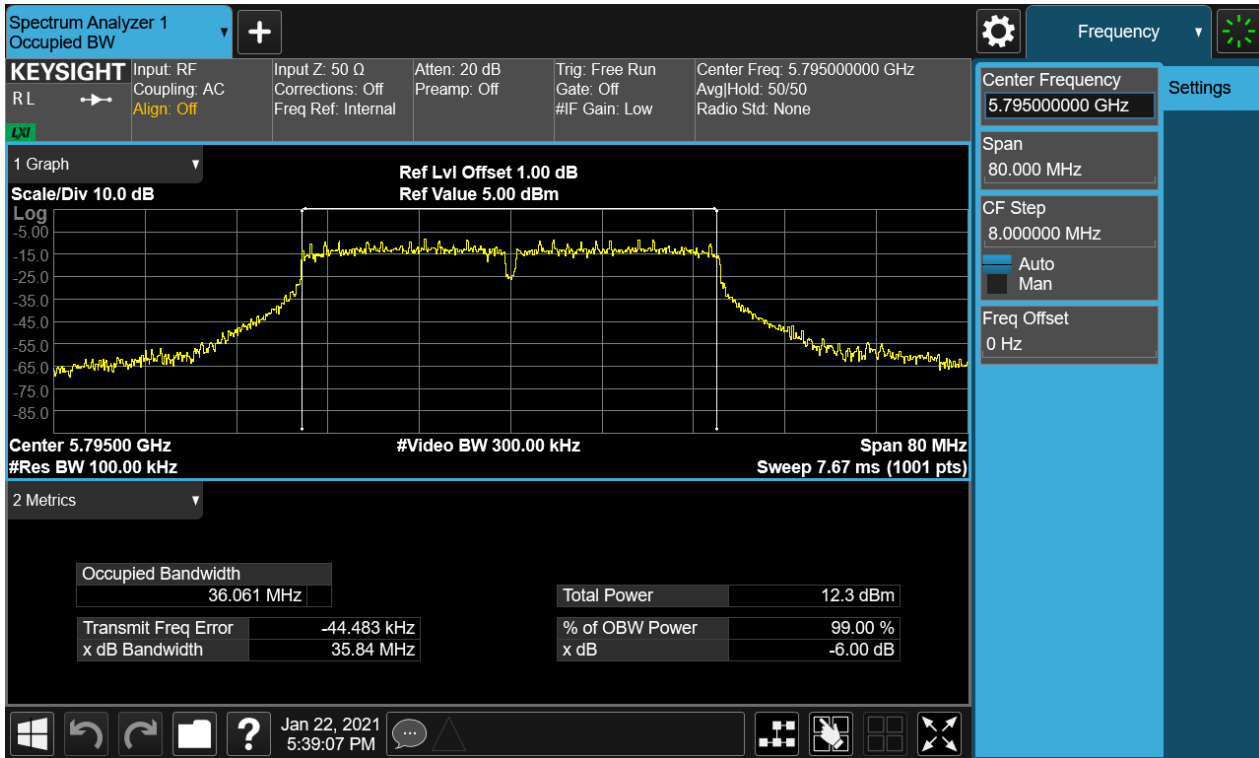
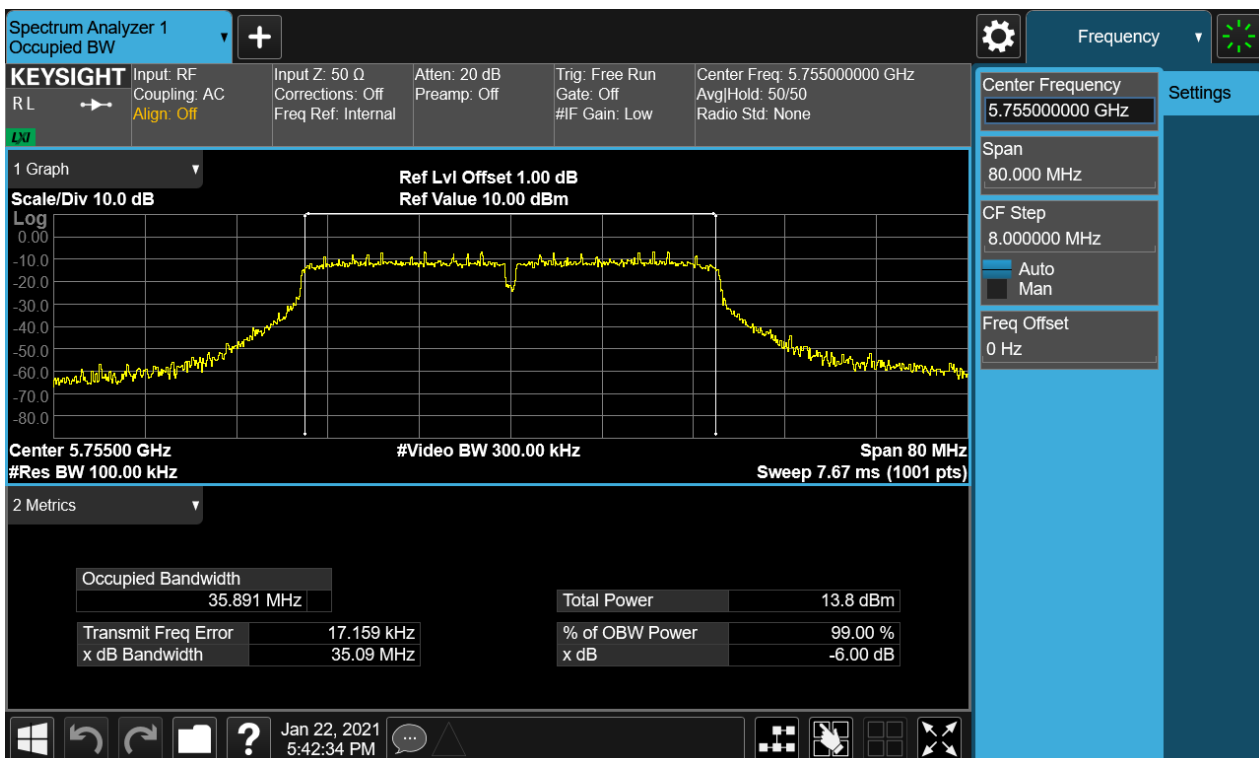


Figure 12: 6dB Bandwidth, 802.11ac(VHT40), 5755MHz



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

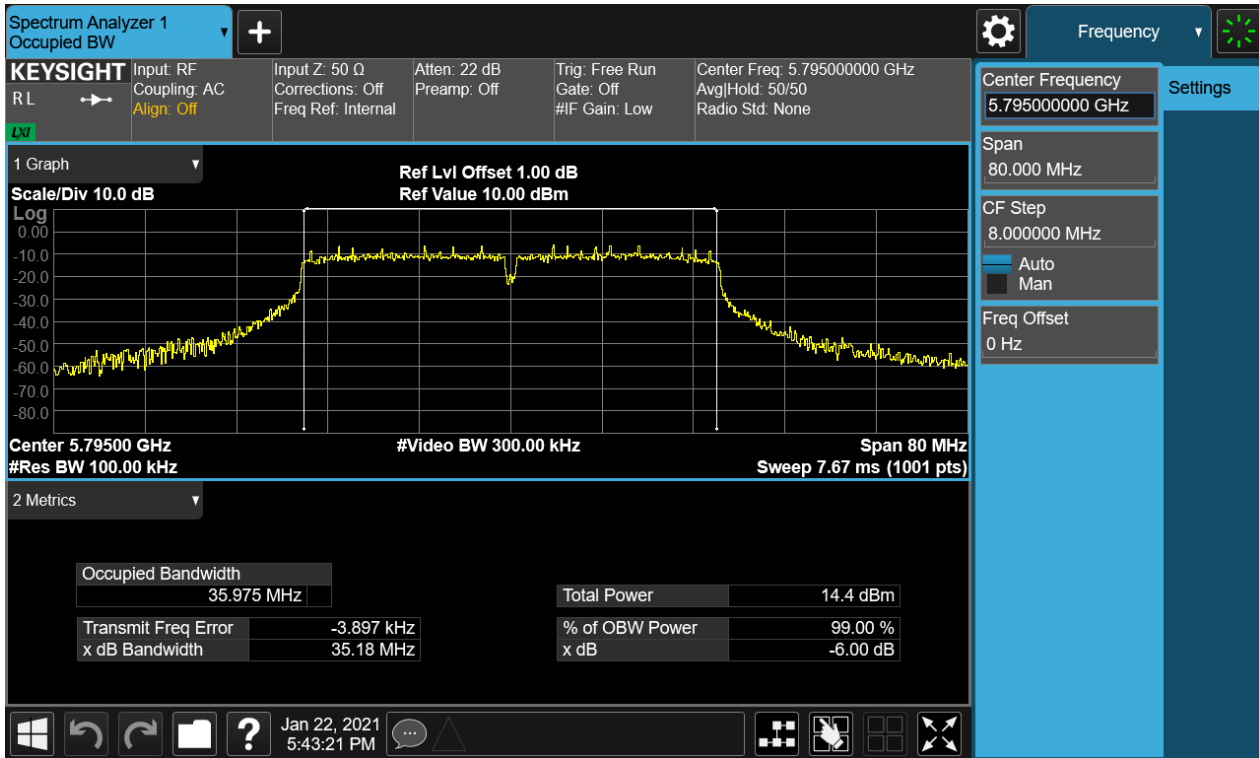
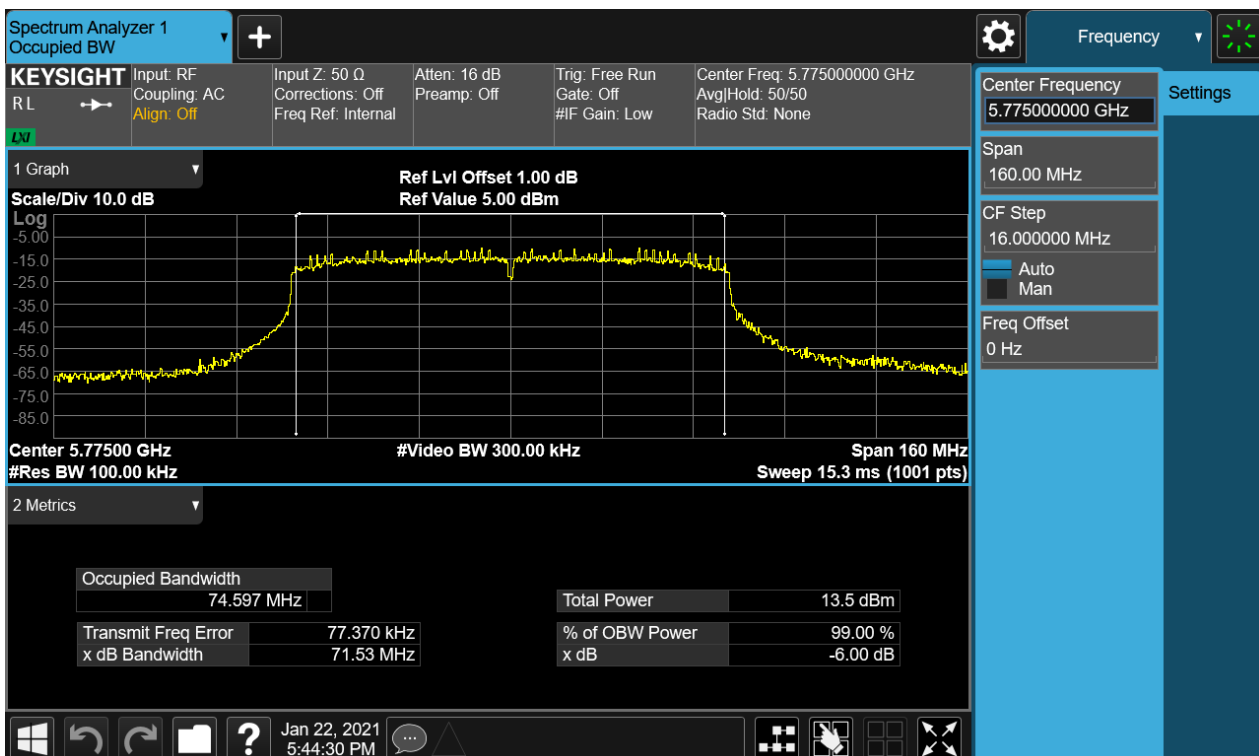


Figure 14: 6dB Bandwidth, 802.11ac(VHT80), 5775MHz



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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 "SHE20090007-02IE DATA WIFI5G PSD EXHIBIT A".

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	4.55	11
	5220	3.43	
	5240	4.48	
802.11n(HT20)	5180	3.27	
	5220	3.70	
	5240	3.25	
802.11ac(VHT20)	5180	4.19	
	5220	4.29	
	5240	4.29	
802.11n(HT40)	5190	1.07	
	5230	0.35	
802.11ac(VHT40)	5190	1.17	
	5230	1.05	
802.11ac(VHT80)	5210	-1.56	

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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	3.52	30
	5785	4.15	
	5825	2.72	
802.11n(HT20)	5745	2.70	
	5785	2.86	
	5825	3.23	
802.11ac(VHT20)	5745	3.95	
	5785	3.98	
	5825	4.54	
802.11n(HT40)	5755	0.17	
	5795	0.19	
802.11ac(VHT40)	5755	2.08	
	5795	1.74	
802.11ac(VHT80)	5775	-2.28	

Band I (5150 – 5250 MHz)

Test Mode	Test Channel (MHz)	EIRP PSD (dBm/MHz)	IC Limit (dBm/MHz)
802.11a	5180	7.84	10
	5220	6.72	
	5240	7.77	
802.11n(HT20)	5180	6.56	
	5220	6.99	
	5240	6.54	
802.11ac(VHT20)	5180	7.48	
	5220	7.58	
	5240	7.58	
802.11n(HT40)	5190	4.36	
	5230	3.64	
802.11ac(VHT40)	5190	4.46	
	5230	4.34	
802.11ac(VHT80)	5210	1.73	

Note: 5G antenna peak gain is 3.29dBi

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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 "SHE20090007-02IE DATA WLAN 5GHz-TX CSE EXHIBIT A".

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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 "SHE20090007-02IE DATA WIFI5GHz-TX EXHIBIT A"

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 "SHE20090007-02IE DATA WIFI5GHz-TX EXHIBIT A"

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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	5179.9780	-4.247	± 20
	3.8V	5179.9727	-5.270	
	4.35V	5179.9840	-3.089	

Temperature vs. Frequency Stability (5180MHz)

Test Conditions		Frequency (MHz)	Max. Deviation (ppm)	Limit (ppm)
Voltage (V)	Temp (°C)			
3.8V	-30	--	--	± 20
	-20	5179.9834	-3.205	
	-10	5179.9725	-5.309	
	0	5179.9632	-7.104	
	10	5179.9865	-2.606	
	20	5179.9723	-5.347	
	30	5179.9685	-6.081	
	40	5179.9583	-8.050	
	55	5179.9872	-2.471	

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	5744.9600	-6.963	± 20
	3.8V	5745.0000	0.000	
	4.35V	5744.9200	-10.393	

Temperature vs. Frequency Stability (5745MHz)

Test Conditions		Frequency (MHz)	Max. Deviation (ppm)	Limit (ppm)
Voltage (V)	Temp (°C)			
3.8V	-30	--	--	± 20
	-20	5744.9782	-3.795	
	-10	5744.9845	-2.698	
	0	5744.9763	-4.125	
	10	5744.9654	-6.023	
	20	5744.9583	-7.258	
	30	5744.9675	-5.657	
	40	5744.9832	-2.924	
	55	5744.9638	-6.301	

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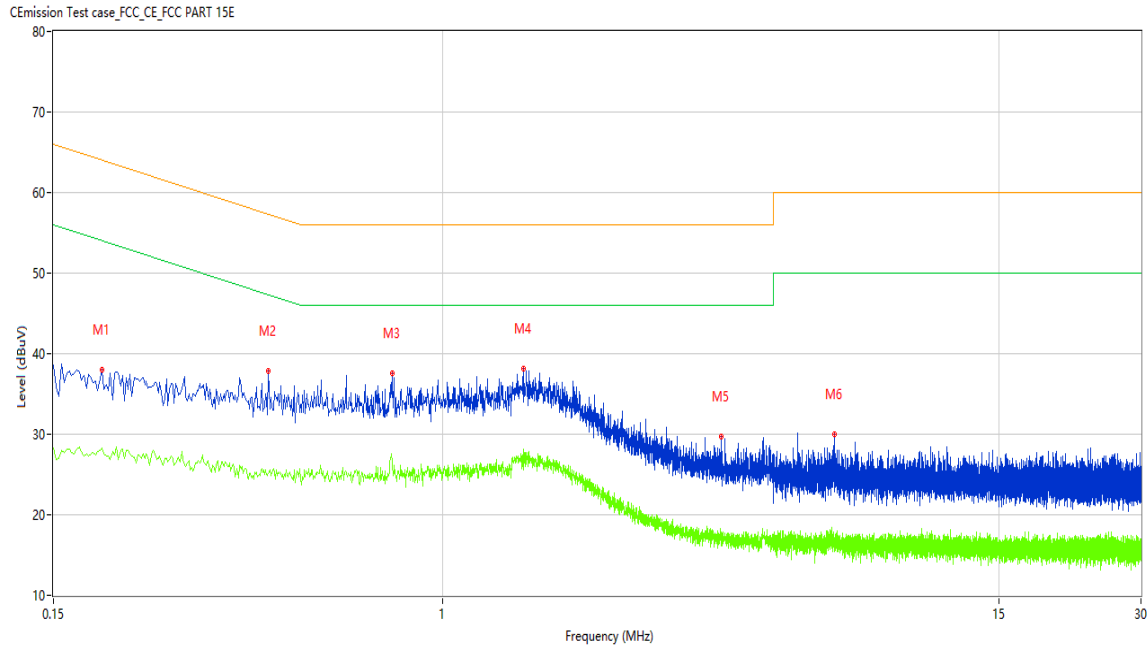
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Note: The all configurations were tested respectively, but only the worst configuration shown here.

Figure 15: Conducted Emission on AC Mains, L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.190	32.26	9.65	64.04	-31.78	Peak	L	Pass
1*	0.190	23.29	9.65	64.04	-40.75	QP	L	Pass
1**	0.190	28.30	9.65	54.04	-25.74	AV	L	Pass
2	0.428	32.36	9.74	57.29	-24.93	Peak	L	Pass
2*	0.428	22.06	9.74	57.29	-35.23	QP	L	Pass
2**	0.428	25.17	9.74	47.29	-22.12	AV	L	Pass
3	0.780	30.00	9.75	56.00	-26.00	Peak	L	Pass
3*	0.780	22.86	9.75	56.00	-33.14	QP	L	Pass
3**	0.780	26.56	9.75	46.00	-19.44	AV	L	Pass
4	1.484	30.64	9.67	56.00	-25.36	Peak	L	Pass
4*	1.484	22.19	9.67	56.00	-33.81	QP	L	Pass
4**	1.484	28.18	9.67	46.00	-17.82	AV	L	Pass
5	3.880	27.77	9.68	56.00	-28.23	Peak	L	Pass
5*	3.880	15.87	9.68	56.00	-40.13	QP	L	Pass
5**	3.880	16.17	9.68	46.00	-29.83	AV	L	Pass
6	6.754	25.68	9.68	60.00	-34.32	Peak	L	Pass
6*	6.754	13.53	9.68	60.00	-46.47	QP	L	Pass
6**	6.754	16.70	9.68	50.00	-33.30	AV	L	Pass

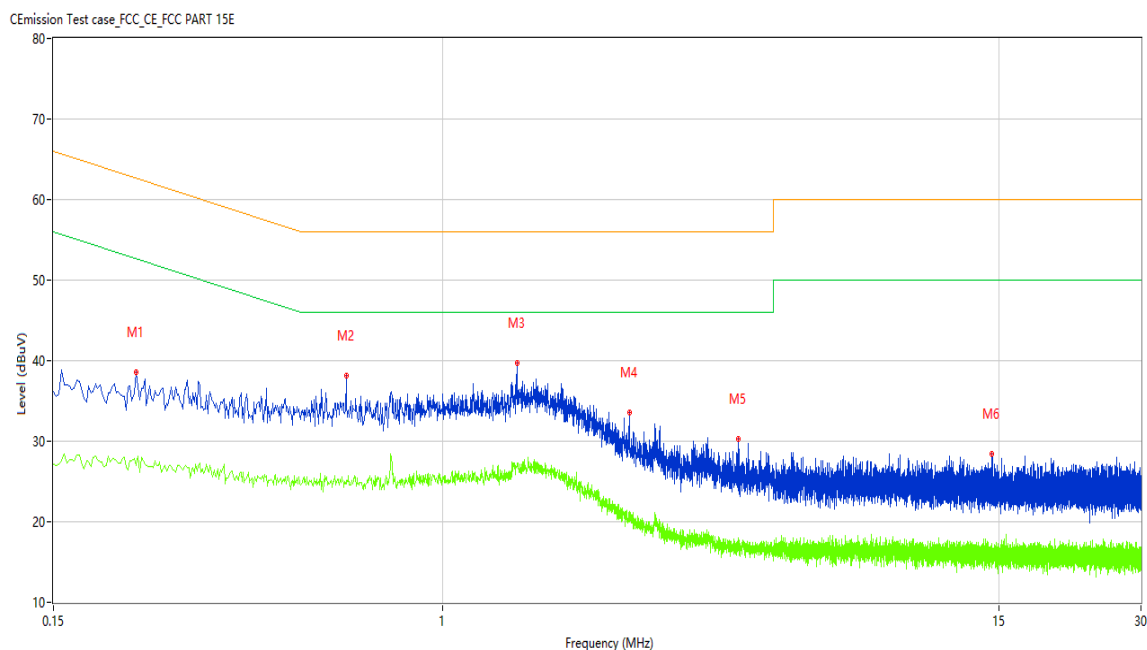
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Figure 16: Conducted Emission on AC Mains, N Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.224	31.01	9.68	62.67	-31.66	Peak	N	Pass
1*	0.224	22.90	9.68	62.67	-39.77	QP	N	Pass
1**	0.224	27.07	9.68	52.67	-25.60	AV	N	Pass
2	0.624	36.53	9.76	56.00	-19.47	Peak	N	Pass
2*	0.624	27.48	9.76	56.00	-28.52	QP	N	Pass
2**	0.624	25.10	9.76	46.00	-20.90	AV	N	Pass
3	1.434	30.65	9.67	56.00	-25.35	Peak	N	Pass
3*	1.434	22.68	9.67	56.00	-33.32	QP	N	Pass
3**	1.434	27.08	9.67	46.00	-18.92	AV	N	Pass
4	2.480	25.51	9.68	56.00	-30.49	Peak	N	Pass
4*	2.480	17.01	9.68	56.00	-38.99	QP	N	Pass
4**	2.480	21.35	9.68	46.00	-24.65	AV	N	Pass
5	4.226	25.43	9.69	56.00	-30.57	Peak	N	Pass
5*	4.226	14.06	9.69	56.00	-41.94	QP	N	Pass
5**	4.226	16.81	9.69	46.00	-29.19	AV	N	Pass
6	14.494	18.82	9.55	60.00	-41.18	Peak	N	Pass
6*	14.494	10.94	9.55	60.00	-49.06	QP	N	Pass
6**	14.494	16.81	9.55	50.00	-33.19	AV	N	Pass

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5 Appendixes

5.1 Photographs of the Sample



Front of the sample



Rear of the sample

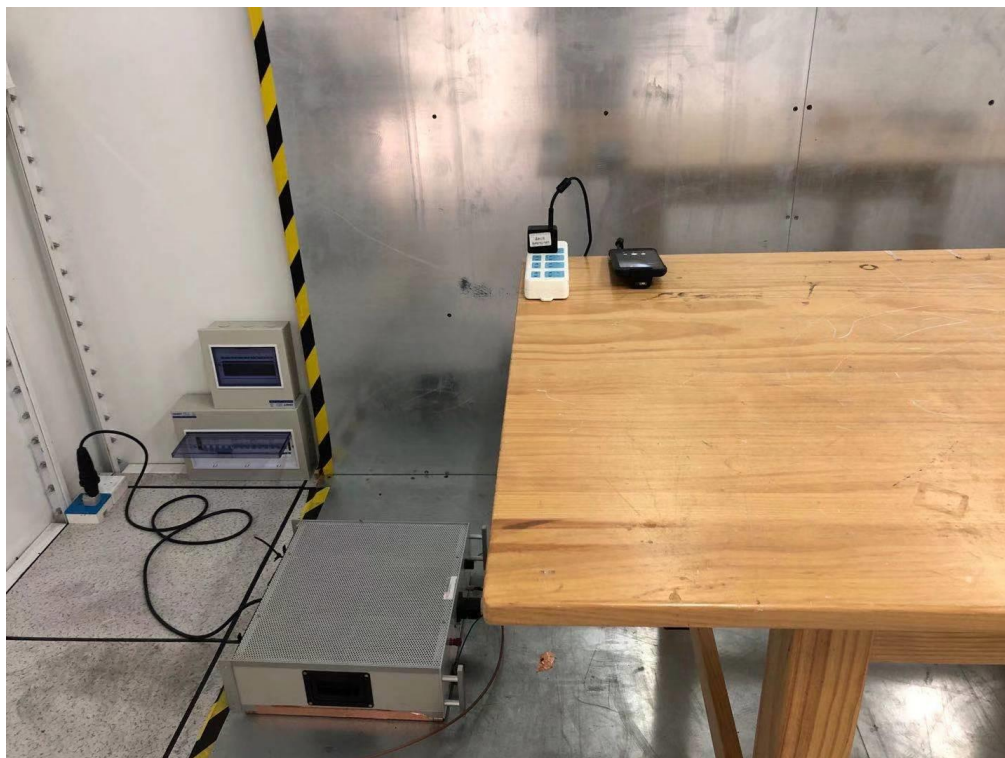
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5.2 Set-up for Conducted Emissions



5.3 Set-up for Conducted RF test at Antenna Port



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5.4 Set-up for Spurious Emissions below 1GHz



5.5 Set-up for Spurious Emissions above 1GHz



End of the report