

TEST REPORT

Report No.: SHE20100017-02IE

Date: 2021-03-15

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Applicant : Trimble Europe BV.
Address of Applicant : Industrieweg 187a, 5683 CC Best, Netherlands

Product Name : Rugged Smart Phone
Model No. : TDC600_2, MobileMapper60_2
Sample No. : E20100017-01 #16
E20100017-01 #01
FCC ID : NZI-11705920
ISED Number : 9288A-11705920

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

Date of Receipt : 2021-01-26
Date of Test : 2021-01-26 ~ 2021-03-15
Date of Issue : 2021-03-15

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

Applicant Company Name	Trimble Europe BV.
Address	Industrieweg 187a, 5683 CC Best, Netherlands
Contact Person	Joel Hamberg Magnusson
Telephone	+46764953125
Email	joel_hambergmagnusson@trimble.com
Manufacturer Company Name	Trimble Europe BV.
Address	Industrieweg 187a, 5683 CC Best, Netherlands
Factory Company Name	Shenzhen UniStrong Science & Technology Co., Ltd.
Address	B,4-4Factory, Zhengcheng Road, FuyongBaoan District, Shenzhen, China

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1.3 Details of EUT

Product Name	Rugged Smart Phone
Brand Name	Trimble, Spectra Geospatial
Test Model No.	TDC600_2
Series Model No.	TDC600_2; MobileMapper60_2
Description of Model name differentiation	All model are same with electrical paramters and Internal circult structure,but only different on model name,brand name and colors and software version.
FCC ID	NZI-11705920
ISED Number	9288A-11705920
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	1.09dBi
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	V1.0
Software version	TDC600_2.53.10.14 (model:TDC600_2) MM60_2.53.10.05 (model: MobileMapper60_2)
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

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Note(s): All test items were verified and recorded according to the standards and without any addition/deviation/exclusion during the test

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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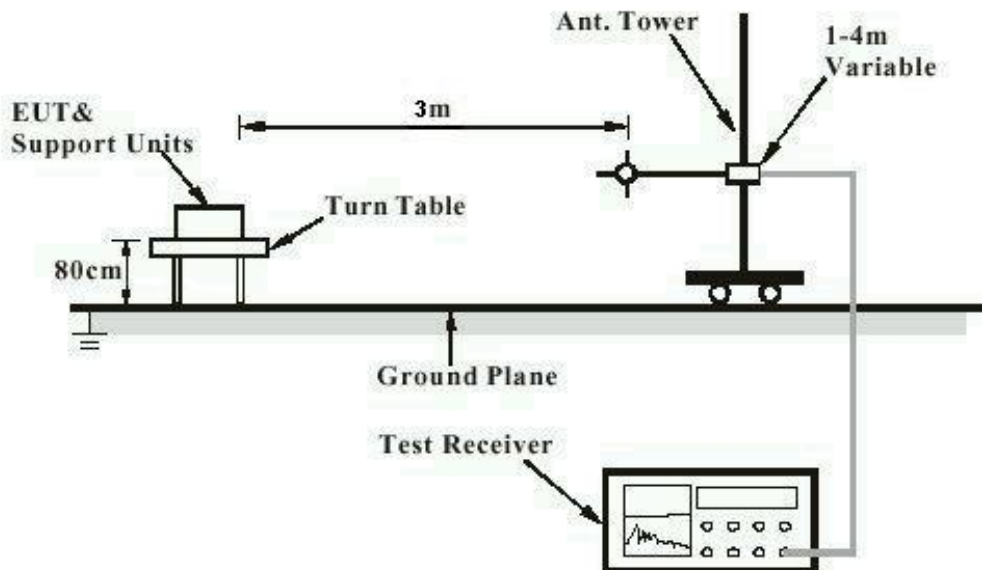
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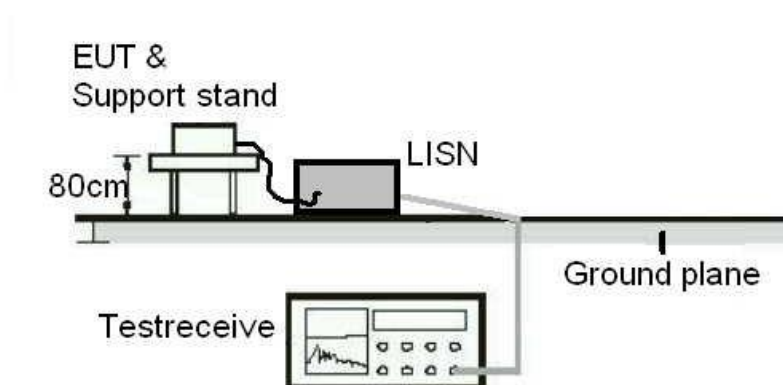
3.4 Test Setup Diagram

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



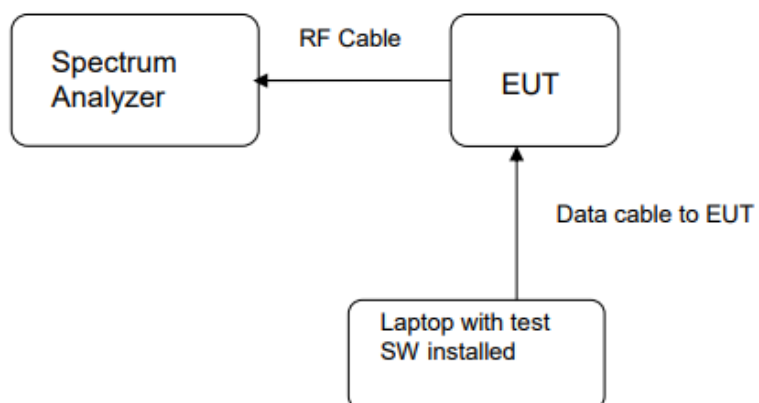
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Diagram of Measurement Equipment Configuration for Transmitter Measurement



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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 1.09dBi. 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 : 23°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	9.51	8.93	250
	5220	9.49	8.89	
	5240	9.67	9.27	
802.11n(HT20)	5180	9.25	8.41	
	5220	9.20	8.32	
	5240	9.22	8.36	
802.11ac(VHT20)	5180	10.64	11.59	
	5220	10.50	11.22	
	5240	10.55	11.35	
802.11n(HT40)	5190	8.38	6.89	
	5230	8.47	7.03	
802.11ac(VHT40)	5190	9.46	8.83	
	5230	9.53	8.97	
802.11ac(VHT80)	5210	8.25	6.68	

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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	11.38	13.74	1
	5785	10.96	12.47	
	5825	11.03	12.68	
802.11n(HT20)	5745	11.01	12.62	
	5785	10.71	11.78	
	5825	10.20	10.47	
802.11ac(VHT20)	5745	11.69	14.76	
	5785	11.06	12.76	
	5825	10.98	12.53	
802.11n(HT40)	5755	10.56	11.38	
	5795	9.92	9.82	
802.11ac(VHT40)	5755	11.08	12.82	
	5795	10.58	11.43	
802.11ac(VHT80)	5775	9.49	8.89	

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	10.60	11.48	200 mW or 10 dBm + 10log B, which is less
	5220	10.58	11.43	
	5240	10.76	11.91	
802.11n(HT20)	5180	10.34	10.81	
	5220	10.29	10.69	
	5240	10.31	10.74	
802.11ac(VHT20)	5180	11.73	14.89	
	5220	11.59	14.42	
	5240	11.64	14.59	
802.11n(HT40)	5190	9.47	8.85	
	5230	9.56	9.04	
802.11ac(VHT40)	5190	10.55	11.35	
	5230	10.62	11.53	
802.11ac(VHT80)	5210	9.34	8.59	

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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	12.47	17.66	200 mW or 10 dBm + 10log B, which is less
	5785	12.05	16.03	
	5825	12.12	16.29	
802.11n(HT20)	5745	12.10	16.22	
	5785	11.80	15.14	
	5825	11.29	13.46	
802.11ac(VHT20)	5745	12.78	18.97	
	5785	12.15	16.41	
	5825	12.07	16.11	
802.11n(HT40)	5755	11.65	14.62	
	5795	11.01	12.62	
802.11ac(VHT40)	5755	12.17	16.48	
	5795	11.67	14.69	
802.11ac(VHT80)	5775	10.58	11.43	

Note: 5G antenna peak gain is 1.09dBi

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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 : 23°C
Relative humidity : 52%

Notes

Test plots please refer to the annex document "SHE20100017-02IE 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	21.051	16.657
	5220	21.153	16.625
	5240	20.940	16.681
802.11n(HT20)	5180	22.209	17.798
	5220	21.675	17.801
	5240	21.457	17.761
802.11ac(VHT20)	5180	20.865	17.807
	5220	21.415	17.821
	5240	21.964	17.927
802.11n(HT40)	5190	41.117	36.183
	5230	42.138	36.180
802.11ac(VHT40)	5190	42.357	36.216
	5230	42.778	36.300
802.11ac(VHT80)	5210	84.523	74.756

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Band IV (5725 – 5850 MHz)

Test Mode	Test Channel (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
802.11a	5745	22.196	16.766
	5785	21.212	16.850
	5825	21.031	16.796
802.11n(HT20)	5745	21.411	17.783
	5785	22.366	17.855
	5825	22.557	17.837
802.11ac(VHT20)	5745	22.056	17.943
	5785	22.128	17.860
	5825	21.797	17.846
802.11n(HT40)	5755	42.851	36.090
	5795	43.695	36.174
802.11ac(VHT40)	5755	43.059	36.154
	5795	42.618	36.147
802.11ac(VHT80)	5775	83.449	74.724

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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	16.39	≥0.5
	5785	16.43	
	5825	16.39	
802.11n(HT20)	5745	17.63	
	5785	17.62	
	5825	17.62	
802.11ac(VHT20)	5745	17.61	
	5785	17.64	
	5825	17.63	
802.11n(HT40)	5755	34.99	
	5795	34.57	
802.11ac(VHT40)	5755	35.36	
	5795	34.54	
802.11ac(VHT80)	5775	74.02	

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

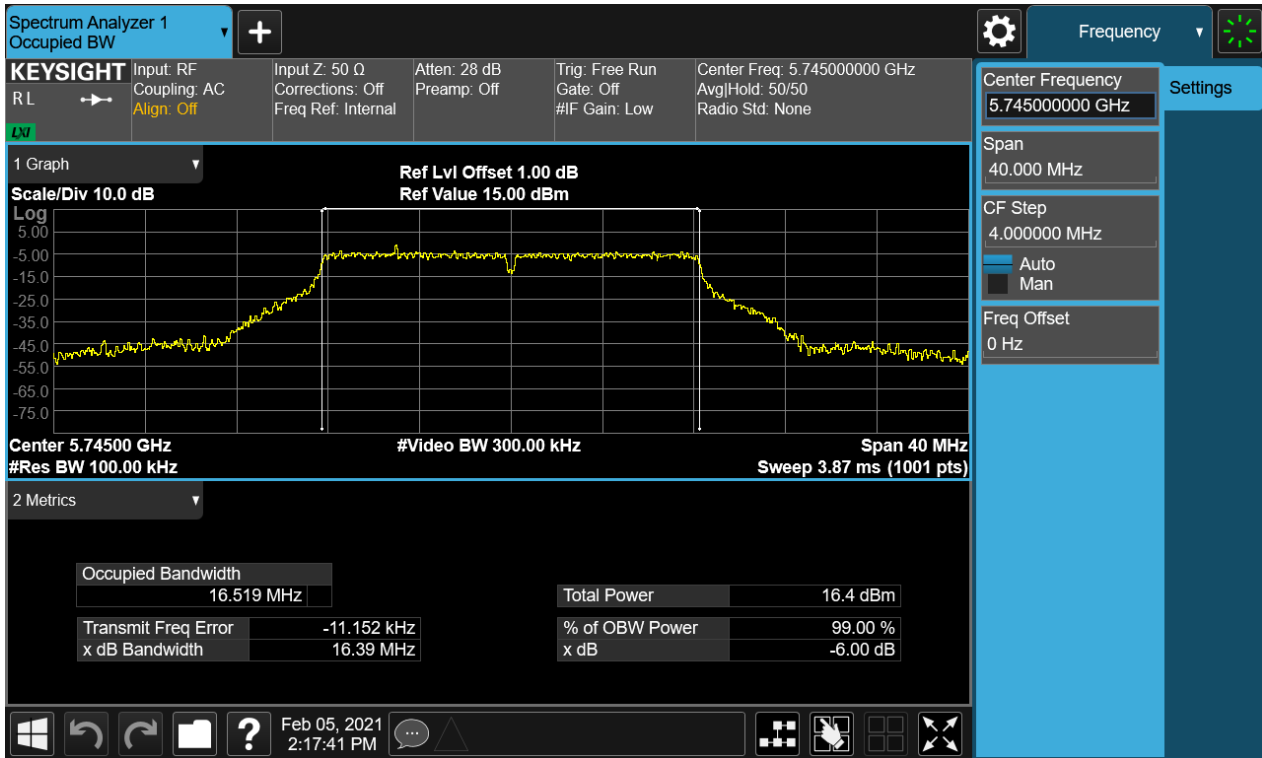
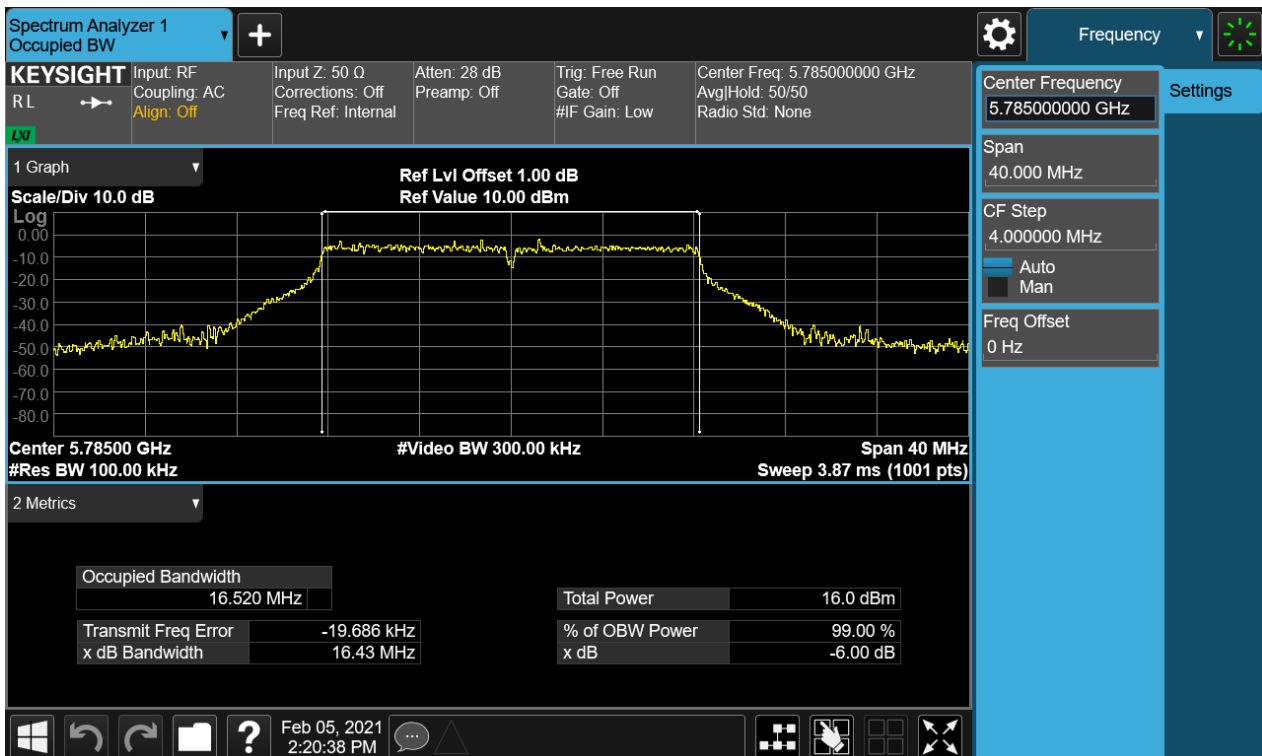


Figure 2: 6dB Bandwidth, 802.11a, 5785MHz



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

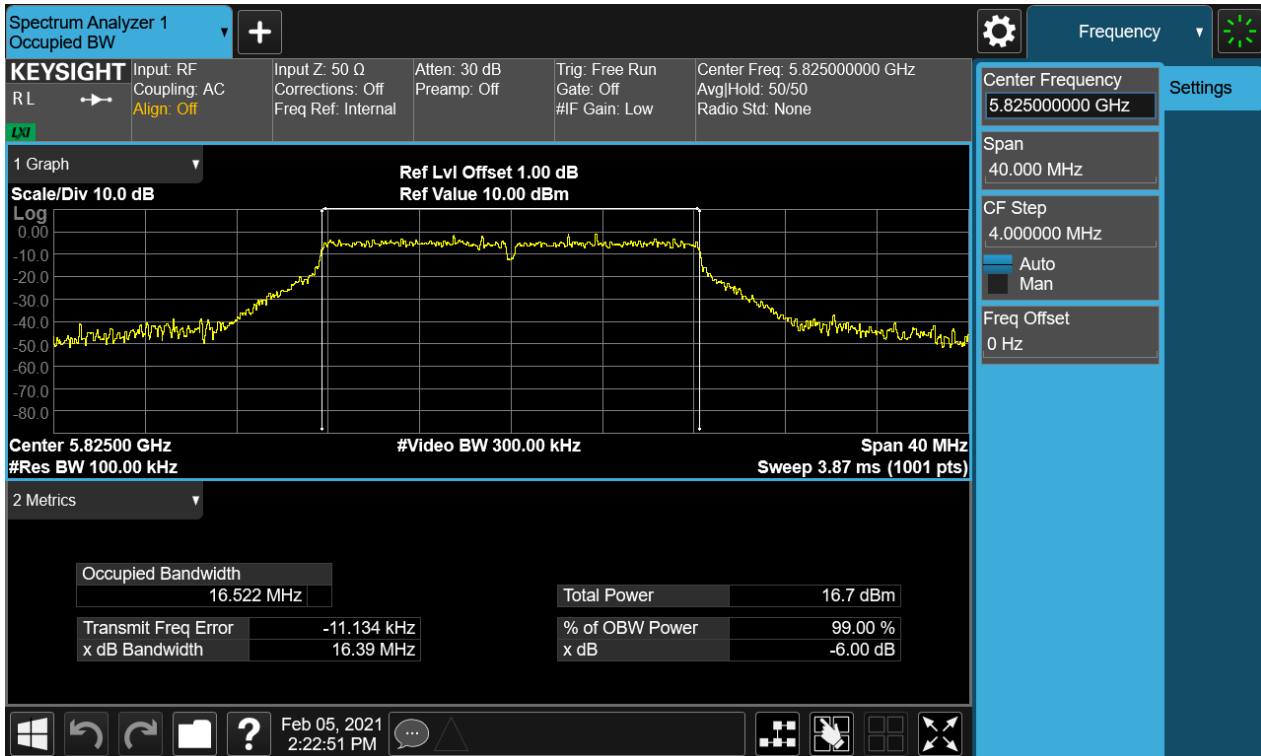
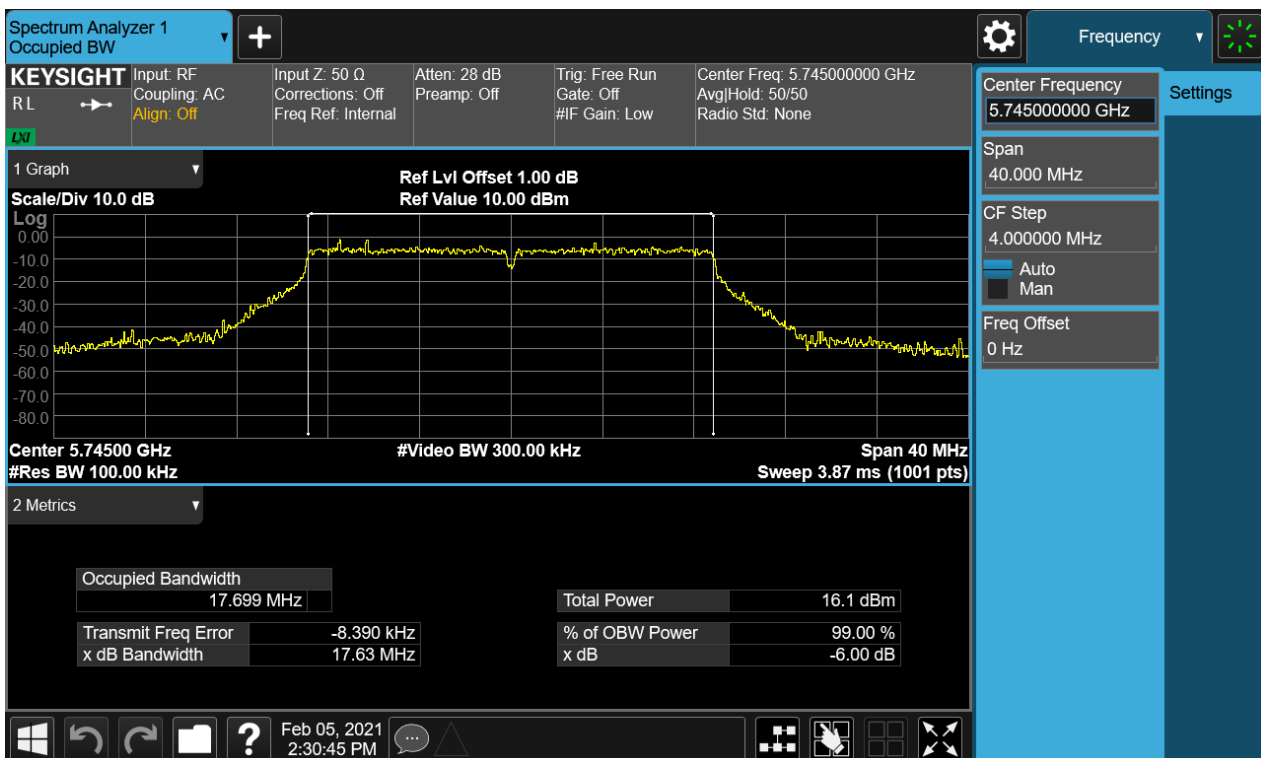


Figure 4: 6dB Bandwidth, 802.11n(HT20), 5745MHz



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

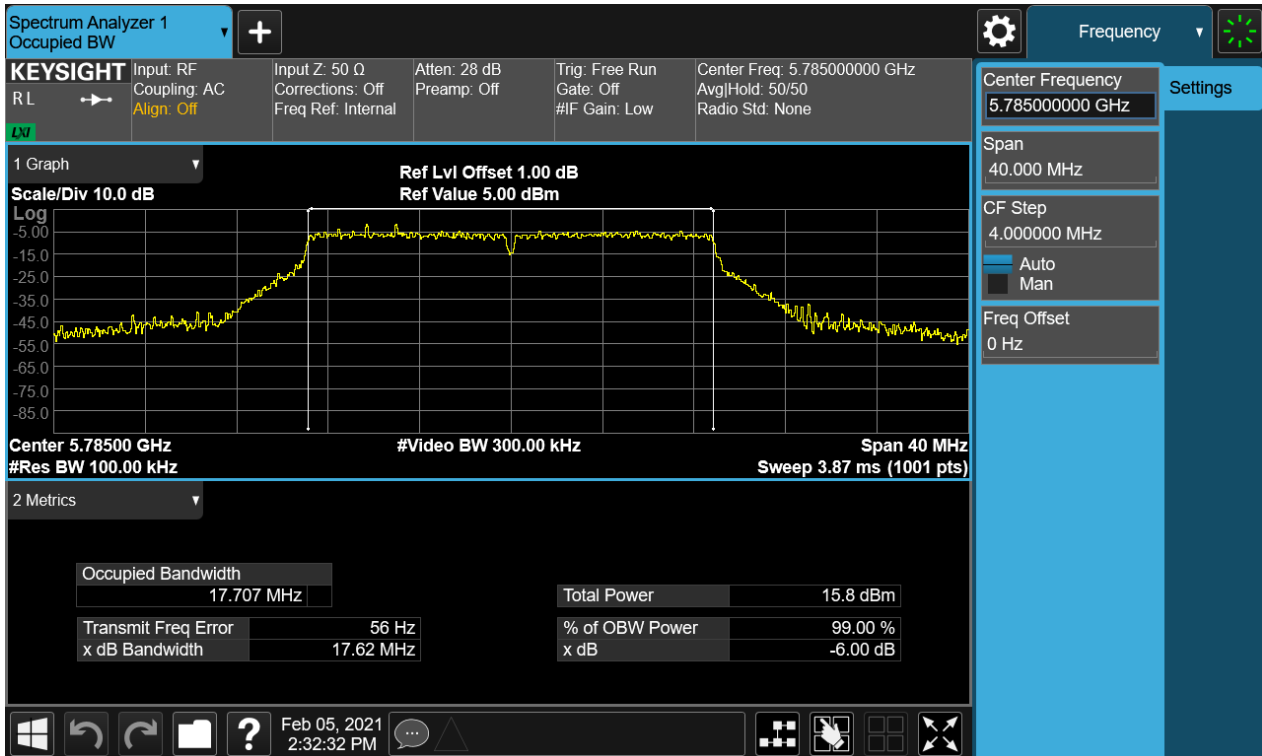
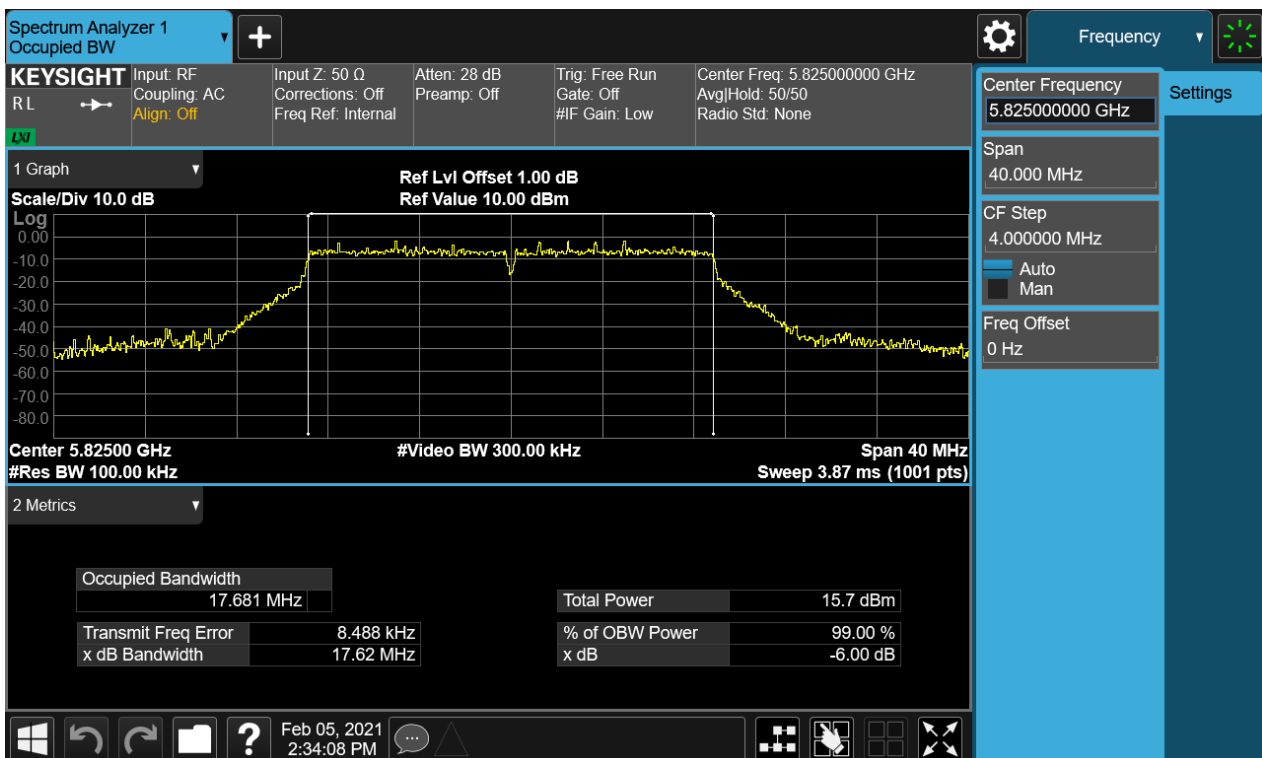


Figure 6: 6dB Bandwidth, 802.11n(HT20), 5825MHz



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

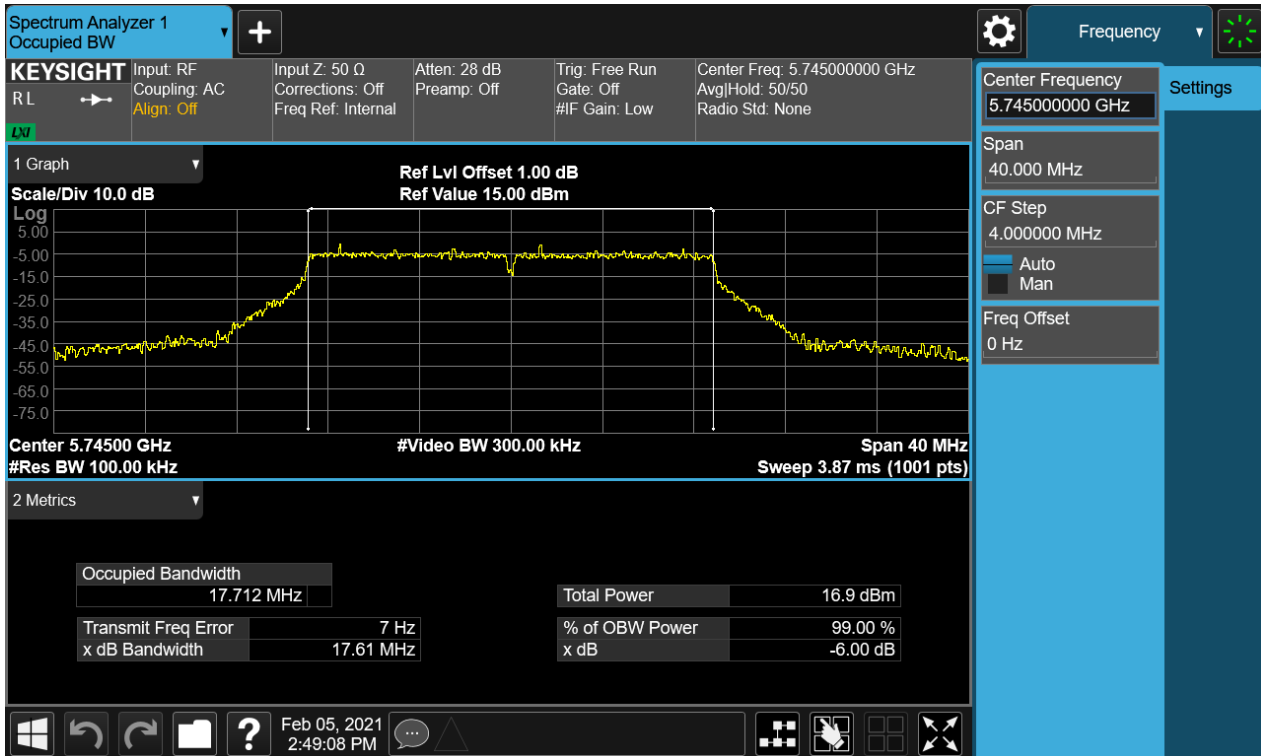
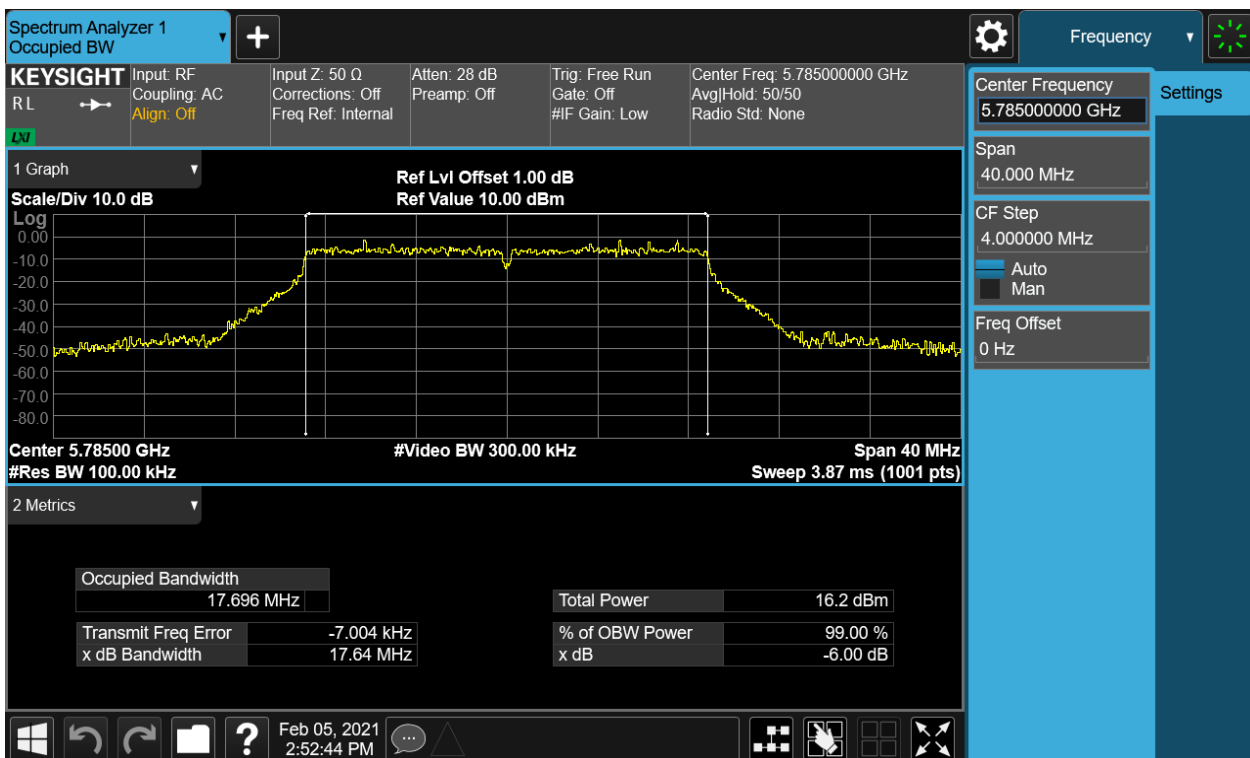


Figure 8: 6dB Bandwidth, 802.11ac(VHT20), 5785MHz



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

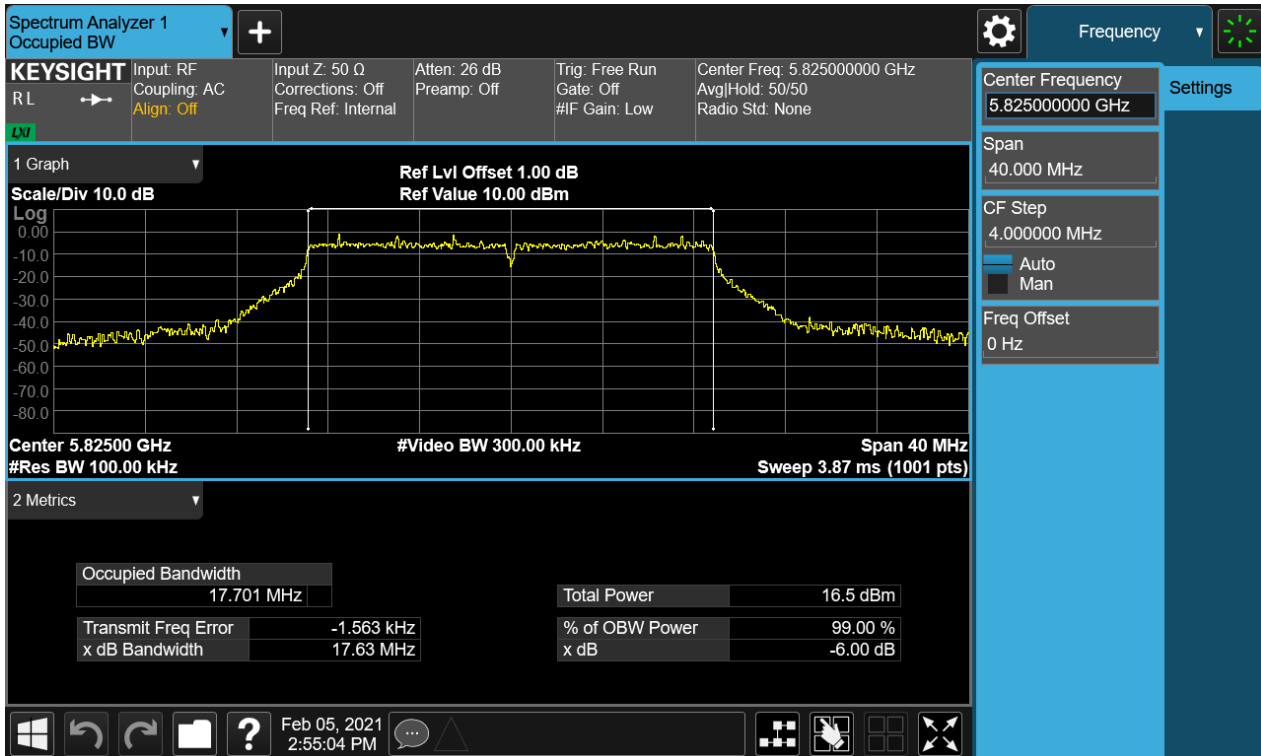
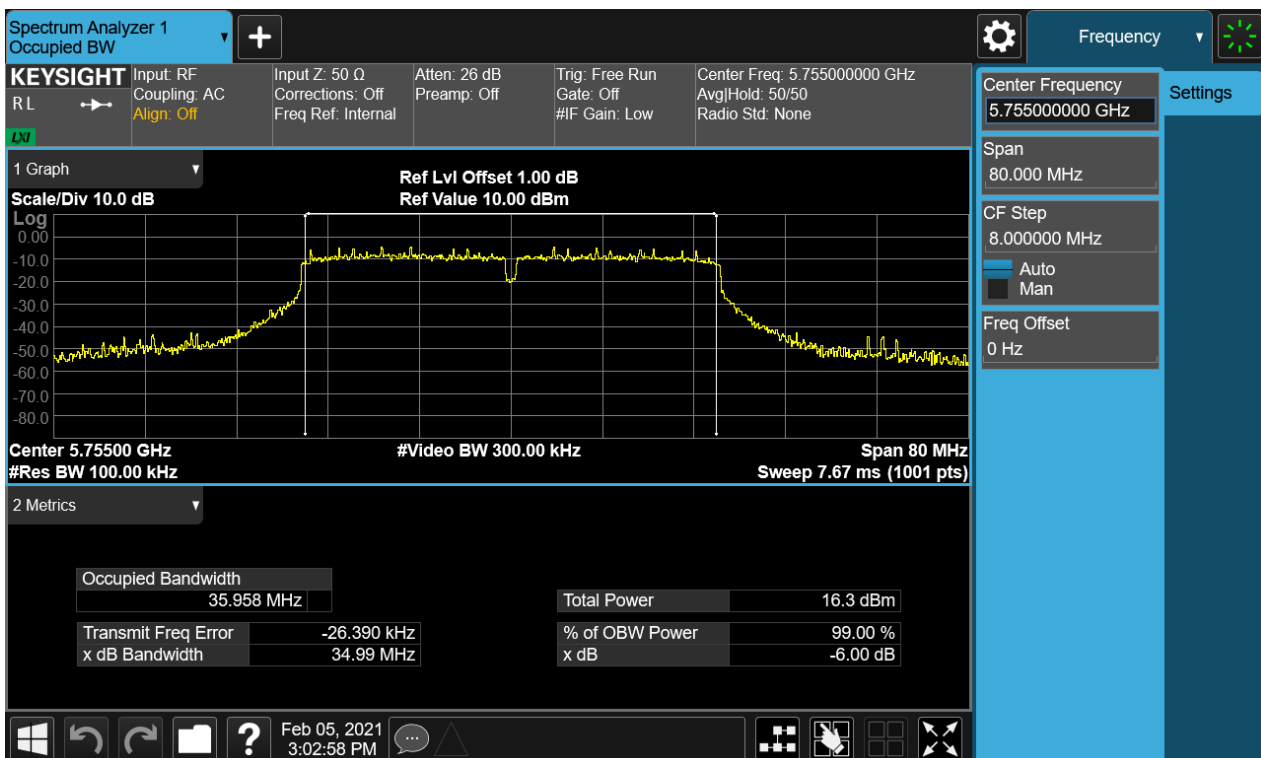


Figure 10: 6dB Bandwidth, 802.11n(HT40), 5755MHz



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

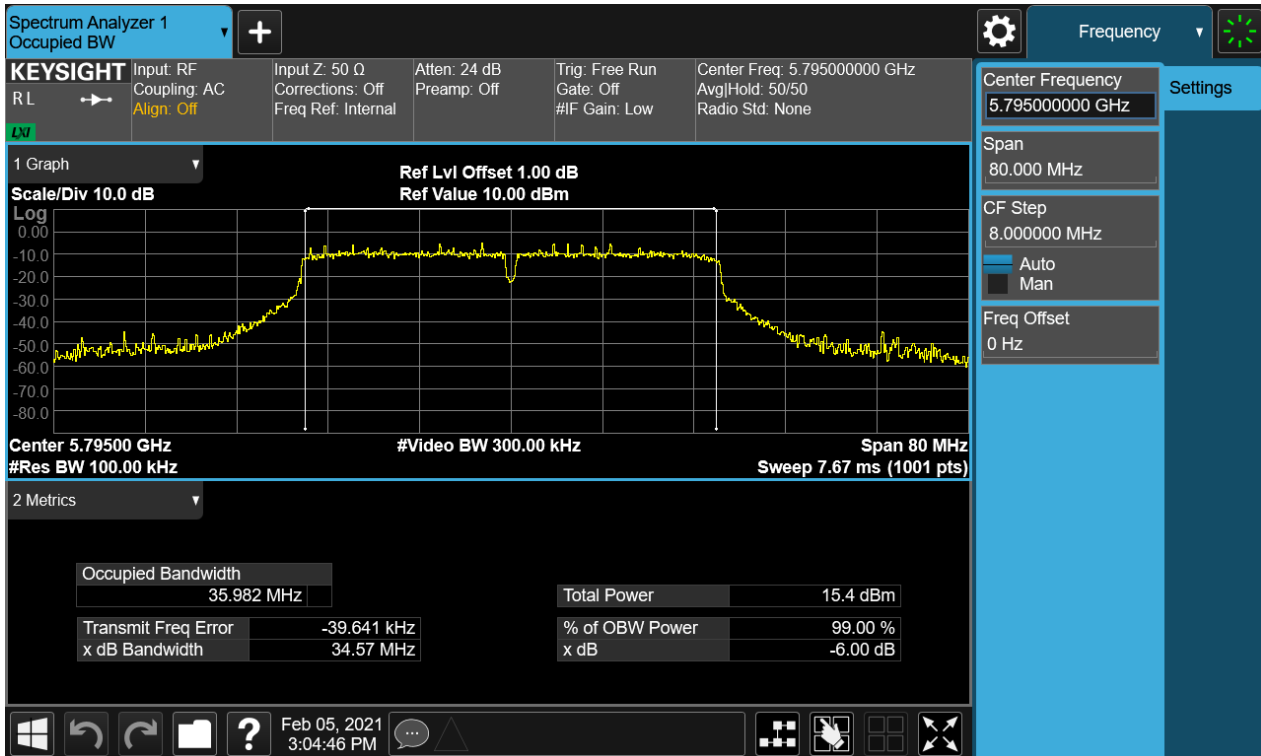
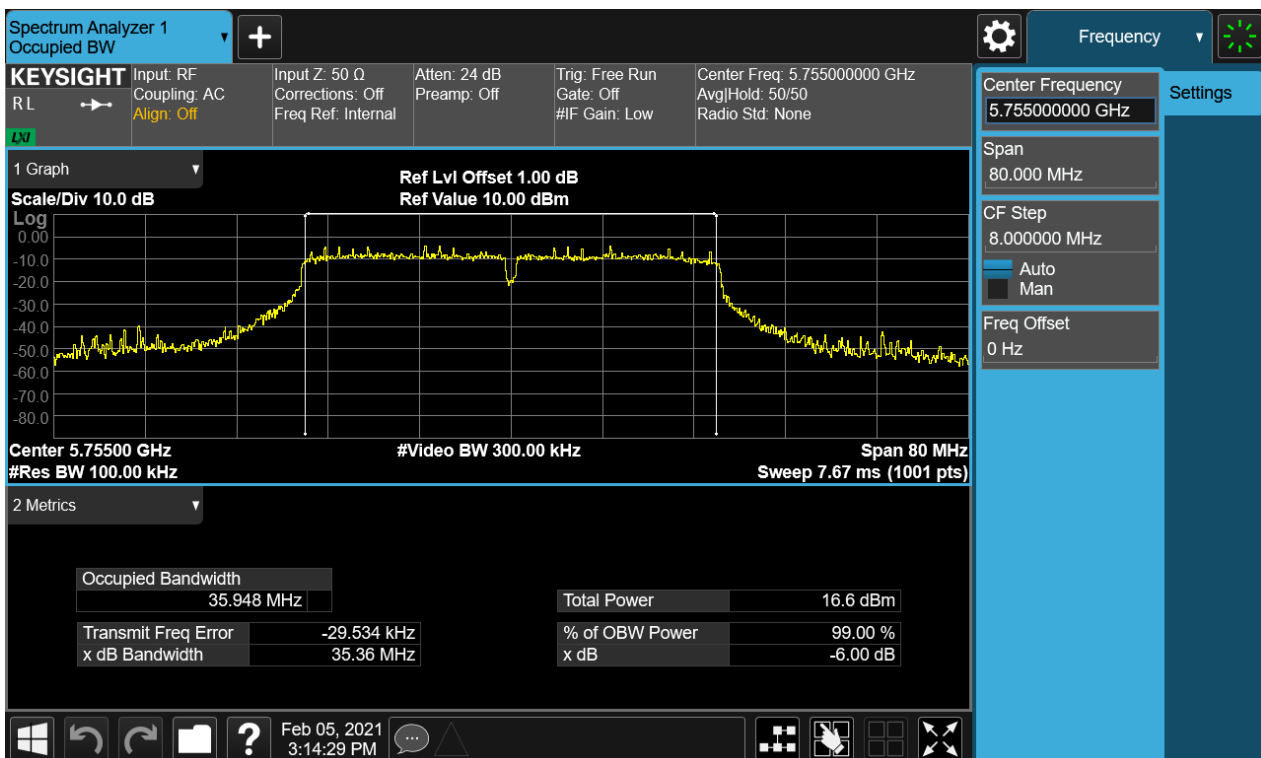


Figure 12: 6dB Bandwidth, 802.11ac(VHT40), 5755MHz



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

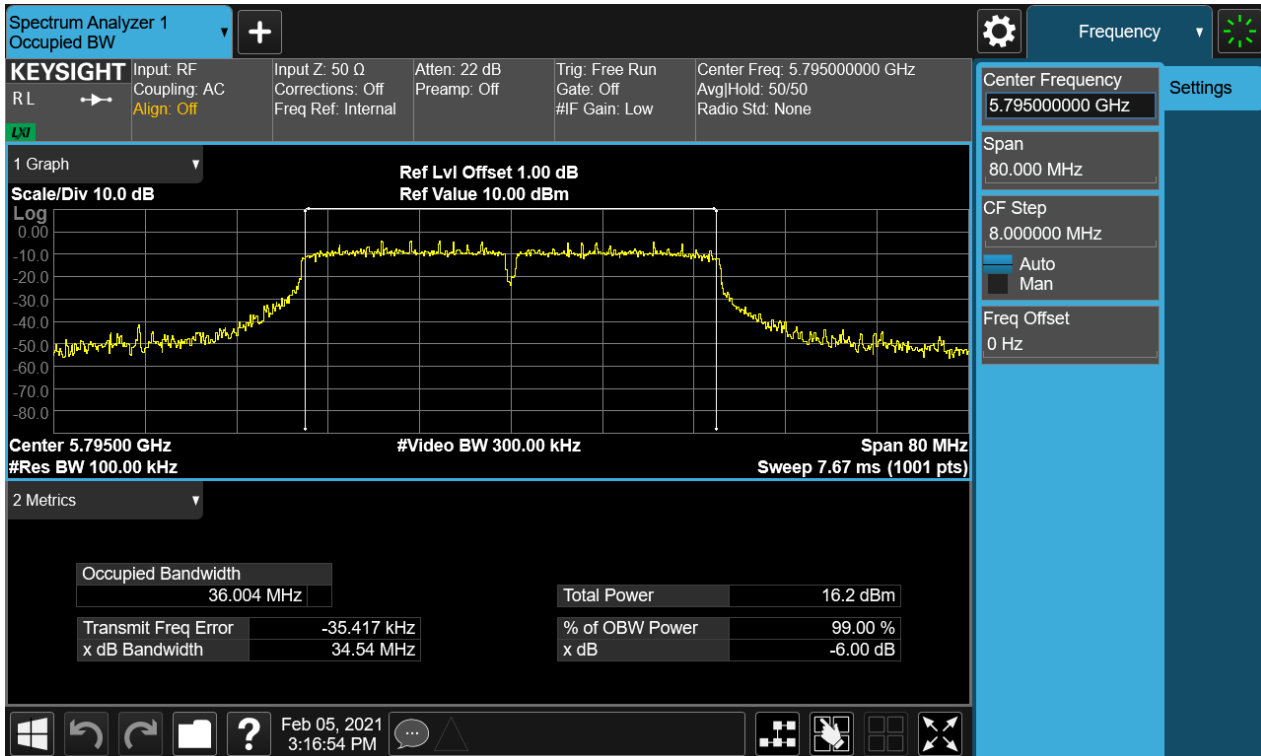
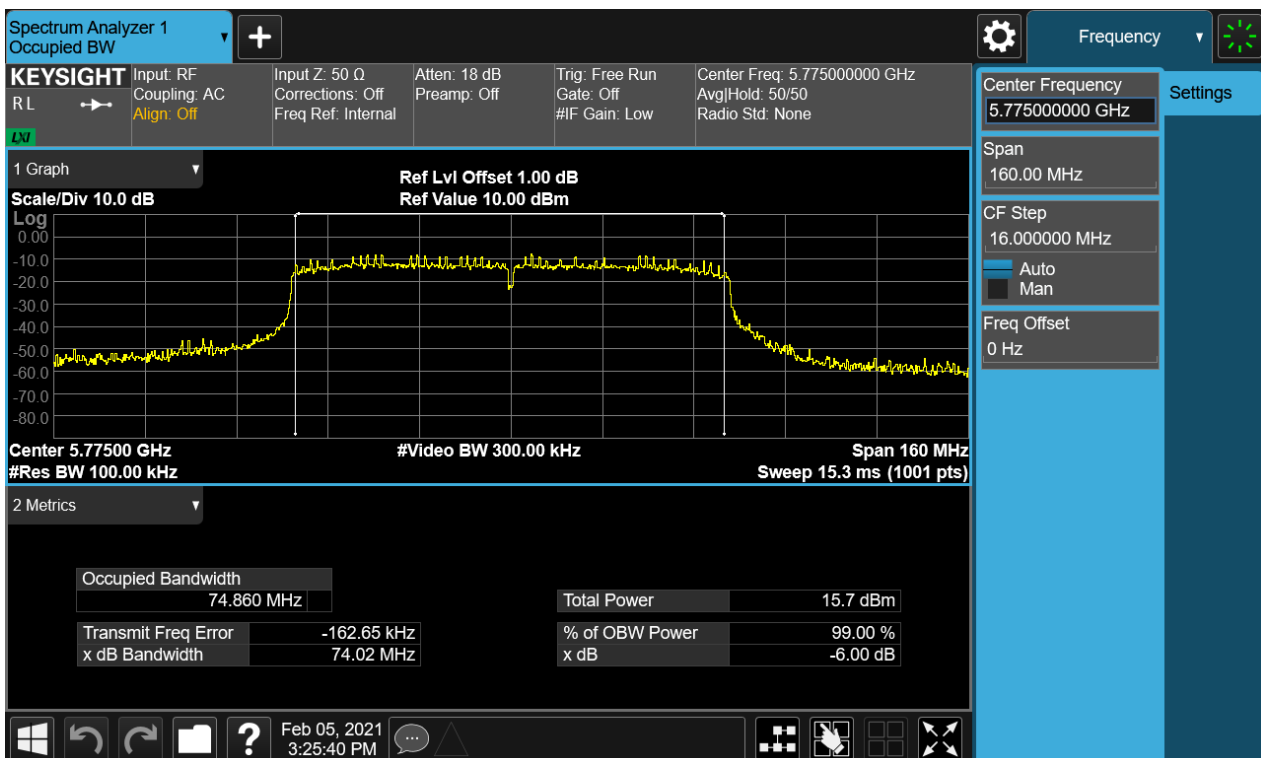


Figure 14: 6dB Bandwidth, 802.11ac(VHT80), 5775MHz



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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 : 23°C
Relative humidity : 52%

Notes

Test plots please refer to the annex document "SHE20100017-02IE 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	5.83	11
	5220	5.67	
	5240	5.94	
802.11n(HT20)	5180	5.84	
	5220	5.40	
	5240	5.76	
802.11ac(VHT20)	5180	6.13	
	5220	6.07	
	5240	6.24	
802.11n(HT40)	5190	1.28	
	5230	2.44	
802.11ac(VHT40)	5190	3.54	
	5230	4.03	
802.11ac(VHT80)	5210	-1.01	

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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	4.03	30
	5785	3.78	
	5825	3.75	
802.11n(HT20)	5745	3.95	
	5785	3.43	
	5825	3.38	
802.11ac(VHT20)	5745	3.93	
	5785	3.94	
	5825	3.41	
802.11n(HT40)	5755	1.21	
	5795	-0.10	
802.11ac(VHT40)	5755	1.45	
	5795	0.39	
802.11ac(VHT80)	5775	-3.11	

Band I (5150 – 5250 MHz)

Test Mode	Test Channel (MHz)	EIRP PSD (dBm/MHz)	IC Limit (dBm/MHz)
802.11a	5180	6.92	10
	5220	6.76	
	5240	7.03	
802.11n(HT20)	5180	6.93	
	5220	6.49	
	5240	6.85	
802.11ac(VHT20)	5180	7.22	
	5220	7.16	
	5240	7.33	
802.11n(HT40)	5190	2.37	
	5230	3.53	
802.11ac(VHT40)	5190	4.63	
	5230	5.12	
802.11ac(VHT80)	5210	0.08	

Note: 5G antenna peak gain is 1.09dBi

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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 : 23°C
Relative humidity : 52%

Notes:

Test plots please refer to the annex document "SHE20100017-02IE 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	: 23°C
Relative humidity	: 52%

Notes:

Test plots please refer to the annex document "SHE20100017-02IE 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	: 23°C
Relative humidity	: 52%

Notes:

Test plots please refer to the annex document "SHE20100017-02IE 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 : 23°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)			
23	3.7V	5179.99725	-0.531	± 20
	3.8V	5179.99832	-0.324	
	4.35V	5179.99646	-0.683	

Temperature vs. Frequency Stability (5180MHz)

Test Conditions		Frequency (MHz)	Max. Deviation (ppm)	Limit (ppm)
Voltage (V)	Temp (°C)			
3.8V	-30	--	--	± 20
	-20	5179.98816	-2.286	
	-10	5179.99423	-1.114	
	0	5179.98722	-2.468	
	10	5179.98657	-2.593	
	20	5179.99322	-1.309	
	30	5179.98465	-2.963	
	40	5179.98750	-2.413	
	55	5179.99563	-0.844	

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)			
23	3.7V	5745.03263	5.680	± 20
	3.8V	5744.98322	-2.921	
	4.35V	5744.98790	-2.106	

Temperature vs. Frequency Stability (5745MHz)

Test Conditions		Frequency (MHz)	Max. Deviation (ppm)	Limit (ppm)
Voltage (V)	Temp (°C)			
3.8V	-30	--	--	± 20
	-20	5744.98542	-2.538	
	-10	5744.99766	-0.407	
	0	5744.97812	-3.809	
	10	5744.98792	-2.103	
	20	5745.03654	6.360	
	30	5745.02542	4.425	
	40	5745.02763	4.809	
	55	5745.01068	1.859	

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	: 23°C
Relative humidity	: 52%

For details refer to following test plot.

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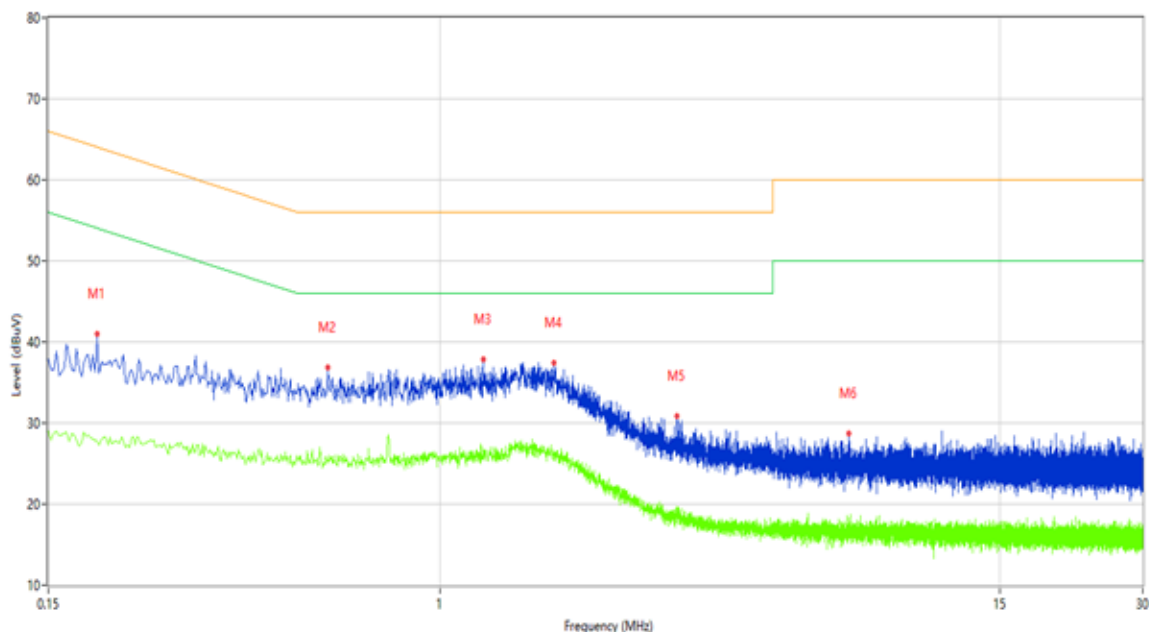
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Note: The all configurations were tested respectively, but only the worst configuration shown here.

Figure 1: Conducted Emission on AC Mains, L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.190	42.03	9.65	64.04	-22.01	Peak	L	Pass
1*	0.190	34.56	9.65	64.04	-29.48	QP	L	Pass
1**	0.190	27.68	9.65	54.04	-26.36	AV	L	Pass
2	0.580	37.37	9.76	56.00	-18.63	Peak	L	Pass
2*	0.580	28.70	9.76	56.00	-27.30	QP	L	Pass
2**	0.580	25.04	9.76	46.00	-20.96	AV	L	Pass
3	1.232	28.51	9.66	56.00	-27.49	Peak	L	Pass
3*	1.232	21.53	9.66	56.00	-34.47	QP	L	Pass
3**	1.232	25.60	9.66	46.00	-20.40	AV	L	Pass
4	1.732	28.48	9.67	56.00	-27.52	Peak	L	Pass
4*	1.732	21.70	9.67	56.00	-34.30	QP	L	Pass
4**	1.732	26.41	9.67	46.00	-19.59	AV	L	Pass
5	3.142	22.97	9.69	56.00	-33.03	Peak	L	Pass
5*	3.142	13.89	9.69	56.00	-42.11	QP	L	Pass
5**	3.142	19.60	9.69	46.00	-26.40	AV	L	Pass
6	7.234	21.13	9.68	60.00	-38.87	Peak	L	Pass
6*	7.234	12.13	9.68	60.00	-47.87	QP	L	Pass
6**	7.234	18.24	9.68	50.00	-31.76	AV	L	Pass

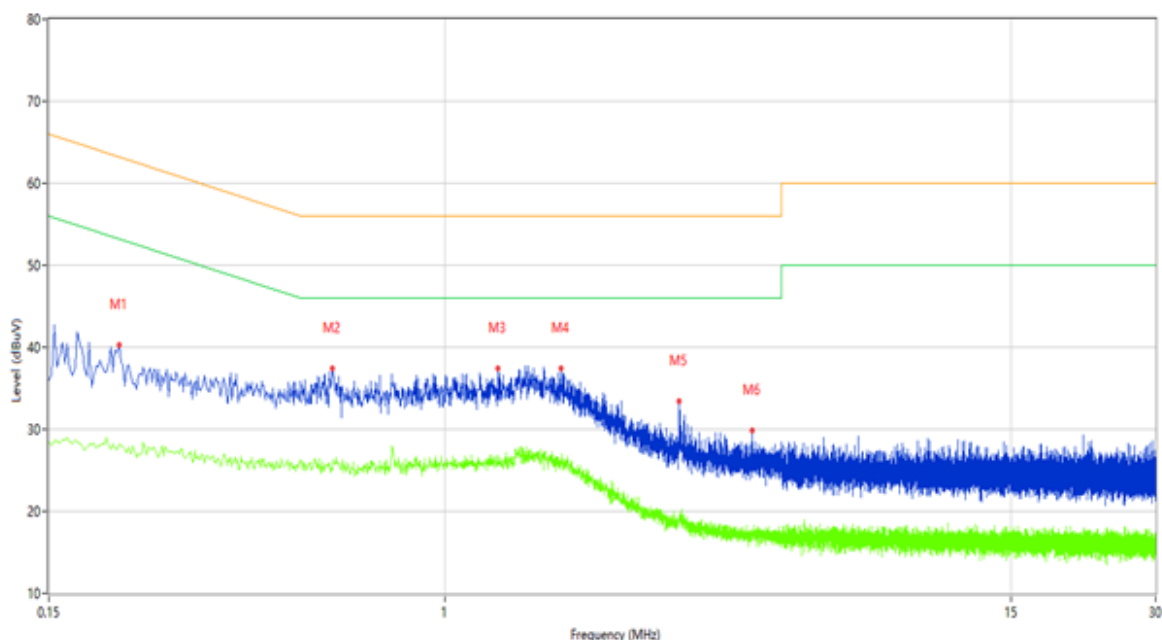
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Figure 72: Conducted Emission on AC Mains, N Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.210	41.91	9.66	63.21	-21.30	Peak	N	Pass
1*	0.210	32.67	9.66	63.21	-30.54	QP	N	Pass
1**	0.210	28.13	9.66	53.21	-25.08	AV	N	Pass
2	0.584	39.46	9.76	56.00	-16.54	Peak	N	Pass
2*	0.584	34.25	9.76	56.00	-21.75	QP	N	Pass
2**	0.584	25.07	9.76	46.00	-20.93	AV	N	Pass
3	1.290	29.27	9.67	56.00	-26.73	Peak	N	Pass
3*	1.290	22.17	9.67	56.00	-33.83	QP	N	Pass
3**	1.290	26.90	9.67	46.00	-19.10	AV	N	Pass
4	1.742	28.84	9.67	56.00	-27.16	Peak	N	Pass
4*	1.742	22.06	9.67	56.00	-33.94	QP	N	Pass
4**	1.742	25.90	9.67	46.00	-20.10	AV	N	Pass
5	3.060	25.17	9.69	56.00	-30.83	Peak	N	Pass
5*	3.060	15.14	9.69	56.00	-40.86	QP	N	Pass
5**	3.060	19.40	9.69	46.00	-26.60	AV	N	Pass
6	4.342	27.02	9.69	56.00	-28.98	Peak	N	Pass
6*	4.342	18.75	9.69	56.00	-37.25	QP	N	Pass
6**	4.342	17.41	9.69	46.00	-28.59	AV	N	Pass

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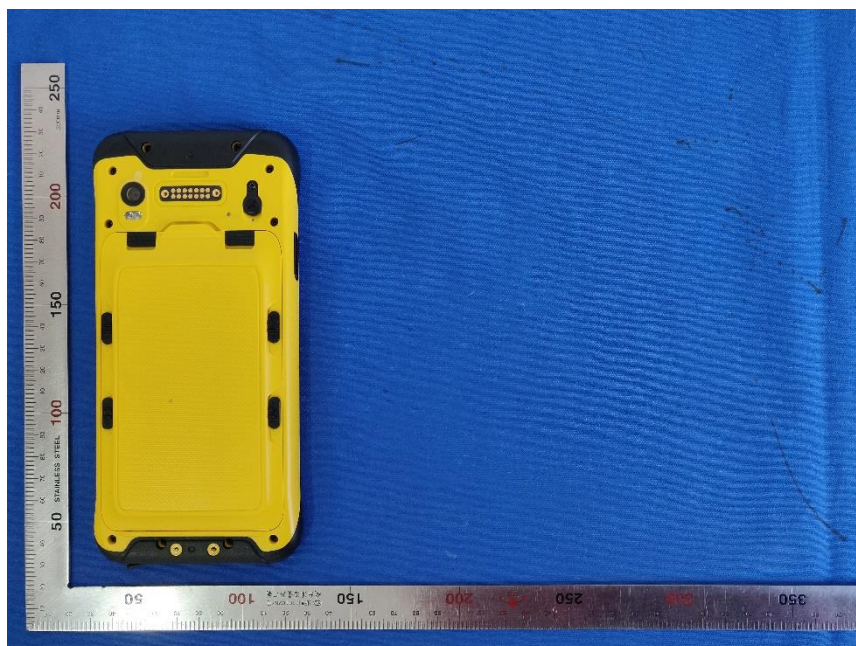
5 Appendixes

5.1 Photographs of the Sample

TDC600_2 Model



Front of the sample



Rear of the sample

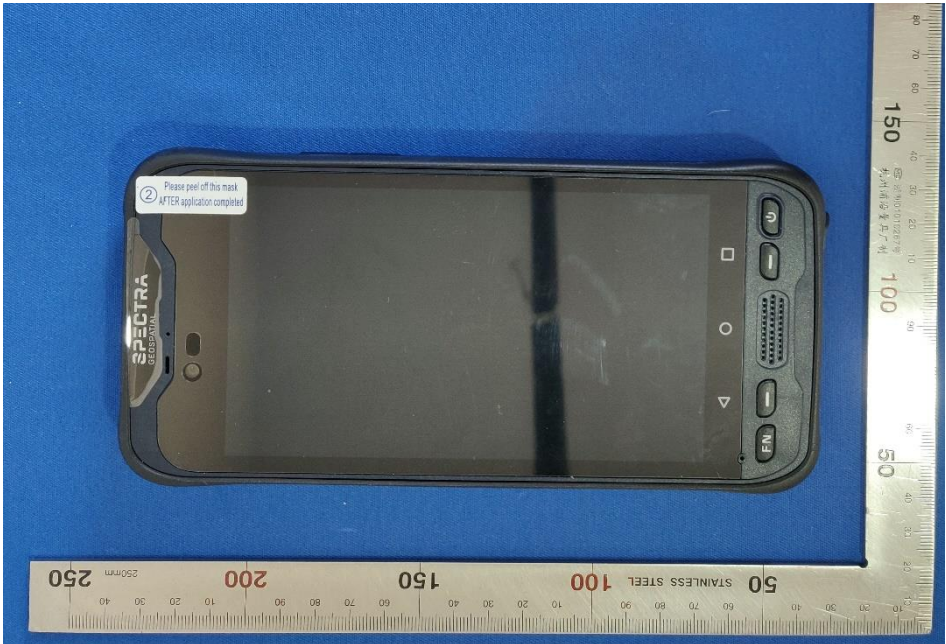
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MobileMapper60_2 Model



Front of the sample



Rear of the sample

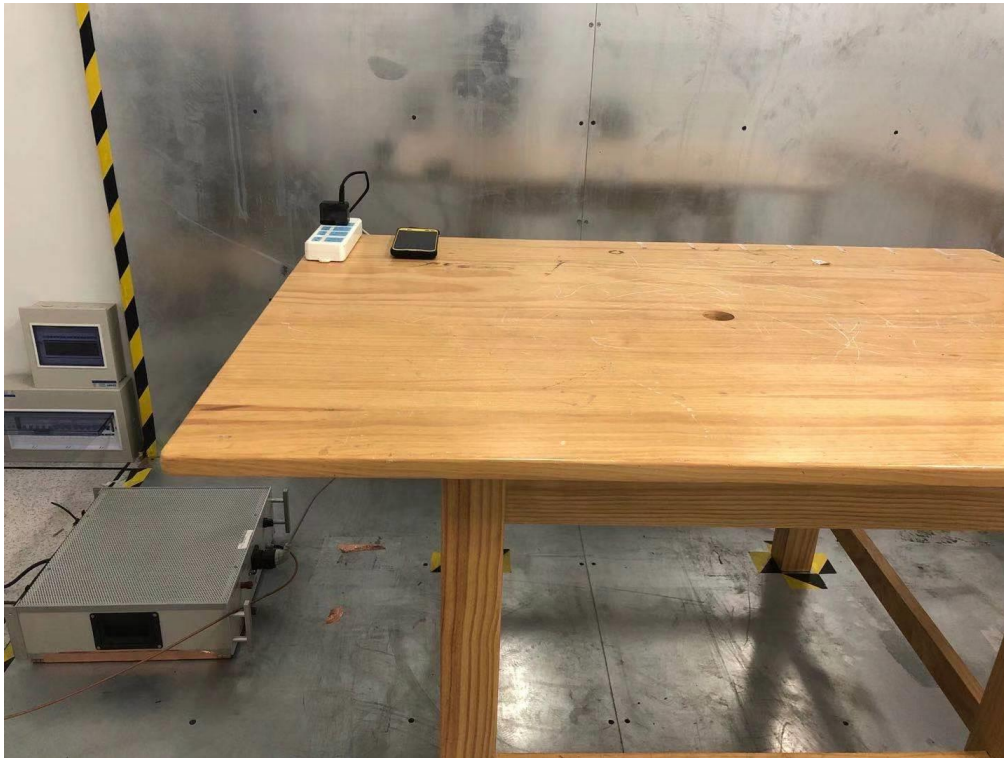
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5.2 Set-up for Conducted Emissions



5.3 Set-up for Conducted RF test at Antenna Port



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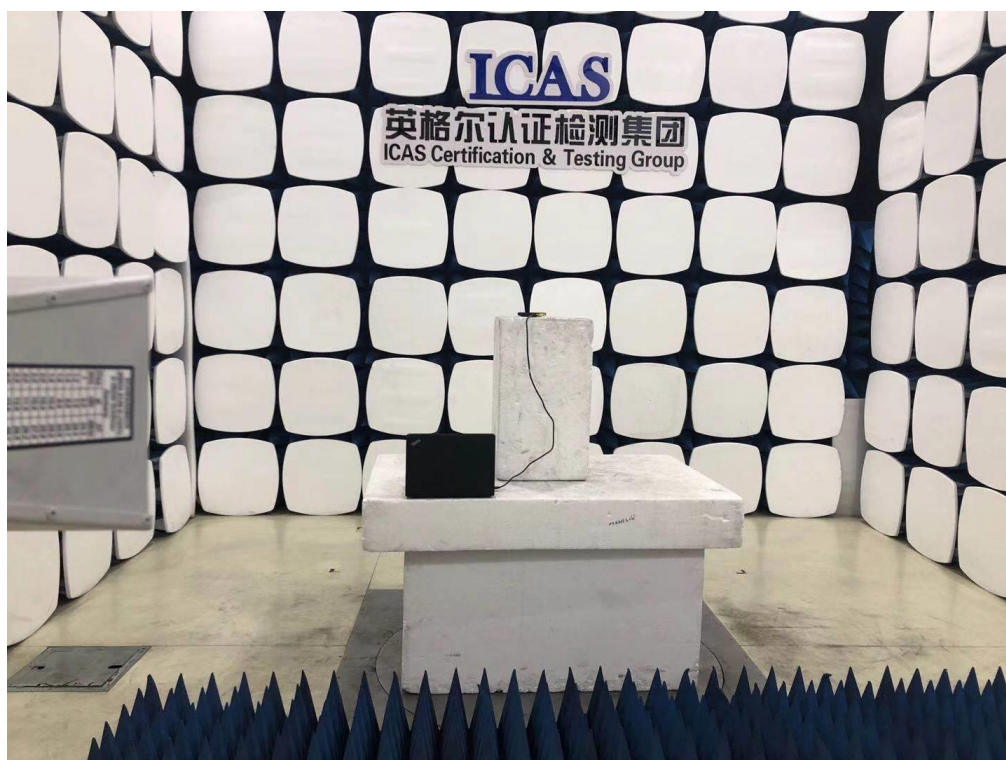
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5.4 Set-up for Spurious Emissions below 1GHz



5.5 Set-up for Spurious Emissions above 1GHz



End of the report