

FCC TEST REPORT

For

Qingdao Hisense Intelligent Commercial System Co., Ltd.

Tablet POS

Test Model: HM518

Prepared for : Qingdao Hisense Intelligent Commercial System Co., Ltd.
Address : Bldg 3, 151 Zhuzhou Lu, Laoshan, Qingdao, China

Prepared by : Shenzhen LCS Compliance Testing Laboratory Ltd.
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Date of receipt of test sample : August 10, 2015

Number of tested samples : 1

Sample number : 15080632

Date of Test : September 16, 2015 - October 16, 2015

Date of Report : October 16, 2015

FCC TEST REPORT
FCC CFR 47 PART 15 E(15.407): 2014

Report Reference No. : **LCS1509140630E**
Date of Issue..... : October 16, 2015

Testing Laboratory Name : **Shenzhen LCS Compliance Testing Laboratory Ltd.**
Address..... : 1/F., Xingyuan Industrial Park, Tongda Road, Bao'an Avenue,
 Bao'an District, Shenzhen, Guangdong, China
Testing Location/ Procedure : Full application of Harmonised standards
 Partial application of Harmonised standards
 Other standard testing method

Applicant's Name..... : **Qingdao Hisense Intelligent Commercial System Co., Ltd.**
Address..... : Bldg 3, 151 Zhuzhou Lu, Laoshan, Qingdao, China

Test Specification
Standard : FCC CFR 47 PART 15 E(15.407): 2014 / ANSI C63.10: 2013
Test Report Form No...... : LCSEMC-1.0
TRF Originator..... : Shenzhen LCS Compliance Testing Laboratory Ltd.
Master TRF : Dated 2011-03

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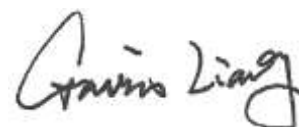
Test Item Description..... : **Tablet POS**
Trade Mark..... : **Hisense**
Test Model : HM518
Ratings : DC 7.4V by li-ion polymer battery(4000mAh)
 Recharged Voltage: DC 12V/3.33A
Result : **Positive**

Compiled by:

Supervised by:

Approved by:





Leo Lee/ File administrators

Glin Lu/ Technique principal

Gavin Liang/ Manager

FCC -- TEST REPORT

Test Report No. : LCS1509140630E	<u>October 16, 2015</u> Date of issue
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Test Model.....	: HM518
EUT.....	: Tablet POS
Applicant.....	: Qingdao Hisense Intelligent Commercial System Co., Ltd.
Address.....	: Bldg 3, 151 Zhuzhou Lu, Laoshan, Qingdao, China
Telephone.....	: /
Fax.....	: /
Manufacturer.....	: Qingdao Hisense Intelligent Commercial System Co., Ltd.
Address.....	: Bldg 3, 151 Zhuzhou Lu, Laoshan, Qingdao, China
Telephone.....	: /
Fax.....	: /
Factory.....	: Qingdao Hisense Intelligent Commercial System Co., Ltd.
Address.....	: Bldg 3, 151 Zhuzhou Lu, Laoshan, Qingdao, China
Telephone.....	: /
Fax.....	: /

Test Result	Positive
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The test report merely corresponds to the test sample.
 It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

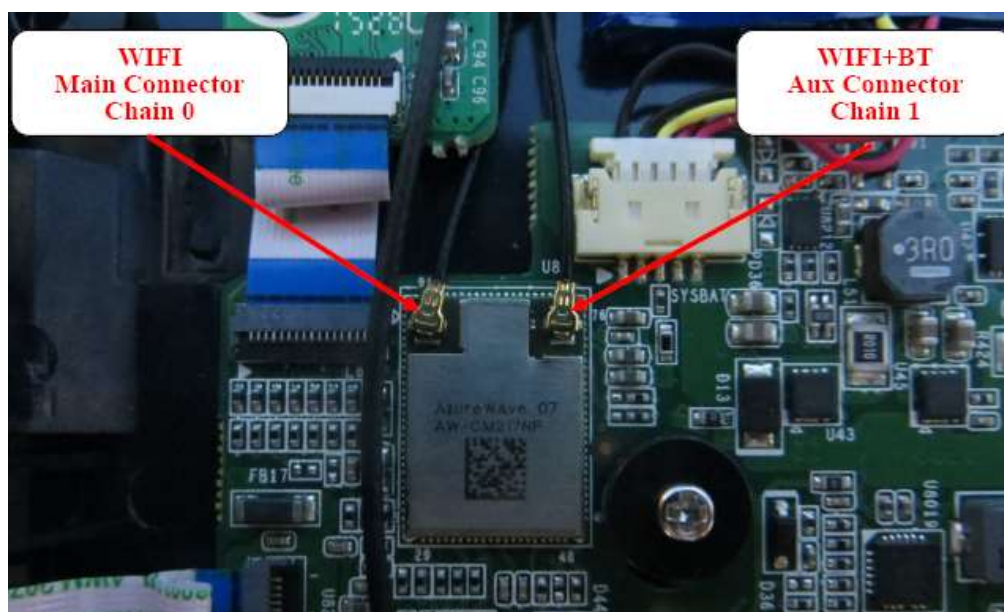
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1. GENERAL INFORMATION

1.1. Description of Device (EUT)

EUT	: Tablet POS
Test Model	: HM518
Hardware Version	: I1170D0P3V1.0
Software Version	: BIOS:BTPHS140.BIN
Power Supply	: DC 7.4V by li-ion polymer battery(4000mAh) Recharged Voltage: DC 12V/3.33A
EUT Support	: GSM/GPRS/EGPRS/WCDMA/HSUPA/HSDPA/WIFI/
Radios Application	Bluetooth/NFC
5G WIFI Technology	:
Operating Frequency	: 5180.00-5240.00MHz / 5745.00-5825.00MHz
Channel Number	: 9 Channel for 20MHz Bandwidth 4 channels for 40MHz Bandwidth 2 channels for 80MHz Bandwidth
Modulation Type	: 802.11a/n/ac: OFDM
Antenna Description	: IFA Antenna(Chain 0), 1.2dBi(Max.) For 5G Band IFA Antenna(Chain 1), 1.6dBi(Max.) For 5G Band



1.2. Host System Configuration List and Details

Manufacturer	Description	Model	Serial Number	Certificate
FSP GROUP INC.	Switching Power Adapter	FSP040-RHAN2	--	VOC
Qingdao Hisense Intelligent Commercial System Co., Ltd.	Docking Station	HM518	--	VOC

1.3. External I/O

I/O Port Description	Quantity	Cable
Micro-SD Card Slot	1	N/A
SIM Card Slot	1	N/A
IC Card Slot	1	N/A
USB Port	1	N/A
Headset Jack	1	N/A
DC 12V IN Port	1	N/A

1.4. Description of Test Facility

CNAS Registration Number. is L4595.

FCC Registration Number. is 899208.

Industry Canada Registration Number. is 9642A-1.

VCCI Registration Number. is C-4260 and R-3804.

ESMD Registration Number. is ARCB0108.

UL Registration Number. is 100571-492.

TUV SUD Registration Number. is SCN1081.

TUV RH Registration Number. is UA 50296516-001

1.5. List Of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Cal Date	Due Date
EMC Receiver	R&S	ESCS 30	100174	9kHz – 2.75GHz	June 18,2015	June 17,2016
Signal analyzer	Agilent	E4448A(External mixers to 40GHz)	US44300469	9kHz~40GHz	July 16,2015	July 15,2016
LISN	MESS Tec	NNB-2/16Z	99079	9KHz-30MHz	June 18,2015	June 17,2016
LISN (Support Unit)	EMCO	3819/2NM	9703-1839	9KHz-30MHz	June 18,2015	June 17,2016
RF Cable-CON	UTIFLEX	3102-26886-4	CB049	9KHz-30MHz	June 18,2015	June 17,2016
ISN	SCHAFFNER	ISN ST08	21653	9KHz-30MHz	June 18,2015	June 17,2016
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30M-1GHz 3m	June 18,2015	June 17,2016
Amplifier	SCHAFFNER	COA9231A	18667	9kHz-2GHz	June 18,2015	June 17,2016
Amplifier	Agilent	8449B	3008A02120	1GHz-26.5GHz	July 16,2015	July 15,2016
Amplifier	MITEQ	AMF-6F-260400	9121372	26.5GHz-40GHz	July 16,2015	July 15,2016
Spectrum Analyzer	Agilent	E4407B	MY41440292	9k-26.5GHz	July 16,2015	July 15,2016
MAX Signal Analyzer	Agilent	N9020A	MY50510140	20Hz~26.5GHz	Oct. 27, 2014	Oct. 26, 2015
Loop Antenna	R&S	HFH2-Z2	860004/001	9k-30MHz	June 18,2015	June 17,2016
By-log Antenna	SCHWARZBECK	VULB9163	9163-470	30MHz-1GHz	June 10,2015	June 09,2016
Horn Antenna	EMCO	3115	6741	1GHz-18GHz	June 10,2015	June 09,2016
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	15GHz-40GHz	June 10,2015	June 09,2016
RF Cable-R03m	Jye Bao	RG142	CB021	30MHz-1GHz	June 18,2015	June 17,2016
RF Cable-HIGH	SUHNER	SUCOFLEX 106	03CH03-HY	1GHz-40GHz	June 18,2015	June 17,2016
Spectrum Meter	R&S	FSP 30	100023	9kHz-30GHz	July 16,2015	July 15,2016
Power Meter	R&S	NRVS	100444	DC-40GHz	June 18,2015	June 17,2016
Power Sensor	R&S	NRV-Z51	100458	DC-30GHz	June 18,2015	June 17,2016
Power Sensor	R&S	NRV-Z32	10057	30MHz-6GHz	June 18,2015	June 17,2016
RF CABLE-1m	JYE Bao	RG142	CB034-1m	20MHz-7GHz	June 18,2015	June 17,2016
RF CABLE-2m	JYE Bao	RG142	CB035-2m	20MHz-1GHz	June 18,2015	June 17,2016

Note: All equipment through GRGT EST calibration

1.6. Statement of The Measurement Uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. To CISPR 16 – 4 “Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements” and is documented in the LCS quality system acc. To DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

1.7. Measurement Uncertainty

Test Item	Frequency Range	Uncertainty	Note
Radiation Uncertainty	9KHz~30MHz	3.10dB	(1)
	30MHz~200MHz	2.96dB	(1)
	200MHz~1000MHz	3.10dB	(1)
	1GHz~26.5GHz	3.80dB	(1)
	26.5GHz~40GHz	3.90dB	(1)
Conduction Uncertainty	150kHz~30MHz	1.63dB	(1)
Power disturbance	30MHz~300MHz	1.60dB	(1)

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

1.8. Description Of Test Modes

The EUT has been tested under operating condition.

The EUT was set to transmit at 100% duty cycle. This test was performed with EUT in X, Y, Z position and the worse case was found when EUT in Y position.

There are two test configurations for the pre-testing:

Configuration 1: Configured with Switching Power Adapter (Used For Charging)

Configuration 2: Configured with Switching Power Adapter and Docking Station (Used For Charging)

For pre-testing, the input Voltage/Frequency AC 120V/60Hz and AC 240V/60Hz were used. We found that the Configuration 2(Input AC 120V/60Hz) was the worst case and used for the full test and recorded in this report.

Worst-case mode and channel used for 150kHz-30 MHz power line conducted emissions was determined to be 802.11n(HT20) mode(Low Channel, Chain 0 + Chain 1, 5745-5825MHz Band).

Worst-case mode and channel used for 9kHz-1000 MHz radiated emissions was determined to be 802.11n(HT20) mode(Low Channel, Chain 0 + Chain 1, 5745-5825MHz Band).

Worst-Case data rates were utilized from preliminary testing of the Chipset, worst-case data rates used during the testing are as follows:

802.11a Mode: 6 Mbps, OFDM.

802.11n(HT20) Mode: MCS0, OFDM.

802.11n(HT40) Mode: MCS0, OFDM.

802.11ac(VHT20) Mode: MCS0, OFDM.

802.11ac(VHT40) Mode: MCS0, OFDM.

802.11ac(VHT80) Mode: MCS0, OFDM.

Antenna & Bandwidth For 5G WIFI Part:

Antenna	Chain 0			Chain 1		
	20MHz	40MHz	80MHz	20MHz	40MHz	80MHz
802.11a	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
802.11n(HT20)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
802.11n(HT40)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
802.11ac(VHT20)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
802.11ac(VHT40)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
802.11ac(VHT80)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Channel & Frequency:

Frequency Band	Channel No.	Frequency(MHz)	Channel No.	Frequency(MHz)
5180~5240MHz	36	5180	44	5220
	38	5190	46	5230
	40	5200	48	5240
	42	5210	/	/
For 802.11a/n(HT20)/ac(VHT20), Channel 36, 40 and 48 were tested. For 802.11n(HT40)/ac(VHT40), Channel 38 and 46 were tested. For 802.11ac(VHT80), Channel 42 was tested.				
5745~5825MHz	149	5745	155	5775
	151	5755	159	5795
	153	5765	161	5805
	157	5785	165	5825
For 802.11a/n(HT20)/ac(VHT20), Channel 149, 157 and 165 were tested. For 802.11n(HT40)/ac(VHT40), Channel 151 and 159 were tested. For 802.11ac(VHT80), Channel 155 was tested.				

2. TEST METHODOLOGY

All measurements contained in this report were conducted with ANSI C63.10: 2013, 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 radiated testing was performed at an antenna-to-EUT distance of 3 meters. All radiated and conducted emissions measurement was performed at Shenzhen LCS Compliance Testing Laboratory Ltd..

2.1. EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

2.2. EUT Exercise

The EUT was operated in the engineering mode to fix the TX frequency that was for the purpose of the measurements.

According to FCC's request, Test Procedure 789033 D02 General UNII Test Procedures New Rules v01 and KDB 6622911 are required to be used for this kind of FCC 15.407 UII device.

According to its specifications, the EUT must comply with the requirements of the Section 15.203, 15.205, 15.207, 15.209 and 15.407 under the FCC Rules Part 15 Subpart E

2.3. General Test Procedures

2.3.1 Conducted Emissions

According to the requirements in Section 6.2 of ANSI C63.10: 2013, AC power-line conducted emissions shall be measured in the frequency range between 0.15 MHz and 30MHz using Quasi-peak and average detector modes.

2.3.2 Radiated Emissions

The EUT is placed on a turn table and the turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna, which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the maximum emissions, exploratory radiated emission measurements were made according to the requirements in Section 6.3 of ANSI C63.10: 2013

3. SYSTEM TEST CONFIGURATION

3.1. Justification

The system was configured for testing in a continuous transmit condition.

3.2. EUT Exercise Software

N/A

3.3. Special Accessories

N/A

3.4. Block Diagram/Schematics

Please refer to the related document

3.5. Equipment Modifications

Shenzhen LCS Compliance Testing Laboratory Ltd. has not done any modification on the EUT.

3.6. Test Setup

Please refer to the test setup photo.

4. SUMMARY OF TEST RESULTS

Applied Standard: FCC Part 15 Subpart E		
FCC Rules	Description of Test	Result
§15.407(a)	Maximum Conducted Output Power	Compliant
§15.407(a)	Power Spectral Density	Compliant
§15.407(e)	6dB & 26dB Bandwidth	Compliant
§15.205, §15.407(b)	Radiated Spurious Emissions and Band Edge	Compliant
§15.407(g)	Frequency Stability	N/A
§15.407(h)	Transmit Power Control (TPC)	N/A
§15.207(a)	Line Conducted Emissions	Compliant
§15.203	Antenna Requirements	Compliant

Note: The customer declared frequency stability is better than 20ppm which ensures that the signal remains in the allocated bands under all operational conditions stated in the user manual.

5. TEST RESULT

5.1. Maximum Conducted Output Power Measurement

5.1.1. Standard Applicable

According to § 15.407(a)(1)(i), For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

According to § 15.407(a)(1)(ii), For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi.

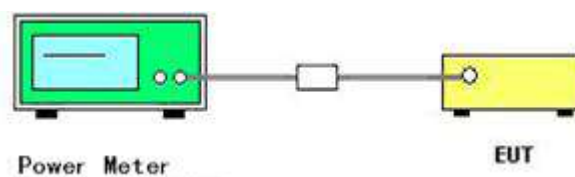
According to § 15.407(a)(1)(iv), For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi.

According to § 15.407(a)(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.

5.1.2. Test Procedures

The transmitter output (antenna port) was connected to the power meter.

5.1.3. Test Setup Layout



5.1.4. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

5.1.5. Test Result of Maximum Conducted Output Power

Temperature	25°C	Humidity	60%
Test Engineer	Leo	Configurations	802.11a/n/ac

Maximum Conducted Output Power Measurement Result For 5180~5240MHz Band

802.11a

Channel	Frequency (MHz)	Conducted Power(dBm, Average)		Max. Limit (dBm)	Result
		Chain 0	Chain 1		
36	5180	11.01	10.87	24	Complies
40	5200	11.07	10.93	24	Complies
48	5240	11.15	11.01	24	Complies

802.11n(HT20)

Channel	Frequency (MHz)	Conducted Power(dBm, Average)			Max. Limit (dBm)	Result
		Chain 0	Chain 1	Chain 0+ Chain 1		
36	5180	9.91	9.46	12.70	24	Complies
40	5200	9.95	9.51	12.75	24	Complies
48	5240	10.03	9.54	12.80	24	Complies

802.11n(HT40)

Channel	Frequency (MHz)	Conducted Power(dBm, Average)			Max. Limit (dBm)	Result
		Chain 0	Chain 1	Chain 0+ Chain 1		
38	5190	7.57	7.52	10.56	24	Complies
46	5230	7.61	7.57	10.60	24	Complies

802.11ac(VHT20)

Channel	Frequency (MHz)	Conducted Power(dBm, Average)			Max. Limit (dBm)	Result
		Chain 0	Chain 1	Chain 0+ Chain 1		
36	5180	7.71	7.64	10.69	24	Complies
40	5200	7.76	7.71	10.75	24	Complies
48	5240	7.81	7.77	10.80	24	Complies

802.11ac(VHT40)

Channel	Frequency (MHz)	Conducted Power(dBm, Average)			Max. Limit (dBm)	Result
		Chain 0	Chain 1	Chain 0+ Chain 1		
38	5190	8.87	8.79	11.84	24	Complies
46	5230	8.93	8.86	11.91	24	Complies

802.11ac(VHT80)

Channel	Frequency (MHz)	Conducted Power(dBm, Average)			Max. Limit (dBm)	Result
		Chain 0	Chain 1	Chain 0+ Chain 1		
42	5210	9.61	9.53	12.58	24	Complies

Maximum Conducted Output Power Measurement Result For 5745~5825MHz Band

802.11a

Channel	Frequency (MHz)	Conducted Power(dBm, Average)		Max. Limit (dBm)	Result
		Chain 0	Chain 1		
149	5745	12.31	12.16	30	Complies
157	5785	12.37	12.21	30	Complies
165	5825	12.41	12.28	30	Complies

802.11n(HT20)

Channel	Frequency (MHz)	Conducted Power(dBm, Average)			Max. Limit (dBm)	Result
		Chain 0	Chain 1	Chain 0+ Chain 1		
149	5745	10.91	10.76	13.85	30	Complies
157	5785	10.64	10.69	13.68	30	Complies
165	5825	10.80	10.73	13.78	30	Complies

802.11n(HT40)

Channel	Frequency (MHz)	Conducted Power(dBm, Average)			Max. Limit (dBm)	Result
		Chain 0	Chain 1	Chain 0+ Chain 1		
151	5755	9.20	9.15	12.19	30	Complies
159	5795	9.09	9.01	12.06	30	Complies

802.11ac(VHT20)

Channel	Frequency (MHz)	Conducted Power(dBm, Average)			Max. Limit (dBm)	Result
		Chain 0	Chain 1	Chain 0+ Chain 1		
149	5745	8.91	8.84	11.89	30	Complies
157	5785	8.67	8.61	11.65	30	Complies
165	5825	8.83	8.75	11.80	30	Complies

802.11ac(VHT40)

Channel	Frequency (MHz)	Conducted Power(dBm, Average)			Max. Limit (dBm)	Result
		Chain 0	Chain 1	Chain 0+ Chain 1		
151	5755	8.89	8.81	11.86	30	Complies
159	5795	8.73	8.66	11.71	30	Complies

802.11ac(VHT80)

Channel	Frequency (MHz)	Conducted Power(dBm, Average)			Max. Limit (dBm)	Result
		Chain 0	Chain 1	Chain 0+ Chain 1		
155	5775	10.15	10.03	13.10	30	Complies

5.2. Power Spectral Density Measurement

5.2.1. Standard Applicable

According to § 15.407(a)(1)(i), For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band.

According to § 15.407(a)(1)(ii), For an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band.

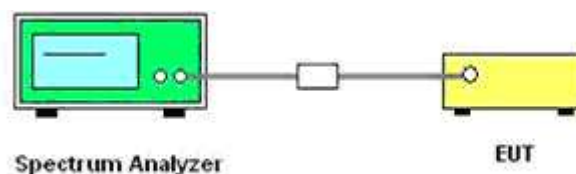
According to § 15.407(a)(1)(iv), For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band.

According to § 15.407(a)(3), For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band.

5.2.2. Test Procedures

- 1) The transmitter was connected directly to a Spectrum Analyzer through a directional coupler.
- 2) The power was monitored at the coupler port with a Spectrum Analyzer. The power level was set to the maximum level.
- 3) Set the RBW = 1MHz.
- 4) Set the VBW \geq 3MHz.
- 5) Set the span to encompass the entire emission bandwidth of the signal.
- 6) Detector = RMS.
- 7) Sweep time = auto couple.
- 8) Trace mode = max hold.
- 9) Allow trace to fully stabilize.
- 10) Use the peak marker function to determine the maximum amplitude level.

5.2.3. Test Setup Layout



5.2.4. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

5.2.5. Test Result of Power Spectral Density

Temperature	25°C	Humidity	60%
Test Engineer	Leo	Configurations	802.11a/n/ac

Power Spectral Density Measurement Result For 5180~5240MHz Band

802.11a

Channel	Frequency (MHz)	Power Density(dBm/MHz)		Max. Limit (dBm/MHz)	Result
		Chain 0	Chain 1		
36	5180	0.90	0.52	11	Complies
40	5200	1.18	0.64	11	Complies
48	5240	1.33	1.00	11	Complies

802.11n(HT20)

Channel	Frequency (MHz)	Power Density(dBm/MHz)			Max. Limit (dBm/MHz)	Result
		Chain 0	Chain 1	Chain 0+Chain 1		
36	5180	0.49	-1.17	2.75	11	Complies
40	5200	-0.08	-0.72	2.62	11	Complies
48	5240	-0.41	-0.42	2.60	11	Complies

802.11n(HT40)

Channel	Frequency (MHz)	Power Density(dBm/MHz)			Max. Limit (dBm/MHz)	Result
		Chain 0	Chain 1	Chain 0+Chain 1		
38	5190	-3.47	-2.92	-0.18	11	Complies
46	5230	-2.82	-3.54	-0.15	11	Complies

802.11ac(VHT20)

Channel	Frequency (MHz)	Power Density(dBm/MHz)			Max. Limit (dBm/MHz)	Result
		Chain 0	Chain 1	Chain 0+Chain 1		
36	5180	-1.60	-2.73	0.88	11	Complies
40	5200	-1.77	-1.98	1.14	11	Complies
48	5240	-1.77	-2.12	1.07	11	Complies

802.11ac(VHT40)

Channel	Frequency (MHz)	Power Density(dBm/MHz)			Max. Limit (dBm/MHz)	Result
		Chain 0	Chain 1	Chain 0+Chain 1		
38	5190	-5.10	-5.62	-2.34	11	Complies
46	5230	-4.73	-5.47	-2.07	11	Complies

802.11ac(VHT80)

Channel	Frequency (MHz)	Power Density(dBm/MHz)			Max. Limit (dBm/MHz)	Result
		Chain 0	Chain 1	Chain 0+Chain 1		
42	5210	-9.15	-8.91	-6.02	11	Complies

Power Spectral Density Measurement Result For 5745~5825MHz Band

802.11a

Channel	Frequency (MHz)	Power Density(dBm/500KHz)		Max. Limit (dBm/500KHz)	Result
		Chain 0	Chain 1		
149	5745	-0.92	-0.45	30	Complies
157	5785	-0.22	-0.55	30	Complies
165	5825	0.77	-0.50	30	Complies

802.11n(HT20)

Channel	Frequency (MHz)	Power Density(dBm/500KHz)			Max. Limit (dBm/500KHz)	Result
		Chain 0	Chain 1	Chain 0+Chain 1		
149	5745	-1.40	-0.31	2.19	30	Complies
157	5785	-0.95	-1.60	1.75	30	Complies
165	5825	-1.18	-0.80	2.02	30	Complies

802.11n(HT40)

Channel	Frequency (MHz)	Power Density(dBm/500KHz)			Max. Limit (dBm/500KHz)	Result
		Chain 0	Chain 1	Chain 0+Chain 1		
151	5755	-4.17	-2.78	-0.41	30	Complies
159	5795	-2.98	-3.97	-0.44	30	Complies

802.11ac(VHT20)

Channel	Frequency (MHz)	Power Density(dBm/500KHz)			Max. Limit (dBm/500KHz)	Result
		Chain 0	Chain 1	Chain 0+Chain 1		
149	5745	-2.26	-3.50	0.17	30	Complies
157	5785	-2.34	-2.83	0.43	30	Complies
165	5825	-1.33	-2.94	0.95	30	Complies

802.11ac(VHT40)

Channel	Frequency (MHz)	Power Density(dBm/500KHz)			Max. Limit (dBm/500KHz)	Result
		Chain 0	Chain 1	Chain 0+Chain 1		
151	5755	-5.64	-5.74	-2.68	30	Complies
159	5795	-5.90	-5.31	-2.58	30	Complies

802.11ac(VHT80)

Channel	Frequency (MHz)	Power Density(dBm/500KHz)			Max. Limit (dBm/500KHz)	Result
		Chain 0	Chain 1	Chain 0+Chain 1		
155	5775	-9.99	-9.65	-6.81	30	Complies

Note: BW correction factor = $10\log(500\text{kHz}/\text{RBW}) = 10\log(500\text{kHz}/1000\text{KHz}) = -3.01$

The measured power density (dBm) has the offset with cable loss already.



Test Plot For 802.11a-5180M-Chain 0



Test Plot For 802.11a-5180M-Chain 1



Test Plot For 802.11a-5200M-Chain 0



Test Plot For 802.11a-5200M-Chain 1



Test Plot For 802.11a-5240M-Chain 0



Test Plot For 802.11a-5240M-Chain 1



Test Plot For 802.11n(HT20)-5180M-Chain 0



Test Plot For 802.11n(HT20)-5180M-Chain 1



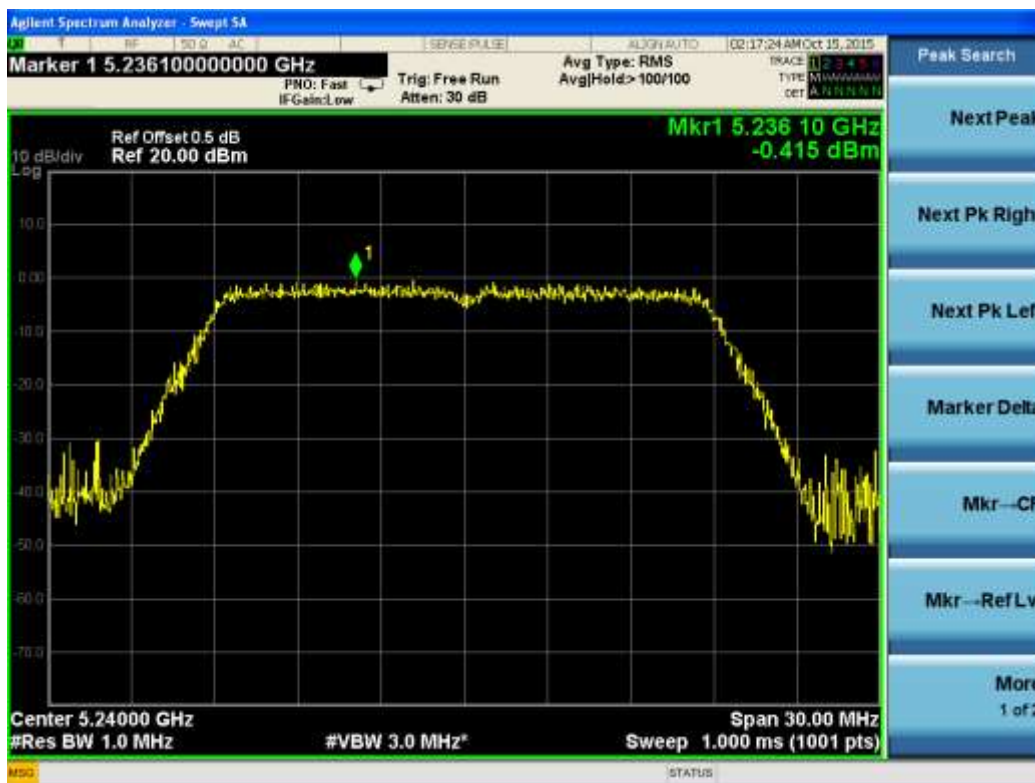
Test Plot For 802.11n(HT20)-5200M-Chain 0



Test Plot For 802.11n(HT20)-5200M-Chain 1



Test Plot For 802.11n(HT20)-5240M-Chain 0



Test Plot For 802.11n(HT20)-5240M-Chain 1



Test Plot For 802.11n(HT40)-5190M-Chain 0



Test Plot For 802.11n(HT40)-5190M-Chain 1



Test Plot For 802.11n(HT40)-5230M-Chain 0



Test Plot For 802.11n(HT40)-5230M-Chain 1



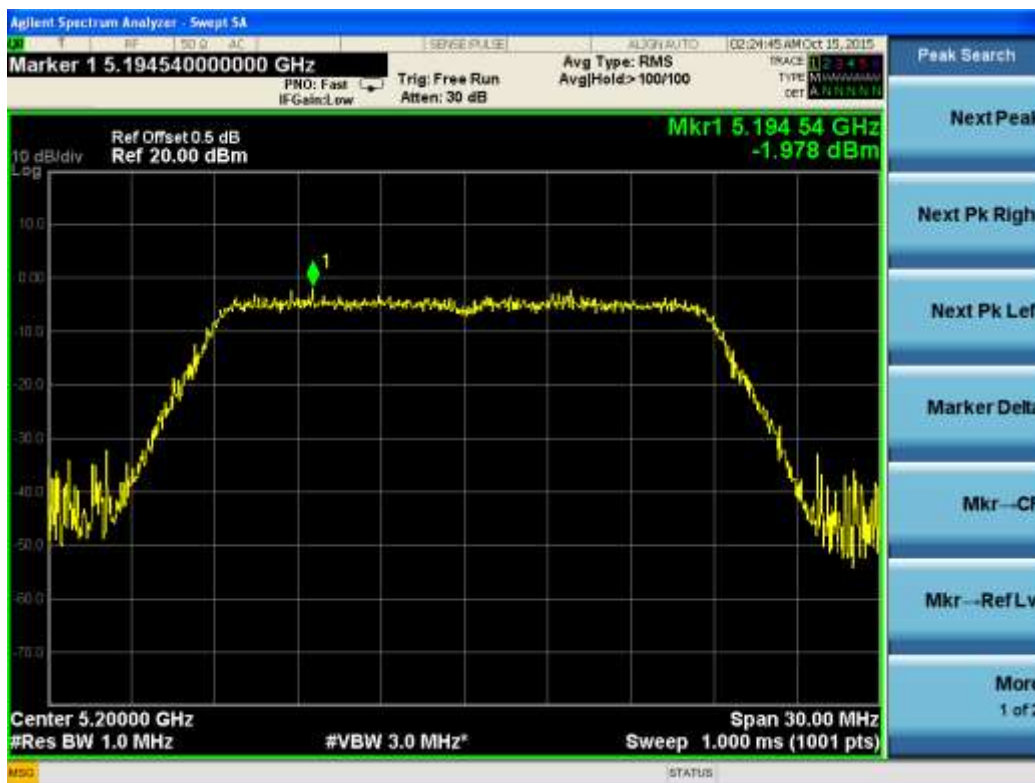
Test Plot For 802.11ac(VHT20)-5180M-Chain 0



Test Plot For 802.11ac(VHT20)-5180M-Chain 1



Test Plot For 802.11ac(VHT20)-5200M-Chain 0



Test Plot For 802.11ac(VHT20)-5200M-Chain 1



Test Plot For 802.11ac(VHT20)-5240M-Chain 0



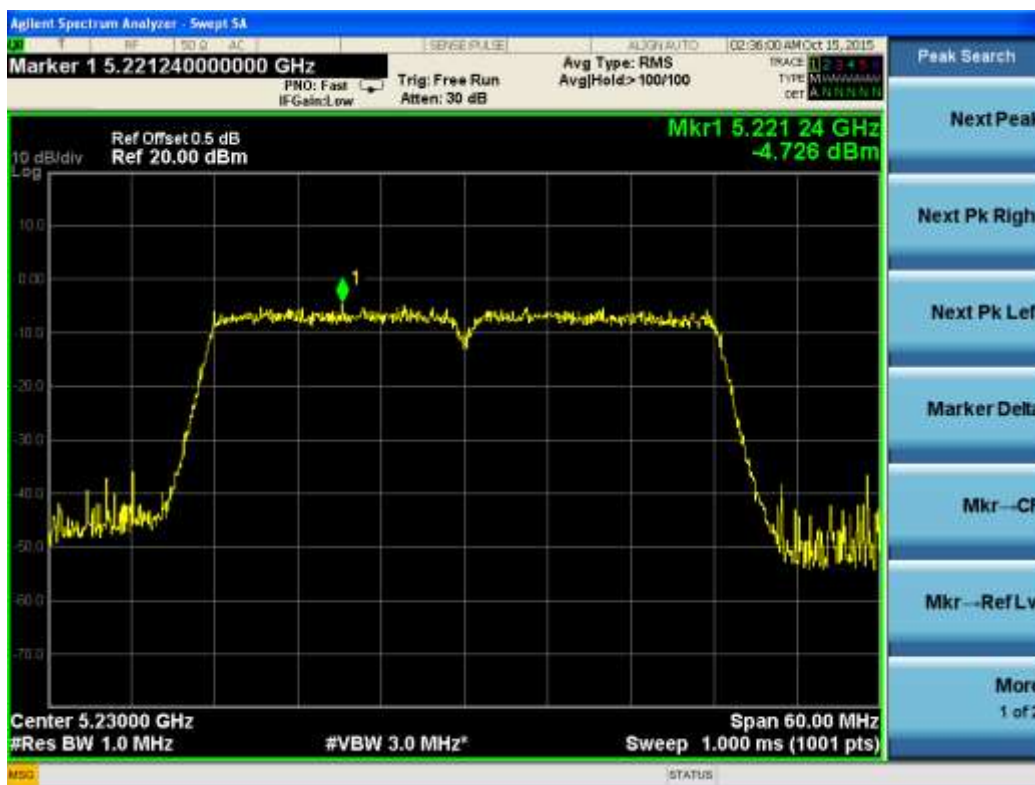
Test Plot For 802.11ac(VHT20)-5240M-Chain 1



Test Plot For 802.11ac(VHT40)-5190M-Chain 0



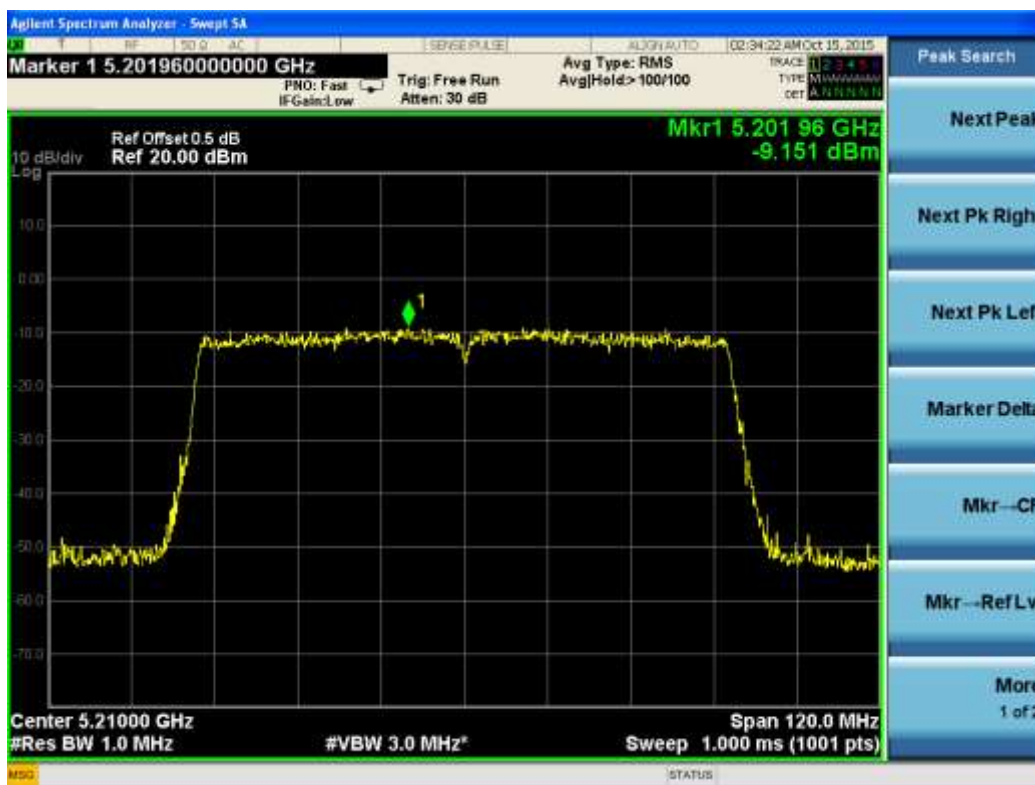
Test Plot For 802.11ac(VHT40)-5190M-Chain 1



Test Plot For 802.11ac(VHT40)-5230M-Chain 0



Test Plot For 802.11ac(VHT40)-5230M-Chain 1



Test Plot For 802.11ac(VHT80)-5210M-Chain 0



Test Plot For 802.11ac(VHT80)-5210M-Chain 1



Test Plot For 802.11a-5745M-Chain 0



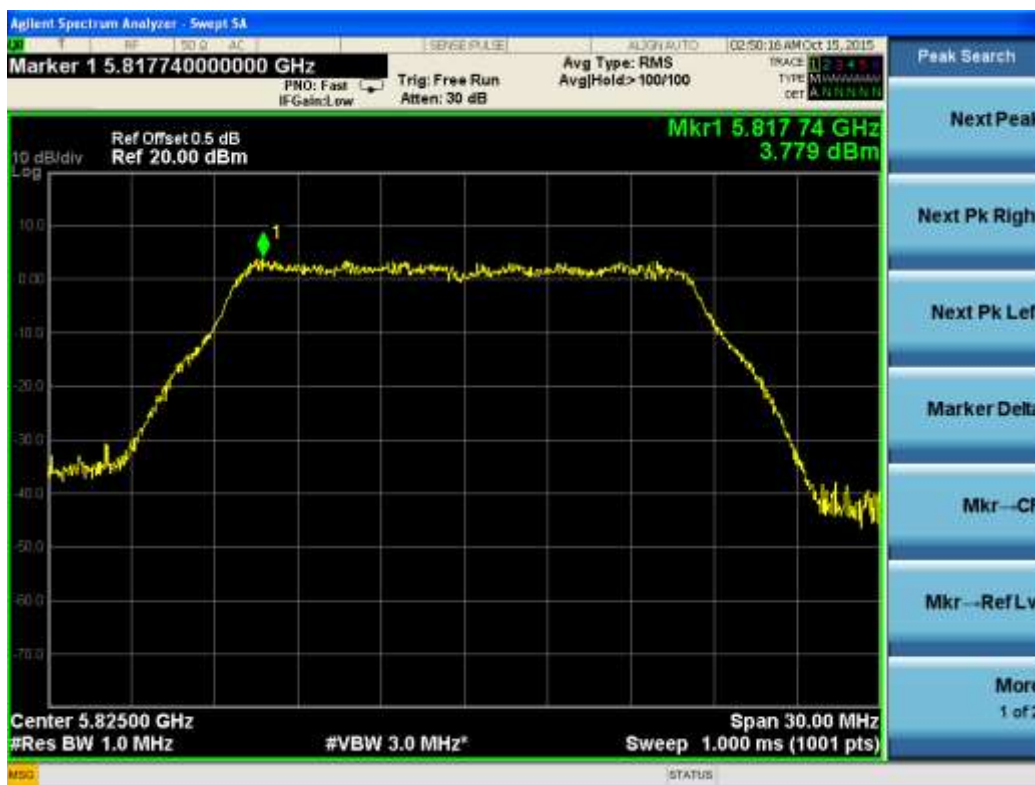
Test Plot For 802.11a-5745M-Chain 1



Test Plot For 802.11a-5785M-Chain 0



Test Plot For 802.11a-5785M-Chain 1



Test Plot For 802.11a-5825M-Chain 0



Test Plot For 802.11a-5825M-Chain 1



Test Plot For 802.11n(HT20)-5745M-Chain 0



Test Plot For 802.11n(HT20)-5745M-Chain 1



Test Plot For 802.11n(HT20)-5785M-Chain 0



Test Plot For 802.11n(HT20)-5785M-Chain 1



Test Plot For 802.11n(HT20)-5825M-Chain 0



Test Plot For 802.11n(HT20)-5825M-Chain 1



Test Plot For 802.11n(HT40)-5755M-Chain 0



Test Plot For 802.11n(HT40)-5755M-Chain 1



Test Plot For 802.11n(HT40)-5795M-Chain 0



Test Plot For 802.11n(HT40)-5795M-Chain 1



Test Plot For 802.11ac(VHT20)-5745M-Chain 0



Test Plot For 802.11ac(VHT20)-5745M-Chain 1



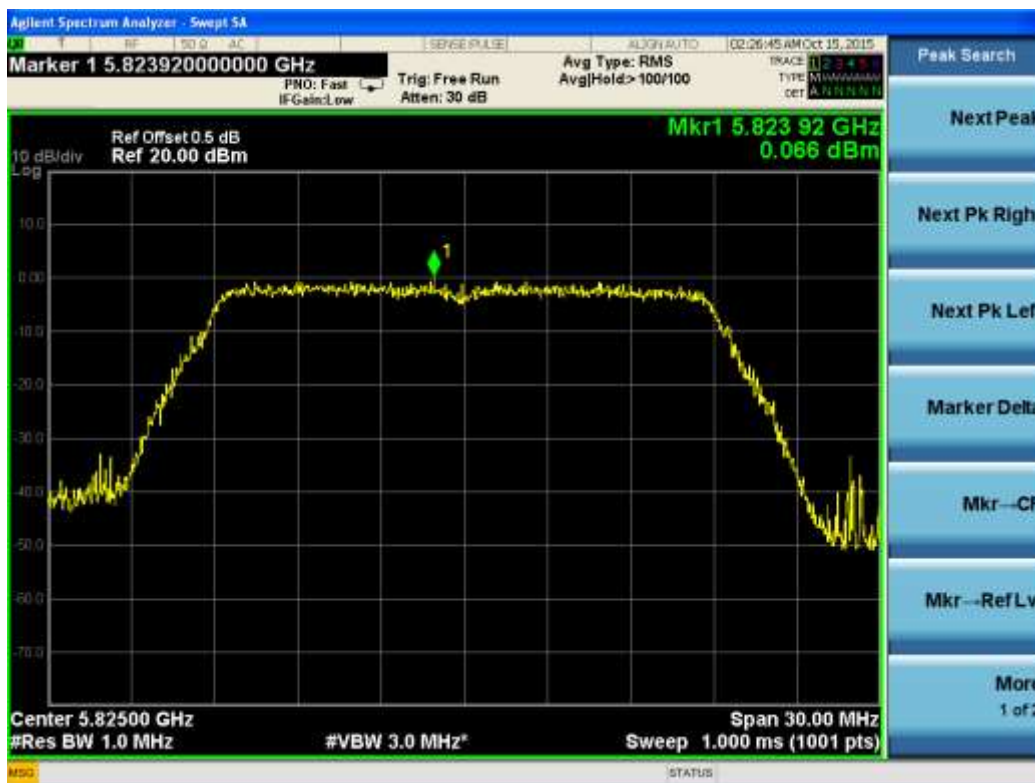
Test Plot For 802.11ac(VHT20)-5785M-Chain 0



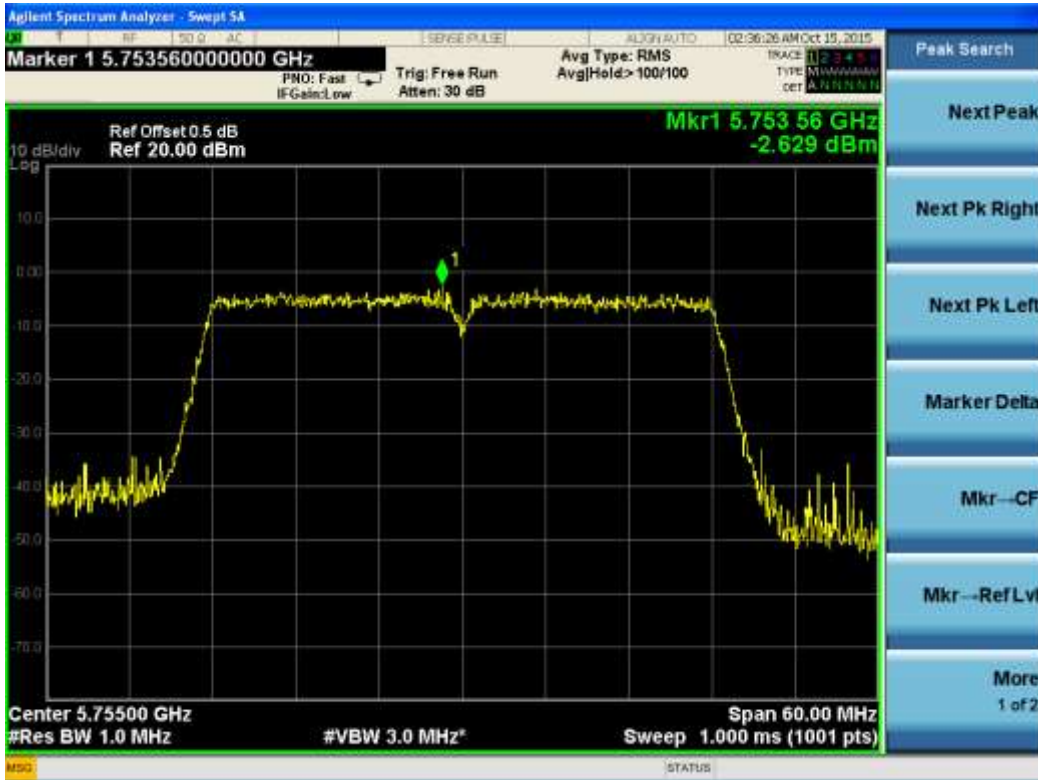
Test Plot For 802.11ac(VHT20)-5785M-Chain 1



Test Plot For 802.11ac(VHT20)-5825M-Chain 0



Test Plot For 802.11ac(VHT20)-5825M-Chain 1



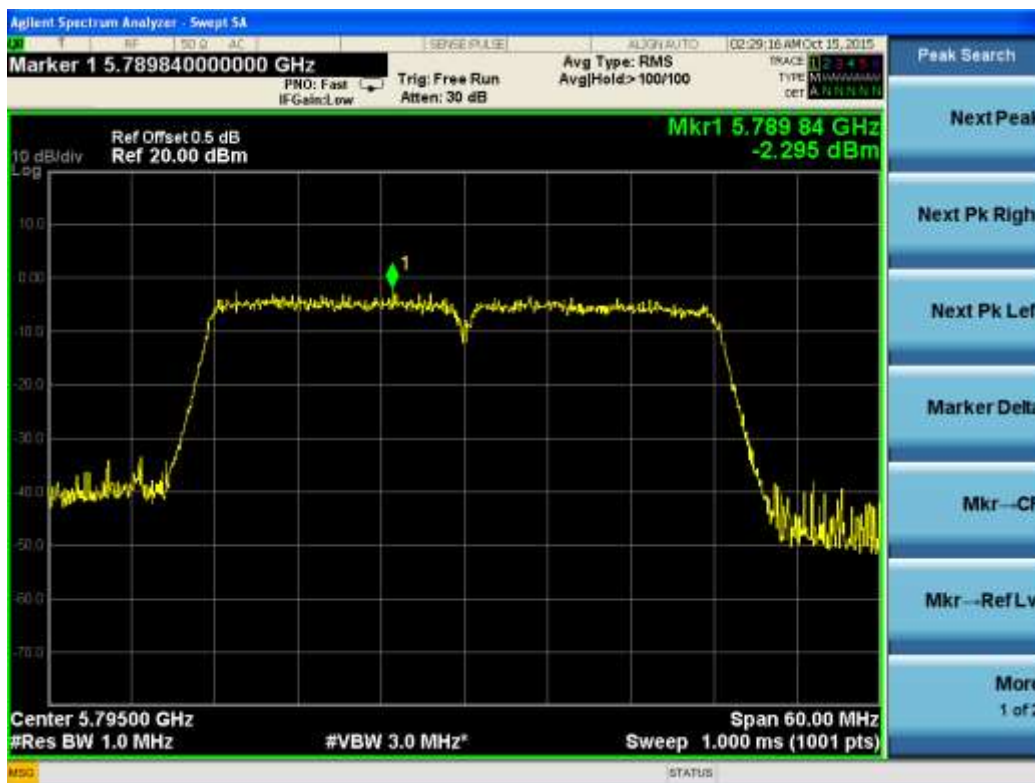
Test Plot For 802.11ac(VHT40)-5755M-Chain 0



Test Plot For 802.11ac(VHT40)-5755M-Chain 1



Test Plot For 802.11ac(VHT40)-5795M-Chain 0



Test Plot For 802.11ac(VHT40)-5795M-Chain 1



Test Plot For 802.11ac(VHT80)-5775M-Chain 0



Test Plot For 802.11ac(VHT80)-5775M-Chain 1

5.3. 6dB & 26dB Bandwidth Measurement

5.3.1. Standard Applicable

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

There is no restriction limits for 26dB & 99% occupied bandwidth, report only for reference.

5.3.2. Instruments Setting

The following table is the setting of the Spectrum Analyzer.

6dB Bandwidth Measurement (Only For 5745~5825MHz Band)	
Spectrum Parameter	Setting
Attenuation	Auto
RBW	100KHz
VBW	$\geq 3 \times \text{RBW}$
Detector	Peak
Trace	Max Hold

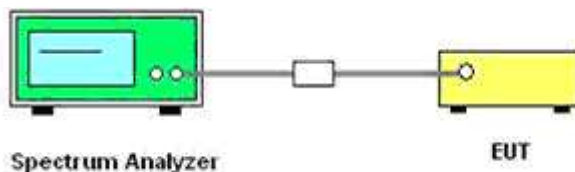
26dB & 99%Bandwidth Measurement (Only For 5180~5240MHz Band)	
Spectrum Parameter	Setting
Attenuation	Auto
RBW	approximately 1% of the emission bandwidth
VBW	$\geq \text{RBW}$
Detector	Peak
Trace	Max Hold

5

5.3.3. Test Procedures

- 1) The transmitter output (antenna port) was connected to the spectrum analyser in peak hold mode.
- 2) The resolution bandwidth and the video bandwidth were set according to KDB 789033 D02 General UNII Test Procedures New Rules v01
- 3) For 5745~5825MHz Band, Measured the maximum width of the emission that is 6dB down from the peak of the emission.
- 4) For 5180~5240MHz Band, Measured the maximum width of the emission that is 26dB down from the peak of the emission. Record the 26dB & 99% Bandwidth.

5.3.4. Test Setup Layout



5.3.5. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

5.3.6. Test Result of Spectrum Bandwidth

Temperature	25°C	Humidity	60%
Test Engineer	Leo	Configurations	802.11a/n/ac

802.11a

Channel	Frequency	6dB Bandwidth (MHz, Chain 0)	6dB Bandwidth (MHz, Chain 1)	Min. Limit (kHz)	Result
149	5745	16.42	16.40	500	Complies
157	5785	16.42	16.43	500	Complies
165	5825	16.38	16.41	500	Complies

802.11n(HT20)

Channel	Frequency	6dB Bandwidth (MHz, Chain 0)	6dB Bandwidth (MHz, Chain 1)	Min. Limit (kHz)	Result
149	5745	17.71	17.72	500	Complies
157	5785	17.69	17.70	500	Complies
165	5825	17.71	17.71	500	Complies

802.11n(HT40)

Channel	Frequency	6dB Bandwidth (MHz, Chain 0)	6dB Bandwidth (MHz, Chain 1)	Min. Limit (kHz)	Result
151	5755	36.50	36.46	500	Complies
159	5795	36.51	35.45	500	Complies

802.11ac(VHT20)

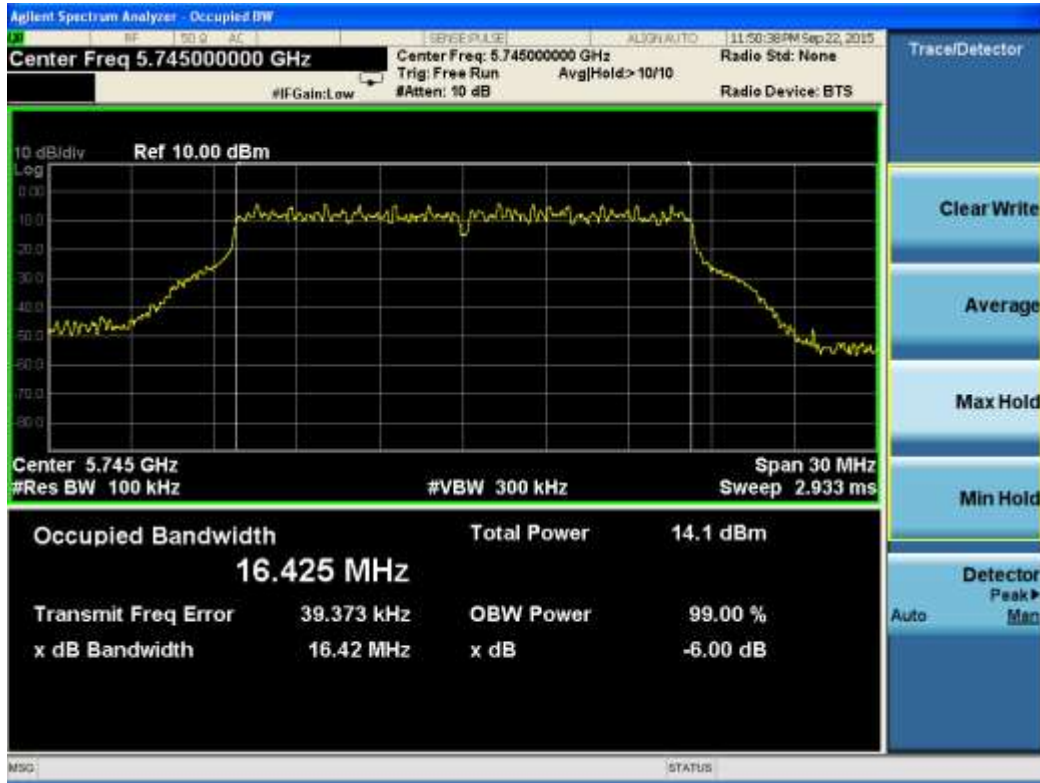
Channel	Frequency	6dB Bandwidth (MHz, Chain 0)	6dB Bandwidth (MHz, Chain 1)	Min. Limit (kHz)	Result
149	5745	17.62	17.61	500	Complies
157	5785	17.59	17.57	500	Complies
165	5825	17.64	17.66	500	Complies

802.11ac(VHT40)

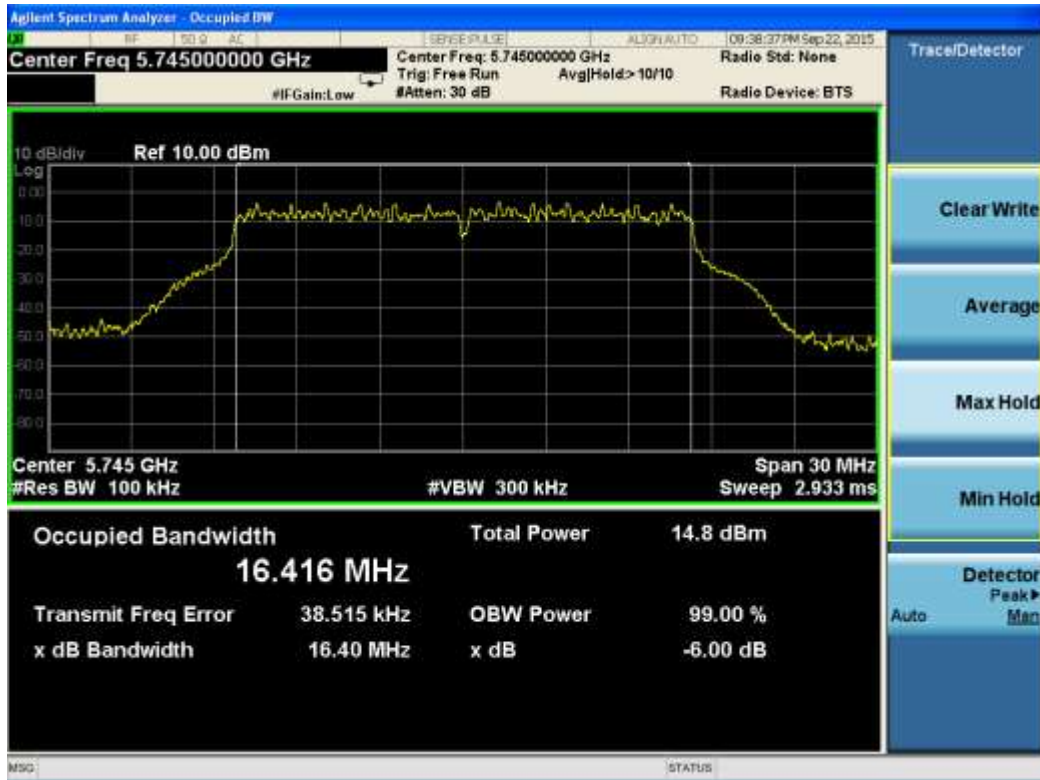
Channel	Frequency	6dB Bandwidth (MHz, Chain 0)	6dB Bandwidth (MHz, Chain 1)	Min. Limit (kHz)	Result
151	5755	36.45	36.45	500	Complies
159	5795	36.42	36.42	500	Complies

802.11ac(VHT80)

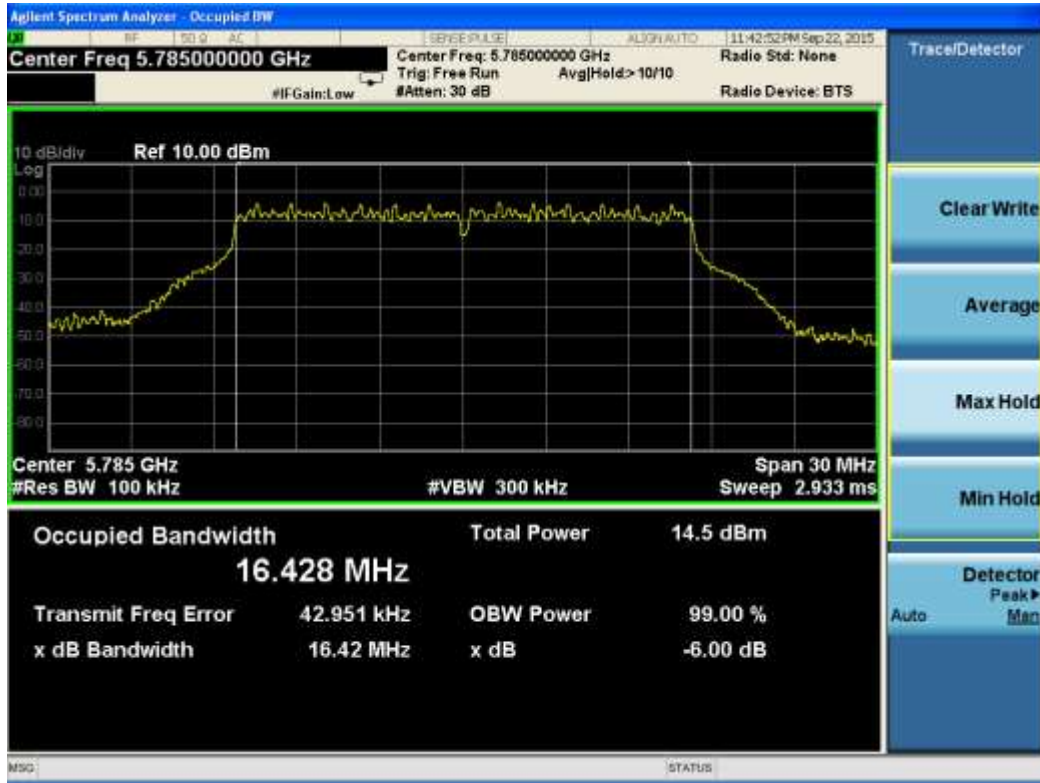
Channel	Frequency	6dB Bandwidth (MHz, Chain 0)	6dB Bandwidth (MHz, Chain 1)	Min. Limit (kHz)	Result
155	5775	75.59	75.83	500	Complies



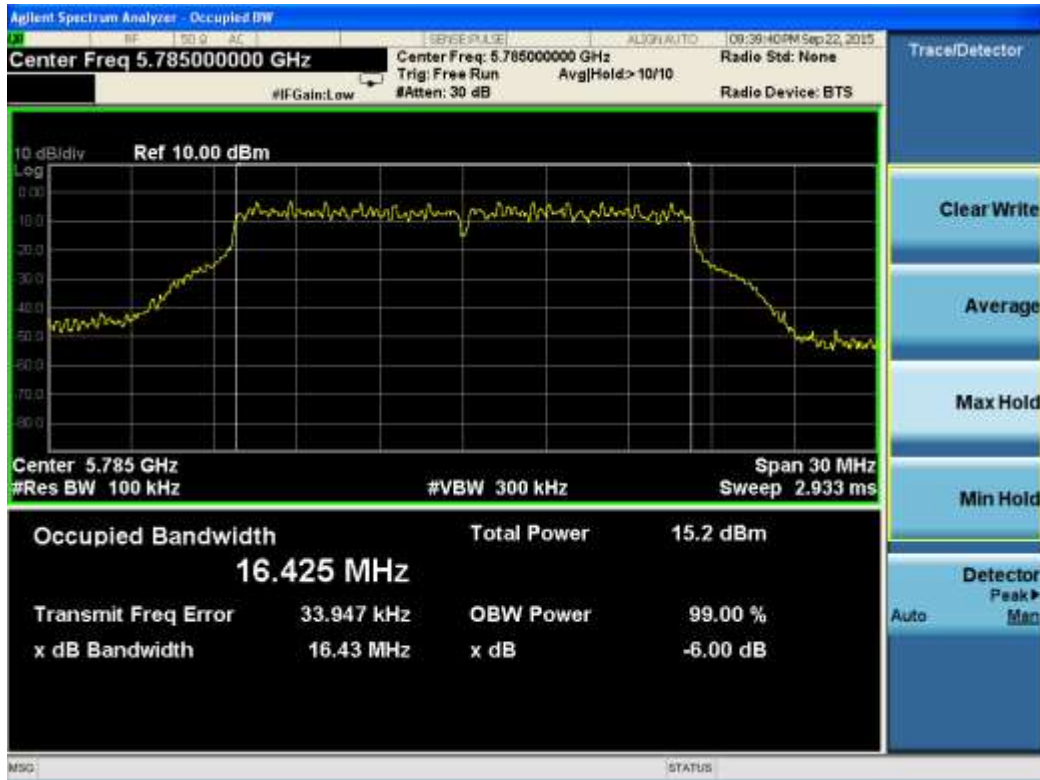
Test Plot For 802.11a-6dB BW-5745M-Chain 0



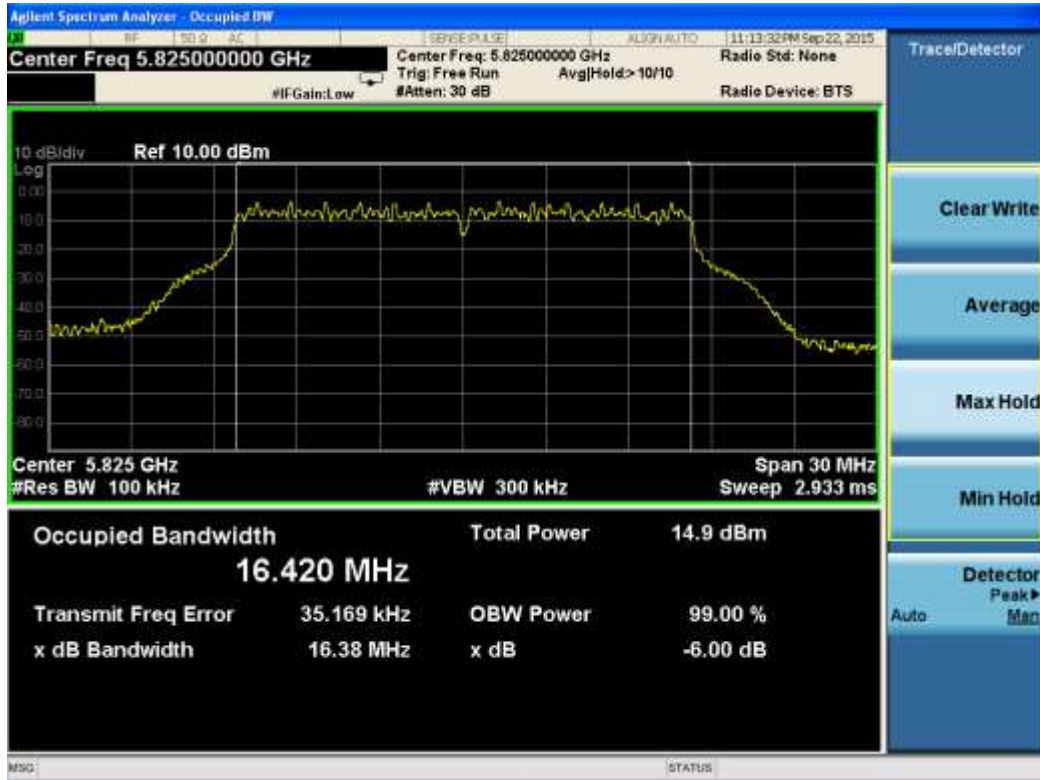
Test Plot For 802.11a-6dB BW-5745M-Chain 1



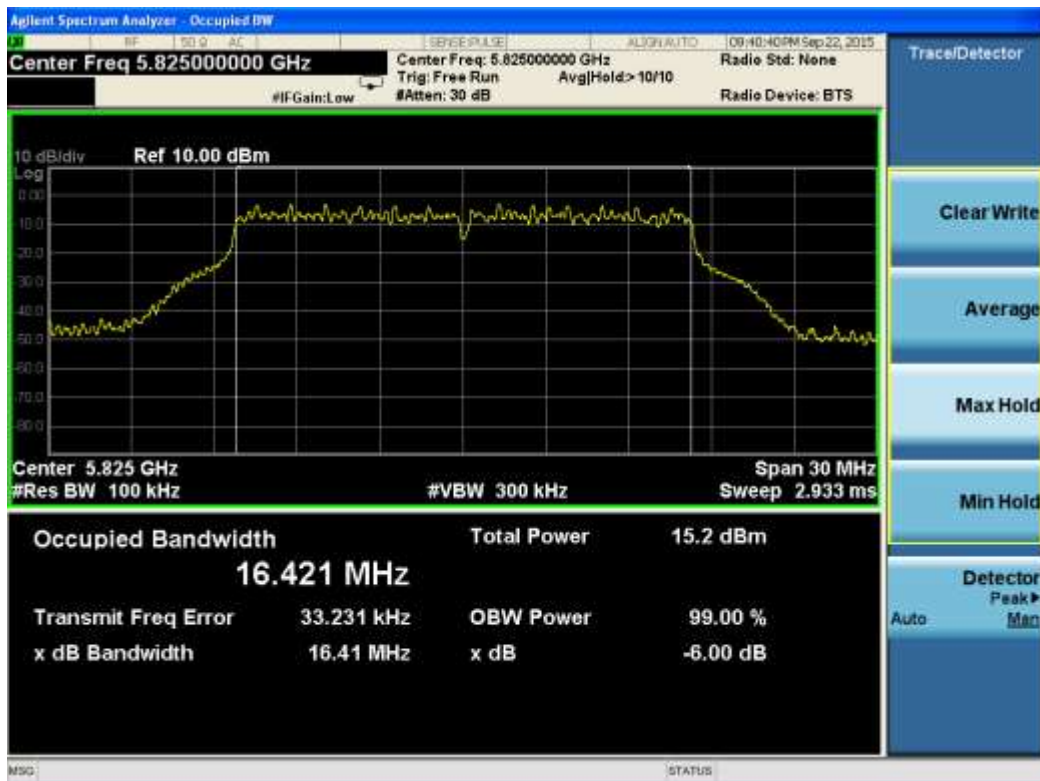
Test Plot For 802.11a-6dB BW-5785M-Chain 0



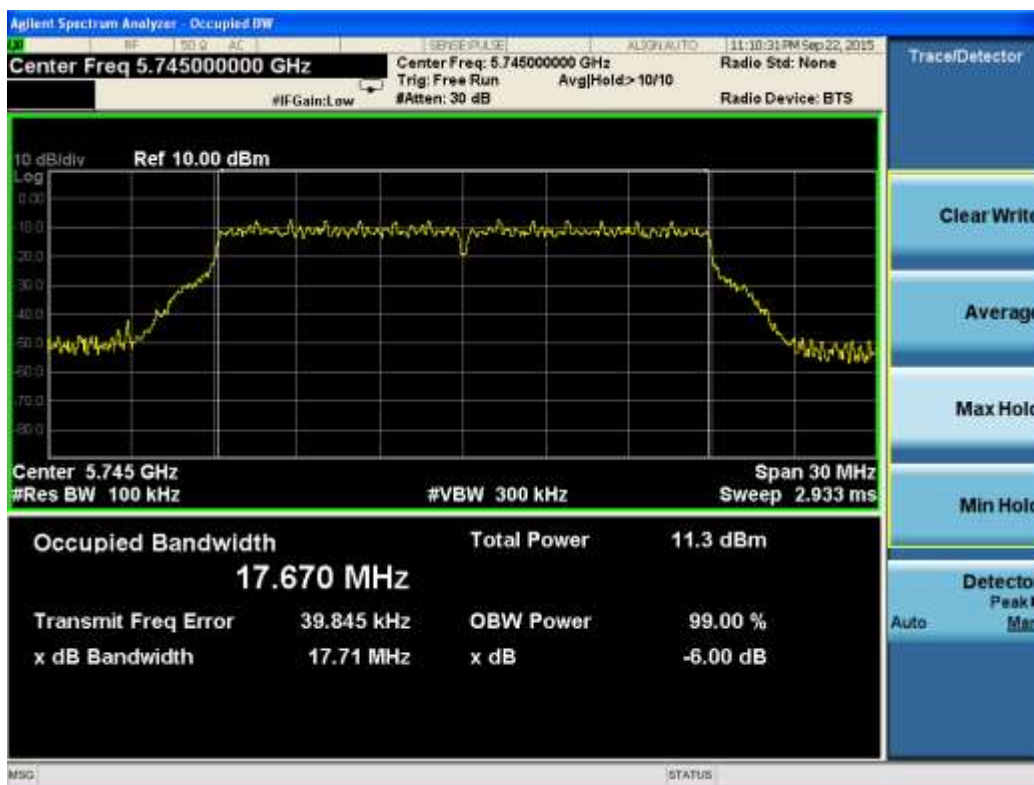
Test Plot For 802.11a-6dB BW-5785M-Chain 1



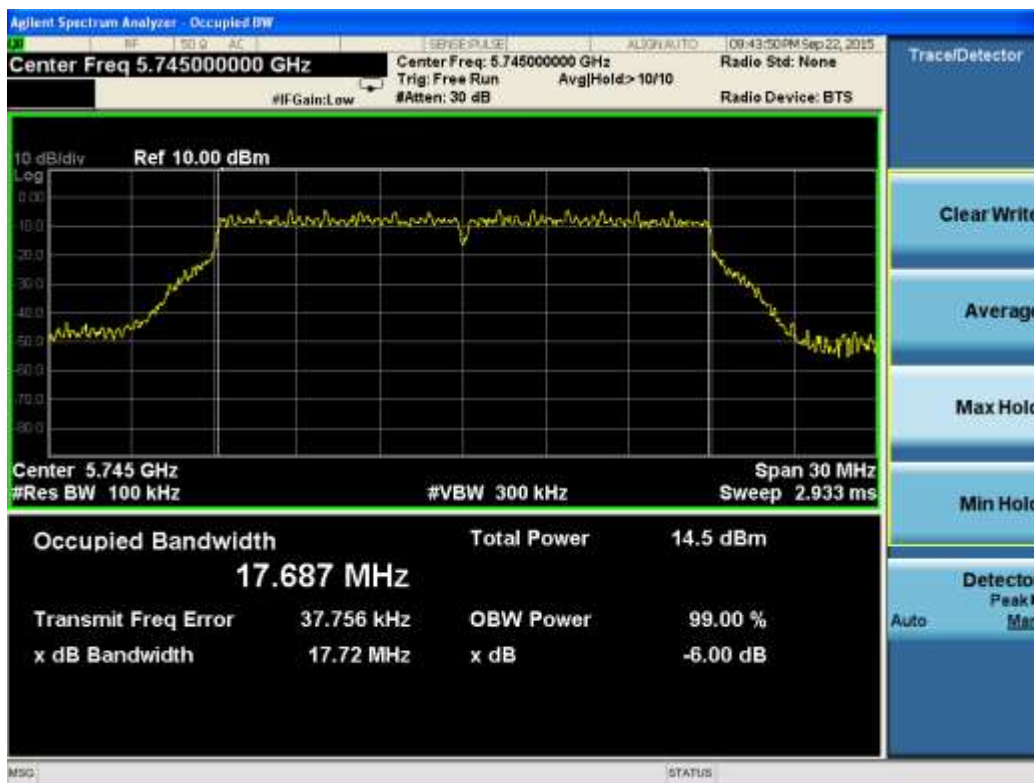
Test Plot For 802.11a-6dB BW-5825M-Chain 0



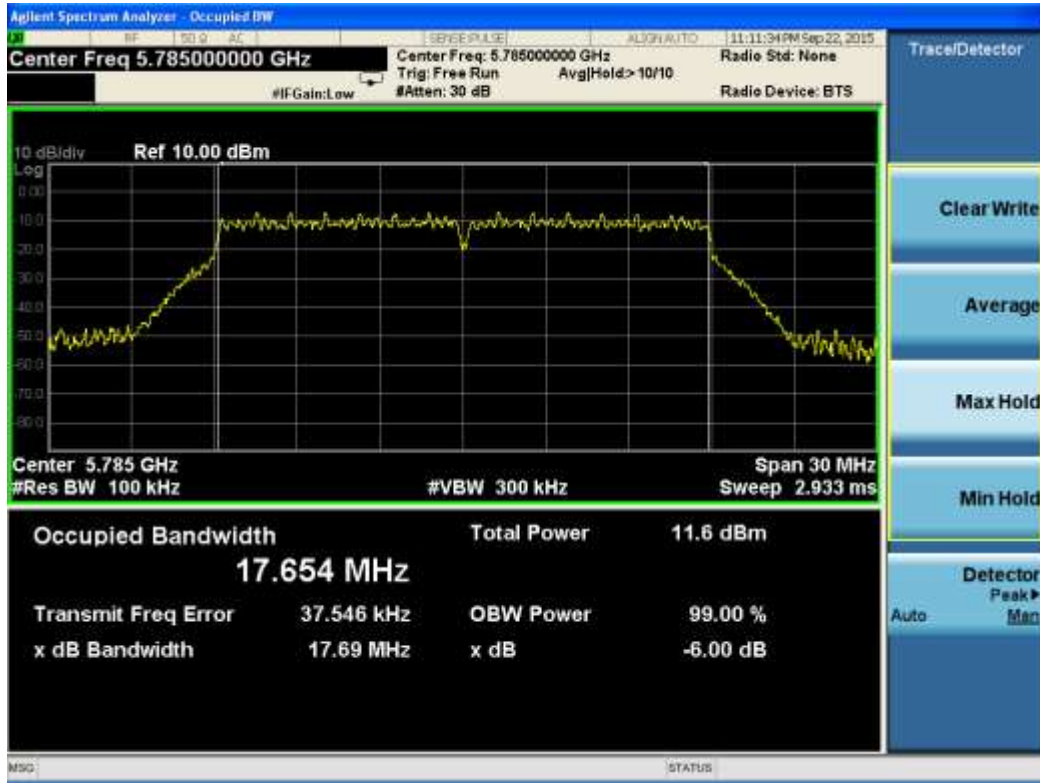
Test Plot For 802.11a-6dB BW-5825M-Chain 1



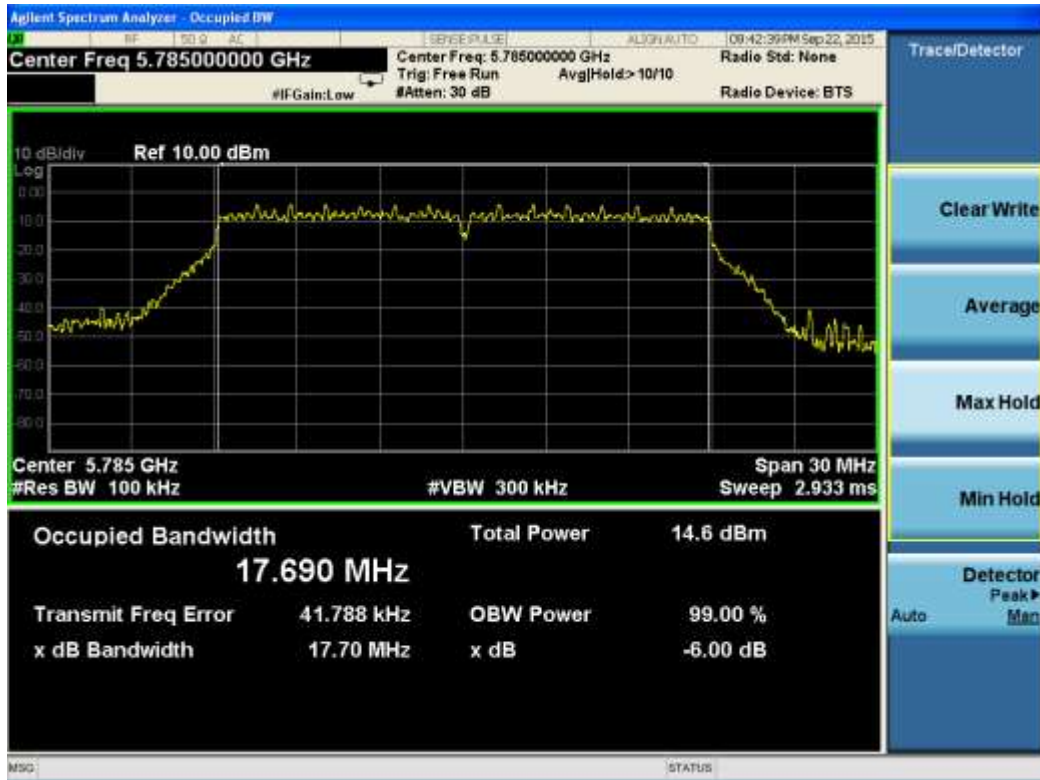
Test Plot For 802.11n(HT20)-6dB BW-5745M-Chain 0



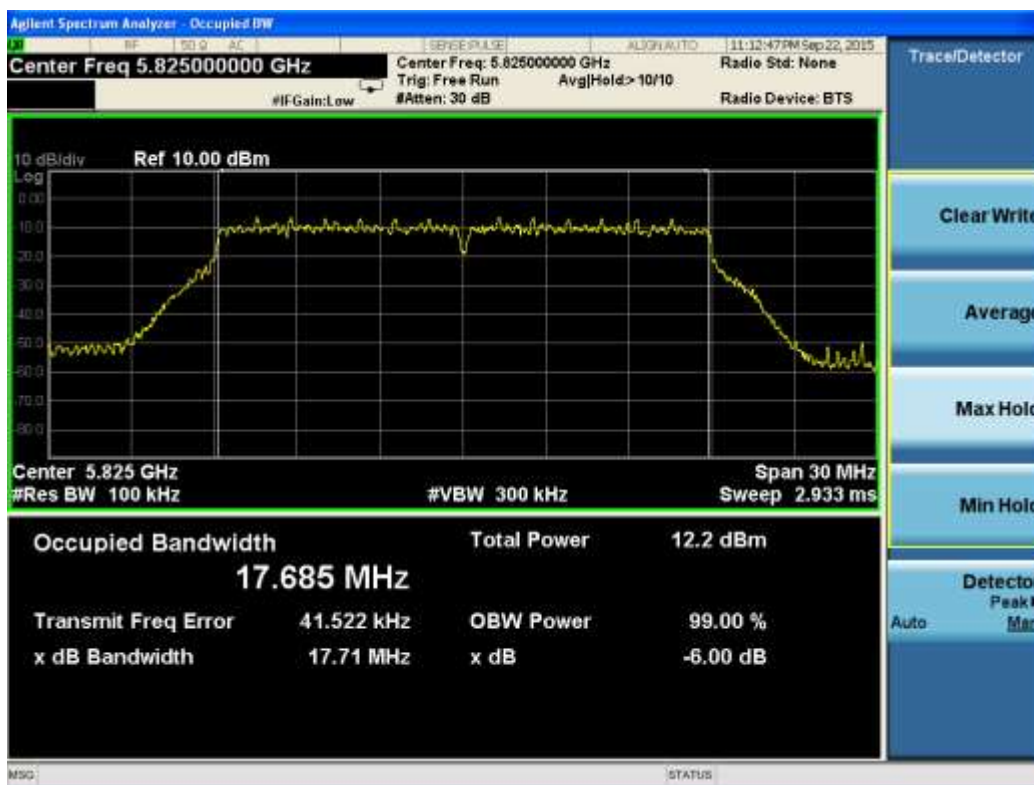
Test Plot For 802.11n(HT20)-6dB BW-5745M-Chain 1



Test Plot For 802.11n(HT20)-6dB BW-5785M-Chain 0



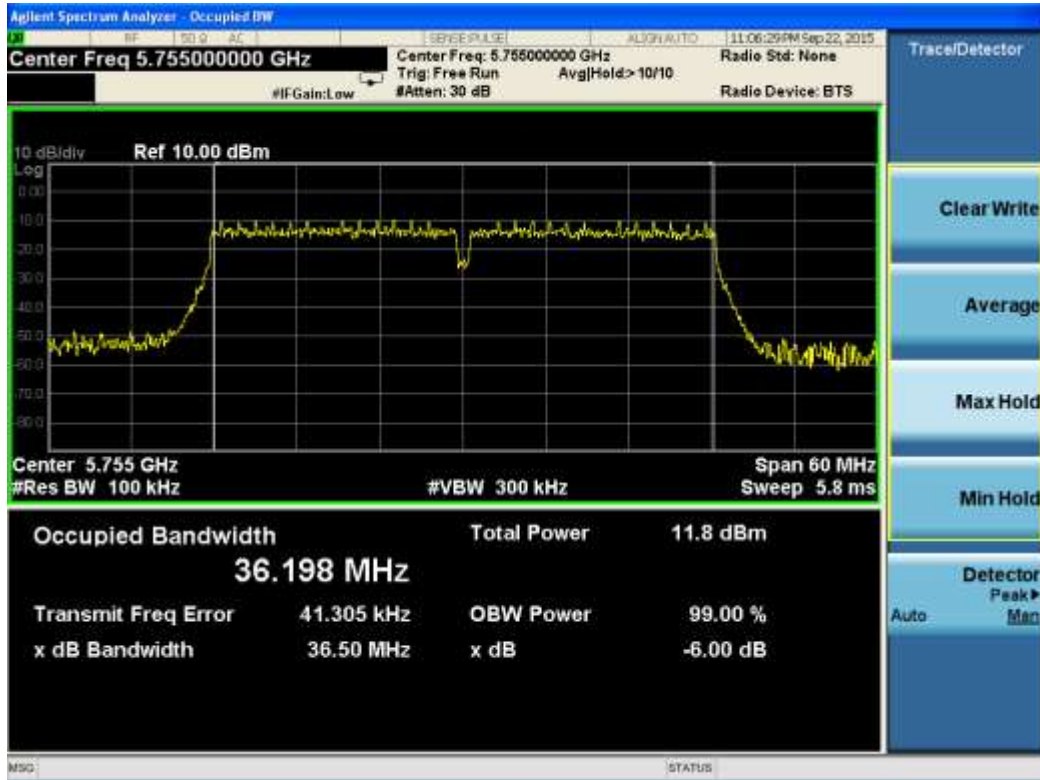
Test Plot For 802.11n(HT20)-6dB BW-5785M-Chain 1



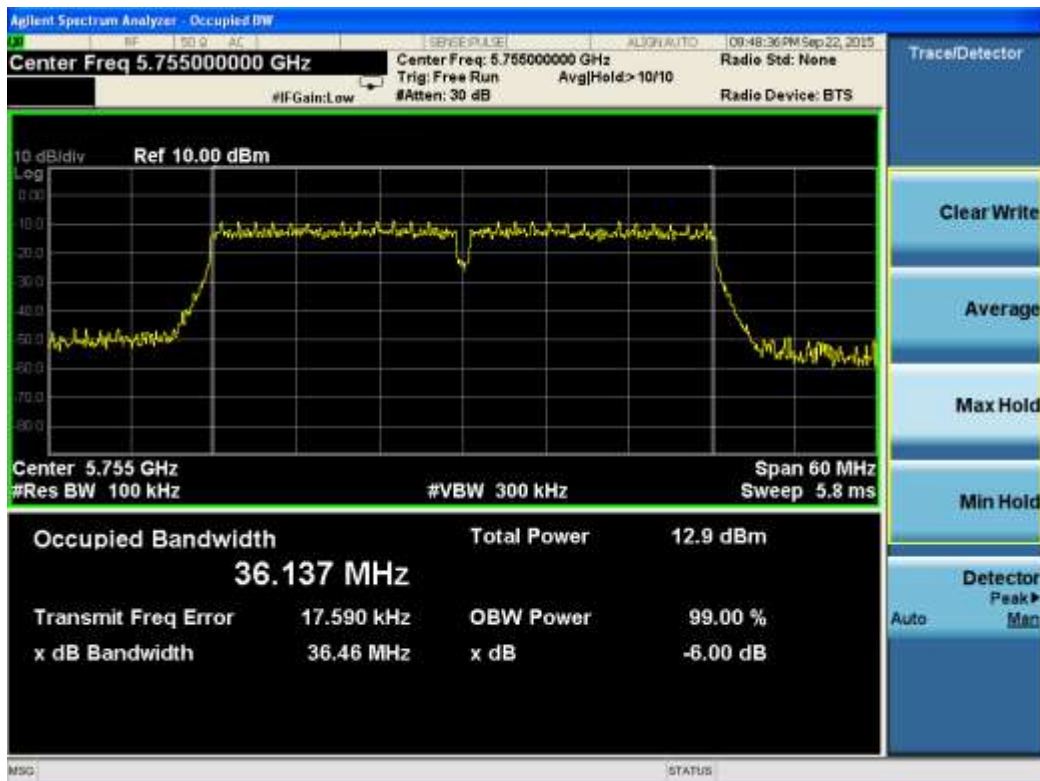
Test Plot For 802.11n(HT20)-6dB BW-5825M-Chain 0



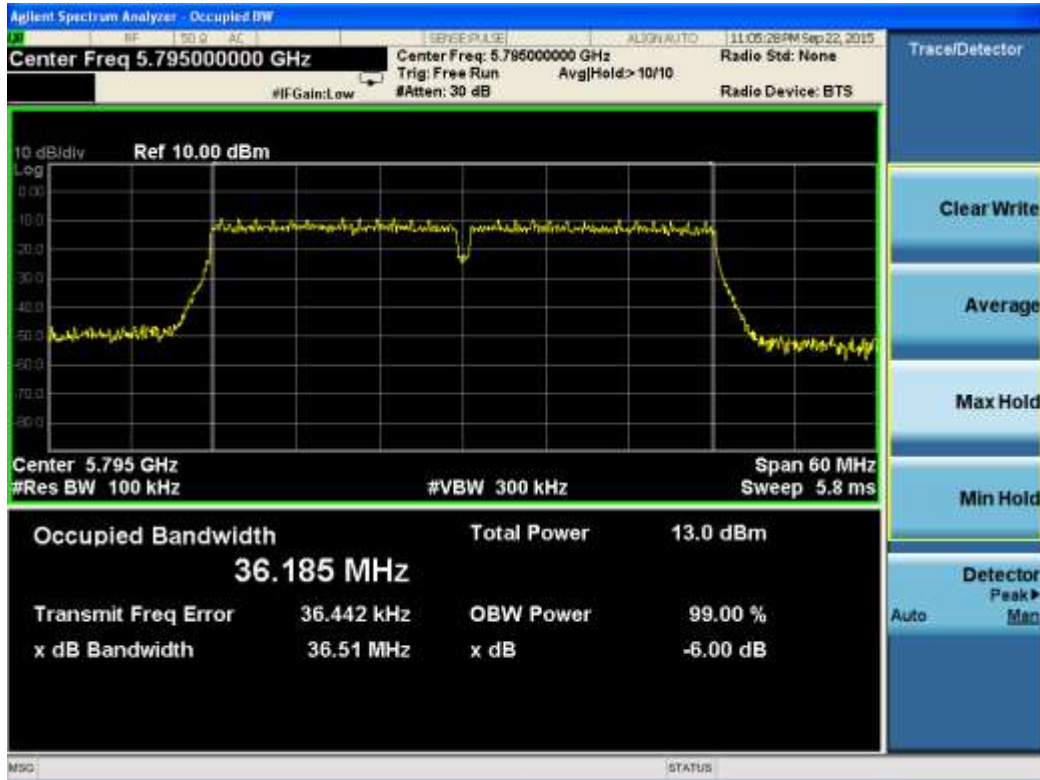
Test Plot For 802.11n(HT20)-6dB BW-5825M-Chain 1



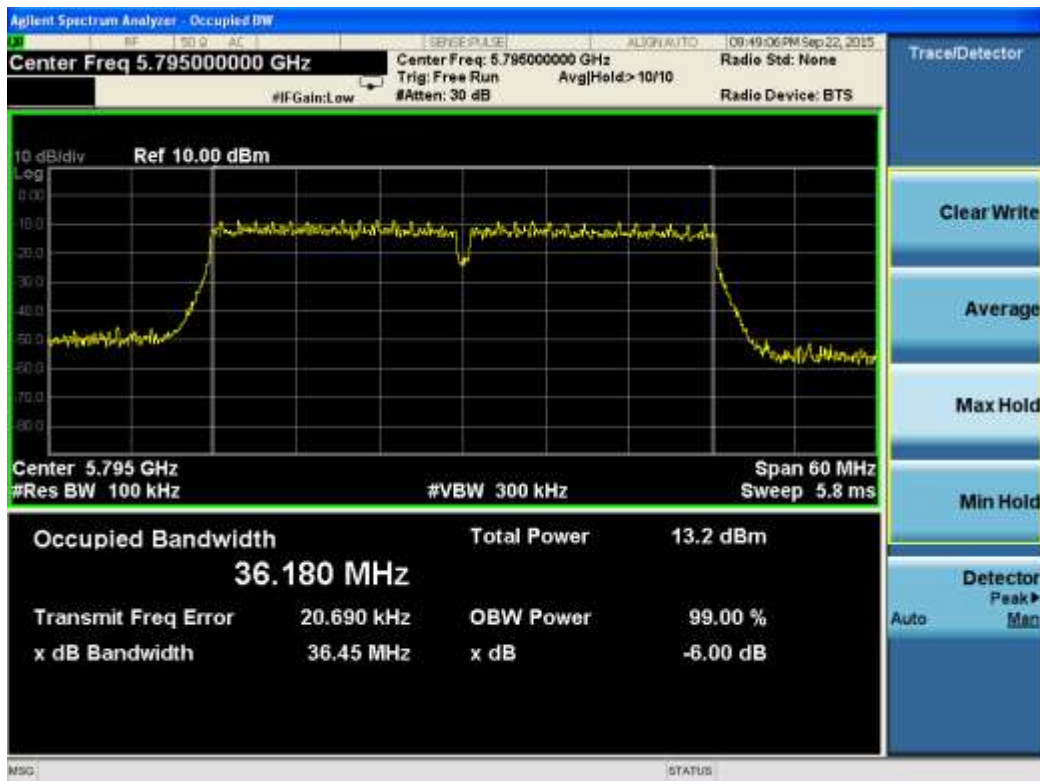
Test Plot For 802.11n(HT40)-6dB BW-5755M-Chain 0



Test Plot For 802.11n(HT40)-6dB BW-5755M-Chain 1



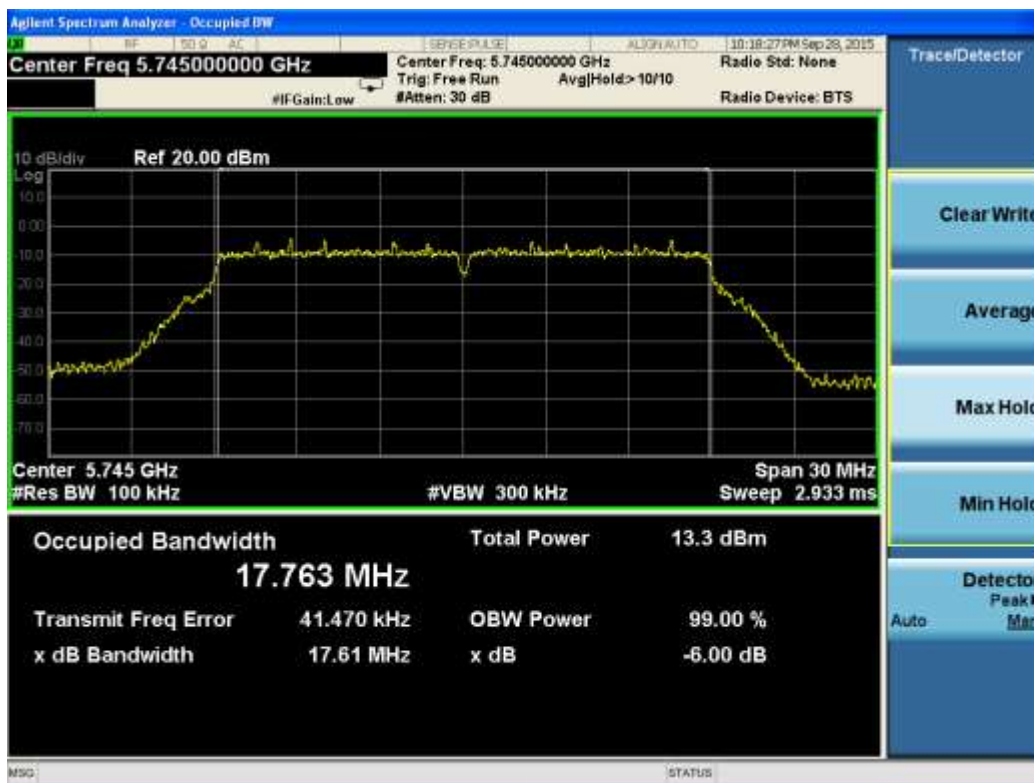
Test Plot For 802.11n(HT40)-6dB BW-5795M-Chain 0



Test Plot For 802.11n(HT40)-6dB BW-5795M-Chain 1



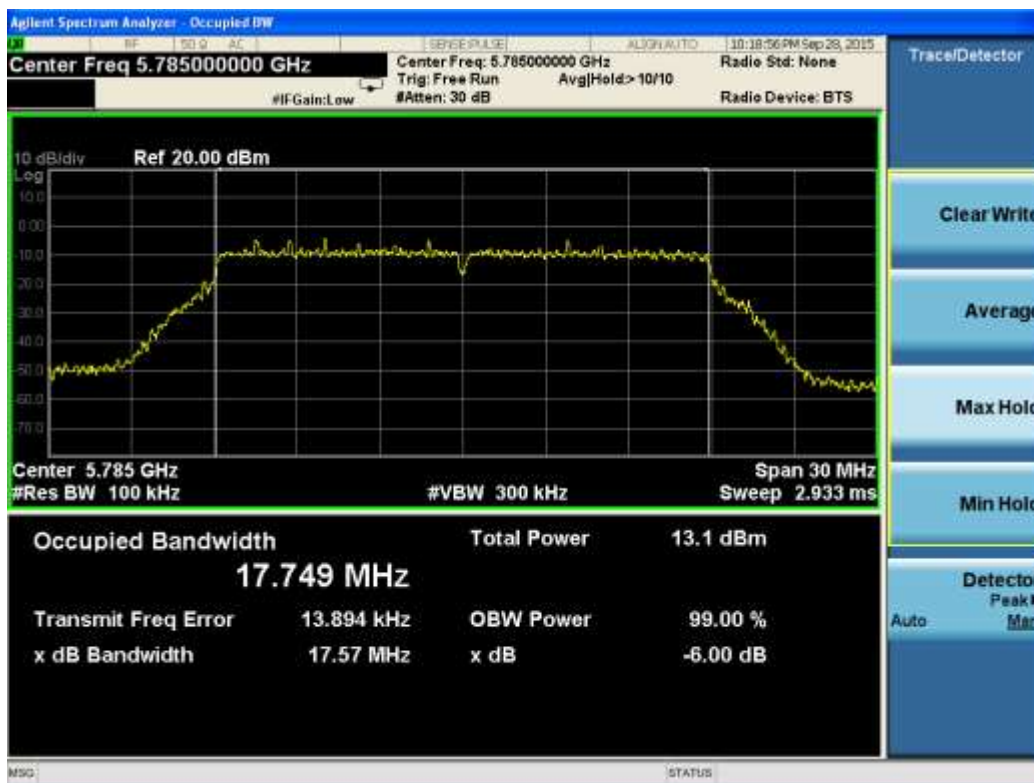
Test Plot For 802.11ac(VHT20)-6dB BW-5745M-Chain 0



Test Plot For 802.11ac(VHT20)-6dB BW-5745M-Chain 1



Test Plot For 802.11ac(VHT20)-6dB BW-5785M-Chain 0



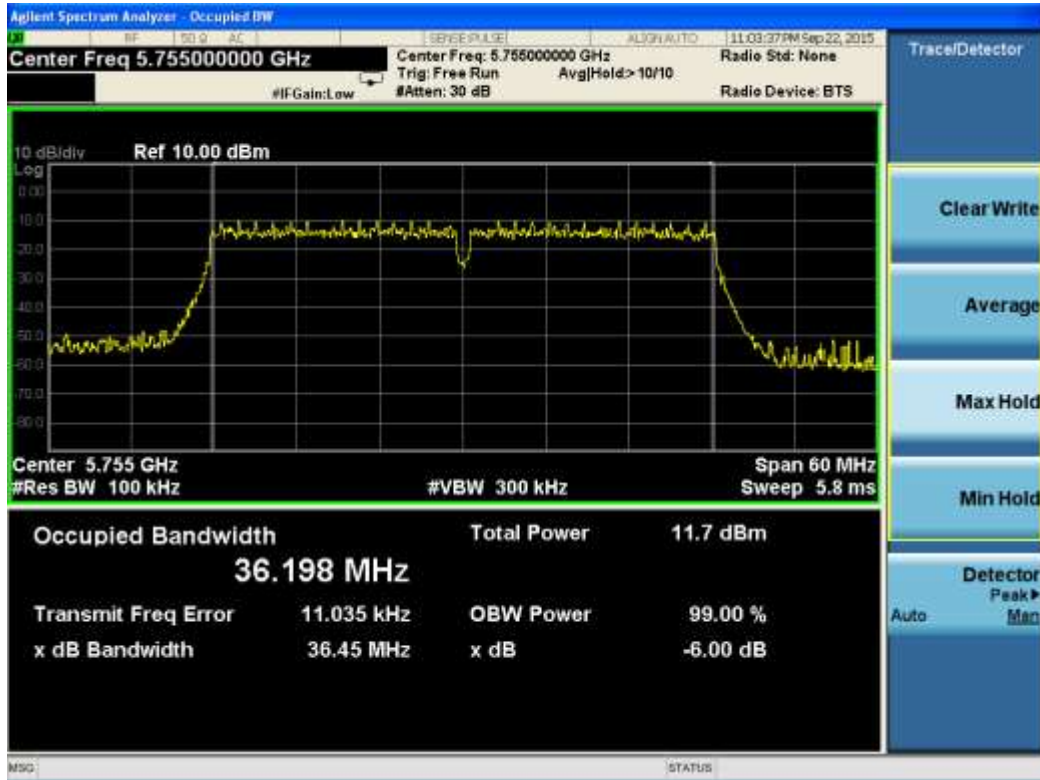
Test Plot For 802.11ac(VHT20)-6dB BW-5785M-Chain 1



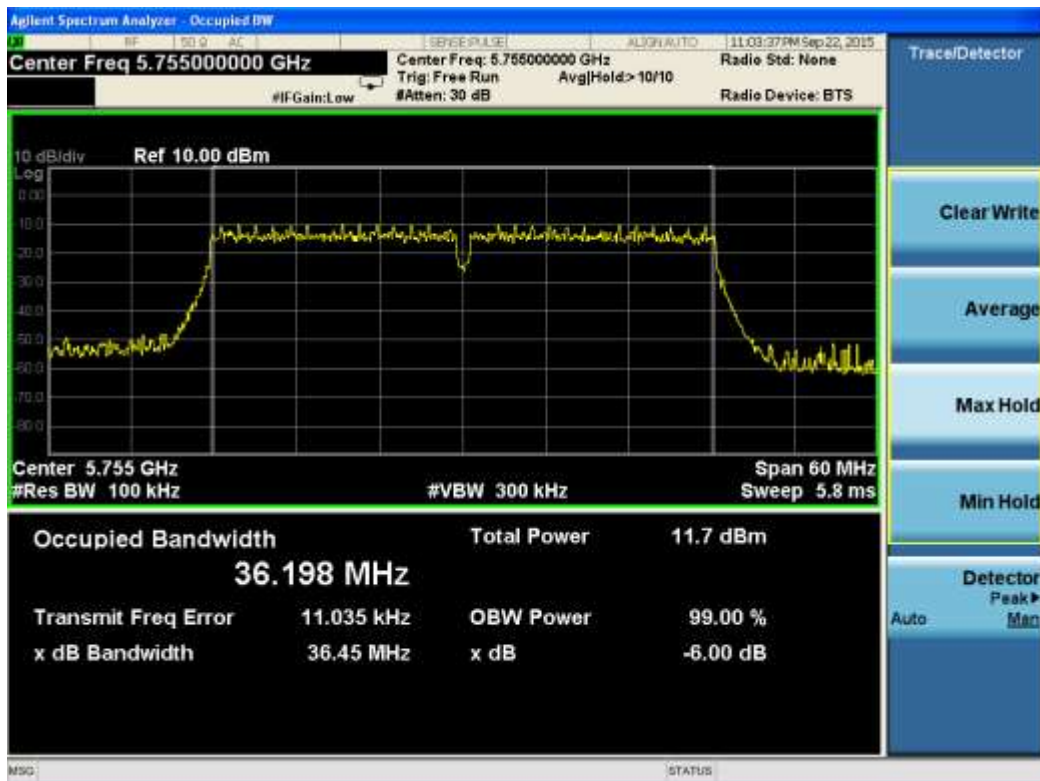
Test Plot For 802.11ac(VHT20)-6dB BW-5825M-Chain 0



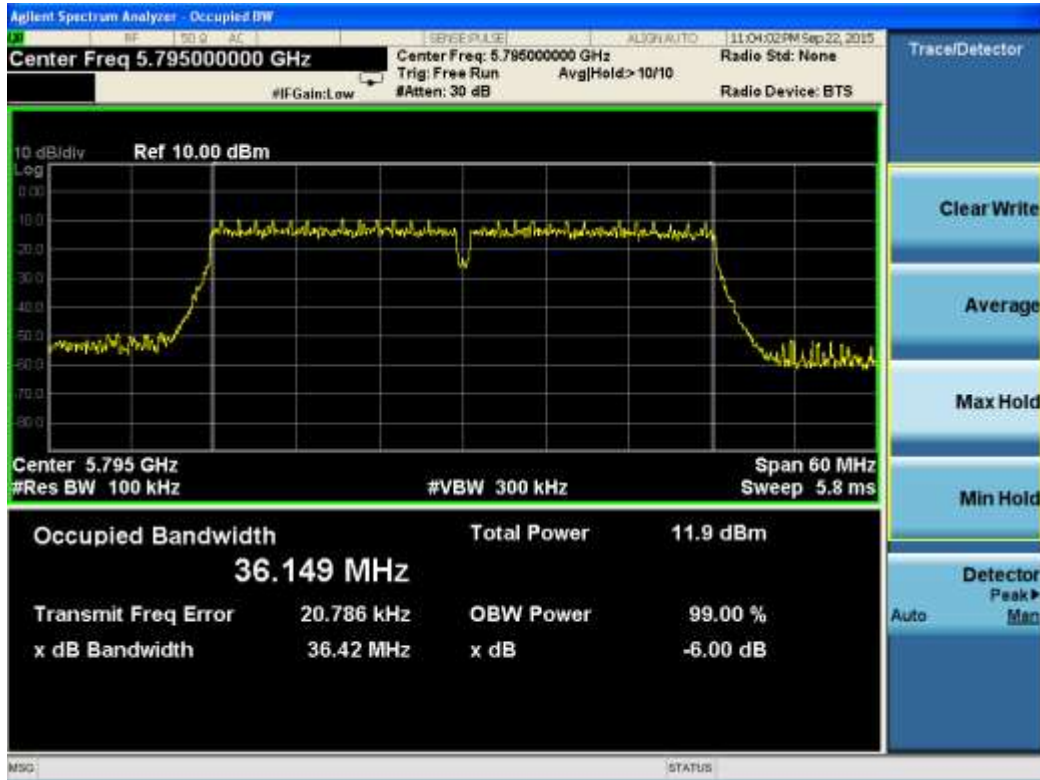
Test Plot For 802.11ac(VHT20)-6dB BW-5825M-Chain 1



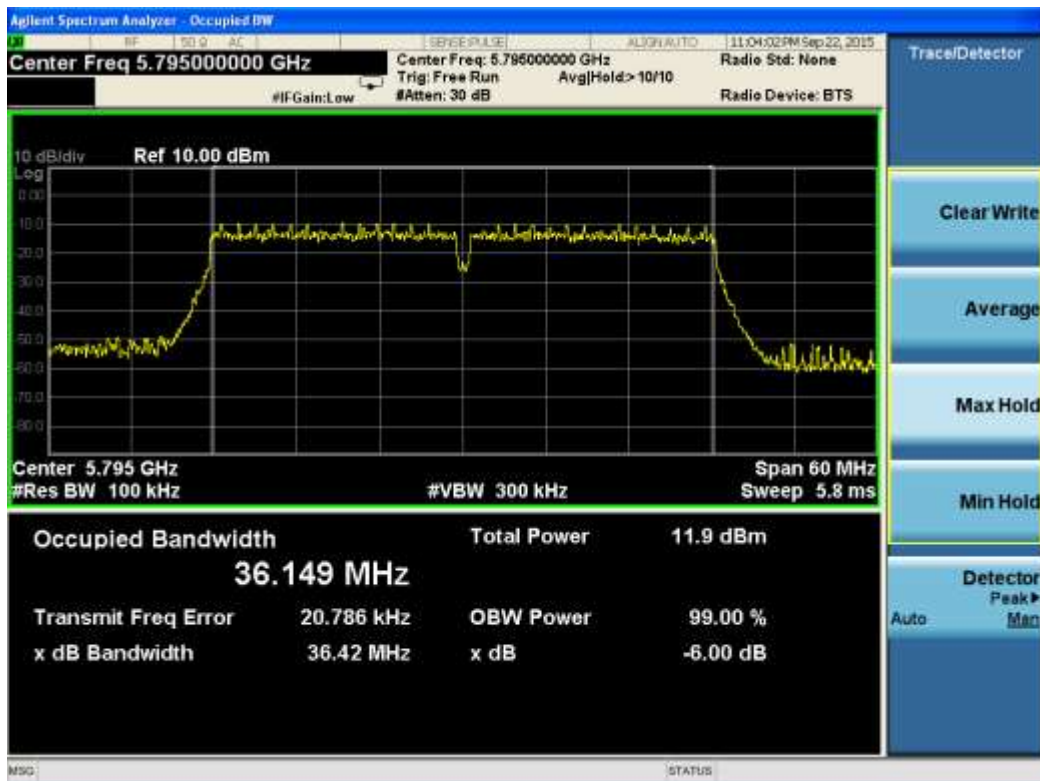
Test Plot For 802.11ac(VHT40)-6dB BW-5755M-Chain 0



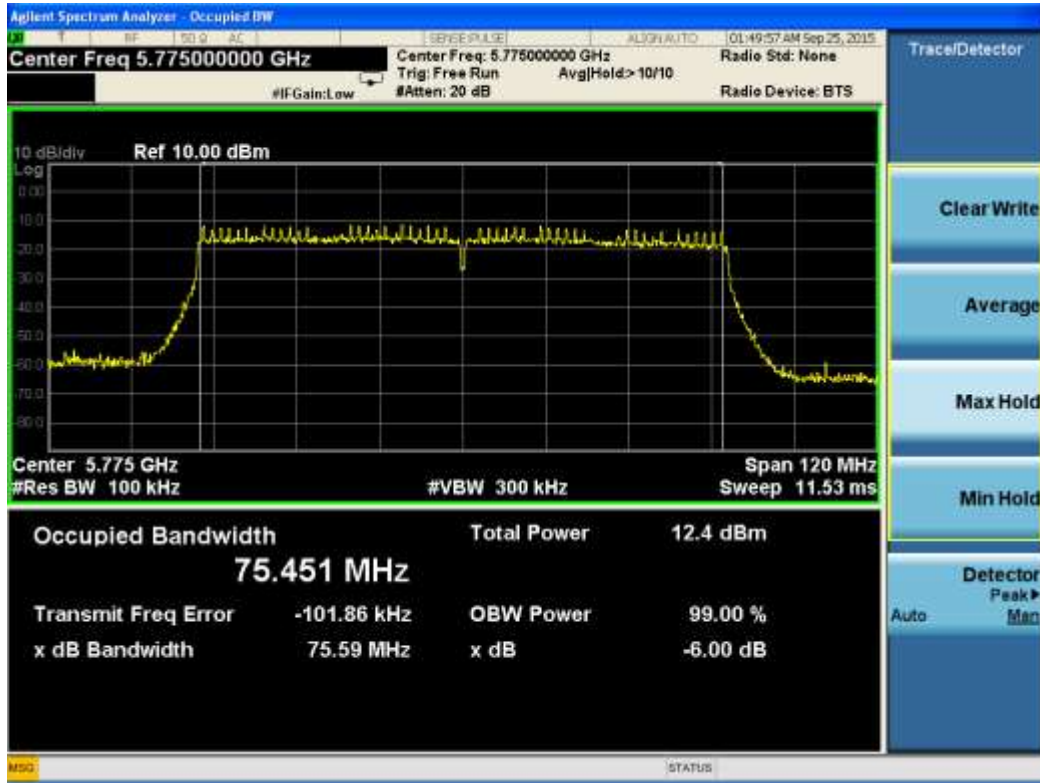
Test Plot For 802.11ac(VHT40)-6dB BW-5755M-Chain 1



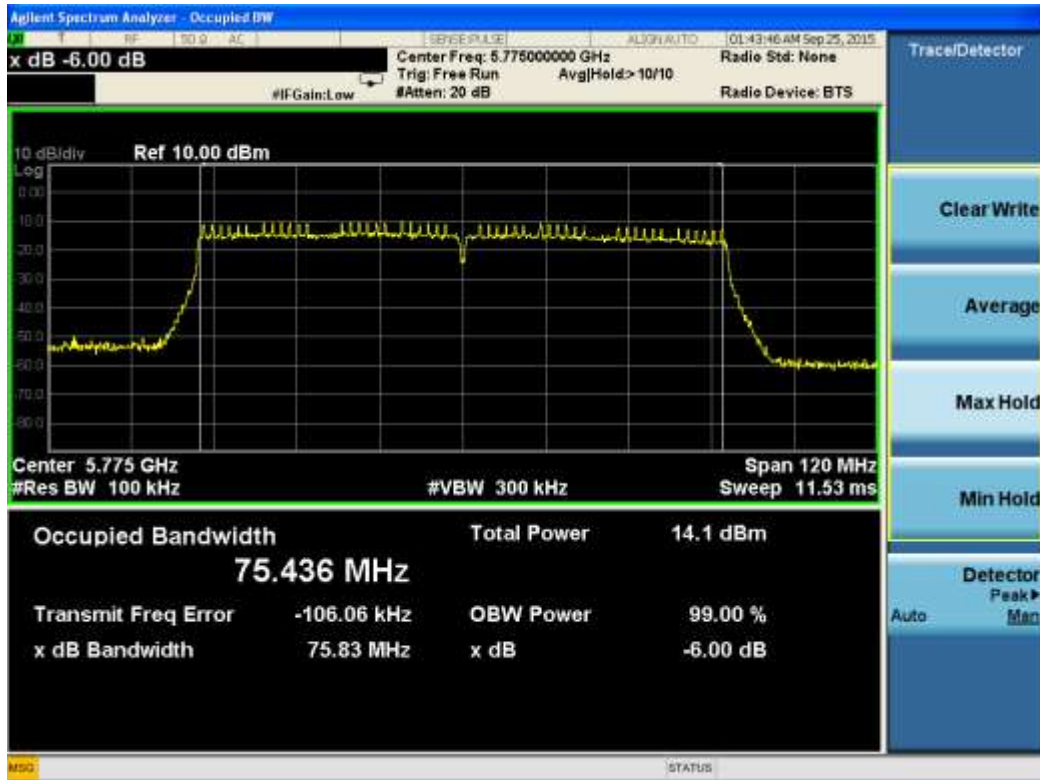
Test Plot For 802.11ac(VHT40)-6dB BW-5795M-Chain 0



Test Plot For 802.11ac(VHT40)-6dB BW-5795M-Chain 1



Test Plot For 802.11ac(VHT80)-6dB BW-5775M-Chain 0



Test Plot For 802.11ac(VHT80)-6dB BW-5775M-Chain 1

802.11a

Channel	Frequency	Chain 0		Chain 1		Limit
		6dB BW (MHz)	99% BW (MHz)	6dB BW (MHz)	99% BW (MHz)	
36	5180	21.20	16.69	21.21	16.68	Non-specified
40	5200	21.21	16.70	21.20	16.68	
48	5240	21.21	16.69	21.22	16.68	

802.11n(HT20)

Channel	Frequency	Chain 0		Chain 1		Limit
		6dB BW (MHz)	99% BW (MHz)	6dB BW (MHz)	99% BW (MHz)	
36	5180	21.75	18.03	21.60	17.98	Non-specified
40	5200	21.80	18.01	21.51	17.96	
48	5240	21.72	18.00	21.69	17.99	

802.11n(HT40)

Channel	Frequency	Chain 0		Chain 1		Limit
		26dB BW (MHz)	99% BW (MHz)	26dB BW (MHz)	99% BW (MHz)	
38	5190	40.36	36.66	40.47	36.67	Non-specified
46	5230	40.60	36.68	40.33	36.58	

802.11ac(VHT20)

Channel	Frequency	Chain 0		Chain 1		Limit
		26dB BW (MHz)	99% BW (MHz)	26dB BW (MHz)	99% BW (MHz)	
36	5180	21.83	18.10	21.98	18.06	Non-specified
40	5200	21.84	18.12	21.92	18.14	
48	5240	22.05	18.12	21.84	18.09	

802.11ac(VHT40)

Channel	Frequency	Chain 0		Chain 1		Limit
		26dB BW (MHz)	99% BW (MHz)	26dB BW (MHz)	99% BW (MHz)	
38	5190	40.55	36.54	40.39	36.52	Non-specified
46	5230	40.46	36.57	40.43	36.54	

802.11ac(VHT40)

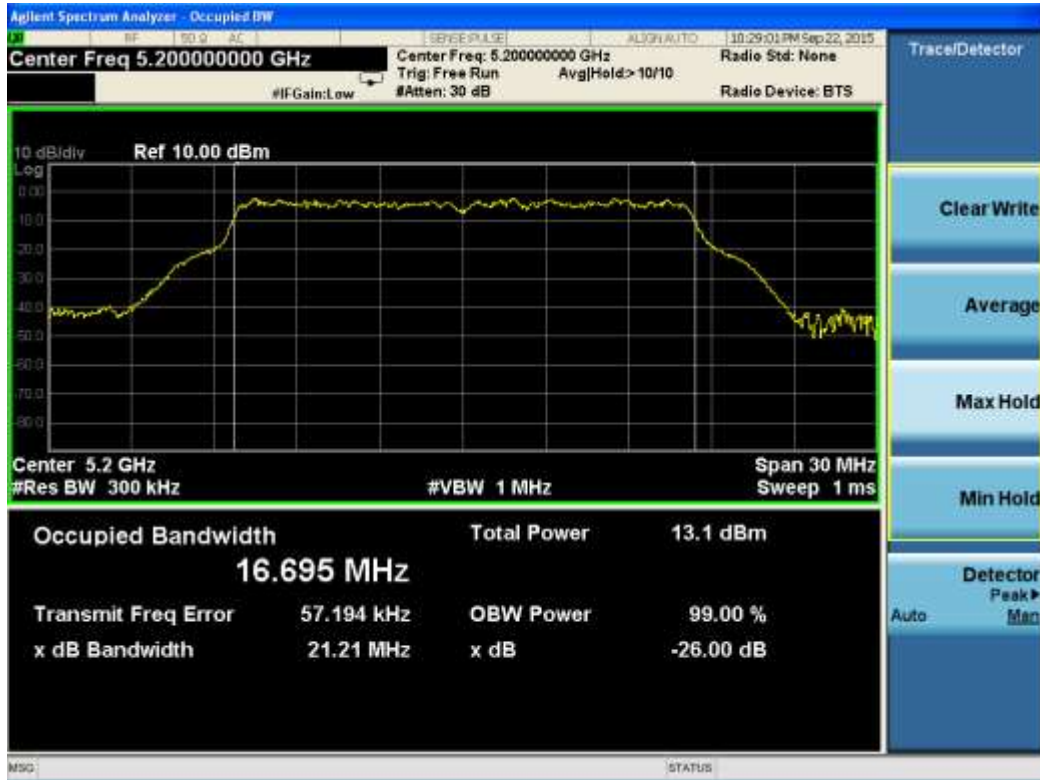
Channel	Frequency	Chain 0		Chain 1		Limit
		26dB BW (MHz)	99% BW (MHz)	26dB BW (MHz)	99% BW (MHz)	
38	5190	82.32	75.63	81.44	75.62	Non-specified



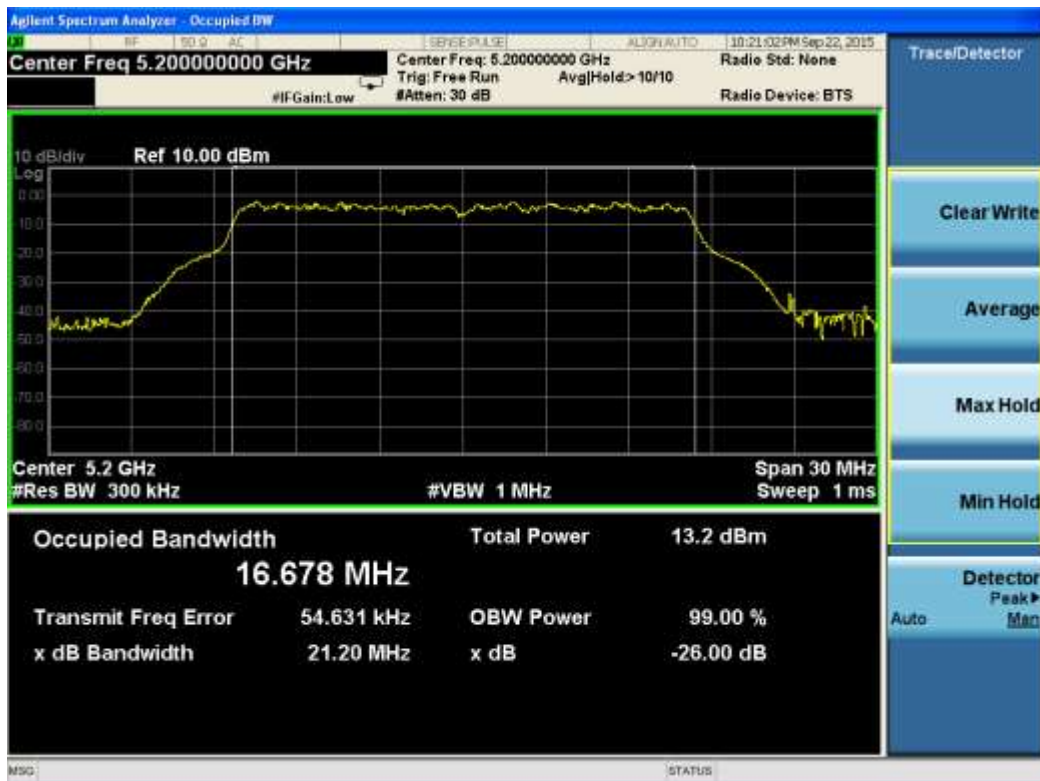
Test Plot For 802.11a-26dB BW-5180M-Chain 0



Test Plot For 802.11a-26dB BW-5180M-Chain 1



Test Plot For 802.11a-26dB BW-5200M-Chain 0



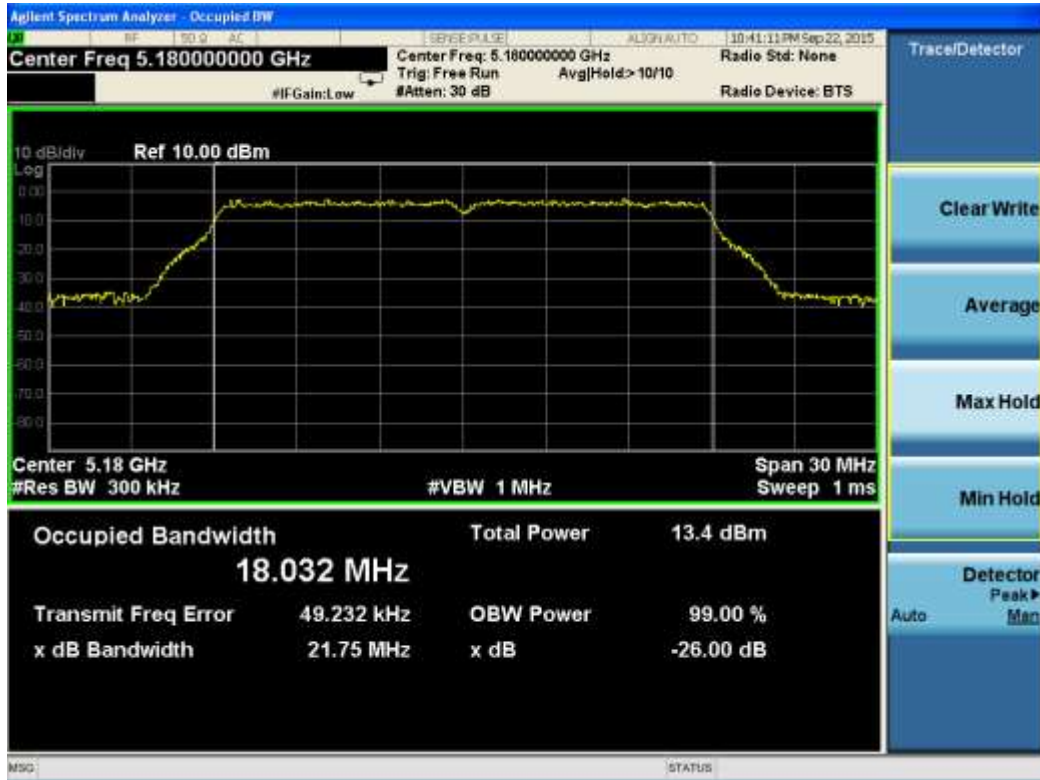
Test Plot For 802.11a-26dB BW-5200M-Chain 1



Test Plot For 802.11a-26dB BW-5240M-Chain 0



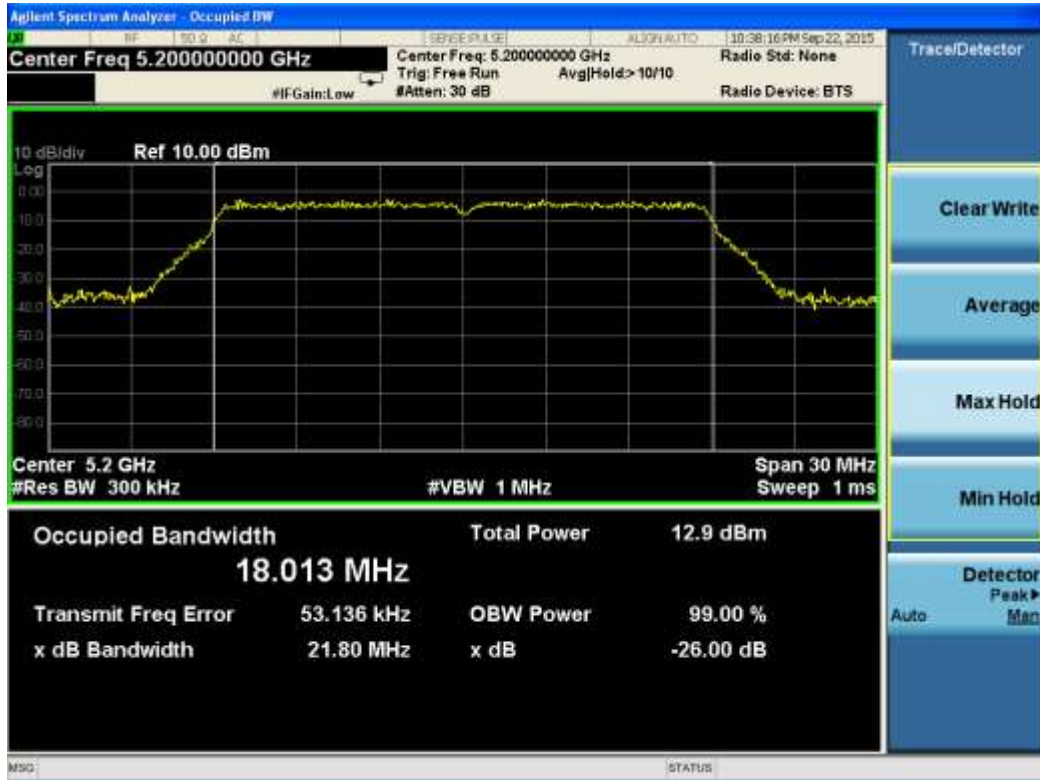
Test Plot For 802.11a-26dB BW-5240M-Chain 1



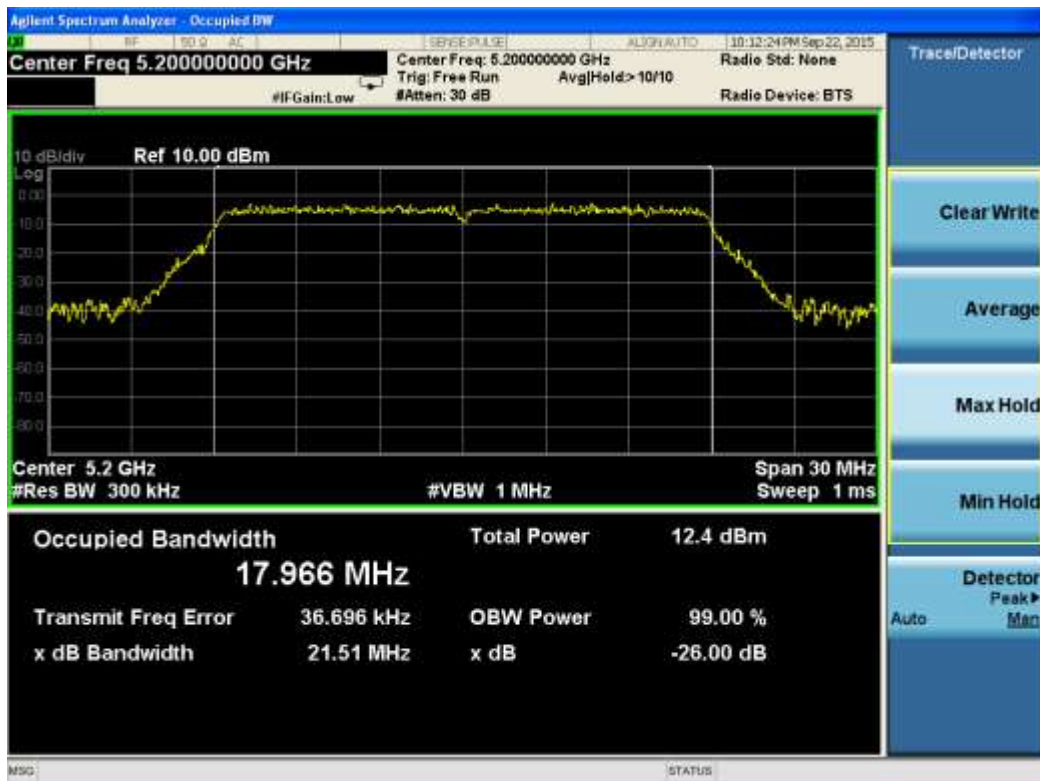
Test Plot For 802.11n(HT20)-26dB BW-5180M-Chain 0



Test Plot For 802.11n(HT20)-26dB BW-5180M-Chain 1



Test Plot For 802.11n(HT20)-26dB BW-5200M-Chain 0



Test Plot For 802.11n(HT20)-26dB BW-5200M-Chain 1



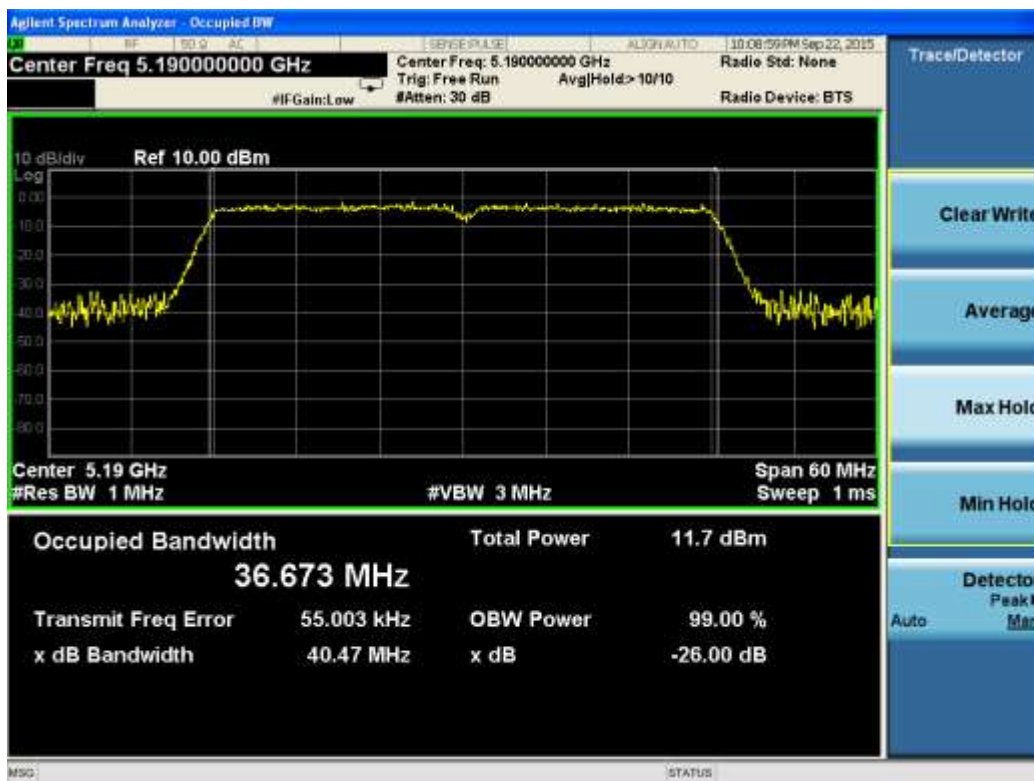
Test Plot For 802.11n(HT20)-26dB BW-5240M-Chain 0



Test Plot For 802.11n(HT20)-26dB BW-5240M-Chain 1



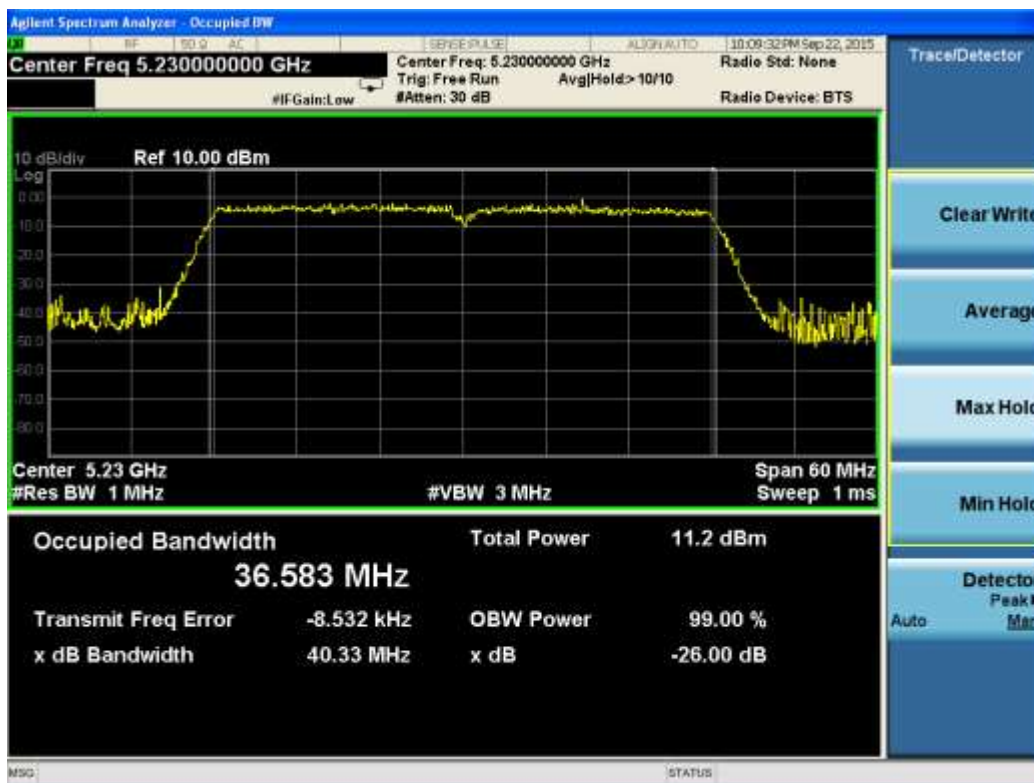
Test Plot For 802.11n(HT40)-26dB BW-5190M-Chain 0



Test Plot For 802.11n(HT40)-26dB BW-5190M-Chain 1



Test Plot For 802.11n(HT40)-26dB BW-5230M-Chain 0



Test Plot For 802.11n(HT40)-26dB BW-5230M-Chain 1



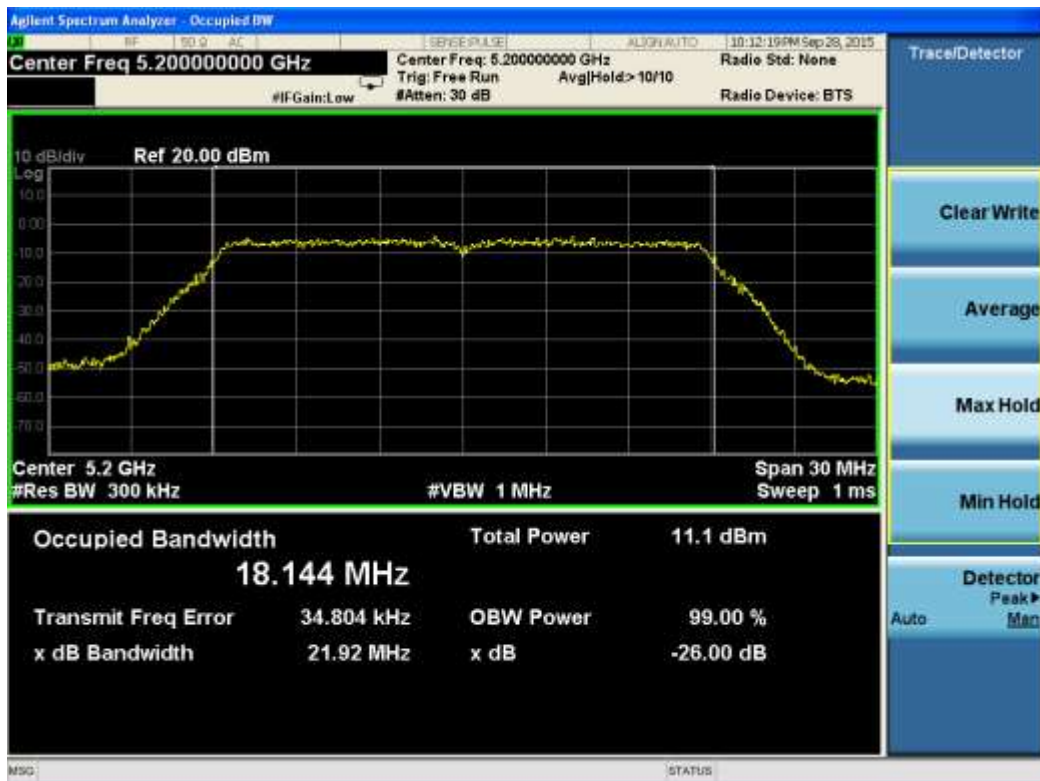
Test Plot For 802.11ac(VHT20)-26dB BW-5180M-Chain 0



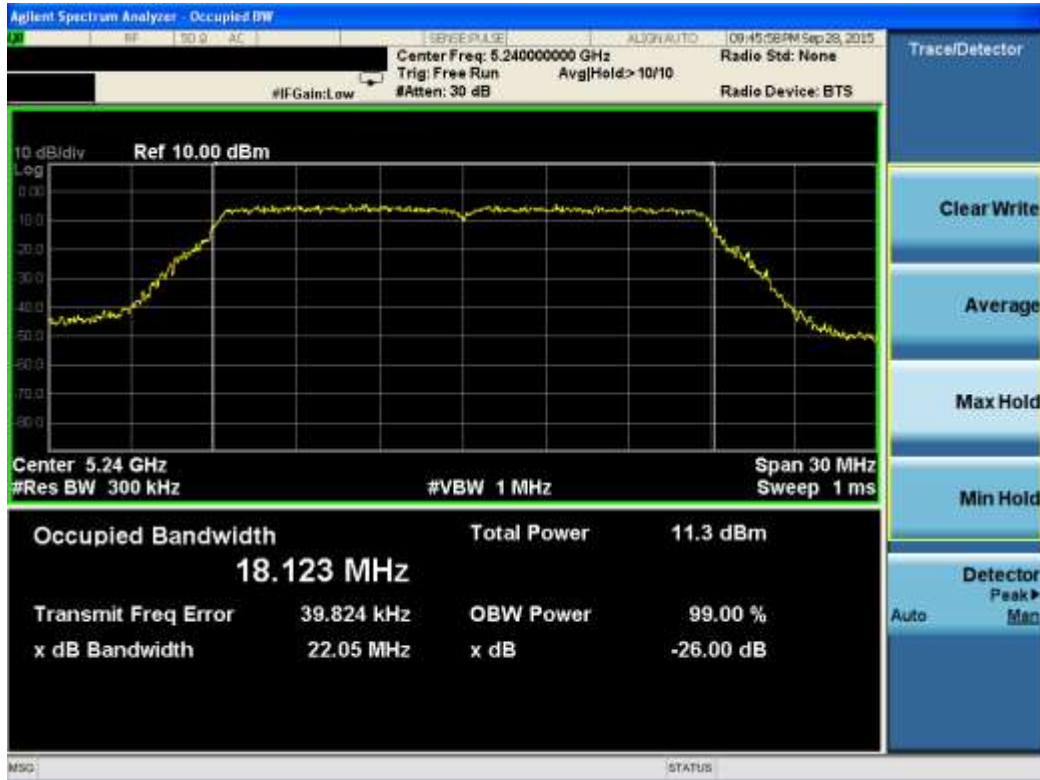
Test Plot For 802.11ac(VHT20)-26dB BW-5180M-Chain 1



Test Plot For 802.11ac(VHT20)-26dB BW-5200M-Chain 0



Test Plot For 802.11ac(VHT20)-26dB BW-5200M-Chain 1



Test Plot For 802.11ac(VHT20)-26dB BW-5240M-Chain 0



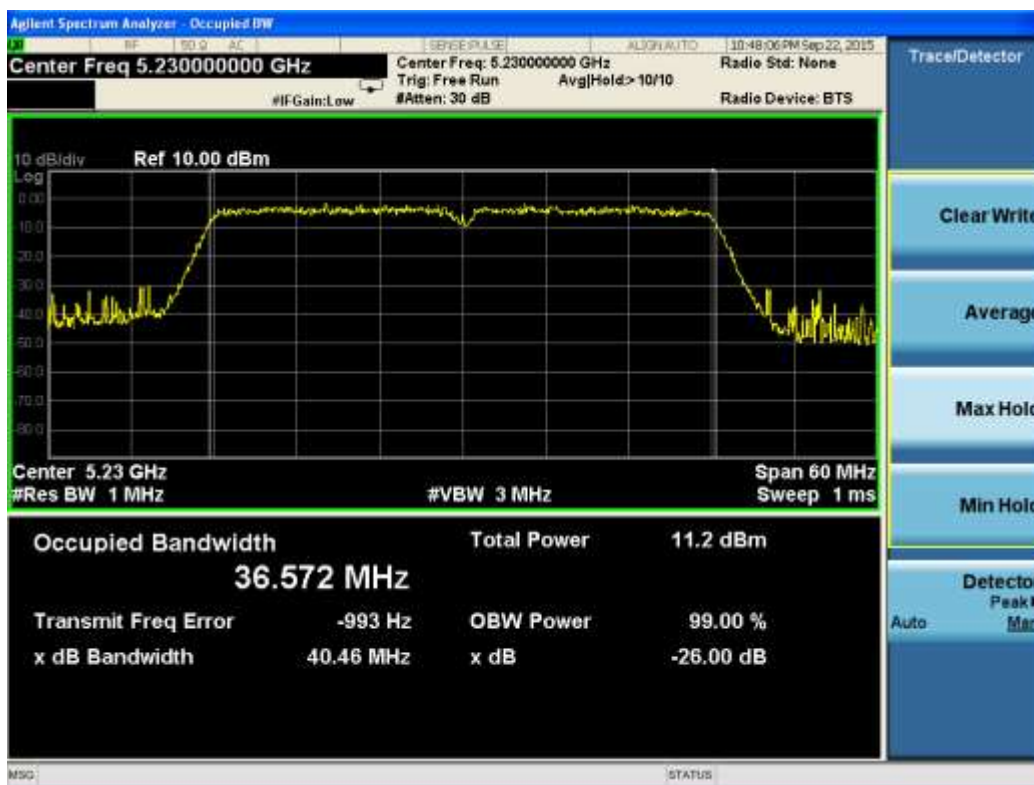
Test Plot For 802.11ac(VHT20)-26dB BW-5240M-Chain 1



Test Plot For 802.11ac(VHT40)-26dB BW-5190M-Chain 0



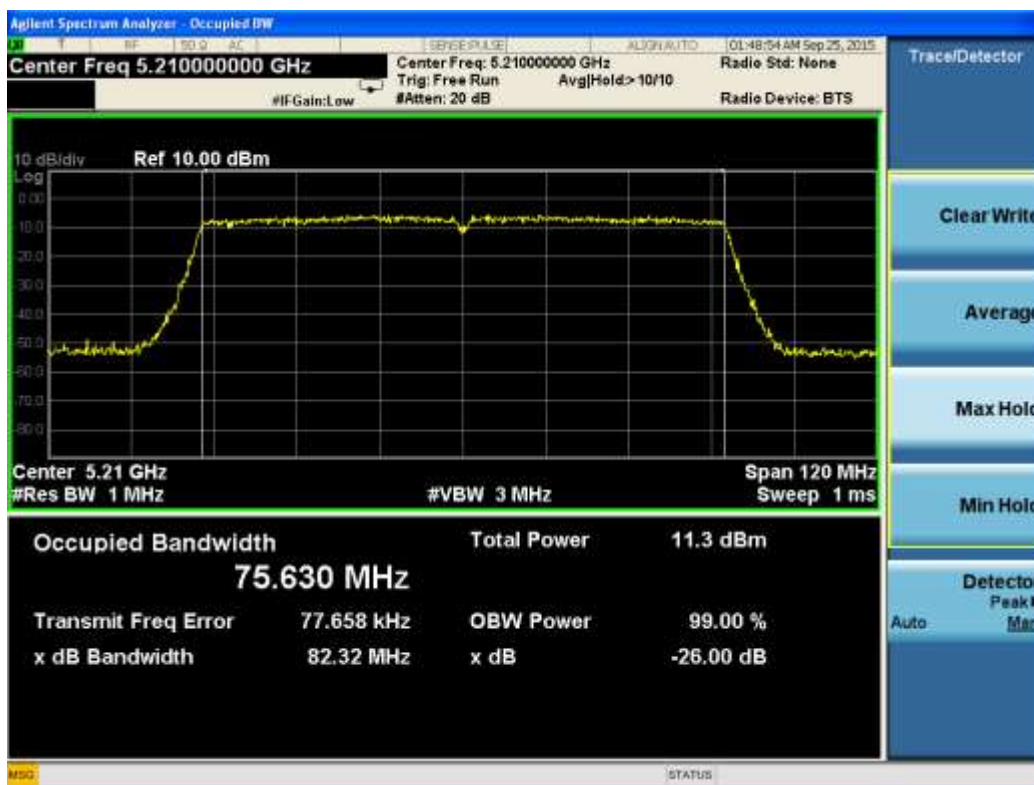
Test Plot For 802.11ac(VHT40)-26dB BW-5190M-Chain 1



Test Plot For 802.11ac(VHT40)-26dB BW-5230M-Chain 0



Test Plot For 802.11ac(VHT40)-26dB BW-5230M-Chain 1



Test Plot For 802.11ac(VHT80)-26dB BW-5210M-Chain 0



Test Plot For 802.11ac(VHT80)-26dB BW-5210M-Chain 1

5.4. Radiated Emissions Measurement

5.4.1. Standard Applicable

According to §15.407 (b)(1) to (6):

For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz (68.3dBuV/m at 3m).

For transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz (78.3dBuV/m at 3m); for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of -27 dBm/MHz (68.3dBuV/m at 3m).

In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies(MHz)	Field Strength(microvolts/meter)	Measurement Distance(meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

5.4.2. Instruments Setting

The following table is the setting of spectrum analyzer and receiver.

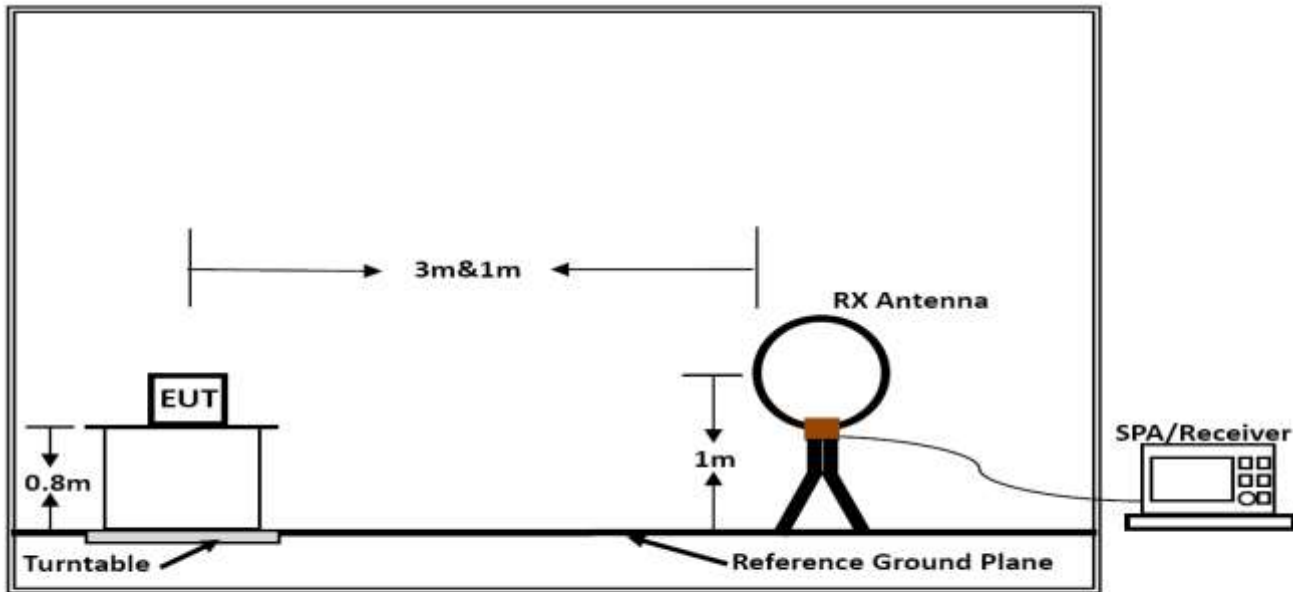
Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (Emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average
RB / VB (Emission in non-restricted band)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 100kHz for QP

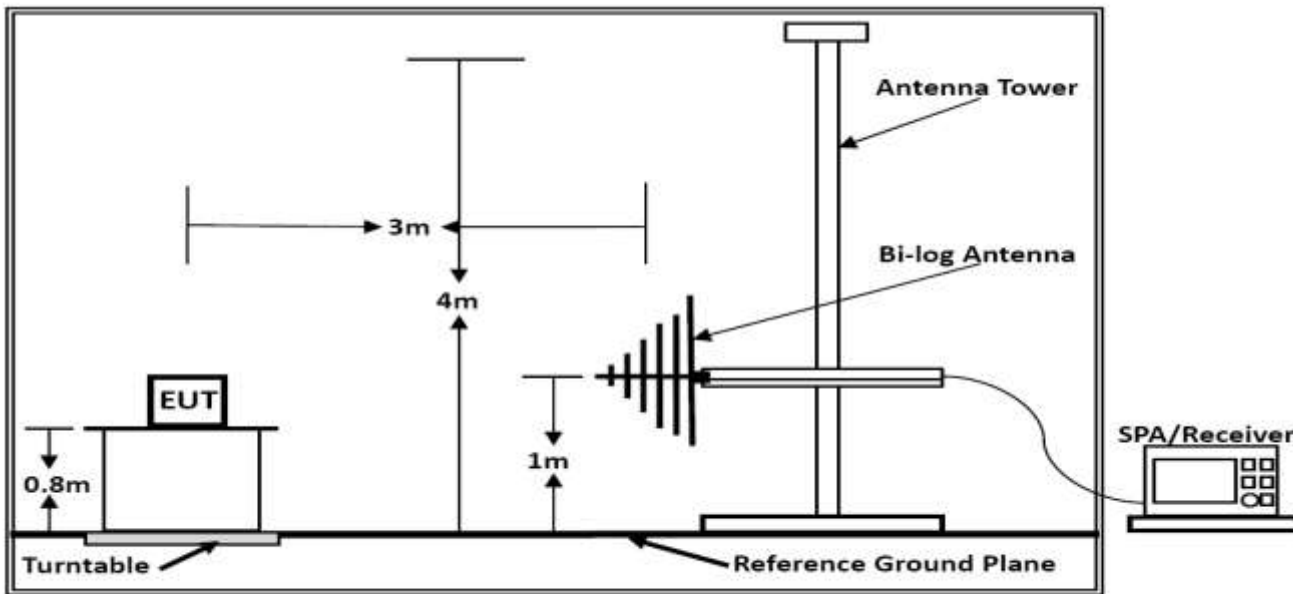
5.4.3. Test Procedures

- 1) Configure the EUT according to ANSI C63.10: 2013. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
- 2) Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
- 3) The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
- 4) For each suspected emissions, the antenna tower was scan (from 1 m to 4 m) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading
- 5) Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
- 6) For emissions above 1GHz, use 1MHz VBW and RBW for peak reading. Then 1MHz RBW and 10Hz VBW for average reading in spectrum analyzer.
- 7) When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.
- 8) If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
- 9) For the radiated emission test above 1GHz: Place the measurement antenna away from each area of the EUT determined to be a source of emission sat the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane. The emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
- 10) In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High – Low scan is not required in this case.

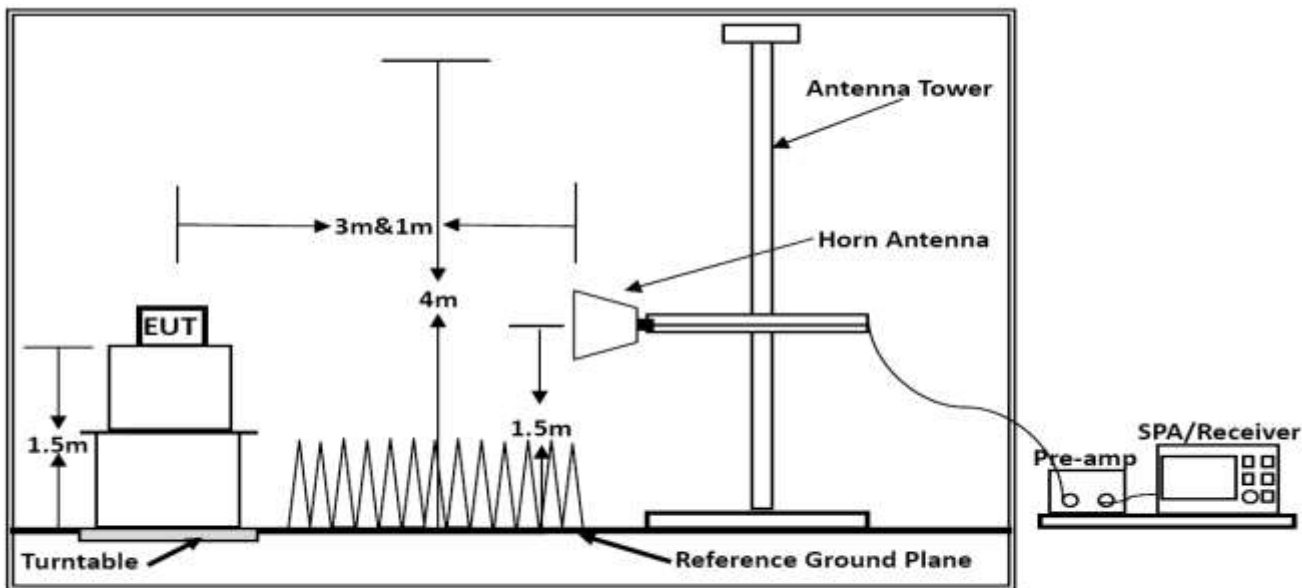
5.4.4. Test Setup Layout



Below 30MHz



Below 1GHz



Above 1GHz

Above 10 GHz shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade from 3m to 1.5m.

Distance extrapolation factor = $20 \log (\text{specific distance [3m]} / \text{test distance [1.5m]})$ (dB);

Limit line = specific limits (dBuV) + distance extrapolation factor [6 dB].

5.4.5. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

5.4.6. Results of Radiated Emissions (9kHz~30MHz)

Temperature	25°C	Humidity	60%
Test Engineer	Leo	Configurations	802.11a/n/ac

Freq. (MHz)	Level (dBuV)	Over Limit (dB)	Over Limit (dBuV)	Remark
-	-	-	-	See Note

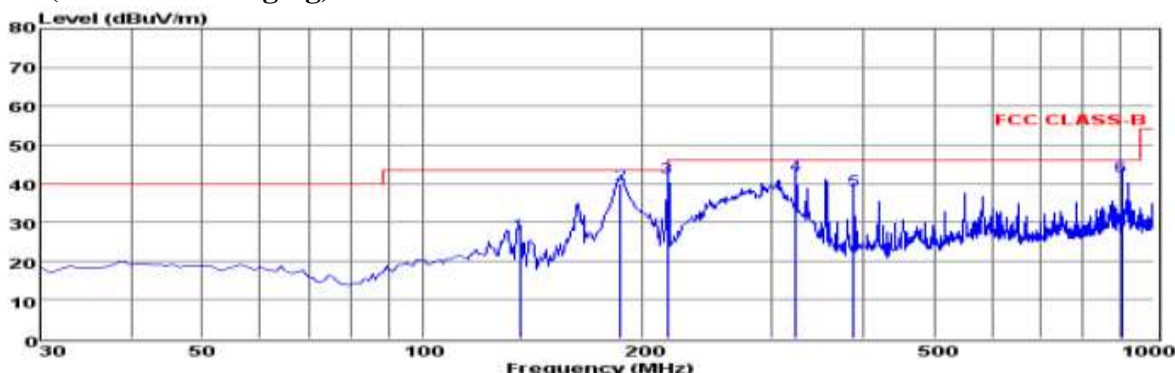
Note:

The radiated emissions from 9kHz to 30MHz are at least 20dB below the official limit and no need to report.

5.4.7. Results of Radiated Emissions (30MHz~1GHz)

Note: Only record the worst test result in this report.

The Test Result For Configuration 1(Input AC 120V/60Hz): Configured with Switching Power Adapter (Used For Charging)

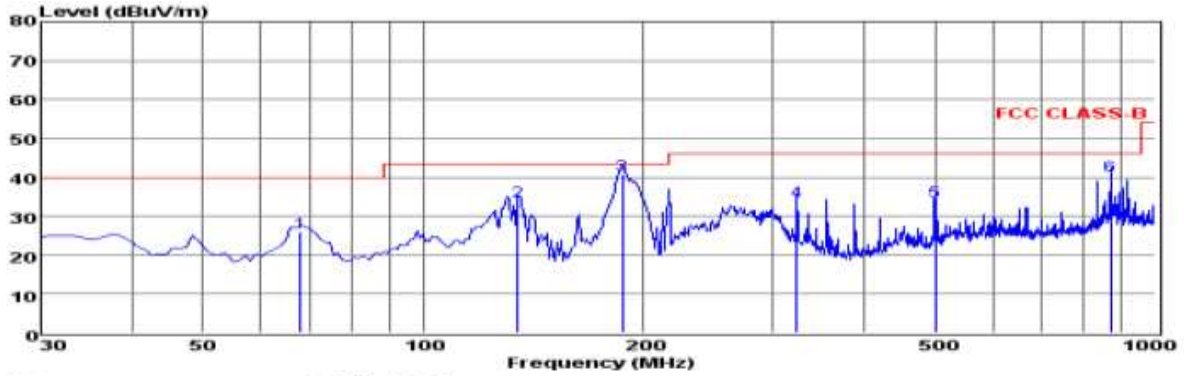


```

Env./Ins:      24°C/56%
EUT:           Tablet POS
M/N:           HM518
Power Rating:  AC 120V/60Hz
Test Mode:     TX-Low Channel(n20, Chain0+Chain1, 5.8G)
Operator:     Leo
Memo:          Configuration 1
pol:          HORIZONTAL
    
```

	Freq	Reading	CabLos	Antfac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB/m	dBuV/m	dBuV/m	dB	
1	135.73	17.86	0.70	8.51	27.07	43.50	-16.43	QP
2	186.17	28.76	0.98	10.22	39.96	43.50	-3.54	QP
3	216.24	29.69	0.88	11.08	41.65	46.00	-4.35	QP
4	323.91	27.55	1.10	13.48	42.13	46.00	-3.87	QP
5	388.90	22.26	1.17	14.80	38.23	46.00	-7.77	QP
6	903.00	19.09	1.87	21.11	42.07	46.00	-3.93	QP

Note: 1. All readings are Quasi-peak values.
 2. Measured= Reading + Antenna Factor + Cable Loss
 3. The emission that are 20db below the official limit are not reported

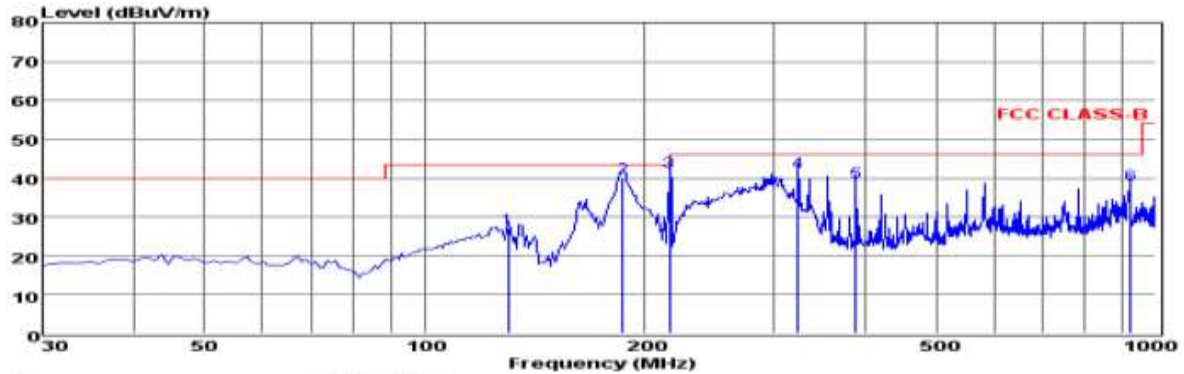


Env./Ins: 24°C/56%
 EUT: Tablet POS
 M/N: HM518
 Power Rating: AC 120V/60Hz
 Test Mode: TX-Low Channel(n20, Chain0+Chain1, 5.8G)
 Operator: Leo
 Memo: Configuration 1
 pol: VERTICAL

	Freq MHz	Reading dBuV	CabLos dB	Antfac dB/m	Measured dBuV/m	Limit dBuV/m	Over dB	Remark
1	67.83	15.72	0.51	9.54	25.77	40.00	-14.23	QP
2	134.76	24.48	0.74	8.58	33.80	43.50	-9.70	QP
3	187.14	29.39	0.98	10.31	40.68	43.50	-2.82	QP
4	323.91	19.18	1.10	13.48	33.76	46.00	-12.24	QP
5	500.45	15.96	1.34	16.59	33.89	46.00	-12.11	QP
6	869.05	17.77	1.87	20.77	40.41	46.00	-5.59	QP

Note: 1. All readings are Quasi-peak values.
 2. Measured= Reading + Antenna Factor + Cable Loss
 3. The emission that are 20db below the official limit are not reported

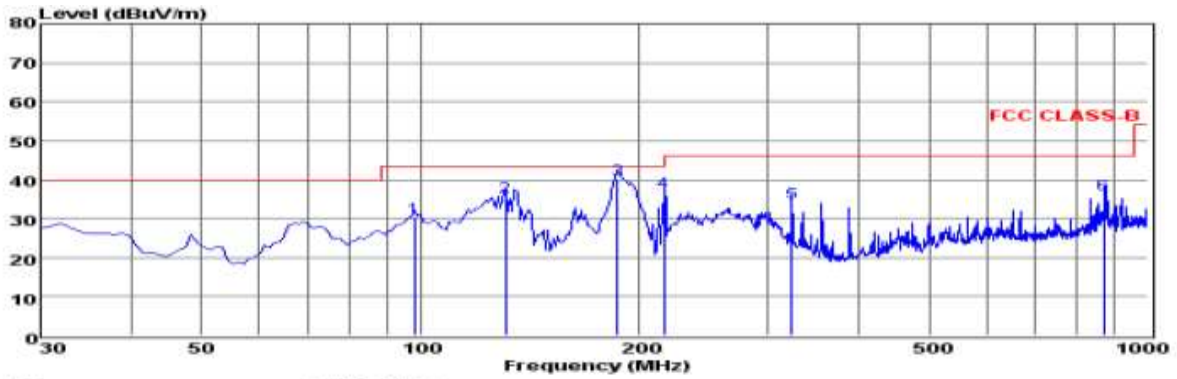
The Test Result For Configuration 1(Input AC 240V/60Hz): Configured with Switching Power Adapter (Used For Charging)



Env./Ins: 24°C/56%
 EUT: Tablet POS
 M/N: HM518
 Power Rating: AC 240V/60Hz
 Test Mode: TX-Low Channel(n20, Chain0+Chain1, 5.8G)
 Operator: Leo
 Memo: Configuration 1
 pol: HORIZONTAL

	Freq MHz	Reading dBuV	CabLos dB	Antfac dB/m	Measured dBuV/m	Limit dBuV/m	Over dB	Remark
1	129.91	17.29	0.76	8.94	26.99	43.50	-16.51	QP
2	186.17	28.92	0.98	10.22	40.12	43.50	-3.38	QP
3	216.24	29.78	0.88	11.08	41.74	46.00	-4.26	QP
4	323.91	27.19	1.10	13.48	41.77	46.00	-4.23	QP
5	388.90	22.99	1.17	14.80	38.96	46.00	-7.04	QP
6	923.37	15.23	1.99	21.24	38.46	46.00	-7.54	QP

Note: 1. All readings are Quasi-peak values.
 2. Measured= Reading + Antenna Factor + Cable Loss
 3. The emission that are 20db below the official limit are not reported



```

Env./Ins:          24°C/56%
EUT:              Tablet POS
M/N:              HM518
Power Rating:     AC 240V/60Hz
Test Mode:        TX-Low Channel(n20, Chain0+Chain1, 5.8G)
Operator:         Leo
Memo:             Configuration 1
pol:             VERTICAL
    
```

	Freq	Reading	CabLos	Antfac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB/m	dBuV/m	dBuV/m	dB	
1	97.90	16.62	0.61	13.03	30.26	43.50	-13.24	QP
2	130.88	26.15	0.76	8.86	35.77	43.50	-7.73	QP
3	186.17	28.92	0.98	10.22	40.12	43.50	-3.38	QP
4	216.24	24.92	0.88	11.08	36.88	46.00	-9.12	QP
5	323.91	19.65	1.10	13.48	34.23	46.00	-11.77	QP
6	870.02	13.57	1.87	20.78	36.22	46.00	-9.78	QP

Note: 1. All readings are Quasi-peak values.
 2. Measured= Reading + Antenna Factor + Cable Loss
 3. The emission that are 20db below the official limit are not reported

***Note:

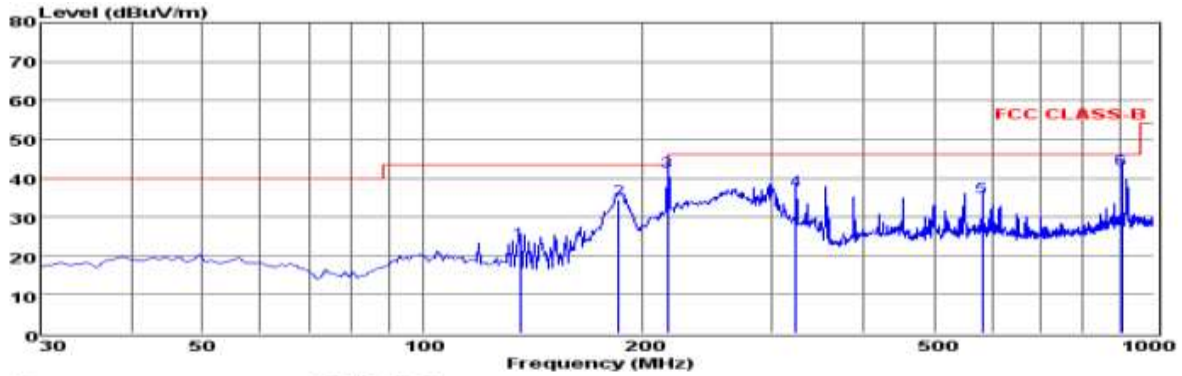
Pre-scan all mode and recorded the worst case results in this report (802.11n(HT20) mode(Low Channel, Chain 0 + Chain 1, 5745-5825MHz Band)).

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Only recorded the worst test case in this report.

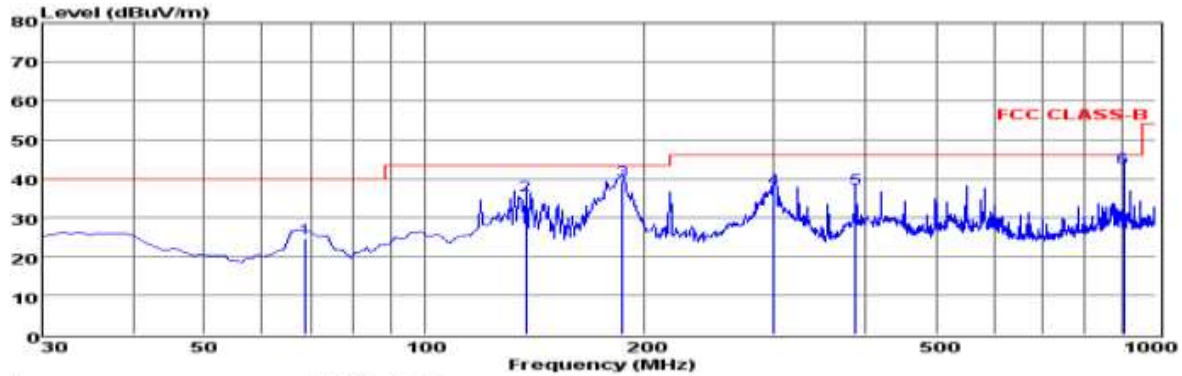
The Test Result For Configuration 2(Input AC 120V/60Hz): Configured with Switching Power Adapter and Docking Station (Used For Charging)



Env./Ins: 24°C/56%
 EUT: Tablet POS
 M/N: HM518
 Power Rating: AC 120V/60Hz
 Test Mode: TX-Low Channel(n20, Chain0+Chain1, 5.8G)
 Operator: Leo
 Memo: Configuration 2
 pol: HORIZONTAL

	Freq	Reading	CabLos	Antfac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB/m	dBuV/m	dBuV/m	dB	
1	135.73	14.41	0.70	8.51	23.62	43.50	-19.88	QP
2	185.20	23.54	0.70	10.14	34.38	43.50	-9.12	QP
3	216.24	29.71	0.88	11.08	41.67	46.00	-4.33	QP
4	323.91	22.19	1.10	13.48	36.77	46.00	-9.23	QP
5	582.90	15.29	1.54	18.13	34.96	46.00	-11.04	QP
6	903.00	19.30	1.87	21.11	42.28	46.00	-3.72	QP

Note: 1. All readings are Quasi-peak values.
 2. Measured= Reading + Antenna Factor + Cable Loss
 3. The emission that are 20db below the official limit are not reported

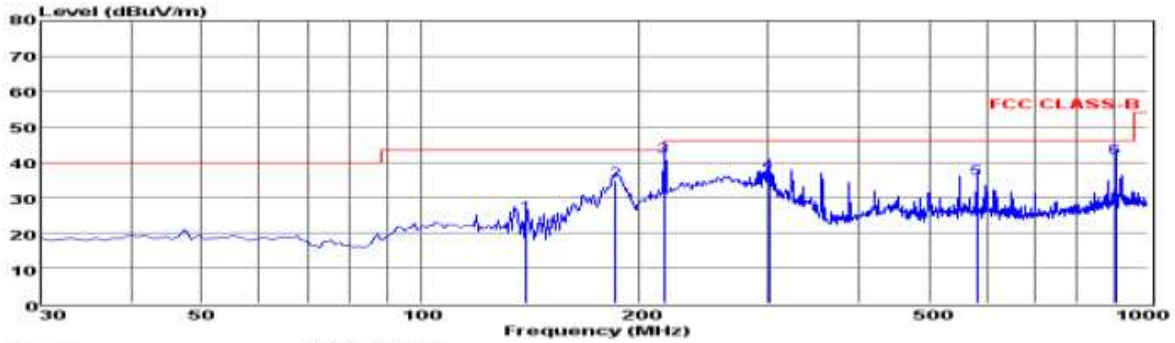


Env./Ins: 24°C/56%
 EUT: Tablet POS
 M/N: HM518
 Power Rating: AC 120V/60Hz
 Test Mode: TX-Low Channel(n20, Chain0+Chain1, 5.8G)
 Operator: Leo
 Memo: Configuration 2
 pol: VERTICAL

	Freq	Reading	CabLos	Antfac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB/m	dBuV/m	dBuV/m	dB	
1	68.80	15.16	0.51	9.14	24.81	40.00	-15.19	QP
2	137.67	26.62	0.70	8.36	35.68	43.50	-7.82	QP
3	186.17	28.27	0.98	10.22	39.47	43.50	-4.03	QP
4	300.63	23.17	1.13	13.07	37.37	46.00	-8.63	QP
5	388.90	21.59	1.17	14.80	37.56	46.00	-8.44	QP
6	903.00	19.80	1.87	21.11	42.78	46.00	-3.22	QP

Note: 1. All readings are Quasi-peak values.
 2. Measured= Reading + Antenna Factor + Cable Loss
 3. The emission that are 20db below the official limit are not reported

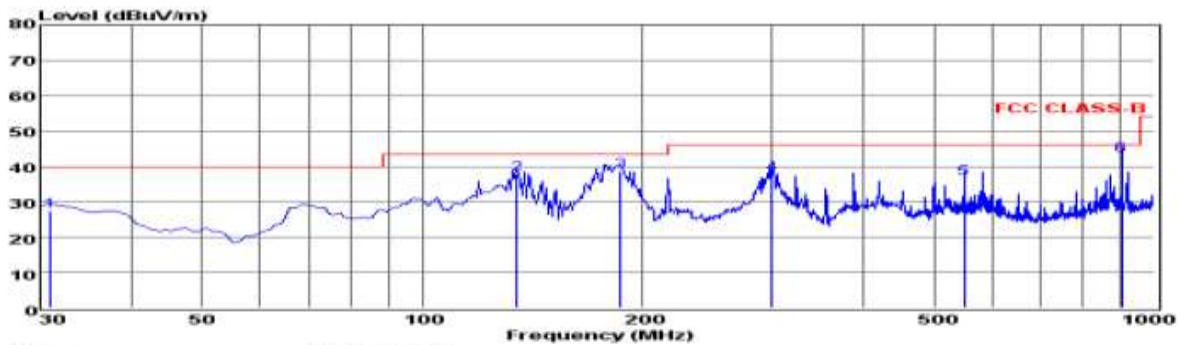
The Test Result For Configuration 2(Input AC 240V/60Hz): Configured with Switching Power Adapter and Docking Station (Used For Charging)



Env./Ins: 24°C/56%
 EUT: Tablet POS
 M/N: HM518
 Power Rating: AC 240V/60Hz
 Test Mode: TX-Low Channel(n20, Chain0+Chain1, 5.8G)
 Operator: Leo
 Memo: Configuration 2
 pol: HORIZONTAL

	Freq	Reading	CabLos	Antfac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB/m	dBuV/m	dBuV/m	dB	
1	139.61	16.38	0.75	8.22	25.35	43.50	-18.15	QP
2	185.20	23.97	0.70	10.14	34.81	43.50	-8.69	QP
3	216.24	29.61	0.88	11.08	41.57	46.00	-4.43	QP
4	301.60	22.95	1.13	13.08	37.16	46.00	-8.84	QP
5	582.90	15.85	1.54	18.13	35.52	46.00	-10.48	QP
6	903.00	18.37	1.87	21.11	41.35	46.00	-4.65	QP

Note: 1. All readings are Quasi-peak values.
 2. Measured= Reading + Antenna Factor + Cable Loss
 3. The emission that are 20db below the official limit are not reported



Env./Ins: 24°C/56%
 EUT: Tablet POS
 M/N: HM518
 Power Rating: AC 240V/60Hz
 Test Mode: TX-Low Channel(n20, Chain0+Chain1, 5.8G)
 Operator: Leo
 Memo: Configuration 2
 pol: VERTICAL

	Freq	Reading	CabLos	Antfac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB/m	dBuV/m	dBuV/m	dB	
1	30.97	14.73	0.39	12.32	27.44	40.00	-12.56	QP
2	134.76	28.35	0.74	8.58	37.67	43.50	-5.83	QP
3	186.17	27.37	0.98	10.22	38.57	43.50	-4.93	QP
4	300.63	23.45	1.13	13.07	37.65	46.00	-8.35	QP
5	550.89	17.77	1.39	17.53	36.69	46.00	-9.31	QP
6	903.00	20.29	1.87	21.11	43.27	46.00	-2.73	QP

Note: 1. All readings are Quasi-peak values.
 2. Measured= Reading + Antenna Factor + Cable Loss
 3. The emission that are 20db below the official limit are not reported

*****Note:**

Pre-scan all mode and recorded the worst case results in this report (802.11n(HT20) mode(Low Channel, Chain 0 + Chain 1, 5745-5825MHz Band)).

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Only recorded the worst test case in this report.

5.4.8. Results for Radiated Emissions (Above 1GHz)

Note: Only recorded the worst test result in this report.

The Worst Test Result For 5180~5240MHz Band.

802.11a / Channel 36 / Chain 0

Freq. GHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
15.54	45.35	33.21	35.82	9.52	52.26	74	-21.74	Peak	Horizontal
15.54	34.48	33.21	35.82	9.52	41.39	54	-12.61	Average	Horizontal
15.54	46.49	32.82	35.82	9.52	53.01	74	-20.99	Peak	Vertical
15.54	35.17	32.82	35.82	9.52	41.69	54	-12.31	Average	Vertical

802.11a / Channel 40 / Chain 0

Freq. GHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
15.60	45.83	33.21	35.82	9.52	52.74	74	-21.26	Peak	Horizontal
15.60	35.04	33.21	35.82	9.52	41.95	54	-12.05	Average	Horizontal
15.60	46.94	32.82	35.82	9.52	53.46	74	-20.54	Peak	Vertical
15.60	35.54	32.82	35.82	9.52	42.06	54	-11.94	Average	Vertical

802.11a / Channel 48 / Chain 0

Freq. GHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
15.72	46.31	33.21	35.82	9.52	53.22	74	-20.78	Peak	Horizontal
15.72	35.49	33.21	35.82	9.52	42.40	54	-11.60	Average	Horizontal
15.72	47.54	32.82	35.82	9.52	54.06	74	-19.94	Peak	Vertical
15.72	36.01	32.82	35.82	9.52	42.53	54	-11.47	Average	Vertical

802.11n(HT20) / Channel 36 / Chain 0 + Chain 1

Freq. GHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
15.54	45.13	33.21	35.82	9.52	52.04	74	-21.96	Peak	Horizontal
15.54	34.20	33.21	35.82	9.52	41.11	54	-12.89	Average	Horizontal
15.54	46.31	32.82	35.82	9.52	52.83	74	-21.17	Peak	Vertical
15.54	34.67	32.82	35.82	9.52	41.19	54	-12.81	Average	Vertical

802.11n(HT20) / Channel 40 / Chain 0 + Chain 1

Freq. GHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
15.60	45.73	33.21	35.82	9.52	52.64	74	-21.36	Peak	Horizontal
15.60	34.90	33.21	35.82	9.52	41.81	54	-12.19	Average	Horizontal
15.60	46.65	32.82	35.82	9.52	53.17	74	-20.83	Peak	Vertical
15.60	35.34	32.82	35.82	9.52	41.86	54	-12.14	Average	Vertical

802.11n(HT20) / Channel 48 / Chain 0 + Chain 1

Freq. GHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
15.72	46.12	33.21	35.82	9.52	53.03	74	-20.97	Peak	Horizontal
15.72	35.46	33.21	35.82	9.52	42.37	54	-11.63	Average	Horizontal
15.72	47.28	32.82	35.82	9.52	53.80	74	-20.20	Peak	Vertical
15.72	35.78	32.82	35.82	9.52	42.30	54	-11.70	Average	Vertical

802.11n(HT40) / Channel 38 / Chain 0 + Chain 1

Freq. GHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
15.57	45.74	33.21	35.82	9.52	52.65	74	-21.35	Peak	Horizontal
15.57	34.89	33.21	35.82	9.52	41.80	54	-12.20	Average	Horizontal
15.57	46.96	32.82	35.82	9.52	53.48	74	-20.52	Peak	Vertical
15.57	35.51	32.82	35.82	9.52	42.03	54	-11.97	Average	Vertical

802.11n(HT40) / Channel 46 / Chain 0 + Chain 1

Freq. GHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
15.69	45.90	33.21	35.82	9.52	52.81	74	-21.19	Peak	Horizontal
15.69	35.35	33.21	35.82	9.52	42.26	54	-11.74	Average	Horizontal
15.69	47.14	32.82	35.82	9.52	53.66	74	-20.34	Peak	Vertical
15.69	35.50	32.82	35.82	9.52	42.02	54	-11.98	Average	Vertical

802.11ac(VHT20) / Channel 36 / Chain 0 + Chain 1

Freq. GHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
15.54	45.13	33.21	35.82	9.52	52.04	74	-21.96	Peak	Horizontal
15.54	34.43	33.21	35.82	9.52	41.34	54	-12.66	Average	Horizontal
15.54	46.30	32.82	35.82	9.52	52.82	74	-21.18	Peak	Vertical
15.54	34.89	32.82	35.82	9.52	41.41	54	-12.59	Average	Vertical

802.11ac(VHT20) / Channel 40 / Chain 0 + Chain 1

Freq. GHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
15.60	45.60	33.21	35.82	9.52	52.51	74	-21.49	Peak	Horizontal
15.60	34.91	33.21	35.82	9.52	41.82	54	-12.18	Average	Horizontal
15.60	46.90	32.82	35.82	9.52	53.42	74	-20.58	Peak	Vertical
15.60	35.43	32.82	35.82	9.52	41.95	54	-12.05	Average	Vertical

802.11ac(VHT20) / Channel 48 / Chain 0 + Chain 1

Freq. GHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
15.72	46.24	33.21	35.82	9.52	53.15	74	-20.85	Peak	Horizontal
15.72	35.35	33.21	35.82	9.52	42.26	54	-11.74	Average	Horizontal
15.72	47.37	32.82	35.82	9.52	53.89	74	-20.11	Peak	Vertical
15.72	35.95	32.82	35.82	9.52	42.47	54	-11.53	Average	Vertical

802.11ac(VHT40) / Channel 38 / Chain 0 + Chain 1

Freq. GHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
15.57	45.30	33.21	35.82	9.52	52.21	74	-21.79	Peak	Horizontal
15.57	34.54	33.21	35.82	9.52	41.45	54	-12.55	Average	Horizontal
15.57	46.51	32.82	35.82	9.52	53.03	74	-20.97	Peak	Vertical
15.57	34.83	32.82	35.82	9.52	41.35	54	-12.65	Average	Vertical

802.11ac(VHT40) / Channel 46 / Chain 0 + Chain 1

Freq. GHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
15.69	45.69	33.21	35.82	9.52	52.60	74	-21.40	Peak	Horizontal
15.69	35.10	33.21	35.82	9.52	42.01	54	-11.99	Average	Horizontal
15.69	47.10	32.82	35.82	9.52	53.62	74	-20.38	Peak	Vertical
15.69	35.49	32.82	35.82	9.52	42.01	54	-11.99	Average	Vertical

802.11ac(VHT80) / Channel 42 / Chain 0 + Chain 1

Freq. GHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
15.63	44.94	33.21	35.82	9.52	51.85	74	-22.15	Peak	Horizontal
15.63	34.16	33.21	35.82	9.52	41.07	54	-12.93	Average	Horizontal
15.63	46.27	32.82	35.82	9.52	52.79	74	-21.21	Peak	Vertical
15.63	34.54	32.82	35.82	9.52	41.06	54	-12.94	Average	Vertical

Notes:

1. Measuring frequencies from 9k~40GHz, No emission found between lowest internal used/generated frequency to 30MHz.
2. Radiated emissions measured in frequency range from 30MHz~40GH were made with an instrument using Peak detector mode.
3. The radiated emissions from 18GHz to 40GHz are at least 20dB below the official limit and no need to report.

The Worst Test Result For 5745~5825MHz Band.

802.11a / Channel 149 / Chain 0

Freq. GHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
17.235	50.01	33.92	36.09	10.26	58.10	74	-15.90	Peak	Horizontal
17.235	39.17	33.92	36.09	10.26	47.26	54	-6.74	Average	Horizontal
17.235	50.95	33.99	35.99	10.26	59.21	74	-14.79	Peak	Vertical
17.235	39.65	33.99	35.99	10.26	47.91	54	-6.09	Average	Vertical

802.11a / Channel 157 / Chain 0

Freq. GHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
17.355	50.23	33.92	36.09	10.26	58.32	74	-15.68	Peak	Horizontal
17.355	39.64	33.92	36.09	10.26	47.73	54	-6.27	Average	Horizontal
17.355	51.17	33.99	35.99	10.26	59.43	74	-14.57	Peak	Vertical
17.355	39.68	33.99	35.99	10.26	47.94	54	-6.06	Average	Vertical

802.11a / Channel 165 / Chain 0

Freq. GHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
17.475	50.45	33.92	36.09	10.26	58.54	74	-15.46	Peak	Horizontal
17.475	39.71	33.92	36.09	10.26	47.80	54	-6.20	Average	Horizontal
17.475	51.74	33.99	35.99	10.26	60.00	74	-14.00	Peak	Vertical
17.475	40.18	33.99	35.99	10.26	48.44	54	-5.56	Average	Vertical

802.11n(HT20) / Channel 149 / Chain 0 + Chain 1

Freq. GHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
17.235	50.23	33.92	36.09	10.26	58.32	74	-15.68	Peak	Horizontal
17.235	39.50	33.92	36.09	10.26	47.59	54	-6.41	Average	Horizontal
17.235	51.34	33.99	35.99	10.26	59.60	74	-14.40	Peak	Vertical
17.235	39.83	33.99	35.99	10.26	48.09	54	-5.91	Average	Vertical

802.11n(HT20) / Channel 157 / Chain 0 + Chain 1

Freq. GHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
17.355	49.79	33.92	36.09	10.26	57.88	74	-16.12	Peak	Horizontal
17.355	39.21	33.92	36.09	10.26	47.30	54	-6.70	Average	Horizontal
17.355	50.90	33.99	35.99	10.26	59.16	74	-14.84	Peak	Vertical
17.355	39.74	33.99	35.99	10.26	48.00	54	-6.00	Average	Vertical

802.11n(HT20) / Channel 165 / Chain 0 + Chain 1

Freq. GHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
17.475	49.79	33.92	36.09	10.26	57.88	74	-16.12	Peak	Horizontal
17.475	39.21	33.92	36.09	10.26	47.30	54	-6.70	Average	Horizontal
17.475	50.70	33.99	35.99	10.26	58.96	74	-15.04	Peak	Vertical
17.475	39.59	33.99	35.99	10.26	47.85	54	-6.15	Average	Vertical

802.11n(HT40) / Channel 151 / Chain 0 + Chain 1

Freq. GHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
17.265	49.86	33.92	36.09	10.26	57.95	74	-16.05	Peak	Horizontal
17.265	38.98	33.92	36.09	10.26	47.07	54	-6.93	Average	Horizontal
17.265	50.64	33.99	35.99	10.26	58.90	74	-15.10	Peak	Vertical
17.265	39.32	33.99	35.99	10.26	47.58	54	-6.42	Average	Vertical

802.11n(HT40) / Channel 159 / Chain 0 + Chain 1

Freq. GHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
17.385	49.49	33.92	36.09	10.26	57.58	74	-16.42	Peak	Horizontal
17.385	38.65	33.92	36.09	10.26	46.74	54	-7.26	Average	Horizontal
17.385	50.43	33.99	35.99	10.26	58.69	74	-15.31	Peak	Vertical
17.385	39.14	33.99	35.99	10.26	47.40	54	-6.60	Average	Vertical

802.11ac(VHT20) / Channel 149 / Chain 0 + Chain 1

Freq. GHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
17.235	49.49	33.92	36.09	10.26	57.58	74	-16.42	Peak	Horizontal
17.235	38.69	33.92	36.09	10.26	46.78	54	-7.22	Average	Horizontal
17.235	50.45	33.99	35.99	10.26	58.71	74	-15.29	Peak	Vertical
17.235	39.27	33.99	35.99	10.26	47.53	54	-6.47	Average	Vertical

802.11ac(VHT20) / Channel 157 / Chain 0 + Chain 1

Freq. GHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
17.355	49.26	33.92	36.09	10.26	57.35	74	-16.65	Peak	Horizontal
17.355	38.81	33.92	36.09	10.26	46.90	54	-7.10	Average	Horizontal
17.355	50.22	33.99	35.99	10.26	58.48	74	-15.52	Peak	Vertical
17.355	39.18	33.99	35.99	10.26	47.44	54	-6.56	Average	Vertical

802.11ac(VHT20) / Channel 165 / Chain 0 + Chain 1

Freq. GHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
17.475	48.97	33.92	36.09	10.26	57.06	74	-16.94	Peak	Horizontal
17.475	38.30	33.92	36.09	10.26	46.39	54	-7.61	Average	Horizontal
17.475	50.05	33.99	35.99	10.26	58.31	74	-15.69	Peak	Vertical
17.475	38.89	33.99	35.99	10.26	47.15	54	-6.85	Average	Vertical

802.11ac(VHT40) / Channel 151 / Chain 0 + Chain 1

Freq. GHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
17.265	49.16	33.92	36.09	10.26	57.25	74	-16.75	Peak	Horizontal
17.265	38.62	33.92	36.09	10.26	46.71	54	-7.29	Average	Horizontal
17.265	50.46	33.99	35.99	10.26	58.72	74	-15.28	Peak	Vertical
17.265	38.84	33.99	35.99	10.26	47.10	54	-6.90	Average	Vertical

802.11ac(VHT40) / Channel 159 / Chain 0 + Chain 1

Freq. GHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
17.385	48.99	33.92	36.09	10.26	57.08	74	-16.92	Peak	Horizontal
17.385	38.17	33.92	36.09	10.26	46.26	54	-7.74	Average	Horizontal
17.385	49.82	33.99	35.99	10.26	58.08	74	-15.92	Peak	Vertical
17.385	38.62	33.99	35.99	10.26	46.88	54	-7.12	Average	Vertical

802.11ac(VHT80) / Channel 155 / Chain 0 + Chain 1

Freq. GHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
17.325	49.21	33.92	36.09	10.26	57.30	74	-16.70	Peak	Horizontal
17.325	38.52	33.92	36.09	10.26	46.61	54	-7.39	Average	Horizontal
17.325	50.18	33.99	35.99	10.26	58.44	74	-15.56	Peak	Vertical
17.325	38.73	33.99	35.99	10.26	46.99	54	-7.01	Average	Vertical

Notes:

- 1. Measuring frequencies from 9k~40GHz, No emission found between lowest internal used/generated frequency to 30MHz.*
- 2. Radiated emissions measured in frequency range from 30MHz~40GH were made with an instrument using Peak detector mode.*
- 3. The radiated emissions from 18GHz to 40GHz are at least 20dB below the official limit and no need to report.*

5.4.9. Results of Band Edges Test (Radiated)

Note: Only recorded the worst test result in this report.

The Worst Test Result For 5180~5240MHz Band.

802.11a / Channel 36 / Chain 0

Freq. MHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
5150.00	48.66	33.79	36.42	7.80	53.83	74	-20.17	Peak	Horizontal
5150.00	38.45	33.79	36.42	7.80	43.62	54	-10.38	Average	Horizontal
5150.00	50.13	34.24	36.42	7.80	55.75	74	-18.25	Peak	Vertical
5150.00	39.02	34.24	36.42	7.80	44.64	54	-9.36	Average	Vertical

802.11a / Channel 48 / Chain 0

Freq. MHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
5350.00	49.99	34.66	36.59	7.98	56.04	74	-17.96	Peak	Horizontal
5350.00	39.19	34.66	36.59	7.98	45.24	54	-8.76	Average	Horizontal
5350.00	51.64	34.69	36.59	7.98	57.72	74	-16.28	Peak	Vertical
5350.00	41.19	34.69	36.59	7.98	47.27	54	-6.73	Average	Vertical

802.11n(HT20) / Channel 36 / Chain 0 + Chain 1

Freq. MHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
5150.00	48.64	33.79	36.42	7.80	53.81	74	-20.19	Peak	Horizontal
5150.00	38.24	33.79	36.42	7.80	43.41	54	-10.59	Average	Horizontal
5150.00	49.85	34.24	36.42	7.80	55.47	74	-18.53	Peak	Vertical
5150.00	39.01	34.24	36.42	7.80	44.63	54	-9.37	Average	Vertical

802.11n(HT20) / Channel 48 / Chain 0 + Chain 1

Freq. MHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
5350.00	49.27	34.66	36.59	7.98	55.32	74	-18.68	Peak	Horizontal
5350.00	38.75	34.66	36.59	7.98	44.80	54	-9.20	Average	Horizontal
5350.00	51.08	34.69	36.59	7.98	57.16	74	-16.84	Peak	Vertical
5350.00	40.60	34.69	36.59	7.98	46.68	54	-7.32	Average	Vertical

802.11n(HT40) / Channel 38 / Chain 0 + Chain 1

Freq. MHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
5150.00	47.94	33.79	36.42	7.80	53.11	74	-20.89	Peak	Horizontal
5150.00	37.76	33.79	36.42	7.80	42.93	54	-11.07	Average	Horizontal
5150.00	49.61	34.24	36.42	7.80	55.23	74	-18.77	Peak	Vertical
5150.00	38.32	34.24	36.42	7.80	43.94	54	-10.06	Average	Vertical

802.11n(HT40) / Channel 46 / Chain 0 + Chain 1

Freq. MHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
5350.00	49.00	34.66	36.59	7.98	55.05	74	-18.95	Peak	Horizontal
5350.00	38.34	34.66	36.59	7.98	44.39	54	-9.61	Average	Horizontal
5350.00	50.87	34.69	36.59	7.98	56.95	74	-17.05	Peak	Vertical
5350.00	40.28	34.69	36.59	7.98	46.36	54	-7.64	Average	Vertical

802.11ac(VHT80) / Channel 42 / Chain 0 + Chain 1

Freq. MHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
5150.00	48.40	33.79	36.42	7.80	53.57	74	-20.43	Peak	Horizontal
5150.00	38.23	33.79	36.42	7.80	43.40	54	-10.60	Average	Horizontal
5150.00	49.61	34.24	36.42	7.80	55.23	74	-18.77	Peak	Vertical
5150.00	38.69	34.24	36.42	7.80	44.31	54	-9.69	Average	Vertical
5350.00	49.19	34.66	36.59	7.98	55.24	74	-18.76	Peak	Horizontal
5350.00	38.21	34.66	36.59	7.98	44.26	54	-9.74	Average	Horizontal
5350.00	50.82	34.69	36.59	7.98	56.90	74	-17.10	Peak	Vertical
5350.00	40.42	34.69	36.59	7.98	46.50	54	-7.50	Average	Vertical

The Worst Test Result For 5745~5825MHz Band.

802.11a / Channel 149 / Chain 0

Freq. MHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
5725.00	49.83	34.46	36.75	8.19	55.73	74	-18.27	Peak	Horizontal
5725.00	38.00	34.46	36.75	8.19	43.90	54	-10.10	Average	Horizontal
5725.00	50.99	34.52	36.75	8.19	56.95	74	-17.05	Peak	Vertical
5725.00	39.40	34.52	36.75	8.19	45.36	54	-8.64	Average	Vertical

802.11a / Channel 165 / Chain 0

Freq. MHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
5850.00	50.77	34.82	36.80	8.30	57.09	74	-16.91	Peak	Horizontal
5850.00	39.63	34.82	36.80	8.30	45.95	54	-8.05	Average	Horizontal
5850.00	52.39	34.86	36.80	8.30	58.75	74	-15.25	Peak	Vertical
5850.00	41.43	34.86	36.80	8.30	47.79	54	-6.21	Average	Vertical

802.11n(HT20) / Channel 149 / Chain 0 + Chain 1

Freq. MHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
5725.00	49.55	34.46	36.75	8.19	55.45	74	-18.55	Peak	Horizontal
5725.00	38.34	34.46	36.75	8.19	44.24	54	-9.76	Average	Horizontal
5725.00	51.13	34.52	36.75	8.19	57.09	74	-16.91	Peak	Vertical
5725.00	39.39	34.52	36.75	8.19	45.35	54	-8.65	Average	Vertical

802.11n(HT20) / Channel 165 / Chain 0 + Chain 1

Freq. MHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
5850.00	50.82	34.82	36.80	8.30	57.14	74	-16.86	Peak	Horizontal
5850.00	39.59	34.82	36.80	8.30	45.91	54	-8.09	Average	Horizontal
5850.00	52.15	34.86	36.80	8.30	58.51	74	-15.49	Peak	Vertical
5850.00	41.30	34.86	36.80	8.30	47.66	54	-6.34	Average	Vertical

802.11n(HT40) / Channel 151 / Chain 0 + Chain 1

Freq. MHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
5725.00	49.74	34.46	36.75	8.19	55.64	74	-18.36	Peak	Horizontal
5725.00	38.28	34.46	36.75	8.19	44.18	54	-9.82	Average	Horizontal
5725.00	51.09	34.52	36.75	8.19	57.05	74	-16.95	Peak	Vertical
5725.00	39.39	34.52	36.75	8.19	45.35	54	-8.65	Average	Vertical

802.11n(HT40) / Channel 159 / Chain 0 + Chain 1

Freq. MHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
5850.00	51.03	34.82	36.80	8.30	57.35	74	-16.65	Peak	Horizontal
5850.00	39.57	34.82	36.80	8.30	45.89	54	-8.11	Average	Horizontal
5850.00	52.60	34.86	36.80	8.30	58.96	74	-15.04	Peak	Vertical
5850.00	41.42	34.86	36.80	8.30	47.78	54	-6.22	Average	Vertical

802.11ac(VHT80) / Channel 155 / Chain 0 + Chain 1

Freq. MHz	Reading Level dBuV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Measured dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol.
5725.00	49.83	34.46	36.75	8.19	55.73	74	-18.27	Peak	Horizontal
5725.00	38.27	34.46	36.75	8.19	44.17	54	-9.83	Average	Horizontal
5725.00	51.37	34.52	36.75	8.19	57.33	74	-16.67	Peak	Vertical
5725.00	39.84	34.52	36.75	8.19	45.80	54	-8.20	Average	Vertical
5850.00	50.77	34.82	36.80	8.30	57.09	74	-16.91	Peak	Horizontal
5850.00	39.49	34.82	36.80	8.30	45.81	54	-8.19	Average	Horizontal
5850.00	52.50	34.86	36.80	8.30	58.86	74	-15.14	Peak	Vertical
5850.00	41.41	34.86	36.80	8.30	47.77	54	-6.23	Average	Vertical

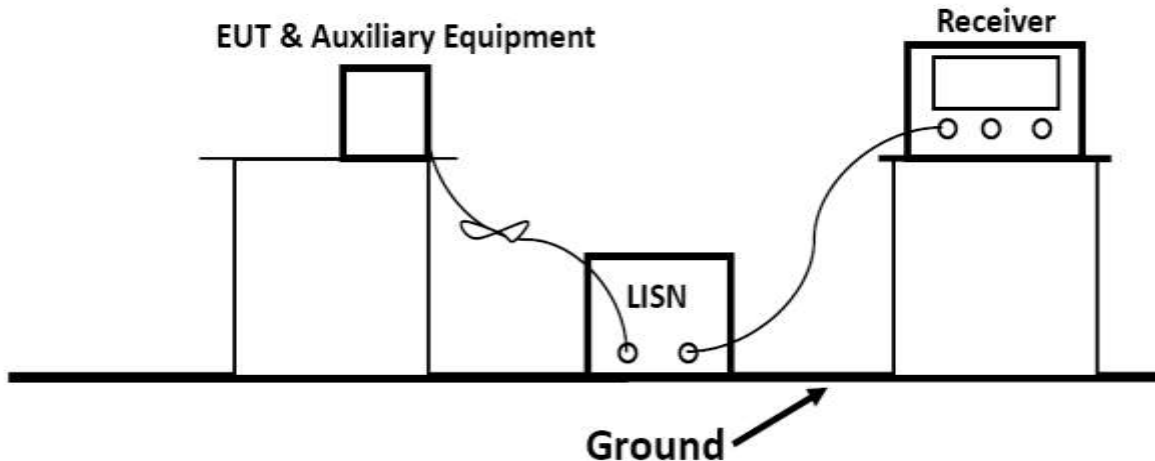
5.6. Power line conducted emissions

5.6.1 Standard Applicable

According to §15.207 (a): For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed 250 microvolts (The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz). The limits at specific frequency range is listed as follows:

Frequency Range (MHz)	Limits (dBµV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5	56	46
5 to 30	60	50

5.6.2 Block Diagram of Test Setup



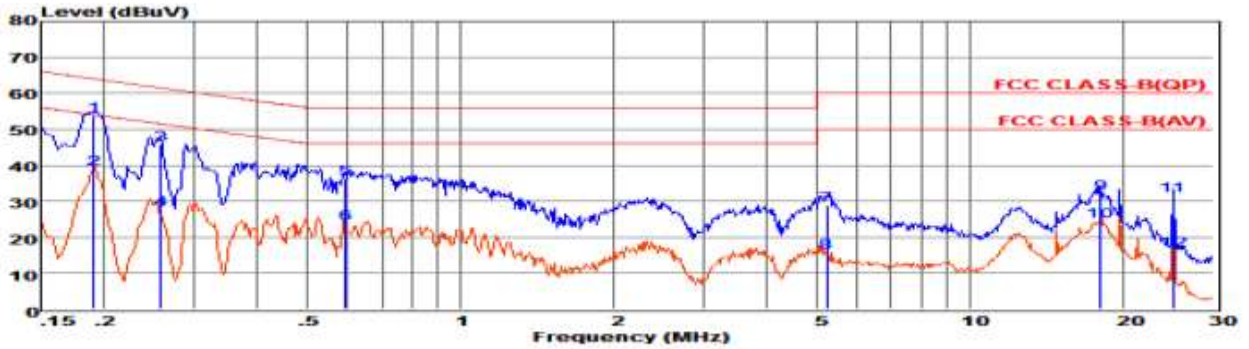
5.6.3 Test Results

PASS.

Only recorded the worst test case in this report.

The test data please refer to following page.

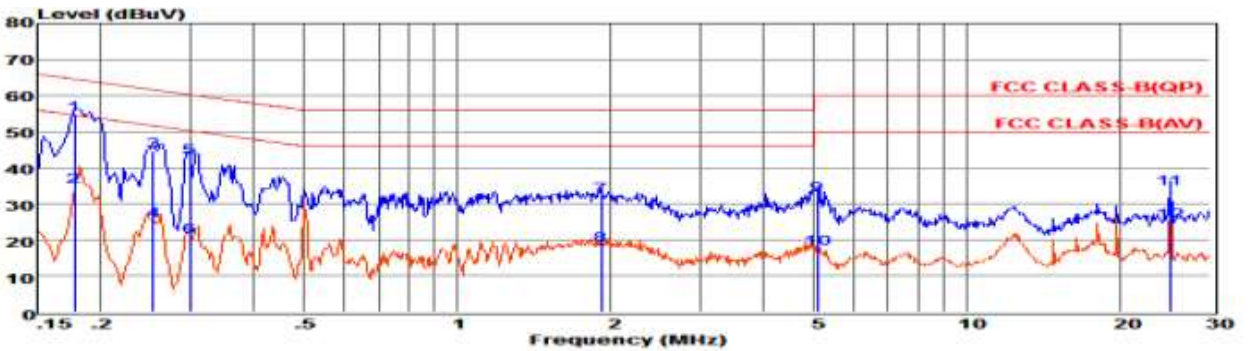
The Test Result For Configuration 1(Input AC 120V/60Hz): Configured with Switching Power Adapter (Used For Charging)



Env. Ins: 24*/56k
 EUT: Tablet POS
 M/N: HM518
 Power Rating: AC 120V/60Hz
 Test Mode: TX-Low Channel (n20, chain0+chain1, 5.8G)
 Operator: Leo
 Memo: Configuration 1
 Pol: LINE

Line	Freq MHz	Reading dBuV	LisnFac dB	CabLos dB	Atten_Fac dB	Measured dBuV	Limit dBuV	Over dB	Remark
1	0.19039	34.32	9.62	0.02	10.00	53.96	64.02	-10.06	QP
2	0.19049	19.44	9.62	0.02	10.00	39.08	54.02	-14.94	Average
3	0.25751	26.13	9.63	0.03	10.00	45.79	61.51	-15.72	QP
4	0.25761	8.06	9.63	0.03	10.00	27.72	51.51	-23.79	Average
5	0.59478	16.53	9.63	0.04	10.00	36.20	56.00	-19.80	QP
6	0.59488	3.98	9.63	0.04	10.00	23.65	46.00	-22.35	Average
7	5.22133	9.23	9.65	0.06	10.00	28.94	60.00	-31.06	QP
8	5.22233	-3.86	9.65	0.06	10.00	15.85	50.00	-34.15	Average
9	18.03941	12.13	9.74	0.11	10.00	31.98	60.00	-28.02	QP
10	18.04041	4.53	9.74	0.11	10.00	24.38	50.00	-25.62	Average
11	25.05453	11.58	9.71	0.13	10.00	31.42	60.00	-28.58	QP
12	25.05553	-3.61	9.71	0.13	10.00	16.23	50.00	-33.77	Average

Remarks: 1. Measured = Reading + Lisn Factor +Cable Loss+Atten_Fac.
 2. The emission levels that are 20dB below the official limit are not reported.



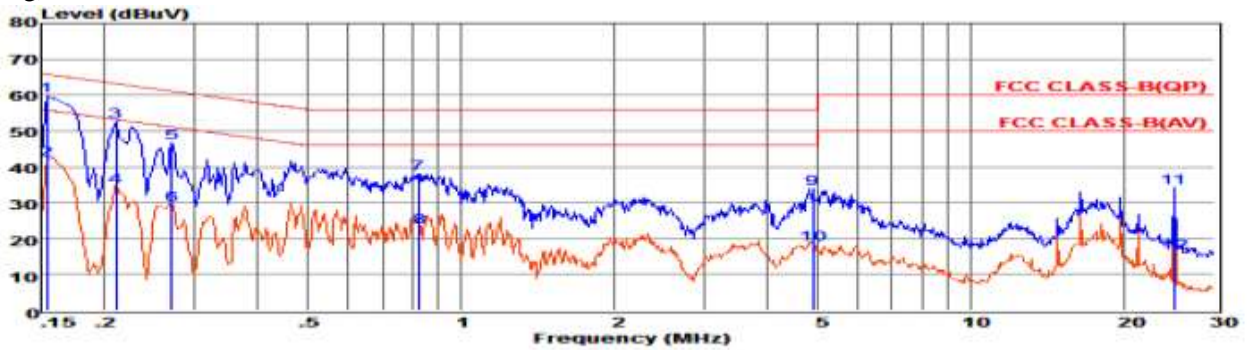
Env. Ins: 24*/56k
 EUT: Tablet POS
 M/N: HM518
 Power Rating: AC 120V/60Hz
 Test Mode: TX-Low Channel (n20, chain0+chain1, 5.8G)
 Operator: Leo
 Memo: Configuration 1
 Pol: NEUTRAL

Line	Freq MHz	Reading dBuV	LisnFac dB	CabLos dB	Atten_Fac dB	Measured dBuV	Limit dBuV	Over dB	Remark
1	0.17772	34.96	9.64	0.02	10.00	54.62	64.59	-9.97	QP
2	0.17782	15.16	9.63	0.02	10.00	34.81	54.59	-19.78	Average
3	0.25345	25.10	9.60	0.03	10.00	44.73	61.64	-16.91	QP
4	0.25355	5.55	9.60	0.03	10.00	25.18	51.64	-26.46	Average
5	0.29869	23.09	9.60	0.03	10.00	42.72	60.28	-17.56	QP
6	0.29879	1.31	9.60	0.03	10.00	20.94	50.28	-29.34	Average
7	1.91817	12.58	9.63	0.05	10.00	32.26	56.00	-23.74	QP
8	1.91917	-1.14	9.63	0.05	10.00	18.54	46.00	-27.46	Average
9	5.08483	12.58	9.66	0.06	10.00	32.30	60.00	-27.70	QP
10	5.08583	-2.16	9.66	0.06	10.00	17.56	50.00	-32.44	Average
11	25.05453	14.24	9.83	0.13	10.00	34.20	60.00	-25.80	QP
12	25.05553	5.16	9.83	0.13	10.00	25.12	50.00	-24.88	Average

Remarks: 1. Measured = Reading + Lisn Factor +Cable Loss+Atten_Fac.
 2. The emission levels that are 20dB below the official limit are not reported.

Note: Pre-scan all modes and recorded the worst case results in this report.

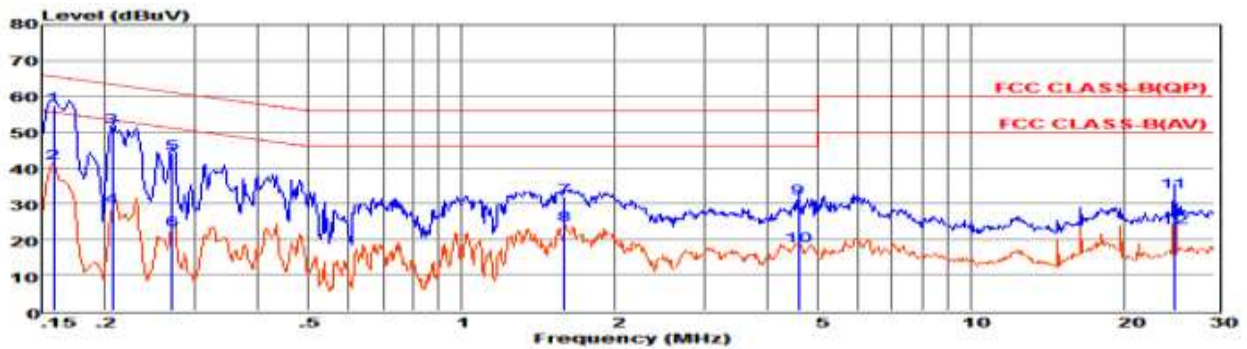
The Test Result For Configuration 1(Input AC 240V/60Hz): Configured with Switching Power Adapter (Used For Charging)



Env. Ins: 24*/56%
 EUT: Tablet POS
 M/N: HM518
 Power Rating: AC 240V/60Hz
 Test Mode: TX-Low Channel(n20,chain0+chain1,5.8G)
 Operator: Leo
 Memo: Configuration 1
 Pol: LINE

Freq	Reading	LisnFac	CabLos	Atten_Fac	Measured	Limit	Over	Remark
MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1 0.15403	40.16	9.58	0.02	10.00	59.76	65.78	-6.02	QP
2 0.15413	22.25	9.58	0.02	10.00	41.85	55.77	-13.92	Average
3 0.21055	32.83	9.63	0.03	10.00	52.49	63.18	-10.69	QP
4 0.21065	14.74	9.63	0.03	10.00	34.40	53.18	-18.78	Average
5 0.27009	26.91	9.63	0.03	10.00	46.57	61.12	-14.55	QP
6 0.27019	9.78	9.63	0.03	10.00	29.44	51.11	-21.67	Average
7 0.82608	18.40	9.64	0.04	10.00	38.08	56.00	-17.92	QP
8 0.82618	3.46	9.64	0.04	10.00	23.14	46.00	-22.86	Average
9 4.89969	14.19	9.65	0.06	10.00	33.90	56.00	-22.10	QP
10 4.90069	-1.18	9.65	0.06	10.00	18.53	46.00	-27.47	Average
1125.05453	14.25	9.71	0.13	10.00	34.09	60.00	-25.91	QP
1225.05553	-3.77	9.71	0.13	10.00	16.07	50.00	-33.93	Average

Remarks: 1. Measured = Reading + Lisn Factor +Cable Loss+Atten_Fac.
 2. The emission levels that are 20dB below the official limit are not reported.



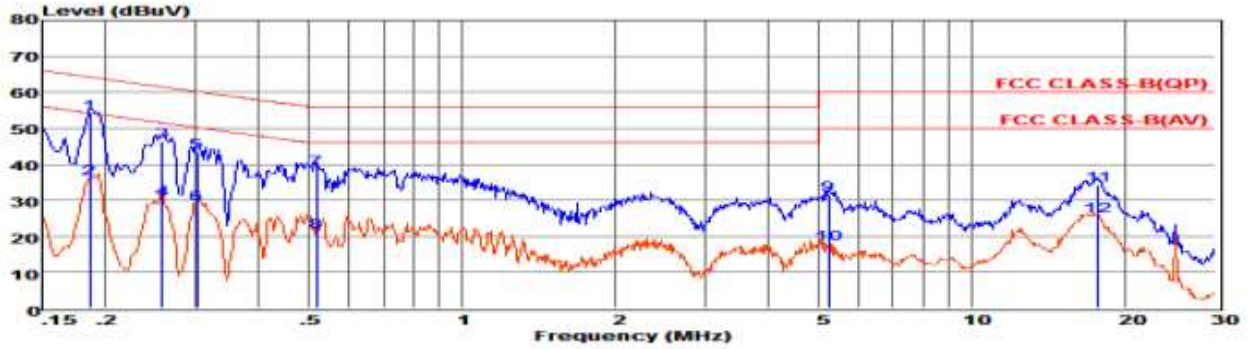
Env. Ins: 24*/56%
 EUT: Tablet POS
 M/N: HM518
 Power Rating: AC 240V/60Hz
 Test Mode: TX-Low Channel(n20,chain0+chain1,5.8G)
 Operator: Leo
 Memo: Configuration 1
 Pol: NEUTRAL

Freq	Reading	LisnFac	CabLos	Atten_Fac	Measured	Limit	Over	Remark
MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1 0.15816	37.76	9.68	0.02	10.00	57.46	65.56	-8.10	QP
2 0.15826	21.64	9.68	0.02	10.00	41.34	55.55	-14.21	Average
3 0.20614	31.70	9.59	0.03	10.00	51.32	63.36	-12.04	QP
4 0.20624	9.62	9.59	0.03	10.00	29.24	53.36	-24.12	Average
5 0.27009	24.36	9.60	0.03	10.00	43.99	61.12	-17.13	QP
6 0.27019	2.99	9.60	0.03	10.00	22.62	51.11	-28.49	Average
7 1.59350	12.08	9.63	0.05	10.00	31.76	56.00	-24.24	QP
8 1.59450	4.39	9.63	0.05	10.00	24.07	46.00	-21.93	Average
9 4.57357	11.75	9.66	0.06	10.00	31.47	56.00	-24.53	QP
10 4.57457	-1.63	9.66	0.06	10.00	18.09	46.00	-27.91	Average
1125.05453	13.45	9.83	0.13	10.00	33.41	60.00	-26.59	QP
1225.05553	3.19	9.83	0.13	10.00	23.15	50.00	-26.85	Average

Remarks: 1. Measured = Reading + Lisn Factor +Cable Loss+Atten_Fac.
 2. The emission levels that are 20dB below the official limit are not reported.

Note: Pre-scan all modes and recorded the worst case results in this report.

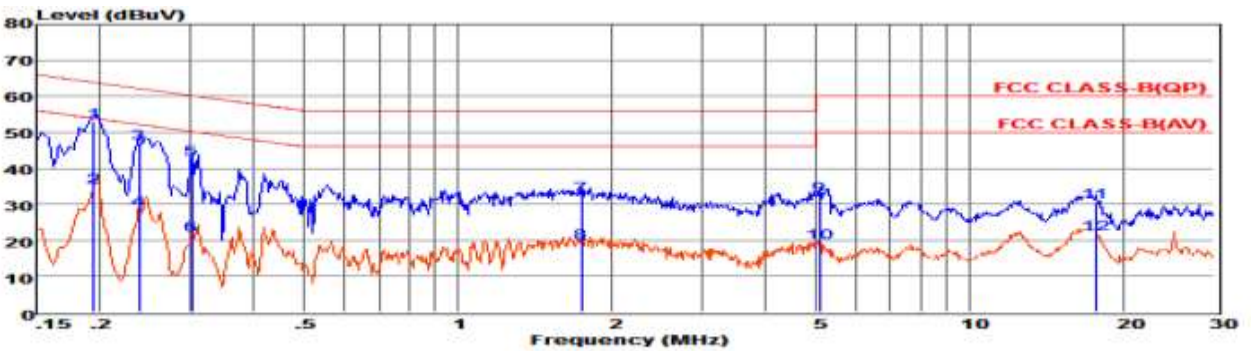
The Test Result For Configuration 2(Input AC 120V/60Hz): Configured with Switching Power Adapter and Docking Station (Used For Charging)



Env. Ins: 24*/56k
 EUT: Tablet POS
 M/N: HM518
 Power Rating: AC 120V/60Hz
 Test Mode: TX-Low Channel(n20,chain0+chain1,5.8G)
 Operator: Leo
 Memo: Configuration 2
 Pol: LINE

Freq	Reading	LisnFac	CabLos	Atten_Fac	Measured	Limit	Over	Remark
MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1 0.18639	34.40	9.62	0.02	10.00	54.04	64.20	-10.16	QP
2 0.18649	16.23	9.62	0.02	10.00	35.87	54.19	-18.32	Average
3 0.25751	26.60	9.63	0.03	10.00	46.26	61.51	-15.25	QP
4 0.25761	10.73	9.63	0.03	10.00	30.39	51.51	-21.12	Average
5 0.30188	23.80	9.63	0.03	10.00	43.46	60.19	-16.73	QP
6 0.30198	9.23	9.63	0.03	10.00	28.89	50.19	-21.30	Average
7 0.51824	18.90	9.62	0.04	10.00	38.56	56.00	-17.44	QP
8 0.51834	1.60	9.62	0.04	10.00	21.26	46.00	-24.74	Average
9 5.22133	11.76	9.65	0.06	10.00	31.47	60.00	-28.53	QP
10 5.22233	-1.85	9.65	0.06	10.00	17.86	50.00	-32.14	Average
1117.66112	14.38	9.74	0.11	10.00	34.23	60.00	-25.77	QP
1217.66212	5.65	9.74	0.11	10.00	25.50	50.00	-24.50	Average

Remarks: 1. Measured = Reading + Lisn Factor +Cable Loss+Atten_Fac.
 2. The emission levels that are 20dB below the official limit are not reported.



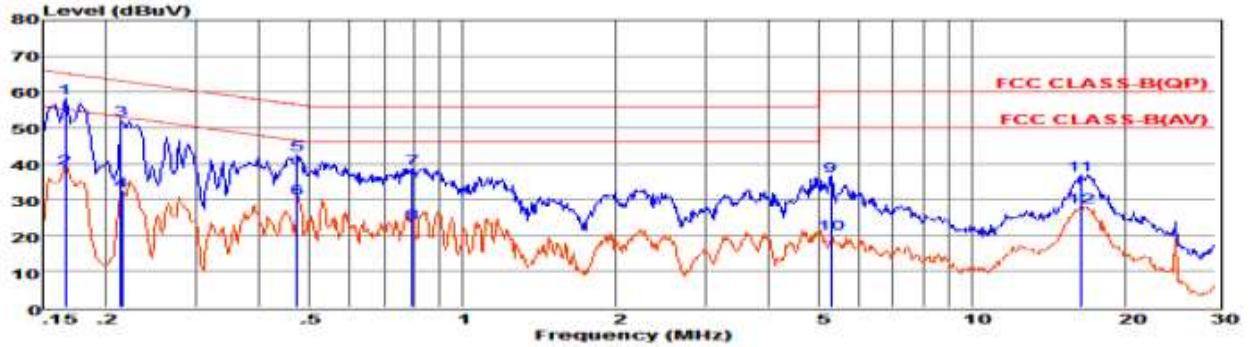
Env. Ins: 24*/56k
 EUT: Tablet POS
 M/N: HM518
 Power Rating: AC 120V/60Hz
 Test Mode: TX-Low Channel(n20,chain0+chain1,5.8G)
 Operator: Leo
 Memo: Configuration 2
 Pol: NEUTRAL

Freq	Reading	LisnFac	CabLos	Atten_Fac	Measured	Limit	Over	Remark
MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1 0.19447	33.44	9.60	0.02	10.00	53.06	63.84	-10.78	QP
2 0.19457	15.26	9.60	0.02	10.00	34.88	53.84	-18.96	Average
3 0.23784	27.48	9.60	0.03	10.00	47.11	62.17	-15.06	QP
4 0.23794	8.90	9.60	0.03	10.00	28.53	52.17	-23.64	Average
5 0.30188	22.82	9.60	0.03	10.00	42.45	60.19	-17.74	QP
6 0.30198	1.71	9.60	0.03	10.00	21.34	50.19	-28.85	Average
7 1.74369	12.88	9.63	0.05	10.00	32.56	56.00	-23.44	QP
8 1.74469	-0.44	9.63	0.05	10.00	19.24	46.00	-26.76	Average
9 5.08483	12.61	9.66	0.06	10.00	32.33	60.00	-27.67	QP
10 5.08583	-0.52	9.66	0.06	10.00	19.20	50.00	-30.80	Average
1117.56779	10.87	9.79	0.11	10.00	30.77	60.00	-29.23	QP
1217.56879	1.81	9.79	0.11	10.00	21.71	50.00	-28.29	Average

Remarks: 1. Measured = Reading + Lisn Factor +Cable Loss+Atten_Fac.
 2. The emission levels that are 20dB below the official limit are not reported.

Note: Pre-scan all modes and recorded the worst case results in this report.

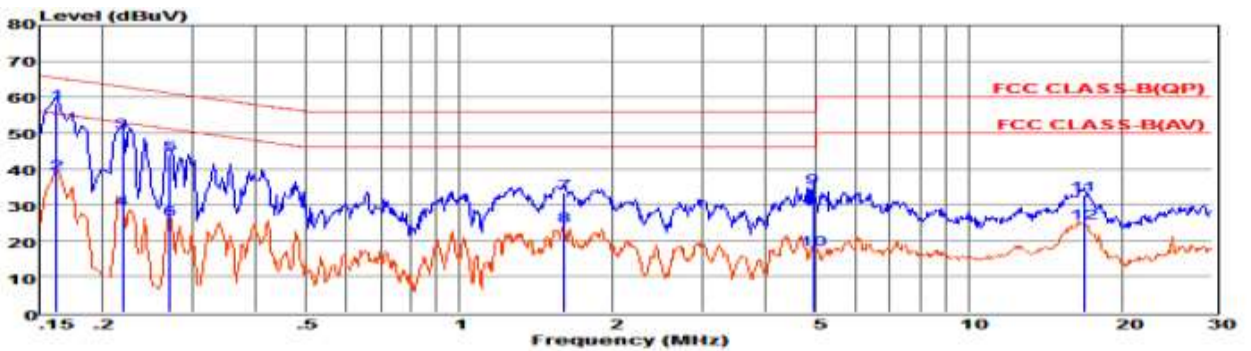
The Test Result For Configuration 2(Input AC 240V/60Hz): Configured with Switching Power Adapter and Docking Station (Used For Charging)



Env. Ins: 24*/56%
 EUT: Tablet POS
 M/N: HMS18
 Power Rating: AC 240V/60Hz
 Test Mode: TX-Low Channel(n20,chain0+chain1,5.8G)
 Operator: Leo
 Memo: Configuration 2
 Pol: LINE

Freq	Reading	LisnFac	CabLos	Atten_Fac	Measured	Limit	Over	Remark
MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1 0.16589	38.78	9.59	0.02	10.00	58.39	65.16	-6.77	QP
2 0.16599	19.14	9.59	0.02	10.00	38.75	55.16	-16.41	Average
3 0.21392	32.53	9.63	0.03	10.00	52.19	63.05	-10.86	QP
4 0.21402	12.86	9.63	0.03	10.00	32.52	53.05	-20.53	Average
5 0.47360	23.00	9.62	0.04	10.00	42.66	56.45	-13.79	QP
6 0.47370	10.58	9.62	0.04	10.00	30.24	46.45	-16.21	Average
7 0.79600	19.07	9.64	0.04	10.00	38.75	56.00	-17.25	QP
8 0.79610	3.78	9.64	0.04	10.00	23.46	46.00	-22.54	Average
9 5.27696	17.00	9.65	0.06	10.00	36.71	60.00	-23.29	QP
10 5.27796	0.80	9.65	0.06	10.00	20.51	50.00	-29.49	Average
1116.31183	17.07	9.72	0.11	10.00	36.90	60.00	-23.10	QP
1216.31283	7.99	9.72	0.11	10.00	27.82	50.00	-22.18	Average

Remarks: 1. Measured = Reading + Lisn Factor +Cable Loss+Atten_Fac.
 2. The emission levels that are 20dB below the official limit are not reported.



Env. Ins: 24*/56%
 EUT: Tablet POS
 M/N: HMS18
 Power Rating: AC 240V/60Hz
 Test Mode: TX-Low Channel(n20,chain0+chain1,5.8G)
 Operator: Leo
 Memo: Configuration 2
 Pol: NEUTRAL

Freq	Reading	LisnFac	CabLos	Atten_Fac	Measured	Limit	Over	Remark
MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1 0.16241	38.51	9.67	0.02	10.00	58.20	65.34	-7.14	QP
2 0.16251	19.00	9.67	0.02	10.00	38.69	55.33	-16.64	Average
3 0.21851	30.78	9.59	0.03	10.00	50.40	62.88	-12.48	QP
4 0.21861	9.23	9.59	0.03	10.00	28.85	52.87	-24.02	Average
5 0.27009	24.49	9.60	0.03	10.00	44.12	61.12	-17.00	QP
6 0.27019	6.12	9.60	0.03	10.00	25.75	51.11	-25.36	Average
7 1.61047	13.61	9.63	0.05	10.00	33.29	56.00	-22.71	QP
8 1.61147	4.31	9.63	0.05	10.00	23.99	46.00	-22.01	Average
9 4.95189	14.97	9.66	0.06	10.00	34.69	56.00	-21.31	QP
10 4.95289	-2.08	9.66	0.06	10.00	17.64	46.00	-28.36	Average
1116.74973	12.81	9.76	0.11	10.00	32.68	60.00	-27.32	QP
1216.75073	4.97	9.76	0.11	10.00	24.84	50.00	-25.16	Average

Remarks: 1. Measured = Reading + Lisn Factor +Cable Loss+Atten_Fac.
 2. The emission levels that are 20dB below the official limit are not reported.

Note: Pre-scan all modes and recorded the worst case results in this report.

5.7. Antenna Requirements

5.7.1. Standard Applicable

According to § 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. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

5.7.2. Antenna Connector Construction

The antenna used for transmitting is permanently attached and no consideration of replacement. Please see EUT photo for details.

5.7.3. Results: Compliance.

-----THE END OF REPORT-----