

TEST REPORT

of

FCC PART 15 SUBPART E

☒ New Application; ☐ Class I PC; ☐ Class II PC

Product : IEEE802.11ac Access point
Brand: Packetalk
Model: PT420
Model Difference: N/A
FCC ID: 2ALXC-PT420
FCC Rule Part: §15.407, Cat:NII
Applicant: Packetalk, LLC
Address: 163 Stuyvesant Avenue , Lyndhurst, NJ 07071 , USA

Test Performed by:
International Standards Laboratory Corp.

<LT Lab.>

*Site Registration No.

BSMI: SL2-IN-E-0013; MRA TW0997; TAF: 0997; IC: IC4067B-4;

*Address:

No. 120, Lane 180, Hsin Ho Rd., Lung-Tan Dist., Tao Yuan City 325, Taiwan

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Report No.: **ISL-20LR133FE**

Issue Date : **2020/05/29**



Test results given in this report apply only to the specific sample(s) tested and are traceable to national or international standard through calibration of the equipment and evaluating measurement uncertainty herein.

This report MUST not be used to claim product endorsement by TAF or any agency of the Government.

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VERIFICATION OF COMPLIANCE

Applicant: Packetalk, LLC
Product Description: IEEE802.11ac Access point
Brand Name: Packetalk
Model No.: PT420
Model Difference: N/A
FCC ID: 2ALXC-PT420
Date of test: 2020/05/05 ~ 2020/05/28
Date of EUT Received: 2020/05/05

We hereby certify that:

All the tests in this report have been performed and recorded in accordance with the standards described above and performed by an independent electromagnetic compatibility consultant, International Standards Laboratory Corp.

The test results contained in this report accurately represent the measurements of the characteristics and the energy generated by sample equipment under test at the time of the test. The sample equipment tested as described in this report is in compliance with the limits of above standards.

Test By:		Date:	2020/05/29
	<i>Bill Huang / Senior Engineer</i>		
Prepared By:		Date:	2020/05/29
	<i>Gigi Yeh / Senior Engineer</i>		
Approved By:		Date:	2020/05/29
	<i>Jerry Liu / Technical Manager</i>		

Version

Version No.	Date	Description
00	2020/05/29	Initial creation of document

Uncertainty of Measurement

ISO/IEC 17025 requires that an estimate of measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)).

Description Of Test	Uncertainty
Conducted Emission (AC power line)	2.586 dB
Field Strength of Spurious Radiation	$\leq 30\text{MHz}$: 2.96dB 30-1GHz: 4.22 dB 1-40 GHz: 4.08 dB
Conducted Power	2.412 GHz: 1.30 dB 5.805 GHz: 1.55 dB
Power Density	2.412 GHz: 1.30 dB 5.805 GHz: 1.67 dB
Frequency	0.0032%
Time	0.01%
DC Voltage	1%

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1. General Information

1.1. Product Description

General:

Product Name	IEEE802.11ac Access point	
Brand Name	Packetalk	
Model Name	PT420	
Model Difference	N/A	
Power Tolerance:	+/- 1 dB	
Power Supply	POE or 12Vdc from AC/DC adapter	
	Adapter:	1. Model: 2AAJ024FC

5GHz WLAN: 1TX/1RX

Mode		Frequency Range (MHz)	Channels	Peak / Average Rated Power	Modulation Technology	
802.11a		5180 – 5240	4	-1.68 dBm (AV)	OFDM	
		5745 – 5825	5	-5.78 dBm (AV)		
802.11n	HT20	5180 – 5240	4	-1.61 dBm (AV)		
		5745 – 5825	5	-5.90 dBm (AV)		
	HT40	5190 – 5230	2	-4.61 dBm (AV)		
		5755 – 5795	2	-8.21 dBm (AV)		
802.11ac	VHT20	5180 – 5240	4	-1.83 dBm (AV)		
		5745 – 5825	5	-5.94 dBm (AV)		
	VHT40	5190 – 5230	2	-11.59 dBm (AV)		
		5755 – 5795	2	-12.14 dBm (AV)		
	VHT80	5210	1	-8.74 dBm (AV)		
		5775	1	-12.14dBm (AV)		
Modulation type		CCK, DQPSK, DBPSK for DSSS 256QAM.64QAM. 16QAM, QPSK, BPSK for OFDM				
Antenna Designation		PIFA Antenna WiFi 5GHz Antenna : 12 dBi				

The EUT is compliance with IEEE 802.11 a/n/ac Standard.

This report applies for Wifi frequency band 5150 MHz– 5250 MHz, 5725 MHz– 5850 MHz

Remark: The above DUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

Test SoftWare Version	4.0.00134.0
RF power setting in TEST SoftWare	a mode : TxPowerForce_OLPC 5dBm HT20 mode : TxPowerForce_OLPC 5dBm VHT20 mode : TxPowerForce_OLPC 5dBm HT40 mode : TxPowerForce_OLPC 3dBm VHT40 mode : TxPowerForce_OLPC 0dBm VHT80 mode : TxPowerForce_OLPC 0dBm

Channel List

Frequency Band	Modulation Mode	Channel No.	Frequency (MHz)
5150 - 5250 MHz	802.11a	CH 36	5180
	802.11n HT20	CH 40	5200
	802.11ac VHT20	CH 44	5220
		CH 48	5240
	802.11n HT40	CH 38	5190
	802.11ac VHT40	CH 46	5230
5725 - 5850 MHz	802.11ac VHT80	CH 42	5210
	802.11a	CH 149	5745
	802.11n HT20	CH 153	5765
	802.11ac VHT20	CH 157	5785
		CH 161	5805
		CH 165	5825
	802.11n HT40	CH 151	5755
	802.11ac VHT40	CH 159	5795
	802.11ac VHT80	CH 155	5775

Remark: The above DUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.2. Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for **FCC ID: 2ALXC-PT420** filing to comply with Section 15.407 of the FCC Part 15, Subpart E Rules.

1.3. Test Methodology

Both conducted and radiated testing were performed according to the procedures in ANSI C63.10: 2013. Radiated testing was performed at an antenna to EUT distance 3 meters.

1.4. Test Facility

The measurement facilities used to collect the 3m Radiated Emission and AC power line conducted data are located on the address of International Standards Laboratory Corp. <LT Lab.> No. 120, Lane 180, Hsin Ho Rd., Lung-Tan Dist., Tao Yuan City 325, Taiwan which are constructed and calibrated to meet the FCC requirements in documents ANSI C63.10: 2013. FCC Registration Number is: 487532; Designation Number is: TW0997, Canada Registration Number: 4067B-4.

1.5. Special Accessories

Not available for this EUT intended for grant.

1.6. Equipment Modifications

Not available for this EUT intended for grant.

1.7. Reference

KDB Document: 789033 D02 General UNII Test Procedures New Rules v02r01

FCC 14-30 Revision UNII

594280 D02 U-NII Device Security v01r03

2. System Test Configuration

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 which intends to maximize its emission characteristics in a continuous normal application.

2.2. EUT Exercise

The EUT (Transmitter) was operated in the engineering mode to fix the Tx frequency that was for the purpose of the measurements.

2.3. Test Procedure

2.3.1 Conducted Emissions

The EUT is a placed on as turn table which is 0.8 m above ground plane. According to the requirements in Section 6 of ANSI C63.10: 2013. Con-ducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR 16-1-1 Quasi-Peak and Average detector mode.

2.3.2 Radiated Emissions

The EUT is a placed on as turn table which is 0.8 m/1.5m (Frequency above 1GHz) above ground plane. The turn table 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 max. emission, the relative positions of this hand-held transmitter (EUT) was rotated through three orthogonal axes and measurement procedures for electric field radiated emissions above 1 GHz the EUT measurement is to be made “while keeping the antenna in the ‘cone of radiation’ from that area and pointed at the area both in azimuth and elevation, with polarization oriented for maximum response.” is still within the 3dB illumination BW of the measurement antenna according to the requirements in Section 6 and 11 of ANSI C63.10: 2013

2.4. Configuration of Tested System

Fig. 2-1 Configuration of Tested System

Radiated Emission / AC Conducted Emission



Table 1-1 Equipment Used in Tested System

Item	Equipment	Mfr/Brand	Model/ Type No.	Series No.	Data Cable	Power Cord
1	Adapter	CWT	2AAJ024FC	N/A	N/A	N/A
2	NB	Lenovo	V370	N/A	N/A	N/A

2.5. Duty Cycle

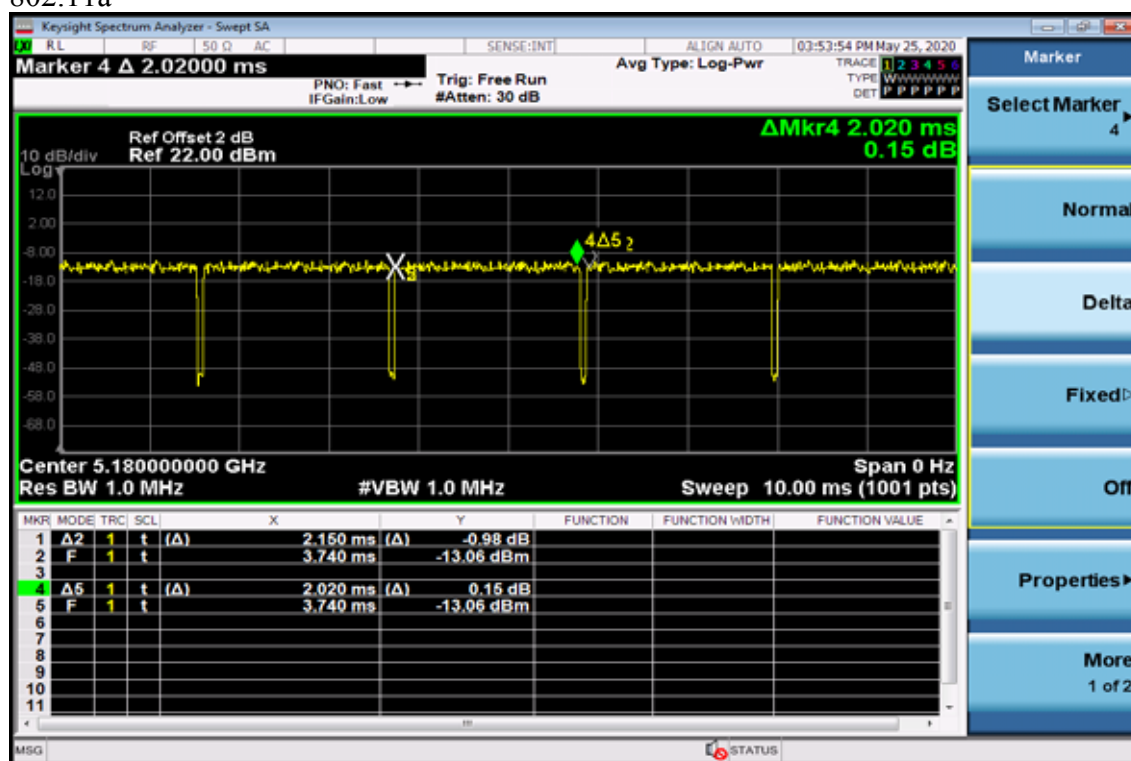
If duty cycle of test signal is $\geq 98\%$, duty factor is not required.

If duty cycle of test signal is $< 98\%$, duty factor shall be considered.

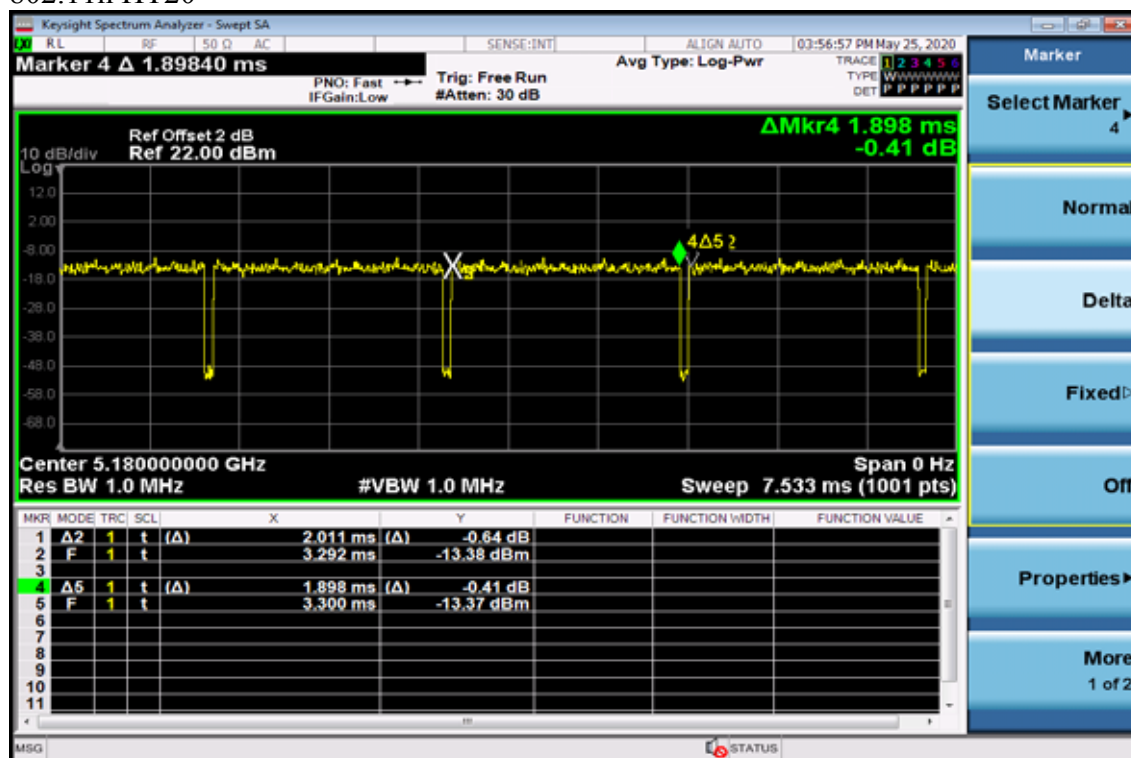
The output power = measured power + duty factor.

Mode	ON time (ms)	Total time (ms)	Duty Cycle	Duty Factor	1/Ton	VBW (kHz)
a	2.020	2.150	93.953%	0.27	0.495	1
HT20	1.898	2.011	94.382%	0.25	0.527	1
HT40	0.905	1.010	89.604%	0.48	1.105	2
VHT20	1.913	2.001	95.601%	0.20	0.523	1
VHT40	0.905	1.025	88.293%	0.54	1.105	2
VHT80	0.431	0.519	82.927%	0.81	2.322	3

802.11a



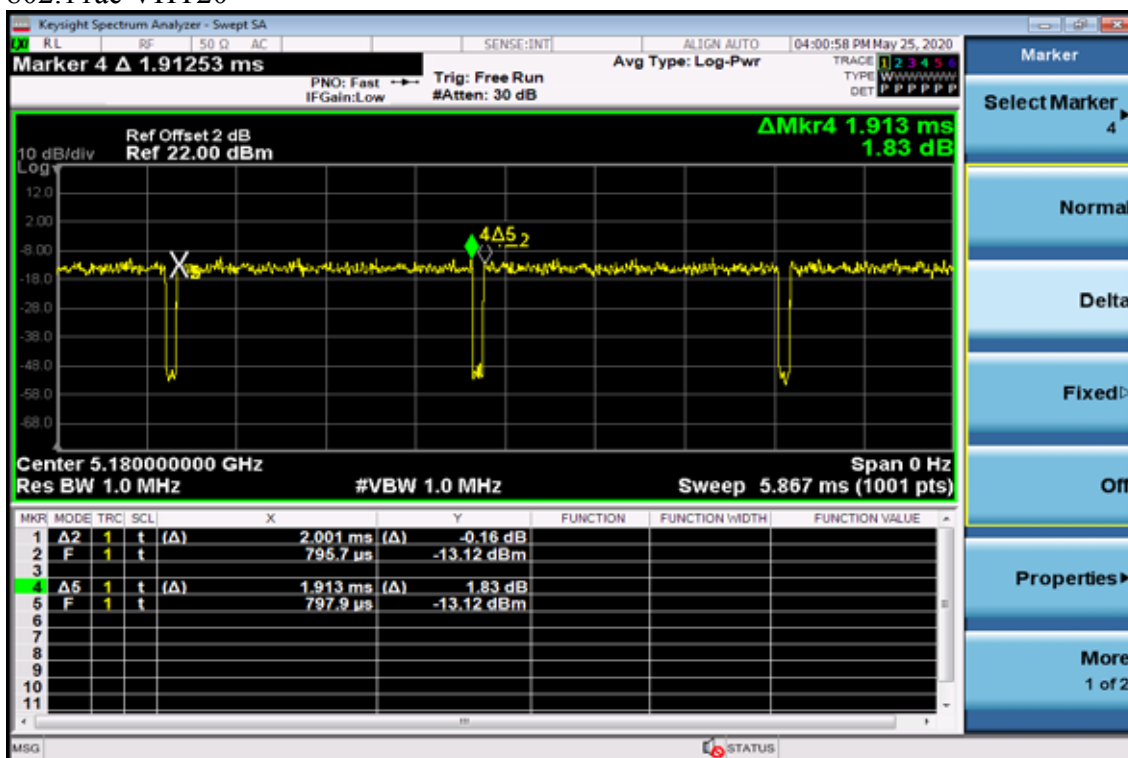
802.11n HT20



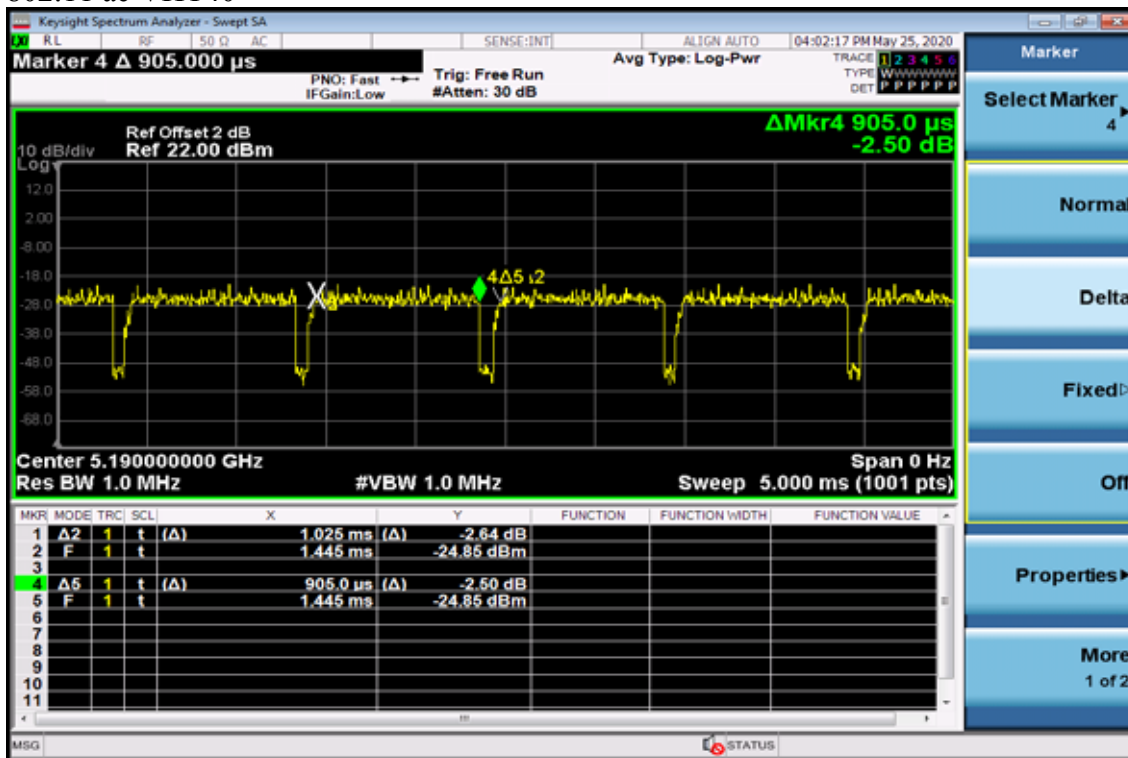
802.11n HT40



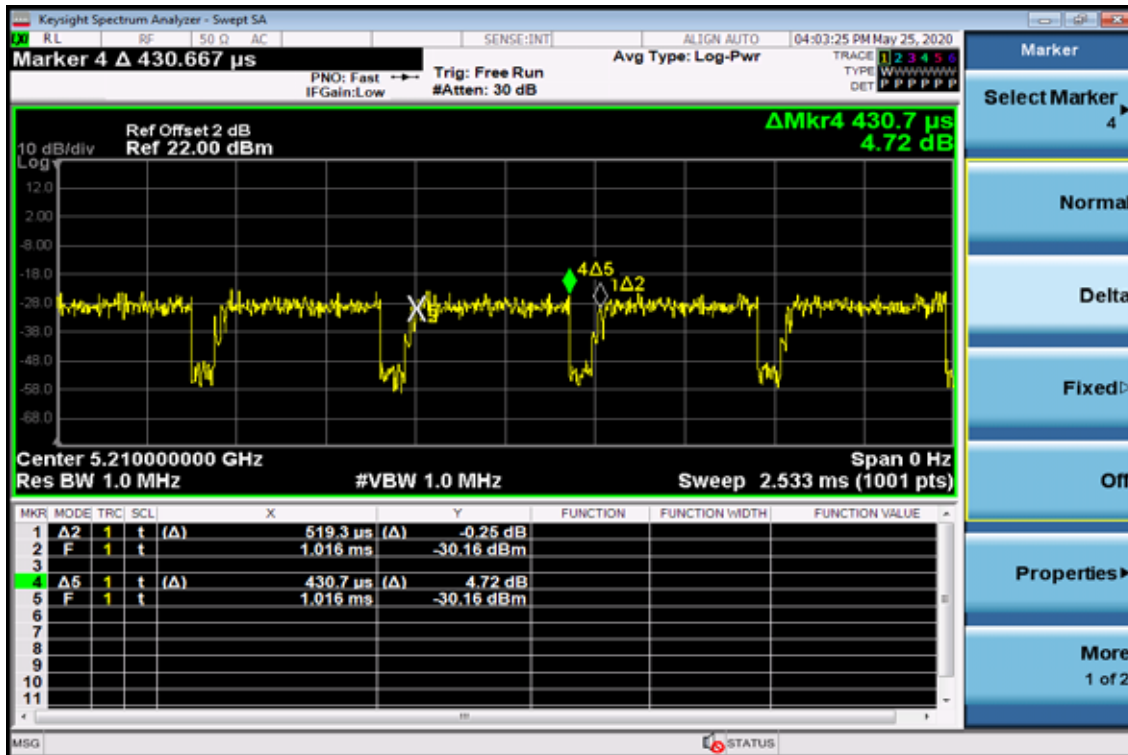
802.11ac VHT20



802.11 ac VHT40



802.11ac VHT80



3. Summary of Test Results

FCC Rules	Description Of Test	Result
§15.207	AC Power Line Conducted Emission	Compliant
§15.407(a)(2)	Output Power/ EIRP/ Spectral Density Measurement	Compliant
§15.407(a)	26dB Emission Bandwidth	Compliant
§15.407(e)	6dB Emission Bandwidth	Compliant
§15.407(b)	Undesirable Emission – Radiated Measurement	Compliant
§15.407(a)	Antenna Requirement	Compliant

4. Description of Test Modes

The EUT has been tested under operating condition.

Test program used to control the EUT for staying in continuous transmitting mode is programmed.

The modulation and bandwidth are similar for 802.11n mode for 20MHz/40MHz and 802.11ac mode for 20MHz/40MHz, therefore investigated worst case to representative mode in test report.

Following channels were selected for the final test as listed below.

Frequency Band (MHz)	Modulation Mode	Test Channel	Data Rate (Mbps)
5150 - 5250	802.11a	36, 40, 48	6
	802.11n HT20	36, 40, 48	6.5
	802.11n HT40	38, 46	13.5
	802.11ac VHT80	42	29.3
5725 - 5850	802.11a	149, 157, 165	6
	802.11n HT20	149, 157, 165	6.5
	802.11n HT40	151, 159	13.5
	802.11ac VHT80	155	29.3

$$\text{Directional gain} = G_{ANT} + 10 \log(N_{ANT}) \text{ dBi}$$

5. Conducted Emission Test

5.1. Standard Applicable

According to §15.207, frequency range within 150kHz to 30MHz shall not exceed the Limit table as below.

Frequency range MHz	Limits dB(uV)	
	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
Note 1.The lower limit shall apply at the transition frequencies 2.The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.		

5.2. Measurement Equipment Used:

Location Con03	Equipment Name	Brand	Model	S/N	Last Cal. Date	Next Cal. Date
Conduction 03	EMI Receiver 13	ROHDE & SCHWARZ	ESCI	101015	07/25/2019	07/25/2020
Conduction 03	ISN T4 09	Teseq GmbH	ISN T400A	49914	08/11/2019	08/11/2020
Conduction 03	ISNT8 09	Teseq GmbH	ISN T800	36190	09/20/2019	09/20/2020
Conduction 03	LISN 15	R&S	ENV216	101335	12/12/2019	12/12/2020
Conduction 03	LISN 22	R&S	ENV216	101478	08/13/2019	08/13/2020
Conduction 03	Conduction 04-3 Cable	WOKEN	CFD 300-NL	conduction 04-3	08/29/2019	08/29/2020
Conduction 03	Capacitive Voltage Probe	FCC	F-CVP-1	68	01/17/2020	01/17/2021
Conduction 03	Current Probe	SCHAFFNER	SMZ 11	18030	01/17/2020	01/17/2021

5.3. EUT Setup:

1. The conducted emission tests were performed in the test site, using the setup in accordance with the ANSI C63.10: 2013.
2. The AC/DC Power adaptor of EUT was plug-in LISN. The EUT was placed flushed with the rear of the table.
3. The LISN was connected with 120Vac/60Hz power source.

5.4. Measurement Procedure:

1. The EUT was placed on a table which is 0.8m above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. Repeat above procedures until all frequency measured were complete.
4. Both 120V & 240V have been verified, and 120V/60Hz was defined as the worst-case and record in the report.

5.5. Measurement Result:

The initial step in collecting conducted data is a spectrum analyzer peak scan of the measurement range. Significant peaks are then marked as shown on the following data page, and these signals are then quasi-peaked.

Note: Refer to next page for measurement data and plots.

AC POWER LINE CONDUCTED EMISSION TEST DATA



Address: No. 120, Lane 180, Hsin Ho Rd., Lung-Tan Dist.,
Tao Yuan City 325, Taiwan.
Tel: 03-4071718

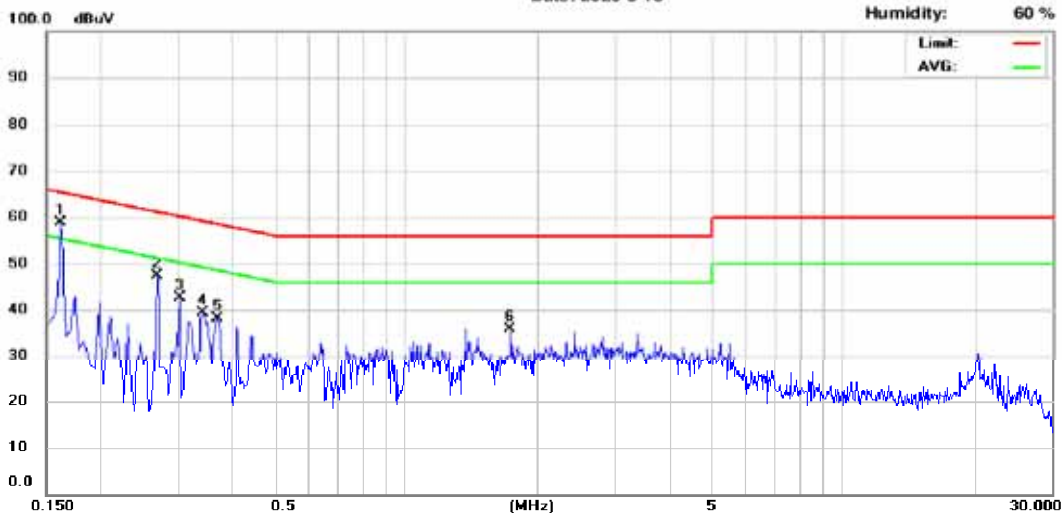
Conducted Emission Measurement

Date: 2020-5-15

operator: Hasan Yu

Temperature: 26 °C

Humidity: 60 %



Site: Conduction 03

Phase: L1

No.	Frequency (MHz)	QP_R (dBuV)	AVG_R (dBuV)	Correct Factor (dB)	QP Emission (dBuV)	QP Limit (dBuV)	QP Margin (dB)	AVG Emission (dBuV)	AVG Limit (dBuV)	AVG Margin (dB)
1	0.162	34.34	18.23	9.62	43.96	65.36	-21.40	27.85	55.36	-27.51
2	0.270	25.35	14.50	9.63	34.98	61.12	-26.14	24.13	51.12	-26.99
3	0.302	23.15	9.14	9.62	32.77	60.19	-27.42	18.76	50.19	-31.43
4	0.342	28.52	25.46	9.62	38.14	59.15	-21.01	35.08	49.15	-14.07
5	0.370	27.92	24.95	9.62	37.54	58.50	-20.96	34.57	48.50	-13.93
6	1.734	25.52	13.52	9.68	35.20	56.00	-20.80	23.20	46.00	-22.80

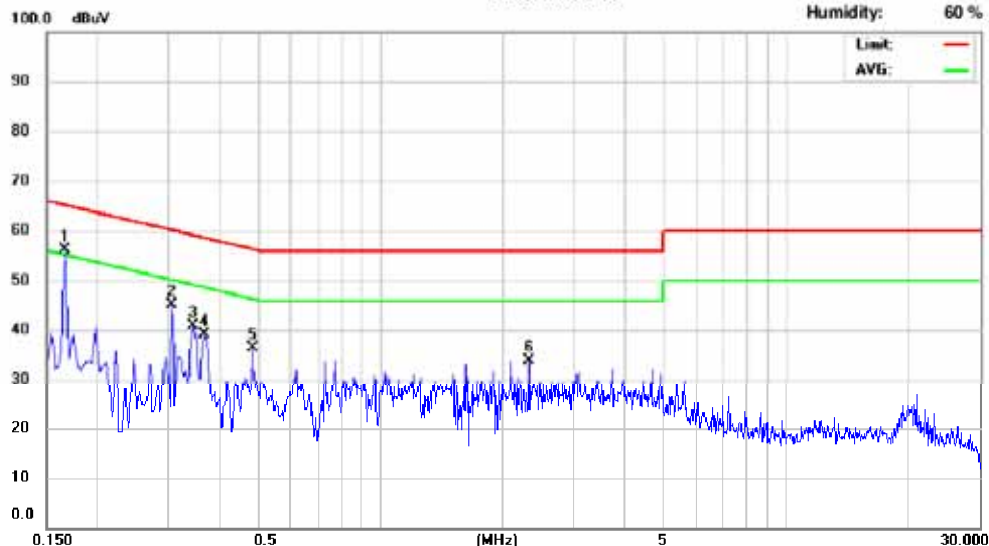


Address: No. 120, Lane 180, Hsin Ho Rd., Lung-Tan Dist.,
Tao Yuan City 325, Taiwan.
Tel: 03-4071718

Conducted Emission Measurement

Date: 2020-5-15

operator: Hasan Yu
Temperature: 26 °C
Humidity: 60 %



Site: Conduction 03

Phase: **N**

No.	Frequency (MHz)	QP_R (dBuV)	AVG_R (dBuV)	Correct Factor (dB)	QP Emission (dBuV)	QP Limit (dBuV)	QP Margin (dB)	AVG Emission (dBuV)	AVG Limit (dBuV)	AVG Margin (dB)
1	0.166	32.53	18.63	9.64	42.17	65.16	-22.99	28.27	55.16	-26.89
2	0.306	20.99	9.11	9.64	30.63	60.08	-29.45	18.75	50.08	-31.33
3	0.346	29.60	26.70	9.64	39.24	59.06	-19.82	36.34	49.06	-12.72
4	0.366	28.20	24.79	9.64	37.84	58.59	-20.75	34.43	48.59	-14.16
5	0.482	17.15	10.83	9.65	26.80	56.30	-29.50	20.48	46.30	-25.82
6	2.330	14.82	8.26	9.71	24.53	56.00	-31.47	17.97	46.00	-28.03

6. Output Power / EIRP /Spectral Density Measurement

6.1. Standard Applicable

According to §15.407(a) Power limits:

(1) For the band 5.15 - 5.25 GHz.

- (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. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. 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).
- (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. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
- (iii) For fixed point-to-point access points 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. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

- (iv) For mobile and portable client devices in the 5.15 - 5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
- (2) For the 5.25 - 5.35 GHz and 5.47 - 5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
- (3) For the band 5.725 - 5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500 kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

6.2. Measurement Procedure

For Output Power

1. Place the EUT on the table and set it in transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the power meter
3. Record the max. reading.
4. Repeat above procedures until all frequency measured were complete.

For Power Spectral Density

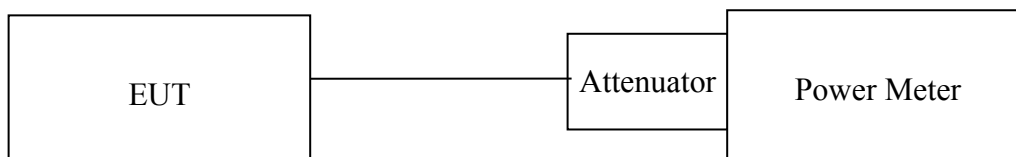
1. Place the EUT on the table and set it in transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to Spectrum.
3. Set RBW=1MHz,VBW=3MHz, Span=50MHz (Base Mode), Sweep time = Auto, traces 100 sweeps of video averaging for 5150-5725MHz;
4. Set RBW=500kHz,VBW=1.5MHz, Span=60MHz (Base Mode), Sweep time = Auto, traces 100 sweeps of video averaging for 5725-5850MHz;
5. Record the max. reading.
6. Repeat above procedures until all frequency measured were complete.

Refer to KDB 789033 D02 General UNII Test Procedures New Rules v02r01

6.3. Measurement Equipment Used:

Location Conducted	Equipment Name	Brand	Model	S/N	Last Cal. Date	Next Cal. Date
Conducted	Power Meter	Anritsu	ML2495A	1116010	10/04/2019	10/04/2020
Conducted	Power Sensor	Anritsu	MA2411B	34NKF50	10/04/2019	10/04/2020
Conducted	Power Sensor	DARE	RPR3006W	13I00030SNO33	01/03/2020	01/03/2021
Conducted	Power Sensor	DARE	RPR3006W	13I00030SNO34	01/09/2020	01/09/2021
Conducted	Power Sensor	DARE	RPR3006W	14I00889SNO35	06/27/2019	06/27/2020
Conducted	Power Sensor	DARE	RPR3006W	14I00889SNO36	06/27/2019	06/27/2020
Conducted	Temperature Chamber	KSON	THS-B4H100	2287	03/11/2020	03/11/2021
Conducted	DC Power supply	ABM	8185D	N/A	01/03/2020	01/03/2021
Conducted	AC Power supply	EXTECH	CFC105W	NA	N/A	N/A
Conducted	Spectrum analyzer	Keysight	N9010A	MY56070257	10/05/2019	10/05/2020
Conducted	Spectrum analyzer	R&S	FSP40	100116	01/10/2020	01/10/2021
Conducted	Test Software	DARE	Radiation Ver:2013.1.23	NA	NA	NA
Conducted	Test Software	R&S	CMUGO Ver:2.0.0	N/A	N/A	N/A
Conducted	Radio Communication Analyzer	R&S	CMU200	111968	11/29/2019	11/29/2020
Conducted	Radio Communication Analyzer	R&S	CMW500	1201.002K50108793-JG	10/11/2019	10/11/2020
Conducted	BT Simulator	Agilent	N4010A	MY48100200	NA	NA
Conducted	GPS Simulator	Welnavigate	GS-50	701523	NA	NA

6.4. Measurement Equipment Used:



6.5. Measurement Result

Band	Mode	Freq. (MHz)	Output Power (dBm)				Duty Factor (dB)	Total Out- put Power (dBm)	Output Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
UNII-1	11a	5180	-3.84				0.27	-3.57	24.00
		5200	-3.92				0.27	-3.65	24.00
		5240	-1.95				0.27	-1.68	24.00
	HT20	5180	-4.16				0.25	-3.91	24.00
		5200	-4.06				0.25	-3.81	24.00
		5240	-1.86				0.25	-1.61	24.00
	HT40	5190	-6.83				0.48	-6.35	24.00
		5230	-5.09				0.48	-4.61	24.00
	VHT20	5180	-4.37				0.20	-4.17	24.00
		5200	-4.24				0.20	-4.04	24.00
		5240	-2.03				0.20	-1.83	24.00
	VHT40	5190	-10.11				0.54	-9.57	24.00
		5230	-8.23				0.54	-7.69	24.00
	VHT80	5210	-9.55				0.81	-8.74	24.00

Band	Mode	Freq. (MHz)	Output Power (dBm)				Duty Factor (dB)	Total Out- put Power (dBm)	Output Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
UNII-3	11a	5745	-7.02				0.27	-6.75	24.00
		5785	-6.05				0.27	-5.78	24.00
		5825	-7.59				0.27	-7.32	24.00
	HT20	5745	-7.16				0.25	-6.91	24.00
		5785	-6.15				0.25	-5.90	24.00
		5825	-7.82				0.25	-7.57	24.00
	HT40	5755	-9.5				0.48	-9.02	24.00
		5795	-8.69				0.48	-8.21	24.00
	VHT20	5745	-7.16				0.20	-6.96	24.00
		5785	-6.14				0.20	-5.94	24.00
		5825	-7.75				0.20	-7.55	24.00
	VHT40	5755	-12.94				0.54	-12.40	24.00
		5795	-12.13				0.54	-11.59	24.00
	VHT80	5775	-12.95				0.81	-12.14	24.00

Power Spectral Density Measurement:

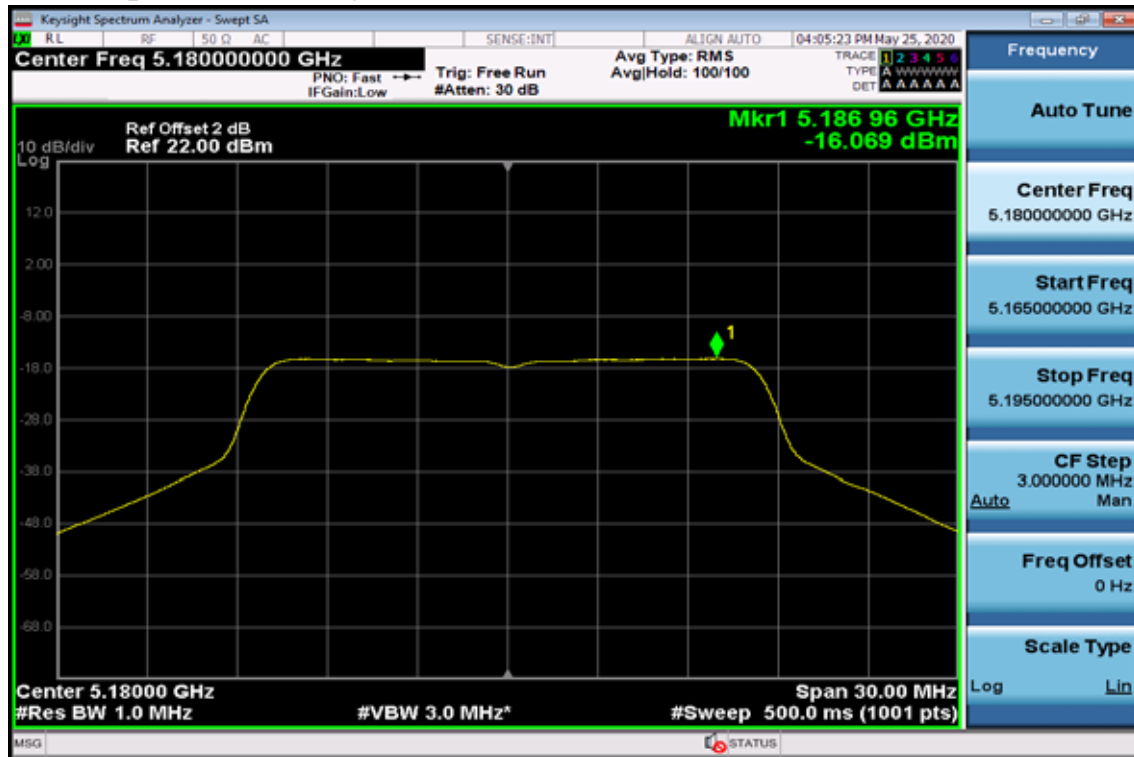
Band	Mode	Frequency (MHz)	PSD (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)
			Chain 0	Chain 1	Chain 2	Chain 3			
UNII-1	11a	5180	-16.07				0.27	-15.80	11.00
		5200	-15.50				0.27	-15.23	11.00
		5240	-14.72				0.27	-14.44	11.00
	HT20	5180	-16.59				0.25	-16.34	11.00
		5200	-16.61				0.25	-16.36	11.00
		5240	-13.59				0.25	-13.34	11.00
	HT40	5190	-22.05				0.48	-21.58	11.00
		5230	-19.69				0.48	-19.21	11.00
	VHT20	5180	-17.02				0.20	-16.83	11.00
		5200	-17.23				0.20	-17.03	11.00
		5240	-15.09				0.20	-14.90	11.00
	VHT40	5190	-24.89				0.54	-24.35	11.00
		5230	-23.11				0.54	-22.57	11.00
	VHT80	5210	-26.98				0.81	-26.16	11.00

Band	Mode	Frequency (MHz)	PSD (dBm/500kHz)				Duty Factor (dB)	Total PSD (dBm/500k Hz)	PSD Limit (dBm/500k Hz)
			Chain 0	Chain 1	Chain 2	Chain 3			
UNII-3	11a	5745	-22.89				0.27	-22.62	24.00
		5785	-21.72				0.27	-21.45	24.00
		5825	-22.72				0.27	-22.44	24.00
	HT20	5745	-22.96				0.25	-22.71	24.00
		5785	-22.16				0.25	-21.91	24.00
		5825	-22.96				0.25	-22.71	24.00
	HT40	5755	-28.04				0.48	-27.56	24.00
		5795	-26.80				0.48	-26.32	24.00
	VHT20	5745	-22.87				0.20	-22.67	24.00
		5785	-22.11				0.20	-21.92	24.00
		5825	-22.83				0.20	-22.63	24.00
	VHT40	5755	-30.98				0.54	-30.44	24.00
		5795	-29.74				0.54	-29.20	24.00
	VHT80	5775	-33.64				0.81	-32.82	24.00

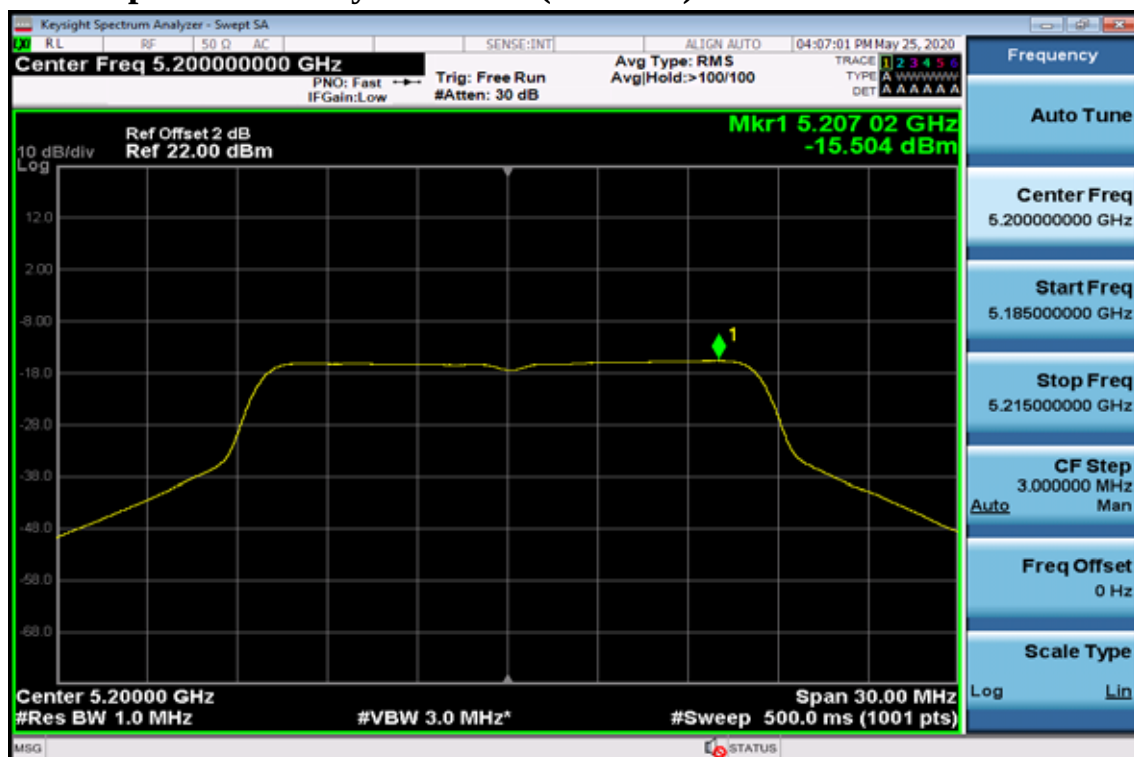
Band UNII-1

802.11a

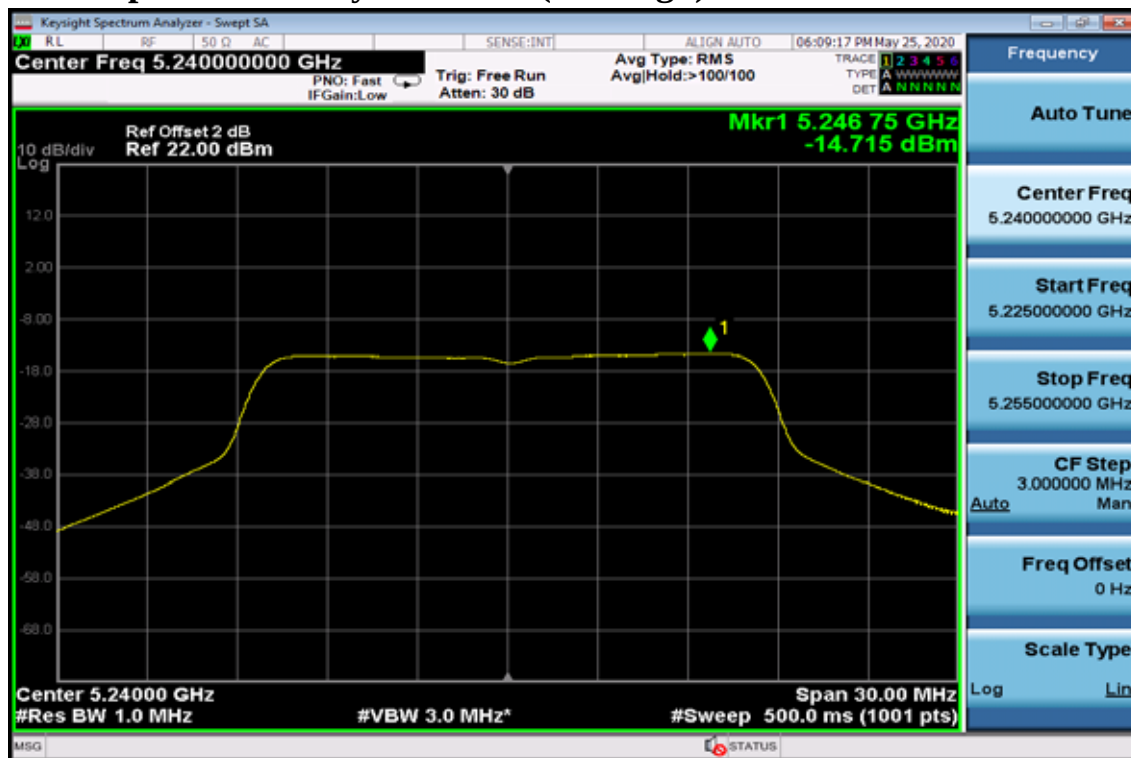
Power Spectral Density Data Plot (CH Low)



Power Spectral Density Data Plot (CH Mid)



Power Spectral Density Data Plot (CH High)

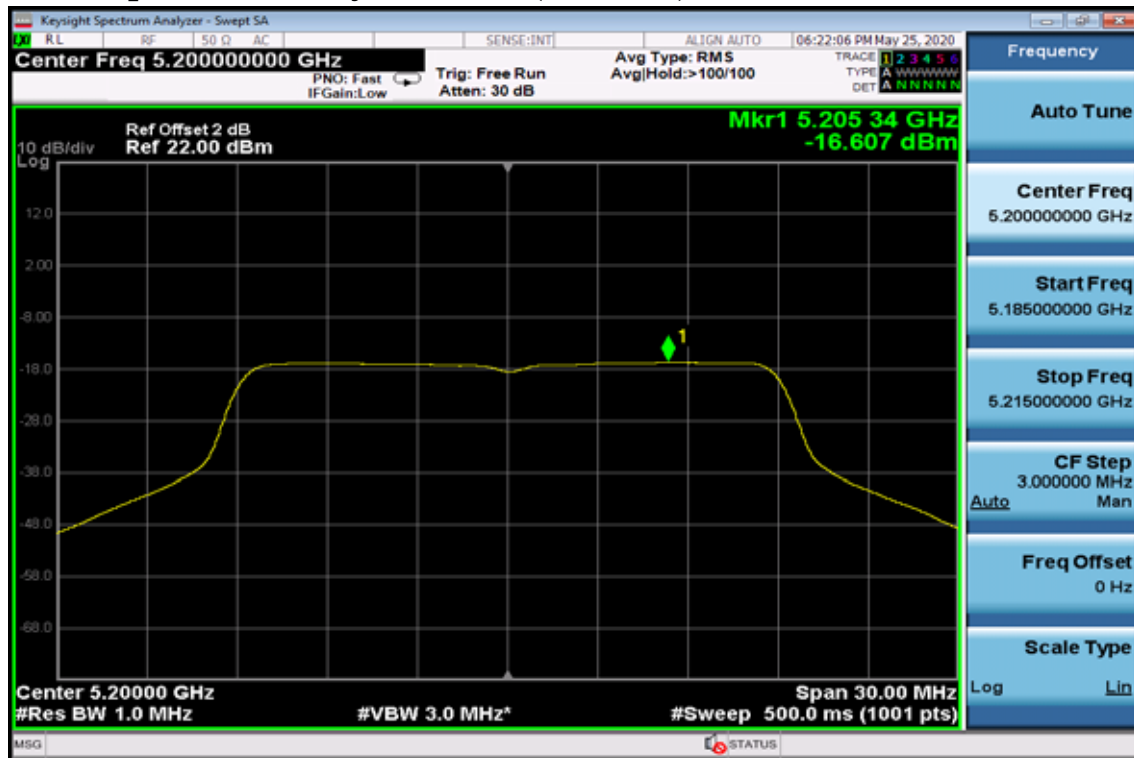


802.11n HT20

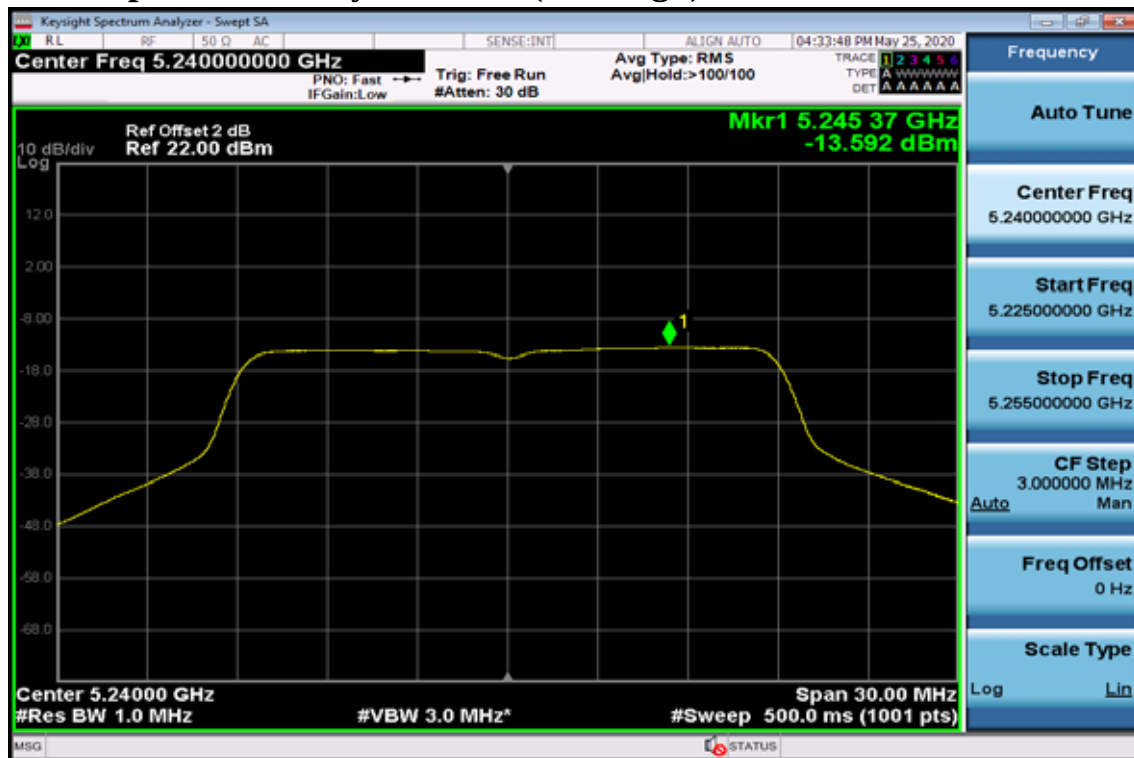
Power Spectral Density Test Plot (CH-Low)



Power Spectral Density Test Plot (CH-Mid)



Power Spectral Density Test Plot (CH-High)



802.11n HT40

Power Spectral Density Test Plot (CH-Low)



Power Spectral Density Test Plot (CH-High)

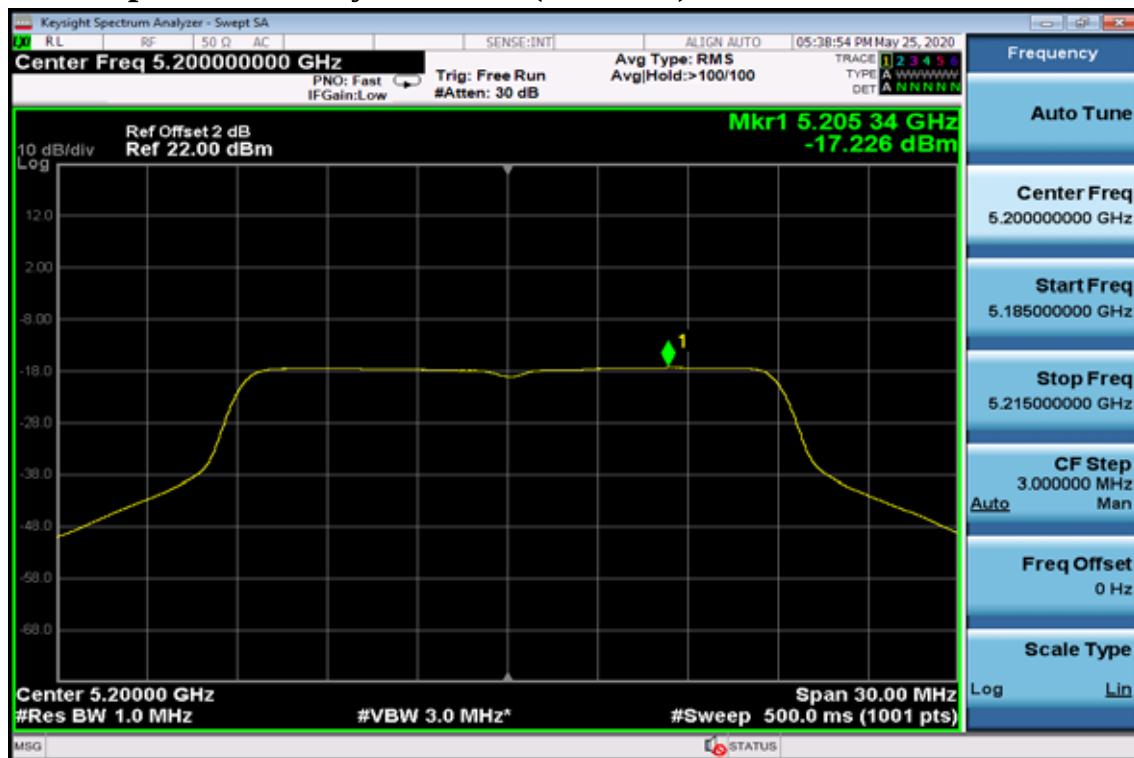


802.11n VHT20

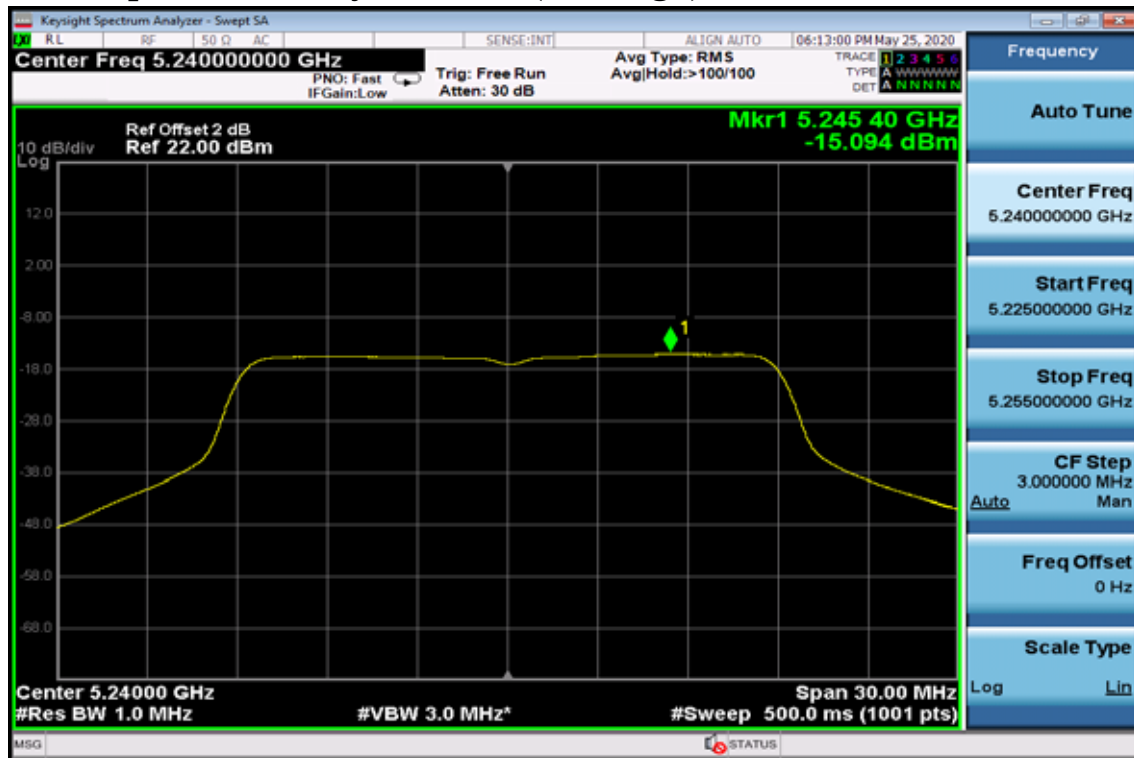
Power Spectral Density Test Plot (CH-Low)



Power Spectral Density Test Plot (CH-Mid)

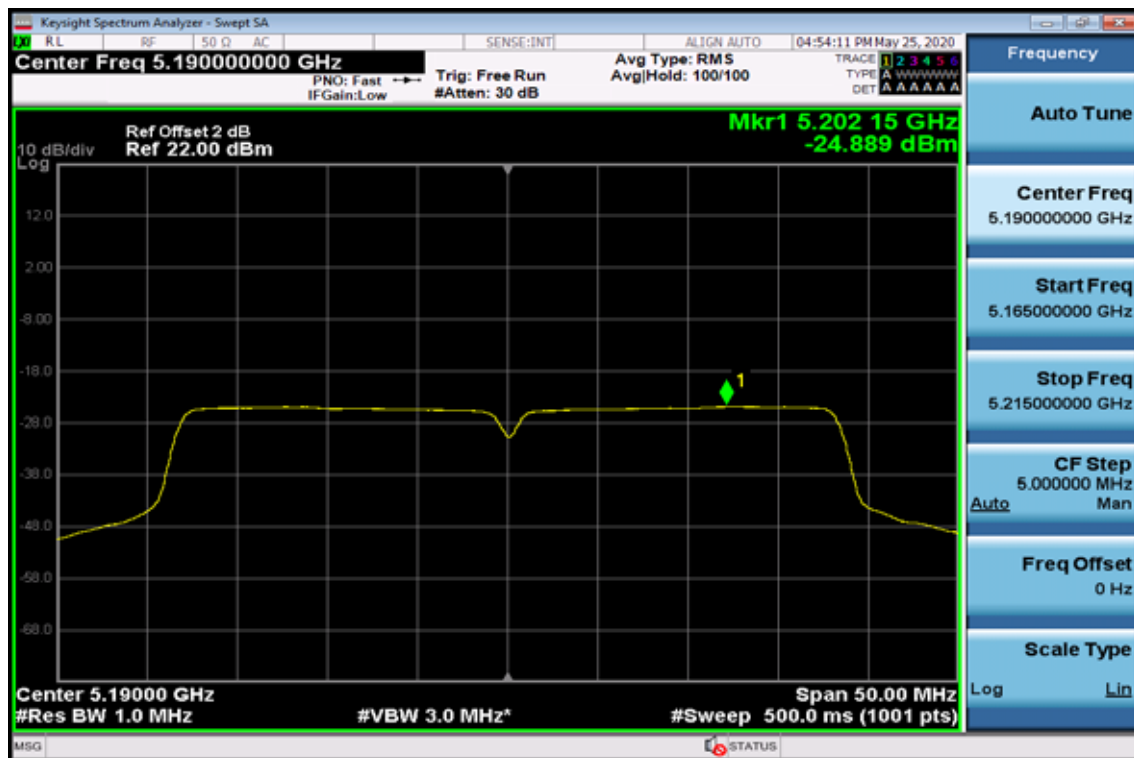


Power Spectral Density Test Plot (CH-High)



802.11n VHT40

Power Spectral Density Test Plot (CH-Low)

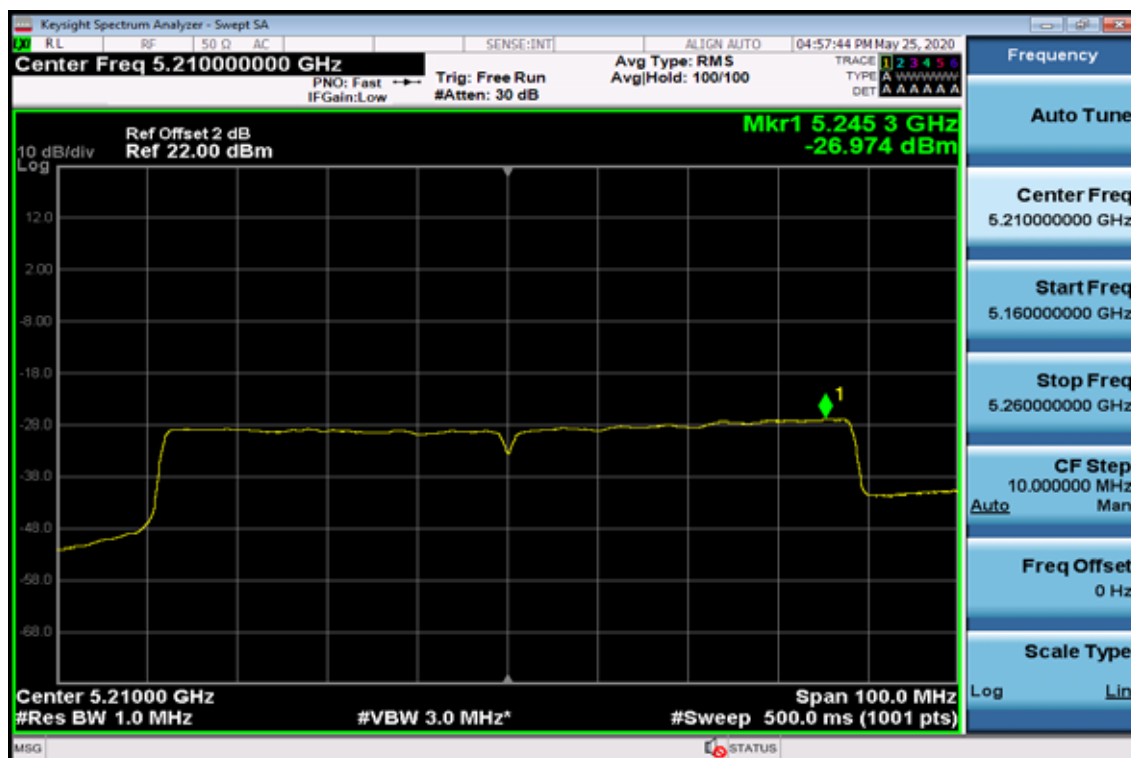


Power Spectral Density Test Plot (CH-High)



802.11ac VHT80

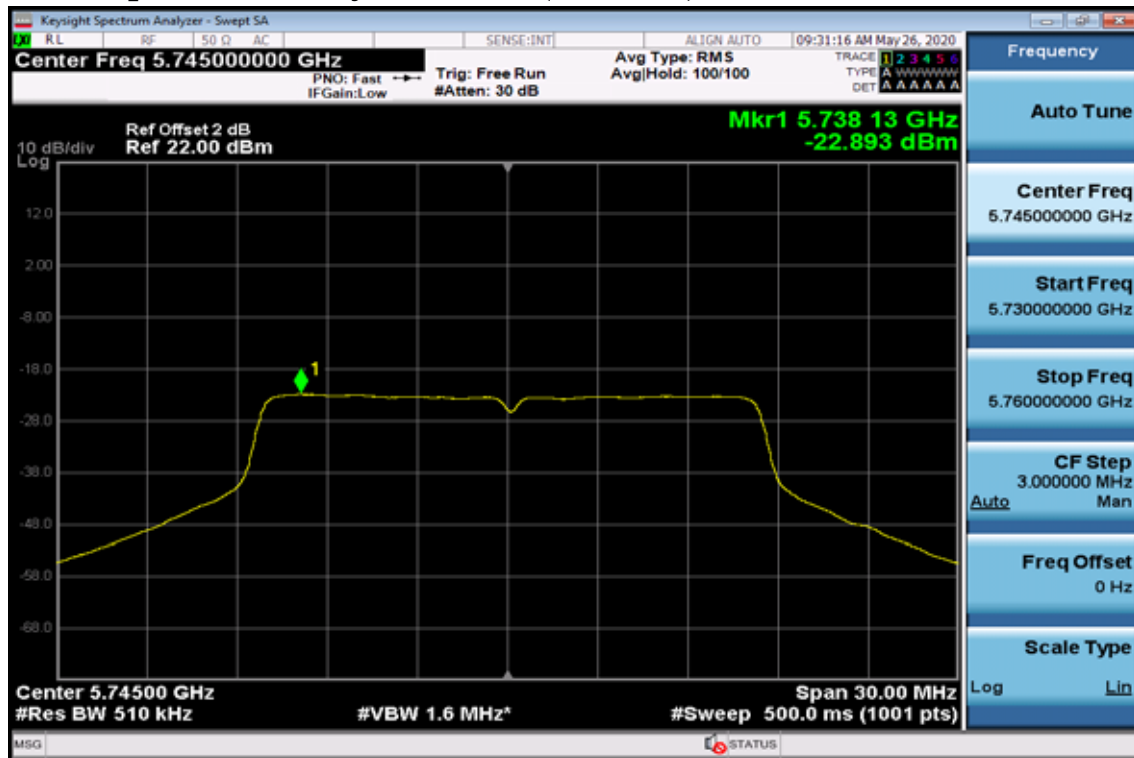
Power Spectral Density Test Plot (CH-Low)



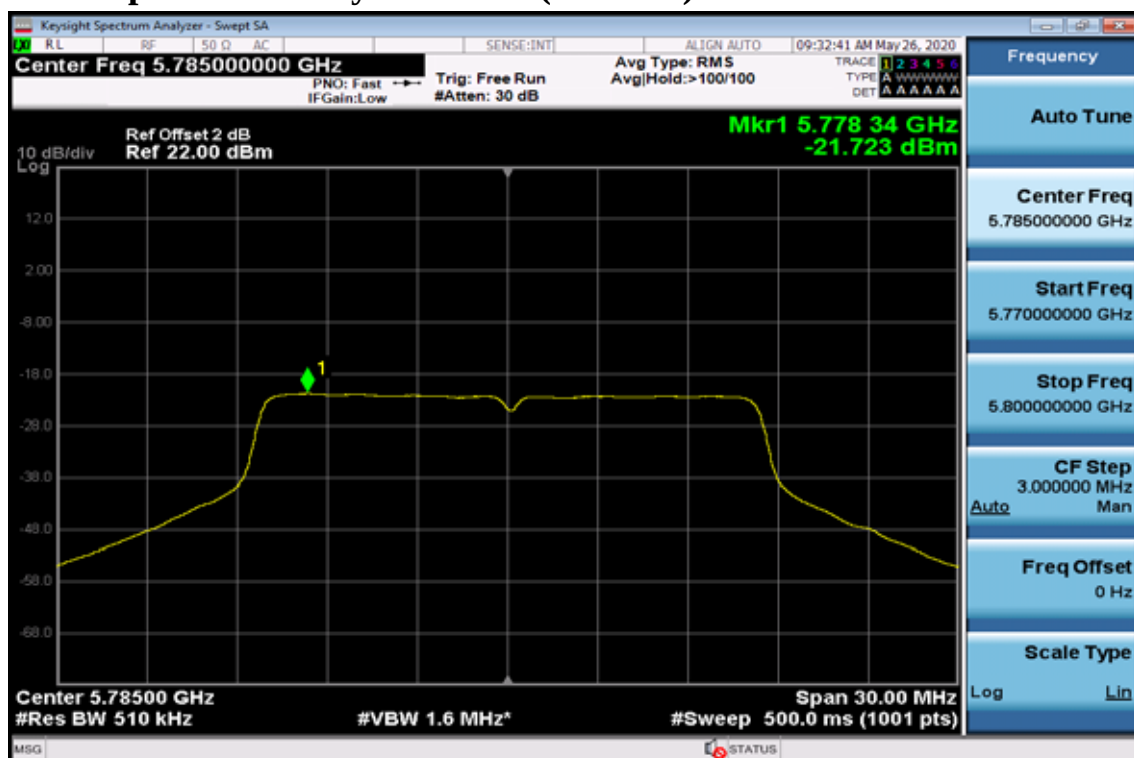
Band UNII-3

802.11a

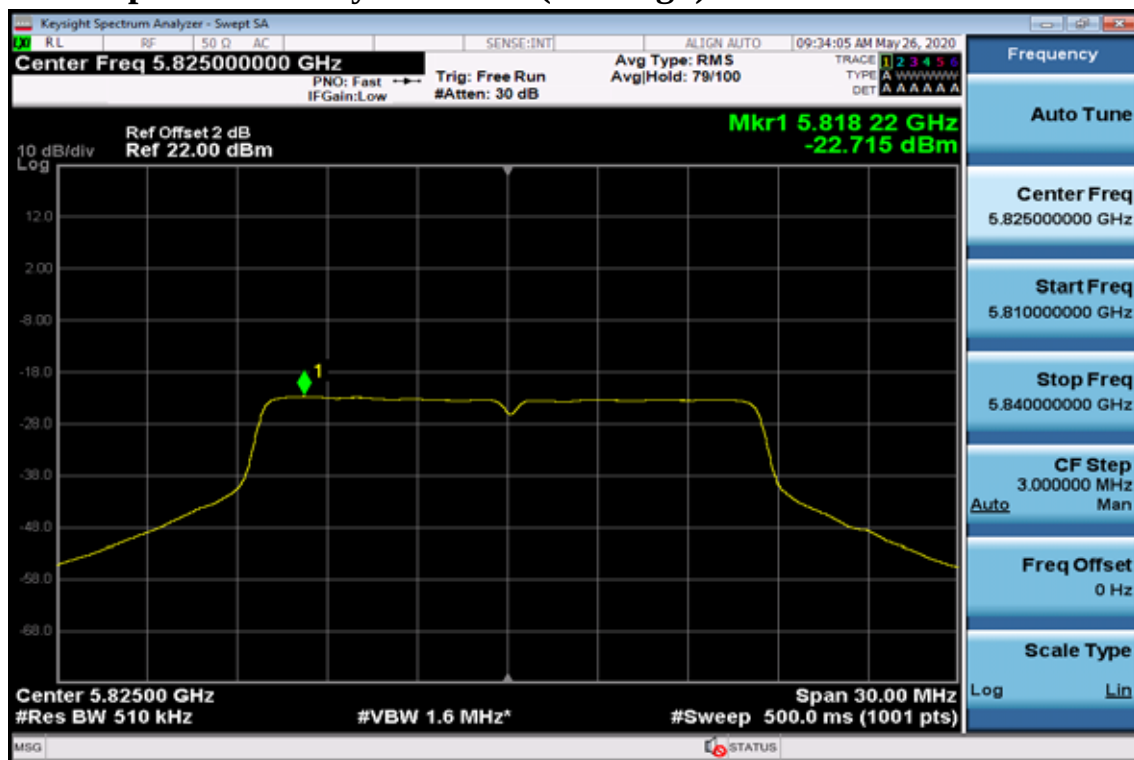
Power Spectral Density Data Plot (CH Low)



Power Spectral Density Data Plot (CH Mid)

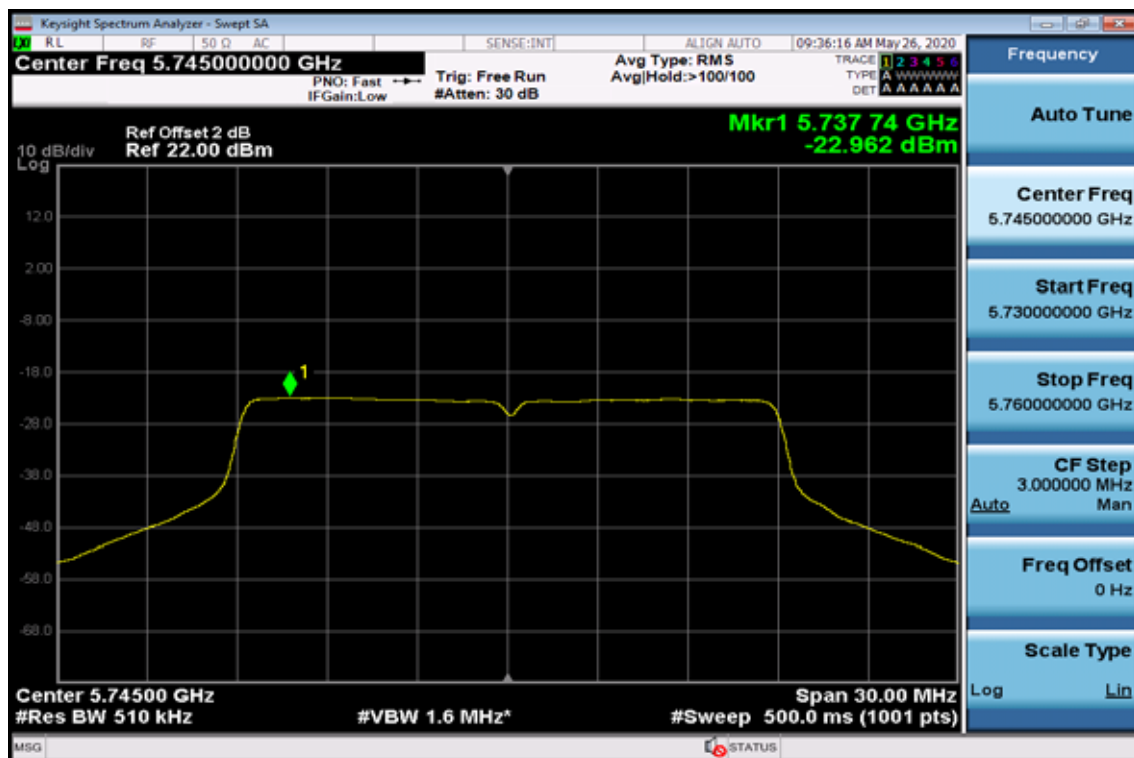


Power Spectral Density Data Plot (CH High)

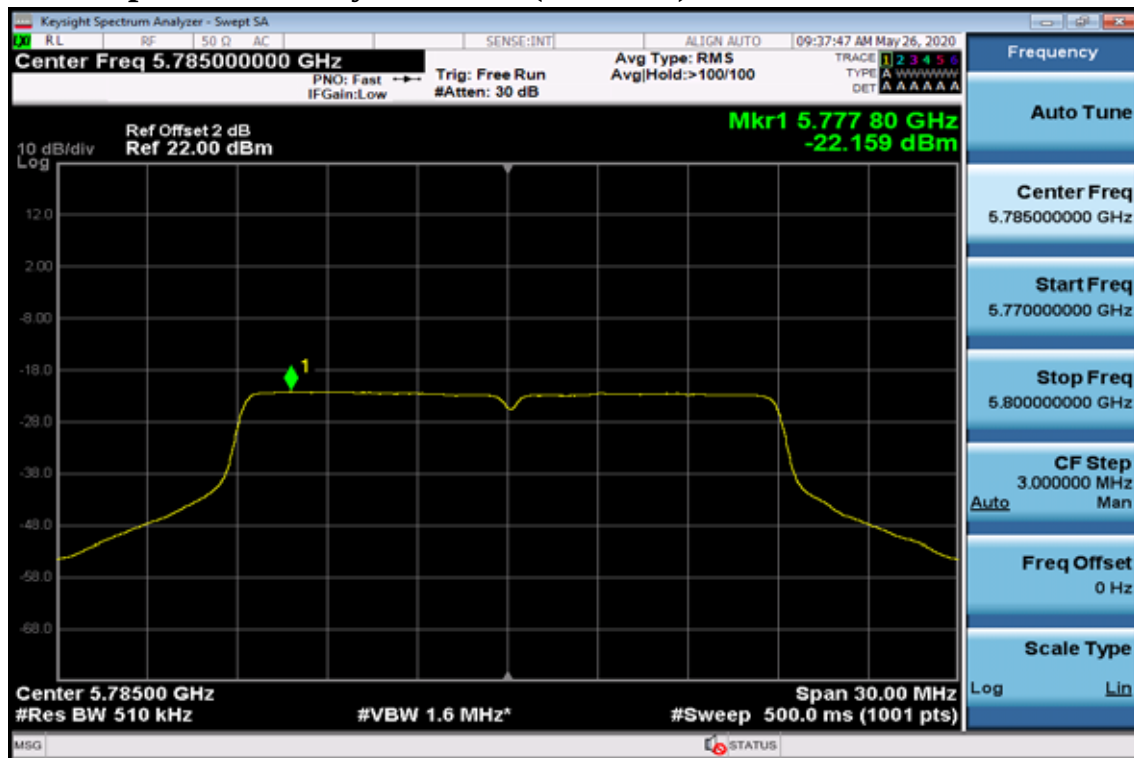


802.11n HT20

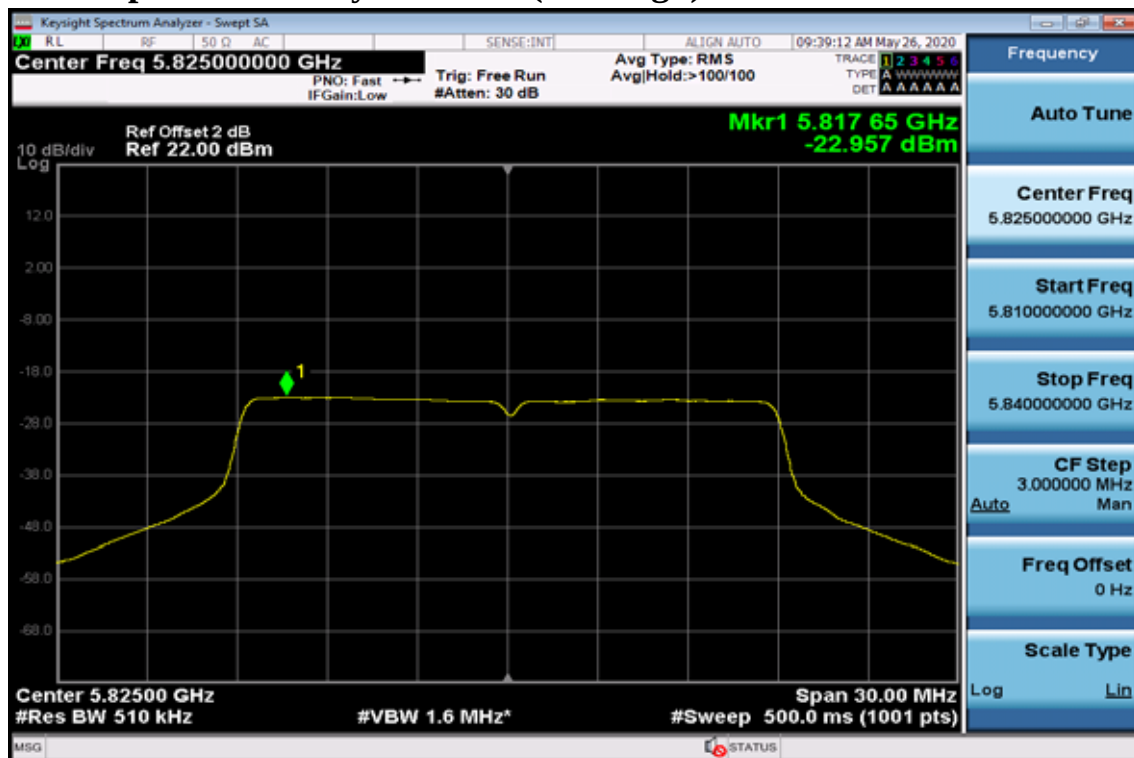
Power Spectral Density Test Plot (CH-Low)



Power Spectral Density Test Plot (CH-Mid)

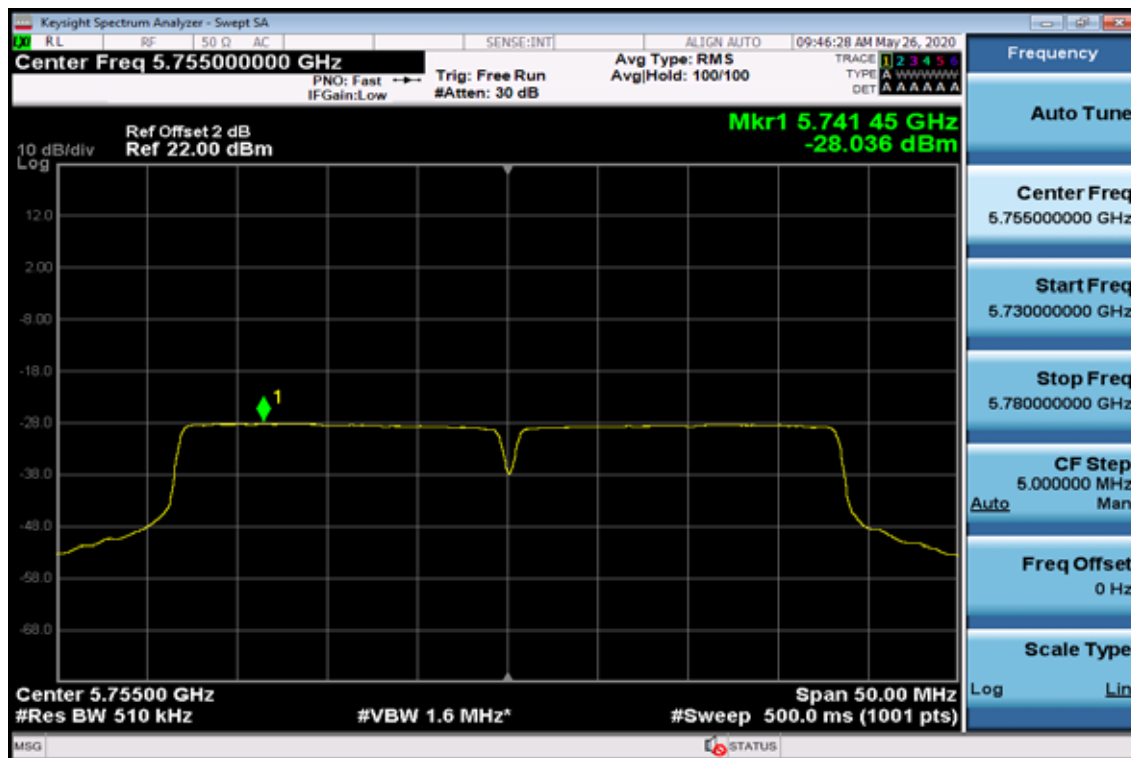


Power Spectral Density Test Plot (CH-High)

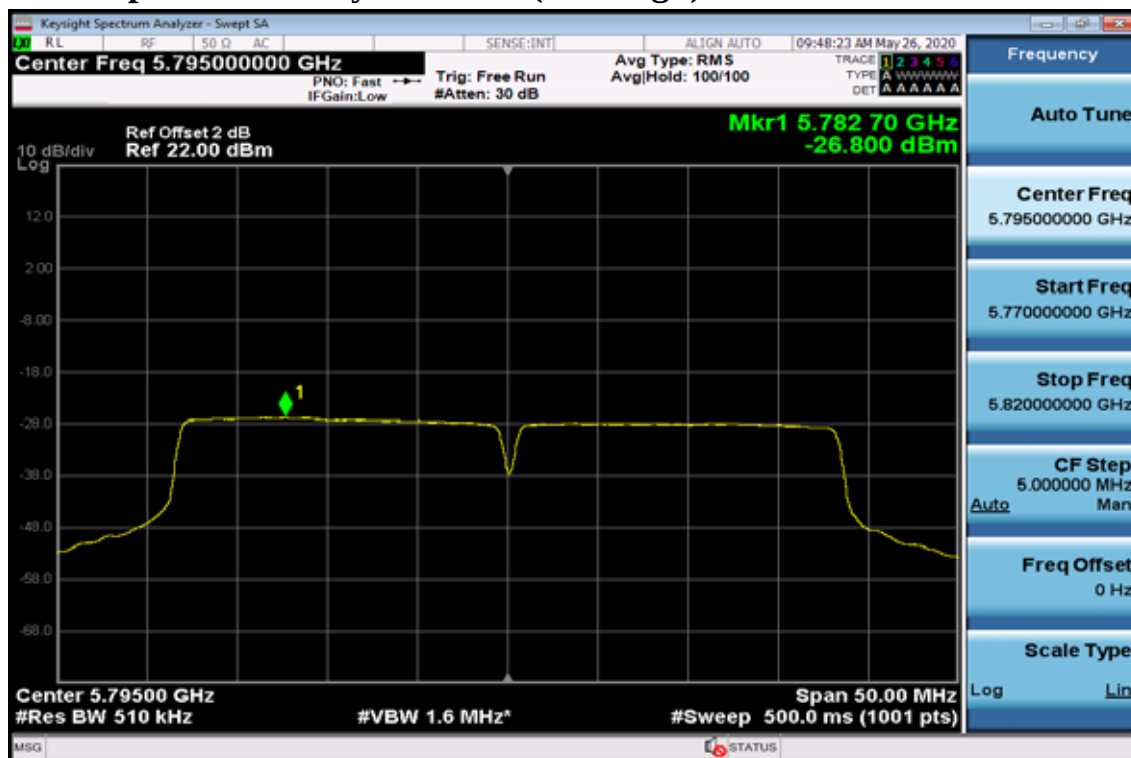


802.11n HT40

Power Spectral Density Test Plot (CH-Low)

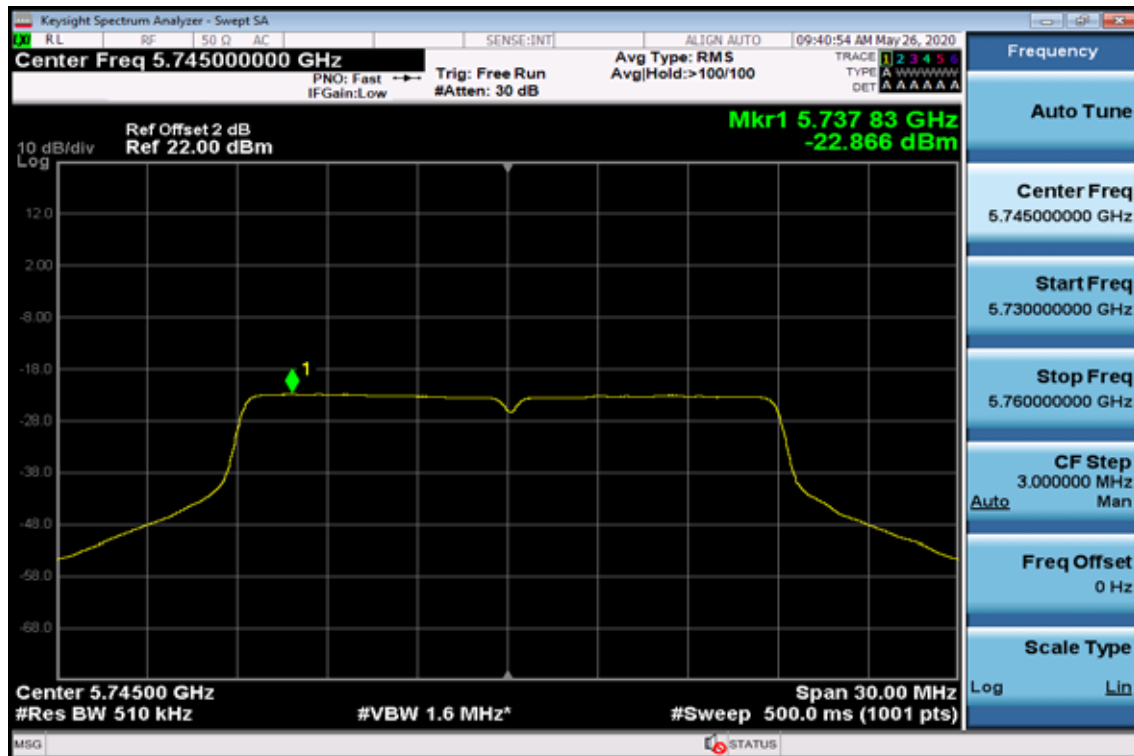


Power Spectral Density Test Plot (CH-High)

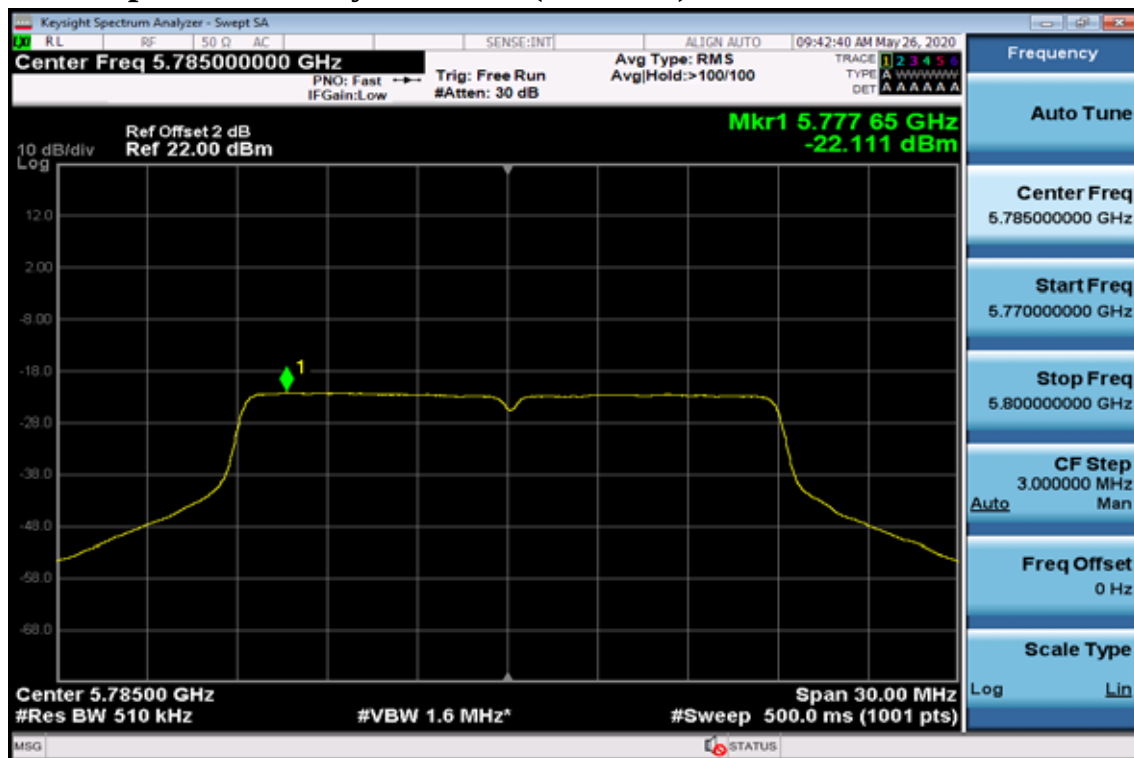


802.11n VHT20

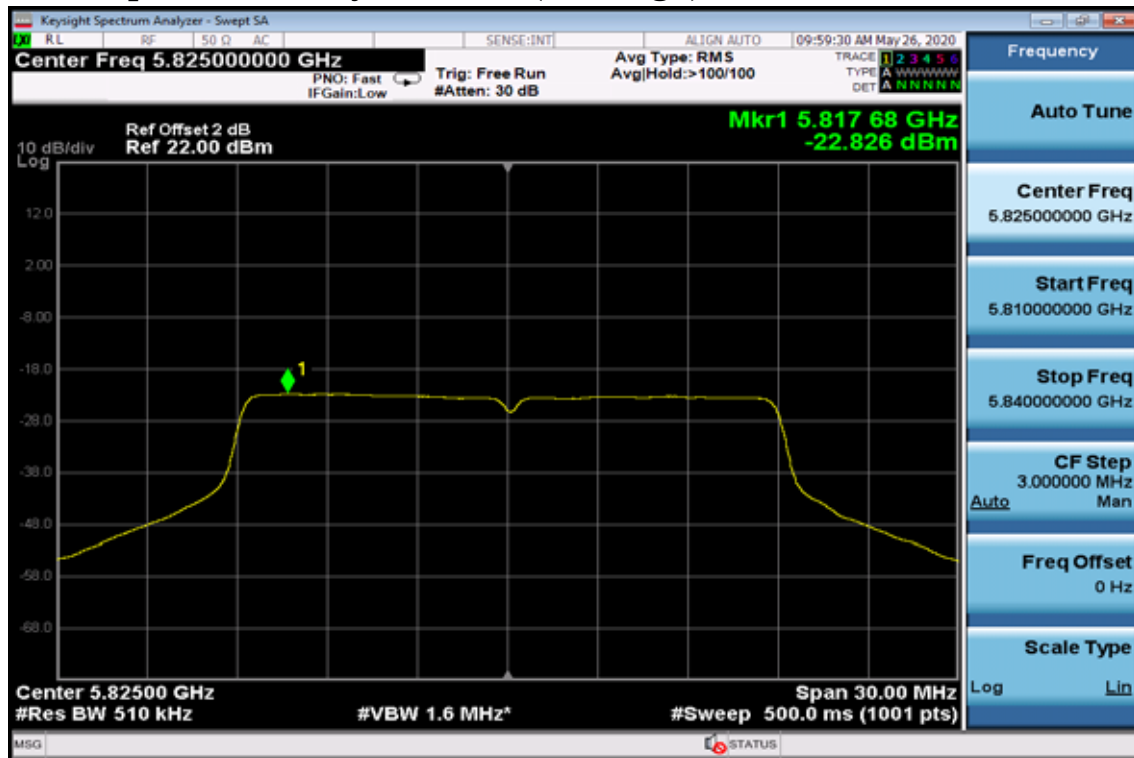
Power Spectral Density Test Plot (CH-Low)



Power Spectral Density Test Plot (CH-Mid)

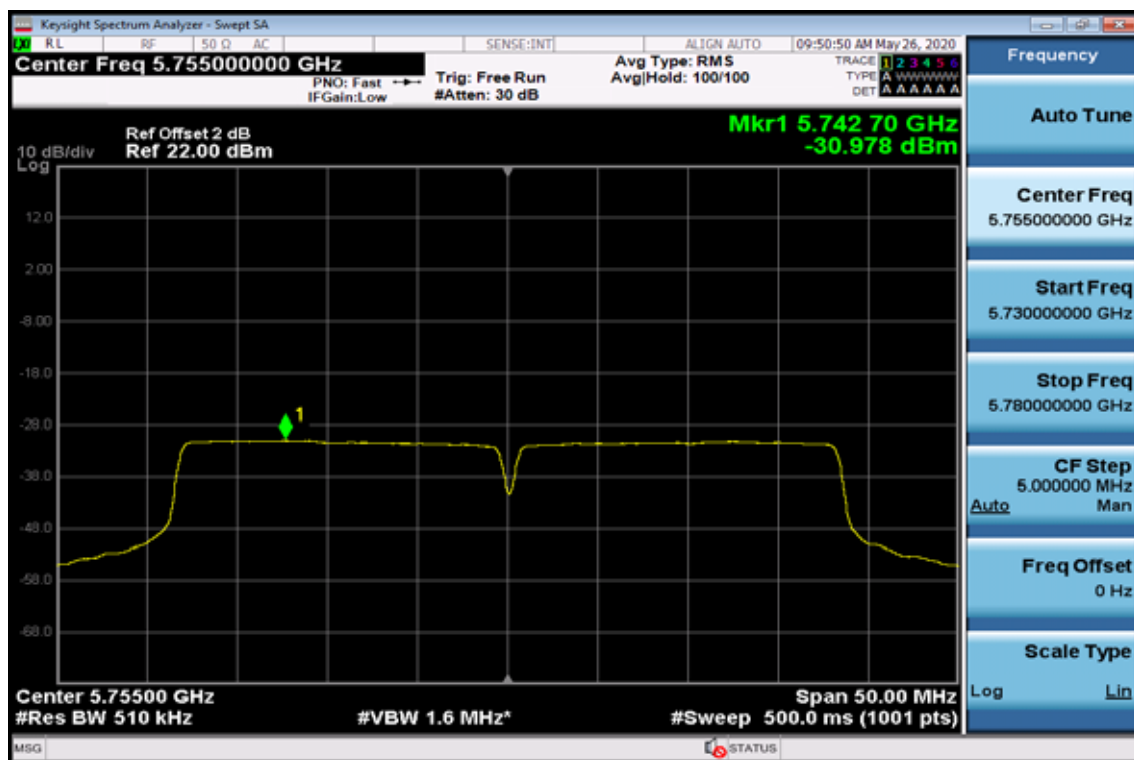


Power Spectral Density Test Plot (CH-High)

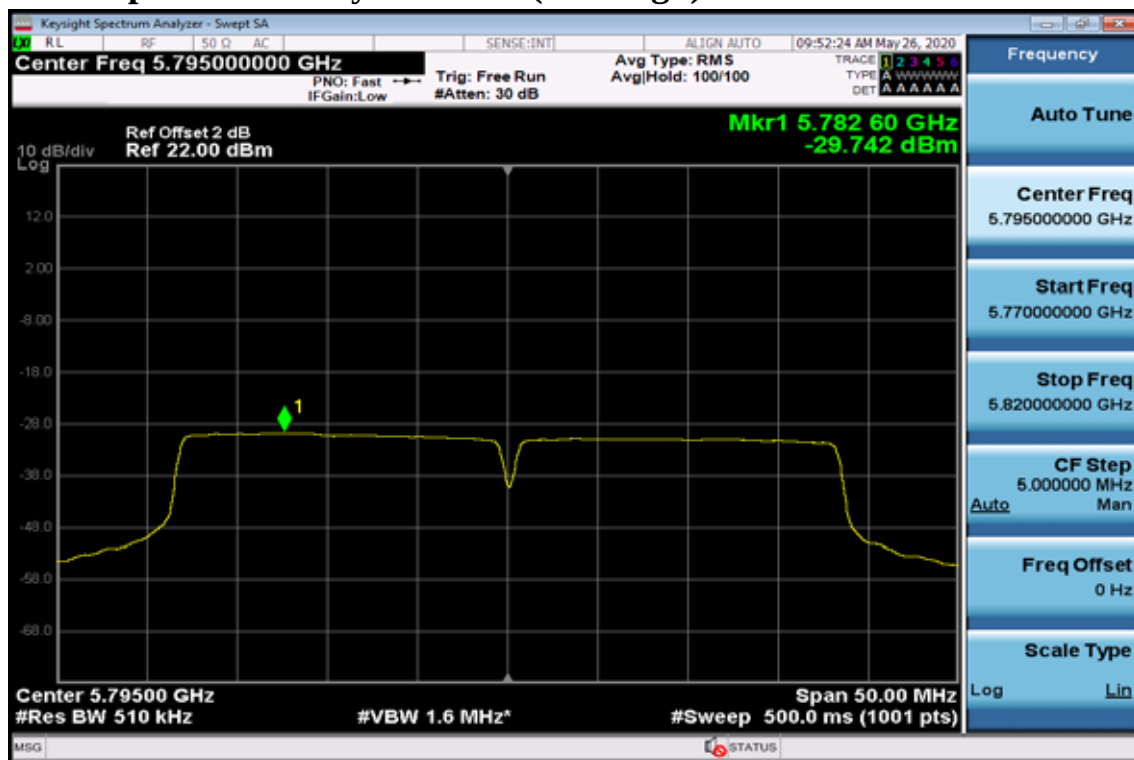


802.11n VHT40

Power Spectral Density Test Plot (CH-Low)

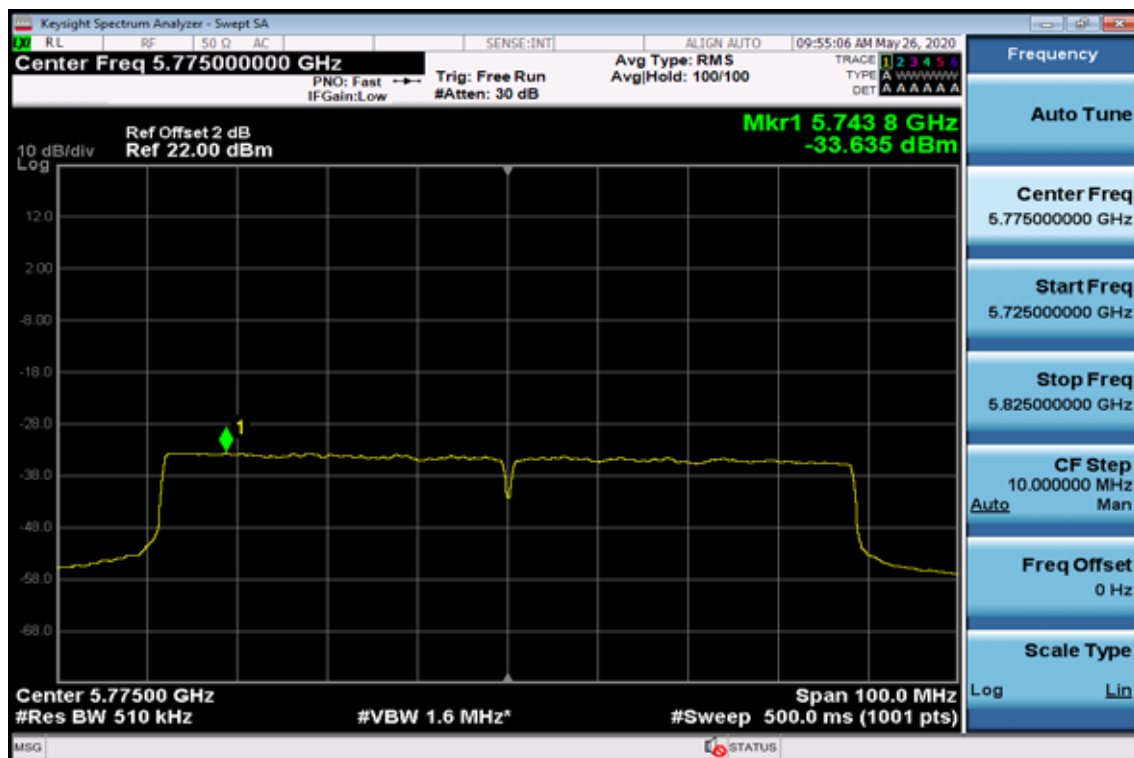


Power Spectral Density Test Plot (CH-High)



802.11ac VHT80

Power Spectral Density Test Plot



7. 26dB /99% Emission Bandwidth Measurement

7.1. Standard Applicable

According to §15.407(a) for band 1,2,3. No Limit required.

7.2. Measurement Procedure

1. Place the EUT on the table and set it in transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
3. Set the spectrum analyzer as RBW=300kHz, VBW =1MHz, Span= 50MHz, Sweep=auto
4. Mark the peak frequency and -26dB (upper and lower) frequency.
5. Repeat above procedures until all frequency measured were complete.

Refer to section D of KDB Document: KDB 789033 D02 General UNII Test Procedures New Rules v01r03

7.3. Measurement Equipment Used:

Refer to section 6.3 for details.

7.4. Test Set-up:

Refer to section 6.4 for details.

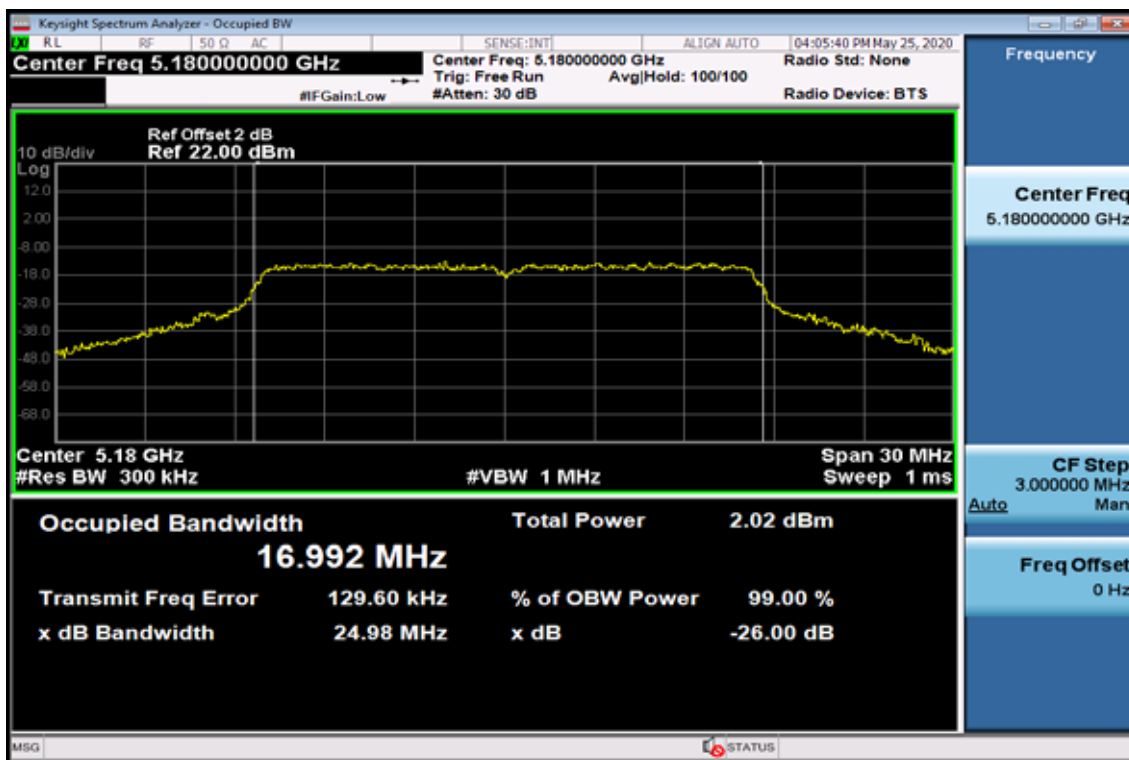
7.5. Measurement Result

Band	Mode	Frequency (MHz)	26dB Bandwidth (MHz)	99% OBW (MHz)
UNII-1	11a	5180	24.98	16.99
		5200	27.07	17.06
		5240	29.91	22.42
	HT20	5180	26.10	18.11
		5200	27.92	18.22
		5240	29.87	22.21
	HT40	5190	50.00	37.58
		5230	50.00	42.67
	VHT20	5180	26.16	18.15
		5200	27.91	18.24
		5240	29.58	22.50
	VHT40	5190	50.00	38.63
		5230	50.00	43.17
	VHT80	5210	99.70	87.40

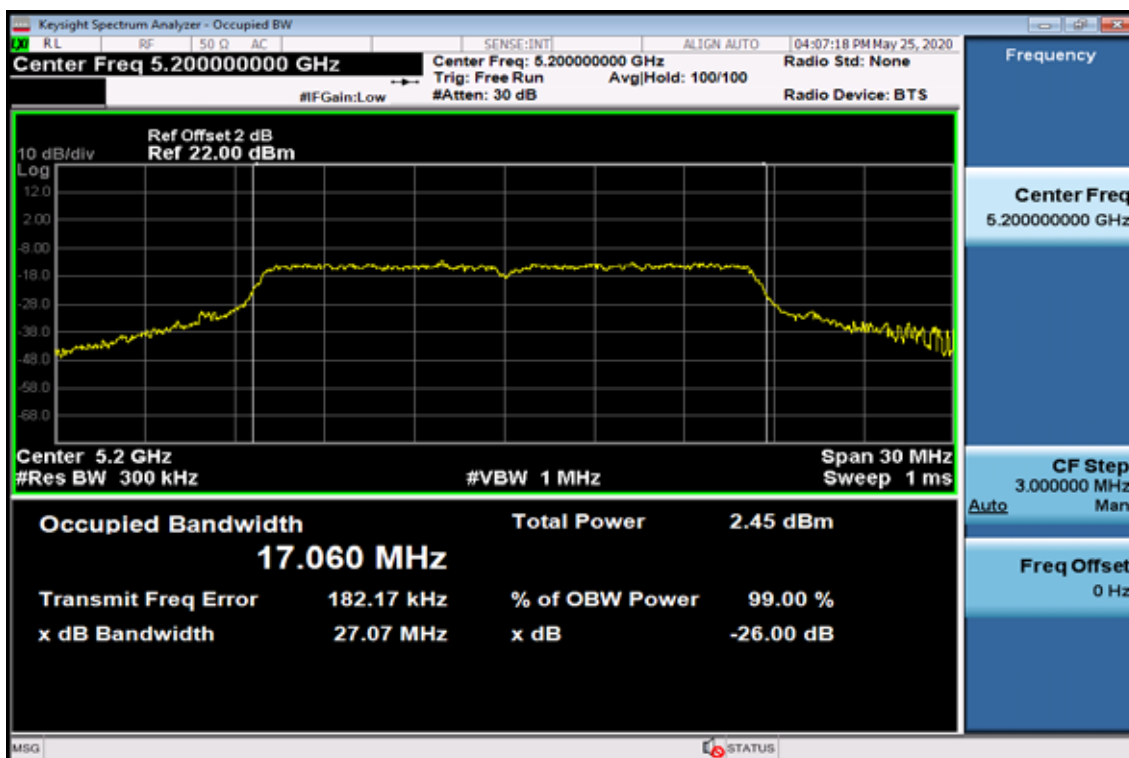
Band UNII-1

802.11a

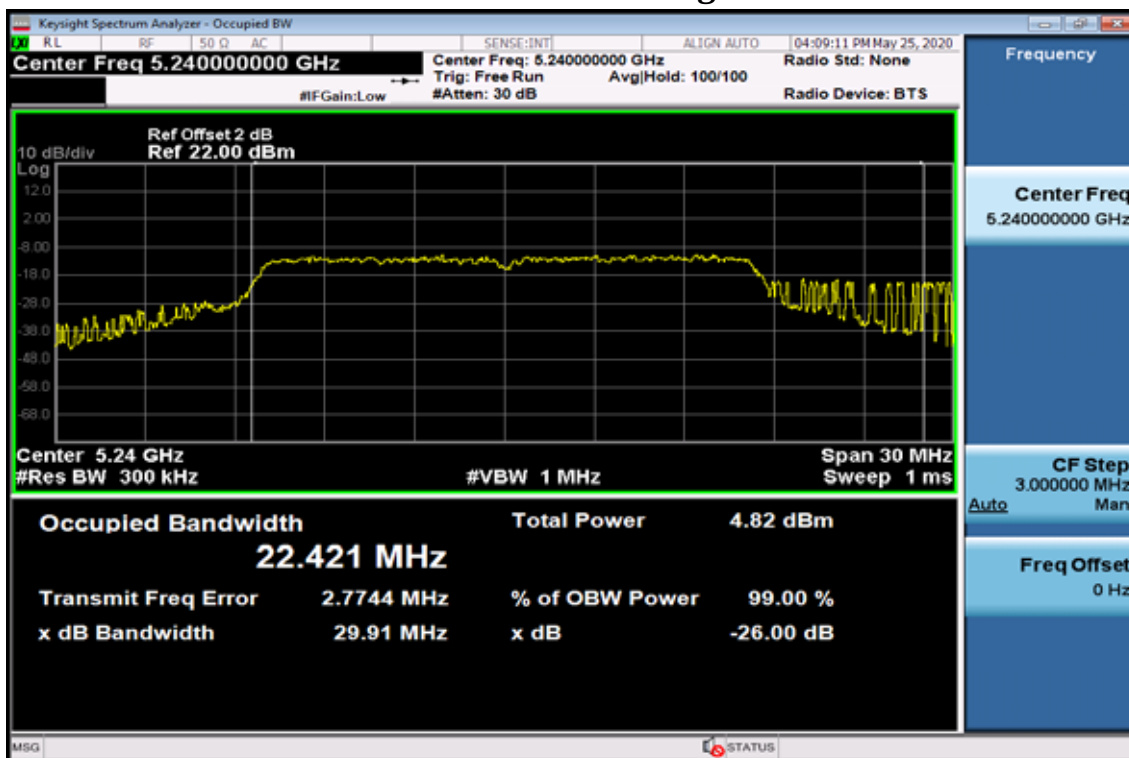
26dB / 99% Band Width Test Data CH-Low



26dB / 99% Band Width Test Data CH-Mid

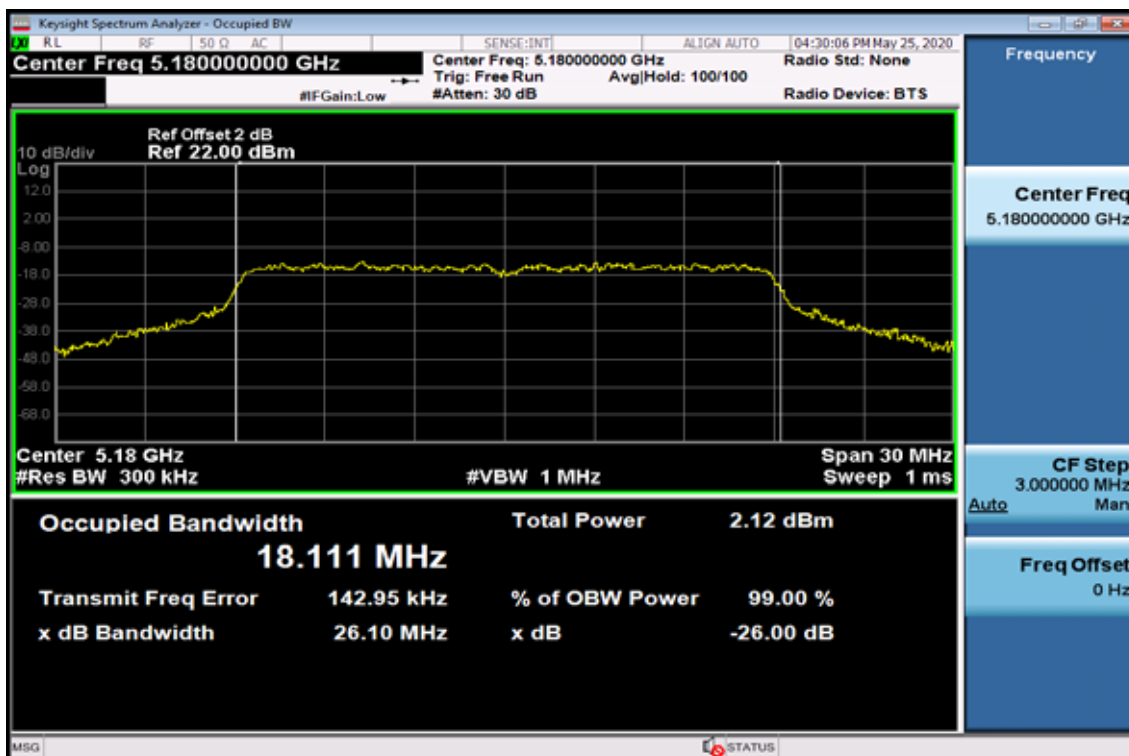


26dB / 99% Band Width Test Data CH-High

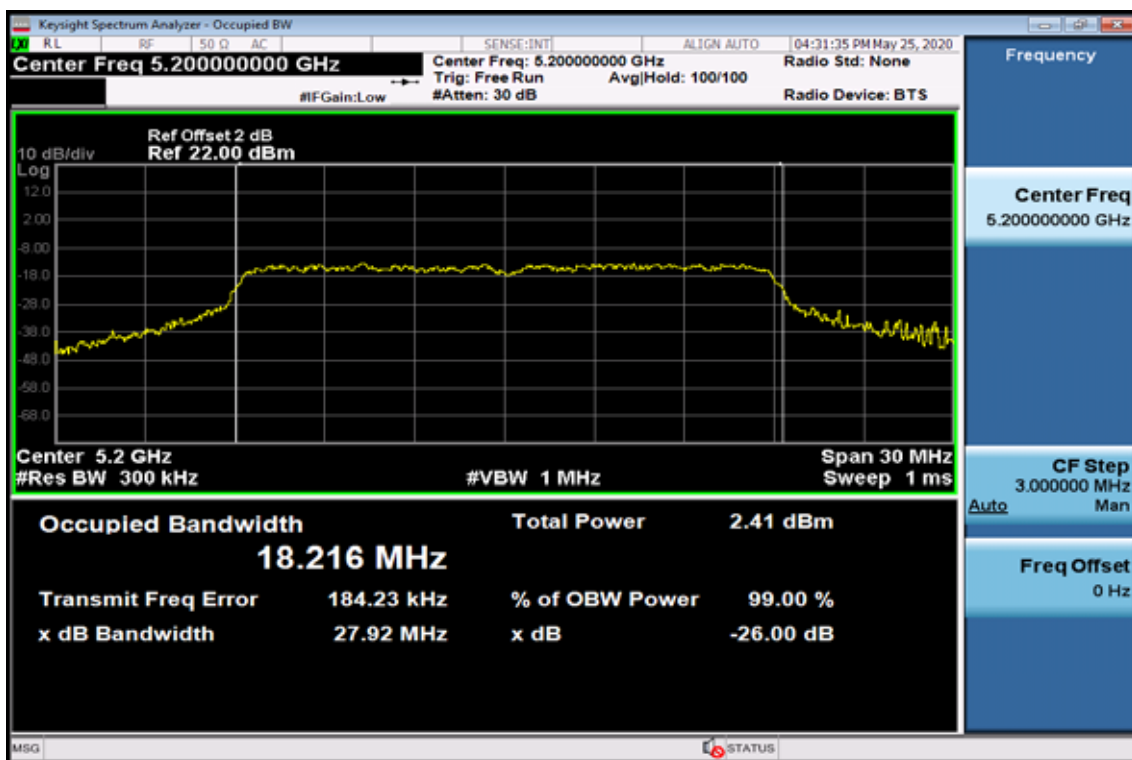


802.11n HT20

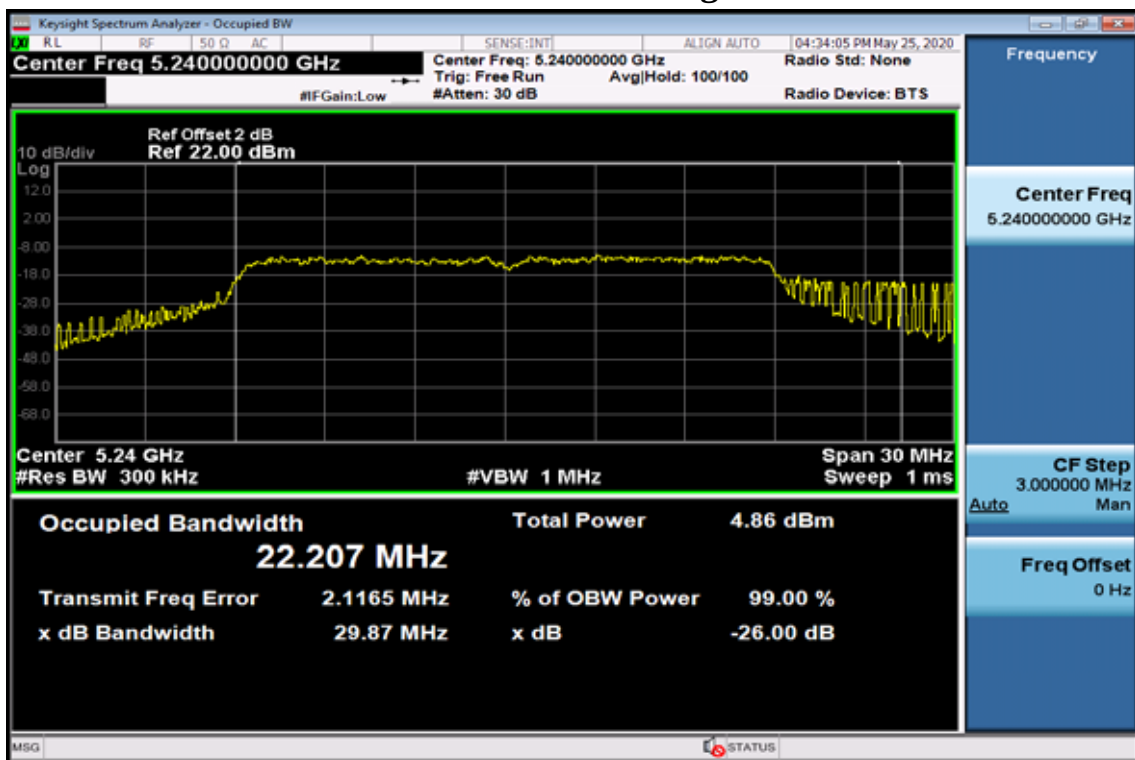
26dB / 99% Band Width Test Data CH-Low



26dB / 99% Band Width Test Data CH-Mid

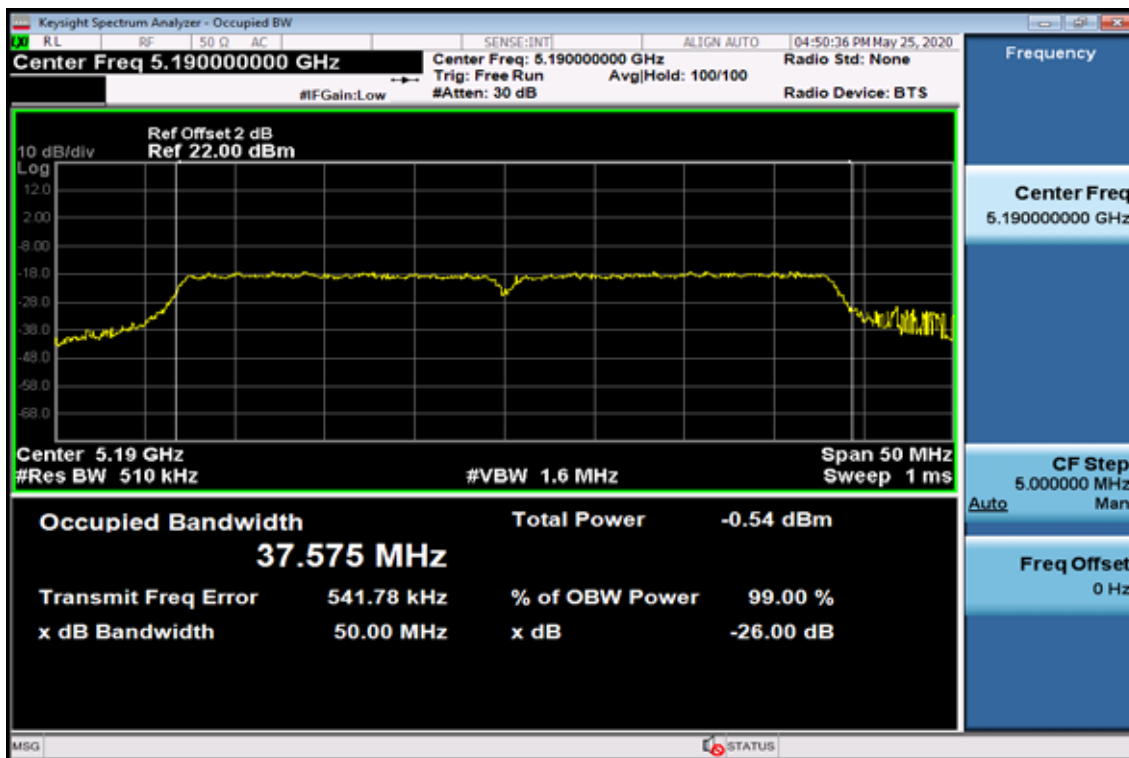


26dB / 99% Band Width Test Data CH-High

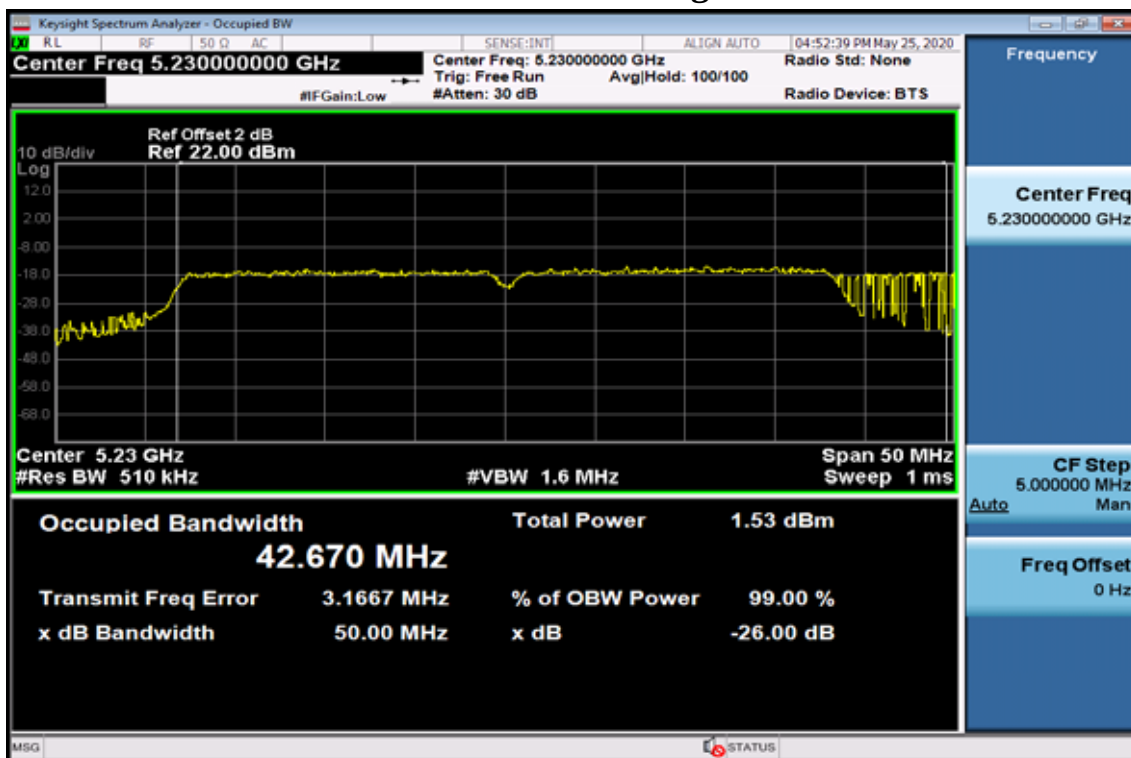


802.11n HT40

26dB / 99% Band Width Test Data CH-Low

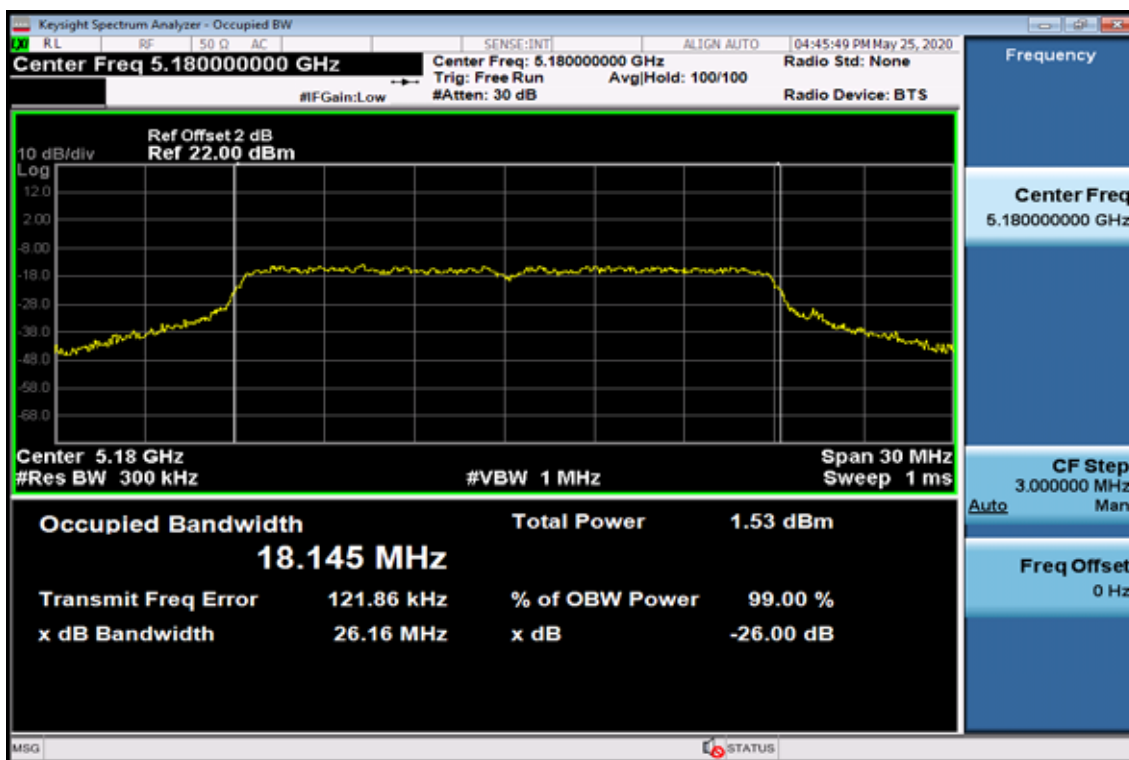


26dB / 99% Band Width Test Data CH-High

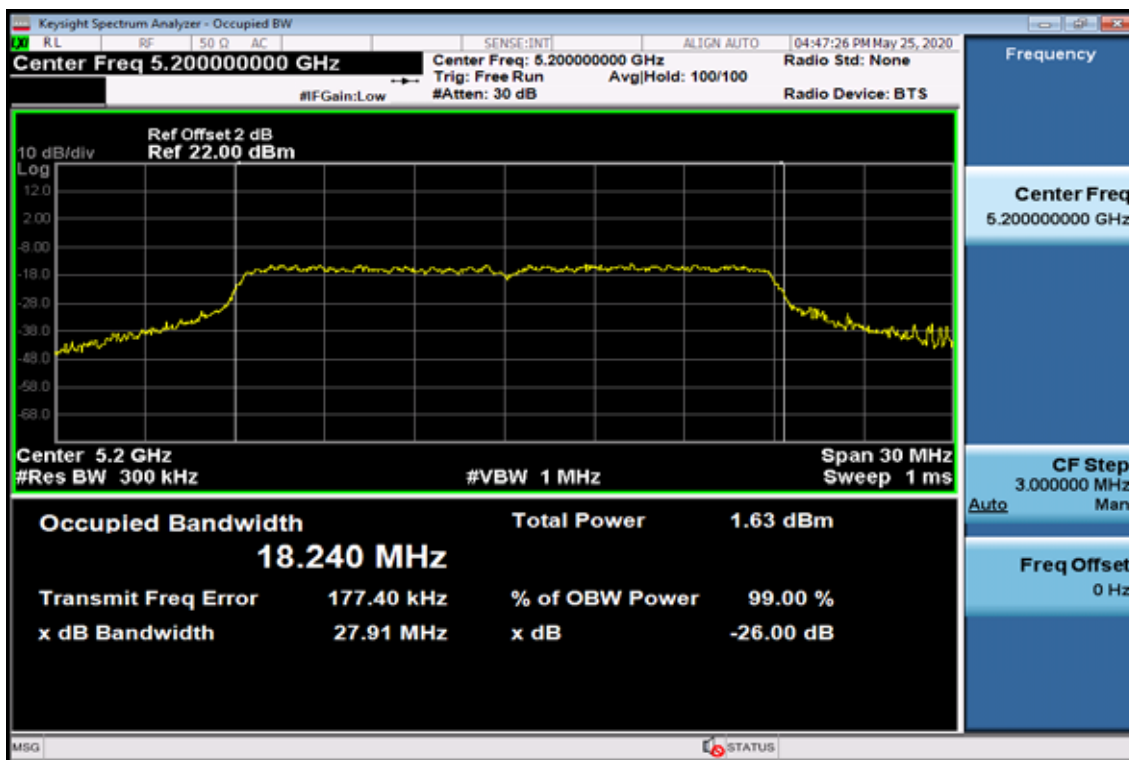


802.11n VHT20

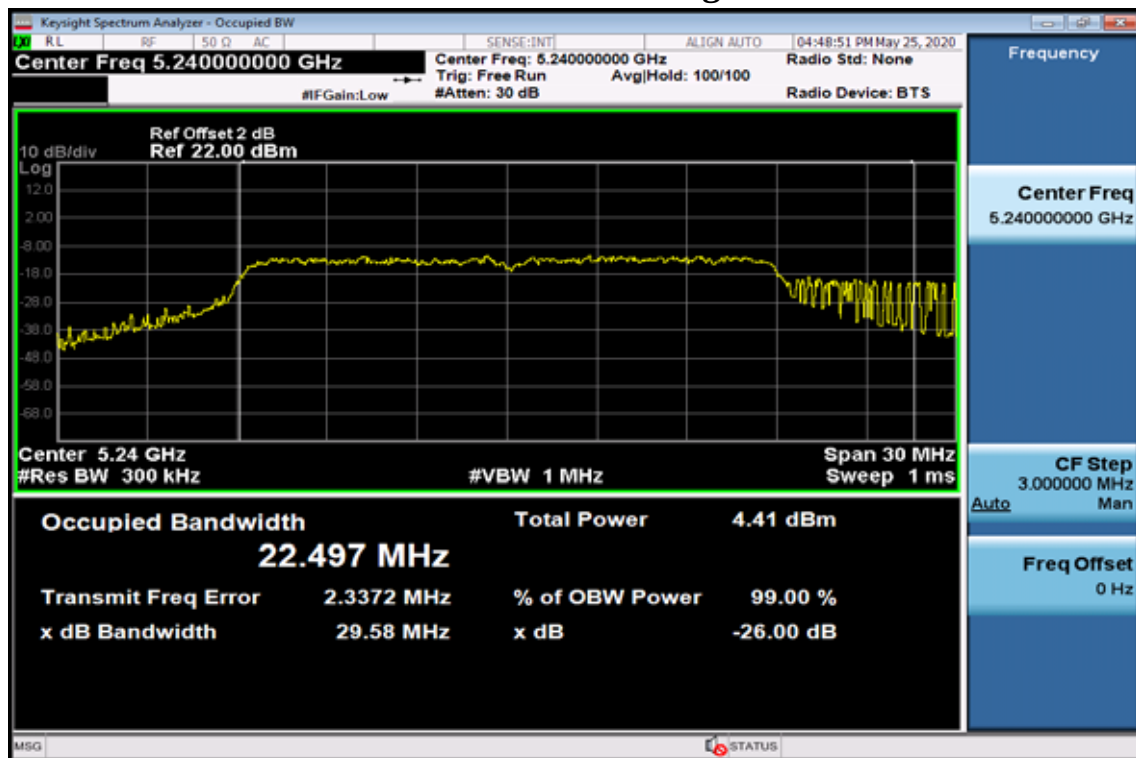
26dB / 99% Band Width Test Data CH-Low



26dB / 99% Band Width Test Data CH-Mid

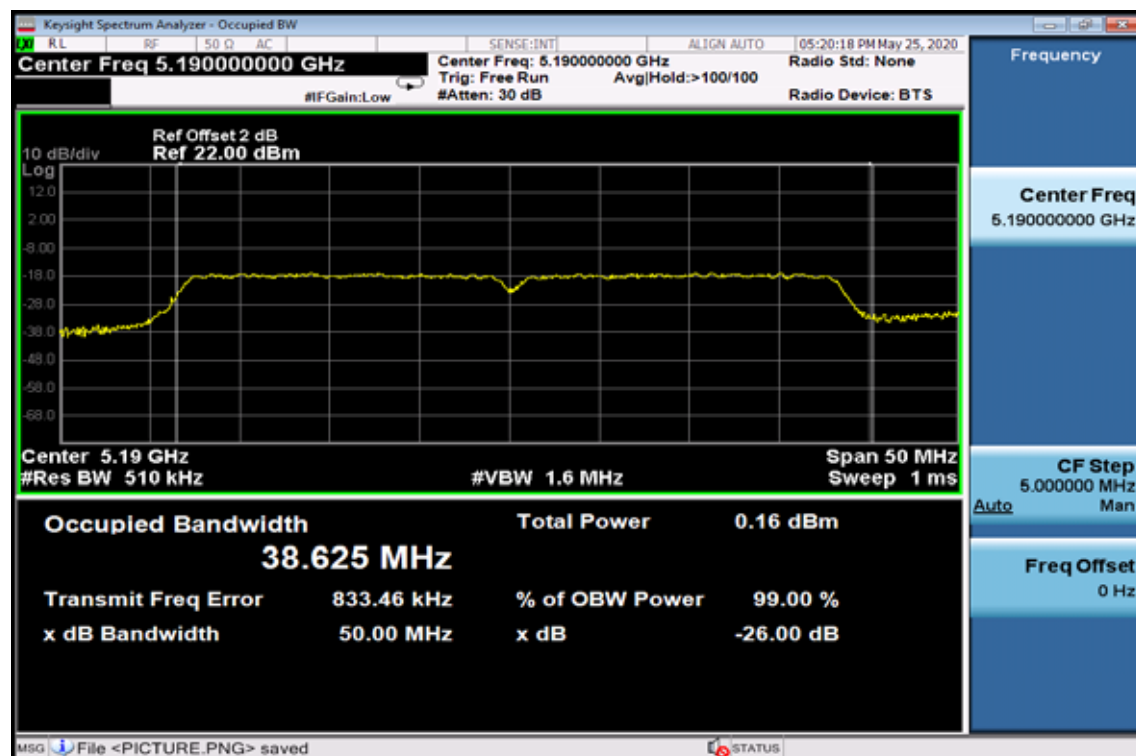


26dB / 99% Band Width Test Data CH-High

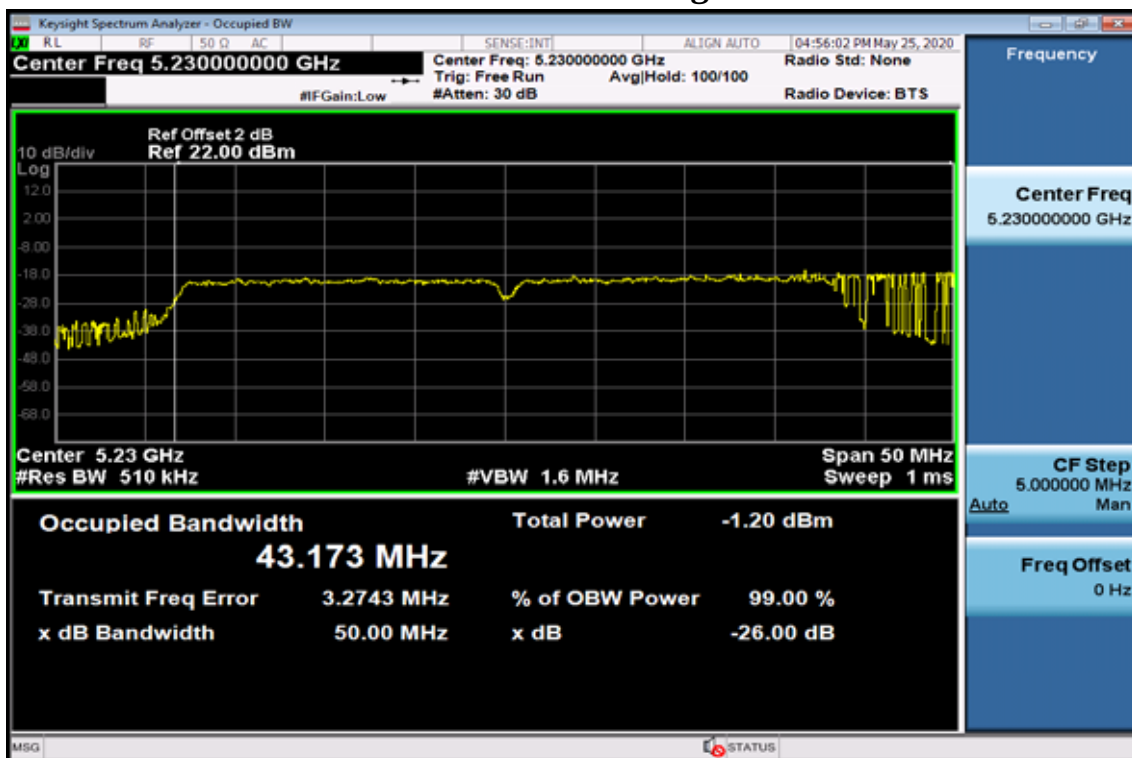


802.11n VHT40

26dB / 99% Band Width Test Data CH-Low

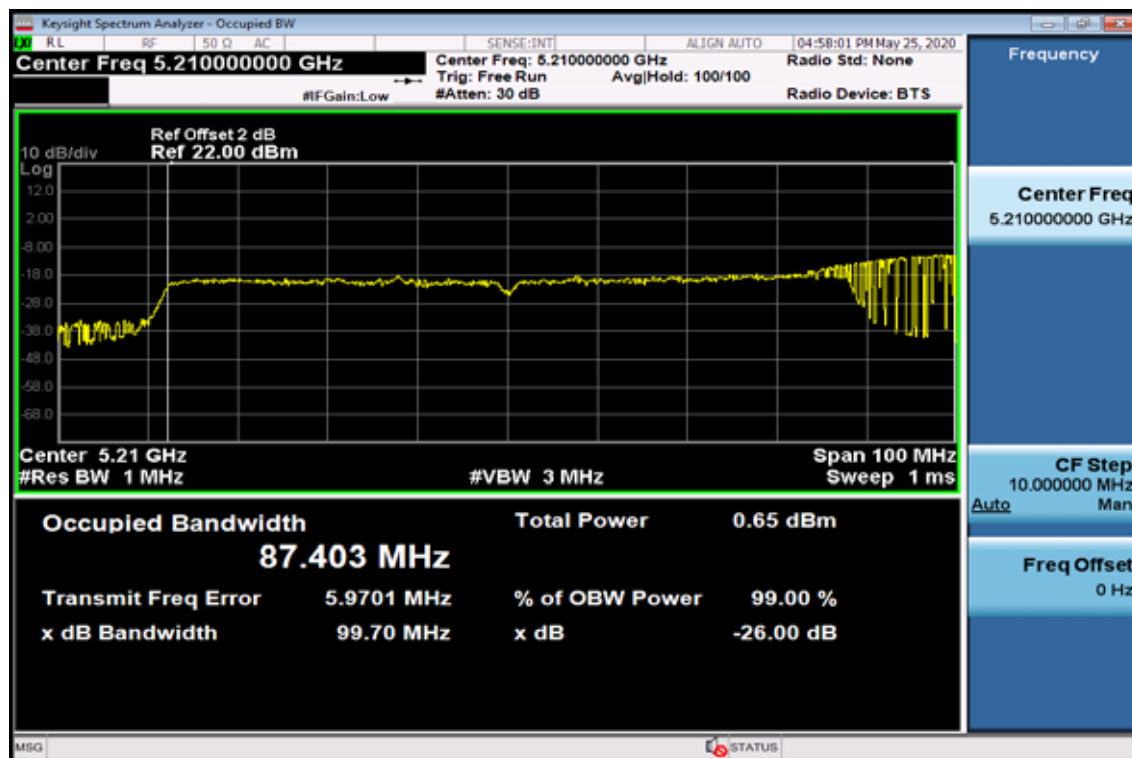


26dB / 99% Band Width Test Data CH-High



802.11ac VHT80

26dB / 99% Band Width Test Data CH-Low



8. 6dB Emission Bandwidth Measurement

8.1. 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.

8.2. Measurement Procedure

1. Place the EUT on the table and set it in transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
3. Set the spectrum analyzer as RBW=100kHz, VBW =300MHz, Span= 50MHz, Sweep=auto
4. Mark the peak frequency and -6dB (upper and lower) frequency.
5. Repeat above procedures until all frequency measured were complete.

Refer to section D of KDB Document: KDB 789033 D02 General UNII Test Procedures New Rules v01r03

8.3. Measurement Equipment Used:

Refer to section 6.3 for details.

8.4. Test Set-up:

Refer to section 6.4 for details.

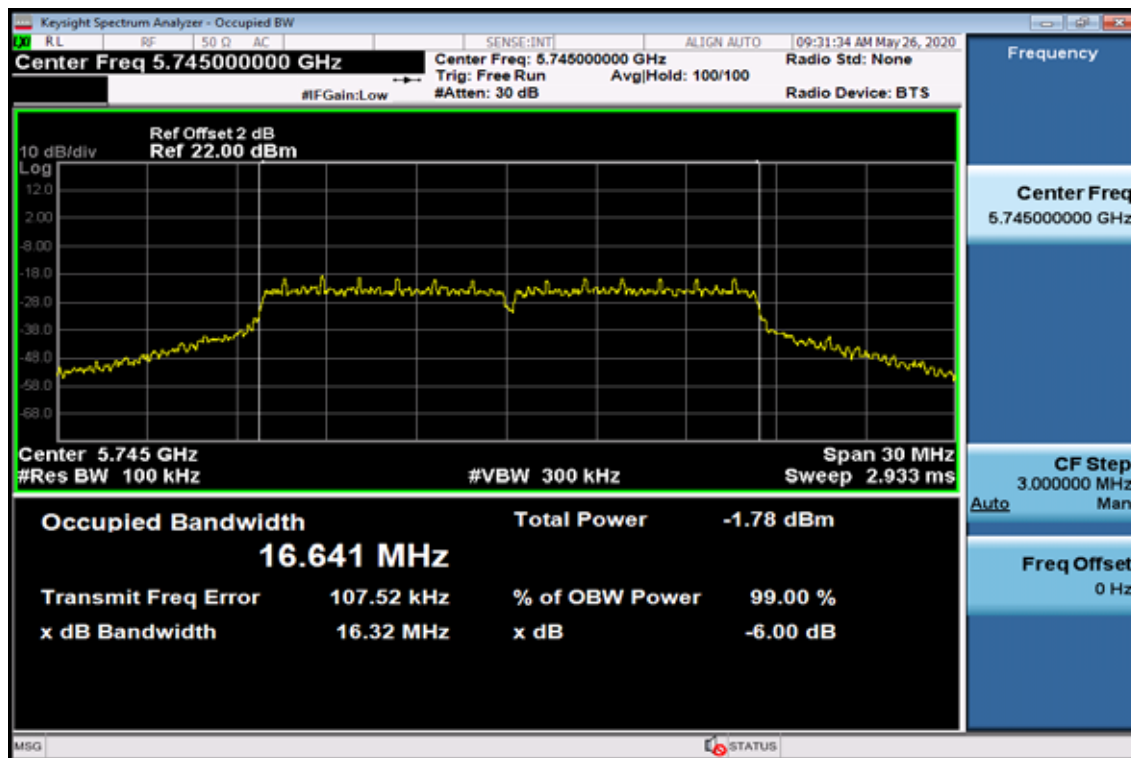
8.5. Measurement Result

Band	Mode	Frequency (MHz)	6dB Bandwidth (MHz)	99% OBW (MHz)	6dB BW Limit (kHz)
UNII-3	11a	5745	16.32	16.64	> 500
		5785	16.11	16.62	> 500
		5825	16.09	16.68	> 500
	HT20	5745	17.56	17.81	> 500
		5785	17.18	17.83	> 500
		5825	17.36	17.84	> 500
	HT40	5755	36.35	36.33	> 500
		5795	35.98	36.28	> 500
	VHT20	5745	17.57	17.83	> 500
		5785	17.54	17.82	> 500
		5825	17.59	17.83	> 500
	VHT40	5755	36.36	36.35	> 500
		5795	35.98	36.31	> 500
	VHT80	5775	75.73	76.06	> 500

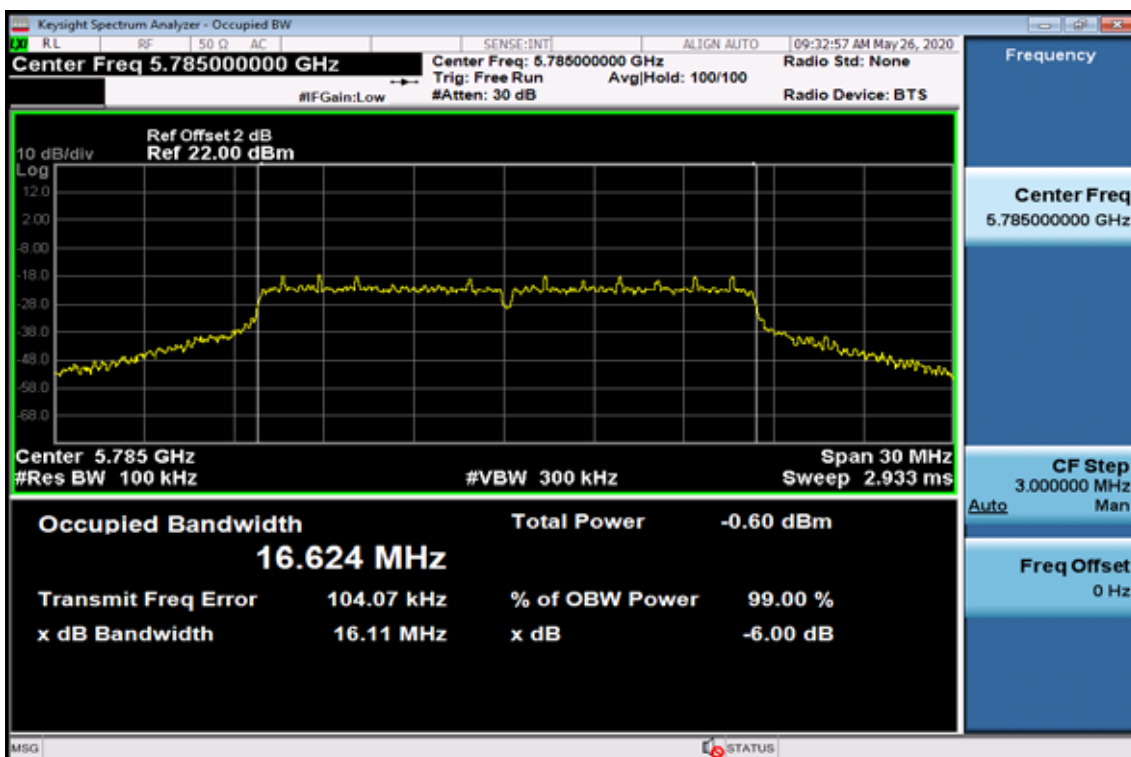
Band UNII-3

802.11a

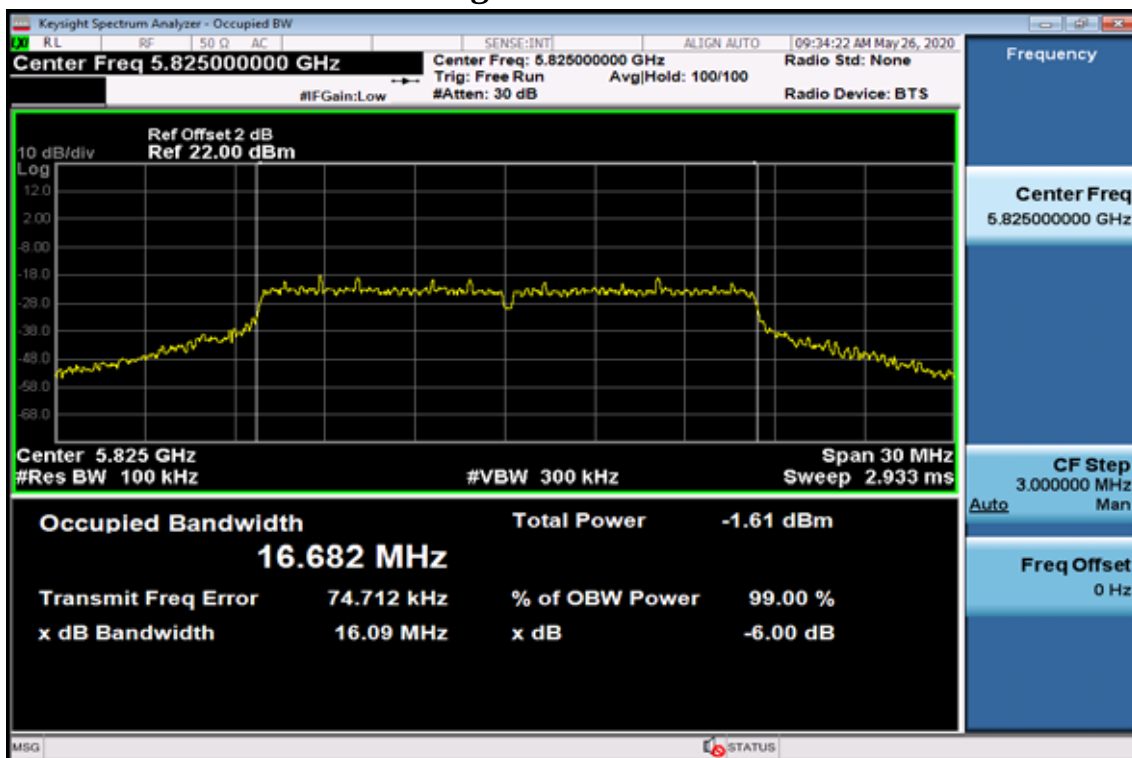
6dB Band Width Test Data CH-Low



6dB Band Width Data CH-Mid

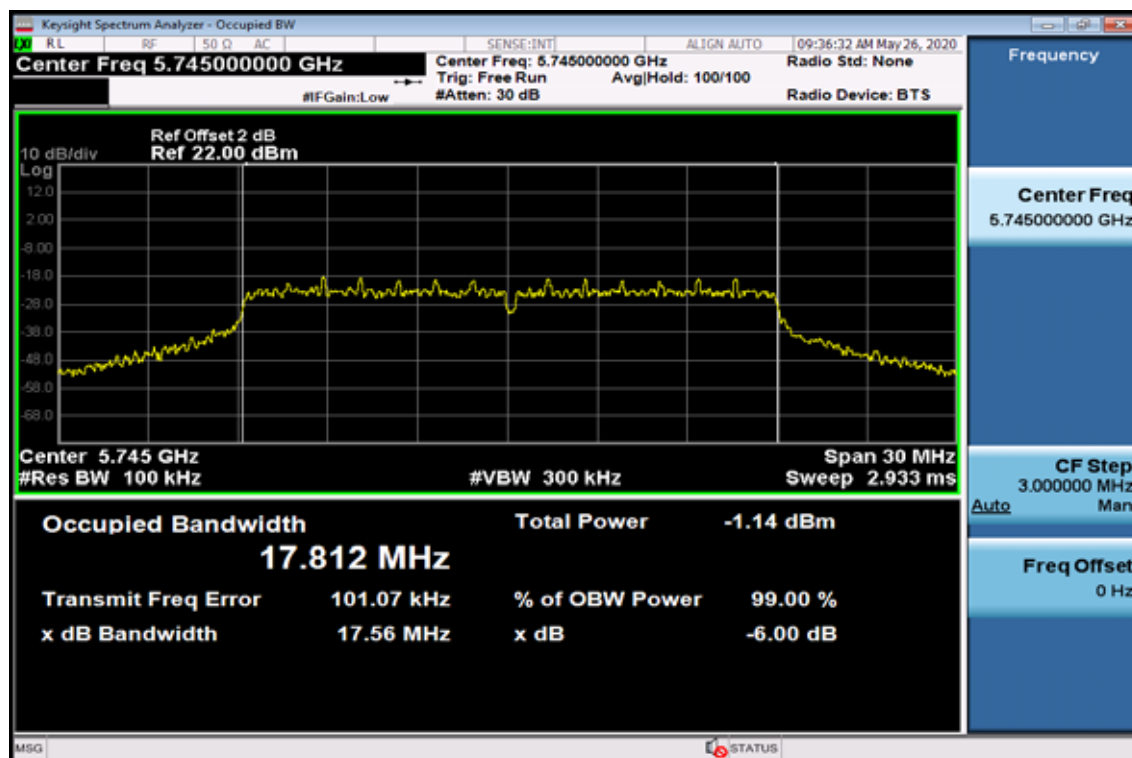


6dB Band Width Data CH-High

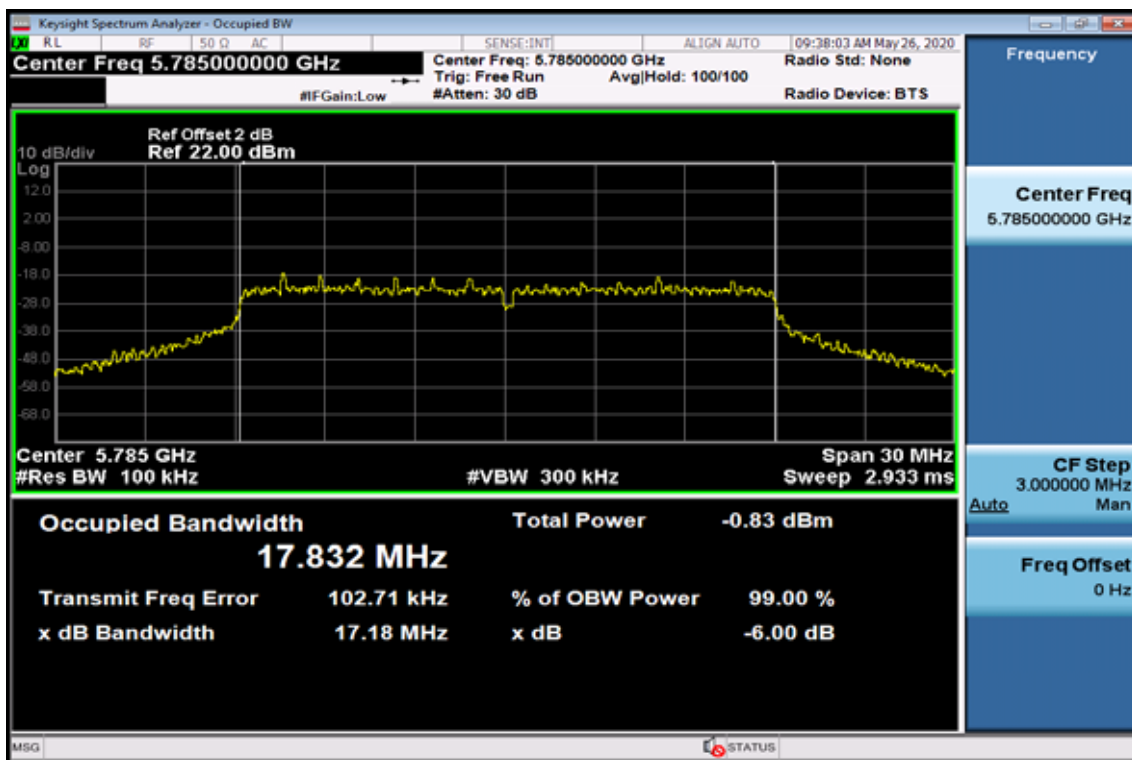


802.11n HT20

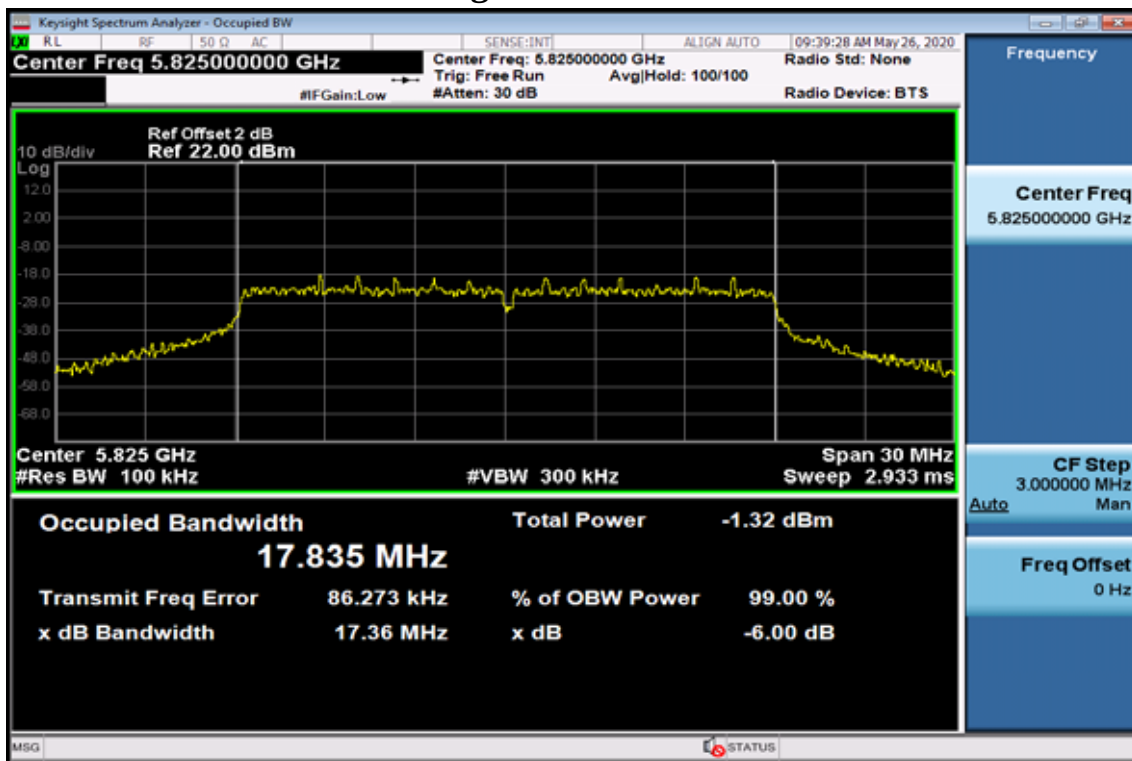
6dB Band Width Data CH-Low



6dB Band Width Data CH-Mid

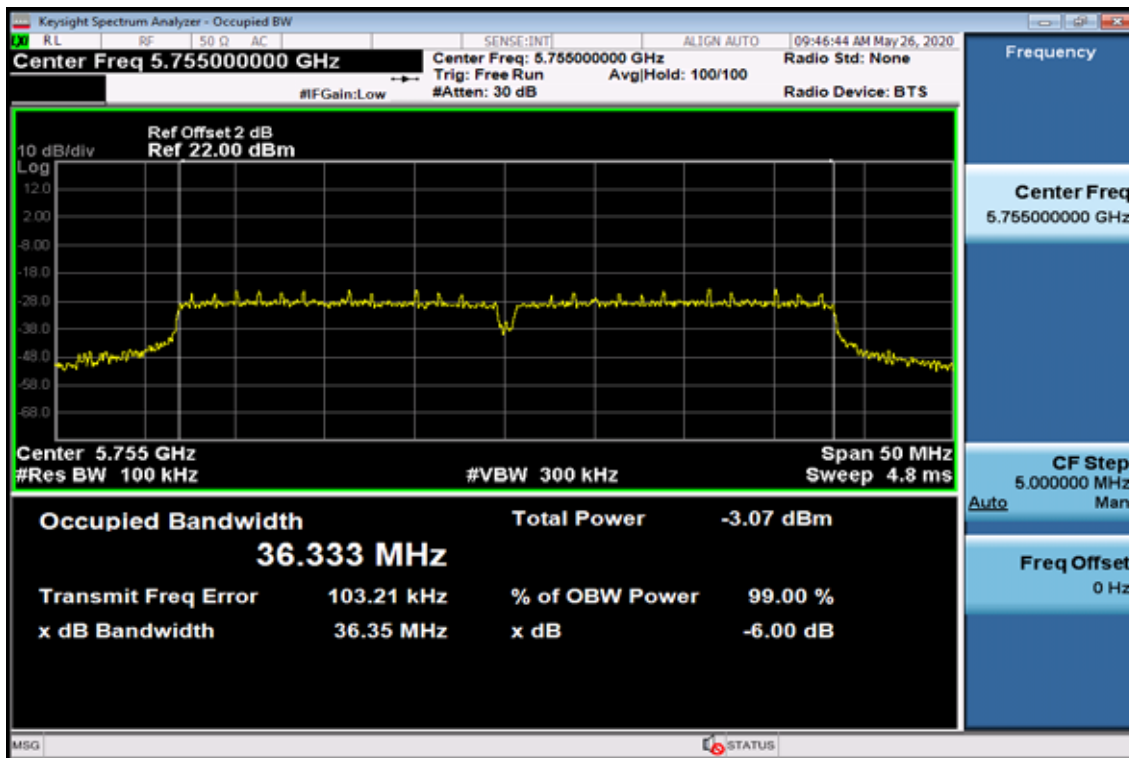


6dB Band Width Data CH-High

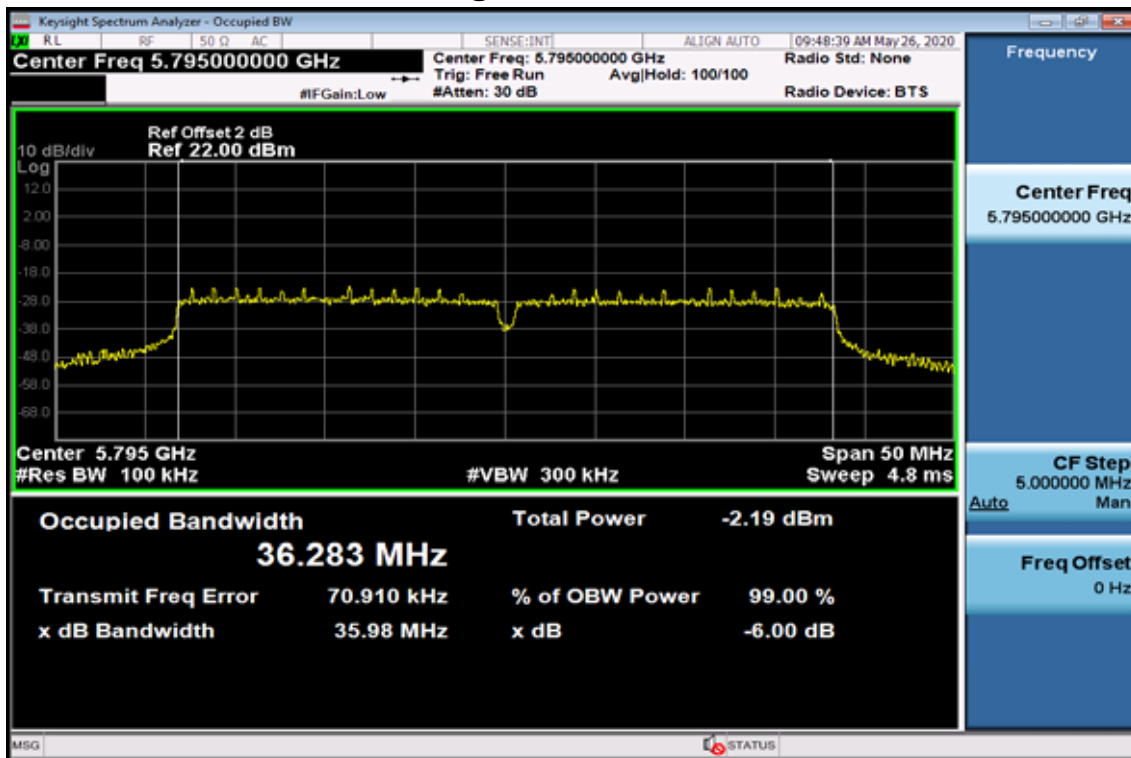


802.11n HT40

6dB Band Width Data CH-Low

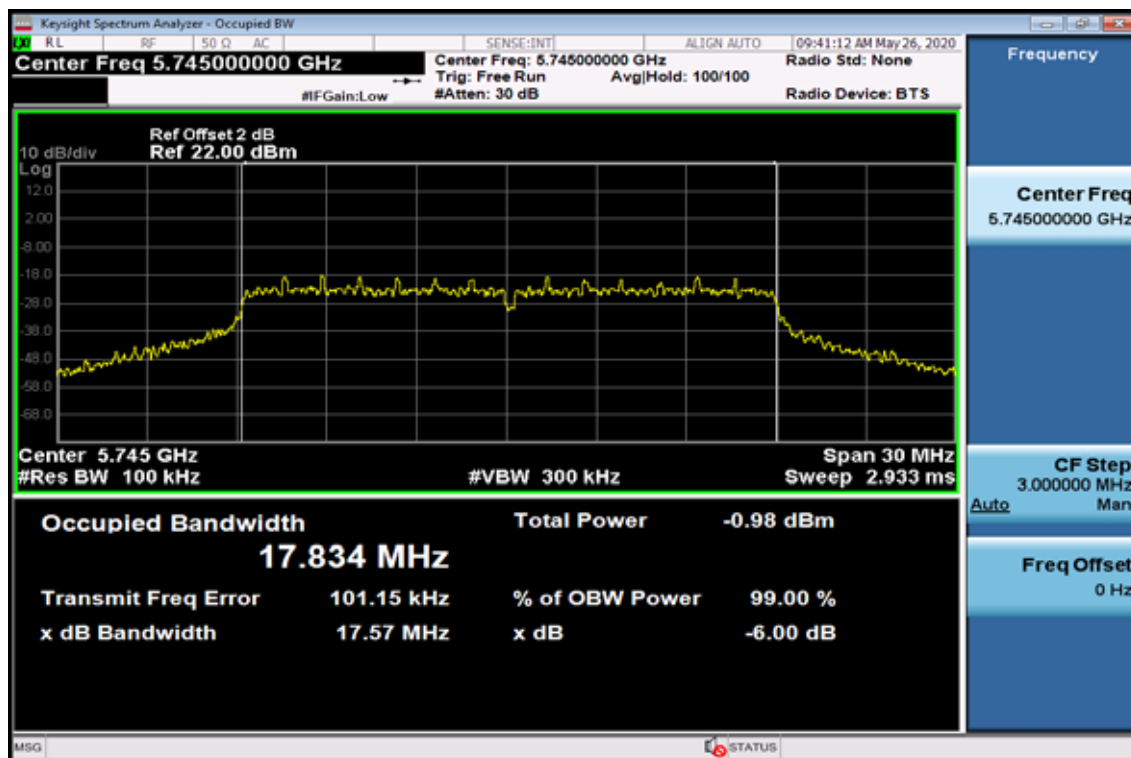


6dB Band Width Data CH-High

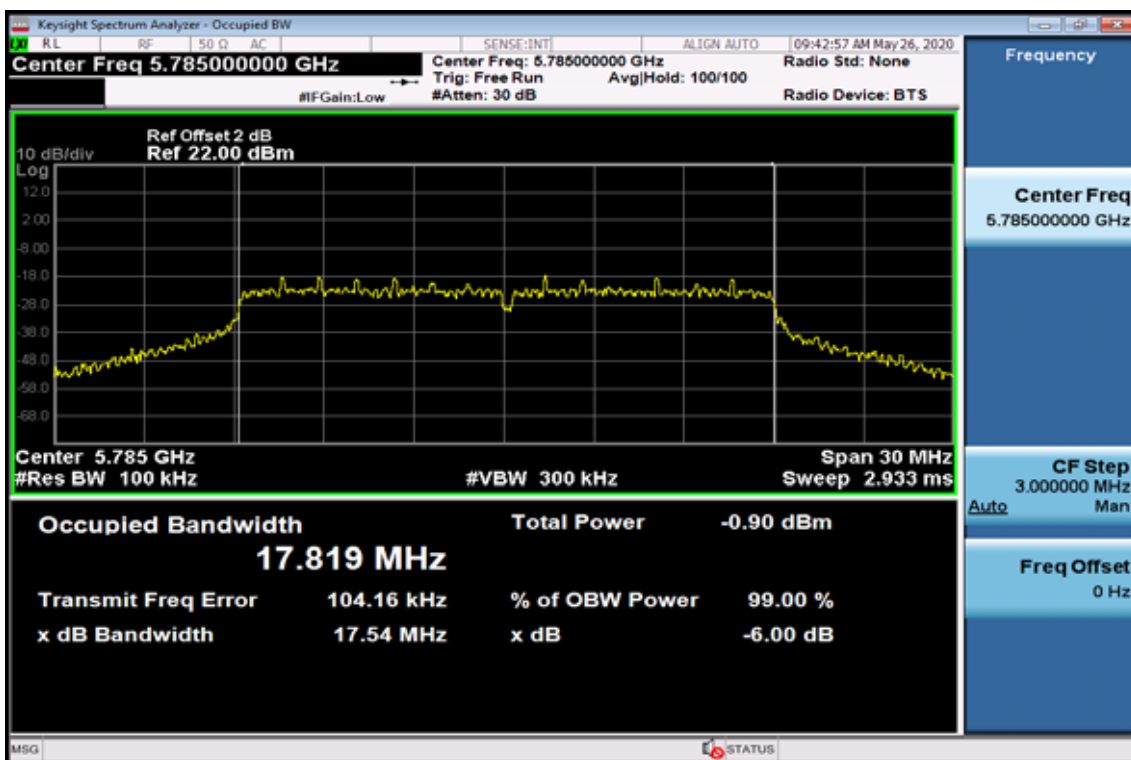


802.11n VHT20

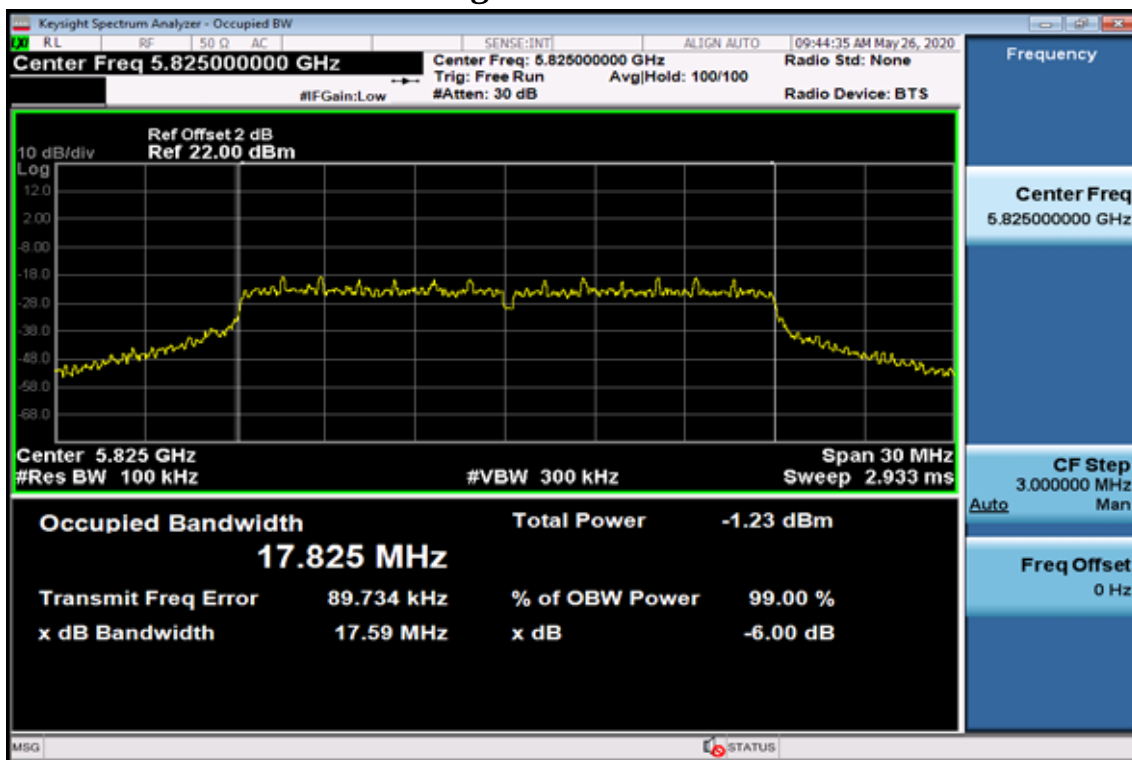
6dB Band Width Data CH-Low



6dB Band Width Data CH-Mid

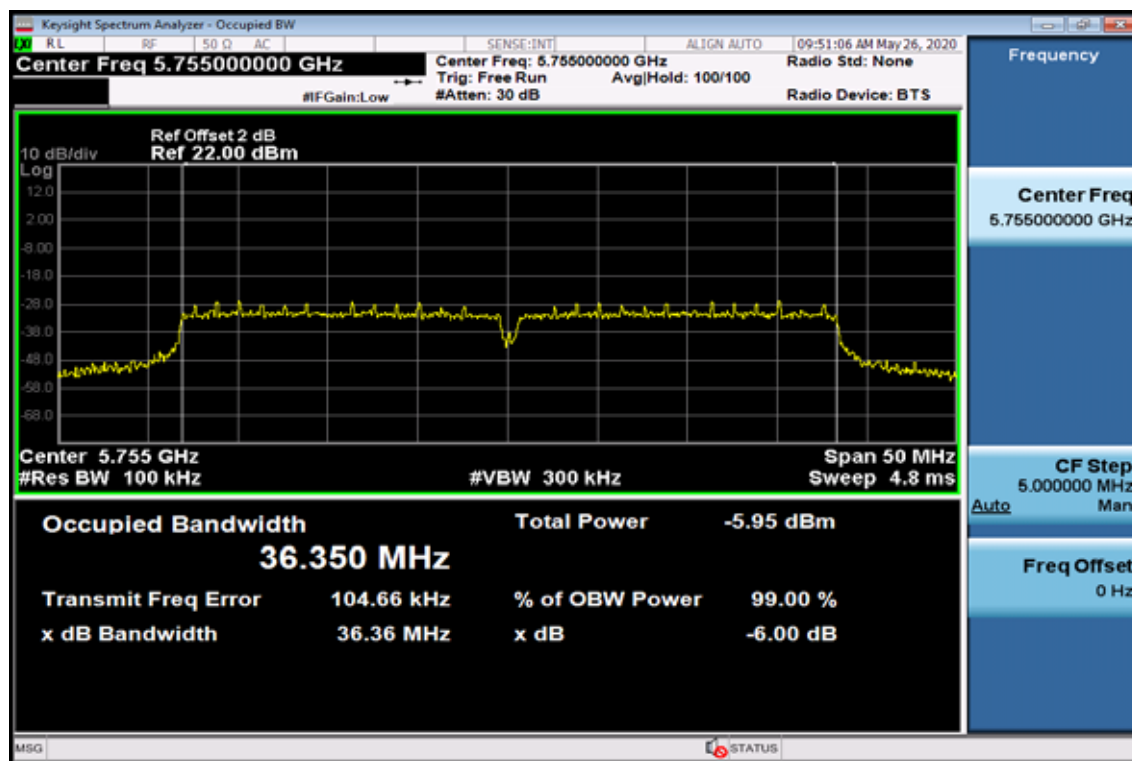


6dB Band Width Data CH-High

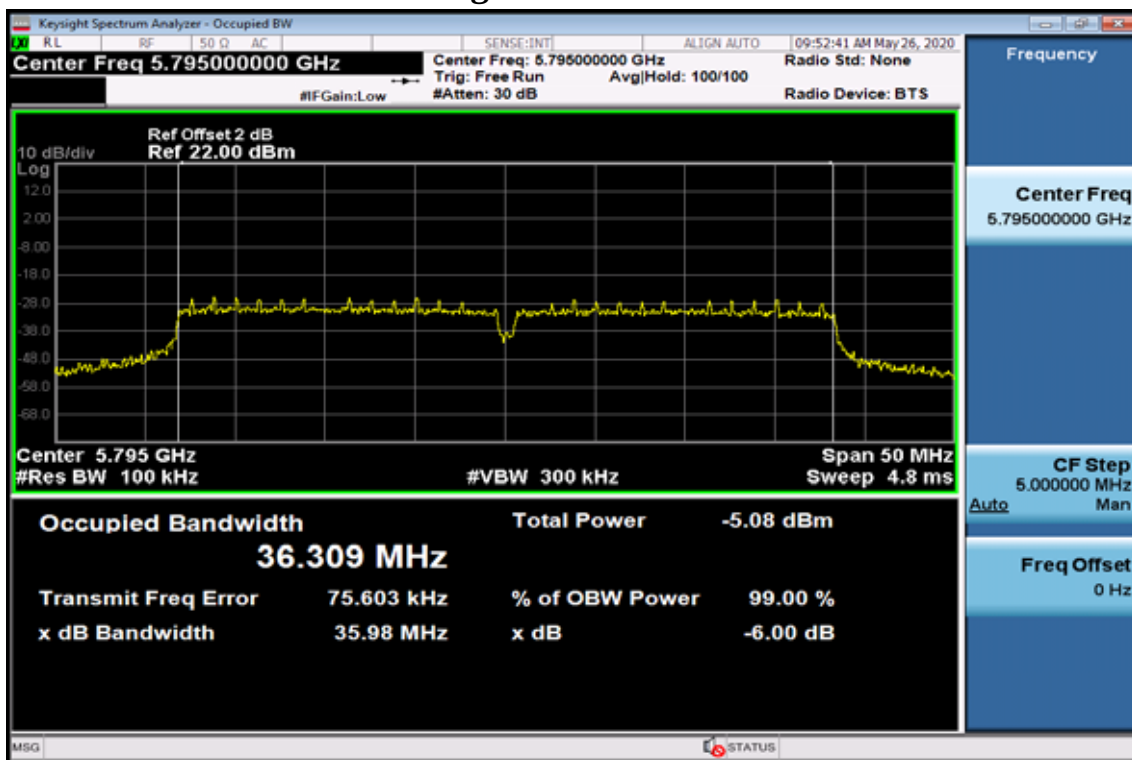


802.11n VHT40

6dB Band Width Data CH-Low

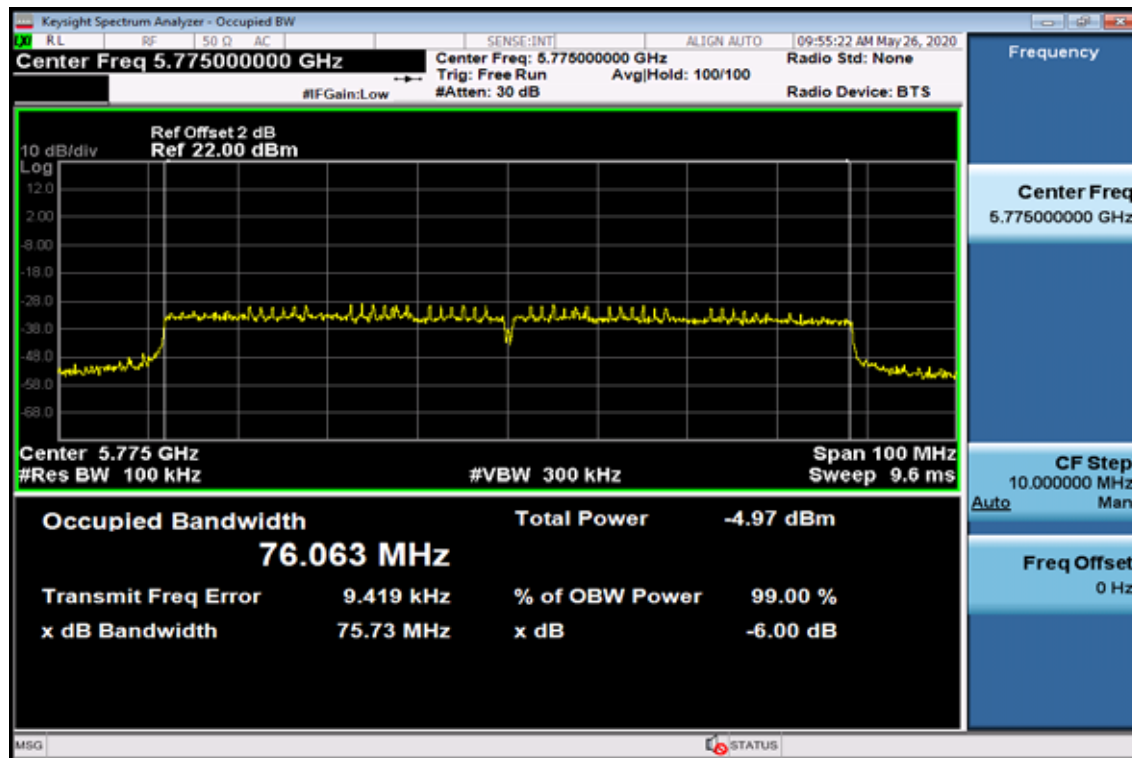


6dB Band Width Data CH-High



802.11ac VHT80

6dB Band Width Data



9. Undesirable Emission – Radiated Measurement

9.1. Standard Applicable

According to §15.407(b), Undesirable Emission Limits: Except as shown in Paragraph (b)(7) of this section, the peak emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- (1) 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.
- (2) For transmitters operating in the 5.25-5.35 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.
- (3) For transmitters operating in the 5.47-5.725 GHz band: all emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (4) 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 -17dBm/MHz; 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.
- (5) The above emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.
- (6) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in Section 15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in Section 15.207.
- (7) The provisions of Section 15.205 of this part apply to intentional radiators operating under this section.
- (8) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency band edges as the design of the equipment permits.

§15.205- RESTRICTED BANDS OF OPERATIONS

- (a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 -	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.52525	2655 - 2900	22.01 - 23.12
8.41425 - 8.41475	156.7 - 156.9	3260 - 3267	23.6 - 24.0
12.29 - 12.293	162.0125 - 167.17	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	167.72 - 173.2	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	240 - 285	3600 - 4400	(²)
13.36 - 13.41	322 - 335.4		

¹ Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

² Above 38.6

- (b) Except as provided in paragraphs (d) and (e), the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

§15.209- RADIATED EMISSION LIMITS: GENERAL REQUIREMENTS

FCC PART 15.209

MEASURING DISTANCE OF 3 METER		
FREQUENCY RANGE (MHz)	FIELD STRENGTH (Microvolts/m)	FIELD STRENGTH (dBuV/m)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

9.2. EUT Setup

1. The radiated emission tests were performed in the 3 meter open-test site, using the setup in accordance with the ANSI C63.10: 2013
2. The EUT was put in the front of the test table. The host PC system was placed on the center of the back edge on the test table. The peripherals like modem, monitor printer, K/B, and mouse were placed on the side of the host PC system. The rear of the EUT and peripherals were placed flushed with the rear of the tabletop.
3. The keyboard was placed directly in the front of the monitor, flushed with the front tabletop. The mouse was placed next to the Keyboard, flushed with the back of keyboard.
4. The spacing between the peripherals was 10 centimeters.
5. External I/O cables were draped along the edge of the test table and bundle when necessary.
6. The host PC system was connected with 120Vac/60Hz power source.

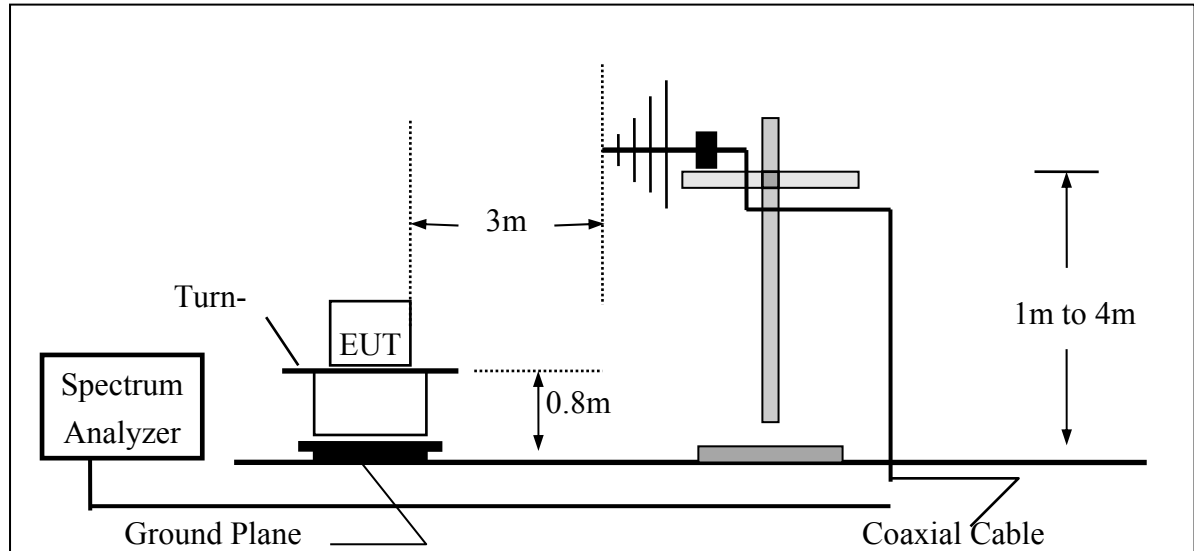
9.3. Measurement Procedure

1. The EUT was placed on a turn table which is 0.8m above ground plane.
2. The turn table shall rotate 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emissions.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Repeat above procedures until all frequency measured were complete.

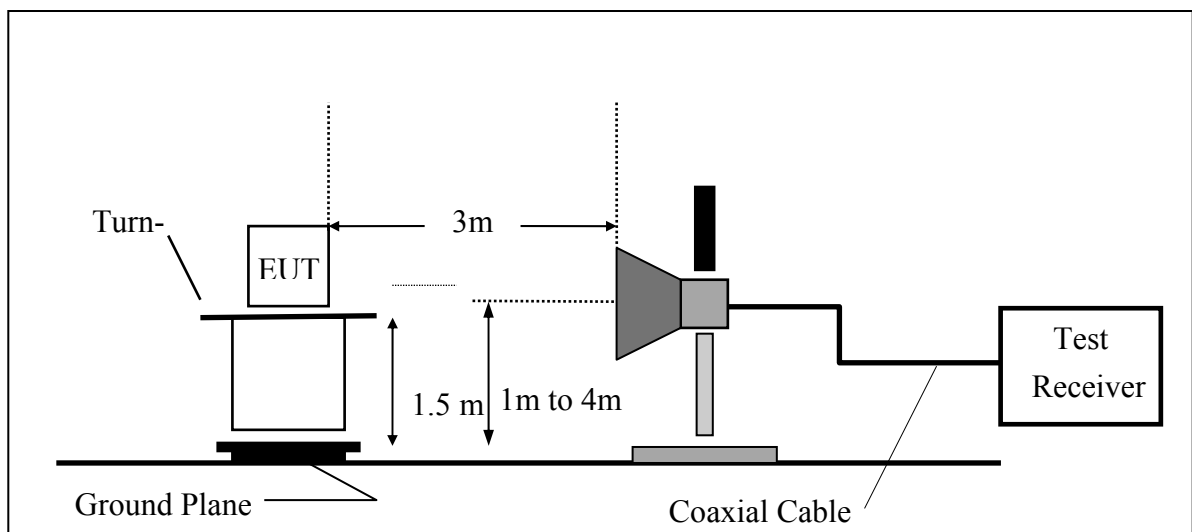
Refer to section F of KDB Document: KDB 789033 D02 General UNII Test Procedures New Rules v02r01

9.4. Test SET-UP (Block Diagram of Configuration)

(A) Radiated Emission Test Setup, Frequency below 1000MHz



(B) Radiated Emission Test Setup Frequency above 1 GHz



9.5. Measurement Equipment Used:

Location	Equipment Name	Brand	Model	S/N	Last Cal. Date	Next Cal. Date
Chamber 19	EMI Receiver	R&S	ESR3	102461	05/05/2020	05/05/2021
Chamber 19	Loop Antenna	EM	EM-6879	271	05/21/2020	05/21/2021
Chamber 19	Bilog Antenna (30MHz-1GHz)	Schwarzbeck	VULB9168 w 5dB Att.	736	02/11/2020	02/11/2021
Chamber 19	Horn antenna (1GHz-18GHz)	Schwarzbeck	9120D	9120D-1627	06/17/2019	06/17/2020
Chamber 19	Horn antenna (18GHz-26GHz)	Com-power	AH-826	081001	11/25/2019	11/25/2020
Chamber 19	Horn antenna (26GHz-40GHz)	Com-power	AH-640	100A	03/13/2020	03/13/2021
Chamber 19	Preamplifier (9kHz-1GHz)	HP	8447F	3113A06362	01/06/2020	01/06/2021
Chamber 19	Preamplifier (1GHz - 26GHz)	EM	EM01M26G	060681	05/04/2020	05/04/2021
Chamber 19	Preamplifier (26GHz-40GHz)	MITEQ	JS4-26004000- 27-5A	818471	05/04/2020	05/04/2021
Chamber 19	RF Cable (9kHz-18GHz)	HUBER SU- HNER	Sucoflex 104A	MY1397/4A	01/10/2020	01/10/2021
Chamber 19	RF Cable (18GHz-40GHz)	HUBER SU- HNER	Sucoflex 102	27963/2&374 21/2	11/21/2019	11/21/2020
Chamber 19	Signal Generator	Anritsu	MG3692A	20311	01/06/2020	01/06/2021
Chamber 19	Test Software	Audix	E3 Ver:6.12023	N/A	N/A	N/A

9.6. Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CL - AG$$

Where	FS = Field Strength	CL = Cable Attenuation Factor (Cable Loss)
	RA = Reading Amplitude	AG = Amplifier Gain
	AF = Antenna Factor	

9.7. Measurement Result

Refer to attach tabular data sheets.

NOTE:

The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 100kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz. And RBW 1MHz for frequency above 1GHz.

Radiated Spurious Emission Measurement Result (below 1GHz)
(Band UNII-1 a mode)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH Low	Test By	Bill
Temperature	25	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	106.63	45.50	-9.02	36.48	43.50	-7.02	Peak	VERTICAL
2	250.19	45.86	-5.70	40.16	46.00	-5.84	Peak	VERTICAL
3	374.35	42.98	-2.47	40.51	46.00	-5.49	Peak	VERTICAL
4	500.45	35.44	-0.68	34.76	46.00	-11.24	Peak	VERTICAL
5	674.08	33.62	2.30	35.92	46.00	-10.08	Peak	VERTICAL
6	899.12	30.33	6.11	36.44	46.00	-9.56	Peak	VERTICAL
1	149.31	46.15	-5.08	41.07	43.50	-2.43	Peak	HORIZONTAL
2	224.97	49.93	-7.13	42.80	46.00	-3.20	Peak	HORIZONTAL
3	297.72	43.36	-3.99	39.37	46.00	-6.63	Peak	HORIZONTAL
4	500.45	39.09	-0.68	38.41	46.00	-7.59	Peak	HORIZONTAL
5	625.58	29.75	1.68	31.43	46.00	-14.57	Peak	HORIZONTAL
6	875.84	28.63	5.62	34.25	46.00	-11.75	Peak	HORIZONTAL

Remark:

- 1 emission is 20dB lower, so that emission as measured between 9kHz to 30MHz is not reported
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9MHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (below 1GHz)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH Mid	Test By	Bill
Temperature	25	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	149.31	40.85	-5.08	35.77	43.50	-7.73	Peak	VERTICAL
2	202.66	44.76	-7.45	37.31	43.50	-6.19	Peak	VERTICAL
3	375.32	40.23	-2.46	37.77	46.00	-8.23	Peak	VERTICAL
4	500.45	36.97	-0.68	36.29	46.00	-9.71	Peak	VERTICAL
5	676.99	37.79	2.42	40.21	46.00	-5.79	Peak	VERTICAL
6	875.84	29.92	5.62	35.54	46.00	-10.46	Peak	VERTICAL
1	149.31	45.37	-5.08	40.29	43.50	-3.21	Peak	HORIZONTAL
2	239.52	47.46	-5.98	41.48	46.00	-4.52	Peak	HORIZONTAL
3	431.58	37.10	-1.45	35.65	46.00	-10.35	Peak	HORIZONTAL
4	500.45	38.19	-0.68	37.51	46.00	-8.49	Peak	HORIZONTAL
5	625.58	30.59	1.68	32.27	46.00	-13.73	Peak	HORIZONTAL
6	870.02	29.06	5.49	34.55	46.00	-11.45	Peak	HORIZONTAL

Remark:

- 1 emission is 20dB lower, so that emission as measured between 9kHz to 30MHz is not reported
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9MHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (below 1GHz)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH High	Test By	Bill
Temperature	25	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	207.51	44.99	-7.32	37.67	43.50	-5.83	Peak	VERTICAL
2	374.35	41.31	-2.47	38.84	46.00	-7.16	Peak	VERTICAL
3	500.45	37.47	-0.68	36.79	46.00	-9.21	Peak	VERTICAL
4	674.08	35.70	2.30	38.00	46.00	-8.00	Peak	VERTICAL
5	827.34	30.09	5.14	35.23	46.00	-10.77	Peak	VERTICAL
6	899.12	29.47	6.11	35.58	46.00	-10.42	Peak	VERTICAL
1	106.63	49.06	-9.02	40.04	43.50	-3.46	Peak	HORIZONTAL
2	200.72	48.08	-7.47	40.61	43.50	-2.89	Peak	HORIZONTAL
3	375.32	36.44	-2.46	33.98	46.00	-12.02	Peak	HORIZONTAL
4	500.45	39.08	-0.68	38.40	46.00	-7.60	Peak	HORIZONTAL
5	756.53	28.67	4.22	32.89	46.00	-13.11	Peak	HORIZONTAL
6	903.00	29.27	6.15	35.42	46.00	-10.58	Peak	HORIZONTAL

Remark:

- 1 emission is 20dB lower, so that emission as measured between 9kHz to 30MHz is not reported
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9MHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (below 1GHz)
(Band UNII-1 802.11n HT20 mode)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH Low	Test By	Bill
Temperature	25	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	201.69	44.92	-7.46	37.46	43.50	-6.04	Peak	VERTICAL
2	299.66	41.86	-3.98	37.88	46.00	-8.12	Peak	VERTICAL
3	376.29	39.83	-2.42	37.41	46.00	-8.59	Peak	VERTICAL
4	500.45	36.90	-0.68	36.22	46.00	-9.78	Peak	VERTICAL
5	674.08	36.55	2.30	38.85	46.00	-7.15	Peak	VERTICAL
6	875.84	29.56	5.62	35.18	46.00	-10.82	Peak	VERTICAL
1	149.31	45.29	-5.08	40.21	43.50	-3.29	Peak	HORIZONTAL
2	201.69	48.66	-7.46	41.20	43.50	-2.30	Peak	HORIZONTAL
3	299.66	43.64	-3.98	39.66	46.00	-6.34	Peak	HORIZONTAL
4	500.45	37.59	-0.68	36.91	46.00	-9.09	Peak	HORIZONTAL
5	674.08	30.29	2.30	32.59	46.00	-13.41	Peak	HORIZONTAL
6	851.59	28.60	5.34	33.94	46.00	-12.06	Peak	HORIZONTAL

Remark:

- 1 emission is 20dB lower, so that emission as measured between 9kHz to 30MHz is not reported
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9MHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (below 1GHz)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH Mid	Test By	Bill
Temperature	25	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	149.31	39.79	-5.08	34.71	43.50	-8.79	Peak	VERTICAL
2	239.52	43.85	-5.98	37.87	46.00	-8.13	Peak	VERTICAL
3	299.66	42.39	-3.98	38.41	46.00	-7.59	Peak	VERTICAL
4	431.58	35.36	-1.45	33.91	46.00	-12.09	Peak	VERTICAL
5	500.45	36.93	-0.68	36.25	46.00	-9.75	Peak	VERTICAL
6	674.08	36.50	2.30	38.80	46.00	-7.20	Peak	VERTICAL
1	149.31	44.71	-5.08	39.63	43.50	-3.87	Peak	HORIZONTAL
2	299.66	43.01	-3.98	39.03	46.00	-6.97	Peak	HORIZONTAL
3	391.81	37.05	-2.20	34.85	46.00	-11.15	Peak	HORIZONTAL
4	500.45	38.18	-0.68	37.50	46.00	-8.50	Peak	HORIZONTAL
5	676.99	29.85	2.42	32.27	46.00	-13.73	Peak	HORIZONTAL
6	875.84	29.03	5.62	34.65	46.00	-11.35	Peak	HORIZONTAL

Remark:

- 1 emission is 20dB lower, so that emission as measured between 9kHz to 30MHz is not reported
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9MHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (below 1GHz)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH High	Test By	Bill
Temperature	25	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	106.63	45.29	-9.02	36.27	43.50	-7.23	Peak	VERTICAL
2	204.60	44.82	-7.44	37.38	43.50	-6.12	Peak	VERTICAL
3	376.29	40.78	-2.42	38.36	46.00	-7.64	Peak	VERTICAL
4	500.45	36.78	-0.68	36.10	46.00	-9.90	Peak	VERTICAL
5	676.99	36.72	2.42	39.14	46.00	-6.86	Peak	VERTICAL
6	822.49	29.00	5.06	34.06	46.00	-11.94	Peak	VERTICAL
1	106.63	48.46	-9.02	39.44	43.50	-4.06	Peak	HORIZONTAL
2	199.75	48.56	-7.47	41.09	43.50	-2.41	Peak	HORIZONTAL
3	299.66	44.25	-3.98	40.27	46.00	-5.73	Peak	HORIZONTAL
4	431.58	36.10	-1.45	34.65	46.00	-11.35	Peak	HORIZONTAL
5	500.45	38.17	-0.68	37.49	46.00	-8.51	Peak	HORIZONTAL
6	737.13	28.78	3.61	32.39	46.00	-13.61	Peak	HORIZONTAL

Remark:

- 1 emission is 20dB lower, so that emission as measured between 9kHz to 30MHz is not reported
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9MHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (below 1GHz)

(Band UNII-1 HT40 mode)

Operation Mode TX MODE
Channel Number CH Low
Temperature 25
Humidity 65 %

Test Date 2020/05/27
Test By Bill
Pol Ver./Hor

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	149.31	39.73	-5.08	34.65	43.50	-8.85	Peak	VERTICAL
2	299.66	43.02	-3.98	39.04	46.00	-6.96	Peak	VERTICAL
3	431.58	35.79	-1.45	34.34	46.00	-11.66	Peak	VERTICAL
4	500.45	36.16	-0.68	35.48	46.00	-10.52	Peak	VERTICAL
5	676.99	37.22	2.42	39.64	46.00	-6.36	Peak	VERTICAL
6	875.84	30.54	5.62	36.16	46.00	-9.84	Peak	VERTICAL
1	149.31	46.03	-5.08	40.95	43.50	-2.55	Peak	HORIZONTAL
2	299.66	45.13	-3.98	41.15	46.00	-4.85	Peak	HORIZONTAL
3	500.45	38.22	-0.68	37.54	46.00	-8.46	Peak	HORIZONTAL
4	625.58	31.66	1.68	33.34	46.00	-12.66	Peak	HORIZONTAL
5	788.54	29.54	4.54	34.08	46.00	-11.92	Peak	HORIZONTAL
6	903.00	28.93	6.15	35.08	46.00	-10.92	Peak	HORIZONTAL

Remark:

- 1 emission is 20dB lower, so that emission as measured between 9kHz to 30MHz is not reported
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9MHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (below 1GHz)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH High	Test By	Bill
Temperature	25	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	106.63	45.36	-9.02	36.34	43.50	-7.16	Peak	VERTICAL
2	299.66	42.54	-3.98	38.56	46.00	-7.44	Peak	VERTICAL
3	500.45	36.71	-0.68	36.03	46.00	-9.97	Peak	VERTICAL
4	676.99	38.26	2.42	40.68	46.00	-5.32	Peak	VERTICAL
5	806.97	28.50	4.58	33.08	46.00	-12.92	Peak	VERTICAL
6	903.00	30.60	6.15	36.75	46.00	-9.25	Peak	VERTICAL
1	149.31	44.88	-5.08	39.80	43.50	-3.70	Peak	HORIZONTAL
2	299.66	44.32	-3.98	40.34	46.00	-5.66	Peak	HORIZONTAL
3	500.45	38.01	-0.68	37.33	46.00	-8.67	Peak	HORIZONTAL
4	597.45	30.82	1.38	32.20	46.00	-13.80	Peak	HORIZONTAL
5	752.65	28.21	4.05	32.26	46.00	-13.74	Peak	HORIZONTAL
6	875.84	28.92	5.62	34.54	46.00	-11.46	Peak	HORIZONTAL

Remark:

- 1 emission is 20dB lower, so that emission as measured between 9kHz to 30MHz is not reported
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9MHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (below 1GHz)
(Band UNII-1 802.11ac VHT20 mode)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH Low	Test By	Bill
Temperature	25	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	106.63	45.17	-9.02	36.15	43.50	-7.35	Peak	VERTICAL
2	299.66	41.11	-3.98	37.13	46.00	-8.87	Peak	VERTICAL
3	431.58	35.62	-1.45	34.17	46.00	-11.83	Peak	VERTICAL
4	599.39	32.66	1.47	34.13	46.00	-11.87	Peak	VERTICAL
5	730.34	31.91	3.54	35.45	46.00	-10.55	Peak	VERTICAL
6	875.84	29.54	5.62	35.16	46.00	-10.84	Peak	VERTICAL
1	106.63	48.72	-9.02	39.70	43.50	-3.80	Peak	HORIZONTAL
2	250.19	46.97	-5.70	41.27	46.00	-4.73	Peak	HORIZONTAL
3	450.01	35.37	-1.25	34.12	46.00	-11.88	Peak	HORIZONTAL
4	597.45	31.43	1.38	32.81	46.00	-13.19	Peak	HORIZONTAL
5	758.47	28.22	4.31	32.53	46.00	-13.47	Peak	HORIZONTAL
6	875.84	29.50	5.62	35.12	46.00	-10.88	Peak	HORIZONTAL

Remark:

- 1 emission is 20dB lower, so that emission as measured between 9kHz to 30MHz is not reported
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9MHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (below 1GHz)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH Mid	Test By	Bill
Temperature	25	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	149.31	39.95	-5.08	34.87	43.50	-8.63	Peak	VERTICAL
2	300.63	41.71	-3.96	37.75	46.00	-8.25	Peak	VERTICAL
3	500.45	37.19	-0.68	36.51	46.00	-9.49	Peak	VERTICAL
4	674.08	36.00	2.30	38.30	46.00	-7.70	Peak	VERTICAL
5	827.34	29.17	5.14	34.31	46.00	-11.69	Peak	VERTICAL
6	903.00	30.53	6.15	36.68	46.00	-9.32	Peak	VERTICAL
1	149.31	44.20	-5.08	39.12	43.50	-4.38	Peak	HORIZONTAL
2	299.66	44.29	-3.98	40.31	46.00	-5.69	Peak	HORIZONTAL
3	500.45	38.09	-0.68	37.41	46.00	-8.59	Peak	HORIZONTAL
4	714.82	28.33	3.07	31.40	46.00	-14.60	Peak	HORIZONTAL
5	825.40	28.89	5.17	34.06	46.00	-11.94	Peak	HORIZONTAL
6	920.46	27.62	6.73	34.35	46.00	-11.65	Peak	HORIZONTAL

Remark:

- 1 emission is 20dB lower, so that emission as measured between 9kHz to 30MHz is not reported
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9MHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (below 1GHz)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH High	Test By	Bill
Temperature	25	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	202.66	45.01	-7.45	37.56	43.50	-5.94	Peak	VERTICAL
2	299.66	41.76	-3.98	37.78	46.00	-8.22	Peak	VERTICAL
3	374.35	41.71	-2.47	39.24	46.00	-6.76	Peak	VERTICAL
4	500.45	36.88	-0.68	36.20	46.00	-9.80	Peak	VERTICAL
5	674.08	34.53	2.30	36.83	46.00	-9.17	Peak	VERTICAL
6	903.00	29.72	6.15	35.87	46.00	-10.13	Peak	VERTICAL
1	149.31	45.39	-5.08	40.31	43.50	-3.19	Peak	HORIZONTAL
2	198.78	47.45	-7.47	39.98	43.50	-3.52	Peak	HORIZONTAL
3	300.63	43.06	-3.96	39.10	46.00	-6.90	Peak	HORIZONTAL
4	500.45	37.86	-0.68	37.18	46.00	-8.82	Peak	HORIZONTAL
5	785.63	28.26	4.41	32.67	46.00	-13.33	Peak	HORIZONTAL
6	941.80	27.84	7.03	34.87	46.00	-11.13	Peak	HORIZONTAL

Remark:

- 1 emission is 20dB lower, so that emission as measured between 9kHz to 30MHz is not reported
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9MHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (below 1GHz)

(Band UNII-1 802.11ac VHT40 mode)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH Low	Test By	Bill
Temperature	25	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	106.63	45.11	-9.02	36.09	43.50	-7.41	Peak	VERTICAL
2	199.75	44.44	-7.47	36.97	43.50	-6.53	Peak	VERTICAL
3	299.66	41.94	-3.98	37.96	46.00	-8.04	Peak	VERTICAL
4	376.29	40.24	-2.42	37.82	46.00	-8.18	Peak	VERTICAL
5	500.45	36.31	-0.68	35.63	46.00	-10.37	Peak	VERTICAL
6	676.99	36.78	2.42	39.20	46.00	-6.80	Peak	VERTICAL
1	106.63	48.82	-9.02	39.80	43.50	-3.70	Peak	HORIZONTAL
2	300.63	43.75	-3.96	39.79	46.00	-6.21	Peak	HORIZONTAL
3	450.98	37.32	-1.22	36.10	46.00	-9.90	Peak	HORIZONTAL
4	597.45	30.79	1.38	32.17	46.00	-13.83	Peak	HORIZONTAL
5	778.84	29.18	4.34	33.52	46.00	-12.48	Peak	HORIZONTAL
6	926.28	28.14	6.79	34.93	46.00	-11.07	Peak	HORIZONTAL

Remark:

- 1 emission is 20dB lower, so that emission as measured between 9kHz to 30MHz is not reported
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9MHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (below 1GHz)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH High	Test By	Bill
Temperature	25	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	106.63	45.54	-9.02	36.52	43.50	-6.98	Peak	VERTICAL
2	205.57	45.15	-7.42	37.73	43.50	-5.77	Peak	VERTICAL
3	299.66	42.47	-3.98	38.49	46.00	-7.51	Peak	VERTICAL
4	500.45	36.52	-0.68	35.84	46.00	-10.16	Peak	VERTICAL
5	674.08	35.55	2.30	37.85	46.00	-8.15	Peak	VERTICAL
6	875.84	29.77	5.62	35.39	46.00	-10.61	Peak	VERTICAL
1	149.31	45.27	-5.08	40.19	43.50	-3.31	Peak	HORIZONTAL
2	299.66	44.18	-3.98	40.20	46.00	-5.80	Peak	HORIZONTAL
3	500.45	38.30	-0.68	37.62	46.00	-8.38	Peak	HORIZONTAL
4	674.08	30.38	2.30	32.68	46.00	-13.32	Peak	HORIZONTAL
5	783.69	28.42	4.38	32.80	46.00	-13.20	Peak	HORIZONTAL
6	875.84	29.35	5.62	34.97	46.00	-11.03	Peak	HORIZONTAL

Remark:

- 1 emission is 20dB lower, so that emission as measured between 9kHz to 30MHz is not reported
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9MHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (below 1GHz)

(Band UNII-1, 802.11ac VHT80mode)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH Low	Test By	Bill
Temperature	25	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	106.63	45.56	-9.02	36.54	43.50	-6.96	Peak	VERTICAL
2	205.57	44.11	-7.42	36.69	43.50	-6.81	Peak	VERTICAL
3	375.32	40.03	-2.46	37.57	46.00	-8.43	Peak	VERTICAL
4	500.45	36.32	-0.68	35.64	46.00	-10.36	Peak	VERTICAL
5	676.99	35.84	2.42	38.26	46.00	-7.74	Peak	VERTICAL
6	875.84	29.96	5.62	35.58	46.00	-10.42	Peak	VERTICAL
1	149.31	45.36	-5.08	40.28	43.50	-3.22	Peak	HORIZONTAL
2	299.66	44.44	-3.98	40.46	46.00	-5.54	Peak	HORIZONTAL
3	450.98	36.76	-1.22	35.54	46.00	-10.46	Peak	HORIZONTAL
4	587.75	33.56	1.09	34.65	46.00	-11.35	Peak	HORIZONTAL
5	753.62	28.83	4.09	32.92	46.00	-13.08	Peak	HORIZONTAL
6	899.12	29.32	6.11	35.43	46.00	-10.57	Peak	HORIZONTAL

Remark:

- 1 emission is 20dB lower, so that emission as measured between 9kHz to 30MHz is not reported
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9MHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (below 1GHz)

(Band UNII-3, 802.11a mode)

Operation Mode TX MODE
Channel Number CH Low
Temperature 25
Humidity 65 %

Test Date 2020/05/27
Test By Bill
Pol Ver./Hor

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	106.63	44.95	-9.02	35.93	43.50	-7.57	Peak	VERTICAL
2	201.69	45.16	-7.46	37.70	43.50	-5.80	Peak	VERTICAL
3	300.63	41.21	-3.96	37.25	46.00	-8.75	Peak	VERTICAL
4	500.45	37.14	-0.68	36.46	46.00	-9.54	Peak	VERTICAL
5	676.99	35.59	2.42	38.01	46.00	-7.99	Peak	VERTICAL
6	899.12	29.92	6.11	36.03	46.00	-9.97	Peak	VERTICAL
1	149.31	45.32	-5.08	40.24	43.50	-3.26	Peak	HORIZONTAL
2	299.66	43.37	-3.98	39.39	46.00	-6.61	Peak	HORIZONTAL
3	500.45	37.92	-0.68	37.24	46.00	-8.76	Peak	HORIZONTAL
4	625.58	29.63	1.68	31.31	46.00	-14.69	Peak	HORIZONTAL
5	827.34	28.91	5.14	34.05	46.00	-11.95	Peak	HORIZONTAL
6	930.16	27.85	6.87	34.72	46.00	-11.28	Peak	HORIZONTAL

Remark:

- 1 emission is 20dB lower, so that emission as measured between 9kHz to 30MHz is not reported
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9MHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (below 1GHz)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH Mid	Test By	Bill
Temperature	25	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	106.63	45.86	-9.02	36.84	43.50	-6.66	Peak	VERTICAL
2	209.45	43.76	-7.23	36.53	43.50	-6.97	Peak	VERTICAL
3	375.32	41.67	-2.46	39.21	46.00	-6.79	Peak	VERTICAL
4	500.45	36.32	-0.68	35.64	46.00	-10.36	Peak	VERTICAL
5	674.08	37.66	2.30	39.96	46.00	-6.04	Peak	VERTICAL
6	903.00	29.71	6.15	35.86	46.00	-10.14	Peak	VERTICAL
1	149.31	44.85	-5.08	39.77	43.50	-3.73	Peak	HORIZONTAL
2	300.63	43.27	-3.96	39.31	46.00	-6.69	Peak	HORIZONTAL
3	500.45	37.88	-0.68	37.20	46.00	-8.80	Peak	HORIZONTAL
4	674.08	29.79	2.30	32.09	46.00	-13.91	Peak	HORIZONTAL
5	827.34	28.92	5.14	34.06	46.00	-11.94	Peak	HORIZONTAL
6	899.12	29.08	6.11	35.19	46.00	-10.81	Peak	HORIZONTAL

Remark:

- 1 emission is 20dB lower, so that emission as measured between 9kHz to 30MHz is not reported
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9MHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (below 1GHz)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH High	Test By	Bill
Temperature	25	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	106.63	45.38	-9.02	36.36	43.50	-7.14	Peak	VERTICAL
2	299.66	41.96	-3.98	37.98	46.00	-8.02	Peak	VERTICAL
3	500.45	37.10	-0.68	36.42	46.00	-9.58	Peak	VERTICAL
4	676.99	37.44	2.42	39.86	46.00	-6.14	Peak	VERTICAL
5	809.88	28.31	4.60	32.91	46.00	-13.09	Peak	VERTICAL
6	901.06	30.53	6.13	36.66	46.00	-9.34	Peak	VERTICAL
1	149.31	45.12	-5.08	40.04	43.50	-3.46	Peak	HORIZONTAL
2	299.66	43.75	-3.98	39.77	46.00	-6.23	Peak	HORIZONTAL
3	500.45	38.01	-0.68	37.33	46.00	-8.67	Peak	HORIZONTAL
4	675.05	29.60	2.32	31.92	46.00	-14.08	Peak	HORIZONTAL
5	826.37	28.96	5.15	34.11	46.00	-11.89	Peak	HORIZONTAL
6	899.12	29.02	6.11	35.13	46.00	-10.87	Peak	HORIZONTAL

Remark:

- 1 emission is 20dB lower, so that emission as measured between 9kHz to 30MHz is not reported
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9MHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (below 1GHz)
(Band UNII-3, 802.11n HT20 mode)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH Low	Test By	Bill
Temperature	25	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	106.63	45.01	-9.02	35.99	43.50	-7.51	Peak	VERTICAL
2	300.63	43.27	-3.96	39.31	46.00	-6.69	Peak	VERTICAL
3	500.45	36.86	-0.68	36.18	46.00	-9.82	Peak	VERTICAL
4	676.99	36.65	2.42	39.07	46.00	-6.93	Peak	VERTICAL
5	788.54	28.30	4.54	32.84	46.00	-13.16	Peak	VERTICAL
6	899.12	30.22	6.11	36.33	46.00	-9.67	Peak	VERTICAL
1	149.31	44.69	-5.08	39.61	43.50	-3.89	Peak	HORIZONTAL
2	231.76	45.89	-6.55	39.34	46.00	-6.66	Peak	HORIZONTAL
3	300.63	44.11	-3.96	40.15	46.00	-5.85	Peak	HORIZONTAL
4	500.45	38.06	-0.68	37.38	46.00	-8.62	Peak	HORIZONTAL
5	710.94	29.68	3.05	32.73	46.00	-13.27	Peak	HORIZONTAL
6	899.12	29.35	6.11	35.46	46.00	-10.54	Peak	HORIZONTAL

Remark:

- 1 emission is 20dB lower, so that emission as measured between 9kHz to 30MHz is not reported
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9MHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (below 1GHz)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH Mid	Test By	Bill
Temperature	25	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	106.63	45.22	-9.02	36.20	43.50	-7.30	Peak	VERTICAL
2	202.66	44.27	-7.45	36.82	43.50	-6.68	Peak	VERTICAL
3	376.29	39.67	-2.42	37.25	46.00	-8.75	Peak	VERTICAL
4	500.45	36.58	-0.68	35.90	46.00	-10.10	Peak	VERTICAL
5	674.08	36.09	2.30	38.39	46.00	-7.61	Peak	VERTICAL
6	899.12	30.07	6.11	36.18	46.00	-9.82	Peak	VERTICAL
1	149.31	44.93	-5.08	39.85	43.50	-3.65	Peak	HORIZONTAL
2	299.66	43.53	-3.98	39.55	46.00	-6.45	Peak	HORIZONTAL
3	500.45	37.92	-0.68	37.24	46.00	-8.76	Peak	HORIZONTAL
4	674.08	29.49	2.30	31.79	46.00	-14.21	Peak	HORIZONTAL
5	777.87	28.61	4.32	32.93	46.00	-13.07	Peak	HORIZONTAL
6	903.00	28.42	6.15	34.57	46.00	-11.43	Peak	HORIZONTAL

Remark:

- 1 emission is 20dB lower, so that emission as measured between 9kHz to 30MHz is not reported
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9MHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (below 1GHz)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH High	Test By	Bill
Temperature	25	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	106.63	45.47	-9.02	36.45	43.50	-7.05	Peak	VERTICAL
2	224.97	45.74	-7.13	38.61	46.00	-7.39	Peak	VERTICAL
3	375.32	41.54	-2.46	39.08	46.00	-6.92	Peak	VERTICAL
4	500.45	36.49	-0.68	35.81	46.00	-10.19	Peak	VERTICAL
5	674.08	37.78	2.30	40.08	46.00	-5.92	Peak	VERTICAL
6	903.00	30.00	6.15	36.15	46.00	-9.85	Peak	VERTICAL
1	149.31	44.57	-5.08	39.49	43.50	-4.01	Peak	HORIZONTAL
2	299.66	43.76	-3.98	39.78	46.00	-6.22	Peak	HORIZONTAL
3	500.45	37.80	-0.68	37.12	46.00	-8.88	Peak	HORIZONTAL
4	676.99	30.19	2.42	32.61	46.00	-13.39	Peak	HORIZONTAL
5	797.27	28.40	4.59	32.99	46.00	-13.01	Peak	HORIZONTAL
6	875.84	31.41	5.62	37.03	46.00	-8.97	Peak	HORIZONTAL

Remark:

- 1 emission is 20dB lower, so that emission as measured between 9kHz to 30MHz is not reported
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9MHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (below 1GHz)
(Band UNII-3, 802.11n HT40 mode)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH Low	Test By	Bill
Temperature	25	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	106.63	45.45	-9.02	36.43	43.50	-7.07	Peak	VERTICAL
2	239.52	43.83	-5.98	37.85	46.00	-8.15	Peak	VERTICAL
3	375.32	42.08	-2.46	39.62	46.00	-6.38	Peak	VERTICAL
4	500.45	37.76	-0.68	37.08	46.00	-8.92	Peak	VERTICAL
5	674.08	38.05	2.30	40.35	46.00	-5.65	Peak	VERTICAL
6	875.84	29.83	5.62	35.45	46.00	-10.55	Peak	VERTICAL
1	149.31	44.08	-5.08	39.00	43.50	-4.50	Peak	HORIZONTAL
2	299.66	41.71	-3.98	37.73	46.00	-8.27	Peak	HORIZONTAL
3	450.98	36.77	-1.22	35.55	46.00	-10.45	Peak	HORIZONTAL
4	597.45	31.83	1.38	33.21	46.00	-12.79	Peak	HORIZONTAL
5	759.44	28.43	4.36	32.79	46.00	-13.21	Peak	HORIZONTAL
6	909.79	28.08	6.28	34.36	46.00	-11.64	Peak	HORIZONTAL

Remark:

- 1 emission is 20dB lower, so that emission as measured between 9kHz to 30MHz is not reported
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9MHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (below 1GHz)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH High	Test By	Bill
Temperature	25	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	106.63	45.73	-9.02	36.71	43.50	-6.79	Peak	VERTICAL
2	205.57	43.32	-7.42	35.90	43.50	-7.60	Peak	VERTICAL
3	375.32	40.79	-2.46	38.33	46.00	-7.67	Peak	VERTICAL
4	601.33	32.78	1.52	34.30	46.00	-11.70	Peak	VERTICAL
5	730.34	31.67	3.54	35.21	46.00	-10.79	Peak	VERTICAL
6	903.00	29.51	6.15	35.66	46.00	-10.34	Peak	VERTICAL
1	149.31	44.75	-5.08	39.67	43.50	-3.83	Peak	HORIZONTAL
2	299.66	43.62	-3.98	39.64	46.00	-6.36	Peak	HORIZONTAL
3	500.45	37.95	-0.68	37.27	46.00	-8.73	Peak	HORIZONTAL
4	676.99	28.70	2.42	31.12	46.00	-14.88	Peak	HORIZONTAL
5	826.37	28.04	5.15	33.19	46.00	-12.81	Peak	HORIZONTAL
6	903.00	28.58	6.15	34.73	46.00	-11.27	Peak	HORIZONTAL

Remark:

- 1 emission is 20dB lower, so that emission as measured between 9kHz to 30MHz is not reported
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9MHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (below 1GHz)
(Band UNII-3, 802.11ac VHT20 mode)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH Low	Test By	Bill
Temperature	25	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	106.63	45.40	-9.02	36.38	43.50	-7.12	Peak	VERTICAL
2	207.51	44.07	-7.32	36.75	43.50	-6.75	Peak	VERTICAL
3	299.66	43.12	-3.98	39.14	46.00	-6.86	Peak	VERTICAL
4	500.45	36.80	-0.68	36.12	46.00	-9.88	Peak	VERTICAL
5	674.08	36.38	2.30	38.68	46.00	-7.32	Peak	VERTICAL
6	899.12	29.66	6.11	35.77	46.00	-10.23	Peak	VERTICAL
1	106.63	48.69	-9.02	39.67	43.50	-3.83	Peak	HORIZONTAL
2	204.60	46.12	-7.44	38.68	43.50	-4.82	Peak	HORIZONTAL
3	375.32	37.65	-2.46	35.19	46.00	-10.81	Peak	HORIZONTAL
4	500.45	37.93	-0.68	37.25	46.00	-8.75	Peak	HORIZONTAL
5	692.51	29.03	2.88	31.91	46.00	-14.09	Peak	HORIZONTAL
6	824.43	28.99	5.16	34.15	46.00	-11.85	Peak	HORIZONTAL

Remark:

- 1 emission is 20dB lower, so that emission as measured between 9kHz to 30MHz is not reported
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9MHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (below 1GHz)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH Mid	Test By	Bill
Temperature	25	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	106.63	48.66	-9.02	39.64	43.50	-3.86	Peak	VERTICAL
2	250.19	46.83	-5.70	41.13	46.00	-4.87	Peak	VERTICAL
3	500.45	38.42	-0.68	37.74	46.00	-8.26	Peak	VERTICAL
4	625.58	30.20	1.68	31.88	46.00	-14.12	Peak	VERTICAL
5	827.34	28.44	5.14	33.58	46.00	-12.42	Peak	VERTICAL
6	918.52	28.27	6.63	34.90	46.00	-11.10	Peak	VERTICAL
1	106.63	45.37	-9.02	36.35	43.50	-7.15	Peak	HORIZONTAL
2	201.69	43.68	-7.46	36.22	43.50	-7.28	Peak	HORIZONTAL
3	374.35	40.65	-2.47	38.18	46.00	-7.82	Peak	HORIZONTAL
4	600.36	30.80	1.50	32.30	46.00	-13.70	Peak	HORIZONTAL
5	674.08	36.18	2.30	38.48	46.00	-7.52	Peak	HORIZONTAL
6	903.00	30.06	6.15	36.21	46.00	-9.79	Peak	HORIZONTAL

Remark:

- 1 emission is 20dB lower, so that emission as measured between 9kHz to 30MHz is not reported
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9MHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (below 1GHz)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH High	Test By	Bill
Temperature	25	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	106.63	45.49	-9.02	36.47	43.50	-7.03	Peak	VERTICAL
2	200.72	43.97	-7.47	36.50	43.50	-7.00	Peak	VERTICAL
3	375.32	40.41	-2.46	37.95	46.00	-8.05	Peak	VERTICAL
4	676.02	34.49	2.37	36.86	46.00	-9.14	Peak	VERTICAL
5	799.21	30.40	4.57	34.97	46.00	-11.03	Peak	VERTICAL
6	875.84	30.00	5.62	35.62	46.00	-10.38	Peak	VERTICAL
1	106.63	48.64	-9.02	39.62	43.50	-3.88	Peak	HORIZONTAL
2	299.66	42.66	-3.98	38.68	46.00	-7.32	Peak	HORIZONTAL
3	500.45	38.65	-0.68	37.97	46.00	-8.03	Peak	HORIZONTAL
4	644.01	30.08	1.93	32.01	46.00	-13.99	Peak	HORIZONTAL
5	792.42	27.83	4.62	32.45	46.00	-13.55	Peak	HORIZONTAL
6	875.84	29.19	5.62	34.81	46.00	-11.19	Peak	HORIZONTAL

Remark:

- 1 emission is 20dB lower, so that emission as measured between 9kHz to 30MHz is not reported
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9MHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (below 1GHz)

(Band UNII-3, 802.11ac VHT40 mode)

Operation Mode TX MODE
Channel Number CH Low
Temperature 25
Humidity 65 %

Test Date 2020/05/27
Test By Bill
Pol Ver./Hor

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	106.63	45.04	-9.02	36.02	43.50	-7.48	Peak	VERTICAL
2	207.51	43.69	-7.32	36.37	43.50	-7.13	Peak	VERTICAL
3	375.32	40.75	-2.46	38.29	46.00	-7.71	Peak	VERTICAL
4	500.45	36.51	-0.68	35.83	46.00	-10.17	Peak	VERTICAL
5	676.99	37.71	2.42	40.13	46.00	-5.87	Peak	VERTICAL
6	848.68	28.91	5.26	34.17	46.00	-11.83	Peak	VERTICAL
1	106.63	48.80	-9.02	39.78	43.50	-3.72	Peak	HORIZONTAL
2	231.76	47.98	-6.55	41.43	46.00	-4.57	Peak	HORIZONTAL
3	500.45	37.69	-0.68	37.01	46.00	-8.99	Peak	HORIZONTAL
4	675.05	30.36	2.32	32.68	46.00	-13.32	Peak	HORIZONTAL
5	799.21	28.23	4.57	32.80	46.00	-13.20	Peak	HORIZONTAL
6	875.84	29.04	5.62	34.66	46.00	-11.34	Peak	HORIZONTAL

Remark:

- 1 emission is 20dB lower, so that emission as measured between 9kHz to 30MHz is not reported
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9MHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (below 1GHz)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH High	Test By	Bill
Temperature	25	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	106.63	45.29	-9.02	36.27	43.50	-7.23	Peak	VERTICAL
2	239.52	44.63	-5.98	38.65	46.00	-7.35	Peak	VERTICAL
3	374.35	41.71	-2.47	39.24	46.00	-6.76	Peak	VERTICAL
4	500.45	36.56	-0.68	35.88	46.00	-10.12	Peak	VERTICAL
5	674.08	36.21	2.30	38.51	46.00	-7.49	Peak	VERTICAL
6	827.34	28.82	5.14	33.96	46.00	-12.04	Peak	VERTICAL
1	149.31	45.51	-5.08	40.43	43.50	-3.07	Peak	HORIZONTAL
2	250.19	45.80	-5.70	40.10	46.00	-5.90	Peak	HORIZONTAL
3	300.63	43.91	-3.96	39.95	46.00	-6.05	Peak	HORIZONTAL
4	500.45	38.21	-0.68	37.53	46.00	-8.47	Peak	HORIZONTAL
5	674.08	29.97	2.30	32.27	46.00	-13.73	Peak	HORIZONTAL
6	827.34	28.65	5.14	33.79	46.00	-12.21	Peak	HORIZONTAL

Remark:

- 1 emission is 20dB lower, so that emission as measured between 9kHz to 30MHz is not reported
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9MHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (below 1GHz)

(Band UNII-3, 802.11ac VHT80 mode)

Operation Mode TX MODE
Channel Number CH Low
Temperature 25
Humidity 65 %

Test Date 2020/05/27
Test By Bill
Pol Ver./Hor

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	106.63	45.59	-9.02	36.57	43.50	-6.93	Peak	VERTICAL
2	203.63	44.35	-7.45	36.90	43.50	-6.60	Peak	VERTICAL
3	375.32	40.71	-2.46	38.25	46.00	-7.75	Peak	VERTICAL
4	500.45	36.34	-0.68	35.66	46.00	-10.34	Peak	VERTICAL
5	674.08	36.92	2.30	39.22	46.00	-6.78	Peak	VERTICAL
6	903.00	29.49	6.15	35.64	46.00	-10.36	Peak	VERTICAL
1	106.63	48.09	-9.02	39.07	43.50	-4.43	Peak	HORIZONTAL
2	250.19	45.80	-5.70	40.10	46.00	-5.90	Peak	HORIZONTAL
3	431.58	36.88	-1.45	35.43	46.00	-10.57	Peak	HORIZONTAL
4	500.45	37.70	-0.68	37.02	46.00	-8.98	Peak	HORIZONTAL
5	676.99	30.17	2.42	32.59	46.00	-13.41	Peak	HORIZONTAL
6	875.84	28.86	5.62	34.48	46.00	-11.52	Peak	HORIZONTAL

Remark:

- 1 emission is 20dB lower, so that emission as measured between 9kHz to 30MHz is not reported
- 2 Measuring frequencies from the lowest internal frequency to the 1GHz.
- 3 Radiated emissions measured in frequency range from 9MHz to 1000MHz were made with an instrument detector setting 9-90kHz/110-490kHz using PK/AV and other Frequency Band using PK/QP
- 4 Measurement result within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (above 1GHz)
(Band UNII-1, 802.11a mode)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH Low	Test By	Bill
Temperature	25	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	1595.00	58.27	-18.99	39.28	74.00	-34.72	Peak	VERTICAL
2	4780.00	50.04	-9.29	40.75	74.00	-33.25	Peak	VERTICAL
3	10360.00	32.21	4.18	36.39	68.20	-31.81	Peak	VERTICAL
4	15540.00	31.06	7.94	39.00	74.00	-35.00	Peak	VERTICAL
1	3450.00	58.56	-14.02	44.54	68.20	-23.66	Peak	HORIZONTAL
2	4836.00	48.71	-9.15	39.56	74.00	-34.44	Peak	HORIZONTAL
3	10360.00	29.22	4.18	33.40	68.20	-34.80	Peak	HORIZONTAL
4	15540.00	28.16	7.94	36.10	74.00	-37.90	Peak	HORIZONTAL

Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (above 1GHz)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH Mid	Test By	Bill
Temperature	25	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2988.00	54.58	-14.60	39.98	68.20	-28.22	Peak	VERTICAL
2	5200.00	49.03	-8.24	40.79	68.20	-27.41	Peak	VERTICAL
3	10400.00	28.38	4.30	32.68	68.20	-35.52	Peak	VERTICAL
4	15600.00	28.88	7.75	36.63	74.00	-37.37	Peak	VERTICAL
1	2386.00	59.83	-15.69	44.14	74.00	-29.86	Peak	HORIZONTAL
2	5634.00	47.83	-7.11	40.72	68.20	-27.48	Peak	HORIZONTAL
3	10400.00	30.88	4.30	35.18	68.20	-33.02	Peak	HORIZONTAL
4	15600.00	31.61	7.75	39.36	74.00	-34.64	Peak	HORIZONTAL

Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (above 1GHz)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH High	Test By	Bill
Temperature	25	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	3492.00	56.59	-13.71	42.88	68.20	-25.32	Peak	VERTICAL
2	6096.00	47.98	-5.52	42.46	68.20	-25.74	Peak	VERTICAL
3	10480.00	30.48	4.52	35.00	68.20	-33.20	Peak	VERTICAL
4	15720.00	30.61	7.35	37.96	74.00	-36.04	Peak	VERTICAL
1	2386.00	60.70	-15.69	45.01	74.00	-28.99	Peak	HORIZONTAL
2	6698.00	46.80	-3.75	43.05	68.20	-25.15	Peak	HORIZONTAL
3	10480.00	31.59	4.52	36.11	68.20	-32.09	Peak	HORIZONTAL
4	15720.00	32.75	7.35	40.10	74.00	-33.90	Peak	HORIZONTAL

Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (above 1GHz)

(Band UNII-1, 802.11n HT20 mode)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH Low	Test By	Bill
Temperature	25	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	1595.00	60.40	-18.99	41.41	74.00	-32.59	Peak	VERTICAL
2	7048.00	46.71	-2.51	44.20	68.20	-24.00	Peak	VERTICAL
3	10360.00	30.76	4.18	34.94	68.20	-33.26	Peak	VERTICAL
4	15540.00	30.21	7.94	38.15	74.00	-35.85	Peak	VERTICAL
1	2386.00	60.24	-15.69	44.55	74.00	-29.45	Peak	HORIZONTAL
2	5921.00	46.53	-6.09	40.44	68.20	-27.76	Peak	HORIZONTAL
3	10360.00	29.69	4.18	33.87	68.20	-34.33	Peak	HORIZONTAL
4	15540.00	30.07	7.94	38.01	74.00	-35.99	Peak	HORIZONTAL

Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (above 1GHz)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH Mid	Test By	Bill
Temperature	25	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	3464.00	55.66	-13.91	41.75	68.20	-26.45	Peak	VERTICAL
2	6600.00	46.15	-3.79	42.36	68.20	-25.84	Peak	VERTICAL
3	10400.00	28.64	4.30	32.94	68.20	-35.26	Peak	VERTICAL
4	15600.00	27.88	7.75	35.63	74.00	-38.37	Peak	VERTICAL
1	2386.00	59.69	-15.69	44.00	74.00	-30.00	Peak	HORIZONTAL
2	6817.00	48.40	-3.63	44.77	68.20	-23.43	Peak	HORIZONTAL
3	10400.00	30.81	4.30	35.11	68.20	-33.09	Peak	HORIZONTAL
4	15600.00	31.77	7.75	39.52	74.00	-34.48	Peak	HORIZONTAL

Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (above 1GHz)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH High	Test By	Bill
Temperature	25	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2498.00	56.57	-15.69	40.88	74.00	-33.12	Peak	VERTICAL
2	6663.00	46.79	-3.76	43.03	68.20	-25.17	Peak	VERTICAL
3	10480.00	32.12	4.52	36.64	68.20	-31.56	Peak	VERTICAL
4	15720.00	29.75	7.35	37.10	74.00	-36.90	Peak	VERTICAL
1	3492.00	58.40	-13.71	44.69	68.20	-23.51	Peak	HORIZONTAL
2	6607.00	46.90	-3.79	43.11	68.20	-25.09	Peak	HORIZONTAL
3	10480.00	30.52	4.52	35.04	68.20	-33.16	Peak	HORIZONTAL
4	15720.00	28.95	7.35	36.30	74.00	-37.70	Peak	HORIZONTAL

Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (above 1GHz)

(Band UNII-1, 802.11n HT40 mode)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH Low	Test By	Bill
Temperature	25	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	3457.00	54.99	-13.96	41.03	68.20	-27.17	Peak	VERTICAL
2	5991.00	48.12	-5.85	42.27	68.20	-25.93	Peak	VERTICAL
3	10380.00	28.35	4.25	32.60	68.20	-35.60	Peak	VERTICAL
4	15570.00	30.84	7.85	38.69	74.00	-35.31	Peak	VERTICAL
1	2386.00	60.71	-15.69	45.02	74.00	-28.98	Peak	HORIZONTAL
2	6551.00	45.93	-3.91	42.02	68.20	-26.18	Peak	HORIZONTAL
3	10380.00	28.70	4.25	32.95	68.20	-35.25	Peak	HORIZONTAL
4	15570.00	30.08	7.85	37.93	74.00	-36.07	Peak	HORIZONTAL

Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (above 1GHz)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH High	Test By	Bill
Temperature	25	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	3485.00	55.82	-13.76	42.06	68.20	-26.14	Peak	VERTICAL
2	5746.00	47.26	-6.71	40.55	68.20	-27.65	Peak	VERTICAL
3	10460.00	29.59	4.46	34.05	68.20	-34.15	Peak	VERTICAL
4	15690.00	28.84	7.45	36.29	74.00	-37.71	Peak	VERTICAL
1	2981.00	57.68	-14.62	43.06	68.20	-25.14	Peak	HORIZONTAL
2	5998.00	46.56	-5.81	40.75	68.20	-27.45	Peak	HORIZONTAL
3	10460.00	29.01	4.46	33.47	68.20	-34.73	Peak	HORIZONTAL
4	15690.00	28.05	7.45	35.50	74.00	-38.50	Peak	HORIZONTAL

Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (above 1GHz)

(Band UNII-1, 802.11ac VHT20 mode)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH Low	Test By	Bill
Temperature	25	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	3450.00	54.76	-14.02	40.74	68.20	-27.46	Peak	VERTICAL
2	6705.00	46.22	-3.74	42.48	68.20	-25.72	Peak	VERTICAL
3	10360.00	29.36	4.18	33.54	68.20	-34.66	Peak	VERTICAL
4	15540.00	31.07	7.94	39.01	74.00	-34.99	Peak	VERTICAL
1	3450.00	58.51	-14.02	44.49	68.20	-23.71	Peak	HORIZONTAL
2	6467.00	47.15	-4.13	43.02	68.20	-25.18	Peak	HORIZONTAL
3	10360.00	29.90	4.18	34.08	68.20	-34.12	Peak	HORIZONTAL
4	15540.00	29.04	7.94	36.98	74.00	-37.02	Peak	HORIZONTAL

Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (above 1GHz)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH Mid	Test By	Bill
Temperature	25	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	3464.00	55.02	-13.91	41.11	68.20	-27.09	Peak	VERTICAL
2	5809.00	47.39	-6.49	40.90	68.20	-27.30	Peak	VERTICAL
3	10400.00	29.09	4.30	33.39	68.20	-34.81	Peak	VERTICAL
4	15600.00	30.24	7.75	37.99	74.00	-36.01	Peak	VERTICAL
1	3464.00	58.03	-13.91	44.12	68.20	-24.08	Peak	HORIZONTAL
2	6383.00	46.63	-4.41	42.22	68.20	-25.98	Peak	HORIZONTAL
3	10400.00	31.37	4.30	35.67	68.20	-32.53	Peak	HORIZONTAL
4	15600.00	30.67	7.75	38.42	74.00	-35.58	Peak	HORIZONTAL

Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (above 1GHz)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH High	Test By	Bill
Temperature	25	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	3492.00	55.50	-13.71	41.79	68.20	-26.41	Peak	VERTICAL
2	5991.00	46.91	-5.85	41.06	68.20	-27.14	Peak	VERTICAL
3	10480.00	29.54	4.52	34.06	68.20	-34.14	Peak	VERTICAL
4	15720.00	29.12	7.35	36.47	74.00	-37.53	Peak	VERTICAL
1	2393.00	60.04	-15.70	44.34	68.20	-23.86	Peak	HORIZONTAL
2	5620.00	48.26	-7.15	41.11	68.20	-27.09	Peak	HORIZONTAL
3	10480.00	30.62	4.52	35.14	68.20	-33.06	Peak	HORIZONTAL
4	15720.00	29.74	7.35	37.09	74.00	-36.91	Peak	HORIZONTAL

Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (above 1GHz)

(Band UNII-1, 802.11ac VHT40 mode)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH Low	Test By	Bill
Temperature	25	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	3457.00	55.95	-13.96	41.99	68.20	-26.21	Peak	VERTICAL
2	5907.00	46.12	-6.14	39.98	68.20	-28.22	Peak	VERTICAL
3	10380.00	27.36	4.25	31.61	68.20	-36.59	Peak	VERTICAL
4	15570.00	27.95	7.85	35.80	74.00	-38.20	Peak	VERTICAL
1	3457.00	58.14	-13.96	44.18	68.20	-24.02	Peak	HORIZONTAL
2	7048.00	46.62	-2.51	44.11	68.20	-24.09	Peak	HORIZONTAL
3	10380.00	29.16	4.25	33.41	68.20	-34.79	Peak	HORIZONTAL
4	15570.00	29.64	7.85	37.49	74.00	-36.51	Peak	HORIZONTAL

Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (above 1GHz)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH High	Test By	Bill
Temperature	25	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2498.00	56.66	-15.69	40.97	74.00	-33.03	Peak	VERTICAL
2	5914.00	47.21	-6.11	41.10	68.20	-27.10	Peak	VERTICAL
3	10460.00	31.11	4.46	35.57	68.20	-32.63	Peak	VERTICAL
4	15690.00	30.84	7.45	38.29	74.00	-35.71	Peak	VERTICAL
1	2386.00	59.78	-15.69	44.09	74.00	-29.91	Peak	HORIZONTAL
2	7055.00	47.16	-2.47	44.69	68.20	-23.51	Peak	HORIZONTAL
3	10460.00	29.63	4.46	34.09	68.20	-34.11	Peak	HORIZONTAL
4	15690.00	29.34	7.45	36.79	74.00	-37.21	Peak	HORIZONTAL

Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (above 1GHz)

(Band UNII-1, 802.11ac VHT80 mode)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH Low	Test By	Bill
Temperature	25	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	3471.00	56.87	-13.87	43.00	68.20	-25.20	Peak	VERTICAL
2	5977.00	47.53	-5.89	41.64	68.20	-26.56	Peak	VERTICAL
3	10420.00	28.57	4.36	32.93	68.20	-35.27	Peak	VERTICAL
4	15630.00	28.60	7.65	36.25	74.00	-37.75	Peak	VERTICAL
1	2386.00	60.45	-15.69	44.76	74.00	-29.24	Peak	HORIZONTAL
2	6467.00	47.16	-4.13	43.03	68.20	-25.17	Peak	HORIZONTAL
3	10420.00	28.87	4.36	33.23	68.20	-34.97	Peak	HORIZONTAL
4	15630.00	27.93	7.65	35.58	74.00	-38.42	Peak	HORIZONTAL

Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (above 1GHz)

(Band UNII-3, 802.11 a mode)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH Low	Test By	Bill
Temperature	25	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2988.00	55.47	-14.60	40.87	68.20	-27.33	Peak	VERTICAL
2	6901.00	46.51	-3.23	43.28	68.20	-24.92	Peak	VERTICAL
3	11490.00	29.63	6.52	36.15	74.00	-37.85	Peak	VERTICAL
4	17235.00	28.77	11.50	40.27	68.20	-27.93	Peak	VERTICAL
1	2386.00	59.30	-15.69	43.61	74.00	-30.39	Peak	HORIZONTAL
2	7006.00	47.54	-2.74	44.80	68.20	-23.40	Peak	HORIZONTAL
3	11490.00	27.96	6.52	34.48	74.00	-39.52	Peak	HORIZONTAL
4	17235.00	29.28	11.50	40.78	68.20	-27.42	Peak	HORIZONTAL

Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (above 1GHz)

(Band UNII-3, 802.11 a mode)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH Mid	Test By	Bill
Temperature	25	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	3856.00	57.33	-12.50	44.83	74.00	-29.17	Peak	VERTICAL
2	7020.00	47.18	-2.66	44.52	68.20	-23.68	Peak	VERTICAL
3	11570.00	28.94	6.54	35.48	74.00	-38.52	Peak	VERTICAL
4	17355.00	26.36	12.56	38.92	68.20	-29.28	Peak	VERTICAL
1	2386.00	59.81	-15.69	44.12	74.00	-29.88	Peak	HORIZONTAL
2	6411.00	47.28	-4.30	42.98	68.20	-25.22	Peak	HORIZONTAL
3	11570.00	27.68	6.54	34.22	74.00	-39.78	Peak	HORIZONTAL
4	17355.00	25.62	12.56	38.18	68.20	-30.02	Peak	HORIZONTAL

Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (above 1GHz)

(Band UNII-3, 802.11 a mode)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH High	Test By	Bill
Temperature	25	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	3884.00	61.29	-12.38	48.91	74.00	-25.09	Peak	VERTICAL
2	7027.00	47.50	-2.62	44.88	68.20	-23.32	Peak	VERTICAL
3	11650.00	27.92	6.56	34.48	74.00	-39.52	Peak	VERTICAL
4	17475.00	27.74	13.64	41.38	68.20	-26.82	Peak	VERTICAL
1	2386.00	60.27	-15.69	44.58	74.00	-29.42	Peak	HORIZONTAL
2	6908.00	47.24	-3.19	44.05	68.20	-24.15	Peak	HORIZONTAL
3	11650.00	28.76	6.56	35.32	74.00	-38.68	Peak	HORIZONTAL
4	17475.00	30.08	13.64	43.72	68.20	-24.48	Peak	HORIZONTAL

Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (above 1GHz)

(Band UNII-3, 802.11n HT20 mode)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH Low	Test By	Bill
Temperature	25	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	3828.00	55.59	-12.62	42.97	74.00	-31.03	Peak	VERTICAL
2	7076.00	47.61	-2.35	45.26	68.20	-22.94	Peak	VERTICAL
3	11490.00	26.78	6.52	33.30	74.00	-40.70	Peak	VERTICAL
4	17235.00	29.56	11.50	41.06	68.20	-27.14	Peak	VERTICAL
1	2498.00	58.60	-15.69	42.91	74.00	-31.09	Peak	HORIZONTAL
2	7405.00	48.81	-1.57	47.24	74.00	-26.76	Peak	HORIZONTAL
3	11490.00	27.81	6.52	34.33	74.00	-39.67	Peak	HORIZONTAL
4	17235.00	28.69	11.50	40.19	68.20	-28.01	Peak	HORIZONTAL

Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (above 1GHz)

(Band UNII-3, 802.11n HT20 mode)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH Mid	Test By	Bill
Temperature	25	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	3856.00	58.61	-12.50	46.11	74.00	-27.89	Peak	VERTICAL
2	7314.00	47.43	-1.61	45.82	74.00	-28.18	Peak	VERTICAL
3	11570.00	28.94	6.54	35.48	74.00	-38.52	Peak	VERTICAL
4	17355.00	28.62	12.56	41.18	68.20	-27.02	Peak	VERTICAL
1	2988.00	57.17	-14.60	42.57	68.20	-25.63	Peak	HORIZONTAL
2	7349.00	47.14	-1.59	45.55	74.00	-28.45	Peak	HORIZONTAL
3	11570.00	29.10	6.54	35.64	74.00	-38.36	Peak	HORIZONTAL
4	17355.00	27.24	12.56	39.80	68.20	-28.40	Peak	HORIZONTAL

Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (above 1GHz)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH High	Test By	Bill
Temperature	25	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	3884.00	62.20	-12.38	49.82	74.00	-24.18	Peak	VERTICAL
2	7230.00	46.65	-1.65	45.00	68.20	-23.20	Peak	VERTICAL
3	11650.00	28.67	6.56	35.23	74.00	-38.77	Peak	VERTICAL
4	17475.00	28.22	13.64	41.86	68.20	-26.34	Peak	VERTICAL
1	3884.00	55.10	-12.38	42.72	74.00	-31.28	Peak	HORIZONTAL
2	7111.00	47.62	-2.15	45.47	68.20	-22.73	Peak	HORIZONTAL
3	11650.00	27.78	6.56	34.34	74.00	-39.66	Peak	HORIZONTAL
4	17475.00	28.50	13.64	42.14	68.20	-26.06	Peak	HORIZONTAL

Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (above 1GHz)

(Band UNII-3, 802.11n HT40 mode)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH Low	Test By	Bill
Temperature	25	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	1595.00	61.43	-18.99	42.44	74.00	-31.56	Peak	VERTICAL
2	3835.00	55.56	-12.60	42.96	74.00	-31.04	Peak	VERTICAL
3	11510.00	28.85	6.53	35.38	74.00	-38.62	Peak	VERTICAL
4	17265.00	28.09	11.76	39.85	68.20	-28.35	Peak	VERTICAL
1	2386.00	57.75	-15.69	42.06	74.00	-31.94	Peak	HORIZONTAL
2	3835.00	54.38	-12.60	41.78	74.00	-32.22	Peak	HORIZONTAL
3	11510.00	29.32	6.53	35.85	74.00	-38.15	Peak	HORIZONTAL
4	17265.00	27.77	11.76	39.53	68.20	-28.67	Peak	HORIZONTAL

Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (above 1GHz)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH High	Test By	Bill
Temperature	25	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	1588.00	60.16	-18.99	41.17	74.00	-32.83	Peak	VERTICAL
2	3863.00	58.93	-12.47	46.46	74.00	-27.54	Peak	VERTICAL
3	11590.00	29.95	6.55	36.50	74.00	-37.50	Peak	HORIZONTAL
4	17385.00	27.98	12.83	40.81	68.20	-27.39	Peak	HORIZONTAL
1	3863.00	55.60	-12.47	43.13	74.00	-30.87	Peak	HORIZONTAL
2	7426.00	47.40	-1.58	45.82	74.00	-28.18	Peak	HORIZONTAL
3	11590.00	28.64	6.55	35.19	74.00	-38.81	Peak	VERTICAL
4	17385.00	28.02	12.83	40.85	68.20	-27.35	Peak	VERTICAL

Remark:

- Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (above 1GHz)
(Band UNII-3, 802.11ac VHT20 mode)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH Low	Test By	Bill
Temperature	25	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	1595.00	60.45	-18.99	41.46	74.00	-32.54	Peak	VERTICAL
2	7041.00	47.24	-2.54	44.70	68.20	-23.50	Peak	VERTICAL
3	11490.00	28.34	6.52	34.86	74.00	-39.14	Peak	VERTICAL
4	17235.00	28.31	11.50	39.81	68.20	-28.39	Peak	VERTICAL
1	2498.00	58.98	-15.69	43.29	74.00	-30.71	Peak	HORIZONTAL
2	7013.00	47.17	-2.69	44.48	68.20	-23.72	Peak	HORIZONTAL
3	11490.00	27.50	6.52	34.02	74.00	-39.98	Peak	HORIZONTAL
4	17235.00	28.56	11.50	40.06	68.20	-28.14	Peak	HORIZONTAL

Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (above 1GHz)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH Mid	Test By	Bill
Temperature	25	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	3856.00	58.63	-12.50	46.13	74.00	-27.87	Peak	VERTICAL
2	7202.00	46.71	-1.67	45.04	68.20	-23.16	Peak	VERTICAL
3	11570.00	28.92	6.54	35.46	74.00	-38.54	Peak	VERTICAL
4	17355.00	27.58	12.56	40.14	68.20	-28.06	Peak	VERTICAL
1	2386.00	59.78	-15.69	44.09	74.00	-29.91	Peak	HORIZONTAL
2	6712.00	46.73	-3.75	42.98	68.20	-25.22	Peak	HORIZONTAL
3	11570.00	28.86	6.54	35.40	74.00	-38.60	Peak	HORIZONTAL
4	17355.00	26.95	12.56	39.51	68.20	-28.69	Peak	HORIZONTAL

Remark:

- Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (above 1GHz)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH High	Test By	Bill
Temperature	25	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	3884.00	61.99	-12.38	49.61	74.00	-24.39	Peak	VERTICAL
2	7034.00	47.73	-2.58	45.15	68.20	-23.05	Peak	VERTICAL
3	11650.00	29.55	6.56	36.11	74.00	-37.89	Peak	VERTICAL
4	17475.00	29.93	13.64	43.57	68.20	-24.63	Peak	VERTICAL
1	2498.00	59.11	-15.69	43.42	74.00	-30.58	Peak	HORIZONTAL
2	7062.00	47.24	-2.42	44.82	68.20	-23.38	Peak	HORIZONTAL
3	11650.00	28.16	6.56	34.72	74.00	-39.28	Peak	HORIZONTAL
4	17475.00	28.20	13.64	41.84	68.20	-26.36	Peak	HORIZONTAL

Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (above 1GHz)

(Band UNII-3, 802.11ac VHT40 mode)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH Low	Test By	Bill
Temperature	25	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	2498.00	56.12	-15.69	40.43	74.00	-33.57	Peak	VERTICAL
2	6656.00	46.13	-3.76	42.37	68.20	-25.83	Peak	VERTICAL
3	11510.00	29.54	6.53	36.07	74.00	-37.93	Peak	VERTICAL
4	17265.00	28.55	11.76	40.31	68.20	-27.89	Peak	VERTICAL
1	2386.00	58.31	-15.69	42.62	74.00	-31.38	Peak	HORIZONTAL
2	7013.00	47.99	-2.69	45.30	68.20	-22.90	Peak	HORIZONTAL
3	11510.00	29.56	6.53	36.09	74.00	-37.91	Peak	HORIZONTAL
4	17265.00	29.19	11.76	40.95	68.20	-27.25	Peak	HORIZONTAL

Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (above 1GHz)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH High	Test By	Bill
Temperature	25	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	3863.00	59.60	-12.47	47.13	74.00	-26.87	Peak	VERTICAL
2	7405.00	46.81	-1.57	45.24	74.00	-28.76	Peak	VERTICAL
3	11590.00	27.99	6.55	34.54	74.00	-39.46	Peak	HORIZONTAL
4	17385.00	27.26	12.83	40.09	68.20	-28.11	Peak	HORIZONTAL
1	3863.00	55.12	-12.47	42.65	74.00	-31.35	Peak	HORIZONTAL
2	7391.00	47.79	-1.56	46.23	74.00	-27.77	Peak	HORIZONTAL
3	11590.00	29.50	6.55	36.05	74.00	-37.95	Peak	VERTICAL
4	17385.00	28.34	12.83	41.17	68.20	-27.03	Peak	VERTICAL

Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (above 1GHz)

(Band UNII-3, 802.11ac VHT80 mode)

Operation Mode	TX MODE	Test Date	2020/05/27
Channel Number	CH Low	Test By	Bill
Temperature	25	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	3849.00	57.07	-12.52	44.55	74.00	-29.45	Peak	VERTICAL
2	7370.00	47.41	-1.58	45.83	74.00	-28.17	Peak	VERTICAL
3	11550.00	28.98	6.53	35.51	74.00	-38.49	Peak	VERTICAL
4	17325.00	27.78	12.30	40.08	68.20	-28.12	Peak	VERTICAL
1	3849.00	56.69	-12.52	44.17	74.00	-29.83	Peak	HORIZONTAL
2	7510.00	48.31	-1.63	46.68	74.00	-27.32	Peak	HORIZONTAL
3	11550.00	29.03	6.53	35.56	74.00	-38.44	Peak	HORIZONTAL
4	17325.00	28.26	12.30	40.56	68.20	-27.64	Peak	HORIZONTAL

Remark:

- 1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 2 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Band Edges test (Band UNII-1, 802.11a mode) -Radiated

Operation Mode TX CH Low
Channel Number 5180 MHz
Temperature 25

Test Date 2020/05/27
Test By Bill
Humidity 65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5132.10	48.97	-8.41	40.56	54.00	-13.44	Average	VERTICAL
2	5132.10	70.96	-8.41	62.55	74.00	-11.45	Peak	VERTICAL
3	5150.00	60.53	-8.35	52.18	74.00	-21.82	Peak	VERTICAL
4	5188.10	110.22	-8.28	101.94	F	--	Peak	VERTICAL
1	5150.00	58.17	-8.35	49.82	74.00	-24.18	Peak	HORIZONTAL
2	5186.70	95.86	-8.28	87.58	F	--	Peak	HORIZONTAL

Operation Mode TX CH High
Channel Number 5240MHz
Temperature 25

Test Date 2020/05/27
Test By Bill
Humidity 65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5246.28	111.26	-8.16	103.10	F	--	Peak	VERTICAL
2	5350.00	61.82	-7.96	53.86	74.00	-20.14	Peak	VERTICAL
1	5246.72	94.23	-8.16	86.07	--	--	Peak	HORIZONTAL
2	5350.00	55.40	-7.96	47.44	74.00	-26.56	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW $\geq$ 1/Ton, Sweep time= 200 ms.

Band Edges test (Band UNII-1, 802.11n HT20 mode) -Radiated

Operation Mode	TX CH Low	Test Date	2020/05/27
Channel Number	5180 MHz	Test By	Bill
Temperature	25	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5134.20	45.29	-8.41	36.88	54.00	-17.12	Average	VERTICAL
2	5134.20	71.07	-8.41	62.66	74.00	-11.34	Peak	VERTICAL
3	5150.00	45.31	-8.35	36.96	54.00	-17.04	Average	VERTICAL
4	5150.00	68.51	-8.35	60.16	74.00	-13.84	Peak	VERTICAL
5	5184.60	110.33	-8.28	102.05	F	--	Peak	VERTICAL
1	5150.00	60.03	-8.35	51.68	74.00	-22.32	Peak	HORIZONTAL
2	5184.60	94.73	-8.28	86.45	F	--	Peak	HORIZONTAL

Operation Mode	TX CH High	Test Date	2020/05/27
Channel Number	5240MHz	Test By	Bill
Temperature	25	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5246.28	110.36	-8.16	102.20	F	--	Peak	VERTICAL
2	5350.00	59.69	-7.96	51.73	74.00	-22.27	Peak	VERTICAL
1	5235.94	93.68	-8.18	85.50	F	--	Peak	HORIZONTAL
2	5350.00	56.76	-7.96	48.80	74.00	-25.20	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW $\geq 1/\text{Ton}$, Sweep time= 200 ms.

Band Edges test (Band UNII-1, 802.11n HT40 mode) -Radiated

Operation Mode	TX CH Low	Test Date	2020/05/27
Channel Number	5190 MHz	Test By	Bill
Temperature	25	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5150.00	54.69	-8.35	46.34	54.00	-7.66	Average	VERTICAL
2	5150.00	68.77	-8.35	60.42	74.00	-13.58	Peak	VERTICAL
3	5179.00	106.24	-8.28	97.96	F	--	Peak	VERTICAL
1	5150.00	61.58	-8.35	53.23	74.00	-20.77	Peak	HORIZONTAL
2	5193.70	90.79	-8.25	82.54	F	--	Peak	HORIZONTAL

Operation Mode	TX CH High	Test Date	2020/05/27
Channel Number	5230MHz	Test By	Bill
Temperature	25	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5240.78	105.90	-8.16	97.74	F	--	Peak	VERTICAL
2	5350.00	60.42	-7.96	52.46	74.00	-21.54	Peak	VERTICAL
1	5247.16	89.20	-8.16	81.04	F	--	Peak	HORIZONTAL
2	5350.00	56.22	-7.96	48.26	74.00	-25.74	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW $\geq$ 1/Ton, Sweep time= 200 ms.

Band Edges test (Band UNII-1, 802.11ac VHT20 mode) -Radiated

Operation Mode	TX CH Low	Test Date	2020/05/27
Channel Number	5180 MHz	Test By	Bill
Temperature	25	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5132.10	45.59	-8.41	37.18	54.00	-16.82	Average	VERTICAL
2	5132.10	70.73	-8.41	62.32	74.00	-11.68	Peak	VERTICAL
3	5150.00	45.31	-8.35	36.96	54.00	-17.04	Average	VERTICAL
4	5150.00	66.42	-8.35	58.07	74.00	-15.93	Peak	VERTICAL
5	5184.60	110.40	-8.28	102.12	F	--	Peak	VERTICAL
1	5150.00	61.27	-8.35	52.92	74.00	-21.08	Peak	HORIZONTAL
2	5188.80	95.23	-8.27	86.96	F	--	Peak	HORIZONTAL

Operation Mode	TX CH High	Test Date	2020/05/27
Channel Number	5240MHz	Test By	Bill
Temperature	25	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5236.60	110.34	-8.18	102.16	F	--	Peak	VERTICAL
2	5350.00	60.52	-7.96	52.56	74.00	-21.44	Peak	VERTICAL
1	5246.50	94.40	-8.16	86.24	F	--	Peak	HORIZONTAL
2	5350.00	56.00	-7.96	48.04	74.00	-25.96	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW $\geq$ 1/Ton, Sweep time= 200 ms.

Band Edges test (Band UNII-1, 802.11ac VHT40 mode) -Radiated

Operation Mode	TX CH Low	Test Date	2020/05/27
Channel Number	5190 MHz	Test By	Bill
Temperature	25	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5150.00	51.53	-8.35	43.18	54.00	-10.82	Average	VERTICAL
2	5150.00	67.01	-8.35	58.66	74.00	-15.34	Peak	VERTICAL
3	5199.35	102.34	-8.24	94.10	F	--	Peak	VERTICAL
1	5150.00	60.24	-8.35	51.89	74.00	-22.11	Peak	HORIZONTAL
2	5200.77	86.58	-8.24	78.34	F	--	Peak	HORIZONTAL

Operation Mode	TX CH High	Test Date	2020/05/27
Channel Number	5230MHz	Test By	Bill
Temperature	25	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5233.08	101.84	-8.18	93.66	F	--	Peak	VERTICAL
2	5350.00	58.94	-7.96	50.98	74.00	-23.02	Peak	VERTICAL
1	5252.00	86.67	-8.13	78.54	F	--	Peak	HORIZONTAL
2	5350.00	55.58	-7.96	47.62	74.00	-26.38	Peak	HORIZONTAL

Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW $\geq$ 1/Ton, Sweep time= 200 ms.

Band Edges test (Band UNII-1, 802.11ac VHT80 mode) -Radiated

Operation Mode	TX CH Low	Test Date	2020/05/27
Channel Number	5210 MHz	Test By	Bill
Temperature	25	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5130.00	57.20	-8.41	48.79	54.00	-5.21	Average	VERTICAL
2	5130.00	71.20	-8.41	62.79	74.00	-11.21	Peak	VERTICAL
3	5150.00	57.11	-8.35	48.76	54.00	-5.24	Average	VERTICAL
4	5150.00	71.18	-8.35	62.83	74.00	-11.17	Peak	VERTICAL
5	5198.25	100.33	-8.25	92.08	F	--	Peak	VERTICAL
1	5150.00	46.53	-8.35	38.18	54.00	-15.82	Average	HORIZONTAL
2	5150.00	63.90	-8.35	55.55	74.00	-18.45	Peak	HORIZONTAL
3	5248.50	89.57	-8.16	81.41	F	--	Peak	HORIZONTAL

Operation Mode	TX CH High	Test Date	2020/05/27
Channel Number	5210 MHz	Test By	Bill
Temperature	25	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5241.66	98.74	-8.16	90.58	F	--	Peak	VERTICAL
2	5350.00	57.95	-7.96	49.99	54.00	-4.01	Average	VERTICAL
3	5350.00	66.95	-7.96	58.99	74.00	-15.01	Peak	VERTICAL
1	5242.98	87.15	-8.16	78.99	F	--	Peak	HORIZONTAL
2	5350.00	57.44	-7.96	49.48	74.00	-24.52	Peak	HORIZONTAL

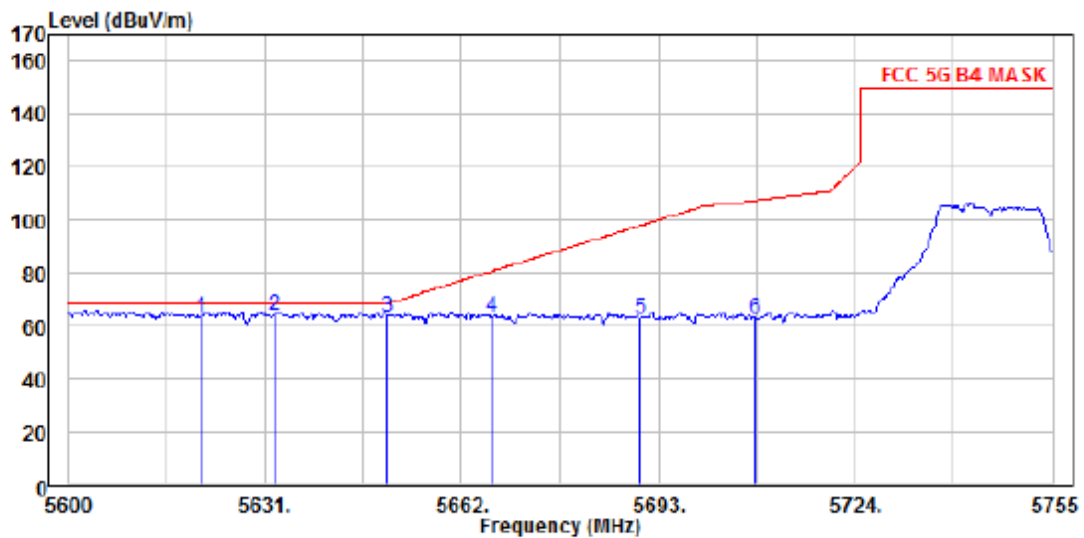
Remark:

- 1 Measuring frequencies from the lowest internal frequency to the 10th of fundamental frequency
- 2 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.
- 3 Measurement of data within this frequency range shown “ - ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 Spectrum Peak mode IF bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, Sweep time= 200 ms., the VBW setting was 3 MHz.
- 5 Spectrum AV mode if bandwidth Setting : 1GHz- 40GHz, RBW= 1MHz, VBW $\geq 1/T_{on}$, Sweep time= 200 ms.

Band Edges test (Band UNII-3, 802.11a mode) –Radiated

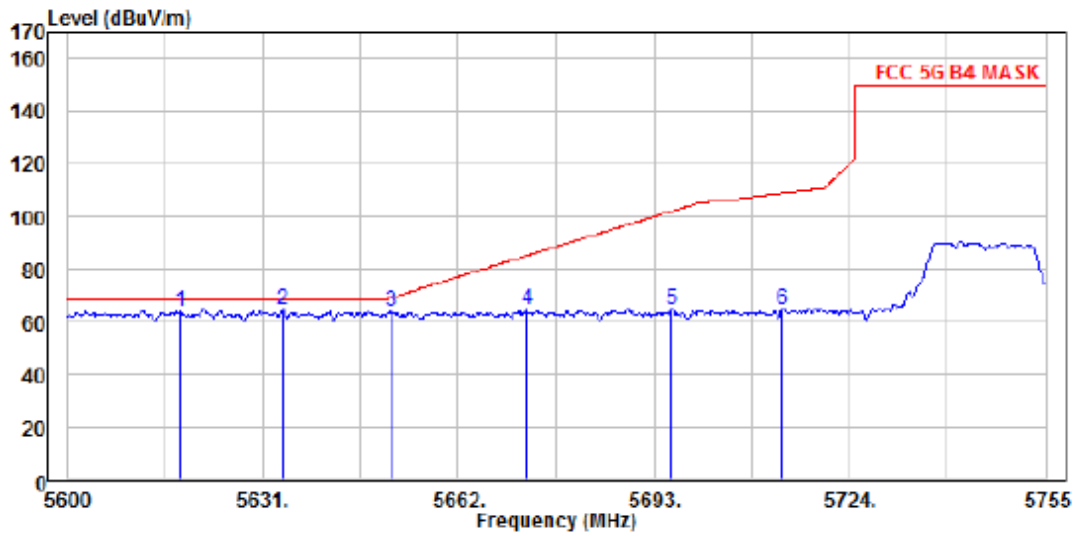
Operation Mode TX CH Low
Channel Number 5745 MHz
Temperature 25

Test Date 2020/05/25
Test By Bill
Humidity 65 %



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 9120D V 1-18G.csv Vertical
: RBW:1000kHz VBW:1000kHz SWT:Auto DET:Positive
EUT : B4 a mode low ch
Mode :
Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5620.925	59.80	3.44	63.24	68.20	-4.96	Vertical
2 PP	5632.395	60.73	3.47	64.20	68.20	-4.00	Vertical
3	5650.375	59.61	3.53	63.14	68.48	-5.34	Vertical
4	5666.805	59.72	3.57	63.29	80.67	-17.38	Vertical
5	5690.055	59.10	3.62	62.72	97.87	-35.15	Vertical
6	5708.345	58.99	3.68	62.67	107.54	-44.87	Vertical

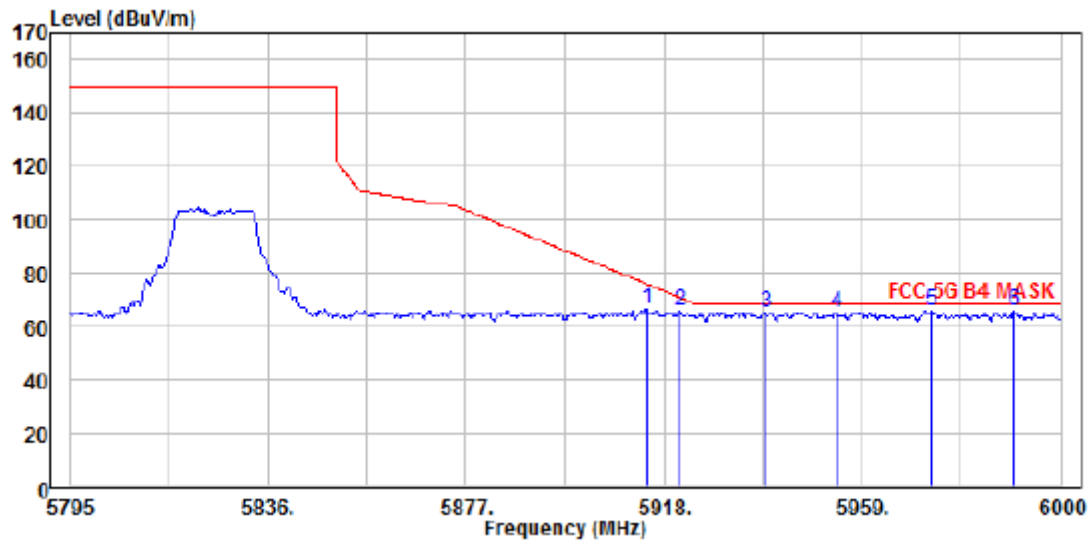


Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 9120D H 1-18G.csv Horizont
 : RBW:1000kHz VBW:1000kHz SWT:Auto DET:Positive
 EUT : B4 a mode low ch
 Mode :
 Note :

	Freq	Read Level	Read Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5617.825	60.49	3.43	63.92	68.20	-4.28	Horizontal
2 PP	5634.100	60.90	3.47	64.37	68.20	-3.83	Horizontal
3	5651.305	60.32	3.53	63.85	69.17	-5.32	Horizontal
4	5672.850	60.86	3.58	64.44	85.15	-20.71	Horizontal
5	5695.945	61.01	3.64	64.65	102.21	-37.56	Horizontal
6	5713.305	60.73	3.68	64.41	108.93	-44.52	Horizontal

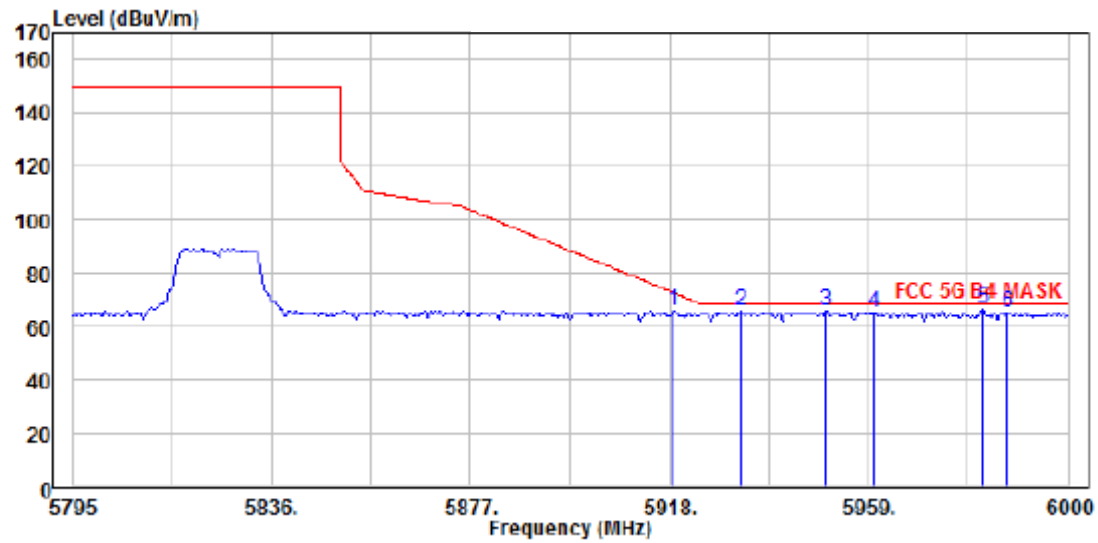
Operation Mode TX CH High
Channel Number 5825MHz
Temperature 25

Test Date 2020/05/27
Test By Bill
Humidity 65 %



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 9120D V 1-18G.csv Vertical
: RBW:1000kHz VBW:1000kHz SWT:Auto DET:Positive
EUT : B4 a mode high ch
Mode :
Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5914.515	62.20	4.20	66.40	75.93	-9.53	Vertical
2	5921.280	61.62	4.21	65.83	70.94	-5.11	Vertical
3	5939.115	61.30	4.26	65.56	68.20	-2.64	Vertical
4	5953.670	61.23	4.30	65.53	68.20	-2.67	Vertical
5	5973.555	61.36	4.35	65.71	68.20	-2.49	Vertical
6 PP	5990.160	61.36	4.39	65.75	68.20	-2.45	Vertical



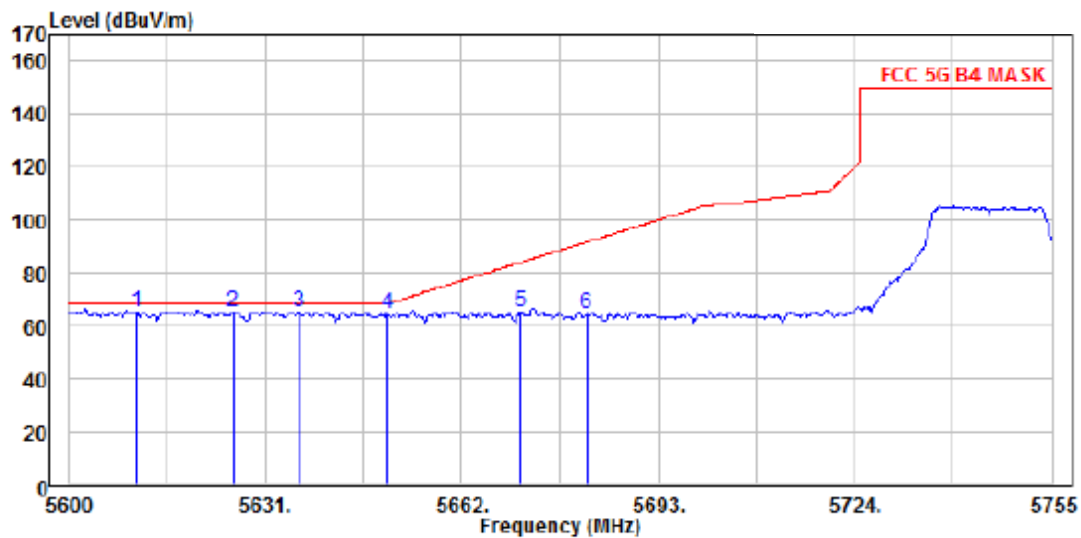
Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 9120D H 1-18G.csv Horizontal
 : RBW:1000kHz VBW:1000kHz SWT:Auto DET:Positive
 EUT : B4 a mode high ch
 Mode :
 Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5919.025	61.69	4.21	65.90	72.61	-6.71	Horizontal
2	5932.760	61.68	4.24	65.92	68.20	-2.28	Horizontal
3	5950.390	61.95	4.30	66.25	68.20	-1.95	Horizontal
4	5960.230	61.14	4.31	65.45	68.20	-2.75	Horizontal
5 PP	5982.780	62.09	4.38	66.47	68.20	-1.73	Horizontal
6	5987.290	60.95	4.39	65.34	68.20	-2.86	Horizontal

Band Edges test (Band UNII-3, 802.11n HT20 mode) –Radiated

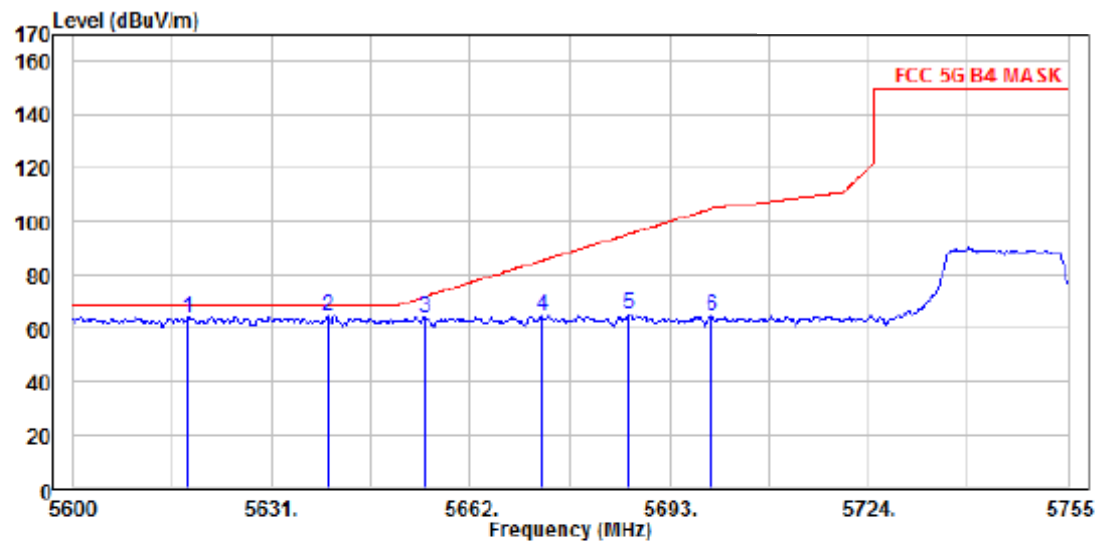
Operation Mode TX CH Low
Channel Number 5745 MHz
Temperature 25

Test Date 2020/05/25
Test By Bill
Humidity 65 %



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 9120D V 1-18G.csv Vertical
: RBW:1000kHz VBW:1000kHz SWT:Auto DET:Positive
EUT : B4 HT20 mode low ch
Mode :
Note :

		Read		Limit	Over	
Freq	Level	Factor	Level	Line	Limit	Pol/Phase
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1 PP 5610.695	62.05	3.42	65.47	68.20	-2.73	Vertical
2 5625.885	61.59	3.46	65.05	68.20	-3.15	Vertical
3 5636.270	61.78	3.49	65.27	68.20	-2.93	Vertical
4 5650.220	61.19	3.53	64.72	68.36	-3.64	Vertical
5 5671.300	61.46	3.58	65.04	84.00	-18.96	Vertical
6 5681.685	61.07	3.61	64.68	91.68	-27.00	Vertical

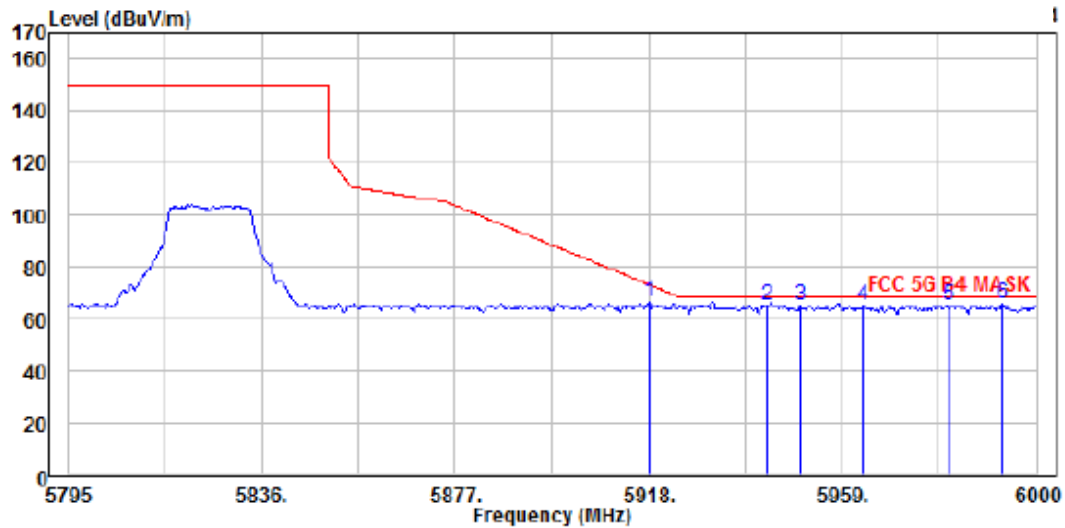


Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 9120D H 1-18G.csv Horizontal
 : RBW:1000kHz VBW:1000kHz SWT:Auto DET:Positive
 EUT : B4 HT20 mode low ch
 Mode :
 Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5617.980	60.64	3.43	64.07	68.20	-4.13	Horizontal
2 PP	5639.680	60.91	3.50	64.41	68.20	-3.79	Horizontal
3	5654.870	60.39	3.53	63.92	71.82	-7.90	Horizontal
4	5673.160	60.86	3.58	64.44	85.38	-20.94	Horizontal
5	5686.800	61.59	3.61	65.20	95.46	-30.26	Horizontal
6	5699.665	60.93	3.65	64.58	104.95	-40.37	Horizontal

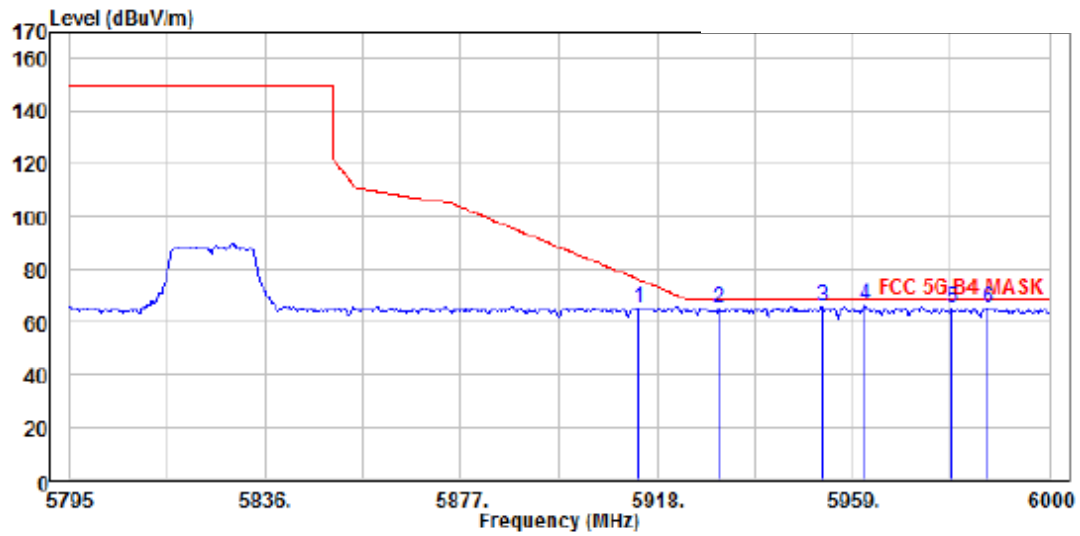
Operation Mode TX CH High
Channel Number 5825MHz
Temperature 25

Test Date 2020/05/27
Test By Bill
Humidity 65 %



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 9120D V 1-18G.csv Vertical
: RBW:1000kHz VBW:1000kHz SWT:Auto DET:Positive
EUT : B4 HT20 mode high ch
Mode :
Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5918.205	62.21	4.20	66.41	73.21	-6.80	Vertical
2	5943.010	61.18	4.27	65.45	68.20	-2.75	Vertical
3	5950.185	60.83	4.30	65.13	68.20	-3.07	Vertical
4	5963.510	60.66	4.32	64.98	68.20	-3.22	Vertical
5	5981.550	60.72	4.37	65.09	68.20	-3.11	Vertical
6 PP	5992.825	61.77	4.40	66.17	68.20	-2.03	Vertical



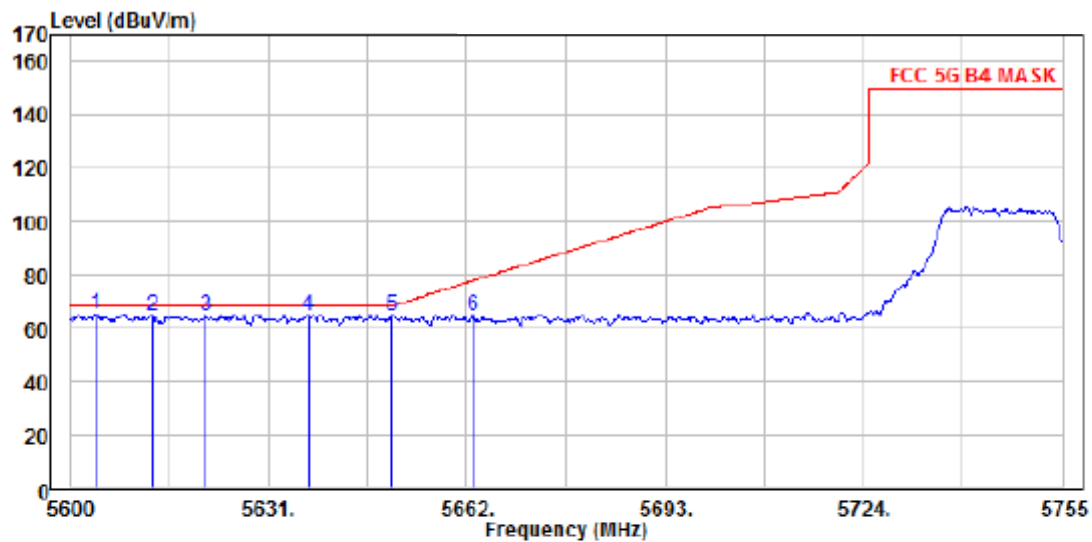
Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 9120D H 1-18G.csv Horizontal
 : RBW:1000kHz VBW:1000kHz SWT:Auto DET:Positive
 EUT : B4 HT20 mode high ch
 Mode :
 Note :

	Freq	Read Level	Factor	Level	Limit	Over	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5914.105	61.36	4.20	65.56	76.24	-10.68	Horizontal
2	5931.120	61.20	4.24	65.44	68.20	-2.76	Horizontal
3	5952.645	61.75	4.30	66.05	68.20	-2.15	Horizontal
4 PP	5961.665	61.97	4.32	66.29	68.20	-1.91	Horizontal
5	5979.705	60.74	4.37	65.11	68.20	-3.09	Horizontal
6	5986.880	61.19	4.39	65.58	68.20	-2.62	Horizontal

Band Edges test (Band UNII-3, 802.11ac VHT20 mode) –Radiated

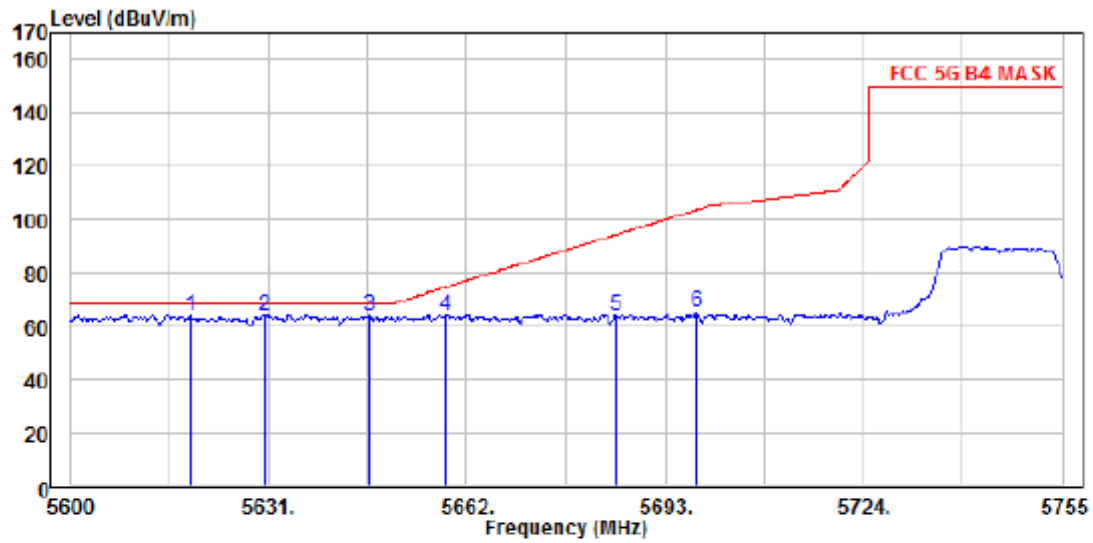
Operation Mode TX CH Low
Channel Number 5745 MHz
Temperature 25

Test Date 2020/05/25
Test By Bill
Humidity 65 %



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 9120D V 1-18G.csv Vertical
: RBW:1000kHz VBW:1000kHz SWT:Auto DET:Positive
EUT : B4 VHT20 mode low ch
Mode :
Note :

		Read		Limit	Over	
	Freq	Level	Factor	Level	Line	Limit Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1 PP	5603.875	61.69	3.40	65.09	68.20	-3.11 Vertical
2	5612.710	61.13	3.42	64.55	68.20	-3.65 Vertical
3	5621.080	61.16	3.44	64.60	68.20	-3.60 Vertical
4	5637.200	61.12	3.49	64.61	68.20	-3.59 Vertical
5	5650.375	61.12	3.53	64.65	68.48	-3.83 Vertical
6	5662.930	61.18	3.55	64.73	77.80	-13.07 Vertical

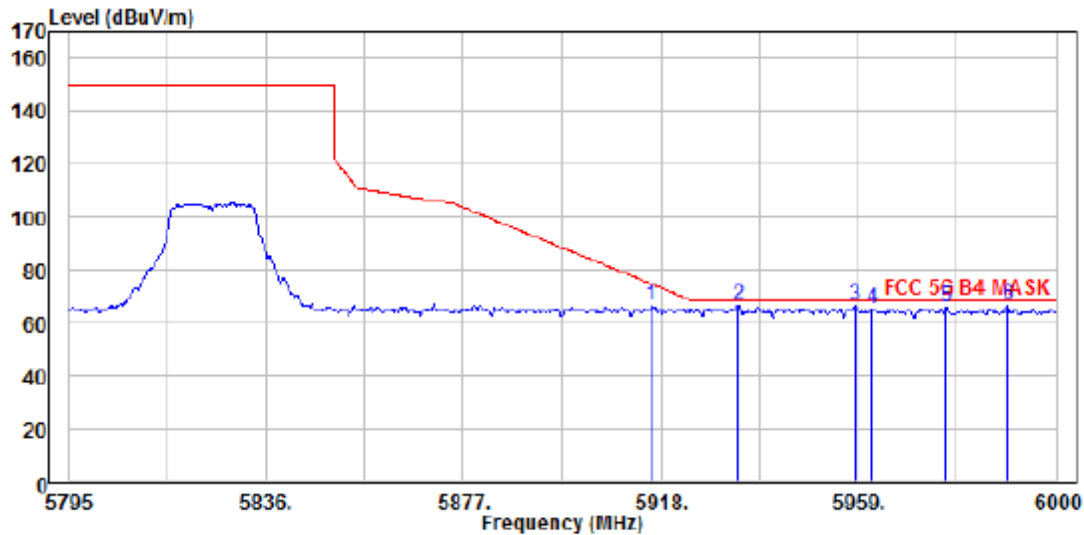


Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 9120D H 1-18G.csv Horizont
 : RBW:1000kHz VBW:1000kHz SWT:Auto DET:Positive
 EUT : B4 VHT20 mode low ch
 Mode :
 Note :

	Freq	Read Level	Factor	Level	Limit	Over	
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Pol/Phase
1	5618.755	60.32	3.44	63.76	68.20	-4.44	Horizontal
2	5630.380	60.74	3.47	64.21	68.20	-3.99	Horizontal
3	5646.810	60.23	3.51	63.74	68.20	-4.46	Horizontal
4	5658.745	60.54	3.54	64.08	74.69	-10.61	Horizontal
5	5685.250	60.55	3.61	64.16	94.32	-30.16	Horizontal
6	5697.960	61.44	3.65	65.09	103.70	-38.61	Horizontal

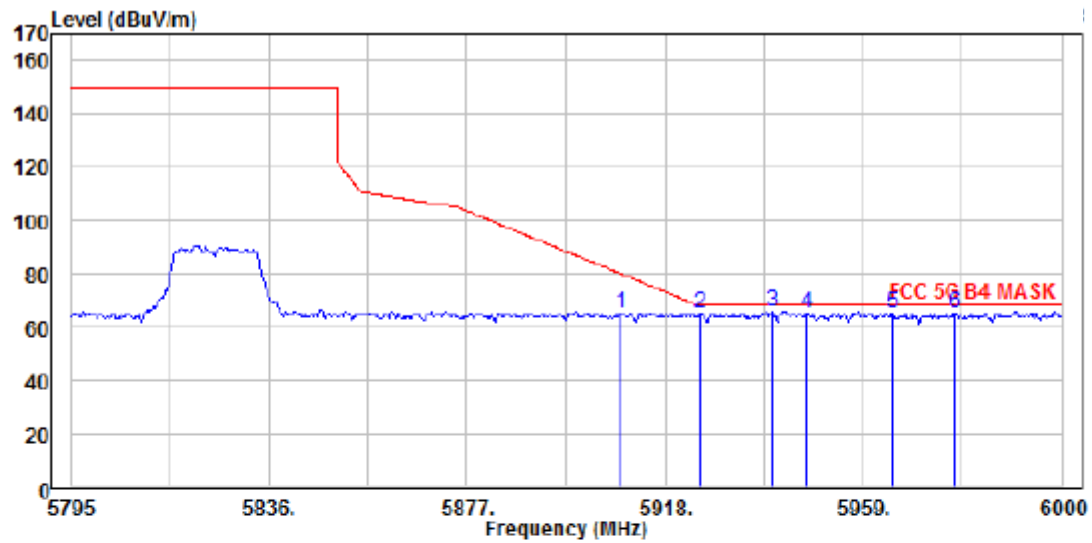
Operation Mode TX CH High
Channel Number 5825MHz
Temperature 25

Test Date 2020/05/27
Test By Bill
Humidity 65 %



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 9120D V 1-18G.csv Vertical
: RBW:1000kHz VBW:1000kHz SWT:Auto DET:Positive
EUT : B4 VHT20 mode high ch
Mode :
Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5916.155	62.08	4.20	66.28	74.72	-8.44	Vertical
2 PP	5934.195	62.32	4.24	66.56	68.20	-1.64	Vertical
3	5958.385	62.04	4.31	66.35	68.20	-1.85	Vertical
4	5962.075	60.78	4.32	65.10	68.20	-3.10	Vertical
5	5977.450	61.28	4.36	65.64	68.20	-2.56	Vertical
6	5989.750	62.05	4.39	66.44	68.20	-1.76	Vertical



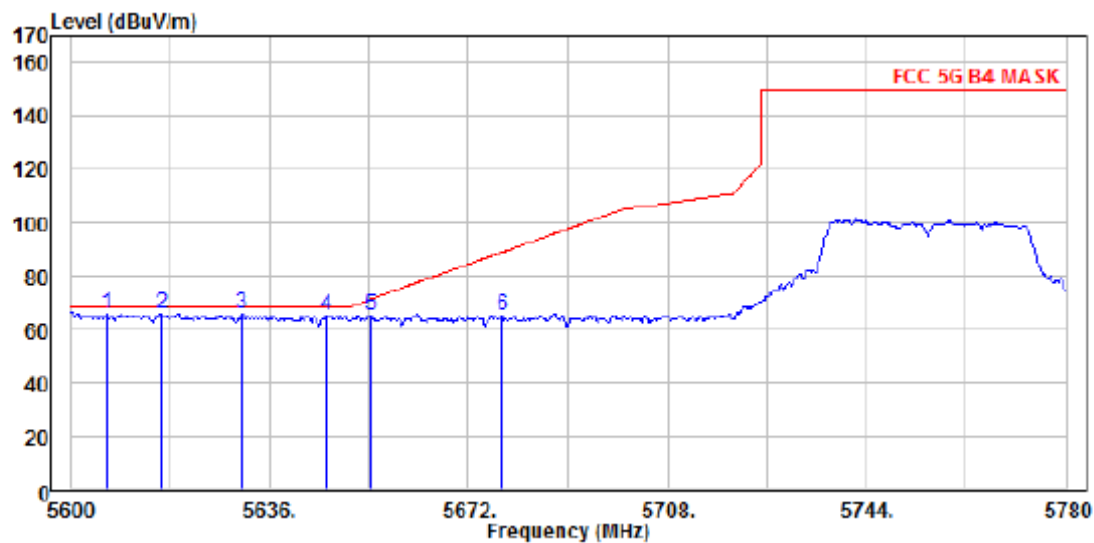
Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 9120D H 1-18G.csv Horizontal
: RBW:1000kHz VBW:1000kHz SWT:Auto DET:Positive
EUT : B4 VHT20 mode high ch
Mode :
Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5908.775	61.06	4.19	65.25	80.17	-14.92	Horizontal
2	5925.380	61.08	4.23	65.31	68.20	-2.89	Horizontal
3 PP	5940.140	61.47	4.27	65.74	68.20	-2.46	Horizontal
4	5947.520	61.16	4.28	65.44	68.20	-2.76	Horizontal
5	5965.150	61.01	4.33	65.34	68.20	-2.86	Horizontal
6	5978.065	61.25	4.36	65.61	68.20	-2.59	Horizontal

Band Edges test (Band UNII-3, 802.11n HT40 mode) –Radiated

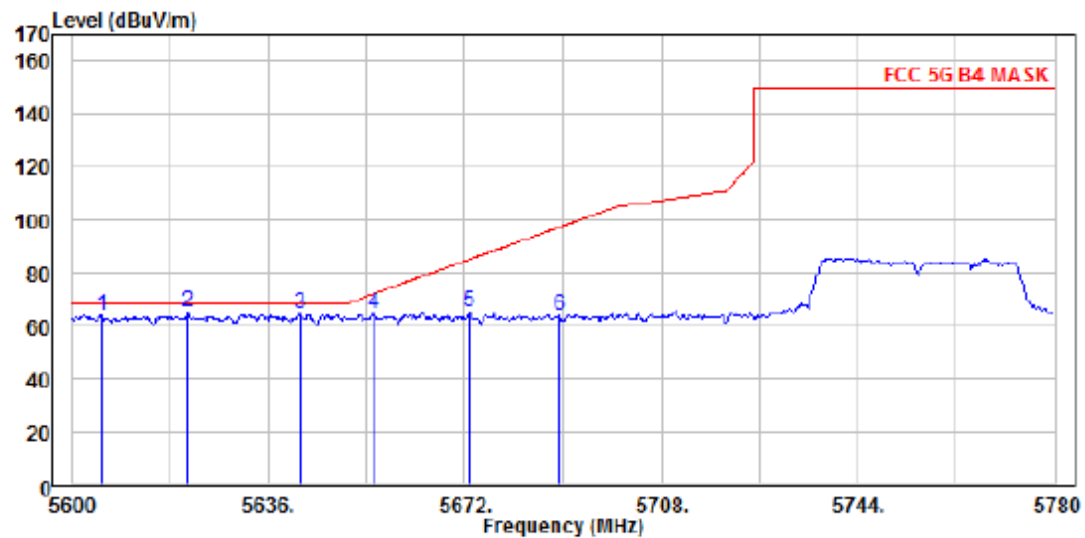
Operation Mode TX CH Low
Channel Number 5755 MHz
Temperature 25

Test Date 2020/05/25
Test By Bill
Humidity 65 %



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 9120D V 1-18G.csv Vertical
: RBW:1000kHz VBW:1000kHz SWT:Auto DET:Positive
EUT : B4 HT40 mode low ch
Mode :
Note :

		Read		Limit	Over	
	Freq	Level	Factor	Level	Line	Limit Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1	5606.300	62.37	3.40	65.77	68.20	-2.43 Vertical
2 PP	5616.380	62.67	3.43	66.10	68.20	-2.10 Vertical
3	5630.960	62.38	3.47	65.85	68.20	-2.35 Vertical
4	5646.080	61.51	3.51	65.02	68.20	-3.18 Vertical
5	5654.360	61.55	3.53	65.08	71.44	-6.36 Vertical
6	5678.120	61.44	3.59	65.03	89.05	-24.02 Vertical

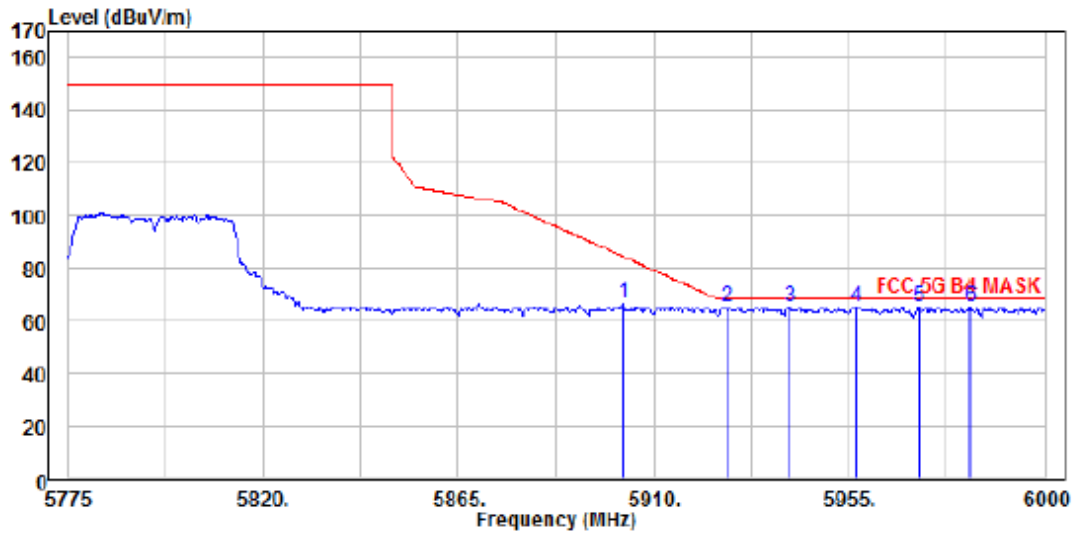


Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 9120D H 1-18G.csv Horizont
 : RBW:1000kHz VBW:1000kHz SWT:Auto DET:Positive
 EUT : B4 HT40 mode low ch
 Mode :
 Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5605.400	60.61	3.40	64.01	68.20	-4.19	Horizontal
2 PP	5621.240	61.54	3.44	64.98	68.20	-3.22	Horizontal
3	5641.760	61.16	3.50	64.66	68.20	-3.54	Horizontal
4	5655.260	61.14	3.53	64.67	72.11	-7.44	Horizontal
5	5672.900	61.54	3.58	65.12	85.19	-20.07	Horizontal
6	5689.280	60.65	3.62	64.27	97.29	-33.02	Horizontal

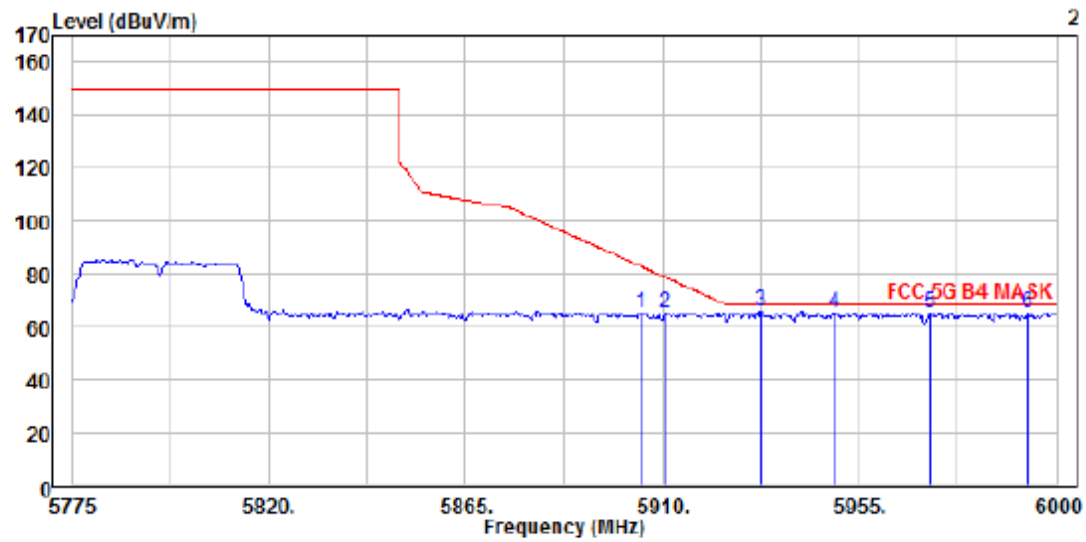
Operation Mode TX CH High
Channel Number 5795MHz
Temperature 25

Test Date 2020/05/27
Test By Bill
Humidity 65 %



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 9120D V 1-18G.csv Vertical
: RBW:1000kHz VBW:1000kHz SWT:Auto DET:Positive
EUT : B4 HT40 mode high ch
Mode :
Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5903.025	62.17	4.17	66.34	84.42	-18.08	Vertical
2	5926.875	60.82	4.23	65.05	68.20	-3.15	Vertical
3	5941.500	61.13	4.27	65.40	68.20	-2.80	Vertical
4 PP	5956.800	61.26	4.31	65.57	68.20	-2.63	Vertical
5	5971.200	61.14	4.35	65.49	68.20	-2.71	Vertical
6	5982.900	60.76	4.38	65.14	68.20	-3.06	Vertical



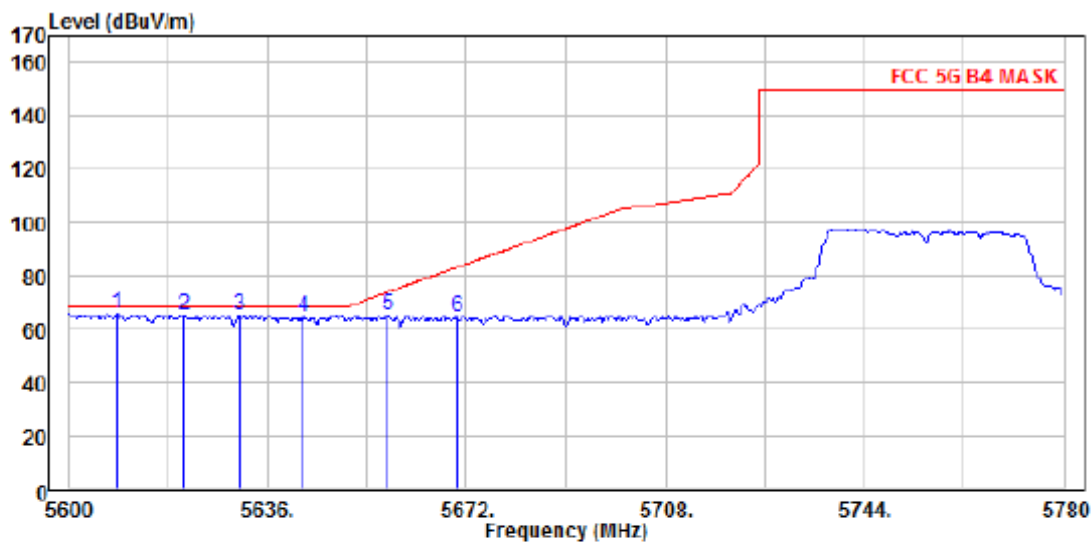
Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 9120D H 1-18G.csv Horizontal
 : RBW:1000kHz VBW:1000kHz SWT:Auto DET:Positive
 EUT : B4 HT40 mode high ch
 Mode :
 Note :

		Read		Limit	Over		
	Freq	Level	Factor	Level	Line	Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5905.050	60.87	4.17	65.04	82.93	-17.89	Horizontal
2	5910.675	61.14	4.19	65.33	78.77	-13.44	Horizontal
3 PP	5932.500	61.74	4.24	65.98	68.20	-2.22	Horizontal
4	5949.150	61.10	4.28	65.38	68.20	-2.82	Horizontal
5	5971.425	60.93	4.35	65.28	68.20	-2.92	Horizontal
6	5993.250	60.60	4.41	65.01	68.20	-3.19	Horizontal

Band Edges test (Band UNII-3, 802.11ac VHT40 mode) –Radiated

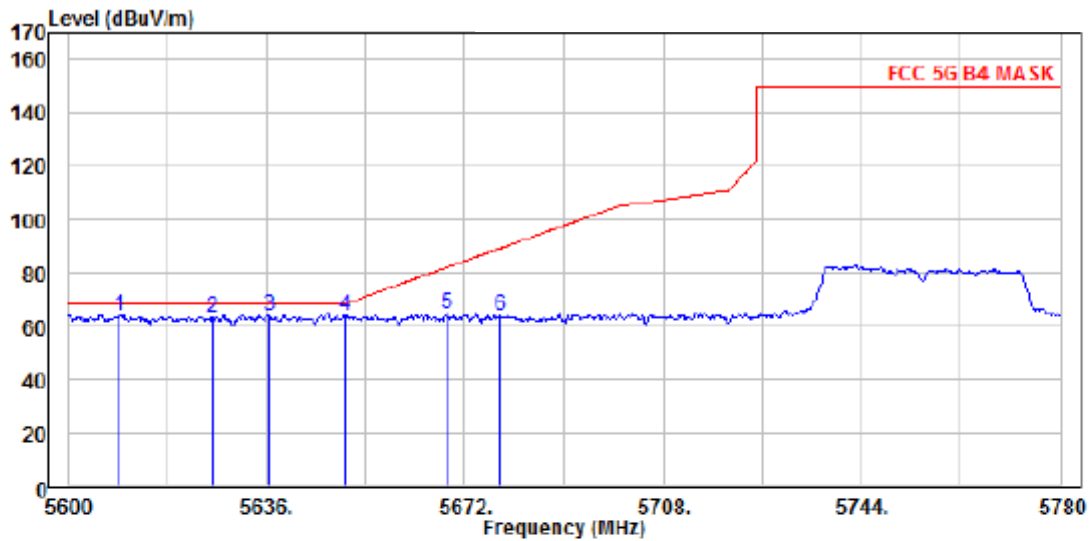
Operation Mode TX CH Low
Channel Number 5755 MHz
Temperature 25

Test Date 2020/05/25
Test By Bill
Humidity 65 %



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 9120D V 1-18G.csv Vertical
: RBW:1000kHz VBW:1000kHz SWT:Auto DET:Positive
EUT : B4 VHT40 mode low ch
Mode :
Note :

		Read		Limit	Over	
	Freq	Level	Factor	Level	Line	Limit Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB
1 PP	5608.640	62.75	3.42	66.17	68.20	-2.03 Vertical
2	5620.880	62.01	3.44	65.45	68.20	-2.75 Vertical
3	5630.780	61.94	3.47	65.41	68.20	-2.79 Vertical
4	5642.480	61.17	3.50	64.67	68.20	-3.53 Vertical
5	5657.780	61.90	3.54	65.44	73.98	-8.54 Vertical
6	5670.200	61.11	3.57	64.68	83.19	-18.51 Vertical

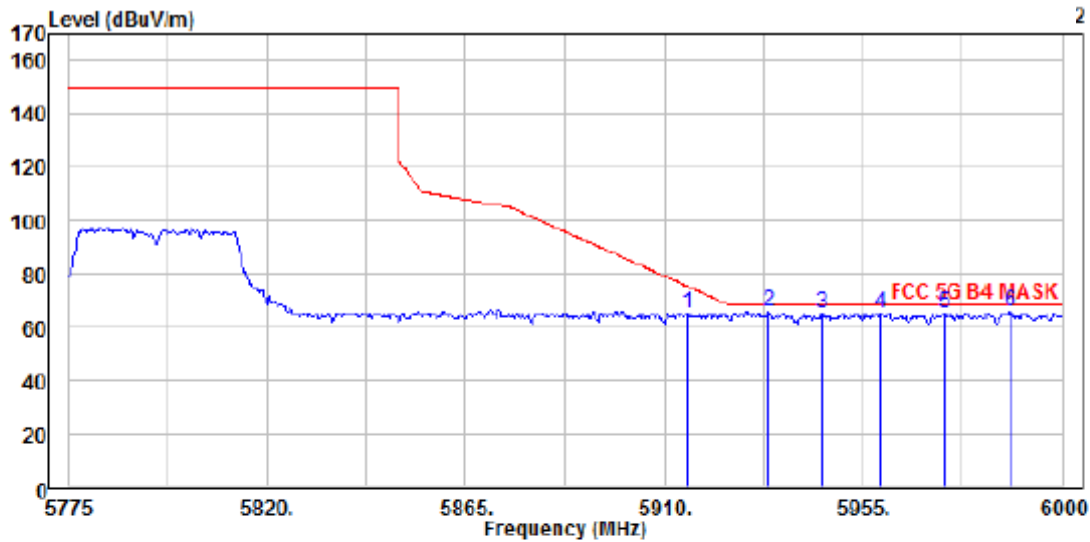


Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 9120D H 1-18G.csv Horizont
 : RBW:1000kHz VBW:1000kHz SWT:Auto DET:Positive
 EUT : B4 VHT40 mode low ch
 Mode :
 Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5609.360	60.65	3.42	64.07	68.20	-4.13	Horizontal
2	5626.100	60.18	3.46	63.64	68.20	-4.56	Horizontal
3 PP	5636.360	60.68	3.49	64.17	68.20	-4.03	Horizontal
4	5650.220	60.62	3.53	64.15	68.36	-4.21	Horizontal
5	5668.580	60.99	3.57	64.56	81.99	-17.43	Horizontal
6	5678.300	60.40	3.59	63.99	89.18	-25.19	Horizontal

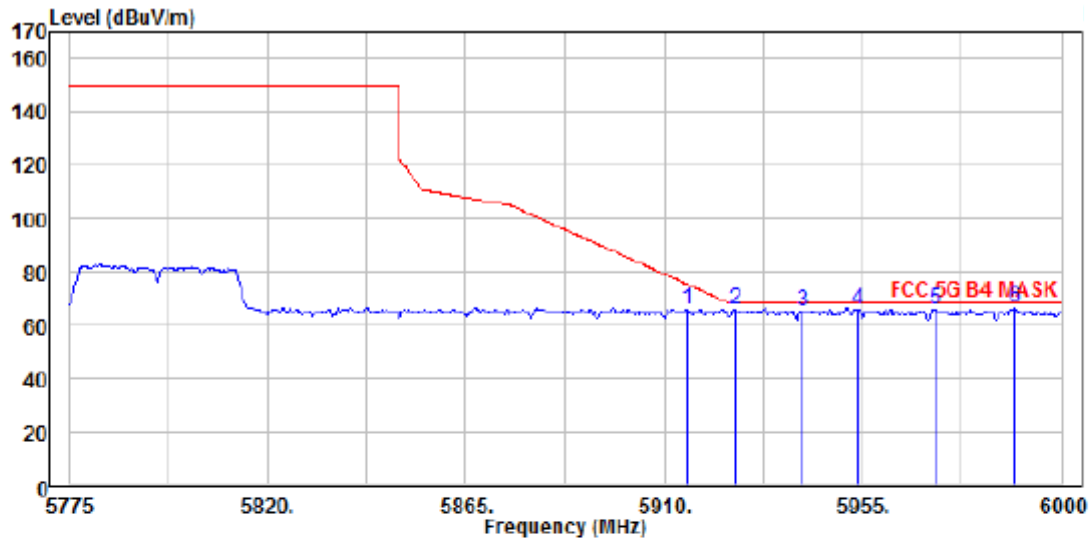
Operation Mode TX CH High
Channel Number 5795MHz
Temperature 25

Test Date 2020/05/27
Test By Bill
Humidity 65 %



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 9120D V 1-18G.csv Vertical]
: RBW:1000kHz VBW:1000kHz SWT:Auto DET:Positive
EUT : B4 VHT40 mode high ch
Mode :
Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5915.400	60.88	4.20	65.08	75.28	-10.20	Vertical
2 PP	5933.850	61.69	4.24	65.93	68.20	-2.27	Vertical
3	5945.775	60.74	4.28	65.02	68.20	-3.18	Vertical
4	5959.050	60.66	4.31	64.97	68.20	-3.23	Vertical
5	5973.675	61.09	4.35	65.44	68.20	-2.76	Vertical
6	5988.075	61.44	4.39	65.83	68.20	-2.37	Vertical



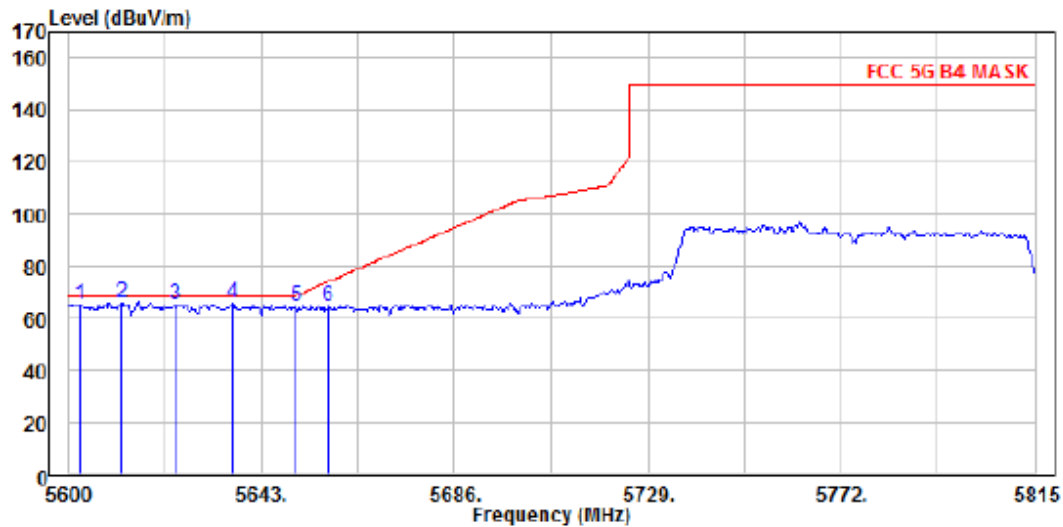
Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 9120D H 1-18G.csv Horizontal
 : RBW:1000kHz VBW:1000kHz SWT:Auto DET:Positive
 EUT : B4 VHT40 mode high ch
 Mode :
 Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5915.175	61.87	4.20	66.07	75.45	-9.38	Horizontal
2	5926.200	61.75	4.23	65.98	68.20	-2.22	Horizontal
3	5941.500	61.22	4.27	65.49	68.20	-2.71	Horizontal
4	5953.875	61.89	4.30	66.19	68.20	-2.01	Horizontal
5	5971.650	61.74	4.35	66.09	68.20	-2.11	Horizontal
6 PP	5989.425	62.16	4.39	66.55	68.20	-1.65	Horizontal

Band Edges test (Band UNII-3, 802.11ac VHT80 mode) –Radiated

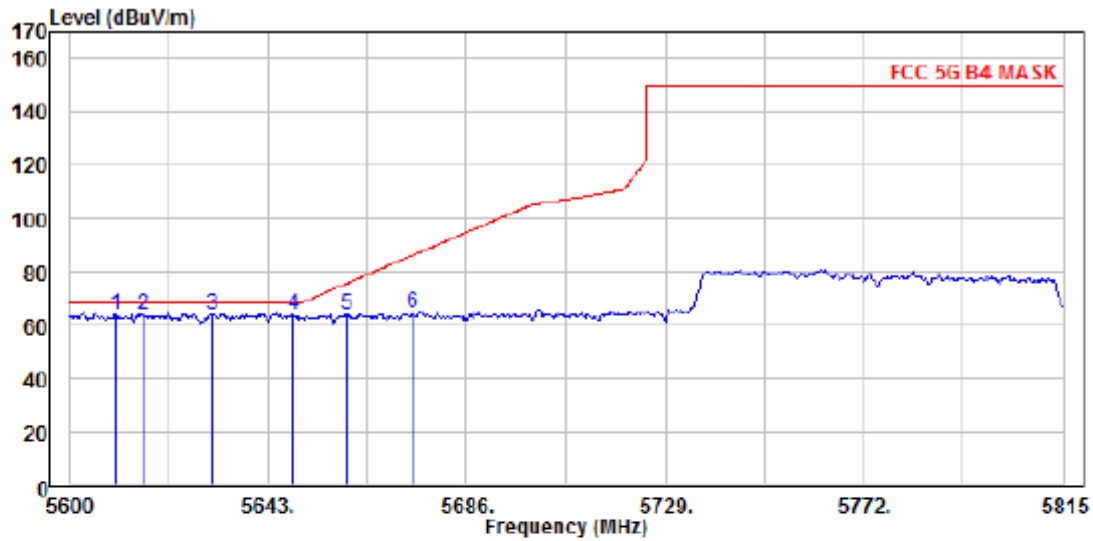
Operation Mode TX CH Low
Channel Number 5775 MHz
Temperature 25

Test Date 2020/05/25
Test By Bill
Humidity 65 %



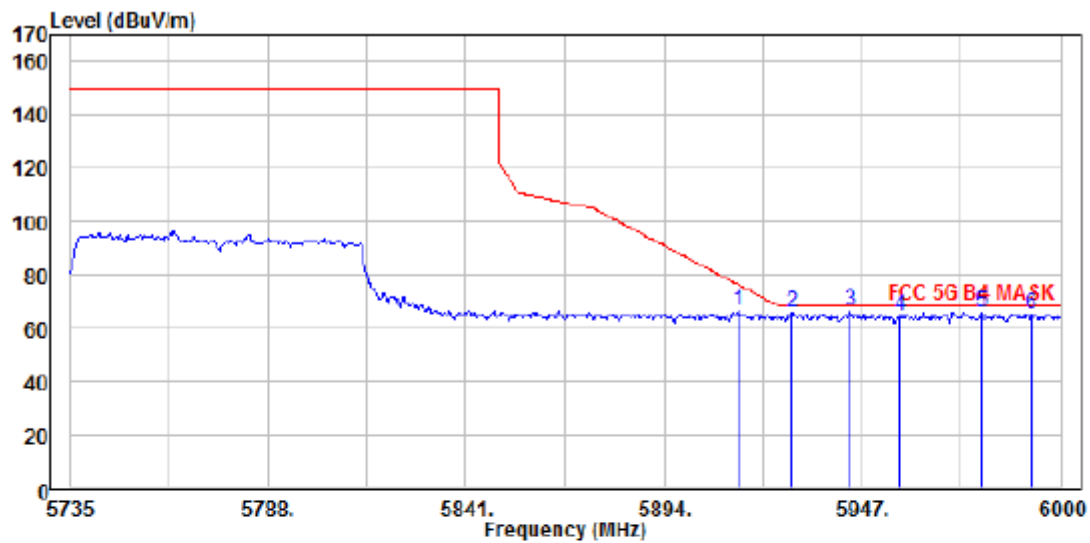
Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 9120D V 1-18G.csv Vertical]
: RBW:1000kHz VBW:1000kHz SWT:Auto DET:Positive
EUT : B4 VHT80 mode low ch
Mode :
Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5602.580	62.11	3.39	65.50	68.20	-2.70	Vertical
2 PP	5611.825	62.71	3.42	66.13	68.20	-2.07	Vertical
3	5623.650	61.87	3.45	65.32	68.20	-2.88	Vertical
4	5636.550	62.13	3.49	65.62	68.20	-2.58	Vertical
5	5650.525	61.29	3.53	64.82	68.59	-3.77	Vertical
6	5657.835	60.80	3.54	64.34	74.02	-9.68	Vertical



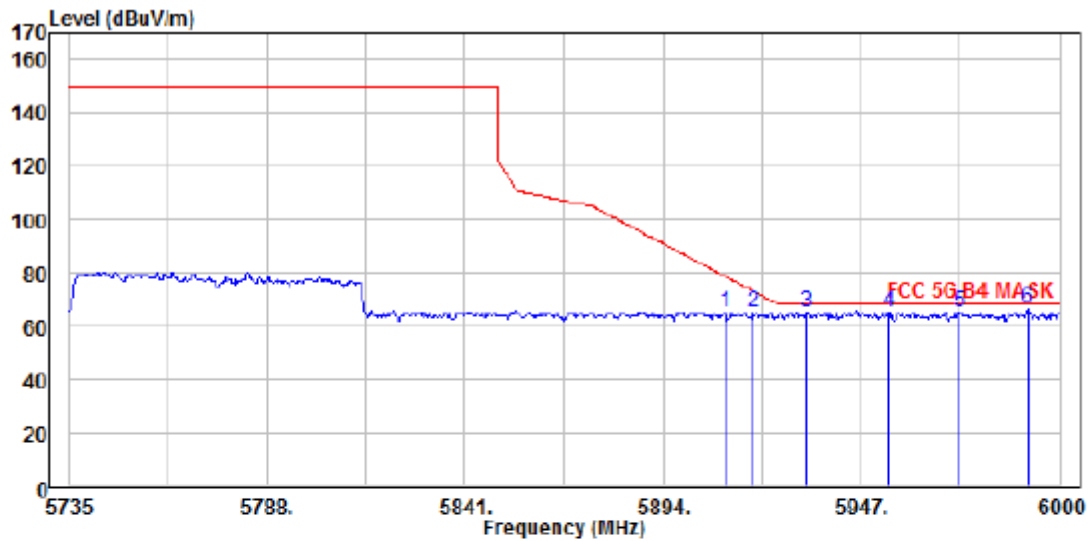
Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 9120D H 1-18G.csv Horizont
: RBW:1000kHz VBW:1000kHz SWT:Auto DET:Positive
EUT : B4 VHT80 mode low ch
Mode :
Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5609.890	60.42	3.42	63.84	68.20	-4.36	Horizontal
2	5615.910	60.45	3.43	63.88	68.20	-4.32	Horizontal
3 PP	5630.960	60.84	3.47	64.31	68.20	-3.89	Horizontal
4	5648.375	60.39	3.51	63.90	68.20	-4.30	Horizontal
5	5659.985	60.73	3.54	64.27	75.61	-11.34	Horizontal
6	5674.390	60.80	3.58	64.38	86.29	-21.91	Horizontal



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 9120D V 1-18G.csv Vertical
 : RBW:1000kHz VBW:1000kHz SWT:Auto DET:Positive
 EUT : B4 VHT80 mode high ch
 Mode :
 Note :

		Read			Limit	Over	
	Freq	Level	Factor	Level	Line	Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5914.140	62.20	4.20	66.40	76.21	-9.81	Vertical
2	5928.450	61.43	4.23	65.66	68.20	-2.54	Vertical
3 PP	5943.820	62.08	4.27	66.35	68.20	-1.85	Vertical
4	5957.335	60.26	4.31	64.57	68.20	-3.63	Vertical
5	5979.065	61.80	4.37	66.17	68.20	-2.03	Vertical
6	5992.050	60.78	4.39	65.17	68.20	-3.03	Vertical



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 9120D H 1-18G.csv Horizont
 : RBW:1000kHz VBW:1000kHz SWT:Auto DET:Positive
 EUT : B4 VHT80 mode high ch
 Mode :
 Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5910.960	61.02	4.19	65.21	78.56	-13.35	Horizontal
2	5918.115	60.96	4.20	65.16	73.28	-8.12	Horizontal
3	5932.690	61.05	4.24	65.29	68.20	-2.91	Horizontal
4	5954.685	61.24	4.30	65.54	68.20	-2.66	Horizontal
5	5973.500	61.03	4.35	65.38	68.20	-2.82	Horizontal
6 PP	5991.255	61.94	4.39	66.33	68.20	-1.87	Horizontal

10. Transmission in the Absence of Date

10.1. Standard Applicable

According to §15.407(c)

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization a description of how this requirement is met.

10.2. Result:

Pass, the device is compliance with 802.11 a/b/g/n ac standard, the short control signal is appear during no transmission period.

11. Antenna Requirement

11.1. Standard Applicable

According to §15.203, Antenna requirement.

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. This requirement does not apply to carrier current devices or to devices operated under the provisions of Sections 15.211, 15.213, 15.217, 15.219, or 15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with Section 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this Part are not exceeded.

11.2. Antenna Connected Construction

The directional gains of antenna used for transmitting is below table, and the antenna connector is designed with unique type RF connector and no consideration of replacement. Please see EUT photo and antenna spec. for details.

Antenna Designation:

	Type	Gain (5GHz)
Ant 1	PIFA Antenna	12dBi