

# TEST REPORT


of

## FCC PART 15 SUBPART E

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

**Product :** HDMI™ Wireless Display TX  
**Brand:** j5create  
**Model:** JVAW62  
**Model Difference:** N/A  
**FCC ID:** 2AD37JVAW62  
**FCC Rule Part:** §15.407, Cat:NII  
**Applicant:** KaiJet Technology International Corporation  
**Address:** 8F., No. 109, Zhongcheng Road, Tucheng Dist.,  
New Taipei City, Taiwan R.O.C

Test Performed by:

 **International Standards Laboratory Corp. LT Lab.**  
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No. 120, Lane 180, Hsin Ho Rd., Lung-Tan Dist., Tao Yuan City 325, Taiwan

Report No.: ISL-21LR091FE  
Issue Date : 2021/05/05



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. The uncertainty of the measurement does not include in consideration of the test result unless the customer required the determination of uncertainty via the agreement, regulation or standard document specification. This test report shall not be reproduced except in full, without the written approval of International Standards Laboratory Corp.

## VERIFICATION OF COMPLIANCE

**Applicant:** KaiJet Technology International Corporation  
**Product Description:** HDMI™ Wireless Display TX  
**Brand Name:** j5create  
**Model No.:** JVAW62  
**Model Difference:** N/A  
**FCC ID:** 2AD37JVAW62  
**Date of test:** 2021/03/28 ~ 2021/05/03  
**Date of EUT Received:** 2021/03/28

### 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.

<b>Test By:</b>	<u>Weitin Chen</u>	<b>Date:</b>	<u>2021/05/05</u>
	<i>Weitin Chen / Senior Engineer</i>		
<b>Prepared By:</b>	<u>Elisa Chen</u>	<b>Date:</b>	<u>2021/05/05</u>
	<i>Elisa Chen / Senior Engineer</i>		
<b>Approved By:</b>	<u>Jerry Liu</u>	<b>Date:</b>	<u>2021/05/05</u>
	<i>Jerry Liu / Assistant Manager</i>		

## Version

Version No.	Date	Description
00	2021/05/05	Initial creation of document

## Uncertainty of Measurement

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	HDMI™ Wireless Display TX
Brand Name	j5create
Model Name	JVAW62
Model Difference	N/A
Power Tolerance:	+/- 1 dB
Power Supply	5Vdc from adapter
USB Port	2 provided. One for Data link and one for Power

## 5GHz WLAN: 1TX/1RX

Wi-Fi	Frequency Range (MHz)	Channels	Peak / Average Rated Power	Modulation Technology	
802.11a	5150 – 5250(NII)	4	14.56dBm (AV)	OFDM	
	5725 – 5850(NII)	5	14.59dBm (AV)		
802.11n (5G)	HT20 5150 – 5250(NII)	4	14.41dBm (AV)		
	HT20 5725 – 5850(NII)	5	14.37dBm (AV)		
	HT40 5150 – 5250(NII)	2	13.57dBm (AV)		
	HT40 5725 – 5850(NII)	2	13.47dBm (AV)		
802.11VHT	VHT20 5150 – 5250(NII)	4	14.35dBm (AV)		
	VHT20 5725 – 5850(NII)	5	14.32dBm (AV)		
	VHT40 5150 – 5250(NII)	2	13.46dBm (AV)		
	VHT40 5725 – 5850(NII)	2	13.45dBm (AV)		
	VHT80 5150 – 5250(NII)	1	12.07dBm (AV)		
	VHT80 5725 – 5850(NII)	1	12.46dBm (AV)		
Modulation type		CCK, DQPSK, DBPSK for DSSS 256QAM.64QAM. 16QAM, QPSK, BPSK for OFDM			
Antenna Designation		PIFA Antenna WiFi 5G Antenna : 1.52 dBi According to KDB662911 D01 SM-MIMO signals could be considered uncorrelated for purposes of directional gain computation. Directional gain = $G_{ANT}$			

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.

S/N	AMB27U_EXCast_TX_TYPE-C_V4.1
Test SW Version	N/A
RF power setting	802.11b : 45 802.11g : 44 802.11n20 : 44 802.11n40 : 40 802.11a : 52 802.11HT20 : 52 802.11HT40 : 50 802.11VHT20 : 52 802.11VHT40 : 50 802.11VHT80 : 50

### 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: 2AD37JVAW62** 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.

KDB Document: 789033 D02 General U-NII Test Procedures New Rules v02r01

FCC 14-30 Revision UNII

594280 D02 U-NII Device Security v01r03

## **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.

## **1.5. Special Accessories**

Not available for this EUT intended for grant.

## **1.6. Equipment Modifications**

Not available for this EUT intended for grant.

## **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.

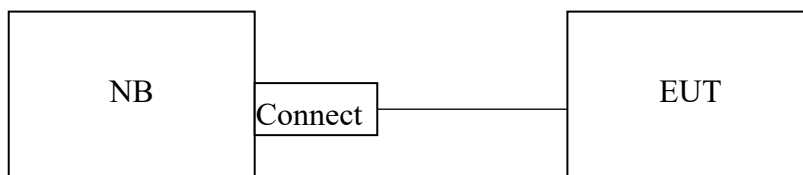
#### **2.3.2 Radiated Emissions**

The EUT is a placed on a turntable which is 0.8 m/1.5m (Frequency above 1GHz) above the ground plane. The turntable shall rotate 360 degrees to determine the position of maximum emission level. The 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. To find out the maximum 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, 11 and 12 of ANSI C63.10: 2013.

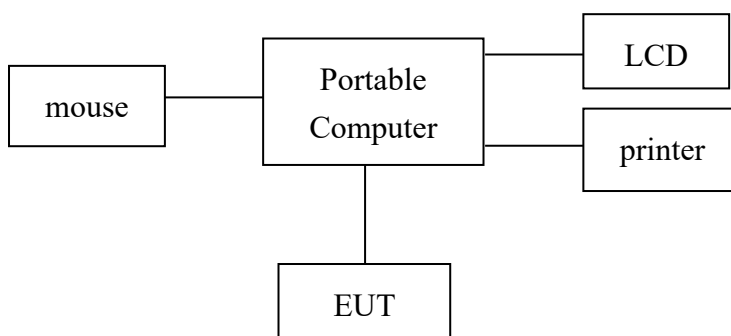
## 2.4. Configuration of Tested System

**Fig. 2-1 Configuration of Tested System**

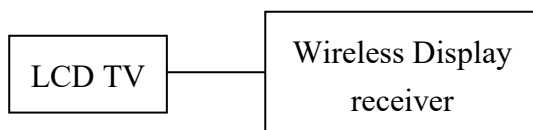
### **Radiated Emission**



### **Conducted Emission**



-----remote-----



**Table 2-1 Equipment Used in Tested System**

Item	Equipment	Mfr/Brand	Model/ Type No.	Series No.	Data Cable	Power Cord
1	NB	HP	440i	NA	200cm	15cm
2	USB Type C to Type Connect	NA	NA	NA	NA	NA
3	24" LCD Monitor	DELL	P2416Db	N/A	Shielded /1.8m	Non-shielded /1.8m
4	Notebook PC	Lenovo	LC55-15C	N/A	N/A	Non-shielded /1.8m
5	USB mouse	Logitech	M-U0026	1627HS05K N58	Shielded /1.8m	N/A
6	Printer	HP	C930	N/A	Shielded /1.8m	Non-shielded /1.8m
7	LCD TV	PHILIPS	24PFH4200/96	KT1A15440 01757	N/A	Non-shielded /1.8m
8	Wireless Display receiver	EZCast	EZC-CS2	N/A	Shielded /0.6m	N/A

**Note:** All the above equipment/cables were placed in worse case positions to maximize emission signals during emission test.

**Grounding:** Grounding was in accordance with the manufacturer's requirements and conditions for the intended use.

## 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 (kHz)	VBW for average detector (kHz)
a	10.000	10.000	100.000%	0.00	0.100	0.1
HT20	7.533	7.533	100.000%	0.00	0.133	0.3
HT40	5.000	5.000	100.000%	0.00	0.200	0.3
VHT20	5.000	5.000	100.000%	0.00	0.200	0.3
VHT40	5.000	5.000	100.000%	0.00	0.200	0.3
VHT80	2.533	2.533	100.000%	0.00	0.395	0.5

### 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

Directional gain =  $GANT + 10 \log(NANT)$  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	Equipment Name	Brand	Model	S/N	Last Cal. Date	Next Cal. Date
Conduction 03	EMI Receiver 15	ROHDE & SCHWARZ	ESCI	101166	07/29/2020	07/29/2021
Conduction 03	ISN T4 09	Teseq GmbH	ISN T400A	49914	08/10/2020	08/10/2021
Conduction 03	ISNT8 09	Teseq GmbH	ISN T800	36190	09/16/2020	09/16/2021
Conduction 03	LISN 19	R&S	ENV216	101425	11/05/2020	11/05/2021
Conduction 03	LISN 15	R&S	ENV216	101335	11/27/2020	11/27/2021
Conduction 03	Conduction 04-3 Cable	WOKEN	CFD 300-NL	conduction 04-3	09/07/2020	09/07/2021
Conduction 03	Capacitive Voltage Probe 01	SCHAFFNER	CVP 2200A	18711	08/14/2020	08/14/2021
Conduction 03	Current Probe	SCHAFFNER	SMZ 11	18030	03/04/2021	03/04/2022

### 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

Operation Mode: Normal Operation



Address: No. 120, Lane 180, Hsin Ho Rd., Lung-Tan Dist.,  
Tao Yuan City 325, Taiwan.  
Tel: 03-2638888

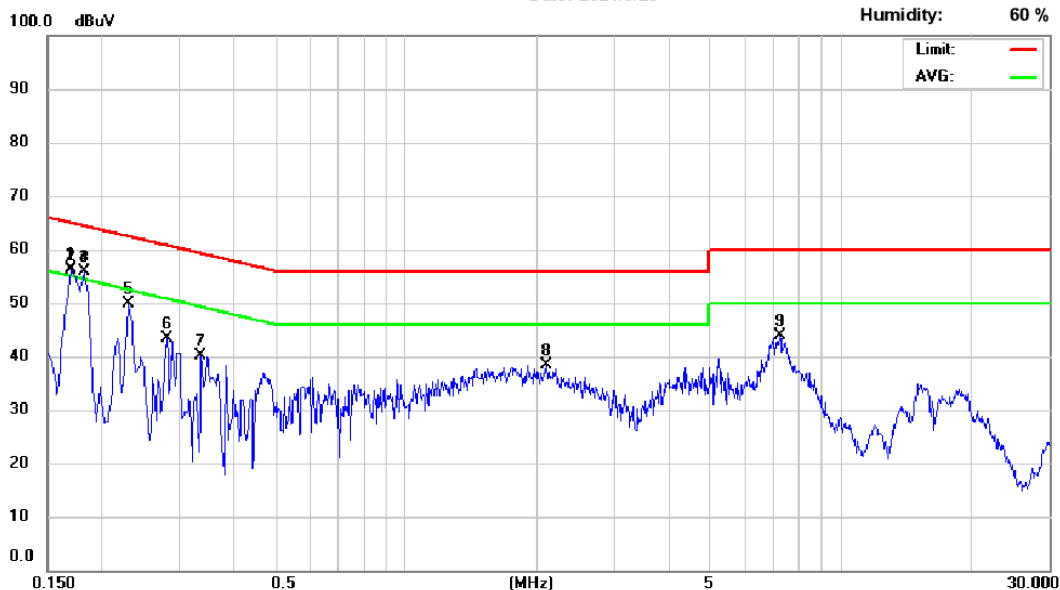
### Conducted Emission Measurement

Date: 2021/3/29

operator: Ted Fan

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	0.170	44.31	30.19	9.72	54.03	64.96	-10.93	39.91	54.96	-15.05
2	0.172	43.76	29.29	9.72	53.48	64.85	-11.37	39.01	54.85	-15.84
3	0.181	41.18	22.08	9.71	50.89	64.46	-13.57	31.79	54.46	-22.67
4	0.182	39.28	14.39	9.71	48.99	64.39	-15.40	24.10	54.39	-30.29
5	0.230	36.30	23.77	9.72	46.02	62.45	-16.43	33.49	52.45	-18.96
6	0.282	30.76	16.74	9.72	40.48	60.76	-20.28	26.46	50.76	-24.30
7	0.338	35.30	22.71	9.71	45.01	59.25	-14.24	32.42	49.25	-16.83
8	2.106	32.21	18.74	9.78	41.99	56.00	-14.01	28.52	46.00	-17.48
9	7.222	28.43	23.24	9.90	38.33	60.00	-21.67	33.14	50.00	-16.86



Address: No. 120, Lane 180, Hsin Ho Rd., Lung-Tan Dist.,  
Tao Yuan City 325, Taiwan.  
Tel: 03-2638888

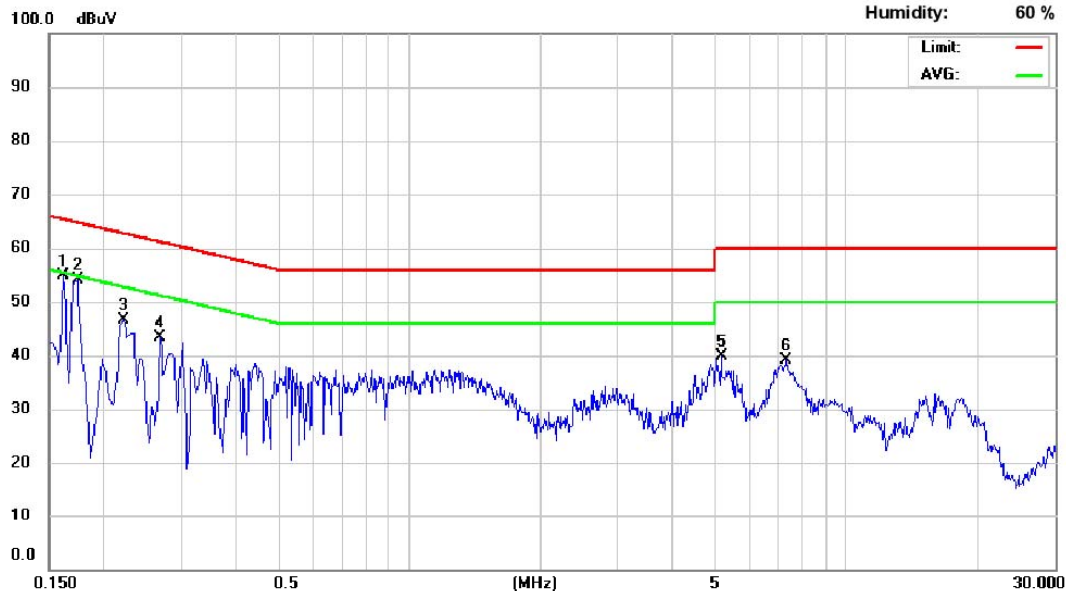
### Conducted Emission Measurement

Date: 2021/3/29

operator: Ted Fan

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	0.162	43.85	28.48	9.71	53.56	65.36	-11.80	38.19	55.36	-17.17
2	0.174	41.60	26.60	9.71	51.31	64.77	-13.46	36.31	54.77	-18.46
3	0.222	34.95	27.20	9.71	44.66	62.74	-18.08	36.91	52.74	-15.83
4	0.270	30.60	17.06	9.71	40.31	61.12	-20.81	26.77	51.12	-24.35
5	5.174	20.93	7.54	9.85	30.78	60.00	-29.22	17.39	50.00	-32.61
6	7.298	24.27	18.63	9.90	34.17	60.00	-25.83	28.53	50.00	-21.47

## **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

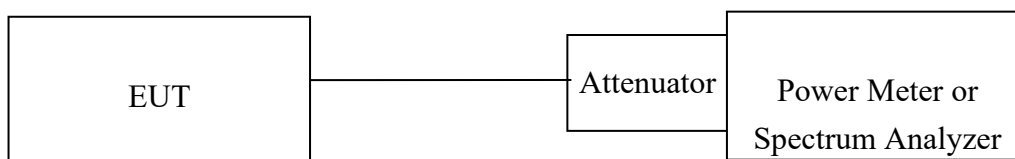
1. Place the EUT on the table and set it in transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to Spectrum.
3. Set RBW=1MHz,VBW=3MHz, Span=50MHz (Base Mode), Sweep time = Auto, traces 100 sweeps of video averaging for 5150-5725MHz;
4. Set 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	09/25/2020	09/25/2021
Conducted	Power Sensor	Anritsu	MA2411B	34NKF50	09/25/2020	09/25/2021
Conducted	Power Sensor	DARE	RPR3006W	13I00030SNO33	01/04/2021	01/04/2022
Conducted	Power Sensor	DARE	RPR3006W	13I00030SNO34	01/04/2021	01/04/2022
Conducted	Power Sensor	DARE	RPR3006W	14I00889SNO35	06/29/2020	06/29/2021
Conducted	Power Sensor	DARE	RPR3006W	14I00889SNO36	06/29/2020	06/29/2021
Conducted	Temperature Chamber	KSON	THS-B4H100	2287	03/11/2021	03/11/2022
Conducted	DC Power supply	ABM	8185D	N/A	01/05/2021	01/05/2022
Conducted	AC Power supply	EXTECH	CFC105W	NA	N/A	N/A
Conducted	Spectrum analyzer	Keysight	N9010A	MY56070257	09/23/2020	09/23/2021
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	Universal Digital Radio Communication Tester	R&S	CMU200	111968	11/29/2020	11/29/2021
Conducted	Wideband Radio Communication Tester	R&S	CMW500	1201.002K50108793-JG	10/28/2020	10/28/2021
Conducted	BT Simulator	Agilent	N4010A	MY48100200	NA	NA
Conducted	GPS Simulator	Welnavigate	GS-50	701523	NA	NA
Conducted (TS8997)	Wideband Radio Communication Tester	R&S	CMW500	168811	07/19/2020	07/19/2021
Conducted (TS8997)	Signal Generator	R&S	SMB100B	101085	10/28/2020	10/28/2021
Conducted (TS8997)	Vector Signal Generator	R&S	SMBV100A	263246	10/28/2020	10/28/2021
Conducted (TS8997)	Signal analyzer 40GHz	R&S	FSV40	101884	10/20/2020	10/20/2021
Conducted (TS8997)	OSP150 extension unit CAM-BUS	R&S	OSP150	101107	04/06/2020	04/06/2021
Conducted (TS8997)	Test Software	R&S	EMC32	NA	NA	NA

### 6.4. Measurement Equipment Used:



## 6.5. Measurement Result

According to §15.407(a)

(iv) For 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.

Band	Mode	Freq. (MHz)	Output Power (dBm)	Duty Factor (dB)	Total Output Power (dBm)	Output Power Limit (dBm)
			Chain 0			
UNII-1	11a	5180	14.020	0.00	14.02	23.98
		5200	14.560	0.00	14.56	23.98
		5240	14.250	0.00	14.25	23.98
	HT20	5180	14.180	0.00	14.18	23.98
		5200	14.410	0.00	14.41	23.98
		5240	14.110	0.00	14.11	23.98
	HT40	5190	13.570	0.00	13.57	23.98
		5230	13.360	0.00	13.36	23.98
	VHT20	5180	14.320	0.00	14.32	23.98
		5200	14.350	0.00	14.35	23.98
		5240	14.170	0.00	14.17	23.98
	VHT40	5190	13.350	0.00	13.35	23.98
		5230	13.460	0.00	13.46	23.98
	VHT80	5210	12.070	0.00	12.07	23.98

Band	Mode	Freq. (MHz)	Output Power (dBm)	Duty Factor (dB)	Total Output Power (dBm)	Output Power Limit (dBm)
			Chain 0			
UNII-3	11a	5745	14.410	0.00	14.41	30.00
		5785	14.180	0.00	14.18	30.00
		5825	14.590	0.00	14.59	30.00
	HT20	5745	14.370	0.00	14.37	30.00
		5785	14.290	0.00	14.29	30.00
		5825	14.300	0.00	14.30	30.00
	HT40	5755	13.470	0.00	13.47	30.00
		5795	13.280	0.00	13.28	30.00
	VHT20	5745	14.320	0.00	14.32	30.00
		5785	14.300	0.00	14.30	30.00
		5825	14.270	0.00	14.27	30.00
	VHT40	5755	13.420	0.00	13.42	30.00
		5795	13.450	0.00	13.45	30.00
	VHT80	5775	12.460	0.00	12.46	30.00



**Power Spectral Density Measurement:**

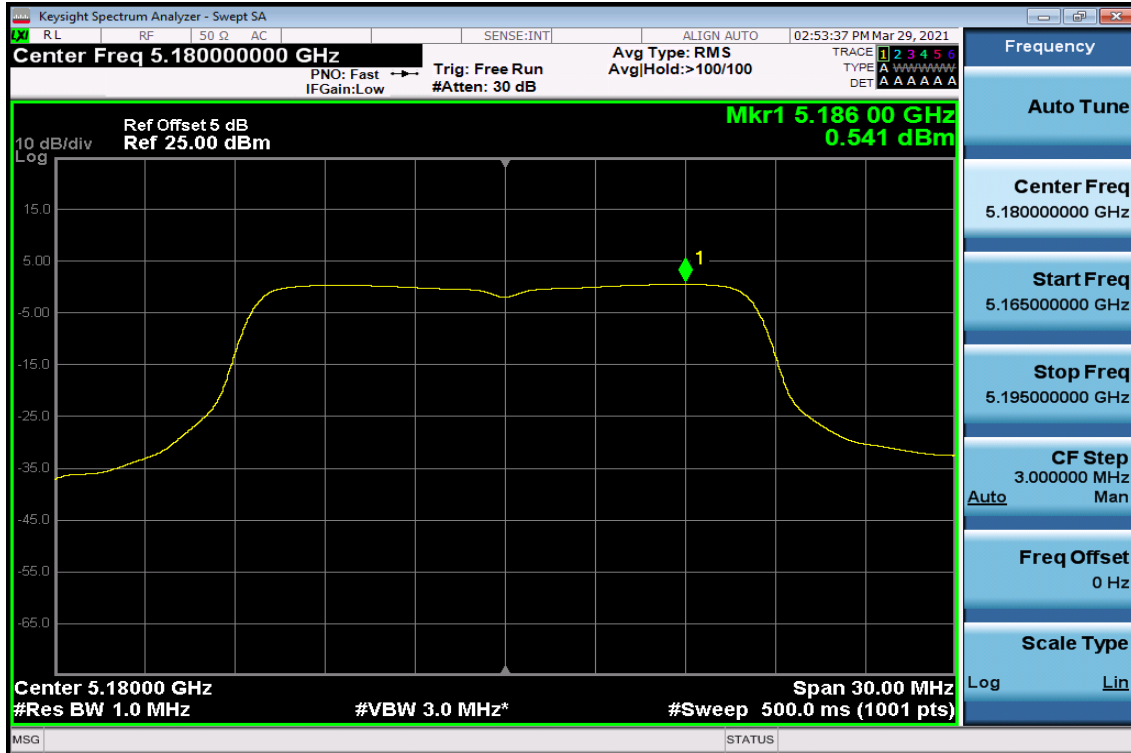
Band	Mode	Frequency (MHz)	PSD (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)
			Chain 0			
UNII-1	11a	5180	0.543	0.00	0.54	23.98
		5200	1.402	0.00	1.40	23.98
		5240	2.486	0.00	2.49	23.98
	HT20	5180	0.145	0.00	0.15	23.98
		5200	0.902	0.00	0.90	23.98
		5240	2.116	0.00	2.12	23.98
	HT40	5190	-2.962	0.00	-2.96	23.98
		5230	-1.666	0.00	-1.67	23.98
	VHT20	5180	0.365	0.00	0.37	23.98
		5200	1.068	0.00	1.07	23.98
		5240	2.858	0.00	2.86	23.98
	VHT40	5190	-2.943	0.00	-2.94	23.98
		5230	-1.612	0.00	-1.61	23.98
	VHT80	5210	-3.841	0.00	-3.84	23.98

Band	Mode	Frequency (MHz)	PSD (dBm/500kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)
			Chain 0			
UNII-3	11a	5745	1.722	0.00	1.72	30
		5785	1.561	0.00	1.56	30
		5825	1.576	0.00	1.58	30
	HT20	5745	1.515	0.00	1.52	30
		5785	1.550	0.00	1.55	30
		5825	1.352	0.00	1.35	30
	HT40	5755	-2.270	0.00	-2.27	30
		5795	-2.162	0.00	-2.16	30
	VHT20	5745	1.842	0.00	1.84	30
		5785	1.714	0.00	1.71	30
		5825	1.374	0.00	1.37	30
	VHT40	5755	-2.245	0.00	-2.25	30
		5795	-2.201	0.00	-2.20	30
	VHT80	5775	-4.171	0.00	-4.17	30

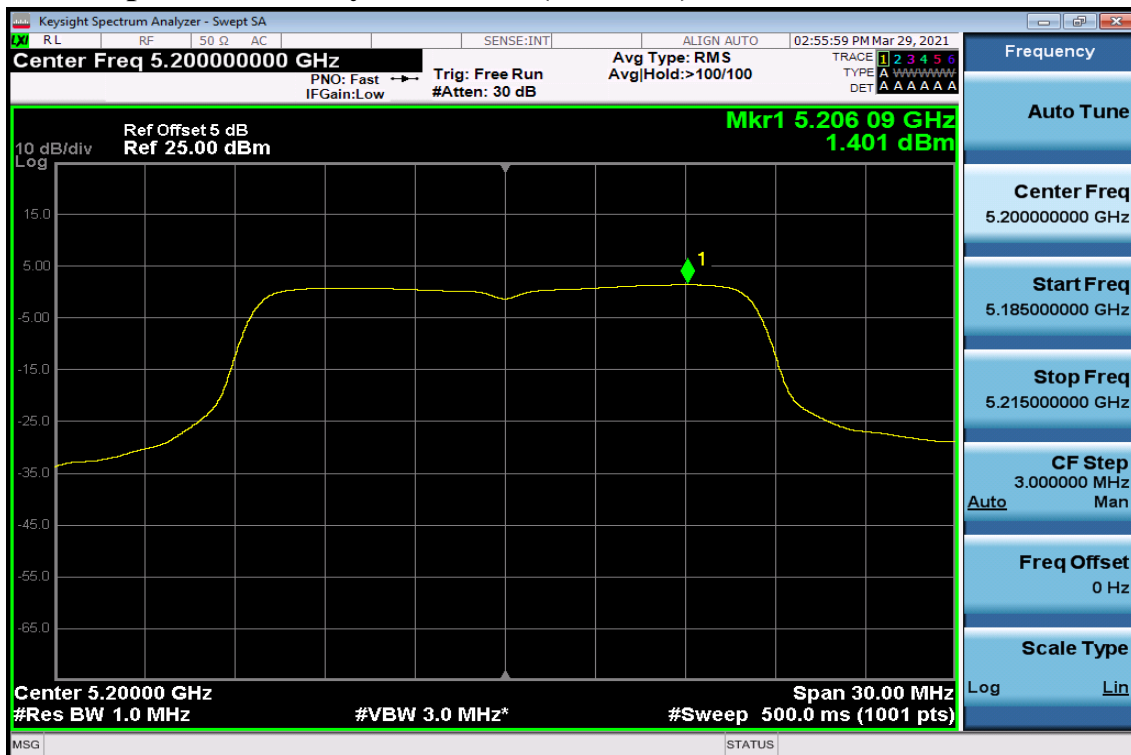
## Band UNII-1

802.11a

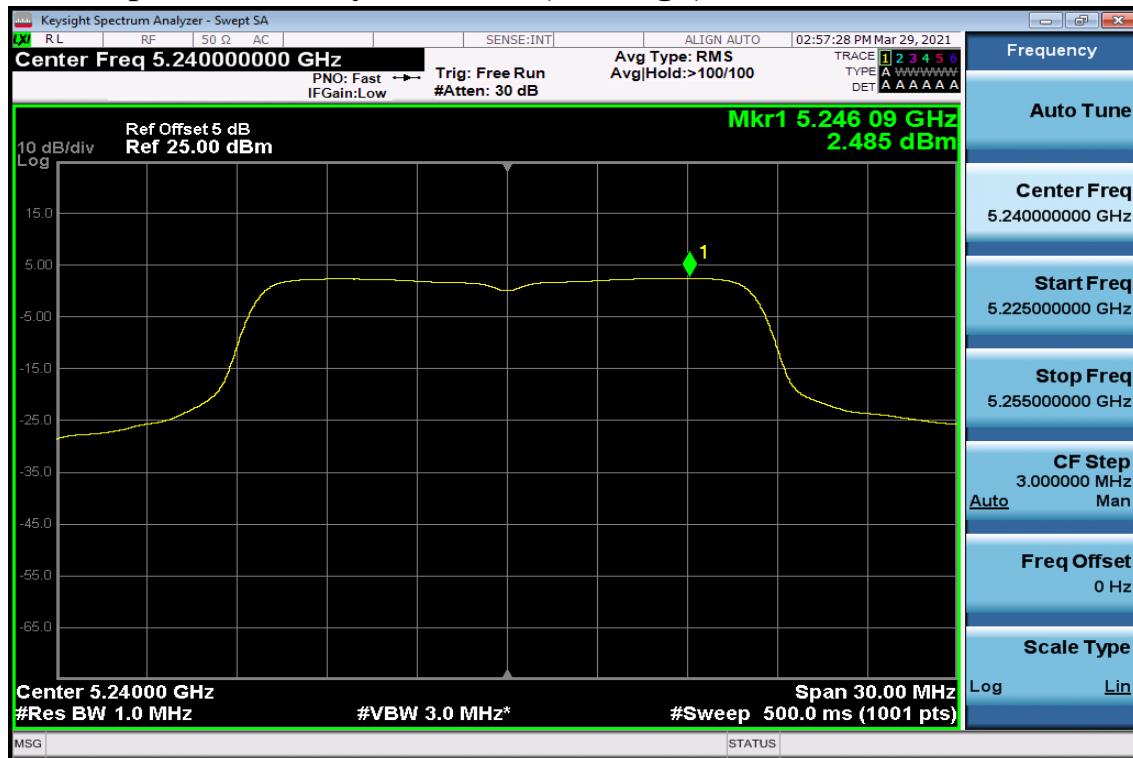
### Power Spectral Density Data Plot (CH Low)



### Power Spectral Density Data Plot (CH Mid)



## Power Spectral Density Data Plot (CH High)

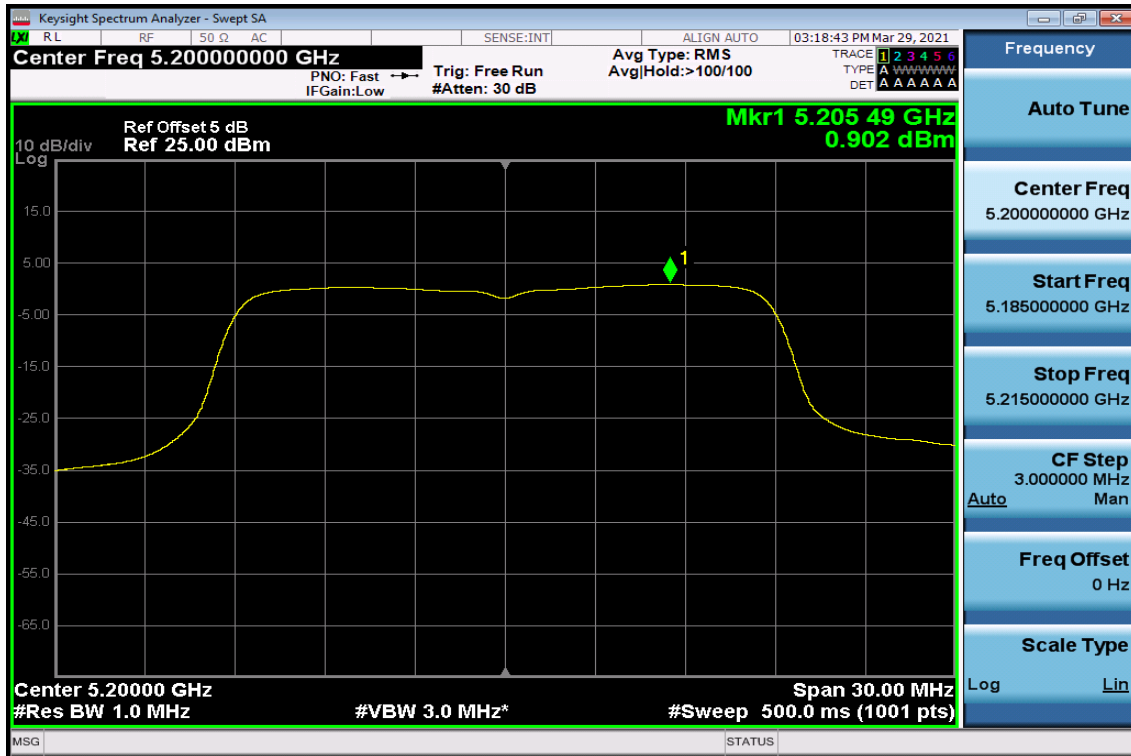


## 802.11n HT20

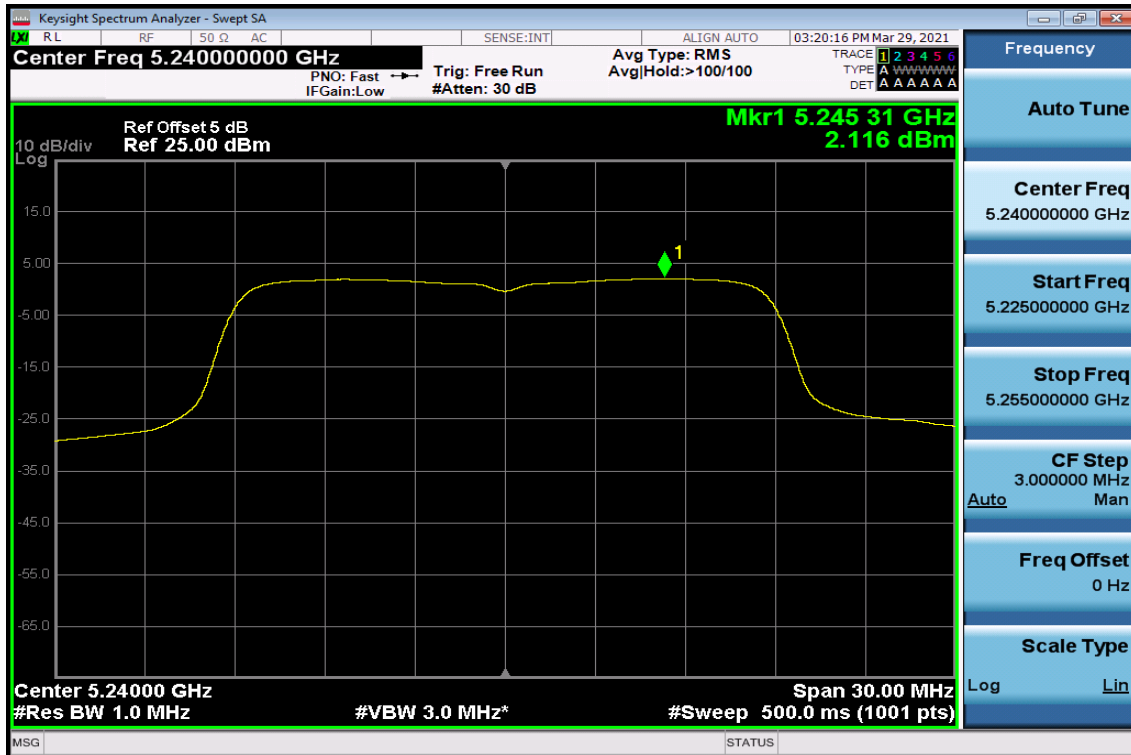
## Power Spectral Density Test Plot (CH-Low)



## Power Spectral Density Test Plot (CH-Mid)

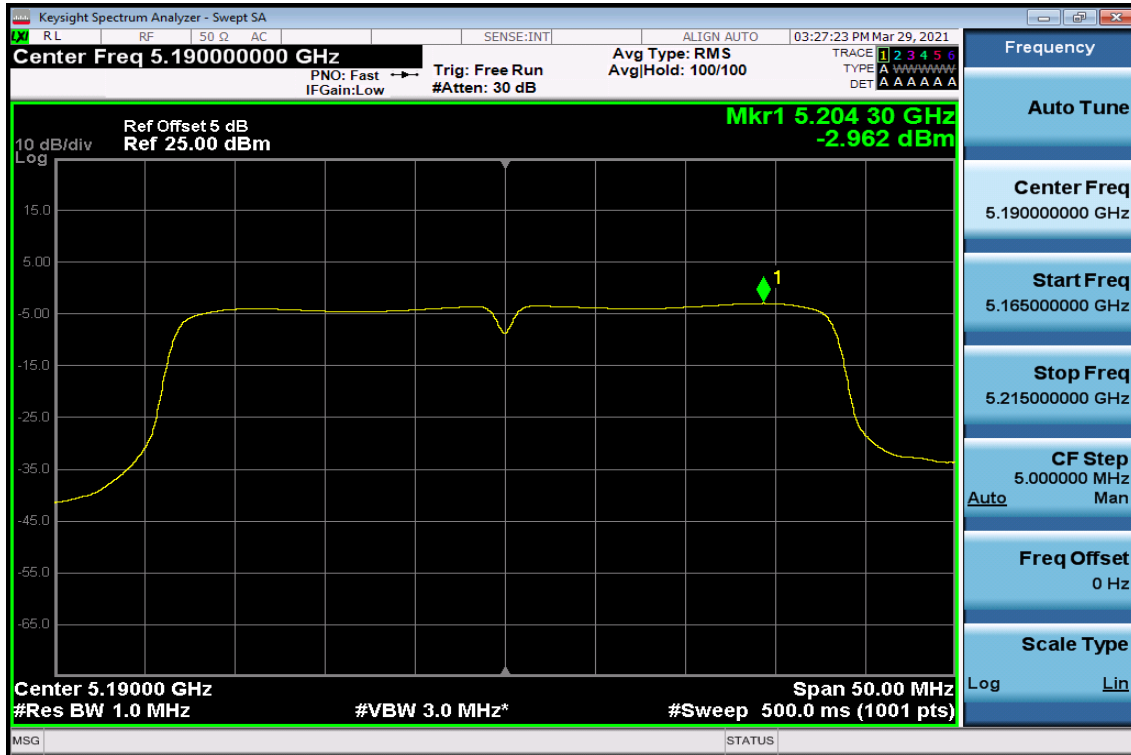


## Power Spectral Density Test Plot (CH-High)



## 802.11n HT40

### Power Spectral Density Test Plot (CH-Low)

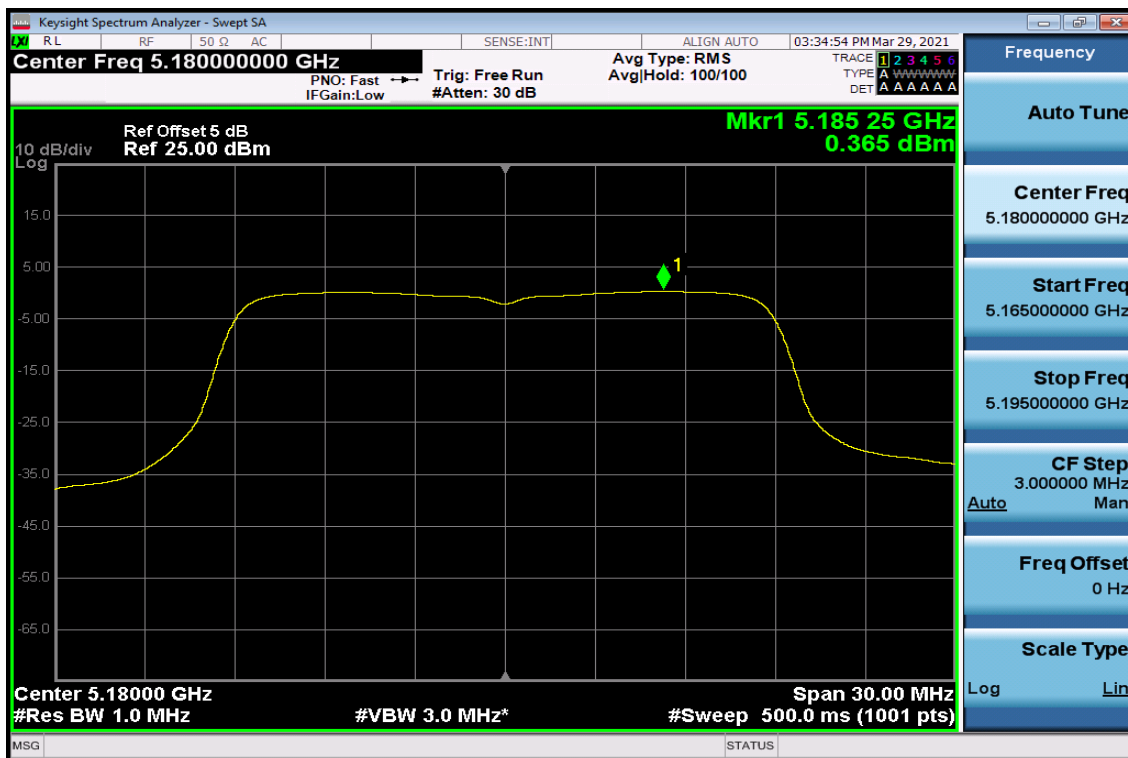


### Power Spectral Density Test Plot (CH-High)

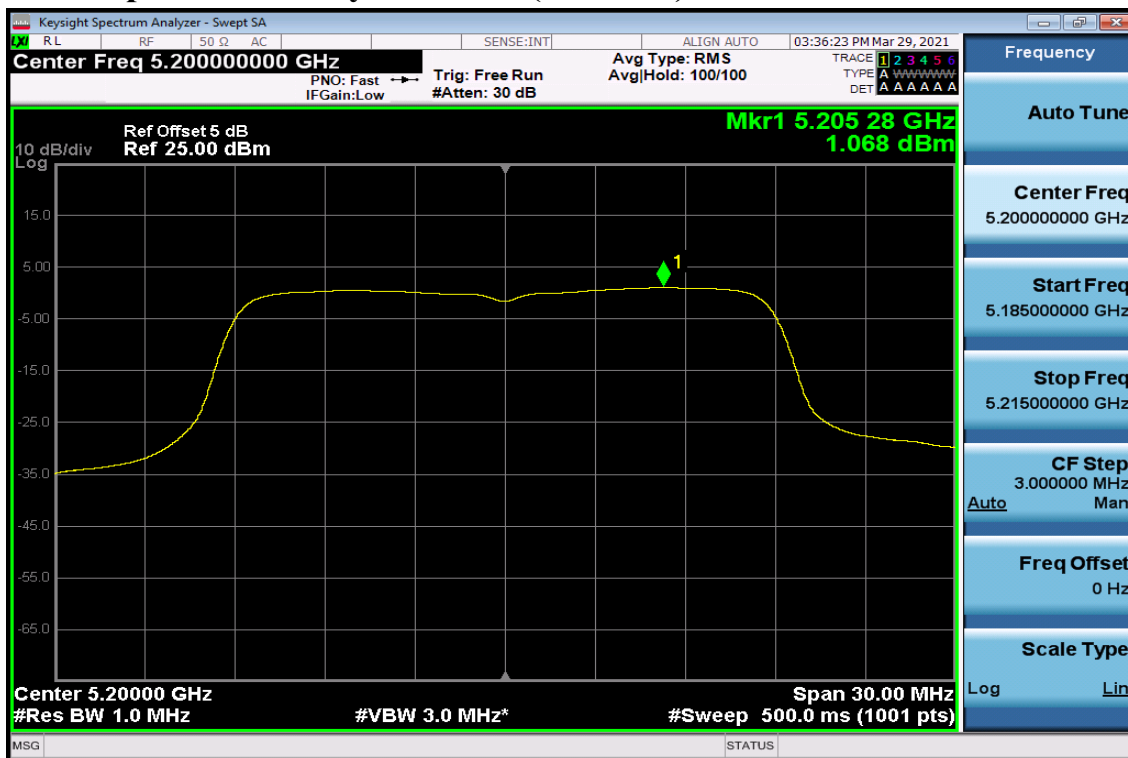


## 802.11n VHT20

### 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)

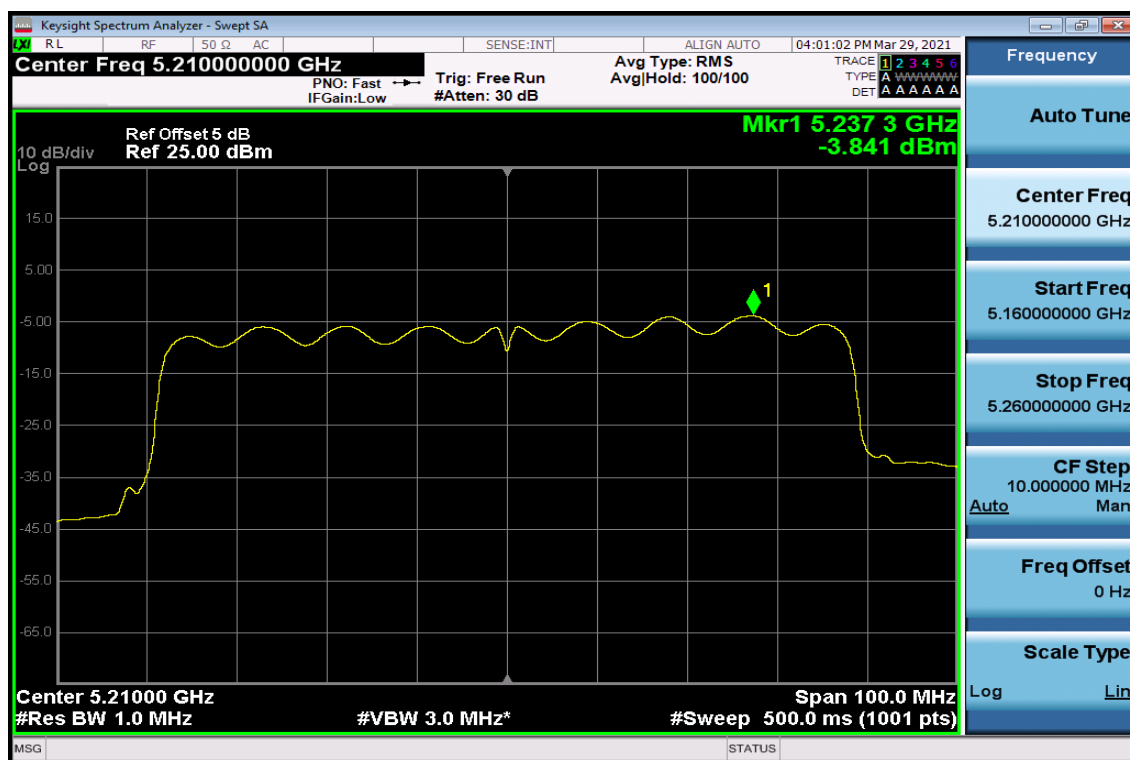


## Power Spectral Density Test Plot (CH-High)



## 802.11ac VHT80

## Power Spectral Density Test Plot (CH-Low)

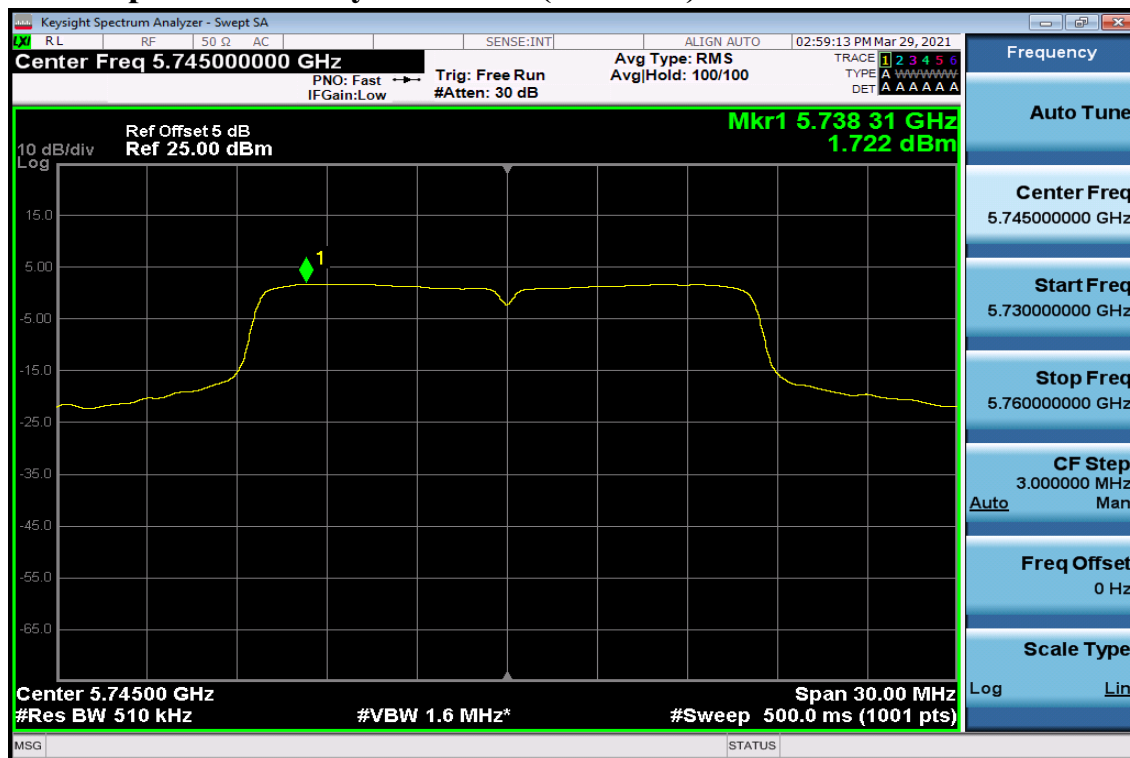




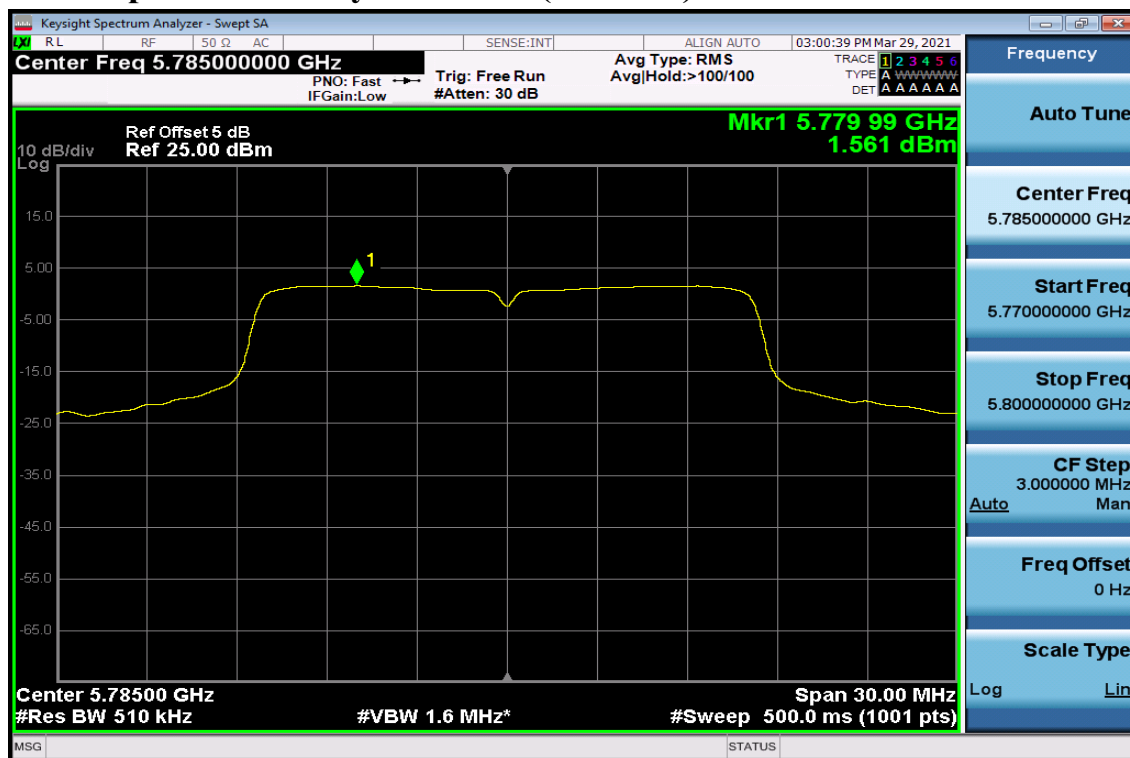
## Band UNII-3

802.11a

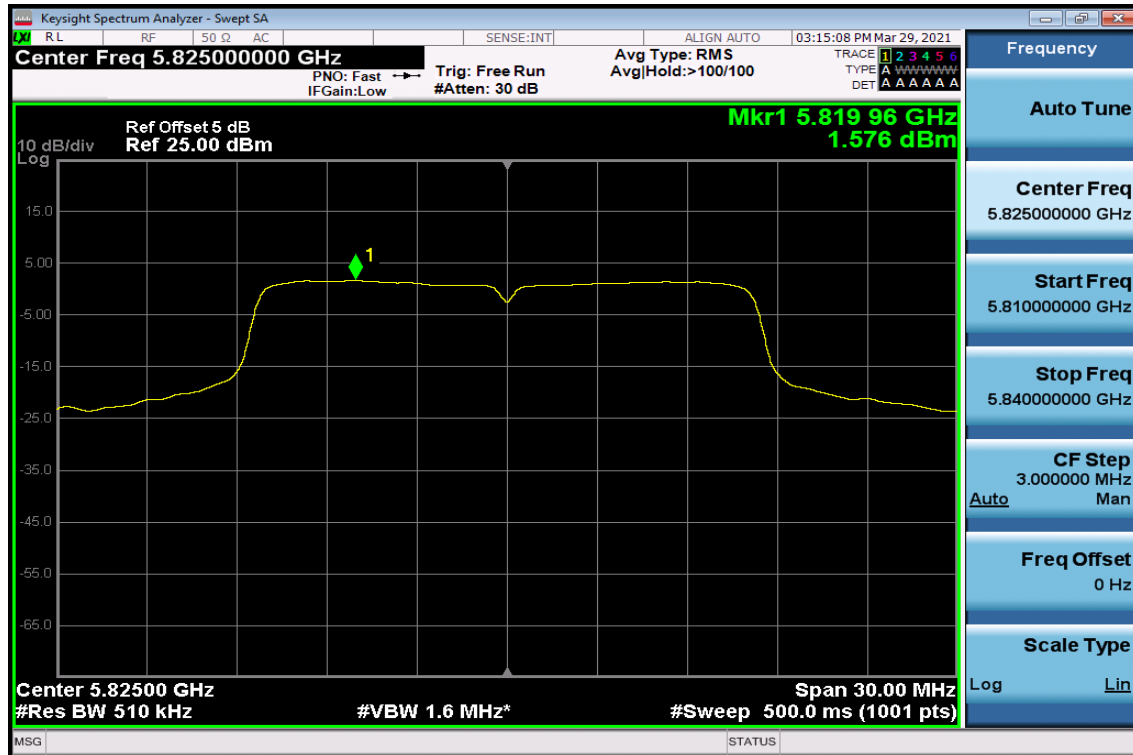
### Power Spectral Density Data Plot (CH Low)



### Power Spectral Density Data Plot (CH Mid)

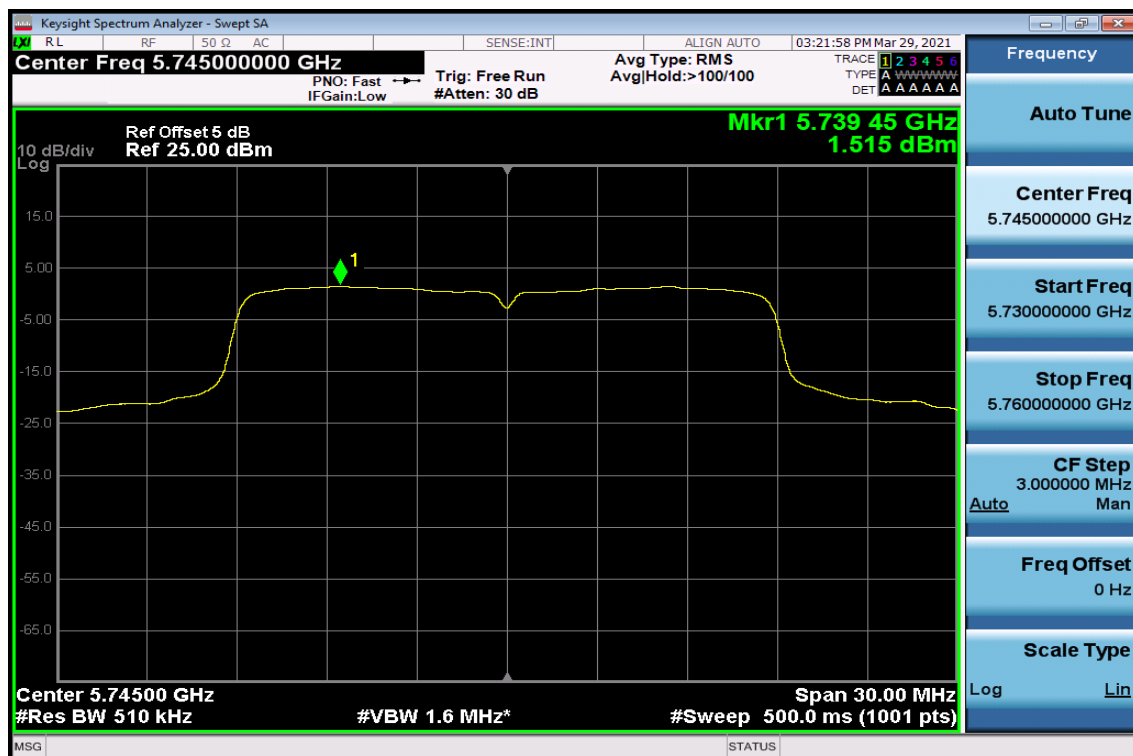


## Power Spectral Density Data Plot (CH High)

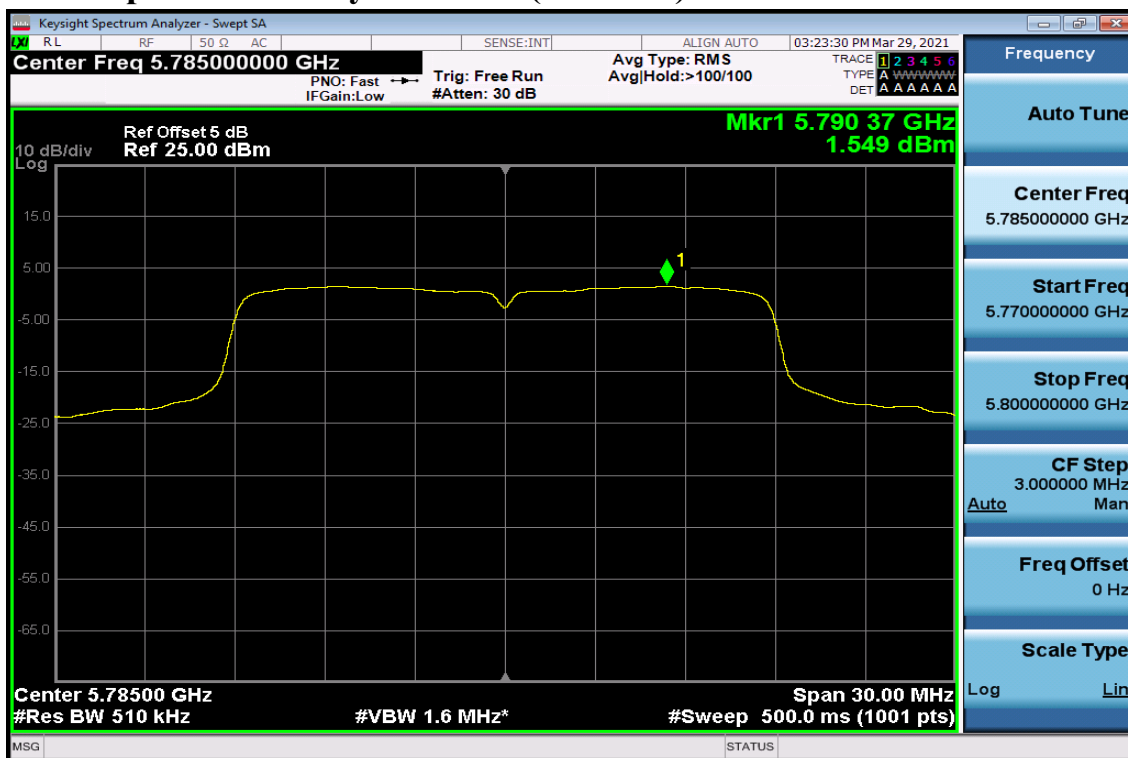


## 802.11n HT20

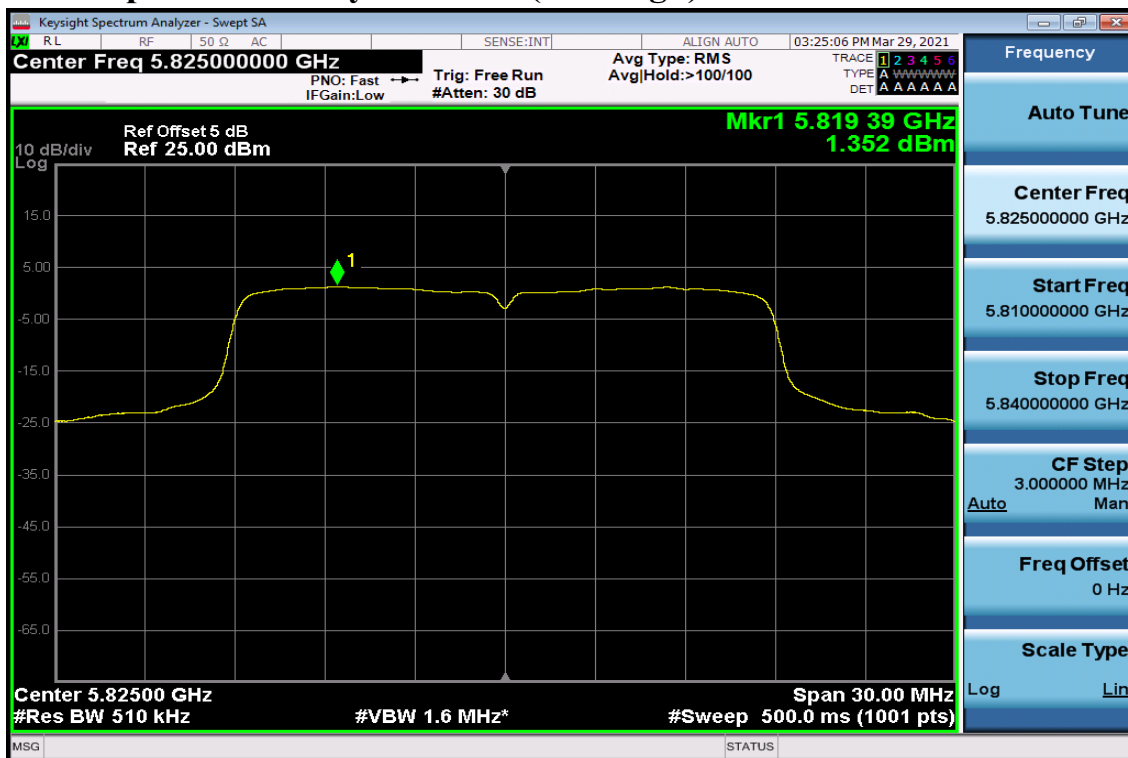
## Power Spectral Density Test Plot (CH-Low)



## Power Spectral Density Test Plot (CH-Mid)



## Power Spectral Density Test Plot (CH-High)



## 802.11n HT40

### Power Spectral Density Test Plot (CH-Low)

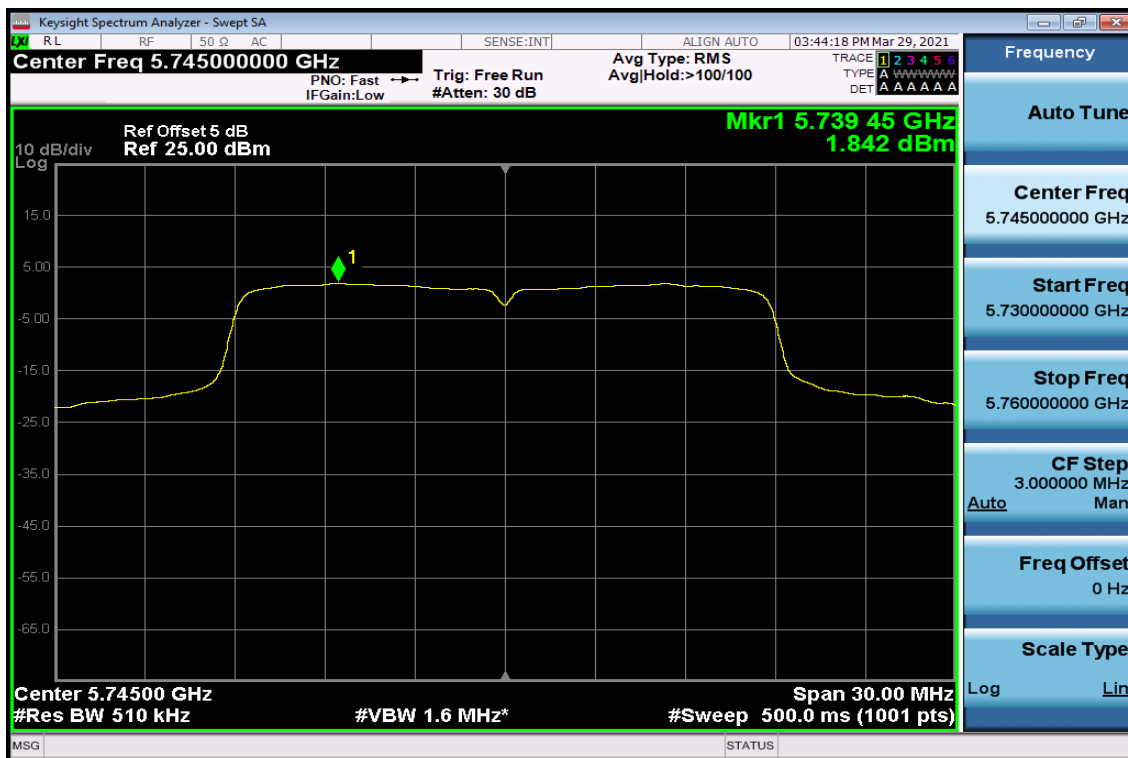


### Power Spectral Density Test Plot (CH-High)

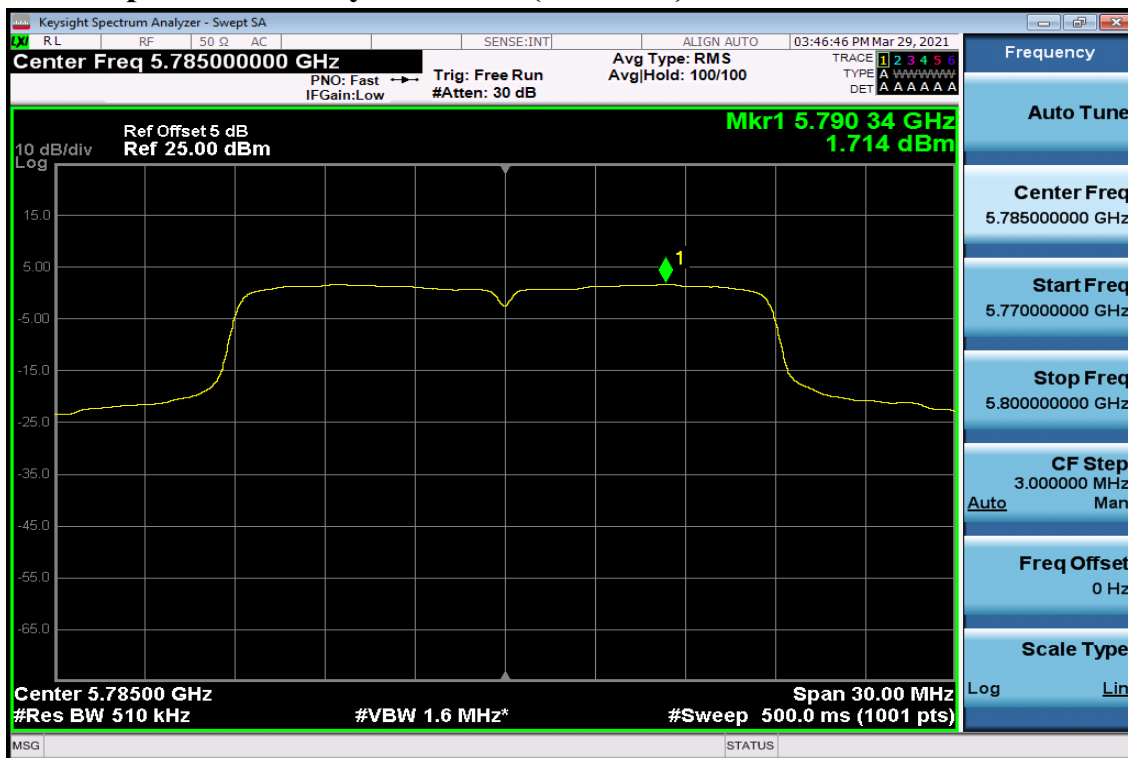


## 802.11n VHT20

### 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)



Keysight Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:INT ALIGN AUTO 03:57:48 PM Mar 29, 2021

**Center Freq 5.795000000 GHz** Avg Type: RMS  
 PNO: Fast Trig: Free Run Avg|Hold: 100/100  
 IFGain:Low #Atten: 30 dB

TRACE 1 2 3 4 5 6  
 TYPE A W W W W W W  
 DET A A A A A A

Ref Offset 5 dB  
 Ref 25.00 dBm

**Mkr1 5.796 80 GHz**  
**-2.201 dBm**

10 dB/div  
 Log

Center 5.79500 GHz Span 50.00 MHz  
 #Res BW 510 kHz #VBW 1.6 MHz\* #Sweep 500.0 ms (1001 pts)

MSG STATUS

Keysight Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:INT ALIGN:AUTO 04:03:10 PM Mar 29, 2021

**Center Freq 5.77500000 GHz** PNO: Fast IF Gain: Low Trig: Free Run #Atten: 30 dB Avg Type: RMS Avg Hold: 100/100

TRACE 1 2 3 4 5 6 TYPE A A A A A A A A DET A A A A A A A A

Ref Offset 5 dB Ref 25.00 dBm

**Mkr1 5.793 0 GHz -4.171 dBm**

10 dB/div Log

The spectrum analyzer display shows a signal centered at 5.775 GHz. The frequency span is 100.0 MHz, and the resolution bandwidth (RBW) is 1.6 MHz. The signal level is approximately -4.171 dBm at the marker frequency of 5.793 GHz. The display includes a grid and a trace showing the signal spectrum.

Center 5.77500 GHz #Res BW 510 kHz #VBW 1.6 MHz\* Span 100.0 MHz #Sweep 500.0 ms (1001 pts)

Frequency Auto Tune

Center Freq 5.77500000 GHz

Start Freq 5.725000000 GHz

Stop Freq 5.825000000 GHz

CF Step 10.000000 MHz Auto Man

Freq Offset 0 Hz

Scale Type Log Lin

## **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.



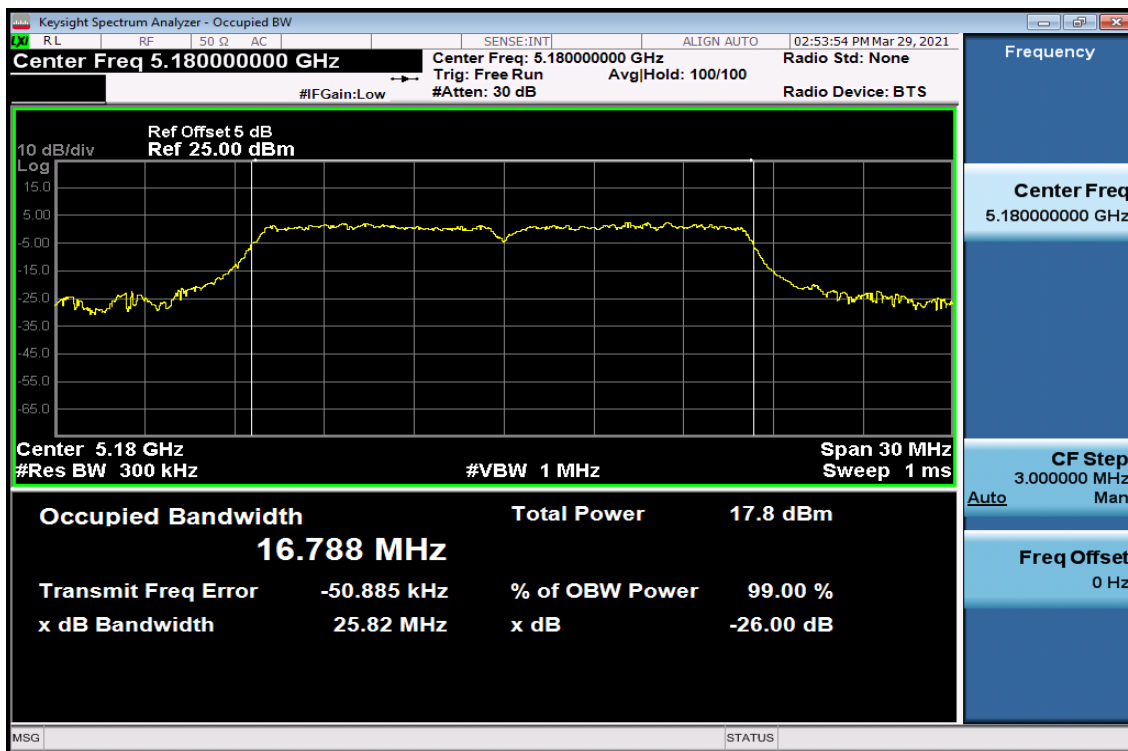
## 7.5. Measurement Result

Band	Mode	Frequency (MHz)	26dB Bandwidth (MHz)	99% OBW (MHz)
UNII-1	11a	5180	25.819	16.788
		5200	28.448	16.892
		5240	29.743	17.009
	HT20	5180	21.657	17.782
		5200	25.779	17.815
		5240	28.538	17.931
	HT40	5190	43.749	36.250
		5230	46.588	36.281
	VHT20	5180	22.040	17.800
		5200	25.676	17.855
		5240	29.998	18.036
	VHT40	5190	43.603	36.276
		5230	46.037	36.262
	VHT80	5210	90.123	75.160

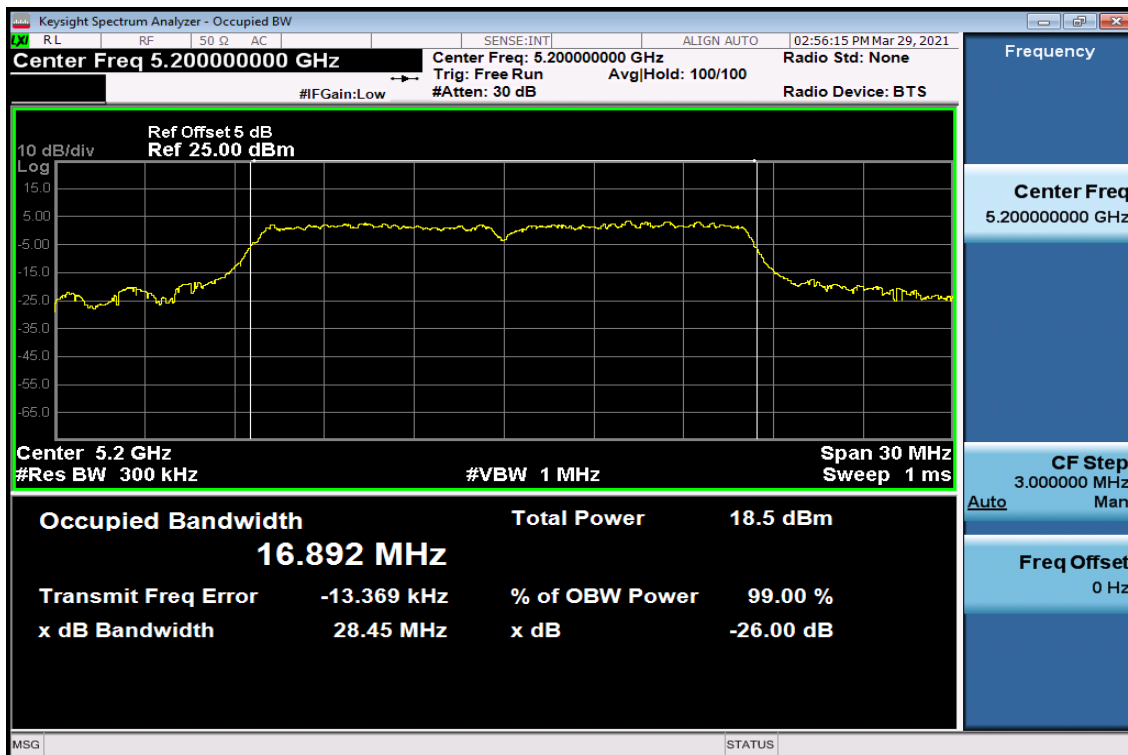
## Band UNII-1

802.11a

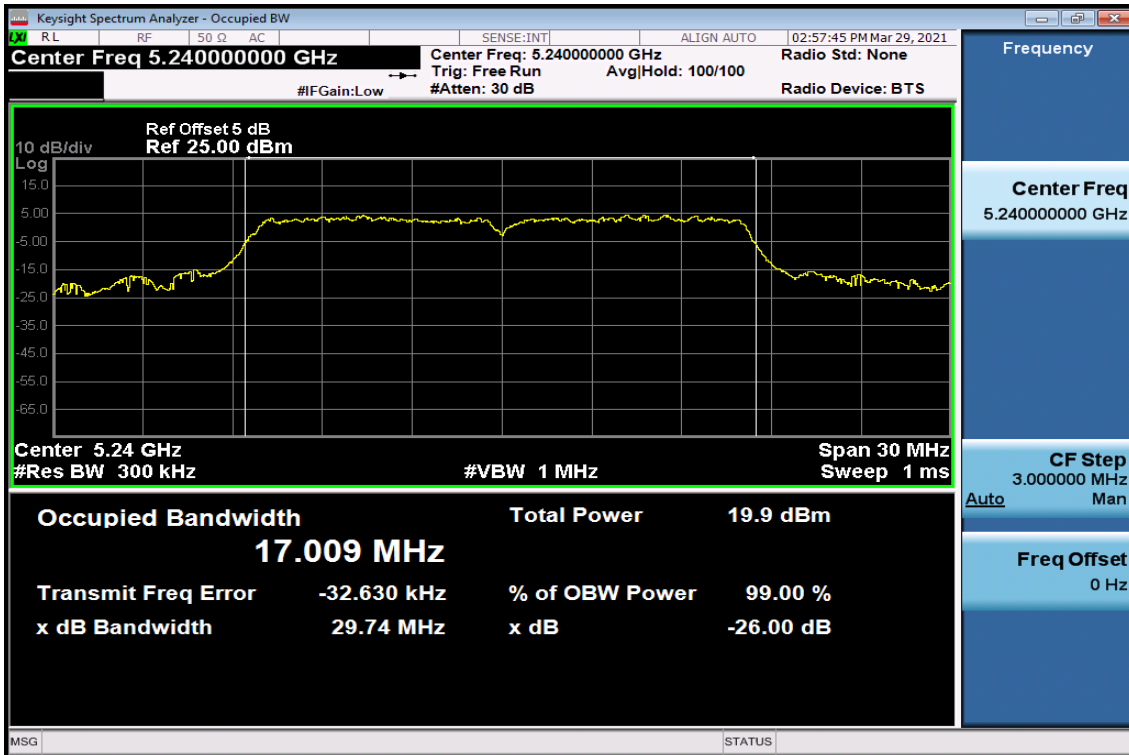
26dB / 99% Band Width Test Data CH-Low



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

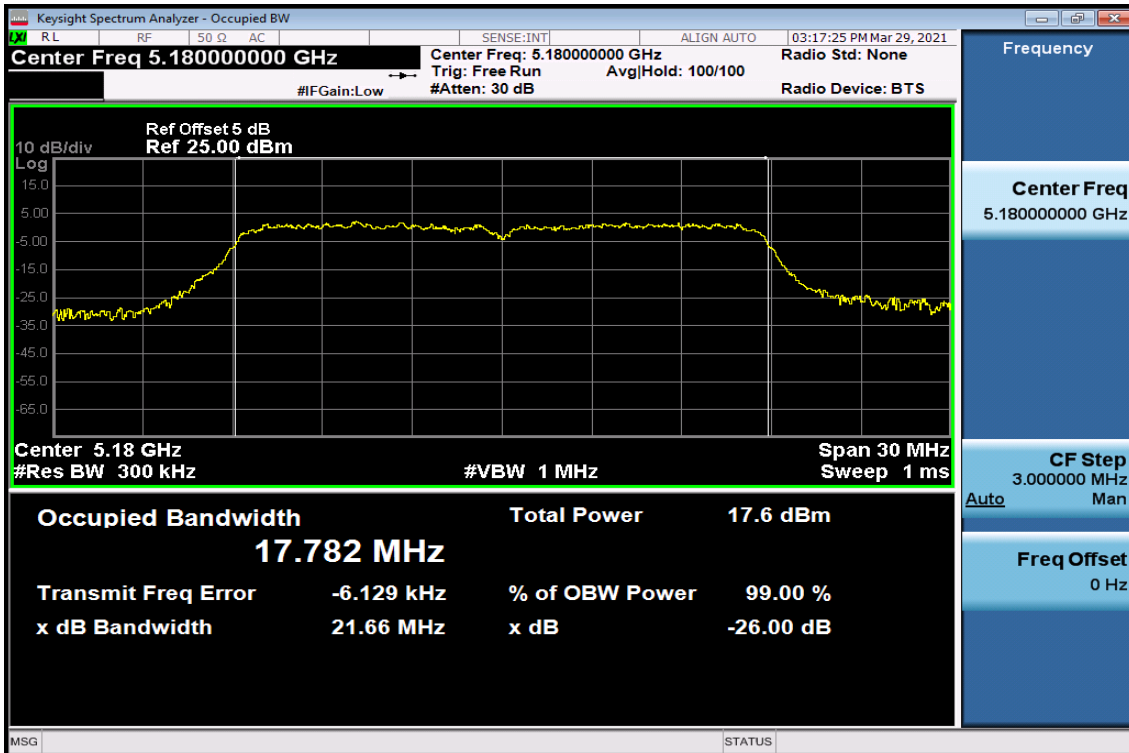


## 26dB / 99% Band Width Test Data CH-High

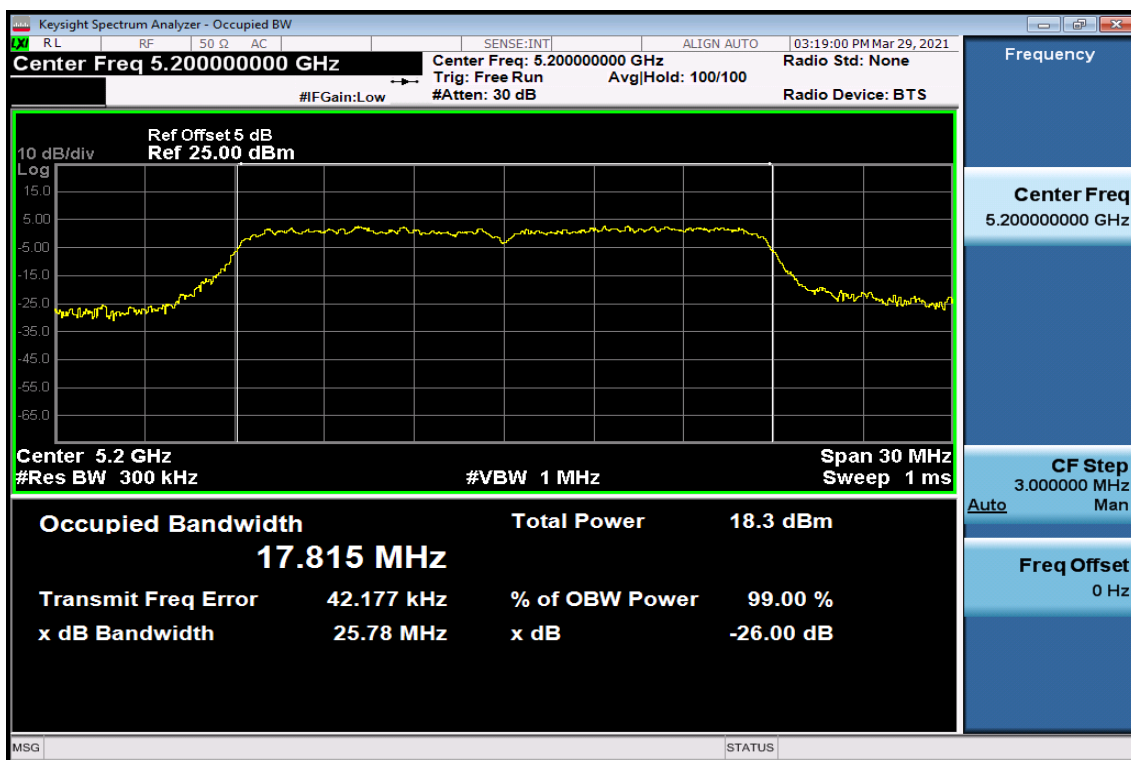


## 802.11n HT20

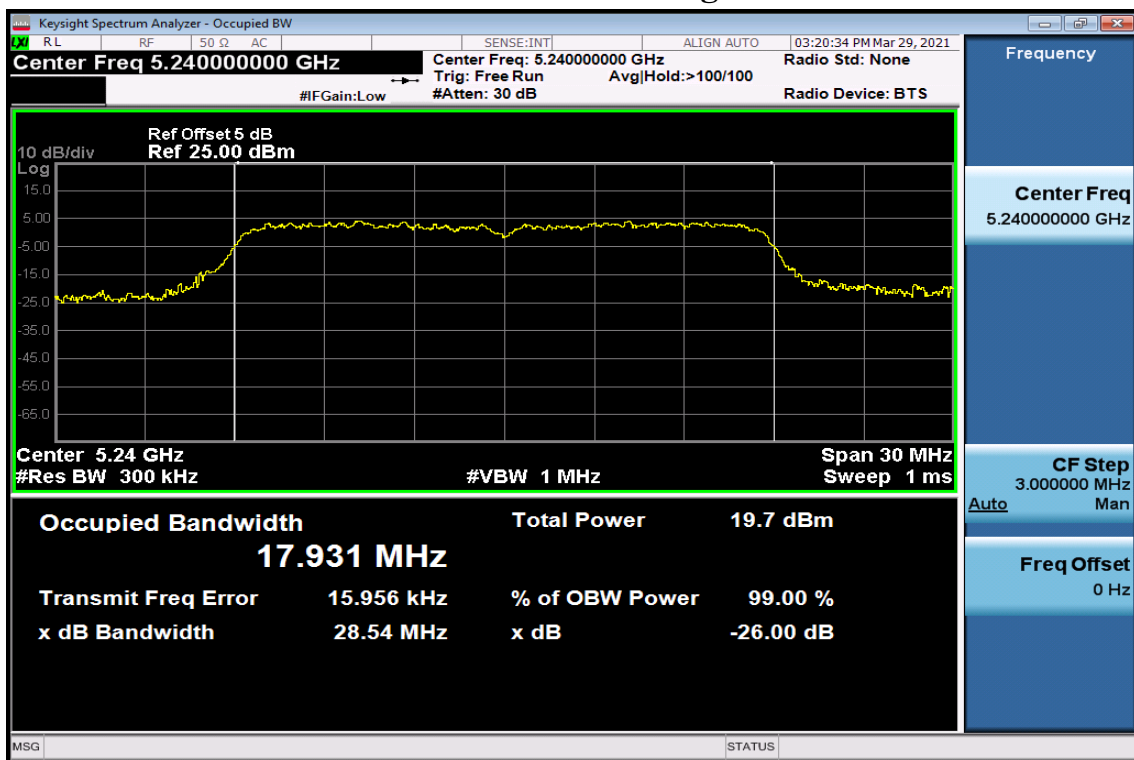
## 26dB / 99% Band Width Test Data CH-Low



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

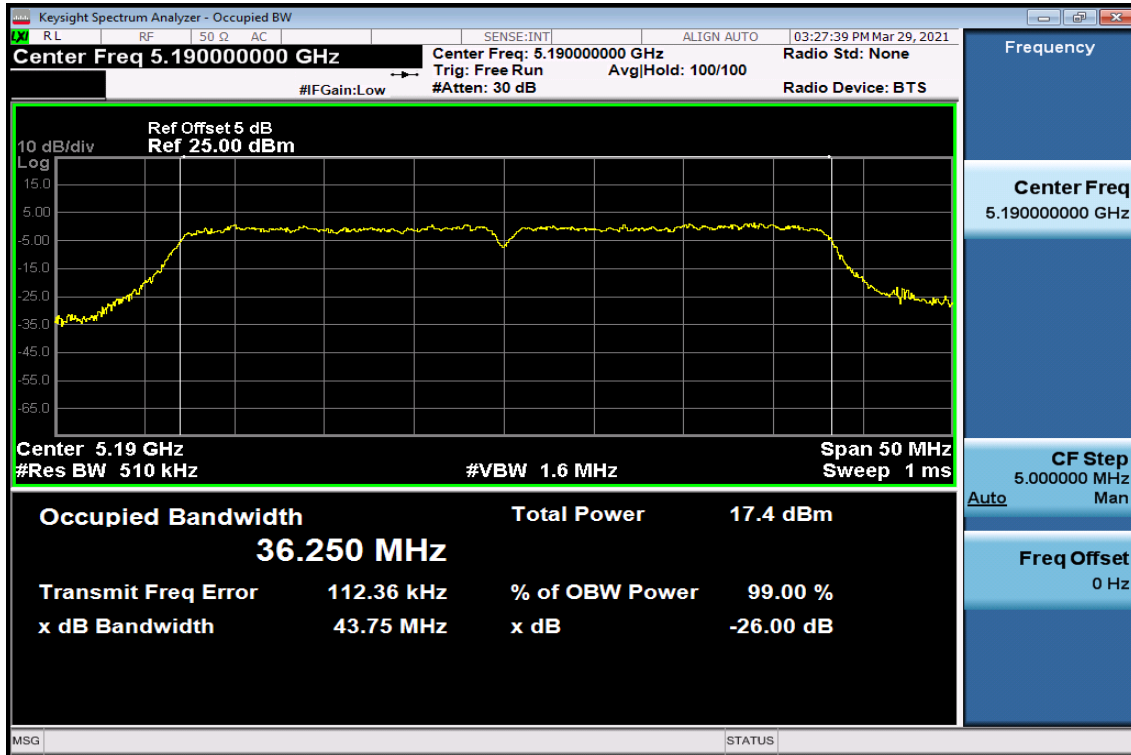


## 26dB / 99% Band Width Test Data CH-High

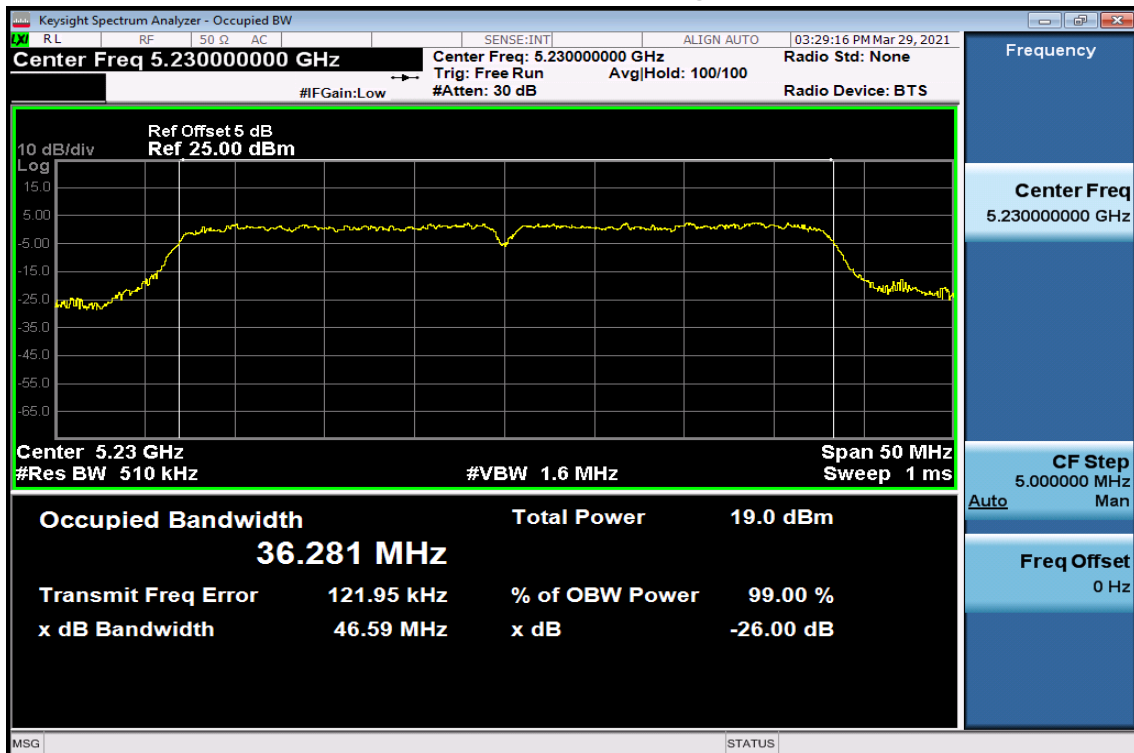


## 802.11n HT40

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

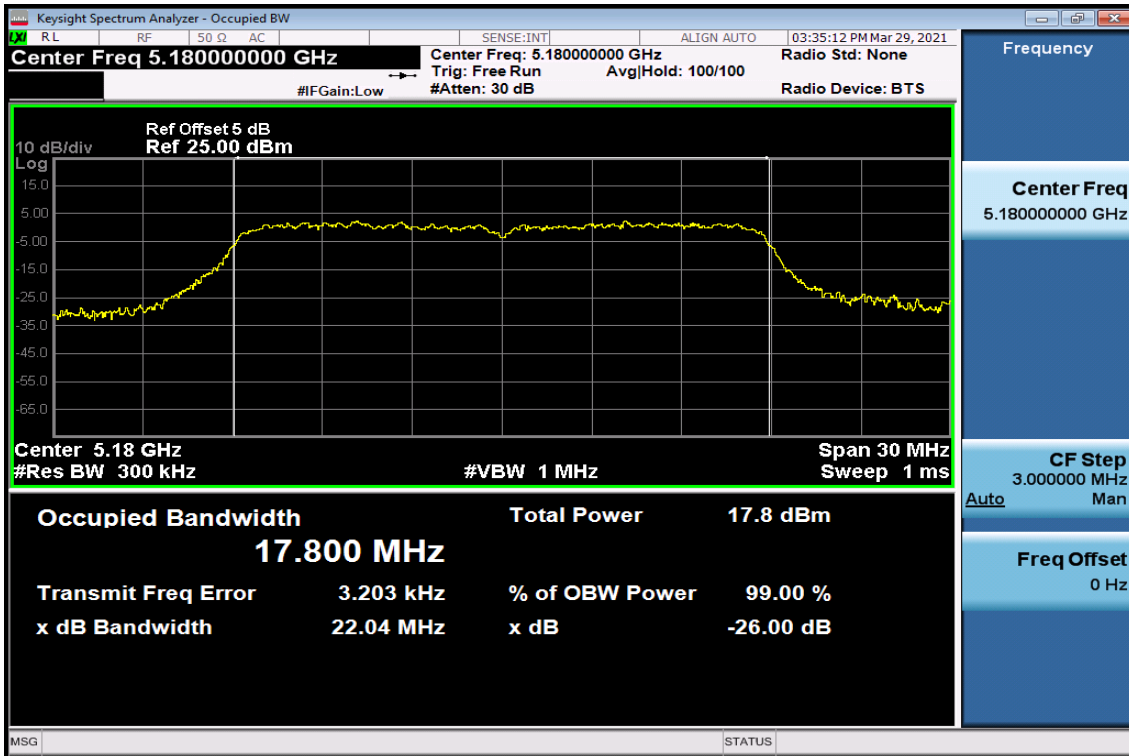


### 26dB / 99% Band Width Test Data CH-High

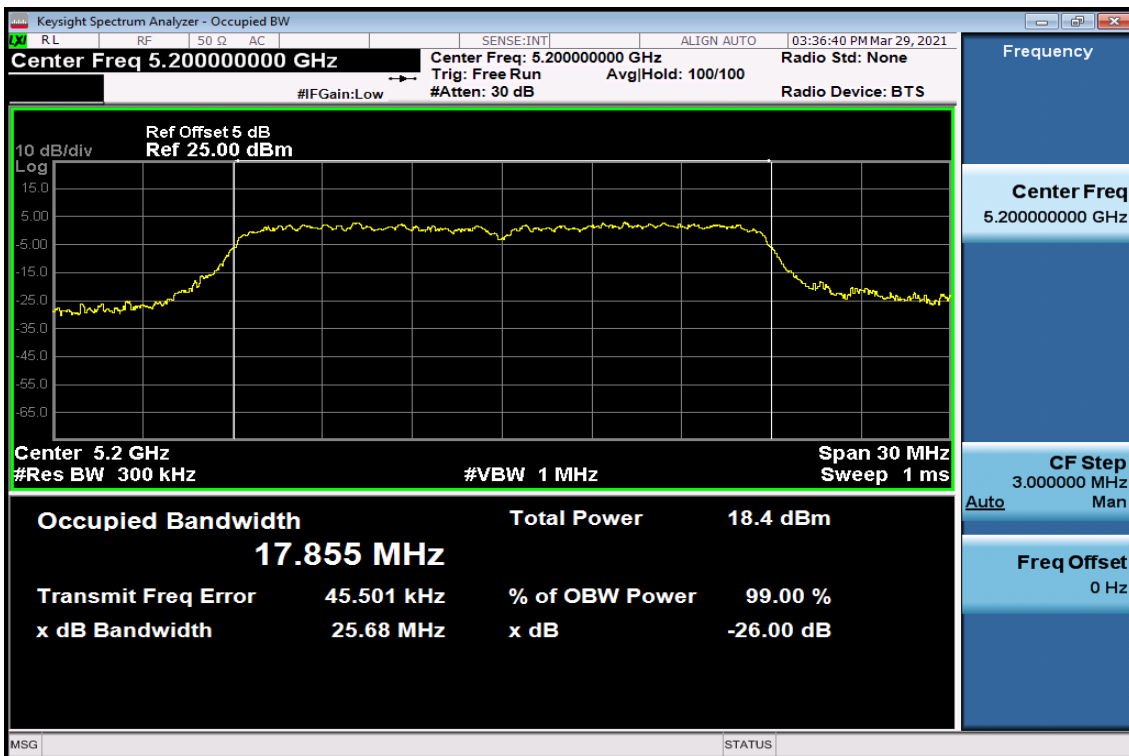


## 802.11n VHT20

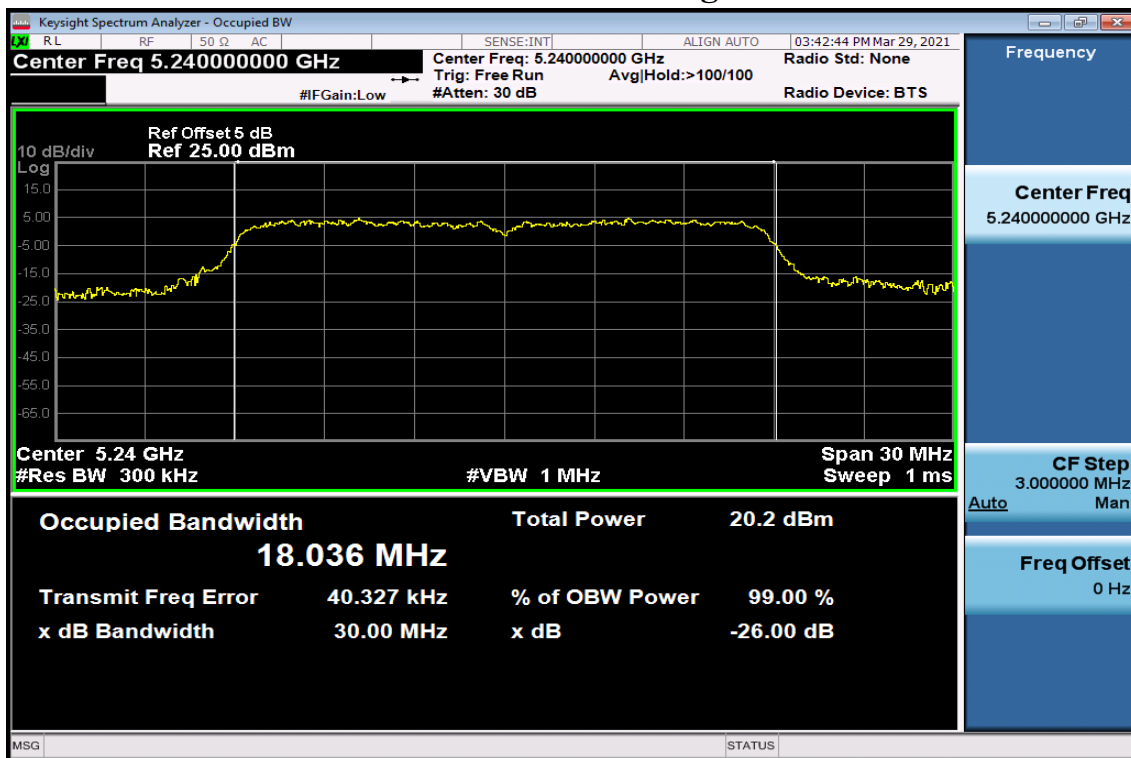
### 26dB / 99% Band Width Test Data CH-Low



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

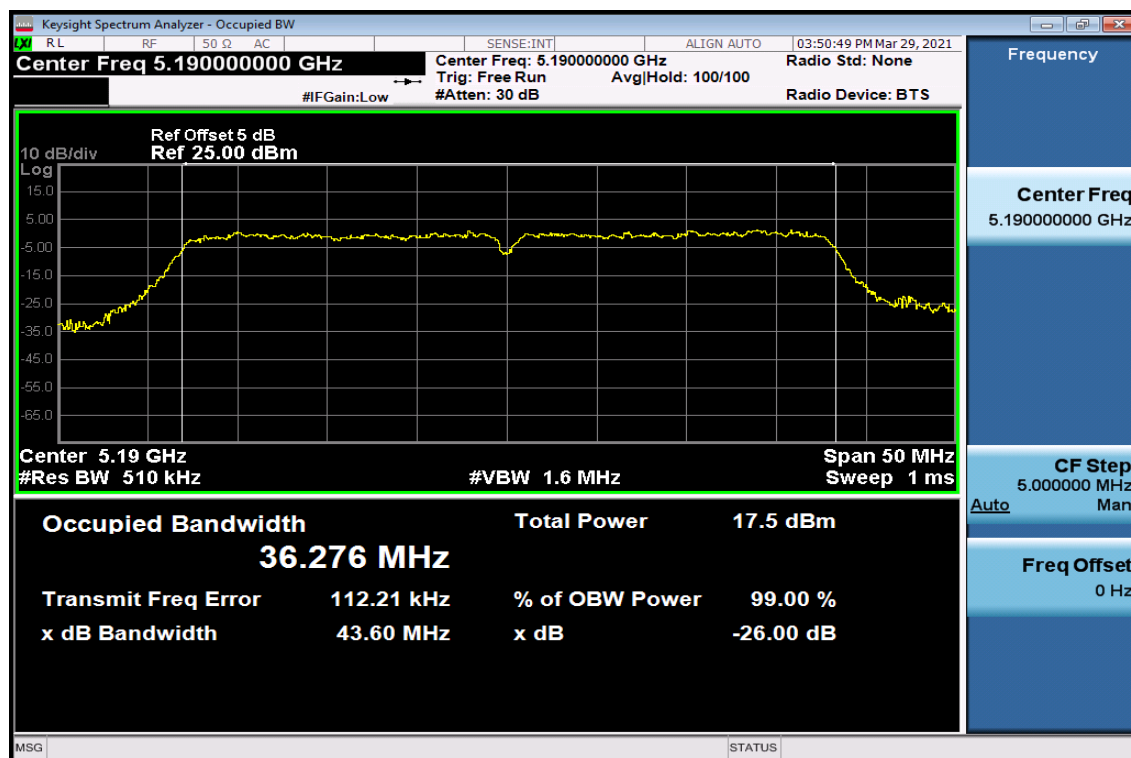


## 26dB / 99% Band Width Test Data CH-High



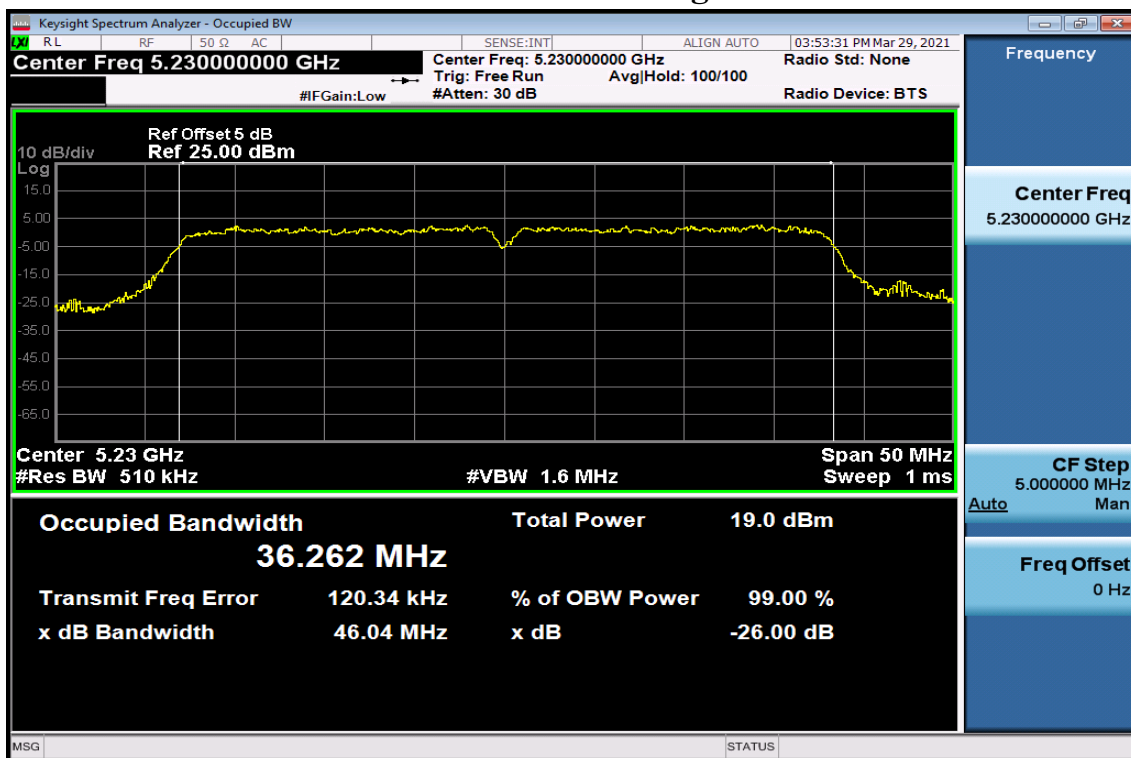
## 802.11n VHT40

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



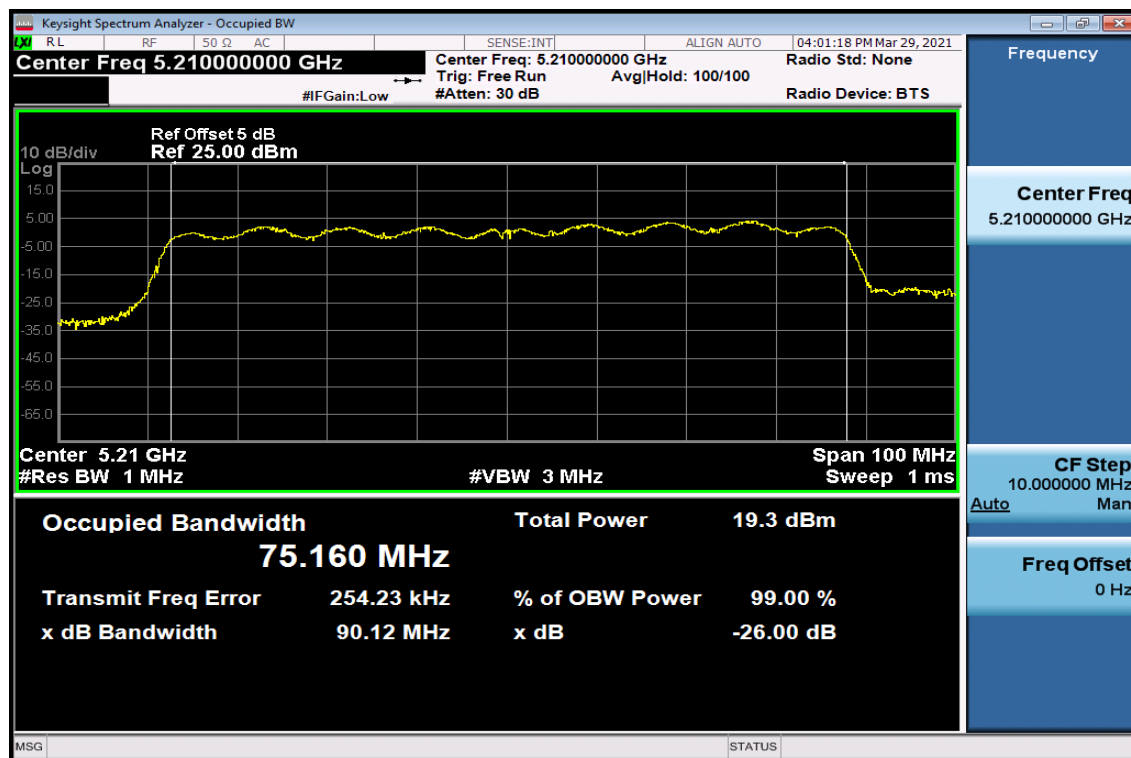


## 26dB / 99% Band Width Test Data CH-High



## 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.

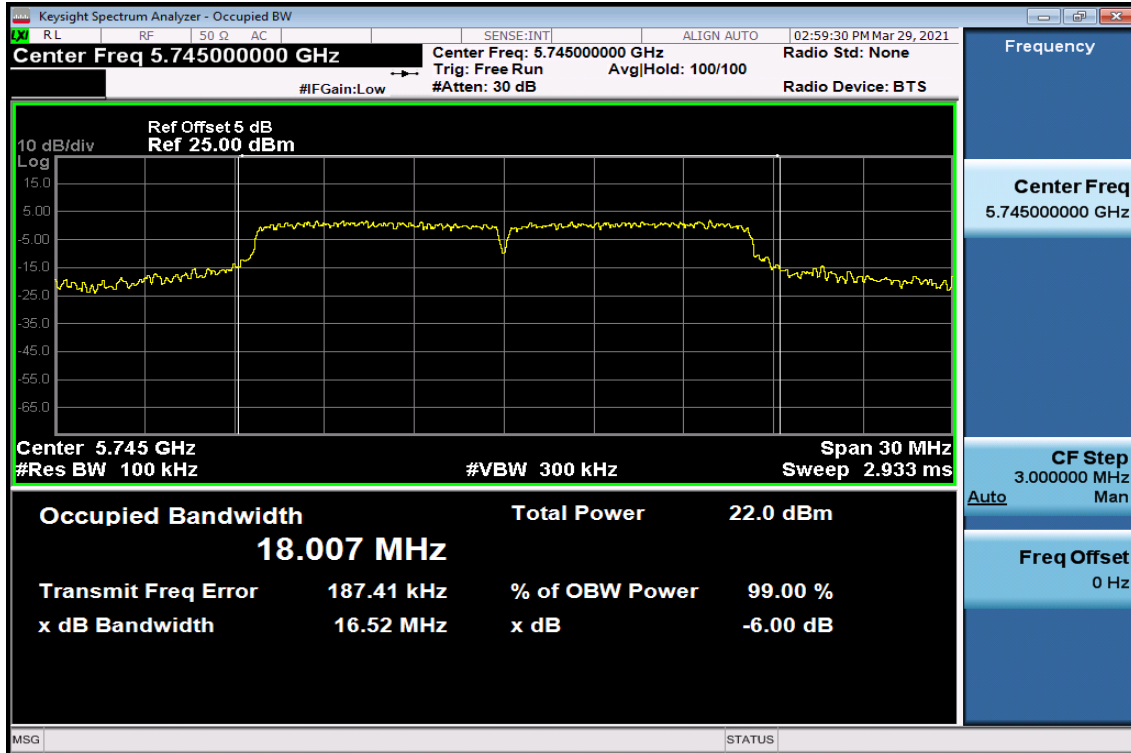
## 8.5. Measurement Result

Band	Mode	Frequency (MHz)	6dB Bandwidth (MHz)	99% OBW (MHz)	6dB BW Limit (kHz)
UNII-3	11a	5745	16.516	18.007	> 500
		5785	16.533	17.398	> 500
		5825	16.534	17.320	> 500
	HT20	5745	17.728	18.509	> 500
		5785	17.723	18.035	> 500
		5825	17.681	17.890	> 500
	HT40	5755	36.453	36.282	> 500
		5795	36.452	36.228	> 500
	VHT20	5745	17.715	18.971	> 500
		5785	17.699	18.180	> 500
		5825	17.728	17.923	> 500
	VHT40	5755	36.448	36.276	> 500
		5795	36.447	36.233	> 500
	VHT80	5775	75.851	75.659	> 500

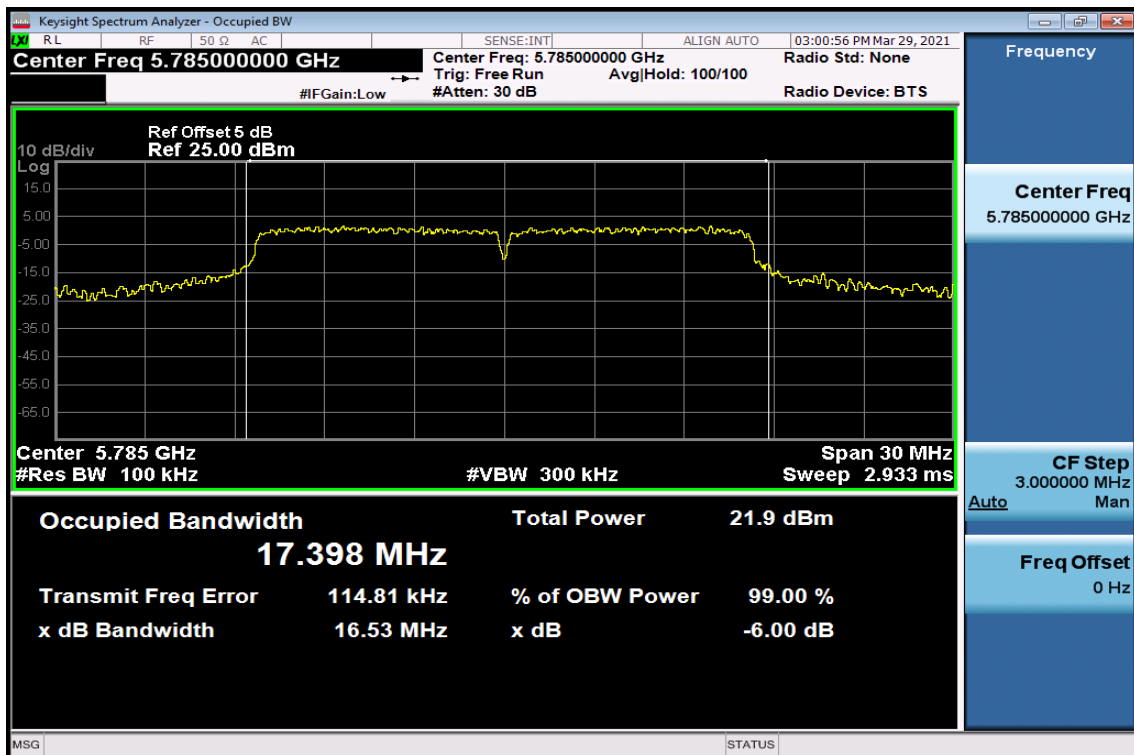
## Band UNII-3

802.11a

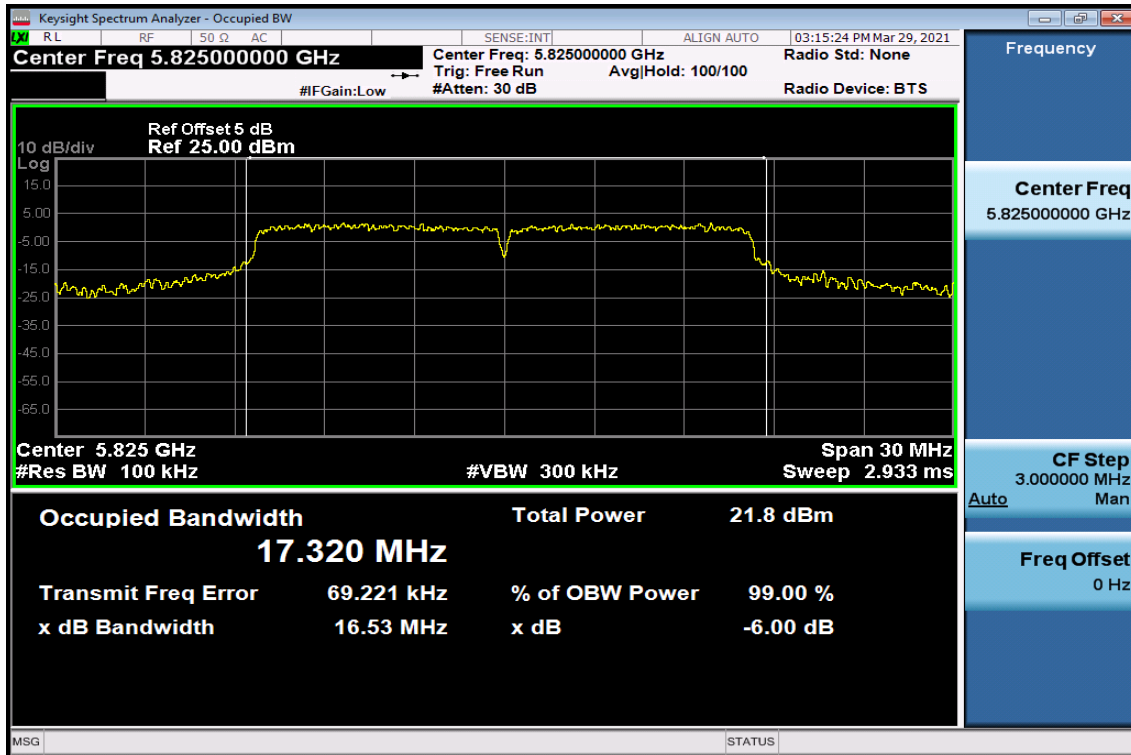
### 6dB Band Width Test Data CH-Low



### 6dB Band Width Data CH-Mid

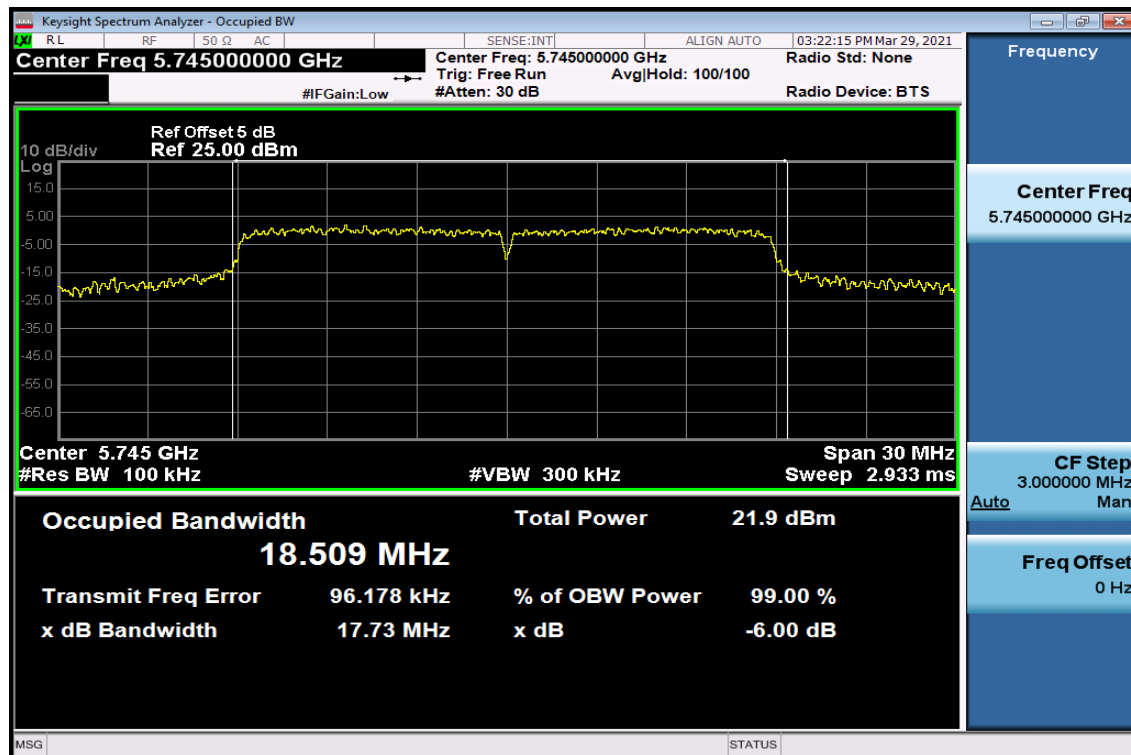


## 6dB Band Width Data CH-High

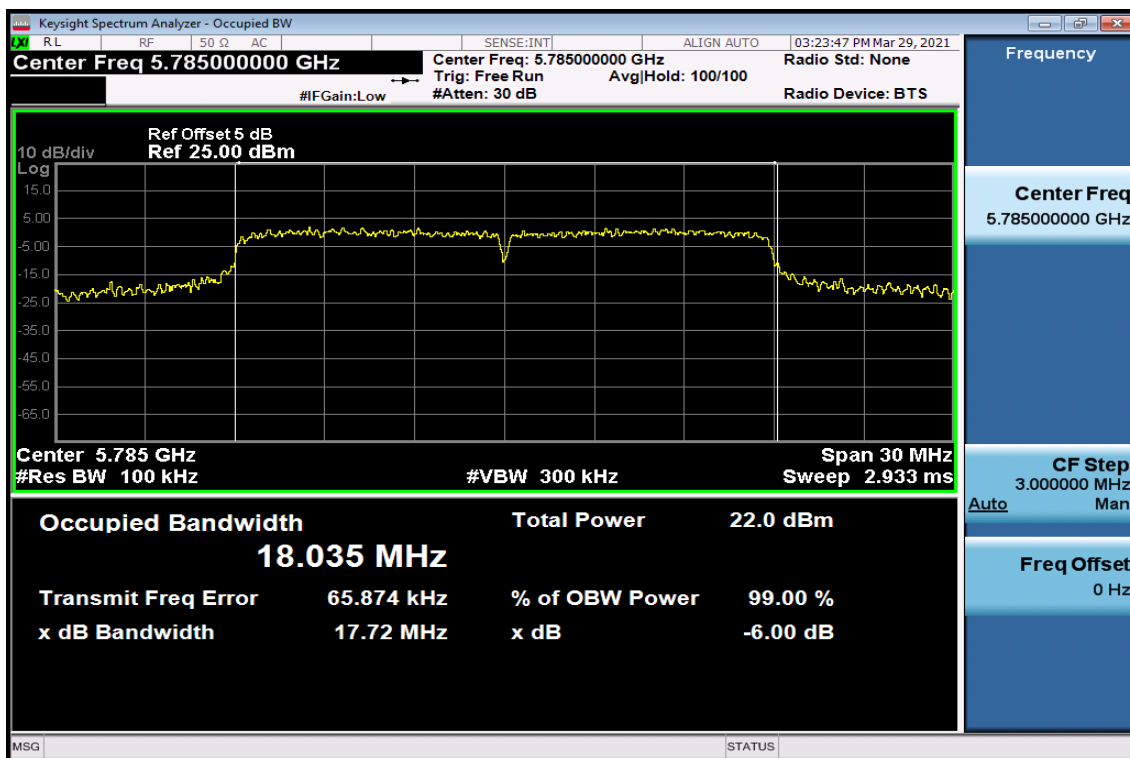


## 802.11n HT20

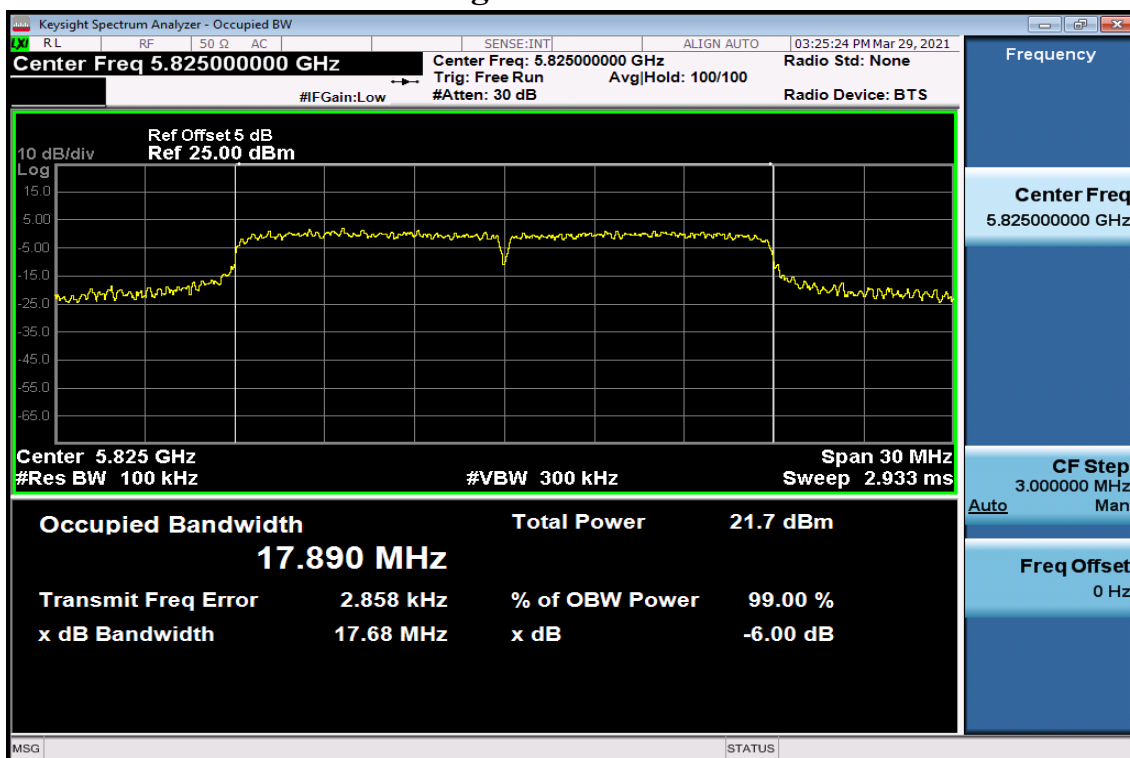
## 6dB Band Width Data CH-Low



## 6dB Band Width Data CH-Mid

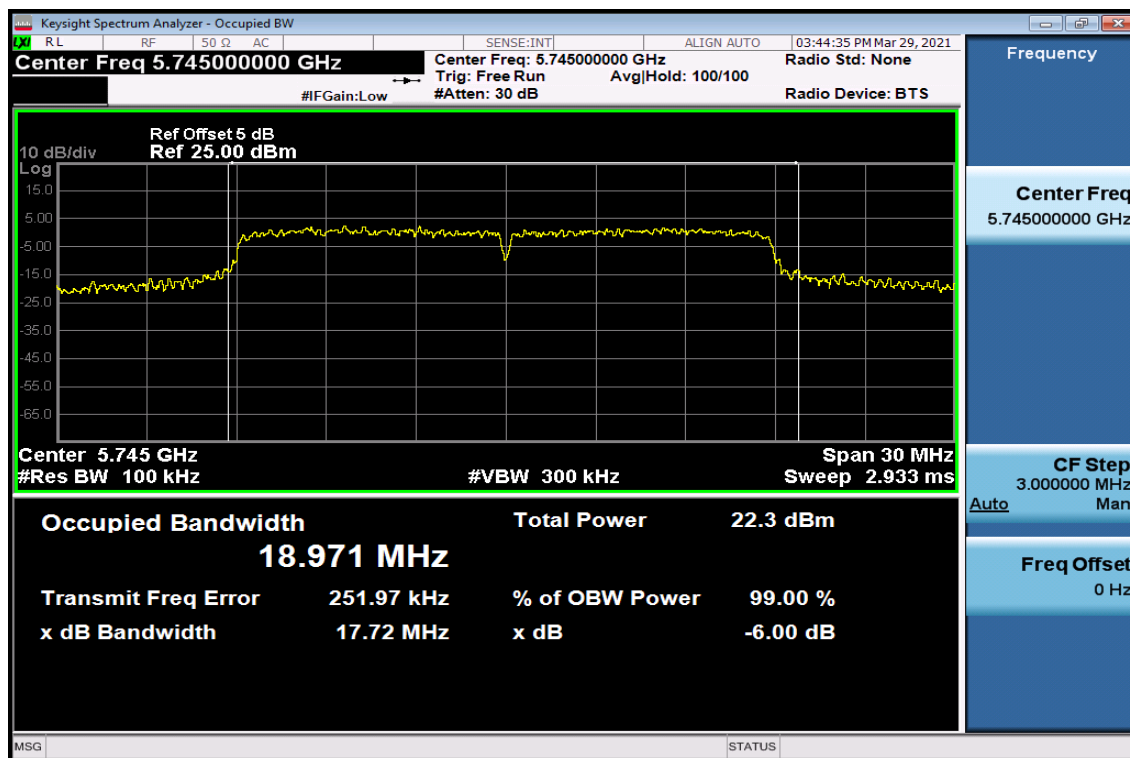


## 6dB Band Width Data CH-High

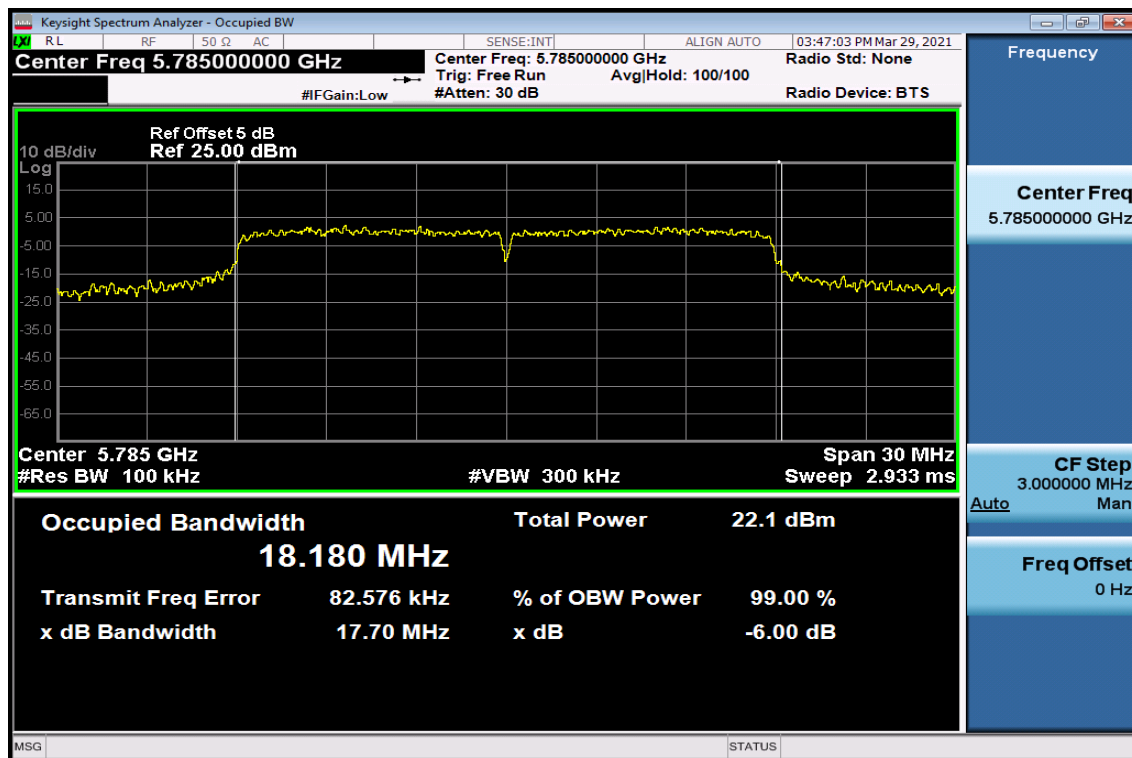


## 802.11ac VHT20

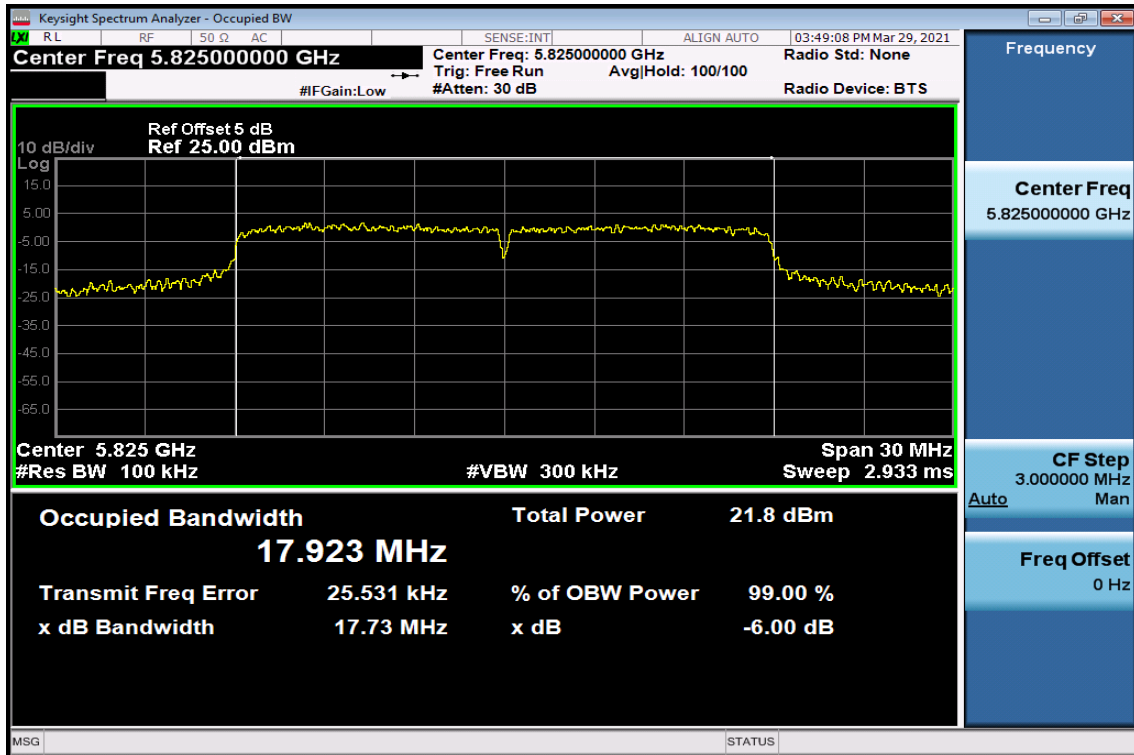
### 6dB Band Width Data CH-Low



### 6dB Band Width Data CH-Mid

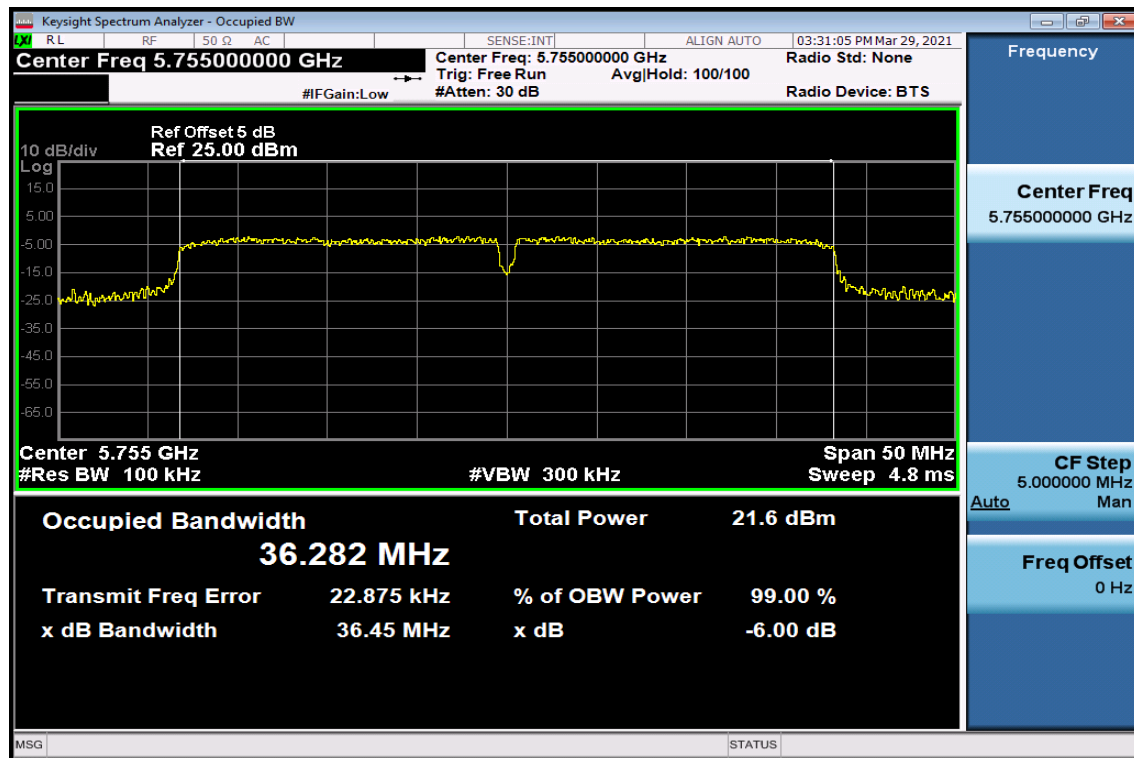


## 6dB Band Width Data CH-High

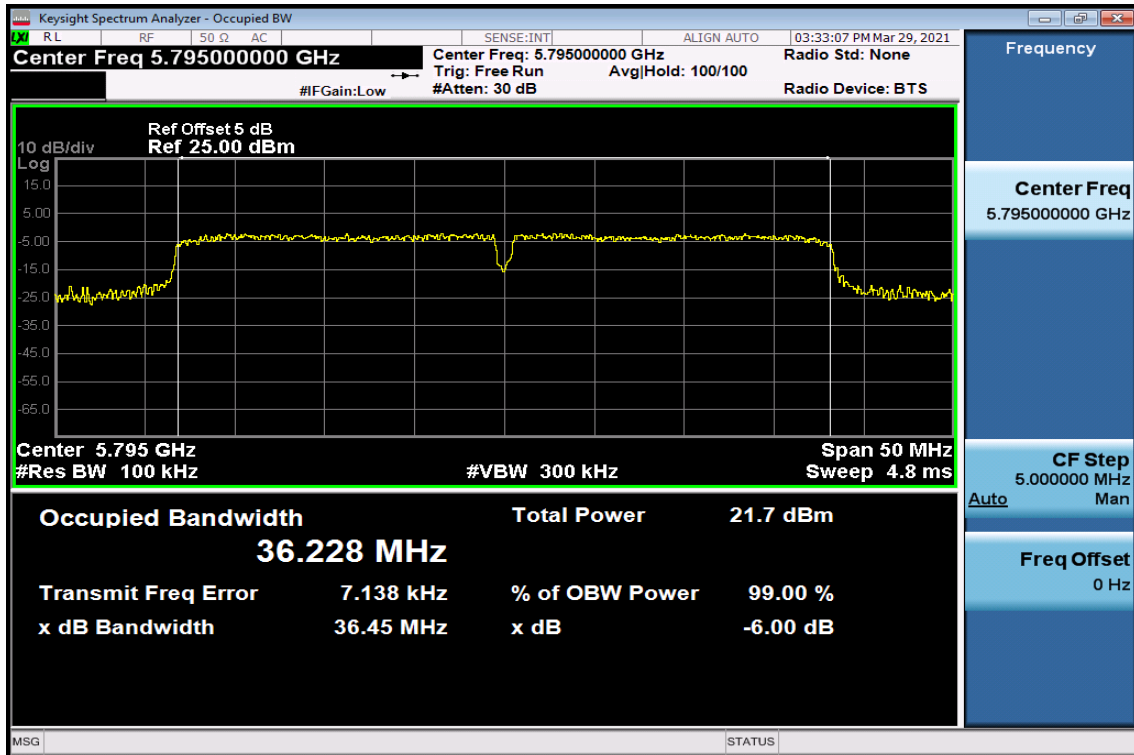


## 802.11n HT40

## 6dB Band Width Data CH-Low

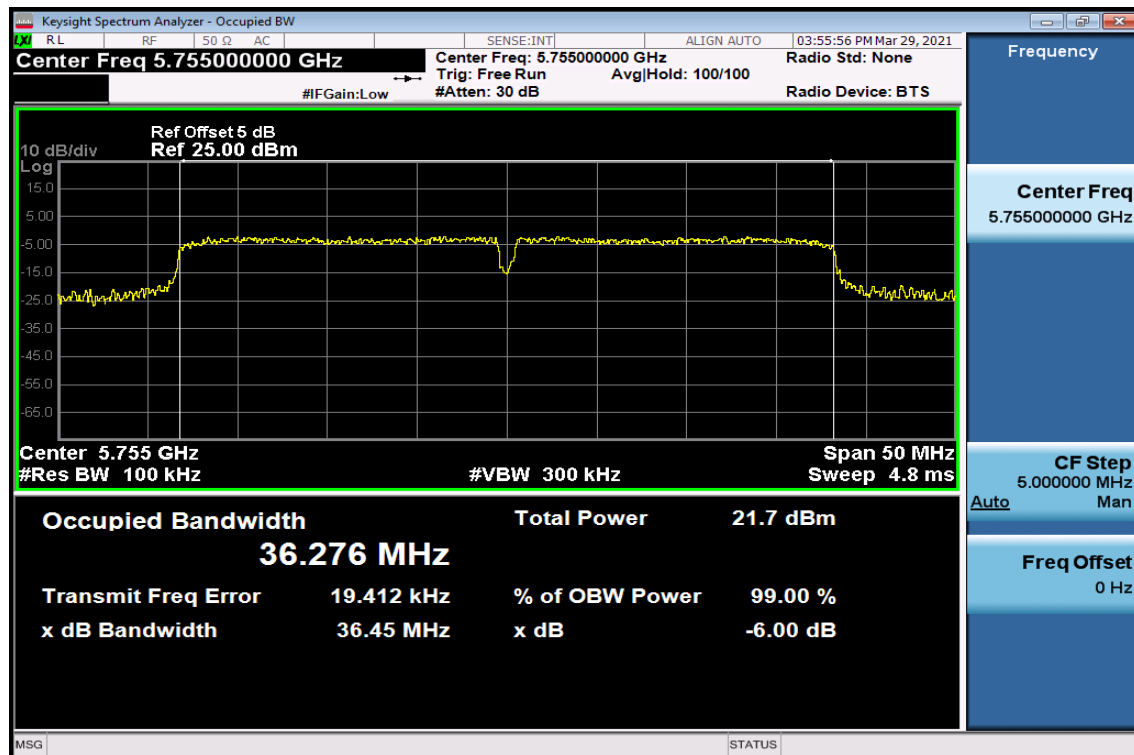


## 6dB Band Width Data CH-High



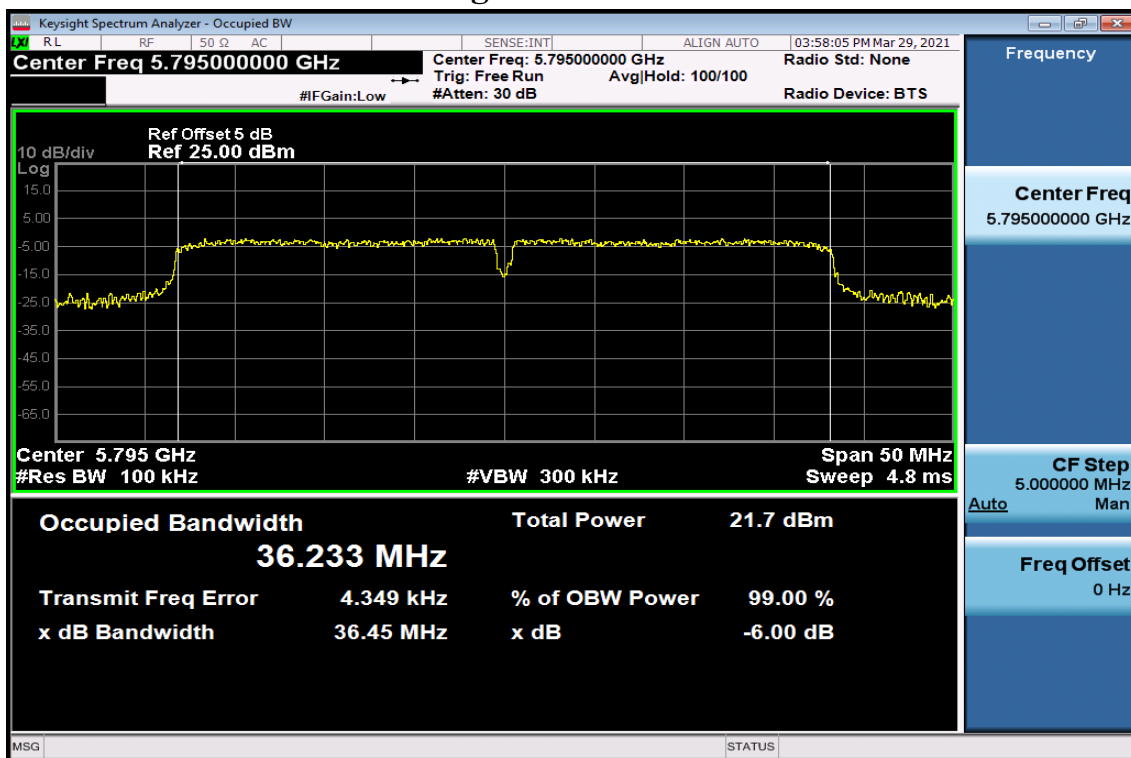
## 802.11ac VHT40

## 6dB Band Width Data CH-Low



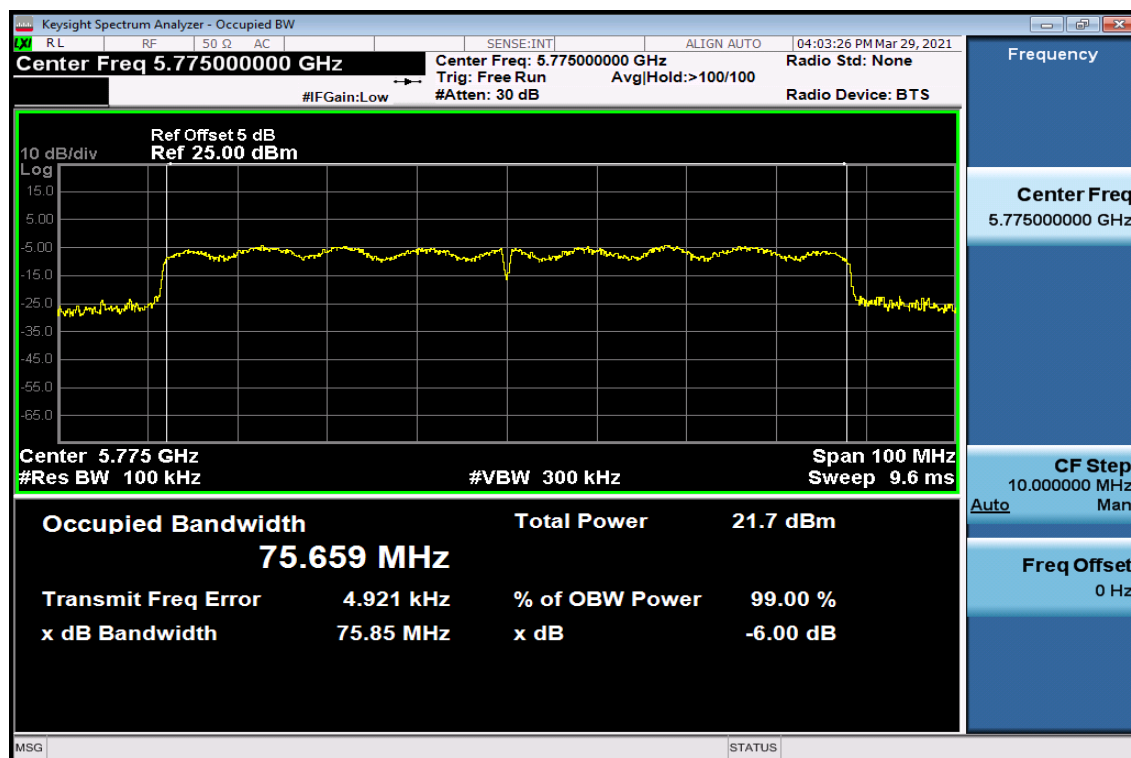


## 6dB Band Width Data CH-High



## 802.11 ac VHT80

## 6dB Band Width Data CH-Low



## **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
<sup>1</sup> 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	( <sup>2</sup> )
13.36 - 13.41	322 - 335.4		

<sup>1</sup> Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

<sup>2</sup> 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.

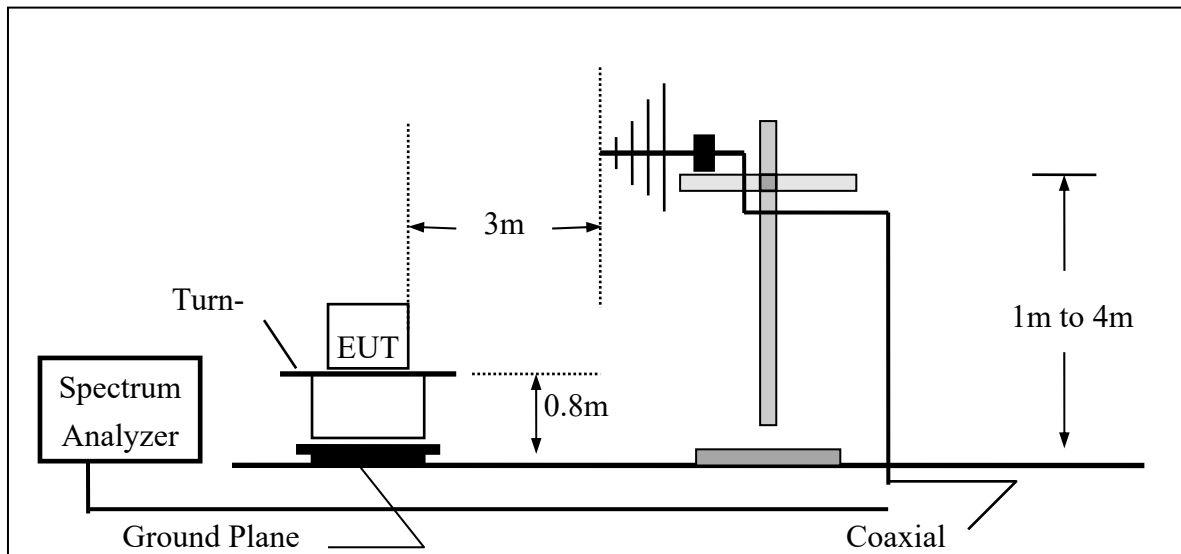
### 9.3. Measurement Procedure

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.

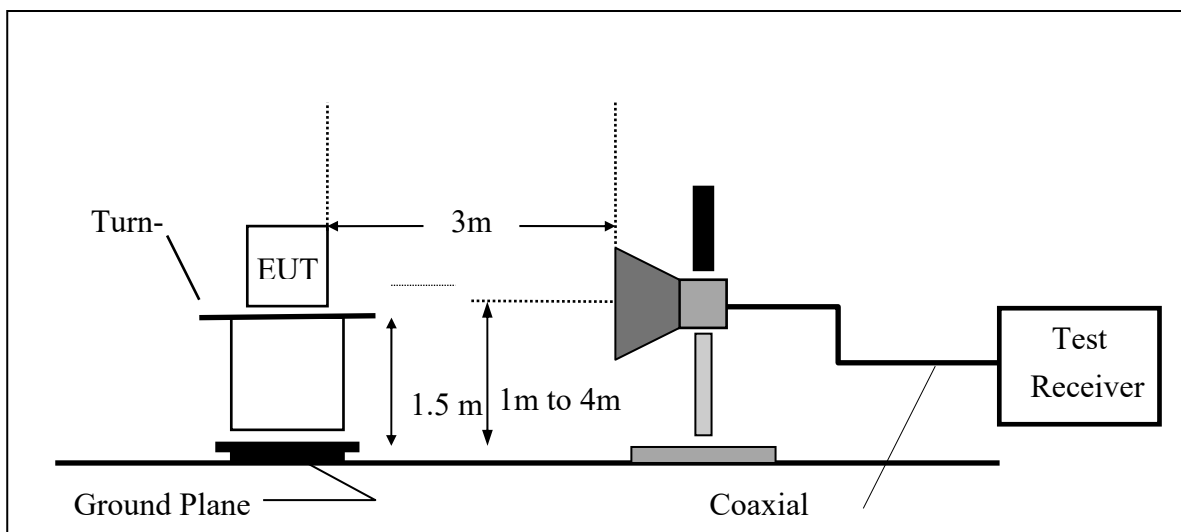
**Refer to section F of KDB Document: KDB 789033 D02 General U-NII Test Procedures New Rules v02r01**

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

##### (A) Radiated Emission Test Set-Up, Frequency Below 1000MHz



##### (B) Radiated Emission Test Set-UP Frequency Over 1 GHz



## 9.5. Measurement Equipment Used:

Location Conducted	Equipment Name	Brand	Model	S/N	Last Cal. Date	Next Cal. Date
Chamber 19	Spectrum analyzer	R&S	FSV40	101919	08/13/2020	08/13/2021
Chamber 19	EMI Receiver	R&S	ESR3	102461	05/05/2021	05/05/2022
Chamber 19	Loop Antenna	EM	EM-6879	271	05/21/2020	05/21/2021
Chamber 19	Bilog Antenna (30MHz-1GHz)	Schwarzbeck	VULB9168 w 6dB Att.	9168-736	02/22/2021	02/22/2022
Chamber 19	Horn antenna (1GHz-18GHz)	ETS LIND-GREN	3117	00218718	09/25/2020	09/25/2021
Chamber 19	Horn antenna (18GHz-26GHz)	Com-power	AH-826	081001	11/23/2020	11/23/2021
Chamber 19	Horn antenna (26GHz-40GHz)	Com-power	AH-640	100A	03/11/2021	03/11/2022
Chamber 19	Preamplifier (9kHz-1GHz)	HP	8447F	3113A04621	06/19/2020	06/19/2021
Chamber 19	Preamplifier (1GHz-26GHz)	AGILENT	8449B	3008A02471	10/22/2020	10/22/2021
Chamber 19	Preamplifier (26GHz-40GHz)	MITEQ	JS4-26004000-27-5A	818471	05/04/2021	05/04/2022
Chamber 19	RF Cable (9kHz-18GHz)	HUBER SU-HNER	Sucoflex 104A & 18GHz SMA(M)-SMA(M)-10M	MY817/4A & 20200525	12/25/2020	12/25/2021
Chamber 19	RF Cable (18GHz-40GHz)	HUBER SU-HNER	Sucoflex 102	27963/2&37421/2	11/19/2020	11/19/2021
Chamber 19	Signal Generator	Anritsu	MG3692A	20311	01/03/2021	01/03/2022
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  
Channel Number CH Low  
Temperature 25 °C  
Humidity 65 %

Test Date 2021/04/07  
Test By Weitin  
Pol Ver./Hor

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	62.01	31.71	-7.10	24.61	40.00	-15.39	Peak	VERTICAL
2	191.99	32.93	-8.17	24.76	43.50	-18.74	Peak	VERTICAL
3	246.31	32.23	-6.65	25.58	46.00	-20.42	Peak	VERTICAL
4	299.66	30.26	-4.56	25.70	46.00	-20.30	Peak	VERTICAL
5	399.57	32.80	-2.75	30.05	46.00	-15.95	Peak	VERTICAL
6	888.45	28.62	5.61	34.23	46.00	-11.77	Peak	VERTICAL
1	125.06	32.00	-7.33	24.67	43.50	-18.83	Peak	HORIZONTAL
2	191.99	38.90	-8.17	30.73	43.50	-12.77	Peak	HORIZONTAL
3	239.52	44.67	-6.96	37.71	46.00	-8.29	Peak	HORIZONTAL
4	299.66	34.67	-4.56	30.11	46.00	-15.89	Peak	HORIZONTAL
5	438.37	31.20	-1.69	29.51	46.00	-16.49	Peak	HORIZONTAL
6	775.93	28.02	4.30	32.32	46.00	-13.68	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	2021/04/07
Channel Number	CH Mid	Test By	Weitin
Temperature	25 °C	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	43.58	32.65	-5.99	26.66	40.00	-13.34	Peak	VERTICAL
2	62.98	33.19	-7.08	26.11	40.00	-13.89	Peak	VERTICAL
3	245.34	33.11	-6.67	26.44	46.00	-19.56	Peak	VERTICAL
4	399.57	32.60	-2.75	29.85	46.00	-16.15	Peak	VERTICAL
5	477.17	30.71	-1.27	29.44	46.00	-16.56	Peak	VERTICAL
6	833.16	29.04	4.94	33.98	46.00	-12.02	Peak	VERTICAL
1	126.03	32.22	-7.40	24.82	43.50	-18.68	Peak	HORIZONTAL
2	165.80	34.63	-5.54	29.09	43.50	-14.41	Peak	HORIZONTAL
3	191.99	38.82	-8.17	30.65	43.50	-12.85	Peak	HORIZONTAL
4	241.46	43.12	-6.84	36.28	46.00	-9.72	Peak	HORIZONTAL
5	299.66	34.10	-4.56	29.54	46.00	-16.46	Peak	HORIZONTAL
6	372.41	27.19	-3.22	23.97	46.00	-22.03	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)

Operation Mode	TX MODE	Test Date	2021/04/07
Channel Number	CH High	Test By	Weitin
Temperature	25 °C	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	62.01	33.00	-7.10	25.90	40.00	-14.10	Peak	VERTICAL
2	191.99	32.91	-8.17	24.74	43.50	-18.76	Peak	VERTICAL
3	244.37	32.32	-6.72	25.60	46.00	-20.40	Peak	VERTICAL
4	297.72	30.69	-4.61	26.08	46.00	-19.92	Peak	VERTICAL
5	399.57	33.28	-2.75	30.53	46.00	-15.47	Peak	VERTICAL
6	833.16	31.68	4.94	36.62	46.00	-9.38	Peak	VERTICAL
1	165.80	35.57	-5.54	30.03	43.50	-13.47	Peak	HORIZONTAL
2	191.99	39.81	-8.17	31.64	43.50	-11.86	Peak	HORIZONTAL
3	239.52	42.16	-6.96	35.20	46.00	-10.80	Peak	HORIZONTAL
4	299.66	34.94	-4.56	30.38	46.00	-15.62	Peak	HORIZONTAL
5	498.51	29.24	-1.05	28.19	46.00	-17.81	Peak	HORIZONTAL
6	778.84	27.99	4.37	32.36	46.00	-13.64	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)**
**(Band UNII-1 802.11n HT20 mode)**

Operation Mode	TX MODE	Test Date	2021/04/07
Channel Number	CH Low	Test By	Weitin
Temperature	25 °C	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	62.93	32.11	-7.10	25.01	40.00	-14.99	Peak	VERTICAL
2	192.75	33.82	-8.17	25.65	43.50	-17.85	Peak	VERTICAL
3	247.17	32.78	-6.65	26.13	46.00	-19.87	Peak	VERTICAL
4	299.71	30.93	-4.56	26.37	46.00	-19.63	Peak	VERTICAL
5	400.49	32.89	-2.75	30.14	46.00	-15.86	Peak	VERTICAL
6	889.16	28.72	5.61	34.33	46.00	-11.67	Peak	VERTICAL
1	125.57	32.02	-7.33	24.69	43.50	-18.81	Peak	HORIZONTAL
2	192.79	39.79	-8.17	31.62	43.50	-11.88	Peak	HORIZONTAL
3	240.16	44.78	-6.96	37.82	46.00	-8.18	Peak	HORIZONTAL
4	299.82	34.71	-4.56	30.15	46.00	-15.85	Peak	HORIZONTAL
5	439.04	32.14	-1.69	30.45	46.00	-15.55	Peak	HORIZONTAL
6	776.70	28.36	4.30	32.66	46.00	-13.34	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	2021/04/07
Channel Number	CH Mid	Test By	Weitin
Temperature	25 °C	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	43.84	32.72	-5.99	26.73	40.00	-13.27	Peak	VERTICAL
2	63.55	33.23	-7.08	26.15	40.00	-13.85	Peak	VERTICAL
3	245.45	33.96	-6.67	27.29	46.00	-18.71	Peak	VERTICAL
4	400.37	32.67	-2.75	29.92	46.00	-16.08	Peak	VERTICAL
5	477.58	31.07	-1.27	29.80	46.00	-16.20	Peak	VERTICAL
6	833.40	29.44	4.94	34.38	46.00	-11.62	Peak	VERTICAL
1	126.45	33.19	-7.40	25.79	43.50	-17.71	Peak	HORIZONTAL
2	166.70	35.49	-5.54	29.95	43.50	-13.55	Peak	HORIZONTAL
3	192.39	38.83	-8.17	30.66	43.50	-12.84	Peak	HORIZONTAL
4	242.02	43.27	-6.84	36.43	46.00	-9.57	Peak	HORIZONTAL
5	300.02	34.17	-4.56	29.61	46.00	-16.39	Peak	HORIZONTAL
6	372.73	27.98	-3.22	24.76	46.00	-21.24	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	2021/04/07
Channel Number	CH High	Test By	Weitin
Temperature	25 °C	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	62.91	33.97	-7.10	26.87	40.00	-13.13	Peak	VERTICAL
2	192.09	33.06	-8.17	24.89	43.50	-18.61	Peak	VERTICAL
3	245.04	32.33	-6.72	25.61	46.00	-20.39	Peak	VERTICAL
4	297.72	31.57	-4.61	26.96	46.00	-19.04	Peak	VERTICAL
5	399.69	34.22	-2.75	31.47	46.00	-14.53	Peak	VERTICAL
6	834.14	32.07	4.94	37.01	46.00	-8.99	Peak	VERTICAL
1	166.39	36.32	-5.54	30.78	43.50	-12.72	Peak	HORIZONTAL
2	192.70	40.17	-8.17	32.00	43.50	-11.50	Peak	HORIZONTAL
3	239.62	43.05	-6.96	36.09	46.00	-9.91	Peak	HORIZONTAL
4	300.11	34.94	-4.56	30.38	46.00	-15.62	Peak	HORIZONTAL
5	499.36	29.93	-1.05	28.88	46.00	-17.12	Peak	HORIZONTAL
6	779.68	28.31	4.37	32.68	46.00	-13.32	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 °C  
Humidity 65 %

Test Date 2021/04/07  
Test By Weitin  
Pol Ver./Hor

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	62.83	31.93	-7.10	24.83	40.00	-15.17	Peak	VERTICAL
2	192.20	33.19	-8.17	25.02	43.50	-18.48	Peak	VERTICAL
3	246.35	32.64	-6.65	25.99	46.00	-20.01	Peak	VERTICAL
4	300.55	30.82	-4.56	26.26	46.00	-19.74	Peak	VERTICAL
5	399.74	33.58	-2.75	30.83	46.00	-15.17	Peak	VERTICAL
6	888.99	29.61	5.61	35.22	46.00	-10.78	Peak	VERTICAL
1	125.09	32.74	-7.33	25.41	43.50	-18.09	Peak	HORIZONTAL
2	192.89	39.46	-8.17	31.29	43.50	-12.21	Peak	HORIZONTAL
3	240.49	44.77	-6.96	37.81	46.00	-8.19	Peak	HORIZONTAL
4	299.74	35.41	-4.56	30.85	46.00	-15.15	Peak	HORIZONTAL
5	438.53	31.65	-1.69	29.96	46.00	-16.04	Peak	HORIZONTAL
6	776.27	28.44	4.30	32.74	46.00	-13.26	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	2021/04/07
Channel Number	CH High	Test By	Weitin
Temperature	25 °C	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	62.32	33.61	-7.10	26.51	40.00	-13.49	Peak	VERTICAL
2	192.70	33.68	-8.17	25.51	43.50	-17.99	Peak	VERTICAL
3	244.78	32.94	-6.72	26.22	46.00	-19.78	Peak	VERTICAL
4	297.98	31.64	-4.61	27.03	46.00	-18.97	Peak	VERTICAL
5	400.42	33.52	-2.75	30.77	46.00	-15.23	Peak	VERTICAL
6	833.50	31.95	4.94	36.89	46.00	-9.11	Peak	VERTICAL
1	165.92	36.41	-5.54	30.87	43.50	-12.63	Peak	HORIZONTAL
2	192.52	40.59	-8.17	32.42	43.50	-11.08	Peak	HORIZONTAL
3	240.37	42.85	-6.96	35.89	46.00	-10.11	Peak	HORIZONTAL
4	300.34	35.47	-4.56	30.91	46.00	-15.09	Peak	HORIZONTAL
5	498.93	29.92	-1.05	28.87	46.00	-17.13	Peak	HORIZONTAL
6	778.93	28.74	4.37	33.11	46.00	-12.89	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	2021/04/07
Channel Number	CH Low	Test By	Weitin
Temperature	25 °C	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	62.23	32.41	-7.10	25.31	40.00	-14.69	Peak	VERTICAL
2	192.16	33.10	-8.17	24.93	43.50	-18.57	Peak	VERTICAL
3	246.31	33.10	-6.65	26.45	46.00	-19.55	Peak	VERTICAL
4	300.22	31.12	-4.56	26.56	46.00	-19.44	Peak	VERTICAL
5	399.63	33.08	-2.75	30.33	46.00	-15.67	Peak	VERTICAL
6	889.12	28.96	5.61	34.57	46.00	-11.43	Peak	VERTICAL
1	125.91	32.31	-7.33	24.98	43.50	-18.52	Peak	HORIZONTAL
2	192.39	39.33	-8.17	31.16	43.50	-12.34	Peak	HORIZONTAL
3	240.09	44.73	-6.96	37.77	46.00	-8.23	Peak	HORIZONTAL
4	299.77	35.16	-4.56	30.60	46.00	-15.40	Peak	HORIZONTAL
5	439.04	32.05	-1.69	30.36	46.00	-15.64	Peak	HORIZONTAL
6	776.74	28.29	4.30	32.59	46.00	-13.41	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	2021/04/07
Channel Number	CH Mid	Test By	Weitin
Temperature	25 °C	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	43.60	33.11	-5.99	27.12	40.00	-12.88	Peak	VERTICAL
2	63.36	33.64	-7.08	26.56	40.00	-13.44	Peak	VERTICAL
3	245.44	33.46	-6.67	26.79	46.00	-19.21	Peak	VERTICAL
4	400.22	33.26	-2.75	30.51	46.00	-15.49	Peak	VERTICAL
5	477.53	31.29	-1.27	30.02	46.00	-15.98	Peak	VERTICAL
6	833.18	29.27	4.94	34.21	46.00	-11.79	Peak	VERTICAL
1	126.19	32.30	-7.40	24.90	43.50	-18.60	Peak	HORIZONTAL
2	166.76	35.30	-5.54	29.76	43.50	-13.74	Peak	HORIZONTAL
3	192.89	39.57	-8.17	31.40	43.50	-12.10	Peak	HORIZONTAL
4	242.37	43.89	-6.84	37.05	46.00	-8.95	Peak	HORIZONTAL
5	299.72	35.07	-4.56	30.51	46.00	-15.49	Peak	HORIZONTAL
6	372.71	27.38	-3.22	24.16	46.00	-21.84	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	2021/04/07
Channel Number	CH High	Test By	Weitin
Temperature	25 °C	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	62.03	33.06	-7.10	25.96	40.00	-14.04	Peak	VERTICAL
2	192.22	33.85	-8.17	25.68	43.50	-17.82	Peak	VERTICAL
3	245.01	33.02	-6.72	26.30	46.00	-19.70	Peak	VERTICAL
4	298.46	31.25	-4.61	26.64	46.00	-19.36	Peak	VERTICAL
5	400.03	33.79	-2.75	31.04	46.00	-14.96	Peak	VERTICAL
6	833.64	32.46	4.94	37.40	46.00	-8.60	Peak	VERTICAL
1	166.34	35.91	-5.54	30.37	43.50	-13.13	Peak	HORIZONTAL
2	192.10	40.61	-8.17	32.44	43.50	-11.06	Peak	HORIZONTAL
3	239.89	42.37	-6.96	35.41	46.00	-10.59	Peak	HORIZONTAL
4	299.94	35.86	-4.56	31.30	46.00	-14.70	Peak	HORIZONTAL
5	498.73	29.89	-1.05	28.84	46.00	-17.16	Peak	HORIZONTAL
6	779.49	28.03	4.37	32.40	46.00	-13.60	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	2021/04/07
Channel Number	CH Low	Test By	Weitin
Temperature	25 °C	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	63.29	32.75	-7.10	25.65	40.00	-14.35	Peak	VERTICAL
2	192.81	34.17	-8.17	26.00	43.50	-17.50	Peak	VERTICAL
3	247.31	33.01	-6.65	26.36	46.00	-19.64	Peak	VERTICAL
4	300.63	31.23	-4.56	26.67	46.00	-19.33	Peak	VERTICAL
5	400.01	34.33	-2.75	31.58	46.00	-14.42	Peak	VERTICAL
6	889.28	30.35	5.61	35.96	46.00	-10.04	Peak	VERTICAL
1	125.78	33.30	-7.33	25.97	43.50	-17.53	Peak	HORIZONTAL
2	192.96	39.62	-8.17	31.45	43.50	-12.05	Peak	HORIZONTAL
3	240.49	45.74	-6.96	38.78	46.00	-7.22	Peak	HORIZONTAL
4	300.13	36.08	-4.56	31.52	46.00	-14.48	Peak	HORIZONTAL
5	438.67	32.45	-1.69	30.76	46.00	-15.24	Peak	HORIZONTAL
6	776.72	29.34	4.30	33.64	46.00	-12.36	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	2021/04/07
Channel Number	CH High	Test By	Weitin
Temperature	25 °C	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	63.12	34.37	-7.10	27.27	40.00	-12.73	Peak	VERTICAL
2	193.19	33.92	-8.17	25.75	43.50	-17.75	Peak	VERTICAL
3	244.85	33.22	-6.72	26.50	46.00	-19.50	Peak	VERTICAL
4	298.27	32.39	-4.61	27.78	46.00	-18.22	Peak	VERTICAL
5	400.69	34.34	-2.75	31.59	46.00	-14.41	Peak	VERTICAL
6	833.54	32.43	4.94	37.37	46.00	-8.63	Peak	VERTICAL
1	166.55	37.26	-5.54	31.72	43.50	-11.78	Peak	HORIZONTAL
2	192.79	41.18	-8.17	33.01	43.50	-10.49	Peak	HORIZONTAL
3	240.53	42.96	-6.96	36.00	46.00	-10.00	Peak	HORIZONTAL
4	300.39	36.30	-4.56	31.74	46.00	-14.26	Peak	HORIZONTAL
5	499.72	30.53	-1.05	29.48	46.00	-16.52	Peak	HORIZONTAL
6	779.77	29.06	4.37	33.43	46.00	-12.57	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-1, 802.11ac VHT80mode)**

Operation Mode	TX MODE	Test Date	2021/04/07
Channel Number	CH Low	Test By	Weitin
Temperature	25 °C	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	62.25	32.25	-7.10	25.15	40.00	-14.85	Peak	VERTICAL
2	192.39	33.80	-8.17	25.63	43.50	-17.87	Peak	VERTICAL
3	247.30	32.48	-6.65	25.83	46.00	-20.17	Peak	VERTICAL
4	300.02	30.72	-4.56	26.16	46.00	-19.84	Peak	VERTICAL
5	400.35	33.12	-2.75	30.37	46.00	-15.63	Peak	VERTICAL
6	888.59	29.17	5.61	34.78	46.00	-11.22	Peak	VERTICAL
1	125.90	32.09	-7.33	24.76	43.50	-18.74	Peak	HORIZONTAL
2	192.94	38.95	-8.17	30.78	43.50	-12.72	Peak	HORIZONTAL
3	239.68	44.87	-6.96	37.91	46.00	-8.09	Peak	HORIZONTAL
4	300.48	34.88	-4.56	30.32	46.00	-15.68	Peak	HORIZONTAL
5	439.20	31.53	-1.69	29.84	46.00	-16.16	Peak	HORIZONTAL
6	776.77	28.50	4.30	32.80	46.00	-13.20	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 °C  
Humidity 65 %

Test Date 2021/04/07  
Test By Weitin  
Pol Ver./Hor

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	62.01	31.97	-7.10	24.87	40.00	-15.13	Peak	VERTICAL
2	191.99	32.08	-8.17	23.91	43.50	-19.59	Peak	VERTICAL
3	239.52	34.28	-6.96	27.32	46.00	-18.68	Peak	VERTICAL
4	299.66	30.61	-4.56	26.05	46.00	-19.95	Peak	VERTICAL
5	399.57	34.38	-2.75	31.63	46.00	-14.37	Peak	VERTICAL
6	697.36	29.21	2.57	31.78	46.00	-14.22	Peak	VERTICAL
1	125.06	31.39	-7.33	24.06	43.50	-19.44	Peak	HORIZONTAL
2	165.80	35.03	-5.54	29.49	43.50	-14.01	Peak	HORIZONTAL
3	191.99	38.72	-8.17	30.55	43.50	-12.95	Peak	HORIZONTAL
4	239.52	42.31	-6.96	35.35	46.00	-10.65	Peak	HORIZONTAL
5	299.66	35.02	-4.56	30.46	46.00	-15.54	Peak	HORIZONTAL
6	754.59	28.86	4.09	32.95	46.00	-13.05	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	2021/04/07
Channel Number	CH Mid	Test By	Weitin
Temperature	25 °C	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	62.01	32.22	-7.10	25.12	40.00	-14.88	Peak	VERTICAL
2	191.99	32.20	-8.17	24.03	43.50	-19.47	Peak	VERTICAL
3	240.49	33.13	-6.88	26.25	46.00	-19.75	Peak	VERTICAL
4	399.57	32.59	-2.75	29.84	46.00	-16.16	Peak	VERTICAL
5	474.26	30.38	-1.27	29.11	46.00	-16.89	Peak	VERTICAL
6	699.30	29.50	2.65	32.15	46.00	-13.85	Peak	VERTICAL
1	126.03	31.57	-7.40	24.17	43.50	-19.33	Peak	HORIZONTAL
2	165.80	34.84	-5.54	29.30	43.50	-14.20	Peak	HORIZONTAL
3	191.99	39.37	-8.17	31.20	43.50	-12.30	Peak	HORIZONTAL
4	243.40	42.79	-6.76	36.03	46.00	-9.97	Peak	HORIZONTAL
5	299.66	34.44	-4.56	29.88	46.00	-16.12	Peak	HORIZONTAL
6	731.31	36.60	3.18	39.78	46.00	-6.22	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	2021/04/07
Channel Number	CH High	Test By	Weitin
Temperature	25 °C	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	62.01	32.55	-7.10	25.45	40.00	-14.55	Peak	VERTICAL
2	239.52	32.98	-6.96	26.02	46.00	-19.98	Peak	VERTICAL
3	398.60	31.75	-2.76	28.99	46.00	-17.01	Peak	VERTICAL
4	434.49	32.14	-1.77	30.37	46.00	-15.63	Peak	VERTICAL
5	608.12	29.06	1.36	30.42	46.00	-15.58	Peak	VERTICAL
6	775.93	27.71	4.30	32.01	46.00	-13.99	Peak	VERTICAL
1	125.06	33.00	-7.33	25.67	43.50	-17.83	Peak	HORIZONTAL
2	165.80	35.02	-5.54	29.48	43.50	-14.02	Peak	HORIZONTAL
3	191.99	38.84	-8.17	30.67	43.50	-12.83	Peak	HORIZONTAL
4	244.37	42.07	-6.72	35.35	46.00	-10.65	Peak	HORIZONTAL
5	299.66	34.39	-4.56	29.83	46.00	-16.17	Peak	HORIZONTAL
6	497.54	30.30	-1.08	29.22	46.00	-16.78	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	2021/04/07
Channel Number	CH Low	Test By	Weitin
Temperature	25 °C	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	62.93	32.11	-7.10	25.01	40.00	-14.99	Peak	VERTICAL
2	192.75	33.82	-8.17	25.65	43.50	-17.85	Peak	VERTICAL
3	247.17	32.78	-6.65	26.13	46.00	-19.87	Peak	VERTICAL
4	299.71	30.93	-4.56	26.37	46.00	-19.63	Peak	VERTICAL
5	400.49	32.89	-2.75	30.14	46.00	-15.86	Peak	VERTICAL
6	889.16	28.72	5.61	34.33	46.00	-11.67	Peak	VERTICAL
1	125.57	32.02	-7.33	24.69	43.50	-18.81	Peak	HORIZONTAL
2	192.79	39.79	-8.17	31.62	43.50	-11.88	Peak	HORIZONTAL
3	240.16	44.78	-6.96	37.82	46.00	-8.18	Peak	HORIZONTAL
4	299.82	34.71	-4.56	30.15	46.00	-15.85	Peak	HORIZONTAL
5	439.04	32.14	-1.69	30.45	46.00	-15.55	Peak	HORIZONTAL
6	776.70	28.36	4.30	32.66	46.00	-13.34	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	2021/04/07
Channel Number	CH Mid	Test By	Weitin
Temperature	25 °C	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	43.84	32.72	-5.99	26.73	40.00	-13.27	Peak	VERTICAL
2	63.55	33.23	-7.08	26.15	40.00	-13.85	Peak	VERTICAL
3	245.45	33.96	-6.67	27.29	46.00	-18.71	Peak	VERTICAL
4	400.37	32.67	-2.75	29.92	46.00	-16.08	Peak	VERTICAL
5	477.58	31.07	-1.27	29.80	46.00	-16.20	Peak	VERTICAL
6	833.40	29.44	4.94	34.38	46.00	-11.62	Peak	VERTICAL
1	126.45	33.19	-7.40	25.79	43.50	-17.71	Peak	HORIZONTAL
2	166.70	35.49	-5.54	29.95	43.50	-13.55	Peak	HORIZONTAL
3	192.39	38.83	-8.17	30.66	43.50	-12.84	Peak	HORIZONTAL
4	242.02	43.27	-6.84	36.43	46.00	-9.57	Peak	HORIZONTAL
5	300.02	34.17	-4.56	29.61	46.00	-16.39	Peak	HORIZONTAL
6	372.73	27.98	-3.22	24.76	46.00	-21.24	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	2021/04/07
Channel Number	CH High	Test By	Weitin
Temperature	25 °C	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	62.91	33.97	-7.10	26.87	40.00	-13.13	Peak	VERTICAL
2	192.09	33.06	-8.17	24.89	43.50	-18.61	Peak	VERTICAL
3	245.04	32.33	-6.72	25.61	46.00	-20.39	Peak	VERTICAL
4	297.72	31.57	-4.61	26.96	46.00	-19.04	Peak	VERTICAL
5	399.69	34.22	-2.75	31.47	46.00	-14.53	Peak	VERTICAL
6	834.14	32.07	4.94	37.01	46.00	-8.99	Peak	VERTICAL
1	166.39	36.32	-5.54	30.78	43.50	-12.72	Peak	HORIZONTAL
2	192.70	40.17	-8.17	32.00	43.50	-11.50	Peak	HORIZONTAL
3	239.62	43.05	-6.96	36.09	46.00	-9.91	Peak	HORIZONTAL
4	300.11	34.94	-4.56	30.38	46.00	-15.62	Peak	HORIZONTAL
5	499.36	29.93	-1.05	28.88	46.00	-17.12	Peak	HORIZONTAL
6	779.68	28.31	4.37	32.68	46.00	-13.32	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	2021/04/07
Channel Number	CH Low	Test By	Weitin
Temperature	25 °C	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	62.83	31.93	-7.10	24.83	40.00	-15.17	Peak	VERTICAL
2	192.20	33.19	-8.17	25.02	43.50	-18.48	Peak	VERTICAL
3	246.35	32.64	-6.65	25.99	46.00	-20.01	Peak	VERTICAL
4	300.55	30.82	-4.56	26.26	46.00	-19.74	Peak	VERTICAL
5	399.74	33.58	-2.75	30.83	46.00	-15.17	Peak	VERTICAL
6	888.99	29.61	5.61	35.22	46.00	-10.78	Peak	VERTICAL
1	125.09	32.74	-7.33	25.41	43.50	-18.09	Peak	HORIZONTAL
2	192.89	39.46	-8.17	31.29	43.50	-12.21	Peak	HORIZONTAL
3	240.49	44.77	-6.96	37.81	46.00	-8.19	Peak	HORIZONTAL
4	299.74	35.41	-4.56	30.85	46.00	-15.15	Peak	HORIZONTAL
5	438.53	31.65	-1.69	29.96	46.00	-16.04	Peak	HORIZONTAL
6	776.27	28.44	4.30	32.74	46.00	-13.26	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	2021/04/07
Channel Number	CH High	Test By	Weitin
Temperature	25 °C	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	62.32	33.61	-7.10	26.51	40.00	-13.49	Peak	VERTICAL
2	192.70	33.68	-8.17	25.51	43.50	-17.99	Peak	VERTICAL
3	244.78	32.94	-6.72	26.22	46.00	-19.78	Peak	VERTICAL
4	297.98	31.64	-4.61	27.03	46.00	-18.97	Peak	VERTICAL
5	400.42	33.52	-2.75	30.77	46.00	-15.23	Peak	VERTICAL
6	833.50	31.95	4.94	36.89	46.00	-9.11	Peak	VERTICAL
1	165.92	36.41	-5.54	30.87	43.50	-12.63	Peak	HORIZONTAL
2	192.52	40.59	-8.17	32.42	43.50	-11.08	Peak	HORIZONTAL
3	240.37	42.85	-6.96	35.89	46.00	-10.11	Peak	HORIZONTAL
4	300.34	35.47	-4.56	30.91	46.00	-15.09	Peak	HORIZONTAL
5	498.93	29.92	-1.05	28.87	46.00	-17.13	Peak	HORIZONTAL
6	778.93	28.74	4.37	33.11	46.00	-12.89	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	2021/04/07
Channel Number	CH Low	Test By	Weitin
Temperature	25 °C	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	62.23	32.41	-7.10	25.31	40.00	-14.69	Peak	VERTICAL
2	192.16	33.10	-8.17	24.93	43.50	-18.57	Peak	VERTICAL
3	246.31	33.10	-6.65	26.45	46.00	-19.55	Peak	VERTICAL
4	300.22	31.12	-4.56	26.56	46.00	-19.44	Peak	VERTICAL
5	399.63	33.08	-2.75	30.33	46.00	-15.67	Peak	VERTICAL
6	889.12	28.96	5.61	34.57	46.00	-11.43	Peak	VERTICAL
1	125.91	32.31	-7.33	24.98	43.50	-18.52	Peak	HORIZONTAL
2	192.39	39.33	-8.17	31.16	43.50	-12.34	Peak	HORIZONTAL
3	240.09	44.73	-6.96	37.77	46.00	-8.23	Peak	HORIZONTAL
4	299.77	35.16	-4.56	30.60	46.00	-15.40	Peak	HORIZONTAL
5	439.04	32.05	-1.69	30.36	46.00	-15.64	Peak	HORIZONTAL
6	776.74	28.29	4.30	32.59	46.00	-13.41	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	2021/04/07
Channel Number	CH Mid	Test By	Weitin
Temperature	25 °C	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	43.60	33.11	-5.99	27.12	40.00	-12.88	Peak	VERTICAL
2	63.36	33.64	-7.08	26.56	40.00	-13.44	Peak	VERTICAL
3	245.44	33.46	-6.67	26.79	46.00	-19.21	Peak	VERTICAL
4	400.22	33.26	-2.75	30.51	46.00	-15.49	Peak	VERTICAL
5	477.53	31.29	-1.27	30.02	46.00	-15.98	Peak	VERTICAL
6	833.18	29.27	4.94	34.21	46.00	-11.79	Peak	VERTICAL
1	126.19	32.30	-7.40	24.90	43.50	-18.60	Peak	HORIZONTAL
2	166.76	35.30	-5.54	29.76	43.50	-13.74	Peak	HORIZONTAL
3	192.89	39.57	-8.17	31.40	43.50	-12.10	Peak	HORIZONTAL
4	242.37	43.89	-6.84	37.05	46.00	-8.95	Peak	HORIZONTAL
5	299.72	35.07	-4.56	30.51	46.00	-15.49	Peak	HORIZONTAL
6	372.71	27.38	-3.22	24.16	46.00	-21.84	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	2021/04/07
Channel Number	CH High	Test By	Weitin
Temperature	25 °C	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	62.03	33.06	-7.10	25.96	40.00	-14.04	Peak	VERTICAL
2	192.22	33.85	-8.17	25.68	43.50	-17.82	Peak	VERTICAL
3	245.01	33.02	-6.72	26.30	46.00	-19.70	Peak	VERTICAL
4	298.46	31.25	-4.61	26.64	46.00	-19.36	Peak	VERTICAL
5	400.03	33.79	-2.75	31.04	46.00	-14.96	Peak	VERTICAL
6	833.64	32.46	4.94	37.40	46.00	-8.60	Peak	VERTICAL
1	166.34	35.91	-5.54	30.37	43.50	-13.13	Peak	HORIZONTAL
2	192.10	40.61	-8.17	32.44	43.50	-11.06	Peak	HORIZONTAL
3	239.89	42.37	-6.96	35.41	46.00	-10.59	Peak	HORIZONTAL
4	299.94	35.86	-4.56	31.30	46.00	-14.70	Peak	HORIZONTAL
5	498.73	29.89	-1.05	28.84	46.00	-17.16	Peak	HORIZONTAL
6	779.49	28.03	4.37	32.40	46.00	-13.60	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	Test Date	2021/04/07
Channel Number	CH Low	Test By	Weitin
Temperature	25 °C	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	63.29	32.75	-7.10	25.65	40.00	-14.35	Peak	VERTICAL
2	192.81	34.17	-8.17	26.00	43.50	-17.50	Peak	VERTICAL
3	247.31	33.01	-6.65	26.36	46.00	-19.64	Peak	VERTICAL
4	300.63	31.23	-4.56	26.67	46.00	-19.33	Peak	VERTICAL
5	400.01	34.33	-2.75	31.58	46.00	-14.42	Peak	VERTICAL
6	889.28	30.35	5.61	35.96	46.00	-10.04	Peak	VERTICAL
1	125.78	33.30	-7.33	25.97	43.50	-17.53	Peak	HORIZONTAL
2	192.96	39.62	-8.17	31.45	43.50	-12.05	Peak	HORIZONTAL
3	240.49	45.74	-6.96	38.78	46.00	-7.22	Peak	HORIZONTAL
4	300.13	36.08	-4.56	31.52	46.00	-14.48	Peak	HORIZONTAL
5	438.67	32.45	-1.69	30.76	46.00	-15.24	Peak	HORIZONTAL
6	776.72	29.34	4.30	33.64	46.00	-12.36	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	2021/04/07
Channel Number	CH High	Test By	Weitin
Temperature	25 °C	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	63.12	34.37	-7.10	27.27	40.00	-12.73	Peak	VERTICAL
2	193.19	33.92	-8.17	25.75	43.50	-17.75	Peak	VERTICAL
3	244.85	33.22	-6.72	26.50	46.00	-19.50	Peak	VERTICAL
4	298.27	32.39	-4.61	27.78	46.00	-18.22	Peak	VERTICAL
5	400.69	34.34	-2.75	31.59	46.00	-14.41	Peak	VERTICAL
6	833.54	32.43	4.94	37.37	46.00	-8.63	Peak	VERTICAL
1	166.55	37.26	-5.54	31.72	43.50	-11.78	Peak	HORIZONTAL
2	192.79	41.18	-8.17	33.01	43.50	-10.49	Peak	HORIZONTAL
3	240.53	42.96	-6.96	36.00	46.00	-10.00	Peak	HORIZONTAL
4	300.39	36.30	-4.56	31.74	46.00	-14.26	Peak	HORIZONTAL
5	499.72	30.53	-1.05	29.48	46.00	-16.52	Peak	HORIZONTAL
6	779.77	29.06	4.37	33.43	46.00	-12.57	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, 802.11ac VHT80 mode)**

Operation Mode	TX MODE	Test Date	2021/04/07
Channel Number	CH Low	Test By	Weitin
Temperature	25 °C	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	62.25	32.25	-7.10	25.15	40.00	-14.85	Peak	VERTICAL
2	192.39	33.80	-8.17	25.63	43.50	-17.87	Peak	VERTICAL
3	247.30	32.48	-6.65	25.83	46.00	-20.17	Peak	VERTICAL
4	300.02	30.72	-4.56	26.16	46.00	-19.84	Peak	VERTICAL
5	400.35	33.12	-2.75	30.37	46.00	-15.63	Peak	VERTICAL
6	888.59	29.17	5.61	34.78	46.00	-11.22	Peak	VERTICAL
1	125.90	32.09	-7.33	24.76	43.50	-18.74	Peak	HORIZONTAL
2	192.94	38.95	-8.17	30.78	43.50	-12.72	Peak	HORIZONTAL
3	239.68	44.87	-6.96	37.91	46.00	-8.09	Peak	HORIZONTAL
4	300.48	34.88	-4.56	30.32	46.00	-15.68	Peak	HORIZONTAL
5	439.20	31.53	-1.69	29.84	46.00	-16.16	Peak	HORIZONTAL
6	776.77	28.50	4.30	32.80	46.00	-13.20	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	2021/04/07
Channel Number	CH Low	Test By	Weitin
Temperature	25 °C	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	10360.00	44.45	2.62	47.07	68.20	-21.13	Peak	VERTICAL
2	14226.00	45.02	7.13	52.15	68.20	-16.05	Peak	VERTICAL
1	10360.00	44.93	2.62	47.55	68.20	-20.65	Peak	HORIZONTAL
2	14260.00	45.03	7.21	52.24	68.20	-15.96	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	2021/04/07
Channel Number	CH Mid	Test By	Weitin
Temperature	25 °C	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	10400.00	43.78	2.75	46.53	68.20	-21.67	Peak	VERTICAL
2	14430.00	45.34	7.60	52.94	68.20	-15.26	Peak	VERTICAL
1	10400.00	44.42	2.75	47.17	68.20	-21.03	Peak	HORIZONTAL
2	14515.00	45.19	7.77	52.96	68.20	-15.24	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	2021/04/07
Channel Number	CH High	Test By	Weitin
Temperature	25 °C	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	10480.00	44.13	2.84	46.97	68.20	-21.23	Peak	VERTICAL
2	14209.00	44.58	7.10	51.68	68.20	-16.52	Peak	VERTICAL
1	10480.00	43.97	2.84	46.81	68.20	-21.39	Peak	HORIZONTAL
2	14328.00	44.22	7.36	51.58	68.20	-16.62	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	2021/04/07
Channel Number	CH Low	Test By	Weitin
Temperature	25 °C	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	10360.00	45.39	2.62	48.01	68.20	-20.19	Peak	VERTICAL
2	14226.89	45.43	7.13	52.56	68.20	-15.64	Peak	VERTICAL
1	10360.00	45.46	2.62	48.08	68.20	-20.12	Peak	HORIZONTAL
2	14260.43	45.86	7.21	53.07	68.20	-15.13	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	2021/04/07
Channel Number	CH Mid	Test By	Weitin
Temperature	25 °C	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	10400.00	44.45	2.75	47.20	68.20	-21.00	Peak	VERTICAL
2	14430.70	45.45	7.60	53.05	68.20	-15.15	Peak	VERTICAL
1	10400.00	44.54	2.75	47.29	68.20	-20.91	Peak	HORIZONTAL
2	14515.26	45.97	7.77	53.74	68.20	-14.46	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	2021/04/07
Channel Number	CH High	Test By	Weitin
Temperature	25 °C	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	10480.00	44.44	2.84	47.28	68.20	-20.92	Peak	VERTICAL
2	14209.87	45.31	7.10	52.41	68.20	-15.79	Peak	VERTICAL
1	10480.00	44.21	2.84	47.05	68.20	-21.15	Peak	HORIZONTAL
2	14328.97	44.57	7.36	51.93	68.20	-16.27	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	2021/04/07
Channel Number	CH Low	Test By	Weitin
Temperature	25 °C	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	10380.00	44.62	2.62	47.24	68.20	-20.96	Peak	VERTICAL
2	14226.17	45.27	7.13	52.40	68.20	-15.80	Peak	VERTICAL
1	10380.00	45.45	2.62	48.07	68.20	-20.13	Peak	HORIZONTAL
2	14260.39	45.22	7.21	52.43	68.20	-15.77	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	2021/04/07
Channel Number	CH High	Test By	Weitin
Temperature	25 °C	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	10460.00	44.13	2.84	46.97	68.20	-21.23	Peak	VERTICAL
2	14209.02	44.94	7.10	52.04	68.20	-16.16	Peak	VERTICAL
1	10460.00	44.12	2.84	46.96	68.20	-21.24	Peak	HORIZONTAL
2	14328.84	44.95	7.36	52.31	68.20	-15.89	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)**

## **(Band UNII-1, 802.11ac VHT20 mode)**

Operation Mode	TX MODE	Test Date	2021/04/07
Channel Number	CH Low	Test By	Weitin
Temperature	25 °C	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	10360.00	45.03	2.62	47.65	68.20	-20.55	Peak	VERTICAL
2	14226.70	45.68	7.13	52.81	68.20	-15.39	Peak	VERTICAL
1	10360.00	45.05	2.62	47.67	68.20	-20.53	Peak	HORIZONTAL
2	14260.35	45.32	7.21	52.53	68.20	-15.67	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	2021/04/07
Channel Number	CH Mid	Test By	Weitin
Temperature	25 °C	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	10400.00	44.36	2.75	47.11	68.20	-21.09	Peak	VERTICAL
2	14430.11	46.26	7.60	53.86	68.20	-14.34	Peak	VERTICAL
1	10400.00	45.03	2.75	47.78	68.20	-20.42	Peak	HORIZONTAL
2	14515.81	46.03	7.77	53.80	68.20	-14.40	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	2021/04/07
Channel Number	CH High	Test By	Weitin
Temperature	25 °C	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	10480.00	44.98	2.84	47.82	68.20	-20.38	Peak	VERTICAL
2	14209.24	44.74	7.10	51.84	68.20	-16.36	Peak	VERTICAL
1	10480.00	44.24	2.84	47.08	68.20	-21.12	Peak	HORIZONTAL
2	14328.08	44.42	7.36	51.78	68.20	-16.42	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-1, 802.11ac VHT40 mode)**

Operation Mode	TX MODE	Test Date	2021/04/07
Channel Number	CH Low	Test By	Weitin
Temperature	25 °C	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	10380.00	45.22	2.62	47.84	68.20	-20.36	Peak	VERTICAL
2	14227.00	46.26	7.13	53.39	68.20	-14.81	Peak	VERTICAL
1	10380.00	46.26	2.62	48.88	68.20	-19.32	Peak	HORIZONTAL
2	14260.92	45.69	7.21	52.90	68.20	-15.30	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	2021/04/07
Channel Number	CH High	Test By	Weitin
Temperature	25 °C	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	10460.00	44.49	2.84	47.33	68.20	-20.87	Peak	VERTICAL
2	14209.53	45.45	7.10	52.55	68.20	-15.65	Peak	VERTICAL
1	10460.00	44.24	2.84	47.08	68.20	-21.12	Peak	HORIZONTAL
2	14329.74	45.34	7.36	52.70	68.20	-15.50	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)**
**(Band UNII-1, 802.11ac VHT80 mode)**

Operation Mode	TX MODE	Test Date	2021/04/07
Channel Number	CH Low	Test By	Weitin
Temperature	25 °C	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	10420.00	45.32	2.62	47.94	68.20	-20.26	Peak	VERTICAL
2	14226.33	45.50	7.13	52.63	68.20	-15.57	Peak	VERTICAL
1	10420.00	45.41	2.62	48.03	68.20	-20.17	Peak	HORIZONTAL
2	14260.88	45.45	7.21	52.66	68.20	-15.54	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	2021/04/07
Channel Number	CH Low	Test By	Weitin
Temperature	25 °C	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11490.00	42.15	5.23	47.38	74.00	-26.62	Peak	VERTICAL
2	14294.00	44.67	7.29	51.96	68.20	-16.24	Peak	VERTICAL
1	11490.00	42.61	5.23	47.84	74.00	-26.16	Peak	HORIZONTAL
2	14379.00	44.12	7.48	51.60	68.20	-16.60	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	2021/04/07
Channel Number	CH Mid	Test By	Weitin
Temperature	25 °C	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11570.00	42.19	5.44	47.63	74.00	-26.37	Peak	VERTICAL
2	14192.00	44.79	7.07	51.86	68.20	-16.34	Peak	VERTICAL
1	11570.00	42.24	5.44	47.68	74.00	-26.32	Peak	HORIZONTAL
2	14328.00	44.13	7.36	51.49	68.20	-16.71	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	2021/04/07
Channel Number	CH High	Test By	Weitin
Temperature	25 °C	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11650.00	42.55	5.65	48.20	74.00	-25.80	Peak	VERTICAL
2	13733.00	44.73	6.95	51.68	68.20	-16.52	Peak	VERTICAL
1	11650.00	43.75	5.65	49.40	74.00	-24.60	Peak	HORIZONTAL
2	14447.00	43.62	7.62	51.24	68.20	-16.96	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	2021/04/07
Channel Number	CH Low	Test By	Weitin
Temperature	25 °C	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11490.00	42.79	5.23	48.02	74.00	-25.98	Peak	VERTICAL
2	14294.08	45.14	7.29	52.43	68.20	-15.77	Peak	VERTICAL
1	11490.00	43.11	5.23	48.34	74.00	-25.66	Peak	HORIZONTAL
2	14379.05	44.54	7.48	52.02	68.20	-16.18	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	2021/04/07
Channel Number	CH Mid	Test By	Weitin
Temperature	25 °C	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11570.00	42.25	5.44	47.69	74.00	-26.31	Peak	VERTICAL
2	14192.13	45.45	7.07	52.52	68.20	-15.68	Peak	VERTICAL
1	11570.00	42.48	5.44	47.92	74.00	-26.08	Peak	HORIZONTAL
2	14328.12	44.41	7.36	51.77	68.20	-16.43	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	2021/04/07
Channel Number	CH High	Test By	Weitin
Temperature	25 °C	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11650.00	43.21	5.65	48.86	74.00	-25.14	Peak	VERTICAL
2	13733.41	45.39	6.95	52.34	68.20	-15.86	Peak	VERTICAL
1	11650.00	44.42	5.65	50.07	74.00	-23.93	Peak	HORIZONTAL
2	14447.05	44.05	7.62	51.67	68.20	-16.53	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	2021/04/07
Channel Number	CH Low	Test By	Weitin
Temperature	25 °C	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11510.00	42.74	5.23	47.97	74.00	-26.03	Peak	VERTICAL
2	14294.34	45.40	7.29	52.69	68.20	-15.51	Peak	VERTICAL
1	11510.00	43.38	5.23	48.61	74.00	-25.39	Peak	HORIZONTAL
2	14379.69	44.33	7.48	51.81	68.20	-16.39	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	2021/04/07
Channel Number	CH High	Test By	Weitin
Temperature	25 °C	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11590.00	43.01	5.44	48.45	74.00	-25.55	Peak	VERTICAL
2	14192.36	45.62	7.07	52.69	68.20	-15.51	Peak	VERTICAL
1	11590.00	43.23	5.44	48.67	74.00	-25.33	Peak	HORIZONTAL
2	14328.04	44.29	7.36	51.65	68.20	-16.55	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 VHT20 mode)**

Operation Mode	TX MODE	Test Date	2021/04/07
Channel Number	CH Low	Test By	Weitin
Temperature	25 °C	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11490.00	42.74	5.23	47.97	74.00	-26.03	Peak	VERTICAL
2	14294.41	45.41	7.29	52.70	68.20	-15.50	Peak	VERTICAL
1	11490.00	43.58	5.23	48.81	74.00	-25.19	Peak	HORIZONTAL
2	14379.35	44.40	7.48	51.88	68.20	-16.32	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	2021/04/07
Channel Number	CH Mid	Test By	Weitin
Temperature	25 °C	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11570.00	42.75	5.44	48.19	74.00	-25.81	Peak	VERTICAL
2	14192.75	45.44	7.07	52.51	68.20	-15.69	Peak	VERTICAL
1	11570.00	42.36	5.44	47.80	74.00	-26.20	Peak	HORIZONTAL
2	14328.57	44.35	7.36	51.71	68.20	-16.49	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	2021/04/07
Channel Number	CH High	Test By	Weitin
Temperature	25 °C	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11650.00	43.47	5.65	49.12	74.00	-24.88	Peak	VERTICAL
2	13733.00	44.75	6.95	51.70	68.20	-16.50	Peak	VERTICAL
1	11650.00	43.87	5.65	49.52	74.00	-24.48	Peak	HORIZONTAL
2	14447.74	44.30	7.62	51.92	68.20	-16.28	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)**

## **(Band UNII-3, 802.11ac VHT40 mode)**

Operation Mode	TX MODE	Test Date	2021/04/07
Channel Number	CH Low	Test By	Weitin
Temperature	25 °C	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11510.00	42.80	5.23	48.03	74.00	-25.97	Peak	VERTICAL
2	14294.61	45.70	7.29	52.99	68.20	-15.21	Peak	VERTICAL
1	11510.00	43.55	5.23	48.78	74.00	-25.22	Peak	HORIZONTAL
2	14380.42	44.60	7.48	52.08	68.20	-16.12	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	2021/04/07
Channel Number	CH High	Test By	Weitin
Temperature	25 °C	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11590.00	43.28	5.44	48.72	74.00	-25.28	Peak	VERTICAL
1	11590.00	43.28	5.44	48.72	74.00	-25.28	Peak	VERTICAL
1	11590.00	44.13	5.44	49.57	74.00	-24.43	Peak	HORIZONTAL
2	14328.75	44.42	7.36	51.78	68.20	-16.42	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)**

## **(Band UNII-3, 802.11ac VHT80 mode)**

Operation Mode	TX MODE	Test Date	2021/04/07
Channel Number	CH Low	Test By	Weitin
Temperature	25 °C	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11550.00	42.23	5.23	47.46	74.00	-26.54	Peak	VERTICAL
2	14294.10	44.69	7.29	51.98	68.20	-16.22	Peak	VERTICAL
1	11550.00	43.33	5.23	48.56	74.00	-25.44	Peak	HORIZONTAL
2	14379.06	44.55	7.48	52.03	68.20	-16.17	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 Ch  
Channel Number 5180 MHz  
Temperature 25 °C

Test Date 2021/04/07  
Test By Weitin  
Humidity 65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5150.00	50.25	-6.29	43.96	54.00	-10.04	Average	VERTICAL
2	5150.00	64.56	-6.29	58.27	68.20	-9.93	Peak	VERTICAL
1	5150.00	47.33	-6.29	41.04	54.00	-12.96	Average	HORIZONTAL
2	5150.00	59.76	-6.29	53.47	68.20	-14.73	Peak	HORIZONTAL

Operation Mode TX CH High Ch  
Channel Number 5240MHz  
Temperature 25 °C

Test Date 2021/04/07  
Test By Weitin  
Humidity 65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5350.00	57.30	-5.50	51.80	68.20	-16.40	Peak	VERTICAL
1	5350.00	56.03	-5.50	50.53	68.20	-17.67	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	2021/04/07
Channel Number	5180 MHz	Test By	Weitin
Temperature	25 °C	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5150.00	56.77	-6.29	50.48	54.00	-3.52	Average	VERTICAL
2	5150.00	69.79	-6.29	63.50	68.20	-4.70	Peak	VERTICAL
1	5150.00	40.36	-6.29	34.07	54.00	-19.93	Average	HORIZONTAL
2	5150.00	60.93	-6.29	54.64	68.20	-13.56	Peak	HORIZONTAL

Operation Mode	TX CH High	Test Date	2021/04/07
Channel Number	5240MHz	Test By	Weitin
Temperature	25 °C	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5350.00	55.36	-5.50	49.86	68.20	-18.34	Peak	VERTICAL
1	5350.00	55.47	-5.50	49.97	68.20	-18.23	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 HT40 mode) -Radiated**

Operation Mode	TX CH Low	Test Date	2021/04/07
Channel Number	5190 MHz	Test By	Weitin
Temperature	25 °C	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5150.00	55.73	-6.29	49.44	54.00	-4.56	Average	VERTICAL
2	5150.00	70.18	-6.29	63.89	68.20	-4.31	Peak	VERTICAL
1	5150.00	50.36	-6.29	44.07	54.00	-9.93	Average	HORIZONTAL
2	5150.00	65.69	-6.29	59.40	68.20	-8.80	Peak	HORIZONTAL

Operation Mode	TX CH High	Test Date	2021/04/07
Channel Number	5230MHz	Test By	Weitin
Temperature	25 °C	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5350.00	56.06	-5.50	50.56	68.20	-17.64	Peak	VERTICAL
1	5350.00	55.05	-5.50	49.55	68.20	-18.65	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	2021/04/07
Channel Number	5180 MHz	Test By	Weitin
Temperature	25 °C	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5150.00	52.47	-6.29	46.18	54.00	-7.82	Average	VERTICAL
2	5150.00	66.70	-6.29	60.41	68.20	-7.79	Peak	VERTICAL
1	5150.00	43.28	-6.29	36.99	54.00	-17.01	Average	HORIZONTAL
2	5150.00	60.85	-6.29	54.56	68.20	-13.64	Peak	HORIZONTAL

Operation Mode	TX CH High	Test Date	2021/04/07
Channel Number	5240MHz	Test By	Weitin
Temperature	25 °C	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5350.00	56.20	-5.50	50.70	68.20	-17.50	Peak	VERTICAL
1	5350.00	55.27	-5.50	49.77	68.20	-18.43	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	2021/04/07
Channel Number	5190 MHz	Test By	Weitin
Temperature	25 °C	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5150.00	55.87	-6.29	49.58	54.00	-4.42	Average	VERTICAL
2	5150.00	68.75	-6.29	62.46	68.20	-5.74	Peak	VERTICAL
1	5150.00	49.26	-6.29	42.97	54.00	-11.03	Average	HORIZONTAL
2	5150.00	63.32	-6.29	57.03	68.20	-11.17	Peak	HORIZONTAL

Operation Mode	TX CH High	Test Date	2021/04/07
Channel Number	5230MHz	Test By	Weitin
Temperature	25 °C	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5350.00	55.58	-5.50	50.08	68.20	-18.12	Peak	VERTICAL
1	5350.00	55.86	-5.50	50.36	68.20	-17.84	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, 802.11ac VHT80 mode) -Radiated**

Operation Mode	TX CH Low	Test Date	2021/04/07
Channel Number	5210 MHz	Test By	Weitin
Temperature	25 °C	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5150.00	44.38	-6.29	38.09	54.00	-15.91	Average	VERTICAL
2	5150.00	64.79	-6.29	58.50	68.20	-9.70	Peak	VERTICAL
1	5150.00	40.84	-6.29	34.55	54.00	-19.45	Average	HORIZONTAL
2	5150.00	59.30	-6.29	53.01	68.20	-15.19	Peak	HORIZONTAL

Operation Mode	TX CH High	Test Date	2021/04/07
Channel Number	5210 MHz	Test By	Weitin
Temperature	25 °C	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5350.00	55.93	-5.50	50.43	68.20	-17.77	Peak	VERTICAL
1	5350.00	56.27	-5.50	50.77	68.20	-17.43	Peak	HORIZONTAL

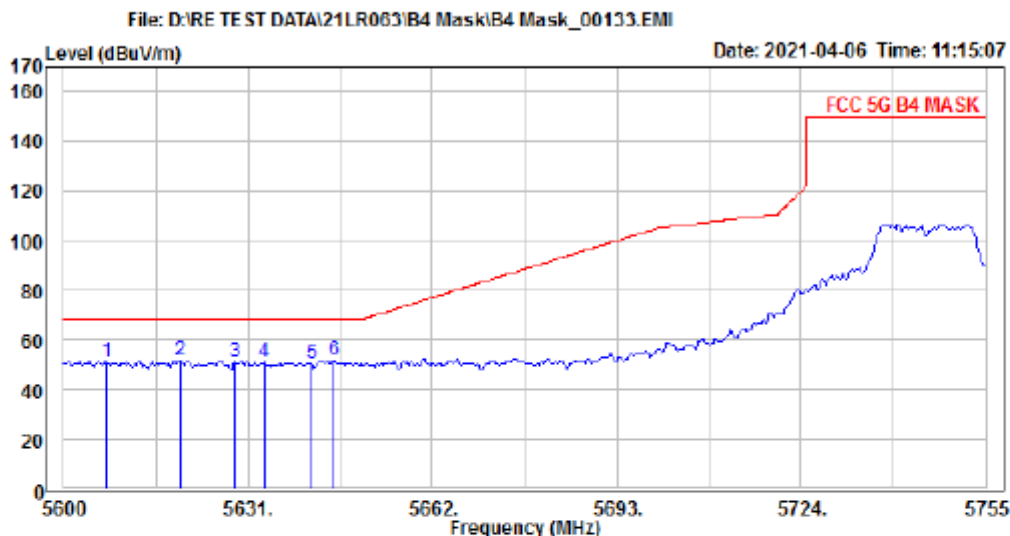
**Remark:**

- 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-3, 802.11a mode) –Radiated



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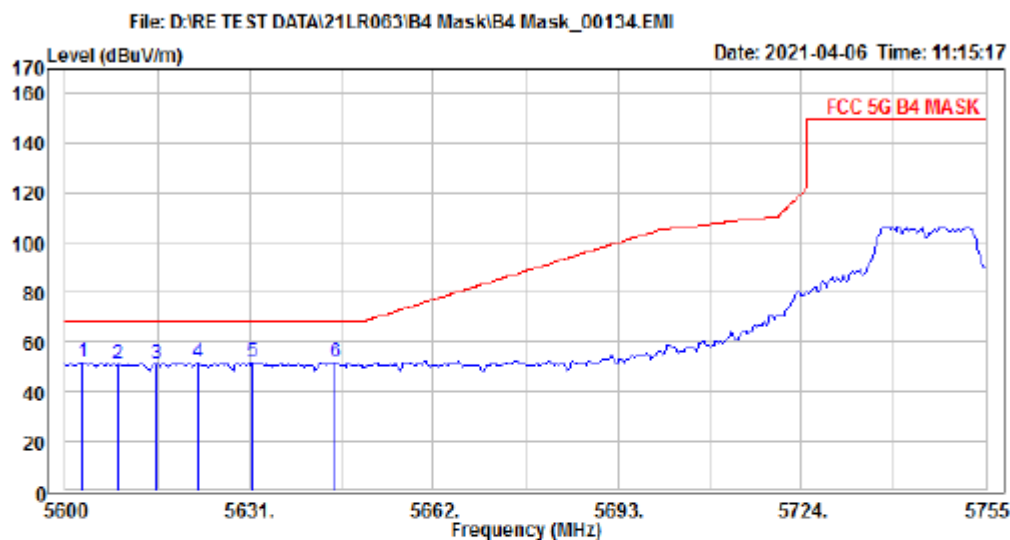


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: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive  
EUT :  
Mode : 5G Mask B4 a Mode Low CH  
Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5607.188	55.71	-4.62	51.09	68.20	-17.11	Vertical
2	5619.543	56.48	-4.65	51.83	68.20	-16.37	Vertical
3	5628.753	55.72	-4.67	51.05	68.20	-17.15	Vertical
4	5633.696	55.49	-4.68	50.81	68.20	-17.39	Vertical
5	5641.558	55.18	-4.70	50.48	68.20	-17.72	Vertical
6 PP	5645.377	56.68	-4.70	51.98	68.20	-16.22	Vertical



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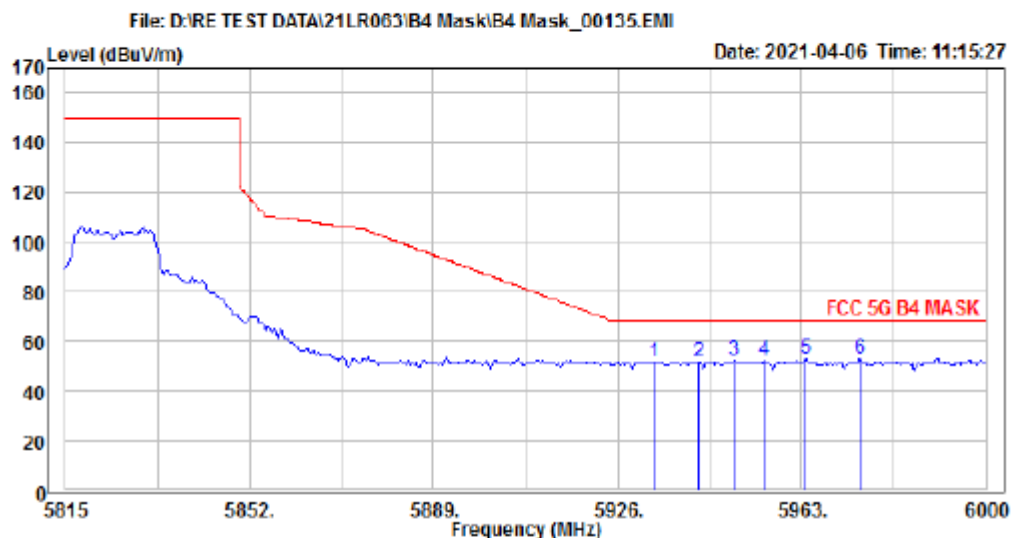
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: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive  
EUT :  
Mode : 5G Mask B4 a Mode Low CH  
Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5602.920	56.51	-4.61	51.90	68.20	-16.30	Horizontal
2	5608.761	55.91	-4.63	51.28	68.20	-16.92	Horizontal
3	5615.275	55.79	-4.63	51.16	68.20	-17.04	Horizontal
4	5622.239	56.10	-4.65	51.45	68.20	-16.75	Horizontal
5	5631.449	56.38	-4.68	51.70	68.20	-16.50	Horizontal
6 PP	5645.377	56.68	-4.70	51.98	68.20	-16.22	Horizontal





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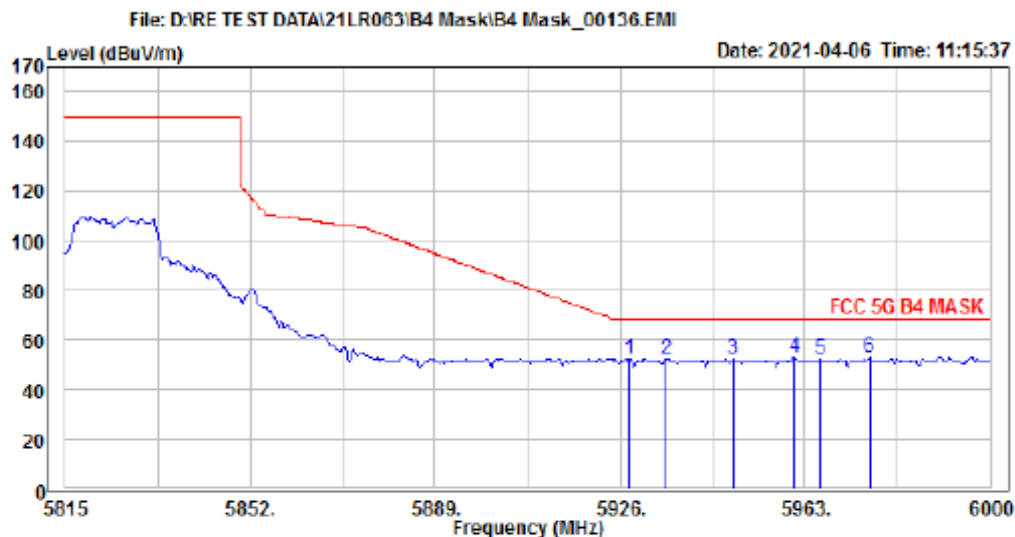


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: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive  
EUT :  
Mode : 5G Mask B4 a Mode High CH  
Note :

	Read			Limit	Over	
Freq	Level	Factor	Level	Line	Limit	Pol/Phase
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5933.239	55.62	-3.88	51.74	68.20	-16.46 Vertical
2	5942.355	55.53	-3.87	51.66	68.20	-16.54 Vertical
3	5949.326	56.36	-3.88	52.48	68.20	-15.72 Vertical
4	5955.493	55.89	-3.85	52.04	68.20	-16.16 Vertical
5	5963.804	56.60	-3.83	52.77	68.20	-15.43 Vertical
6 PP	5974.797	57.01	-3.79	53.22	68.20	-14.98 Vertical



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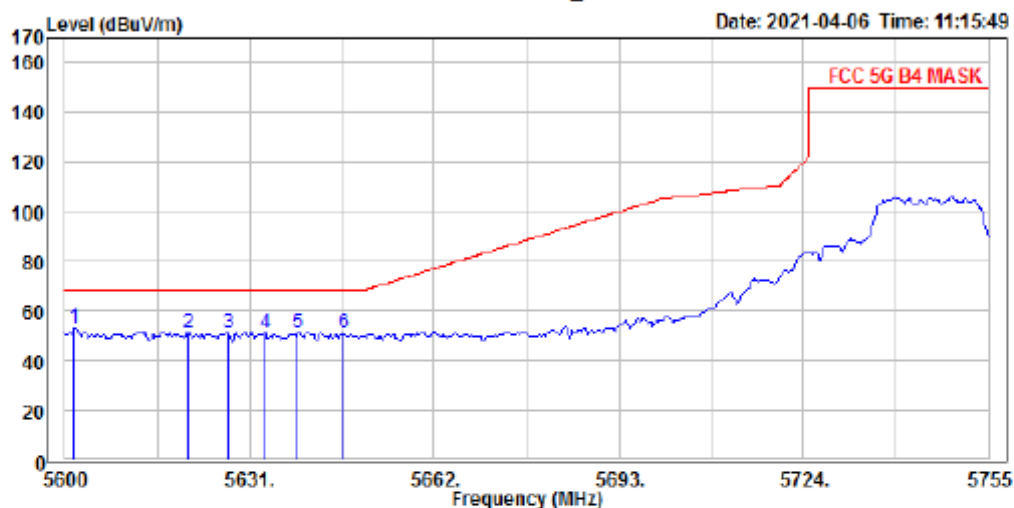
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EUT :  
Mode : 5G Mask B4 a Mode High CH  
Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5927.877	56.31	-3.88	52.43	68.20	-15.77	Horizontal
2	5935.116	56.54	-3.87	52.67	68.20	-15.53	Horizontal
3	5948.522	56.20	-3.88	52.32	68.20	-15.88	Horizontal
4 PP	5960.855	56.92	-3.84	53.08	68.20	-15.12	Horizontal
5	5965.949	56.15	-3.82	52.33	68.20	-15.87	Horizontal
6	5975.870	56.50	-3.78	52.72	68.20	-15.48	Horizontal



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File: D:\RE TEST DATA\21LR003\B4 Mask\B4 Mask\_00137.EMI



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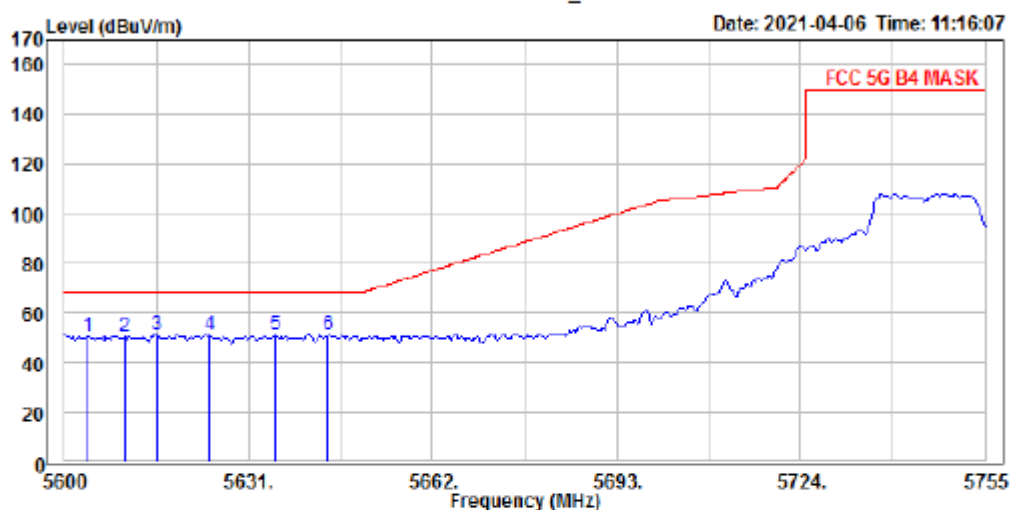
EUT :  
Mode : 5G Mask B4 HT20 Mode Low CH  
Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	PP 5601.572	57.91	-4.61	53.30	68.20	-14.90	Vertical
2	5620.667	55.82	-4.65	51.17	68.20	-17.03	Vertical
3	5627.406	55.70	-4.66	51.04	68.20	-17.16	Vertical
4	5633.471	55.89	-4.68	51.21	68.20	-16.99	Vertical
5	5639.087	55.66	-4.69	50.97	68.20	-17.23	Vertical
6	5646.725	55.52	-4.71	50.81	68.20	-17.39	Vertical



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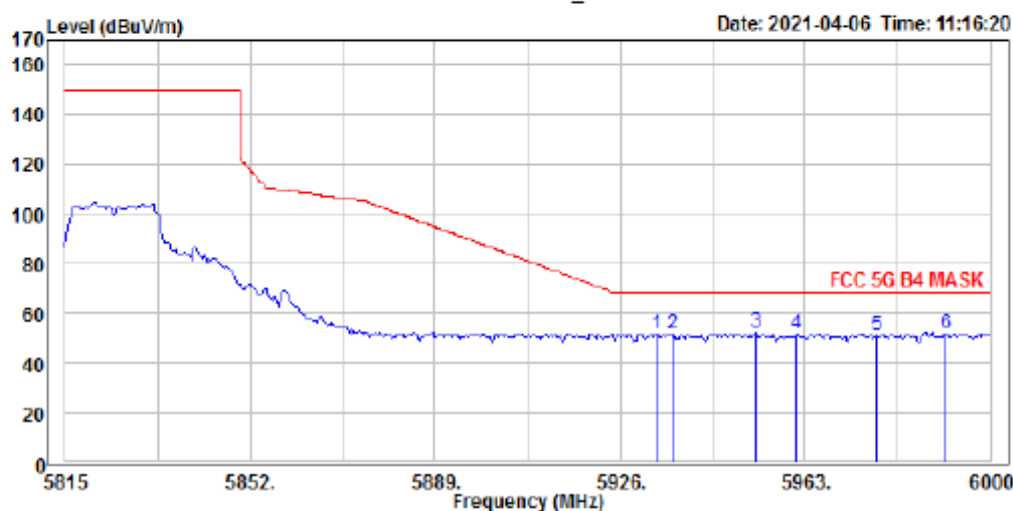
EUT :  
Mode : 5G Mask B4 HT20 Mode Low CH  
Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5603.819	55.28	-4.62	50.66	68.20	-17.54	Horizontal
2	5610.109	54.98	-4.62	50.36	68.20	-17.84	Horizontal
3	5615.500	55.66	-4.63	51.03	68.20	-17.17	Horizontal
4	5624.485	55.64	-4.66	50.98	68.20	-17.22	Horizontal
5	5635.493	55.52	-4.67	50.85	68.20	-17.35	Horizontal
6 PP	5644.478	55.78	-4.71	51.07	68.20	-17.13	Horizontal



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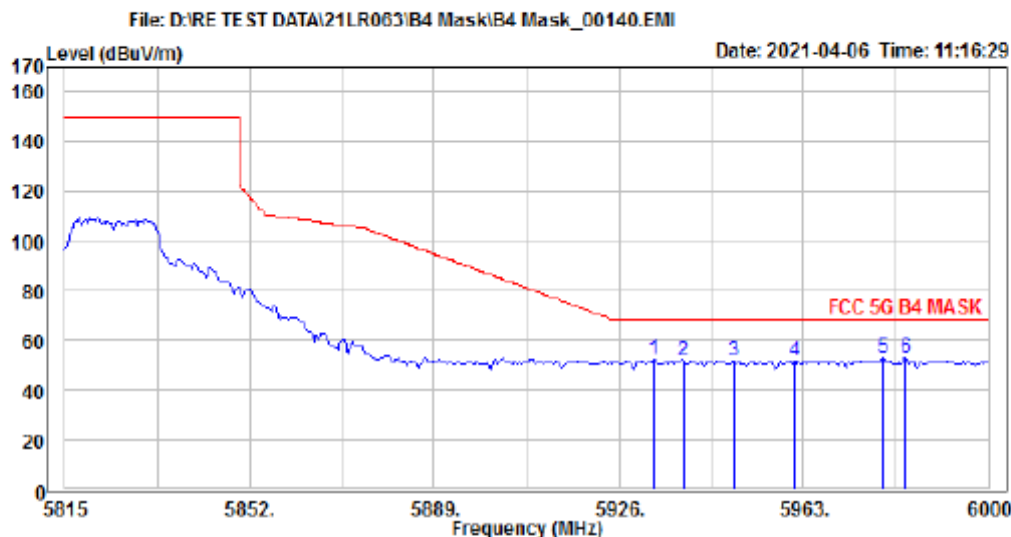


Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 V 1-18G.csv Vertical  
: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive  
EUT :  
Mode : 5G Mask B4 HT20 Mode High CH  
Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5933.239	55.88	-3.88	52.00	68.20	-16.20	Vertical
2	5936.457	55.42	-3.87	51.55	68.20	-16.65	Vertical
3 PP	5953.080	56.52	-3.87	52.65	68.20	-15.55	Vertical
4	5961.391	55.66	-3.84	51.82	68.20	-16.38	Vertical
5	5977.210	54.95	-3.78	51.17	68.20	-17.03	Vertical
6	5991.152	55.55	-3.73	51.82	68.20	-16.38	Vertical



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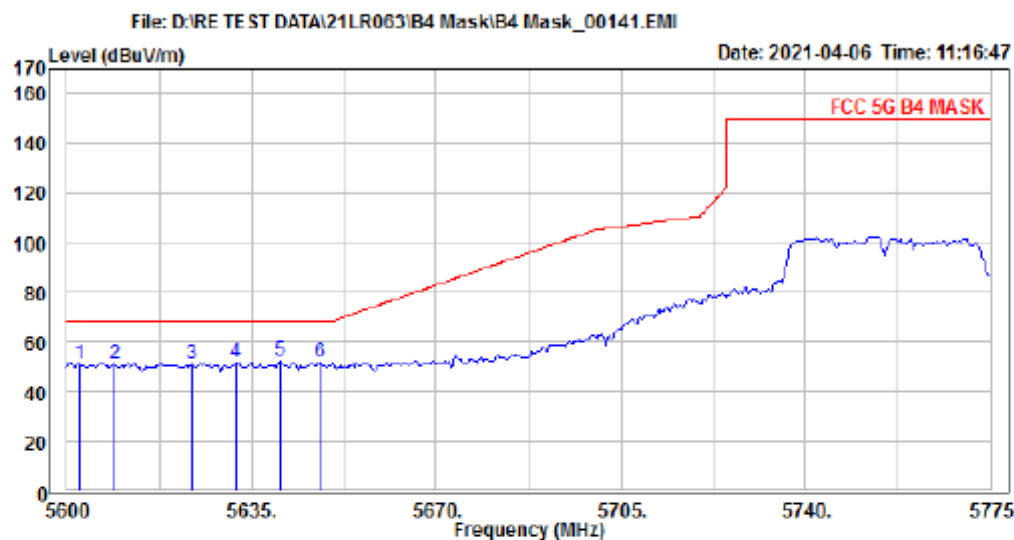


Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 H 1-18G.csv Horizontal  
: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive  
EUT :  
Mode : 5G Mask B4 HT20 Mode High CH  
Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5932.971	56.47	-3.88	52.59	68.20	-15.61	Horizontal
2	5938.870	55.72	-3.88	51.84	68.20	-16.36	Horizontal
3	5949.058	55.89	-3.88	52.01	68.20	-16.19	Horizontal
4	5961.123	55.66	-3.84	51.82	68.20	-16.38	Horizontal
5 PP	5979.087	56.90	-3.77	53.13	68.20	-15.07	Horizontal
6	5983.377	56.85	-3.75	53.10	68.20	-15.10	Horizontal



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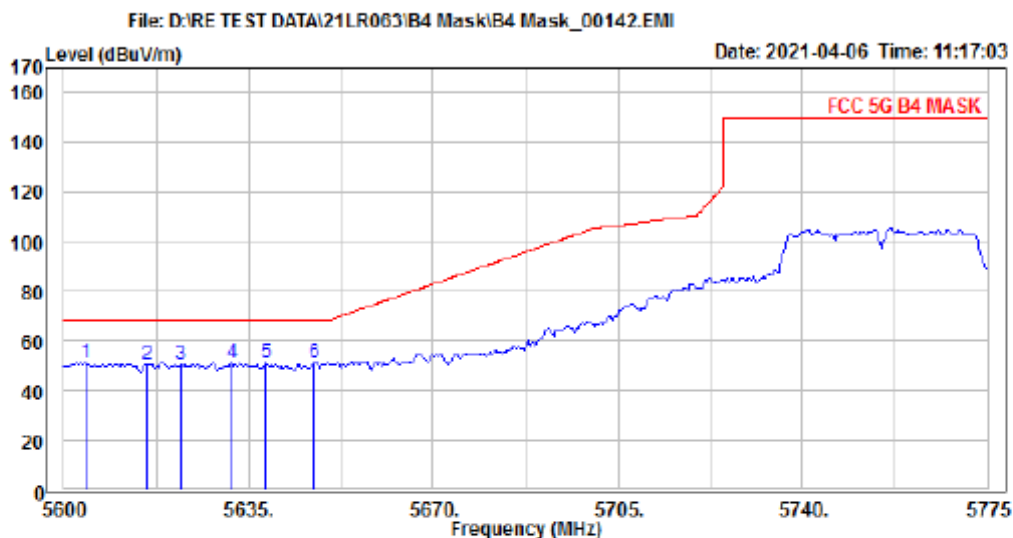


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: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive  
EUT :  
Mode : 5G Mask B4 HT40 Mode Low CH  
Note :

	Read			Limit	Over	
Freq	Level	Factor	Level	Line	Limit	Pol/Phase
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5602.283	55.90	-4.61	51.29	68.20	-16.91 Vertical
2	5608.877	55.72	-4.63	51.09	68.20	-17.11 Vertical
3	5623.587	55.42	-4.65	50.77	68.20	-17.43 Vertical
4	5631.957	56.26	-4.68	51.58	68.20	-16.62 Vertical
5 PP	5648.326	56.73	-4.69	52.04	68.20	-16.16 Vertical
6	5647.935	56.47	-4.70	51.77	68.20	-16.43 Vertical



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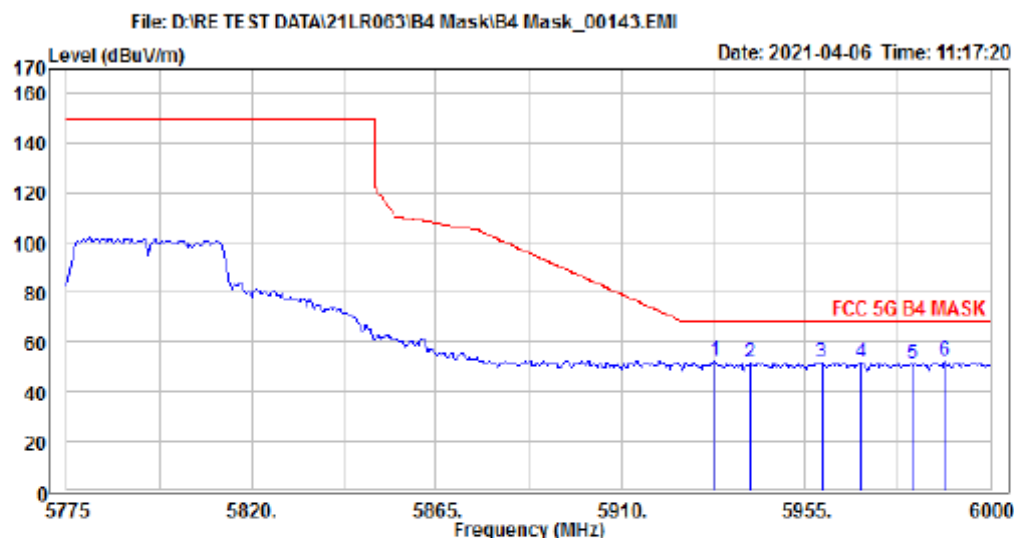
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: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive  
EUT :  
Mode : 5G Mask B4 HT40 Mode Low CH  
Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5604.058	55.74	-4.62	51.12	68.20	-17.08	Horizontal
2	5615.725	55.32	-4.63	50.69	68.20	-17.51	Horizontal
3	5622.065	55.35	-4.65	50.70	68.20	-17.50	Horizontal
4 PP	5631.703	55.89	-4.68	51.21	68.20	-16.99	Horizontal
5	5638.297	55.68	-4.68	51.00	68.20	-17.20	Horizontal
6	5647.428	55.84	-4.71	51.13	68.20	-17.07	Horizontal





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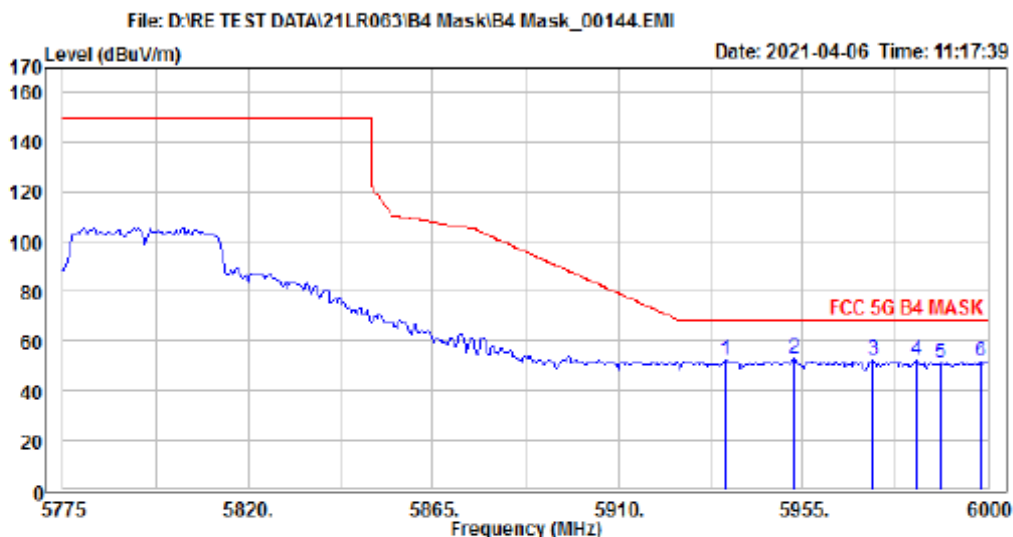


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: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive  
EUT :  
Mode : 5G Mask B4 HT40 Mode High CH  
Note :

	Read			Limit	Over	
Freq	Level	Factor	Level	Line	Limit	Pol/Phase
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1 PP 5932.826	56.40	-3.88	52.52	68.20	-15.68	Vertical
2 5941.630	55.28	-3.88	51.40	68.20	-16.80	Vertical
3 5958.913	55.80	-3.84	51.96	68.20	-16.24	Vertical
4 5968.370	55.28	-3.80	51.48	68.20	-16.72	Vertical
5 5981.087	55.09	-3.76	51.33	68.20	-16.87	Vertical
6 5988.913	55.99	-3.73	52.26	68.20	-15.94	Vertical



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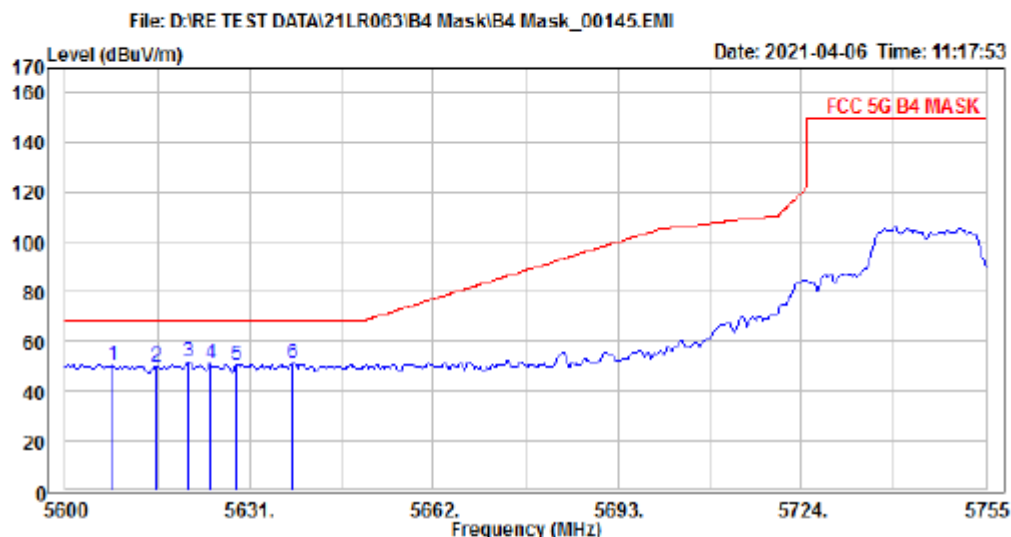


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: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive  
EUT :  
Mode : 5G Mask B4 HT40 Mode High CH  
Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5936.087	56.47	-3.87	52.60	68.20	-15.60	Horizontal
2 PP	5952.717	56.63	-3.87	52.76	68.20	-15.44	Horizontal
3	5971.957	55.85	-3.80	52.05	68.20	-16.15	Horizontal
4	5982.717	56.12	-3.75	52.37	68.20	-15.83	Horizontal
5	5988.587	54.88	-3.73	51.15	68.20	-17.05	Horizontal
6	5998.370	55.29	-3.69	51.60	68.20	-16.60	Horizontal



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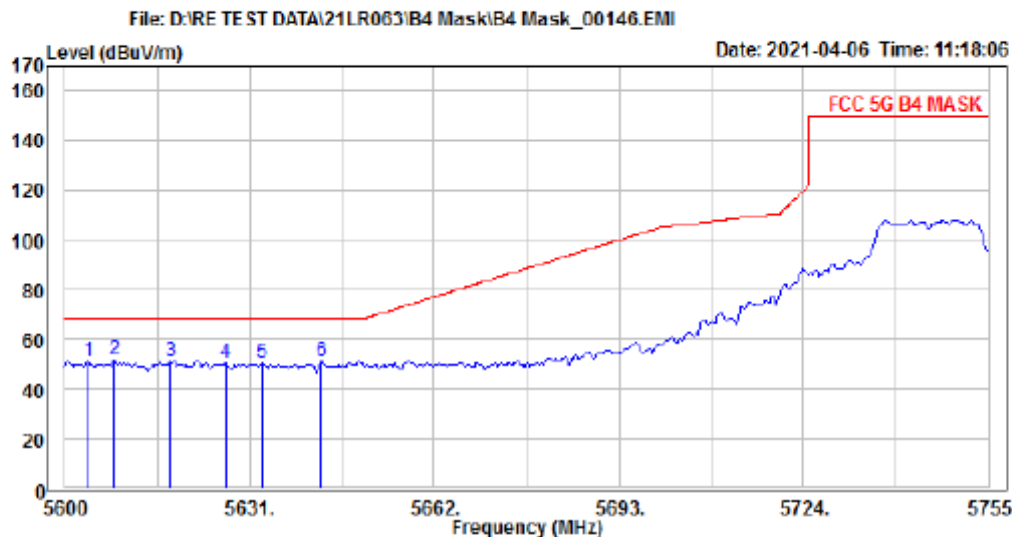


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: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive  
EUT :  
Mode : 5G Mask B4 VHT20 Mode Low CH  
Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5608.087	54.85	-4.62	50.23	68.20	-17.97	Vertical
2	5615.275	54.60	-4.63	49.97	68.20	-18.23	Vertical
3 PP	5620.667	56.52	-4.65	51.87	68.20	-16.33	Vertical
4	5624.485	55.67	-4.66	51.01	68.20	-17.19	Vertical
5	5628.753	55.02	-4.67	50.35	68.20	-17.85	Vertical
6	5638.188	55.69	-4.68	51.01	68.20	-17.19	Vertical



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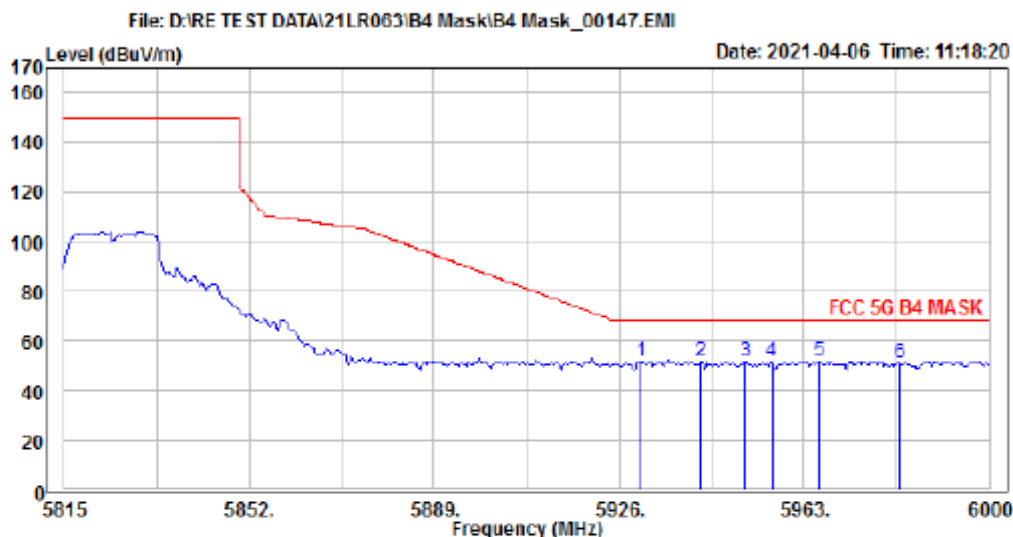


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: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive  
EUT :  
Mode : 5G Mask B4 VHT20 Mode Low CH  
Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5603.819	55.47	-4.62	50.85	68.20	-17.35	Horizontal
2 PP	5608.312	56.01	-4.62	51.39	68.20	-16.81	Horizontal
3	5617.747	55.67	-4.64	51.03	68.20	-17.17	Horizontal
4	5626.957	54.89	-4.66	50.23	68.20	-17.97	Horizontal
5	5633.022	54.78	-4.68	50.10	68.20	-18.10	Horizontal
6	5643.130	55.91	-4.70	51.21	68.20	-16.99	Horizontal



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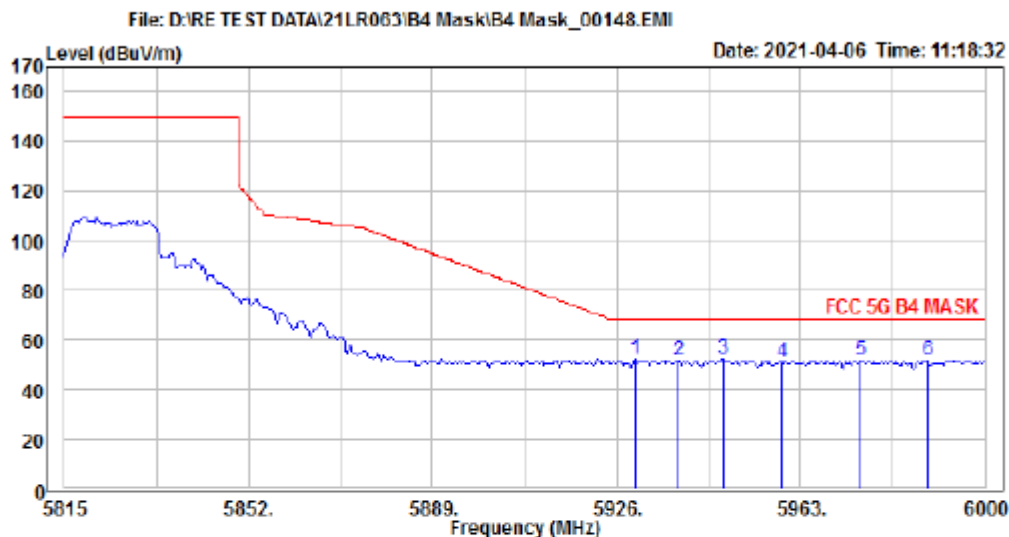


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: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive  
EUT :  
Mode : 5G Mask B4 VHT20 Mode High CH  
Note :

	Read			Limit	Over	
Freq	Level	Factor	Level	Line	Limit	Pol/Phase
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1 PP 5930.290	55.87	-3.87	52.00	68.20	-16.20	Vertical
2 5942.355	55.56	-3.87	51.69	68.20	-16.51	Vertical
3 5951.203	55.79	-3.88	51.91	68.20	-16.29	Vertical
4 5956.565	55.64	-3.85	51.79	68.20	-16.41	Vertical
5 5965.949	55.68	-3.82	51.86	68.20	-16.34	Vertical
6 5982.036	54.90	-3.76	51.14	68.20	-17.06	Vertical



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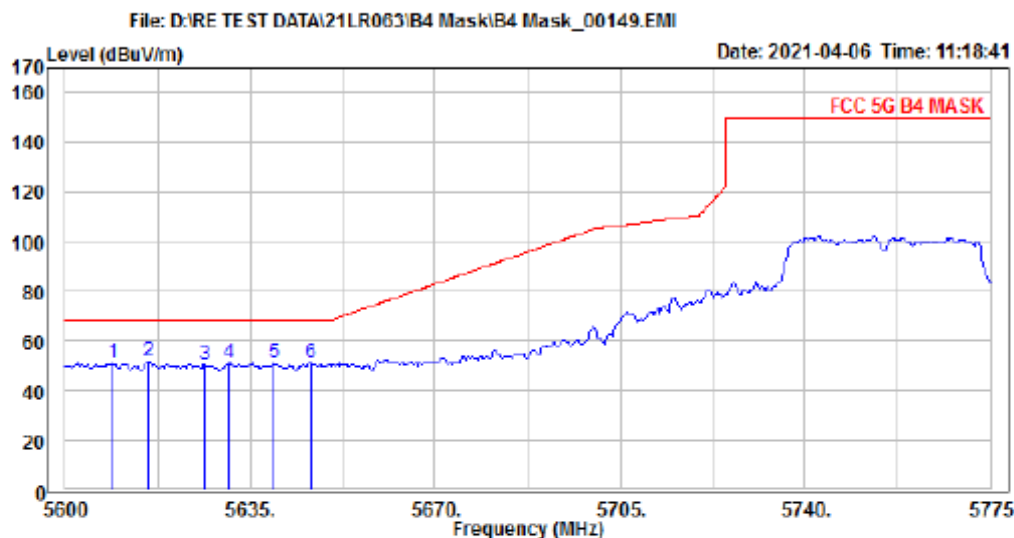


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: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive  
EUT :  
Mode : 5G Mask B4 VHT20 Mode High CH  
Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5929.753	56.11	-3.87	52.24	68.20	-15.96	Horizontal
2	5938.333	55.70	-3.88	51.82	68.20	-16.38	Horizontal
3 PP	5947.449	56.28	-3.87	52.41	68.20	-15.79	Horizontal
4	5959.247	55.03	-3.84	51.19	68.20	-17.01	Horizontal
5	5975.065	55.17	-3.78	51.39	68.20	-16.81	Horizontal
6	5988.471	55.47	-3.73	51.74	68.20	-16.46	Horizontal



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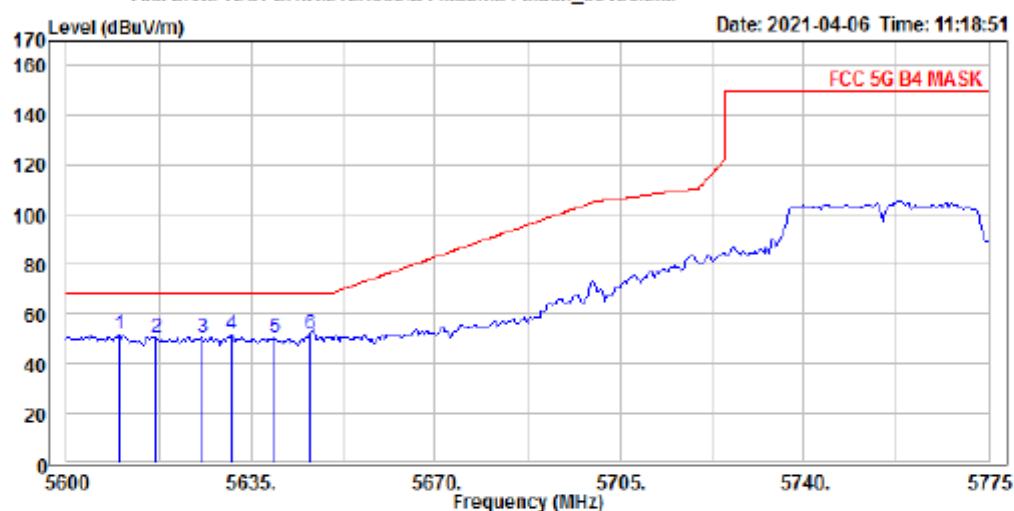
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: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive  
EUT :  
Mode : 5G Mask B4 VHT40 Mode Low CH  
Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5608.877	55.87	-4.63	51.24	68.20	-16.96	Vertical
2 PP	5615.725	56.28	-4.63	51.65	68.20	-16.55	Vertical
3	5626.377	55.14	-4.66	50.48	68.20	-17.72	Vertical
4	5630.942	55.73	-4.67	51.06	68.20	-17.14	Vertical
5	5639.312	55.96	-4.69	51.27	68.20	-16.93	Vertical
6	5646.413	56.03	-4.71	51.32	68.20	-16.88	Vertical



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File: D:\RE TEST DATA\21LR063\B4 Mask\B4 Mask\_00150.EMI



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 H 1-18G.csv Horizontal  
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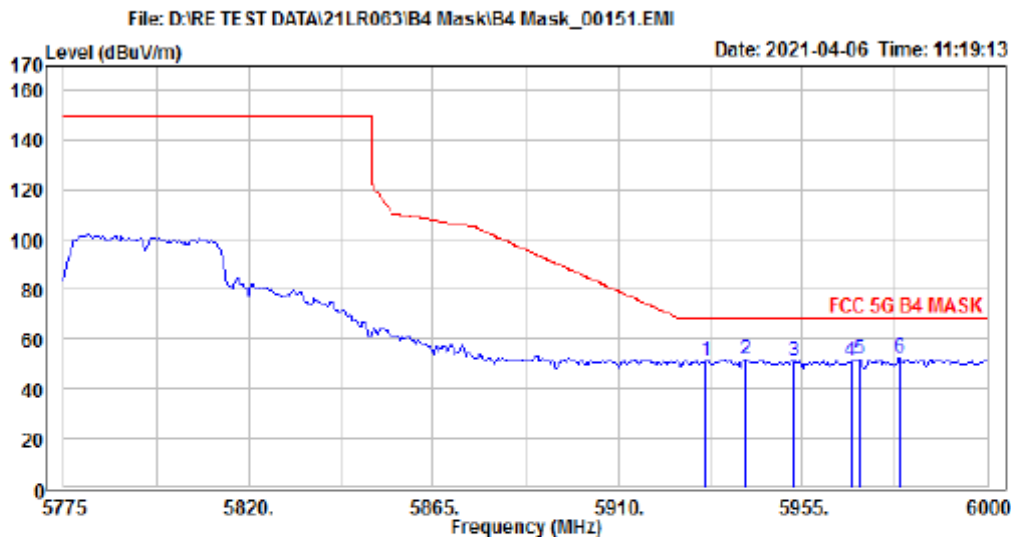
EUT :  
Mode : 5G Mask B4 VHT40 Mode Low CH  
Note :

	Read			Limit	Over	
Freq	Level	Factor	Level	Line	Limit	Pol/Phase
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1 PP 5609.891	56.09	-4.62	51.47	68.20	-16.73	Horizontal
2 5616.993	55.38	-4.64	50.74	68.20	-17.46	Horizontal
3 5625.616	55.33	-4.65	50.68	68.20	-17.52	Horizontal
4 5631.196	56.12	-4.67	51.45	68.20	-16.75	Horizontal
5 5639.312	55.15	-4.69	50.46	68.20	-17.74	Horizontal
6 5646.159	56.15	-4.70	51.45	68.20	-16.75	Horizontal





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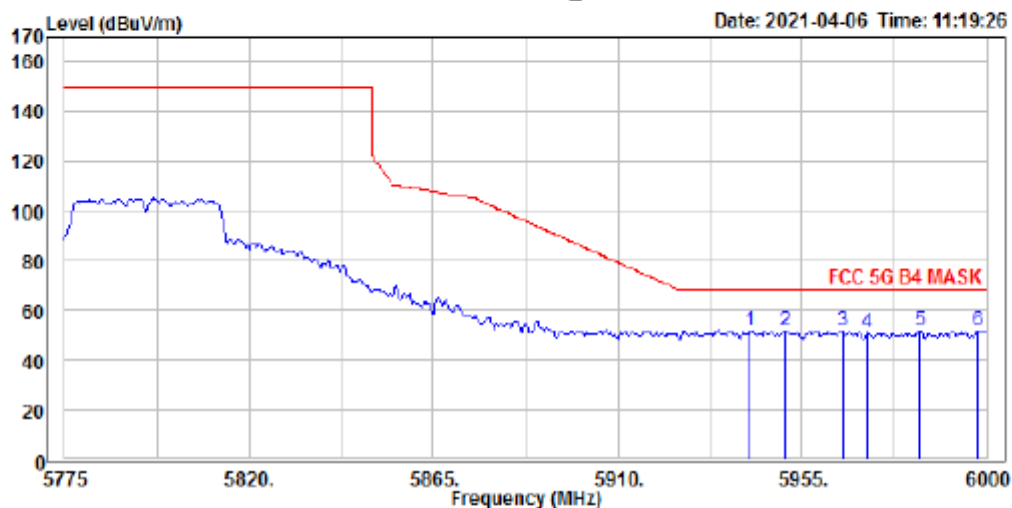
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: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive  
EUT :  
Mode : 5G Mask B4 VHT40 Mode High CH  
Note :

	Freq	Read Level	Factor	Level	Limit	Over	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5931.196	55.16	-3.87	51.29	68.20	-16.91	Vertical
2	5940.978	55.46	-3.88	51.58	68.20	-16.62	Vertical
3	5952.717	55.13	-3.87	51.26	68.20	-16.94	Vertical
4	5966.739	55.00	-3.82	51.18	68.20	-17.02	Vertical
5	5969.022	55.55	-3.80	51.75	68.20	-16.45	Vertical
6 PP	5978.804	56.37	-3.77	52.60	68.20	-15.60	Vertical



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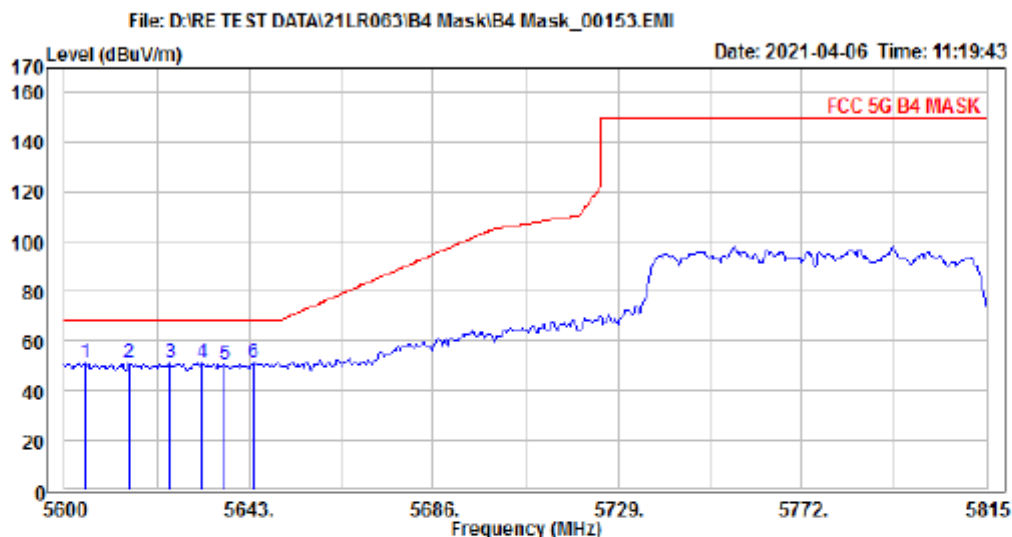
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: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive

EUT :  
Mode : 5G Mask B4 VHT40 Mode High CH  
Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5942.283	55.38	-3.88	51.50	68.20	-16.70	Horizontal
2	5951.087	55.31	-3.88	51.43	68.20	-16.77	Horizontal
3	5965.109	55.49	-3.82	51.67	68.20	-16.53	Horizontal
4	5970.978	54.78	-3.80	50.98	68.20	-17.22	Horizontal
5 PP	5983.696	55.55	-3.75	51.80	68.20	-16.40	Horizontal
6	5997.717	55.32	-3.69	51.63	68.20	-16.57	Horizontal



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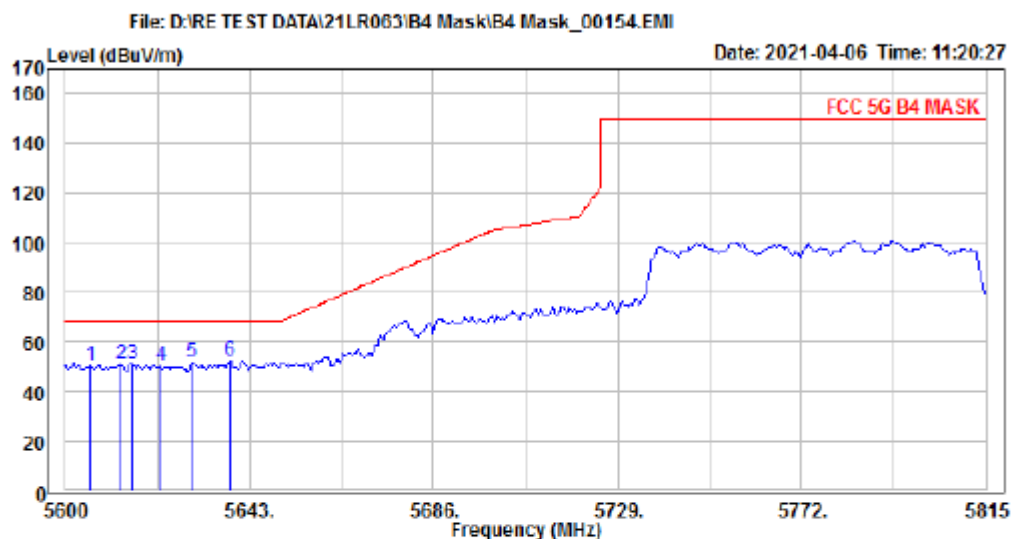


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: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive  
EUT :  
Mode : 5G Mask B4 VHT80 Mode Low CH  
Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5604.674	55.47	-4.62	50.85	68.20	-17.35	Vertical
2	5614.957	55.80	-4.64	51.16	68.20	-17.04	Vertical
3	5624.616	55.46	-4.66	50.80	68.20	-17.40	Vertical
4	5632.094	55.59	-4.68	50.91	68.20	-17.29	Vertical
5	5637.880	55.40	-4.68	50.72	68.20	-17.48	Vertical
6 PP	5643.935	55.91	-4.71	51.20	68.20	-17.00	Vertical



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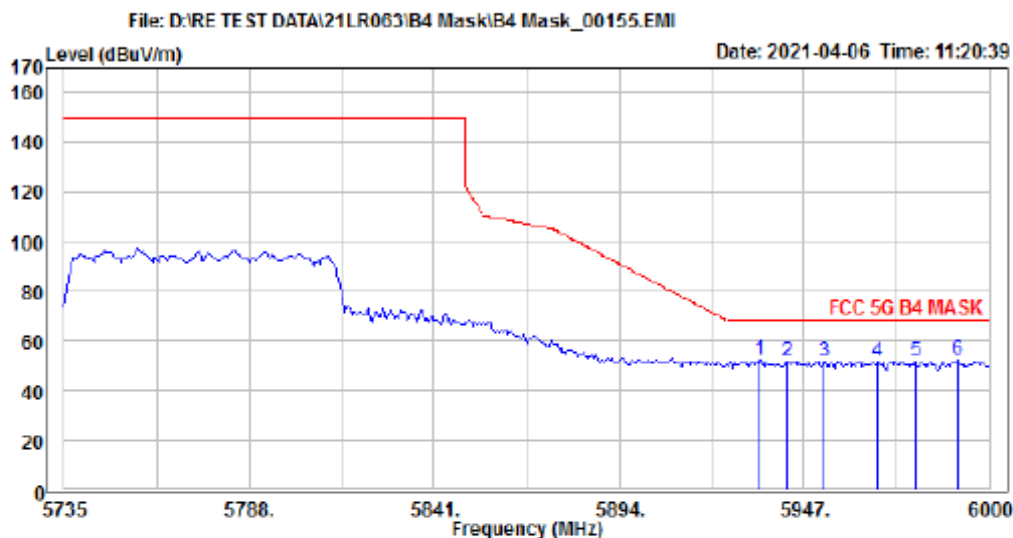


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: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive  
EUT :  
Mode : 5G Mask B4 VHT80 Mode Low CH  
Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5605.920	55.32	-4.61	50.71	68.20	-17.49	Horizontal
2	5612.775	55.42	-4.63	50.79	68.20	-17.41	Horizontal
3	5615.580	55.72	-4.63	51.09	68.20	-17.11	Horizontal
4	5622.435	55.08	-4.65	50.43	68.20	-17.77	Horizontal
5	5629.290	56.34	-4.67	51.67	68.20	-16.53	Horizontal
6 PP	5638.326	57.23	-4.68	52.55	68.20	-15.65	Horizontal



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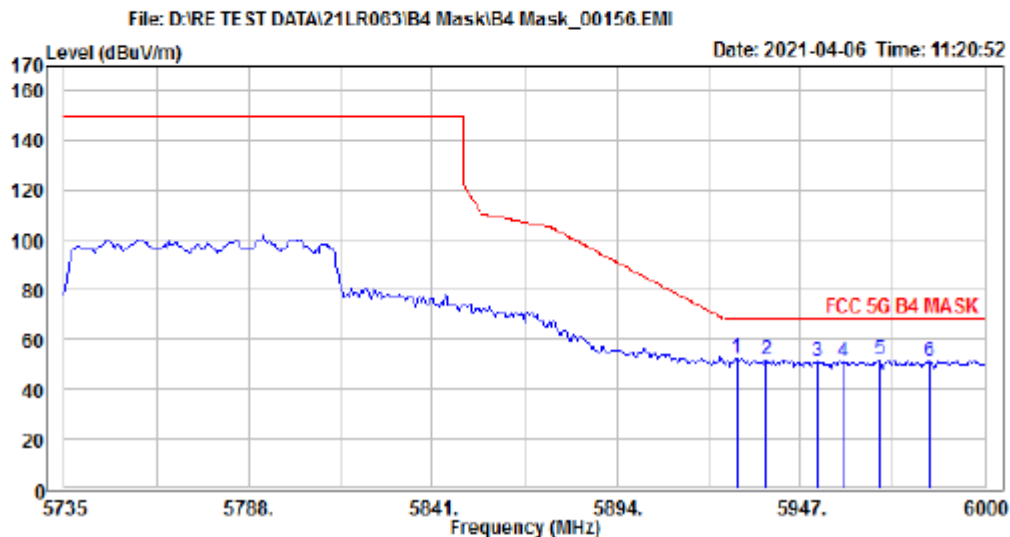


Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 V 1-18G.csv Vertical  
: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive  
EUT :  
Mode : 5G Mask B4 VHT80 Mode High CH  
Note :

	Read			Limit	Over	
Freq	Level	Factor	Level	Line	Limit	Pol/Phase
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1 PP 5934.326	56.07	-3.88	52.19	68.20	-16.01	Vertical
2 5942.007	55.46	-3.88	51.58	68.20	-16.62	Vertical
3 5952.761	55.84	-3.87	51.97	68.20	-16.23	Vertical
4 5968.123	55.33	-3.80	51.53	68.20	-16.67	Vertical
5 5978.877	55.25	-3.77	51.48	68.20	-16.72	Vertical
6 5991.167	55.77	-3.73	52.04	68.20	-16.16	Vertical



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Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 H 1-18G.csv Horizontal  
: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive  
EUT :  
Mode : 5G Mask B4 VHT80 Mode High CH  
Note :

	Read			Limit	Over	
Freq	Level	Factor	Level	Line	Limit	Pol/Phase
MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1 PP 5928.565	56.30	-3.88	52.42	68.20	-15.78	Horizontal
2 5937.015	55.77	-3.87	51.90	68.20	-16.30	Horizontal
3 5951.993	54.68	-3.88	50.80	68.20	-17.40	Horizontal
4 5959.290	54.64	-3.84	50.80	68.20	-17.40	Horizontal
5 5970.043	55.76	-3.80	51.96	68.20	-16.24	Horizontal
6 5984.253	54.90	-3.75	51.15	68.20	-17.05	Horizontal

## **10. Transmission in the Absence of Data**

### **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:

	PCB Antenna	Gain
1	WiFi 5G Antenna (UNII-1, UNII-3)	1.52dBi