TEST REPORT

of

FCC PART 15 SUBPART E

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

Product :	**ProDVX APPC-10SLBe**
Brand:	**ProDVX**
Model:	**APPC-10SLBe 10 inch Android Panel PC Impact**
Model Difference:	**N/A**
FCC ID:	**2AR42APPC10SLBE**
FCC Rule Part:	**§15.407, Cat:NII**
Applicant:	**ProDVX Europe B.V.**
Address:	**Europalaan 10, 5232 BC Den Bosch, The Netherlands**

Test Performed by:

International Standards Laboratory Corp. LT Lab.
TEL: +886-3-263-8888 FAX: +886-3-263-8899
No. 120, Lane 180, Hsin Ho Rd., Lung-Tan Dist., Tao Yuan City 325, Taiwan

Report No.: **ISL-22LR0167FE**
Issue Date :**2022/10/03**

VERIFICATION OF COMPLIANCE

Applicant:	ProDVX Europe B.V.
Product Description:	ProDVX APPC-10SLBe
Brand Name:	ProDVX
Model No.:	APPC-10SLBe 10 inch Android Panel PC Impact
Model Difference:	N/A
FCC ID:	2AR42APPC10SLBE
Date of test:	2022/09/12 ~ 2022/09/30
Date of EUT Received:	2022/09/12

We hereby certify that:

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

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

Test By:	Barry Lee	***Date:***	2022/10/03
	Barry Lee / Senior Engineer		
Prepared By:	Gigi yeh	***Date:***	2022/10/03
	Gigi Yeh / Senior Engineer		
Approved By:	Jerry Liu	***Date:***	2022/10/03
	Jerry Liu / Assistant Manager		

Version

Version No.	Date	Description
00	2022/10/03	Initial creation of document

Uncertainty of Measurement

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

Parameter	Uncertainty (k=2)
Conducted Emission (AC power line)	±0.852 dB
Spurious emissions, radiated	±3.46 dB
RF power, conducted	±1.386 dB
Power Density	±1.432 dB
RF Frequency	±0.00298%
Time	±0.01%
DC Voltage	±0.808%

Table of Contents

1. General Information

1.1. Product Description

General:

General Information		
Product Name:	ProDVX APPC-10SLBe	
Brand Name:	ProDVX	
Model Name:	APPC-10SLBe 10 inch Android Panel PC Impact	
Model Difference:	N/A	
Temperature Range	0°C to 40°C	
Power Supply:	12V DC from adaptor	
	Adaptor:	Model:2AAJ024FC

WiFi Information	
WLAN Modular	AP6256
Frequency Range:	WLAN 5GHz Band U-NII-1 5150MHz ~ 5250MHz U-NII-2A 5250MHz ~ 5350MHz U-NII-2C 5470MHz ~ 5725MHz U-NII-3 5725MHz ~ 5825MHz
Max Output Power:	5150MHz ~ 5250MHz: 14.09dBm 5250MHz ~ 5350MHz: 13.85dBm 5470MHz ~ 5725MHz: 14.2dBm 5725MHz ~ 5825MHz: 13.85dBm
Channel number:	WLAN 5GHz Band 802.11a U-NII-1 : 4ch 802.11a U-NII-2A : 4ch 802.11a U-NII-2C : 11ch 802.11a U-NII-3 : 5ch 802.11n(HT20) U-NII-1 : 4ch 802.11n(HT20) U-NII-2A : 4ch 802.11n(HT20) U-NII-2C : 11ch 802.11n(HT20) U-NII-3 : 5ch 802.11n(HT40) U-NII-1 : 2ch 802.11n(HT40) U-NII-2A : 2ch 802.11n(HT40) U-NII-2C : 5ch

	802.11n(HT40)	U-NII-3	:	2ch
	802.11ac(VHT20)	U-NII-1	:	4ch
	802.11ac(VHT20)	U-NII-2A	:	4ch
	802.11ac(VHT20)	U-NII-2C	:	11ch
	802.11ac(VHT20)	U-NII-3	:	5ch
	802.11ac(VHT40)	U-NII-1	:	2ch
	802.11ac(VHT40)	U-NII-2A	:	2ch
	802.11ac(VHT40)	U-NII-2C	:	5ch
	802.11ac(VHT40)	U-NII-3	:	2ch
	802.11ac(VHT80)	U-NII-1	:	1ch
	802.11ac(VHT80)	U-NII-2A	:	1ch
	802.11ac(VHT80)	U-NII-2C	:	2ch
	802.11ac(VHT80)	U-NII-3	:	1ch
	802.11a	Straddle		1ch
	802.11n(HT20)	Straddle	:	1ch
	802.11n(HT40)	Straddle		1ch
	802.11ac(VHT20)	Straddle		1ch
	802.11ac(VHT40)	Straddle		1ch
	802.11ac(VHT80)	Straddle		1ch
Product HW Version:	22080147			
Product SW Version:	11			
Product FW Version:	11			
Test SW Version:	Ampak RFTestTool 7.3			
RF power setting:	Refer power table			

	Antenna Type	Brand	Model	Peak Gain	Frequency Range	Con-nector Type
1	PCB	TSKY CO., LTD.	A8-A006-00509	6.63dBi 6.63dBi 5.78dBi 5.55dBi	5150MHz ~ 5250MHz 5250MHz ~ 5350MHz 5470MHz ~ 5725MHz 5725MHz ~ 5825MHz	i-pex

The EUT is compliance with IEEE 802.11 a/b/g/n/ac Standard.
This report applies for Wifi frequency band 5150 MHz– 5250 MHz, 5150 MHz– 5250 MHz, 5470MHz – 5725MHz, 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.

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

This submittal(s) (test report) is intended for **FCC ID: 2AR42APPC10SLBE** 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

1. Table 1-1 Equipment Used in Tested System

Item	Equipment	Mfr/Brand	Model/ Type No.	Series No.	Data Cable	Power Cord
1	adaptor	CWT	2AAJ024FC	NA	NA	300cm

Fig. 2-2 Configuration of Tested System

AC Conducted Emission

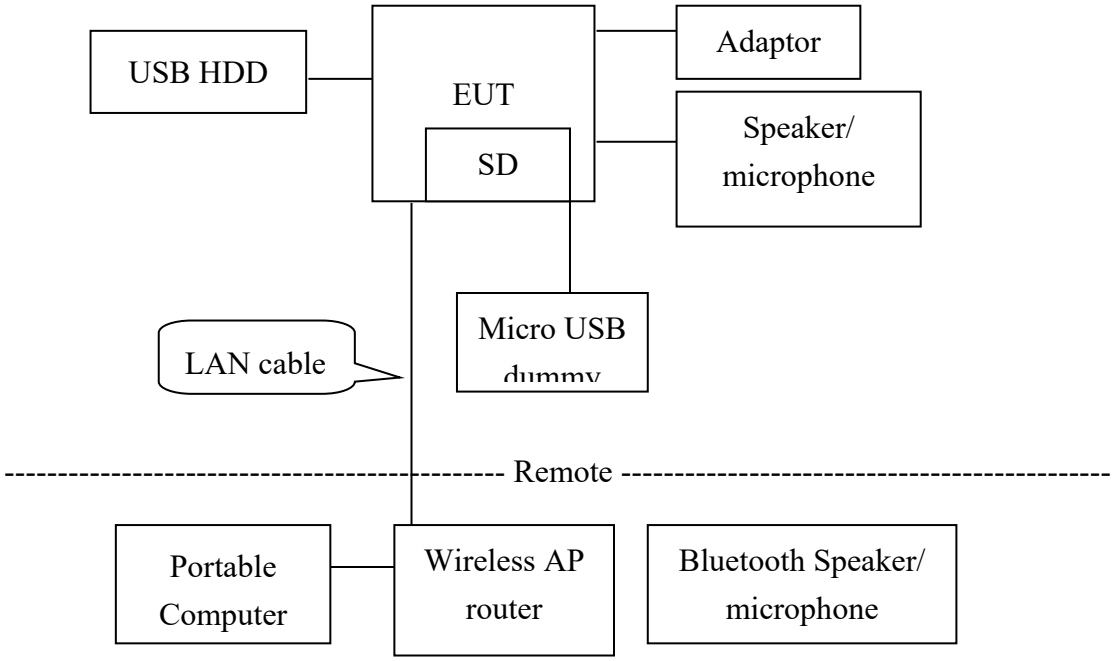


Table 2-2 Equipment Used in Tested System

Item	Equipment	Mfr/Brand	Model/ Type No.	Series No.	Data Cable	Power Cord
1	USB HDD	AKiTIO	SK2-U31AS-A KT	N/A	Shielded /1m	N/A
2	Portable Com-puter	Lenovo	TP00067B	N/A	N/A	Non-shielded /1.8m
3	Speaker/ microphone	KOKA	ST-304	N/A	Non-shielded /1.5m	N/A
4	Bluetooth Speaker/ microphone	N/A	SA-868	N/A	N/A	N/A
5	Wireless AP router	ASUS	RT-AC66U	N/A	Non-shield / 10m	Non-shield / 1.8m
6	SD card	SanDisk	11287080S2CA RD	N/A	N/A	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 ≥ 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	1.390	1.440	96.528%	0.15	0.719	1
HT20	1.296	1.348	96.089%	0.17	0.772	1
HT40	0.635	0.690	92.029%	0.36	1.575	3
VHT20	1.305	1.360	95.956%	0.18	0.766	1
VHT40	0.648	0.702	92.308%	0.35	1.543	3
VHT80	0.322	0.362	88.950%	0.51	3.106	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(c)	Transmission in case of Absence of Information	Compliant
§15.407(a)	Antenna Requirement	Compliant
§15.407(d)	TPC and DFS Measurement	Compliant
§15.407(i)	Device Security	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.

5150MHz-5350MHz:
802.11a mode: Channel low (5180MHz), mid (5260MHz) and high (5320MHz) with 6Mbps lowest data rate are chosen for pre-test testing of radiated emissions.
802.11 n HT20: Channel low (5180MHz), mid (5260MHz) and high (5320MHz) with 6.5Mbps lowest data rate are chosen for pre-test testing of radiated emissions.
802.11 n HT40: Channel low (5190MHz), mid (5230MHz) and high (5310MHz) with 13.5Mbps lowest data rate are chosen for pre-test testing of radiated emissions.
802.11 ac VHT20: Channel low (5180MHz), mid (5260MHz) and high (5320MHz) with 6.5Mbps lowest data rate are chosen for pre-test testing of radiated emissions.
802.11 ac VHT40: Channel low (5190MHz), mid (5230MHz) and high (5310MHz) with 13.5Mbps lowest data rate are chosen for pre-test testing of radiated emissions.
802.11 ac VHT80: Channel low (5210MHz) and high (5290MHz) with 13.5Mbps lowest data rate is chosen for pre-test testing of radiated emissions.

5470MHz-5725MHz:
802.11a mode: Channel low (5500MHz), mid (5600MHz) and high (5700MHz) with 6Mbps lowest data rate are chosen for pre-test testing of radiated emissions.
802.11 n HT20: Channel low (5500MHz), mid (5600MHz) and high (5700MHz) with 6.5Mbps lowest data rate are chosen for pre-test testing of radiated emissions.
802.11 n HT40: Channel low (5510MHz), mid (5550MHz) and high (5670MHz) with 13.5Mbps lowest data rate are chosen for pre-test testing of radiated emissions.
802.11 ac VHT20: Channel low (5500MHz), mid (5600MHz) and high (5700MHz) with 6.5Mbps lowest data rate are chosen for pre-test testing of radiated emissions.
802.11 ac VHT40: Channel low (5510MHz), mid (5550MHz) and high (5670MHz) with 13.5Mbps lowest data rate are chosen for pre-test testing of radiated emissions.
802.11 ac VHT80: Channel low (5530MHz) and high (5610MHz) with 13.5Mbps lowest data rate is chosen for pre-test testing of radiated emissions.
5650MHz-5735MHz (Straddle channel) :
802.11a mode: Channel (5720MHz) with 6Mbps lowest data rate are chosen for pre-test testing of radiated emissions.
802.11 n HT20: Channel (5720MHz) with 6.5Mbps lowest data rate are chosen for pre-test testing of radiated emissions.
802.11 n HT40: Channel (5710MHz) with 13.5Mbps lowest data rate are chosen for pre-test

testing of radiated emissions.

802.11 ac VHT20: Channel (5720MHz) with 6.5Mbps lowest data rate are chosen for pre-test testing of radiated emissions.
802.11 ac VHT40: Channel (5710MHz) z) with 13.5Mbps lowest data rate are chosen for pre-test testing of radiated emissions.
802.11 ac VHT80: Channel (5690MHz) with 13.5Mbps lowest data rate is chosen for pre-test testing of radiated emissions.

5725MHz-5850MHz:
802.11a mode: Channel low (5745MHz), mid (5785MHz) and high (5825MHz) with 6Mbps lowest data rate are chosen for pre-test testing of radiated emissions.
802.11 n HT20: Channel low (5745MHz), mid (5785MHz) and high (5825MHz) with 6.5Mbps lowest data rate are chosen for pre-test testing of radiated emissions.
802.11 n HT40: Channel low (5755MHz) and high (5795MHz) with 13.5Mbps lowest data rate are chosen for pre-test testing of radiated emissions.
802.11 ac VHT20: Channel low (5745MHz), mid (5785MHz) and high (5825MHz) with 6.5Mbps lowest data rate are chosen for pre-test testing of radiated emissions.
802.11 ac VHT40: Channel low (5755MHz) and high (5795MHz) with 13.5Mbps lowest data rate are chosen for pre-test testing of radiated emissions.
802.11 ac VHT80: Channel (5775MHz) with 13.5Mbps lowest data rate is chosen for pre-test testing of radiated emissions.

5. Conduced 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 02	EMI Receiver 14	ROHDE& SCHWARZ	ESCI	101034	05/25/2022	05/25/2023
Conduction 02	Conduction 02-1 Cable	WOKEN	CFD 300-NL	Conduction 02 -1	10/13/2021	10/13/2022
Conduction 02	LISN 26	R&S	ENV216	102378	12/03/2021	12/03/2022
Conduction 02	LISN 21	R&S	ENV216	101476	07/20/2022	07/20/2023
Conduction 02	ISN T4 07	Teseq GmbH	ISN T400A	30449	07/28/2022	07/28/2023
Conduction 02	ISN T8 10	TESEQ	ISN T800	42773	08/05/2022	08/05/2023
Conduction 02	ISN T8 CAT6A_01	SCHWARZ-BECK	NTFM 8158	8158 0123	01/25/2022	01/25/2023
Conduction 02	CDN ISN ST08A_1	Teseq GmbH	CDN ISN ST08A	43352	10/07/2021	10/07/2022
Conduction 02	Capacitive Volt-age Probe 01	SCHAFFNER	CVP 2200A	18711	02/23/2022	02/23/2023
Conduction 02	Current Probe	SCHAFFNER	SMZ 11	18030	02/23/2022	02/23/2023

5.3. EUT Setup:

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

5.4. Measurement Procedure:

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

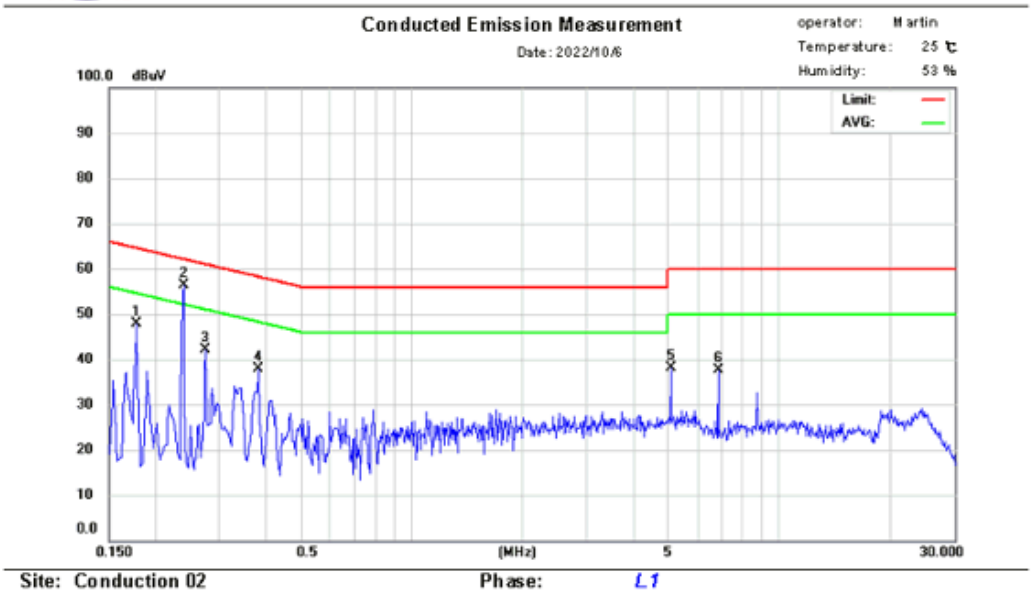
5.5. Measurement Result:

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

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

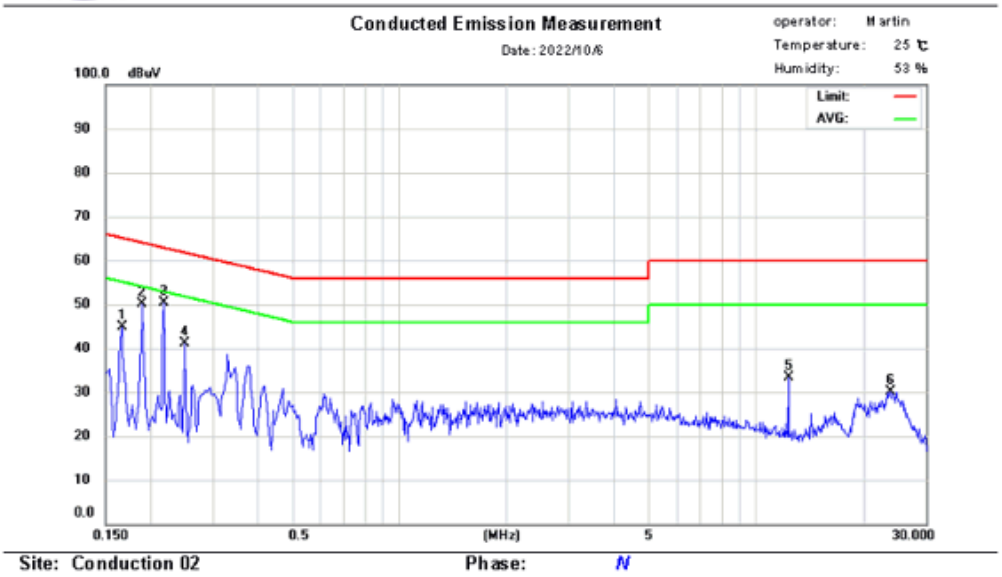
AC POWER LINE CONDUCTED EMISSION TEST DATA

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



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	0.178	30.87	6.71	9.67	40.54	64.58	-24.04	16.38	54.58	-38.20
2	0.238	24.93	4.41	9.67	34.60	62.17	-27.57	14.08	52.17	-38.09
3	0.274	21.73	5.36	9.67	31.40	61.00	-29.60	15.03	51.00	-35.97
4	0.382	19.13	11.76	9.68	28.81	58.24	-29.43	21.44	48.24	-26.80
5	5.074	13.23	6.43	9.81	23.04	60.00	-36.96	16.24	50.00	-33.76
6	6.834	9.91	3.19	9.84	19.75	60.00	-40.25	13.03	50.00	-36.97

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



No.	Frequency (MHz)	QP_R (dBuV)	AVG_R (dBuV)	Correct Factor (dB)	QP Emission (dBuV)	QP Limit (dBuV)	QP Margin (dB)	AVG Emission (dBuV)	AVG Limit (dBuV)	AVG Margin (dB)
1	0.166	31.79	8.20	9.67	41.46	65.16	-23.70	17.87	55.16	-37.29
2	0.190	28.85	8.02	9.67	38.52	64.04	-25.52	17.69	54.04	-36.35
3	0.218	25.76	8.08	9.67	35.43	62.89	-27.46	17.75	52.89	-35.14
4	0.250	20.43	4.46	9.67	30.10	61.76	-31.66	14.13	51.76	-37.63
5	12.362	5.63	0.47	9.95	15.58	60.00	-44.42	10.42	50.00	-39.58
6	23.922	14.20	3.26	10.07	24.27	60.00	-35.73	13.33	50.00	-36.67

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 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 dBiare 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

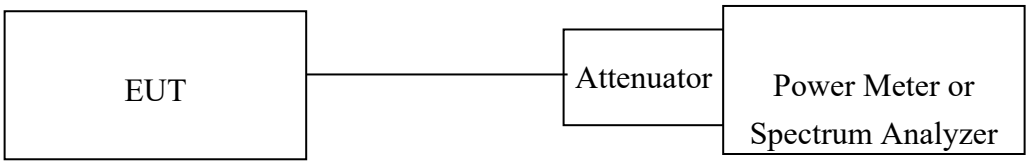
1. Place the EUT on the table and set it in transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to Spectrum.
3. Set RBW=1MHz,VBW=3MHz, Span=50MHz (Base Mode), Sweep time = Auto, traces 100 sweeps of video averaging for 5150-5725MHz;
4. Set 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	09/29/2022	09/29/2023
Conducted	Power Sensor	Anritsu	MA2411B	34NKF50	09/29/2022	09/29/2023
Conducted	Power Sensor	DARE	RPR3006W	13I00030SNO33	01/07/2022	01/07/2023
Conducted	Power Sensor	DARE	RPR3006W	13I00030SNO34	01/07/2022	01/07/2023
Conducted	Power Sensor	DARE	RPR3006W	14I00889SNO35	06/29/2022	06/29/2023
Conducted	Power Sensor	DARE	RPR3006W	14I00889SNO36	06/29/2022	06/29/2023
Conducted	Temperature Chamber	KSON	THS-B4H100	2287	05/20/2022	05/20/2023
Conducted	DC Power supply	ABM	8185D	N/A	01/06/2022	01/06/2023
Conducted	AC Power supply	EXTECH	CFC105W	NA	N/A	N/A
Conducted	Spectrum analyzer	Keysight	N9010A	MY56070257	09/28/2022	09/28/2023
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	11/18/2021	11/18/2022
Conducted	Wideband Radio Communication Tester	R&S	CMW500	1201.002K50108 793-JG	10/26/2021	10/26/2022
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	09/22/2022	09/22/2023
Conducted (TS8997)	Signal Generator	R&S	SMB100B	101085	09/21/2022	09/21/2023
Conducted (TS8997)	Vector Signal Generator	R&S	SMBV100A	263246	09/21/2022	09/21/2023
Conducted (TS8997)	Signal analyzer 40GHz	R&S	FSV40	101884	09/22/2022	09/22/2023
Conducted (TS8997)	OSP150 extension unit CAM-BUS	R&S	OSP150	101107	09/21/2022	09/21/2023
Conducted (TS8997)	Test Software	R&S	EMC32 Ver:11.10.00	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	Chain 1	Chain 2	Chain 3			
UNII-1	11a	5180	13.357				0.15	13.51	23.35
		5200	13.936				0.15	14.09	23.35
		5240	13.753				0.15	13.91	23.35
	HT20	5180	12.550				0.17	12.72	23.35
		5200	13.030				0.17	13.20	23.35
		5240	13.050				0.17	13.22	23.35
	HT40	5190	12.750				0.36	13.11	23.35
		5230	13.340				0.36	13.70	23.35
	VHT20	5180	12.800				0.18	12.98	23.35
		5200	13.400				0.18	13.58	23.35
		5240	13.316				0.18	13.50	23.35
	VHT40	5190	12.280				0.35	12.63	23.35
		5230	13.310				0.35	13.66	23.35
	VHT80	5210	10.200				0.51	10.71	23.35

Band	Mode	Freq. (MHz)	Output Power (dBm)				Duty Factor (dB)	Total Output Power (dBm)	Output Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
UNII-2A	11a	5260	12.850				0.15	13.00	23.35
		5300	13.700				0.15	13.85	23.35
		5320	13.520				0.15	13.67	23.35
	HT20	5260	12.250				0.17	12.42	23.35
		5300	13.030				0.17	13.20	23.35
		5320	13.480				0.17	13.65	23.35
	HT40	5270	11.763				0.36	12.12	23.35
		5310	12.812				0.36	13.17	23.35
	VHT20	5260	12.300				0.18	12.48	23.35
		5300	13.030				0.18	13.21	23.35
		5320	13.500				0.18	13.68	23.35
	VHT40	5270	12.500				0.35	12.85	23.35
		5310	12.810				0.35	13.16	23.35
	VHT80	5290	9.500				0.51	10.01	23.35

Band	Mode	Freq. (MHz)	Output Power (dBm)				Duty Factor (dB)	Total Output Power (dBm)	Output Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
UNII-2C	11a	5500	13.600				0.15	13.75	23.98
		5580	13.700				0.15	13.85	23.98
		5700	13.400				0.15	13.55	23.98
	HT20	5500	13.910				0.17	14.08	23.98
		5580	14.028				0.17	14.20	23.98
		5700	13.090				0.17	13.26	23.98
	HT40	5510	13.300				0.36	13.66	23.98
		5550	12.800				0.36	13.16	23.98
		5670	12.700				0.36	13.06	23.98
	VHT20	5500	13.200				0.18	13.38	23.98
		5580	13.510				0.18	13.69	23.98
		5700	13.410				0.18	13.59	23.98
	VHT40	5510	13.420				0.35	13.77	23.98
		5550	12.840				0.35	13.19	23.98
		5670	13.652				0.35	14.00	23.98
	VHT80	5530	9.800				0.51	10.31	23.98
		5610	10.400				0.51	10.91	23.98

Band	Mode	Freq. (MHz)	Output Power (dBm)				Duty Factor (dB)	Total Output Power (dBm)	Output Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
UNII-3	11a	5745	13.700				0.15	13.85	30.00
		5785	13.260				0.15	13.41	30.00
		5825	13.275				0.15	13.43	30.00
	HT20	5745	13.030				0.17	13.20	30.00
		5785	13.060				0.17	13.23	30.00
		5825	12.988				0.17	13.16	30.00
	HT40	5755	13.300				0.36	13.66	30.00
		5795	13.260				0.36	13.62	30.00
	VHT20	5745	13.268				0.18	13.45	30.00
		5785	12.680				0.18	12.86	30.00
		5825	12.700				0.18	12.88	30.00
	VHT40	5755	12.780				0.35	13.13	30.00
		5795	12.810				0.35	13.16	30.00
	VHT80	5775	10.525				0.51	11.03	30.00

Straddle channels

Band	Mode	Freq. (MHz)	Output Power (dBm)				Duty Factor (dB)	Total Out-put Power (dBm)	Output Power Limit (dBm)
			Chain 0	Chain 1	Chain 2	Chain 3			
UNII-2C	11a	5720	13.410				0.15	13.56	23.98
	HT20	5720	13.180				0.17	13.35	23.98
	HT40	5710	12.788				0.36	13.15	23.98
	VHT20	5720	13.210				0.18	13.39	23.98
	VHT40	5710	13.370				0.35	13.72	23.98
	VHT80	5690	10.560				0.51	11.07	23.98

Power Spectral Density Measurement:

Band	Mode	Frequency (MHz)	PSD (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)
			Chain 0	Chain 1	Chain 2	Chain 3			
UNII-1	11a	5180	3.712				0.15	3.87	10.37
		5200	2.841				0.15	2.99	10.37
		5240	3.305				0.15	3.46	10.37
	HT20	5180	2.208				0.17	2.38	10.37
		5200	2.011				0.17	2.18	10.37
		5240	2.600				0.17	2.77	10.37
	HT40	5190	-1.967				0.36	-1.61	10.37
		5230	-2.014				0.36	-1.65	10.37
	VHT20	5180	2.031				0.18	2.21	10.37
		5200	0.153				0.18	0.33	10.37
		5240	0.569				0.18	0.75	10.37
	VHT40	5190	-2.094				0.35	-1.75	10.37
		5230	-2.633				0.35	-2.29	10.37
	VHT80	5210	-5.416				0.51	-4.91	10.37

Band	Mode	Frequency (MHz)	PSD (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)
			Chain 0	Chain 1	Chain 2	Chain 3			
UNII-2A	11a	5260	3.245				0.15	3.40	10.37
		5300	3.329				0.15	3.48	10.37
		5320	3.610				0.15	3.76	10.37
	HT20	5260	2.465				0.17	2.64	10.37
		5300	2.785				0.17	2.96	10.37
		5320	3.134				0.17	3.31	10.37
	HT40	5270	-2.020				0.36	-1.66	10.37
		5310	-1.875				0.36	-1.51	10.37
	VHT20	5260	0.422				0.18	0.60	10.37
		5300	0.847				0.18	1.03	10.37
		5320	1.012				0.18	1.19	10.37
	VHT40	5270	-2.550				0.35	-2.20	10.37
		5310	-2.391				0.35	-2.04	10.37
	VHT80	5290	-5.650				0.51	-5.14	10.37

Band	Mode	Frequency (MHz)	PSD (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)
			Chain 0	Chain 1	Chain 2	Chain 3			
UNII-2C	11a	5500	2.799				0.15	2.95	11.00
		5580	3.011				0.15	3.16	11.00
		5700	3.358				0.15	3.51	11.00
	HT20	5500	2.037				0.17	2.21	11.00
		5580	2.160				0.17	2.33	11.00
		5700	2.561				0.17	2.73	11.00
	HT40	5510	-2.475				0.36	-2.11	11.00
		5550	-2.367				0.36	-2.01	11.00
		5670	-2.202				0.36	-1.84	11.00
	VHT20	5500	0.013				0.18	0.19	11.00
		5580	-0.134				0.18	0.05	11.00
		5700	0.347				0.18	0.53	11.00
	VHT40	5510	-3.297				0.35	-2.95	11.00
		5550	-3.502				0.35	-3.15	11.00
		5670	-2.976				0.35	-2.63	11.00
	VHT80	5530	-6.235				0.51	-5.73	11.00
		5610	-6.034				0.51	-5.53	11.00

Band	Mode	Frequency (MHz)	PSD (dBm/500kHz)				Duty Factor (dB)	Total PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)
			Chain 0	Chain 1	Chain 2	Chain 3			
UNII-3	11a	5745	0.443				0.15	0.60	30
		5785	0.391				0.15	0.54	30
		5825	0.625				0.15	0.78	30
	HT20	5745	-0.401				0.17	-0.23	30
		5785	-0.291				0.17	-0.12	30
		5825	0.029				0.17	0.20	30
	HT40	5755	-4.882				0.36	-4.52	30
		5795	-4.663				0.36	-4.30	30
	VHT20	5745	-2.214				0.18	-2.03	30
		5785	-2.127				0.18	-1.95	30
		5825	-1.988				0.18	-1.81	30
	VHT40	5755	-5.578				0.35	-5.23	30
		5795	-5.313				0.35	-4.97	30
	VHT80	5775	-8.395				0.51	-7.89	30

Straddle channels

Band	Mode	Frequency (MHz)	PSD (dBm/MHz)				Duty Factor (dB)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)
			Chain 0	Chain 1	Chain 2	Chain 3			
UNII-2C	11a	5720	3.187				0.15	3.34	11.00
	HT20	5720	2.564				0.17	2.74	11.00
	HT40	5710	-1.943				0.36	-1.58	11.00
	VHT20	5720	0.530				0.18	0.71	11.00
	VHT40	5710	-2.751				0.35	-2.40	11.00
	VHT80	5690	-6.177				0.51	-5.67	11.00

Band UNII-1
802.11a
Power Spectral Density Data Plot (CH Low)

Power Spectral Density Data Plot (CH Mid)

Power Spectral Density Data Plot (CH High)

802.11n HT20,
Power Spectral Density Test Plot (CH-Low)

Power Spectral Density Test Plot (CH-Mid)

Power Spectral Density Test Plot (CH-High)

802.11ac VHT20,

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)

802.11ac VHT40

Power Spectral Density Test Plot (CH-Low)

Power Spectral Density Test Plot (CH-High)

802.11 ac VHT80

Power Spectral Density Test Plot (CH-Low)

Band UNII-2A
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)

802.11ac VHT20,
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)

802.11ac VHT40

Power Spectral Density Test Plot (CH-Low)

Power Spectral Density Test Plot (CH-High)

802.11 ac VHT80

Power Spectral Density Test Plot (CH-Low)

Band UNII-2C
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)

802.11ac VHT20

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-Mid)

Power Spectral Density Test Plot (CH-High)

802.11ac VHT40

Power Spectral Density Test Plot (CH-Low)

Power Spectral Density Test Plot (CH-Mid)

Power Spectral Density Test Plot (CH-High)

802.11 ac VHT80

Power Spectral Density Test Plot (CH-Low)

802.11 ac VHT80

Power Spectral Density Test Plot (CH-High)

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)

802.11ac VHT20

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)

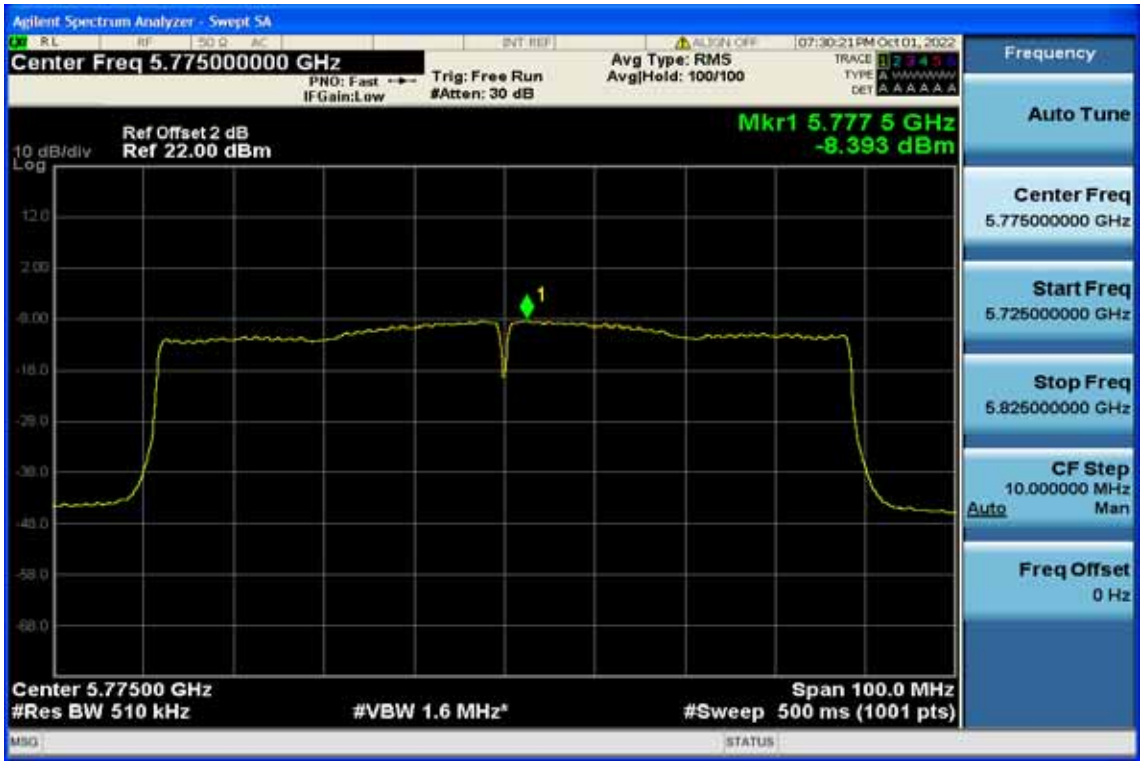
Power Spectral Density Test Plot (CH-High)

802.11ac VHT40

Power Spectral Density Test Plot (CH-Low)

Power Spectral Density Test Plot (CH-High)

802.11 ac VHT80,
Power Spectral Density Test Plot



Straddle Channels
Band UNII-2C
802.11a
Power Spectral Density Data Plot

802.11n HT20
Power Spectral Density Test Plot

802.11ac VHT20
Power Spectral Density Test Plot

802.11n HT40
Power Spectral Density Test Plot

802.11ac VHT40

Power Spectral Density Test Plot

802.11 ac VHT80

Power Spectral Density Test Plot

7. 26dB /99% Emission Bandwidth Measurement

7.1. Standard Applicable

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

7.2. Measurement Procedure

2. Place the EUT on the table and set it in transmitting mode.
3. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
4. Set the spectrum analyzer as RBW=300kHz, VBW =1MHz, Span= 50MHz, Sweep=auto
5. Mark the peak frequency and –26dB (upper and lower) frequency.
6. 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	27.62	17.227
		5200	22.06	16.968
		5240	21.68	16.978
	HT20	5180	23.80	18.084
		5200	29.82	18.261
		5240	23.78	18.080
	HT40	5190	47.34	36.367
		5230	42.28	36.389
	VHT20	5180	29.71	18.188
		5200	27.11	18.170
		5240	27.48	18.207
	VHT40	5190	48.32	36.434
		5230	40.12	36.305
	VHT80	5210	88.26	75.595

Band	Mode	Frequency (MHz)	26dB Bandwidth (MHz)	99% OBW (MHz)	Power Limit (dBm)
UNII-2A	11a	5260	21.76	16.952	23.98
		5300	21.42	16.899	23.98
		5320	22.06	16.972	23.98
	HT20	5260	24.17	18.117	23.98
		5300	25.27	18.019	23.98
		5320	22.06	18.007	23.98
	HT40	5270	40.17	36.283	23.98
		5310	40.05	36.292	23.98
	VHT20	5260	21.85	18.049	23.98
		5300	21.49	17.976	23.98
		5320	21.39	18.004	23.98
	VHT40	5270	39.94	36.315	23.98
		5310	39.98	36.321	23.98
	VHT80	5290	81.90	75.540	23.98
For Band UNII-2A: Max. Output Power Limit = 250mW or 11+10*Log(B), whichever is less. Where B is 26dB BW in MHz.					

Band	Mode	Frequency (MHz)	26dB Bandwidth (MHz)	99% OBW (MHz)	Power Limit (dBm)
UNII-2C	11a	5500	21.38	16.933	23.98
		5580	21.37	16.938	23.98
		5700	21.72	16.915	23.98
	HT20	5500	21.71	17.986	23.98
		5580	21.82	18.040	23.98
		5700	21.77	17.997	23.98
	HT40	5510	39.69	36.301	23.98
		5550	40.38	36.289	23.98
		5670	39.76	36.310	23.98
	VHT20	5500	21.66	18.007	23.98
		5580	21.68	17.963	23.98
		5700	21.51	18.000	23.98
	VHT40	5510	39.84	36.269	23.98
		5550	39.91	36.337	23.98
		5670	39.99	36.273	23.98
	VHT80	5530	81.62	75.551	23.98
		5610	81.91	75.524	23.98
For Band UNII-2C: Max. Output Power Limit = 250mW or 11+10*Log(B), whichever is less. Where B is 26dB BW in MHz.					

Straddle channels

Band	Mode	Frequency (MHz)	26dB Bandwidth (MHz)	99% OBW (MHz)	Power Limit (dBm)
UNII-2C	11a	5720	21.46	16.925	23.98
	HT20	5720	22.37	18.023	23.98
	HT40	5710	39.84	36.311	23.98
	VHT20	5720	21.45	17.986	23.98
	VHT40	5710	39.65	36.257	23.98
	VHT80	5690	81.53	75.404	23.98
For Band UNII-2C: Max. Output Power Limit = 250mW or 11+10*Log(B), whichever is less. Where B is 26dB BW in MHz.					

Band UNII-1

802.11a

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

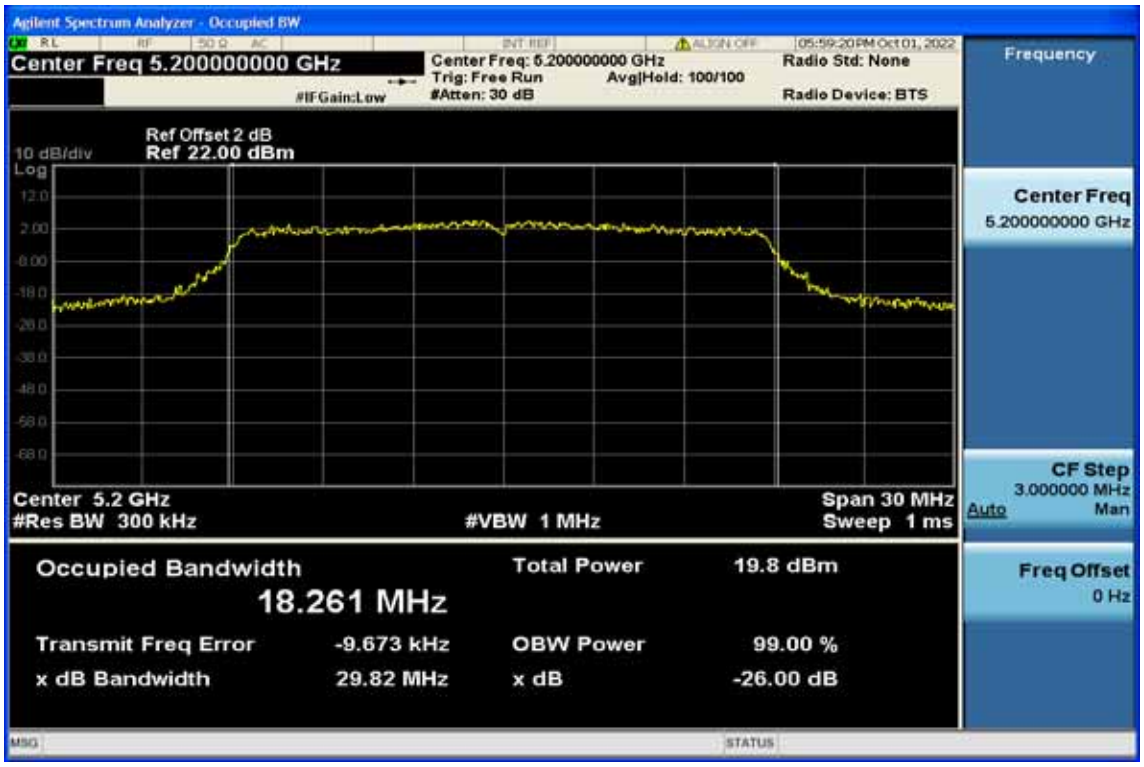
26dB / 99% Band Width Test Data CH-Mid

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

802.11n HT20

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

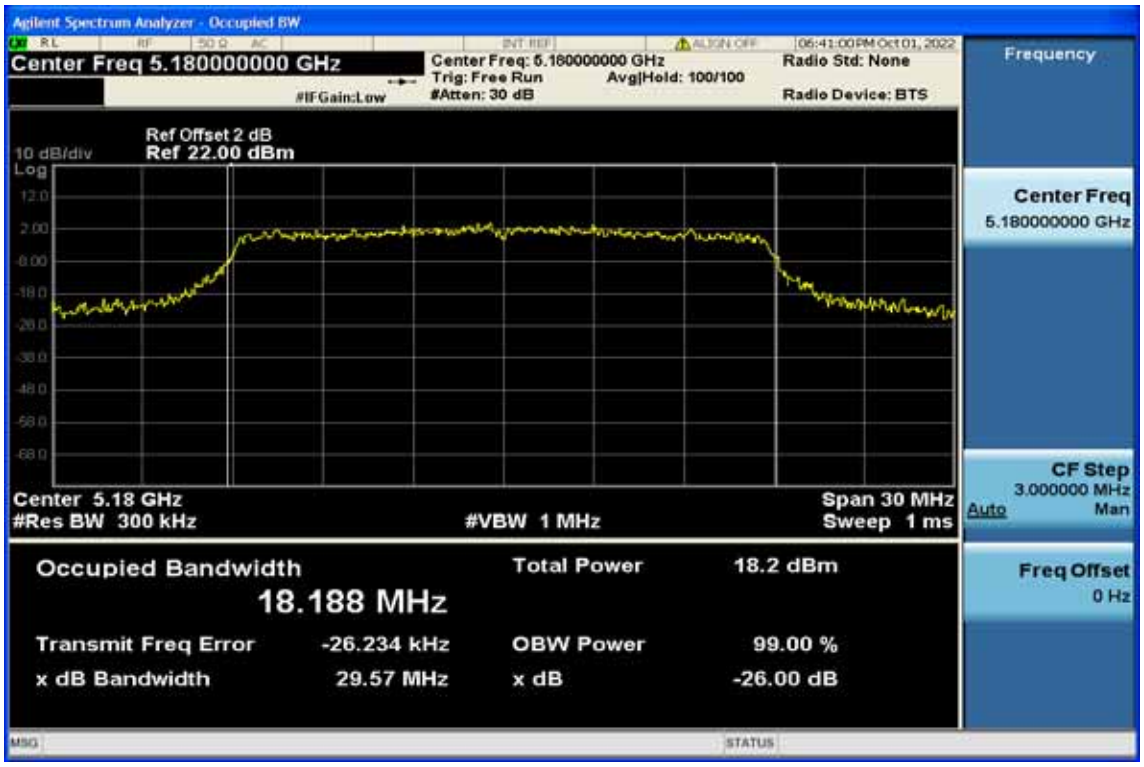
26dB / 99% Band Width Test Data CH-Mid



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

802.11ac 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

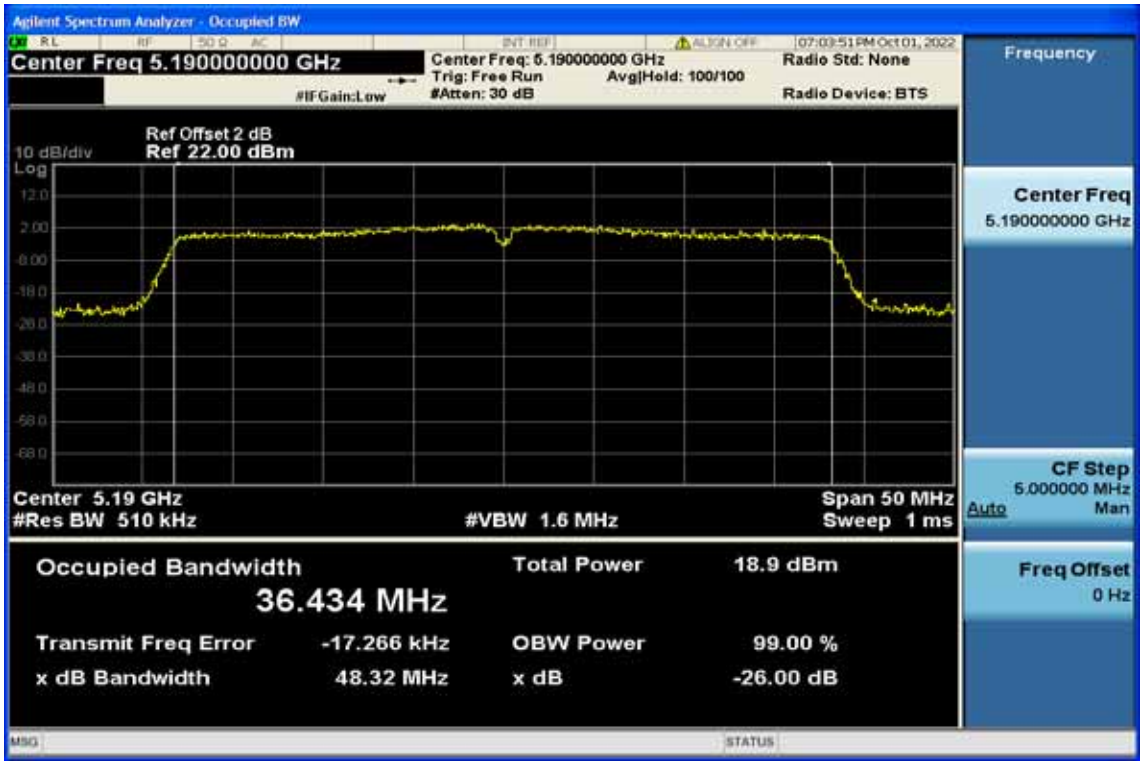
802.11n HT40

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

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

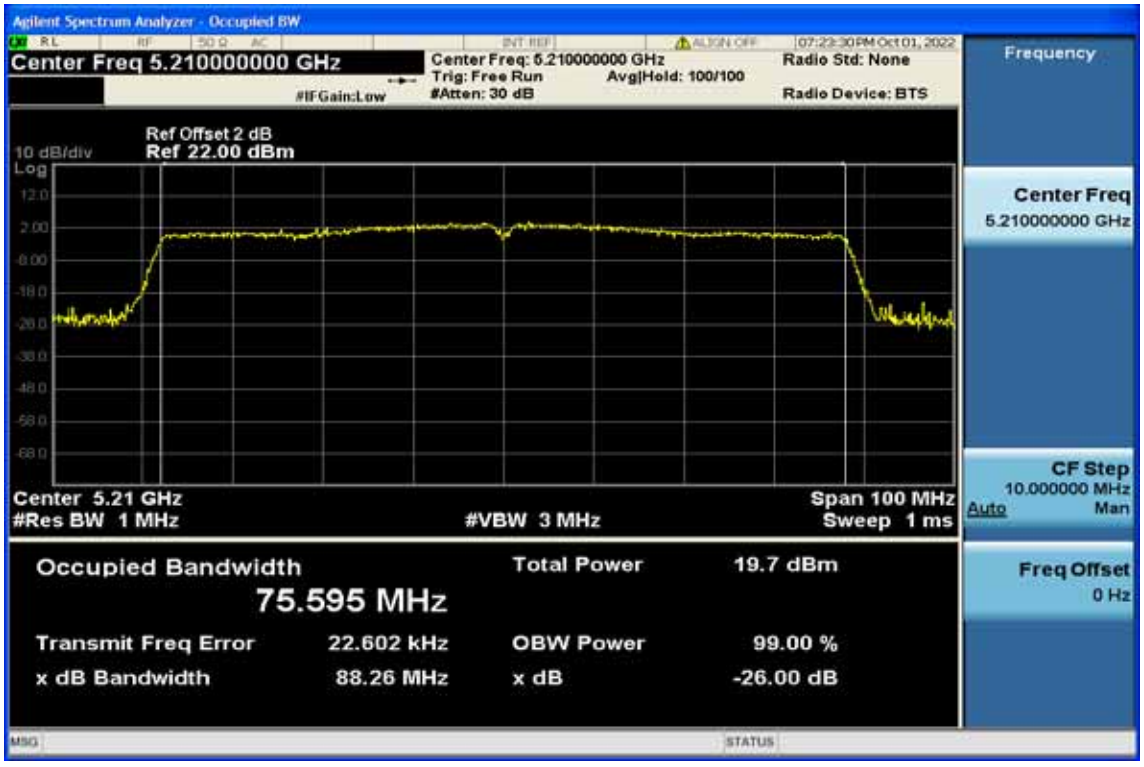
802.11ac VHT40

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



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

802.11 ac VHT80
26dB / 99% Band Width Test Data



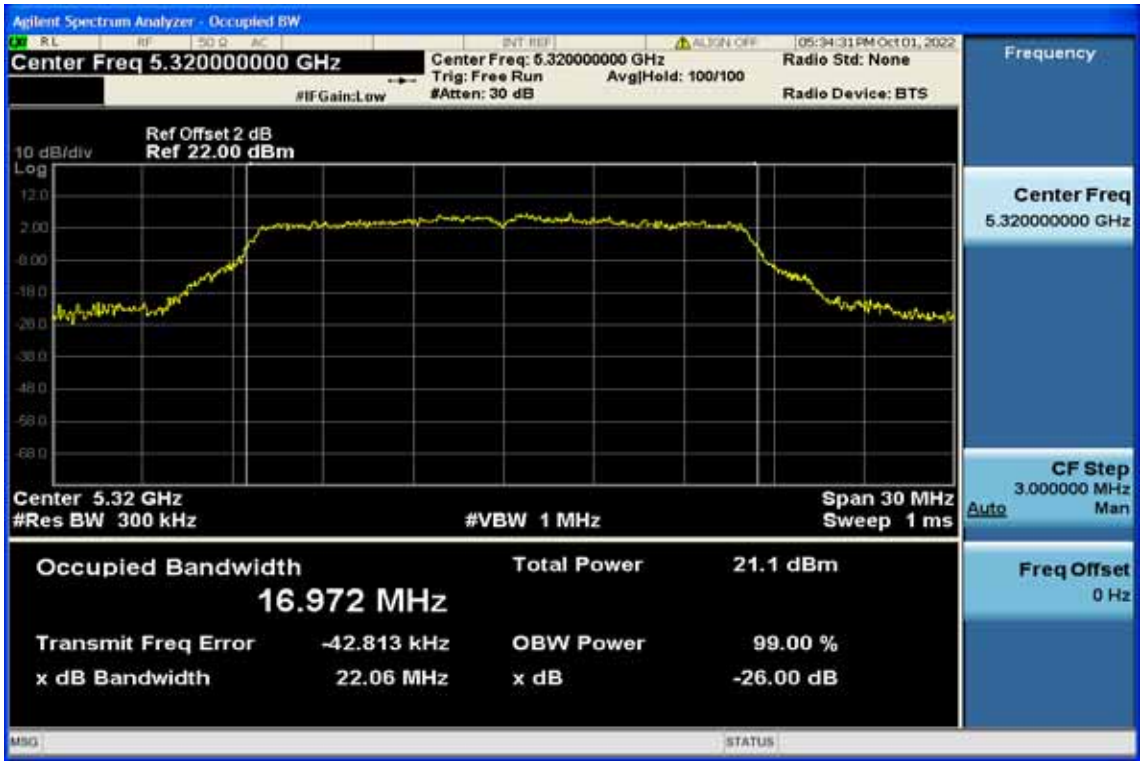
Band UNII-2A

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

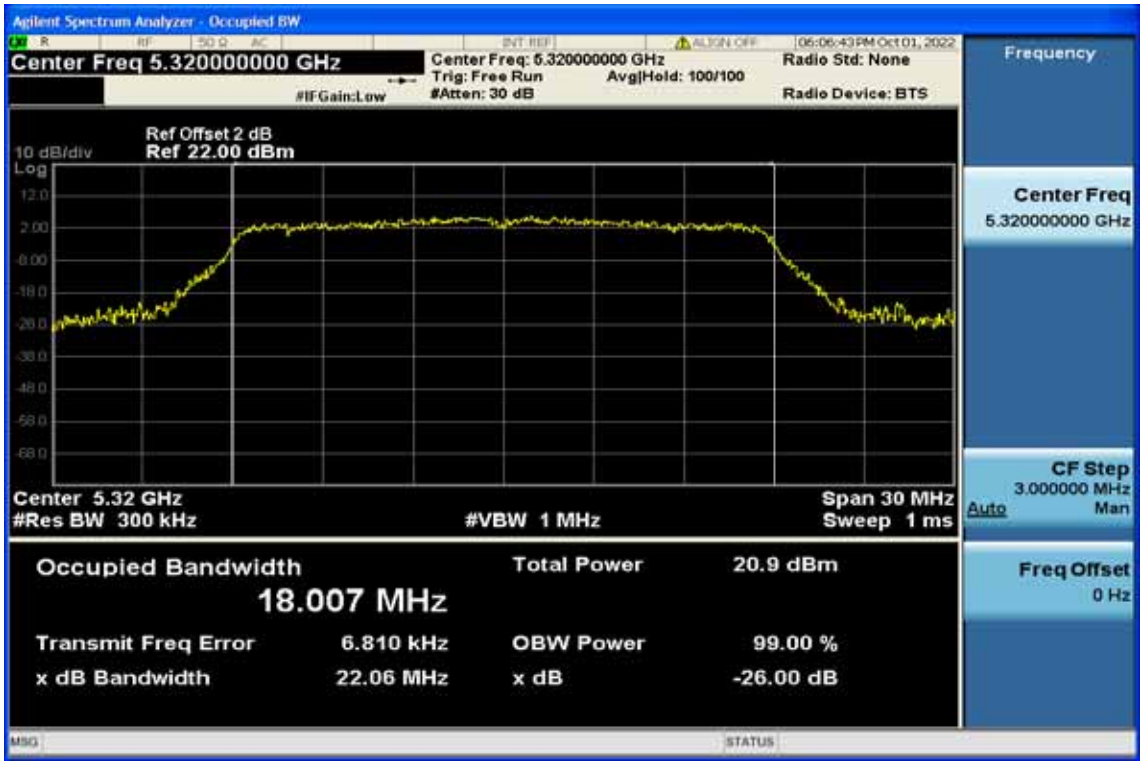


802.11n HT20

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

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

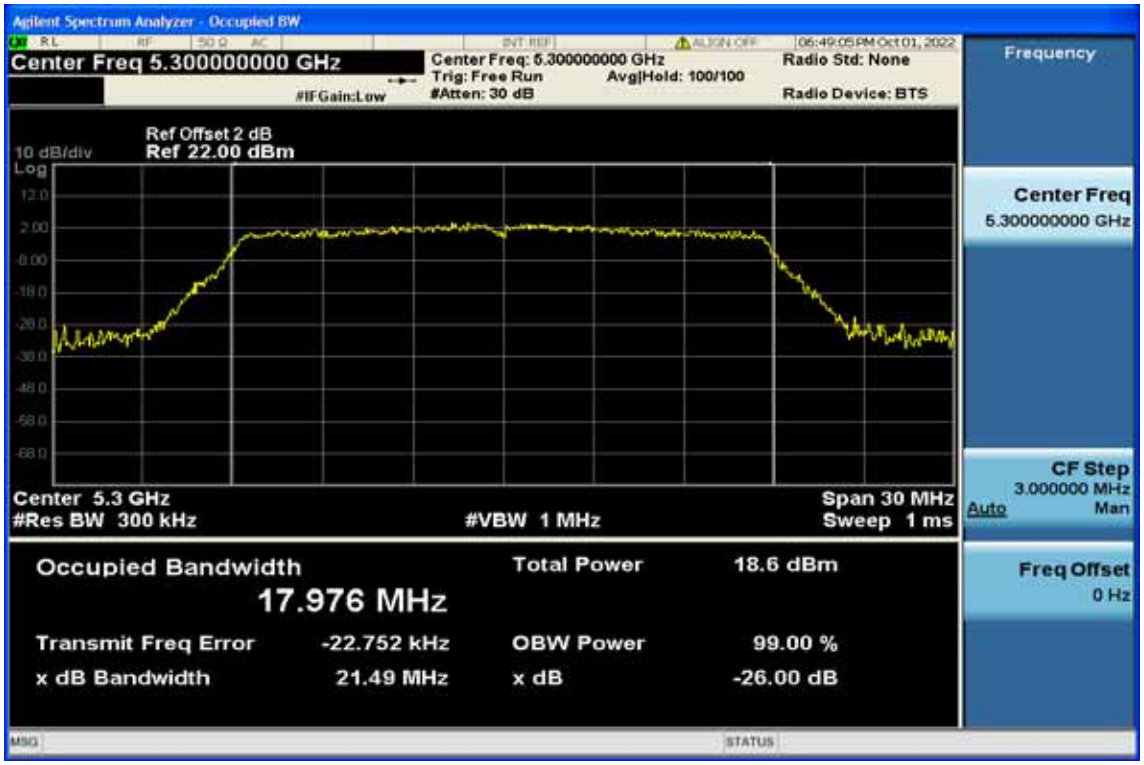
26dB / 99% Band Width Test Data CH-High



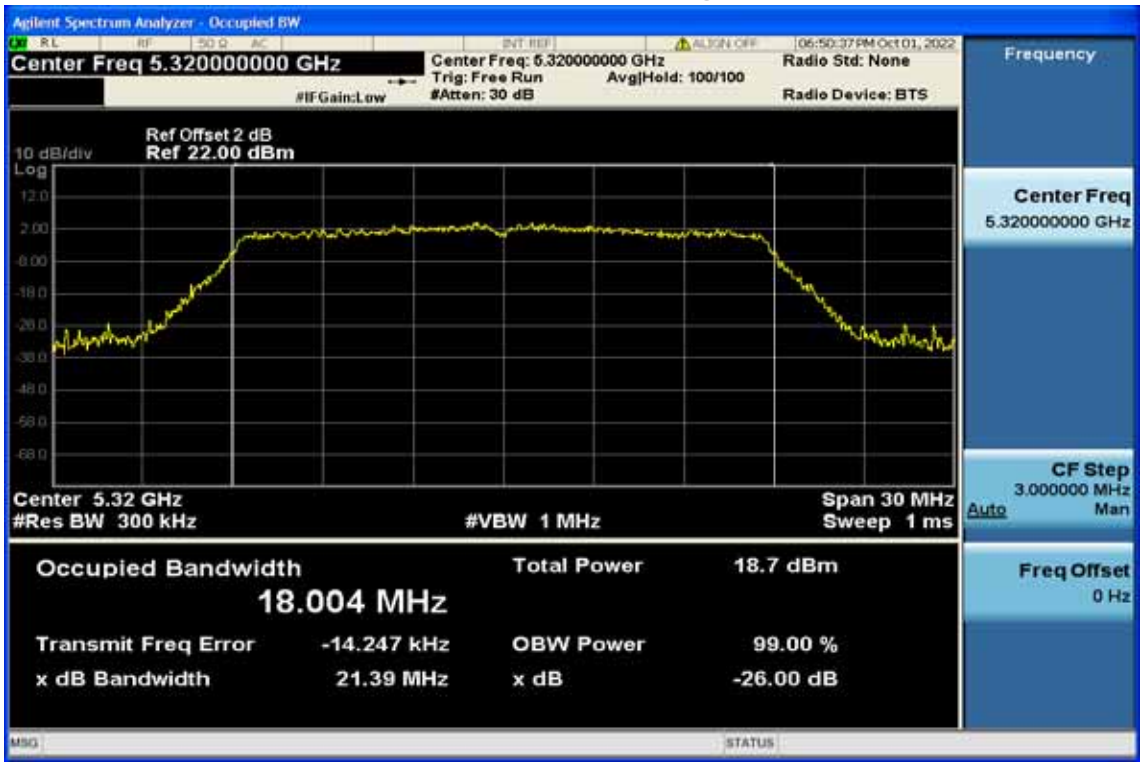
802.11ac VHT20

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

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

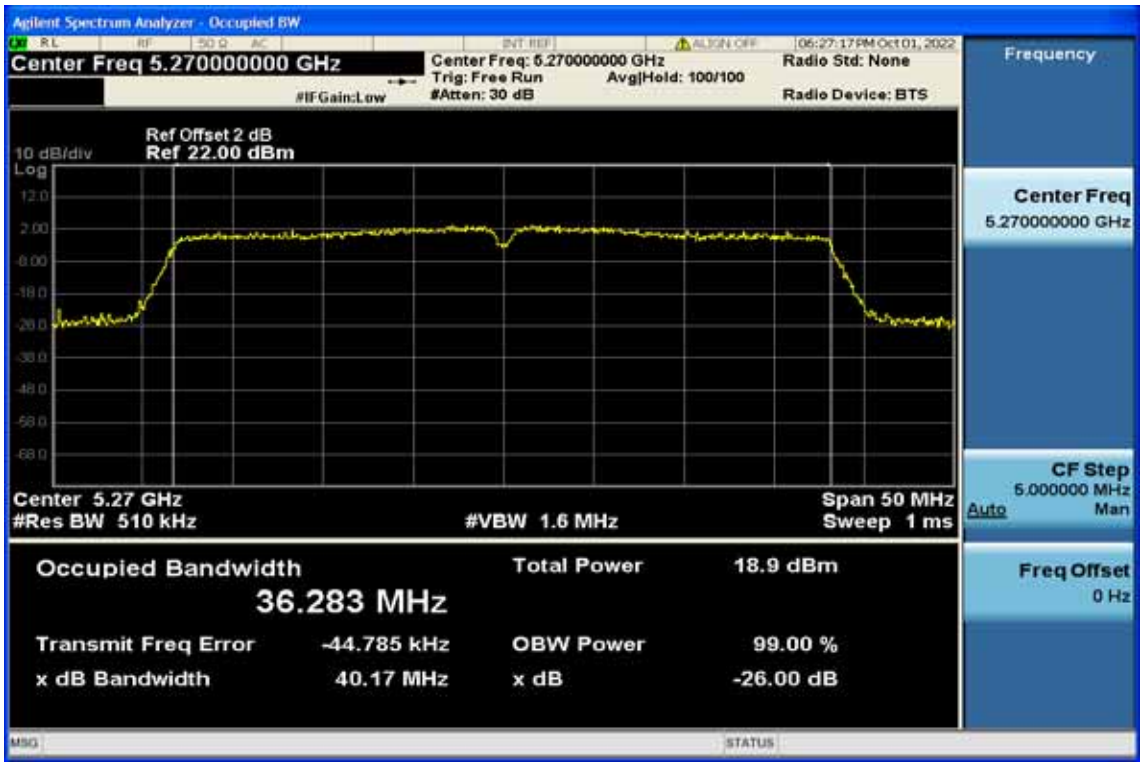


26dB / 99% Band Width Test Data CH-High



802.11n HT40

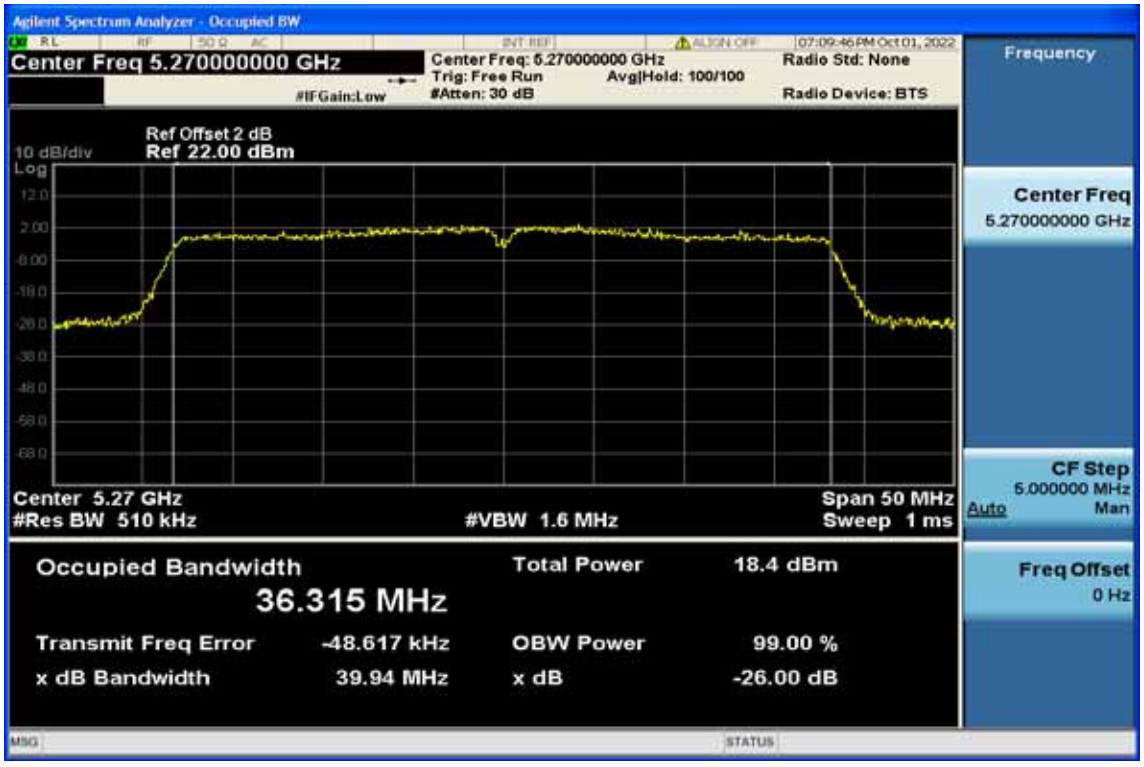
26dB / 99% Band Width Test Data CH-Low



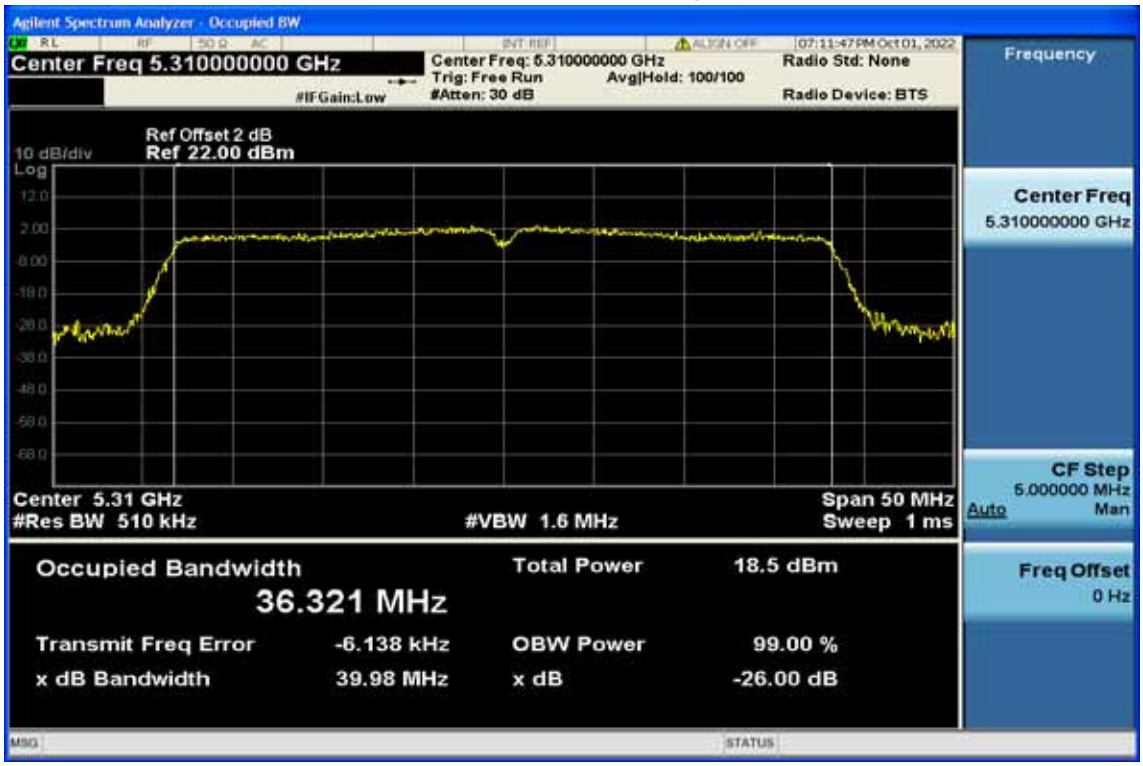
26dB / 99%Band Width Test Data CH-High

802.11ac VHT40

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



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

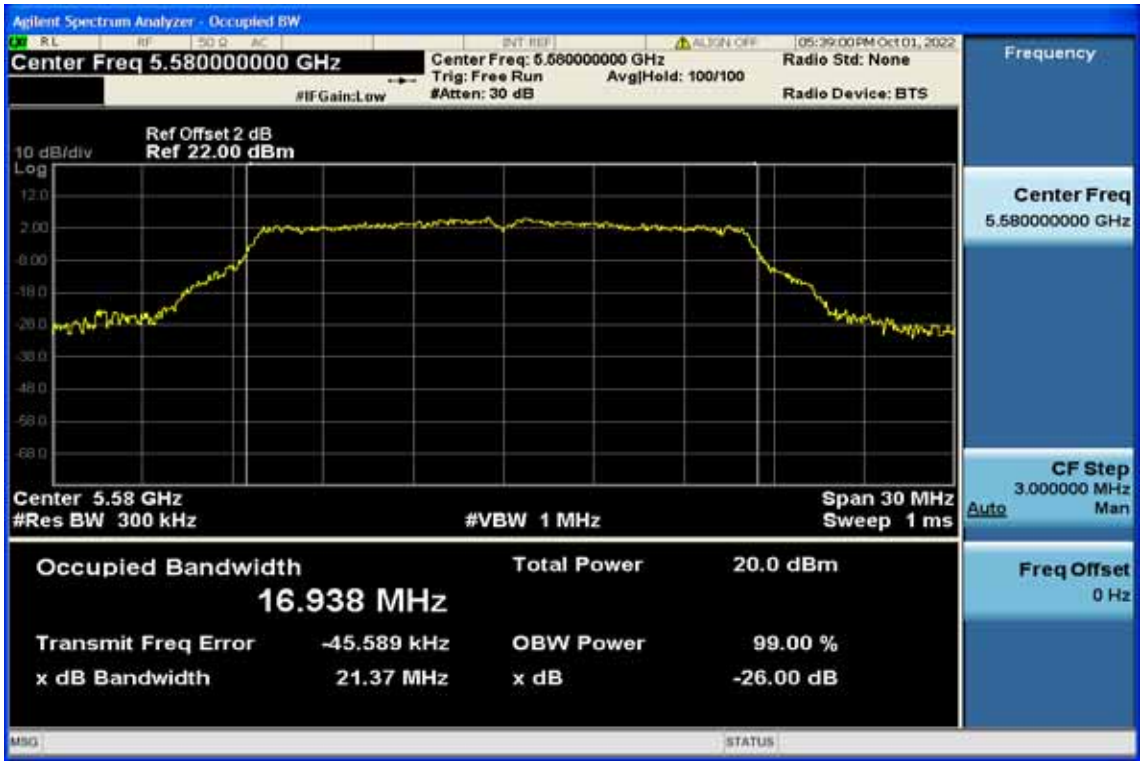


802.11 ac VHT80

26dB / 99% Band Width Test Data

Band UNII-2C
802.11a
26dB / 99% Band Width Test Data CH-Low

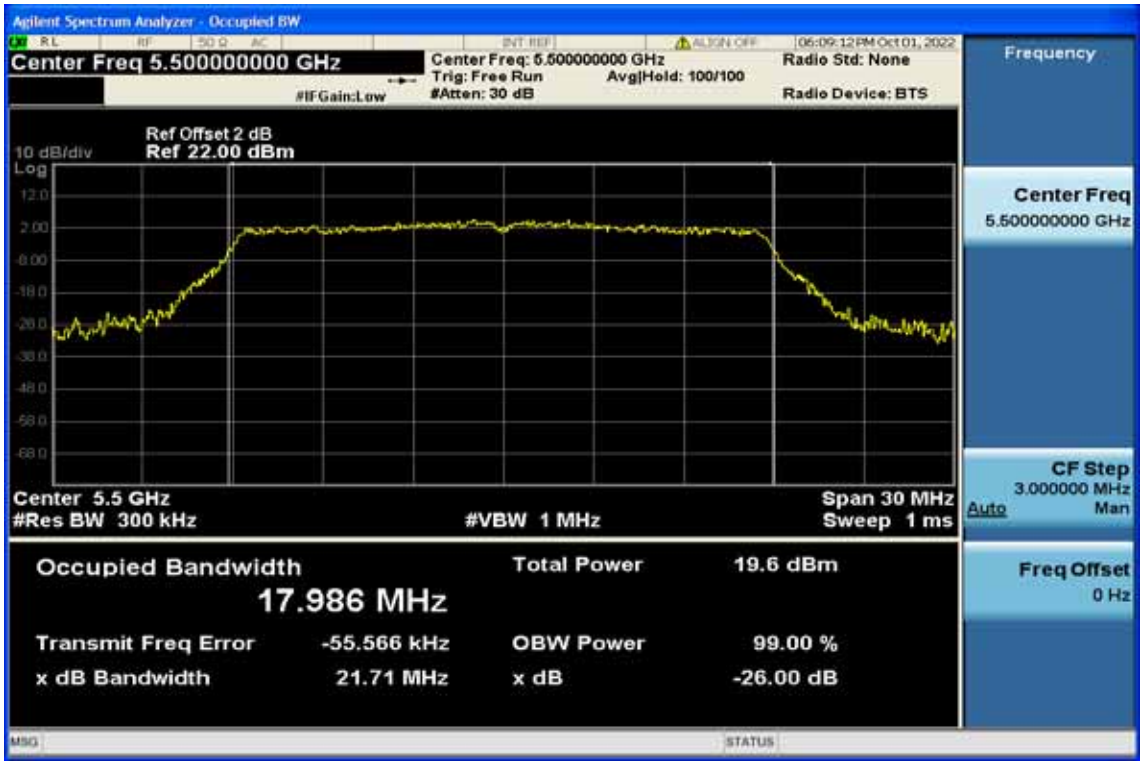
26dB / 99% Band Width Test Data CH-Mid



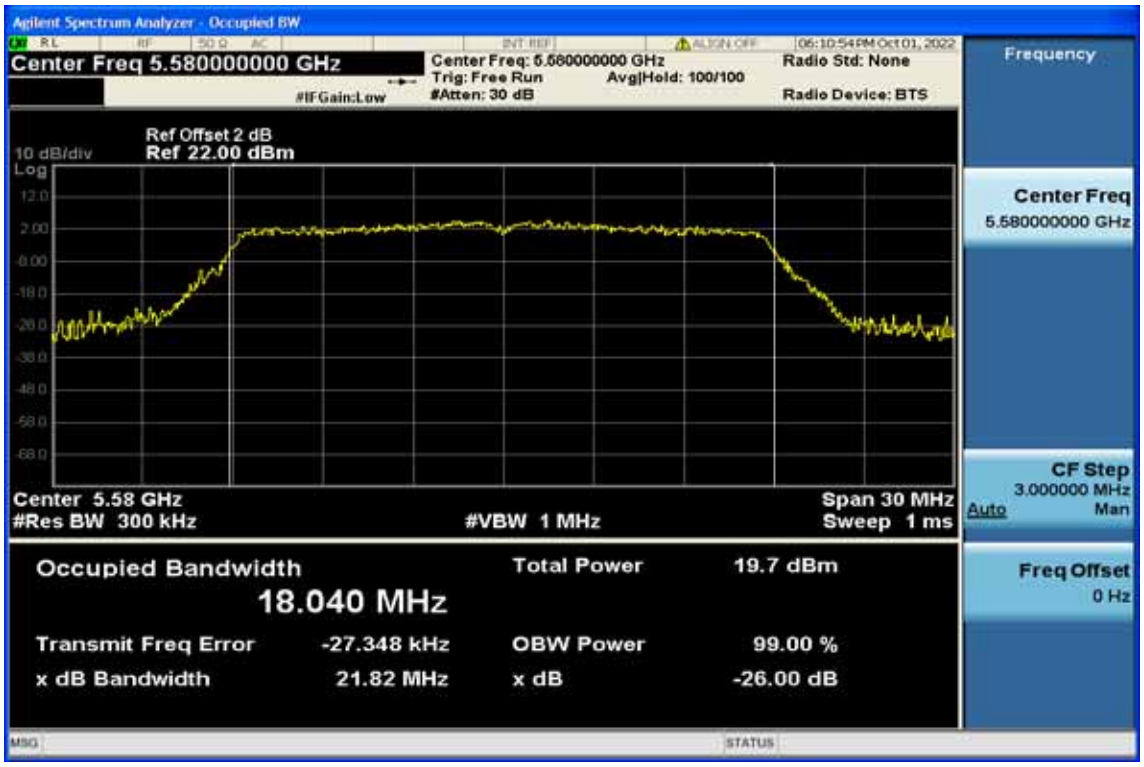
26dB / 99% Band Width Test Data CH-High

802.11n HT20

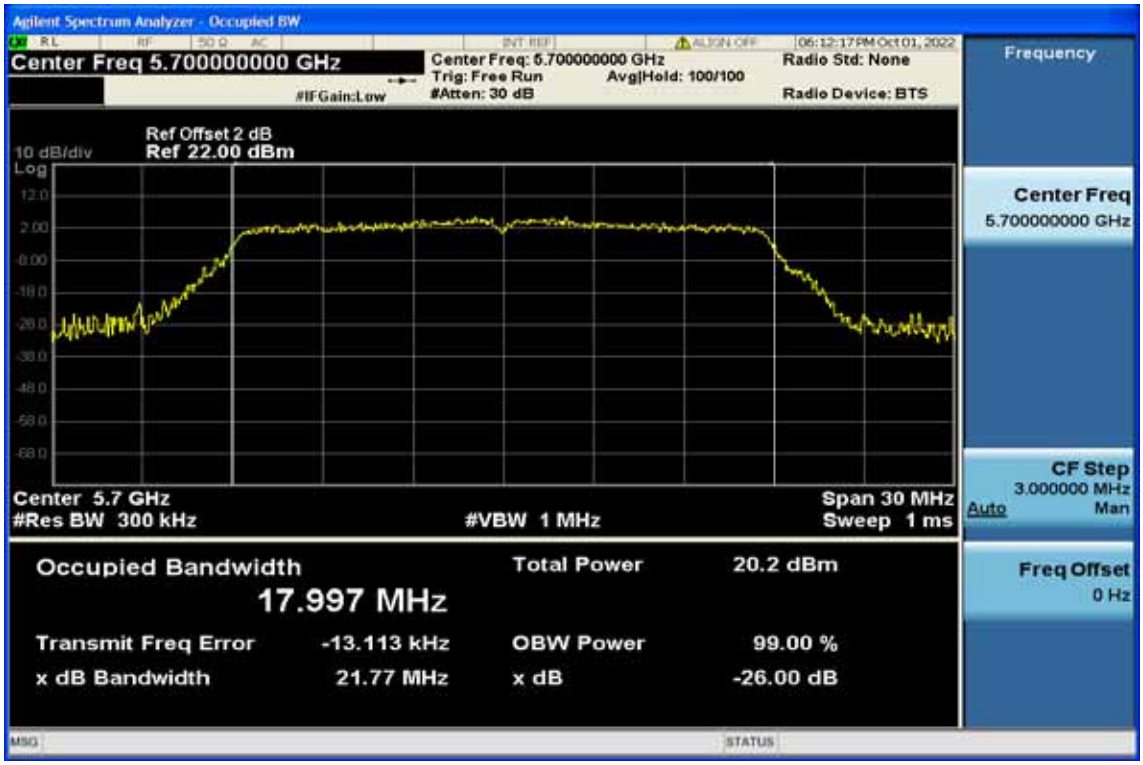
26dB / 99% Band Width Test Data CH-Low



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

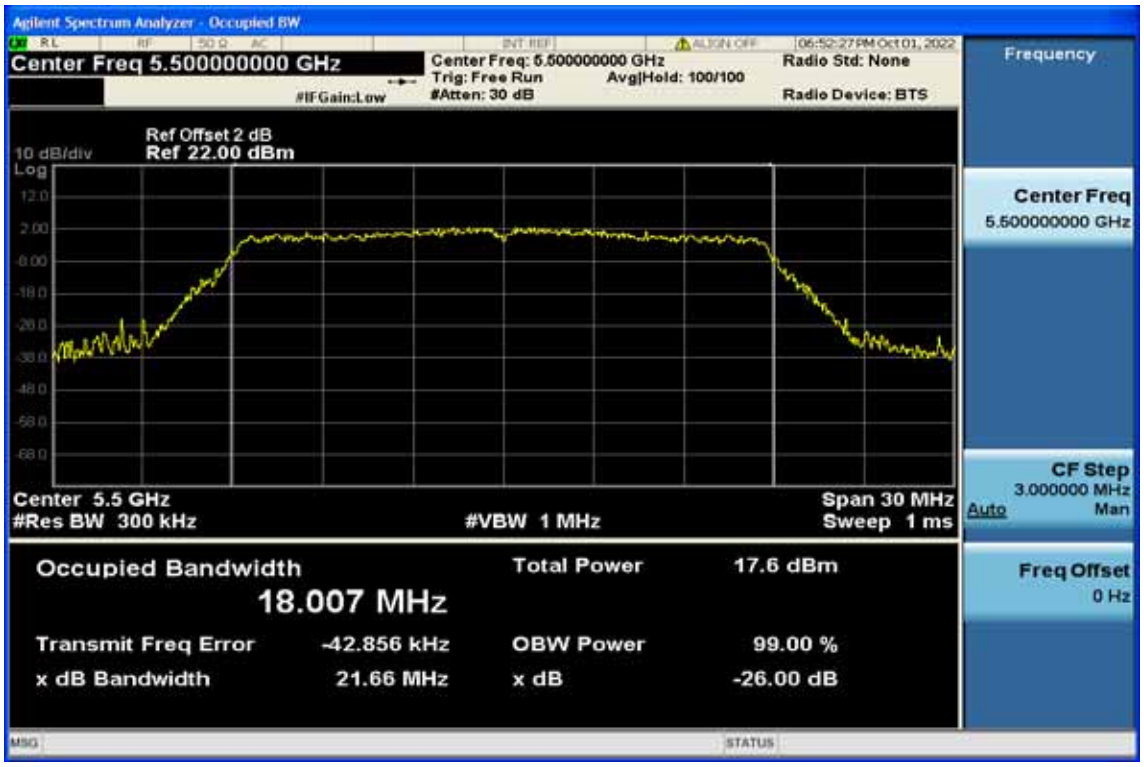


26dB / 99% Band Width Test Data CH-High



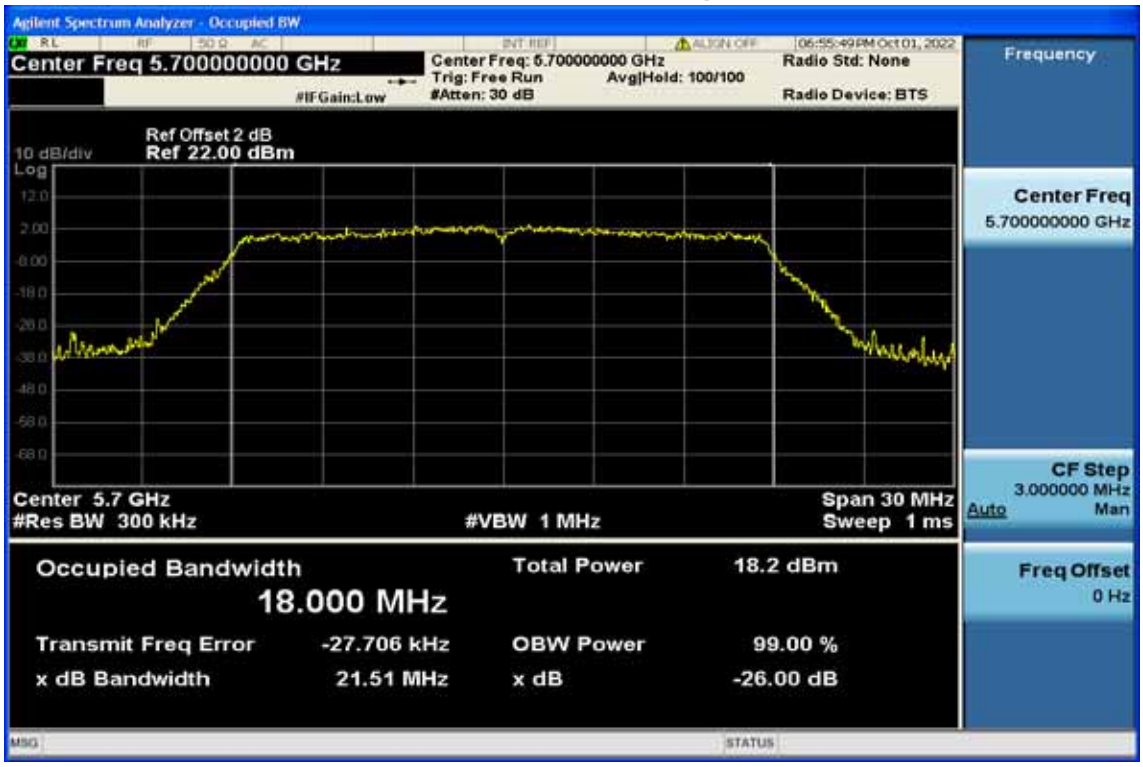
802.11ac VHT20

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



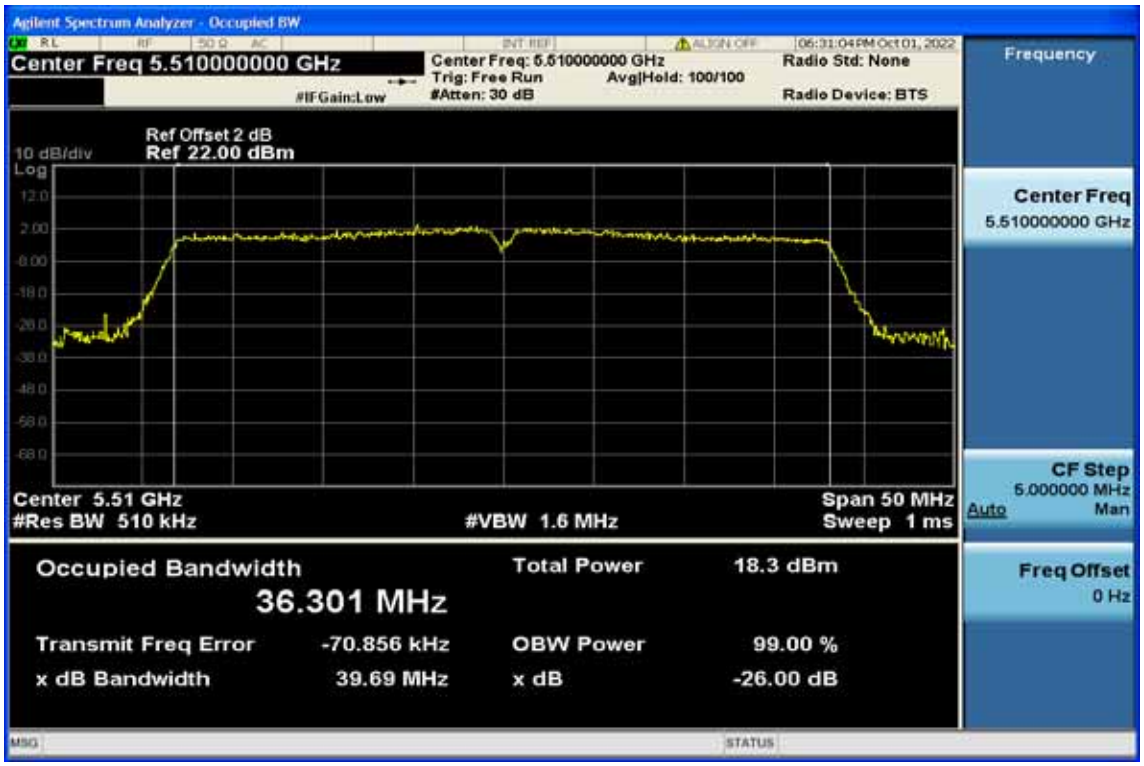
26dB / 99% Band Width Test Data CH-Mid

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

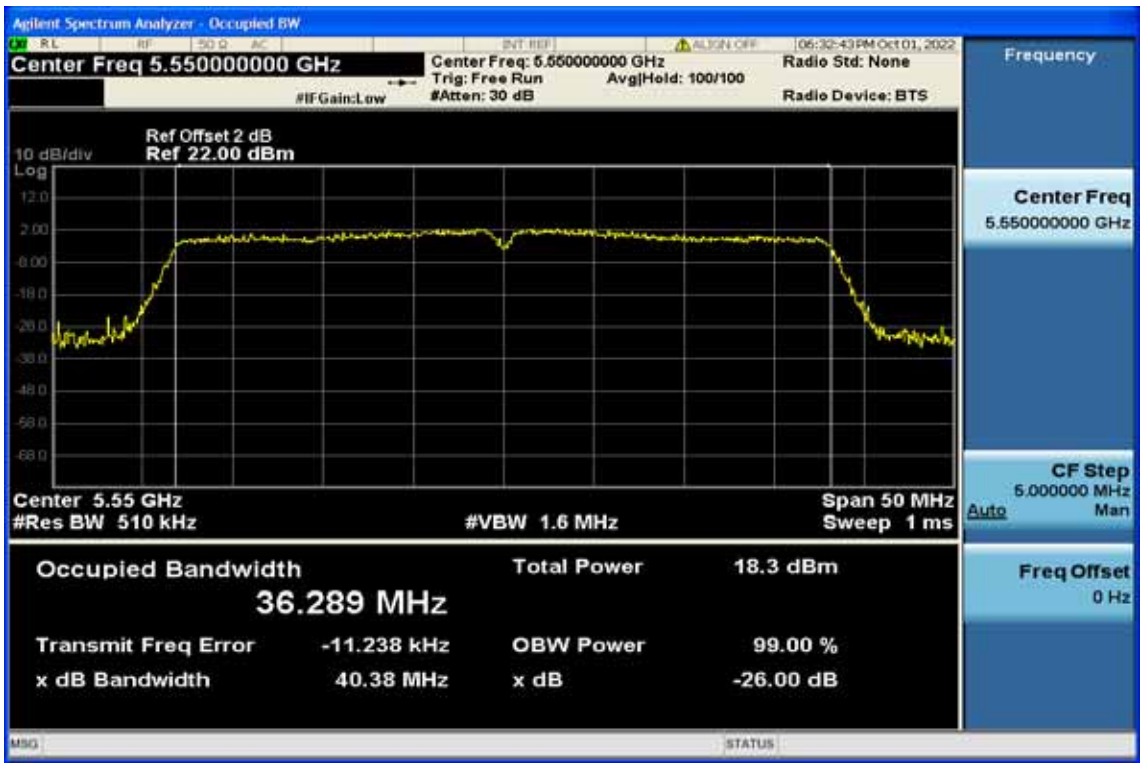


802.11n HT40

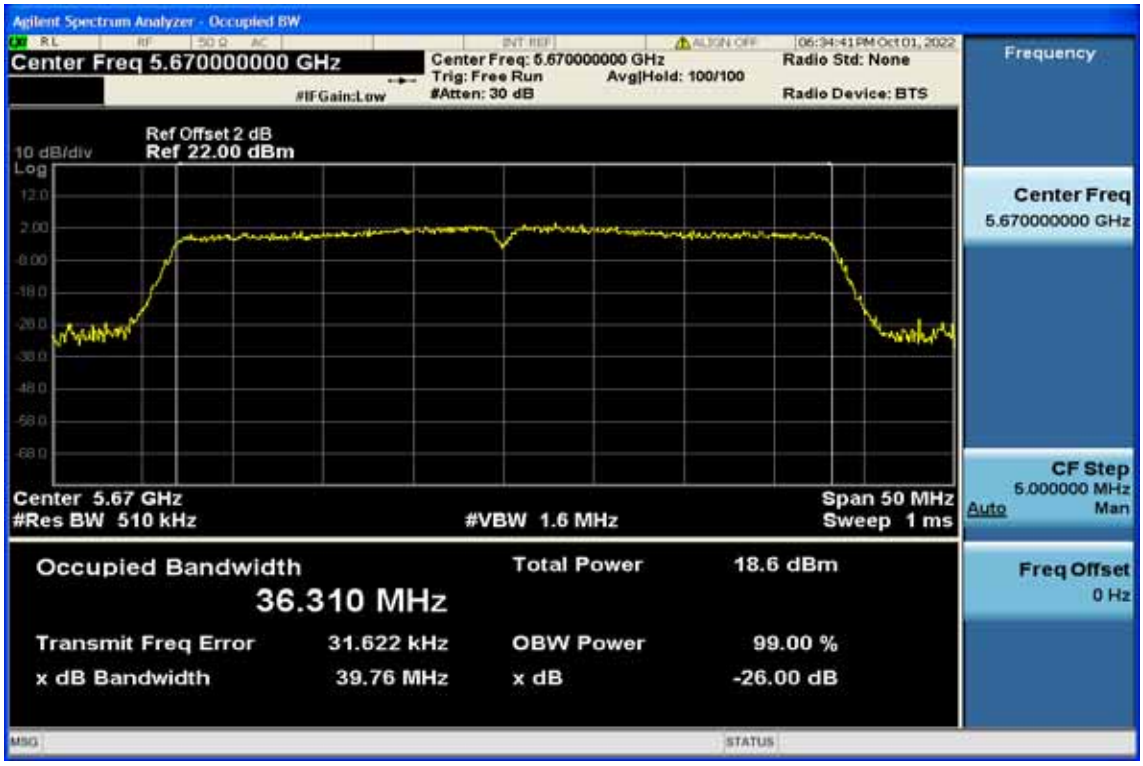
26dB / 99% Band Width Test Data CH-Low



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

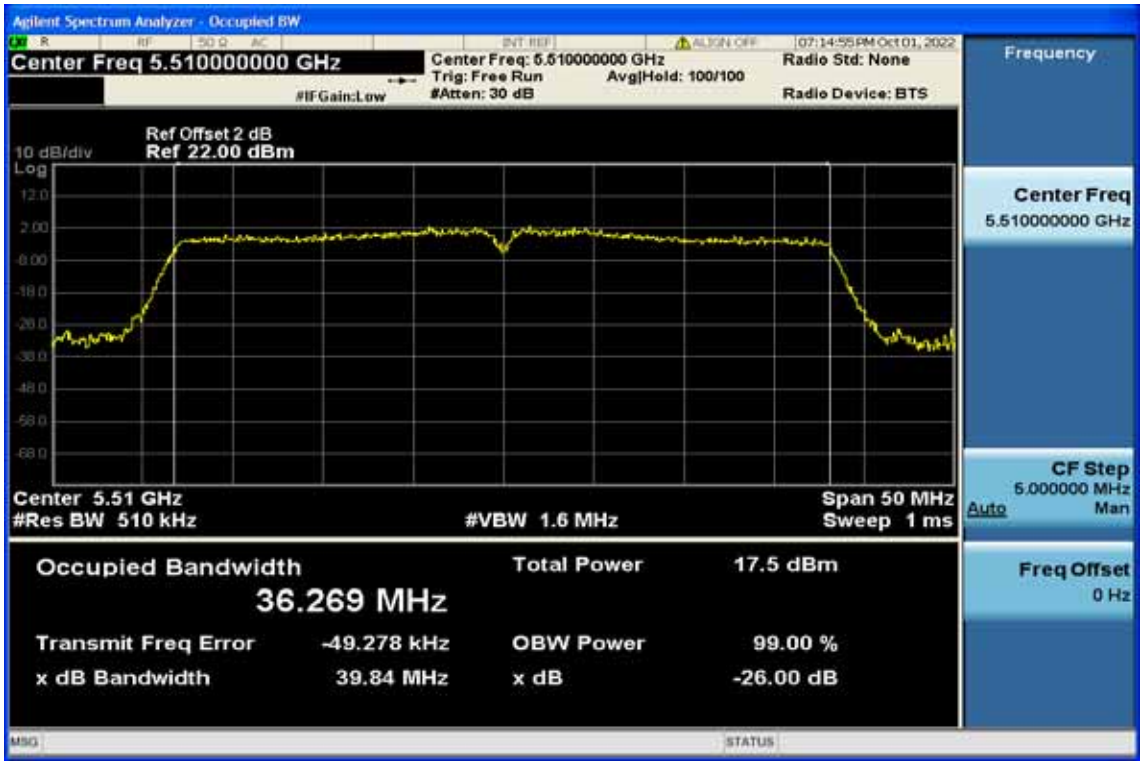


26dB / 99%Band Width Test Data CH-High

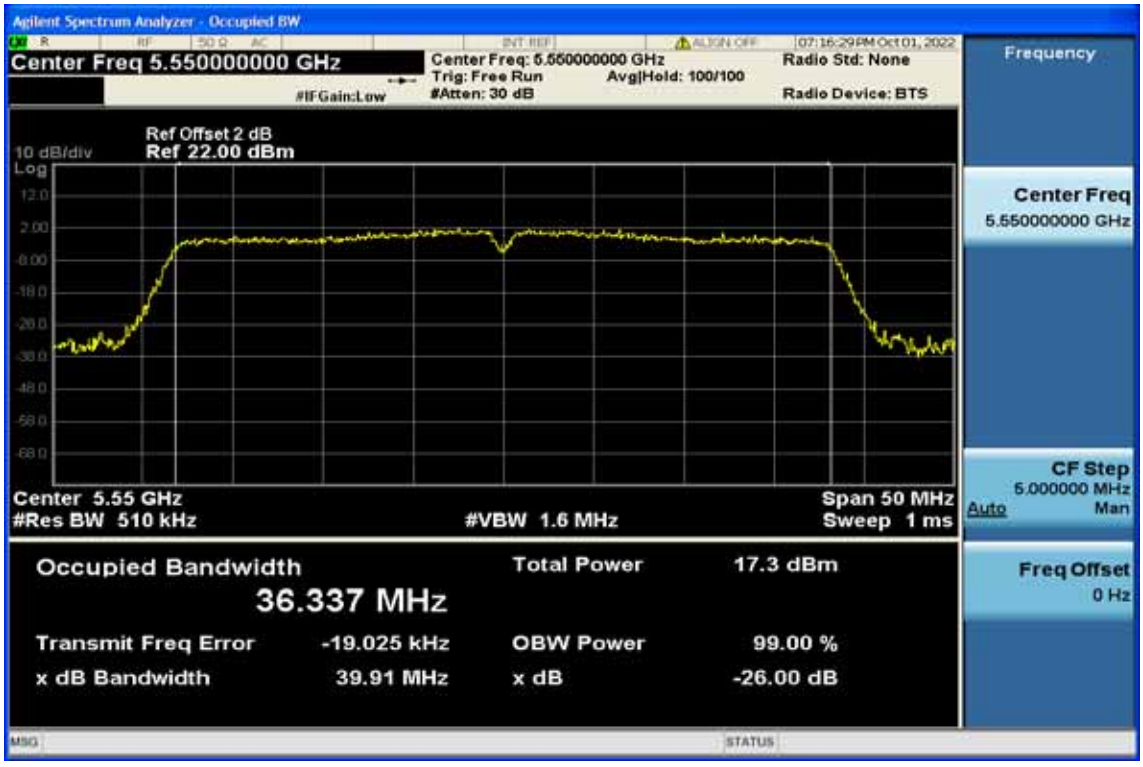


802.11ac VHT40

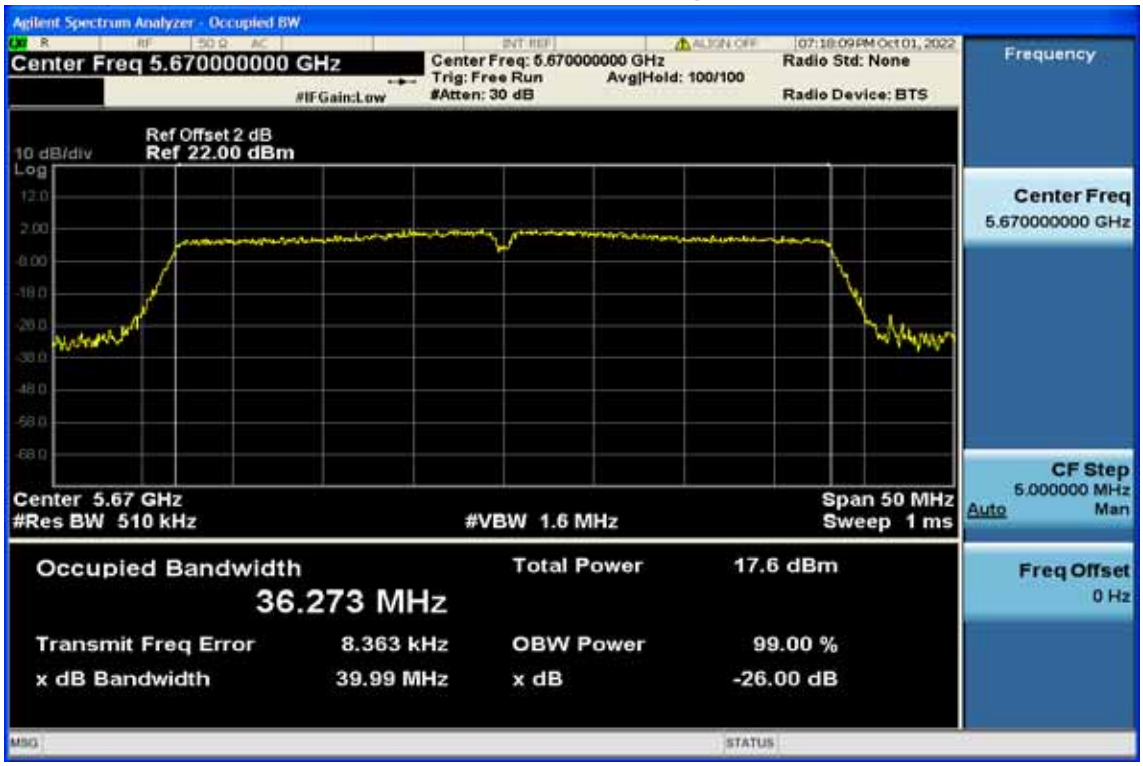
26dB / 99% Band Width Test Data CH-Low



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



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



802.11 ac VHT80

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

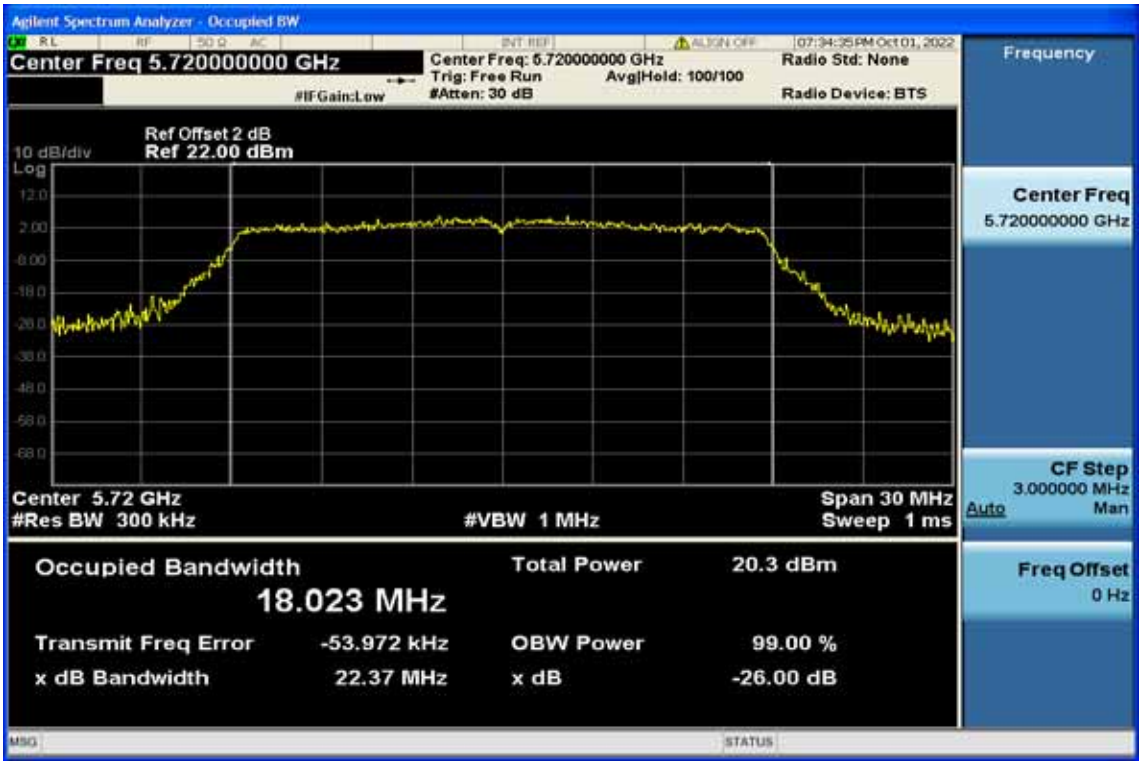
802.11 ac VHT80
26dB / 99% Band Width Test Data CH-High

Straddle Channels
Band UNII-2C
802.11 a
26dB / 99% Band Width Test Data CH-

Band UNII-2C

802.11n HT20

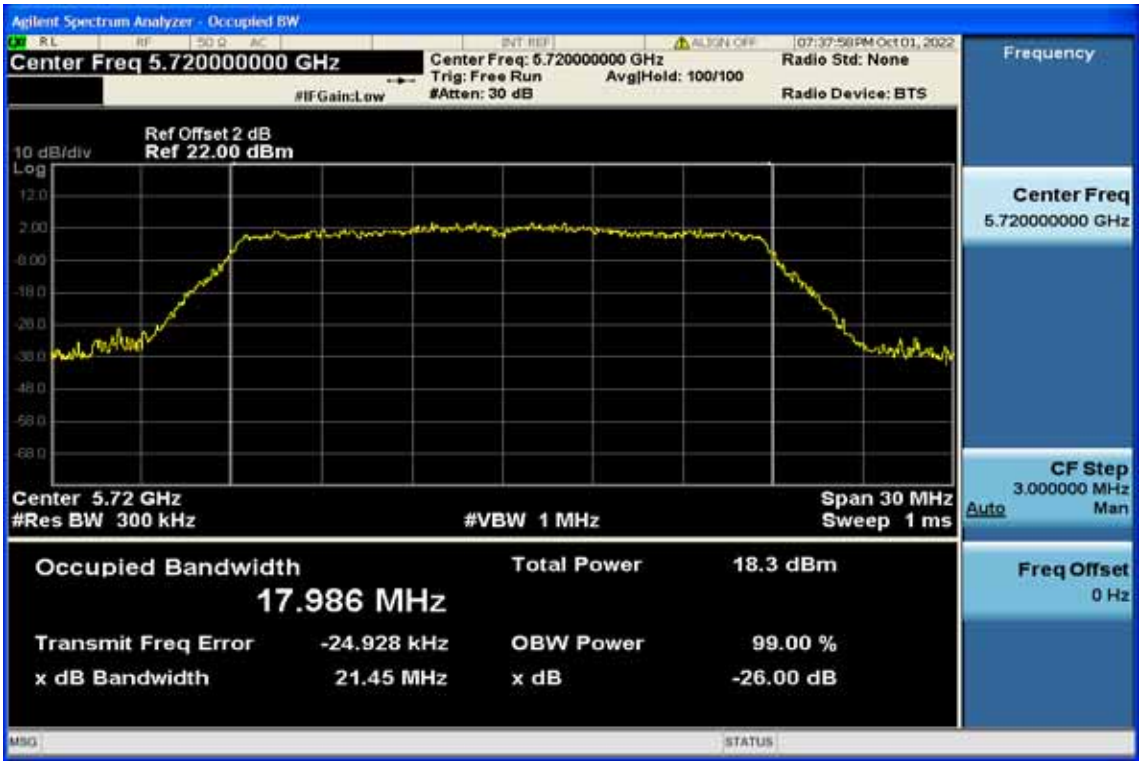
26dB / 99% Band Width Test Data CH-



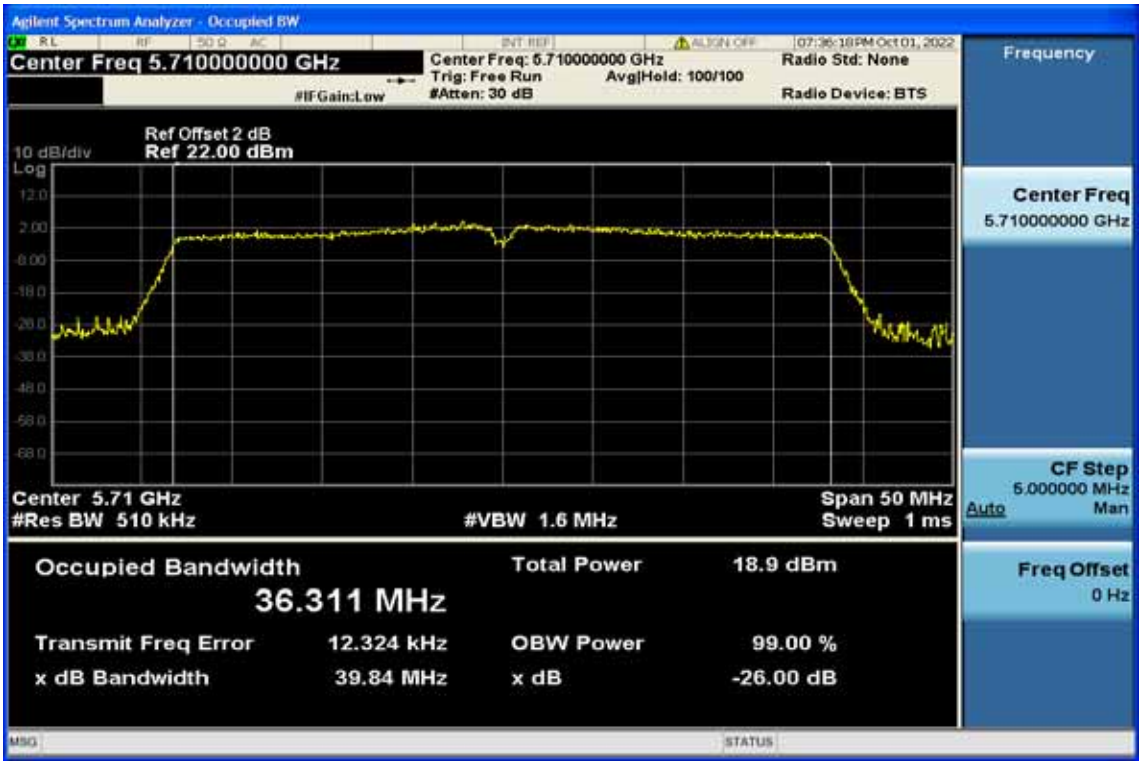
Band UNII-2C

802.11ac VHT20

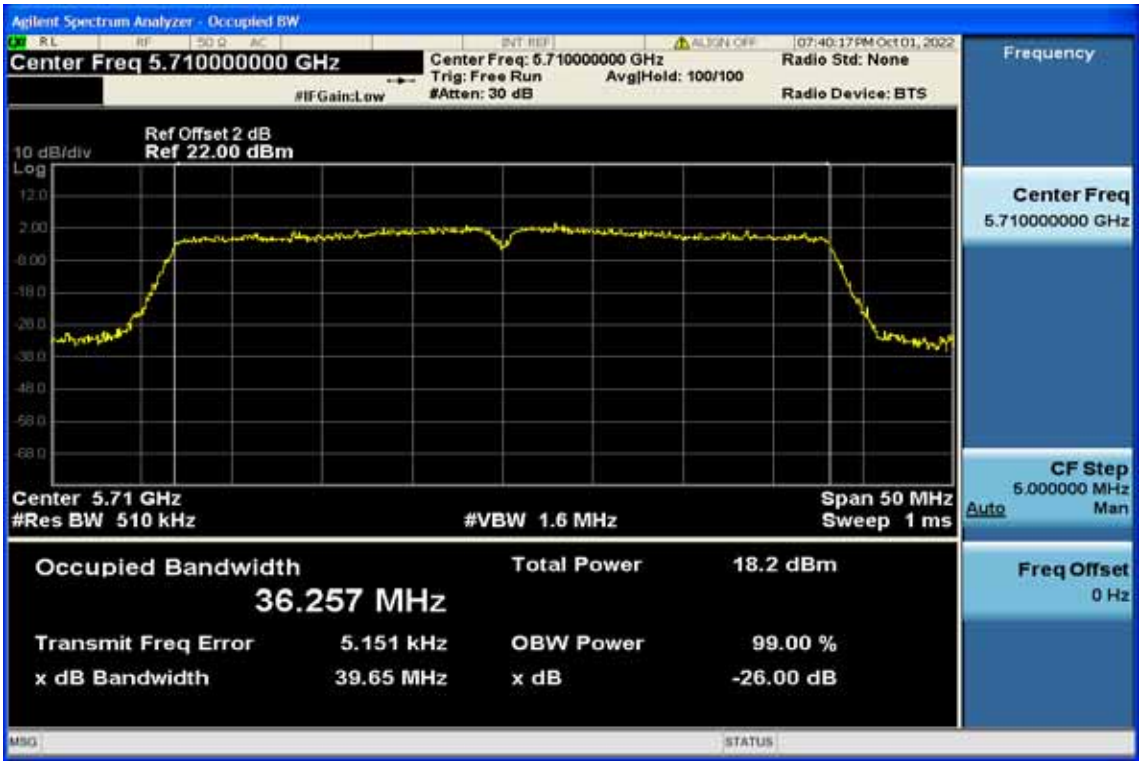
26dB / 99% Band Width Test Data CH-



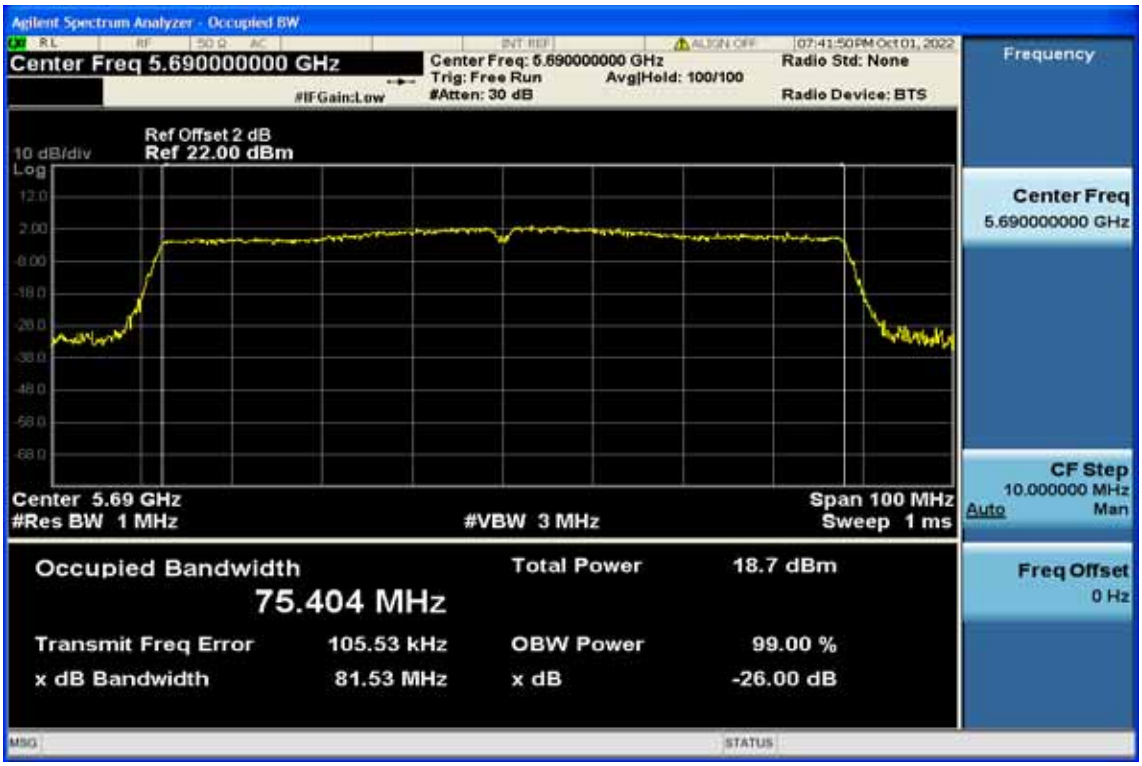
Band UNII-2C
802.11n HT40
26dB / 99% Band Width Test Data CH-



Band UNII-2C
802.11ac VHT40
26dB / 99% Band Width Test Data CH-



Band UNII-2C
802.11ac VHT80
26dB / 99% Band Width Test Data CH-



8. 6dB Emission Bandwidth Measurement

8.1. Standard Applicable

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

8.2. Measurement Procedure

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

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

8.3. Measurement Equipment Used:

Refer to section 6.3 for details.

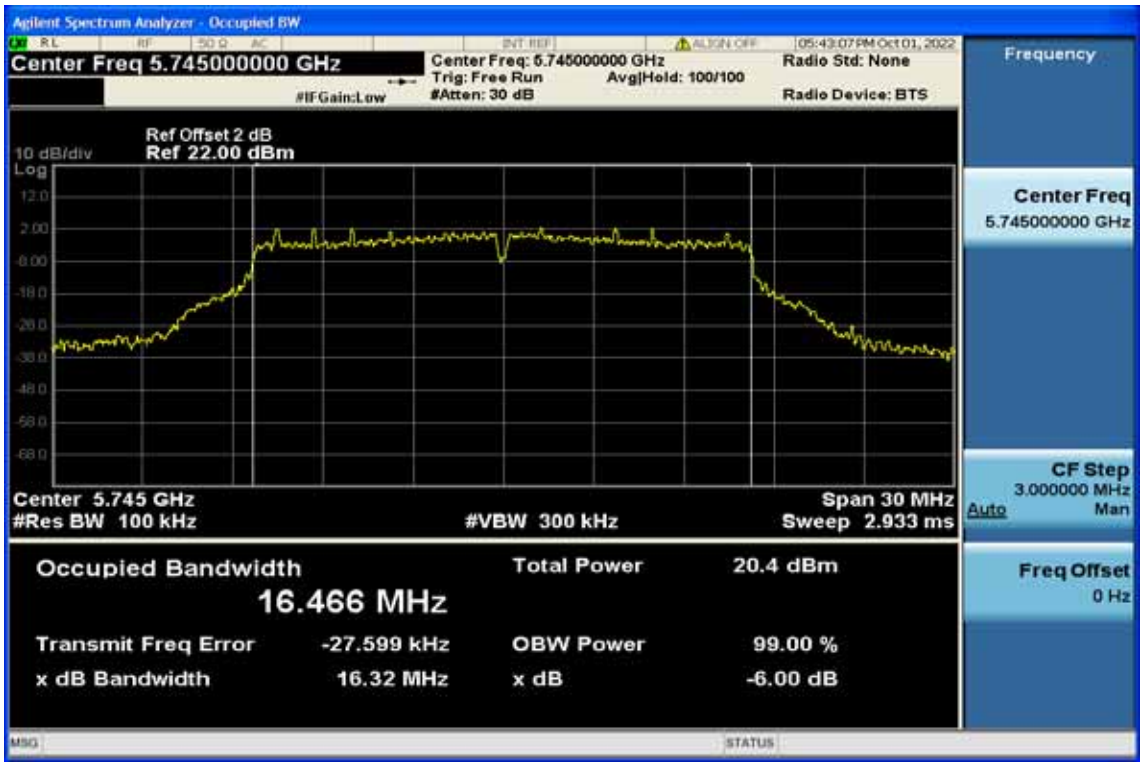
8.4. Test Set-up:

Refer to section 6.4 for details.

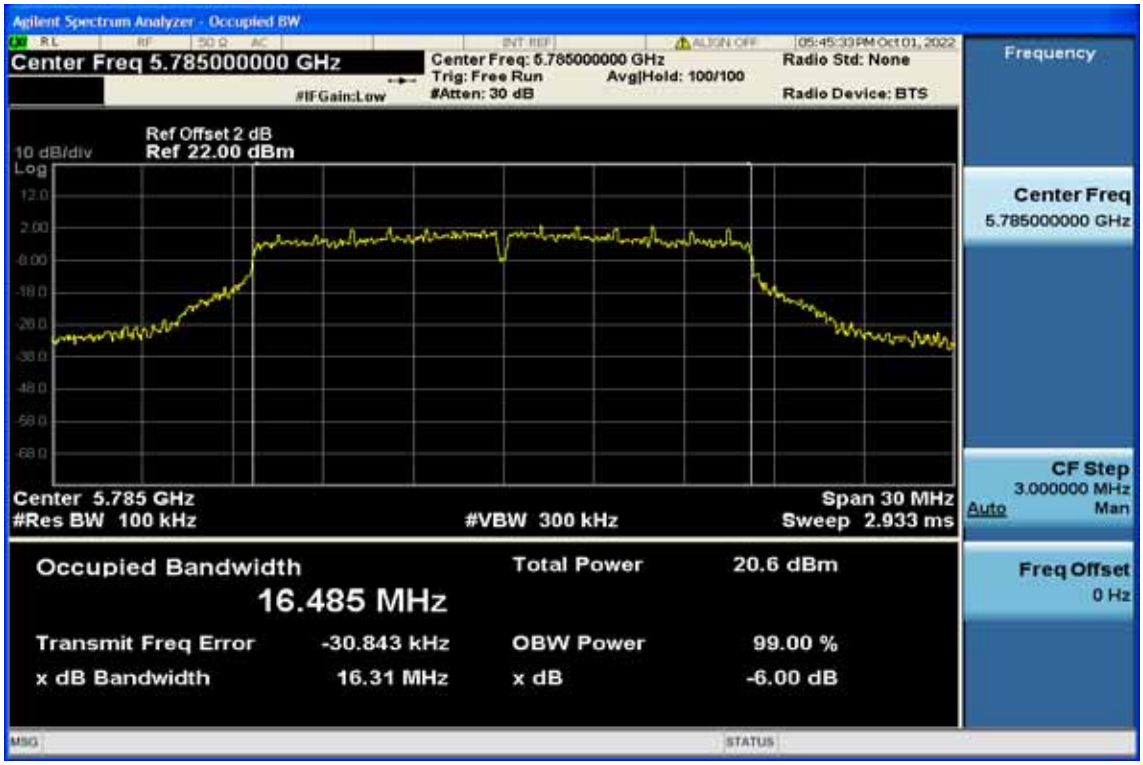
8.5. Measurement Result

Band	Mode	Frequency (MHz)	6dB Bandwidth (MHz)	99% OBW (MHz)	6dB BW Limit (kHz)
UNII-3	11a	5745	16.32	16.466	> 500
		5785	16.31	16.485	> 500
		5825	16.34	16.482	> 500
	HT20	5745	17.55	17.635	> 500
		5785	17.30	17.667	> 500
		5825	17.34	17.640	> 500
	HT40	5755	35.72	36.031	> 500
		5795	35.54	36.022	> 500
	VHT20	5745	17.31	17.643	> 500
		5785	17.55	17.647	> 500
		5825	17.33	17.648	> 500
	VHT40	5755	36.06	36.035	> 500
		5795	36.07	36.055	> 500
	VHT80	5775	75.37	75.258	> 500

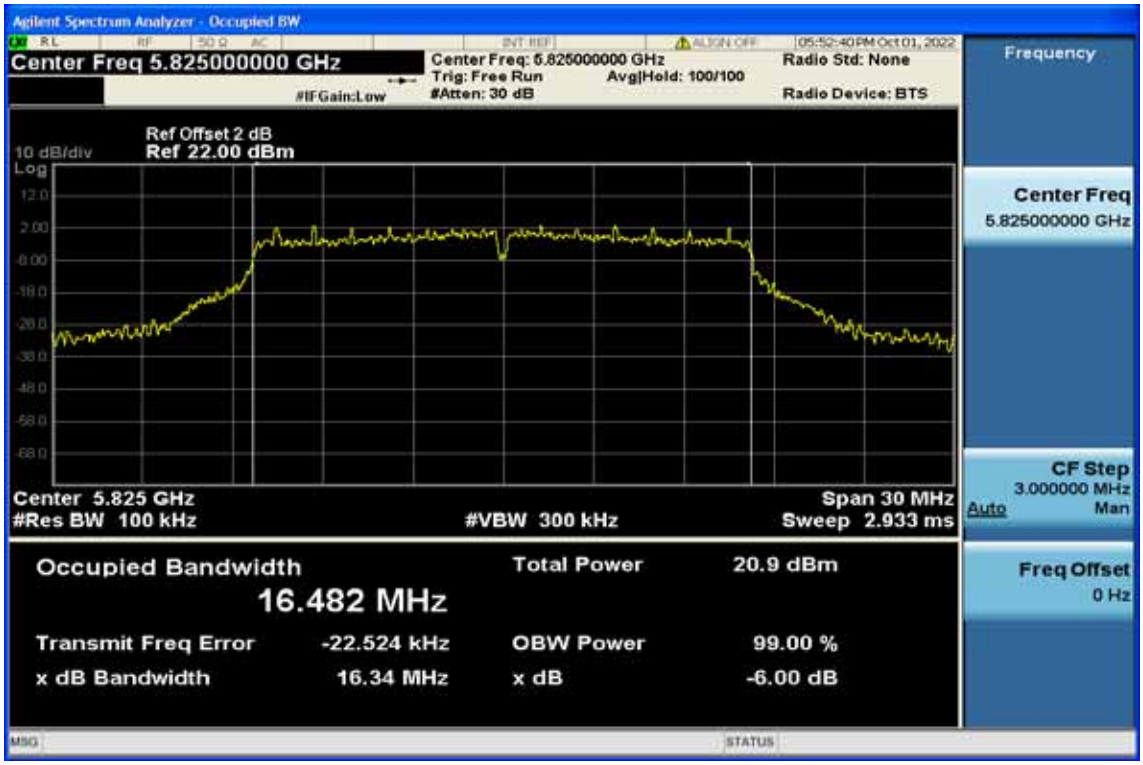
Band UNII-3
802.11a
6dB Band Width Test Data CH-Low



6dB Band Width Data CH-Mid

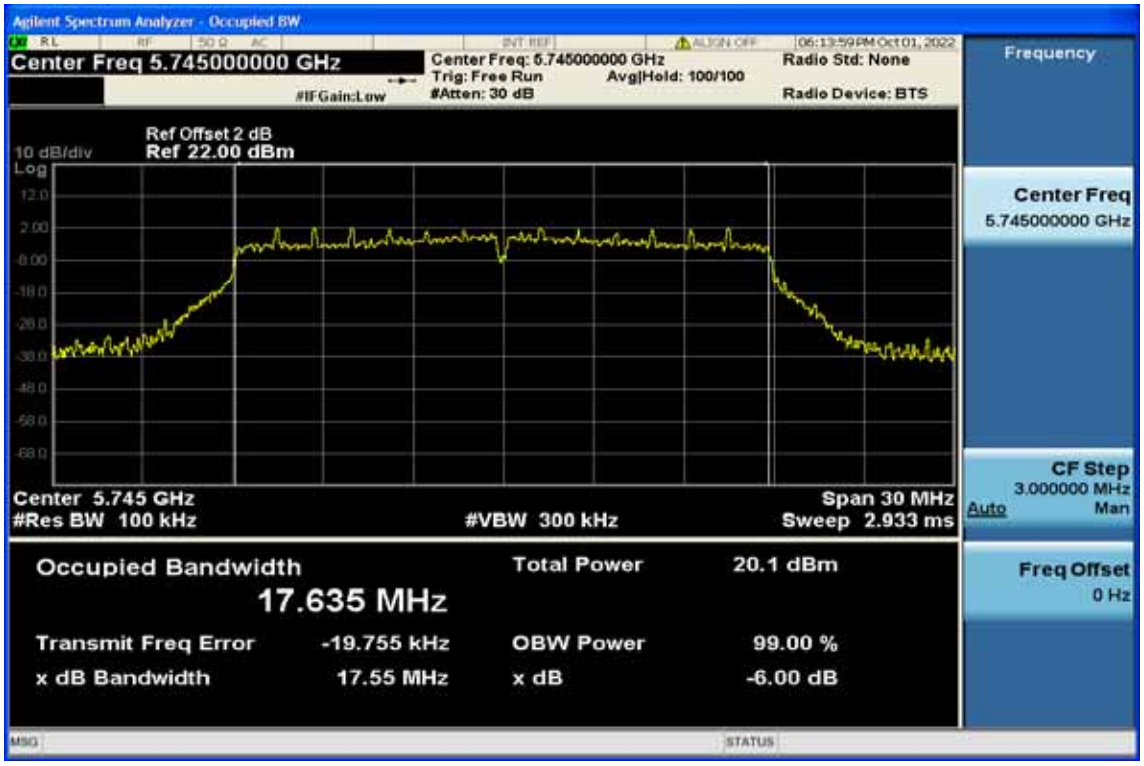


6dB Band Width Data CH-High

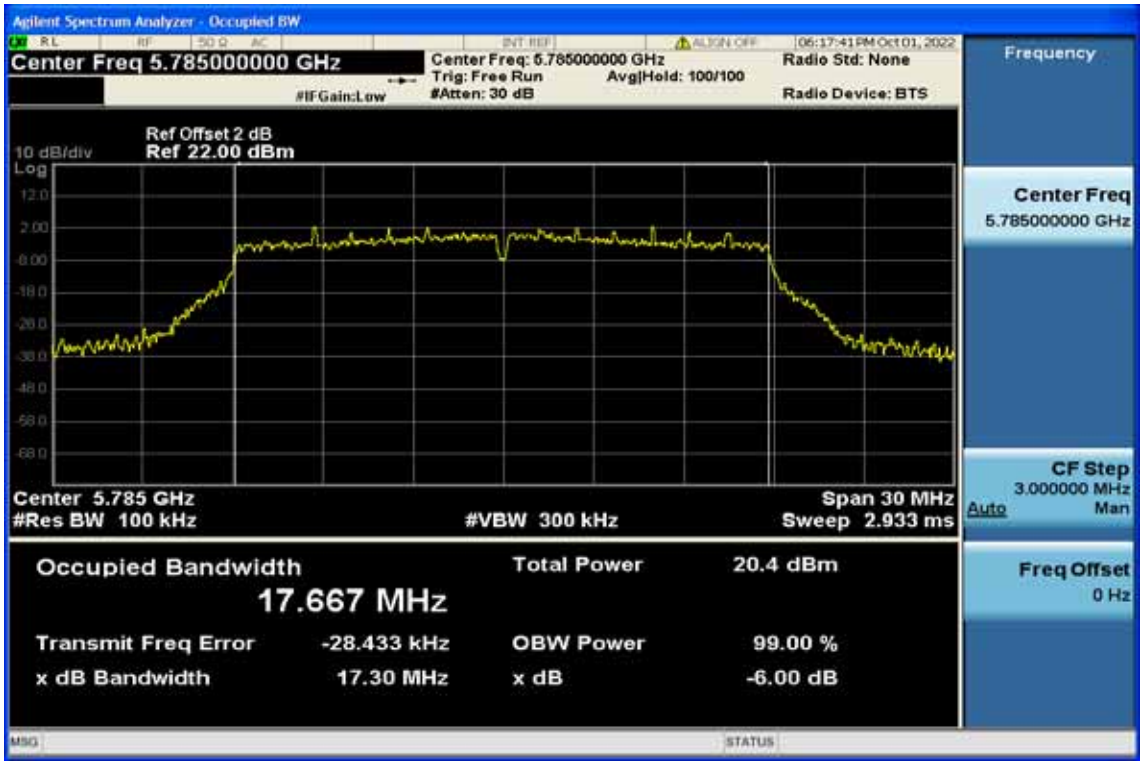


802.11n HT20

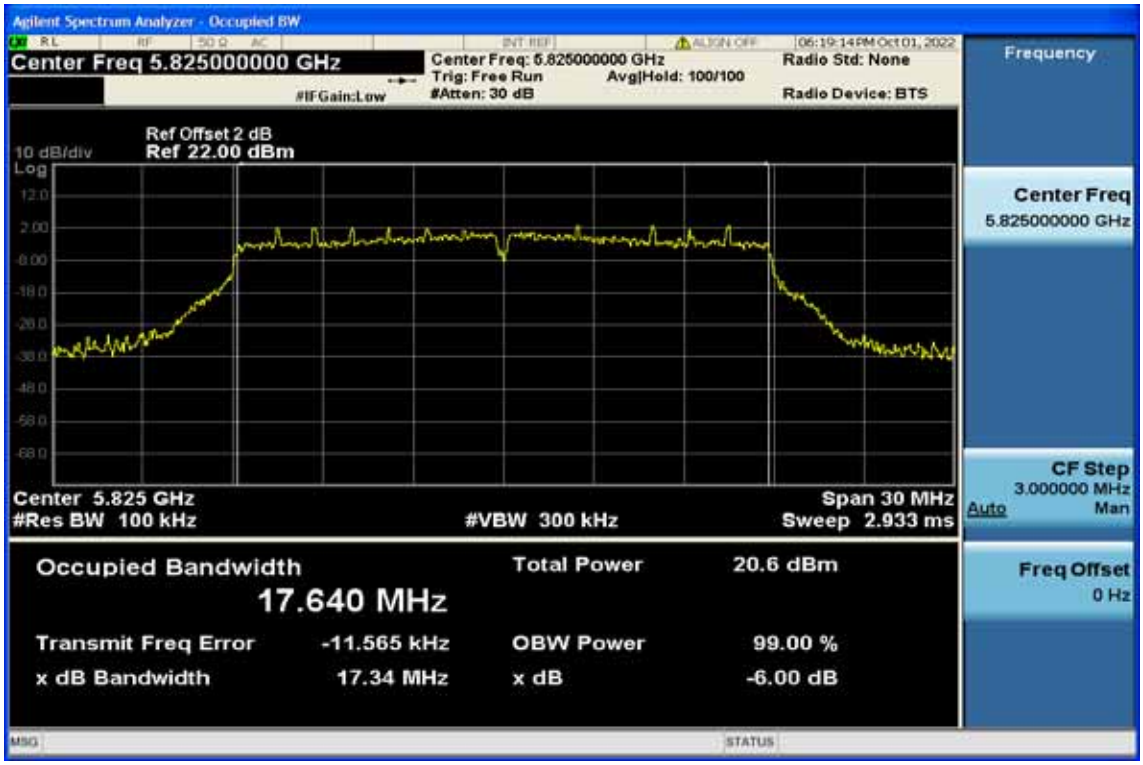
6dB Band Width Data CH-Low



6dB Band Width Data CH-Mid

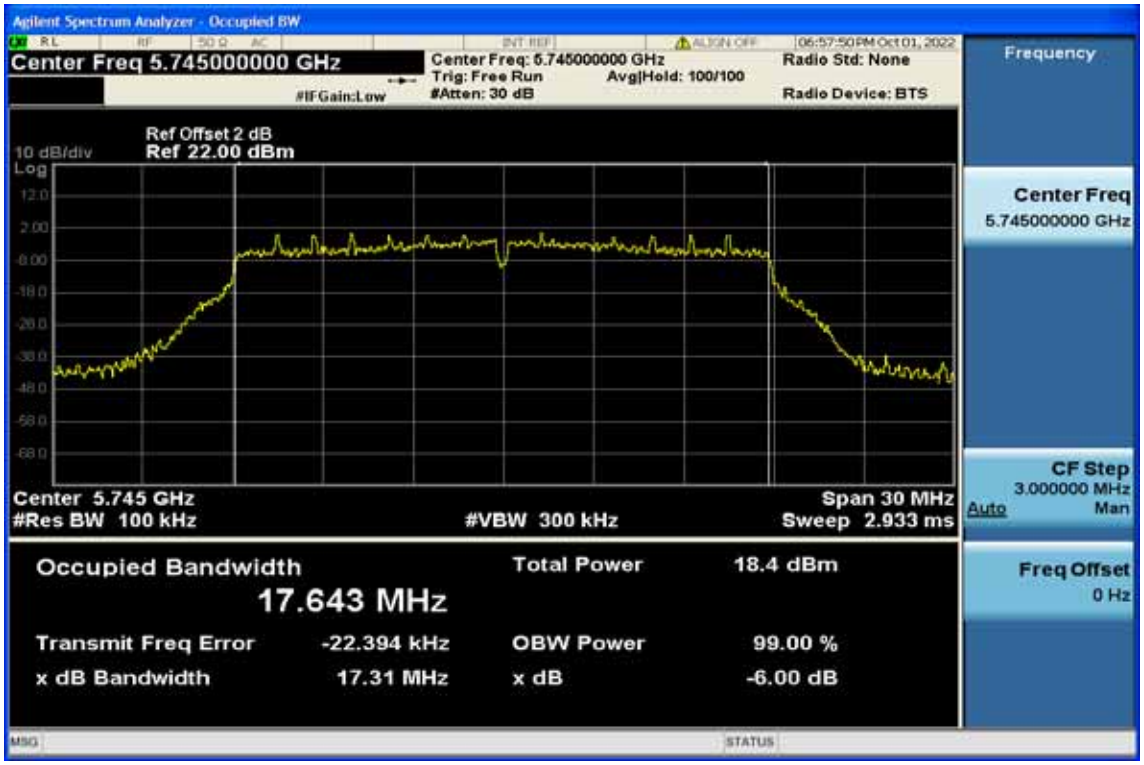


6dB Band Width Data CH-High

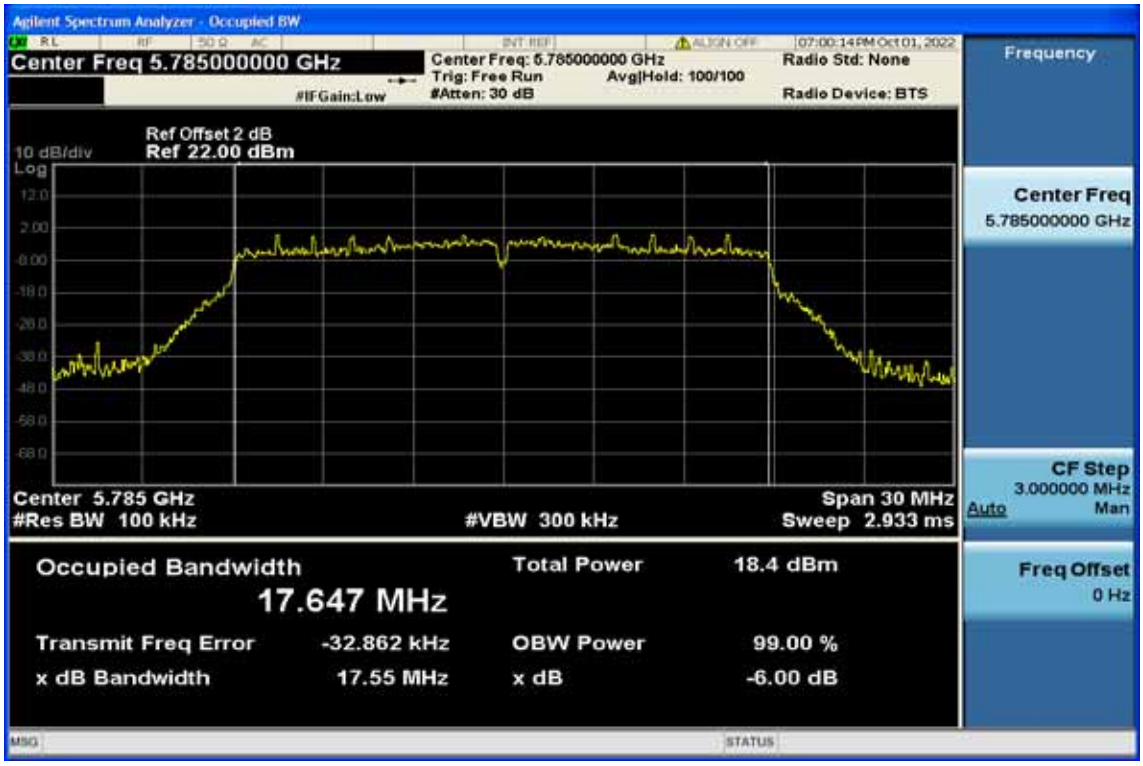


802.11ac VHT20

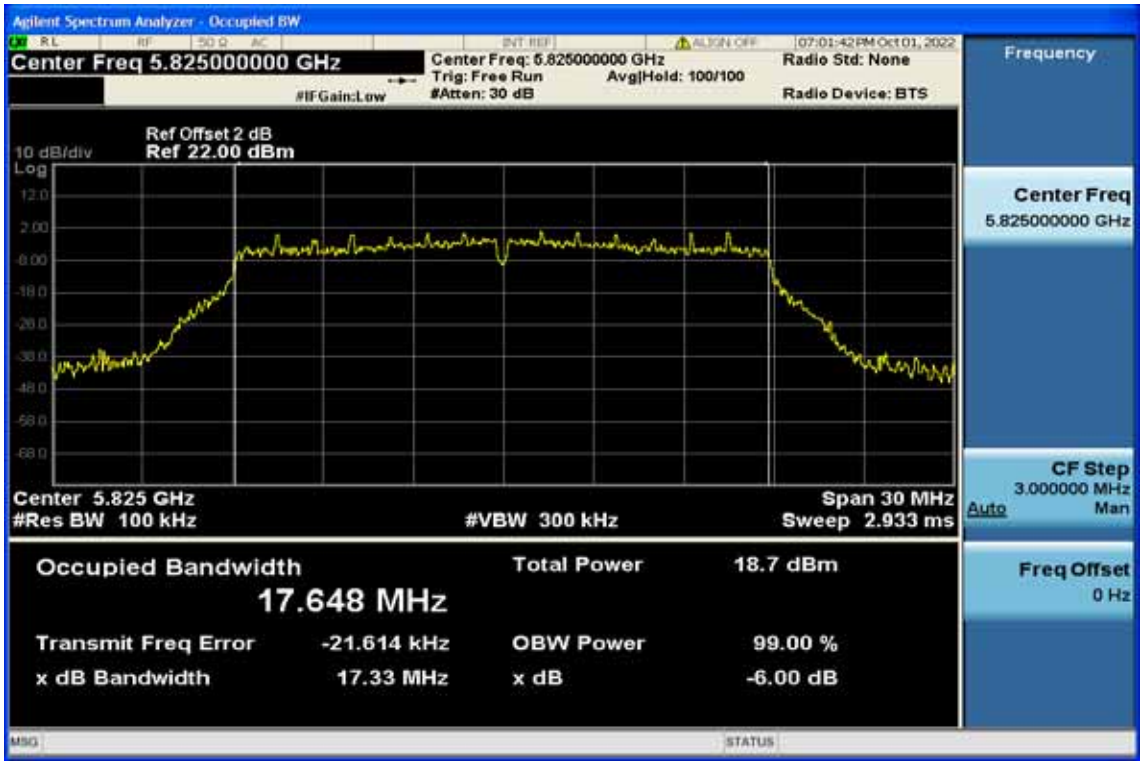
6dB Band Width Data CH-Low



6dB Band Width Data CH-Mid

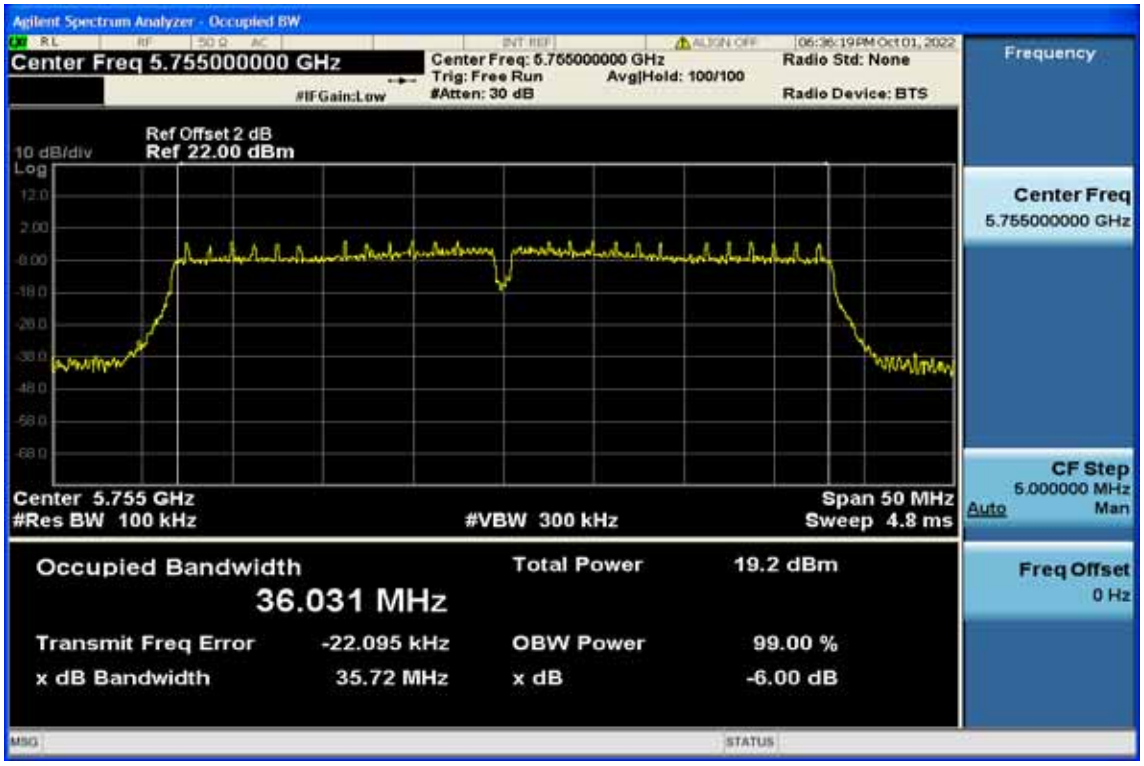


6dB Band Width Data CH-High

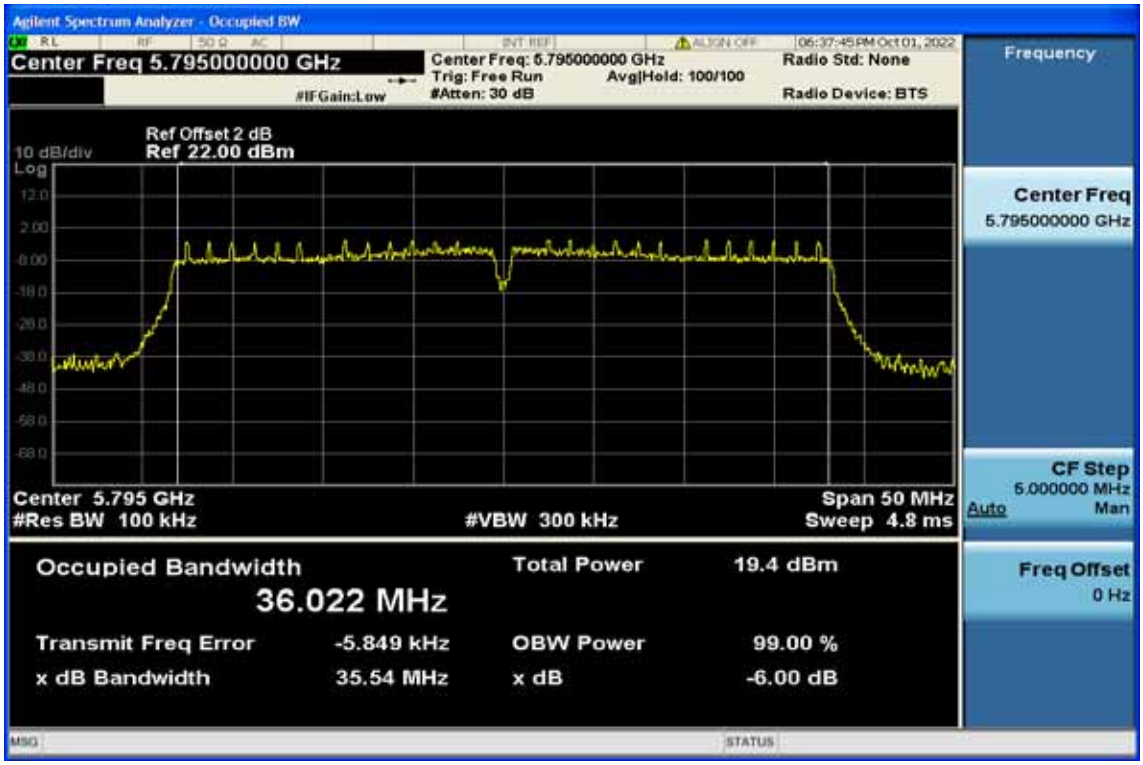


802.11n HT40

6dB Band Width Data CH-Low

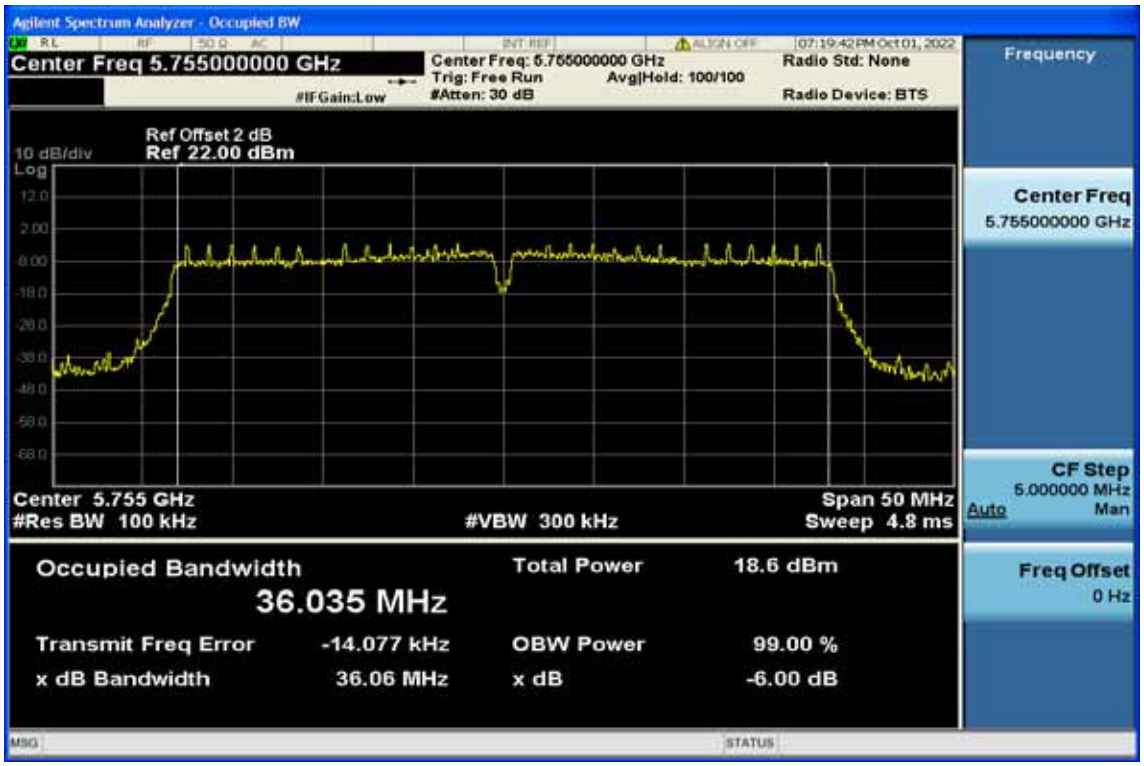


6dB Band Width Data CH-High



802.11ac VHT40

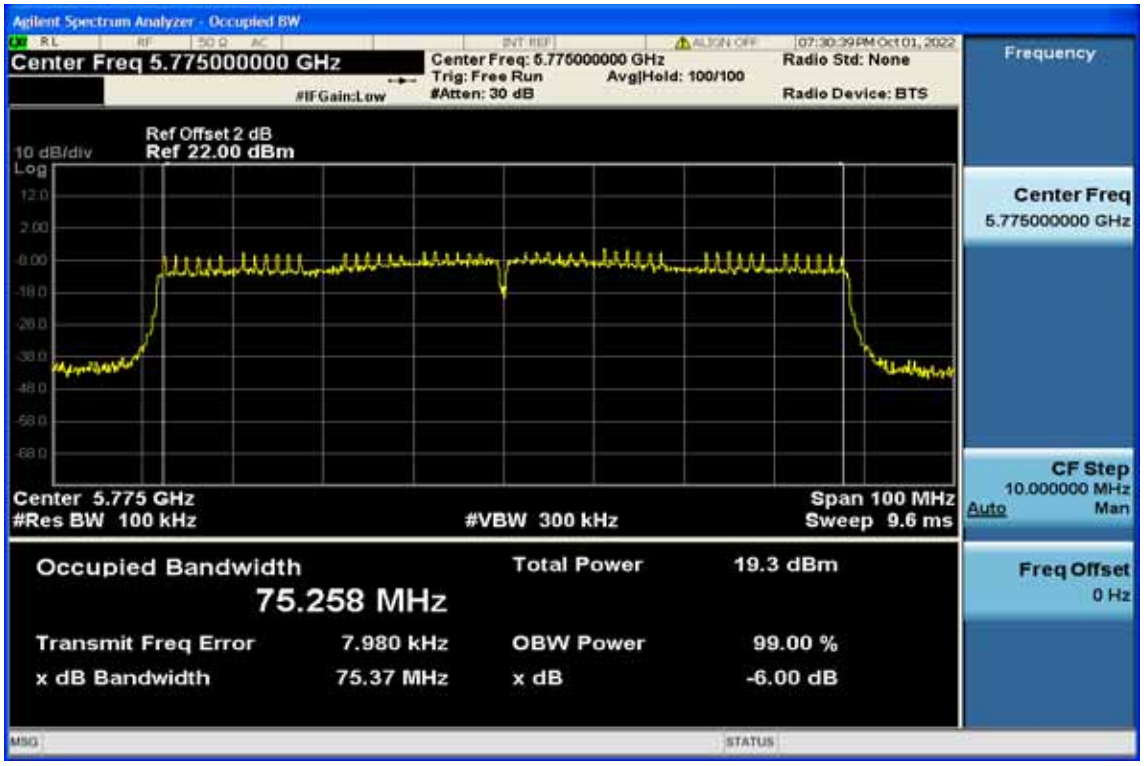
6dB Band Width Data CH-Low



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

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

[2] Above 38.6

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

§15.209- RADIATED EMISSION LIMITS: GENERAL REQUIREMENTS

FCC PART 15.209

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

9.2. EUT Setup

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

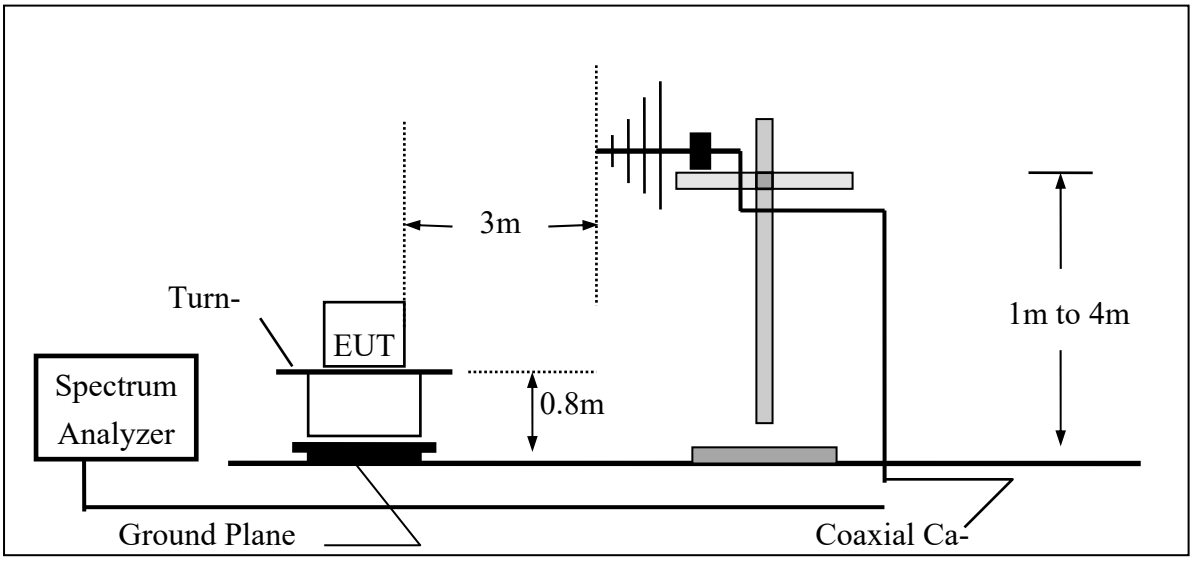
9.3. Measurement Procedure

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

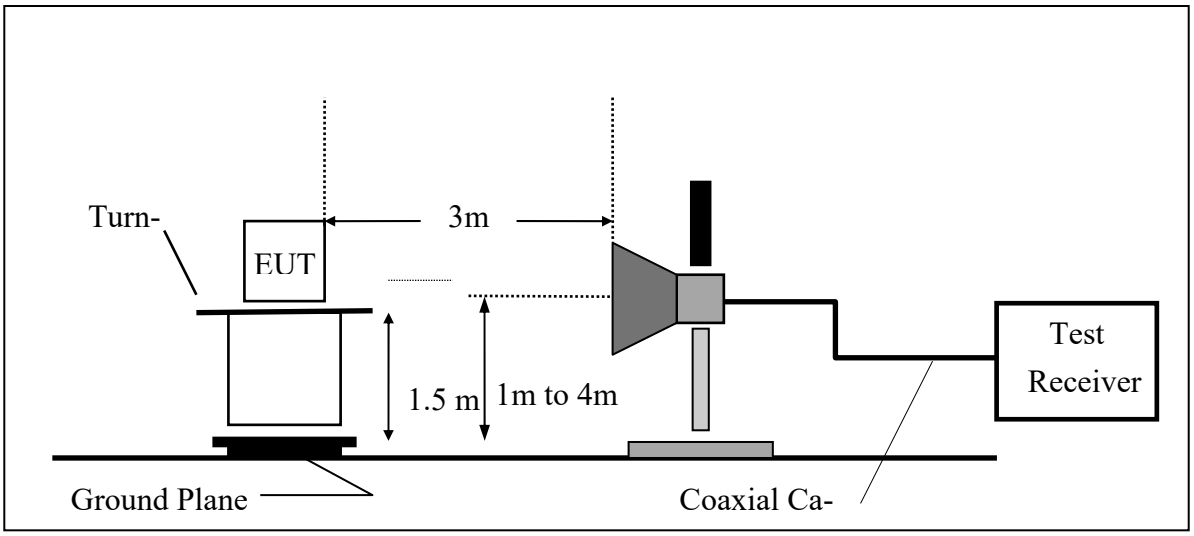
Refer to section F of KDB Document: KDB 789033 D02 General U-NII Test Procedures New Rules v02r01

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	Equipment Name	Brand	Model	S/N	Last Cal. Date	Next Cal. Date
Chamber 19	Signal analyzer	R&S	FSV40	101919	8/17/2022	8/17/2023
Chamber 19	EMI Receiver	R&S	ESR3	102461	05/10/2022	05/10/2023
Chamber 19	Loop Antenna	EM	EM-6879	271	10/05/2022	10/05/2023
Chamber 19	Bilog Antenna (30MHz-1GHz)	Schwarzbeck	VULB9168 w 6dB Att.	9168-736	03/09/2022	03/09/2023
Chamber 19	Horn antenna (1GHz-18GHz)	ETS	3117	00218718	10/12/2022	10/12/2023
Chamber 19	Horn antenna (18GHz-26GHz)	Com-power	AH-826	081001	11/30/2021	11/30/2022
Chamber 19	Horn antenna (26GHz-40GHz)	Com-power	AH-640	100A	03/18/2022	03/18/2023
Chamber 19	Preamplifier (9kHz-1GHz)	HP	8447F	3113A04621	06/24/2022	06/24/2023
Chamber 19	Preamplifier (1GHz - 26GHz)	EM	EM01M26G	060681	05/12/2022	05/12/2023
Chamber 19	Preamplifier (26GHz-40GHz)	MITEQ	JS4-26004000-27-5A	818471	05/12/2022	05/12/2023
Chamber 19	RF Cable (100kHz-26.5GHz)	Huber Suhner & Woken	Sucoflex 104A & 18GHz SMA(M)-SMA(M)-10M	MY817/4A & 20200525	12/23/2021	12/23/2022
Chamber 19	RF Cable (18GHz-40GHz)	HUBER SU-HNER	Sucoflex 102	27963/2&37421/2	11/17/2021	11/17/2022
Chamber 19	Signal Generator	Anritsu	MG3692A	20311	12/28/2021	12/28/2022
Chamber 19	Test Software	Audix	E3 Ver:6.120203b	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 / Band UNII-2A, 802.11a mode)

Operation Mode	TX MODE	Test Date	2022/09/27
Channel Number	CH Low	Test By	Barry
Temperature	25 ℃	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	369.50	45.38	-3.12	42.26	46.00	-3.74	Peak	VERTICAL
2	375.32	43.97	-2.91	41.06	46.00	-4.94	Peak	VERTICAL
3	399.57	44.70	-2.54	42.16	46.00	-3.84	Peak	VERTICAL
4	444.19	44.14	-1.11	43.03	46.00	-2.97	Peak	VERTICAL
5	625.58	41.36	2.00	43.36	46.00	-2.64	Peak	VERTICAL
6	888.45	35.88	5.96	41.84	46.00	-4.16	Peak	VERTICAL
1	369.50	44.97	-3.12	41.85	46.00	-4.15	Peak	HORIZONTAL
2	591.63	40.59	1.55	42.14	46.00	-3.86	Peak	HORIZONTAL
3	600.36	36.09	1.79	37.88	46.00	-8.12	Peak	HORIZONTAL
4	625.58	35.55	2.00	37.55	46.00	-8.45	Peak	HORIZONTAL
5	783.69	36.43	4.65	41.08	46.00	-4.92	Peak	HORIZONTAL
6	888.45	31.60	5.96	37.56	46.00	-8.44	Peak	HORIZONTAL

Remark:

1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.
2 Measuring frequencies from the lowest internal frequency to the 1GHz.
3 Radiated emissions measured in frequency range from 9kHz 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	2022/09/27
Channel Number	CH Mid	Test By	Barry
Temperature	25 ℃	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	369.50	45.31	-3.12	42.19	46.00	-3.81	Peak	VERTICAL
2	375.32	42.64	-2.91	39.73	46.00	-6.27	Peak	VERTICAL
3	399.57	44.33	-2.54	41.79	46.00	-4.21	Peak	VERTICAL
4	444.19	45.48	-1.11	44.37	46.00	-1.63	Peak	VERTICAL
5	625.58	40.53	2.00	42.53	46.00	-3.47	Peak	VERTICAL
6	888.45	36.24	5.96	42.20	46.00	-3.80	Peak	VERTICAL
1	216.24	46.28	-7.77	38.51	46.00	-7.49	Peak	HORIZONTAL
2	222.06	49.37	-7.93	41.44	46.00	-4.56	Peak	HORIZONTAL
3	369.50	43.67	-3.12	40.55	46.00	-5.45	Peak	HORIZONTAL
4	591.63	40.05	1.55	41.60	46.00	-4.40	Peak	HORIZONTAL
5	600.36	34.83	1.79	36.62	46.00	-9.38	Peak	HORIZONTAL
6	888.45	35.65	5.96	41.61	46.00	-4.39	Peak	HORIZONTAL

Remark:

1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.

2 Measuring frequencies from the lowest internal frequency to the 1GHz.

3 Radiated emissions measured in frequency range from 9kHz 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	2022/09/27
Channel Number	CH High	Test By	Barry
Temperature	25 ℃	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	369.50	46.37	-3.12	43.25	46.00	-2.75	Peak	VERTICAL
2	375.32	43.68	-2.91	40.77	46.00	-5.23	Peak	VERTICAL
3	399.57	44.77	-2.54	42.23	46.00	-3.77	Peak	VERTICAL
4	444.19	45.12	-1.11	44.01	46.00	-1.99	Peak	VERTICAL
5	625.58	40.91	2.00	42.91	46.00	-3.09	Peak	VERTICAL
6	888.45	36.71	5.96	42.67	46.00	-3.33	Peak	VERTICAL
1	216.24	47.02	-7.77	39.25	46.00	-6.75	Peak	HORIZONTAL
2	222.06	49.00	-7.93	41.07	46.00	-4.93	Peak	HORIZONTAL
3	243.40	45.25	-6.19	39.06	46.00	-6.94	Peak	HORIZONTAL
4	369.50	44.83	-3.12	41.71	46.00	-4.29	Peak	HORIZONTAL
5	592.60	40.78	1.58	42.36	46.00	-3.64	Peak	HORIZONTAL
6	600.36	39.24	1.79	41.03	46.00	-4.97	Peak	HORIZONTAL

Remark:

1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.

2 Measuring frequencies from the lowest internal frequency to the 1GHz.

3 Radiated emissions measured in frequency range from 9kHz 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 / Band UNII-2A, 802.11n HT20 mode)

Operation Mode	TX MODE	Test Date	2022/09/27
Channel Number	CH Low	Test By	Barry
Temperature	25 ℃	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	369.50	46.27	-3.12	43.15	46.00	-2.85	Peak	VERTICAL
2	375.32	42.93	-2.91	40.02	46.00	-5.98	Peak	VERTICAL
3	399.57	44.20	-2.54	41.66	46.00	-4.34	Peak	VERTICAL
4	444.19	43.69	-1.11	42.58	46.00	-3.42	Peak	VERTICAL
5	625.58	41.16	2.00	43.16	46.00	-2.84	Peak	VERTICAL
6	888.45	36.32	5.96	42.28	46.00	-3.72	Peak	VERTICAL
1	216.24	48.55	-7.77	40.78	46.00	-5.22	Peak	HORIZONTAL
2	222.06	49.48	-7.93	41.55	46.00	-4.45	Peak	HORIZONTAL
3	243.40	46.61	-6.19	40.42	46.00	-5.58	Peak	HORIZONTAL
4	369.50	45.38	-3.12	42.26	46.00	-3.74	Peak	HORIZONTAL
5	591.63	41.65	1.55	43.20	46.00	-2.80	Peak	HORIZONTAL
6	625.58	40.55	2.00	42.55	46.00	-3.45	Peak	HORIZONTAL

Remark:

1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.

2 Measuring frequencies from the lowest internal frequency to the 1GHz.

3 Radiated emissions measured in frequency range from 9kHz 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	2022/09/27
Channel Number	CH Mid	Test By	Barry
Temperature	25 ℃	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	369.50	45.46	-3.12	42.34	46.00	-3.66	Peak	VERTICAL
2	375.32	44.18	-2.91	41.27	46.00	-4.73	Peak	VERTICAL
3	399.57	44.74	-2.54	42.20	46.00	-3.80	Peak	VERTICAL
4	444.19	44.67	-1.11	43.56	46.00	-2.44	Peak	VERTICAL
5	625.58	39.83	2.00	41.83	46.00	-4.17	Peak	VERTICAL
6	888.45	36.83	5.96	42.79	46.00	-3.21	Peak	VERTICAL
1	189.08	40.30	-7.54	32.76	43.50	-10.74	Peak	HORIZONTAL
2	216.24	47.78	-7.77	40.01	46.00	-5.99	Peak	HORIZONTAL
3	222.06	48.82	-7.93	40.89	46.00	-5.11	Peak	HORIZONTAL
4	369.50	44.55	-3.12	41.43	46.00	-4.57	Peak	HORIZONTAL
5	591.63	41.02	1.55	42.57	46.00	-3.43	Peak	HORIZONTAL
6	625.58	38.99	2.00	40.99	46.00	-5.01	Peak	HORIZONTAL

Remark:

1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.

2 Measuring frequencies from the lowest internal frequency to the 1GHz.

3 Radiated emissions measured in frequency range from 9kHz 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	2022/09/27
Channel Number	CH High	Test By	Barry
Temperature	25 ℃	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	369.50	41.24	-3.12	38.12	46.00	-7.88	Peak	VERTICAL
2	399.57	38.82	-2.54	36.28	46.00	-9.72	Peak	VERTICAL
3	444.19	44.41	-1.11	43.30	46.00	-2.70	Peak	VERTICAL
4	625.58	37.30	2.00	39.30	46.00	-6.70	Peak	VERTICAL
5	783.69	36.07	4.65	40.72	46.00	-5.28	Peak	VERTICAL
6	888.45	32.82	5.96	38.78	46.00	-7.22	Peak	VERTICAL
1	216.24	46.71	-7.77	38.94	46.00	-7.06	Peak	HORIZONTAL
2	222.06	46.56	-7.93	38.63	46.00	-7.37	Peak	HORIZONTAL
3	369.50	43.56	-3.12	40.44	46.00	-5.56	Peak	HORIZONTAL
4	591.63	40.36	1.55	41.91	46.00	-4.09	Peak	HORIZONTAL
5	600.36	40.94	1.79	42.73	46.00	-3.27	Peak	HORIZONTAL
6	888.45	35.66	5.96	41.62	46.00	-4.38	Peak	HORIZONTAL

Remark:

1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.

2 Measuring frequencies from the lowest internal frequency to the 1GHz.

3 Radiated emissions measured in frequency range from 9kHz 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 / Band UNII-2A, 802.11n HT40 mode)

Operation Mode	TX MODE	Test Date	2022/09/27
Channel Number	CH Low	Test By	Barry
Temperature	25 ℃	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	369.50	46.33	-3.12	43.21	46.00	-2.79	Peak	VERTICAL
2	399.57	44.44	-2.54	41.90	46.00	-4.10	Peak	VERTICAL
3	444.19	44.59	-1.11	43.48	46.00	-2.52	Peak	VERTICAL
4	625.58	40.03	2.00	42.03	46.00	-3.97	Peak	VERTICAL
5	814.73	35.79	5.08	40.87	46.00	-5.13	Peak	VERTICAL
6	888.45	36.85	5.96	42.81	46.00	-3.19	Peak	VERTICAL
1	216.24	47.29	-7.77	39.52	46.00	-6.48	Peak	HORIZONTAL
2	222.06	47.91	-7.93	39.98	46.00	-6.02	Peak	HORIZONTAL
3	369.50	45.83	-3.12	42.71	46.00	-3.29	Peak	HORIZONTAL
4	591.63	40.47	1.55	42.02	46.00	-3.98	Peak	HORIZONTAL
5	625.58	36.33	2.00	38.33	46.00	-7.67	Peak	HORIZONTAL
6	888.45	36.50	5.96	42.46	46.00	-3.54	Peak	HORIZONTAL

Remark:

1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.

2 Measuring frequencies from the lowest internal frequency to the 1GHz.

3 Radiated emissions measured in frequency range from 9kHz 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	2022/09/27
Channel Number	CH Mid	Test By	Barry
Temperature	25 ℃	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	369.50	44.77	-3.12	41.65	46.00	-4.35	Peak	VERTICAL
2	375.32	43.27	-2.91	40.36	46.00	-5.64	Peak	VERTICAL
3	399.57	43.28	-2.54	40.74	46.00	-5.26	Peak	VERTICAL
4	444.19	43.53	-1.11	42.42	46.00	-3.58	Peak	VERTICAL
5	625.58	39.14	2.00	41.14	46.00	-4.86	Peak	VERTICAL
6	888.45	35.67	5.96	41.63	46.00	-4.37	Peak	VERTICAL
1	216.24	48.19	-7.77	40.42	46.00	-5.58	Peak	HORIZONTAL
2	222.06	46.55	-7.93	38.62	46.00	-7.38	Peak	HORIZONTAL
3	369.50	45.62	-3.12	42.50	46.00	-3.50	Peak	HORIZONTAL
4	592.60	41.35	1.58	42.93	46.00	-3.07	Peak	HORIZONTAL
5	600.36	40.30	1.79	42.09	46.00	-3.91	Peak	HORIZONTAL
6	888.45	36.06	5.96	42.02	46.00	-3.98	Peak	HORIZONTAL

Remark:

1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.

2 Measuring frequencies from the lowest internal frequency to the 1GHz.

3 Radiated emissions measured in frequency range from 9kHz 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	2022/09/27
Channel Number	CH High	Test By	Barry
Temperature	25 ℃	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	369.50	45.97	-3.12	42.85	46.00	-3.15	Peak	VERTICAL
2	375.32	42.88	-2.91	39.97	46.00	-6.03	Peak	VERTICAL
3	399.57	44.04	-2.54	41.50	46.00	-4.50	Peak	VERTICAL
4	444.19	44.65	-1.11	43.54	46.00	-2.46	Peak	VERTICAL
5	625.58	37.80	2.00	39.80	46.00	-6.20	Peak	VERTICAL
6	888.45	32.61	5.96	38.57	46.00	-7.43	Peak	VERTICAL
1	216.24	46.70	-7.77	38.93	46.00	-7.07	Peak	HORIZONTAL
2	222.06	49.47	-7.93	41.54	46.00	-4.46	Peak	HORIZONTAL
3	243.40	46.33	-6.19	40.14	46.00	-5.86	Peak	HORIZONTAL
4	369.50	43.67	-3.12	40.55	46.00	-5.45	Peak	HORIZONTAL
5	591.63	40.34	1.55	41.89	46.00	-4.11	Peak	HORIZONTAL
6	888.45	35.17	5.96	41.13	46.00	-4.87	Peak	HORIZONTAL

Remark:

1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.

2 Measuring frequencies from the lowest internal frequency to the 1GHz.

3 Radiated emissions measured in frequency range from 9kHz 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 / Band UNII-2A, 802.11ac VHT80 mode)

Operation Mode	TX MODE	Test Date	2022/09/27
Channel Number	CH Low	Test By	Barry
Temperature	25 ℃	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	369.50	44.89	-3.12	41.77	46.00	-4.23	Peak	VERTICAL
2	375.32	42.99	-2.91	40.08	46.00	-5.92	Peak	VERTICAL
3	399.57	43.68	-2.54	41.14	46.00	-4.86	Peak	VERTICAL
4	444.19	44.77	-1.11	43.66	46.00	-2.34	Peak	VERTICAL
5	625.58	40.55	2.00	42.55	46.00	-3.45	Peak	VERTICAL
6	888.45	35.91	5.96	41.87	46.00	-4.13	Peak	VERTICAL
1	216.24	46.98	-7.77	39.21	46.00	-6.79	Peak	HORIZONTAL
2	222.06	48.57	-7.93	40.64	46.00	-5.36	Peak	HORIZONTAL
3	243.40	47.16	-6.19	40.97	46.00	-5.03	Peak	HORIZONTAL
4	369.50	44.99	-3.12	41.87	46.00	-4.13	Peak	HORIZONTAL
5	591.63	40.23	1.55	41.78	46.00	-4.22	Peak	HORIZONTAL
6	888.45	34.29	5.96	40.25	46.00	-5.75	Peak	HORIZONTAL

Remark:

1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.
2 Measuring frequencies from the lowest internal frequency to the 1GHz.
3 Radiated emissions measured in frequency range from 9kHz 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	2022/09/27
Channel Number	CH High	Test By	Barry
Temperature	25 ℃	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	369.50	45.50	-3.12	42.38	46.00	-3.62	Peak	VERTICAL
2	375.32	43.71	-2.91	40.80	46.00	-5.20	Peak	VERTICAL
3	399.57	44.12	-2.54	41.58	46.00	-4.42	Peak	VERTICAL
4	444.19	44.55	-1.11	43.44	46.00	-2.56	Peak	VERTICAL
5	625.58	40.42	2.00	42.42	46.00	-3.58	Peak	VERTICAL
6	888.45	36.11	5.96	42.07	46.00	-3.93	Peak	VERTICAL
1	216.24	47.01	-7.77	39.24	46.00	-6.76	Peak	HORIZONTAL
2	222.06	47.16	-7.93	39.23	46.00	-6.77	Peak	HORIZONTAL
3	369.50	43.98	-3.12	40.86	46.00	-5.14	Peak	HORIZONTAL
4	591.63	42.19	1.55	43.74	46.00	-2.26	Peak	HORIZONTAL
5	600.36	36.09	1.79	37.88	46.00	-8.12	Peak	HORIZONTAL
6	888.45	33.11	5.96	39.07	46.00	-6.93	Peak	HORIZONTAL

Remark:

1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.

2 Measuring frequencies from the lowest internal frequency to the 1GHz.

3 Radiated emissions measured in frequency range from 9kHz 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-2C, 802.11a mode)

Operation Mode	TX MODE	Test Date	2022/09/27
Channel Number	CH Low	Test By	Barry
Temperature	25 ℃	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	369.50	40.89	-3.12	37.77	46.00	-8.23	Peak	VERTICAL
2	399.57	43.49	-2.54	40.95	46.00	-5.05	Peak	VERTICAL
3	408.30	41.54	-2.29	39.25	46.00	-6.75	Peak	VERTICAL
4	444.19	44.66	-1.11	43.55	46.00	-2.45	Peak	VERTICAL
5	625.58	39.50	2.00	41.50	46.00	-4.50	Peak	VERTICAL
6	888.45	35.19	5.96	41.15	46.00	-4.85	Peak	VERTICAL
1	216.24	45.49	-7.77	37.72	46.00	-8.28	Peak	HORIZONTAL
2	222.06	46.73	-7.93	38.80	46.00	-7.20	Peak	HORIZONTAL
3	243.40	49.92	-6.19	43.73	46.00	-2.27	Peak	HORIZONTAL
4	369.50	43.32	-3.12	40.20	46.00	-5.80	Peak	HORIZONTAL
5	591.63	36.92	1.55	38.47	46.00	-7.53	Peak	HORIZONTAL
6	888.45	31.95	5.96	37.91	46.00	-8.09	Peak	HORIZONTAL

Remark:

1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.

2 Measuring frequencies from the lowest internal frequency to the 1GHz.

3 Radiated emissions measured in frequency range from 9kHz 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	2022/09/27
Channel Number	CH Mid	Test By	Barry
Temperature	25 ℃	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	369.50	45.67	-3.12	42.55	46.00	-3.45	Peak	VERTICAL
2	375.32	42.86	-2.91	39.95	46.00	-6.05	Peak	VERTICAL
3	399.57	44.46	-2.54	41.92	46.00	-4.08	Peak	VERTICAL
4	444.19	44.23	-1.11	43.12	46.00	-2.88	Peak	VERTICAL
5	625.58	40.34	2.00	42.34	46.00	-3.66	Peak	VERTICAL
6	888.45	35.08	5.96	41.04	46.00	-4.96	Peak	VERTICAL
1	216.24	44.89	-7.77	37.12	46.00	-8.88	Peak	HORIZONTAL
2	222.06	47.16	-7.93	39.23	46.00	-6.77	Peak	HORIZONTAL
3	295.78	44.87	-4.21	40.66	46.00	-5.34	Peak	HORIZONTAL
4	369.50	45.49	-3.12	42.37	46.00	-3.63	Peak	HORIZONTAL
5	591.63	41.30	1.55	42.85	46.00	-3.15	Peak	HORIZONTAL
6	888.45	35.05	5.96	41.01	46.00	-4.99	Peak	HORIZONTAL

Remark:

1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.

2 Measuring frequencies from the lowest internal frequency to the 1GHz.

3 Radiated emissions measured in frequency range from 9kHz 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	2022/09/27
Channel Number	CH High	Test By	Barry
Temperature	25 ℃	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	369.50	46.81	-3.12	43.69	46.00	-2.31	Peak	VERTICAL
2	375.32	44.91	-2.91	42.00	46.00	-4.00	Peak	VERTICAL
3	399.57	44.57	-2.54	42.03	46.00	-3.97	Peak	VERTICAL
4	444.19	44.43	-1.11	43.32	46.00	-2.68	Peak	VERTICAL
5	625.58	41.59	2.00	43.59	46.00	-2.41	Peak	VERTICAL
6	888.45	36.70	5.96	42.66	46.00	-3.34	Peak	VERTICAL
1	216.24	46.00	-7.77	38.23	46.00	-7.77	Peak	HORIZONTAL
2	222.06	50.02	-7.93	42.09	46.00	-3.91	Peak	HORIZONTAL
3	369.50	44.45	-3.12	41.33	46.00	-4.67	Peak	HORIZONTAL
4	591.63	41.21	1.55	42.76	46.00	-3.24	Peak	HORIZONTAL
5	625.58	38.08	2.00	40.08	46.00	-5.92	Peak	HORIZONTAL
6	888.45	35.99	5.96	41.95	46.00	-4.05	Peak	HORIZONTAL

Remark:

1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.

2 Measuring frequencies from the lowest internal frequency to the 1GHz.

3 Radiated emissions measured in frequency range from 9kHz 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-2C, 802.11n HT20 mode)

Operation Mode	TX MODE	Test Date	2022/09/27
Channel Number	CH Low	Test By	Barry
Temperature	25 ℃	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	369.50	45.50	-3.12	42.38	46.00	-3.62	Peak	VERTICAL
2	375.32	43.40	-2.91	40.49	46.00	-5.51	Peak	VERTICAL
3	399.57	44.10	-2.54	41.56	46.00	-4.44	Peak	VERTICAL
4	444.19	44.69	-1.11	43.58	46.00	-2.42	Peak	VERTICAL
5	625.58	37.94	2.00	39.94	46.00	-6.06	Peak	VERTICAL
6	888.45	36.27	5.96	42.23	46.00	-3.77	Peak	VERTICAL
1	216.24	49.01	-7.77	41.24	46.00	-4.76	Peak	HORIZONTAL
2	222.06	49.33	-7.93	41.40	46.00	-4.60	Peak	HORIZONTAL
3	243.40	48.61	-6.19	42.42	46.00	-3.58	Peak	HORIZONTAL
4	369.50	43.51	-3.12	40.39	46.00	-5.61	Peak	HORIZONTAL
5	591.63	39.93	1.55	41.48	46.00	-4.52	Peak	HORIZONTAL
6	888.45	35.97	5.96	41.93	46.00	-4.07	Peak	HORIZONTAL

Remark:

1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.

2 Measuring frequencies from the lowest internal frequency to the 1GHz.

3 Radiated emissions measured in frequency range from 9kHz 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	2022/09/27
Channel Number	CH Mid	Test By	Barry
Temperature	25 ℃	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	369.50	44.76	-3.12	41.64	46.00	-4.36	Peak	VERTICAL
2	375.32	43.30	-2.91	40.39	46.00	-5.61	Peak	VERTICAL
3	399.57	44.47	-2.54	41.93	46.00	-4.07	Peak	VERTICAL
4	444.19	44.23	-1.11	43.12	46.00	-2.88	Peak	VERTICAL
5	625.58	40.57	2.00	42.57	46.00	-3.43	Peak	VERTICAL
6	888.45	35.77	5.96	41.73	46.00	-4.27	Peak	VERTICAL
1	216.24	50.07	-7.77	42.30	46.00	-3.70	Peak	HORIZONTAL
2	222.06	50.27	-7.93	42.34	46.00	-3.66	Peak	HORIZONTAL
3	369.50	42.53	-3.12	39.41	46.00	-6.59	Peak	HORIZONTAL
4	591.63	41.46	1.55	43.01	46.00	-2.99	Peak	HORIZONTAL
5	783.69	36.53	4.65	41.18	46.00	-4.82	Peak	HORIZONTAL
6	888.45	34.63	5.96	40.59	46.00	-5.41	Peak	HORIZONTAL

Remark:

1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.

2 Measuring frequencies from the lowest internal frequency to the 1GHz.

3 Radiated emissions measured in frequency range from 9kHz 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	2022/09/27
Channel Number	CH High	Test By	Barry
Temperature	25 ℃	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	369.50	45.45	-3.12	42.33	46.00	-3.67	Peak	VERTICAL
2	375.32	44.11	-2.91	41.20	46.00	-4.80	Peak	VERTICAL
3	399.57	44.72	-2.54	42.18	46.00	-3.82	Peak	VERTICAL
4	444.19	45.03	-1.11	43.92	46.00	-2.08	Peak	VERTICAL
5	625.58	37.54	2.00	39.54	46.00	-6.46	Peak	VERTICAL
6	888.45	35.81	5.96	41.77	46.00	-4.23	Peak	VERTICAL
1	216.24	47.22	-7.77	39.45	46.00	-6.55	Peak	HORIZONTAL
2	222.06	48.39	-7.93	40.46	46.00	-5.54	Peak	HORIZONTAL
3	295.78	45.01	-4.21	40.80	46.00	-5.20	Peak	HORIZONTAL
4	369.50	45.82	-3.12	42.70	46.00	-3.30	Peak	HORIZONTAL
5	591.63	40.37	1.55	41.92	46.00	-4.08	Peak	HORIZONTAL
6	888.45	36.62	5.96	42.58	46.00	-3.42	Peak	HORIZONTAL

Remark:

1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.

2 Measuring frequencies from the lowest internal frequency to the 1GHz.

3 Radiated emissions measured in frequency range from 9kHz 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-2C, 802.11n HT40 mode)

Operation Mode	TX MODE	Test Date	2022/09/27
Channel Number	CH Low	Test By	Barry
Temperature	25 ℃	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	369.50	40.55	-3.12	37.43	46.00	-8.57	Peak	VERTICAL
2	399.57	39.53	-2.54	36.99	46.00	-9.01	Peak	VERTICAL
3	444.19	44.46	-1.11	43.35	46.00	-2.65	Peak	VERTICAL
4	625.58	39.92	2.00	41.92	46.00	-4.08	Peak	VERTICAL
5	783.69	38.37	4.65	43.02	46.00	-2.98	Peak	VERTICAL
6	888.45	37.16	5.96	43.12	46.00	-2.88	Peak	VERTICAL
1	216.24	49.74	-7.77	41.97	46.00	-4.03	Peak	HORIZONTAL
2	222.06	49.74	-7.93	41.81	46.00	-4.19	Peak	HORIZONTAL
3	369.50	44.35	-3.12	41.23	46.00	-4.77	Peak	HORIZONTAL
4	399.57	44.81	-2.54	42.27	46.00	-3.73	Peak	HORIZONTAL
5	592.60	40.22	1.58	41.80	46.00	-4.20	Peak	HORIZONTAL
6	625.58	39.27	2.00	41.27	46.00	-4.73	Peak	HORIZONTAL

Remark:

1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.

2 Measuring frequencies from the lowest internal frequency to the 1GHz.

3 Radiated emissions measured in frequency range from 9kHz 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	2022/09/27
Channel Number	CH Mid	Test By	Barry
Temperature	25 ℃	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	369.50	44.42	-3.12	41.30	46.00	-4.70	Peak	VERTICAL
2	375.32	45.25	-2.91	42.34	46.00	-3.66	Peak	VERTICAL
3	399.57	44.61	-2.54	42.07	46.00	-3.93	Peak	VERTICAL
4	444.19	44.07	-1.11	42.96	46.00	-3.04	Peak	VERTICAL
5	625.58	37.92	2.00	39.92	46.00	-6.08	Peak	VERTICAL
6	888.45	35.73	5.96	41.69	46.00	-4.31	Peak	VERTICAL
1	216.24	46.29	-7.77	38.52	46.00	-7.48	Peak	HORIZONTAL
2	222.06	47.86	-7.93	39.93	46.00	-6.07	Peak	HORIZONTAL
3	369.50	45.01	-3.12	41.89	46.00	-4.11	Peak	HORIZONTAL
4	591.63	40.12	1.55	41.67	46.00	-4.33	Peak	HORIZONTAL
5	600.36	40.55	1.79	42.34	46.00	-3.66	Peak	HORIZONTAL
6	888.45	36.83	5.96	42.79	46.00	-3.21	Peak	HORIZONTAL

Remark:

1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.

2 Measuring frequencies from the lowest internal frequency to the 1GHz.

3 Radiated emissions measured in frequency range from 9kHz 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	2022/09/27
Channel Number	CH High	Test By	Barry
Temperature	25 ℃	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	369.50	47.07	-3.12	43.95	46.00	-2.05	Peak	VERTICAL
2	375.32	44.22	-2.91	41.31	46.00	-4.69	Peak	VERTICAL
3	399.57	44.33	-2.54	41.79	46.00	-4.21	Peak	VERTICAL
4	444.19	44.53	-1.11	43.42	46.00	-2.58	Peak	VERTICAL
5	625.58	40.76	2.00	42.76	46.00	-3.24	Peak	VERTICAL
6	888.45	35.98	5.96	41.94	46.00	-4.06	Peak	VERTICAL
1	216.24	48.17	-7.77	40.40	46.00	-5.60	Peak	HORIZONTAL
2	222.06	48.38	-7.93	40.45	46.00	-5.55	Peak	HORIZONTAL
3	369.50	44.62	-3.12	41.50	46.00	-4.50	Peak	HORIZONTAL
4	591.63	40.11	1.55	41.66	46.00	-4.34	Peak	HORIZONTAL
5	600.36	39.07	1.79	40.86	46.00	-5.14	Peak	HORIZONTAL
6	888.45	34.96	5.96	40.92	46.00	-5.08	Peak	HORIZONTAL

Remark:

1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.

2 Measuring frequencies from the lowest internal frequency to the 1GHz.

3 Radiated emissions measured in frequency range from 9kHz 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-2C, 802.11ac VHT80 mode)

Operation Mode	TX MODE	Test Date	2022/09/27
Channel Number	CH Low	Test By	Barry
Temperature	25 ℃	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	369.50	45.27	-3.12	42.15	46.00	-3.85	Peak	VERTICAL
2	375.32	44.27	-2.91	41.36	46.00	-4.64	Peak	VERTICAL
3	399.57	45.79	-2.54	43.25	46.00	-2.75	Peak	VERTICAL
4	444.19	44.21	-1.11	43.10	46.00	-2.90	Peak	VERTICAL
5	625.58	40.54	2.00	42.54	46.00	-3.46	Peak	VERTICAL
6	888.45	36.37	5.96	42.33	46.00	-3.67	Peak	VERTICAL
1	216.24	46.95	-7.77	39.18	46.00	-6.82	Peak	HORIZONTAL
2	222.06	48.55	-7.93	40.62	46.00	-5.38	Peak	HORIZONTAL
3	243.40	45.80	-6.19	39.61	46.00	-6.39	Peak	HORIZONTAL
4	369.50	42.69	-3.12	39.57	46.00	-6.43	Peak	HORIZONTAL
5	591.63	39.52	1.55	41.07	46.00	-4.93	Peak	HORIZONTAL
6	888.45	35.65	5.96	41.61	46.00	-4.39	Peak	HORIZONTAL

Remark:

1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.
2 Measuring frequencies from the lowest internal frequency to the 1GHz.
3 Radiated emissions measured in frequency range from 9kHz 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.

Operation Mode	TX MODE	Test Date	2022/09/27
Channel Number	CH High	Test By	Barry
Temperature	25 ℃	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	369.50	44.68	-3.12	41.56	46.00	-4.44	Peak	VERTICAL
2	375.32	44.25	-2.91	41.34	46.00	-4.66	Peak	VERTICAL
3	399.57	45.62	-2.54	43.08	46.00	-2.92	Peak	VERTICAL
4	408.30	44.20	-2.29	41.91	46.00	-4.09	Peak	VERTICAL
5	444.19	43.68	-1.11	42.57	46.00	-3.43	Peak	VERTICAL
6	625.58	40.70	2.00	42.70	46.00	-3.30	Peak	VERTICAL
1	216.24	47.65	-7.77	39.88	46.00	-6.12	Peak	HORIZONTAL
2	222.06	49.31	-7.93	41.38	46.00	-4.62	Peak	HORIZONTAL
3	243.40	48.16	-6.19	41.97	46.00	-4.03	Peak	HORIZONTAL
4	369.50	45.63	-3.12	42.51	46.00	-3.49	Peak	HORIZONTAL
5	591.63	39.49	1.55	41.04	46.00	-4.96	Peak	HORIZONTAL
6	888.45	35.58	5.96	41.54	46.00	-4.46	Peak	HORIZONTAL

Remark:

1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.

2 Measuring frequencies from the lowest internal frequency to the 1GHz.

3 Radiated emissions measured in frequency range from 9kHz 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	Test Date	2022/09/27
Channel Number	CH Low	Test By	Barry
Temperature	25 ℃	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	369.50	45.54	-3.12	42.42	46.00	-3.58	Peak	VERTICAL
2	375.32	42.89	-2.91	39.98	46.00	-6.02	Peak	VERTICAL
3	399.57	45.51	-2.54	42.97	46.00	-3.03	Peak	VERTICAL
4	444.19	44.57	-1.11	43.46	46.00	-2.54	Peak	VERTICAL
5	625.58	40.60	2.00	42.60	46.00	-3.40	Peak	VERTICAL
6	888.45	35.97	5.96	41.93	46.00	-4.07	Peak	VERTICAL
1	216.24	47.20	-7.77	39.43	46.00	-6.57	Peak	HORIZONTAL
2	222.06	50.09	-7.93	42.16	46.00	-3.84	Peak	HORIZONTAL
3	243.40	45.54	-6.19	39.35	46.00	-6.65	Peak	HORIZONTAL
4	369.50	42.91	-3.12	39.79	46.00	-6.21	Peak	HORIZONTAL
5	592.60	40.00	1.58	41.58	46.00	-4.42	Peak	HORIZONTAL
6	888.45	36.84	5.96	42.80	46.00	-3.20	Peak	HORIZONTAL

Remark:

1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.
2 Measuring frequencies from the lowest internal frequency to the 1GHz.
3 Radiated emissions measured in frequency range from 9kHz 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	2022/09/27
Channel Number	CH Mid	Test By	Barry
Temperature	25 ℃	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	369.50	46.50	-3.12	43.38	46.00	-2.62	Peak	VERTICAL
2	375.32	44.00	-2.91	41.09	46.00	-4.91	Peak	VERTICAL
3	399.57	45.46	-2.54	42.92	46.00	-3.08	Peak	VERTICAL
4	444.19	44.19	-1.11	43.08	46.00	-2.92	Peak	VERTICAL
5	625.58	37.77	2.00	39.77	46.00	-6.23	Peak	VERTICAL
6	888.45	36.11	5.96	42.07	46.00	-3.93	Peak	VERTICAL
1	216.24	46.96	-7.77	39.19	46.00	-6.81	Peak	HORIZONTAL
2	222.06	48.44	-7.93	40.51	46.00	-5.49	Peak	HORIZONTAL
3	243.40	47.67	-6.19	41.48	46.00	-4.52	Peak	HORIZONTAL
4	369.50	45.33	-3.12	42.21	46.00	-3.79	Peak	HORIZONTAL
5	591.63	38.58	1.55	40.13	46.00	-5.87	Peak	HORIZONTAL
6	888.45	35.85	5.96	41.81	46.00	-4.19	Peak	HORIZONTAL

Remark:

1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.

2 Measuring frequencies from the lowest internal frequency to the 1GHz.

3 Radiated emissions measured in frequency range from 9kHz 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	2022/09/27
Channel Number	CH High	Test By	Barry
Temperature	25 ℃	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	369.50	45.64	-3.12	42.52	46.00	-3.48	Peak	VERTICAL
2	375.32	43.02	-2.91	40.11	46.00	-5.89	Peak	VERTICAL
3	399.57	44.11	-2.54	41.57	46.00	-4.43	Peak	VERTICAL
4	444.19	45.15	-1.11	44.04	46.00	-1.96	Peak	VERTICAL
5	625.58	38.11	2.00	40.11	46.00	-5.89	Peak	VERTICAL
6	888.45	37.10	5.96	43.06	46.00	-2.94	Peak	VERTICAL
1	216.24	46.15	-7.77	38.38	46.00	-7.62	Peak	HORIZONTAL
2	222.06	47.74	-7.93	39.81	46.00	-6.19	Peak	HORIZONTAL
3	369.50	43.88	-3.12	40.76	46.00	-5.24	Peak	HORIZONTAL
4	399.57	43.72	-2.54	41.18	46.00	-4.82	Peak	HORIZONTAL
5	591.63	40.25	1.55	41.80	46.00	-4.20	Peak	HORIZONTAL
6	888.45	35.91	5.96	41.87	46.00	-4.13	Peak	HORIZONTAL

Remark:

1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.

2 Measuring frequencies from the lowest internal frequency to the 1GHz.

3 Radiated emissions measured in frequency range from 9kHz 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	2022/09/27
Channel Number	CH Low	Test By	Barry
Temperature	25 ℃	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	369.50	45.56	-3.12	42.44	46.00	-3.56	Peak	VERTICAL
2	375.32	44.44	-2.91	41.53	46.00	-4.47	Peak	VERTICAL
3	399.57	44.90	-2.54	42.36	46.00	-3.64	Peak	VERTICAL
4	444.19	44.62	-1.11	43.51	46.00	-2.49	Peak	VERTICAL
5	625.58	38.12	2.00	40.12	46.00	-5.88	Peak	VERTICAL
6	888.45	36.17	5.96	42.13	46.00	-3.87	Peak	VERTICAL
1	216.24	46.99	-7.77	39.22	46.00	-6.78	Peak	HORIZONTAL
2	222.06	47.27	-7.93	39.34	46.00	-6.66	Peak	HORIZONTAL
3	243.40	46.62	-6.19	40.43	46.00	-5.57	Peak	HORIZONTAL
4	369.50	43.63	-3.12	40.51	46.00	-5.49	Peak	HORIZONTAL
5	592.60	39.59	1.58	41.17	46.00	-4.83	Peak	HORIZONTAL
6	888.45	35.96	5.96	41.92	46.00	-4.08	Peak	HORIZONTAL

Remark:

1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.

2 Measuring frequencies from the lowest internal frequency to the 1GHz.

3 Radiated emissions measured in frequency range from 9kHz 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	2022/09/27
Channel Number	CH Mid	Test By	Barry
Temperature	25 ℃	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	369.50	44.21	-3.12	41.09	46.00	-4.91	Peak	VERTICAL
2	375.32	42.11	-2.91	39.20	46.00	-6.80	Peak	VERTICAL
3	399.57	44.10	-2.54	41.56	46.00	-4.44	Peak	VERTICAL
4	444.19	44.60	-1.11	43.49	46.00	-2.51	Peak	VERTICAL
5	625.58	40.50	2.00	42.50	46.00	-3.50	Peak	VERTICAL
6	888.45	35.61	5.96	41.57	46.00	-4.43	Peak	VERTICAL
1	216.24	46.99	-7.77	39.22	46.00	-6.78	Peak	HORIZONTAL
2	222.06	48.74	-7.93	40.81	46.00	-5.19	Peak	HORIZONTAL
3	369.50	44.52	-3.12	41.40	46.00	-4.60	Peak	HORIZONTAL
4	592.60	39.10	1.58	40.68	46.00	-5.32	Peak	HORIZONTAL
5	600.36	38.46	1.79	40.25	46.00	-5.75	Peak	HORIZONTAL
6	888.45	32.85	5.96	38.81	46.00	-7.19	Peak	HORIZONTAL

Remark:

1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.

2 Measuring frequencies from the lowest internal frequency to the 1GHz.

3 Radiated emissions measured in frequency range from 9kHz 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	2022/09/27
Channel Number	CH High	Test By	Barry
Temperature	25 ℃	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	369.50	45.36	-3.12	42.24	46.00	-3.76	Peak	VERTICAL
2	375.32	44.38	-2.91	41.47	46.00	-4.53	Peak	VERTICAL
3	399.57	45.30	-2.54	42.76	46.00	-3.24	Peak	VERTICAL
4	444.19	43.30	-1.11	42.19	46.00	-3.81	Peak	VERTICAL
5	625.58	41.35	2.00	43.35	46.00	-2.65	Peak	VERTICAL
6	888.45	36.50	5.96	42.46	46.00	-3.54	Peak	VERTICAL
1	216.24	47.85	-7.77	40.08	46.00	-5.92	Peak	HORIZONTAL
2	222.06	48.38	-7.93	40.45	46.00	-5.55	Peak	HORIZONTAL
3	369.50	42.96	-3.12	39.84	46.00	-6.16	Peak	HORIZONTAL
4	591.63	37.03	1.55	38.58	46.00	-7.42	Peak	HORIZONTAL
5	625.58	39.96	2.00	41.96	46.00	-4.04	Peak	HORIZONTAL
6	888.45	35.73	5.96	41.69	46.00	-4.31	Peak	HORIZONTAL

Remark:

1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.

2 Measuring frequencies from the lowest internal frequency to the 1GHz.

3 Radiated emissions measured in frequency range from 9kHz 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	2022/09/27
Channel Number	CH Low	Test By	Barry
Temperature	25 ℃	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	369.50	46.41	-3.12	43.29	46.00	-2.71	Peak	VERTICAL
2	375.32	42.89	-2.91	39.98	46.00	-6.02	Peak	VERTICAL
3	399.57	44.59	-2.54	42.05	46.00	-3.95	Peak	VERTICAL
4	444.19	45.07	-1.11	43.96	46.00	-2.04	Peak	VERTICAL
5	625.58	37.88	2.00	39.88	46.00	-6.12	Peak	VERTICAL
6	888.45	35.67	5.96	41.63	46.00	-4.37	Peak	VERTICAL
1	216.24	47.69	-7.77	39.92	46.00	-6.08	Peak	HORIZONTAL
2	222.06	49.76	-7.93	41.83	46.00	-4.17	Peak	HORIZONTAL
3	243.40	46.75	-6.19	40.56	46.00	-5.44	Peak	HORIZONTAL
4	369.50	44.04	-3.12	40.92	46.00	-5.08	Peak	HORIZONTAL
5	591.63	40.55	1.55	42.10	46.00	-3.90	Peak	HORIZONTAL
6	888.45	36.20	5.96	42.16	46.00	-3.84	Peak	HORIZONTAL

Remark:

1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.
2 Measuring frequencies from the lowest internal frequency to the 1GHz.
3 Radiated emissions measured in frequency range from 9kHz 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	2022/09/27
Channel Number	CH High	Test By	Barry
Temperature	25 ℃	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	369.50	46.54	-3.12	43.42	46.00	-2.58	Peak	VERTICAL
2	375.32	44.14	-2.91	41.23	46.00	-4.77	Peak	VERTICAL
3	399.57	45.11	-2.54	42.57	46.00	-3.43	Peak	VERTICAL
4	408.30	44.45	-2.29	42.16	46.00	-3.84	Peak	VERTICAL
5	444.19	45.85	-1.11	44.74	46.00	-1.26	Peak	VERTICAL
6	625.58	39.33	2.00	41.33	46.00	-4.67	Peak	VERTICAL
1	216.24	47.27	-7.77	39.50	46.00	-6.50	Peak	HORIZONTAL
2	222.06	48.13	-7.93	40.20	46.00	-5.80	Peak	HORIZONTAL
3	369.50	45.41	-3.12	42.29	46.00	-3.71	Peak	HORIZONTAL
4	591.63	40.14	1.55	41.69	46.00	-4.31	Peak	HORIZONTAL
5	625.58	38.83	2.00	40.83	46.00	-5.17	Peak	HORIZONTAL
6	888.45	36.03	5.96	41.99	46.00	-4.01	Peak	HORIZONTAL

Remark:

1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.

2 Measuring frequencies from the lowest internal frequency to the 1GHz.

3 Radiated emissions measured in frequency range from 9kHz 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	2022/09/27
Channel Number	CH Low	Test By	Barry
Temperature	25 ℃	Pol	Ver./Hor
Humidity	65 %		

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	369.50	46.57	-3.12	43.45	46.00	-2.55	Peak	VERTICAL
2	375.32	44.26	-2.91	41.35	46.00	-4.65	Peak	VERTICAL
3	399.57	45.23	-2.54	42.69	46.00	-3.31	Peak	VERTICAL
4	444.19	44.86	-1.11	43.75	46.00	-2.25	Peak	VERTICAL
5	625.58	40.23	2.00	42.23	46.00	-3.77	Peak	VERTICAL
6	888.45	34.97	5.96	40.93	46.00	-5.07	Peak	VERTICAL
1	216.24	46.96	-7.77	39.19	46.00	-6.81	Peak	HORIZONTAL
2	222.06	49.83	-7.93	41.90	46.00	-4.10	Peak	HORIZONTAL
3	369.50	44.61	-3.12	41.49	46.00	-4.51	Peak	HORIZONTAL
4	591.63	40.32	1.55	41.87	46.00	-4.13	Peak	HORIZONTAL
5	625.58	39.34	2.00	41.34	46.00	-4.66	Peak	HORIZONTAL
6	888.45	36.77	5.96	42.73	46.00	-3.27	Peak	HORIZONTAL

Remark:

1 The measured emissions between 9kHz to 30MHz are 20dB lower against the limit, so the result is not recorded in the report.
2 Measuring frequencies from the lowest internal frequency to the 1GHz.
3 Radiated emissions measured in frequency range from 9kHz 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 / Band UNII-2A, 802.11a mode)

Operation Mode	TX MODE	Test Date	2022/09/27
Channel Number	CH Low	Test By	Barry
Temperature	25 ℃	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	10360.00	42.35	3.06	45.41	68.20	-22.79	Peak	VERTICAL
2	15540.00	41.40	9.28	50.68	74.00	-23.32	Peak	VERTICAL
1	10360.00	41.64	3.06	44.70	68.20	-23.50	Peak	HORIZONTAL
2	15540.00	40.91	9.28	50.19	74.00	-23.81	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	2022/09/27
Channel Number	CH Mid	Test By	Barry
Temperature	25 ℃	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	10400.00	42.39	3.18	45.57	68.20	-22.63	Peak	VERTICAL
2	15600.00	40.51	9.32	49.83	74.00	-24.17	Peak	VERTICAL
1	10400.00	41.93	3.18	45.11	68.20	-23.09	Peak	HORIZONTAL
2	15600.00	39.46	9.32	48.78	74.00	-25.22	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	2022/09/27
Channel Number	CH High	Test By	Barry
Temperature	25 ℃	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	10480.00	41.57	3.36	44.93	68.20	-23.27	Peak	VERTICAL
2	15720.00	39.86	9.33	49.19	74.00	-24.81	Peak	VERTICAL
1	10480.00	42.40	3.36	45.76	68.20	-22.44	Peak	HORIZONTAL
2	15720.00	39.62	9.33	48.95	74.00	-25.05	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 / Band UNII-2A, 802.11n HT20 mode)

Operation Mode	TX MODE	Test Date	2022/09/27
Channel Number	CH Low	Test By	Barry
Temperature	25 ℃	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	10360.00	41.67	3.06	44.73	68.20	-23.47	Peak	VERTICAL
2	15540.00	40.21	9.28	49.49	74.00	-24.51	Peak	VERTICAL
1	10360.00	41.89	3.06	44.95	68.20	-23.25	Peak	HORIZONTAL
2	15540.00	40.61	9.28	49.89	74.00	-24.11	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	2022/09/27
Channel Number	CH Mid	Test By	Barry
Temperature	25 ℃	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	10400.00	42.00	3.18	45.18	68.20	-23.02	Peak	VERTICAL
2	15600.00	39.95	9.32	49.27	74.00	-24.73	Peak	VERTICAL
1	10400.00	41.36	3.18	44.54	68.20	-23.66	Peak	HORIZONTAL
2	15600.00	39.35	9.32	48.67	74.00	-25.33	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	2022/09/27
Channel Number	CH High	Test By	Barry
Temperature	25 ℃	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	10480.00	41.03	3.36	44.39	68.20	-23.81	Peak	VERTICAL
2	15720.00	39.39	9.33	48.72	74.00	-25.28	Peak	VERTICAL
1	10480.00	41.52	3.36	44.88	68.20	-23.32	Peak	HORIZONTAL
2	15720.00	39.58	9.33	48.91	74.00	-25.09	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 / Band UNII-2A, 802.11n HT40 mode)

Operation Mode	TX MODE	Test Date	2022/09/27
Channel Number	CH Low	Test By	Barry
Temperature	25 ℃	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	10380.00	40.98	3.12	44.10	68.20	-24.10	Peak	VERTICAL
2	15570.00	40.05	9.30	49.35	74.00	-24.65	Peak	VERTICAL
1	10380.00	40.88	3.12	44.00	68.20	-24.20	Peak	HORIZONTAL
2	15570.00	39.78	9.30	49.08	74.00	-24.92	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	2022/09/27
Channel Number	CH Mid	Test By	Barry
Temperature	25 ℃	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	10540.00	42.13	3.55	45.68	68.20	-22.52	Peak	VERTICAL
2	15810.00	40.51	9.43	49.94	74.00	-24.06	Peak	VERTICAL
1	10540.00	41.78	3.55	45.33	68.20	-22.87	Peak	HORIZONTAL
2	15810.00	41.01	9.43	50.44	74.00	-23.56	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	2022/09/27
Channel Number	CH High	Test By	Barry
Temperature	25 ℃	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	10620.00	41.55	3.80	45.35	74.00	-28.65	Peak	VERTICAL
2	15930.00	41.17	9.74	50.91	74.00	-23.09	Peak	VERTICAL
1	10620.00	42.22	3.80	46.02	74.00	-27.98	Peak	HORIZONTAL
2	15930.00	42.29	9.74	52.03	74.00	-21.97	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 / Band UNII-2A, 802.11ac VHT80 mode)

Operation Mode	TX MODE	Test Date	2022/09/27
Channel Number	CH Low	Test By	Barry
Temperature	25 ℃	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	10420.00	40.93	3.23	44.16	68.20	-24.04	Peak	VERTICAL
2	15630.00	40.14	9.32	49.46	74.00	-24.54	Peak	VERTICAL
1	10420.00	41.10	3.23	44.33	68.20	-23.87	Peak	HORIZONTAL
2	15630.00	40.38	9.32	49.70	74.00	-24.30	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	2022/09/27
Channel Number	CH High	Test By	Barry
Temperature	25 ℃	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	10580.00	43.55	3.70	47.25	68.20	-20.95	Peak	VERTICAL
2	15870.00	42.73	9.60	52.33	74.00	-21.67	Peak	VERTICAL
1	10580.00	40.91	3.70	44.61	68.20	-23.59	Peak	HORIZONTAL
2	15870.00	42.24	9.60	51.84	74.00	-22.16	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-2C, 802.11a mode)

Operation Mode	TX MODE	Test Date	2022/09/27
Channel Number	CH Low	Test By	Barry
Temperature	25 ℃	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11000.00	40.50	4.55	45.05	74.00	-28.95	Peak	VERTICAL
2	16500.00	41.70	10.67	52.37	68.20	-15.83	Peak	VERTICAL
1	11000.00	41.04	4.55	45.59	74.00	-28.41	Peak	HORIZONTAL
2	16500.00	40.60	10.67	51.27	68.20	-16.93	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	2022/09/27
Channel Number	CH Mid	Test By	Barry
Temperature	25 ℃	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11160.00	40.82	4.95	45.77	74.00	-28.23	Peak	VERTICAL
2	16740.00	42.23	11.14	53.37	68.20	-14.83	Peak	VERTICAL
1	11160.00	41.60	4.95	46.55	74.00	-27.45	Peak	HORIZONTAL
2	16740.00	39.81	11.14	50.95	68.20	-17.25	Peak	HORIZONTAL

Remark:

1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.

2 Measurement of data within this frequency range shown " - " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (above 1GHz)

Operation Mode	TX MODE	Test Date	2022/09/27
Channel Number	CH High	Test By	Barry
Temperature	25 ℃	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11400.00	39.12	5.56	44.68	74.00	-29.32	Peak	VERTICAL
2	17100.00	40.70	11.10	51.80	68.20	-16.40	Peak	VERTICAL
1	11400.00	39.24	5.56	44.80	74.00	-29.20	Peak	HORIZONTAL
2	17100.00	40.59	11.10	51.69	68.20	-16.51	Peak	HORIZONTAL

Remark:

1 Field strength limits for frequency above 1000MHz are based on average limits. However, Peak mode field strength shall not exceed the average limits specified plus 20dB.

2 Measurement of data within this frequency range shown " - " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Radiated Spurious Emission Measurement Result (above 1GHz)

(Band UNII-2C, 802.11n HT20 mode)

Operation Mode	TX MODE	Test Date	2022/09/27
Channel Number	CH Low	Test By	Barry
Temperature	25 ℃	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11000.00	40.31	4.55	44.86	74.00	-29.14	Peak	VERTICAL
2	16500.00	40.31	10.67	50.98	68.20	-17.22	Peak	VERTICAL
1	11000.00	41.34	4.55	45.89	74.00	-28.11	Peak	HORIZONTAL
2	16500.00	41.19	10.67	51.86	68.20	-16.34	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	2022/09/27
Channel Number	CH Mid	Test By	Barry
Temperature	25 ℃	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11160.00	42.69	4.95	47.64	74.00	-26.36	Peak	VERTICAL
2	16740.00	40.49	11.14	51.63	68.20	-16.57	Peak	VERTICAL
1	11160.00	42.18	4.95	47.13	74.00	-26.87	Peak	HORIZONTAL
2	16740.00	40.11	11.14	51.25	68.20	-16.95	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	2022/09/27
Channel Number	CH High	Test By	Barry
Temperature	25 ℃	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11400.00	38.85	5.56	44.41	74.00	-29.59	Peak	VERTICAL
2	17100.00	39.68	11.10	50.78	68.20	-17.42	Peak	VERTICAL
1	11400.00	37.84	5.56	43.40	74.00	-30.60	Peak	HORIZONTAL
2	17100.00	39.88	11.10	50.98	68.20	-17.22	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-2C, 802.11n HT40 mode)

Operation Mode	TX MODE	Test Date	2022/09/27
Channel Number	CH Low	Test By	Barry
Temperature	25 ℃	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11020.00	41.22	4.60	45.82	74.00	-28.18	Peak	VERTICAL
2	16530.00	42.02	10.68	52.70	68.20	-15.50	Peak	VERTICAL
1	11020.00	41.59	4.60	46.19	74.00	-27.81	Peak	HORIZONTAL
2	16530.00	42.65	10.68	53.33	68.20	-14.87	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	2022/09/27
Channel Number	CH Mid	Test By	Barry
Temperature	25 ℃	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11100.00	40.51	4.80	45.31	74.00	-28.69	Peak	VERTICAL
2	16650.00	40.46	10.96	51.42	68.20	-16.78	Peak	VERTICAL
1	11100.00	41.12	4.80	45.92	74.00	-28.08	Peak	HORIZONTAL
2	16650.00	41.05	10.96	52.01	68.20	-16.19	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	2022/09/27
Channel Number	CH High	Test By	Barry
Temperature	25 ℃	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11340.00	39.30	5.41	44.71	74.00	-29.29	Peak	VERTICAL
2	17010.00	42.34	10.89	53.23	68.20	-14.97	Peak	VERTICAL
1	11340.00	41.46	5.41	46.87	74.00	-27.13	Peak	HORIZONTAL
2	17010.00	40.46	10.89	51.35	68.20	-16.85	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-2C, 802.11ac VHT80 mode)

Operation Mode	TX MODE	Test Date	2022/09/27
Channel Number	CH Low	Test By	Barry
Temperature	25 ℃	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11060.00	42.40	4.70	47.10	74.00	-26.90	Peak	VERTICAL
2	16590.00	42.73	10.72	53.45	68.20	-14.75	Peak	VERTICAL
1	11060.00	41.37	4.70	46.07	74.00	-27.93	Peak	HORIZONTAL
2	16590.00	43.14	10.72	53.86	68.20	-14.34	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	2022/09/27
Channel Number	CH High	Test By	Barry
Temperature	25 ℃	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11380.00	41.11	5.51	46.62	74.00	-27.38	Peak	VERTICAL
2	17070.00	40.69	11.03	51.72	68.20	-16.48	Peak	VERTICAL
1	11380.00	40.83	5.51	46.34	74.00	-27.66	Peak	HORIZONTAL
2	17070.00	40.36	11.03	51.39	68.20	-16.81	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, 802.11a mode)

Operation Mode	TX MODE	Test Date	2022/09/27
Channel Number	CH Low	Test By	Barry
Temperature	25 ℃	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11490.00	40.60	5.78	46.38	74.00	-27.62	Peak	VERTICAL
2	17235.00	39.97	11.16	51.13	68.20	-17.07	Peak	VERTICAL
1	11490.00	39.41	5.78	45.19	74.00	-28.81	Peak	HORIZONTAL
2	17235.00	40.42	11.16	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)

Operation Mode	TX MODE	Test Date	2022/09/27
Channel Number	CH Mid	Test By	Barry
Temperature	25 ℃	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11570.00	39.75	5.97	45.72	74.00	-28.28	Peak	VERTICAL
2	17355.00	41.38	11.56	52.94	68.20	-15.26	Peak	VERTICAL
1	11570.00	40.54	5.97	46.51	74.00	-27.49	Peak	HORIZONTAL
2	17355.00	40.72	11.56	52.28	68.20	-15.92	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	2022/09/27
Channel Number	CH High	Test By	Barry
Temperature	25 ℃	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11650.00	39.93	6.11	46.04	74.00	-27.96	Peak	VERTICAL
2	17475.00	39.90	12.03	51.93	68.20	-16.27	Peak	VERTICAL
1	11650.00	40.23	6.11	46.34	74.00	-27.66	Peak	HORIZONTAL
2	17475.00	39.14	12.03	51.17	68.20	-17.03	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	2022/09/27
Channel Number	CH Low	Test By	Barry
Temperature	25 ℃	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11490.00	39.67	5.78	45.45	74.00	-28.55	Peak	VERTICAL
2	17235.00	41.17	11.16	52.33	68.20	-15.87	Peak	VERTICAL
1	11490.00	39.33	5.78	45.11	74.00	-28.89	Peak	HORIZONTAL
2	17235.00	39.63	11.16	50.79	68.20	-17.41	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	2022/09/27
Channel Number	CH Mid	Test By	Barry
Temperature	25 ℃	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11570.00	39.95	5.97	45.92	74.00	-28.08	Peak	VERTICAL
2	17355.00	39.69	11.56	51.25	68.20	-16.95	Peak	VERTICAL
1	11570.00	41.11	5.97	47.08	74.00	-26.92	Peak	HORIZONTAL
2	17355.00	40.33	11.56	51.89	68.20	-16.31	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	2022/09/27
Channel Number	CH High	Test By	Barry
Temperature	25 ℃	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11650.00	40.30	6.11	46.41	74.00	-27.59	Peak	VERTICAL
2	17475.00	40.61	12.03	52.64	68.20	-15.56	Peak	VERTICAL
1	11650.00	42.55	6.11	48.66	74.00	-25.34	Peak	HORIZONTAL
2	17475.00	38.95	12.03	50.98	68.20	-17.22	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	2022/09/27
Channel Number	CH Low	Test By	Barry
Temperature	25 ℃	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11510.00	39.15	5.83	44.98	74.00	-29.02	Peak	VERTICAL
2	17265.00	40.73	11.26	51.99	68.20	-16.21	Peak	VERTICAL
1	11510.00	39.16	5.83	44.99	74.00	-29.01	Peak	HORIZONTAL
2	17265.00	40.21	11.26	51.47	68.20	-16.73	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	2022/09/27
Channel Number	CH High	Test By	Barry
Temperature	25 ℃	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11590.00	42.39	6.02	48.41	74.00	-25.59	Peak	VERTICAL
2	17385.00	39.54	11.65	51.19	68.20	-17.01	Peak	VERTICAL
1	11590.00	39.63	6.02	45.65	74.00	-28.35	Peak	HORIZONTAL
2	17385.00	40.22	11.65	51.87	68.20	-16.33	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 VHT80 mode)

Operation Mode	TX MODE	Test Date	2022/09/27
Channel Number	CH Low	Test By	Barry
Temperature	25 ℃	Humidity	60 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	11550.00	40.97	5.92	46.89	74.00	-27.11	Peak	VERTICAL
2	17325.00	39.47	11.46	50.93	68.20	-17.27	Peak	VERTICAL
1	11550.00	39.09	5.92	45.01	74.00	-28.99	Peak	HORIZONTAL
2	17325.00	40.33	11.46	51.79	68.20	-16.41	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 / Band UNII-2A, 802.11a mode) -Radiated

Operation Mode	TX CH Low	Test Date	2022/09/27
Channel Number	5180 MHz	Test By	Barry
Temperature	25 ℃	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5150.00	10.25	42.68	52.93	54.00	-1.07	Average	VERTICAL
2	5150.00	26.85	42.68	69.53	90.86	-21.33	Peak	VERTICAL
3	5181.72	67.97	42.89	110.86	F	--	Peak	VERTICAL
1	5150.00	10.01	42.68	52.69	54.00	-1.31	Average	HORIZONTAL
2	5150.00	23.52	42.68	66.20	90.71	-24.51	Peak	HORIZONTAL
3	5181.72	67.82	42.89	110.71	F	--	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= 1kHz, Sweep time= 200 ms.

Operation Mode	TX CH High	Test Date	2022/09/27
Channel Number	5320MHz	Test By	Barry
Temperature	25 ℃	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5318.68	67.17	43.12	110.29	F	--	Peak	VERTICAL
2	5350.00	9.73	43.01	52.74	54.00	-1.26	Average	VERTICAL
3	5350.00	22.29	43.01	65.30	68.20	-2.90	Peak	VERTICAL
1	5318.68	65.65	43.12	108.77	F	--	Peak	HORIZONTAL
2	5350.00	9.76	43.01	52.77	54.00	-1.23	Average	HORIZONTAL
3	5350.04	20.81	43.01	63.82	74.00	-10.18	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= 1kHz, Sweep time= 200 ms.

Band Edges test (Band UNII-1 / Band UNII-2A, 802.11n HT20 mode) -Radiated

Operation Mode	TX CH Low	Test Date	2022/09/27
Channel Number	5180 MHz	Test By	Barry
Temperature	25 ℃	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5150.00	9.65	42.68	52.33	54.00	-1.67	Average	VERTICAL
2	5150.00	23.72	42.68	66.40	68.20	-1.80	Peak	VERTICAL
3	5182.41	67.99	42.89	110.88	F	--	Peak	VERTICAL
1	5150.00	9.61	42.68	52.29	54.00	-1.71	Average	HORIZONTAL
2	5150.00	22.43	42.68	65.11	68.20	-3.09	Peak	HORIZONTAL
3	5181.72	67.55	42.89	110.44	F	--	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 ≥ 1/Ton, Sweep time= 200 ms.

Operation Mode	TX CH High	Test Date	2022/09/27
Channel Number	5320MHz	Test By	Barry
Temperature	25 ℃	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5318.96	66.63	43.11	109.74	F	--	Peak	VERTICAL
2	5350.00	8.93	43.01	51.94	54.00	-2.06	Average	VERTICAL
3	5350.00	20.94	43.01	63.95	68.20	-4.25	Peak	VERTICAL
1	5321.62	65.35	43.11	108.46	F	--	Peak	HORIZONTAL
2	5350.00	9.11	43.01	52.12	54.00	-1.88	Average	HORIZONTAL
3	5350.00	21.00	43.01	64.01	68.20	-4.19	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 ≥ 1/Ton, Sweep time= 200 ms.

Band Edges test (Band UNII-1 / Band UNII-2A, 802.11n HT40 mode) -Radiated

Operation Mode	TX CH Low	Test Date	2022/09/27
Channel Number	5190 MHz	Test By	Barry
Temperature	25 ℃	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5150.00	9.24	42.68	51.92	54.00	-2.08	Average	VERTICAL
2	5150.00	24.35	42.68	67.03	68.20	-1.17	Peak	VERTICAL
3	5189.41	64.01	42.95	106.96	F	--	Peak	VERTICAL
1	5150.00	9.11	42.68	51.79	54.00	-2.21	Average	HORIZONTAL
2	5150.00	22.53	42.68	65.21	68.20	-2.99	Peak	HORIZONTAL
3	5187.99	63.70	42.94	106.64	F	--	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 ≥ 1/Ton, Sweep time= 200 ms.

Operation Mode	TX CH High	Test Date	2022/09/27
Channel Number	5310MHz	Test By	Barry
Temperature	25 ℃	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5306.16	63.30	43.17	106.47	F	--	Peak	VERTICAL
2	5350.00	9.64	43.01	52.65	54.00	-1.35	Average	VERTICAL
3	5350.00	21.67	43.01	64.68	68.20	-3.52	Peak	VERTICAL
1	5313.52	62.78	43.14	105.92	F	--	Peak	HORIZONTAL
2	5350.00	9.74	43.01	52.75	54.00	-1.25	Average	HORIZONTAL
3	5350.00	22.54	43.01	65.55	68.20	-2.65	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 ≥ 1/Ton, Sweep time= 200 ms.

Band Edges test (Band UNII-1 / Band UNII-2A, 802.11ac VHT80 mode) -Radiated

Operation Mode	TX CH Low	Test Date	2022/09/27
Channel Number	5210 MHz	Test By	Barry
Temperature	25 ℃	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5150.00	9.35	42.68	52.03	54.00	-1.97	Average	VERTICAL
2	5150.00	20.54	42.68	63.22	68.20	-4.98	Peak	VERTICAL
3	5201.25	60.24	43.02	103.26	F	--	Peak	VERTICAL
1	5150.00	9.44	42.68	52.12	54.00	-1.88	Average	HORIZONTAL
2	5150.25	23.14	42.68	65.82	68.20	-2.38	Peak	HORIZONTAL
3	5206.50	57.76	43.02	100.78	F	--	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 ≥ 1/Ton, Sweep time= 200 ms.

Operation Mode	TX CH High	Test Date	2022/09/27
Channel Number	5290MHz	Test By	Barry
Temperature	25 ℃	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5280.20	59.06	43.13	102.19	F	--	Peak	VERTICAL
2	5350.00	9.36	43.01	52.37	54.00	-1.63	Average	VERTICAL
3	5350.00	22.10	43.01	65.11	68.20	-3.09	Peak	VERTICAL
1	5292.40	57.78	43.16	100.94	F	--	Peak	HORIZONTAL
2	5350.00	9.35	43.01	52.36	54.00	-1.64	Average	HORIZONTAL
3	5350.00	21.78	43.01	64.79	68.20	-3.41	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 ≥ 1/Ton, Sweep time= 200 ms.

Band Edges test (Band UNII-2C, 802.11a mode) -Radiated

Operation Mode	TX CH Low	Test Date	2022/09/27
Channel Number	5500 MHz	Test By	Barry
Temperature	25 ℃	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5470.00	19.36	43.37	62.73	68.20	-5.47	Peak	VERTICAL
2	5498.78	65.91	43.51	109.42	F	--	Peak	VERTICAL
1	5470.00	21.60	43.37	64.97	68.20	-3.23	Peak	HORIZONTAL
2	5501.09	63.72	43.51	107.23	F	--	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= 1kHz, Sweep time= 200 ms.

Operation Mode	TX CH High	Test Date	2022/09/27
Channel Number	5700MHz	Test By	Barry
Temperature	25 ℃	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5698.16	63.68	43.93	107.61	F	--	Peak	VERTICAL
2	5725.00	20.92	43.96	64.88	68.20	-3.32	Peak	VERTICAL
1	5698.16	63.68	43.93	107.61	F	--	Peak	HORIZONTAL
2	5725.36	22.57	43.96	66.53	68.20	-1.67	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= 1kHz, Sweep time= 200 ms.

Band Edges test (Band UNII-2C, 802.11n HT20 mode) -Radiated

Operation Mode	TX CH Low	Test Date	2022/09/27
Channel Number	5500 MHz	Test By	Barry
Temperature	25 ℃	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5470.00	22.72	43.37	66.09	68.20	-2.11	Peak	VERTICAL
2	5498.89	65.86	43.51	109.37	F	--	Peak	VERTICAL
1	5470.00	23.39	43.37	66.76	68.20	-1.44	Peak	HORIZONTAL
2	5499.88	63.85	43.51	107.36	F	--	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 ≥ 1/Ton, Sweep time= 200 ms.

Operation Mode	TX CH High	Test Date	2022/09/27
Channel Number	5700MHz	Test By	Barry
Temperature	25 ℃	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5701.04	67.72	43.95	111.67	F	--	Peak	VERTICAL
2	5725.00	22.51	43.96	66.47	68.20	-1.73	Peak	VERTICAL
1	5702.32	63.21	43.95	107.16	F	--	Peak	HORIZONTAL
2	5725.00	21.22	43.96	65.18	68.20	-3.02	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 ≥ 1/Ton, Sweep time= 200 ms.

Band Edges test (Band UNII-2C, 802.11n HT40 mode) -Radiated

Operation Mode	TX CH Low	Test Date	2022/09/27
Channel Number	5510 MHz	Test By	Barry
Temperature	25 ℃	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5470.00	22.83	43.37	66.20	68.20	-2.00	Peak	VERTICAL
2	5511.54	62.44	43.54	105.98	F	--	Peak	VERTICAL
1	5470.00	22.47	43.37	65.84	68.20	-2.36	Peak	HORIZONTAL
2	5511.93	60.83	43.54	104.37	F	--	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 ≥ 1/Ton, Sweep time= 200 ms.

Operation Mode	TX CH High	Test Date	2022/09/27
Channel Number	5670MHz	Test By	Barry
Temperature	25 ℃	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5671.40	63.84	43.70	107.54	F	--	Peak	VERTICAL
2	5725.00	20.23	43.96	64.19	68.20	-4.01	Peak	VERTICAL
1	5666.20	61.44	43.65	105.09	F	--	Peak	HORIZONTAL
2	5725.00	20.84	43.96	64.80	68.20	-3.40	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 ≥ 1/Ton, Sweep time= 200 ms.

Band Edges test (Band UNII-2C, 802.11ac VHT80 mode) -Radiated

Operation Mode	TX CH Low	Test Date	2022/09/27
Channel Number	5530 MHz	Test By	Barry
Temperature	25 ℃	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5470.00	22.40	43.37	65.77	68.20	-2.43	Peak	VERTICAL
2	5533.28	57.19	43.60	100.79	F	--	Peak	VERTICAL
1	5470.00	20.87	43.37	64.24	68.20	-3.96	Peak	HORIZONTAL
2	5520.02	55.17	43.56	98.73	F	--	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= 2kHz, Sweep time= 200 ms.

Operation Mode	TX CH High	Test Date	2022/09/27
Channel Number	5610MHz	Test By	Barry
Temperature	25 ℃	Humidity	65 %

No	Freq MHz	Reading dBuV	Factor dB	Level dBuV/m	Limit dBuV/m	Margin dB	Remark	Pol V/H
1	5601.08	57.60	43.77	101.37	F	--	Peak	VERTICAL
2	5725.00	20.84	43.96	64.80	68.20	-3.40	Peak	VERTICAL
1	5615.92	55.17	43.69	98.86	F	--	Peak	HORIZONTAL
2	5725.00	20.99	43.96	64.95	68.20	-3.25	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.

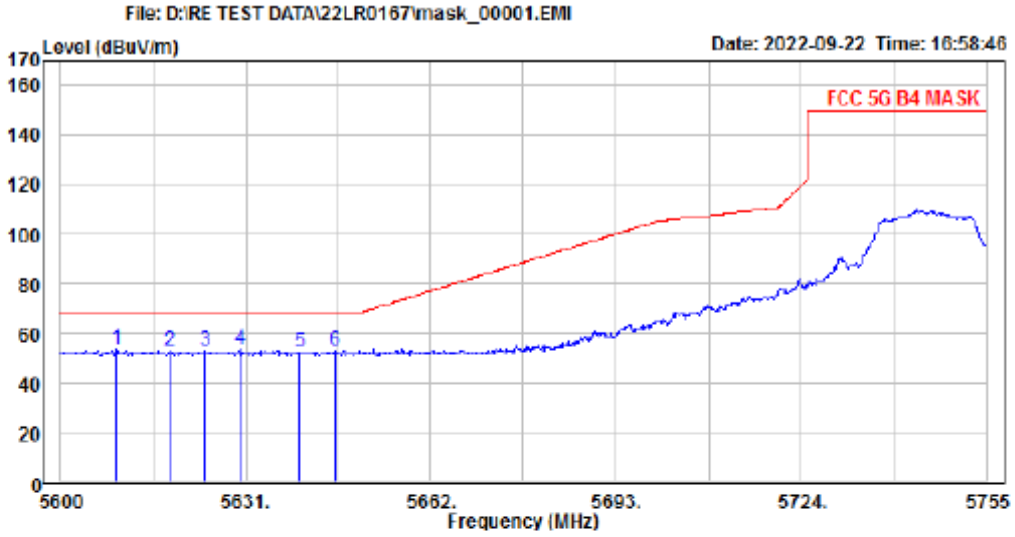
3 Measurement of data within this frequency range shown " - " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

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= 2kHz, Sweep time= 200 ms.

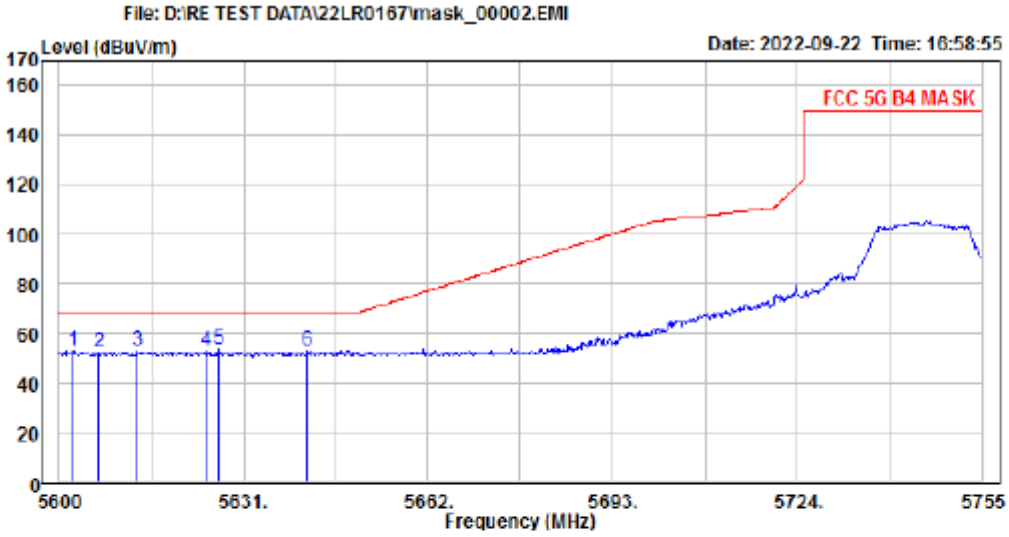
Band Edges test (Band UNII-3, 802.11a mode) –Radiated

Operation Mode	TX CH Low	Test Date	2022/09/22
Channel Number	5745 MHz	Test By	Barry
Temperature	25 ℃	Humidity	65 %



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 a Mode Low Ch
Note :

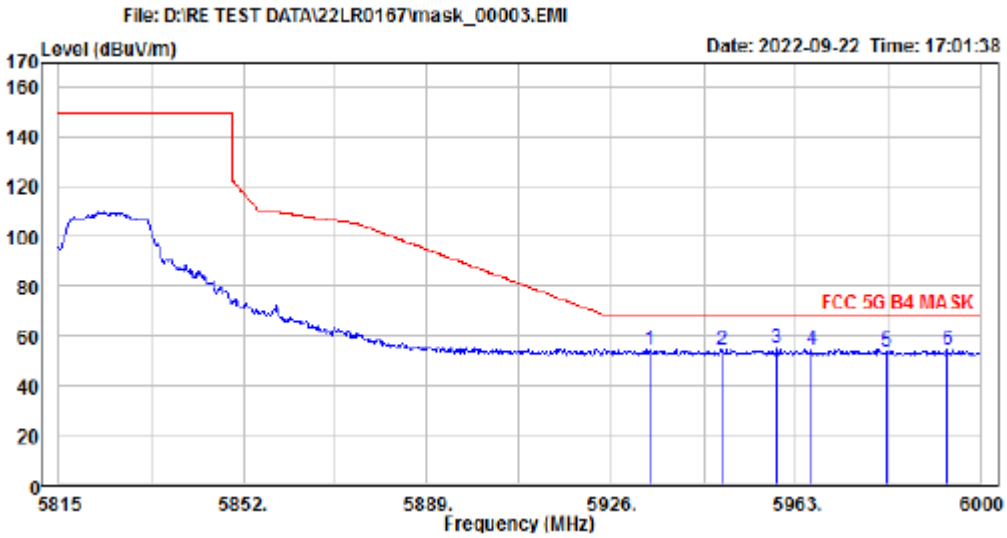
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5609.300	58.10	-4.62	53.48	68.20	-14.72	Vertical
2	5618.290	57.59	-4.64	52.95	68.20	-15.25	Vertical
3	5624.025	57.45	-4.66	52.79	68.20	-15.41	Vertical
4 PP	5630.070	58.58	-4.67	53.91	68.20	-14.29	Vertical
5	5639.990	57.32	-4.69	52.63	68.20	-15.57	Vertical
6	5645.880	57.62	-4.70	52.92	68.20	-15.28	Vertical



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

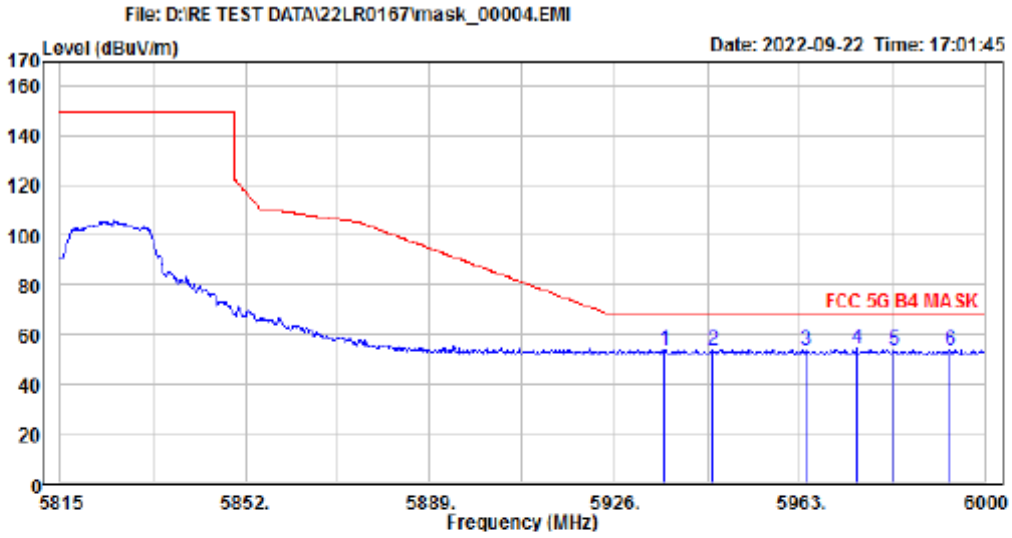
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5602.325	57.47	-4.61	52.86	68.20	-15.34	Horizontal
2	5606.665	57.24	-4.62	52.62	68.20	-15.58	Horizontal
3	5613.175	57.73	-4.63	53.10	68.20	-15.10	Horizontal
4	5624.645	57.71	-4.66	53.05	68.20	-15.15	Horizontal
5 PP	5626.815	58.41	-4.66	53.75	68.20	-14.45	Horizontal
6	5641.695	57.39	-4.70	52.69	68.20	-15.51	Horizontal

Operation Mode	TX CH High	Test Date	2022/09/22
Channel Number	5825MHz	Test By	Barry
Temperature	25 ℃	Humidity	65 %



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 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	5933.770	58.42	-3.88	54.54	68.20	-13.66	Vertical
2	5948.015	58.01	-3.88	54.13	68.20	-14.07	Vertical
3 PP	5959.115	58.48	-3.84	54.64	68.20	-13.56	Vertical
4	5965.960	57.87	-3.82	54.05	68.20	-14.15	Vertical
5	5981.315	57.46	-3.76	53.70	68.20	-14.50	Vertical
6	5993.340	57.81	-3.72	54.09	68.20	-14.11	Vertical

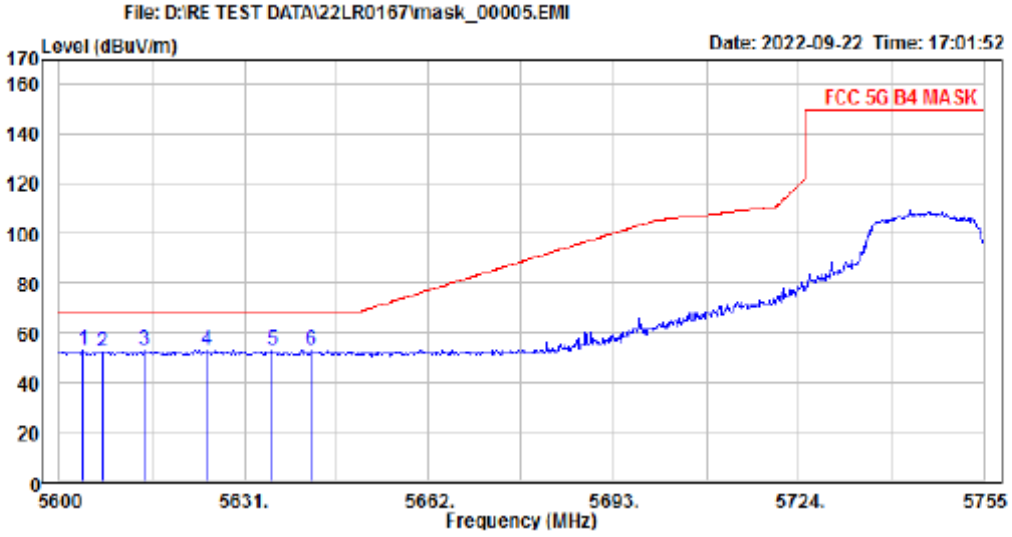


Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 H 1-18G.csv Horizonta
: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
EUT :
Mode : 5G Mask B4 a Mode High Ch
Note :

		Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1		5935.990	57.84	-3.87	53.97	68.20	-14.23	Horizontal
2		5945.610	57.51	-3.87	53.64	68.20	-14.56	Horizontal
3		5964.295	57.60	-3.83	53.77	68.20	-14.43	Horizontal
4	PP	5974.285	57.88	-3.79	54.09	68.20	-14.11	Horizontal
5		5981.685	57.39	-3.76	53.63	68.20	-14.57	Horizontal
6		5993.155	57.38	-3.72	53.66	68.20	-14.54	Horizontal

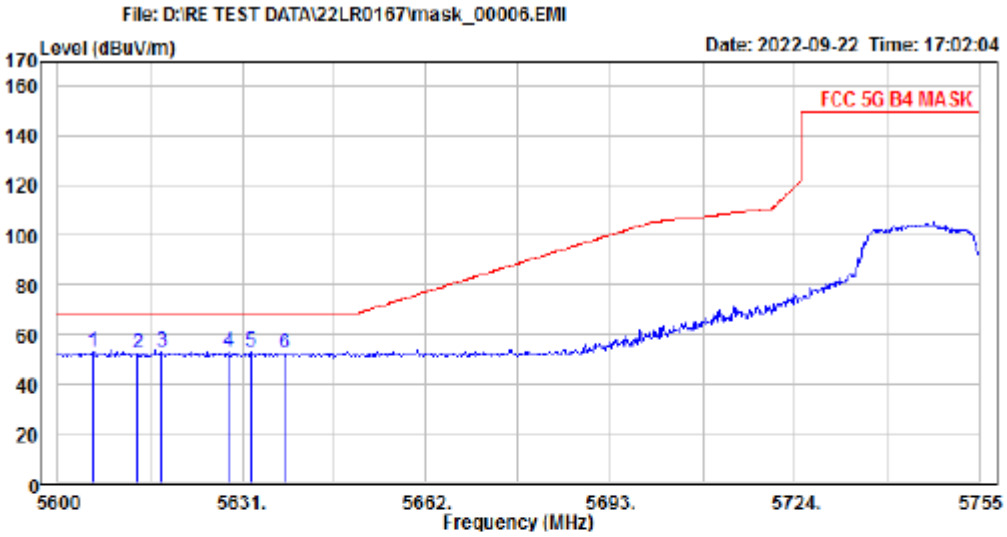
Band Edges test (Band UNII-3, 802.11n HT20 mode) –Radiated

Operation Mode	TX CH Low	Test Date	2022/09/22
Channel Number	5745 MHz	Test By	Barry
Temperature	25 ℃	Humidity	65 %



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 n20 Mode Low Ch
Note :

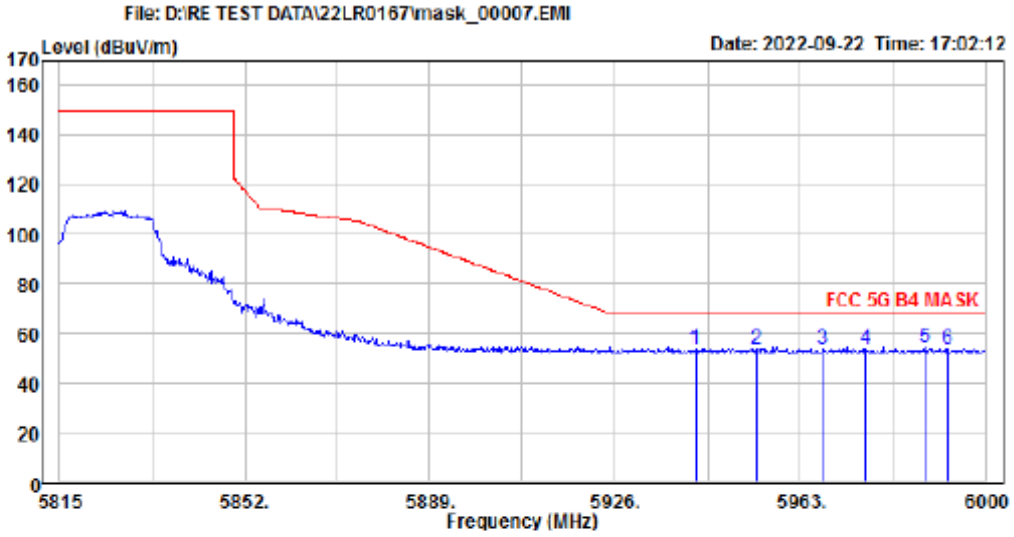
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5603.875	57.40	-4.62	52.78	68.20	-15.42	Vertical
2	5607.130	56.70	-4.62	52.08	68.20	-16.12	Vertical
3	5614.260	57.51	-4.64	52.87	68.20	-15.33	Vertical
4 PP	5624.800	57.63	-4.66	52.97	68.20	-15.23	Vertical
5	5635.650	57.41	-4.67	52.74	68.20	-15.46	Vertical
6	5642.315	57.55	-4.70	52.85	68.20	-15.35	Vertical



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 H 1-18G.csv Horizonta
: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
EUT :
Mode : 5G Mask B4 n20 Mode Low Ch
Note :

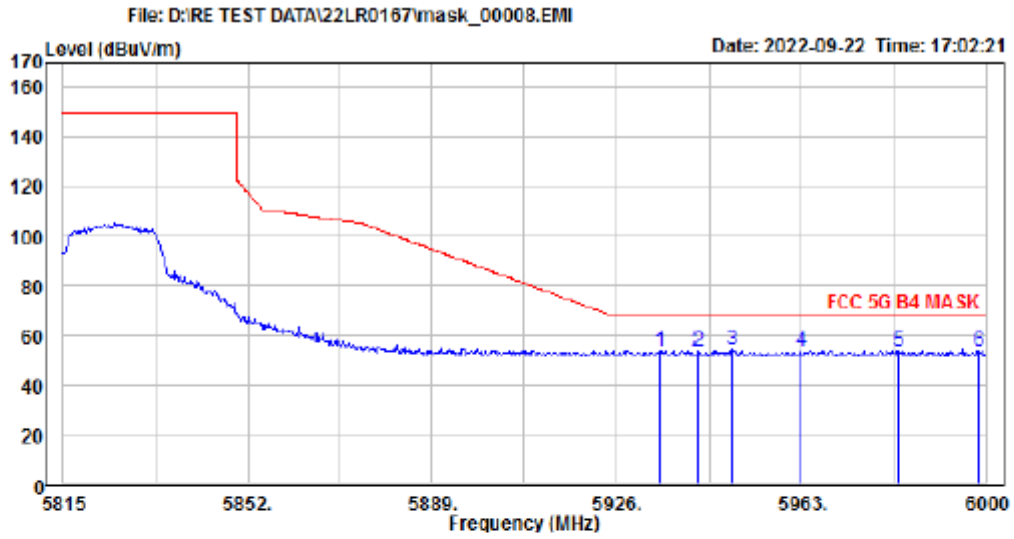
		Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	PP	5605.890	57.85	-4.61	53.24	68.20	-14.96	Horizontal
2		5613.330	56.91	-4.63	52.28	68.20	-15.92	Horizontal
3		5617.360	57.38	-4.64	52.74	68.20	-15.46	Horizontal
4		5628.675	57.35	-4.66	52.69	68.20	-15.51	Horizontal
5		5632.395	57.38	-4.68	52.70	68.20	-15.50	Horizontal
6		5638.130	57.13	-4.68	52.45	68.20	-15.75	Horizontal

Operation Mode	TX CH High	Test Date	2022/09/22
Channel Number	5825 MHz	Test By	Barry
Temperature	25 ℃	Humidity	65 %



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 n20 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	5942.095	57.45	-3.88	53.57	68.20	-14.63	Vertical
2	5954.120	57.68	-3.87	53.81	68.20	-14.39	Vertical
3	5967.440	57.76	-3.82	53.94	68.20	-14.26	Vertical
4	5975.950	57.28	-3.78	53.50	68.20	-14.70	Vertical
5 PP	5987.790	58.09	-3.73	54.36	68.20	-13.84	Vertical
6	5992.415	57.40	-3.73	53.67	68.20	-14.53	Vertical

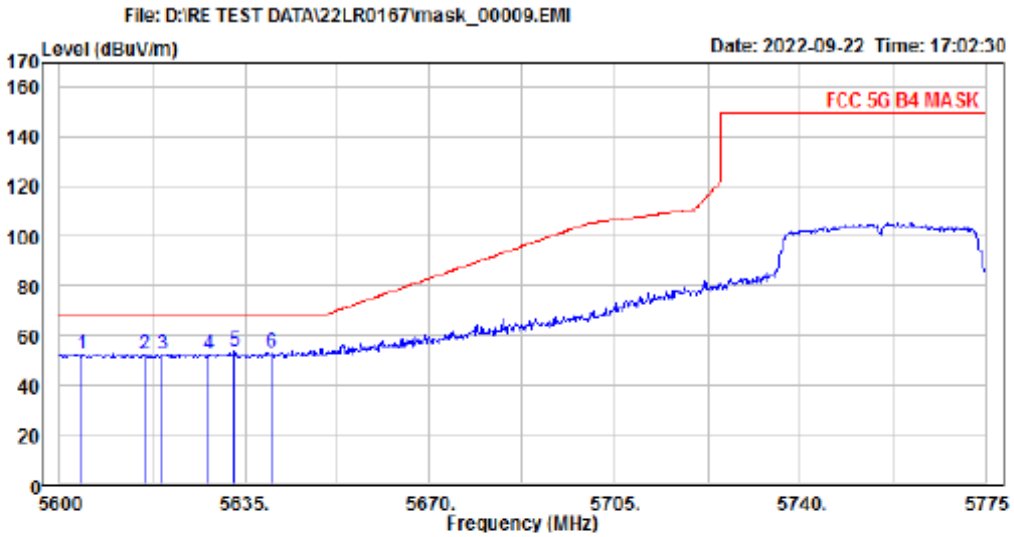


Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 H 1-18G.csv Horizonta
: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
EUT :
Mode : 5G Mask B4 n20 Mode High Ch
Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5934.880	57.80	-3.88	53.92	68.20	-14.28	Horizontal
2	5942.280	57.30	-3.88	53.42	68.20	-14.78	Horizontal
3 PP	5948.940	58.07	-3.88	54.19	68.20	-14.01	Horizontal
4	5963.000	57.73	-3.83	53.90	68.20	-14.30	Horizontal
5	5982.425	57.51	-3.76	53.75	68.20	-14.45	Horizontal
6	5998.520	57.48	-3.69	53.79	68.20	-14.41	Horizontal

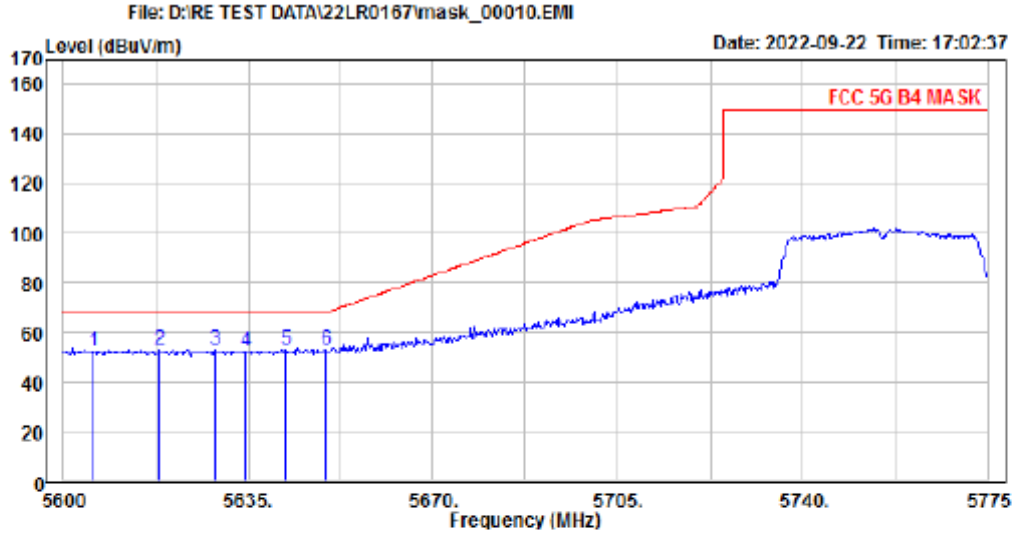
Band Edges test (Band UNII-3, 802.11n HT40 mode) –Radiated

Operation Mode	TX CH Low	Test Date	2022/09/22
Channel Number	5755 MHz	Test By	Barry
Temperature	25 ℃	Humidity	65 %



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 n40 Mode Low Ch
Note :

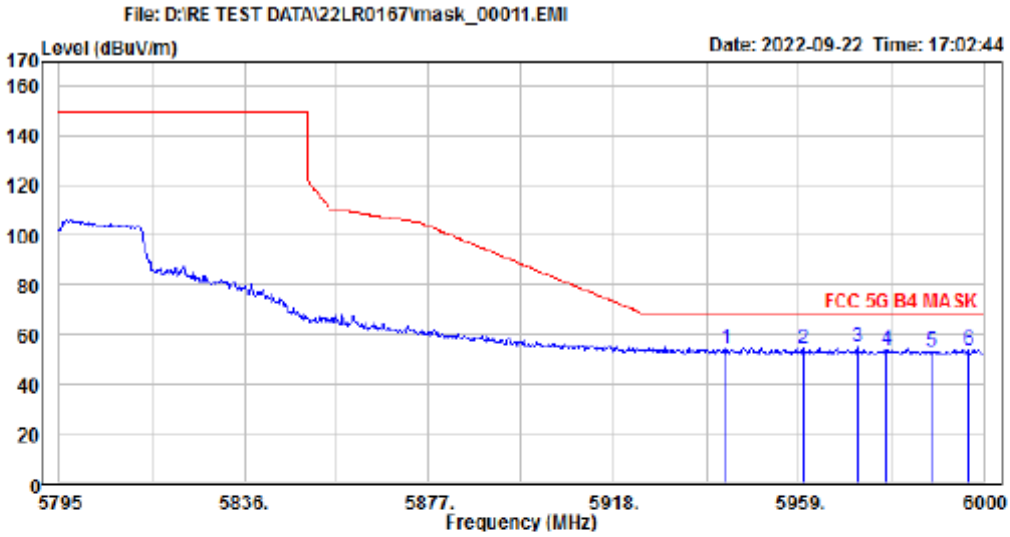
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5604.025	57.30	-4.62	52.68	68.20	-15.52	Vertical
2	5615.925	56.97	-4.63	52.34	68.20	-15.86	Vertical
3	5619.250	57.29	-4.65	52.64	68.20	-15.56	Vertical
4	5628.175	57.08	-4.66	52.42	68.20	-15.78	Vertical
5 PP	5632.900	58.34	-4.68	53.66	68.20	-14.54	Vertical
6	5639.900	57.60	-4.69	52.91	68.20	-15.29	Vertical



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 H 1-18G.csv Horizonta
: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
EUT :
Mode : 5G Mask B4 n40 Mode Low Ch
Note :

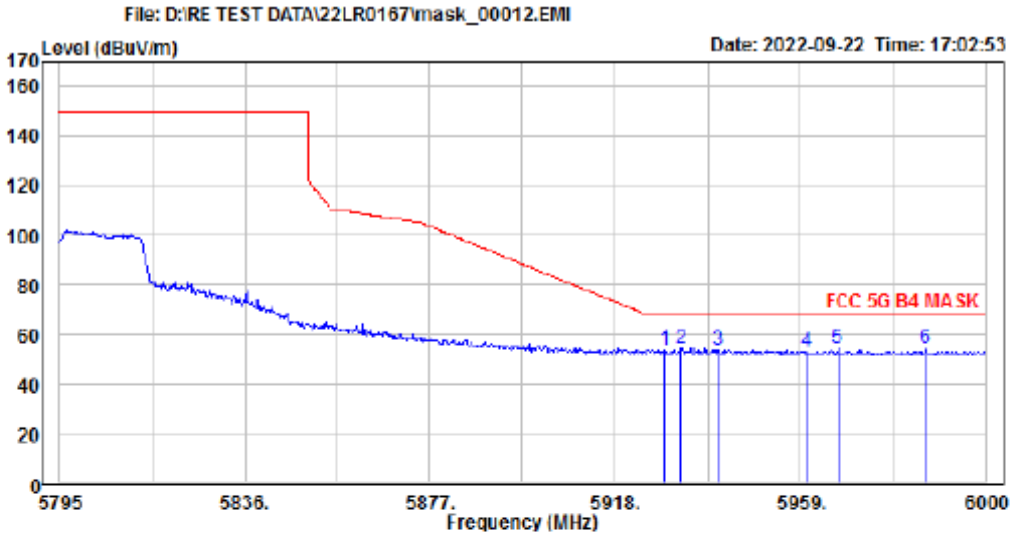
		Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1		5605.600	56.88	-4.61	52.27	68.20	-15.93	Horizontal
2		5618.200	57.50	-4.64	52.86	68.20	-15.34	Horizontal
3		5628.700	57.37	-4.66	52.71	68.20	-15.49	Horizontal
4		5634.475	57.12	-4.69	52.43	68.20	-15.77	Horizontal
5		5642.175	57.70	-4.70	53.00	68.20	-15.20	Horizontal
6	PP	5649.700	57.90	-4.71	53.19	68.20	-15.01	Horizontal

Operation Mode	TX CH High	Test Date	2022/09/22
Channel Number	5795MHz	Test By	Barry
Temperature	25 ℃	Humidity	65 %



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 n40 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	5942.805	58.25	-3.88	54.37	68.20	-13.83	Vertical
2	5960.025	57.90	-3.84	54.06	68.20	-14.14	Vertical
3 PP	5971.915	58.82	-3.80	55.02	68.20	-13.18	Vertical
4	5978.475	57.70	-3.77	53.93	68.20	-14.27	Vertical
5	5988.315	56.98	-3.73	53.25	68.20	-14.95	Vertical
6	5996.515	57.52	-3.70	53.82	68.20	-14.38	Vertical

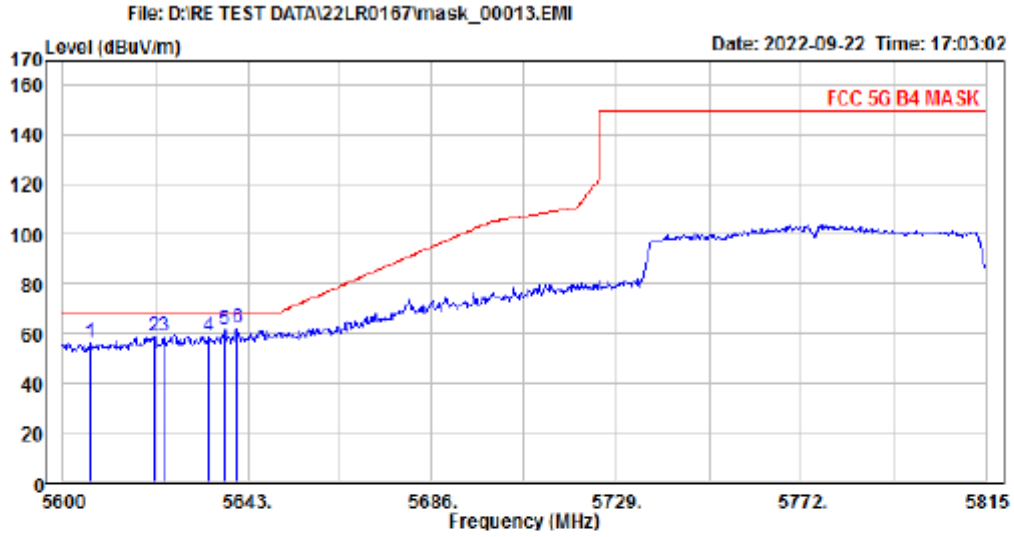


Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 H 1-18G.csv Horizonta
: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
EUT :
Mode : 5G Mask B4 n40 Mode High Ch
Note :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5929.070	57.62	-3.88	53.74	68.20	-14.46	Horizontal
2	5932.965	58.03	-3.88	54.15	68.20	-14.05	Horizontal
3	5940.755	57.62	-3.88	53.74	68.20	-14.46	Horizontal
4	5960.435	56.76	-3.84	52.92	68.20	-15.28	Horizontal
5 PP	5967.200	58.03	-3.82	54.21	68.20	-13.99	Horizontal
6	5986.675	57.83	-3.74	54.09	68.20	-14.11	Horizontal

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

Operation Mode	TX CH Low	Test Date	2022/09/22
Channel Number	5775 MHz	Test By	Barry
Temperature	25 ℃	Humidity	65 %

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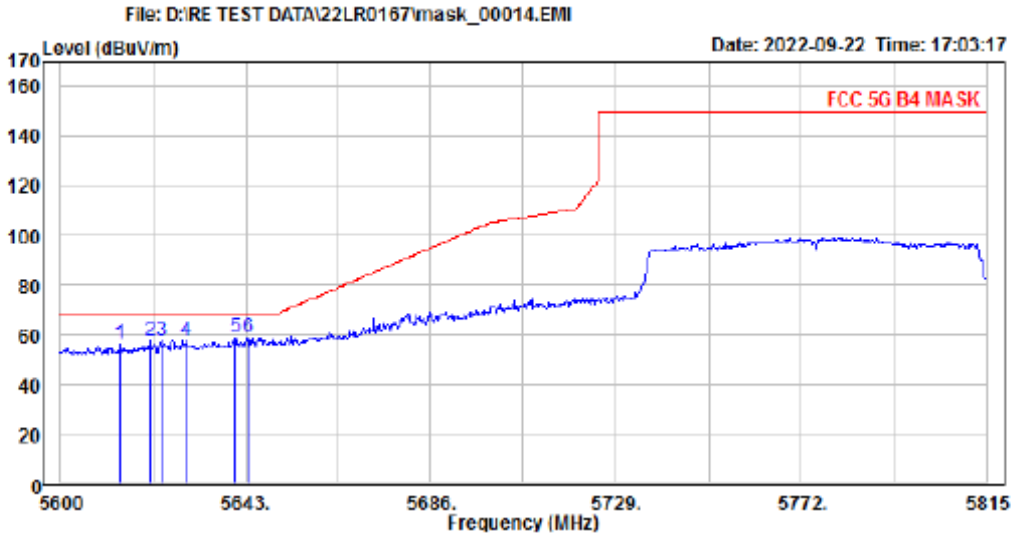
Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 V 1-18G.csv Vertical
         : RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
EUT      :
Mode     : 5G Mask B4 ac80 Mode Low Ch
Note     :
```

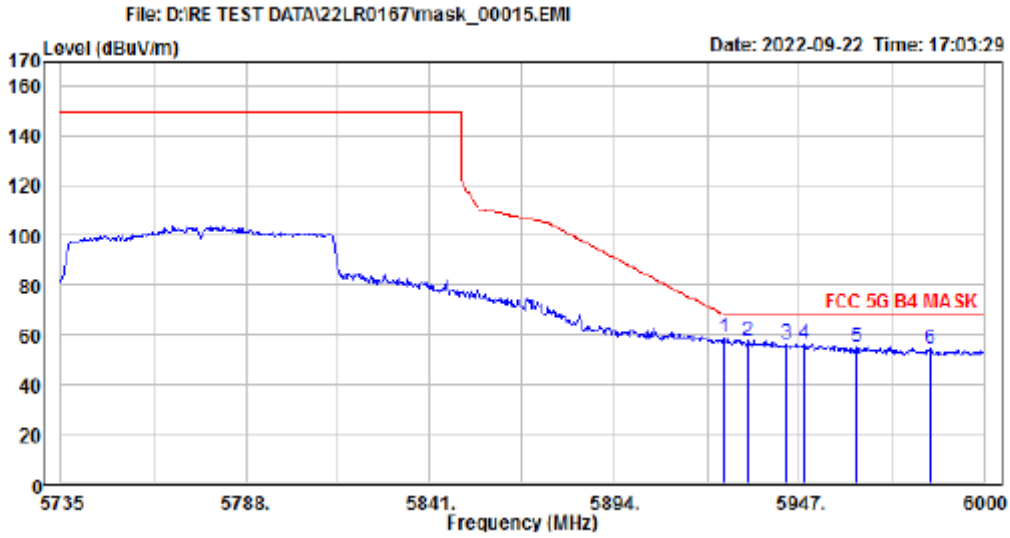
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1	5606.235	61.00	-4.61	56.39	68.20	-11.81	Vertical
2	5621.285	63.41	-4.66	58.75	68.20	-9.45	Vertical
3	5623.220	63.52	-4.65	58.87	68.20	-9.33	Vertical
4	5633.970	63.83	-4.69	59.14	68.20	-9.06	Vertical
5	5637.625	66.35	-4.68	61.67	68.20	-6.53	Vertical
6 PP	5640.420	66.62	-4.69	61.93	68.20	-6.27	Vertical



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 H 1-18G.csv Horizonta
: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
EUT :
Mode : 5G Mask B4 ac80 Mode Low Ch
Note :

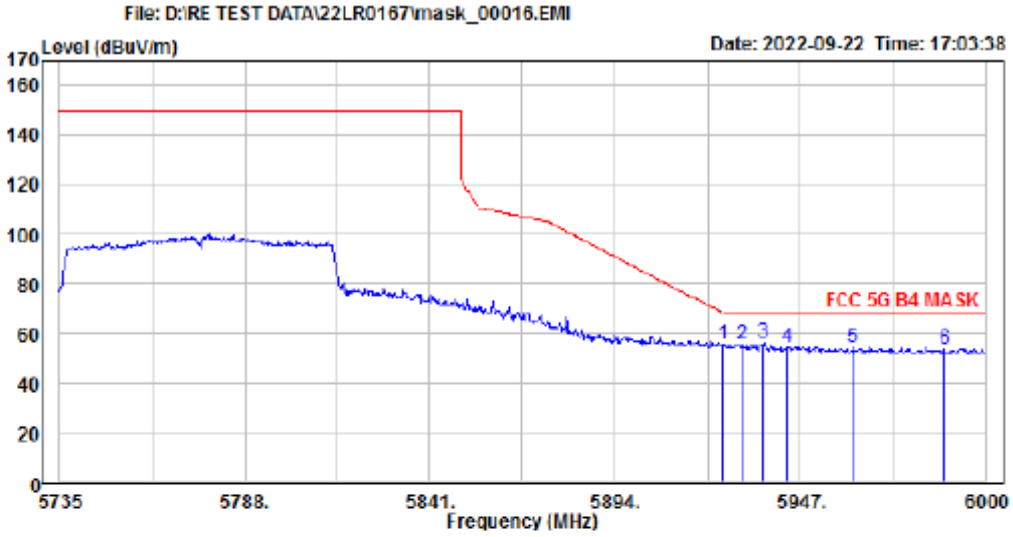
		Freq	Read Level	Factor	Level	Limit Line	Over Limit	Pol/Phase
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
1		5613.760	60.87	-4.64	56.23	68.20	-11.97	Horizontal
2		5620.640	62.14	-4.65	57.49	68.20	-10.71	Horizontal
3		5623.220	62.15	-4.65	57.50	68.20	-10.70	Horizontal
4		5629.025	62.39	-4.67	57.72	68.20	-10.48	Horizontal
5	PP	5640.420	63.77	-4.69	59.08	68.20	-9.12	Horizontal
6		5643.430	63.71	-4.70	59.01	68.20	-9.19	Horizontal

Operation Mode	TX CH High	Test Date	2022/09/27
Channel Number	5775MHz	Test By	Barry
Temperature	25 ℃	Humidity	65 %



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 ac80 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 PP	5925.270	62.42	-3.87	58.55	68.20	-9.65	Vertical
2	5931.895	61.28	-3.87	57.41	68.20	-10.79	Vertical
3	5943.290	60.35	-3.88	56.47	68.20	-11.73	Vertical
4	5948.060	60.23	-3.88	56.35	68.20	-11.85	Vertical
5	5963.430	58.52	-3.83	54.69	68.20	-13.51	Vertical
6	5984.630	57.81	-3.75	54.06	68.20	-14.14	Vertical



Condition: limit\FCC\FCC 5G B4 MASK.csv 3m factor\966 3117 H 1-18G.csv Horizonta
: RBW:1000kHz VBW:3000kHz SWT:Auto DET:Positive
EUT :
Mode : 5G Mask B4 ac80 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	5924.475	59.62	-3.88	55.74	68.59	-12.85	Horizontal
2	5930.040	59.54	-3.87	55.67	68.20	-12.53	Horizontal
3 PP	5936.400	59.95	-3.87	56.08	68.20	-12.12	Horizontal
4	5943.025	58.36	-3.88	54.48	68.20	-13.72	Horizontal
5	5962.105	58.00	-3.84	54.16	68.20	-14.04	Horizontal
6	5988.340	57.09	-3.73	53.36	68.20	-14.84	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 gins 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:

	Antenna Type	Brand	Model	Peak Gain	Frequency Range	Connector Type
1	PCB	TSKY CO., LTD.	A8-A006-00509	6.63dBi 6.63dBi 5.78dBi 5.55dBi	5150MHz ~ 5250MHz 5250MHz ~ 5350MHz 5470MHz ~ 5725MHz 5725MHz ~ 5825MHz	i-pex

12. TPC and DFS Measurement

12.1. TPC: Standard Applicable

According to §15.407(h)(1), Transmit power control (TPC). U-NII devices operating in the 5.25-5.35 GHz band and the 5.47-5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

12.2. DFS: Standard Applicable

According to §15.407(h)(2), Radar Detection Function of Dynamic Frequency Selection (DFS). U-NII devices operating in the 5.25-5.35 GHz and 5.47-5.725 GHz bands shall employ a DFS radar detection.

13.2.1. Limit

Table 1: Applicability of DFS requirements prior to use of a channel

Requirement	Operational Mode		
	Slave	Client(without radar detection)	Client(with radar detection)
Non-occupancy Period	Yes	Not required	Yes
DFS Detection Threshold	Yes	Not required	Yes
Channel Availability Check Time	Yes	Not required	Not required
Uniform Spreading	Yes	Not required	Not required
U-NII Detection Band-width	Yes	Not required	Yes

Table 2: Applicability of DFS requirements during normal operation

Requirement	Operational Mode		
	Slave	Client(without radar detection)	Client(with radar detection)
DFS Detection Threshold	Yes	Not required	Yes
Channel Closing Transmis-sion Time	Yes	Yes	Yes
Channel Move Time	Yes	Yes	Yes
U-NII Detection Bandwidth	Yes	Not required	Yes

Refer to KDB Number: 905462 APPENDIX B COMPLIANCE MEASUREMENT PROCEDURES FOR UNLICENSED-NATIONAL INFORMATION INFRASTRUCTURE DEVICES OPERATING IN THE 5.25-5.35 GHz AND 5.47-5.725 GHz BANDS INCORPORATING DYNAMIC FREQUENCY SELECTION.

Table 3: Interference Threshold values, Master or Client incorporating In-Service Monitoring

Maximum Transmit Power	Value (see note)
≥ 200 milliwatt	-64 dBm
< 200 milliwatt	-62 dBm
Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.	

Table 4: DFS Response requirement values

Parameter	Value
Non-occupancy period	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds See Note 1.
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.
U-NII Detection Bandwidth	Minimum 80% of the U-NII 99% transmission power bandwidth. See Note 3.

Note 1: The instant that the *Channel Move Time* and the *Channel Closing Transmission Time* begins is as follows:

- For the Short Pulse Radar Test Signals this instant is the end of the *Burst*.
- For the Frequency Hopping radar Test Signal, this instant is the end of the last radar *Burst* generated.
- For the Long Pulse Radar Test Signal this instant is the end of the 12 second period defining the *Radar Waveform*.

Note 2: The *Channel Closing Transmission Time* is comprised of 200 milliseconds starting at the beginning of the *Channel Move Time* plus any additional intermittent control signals required to facilitate a *Channel* move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the *U-NII Detection Bandwidth* detection test, radar type 1 is used and for each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

Table 5: Radar Test Waveforms

Short Pulse Radar

Radar Type	Pulse Width (µsec)	PRI (µsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of Trials
0	1	1428	18	See Note 1	See Note 1
1	1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a	Roundup $\left\{\left(\frac{1}{360}\right)\cdot\left(\frac{19\cdot 10^6}{PRI_{\mu sec}}\right)\right\}$	60%	30
		Test B: 15 unique PRI values randomly selected within the range of 518-3066 µsec, with a minimum increment of 1 µsec, excluding PRI values selected in Test A			
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120
Note 1: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.					

A minimum of 30 unique waveforms are required for each of the Short Pulse Radar Types 2 through 4. For Short Pulse Radar Type 1, the same waveform is used a minimum of 30 times. If more than 30 waveforms are used for Short Pulse Radar Types 2 through 4, then each additional waveform must also be unique and not repeated from the previous waveforms

Long Pulse Radar

Radar Type	Pulse Width (µsec)	Chirp Width (MHz)	PRI (µsec)	Number of Pulses per *Burst*	Number of *Bursts*	Minimum Percentage of Successful Detection	Minimum Trials
5	50-100	5-20	1000-2000	1-3	8-20	80%	30

The parameters for this waveform are randomly chosen. Thirty unique waveforms are required for the Long Pulse Radar Type waveforms. If more than 30 waveforms are used for the Long Pulse Radar Type waveforms, then each additional waveform must also be unique and not repeated from the previous waveforms.

Frequency Hopping Radar

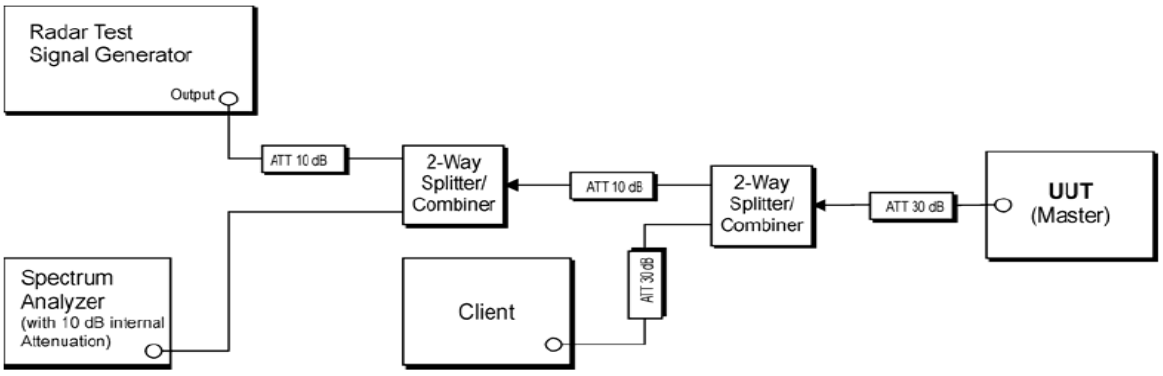
Radar Type	Pulse Width (μsec)	PRI (μsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Minimum Percentage of Successful Detection	Minimum Trials
6	1	333	9	.333	300	70%	30

For the Frequency Hopping Radar Type, the same *Burst* parameters are used for each waveform. The hopping sequence is different for each waveform and a 100-length segment is selected from the hopping sequence defined by the following algorithm: 3

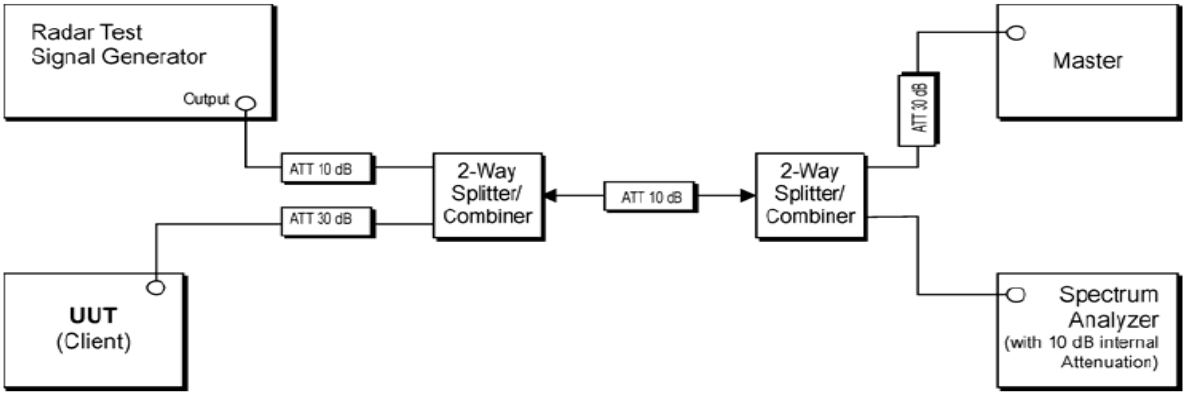
The first frequency in a hopping sequence is selected randomly from the group of 475 integer frequencies from 5250 – 5724 MHz. Next, the frequency that was just chosen is removed from the group and a frequency is randomly selected from the remaining 474 frequencies in the group. This process continues until all 475 frequencies are chosen for the set. For selection of a random frequency, the frequencies remaining within the group are always treated as equally likely.

13.2.2. Test Setup

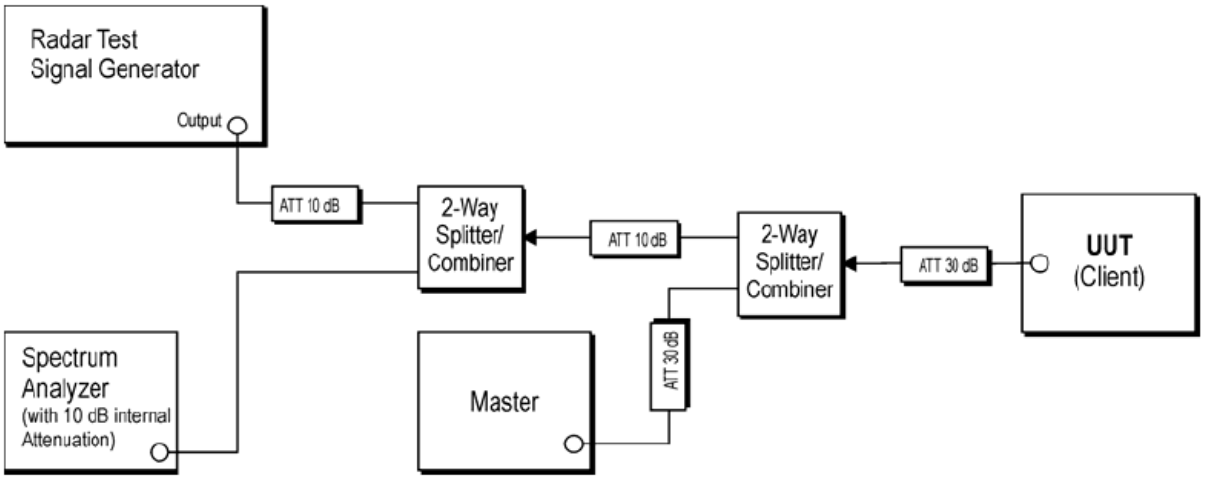
Setup for Master with injection at the Master



Setup for Client with injection at the Master



Setup for Client with injection at the Client



Note: device under test are configured with AP as IP based by streaming MPEG video, 30 frames per seconds

12.3. Test Equipment Used:

Location Conducted	Equipment Name	Brand	Model	S/N	Last Cal. Date	Next Cal. Date
Conducted (DFS)	Signal Generator	Agilent	E4438C	MY49071550	12/29/2021	12/29/2022
Conducted (DFS)	Signal Generator	Keysight	N5182B	MY53052399	12/29/2021	12/29/2022
Conducted (DFS)	Spectrum analyzer	Keysight	N9010A	MY56070257	09/28/2022	09/28/2023
Conducted (DFS)	AP Router	Synology	RT1900ac	15B0N3N369502	NA	NA
Conducted (DFS)	USB Adapter	D-Link	DWA-182	QBYS1D8000073	NA	NA
Conducted (DFS)	Direction Coupler	Krytar	1821S	1461	NA	NA
Conducted (DFS)	Splitter	Mini-Circuits	ZN2PD-63-S	UU97201111	NA	NA
Conducted (DFS)	Attenuator	Woken	Watt-65m3502	11051601	NA	NA
Conducted (DFS)	Cable	Draka	NA	NA	NA	NA
Conducted (TS8997)	Wideband Radio Communication Tester	R&S	CMW500	168811	09/22/2022	09/22/2023
Conducted (TS8997)	Signal Generator	R&S	SMB100B	101085	09/21/2022	09/21/2023
Conducted (TS8997)	Vector Signal Generator	R&S	SMBV100A	263246	09/21/2022	09/21/2023
Conducted (TS8997)	Signal analyzer 40GHz	R&S	FSV40	101884	09/22/2022	09/22/2023
Conducted (TS8997)	OSP150 extension unit CAM-BUS	R&S	OSP150	101107	09/21/2022	09/21/2023
Conducted (TS8997)	Test Software	R&S	EMC32 Ver:11.10.00	NA	NA	NA

12.3.1. Description of EUT :

EUT operates over the 5250-5350MHz and 5470-5725MHz ranges and EUT is a slave device (client equipment) w/o radar detection and DFS capability.

The EUT utilizes the 802.11n architecture, with a nominal channel bandwidth of 80MHz WLAN traffic is generated by streaming the mpeg file from the master to slave in full monitor video mode using the media player.

The rated output power of the master unit is >23dBm(EIRP).therefore the required interference threshold level is -64dBm. The master device as employed for the applicable DFS test is router whose FCC ID= YOR-RT1900AC for Synology

12.4. Test results

Applicability of DFS requirements during normal operation

Requirement	Operational Mode: Client(without radar detection)	
	Test Result	Remark
Non-occupancy Period	No transmission in 30mins. (test results), pass (Remark)	Pass
DFS Detection Threshold	N/A	N/A
Channel Closing Transmission Time	Less than 200ms, Refer to next page for plots.	Pass
Channel Move Time	Less than 10s, Refer to next page for plots.	Pass
U-NII Detection Bandwidth	N/A	N/A

Input Level to Master AP= -64dBm

DFS In-Service Monitoring (5290 MHz; 80 MHz)

Measurement Summary

DUT Frequency (MHz)	Radar Type No.	Type of Measurement value	Overall Result
5290.000000	0	First of all Transmitt Test	---
5290.000000	0	Channel Move Time	PASS
5290.000000	0	Channel Closing Transmission Time	PASS
5290.000000	0	Non-occupancy period	PASS

Channel Move Time Detailed Results

DUT Frequency (MHz)	Radar Type No.	CMT Tx Time (s)	CMT Limit (s)	CMT Result	CMT Comment
5290.000000	0	4.012	10.000	PASS	Tx Time value is last trailing edge found within sweep. See Note 1.

Channel Closing Transmission Time Detailed Results

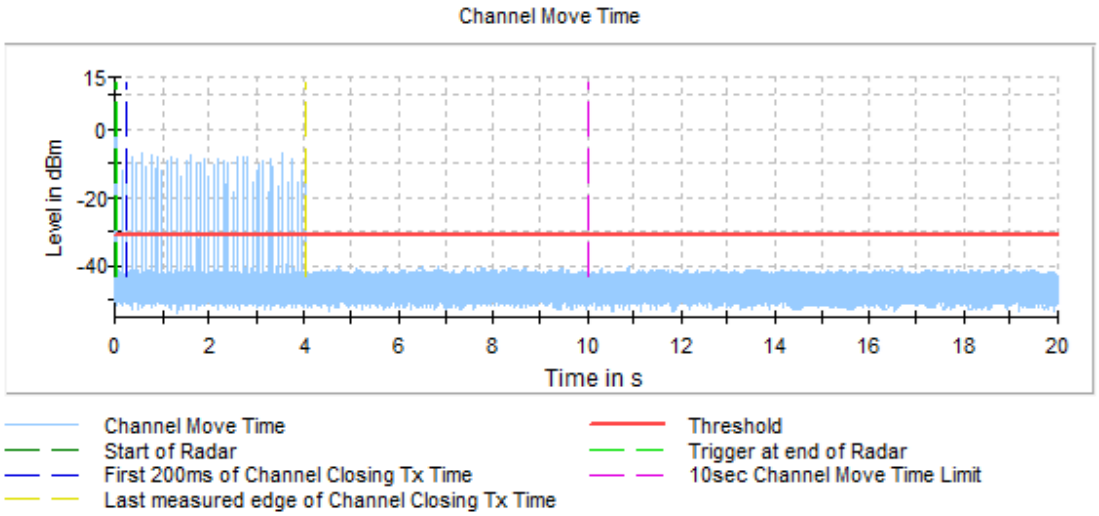
DUT Frequency (MHz)	Radar Type No.	CCTT Type of Value	CCTT No. of Pulses found	CCTT Tx Time (ms)
5290.000000	0	first 200 ms	7	1.132
5290.000000	0	remaining 10.0 second(s) period	120	35.520

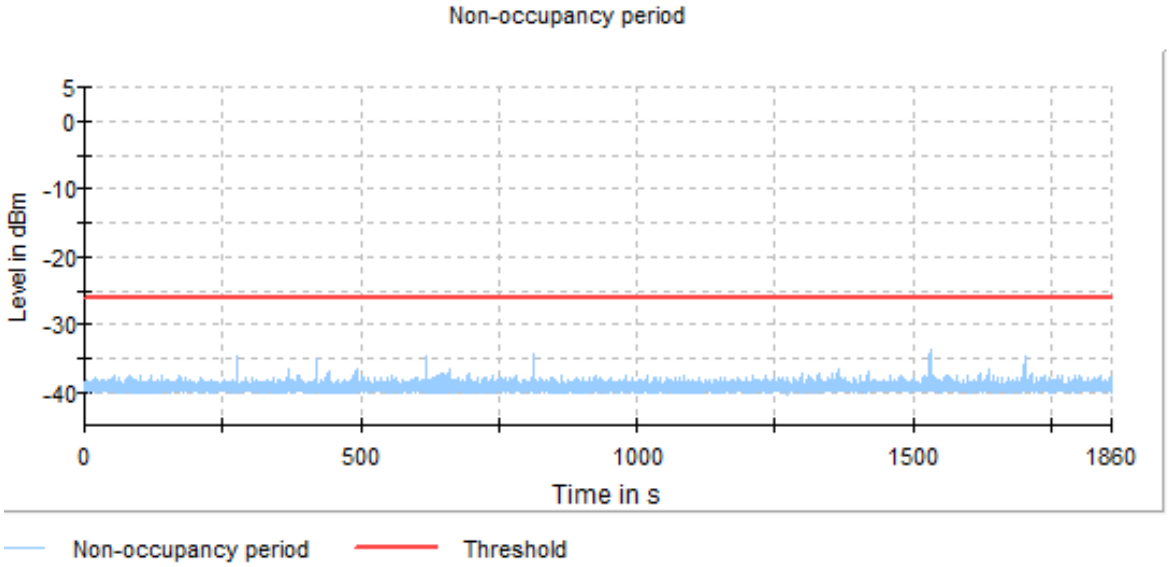
(continuation of the "Channel Closing Transmission Time Detailed Results" table from column 5 ...)

DUT Frequency (MHz)	CCTT Tx Time Limit (ms)	CCTT Result	CCTT Comment
5290.000000	200.000	PASS	See Note 1.
5290.000000	60.000	PASS	See Note 1.

Non-occupancy period Detailed Results

DUT Frequency (MHz)	Radar Type No.	NOP No. of Pulses found	NOP No. of Pulses Limit	NOP Tx Time (s)	NOP Tx Time Limit (s)	NOP Result
5290.000000	0	0	0	0.000	0.000	PASS


Channel Move Time
Level in dBm
15
0
-20
-40
0
2
4
6
8
10
12
14
16
18
20
Time in s
Channel Move Time
Start of Radar
First 200ms of Channel Closing Tx Time
Last measured edge of Channel Closing Tx Time
Threshold
Trigger at end of Radar
10sec Channel Move Time Limit


Non-occupancy period
Level in dBm
5
0
-10
-20
-30
-40
0
500
1000
1500
1860
Time in s
Non-occupancy period
Threshold

DFS In-Service Monitoring (5530 MHz; 80 MHz)

Measurement Summary

DUT Frequency (MHz)	Radar Type No.	Type of Measurement value	Overall Result
5530.000000	0	First of all Transmitt Test	---
5530.000000	0	Channel Move Time	PASS
5530.000000	0	Channel Closing Transmission Time	PASS
5530.000000	0	Non-occupancy period	PASS

Channel Move Time Detailed Results

DUT Frequency (MHz)	Radar Type No.	CMT Tx Time (s)	CMT Limit (s)	CMT Result	CMT Comment
5530.000000	0	4.018	10.000	PASS	Tx Time value is last trailing edge found within sweep. See Note 1.

Channel Closing Transmission Time Detailed Results

DUT Frequency (MHz)	Radar Type No.	CCTT Type of Value	CCTT No. of Pulses found	CCTT Tx Time (ms)
5530.000000	0	first 200 ms	6	1.232
5530.000000	0	remaining 10.0 second(s) period	107	27.880

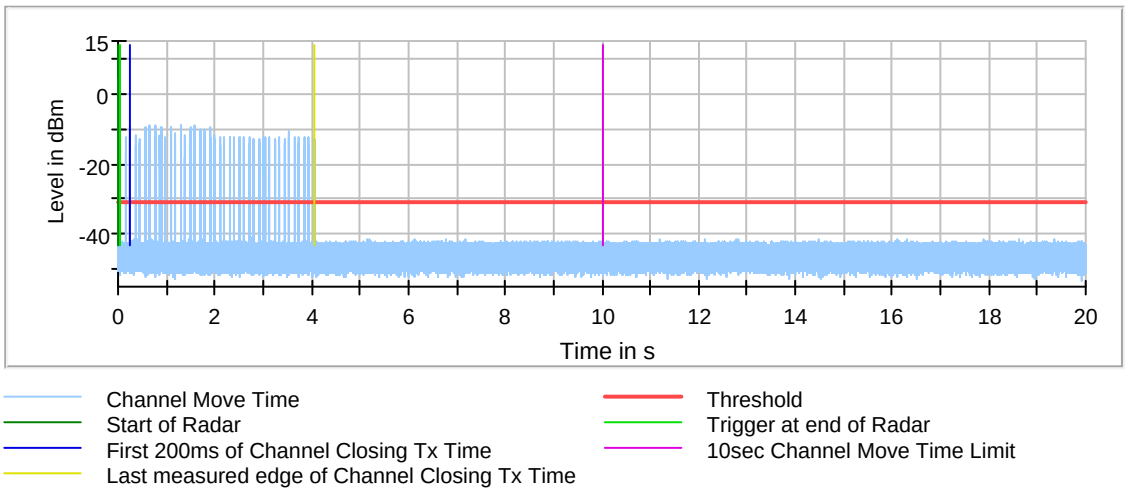
(continuation of the "Channel Closing Transmission Time Detailed Results" table from column 5 ...)

DUT Frequency (MHz)	CCTT Tx Time Limit (ms)	CCTT Result	CCTT Comment
5530.000000	200.000	PASS	See Note 1.
5530.000000	60.000	PASS	See Note 1.

Non-occupancy period Detailed Results

DUT Frequency (MHz)	Radar Type No.	NOP No. of Pulses found	NOP No. of Pulses Limit	NOP Tx Time (s)	NOP Tx Time Limit (s)	NOP Result
5530.000000	0	0	0	0.000	0.000	PASS

Channel Move Time



Non-occupancy period