

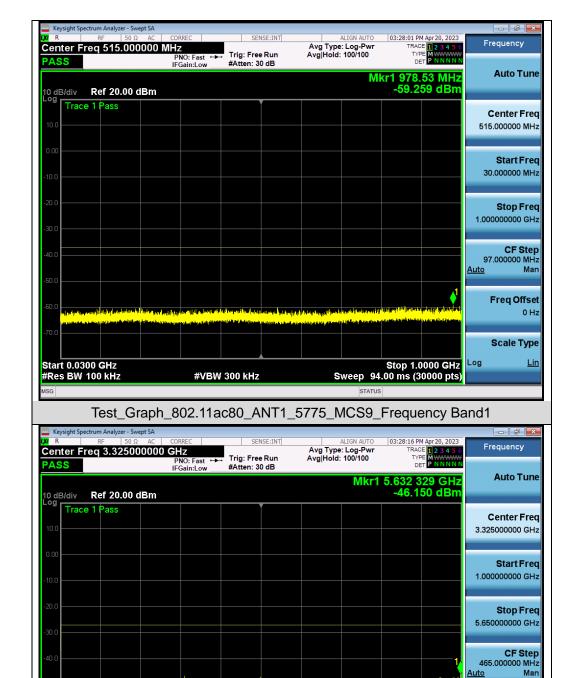
Freq Offset 0 Hz

Scale Type

Log

Stop 5.650 GHz Sweep 8.000 ms (30000 pts)



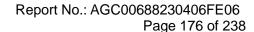


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Test\_Graph\_802.11ac80\_ANT1\_5775\_MCS9\_Frequency Band2

#VBW 3.0 MHz

Start 1.000 GHz #Res BW 1.0 MHz



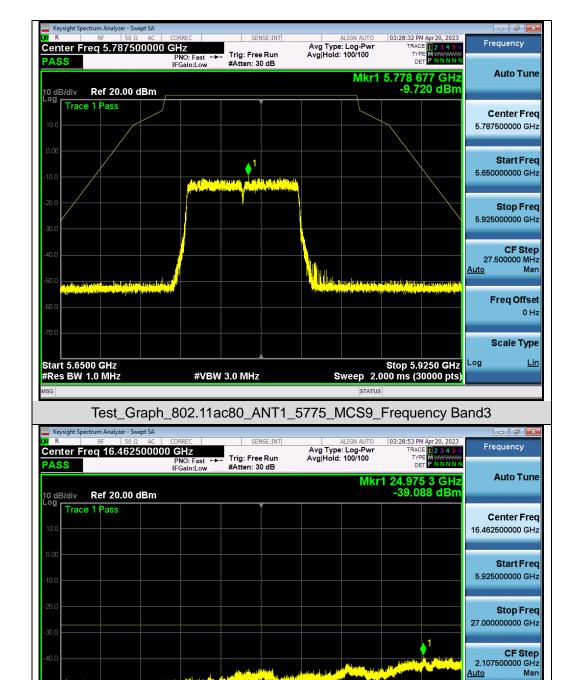
Freq Offset 0 Hz

Scale Type

Log

Stop 27.00 GHz Sweep 54.00 ms (30000 pts)



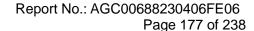


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Test\_Graph\_802.11ac80\_ANT1\_5775\_MCS9\_Frequency Band4

#VBW 3.0 MHz

Start 5.93 GHz #Res BW 1.0 MHz



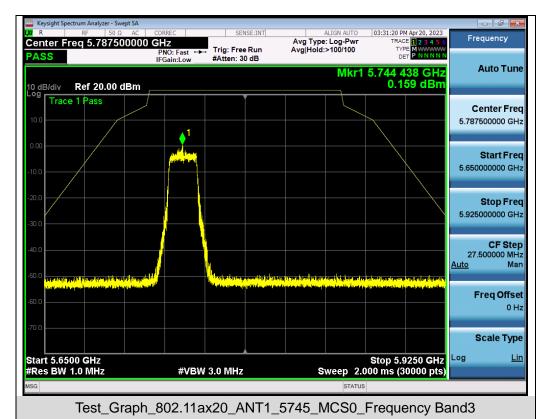








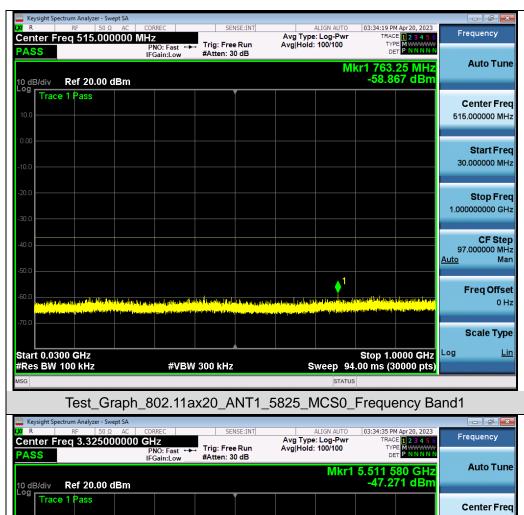


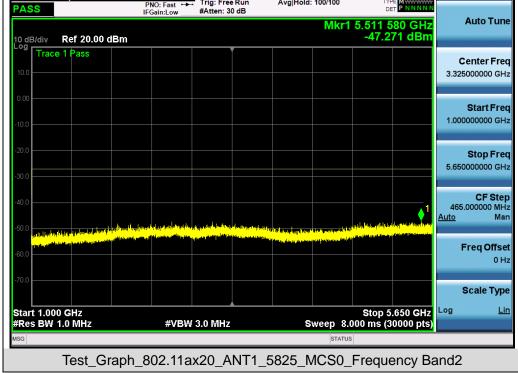


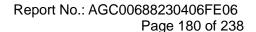












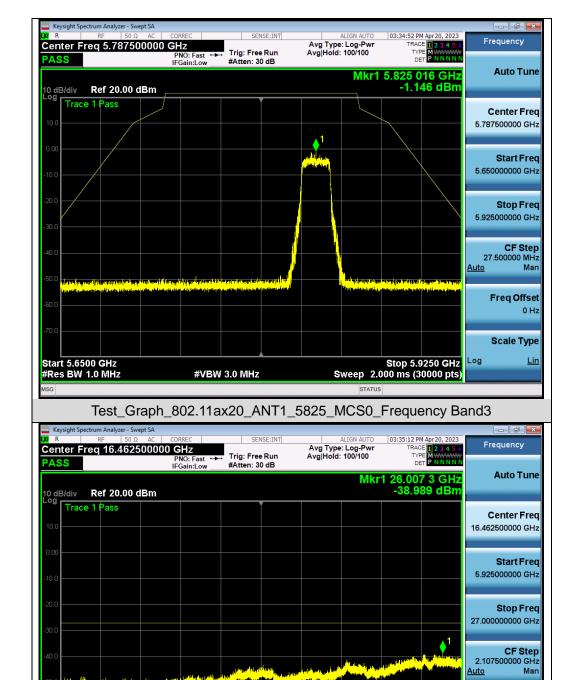
Freq Offset 0 Hz

Scale Type

Log

Stop 27.00 GHz Sweep 54.00 ms (30000 pts)



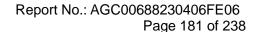


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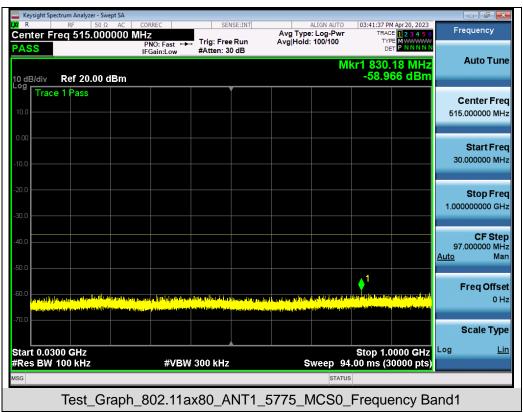
Test Graph 802.11ax20 ANT1 5825 MCS0 Frequency Band4

#VBW 3.0 MHz

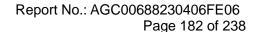
Start 5.93 GHz #Res BW 1.0 MHz











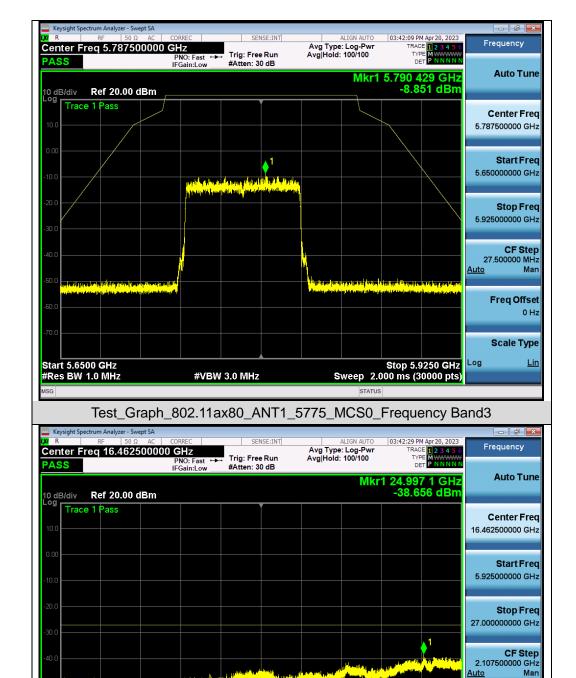
Freq Offset 0 Hz

Scale Type

Log

Stop 27.00 GHz Sweep 54.00 ms (30000 pts)



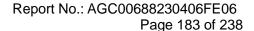


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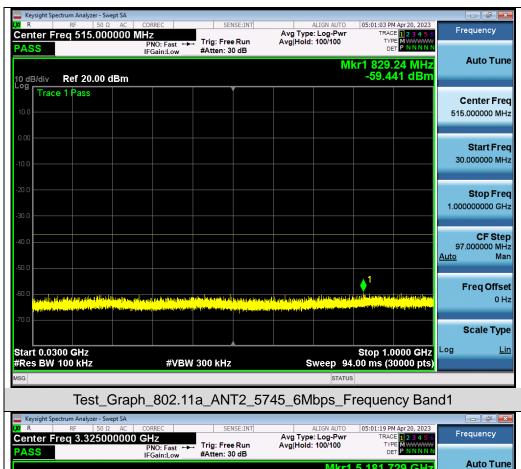
Test\_Graph\_802.11ax80\_ANT1\_5775\_MCS0\_Frequency Band4

#VBW 3.0 MHz

Start 5.93 GHz #Res BW 1.0 MHz









Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: http://www.agccert.com/



<u>Auto</u>

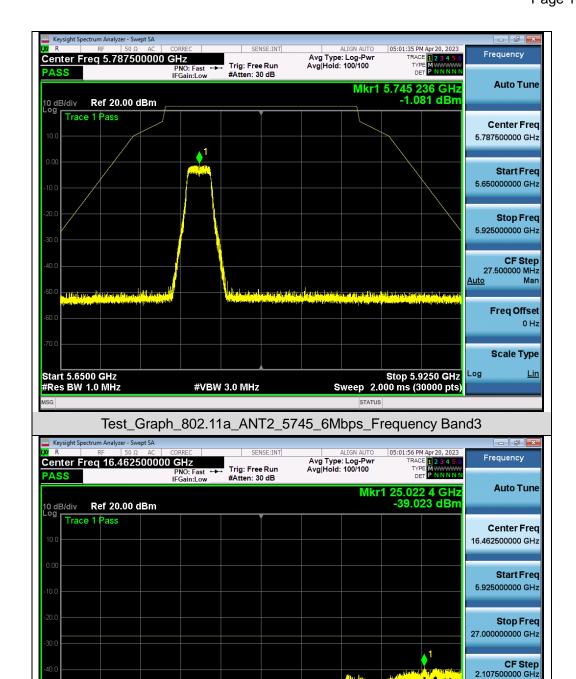
Log

Stop 27.00 GHz Sweep 54.00 ms (30000 pts) Man

Freq Offset 0 Hz

Scale Type



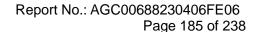


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Test Graph 802.11a ANT2 5745 6Mbps Frequency Band4

#VBW 3.0 MHz

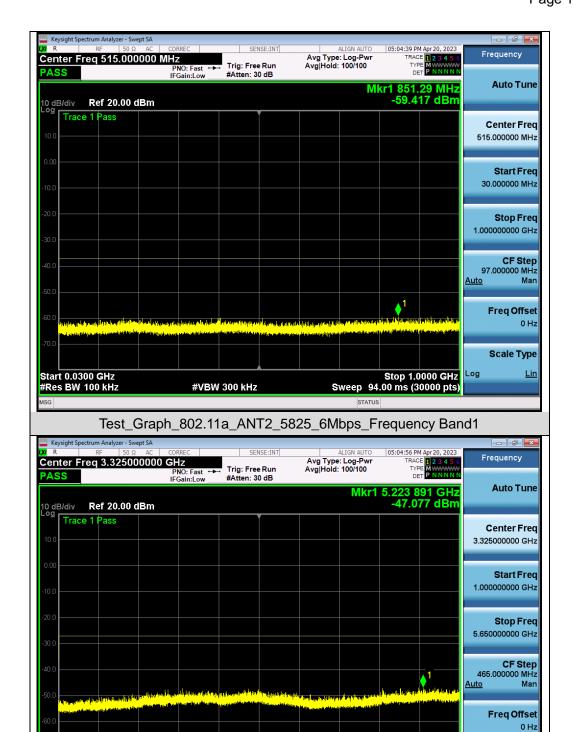
Start 5.93 GHz #Res BW 1.0 MHz



Scale Type

Stop 5.650 GHz Sweep 8.000 ms (30000 pts)





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Test Graph 802.11a ANT2 5825 6Mbps Frequency Band2

#VBW 3.0 MHz

Start 1.000 GHz #Res BW 1.0 MHz

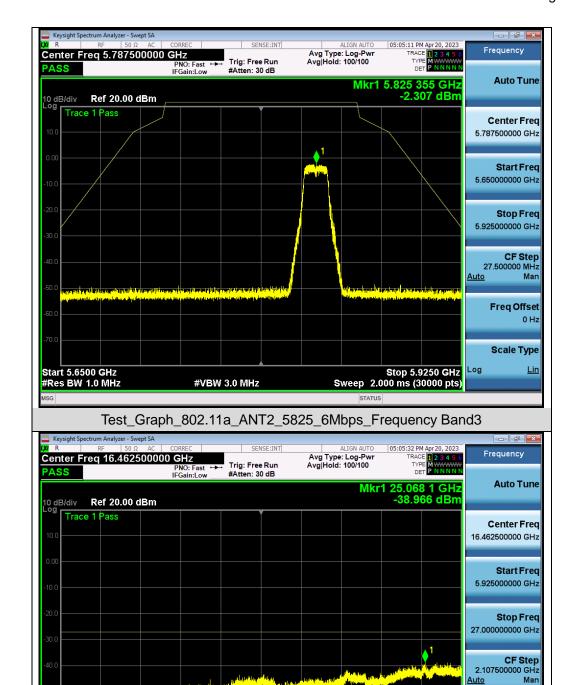


Freq Offset 0 Hz

Scale Type

Stop 27.00 GHz Sweep 54.00 ms (30000 pts)





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Test Graph 802.11a ANT2 5825 6Mbps Frequency Band4

#VBW 3.0 MHz

Start 5.93 GHz #Res BW 1.0 MHz

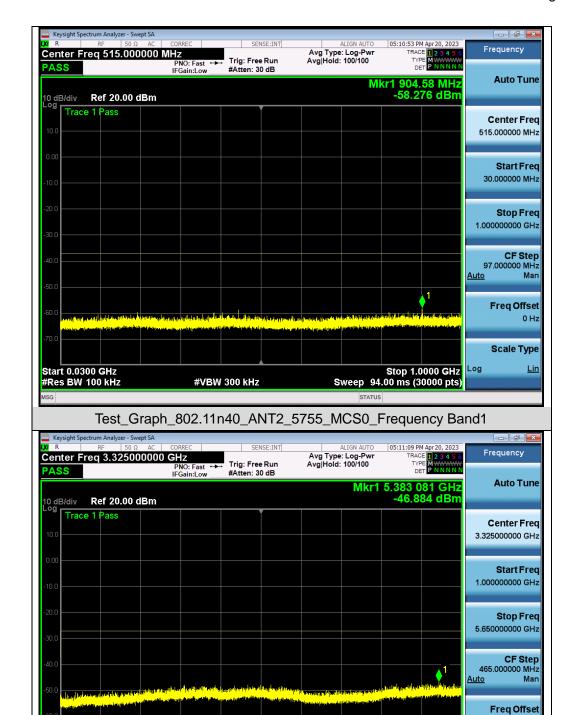


0 Hz

Scale Type

Stop 5.650 GHz Sweep 8.000 ms (30000 pts)



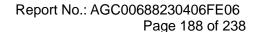


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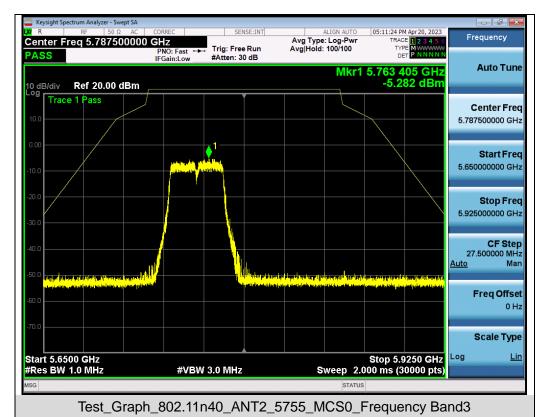
Test Graph 802.11n40 ANT2 5755 MCS0 Frequency Band2

#VBW 3.0 MHz

Start 1.000 GHz #Res BW 1.0 MHz











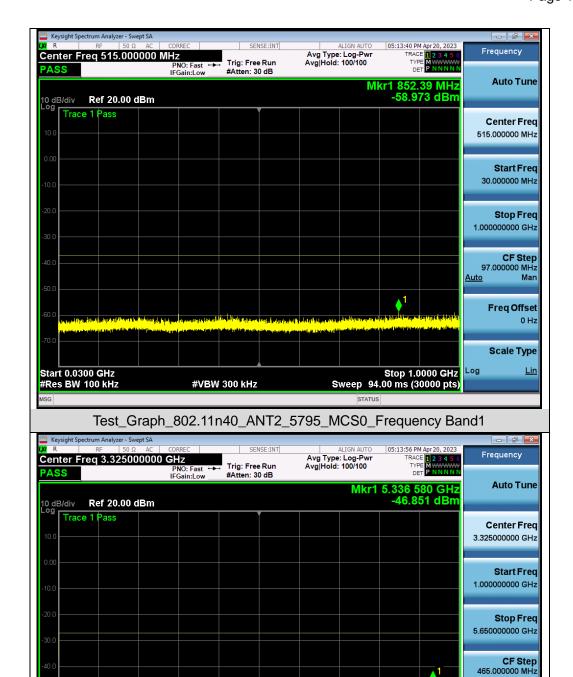
<u>Auto</u>

Stop 5.650 GHz Sweep 8.000 ms (30000 pts) Man

Freq Offset 0 Hz

Scale Type



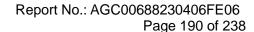


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Test Graph 802.11n40 ANT2 5795 MCS0 Frequency Band2

#VBW 3.0 MHz

Start 1.000 GHz #Res BW 1.0 MHz



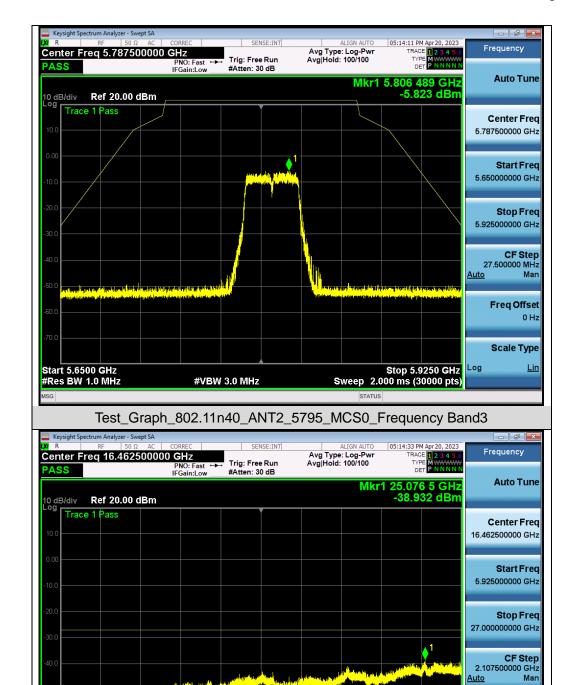
Freq Offset 0 Hz

Scale Type

Log

Stop 27.00 GHz Sweep 54.00 ms (30000 pts)





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Test Graph 802.11n40 ANT2 5795 MCS0 Frequency Band4

#VBW 3.0 MHz

Start 5.93 GHz #Res BW 1.0 MHz



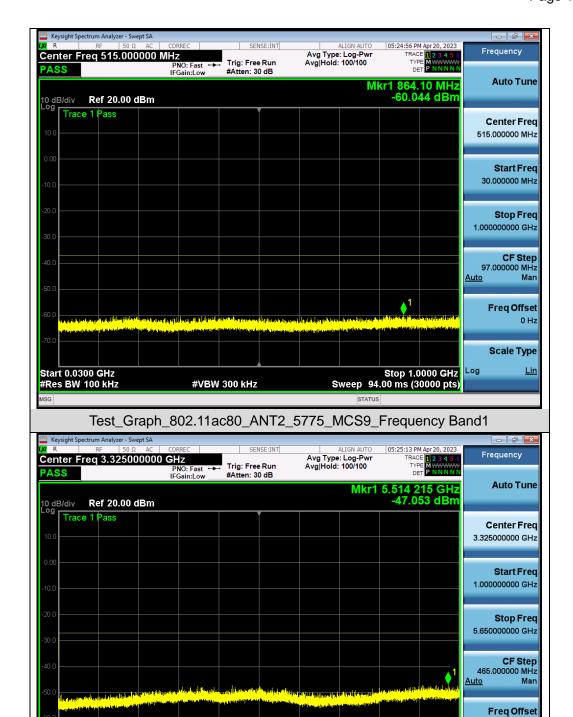
0 Hz

Scale Type

Log

Stop 5.650 GHz Sweep 8.000 ms (30000 pts)





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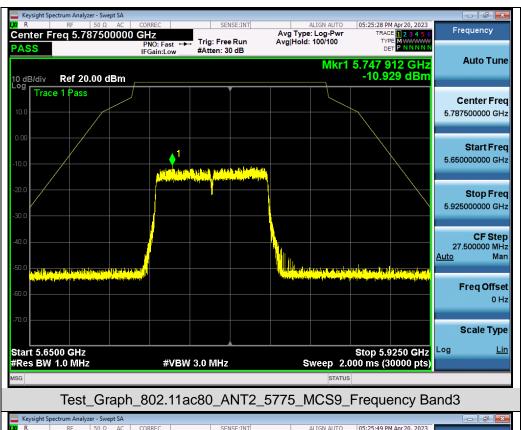
Test Graph 802.11ac80 ANT2 5775 MCS9 Frequency Band2

#VBW 3.0 MHz

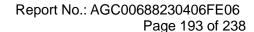
Start 1.000 GHz #Res BW 1.0 MHz











**CF Step** 465.000000 MHz

Freq Offset 0 Hz

Scale Type

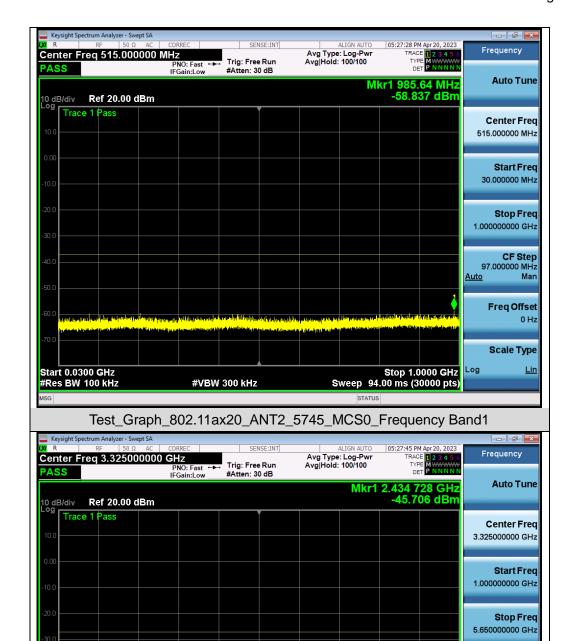
Man

<u>Auto</u>

Log

Stop 5.650 GHz Sweep 8.000 ms (30000 pts)





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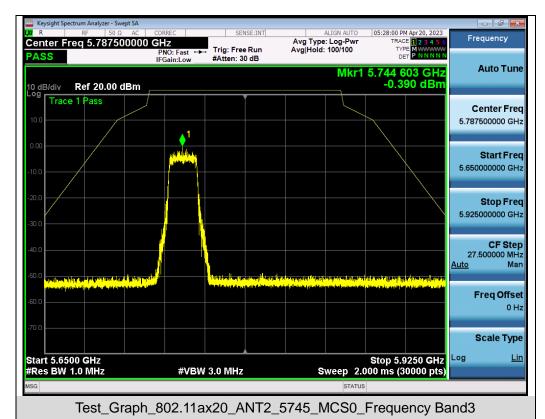
Test Graph 802.11ax20 ANT2 5745 MCS0 Frequency Band2

#VBW 3.0 MHz

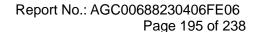
Start 1.000 GHz #Res BW 1.0 MHz











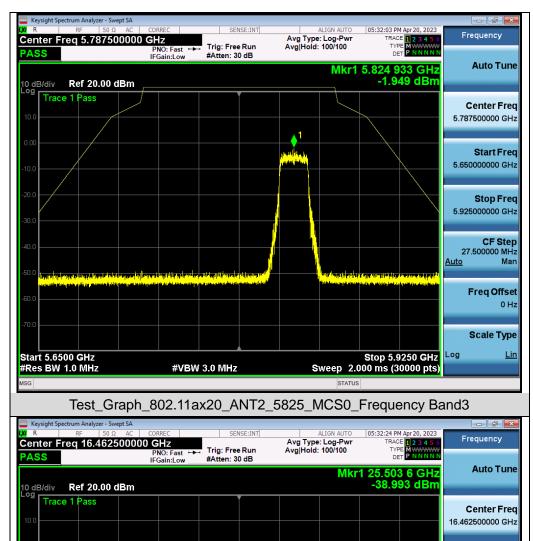




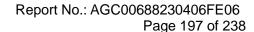








Start Freq 5.925000000 GHz Stop Freq 27.000000000 GHz **CF Step** 2.107500000 GHz <u>Auto</u> Man Freq Offset 0 Hz Scale Type Start 5.93 GHz #Res BW 1.0 MHz Stop 27.00 GHz Sweep 54.00 ms (30000 pts) Log #VBW 3.0 MHz Test Graph 802.11ax20 ANT2 5825 MCS0 Frequency Band4



<u>Auto</u>

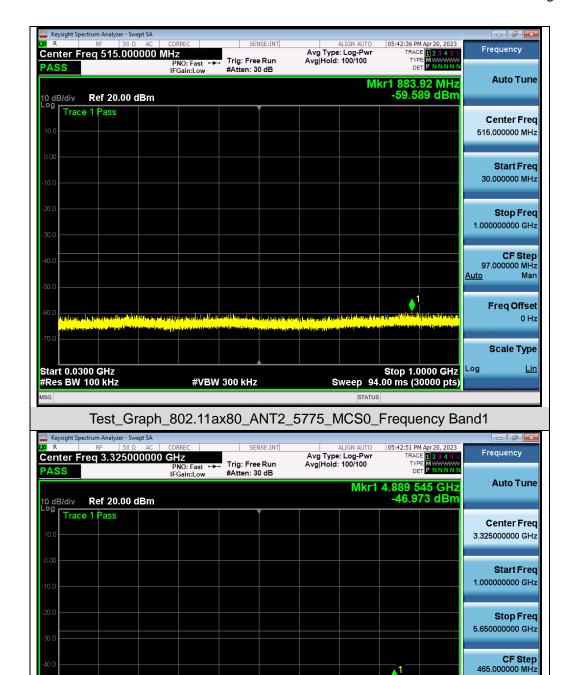
Log

Stop 5.650 GHz Sweep 8.000 ms (30000 pts) Man

Freq Offset 0 Hz

Scale Type





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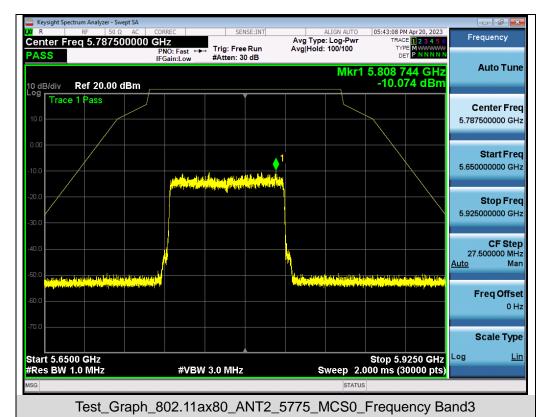
Test Graph 802.11ax80 ANT2 5775 MCS0 Frequency Band2

#VBW 3.0 MHz

Start 1.000 GHz #Res BW 1.0 MHz











## 10. RADIATED EMISSION

#### **10.1 LIMITS OF RADIATED EMISSION TEST**

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table:

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

#### NOTE:

- 1. The lower limit shall apply at the transition frequencies.
- 2. Emission level  $(dBuV/m) = 20 \log Emission level (uV/m)$ .
- 3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

	Applicable to	Limit			
Restricted	789033 D02 General UNII Test	Field stre	ength at 3m (dBuV/m)		
bands	Procedures New Rules v02r01	PK: 74	AV: 54		
	Applicable to	EIRP Limit (dBm/MHz)	Equivalent field Strength at 3m (dBuV/m)		
Out of the	FCC 15.407(b)(1)				
restricted bands	15.407(b)(2)	PK: -27	PK: 68.2		
	15.407(b)(3)				
	15.407(b)(4)	See Note 2			

Note 1: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

E = 
$$\frac{1000000 \sqrt{30 P}}{3}$$
 µV/m, where P is the eirp (Watts).

Note 2: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.



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## **10.2 MEASUREMENT PROCEDURE**

- The EUT was placed on the top of the turntable 0.8 or 1.5 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
- 2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
- 3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
- 4. For each suspected emission, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
- 5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
- 6. For emissions above 1GHz, use 1MHz RBW and 3MHz VBW for peak reading. Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
- 7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum values.
- 8. If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
- 9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
- 10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High Low scan is not required in this case.



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

Receiver Parameter	Setting
Start ~Stop Frequency	9KHz~150KHz/RB 200Hz for QP
Start ~Stop Frequency	150KHz~30MHz/RB 9KHz for QP
Start ~Stop Frequency	30MHz~1000MHz/RB 120KHz for QP

The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r04.Section G) Unwanted emissions measurement.

## (1) Procedure for Unwanted Emissions Measurements Below 1000MHz:

- RBW = 120 kHz
- VBW = 300 kHz
- Detector = Peak
- Trace mode = max hold

# (2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz:

- RBW = 1 MHz
- VBW ≥ 3 MHz
- Detector = Peak
- Sweep time = auto
- Trace mode = max hold

## (3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz:

- RBW = 1 MHz
- VBW = 10 Hz, when duty cycle is no less than 98 percent.
- VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

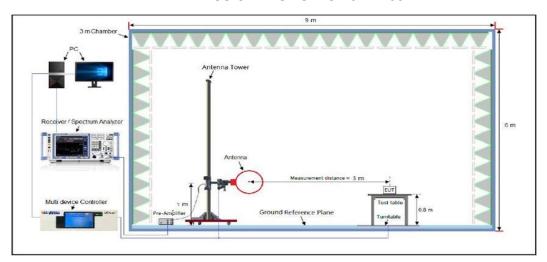
#### (4) Procedures for Average Unwanted Emissions Measurements Above 1000MHz:

- RBW = 1 MHz
- VBW = 3 MHz Detector = power averaging (rms), set span/(# of points in sweep) ≥ RBW/2.
- Averaging type = power averaging (RMS)
- The correction factor shall be offset is 10  $\log (1/x)$ , where x is the duty cycle.

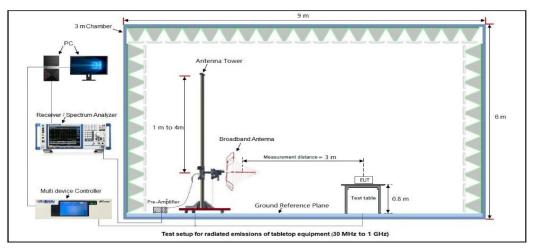


# 10.3 MEASUREMENT SETUP (BLOCK DIAGRAM OF CONFIGURATION)

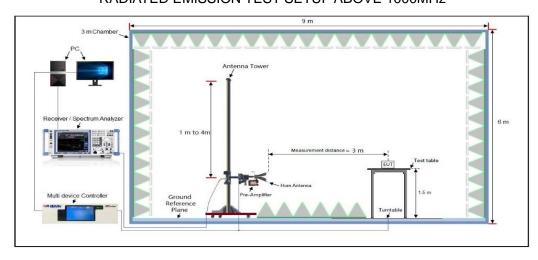
## RADIATED EMISSION TEST SETUP 9KHz-30MHz



## RADIATED EMISSION TEST SETUP 30MHz-1000MHz



# RADIATED EMISSION TEST SETUP ABOVE 1000MHz





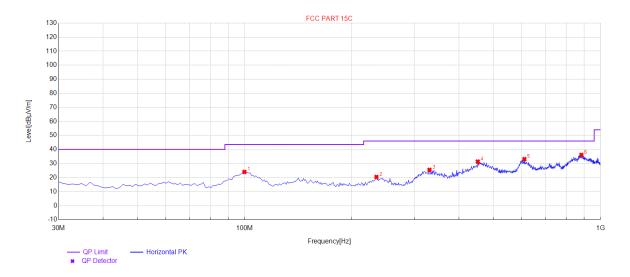
#### **10.4 MEASUREMENT RESULT**

## **Radiated Emission Below 30MHz**

The amplitude of spurious emissions from 9kHz to 30MHz which are attenuated more than 20 dB below the permissible value need not be reported.

## Radiated emission from 30MHz to 1000MHz

EUT	Wireless USB Adapter	Model Name	AX3010
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5180MHz	Antenna	Horizontal

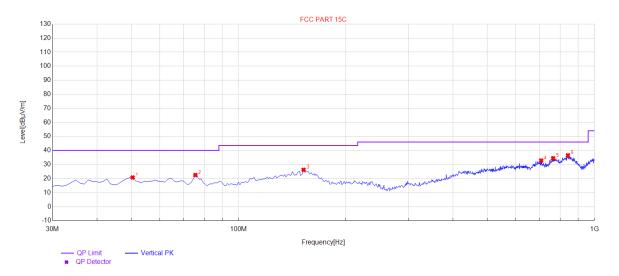


NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	99.84	24.00	21.38	43.50	19.50	100	170	Horizontal
2	234.67	20.43	16.62	46.00	25.57	100	180	Horizontal
3	330.7	25.51	21.07	46.00	20.49	100	70	Horizontal
4	451.95	31.40	26.39	46.00	14.60	100	330	Horizontal
5	611.03	33.12	28.31	46.00	12.88	100	100	Horizontal
6	883.6	36.14	32.99	46.00	9.86	100	350	Horizontal

**RESULT: PASS** 

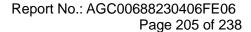


EUT	Wireless USB Adapter	Model Name	AX3010
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5180MHz	Antenna	Vertical



NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	50.37	20.77	13.38	40.00	19.23	100	220	Vertical
2	75.59	22.49	12.76	40.00	17.51	100	230	Vertical
3	152.22	26.24	21.12	43.50	17.26	100	220	Vertical
4	708.03	32.81	28.41	46.00	13.19	100	70	Vertical
5	765.26	34.49	30.62	46.00	11.51	100	170	Vertical
6	841.89	36.54	32.48	46.00	9.46	100	280	Vertical

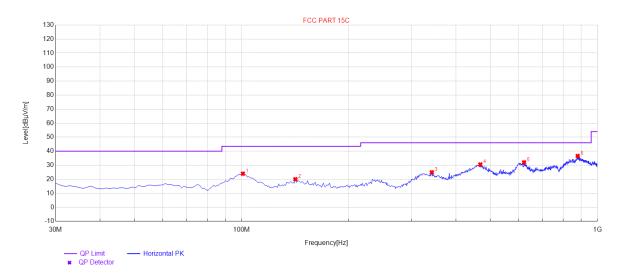
**RESULT: PASS** 





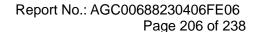
## Radiated emission from 30MHz to 1000MHz

EUT	Wireless USB Adapter	Model Name	AX3010
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5745MHz	Antenna	Horizontal



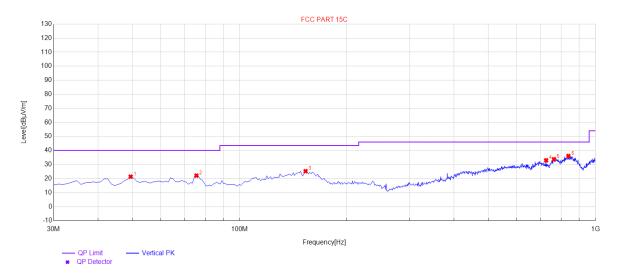
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	100.81	23.97	21.07	43.50	19.53	100	110	Horizontal
2	141.55	20.02	14.80	43.50	23.48	100	310	Horizontal
3	342.34	24.95	20.67	46.00	21.05	100	10	Horizontal
4	468.44	30.57	26.83	46.00	15.43	100	140	Horizontal
5	621.7	32.03	27.79	46.00	13.97	100	280	Horizontal
6	879.72	36.60	33.24	46.00	9.40	100	160	Horizontal

**RESULT: PASS** 





EUT	Wireless USB Adapter	Model Name	AX3010
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5745MHz	Antenna	Vertical



NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	49.4	21.37	13.23	40.00	18.63	100	180	Vertical
2	75.59	22.11	12.76	40.00	17.89	100	320	Vertical
3	153.19	25.27	21.23	43.50	18.23	100	350	Vertical
4	726.46	33.01	27.36	46.00	12.99	100	10	Vertical
5	764.29	33.78	30.59	46.00	12.22	100	230	Vertical
6	838.98	36.10	32.48	46.00	9.90	100	0	Vertical

# **RESULT: PASS**

**Note:** All test channels had been tested. The 802.11a20 at 5180MHz and 5745MHz are the worst case and recorded in the test report.

Factor = Antenna Factor + Cable loss - Amplifier gain, Margin= Limit-Level.

The "Factor" value can be calculated automatically by software of measurement system.



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#### Radiated emission above 1GHz

EUT	Wireless USB Adapter	Model Name	AX3010
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5180MHz	Antenna	Horizontal/Vertical

# RADIATED EMISSION ABOVE 1GHZ-Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	
10360.042	47.85	9.14	56.99	68.20	-11.21	peak
15540.063	41.38	10.22	51.60	74.00	-22.40	peak
15540.063	32.55	10.22	42.77	54.00	-11.23	AVG
Remark:						
Factor = Anten	na Factor + Cabl	le Loss – Pre-ar	mplifier.			

# RADIATED EMISSION ABOVE 1GHZ-Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	
10360.042	48.96	9.14	58.10	68.20	-10.10	peak
15540.063	42.02	10.22	52.24	74.00	-21.76	peak
15540.063	31.45	10.22	41.67	54.00	-12.33	AVG
Remark:						
Factor = Anter	nna Factor + Cabl	e Loss – Pre-	amplifier.			



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EUT	Wireless USB Adapter	Model Name	AX3010
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5200MHz	Antenna	Horizontal/Vertical

# RADIATED EMISSION ABOVE 1GHZ-Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
10400.042	46.34	9.14	55.48	68.20	-12.72	peak
15600.063	41.20	10.22	51.42	74.00	-22.58	peak
15600.063	33.41	10.22	43.63	54.00	-10.37	AVG
Remark:						
Factor = Anten	na Factor + Cabl	le Loss – Pre-ai	mplifier.			

# RADIATED EMISSION ABOVE 1GHZ-Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	
10400.042	47.15	9.14	56.29	68.20	-11.91	peak
15600.063	41.26	10.22	51.48	74.00	-22.52	peak
15600.063	31.87	10.22	42.09	54.00	-11.91	AVG
Remark:						
Factor = Anter	na Factor + Cabl	e Loss – Pre-a	mplifier.			
					•	



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EUT	Wireless USB Adapter	Model Name	AX3010
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5240MHz	Antenna	Horizontal/Vertical

## RADIATED EMISSION ABOVE 1GHZ-Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)		
10480.042	47.74	9.27	57.01	68.20	-11.19	peak	
15720.063	41.18	10.38	51.56	74.00	-22.44	peak	
15720.063	32.14	10.38	42.52	54.00	-11.48	AVG	
Remark:	•	1				•	
Factor = Antenna Factor + Cable Loss – Pre-amplifier.							

## RADIATED EMISSION ABOVE 1GHZ-Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
10480.042	46.34	9.27	55.61	68.20	-12.59	peak
15720.063	42.15	10.38	52.53	74.00	-21.47	peak
15720.063	33.51	10.38	43.89	54.00	-10.11	AVG
Remark:						
Factor = Anten	na Factor + Cabl	e Loss – Pre-a	mplifier.			



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EUT	Wireless USB Adapter	Model Name	AX3010
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5745MHz	Antenna	Horizontal/Vertical

## RADIATED EMISSION ABOVE 1GHZ-Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type	
11490.042	48.63	9.42	58.05	74.00	-15.95	peak	
11490.042	32.77	9.42	42.19	54.00	-11.81	AVG	
17253.063	36.15	10.51	46.66	68.20	-21.54	peak	
Remark:	Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.							

## RADIATED EMISSION ABOVE 1GHZ-Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type	
11490.042	49.14	9.42	58.56	74.00	-15.44	peak	
11490.042	34.20	9.42	43.62	54.00	-10.38	AVG	
17253.063	38.51	10.51	49.02	68.20	-19.18	peak	
Remark:	Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.							



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EUT	Wireless USB Adapter	Model Name	AX3010
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5785MHz	Antenna	Horizontal/Vertical

#### RADIATED EMISSION ABOVE 1GHZ-Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type	
11570.042	47.51	9.42	56.93	74.00	-17.07	peak	
11570.042	34.19	9.42	43.61	54.00	-10.39	AVG	
17355.063	34.51	10.51	45.02	68.20	-23.18	peak	
Remark:	Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.							

## RADIATED EMISSION ABOVE 1GHZ-Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
11570.042	48.25	9.42	57.67	74.00	-16.33	peak
11570.042	33.51	9.42	42.93	54.00	-11.07	AVG
17355.063	40.06	10.51	50.57	68.20	-17.63	peak
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						



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EUT	Wireless USB Adapter	Model Name	AX3010
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5825MHz	Antenna	Horizontal/Vertical

#### RADIATED EMISSION ABOVE 1GHZ-Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type	
11650.042	48.52	9.62	58.14	74.00	-15.86	peak	
11650.042	32.33	9.62	41.95	54.00	-12.05	AVG	
17475.063	38.04	10.75	48.79	68.20	-19.41	peak	
Remark:	Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.							

#### RADIATED EMISSION ABOVE 1GHZ-Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
11650.042	49.01	9.62	58.63	74.00	-15.37	peak
11650.042	31.52	9.62	41.14	54.00	-12.86	AVG
17475.063	38.11	10.75	48.86	68.20	-19.34	peak
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

#### Note:

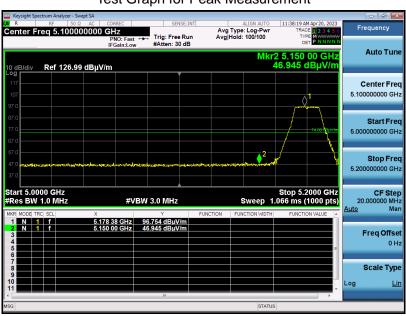
- 1. All test channels had been tested. The 802.11a20\_ANT 1 is the worst case and recorded in the test report.
- 2. Other frequencies radiation emission from 1GHz to 40GHz at least have 20dB margin and not recorded in the test report.
- 3. Factor = Antenna Factor + Cable loss Amplifier gain, Margin= Limit-Level.
- 4. The "Factor" value can be calculated automatically by software of measurement system.



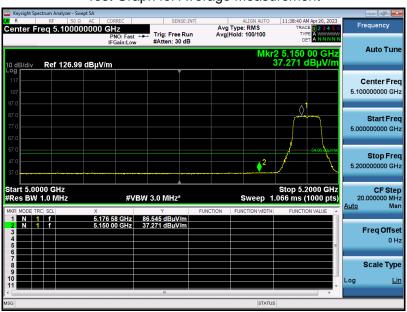
# Test result for band edge emission at restricted bands 5.150GHz~5.250GHz-ANT 1

EUT	Wireless USB Adapter	Model Name	AX3010
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5180MHz	Antenna	Horizontal

## Test Graph for Peak Measurement



Test Graph for Average Measurement



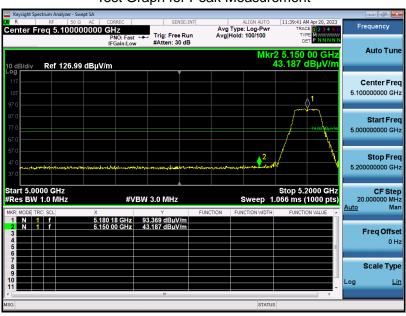
#### **RESULT: PASS**



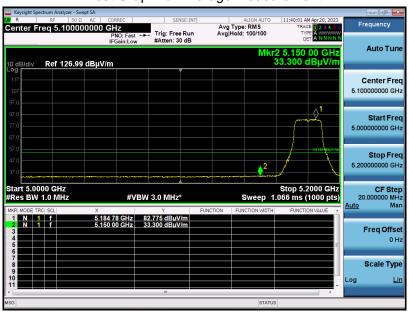


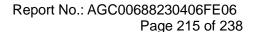
EUT	Wireless USB Adapter	Model Name	AX3010
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5180MHz	Antenna	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement

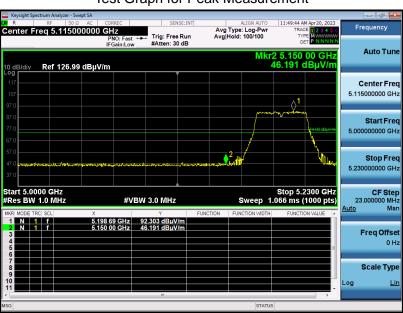




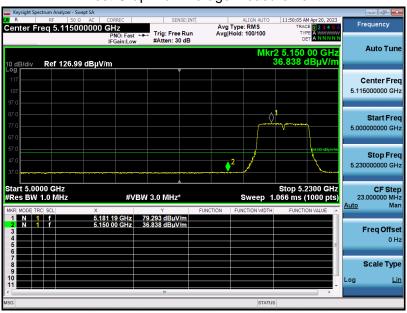


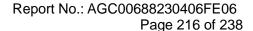
EUT	Wireless USB Adapter	Model Name	AX3010
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n40 5190MHz	Antenna	Horizontal

Test Graph for Peak Measurement



Test Graph for Average Measurement





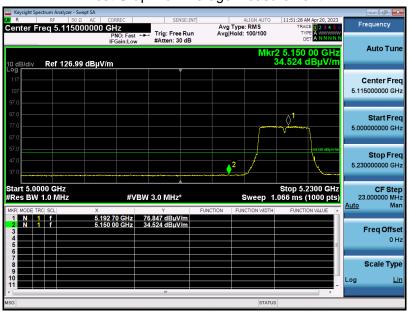


EUT	Wireless USB Adapter	Model Name	AX3010
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n40 5190MHz	Antenna	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement





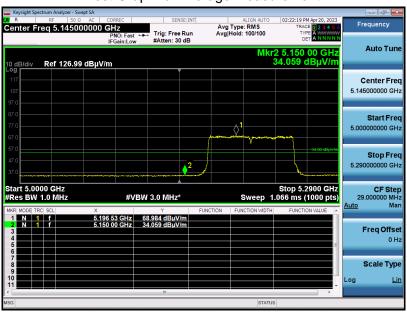


EUT	Wireless USB Adapter	Model Name	AX3010
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ac80 5210MHz	Antenna	Horizontal

Test Graph for Peak Measurement



Test Graph for Average Measurement

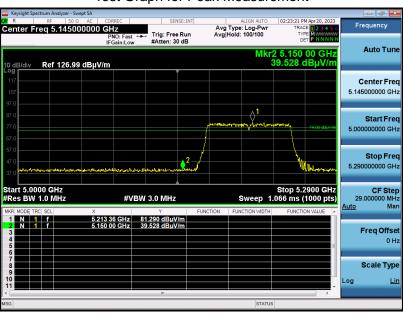




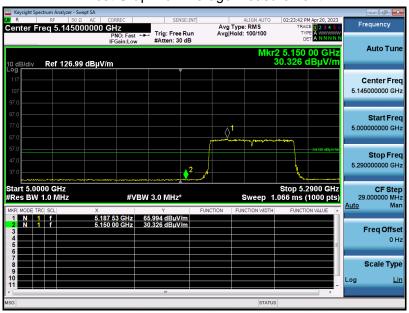


EUT	Wireless USB Adapter	Model Name	AX3010
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ac80 5210MHz	Antenna	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement





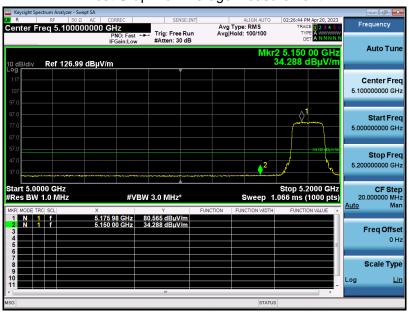


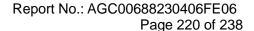
EUT	Wireless USB Adapter	Model Name	AX3010
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ax20 5180MHz	Antenna	Horizontal

Test Graph for Peak Measurement



Test Graph for Average Measurement





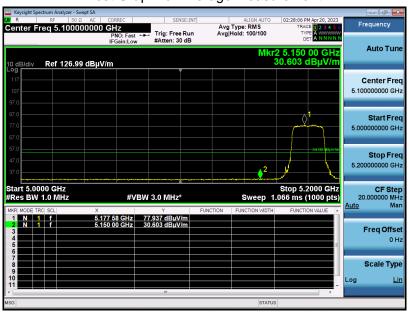


EUT	Wireless USB Adapter	Model Name	AX3010
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ax20 5180MHz	Antenna	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement





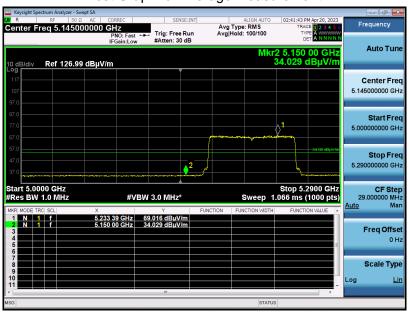


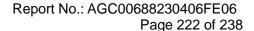
EUT	Wireless USB Adapter	Model Name	AX3010
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ax80 5210MHz	Antenna	Horizontal

Test Graph for Peak Measurement



Test Graph for Average Measurement

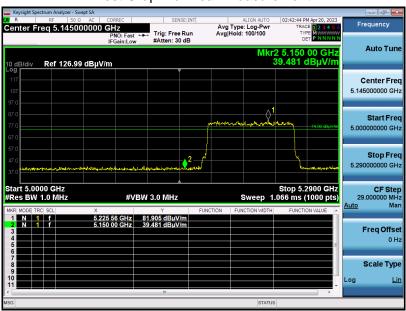




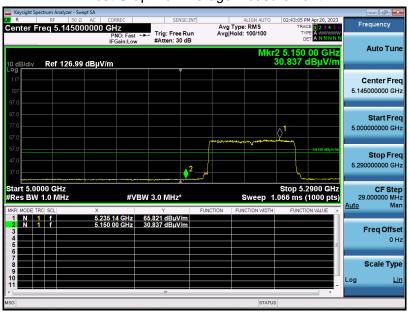


EUT	Wireless USB Adapter	Model Name	AX3010
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ax80 5210MHz	Antenna	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement

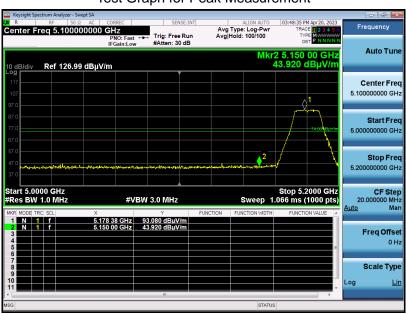




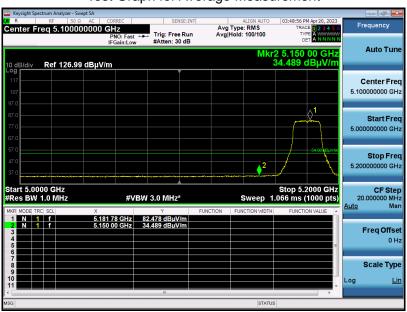
# Test result for band edge emission at restricted bands 5.150GHz~5.250GHz-ANT 2

EUT	Wireless USB Adapter	Model Name	AX3010
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5180MHz	Antenna	Horizontal

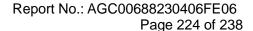
## Test Graph for Peak Measurement



Test Graph for Average Measurement



#### **RESULT: PASS**



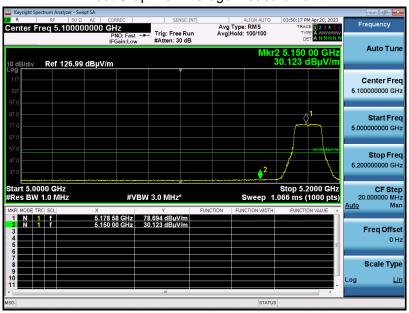


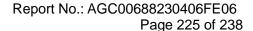
EUT	Wireless USB Adapter	Model Name	AX3010
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5180MHz	Antenna	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement





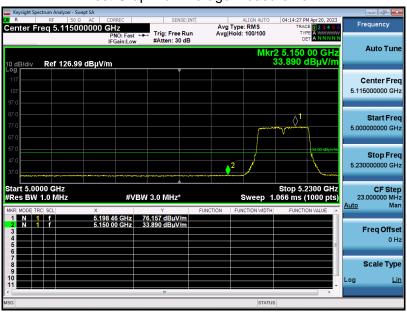


EUT	Wireless USB Adapter	Model Name	AX3010
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n40 5190MHz	Antenna	Horizontal

Test Graph for Peak Measurement



Test Graph for Average Measurement







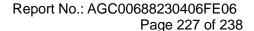
EUT	Wireless USB Adapter	Model Name	AX3010
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n40 5190MHz	Antenna	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement





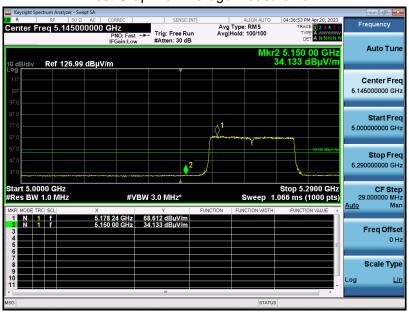


EUT	Wireless USB Adapter	Model Name	AX3010
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ac80 5210MHz	Antenna	Horizontal

Test Graph for Peak Measurement



Test Graph for Average Measurement





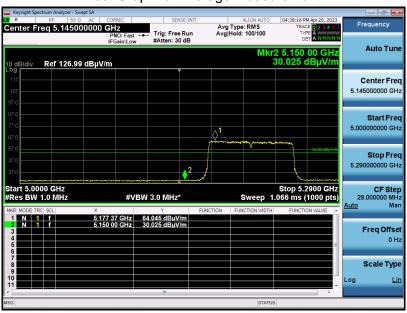


EUT	Wireless USB Adapter	Model Name	AX3010
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ac80 5210MHz	Antenna	Vertical

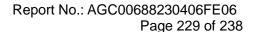
# Test Graph for Peak Measurement



Test Graph for Average Measurement



**RESULT: PASS** 



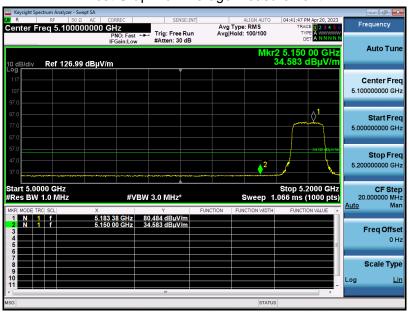


EUT	Wireless USB Adapter	Model Name	AX3010
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ax20 5180MHz	Antenna	Horizontal

Test Graph for Peak Measurement



Test Graph for Average Measurement

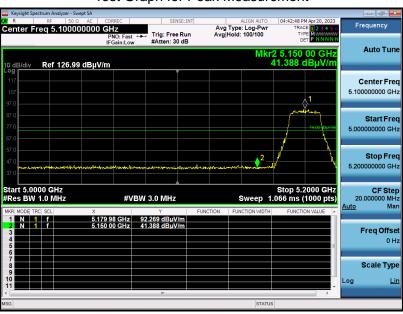




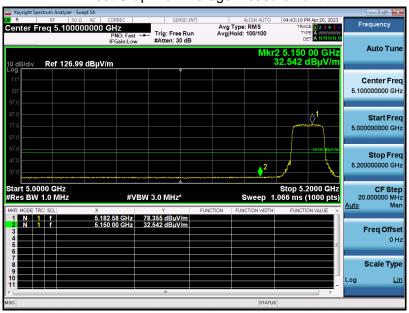


EUT	Wireless USB Adapter	Model Name	AX3010
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ax20 5180MHz	Antenna	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement





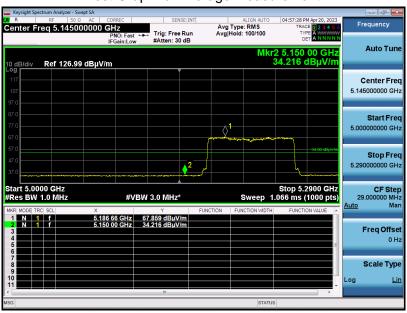


EUT	Wireless USB Adapter	Model Name	AX3010
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ax80 5210MHz	Antenna	Horizontal

Test Graph for Peak Measurement



Test Graph for Average Measurement







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Temperature	25°C	Relative Humidity	60%
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Test Graph for Peak Measurement



Test Graph for Average Measurement

