

























5.7. Frequency Stability Measurement

5.7.1.Test Limit

Fundamental emissions must be contained within the frequency bands specified in this section during all conditions of operation.

5.7.2.Test Procedure Used

Frequency Stability Under Temperature Variations:

The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to highest. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C decreased per stage until the lowest temperature reached.

Frequency Stability Under Voltage Variations:

Set chamber temperature to 20°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.

Reduce the input voltage to specify extreme voltage variation (±15%) and endpoint, record the maximum frequency change.

5.7.3.Test Setup





5.7.4.Test Result

Test Site	WZ-TR3	Test Engineer	Liz Yuan
Test Date	2021/08/09	Test Mode	5180MHz (Carrier Mode)

Voltage Ratio	Voltage	Temperature	Frequency Tolerance (ppm)					
(%)	(V _{AC})	(°C)	0 minutes	2 minutes	5 minutes	10 minutes		
		- 30	-13.69	-13.26	-13.13	-13.41		
		- 20	-13.52	-13.19	-13.16	-13.33		
		- 10	-13.46	-13.16	-13.14	-13.40		
	120	0	-13.43	-13.12	-13.16	-13.22		
100%		+ 10	-13.40	-13.19	-13.23	-13.21		
		+ 20 (Ref)	-13.37	-13.19	-13.23	-13.22		
		+ 30	-13.36	-13.15	-12.98	-13.22		
		+ 40	-13.34	-13.13	-13.67	-13.21		
		+ 50	-13.31	-13.12	-13.60	-13.19		
115%	138	+ 20	-13.28	-13.15	-13.56	-13.21		
85%	102	+ 20	-13.32	-13.13	-13.68	-13.20		

Note: Frequency Tolerance (ppm) = {[Measured Frequency (MHz) - Declared Frequency (MHz)] / Declared Frequency (MHz)} $*10^{6}$.



5.8. Radiated Spurious Emission Measurement

5.8.1.Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47

CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15.209 Limit						
Frequency	Field Strength	Measured Distance				
(IVIH2)	(μν/m)	(m)				
0.009 - 0.490	2400/F (kHz)	300				
0.490 - 1.705	24000/F (kHz)	30				
1.705 - 30	30	30				
30 - 88	100	3				
88 - 216	150	3				
216 - 960	200	3				
Above 960	500	3				

5.8.2.Test Procedure Used

- ANSI C63.10 Section 6.3 (General Requirements)
- ANSI C63.10 Section 6.4 (Standard test method below 30MHz)
- ANSI C63.10 Section 6.5 (Standard test method above 30MHz to 1GHz)
- ANSI C63.10 Section 6.6 (Standard test method above 1GHz)

5.8.3.Test Setting

Table 1 - RBW as a function of frequency

Frequency	RBW		
9 ~ 150 kHz	200 ~ 300 Hz		
0.15 ~ 30 MHz	9 ~ 10 kHz		
30 ~ 1000 MHz	100 ~ 120 kHz		
> 1000 MHz	1 MHz		



Quasi-Peak Measurements below 1GHz

- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. Span was set greater than 1MHz
- 3. RBW = 120kHz
- 4. Detector = CISPR quasi-peak
- 5. Sweep time = auto couple
- 6. Trace was allowed to stabilize

Peak Measurements above 1GHz

- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = 1MHz
- 3. VBW = 3MHz
- 4. Detector = peak
- 5. Sweep time = auto couple
- 6. Trace mode = max hold
- 7. Trace was allowed to stabilize

Average Measurements above 1GHz (Method VB)

- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = 1MHz
- 3. VBW, If the EUT is configured to transmit with duty cycle \ge 98%, set VBW = 10 Hz.

If the EUT duty cycle is < 98%, set VBW \geq 1/T. T is the minimum transmission duration.

- 4. Detector = Peak
- 5. Sweep time = auto
- 6. Trace mode = max hold
- 7. Trace was allowed to stabilize



5.8.4.Test Setup







5.8.5.Test Result

Test Site	WZ-AC1	Test Engineer	Hyde Yu				
Test Mode	802.11a - SISO Ant 0	Test Date	2021/08/07				
Test Channel	52						
Remark	1. Average measurement was not p	erformed if peak level lov	wer than average				
	limit.						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7468.5	38.3	8.5	46.8	74.0	-27.2	Peak	Horizontal
	8327.0	38.2	8.8	47.0	74.0	-27.0	Peak	Horizontal
*	8769.0	36.5	10.5	47.0	68.2	-21.2	Peak	Horizontal
*	10163.0	37.3	12.8	50.1	68.2	-18.1	Peak	Horizontal
	7502.5	38.4	8.7	47.1	74.0	-26.9	Peak	Vertical
	8259.0	39.4	9.0	48.4	74.0	-25.6	Peak	Vertical
*	8820.0	37.3	10.5	47.8	68.2	-20.4	Peak	Vertical
*	9942.0	37.1	12.5	49.6	68.2	-18.6	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu					
Test Mode	802.11ac-VHT20 - SISO Ant 0	Test Date	2021/08/07					
Test Channel	52							
Remark	1. Average measurement was not p	performed if peak level low	wer than average					
	limit.							
	2. Other frequency was 20dB below	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.							

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7553.5	38.3	8.5	46.8	74.0	-27.2	Peak	Horizontal
	8267.5	37.8	9.0	46.8	74.0	-27.2	Peak	Horizontal
*	8922.0	38.3	10.6	48.9	68.2	-19.3	Peak	Horizontal
*	9967.5	37.6	12.5	50.1	68.2	-18.1	Peak	Horizontal
	7468.5	36.9	8.5	45.4	74.0	-28.6	Peak	Vertical
	8225.0	37.9	9.1	47.0	74.0	-27.0	Peak	Vertical
*	8879.5	38.5	10.6	49.1	68.2	-19.1	Peak	Vertical
*	10180.0	37.7	12.9	50.6	68.2	-17.6	Peak	Vertical

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11ac-VHT40 - SISO Ant 0	Test Date	2021/08/07
Test Channel	54		
Remark	1. Average measurement was not p	performed if peak level low	wer than average
	limit.		
	2. Other frequency was 20dB below	v limit line within 1-18GH	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7494.0	37.9	8.7	46.6	74.0	-27.4	Peak	Horizontal
	8276.0	36.3	9.0	45.3	74.0	-28.7	Peak	Horizontal
*	8777.5	35.2	10.5	45.7	68.2	-22.5	Peak	Horizontal
*	9993.0	36.9	12.6	49.5	68.2	-18.7	Peak	Horizontal
	7502.5	38.2	8.7	46.9	74.0	-27.1	Peak	Vertical
	8250.5	37.6	8.9	46.5	74.0	-27.5	Peak	Vertical
*	8794.5	36.7	10.4	47.1	68.2	-21.1	Peak	Vertical
*	9772.0	35.1	12.6	47.7	68.2	-20.5	Peak	Vertical

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu					
Test Mode	802.11ac-VHT80 - SISO Ant 0	Test Date	2021/08/07					
Test Channel	58							
Remark	1. Average measurement was not p	performed if peak level lov	wer than average					
	limit.							
	2. Other frequency was 20dB below	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.							

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7562.0	38.5	8.5	47.0	74.0	-27.0	Peak	Horizontal
	8216.5	38.0	9.1	47.1	74.0	-26.9	Peak	Horizontal
*	8930.5	38.5	10.6	49.1	68.2	-19.1	Peak	Horizontal
*	9627.5	37.1	12.2	49.3	68.2	-18.9	Peak	Horizontal
	7477.0	37.9	8.6	46.5	74.0	-27.5	Peak	Vertical
	8318.5	38.3	8.9	47.2	74.0	-26.8	Peak	Vertical
*	8709.5	36.8	10.3	47.1	68.2	-21.1	Peak	Vertical
*	10069.5	36.4	12.7	49.1	68.2	-19.1	Peak	Vertical

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11a - SISO Ant 1	Test Date	2021/08/07
Test Channel	36		
Remark	1. Average measurement was not p	performed if peak level low	wer than average
	limit.		
	2. Other frequency was 20dB below	/ limit line within 1-18GHz	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7536.5	37.1	8.4	45.5	74.0	-28.5	Peak	Horizontal
	8310.0	38.3	8.9	47.2	74.0	-26.8	Peak	Horizontal
*	8939.0	38.8	10.5	49.3	68.2	-18.9	Peak	Horizontal
*	9729.5	37.1	12.5	49.6	68.2	-18.6	Peak	Horizontal
	7570.5	36.8	8.5	45.3	74.0	-28.7	Peak	Vertical
	8165.5	36.0	9.1	45.1	74.0	-28.9	Peak	Vertical
*	8735.0	35.8	10.2	46.0	68.2	-22.2	Peak	Vertical
*	9899.5	36.2	12.6	48.8	68.2	-19.4	Peak	Vertical

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu				
Test Mode	802.11a - SISO Ant 1	Test Date	2021/08/07				
Test Channel	44						
Remark	1. Average measurement was not p	performed if peak level low	wer than average				
	limit.						
	2. Other frequency was 20dB below	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7400.5	39.1	8.7	47.8	74.0	-26.2	Peak	Horizontal
	8208.0	37.5	9.2	46.7	74.0	-27.3	Peak	Horizontal
*	8658.5	36.4	10.0	46.4	68.2	-21.8	Peak	Horizontal
*	9942.0	37.0	12.5	49.5	68.2	-18.7	Peak	Horizontal
	7545.0	36.5	8.4	44.9	74.0	-29.1	Peak	Vertical
	8259.0	37.2	9.0	46.2	74.0	-27.8	Peak	Vertical
*	8811.5	36.2	10.5	46.7	68.2	-21.5	Peak	Vertical
*	9874.0	36.0	12.7	48.7	68.2	-19.5	Peak	Vertical

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu				
Test Mode	802.11a - SISO Ant 1	Test Date	2021/08/07				
Test Channel	48						
Remark	1. Average measurement was not p	performed if peak level low	wer than average				
	limit.						
	2. Other frequency was 20dB below	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7502.5	37.7	8.7	46.4	74.0	-27.6	Peak	Horizontal
	8165.5	36.9	9.1	46.0	74.0	-28.0	Peak	Horizontal
*	8760.5	39.4	10.4	49.8	68.2	-18.4	Peak	Horizontal
*	9789.0	35.9	12.5	48.4	68.2	-19.8	Peak	Horizontal
	7468.5	36.5	8.5	45.0	74.0	-29.0	Peak	Vertical
	8276.0	36.3	9.0	45.3	74.0	-28.7	Peak	Vertical
*	8743.5	35.7	10.2	45.9	68.2	-22.3	Peak	Vertical
*	10571.0	38.0	13.7	51.7	68.2	-16.5	Peak	Vertical

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu				
Test Mode	802.11a - SISO Ant 1	Test Date	2021/08/07				
Test Channel	52						
Remark	1. Average measurement was not p	performed if peak level low	wer than average				
	limit.						
	2. Other frequency was 20dB below	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	7018.0	40.3	7.8	48.1	68.2	-20.1	Peak	Horizontal
*	7885.0	36.4	8.7	45.1	68.2	-23.1	Peak	Horizontal
	8276.0	39.3	9.0	48.3	74.0	-25.7	Peak	Horizontal
	11557.0	37.9	13.2	51.1	74.0	-22.9	Peak	Horizontal
*	7009.5	44.5	7.8	52.3	68.2	-15.9	Peak	Vertical
*	7944.5	39.1	8.9	48.0	68.2	-20.2	Peak	Vertical
	8344.0	38.0	8.8	46.8	74.0	-27.2	Peak	Vertical
	11217.0	35.9	13.1	49.0	74.0	-25.0	Peak	Vertical

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11a - SISO Ant 1	Test Date	2021/08/07
Test Channel	60		
Remark	1. Average measurement was not p	performed if peak level low	wer than average
	limit.		
	2. Other frequency was 20dB below	/ limit line within 1-18GHz	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7307.0	39.2	8.5	47.7	74.0	-26.3	Peak	Horizontal
	8191.0	37.3	9.0	46.3	74.0	-27.7	Peak	Horizontal
*	8692.5	35.9	10.1	46.0	68.2	-22.2	Peak	Horizontal
*	9814.5	35.6	12.6	48.2	68.2	-20.0	Peak	Horizontal
	7502.5	39.3	8.7	48.0	74.0	-26.0	Peak	Vertical
	8310.0	39.3	8.9	48.2	74.0	-25.8	Peak	Vertical
*	8726.5	38.8	10.2	49.0	68.2	-19.2	Peak	Vertical
*	10027.0	37.6	12.6	50.2	68.2	-18.0	Peak	Vertical

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu				
Test Mode	802.11a - SISO Ant 1	Test Date	2021/08/07				
Test Channel	64						
Remark	1. Average measurement was not p	performed if peak level low	wer than average				
	limit.						
	2. Other frequency was 20dB below	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7545.0	36.6	8.4	45.0	74.0	-29.0	Peak	Horizontal
	8165.5	37.2	9.1	46.3	74.0	-27.7	Peak	Horizontal
*	8862.5	38.9	10.7	49.6	68.2	-18.6	Peak	Horizontal
*	10061.0	37.0	12.5	49.5	68.2	-18.7	Peak	Horizontal
	7502.5	40.8	8.7	49.5	74.0	-24.5	Peak	Vertical
	8310.0	37.6	8.9	46.5	74.0	-27.5	Peak	Vertical
*	8692.5	37.0	10.1	47.1	68.2	-21.1	Peak	Vertical
*	9967.5	37.7	12.5	50.2	68.2	-18.0	Peak	Vertical

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11a - SISO Ant 1	Test Date	2021/08/07
Test Channel	100		
Remark	1. Average measurement was not p	performed if peak level low	wer than average
	limit.		
	2. Other frequency was 20dB below	/ limit line within 1-18GHz	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7468.5	36.9	8.5	45.4	74.0	-28.6	Peak	Horizontal
	8293.0	36.9	8.9	45.8	74.0	-28.2	Peak	Horizontal
*	8956.0	36.1	10.5	46.6	68.2	-21.6	Peak	Horizontal
*	10222.5	38.2	12.7	50.9	68.2	-17.3	Peak	Horizontal
	7502.5	38.8	8.7	47.5	74.0	-26.5	Peak	Vertical
	8250.5	37.5	8.9	46.4	74.0	-27.6	Peak	Vertical
*	8743.5	36.4	10.2	46.6	68.2	-21.6	Peak	Vertical
*	10044.0	35.4	12.4	47.8	68.2	-20.4	Peak	Vertical

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11a - SISO Ant 1	Test Date	2021/08/07
Test Channel	116		
Remark	1. Average measurement was not p	performed if peak level low	wer than average
	limit.		
	2. Other frequency was 20dB below	/ limit line within 1-18GHz	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7596.0	37.0	8.4	45.4	74.0	-28.6	Peak	Horizontal
	8199.5	36.8	9.1	45.9	74.0	-28.1	Peak	Horizontal
*	8845.5	38.6	10.5	49.1	68.2	-19.1	Peak	Horizontal
*	10409.5	38.6	13.3	51.9	68.2	-16.3	Peak	Horizontal
	7443.0	39.4	8.5	47.9	74.0	-26.1	Peak	Vertical
	8361.0	38.8	9.0	47.8	74.0	-26.2	Peak	Vertical
*	8837.0	38.6	10.4	49.0	68.2	-19.2	Peak	Vertical
*	10494.5	37.9	13.4	51.3	68.2	-16.9	Peak	Vertical

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu					
Test Mode	802.11a - SISO Ant 1	Test Date	2021/08/07					
Test Channel	140							
Remark	1. Average measurement was not p	performed if peak level low	wer than average					
	limit.							
	2. Other frequency was 20dB below	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.							

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7604.5	38.3	8.4	46.7	74.0	-27.3	Peak	Horizontal
	8242.0	37.7	8.8	46.5	74.0	-27.5	Peak	Horizontal
*	8862.5	38.9	10.7	49.6	68.2	-18.6	Peak	Horizontal
*	10010.0	36.8	12.5	49.3	68.2	-18.9	Peak	Horizontal
	7536.5	36.5	8.4	44.9	74.0	-29.1	Peak	Vertical
	8284.5	36.7	8.9	45.6	74.0	-28.4	Peak	Vertical
*	8752.0	35.8	10.3	46.1	68.2	-22.1	Peak	Vertical
*	9899.5	35.1	12.6	47.7	68.2	-20.5	Peak	Vertical

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11a - SISO Ant 1	Test Date	2021/08/07
Test Channel	149		
Remark	1. Average measurement was not p	performed if peak level low	wer than average
	limit.		
	2. Other frequency was 20dB below	/ limit line within 1-18GHz	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7664.0	39.2	8.4	47.6	74.0	-26.4	Peak	Horizontal
	8208.0	37.4	9.2	46.6	74.0	-27.4	Peak	Horizontal
*	8735.0	36.3	10.2	46.5	68.2	-21.7	Peak	Horizontal
*	10069.5	37.3	12.7	50.0	68.2	-18.2	Peak	Horizontal
	7502.5	38.1	8.7	46.8	74.0	-27.2	Peak	Vertical
	8276.0	37.6	9.0	46.6	74.0	-27.4	Peak	Vertical
*	8837.0	36.0	10.4	46.4	68.2	-21.8	Peak	Vertical
*	9831.5	36.2	12.6	48.8	68.2	-19.4	Peak	Vertical

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11a - SISO Ant 1	Test Date	2021/08/07
Test Channel	157		
Remark	1. Average measurement was not p	performed if peak level low	wer than average
	limit.		
	2. Other frequency was 20dB below	v limit line within 1-18GHz	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7451.5	35.8	8.5	44.3	74.0	-29.7	Peak	Horizontal
	8242.0	37.5	8.8	46.3	74.0	-27.7	Peak	Horizontal
*	8709.5	35.8	10.3	46.1	68.2	-22.1	Peak	Horizontal
*	9857.0	35.7	12.5	48.2	68.2	-20.0	Peak	Horizontal
	7485.5	36.6	8.6	45.2	74.0	-28.8	Peak	Vertical
	8242.0	36.9	8.8	45.7	74.0	-28.3	Peak	Vertical
*	8820.0	35.6	10.5	46.1	68.2	-22.1	Peak	Vertical
*	9908.0	36.7	12.7	49.4	68.2	-18.8	Peak	Vertical

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11a - SISO Ant 1	Test Date	2021/08/07
Test Channel	165		
Remark	1. Average measurement was not p	performed if peak level low	wer than average
	limit.		
	2. Other frequency was 20dB below	/ limit line within 1-18GHz	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7553.5	37.7	8.5	46.2	74.0	-27.8	Peak	Horizontal
	8199.5	37.9	9.1	47.0	74.0	-27.0	Peak	Horizontal
*	8760.5	37.3	10.4	47.7	68.2	-20.5	Peak	Horizontal
*	9772.0	35.7	12.6	48.3	68.2	-19.9	Peak	Horizontal
	7502.5	37.3	8.7	46.0	74.0	-28.0	Peak	Vertical
	8199.5	37.2	9.1	46.3	74.0	-27.7	Peak	Vertical
*	8769.0	36.2	10.5	46.7	68.2	-21.5	Peak	Vertical
*	9984.5	36.9	12.6	49.5	68.2	-18.7	Peak	Vertical

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11ac-VHT20 - SISO Ant 1	Test Date	2021/08/07
Test Channel	52		
Remark	1. Average measurement was not p	performed if peak level lov	wer than average
	limit.		
	2. Other frequency was 20dB below	limit line within 1-18GH	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7570.5	37.6	8.5	46.1	74.0	-27.9	Peak	Horizontal
	8293.0	38.4	8.9	47.3	74.0	-26.7	Peak	Horizontal
*	8803.0	37.7	10.5	48.2	68.2	-20.0	Peak	Horizontal
*	10061.0	36.6	12.5	49.1	68.2	-19.1	Peak	Horizontal
	7502.5	38.1	8.7	46.8	74.0	-27.2	Peak	Vertical
	8208.0	37.8	9.2	47.0	74.0	-27.0	Peak	Vertical
*	8760.5	37.2	10.4	47.6	68.2	-20.6	Peak	Vertical
*	10027.0	36.9	12.6	49.5	68.2	-18.7	Peak	Vertical

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11ac-VHT40 - SISO Ant 1	Test Date	2021/08/07
Test Channel	54		
Remark	1. Average measurement was not p	performed if peak level lov	wer than average
	limit.		
	2. Other frequency was 20dB below	v limit line within 1-18GH	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7536.5	36.6	8.4	45.0	74.0	-29.0	Peak	Horizontal
	8148.5	36.0	9.2	45.2	74.0	-28.8	Peak	Horizontal
*	8735.0	35.4	10.2	45.6	68.2	-22.6	Peak	Horizontal
*	10146.0	37.7	12.7	50.4	68.2	-17.8	Peak	Horizontal
	7502.5	38.2	8.7	46.9	74.0	-27.1	Peak	Vertical
	8208.0	38.7	9.2	47.9	74.0	-26.1	Peak	Vertical
*	8888.0	37.5	10.4	47.9	68.2	-20.3	Peak	Vertical
*	9746.5	36.5	12.4	48.9	68.2	-19.3	Peak	Vertical

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11ac-VHT80 - SISO Ant 1	Test Date	2021/08/07
Test Channel	58		
Remark	1. Average measurement was not p	performed if peak level lov	wer than average
	limit.		
	2. Other frequency was 20dB below	v limit line within 1-18GH	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7502.5	38.6	8.7	47.3	74.0	-26.7	Peak	Horizontal
	8284.5	37.7	8.9	46.6	74.0	-27.4	Peak	Horizontal
*	8794.5	35.9	10.4	46.3	68.2	-21.9	Peak	Horizontal
*	9908.0	36.7	12.7	49.4	68.2	-18.8	Peak	Horizontal
	7502.5	37.7	8.7	46.4	74.0	-27.6	Peak	Vertical
	8208.0	38.5	9.2	47.7	74.0	-26.3	Peak	Vertical
*	8888.0	38.7	10.4	49.1	68.2	-19.1	Peak	Vertical
*	9976.0	36.6	12.6	49.2	68.2	-19.0	Peak	Vertical

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11ac-VHT20 - MIMO Ant 0+1	Test Date	2021/08/07
Test Channel	36		
Remark	1. Average measurement was not p	performed if peak level low	wer than average
	limit.		
	2. Other frequency was 20dB below	v limit line within 1-18GH	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7502.5	38.2	8.7	46.9	74.0	-27.1	Peak	Horizontal
	8242.0	36.6	8.8	45.4	74.0	-28.6	Peak	Horizontal
*	8692.5	35.6	10.1	45.7	68.2	-22.5	Peak	Horizontal
*	9772.0	36.7	12.6	49.3	68.2	-18.9	Peak	Horizontal
	7502.5	39.0	8.7	47.7	74.0	-26.3	Peak	Vertical
	8233.5	38.4	8.9	47.3	74.0	-26.7	Peak	Vertical
*	8786.0	37.2	10.4	47.6	68.2	-20.6	Peak	Vertical
*	9933.5	37.4	12.7	50.1	68.2	-18.1	Peak	Vertical

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11ac-VHT20 - MIMO Ant 0+1	Test Date	2021/08/07
Test Channel	44		
Remark	1. Average measurement was not p	performed if peak level lov	wer than average
	limit.		
	2. Other frequency was 20dB below	v limit line within 1-18GH	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7426.0	36.4	8.6	45.0	74.0	-29.0	Peak	Horizontal
	8199.5	37.2	9.1	46.3	74.0	-27.7	Peak	Horizontal
*	8735.0	35.5	10.2	45.7	68.2	-22.5	Peak	Horizontal
*	9857.0	34.4	12.5	46.9	68.2	-21.3	Peak	Horizontal
	7494.0	36.1	8.7	44.8	74.0	-29.2	Peak	Vertical
	8242.0	37.0	8.8	45.8	74.0	-28.2	Peak	Vertical
*	8701.0	35.8	10.2	46.0	68.2	-22.2	Peak	Vertical
*	10171.5	38.0	12.8	50.8	68.2	-17.4	Peak	Vertical

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11ac-VHT20 - MIMO Ant 0+1	Test Date	2021/08/07
Test Channel	48		
Remark	1. Average measurement was not p	performed if peak level lov	wer than average
	limit.		
	2. Other frequency was 20dB below	v limit line within 1-18GH	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7502.5	36.6	8.7	45.3	74.0	-28.7	Peak	Horizontal
	8310.0	38.0	8.9	46.9	74.0	-27.1	Peak	Horizontal
*	8743.5	36.5	10.2	46.7	68.2	-21.5	Peak	Horizontal
*	10384.0	37.8	13.2	51.0	68.2	-17.2	Peak	Horizontal
	7511.0	35.9	8.6	44.5	74.0	-29.5	Peak	Vertical
	8242.0	36.8	8.8	45.6	74.0	-28.4	Peak	Vertical
*	8735.0	35.7	10.2	45.9	68.2	-22.3	Peak	Vertical
*	10146.0	37.0	12.7	49.7	68.2	-18.5	Peak	Vertical

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu				
Test Mode	802.11ac-VHT20 - MIMO Ant 0+1	Test Date	2021/08/07				
Test Channel	52						
Remark	1. Average measurement was not performed if peak level lower than average						
	limit.						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	7145.5	38.2	8.6	46.8	68.2	-21.4	Peak	Horizontal
*	7885.0	36.4	8.7	45.1	68.2	-23.1	Peak	Horizontal
	8310.0	37.6	8.9	46.5	74.0	-27.5	Peak	Horizontal
	11191.5	38.1	13.3	51.4	74.0	-22.6	Peak	Horizontal
*	7009.5	46.4	7.8	54.2	68.2	-14.0	Peak	Vertical
*	7927.5	36.3	8.8	45.1	68.2	-23.1	Peak	Vertical
	8276.0	37.1	9.0	46.1	74.0	-27.9	Peak	Vertical
	11616.5	38.4	13.0	51.4	74.0	-22.6	Peak	Vertical

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu				
Test Mode	802.11ac-VHT20 - MIMO Ant 0+1	Test Date	2021/08/07				
Test Channel	60						
Remark	1. Average measurement was not performed if peak level lower than average						
	limit.						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7468.5	36.2	8.5	44.7	74.0	-29.3	Peak	Horizontal
	8199.5	36.7	9.1	45.8	74.0	-28.2	Peak	Horizontal
*	8879.5	38.6	10.6	49.2	68.2	-19.0	Peak	Horizontal
*	10112.0	37.6	12.3	49.9	68.2	-18.3	Peak	Horizontal
	7460.0	36.1	8.5	44.6	74.0	-29.4	Peak	Vertical
	8165.5	39.1	9.1	48.2	74.0	-25.8	Peak	Vertical
*	8786.0	36.9	10.4	47.3	68.2	-20.9	Peak	Vertical
*	9780.5	36.0	12.6	48.6	68.2	-19.6	Peak	Vertical

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu				
Test Mode	802.11ac-VHT20 - MIMO Ant 0+1	Test Date	2021/08/07				
Test Channel	64						
Remark	1. Average measurement was not performed if peak level lower than average						
	limit.						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7528.0	36.3	8.4	44.7	74.0	-29.3	Peak	Horizontal
	8276.0	36.1	9.0	45.1	74.0	-28.9	Peak	Horizontal
*	8777.5	35.7	10.5	46.2	68.2	-22.0	Peak	Horizontal
*	9916.5	35.7	12.7	48.4	68.2	-19.8	Peak	Horizontal
	7451.5	35.7	8.5	44.2	74.0	-29.8	Peak	Vertical
	8293.0	37.3	8.9	46.2	74.0	-27.8	Peak	Vertical
*	8769.0	36.2	10.5	46.7	68.2	-21.5	Peak	Vertical
*	9882.5	35.0	12.7	47.7	68.2	-20.5	Peak	Vertical

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)


Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11ac-VHT20 - MIMO Ant 0+1	Test Date	2021/08/07
Test Channel	100		
Remark	1. Average measurement was not p	performed if peak level lov	wer than average
	limit.		
	2. Other frequency was 20dB below	/ limit line within 1-18GH	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7570.5	37.1	8.5	45.6	74.0	-28.4	Peak	Horizontal
	8276.0	36.5	9.0	45.5	74.0	-28.5	Peak	Horizontal
*	8769.0	35.6	10.5	46.1	68.2	-22.1	Peak	Horizontal
*	9678.5	37.0	12.4	49.4	68.2	-18.8	Peak	Horizontal
	7502.5	38.6	8.7	47.3	74.0	-26.7	Peak	Vertical
	8072.0	39.5	9.2	48.7	74.0	-25.3	Peak	Vertical
*	8735.0	36.5	10.2	46.7	68.2	-21.5	Peak	Vertical
*	9874.0	35.8	12.7	48.5	68.2	-19.7	Peak	Vertical

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11ac-VHT20 - MIMO Ant 0+1	Test Date	2021/08/07
Test Channel	116		
Remark	1. Average measurement was not p	performed if peak level low	wer than average
	limit.		
	2. Other frequency was 20dB below	v limit line within 1-18GH	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7502.5	38.7	8.7	47.4	74.0	-26.6	Peak	Horizontal
	8208.0	37.6	9.2	46.8	74.0	-27.2	Peak	Horizontal
*	8769.0	36.4	10.5	46.9	68.2	-21.3	Peak	Horizontal
*	9976.0	37.2	12.6	49.8	68.2	-18.4	Peak	Horizontal
	7434.5	35.8	8.6	44.4	74.0	-29.6	Peak	Vertical
	8063.5	38.4	9.3	47.7	74.0	-26.3	Peak	Vertical
*	8811.5	36.3	10.5	46.8	68.2	-21.4	Peak	Vertical
*	10018.5	37.6	12.6	50.2	68.2	-18.0	Peak	Vertical

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11ac-VHT20 - MIMO Ant 0+1	Test Date	2021/08/07
Test Channel	140		
Remark	1. Average measurement was not p	performed if peak level lov	wer than average
	limit.		
	2. Other frequency was 20dB below	/ limit line within 1-18GH	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7596.0	38.7	8.4	47.1	74.0	-26.9	Peak	Horizontal
	8276.0	36.8	9.0	45.8	74.0	-28.2	Peak	Horizontal
*	8786.0	35.7	10.4	46.1	68.2	-22.1	Peak	Horizontal
*	9933.5	36.6	12.7	49.3	68.2	-18.9	Peak	Horizontal
	7536.5	36.1	8.4	44.5	74.0	-29.5	Peak	Vertical
	8250.5	36.6	8.9	45.5	74.0	-28.5	Peak	Vertical
*	8803.0	37.8	10.5	48.3	68.2	-19.9	Peak	Vertical
*	10137.5	37.2	12.7	49.9	68.2	-18.3	Peak	Vertical

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11ac-VHT20 - MIMO Ant 0+1	Test Date	2021/08/07
Test Channel	144		
Remark	1. Average measurement was not p	performed if peak level lov	wer than average
	limit.		
	2. Other frequency was 20dB below	/ limit line within 1-18GH	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7477.0	37.4	8.6	46.0	74.0	-28.0	Peak	Horizontal
	8199.5	36.4	9.1	45.5	74.0	-28.5	Peak	Horizontal
*	8692.5	37.4	10.1	47.5	68.2	-20.7	Peak	Horizontal
*	9874.0	35.4	12.7	48.1	68.2	-20.1	Peak	Horizontal
	7545.0	36.6	8.4	45.0	74.0	-29.0	Peak	Vertical
	8293.0	37.3	8.9	46.2	74.0	-27.8	Peak	Vertical
*	8820.0	36.6	10.5	47.1	68.2	-21.1	Peak	Vertical
*	9916.5	35.8	12.7	48.5	68.2	-19.7	Peak	Vertical

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11ac-VHT20 - MIMO Ant 0+1	Test Date	2021/08/07
Test Channel	149		
Remark	1. Average measurement was not p	erformed if peak level lov	wer than average
	limit.		
	2. Other frequency was 20dB below	limit line within 1-18GH	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7511.0	38.1	8.6	46.7	74.0	-27.3	Peak	Horizontal
	8276.0	37.0	9.0	46.0	74.0	-28.0	Peak	Horizontal
*	8692.5	35.3	10.1	45.4	68.2	-22.8	Peak	Horizontal
*	9755.0	35.3	12.4	47.7	68.2	-20.5	Peak	Horizontal
	7519.5	37.2	8.5	45.7	74.0	-28.3	Peak	Vertical
	8242.0	36.5	8.8	45.3	74.0	-28.7	Peak	Vertical
*	8803.0	36.1	10.5	46.6	68.2	-21.6	Peak	Vertical
*	9916.5	34.9	12.7	47.6	68.2	-20.6	Peak	Vertical

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11ac-VHT20 - MIMO Ant 0+1	Test Date	2021/08/07
Test Channel	157		
Remark	1. Average measurement was not p	performed if peak level lov	wer than average
	limit.		
	2. Other frequency was 20dB below	/ limit line within 1-18GH	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7502.5	37.4	8.7	46.1	74.0	-27.9	Peak	Horizontal
	8225.0	35.9	9.1	45.0	74.0	-29.0	Peak	Horizontal
*	8692.5	36.9	10.1	47.0	68.2	-21.2	Peak	Horizontal
*	9296.0	37.6	12.0	49.6	68.2	-18.6	Peak	Horizontal
	7528.0	38.6	8.4	47.0	74.0	-27.0	Peak	Vertical
	8293.0	36.7	8.9	45.6	74.0	-28.4	Peak	Vertical
*	8786.0	35.9	10.4	46.3	68.2	-21.9	Peak	Vertical
*	9857.0	34.8	12.5	47.3	68.2	-20.9	Peak	Vertical

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11ac-VHT20 - MIMO Ant 0+1	Test Date	2021/08/07
Test Channel	165		
Remark	1. Average measurement was not p	performed if peak level lov	wer than average
	limit.		
	2. Other frequency was 20dB below	/ limit line within 1-18GH	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7536.5	36.2	8.4	44.6	74.0	-29.4	Peak	Horizontal
	8267.5	35.9	9.0	44.9	74.0	-29.1	Peak	Horizontal
*	8777.5	38.0	10.5	48.5	68.2	-19.7	Peak	Horizontal
*	9976.0	36.7	12.6	49.3	68.2	-18.9	Peak	Horizontal
	7502.5	38.0	8.7	46.7	74.0	-27.3	Peak	Vertical
	8216.5	36.9	9.1	46.0	74.0	-28.0	Peak	Vertical
*	8735.0	35.9	10.2	46.1	68.2	-22.1	Peak	Vertical
*	9772.0	36.3	12.6	48.9	68.2	-19.3	Peak	Vertical

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11ac-VHT40 - MIMO Ant 0+1	Test Date	2021/08/07
Test Channel	38		
Remark	1. Average measurement was not p	performed if peak level lov	wer than average
	limit.		
	2. Other frequency was 20dB below	v limit line within 1-18GH	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7536.5	36.6	8.4	45.0	74.0	-29.0	Peak	Horizontal
	8216.5	38.2	9.1	47.3	74.0	-26.7	Peak	Horizontal
*	8735.0	36.0	10.2	46.2	68.2	-22.0	Peak	Horizontal
*	10027.0	36.3	12.6	48.9	68.2	-19.3	Peak	Horizontal
	7400.5	38.7	8.7	47.4	74.0	-26.6	Peak	Vertical
	8233.5	38.8	8.9	47.7	74.0	-26.3	Peak	Vertical
*	8871.0	37.5	10.7	48.2	68.2	-20.0	Peak	Vertical
*	10069.5	37.0	12.7	49.7	68.2	-18.5	Peak	Vertical

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11ac-VHT40 - MIMO Ant 0+1	Test Date	2021/08/07
Test Channel	46		
Remark	1. Average measurement was not p	performed if peak level lov	wer than average
	limit.		
	2. Other frequency was 20dB below	v limit line within 1-18GH	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7494.0	38.0	8.7	46.7	74.0	-27.3	Peak	Horizontal
	8301.5	38.2	8.9	47.1	74.0	-26.9	Peak	Horizontal
*	8735.0	36.6	10.2	46.8	68.2	-21.4	Peak	Horizontal
*	10384.0	37.0	13.2	50.2	68.2	-18.0	Peak	Horizontal
	7468.5	36.4	8.5	44.9	74.0	-29.1	Peak	Vertical
	8029.5	38.7	9.2	47.9	74.0	-26.1	Peak	Vertical
*	8956.0	37.7	10.5	48.2	68.2	-20.0	Peak	Vertical
*	10112.0	37.1	12.3	49.4	68.2	-18.8	Peak	Vertical

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11ac-VHT40 - MIMO Ant 0+1	Test Date	2021/08/07
Test Channel	54		
Remark	1. Average measurement was not p	performed if peak level lov	wer than average
	limit.		
	2. Other frequency was 20dB below	/ limit line within 1-18GH	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	7885.0	36.0	8.7	44.7	68.2	-23.5	Peak	Horizontal
*	8658.5	38.5	10.0	48.5	68.2	-19.7	Peak	Horizontal
	10783.5	38.1	13.5	51.6	74.0	-22.4	Peak	Horizontal
	11565.5	37.2	13.0	50.2	74.0	-23.8	Peak	Horizontal
*	7026.5	42.2	7.8	50.0	68.2	-18.2	Peak	Vertical
*	7944.5	38.2	8.9	47.1	68.2	-21.1	Peak	Vertical
	8284.5	37.9	8.9	46.8	74.0	-27.2	Peak	Vertical
	9117.5	36.5	11.3	47.8	74.0	-26.2	Peak	Vertical

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11ac-VHT40 - MIMO Ant 0+1	Test Date	2021/08/07
Test Channel	62		
Remark	1. Average measurement was not p	performed if peak level low	wer than average
	limit.		
	2. Other frequency was 20dB below	v limit line within 1-18GH	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7468.5	38.5	8.5	47.0	74.0	-27.0	Peak	Horizontal
	8276.0	36.5	9.0	45.5	74.0	-28.5	Peak	Horizontal
*	8811.5	37.7	10.5	48.2	68.2	-20.0	Peak	Horizontal
*	9899.5	36.8	12.6	49.4	68.2	-18.8	Peak	Horizontal
	7502.5	38.1	8.7	46.8	74.0	-27.2	Peak	Vertical
	8276.0	36.8	9.0	45.8	74.0	-28.2	Peak	Vertical
*	8828.5	36.3	10.5	46.8	68.2	-21.4	Peak	Vertical
*	10163.0	37.1	12.8	49.9	68.2	-18.3	Peak	Vertical

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11ac-VHT40 - MIMO Ant 0+1	Test Date	2021/08/07
Test Channel	102		
Remark	1. Average measurement was not p	performed if peak level lov	wer than average
	limit.		
	2. Other frequency was 20dB below	v limit line within 1-18GH	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7536.5	36.4	8.4	44.8	74.0	-29.2	Peak	Horizontal
	8233.5	38.8	8.9	47.7	74.0	-26.3	Peak	Horizontal
*	8735.0	36.0	10.2	46.2	68.2	-22.0	Peak	Horizontal
*	9738.0	36.3	12.5	48.8	68.2	-19.4	Peak	Horizontal
	7502.5	39.3	8.7	48.0	74.0	-26.0	Peak	Vertical
	8267.5	38.2	9.0	47.2	74.0	-26.8	Peak	Vertical
*	8803.0	38.5	10.5	49.0	68.2	-19.2	Peak	Vertical
*	10460.5	38.5	13.3	51.8	68.2	-16.4	Peak	Vertical

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11ac-VHT40 - MIMO Ant 0+1	Test Date	2021/08/07
Test Channel	110		
Remark	1. Average measurement was not p	performed if peak level lov	wer than average
	limit.		
	2. Other frequency was 20dB below	v limit line within 1-18GH	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7477.0	38.3	8.6	46.9	74.0	-27.1	Peak	Horizontal
	8267.5	38.0	9.0	47.0	74.0	-27.0	Peak	Horizontal
*	8811.5	37.2	10.5	47.7	68.2	-20.5	Peak	Horizontal
*	10001.5	36.9	12.5	49.4	68.2	-18.8	Peak	Horizontal
	7536.5	36.1	8.4	44.5	74.0	-29.5	Peak	Vertical
	8284.5	36.1	8.9	45.0	74.0	-29.0	Peak	Vertical
*	8854.0	35.7	10.6	46.3	68.2	-21.9	Peak	Vertical
*	9882.5	37.5	12.7	50.2	68.2	-18.0	Peak	Vertical

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11ac-VHT40 - MIMO Ant 0+1	Test Date	2021/08/07
Test Channel	134		
Remark	1. Average measurement was not p	performed if peak level lov	wer than average
	limit.		
	2. Other frequency was 20dB below	v limit line within 1-18GH	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7460.0	37.2	8.5	45.7	74.0	-28.3	Peak	Horizontal
	8242.0	36.4	8.8	45.2	74.0	-28.8	Peak	Horizontal
*	8777.5	35.5	10.5	46.0	68.2	-22.2	Peak	Horizontal
*	10477.5	37.3	13.5	50.8	68.2	-17.4	Peak	Horizontal
	7468.5	37.9	8.5	46.4	74.0	-27.6	Peak	Vertical
	8293.0	38.8	8.9	47.7	74.0	-26.3	Peak	Vertical
*	8726.5	36.8	10.2	47.0	68.2	-21.2	Peak	Vertical
*	9908.0	36.0	12.7	48.7	68.2	-19.5	Peak	Vertical

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11ac-VHT40 - MIMO Ant 0+1	Test Date	2021/08/07
Test Channel	142		
Remark	1. Average measurement was not p	performed if peak level low	wer than average
	limit.		
	2. Other frequency was 20dB below	v limit line within 1-18GH	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7519.5	37.8	8.5	46.3	74.0	-27.7	Peak	Horizontal
	8276.0	36.7	9.0	45.7	74.0	-28.3	Peak	Horizontal
*	8752.0	37.4	10.3	47.7	68.2	-20.5	Peak	Horizontal
*	9976.0	37.0	12.6	49.6	68.2	-18.6	Peak	Horizontal
	7536.5	37.0	8.4	45.4	74.0	-28.6	Peak	Vertical
	8276.0	37.4	9.0	46.4	74.0	-27.6	Peak	Vertical
*	8811.5	36.8	10.5	47.3	68.2	-20.9	Peak	Vertical
*	9976.0	36.9	12.6	49.5	68.2	-18.7	Peak	Vertical

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11ac-VHT40 - MIMO Ant 0+1	Test Date	2021/08/07
Test Channel	151		
Remark	1. Average measurement was not p	performed if peak level lov	wer than average
	limit.		
	2. Other frequency was 20dB below	/ limit line within 1-18GH	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7536.5	37.4	8.4	45.8	74.0	-28.2	Peak	Horizontal
	8208.0	36.5	9.2	45.7	74.0	-28.3	Peak	Horizontal
*	8769.0	36.1	10.5	46.6	68.2	-21.6	Peak	Horizontal
*	9950.5	35.4	12.3	47.7	68.2	-20.5	Peak	Horizontal
	7502.5	38.4	8.7	47.1	74.0	-26.9	Peak	Vertical
	8276.0	37.0	9.0	46.0	74.0	-28.0	Peak	Vertical
*	8811.5	36.6	10.5	47.1	68.2	-21.1	Peak	Vertical
*	9984.5	37.6	12.6	50.2	68.2	-18.0	Peak	Vertical

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11ac-VHT40 - MIMO Ant 0+1	Test Date	2021/08/07
Test Channel	159		
Remark	1. Average measurement was not p	performed if peak level lov	wer than average
	limit.		
	2. Other frequency was 20dB below	v limit line within 1-18GH	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7647.0	38.3	8.4	46.7	74.0	-27.3	Peak	Horizontal
	8301.5	38.9	8.9	47.8	74.0	-26.2	Peak	Horizontal
*	8939.0	38.1	10.5	48.6	68.2	-19.6	Peak	Horizontal
*	10103.5	37.1	12.4	49.5	68.2	-18.7	Peak	Horizontal
	7502.5	39.2	8.7	47.9	74.0	-26.1	Peak	Vertical
	8250.5	37.0	8.9	45.9	74.0	-28.1	Peak	Vertical
*	8760.5	35.7	10.4	46.1	68.2	-22.1	Peak	Vertical
*	9857.0	33.8	12.5	46.3	68.2	-21.9	Peak	Vertical

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11ac-VHT80 - MIMO Ant 0+1	Test Date	2021/08/07
Test Channel	42		
Remark	1. Average measurement was not p	performed if peak level lov	wer than average
	limit.		
	2. Other frequency was 20dB below	v limit line within 1-18GH	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7528.0	36.0	8.4	44.4	74.0	-29.6	Peak	Horizontal
	8199.5	37.2	9.1	46.3	74.0	-27.7	Peak	Horizontal
*	8743.5	35.9	10.2	46.1	68.2	-22.1	Peak	Horizontal
*	10154.5	36.8	12.7	49.5	68.2	-18.7	Peak	Horizontal
	7502.5	36.9	8.7	45.6	74.0	-28.4	Peak	Vertical
	8310.0	36.3	8.9	45.2	74.0	-28.8	Peak	Vertical
*	8794.5	36.9	10.4	47.3	68.2	-20.9	Peak	Vertical
*	9823.0	35.9	12.7	48.6	68.2	-19.6	Peak	Vertical

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11ac-VHT80 - MIMO Ant 0+1	Test Date	2021/08/07
Test Channel	58		
Remark	1. Average measurement was not p	performed if peak level lov	wer than average
	limit.		
	2. Other frequency was 20dB below	v limit line within 1-18GH	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7468.5	37.5	8.5	46.0	74.0	-28.0	Peak	Horizontal
	8216.5	37.2	9.1	46.3	74.0	-27.7	Peak	Horizontal
*	8692.5	35.3	10.1	45.4	68.2	-22.8	Peak	Horizontal
*	9857.0	34.4	12.5	46.9	68.2	-21.3	Peak	Horizontal
	7460.0	36.3	8.5	44.8	74.0	-29.2	Peak	Vertical
	8242.0	37.3	8.8	46.1	74.0	-27.9	Peak	Vertical
*	8709.5	35.9	10.3	46.2	68.2	-22.0	Peak	Vertical
*	9857.0	34.7	12.5	47.2	68.2	-21.0	Peak	Vertical

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11ac-VHT80 - MIMO Ant 0+1	Test Date	2021/08/07
Test Channel	106		
Remark	1. Average measurement was not p	erformed if peak level lov	wer than average
	limit.		
	2. Other frequency was 20dB below	limit line within 1-18GH	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7502.5	36.9	8.7	45.6	74.0	-28.4	Peak	Horizontal
	8361.0	38.1	9.0	47.1	74.0	-26.9	Peak	Horizontal
*	8820.0	36.1	10.5	46.6	68.2	-21.6	Peak	Horizontal
*	9950.5	37.2	12.3	49.5	68.2	-18.7	Peak	Horizontal
	7468.5	35.8	8.5	44.3	74.0	-29.7	Peak	Vertical
	8310.0	36.8	8.9	45.7	74.0	-28.3	Peak	Vertical
*	8769.0	36.0	10.5	46.5	68.2	-21.7	Peak	Vertical
*	9857.0	34.5	12.5	47.0	68.2	-21.2	Peak	Vertical

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11ac-VHT80 - MIMO Ant 0+1	Test Date	2021/08/07
Test Channel	122		
Remark	1. Average measurement was not p	performed if peak level lov	wer than average
	limit.		
	2. Other frequency was 20dB below	v limit line within 1-18GH	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7477.0	38.5	8.6	47.1	74.0	-26.9	Peak	Horizontal
	8250.5	37.0	8.9	45.9	74.0	-28.1	Peak	Horizontal
*	8913.5	38.3	10.5	48.8	68.2	-19.4	Peak	Horizontal
*	10112.0	37.0	12.3	49.3	68.2	-18.9	Peak	Horizontal
	7519.5	38.6	8.5	47.1	74.0	-26.9	Peak	Vertical
	8293.0	37.1	8.9	46.0	74.0	-28.0	Peak	Vertical
*	8709.5	35.7	10.3	46.0	68.2	-22.2	Peak	Vertical
*	9857.0	34.4	12.5	46.9	68.2	-21.3	Peak	Vertical

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11ac-VHT80 - MIMO Ant 0+1	Test Date	2021/08/07
Test Channel	138		
Remark	1. Average measurement was not p	erformed if peak level lov	wer than average
	limit.		
	2. Other frequency was 20dB below	limit line within 1-18GH	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7698.0	39.4	8.3	47.7	74.0	-26.3	Peak	Horizontal
	8233.5	37.7	8.9	46.6	74.0	-27.4	Peak	Horizontal
*	8701.0	37.8	10.2	48.0	68.2	-20.2	Peak	Horizontal
*	9823.0	36.2	12.7	48.9	68.2	-19.3	Peak	Horizontal
	7570.5	37.7	8.5	46.2	74.0	-27.8	Peak	Vertical
	8225.0	37.1	9.1	46.2	74.0	-27.8	Peak	Vertical
*	8879.5	38.0	10.6	48.6	68.2	-19.6	Peak	Vertical
*	9984.5	35.8	12.6	48.4	68.2	-19.8	Peak	Vertical

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Test Site	WZ-AC1	Test Engineer	Hyde Yu
Test Mode	802.11ac-VHT80 - MIMO Ant 0+1	Test Date	2021/08/07
Test Channel	155		
Remark	1. Average measurement was not p	erformed if peak level lov	wer than average
	limit.		
	2. Other frequency was 20dB below	limit line within 1-18GH	z, there is not show
	in the report.		

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8208.0	38.6	9.2	47.8	74.0	-26.2	Peak	Horizontal
	9109.0	39.1	11.2	50.3	74.0	-23.7	Peak	Horizontal
*	9721.0	35.6	12.5	48.1	68.2	-20.1	Peak	Horizontal
*	10494.5	37.5	13.4	50.9	68.2	-17.3	Peak	Horizontal
	7545.0	38.1	8.4	46.5	74.0	-27.5	Peak	Vertical
	8250.5	36.6	8.9	45.5	74.0	-28.5	Peak	Vertical
*	8769.0	35.9	10.5	46.4	68.2	-21.8	Peak	Vertical
*	9967.5	37.1	12.5	49.6	68.2	-18.6	Peak	Vertical

Note 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



The Result of Radiated Emission below 1GHz

Site: WZ-AC2	Time: 2021/08/11 - 22:11
Limit: FCC_Part15.209_RSE(3m)	Engineer: Lucas Wang
Probe: WZ-AC2_VULB9162_0.03-7GHz	Polarity: Horizontal
EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz

Test Mode: Transmit by 802.11ac-VHT80 at Channel 5775MHz Ant 0+1



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			149.795	37.577	22.452	-5.923	43.500	15.125	PK
2		*	153.190	40.428	25.135	-3.072	43.500	15.293	PK
3			209.450	36.004	17.745	-7.496	43.500	18.259	PK
4			249.705	34.721	14.860	-11.279	46.000	19.861	PK
5			650.315	42.022	14.251	-3.978	46.000	27.771	PK
6			975.265	39.693	7.837	-14.307	54.000	31.856	PK

Note 1: Measure Level $(dB\mu V/m)$ = Reading Level $(dB\mu V)$ + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Note 2: The amplitude of radiated emissions (frequency range from 9kHz to 30MHz and 18GHz to 40GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value. Therefore, the data is not presented in the report.



Site: WZ-AC2	Time: 2021/08/11 - 22:20				
Limit: FCC_Part15.209_RSE(3m)	Engineer: Lucas Wang				
Probe: WZ-AC2_VULB9162_0.03-7GHz	Polarity: Vertical				
EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz				

Test Mode: Transmit by 802.11ac-VHT80 at Channel 5775MHz Ant 0+1



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			130.880	34.313	18.720	-9.187	43.500	15.593	PK
2			134.275	38.331	23.078	-5.169	43.500	15.252	PK
3		*	150.015	41.436	26.300	-2.064	43.500	15.136	QP
4			471.835	34.326	9.900	-11.674	46.000	24.426	PK
5			650.013	43.064	15.300	-2.936	46.000	27.764	QP
6			719.185	36.392	7.356	-9.608	46.000	29.037	PK

Note 1: Measure Level $(dB\mu V/m)$ = Reading Level $(dB\mu V)$ + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

Note 2: The amplitude of radiated emissions (frequency range from 9kHz to 30MHz and 18GHz to 40GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value. Therefore, the data is not presented in the report.



5.9. Radiated Restricted Band Edge Measurement

5.9.1.Test Limit

For 15.205 Requirement:

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title

47CFR must not exceed the limits shown in Table per Section 15.209.

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (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 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)
13.36 - 13.41			



For 15.407(b) Requirement:

For transmitters operating in the 5.15-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27dBm/MHz.

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 -27dBm/MHz.

For transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz; 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.

Refer to KDB 789033 D02v01r04 G)2)c), as specified in § 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a maximum emission limit of -27 dBm/MHz (or -17 dBm/MHz as specified in § 15.407(b)(4)). However, an out-of-band emission that complies with both the peak and average limits of § 15.209 is not required to satisfy the -27 dBm/MHz or -17 dBm/MHz maximum emission limit.

FCC Part 15.209 Limit						
Frequency (MHz)	Field Strength (μV/m)	Measured Distance (m)				
0.009 - 0.490	2400/F (kHz)	300				
0.490 - 1.705	24000/F (kHz)	30				
1.705 - 30	30	30				
30 - 88	100	3				
88 - 216	150	3				
216 - 960	200	3				
Above 960	500	3				



5.9.2.Test Procedure Used

ANSI C63.10 - Section 6.3 (General Requirements)

ANSI C63.10 - Section 6.6 (Standard test method above 1GHz)

5.9.3.Test Setting

Peak Measurements above 1GHz

- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = 1MHz
- 3. VBW = 3MHz
- 4. Detector = peak
- 5. Sweep time = auto couple
- 6. Trace mode = max hold
- 7. Trace was allowed to stabilize

Average Measurements above 1GHz (Method VB)

- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = 1MHz
- 3. VBW, If the EUT is configured to transmit with duty cycle \ge 98%, set VBW = 10 Hz.

If the EUT duty cycle is < 98%, set VBW \geq 1/T. T is the minimum transmission duration.

- 4. Detector = Peak
- 5. Sweep time = auto
- 6. Trace mode = max hold
- 7. Trace was allowed to stabilize



5.9.4.Test Setup





5.9.5.Test Result

SISO Mode:

Site: WZ-AC1	Time: 2021/08/05 - 22:24		
Limit: FCC_Part15.209_RE(3m)	Engineer: Hyde Yu		
Probe: WZ-AC1_BBHA9120D_1-18GHz	Polarity: Horizontal		
EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz		
Test Mode: Transmit by 802.11a at Channel 5180MHz Ant 0			



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBµV/m)	(dB)	
				(dBµV/m)	(dBµV)				
1			5113.195	61.018	56.794	-12.982	74.000	4.224	PK
2			5150.000	59.188	55.159	-14.812	74.000	4.029	PK
3		*	5176.555	107.057	102.939	N/A	N/A	4.119	PK

Note: Measure Level $(dB\mu V/m)$ = Reading Level $(dB\mu V)$ + Factor (dB)



Site: WZ-AC1	Time: 2021/08/05 - 22:26			
Limit: FCC_Part15.209_RE(3m)	Engineer: Hyde Yu			
Probe: WZ-AC1_BBHA9120D_1-18GHz	Polarity: Horizontal			
EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz			
Test Meder Trenemit by 202 44e at Channel 5420MUs Ant 0				



		(MHz)	Level	Level	(dB)	(dBµV/m)	(dB)	
			(dBµV/m)	(dBµV)				
1		5150.000	48.608	44.579	-5.392	54.000	4.029	AV
2	*	5173.270	97.609	93.475	N/A	N/A	4.134	AV

Note: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Site: WZ-AC1	Time: 2021/08/05 - 22:24
Limit: FCC_Part15.209_RE(3m)	Engineer: Hyde Yu
Probe: WZ-AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBµV/m)	(dB)	
				(dBµV/m)	(dBµV)				
1			5147.080	65.639	61.615	-8.361	74.000	4.023	PK
2			5150.000	65.390	61.361	-8.610	74.000	4.029	PK
3		*	5174.395	115.891	111.763	N/A	N/A	4.128	PK

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)



Site: WZ-AC1	Time: 2021/08/05 - 22:23				
Limit: FCC_Part15.209_RE(3m)	Engineer: Hyde Yu				
Probe: WZ-AC1_BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz				



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBµV/m)	(dB)	
				(dBµV/m)	(dBµV)				
1			5149.960	53.243	49.214	-0.757	54.000	4.028	AV
2			5150.000	53.170	49.141	-0.830	54.000	4.029	AV
3		*	5173.630	107.318	103.186	N/A	N/A	4.133	AV

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Site: WZ-AC1	Time: 2021/08/04 - 01:10
Limit: FCC_Part15.209_RE(3m)	Engineer: Hyde Yu
Probe: WZ-AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBµV/m)	(dB)	
				(dBµV/m)	(dBµV)				
1			5140.330	60.731	56.688	-13.269	74.000	4.043	PK
2			5150.000	59.145	55.116	-14.855	74.000	4.029	PK
3		*	5183.035	102.426	98.345	N/A	N/A	4.080	PK

Note: Measure Level $(dB\mu V/m)$ = Reading Level $(dB\mu V)$ + Factor (dB)



EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz				
Probe: WZ-AC1_BBHA9120D_1-18GHz	Polarity: Horizontal				
Limit: FCC_Part15.209_RE(3m)	Engineer: Hyde Yu				
Site: WZ-AC1	Time: 2021/08/04 - 01:12				



		(MHz)	Level	Level	(dB)	(dBµV/m)	(dB)	
			(dBµV/m)	(dBµV)				
1		5150.000	48.187	44.158	-5.813	54.000	4.029	AV
2	*	5181.550	92.901	88.808	N/A	N/A	4.094	AV

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Site: WZ-AC1	Time: 2021/08/04 - 01:09
Limit: FCC_Part15.209_RE(3m)	Engineer: Hyde Yu
Probe: WZ-AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz



	. lag	man	i requeriej	medeale	rtodding	margin		1 40101	.)pe
			(MHz)	Level	Level	(dB)	(dBµV/m)	(dB)	
				(dBµV/m)	(dBµV)				
1			5147.305	67.983	63.960	-6.017	74.000	4.022	PK
2			5150.000	65.053	61.024	-8.947	74.000	4.029	PK
3		*	5179.075	116.182	112.077	N/A	N/A	4.106	PK

Note: Measure Level $(dB\mu V/m)$ = Reading Level $(dB\mu V)$ + Factor (dB)


Site: WZ-AC1	Time: 2021/08/04 - 01:08				
Limit: FCC_Part15.209_RE(3m)	Engineer: Hyde Yu				
Probe: WZ-AC1_BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz				



		(101112)	LOVOI	LOVOI	(uD)		(uD)	
			(dBµV/m)	(dBµV)				
1		5150.000	53.421	49.392	-0.579	54.000	4.029	AV
2	*	5183.575	107.510	103.435	N/A	N/A	4.076	AV

Note: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Site: WZ-AC1	Time: 2021/08/04 - 21:56				
Limit: FCC_Part15.209_RE(3m)	Engineer: Hyde Yu				
Probe: WZ-AC1_BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz				



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBµV/m)	(dB)	
				(dBµV/m)	(dBµV)				
1		*	5314.320	102.524	98.710	N/A	N/A	3.814	PK
2			5350.000	58.395	54.378	-15.605	74.000	4.017	PK
3			5351.120	61.220	57.196	-12.780	74.000	4.024	PK

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)



Site: WZ-AC1	Time: 2021/08/04 - 21:58				
Limit: FCC_Part15.209_RE(3m)	Engineer: Hyde Yu				
Probe: WZ-AC1_BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz				



		(MHz)	Level	Level	(dB)	(dBµV/m)	(dB)	
			(dBµV/m)	(dBµV)				
1	*	5313.480	93.859	90.043	N/A	N/A	3.816	AV
2		5350.000	48.095	44.078	-5.905	54.000	4.017	AV

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Site: WZ-AC1	Time: 2021/08/04 - 21:56				
Limit: FCC_Part15.209_RE(3m)	Engineer: Hyde Yu				
Probe: WZ-AC1_BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz				



INO	Flag	Mark	Frequency	weasure	Reading	wargin	Limit	Factor	туре
			(MHz)	Level	Level	(dB)	(dBµV/m)	(dB)	
				(dBµV/m)	(dBµV)				
1		*	5316.160	116.387	112.576	N/A	N/A	3.810	PK
2			5350.000	61.347	57.330	-12.653	74.000	4.017	PK
3			5351.920	64.773	60.744	-9.227	74.000	4.029	PK

Note: Measure Level $(dB\mu V/m)$ = Reading Level $(dB\mu V)$ + Factor (dB)



Site: WZ-AC1	Time: 2021/08/04 - 21:51				
Limit: FCC_Part15.209_RE(3m)	Engineer: Hyde Yu				
Probe: WZ-AC1_BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz				



		(MHz)	Level	Level	(dB)	(dBµV/m)	(dB)	
			(dBµV/m)	(dBµV)				
1	*	5313.480	106.878	103.062	N/A	N/A	3.816	AV
2		5350.000	51.536	47.519	-2.464	54.000	4.017	AV

Note: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Site: WZ-AC1	Time: 2021/08/04 - 22:08				
Limit: FCC_Part15.209_RE(3m)	Engineer: Hyde Yu				
Probe: WZ-AC1_BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz				



2		5460.000	58.651	54.389	-15.349	74.000	4.261	PK
3		5468.745	60.306	56.095	-7.894	68.200	4.211	PK
4		5470.000	58.658	54.454	-9.542	68.200	4.204	PK
5	*	5495.295	105.345	101.041	N/A	N/A	4.304	PK

Note: Measure Level $(dB\mu V/m)$ = Reading Level $(dB\mu V)$ + Factor (dB)



Site: WZ-AC1	Time: 2021/08/04 - 22:09				
Limit: FCC_Part15.209_RE(3m)	Engineer: Hyde Yu				
Probe: WZ-AC1_BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz				



		(MHz)	Level	Level	(dB)	(dBµV/m)	(dB)	
			(dBµV/m)	(dBµV)				
1		5460.000	47.943	43.681	-6.057	54.000	4.261	AV
2	*	5506.275	96.630	92.172	N/A	N/A	4.458	AV

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Site: WZ-AC1	Time: 2021/08/04 - 22:07
Limit: FCC_Part15.209_RE(3m)	Engineer: Hyde Yu
Probe: WZ-AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz



2		5460.000	60.640	56.378	-13.360	74.000	4.261	РК
3		5469.150	65.782	61.573	-2.418	68.200	4.209	PK
4		5470.000	64.944	60.740	-3.256	68.200	4.204	PK
5	*	5493.945	114.859	110.575	N/A	N/A	4.284	PK

Note: Measure Level $(dB\mu V/m)$ = Reading Level $(dB\mu V)$ + Factor (dB)



Site: WZ-AC1	Time: 2021/08/04 - 22:03				
Limit: FCC_Part15.209_RE(3m)	Engineer: Hyde Yu				
Probe: WZ-AC1_BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz				



		(MHz)	Level	Level	(dB)	(dBµV/m)	(dB)	
			(dBµV/m)	(dBµV)				
1		5460.000	50.487	46.225	-3.513	54.000	4.261	AV
2	*	5493.675	105.678	101.398	N/A	N/A	4.280	AV

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Site: WZ-AC1	Time: 2021/08/04 - 22:19
Limit: FCC_Part15.209_RE(3m)	Engineer: Hyde Yu
Probe: WZ-AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBµV/m)	(dB)	
				(dBµV/m)	(dBµV)				
1		*	5696.635	101.725	97.160	N/A	N/A	4.565	PK
2			5725.000	58.759	54.248	-9.441	68.200	4.511	PK
3			5736.252	60.675	56.167	-7.525	68.200	4.507	PK

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)



Site: WZ-AC1	Time: 2021/08/04 - 22:17					
Limit: FCC_Part15.209_RE(3m)	Engineer: Hyde Yu					
Probe: WZ-AC1_BBHA9120D_1-18GHz	Polarity: Vertical					
EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBµV/m)	(dB)	
				(dBµV/m)	(dBµV)				
1		*	5698.000	112.174	107.614	N/A	N/A	4.560	PK
2			5725.000	60.052	55.541	-8.148	68.200	4.511	PK
3			5727.640	64.110	59.595	-4.090	68.200	4.515	PK

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Time: 2021/08/04 - 22:23
Engineer: Hyde Yu
Polarity: Horizontal
Power: AC 120V/60Hz



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBµV/m)	(dB)	
				(dBµV/m)	(dBµV)				
1		*	5626.647	60.369	55.916	-7.831	68.200	4.453	PK
2			5650.000	58.458	54.125	-9.742	68.200	4.333	PK
3			5700.000	58.842	54.290	-46.358	105.200	4.551	PK
4			5720.000	58.087	53.574	-52.713	110.800	4.513	PK
5			5725.000	59.322	54.811	-62.878	122.200	4.511	PK
6			5741.405	100.446	95.943	-21.754	122.200	4.503	PK

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Time: 2021/08/04 - 22:22
Engineer: Hyde Yu
Polarity: Vertical
Power: AC 120V/60Hz



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBµV/m)	(dB)	
				(dBµV/m)	(dBµV)				
1		*	5637.538	61.599	57.298	-6.601	68.200	4.301	PK
2			5650.000	60.347	56.014	-7.853	68.200	4.333	PK
3			5700.000	60.211	55.659	-44.989	105.200	4.551	PK
4			5720.000	59.925	55.412	-50.875	110.800	4.513	PK
5			5725.000	68.061	63.550	-54.139	122.200	4.511	PK
6			5738.930	110.287	105.782	-11.913	122.200	4.506	PK

Note: Measure Level $(dB\mu V/m)$ = Reading Level $(dB\mu V)$ + Factor (dB)



Site: WZ-AC1	Time: 2021/08/04 - 22:28
Limit: FCC_Part15.407_RE(3m)	Engineer: Hyde Yu
Probe: WZ-AC1_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBµV/m)	(dB)	
				(dBµV/m)	(dBµV)				
1			5818.065	102.891	98.223	-19.309	122.200	4.668	PK
2			5850.000	59.113	54.318	-63.087	122.200	4.795	PK
3			5855.000	59.528	54.732	-51.272	110.800	4.796	PK
4			5875.000	59.131	54.341	-46.069	105.200	4.790	PK
5			5925.000	59.304	54.241	-8.896	68.200	5.063	PK
6		*	5983.328	60.968	56.081	-7.232	68.200	4.887	PK

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Time: 2021/08/04 - 22:26
Engineer: Hyde Yu
Polarity: Vertical
Power: AC 120V/60Hz



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBµV/m)	(dB)	
				(dBµV/m)	(dBµV)				
1			5819.625	113.263	108.587	-8.937	122.200	4.676	PK
2			5850.000	61.734	56.939	-60.466	122.200	4.795	PK
3			5855.000	60.642	55.846	-50.158	110.800	4.796	PK
4			5875.000	59.696	54.906	-45.504	105.200	4.790	PK
5			5925.000	59.770	54.707	-8.430	68.200	5.063	PK
6		*	5944.717	61.026	56.137	-7.174	68.200	4.889	PK

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Site: WZ-AC1	Time: 2021/08/05 - 22:34				
Limit: FCC_Part15.209_RE(3m)	Engineer: Hyde Yu				
Probe: WZ-AC1_BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz				

Test Mode: Transmit by 802.11ac-VHT20 at Channel 5180MHz Ant 1 130 3 Level(dBuV/m) 80 Handbalallit 70 1 2 60 50 40 30 5110 5115 5120 5125 5130 5135 5140 5145 5150 5155 5160 5165 5170 5175 5180 5185 5190 5195 5200 Frequency(MHz)

No Flag Mark Frequency Measure Reading Margin Limit Factor Туре (MHz) Level Level (dB) (dBµV/m) (dB) (dBµV/m) (dBµV) 5113.420 60.351 56.126 -13.649 74.000 4.225 ΡK 1 2 5150.000 58.835 54.806 -15.165 74.000 4.029 ΡK 3 * ΡK 5182.990 101.711 97.630 N/A N/A 4.081 Note: Measure Level $(dB\mu V/m)$ = Reading Level $(dB\mu V)$ + Factor (dB)Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)



Site: WZ-AC1	Time: 2021/08/05 - 22:36			
Limit: FCC_Part15.209_RE(3m)	Engineer: Hyde Yu			
Probe: WZ-AC1_BBHA9120D_1-18GHz	Polarity: Horizontal			
EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz			
Test Meder Trenemit by 202 44 cs // IT22 st Channel 5420M Is Ant 4				



		(MHz)	Level	Level	(dB)	(dBµV/m)	(dB)	
			(dBµV/m)	(dBµV)				
1		5150.000	47.662	43.633	-6.338	54.000	4.029	AV
2	*	5182.720	92.275	88.191	N/A	N/A	4.084	AV

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Site: WZ-AC1	Time: 2021/08/05 - 22:33				
Limit: FCC_Part15.209_RE(3m)	Engineer: Hyde Yu				
Probe: WZ-AC1_BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz				

No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBµV/m)	(dB)	
				(dBµV/m)	(dBµV)				
1			5149.690	65.573	61.546	-8.427	74.000	4.028	PK
2			5150.000	62.558	58.529	-11.442	74.000	4.029	PK
3		*	5176.735	113.879	109.762	N/A	N/A	4.116	PK
Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)									



Site: WZ-AC1	Time: 2021/08/05 - 22:30			
Limit: FCC_Part15.209_RE(3m)	Engineer: Hyde Yu			
Probe: WZ-AC1_BBHA9120D_1-18GHz	Polarity: Vertical			
EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz			
Test Model Tropperit by 202 11cs V/UT20 of Channel 5120NUz Apt 1				



		(MHz)	Level	Level	(dB)	(dBµV/m)	(dB)	
			(dBµV/m)	(dBµV)				
1		5150.000	51.078	47.049	-2.922	54.000	4.029	AV
2	*	5184.475	105.341	101.275	N/A	N/A	4.066	AV

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Site: WZ-AC1	Time: 2021/08/05 - 22:43				
Limit: FCC_Part15.209_RE(3m)	Engineer: Hyde Yu				
Probe: WZ-AC1_BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz				



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBµV/m)	(dB)	
				(dBµV/m)	(dBµV)				
1			5121.950	60.693	56.531	-13.307	74.000	4.162	PK
2			5150.000	58.785	54.756	-15.215	74.000	4.029	PK
3		*	5202.900	95.255	91.210	N/A	N/A	4.044	PK

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Site: WZ-AC1	Time: 2021/08/05 - 22:45			
Limit: FCC_Part15.209_RE(3m)	Engineer: Hyde Yu			
Probe: WZ-AC1_BBHA9120D_1-18GHz	Polarity: Horizontal			
EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz			
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5190MHz Ant 1				



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBµV/m)	(dB)	
				(dBµV/m)	(dBµV)				
1			5150.000	47.697	43.668	-6.303	54.000	4.029	AV
2		*	5202.450	85.866	81.820	N/A	N/A	4.046	AV

Note: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Site: WZ-AC1	Time: 2021/08/05 - 22:43				
Limit: FCC_Part15.209_RE(3m)	Engineer: Hyde Yu				
Probe: WZ-AC1_BBHA9120D_1-18GHz	Polarity: Vertical				
EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz				



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBµV/m)	(dB)	
				(dBµV/m)	(dBµV)				
1			5148.550	66.537	62.514	-7.463	74.000	4.022	PK
2			5150.000	64.972	60.943	-9.028	74.000	4.029	PK
3		*	5178.800	106.969	102.862	N/A	N/A	4.107	PK

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



EUT: 802.11ac Dual Band Module Pow	wer: AC 120V/60Hz
Probe: WZ-AC1_BBHA9120D_1-18GHz Pola	larity: Vertical
Limit: FCC_Part15.209_RE(3m) Eng	gineer: Hyde Yu
Site: WZ-AC1 Tim	ne: 2021/08/05 - 22:42



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBµV/m)	(dB)	
				(dBµV/m)	(dBµV)				
1			5149.900	53.173	49.145	-0.827	54.000	4.028	AV
2			5150.000	53.067	49.038	-0.933	54.000	4.029	AV
3		*	5179.700	97.939	93.837	N/A	N/A	4.103	AV

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Site: WZ-AC1	Time: 2021/08/05 - 22:57				
Limit: FCC_Part15.209_RE(3m)	Engineer: Hyde Yu				
Probe: WZ-AC1_BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz				



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBµV/m)	(dB)	
				(dBµV/m)	(dBµV)				
1		*	5278.830	91.985	88.074	N/A	N/A	3.911	PK
2			5350.000	58.358	54.341	-15.642	74.000	4.017	PK
3			5356.270	59.484	55.461	-14.516	74.000	4.022	PK

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)



Site: WZ-AC1	Time: 2021/08/05 - 22:58				
Limit: FCC_Part15.209_RE(3m)	Engineer: Hyde Yu				
Probe: WZ-AC1_BBHA9120D_1-18GHz	Polarity: Horizontal				
EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz				



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBµV/m)	(dB)	
				(dBµV/m)	(dBµV)				
1		*	5266.510	81.244	77.254	N/A	N/A	3.991	AV
2			5350.000	48.401	44.384	-5.599	54.000	4.017	AV

Note: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



Site: WZ-AC1	Time: 2021/08/05 - 22:56					
Limit: FCC_Part15.209_RE(3m)	Engineer: Hyde Yu					
Probe: WZ-AC1_BBHA9120D_1-18GHz	Polarity: Vertical					
EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBµV/m)	(dB)	
				(dBµV/m)	(dBµV)				
1		*	5278.940	104.247	100.337	N/A	N/A	3.911	PK
2			5350.000	65.281	61.264	-8.719	74.000	4.017	PK
3			5353.740	64.774	60.747	-9.226	74.000	4.026	PK

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)



Site: WZ-AC1	Time: 2021/08/05 - 22:55
Limit: FCC_Part15.209_RE(3m)	Engineer: Hyde Yu
Probe: WZ-AC1_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBµV/m)	(dB)	
				(dBµV/m)	(dBµV)				
1		*	5305.230	93.323	89.545	N/A	N/A	3.778	AV
2			5350.000	53.537	49.520	-0.463	54.000	4.017	AV

Note: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)



MIMO Mode:

EUT: 802.11ac Dual Band Module	Power: AC 120V/60Hz				
Probe: WZ-AC1_BBHA9120D_1-18GHz	Polarity: Horizontal				
Limit: FCC_Part15.209_RE(3m)	Engineer: Hyde Yu				
Site: WZ-AC1	Time: 2021/08/04 - 22:38				

Test Mode: Transmit by 802.11ac-VHT20 at Channel 5180MHz Ant 0+1



		(MHz)	Level	Level	(dB)	(dBµV/m)	(dB)	
			(dBµV/m)	(dBµV)				
1		5146.810	60.332	56.308	-13.668	74.000	4.024	PK
2		5150.000	58.451	54.422	-15.549	74.000	4.029	PK
3	*	5186.275	106.891	102.843	N/A	N/A	4.048	PK

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)



LOT. 002. That Dual Dand Module	ower: AC 120V/60Hz
FLIT: 802 11ac Dual Band Module	
Probe: WZ-AC1_BBHA9120D_1-18GHz Pc	olarity: Horizontal
Limit: FCC_Part15.209_RE(3m) Er	ngineer: Hyde Yu
Site: WZ-AC1 Ti	ime: 2021/08/04 - 22:39



INU	Tiay	IVIAIN	riequency	Measure	Reading	Margin		I actor	туре
			(MHz)	Level	Level	(dB)	(dBµV/m)	(dB)	
				(dBµV/m)	(dBµV)				
1			5150.000	47.675	43.646	-6.325	54.000	4.029	AV
2		*	5185.420	98.172	94.116	N/A	N/A	4.056	AV

Note: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)