

























6.7. Frequency Stability Measurement

6.7.1.Test Limit

Manufactures of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

6.7.2.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 ($\pm 15\%$) and endpoint, record the maximum frequency change. For hand-carried battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.



6.7.3.Test Setup





6.7.4.Test Result

Product	Mobile Computer	Test Engineer	Chase Zhu
Test Site	SIP-SR5	Test Time	2020/11/12
Test Mode	5180MHz (Carrier Mode)		

Voltage	Power	Temp	Frequency Tolerance (ppm)					
(%)	(%) (V _{DC})		0 minutes	2 minutes	5 minutes	10 minutes		
		- 30	-3.45	-3.39	-3.48	-3.46		
		- 20	-3.05	-3.11	-3.15	-3.14		
		- 10	-2.38	-2.35	-2.39	-2.41		
	3.80	0	-2.62	-2.88	-2.81	-2.71		
100%		+ 10	-3.60	-3.51	-3.48	-3.54		
		+ 20 (Ref)	-4.96	-5.00	-5.05	-4.98		
		+ 30	-7.00	-6.89	-7.05	-7.09		
		+ 40	-8.67	-8.61	-8.70	-8.62		
		+ 50	-9.13	-9.15	-9.16	-9.08		
Battery Upper	4.35	+ 20	-5.60	-5.55	-5.59	-5.62		
Battery Endpoint	3.45	+ 20	-5.69	-5.69	-5.66	-5.61		

Note 1: Frequency Tolerance (ppm) = {[Measured Frequency (MHz) - Declared Frequency (MHz)] / Declared Frequency (MHz)} $*10^{6}$.

Note 2: Battery upper voltage is 4.35Vdc, battery endpoint voltage is 3.45Vdc, which are declared by the manufacturer.



6.8. Radiated Spurious Emission Measurement

6.8.1.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 Subpart C Paragraph 15.209							
Frequency	Field Strength	Measured Distance					
(MHz)	(µV/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					

6.8.2.Test Procedure Used

KDB 789033 D02v02r01- Section G

6.8.3.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 = as specified in Table 1
- 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 ≥ 98%, set VBW = 10Hz

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



6.8.4.Test Setup

Below 1GHz Test Setup:





6.8.5.Test Result

Product	Mobile Computer	Test Engineer	White Wang				
Test Site	SIP-AC3	Test Date	2020/11/15				
Test Mode	802.11a	Test Channel	36				
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)				
	11106.5	-3.7	50.3	46.6	74.0	-27.4	Peak	Horizontal
	12543.0	-3.0	50.5	47.5	74.0	-26.5	Peak	Horizontal
*	14957.0	2.2	47.7	49.9	68.2	-18.3	Peak	Horizontal
*	16835.5	4.7	48.1	52.8	68.2	-15.4	Peak	Horizontal
	11183.0	-3.8	50.6	46.8	74.0	-27.2	Peak	Vertical
	11650.5	-3.5	51.0	47.5	74.0	-26.5	Peak	Vertical
*	15042.0	2.6	49.4	52.0	68.2	-16.2	Peak	Vertical
*	16776.0	5.1	47.1	52.2	68.2	-16.0	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 ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)

Product	Mobile Computer	Test Engineer	White Wang				
Test Site	SIP-AC3	Test Date	2020/11/15				
Test Mode	802.11a	Test Channel	44				
Remark	1. Average measurement was no	ot performed if peak lev	el lower than average				
	limit.	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)				
	11251.0	-3.7	50.7	47.0	74.0	-27.0	Peak	Horizontal
	12407.0	-2.6	49.5	46.9	74.0	-27.1	Peak	Horizontal
*	13843.5	0.4	49.8	50.2	68.2	-18.0	Peak	Horizontal
*	17405.0	4.7	47.9	52.6	68.2	-15.6	Peak	Horizontal
	10809.0	-3.3	50.7	47.4	74.0	-26.6	Peak	Vertical
	12543.0	-3.0	50.6	47.6	74.0	-26.4	Peak	Vertical
*	14940.0	2.5	48.2	50.7	68.2	-17.5	Peak	Vertical
*	17371.0	5.5	47.3	52.8	68.2	-15.4	Peak	Vertical

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

Product	Mobile Computer	Test Engineer	White Wang			
Test Site	SIP-AC3	Test Date	2020/11/15			
Test Mode	802.11a	Test Channel	48			
Remark	1. Average measurement was no	ot performed if peak lev	el 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)				
	11072.5	-3.3	50.2	46.9	74.0	-27.1	Peak	Horizontal
	12594.0	-2.7	51.3	48.6	74.0	-25.4	Peak	Horizontal
*	14285.5	1.4	49.0	50.4	68.2	-17.8	Peak	Horizontal
*	17473.0	5.1	48.6	53.7	68.2	-14.5	Peak	Horizontal
	10979.0	-3.2	49.1	45.9	74.0	-28.1	Peak	Vertical
	11990.5	-3.2	50.1	46.9	74.0	-27.1	Peak	Vertical
*	13911.5	0.4	47.8	48.2	68.2	-20.0	Peak	Vertical
*	16827.0	4.8	46.9	51.7	68.2	-16.5	Peak	Vertical

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



Product	Mobile Computer	Test Engineer	White Wang				
Test Site	SIP-AC3	Test Date	2020/11/15				
Test Mode	802.11a	Test Channel	52				
Remark	1. Average measurement was not p	performed if peak le	vel lower than average				
	limit.	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)				
	11004.5	-3.4	50.8	47.4	74.0	-26.6	Peak	Horizontal
	12101.0	-3.2	50.6	47.4	74.0	-26.6	Peak	Horizontal
*	14081.5	0.9	48.9	49.8	68.2	-18.4	Peak	Horizontal
*	17422.0	5.4	47.3	52.7	68.2	-15.5	Peak	Horizontal
	11030.0	-3.3	49.4	46.1	74.0	-27.9	Peak	Vertical
	11778.0	-3.4	50.4	47.0	74.0	-27.0	Peak	Vertical
*	14906.0	2.3	47.6	49.9	68.2	-18.3	Peak	Vertical
*	16376.5	4.5	48.1	52.6	68.2	-15.6	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/MH	Hz. At a distand	e of 3 me	ters, the f	ield 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 ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)

Product	Mobile Computer	Test Engineer	White Wang			
Test Site	SIP-AC3	Test Date	2020/11/15			
Test Mode	802.11a	Test Channel	60			
Remark	1. Average measurement was no	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)				
	11990.5	-3.2	50.7	47.5	74.0	-26.5	Peak	Horizontal
*	13095.5	-2.2	50.2	48.0	68.2	-20.2	Peak	Horizontal
*	13988.0	0.6	49.5	50.1	68.2	-18.1	Peak	Horizontal
	15458.5	3.0	47.6	50.6	74.0	-23.4	Peak	Horizontal
	12177.5	-3.4	50.2	46.8	74.0	-27.2	Peak	Vertical
*	13665.0	-0.5	50.1	49.6	68.2	-18.6	Peak	Vertical
*	14931.5	2.6	48.6	51.2	68.2	-17.0	Peak	Vertical
	16079.0	3.7	48.2	51.9	74.0	-22.1	Peak	Vertical

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

Product	Mobile Computer	Test Engineer	White Wang			
Test Site	SIP-AC3	Test Date	2020/11/15			
Test Mode	802.11a	Test Channel	64			
Remark	1. Average measurement was no	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)				
	12288.0	-3.3	51.1	47.8	74.0	-26.2	Peak	Horizontal
*	13886.0	0.4	49.4	49.8	68.2	-18.4	Peak	Horizontal
*	15050.5	2.5	48.2	50.7	68.2	-17.5	Peak	Horizontal
	17949.0	5.9	48.6	54.5	74.0	-19.5	Peak	Horizontal
	12220.0	-3.2	49.2	46.0	74.0	-28.0	Peak	Vertical
*	13971.0	0.8	49.4	50.2	68.2	-18.0	Peak	Vertical
*	14923.0	2.7	47.3	50.0	68.2	-18.2	Peak	Vertical
	15560.5	2.9	46.1	49.0	74.0	-25.0	Peak	Vertical

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

Product	Mobile Computer	Test Engineer	White Wang			
Test Site	SIP-AC3	Test Date	2020/11/15			
Test Mode	802.11a	Test Channel	100			
Remark	1. Average measurement was no	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)				
	12339.0	-3.4	50.8	47.4	74.0	-26.6	Peak	Horizontal
*	13809.5	0.0	50.6	50.6	68.2	-17.6	Peak	Horizontal
*	14821.0	2.5	47.7	50.2	68.2	-18.0	Peak	Horizontal
	16062.0	4.3	46.9	51.2	74.0	-22.8	Peak	Horizontal
	11599.5	-3.6	50.3	46.7	74.0	-27.3	Peak	Vertical
*	12823.5	-2.5	49.9	47.4	68.2	-20.8	Peak	Vertical
*	14166.5	1.0	47.5	48.5	68.2	-19.7	Peak	Vertical
	15450.0	3.1	47.3	50.4	74.0	-23.6	Peak	Vertical

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

Product	Mobile Computer	Test Engineer	White Wang			
Test Site	SIP-AC3	Test Date	2020/11/15			
Test Mode	802.11a	Test Channel	120			
Remark	1. Average measurement was no	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)				
	12092.5	-3.3	50.5	47.2	74.0	-26.8	Peak	Horizontal
*	14243.0	1.3	48.9	50.2	68.2	-18.0	Peak	Horizontal
*	16886.5	4.8	47.3	52.1	68.2	-16.1	Peak	Horizontal
	17855.5	5.6	47.9	53.5	74.0	-20.5	Peak	Horizontal
	11999.0	-2.9	50.7	47.8	74.0	-26.2	Peak	Vertical
	15722.0	3.1	47.0	50.1	74.0	-23.9	Peak	Vertical
*	16495.5	4.5	47.4	51.9	68.2	-16.3	Peak	Vertical
	17915.0	5.7	47.9	53.6	74.0	-20.4	Peak	Vertical

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

Product	Mobile Computer	Test Engineer	White Wang			
Test Site	SIP-AC3	Test Date	2020/11/15			
Test Mode	802.11a	Test Channel	140			
Remark	1. Average measurement was no	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)				
	11786.5	-3.6	50.7	47.1	74.0	-26.9	Peak	Horizontal
*	13962.5	0.7	49.4	50.1	68.2	-18.1	Peak	Horizontal
*	15093.0	2.5	47.3	49.8	68.2	-18.4	Peak	Horizontal
	15747.5	3.7	46.8	50.5	74.0	-23.5	Peak	Horizontal
	12602.5	-2.7	49.6	46.9	74.0	-27.1	Peak	Vertical
*	13843.5	0.4	49.2	49.6	68.2	-18.6	Peak	Vertical
*	14736.0	2.2	47.6	49.8	68.2	-18.4	Peak	Vertical
	15722.0	3.1	47.0	50.1	74.0	-23.9	Peak	Vertical

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

Product	Mobile Computer	Test Engineer	White Wang			
Test Site	SIP-AC3	Test Date	2020/11/15			
Test Mode	802.11a	Test Channel	144			
Remark	1. Average measurement was no	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)				
	12339.0	-3.4	50.1	46.7	74.0	-27.3	Peak	Horizontal
*	13852.0	0.4	50.2	50.6	68.2	-17.6	Peak	Horizontal
	15858.0	3.1	47.8	50.9	74.0	-23.1	Peak	Horizontal
*	17422.0	5.4	47.3	52.7	68.2	-15.5	Peak	Horizontal
	12339.0	-3.4	51.0	47.6	74.0	-26.4	Peak	Vertical
*	13988.0	0.6	49.8	50.4	68.2	-17.8	Peak	Vertical
*	15135.5	2.6	47.9	50.5	68.2	-17.7	Peak	Vertical
	16079.0	3.7	47.6	51.3	74.0	-22.7	Peak	Vertical

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



Product	Mobile Computer	Test Engineer	White Wang					
Test Site	SIP-AC3	Test Date	2020/10/22					
Test Mode	802.11a	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	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)				
	11489.0	59.7	-3.1	56.6	74.0	-17.4	Peak	Horizontal
	11490.3	50.8	-3.2	47.6	54.0	-6.4	Average	Horizontal
*	13724.5	50.1	-0.3	49.8	68.2	-18.4	Peak	Horizontal
*	14906.0	47.9	2.3	50.2	68.2	-18.0	Peak	Horizontal
	15747.5	48.0	3.7	51.7	74.0	-22.3	Peak	Horizontal
	11489.0	58.1	-3.1	55.0	74.0	-19.0	Peak	Vertical
	11490.2	47.6	-3.2	44.4	54.0	-9.6	Average	Vertical
*	13758.5	49.2	0.0	49.2	68.2	-19.0	Peak	Vertical
*	15263.0	47.2	3.1	50.3	68.2	-17.9	Peak	Vertical
	16062.0	47.1	4.3	51.4	74.0	-22.6	Peak	Vertical
Test M	ode 1: "*" is n	ot in restricte	d band, its	limit is -27d	Bm/MHz. At a c	listance o	f 3 meters	s, 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.

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

Product	Mobile Computer	Test Engineer	White Wang				
Test Site	SIP-AC3	Test Date	2020/10/22				
Test Mode	802.11a	Test Channel	157				
Remark	1. Average measurement was no	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)				
	11570.0	61.9	-3.7	58.2	74.0	-15.8	Peak	Horizontal
	11570.0	51.3	-3.7	47.6	54.0	-6.4	Average	Horizontal
	12109.5	50.3	-3.1	47.2	74.0	-26.8	Peak	Horizontal
*	14141.0	48.6	1.2	49.8	68.2	-18.4	Peak	Horizontal
*	17362.5	49.9	5.0	54.9	68.2	-13.3	Peak	Horizontal
	11570.0	57.8	-3.7	54.1	74.0	-19.9	Peak	Vertical
	11570.0	45.0	-3.7	41.3	54.0	-12.7	Average	Vertical
*	13988.0	49.1	0.6	49.7	68.2	-18.5	Peak	Vertical
*	15305.5	47.2	2.8	50.0	68.2	-18.2	Peak	Vertical
	16045.0	47.5	3.7	51.2	74.0	-22.8	Peak	Vertical
Test M	ode 1: "*" is n	ot in restricte	d band, its	limit is -27dE	3m/MHz. At a d	listance o	f 3 meters	s, 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.

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

Product	Mobile Computer	Test Engineer	White Wang			
Test Site	SIP-AC3	Test Date	2020/10/22			
Test Mode	802.11a	Test Channel	165			
Remark	1. Average measurement was no	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)				
	11650.5	61.6	-3.5	58.1	74.0	-15.9	Peak	Horizontal
	11650.7	52.0	-3.5	48.5	54.0	-5.5	Average	Horizontal
	12696.0	49.5	-2.5	47.0	74.0	-27.0	Peak	Horizontal
*	15237.5	47.2	3.0	50.2	68.2	-18.0	Peak	Horizontal
*	17481.5	49.7	5.2	54.9	68.2	-13.3	Peak	Horizontal
	11650.5	56.2	-3.5	52.7	74.0	-21.3	Peak	Vertical
*	13835.0	49.0	0.3	49.3	68.2	-18.9	Peak	Vertical
*	15212.0	47.8	2.9	50.7	68.2	-17.5	Peak	Vertical
	15594.5	48.1	2.3	50.4	74.0	-23.6	Peak	Vertical
Test Mode 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field								
strengt	h limit in dBµ	V/m can be d	letermined	by adding a	"conversion" fa	ctor of 95	5.2dB to th	ne EIRP limit

of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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



Product	Mobile Computer	Test Engineer	White Wang			
Test Site	SIP-AC3	Test Date	2020/11/15			
Test Mode	802.11ac-VHT20	Test Channel	36			
Remark	1. Average measurement was no	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)				
	11897.0	-3.3	51.4	48.1	74.0	-25.9	Peak	Horizontal
*	12806.5	-2.5	50.1	47.6	68.2	-20.6	Peak	Horizontal
*	14268.5	1.2	48.6	49.8	68.2	-18.4	Peak	Horizontal
	15560.5	2.9	48.5	51.4	74.0	-22.6	Peak	Horizontal
	12407.0	-2.6	49.7	47.1	74.0	-26.9	Peak	Vertical
*	13835.0	0.3	49.3	49.6	68.2	-18.6	Peak	Vertical
*	14795.5	2.2	48.3	50.5	68.2	-17.7	Peak	Vertical
	15722.0	3.1	47.2	50.3	74.0	-23.7	Peak	Vertical
Note 1:	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/M⊦	Iz. At a distanc	e of 3 me	ters, the f	ield 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 ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)

Product	Mobile Computer	Test Engineer	White Wang				
Test Site	SIP-AC3	Test Date	2020/11/15				
Test Mode	802.11ac-VHT20	Test Channel	44				
Remark	1. Average measurement was no	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)				
	12398.5	-2.9	50.2	47.3	74.0	-26.7	Peak	Horizontal
*	12951.0	-2.6	49.1	46.5	68.2	-21.7	Peak	Horizontal
*	14073.0	1.0	49.1	50.1	68.2	-18.1	Peak	Horizontal
	15849.5	3.5	47.4	50.9	74.0	-23.1	Peak	Horizontal
	12322.0	-3.2	50.1	46.9	74.0	-27.1	Peak	Vertical
*	13826.5	0.3	49.5	49.8	68.2	-18.4	Peak	Vertical
	15569.0	2.8	47.7	50.5	74.0	-23.5	Peak	Vertical
*	17422.0	5.4	47.8	53.2	68.2	-15.0	Peak	Vertical

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

Product	Mobile Computer	Test Engineer	White Wang				
Test Site	SIP-AC3	Test Date	2020/11/15				
Test Mode	802.11ac-VHT20	Test Channel	48				
Remark	1. Average measurement was no	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)				
	12628.0	-2.6	50.0	47.4	74.0	-26.6	Peak	Horizontal
*	14107.0	0.6	49.3	49.9	68.2	-18.3	Peak	Horizontal
*	14812.5	2.5	47.9	50.4	68.2	-17.8	Peak	Horizontal
	15637.0	2.6	46.1	48.7	74.0	-25.3	Peak	Horizontal
	12611.0	-2.7	50.1	47.4	74.0	-26.6	Peak	Vertical
*	13894.5	0.4	49.5	49.9	68.2	-18.3	Peak	Vertical
*	14821.0	2.5	47.5	50.0	68.2	-18.2	Peak	Vertical
	15492.5	2.8	48.6	51.4	74.0	-22.6	Peak	Vertical

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



Product	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/15
Test Mode	802.11ac-VHT20	Test Channel	52
Remark	1. Average measurement was not	performed if pea	ak level lower than average
	limit.		
	2. Other frequency was 20dB belo	w limit line withi	n 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)				
	12517.5	-2.8	49.9	47.1	74.0	-26.9	Peak	Horizontal
*	13988.0	0.6	48.9	49.5	68.2	-18.7	Peak	Horizontal
*	14948.5	2.3	46.5	48.8	68.2	-19.4	Peak	Horizontal
	15832.5	3.8	46.5	50.3	74.0	-23.7	Peak	Horizontal
	12339.0	-3.4	50.6	47.2	74.0	-26.8	Peak	Vertical
*	13733.0	0.0	49.7	49.7	68.2	-18.5	Peak	Vertical
*	14923.0	2.7	47.6	50.3	68.2	-17.9	Peak	Vertical
	15832.5	3.8	47.1	50.9	74.0	-23.1	Peak	Vertical

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

Product	Mobile Computer	Test Engineer	White Wang			
Test Site	SIP-AC3	Test Date	2020/11/15			
Test Mode	802.11ac-VHT20	Test Channel	60			
Remark	1. Average measurement was no	1. Average measurement was not performed if peak level lower than average				
	limit.					
	2. Other frequency was 20dB bel	ow limit line within 1-18	GHz, 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)				
	12092.5	-3.3	50.4	47.1	74.0	-26.9	Peak	Horizontal
*	13758.5	0.0	49.3	49.3	68.2	-18.9	Peak	Horizontal
*	15016.5	2.2	46.7	48.9	68.2	-19.3	Peak	Horizontal
	15849.5	3.5	46.8	50.3	74.0	-23.7	Peak	Horizontal
	12466.5	-3.2	49.9	46.7	74.0	-27.3	Peak	Vertical
*	13877.5	0.4	49.5	49.9	68.2	-18.3	Peak	Vertical
*	14846.5	2.2	48.7	50.9	68.2	-17.3	Peak	Vertical
	15773.0	3.2	47.3	50.5	74.0	-23.5	Peak	Vertical

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

Product	Mobile Computer	Test Engineer	White Wang			
Test Site	SIP-AC3	Test Date	2020/11/15			
Test Mode	802.11ac-VHT20	Test Channel	64			
Remark	1. Average measurement was no	1. Average measurement was not performed if peak level lower than average				
	limit.					
	2. Other frequency was 20dB bel	ow limit line within 1-18	GHz, 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)				
	12203.0	-3.2	50.3	47.1	74.0	-26.9	Peak	Horizontal
*	12815.0	-2.3	50.4	48.1	68.2	-20.1	Peak	Horizontal
*	14073.0	1.0	49.0	50.0	68.2	-18.2	Peak	Horizontal
	15552.0	2.9	47.3	50.2	74.0	-23.8	Peak	Horizontal
	11999.0	-2.9	50.0	47.1	74.0	-26.9	Peak	Vertical
*	13665.0	-0.5	48.0	47.5	68.2	-20.7	Peak	Vertical
	15756.0	3.6	46.9	50.5	74.0	-23.5	Peak	Vertical
*	16716.5	4.7	48.3	53.0	68.2	-15.2	Peak	Vertical

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

Product	Mobile Computer	Test Engineer	White Wang			
Test Site	SIP-AC3	Test Date	2020/11/15			
Test Mode	802.11ac-VHT20	Test Channel	100			
Remark	1. Average measurement was no	1. Average measurement was not performed if peak level lower than average				
	limit.					
	2. Other frequency was 20dB bel	ow limit line within 1-18	GHz, 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)				
	11999.0	-2.9	49.7	46.8	74.0	-27.2	Peak	Horizontal
*	13852.0	0.4	49.4	49.8	68.2	-18.4	Peak	Horizontal
	15739.0	3.8	46.7	50.5	74.0	-23.5	Peak	Horizontal
*	17150.0	4.8	47.6	52.4	68.2	-15.8	Peak	Horizontal
	12356.0	-3.4	50.5	47.1	74.0	-26.9	Peak	Vertical
*	13614.0	-0.8	49.9	49.1	68.2	-19.1	Peak	Vertical
	15739.0	3.8	47.5	51.3	74.0	-22.7	Peak	Vertical
*	16376.5	4.5	48.2	52.7	68.2	-15.5	Peak	Vertical

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

Product	Mobile Computer	Test Engineer	White Wang			
Test Site	SIP-AC3	Test Date	2020/11/15			
Test Mode	802.11ac-VHT20	Test Channel	120			
Remark	1. Average measurement was no	1. Average measurement was not performed if peak level lower than average				
	limit.					
	2. Other frequency was 20dB bel	ow limit line within 1-18	GHz, 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)				
	12645.0	-2.6	49.6	47.0	74.0	-27.0	Peak	Horizontal
*	14056.0	0.9	48.6	49.5	68.2	-18.7	Peak	Horizontal
*	14812.5	2.5	47.4	49.9	68.2	-18.3	Peak	Horizontal
	15790.0	3.1	47.6	50.7	74.0	-23.3	Peak	Horizontal
	12143.5	-3.5	50.3	46.8	74.0	-27.2	Peak	Vertical
*	14243.0	1.3	48.9	50.2	68.2	-18.0	Peak	Vertical
*	15271.5	2.9	47.2	50.1	68.2	-18.1	Peak	Vertical
	15637.0	2.6	46.9	49.5	74.0	-24.5	Peak	Vertical

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

Product	Mobile Computer	Test Engineer	White Wang			
Test Site	SIP-AC3	Test Date	2020/11/15			
Test Mode	802.11ac-VHT20	Test Channel	140			
Remark	1. Average measurement was no	1. Average measurement was not performed if peak level lower than average				
	limit.					
	2. Other frequency was 20dB bel	ow limit line within 1-18	GHz, 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)				
	11999.0	-2.9	49.3	46.4	74.0	-27.6	Peak	Horizontal
*	14209.0	1.0	49.2	50.2	68.2	-18.0	Peak	Horizontal
*	14923.0	2.7	47.6	50.3	68.2	-17.9	Peak	Horizontal
	15739.0	3.8	47.2	51.0	74.0	-23.0	Peak	Horizontal
*	14277.0	1.2	48.7	49.9	68.2	-18.3	Peak	Vertical
	16045.0	3.7	47.9	51.6	74.0	-22.4	Peak	Vertical
*	17320.0	5.1	47.9	53.0	68.2	-15.2	Peak	Vertical
	17838.5	5.5	48.9	54.4	74.0	-19.6	Peak	Vertical

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

Product	Mobile Computer	Test Engineer	White Wang		
Test Site	SIP-AC3	Test Date	2020/11/15		
Test Mode	802.11ac-VHT20	Test Channel	144		
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)				
	12611.0	-2.7	50.3	47.6	74.0	-26.4	Peak	Horizontal
*	13818.0	0.2	50.3	50.5	68.2	-17.7	Peak	Horizontal
*	15246.0	3.0	47.2	50.2	68.2	-18.0	Peak	Horizontal
	15705.0	2.3	45.7	48.0	74.0	-26.0	Peak	Horizontal
	12645.0	-2.6	49.8	47.2	74.0	-26.8	Peak	Vertical
*	13843.5	0.4	48.6	49.0	68.2	-19.2	Peak	Vertical
*	14880.5	2.3	47.8	50.1	68.2	-18.1	Peak	Vertical
	15747.5	3.7	47.3	51.0	74.0	-23.0	Peak	Vertical

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

Product	Mobile Computer	Test Engineer	White Wang		
Test Site	SIP-AC3	Test Date	2020/10/22		
Test Mode	802.11ac-VHT20	Test Channel	149		
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 (MHz)	Reading	Factor (dB)	Measure Level	Limit (dBuV/m)	Margin (dB)	Detector	Polarization
	()	(dBµV)	(02)	(dBµV/m)		(0.2)		
	11490.0	59.8	-3.1	56.7	74.0	-17.3	Peak	Horizontal
	11490.0	50.0	-3.2	46.8	54.0	-7.2	Average	Horizontal
	12228.5	50.0	-3.2	46.8	74.0	-27.2	Peak	Horizontal
*	13767.0	49.3	0.0	49.3	68.2	-18.9	Peak	Horizontal
*	14965.5	48.4	2.3	50.7	68.2	-17.5	Peak	Horizontal
	11490.2	58.3	-3.1	55.2	74.0	-18.8	Peak	Vertical
	11490.2	46.7	-3.2	43.5	54.0	-10.5	Average	Vertical
	12288.0	50.7	-3.3	47.4	74.0	-26.6	Peak	Vertical
*	13877.5	48.9	0.4	49.3	68.2	-18.9	Peak	Vertical
*	16521.0	47.6	3.9	51.5	68.2	-16.7	Peak	Vertical
Test M	Test Mode 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.

Test Mode 2: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)
Product	Mobile Computer	Test Engineer	White Wang			
Test Site	SIP-AC3	Test Date	2020/10/22			
Test Mode	802.11ac-VHT20	Test Channel	157			
Remark	1. Average measurement was no	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)					
	11570.5	62.0	-3.7	58.3	74.0	-15.7	Peak	Horizontal	
	11570.5	51.9	-3.7	48.2	54.0	-5.8	Average	Horizontal	
	12109.5	50.1	-3.1	47.0	74.0	-27.0	Peak	Horizontal	
*	16801.5	48.5	4.7	53.2	68.2	-15.0	Peak	Horizontal	
*	17362.5	49.4	5.0	54.4	68.2	-13.8	Peak	Horizontal	
	11574.0	56.2	-3.7	52.5	74.0	-21.5	Peak	Vertical	
	12092.5	50.5	-3.3	47.2	74.0	-26.8	Peak	Vertical	
*	13903.0	48.6	0.4	49.0	68.2	-19.2	Peak	Vertical	
*	17362.5	48.0	5.0	53.0	68.2	-15.2	Peak	Vertical	
Test M	Test Mode 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field								
strengt	h limit in dBµ	V/m can be d	etermined	by adding a	"conversion" fa	ctor of 95	5.2dB to th	ne EIRP limit	

of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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

Product	Mobile Computer	Test Engineer	White Wang			
Test Site	SIP-AC3	Test Date	2020/10/22			
Test Mode	802.11ac-VHT20	Test Channel	165			
Remark	1. Average measurement was no	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)				
	11650.5	63.3	-3.5	59.8	74.0	-14.2	Peak	Horizontal
	11650.5	51.6	-3.6	48.0	54.0	-6.0	Average	Horizontal
	12118.0	50.3	-3.0	47.3	74.0	-26.7	Peak	Horizontal
*	14047.5	48.5	0.9	49.4	68.2	-18.8	Peak	Horizontal
*	17473.0	49.8	5.1	54.9	68.2	-13.3	Peak	Horizontal
	10766.5	50.2	-3.6	46.6	74.0	-27.4	Peak	Vertical
	11650.5	56.5	-3.5	53.0	74.0	-21.0	Peak	Vertical
	11650.5	47.1	-3.6	43.5	54.0	-10.5	Average	Vertical
*	13767.0	51.7	0.0	51.7	68.2	-16.5	Peak	Vertical
*	16776.0	46.8	5.1	51.9	68.2	-16.3	Peak	Vertical
Test M	ode 1: "*" is n	ot in restricte	d band, its	limit is -27dE	3m/MHz. At a d	listance o	f 3 meters	s, 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.

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



Product	Mobile Computer	Test Engineer	White Wang			
Test Site	SIP-AC3	Test Date	2020/11/15			
Test Mode	802.11ac-VHT40	Test Channel	38			
Remark	1. Average measurement was no	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)				
	12262.5	-3.6	51.2	47.6	74.0	-26.4	Peak	Horizontal
*	14345.0	1.6	48.8	50.4	68.2	-17.8	Peak	Horizontal
*	14948.5	2.3	46.8	49.1	68.2	-19.1	Peak	Horizontal
	16147.0	4.1	48.1	52.2	74.0	-21.8	Peak	Horizontal
	12330.5	-3.3	49.0	45.7	74.0	-28.3	Peak	Vertical
*	13886.0	0.4	48.9	49.3	68.2	-18.9	Peak	Vertical
*	14719.0	2.1	48.0	50.1	68.2	-18.1	Peak	Vertical
	15747.5	3.7	46.9	50.6	74.0	-23.4	Peak	Vertical
Note 1:	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/MH	Iz. At a distanc	e of 3 me	eters, the f	ield strength

limit in dB μ V/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 ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)

Product	Mobile Computer	Test Engineer	White Wang			
Test Site	SIP-AC3	Test Date	2020/11/15			
Test Mode	802.11ac-VHT40	Test Channel	46			
Remark	1. Average measurement was no	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)				
	12628.0	-2.6	49.9	47.3	74.0	-26.7	Peak	Horizontal
*	13631.0	-0.7	49.9	49.2	68.2	-19.0	Peak	Horizontal
*	15152.5	2.8	47.9	50.7	68.2	-17.5	Peak	Horizontal
	15960.0	3.5	47.6	51.1	74.0	-22.9	Peak	Horizontal
	12186.0	-3.3	50.6	47.3	74.0	-26.7	Peak	Vertical
*	14081.5	0.9	49.4	50.3	68.2	-17.9	Peak	Vertical
*	14821.0	2.5	47.7	50.2	68.2	-18.0	Peak	Vertical
	15764.5	3.4	47.2	50.6	74.0	-23.4	Peak	Vertical

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



Product	Mobile Computer	Test Engineer	White Wang				
Test Site	SIP-AC3	Test Date	2020/11/15				
Test Mode	802.11ac-VHT40	Test Channel	54				
Remark	1. Average measurement was not	performed if peak	level lower 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)				
	13333.5	-1.4	50.2	48.8	74.0	-25.2	Peak	Horizontal
*	14914.5	2.5	48.2	50.7	68.2	-17.5	Peak	Horizontal
	15824.0	3.7	47.9	51.6	74.0	-22.4	Peak	Horizontal
*	17685.5	5.3	48.2	53.5	68.2	-14.7	Peak	Horizontal
	12339.0	-3.4	50.2	46.8	74.0	-27.2	Peak	Vertical
*	13818.0	0.2	48.4	48.6	68.2	-19.6	Peak	Vertical
*	15016.5	2.2	46.9	49.1	68.2	-19.1	Peak	Vertical
	15705.0	2.3	45.2	47.5	74.0	-26.5	Peak	Vertical

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

Product	Mobile Computer	Test Engineer	White Wang			
Test Site	SIP-AC3	Test Date	2020/11/15			
Test Mode	802.11ac-VHT40	Test Channel	62			
Remark	1. Average measurement was	not performed if pea	ak 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)				
	12007.5	-3.1	51.2	48.1	74.0	-25.9	Peak	Horizontal
*	14464.0	1.9	49.6	51.5	68.2	-16.7	Peak	Horizontal
	15645.5	2.7	47.0	49.7	74.0	-24.3	Peak	Horizontal
*	16682.5	4.7	48.3	53.0	68.2	-15.2	Peak	Horizontal
	12220.0	-3.2	48.5	45.3	74.0	-28.7	Peak	Vertical
*	14056.0	0.9	48.8	49.7	68.2	-18.5	Peak	Vertical
*	14685.0	1.7	46.9	48.6	68.2	-19.6	Peak	Vertical
	15560.5	2.9	45.7	48.6	74.0	-25.4	Peak	Vertical

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

Product	Mobile Computer	Test Engineer	White Wang			
Test Site	SIP-AC3	Test Date	2020/11/15			
Test Mode	802.11ac-VHT40	Test Channel	102			
Remark	1. Average measurement was no	1. Average measurement was not performed if peak level lower than average				
	limit.					
	2. Other frequency was 20dB bel	ow limit line within 1-18	GHz, 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)				
*	13172.0	-2.2	49.9	47.7	68.2	-20.5	Peak	Horizontal
*	14251.5	1.3	48.9	50.2	68.2	-18.0	Peak	Horizontal
	15543.5	2.7	47.4	50.1	74.0	-23.9	Peak	Horizontal
	17957.5	5.9	48.1	54.0	74.0	-20.0	Peak	Horizontal
	17957.5	5.9	34.7	40.6	54.0	-13.4	Average	Horizontal
	12109.5	-3.1	50.6	47.5	74.0	-26.5	Peak	Vertical
*	13852.0	0.4	49.1	49.5	68.2	-18.7	Peak	Vertical
*	15331.0	3.1	48.3	51.4	68.2	-16.8	Peak	Vertical
	15968.5	3.3	48.0	51.3	74.0	-22.7	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/MF	Iz. At a distanc	e of 3 me	ters, the f	ield strenath

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

Product	Mobile Computer	Test Engineer	White Wang			
Test Site	SIP-AC3	Test Date	2020/11/15			
Test Mode	802.11ac-VHT40	Test Channel	118			
Remark	1. Average measurement was no	1. Average measurement was not performed if peak level lower than average				
	limit.					
	2. Other frequency was 20dB bel	ow limit line within 1-18	GHz, 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)				
	12381.5	-3.4	50.3	46.9	74.0	-27.1	Peak	Horizontal
*	13886.0	0.4	49.3	49.7	68.2	-18.5	Peak	Horizontal
*	15271.5	2.9	48.0	50.9	68.2	-17.3	Peak	Horizontal
	15773.0	3.2	45.5	48.7	74.0	-25.3	Peak	Horizontal
	11982.0	-3.5	50.8	47.3	74.0	-26.7	Peak	Vertical
*	14345.0	1.6	48.5	50.1	68.2	-18.1	Peak	Vertical
*	14761.5	2.0	48.2	50.2	68.2	-18.0	Peak	Vertical
	16062.0	4.3	45.9	50.2	74.0	-23.8	Peak	Vertical

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

Product	Mobile Computer	Test Engineer	White Wang			
Test Site	SIP-AC3	Test Date	2020/11/15			
Test Mode	802.11ac-VHT40	Test Channel	134			
Remark	1. Average measurement was no	1. Average measurement was not performed if peak level lower than average				
	limit.					
	2. Other frequency was 20dB bel	low limit line within 1-18	GHz, 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)				
	12407.0	-2.6	50.3	47.7	74.0	-26.3	Peak	Horizontal
*	13852.0	0.4	46.9	47.3	68.2	-20.9	Peak	Horizontal
*	14812.5	2.5	46.6	49.1	68.2	-19.1	Peak	Horizontal
	15985.5	3.1	45.8	48.9	74.0	-25.1	Peak	Horizontal
*	13792.5	-0.3	47.7	47.4	68.2	-20.8	Peak	Vertical
	15832.5	3.8	46.7	50.5	74.0	-23.5	Peak	Vertical
*	16810.0	4.6	48.0	52.6	68.2	-15.6	Peak	Vertical
	17949.0	5.9	47.4	53.3	74.0	-20.7	Peak	Vertical

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

Product	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/15
Test Mode	802.11ac-VHT40	Test Channel	142
Remark	1. Average measurement was no	ot performed if peak leve	el lower than average
	limit.		
	2. Other frequency was 20dB bel	low limit line within 1-18	GHz, 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)				
	12092.5	-3.3	50.4	47.1	74.0	-26.9	Peak	Horizontal
*	15101.5	2.3	49.1	51.4	68.2	-16.8	Peak	Horizontal
	15705.0	2.3	45.7	48.0	74.0	-26.0	Peak	Horizontal
*	16725.0	4.7	45.6	50.3	68.2	-17.9	Peak	Horizontal
	12245.5	-3.4	51.0	47.6	74.0	-26.4	Peak	Vertical
*	13835.0	0.3	50.3	50.6	68.2	-17.6	Peak	Vertical
*	14804.0	2.5	48.1	50.6	68.2	-17.6	Peak	Vertical
	15985.5	3.1	45.6	48.7	74.0	-25.3	Peak	Vertical

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

Product	Mobile Computer	Test Engineer	White Wang			
Test Site	SIP-AC3	Test Date	2020/10/22			
Test Mode	802.11ac-VHT40	Test Channel	151			
Remark	1. Average measurement was no	1. Average measurement was not performed if peak level lower than average				
	limit.					
	2. Other frequency was 20dB bel	ow limit line within 1-18	GHz, 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)				
	11506.0	57.6	-4.0	53.6	74.0	-20.4	Peak	Horizontal
	11506.8	45.2	-4.0	41.2	54.0	-12.8	Average	Horizontal
	12118.0	49.9	-3.0	46.9	74.0	-27.1	Peak	Horizontal
*	13971.0	48.5	0.8	49.3	68.2	-18.9	Peak	Horizontal
*	16708.0	47.3	4.7	52.0	68.2	-16.2	Peak	Horizontal
	10715.5	50.7	-3.3	47.4	74.0	-26.6	Peak	Vertical
	11506.0	55.3	-4.0	51.3	74.0	-22.7	Peak	Vertical
*	14974.0	47.8	2.3	50.1	68.2	-18.1	Peak	Vertical
*	16988.5	47.8	4.7	52.5	68.2	-15.7	Peak	Vertical
Test M	ode 1: "*" is n	ot in restricte	d band, its	limit is -27dE	Bm/MHz. At a c	listance o	f 3 meters	s, the field
strengt	h limit in dBµ	V/m can be d	letermined	by adding a	"conversion" fa	ctor of 95	5.2dB to th	e EIRP limit

of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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

Product	Mobile Computer	Test Engineer	White Wang			
Test Site	SIP-AC3	Test Date	2020/10/22			
Test Mode	802.11ac-VHT40	Test Channel	159			
Remark	1. Average measurement was no	1. Average measurement was not performed if peak level lower than average				
	limit.					
	2. Other frequency was 20dB bel	low limit line within 1-18	GHz, 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)				
	11591.0	60.4	-3.7	56.7	74.0	-17.3	Peak	Horizontal
	11590.3	49.8	-3.7	46.1	54.0	-7.9	Average	Horizontal
	12177.5	50.7	-3.4	47.3	74.0	-26.7	Peak	Horizontal
*	14804.0	47.4	2.5	49.9	68.2	-18.3	Peak	Horizontal
*	17371.0	48.4	5.5	53.9	68.2	-14.3	Peak	Horizontal
	11599.5	54.7	-3.6	51.1	74.0	-22.9	Peak	Vertical
*	13095.5	51.8	-2.2	49.6	68.2	-18.6	Peak	Vertical
*	14056.0	48.7	0.9	49.6	68.2	-18.6	Peak	Vertical
	16155.5	46.7	4.1	50.8	74.0	-23.2	Peak	Vertical
Test Mo	ode 1: "*" is n	ot in restricte	d band, its	limit is -27dE	Bm/MHz. At a c	listance o	f 3 meters	s, the field
strengt	h limit in dBµ	V/m can be d	letermined	by adding a	"conversion" fa	ctor of 95	.2dB to th	ne EIRP limit

of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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



Product	Mobile Computer	Test Engineer	White Wang			
Test Site	SIP-AC3	Test Date	2020/11/15			
Test Mode	802.11ac-VHT80	Test Channel	42			
Remark	1. Average measurement was no	ot performed if peak lev	el 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)				
	12322.0	-3.2	50.1	46.9	74.0	-27.1	Peak	Horizontal
*	13911.5	0.4	48.0	48.4	68.2	-19.8	Peak	Horizontal
	15560.5	2.9	46.2	49.1	74.0	-24.9	Peak	Horizontal
*	16674.0	4.7	48.3	53.0	68.2	-15.2	Peak	Horizontal
*	13665.0	-0.5	48.2	47.7	68.2	-20.5	Peak	Vertical
*	15016.5	2.2	46.5	48.7	68.2	-19.5	Peak	Vertical
	15841.0	3.9	46.6	50.5	74.0	-23.5	Peak	Vertical
	17974.5	5.8	47.9	53.7	74.0	-20.3	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distand	e of 3 me	ters, the f	ield 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 ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)

Product	Mobile Computer	Test Engineer	White Wang				
Test Site	SIP-AC3	Test Date	2020/11/15				
Test Mode	802.11ac-VHT80	Test Channel	58				
Remark	1. Average measurement was no	ot performed if peak leve	el 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)				
	12373.0	-3.6	50.4	46.8	74.0	-27.2	Peak	Horizontal
*	13792.5	-0.3	49.1	48.8	68.2	-19.4	Peak	Horizontal
*	16589.0	4.2	47.4	51.6	68.2	-16.6	Peak	Horizontal
	17966.0	5.9	45.5	51.4	74.0	-22.6	Peak	Horizontal
	11999.0	-2.9	49.6	46.7	74.0	-27.3	Peak	Vertical
*	13554.5	-0.7	50.2	49.5	68.2	-18.7	Peak	Vertical
*	15016.5	2.2	46.3	48.5	68.2	-19.7	Peak	Vertical
	15637.0	2.6	45.7	48.3	74.0	-25.7	Peak	Vertical

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

Product	Mobile Computer	Test Engineer	White Wang
Test Site	SIP-AC3	Test Date	2020/11/15
Test Mode	802.11ac-VHT80	Test Channel	106
Remark	1. Average measurement was no	ot performed if peak leve	el lower than average
	limit.		
	2. Other frequency was 20dB bel	ow limit line within 1-18	GHz, 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)				
	12305.0	-3.0	50.1	47.1	74.0	-26.9	Peak	Horizontal
*	14166.5	1.0	47.4	48.4	68.2	-19.8	Peak	Horizontal
*	15220.5	2.9	46.5	49.4	68.2	-18.8	Peak	Horizontal
	15985.5	3.1	46.4	49.5	74.0	-24.5	Peak	Horizontal
	12067.0	-3.4	50.3	46.9	74.0	-27.1	Peak	Vertical
*	13979.5	0.7	47.6	48.3	68.2	-19.9	Peak	Vertical
*	15314.0	2.9	47.5	50.4	68.2	-17.8	Peak	Vertical
	15832.5	3.8	46.8	50.6	74.0	-23.4	Peak	Vertical

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



Product	Mobile Computer	Test Engineer	White Wang			
Test Site	SIP-AC3	Test Date	2020/11/15			
Test Mode	802.11ac-VHT80	Test Channel	122			
Remark	1. Average measurement was	not performed if peak	k 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)				
	12228.5	-3.2	49.9	46.7	74.0	-27.3	Peak	Horizontal
*	14243.0	1.3	49.1	50.4	68.2	-17.8	Peak	Horizontal
	15909.0	3.2	48.3	51.5	74.0	-22.5	Peak	Horizontal
*	17422.0	5.4	47.1	52.5	68.2	-15.7	Peak	Horizontal
	12441.0	-3.4	50.8	47.4	74.0	-26.6	Peak	Vertical
*	14268.5	1.2	48.9	50.1	68.2	-18.1	Peak	Vertical
	15569.0	2.8	47.6	50.4	74.0	-23.6	Peak	Vertical
*	17371.0	5.5	47.1	52.6	68.2	-15.6	Peak	Vertical

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



Product	Mobile Computer	Test Engineer	White Wang				
Test Site	SIP-AC3	Test Date	2020/11/15				
Test Mode	802.11ac-VHT80	Test Channel	138				
Remark	1. Average measurement was	not performed if peak	level lower than average				
	limit.						
	2. Other frequency was 20dB I	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)				
	12398.5	-2.9	50.0	47.1	74.0	-26.9	Peak	Horizontal
*	13809.5	0.0	49.5	49.5	68.2	-18.7	Peak	Horizontal
	15849.5	3.5	47.5	51.0	74.0	-23.0	Peak	Horizontal
*	16759.0	4.6	49.0	53.6	68.2	-14.6	Peak	Horizontal
	12092.5	-3.3	50.9	47.6	74.0	-26.4	Peak	Vertical
*	14345.0	1.6	48.6	50.2	68.2	-18.0	Peak	Vertical
*	14948.5	2.3	47.8	50.1	68.2	-18.1	Peak	Vertical
	16062.0	4.3	47.4	51.7	74.0	-22.3	Peak	Vertical

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

Product	Mobile Computer	Test Engineer	White Wang				
Test Site	SIP-AC3	Test Date	2020/10/22				
Test Mode	802.11ac-VHT80	Test Channel	155				
Remark	1. Average measurement was no	ot performed if peak lev	el 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)				
	11548.5	56.6	-3.8	52.8	74.0	-21.2	Peak	Horizontal
	12322.0	50.1	-3.2	46.9	74.0	-27.1	Peak	Horizontal
*	14056.0	48.3	0.9	49.2	68.2	-19.0	Peak	Horizontal
*	16512.5	48.4	4.3	52.7	68.2	-15.5	Peak	Horizontal
	11531.5	56.0	-4.0	52.0	74.0	-22.0	Peak	Vertical
	12092.5	50.6	-3.3	47.3	74.0	-26.7	Peak	Vertical
*	13971.0	48.8	0.8	49.6	68.2	-18.6	Peak	Vertical
*	17014.0	48.0	4.0	52.0	68.2	-16.2	Peak	Vertical
		- 1 1 1 - 1 - 1 - 1 - 1 - 1	al la sur al 10 s	1		P=(=	(O	. (h C l

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



The Worst Case of Radiated Emission below 1GHz:

Weret Case Meder Transmit by 202 11a at channel 5500MUz				
EUT: Mobile Computer	Power: AC 120V/60Hz			
Probe: SIP-AC3_VULB 9168 _20-2000MHz	Polarity: Horizontal			
Limit: FCC_Part15.209_RSE(3m)	Engineer: White Wang			
Site: SIP-AC3	Time: 2020/11/15 - 17:33			

Worst Case Mode: Transmit by 802.11a at channel 5500MHz



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			35.601	24.644	10.800	-15.356	40.000	13.844	QP
2			60.003	31.375	18.200	-8.625	40.000	13.175	QP
3		*	119.994	35.864	23.000	-7.636	43.500	12.864	QP
4			129.780	28.861	15.400	-14.639	43.500	13.461	QP
5			143.975	27.183	12.700	-16.317	43.500	14.483	QP
6			240.156	24.769	12.400	-21.231	46.000	12.369	QP

Note 1: Measure Level (dB μ V/m) = Reading Level (dB μ 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: SIP-AC3	Time: 2020/11/15 - 17:47
Limit: FCC_Part15.209_RSE(3m)	Engineer: White Wang
Probe: SIP-AC3_VULB 9168 _20-2000MHz	Polarity: Vertical
EUT: Mobile Computer	Power: AC 120V/60Hz

Worst Case Mode: Transmit by 802.11a at channel 5500MHz



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			30.383	34.852	21.300	-5.148	40.000	13.552	QP
2			35.940	38.277	24.400	-1.723	40.000	13.878	QP
3			47.945	34.500	20.500	-5.500	40.000	14.000	QP
4		*	60.009	39.074	25.900	-0.926	40.000	13.174	QP
5			67.351	28.400	16.580	-11.600	40.000	11.821	QP
6			119.725	36.039	23.200	-7.461	43.500	12.838	QP

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.



6.9. Radiated Restricted Band Edge Measurement

6.9.1.Test Limit

For 15.205Requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15,

Frequency Frequency Frequency Frequency (MHz) (MHz) (MHz) (GHz) 0.090 - 0.110 16.42-16.423 399.9 - 410 4.5-5.15 1 0.495 - 0.505 16.69475-16.69525 608 - 614 5.35-5.46 2.1735-2.1905 16.80425-16.80475 960 - 1240 7.25-7.75 4.125-4.128 25.5 - 25.67 1300 - 1427 8.025 - 8.5 4.17725-4.17775 37.5-38.25 1435-1626.5 9.0-9.2 4.20725-4.20775 73-74.6 1645.5-1646.5 9.3-9.5 1660 - 1710 10.6-12.7 6.215-6.218 74.8-75.2 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 2310-2390 8.291-8.294 149.9-150.05 15.35-16.2 8.362-8.366 156.52475-156.52525 2483.5 - 2500 17.7-21.4 156.7-156.9 2690 - 2900 22.01-23.12 8.37625-8.38675 8.41425-8.41475 162.0125-167.17 3260 - 3267 23.6-24.0 12.29-12.293 3332 - 3339 31.2-31.8 167.72-173.2 12.51975-12.52025 3345.8 - 3358 36.43-36.5 240 - 285 (²) 12.57675-12.57725 322-335.4 3600 - 4400 13.36-13.41 -------

must also comply with the radiated emission limits specified in Section 15.209(a).

For 15.407(b) Requirement:

For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz

band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz

band shall not exceedane.i.r.p. of -27 dBm/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 -27 dBm/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 D02v02r01 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.

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.

FCC Part 15 Subpart C Paragraph 15.209							
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					

6.9.2.Test Procedure Used

KDB 789033 D02v02r01- Section G



6.9.3.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 = 10Hz
- 4. If the EUT duty cycle is < 98%, set VBW \geq 1/T. T is the minimum transmission duration
- 5. Detector = Peak
- 6. Sweep time = Auto
- 7. Trace mode = Max hold
- 8. Trace was allowed to stabilize



6.9.4.Test Setup





6.9.5.Test Result

Site: SIP-AC3	Time: 2020/11/19 - 11:49			
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang			
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal			
EUT: Mobile Computer	Power: AC 120V/60Hz			
Test Mode: Transmit by 802.11a at channel 5180MHz				



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



Site:	SIP-A	C3			-	Time: 2020/11/19 - 11:58				
Limi	t: FCC	_Part15	.209_RE(3m)		Engineer: White Wang				
Prob	be: SIP	-AC3_H	IF907_10286	1_1-18GHz		Polarity: Horiz	ontal			
EUT	: Mobil	e Comp	outer			Power: AC 120	0V/60Hz			
Test	Mode:	Transn	nit by 802.11a	a at channel 5	5180MHz					
Level(dBuV/m)	130 80 70 60 50 40 30 5110	5115 5	1	0 5135 5140	2 5145 5150 Frequ	5155 5160 516 ency(MHz)	5 5170 5175	5180 5185 51	90 5195 5200	
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре	
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)		

		(IVIEZ)	Levei	Levei	(ub)	(ubuv/m)	(ub)	
			(dBuV/m)	(dBuV)				
1		5127.235	47.678	57.170	-6.322	54.000	-9.492	AV
2		5150.000	46.713	56.240	-7.287	54.000	-9.527	AV
3	*	5174.755	94.469	104.003	N/A	N/A	-9.535	AV

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



2

3

Site: SIP-AC3	Time: 2020/11/19 - 11:59			
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang			
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Vertical			
EUT: Mobile Computer	Power: AC 120V/60Hz			
Test Mode: Transmit by 802.11a at channel 5180MHz				



74.000

N/A

-14.802

N/A

ΡK

ΡK

-9.527

-9.535

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

59.198

103.142

5150.000

5175.655

*

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

68.725

112.678



Site	SIP-A	C3				Time: 2020/11/19 - 12:02				
Limi	t: FCC	_Part15	5.209_RE(3m)		Engineer: White Wang				
Prot	be: SIP	-AC3_H	IF907_10286	1_1-18GHz		Polarity: Vertic	cal			
EUT	: Mobi	e Com	outer			Power: AC 12	0V/60Hz			
Test	Mode	Transr	nit by 802.11a	a at channel 5	5180MHz					
	130	13	1 1 1				T I	1 1		
_							3			
m//m	•							1		
vel(dB	80									
Le I	70			· · · ·						
	60									
	50				2				harren	
	40									
	30	5115 0	100 5105 510	0 5125 5140	5145 5150	E166 6160 616	5 5170 5175	5100 5105 51	100 5105 5200	
13	5110	5115 .	0120 0120 013	0 5155 5140	Freq	uency(MHz)	5 5170 5175	10 2010 1010	190 5195 5200	
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре	
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)		
				(dBuV/m)	(dBuV)					

			(dBuV/m)	(dBuV)				
1		5128.180	47.335	56.838	-6.665	54.000	-9.503	AV
2		5150.000	46.823	56.350	-7.177	54.000	-9.527	AV
3	*	5174.440	92.941	102.475	N/A	N/A	-9.535	AV

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



Site: SIP-AC3	Time: 2020/11/19 - 13:05
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at channel 5320MHz	

Level(dBuV/m) A share with a second Frequency(MHz) No Flag Mark Frequency Measure Factor Reading Margin Limit Type

	g			measure	riedding	mangin			.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5325.440	104.381	113.568	N/A	N/A	-9.186	PK
2			5350.000	58.785	68.008	-15.215	74.000	-9.222	PK
3			5355.520	60.045	69.284	-13.955	74.000	-9.238	PK

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



Site: SIP-AC3	Time: 2020/11/19 - 13:11
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at channel 5320MHz	



INO	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5317.040	94.523	103.804	N/A	N/A	-9.280	AV
2			5350.000	46.201	55.424	-7.799	54.000	-9.222	AV
3			5372.440	47.113	56.307	-6.887	54.000	-9.194	AV

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



2

3

Site: SIP-AC3	Time: 2020/11/19 - 13:12
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at channel 5320MHz	

130 1 Level(dBuV/m) 80 70 3 2 60 50 40 30 5310 5315 5320 5325 5330 5335 5340 5345 5350 5355 5360 5365 5370 5375 5380 5385 5390 Frequency(MHz) No Flag Frequency Measure Reading Limit Factor Mark Margin Туре (MHz) Level Level (dB) (dBuV/m) (dB) (dBuV/m) (dBuV) * N/A 1 5316.120 102.565 111.858 N/A -9.293 ΡK

-14.922

-13.522

74.000

74.000

ΡK

ΡK

-9.222

-9.238

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

59.078

60.478

5350.000

5356.120

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

68.301

69.717



Site: SIP-AC3	Time: 2020/11/19 - 13:32
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at channel 5320MHz	



		(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
			(dBuV/m)	(dBuV)				
1	*	5315.800	91.962	101.259	N/A	N/A	-9.298	AV
2		5350.000	46.062	55.285	-7.938	54.000	-9.222	AV
3		5357.240	46.318	55.556	-7.682	54.000	-9.237	AV

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



3

4

5

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Site: SIP-AC3	Time: 2020/11/19 - 13:33
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at channel 5500MHz	



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

60.208

58.649

5465.640

5470.000

5497.725

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

69.171

67.667

112.551

-7.992

-9.551

N/A

68.200

68.200

N/A

-8.963

-9.018

-8.791

ΡK

ΡK

ΡK



Site	Site: SIP-AC3					Time: 2020/11/19 - 13:38			
Limi	t: FCC_	_Part15.209_R	E(3m)		Engineer: White Wang				
Prot	be: SIP-	AC3_HF907_	102861_1-18G	Hz	Polarity: Horiz	ontal			
EUT	EUT: Moblie Computer					0V/60Hz			
Test	Mode:	Transmit by 80)2.11a at chann	el 5500MHz					
	130 (m/\ng) 80 80 70 60 50 40 30 5430	5435 5440 54	45 5450 5455 5	2	5475 5480 548	5 5490 5495	5500 5505 551	0 5515 5520	
No	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Type	
	Marit	(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	1,100	
		((dBuV/m)	(dBuV)	()	(()		
1		5447.550	47.549	56.372	-6.451	54.000	-8.823	AV	
2		5460.000	46.625	55.518	-7.375	54.000	-8.894	AV	
3	*	5493.765	93.534	102.356	39.534	54.000	-8.822	AV	

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

ΡK

ΡK

-9.018

-8.826



Site: SIP-AC3	Time: 2020/11/19 - 13:39
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Vertical
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11a at channel 5500MHz	



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

59.290

5470.000

5493.315

4

5

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

68.308

111.350

-8.910

N/A

68.200

N/A



Site	Site: SIP-AC3					Time: 2020/11/19 - 13:49			
Limi	t: FCC_	_Part15.209_R	E(3m)		Engineer: White Wang				
Prob	Probe: SIP-AC3_HF907_102861_1-18GHz				Polarity: Vertic	al			
EUT	EUT: Moblie Computer				Power: AC 12	0V/60Hz			
Test	Mode:	Transmit by 80)2.11a at chanr	el 5500MHz					
	130 [m/m] 80 80 70 60 50 40 30			2		3			
18	5430	5435 5440 54	45 5450 5455 :	6460 5465 5470 Free	5475 5480 548 quency(MHz)	is 5490 5495	5500 5505 551	10 5515 5520	
No	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре	
		(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)		
			(dBuV/m)	(dBuV)					
1		5447.190	47.372	56.195	-6.628	54.000	-8.823	AV	
2		5460.000	46.566	55.459	-7.434	54.000	-8.894	AV	
3	*	5492.955	92.978	101.807	38.978	54.000	-8.829	AV	

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


Site: SIP-AC3	Time: 2020/11/19 - 13:51		
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang		
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal		
EUT: Mobile Computer	Power: AC 120V/60Hz		

Test Mode: Transmit by 802.11a at channel 5700MHz



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5695.725	106.649	115.904	N/A	N/A	-9.256	PK
2			5725.000	58.484	67.591	-9.716	68.200	-9.107	PK
3			5730.370	60.093	69.263	-8.107	68.200	-9.170	PK

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



EUT: Mobile Computer	Power: AC 120V/60Hz
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Vertical
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Site: SIP-AC3	Time: 2020/11/19 - 13:56

Test Mode: Transmit by 802.11a at channel 5700MHz



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5695.692	103.300	112.555	N/A	N/A	-9.256	PK
2			5725.000	59.351	68.458	-8.849	68.200	-9.107	PK
3			5728.745	61.370	70.512	-6.830	68.200	-9.142	PK

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



4

5

Site: AC3	Time: 2020/10/22 - 14:53
Limit: FCC_Part15.407_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: AC 120V/60Hz

Test Mode: Transmit by 802.11a at channel 5745MHz



 6
 5741.322
 110.615
 119.969
 N/A
 N/A

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

85.056

91.192

5720.000

5725.000

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

94.219

100.299

-25.744

-31.008

110.800

122.200

-9.163

-9.107

-9.354

ΡK

ΡK

ΡK

ΡK

-9.382



6

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Site	: AC3				٦	Time: 2020/10/22 - 14:54 Engineer: White Wang Polarity: Vertical				
Limi	t: FCC	_Part15	5.407_RE(3m)	E					
Prot	be: SIP	-AC3_H	IF907_10286	1_1-18GHz	F					
EUT	: Mobil	e Comp	outer		F	Power: AC 120	0V/60Hz			
Test	Mode	Transn	nit by 802.11a	a at channel 5	5745MHz					
I evel(rdBuV/m)	130 80 70 60 50 40 30 5600	5610	5620 5630 5	1 2 6640 5650 56	560 5670 56 Freque	80 5690 5700 ency(MHz)	0 5710 5720	5730 5740	5750 5765	
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре	
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)		
				(dBuV/m)	(dBuV)					
1			5638.940	60.045	69.178	-8.155	68.200	-9.133	PK	
2			5650.000	58.681	67.810	-9.519	68.200	-9.129	PK	
3			5700.000	69.590	78.855	-35.610	105.200	-9.266	PK	
4			5720.000	86.992	96.155	-23.808	110.800	-9.163	PK	
5			5725.000	96.406	105.513	-25.794	122,200	-9.107	РК	

114.875 Test Mode: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

5743.715

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

124.256

N/A

N/A



Site: AC3	Time: 2020/10/22 - 15:02		
Limit: FCC_Part15.407_RE(3m)	Engineer: White Wang		
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal		
EUT: Mobile Computer	Power: AC 120V/60Hz		
Test Made, Trenewith, 000 44 a staken at 5005 Mile			

Test Mode: Transmit by 802.11a at channel 5825MHz



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5828.790	109.497	118.639	N/A	N/A	-9.142	PK
2			5850.000	78.945	87.998	-43.255	122.200	-9.053	PK
3			5855.000	77.866	86.914	-32.934	110.800	-9.049	PK
4			5875.000	60.470	69.490	-44.730	105.200	-9.020	PK
5			5925.000	59.760	68.523	-8.440	68.200	-8.762	PK
6		*	5951.152	60.406	69.131	-7.794	68.200	-8.726	PK

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



Site: AC3	Time: 2020/10/22 - 15:08		
Limit: FCC_Part15.407_RE(3m)	Engineer: White Wang		
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Vertical		
EUT: Mobile Computer	Power: AC 120V/60Hz		
EUT: Mobile Computer	Power: AC 120V/60Hz		

Test Mode: Transmit by 802.11a at channel 5825MHz



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5827.522	114.098	123.250	N/A	N/A	-9.152	PK
2			5850.000	85.481	94.534	-36.719	122.200	-9.053	PK
3			5855.000	81.036	90.084	-29.764	110.800	-9.049	PK
4			5875.000	64.681	73.701	-40.519	105.200	-9.020	PK
5			5925.000	58.280	67.043	-9.920	68.200	-8.762	PK
6		*	5940.135	60.404	69.103	-7.796	68.200	-8.699	PK

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



Site	Site: SIP-AC3						Time: 2020/11/19 - 14:09				
Limi	t: FCC	_Part15	.209_RE(3m)	E	Engineer: White Wang					
Prob	be: SIP	-AC3_H	IF907_10286	1_1-18GHz	P	olarity: Horizo	ontal				
EUT	: Mobil	e Comp	outer		P	ower: AC 120	0V/60Hz				
Test	Mode:	Transn	nit by 802.11a	ac-VHT20 at o	channel 5180	MHz					
Level(dBuV/m)	130 80 70 60 40 30 5110	5115 5	1100 5125 513	1 1 0 5135 5140	2 5145 5150 5 Frequen	155 5160 5165 ncy(MHz)	5 5170 5175	5180 5185 51	90 5195 5200		
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре		
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)			
				(dBuV/m)	(dBuV)						
1			5133.040	60.668	70.204	-13.332	74.000	-9.536	PK		
2			5150.000	58.741	68.268	-15.259	74.000	-9.527	PK		
3		*	5174.710	101.446	110.980	N/A	N/A	-9.535	PK		



Site	: SIP-A	C3			Т	Time: 2020/11/19 - 14:23				
Limi	t: FCC	_Part15	.209_RE(3m))	E	Engineer: White Wang				
Prob	Probe: SIP-AC3_HF907_102861_1-18GHz					olarity: Horiz	ontal			
EUT	EUT: Mobile Computer					ower: AC 120	0V/60Hz			
Test	Test Mode: Transmit by 802.11ac-VHT20 at channel 51					MHz				
Level(dBuV/m)	130 80 70 60 50 40 30 5110	5115 5	1	0 5135 5140	2	155 5160 516	5 5170 5175	5180 5185 51	90 5195 5200	
3					Freque	ncy(MHz)		1		
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре	
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)		
				(dBuV/m)	(dBuV)					
1			5128.045	47.239	56.741	-6.761	54.000	-9.502	AV	
2			5150.000	46.677	56.204	-7.323	54.000	-9.527	AV	
3		*	5175.205	91.656	101.191	N/A	N/A	-9.535	AV	



Site	e: SIP-AC3					Time: 2020/11/19 - 14:24					
Limi	t: FCC	_Part15	.209_RE(3m))	E	Engineer: White Wang					
Prob	be: SIP	-AC3_H	IF907_10286	1_1-18GHz	F	Polarity: Vertical					
EUT	: Mobil	e Comp	outer		F	Power: AC 120V/60Hz					
Test	Mode:	Transn	nit by 802.11a	ac-VHT20 at o	channel 5180	MHz					
Level(dBuV/m)	130 80 70 60 mm 50 40 30 5110	5115 5	1	944-944-944-94 944-94-94 0 5135 5140	2 5145 5150 5 Freque	155 5160 516: ncy(MHz)	5 5170 5175	5180 5185 51	90 5195 5200		
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре		
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)			
				(dBuV/m)	(dBuV)						
1			5127.505	60.760	70.255	-13.240	74.000	-9.495	РК		
2	2 5150.000 58.022		67.549	-15.978	74.000	-9.527	РК				
3		*	5174.260	101.024	110.558	N/A	N/A	-9.533	РК		



Site	re: SIP-AC3 					Time: 2020/11/19 - 14:27					
Limi	t: FCC	_Part15	.209_RE(3m))	E	Engineer: White Wang					
Prob	be: SIP	-AC3_H	IF907_10286	1_1-18GHz	P	Polarity: Vertical					
EUT	: Mobil	e Comp	outer		Р	Power: AC 120V/60Hz					
Test	Mode:	Transn	nit by 802.11a	ac-VHT20 at o	channel 5180	MHz					
Level(dBuV/m)	130 80 70 60 50 40 30 5110	5115 5	1	0 5135 5140	2 5145 5150 5	155 5160 516	5 5170 5175	5180 5185 51	90 5195 5200		
			F	N 4	Freque	ncy(MHz)	L	Factor			
NO	⊦lag	Mark	Frequency	Measure	Reading	Margin		Factor	туре		
			(MHz)	Level (dBuV/m)	Level (dBuV)	(dB)	(dBuV/m)	(dB)			
1			5128.270	47.276	56.780	-6.724	54.000	-9.505	AV		
2			5150.000	46.411	55.938	-7.589	54.000	-9.527	AV		
3		*	5175.475	91.511	101.046	N/A	N/A	-9.535	AV		



Site: SIP-AC3	Time: 2020/11/19 - 14:28
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Mobile Computer	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ac-VHT20 at channel 53	320MHz



			(dBuV/m)	(dBuV)				
1	*	5326.800	101.878	111.050	N/A	N/A	-9.171	PK
2		5350.000	58.011	67.234	-15.989	74.000	-9.222	PK
3		5353.280	60.337	69.578	-13.663	74.000	-9.241	PK



3

Site	SIP-AC3					Time: 2020/11/19 - 14:32					
Limi	t: FCC	_Part15	.209_RE(3m)		Engineer: White Wang					
Prob	be: SIP	-AC3_H	IF907_10286	1_1-18GHz		Polarity: Horizontal					
EUT	: Mobil	e Comp	outer			Power: AC 12	0V/60Hz				
Test	Mode:	Transn	nit by 802.11a	ac-VHT20 at	channel 532	0MHz					
Level(dBuV/m)	130 80 70 60 50 40 30 5310	1	5320 5325	5330 5335 5	5340 5345	2 5350 5355 5:	3 360 5365 53	70 5375 538	0 5385 5390		
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Type		
		Man	(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
			((dBuV/m)	(dBuV)	((3-2)	()			
1		*	5315.320	91.683	100.986	N/A	N/A	-9.303	AV		
2			5350.000	46.092	55.315	-7.908	54.000	-9.222	AV		

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

5365.280

46.399

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

55.630

-7.601

54.000

-9.231

AV



Site: SIP-AC3	Time: 2020/11/19 - 14:33					
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang					
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Vertical					
EUT: Mobile Computer	Power: AC 120V/60Hz					
Test Mode: Transmit by 802.11ac-VHT20 at channel 53	20MHz					
	2 3 au Anny da Manuaga					

Frequency(MHz)

No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5314.640	99.465	108.777	N/A	N/A	-9.313	PK
2			5350.000	57.953	67.176	-16.047	74.000	-9.222	PK
3			5366.480	60.611	69.841	-13.389	74.000	-9.230	PK

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



*

1

2

5315.200

5350.000

Site	: SIP-A	C3				Time: 2020/1	1/19 - 14:37				
Lim	it: FCC	_Part15	5.209_RE(3m)		Engineer: White Wang					
Pro	be: SIP	-AC3_H	IF907_10286	1_1-18GHz		Polarity: Vertical					
EUT	: Mobi	le Comp	outer			Power: AC 12	20V/60Hz				
Test	t Mode	: Transr	nit by 802.11a	ac-VHT20 at	channel 53	20MHz					
	130		n n								
Leviel(AR,IV/m)	80 70 60 50 40 30 5310	1	5320 5325	5330 5335	5340 5345	2	5360 5365 53	70 5375 538	0 5385 5390		
2	1		1		Fred	quency(MHz)	1	1			
No	Flag	Mark	Frequency (MHz)	Measure	Reading	Margin (dB)	Limit	Factor	Туре		
				(dBuV/m)	(dBuV)						

N/A

-7.755

N/A

54.000

-9.305

-9.222

AV

AV

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

89.340

46.245

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

98.645

55.468



Site	: SIP-A	C3				Time: 2020/11/19 - 14:46					
Limi	it: FCC	_Part15	5.209_RE(3m)		Engineer: White Wang					
Prol	be: SIP	-AC3_H	IF907_10286	1_1-18GHz		Polarity: Horizontal					
EUT	Г: Mobil	le Comp	outer			Power: AC 120V/60Hz					
Test	t Mode	: Transr	nit by 802.11a	ac-VHT20 at (channel 550	0MHz					
l evel(dBuV/m)	130 80 70 60 40 30 5430	5435 5	1	2 2 0 5455 5460	3 4 ************************************	5475 5480 548 ency(MHz)	5 5490 5495	5500 5505 55	510 5515 5520		
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Туре		
1			5448.405	60.532	69.354	-13.468	74.000	-8.822	PK		
2			5460.000	59.117	68.010	-14.883	74.000	-8.894	PK		
3			5463.345	60.805	69.740	-7.395	68.200	-8.935	PK		
4			5470.000	58.754	67.772	-9.446	68.200	-9.018	PK		
5		*	5495.160	101.080	109.891	N/A	N/A	-8.811	PK		



Site	SIP-A	C3			Time: 2020/11	/19 - 14:50				
Limi	t: FCC_	_Part15.209_R	E(3m)		Engineer: White Wang					
Prot	be: SIP-	AC3_HF907_	102861_1-18G	Hz	Polarity: Horizontal					
EUT	: Moblie	e Computer			Power: AC 12	0V/60Hz				
Test	Mode:	Transmit by 80)2.11ac-VHT20	at channel 55	00MHz					
	130									
	~						3 J			
	m//m					(man				
	el(dB)						1			
	<u>و</u> 70									
	60									
	50		1	2						
	40									
	30									
	5430	5 <mark>4</mark> 35 5440 54	45 5450 5455	5460 5465 5470 Free	5475 5480 548 quency(MHz)	5 5490 5495	5500 5505 551	0 5515 5520		
No	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре		
		(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)			
			(dBuV/m)	(dBuV)						
1	1 5448.585 47.247 56.069		56.069	-6.753	54.000	-8.823	AV			
2		5460.000	46.593	55.486	-7.407	54.000	-8.894	AV		
3	*	5503.170	90.755	99.504	36.755	54.000	-8.749	AV		



Site	: SIP-A	C3				Time: 2020/11/19 - 14:51				
Limi	t: FCC	_Part15	5.209_RE(3m)		Engineer: White Wang				
Prot	be: SIP	-AC3_H	IF907_10286	61_1-18GHz		Polarity: Vertical				
EUT	: Mobil	e Comp	outer			Power: AC 120V/60Hz				
Test	Mode	Transn	nit by 802.11a	ac-VHT20 at o	channel 550	500MHz				
l evel(rdBuV/m)	130 80 70 60 40 30 5430	1 ************************************	5440 5445 545	2 «"«Чилата "««Чела 0 5455 5460	3 4 5465 5470 Frequ	5475 5480 548 ency(MHz)	5 5490 5495	5500 5505 5	510 5515 5520	
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Туре	
1	1 5438.235 60.168 68.996		68.996	-13.832	74.000	-8.829	PK			
2			5460.000	58.744	67.637	-15.256	74.000	-8.894	РК	
3			5463.345	59.997	68.932	-8.203	68.200	-8.935	PK	
4	4		5470.000	58.769	67.787	-9.431	68.200	-9.018	PK	
5		*	5492.550	100.132	108.964	N/A	N/A	-8.832	PK	



Site	: SIP-A	C3			Time: 2020/11/19 - 14:55					
Limi	t: FCC_	_Part15.209_R	E(3m)		Engineer: White Wang					
Prot	be: SIP-	AC3_HF907_2	102861_1-18GI	Hz	Polarity: Vertical					
EUT	: Moblie	e Computer			Power: AC 120V/60Hz					
Test	Mode:	Transmit by 80)2.11ac-VHT20	at channel 55	00MHz					
	130									
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	m//m						- they			
	el(dB									
	<u>م</u> 70									
	60									
	50		1	2		/				
	40									
	30									
	5430	5435 5440 54	45 5450 5455 5	5460 5465 5470 Free	5475 5480 548 quency(MHz)	5 5490 54 <mark>9</mark> 5	5500 5505 551	0 5515 5520		
No	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре		
		(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)			
			(dBuV/m)	(dBuV)						
1	1 5448.720 47.048 55		55.870	-6.952	54.000	-8.822	AV			
2	2 5460.000 46.71		46.718	55.611	-7.282	54.000	-8.894	AV		
3	*	5503.080	89.186	97.936	35.186	54.000	-8.751	AV		



Site: SIP-AC3	Time: 2020/11/19 - 14:57				
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang				
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal				
EUT: Mobile Computer	Power: AC 120V/60Hz				

Test Mode: Transmit by 802.11ac-VHT20 at channel 5700MHz



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5706.710	103.638	112.919	N/A	N/A	-9.282	PK
2			5725.000	58.807	67.914	-9.393	68.200	-9.107	PK
3			5742.915	60.178	69.559	-8.022	68.200	-9.380	PK

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



Site: SIP-AC3	Time: 2020/11/19 - 15:01				
Limit: FCC_Part15.209_RE(3m)	Engineer: White Wang				
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Vertical				
EUT: Mobile Computer	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT20 at channel 5700MHz					
130					



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5706.645	100.421	109.702	N/A	N/A	-9.282	PK
2			5725.000	58.526	67.633	-9.674	68.200	-9.107	PK
3			5733.132	60.855	70.071	-7.345	68.200	-9.216	PK



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ΡK

-9.364

Site: AC3	Time: 2020/10/22 - 20:30			
Limit: FCC_Part15.407_RE(3m)	Engineer: White Wang			
Probe: SIP-AC3_HF907_102861_1-18GHz	Polarity: Horizontal			
EUT: Mobile Computer	Power: AC 120V/60Hz			

Test Mode: Transmit by 802.11ac-VHT20 at channel 5745MHz



110.324 Test Mode: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

5741.900

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

119.687

N/A

N/A