





802.11n-HT20 Power Spectral Density					
Channel 157 (5785MHz)	Channel 157 (5785MHz) Channel 165 (5825MHz)				
Specifum Analyzer 1         +           Statistical Analyzer 1         +           Prod LS AN         Prod LS 50:0           Altern 10:06         Phol Field           Anne Note Report Analyzer 1         Anne Note Report Analyzer 1           *** Align Aub         Prove Sone Cit           *** Align Aub         Prove Report Analyzer 1           *** Align Aub         Prove Report Analyzer 1           **         Align Aub	Marker • Steelet Marker •	Cpeciarra Analyzer 1 brend 5A KEVSIGENT Noval, Nov 500 →→ Nova Analyzer 1 →→ Reprint Analyzer 1 Frend Field Int (5) Tel Analyzer 1 Frend Field Int (5) Tel Analyzer 1 Frend Field Int (5) Starts Off	Ang Type Power (RMS) 1 2 3 4 5 6 Ang Type Power (RMS) 1 2 3 4 5 6 Ang Host 100/100 A NW NWW WWW A NW NWW WWW		
1 Spectrum    Ref Lvi Offset 21.80 dB  Mkr1 5.787 18 GH2  ScaleDiv 10 dB  Ref Level 10.00 dBm  -13.445 dBm  0  0  0  0  0  0  0  0  0  0  0  0  0	Marker Frequency Settings 5.787180000 GHz Peak Peak Search Search Next Peak Config	1 Spectrum       Perf Lvi Offset 21.80 dB      Scale(Div 10 dB      Ref Level 10.00 dBm      Coo      O	Mkr1 5.833 12 GHz -13.951 dBm Peak Search Next Peak		
100 000 000 000 000 000 000 000 000 000	Next Pk Right Properties Next Pk Left Marker Function	100 200 300	Next Pk Right Properties Next Pk Left Marker Function		
	Marker Delta Marker →	400 600	Wetter++ Counter Wetter+Childen/edu/or Marker Deta		
120 00 00 Center 572500 OHz Super 1 000 0Hz Super 1 000 0Hz Super 1 000 0Hz	MkrCF MkrRef Lvi Continuous Peak Z Search	700 000 Center 52500 GHz Center 52500 GHz FVideo EW 300 HHz	Span 40.00 MHz Span 40.00 MHz Search 20 per (201 per 201		
	Off				



















802.11ac-VHT20 Power Spectral Density					
Channel 157 (57	85MHz)	Channel 165 (	5825MHz)		
Bjochum Analyzer 1 Sweryst SA KEYSIGATT Inout, RF → Coupeng DD → Concetons: Off Galas Off Agen Auto Concetons: Off Figure 2 so Ω Concetons: Off	pe: Power (RMS) 2 3.4.5.6 Select Marker • 25 id: 100100 ee Run Awwwww Marker 1 •	Spectrum Analyzer 1 Swept SA KEYSIGHT Input RP Commodors Off Preg Net in (5) Freq Net in (5) Freq Set in (5)	Avg Type: Power (RMS) 2 3 4 5 0 Avg Type: Power (RMS) 2 3 4 5 0 Avg Type: Power (RMS) 2 3 4 5 0 Avg Type: Power (RMS) 2 4 5 0		
Ner: Adaptive Sig Irack Ult 1 Spectrum Ref Lvi Offset 21.80 dB Scale/Div 10 dB Ref Level 10.00 dBm Log	Mkr1 5.792 14 GHz -15.632 dBm Peak Search Search	N     N	Mkr1 5.827 50 GHz -16.414 dBm Peak Search		
0.00 .100	Next Peak Pk Search Config Next Pk Right Properties	-10.0	Next Peak Pk Search Config Next Pk Right Properties		
200	Next Pk Left Marker Function Minimum Peak Marker	20 0	Next Pk Left Marker Minimum Peak Marker		
-50 0 William of physion and p	Pk-Pk Search Counter	500 where the second se	PK-PK Search Counter		
.60 0	MkrCF MkrRef Lvi Continuous Peak		MkrCF MkrRef Lvl Continuous Peak		
Center 5,78500 GHz #Video BW 300 kHz* #Res BW 100 kHz	Span 40.00 MHz         Search           Sweep 2.00 ms (2001 pts)         On           Off         Off	Center 5.82500 GHz #Video BW 300 kHz* #Res BW 100 kHz	Span 40.00 MHz Search Sweep 2.00 ms (2001 pts)		















## 7.7. Frequency Stability Measurement

### 7.7.1.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.

#### 7.7.2.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.





# 7.7.3.Test Setup





# 7.7.4.Test Result

Product	Wi-Fi module	Temperature	-30 ~ 50°C
Test Engineer	Jone Zhang	Relative Humidity	55%
Test Site	TR3	Test Date	2019/07/18
Test Mode	5180MHz (Carrier Mode)		

Voltage Ratio	Voltage	Temperature	Frequency Tolerance (ppm)			
(%)	(V <sub>DC</sub> )	(°C)	0 minutes	2 minutes	5 minutes	10 minutes
		- 30	-0.67	-0.89	-1.01	-0.86
		- 20	-0.75	-0.98	-0.91	-0.82
		- 10	-0.65	-0.34	-0.70	-0.79
		0	-1.14	-1.08	-0.97	-1.33
100%	3.3	+ 10	-1.10	-1.38	-1.32	-1.32
		+ 20 (Ref)	-1.40	-1.04	-0.97	-1.22
		+ 30	-0.35	-0.58	-0.60	-0.40
		+ 40	-0.32	-0.55	-0.76	-0.43
		+ 50	-0.72	-0.90	-1.24	-1.48
115%	3.8	+ 20	-0.40	-0.11	-0.34	-0.15
85%	2.8	+ 20	-1.12	-1.23	-1.47	-1.66

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



# 7.8. Radiated Spurious Emission Measurement

## 7.8.1.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 / RSS-Gen Issue 5 Section 8.9							
Frequency	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					

### 7.8.2.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)



# 7.8.3.Test Setting

Table 1 - RBW as a function of free	uency
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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
- 1. 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.

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



## 7.8.4.Test Setup

Below 1GHz Test Setup:



Above 1GHz Test Setup:





# 7.8.5.Test Result

Product	Wi-Fi module	Temperature	26°C			
Test Engineer	Dandy Li	Relative Humidity	57%			
Test Site	AC1	Test Date	2019/07/19			
Test Mode	802.11a	Test Channel	36			
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)				
*	8820.0	34.9	13.4	48.3	68.2	-19.9	Peak	Horizontal
*	9993.0	35.2	16.1	51.3	68.2	-16.9	Peak	Horizontal
	10860.0	35.1	17.8	52.9	74.0	-21.1	Peak	Horizontal
	15501.0	34.4	17.6	52.0	74.0	-22.0	Peak	Horizontal
*	8624.5	36.1	13.0	49.1	68.2	-19.1	Peak	Vertical
*	9636.0	34.8	15.6	50.4	68.2	-17.8	Peak	Vertical
	11667.5	35.8	17.4	53.2	74.0	-20.8	Peak	Vertical
	15730.5	34.9	17.0	51.9	74.0	-22.1	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	Wi-Fi module	Temperature	26°C		
Test Engineer	Dandy Li	Relative Humidity	57%		
Test Site	AC1	Test Date	2019/07/19		
Test Mode	802.11a	Test Channel	44		
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)				
*	8667.0	36.6	13.0	49.6	68.2	-18.6	Peak	Horizontal
*	9857.0	34.7	16.0	50.7	68.2	-17.5	Peak	Horizontal
	10868.5	34.8	17.8	52.6	74.0	-21.4	Peak	Horizontal
	15654.0	33.3	17.2	50.5	74.0	-23.5	Peak	Horizontal
*	8701.0	35.8	13.2	49.0	68.2	-19.2	Peak	Vertical
*	10035.5	34.9	16.1	51.0	68.2	-17.2	Peak	Vertical
	11455.0	35.4	17.7	53.1	74.0	-20.9	Peak	Vertical
	15645.5	34.0	17.5	51.5	74.0	-22.5	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	e of 3 me	ters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C		
Test Engineer	Dandy Li	Relative Humidity	57%		
Test Site	AC1	Test Date	2019/07/19		
Test Mode	802.11a	Test Channel	48		
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)				
*	8692.5	33.8	13.2	47.0	68.2	-21.2	Peak	Horizontal
*	10282.0	34.7	16.7	51.4	68.2	-16.8	Peak	Horizontal
	11387.0	35.5	17.6	53.1	74.0	-20.9	Peak	Horizontal
	15628.5	34.4	17.6	52.0	74.0	-22.0	Peak	Horizontal
*	8837.0	35.1	13.3	48.4	68.2	-19.8	Peak	Vertical
*	10154.5	34.4	16.4	50.8	68.2	-17.4	Peak	Vertical
	11395.5	35.7	17.6	53.3	74.0	-20.7	Peak	Vertical
	15679.5	34.3	17.2	51.5	74.0	-22.5	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	e of 3 me	ters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C			
Test Engineer	Dandy Li	Relative Humidity	57%			
Test Site	AC1	Test Date	2019/07/19			
Test Mode	802.11a	Test Channel	52			
Remark	1. Average measurement was not p	performed if peak level lo	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)				
*	8854.0	35.6	13.4	49.0	68.2	-19.2	Peak	Horizontal
*	9823.0	34.7	16.0	50.7	68.2	-17.5	Peak	Horizontal
	11659.0	34.8	17.5	52.3	74.0	-21.7	Peak	Horizontal
	15492.5	34.6	17.6	52.2	74.0	-21.8	Peak	Horizontal
*	8862.5	35.3	13.4	48.7	68.2	-19.5	Peak	Vertical
*	9797.5	34.5	15.9	50.4	68.2	-17.8	Peak	Vertical
	10945.0	35.1	18.0	53.1	74.0	-20.9	Peak	Vertical
	15722.0	34.4	17.0	51.4	74.0	-22.6	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	e of 3 me	ters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C			
Test Engineer	Dandy Li	Relative Humidity	57%			
Test Site	AC1	Test Date	2019/07/19			
Test Mode	802.11a	Test Channel	60			
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 1-18GHz, 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)				
*	8777.5	35.1	13.3	48.4	68.2	-19.8	Peak	Horizontal
*	10154.5	35.8	16.4	52.2	68.2	-16.0	Peak	Horizontal
	11565.5	35.0	17.5	52.5	74.0	-21.5	Peak	Horizontal
	15807.0	35.0	17.0	52.0	74.0	-22.0	Peak	Horizontal
*	8726.5	35.7	13.2	48.9	68.2	-19.3	Peak	Vertical
*	9942.0	35.3	16.1	51.4	68.2	-16.8	Peak	Vertical
	10860.0	36.0	17.8	53.8	74.0	-20.2	Peak	Vertical
	15628.5	34.2	17.6	51.8	74.0	-22.2	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	e of 3 me	ters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C			
Test Engineer	Dandy Li	Relative Humidity	57%			
Test Site	AC1	Test Date	2019/07/19			
Test Mode	802.11a	Test Channel	64			
Remark	1. Average measurement was not p	performed if peak level lo	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)				
*	8667.0	36.0	13.0	49.0	68.2	-19.2	Peak	Horizontal
*	10214.0	35.3	16.5	51.8	68.2	-16.4	Peak	Horizontal
	11948.0	35.4	16.9	52.3	74.0	-21.7	Peak	Horizontal
	15645.5	34.1	17.5	51.6	74.0	-22.4	Peak	Horizontal
*	8692.5	35.4	13.2	48.6	68.2	-19.6	Peak	Vertical
*	10511.5	34.1	17.2	51.3	68.2	-16.9	Peak	Vertical
	11463.5	34.6	17.8	52.4	74.0	-21.6	Peak	Vertical
	15645.5	34.5	17.5	52.0	74.0	-22.0	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	is -27dBm/Mł	Iz. At a distanc	e of 3 me	ters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C			
Test Engineer	Dandy Li	Relative Humidity	57%			
Test Site	AC1	Test Date	2019/07/19			
Test Mode	802.11a	Test Channel	100			
Remark	1. Average measurement was not p	performed if peak level lo	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)				
*	8624.5	35.3	13.0	48.3	68.2	-19.9	Peak	Horizontal
*	9891.0	34.6	16.2	50.8	68.2	-17.4	Peak	Horizontal
	11548.5	35.5	17.6	53.1	74.0	-20.9	Peak	Horizontal
	15705.0	34.9	17.3	52.2	74.0	-21.8	Peak	Horizontal
*	8675.5	35.8	13.1	48.9	68.2	-19.3	Peak	Vertical
*	9687.0	34.9	15.6	50.5	68.2	-17.7	Peak	Vertical
	11455.0	34.7	17.7	52.4	74.0	-21.6	Peak	Vertical
	15586.0	34.8	17.4	52.2	74.0	-21.8	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	is -27dBm/Mł	Iz. At a distanc	e of 3 me	ters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C					
Test Engineer	Dandy Li	Relative Humidity	57%					
Test Site	AC1	Test Date	2019/07/19					
Test Mode	802.11a	Test Channel	116					
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)				
*	8879.5	35.6	13.4	49.0	68.2	-19.2	Peak	Horizontal
*	10154.5	34.4	16.4	50.8	68.2	-17.4	Peak	Horizontal
	10851.5	35.5	17.8	53.3	74.0	-20.7	Peak	Horizontal
	15730.5	34.2	17.0	51.2	74.0	-22.8	Peak	Horizontal
*	8811.5	35.5	13.4	48.9	68.2	-19.3	Peak	Vertical
*	10154.5	34.4	16.4	50.8	68.2	-17.4	Peak	Vertical
	10834.5	36.3	17.7	54.0	74.0	-20.0	Peak	Vertical
	15739.0	34.5	17.0	51.5	74.0	-22.5	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	is -27dBm/Mł	Iz. At a distanc	ce of 3 me	eters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C			
Test Engineer	Dandy Li	Relative Humidity	57%			
Test Site	AC1	Test Date	2019/07/19			
Test Mode	802.11a	Test Channel	120			
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)				
*	8871.0	35.2	13.5	48.7	68.2	-19.5	Peak	Horizontal
*	10282.0	34.7	16.7	51.4	68.2	-16.8	Peak	Horizontal
	11319.0	34.9	17.6	52.5	74.0	-21.5	Peak	Horizontal
	16121.5	34.5	17.4	51.9	74.0	-22.1	Peak	Horizontal
*	8803.0	35.8	13.3	49.1	68.2	-19.1	Peak	Vertical
*	9831.5	35.2	16.1	51.3	68.2	-16.9	Peak	Vertical
	11021.5	35.6	17.8	53.4	74.0	-20.6	Peak	Vertical
	15637.0	34.3	17.7	52.0	74.0	-22.0	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	is -27dBm/MI	Iz. At a distanc	ce of 3 me	ters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C				
Test Engineer	Dandy Li	Relative Humidity	57%				
Test Site	AC1	Test Date	2019/07/19				
Test Mode	802.11a	Test Channel	140				
Remark	1. Average measurement was not p	performed if peak level lo	wer 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)				
*	8726.5	36.1	13.2	49.3	68.2	-18.9	Peak	Horizontal
*	9899.5	34.7	16.1	50.8	68.2	-17.4	Peak	Horizontal
	11497.5	35.2	17.6	52.8	74.0	-21.2	Peak	Horizontal
	15645.5	33.9	17.5	51.4	74.0	-22.6	Peak	Horizontal
*	8607.5	37.2	12.9	50.1	68.2	-18.1	Peak	Vertical
*	10290.5	34.8	16.6	51.4	68.2	-16.8	Peak	Vertical
	10758.0	35.5	17.4	52.9	74.0	-21.1	Peak	Vertical
	15892.0	35.3	16.9	52.2	74.0	-21.8	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	e of 3 me	eters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C				
Test Engineer	Dandy Li	Relative Humidity	57%				
Test Site	AC1	Test Date	2019/07/19				
Test Mode	802.11a	Test Channel	144				
Remark	1. Average measurement was not p	performed if peak level lo	wer 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)				
*	8684.0	35.3	13.1	48.4	68.2	-19.8	Peak	Horizontal
*	10511.5	34.5	17.2	51.7	68.2	-16.5	Peak	Horizontal
	11421.0	35.2	17.7	52.9	74.0	-21.1	Peak	Horizontal
	15569.0	33.8	17.5	51.3	74.0	-22.7	Peak	Horizontal
*	8616.0	36.0	12.9	48.9	68.2	-19.3	Peak	Vertical
*	10010.0	35.1	16.1	51.2	68.2	-17.0	Peak	Vertical
	11387.0	35.9	17.6	53.5	74.0	-20.5	Peak	Vertical
	15424.5	34.5	18.0	52.5	74.0	-21.5	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d. its limit i	s -27dBm/Mł	Iz. At a distanc	ce of 3 me	eters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C				
Test Engineer	Dandy Li	Relative Humidity	57%				
Test Site	AC1	Test Date	2019/07/19				
Test Mode	802.11a	Test Channel	149				
Remark	1. Average measurement was not p	performed if peak level lov	wer 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)				
*	8854.0	36.1	13.4	49.5	68.2	-18.7	Peak	Horizontal
*	9891.0	34.6	16.2	50.8	68.2	-17.4	Peak	Horizontal
	11727.0	36.1	17.2	53.3	74.0	-20.7	Peak	Horizontal
	15509.5	34.9	17.6	52.5	74.0	-21.5	Peak	Horizontal
*	8743.5	35.3	13.3	48.6	68.2	-19.6	Peak	Vertical
*	10350.0	34.0	16.8	50.8	68.2	-17.4	Peak	Vertical
	11378.5	34.5	17.6	52.1	74.0	-21.9	Peak	Vertical
	15594.5	35.7	17.4	53.1	74.0	-20.9	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d. its limit i	s -27dBm/MI	Iz. At a distanc	e of 3 me	eters. the f	ield strenath

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



Product	Wi-Fi module	Temperature	26°C				
Test Engineer	Dandy Li	Relative Humidity	57%				
Test Site	AC1	Test Date	2019/07/19				
Test Mode	802.11a	Test Channel	157				
Remark	1. Average measurement was not p	performed if peak level lov	wer 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)				
*	8879.5	35.9	13.4	49.3	68.2	-18.9	Peak	Horizontal
*	9857.0	35.1	16.0	51.1	68.2	-17.1	Peak	Horizontal
	11064.0	35.1	17.7	52.8	74.0	-21.2	Peak	Horizontal
	15934.5	33.3	17.1	50.4	74.0	-23.6	Peak	Horizontal
*	8871.0	35.9	13.5	49.4	68.2	-18.8	Peak	Vertical
*	10010.0	35.2	16.1	51.3	68.2	-16.9	Peak	Vertical
	11421.0	35.3	17.7	53.0	74.0	-21.0	Peak	Vertical
	15509.5	34.2	17.6	51.8	74.0	-22.2	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	e of 3 me	ters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C				
Test Engineer	Dandy Li	Relative Humidity	57%				
Test Site	AC1	Test Date	2019/07/19				
Test Mode	802.11a	Test Channel	165				
Remark	1. Average measurement was not p	performed if peak level lo	wer 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)				
*	8803.0	35.3	13.3	48.6	68.2	-19.6	Peak	Horizontal
*	10265.0	34.2	16.6	50.8	68.2	-17.4	Peak	Horizontal
	11599.5	35.1	17.6	52.7	74.0	-21.3	Peak	Horizontal
	16011.0	34.3	17.1	51.4	74.0	-22.6	Peak	Horizontal
*	8888.0	36.3	13.4	49.7	68.2	-18.5	Peak	Vertical
*	10528.5	34.5	17.2	51.7	68.2	-16.5	Peak	Vertical
	10877.0	35.3	17.8	53.1	74.0	-20.9	Peak	Vertical
	15662.5	34.6	17.2	51.8	74.0	-22.2	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Hz. At a distand	e of 3 me	eters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C				
Test Engineer	Dandy Li	Relative Humidity	57%				
Test Site	AC1	Test Date	2019/07/19				
Test Mode	802.11n-HT20	Test Channel	36				
Remark	1. Average measurement was not p	performed if peak level lo	wer 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)				
*	8854.0	35.9	13.4	49.3	68.2	-18.9	Peak	Horizontal
*	10358.5	35.3	16.8	52.1	68.2	-16.1	Peak	Horizontal
	11038.5	35.1	17.8	52.9	74.0	-21.1	Peak	Horizontal
	15662.5	34.2	17.2	51.4	74.0	-22.6	Peak	Horizontal
*	8684.0	35.8	13.1	48.9	68.2	-19.3	Peak	Vertical
*	10146.0	36.2	16.2	52.4	68.2	-15.8	Peak	Vertical
	11650.5	34.7	17.4	52.1	74.0	-21.9	Peak	Vertical
	15645.5	33.9	17.5	51.4	74.0	-22.6	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Hz. At a distanc	e of 3 me	ters, the f	ield strength
limit in	dBµV/m can	be determine	d by addin	ng a "convers	ion" factor of 9	5.2dB to t	he EIRP I	imit 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	Wi-Fi module	Temperature	26°C				
Test Engineer	Dandy Li	Relative Humidity	57%				
Test Site	AC1	Test Date	2019/07/19				
Test Mode	802.11n-HT20	Test Channel	44				
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)				
*	8658.5	35.8	13.0	48.8	68.2	-19.4	Peak	Horizontal
*	10392.5	34.3	16.9	51.2	68.2	-17.0	Peak	Horizontal
	10834.5	35.1	17.7	52.8	74.0	-21.2	Peak	Horizontal
	15773.0	34.4	17.1	51.5	74.0	-22.5	Peak	Horizontal
*	8701.0	35.0	13.2	48.2	68.2	-20.0	Peak	Vertical
*	9865.5	33.8	16.1	49.9	68.2	-18.3	Peak	Vertical
	11616.5	35.3	17.3	52.6	74.0	-21.4	Peak	Vertical
	15645.5	34.0	17.5	51.5	74.0	-22.5	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	e of 3 me	ters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C				
Test Engineer	Dandy Li	Relative Humidity	57%				
Test Site	AC1	Test Date	2019/07/19				
Test Mode	802.11n-HT20	Test Channel	48				
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)				
*	8862.5	35.4	13.4	48.8	68.2	-19.4	Peak	Horizontal
*	10401.0	34.7	16.8	51.5	68.2	-16.7	Peak	Horizontal
	11089.5	35.2	17.7	52.9	74.0	-21.1	Peak	Horizontal
	15756.0	34.4	17.3	51.7	74.0	-22.3	Peak	Horizontal
*	8743.5	35.0	13.3	48.3	68.2	-19.9	Peak	Vertical
*	9857.0	34.8	16.0	50.8	68.2	-17.4	Peak	Vertical
	11412.5	35.9	17.7	53.6	74.0	-20.4	Peak	Vertical
	15569.0	34.5	17.5	52.0	74.0	-22.0	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	e of 3 me	ters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C				
Test Engineer	Dandy Li	Relative Humidity	57%				
Test Site	AC1	Test Date	2019/07/19				
Test Mode	802.11n-HT20	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)				
*	8752.0	35.3	13.3	48.6	68.2	-19.6	Peak	Horizontal
*	9865.5	34.9	16.1	51.0	68.2	-17.2	Peak	Horizontal
	10945.0	34.3	18.0	52.3	74.0	-21.7	Peak	Horizontal
	15492.5	34.7	17.6	52.3	74.0	-21.7	Peak	Horizontal
*	8820.0	35.5	13.4	48.9	68.2	-19.3	Peak	Vertical
*	9916.5	34.7	16.0	50.7	68.2	-17.5	Peak	Vertical
	10834.5	34.7	17.7	52.4	74.0	-21.6	Peak	Vertical
	15637.0	34.6	17.7	52.3	74.0	-21.7	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	ce of 3 me	eters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C				
Test Engineer	Dandy Li	Relative Humidity	57%				
Test Site	AC1	Test Date	2019/07/19				
Test Mode	802.11n-HT20	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)				
*	8871.0	35.4	13.5	48.9	68.2	-19.3	Peak	Horizontal
*	9891.0	35.4	16.2	51.6	68.2	-16.6	Peak	Horizontal
	10766.5	35.2	17.5	52.7	74.0	-21.3	Peak	Horizontal
	15526.5	33.6	17.6	51.2	74.0	-22.8	Peak	Horizontal
*	8888.0	35.6	13.4	49.0	68.2	-19.2	Peak	Vertical
*	10350.0	35.6	16.8	52.4	68.2	-15.8	Peak	Vertical
	11591.0	35.3	17.6	52.9	74.0	-21.1	Peak	Vertical
	15611.5	34.9	17.4	52.3	74.0	-21.7	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	e of 3 me	eters, the f	ield strength

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


Product	Wi-Fi module	Temperature	26°C				
Test Engineer	Dandy Li	Relative Humidity	57%				
Test Site	AC1	Test Date	2019/07/19				
Test Mode	802.11n-HT20	Test Channel	64				
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 1-18GHz, 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)				
*	8913.5	35.5	13.4	48.9	68.2	-19.3	Peak	Horizontal
*	10367.0	35.3	16.9	52.2	68.2	-16.0	Peak	Horizontal
	11361.5	34.4	17.6	52.0	74.0	-22.0	Peak	Horizontal
	15526.5	34.6	17.6	52.2	74.0	-21.8	Peak	Horizontal
*	8896.5	36.0	13.3	49.3	68.2	-18.9	Peak	Vertical
*	9857.0	33.8	16.0	49.8	68.2	-18.4	Peak	Vertical
	11429.5	33.0	17.7	50.7	74.0	-23.3	Peak	Vertical
	15705.0	34.0	17.3	51.3	74.0	-22.7	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	e of 3 me	ters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C				
Test Engineer	Dandy Li	Relative Humidity	57%				
Test Site	AC1	Test Date	2019/07/19				
Test Mode	802.11n-HT20	Test Channel	100				
Remark	1. Average measurement was not p	performed if peak level lo	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)				
*	8599.0	36.6	12.9	49.5	68.2	-18.7	Peak	Horizontal
	10384.0	34.6	16.9	51.5	68.2	-16.7	Peak	Horizontal
	11455.0	35.0	17.7	52.7	74.0	-21.3	Peak	Horizontal
*	15722.0	34.3	17.0	51.3	74.0	-22.7	Peak	Horizontal
*	8896.5	35.4	13.3	48.7	68.2	-19.5	Peak	Vertical
*	9925.0	34.9	16.0	50.9	68.2	-17.3	Peak	Vertical
	11361.5	35.3	17.6	52.9	74.0	-21.1	Peak	Vertical
	15450.0	33.9	17.8	51.7	74.0	-22.3	Peak	Vertical
Note 1:	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	e of 3 me	ters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C					
Test Engineer	Dandy Li	Relative Humidity	57%					
Test Site	AC1	Test Date	2019/07/19					
Test Mode	802.11n-HT20	Test Channel	116					
Remark	1. Average measurement was not p	performed if peak level lo	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)				
*	8820.0	35.4	13.4	48.8	68.2	-19.4	Peak	Horizontal
*	9976.0	34.9	15.9	50.8	68.2	-17.4	Peak	Horizontal
	11591.0	35.3	17.6	52.9	74.0	-21.1	Peak	Horizontal
	15739.0	34.4	17.0	51.4	74.0	-22.6	Peak	Horizontal
*	8871.0	35.4	13.5	48.9	68.2	-19.3	Peak	Vertical
*	9755.0	34.2	15.9	50.1	68.2	-18.1	Peak	Vertical
	11769.5	35.5	17.1	52.6	74.0	-21.4	Peak	Vertical
	15518.0	34.6	17.6	52.2	74.0	-21.8	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	is -27dBm/MI	Iz. At a distanc	ce of 3 me	ters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C					
Test Engineer	Dandy Li	Relative Humidity	57%					
Test Site	AC1	Test Date	2019/07/19					
Test Mode	802.11n-HT20	Test Channel	120					
Remark	1. Average measurement was not p	performed if peak level lo	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)				
*	8794.5	35.0	13.3	48.3	68.2	-19.9	Peak	Horizontal
*	9942.0	35.1	16.1	51.2	68.2	-17.0	Peak	Horizontal
	11710.0	33.8	17.2	51.0	74.0	-23.0	Peak	Horizontal
	16019.5	34.2	17.1	51.3	74.0	-22.7	Peak	Horizontal
*	8556.5	35.2	12.8	48.0	68.2	-20.2	Peak	Vertical
*	9857.0	32.7	16.0	48.7	68.2	-19.5	Peak	Vertical
	11387.0	34.5	17.6	52.1	74.0	-21.9	Peak	Vertical
	15892.0	33.8	16.9	50.7	74.0	-23.3	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	is -27dBm/MI	Iz. At a distanc	e of 3 me	ters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C					
Test Engineer	Dandy Li	Relative Humidity	57%					
Test Site	AC1	Test Date	2019/07/19					
Test Mode	802.11n-HT20	Test Channel	140					
Remark	1. Average measurement was not p	performed if peak level lo	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)				
*	8905.0	35.7	13.3	49.0	68.2	-19.2	Peak	Horizontal
*	10316.0	34.7	16.6	51.3	68.2	-16.9	Peak	Horizontal
	10860.0	35.1	17.8	52.9	74.0	-21.1	Peak	Horizontal
	15645.5	33.6	17.5	51.1	74.0	-22.9	Peak	Horizontal
*	8769.0	34.7	13.4	48.1	68.2	-20.1	Peak	Vertical
*	10341.5	34.3	16.8	51.1	68.2	-17.1	Peak	Vertical
	12007.5	36.0	16.9	52.9	74.0	-21.1	Peak	Vertical
	15637.0	33.8	17.7	51.5	74.0	-22.5	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	e of 3 me	ters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C				
Test Engineer	Dandy Li	Relative Humidity	57%				
Test Site	AC1	Test Date	2019/07/19				
Test Mode	802.11n-HT20	Test Channel	144				
Remark	1. Average measurement was not p	performed if peak level lo	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)				
*	8879.5	36.2	13.4	49.6	68.2	-18.6	Peak	Horizontal
*	10222.5	34.6	16.5	51.1	68.2	-17.1	Peak	Horizontal
	11778.0	34.5	17.2	51.7	74.0	-22.3	Peak	Horizontal
	15492.5	34.2	17.6	51.8	74.0	-22.2	Peak	Horizontal
*	8871.0	36.5	13.5	50.0	68.2	-18.2	Peak	Vertical
*	10163.0	33.9	16.5	50.4	68.2	-17.8	Peak	Vertical
	11429.5	35.1	17.7	52.8	74.0	-21.2	Peak	Vertical
	15569.0	34.5	17.5	52.0	74.0	-22.0	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	is -27dBm/MI	Iz. At a distanc	e of 3 me	ters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C					
Test Engineer	Dandy Li	Relative Humidity	57%					
Test Site	AC1	Test Date	2019/07/19					
Test Mode	802.11n-HT20	Test Channel	149					
Remark	1. Average measurement was not p	performed if peak level lo	wer than average					
	limit.	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)				
*	8845.5	35.5	13.4	48.9	68.2	-19.3	Peak	Horizontal
*	10044.0	35.8	16.1	51.9	68.2	-16.3	Peak	Horizontal
	11608.0	35.7	17.5	53.2	74.0	-20.8	Peak	Horizontal
	15934.5	34.8	17.1	51.9	74.0	-22.1	Peak	Horizontal
*	8879.5	35.5	13.4	48.9	68.2	-19.3	Peak	Vertical
*	10231.0	35.6	16.6	52.2	68.2	-16.0	Peak	Vertical
	11497.5	35.2	17.6	52.8	74.0	-21.2	Peak	Vertical
	15713.5	35.0	17.2	52.2	74.0	-21.8	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	is -27dBm/MI	Iz. At a distanc	e of 3 me	eters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C					
Test Engineer	Dandy Li	Relative Humidity	57%					
Test Site	AC1	Test Date	2019/07/19					
Test Mode	802.11n-HT20	Test Channel	157					
Remark	1. Average measurement was not p	performed if peak level lo	wer than average					
	limit.	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)				
*	8871.0	35.5	13.5	49.0	68.2	-19.2	Peak	Horizontal
*	9857.0	34.8	16.0	50.8	68.2	-17.4	Peak	Horizontal
	11395.5	35.7	17.6	53.3	74.0	-20.7	Peak	Horizontal
	15475.5	34.7	17.6	52.3	74.0	-21.7	Peak	Horizontal
*	8718.0	36.0	13.2	49.2	68.2	-19.0	Peak	Vertical
*	9908.0	35.3	16.0	51.3	68.2	-16.9	Peak	Vertical
	11599.5	35.3	17.6	52.9	74.0	-21.1	Peak	Vertical
	15560.5	34.1	17.5	51.6	74.0	-22.4	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	e of 3 me	ters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C					
Test Engineer	Dandy Li	Relative Humidity	57%					
Test Site	AC1	Test Date	2019/07/19					
Test Mode	802.11n-HT20	Test Channel	165					
Remark	1. Average measurement was not p	performed if peak level lov	wer than average					
	limit.	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)				
*	8582.0	36.2	12.9	49.1	68.2	-19.1	Peak	Horizontal
*	10137.5	34.6	16.2	50.8	68.2	-17.4	Peak	Horizontal
	10860.0	35.3	17.8	53.1	74.0	-20.9	Peak	Horizontal
	15645.5	34.8	17.5	52.3	74.0	-21.7	Peak	Horizontal
*	8854.0	35.8	13.4	49.2	68.2	-19.0	Peak	Vertical
*	9636.0	33.6	15.6	49.2	68.2	-19.0	Peak	Vertical
	10877.0	35.7	17.8	53.5	74.0	-20.5	Peak	Vertical
	15637.0	33.4	17.7	51.1	74.0	-22.9	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

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



Product	Wi-Fi module	Temperature	26°C					
Test Engineer	Dandy Li	Relative Humidity	57%					
Test Site	AC1	Test Date	2019/07/19					
Test Mode	802.11n-HT40	Test Channel	38					
Remark	1. Average measurement was not p	performed if peak level lov	wer than average					
	limit.	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)					
*	8709.5	35.4	13.2	48.6	68.2	-19.6	Peak	Horizontal	
*	9891.0	34.3	16.2	50.5	68.2	-17.7	Peak	Horizontal	
	11030.0	34.6	17.8	52.4	74.0	-21.6	Peak	Horizontal	
	15586.0	34.5	17.4	51.9	74.0	-22.1	Peak	Horizontal	
*	8735.0	35.7	13.2	48.9	68.2	-19.3	Peak	Vertical	
*	9840.0	34.2	16.1	50.3	68.2	-17.9	Peak	Vertical	
	11089.5	35.3	17.7	53.0	74.0	-21.0	Peak	Vertical	
	16079.0	33.9	17.2	51.1	74.0	-22.9	Peak	Vertical	
Note 1	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 determine	d by addir	ng a "convers"	ion" factor of 9	5.2dB to t	he EIRP I	imit 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	Wi-Fi module	Temperature	26°C				
Test Engineer	Dandy Li	Relative Humidity	57%				
Test Site	AC1	Test Date	2019/07/19				
Test Mode	802.11n-HT40	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)				
*	8794.5	36.2	13.3	49.5	68.2	-18.7	Peak	Horizontal
*	10596.5	34.9	17.2	52.1	68.2	-16.1	Peak	Horizontal
	11404.0	35.3	17.7	53.0	74.0	-21.0	Peak	Horizontal
	15577.5	32.3	17.5	49.8	74.0	-24.2	Peak	Horizontal
*	8871.0	35.9	13.5	49.4	68.2	-18.8	Peak	Vertical
*	10180.0	35.2	16.3	51.5	68.2	-16.7	Peak	Vertical
	11149.0	35.0	17.7	52.7	74.0	-21.3	Peak	Vertical
	15450.0	34.6	17.8	52.4	74.0	-21.6	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	ce of 3 me	eters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C					
Test Engineer	Dandy Li	Relative Humidity	57%					
Test Site	AC1	Test Date	2019/07/19					
Test Mode	802.11n-HT40	Test Channel	54					
Remark	1. Average measurement was not p	performed if peak level lo	wer than average					
	limit.	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)				
*	8624.5	35.6	13.0	48.6	68.2	-19.6	Peak	Horizontal
*	9636.0	36.0	15.6	51.6	68.2	-16.6	Peak	Horizontal
	10783.5	35.2	17.5	52.7	74.0	-21.3	Peak	Horizontal
	15815.5	34.6	17.1	51.7	74.0	-22.3	Peak	Horizontal
*	8811.5	35.4	13.4	48.8	68.2	-19.4	Peak	Vertical
*	9721.0	33.5	15.4	48.9	68.2	-19.3	Peak	Vertical
	11531.5	36.0	17.6	53.6	74.0	-20.4	Peak	Vertical
	15688.0	34.1	17.2	51.3	74.0	-22.7	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	ters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C					
Test Engineer	Dandy Li	Relative Humidity	57%					
Test Site	AC1	Test Date	2019/07/19					
Test Mode	802.11n-HT40	Test Channel	62					
Remark	1. Average measurement was not p	performed if peak level lo	wer 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)				
*	8735.0	35.4	13.2	48.6	68.2	-19.6	Peak	Horizontal
*	9916.5	34.9	16.0	50.9	68.2	-17.3	Peak	Horizontal
	11412.5	34.9	17.7	52.6	74.0	-21.4	Peak	Horizontal
	15679.5	34.2	17.2	51.4	74.0	-22.6	Peak	Horizontal
*	8879.5	35.2	13.4	48.6	68.2	-19.6	Peak	Vertical
*	9593.5	33.3	15.2	48.5	68.2	-19.7	Peak	Vertical
	11565.5	34.5	17.5	52.0	74.0	-22.0	Peak	Vertical
	15603.0	33.8	17.3	51.1	74.0	-22.9	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	e of 3 me	ters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C					
Test Engineer	Dandy Li	Relative Humidity	57%					
Test Site	AC1	Test Date	2019/07/19					
Test Mode	802.11n-HT40	Test Channel	102					
Remark	1. Average measurement was not p	performed if peak level lo	wer than average					
	limit.	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)				
*	8871.0	35.3	13.5	48.8	68.2	-19.4	Peak	Horizontal
*	10503.0	34.9	17.3	52.2	68.2	-16.0	Peak	Horizontal
	11072.5	35.1	17.8	52.9	74.0	-21.1	Peak	Horizontal
	15841.0	33.6	16.7	50.3	74.0	-23.7	Peak	Horizontal
*	8896.5	36.2	13.3	49.5	68.2	-18.7	Peak	Vertical
*	10027.0	35.0	16.0	51.0	68.2	-17.2	Peak	Vertical
	11659.0	35.7	17.5	53.2	74.0	-20.8	Peak	Vertical
	15594.5	34.0	17.4	51.4	74.0	-22.6	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	e of 3 me	ters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C					
Test Engineer	Dandy Li	Relative Humidity	57%					
Test Site	AC1	Test Date	2019/07/19					
Test Mode	802.11n-HT40	Test Channel	110					
Remark	1. Average measurement was not p	performed if peak level lo	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)				
*	8905.0	36.9	13.3	50.2	68.2	-18.0	Peak	Horizontal
*	10443.5	34.7	16.8	51.5	68.2	-16.7	Peak	Horizontal
	11319.0	35.1	17.6	52.7	74.0	-21.3	Peak	Horizontal
	15509.5	34.9	17.6	52.5	74.0	-21.5	Peak	Horizontal
*	8769.0	35.1	13.4	48.5	68.2	-19.7	Peak	Vertical
*	9908.0	34.8	16.0	50.8	68.2	-17.4	Peak	Vertical
	11582.5	35.4	17.6	53.0	74.0	-21.0	Peak	Vertical
	15671.0	34.5	17.2	51.7	74.0	-22.3	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	is -27dBm/Mł	Iz. At a distanc	e of 3 me	ters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C					
Test Engineer	Dandy Li	Relative Humidity	57%					
Test Site	AC1	Test Date	2019/07/19					
Test Mode	802.11n-HT40	Test Channel	118					
Remark	1. Average measurement was not p	performed if peak level lo	wer than average					
	limit.	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)				
*	8854.0	35.0	13.4	48.4	68.2	-19.8	Peak	Horizontal
*	10222.5	34.8	16.5	51.3	68.2	-16.9	Peak	Horizontal
	10792.0	35.9	17.5	53.4	74.0	-20.6	Peak	Horizontal
	16130.0	34.7	17.3	52.0	74.0	-22.0	Peak	Horizontal
*	9024.0	35.5	13.5	49.0	74.0	-25.0	Peak	Vertical
*	10078.0	33.6	16.0	49.6	68.2	-18.6	Peak	Vertical
	11608.0	34.8	17.5	52.3	74.0	-21.7	Peak	Vertical
	15705.0	33.6	17.3	50.9	74.0	-23.1	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	e of 3 me	eters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C				
Test Engineer	Dandy Li	Relative Humidity	57%				
Test Site	AC1	Test Date	2019/07/19				
Test Mode	802.11n-HT40	Test Channel	134				
Remark	1. Average measurement was not p	performed if peak level lo	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)				
*	8939.0	35.6	13.4	49.0	68.2	-19.2	Peak	Horizontal
*	9814.5	32.9	16.0	48.9	68.2	-19.3	Peak	Horizontal
	11421.0	35.3	17.7	53.0	74.0	-21.0	Peak	Horizontal
	15756.0	34.2	17.3	51.5	74.0	-22.5	Peak	Horizontal
*	8769.0	34.8	13.4	48.2	68.2	-20.0	Peak	Vertical
*	9857.0	34.8	16.0	50.8	68.2	-17.4	Peak	Vertical
	10834.5	34.9	17.7	52.6	74.0	-21.4	Peak	Vertical
	15730.5	33.8	17.0	50.8	74.0	-23.2	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	e of 3 me	eters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C				
Test Engineer	Dandy Li	Relative Humidity	57%				
Test Site	AC1	Test Date	2019/07/19				
Test Mode	802.11n-HT40	Test Channel	142				
Remark	1. Average measurement was not p	performed if peak level lo	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)				
*	8658.5	35.7	13.0	48.7	68.2	-19.5	Peak	Horizontal
*	10146.0	34.7	16.2	50.9	68.2	-17.3	Peak	Horizontal
	11591.0	34.9	17.6	52.5	74.0	-21.5	Peak	Horizontal
	15441.5	33.6	17.8	51.4	74.0	-22.6	Peak	Horizontal
*	7995.5	35.6	12.7	48.3	68.2	-19.9	Peak	Vertical
*	10231.0	35.1	16.6	51.7	68.2	-16.5	Peak	Vertical
	11276.5	33.3	17.5	50.8	74.0	-23.2	Peak	Vertical
	15645.5	34.5	17.5	52.0	74.0	-22.0	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	ce of 3 me	eters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C				
Test Engineer	Dandy Li	Relative Humidity	57%				
Test Site	AC1	Test Date	2019/07/19				
Test Mode	802.11n-HT40	Test Channel	151				
Remark	1. Average measurement was not p	performed if peak level lo	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)				
*	8896.5	35.3	13.3	48.6	68.2	-19.6	Peak	Horizontal
*	10205.5	34.9	16.3	51.2	68.2	-17.0	Peak	Horizontal
	11395.5	35.3	17.6	52.9	74.0	-21.1	Peak	Horizontal
	15747.5	35.2	17.2	52.4	74.0	-21.6	Peak	Horizontal
*	8871.0	35.0	13.5	48.5	68.2	-19.7	Peak	Vertical
*	10205.5	35.5	16.3	51.8	68.2	-16.4	Peak	Vertical
	10877.0	35.0	17.8	52.8	74.0	-21.2	Peak	Vertical
	15535.0	35.4	17.5	52.9	74.0	-21.1	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	e of 3 me	eters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C					
Test Engineer	Dandy Li	Relative Humidity	57%					
Test Site	AC1	Test Date	2019/07/19					
Test Mode	802.11n-HT40	Test Channel	159					
Remark	1. Average measurement was not p	performed if peak level lov	wer 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)				
*	8760.5	35.9	13.3	49.2	68.2	-19.0	Peak	Horizontal
*	10010.0	34.4	16.1	50.5	68.2	-17.7	Peak	Horizontal
	11123.5	35.0	17.5	52.5	74.0	-21.5	Peak	Horizontal
	15705.0	33.8	17.3	51.1	74.0	-22.9	Peak	Horizontal
*	8930.5	35.9	13.4	49.3	68.2	-18.9	Peak	Vertical
*	9925.0	35.0	16.0	51.0	68.2	-17.2	Peak	Vertical
	11370.0	35.6	17.6	53.2	74.0	-20.8	Peak	Vertical
	15620.0	34.1	17.5	51.6	74.0	-22.4	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

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



Product	Wi-Fi module	Temperature	26°C
Test Engineer	Dandy Li	Relative Humidity	57%
Test Site	AC1	Test Date	2019/07/19
Test Mode	802.11ac-VHT20	Test Channel	36
Remark	1. Average measurement was not	performed if peak level l	ower than average
	limit.		
	2. Other frequency was 20dB belo	w limit line within 1-18GH	Iz, 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)				
*	8845.5	35.4	13.4	48.8	68.2	-19.4	Peak	Horizontal
*	9925.0	35.3	16.0	51.3	68.2	-16.9	Peak	Horizontal
	11166.0	36.0	17.4	53.4	74.0	-20.6	Peak	Horizontal
	15594.5	34.3	17.4	51.7	74.0	-22.3	Peak	Horizontal
*	8888.0	36.0	13.4	49.4	68.2	-18.8	Peak	Vertical
*	9950.5	35.3	16.1	51.4	68.2	-16.8	Peak	Vertical
	10877.0	34.5	17.8	52.3	74.0	-21.7	Peak	Vertical
	15628.5	33.9	17.6	51.5	74.0	-22.5	Peak	Vertical
Note 1:	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	e of 3 me	eters, the f	ield strength
limit in	dBuV/m can	be determine	d bv addir	ng a "convers"	ion" factor of 9	5.2dB to t	the EIRP I	imit 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	Wi-Fi module	Temperature	26°C					
Test Engineer	Dandy Li	Relative Humidity	57%					
Test Site	AC1	Test Date	2019/07/19					
Test Mode	802.11ac-VHT20	Test Channel	44					
Remark	1. Average measurement was not p	performed if peak level lov	wer than average					
	limit.	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)				
*	8811.5	34.6	13.4	48.0	68.2	-20.2	Peak	Horizontal
*	10367.0	34.8	16.9	51.7	68.2	-16.5	Peak	Horizontal
	11217.0	35.5	17.4	52.9	74.0	-21.1	Peak	Horizontal
	16155.5	33.8	17.7	51.5	74.0	-22.5	Peak	Horizontal
*	8879.5	35.1	13.4	48.5	68.2	-19.7	Peak	Vertical
*	9882.5	34.3	16.1	50.4	68.2	-17.8	Peak	Vertical
	11446.5	35.1	17.7	52.8	74.0	-21.2	Peak	Vertical
	15798.5	35.5	16.9	52.4	74.0	-21.6	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d. its limit i	s -27dBm/MI	- Iz. At a distanc	e of 3 me	ters. the f	ield strenath

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



Product	Wi-Fi module	Temperature	26°C				
Test Engineer	Dandy Li	Relative Humidity	57%				
Test Site	AC1	Test Date	2019/07/19				
Test Mode	802.11ac-VHT20	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)				
*	8777.5	35.3	13.3	48.6	68.2	-19.6	Peak	Horizontal
*	9993.0	35.1	16.1	51.2	68.2	-17.0	Peak	Horizontal
	10860.0	35.2	17.8	53.0	74.0	-21.0	Peak	Horizontal
	15365.0	34.5	18.3	52.8	74.0	-21.2	Peak	Horizontal
*	8828.5	35.9	13.4	49.3	68.2	-18.9	Peak	Vertical
*	9899.5	32.5	16.1	48.6	68.2	-19.6	Peak	Vertical
	10953.5	35.0	18.0	53.0	74.0	-21.0	Peak	Vertical
	15645.5	34.0	17.5	51.5	74.0	-22.5	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	eters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C				
Test Engineer	Dandy Li	Relative Humidity	57%				
Test Site	AC1	Test Date	2019/07/19				
Test Mode	802.11ac-VHT20	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	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)				
*	8820.0	35.4	13.4	48.8	68.2	-19.4	Peak	Horizontal
*	9789.0	35.1	15.8	50.9	68.2	-17.3	Peak	Horizontal
	11361.5	34.6	17.6	52.2	74.0	-21.8	Peak	Horizontal
	16198.0	34.5	17.6	52.1	74.0	-21.9	Peak	Horizontal
*	8624.5	35.5	13.0	48.5	68.2	-19.7	Peak	Vertical
*	9687.0	35.3	15.6	50.9	68.2	-17.3	Peak	Vertical
	11591.0	35.6	17.6	53.2	74.0	-20.8	Peak	Vertical
	15424.5	35.2	18.0	53.2	74.0	-20.8	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	is -27dBm/Mł	Iz. At a distanc	ce of 3 me	ters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C				
Test Engineer	Dandy Li	Relative Humidity	57%				
Test Site	AC1	Test Date	2019/07/19				
Test Mode	802.11ac-VHT20	Test Channel	60				
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)				
*	8590.5	36.0	12.9	48.9	68.2	-19.3	Peak	Horizontal
*	10307.5	35.2	16.6	51.8	68.2	-16.4	Peak	Horizontal
	11098.0	35.4	17.6	53.0	74.0	-21.0	Peak	Horizontal
	15543.5	35.4	17.5	52.9	74.0	-21.1	Peak	Horizontal
*	8556.5	35.1	12.8	47.9	68.2	-20.3	Peak	Vertical
*	9729.5	35.2	15.6	50.8	68.2	-17.4	Peak	Vertical
	10877.0	34.8	17.8	52.6	74.0	-21.4	Peak	Vertical
	15637.0	33.7	17.7	51.4	74.0	-22.6	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	e of 3 me	eters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C				
Test Engineer	Dandy Li	Relative Humidity	57%				
Test Site	AC1	Test Date	2019/07/19				
Test Mode	802.11ac-VHT20	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	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)				
*	8862.5	35.3	13.4	48.7	68.2	-19.5	Peak	Horizontal
*	9678.5	35.4	15.4	50.8	68.2	-17.4	Peak	Horizontal
	11421.0	35.2	17.7	52.9	74.0	-21.1	Peak	Horizontal
	15730.5	34.2	17.0	51.2	74.0	-22.8	Peak	Horizontal
*	8777.5	35.2	13.3	48.5	68.2	-19.7	Peak	Vertical
*	9636.0	35.5	15.6	51.1	68.2	-17.1	Peak	Vertical
	11310.5	35.1	17.5	52.6	74.0	-21.4	Peak	Vertical
	15518.0	34.6	17.6	52.2	74.0	-21.8	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	e of 3 me	ters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C				
Test Engineer	Dandy Li	Relative Humidity	57%				
Test Site	AC1	Test Date	2019/07/19				
Test Mode	802.11ac-VHT20	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	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)				
*	8718.0	35.8	13.2	49.0	68.2	-19.2	Peak	Horizontal
*	9636.0	35.3	15.6	50.9	68.2	-17.3	Peak	Horizontal
	10860.0	35.3	17.8	53.1	74.0	-20.9	Peak	Horizontal
	16198.0	34.7	17.6	52.3	74.0	-21.7	Peak	Horizontal
*	8845.5	35.0	13.4	48.4	68.2	-19.8	Peak	Vertical
*	10503.0	34.7	17.3	52.0	68.2	-16.2	Peak	Vertical
	11319.0	35.6	17.6	53.2	74.0	-20.8	Peak	Vertical
	15943.0	34.8	17.0	51.8	74.0	-22.2	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	e of 3 me	ters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C					
Test Engineer	Dandy Li	Relative Humidity	57%					
Test Site	AC1	Test Date	2019/07/19					
Test Mode	802.11ac-VHT20	Test Channel	116					
Remark	1. Average measurement was not p	performed if peak level lov	wer than average					
	limit.	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)				
*	8871.0	36.0	13.5	49.5	68.2	-18.7	Peak	Horizontal
*	9670.0	35.6	15.3	50.9	68.2	-17.3	Peak	Horizontal
	10843.0	35.3	17.7	53.0	74.0	-21.0	Peak	Horizontal
	16138.5	34.5	17.5	52.0	74.0	-22.0	Peak	Horizontal
*	8913.5	35.3	13.4	48.7	68.2	-19.5	Peak	Vertical
*	9636.0	35.4	15.6	51.0	68.2	-17.2	Peak	Vertical
	10809.0	35.2	17.6	52.8	74.0	-21.2	Peak	Vertical
	15934.5	34.6	17.1	51.7	74.0	-22.3	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/MH	Hz. At a distanc	e of 3 me	eters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C				
Test Engineer	Dandy Li	Relative Humidity	57%				
Test Site	AC1	Test Date	2019/07/19				
Test Mode	802.11ac-VHT20	Test Channel	120				
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)				
*	8667.0	35.3	13.0	48.3	68.2	-19.9	Peak	Horizontal
*	9976.0	34.7	15.9	50.6	68.2	-17.6	Peak	Horizontal
	10860.0	34.9	17.8	52.7	74.0	-21.3	Peak	Horizontal
	15620.0	34.7	17.5	52.2	74.0	-21.8	Peak	Horizontal
*	8565.0	36.4	12.8	49.2	68.2	-19.0	Peak	Vertical
*	9976.0	35.1	15.9	51.0	68.2	-17.2	Peak	Vertical
	10868.5	35.5	17.8	53.3	74.0	-20.7	Peak	Vertical
	15637.0	33.8	17.7	51.5	74.0	-22.5	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	e of 3 me	ters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C				
Test Engineer	Dandy Li	Relative Humidity	57%				
Test Site	AC1	Test Date	2019/07/19				
Test Mode	802.11ac-VHT20	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	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)				
*	8582.0	34.0	12.9	46.9	68.2	-21.3	Peak	Horizontal
*	10052.5	34.7	16.1	50.8	68.2	-17.4	Peak	Horizontal
	10868.5	35.0	17.8	52.8	74.0	-21.2	Peak	Horizontal
	15586.0	33.8	17.4	51.2	74.0	-22.8	Peak	Horizontal
*	8896.5	35.2	13.3	48.5	68.2	-19.7	Peak	Vertical
*	9653.0	34.7	15.3	50.0	68.2	-18.2	Peak	Vertical
	11421.0	34.8	17.7	52.5	74.0	-21.5	Peak	Vertical
	15637.0	34.0	17.7	51.7	74.0	-22.3	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	is -27dBm/Mł	Iz. At a distanc	e of 3 me	eters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C					
Test Engineer	Dandy Li	Relative Humidity	57%					
Test Site	AC1	Test Date	2019/07/19					
Test Mode	802.11ac-VHT20	Test Channel	144					
Remark	1. Average measurement was not p	performed if peak level lov	wer than average					
	limit.	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)				
*	8862.5	35.5	13.4	48.9	68.2	-19.3	Peak	Horizontal
*	10180.0	34.9	16.3	51.2	68.2	-17.0	Peak	Horizontal
	11472.0	35.0	17.8	52.8	74.0	-21.2	Peak	Horizontal
	15722.0	35.0	17.0	52.0	74.0	-22.0	Peak	Horizontal
*	8590.5	36.4	12.9	49.3	68.2	-18.9	Peak	Vertical
*	9899.5	33.3	16.1	49.4	68.2	-18.8	Peak	Vertical
	11157.5	34.9	17.6	52.5	74.0	-21.5	Peak	Vertical
	15424.5	33.9	18.0	51.9	74.0	-22.1	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	is -27dBm/MI	Iz. At a distanc	e of 3 me	eters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C					
Test Engineer	Dandy Li	Relative Humidity	57%					
Test Site	AC1	Test Date	2019/07/19					
Test Mode	802.11ac-VHT20	Test Channel	149					
Remark	1. Average measurement was not p	performed if peak level lov	wer than average					
	limit.	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)				
*	7961.5	34.4	12.5	46.9	68.2	-21.3	Peak	Horizontal
*	8616.0	35.2	12.9	48.1	68.2	-20.1	Peak	Horizontal
	11523.0	32.6	17.6	50.2	74.0	-23.8	Peak	Horizontal
	12220.0	34.0	17.0	51.0	74.0	-23.0	Peak	Horizontal
*	7128.5	36.2	11.4	47.6	68.2	-20.6	Peak	Vertical
*	7910.5	34.9	12.4	47.3	68.2	-20.9	Peak	Vertical
	11276.5	35.1	17.5	52.6	74.0	-21.4	Peak	Vertical
	12058.5	33.5	17.0	50.5	74.0	-23.5	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	is -27dBm/Mł	Iz. At a distanc	ce of 3 me	eters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C					
Test Engineer	Dandy Li	Relative Humidity	57%					
Test Site	AC1	Test Date	2019/07/19					
Test Mode	802.11ac-VHT20	Test Channel	157					
Remark	1. Average measurement was not p	performed if peak level low	wer than average					
	limit.	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)				
*	8845.5	35.3	13.4	48.7	68.2	-19.5	Peak	Horizontal
*	10180.0	33.9	16.3	50.2	68.2	-18.0	Peak	Horizontal
	11123.5	32.9	17.5	50.4	74.0	-23.6	Peak	Horizontal
	12024.5	33.4	16.9	50.3	74.0	-23.7	Peak	Horizontal
*	8616.0	34.1	12.9	47.0	68.2	-21.2	Peak	Vertical
*	9806.0	31.7	15.9	47.6	68.2	-20.6	Peak	Vertical
	11242.5	32.5	17.4	49.9	74.0	-24.1	Peak	Vertical
	11897.0	33.2	16.9	50.1	74.0	-23.9	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	ters. the f	ield strenath

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



Product	Wi-Fi module	Temperature	26°C					
Test Engineer	Dandy Li	Relative Humidity	57%					
Test Site	AC1	Test Date	2019/07/19					
Test Mode	802.11ac-VHT20	Test Channel	165					
Remark	1. Average measurement was not p	performed if peak level lov	wer than average					
	limit.	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)				
*	8811.5	33.3	13.4	46.7	68.2	-21.5	Peak	Horizontal
*	9942.0	33.5	16.1	49.6	68.2	-18.6	Peak	Horizontal
	11327.5	33.4	17.6	51.0	74.0	-23.0	Peak	Horizontal
	12432.5	33.2	16.6	49.8	74.0	-24.2	Peak	Horizontal
*	8616.0	34.2	12.9	47.1	68.2	-21.1	Peak	Vertical
*	10078.0	32.5	16.0	48.5	68.2	-19.7	Peak	Vertical
	11523.0	32.7	17.6	50.3	74.0	-23.7	Peak	Vertical
	12186.0	32.9	17.1	50.0	74.0	-24.0	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	e of 3 me	ters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C					
Test Engineer	Dandy Li	Relative Humidity	57%					
Test Site	AC1	Test Date	2019/07/19					
Test Mode	802.11ac-VHT40	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	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)					
*	8879.5	35.9	13.4	49.3	68.2	-18.9	Peak	Horizontal	
*	9678.5	33.9	15.4	49.3	68.2	-18.9	Peak	Horizontal	
	11540.0	33.4	17.6	51.0	74.0	-23.0	Peak	Horizontal	
	12390.0	33.2	16.6	49.8	74.0	-24.2	Peak	Horizontal	
*	8616.0	35.2	12.9	48.1	68.2	-20.1	Peak	Vertical	
*	10350.0	32.6	16.8	49.4	68.2	-18.8	Peak	Vertical	
	10987.5	32.8	17.8	50.6	74.0	-23.4	Peak	Vertical	
	12109.5	33.5	17.1	50.6	74.0	-23.4	Peak	Vertical	
Note 1	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 determine	d by addir	ng a "convers	ion" factor of 9	5.2dB to t	he EIRP I	imit 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	Wi-Fi module	Temperature	26°C					
Test Engineer	Dandy Li	Relative Humidity	57%					
Test Site	AC1	Test Date	2019/07/19					
Test Mode	802.11ac-VHT40	Test Channel	46					
Remark	1. Average measurement was not p	performed if peak level lov	wer than average					
	limit.	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)				
*	7987.0	34.8	12.6	47.4	68.2	-20.8	Peak	Horizontal
*	10120.5	32.7	16.2	48.9	68.2	-19.3	Peak	Horizontal
	11574.0	32.9	17.5	50.4	74.0	-23.6	Peak	Horizontal
	12500.5	33.0	16.7	49.7	74.0	-24.3	Peak	Horizontal
*	7851.0	35.3	12.1	47.4	68.2	-20.8	Peak	Vertical
*	8675.5	33.8	13.1	46.9	68.2	-21.3	Peak	Vertical
	10741.0	32.7	17.4	50.1	74.0	-23.9	Peak	Vertical
	11684.5	33.5	17.2	50.7	74.0	-23.3	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	e of 3 me	eters, the f	ield strength

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


Product	Wi-Fi module	Temperature	26°C					
Test Engineer	Dandy Li	Relative Humidity	57%					
Test Site	AC1	Test Date	2019/07/19					
Test Mode	802.11ac-VHT40	Test Channel	54					
Remark	1. Average measurement was not p	performed if peak level lov	wer than average					
	limit.	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)				
*	8811.5	34.9	13.4	48.3	68.2	-19.9	Peak	Horizontal
*	10035.5	33.6	16.1	49.7	68.2	-18.5	Peak	Horizontal
	11319.0	33.6	17.6	51.2	74.0	-22.8	Peak	Horizontal
	12330.5	34.2	16.7	50.9	74.0	-23.1	Peak	Horizontal
*	8582.0	34.2	12.9	47.1	68.2	-21.1	Peak	Vertical
*	9644.5	32.5	15.5	48.0	68.2	-20.2	Peak	Vertical
	10996.0	32.5	17.8	50.3	74.0	-23.7	Peak	Vertical
	11982.0	33.3	16.9	50.2	74.0	-23.8	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	e of 3 me	ters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C					
Test Engineer	Dandy Li	Relative Humidity	57%					
Test Site	AC1	Test Date	2019/07/19					
Test Mode	802.11ac-VHT40	Test Channel	62					
Remark	1. Average measurement was not p	performed if peak level lov	wer than average					
	limit.	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)				
*	7944.5	36.0	12.6	48.6	68.2	-19.6	Peak	Horizontal
*	8811.5	34.4	13.4	47.8	68.2	-20.4	Peak	Horizontal
	11174.5	32.9	17.4	50.3	74.0	-23.7	Peak	Horizontal
	12441.0	34.0	16.5	50.5	74.0	-23.5	Peak	Horizontal
*	8692.5	33.6	13.2	46.8	68.2	-21.4	Peak	Vertical
*	10180.0	32.6	16.3	48.9	68.2	-19.3	Peak	Vertical
	11183.0	32.9	17.4	50.3	74.0	-23.7	Peak	Vertical
	12194.5	33.0	17.0	50.0	74.0	-24.0	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

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



Product	Wi-Fi module	Temperature	26°C					
Test Engineer	Dandy Li	Relative Humidity	57%					
Test Site	AC1	Test Date	2019/07/19					
Test Mode	802.11ac-VHT40	Test Channel	102					
Remark	1. Average measurement was not p	performed if peak level lov	wer than average					
	limit.	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)				
*	8837.0	35.1	13.3	48.4	68.2	-19.8	Peak	Horizontal
*	10350.0	32.8	16.8	49.6	68.2	-18.6	Peak	Horizontal
	11506.0	32.7	17.6	50.3	74.0	-23.7	Peak	Horizontal
	12475.0	33.5	16.9	50.4	74.0	-23.6	Peak	Horizontal
*	7953.0	35.8	12.5	48.3	68.2	-19.9	Peak	Vertical
*	8624.5	36.1	13.0	49.1	68.2	-19.1	Peak	Vertical
	11242.5	34.2	17.4	51.6	74.0	-22.4	Peak	Vertical
	11633.5	34.6	17.2	51.8	74.0	-22.2	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	is -27dBm/MI	Iz. At a distanc	ce of 3 me	ters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C					
Test Engineer	Dandy Li	Relative Humidity	57%					
Test Site	AC1	Test Date	2019/07/19					
Test Mode	802.11ac-VHT40	Test Channel	110					
Remark	1. Average measurement was not p	performed if peak level lov	wer than average					
	limit.	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)				
*	7910.5	34.4	12.4	46.8	68.2	-21.4	Peak	Horizontal
*	9780.5	33.4	15.8	49.2	68.2	-19.0	Peak	Horizontal
	11684.5	33.8	17.2	51.0	74.0	-23.0	Peak	Horizontal
	12177.5	33.4	17.1	50.5	74.0	-23.5	Peak	Horizontal
*	8658.5	33.8	13.0	46.8	68.2	-21.4	Peak	Vertical
*	9908.0	32.7	16.0	48.7	68.2	-19.5	Peak	Vertical
	11013.0	31.9	17.8	49.7	74.0	-24.3	Peak	Vertical
	12041.5	33.0	17.0	50.0	74.0	-24.0	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	is -27dBm/Mł	Iz. At a distanc	ce of 3 me	eters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C					
Test Engineer	Dandy Li	Relative Humidity	57%					
Test Site	AC1	Test Date	2019/07/19					
Test Mode	802.11ac-VHT40	Test Channel	118					
Remark	1. Average measurement was not p	performed if peak level lov	wer than average					
	limit.	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)				
*	8820.0	35.0	13.4	48.4	68.2	-19.8	Peak	Horizontal
*	9942.0	33.2	16.1	49.3	68.2	-18.9	Peak	Horizontal
	11701.5	33.0	17.1	50.1	74.0	-23.9	Peak	Horizontal
	12500.5	33.4	16.7	50.1	74.0	-23.9	Peak	Horizontal
*	8624.5	34.2	13.0	47.2	68.2	-21.0	Peak	Vertical
*	10095.0	32.2	16.2	48.4	68.2	-19.8	Peak	Vertical
	11820.5	32.3	16.8	49.1	74.0	-24.9	Peak	Vertical
	12330.5	32.9	16.7	49.6	74.0	-24.4	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	ce of 3 me	ters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C					
Test Engineer	Dandy Li	Relative Humidity	57%					
Test Site	AC1	Test Date	2019/07/19					
Test Mode	802.11ac-VHT40	Test Channel	134					
Remark	1. Average measurement was not p	performed if peak level lov	wer than average					
	limit.	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)				
*	8794.5	34.6	13.3	47.9	68.2	-20.3	Peak	Horizontal
*	10222.5	33.5	16.5	50.0	68.2	-18.2	Peak	Horizontal
	11812.0	33.4	16.8	50.2	74.0	-23.8	Peak	Horizontal
	12228.5	33.2	17.0	50.2	74.0	-23.8	Peak	Horizontal
*	8973.0	33.2	13.4	46.6	68.2	-21.6	Peak	Vertical
*	9721.0	32.6	15.4	48.0	68.2	-20.2	Peak	Vertical
	10681.5	32.4	17.3	49.7	74.0	-24.3	Peak	Vertical
	11956.5	33.1	16.9	50.0	74.0	-24.0	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d. its limit i	s -27dBm/Mł	Iz. At a distanc	e of 3 me	ters. the f	ield strenath

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



Product	Wi-Fi module	Temperature	26°C				
Test Engineer	Dandy Li	Relative Humidity	57%				
Test Site	AC1	Test Date	2019/07/19				
Test Mode	802.11ac-VHT40	Test Channel	142				
Remark	1. Average measurement was not p	performed if peak level lo	wer than average				
	limit.	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)				
*	8854.0	35.2	13.4	48.6	68.2	-19.6	Peak	Horizontal
*	10035.5	33.8	16.1	49.9	68.2	-18.3	Peak	Horizontal
	11633.5	33.5	17.2	50.7	74.0	-23.3	Peak	Horizontal
	12313.5	32.9	16.9	49.8	74.0	-24.2	Peak	Horizontal
*	8667.0	34.4	13.0	47.4	68.2	-20.8	Peak	Vertical
*	10035.5	32.6	16.1	48.7	68.2	-19.5	Peak	Vertical
	11004.5	32.2	17.8	50.0	74.0	-24.0	Peak	Vertical
	12177.5	33.0	17.1	50.1	74.0	-23.9	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	is -27dBm/MI	Iz. At a distanc	ce of 3 me	ters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C					
Test Engineer	Dandy Li	Relative Humidity	57%					
Test Site	AC1	Test Date	2019/07/19					
Test Mode	802.11ac-VHT40	Test Channel	151					
Remark	1. Average measurement was not p	performed if peak level lov	wer than average					
	limit.	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)				
*	8854.0	34.6	13.4	48.0	68.2	-20.2	Peak	Horizontal
*	10545.5	32.7	17.3	50.0	68.2	-18.2	Peak	Horizontal
	11812.0	32.8	16.8	49.6	74.0	-24.4	Peak	Horizontal
	12551.5	32.5	16.7	49.2	74.0	-24.8	Peak	Horizontal
*	7842.5	33.3	12.1	45.4	68.2	-22.8	Peak	Vertical
*	8760.5	33.0	13.3	46.3	68.2	-21.9	Peak	Vertical
	11013.0	31.7	17.8	49.5	74.0	-24.5	Peak	Vertical
	11956.5	32.8	16.9	49.7	74.0	-24.3	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	e of 3 me	ters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C				
Test Engineer	Dandy Li	Relative Humidity	57%				
Test Site	AC1	Test Date	2019/07/19				
Test Mode	802.11ac-VHT40	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)				
*	8879.5	35.7	13.4	49.1	68.2	-19.1	Peak	Horizontal
*	10316.0	33.2	16.6	49.8	68.2	-18.4	Peak	Horizontal
	11642.0	32.9	17.2	50.1	74.0	-23.9	Peak	Horizontal
	12390.0	33.1	16.6	49.7	74.0	-24.3	Peak	Horizontal
*	8616.0	34.3	12.9	47.2	68.2	-21.0	Peak	Vertical
*	10477.5	32.5	16.9	49.4	68.2	-18.8	Peak	Vertical
	11608.0	33.2	17.5	50.7	74.0	-23.3	Peak	Vertical
	12211.5	33.7	17.0	50.7	74.0	-23.3	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	is -27dBm/MI	Iz. At a distanc	e of 3 me	eters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C				
Test Engineer	Dandy Li	Relative Humidity	57%				
Test Site	AC1	Test Date	2019/07/19				
Test Mode	802.11ac-VHT80	Test Channel	42				
Remark	1. Average measurement was not p	performed if peak level lov	wer than average				
	limit.	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)				
*	8888.0	34.8	13.4	48.2	68.2	-20.0	Peak	Horizontal
*	10452.0	32.7	16.7	49.4	68.2	-18.8	Peak	Horizontal
	11540.0	32.6	17.6	50.2	74.0	-23.8	Peak	Horizontal
	12330.5	33.2	16.7	49.9	74.0	-24.1	Peak	Horizontal
*	7876.5	35.0	12.3	47.3	68.2	-20.9	Peak	Vertical
*	8769.0	33.5	13.4	46.9	68.2	-21.3	Peak	Vertical
	11846.0	33.1	16.9	50.0	74.0	-24.0	Peak	Vertical
	12347.5	32.8	16.7	49.5	74.0	-24.5	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	eters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C				
Test Engineer	Dandy Li	Relative Humidity	57%				
Test Site	AC1	Test Date	2019/07/19				
Test Mode	802.11ac-VHT80	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)				
*	8939.0	32.6	13.4	46.0	68.2	-22.2	Peak	Horizontal
*	10452.0	32.3	16.7	49.0	68.2	-19.2	Peak	Horizontal
	11863.0	33.2	16.8	50.0	74.0	-24.0	Peak	Horizontal
	12560.0	33.2	16.7	49.9	74.0	-24.1	Peak	Horizontal
*	8641.5	34.5	13.1	47.6	68.2	-20.6	Peak	Vertical
*	9797.5	33.4	15.9	49.3	68.2	-18.9	Peak	Vertical
	11820.5	33.3	16.8	50.1	74.0	-23.9	Peak	Vertical
	12500.5	33.0	16.7	49.7	74.0	-24.3	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	e of 3 me	eters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C					
Test Engineer	Dandy Li	Relative Humidity	57%					
Test Site	AC1	Test Date	2019/07/19					
Test Mode	802.11ac-VHT80	Test Channel	106					
Remark	1. Average measurement was not p	performed if peak level lo	wer than average					
	limit.	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)				
*	7961.5	35.6	12.5	48.1	68.2	-20.1	Peak	Horizontal
*	8820.0	35.8	13.4	49.2	68.2	-19.0	Peak	Horizontal
	11854.5	33.7	16.9	50.6	74.0	-23.4	Peak	Horizontal
	12279.5	34.2	16.9	51.1	74.0	-22.9	Peak	Horizontal
*	7876.5	34.5	12.3	46.8	68.2	-21.4	Peak	Vertical
*	8769.0	33.8	13.4	47.2	68.2	-21.0	Peak	Vertical
	11191.5	32.8	17.5	50.3	74.0	-23.7	Peak	Vertical
	12220.0	33.1	17.0	50.1	74.0	-23.9	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	e of 3 me	ters, the f	ield strength

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



Product	Wi-Fi module	Temperature	26°C			
Test Engineer	Dandy Li	Relative Humidity	57%			
Test Site	AC1	Test Date	2019/07/19			
Test Mode	802.11ac-VHT80	Test Channel	122			
Remark	1. Average measurement was not p	performed if peak level lo	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)				
*	8701.0	34.2	13.2	47.4	68.2	-20.8	Peak	Horizontal
*	10069.5	32.7	16.1	48.8	68.2	-19.4	Peak	Horizontal
	11761.0	33.0	16.9	49.9	74.0	-24.1	Peak	Horizontal
	12441.0	33.5	16.5	50.0	74.0	-24.0	Peak	Horizontal
*	8888.0	34.3	13.4	47.7	68.2	-20.5	Peak	Vertical
*	10197.0	32.7	16.2	48.9	68.2	-19.3	Peak	Vertical
	11837.5	32.8	16.9	49.7	74.0	-24.3	Peak	Vertical
	12296.5	32.5	17.0	49.5	74.0	-24.5	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

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	Wi-Fi module	Temperature	26°C				
Test Engineer	Dandy Li	Relative Humidity	57%				
Test Site	AC1	Test Date	2019/07/19				
Test Mode	802.11ac-VHT80	Test Channel	138				
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)				
*	8828.5	35.3	13.4	48.7	68.2	-19.5	Peak	Horizontal
*	10146.0	34.6	16.2	50.8	68.2	-17.4	Peak	Horizontal
	11897.0	33.8	16.9	50.7	74.0	-23.3	Peak	Horizontal
	12381.5	34.0	16.7	50.7	74.0	-23.3	Peak	Horizontal
*	8616.0	34.5	12.9	47.4	68.2	-20.8	Peak	Vertical
*	9857.0	32.6	16.0	48.6	68.2	-19.6	Peak	Vertical
	11863.0	32.4	16.8	49.2	74.0	-24.8	Peak	Vertical
	12254.0	32.4	17.0	49.4	74.0	-24.6	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

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



Product	Wi-Fi module	Temperature	26°C				
Test Engineer	Dandy Li	Relative Humidity	57%				
Test Site	AC1	Test Date	2019/07/19				
Test Mode	802.11ac-VHT80	Test Channel	155				
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)				
*	8811.5	33.8	13.4	47.2	68.2	-21.0	Peak	Horizontal
*	10248.0	32.4	16.5	48.9	68.2	-19.3	Peak	Horizontal
	11999.0	33.1	16.9	50.0	74.0	-24.0	Peak	Horizontal
	12441.0	33.7	16.5	50.2	74.0	-23.8	Peak	Horizontal
*	8641.5	35.5	13.1	48.6	68.2	-19.6	Peak	Vertical
*	9644.5	35.0	15.5	50.5	68.2	-17.7	Peak	Vertical
	10953.5	34.0	18.0	52.0	74.0	-22.0	Peak	Vertical
	15645.5	34.0	17.5	51.5	74.0	-22.5	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/Mł	Iz. At a distanc	e of 3 me	ters, the f	ield strength

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



#### The Worst Case of Radiated Emission below 1GHz:

Site: AC1	Time: 2019/07/24 - 09:54
Limit: FCC_Part15.209_RE(3m)	Engineer: Kyrie Xie
Probe: VULB 9168 _20-2000MHz	Polarity: Horizontal
EUT: Wi-Fi module	Power: AC 120V/60Hz

#### Worst Case Mode: Transmit by 802.11a at Channel 5785MHz



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			84.320	21.967	11.690	-18.033	40.000	10.278	QP
2			143.000	23.253	8.340	-20.247	43.500	14.913	QP
3			236.610	31.372	18.460	-14.628	46.000	12.912	QP
4			300.145	36.307	21.760	-9.693	46.000	14.547	QP
5			445.645	33.329	15.360	-12.671	46.000	17.969	QP
6		*	643.525	36.360	14.690	-9.640	46.000	21.670	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 test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.



Site: AC1	Time: 2019/07/24 - 09:56
Limit: FCC_Part15.109_RE(3m)	Engineer: Kyrie Xie
Probe: VULB 9168 _20-2000MHz	Polarity: Vertical
EUT: Wi-Fi module	Power: AC 120V/60Hz

#### Worst Case Mode: Transmit by 802.11a at Channel 5785MHz



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			58.100	22.790	9.130	-17.210	40.000	13.660	QP
2			84.320	18.737	8.460	-21.263	40.000	10.278	QP
3			123.640	19.878	6.320	-23.622	43.500	13.557	QP
4			293.355	19.072	4.690	-26.928	46.000	14.382	QP
5			445.645	26.609	8.640	-19.391	46.000	17.969	QP
6		*	643.525	33.730	12.060	-12.270	46.000	21.670	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 test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.



# 7.9. Radiated Restricted Band Edge Measurement

## 7.9.1.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

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
<sup>1</sup> 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.525	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			

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

## 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.

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						



### For RSS-Gen Section 8.10 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 8.10 of RSS-Gen, must

also comply with the radiated emission limits specified in Section 8.9.

Restricted frequency bands*								
Frequency (MHz)	Frequency (MHz)	Frequency (GHz)						
0.090 - 0.110	149.9 - 150.05	9.0 - 9.2						
0.495 - 0.505	156.52475 - 156.525225	9.3 - 9.5						
2.1735 - 2.1905	156.7 - 156.9	10.6 - 12.7						
3.020 - 3.026	162.0125 - 167.17	13.25 - 13.4						
4.125 - 4.128	167.72 - 173.2	14.47 - 14.5						
4.17725 - 4.17775	240 - 285	15.35 - 16.2						
4.20725 - 4.20775	322 - 335.4	17.7 - 21.4						
5.677 - 5.683	399.9 - 410	22.01 - 23.12						
6.215 - 6.218	608 - 614	23.6 - 24.0						
6.26775 - 6.26825	960 - 1427	31.2 - 31.8						
6.31175 - 6.31225	1435 - 1626.5	36.43 - 36.5						
8.291 - 8.294	1645.5 - 1646.5	Above 38.6						
8.362 - 8.366	1660 - 1710							
8.37625 - 8.38675	1718.8 -1722.2							
8.41425 - 8.41475	2200 - 2300							
12.29 - 12.293	2310 -2390							
12.51975 - 12.52025	2483.5 - 2500							
12.57675 - 12.57725	2655 - 2900							
13.36 -13.41	3260 - 3267							
16.42 - 16.423	3332 -3339							
16.69475 - 16.69525	3345.8 - 3358							
16.80425 - 16.80475	3500 - 4400							
25.5 - 25.67	4500 - 5150							
37.5 - 38.25	5350 - 5460							
73 - 74.6	7250 - 7750							
74.8 - 75.2	8025 - 8500							
108 - 138								



Note: \*Certain frequency bands listed in Table 6 and in bands above 38.6 GHz are designated for licence-exempt applications. These frequency bands and the requirements that apply to the devices are set out in the 200- and 300-series of RSSs, such as RSS-210 and RSS-310, which contain the requirements that apply to licence-exempt radio apparatus.

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 band 5725-5850 MHz shall have e.i.r.p. of unwanted emissions comply with the following:

a) 27 dBm/MHz at frequencies from the band edges decreasing linearly to 15.6 dBm/MHz at 5MHz above or below the band edges;

b) 15.6 dBm/MHz at 5 MHz above or below the band edges decreasing linearly to 10 dBm/MHz at 25 MHz above or below the band edges;

c) 10 dBm/MHz at 25 MHz above or below the band edges decreasing linearly to -27 dBm/MHz at 75 MHz above or below the band edges; and

d) -27 dBm/MHz at frequencies more than 75 MHz above or below the band edges.

RSS-Gen Section 8.9								
Frequency [MHz]	Field Strength [uV/m]	Measured Distance [Meters]						
0.009 - 0.490	2400/F (kHz)	300						
0.490 - 1.705	24000/F (kHz)	30 30						
1.705 - 30	30							
30 - 88	100	3						
88 - 216	150	3						
216 - 960	200	3						
Above 960	500	3						

All out of band emissions appearing in a restricted band as specified in Section 8.10 of the RSS-Gen must not exceed the limits shown in Table per Section 8.9.



### 7.9.2.Test Procedure Used

ANSI C63.10 Section 6.3 (General Requirements)

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

## 7.9.3.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
- Allow max hold to run for at least 50 traces if the transmitted signal is continuous or has at least 98% duty cycle. For lower duty cycles, increase the minimum number of traces by a factor of 1/x, where x is the duty cycle.



# 7.9.4.Test Setup







# 7.9.5.Test Result

Site: AC1				Time: 2019/07/19 - 00:02						
Limit: FCC_Part15.209_RE(3m)				Engineer: Dandy Li						
Prob	Probe: BBHA9120D_1-18GHz				Polarity: Horizontal					
EUT	EUT: Wi-Fi module				Power: AC 120V/60Hz					
Test Mode: Transmit by 802.11a at Channel 5180MHz										
Level(dBuV/m)	130 80 70 60 40 30 5110	5115 5	5120 5125 513	0 5135 5140	1 2 2 5145 5150 Frequ	5155 5160 516 uency(MHz)	5 5170 5175	3	190 5195 5200	
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре	
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)		
				(dBuV/m)	(dBuV)					
1			5147.665	62.100	55.704	-11.900	74.000	6.395	РК	
2			5150.000	59.088	52.691	-14.912	74.000	6.398	PK	
3		*	5178.085	102.924	96.373	N/A	N/A	6.551	PK	

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





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





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





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