



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.

The transmitter center frequency tolerance shall be ± 20 ppm maximum for the 5GHz band (IEEE 802.11 specification).

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.

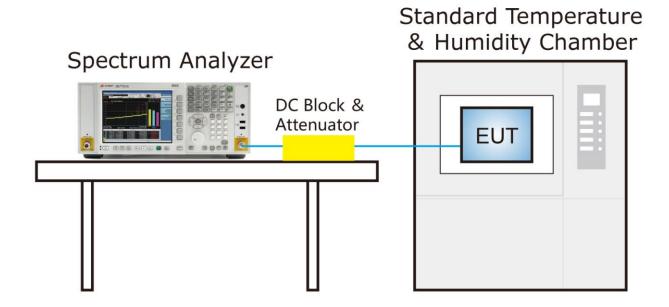
Frequency Stability Under Voltage Variations:

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

Test Engineer	Will Yuan	Temperature	0 ~ 45°C
Test Time	2019/03/04	Relative Humidity	48 ~ 55%RH
Test Mode	5180MHz (Carrier Mode)	Test Site	TR3

Voltage	Power	Temp	Frequency Tolerance (ppm)				
(%)	(VAC)	(°C)	0 minutes	2 minutes	5 minutes	10 minutes	
			2.41	1.43	1.81	2.05	
		+ 10	2.89	1.69	1.63	2.10	
4000/	400	+ 20 (Ref)	1.93	1.41	1.35	1.34	
100%	120	+ 30	1.94	2.00	1.46	1.85	
		+ 40	2.77	2.36	1.70	2.17	
		+ 45	2.46	2.11	2.12	1.38	
115%	138	+ 20	2.12	1.43	1.58	1.96	
85%	102	+ 20	2.89	2.35	1.47	1.75	

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



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								
Frequency	Measured Distance							
[MHz]	[V/m]	[Meters]						
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

Peak Field Strength Measurements

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



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

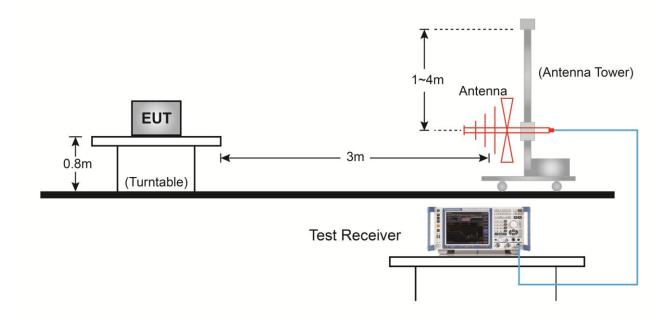
Average Field Strength Measurements

- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = 1MHz
- 3. VBW ≥ 1/T
- 4. De As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to "Voltage" regardless of the display mode
- 5. Detector = Peak
- 6. Sweep time = auto
- 7. Trace mode = max hold
- 8. Allow max hold to run for at least 50 times (1/duty cycle) traces

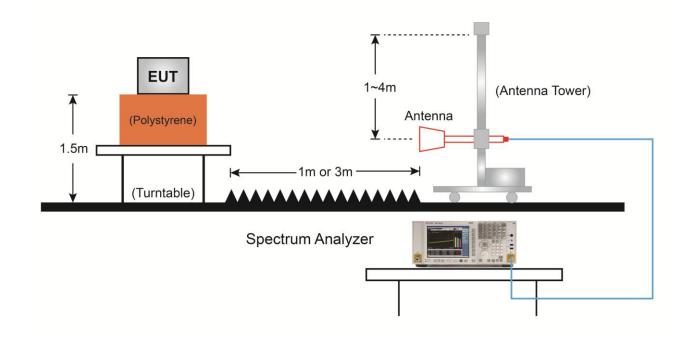


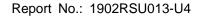
7.8.4.Test Setup

<u>30MHz ~ 1GHz Test Setup:</u>



<u>1GHz ~ 18GHz Test Setup:</u>







7.8.5.Test Result

Product	WIFI+BT Combo Module	Temperature	26°C			
Test Engineer	Stone Jia	Relative Humidity	57 %			
Test Site	AC1	Test Date	2019/03/05			
Test Mode	802.11a	Test Channel	36			
Remark	1. Average measurement was not performed if peak level lower than average					
	limit (54dBµV/m).					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency (MHz)	Reading Level	Factor (dB)	Measure Level	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
		(dBµV)		(dBµV/m)				
*	9814.5	29.1	17.0	46.1	68.2	-22.1	Peak	Horizontal
*	10307.5	28.4	18.4	46.8	68.2	-21.4	Peak	Horizontal
	11429.5	25.7	20.3	46.0	74.0	-28.0	Peak	Horizontal
	12483.5	25.9	20.1	46.0	74.0	-28.0	Peak	Horizontal
*	9831.5	30.2	17.2	47.4	68.2	-20.8	Peak	Vertical
*	10360.0	31.7	18.6	50.3	68.2	-17.9	Peak	Vertical
	10953.5	28.9	20.0	48.9	74.0	-25.1	Peak	Vertical
	11812.0	28.1	20.1	48.2	74.0	-25.8	Peak	Vertical

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

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



Product	WIFI+BT Combo Module	Temperature	26°C			
Test Engineer	Stone Jia	Relative Humidity	57 %			
Test Site	AC1	Test Date	2019/03/05			
Test Mode	802.11a	Test Channel	44			
Remark	1. Average measurement was not performed if peak level lower than average					
	limit (54dBµV/m).					
	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)				
*	10044.0	29.8	17.6	47.4	68.2	-20.8	Peak	Horizontal
*	10440.0	29.7	18.4	48.1	68.2	-20.1	Peak	Horizontal
	11395.5	28.4	20.4	48.8	74.0	-25.2	Peak	Horizontal
	12169.0	28.3	20.4	48.7	74.0	-25.3	Peak	Horizontal
*	10137.5	31.4	17.9	49.3	68.2	-18.9	Peak	Vertical
*	10440.0	31.1	18.4	49.5	68.2	-18.7	Peak	Vertical
	11633.5	29.5	21.0	50.5	74.0	-23.5	Peak	Vertical
	12271.0	29.6	20.1	49.7	74.0	-24.3	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	WIFI+BT Combo Module	Temperature	26°C			
Test Engineer	Stone Jia	Relative Humidity	57 %			
Test Site	AC1	Test Date	2019/03/05			
Test Mode	802.11a	Test Channel	48			
Remark	1. Average measurement was not performed if peak level lower than average					
	limit (54dBµV/m).					
	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)				
*	9780.5	31.3	16.9	48.2	68.2	-20.0	Peak	Horizontal
*	10480.0	30.4	18.8	49.2	68.2	-19.0	Peak	Horizontal
	11106.5	28.8	20.0	48.8	74.0	-25.2	Peak	Horizontal
	12050.0	28.8	20.3	49.1	74.0	-24.9	Peak	Horizontal
*	9899.5	30.3	17.3	47.6	68.2	-20.6	Peak	Vertical
*	10480.0	30.0	18.8	48.8	68.2	-19.4	Peak	Vertical
	11242.5	28.4	20.4	48.8	74.0	-25.2	Peak	Vertical
	11948.0	28.2	20.2	48.4	74.0	-25.6	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 strength

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



Product	WIFI+BT Combo Module	Temperature	26°C			
Test Engineer	Stone Jia	Relative Humidity	57 %			
Test Site	AC1	Test Date	2019/03/05			
Test Mode	802.11a	Test Channel	52			
Remark	1. Average measurement was not performed if peak level lower than average					
	limit (54dBµV/m).					
	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)				
*	9908.0	30.7	17.4	48.1	68.2	-20.1	Peak	Horizontal
*	10520.0	30.2	18.9	49.1	68.2	-19.1	Peak	Horizontal
	11081.0	30.5	20.1	50.6	74.0	-23.4	Peak	Horizontal
	12169.0	29.1	20.4	49.5	74.0	-24.5	Peak	Horizontal
*	9763.5	31.3	17.0	48.3	68.2	-19.9	Peak	Vertical
*	10520.0	30.5	18.9	49.4	68.2	-18.8	Peak	Vertical
	11387.0	28.0	20.5	48.5	74.0	-25.5	Peak	Vertical
	12415.5	28.6	19.9	48.5	74.0	-25.5	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 addin	ig a "conversi	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 (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11a	Test Channel	60				
Remark	1. Average measurement was no	t performed if peak	evel lower than average				
	limit (54dBµV/m).						
	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)				
*	10018.5	32.2	17.7	49.9	68.2	-18.3	Peak	Horizontal
*	10600.0	30.5	19.0	49.5	68.2	-18.7	Peak	Horizontal
	11072.5	30.3	20.1	50.4	74.0	-23.6	Peak	Horizontal
	11633.5	29.3	21.0	50.3	74.0	-23.7	Peak	Horizontal
*	9942.0	30.6	17.5	48.1	68.2	-20.1	Peak	Vertical
*	10600.0	30.1	19.0	49.1	68.2	-19.1	Peak	Vertical
	11395.5	28.2	20.4	48.6	74.0	-25.4	Peak	Vertical
	11786.5	28.4	20.2	48.6	74.0	-25.4	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	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11a	Test Channel	64				
Remark	1. Average measurement was no	t performed if peak l	evel lower than average				
	limit (54dBµV/m).						
	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)				
*	9644.5	31.9	16.4	48.3	68.2	-19.9	Peak	Horizontal
*	9857.0	31.6	17.3	48.9	68.2	-19.3	Peak	Horizontal
	10640.0	30.4	19.0	49.4	74.0	-24.6	Peak	Horizontal
	12220.0	28.7	20.3	49.0	74.0	-25.0	Peak	Horizontal
*	9993.0	31.1	17.4	48.5	68.2	-19.7	Peak	Vertical
*	10426.5	29.9	18.5	48.4	68.2	-19.8	Peak	Vertical
	10640.0	31.0	19.0	50.0	74.0	-24.0	Peak	Vertical
	11395.5	28.6	20.4	49.0	74.0	-25.0	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 strength

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



Duradicast	MUEL DE Osischie Marchale	Tanana ang tang	2000				
Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11a	Test Channel	100				
Remark	1. Average measurement was no	t performed if peak	evel lower than average				
	limit (54dBµV/m).						
	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)				
*	9840.0	31.9	17.3	49.2	68.2	-19.0	Peak	Horizontal
*	10290.5	31.8	18.4	50.2	68.2	-18.0	Peak	Horizontal
	11000.0	29.7	20.0	49.7	74.0	-24.3	Peak	Horizontal
	11846.0	28.5	20.3	48.8	74.0	-25.2	Peak	Horizontal
*	9840.0	31.0	17.3	48.3	68.2	-19.9	Peak	Vertical
*	10214.0	30.5	18.2	48.7	68.2	-19.5	Peak	Vertical
	11000.0	29.1	20.0	49.1	74.0	-24.9	Peak	Vertical
	12058.5	29.6	20.3	49.9	74.0	-24.1	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	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11a	Test Channel	116				
Remark	1. Average measurement was no	t performed if peak	level lower than average				
	limit (54dBµV/m).						
	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)				
*	9687.0	31.7	16.4	48.1	68.2	-20.1	Peak	Horizontal
*	10350.0	29.9	18.5	48.4	68.2	-19.8	Peak	Horizontal
	11160.0	29.2	20.4	49.6	74.0	-24.4	Peak	Horizontal
	11931.0	27.9	20.1	48.0	74.0	-26.0	Peak	Horizontal
*	9636.0	32.8	16.2	49.0	68.2	-19.2	Peak	Vertical
*	10537.0	30.3	18.9	49.2	68.2	-19.0	Peak	Vertical
	11160.0	29.7	20.4	50.1	74.0	-23.9	Peak	Vertical
	12118.0	28.9	20.5	49.4	74.0	-24.6	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	WIFI+BT Combo Module	Temperature	26°C					
Test Engineer	Stone Jia	Relative Humidity	57 %					
Test Site	AC1	Test Date	2019/03/05					
Test Mode	802.11a	Test Channel	120					
Remark	 Average measurement was no limit (54dBµV/m). 	1. Average measurement was not performed if peak level lower than average						
	 Other frequency was 20dB bel in the report. 	ow limit line within 1	-18GHz, there is not show					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	9814.5	30.3	17.0	47.3	68.2	-20.9	Peak	Horizontal
*	10426.5	29.3	18.5	47.8	68.2	-20.4	Peak	Horizontal
	11200.0	28.7	20.3	49.0	74.0	-25.0	Peak	Horizontal
	12313.5	28.2	19.9	48.1	74.0	-25.9	Peak	Horizontal
*	9585.0	32.6	16.3	48.9	68.2	-19.3	Peak	Vertical
*	10307.5	30.4	18.4	48.8	68.2	-19.4	Peak	Vertical
	11200.0	28.3	20.3	48.6	74.0	-25.4	Peak	Vertical
	11795.0	28.1	20.2	48.3	74.0	-25.7	Peak	Vertical
Note 1:	"*" is not in r	estricted ban	d, its limit i	s -27dBm/MF	Iz. At a distanc	e of 3 me	ters, the f	ield 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	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11a	Test Channel	140				
Remark	1. Average measurement was no	t performed if peak l	evel lower than average				
	limit (54dBµV/m).						
	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)				
*	9840.0	30.8	17.3	48.1	68.2	-20.1	Peak	Horizontal
*	10443.5	29.7	18.4	48.1	68.2	-20.1	Peak	Horizontal
	11400.0	29.7	20.4	50.1	74.0	-23.9	Peak	Horizontal
	12237.0	28.4	20.2	48.6	74.0	-25.4	Peak	Horizontal
*	9678.5	32.3	16.4	48.7	68.2	-19.5	Peak	Vertical
*	10112.0	31.9	18.0	49.9	68.2	-18.3	Peak	Vertical
	11400.0	29.0	20.4	49.4	74.0	-24.6	Peak	Vertical
	11633.5	30.0	21.0	51.0	74.0	-23.0	Peak	Vertical

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

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



Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11a	Test Channel	144				
Remark	1. Average measurement was no	t performed if peak	evel lower than average				
	limit (54dBµV/m).						
	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)				
*	10052.5	30.3	17.5	47.8	68.2	-20.4	Peak	Horizontal
*	10443.5	29.7	18.4	48.1	68.2	-20.1	Peak	Horizontal
	11440.0	29.6	20.4	50.0	74.0	-24.0	Peak	Horizontal
	12305.0	28.1	19.9	48.0	74.0	-26.0	Peak	Horizontal
*	9848.5	32.1	17.3	49.4	68.2	-18.8	Peak	Vertical
*	10239.5	31.4	18.1	49.5	68.2	-18.7	Peak	Vertical
	11440.0	29.0	20.4	49.4	74.0	-24.6	Peak	Vertical
	12381.5	29.0	20.0	49.0	74.0	-25.0	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 strength

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



Product	WIFI+BT Combo Module	Temperature	26°C				
		•					
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11a	Test Channel	149				
Remark	1. Average measurement was not	performed if peak le	evel lower than average				
	limit (54dBµV/m).						
	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)				
*	9942.0	31.4	17.5	48.9	68.2	-19.3	Peak	Horizontal
*	10358.5	30.7	18.5	49.2	68.2	-19.0	Peak	Horizontal
	11490.0	29.2	20.6	49.8	74.0	-24.2	Peak	Horizontal
	12305.0	28.5	19.9	48.4	74.0	-25.6	Peak	Horizontal
*	10027.0	32.1	17.7	49.8	68.2	-18.4	Peak	Vertical
*	10562.5	31.6	19.0	50.6	68.2	-17.6	Peak	Vertical
	11490.0	28.5	20.6	49.1	74.0	-24.9	Peak	Vertical
	11684.5	30.0	20.6	50.6	74.0	-23.4	Peak	Vertical
Note 1:	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/M⊦	Iz. At a distanc	e of 3 me	ters, the f	ield strength

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



Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11a	Test Channel	157				
Remark	1. Average measurement was no	t performed if peak	evel lower than average				
	limit (54dBµV/m).						
	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)				
*	9738.0	31.4	16.6	48.0	68.2	-20.2	Peak	Horizontal
*	10239.5	30.3	18.1	48.4	68.2	-19.8	Peak	Horizontal
	11570.0	29.5	20.8	50.3	74.0	-23.7	Peak	Horizontal
	11795.0	28.2	20.2	48.4	74.0	-25.6	Peak	Horizontal
*	9661.5	32.2	16.5	48.7	68.2	-19.5	Peak	Vertical
*	10316.0	30.8	18.4	49.2	68.2	-19.0	Peak	Vertical
	11570.0	29.6	20.8	50.4	74.0	-23.6	Peak	Vertical
	12024.5	29.3	20.3	49.6	74.0	-24.4	Peak	Vertical
Note 1:	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/M⊦	Iz. At a distand	e of 3 me	ters, the f	ield strength

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



Draduct	MILL DT Combo Modulo	Tomoreture	20%0				
Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11a	Test Channel	est Channel 165				
Remark	1. Average measurement was no	t performed if peak	evel lower than average				
	limit (54dBµV/m).						
	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)				
*	9916.5	30.3	17.4	47.7	68.2	-20.5	Peak	Horizontal
*	10350.0	30.0	18.5	48.5	68.2	-19.7	Peak	Horizontal
	11200.0	28.2	20.3	48.5	74.0	-25.5	Peak	Horizontal
	11650.0	29.9	21.0	50.9	74.0	-23.1	Peak	Horizontal
*	9823.0	29.9	17.1	47.0	68.2	-21.2	Peak	Vertical
*	10443.5	29.7	18.4	48.1	68.2	-20.1	Peak	Vertical
	10792.0	29.4	19.7	49.1	74.0	-24.9	Peak	Vertical
	11650.0	29.2	21.0	50.2	74.0	-23.8	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 addin	ig a "conversi	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 (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11n-HT20	Test Channel	36				
Remark	1. Average measurement was no	t performed if peak	evel lower than average				
	limit (54dBµV/m).						
	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)				
*	10027.0	31.8	17.7	49.5	68.2	-18.7	Peak	Horizontal
*	10360.0	30.8	18.6	49.4	68.2	-18.8	Peak	Horizontal
	10894.0	29.5	20.0	49.5	74.0	-24.5	Peak	Horizontal
	11795.0	28.6	20.2	48.8	74.0	-25.2	Peak	Horizontal
*	9593.5	31.2	16.2	47.4	68.2	-20.8	Peak	Vertical
*	10360.0	31.6	18.6	50.2	68.2	-18.0	Peak	Vertical
	11098.0	28.3	20.0	48.3	74.0	-25.7	Peak	Vertical
	12441.0	29.5	19.9	49.4	74.0	-24.6	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	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11n-HT20	Test Channel	44				
Remark	1. Average measurement was no	t performed if peak	evel lower than average				
	limit (54dBµV/m).						
	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)				
*	9763.5	32.1	17.0	49.1	68.2	-19.1	Peak	Horizontal
*	10440.0	30.1	18.4	48.5	68.2	-19.7	Peak	Horizontal
	11395.5	28.6	20.4	49.0	74.0	-25.0	Peak	Horizontal
	12203.0	28.8	20.4	49.2	74.0	-24.8	Peak	Horizontal
*	9780.5	32.0	16.9	48.9	68.2	-19.3	Peak	Vertical
*	10440.0	30.6	18.4	49.0	68.2	-19.2	Peak	Vertical
	11072.5	30.7	20.1	50.8	74.0	-23.2	Peak	Vertical
	12330.5	28.9	19.9	48.8	74.0	-25.2	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							

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



Product	WIFI+BT Combo Module	Temperature	26°C			
Test Engineer	Stone Jia	Relative Humidity	57 %			
Test Site	AC1	Test Date	2019/03/05			
Test Mode	802.11n-HT20	Test Channel	48			
Remark	1. Average measurement was not performed if peak level lower than average					
	limit (54dBµV/m).					
	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)				
*	9993.0	28.5	17.4	45.9	68.2	-22.3	Peak	Horizontal
*	10480.0	30.3	18.8	49.1	68.2	-19.1	Peak	Horizontal
	11421.0	26.1	20.3	46.4	74.0	-27.6	Peak	Horizontal
	12169.0	27.1	20.4	47.5	74.0	-26.5	Peak	Horizontal
*	10163.0	31.6	17.8	49.4	68.2	-18.8	Peak	Vertical
*	10480.0	30.8	18.8	49.6	68.2	-18.6	Peak	Vertical
	11089.5	29.4	20.1	49.5	74.0	-24.5	Peak	Vertical
	11591.0	29.1	20.7	49.8	74.0	-24.2	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							

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



Product	WIFI+BT Combo Module	Temperature	26°C			
Test Engineer	Stone Jia	Relative Humidity	57 %			
Test Site	AC1	Test Date	2019/03/05			
Test Mode	802.11n-HT20	Test Channel	52			
Remark	1. Average measurement was not performed if peak level lower than average					
	limit (54dBµV/m).					
	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)				
*	9636.0	30.8	16.2	47.0	68.2	-21.2	Peak	Horizontal
*	10520.0	29.2	18.9	48.1	68.2	-20.1	Peak	Horizontal
	11115.0	28.5	20.0	48.5	74.0	-25.5	Peak	Horizontal
	11948.0	29.2	20.2	49.4	74.0	-24.6	Peak	Horizontal
*	9610.5	30.9	16.2	47.1	68.2	-21.1	Peak	Vertical
*	10520.0	30.1	18.9	49.0	68.2	-19.2	Peak	Vertical
	10681.5	30.0	19.2	49.2	74.0	-24.8	Peak	Vertical
	12220.0	29.2	20.3	49.5	74.0	-24.5	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							

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



Product	WIFI+BT Combo Module	Temperature	26°C			
Test Engineer	Stone Jia	Relative Humidity	57 %			
Test Site	AC1	Test Date	2019/03/05			
Test Mode	802.11n-HT20	Test Channel	60			
Remark	1. Average measurement was no	t performed if peak	evel lower than average			
	limit (54dBµV/m).					
	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)				
*	9865.5	30.6	17.3	47.9	68.2	-20.3	Peak	Horizontal
*	10600.0	31.0	19.0	50.0	68.2	-18.2	Peak	Horizontal
	11786.5	28.2	20.2	48.4	74.0	-25.6	Peak	Horizontal
	12381.5	30.0	20.0	50.0	74.0	-24.0	Peak	Horizontal
*	10001.5	31.7	17.6	49.3	68.2	-18.9	Peak	Vertical
*	10600.0	30.4	19.0	49.4	68.2	-18.8	Peak	Vertical
	11021.5	29.7	19.8	49.5	74.0	-24.5	Peak	Vertical
	11948.0	28.7	20.2	48.9	74.0	-25.1	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	ters, the f	ield strength

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



Product	WIFI+BT Combo Module	Temperature	26°C					
Test Engineer	Stone Jia	Relative Humidity	57 %					
Test Site	AC1	Test Date	2019/03/05					
Test Mode	802.11n-HT20	Test Channel	64					
Remark	1. Average measurement was no	t performed if peak l	evel lower than average					
	limit (54dBµV/m).	limit (54dBµV/m).						
	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)				
*	9602.0	31.3	16.2	47.5	68.2	-20.7	Peak	Horizontal
*	10078.0	30.3	17.5	47.8	68.2	-20.4	Peak	Horizontal
	10640.0	30.5	19.0	49.5	74.0	-24.5	Peak	Horizontal
	11480.5	28.1	20.6	48.7	74.0	-25.3	Peak	Horizontal
*	9644.5	32.6	16.4	49.0	68.2	-19.2	Peak	Vertical
*	10367.0	31.4	18.6	50.0	68.2	-18.2	Peak	Vertical
	10640.0	29.9	19.0	48.9	74.0	-25.1	Peak	Vertical
	11914.0	29.3	20.1	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 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	WIFI+BT Combo Module	Temperature	26°C			
Test Engineer	Stone Jia	Relative Humidity	57 %			
Test Site	AC1	Test Date	2019/03/05			
Test Mode	802.11n-HT20	Test Channel	100			
Remark	1. Average measurement was no	t performed if peak	evel lower than average			
	limit (54dBµV/m).					
	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)						
*	9959.0	30.5	17.3	47.8	68.2	-20.4	Peak	Horizontal		
*	10358.5	30.2	18.5	48.7	68.2	-19.5	Peak	Horizontal		
	11000.0	29.5	20.0	49.5	74.0	-24.5	Peak	Horizontal		
	11812.0	28.0	20.1	48.1	74.0	-25.9	Peak	Horizontal		
*	9644.5	32.6	16.4	49.0	68.2	-19.2	Peak	Vertical		
*	10341.5	31.3	18.4	49.7	68.2	-18.5	Peak	Vertical		
	11000.0	29.5	20.0	49.5	74.0	-24.5	Peak	Vertical		
	11395.5	28.5	20.4	48.9	74.0	-25.1	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									

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



Product	WIFI+BT Combo Module	Temperature	26°C					
Test Engineer	Stone Jia	Relative Humidity	57 %					
Test Site	AC1	Test Date	2019/03/05					
Test Mode	802.11n-HT20	Test Channel	116					
Remark	1. Average measurement was no	t performed if peak	evel lower than average					
	limit (54dBµV/m).	limit (54dBµV/m).						
	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)					
*	9933.5	30.2	17.5	47.7	68.2	-20.5	Peak	Horizontal	
*	10486.0	29.6	18.9	48.5	68.2	-19.7	Peak	Horizontal	
	11160.0	30.1	20.4	50.5	74.0	-23.5	Peak	Horizontal	
	11795.0	28.1	20.2	48.3	74.0	-25.7	Peak	Horizontal	
*	9661.5	32.7	16.5	49.2	68.2	-19.0	Peak	Vertical	
*	10282.0	30.1	18.3	48.4	68.2	-19.8	Peak	Vertical	
	11160.0	29.5	20.4	49.9	74.0	-24.1	Peak	Vertical	
	12279.5	29.2	20.1	49.3	74.0	-24.7	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								

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



Product	WIFI+BT Combo Module	Temperature	26°C					
Test Engineer	Stone Jia	Relative Humidity	57 %					
Test Site	AC1	Test Date	2019/03/05					
Test Mode	802.11n-HT20	Test Channel	120					
Remark	1. Average measurement was no	t performed if peak l	evel lower than average					
	limit (54dBµV/m).	limit (54dBµV/m).						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show							
	in the report.							

Mark	Frequency (MHz)	Reading Level	Factor (dB)	Measure Level	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
	()	(dBµV)	(0.2)	(dBµV/m)	((0.2)		
*	9857.0	30.7	17.3	48.0	68.2	-20.2	Peak	Horizontal
*	10435.0	29.2	18.4	47.6	68.2	-20.6	Peak	Horizontal
	11200.0	29.1	20.3	49.4	74.0	-24.6	Peak	Horizontal
	11854.5	27.9	20.3	48.2	74.0	-25.8	Peak	Horizontal
*	9857.0	31.7	17.3	49.0	68.2	-19.2	Peak	Vertical
*	10443.5	30.6	18.4	49.0	68.2	-19.2	Peak	Vertical
	11200.0	28.3	20.3	48.6	74.0	-25.4	Peak	Vertical
	12245.5	28.3	20.2	48.5	74.0	-25.5	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 (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11n-HT20	Test Channel	140				
Remark	1. Average measurement was no	t performed if peak	evel lower than average				
	limit (54dBµV/m).						
	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)				
*	9551.0	31.7	16.1	47.8	68.2	-20.4	Peak	Horizontal
*	10265.0	31.0	18.2	49.2	68.2	-19.0	Peak	Horizontal
	11400.0	29.1	20.4	49.5	74.0	-24.5	Peak	Horizontal
	11803.5	28.4	20.1	48.5	74.0	-25.5	Peak	Horizontal
*	9653.0	31.3	16.4	47.7	68.2	-20.5	Peak	Vertical
*	10426.5	29.7	18.5	48.2	68.2	-20.0	Peak	Vertical
	11400.0	28.9	20.4	49.3	74.0	-24.7	Peak	Vertical
	12305.0	28.3	19.9	48.2	74.0	-25.8	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 1: "^" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strengtr limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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



Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11n-HT20	Test Channel	144				
Remark	1. Average measurement was no	t performed if peak	evel lower than average				
	limit (54dBµV/m).						
	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)				
*	9993.0	30.3	17.4	47.7	68.2	-20.5	Peak	Horizontal
*	10418.0	29.9	18.6	48.5	68.2	-19.7	Peak	Horizontal
	11440.0	29.4	20.4	49.8	74.0	-24.2	Peak	Horizontal
	12169.0	28.9	20.4	49.3	74.0	-24.7	Peak	Horizontal
*	9695.5	32.1	16.3	48.4	68.2	-19.8	Peak	Vertical
*	10307.5	30.5	18.4	48.9	68.2	-19.3	Peak	Vertical
	10732.5	30.9	19.5	50.4	74.0	-23.6	Peak	Vertical
	11440.0	28.6	20.4	49.0	74.0	-25.0	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 strength

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



Product	WIFI+BT Combo Module	Temperature	26°C			
Test Engineer	Stone Jia	Relative Humidity	57 %			
Test Site	AC1	Test Date	2019/03/05			
Test Mode	802.11n-HT20	Test Channel	149			
Remark	1. Average measurement was no	t performed if peak	evel lower than average			
	limit (54dBµV/m).					
	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)				
*	9899.5	30.1	17.3	47.4	68.2	-20.8	Peak	Horizontal
*	10350.0	30.0	18.5	48.5	68.2	-19.7	Peak	Horizontal
	10928.0	29.9	20.0	49.9	74.0	-24.1	Peak	Horizontal
	11490.0	28.6	20.6	49.2	74.0	-24.8	Peak	Horizontal
*	9925.0	31.8	17.5	49.3	68.2	-18.9	Peak	Vertical
*	10367.0	29.8	18.6	48.4	68.2	-19.8	Peak	Vertical
	11490.0	28.9	20.6	49.5	74.0	-24.5	Peak	Vertical
	12381.5	28.9	20.0	48.9	74.0	-25.1	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 strength

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



Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11n-HT20	Test Channel	157				
Remark	1. Average measurement was no	t performed if peak	evel lower than average				
	limit (54dBµV/m).						
	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)				
*	9653.0	29.7	16.4	46.1	68.2	-22.1	Peak	Horizontal
*	10180.0	28.1	17.9	46.0	68.2	-22.2	Peak	Horizontal
	11570.0	28.2	20.8	49.0	74.0	-25.0	Peak	Horizontal
	12075.5	26.1	20.4	46.5	74.0	-27.5	Peak	Horizontal
*	9678.5	31.6	16.4	48.0	68.2	-20.2	Peak	Vertical
*	10409.5	29.6	18.7	48.3	68.2	-19.9	Peak	Vertical
	11157.5	28.3	20.4	48.7	74.0	-25.3	Peak	Vertical
	11948.0	28.3	20.2	48.5	74.0	-25.5	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 strength

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



Product	WIFI+BT Combo Module	Temperature	26°C			
Test Engineer	Stone Jia	Relative Humidity	57 %			
Test Site	AC1	Test Date	2019/03/05			
Test Mode	802.11n-HT20	Test Channel	165			
Remark	1. Average measurement was no	t performed if peak	evel lower than average			
	limit (54dBµV/m).					
	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)				
*	9627.5	32.8	16.2	49.0	68.2	-19.2	Peak	Horizontal
*	10350.0	30.8	18.5	49.3	68.2	-18.9	Peak	Horizontal
	11217.0	29.1	20.2	49.3	74.0	-24.7	Peak	Horizontal
	11650.0	29.5	21.0	50.5	74.0	-23.5	Peak	Horizontal
*	9763.5	31.1	17.0	48.1	68.2	-20.1	Peak	Vertical
*	10086.5	30.3	17.7	48.0	68.2	-20.2	Peak	Vertical
	11650.0	30.9	21.0	51.9	74.0	-22.1	Peak	Vertical
	12194.5	28.6	20.4	49.0	74.0	-25.0	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 strength

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



Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11n-HT40	Test Channel	38				
Remark	1. Average measurement was no	t performed if peak	evel lower than average				
	limit (54dBµV/m).						
	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)				
*	9551.0	31.5	16.1	47.6	68.2	-20.6	Peak	Horizontal
*	10222.5	29.9	18.1	48.0	68.2	-20.2	Peak	Horizontal
	11293.5	29.7	20.4	50.1	74.0	-23.9	Peak	Horizontal
	11973.5	29.1	20.3	49.4	74.0	-24.6	Peak	Horizontal
*	10052.5	30.2	17.5	47.7	68.2	-20.5	Peak	Vertical
*	10588.0	29.5	19.0	48.5	68.2	-19.7	Peak	Vertical
	11089.5	29.2	20.1	49.3	74.0	-24.7	Peak	Vertical
	11922.5	28.8	20.1	48.9	74.0	-25.1	Peak	Vertical
Note 1:	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/M⊦	Iz. At a distanc	e of 3 me	ters, the f	ield strength

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



Product	WIFI+BT Combo Module	Temperature	26°C			
Test Engineer	Stone Jia	Relative Humidity	57 %			
Test Site	AC1	Test Date	2019/03/05			
Test Mode	802.11n-HT40	Test Channel	46			
Remark	1. Average measurement was no	t performed if peak	evel lower than average			
	limit (54dBµV/m).					
	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)					
*	9874.0	32.3	17.3	49.6	68.2	-18.6	Peak	Horizontal	
*	10265.0	31.2	18.2	49.4	68.2	-18.8	Peak	Horizontal	
	11072.5	29.5	20.1	49.6	74.0	-24.4	Peak	Horizontal	
	11480.5	29.2	20.6	49.8	74.0	-24.2	Peak	Horizontal	
*	9636.0	32.7	16.2	48.9	68.2	-19.3	Peak	Vertical	
*	10171.5	31.9	17.9	49.8	68.2	-18.4	Peak	Vertical	
	11191.5	29.0	20.4	49.4	74.0	-24.6	Peak	Vertical	
	12500.5	30.2	20.2	50.4	74.0	-23.6	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								

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



Product	WIFI+BT Combo Module	Temperature	26°C					
Test Engineer	Stone Jia	Relative Humidity	57 %					
Test Site	AC1	Test Date	2019/03/05					
Test Mode	802.11n-HT40	Test Channel	54					
Remark	1. Average measurement was no	t performed if peak	evel lower than average					
	limit (54dBµV/m).							
	2. Other frequency was 20dB bel	ow 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)				
*	9814.5	31.3	17.0	48.3	68.2	-19.9	Peak	Horizontal
*	10214.0	30.5	18.2	48.7	68.2	-19.5	Peak	Horizontal
	10809.0	28.8	19.8	48.6	74.0	-25.4	Peak	Horizontal
	11727.0	28.0	20.6	48.6	74.0	-25.4	Peak	Horizontal
*	9789.0	30.3	16.9	47.2	68.2	-21.0	Peak	Vertical
*	10341.5	29.7	18.4	48.1	68.2	-20.1	Peak	Vertical
	11327.5	29.2	20.3	49.5	74.0	-24.5	Peak	Vertical
	12381.5	29.1	20.0	49.1	74.0	-24.9	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 strength

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



Product	WIFI+BT Combo Module	Temperature	26°C					
Test Engineer	Stone Jia	Relative Humidity	57 %					
Test Site	AC1	Test Date	2019/03/05					
Test Mode	802.11n-HT40	Test Channel	62					
Remark	1. Average measurement was no	. Average measurement was not performed if peak level lower than average						
	limit (54dBµV/m).							
	2. Other frequency was 20dB bel							
	in the report.							

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	9916.5	31.5	17.4	48.9	68.2	-19.3	Peak	Horizontal
*	10528.5	32.0	18.9	50.9	68.2	-17.3	Peak	Horizontal
	11200.0	28.0	20.3	48.3	74.0	-25.7	Peak	Horizontal
	12194.5	28.7	20.4	49.1	74.0	-24.9	Peak	Horizontal
*	9678.5	30.4	16.4	46.8	68.2	-21.4	Peak	Vertical
*	10350.0	30.2	18.5	48.7	68.2	-19.5	Peak	Vertical
	11115.0	28.8	20.0	48.8	74.0	-25.2	Peak	Vertical
	12475.0	29.7	20.1	49.8	74.0	-24.2	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

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



Product	WIFI+BT Combo Module	Temperature	26°C					
Test Engineer	Stone Jia	Relative Humidity	57 %					
Test Site	AC1	Test Date	2019/03/05					
Test Mode	802.11n-HT40	Test Channel	102					
Remark	1. Average measurement was no	t performed if peak	evel lower than average					
	limit (54dBµV/m).							
	2. Other frequency was 20dB bel	ow 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)				
*	9865.5	30.8	17.3	48.1	68.2	-20.1	Peak	Horizontal
*	10452.0	30.7	18.5	49.2	68.2	-19.0	Peak	Horizontal
	11021.5	29.9	19.8	49.7	74.0	-24.3	Peak	Horizontal
	11786.5	29.3	20.2	49.5	74.0	-24.5	Peak	Horizontal
*	10052.5	30.6	17.5	48.1	68.2	-20.1	Peak	Vertical
*	10494.5	29.6	18.9	48.5	68.2	-19.7	Peak	Vertical
	11174.5	28.7	20.5	49.2	74.0	-24.8	Peak	Vertical
	11897.0	28.9	20.1	49.0	74.0	-25.0	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 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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



Product	WIFI+BT Combo Module	Temperature	26°C					
Test Engineer	Stone Jia	Relative Humidity	57 %					
Test Site	AC1	Test Date	2019/03/05					
Test Mode	802.11n-HT40	Test Channel	110					
Remark	1. Average measurement was no	t performed if peak	evel lower than average					
	limit (54dBµV/m).							
	2. Other frequency was 20dB bel	ow 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)				
*	9806.0	30.5	17.0	47.5	68.2	-20.7	Peak	Horizontal
*	10494.5	29.3	18.9	48.2	68.2	-20.0	Peak	Horizontal
	11344.5	28.4	20.4	48.8	74.0	-25.2	Peak	Horizontal
	12186.0	28.4	20.4	48.8	74.0	-25.2	Peak	Horizontal
*	9806.0	30.5	17.0	47.5	68.2	-20.7	Peak	Vertical
*	10086.5	31.1	17.7	48.8	68.2	-19.4	Peak	Vertical
	11191.5	28.4	20.4	48.8	74.0	-25.2	Peak	Vertical
	12415.5	28.5	19.9	48.4	74.0	-25.6	Peak	Vertical
Note 1:	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/M⊦	Iz. At a distanc	e of 3 me	ters, the f	ield strength

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



Product	WIFI+BT Combo Module	Temperature	26°C					
Test Engineer	Stone Jia	Relative Humidity	57 %					
Test Site	AC1	Test Date	2019/03/05					
Test Mode:	802.11n-HT40	Test Channel:	118					
Remark:	1. Average measurement was no	t performed if peak	evel lower than average					
	limit (54dBµV/m).							
	2. Other frequency was 20dB bel	ow 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)				
*	9746.5	31.9	16.8	48.7	68.2	-19.5	Peak	Horizontal
*	10350.0	30.3	18.5	48.8	68.2	-19.4	Peak	Horizontal
	10826.0	29.8	19.8	49.6	74.0	-24.4	Peak	Horizontal
	11684.5	28.8	20.6	49.4	74.0	-24.6	Peak	Horizontal
*	9976.0	29.4	17.3	46.7	68.2	-21.5	Peak	Vertical
*	10452.0	29.4	18.5	47.9	68.2	-20.3	Peak	Vertical
	11115.0	28.7	20.0	48.7	74.0	-25.3	Peak	Vertical
	12109.5	28.7	20.5	49.2	74.0	-24.8	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	WIFI+BT Combo Module	Temperature	26°C					
		•	20 0					
Test Engineer	Stone Jia	Relative Humidity	57 %					
Test Site	AC1	Test Date	2019/03/05					
Test Mode	802.11n-HT40	Test Channel	134					
Remark	1. Average measurement was no	t performed if peak	evel lower than average					
	limit (54dBµV/m).							
	2. Other frequency was 20dB bel	ow 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)				
*	9729.5	32.4	16.5	48.9	68.2	-19.3	Peak	Horizontal
*	10180.0	31.1	17.9	49.0	68.2	-19.2	Peak	Horizontal
	11225.5	28.8	20.2	49.0	74.0	-25.0	Peak	Horizontal
	12152.0	28.7	20.4	49.1	74.0	-24.9	Peak	Horizontal
*	10035.5	31.4	17.7	49.1	68.2	-19.1	Peak	Vertical
*	10316.0	30.5	18.4	48.9	68.2	-19.3	Peak	Vertical
	10826.0	29.6	19.8	49.4	74.0	-24.6	Peak	Vertical
	12441.0	29.1	19.9	49.0	74.0	-25.0	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 strength

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



Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11n-HT40	Test Channel	142				
Remark	1. Average measurement was no	t performed if peak	evel lower than average				
	limit (54dBµV/m).	limit (54dBµV/m).					
	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)					
*	9763.5	31.7	17.0	48.7	68.2	-19.5	Peak	Horizontal	
*	10528.5	29.3	18.9	48.2	68.2	-20.0	Peak	Horizontal	
	11225.5	27.8	20.2	48.0	74.0	-26.0	Peak	Horizontal	
	12177.5	27.7	20.4	48.1	74.0	-25.9	Peak	Horizontal	
*	10010.0	31.3	17.7	49.0	68.2	-19.2	Peak	Vertical	
*	10494.5	31.0	18.9	49.9	68.2	-18.3	Peak	Vertical	
	11438.0	29.3	20.4	49.7	74.0	-24.3	Peak	Vertical	
	12594.0	28.8	20.3	49.1	74.0	-24.9	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								

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



Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11n-HT40	Test Channel	151				
Remark	1. Average measurement was no	t performed if peak	evel lower than average				
	limit (54dBµV/m).	limit (54dBµV/m).					
	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)				
*	9712.5	31.3	16.3	47.6	68.2	-20.6	Peak	Horizontal
*	10418.0	29.4	18.6	48.0	68.2	-20.2	Peak	Horizontal
	11191.5	28.5	20.4	48.9	74.0	-25.1	Peak	Horizontal
	12237.0	28.2	20.2	48.4	74.0	-25.6	Peak	Horizontal
*	9925.0	31.9	17.5	49.4	68.2	-18.8	Peak	Vertical
*	10358.5	31.8	18.5	50.3	68.2	-17.9	Peak	Vertical
	10834.5	30.5	19.9	50.4	74.0	-23.6	Peak	Vertical
	11591.0	29.6	20.7	50.3	74.0	-23.7	Peak	Vertical
Note 1	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/MH	Iz. At a distand	e of 3 me	ters, the f	ield strength

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



Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11n-HT40	Test Channel	159				
Remark	1. Average measurement was no	1. Average measurement was not performed if peak le					
	limit (54dBµV/m).	limit (54dBµV/m).					
	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)				
*	9585.0	31.6	16.3	47.9	68.2	-20.3	Peak	Horizontal
*	10443.5	31.1	18.4	49.5	68.2	-18.7	Peak	Horizontal
	10928.0	29.3	20.0	49.3	74.0	-24.7	Peak	Horizontal
	11582.5	29.2	20.7	49.9	74.0	-24.1	Peak	Horizontal
*	9908.0	31.8	17.4	49.2	68.2	-19.0	Peak	Vertical
*	10443.5	30.3	18.4	48.7	68.2	-19.5	Peak	Vertical
	11089.5	28.7	20.1	48.8	74.0	-25.2	Peak	Vertical
	12458.0	28.5	19.9	48.4	74.0	-25.6	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	ters, the f	ield strength

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



Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11ac-VHT20	Test Channel	36				
Remark	1. Average measurement was no	1. Average measurement was not performed if peak level lower than average					
	limit (54dBµV/m).	limit (54dBµV/m).					
	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)					
*	9593.5	32.1	16.2	48.3	68.2	-19.9	Peak	Horizontal	
*	10443.5	29.7	18.4	48.1	68.2	-20.1	Peak	Horizontal	
	11191.5	28.4	20.4	48.8	74.0	-25.2	Peak	Horizontal	
	11803.5	28.6	20.1	48.7	74.0	-25.3	Peak	Horizontal	
*	9848.5	31.7	17.3	49.0	68.2	-19.2	Peak	Vertical	
*	10248.0	32.1	18.1	50.2	68.2	-18.0	Peak	Vertical	
	11055.5	29.3	20.0	49.3	74.0	-24.7	Peak	Vertical	
	12560.0	28.4	20.0	48.4	74.0	-25.6	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								

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



Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11ac-VHT20	Test Channel	44				
Remark	1. Average measurement was no	t performed if peak	evel lower than average				
	limit (54dBµV/m).	limit (54dBµV/m).					
	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)					
*	8743.5	32.2	14.7	46.9	68.2	-21.3	Peak	Horizontal	
*	9950.5	29.6	17.4	47.0	68.2	-21.2	Peak	Horizontal	
	11480.5	27.9	20.6	48.5	74.0	-25.5	Peak	Horizontal	
	12645.0	28.7	20.1	48.8	74.0	-25.2	Peak	Horizontal	
*	8939.0	31.9	14.7	46.6	68.2	-21.6	Peak	Vertical	
*	9644.5	31.9	16.4	48.3	68.2	-19.9	Peak	Vertical	
	11013.0	28.7	19.8	48.5	74.0	-25.5	Peak	Vertical	
	11948.0	28.5	20.2	48.7	74.0	-25.3	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								

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



Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11ac-VHT20	Test Channel	48				
Remark	1. Average measurement was no	t performed if peak	evel lower than average				
	limit (54dBµV/m).	limit (54dBµV/m).					
	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	29.4	14.6	44.0	68.2	-24.2	Peak	Horizontal	
*	10120.5	30.1	18.0	48.1	68.2	-20.1	Peak	Horizontal	
	11344.5	27.6	20.4	48.0	74.0	-26.0	Peak	Horizontal	
	12058.5	29.5	20.3	49.8	74.0	-24.2	Peak	Horizontal	
*	8718.0	30.8	14.6	45.4	68.2	-22.8	Peak	Vertical	
*	10426.5	29.2	18.5	47.7	68.2	-20.5	Peak	Vertical	
	11191.5	28.5	20.4	48.9	74.0	-25.1	Peak	Vertical	
	12169.0	28.7	20.4	49.1	74.0	-24.9	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								

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



Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11ac-VHT20	Test Channel	52				
Remark	1. Average measurement was no	t performed if peak	evel lower than average				
	limit (54dBµV/m).						
	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)				
*	8743.5	31.1	14.7	45.8	68.2	-22.4	Peak	Horizontal
*	9755.0	31.4	16.9	48.3	68.2	-19.9	Peak	Horizontal
	10928.0	29.6	20.0	49.6	74.0	-24.4	Peak	Horizontal
	12441.0	29.7	19.9	49.6	74.0	-24.4	Peak	Horizontal
*	8871.0	30.2	14.9	45.1	68.2	-23.1	Peak	Vertical
*	9823.0	29.7	17.1	46.8	68.2	-21.4	Peak	Vertical
	10979.0	29.2	20.0	49.2	74.0	-24.8	Peak	Vertical
	12118.0	28.7	20.5	49.2	74.0	-24.8	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	ters, the f	ield strength

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



Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11ac-VHT20	Test Channel	60				
Remark	1. Average measurement was no	t performed if peak	evel lower than average				
	limit (54dBµV/m).						
	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)				
*	8769.0	30.4	14.8	45.2	68.2	-23.0	Peak	Horizontal
*	9746.5	32.4	16.8	49.2	68.2	-19.0	Peak	Horizontal
	11174.5	29.2	20.5	49.7	74.0	-24.3	Peak	Horizontal
	12628.0	29.1	20.3	49.4	74.0	-24.6	Peak	Horizontal
*	8692.5	30.8	14.6	45.4	68.2	-22.8	Peak	Vertical
*	10341.5	29.8	18.4	48.2	68.2	-20.0	Peak	Vertical
	11387.0	28.5	20.5	49.0	74.0	-25.0	Peak	Vertical
	12560.0	28.8	20.0	48.8	74.0	-25.2	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 1: "^" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strengtr limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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



Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11ac-VHT20	Test Channel	64				
Remark	1. Average measurement was no	t performed if peak l	evel lower than average				
	limit (54dBµV/m).						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency (MHz)	Reading Level	Factor (dB)	Measure Level	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
		(dBµV)		(dBµV/m)				
*	9653.0	32.3	16.4	48.7	68.2	-19.5	Peak	Horizontal
*	10265.0	31.3	18.2	49.5	68.2	-18.7	Peak	Horizontal
	11225.5	29.2	20.2	49.4	74.0	-24.6	Peak	Horizontal
	11973.5	28.3	20.3	48.6	74.0	-25.4	Peak	Horizontal
*	8735.0	31.3	14.6	45.9	68.2	-22.3	Peak	Vertical
*	10171.5	30.5	17.9	48.4	68.2	-19.8	Peak	Vertical
	10741.0	29.7	19.5	49.2	74.0	-24.8	Peak	Vertical
	12441.0	29.2	19.9	49.1	74.0	-24.9	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 strength

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



Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11ac-VHT20	Test Channel	100				
Remark	1. Average measurement was no	t performed if peak	evel lower than average				
	limit (54dBµV/m).						
	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)				
*	7936.0	30.9	14.7	45.6	68.2	-22.6	Peak	Horizontal
*	8777.5	29.0	14.9	43.9	68.2	-24.3	Peak	Horizontal
	11191.5	27.4	20.4	47.8	74.0	-26.2	Peak	Horizontal
	12220.0	29.1	20.3	49.4	74.0	-24.6	Peak	Horizontal
*	8947.5	31.4	14.7	46.1	68.2	-22.1	Peak	Vertical
*	10095.0	31.2	17.8	49.0	68.2	-19.2	Peak	Vertical
	11089.5	29.6	20.1	49.7	74.0	-24.3	Peak	Vertical
	11684.5	28.6	20.6	49.2	74.0	-24.8	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	ters, the f	ield strength

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



Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11ac-VHT20	Test Channel 116					
Remark	1. Average measurement was no	t performed if peak	evel lower than average				
	limit (54dBµV/m).						
	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)				
*	8786.0	29.5	14.9	44.4	68.2	-23.8	Peak	Horizontal
*	10180.0	29.1	17.9	47.0	68.2	-21.2	Peak	Horizontal
	10928.0	30.2	20.0	50.2	74.0	-23.8	Peak	Horizontal
	11948.0	28.6	20.2	48.8	74.0	-25.2	Peak	Horizontal
*	8709.5	31.7	14.6	46.3	68.2	-21.9	Peak	Vertical
*	10112.0	31.6	18.0	49.6	68.2	-18.6	Peak	Vertical
	10970.5	30.8	20.0	50.8	74.0	-23.2	Peak	Vertical
	12228.5	29.5	20.3	49.8	74.0	-24.2	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 (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11ac-VHT20	Test Channel	120				
Remark	1. Average measurement was no	t performed if peak I	evel lower than average				
	limit (54dBµV/m).						
	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	29.2	14.9	44.1	68.2	-24.1	Peak	Horizontal
*	9789.0	29.4	16.9	46.3	68.2	-21.9	Peak	Horizontal
	10877.0	28.0	20.0	48.0	74.0	-26.0	Peak	Horizontal
	11897.0	28.8	20.1	48.9	74.0	-25.1	Peak	Horizontal
*	8888.0	29.9	14.9	44.8	68.2	-23.4	Peak	Vertical
*	9712.5	29.7	16.3	46.0	68.2	-22.2	Peak	Vertical
	11200.0	27.4	20.3	47.7	74.0	-26.3	Peak	Vertical
	12220.0	28.5	20.3	48.8	74.0	-25.2	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 strength

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



Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11ac-VHT20	Test Channel	140				
Remark	1. Average measurement was no	t performed if peak	evel lower than average				
	limit (54dBµV/m).						
	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)				
*	9678.5	32.8	16.4	49.2	68.2	-19.0	Peak	Horizontal
*	10222.5	32.0	18.1	50.1	68.2	-18.1	Peak	Horizontal
	11072.5	30.3	20.1	50.4	74.0	-23.6	Peak	Horizontal
	12551.5	29.3	20.0	49.3	74.0	-24.7	Peak	Horizontal
*	8658.5	32.1	14.4	46.5	68.2	-21.7	Peak	Vertical
*	9950.5	30.2	17.4	47.6	68.2	-20.6	Peak	Vertical
	11200.0	28.0	20.3	48.3	74.0	-25.7	Peak	Vertical
	12551.5	28.1	20.0	48.1	74.0	-25.9	Peak	Vertical
Note 1:	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/M⊦	Iz. At a distanc	e of 3 me	ters, the f	ield strength

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



Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11ac-VHT20	Test Channel	144				
Remark	1. Average measurement was no	t performed if peak	evel lower than average				
	limit (54dBµV/m).						
	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)					
*	8769.0	30.3	14.8	45.1	68.2	-23.1	Peak	Horizontal	
*	10265.0	31.1	18.2	49.3	68.2	-18.9	Peak	Horizontal	
	11276.5	28.8	20.6	49.4	74.0	-24.6	Peak	Horizontal	
	12007.5	28.1	20.4	48.5	74.0	-25.5	Peak	Horizontal	
*	8930.5	30.6	14.7	45.3	68.2	-22.9	Peak	Vertical	
*	10511.5	28.4	18.9	47.3	68.2	-20.9	Peak	Vertical	
	11123.5	28.8	20.1	48.9	74.0	-25.1	Peak	Vertical	
	12220.0	29.0	20.3	49.3	74.0	-24.7	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								

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



Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11ac-VHT20	Test Channel	149				
Remark	1. Average measurement was no	t performed if peak	evel lower than average				
	limit (54dBµV/m).						
	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)				
*	9704.0	29.9	16.2	46.1	68.2	-22.1	Peak	Horizontal
*	10358.5	31.8	18.5	50.3	68.2	-17.9	Peak	Horizontal
	11072.5	29.8	20.1	49.9	74.0	-24.1	Peak	Horizontal
	12534.5	28.0	20.1	48.1	74.0	-25.9	Peak	Horizontal
*	8590.5	31.7	14.3	46.0	68.2	-22.2	Peak	Vertical
*	10265.0	30.2	18.2	48.4	68.2	-19.8	Peak	Vertical
	11480.5	29.2	20.6	49.8	74.0	-24.2	Peak	Vertical
	12109.5	30.9	20.5	51.4	74.0	-22.6	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 (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11ac-VHT20	Test Channel	157				
Remark	1. Average measurement was no	t performed if peak	evel lower than average				
	limit (54dBµV/m).						
	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)					
*	8964.5	31.3	14.8	46.1	68.2	-22.1	Peak	Horizontal	
*	10120.5	30.5	18.0	48.5	68.2	-19.7	Peak	Horizontal	
	10945.0	28.3	20.0	48.3	74.0	-25.7	Peak	Horizontal	
	12390.0	29.1	19.9	49.0	74.0	-25.0	Peak	Horizontal	
*	8760.5	31.3	14.8	46.1	68.2	-22.1	Peak	Vertical	
*	9942.0	29.7	17.5	47.2	68.2	-21.0	Peak	Vertical	
	11191.5	27.9	20.4	48.3	74.0	-25.7	Peak	Vertical	
	12339.0	28.3	19.9	48.2	74.0	-25.8	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								

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



Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11ac-VHT20	Test Channel	165				
Remark	1. Average measurement was no	t performed if peak	evel lower than average				
	limit (54dBµV/m).						
	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	29.5	14.8	44.3	68.2	-23.9	Peak	Horizontal
*	9976.0	29.3	17.3	46.6	68.2	-21.6	Peak	Horizontal
	10647.5	29.1	19.1	48.2	74.0	-25.8	Peak	Horizontal
	11378.5	27.8	20.6	48.4	74.0	-25.6	Peak	Horizontal
*	8905.0	30.7	14.9	45.6	68.2	-22.6	Peak	Vertical
*	10103.5	31.0	17.9	48.9	68.2	-19.3	Peak	Vertical
	11106.5	29.3	20.0	49.3	74.0	-24.7	Peak	Vertical
	12075.5	28.8	20.4	49.2	74.0	-24.8	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	ters, the f	ield strength

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

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



Product	WIFI+BT Combo Module	Temperature	26°C					
1100000		Temperature	20.0					
Test Engineer	Stone Jia	Relative Humidity	57 %					
Test Site	AC1	Test Date	2019/03/05					
Test Mode	802.11ac-VHT40	Test Channel	38					
Remark	1. Average measurement was no	t performed if peak	evel lower than average					
	limit (54dBµV/m).	limit (54dBµV/m).						
	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	30.8	14.4	45.2	68.2	-23.0	Peak	Horizontal
*	10214.0	31.0	18.2	49.2	68.2	-19.0	Peak	Horizontal
	11123.5	29.0	20.1	49.1	74.0	-24.9	Peak	Horizontal
	12237.0	28.1	20.2	48.3	74.0	-25.7	Peak	Horizontal
*	8769.0	29.6	14.8	44.4	68.2	-23.8	Peak	Vertical
*	10239.5	32.1	18.1	50.2	68.2	-18.0	Peak	Vertical
	11021.5	30.8	19.8	50.6	74.0	-23.4	Peak	Vertical
	11582.5	29.0	20.7	49.7	74.0	-24.3	Peak	Vertical
Note 1:	"*" is not in r	estricted ban	d, its limit i	s -27dBm/M⊦	Iz. At a distanc	e of 3 me	ters, the f	ield strength

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



Product	WIFI+BT Combo Module	Temperature	26°C			
Test Engineer	Stone Jia	Relative Humidity	57 %			
Test Site	AC1	Test Date	2019/03/05			
Test Mode	802.11ac-VHT40	Test Channel	46			
Remark	1. Average measurement was no	t performed if peak	evel lower than average			
	limit (54dBµV/m).					
	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)				
*	9780.5	29.7	16.9	46.6	68.2	-21.6	Peak	Horizontal
*	10401.0	29.5	18.7	48.2	68.2	-20.0	Peak	Horizontal
	11132.0	28.3	20.2	48.5	74.0	-25.5	Peak	Horizontal
	11973.5	28.0	20.3	48.3	74.0	-25.7	Peak	Horizontal
*	8888.0	31.5	14.9	46.4	68.2	-21.8	Peak	Vertical
*	10103.5	31.2	17.9	49.1	68.2	-19.1	Peak	Vertical
	10928.0	29.2	20.0	49.2	74.0	-24.8	Peak	Vertical
	12500.5	30.4	20.2	50.6	74.0	-23.4	Peak	Vertical
Note 1:	: "*" is not in r	estricted ban	d, its limit i	s -27dBm/M⊦	Iz. At a distanc	e of 3 me	ters, the f	ield strength

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



Product	WIFI+BT Combo Module	Temperature	26°C			
Test Engineer	Stone Jia	Relative Humidity	57 %			
Test Site	AC1	Test Date	2019/03/05			
Test Mode	802.11ac-VHT40	Test Channel	54			
Remark	1. Average measurement was no	t performed if peak	evel lower than average			
	limit (54dBµV/m).					
	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	30.4	14.6	45.0	68.2	-23.2	Peak	Horizontal
*	10494.5	29.3	18.9	48.2	68.2	-20.0	Peak	Horizontal
	11021.5	29.1	19.8	48.9	74.0	-25.1	Peak	Horizontal
	12016.0	28.9	20.4	49.3	74.0	-24.7	Peak	Horizontal
*	9721.0	32.0	16.4	48.4	68.2	-19.8	Peak	Vertical
*	10350.0	29.7	18.5	48.2	68.2	-20.0	Peak	Vertical
	11336.0	29.0	20.4	49.4	74.0	-24.6	Peak	Vertical
	12645.0	28.1	20.1	48.2	74.0	-25.8	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	ters, the f	ield strength

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

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



Product	WIFI+BT Combo Module	Temperature	26°C			
Test Engineer	Stone Jia	Relative Humidity	57 %			
Test Site	AC1	Test Date	2019/03/05			
Test Mode	802.11ac-VHT40	Test Channel	62			
Remark	1. Average measurement was no	t performed if peak	evel lower than average			
	limit (54dBµV/m).					
	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	31.5	14.9	46.4	68.2	-21.8	Peak	Horizontal
*	10171.5	29.2	17.9	47.1	68.2	-21.1	Peak	Horizontal
	11030.0	28.4	19.8	48.2	74.0	-25.8	Peak	Horizontal
	12245.5	27.8	20.2	48.0	74.0	-26.0	Peak	Horizontal
*	8658.5	30.9	14.4	45.3	68.2	-22.9	Peak	Vertical
*	10256.5	31.4	18.2	49.6	68.2	-18.6	Peak	Vertical
	11072.5	29.4	20.1	49.5	74.0	-24.5	Peak	Vertical
	11735.5	29.1	20.7	49.8	74.0	-24.2	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 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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



Product	WIFI+BT Combo Module	Temperature	26°C			
Test Engineer	Stone Jia	Relative Humidity	57 %			
Test Site	AC1	Test Date	2019/03/05			
Test Mode	802.11ac-VHT40	Test Channel	102			
Remark	1. Average measurement was no	t performed if peak l	evel lower than average			
	limit (54dBµV/m).					
	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	30.3	14.9	45.2	68.2	-23.0	Peak	Horizontal
*	10180.0	29.5	17.9	47.4	68.2	-20.8	Peak	Horizontal
	10962.0	28.4	20.0	48.4	74.0	-25.6	Peak	Horizontal
	12262.5	30.6	20.1	50.7	74.0	-23.3	Peak	Horizontal
*	8803.0	31.0	14.9	45.9	68.2	-22.3	Peak	Vertical
*	10197.0	30.7	18.1	48.8	68.2	-19.4	Peak	Vertical
	10860.0	28.7	20.0	48.7	74.0	-25.3	Peak	Vertical
	11506.0	27.9	20.6	48.5	74.0	-25.5	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 (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11ac-VHT40	Test Channel	110				
Remark	1. Average measurement was no	t performed if peak	evel lower than average				
	limit (54dBµV/m).						
	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)					
*	9967.5	29.3	17.3	46.6	68.2	-21.6	Peak	Horizontal	
*	10579.5	28.5	19.0	47.5	68.2	-20.7	Peak	Horizontal	
	11387.0	28.3	20.5	48.8	74.0	-25.2	Peak	Horizontal	
	12169.0	28.6	20.4	49.0	74.0	-25.0	Peak	Horizontal	
*	8616.0	31.2	14.3	45.5	68.2	-22.7	Peak	Vertical	
*	9993.0	31.2	17.4	48.6	68.2	-19.6	Peak	Vertical	
	10834.5	28.8	19.9	48.7	74.0	-25.3	Peak	Vertical	
	12551.5	28.4	20.0	48.4	74.0	-25.6	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								

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



Product	WIFI+BT Combo Module	Temperature	26°C			
Test Engineer	Stone Jia	Relative Humidity	57 %			
Test Site	AC1	Test Date	2019/03/05			
Test Mode	802.11ac-VHT40	Test Channel	118			
Remark	1. Average measurement was no	t performed if peak	evel lower than average			
	limit (54dBµV/m).					
	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)				
*	8786.0	29.6	14.9	44.5	68.2	-23.7	Peak	Horizontal
*	9857.0	30.2	17.3	47.5	68.2	-20.7	Peak	Horizontal
	11565.5	31.8	20.8	52.6	74.0	-21.4	Peak	Horizontal
	12220.0	28.2	20.3	48.5	74.0	-25.5	Peak	Horizontal
*	9712.5	31.7	16.3	48.0	68.2	-20.2	Peak	Vertical
*	10418.0	29.4	18.6	48.0	68.2	-20.2	Peak	Vertical
	11225.5	28.3	20.2	48.5	74.0	-25.5	Peak	Vertical
	12611.0	28.5	20.4	48.9	74.0	-25.1	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 strength

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



Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11ac-VHT40	Test Channel	134				
Remark	1. Average measurement was no	t performed if peak	evel lower than average				
	limit (54dBµV/m).						
	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)					
*	8888.0	29.3	14.9	44.2	68.2	-24.0	Peak	Horizontal	
*	10265.0	29.6	18.2	47.8	68.2	-20.4	Peak	Horizontal	
	11191.5	27.5	20.4	47.9	74.0	-26.1	Peak	Horizontal	
	12296.5	28.1	20.0	48.1	74.0	-25.9	Peak	Horizontal	
*	8896.5	31.9	14.9	46.8	68.2	-21.4	Peak	Vertical	
*	9933.5	31.3	17.5	48.8	68.2	-19.4	Peak	Vertical	
	10928.0	29.5	20.0	49.5	74.0	-24.5	Peak	Vertical	
	11948.0	29.2	20.2	49.4	74.0	-24.6	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								

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



Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11ac-VHT40	Test Channel	142				
Remark	1. Average measurement was no	t performed if peak	evel lower than average				
	limit (54dBµV/m).						
	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	29.6	14.6	44.2	68.2	-24.0	Peak	Horizontal	
*	9678.5	31.3	16.4	47.7	68.2	-20.5	Peak	Horizontal	
	11191.5	28.0	20.4	48.4	74.0	-25.6	Peak	Horizontal	
	12390.0	28.5	19.9	48.4	74.0	-25.6	Peak	Horizontal	
*	8752.0	29.2	14.8	44.0	68.2	-24.2	Peak	Vertical	
*	10044.0	29.4	17.6	47.0	68.2	-21.2	Peak	Vertical	
	11191.5	27.3	20.4	47.7	74.0	-26.3	Peak	Vertical	
	12271.0	28.3	20.1	48.4	74.0	-25.6	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								

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



Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11ac-VHT40	Test Channel	151				
Remark	1. Average measurement was no	t performed if peak l	evel lower than average				
	limit (54dBµV/m).						
	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)				
*	8888.0	30.1	14.9	45.0	68.2	-23.2	Peak	Horizontal
*	9551.0	30.3	16.1	46.4	68.2	-21.8	Peak	Horizontal
	11446.5	27.6	20.5	48.1	74.0	-25.9	Peak	Horizontal
	12126.5	28.5	20.5	49.0	74.0	-25.0	Peak	Horizontal
*	8777.5	30.2	14.9	45.1	68.2	-23.1	Peak	Vertical
*	10282.0	29.6	18.3	47.9	68.2	-20.3	Peak	Vertical
	11174.5	29.2	20.5	49.7	74.0	-24.3	Peak	Vertical
	11633.5	28.9	21.0	49.9	74.0	-24.1	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 (dBµV/m) = Reading Level (dBµV) + Factor (dB)



Product	WIFI+BT Combo Module	Temperature	26°C			
		•	57 %			
Test Engineer	Stone Jia	Relative Humidity	57 %			
Test Site	AC1	Test Date	2019/03/05			
Test Mode	802.11ac-VHT40	Test Channel	159			
Remark	1. Average measurement was no	t performed if peak l	evel lower than average			
	limit (54dBµV/m).					
	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	30.2	14.2	44.4	68.2	-23.8	Peak	Horizontal	
*	9789.0	29.4	16.9	46.3	68.2	-21.9	Peak	Horizontal	
	10885.5	28.1	20.0	48.1	74.0	-25.9	Peak	Horizontal	
	12169.0	28.2	20.4	48.6	74.0	-25.4	Peak	Horizontal	
*	9721.0	32.4	16.4	48.8	68.2	-19.4	Peak	Vertical	
*	10469.0	30.1	18.7	48.8	68.2	-19.4	Peak	Vertical	
	11072.5	29.3	20.1	49.4	74.0	-24.6	Peak	Vertical	
	12024.5	28.9	20.3	49.2	74.0	-24.8	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								

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



Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11ac-VHT80	Test Channel	42				
Remark	1. Average measurement was no	t performed if peak	evel lower than average				
	limit (54dBµV/m).						
	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	32.0	14.6	46.6	68.2	-21.6	Peak	Horizontal
*	10129.0	31.5	17.9	49.4	68.2	-18.8	Peak	Horizontal
	11047.0	28.8	19.9	48.7	74.0	-25.3	Peak	Horizontal
	12347.5	29.3	19.9	49.2	74.0	-24.8	Peak	Horizontal
*	8837.0	29.7	14.8	44.5	68.2	-23.7	Peak	Vertical
*	9823.0	29.4	17.1	46.5	68.2	-21.7	Peak	Vertical
	11880.0	27.9	20.2	48.1	74.0	-25.9	Peak	Vertical
	12662.0	28.1	20.1	48.2	74.0	-25.8	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 strength

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



Product	WIFI+BT Combo Module	Temperature	26°C				
Test Engineer	Stone Jia	Relative Humidity	57 %				
Test Site	AC1	Test Date	2019/03/05				
Test Mode	802.11ac-VHT80	Test Channel	58				
Remark	1. Average measurement was no	t performed if peak	evel lower than average				
	limit (54dBµV/m).						
	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)						
*	8769.0	31.0	14.8	45.8	68.2	-22.4	Peak	Horizontal		
*	10426.5	28.8	18.5	47.3	68.2	-20.9	Peak	Horizontal		
	10996.0	31.1	20.0	51.1	74.0	-22.9	Peak	Horizontal		
	11897.0	28.1	20.1	48.2	74.0	-25.8	Peak	Horizontal		
*	8888.0	28.8	14.9	43.7	68.2	-24.5	Peak	Vertical		
*	9942.0	30.4	17.5	47.9	68.2	-20.3	Peak	Vertical		
	10928.0	29.7	20.0	49.7	74.0	-24.3	Peak	Vertical		
	11846.0	28.7	20.3	49.0	74.0	-25.0	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									

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



Product	WIFI+BT Combo Module	Temperature	26°C						
Test Engineer	Stone Jia	Relative Humidity	57 %						
Test Site	AC1	Test Date	2019/03/05						
Test Mode	802.11ac-VHT80	Test Channel	106						
Remark	1. Average measurement was no	t performed if peak	evel lower than average						
	limit (54dBµV/m).								
	2. Other frequency was 20dB bel	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	29.3	14.9	44.2	68.2	-24.0	Peak	Horizontal			
*	10239.5	30.4	18.1	48.5	68.2	-19.7	Peak	Horizontal			
	11081.0	29.0	20.1	49.1	74.0	-24.9	Peak	Horizontal			
	12271.0	27.9	20.1	48.0	74.0	-26.0	Peak	Horizontal			
*	8667.0	29.8	14.4	44.2	68.2	-24.0	Peak	Vertical			
*	9738.0	30.0	16.6	46.6	68.2	-21.6	Peak	Vertical			
	11200.0	27.6	20.3	47.9	74.0	-26.1	Peak	Vertical			
	12109.5	29.3	20.5	49.8	74.0	-24.2	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										

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



Product	WIFI+BT Combo Module	Temperature	26°C						
Test Engineer	Stone Jia	Relative Humidity	57 %						
Test Site	AC1	Test Date	2019/03/05						
Test Mode	802.11ac-VHT80	Test Channel	122						
Remark	1. Average measurement was no	t performed if peak l	evel lower than average						
	limit (54dBµV/m).								
	2. Other frequency was 20dB bel	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)							
*	9678.5	31.7	16.4	48.1	68.2	-20.1	Peak	Horizontal			
*	10409.5	30.5	18.7	49.2	68.2	-19.0	Peak	Horizontal			
	11081.0	29.6	20.1	49.7	74.0	-24.3	Peak	Horizontal			
	12381.5	28.4	20.0	48.4	74.0	-25.6	Peak	Horizontal			
*	8692.5	31.3	14.6	45.9	68.2	-22.3	Peak	Vertical			
*	9857.0	31.4	17.3	48.7	68.2	-19.5	Peak	Vertical			
	10783.5	30.5	19.7	50.2	74.0	-23.8	Peak	Vertical			
	12194.5	29.0	20.4	49.4	74.0	-24.6	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										

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



Product	WIFI+BT Combo Module	Temperature	26°C					
Test Engineer	Stone Jia	Relative Humidity	57 %					
Test Site	AC1	Test Date	2019/03/05					
Test Mode	802.11ac-VHT80	Test Channel	138					
Remark	1. Average measurement was no	t performed if peak	evel lower than average					
	limit (54dBµV/m).							
	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	32.3	14.6	46.9	68.2	-21.3	Peak	Horizontal			
*	9976.0	29.4	17.3	46.7	68.2	-21.5	Peak	Horizontal			
	10928.0	29.5	20.0	49.5	74.0	-24.5	Peak	Horizontal			
	12415.5	29.2	19.9	49.1	74.0	-24.9	Peak	Horizontal			
*	9644.5	31.2	16.4	47.6	68.2	-20.6	Peak	Vertical			
*	10350.0	29.6	18.5	48.1	68.2	-20.1	Peak	Vertical			
	11327.5	28.8	20.3	49.1	74.0	-24.9	Peak	Vertical			
	12271.0	28.1	20.1	48.2	74.0	-25.8	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										

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



Product	WIFI+BT Combo Module	Temperature	26°C					
Test Engineer	Stone Jia	Relative Humidity	57 %					
Test Site	AC1	Test Date	2019/03/05					
Test Mode	802.11ac-VHT80	Test Channel	155					
Remark	1. Average measurement was no	t performed if peak l	evel lower than average					
	limit (54dBµV/m).							
	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	31.9	14.8	46.7	68.2	-21.5	Peak	Horizontal
*	9933.5	29.7	17.5	47.2	68.2	-21.0	Peak	Horizontal
	10877.0	28.5	20.0	48.5	74.0	-25.5	Peak	Horizontal
	12126.5	28.4	20.5	48.9	74.0	-25.1	Peak	Horizontal
*	9772.0	31.5	17.0	48.5	68.2	-19.7	Peak	Vertical
*	10316.0	30.6	18.4	49.0	68.2	-19.2	Peak	Vertical
	11132.0	29.9	20.2	50.1	74.0	-23.9	Peak	Vertical
	12577.0	29.0	20.1	49.1	74.0	-24.9	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	ters, the f	ield strength

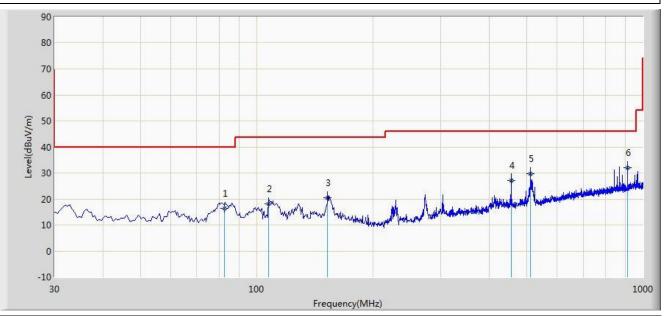
Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)



The worst case of Radiated Emission below 1GHz:

Site: AC1	Time: 2019/03/13 - 03:20
Limit: FCC_Part15.209_RSE(3m)	Engineer: Messiah Li
Probe: VULB 9168 _20-2000MHz	Polarity: Horizontal
EUT: WIFI+BT Combo Module	Power: AC 120V/60Hz

Worst Case Mode: There is the worst case within frequency range 30MHz~1GHz.



No	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
		(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
			(dBuV/m)	(dBuV)				
1		82.580	16.512	6.350	-23.488	40.000	10.162	QP
2		107.250	18.220	6.410	-25.280	43.500	11.810	QP
3		152.750	20.550	5.260	-22.950	43.500	15.290	QP
4		455.820	27.115	9.120	-18.885	46.000	17.995	QP
5		511.260	29.826	11.030	-16.174	46.000	18.796	QP
6	*	912.650	32.015	7.410	-13.985	46.000	24.606	QP

Note 1: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

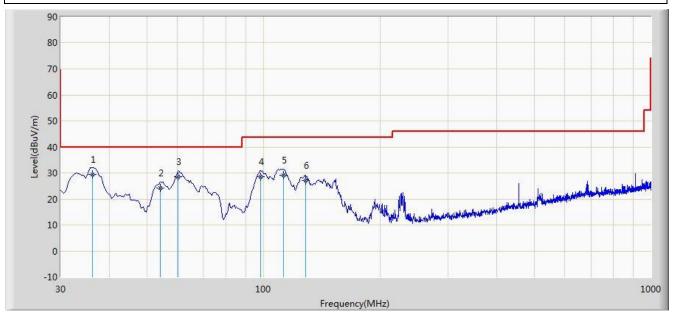
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Note 2: The 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 ~ 25GHz), therefore no data appear in the report.



Site: AC1	Time: 2019/03/13 - 03:22
Limit: FCC_Part15.209_RSE(3m)	Engineer: Messiah Li
Probe: VULB 9168 _20-2000MHz	Polarity: Vertical
EUT: WIFI+BT Combo Module	Power: AC 120V/60Hz

Worst Case Mode: There is the worst case within frequency range 30MHz~1GHz.



No	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
		(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
			(dBuV/m)	(dBuV)				
1	*	36.250	29.357	15.240	-10.643	40.000	14.117	QP
2		54.160	24.149	10.260	-15.851	40.000	13.889	QP
3		60.250	28.645	15.260	-11.355	40.000	13.384	QP
4		98.600	28.412	17.450	-15.088	43.500	10.962	QP
5		112.850	29.001	16.580	-14.499	43.500	12.421	QP
6		128.540	27.008	13.260	-16.492	43.500	13.748	QP

Note 1: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

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

Note 2: The 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 ~ 25GHz), therefore no data appear in the report.



7.9. Radiated Restricted Band Edge Measurement

7.9.1.Test Limit

For 15.205 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

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

For 15.407(b) requirement:

For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27

dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10dBm/MHz at 25

MHz above or below the band edge, and from 25 MHz above or below the band edge increasing

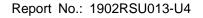


linearly to a level of 15.6dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27dBm/MHz at the band edge.

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

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209						
Frequency	Field Strength	Measured Distance				
[MHz]	[V/m]	[Meters]				
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.

Frequency	Frequency	Frequency
(MHz)	(MHz)	(GHz)
0.009 - 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	2655 - 2900	
12.57675 - 12.57725	3260 - 3267	
13.36 -13.41	3332 -3339	
16.42 - 16.423	334.5 - 3358	
16.69475 - 16.69525	3500 - 4400	
16.80425 - 16.80475	4500 - 5150	
25.5 - 25.67	5350 - 5460	
37.5 - 38.25	7250 - 7750	
73 - 74.6	8025 - 8500	
74.8 - 75.2		
108 - 138		



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.

RSS-Gen Section 8.9						
Frequency	Field Strength	Measured Distance				
[MHz]	[uV/m]	[Meters]				
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				

7.9.2.Test Procedure Used

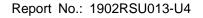
ANSI C63.10 Section 6.3 (General Requirements)

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

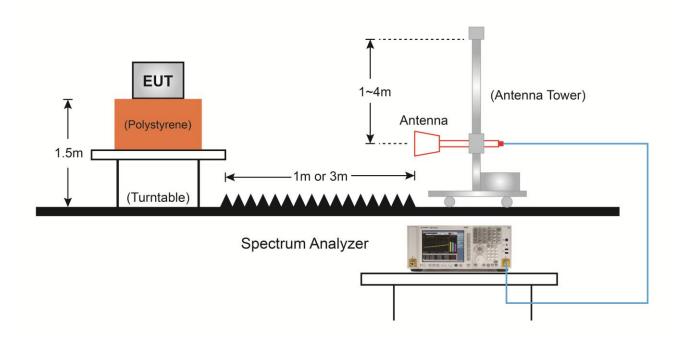




Average Measurements above 1GHz (Method AD)

- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = 1MHz
- 3. If duty cycle ≥ 98%, VBW ≤ RBW/100 but not less than 10Hz; If duty cycle < 98%, set VBW≥1/T.
- 4. Detector = Peak
- 5. Sweep time = auto
- 6. Trace mode = max hold
- 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: 2019/02/28 - 23:11			
						Engineer: Dandy Li			
)		-	•		
Prol	be: BBH	HA9120	D_1-18GHz			Polarity: Horiz	ontal		
EUT	: WIFI+	-BT Co	mbo Module			Power: AC 120)V/60Hz		
Test	Mode:	Transn	nit by 802.11a	a at Channel &	5180MHz, Ar	nt 0 + 1			
Level(dBuV/m)	60	5115 5	120 5125 5130	0 5135 5140	Freque	155 5160 5165 ncy(MHz)		5180 5185 5194	
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5149.780	68.887	62.326	-5.113	74.000	6.561	PK
2			5150.000	66.716	60.154	-7.284	74.000	6.562	PK
3		*	5174.935	113.979	107.494	N/A	N/A	6.485	PK

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



Site: AC1	Time: 2019/02/28 - 23:09		
Limit: FCC_Part15.209_RE(3m)	Engineer: Dandy Li		
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal		
EUT: WIFI+BT Combo Module	Power: AC 120V/60Hz		
Test Mode: Transmit by 802.11a at Channel 5180MHz, A	Ant 0 + 1		
130 (E) 80 70 60 50 40 30 5110 5115 5120 5125 5130 5135 5140 5145 5150	5155 5160 5165 5170 5175 5180 5185 5190 5195 5200		

3	Frequency(MHz)								
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5150.000	52.517	45.955	-1.483	54.000	6.562	AV
2		*	5175.115	103.771	97.288	N/A	N/A	6.483	AV

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



Site	Site: AC1					Time: 2019/02/28 - 23:12			
Limi	t: FCC	_Part15	5.209_RE(3m))	E	Engineer: Dandy Li			
Prot	be: BBH	HA9120	D_1-18GHz		F	Polarity: Vertic	al		
EUT	: WIFI+	BT Co	mbo Module		F	Power: AC 120)V/60Hz		
Test	Mode:	Transn	nit by 802.11a	at Channel 5	5180MHz, An	it 0 + 1			
Level(dBuV/m)	130 80 70 60 50 40 30 5110	5115 5	1, 1 , 1			155 5160 5165 rcy(MHz)	5170 5175 5	5180 5185 5190	0 5195 5200
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5149.825	63.202	56.640	-10.798	74.000	6.561	PK
2			5150.000	62.102	55.540	-11.898	74.000	6.562	PK
3		*	5174.800	106.114	99.628	N/A	N/A	6.486	PK

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



Site:	Site: AC1						Time: 2019/02/28 - 23:14			
Limi	Limit: FCC_Part15.209_RE(3m)				Engineer: Dandy Li					
Prob	be: BBI	HA9120	D_1-18GHz			Polarity: Vertic	al			
EUT	: WIFI-	BT Co	mbo Module			Power: AC 120	0V/60Hz			
Test	Mode:	Transr	nit by 802.11a	a at Channel	5180MHz, A	nt 0 + 1				
Level(dBuV/m)	130 80 70 60 50 40 30 5110	5115 5	5120 5125 5130	0 5135 5140		5155 5160 5165 ency(MHz)	5170 5175 5	5180 5185 519	0 5195 5200	
No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре	
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)		
				(dBuV/m)	(dBuV)					
1			5150.000	48.124	41.562	-5.876	54.000	6.562	AV	

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

95.996

5174.710

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

89.510

N/A

N/A

6.486

AV

2

*



Site: AC1	Time: 2019/02/28 - 23:19			
Limit: FCC_Part15.209_RE(3m)	Engineer: Dandy Li			
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal			
EUT: WIFI+BT Combo Module	Power: AC 120V/60Hz			
Test Mode: Transmit by 802.11a at Channel 5320MHz, Ant 0 + 1				

130 1 Level(dBuV/m) 80 ML, 70 23 60 50 40 30 5315 5325 5330 5335 5340 5345 5350 5360 5365 5370 5375 5380 5385 5390 5310 5320 5355 Frequency(MHz) Factor No Flag Mark Frequency Measure Reading Over Limit Limit Туре (dBuV/m) (dB) (MHz) Level Level (dB) (dBuV/m) (dBuV) * 1 5315.320 113.436 107.159 N/A N/A 6.276 ΡK 2 63.295 -10.705 5350.000 56.835 74.000 6.460 ΡK

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

65.012

5350.520

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

58.549

-8.988

74.000

6.463

ΡK

3