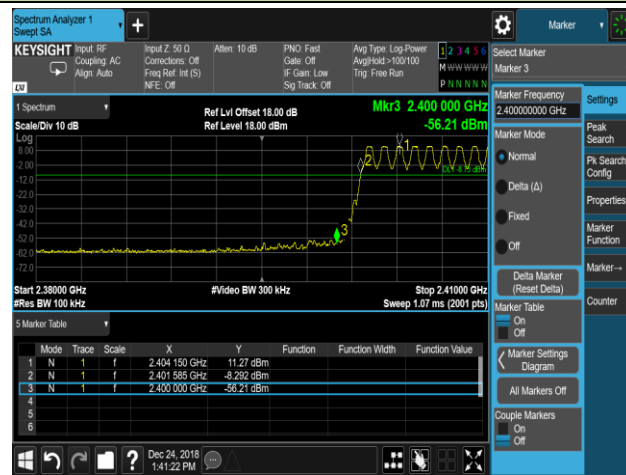
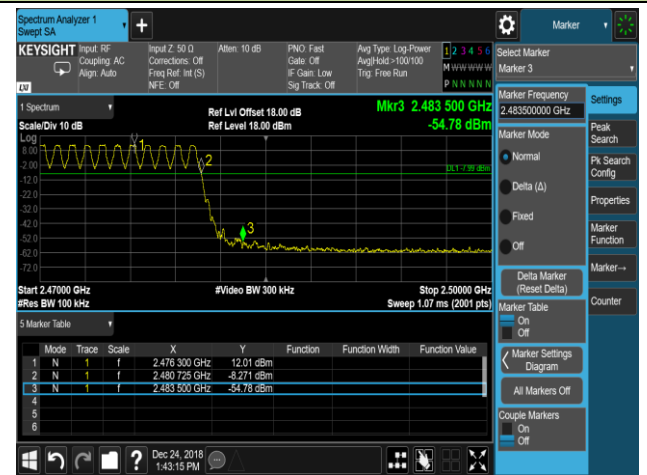


DH5 Operation Frequency Range of 20dB Bandwidth within Hopping Mode

Channel 00 (2402MHz)

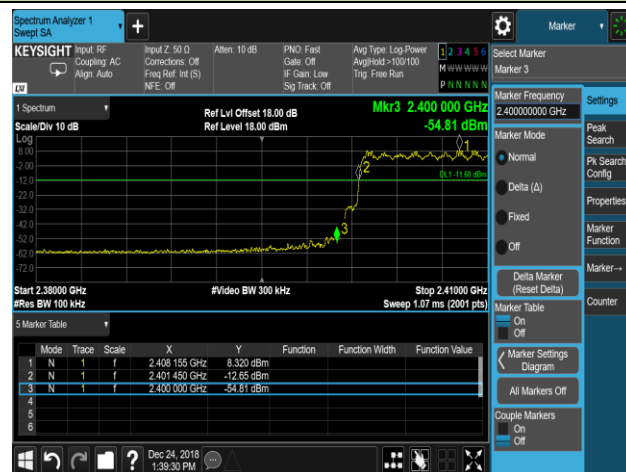


Channel 78 (2480MHz)



2DH5 Operation Frequency Range of 20dB Bandwidth within Hopping Mode

Channel 00 (2402MHz)

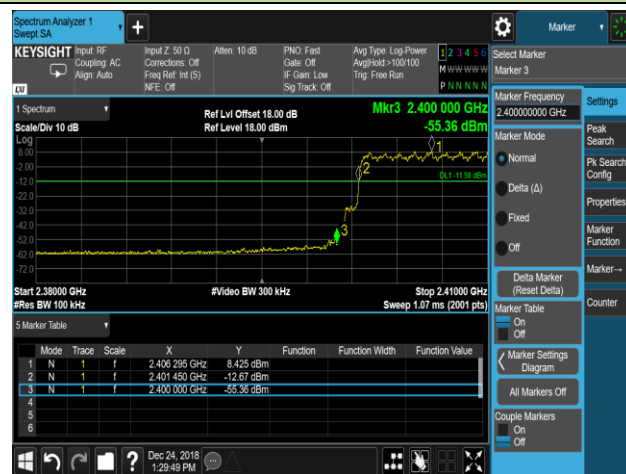


Channel 78 (2480MHz)

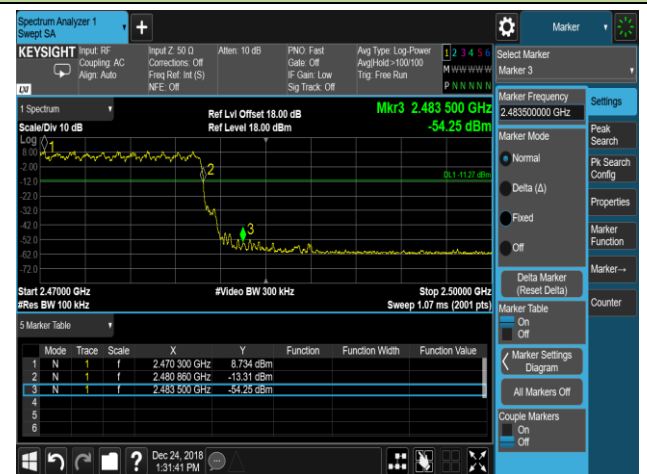


DH5 Operation Frequency Range of 20dB Bandwidth within Hopping Mode

Channel 00 (2402MHz)



Channel 78 (2480MHz)



7.8. Conducted Spurious Emissions Measurement

7.8.1. Test Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

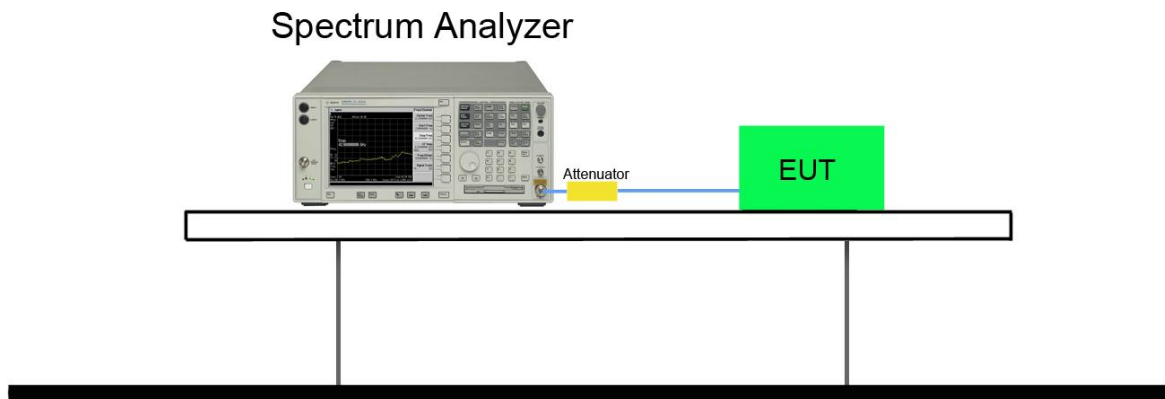
7.8.2. Test Procedure Used

ANSI C63.10-2013 - Section 7.8.8

7.8.3. Test Setting

1. Span = wide enough to capture the peak level of the in-band emission and all spurious emissions (e.g., harmonics) from the lowest frequency generated in the EUT up through the 10th harmonic.
Typically, several plots are required to cover this entire span.
2. RBW = 100 KHz
3. VBW $\geq$ RBW
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize
8. Set the marker on the peak of any spurious emission recorded. The level displayed must comply with the limit specified in this section.

7.8.4. Test Setup



7.8.5. Test Result

Product	2.4GHz/5GHz WiFi + Bluetooth Combination Module	Temperature	25°C
Test Engineer	Dandy Li	Relative Humidity	52%
Test Site	TR3	Test Date	2018/12/24

Test Mode	Channel No.	Frequency (MHz)	Limit (MHz)	Result
DH5	00	2402	20dBc	Pass
DH5	39	2441	20dBc	Pass
DH5	78	2480	20dBc	Pass
2DH5	00	2402	20dBc	Pass
2DH5	39	2441	20dBc	Pass
2DH5	78	2480	20dBc	Pass
3DH5	00	2402	20dBc	Pass
3DH5	39	2441	20dBc	Pass
3DH5	78	2480	20dBc	Pass

DH5 Conducted Spurious Emissions

Channel 00 (2402MHz)



Channel 39 (2441MHz)



Channel 78 (2480MHz)

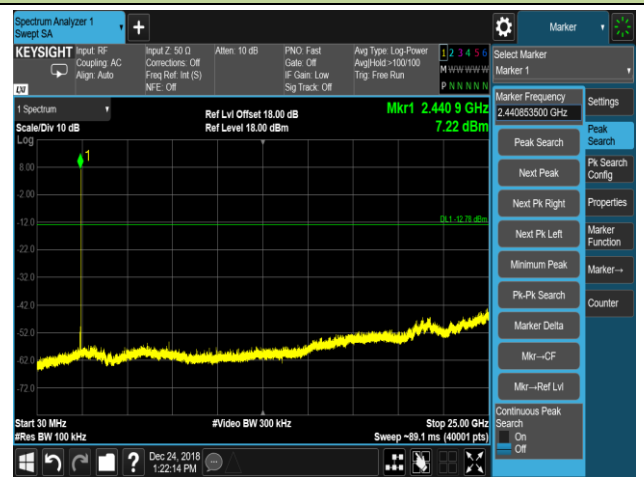


2DH5 Conducted Spurious Emissions

Channel 00 (2402MHz)



Channel 39 (2441MHz)



Channel 78 (2480MHz)

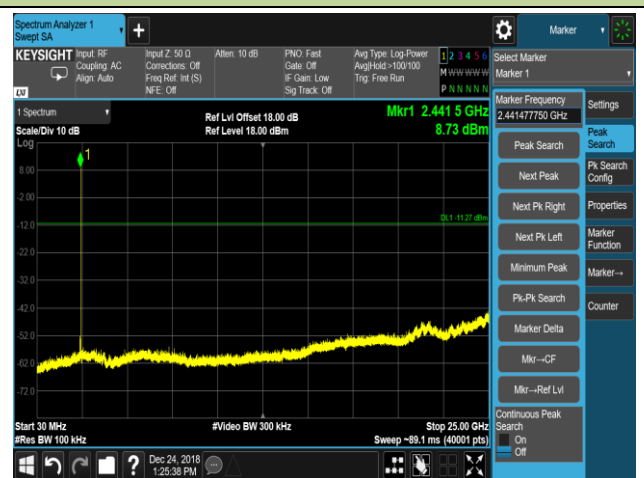


3DH5 Conducted Spurious Emissions

Channel 00 (2402MHz)



Channel 39 (2441MHz)



Channel 78 (2480MHz)



7.9. Radiated Spurious Emission Measurement

7.9.1. 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 [MHz]	Field Strength [uV/m]	Measured Distance [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 C63.10-2013 - Section 11.12.1

7.9.3. 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 = 3 * RBW
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Table 1 - RBW as a function of frequency

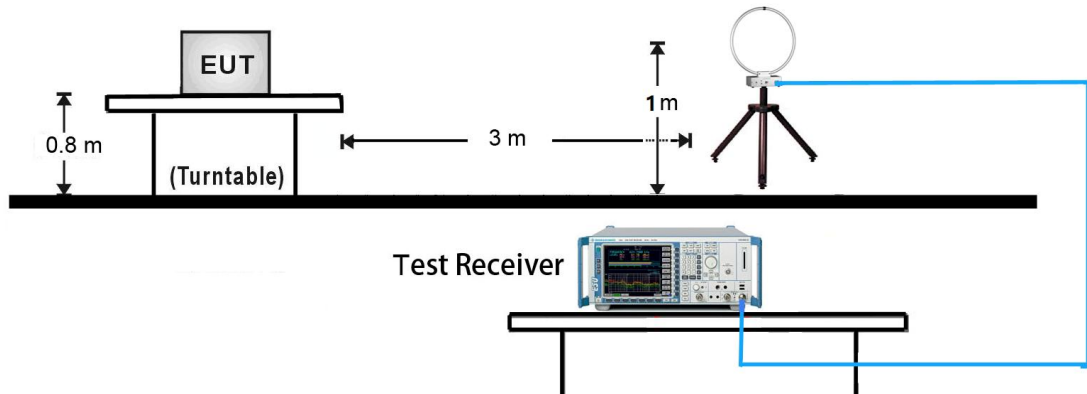
Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000 MHz	1 MHz

Average Field Strength Measurements

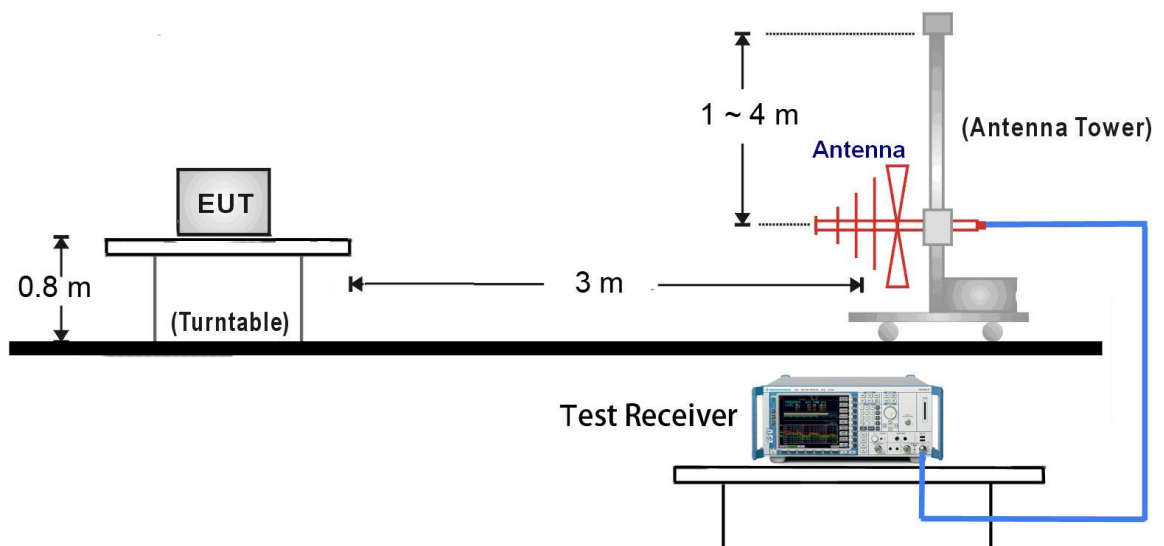
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW $\geq 1/T$
4. De As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). 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

7.9.4. Test Setup

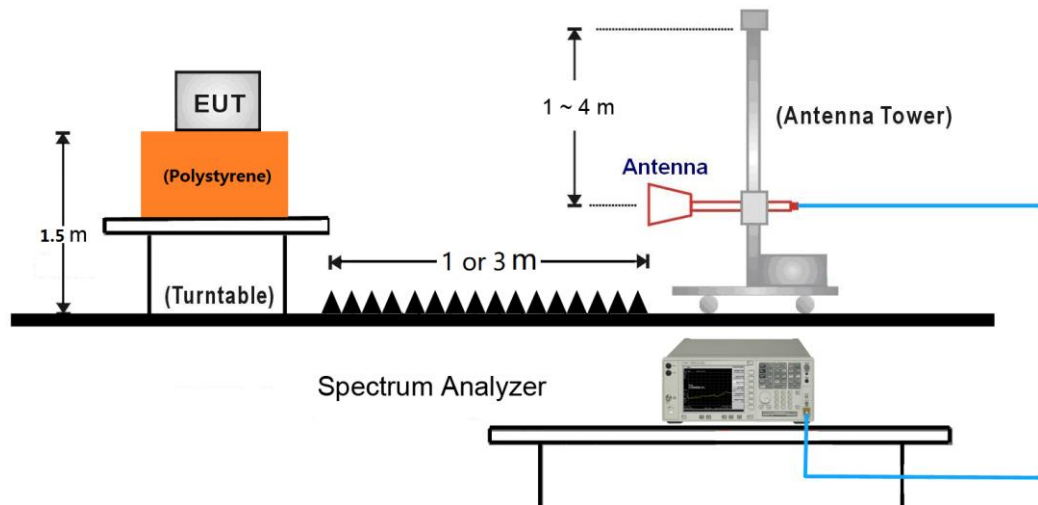
9kHz ~ 30MHz Test Setup:



30MHz ~ 1GHz Test Setup:



Above 1GHz Test Setup:



7.9.5. Test Result

Product	2.4GHz/5GHz WiFi + Bluetooth Combination Module	Temperature	26°C
Test Engineer	Stone Jia	Relative Humidity	56%
Test Site	AC1	Test Date	2018/12/21
Test Mode:	DH5	Test Channel:	00
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4808.0	40.2	5.5	45.7	74.0	-28.3	Peak	Horizontal
	5003.5	42.3	5.8	48.1	74.0	-25.9	Peak	Horizontal
*	7205.0	36.8	13.9	50.7	88.5	-37.8	Peak	Horizontal
*	10001.5	35.1	17.6	52.7	88.5	-35.8	Peak	Horizontal
	4808.0	44.7	5.5	50.2	74.0	-23.8	Peak	Vertical
	5003.5	43.6	5.8	49.4	74.0	-24.6	Peak	Vertical
*	7205.0	40.6	13.9	54.5	88.5	-34.0	Peak	Vertical
*	10001.5	36.3	17.6	53.9	88.5	-34.6	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (108.5dBμV/m) or 15.209 which is higher.

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

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

Product	2.4GHz/5GHz WiFi + Bluetooth Combination Module	Temperature	26°C
Test Engineer	Stone Jia	Relative Humidity	56%
Test Site	AC1	Test Date	2018/12/21
Test Mode:	DH5	Test Channel:	39
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4884.5	40.7	5.6	46.3	74.0	-27.7	Peak	Horizontal
	7502.5	37.3	14.2	51.5	74.0	-22.5	Peak	Horizontal
*	9619.0	32.7	16.2	48.9	89.4	-40.5	Peak	Horizontal
*	10001.5	35.7	17.6	53.3	89.4	-36.1	Peak	Horizontal
	4884.5	45.8	5.6	51.4	74.0	-22.6	Peak	Vertical
	7324.0	35.3	13.8	49.1	74.0	-24.9	Peak	Vertical
*	10001.5	34.4	17.6	52.0	89.4	-37.4	Peak	Vertical
*	10367.0	31.5	18.6	50.1	89.4	-39.3	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (109.4dBμV/m) or 15.209 which is higher.

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

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

Product	2.4GHz/5GHz WiFi + Bluetooth Combination Module	Temperature	26°C
Test Engineer	Stone Jia	Relative Humidity	56%
Test Site	AC1	Test Date	2018/12/21
Test Mode:	DH5	Test Channel:	78
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4961.0	39.4	5.7	45.1	74.0	-28.9	Peak	Horizontal
	7502.5	37.6	14.2	51.8	74.0	-22.2	Peak	Horizontal
*	9602.0	32.1	16.2	48.3	90.0	-41.7	Peak	Horizontal
*	10001.5	35.4	17.6	53.0	90.0	-37.0	Peak	Horizontal
	4961.0	46.2	5.7	51.9	74.0	-22.1	Peak	Vertical
	7443.0	37.9	14.3	52.2	74.0	-21.8	Peak	Vertical
*	10001.5	34.7	17.6	52.3	90.0	-37.7	Peak	Vertical
*	10384.0	31.8	18.8	50.6	90.0	-39.4	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (110.0dBμV/m) or 15.209 which is higher.

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

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

Product	2.4GHz/5GHz WiFi + Bluetooth Combination Module	Temperature	26°C
Test Engineer	Stone Jia	Relative Humidity	56%
Test Site	AC1	Test Date	2018/12/21
Test Mode:	2DH5	Test Channel:	00
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4808.0	38.8	5.5	44.3	74.0	-29.7	Peak	Horizontal
	7502.5	37.3	14.2	51.5	74.0	-22.5	Peak	Horizontal
*	9653.0	33.2	16.4	49.6	87.1	-37.5	Peak	Horizontal
*	10001.5	37.0	17.6	54.6	87.1	-32.5	Peak	Horizontal
	4808.0	43.6	5.5	49.1	74.0	-24.9	Peak	Vertical
	5003.5	42.2	5.8	48.0	74.0	-26.0	Peak	Vertical
*	7205.0	38.1	13.9	52.0	87.1	-35.1	Peak	Vertical
*	10001.5	34.4	17.6	52.0	87.1	-35.1	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (107.1dBμV/m) or 15.209 which is higher.

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

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

Product	2.4GHz/5GHz WiFi + Bluetooth Combination Module	Temperature	26°C
Test Engineer	Stone Jia	Relative Humidity	56%
Test Site	AC1	Test Date	2018/12/21
Test Mode:	2DH5	Test Channel:	39
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4884.5	38.0	5.6	43.6	74.0	-30.4	Peak	Horizontal
	7502.5	38.3	14.2	52.5	74.0	-21.5	Peak	Horizontal
*	10001.5	36.5	17.6	54.1	88.1	-34.0	Peak	Horizontal
*	10316.0	31.0	18.4	49.4	88.1	-38.7	Peak	Horizontal
	4884.5	42.6	5.6	48.2	74.0	-25.8	Peak	Vertical
	7502.5	37.0	14.2	51.2	74.0	-22.8	Peak	Vertical
*	9738.0	32.2	16.6	48.8	88.1	-39.3	Peak	Vertical
*	10001.5	34.6	17.6	52.2	88.1	-35.9	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (108.1dBμV/m) or 15.209 which is higher.

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

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

Product	2.4GHz/5GHz WiFi + Bluetooth Combination Module	Temperature	26°C
Test Engineer	Stone Jia	Relative Humidity	56%
Test Site	AC1	Test Date	2018/12/21
Test Mode:	2DH5	Test Channel:	78
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4995.0	42.9	5.8	48.7	74.0	-25.3	Peak	Horizontal
	7502.5	36.8	14.2	51.0	74.0	-23.0	Peak	Horizontal
*	9993.0	36.4	17.4	53.8	88.8	-35.0	Peak	Horizontal
*	10392.5	31.5	18.8	50.3	88.8	-38.5	Peak	Horizontal
	4961.0	44.7	5.7	50.4	74.0	-23.6	Peak	Vertical
	7494.0	36.2	14.0	50.2	74.0	-23.8	Peak	Vertical
*	10001.5	37.9	17.6	55.5	88.8	-33.3	Peak	Vertical
*	10350.0	31.7	18.5	50.2	88.8	-38.6	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (108.8dBμV/m) or 15.209 which is higher.

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

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

Product	2.4GHz/5GHz WiFi + Bluetooth Combination Module	Temperature	26°C
Test Engineer	Stone Jia	Relative Humidity	56%
Test Site	AC1	Test Date	2018/12/21
Test Mode:	3DH5	Test Channel:	00
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4808.0	39.2	5.5	44.7	74.0	-29.3	Peak	Horizontal
	7502.5	37.9	14.2	52.1	74.0	-21.9	Peak	Horizontal
*	9661.5	32.6	16.5	49.1	87.6	-38.5	Peak	Horizontal
*	10001.5	36.0	17.6	53.6	87.6	-34.0	Peak	Horizontal
	4808.0	39.2	5.5	44.7	74.0	-29.3	Peak	Vertical
	5003.5	41.7	5.8	47.5	74.0	-26.5	Peak	Vertical
*	7205.0	37.9	13.9	51.8	87.6	-35.8	Peak	Vertical
*	10001.5	35.6	17.6	53.2	87.6	-34.4	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (107.6dBμV/m) or 15.209 which is higher.

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

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

Product	2.4GHz/5GHz WiFi + Bluetooth Combination Module	Temperature	26°C
Test Engineer	Stone Jia	Relative Humidity	56%
Test Site	AC1	Test Date	2018/12/21
Test Mode:	3DH5	Test Channel:	39
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4884.5	38.6	5.6	44.2	74.0	-29.8	Peak	Horizontal
	7502.5	38.1	14.2	52.3	74.0	-21.7	Peak	Horizontal
*	9619.0	33.3	16.2	49.5	88.4	-38.9	Peak	Horizontal
*	10001.5	38.0	17.6	55.6	88.4	-32.8	Peak	Horizontal
	4884.5	42.5	5.6	48.1	74.0	-25.9	Peak	Vertical
	7494.0	36.4	14.0	50.4	74.0	-23.6	Peak	Vertical
*	9848.5	32.5	17.3	49.8	88.4	-38.6	Peak	Vertical
*	10001.5	36.2	17.6	53.8	88.4	-34.6	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (108.4dBμV/m) or 15.209 which is higher.

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

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

Product	2.4GHz/5GHz WiFi + Bluetooth Combination Module	Temperature	26°C
Test Engineer	Stone Jia	Relative Humidity	56%
Test Site	AC1	Test Date	2018/12/21
Test Mode:	3DH5	Test Channel:	78
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4961.0	39.5	5.7	45.2	74.0	-28.8	Peak	Horizontal
	7502.5	37.3	14.2	51.5	74.0	-22.5	Peak	Horizontal
*	9763.5	32.2	17.0	49.2	89.0	-39.8	Peak	Horizontal
*	9993.0	37.2	17.4	54.6	89.0	-34.4	Peak	Horizontal
	4961.0	42.5	5.7	48.2	74.0	-25.8	Peak	Vertical
	7502.5	37.5	14.2	51.7	74.0	-22.3	Peak	Vertical
*	9763.5	31.3	17.0	48.3	89.0	-40.7	Peak	Vertical
*	10001.5	37.4	17.6	55.0	89.0	-34.0	Peak	Vertical

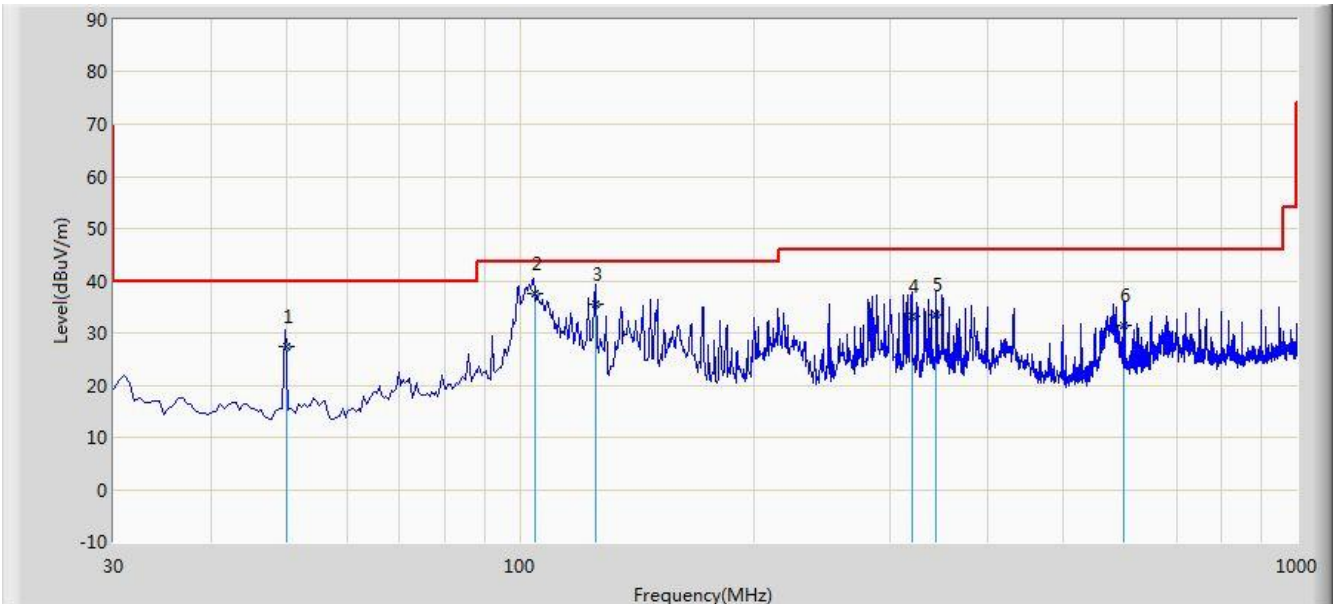
Note 1: “*” is not in restricted band, its limit is 20dBc of the fundamental emission level (109.0dBμV/m) or 15.209 which is higher.

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

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

The Worst Case of Radiated Emission below 1GHz:

Site: AC1	Time: 2018/12/20 - 15:08
Limit: FCC_Part15.209_RE(3m)	Engineer: David Lv
Probe: VULB 9168 _20-2000MHz	Polarity: Horizontal
EUT: 2.4GHz/5GHz WiFi + Bluetooth Combination Module	Power: AC 120V/60Hz
Test Mode: There is the worst case within frequency range 30MHz~1GHz.	



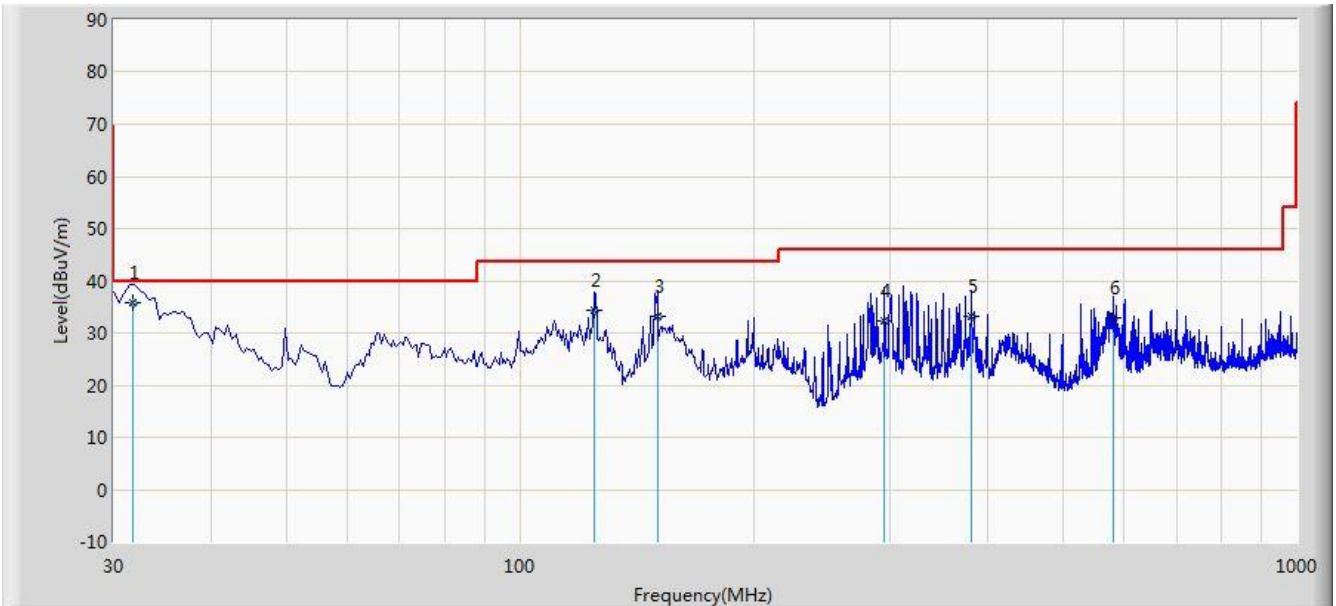
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			49.992	27.297	13.117	-12.703	40.000	14.180	QP
2		*	104.456	37.642	26.118	-5.858	43.500	11.524	QP
3			125.311	35.457	21.901	-8.043	43.500	13.555	QP
4			319.771	33.166	18.228	-12.834	46.000	14.938	QP
5			343.561	33.555	18.117	-12.445	46.000	15.437	QP
6			599.561	31.573	11.001	-14.427	46.000	20.572	QP

Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + 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: 2018/12/20 - 15:27
Limit: FCC_Part15.209_RE(3m)	Engineer: David Lv
Probe: VULB 9168 _20-2000MHz	Polarity: Vertical
EUT: 2.4GHz/5GHz WiFi + Bluetooth Combination Module	Power: AC 120V/60Hz
Test Mode: There is the worst case within frequency range 30MHz~1GHz.	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	31.779	35.807	22.003	-4.193	40.000	13.805	QP
2			124.667	34.408	20.891	-9.092	43.500	13.517	QP
3			150.442	33.060	17.787	-10.440	43.500	15.273	QP
4			294.690	32.264	17.999	-13.736	46.000	14.265	QP
5			381.225	33.228	17.008	-12.772	46.000	16.220	QP
6			581.120	32.930	12.771	-13.070	46.000	20.159	QP

Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + 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.

7.10. Radiated Restricted Band Edge Measurement

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	--	--	--

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

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

7.10.1.Test Procedure Used

ANSI C63.10 Section 6.3 (General Requirements)

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

7.10.2.Test Setting

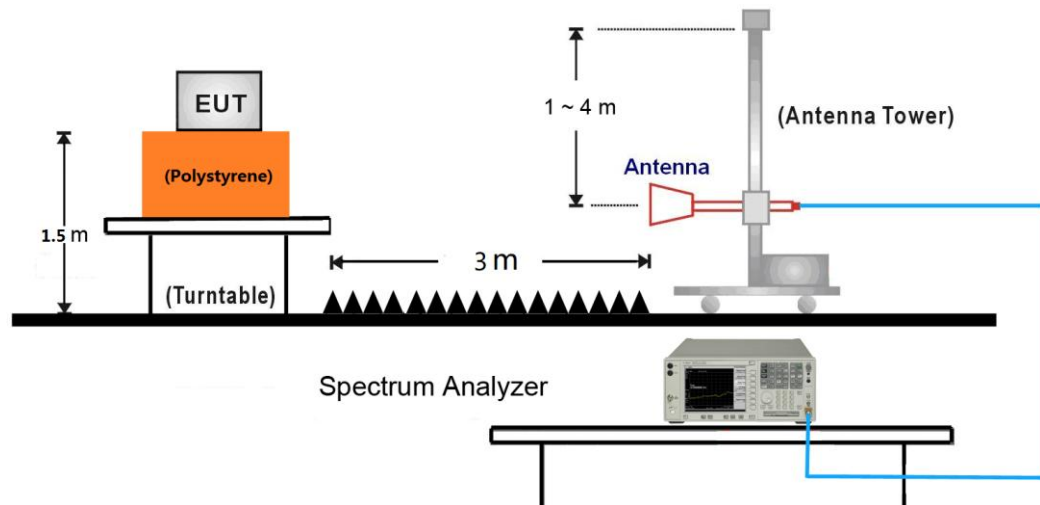
Peak Field Strength Measurements

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

Average Measurements above 1GHz (Method VB)

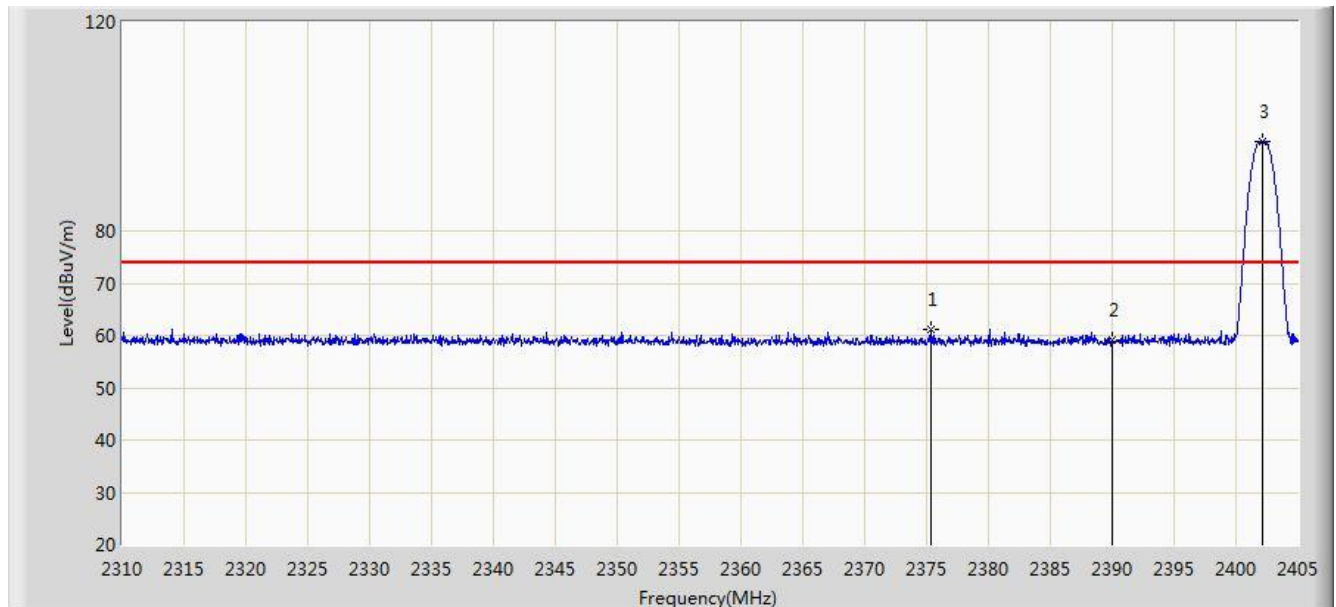
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; If the EUT is configured to transmit with duty cycle $\geq 98\%$, set VBW = 10 Hz.
If the EUT duty cycle is $< 98\%$, set VBW $\geq 1/T$. T is the minimum transmission duration.
4. Detector = Peak
5. Sweep time = auto
6. Trace mode = max hold
7. Trace was allowed to stabilize

7.10.3.Test Setup



7.10.4.Test Result

Site: AC1	Time: 2018/12/21 - 16:59
Limit: FCC_Part15.209_RE(3m)	Engineer: Messiah Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 2.4GHz/5GHz WiFi + Bluetooth Combination Module	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at channel 2402MHz	

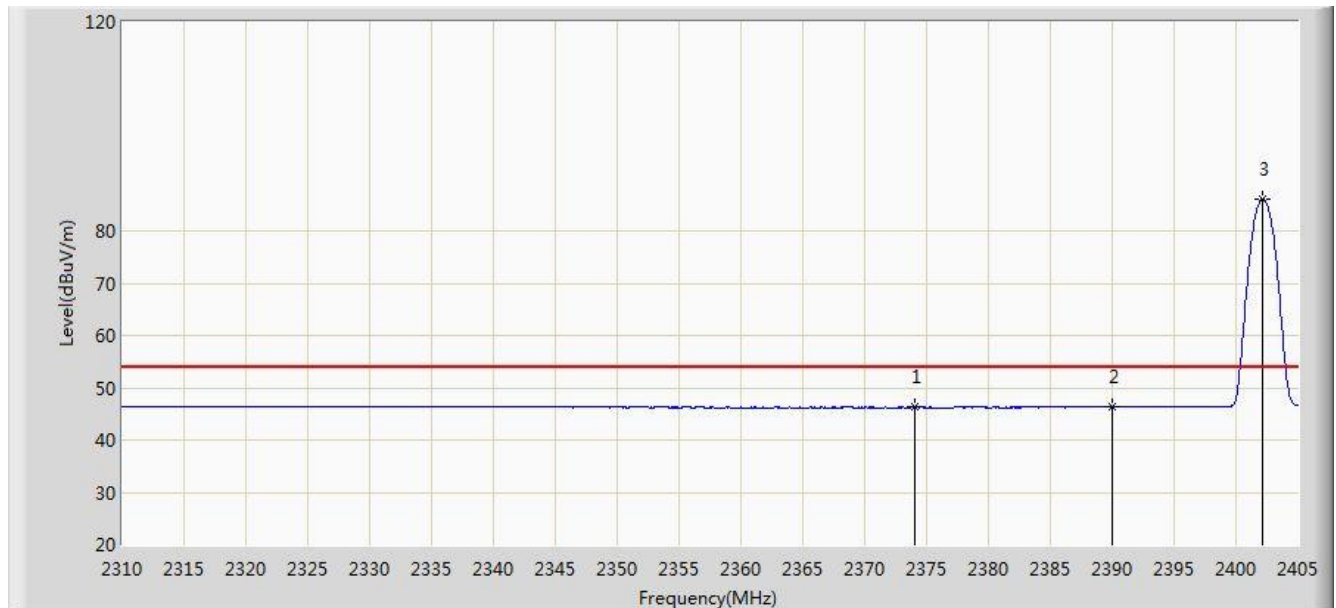


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2375.407	61.169	28.569	-12.831	74.000	32.600	PK
2			2390.000	59.001	26.426	-14.999	74.000	32.575	PK
3		*	2402.150	97.014	64.455	N/A	N/A	32.559	PK

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

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

Site: AC1	Time: 2018/12/21 - 17:28
Limit: FCC_Part15.209_RE(3m)	Engineer: Messiah Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 2.4GHz/5GHz WiFi + Bluetooth Combination Module	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at channel 2402MHz	

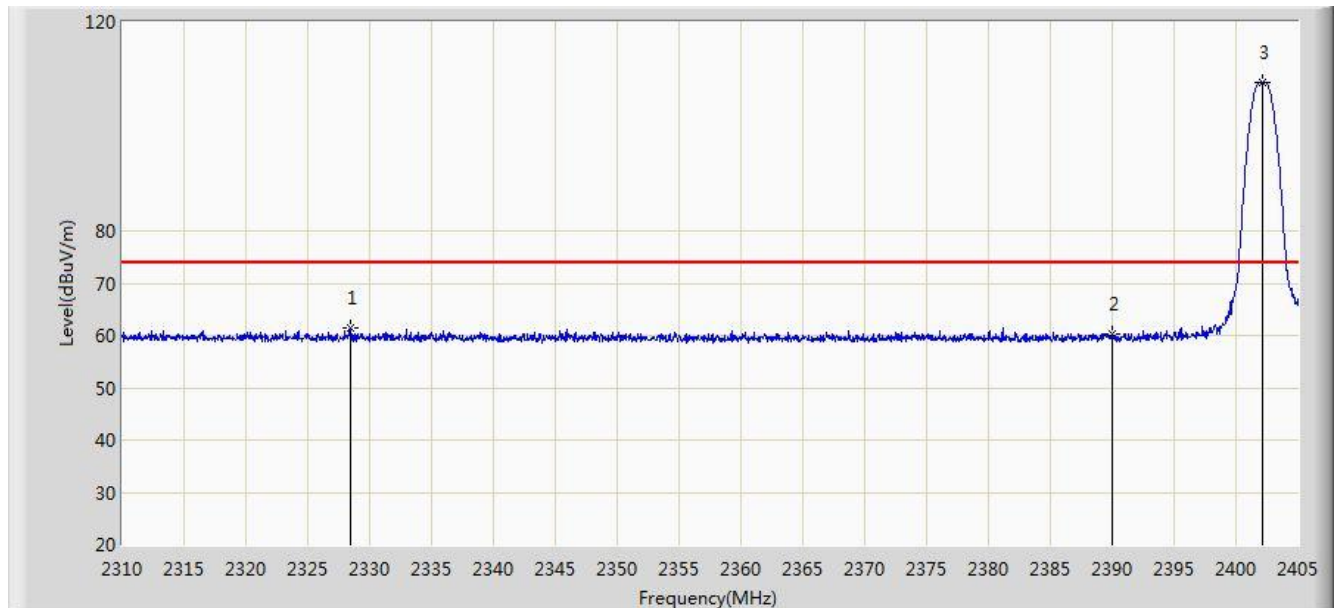


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2374.077	46.288	13.686	-7.712	54.000	32.602	AV
2			2390.000	46.283	13.708	-7.717	54.000	32.575	AV
3		*	2402.103	86.011	53.452	N/A	N/A	32.558	AV

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

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

Site: AC1	Time: 2018/12/21 - 17:29
Limit: FCC_Part15.209_RE(3m)	Engineer: Messiah Li
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 2.4GHz/5GHz WiFi + Bluetooth Combination Module	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at channel 2402MHz	

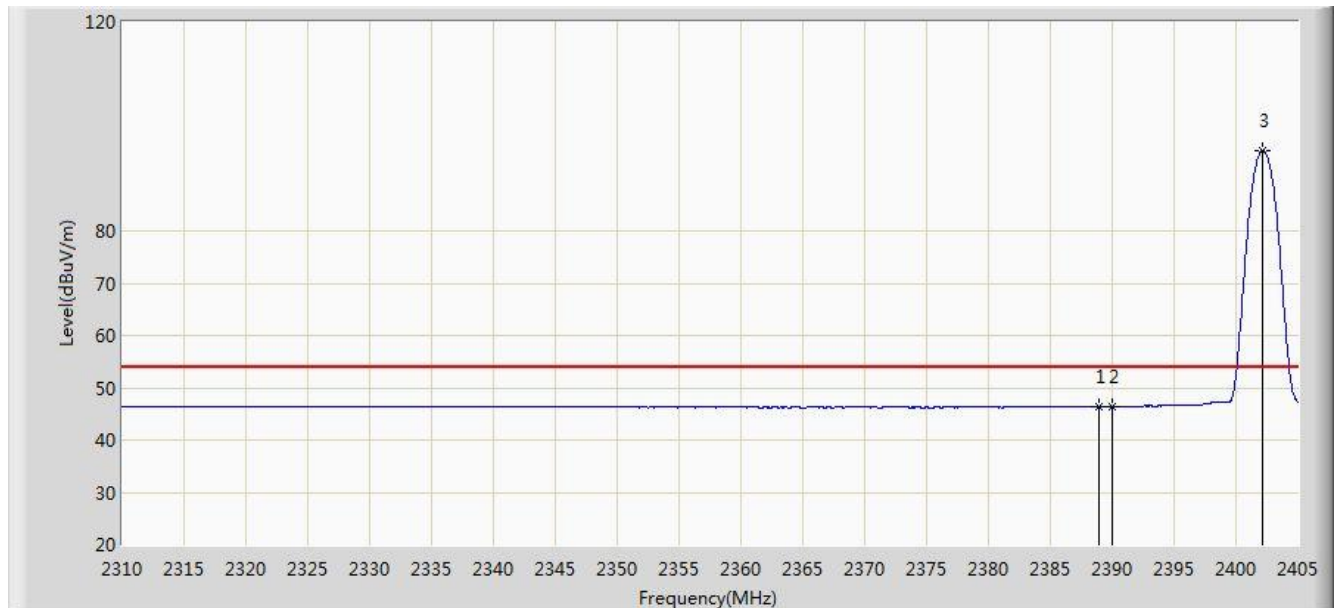


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2328.430	61.587	28.849	-12.413	74.000	32.738	PK
2			2390.000	60.212	27.637	-13.788	74.000	32.575	PK
3		*	2402.150	108.505	75.946	N/A	N/A	32.559	PK

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

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

Site: AC1	Time: 2018/12/21 - 17:33
Limit: FCC_Part15.209_RE(3m)	Engineer: Messiah Li
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 2.4GHz/5GHz WiFi + Bluetooth Combination Module	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at channel 2402MHz	

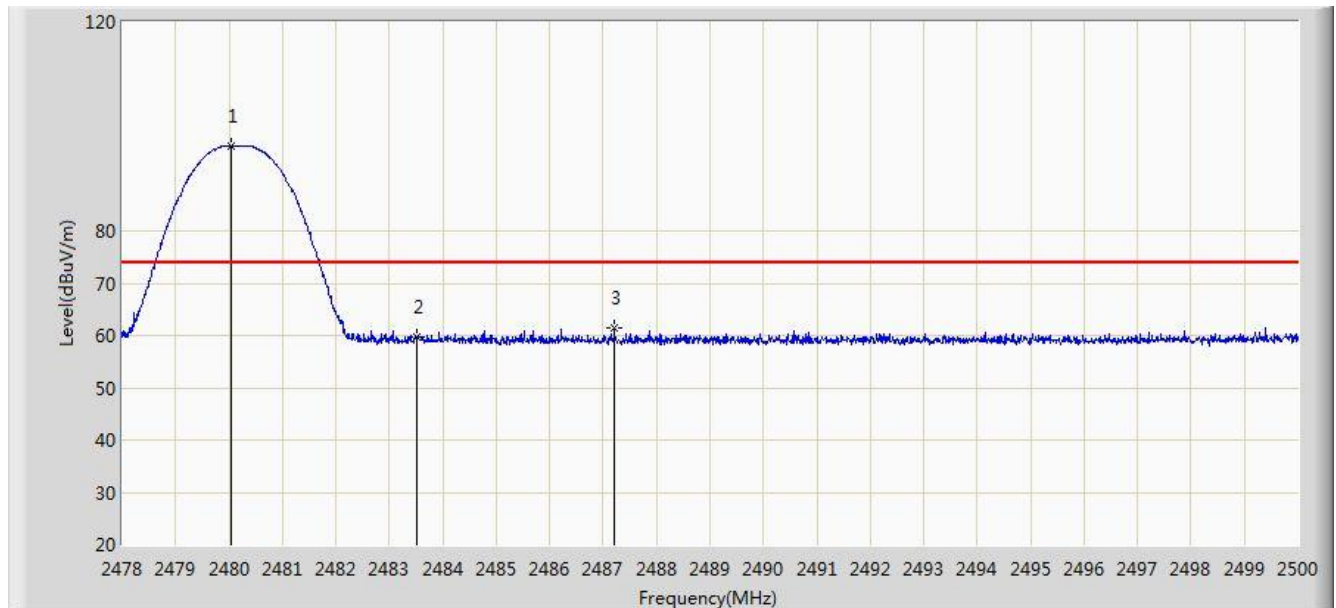


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2388.945	46.390	13.814	-7.610	54.000	32.577	AV
2			2390.000	46.321	13.746	-7.679	54.000	32.575	AV
3		*	2402.150	95.360	62.801	N/A	N/A	32.559	AV

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

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

Site: AC1	Time: 2018/12/21 - 17:33
Limit: FCC_Part15.209_RE(3m)	Engineer: Messiah Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 2.4GHz/5GHz WiFi + Bluetooth Combination Module	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at channel 2480MHz	

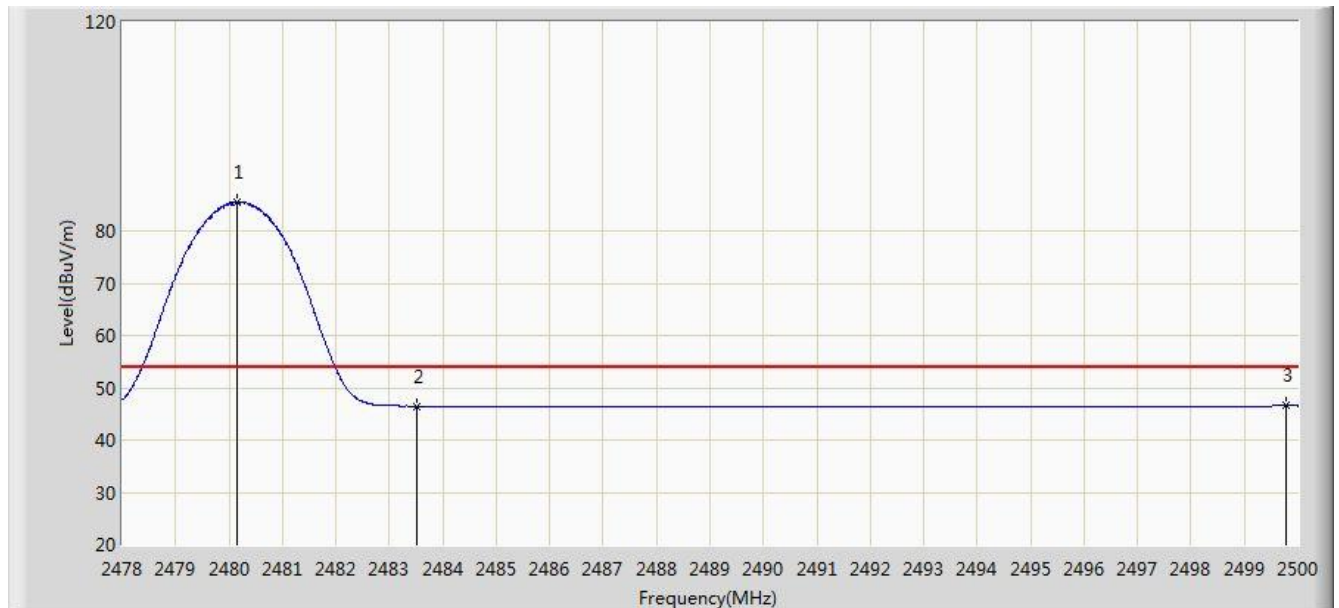


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2480.046	96.273	63.686	N/A	N/A	32.587	PK
2			2483.500	59.660	27.064	-14.340	74.000	32.596	PK
3			2487.207	61.383	28.778	-12.617	74.000	32.605	PK

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

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

Site: AC1	Time: 2018/12/21 - 17:36
Limit: FCC_Part15.209_RE(3m)	Engineer: Messiah Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 2.4GHz/5GHz WiFi + Bluetooth Combination Module	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at channel 2480MHz	

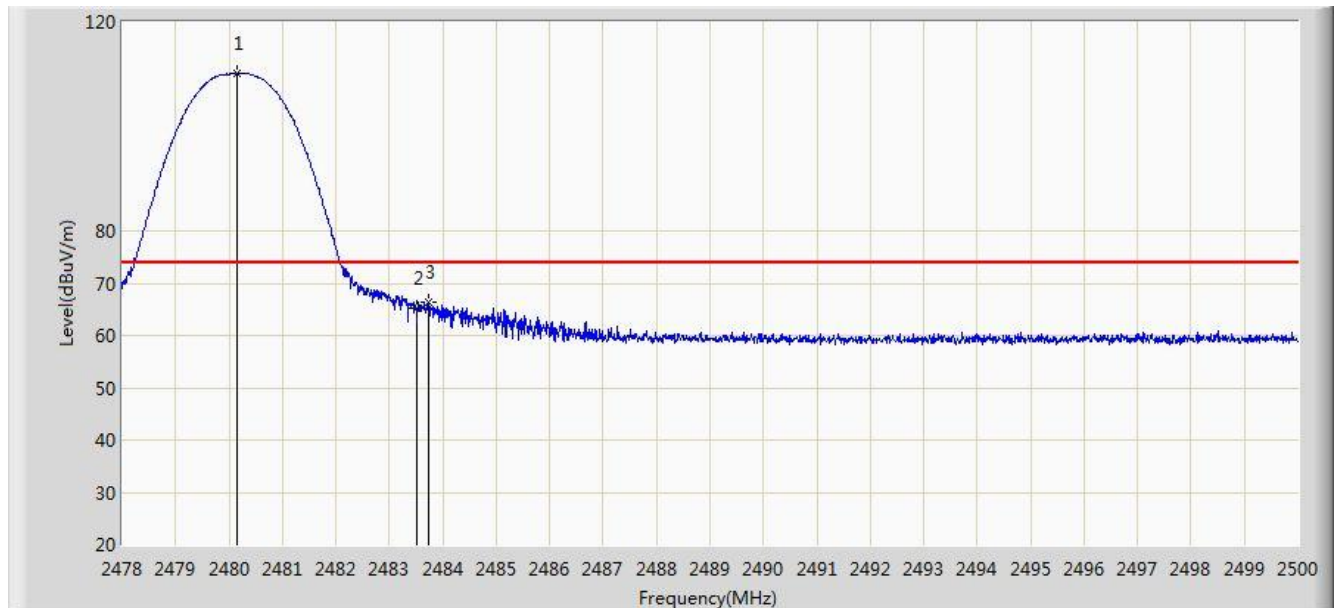


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2480.145	85.563	52.976	N/A	N/A	32.588	AV
2			2483.500	46.482	13.886	-7.518	54.000	32.596	AV
3			2499.769	46.556	13.916	-7.444	54.000	32.640	AV

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

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

Site: AC1	Time: 2018/12/21 - 17:37
Limit: FCC_Part15.209_RE(3m)	Engineer: Messiah Li
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 2.4GHz/5GHz WiFi + Bluetooth Combination Module	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at channel 2480MHz	

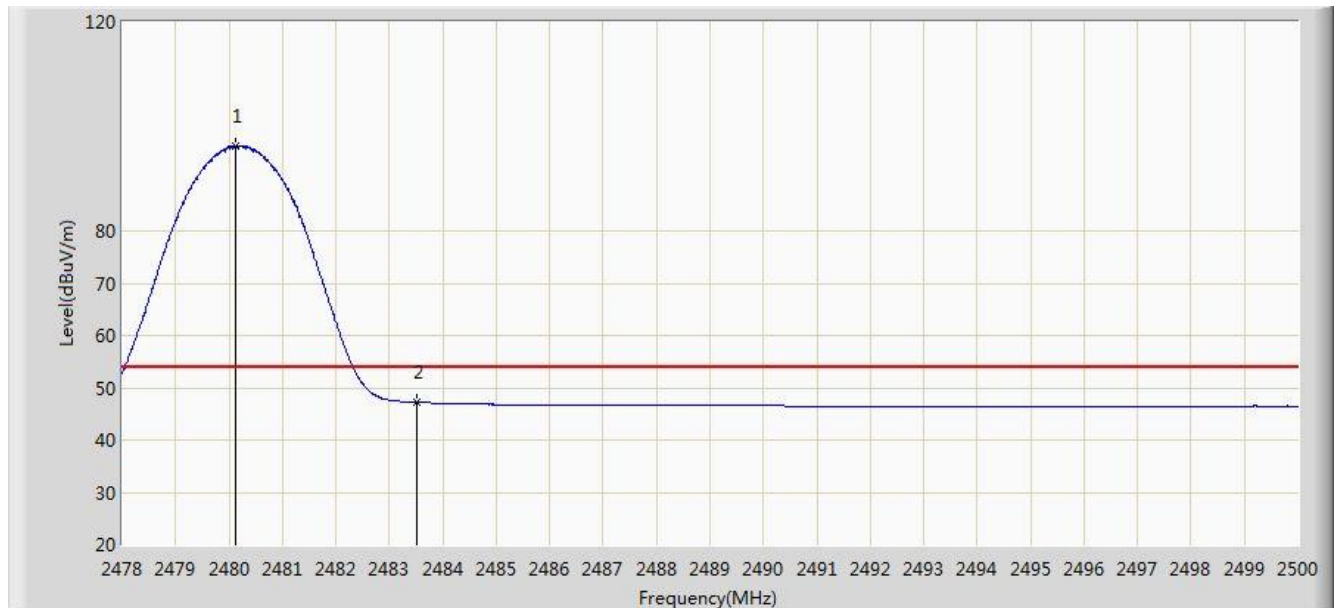


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2480.145	110.004	77.417	N/A	N/A	32.588	PK
2			2483.500	65.197	32.601	-8.803	74.000	32.596	PK
3			2483.742	66.446	33.850	-7.554	74.000	32.596	PK

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

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

Site: AC1	Time: 2018/12/21 - 17:38
Limit: FCC_Part15.209_RE(3m)	Engineer: Messiah Li
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 2.4GHz/5GHz WiFi + Bluetooth Combination Module	Power: AC 120V/60Hz
Test Mode: Transmit by DH5 at channel 2480MHz	

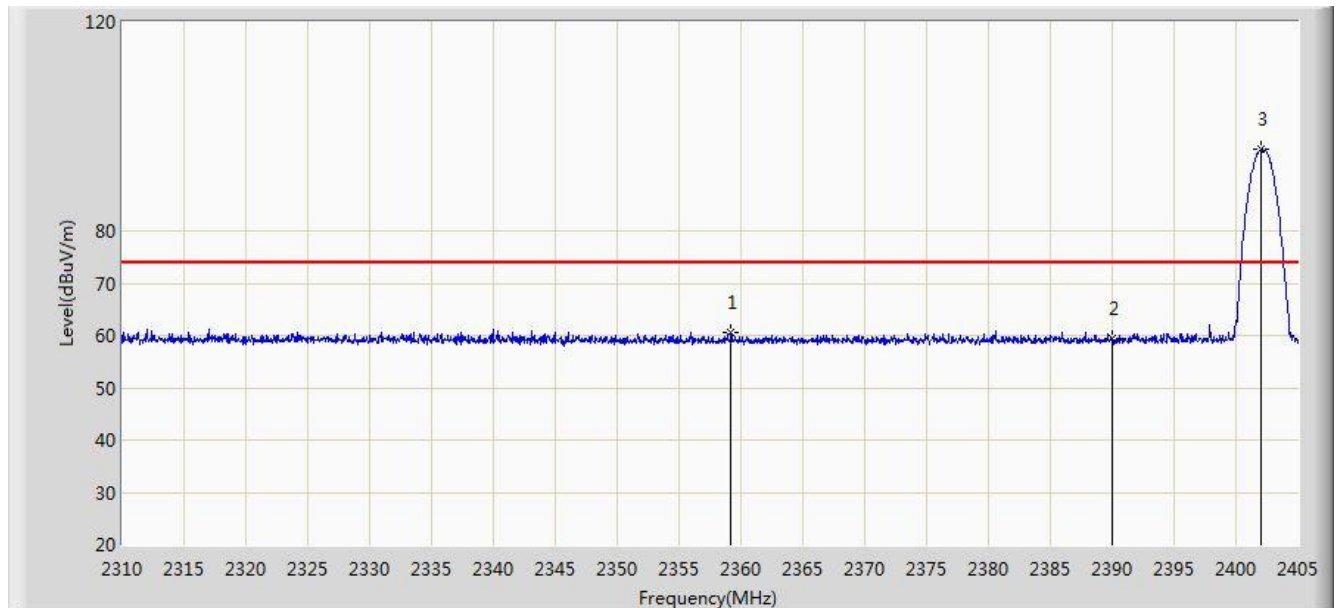


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2480.134	96.285	63.698	N/A	N/A	32.588	AV
2			2483.500	47.262	14.666	-6.738	54.000	32.596	AV

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

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

Site: AC1	Time: 2018/12/21 - 17:39
Limit: FCC_Part15.209_RE(3m)	Engineer: Messiah Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 2.4GHz/5GHz WiFi + Bluetooth Combination Module	Power: AC 120V/60Hz
Test Mode: Transmit by 2DH5 at channel 2402MHz	

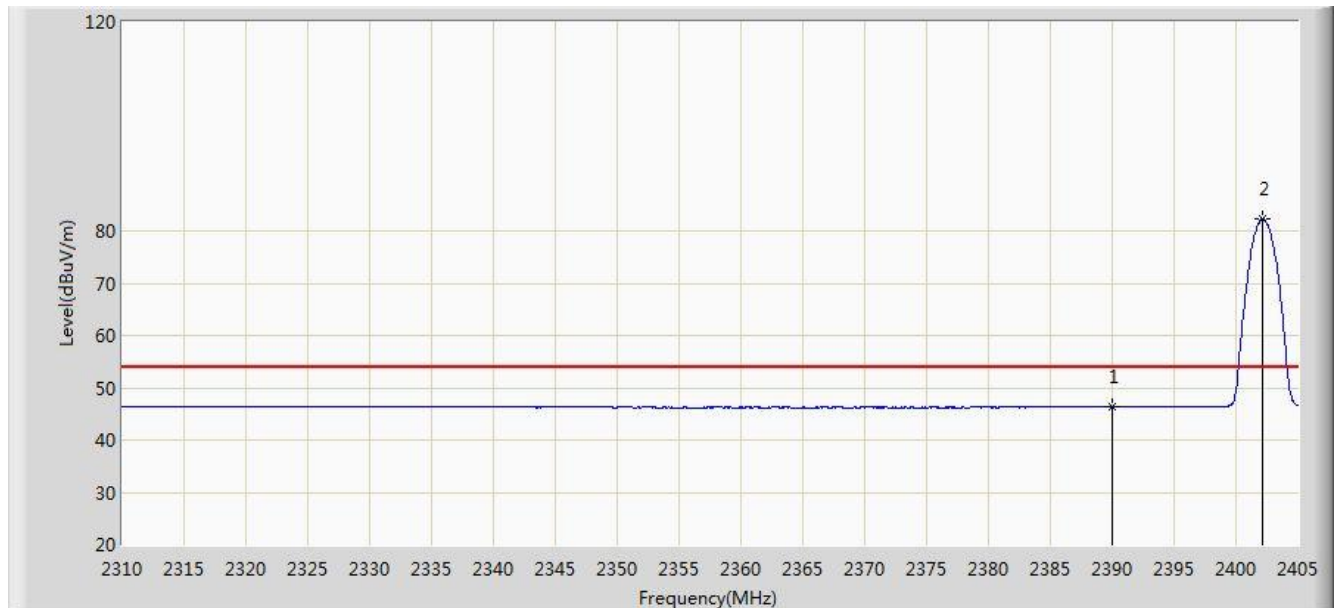


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2359.163	60.648	28.024	-13.352	74.000	32.624	PK
2			2390.000	59.371	26.796	-14.629	74.000	32.575	PK
3		*	2402.055	95.637	63.078	N/A	N/A	32.558	PK

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

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

Site: AC1	Time: 2018/12/21 - 17:42
Limit: FCC_Part15.209_RE(3m)	Engineer: Messiah Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 2.4GHz/5GHz WiFi + Bluetooth Combination Module	Power: AC 120V/60Hz
Test Mode: Transmit by 2DH5 at channel 2402MHz	

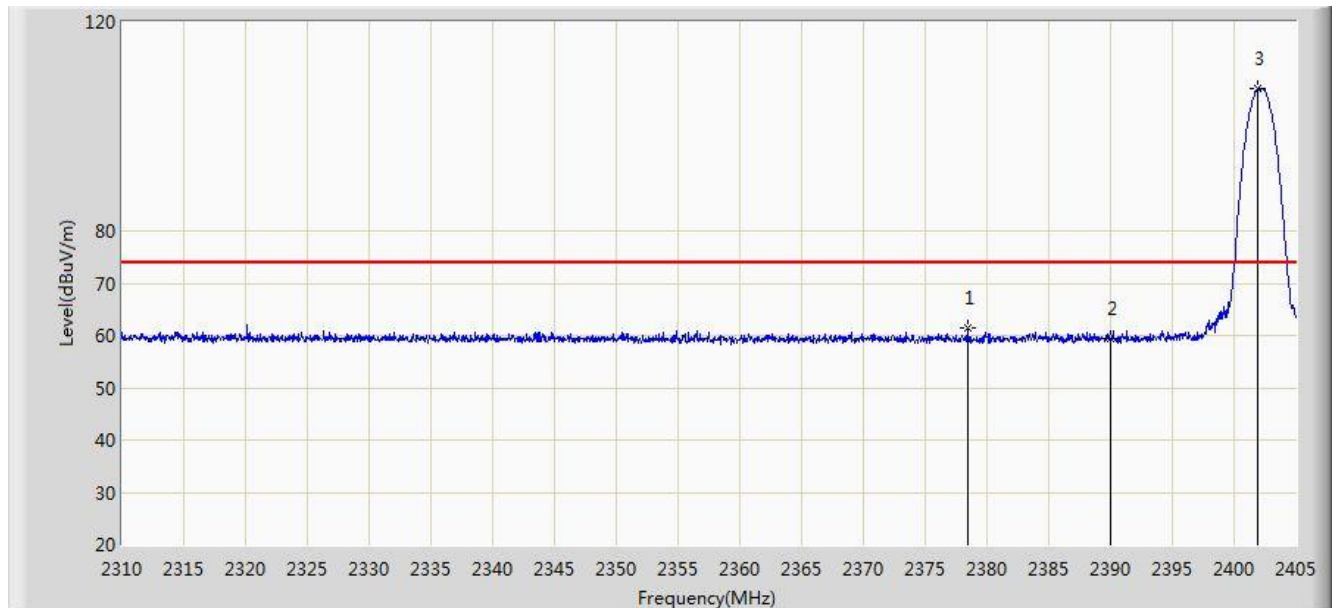


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	46.281	13.706	-7.719	54.000	32.575	AV
2		*	2402.103	82.325	49.766	N/A	N/A	32.558	AV

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

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

Site: AC1	Time: 2018/12/21 - 17:43
Limit: FCC_Part15.209_RE(3m)	Engineer: Messiah Li
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 2.4GHz/5GHz WiFi + Bluetooth Combination Module	Power: AC 120V/60Hz
Test Mode: Transmit by 2DH5 at channel 2402MHz	

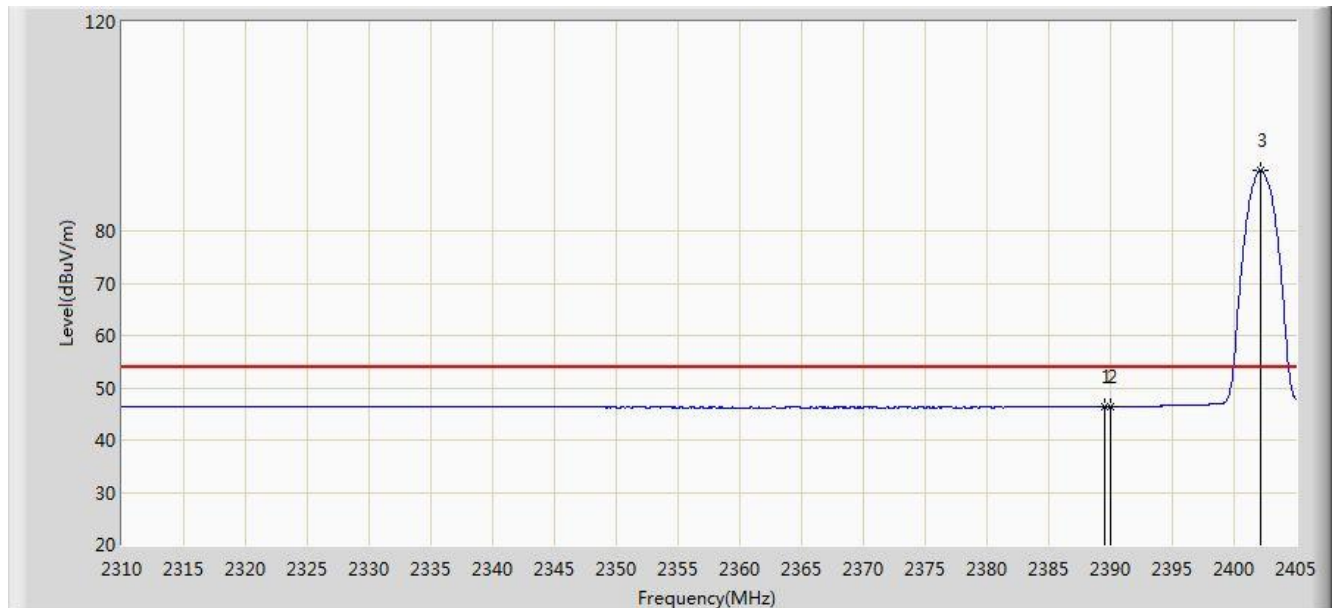


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2378.400	61.323	28.728	-12.677	74.000	32.595	PK
2			2390.000	59.284	26.709	-14.716	74.000	32.575	PK
3		*	2401.960	107.123	74.564	N/A	N/A	32.559	PK

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

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

Site: AC1	Time: 2018/12/21 - 17:45
Limit: FCC_Part15.209_RE(3m)	Engineer: Messiah Li
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 2.4GHz/5GHz WiFi + Bluetooth Combination Module	Power: AC 120V/60Hz
Test Mode: Transmit by 2DH5 at channel 2402MHz	

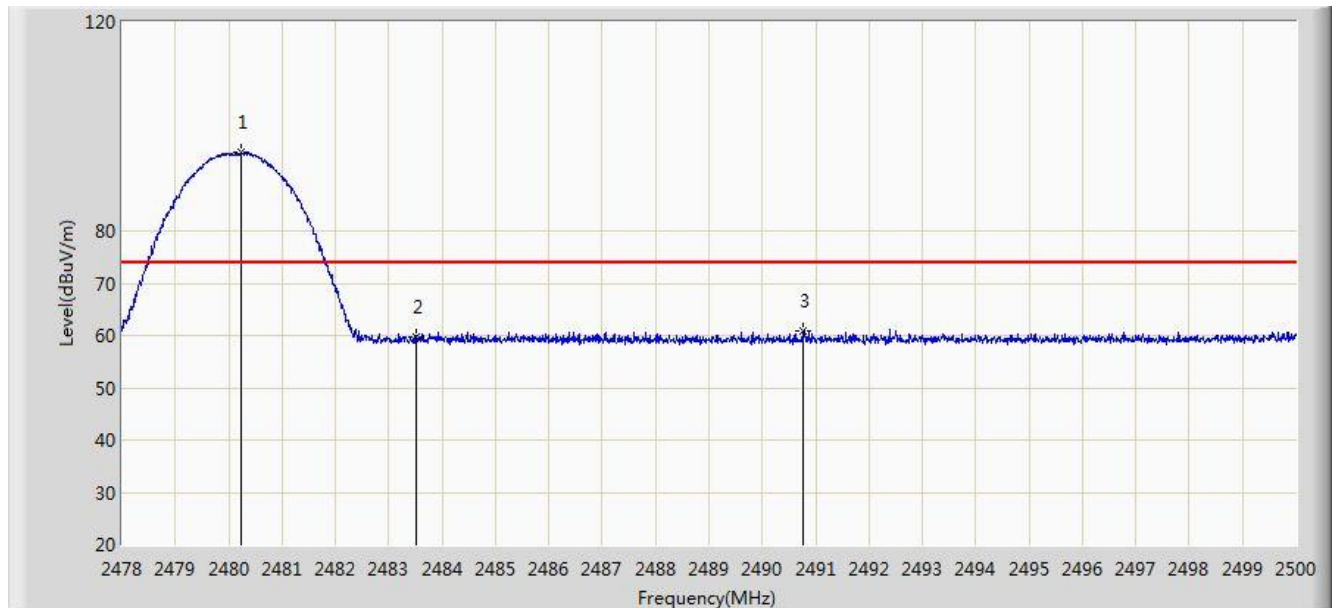


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2389.468	46.374	13.799	-7.626	54.000	32.575	AV
2			2390.000	46.372	13.797	-7.628	54.000	32.575	AV
3		*	2402.103	91.614	59.055	N/A	N/A	32.558	AV

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

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

Site: AC1	Time: 2018/12/21 - 17:46
Limit: FCC_Part15.209_RE(3m)	Engineer: Messiah Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 2.4GHz/5GHz WiFi + Bluetooth Combination Module	Power: AC 120V/60Hz
Test Mode: Transmit by 2DH5 at channel 2480MHz	

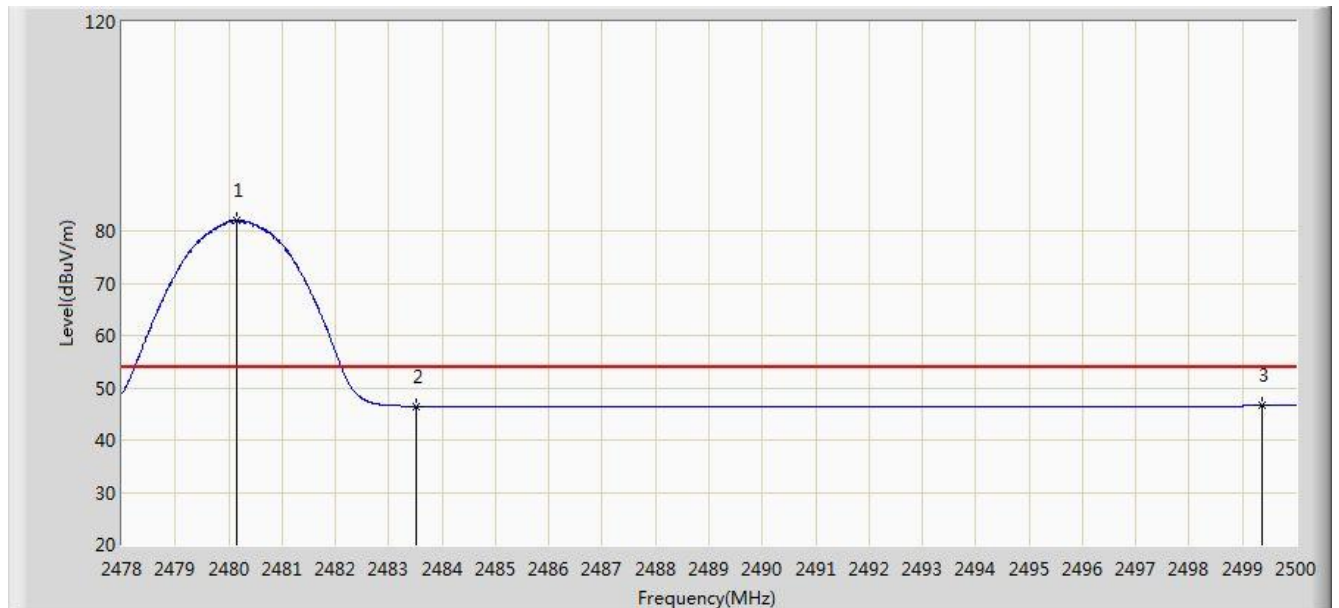


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2480.244	95.032	62.444	N/A	N/A	32.588	PK
2			2483.500	59.578	26.982	-14.422	74.000	32.596	PK
3			2490.771	60.964	28.350	-13.036	74.000	32.614	PK

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

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

Site: AC1	Time: 2018/12/21 - 17:48
Limit: FCC_Part15.209_RE(3m)	Engineer: Messiah Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 2.4GHz/5GHz WiFi + Bluetooth Combination Module	Power: AC 120V/60Hz
Test Mode: Transmit by 2DH5 at channel 2480MHz	

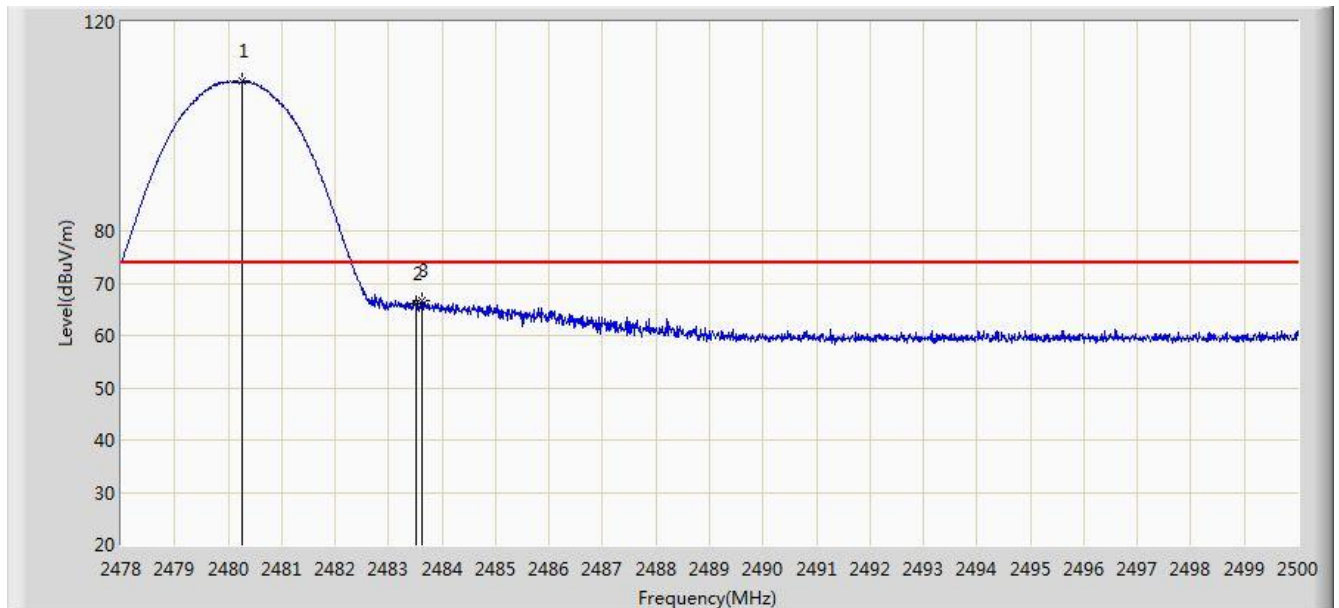


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2480.145	82.004	49.417	N/A	N/A	32.588	AV
2			2483.500	46.485	13.889	-7.515	54.000	32.596	AV
3			2499.373	46.639	14.001	-7.361	54.000	32.638	AV

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

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

Site: AC1	Time: 2018/12/21 - 17:49
Limit: FCC_Part15.209_RE(3m)	Engineer: Messiah Li
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 2.4GHz/5GHz WiFi + Bluetooth Combination Module	Power: AC 120V/60Hz
Test Mode: Transmit by 2DH5 at channel 2480MHz	

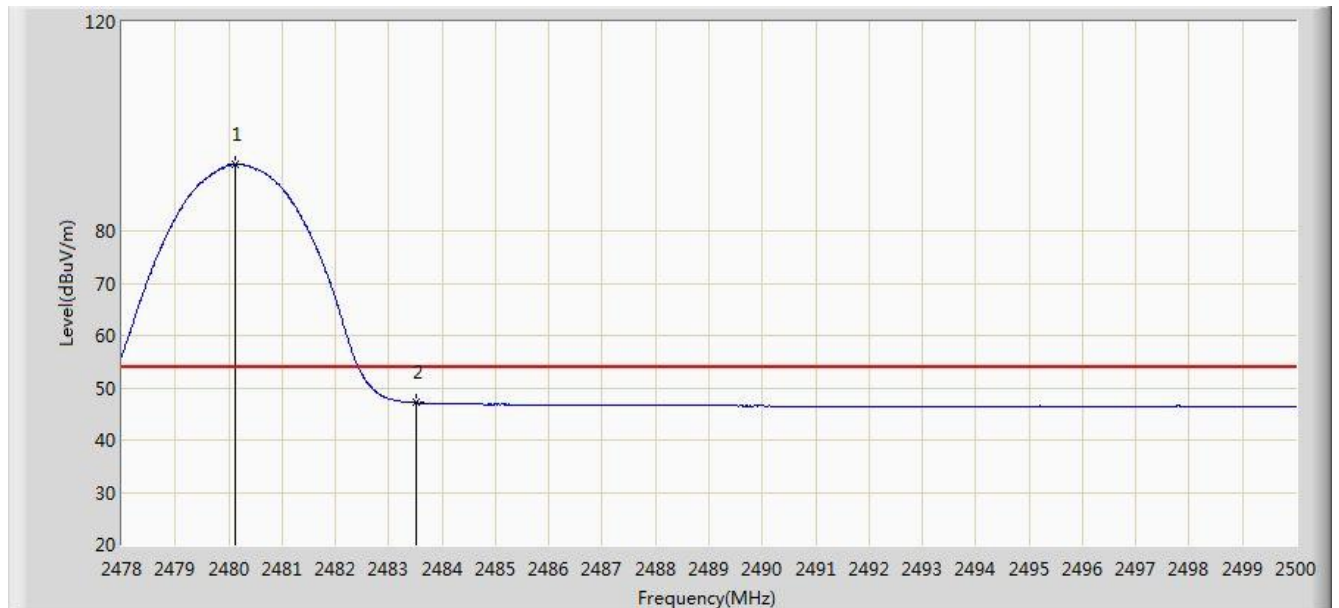


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2480.255	108.786	76.198	N/A	N/A	32.588	PK
2			2483.500	65.966	33.370	-8.034	74.000	32.596	PK
3			2483.632	66.600	34.004	-7.400	74.000	32.596	PK

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

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

Site: AC1	Time: 2018/12/21 - 17:52
Limit: FCC_Part15.209_RE(3m)	Engineer: Messiah Li
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 2.4GHz/5GHz WiFi + Bluetooth Combination Module	Power: AC 120V/60Hz
Test Mode: Transmit by 2DH5 at channel 2480MHz	

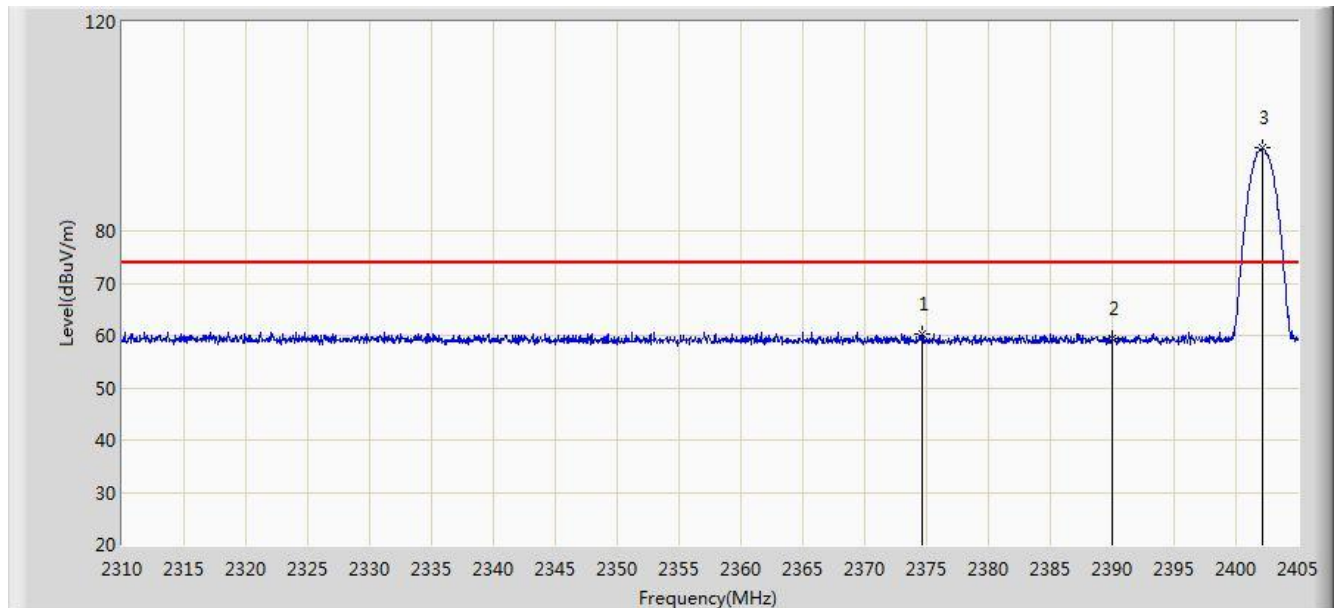


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2480.112	92.732	60.145	N/A	N/A	32.587	AV
2			2483.500	47.119	14.523	-6.881	54.000	32.596	AV

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

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

Site: AC1	Time: 2018/12/21 - 17:52
Limit: FCC_Part15.209_RE(3m)	Engineer: Messiah Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 2.4GHz/5GHz WiFi + Bluetooth Combination Module	Power: AC 120V/60Hz
Test Mode: Transmit by 3DH5 at channel 2402MHz	

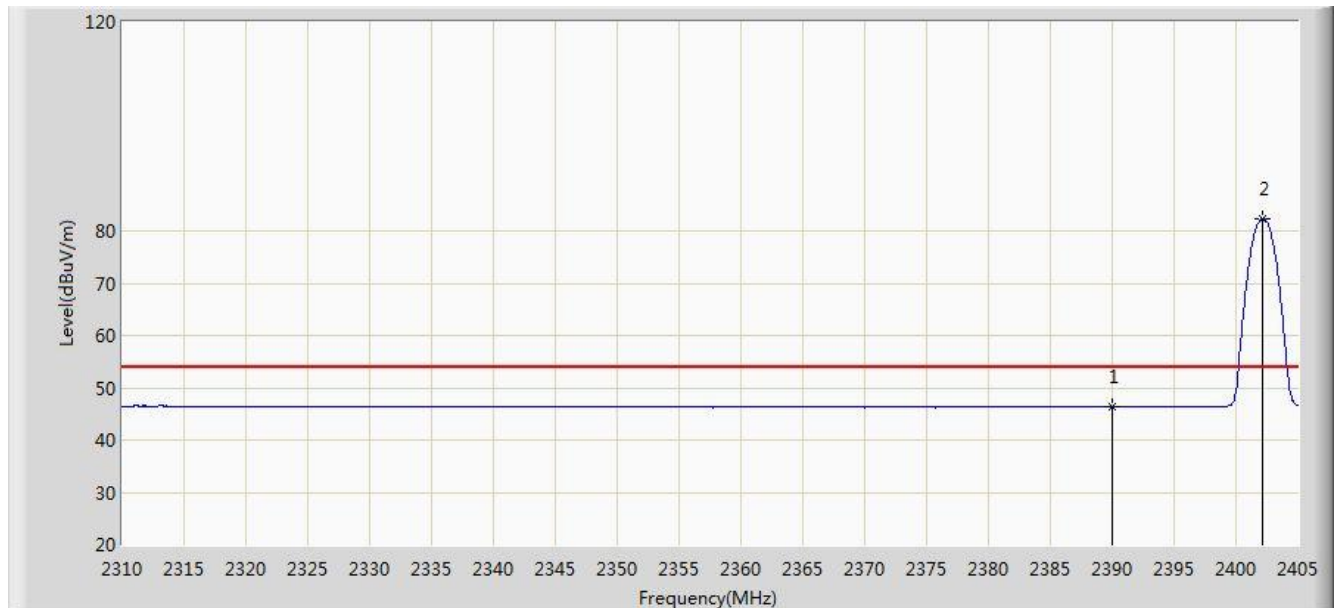


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2374.695	60.255	27.654	-13.745	74.000	32.601	PK
2			2390.000	59.460	26.885	-14.540	74.000	32.575	PK
3		*	2402.198	95.942	63.383	N/A	N/A	32.559	PK

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

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

Site: AC1	Time: 2018/12/21 - 17:55
Limit: FCC_Part15.209_RE(3m)	Engineer: Messiah Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 2.4GHz/5GHz WiFi + Bluetooth Combination Module	Power: AC 120V/60Hz
Test Mode: Transmit by 3DH5 at channel 2402MHz	

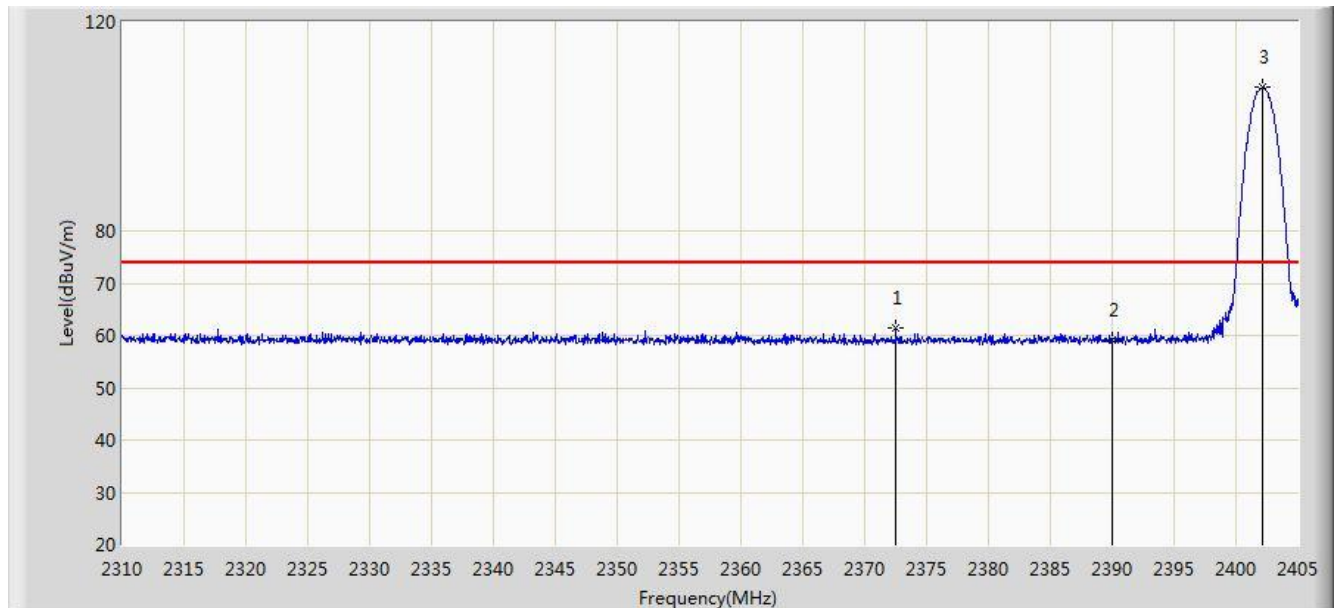


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	46.351	13.776	-7.649	54.000	32.575	AV
2		*	2402.103	82.355	49.796	N/A	N/A	32.558	AV

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

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

Site: AC1	Time: 2018/12/21 - 17:56
Limit: FCC_Part15.209_RE(3m)	Engineer: Messiah Li
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 2.4GHz/5GHz WiFi + Bluetooth Combination Module	Power: AC 120V/60Hz
Test Mode: Transmit by 3DH5 at channel 2402MHz	

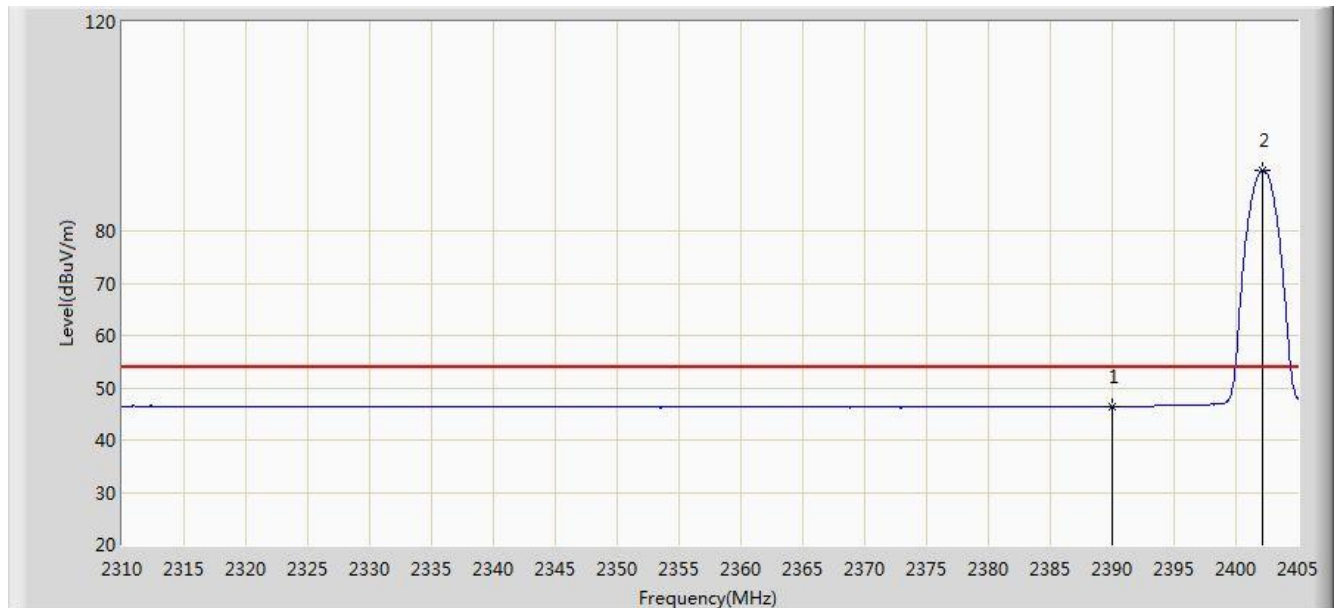


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2372.510	61.441	28.837	-12.559	74.000	32.604	PK
2			2390.000	59.246	26.671	-14.754	74.000	32.575	PK
3		*	2402.150	107.552	74.993	N/A	N/A	32.559	PK

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

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

Site: AC1	Time: 2018/12/21 - 17:57
Limit: FCC_Part15.209_RE(3m)	Engineer: Messiah Li
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 2.4GHz/5GHz WiFi + Bluetooth Combination Module	Power: AC 120V/60Hz
Test Mode: Transmit by 3DH5 at channel 2402MHz	

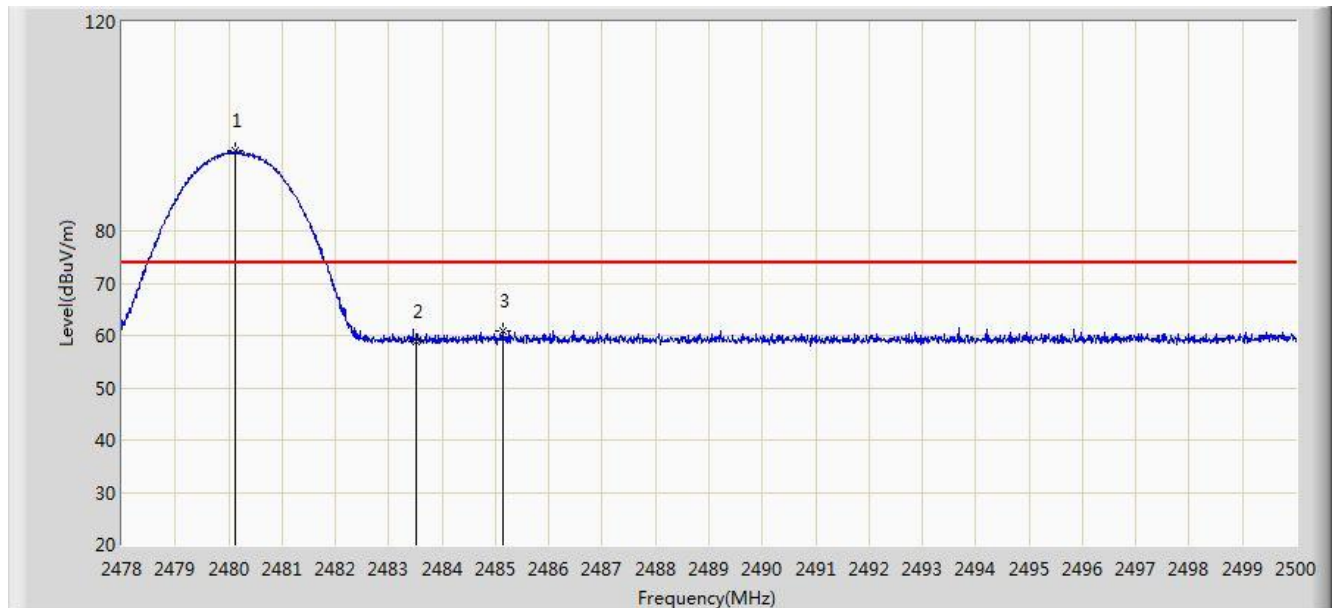


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	46.388	13.813	-7.612	54.000	32.575	AV
2		*	2402.103	91.656	59.097	N/A	N/A	32.558	AV

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

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

Site: AC1	Time: 2018/12/21 - 17:58
Limit: FCC_Part15.209_RE(3m)	Engineer: Messiah Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 2.4GHz/5GHz WiFi + Bluetooth Combination Module	Power: AC 120V/60Hz
Test Mode: Transmit by 3DH5 at channel 2480MHz	

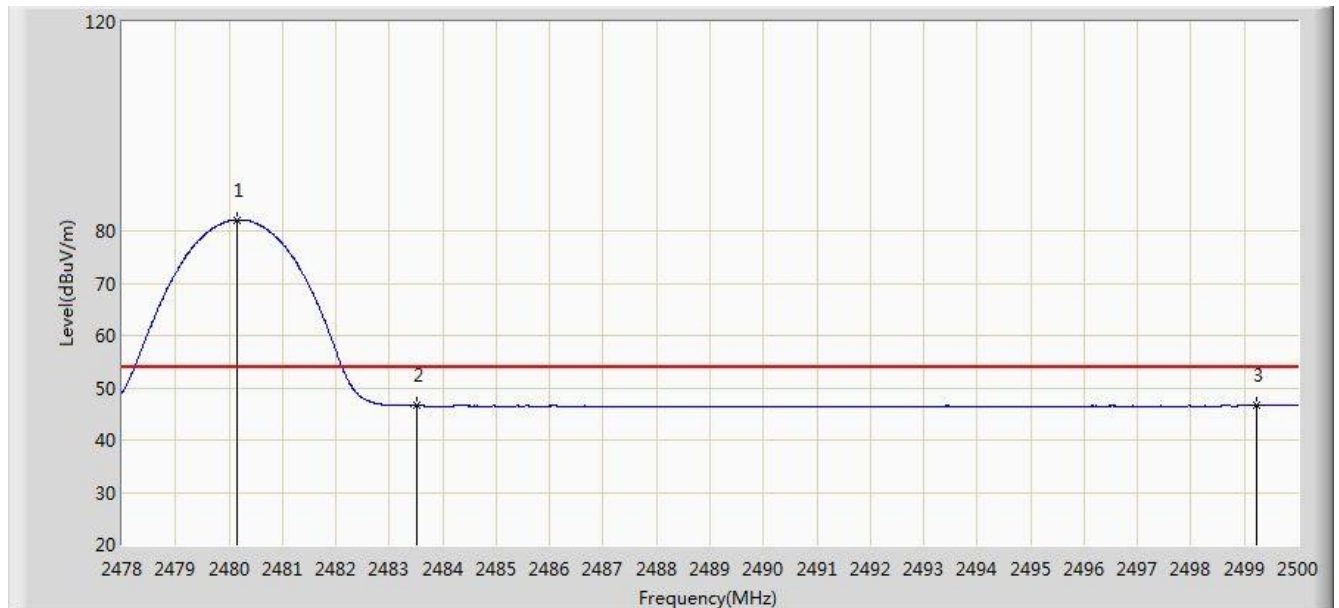


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2480.112	95.263	62.676	N/A	N/A	32.587	PK
2			2483.500	58.786	26.190	-15.214	74.000	32.596	PK
3			2485.139	61.012	28.412	-12.988	74.000	32.600	PK

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

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

Site: AC1	Time: 2018/12/21 - 17:59
Limit: FCC_Part15.209_RE(3m)	Engineer: Messiah Li
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: 2.4GHz/5GHz WiFi + Bluetooth Combination Module	Power: AC 120V/60Hz
Test Mode: Transmit by 3DH5 at channel 2480MHz	

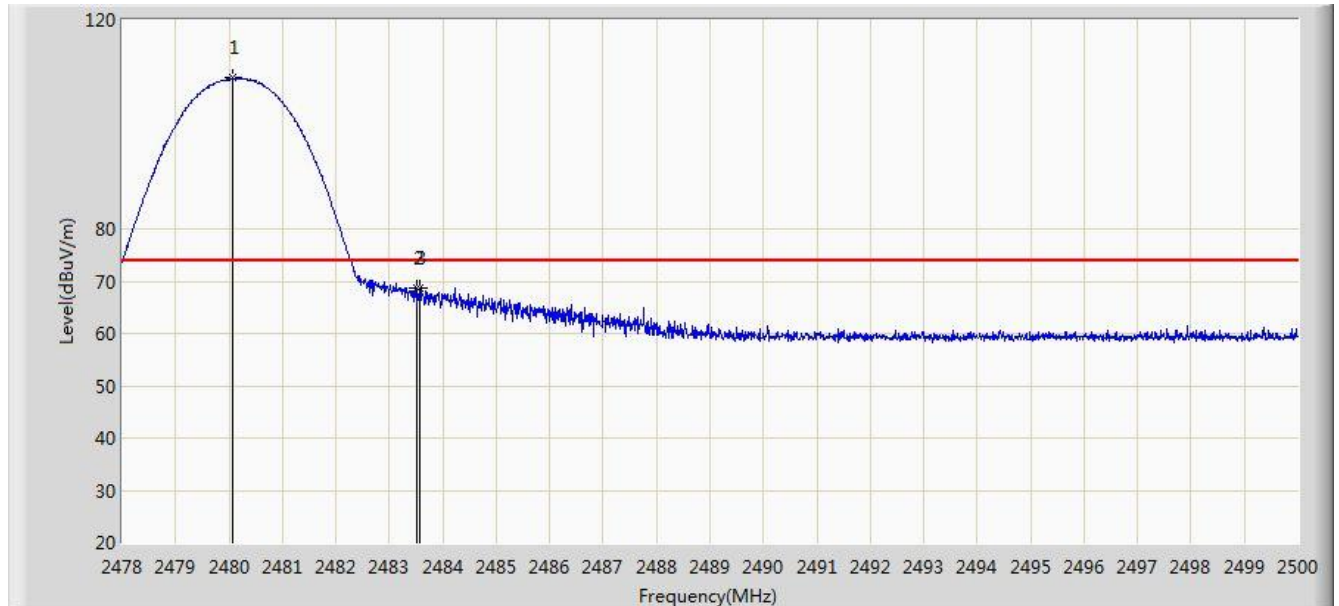


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2480.145	82.135	49.548	N/A	N/A	32.588	AV
2			2483.500	46.553	13.957	-7.447	54.000	32.596	AV
3			2499.241	46.574	13.936	-7.426	54.000	32.638	AV

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

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

Site: AC1	Time: 2018/12/21 - 18:00
Limit: FCC_Part15.209_RE(3m)	Engineer: Messiah Li
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 2.4GHz/5GHz WiFi + Bluetooth Combination Module	Power: AC 120V/60Hz
Test Mode: Transmit by 3DH5 at channel 2480MHz	

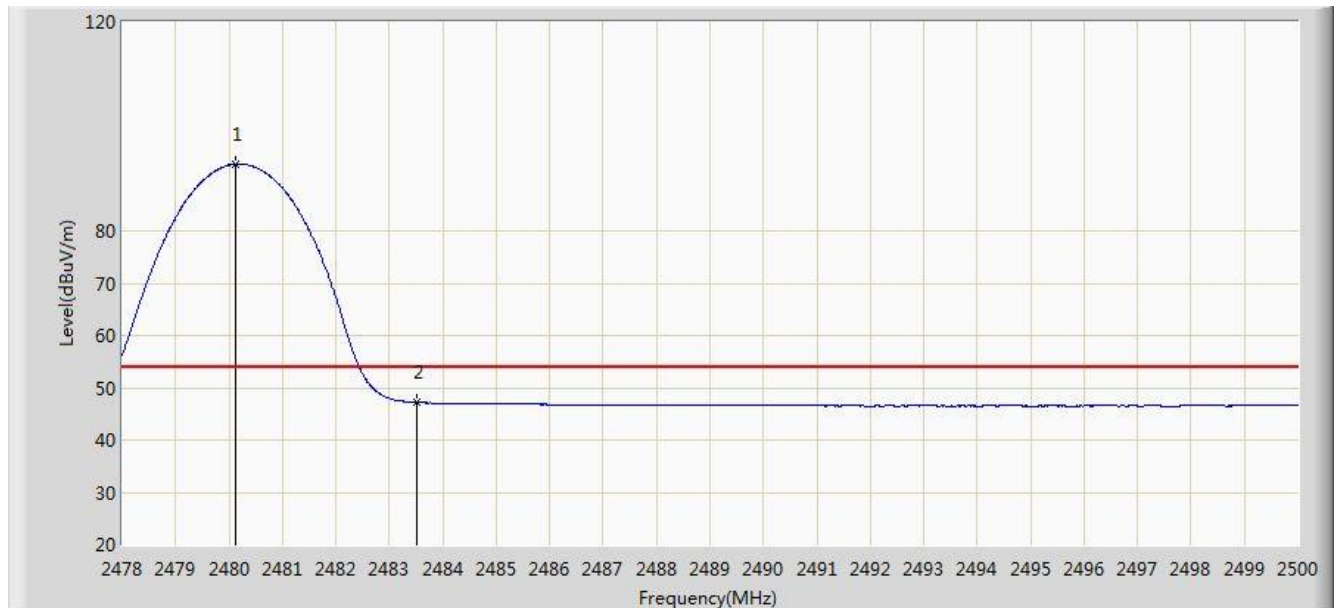


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2480.068	108.985	76.398	N/A	N/A	32.587	PK
2			2483.500	68.634	36.038	-5.366	74.000	32.596	PK
3			2483.577	68.636	36.040	-5.364	74.000	32.596	PK

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

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

Site: AC1	Time: 2018/12/21 - 18:02
Limit: FCC_Part15.209_RE(3m)	Engineer: Messiah Li
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: 2.4GHz/5GHz WiFi + Bluetooth Combination Module	Power: AC 120V/60Hz
Test Mode: Transmit by 3DH5 at channel 2480MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2480.112	92.783	60.196	N/A	N/A	32.587	AV
2			2483.500	47.198	14.602	-6.802	54.000	32.596	AV

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

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

7.11. AC Conducted Emissions Measurement

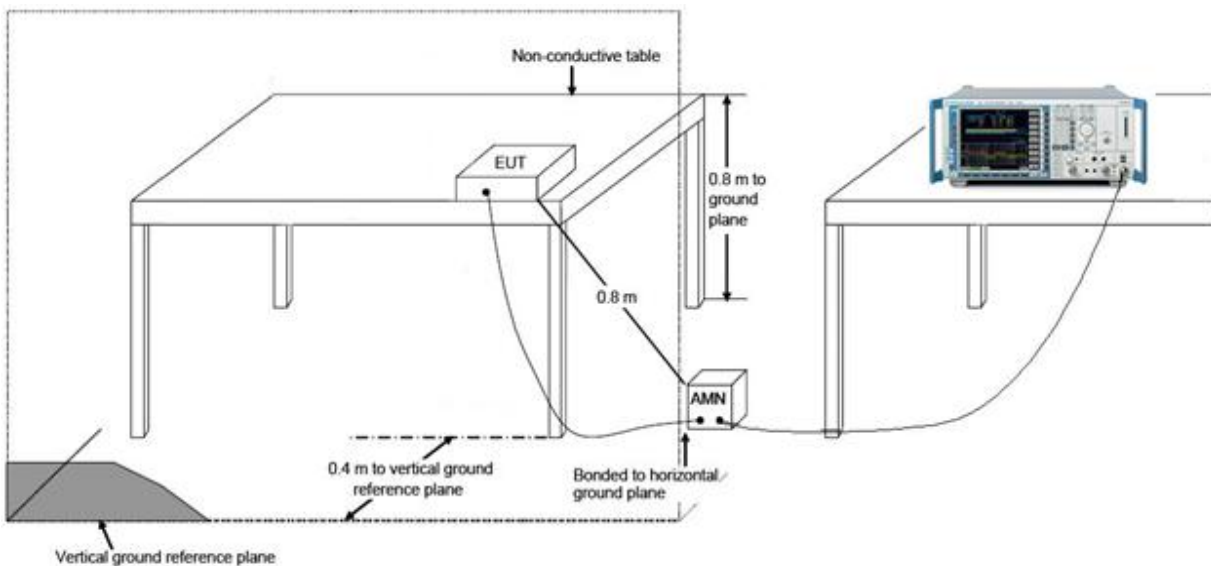
7.11.1. Test Limit

FCC Part 15 Subpart C Paragraph 15.207 Limits		
Frequency (MHz)	QP (dB μ V)	Average (dB μ V)
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Note 1: The lower limit shall apply at the transition frequencies.

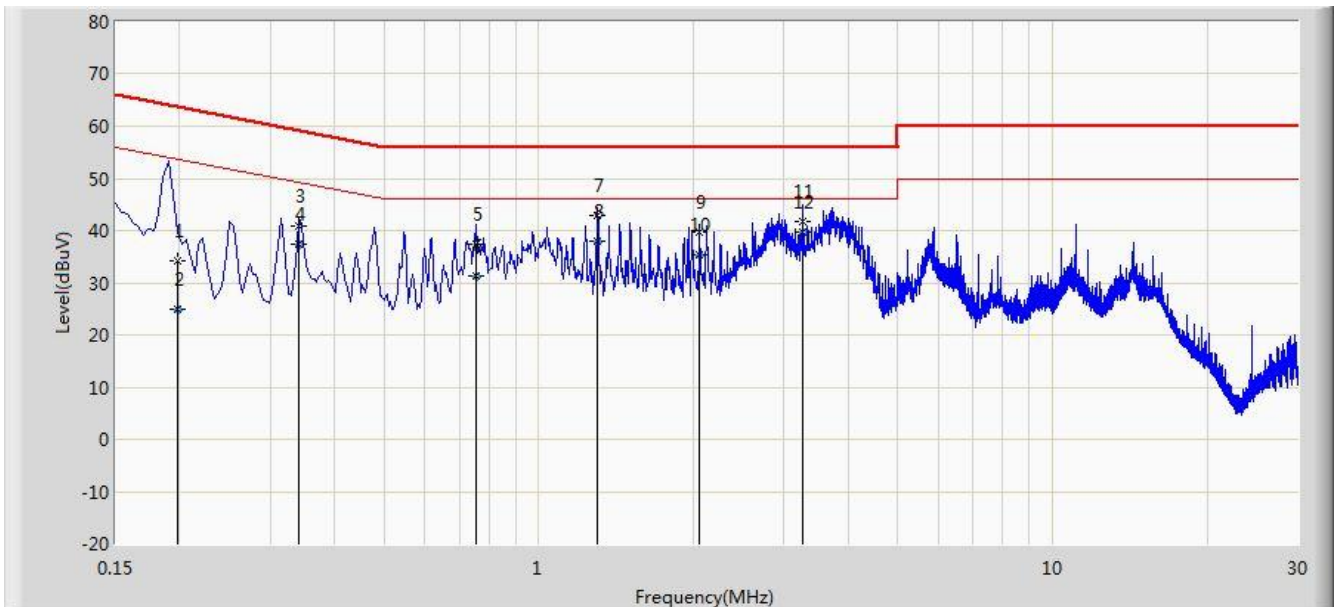
Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

7.11.2. Test Setup



7.11.3. Test Result

Site: SR2	Time: 2018/12/26 - 16:54
Limit: FCC_Part15.207_CE_AC Power_Class B	Engineer: Liz Yuan
Probe: ENV216_101683_Filter On	Polarity: Line
EUT: 2.4GHz/5GHz WiFi + Bluetooth Combination Module	Power: AC 120V/60Hz
Worst Case Mode: Transmit by DH5 at channel 2480MHz	

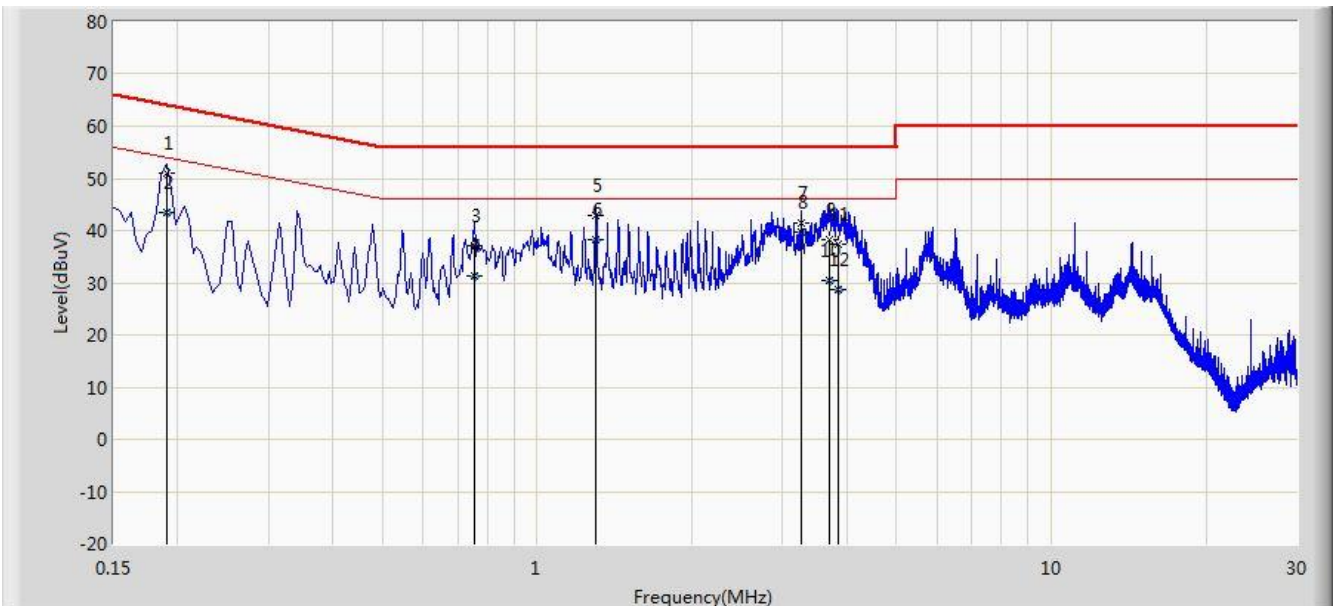


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.198	34.202	24.199	-29.478	63.680	10.004	QP
2			0.198	24.805	14.801	-28.875	53.680	10.004	AV
3			0.342	40.921	30.883	-18.234	59.155	10.038	QP
4			0.342	37.475	27.438	-11.679	49.155	10.038	AV
5			0.754	37.403	27.368	-18.597	56.000	10.035	QP
6			0.754	31.378	21.343	-14.622	46.000	10.035	AV
7			1.302	42.994	33.097	-13.006	56.000	9.897	QP
8			1.302	38.069	28.172	-7.931	46.000	9.897	AV
9			2.054	39.732	29.863	-16.268	56.000	9.869	QP
10			2.054	35.345	25.476	-10.655	46.000	9.869	AV
11			3.258	41.813	31.933	-14.187	56.000	9.881	QP
12		*	3.258	39.674	29.794	-6.326	46.000	9.881	AV

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

Factor (dB) = Cable Loss (dB) + LISN Factor (dB)

Site: SR2	Time: 2018/12/26 - 17:01
Limit: FCC_Part15.207_CE_AC Power_Class B	Engineer: Liz Yuan
Probe: ENV216_101683_Filter On	Polarity: Neutral
EUT: 2.4GHz/5GHz WiFi + Bluetooth Combination Module	Power: AC 120V/60Hz
Worst Case Mode: Transmit by DH5 at channel 2480MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1			0.190	51.141	41.114	-12.880	64.021	10.027	QP
2			0.190	43.555	33.527	-10.467	54.021	10.027	AV
3			0.754	37.093	27.048	-18.907	56.000	10.045	QP
4			0.754	31.378	21.333	-14.622	46.000	10.045	AV
5			1.302	42.944	33.046	-13.056	56.000	9.898	QP
6			1.302	38.129	28.231	-7.871	46.000	9.898	AV
7			3.258	41.479	31.593	-14.521	56.000	9.887	QP
8		*	3.258	39.685	29.799	-6.315	46.000	9.887	AV
9			3.702	38.353	28.403	-17.647	56.000	9.950	QP
10			3.702	30.324	20.374	-15.676	46.000	9.950	AV
11			3.838	37.493	27.527	-18.507	56.000	9.965	QP
12			3.838	28.734	18.768	-17.266	46.000	9.965	AV

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

Factor (dB) = Cable Loss (dB) + LISN Factor (dB)

8. CONCLUSION

The data collected relate only the item(s) tested and show that the **2.4GHz/5GHz WiFi + Bluetooth Combination Module** is in compliance with Part 15C of the FCC Rules.

The End

Appendix A - Test Setup Photograph

Refer to “1812RSU007-UT” file.

Appendix B - EUT Photograph

Refer to “1812RSU007-UE” file.