

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

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 (MHz)	Frequency (MHz)	Frequency (GHz)
0.009 - 0.110	240 - 285	9.0 - 9.2
2.1735 - 2.1905	322 - 335.4	9.3 - 9.5
3.020 - 3.026	399.9 - 410	10.6 - 12.7
4.125 - 4.128	608 - 614	13.25 - 13.4
4.17725 - 4.17775	960 - 1427	14.47 - 14.5
4.20725 - 4.20775	1435 - 1626.5	15.35 - 16.2
5.677 - 5.683	1645.5 - 1646.5	17.7 - 21.4
6.215 - 6.218	1660 - 1710	22.01 - 23.12
6.26775 - 6.26825	1718.8 -1722.2	23.6 - 24.0
6.31175 - 6.31225	2200 - 2300	31.2 - 31.8
8.291 - 8.294	2310 -2390	36.43 - 36.5
8.362 - 8.366	2655 - 2900	Above 38.6
8.37625 - 8.38675	3260 - 3267	--
8.41425 - 8.41475	3332 -3339	
12.29 - 12.293	334.5 - 3358	
12.51975 - 12.52025	3500 - 4400	
12.57675 - 12.57725	4500 - 5150	
13.36 -13.41	5350 - 5460	
16.42 - 16.423	7250 - 7750	
16.69475 - 16.69525	8025 - 8500	
16.80425 - 16.80475	--	
25.5 - 25.67		
37.5 - 38.25		
73 - 74.6		
74.8 - 75.2		
108 - 138		
156.52475 - 156.525225		
156.7 - 156.9		

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 [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

7.7.2. Test Procedure Used

ANSI C63.10 Section 6.3 (General Requirements)

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

7.7.3. Test Setting

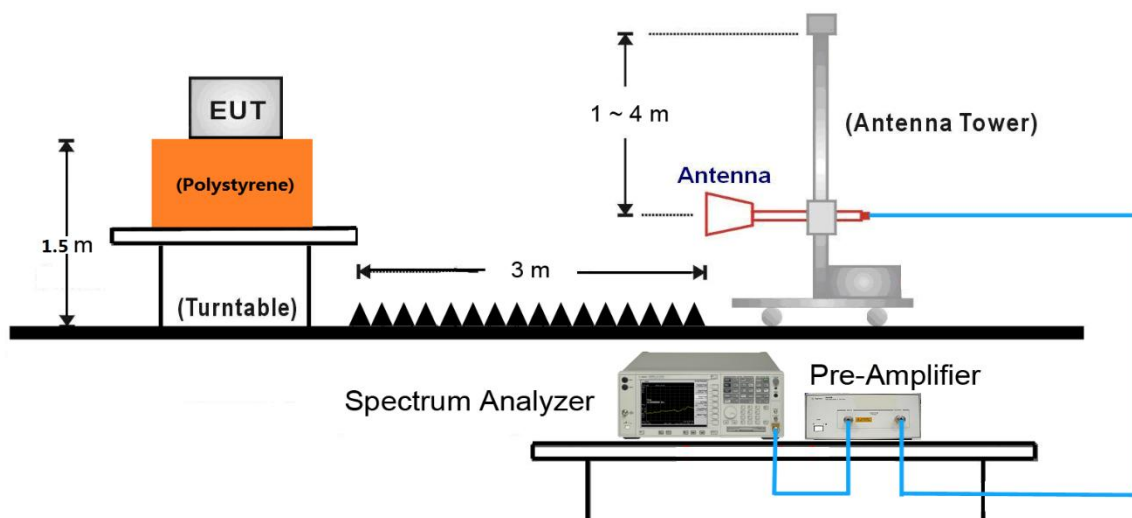
Peak Field Strength Measurements

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

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 = 3MHz
4. Detector = Power Average (RMS)
5. Number of sweep point = 2001 (Number of sweep points must be $\geq 2 \times \text{span} / \text{RBW}$)
6. Sweep time = auto
7. Trace (RMS) averaging was performed over at least 100 traces.

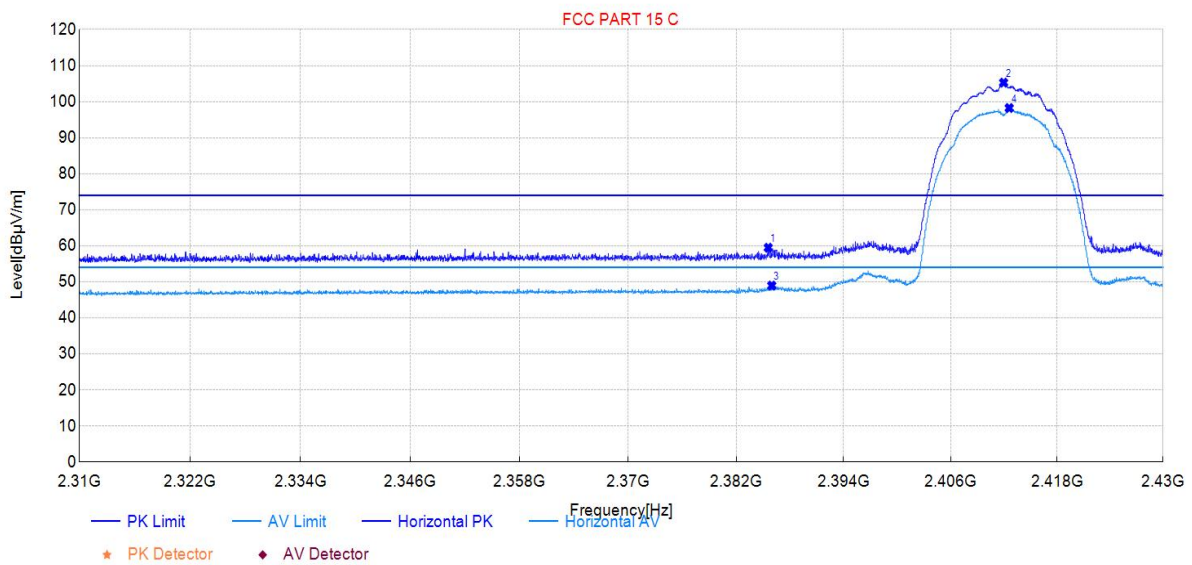
7.7.4. Test Setup



Note: This item was performed with the WIFI antenna connected.

7.7.5. Test Result

Project Information			
EUT:	IoT module	Model:	IOTD-2
Test Date:	2024-10-31	Voltage:	DC 24V
Environment:	Temp: 25.1°C; Humi:48%	Engineer:	Stone Zhang
Remark:	Transmit by 802.11b at Channel 2412MHz		

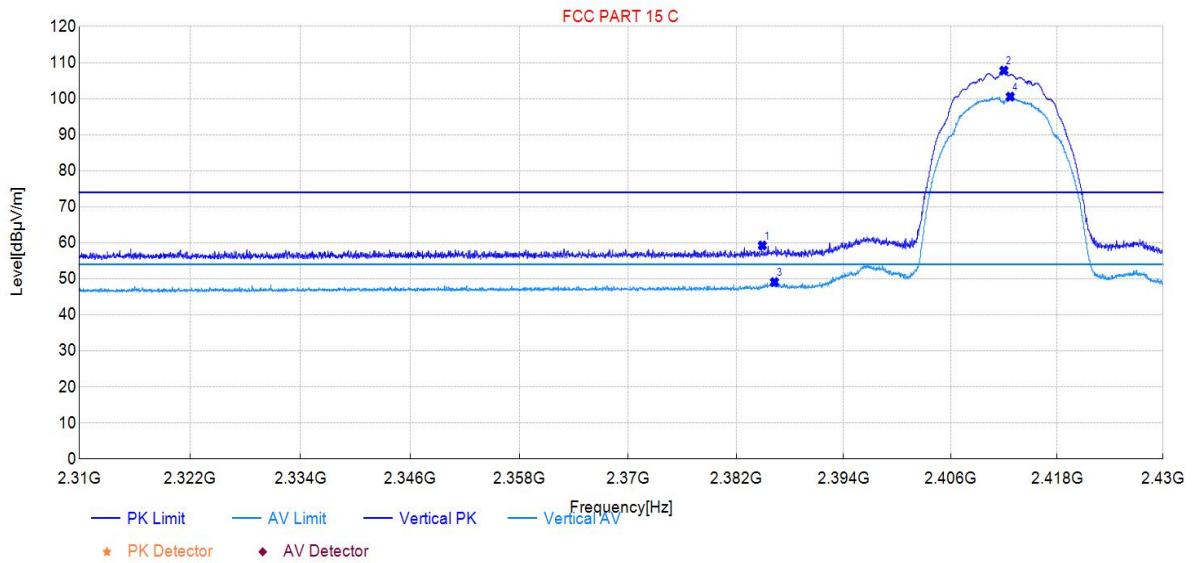


Suspected Data List											
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Pol	Verdict
1	2385.59	23.39	59.47	36.08	74.00	14.53	150	10	PK	Horizontal	PASS
2	2411.97	69.11	105.29	36.18	/	/	150	351	PK	Horizontal	PASS
3	2385.98	12.88	48.96	36.08	54.00	5.04	150	311	AV	Horizontal	PASS
4	2412.60	62.06	98.24	36.18	/	/	150	26	AV	Horizontal	PASS

Note:

(1) Level=Reading + Factor

(2) Margin=Limit-Level



Suspected Data List

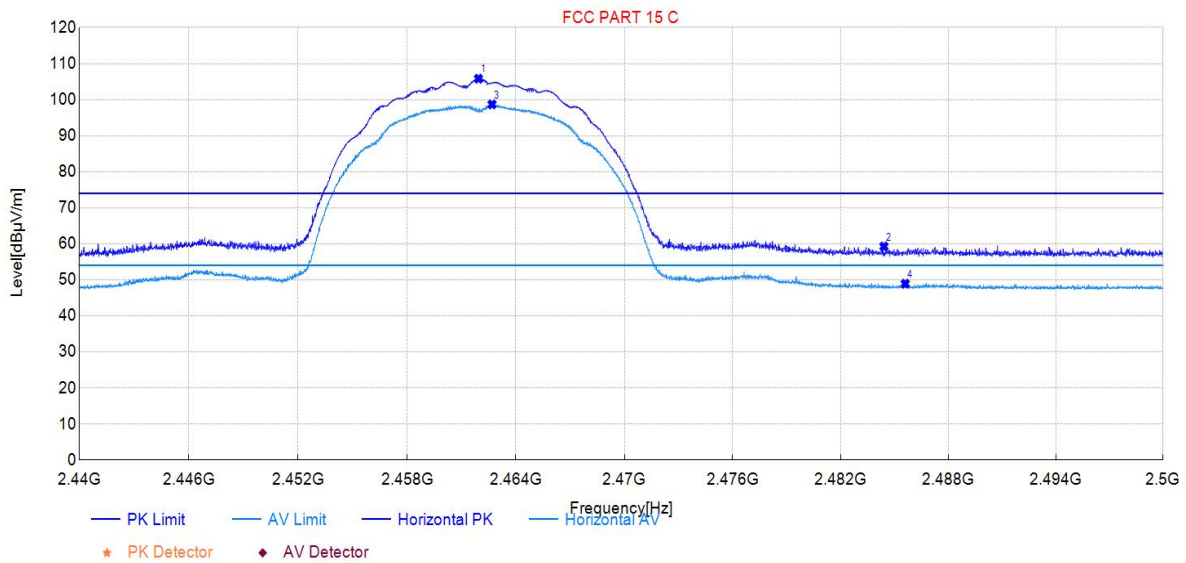
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Pol	Verdict
1	2384.93	23.34	59.27	35.93	74.00	14.73	150	251	PK	Vertical	PASS
2	2412.00	71.80	107.80	36.00	/	/	150	289	PK	Vertical	PASS
3	2386.28	13.17	49.11	35.94	54.00	4.89	150	281	AV	Vertical	PASS
4	2412.72	64.56	100.56	36.00	/	/	150	289	AV	Vertical	PASS

Note:

(1) Level=Reading + Factor

(2) Margin=Limit-Level

Project Information			
EUT:	IoT module	Model:	IOTD-2
Test Date:	2024-10-31	Voltage:	DC 24V
Environment:	Temp: 25.1°C; Humi:48%	Engineer:	Stone Zhang
Remark:	Transmit by 802.11b at Channel 2462MHz		

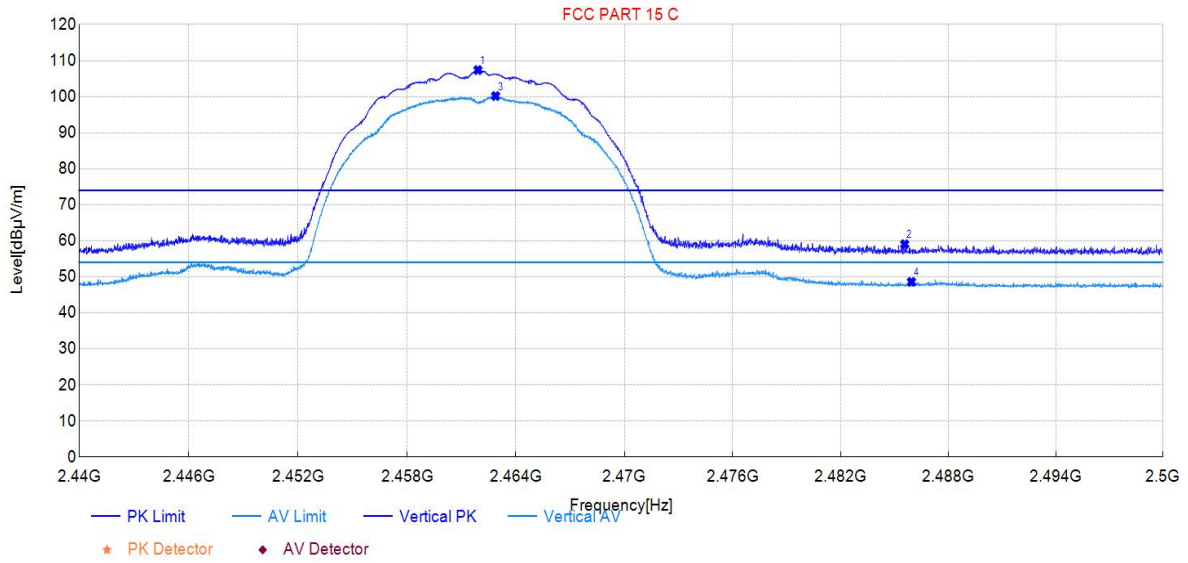


Suspected Data List											
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Pol	Verdict
1	2461.94	69.51	105.82	36.31	/	/	150	352	PK	Horizontal	PASS
2	2484.41	22.91	59.27	36.36	74.00	14.73	150	0	PK	Horizontal	PASS
3	2462.69	62.37	98.68	36.31	/	/	150	352	AV	Horizontal	PASS
4	2485.60	12.56	48.93	36.37	54.00	5.07	150	310	AV	Horizontal	PASS

Note:

(1) Level=Reading + Factor

(2) Margin=Limit-Level



Suspected Data List

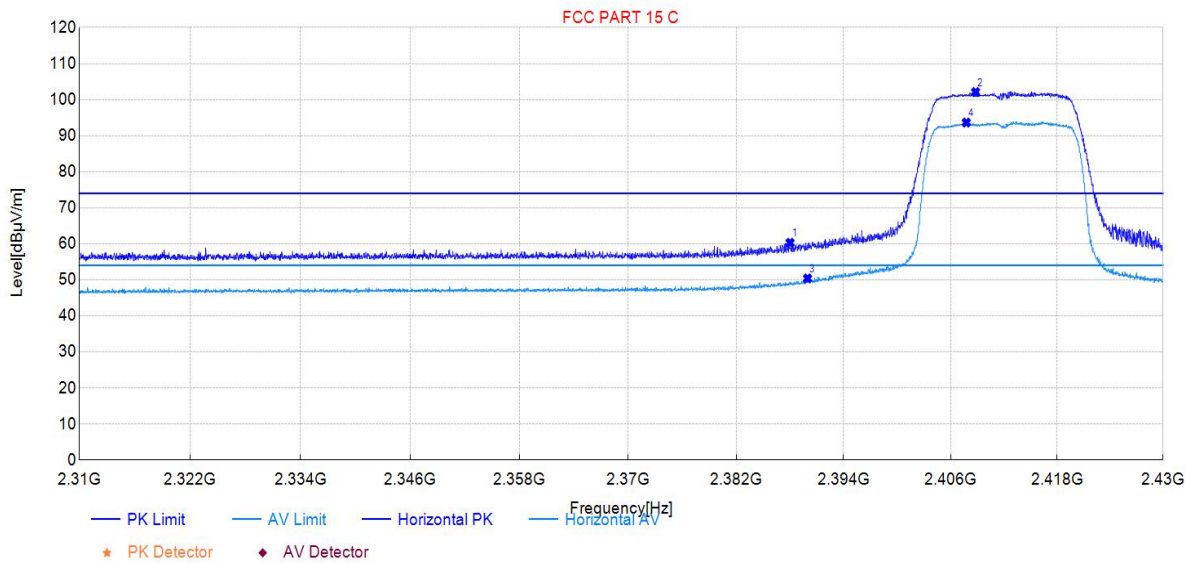
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Pol	Verdict
1	2461.91	71.32	107.38	36.06	/	/	150	289	PK	Vertical	PASS
2	2485.57	22.96	59.05	36.09	74.00	14.95	150	359	PK	Vertical	PASS
3	2462.88	64.11	100.17	36.06	/	/	150	289	AV	Vertical	PASS
4	2485.94	12.52	48.61	36.09	54.00	5.39	150	281	AV	Vertical	PASS

Note:

(1) Level=Reading + Factor

(2) Margin=Limit-Level

Project Information			
EUT:	IoT module	Model:	IOTD-2
Test Date:	2024-10-31	Voltage:	DC 24V
Environment:	Temp: 25.1°C; Humi:48%	Engineer:	Stone Zhang
Remark:	Transmit by 802.11g at Channel 2412MHz		

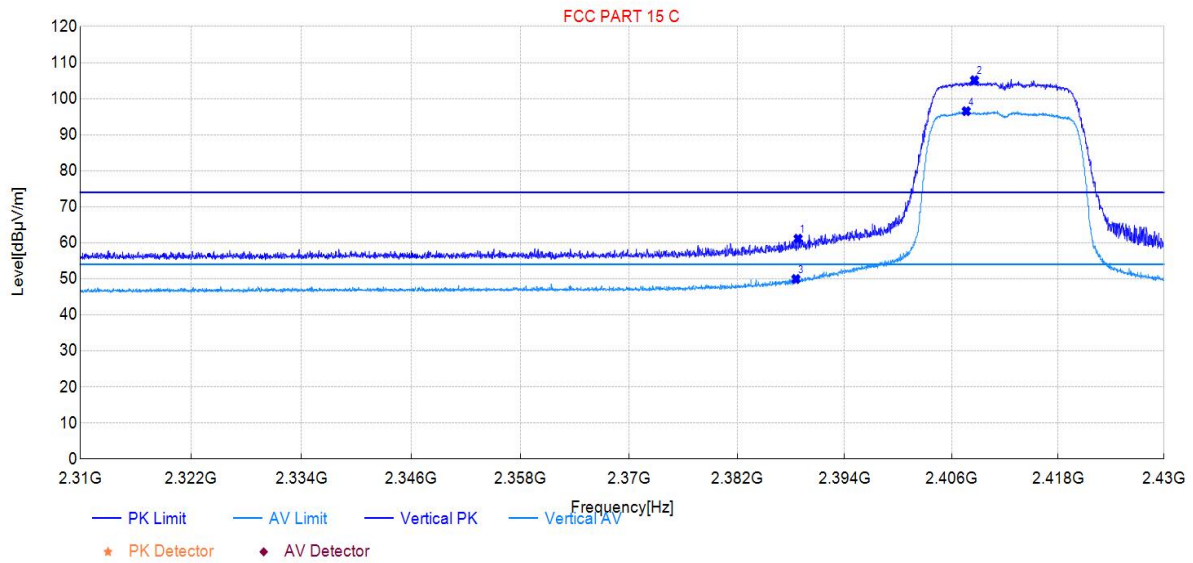


Suspected Data List											
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Pol	Verdict
1	2388.02	24.20	60.29	36.09	74.00	13.71	150	360	PK	Horizontal	PASS
2	2408.81	65.95	102.12	36.17	/	/	150	310	PK	Horizontal	PASS
3	2389.97	14.31	50.41	36.10	54.00	3.59	150	305	AV	Horizontal	PASS
4	2407.76	57.48	93.65	36.17	/	/	150	310	AV	Horizontal	PASS

Note:

(1) Level=Reading + Factor

(2) Margin=Limit-Level



Suspected Data List

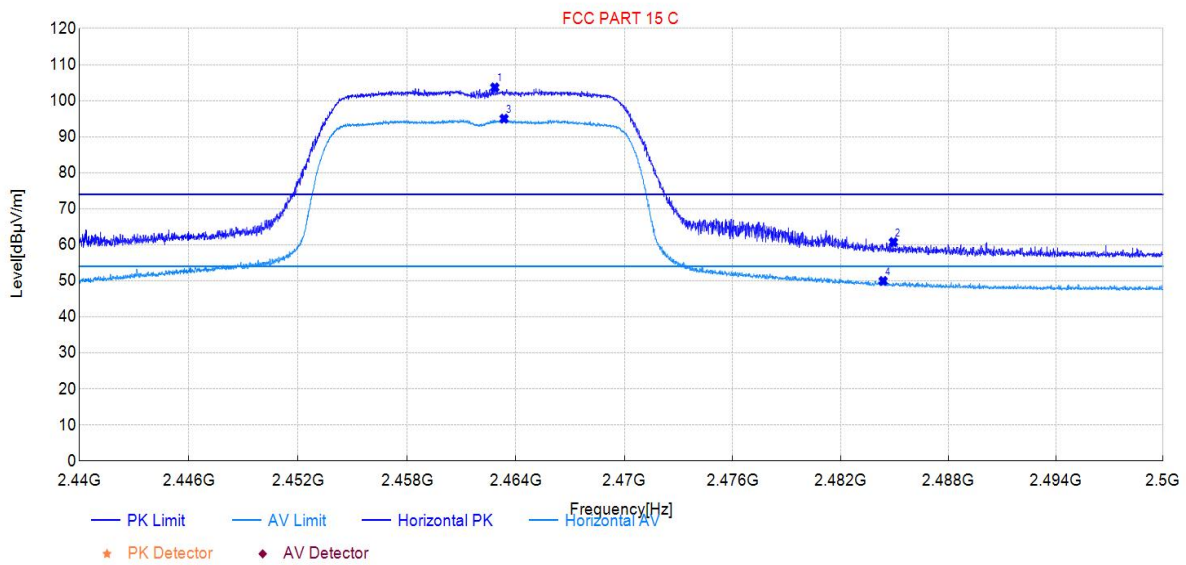
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Pol	Verdict
1	2388.80	25.20	61.15	35.95	74.00	12.85	150	296	PK	Vertical	PASS
2	2408.57	69.11	105.11	36.00	/	/	150	291	PK	Vertical	PASS
3	2388.56	14.01	49.96	35.95	54.00	4.04	150	275	AV	Vertical	PASS
4	2407.64	60.53	96.53	36.00	/	/	150	288	AV	Vertical	PASS

Note:

(1) Level=Reading + Factor

(2) Margin=Limit-Level

Project Information			
EUT:	IoT module	Model:	IOTD-2
Test Date:	2024-10-31	Voltage:	DC 24V
Environment:	Temp: 25.1°C; Humi:48%	Engineer:	Stone Zhang
Remark:	Transmit by 802.11g at Channel 2462MHz		

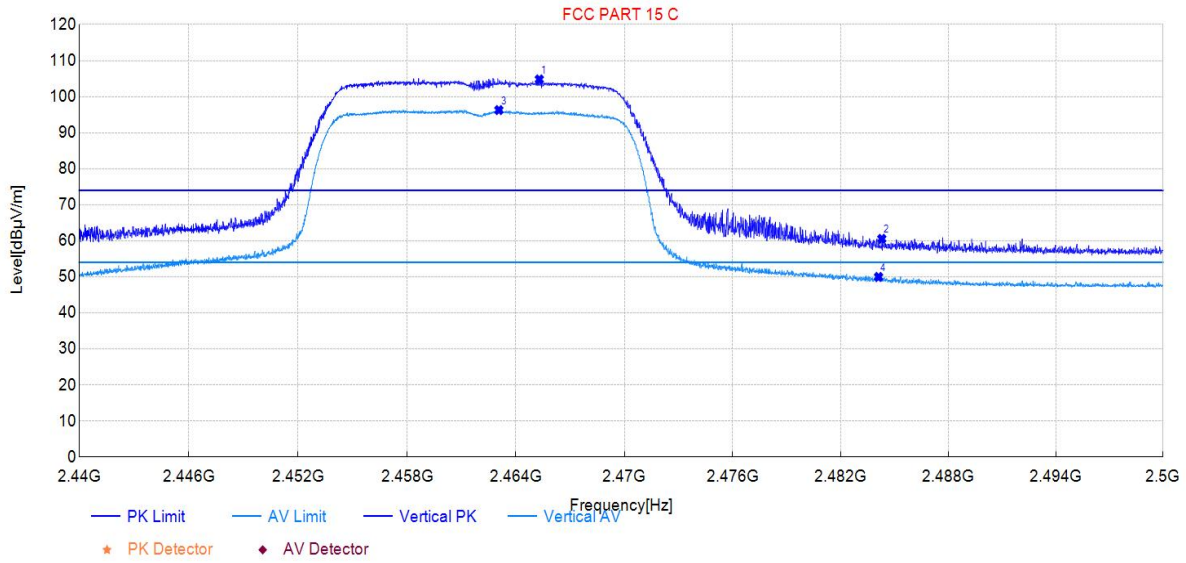


Suspected Data List											
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Pol	Verdict
1	2462.84	67.36	103.67	36.31	/	/	150	352	PK	Horizontal	PASS
2	2484.94	24.38	60.74	36.36	74.00	13.26	150	0	PK	Horizontal	PASS
3	2463.35	58.70	95.01	36.31	/	/	150	352	AV	Horizontal	PASS
4	2484.37	13.60	49.96	36.36	54.00	4.04	150	28	AV	Horizontal	PASS

Note:

(1) Level=Reading + Factor

(2) Margin=Limit-Level



Suspected Data List

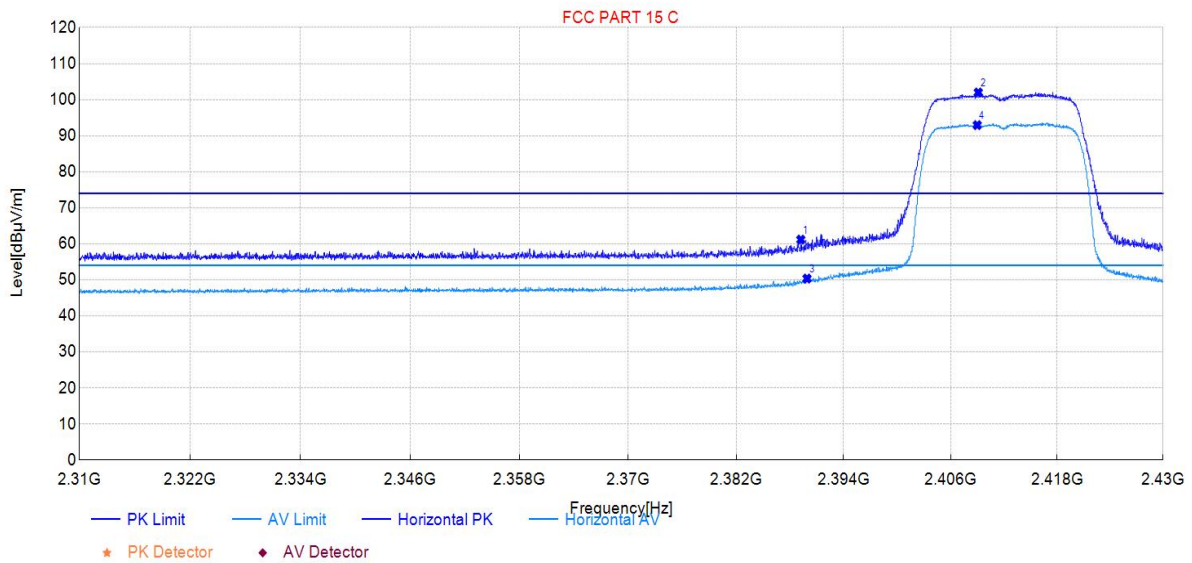
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Pol	Verdict
1	2465.30	68.73	104.80	36.07	/	/	150	286	PK	Vertical	PASS
2	2484.29	24.48	60.56	36.08	74.00	13.44	150	290	PK	Vertical	PASS
3	2463.06	60.22	96.28	36.06	/	/	150	290	AV	Vertical	PASS
4	2484.11	13.90	49.98	36.08	54.00	4.02	150	281	AV	Vertical	PASS

Note:

(1) Level=Reading + Factor

(2) Margin=Limit-Level

Project Information			
EUT:	IoT module	Model:	IOTD-2
Test Date:	2024-10-31	Voltage:	DC 24V
Environment:	Temp: 25.1°C; Humi:48%	Engineer:	Stone Zhang
Remark:	Transmit by 802.11n-HT20 at Channel 2412MHz		

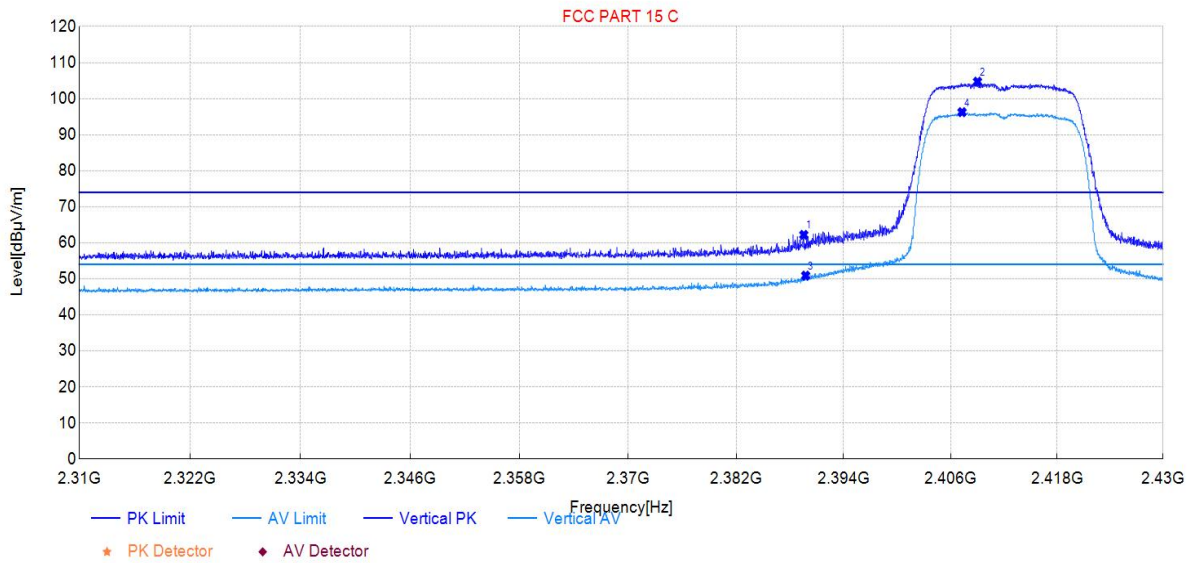


Suspected Data List											
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Pol	Verdict
1	2389.22	25.08	61.17	36.09	74.00	12.83	150	1	PK	Horizontal	PASS
2	2409.11	65.83	102.00	36.17	/	/	150	315	PK	Horizontal	PASS
3	2389.91	14.26	50.36	36.10	54.00	3.64	150	310	AV	Horizontal	PASS
4	2408.99	56.77	92.94	36.17	/	/	150	2	AV	Horizontal	PASS

Note:

(1) Level=Reading + Factor

(2) Margin=Limit-Level



Suspected Data List

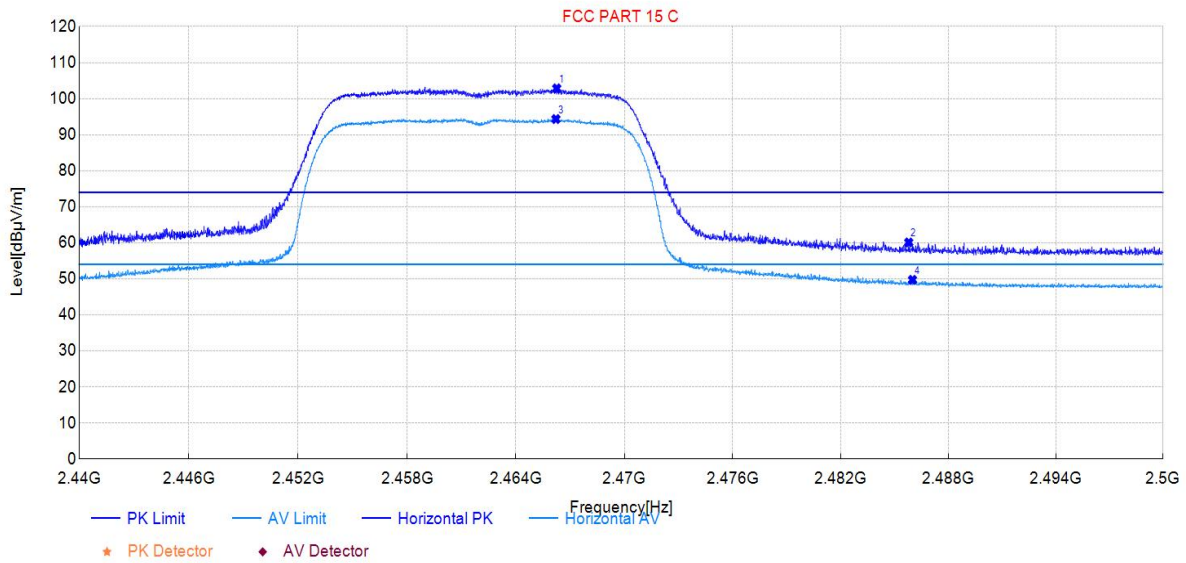
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Pol	Verdict
1	2389.55	26.26	62.21	35.95	74.00	11.79	150	278	PK	Vertical	PASS
2	2409.02	68.72	104.72	36.00	/	/	150	281	PK	Vertical	PASS
3	2389.76	14.95	50.90	35.95	54.00	3.10	150	291	AV	Vertical	PASS
4	2407.28	60.25	96.25	36.00	/	/	150	286	AV	Vertical	PASS

Note:

(1) Level=Reading + Factor

(2) Margin=Limit-Level

Project Information			
EUT:	IoT module	Model:	IOTD-2
Test Date:	2024-10-31	Voltage:	DC 24V
Environment:	Temp: 25.1°C; Humi:48%	Engineer:	Stone Zhang
Remark:	Transmit by 802.11n-HT20 at Channel 2462MHz		

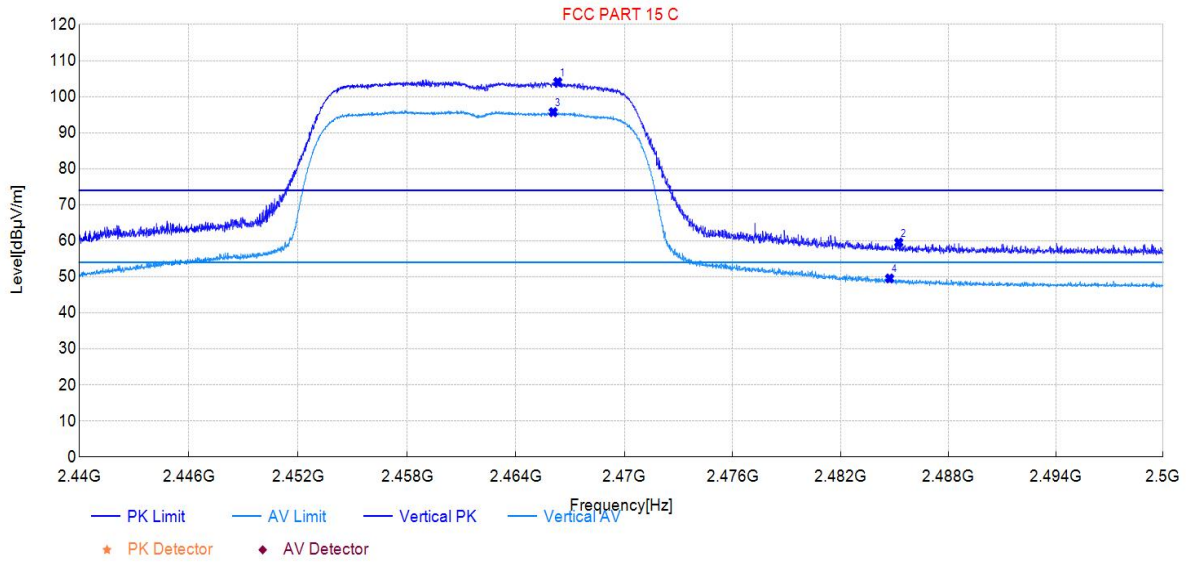


Suspected Data List											
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Pol	Verdict
1	2466.26	66.53	102.85	36.32	/	/	150	352	PK	Horizontal	PASS
2	2485.79	23.73	60.10	36.37	74.00	13.90	150	356	PK	Horizontal	PASS
3	2466.21	58.02	94.34	36.32	/	/	150	352	AV	Horizontal	PASS
4	2486.00	13.35	49.72	36.37	54.00	4.28	150	4	AV	Horizontal	PASS

Note:

(1) Level=Reading + Factor

(2) Margin=Limit-Level



Suspected Data List

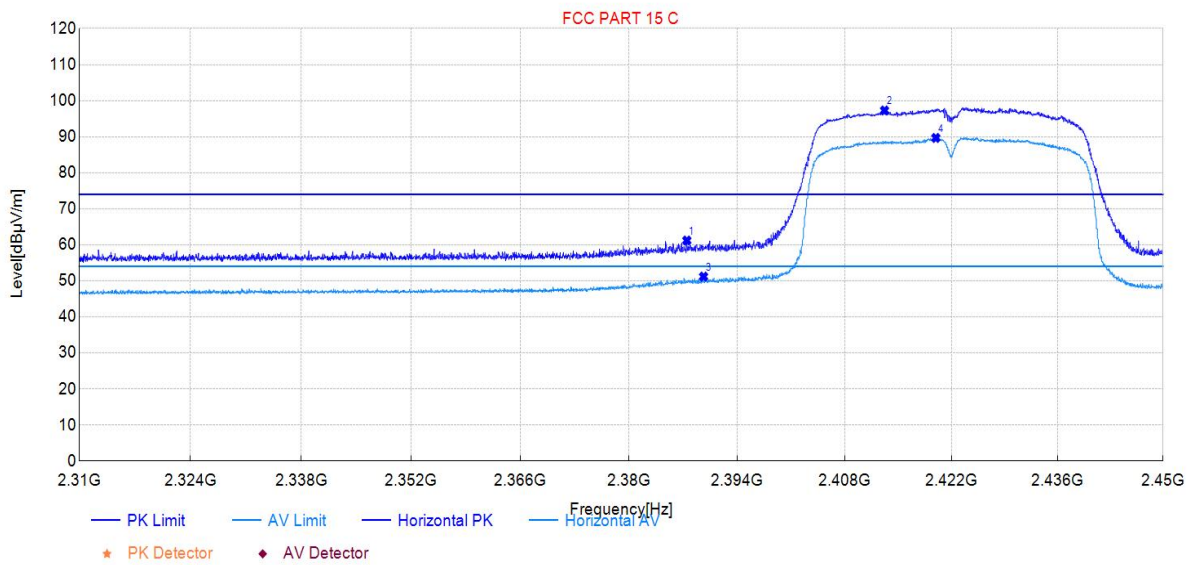
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Pol	Verdict
1	2466.32	68.00	104.07	36.07	/	/	150	285	PK	Vertical	PASS
2	2485.24	23.44	59.53	36.09	74.00	14.47	150	281	PK	Vertical	PASS
3	2466.06	59.63	95.70	36.07	/	/	150	290	AV	Vertical	PASS
4	2484.73	13.48	49.56	36.08	54.00	4.44	150	290	AV	Vertical	PASS

Note:

(1) Level=Reading + Factor

(2) Margin=Limit-Level

Project Information			
EUT:	IoT module	Model:	IOTD-2
Test Date:	2024-10-31	Voltage:	DC 24V
Environment:	Temp: 25.1°C; Humi:48%	Engineer:	Stone Zhang
Remark:	Transmit by 802.11n-HT40 at Channel 2422MHz		

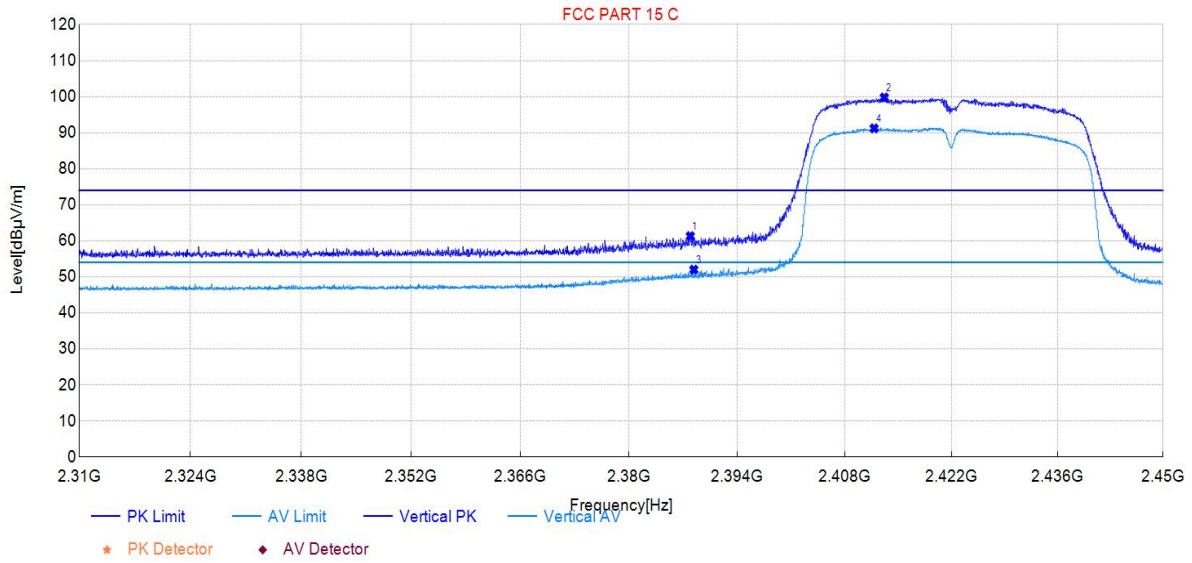


Suspected Data List											
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Pol	Verdict
1	2387.47	25.10	61.19	36.09	74.00	12.81	150	360	PK	Horizontal	PASS
2	2413.24	61.10	97.28	36.18	/	/	150	352	PK	Horizontal	PASS
3	2389.64	15.08	51.18	36.10	54.00	2.82	150	0	AV	Horizontal	PASS
4	2419.96	53.46	89.66	36.20	/	/	150	352	AV	Horizontal	PASS

Note:

(1) Level=Reading + Factor

(2) Margin=Limit-Level



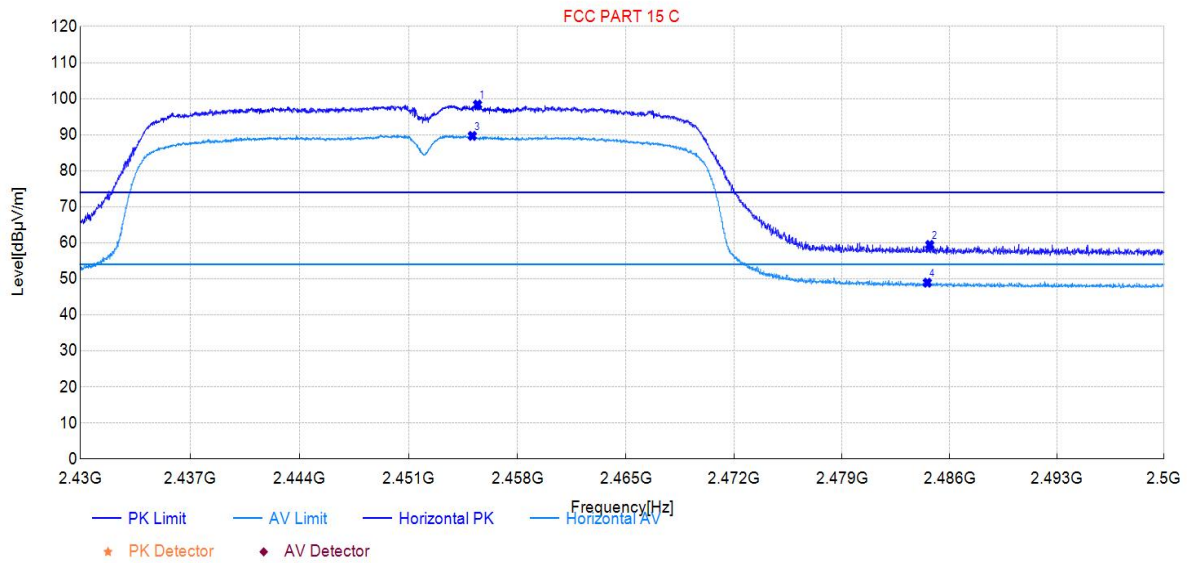
Suspected Data List											
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Pol	Verdict
1	2387.93	25.34	61.29	35.95	74.00	12.71	150	277	PK	Vertical	PASS
2	2413.21	63.77	99.77	36.00	/	/	150	286	PK	Vertical	PASS
3	2388.38	16.04	51.99	35.95	54.00	2.01	150	282	AV	Vertical	PASS
4	2411.88	55.20	91.20	36.00	/	/	150	290	AV	Vertical	PASS

Note:

(1) Level=Reading + Factor

(2) Margin=Limit-Level

Project Information			
EUT:	IoT module	Model:	IOTD-2
Test Date:	2024-10-31	Voltage:	DC 24V
Environment:	Temp: 25.1°C; Humi:48%	Engineer:	Stone Zhang
Remark:	Transmit by 802.11n-HT40 at Channel 2452MHz		

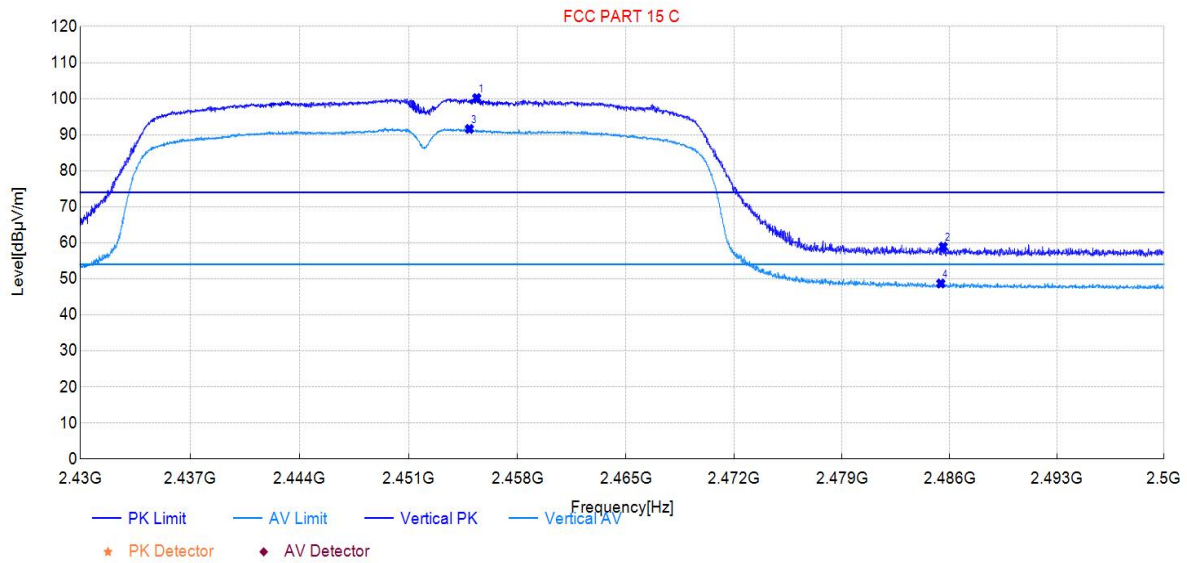


Suspected Data List											
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Pol	Verdict
1	2455.43	62.07	98.36	36.29	/	/	150	352	PK	Horizontal	PASS
2	2484.70	23.06	59.42	36.36	74.00	14.58	150	301	PK	Horizontal	PASS
3	2455.10	53.38	89.67	36.29	/	/	150	352	AV	Horizontal	PASS
4	2484.54	12.57	48.93	36.36	54.00	5.07	150	0	AV	Horizontal	PASS

Note:

(1) Level=Reading + Factor

(2) Margin=Limit-Level



Suspected Data List											
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Pol	Verdict
1	2455.38	64.10	100.16	36.06	/	/	150	286	PK	Vertical	PASS
2	2485.58	22.84	58.93	36.09	74.00	15.07	150	278	PK	Vertical	PASS
3	2454.91	55.55	91.60	36.05	/	/	150	290	AV	Vertical	PASS
4	2485.42	12.62	48.71	36.09	54.00	5.29	150	311	AV	Vertical	PASS

Note:

(1) Level=Reading + Factor

(2) Margin=Limit-Level

7.8. AC Conducted Emissions Measurement

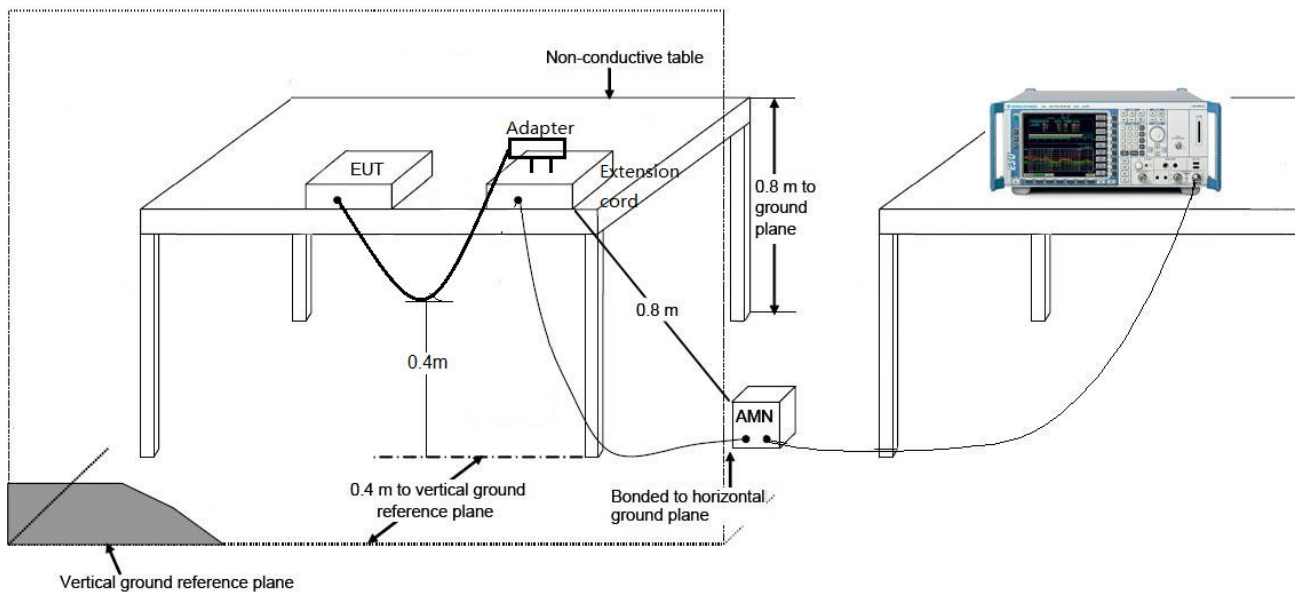
7.8.1. Test Limit

FCC Part 15 Subpart C Paragraph 15.207 Limits		
Frequency (MHz)	QP (dBuV)	AV (dBuV)
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.

7.8.2. Test Setup



7.8.3. Test Result

The EUT is DC supply, this item only for the EUT is designed to be connected to the public utility (AC) power line. Not applicable.

8. CONCLUSION

The data collected relate only the item(s) tested and show that the **IoT module** is compliance with Part 15C of the FCC Rules.

_____ The End _____