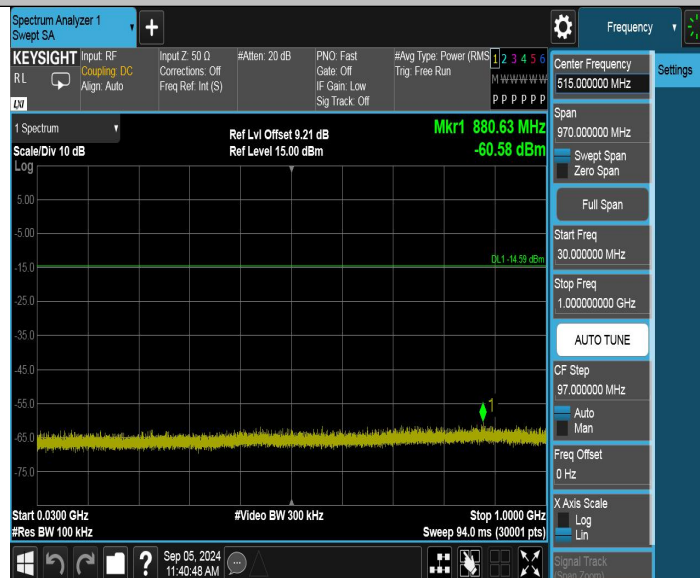


Test Graphs of Out-of-Band Emissions

BLE_1M_Ant1_2402_0~Reference



BLE_1M_Ant1_2402_30~1000



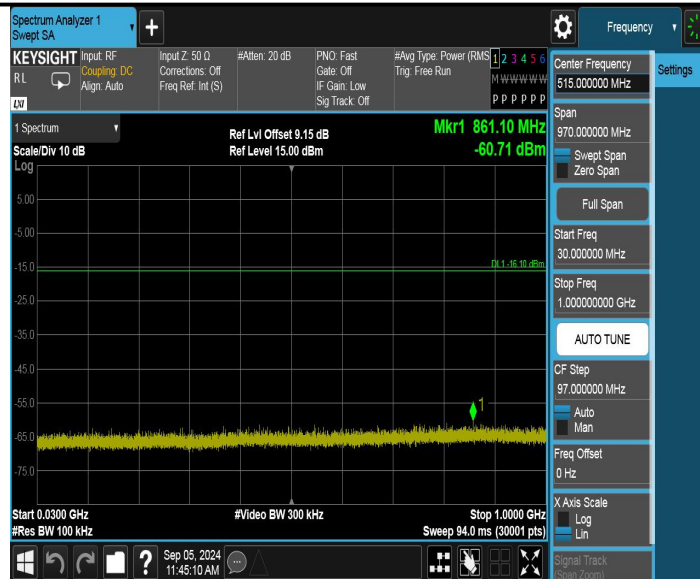
BLE_1M_Ant1_2402_1000~26500



BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



BLE_1M_Ant1_2440_1000~26500



BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



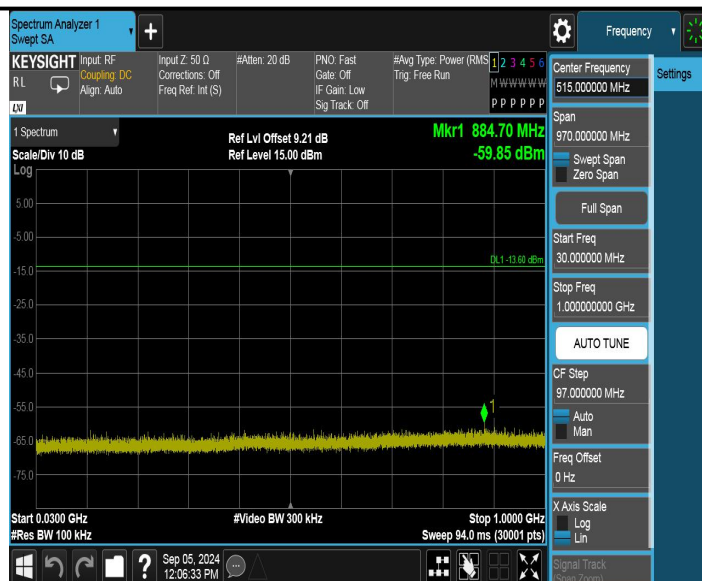
BLE_1M_Ant1_2480_1000~26500



BLE_2M_Ant1_2402_0~Reference



BLE_2M_Ant1_2402_30~1000



BLE_2M_Ant1_2402_1000~26500



BLE_2M_Ant1_2440_0~Reference



BLE_2M_Ant1_2440_30~1000



BLE_2M_Ant1_2440_1000~26500



BLE_2M_Ant1_2480_0~Reference



BLE_2M_Ant1_2480_30~1000



7.6. Radiated Spurious Emission Measurement

7.6.1. 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

7.6.2. Test Procedure Used

ANSI C63.10-2013 – Section 6.6.4.3

7.6.3. 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

Table 1 - RBW as a function of frequency

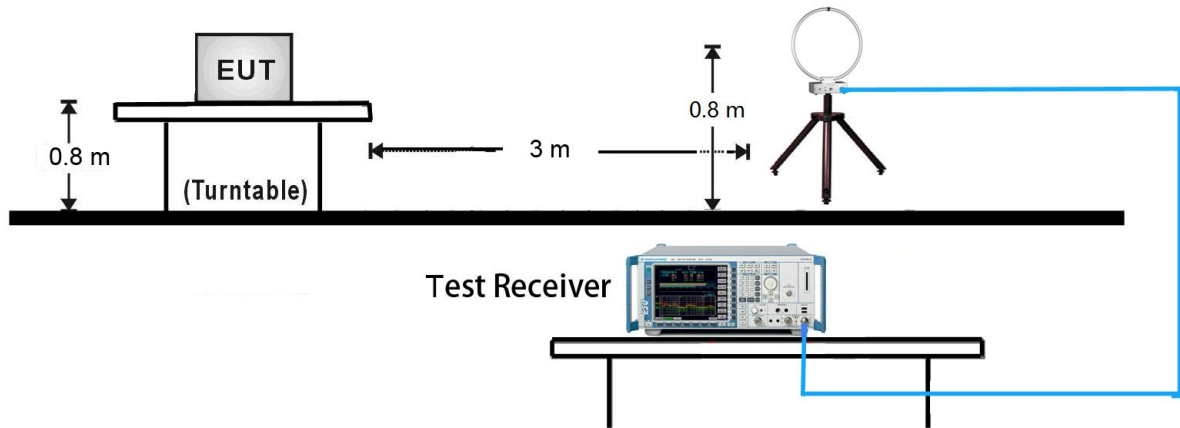
Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000 MHz	1 MHz

Average Field Strength Measurements

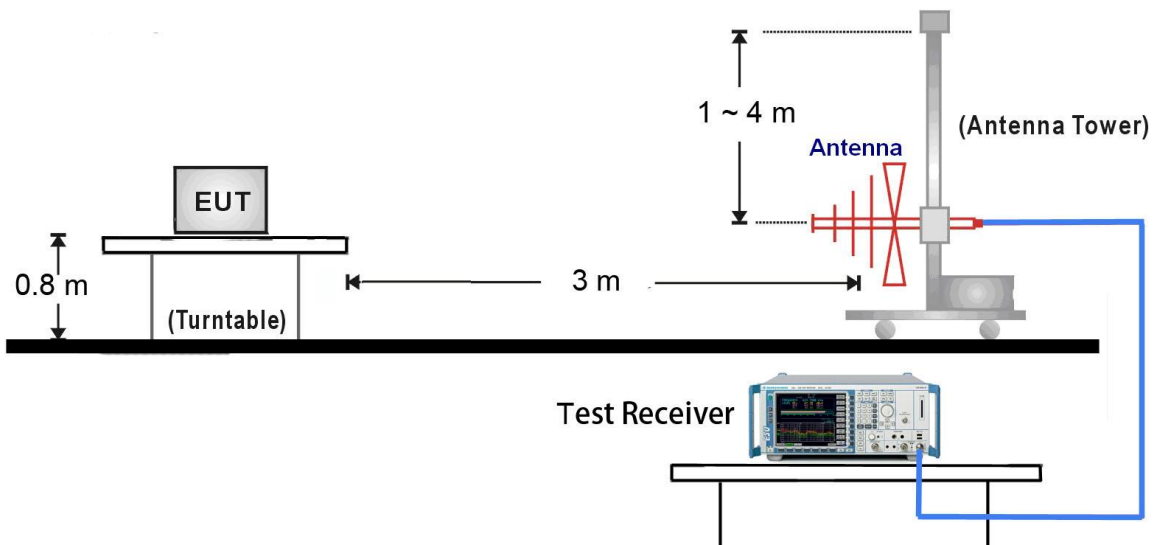
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = Power Average (RMS)
5. Number of sweep point = 2001 (Number of sweep points must be $\geq 2 \times \text{span} / \text{RBW}$)
6. Sweep time = auto
7. Trace (RMS) averaging was performed over at least 100 traces.

7.6.4. Test Setup

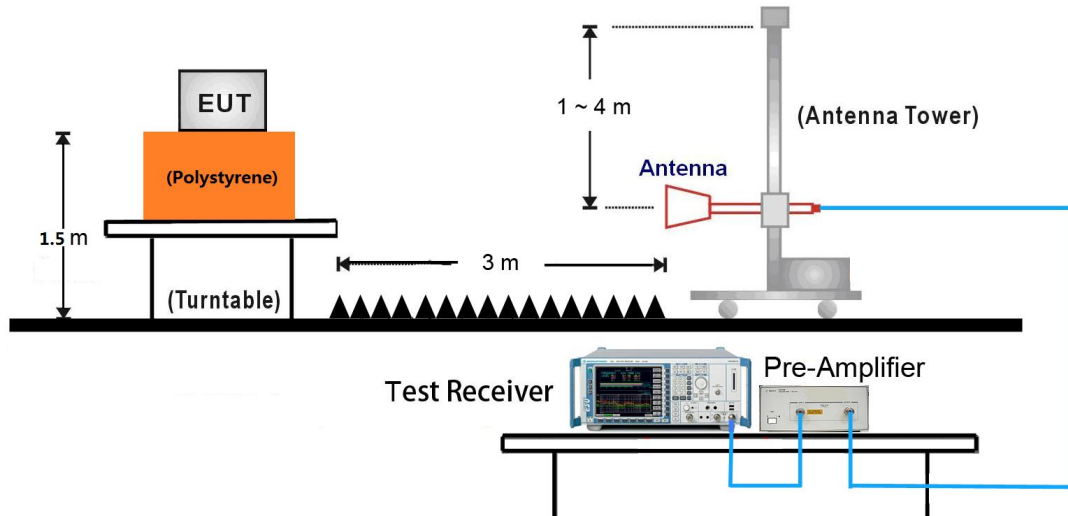
9kHz ~ 30MHz Test Setup:



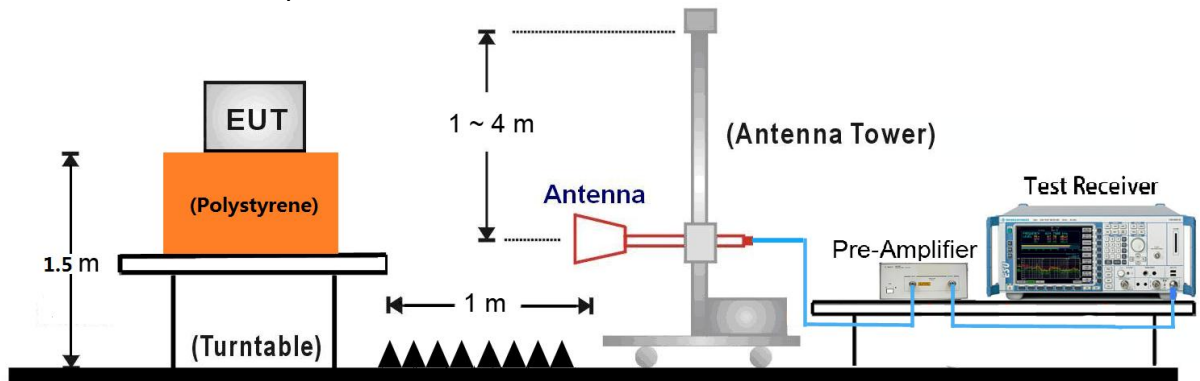
30MHz ~ 1GHz Test Setup:



1GHz ~ 18GHz Test Setup:



18GHz ~ 25GHz Test Setup:



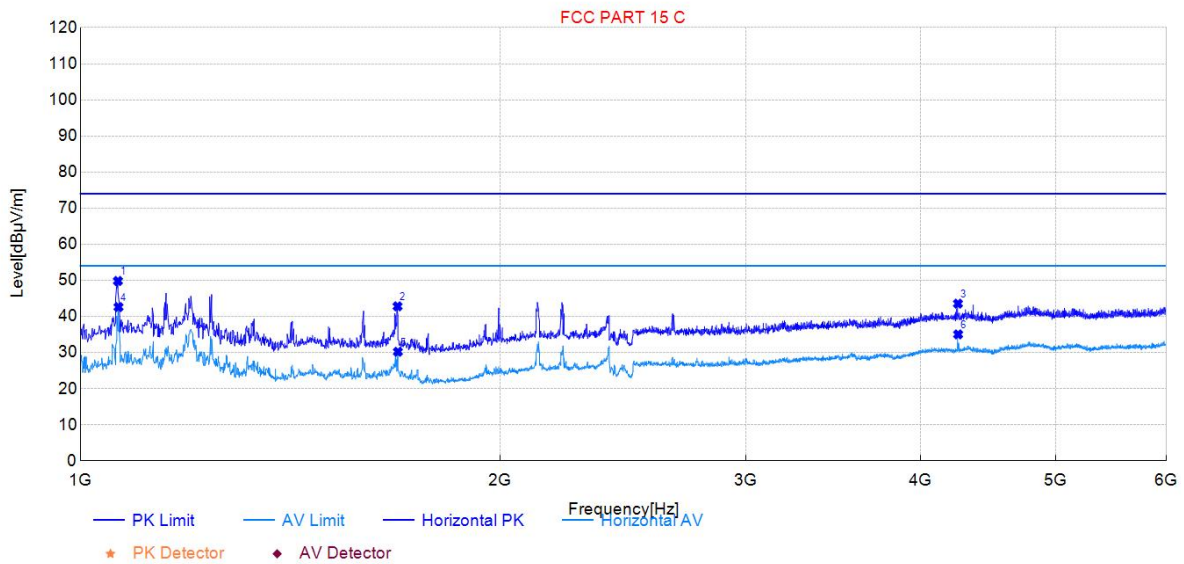
7.6.5. Test Result

The worst case of Radiated Emission above 1GHz:

1GHz – 6GHz Test Data

EUT:	2.4GHz Wi-Fi/BLE Module	Polarity:	Horizontal
Model:	EMC6270-E	S/N:	/
Mode:	Transmit at BLE_1M Channel 00	Voltage:	DC3.3V
Environment:	Temp: 23°C; Humi:50%	Engineer:	Chuang Li

Test Graph

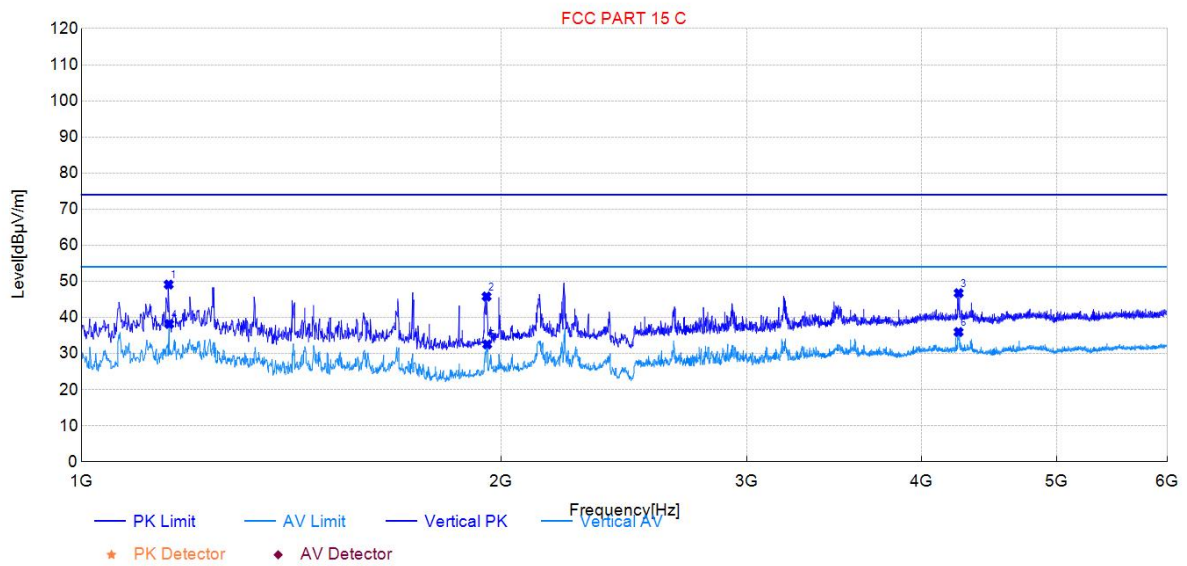


Frequency (MHz)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
1064.00	49.83	-24.00	74.00	24.17	PK	Horizontal
1688.00	42.80	-20.42	74.00	31.20	PK	Horizontal
4257.00	43.55	-7.77	74.00	30.45	PK	Horizontal
1065.00	42.60	-23.99	54.00	11.40	AV	Horizontal
1689.00	30.22	-20.42	54.00	23.78	AV	Horizontal
4258.00	35.03	-7.77	54.00	18.97	AV	Horizontal

Note 1: 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 ~ 26.5GHz), therefore no data appear in the report.

EUT:	2.4GHz Wi-Fi/BLE Module	Polarity:	Horizontal
Model:	EMC6270-E	S/N:	/
Mode:	Transmit at BLE_1M Channel 00	Voltage:	DC3.3V
Environment:	Temp: 23°C; Humi:50%	Engineer:	Chuang Li

Test Graph



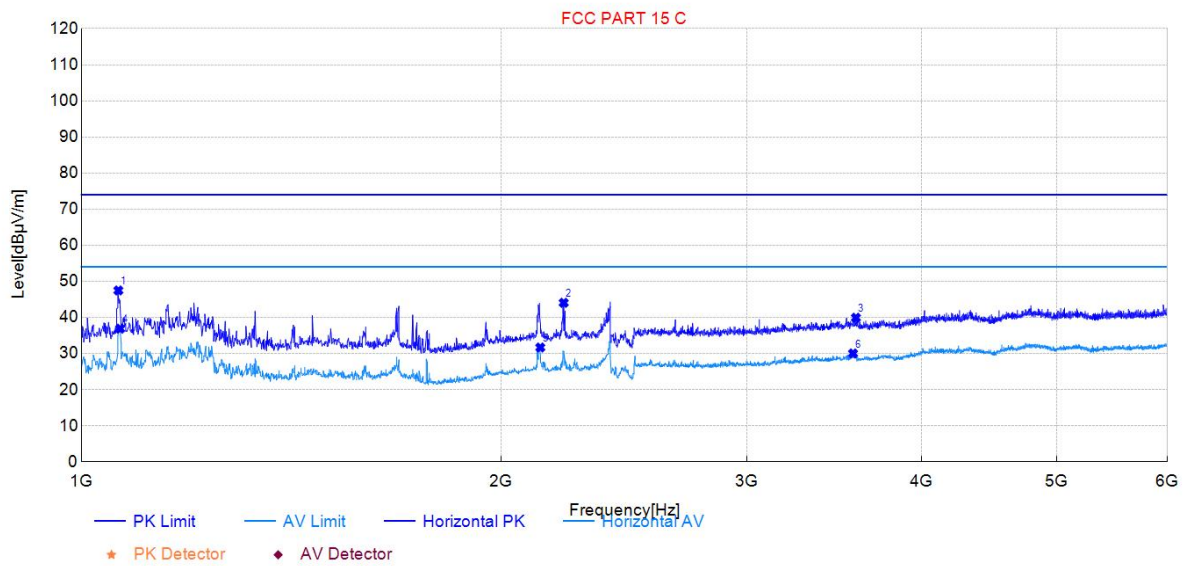
Frequency (MHz)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
1155.00	49.11	-22.62	74.00	24.89	PK	Vertical
1952.00	45.80	-18.14	74.00	28.20	PK	Vertical
4255.00	46.73	-7.79	74.00	27.27	PK	Vertical
1156.00	38.19	-22.62	54.00	15.81	AV	Vertical
1954.00	32.54	-18.13	54.00	21.46	AV	Vertical
4254.00	35.96	-7.79	54.00	18.04	AV	Vertical

Note 1: 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 ~ 26.5GHz), therefore no data appear in the report.

1GHz – 6GHz Test Data

EUT:	2.4GHz Wi-Fi/BLE Module	Polarity:	Horizontal
Model:	EMC6270-E	S/N:	/
Mode:	Transmit at BLE_1M Channel 19	Voltage:	DC3.3V
Environment:	Temp: 23°C; Humi:50%	Engineer:	Chuang Li

Test Graph

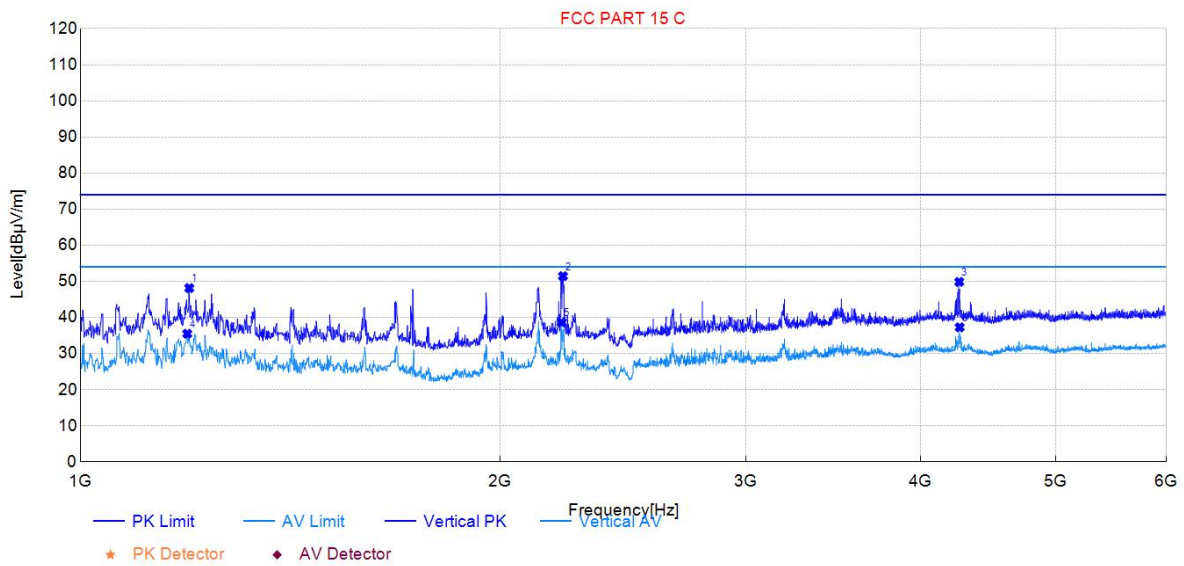


Frequency (MHz)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
1063.00	47.48	-24.00	74.00	26.52	PK	Horizontal
2217.00	44.06	-17.15	74.00	29.94	PK	Horizontal
3591.00	39.93	-11.58	74.00	34.07	PK	Horizontal
1066.00	36.89	-23.99	54.00	17.11	AV	Horizontal
2133.00	31.68	-17.50	54.00	22.32	AV	Horizontal
3574.00	30.03	-11.72	54.00	23.97	AV	Horizontal

Note 1: 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 ~ 26.5GHz), therefore no data appear in the report.

EUT:	2.4GHz Wi-Fi/BLE Module	Polarity:	Horizontal
Model:	EMC6270-E	S/N:	/
Mode:	Transmit at BLE_1M Channel 19	Voltage:	DC3.3V
Environment:	Temp: 23°C; Humi:50%	Engineer:	Chuang Li

Test Graph



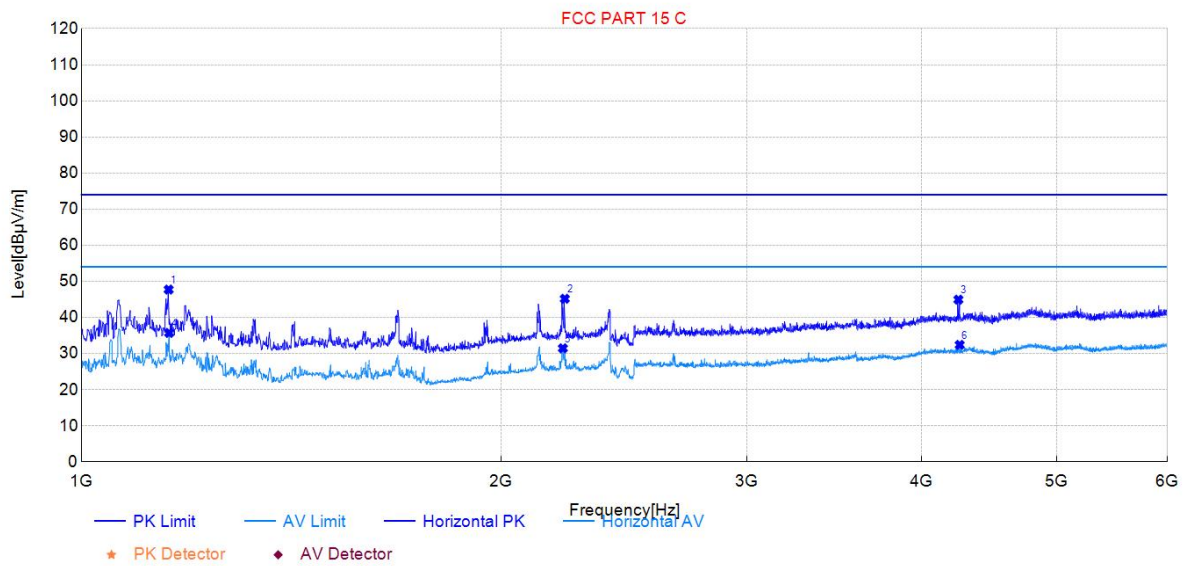
Frequency (MHz)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
1197.00	48.14	-22.48	74.00	25.86	PK	Vertical
2218.00	51.44	-17.05	74.00	22.56	PK	Vertical
4266.00	49.85	-7.76	74.00	24.15	PK	Vertical
1193.00	35.49	-22.50	54.00	18.51	AV	Vertical
2213.00	38.62	-17.06	54.00	15.38	AV	Vertical
4269.00	37.27	-7.75	54.00	16.73	AV	Vertical

Note 1: 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 ~ 26.5GHz), therefore no data appear in the report.

1GHz – 6GHz Test Data

EUT:	2.4GHz Wi-Fi/BLE Module	Polarity:	Horizontal
Model:	EMC6270-E	S/N:	/
Mode:	Transmit at BLE_1M Channel 39	Voltage:	DC3.3V
Environment:	Temp: 23°C; Humi:50%	Engineer:	Chuang Li

Test Graph

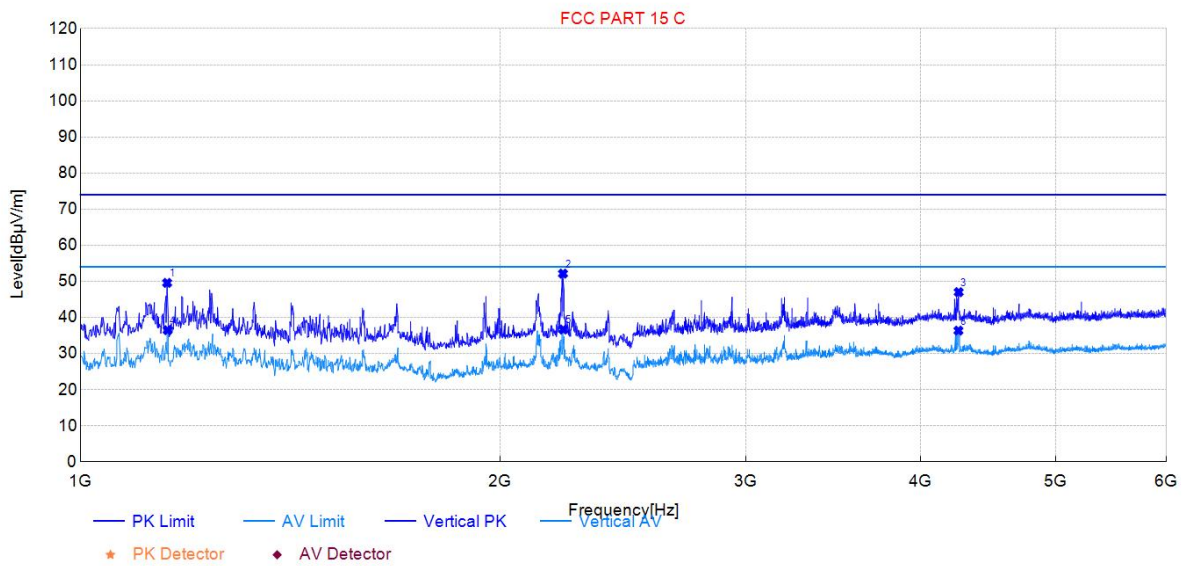


Frequency (MHz)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
1155.00	47.73	-23.63	74.00	26.27	PK	Horizontal
2221.00	45.17	-17.13	74.00	28.83	PK	Horizontal
4253.00	44.94	-7.79	74.00	29.06	PK	Horizontal
1156.00	35.72	-23.62	54.00	18.28	AV	Horizontal
2214.00	31.46	-17.16	54.00	22.54	AV	Horizontal
4262.00	32.40	-7.76	54.00	21.60	AV	Horizontal

Note 1: 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 ~ 26.5GHz), therefore no data appear in the report.

EUT:	2.4GHz Wi-Fi/BLE Module	Polarity:	Horizontal
Model:	EMC6270-E	S/N:	/
Mode:	Transmit at BLE_1M Channel 39	Voltage:	DC3.3V
Environment:	Temp: 23°C; Humi:50%	Engineer:	Chuang Li

Test Graph



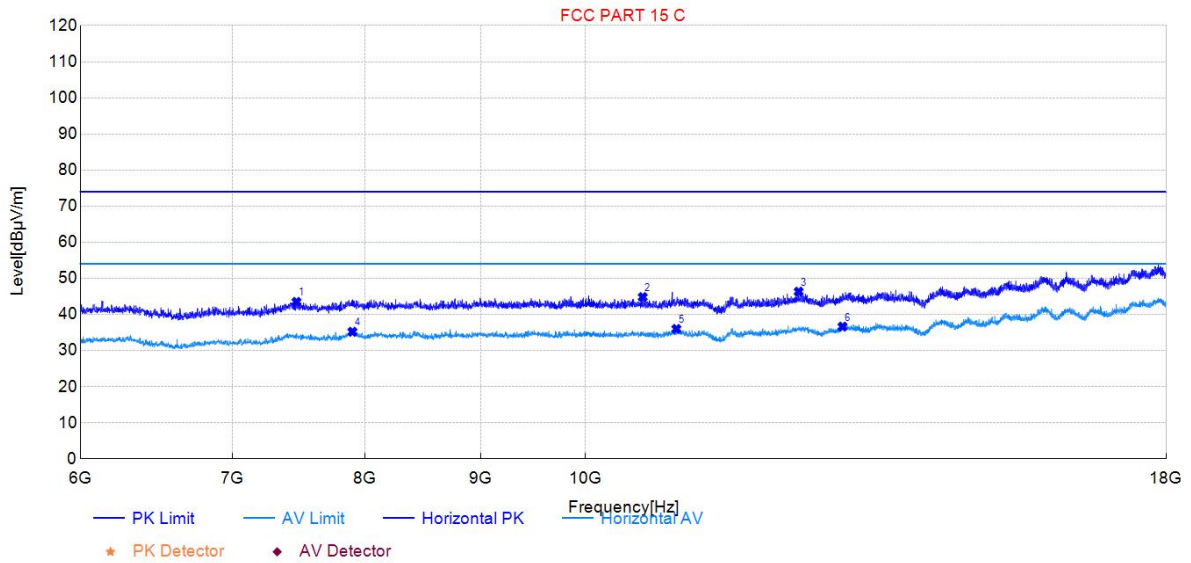
Frequency (MHz)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
1154.00	49.58	-22.62	74.00	24.42	PK	Vertical
2218.00	52.14	-17.05	74.00	21.86	PK	Vertical
4262.00	47.01	-7.77	74.00	26.99	PK	Vertical
1155.00	36.47	-22.62	54.00	17.53	AV	Vertical
2219.00	36.65	-17.05	54.00	17.35	AV	Vertical
4260.00	36.35	-7.77	54.00	17.65	AV	Vertical

Note 1: 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 ~ 26.5GHz), therefore no data appear in the report.

6GHz – 18GHz Test Data

EUT:	2.4GHz Wi-Fi/BLE Module	Polarity:	Horizontal
Model:	EMC6270-E	S/N:	/
Mode:	Transmit at BLE_1M Channel 00	Voltage:	DC3.3V
Environment:	Temp: 23°C; Humi:50%	Engineer:	Chuang Li

Test Graph

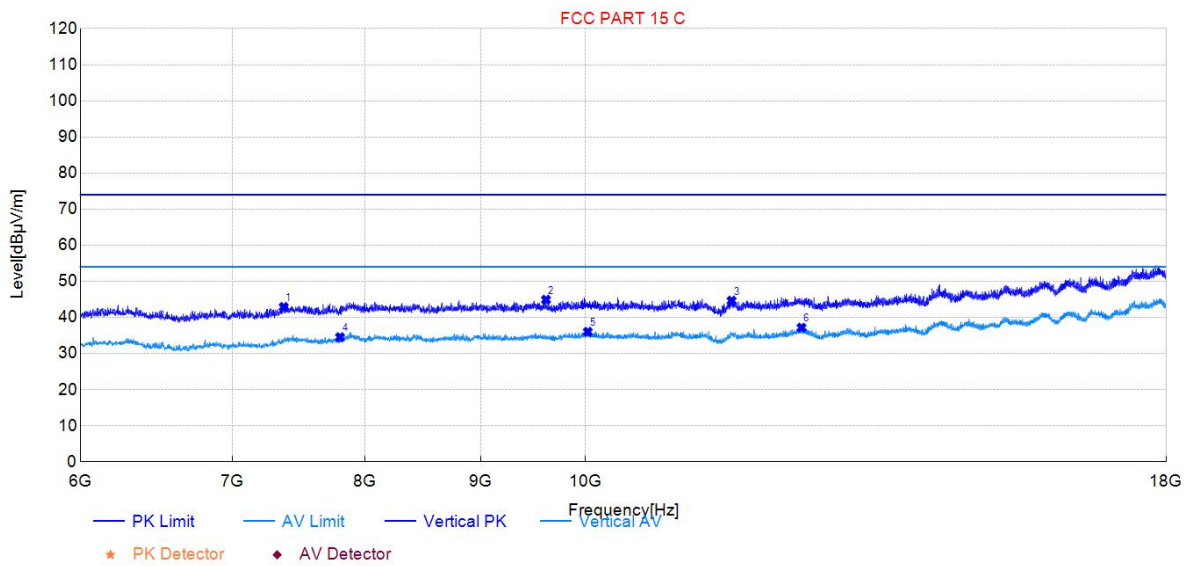


Frequency (MHz)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
7467.00	43.47	-2.93	74.00	30.53	PK	Horizontal
10600.50	44.81	0.74	74.00	29.19	PK	Horizontal
12412.50	46.31	2.31	74.00	27.69	PK	Horizontal
7902.00	35.20	-0.97	54.00	18.80	AV	Horizontal
10968.00	35.99	1.20	54.00	18.01	AV	Horizontal
12976.50	36.62	2.49	54.00	17.38	AV	Horizontal

Note 1: 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 ~ 26.5GHz), therefore no data appear in the report.

EUT:	2.4GHz Wi-Fi/BLE Module	Polarity:	Horizontal
Model:	EMC6270-E	S/N:	/
Mode:	Transmit at BLE_1M Channel 00	Voltage:	DC3.3V
Environment:	Temp: 23°C; Humi:50%	Engineer:	Chuang Li

Test Graph



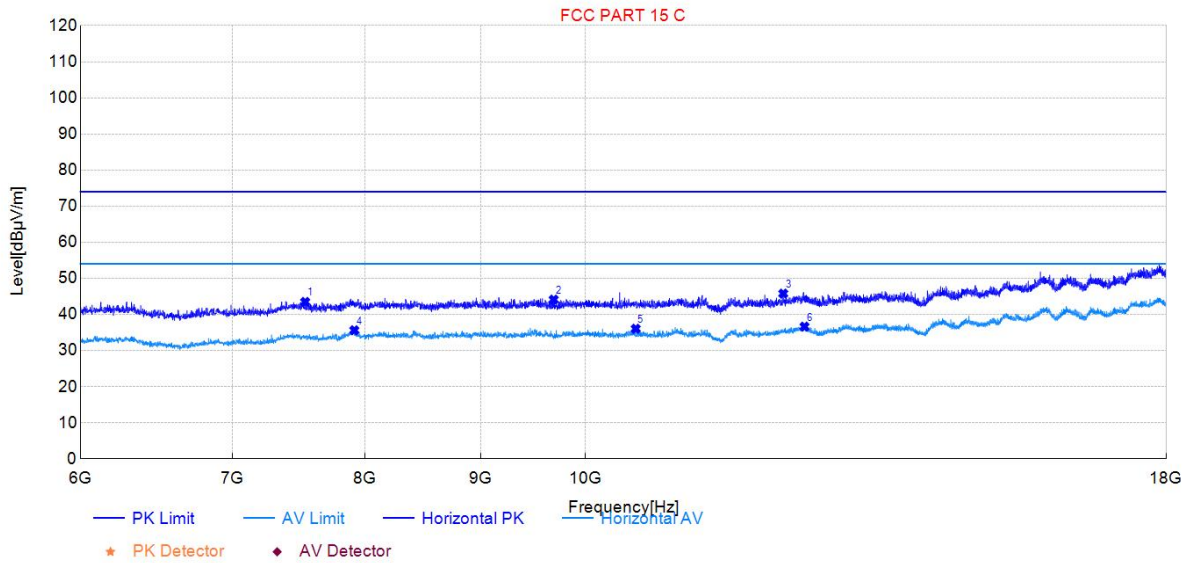
Frequency (MHz)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
7371.00	42.89	-2.95	74.00	31.11	PK	Vertical
9612.00	44.90	-0.22	74.00	29.10	PK	Vertical
11598.00	44.64	1.78	74.00	29.36	PK	Vertical
7803.00	34.53	-3.02	54.00	19.47	AV	Vertical
10027.50	36.03	0.46	54.00	17.97	AV	Vertical
12448.50	37.17	2.46	54.00	16.83	AV	Vertical

Note 1: 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 ~ 26.5GHz), therefore no data appear in the report.

6GHz – 18GHz Test Data

EUT:	2.4GHz Wi-Fi/BLE Module	Polarity:	Horizontal
Model:	EMC6270-E	S/N:	/
Mode:	Transmit at BLE_1M Channel 19	Voltage:	DC3.3V
Environment:	Temp: 23°C; Humi:50%	Engineer:	Chuang Li

Test Graph

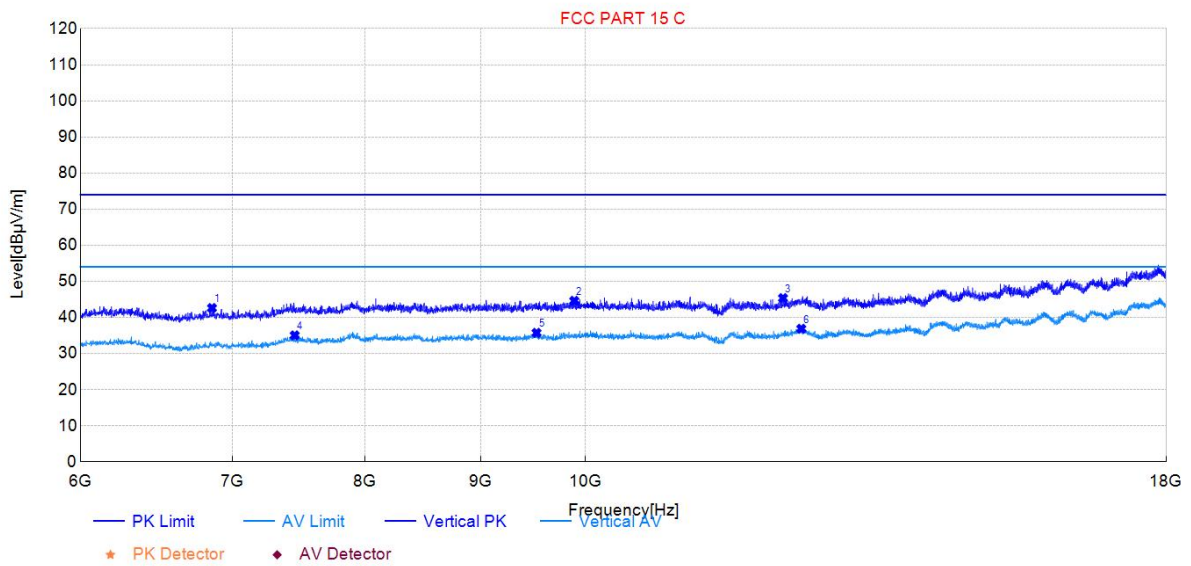


Frequency (MHz)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
7533.00	43.47	-2.91	74.00	30.53	PK	Horizontal
9687.00	44.11	-1.09	74.00	29.89	PK	Horizontal
12220.50	45.78	1.72	74.00	28.22	PK	Horizontal
7917.00	35.61	-1.05	54.00	18.39	AV	Horizontal
10525.50	36.04	0.84	54.00	17.96	AV	Horizontal
12486.00	36.63	2.43	54.00	17.37	AV	Horizontal

Note 1: 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 ~ 26.5GHz), therefore no data appear in the report.

EUT:	2.4GHz Wi-Fi/BLE Module	Polarity:	Horizontal
Model:	EMC6270-E	S/N:	/
Mode:	Transmit at BLE_1M Channel 19	Voltage:	DC3.3V
Environment:	Temp: 23°C; Humi:50%	Engineer:	Chuang Li

Test Graph



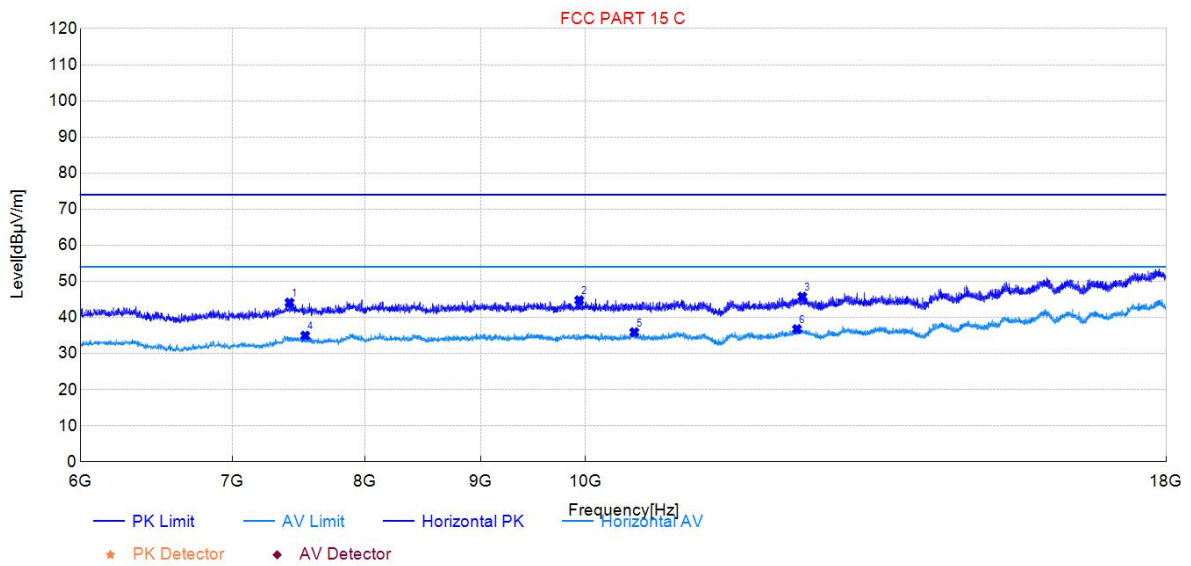
Frequency (MHz)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
6855.00	42.62	-4.54	74.00	31.38	PK	Vertical
9891.00	44.61	-0.03	74.00	29.39	PK	Vertical
12217.50	45.36	1.77	74.00	28.64	PK	Vertical
7453.50	35.03	-2.89	54.00	18.97	AV	Vertical
9520.50	35.74	0.02	54.00	18.26	AV	Vertical
12445.50	36.86	2.45	54.00	17.14	AV	Vertical

Note 1: 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 ~ 26.5GHz), therefore no data appear in the report.

6GHz – 18GHz Test Data

EUT:	2.4GHz Wi-Fi/BLE Module	Polarity:	Horizontal
Model:	EMC6270-E	S/N:	/
Mode:	Transmit at BLE_1M Channel 39	Voltage:	DC3.3V
Environment:	Temp: 23°C; Humi:50%	Engineer:	Chuang Li

Test Graph

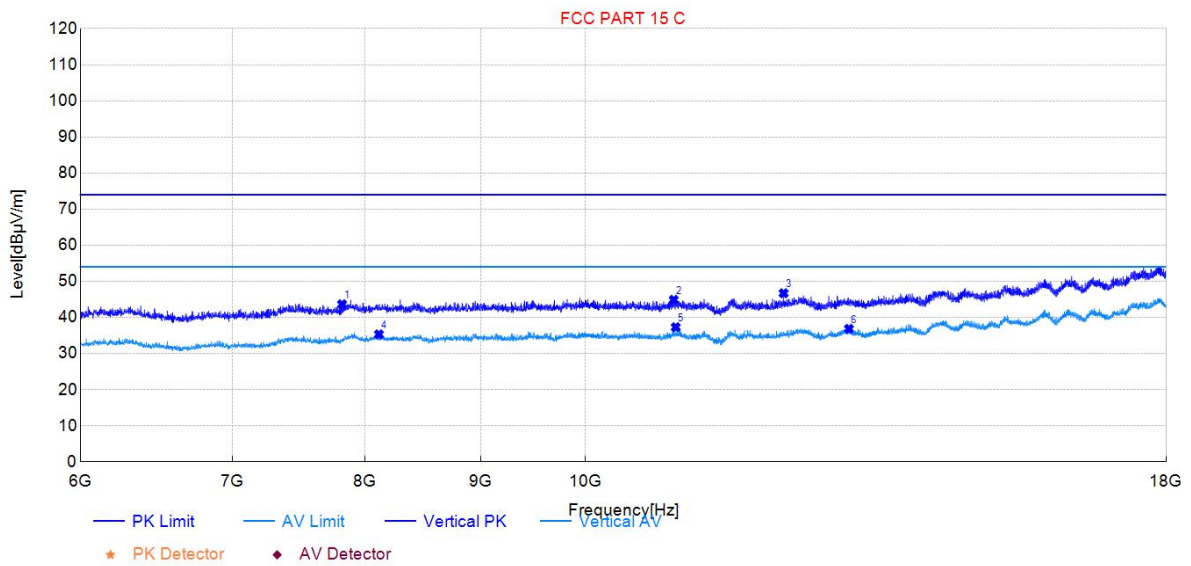


Frequency (MHz)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
7414.50	44.11	-2.77	74.00	29.89	PK	Horizontal
9940.50	44.76	-0.27	74.00	29.24	PK	Horizontal
12459.00	45.76	2.38	74.00	28.24	PK	Horizontal
7533.00	34.96	-2.91	54.00	19.04	AV	Horizontal
10510.50	35.90	0.85	54.00	18.10	AV	Horizontal
12391.50	36.77	2.23	54.00	17.23	AV	Horizontal

Note 1: 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 ~ 26.5GHz), therefore no data appear in the report.

EUT:	2.4GHz Wi-Fi/BLE Module	Polarity:	Horizontal
Model:	EMC6270-E	S/N:	/
Mode:	Transmit at BLE_1M Channel 39	Voltage:	DC3.3V
Environment:	Temp: 23°C; Humi:50%	Engineer:	Chuang Li

Test Graph



Frequency (MHz)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
7819.50	43.65	-2.66	74.00	30.35	PK	Vertical
10938.00	44.88	1.22	74.00	29.12	PK	Vertical
12225.00	46.70	1.76	74.00	27.30	PK	Vertical
8116.50	35.32	-1.09	54.00	18.68	AV	Vertical
10960.50	37.30	1.29	54.00	16.70	AV	Vertical
13060.50	36.85	2.40	54.00	17.15	AV	Vertical

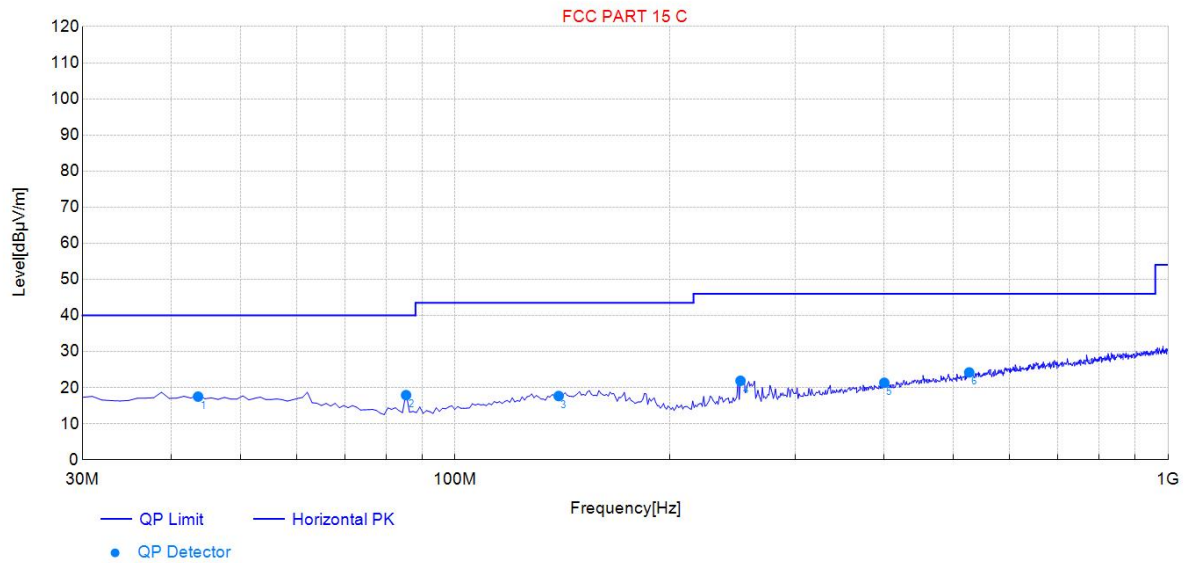
Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 26.5GHz), therefore no data appear in the report.

The worst case of Radiated Emission below 1GHz:

30MHz – 1GHz Test Data

EUT:	2.4GHz Wi-Fi/BLE Module	Polarity:	Horizontal
Model:	EMC6270-E	SN:	N/A
Mode:	Transmit at BLE_1M Channel 00	Voltage:	DC 3.3V
Environment:	Temp: 23°C; Humi:50%	Engineer:	Chuang Li

Test Graph



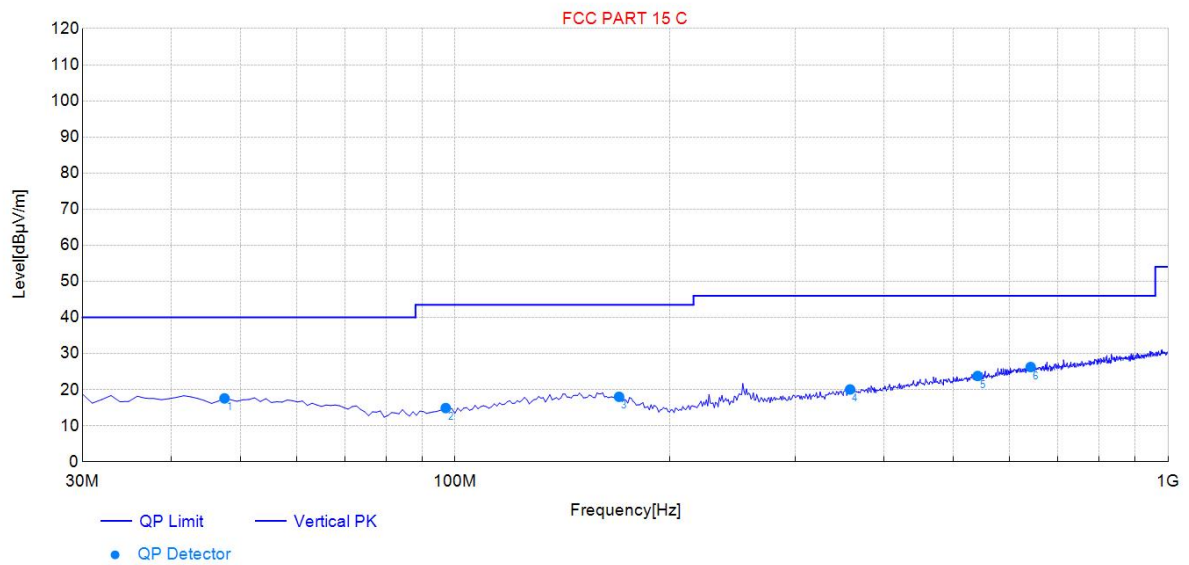
Final Data List

NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	43.59	14.68	17.52	40.00	22.48	100	360	Horizontal
2	85.35	10.63	17.93	40.00	22.07	100	137	Horizontal
3	139.72	15.14	17.69	43.50	25.81	100	359	Horizontal
4	251.38	13.77	21.91	46.00	24.09	100	177	Horizontal
5	399.94	17.40	21.36	46.00	24.64	100	237	Horizontal
6	526.17	20.12	24.22	46.00	21.78	100	204	Horizontal

Note 1: 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.

EUT:	2.4GHz Wi-Fi/BLE Module	Polarity:	Vertical
Model:	EMC6270-E	SN:	N/A
Mode:	Transmit at BLE_1M Channel 00	Voltage:	DC 3.3V
Environment:	Temp: 23°C; Humi:50%	Engineer:	Chuang Li

Test Graph

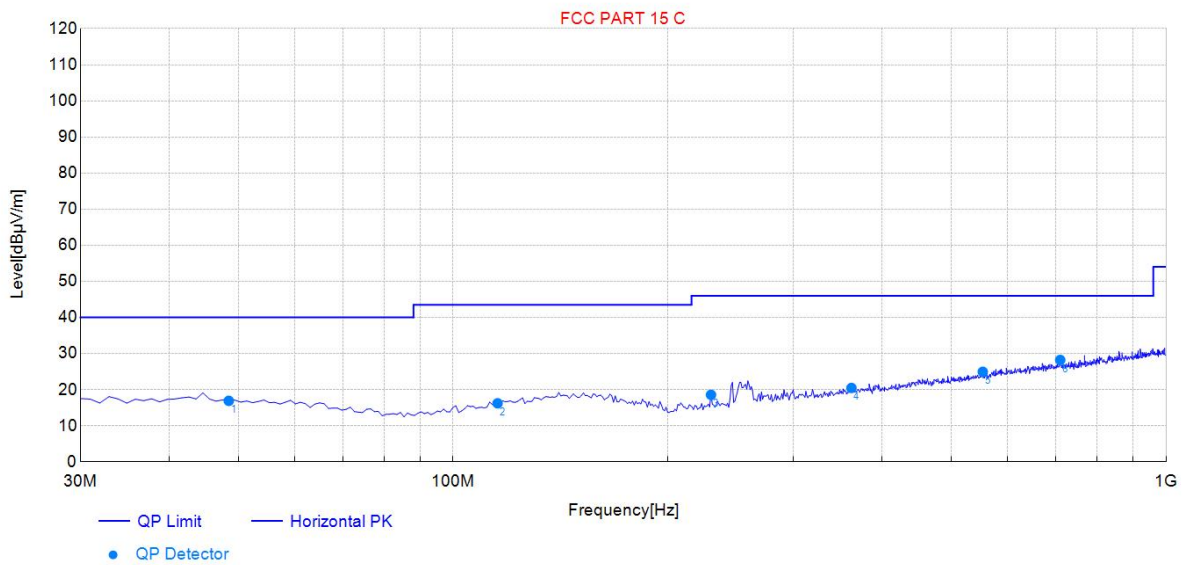


Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	47.48	14.56	17.59	40.00	22.41	100	148	Vertical
2	97.00	11.27	14.91	43.50	28.59	100	170	Vertical
3	169.82	14.69	18.03	43.50	25.47	100	148	Vertical
4	358.19	16.53	20.07	46.00	25.93	100	63	Vertical
5	540.73	20.38	23.80	46.00	22.20	100	237	Vertical
6	641.71	22.33	26.28	46.00	19.72	100	0	Vertical

30MHz – 1GHz Test Data

EUT:	2.4GHz Wi-Fi/BLE Module	Polarity:	Horizontal
Model:	EMC6270-E	SN:	N/A
Mode:	Transmit at BLE_1M Channel 19	Voltage:	DC 3.3V
Environment:	Temp: 23°C; Humi:50%	Engineer:	Chuang Li

Test Graph



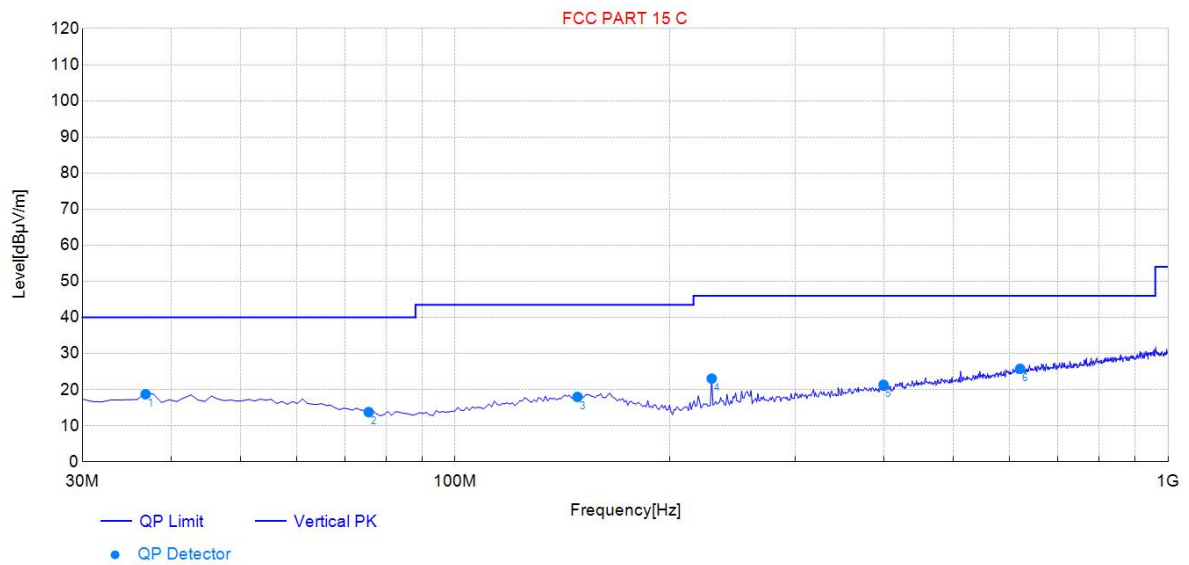
Final Data List

NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	48.45	14.54	16.91	40.00	23.09	100	150	Horizontal
2	115.45	13.25	16.23	43.50	27.27	100	123	Horizontal
3	230.02	12.96	18.57	46.00	27.43	100	69	Horizontal
4	362.07	16.63	20.47	46.00	25.53	100	69	Horizontal
5	553.35	20.63	24.95	46.00	21.05	100	200	Horizontal
6	710.65	23.38	28.24	46.00	17.76	100	351	Horizontal

Note 1: 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.

EUT:	2.4GHz Wi-Fi/BLE Module	Polarity:	Vertical
Model:	EMC6270-E	SN:	N/A
Mode:	Transmit at BLE_1M Channel 19	Voltage:	DC 3.3V
Environment:	Temp: 23°C; Humi:50%	Engineer:	Chuang Li

Test Graph



Final Data List

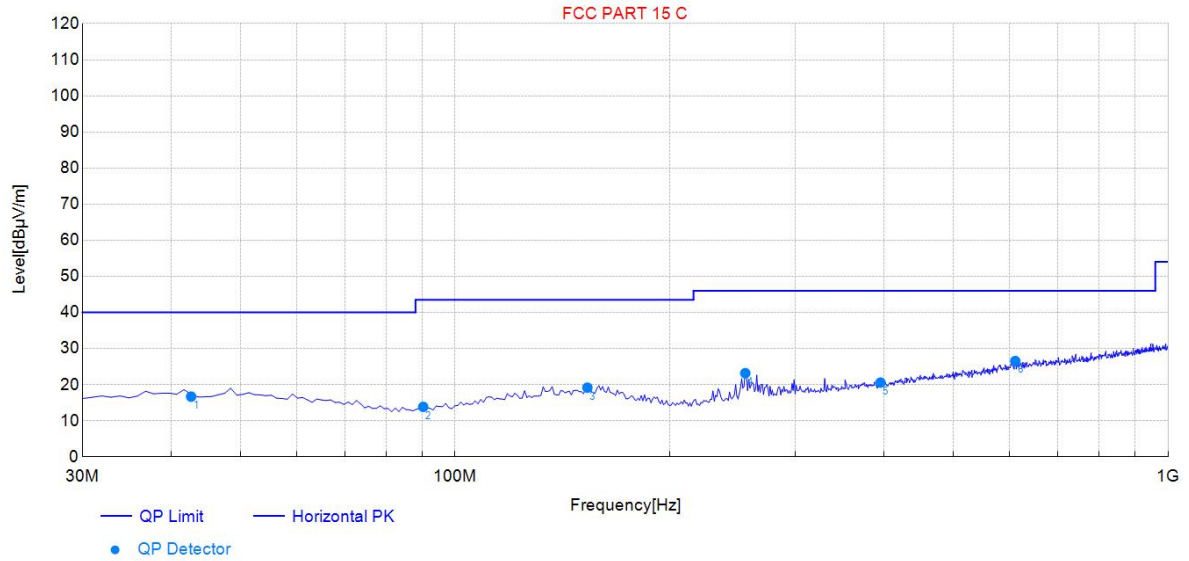
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	36.80	14.43	18.74	40.00	21.26	100	106	Vertical
2	75.64	11.19	13.80	40.00	26.20	100	268	Vertical
3	148.46	15.45	18.00	43.50	25.50	100	86	Vertical
4	229.05	12.92	23.06	46.00	22.94	100	49	Vertical
5	398.97	17.38	21.34	46.00	24.66	100	260	Vertical
6	620.35	21.96	25.78	46.00	20.22	100	324	Vertical

Note 1: 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.

30MHz – 1GHz Test Data

EUT:	2.4GHz Wi-Fi/BLE Module	Polarity:	Horizontal
Model:	EMC6270-E	SN:	N/A
Mode:	Transmit at BLE_1M Channel 39	Voltage:	DC 3.3V
Environment:	Temp: 23°C; Humi:50%	Engineer:	Chuang Li

Test Graph



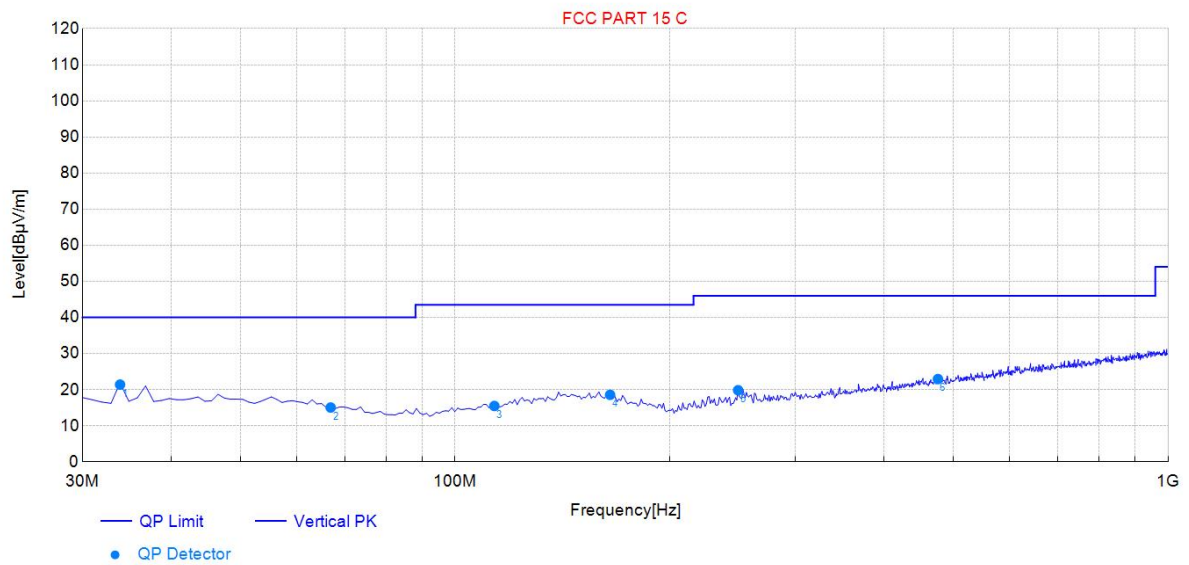
Final Data List

NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	42.62	14.74	16.68	40.00	23.32	100	50	Horizontal
2	90.20	10.75	13.86	43.50	29.64	100	177	Horizontal
3	153.31	15.61	19.18	43.50	24.32	100	16	Horizontal
4	255.27	13.91	23.18	46.00	22.82	100	184	Horizontal
5	395.09	17.30	20.58	46.00	25.42	100	54	Horizontal
6	610.64	21.81	26.55	46.00	19.45	100	248	Horizontal

Note 1: 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.

EUT:	2.4GHz Wi-Fi/BLE Module	Polarity:	Vertical
Model:	EMC6270-E	SN:	N/A
Mode:	Transmit at BLE_1M Channel 39	Voltage:	DC 3.3V
Environment:	Temp: 23°C; Humi:50%	Engineer:	Chuang Li

Test Graph



Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	33.88	14.09	21.41	40.00	18.59	100	180	Vertical
2	66.90	12.63	15.05	40.00	24.95	100	170	Vertical
3	113.50	13.05	15.49	43.50	28.01	100	305	Vertical
4	164.96	15.26	18.58	43.50	24.92	100	177	Vertical
5	249.44	13.70	19.85	46.00	26.15	100	0	Vertical
6	475.68	19.19	22.94	46.00	23.06	100	355	Vertical

Note 1: 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.

7.7. Restricted Band Edge Measurement

7.7.1. 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	8.25 - 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

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

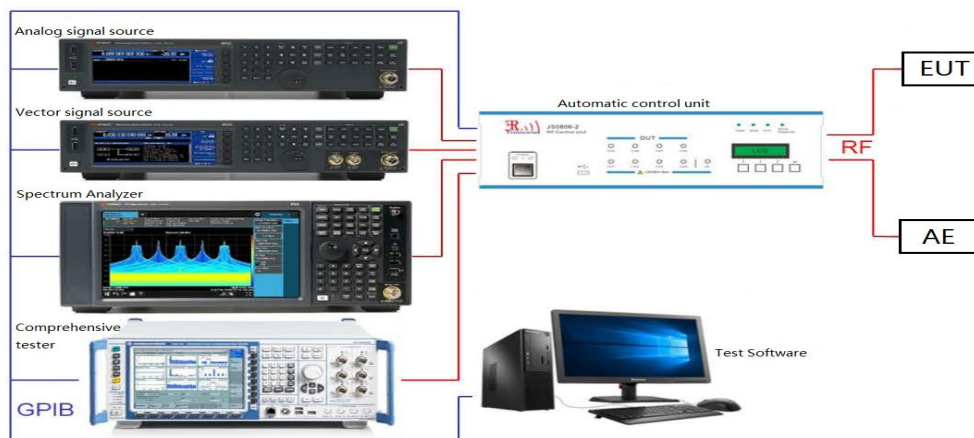
Peak Field Strength Measurements

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

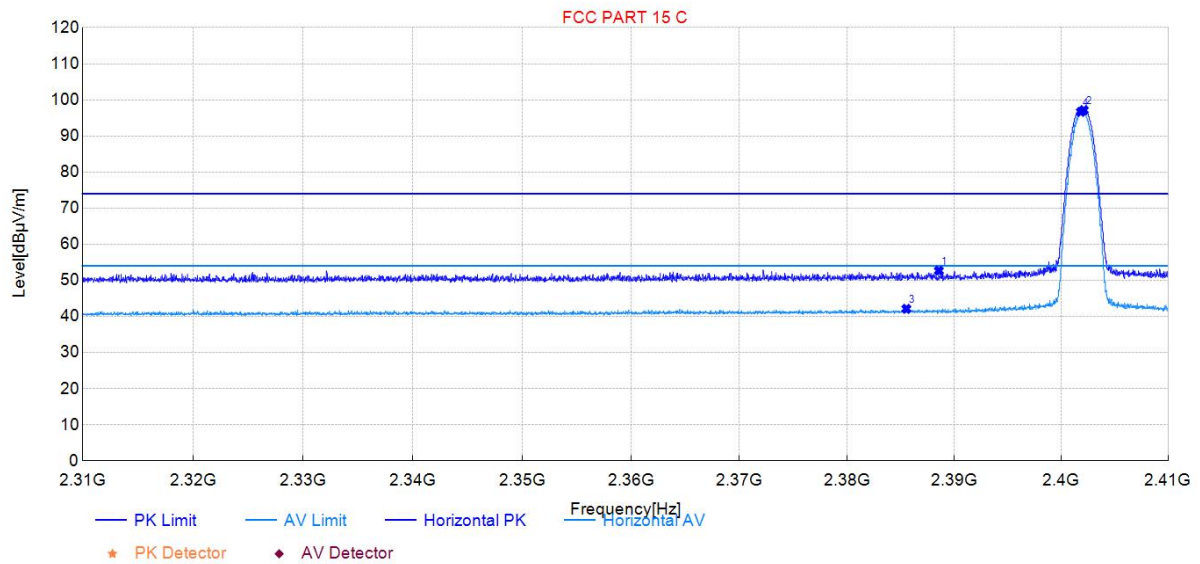


7.7.5. Test Result

BLE_1M

Test Mode:	BLE_1M	Test Date:	2024-09-18
Test Channel:	2402	Test Engineer:	Chuang Li
Remark:	The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.		

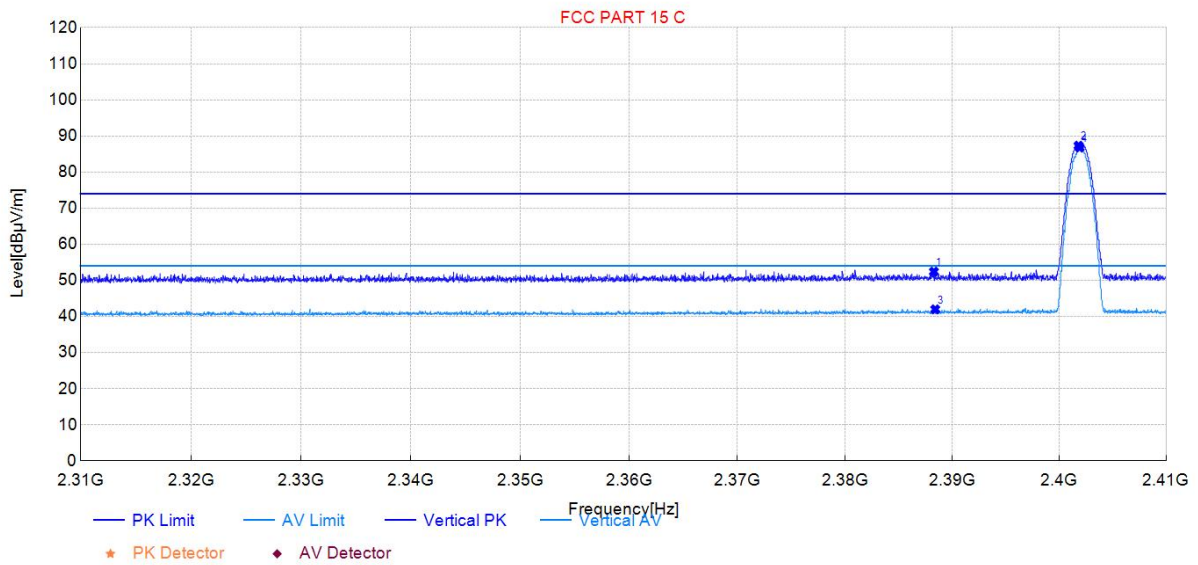
Test Graph



Freq. [MHz]	Level [dBuV/m]	Factor [dB]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
2388.54	52.68	36.09	74.00	21.32	150	128	Peak	Horizontal
2402.10	97.16	36.16	74.00	-23.16	150	70	Peak	Horizontal
2385.52	42.11	36.08	54.00	11.89	150	185	Average	Horizontal
2401.82	96.67	36.15	54.00	-42.67	150	70	Average	Horizontal

Test Mode:	BLE_1M	Test Date:	2024-09-18
Test Channel:	2402	Test Engineer:	Chuang Li
Remark:	The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.		

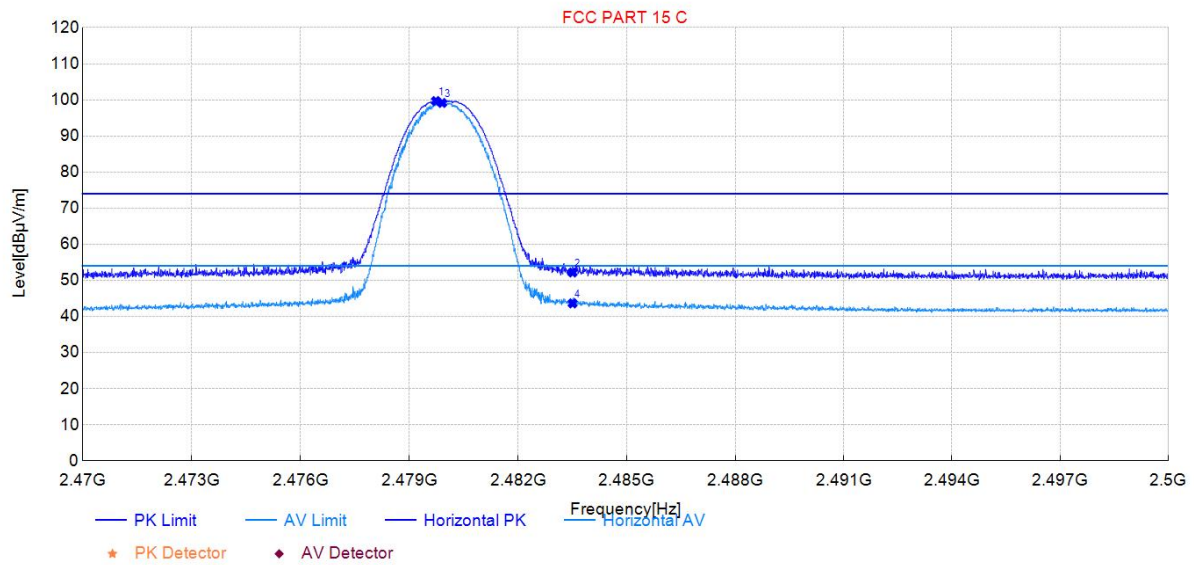
Test Graph



Freq. [MHz]	Level [dBuV/m]	Factor [dB]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
2388.27	52.42	35.95	74.00	21.58	150	223	Peak	Vertical
2401.80	87.30	35.99	74.00	-13.30	150	198	Peak	Vertical
2388.39	41.97	35.95	54.00	12.03	150	281	Average	Vertical
2401.90	86.78	35.99	54.00	-32.78	150	198	Average	Vertical

Test Mode:	BLE_1M	Test Date:	2024-09-18
Test Channel:	2480	Test Engineer:	Chuang Li
Remark:	The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.		

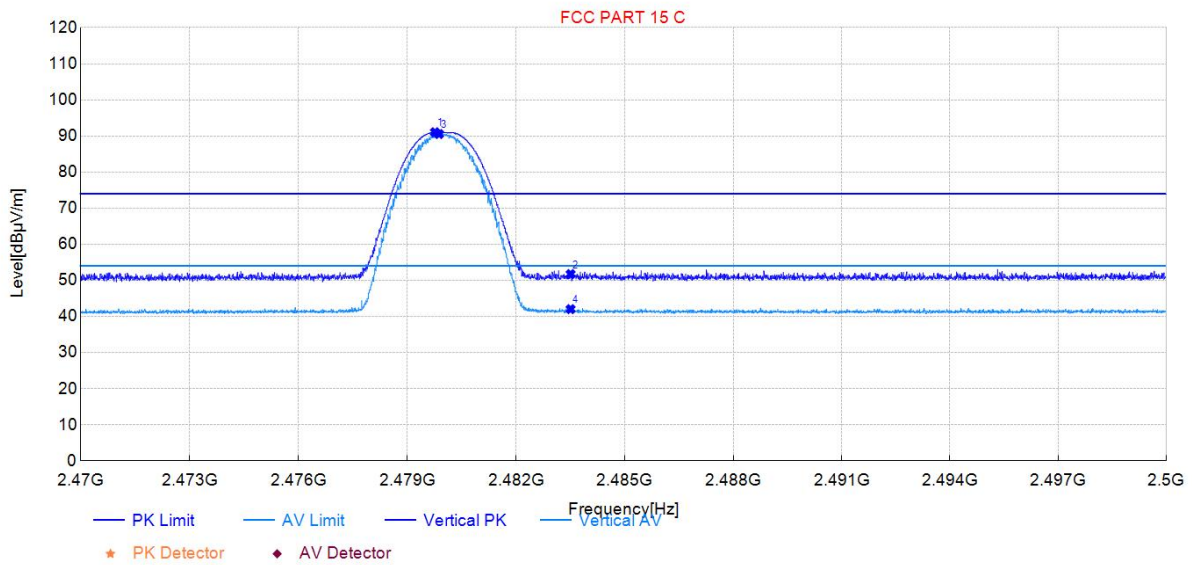
Test Graph



Freq. [MHz]	Level [dBuV/m]	Factor [dB]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
2479.73	99.68	36.35	74.00	-25.68	150	66	Peak	Horizontal
2483.50	52.18	36.36	74.00	21.82	150	61	Peak	Horizontal
2479.90	99.15	36.35	54.00	-45.15	150	61	Average	Horizontal
2483.50	43.62	36.36	54.00	10.38	150	61	Average	Horizontal

Test Mode:	BLE_1M	Test Date:	2024-09-18
Test Channel:	2480	Test Engineer:	Chuang Li
Remark:	The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.		

Test Graph

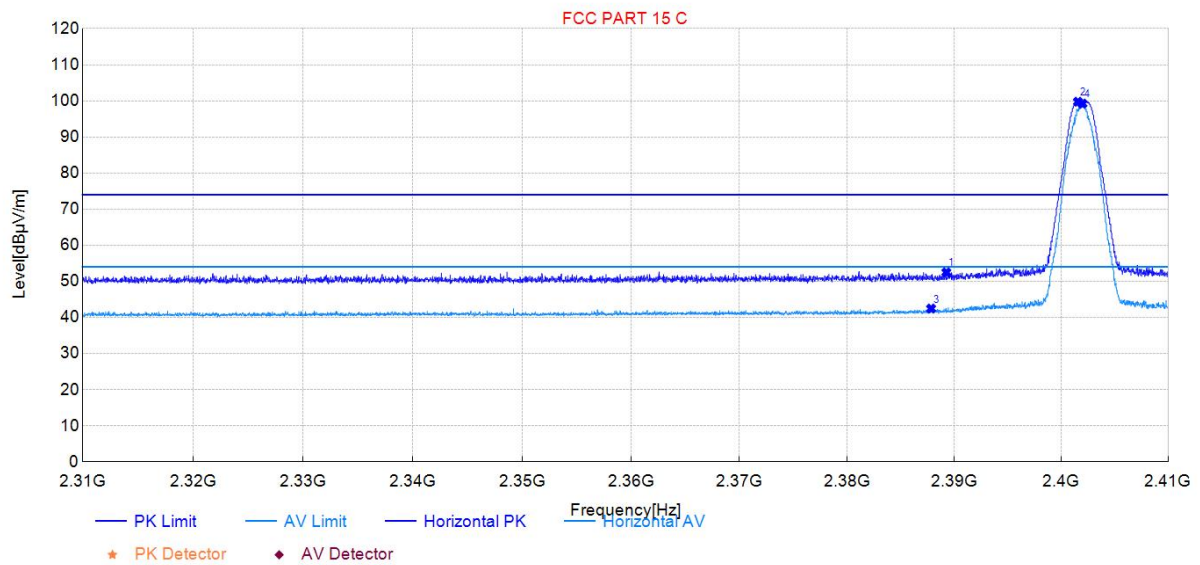


Freq. [MHz]	Level [dBuV/m]	Factor [dB]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
2479.76	91.03	36.08	74.00	-17.03	150	74	Peak	Vertical
2483.50	51.73	36.08	74.00	22.27	150	125	Peak	Vertical
2479.87	90.54	36.08	54.00	-36.54	150	74	Average	Vertical
2483.50	42.03	36.08	54.00	11.97	150	196	Average	Vertical

BLE_2M

Test Mode:	BLE_2M	Test Date:	2024-09-18
Test Channel:	2402	Test Engineer:	Chuang Li
Remark:	The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.		

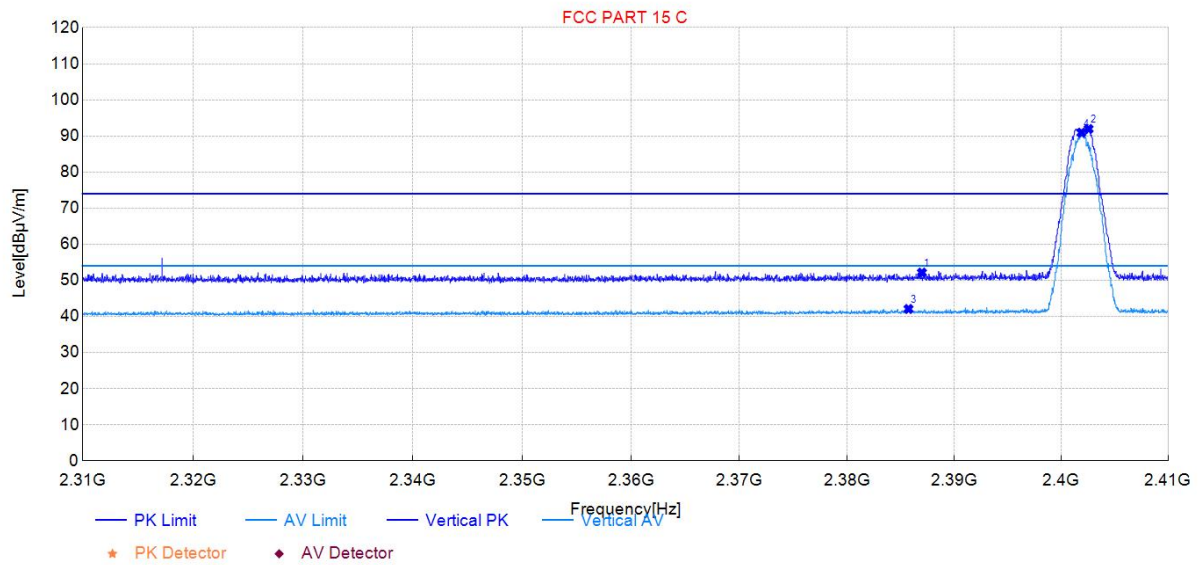
Test Graph



Freq. [MHz]	Level [dBuV/m]	Factor [dB]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
2389.24	52.48	36.09	74.00	21.52	150	76	Peak	Horizontal
2401.55	99.75	36.15	74.00	-25.75	150	63	Peak	Horizontal
2387.82	42.45	36.09	54.00	11.55	150	173	Average	Horizontal
2401.97	99.23	36.15	54.00	-45.23	150	63	Average	Horizontal

Test Mode:	BLE_2M	Test Date:	2024-09-18
Test Channel:	2402	Test Engineer:	Chuang Li
Remark:	The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.		

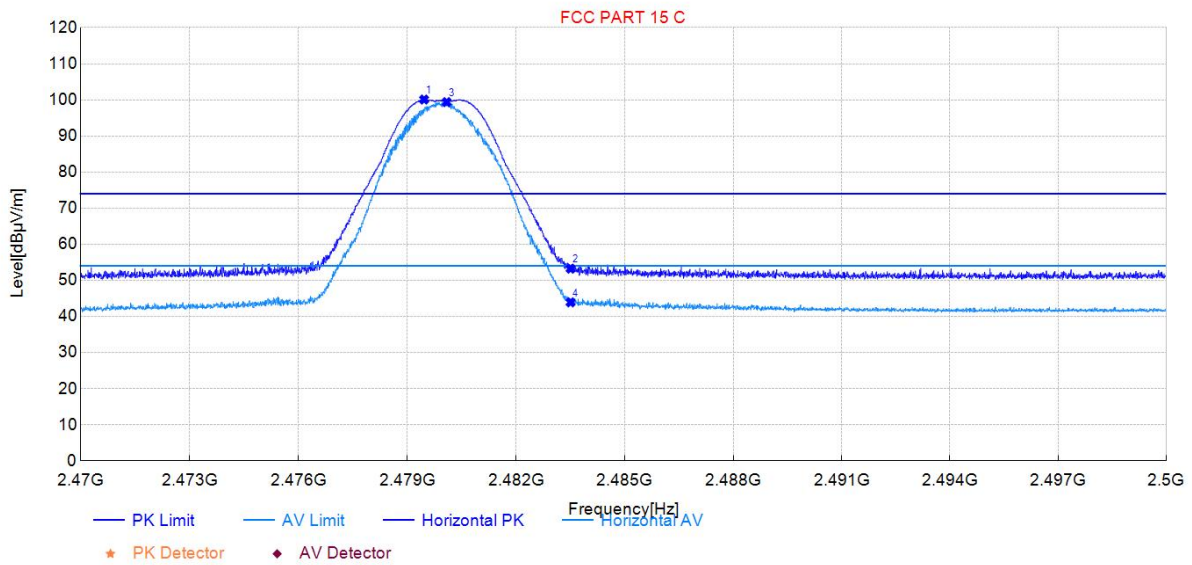
Test Graph



Freq. [MHz]	Level [dBuV/m]	Factor [dB]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
2386.97	52.14	35.94	74.00	21.86	150	55	Peak	Vertical
2402.55	91.94	35.99	74.00	-17.94	150	198	Peak	Vertical
2385.72	42.08	35.94	54.00	11.92	150	281	Average	Vertical
2401.87	90.91	35.99	54.00	-36.91	150	198	Average	Vertical

Test Mode:	BLE_2M	Test Date:	2024-09-18
Test Channel:	2480	Test Engineer:	Chuang Li
Remark:	The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.		

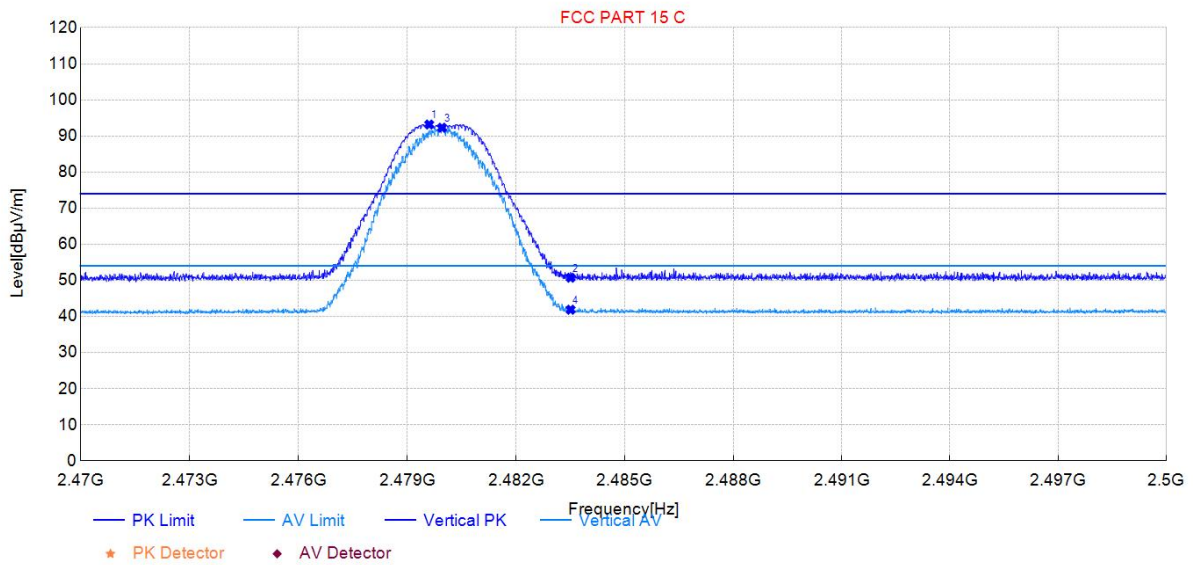
Test Graph



Freq. [MHz]	Level [dBuV/m]	Factor [dB]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
2479.46	100.09	36.35	74.00	-26.09	150	67	Peak	Horizontal
2483.50	53.24	36.36	74.00	20.76	150	75	Peak	Horizontal
2480.08	99.38	36.35	54.00	-45.38	150	62	Average	Horizontal
2483.50	43.91	36.36	54.00	10.09	150	62	Average	Horizontal

Test Mode:	BLE_2M	Test Date:	2024-09-18
Test Channel:	2480	Test Engineer:	Chuang Li
Remark:	The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.		

Test Graph



Freq. [MHz]	Level [dBuV/m]	Factor [dB]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity
2479.60	93.17	36.08	74.00	-19.17	150	72	Peak	Vertical
2483.50	50.73	36.08	74.00	23.27	150	269	Peak	Vertical
2479.95	92.29	36.08	54.00	-38.29	150	72	Average	Vertical
2483.50	41.87	36.08	54.00	12.13	150	109	Average	Vertical

7.8. AC Conducted Emissions Measurement

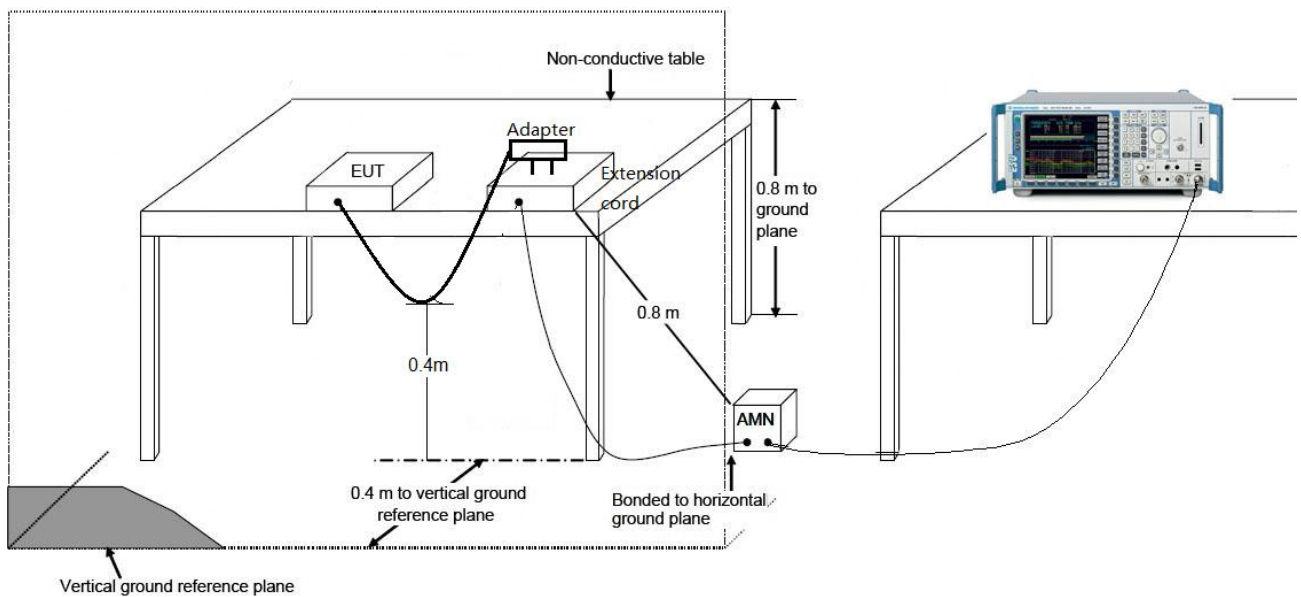
7.8.1. Test Limit

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

Not Applicable . The device is only powered by DC 3.3V.

8. CONCLUSION

The data collected relate only the item(s) tested and show that the **2.4GHz Wi-Fi/BLE Module (Model: EMC6270-E)** is in compliance with Part 15C of the FCC Rules.

_____ The End _____