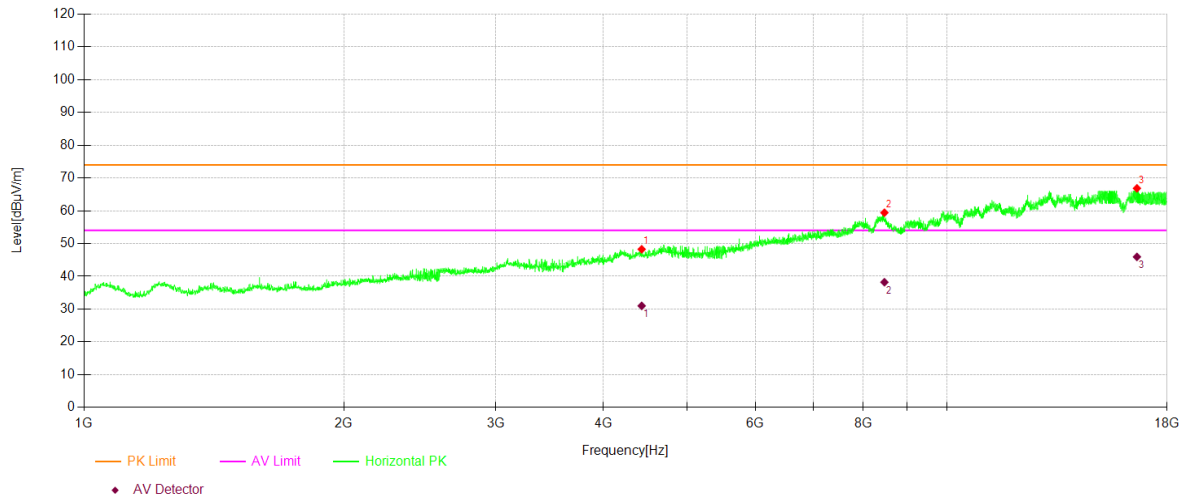


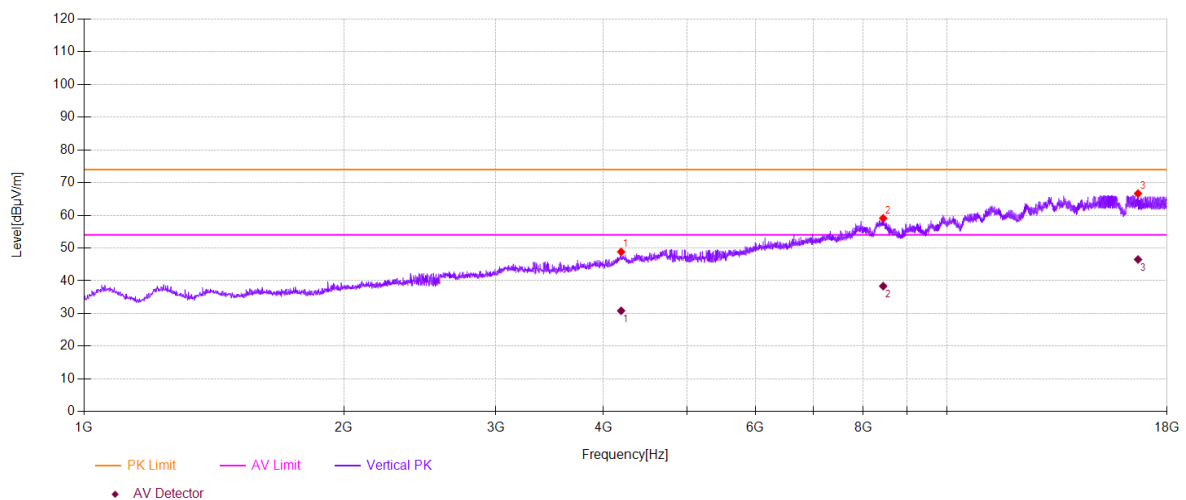
Horizontal



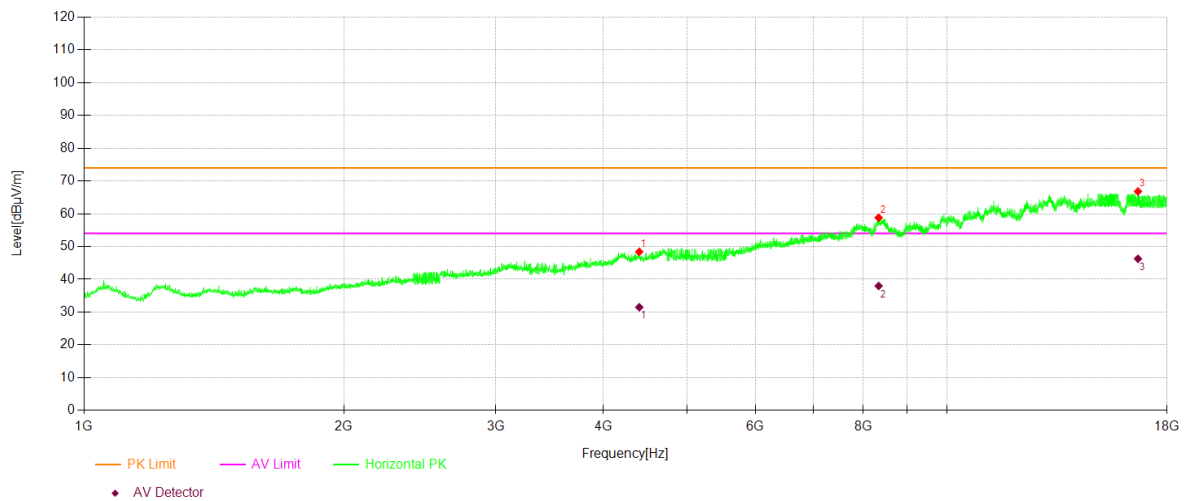
Test mode: 802.11 B Frequency: Channel 11: 2462MHz

Freq. (MHz)	Ant. Pol.	Emission Level (dBuV/m)	Limit 3m (dBuV/m)	Over (dB)	Detector
4192.5	V	48.83	74.00	25.17	Peak
8437.5	V	59.11	74.00	14.89	Peak
16655.6	V	66.67	74.00	7.33	Peak
4192.5	V	30.83	54.00	23.17	Avg
8437.5	V	38.36	54.00	15.64	Avg
16655.6	V	46.50	54.00	7.50	Avg
4400.62	H	48.41	74.00	25.59	Peak
8336.25	H	58.80	74.00	15.20	Peak
16653.7	H	66.81	74.00	7.19	Peak
4400.62	H	31.48	54.00	22.52	Avg
8336.25	H	37.98	54.00	16.02	Avg
16653.7	H	46.27	54.00	7.73	Avg

Vertical



Horizontal



- Note:**
- (1) All Readings are Peak Value (VBW=3MHz) and Average Value (VBW=10Hz).
 - (2) Emission Level= Reading Level+Correct Factor.
 - (3) Correct Factor= Ant_F + Cab_L - Preamp
 - (4) The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

■ Spurious Emission in Restricted Band 2310-2390MHz and 2483.5-2500MHz

Test mode: 802.11AX20 Frequency: Channel 1: 2412MHz

Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
2386.21	V	50.19	74.00	23.81	peak
2386.21	V	38.74	54.00	15.26	AVG
2386.29	H	52.98	74.00	21.02	peak
2386.29	H	38.43	54.00	15.57	AVG

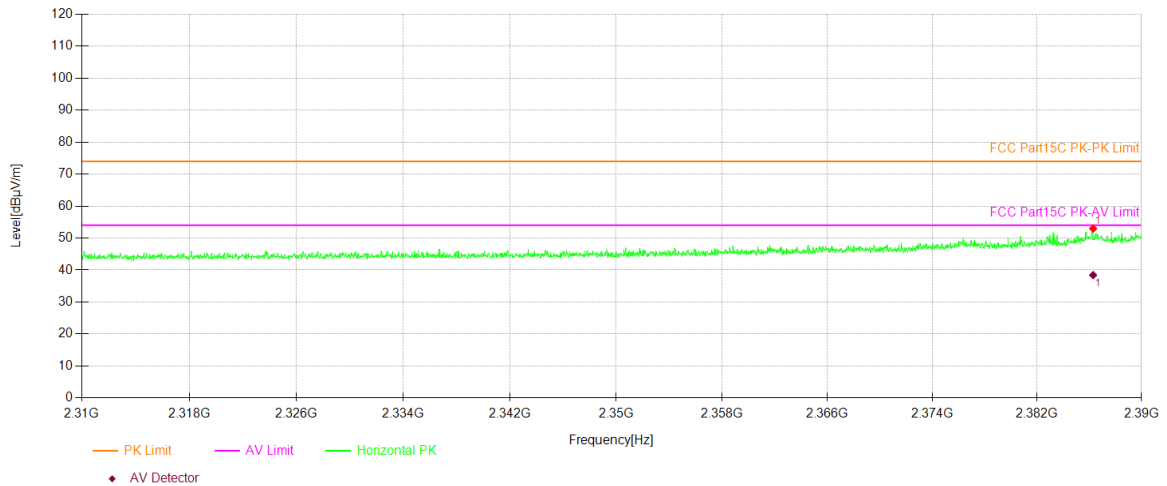
Test mode: 802.11AX20 Frequency: Channel 11: 2462MHz

Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)	Limit 3m(dBuV/m)	Over(dB)	Detector
2485.55	V	49.80	74.00	24.20	peak
2485.55	V	38.46	54.00	15.54	AVG
2487.93	H	55.15	74.00	18.85	peak
2487.93	H	38.67	54.00	15.33	AVG

- Note:** (1) All Readings are Peak Value (VBW=3MHz) and Average Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor.
(3) Correct Factor= Ant_F + Cab_L - Preamp
(4) The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

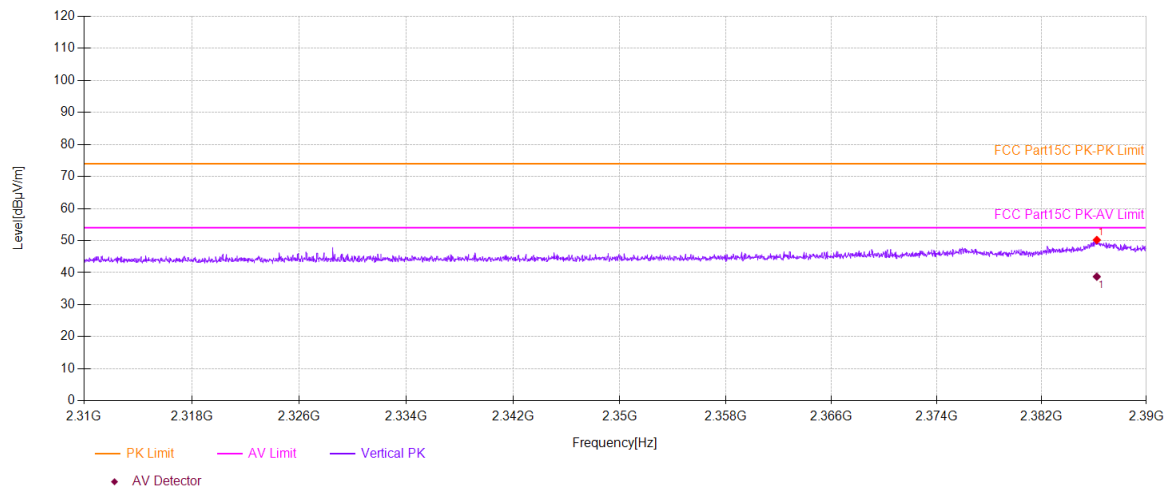
Spurious Emission in Restricted Band 2310-2390MHz

Test Model ☒ 802.11AX20 ☐ 802.11g ☐ 802.11n(HT20) ☐ 802.11n(HT40)
☒ Channel 1:2412MHz ☐ Channel 3: 2422MHz Polarity: H
 VBW=3MHz



Spurious Emission in Restricted Band 2310-2390MHz

Test Model ☒ 802.11 AX20 ☐ 802.11g ☐ 802.11n(HT20) ☐ 802.11n(HT40)
☒ Channel 1:2412MHz ☐ Channel 3: 2422MHz Polarity:V
 VBW=3MHz

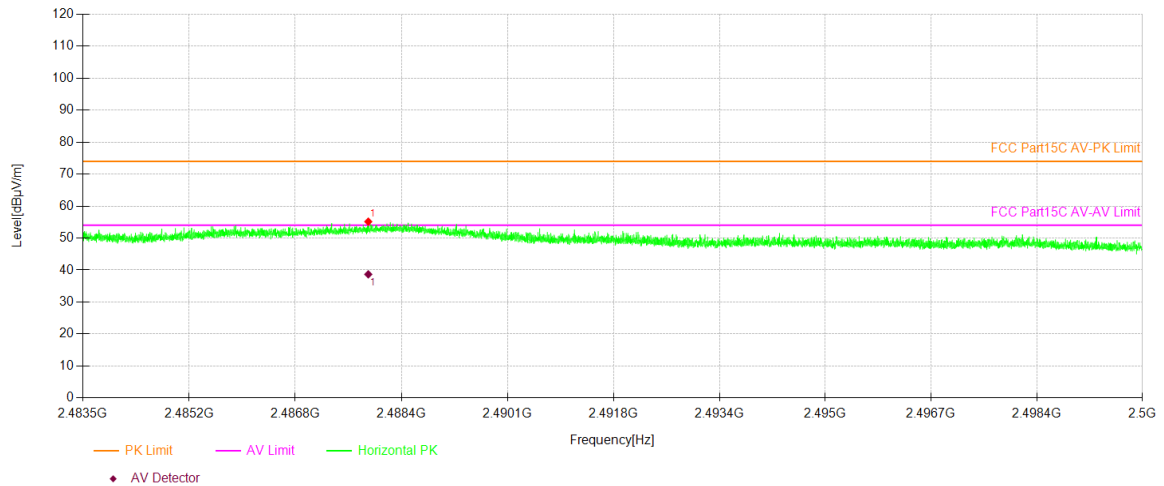


Spurious Emission in Restricted Band 2483.5-2500MHz

Test Model ☒ 802.11 AX20 ☐ 802.11g ☐ 802.11n(HT20) ☐ 802.11n(HT40)

☒ Channel 11: 2462MHz ☐ Channel 9: 2452MHz Polarity: H

VBW=3MHz

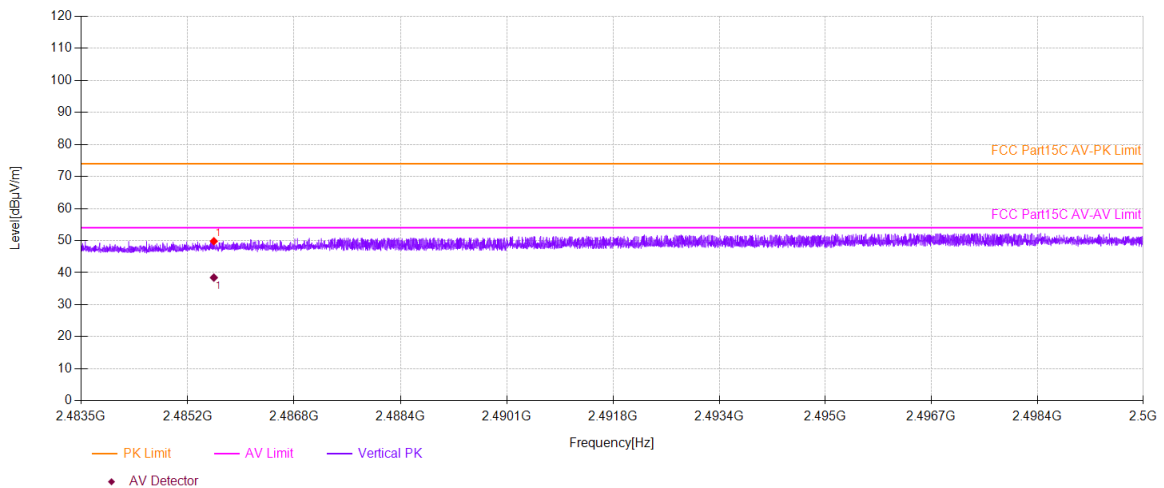


Spurious Emission in Restricted Band 2483.5-2500MHz

Test Model ☒ 802.11 AX20 ☐ 802.11g ☐ 802.11n(HT20) ☐ 802.11n(HT40)

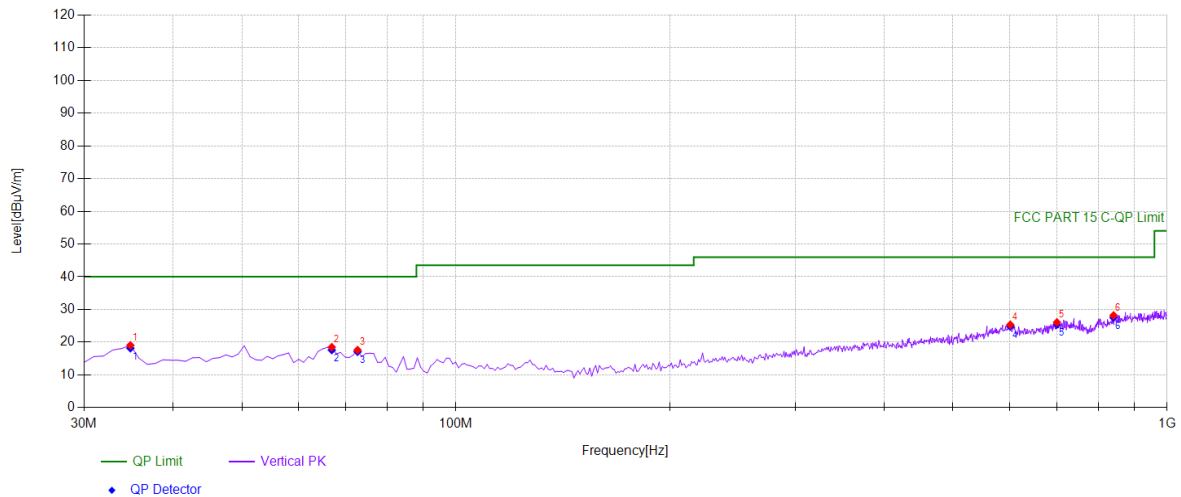
☒ Channel 11: 2462MHz ☐ Channel 9: 2452MHz Polarity: V

VBW=3MHz



■ Spurious Emission below 1GHz (30MHz to 1GHz)

Test mode: 802.11B Frequency: Channel 1: 2412MHz

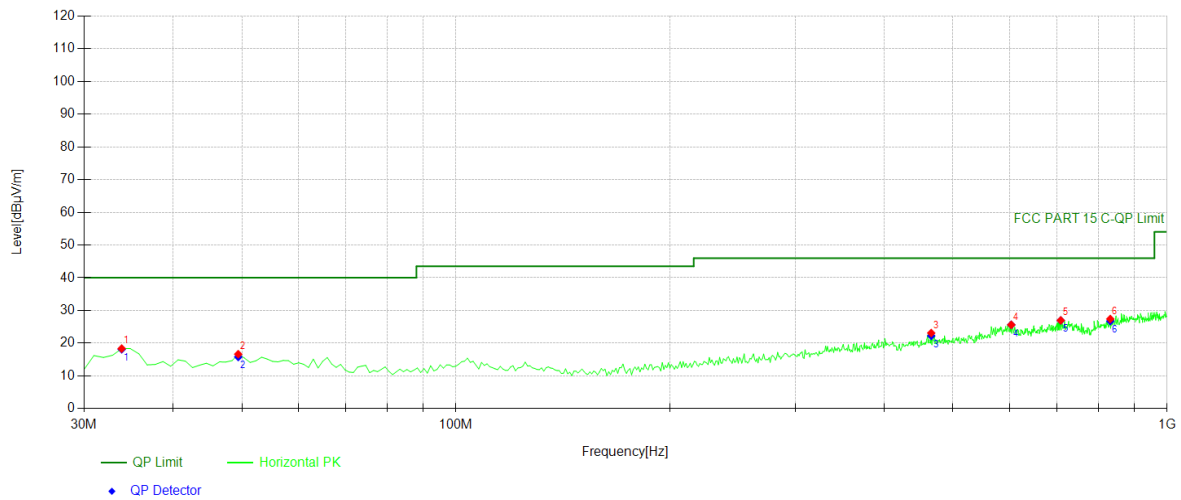


Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Detector	Limit [dBμV/m]	Margin [dB]	Polarity
1	34.8549	30.00	-10.94	19.06	PK	40.00	20.94	Vertical
2	66.8969	29.28	-10.79	18.49	PK	40.00	21.51	Vertical
3	72.7227	29.20	-11.60	17.60	PK	40.00	22.40	Vertical
4	601.901	24.85	0.49	25.34	PK	46.00	20.66	Vertical
5	699.97	25.19	0.90	26.09	PK	46.00	19.91	Vertical
6	840.760	26.01	2.19	28.20	PK	46.00	17.80	Vertical

Final Data List

NO.	Freq. [MHz]	Factor [dB/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]
1	34.8549	-10.94	18.19	40.00	21.81
2	66.8969	-10.79	17.62	40.00	22.38
3	72.7227	-11.60	17.09	40.00	22.91
4	601.9019	0.49	24.83	46.00	21.17
5	699.97	0.90	25.42	46.00	20.58
6	840.7608	2.19	27.53	46.00	18.47



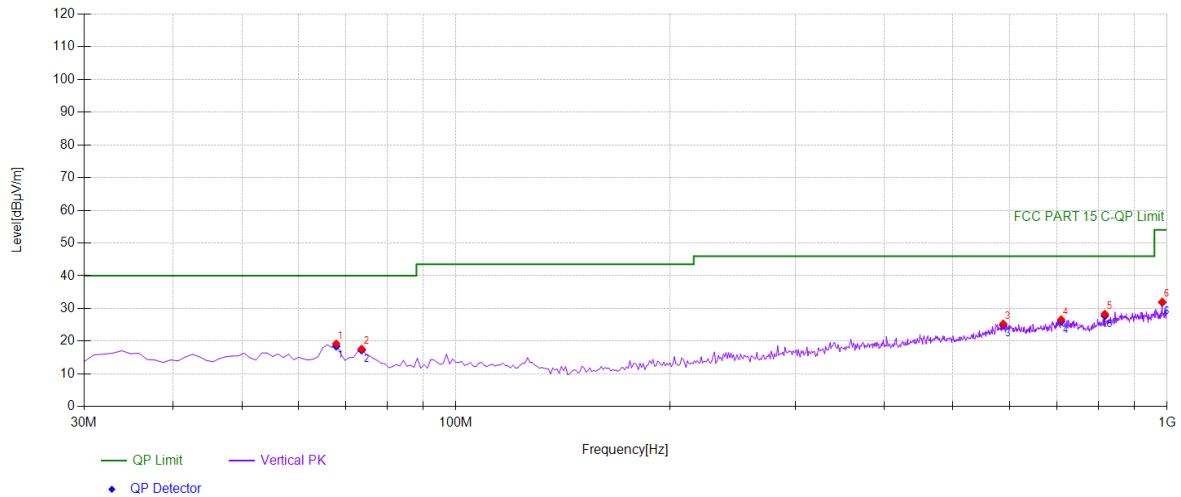
Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Detector	Limit [dBμV/m]	Margin [dB]	Polarity
1	33.8839	29.46	-11.09	18.37	PK	40.00	21.63	Horizontal
2	49.4194	25.34	-8.69	16.65	PK	40.00	23.35	Horizontal
3	465.966	26.25	-3.14	23.11	PK	46.00	22.89	Horizontal
4	603.843	25.26	0.37	25.63	PK	46.00	20.37	Horizontal
5	708.708	25.93	1.05	26.98	PK	46.00	19.02	Horizontal
6	832.022	25.43	1.98	27.41	PK	46.00	18.59	Horizontal

Final Data List

NO.	Freq. [MHz]	Factor [dB/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]
1	33.8839	-11.09	18.16	40.00	21.84
2	49.4194	-8.69	15.80	40.00	24.20
3	465.966	-3.14	22.26	46.00	23.74
4	603.8438	0.37	25.61	46.00	20.39
5	708.7087	1.05	26.96	46.00	19.04
6	832.022	1.98	26.75	46.00	19.25

Test mode: 802.11B Frequency: Channel 6: 2437MHz

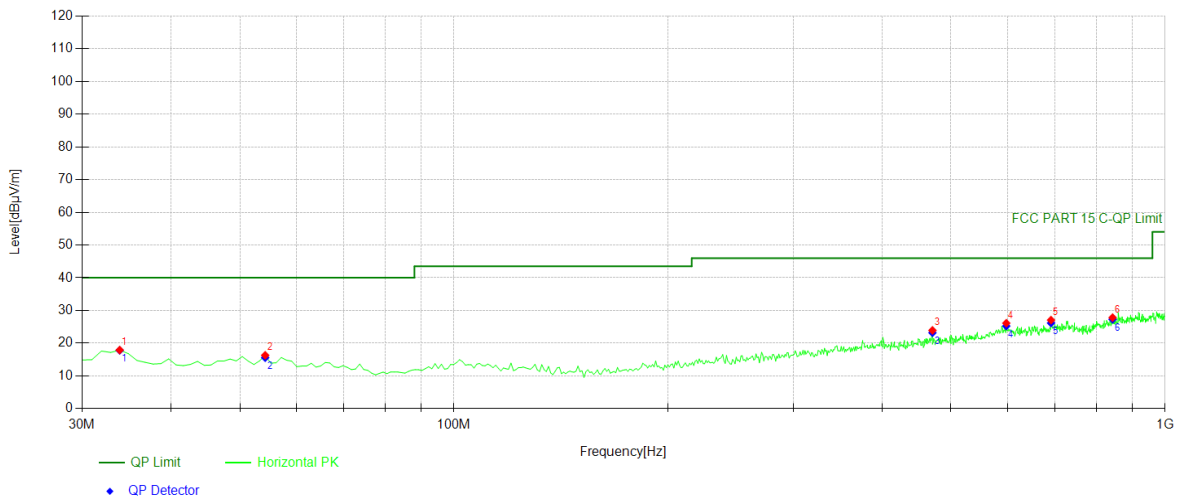


Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Detector	Limit [dBμV/m]	Margin [dB]	Polarity
1	67.8679	30.14	-10.92	19.22	PK	40.00	20.78	Vertical
2	73.6937	29.37	-11.74	17.63	PK	40.00	22.37	Vertical
3	588.308	25.28	0.05	25.33	PK	46.00	20.67	Vertical
4	709.679	25.56	1.06	26.62	PK	46.00	19.38	Vertical
5	817.457	26.71	1.62	28.33	PK	46.00	17.67	Vertical
6	984.464	28.22	3.83	32.05	PK	54.00	21.95	Vertical

Final Data List

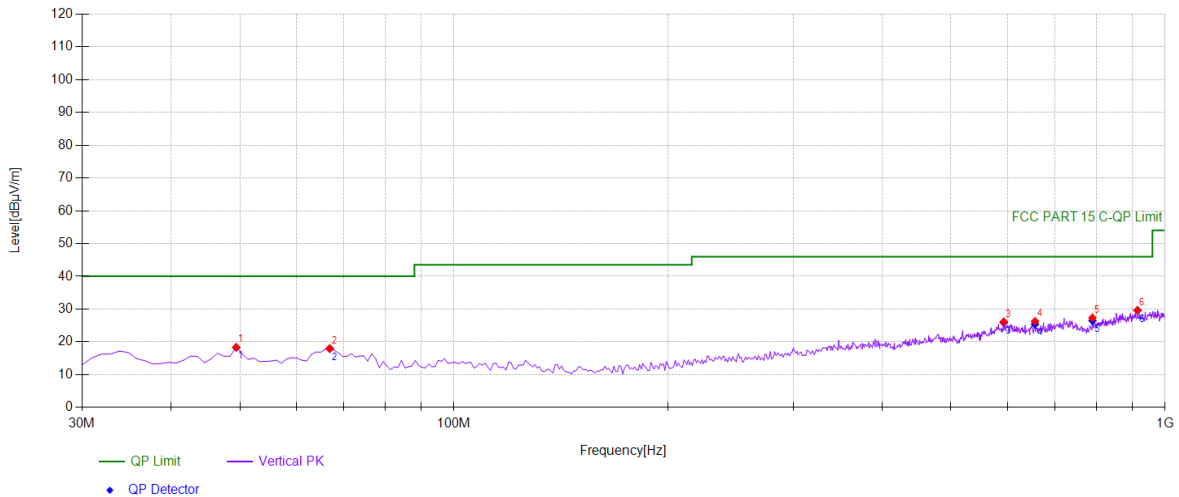
NO.	Freq. [MHz]	Factor [dB/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]
1	67.8679	-10.92	18.47	40.00	21.53
2	73.6937	-11.74	17.24	40.00	22.76
3	588.3083	0.05	24.94	46.00	21.06
4	709.6797	1.06	26.06	46.00	19.94
5	817.4575	1.62	27.77	46.00	18.23
6	984.4645	3.83	31.85	54.00	22.15



Suspected Data List								
NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Detector	Limit [dBμV/m]	Margin [dB]	Polarity
1	33.8839	29.01	-11.09	17.92	PK	40.00	22.08	Horizontal
2	54.2743	25.47	-9.15	16.32	PK	40.00	23.68	Horizontal
3	470.820	27.04	-3.11	23.93	PK	46.00	22.07	Horizontal
4	598.018	25.63	0.51	26.14	PK	46.00	19.86	Horizontal
5	691.231	26.54	0.53	27.07	PK	46.00	18.93	Horizontal
6	843.673	25.51	2.32	27.83	PK	46.00	18.17	Horizontal

Final Data List					
NO.	Freq. [MHz]	Factor [dB/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]
1	33.8839	-11.09	17.82	40.00	22.18
2	54.2743	-9.15	15.58	40.00	24.42
3	470.8208	-3.11	23.19	46.00	22.81
4	598.018	0.51	25.24	46.00	20.76
5	691.2312	0.53	26.17	46.00	19.83
6	843.6737	2.32	27.29	46.00	18.71

Test mode: 802.11B Frequency: Channel 11: 2462MHz

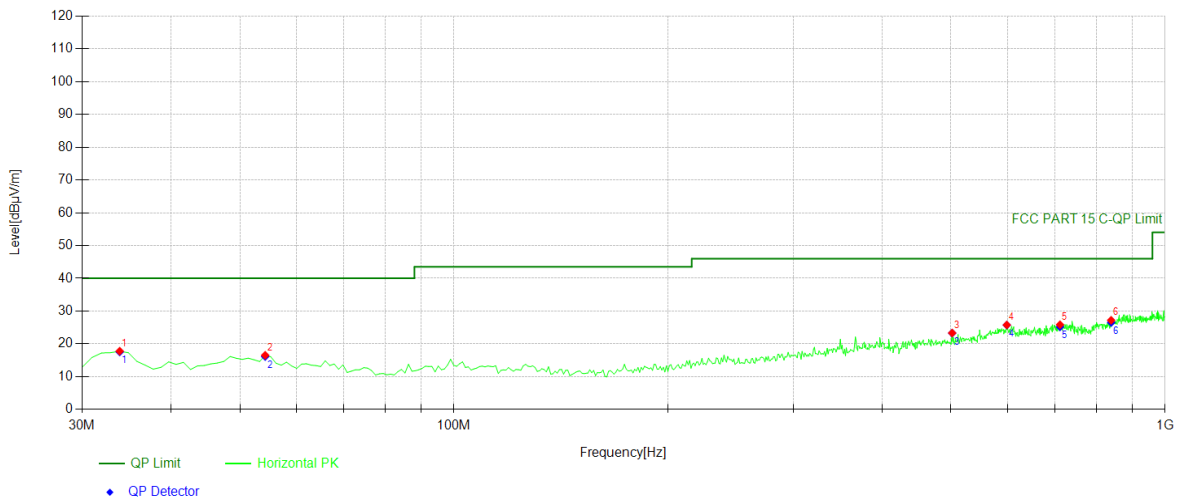


Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Detector	Limit [dBμV/m]	Margin [dB]	Polarity
1	49.4194	27.06	-8.69	18.37	PK	40.00	21.63	Vertical
2	66.8969	28.79	-10.79	18.00	PK	40.00	22.00	Vertical
3	593.163	25.89	0.27	26.16	PK	46.00	19.84	Vertical
4	656.276	26.28	-0.01	26.27	PK	46.00	19.73	Vertical
5	790.270	26.86	0.52	27.38	PK	46.00	18.62	Vertical
6	914.554	26.26	3.41	29.67	PK	46.00	16.33	Vertical

Final Data List

NO.	Freq. [MHz]	Factor [dB/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]
1	49.4194	-8.69	18.29	40.00	21.71
2	66.8969	-10.79	17.92	40.00	22.08
3	593.1632	0.27	25.92	46.00	20.08
4	656.2763	-0.01	25.38	46.00	20.62
5	790.2703	0.52	26.49	46.00	19.51
6	914.5546	3.41	29.62	46.00	16.38



Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Detector	Limit [dBμV/m]	Margin [dB]	Polarity
1	33.8839	28.88	-11.09	17.79	PK	40.00	22.21	Horizontal
2	54.2743	25.69	-9.15	16.54	PK	40.00	23.46	Horizontal
3	501.891	26.36	-3.03	23.33	PK	46.00	22.67	Horizontal
4	598.989	25.23	0.56	25.79	PK	46.00	20.21	Horizontal
5	711.621	24.81	1.06	25.87	PK	46.00	20.13	Horizontal
6	839.789	25.05	2.16	27.21	PK	46.00	18.79	Horizontal

Final Data List

NO.	Freq. [MHz]	Factor [dB/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]
1	33.8839	-11.09	17.56	40.00	22.44
2	54.2743	-9.15	16.15	40.00	23.85
3	501.8919	-3.03	23.30	46.00	22.70
4	598.989	0.56	25.76	46.00	20.24
5	711.6216	1.06	25.19	46.00	20.81
6	839.7898	2.16	26.53	46.00	19.47

7.6 CONDUCTED EMISSION TEST

7.6.1 Applicable Standard

According to FCC Part 15.207(a).

7.6.2 Conformance Limit

Conducted Emission Limit		
Frequency(MHz)	Quasi-peak	Average
0.15-0.5	66-56	56-46
0.5-5.0	56	46
5.0-30.0	60	50

Note:

1. The lower limit shall apply at the transition frequencies
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

7.6.3 Test Configuration

Test according to clause 6.3 conducted emission test setup 3.

7.6.4 Test Procedure

The EUT was placed on a table which is 0.8m above ground plane.
Maximum procedure was performed on the highest emissions to ensure EUT compliance.
Repeat above procedures until all frequency measured were complete.

7.6.5 Test Results

N/A

Not applicable, since EUT is DC power.

7.7 ANTENNA APPLICATION

7.7.1 Antenna Requirement

Standard	Requirement
FCC CRF Part15.203	An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, §15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi..

7.7.2 Result

PASS

Temperature : 21.4℃ ATM Pressure: 1011 mbar
Humidity : 52% Test Engineer: Yi Xingpeng

- ☐ Antenna uses a permanently attached antenna which is not replaceable.
- ☒ Not using a standard antenna jack or electrical connector for antenna replacement.
- ☐ The antenna has to be professionally installed (please provide method of installation).

Which in accordance to section 15.203, please refer to the internal photos.

Detail of factor for radiated emission:

Frequency(MHz)	Ant F(dB)	Cab L(dB)	Preamp(dB)	Correct Factor(dB)
0.009	20.6	0.03	\	20.63
0.15	20.7	0.1	\	20.8
1	20.9	0.15	\	21.05
10	20.1	0.28	\	20.38
30	18.8	0.45	\	19.25
30	11.7	0.62	27.9	-15.58
100	12.5	1.02	27.8	-14.28
300	12.9	1.91	27.5	-12.69
600	19.2	2.92	27	-4.88
800	21.1	3.54	26.6	-1.96
1000	22.3	4.17	26.2	0.27
1000	25.6	1.76	41.4	-14.04
3000	28.9	3.27	43.2	-11.03
5000	31.1	4.2	44.6	-9.3
8000	36.2	5.95	44.7	-2.55
10000	38.4	6.3	43.9	0.8
12000	38.5	7.14	42.3	3.34
15000	40.2	8.15	41.4	6.95
18000	45.4	9.02	41.3	13.12
18000	37.9	1.81	47.9	-8.19
21000	37.9	1.95	48.7	-8.85
25000	39.3	2.01	42.8	-1.49
28000	39.6	2.16	46.0	-4.24
31000	41.2	2.24	44.5	-1.06
34000	41.5	2.29	46.6	-2.81
37000	43.8	2.30	46.4	-0.3
40000	43.2	2.50	42.2	3.5

--- End of Report ---

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1. 本报告无授权批准人签字及“检验检测专用章”无效。
1. This report is invalid without the signature of the authorized approver and "special seal for testing".
2. 未经许可本报告不得部分复制。
2. This report shall not be copied partly without authorization.
3. 本报告的检测结果仅对送测样品有效，委托方对样品的代表性和资料的真实性负责。
3. The test results or observations are applicable only to tested sample. Client shall be responsible for representativeness of the sample and authenticity of the material.
4. 本检测报告中检测项目标注有特殊符号则该项目不在资质认定范围内，仅作为客户委托、科研、教学或内部质量控制等目的使用。
4. The observations or tests with special mark fall outside the scope of accreditation, and are only used for purpose of commission, research, training, internal quality control etc.
5. 本检测报告以实测值进行符合性判定，未考虑不确定度所带来的风险，本实验室不承担相关责任，特别约定、标准或规范中有明确规定的除外。
5. The test results or observations are provided in accordance with measured value, without taking risks caused by uncertainty into account. Without explicit stipulation in special agreements, standards or regulations, EMTEK shall not assume any responsibility.
6. 对本检验报告若有异议，请于收到报告之日起 20 日内提出。
6. Objections shall be raised within 20 days from the date receiving the report.