



EUROFINS ELECTRICAL TESTING SERVICE (SHENZHEN) CO., LTD.

RADIO TEST - REPORT

FCC / IC Compliance Test Report for

Product name: Audio Mixer

Model name: AUREUS 28

FCC ID: I4S-AUREUS28

IC:3624A- AUREUS28

Test Report Number: EFGX200300111-IE-01-E01

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1 General Information

1.1 Notes

The results of this test report relate exclusively to the item tested as specified in chapter "Description of test item" and are not transferable to any other test items.

Eurofins Electrical Testing Service (Shenzhen) Co., Ltd. is not responsible for any generalisations and conclusions drawn from this report. Any modification of the test item can lead to invalidity of test results and this test report may therefore be not applicable to the modified test item.

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Operator:

2020-06-16

Bruce Zheng / Project Engineer



Date

Eurofins-Lab.

Name / Title

Signature

Technical responsibility for area of testing:

2020-06-16

Tom Tian / Supervisor



Date

Eurofins

Name / Title

Signature

1.2 Testing laboratory

Eurofins Electrical Testing Service (Shenzhen) Co., Ltd.

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The Laboratory has passed the Accreditation by the American Association for Laboratory Accreditation (A2LA). The Accreditation number is 5376.01

The Laboratory has been listed by industry Canada to perform electromagnetic emission measurements, The CAB identifier is CN0088

1.3 Details of approval holder

Name : Peavey Electronics Corp.
Address : 5022 Hartley Peavey Drive
Meridian, MS 39305, USA
Telephone : N/A
Fax : N/A

1.4 Application details

Date of receipt of application : March 23, 2020
Date of receipt of test item : March 23, 2020
Date of test : March 23, 2020 – April 15, 2020
Date of issue : June 16, 2020

1.5 Test item

Product type : Audio Mixer
Model name : AUREUS 28
Brand : PEAVEY
Serial number : N/A
Ratings : 100-240V~, 50/60Hz (for adapter)
Test voltage : 120V~, 60Hz (for adapter)
DC3.3V for radio module
FCC ID : I4S-AUREUS28
IC : 3624A- AUREUS28
PMN : Audio Mixer
HVIN : Aureus
Additional information : The appliance covered by this report is Audio Mixer which is powered by adaptor.

Adapter information

Model name: GPE072D-225320W
Input: 100-240V~, 50/60Hz, 1.8A
Output: 22.5Vdc, 3200mA

RadioTechnical data

Frequency range : 802.11 b/g/n(HT20) :2412MHz – 2462MHz
802.11 n(HT40) :2422MHz – 2452MHz
Radio Tech. : WLAN 2.4G
Frequency channel : 802.11 b/g/n(HT20) :11
802.11 n(HT40) :7
Modulation : DSSS,OFDM
Antenna type : External antenna
Antenna gain : 3.0dBi

Radio module

Type : WLAN 2.4G
Model : BL-R8188EU1
Manufacturer : Shenzhen Bilian Electronic Co., Ltd.

1.6 Test standards

Test Standards	
FCC Part 15 Subpart C 10-1-2018 Edition	PART 15 - RADIO FREQUENCY DEVICES Subpart C - Intentional Radiators
RSS-247 Issue 2 February 2017	RSS-247 — Digital Transmission Systems (DTSS), Frequency Hop- ping Systems (FHSs) and Licence-Exempt Local Area Network (LE- LAN) Devices
RSS-GEN Issue 5 March 2019	RSS-Gen — General Requirements for Compliance of Radio Appa- ratus

Test Method

- 1: ANSI C63.4-2014, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz.
- 2: ANSI C63.10-2013, American National Standard for Testing Unlicensed Wireless Devices.
- 3: KDB558074 D01 15.247 Meas Guidance v05r02

2 Technical test

2.1 Summary of test results

No deviations from the technical specification(s) were ascertained in the course of the tests performed.



or

The deviations as specified were ascertained in the course of the tests performed.



2.2 Test environment

Temperature : 20 ... 25°C
 Relative humidity content : 30 ... 60%
 Air pressure : 100 ... 101kPa

2.3 Measurement uncertainty

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in Measurement" (GUM) published by ISO.

System Measurement Uncertainty	
Test Items	Extended Uncertainty
Uncertainty for Conducted RF test	RF Power Conducted: 1.16dB Frequency test involved: 1.05×10 ⁻⁷ or 1%
Uncertainty for Radiated Spurious Emission 25MHz-3000MHz	Horizontal: 4.46dB; Vertical: 4.54dB;
Uncertainty for Radiated Spurious Emission 3000MHz-18000MHz	Horizontal: 4.42dB; Vertical: 4.41dB;
Uncertainty for Radiated Spurious Emission 18000MHz-40000MHz	Horizontal: 4.63dB; Vertical: 4.62dB;

2.4 Test mode

The EUT is operating at 2.4GHz ISM; it supports 802.11b, 802.11g, 802.11n(HT20,HT40) and they are all tested in this report.

For 802.11b/g/n(HT20) (2.4GHz band), the lowest, middle, highest channel numbers of the EUT used and tested in this report are separately 1 (2412MHz), 6 (2437MHz) and 11 (2462MHz).

For 802.11n(HT40) (2.4GHz band), the lowest, middle, highest channel numbers of the EUT used and tested in this report are separately 3 (2422MHz), 6 (2437MHz) and 9 (2452MHz).

2.5 Test equipment utilized

EQUIPMENT ID	EQUIPMENT NAME	MODEL NO.	CAL. DUE DATE
23-2-13-12	Signal Analyzer	N9010B-544	2021-04-14
23-2-13-13	BT/WLAN Tester	CMW270	2021-04-14
23-2-13-14	Signal Generator	N5183B-520	2020-05-05
23-2-13-15	Vector Signal Generator	N5182B-506	2021-04-14
23-2-10-43	Switch and Control Unit	ERIT-E-JS0806-2	2021-04-14
23-2-10-44	DC power supply	E3642A	2021-04-14
23-2-10-45	temperature test chamber	SG-80-CC-2	2020-05-05
23-2-13-01	EMI Test Receiver	ESR7	2021-04-04
23-2-13-02	Signal Analyzer	N9020B-544	2021-05-05
23-2-12-01	Active Loop Antenna	FMZB 1519B	2020-04-20
23-2-12-02	TRILOG Broadband Antenna	VULB9168	2021-04-13
23-2-12-03	Horn Antenna	3117	2021-04-13
23-2-12-04	Horn Antenna	BBHA 9170	2020-04-17
23-2-12-05	Universal Antenna Stand	CLSA0110	2021-04-13
23-2-10-01	Preamplifier	BBV9745	2021-04-15
23-2-10-02	Preamplifier	EMC001330	2021-04-15
23-2-10-03	Preamplifier	EMC051845SE	2020-05-06
23-2-10-14	Switch and Control Unit	ERIT-E-JS0806-SF1	N/A

2.6 Auxiliary Equipment Used during Test:

DESCRIPTION	MANUFACTURER	MODEL NO.	S/N
Laptop	LENOVO	TP00096A	PF-1QH0LV

2.7 Test software information:

Test Software Version	REALTEK 11n		
Mode	Setting TX Power	TX Pattern	Modulation Type
802.11b	L: 51, M: 48, H: 50	TX Continuous	DBPSK
802.11g	52	TX Continuous	BPSK
802.11n HT20	56	TX Continuous	BPSK
802.11n HT40	50	TX Continuous	BPSK

2.8 Customized Configurations

EUT Conf.	Signal Description	Operating Frequency	Duty Cycle
TM1	802.11b(DBPSK)	2412 MHz – 2462MHz	100%
TM1	802.11g(BPSK)	2412 MHz – 2462MHz	100%
TM1	802.11n HT20(BPSK)	2412 MHz – 2462MHz	100%
TM1	802.11n HT40(BPSK)	2422 MHz – 2452MHz	100%

2.9 Test Environments

Enviroment Parameter	Temperature	Voltage	Relative Humidity
101.5Kpa	25.6℃	3.3Vdc	59.4%

2.10 Test results

☒ 1st test

☐ test after modification

☐ production test

Technical Requirements					
FCC Part 15 Subpart C, RSS-247 Issue 2/RSS-Gen Issue 5					
Test Condition			Test Result	Verdict	Test Site
§15.207	RSS-GEN 8.8	Conducted emission AC power port	Page 11	Pass	Site 1
§15.247(b)(1)	RSS-247 Clause 5.4(b)	Conducted output power for FHSS	--	N/A	--
§15.247(b)(3)	RSS-247 Clause 5.4(d)	Conducted output power and E.I.R.P for DTS	Appendix D	Pass	Site 1
§15.247(e)	RSS-247 Clause 5.2(b)	Power spectral density	Appendix E	Pass	Site 1
§15.247(a)(2)	RSS-247 Clause 5.2(a)	6dB bandwidth	Appendix B	Pass	Site 1
§15.247(a)(1)	RSS-247 Clause 5.1(a)	20dB Occupied bandwidth	--	N/A	--
	RSS-GEN 6.7	99% Occupied Bandwidth	Appendix C	Pass	Site 1
§15.247(a)(1)	RSS-247 Clause 5.1(b)	Carrier frequency separation	--	N/A	--
§15.247(a)(1)(iii)	RSS-247 Clause 5.1(d)	Number of hopping frequencies	--	N/A	--
§15.247(a)(1)(iii)	RSS-247 Clause 5.1(d)	Dwell Time	--	N/A	--
§15.247(d) §15.205	RSS-247 Clause 5.5 RSS-GEN 8.10	Spurious RF conducted emissions	Appendix G Appendix H	Pass	Site 1
§15.247(d)	RSS-247 Clause 5.5	Band edge	Appendix F	Pass	Site 1
§15.247(d) & §15.209 & §15.205	RSS-247 Clause 5.5 & RSS-GEN 6.13 RSS-GEN 8.9 RSS-GEN 8.10	Spurious radiated emissions for transmitter	See page 22	Pass	Site 1
	RSS-GEN Clause 6.11	Transmitter frequency stability	Appendix I	Pass	Site 1
§15.203	RSS-GEN 6.8	Antenna requirement	See note 1	Pass	--

Remark 1: N/A – Not Applicable.

Note 1: The EUT uses an External antenna, the gain: 3dBi. According to §15.203, it is considered sufficiently to comply with the provisions of this section.

3 Technical Requirement

3.1 Conducted Emission

Test Method:

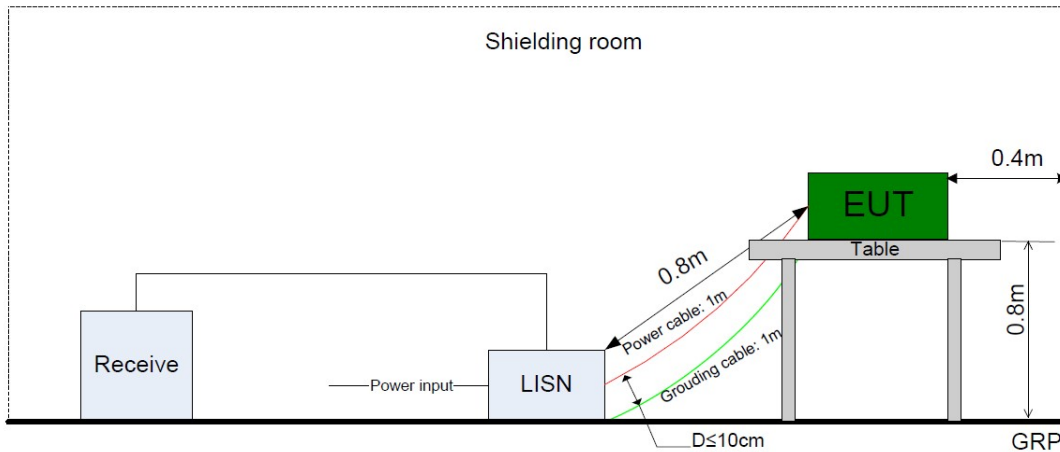
The test method was referred to the subclause 5.2 of ANSI C63.4-2014.

1. The EUT was placed on a table, which is 0.8m above ground plane
2. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.).
3. Maximum procedure was performed to ensure EUT compliance
4. A EMI test receiver is used to test the emissions from both sides of AC line

Test Setup:

The mains cable of the EUT (per AC/DC Adapter) must be connected to LISN. The LISN shall be placed 0.8 m from the boundary of EUT and bonded to a ground reference plane for LISN mounted on top of the ground reference plane. This distance is between the closest points of the LISN and the EUT. All other units of the EUT and associated equipment shall be at least 0.8m from the LISN.

Ground connections, where required for safety purposes, shall be connected to the reference ground point of the LISN and, where not otherwise provided or specified by the manufacturer, shall be of same length as the mains cable and run parallel to the mains connection at a separation distance of not more than 0.1 m.



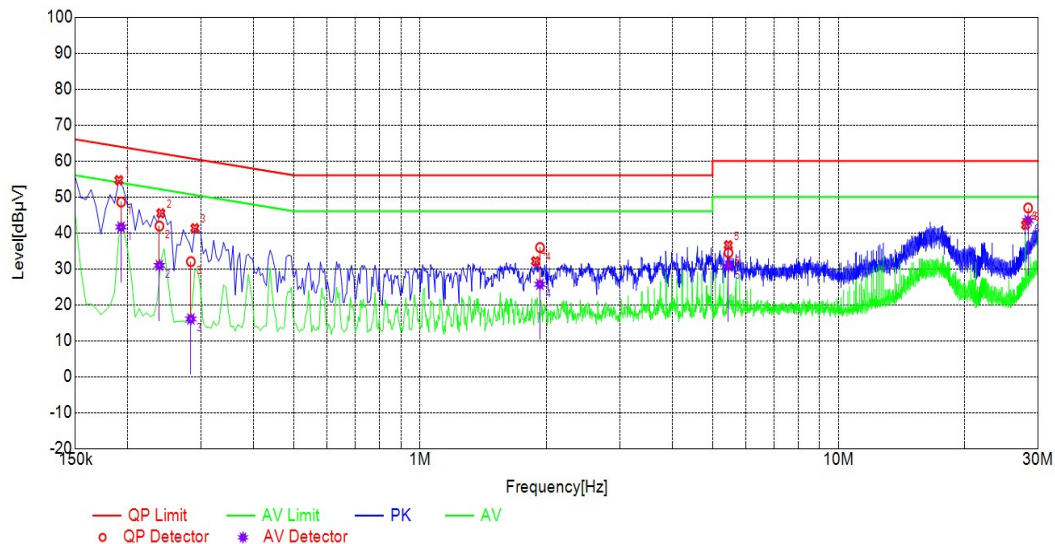
Limit:

Frequency MHz	QP Limit dB μ V	AV Limit dB μ V
0.150-0.500	66-56*	56-46*
0.500-5	56	46
5-30	60	50

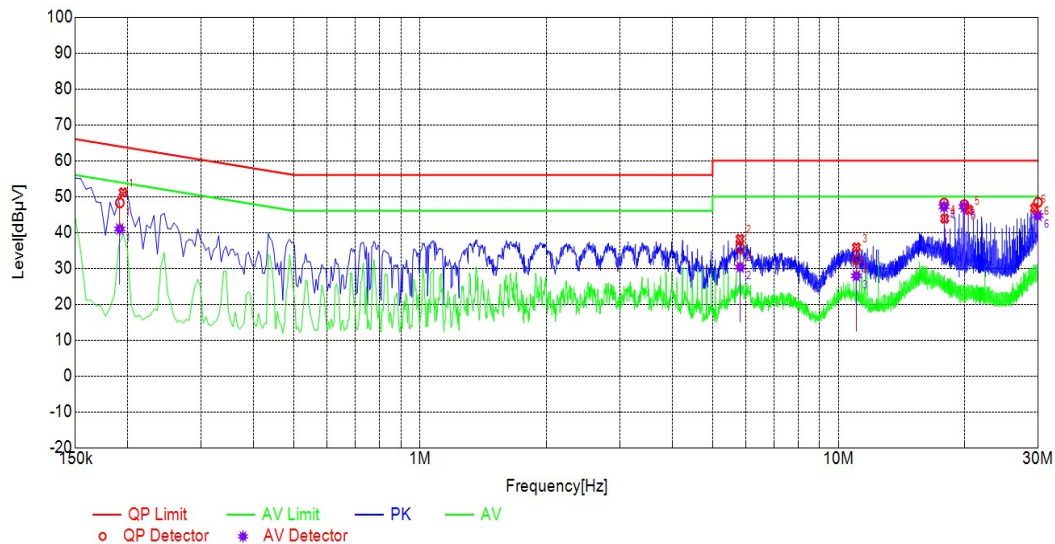
Decreasing linear.

Test Result:

WIFI TX: L



Freq. [MHz]	Factor [dB]	QP Value [dBμV]	QP Limit [dBμV]	QP Margin [dB]	AV Value [dBμV]	AV Limit [dBμV]	AV Margin [dB]	Verdict
0.1928	10.22	48.59	63.91	15.32	41.62	53.91	12.29	PASS
0.2381	10.22	41.89	62.16	20.27	30.95	52.16	21.21	PASS
0.2831	10.23	32.00	60.72	28.72	16.04	50.72	34.68	PASS
1.9336	10.25	35.93	56.00	20.07	25.69	46.00	20.31	PASS
5.4569	10.30	34.48	60.00	25.52	30.75	50.00	19.25	PASS
28.3778	10.60	46.93	60.00	13.07	43.42	50.00	6.58	PASS

WIFI TX: N


Freq. [MHz]	Factor [dB]	QP Value [dBμV]	QP Limit [dBμV]	QP Margin [dB]	AV Value [dBμV]	AV Limit [dBμV]	AV Margin [dB]	Verdict
0.1915	10.21	48.26	63.97	15.71	40.98	53.97	12.99	PASS
5.8210	10.32	35.67	60.00	24.33	30.35	50.00	19.65	PASS
11.0350	10.43	32.37	60.00	27.63	27.93	50.00	22.07	PASS
17.8697	10.56	48.19	60.00	11.81	47.18	50.00	2.82	PASS
19.9741	10.59	47.76	60.00	12.24	47.12	50.00	2.88	PASS
29.9564	10.65	48.39	60.00	11.61	44.71	50.00	5.29	PASS

3.2 Conducted output power and E.I.R.P

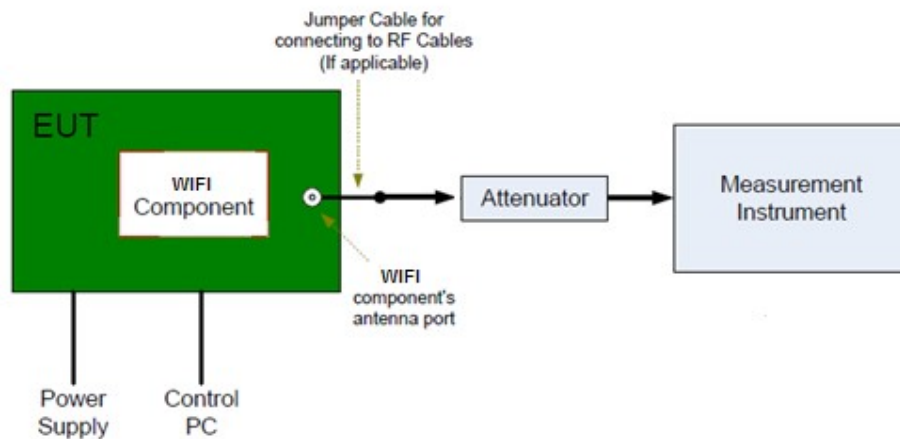
Test Method

The test method was referred to the subclause 11.9.1.1 of ANSI C63.10-2013.

1. Connect EUT test port to spectrum analyzer.
2. Set the EUT to transmit maximum output power at 2.4GHz.
3. Then set the EUT to transmit at high, middle and low frequency and measure the conducted output power separately.
4. RBW=2MHz, VBW≥3RBW, Sweep = auto, Detector function = RMS, Trace = max hold
5. Repeat above procedures until all frequencies measured were complete.

Test Setup:

The WIFI component's antenna ports(s) of the EUT are connected to the measurement instrument per an appropriate attenuator. The EUT is controlled by PC/software to emit the specified signals for the purpose of measurements.



Limits:

According to §15.247 (b) (3), RSS-247 5.4 (d), conducted output power limit as below:

Conducted Power Limit

Frequency Range MHz	Limit W	Limit dBm
2400-2483.5	≤1	≤30

E.I.R.P Limit

Frequency Range MHz	Limit W	Limit dBm
2400-2483.5	≤4	≤36

Test Result: Pass

3.3 6dB bandwidth

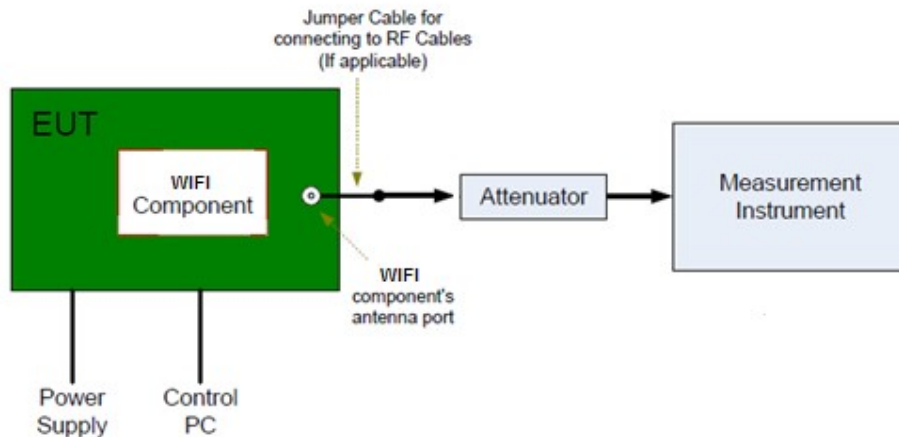
Test Method:

The test method was referred to the subclause 11.8 of ANSI C63.10-2013.

1. Connect EUT test port to spectrum analyzer.
2. Set the EUT to transmit maximum output power at 2.4GHz.
3. Then set the EUT to transmit at high, middle and low frequency and measure the conducted output power separately.
4. RBW=100K, VBW $\geq$ 3RBW, Sweep = auto, Detector function = peak, Trace = max hold
5. Use the automatic bandwidth measurement capability of an instrument, may be employed using the X dB bandwidth mode with X set to 6 dB, care shall be taken so that the bandwidth measurement is not influenced by any intermediate power nulls in the fundamental emission that might be $\geq$ 6 dB.
6. Allow the trace to stabilize, record the X dB Bandwidth value.

Test Setup:

The WIFI component's antenna ports(s) of the EUT are connected to the measurement instrument per an appropriate attenuator. The EUT is controlled by PC/software to emit the specified signals for the purpose of measurements.



Limit:

According to §15.247(a)(2), RSS-247 5.2 (a) 6dB bandwidth limit as below:

Limit [kHz]

≥ 500

Test Result: Pass

3.4 99% bandwidth

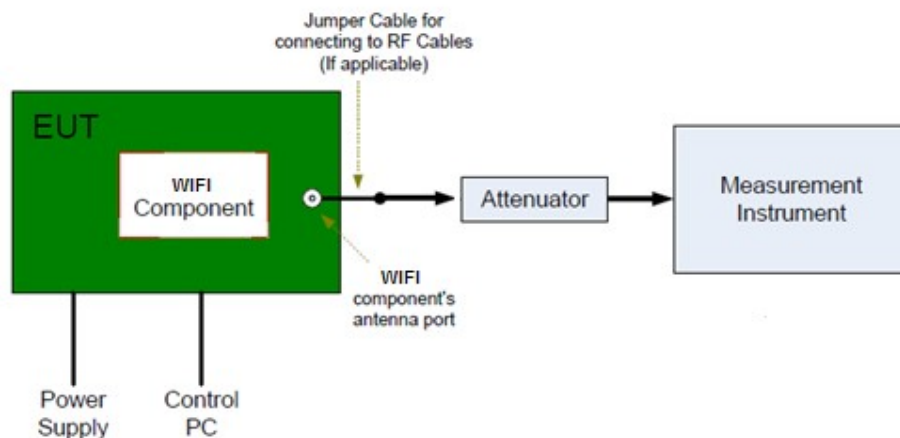
Test Method:

The test method was referred to the subclause 11.8 of ANSI C63.10-2013.

1. Connect EUT test port to spectrum analyzer.
2. Set the EUT to transmit maximum output power at 2.4GHz.
3. Then set the EUT to transmit at high, middle and low frequency separately.
4. Set Span = approximately 1.5 to 5 times the 99% bandwidth.
5. Set RBW $\geq$ 1% to 5% of the 99% bandwidth, VBW $\geq$ RBW.
6. Set Sweep = auto.
7. Set Detector function = peak.
8. Allow the trace to stabilize.
9. Repeat above procedures until all frequencies measured were complete.

Test Setup:

The WIFI component's antenna ports(s) of the EUT are connected to the measurement instrument per an appropriate attenuator. The EUT is controlled by PC/software to emit the specified signals for the purpose of measurements.



Limit:

According to RSS-GEN 6.7, no limit for 99% bandwidth:

Limit [kHz]

--

Test Result: Pass

3.5 Frequency Stability

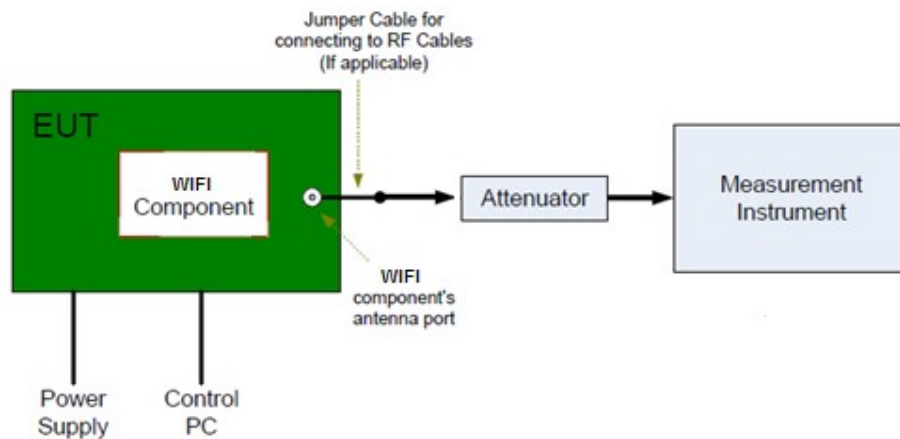
Test Method:

The test method was referred to the subclause 6.8.2 of ANSI C63.10-2013.

1. Connect EUT test port to spectrum analyzer.
2. Set the EUT to transmit maximum output power at 2.4GHz.
3. Then set the EUT to transmit at high, middle and low frequency and measure the conducted output power separately.
4. RBW=100K, VBW $\geq$ 3RBW, Sweep = auto, Detector function = peak, Trace = max hold
5. Allow the trace to stabilize, record the frequency value.

Test Setup:

The WIFI component's antenna ports(s) of the EUT are connected to the measurement instrument per an appropriate attenuator. The EUT is controlled by PC/software to emit the specified signals for the purpose of measurements.



Limit:

According to RSS-GEN 8.11 limit as below:

the fundamental emissions of the radio apparatus should be kept within at least the central 80% of its permitted operating frequency band in order to minimize the possibility of out-of-band operation.

Test Result: Pass

3.6 Power spectral density

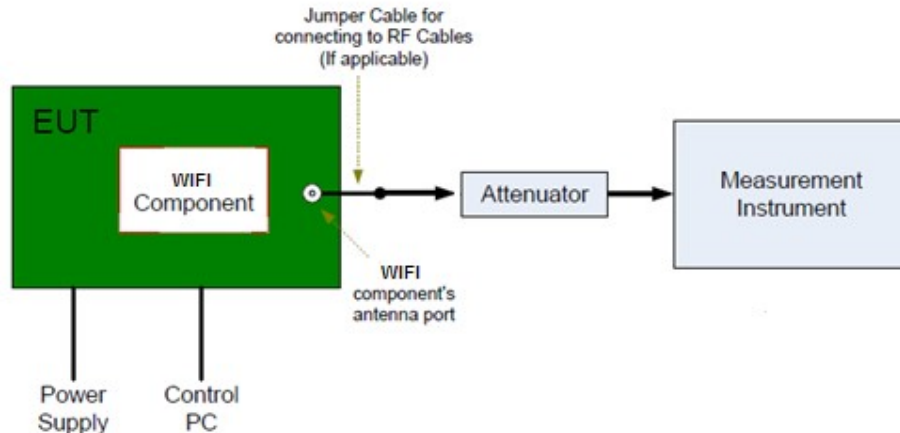
Test Method:

The test method was referred to the subclause 11.10 of ANSI C63.10-2013.

1. Connect EUT test port to spectrum analyzer.
2. Set the EUT to transmit maximum output power at 2.4GHz.
3. Then set the EUT to transmit at high, middle and low frequency separately.
4. Set analyzer center frequency to DTS channel center frequency.
5. Set the span to 1.5DTS bandwidth, set the RBW to: $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$, set the VBW $\geq 3\text{RBW}$.
6. Detector = peak.
7. Sweep time = auto couple.
8. Trace mode = max hold.
9. Allow trace to fully stabilize.
10. Use the peak marker function to determine the maximum amplitude level within the RBW.
11. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

Test Setup:

The WIFI component's antenna ports(s) of the EUT are connected to the measurement instrument per an appropriate attenuator. The EUT is controlled by PC/software to emit the specified signals for the purpose of measurements.



Limit:

According to §15.247(e), Power spectral density limit as below:

Limit [dBm]

≤ 8

Test Result: Pass

3.7 Spurious RF conducted emissions

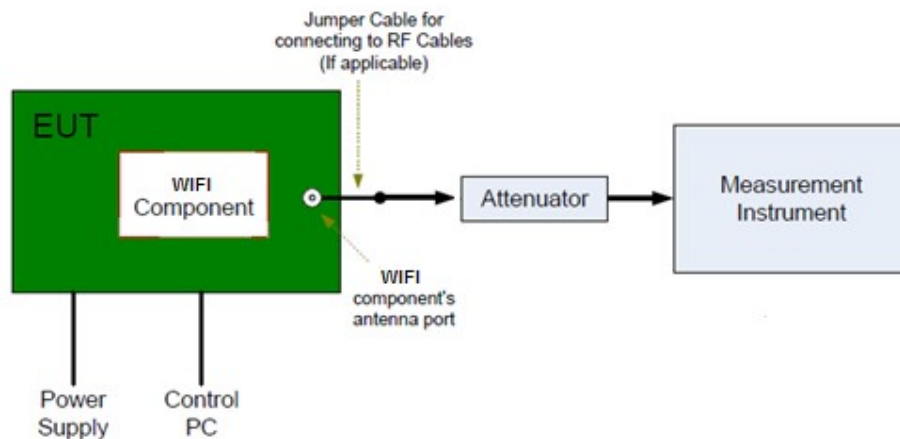
Test Method:

The test method was referred to the subclause 11.11/11.12 of ANSI C63.10-2013.

1. Connect EUT test port to spectrum analyzer.
2. Set the EUT to transmit maximum output power at 2.4GHz.
3. Then set the EUT to transmit at high, middle and low frequency separately.
4. Set Span = wide enough to capture the peak level of the emission operating on the channel closest to the band edge, as well as any modulation products which fall outside of the authorized band of operation.
5. Set RBW = 100 kHz, VBW $\geq$ RBW.
6. Set Sweep = auto.
7. Set Detector function = peak.
8. Allow the trace to stabilize.
9. Repeat above procedures until all frequencies measured were complete.

Test Setup:

The WIFI component's antenna ports(s) of the EUT are connected to the measurement instrument per an appropriate attenuator. The EUT is controlled by PC/software to emit the specified signals for the purpose of measurements.



Limit:

According to §15.247(d) & §15.209 & §15.205 Spurious RF conducted emissions limit as below:

Frequency Range MHz	L edimit (dBc)
30-25000	-20

Test Result: Pass

3.8 Band edge

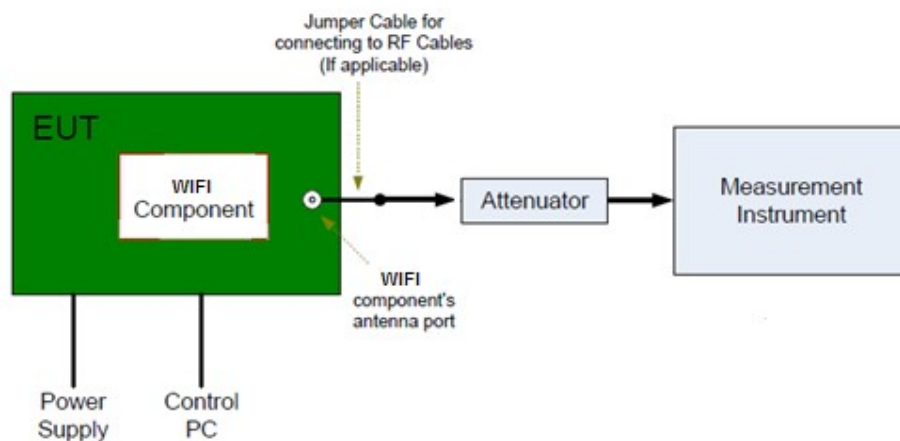
Test Method:

The test method was referred to the subclause 11.13.3.4 of ANSI C63.10-2013.

1. Connect EUT test port to spectrum analyzer.
2. Set the EUT to transmit maximum output power at 2.4GHz.
3. Then set the EUT to transmit at high, middle and low frequency separately.
4. Set Span = wide enough to capture the peak level of the emission operating on the channel closest to the band edge, as well as any modulation products which fall outside of the authorized band of operation.
5. Set RBW $\geq$ 1% of the span, VBW $\geq$ RBW.
6. Set Sweep = auto.
7. Set Detector function = peak.
8. Allow the trace to stabilize.
9. Repeat above procedures until all frequencies measured were complete.

Test Setup:

The WIFI component's antenna ports(s) of the EUT are connected to the measurement instrument per an appropriate attenuator. The EUT is controlled by PC/software to emit the specified signals for the purpose of measurements.



Limit:

In any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced 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 that the transmitter demonstrates compliance with the peak conducted power limits.

Test Result: Pass

3.9 Spurious radiated emissions for transmitter

Test Method:

The test method was referred to the subclause 11.11/11.12 of ANSI C63.10-2013.

- 1: The EUT was placed on a turn table which is 1.5m above ground plane for above 1GHz and 0.8m above ground for below 1GHz at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- 2: The EUT was set 3 meters away from the interference – receiving antenna, which was mounted on the top of a variable – height antenna tower.
- 3: The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- 4: For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- 5: Use the following spectrum analyzer settings According to C63.10:

For Above 1GHz

Span = wide enough to capture the peak level of the in-band emission and all spurious
RBW = 1MHz, VBW ≥ RBW for peak measurement and VBW = 10Hz for average measurement, Sweep = auto, Detector function = peak, Trace = max hold.

For Below 1GHz

Use the following spectrum analyzer settings:

Span = wide enough to capture the peak level of the in-band emission and all spurious
RBW = 100 KHz, VBW ≥ RBW for peak measurement, Sweep = auto, Detector function = peak, Trace = max hold.

For Below 30MHz

Use the following spectrum analyzer settings:

Span = wide enough to capture the peak level of the in-band emission and all spurious
RBW = 200 Hz, VBW ≥ RBW from 9KHz to 0.15MHz, RBW 9KHz VBW ≥ RBW from 0.15MHz to 30MHz for peak measurement, Sweep = auto, Detector function = peak, Trace = max hold.

Note:

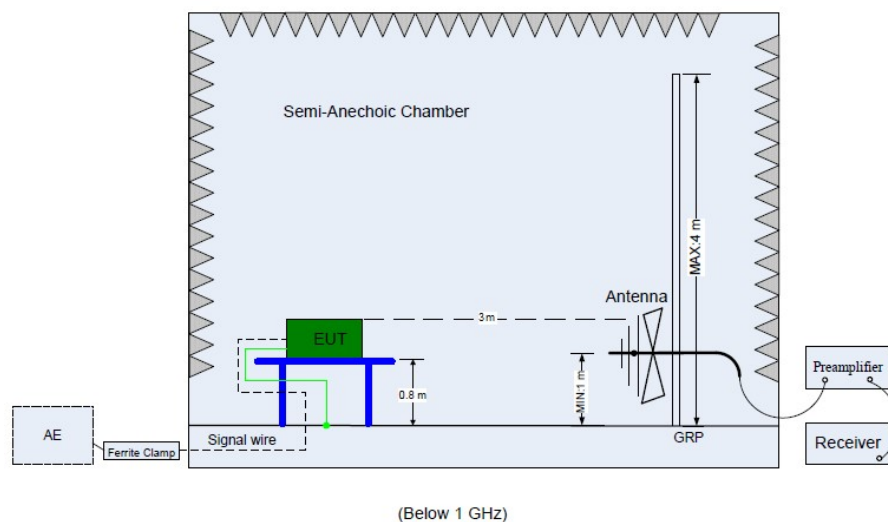
- 1: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 KHz for Quasi-peak detection (QP) at frequency below 1GHz.
- 2: The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for peak detection (PK) at frequency above 1GHz.
- 3: The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for RMS Average ((duty cycle < 98%) for Average detection (AV) at frequency above 1GHz, then the measurement results was added to a correction factor ($20\log(1/\text{duty cycle})$).
- 4: The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz (duty cycle > 98%) for Average detection (AV) at frequency above 1GHz.
- 5: When duty cycle < 98%, The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\text{VBW} \geq 1/T$, the T is transmission duration (T).

Test Setup:

Test Setup 1: Radiated Emission test below 30MHz

The test site semi-anechoic chamber has met the requirement of NSA tolerance 4 dB according to the standards: ANSI C63.4. The test distance is 3m. The setup is according to ANSI C63.4.

The test site semi-anechoic chamber has met the requirement of NSA tolerance 4 dB according to the standards: ANSI C63.4. The test distance is 3m. The setup is according to ANSI C63.4.



§15.205 Restricted bands of operation

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
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	156.52475-156.52525	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			

RSS-GEN 8.10

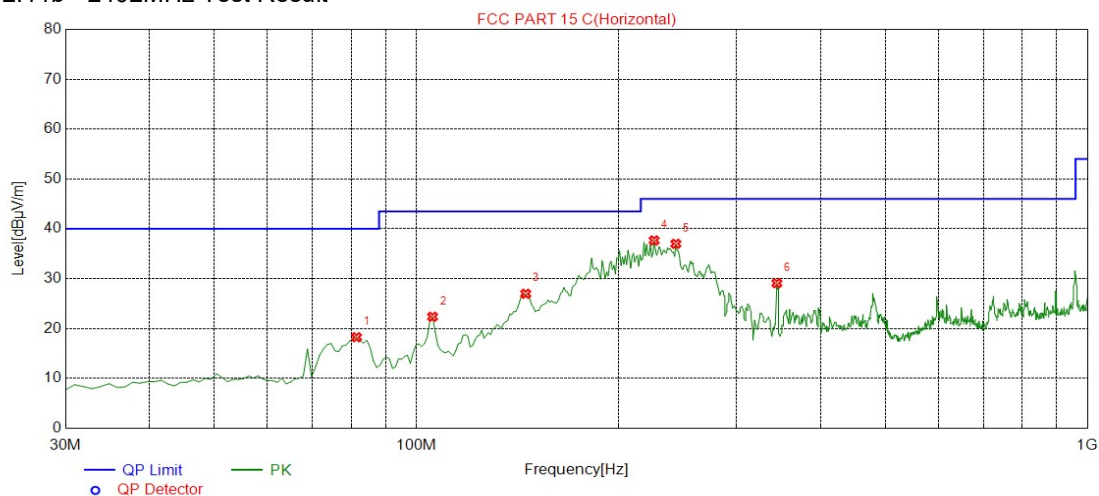
MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	1660 - 1710	9.0 - 9.2
0.495 - 0.505	16.69475 - 16.69525	1718.8 - 1722.2	9.3 - 9.5
2.1735 - 2.1905	25.5 - 25.67	2200 - 2300	10.6 - 12.7
3.020 - 3.026	37.5 - 38.25	2310 - 2390	13.25 - 13.4
4.125 - 4.128	73 - 74.6	2483.5 - 2500	14.47 - 14.5
4.17725 - 4.17775	74.8 - 75.2	2655 - 2900	15.35 - 16.2
.20725 - 4.20775	108 - 138	3260 - 3267	17.7 - 21.4
5.677 - 5.683	149.9 - 150.05	3332 - 3339	22.01 - 23.12
6.215 - 6.218	156.52475 - 156.52525	3345.8 - 3358	23.6 - 24.0
6.26775 - 6.26825	156.7 - 156.9	3500 - 4400	31.2 - 31.8
6.31175 - 6.31225	162.0125 - 167.17	4500 - 5150	36.43 - 36.5
8.291 - 8.294	167.72 - 173.2	5350 - 5460	Above 38.6
8.362 - 8.366	240 - 285	7250 - 7750	
8.37625 - 8.38675	322 - 335.4	8025 - 8500	
8.41425 - 8.41475	399.9 - 410		
12.29 - 12.293	608 - 614		
12.51975 - 12.52025	960 - 1427		
12.57675 - 12.57725	1435 - 1626.5		
13.36 - 13.41	1645.5 - 1646.5		

Test Result: Pass

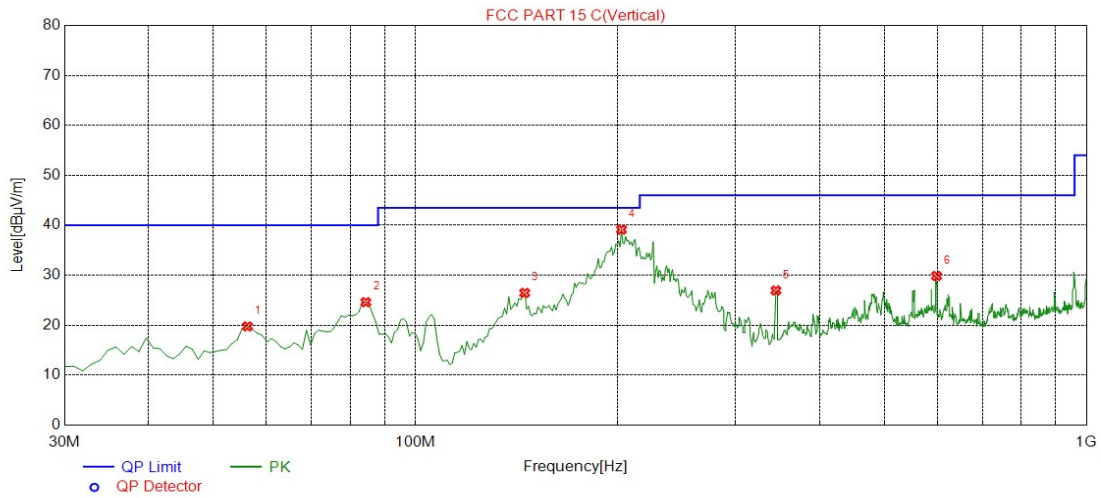
Spurious radiated emissions (Radiated)

According to C63.10, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement, so AV emission value did not show in below table if the peak value complies with average limit.

802.11b - 2402MHz Test Result



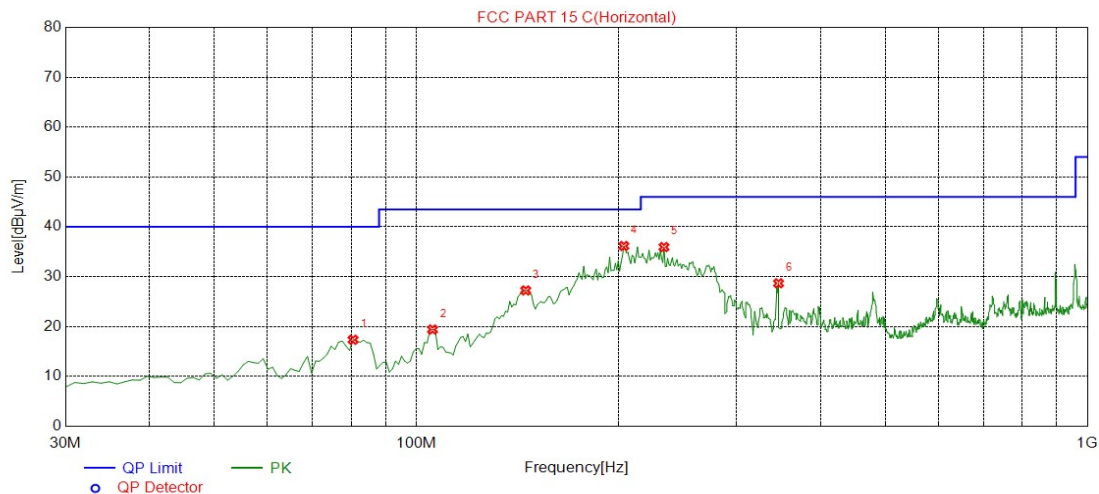
Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
81.4615	18.27	-19.43	40.00	21.73	100	185	Horizontal
105.7357	22.37	-19.86	43.50	21.13	100	63	Horizontal
145.5455	26.98	-15.03	43.50	16.52	100	94	Horizontal
226.1361	37.68	-17.63	46.00	8.32	100	360	Horizontal
243.6136	37.00	-17.23	46.00	9.00	100	334	Horizontal
344.5946	29.10	-14.64	46.00	16.90	100	66	Horizontal



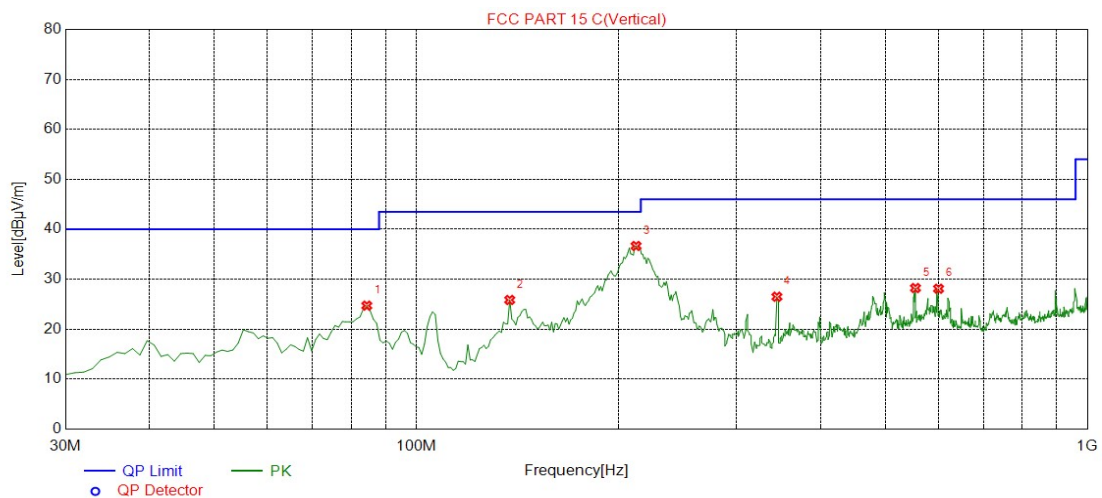
Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
56.2162	19.76	-16.26	40.00	20.24	100	97	Vertical
84.3744	24.61	-19.89	40.00	15.39	100	197	Vertical
145.5455	26.47	-15.03	43.50	17.03	100	343	Vertical
202.8328	39.14	-18.29	43.50	4.36	100	343	Vertical
344.5946	26.95	-14.64	46.00	19.05	100	174	Vertical
598.0180	29.85	-8.87	46.00	16.15	100	9	Vertical

Frequency Band	Frequency	Emission Level	Polarization	Limit	Detector	Margin	Corr.	Result
	MHz	dBμV/m		dBμV/m		dB	(dB)	
1000-25000MHz	4823.4117	49.95	Horizontal	74.00	PK	24.05	-16.57	Pass
	--	--	Horizontal	--	AV	--	--	Pass
	4823.4117	51.33	Vertical	74.00	PK	22.67	-16.57	Pass
	--	--	Vertical	--	AV	--	--	Pass

802.11b - 2437MHz Test Result



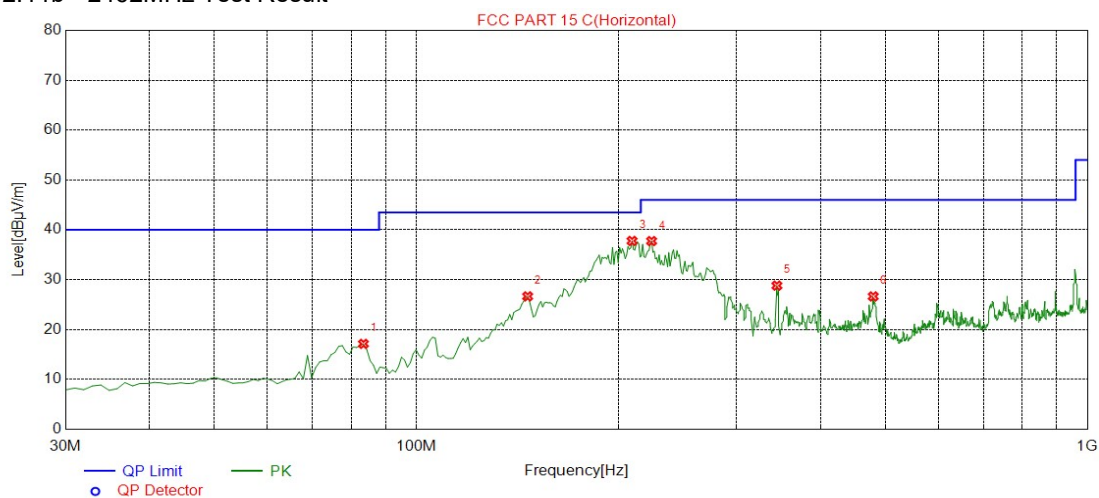
Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
80.4905	17.36	-19.28	40.00	22.64	100	185	Horizontal
105.7357	19.41	-19.86	43.50	24.09	100	78	Horizontal
145.5455	27.25	-15.03	43.50	16.25	100	68	Horizontal
203.8038	36.15	-18.26	43.50	7.35	100	343	Horizontal
233.9039	35.95	-17.47	46.00	10.05	100	0	Horizontal
346.5365	28.68	-14.64	46.00	17.32	100	70	Horizontal



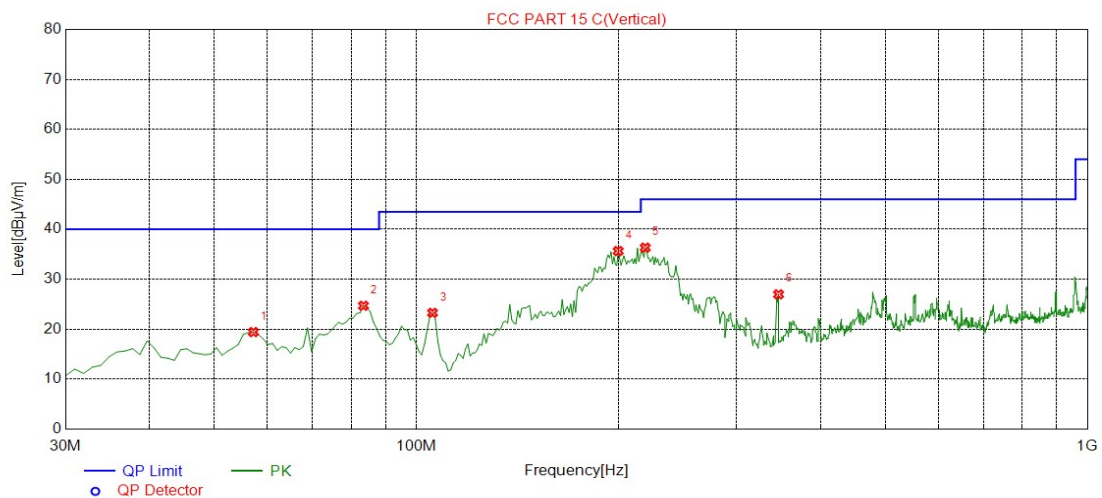
Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
84.3744	24.72	-19.89	40.00	15.28	100	181	Vertical
137.7778	25.86	-15.72	43.50	17.64	100	22	Vertical
212.5425	36.66	-17.98	43.50	6.84	100	293	Vertical
344.5946	26.50	-14.64	46.00	19.50	100	96	Vertical
554.3243	28.24	-10.03	46.00	17.76	100	359	Vertical
599.9600	28.11	-8.78	46.00	17.89	100	20	Vertical

Frequency Band	Frequency	Emission Level	Polarization	Limit	Detector	Margin	Corr.	Result
	MHz	dBuV/m		dBμV/m		dB	(dB)	
1000-25000MHz	4875.9380	51.37	H	74.00	PK	22.63	-16.49	Pass
	--	--	H	--	AV	--	--	Pass
	4875.9380	52.61	V	74.00	PK	21.39	-16.49	Pass
	--	--	V	--	AV	--	--	Pass

802.11b - 2462MHz Test Result



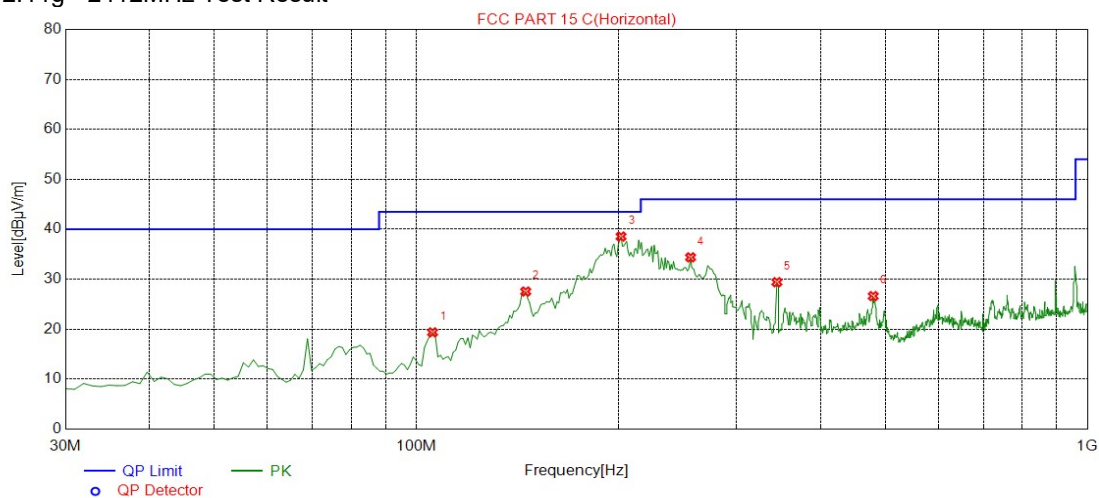
Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
83.4034	17.14	-19.73	40.00	22.86	100	225	Horizontal
146.5165	26.66	-14.96	43.50	16.84	100	74	Horizontal
209.6296	37.78	-18.06	43.50	5.72	100	346	Horizontal
224.1942	37.75	-17.67	46.00	8.25	100	17	Horizontal
344.5946	28.81	-14.64	46.00	17.19	100	71	Horizontal
479.5596	26.65	-11.27	46.00	19.35	100	166	Horizontal



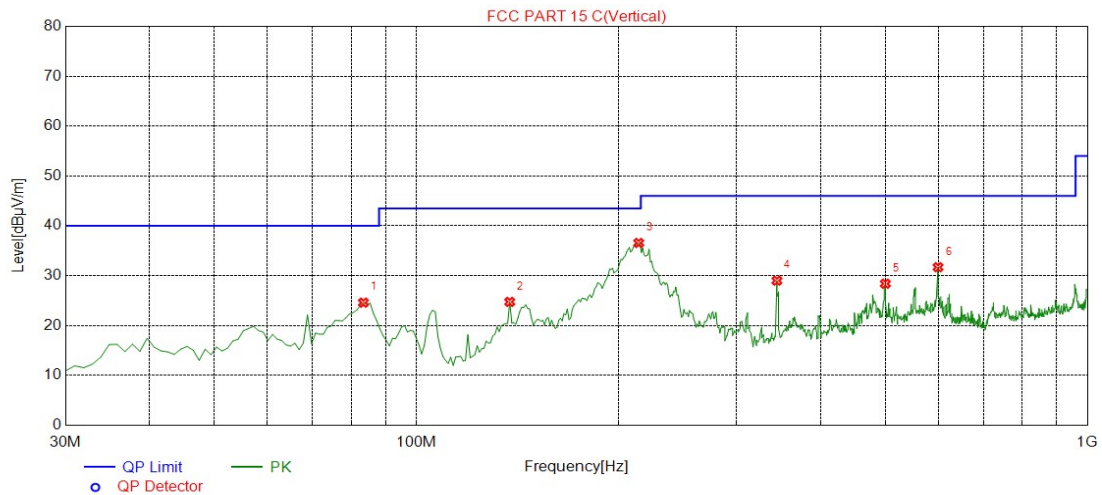
Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
57.1872	19.43	-16.29	40.00	20.57	100	104	Vertical
83.4034	24.70	-19.73	40.00	15.30	100	142	Vertical
105.7357	23.28	-19.86	43.50	20.22	100	132	Vertical
199.9199	35.64	-18.38	43.50	7.86	100	343	Vertical
219.3393	36.32	-17.78	46.00	9.68	100	343	Vertical
346.5365	26.98	-14.64	46.00	19.02	100	203	Vertical

Frequency Band	Frequency	Emission Level	Polarization	Limit	Detector	Margin	Corr.	Result
	MHz	dBuV/m		dBμV/m		dB	(dB)	
1000-25000MHz	4920.9605	51.23	H	74.00	PK	22.77	-16.56	Pass
	--	--	H	--	AV	--	--	Pass
	4920.9605	51.81	V	74.00	PK	22.19	-16.56	Pass
	--	--	V	--	AV	--	--	Pass

802.11g - 2412MHz Test Result



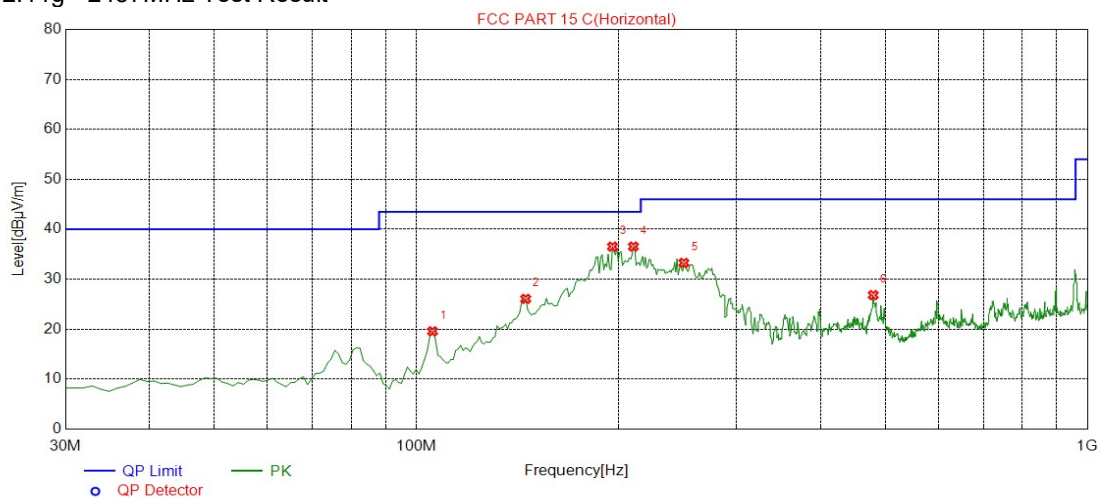
Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
105.7357	19.37	-19.86	43.50	24.13	100	88	Horizontal
145.5455	27.54	-15.03	43.50	15.96	100	88	Horizontal
201.8619	38.55	-18.33	43.50	4.95	100	338	Horizontal
256.2362	34.39	-16.80	46.00	11.61	100	343	Horizontal
344.5946	29.42	-14.64	46.00	16.58	100	272	Horizontal
479.5596	26.63	-11.27	46.00	19.37	100	162	Horizontal



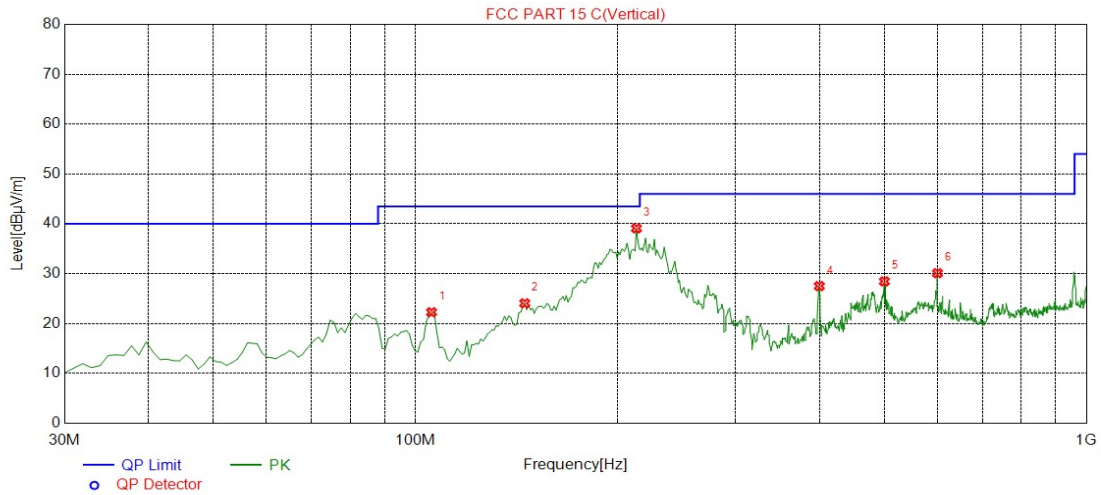
Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
83.4034	24.60	-19.73	40.00	15.40	100	162	Vertical
137.7778	24.75	-15.72	43.50	18.75	100	53	Vertical
214.4845	36.57	-17.92	43.50	6.93	100	297	Vertical
344.5946	29.01	-14.64	46.00	16.99	100	169	Vertical
499.9500	28.40	-10.85	46.00	17.60	100	45	Vertical
598.9890	31.71	-8.82	46.00	14.29	100	345	Vertical

Frequency Band	Frequency	Emission Level	Polarization	Limit	Detector	Margin	Corr.	Result
	MHz	dBuV/m		dBμV/m		dB	(dB)	
1000-25000MHz	6841.9210	51.81	H	74.00	PK	22.19	-12.31	Pass
	--	--	H	--	AV	--	--	Pass
	7884.9425	51.90	V	74.00	PK	22.10	-11.70	Pass
	--	--	V	--	AV	--	--	Pass

802.11g - 2437MHz Test Result



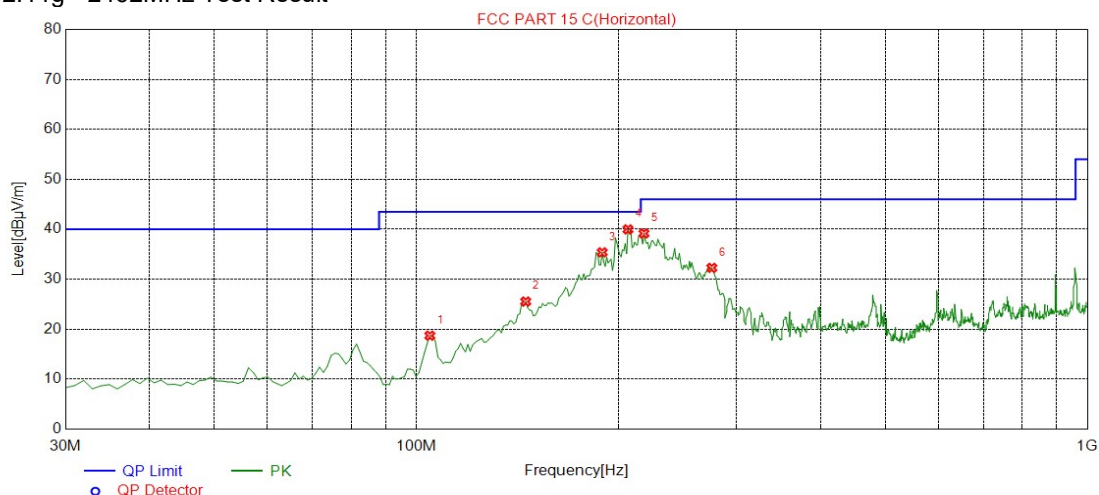
Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
105.7357	19.58	-19.86	43.50	23.92	100	71	Horizontal
145.5455	26.07	-15.03	43.50	17.43	100	63	Horizontal
196.0360	36.53	-17.94	43.50	6.97	100	360	Horizontal
210.6006	36.54	-18.03	43.50	6.96	100	332	Horizontal
250.4104	33.28	-17.01	46.00	12.72	100	17	Horizontal
479.5596	26.83	-11.27	46.00	19.17	100	170	Horizontal



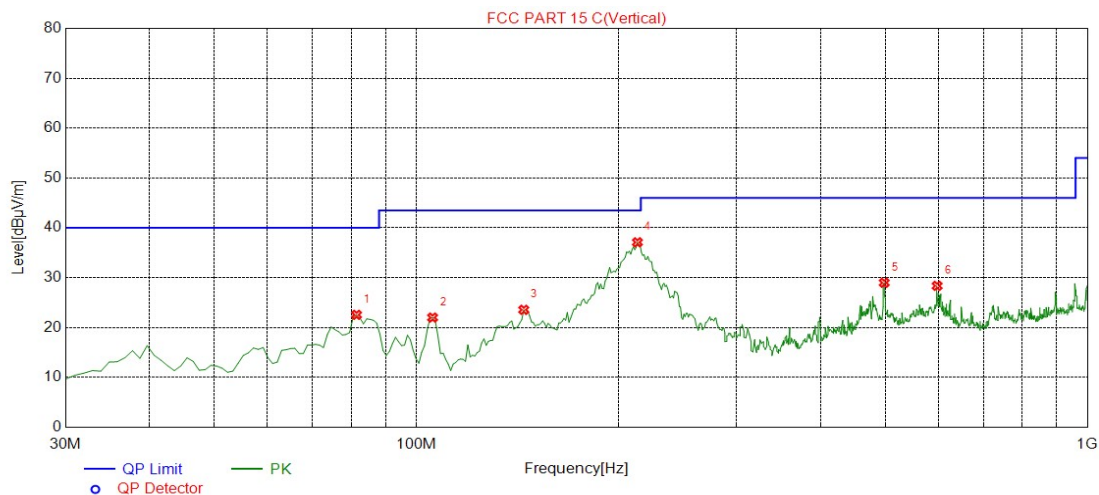
Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
105.7357	22.28	-19.86	43.50	21.22	100	97	Vertical
145.5455	24.07	-15.03	43.50	19.43	100	343	Vertical
213.5135	39.08	-17.95	43.50	4.42	100	343	Vertical
399.9399	27.52	-12.86	46.00	18.48	100	59	Vertical
499.9500	28.45	-10.85	46.00	17.55	100	13	Vertical
599.9600	30.11	-8.78	46.00	15.89	100	13	Vertical

Frequency Band	Frequency	Emission Level	Polarization	Limit	Detector	Margin	Corr.	Result
	MHz	dBuV/m		dBμV/m		dB	(dB)	
1000-25000MHz	7209.6048	51.91	H	74.00	PK	22.09	-12.71	Pass
	--	--	H	--	AV	--	--	Pass
	7914.9575	51.20	V	74.00	PK	22.80	-11.60	Pass
	--	--	V	--	AV	--	--	Pass

802.11g - 2462MHz Test Result



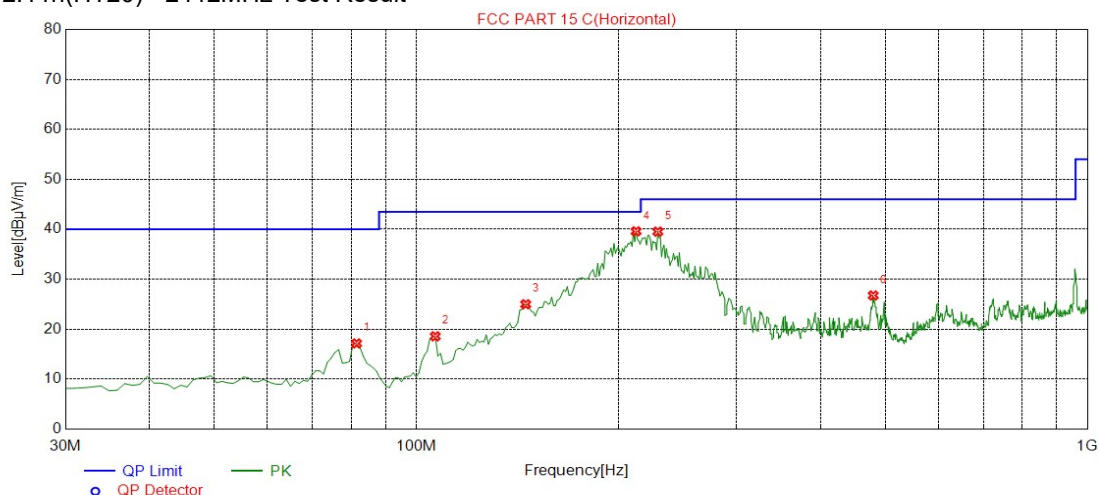
Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
104.7648	18.71	-19.99	43.50	24.79	100	73	Horizontal
145.5455	25.54	-15.03	43.50	17.96	100	81	Horizontal
189.2392	35.38	-17.20	43.50	8.12	100	343	Horizontal
206.7167	39.98	-18.16	43.50	3.52	100	330	Horizontal
218.3684	39.16	-17.81	46.00	6.84	100	343	Horizontal
275.6557	32.28	-15.96	46.00	13.72	100	322	Horizontal



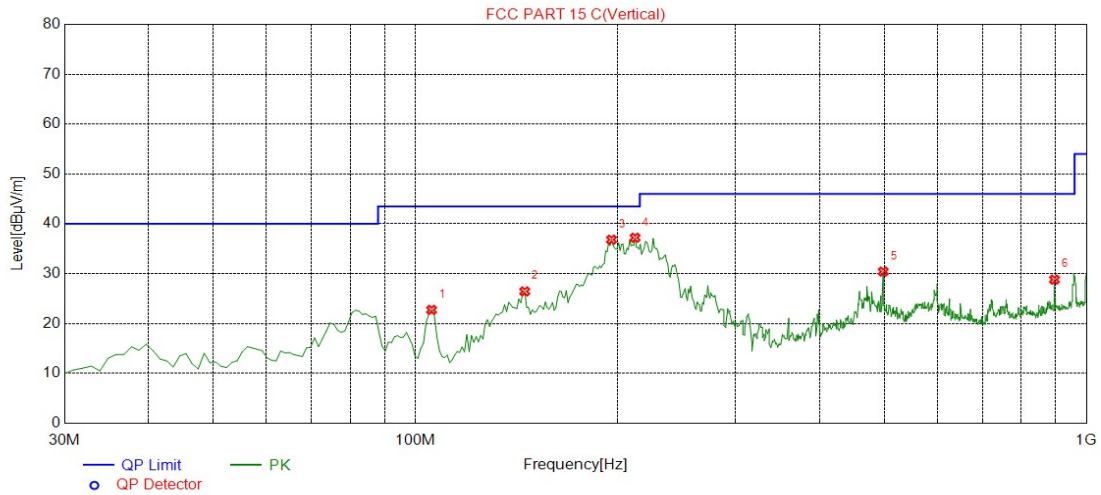
Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
81.4615	22.56	-19.43	40.00	17.44	100	152	Vertical
105.7357	22.01	-19.86	43.50	21.49	100	90	Vertical
144.5746	23.57	-15.11	43.50	19.93	100	67	Vertical
213.5135	37.10	-17.95	43.50	6.40	100	297	Vertical
498.0080	28.99	-10.91	46.00	17.01	100	17	Vertical
597.0470	28.37	-8.91	46.00	17.63	100	355	Vertical

Frequency Band	Frequency	Emission Level	Polarization	Limit	Detector	Margin	Corr.	Result
	MHz	dBuV/m		dBμV/m		dB	(dB)	
1000-25000MHz	4928.4642	51.75	H	74.00	PK	22.25	-16.59	Pass
	--	--	H	--	AV	--	--	Pass
	4920.9605	51.17	V	74.00	PK	22.83	-16.56	Pass
	--	--	V	--	AV	--	--	Pass

802.11n(HT20) - 2412MHz Test Result



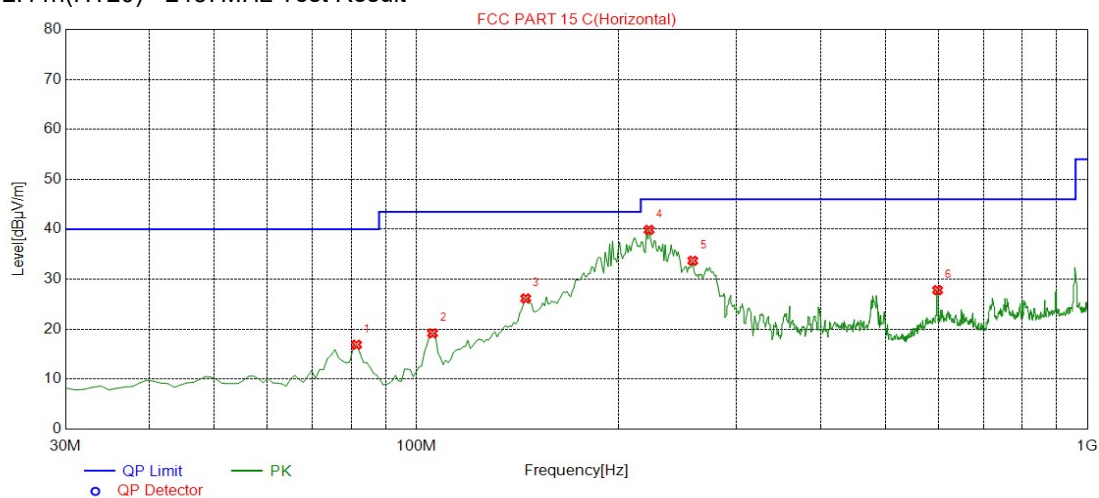
Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
81.4615	17.16	-19.43	40.00	22.84	100	211	Horizontal
106.7067	18.58	-19.72	43.50	24.92	100	76	Horizontal
145.5455	25.00	-15.03	43.50	18.50	100	22	Horizontal
212.5425	39.59	-17.98	43.50	3.91	100	320	Horizontal
229.0490	39.53	-17.57	46.00	6.47	100	328	Horizontal
479.5596	26.75	-11.27	46.00	19.25	100	17	Horizontal



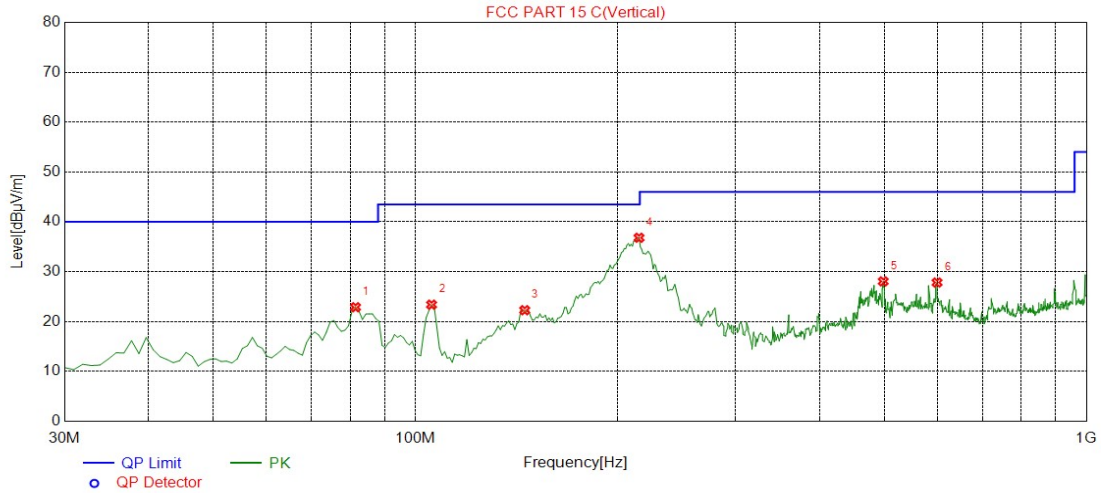
Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
105.7357	22.75	-19.86	43.50	20.75	100	101	Vertical
145.5455	26.45	-15.03	43.50	17.05	100	343	Vertical
196.0360	36.83	-17.94	43.50	6.67	100	343	Vertical
212.5425	37.22	-17.98	43.50	6.28	100	343	Vertical
498.0080	30.43	-10.91	46.00	15.57	100	0	Vertical
896.1061	28.82	-5.36	46.00	17.18	100	178	Vertical

Frequency Band	Frequency	Emission Level	Polarization	Limit	Detector	Margin	Corr.	Result
	MHz	dBμV/m		dBμV/m		dB	(dB)	
1000-25000MHz	7922.4612	51.34	H	74.00	PK	22.66	-11.60	Pass
	--	--	H	--	AV	--	--	Pass
	9685.8429	51.96	V	74.00	PK	22.04	-9.62	Pass
	--	--	V	--	AV	--	--	Pass

802.11n(HT20) - 2437MHz Test Result



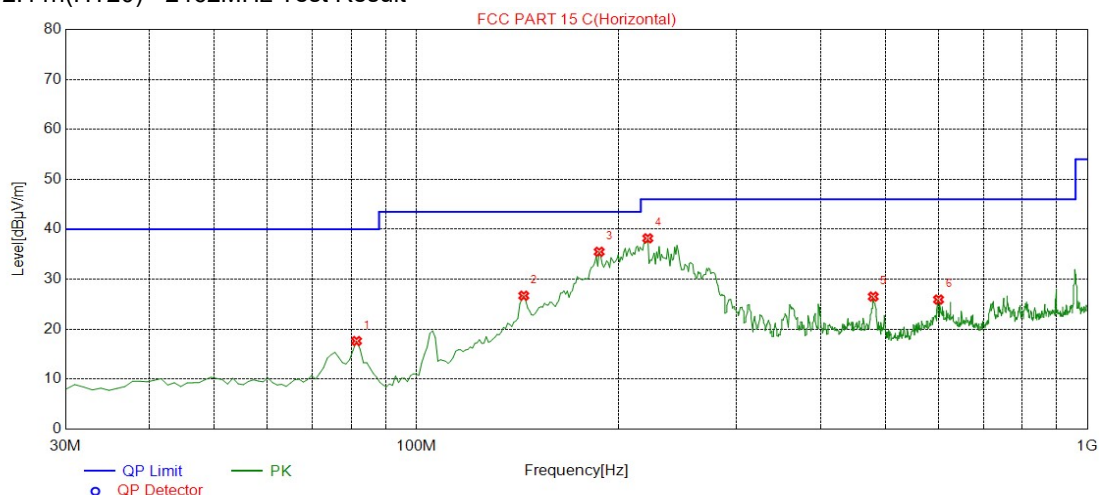
Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
81.4615	16.90	-19.43	40.00	23.10	100	173	Horizontal
105.7357	19.19	-19.86	43.50	24.31	100	76	Horizontal
145.5455	26.16	-15.03	43.50	17.34	100	79	Horizontal
222.2523	39.88	-17.71	46.00	6.12	100	330	Horizontal
258.1782	33.70	-16.73	46.00	12.30	100	338	Horizontal
598.0180	27.82	-8.87	46.00	18.18	100	61	Horizontal



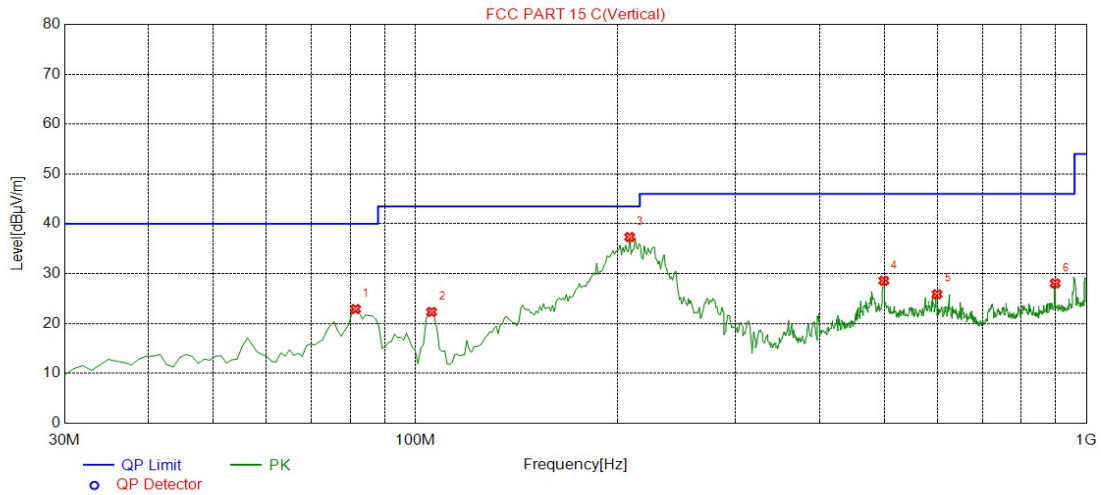
Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
81.4615	22.88	-19.43	40.00	17.12	100	360	Vertical
105.7357	23.39	-19.86	43.50	20.11	100	101	Vertical
145.5455	22.28	-15.03	43.50	21.22	100	42	Vertical
215.4555	36.81	-17.89	43.50	6.69	100	319	Vertical
498.0080	28.06	-10.91	46.00	17.94	100	52	Vertical
598.9890	27.83	-8.82	46.00	18.17	100	24	Vertical

Frequency Band	Frequency	Emission Level	Polarization	Limit	Detector	Margin	Corr.	Result
	MHz	dBμV/m		dBμV/m		dB	(dB)	
1000-25000MHz	7037.0185	51.04	H	74.00	PK	22.96	-12.50	Pass
	--	--	H	--	AV	--	--	Pass
	4875.9380	50.66	V	74.00	PK	23.34	-16.49	Pass
	--	--	V	--	AV	--	--	Pass

802.11n(HT20) - 2462MHz Test Result



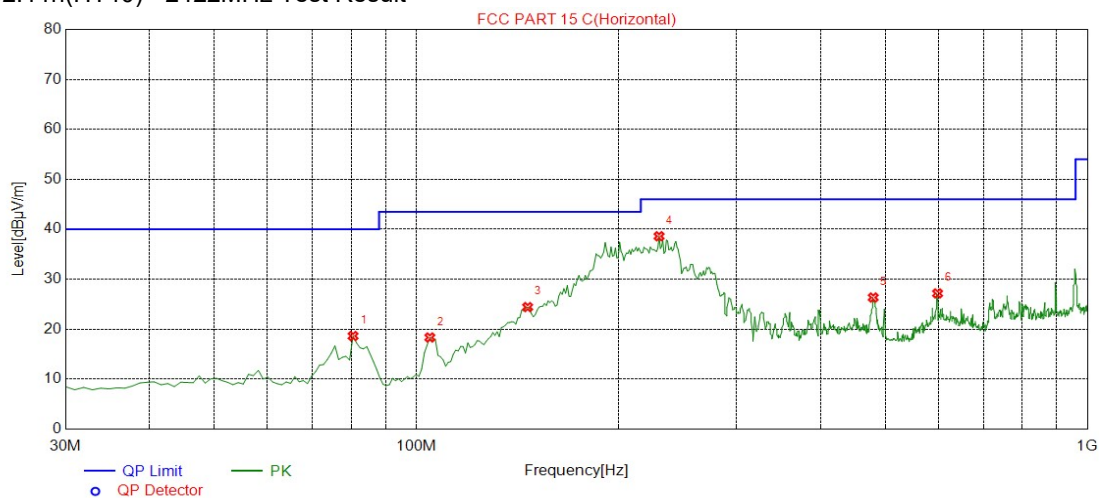
Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
81.4615	17.64	-19.43	40.00	22.36	100	238	Horizontal
144.5746	26.71	-15.11	43.50	16.79	100	58	Horizontal
187.2973	35.50	-17.04	43.50	8.00	100	360	Horizontal
221.2813	38.19	-17.73	46.00	7.81	100	337	Horizontal
479.5596	26.53	-11.27	46.00	19.47	100	156	Horizontal
599.9600	25.93	-8.78	46.00	20.07	100	55	Horizontal



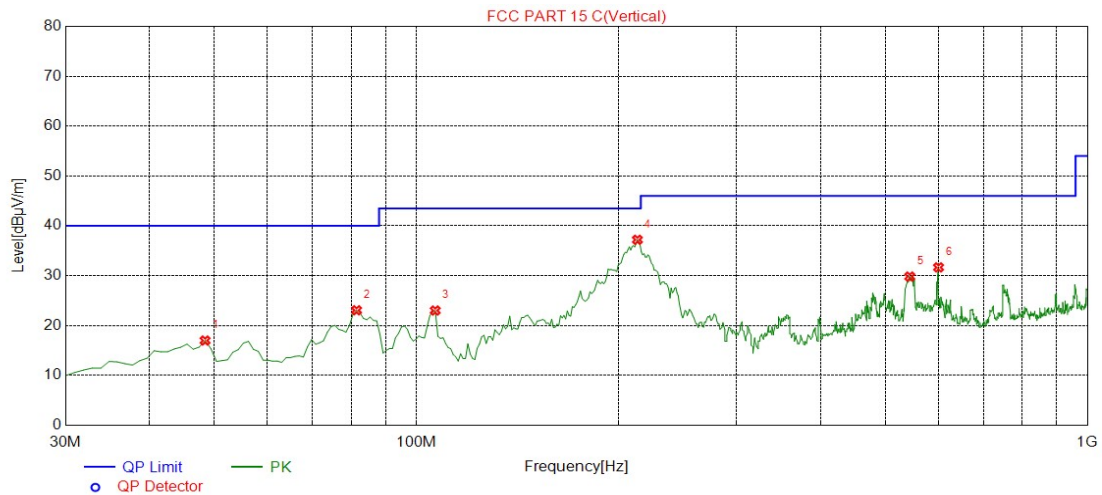
Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
81.4615	22.92	-19.43	40.00	17.08	100	153	Vertical
105.7357	22.33	-19.86	43.50	21.17	100	115	Vertical
208.6587	37.36	-18.10	43.50	6.14	100	343	Vertical
498.9790	28.59	-10.88	46.00	17.41	100	21	Vertical
598.9890	25.89	-8.82	46.00	20.11	100	335	Vertical
898.0480	28.06	-5.37	46.00	17.94	100	136	Vertical

Frequency Band	Frequency	Emission Level	Polarization	Limit	Detector	Margin	Corr.	Result
	MHz	dBuV/m		dBμV/m		dB	(dB)	
1000-25000MHz	4920.9605	51.48	H	74.00	PK	22.52	-16.56	Pass
	--	--	H	--	AV	--	--	Pass
	4920.9605	52.43	V	74.00	PK	21.57	-16.56	Pass
	--	--	V	--	AV	--	--	Pass

802.11n(HT40) - 2422MHz Test Result



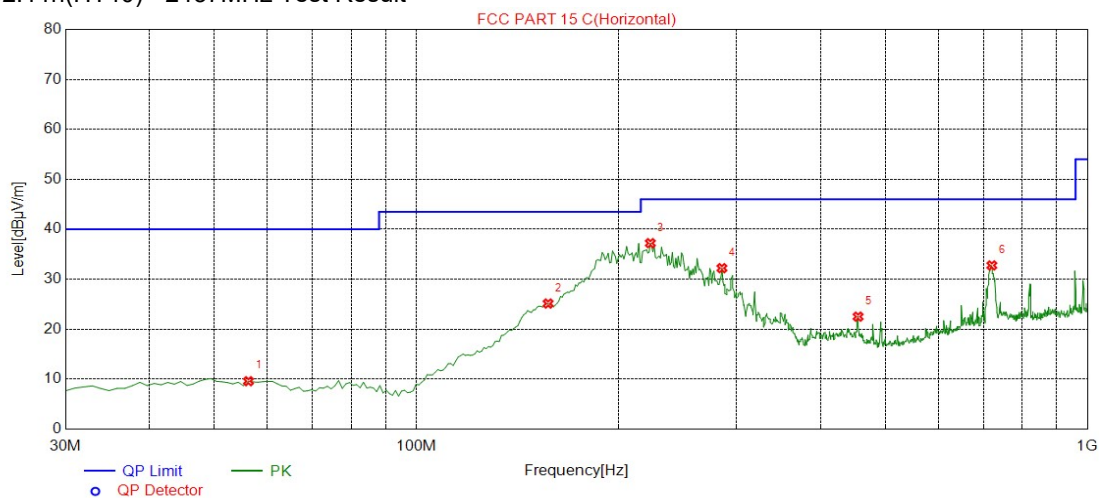
Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	80.4905	18.65	-19.28	40.00	21.35	100	343	Horizontal
2	104.7648	18.35	-19.99	43.50	25.15	100	91	Horizontal
3	146.5165	24.43	-14.96	43.50	19.07	100	132	Horizontal
4	230.0200	38.61	-17.55	46.00	7.39	100	132	Horizontal
5	479.5596	26.35	-11.27	46.00	19.65	100	164	Horizontal
6	598.0180	27.17	-8.87	46.00	18.83	100	68	Horizontal



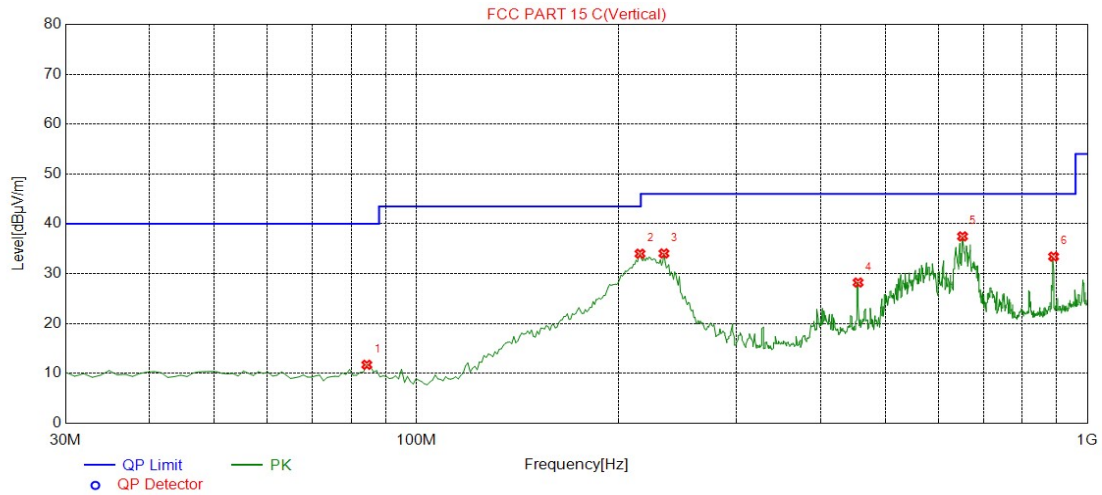
Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
48.4484	17.00	-16.11	40.00	23.00	100	355	Vertical
81.4615	23.07	-19.43	40.00	16.93	100	167	Vertical
106.7067	23.02	-19.72	43.50	20.48	100	350	Vertical
213.5135	37.21	-17.95	43.50	6.29	100	297	Vertical
543.6436	29.83	-10.16	46.00	16.17	100	355	Vertical
599.9600	31.67	-8.78	46.00	14.33	100	320	Vertical

Frequency Band	Frequency	Emission Level	Polarization	Limit	Detector	Margin	Corr.	Result
	MHz	dBuV/m		dBμV/m		dB	(dB)	
1000-25000MHz	7929.9650	51.95	H	74.00	PK	22.05	-11.61	Pass
	--	--	H	--	AV	--	--	Pass
	8485.2426	51.63	V	74.00	PK	22.37	-11.70	Pass
	--	--	V	--	AV	--	--	Pass

802.11n(HT40) - 2437MHz Test Result



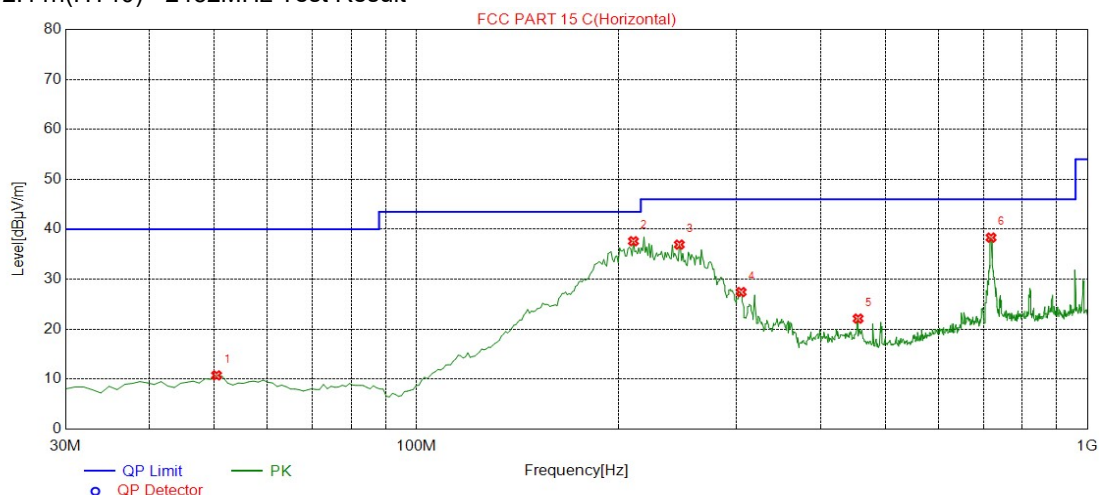
Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
56.2162	9.60	-16.26	40.00	30.40	100	311	Horizontal
157.1972	25.14	-14.91	43.50	18.36	100	332	Horizontal
223.2232	37.22	-17.69	46.00	8.78	100	123	Horizontal
285.3654	32.22	-15.57	46.00	13.78	100	332	Horizontal
455.2853	22.52	-11.78	46.00	23.48	100	214	Horizontal
720.3604	32.77	-7.19	46.00	13.23	100	141	Horizontal



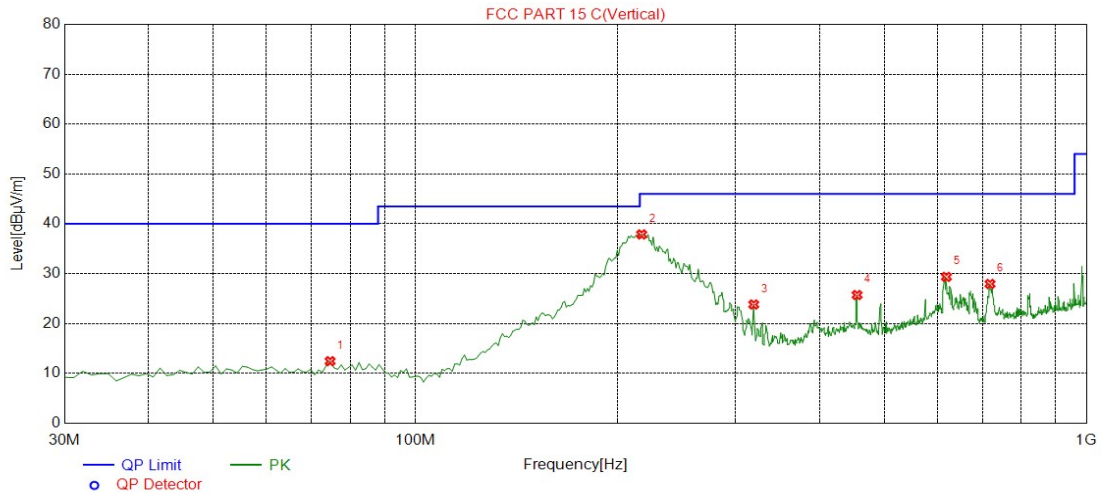
Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
84.3744	11.74	-19.89	40.00	28.26	100	161	Vertical
215.4555	34.01	-17.89	43.50	9.49	100	158	Vertical
233.9039	34.07	-17.47	46.00	11.93	100	92	Vertical
455.2853	28.23	-11.78	46.00	17.77	100	8	Vertical
651.4214	37.48	-8.11	46.00	8.52	100	343	Vertical
890.2803	33.43	-5.34	46.00	12.57	100	146	Vertical

Frequency Band	Frequency	Emission Level	Polarization	Limit	Detector	Margin	Corr.	Result
	MHz	dBuV/m		dBμV/m		dB	(dB)	
1000-25000MHz	9565.7829	52.37	H	74.00	PK	21.63	-9.86	Pass
	--	--	H	--	AV	--	--	Pass
	8537.7689	51.63	V	74.00	PK	22.37	-11.52	Pass
	--	--	V	--	AV	--	--	Pass

802.11n(HT40) - 2452MHz Test Result



Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
50.3904	10.77	-16.08	40.00	29.23	100	291	Horizontal
210.6006	37.61	-18.03	43.50	5.89	100	340	Horizontal
246.5265	36.93	-17.14	46.00	9.07	100	0	Horizontal
304.7848	27.44	-14.89	46.00	18.56	100	0	Horizontal
455.2853	22.12	-11.78	46.00	23.88	100	240	Horizontal
718.4184	38.34	-7.20	46.00	7.66	100	90	Horizontal



Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
74.6647	12.46	-19.07	40.00	27.54	100	56	Vertical
217.3974	37.88	-17.84	46.00	8.12	100	17	Vertical
319.3493	23.83	-14.78	46.00	22.17	100	17	Vertical
455.2853	25.73	-11.78	46.00	20.27	100	354	Vertical
618.4084	29.36	-8.70	46.00	16.64	100	190	Vertical
718.4184	27.95	-7.20	46.00	18.05	100	102	Vertical

Frequency Band	Frequency	Emission Level	Polarization	Limit	Detector	Margin	Corr.	Result
	MHz	dBuV/m		dBμV/m		dB	(dB)	
1000-25000MHz	9753.3767	52.84	H	74.00	PK	21.16	-9.34	Pass
	--	--	H	--	AV	--	--	Pass
	9513.25	51.84	V	74.00	PK	22.16	-9.79	Pass
	--	--	V	--	AV	--	--	Pass

Remark:

- (1) “*” means the emission(s) appear within the restrict bands shall follow the requirement of section 15.205.
- (2) Data of measurement within this frequency range shown “--” in the table above means the reading of emissions are the noise floor or attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (3) Above 1GHz: Corrector factor = Antenna Factor + Cable Loss - Amplifier Gain.
- (4) Below 1GHz: Corrector factor = Antenna Factor + Cable Loss - Amplifier Gain.
- (5) Note: The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

Band Edge (Radiated)

802.11b - 2412MHz Test Result



Freq. [MHz]	PK Level [dBμV/m]	Factor [dB]	PK Limit [dBμV/m]	Margin [dB]	Height [cm]	Polarity
2390.0	46.61	-23.89	74.00	27.39	150	Horizontal
2384.1	47.16	-23.89	74.00	26.84	150	Horizontal

PK level= Read level + Factor

Factor= Antenna Factor + Cable loss – Preamp Factor



Freq. [MHz]	PK Level [dBμV/m]	Factor [dB]	PK Limit [dBμV/m]	Margin [dB]	Height [cm]	Polarity
2390.0	43.39	-23.89	74.00	30.61	150	Vertical
2387.4	44.54	-23.89	74.00	29.46	150	Vertical

PK level= Read level + Factor

Factor= Antenna Factor + Cable loss – Preamp Factor

802.11b - 2462MHz Test Result



Freq. [MHz]	PK Level [dBμV/m]	Factor [dB]	PK Limit [dBμV/m]	Margin [dB]	Height [cm]	Polarity
2483.5	44.22	-23.89	74.00	29.78	150	Horizontal
2487.6	47.99	-23.89	74.00	26.01	150	Horizontal

PK level= Read level + Factor

Factor= Antenna Factor + Cable loss – Preamp Factor



Freq. [MHz]	PK Level [dBμV/m]	Factor [dB]	PK Limit [dBμV/m]	Margin [dB]	Height [cm]	Polarity
2483.5	46.76	-23.89	74.00	27.24	150	Vertical
2487.6	50.85	-23.89	74.00	23.15	150	Vertical

PK level= Read level + Factor

Factor= Antenna Factor + Cable loss – Preamp Factor

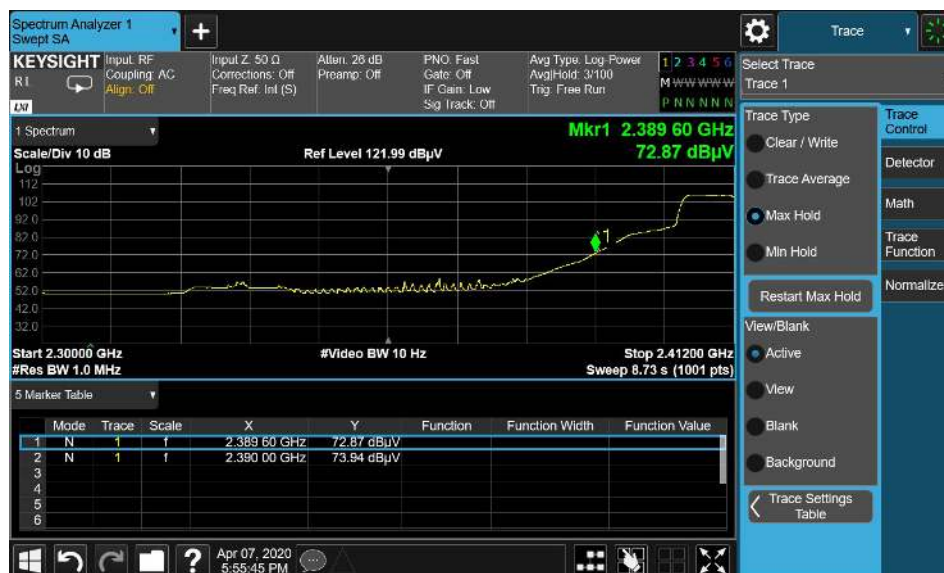
802.11g - 2412MHz Test Result



Freq. [MHz]	PK Level [dBμV/m]	Factor [dB]	PK Limit [dBμV/m]	Margin [dB]	Height [cm]	Polarity
2390.0	70.13	-23.89	74.00	3.87	150	Horizontal
2388.7	66.04	-23.89	74.00	7.96	150	Horizontal

PK level= Read level + Factor

Factor= Antenna Factor + Cable loss – Preamp Factor



Freq. [MHz]	AV Level [dBμV/m]	Factor [dB]	AV Limit [dBμV/m]	Margin [dB]	Height [cm]	Polarity
2389.6	48.98	-23.89	54.00	5.02	150	Horizontal
2390.0	50.05	-23.89	54.00	3.95	150	Horizontal

AV level= Read level + Factor

Factor= Antenna Factor + Cable loss – Preamp Factor



Freq. [MHz]	PK Level [dBμV/m]	Factor [dB]	PK Limit [dBμV/m]	Margin [dB]	Height [cm]	Polarity
2390.0	67.61	-23.89	74.00	6.39	150	Vertical
2389.3	65.59	-23.89	74.00	8.41	150	Vertical

PK level= Read level + Factor

Factor= Antenna Factor + Cable loss – Preamp Factor



Freq. [MHz]	AV Level [dBμV/m]	Factor [dB]	AV Limit [dBμV/m]	Margin [dB]	Height [cm]	Polarity
2390.0	49.74	-23.89	54.00	4.26	150	Vertical
2389.3	48.22	-23.89	54.00	5.78	150	Vertical

AV level= Read level + Factor

Factor= Antenna Factor + Cable loss – Preamp Factor

802.11g - 2462MHz Test Result



Freq. [MHz]	PK Level [dBμV/m]	Factor [dB]	PK Limit [dBμV/m]	Margin [dB]	Height [cm]	Polarity
2483.5	70.46	-23.89	74.00	3.54	150	Horizontal
2486.2	71.62	-23.89	74.00	2.38	150	Horizontal

PK level= Read level + Factor

Factor= Antenna Factor + Cable loss – Preamp Factor



Freq. [MHz]	AV Level [dBμV/m]	Factor [dB]	AV Limit [dBμV/m]	Margin [dB]	Height [cm]	Polarity
2483.5	40.48	-23.89	54.00	13.52	150	Horizontal
2483.6	40.08	-23.89	54.00	13.92	150	Horizontal

AV level= Read level + Factor

Factor= Antenna Factor + Cable loss – Preamp Factor



Freq. [MHz]	PK Level [dBμV/m]	Factor [dB]	PK Limit [dBμV/m]	Margin [dB]	Height [cm]	Polarity
2483.5	61.97	-23.89	74.00	12.03	150	Vertical
2487.6	62.13	-23.89	74.00	11.87	150	Vertical

PK level= Read level + Factor

Factor= Antenna Factor + Cable loss – Preamp Factor



Freq. [MHz]	AV Level [dBμV/m]	Factor [dB]	AV Limit [dBμV/m]	Margin [dB]	Height [cm]	Polarity
2483.5	43.35	-23.89	54.00	10.65	150	Vertical
2483.6	43.10	-23.89	54.00	10.90	150	Vertical

AV level= Read level + Factor

Factor= Antenna Factor + Cable loss – Preamp Factor

802.11n (HT20) - 2412MHz Test Result



Freq. [MHz]	PK Level [dBμV/m]	Factor [dB]	PK Limit [dBμV/m]	Margin [dB]	Height [cm]	Polarity
2389.6	70.38	-23.89	74.00	3.62	150	Horizontal
2390.0	71.02	-23.89	74.00	2.98	150	Horizontal

PK level= Read level + Factor

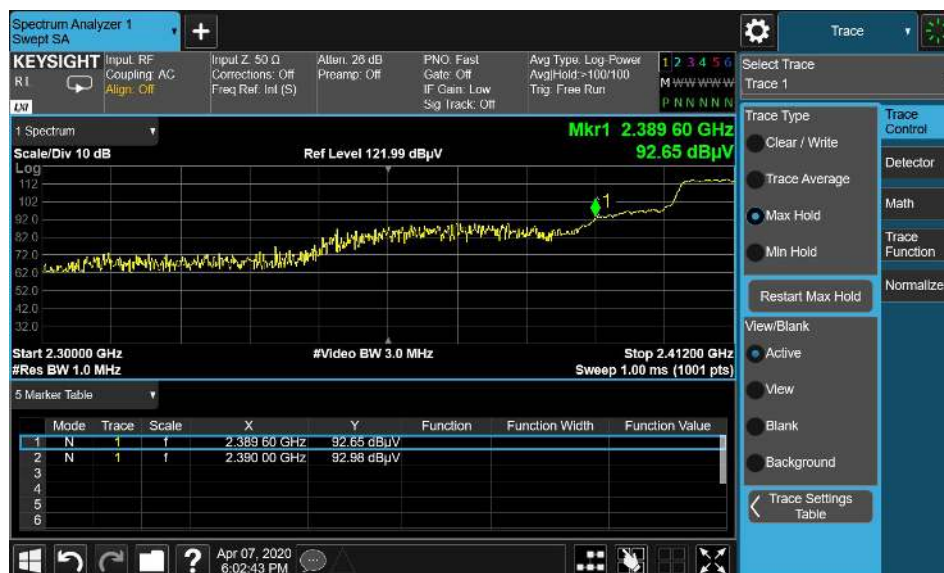
Factor= Antenna Factor + Cable loss – Preamp Factor



Freq. [MHz]	AV Level [dBμV/m]	Factor [dB]	AV Limit [dBμV/m]	Margin [dB]	Height [cm]	Polarity
2389.6	50.82	-23.89	54.00	3.18	150	Horizontal
2390.0	51.75	-23.89	54.00	2.25	150	Horizontal

AV level= Read level + Factor

Factor= Antenna Factor + Cable loss – Preamp Factor



Freq. [MHz]	PK Level [dBμV/m]	Factor [dB]	PK Limit [dBμV/m]	Margin [dB]	Height [cm]	Polarity
2389.6	68.76	-23.89	74.00	5.24	150	Vertical
2390.0	69.09	-23.89	74.00	4.91	150	Vertical

PK level= Read level + Factor

Factor= Antenna Factor + Cable loss – Preamp Factor



Freq. [MHz]	AV Level [dBμV/m]	Factor [dB]	AV Limit [dBμV/m]	Margin [dB]	Height [cm]	Polarity
2389.6	48.05	-23.89	54.00	5.95	150	Vertical
2390.0	49.07	-23.89	54.00	4.93	150	Vertical

AV level= Read level + Factor

Factor= Antenna Factor + Cable loss – Preampl Factor

802.11n (HT20) - 2462MHz Test Result



Freq. [MHz]	PK Level [dBμV/m]	Factor [dB]	PK Limit [dBμV/m]	Margin [dB]	Height [cm]	Polarity
2483.50	70.58	-23.89	74.00	3.42	150	Horizontal
2483.54	71.14	-23.89	74.00	2.86	150	Horizontal

PK level= Read level + Factor

Factor= Antenna Factor + Cable loss – Preamp Factor



Freq. [MHz]	AV Level [dBμV/m]	Factor [dB]	AV Limit [dBμV/m]	Margin [dB]	Height [cm]	Polarity
2483.50	52.87	-23.89	54.00	1.13	150	Horizontal
2483.54	52.85	-23.89	54.00	1.15	150	Horizontal

AV level= Read level + Factor

Factor= Antenna Factor + Cable loss – Preamp Factor



Freq. [MHz]	PK Level [dBμV/m]	Factor [dB]	PK Limit [dBμV/m]	Margin [dB]	Height [cm]	Polarity
2483.50	70.10	-23.89	74.00	3.90	150	Vertical
2483.54	69.72	-23.89	74.00	4.28	150	Vertical

PK level= Read level + Factor

Factor= Antenna Factor + Cable loss – Preamp Factor



Freq. [MHz]	AV Level [dBμV/m]	Factor [dB]	AV Limit [dBμV/m]	Margin [dB]	Height [cm]	Polarity
2483.50	51.47	-23.89	54.00	2.53	150	Vertical
2483.54	51.43	-23.89	54.00	2.57	150	Vertical

AV level= Read level + Factor

Factor= Antenna Factor + Cable loss – Preamp Factor

802.11n (HT40) - 2422MHz Test Result



Freq. [MHz]	PK Level [dBμV/m]	Factor [dB]	PK Limit [dBμV/m]	Margin [dB]	Height [cm]	Polarity
2388.6	71.02	-23.89	74.00	2.98	150	Horizontal
2390.0	69.04	-23.89	74.00	4.96	150	Horizontal

PK level= Read level + Factor

Factor= Antenna Factor + Cable loss – Preamp Factor



Freq. [MHz]	AV Level [dBμV/m]	Factor [dB]	AV Limit [dBμV/m]	Margin [dB]	Height [cm]	Polarity
2389.3	49.87	-23.89	54.00	4.13	150	Horizontal
2390.0	50.27	-23.89	54.00	3.73	150	Horizontal

AV level= Read level + Factor

Factor= Antenna Factor + Cable loss – Preamp Factor



Freq. [MHz]	PK Level [dBμV/m]	Factor [dB]	PK Limit [dBμV/m]	Margin [dB]	Height [cm]	Polarity
2389.3	65.13	-23.89	74.00	8.87	150	Vertical
2390.0	63.57	-23.89	74.00	10.43	150	Vertical

PK level= Read level + Factor

Factor= Antenna Factor + Cable loss – Preamp Factor



Freq. [MHz]	AV Level [dBμV/m]	Factor [dB]	AV Limit [dBμV/m]	Margin [dB]	Height [cm]	Polarity
2389.3	51.40	-23.89	54.00	2.60	150	Vertical
2390.0	51.81	-23.89	54.00	2.19	150	Vertical

AV level= Read level + Factor

Factor= Antenna Factor + Cable loss – Preamp Factor

802.11n (HT40) - 2452MHz Test Result



Freq. [MHz]	PK Level [dBμV/m]	Factor [dB]	PK Limit [dBμV/m]	Margin [dB]	Height [cm]	Polarity
2483.5	61.58	-23.89	74.00	12.42	150	Horizontal
2485.8	62.99	-23.89	74.00	11.01	150	Horizontal

PK level= Read level + Factor

Factor= Antenna Factor + Cable loss – Preamp Factor



Freq. [MHz]	AV Level [dBμV/m]	Factor [dB]	AV Limit [dBμV/m]	Margin [dB]	Height [cm]	Polarity
2483.5	45.65	-23.89	54.00	8.35	150	Horizontal
2483.9	45.51	-23.89	54.00	8.49	150	Horizontal

AV level= Read level + Factor

Factor= Antenna Factor + Cable loss – Preamp Factor



Freq. [MHz]	PK Level [dBμV/m]	Factor [dB]	PK Limit [dBμV/m]	Margin [dB]	Height [cm]	Polarity
2483.5	64.72	-23.89	74.00	9.28	150	Vertical
2486.9	65.28	-23.89	74.00	8.72	150	Vertical

PK level= Read level + Factor

Factor= Antenna Factor + Cable loss – Preamp Factor



Freq. [MHz]	AV Level [dBμV/m]	Factor [dB]	AV Limit [dBμV/m]	Margin [dB]	Height [cm]	Polarity
2483.5	47.78	-23.89	54.00	6.22	150	Vertical
2484.1	47.88	-23.89	54.00	6.12	150	Vertical

AV level= Read level + Factor

Factor= Antenna Factor + Cable loss – Preamp Factor