



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

RADIO TEST - REPORT

FCC Compliance Test Report for

Product name: USB receiver

Model name: GF87+GF88, CW-ACC10BKBL

FCC ID: 2ASCK-GF87GF88

Test Report Number: EFGX23030295-IE-02-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:

2023-05-19

Bruce Zheng / Project Engineer



Date

Eurofins-Lab.

Name / Title

Signature

Technical responsibility for area of testing:

2023-05-19

Albert Xu / Lab Manager



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 applicant

Name : Dongguan Green Power One Co.,Ltd.
Address : No.26, Hongyun Street, Qingxi Town, Dongguan City, Guangdong province, China
Telephone : ./.
Fax : ./.

1.4 Details of manufacturer

Name : Dongguan Green Power One Co.,Ltd.
Address : No.26, Hongyun Street, Qingxi Town, Dongguan City, Guangdong province, China
Telephone : ./.
Fax : ./.

1.5 Application details

Date of receipt of application : 2023-03-23
 Date of receipt of test item : 2023-03-23
 Date of test : 2023-03-23 to 2023-04-23
 Date of issue : 2023-05-19

1.6 Test item

Product type : USB receiver
 Model name : GF87+GF88, CW-ACC10BKBL
 Brand : GPO
 Serial number : ./.
 Ratings : 5.0Vdc from USB port
 Test voltage : 5.0Vdc
 FCC ID : 2ASCK-GF87GF88
 PMN : USB receiver
 Additional information : ./.

RadioTechnical data
 Frequency range : 2402MHz – 2480MHz
 Radio Tech. : 2.4G SRD
 Frequency channel : 79
 Modulation : GFSK
 Antenna type : PCB antenna
 Antenna gain : -2.36 dBi

1.7 Test standards

Test Standards	
FCC Part 15 Subpart C December 16, 2020	PART 15 - RADIO FREQUENCY DEVICES Subpart C - Intentional Radiators

Test Method

- 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.
- ANSI C63.10-2013, American National Standard for Testing Unlicensed Wireless Devices.

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

RF Conducted

Environment Parameter	Temperature	Relative Humidity
101.2Kpa	24.6	62.6%

Radiated

Environment Parameter	Temperature	Relative Humidity
101.2Kpa	23.7	51.7%

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 in conducted measurements	1.96dB
Uncertainty for Conducted RF test	RF Power Conducted: 1.16dB Frequency test involved: 1.05x10 ⁻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

CHANNEL	FREQ. (MHZ)	CHANNEL	FREQ. (MHZ)	CHANNEL	FREQ. (MHZ)	CHANNEL	FREQ. (MHZ)
0	2402	20	2422	40	2442	60	2462
1	2403	21	2423	41	2443	61	2463
2	2404	22	2424	42	2444	62	2464
3	2405	23	2425	43	2445	63	2465
4	2406	24	2426	44	2446	64	2466
5	2407	25	2427	45	2447	65	2467
6	2408	26	2428	46	2448	66	2468
7	2409	27	2429	47	2449	67	2469
8	2410	28	2430	48	2450	68	2470
9	2411	29	2431	49	2451	69	2471
10	2412	30	2432	50	2452	70	2472
11	2413	31	2433	51	2453	71	2473
12	2414	32	2434	52	2454	72	2474
13	2415	33	2435	53	2455	73	2475
14	2416	34	2436	54	2456	74	2476
15	2417	35	2437	55	2457	75	2477
16	2418	36	2438	56	2458	76	2478
17	2419	37	2439	57	2459	77	2479
18	2420	38	2440	58	2460	78	2480
19	2421	39	2441	59	2461		

The EUT was set at continuously transmitting mode during the test.

2.5 Test equipment utilized

EQUIPMENT ID	EQUIPMENT NAME	MODEL NO.	CAL. DUE DATE
23-2-13-05	EMI Test Receiver	ESR3	2024-03-21
23-2-13-06	LISN	NNLK 8127 RC	2024-03-21
23-2-10-16	Attenuator	VTSD 9561-F	2024-03-21
23-2-13-12	Signal Analyzer	N9010B-544	2024-03-21
23-2-13-13	BT/WLAN Tester	CMW270	2024-03-21
23-2-13-14	Signal Generator	N5183B-520	2024-03-21
23-2-13-15	Vector Signal Generator	N5182B-506	2024-03-21
23-2-10-43	Switch and Control Unit	ERIT-E-JS0806-2	2024-03-21
23-2-10-44	DC power supply	E3642A	2024-03-21
23-2-10-45	Temperature test chamber	SG-80-CC-2	2024-03-21
23-2-13-01	EMI Test Receiver	ESR7	2024-03-21
23-2-13-02	Signal Analyzer	N9020B-544	2024-03-21
23-2-12-01	Active Loop Antenna	FMZB 1519B	2024-05-05
23-2-12-02	TRILOG Broadband Antenna	VULB9168	2024-05-05
23-2-12-03	Horn Antenna	3117	2024-05-05
23-2-12-04	Horn Antenna	BBHA 9170	2024-05-05
23-2-10-01	Preamplifier	BBV9745	2024-03-21
23-2-10-02	Preamplifier	TAP01018048	2024-03-21
23-2-10-03	Preamplifier	TAP18040048	2024-03-21
23-2-10-14	Switch and Control Unit	ERIT-E-JS0806-SF1	N/A

2.6 Auxiliary Equipment Used during Test:

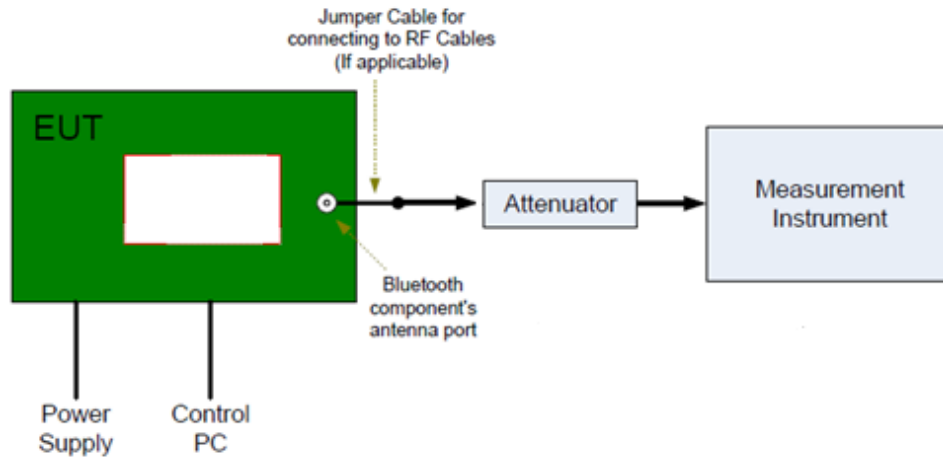
DESCRIPTION	MANUFACTURER	MODEL NO.	S/N
Laptop	LENOVO	TP00096A	PF-1QH0LV

2.7 Test software information:

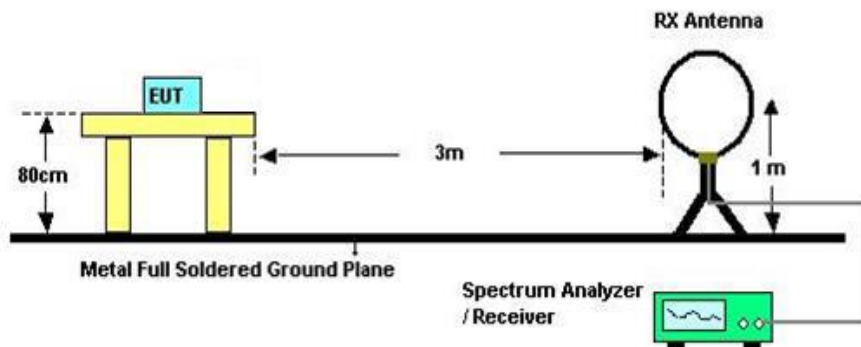
Test Software Version	SE67T_Test_v161(1).exe		
Modulation	Setting TX Power	TX Pattern	Packet Type
GFSK	DEF	TX Packet	N/A

2.8 Test setup

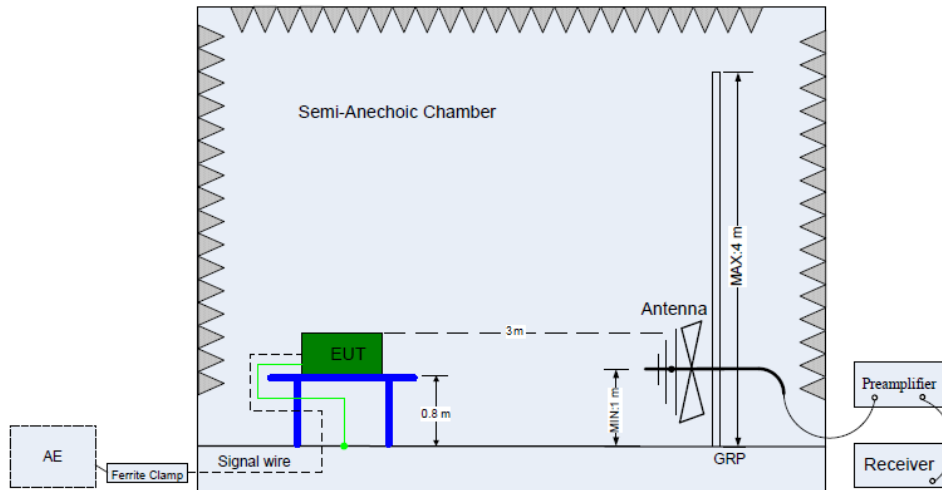
Setup diagram for conducted tests



Setup diagram for radiated tests below 30MHz

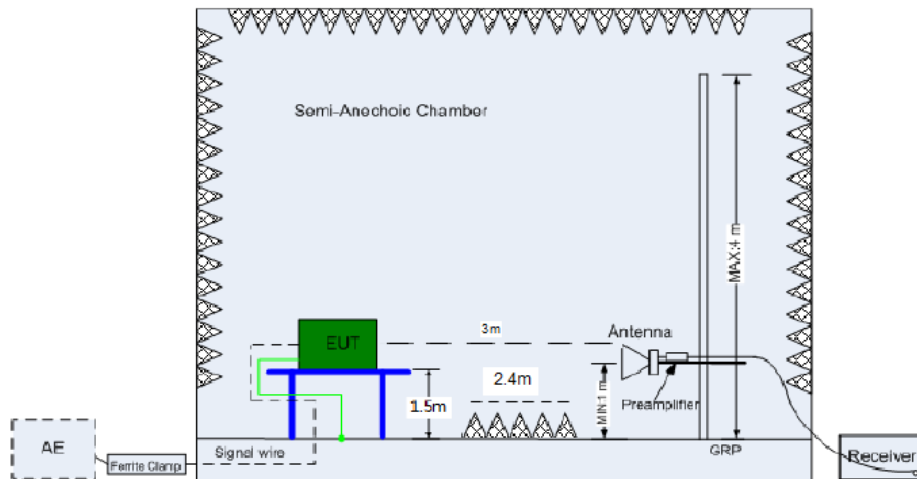


Setup diagram for radiated tests below 1GHz



(Below 1 GHz)

Setup diagram for radiated tests above 1GHz



(Above 1 GHz)

2.9 Test results

 1st test

 test after modification

 production test

Technical Requirements				
FCC Part 15 Subpart C				
Test Condition		Test Result	Verdict	Test Site
§15.207	Conducted emission AC power port	See page 13	Pass	Site 1
§15.215(c)(1)	20dB bandwidth	See page 16	Pass	Site 1
§15.249(a)&(d)&§15.209 &§15.205	Radiated emission	See page 21	Pass	Site 1
§15.203	Antenna requirement	See note 1	Pass	--

Remark 1: N/A – Not Applicable.

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

3 Technical requirement and result

3.1 Conducted emission AC power port

Test Method:

The test method was referred to the subclause 6.2 of ANSI C63.10-2013.

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.10.

The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

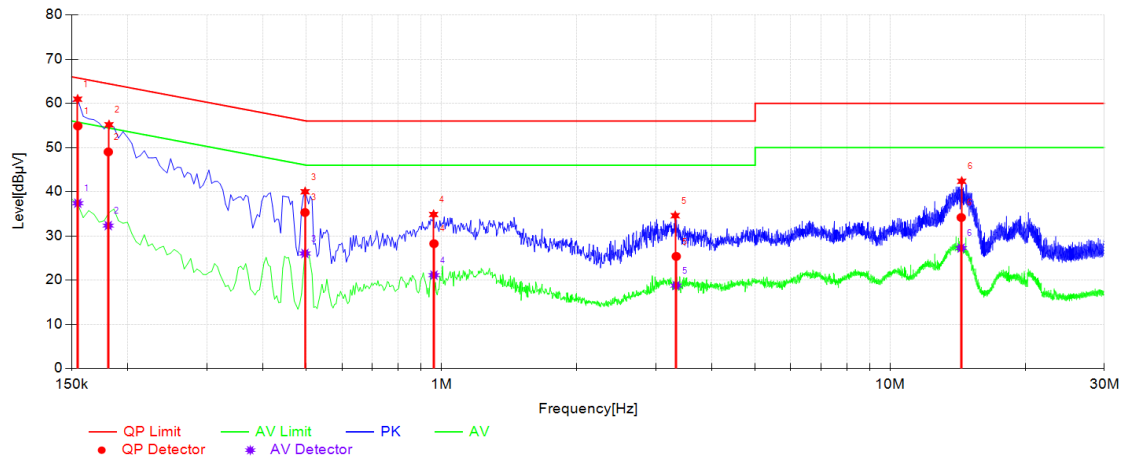
Line conducted data is recorded for both Neutral and Live lines.

Limit:

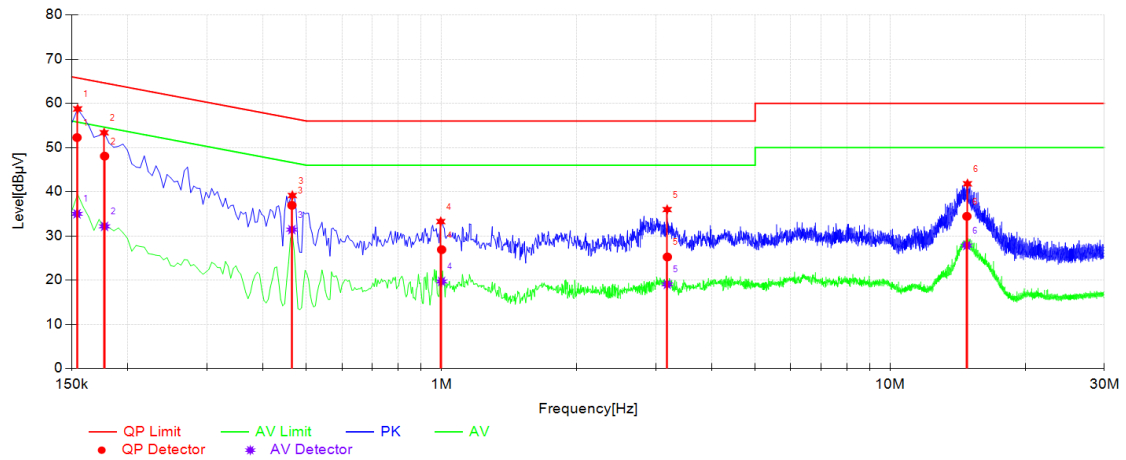
FCC §15.207 (a)

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

Decreasing linear.

Test Result:


Final Data List										
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Value [dBµV]	AV Limit [dBµV]	AV Margin [dB]	Polarity	Verdict
1	0.1546	10.26	54.89	65.75	10.86	37.40	55.75	18.35	N	PASS
2	0.1808	10.26	49.01	64.45	15.44	32.34	54.45	22.11	N	PASS
3	0.4961	10.28	35.30	56.06	20.76	26.02	46.06	20.04	N	PASS
4	0.9618	10.28	28.25	56.00	27.75	21.12	46.00	24.88	N	PASS
5	3.3342	10.37	25.37	56.00	30.63	18.76	46.00	27.24	N	PASS
6	14.3941	10.55	34.17	60.00	25.83	27.25	50.00	22.75	N	PASS



Final Data List										
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Value [dBµV]	AV Limit [dBµV]	AV Margin [dB]	Polarity	Verdict
1	0.1540	10.26	52.26	65.78	13.52	35.00	55.78	20.78	L1	PASS
2	0.1774	10.26	48.06	64.61	16.55	32.16	54.61	22.45	L1	PASS
3	0.4639	10.27	36.92	56.62	19.70	31.41	46.62	15.21	L1	PASS
4	1.0003	10.28	26.89	56.00	29.11	19.70	46.00	26.30	L1	PASS
5	3.1854	10.30	25.24	56.00	30.76	19.04	46.00	26.96	L1	PASS
6	14.8179	10.56	34.43	60.00	25.57	27.83	50.00	22.17	L1	PASS

3.2 20 dB bandwidth

Test Method:

The test method was referred to the subclause 6.9.2 of ANSI C63.10-2013.

The occupied bandwidth is measured as the width of the spectral envelope of the modulated signal, at an amplitude level reduced from a reference value by a specified ratio (or in decibels, a specified number of dB down from the reference value). Typical ratios, expressed in dB, are -6 dB, -20 dB, and -26 dB, corresponding to 6 dB BW, 20 dB BW, and 26 dB BW, respectively. In this subclause, the ratio is designated by “-xx dB.” The reference value is either the level of the unmodulated carrier or the highest level of the spectral envelope of the modulated signal, as stated by the applicable requirement. Some requirements might specify a specific maximum or minimum value for the “-xx dB” bandwidth; other requirements might specify that the “-xx dB” bandwidth be entirely contained within the authorized or designated frequency band.

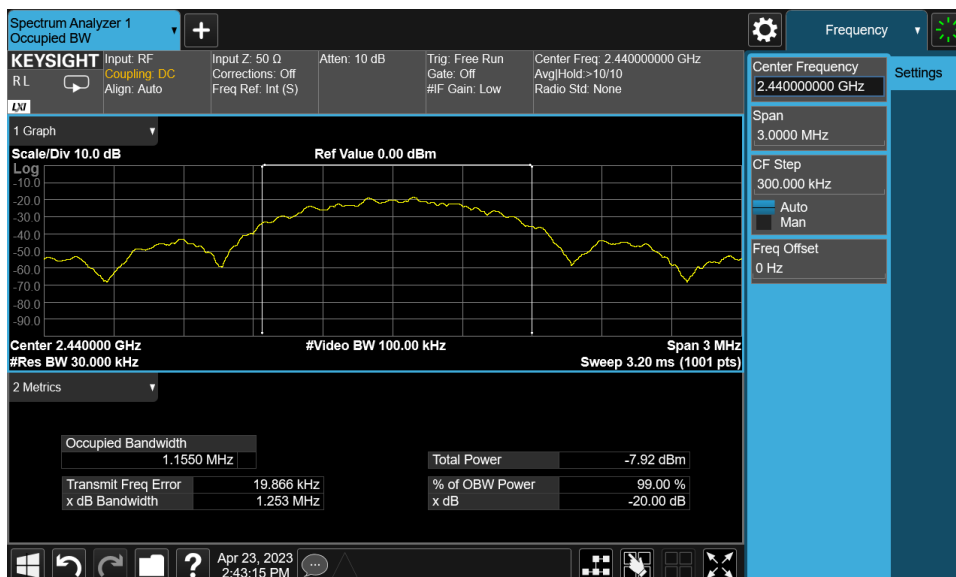
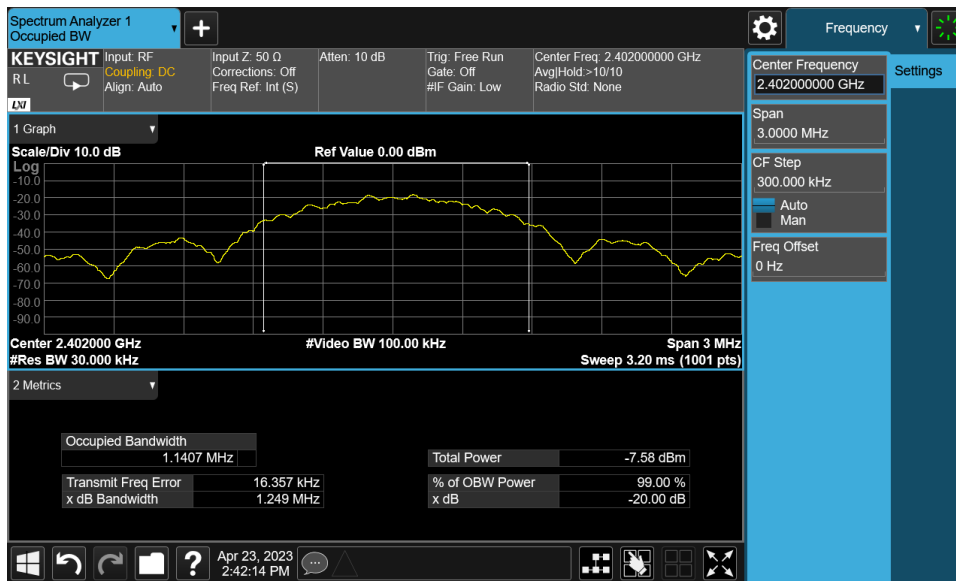
- a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the EMI receiver or spectrum analyzer shall be between two times and five times the OBW.
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW and video bandwidth (VBW) shall be approximately three times RBW, unless otherwise specified by the applicable requirement.
- c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log(\text{OBW}/\text{RBW})]$ below the reference level. Specific guidance is given in 4.1.5.2.
- d) Steps a) through c) might require iteration to adjust within the specified tolerances.
- e) The dynamic range of the instrument at the selected RBW shall be more than 10 dB below the target “-xx dB down” requirement; that is, if the requirement calls for measuring the -20 dB OBW, the instrument noise floor at the selected RBW shall be at least 30 dB below the reference value.
- f) Set detection mode to peak and trace mode to max hold.
- g) Determine the reference value: Set the EUT to transmit an unmodulated carrier or modulated signal, as applicable. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace (this is the reference value).
- h) Determine the “-xx dB down amplitude” using $[(\text{reference value}) - \text{xx}]$. Alternatively, this calculation may be made by using the marker-delta function of the instrument.
- i) If the reference value is determined by an unmodulated carrier, then turn the EUT modulation ON, and either clear the existing trace or start a new trace on the spectrum analyzer and allow the new trace to stabilize. Otherwise, the trace from step g) shall be used for step j).
- j) Place two markers, one at the lowest frequency and the other at the highest frequency of the envelope of the spectral display, such that each marker is at or slightly below the “ixx dB down amplitude” determined in step h). If a marker is below this “-xx dB down amplitude” value, then it shall be as close as possible to this value. The occupied bandwidth is the frequency difference between the two markers. Alternatively, set a marker at the lowest frequency of the envelope of the spectral display, such that the marker is at or slightly below the “ixx dB down amplitude” determined in step h). Reset the marker-delta function and move the marker to the other side of the emission until the delta marker amplitude is at the same level as the reference marker amplitude. The marker-delta frequency reading at this point is the specified emission bandwidth.
- k) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

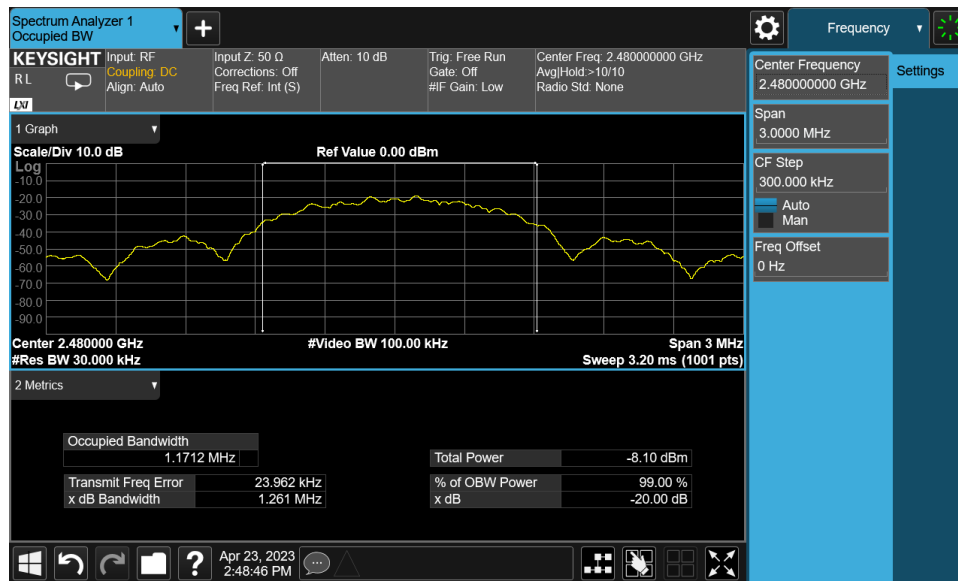
Limit:

None; for reporting purposes only.

Test Result:

Channel	20db EBW[MHz]	Verdict
2402	1.249	PASS
2440	1.253	PASS
2480	1.261	PASS





3.3 Radiated emission

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 \geq 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 \geq 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 \geq RBW from 9KHz to 0.15MHz, RBW 9KHz VBW \geq 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 (20log(1/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 VBW \geq 1 / T, the T is transmission duration (T).

Limit:

FCC §15.209

Frequency Range (MHz)	Field Strength Limit ($\mu\text{V/m}$) at 3 m	Field Strength Limit ($\text{dB}\mu\text{V/m}$) at 3 m
0.009-0.490	2400/F(kHz) @ 300 m	-
0.490-1.705	24000/F(kHz) @ 30 m	-
1.705 - 30	30 @ 30m	-
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

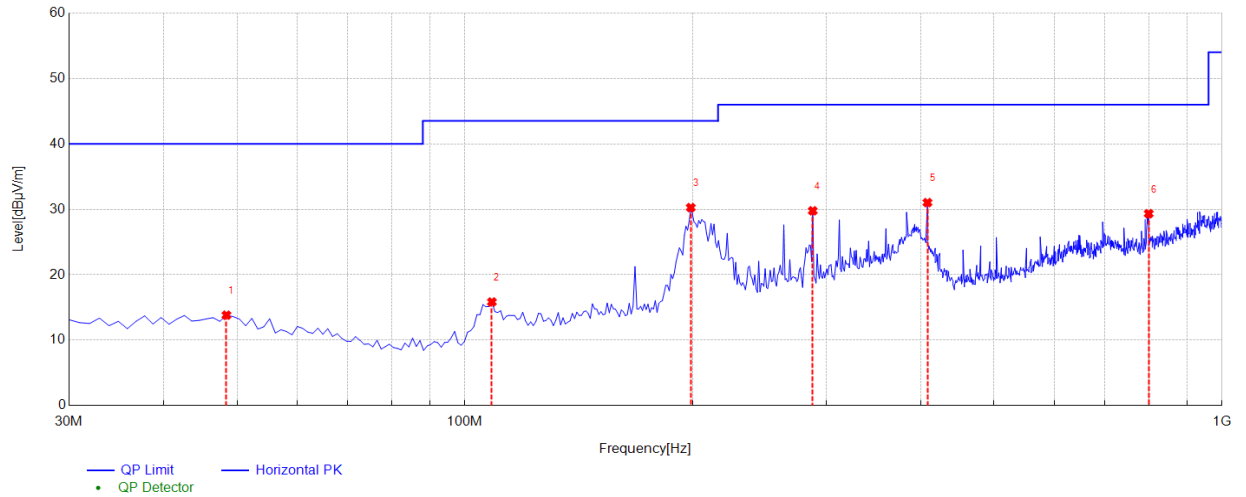
§15.205 Restricted bands of operation

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	
13.36-13.41			

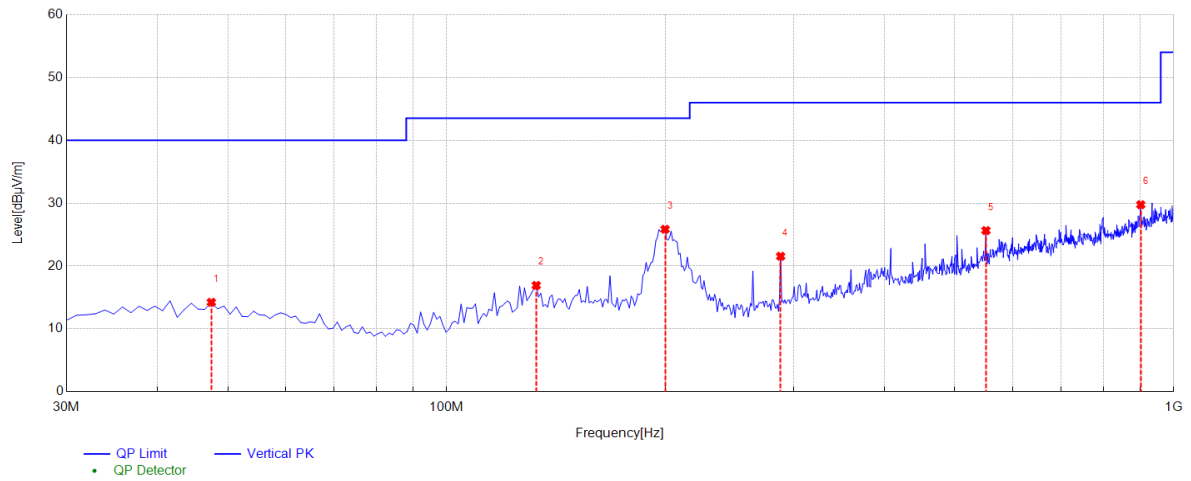
FCC §15.249(a)

Fundamental frequency	Field strength of fundamental (mV/m)	Field strength of fundamental (dBμV/m)	Field strength of harmonics (μV/m)	Field strength of harmonics (dBμV/m)
902-928 MHz	50	94	500	54
2400-2483.5 MHz	50	94	500	54
5725-5875 MHz	50	94	500	54
24.0-24.25 GHz	250	128	2500	68

Test Result:



NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	48.43	13.83	-16.17	40.00	26.17	100	259	Horizontal	PASS
2	108.57	15.85	-19.13	43.50	27.65	100	32	Horizontal	PASS
3	198.78	30.27	-18.92	43.50	13.23	100	100	Horizontal	PASS
4	288.02	29.78	-16.63	46.00	16.22	100	335	Horizontal	PASS
5	408.3	31.03	-13.20	46.00	14.97	100	180	Horizontal	PASS
6	800.18	29.34	-5.21	46.00	16.66	100	47	Horizontal	PASS



NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	47.46	14.24	-16.09	40.00	25.76	100	216	Vertical	PASS
2	132.82	16.93	-17.29	43.50	26.57	100	141	Vertical	PASS
3	199.75	25.85	-18.96	43.50	17.65	100	211	Vertical	PASS
4	288.02	21.56	-16.63	46.00	24.44	100	348	Vertical	PASS
5	551.86	25.65	-10.36	46.00	20.35	100	166	Vertical	PASS
6	901.06	29.76	-3.62	46.00	16.24	100	158	Vertical	PASS

Mode:	2402
-------	------

NO.	Freq. [MHz]	Level [dB μ V/m]	Factor [dB/m]	Limit [dB μ V/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	3834	44.56	-15.20	74.00	29.44	150	243	Horizontal
2	4806	46.09	-14.15	74.00	27.91	150	70	Horizontal
3	7206	51.10	-11.09	74.00	22.90	150	95	Horizontal
4	10059	45.76	-7.20	74.00	28.24	150	302	Horizontal
5	12711	48.05	-3.27	74.00	25.95	150	298	Horizontal
6	15051	51.21	0.31	74.00	22.79	150	103	Horizontal

NO.	Freq. [MHz]	Level [dB μ V/m]	Factor [dB/m]	Limit [dB μ V/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1828	45.71	4.62	74.00	28.29	150	355	Vertical
2	3954	47.81	-15.67	74.00	26.19	150	131	Vertical
3	4803	47.21	-14.13	74.00	26.79	150	67	Vertical
4	7206	52.26	-11.09	74.00	21.74	150	106	Vertical
5	9924	46.31	-7.24	74.00	27.69	150	170	Vertical
6	12078	48.42	-3.60	74.00	25.58	150	302	Vertical

Mode:	2440
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NO.	Freq. [MHz]	Level [dB μ V/m]	Factor [dB/m]	Limit [dB μ V/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1784	46.10	4.13	74.00	27.90	150	54	Horizontal
2	3879	43.56	-14.74	74.00	30.44	150	91	Horizontal
3	4881	45.74	-14.87	74.00	28.26	150	133	Horizontal
4	7320	46.13	-12.04	74.00	27.87	150	253	Horizontal
5	9537	46.92	-8.45	74.00	27.08	150	141	Horizontal
6	12762	47.73	-3.91	74.00	26.27	150	158	Horizontal

NO.	Freq. [MHz]	Level [dB μ V/m]	Factor [dB/m]	Limit [dB μ V/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1856	45.71	4.94	74.00	28.29	150	58	Vertical
2	3837	44.28	-15.17	74.00	29.72	150	124	Vertical
3	4881	45.43	-14.87	74.00	28.57	150	63	Vertical
4	7320	48.50	-12.04	74.00	25.50	150	88	Vertical
5	9501	46.32	-8.45	74.00	27.68	150	55	Vertical
6	11838	47.91	-4.61	74.00	26.09	150	307	Vertical

Mode:	2480
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NO.	Freq. [MHz]	Level [dB μ V/m]	Factor [dB/m]	Limit [dB μ V/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2008	48.07	6.25	74.00	25.93	150	236	Horizontal
2	4959	50.92	-14.70	74.00	23.08	150	117	Horizontal
3	7440	46.10	-11.25	74.00	27.90	150	65	Horizontal
4	9882	46.22	-7.51	74.00	27.78	150	218	Horizontal
5	11361	47.38	-5.83	74.00	26.62	150	48	Horizontal
6	13368	49.85	-2.51	74.00	24.15	150	4	Horizontal

NO.	Freq. [MHz]	Level [dB μ V/m]	Factor [dB/m]	Limit [dB μ V/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1808	45.49	4.40	74.00	28.51	150	313	Vertical
2	4959	49.59	-14.70	74.00	24.41	150	56	Vertical
3	7440	48.42	-11.25	74.00	25.58	150	81	Vertical
4	10938	47.24	-5.86	74.00	26.76	150	69	Vertical
5	15510	50.78	0.53	74.00	23.22	150	205	Vertical

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.

Band-edge (Radiated)

Mode:	2402
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PK Final Data List								
NO.	Freq. [MHz]	Factor [dB/m]	PK Value [dB μ V/m]	PK Limit [dB μ V/m]	PK Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2310	6.94	44.06	74.00	29.94	155	360	Horizontal
2	2329.68	7.16	49.20	74.00	24.80	155	284	Horizontal
3	2366.24	7.42	48.17	74.00	25.83	155	246	Horizontal
4	2377.92	7.62	50.11	74.00	23.89	155	268	Horizontal
5	2386.24	8.61	50.24	74.00	23.76	155	243	Horizontal
6	2390	9.85	46.15	74.00	27.85	155	279	Horizontal

PK Final Data List								
NO.	Freq. [MHz]	Factor [dB/m]	PK Value [dB μ V/m]	PK Limit [dB μ V/m]	PK Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2310	6.94	45.28	74.00	28.72	155	142	Vertical
2	2344.64	7.19	46.34	74.00	27.66	155	0	Vertical
3	2360.16	7.33	46.88	74.00	27.12	155	230	Vertical
4	2378.96	7.59	47.30	74.00	26.70	155	274	Vertical
5	2385.84	8.63	48.81	74.00	25.19	155	274	Vertical
6	2390	9.85	46.79	74.00	27.21	155	66	Vertical

Mode:	2480
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PK Final Data List								
NO.	Freq. [MHz]	Factor [dB/m]	PK Value [dB μ V/m]	PK Limit [dB μ V/m]	PK Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2483.5	8.56	52.34	74.00	21.66	155	240	Horizontal
2	2483.74	8.56	52.85	74.00	21.15	155	235	Horizontal
3	2495.39	8.15	52.06	74.00	21.94	155	237	Horizontal
4	2495.72	8.13	52.47	74.00	21.53	155	235	Horizontal
5	2496.37	8.11	51.50	74.00	22.50	155	240	Horizontal
6	2500	8.43	44.94	74.00	29.06	155	152	Horizontal

PK Final Data List								
NO.	Freq. [MHz]	Factor [dB/m]	PK Value [dB μ V/m]	PK Limit [dB μ V/m]	PK Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2483.5	8.56	48.90	74.00	25.10	155	250	Vertical
2	2485.87	8.02	47.43	74.00	26.57	155	20	Vertical
3	2488.02	8.35	47.13	74.00	26.87	155	158	Vertical
4	2492.54	8.14	46.65	74.00	27.35	155	322	Vertical
5	2495.89	8.13	48.83	74.00	25.17	155	242	Vertical
6	2500	8.43	47.12	74.00	26.88	155	220	Vertical

Level = Read level + Factor

Factor= Antenna Factor + Cable loss – Preamp Factor

Field strength of fundamental

PK Data List								
NO.	Freq. [MHz]	Level [dB μ V/m]	Factor [dB/m]	Limit [dB μ V/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2402	92.40	-20.90	114.00	21.60	150	68	Horizontal
2	2402	90.08	-20.90	114.00	23.92	150	123	Vertical
3	2440	92.48	-20.83	114.00	21.52	150	68	Horizontal
4	2440	89.34	-20.83	114.00	24.66	150	123	Vertical
5	2480	93.06	-20.76	114.00	20.94	150	69	Horizontal
6	2480	91.45	-20.76	114.00	22.55	150	22	Vertical

-END OF REPORT-