

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

RADIO TEST - REPORT

FCC Compliance Test Report for

Product name: Magnetic Wireless Power Bank

Model name: PB763

FCC ID: 2AQI5-PB763D

Test Report Number: EFGX26020226-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:

2026-02-12

Bruce Zheng / Project Engineer



Date

Eurofins-Lab.

Name / Title

Signature

Technical responsibility for area of testing:

2026-02-12

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	: Ugreen Group Limited
Address	: Ugreen Building, Longcheng Industrial Park, Longguanxi Road, Longhua, ShenZhen, China
Telephone	: 075528198930
Fax	: 075528198930

1.4 Details of manufacturer

Name	: Ugreen Group Limited
Address	: Ugreen Building, Longcheng Industrial Park, Longguanxi Road, Longhua, ShenZhen, China
Telephone	: 075528198930
Fax	: 075528198930

1.5 Application details

Date of receipt of application : 2026-01-28
 Date of receipt of test item : 2026-01-28
 Date of test : 2026-01-28 to 2026-02-12
 Date of issue : 2026-02-12

1.6 Test item

Product type : Magnetic Wireless Power Bank
 Model name : PB763
 Sample ID : 260209-47-001
 Brand : **UGREEN**

Serial number : N/A
 Ratings : USB-C (IN) Input:5V $\equiv$ 3A/9V $\equiv$ 2.22A
 USB-C (OUT) Output:5V $\equiv$ 2.4A/5V $\equiv$ 3A/9V $\equiv$ 2.22A/12V $\equiv$ 1.67A
 Wireless Charging Output Power:15W Max
 Cell Capacity: 10000mAh (2*5000mAh)
 Polymer Lithium-ion Battery Rated Energy: 36Wh (3.6V 10000mAh)
 Rated Capacity: 6000mAh (TYP 5V 2.4A)

Test voltage : AC120V/60Hz
 Additional information : N/A

RadioTechnical data

Operating Frequency : 112 kHz -148.5 kHz; 360kHz
 Modulation : ASK

The above sample(s) and sample information was/were submitted and identified on behalf of the applicant.
 Eurofins assures objectivity and impartiality of the test, and fulfills the obligation of confidentiality for applicant's commercial information and technical documents.

Remark:

- P/N code in the below table, for marketing purpose, will be marked on the marking plate.

55135	55135P	55135X	55135A	55135B	55135C	55135U	55135JP	55135ZD
45211	45211P	45211X	45211A	45211B	45211C	45211U	45211JP	45211ZD

1.7 Test standards

Test Standards	
FCC Part 15 Subpart C	PART 15 - RADIO FREQUENCY DEVICES Subpart C - Intentional Radiators

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 C63.10-2020, 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

Ac line conducted

Environment Parameter	Temperature	Relative Humidity
101.2 kPa	24.2°C	57.3%

Radiated

Environment Parameter	Temperature	Relative Humidity
101.2 kPa	24.3°C	52.7%

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 Radiated Emission 9KHz-30MHz	4.56dB
Uncertainty for Radiated Emission 30MHz-3000MHz	Horizontal: 4.46dB; Vertical: 4.54dB;

2.4 Test mode

No.	Operating Mode
Mode 1	Charging+Wireless Output (Phone:5W)
Mode 2	Charging+Wireless Output (Phone:7.5W)
Mode 3	Wireless Output (Phone:5W)
Mode 4	Wireless Output (Phone7.5W)
Mode 5	Wireless Output (Phone15W)
Mode 6	Standby

Note:

Phone 5W: 112-148.5kHz

Phone 7.5W: 112-148.5kHz

Phone 15W: 360kHz

2.5 Test equipment utilized

EQUIPMENT ID	EQUIPMENT NAME	MODEL NO.	CAL. DUE DATE
23-2-10-63	Temperature & Humidity Meter	COS-03	2026-03-25
23-2-10-65	Barometer	Baro	2026-03-25
23-2-13-12	Signal Analyzer	N9010B-544	2026-03-25
23-2-10-43	Switch and Control Unit	ERIT-E-JS0806-2	2026-03-25
23-2-10-44	DC power supply	E3642A	2026-03-25
23-2-10-45	Temperature test chamber	SG-80-CC-2	2026-03-25
23-2-10-50	Temperature & Humidity Meter	COS-03	2026-03-25
23-2-10-66	Barometer	Baro	2026-03-25
23-2-13-01	EMI Test Receiver	ESR7	2026-03-25
23-2-13-02	Signal Analyzer	N9020B-544	2026-03-25
23-2-12-01	Active Loop Antenna	FMZB 1519B	2026-05-29
23-2-12-02	TRILOG Broadband Antenna	VULB9168	2026-05-29

2.6 Auxiliary Equipment Used during Test:

DESCRIPTION	MANUFACTURER	MODEL NO.	S/N
Wireless charging load	YBZ	YBZ1.1	---
Wireless charging load	YBZ	YBZ3.0	---
Wireless charging load	YBZ	YBZ1.2	---

2.8 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 11	Pass	Site 1
§15.209	Radiated Emission	See page 17	Pass	Site 1
§15.215 (c)	20dB Occupied bandwidth	See page 26	Pass	Site 1
§15.203	Antenna requirement	See note 1	Pass	--

Note 1: No antenna connector is used.

3 Technical Requirement

3.1 Conducted emission AC power port

Test Method:

The test method was referred to the subclause 6.2 of ANSI C63.10-2020.

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:

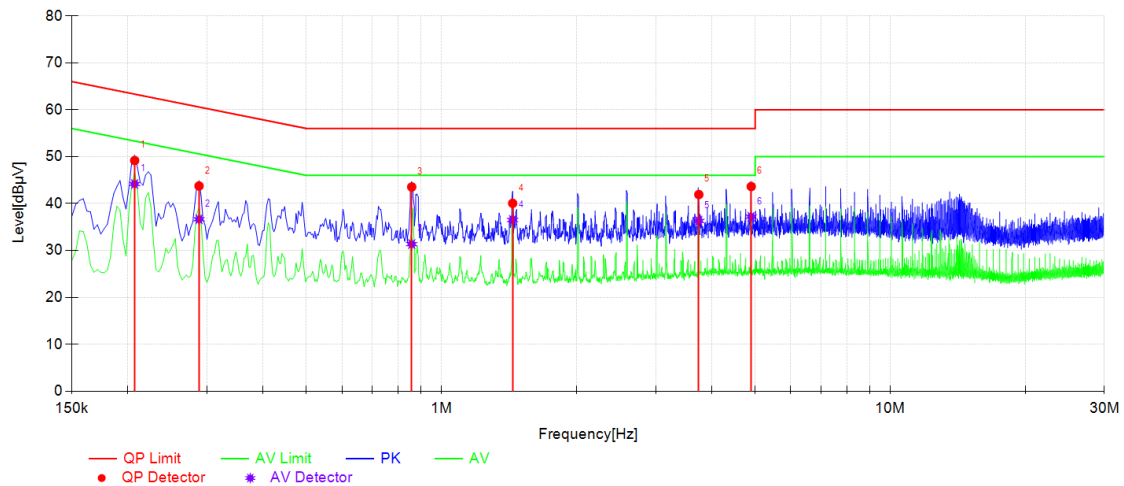
FCC §15.207 (a)

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

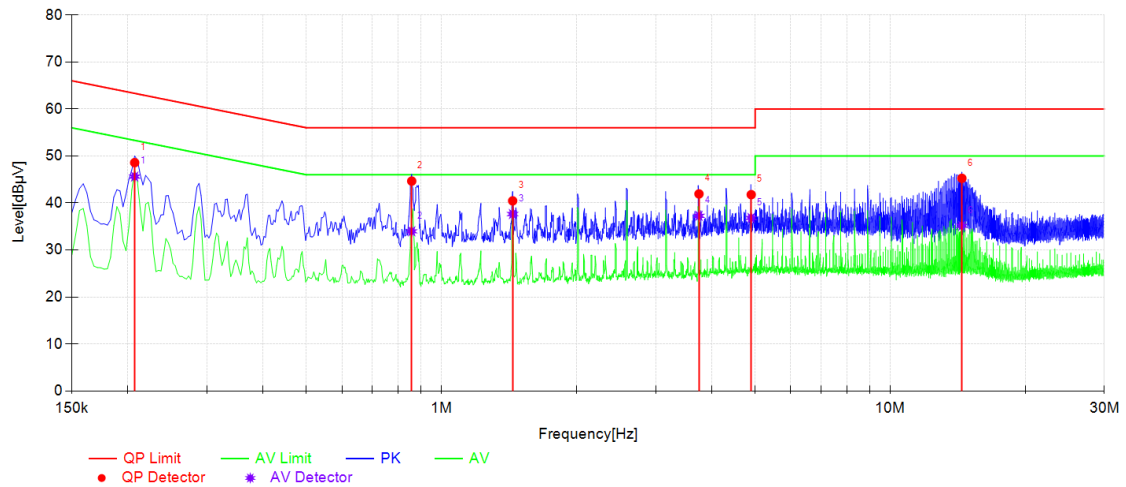
Decreasing linear.

Test Result:

All of the listed pre-test mode were tested, only the data of the worst mode(Mode 1) is recorded in the report



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]	Type	Verdict
1	0.207	10.35	49.18	63.32	14.14	44.17	53.32	9.15	L1	PASS
2	0.288	10.32	43.76	60.58	16.82	36.66	50.58	13.92	L1	PASS
3	0.858	10.31	43.55	56.00	12.45	31.36	46.00	14.64	L1	PASS
4	1.44	10.32	40.06	56.00	15.94	36.51	46.00	9.49	L1	PASS
5	3.744	10.30	41.93	56.00	14.07	36.30	46.00	9.70	L1	PASS
6	4.899	10.34	43.64	56.00	12.36	37.19	46.00	8.81	L1	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]	Type	Verdict
1	0.207	10.35	48.59	63.32	14.73	45.62	53.32	7.70	N	PASS
2	0.858	10.26	44.67	56.00	11.33	33.98	46.00	12.02	N	PASS
3	1.44	10.31	40.46	56.00	15.54	37.65	46.00	8.35	N	PASS
4	3.747	10.40	41.94	56.00	14.06	37.27	46.00	8.73	N	PASS
5	4.899	10.41	41.78	56.00	14.22	36.82	46.00	9.18	N	PASS
6	14.443	10.64	45.26	60.00	14.74	35.15	50.00	14.85	N	PASS

3.2 Radiated emissions

Test Method:

Radiated Spurious Emissions Below 30MHz: ANSI C63.10-2020 Section 6.4

Radiated Spurious Emissions 30-1000MHz: ANSI C63.10-2020 Section 6.3 and 6.5

[For 9 kHz ~ 30 MHz]

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. For measurement below 30MHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9kHz at frequency below 30MHz.

[For above 30 MHz]

- a. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. 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.
- d. 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.
- e. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

Note:

- a. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
- b. All modes of operation were investigated and the worst-case emissions are reported.

Limit:

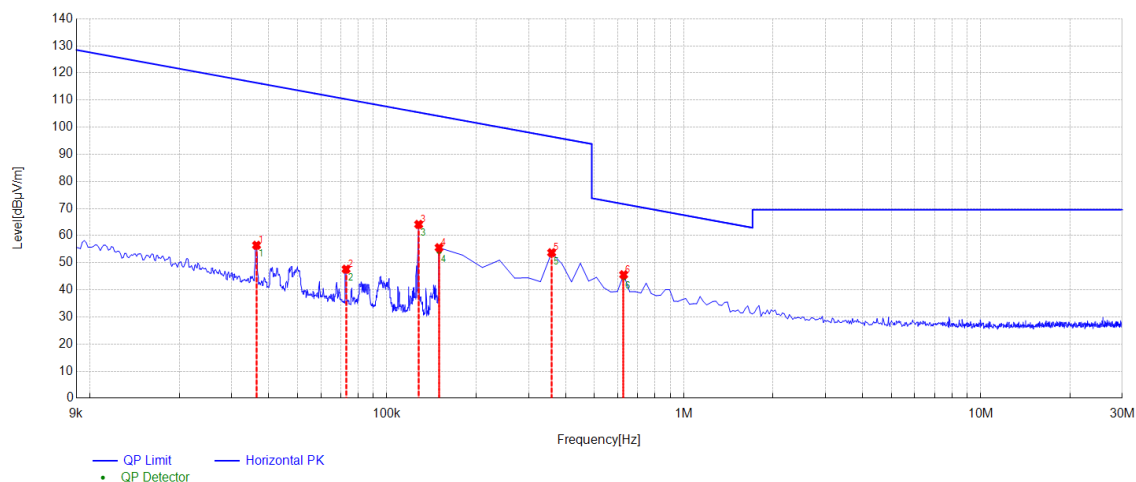
FCC §15.209

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/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

Test Result:

After pre-scan, the worst emission data was recorded.

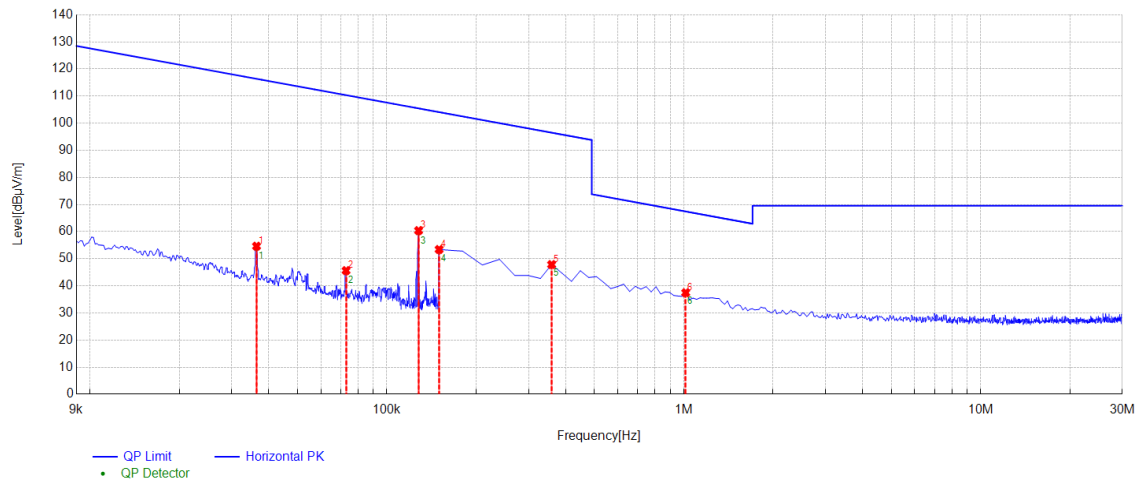
Mode 2



NO.	Freq. [MHz]	Level [dBuV/m]	Factor [dB/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	0.0364	-12.91	56.39	116.37	59.98	100	316	Coplanar	PASS
2	0.0729	-13.75	47.56	110.34	62.78	100	126	Coplanar	PASS
3*	0.1280	-13.01	64.08	105.45	41.37	100	339	Coplanar	PASS
4*	0.1500	-12.72	54.24	104.08	49.84	100	192	Coplanar	PASS
5*	0.3590	-10.99	53.34	96.50	43.16	100	12	Coplanar	PASS
6	0.6276	-10.36	44.55	71.64	27.09	100	16	Coplanar	PASS

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The other emission levels were very low against the limit.
5. "*" : Fundamental Frequency.

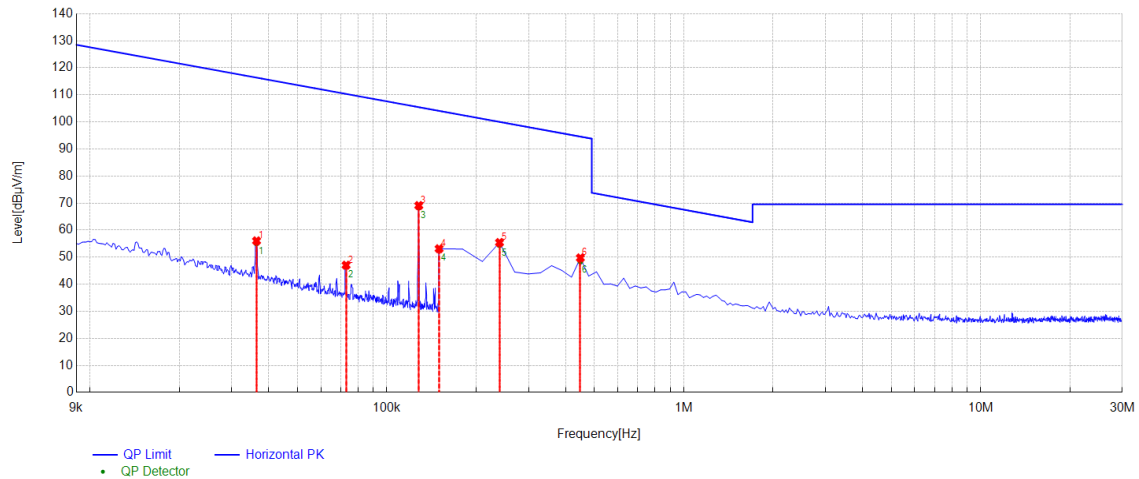


NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	0.0364	-12.91	53.97	116.37	62.40	100	224	Coaxial	PASS
2	0.0729	-13.75	45.21	110.34	65.13	100	214	Coaxial	PASS
3*	0.1279	-13.02	59.72	105.46	45.74	100	56	Coaxial	PASS
4*	0.1500	-12.72	53.00	104.08	51.08	100	181	Coaxial	PASS
5*	0.3590	-10.99	47.73	96.50	48.77	100	119	Coaxial	PASS
6	1.0156	-10.55	37.34	67.43	30.09	100	146	Coaxial	PASS

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamplifier Factor (dB).
4. The other emission levels were very low against the limit.
5. "*" : Fundamental Frequency.

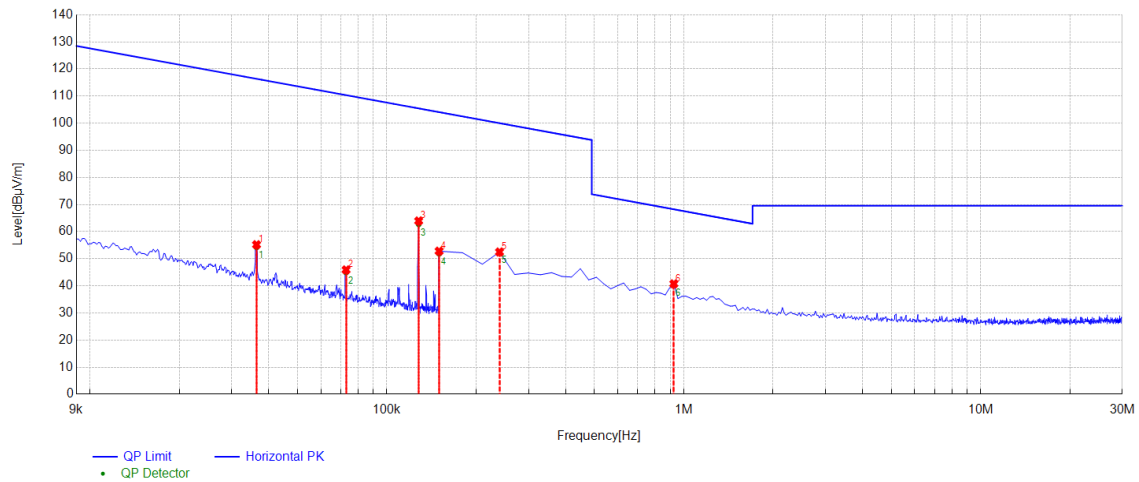
Mode 4



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	0.0364	-12.91	55.07	116.37	61.30	100	345	Coplanar	PASS
2	0.0729	-13.75	46.61	110.34	63.73	100	303	Coplanar	PASS
3*	0.1281	-13.01	68.36	105.45	37.09	100	360	Coplanar	PASS
4*	0.1500	-12.72	52.69	104.08	51.39	100	21	Coplanar	PASS
5*	0.2396	-11.81	54.44	100.01	45.57	100	196	Coplanar	PASS
6	0.4485	-10.66	48.34	94.57	46.23	100	307	Coplanar	PASS

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The other emission levels were very low against the limit.
5. "*" : Fundamental Frequency.

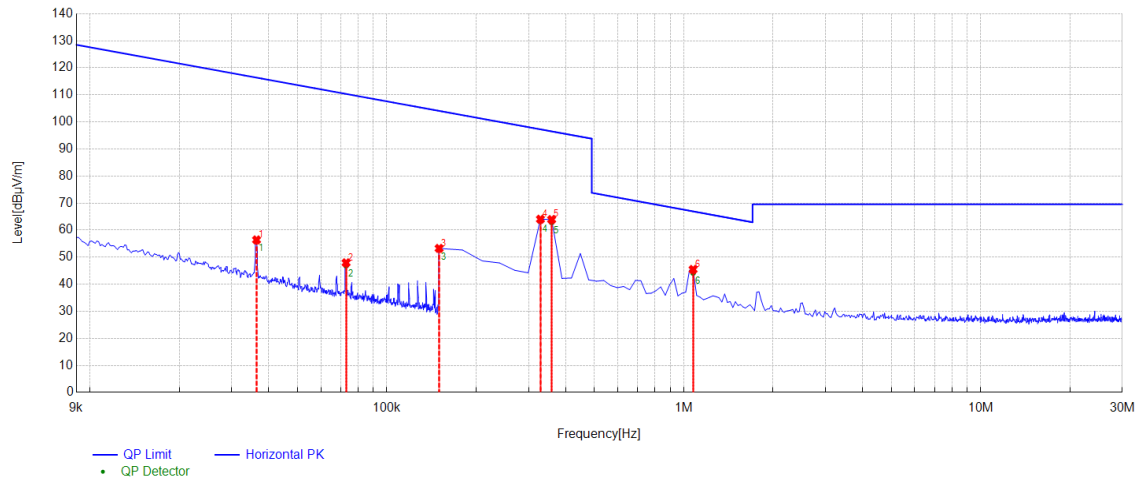


NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	0.0364	-12.91	54.17	116.37	62.20	100	137	Coaxial	PASS
2	0.0729	-13.75	44.89	110.34	65.45	100	17	Coaxial	PASS
3*	0.1280	-13.01	62.65	105.45	42.80	100	82	Coaxial	PASS
4*	0.1500	-12.72	51.80	104.08	52.28	100	14	Coaxial	PASS
5*	0.2396	-11.81	52.43	100.01	47.58	100	105	Coaxial	PASS
6	0.9261	-10.45	40.28	68.24	27.96	100	346	Coaxial	PASS

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The other emission levels were very low against the limit.
5. "*" : Fundamental Frequency.

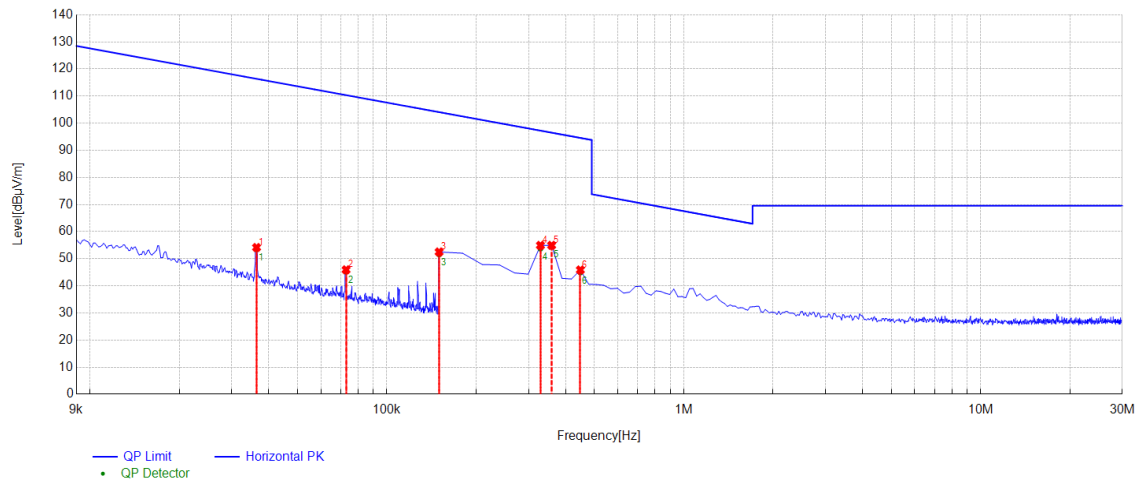
Mode 5



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	0.0364	-12.91	56.29	116.37	60.08	100	138	Coplanar	PASS
2	0.0729	-13.75	46.86	110.34	63.48	100	97	Coplanar	PASS
3*	0.1500	-12.72	53.15	104.08	50.93	100	108	Coplanar	PASS
4*	0.3291	-11.10	63.40	97.26	33.86	100	180	Coplanar	PASS
5*	0.3590	-10.99	62.85	96.50	33.65	100	180	Coplanar	PASS
6	1.0754	-10.54	44.15	66.93	22.78	100	212	Coplanar	PASS

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The other emission levels were very low against the limit.
5. "*" : Fundamental Frequency.

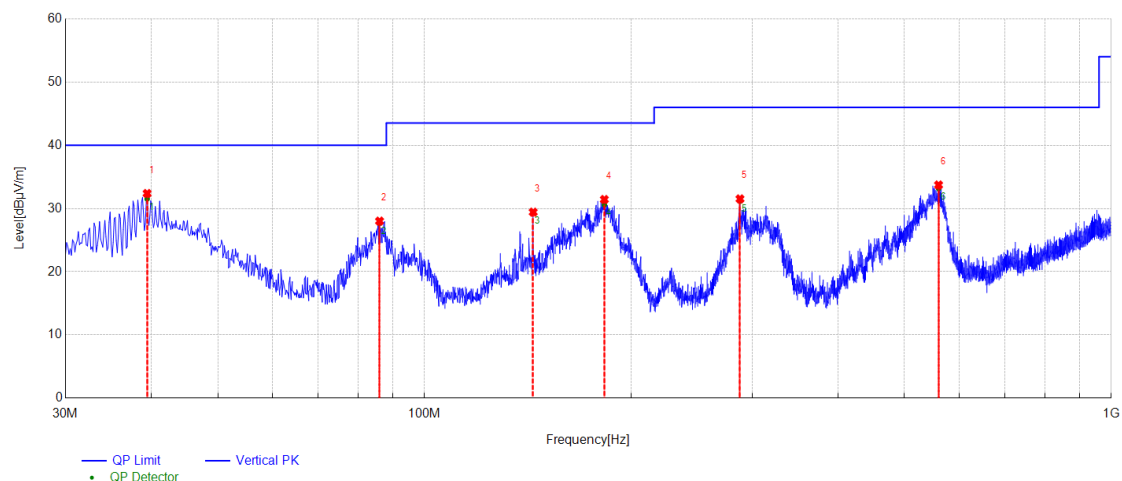


NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	0.0364	-12.91	53.43	116.37	62.94	100	294	Coaxial	PASS
2	0.0729	-13.75	45.20	110.34	65.14	100	271	Coaxial	PASS
3*	0.1500	-12.72	51.53	104.08	52.55	100	360	Coaxial	PASS
4*	0.3291	-11.10	53.67	97.26	43.59	100	310	Coaxial	PASS
5*	0.3590	-10.99	54.65	96.50	41.85	100	108	Coaxial	PASS
6	0.4485	-10.66	44.90	94.57	49.67	100	33	Coaxial	PASS

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The other emission levels were very low against the limit.
5. "*" : Fundamental Frequency.

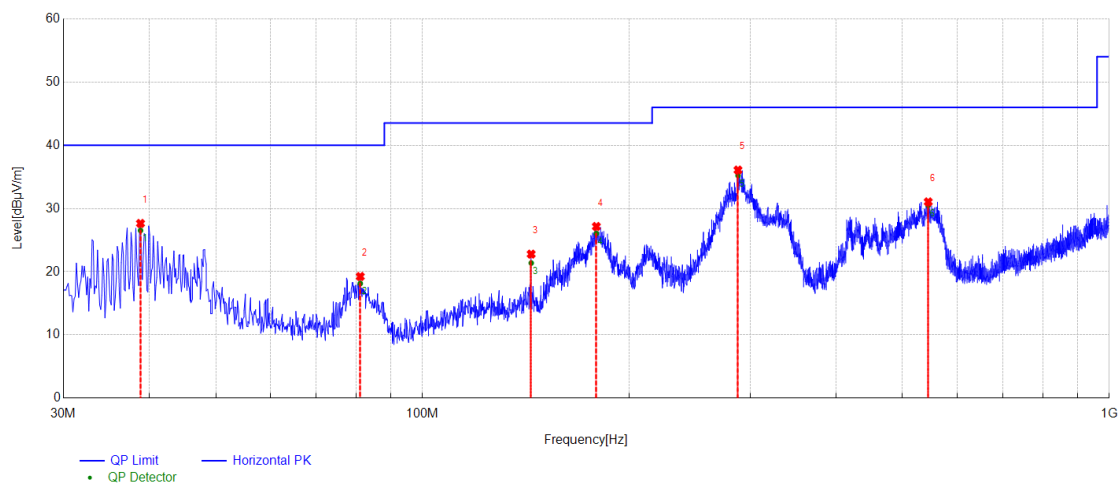
30-1000MHz
Mode 1



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	39.4575	-15.93	31.52	40.00	8.48	100	77	Vertical	PASS
2	86.0175	-20.19	27.68	40.00	12.32	100	288	Vertical	PASS
3	143.975	-16.26	29.40	43.50	14.10	100	18	Vertical	PASS
4	182.775	-17.85	30.57	43.50	12.93	100	62	Vertical	PASS
5	288.020	-16.49	31.19	46.00	14.81	100	350	Vertical	PASS
6	560.468	-9.73	33.15	46.00	12.85	100	190	Vertical	PASS

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).

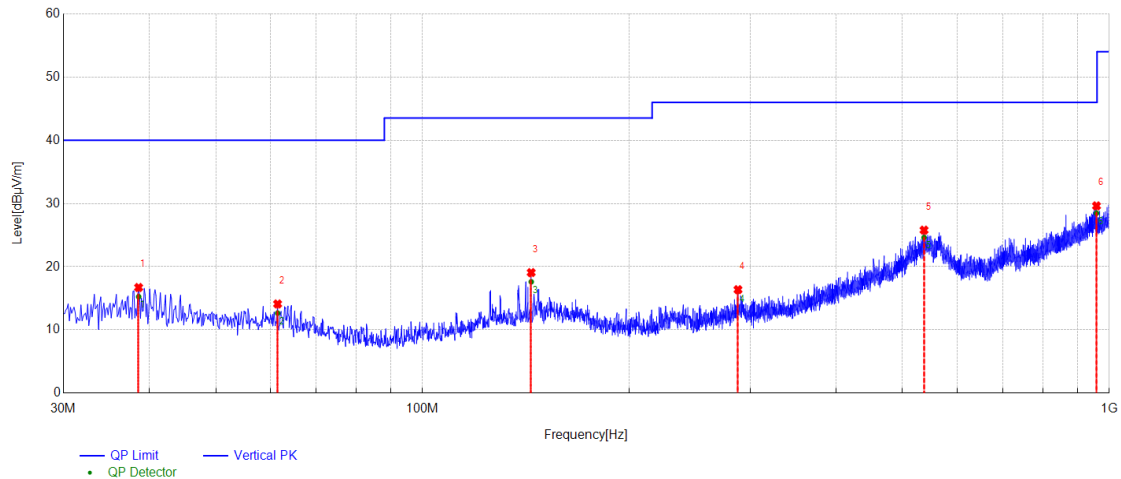


NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	38.8512	-15.99	26.53	40.00	13.47	100	350	Horizontal	PASS
2	81.1675	-19.74	18.14	40.00	21.86	100	160	Horizontal	PASS
3	143.975	-16.26	21.38	43.50	22.12	100	116	Horizontal	PASS
4	179.137	-17.52	26.05	43.50	17.45	100	271	Horizontal	PASS
5	288.020	-16.49	35.21	46.00	10.79	100	96	Horizontal	PASS
6	545.070	-10.21	30.48	46.00	15.52	100	155	Horizontal	PASS

Remarks:

1. Result value (dBμV/m) = Reading value (dBμV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBμV/m) - Limit value (dBμV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBμV/m) + Cable Loss (dB) - Preamplifier Factor (dB).

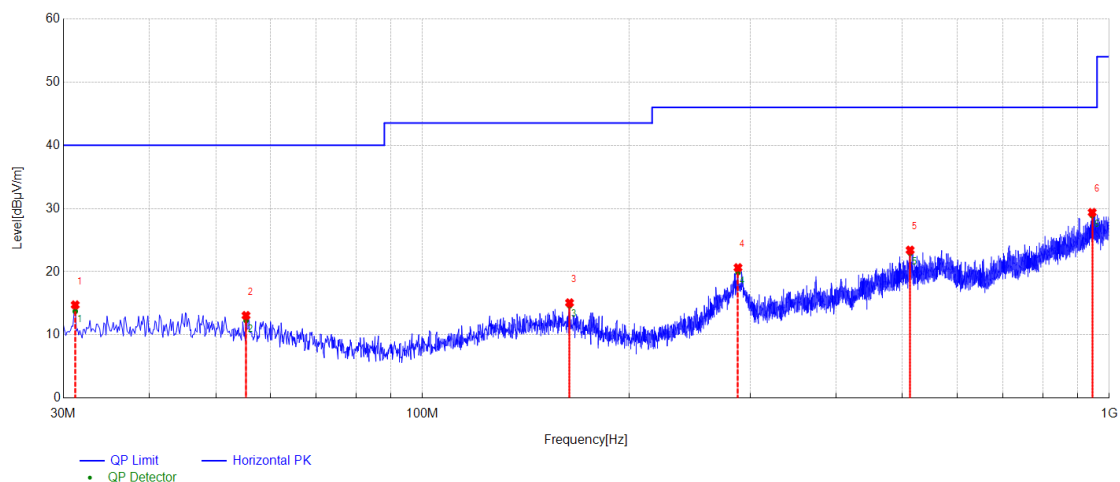
Mode 5



NO.	Freq. [MHz]	Level [dBuV/m]	Factor [dB/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	38.6088	-15.99	15.26	40.00	24.74	100	189	Vertical	PASS
2	61.5250	-17.25	12.66	40.00	27.34	100	191	Vertical	PASS
3	143.975	-16.26	17.62	43.50	25.88	100	274	Vertical	PASS
4	288.020	-16.49	16.18	46.00	29.82	100	63	Vertical	PASS
5	537.431	-10.48	24.63	46.00	21.37	100	206	Vertical	PASS
6	958.168	-1.36	28.47	46.00	17.53	100	35	Vertical	PASS

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamplifier Factor (dB).



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	31.2125	-16.35	13.74	40.00	26.26	100	229	Horizontal	PASS
2	55.3412	-16.49	12.30	40.00	27.70	100	236	Horizontal	PASS
3	163.738	-15.88	14.60	43.50	28.90	100	263	Horizontal	PASS
4	288.020	-16.49	19.87	46.00	26.13	100	288	Horizontal	PASS
5	512.938	-11.24	22.93	46.00	23.07	100	266	Horizontal	PASS
6	944.346	-1.57	28.89	46.00	17.11	100	197	Horizontal	PASS

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamplifier Factor (dB).

3.3 20dB Occupied bandwidth

Test Method:

The test method was referred to the subclause 6.9.2 of ANSI C63.10-2020.

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.

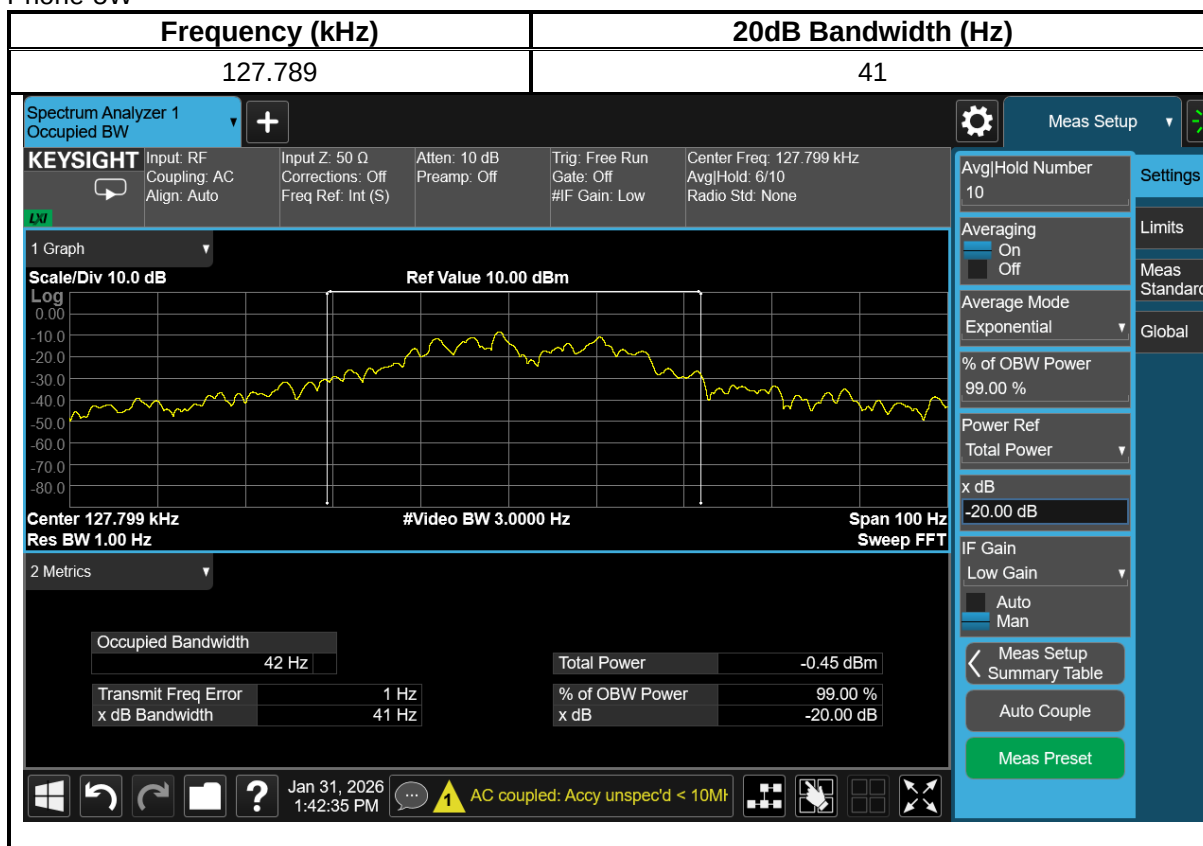
- a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the EMI receiver or spectrum analyzer shall be between two times and five times the OBW.
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW and 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 $[10 \log (OBW/RBW)]$ 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 $[(\text{reference value}) - xx]$. 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 “-xx 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 “-xx 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:

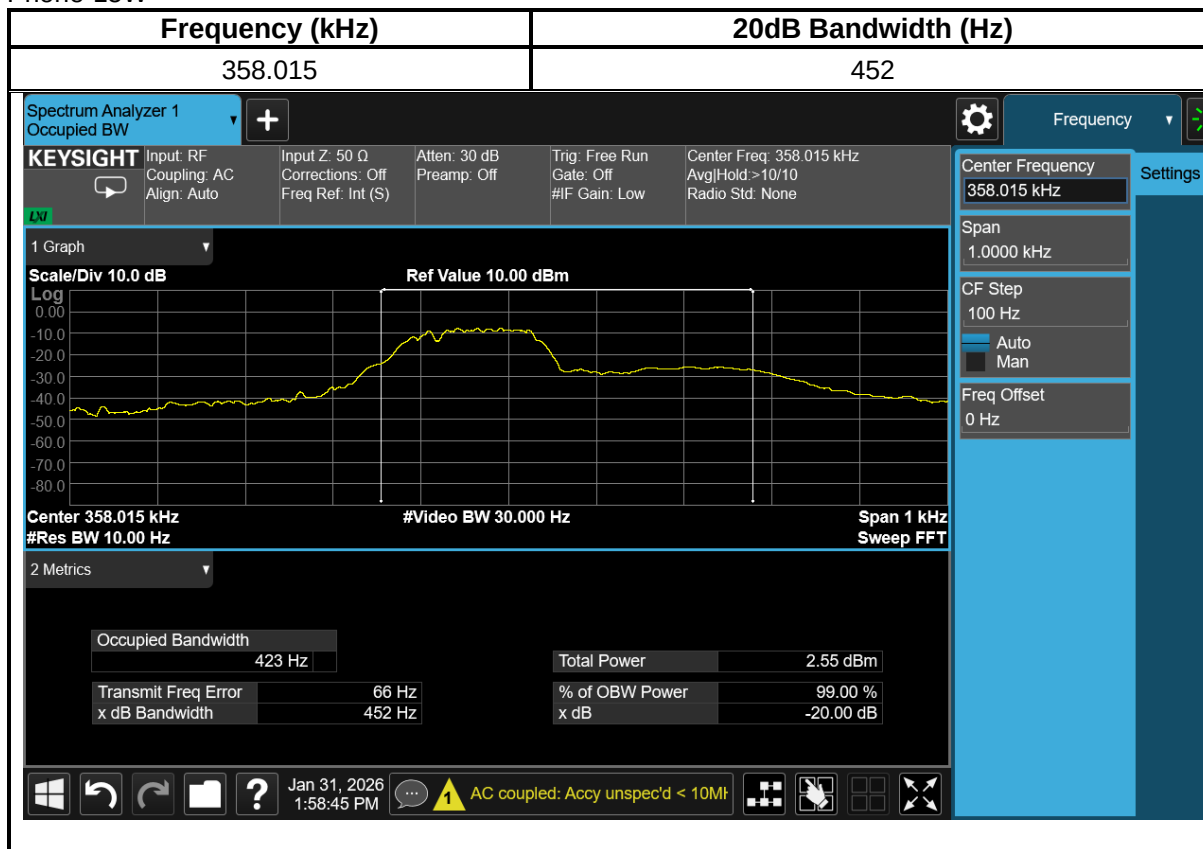
The field strength of any emissions appearing between the band edges and out of band shall be attenuated at least 20 dB below the level of the unmodulated carrier or to the general limits in Section 15.209.

Test Result:

Phone-5W



Phone-15W



-End of report-