




TEST REPORT

<p>Eurofins KCTL Co.,Ltd. 65, Sinwon-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Korea TEL: 82-70-5008-1021 FAX: 82-505-299-8311 www.kctl.co.kr</p>	<p>Report No.: KR24-SRF0009-B Page (1) of (31)</p>	 KCTL
--	--	---

1. Client

- Name : IPX Corporation
- Address : 5F ,98, Hannam-daero, Yongsan-gu, Seoul, Republic of Korea
- Date of Receipt : 2023-12-27

2. Use of Report : Certification

3. Name of Product / Model : LF_LENINI_23 DESK CHARGER / 8809954704642

4. Manufacturer / Country of Origin : Huizhou OJD Technology Co., Ltd / China



5. FCC ID : 2AQTSIPX-23CE-CHA01

6. Date of Test : 2024-01-09 to 2024-02-01

7. Location of Test : Permanent Testing Lab On Site Testing
 (Address:65, Sinwon-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Korea)

8. Test method used : FCC Part 15 Subpart C, 15.209

9. Test Result : Refer to the test result in the test report

Affirmation	Tested by	Technical Manager
	Name : Minki Kim (Signature) 	Name : Heesu Ahn (Signature) 

2024-02-27

Eurofins KCTL Co.,Ltd.

As a test result of the sample which was submitted from the client, this report does not guarantee the whole product quality. This test report should not be used and copied without a written agreement by Eurofins KCTL Co.,Ltd.

REPORT REVISION HISTORY

Date	Revision	Page No
2024-02-07	Originally issued	-
2024-02-26	Updated	1
2024-02-27	Updated	7, 10

This report shall not be reproduced except in full, without the written approval of Eurofins KCTL Co.,Ltd. This document may be altered or revised by Eurofins KCTL Co.,Ltd. personnel only, and shall be noted in the revision section of the document. Any alteration of this document not carried out by Eurofins KCTL Co.,Ltd. will constitute fraud and shall nullify the document. This test report is a general report that does not use the KOLAS accreditation mark and is not related to KS Q ISO/IEC 17025 and KOLAS accreditation.

Note. The report No. KR24-SRF0009-A is superseded by the report No. KR24-SRF0009-B.

General remarks for test reports

Statement concerning the uncertainty of the measurement systems used for the tests

(may be required by the product standard or client)

Internal procedure used for type testing through which traceability of the measuring uncertainty has been established:

Procedure number, issue date and title:

Calculations leading to the reported values are on file with the testing laboratory that conducted the testing.

Statement not required by the standard or client used for type testing

CONTENTS

1.	General information	4
2.	Device information	4
2.1.	Companion device information	5
2.2.	Frequency/channel operations.....	5
2.3.	Worst-Case configuration and mode	5
2.4.	Normal and extreme test conditions	5
3.	Antenna requirement	6
4.	Summary of tests	7
5.	Measurement uncertainty	7
6.	Test results	8
6.1.	Field strength of fundamental and spurious emission.....	8
6.2.	20dB Bandwidth.....	19
6.3.	AC Conducted emission	22
7.	Measurement equipment	31

1. General information

Client : IPX Corporation
 Address : 5F ,98, Hannam-daero, Yongsan-gu, Seoul, Republic of Korea
 Manufacturer : Huizhou OJD Technology Co., Ltd
 Address : 7F, Building 20, Zoina Hi-tech Industrial Park, No.6 Xinhua Avenue,
 Chenjiang Street, Zhongkai High-tech Zone, Huizhou city, Guangdong
 Province, China
 Laboratory : Eurofins KCTL Co.,Ltd.
 Address : 65, Sinwon-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Korea
 Accreditations : FCC Site Designation No: KR0040, FCC Site Registration No: 687132
 VCCI Registration No. : R-20080, G-20078, C-20059, T-20056
 CAB Identifier: KR0040
 ISED Number: 8035A
 KOLAS No.: KT231

2. Device information

Equipment under test : LF_LENINI_23 DESK CHARGER
 Model : 8809954704642
 Modulation technique : ASK
 Frequency range : 110 ~ 205 kHz (WPT)
 Power source : DC 9 V
 Antenna specification : Coil antenna
 Software version : V1.0.0
 Hardware version : V1.0.0
 Test device serial No. : N/A
 Operation temperature : -10 °C ~ 40 °C

2.1. Companion device information

Equipment	Manufacturer	Model	Serial No.
Smart Phone	Samsung Electronics Co., Ltd	SM-G996N	N/A

2.2. Frequency/channel operations

This device contains the following capabilities:
WPT

Frequency (kHz)
110 ~ 205

Table 2.2.1. WPT System

2.3. Worst-Case configuration and mode

Test Case	Description
1	Charging from EUT to Phone (<10% Power Charging, Fast charging mode)
2	Charging from EUT to Phone (50~55% Power Charging, Fast charging mode)
3	Charging from EUT to Phone (90~95% Power Charging, Fast charging mode)

According to current client device's battery level, test results are different. Because the test result were worst when the battery level was below 10%, tests were performed when the battery level was below 10%.(Client device)

Test results of case 1 is worst, so this test report described test case 1.

2.4. Normal and extreme test conditions

- Ambient Conditions

Item	Temperature [°C]	Relative Humidity [%]
Requirement for tests	15 to 35	20 to 75
Ambient Conditions	21	51

- Test Conditions

Test Condition	Temperature [°C]	Voltage [V]
NTNV	21	DC 9

Note 1 : N:Normal T:Temperature V:Voltage

3. Antenna requirement

Requirement of FCC part section 15.203:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.



4. Summary of tests

FCC Part Section(s)	Parameter	Test Mode	Test Results
15.209	Field Strength of Fundamental and Spurious Emission	Radiated	Pass
2.1049	20dB Bandwidth	Conducted	Pass
15.203	Antenna requirement		Pass
15.207	AC Conducted Emission		Pass

Notes:

- The test results shown in the following sections represent the worst case emissions.
- The fundamental of the EUT was investigated in three orthogonal orientations X, Y and Z. It was determined that X orientation was worst-case orientation. Therefore, all final radiated testing was performed with the EUT in X orientation.
- The test procedure(s) in this report were performed in accordance as following.
 - ANSI C63.10-2013
- The measurement facility is compliant with the test site requirements specified in ANSI C63.4-2014.
- EUT and Tag distances were all verified at 0(Direct), 3, 6, and 9 mm. The worst condition is 3 mm.
- This equipment consists of two antennas, and the test is conducted with TOP(ANT1) and BOTTOM(ANT2) respectively. Simultaneous operation is not supported.

5. Measurement uncertainty

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.10-2013.

All measurement uncertainty values are shown with a coverage factor of $k=2$ to indicated a 95 % level of confidence. The measurement data shown herein meets or exceeds the U_{CISPR} measurement uncertainty values specified in CISPR 16-4-2 and thus, can be compared directly to specified limits to determine compliance.

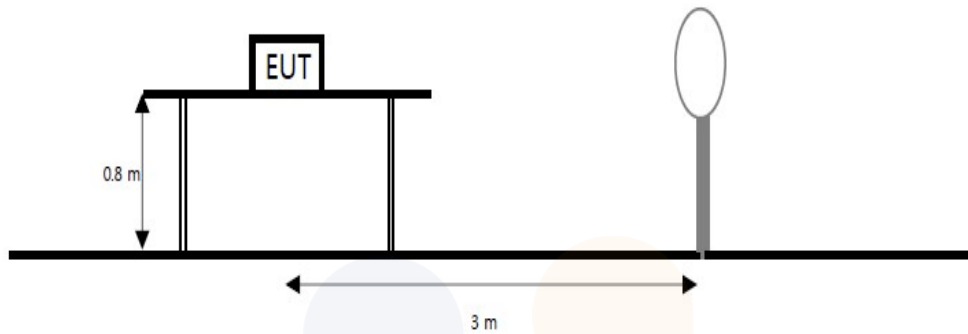
Parameter	Expanded Uncertainty (\pm)	
Radiated Emissions	Below 30 MHz	2.3 dB
Conducted Emissions	150 kHz ~ 30 MHz	2.8 dB
Occupied Bandwidth		0.2 %

6. Test results

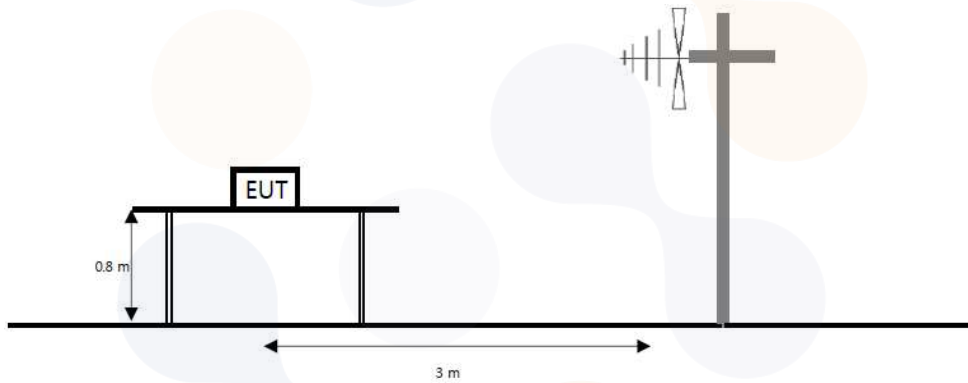
6.1. Field strength of fundamental and spurious emission

Test Setup

The diagram below shows the test setup that is utilized to make the measurements for emission from 9 kHz to 30 MHz Emissions



The diagram below shows the test setup that is utilized to make the measurements for emission from 30 MHz to 1 GHz emissions.



**Limit
 FCC**

According to section 15.209(a). Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field strength ($\mu\text{V}/\text{m}$)	Measurement distance (m)
0.009 - 0.490	2 400/F(kHz)	300
0.490 - 1.705	24 000/F(kHz)	30
1.705 - 30	30	30
30 - 88	100**	3
88 - 216	150**	3
216 - 960	200**	3
Above 960	500	3

**Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54–72 MHz, 76–88 MHz, 174–216 MHz or 470–806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., Section 15.231 and 15.241.

Test Procedure

ANSI C63.10-2013

Test Settings

Test Procedures for emission from 9 kHz to 30 MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter anechoic chamber test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. Then antenna is a loop antenna is fixed at one meter above the ground to determine the maximum value of the field strength. Both parallel and perpendicular of the antenna are set to make the measurement.
- c. For each suspected emission, the EUT was arranged to its worst case and then the table was turned from 0 degrees to 360 degrees to find the maximum reading.
- d. The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode.
- e. Below 30 MHz frequency range, all orientations about parallel, perpendicular, and ground-parallel were investigated then reported and the worse orientations of Face-on and Face-off were set for final test.
 - Face-on = Parallel, Face-off = Perpendicular

Notes:

1. $f < 30$ MHz, extrapolation factor of 40 dB/decade of distance. $F_d = 40\log(D_m/D_s)$
 Where:
 - F_d = Distance factor in dB
 - D_m = Measurement distance in meters
 - D_s = Specification distance in meters
2. The test measurement distance is 3 meter
3. EUT and Tag distances were all verified at 0(Direct), 3, 6, and 9 mm.
 The worst condition is 3 mm.
4. Limit (dB(μ V/m)) =

For 0.009 MHz - 0.490 MHz,	$20*\log(2\ 400/F(\text{kHz}))$ dB(μ V/m)
For 0.490 MHz - 1.705 MHz,	$20*\log(24\ 000/F(\text{kHz}))$ dB(μ V/m)
For 1.705 MHz - 30 MHz,	$20*\log(30) = 29.54$ dB(μ V/m)

Test Results

FCC Radiated Emissions Fundamental & 9 kHz to 30 MHz

[TOP_5W]

[Face-on]

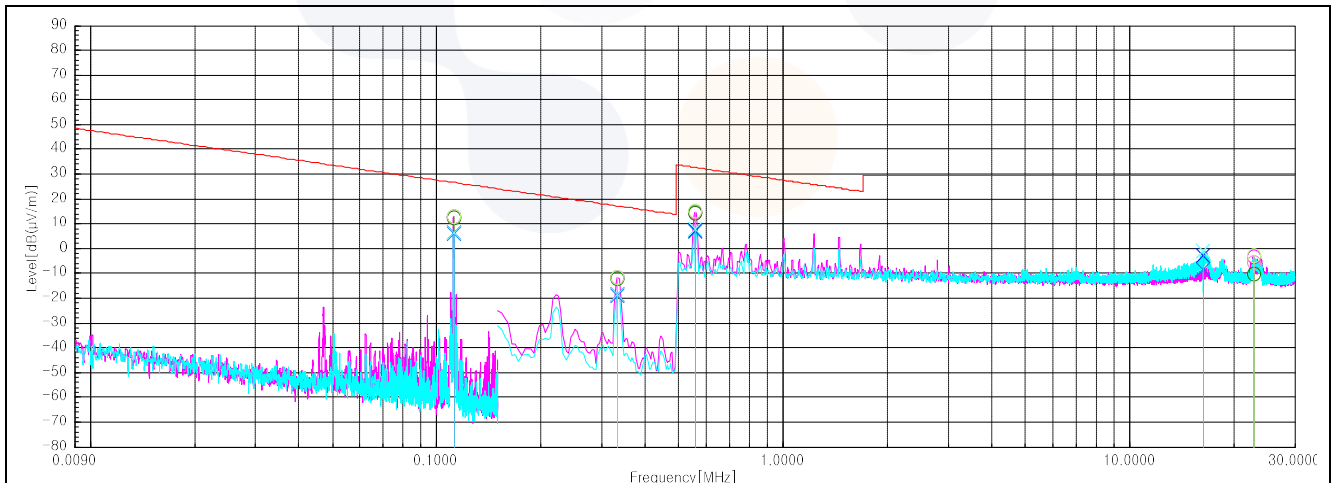
Frequency	Reading	Detector	Ant. Factor	Amp. + Cable	Distance factor	Result	Limit	Margin
(MHz)	(dB(μV))	Mode	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
0.11	105.10	AV	19.99	-32.73	80.00	12.36	26.62	14.26
0.33	80.60	AV	19.90	-32.67	80.00	-12.17	17.16	29.33
0.56	67.50	QP	19.91	-32.67	40.00	14.74	32.69	17.95
22.92	46.20	QP	20.88	-32.68	40.00	-5.60	30.00	35.60

[Face-off]

Frequency	Reading	Detector	Ant. Factor	Amp. + Cable	Distance factor	Result	Limit	Margin
(MHz)	(dB(μV))	Mode	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
0.11	98.80	AV	19.99	-32.73	80.00	6.06	26.62	20.56
0.33	73.70	AV	19.90	-32.67	80.00	-19.07	17.16	36.23
0.56	60.20	QP	19.91	-32.67	40.00	7.44	32.69	25.25
16.33	49.10	QP	20.48	-32.56	40.00	-2.98	30.00	32.98

Note.

1. 80 is distance factor = $40 \cdot \log(3/300)$, 40 is distance factor = $40 \cdot \log(3/30)$



[TOP_7.5W]

[Face-on]

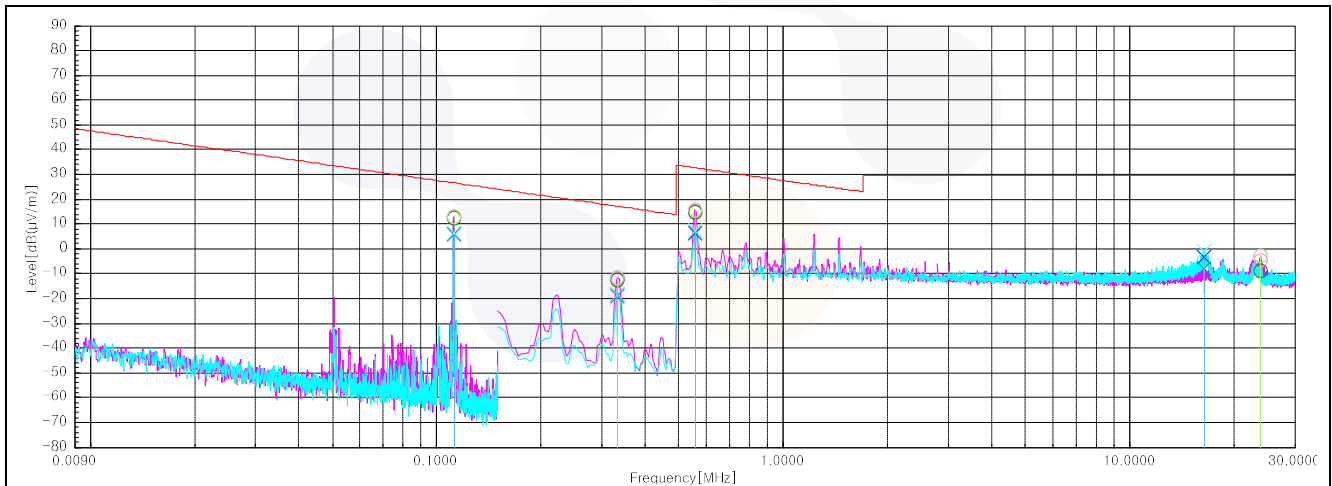
Frequency	Reading	Detector	Ant. Factor	Amp. + Cable	Distance factor	Result	Limit	Margin
(MHz)	(dB(μV))	Mode	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
0.11	105.00	AV	19.99	-32.73	80.00	12.26	26.62	14.36
0.33	80.40	AV	19.90	-32.67	80.00	-12.37	17.16	29.53
0.56	67.60	QP	19.91	-32.67	40.00	14.84	32.69	17.85
23.97	42.70	QP	20.94	-32.72	40.00	-9.08	30.00	39.08

[Face-off]

Frequency	Reading	Detector	Ant. Factor	Amp. + Cable	Distance factor	Result	Limit	Margin
(MHz)	(dB(μV))	Mode	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
0.11	98.60	AV	19.99	-32.73	80.00	5.86	26.62	20.76
0.33	73.80	AV	19.90	-32.67	80.00	-18.97	17.16	36.13
0.56	59.20	QP	19.91	-32.67	40.00	6.44	32.69	26.25
16.40	44.20	QP	20.48	-32.56	40.00	-7.88	30.00	37.88

Note.

1. 80 is distance factor = $40 \cdot \log(3/300)$, 40 is distance factor = $40 \cdot \log(3/30)$



[TOP_10W]

[Face-on]

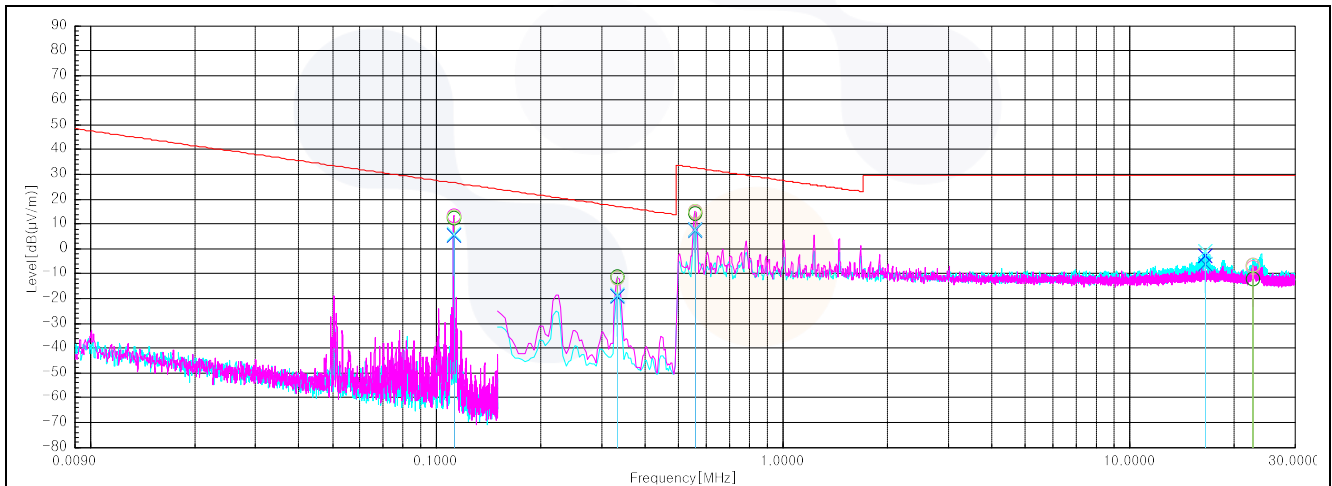
Frequency	Reading	Detector	Ant. Factor	Amp. + Cable	Distance factor	Result	Limit	Margin
(MHz)	(dB(μV))	Mode	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
0.11	98.00	AV	19.99	-32.73	80.00	5.26	26.62	21.36
0.33	73.50	AV	19.90	-32.67	80.00	-19.27	17.16	36.43
0.56	60.50	QP	19.91	-32.67	40.00	7.74	32.69	24.95
16.55	49.00	QP	20.49	-32.56	40.00	-3.07	30.00	33.07

[Face-off]

Frequency	Reading	Detector	Ant. Factor	Amp. + Cable	Distance factor	Result	Limit	Margin
(MHz)	(dB(μV))	Mode	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
0.11	105.30	AV	19.99	-32.73	80.00	12.56	26.62	14.06
0.33	81.70	AV	19.90	-32.67	80.00	-11.07	17.16	28.23
0.56	67.40	QP	19.91	-32.67	40.00	14.64	32.69	18.05
22.75	44.20	QP	20.86	-32.67	40.00	-7.61	30.00	37.61

Note.

1. 80 is distance factor = $40 \cdot \log(3/300)$, 40 is distance factor = $40 \cdot \log(3/30)$



[TOP_15W]

[Face-on]

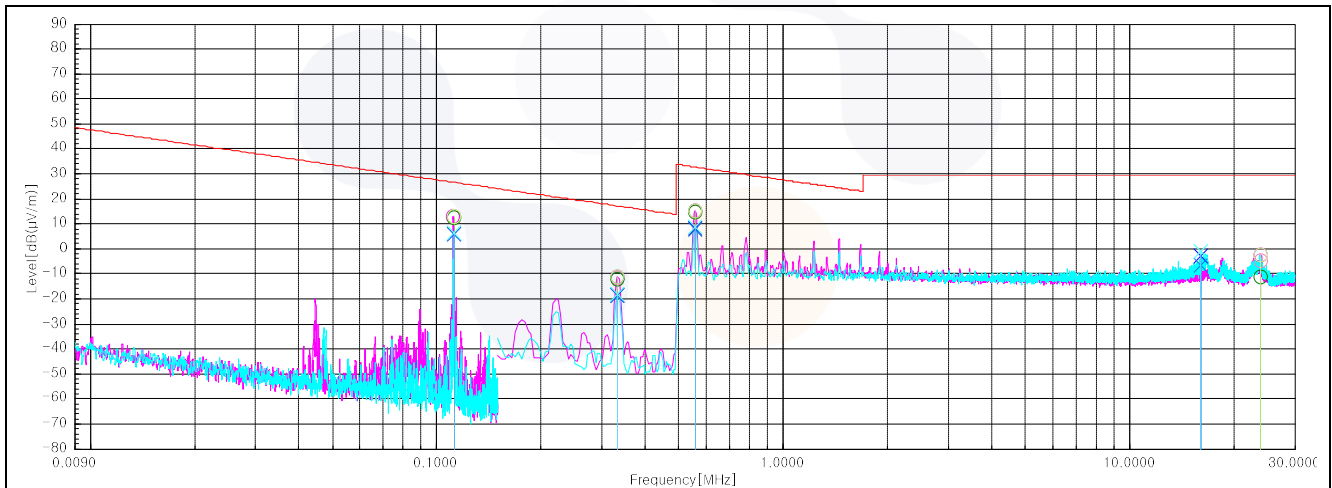
Frequency	Reading	Detector	Ant. Factor	Amp. + Cable	Distance factor	Result	Limit	Margin
(MHz)	(dB(μV))	Mode	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
0.11	105.20	AV	19.99	-32.73	80.00	12.46	26.62	14.16
0.33	80.70	AV	19.90	-32.67	80.00	-12.07	17.16	29.23
0.56	67.70	QP	19.91	-32.67	40.00	14.94	32.69	17.75
24.03	47.00	QP	20.94	-32.72	40.00	-4.78	30.00	34.78

[Face-off]

Frequency	Reading	Detector	Ant. Factor	Amp. + Cable	Distance factor	Result	Limit	Margin
(MHz)	(dB(μV))	Mode	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
0.11	98.50	AV	19.99	-32.73	80.00	5.76	26.62	20.86
0.33	74.00	AV	19.90	-32.67	80.00	-18.77	17.16	35.93
0.56	61.00	QP	19.91	-32.67	40.00	8.24	32.69	24.45
16.10	49.10	QP	20.47	-32.56	40.00	-2.99	30.00	32.99

Note.

1. 80 is distance factor = $40 \cdot \log(3/300)$, 40 is distance factor = $40 \cdot \log(3/30)$



[BOTTOM_5W]

[Face-on]

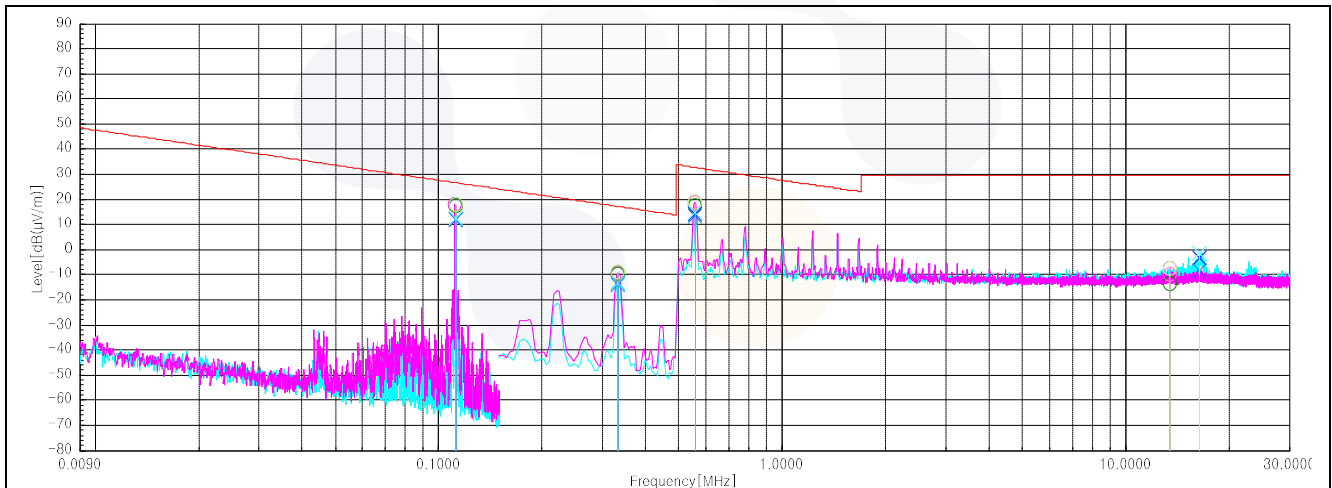
Frequency	Reading	Detector	Ant. Factor	Amp. + Cable	Distance factor	Result	Limit	Margin
(MHz)	(dB(μV))	Mode	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
0.11	110.10	AV	19.99	-32.73	80.00	17.36	26.62	9.26
0.33	83.10	AV	19.90	-32.67	80.00	-9.67	17.16	26.83
0.56	71.20	QP	19.91	-32.67	40.00	18.44	32.69	14.25
13.50	42.50	QP	20.31	-32.63	40.00	-9.82	30.00	39.82

[Face-off]

Frequency	Reading	Detector	Ant. Factor	Amp. + Cable	Distance factor	Result	Limit	Margin
(MHz)	(dB(μV))	Mode	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
0.11	104.50	AV	19.99	-32.73	80.00	11.76	26.62	14.86
0.33	78.90	AV	19.90	-32.67	80.00	-13.87	17.16	31.03
0.56	67.00	QP	19.91	-32.67	40.00	14.24	32.69	18.45
16.46	48.70	QP	20.49	-32.56	40.00	-3.37	30.00	33.37

Note.

1. 80 is distance factor = $40 \cdot \log(3/300)$, 40 is distance factor = $40 \cdot \log(3/30)$



[BOTTOM_7.5W]

[Face-on]

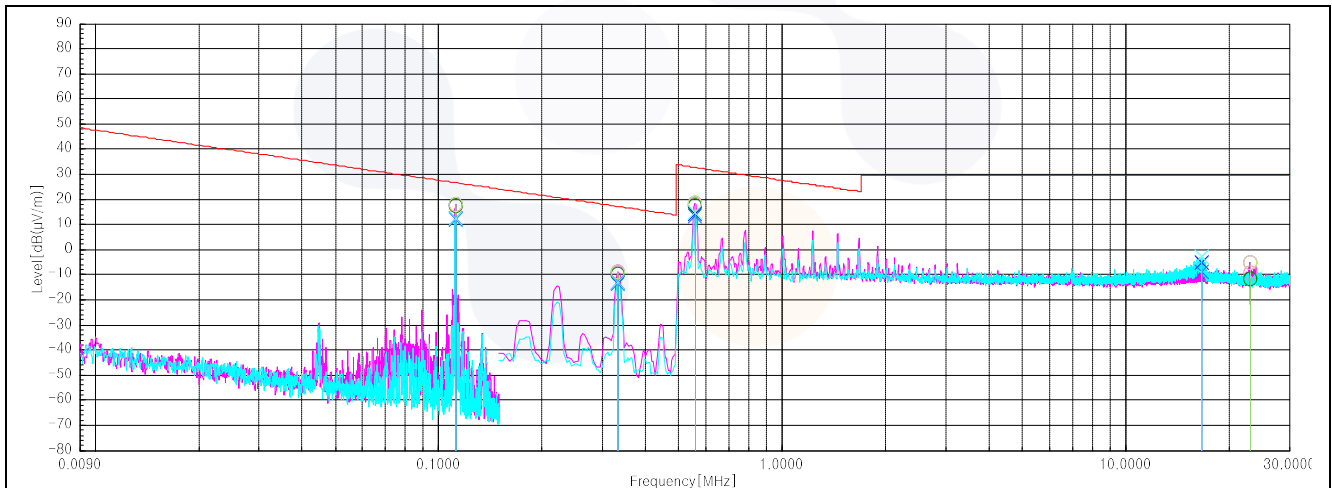
Frequency	Reading	Detector	Ant. Factor	Amp. + Cable	Distance factor	Result	Limit	Margin
(MHz)	(dB(μV))	Mode	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
0.11	110.00	AV	19.99	-32.73	80.00	17.26	26.62	9.36
0.33	83.20	AV	19.90	-32.67	80.00	-9.57	17.16	26.73
0.56	71.00	QP	19.91	-32.67	40.00	18.24	32.69	14.45
23.08	42.50	QP	20.88	-32.68	40.00	-9.30	30.00	39.30

[Face-off]

Frequency	Reading	Detector	Ant. Factor	Amp. + Cable	Distance factor	Result	Limit	Margin
(MHz)	(dB(μV))	Mode	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
0.11	104.80	AV	19.99	-32.73	80.00	12.06	26.62	14.56
0.33	79.40	AV	19.90	-32.67	80.00	-13.37	17.16	30.53
0.56	67.00	QP	19.91	-32.67	40.00	14.24	32.69	18.45
16.65	47.00	QP	20.50	-32.56	40.00	-5.06	30.00	35.06

Note.

1. 80 is distance factor = $40 \cdot \log(3/300)$, 40 is distance factor = $40 \cdot \log(3/30)$



[BOTTOM_10W]

[Face-on]

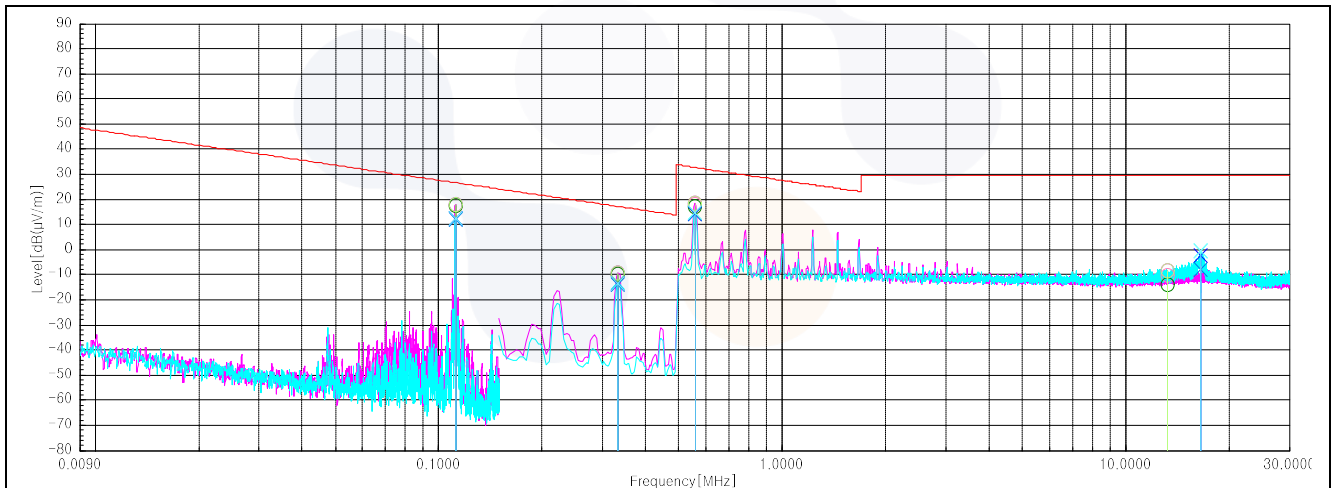
Frequency	Reading	Detector	Ant. Factor	Amp. + Cable	Distance factor	Result	Limit	Margin
(MHz)	(dB(μV))	Mode	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
0.11	110.20	AV	19.99	-32.73	80.00	17.46	26.62	9.16
0.33	83.00	AV	19.90	-32.67	80.00	-9.77	17.16	26.93
0.56	70.60	QP	19.91	-32.67	40.00	17.84	32.69	14.85
13.22	42.00	QP	20.29	-32.65	40.00	-10.36	30.00	40.36

[Face-off]

Frequency	Reading	Detector	Ant. Factor	Amp. + Cable	Distance factor	Result	Limit	Margin
(MHz)	(dB(μV))	Mode	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
0.11	104.70	AV	19.99	-32.73	80.00	11.96	26.62	14.66
0.33	79.00	AV	19.90	-32.67	80.00	-13.77	17.16	30.93
0.56	67.00	QP	19.91	-32.67	40.00	14.24	32.69	18.45
16.56	49.50	QP	20.49	-32.56	40.00	-2.57	30.00	32.57

Note.

1. 80 is distance factor = $40 \cdot \log(3/300)$, 40 is distance factor = $40 \cdot \log(3/30)$



[BOTTOM_15W]

[Face-on]

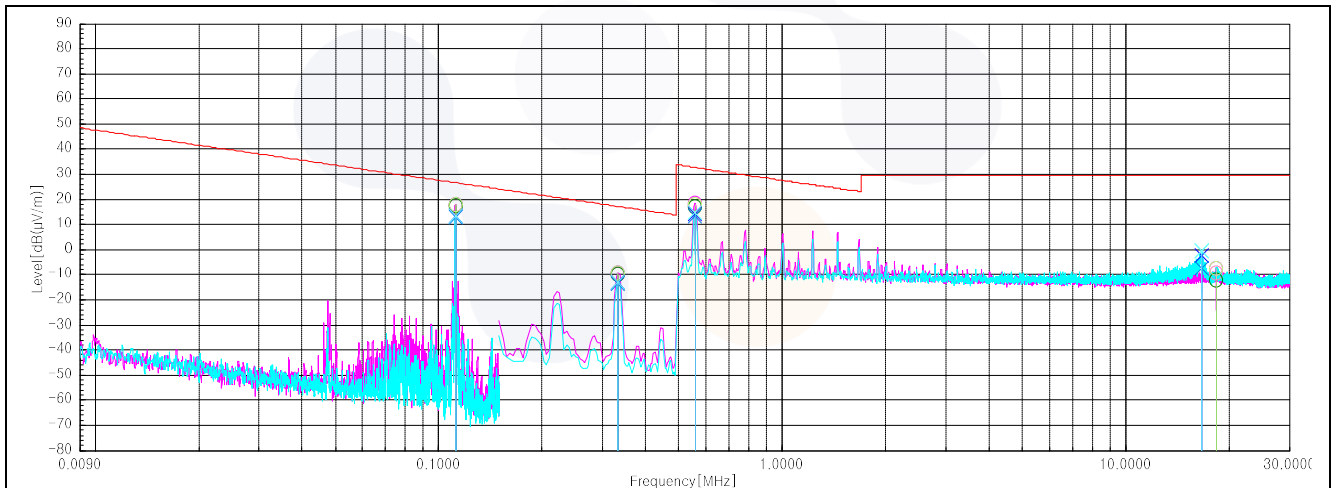
Frequency	Reading	Detector	Ant. Factor	Amp. + Cable	Distance factor	Result	Limit	Margin
(MHz)	(dB(μV))	Mode	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
0.11	110.10	AV	19.99	-32.73	80.00	17.36	26.62	9.26
0.33	82.90	AV	19.99	-38.67	80.00	-9.87	17.16	27.03
0.56	70.60	QP	19.91	-32.67	40.00	17.84	32.69	14.85
18.31	42.60	QP	20.60	-32.57	40.00	-9.37	30.00	39.37

[Face-off]

Frequency	Reading	Detector	Ant. Factor	Amp. + Cable	Distance factor	Result	Limit	Margin
(MHz)	(dB(μV))	Mode	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
0.11	105.60	AV	19.99	-32.73	80.00	12.86	26.62	13.76
0.33	79.50	AV	19.90	-32.67	80.00	-13.27	17.16	30.43
0.56	67.00	QP	19.91	-32.67	40.00	14.24	32.69	18.45
16.62	49.60	QP	20.50	-32.56	40.00	-2.46	30.00	32.46

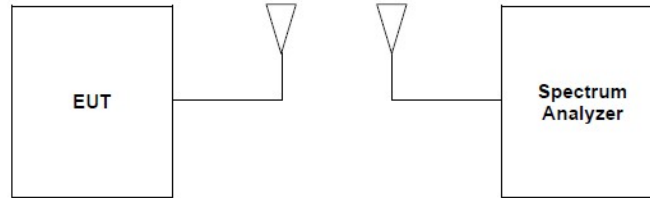
Note.

1. 80 is distance factor = $40 \cdot \log(3/300)$, 40 is distance factor = $40 \cdot \log(3/30)$



6.2. 20dB Bandwidth

Test Setup



Limit

For reporting purpose only

Test Settings

The transmitter shall be operated at its maximum carrier power measured under normal test conditions.

- The span of the analyzer shall be set to capture all products of the modulation process, including the emission skirts.
- The resolution bandwidth (RBW) shall be in the range of 1% to 5% of the occupied bandwidth (OBW) and video bandwidth (VBW) shall be approximately 3x RBW.

A peak, or peak hold, may be used in place of the sampling detector as this may produce a wider bandwidth than the actual bandwidth (worst-case measurement). Use of a peak hold may be necessary to determine the occupied bandwidth if the device is not transmitting continuously.

The trace data points are recovered and are directly summed in linear power level terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached and that frequency recorded. The process is repeated for the highest frequency data points (starting at the highest frequency, at the right side of the span, and going down in frequency). This frequency is then recorded.

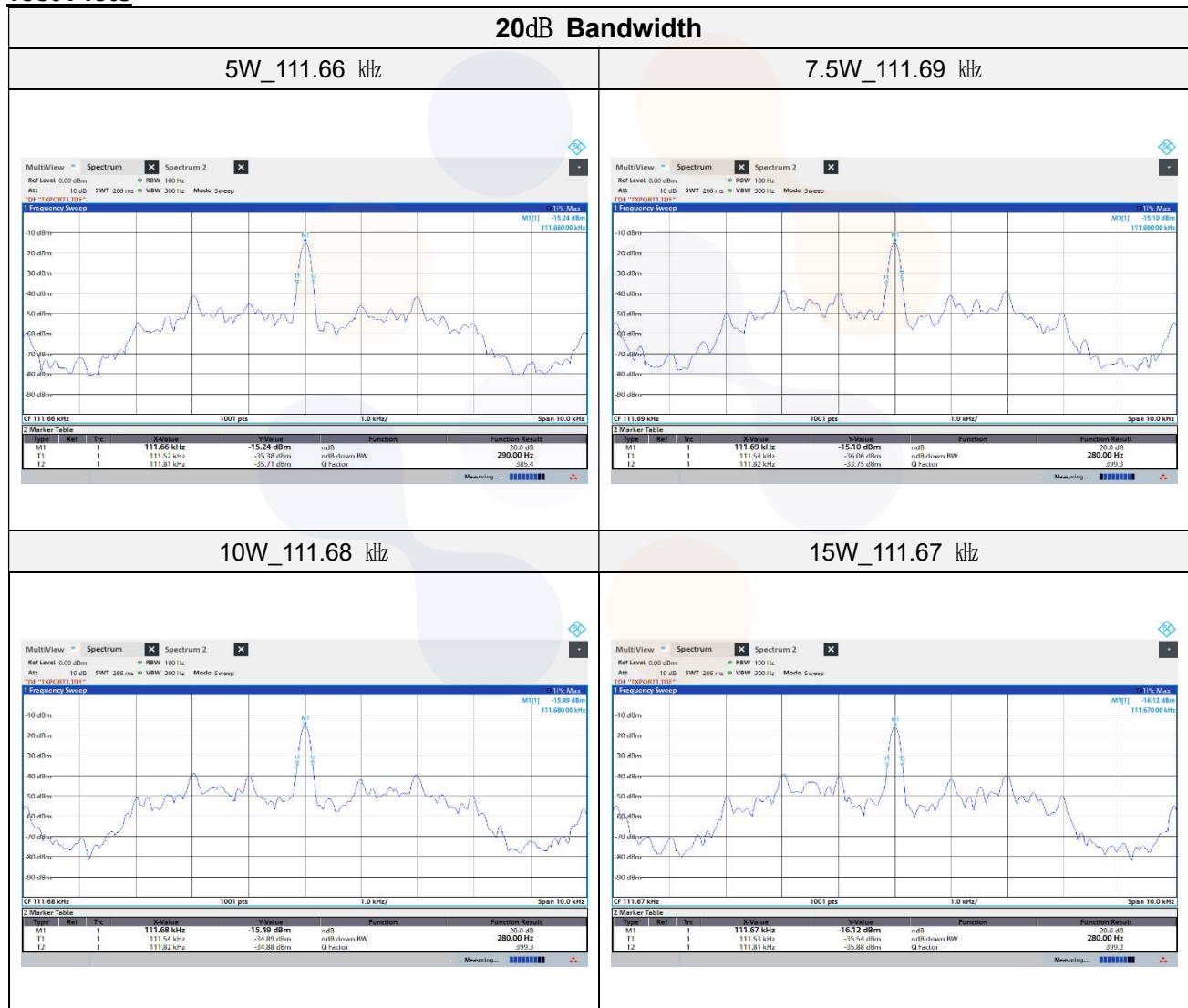
The difference between the two recorded frequencies is the 99% occupied bandwidth.

Test Results

[TOP]

Power Source(W)	Frequency (kHz)	20dB Bandwidth (kHz)	Limit
5	111.66	0.290	Reporting purpose only
7.5	111.69	0.280	Reporting purpose only
10	111.68	0.280	Reporting purpose only
15	111.67	0.280	Reporting purpose only

Test Plots

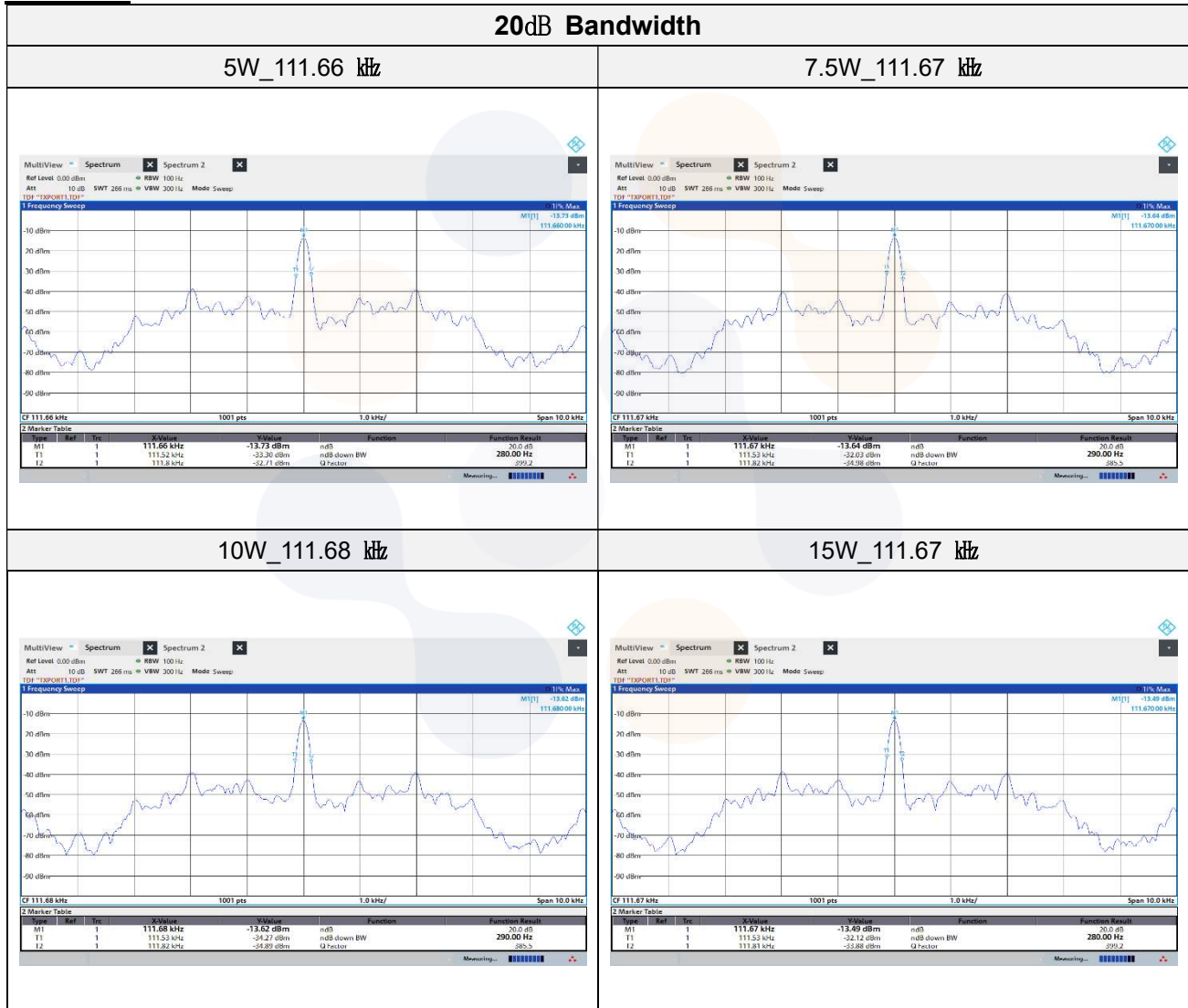


Note. Because the measured signal is CW/CW-like, adjusting the RBW per C63.10 would not be practical since measured bandwidth will always follow the RBW and the result will be approximately twice the RBW.

[BOTTOM]

Power Source(W)	Frequency (kHz)	20dB Bandwidth (kHz)	Limit
5	111.66	0.280	Reporting purpose only
7.5	111.67	0.290	Reporting purpose only
10	111.68	0.290	Reporting purpose only
15	111.67	0.280	Reporting purpose only

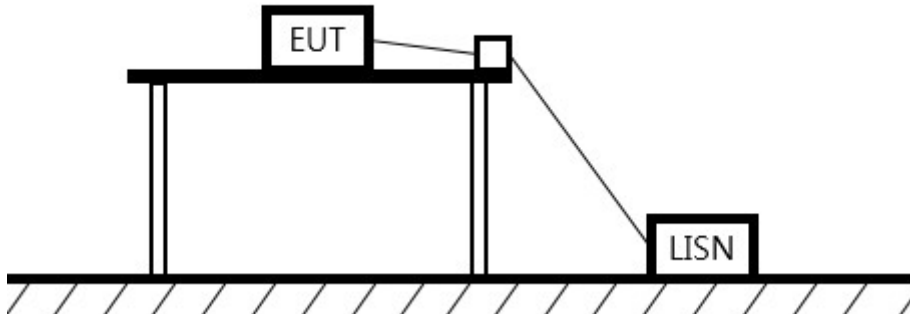
Test Plots



Note. Because the measured signal is CW/CW-like, adjusting the RBW per C63.10 would not be practical since measured bandwidth will always follow the RBW and the result will be approximately twice the RBW.

6.3. AC Conducted emission

Test Setup



Limit

According to 15.207(a) and RSS-Gen(8.8), for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50uH/50 ohm line impedance stabilization network (LISN). Compliance with the provision of this paragraph shall on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower applies at the boundary between the frequencies ranges.

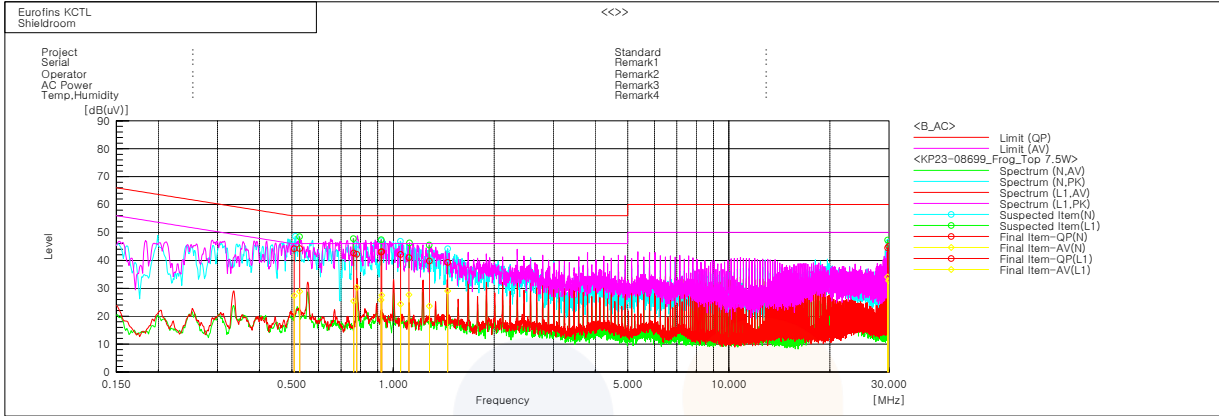
Frequency of Emission (MHz)	Conducted limit (dB μ V/m)	
	Quasi-peak	Average
0.15 – 0.50	66 - 56*	56 - 46*
0.50 – 5.00	56	46
5.00 – 30.0	60	50

Measurement Procedure

1. The EUT was placed on a wooden table of size, 1 m by 1.5 m, raised 80 cm in which is located 40 cm away from the vertical wall and 1.5m away from the side wall of the shielded room.
2. Each current-carrying conductor of the EUT power cord was individually connected through a 50 Ω /50 μ H LISN, which is an input transducer to a spectrum analyzer or an EMI/Field Intensity Meter, to the input power source.
3. Exploratory measurements were made to identify the frequency of the emission that had the highest amplitude relative to the limit by operating the EUT in a range of typical modes of operation, cable position, and with a typical system equipment configuration and arrangement. Based on the exploratory tests of the EUT, the one EUT cable configuration and arrangement and mode of operation that had produced the emission with the highest amplitude relative to the limit was selected for the final measurement.
4. The final test on all current-carrying conductors of all of the power cords to the equipment that comprises the EUT (but not the cords associated with other non-EUT equipment is the system) was then performed over the frequency range of 0.15 MHz to 30 MHz.
5. The measurements were made with the detector set to peak amplitude within a bandwidth of 10 kHz or to quasi-peak and average within a bandwidth of 9 kHz. The EUT was in transmitting mode during the measurements.

Test Results

[TOP_5W]



Final Result

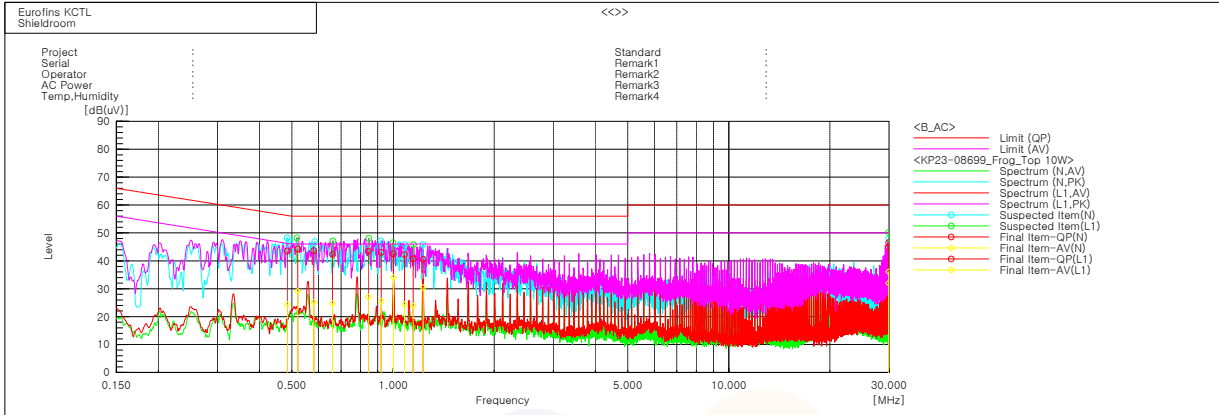
--- N Phase ---

No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin CAV [dB]
1	0.50757	34.4	17.5	9.8	44.2	27.3	56.0	46.0	11.8	18.7
2	0.7792	32.4	20.5	9.8	42.2	30.3	56.0	46.0	13.8	15.7
3	0.92066	33.3	16.2	9.7	43.0	25.9	56.0	46.0	13.0	20.1
4	1.05332	32.4	14.6	9.7	42.1	24.3	56.0	46.0	13.9	21.7
5	1.45418	29.5	19.3	9.7	39.2	29.0	56.0	46.0	16.8	17.0
6	29.92496	35.1	22.7	10.0	45.1	32.7	60.0	50.0	14.9	17.3

--- L1 Phase ---

No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin CAV [dB]
1	0.52726	34.4	19.1	9.8	44.2	28.9	56.0	46.0	11.8	17.1
2	0.76308	32.9	15.7	9.7	42.6	25.4	56.0	46.0	13.4	20.6
3	0.92558	33.5	17.8	9.7	43.2	27.5	56.0	46.0	12.8	18.5
4	1.11455	31.3	18.0	9.7	41.0	27.7	56.0	46.0	15.0	18.3
5	1.28316	30.1	13.9	9.7	39.8	23.6	56.0	46.0	16.2	22.4
6	29.70068	34.6	24.2	9.9	44.5	34.1	60.0	50.0	15.5	15.9

[TOP_7.5W]



Final Result

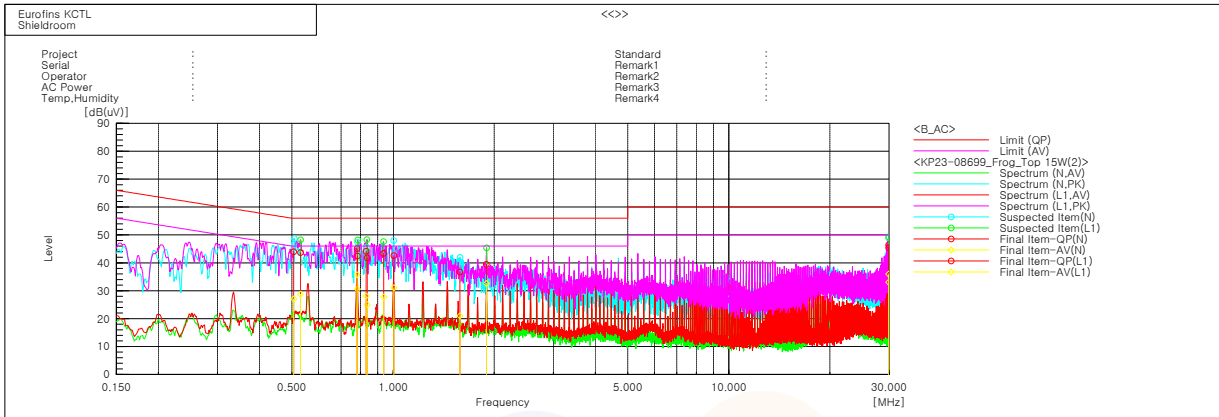
--- N Phase ---

No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin CAV [dB]
1	0.48405	33.7	14.5	9.8	43.5	24.3	56.3	46.3	12.8	22.0
2	0.58077	33.8	15.3	9.8	43.6	25.1	56.0	46.0	12.4	20.9
3	0.92169	33.3	15.9	9.7	43.0	25.6	56.0	46.0	13.0	20.4
4	1.08134	32.6	14.6	9.7	42.3	24.3	56.0	46.0	13.7	21.7
5	1.22917	30.8	20.7	9.7	40.5	30.4	56.0	46.0	15.5	15.6
6	29.92191	34.9	22.0	10.0	44.9	32.0	60.0	50.0	15.1	18.0

--- L1 Phase ---

No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin CAV [dB]
1	0.52017	34.5	19.3	9.8	44.3	29.1	56.0	46.0	11.7	16.9
2	0.66016	32.4	14.9	9.8	42.2	24.7	56.0	46.0	13.8	21.3
3	0.84361	33.7	17.4	9.7	43.4	27.1	56.0	46.0	12.6	18.9
4	1.00288	32.8	24.4	9.7	42.5	34.1	56.0	46.0	13.5	11.9
5	1.14816	31.0	14.2	9.7	40.7	23.9	56.0	46.0	15.3	22.1
6	29.9213	36.6	26.2	9.9	46.5	36.1	60.0	50.0	13.5	13.9

[TOP_10W]



Final Result

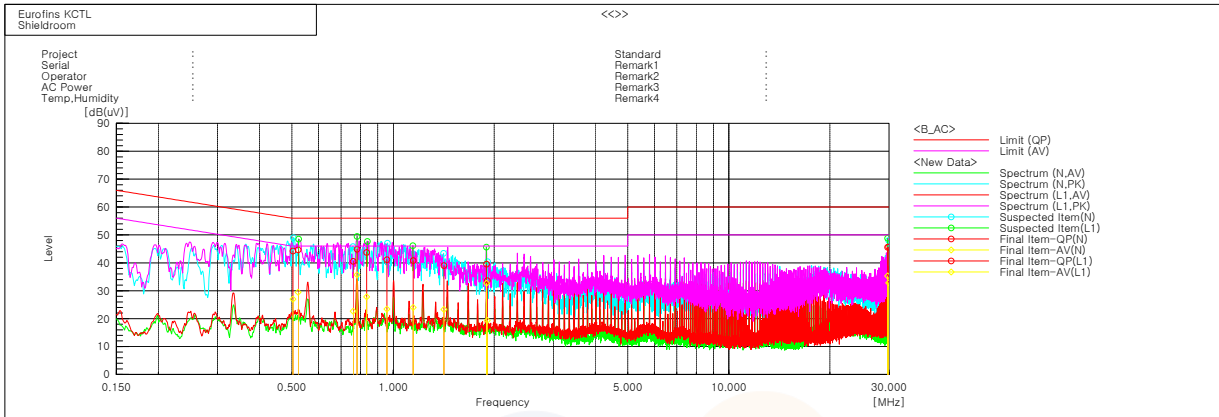
--- N Phase ---

No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin CAV [dB]
1	0.50585	34.2	17.2	9.8	44.0	27.0	56.0	46.0	12.0	19.0
2	0.78352	32.7	20.8	9.8	42.5	30.6	56.0	46.0	13.5	15.4
3	0.83732	32.0	15.2	9.8	41.8	25.0	56.0	46.0	14.2	21.0
4	1.00536	32.9	21.4	9.7	42.6	31.1	56.0	46.0	13.4	14.9
5	1.58185	27.0	11.3	9.7	36.7	21.0	56.0	46.0	19.3	25.0
6	29.92326	35.4	23.0	10.0	45.4	33.0	60.0	50.0	14.6	17.0

--- L1 Phase ---

No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin CAV [dB]
1	0.52967	33.8	19.0	9.8	43.6	28.8	56.0	46.0	12.4	17.2
2	0.78136	35.4	26.0	9.7	45.1	35.7	56.0	46.0	10.9	10.3
3	0.83125	34.5	18.4	9.7	44.2	28.1	56.0	46.0	11.8	17.9
4	0.93792	33.7	18.1	9.7	43.4	27.8	56.0	46.0	12.6	18.2
5	1.8968	29.9	23.0	9.6	39.5	32.6	56.0	46.0	16.5	13.4
6	29.9209	36.6	26.1	9.9	46.5	36.0	60.0	50.0	13.5	14.0

[TOP_15W]



Final Result

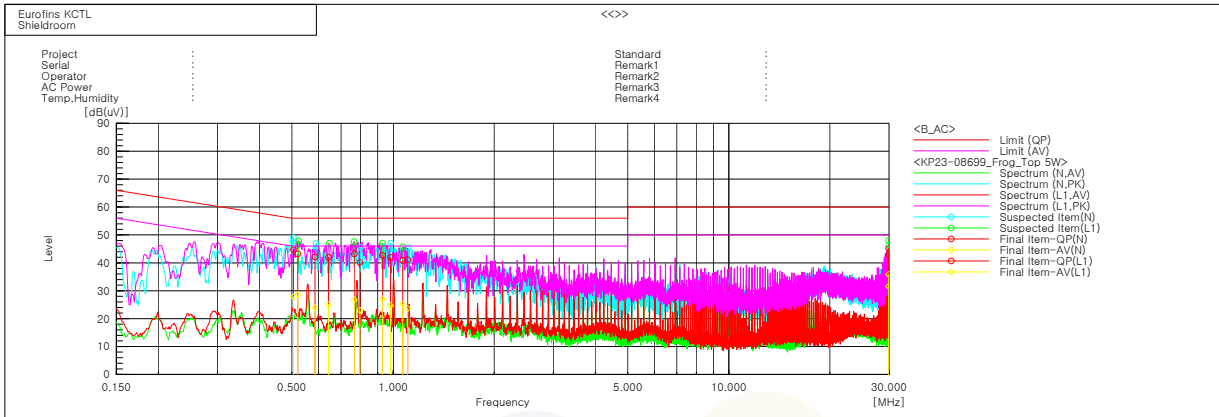
--- N Phase ---

No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin CAV [dB]
1	0.50346	34.5	17.2	9.8	44.3	27.0	56.0	46.0	11.7	19.0
2	0.76063	30.7	12.8	9.8	40.5	22.6	56.0	46.0	15.5	23.4
3	0.95896	31.4	13.7	9.7	41.1	23.4	56.0	46.0	14.9	22.6
4	1.41713	29.3	13.6	9.7	39.0	23.3	56.0	46.0	17.0	22.7
5	1.90847	23.9	9.6	9.7	33.6	19.3	56.0	46.0	22.4	26.7
6	29.91466	35.7	22.9	10.0	45.7	32.9	60.0	50.0	14.3	17.1

--- L1 Phase ---

No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin CAV [dB]
1	0.52145	34.9	19.6	9.8	44.7	29.4	56.0	46.0	11.3	16.6
2	0.78116	35.1	25.9	9.7	44.8	35.6	56.0	46.0	11.2	10.4
3	0.83438	34.0	18.1	9.7	43.7	27.8	56.0	46.0	12.3	18.2
4	1.14852	31.1	14.3	9.7	40.8	24.0	56.0	46.0	15.2	22.0
5	1.89906	30.0	23.1	9.6	39.6	32.7	56.0	46.0	16.4	13.3
6	29.69499	35.6	25.4	9.9	45.5	35.3	60.0	50.0	14.5	14.7

[BOTTOM_5W]



Final Result

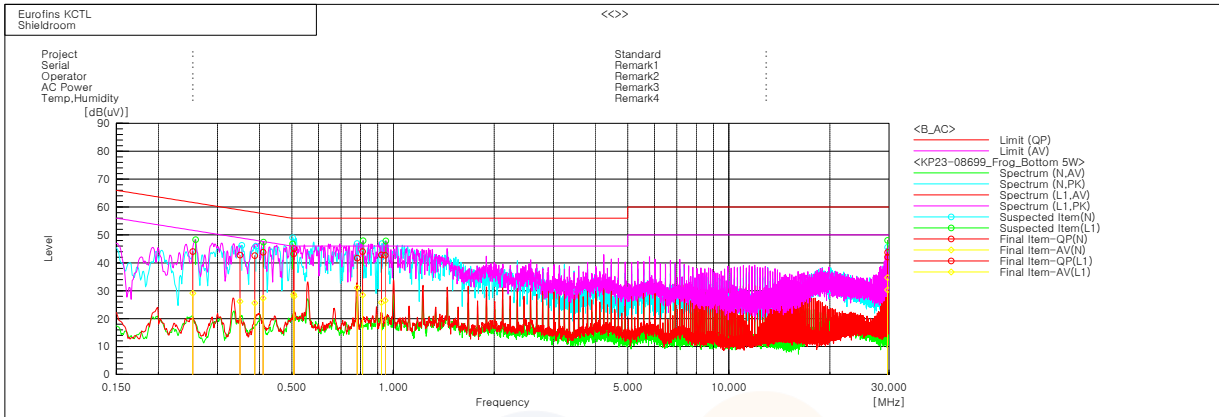
--- N Phase ---

No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin CAV [dB]
1	0.50498	34.9	18.0	9.8	44.7	27.8	56.0	46.0	11.3	18.2
2	0.58563	32.4	14.1	9.8	42.2	23.9	56.0	46.0	13.8	22.1
3	0.79711	30.4	13.2	9.8	40.2	23.0	56.0	46.0	15.8	23.0
4	0.98257	32.3	15.0	9.7	42.0	24.7	56.0	46.0	14.0	21.3
5	1.10629	31.4	13.9	9.7	41.1	23.6	56.0	46.0	14.9	22.4
6	29.91919	33.0	21.6	10.0	43.0	31.6	60.0	50.0	17.0	18.4

--- L1 Phase ---

No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin CAV [dB]
1	0.52002	33.4	18.8	9.8	43.2	28.6	56.0	46.0	12.8	17.4
2	0.64197	32.2	15.1	9.8	42.0	24.9	56.0	46.0	14.0	21.1
3	0.76604	33.5	17.0	9.7	43.2	26.7	56.0	46.0	12.8	19.3
4	0.92894	32.9	17.3	9.7	42.6	27.0	56.0	46.0	13.4	19.0
5	1.06814	31.1	15.5	9.7	40.8	25.2	56.0	46.0	15.2	20.8
6	29.9176	35.2	25.9	9.9	45.1	35.8	60.0	50.0	14.9	14.2

[BOTTOM_7.5W]



Final Result

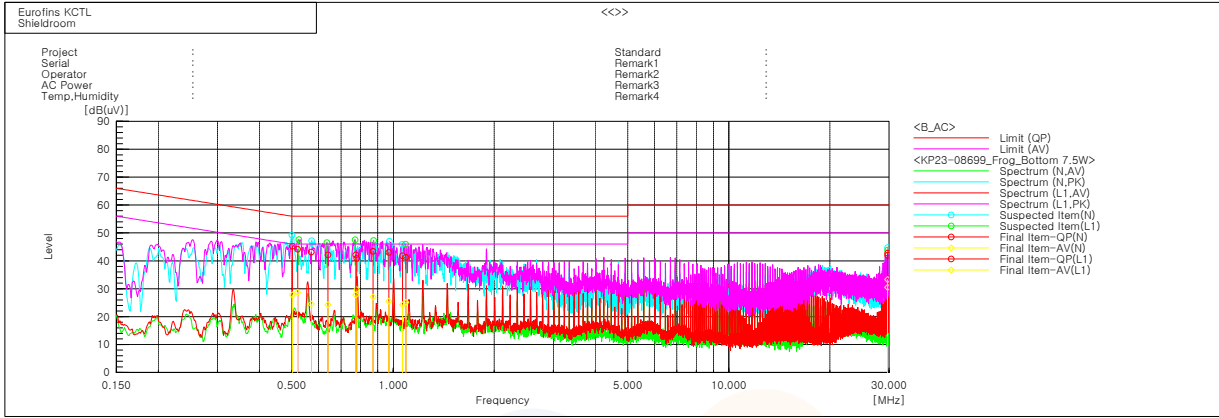
--- N Phase ---

No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c. f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin CAV [dB]
1	0.35006	33.0	16.4	9.8	42.8	26.2	59.0	49.0	16.2	22.8
2	0.3875	32.8	15.8	9.8	42.6	25.6	58.1	48.1	15.5	22.5
3	0.50708	35.3	18.1	9.8	45.1	27.9	56.0	46.0	10.9	18.1
4	0.78218	31.9	21.2	9.8	41.7	31.0	56.0	46.0	14.3	15.0
5	0.92319	33.1	16.1	9.7	42.8	25.8	56.0	46.0	13.2	20.2
6	29.69408	32.0	20.3	10.0	42.0	30.3	60.0	50.0	18.0	19.7

--- L1 Phase ---

No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c. f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin CAV [dB]
1	0.25336	34.5	19.5	9.6	44.1	29.1	61.6	51.6	17.5	22.5
2	0.41018	34.0	17.5	9.8	43.8	27.3	57.6	47.6	13.8	20.3
3	0.50587	33.4	18.9	9.8	43.2	28.7	56.0	46.0	12.8	17.3
4	0.81146	34.4	18.7	9.7	44.1	28.4	56.0	46.0	11.9	17.6
5	0.94747	33.0	16.8	9.7	42.7	26.5	56.0	46.0	13.3	19.5
6	29.69503	33.8	24.8	9.9	43.7	34.7	60.0	50.0	16.3	15.3

[BOTTOM_10W]



Final Result

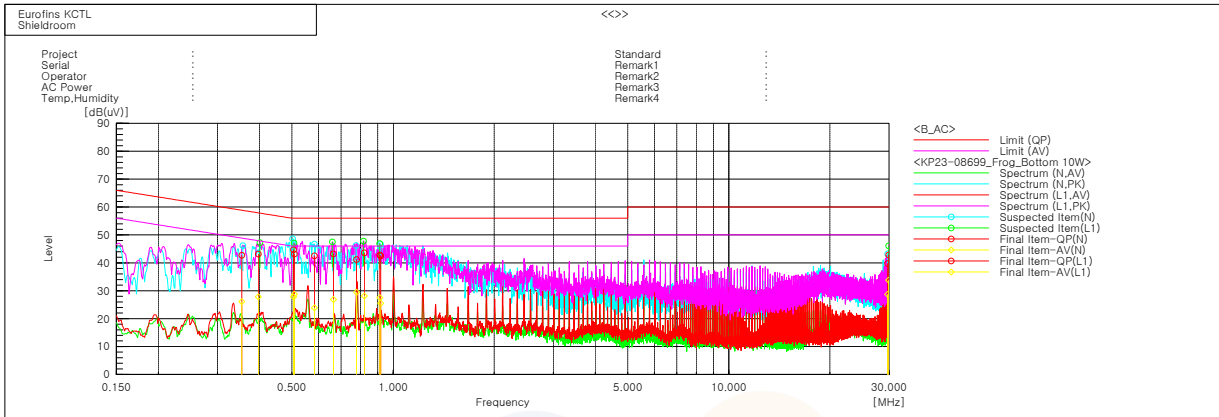
--- N Phase ---

No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c. f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin CAV [dB]
1	0.50166	35.5	18.0	9.8	45.3	27.8	56.0	46.0	10.7	18.2
2	0.57093	33.4	14.8	9.8	43.2	24.6	56.0	46.0	12.8	21.4
3	0.77915	31.0	19.9	9.8	40.8	29.7	56.0	46.0	15.2	16.3
4	0.97153	33.3	15.8	9.7	43.0	25.5	56.0	46.0	13.0	20.5
5	1.06696	32.1	14.6	9.7	41.8	24.3	56.0	46.0	14.2	21.7
6	29.69393	32.0	20.5	10.0	42.0	30.5	60.0	50.0	18.0	19.5

--- L1 Phase ---

No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c. f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin CAV [dB]
1	0.51941	34.4	18.9	9.8	44.2	28.7	56.0	46.0	11.8	17.3
2	0.63956	32.3	14.5	9.8	42.1	24.3	56.0	46.0	13.9	21.7
3	0.77507	32.4	18.1	9.7	42.1	27.8	56.0	46.0	13.9	18.2
4	0.87198	33.7	17.4	9.7	43.4	27.1	56.0	46.0	12.6	18.9
5	1.0917	31.6	15.4	9.7	41.3	25.1	56.0	46.0	14.7	20.9
6	29.69718	32.9	23.4	9.9	42.8	33.3	60.0	50.0	17.2	16.7

[BOTTOM_15W]



Final Result

--- N Phase ---

No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin CAV [dB]
1	0.35442	32.9	16.3	9.8	42.7	26.1	58.9	48.9	16.2	22.8
2	0.50519	34.9	17.9	9.8	44.7	27.7	56.0	46.0	11.3	18.3
3	0.58316	32.7	14.1	9.8	42.5	23.9	56.0	46.0	13.5	22.1
4	0.77878	31.4	19.7	9.8	41.2	29.5	56.0	46.0	14.8	16.5
5	0.91892	32.8	15.8	9.7	42.5	25.5	56.0	46.0	13.5	20.5
6	29.69473	29.7	18.7	10.0	39.7	28.7	60.0	50.0	20.3	21.3

--- L1 Phase ---

No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin CAV [dB]
1	0.397	33.4	18.0	9.8	43.2	27.8	57.9	47.9	14.7	20.1
2	0.50835	33.4	19.0	9.8	43.2	28.8	56.0	46.0	12.8	17.2
3	0.6647	33.4	17.1	9.8	43.2	26.9	56.0	46.0	12.8	19.1
4	0.82107	33.9	18.4	9.7	43.6	28.1	56.0	46.0	12.4	17.9
5	0.91372	33.1	17.8	9.7	42.8	27.5	56.0	46.0	13.2	18.5
6	29.91732	33.0	23.9	9.9	42.9	33.8	60.0	50.0	17.1	16.2

7. Measurement equipment

Equipment Name	Manufacturer	Model No.	Serial No.	Next Cal. Date
Signal Generator	R&S	SMB100A	176206	25.01.18
Signal & Spectrum Analyzer	R&S	FSV3030	1330.5000K30-101711-nf	24.10.12
Attenuator	HUBER+SUHNER	6610_SK-50-1/199_NE	ATT03	24.10.16
Vector Signal Generator	R&S	SMBV100A	1407.6004K02	24.07.04
Spectrum Analyzer	R&S	FSV40	100988	24.07.03
Loop Antenna	R&S	HFH2-Z2	100355	24.08.10
Amplifier	SONOMA INSTRUMENT	310N	421910	24.10.12
TWO-LINE V - NETWORK	R&S	ENV216	101358	24.09.27
EMI TEST RECEIVER	R&S	ESCI3	101408	24.08.18
Antenna Mast	innco systems GmbH	MA4640-XP-ET	N/A	N/A
Turn Device	innco systems GmbH	DS1200-S-1t	N/A	N/A

End of test report