LTA
Laboratory for Test & Approval Co.,Ltd.

243 Jubug-Ri,Yangji-Myeon, Yongin-Si, Gyeonggi-Do, Korea 17159
Tel: +82-31-323-6008 Fax: +82-31-323-6010
http://www.ltalab.com

Dates of Tests: Aug 01, 2025 ~ Aug 21,2025
Test Report S/N: LR500112509A
Test Site : LTA CO., LTD.

CERTIFICATION OF COMPLIANCE

FCC ID. **2BRG5RF-ST-FL-001**

APPLICANT **RECYCLEFARM KOREA Inc.**

Equipment Class	:	**Digital Transmission System (DTS)**
Manufacturing Description	:	**A smart tumbler for water intake measurement.**
Manufacturer	:	**I-Synapse CO., Ltd.**
Model name	:	**RF-ST-FL-001**
Variant Model name	:	**RF-ST-CP-001**
Test Device Serial No.:	:	**Identical prototype**
Rule Part(s)	:	**FCC Part 15.247 Subpart C ; ANSI C63.10 - 2020**
Frequency Range	:	**2402 ~ 2480 MHz BLE**
Max. Output Power	:	**Max -1.51 dBm - Conducted**
Data of issue	:	**Sep 02 ,2025**

This test report is issued under the authority of:

Eun-Hwan Jung, Manager

The test was supervised by:

In-Sun Lee, Test Engineer

Revision history

Revision	Date of issue	Description	Revised by
--	Sep 02 ,2025	Initial	-

TABLE OF CONTENTS

1. General information

1-1 Test Performed

Company name : LTA Co., Ltd.

Address : 243, Jubug-ri,Yangji-Myeon,Youngin-Si, Kyunggi-Do, Korea. 17159

Web site : http://www.ltalab.com

E-mail : chahn@ltalab.com

Telephone : +82-31-323-6008

Facsimile +82-31-323-6010

Quality control in the testing laboratory is implemented as per ISO/IEC 17025 which is the “General requirements for the competents of calibration and testing laboratory”.

1-2 Accredited agencies

LTA Co., Ltd. is approved to perform EMC testing by the following agencies:

Agency	Country	Accreditation No.	Validity	Reference
RRA	KOREA	KR0049	-	EMC accredited Lab.
FCC	U.S.A	649054	2027-03-29	FCC CAB
VCCI	JAPAN	C-4948,	2026-09-10	VCCI registration
VCCI	JAPAN	T-2416,	2026-09-10	VCCI registration
VCCI	JAPAN	R-4483(10 m),	2026-10-15	VCCI registration
VCCI	JAPAN	G-847	2025-12-13	VCCI registration
IC	CANADA	5799A-1	2026-08-15	IC filing

2. Information about test item

2-1 Client & Manufacturer

Client Company name	:	RECYCLEFARM KOREA Inc.
Address	:	47, Gangnam-daero 112-gil, Gangnam-gu, Seoul, South Korea
Tel / Fax	:	+82-70-4334-0019 / +82-31-8017-9066
Manufacturer		I-Synapse CO., Ltd.
Address		1005-ho,, 26, Seongsuil-ro 10-gil, Seongdong-gu, Seoul, 04793, Republic of Korea
Tel / Fax		+82-70-4110-7531 / +82-508-931-6044

2-2 Equipment Under Test (EUT)

Model name	:	RF-ST-FL-001
Serial number	:	Identical prototype
Date of receipt	:	Aug 01, 2025
EUT condition	:	Pre-production, not damaged
Antenna type	:	Pattern Antenna (Gain : 2.0 dBi)
Frequency Range	:	2402 ~ 2480 MHz
RF output power	:	Max -1.51 dBm – Conducted
Type of Modulation	:	GFSK
Power Source	:	DC 3.7 V

2-3 Tested frequency

	LOW	MID	HIGH
Frequency (MHz)	2402	2440	2480

2-4 Ancillary Equipment

Equipment	Model No.	Serial No.	Manufacturer
Notebook	-	MS-1736	MSI

3. Test Report

3.1 Summary of tests

FCC Part Section(s)	Parameter	Test Condition	Status (note 1)
15.247(a)	6 dB Bandwidth	Conducted	C
15.247(b)	Transmitter Peak Output Power		C
15.247(e)	Transmitter Power Spectral Density		C
15.247(d)	Band Edge & Conducted Spurious emission		C
15.209	Transmitter emission	Radiated	C
15.207	AC Conducted Emissions	Conducted	N/A
15.203	Antenna requirement	-	C

N/A : This product is only operated with DC voltage.

The above equipment was tested by LTA Co., Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10-2020 and the energy emitted by the sample EUT tested as described in this report is in compliance with the requirements of FCC Rules Part 2 and Part 15.247 The test results of this report relate only to the tested sample identified in this report.
The tests were performed according to the method of measurements prescribed in KDB No.558074.

→ Antenna Requirement
RECYCLEFARM KOREA Inc. FCC ID: 2BRG5RF-ST-FL-001 unit complies with the requirement of §15.203.
The antenna type is Pattern Antenna

3.2 Technical Characteristics Test

3.2.1 6 dB Bandwidth

Procedure:

The bandwidth at 6 dB below the highest in-band spectral density was measured with a spectrum analyzer connected to the antenna terminal, while EUT is operating in transmission mode at the appropriate frequencies.

After the trace being stable, Use the marker-to-peak function to set the marker to the peak of the emission. Use the marker-delta function to measure 6 dB down one side of the emission. Reset the marker-delta function, and move the marker to the other side of the emission, until it is (as close as possible to) even with the reference marker level. The marker-delta reading at this point is the 6 dB bandwidth of the emission.

The spectrum analyzer is set to:

Center frequency = the highest, middle and the lowest channels

RBW = 100 kHz

Span = 3 X RBW

VBW = 3 X RBW

Sweep = auto

Trace = max hold

Detector function = peak

Measurement Data : Complies

Frequency (MHz)	Test Results	
	Measured Bandwidth (MHz)	Result
2402	**0.640**	Complies
2440	**0.640**	Complies
2480	**0.640**	Complies

- See next pages for actual measured spectrum plots.

Minimum Standard:

6 dB Bandwidth ≥ 500 kHz

Measurement Setup

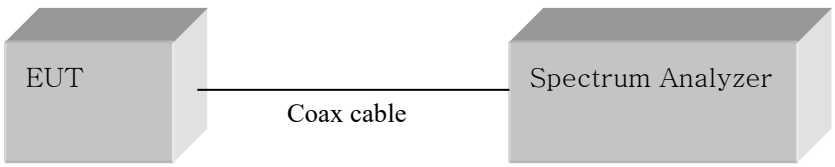
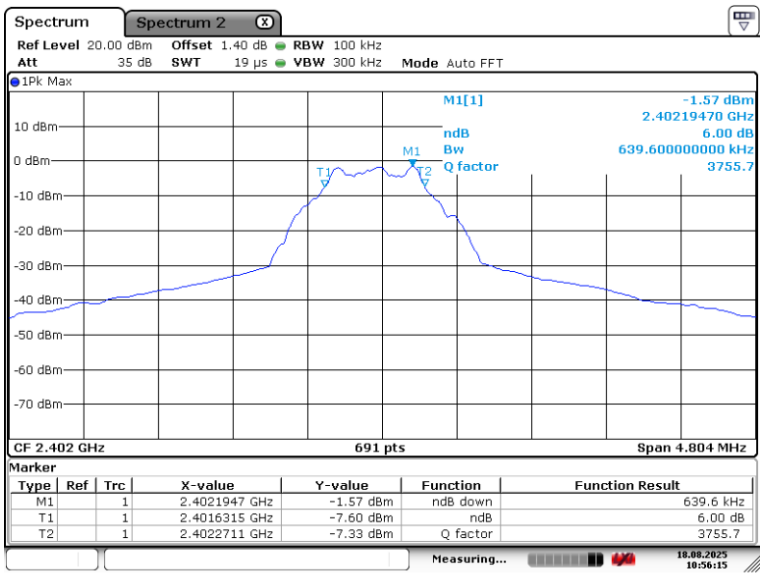
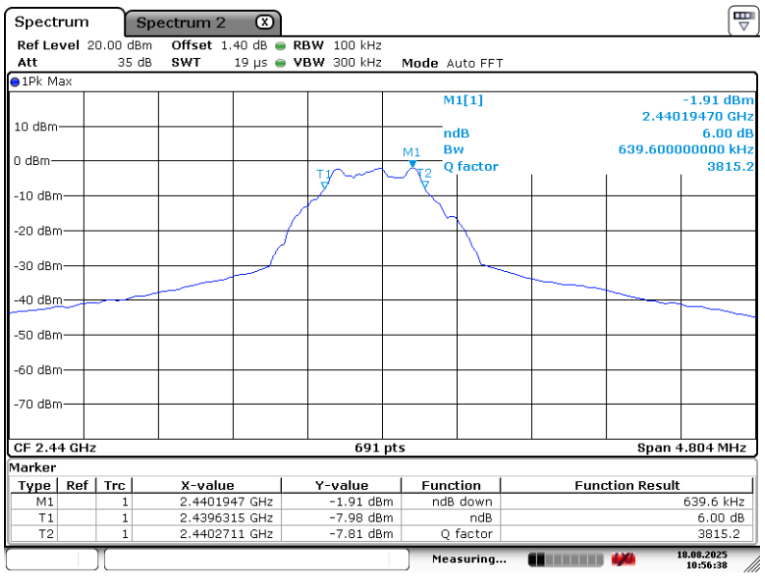
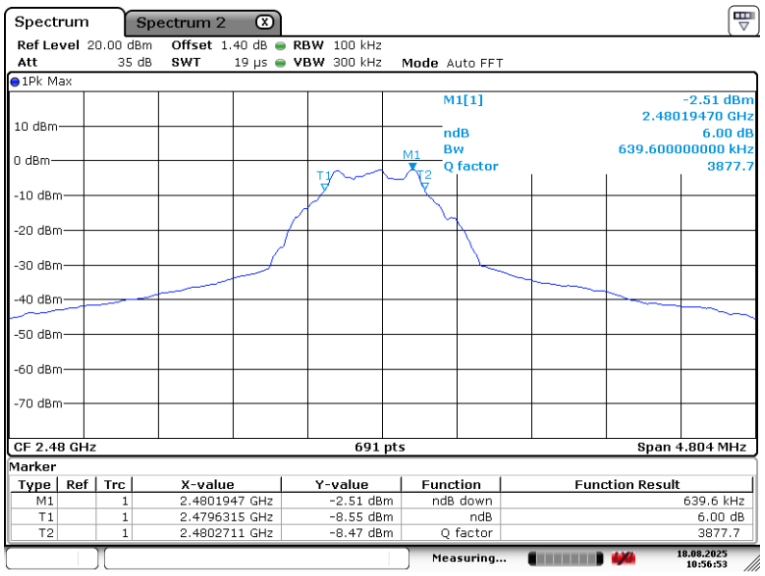


Figure 1: Measurement setup for the carrier frequency separation







3.2.2 Peak Output Power Measurement

Procedure:

The following procedure can be used when the maximum available RBW of the instrument is less than the DTS bandwidth :

The spectrum analyzer is set to:

Center frequency = the highest, middle and the lowest channels

RBW ≥ DTS Bandwidth

Span ≥ 3 X RBW

VBW = 3 X RBW

Sweep = auto

Detector function = peak

Measurement Data : Complies

Frequency (MHz)	Test Results	
	Measured data (dBm)	Result
2402	**-1.51**	Complies
2440	**-1.95**	Complies
2480	**-2.49**	Complies

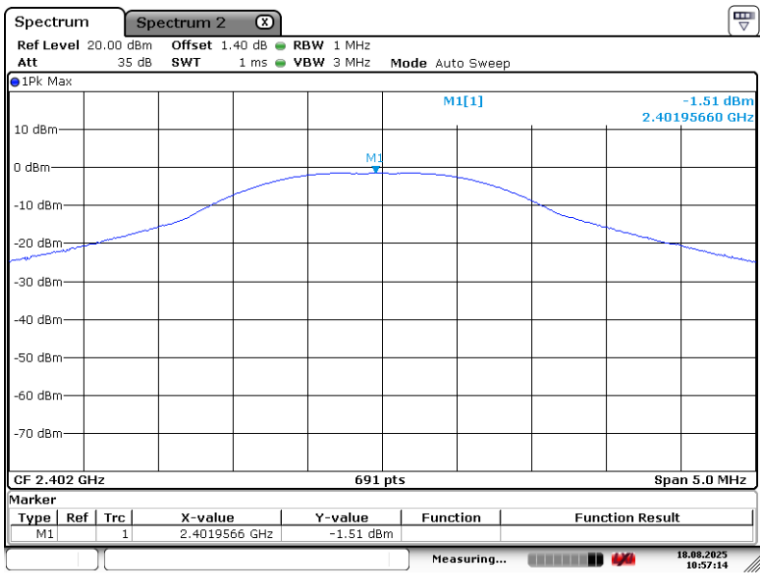
- See next pages for actual measured spectrum plots.

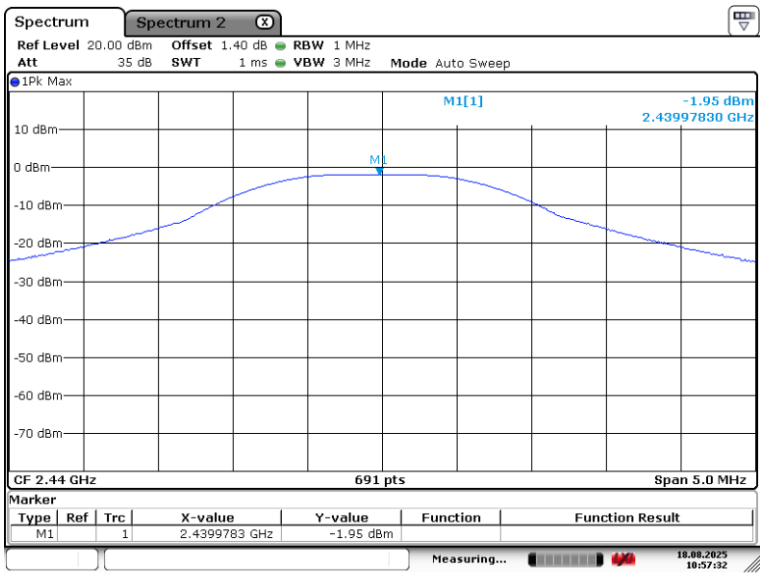
Minimum Standard:

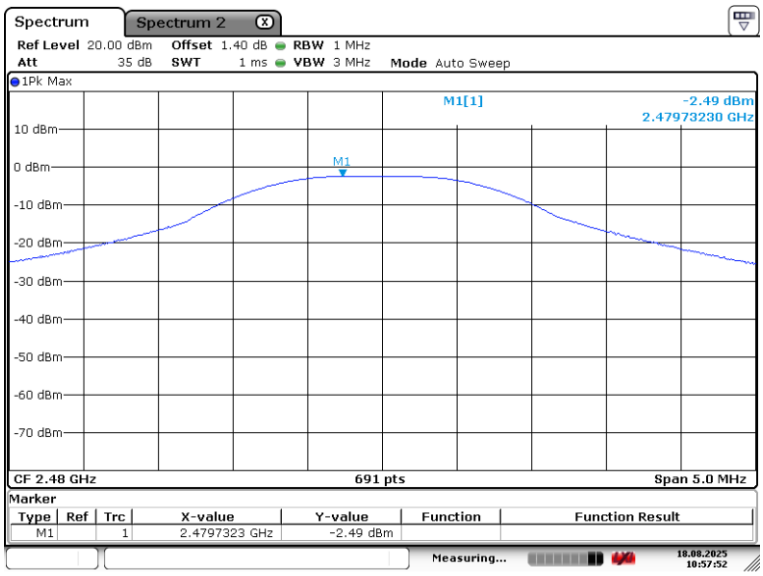
Peak output power	≤ 1 W(30 dBm)

Measurement Setup

Same as the Chapter 3.2.1 (Figure 1)







3.2.3 Power Spectral Density

Procedure:

This procedure shall be used if maximum peak conducted output power was used to demonstrate compliance.

The spectrum analyzer is set to:

RBW = 3 kHz (3 kHz≤RBW≤100 kHz) Span ≥ 1.5 times the DTS bandwidth

VBW = 3 X RBW Sweep = auto

Detector function = peak Trace = max hold

Measurement Data : Complies

Frequency (MHz)	Test Results	
	dBm / 3 kHz BW	Result
2402	**-19.78**	Complies
2440	**-20.16**	Complies
2480	**-20.74**	Complies

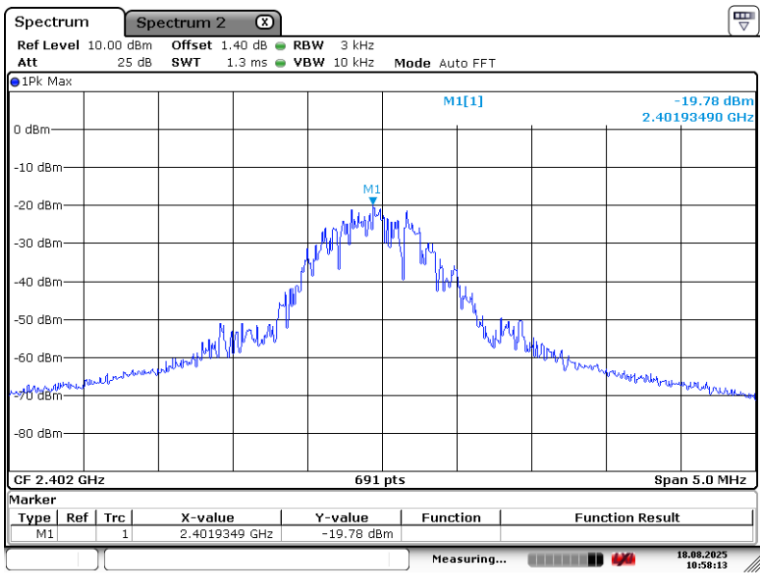
- See next pages for actual measured spectrum plots.

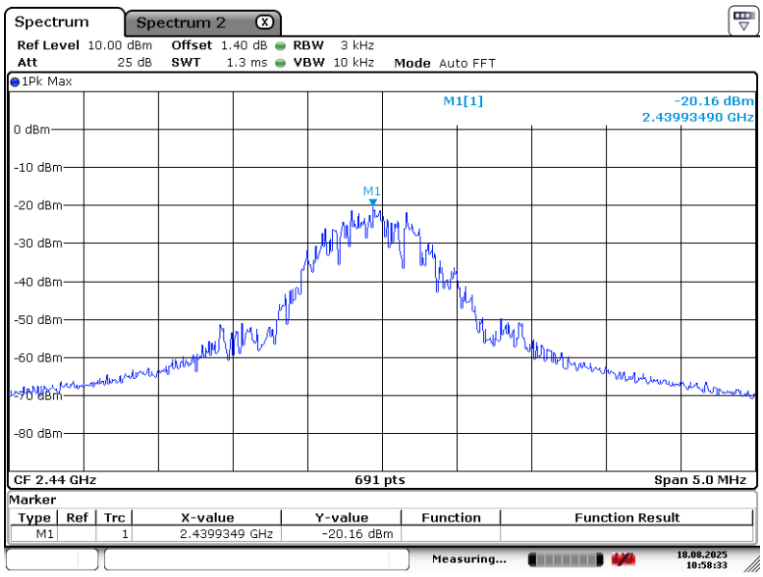
Minimum Standard:

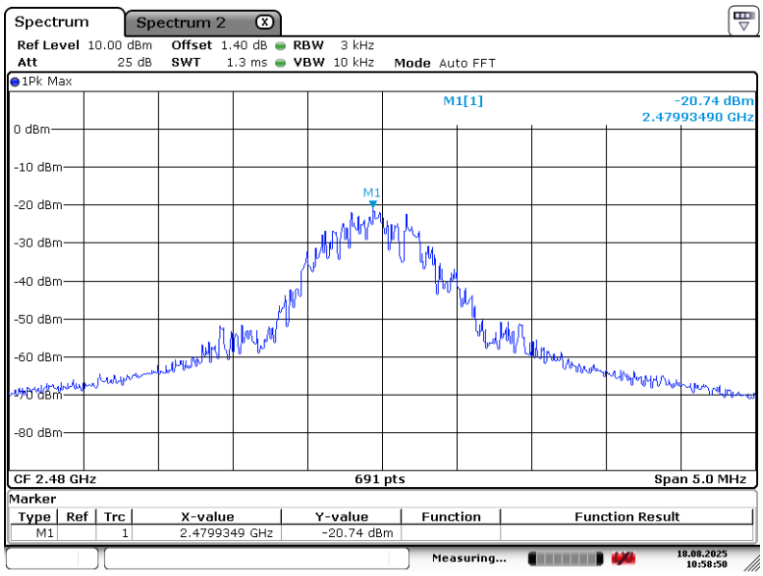
Power Spectral Density	≤ 8 dBm @ 3 kHz BW

Measurement Setup

Same as the Chapter 3.2.1 (Figure 1)







3.2.4 Band Edge

Procedure:

The Unwanted emission from the EUT were measured according to the dictates PKPSD measurement procedure in section 11.11 of ANSI C63.10-2020.

In any 100 kHz 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.

If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under Section 5.4(4), the attenuation required shall be 30 dB instead of 20 dB..

The spectrum analyzer is set to:

Center frequency = the highest, middle and the lowest channels

RBW = 100 kHz VBW ≥ 3 X RBW

Detector function = peak Trace = max hold

Sweep = auto

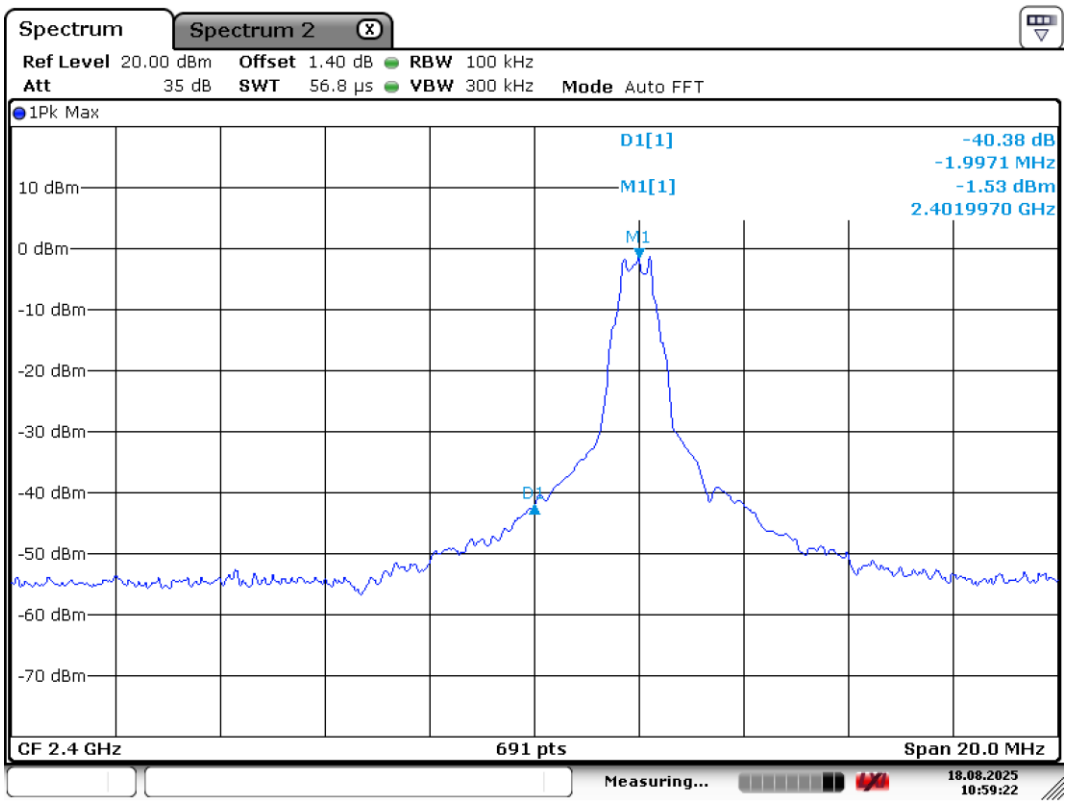
Measurement Data: **Complies**

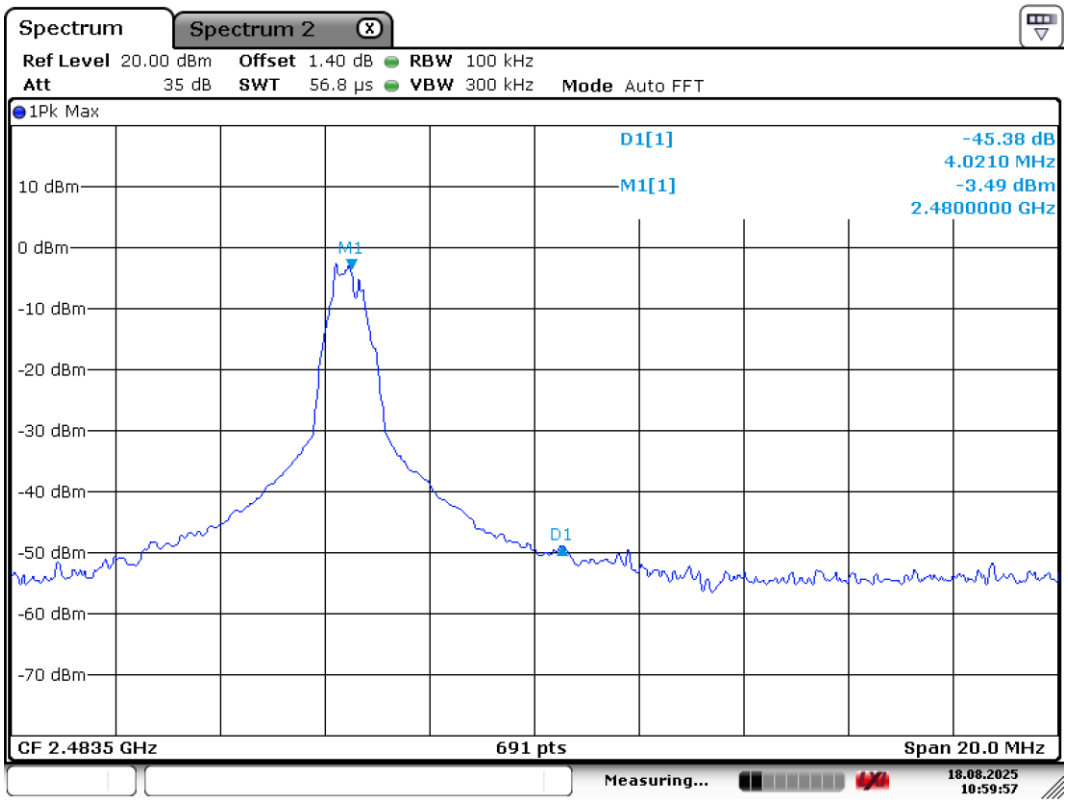
Frequency (MHz)	Test Results	
	dBc	Result
Low edge	**40.38**	Complies
High edge	**45.38**	Complies

- All conducted emission in any 100 kHz bandwidth outside of the spread spectrum band was at least 20dB lower than the highest inband spectral density. Therefore the applying equipment meets the requirement.

- See next pages for actual measured spectrum plots.

Minimum Standard:	≤ 20 dBc





3.2.5 Conducted Spurious Emissions

Procedure:

The test follows KDB558074. The conducted spurious emissions were measured with a spectrum analyzer connected to the antenna terminal, while EUT had its hopping function disabled at the highest, middle and the lowest available channels.

After the trace being stable, set the marker on the peak of any spurious emission recorded.

The spectrum analyzer is set to:

Span = wide enough to capture the peak level of the in-band emission and all spurious emissions

RBW = 100 kHz Sweep = auto

VBW = 100 kHz Detector function = peak

Trace = max hold

Measurement Data: Complies

Frequency (MHz)	Test Results	
	dBc	Result
2402	**51.16**	Complies
2440	**49.42**	Complies
2480	**50.49**	Complies

-

All conducted emission in any 100 kHz bandwidth outside of the spread spectrum band was at least 20dB lower than the highest inband spectral density. Therefore the applying equipment meets the requirement.

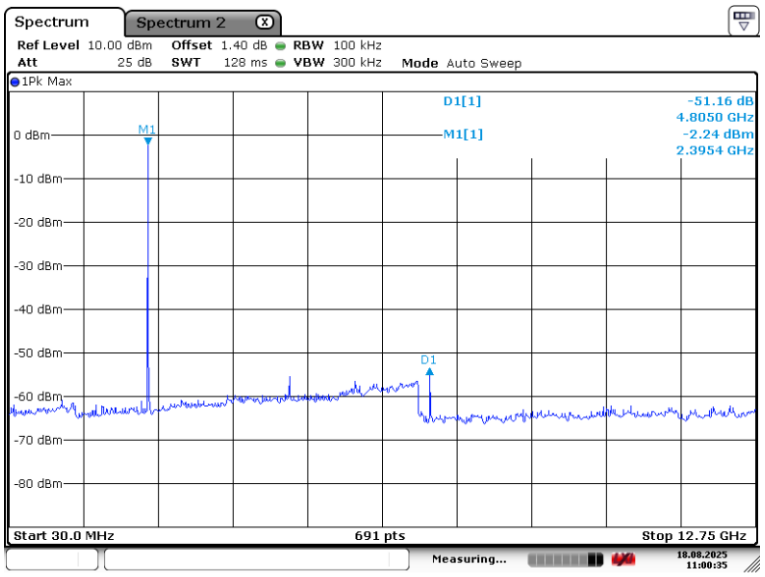
- See next pages for actual measured spectrum plots.

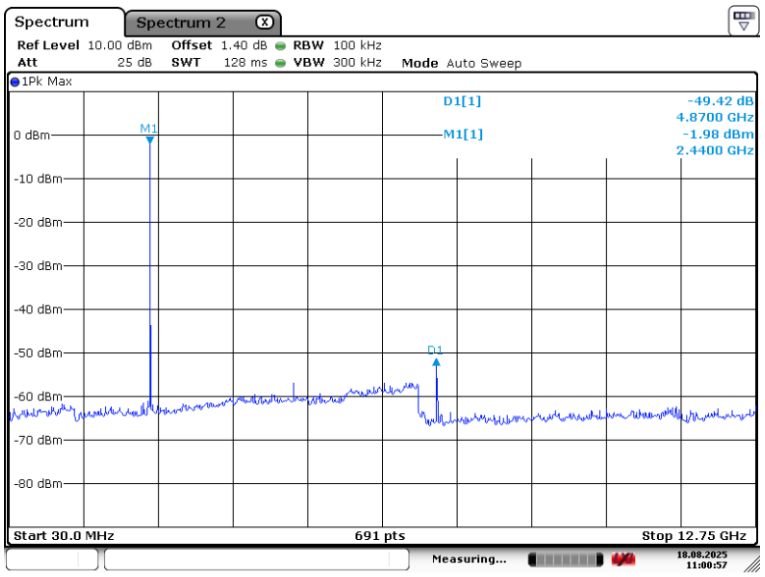
Minimum Standard:	≥ 20 dBc

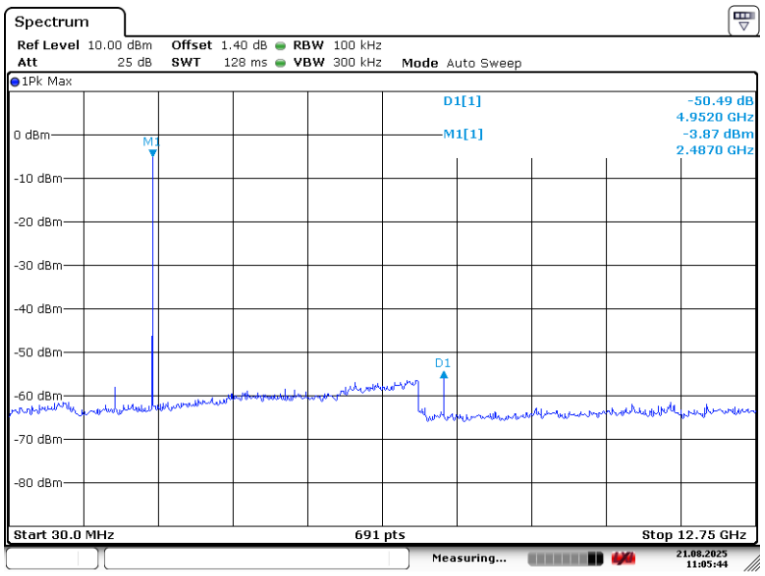
Measurement Setup

Same as the Chapter 3.2.1 (Figure 1)

Unwanted Emission – (Low,Middle,High)







3.2.6 Radiated Spurious Emissions

Procedure:

Radiated emissions from 30 MHz to 25 GHz were measured according to the methods defines in ANSI C63.10-2020. The EUT is a placed on as turn table. For emissions testing at or below 1 GHz, the table height shall be 0.8 m above the reference ground plane. For emission measurements above 1 GHz, the table height shall be 1.5 m. The turn table shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the max. emission, the relative positions of this hand-held transmitter (EUT) was rotated through three orthogonal axes and measurement procedures for electric field radiated emissions above 1 GHz the EUT measurement is to be made "while keeping the antenna in the 'cone of radiation' from that area and pointed at the area both in azimuth and elevation, with polarization oriented for maximum response." is still within the 3dB illumination BW of the measurement antenna.

The spectrum analyzer is set to:

Center frequency = the worst channel

Frequency Range = 9 kHz ~ 10^{th} harmonic.

RBW = 120 kHz (30 MHz ~ 1 GHz) VBW ≥ RBW

= 1 MHz (1 GHz ~ 10^{th} harmonic)

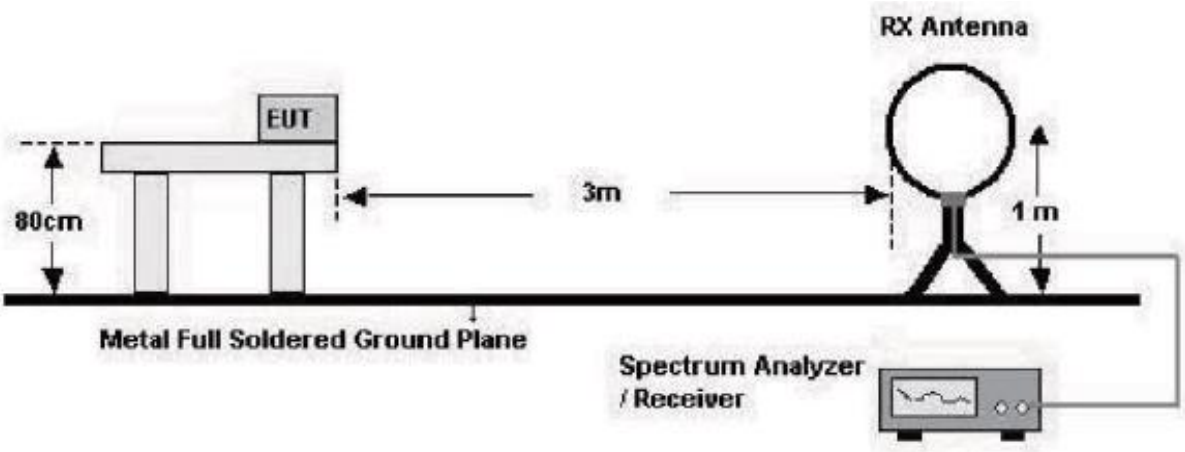
Trace = max hold Detector function = peak

Sweep = auto

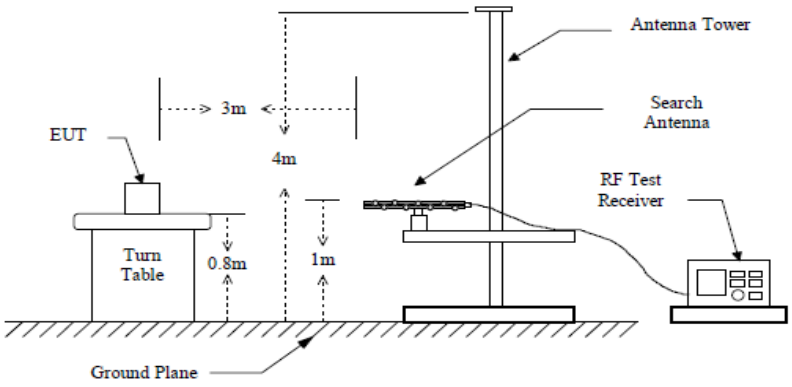
Duty cycle : 98.89 %

The EUT configureal to transmit continuously(D ≥ 98%)/ Duty Factor = 0

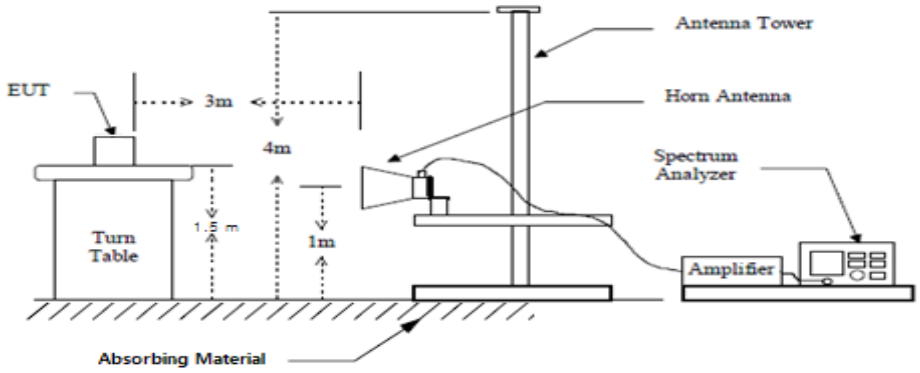
below 30 MHz



below 1 GHz (30 MHz to 1 GHz)



above 1 GHz



Measurement Data: Complies

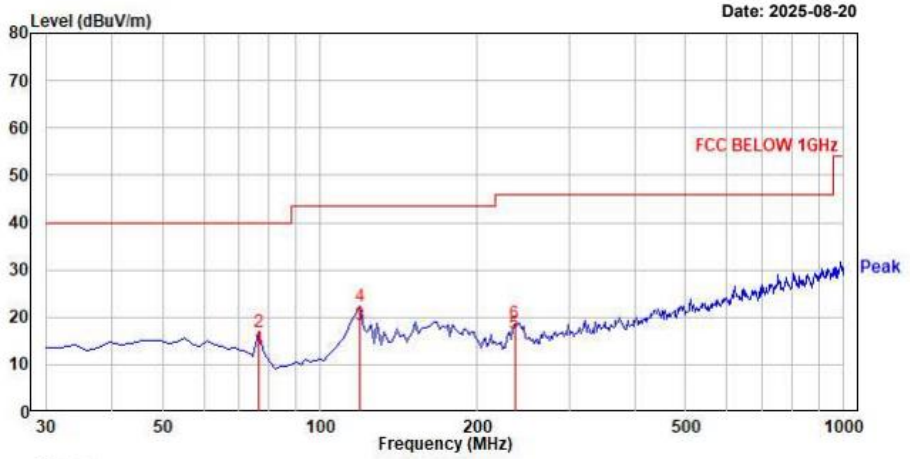
- See next pages for actual measured data.
- No other emissions were detected at a level greater than 20 dB below limit include from 9 kHz to 30MHz.
- The test results for the worst of the various operating modes are presented in accordance with 6.3.4 of ANSI C 63.10.
- Checked with a red circle is the fundamental frequency.

Minimum Standard: FCC Part 15.209(a)

Frequency (MHz)	Limit (uV/m) @ 3 m
0.009 ~ 0.490	2400/F(kHz) **(@ 300 m)**
0.490 ~ 1.705	24000/F(kHz) **(@ 30 m)**
1.705 ~ 30	30**(@ 30 m)**
30 ~ 88	100 **
88 ~ 216	150 **
216 ~ 960	200 **
Above 960	500

** Except as provided in 15.209(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. 15.231 and 15.241.

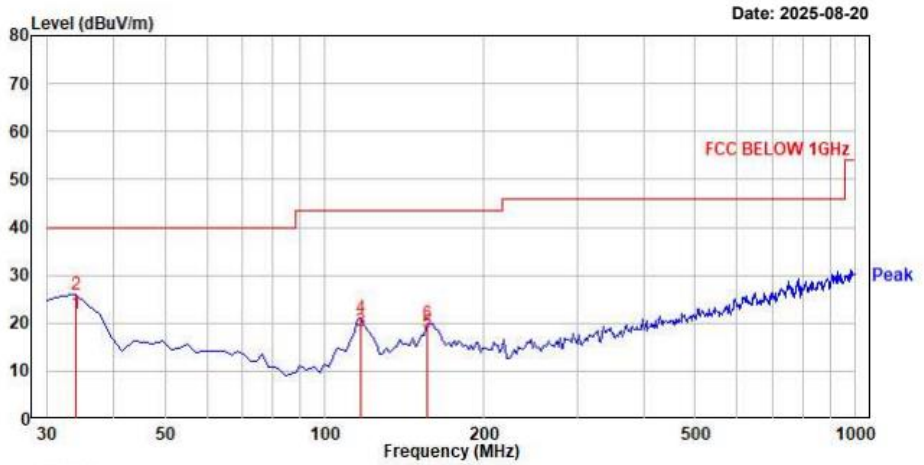
Radiated Emissions - Low



Trace:

No.	Freq	Reading	C.F	Result QP	Limit	Margin	Height	Angle	Polarity
	MHz	dBµV	dB	dBµV/m	dBµV/m	dB	cm	deg	
1.	76.56	28.77	-15.52	13.25	40.00	26.75	------	------	horizontal
2.	76.56	32.46	-15.52	16.94	40.00	23.06	------	------	horizontal
3.	119.24	32.61	-14.08	18.53	43.50	24.97	------	------	horizontal
4.	119.24	36.39	-14.08	22.31	43.50	21.19	------	------	horizontal
5.	235.64	29.45	-12.97	16.48	46.00	29.52	------	------	horizontal
6.	235.64	31.74	-12.97	18.77	46.00	27.23	------	------	horizontal

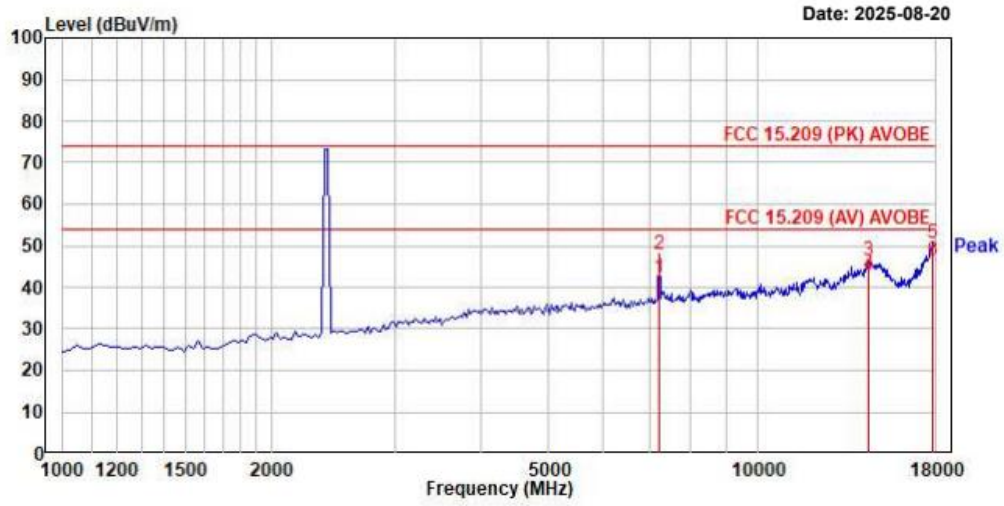
Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain



Trace:

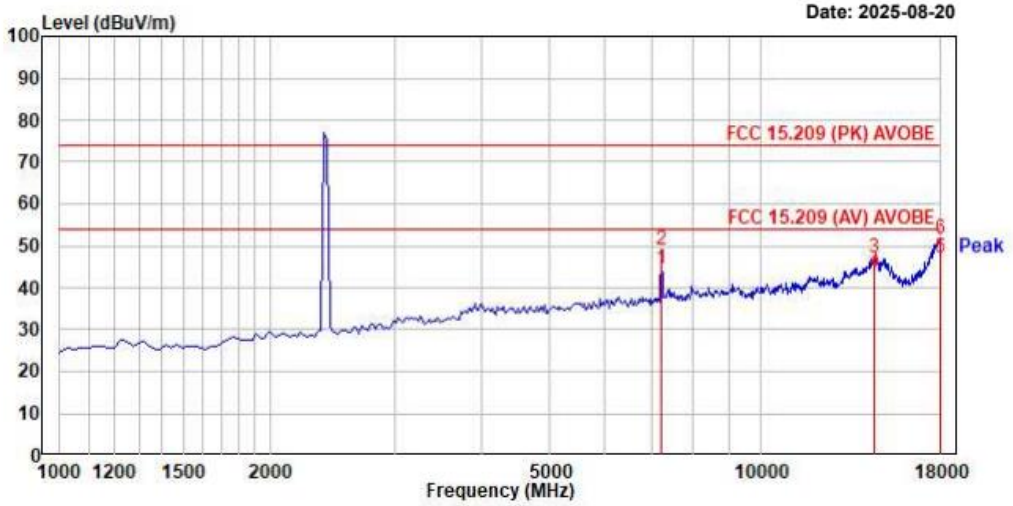
No.	Freq	Reading	C.F	Result QP	Limit	Margin	Height	Angle	Polarity
	MHz	dBµV	dB	dBµV/m	dBµV/m	dB	cm	deg	
1.	33.88	35.54	-13.46	22.08	40.00	17.92	------	------	vertical
2.	33.88	39.34	-13.46	25.88	40.00	14.12	------	------	vertical
3.	117.30	32.57	-14.20	18.37	43.50	25.13	------	------	vertical
4.	117.30	35.47	-14.20	21.27	43.50	22.23	------	------	vertical
5.	156.10	29.42	-11.32	18.10	43.50	25.40	------	------	vertical
6.	156.10	31.39	-11.32	20.07	43.50	23.43	------	------	vertical

Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain



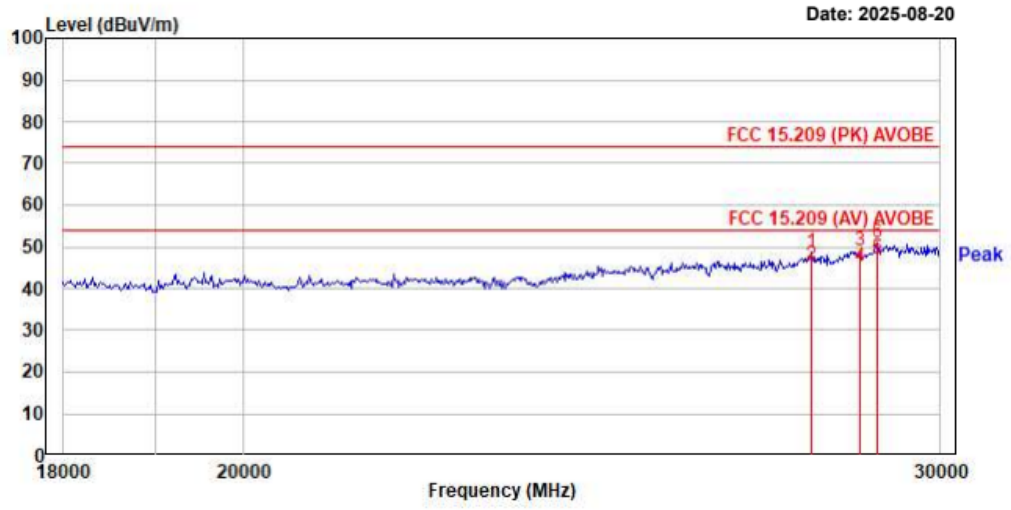
No.	Freq	RD PK	RD AV	C.F	Result PK	Result AV	Limit PK	Limit AV	Margin PK	Margin AV	Height	Angle	Polarity
	MHz	dBµV	dBµV	dB	dBµV	dBµV	dBµV	dBµV	dB	dB	cm	deg	
2.	7208.70	38.16	32.60	9.58	47.74	42.18	74.00	54.00	26.26	11.82	100	325	horizontal
3.	14402.90	26.81	------	19.72	46.53	------	74.00	------	27.47	------	100	192	horizontal
4.	14402.90	------	23.13	19.72	------	42.85	------	54.00	------	11.15	100	192	horizontal
5.	17827.54	26.74	------	23.89	50.63	------	74.00	------	23.37	------	100	325	horizontal
6.	17827.54	------	22.42	23.89	------	46.31	------	54.00	------	7.69	100	325	horizontal

Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain



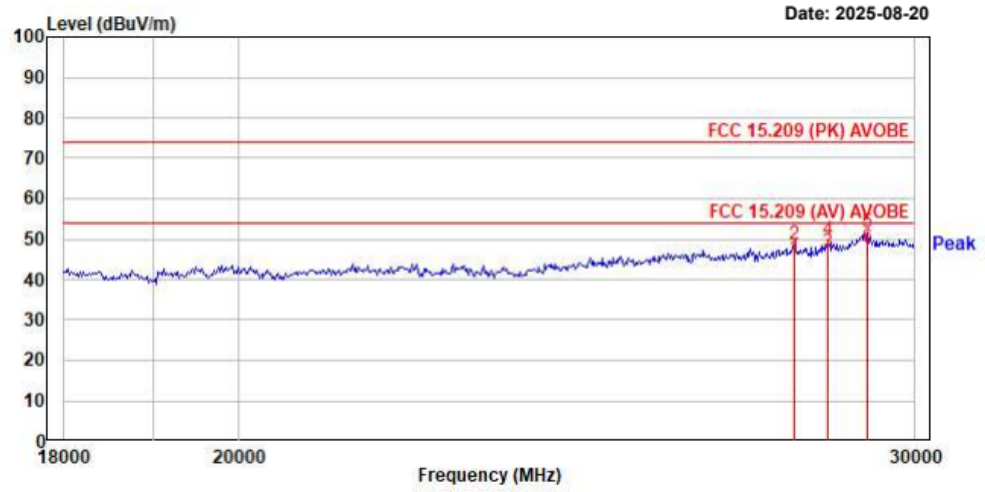
No.	Freq	RD PK	RD AV	C.F	Result PK	Result AV	Limit PK	Limit AV	Margin PK	Margin AV	Height	Angle	Polarity
	MHz	dBµV	dBµV	dB	dBµV	dBµV	dBµV	dBµV	dB	dB	cm	deg	
2.	7208.70	39.64	34.93	9.58	49.22	44.51	74.00	54.00	24.78	9.49	100	78	vertical
3.	14526.09	27.22	------	20.12	47.34	------	74.00	------	26.66	------	100	212	vertical
4.	14526.09	------	23.59	20.12	------	43.71	------	54.00	------	10.29	100	212	vertical
5.	17975.36	------	23.04	24.27	------	47.31	------	54.00	------	6.69	100	360	vertical
6.	17975.36	27.39	------	24.27	51.66	------	74.00	------	22.34	------	100	360	vertical

Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain



No.	Freq	RD PK	RD AV	C.F	Result PK	Result AV	Limit PK	Limit AV	Margin PK	Margin AV	Height	Angle	Polarity
	MHz	dBµV	dBµV	dB	dBµV	dBµV	dBµV	dBµV	dB	dB	cm	deg	
1.	27843.48	26.90	------	21.65	48.55	------	74.00	------	25.45	------	100	360	horizontal
2.	27843.48	------	23.99	21.65	------	45.64	------	54.00	------	8.36	100	360	horizontal
3.	28626.09	25.96	------	22.98	48.94	------	74.00	------	25.06	------	100	192	horizontal
4.	28626.09	------	22.18	22.98	------	45.16	------	54.00	------	8.84	100	192	horizontal
6.	28939.13	27.28	23.59	23.50	50.78	47.09	74.00	54.00	23.22	6.91	100	71	horizontal

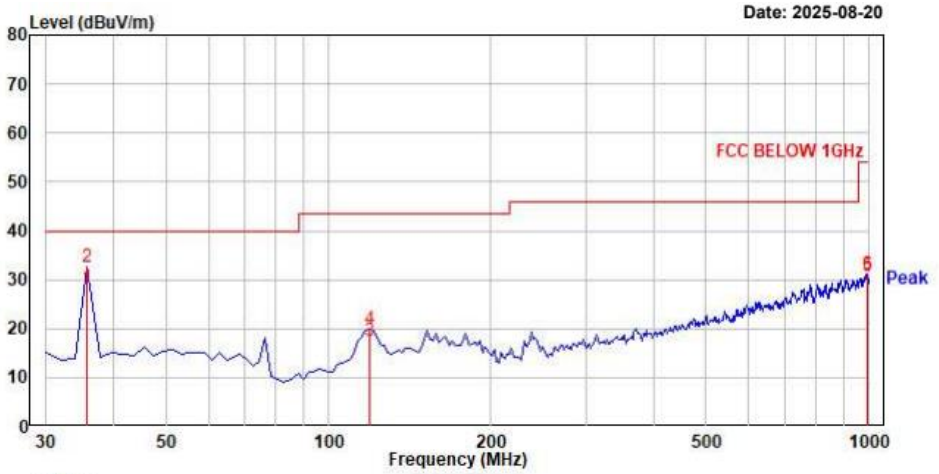
Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain



No.	Freq	RD PK	RD AV	C.F	Result PK	Result AV	Limit PK	Limit AV	Margin PK	Margin AV	Height	Angle	Polarity
	MHz	dBµV	dBµV	dB	dBµV	dBµV	dBµV	dBµV	dB	dB	cm	deg	
1.	27913.04	------	23.79	21.54	------	45.33	------	54.00	------	8.67	100	360	vertical
2.	27913.04	27.07	------	21.54	48.61	------	74.00	------	25.39	------	100	360	vertical
3.	28469.56	------	24.27	22.47	------	46.74	------	54.00	------	7.26	100	210	vertical
4.	28469.56	27.17	------	22.47	49.64	------	74.00	------	24.36	------	100	210	vertical
5.	29165.22	28.55	------	23.16	51.71	------	74.00	------	22.29	------	100	360	vertical
6.	29165.22	------	24.69	23.16	------	47.85	------	54.00	------	6.15	100	360	vertical

Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain

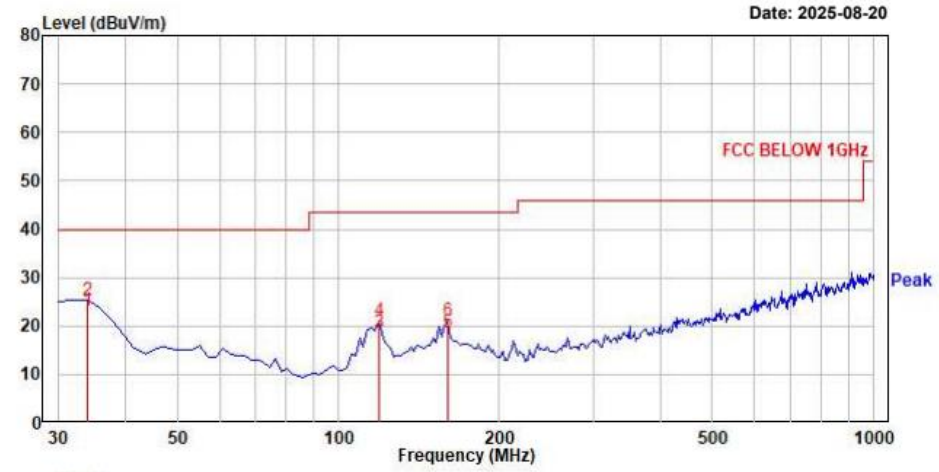
MIddle



Trace:

No.	Freq	Reading	C.F	Result QP	Limit	Margin	Height	Angle	Polarity
	MHz	dBµV	dB	dBµV/m	dBµV/m	dB	cm	deg	
1.	35.82	41.67	-13.24	28.43	40.00	11.57	------	------	horizontal
2.	35.82	45.91	-13.24	32.67	40.00	7.33	------	------	horizontal
3.	119.24	31.73	-14.08	17.65	43.50	25.85	------	------	horizontal
4.	119.24	33.94	-14.08	19.86	43.50	23.64	------	------	horizontal
5.	994.18	27.30	3.44	30.74	54.00	23.26	------	------	horizontal
6.	994.18	27.67	3.44	31.11	54.00	22.89	------	------	horizontal

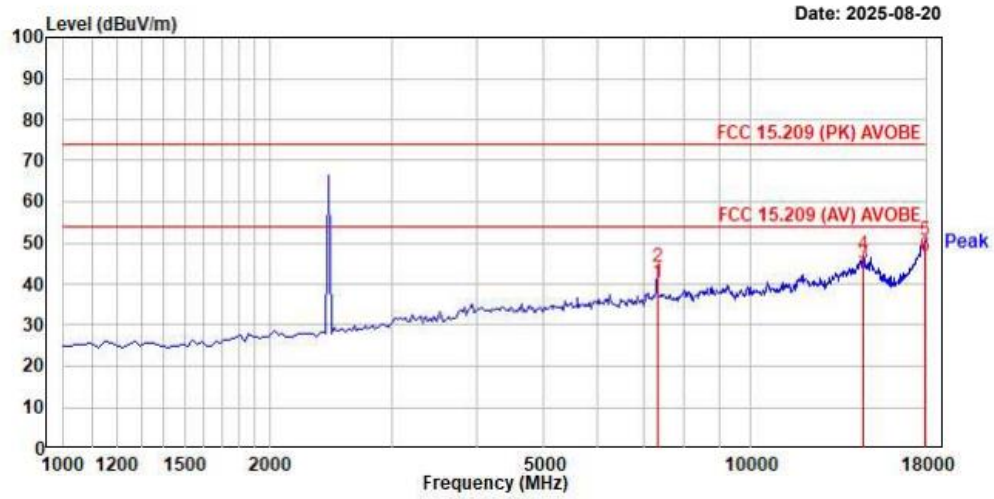
Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain



Trace:

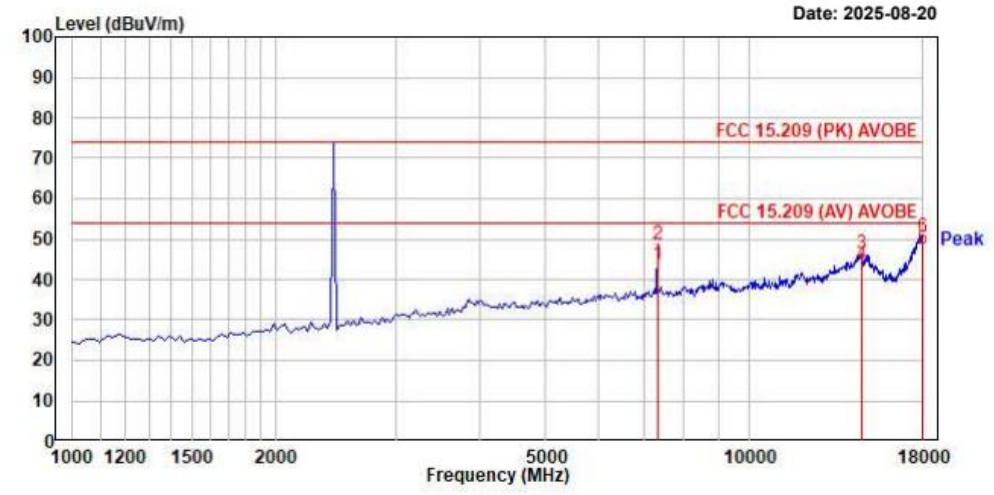
No.	Freq	Reading	C.F	Result QP	Limit	Margin	Height	Angle	Polarity
	MHz	dBµV	dB	dBµV/m	dBµV/m	dB	cm	deg	
1.	33.88	36.74	-13.46	23.28	40.00	16.72	------	------	vertical
2.	33.88	38.97	-13.46	25.51	40.00	14.49	------	------	vertical
3.	119.24	32.68	-14.08	18.60	43.50	24.90	------	------	vertical
4.	119.24	35.08	-14.08	21.00	43.50	22.50	------	------	vertical
5.	159.98	30.23	-11.48	18.75	43.50	24.75	------	------	vertical
6.	159.98	32.57	-11.48	21.09	43.50	22.41	------	------	vertical

Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain



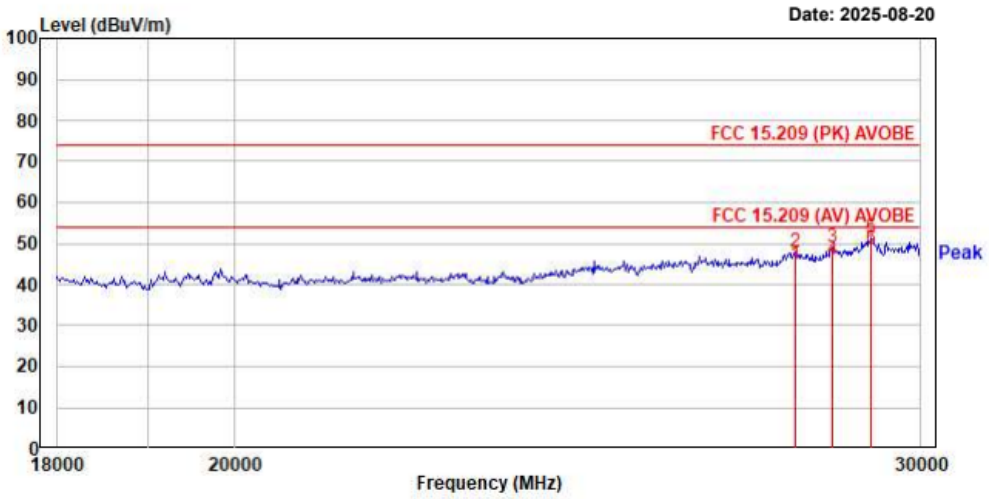
No.	Freq	RD PK	RD AV	C.F	Result PK	Result AV	Limit PK	Limit AV	Margin PK	Margin AV	Height	Angle	Polarity
	MHz	dBµV	dBµV	dB	dBµV	dBµV	dBµV	dBµV	dB	dB	cm	deg	
1.	7307.25	------	30.38	9.96	------	40.34	------	54.00	------	13.66	100	360	horizontal
2.	7307.25	34.05	30.38	9.96	44.01	40.34	74.00	54.00	29.99	13.66	100	360	horizontal
4.	14600.00	27.13	24.85	20.10	47.23	44.95	74.00	54.00	26.77	9.05	100	359	horizontal
5.	17926.09	26.38	------	24.13	50.51	------	74.00	------	23.49	------	100	360	horizontal
6.	17926.09	------	22.75	24.13	------	46.88	------	54.00	------	7.12	100	360	horizontal

Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain



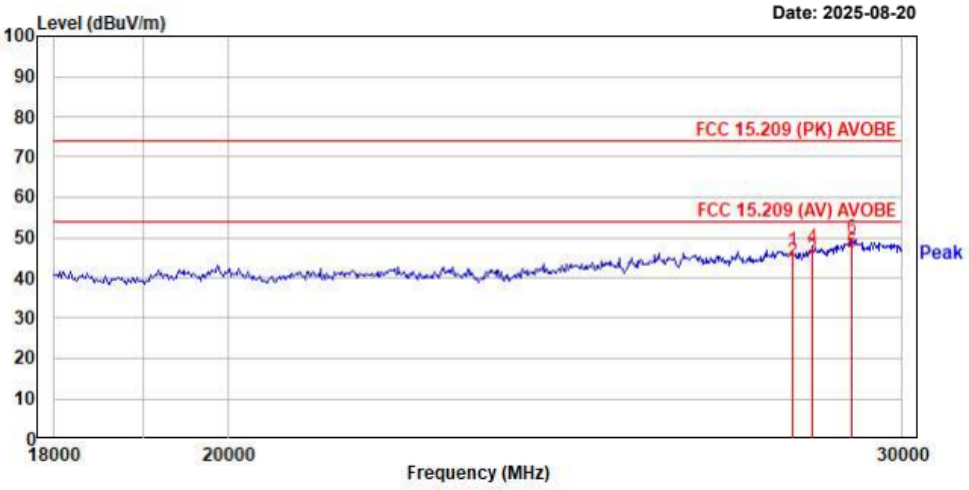
No.	Freq	RD PK	RD AV	C.F	Result PK	Result AV	Limit PK	Limit AV	Margin PK	Margin AV	Height	Angle	Polarity
	MHz	dBµV	dBµV	dB	dBµV	dBµV	dBµV	dBµV	dB	dB	cm	deg	
1.	7307.25	------	33.67	9.96	------	43.63	------	54.00	------	10.37	100	47	vertical
2.	7307.25	38.56	33.67	9.96	48.52	43.63	74.00	54.00	25.48	10.37	100	47	vertical
3.	14624.64	26.24	------	20.05	46.29	------	74.00	------	27.71	------	100	138	vertical
4.	14624.64	------	23.71	20.05	------	43.76	------	54.00	------	10.24	100	138	vertical
5.	17975.36	------	23.25	24.27	------	47.52	------	54.00	------	6.48	100	6	vertical
6.	17975.36	26.26	------	24.27	50.53	------	74.00	------	23.47	------	100	6	vertical

Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain



No.	Freq	RD PK	RD AV	C.F	Result PK	Result AV	Limit PK	Limit AV	Margin PK	Margin AV	Height	Angle	Polarity
	MHz	dBµV	dBµV	dB	dBµV	dBµV	dBµV	dBµV	dB	dB	cm	deg	
2.	27860.87	26.13	23.39	21.67	47.80	45.06	74.00	54.00	26.20	8.94	100	360	horizontal
3.	28486.96	26.24	------	22.89	49.13	------	74.00	------	24.87	------	100	176	horizontal
4.	28486.96	------	23.28	22.89	------	46.17	------	54.00	------	7.83	100	176	horizontal
5.	29147.83	27.64	------	23.56	51.20	------	74.00	------	22.80	------	100	360	horizontal
6.	29147.83	------	25.23	23.56	------	48.79	------	54.00	------	5.21	100	360	horizontal

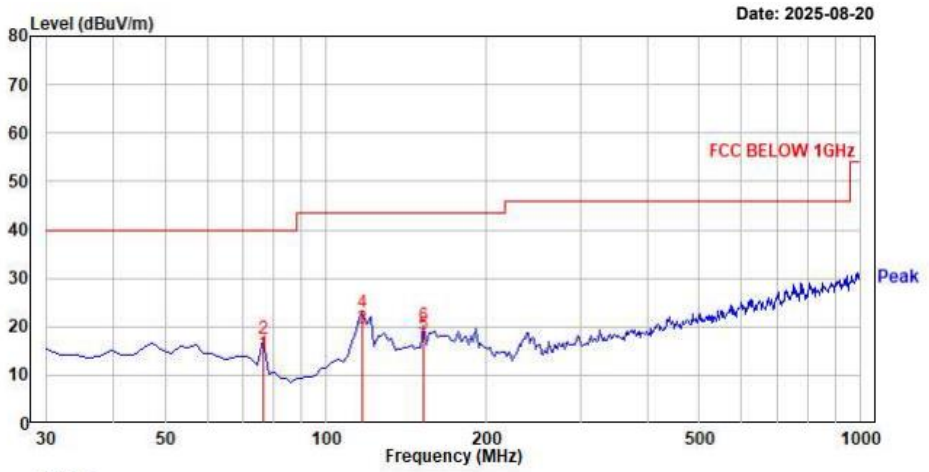
Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain



No.	Freq	RD PK	RD AV	C.F	Result PK	Result AV	Limit PK	Limit AV	Margin PK	Margin AV	Height	Angle	Polarity
	MHz	dBµV	dBµV	dB	dBµV	dBµV	dBµV	dBµV	dB	dB	cm	deg	
1.	28086.96	24.86	------	21.95	46.81	------	74.00	------	27.19	------	100	213	vertical
2.	28086.96	------	22.37	21.95	------	44.32	------	54.00	------	9.68	100	213	vertical
3.	28434.78	------	22.37	22.43	------	44.80	------	54.00	------	9.20	100	360	vertical
4.	28434.78	25.16	------	22.43	47.59	------	74.00	------	26.41	------	100	360	vertical
5.	29113.04	------	23.34	23.17	------	46.51	------	54.00	------	7.49	100	2	vertical
6.	29113.04	26.73	------	23.17	49.90	------	74.00	------	24.10	------	100	2	vertical

Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain

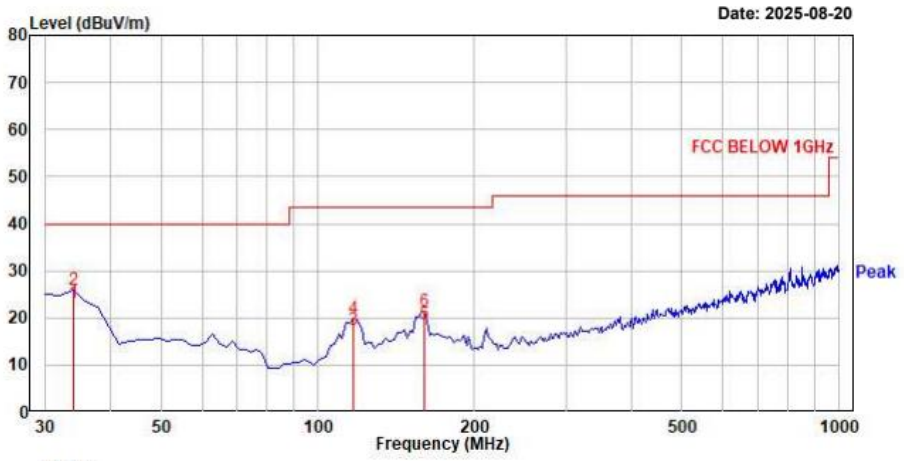
High



Trace:

No.	Freq	Reading	C.F	Result QP	Limit	Margin	Height	Angle	Polarity
	MHz	dBµV	dB	dBµV/m	dBµV/m	dB	cm	deg	
1.	76.56	29.98	-15.52	14.46	40.00	25.54	------	------	horizontal
2.	76.56	32.99	-15.52	17.47	40.00	22.53	------	------	horizontal
3.	117.30	33.86	-14.20	19.66	43.50	23.84	------	------	horizontal
4.	117.30	37.13	-14.20	22.93	43.50	20.57	------	------	horizontal
5.	152.22	29.76	-11.24	18.52	43.50	24.98	------	------	horizontal
6.	152.22	31.51	-11.24	20.27	43.50	23.23	------	------	horizontal

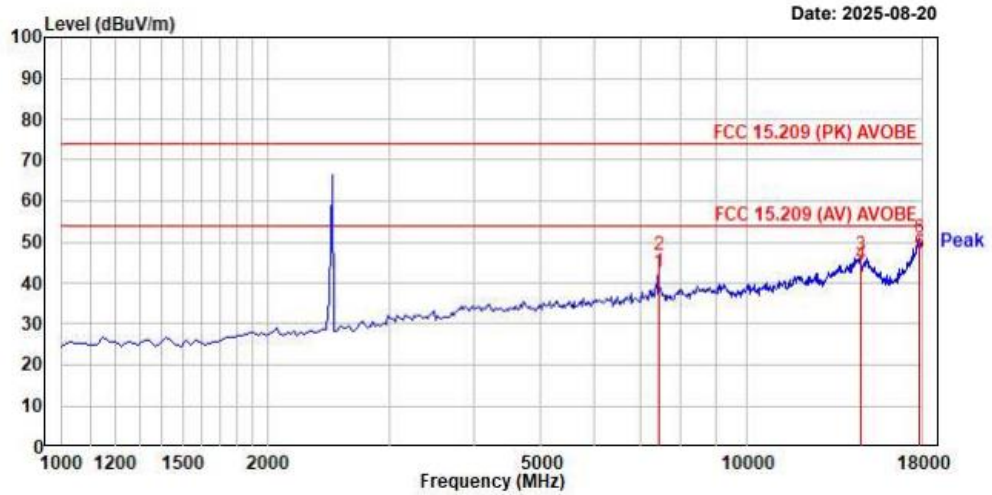
Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain



Trace:

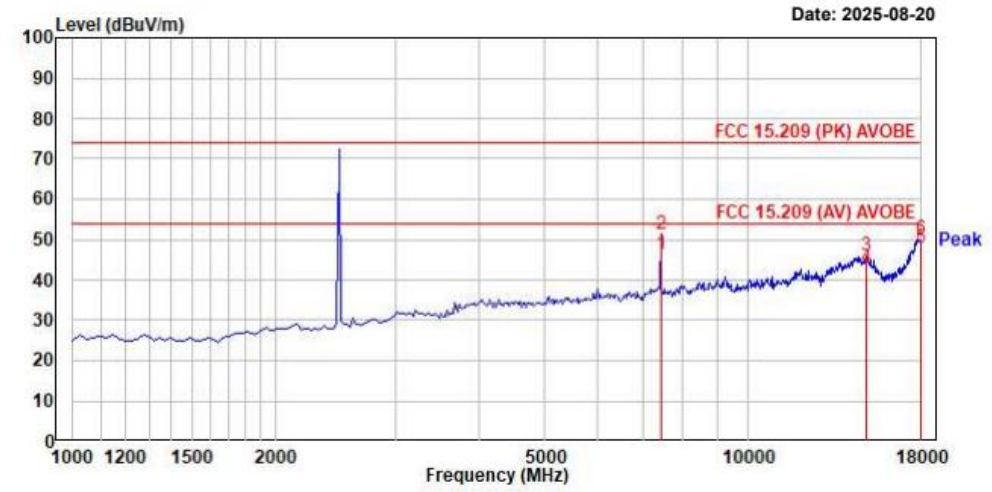
No.	Freq	Reading	C.F	Result QP	Limit	Margin	Height	Angle	Polarity
	MHz	dBµV	dB	dBµV/m	dBµV/m	dB	cm	deg	
1.	33.88	36.82	-13.46	23.36	40.00	16.64	------	------	vertical
2.	33.88	39.43	-13.46	25.97	40.00	14.03	------	------	vertical
3.	117.30	31.79	-14.20	17.59	43.50	25.91	------	------	vertical
4.	117.30	34.14	-14.20	19.94	43.50	23.56	------	------	vertical
5.	159.98	30.05	-11.48	18.57	43.50	24.93	------	------	vertical
6.	159.98	32.85	-11.48	21.37	43.50	22.13	------	------	vertical

Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain



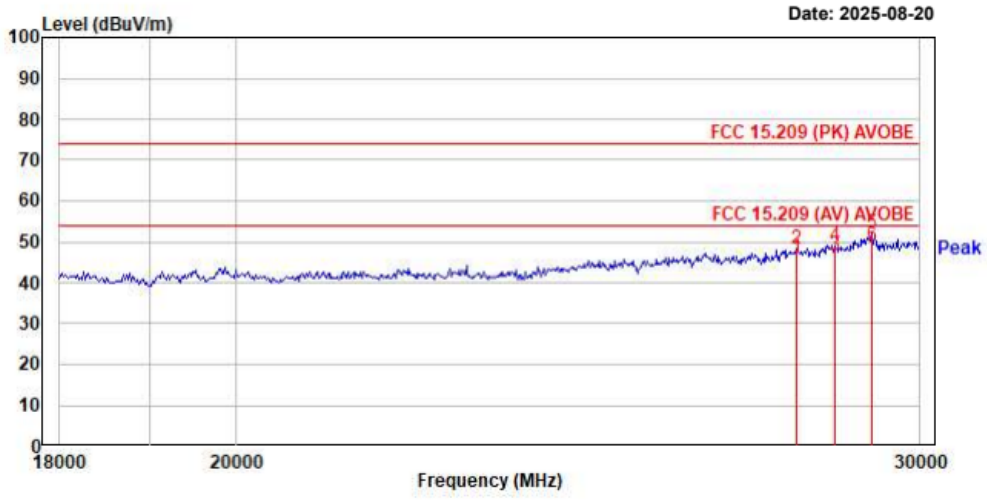
No.	Freq	RD PK	RD AV	C.F	Result PK	Result AV	Limit PK	Limit AV	Margin PK	Margin AV	Height	Angle	Polarity
	MHz	dBµV	dBµV	dB	dBµV	dBµV	dBµV	dBµV	dB	dB	cm	deg	
1.	7430.44	------	32.58	10.10	------	42.68	------	54.00	------	11.32	100	297	horizontal
2.	7430.44	36.67	32.58	10.10	46.77	42.68	74.00	54.00	27.23	11.32	100	297	horizontal
3.	14624.64	26.70	------	20.05	46.75	------	74.00	------	27.25	------	100	194	horizontal
4.	14624.64	------	24.50	20.05	------	44.55	------	54.00	------	9.45	100	194	horizontal
5.	17852.17	------	23.08	24.00	------	47.08	------	54.00	------	6.92	100	0	horizontal
6.	17852.17	26.93	------	24.00	50.93	------	74.00	------	23.07	------	100	0	horizontal

Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain



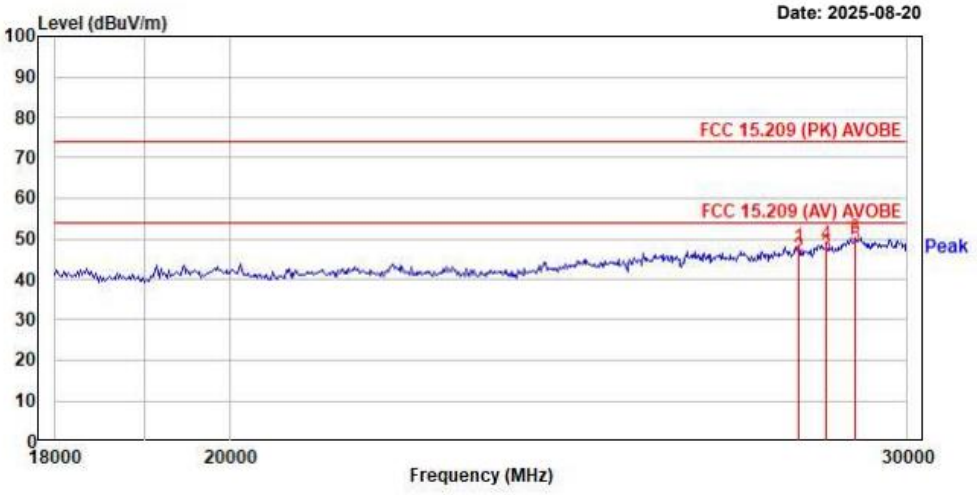
No.	Freq	RD PK	RD AV	C.F	Result PK	Result AV	Limit PK	Limit AV	Margin PK	Margin AV	Height	Angle	Polarity
	MHz	dBµV	dBµV	dB	dBµV	dBµV	dBµV	dBµV	dB	dB	cm	deg	
1.	7430.44	------	36.28	10.10	------	46.38	------	54.00	------	7.62	100	21	vertical
2.	7430.44	41.37	36.28	10.10	51.47	46.38	74.00	54.00	22.53	7.62	100	21	vertical
3.	14944.93	27.25	------	18.75	46.00	------	74.00	------	28.00	------	100	124	vertical
4.	14944.93	------	24.44	18.75	------	43.19	------	54.00	------	10.81	100	124	vertical
5.	17975.36	------	23.55	24.27	------	47.82	------	54.00	------	6.18	100	348	vertical
6.	17975.36	25.95	------	24.27	50.22	------	74.00	------	23.78	------	100	348	vertical

Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain



No.	Freq	RD PK	RD AV	C.F	Result PK	Result AV	Limit PK	Limit AV	Margin PK	Margin AV	Height	Angle	Polarity
	MHz	dBµV	dBµV	dB	dBµV	dBµV	dBµV	dBµV	dB	dB	cm	deg	
1.	27878.26	------	24.38	21.69	------	46.07	------	54.00	------	7.93	100	238	horizontal
2.	27878.26	26.71	------	21.69	48.40	------	74.00	------	25.60	------	100	238	horizontal
4.	28539.13	26.21	23.82	22.92	49.13	46.74	74.00	54.00	24.87	7.26	100	238	horizontal
5.	29165.22	28.60	------	23.56	52.16	------	74.00	------	21.84	------	100	281	horizontal
6.	29165.22	------	25.34	23.56	------	48.90	------	54.00	------	5.10	100	281	horizontal

Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain



No.	Freq	RD PK	RD AV	C.F	Result PK	Result AV	Limit PK	Limit AV	Margin PK	Margin AV	Height	Angle	Polarity
	MHz	dBµV	dBµV	dB	dBµV	dBµV	dBµV	dBµV	dB	dB	cm	deg	
1.	28121.74	26.03	------	21.99	48.02	------	74.00	------	25.98	------	100	0	vertical
2.	28121.74	------	23.84	21.99	------	45.83	------	54.00	------	8.17	100	0	vertical
3.	28591.30	------	23.59	22.63	------	46.22	------	54.00	------	7.78	100	0	vertical
4.	28591.30	26.06	------	22.63	48.69	------	74.00	------	25.31	------	100	0	vertical
5.	29095.65	------	25.14	23.16	------	48.30	------	54.00	------	5.70	100	2	vertical
6.	29095.65	27.02	------	23.16	50.18	------	74.00	------	23.82	------	100	2	vertical

Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain

3.2.7 AC Conducted Emissions

Procedure:

The conducted emissions are measured in the shielded room with a spectrum analyzer in peak hold. While the measurement, EUT had its hopping function disabled at the middle channels in line with Section 15.31(m). Emissions closest to the limit are measured in the quasi-peak mode (QP) with the tuned receiver using a bandwidth of 9 kHz. The emissions are maximized further by cable manipulation and Exerciser operation. The highest emissions relative to the limit are listed.

Minimum Standard: FCC Part 15.207(a) / EN 55022

Measurement Data: N/A

Class B

Frequency Range	quasi-peak	Average
0.15 ~ 0.5	66 to 56 *	56 to 46 *
0.5 ~ 5	56	46
5 ~ 30	60	50

* Decreases with the logarithm of the frequency

APPENDIX

TEST EQUIPMENT USED FOR TESTS

	Use	Description	Model No.	Serial No.	Manufacturer	Interval	Next Cal. Date
1		ATTENUATOR	48-40-34	BM2360	WEINSCHEL	1 year	2026-03-05
2		ATTENUATOR	CL5418	66-30-33	AEROFLEX/WEINSCHEL	1 year	2026-08-19
3		POWER DIVIDER	1506A	TU981	WEINSCHEL	1 year	2026-03-06
4		Digital Multi Meter	34401A	US36062141	H.P	1 year	2026-03-06
5	■	DC Power Supply	E3632A	KR75305998	H.P	1 year	2026-08-18
6		DC POWER SUPPLY	6674A	3637A01657	AGILENT	1 year	2026-08-18
7		AC Power Supply	HK-80	LR001	—	1 year	2026-08-18
8	■	Power Meter	EPM-441A	GB32481702	H.P	1 year	2026-03-05
9	■	Power Sensor	8481A	3318A94972	H.P	1 year	2026-08-18
10		SIGNAL GENERATOR	83711B	US34490456	H.P	1 year	2026-03-05
11	■	VECTOR SIGNAL GENERATOR	SMBV100A	255081	ROHDE&SCHWARZ	1 year	2026-03-05
14		Drop tester	DT-1800	LS06053	LTA	—	N/A
15		TEMP HUMIDITY CHAMBER	NONE	LTAS06041	—	1 year	2026-03-05
16		Constant Temp & Humidity Test Chamber	SJ-503H	SJ10051301	—	1 year	2026-08-18
17	■	SIGNAL ANALYZER (10 Hz ~ 40 GHz)	FSV40	101259	ROHDE&SCHWARZ	1 year	2026-03-06
18		SIGNAL ANALYZER (10 Hz~40 GHz)	FSV40	101367	ROHDE&SCHWARZ	1 year	2026-03-06
20		WIDEBAND RADIO COMMUNICATION TESTER	CMW500	122216	ROHDE&SCHWARZ	1 year	2026-03-05
21		Active Loop Antenna	HFH2-Z2	—	ROHDE&SCHWARZ	2 year	2027-01-14
22	■	Signal Generator (~3.2 GHz)	8648C	3623A02597	HP	1 year	2026-03-05
23	■	EMI Test Receiver (~7 GHz)	ESCI7	100772	R&S	1 year	2026-08-18
24	■	RF Amplifier (~1.3 GHz)	8447D OPT 010	2944A07684	HP	—	N/A
25	■	RF Amplifier (1~26.5 GHz)	8449B	3008A02126	HP	1 year	2026-03-05
26	■	Horn Antenna (1~18 GHz)	3115	00055005	ETS	1 year	2026-03-10
27	■	DRG Horn (Small)	3116B	81109	ETS-Lindgren	2 year	2027-03-19

28	■	TRILOG Antenna	VULB 9160	9160-3237	SCHWARZBECK	—	N/A
29		Mini-Circuits Splitter	ZFSC-2-2500	SF617800326	Mini-Circuits	-	-
30		Audio Analyzer	8903B	3729A18901	HP	1 year	2026-08-18
31		Moduleation Analyzer	8901B	3749A05878	HP	1 year	2026-08-19
32		LISN	KNW-407	8-1430-1	Kyoritsu	1 year	2026-08-18
33		UNIVERSAL RADIO COMMUNICATION TESTER	CMU200	106243	R&S	1 year	2026-03-06
34		Highpass Filter	WHKX1.5/15G-10SS	74	Wainwright Instruments	1 year	2026-03-06
35		Highpass Filter	WHKX3.0/18G-10SS	118	Wainwright Instruments	1 year	2026-03-06
36		OSP120 BASE UNIT	OSP120	101230	R&S	1 year	2026-03-06
37	■	Cable	RG400	-	HUBER SUHNER	1 year	2025-10-31