LTA
Laboratory for Test & Approval Co.,Ltd.

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http://www.ltalab.com

Dates of Tests: June 20,2025 ~ July 24,2025
Test Report S/N: LR500112507E
Test Site : LTA CO., LTD.

CERTIFICATION OF COMPLIANCE

FCC ID. **2BAM7DPA320X**

APPLICANT **dot incorporation**

Equipment Class	:	**Digital Transmission System (DTS)**
Manufacturing Description	:	**Refreshable tactile graphic display**
Manufacturer	:	**dot incorporation**
Model name	:	**DPA320X**
Contains Modules FCC ID	:	**A8TBM70ABCDEFGH**
Test Device Serial No.:	:	**Identical prototype**
Rule Part(s)	:	**FCC Part 15.247 Subpart C ; ANSI C63.10 - 2020**
Frequency Range	:	**2402 ~ 2480 MHz**
Max. Output Power	:	**0.001 4 W**
Data of issue	:	**July 25, 2025**

This test report is issued under the authority of:

Eun-Hwan Jung, Manager

The test was supervised by:

In-Sun Lee, Test Engineer

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1. General information

1-1 Test Performed

Company name : LTA Co., Ltd.

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

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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	2025-08-15	IC filing

2. Information about test item

2-1 Client & Manufacturer

Client Company name	:	dot incorporation
Address	:	401~405, 146, Gasan digital 1-ro, Geumcheon-gu, Seoul, Republic of Korea
Tel / Fax	:	TEL No : +82-2-864-1113 / FAX No : + 82-2-864-1989
Manufacturer		dot incorporation
Address		401~405, 146, Gasan digital 1-ro, Geumcheon-gu, Seoul, Republic of Korea
Tel / Fax		TEL No : +82-2-864-1113 / FAX No : + 82-2-864-1989

2-2 Equipment Under Test (EUT)

Model name	:	2BAM7DPA320X
Serial number	:	Identical prototype
Date of receipt	:	June 20,2025
EUT condition	:	Pre-production, not damaged
Antenna type	:	Chip Antenna (Max Gain : 1.63 dBi)
Frequency Range	:	2402 ~ 2480 MHz
Type of Modulation	:	GFSK
Power Source	:	DC 3.7 V

2-3 Tested frequency

	LOW	MID	HIGH
Frequency (MHz) BLE	2402	2440	2480

2-4 Ancillary Equipment

Equipment	Model No.	Serial No.	Manufacturer
-	-	-	-

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	N/A[1)]
15.247(b)	Transmitter Peak Output Power		N/A[1)]
15.247(e)	Transmitter Power Spectral Density		N/A[1)]
15.247(d)	Band Edge & Conducted Spurious emission		N/A[1)]
15.209	Transmitter emission	Radiated	C
15.207	AC Conducted Emissions	Conducted	N/A[1)]
15.203	Antenna requirement	-	C

N/A[1)] : The product replaces this test with a certificate using an authenticated module.

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
dot incorporation. FCC ID: 2BAM7DPA320X unit complies with the requirement of §15.203.
The antenna type is Chip Antenna

3.2 Technical Characteristics Test

3.2.1 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 ~ 10th harmonic.

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

= 1 MHz (1 GHz ~ 10th harmonic)

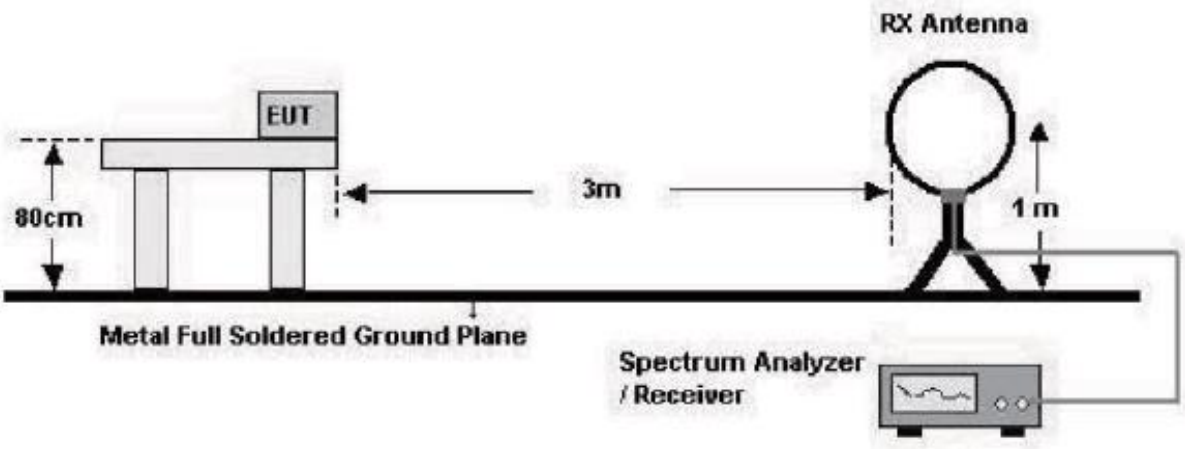
Trace = max hold Detector function = peak

Sweep = auto

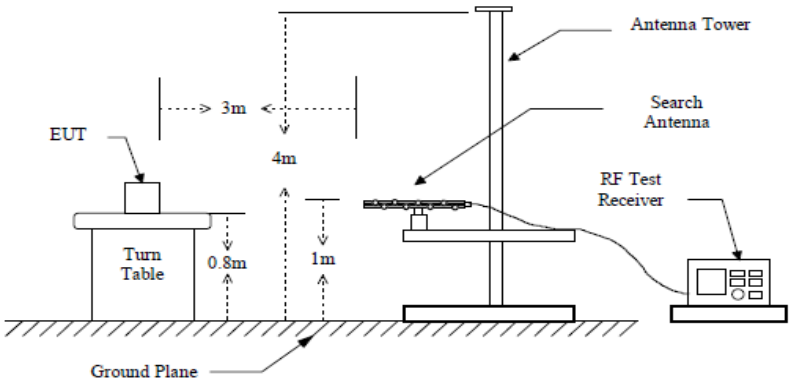
Duty cycle : 98.89 %

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

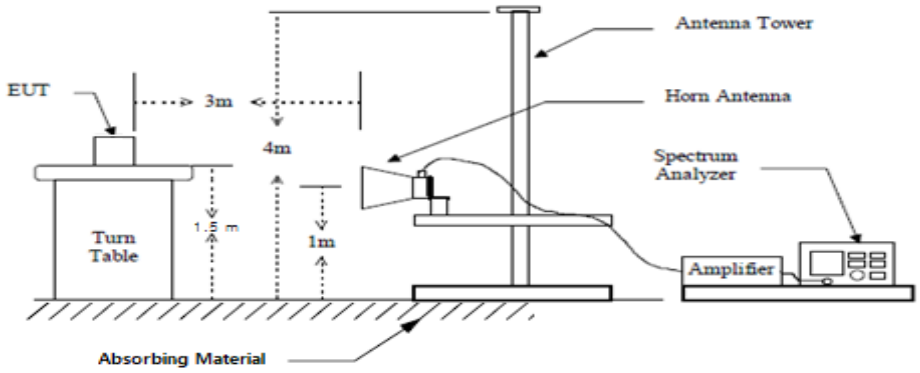
below 30 MHz



below 1 GHz (30 MHz to 1 GHz)



above 1 GHz



Measurement Data: Complies

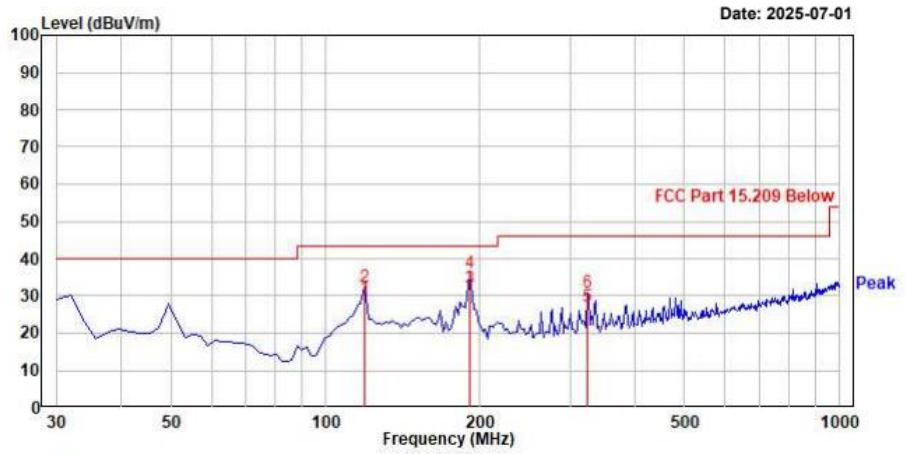
- See next pages for actual measured data.
- No other emissions were detected at a level greater than 20 dB below limit include from 9 kHz to 30MHz.
- The test results for the worst of the various operating modes are presented in accordance with 6.3.4 of ANSI C63.10.
- Checked with a red circle is the fundamental frequency.
- At the request of the applicant, measurements of derived model products are also attached.

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.

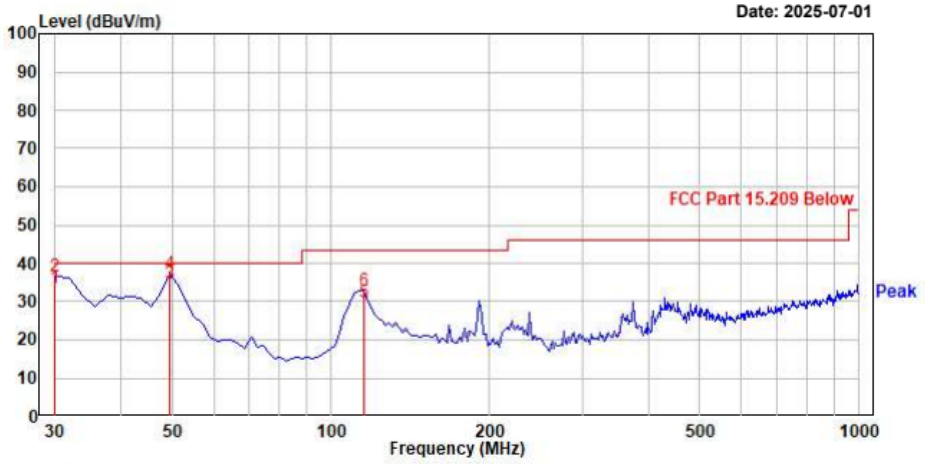
Radiated Emissions



Trace:

No.	Freq	Reading	C.F	Result QP	Limit	Margin	Height	Angle	Polarity
	MHz	dBµV	dB	dBµV/m	dBµV/m	dB	cm	deg	
1.	119.24	43.53	-14.08	29.45	43.52	14.07	------	------	horizontal
2.	119.24	46.49	-14.08	32.41	43.52	11.11	------	------	horizontal
3.	191.02	45.81	-13.63	32.18	43.52	11.34	------	------	horizontal
4.	191.02	49.68	-13.63	36.05	43.52	7.47	------	------	horizontal
5.	322.94	37.04	-9.74	27.30	46.02	18.72	------	------	horizontal
6.	322.94	40.78	-9.74	31.04	46.02	14.98	------	------	horizontal

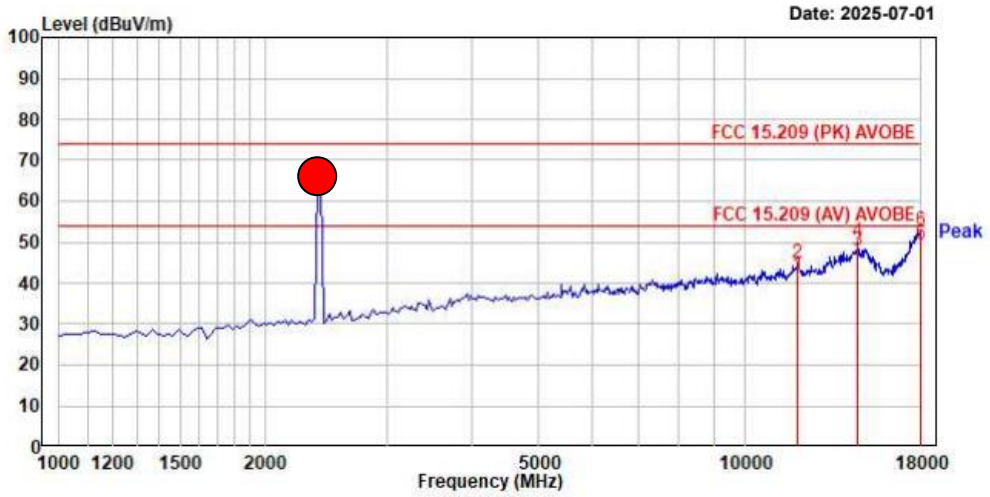
Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain



Trace:

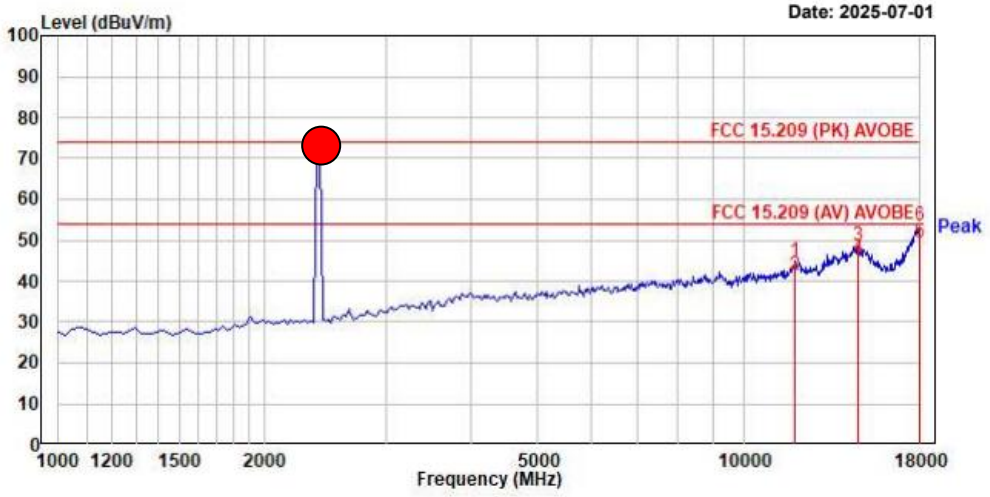
No.	Freq	Reading	C.F	Result QP	Limit	Margin	Height	Angle	Polarity
	MHz	dBµV	dB	dBµV/m	dBµV/m	dB	cm	deg	
1.	30.00	47.27	-13.63	33.64	40.00	6.36	------	------	vertical
2.	30.00	50.15	-13.63	36.52	40.00	3.48	------	------	vertical
3.	49.40	46.56	-11.93	34.63	40.00	5.37	------	------	vertical
4.	49.40	49.29	-11.93	37.36	40.00	2.64	------	------	vertical
5.	115.36	44.13	-14.42	29.71	43.52	13.81	------	------	vertical
6.	115.36	47.30	-14.42	32.88	43.52	10.64	------	------	vertical

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



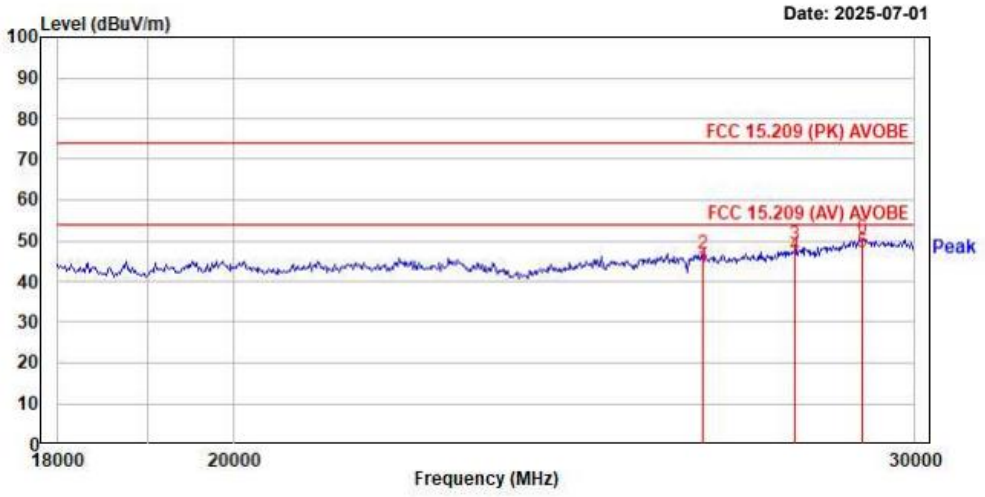
No.	Freq	RD PK	RD AV	C.F	Result PK	Result AV	Limit PK	Limit AV	Margin PK	Margin AV	Height	Angle	Polarity
	MHz	dBµV	dBµV	dB	dBµV	dBµV	dBµV	dBµV	dB	dB	cm	deg	
1.	11914.49	------	26.72	15.10	------	41.82	------	54.00	------	12.18	100	360	horizontal
2.	11914.49	29.67	------	15.10	44.77	------	74.00	------	29.23	------	100	360	horizontal
3.	14575.36	------	27.81	20.11	------	47.92	------	54.00	------	6.08	100	242	horizontal
4.	14575.36	30.14	------	20.11	50.25	------	74.00	------	23.75	------	100	242	horizontal
6.	18000.00	28.39	25.07	24.34	52.73	49.41	74.00	54.00	21.27	4.59	100	302	horizontal

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



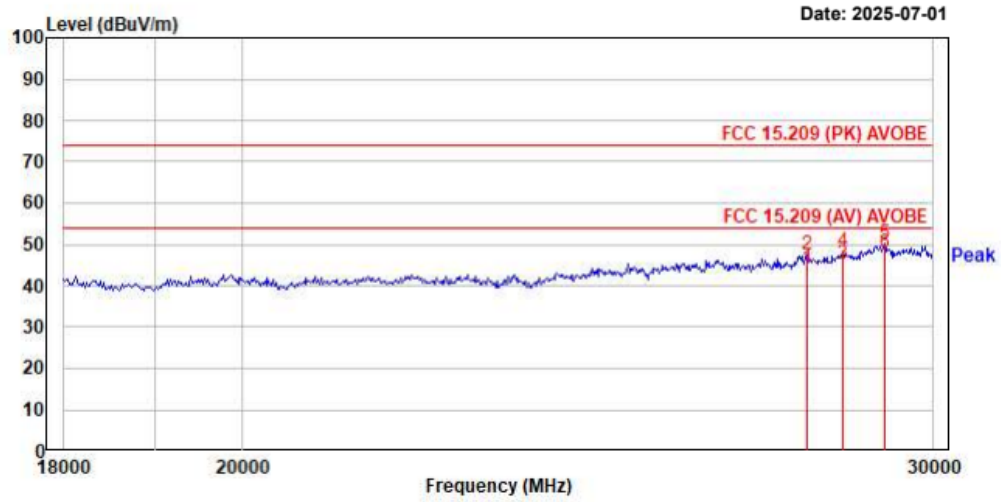
No.	Freq	RD PK	RD AV	C.F	Result PK	Result AV	Limit PK	Limit AV	Margin PK	Margin AV	Height	Angle	Polarity
	MHz	dBµV	dBµV	dB	dBµV	dBµV	dBµV	dBµV	dB	dB	cm	deg	
1.	11865.22	29.72	------	15.08	44.80	------	74.00	------	29.20	------	100	148	vertical
2.	11865.22	------	26.45	15.08	------	41.53	------	54.00	------	12.47	100	148	vertical
3.	14624.64	28.63	------	20.05	48.68	------	74.00	------	25.32	------	100	266	vertical
4.	14624.64	------	25.62	20.05	------	45.67	------	54.00	------	8.33	100	266	vertical
5.	17975.36	------	25.04	24.27	------	49.31	------	54.00	------	4.69	100	130	vertical
6.	17975.36	29.39	------	24.27	53.66	------	74.00	------	20.34	------	100	130	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.	26452.17	------	24.12	19.43	------	43.55	------	54.00	------	10.45	100	241	horizontal
2.	26452.17	27.36	------	19.43	46.79	------	74.00	------	27.21	------	100	241	horizontal
3.	27947.83	27.32	------	21.83	49.15	------	74.00	------	24.85	------	100	226	horizontal
4.	27947.83	------	24.53	21.83	------	46.36	------	54.00	------	7.64	100	226	horizontal
5.	29095.65	------	23.63	23.56	------	47.19	------	54.00	------	6.81	100	5	horizontal
6.	29095.65	27.09	------	23.56	50.65	------	74.00	------	23.35	------	100	5	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.	27860.87	26.11	22.82	21.43	47.54	44.25	74.00	54.00	26.46	9.75	100	221	vertical
3.	28452.17	------	22.79	22.44	------	45.23	------	54.00	------	8.77	100	3	vertical
4.	28452.17	25.88	------	22.44	48.32	------	74.00	------	25.68	------	100	3	vertical
5.	29165.22	27.09	------	23.16	50.25	------	74.00	------	23.75	------	100	360	vertical
6.	29165.22	------	24.66	23.16	------	47.82	------	54.00	------	6.18	100	360	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.

Measurement Data: N/A

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

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	2025-08-20
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	2025-08-19
6		DC POWER SUPPLY	6674A	3637A01657	AGILENT	1 year	2025-08-19
7		AC Power Supply	HK-80	LR001	—	1 year	2025-08-20
8	■	Power Meter	EPM-441A	GB32481702	H.P	1 year	2026-03-05
9	■	Power Sensor	8481A	3318A94972	H.P	1 year	2025-08-20
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
12		TIMER	CT4S-1P	NONE	AUTONICS	1 year	2025-08-20
13		VIBRATION TESTER	GRV-500	N/A	GRWEEN SCIENCE	1 year	2025-08-20
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	2025-08-20
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
19		SIGNAL ANALYZER (9 kHz ~ 30 GHz)	FSV30	100757	ROHDE&SCHWARZ	1 year	2025-08-19
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	2025-08-19
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	2025-08-19
31		Moduleation Analyzer	8901B	3749A05878	HP	1 year	2025-08-19
32		LISN	KNW-407	8-1430-1	Kyoritsu	1 year	2025-08-20
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