

Dates of Tests: July 13, 2026 ~ Sep 22, 2026
Test Site : LTA CO., LTD.

CERTIFICATION OF COMPLIANCE

FCC ID.

2BR2ZAIR7X

APPLICANT

Airstandard Co., Ltd

Equipment Class	:	Digital Transmission System (DTS)
Manufacturing Description	:	RFID Reader
Manufacturer	:	Airstandard Co., Ltd
Model name	:	Air7X
Additional Model name	:	Air71, Air72, Air73, Air74, Air75, Air76
Test Device Serial No.:	:	Identical prototype
Rule Part(s)	:	FCC Part 15.247 Subpart C ; ANSI C63.10 - 2020
Frequency Range	:	2402 ~ 2480 MHz – BT BLE 902.75 ~ 927.25 MHz - RFID/USN Wireless
Max. Output Power	:	0.0056 W – BT BLE 0.869 W - RFID/USN Wireless
Data of issue	:	Sep 22, 2026

This test report is issued under the authority of:



Eun-Hwan Jung, Manager

The test was supervised by:



Jae-Humm Yeon, Test Engineer

TABLE OF CONTENTS

1. GENERAL INFORMATION ----- 3

2. INFORMATION ABOUT TEST ITEM ----- 4

3. TEST REPORT ----- 5

 3.1 SUMMARY OF TESTS ----- 5

 3.2 TECHNICAL CHARACTERISTICS TEST ----- 6

 3.2.1 RADIATED SPURIOUS EMISSIONS----- 6

APPENDIX

 APPENDIX TEST EQUIPMENT USED FOR TESTS ----- 15

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	2027-02-27	FCC CAB
VCCI	JAPAN	C-14948	2026-09-10	VCCI registration
VCCI	JAPAN	T-12416	2026-09-10	VCCI registration
VCCI	JAPAN	R-14483	2026-10-15	VCCI registration
VCCI	JAPAN	G-10847	2027-12-13	VCCI registration
IC	CANADA	5799A-1	2026-08-05	IC filing

2. Information about test item

2-1 Client & Manufacturer

Client Company name : Airstandard Co., Ltd
 Address : 3-Room 508, 120, Gunpocheomdansaneop 2-ro, Gunpo-si, Gyeonggi-do,
 Republic of Korea
 Tel / Fax : TEL No : +82- 010-5526-0605 / FAX No : -
 Manufacturer : Airstandard Co., Ltd
 Address : 3-Room 508, 120, Gunpocheomdansaneop 2-ro, Gunpo-si, Gyeonggi-do,
 Republic of Korea
 Tel / Fax : TEL No : +82- 010-5526-0605 / FAX No : -

2-2 Equipment Under Test (EUT)

Model name : Air7X
 Serial number : Identical prototype
 Date of receipt : July 13, 2026
 EUT condition : Pre-production, not damaged
 Antenna type : Linear Polarized Antenna (Max Gain : 4.71 dBi)
 Frequency Range : 2402 ~ 2480 MHz – BT BLE
 : 902.75 ~ 927.75 MHz - RFID/USN Wireless
 Type of Modulation : GFSK, ASK
 Power Source : DC 3.65 V

2-3 Tested frequency

	LOW	MID	HIGH
Frequency (MHz) - BLE	2402	2440	2480
Frequency (MHz) – RFID/USN Wireless	902.75	915.25	927.25

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/A¹⁾ : 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

Contains Modules FCC ID : 2BR2ZAIR7X unit complies with the requirement of §15.203.

The antenna type is Linear Polarized 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

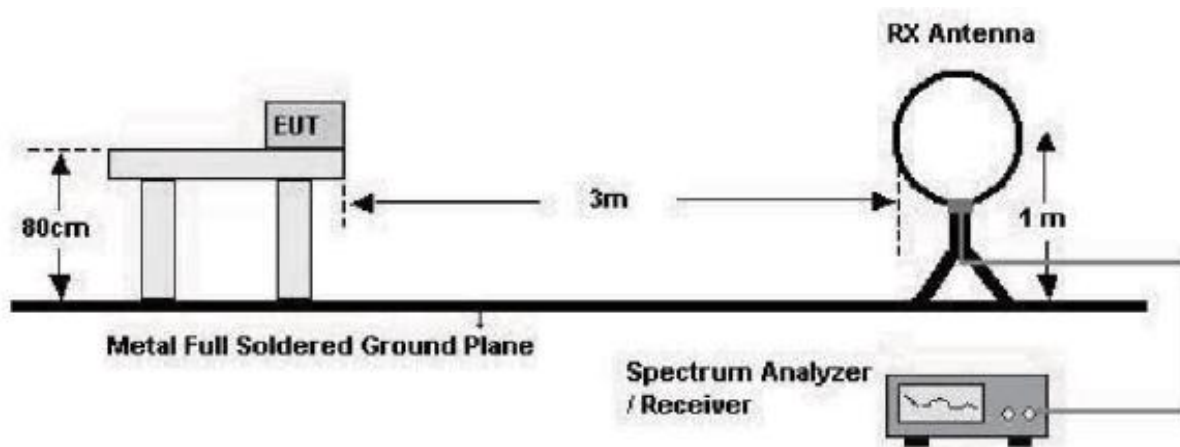
Sweep = auto

Duty Cycle: 99%

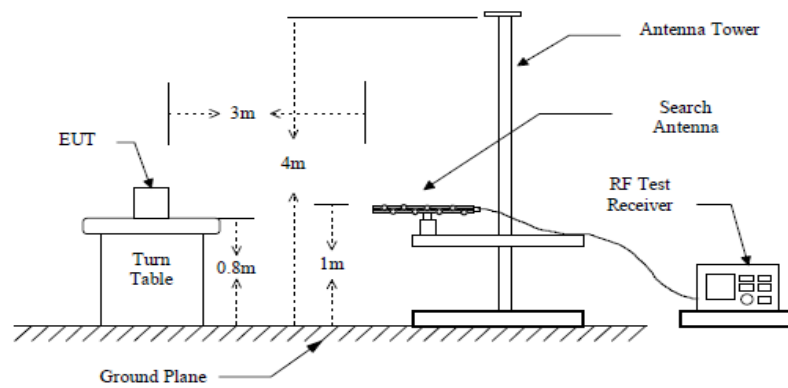
The EUT was configured to transmit continuously during the radiated emissions test. Since the transmit duty cycle was approximately 99%, no duty-cycle correction was applied to the measured radiated emission results.

Duty Cycle Correction Factor: 0 dB

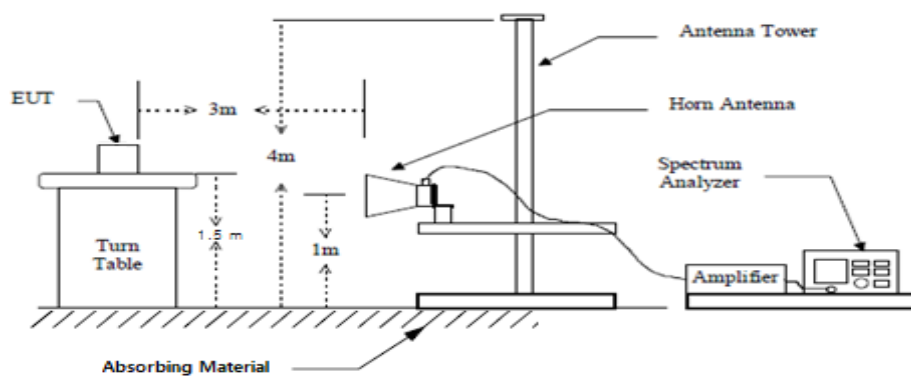
below 30 MHz



below 1 GHz (30 MHz to 1 GHz)



above 1 GHz



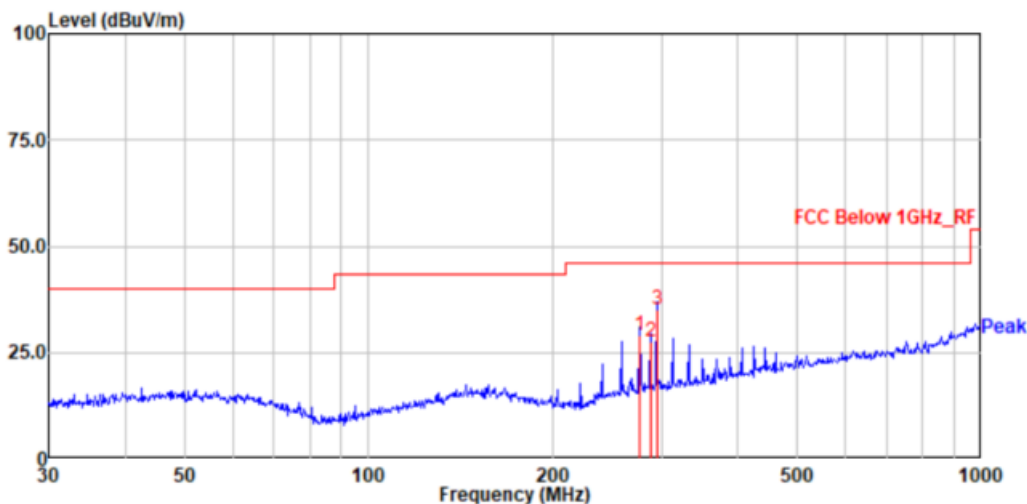
Measurement Data: Complies

- 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)

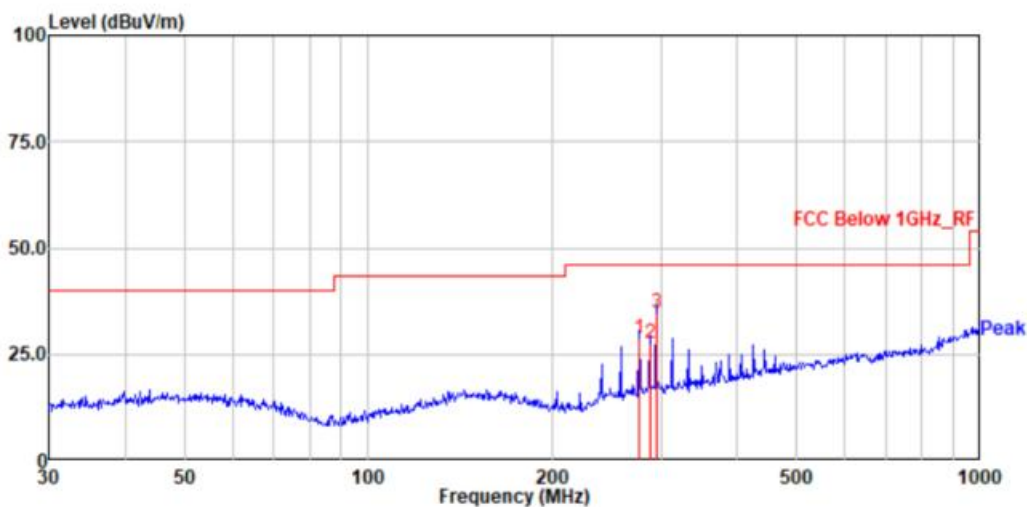
Frequency (MHz)	Limit (uV/m) @ 3 m
0.009 ~ 0.490	2400/F(kHz) (@ 300 m)
0.490 ~ 1.705	24000/F(kHz) (@ 30 m)
1.705 ~ 30	30(@ 30 m)
30 ~ 88	100 **
88 ~ 216	150 **
216 ~ 960	200 **
Above 960	500

** 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 BT BLE

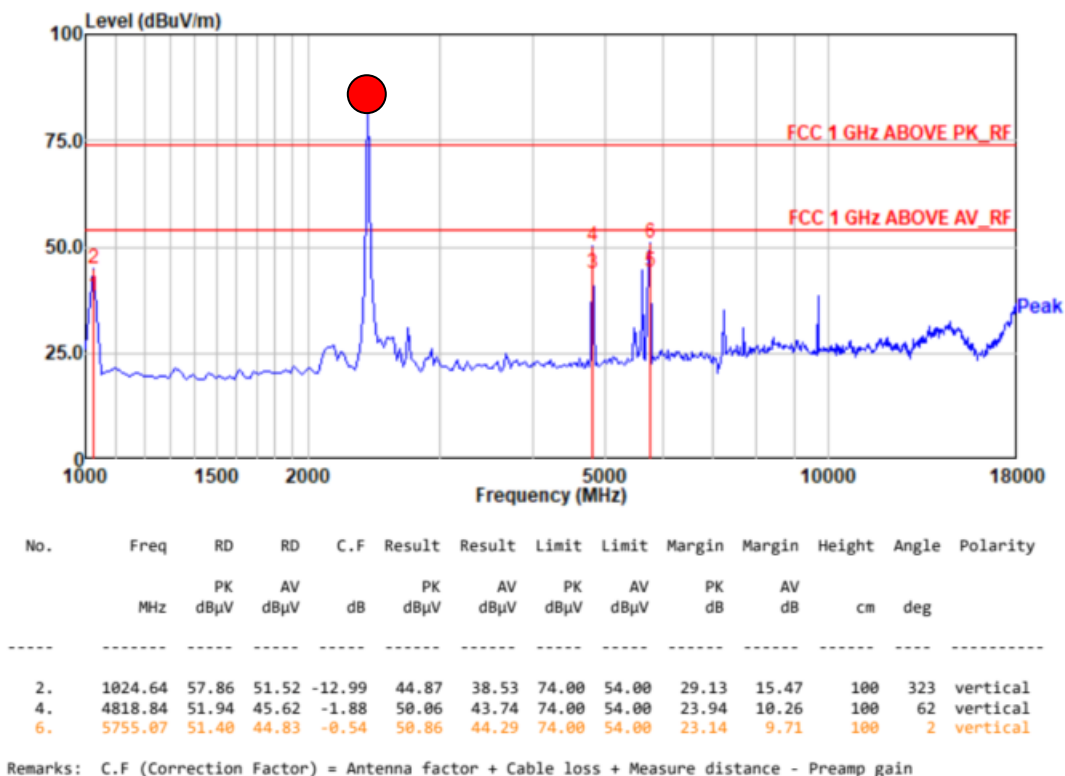
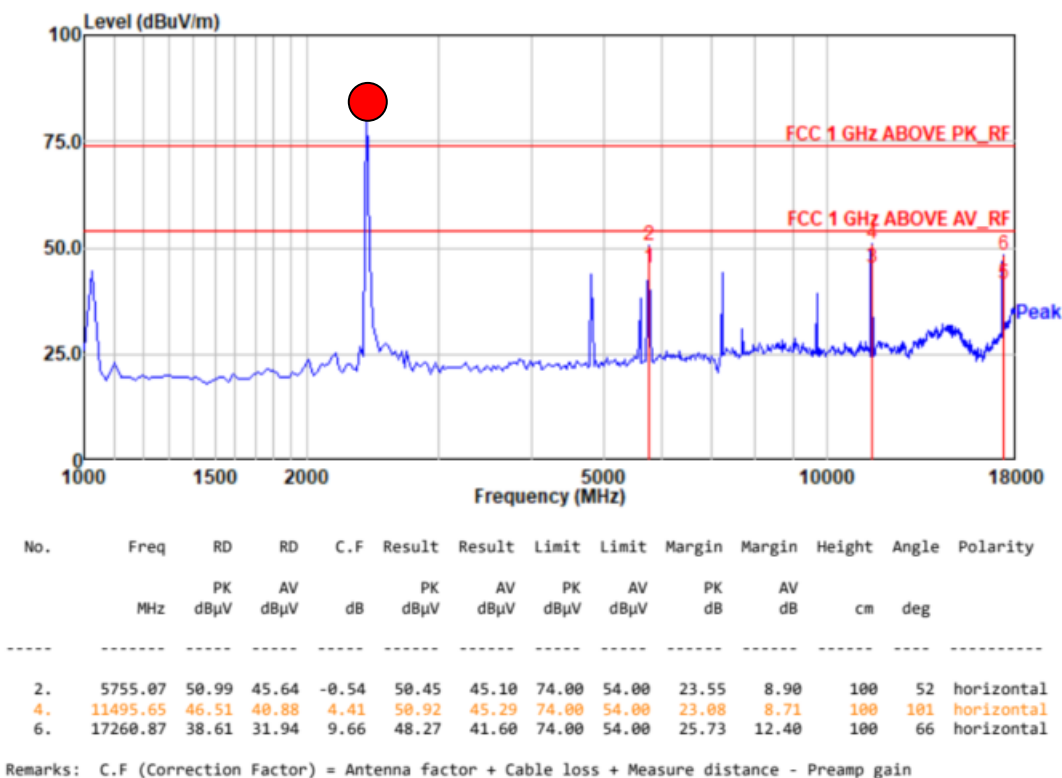
No.	Freq MHz	Reading dBμV	C.F dB	Result QP dBμV/m	Limit dBμV/m	Margin dB	Height cm	Angle deg	Polarity
1.	277.09	39.57	-10.59	28.98	46.00	17.02	100	342	vertical
2.	287.99	37.64	-10.20	27.44	46.00	18.56	100	336	vertical
3.	295.15	44.99	-9.99	35.00	46.00	11.00	100	326	vertical

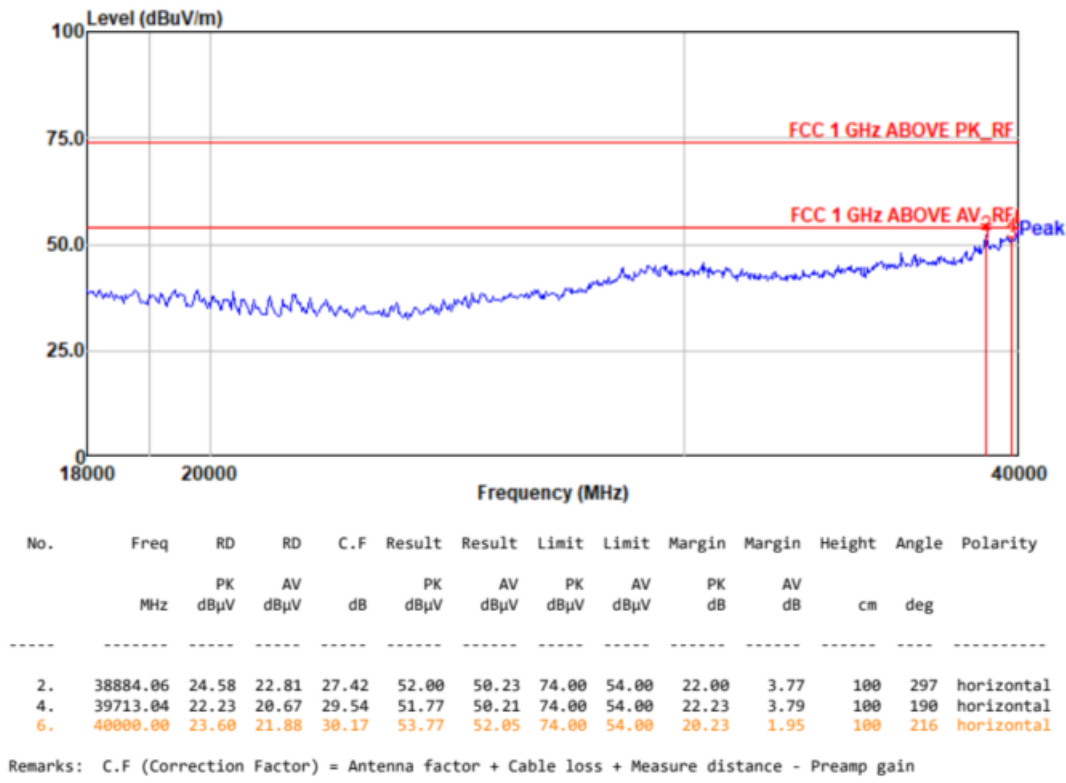
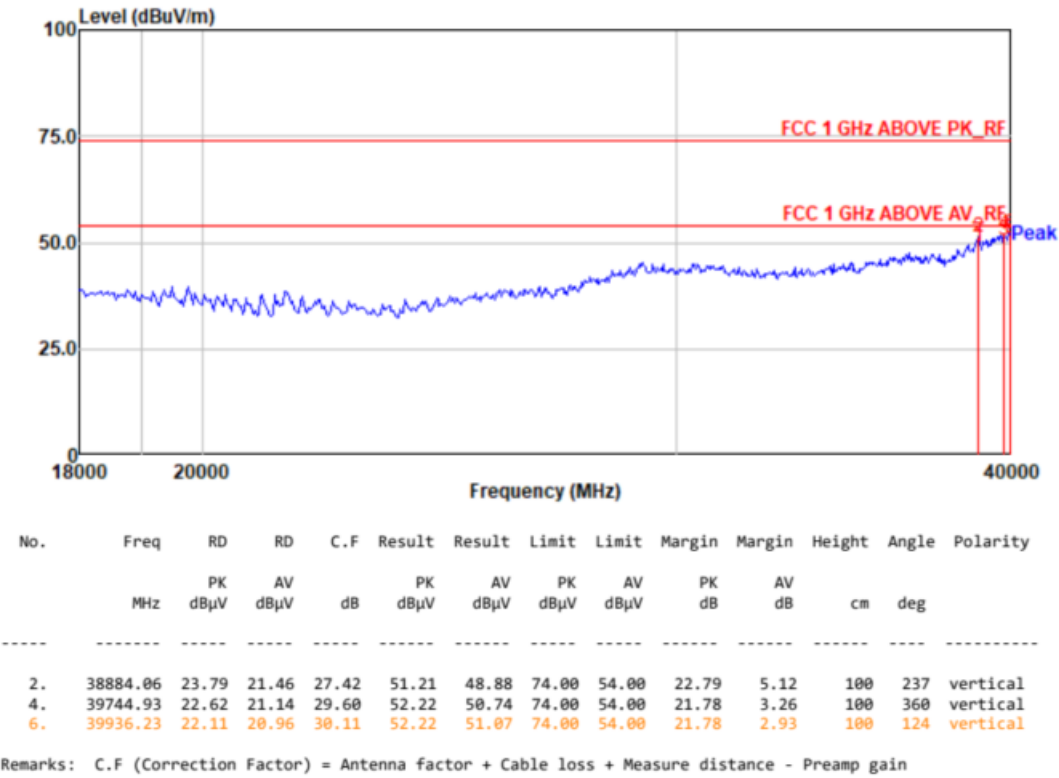
Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain

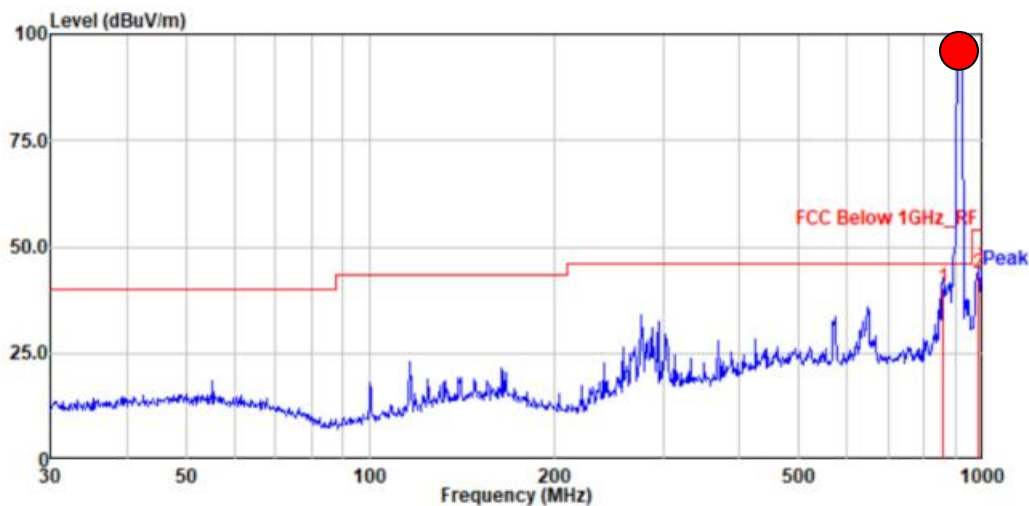


No.	Freq MHz	Reading dBμV	C.F dB	Result QP dBμV/m	Limit dBμV/m	Margin dB	Height cm	Angle deg	Polarity
1.	277.09	39.22	-10.59	28.63	46.00	17.37	100	332	horizontal
2.	287.99	37.56	-10.20	27.36	46.00	18.64	100	307	horizontal
3.	295.15	44.83	-9.99	34.84	46.00	11.16	100	332	horizontal

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

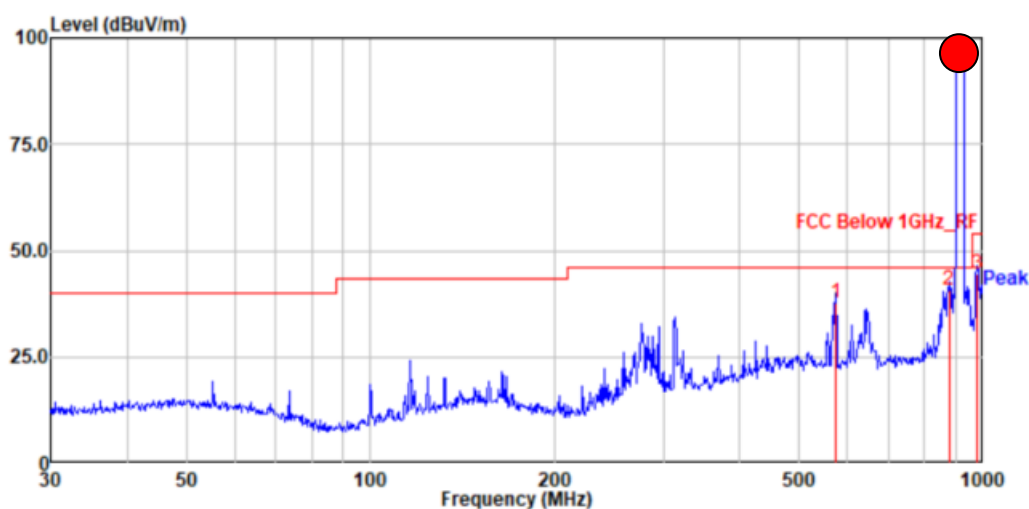




Radiated Emissions RFID/USN Wireless

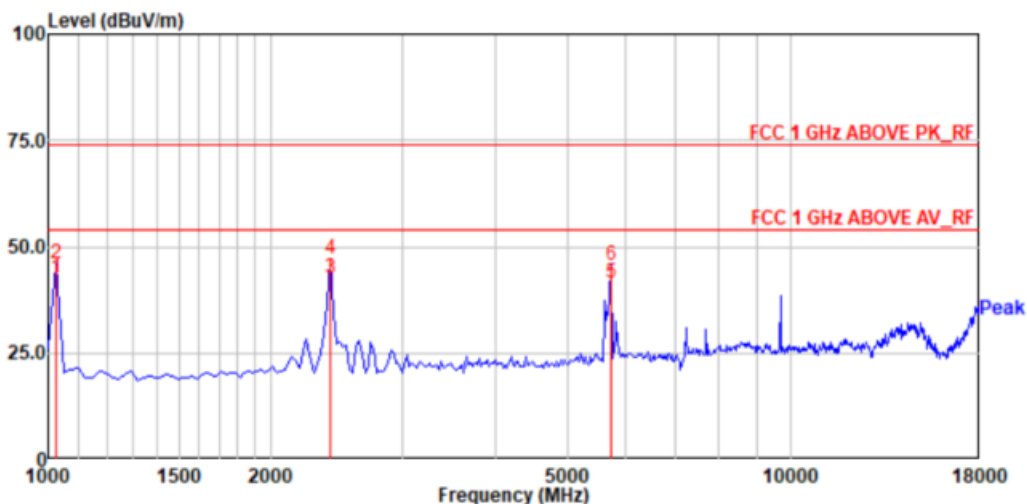
No.	Freq MHz	Reading dBμV	C.F dB	Result QP dBμV/m	Limit dBμV/m	Margin dB	Height cm	Angle deg	Polarity
1.	860.04	41.70	-1.15	40.55	46.00	5.45	100	194	vertical
2.	982.62	40.13	3.64	43.77	54.00	10.23	100	321	vertical
3.	1000.00	40.58	4.64	45.22	54.00	8.78	100	208	vertical

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



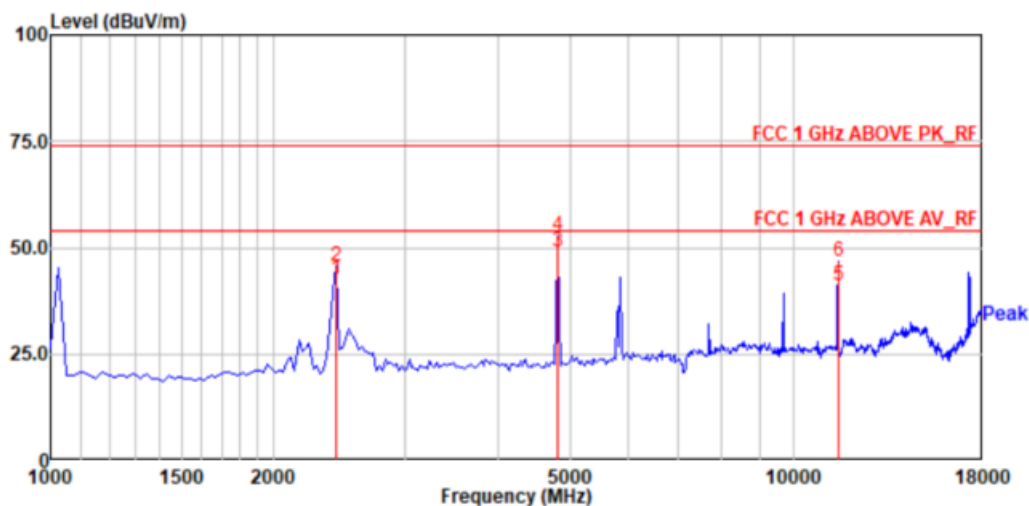
No.	Freq MHz	Reading dBμV	C.F dB	Result QP dBμV/m	Limit dBμV/m	Margin dB	Height cm	Angle deg	Polarity
1.	572.61	42.38	-4.53	37.85	46.00	8.15	100	83	horizontal
2.	878.32	41.07	-0.45	40.62	46.00	5.38	100	68	horizontal
3.	975.75	41.08	3.29	44.37	54.00	9.63	100	134	horizontal

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



No.	Freq	RD	RD	C.F	Result	Result	Limit	Limit	Margin	Margin	Height	Angle	Polarity
	MHz	PK	AV	dB	PK	AV	PK	AV	PK	AV	cm	deg	
		dBμV	dBμV		dBμV	dBμV	dBμV	dBμV	dB	dB			
2.	1024.64	59.12	55.44	-12.99	46.13	42.45	74.00	54.00	27.87	11.55	100	317	horizontal
4.	2404.35	55.28	50.68	-7.95	47.33	42.73	74.00	54.00	26.67	11.27	100	351	horizontal
6.	5730.44	46.32	42.08	-0.57	45.75	41.51	74.00	54.00	28.25	12.49	100	1	horizontal

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



No.	Freq	RD	RD	C.F	Result	Result	Limit	Limit	Margin	Margin	Height	Angle	Polarity
	MHz	PK	AV	dB	PK	AV	PK	AV	PK	AV	cm	deg	
		dBμV	dBμV		dBμV	dBμV	dBμV	dBμV	dB	dB			
2.	2428.99	53.76	50.41	-7.94	45.82	42.47	74.00	54.00	28.18	11.53	100	158	vertical
4.	4818.84	54.84	50.90	-1.88	52.96	49.02	74.00	54.00	21.04	4.98	100	280	vertical
6.	11495.65	42.42	36.73	4.41	46.83	41.14	74.00	54.00	27.17	12.86	100	81	vertical

Remarks: C.F (Correction Factor) = Antenna factor + Cable loss + Measure distance - 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	WEINSCHTEL	1 year	2027-03-04
2		ATTENUATOR	CL5418	66-30-33	AEROFLEX/WEINSCHTEL	1 year	2026-08-19
3		POWER DIVIDER	1506A	TU981	WEINSCHTEL	1 year	2027-03-04
4		Digital Multi Meter	34401A	US36062141	H.P	1 year	2027-03-06
5	■	DC Power Supply	E3632A	KR7530599 8	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	GB3248170 2	H.P	1 year	2027-03-05
9	■	Power Sensor	8481A	3318A94972	H.P	1 year	2026-08-18
10		SIGNAL GENERATOR	83711B	US34490456	H.P	1 year	2027-03-05
11	■	VECTOR SIGNAL GENERATOR	SMBV100A	255081	ROHDE&SCHWARZ	1 year	2027-03-04
12		Drop tester	DT-1800	LS06053	LTA	—	N/A
13		TEMP HUMIDITY CHAMBER	NONE	LTAS06041	—	1 year	2027-03-04
14		Constant Temp & Humidity Test Chamber	SJ-503H	SJ10051301	—	1 year	2026-08-18
15	■	SIGNAL ANALYZER (10 Hz ~ 40 GHz)	FSV40	101259	ROHDE&SCHWARZ	1 year	2027-03-05
16		SIGNAL ANALYZER (10 Hz~40 GHz)	FSV40	101367	ROHDE&SCHWARZ	1 year	2026-11-17
17		WIDEBAND RADIO COMMUNICATION TESTER	CMW500	122216	ROHDE&SCHWARZ	1 year	2027-03-04
18		Active Loop Antenna	HFH2-Z2	—	ROHDE&SCHWARZ	2 year	2027-01-14
19	■	Signal Generator (~3.2 GHz)	8648C	3623A02597	HP	1 year	2027-03-04
20	■	EMI Test Receiver (~7 GHz)	ESCI7	100772	R&S	1 year	2026-08-18
21	■	RF Amplifier (~1.3 GHz)	8447D OPT 010	2944A07684	HP	—	N/A
22	■	RF Amplifier (1~26.5 GHz)	8449B	3008A02126	HP	1 year	2027-03-04
23	■	Horn Antenna (1~18 GHz)	3115	00055005	ETS	1 year	2027-03-11
24	■	DRG Horn (Small)	3116B	81109	ETS-Lindgren	2 year	2027-03-19

25	■	TRILOG Antenna	VULB 9160	9160-3237	SCHWARZBECK	—	N/A
26		Mini-Circuits Splitter	ZFSC-2-2500	SF617800326	Mini-Circuits	-	-
27		Audio Analyzer	8903B	3729A18901	HP	1 year	2026-08-18
28		Modulation Analyzer	8901B	3749A05878	HP	1 year	2026-08-19
29		LISN	KNW-407	8-1430-1	Kyoritsu	1 year	2026-08-18
30		UNIVERSAL RADIO COMMUNICATION TESTER	CMU200	106243	R&S	1 year	2027-03-04
31		Highpass Filter	WHKX1.5/15G-10SS	74	Wainwright Instruments	1 year	2027-03-05
32		Highpass Filter	WHKX3.0/18G-10SS	118	Wainwright Instruments	1 year	2027-03-05
33		POWER MODULE(OSP150 BASE UNIT)	OSP150	100935	R&S	1 year	2027-03-05
34	■	Cable	RG400	-	HUBER SUHNER	1 year	2026-10-31