

Nemko Korea Co., Ltd.

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FCC & IC EVALUATION REPORT FOR CERTIFICATION

Project No. : NK-24-R-180	Dates of receipt : April 25, 2024
Applicant : TAE YOUNG E&T Co., LTD. 908, Ungsang-daero, Yangsan-si, Gyeongsangnam-do, 50537, Korea, Republic of Attn : Mr. Minsu, Goo	Dates of Issue : October 13, 2025 Test Site : Nemko Korea Co., Ltd.

FCC ID :	2BRMJ-UTPLUS
IC :	34443-UTPLUS
Applicant :	TAE YOUNG E&T Co., LTD.
Brand Name :	

Model:	Primus UT PLUS
Additional Model(s):	TY12-UCE H, TY12-UCE9T, TY12-UCE9N, TY12-UCE11T, TY12-UCE11N, TY12-UCE13T, TY12-UCE13N
EUT Type:	Water Ionizer
Classification:	FCC Part 15 Low Power Communication Device Transmitter
Date of Test:	June 24, 2025 ~ September 2, 2025
Applied Standard:	FCC 47 CFR Part 15.225 RSS-Gen Issue 5, RSS-210 Issue 11

The device bearing the brand name and model specified above has been shown to comply with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.10-2020. The client should not use it to claim product endorsement by TAF or any government agencies. The test results in the report only apply to the tested sample.

I attest to the accuracy of data and all measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.



Tested By : Hyeonseung Lee
Test Engineer

Reviewed By : Hoonpyo Lee
Technical Manager

Revision History

Rev.	Issue Date	Revisions	Revised By
00	October 13, 2025	Initial issue	Hyeonseung Lee

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1. INTRODUCTION

1.1 Test facility

The measurement procedure described in American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz (ANSI C63.4-2014), the American National Standard for Testing Unlicensed Wireless Devices (ANSI C63.10-2020) was used in determining radiated and conducted emissions emanating.

These measurement tests were conducted at **Nemko Korea Co., Ltd.**

The site address 165-51, Yurim-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, 17042, Rep. of Korea.

1.2 Accreditation and listing

Accreditation type		Accreditation number
	CAB Accreditation for DOC	Designation No. KR0026
	KOLAS Accredited Lab. (Korea Laboratory Accreditation Scheme)	Registration No. KT155
	Canada IC Registered site	Site No. 29506
	VCCI registration site(RE/CE/Telecom CE)	Member No. 2118
	EMC CBTL	TL124
	KCC(RRL)Designated Lab.	Registration No. KR0026

2. EUT INFORMATION & TEST CONDITIONS

2.1 EUT Information

2.1.1 Specifications

EUT Type	Water Ionizer
Model Name	a) Primus UT PLUS
Variant Model	b) TY12-UCE H, c) TY12-UCE9T, c) TY12-UCE9N, d) TY12-UCE11T, d) TY12-UCE11N, e) TY12-UCE13T, e) TY12-UCE13N
Frequency of Operation	13.56 MHz
Modulation type	ASK
Number of Channels	1 CH
Antenna Specification	Internal type
EUT Rated Voltage	a) AC (100 – 240) V, 50/60 Hz, 270 W b) AC (100 – 240) V, 50/60 Hz, 140 W c) AC (100 – 240) V, 50/60 Hz, 110 W d) AC (100 – 240) V, 50/60 Hz, 100 W e) AC (100 – 240) V, 50/60 Hz, 90 W
Tested Voltage	AC 120 V, 60 Hz
Remarks	-

2.2 Operation During Test

For continuous measurement of the RFID signal during the test, a filter with an attached RFID tag was installed inside the EUT, and the test was conducted accordingly.

2.2.1 Additional Information Related to Testing

The cable and attenuator loss from 9 kHz to 1 GHz was reflected in spectrum analyzer with correction factor for all conducted testing.

2.2.2 Worst-case Configuration and Mode

Radiated emission below 1GHz was performed with the EUT set to transmit on the X-axis as a fixed product.

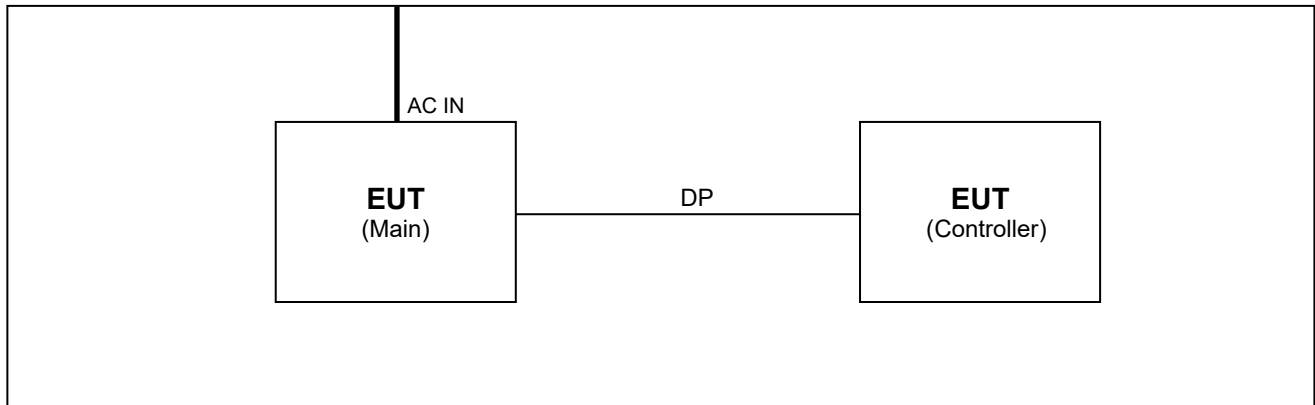
2.2.3 Additional model covered by this report

Model Distinction
N/A

2.3 Support Equipment

EUT	TAE YOUNG E&T Co., LTD. Model : Primus UT PLUS	S/N: N/A
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2.4 Setup Drawing



Main Power 
Signal 

3. ANTENNA REQUIREMENTS

Measurement and determination of electromagnetic emissions (EME) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission under FCC part 15 and RSS-Gen.

§15.203 of the FCC Rules part 15 Subpart C

: 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.

RSS-Gen Section 6.8

: The applicant for equipment certification shall provide a list of all antenna types that may be used with the transmitter, where applicable (i.e. for transmitters with detachable antenna), indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna. The test report shall demonstrate the compliance of the transmitter with the limit for maximum equivalent isotropically radiated power (e.i.r.p.) specified in the applicable RSS, when the transmitter is equipped with any antenna type, selected from this list.

For expediting the testing, measurements may be performed using only the antenna with highest gain of each combination of transmitter and antenna type, with the transmitter output power set at the maximum level. However, the transmitter shall comply with the applicable requirements under all operational conditions and when in combination with any type of antenna from the list provided in the test report (and in the notice to be included in the user manual, provided below)

The test report shall state the RF power, output power setting and spurious emission measurements with each antenna type that is used with the transmitter being tested.

Immediately following the above notice, the manufacturer shall provide a list of all antenna types which can be used with the transmitter, indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna type.

The transmitter has permanently attached PCB embedded antenna (Internal antenna) on board.

4. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specification:

Name of Test	FCC Paragraph No.	IC Paragraph No.	Test Condition	Result	Remark
20dB Bandwidth	15.215(c) 2.1049	RSS-Gen (6.7)	Conducted	Complies	-
Occupied Bandwidth	-	RSS-Gen (6.7)		Complies	
Radiated Emission	15.225(b)(c)(d), 15.209	RSS-210 B.6 (a) RSS-Gen (8.9)	Radiated	Complies	-
Frequency Stability Tolerance	15.225(e)	RSS-210 B.6 (b)	Conducted	Complies	-
AC Line Conducted Emission	15.207	RSS-Gen (8.8)	Line Conducted	Complies	-

5. TEST METHODOLOGY

1. FCC CFR 47 Part 2.
2. FCC CFR 47 Part 15.
3. KDB 414788 D01 Radiated Test Site v01r01.
4. RSS-Gen Issue 5
5. RSS-210 Issue 11
6. ANSI C63.10-2020.

6. DESCRIPTION OF TESTS

6.1 20 dB Bandwidth / Occupied Bandwidth

Test Setup



Test Measurement Method

ANSI C63.10-2020, Section 6.9.2
RSS-Gen section 6.7

Limit

According to §15.215(c), Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

According to §15.225, Operation within the band 13.110MHz – 14.010 MHz

According to RSS-Gen (6.7), The emission bandwidth (x dB) is required, which is defined as the frequency range between two points, one at the lowest frequency below and one at the highest frequency above the carrier frequency, at which the maximum power level of the transmitted emission is attenuated x dB below the maximum in-band power level of the modulated signal, where the two points are on the outskirts of the in-band emission.

Test Procedure

- 20 dB Bandwidth

EUTs 20 dB bandwidth is measured at channels with a spectrum analyzer connected to the antenna terminal while the EUTs operating at its maximum power control level. The spectrum analyzer setting is as follows.

RBW = 1-5% of emission BW

VBW > 3 x RBW

Detector = Peak

Trace mode = max hold

Sweep = auto couple

Allow trace to fully stabilize.

The bandwidth measurement function on the spectrum analyzer is used to measure the 20 dB bandwidth.

- Occupied Bandwidth

EUTs occupied bandwidth is measured at channels with a spectrum analyzer connected to the antenna terminal while the EUTs operating at its maximum power control level.

The spectrum analyzer setting is as follows.

RBW = 1-5% of emission BW

VBW > 3 x RBW

Detector = Peak

Trace mode = max hold

Sweep = auto couple

Allow trace to fully stabilize.

The bandwidth measurement function on the spectrum analyzer is used to measure the Occupied bandwidth.

Note: It may be necessary to repeat the measurement a few times until the RBW and VBW are in compliance with the above requirement.

6.2 Radiated Emissions

Test Measurement Method

ANSI C63.10-2020, Section 6.4, 6.5

Limit

§15.225

- (a) The field strength of any emissions within the band 13.553-13.567 MHz shall not exceed 15,848 microvolts/meter at 30 meters.
- (b) Within the bands 13.410-13.553 MHz and 13.567-13.710 MHz, the field strength of any emissions shall not exceed 334 microvolts/meter at 30 meters.
- (c) Within the bands 13.110-13.410 MHz and 13.710-14.010 MHz the field strength of any emissions shall not exceed 106 microvolts/meter at 30 meters.
- (d) The field strength of any emissions appearing outside of the 13.110-14.010 MHz band shall not exceed the general radiated emission limits in § 15.209.

RSS-210 B.6 (a)

- i. 15.848 mV/m (84 dB μ V/m) at 30 m, within the band 13.553-13.567 MHz
- ii. 334 μ V/m (50.5 dB μ V/m) at 30 m, within the bands 13.410-13.553 MHz and 13.567-13.710 MHz
- iii. 106 μ V/m (40.5 dB μ V/m) at 30 m, within the bands 13.110-13.410 MHz and 13.710-14.010 MHz
- iv. RSS-Gen general field strength limits for frequencies outside the band 13.110-14.010 MHz

Test Procedure

The measurement was performed at the test site that is specified in accordance with ANSI C63.10-2020. The spurious emission was scanned from 9 kHz to 30 MHz using Loop Antenna and 30 to 1000 MHz using Trilog broadband test antenna were used.

For emissions testing at below 1GHz, The test equipment was placed on turntable with 0.8 m above ground. Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The EUT, cable, wire arrangement and mode of operation that has the highest amplitude relative to the limit was selected. Then, the turn table was rotated from 0° to 360° and an antenna mast was moved from 1 m to 4 m height to maximize the suspected highest amplitude signal. The final maximized level was recorded.

At frequencies below 1000 MHz, measurements performed using the CISPR quasi-peak detection.

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009–0.490	2400/F(kHz)	300
0.490–1.705	24000/F(kHz)	30
1.705–30.0	30	30
30–88	100**	3
88–216	150**	3
216–960	200**	3
Above 960	500	3

Radiated Emissions Limits per 47 CFR 15.209(a) & RSS-Gen (8.9)

** 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., §§ 15.231 and 15.241.

Notes:

1. $f < 30$ MHz; extrapolation factor of 40 dB/decade of distance.

Distance factor(dB) = $40\log(\text{Measurement distance in meters}/\text{Specification distance in meters})$

$f \geq 30$ MHz; extrapolation factor of 20 dB/decade of distance.

Distance factor(dB) = $20\log(\text{Measurement distance in meters}/\text{Specification distance in meters})$

2. When below 30 MHz frequency range measurement, all orientations about parallel, perpendicular and ground-parallel were investigated then reported and the worse orientations of Horizontal and Vertical were set for final test. (Horizontal = Parallel, Vertical = Perpendicular)

3. Although these tests were performed other than open field test site, adequate comparison measurements were confirmed against 30 m open are test site.

Therefore, sufficient tests were mad to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field base on KDB 414788.

6.3 Frequency Stability

Test Setup



Test Measurement Method

ANSI C63.10-2020, Section 6.8

Limit

§15.225

The frequency tolerance of the carrier signal shall be maintained within $\pm 0.01\%$ of the operating frequency over a temperature variation of -20 degrees to $+50$ degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.

RSS-210 B.6 (b)

The carrier frequency stability shall not exceed ± 100 ppm

6.4 AC Line Conducted Emissions

Test Measurement Method

ANSI C63.10-2020, Section 6.2

Limit

§15.207(a) & 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 50µH/50ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency of emission (MHz)	Conducted limit (dBµV)	
	Quasi-peak	Average
0.15 to 0.5	66 to 56*	56 to 46*
0.5 to 5	56	46
5 to 30	60	50

*Decreases with the logarithm of the frequency.

Test Procedure

The Line conducted emission test facility is located inside a 4 x 7 x 2.5 meter shielded enclosure.

It is manufactured by EM engineering. The shielding effectiveness of the shielded room is in accordance with MIL-STD-285 or NSA 65-6. A 1 m x 1.5 m wooden table 0.8 m height is placed 0.4 m away from the vertical wall and 1.5 m away from the side of wall of the shielded room. Rohde & Schwarz (ENV216) of the 50 ohm/50 µH Line Impedance Stabilization Network (LISN) are bonded to the shielded room. The EUT is powered from the Rohde & Schwarz LISN. Power to the LISNs are filtered by high-current high insertion loss Power line filters. The purpose of filter is to attenuate ambient signal interference and this filter is also bonded to shielded enclosure. All electrical cables are shielded by tinned copper zipper tubing with inner diameter of 1 / 2 ". If DC power device, power will be derived from the source power supply it normally will be powered from and this supply lines will be connected to the LISNs, All interconnecting cables more than 1 meter were shortened by non-inductive bundling (serpentine fashion) to a 1 meter length. Sufficient time for EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The RF output of the LISN was connected to the spectrum analyzer to determine the frequency producing the maximum EME from the EUT. The spectrum was scanned from 150 kHz to 30 MHz with 200 msec sweep time. The frequency producing the maximum level was re-examined using the EMI test receiver. (Rohde & Schwarz ESCI). The detector functions were set to CISPR quasi-peak mode & average mode. The bandwidth of receiver was set to 9 kHz. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each EME emission. Each emission was maximized by; switching power lines; varying the mode of operation or resolution; clock or data

exchange speed; scrolling H pattern to the EUT and of support equipment, and powering the monitor from the floor mounted outlet box and computer aux AC outlet, if applicable; whichever determined the worst case emission.

Each EME reported was calibrated using the R&S signal generator.

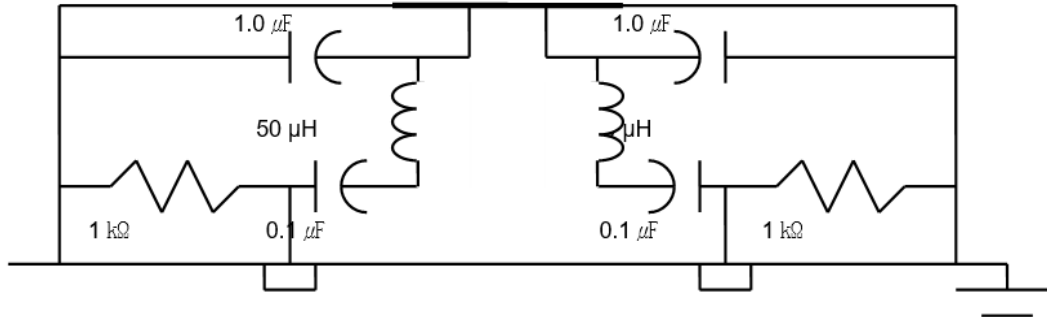


Fig. 2. LISN Schematic Diagram

7. TEST DATA

7.1 20 dB Bandwidth / Occupied Bandwidth

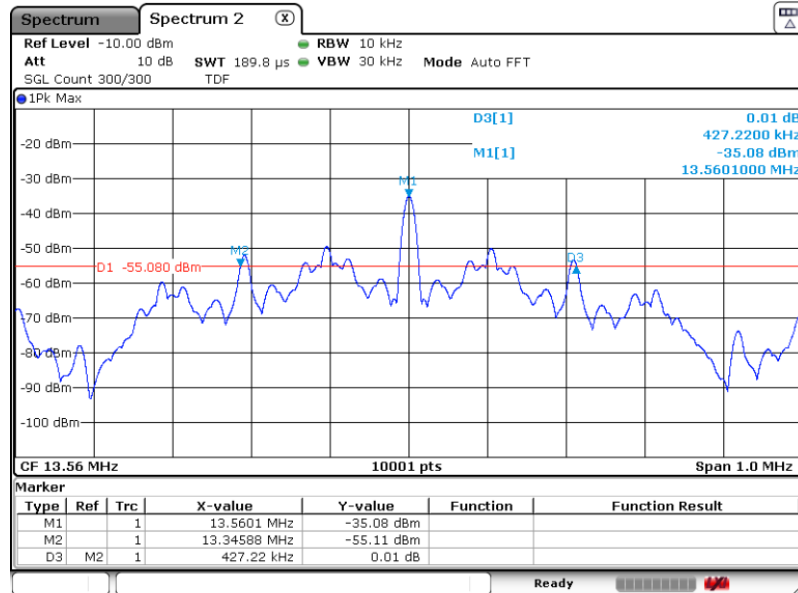
FCC §15.215(c)
RSS-Gen (6.7)

Result

Frequency (MHz)	20 dB Bandwidth (MHz)	Occupied Bandwidth (MHz)
13.56	0.427	0.561

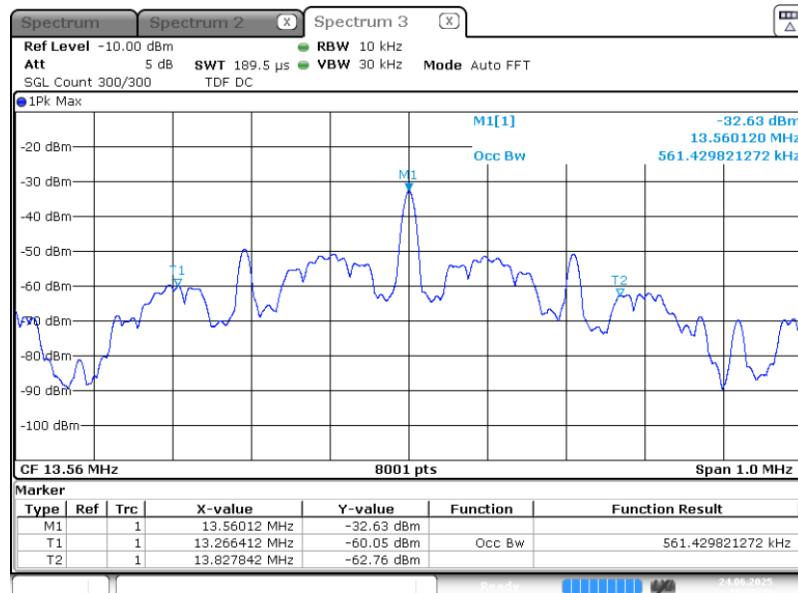
PLOTS OF EMISSIONS

20 dB Bandwidth



Date: 25.AUG.2025 18:22:25

Occupied Bandwidth



Date: 24.JUN.2025 15:38:23

7.2 Radiated Emissions

FCC §15.225(b)(c)(d), §15.209
RSS-Gen (8.9), RSS-210 B.6 (a)

Result

Test Mode : Fundamental and spurious emission (13.110 MHz to 14.010 MHz)

Frequency (MHz)	Reading (dBμV)	Pol* (H/V)	Mode*	AF+CL+Amp (dB)**	Distance Factor (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
11.840	1.92	V	QP	21.23	40.00	-16.85	29.54	46.39
13.288	1.29	H	QP	21.4	40.00	-17.31	40.51	57.82
13.444	1.66	H	QP	21.41	40.00	-16.93	50.47	67.40
13.560	23.06	H	QP	21.42	40.00	4.48	84.00	79.52
13.560	18.31	V	QP	21.42	40.00	-0.27	84.00	84.27
13.640	1.26	H	QP	21.43	40.00	-17.31	50.47	67.78
13.716	1.16	V	QP	21.44	40.00	-17.40	40.51	57.91
14.820	1.11	V	QP	21.65	40.00	-17.24	29.54	46.78

Notes:

- *Pol. : H = Horizontal, V = Vertical, Mode : QP = Quasi-Peak
- **AF + CL + Amp. = Antenna Factor + Cable Loss + Amplifier.
- Measurement distance: 3 m
- Result(dBμV/m) = Reading + Antenna Factor + Cable Loss + Amplifier – Distance Factor
- Other spurious was under 20 dB below Fundamental.

Test Mode : Spurious emission (9 kHz to 30 MHz)

Frequency (MHz)	Reading (dBμV)	Pol* (H/V)	Mode*	AF+CL+Amp (dB)**	Distance Factor (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
0.541	9.04	H	QP	20.6	40.00	-10.36	32.95	43.30
10.567	5.84	V	QP	21.22	40.00	-12.94	29.54	42.48
26.449	1.32	V	QP	22.35	40.00	-16.33	29.54	45.87

Notes:

- *Pol. : H = Horizontal, V = Vertical, Mode : QP = Quasi-Peak
- **AF + CL + Amp. = Antenna Factor + Cable Loss + Amplifier.
- Measurement distance = 3 m
- Result(dBμV/m) = Reading + Antenna Factor + Cable Loss + Amplifier – Distance Factor
- Other spurious was under 20 dB below Fundamental.

Test Mode : Spurious emission (30 MHz to 1 000 MHz)

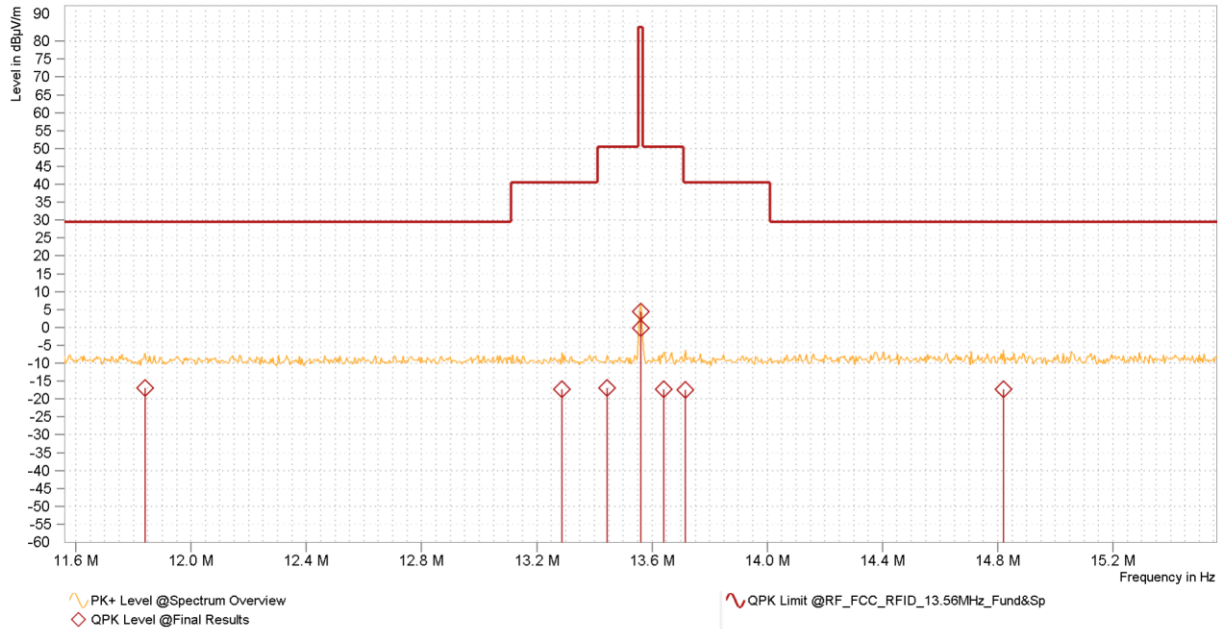
Frequency (MHz)	Reading (dBμV)	Pol* (H/V)	Mode*	AF+CL+Amp (dB)**	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
311.882	65.22	H	QP	-29.5	35.71	46.00	10.29
366.105	64.69	H	QP	-27.9	36.79	46.00	9.21
406.813	66.66	V	QP	-26.7	39.98	46.00	6.02
433.940	67.93	V	QP	-26.1	41.86	46.00	4.14
461.036	68.47	V	QP	-26.2	42.25	46.00	3.75
718.700	63.65	H	QP	-22.0	41.62	46.00	4.38

Notes:

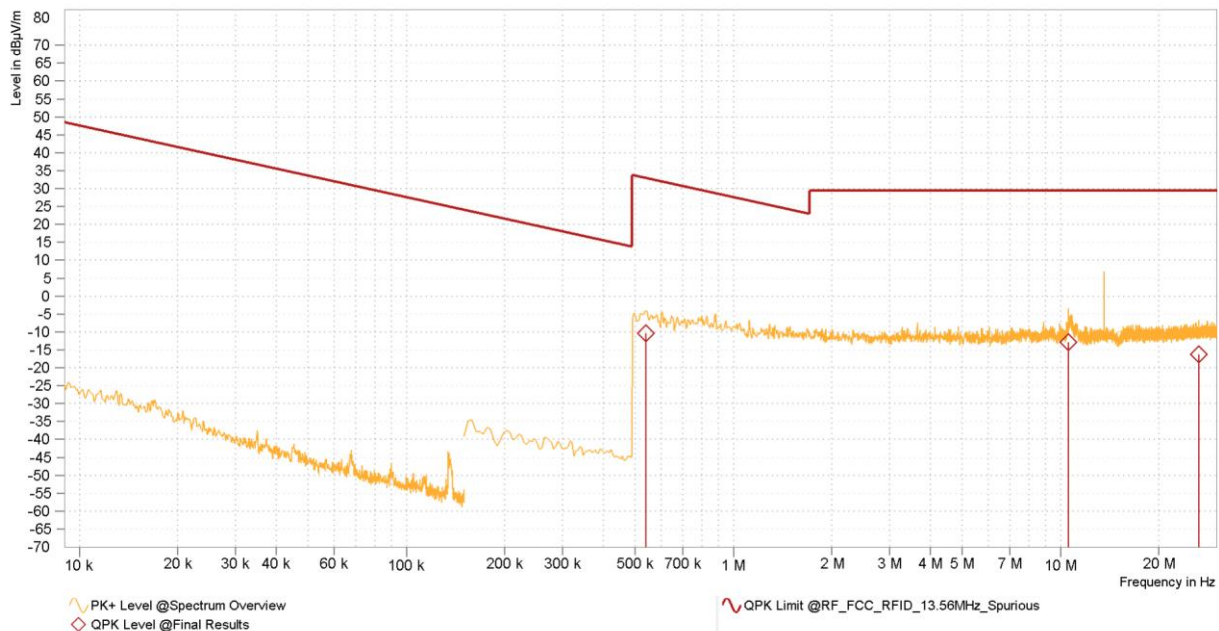
- The worst-case emission was reported.
- *Pol. : H = Horizontal, V = Vertical, Mode : PK = Peak, QP = Quasi-Peak
- **AF + CL + Amp. = Antenna Factor + Cable Loss + Amplifier.
- Measurements using CISPR quasi-peak mode below 1 GHz.
- The radiated emissions testing were made by rotating EUT through three orthogonal axes and rotating the receive antenna with horizontal, Vertical polarization. The worst data was recorded.
- The limit is on the FCC §15.209.

PLOTS OF EMISSIONS

Test Plot : Fundamental and spurious emission (13.110 MHz to 14.010 MHz)



Test Plot : Spurious emission (9 kHz to 30 MHz)



Test Plot : Spurious emission (30 MHz to 1 000 MHz)



7.3 Frequency Stability

FCC §15.225(e)
RSS-210 B.6 (b)

Result

Test Voltage (V)	Temperature (°C)	Maintaining Time	Measured Frequency (MHz)	Frequency Deviation		Limit (%)
				(Hz)	(%)	
120.00	50	Start UP	13.560 033	33.42	0.000 246	±0.01
		2 Minutes	13.560 042	42.43	0.000 313	
		5 Minutes	13.560 029	29.10	0.000 215	
		10 Minutes	13.560 033	32.89	0.000 243	
	40	Start UP	13.560 472	472.49	0.003 484	±0.01
		2 Minutes	13.560 430	430.21	0.003 173	
		5 Minutes	13.560 321	321.30	0.002 369	
		10 Minutes	13.560 421	420.87	0.003 104	
	30	Start UP	13.560 145	145.18	0.001 071	±0.01
		2 Minutes	13.560 081	80.55	0.000 594	
		5 Minutes	13.560 176	176.05	0.001 298	
		10 Minutes	13.560 132	131.74	0.000 972	
	20	Start UP	13.560 120	120.20	0.000 886	±0.01
		2 Minutes	13.560 068	68.40	0.000 504	
		5 Minutes	13.560 069	68.69	0.000 507	
		10 Minutes	13.560 076	76.21	0.000 562	
	10	Start UP	13.560 109	109.21	0.000 805	±0.01
		2 Minutes	13.560 115	115.25	0.000 850	
		5 Minutes	13.560 152	152.30	0.001 123	
		10 Minutes	13.560 081	81.34	0.000 600	
	0	Start UP	13.560 151	151.13	0.001 115	±0.01
		2 Minutes	13.560 104	103.53	0.000 763	
		5 Minutes	13.560 101	101.29	0.000 747	
		10 Minutes	13.560 149	148.70	0.001 097	
	-10	Start UP	13.560 200	200.21	0.001 476	±0.01
		2 Minutes	13.560 189	188.75	0.001 392	
		5 Minutes	13.560 175	175.41	0.001 294	
		10 Minutes	13.560 155	155.40	0.001 146	
	-20	Start UP	13.560 138	138.47	0.001 021	±0.01
		2 Minutes	13.560 170	169.92	0.001 253	
		5 Minutes	13.560 152	151.60	0.001 118	
		10 Minutes	13.560 116	116.04	0.000 856	
	-30	Start UP	13.560 414	413.64	0.003 050	±0.01
		2 Minutes	13.560 470	470.08	0.003 467	
		5 Minutes	13.560 478	477.61	0.003 522	
		10 Minutes	13.560 366	366.17	0.002 700	
102.00	20	Start UP	13.559 717	-282.83	-0.002 086	±0.01
		2 Minutes	13.560 334	334.12	0.002 464	
		5 Minutes	13.560 245	245.50	0.001 810	
		10 Minutes	13.559 605	-394.87	-0.002 912	
138.00	20	Start UP	13.560 155	154.68	0.001 141	±0.01
		2 Minutes	13.560 178	177.60	0.001 310	
		5 Minutes	13.560 104	104.13	0.000 768	
		10 Minutes	13.560 124	123.62	0.000 912	

7.4 AC Line Conducted

FCC §15.207

RSS-Gen(8.8)

Result

Final Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter
0.152488	---	42.27	55.33	13.06	15000.0	9.000	L1	ON
0.152488	47.09	---	65.33	18.24	15000.0	9.000	L1	ON
0.182338	---	33.29	53.92	20.64	15000.0	9.000	L1	ON
0.182338	37.34	---	63.92	26.59	15000.0	9.000	L1	ON
0.214675	---	31.47	52.64	21.17	15000.0	9.000	L1	ON
0.214675	38.57	---	62.64	24.07	15000.0	9.000	L1	ON
0.244525	---	32.07	51.62	19.55	15000.0	9.000	L1	ON
0.244525	37.49	---	61.62	24.13	15000.0	9.000	L1	ON
0.276863	---	32.11	50.64	18.53	15000.0	9.000	L1	ON
0.276863	35.64	---	60.64	25.00	15000.0	9.000	L1	ON
0.368900	---	29.22	48.39	19.17	15000.0	9.000	L1	ON
0.368900	33.65	---	58.39	24.73	15000.0	9.000	L1	ON
0.582825	---	23.51	46.00	22.49	15000.0	9.000	N	ON
0.582825	29.27	---	56.00	26.73	15000.0	9.000	N	ON
9.017938	---	25.56	50.00	24.44	15000.0	9.000	N	ON
9.017938	29.23	---	60.00	30.77	15000.0	9.000	N	ON
27.121963	---	13.92	50.00	36.08	15000.0	9.000	N	ON
27.121963	19.83	---	60.00	40.17	15000.0	9.000	N	ON

(continuation of the "Final_Result" table from column 14 ...)

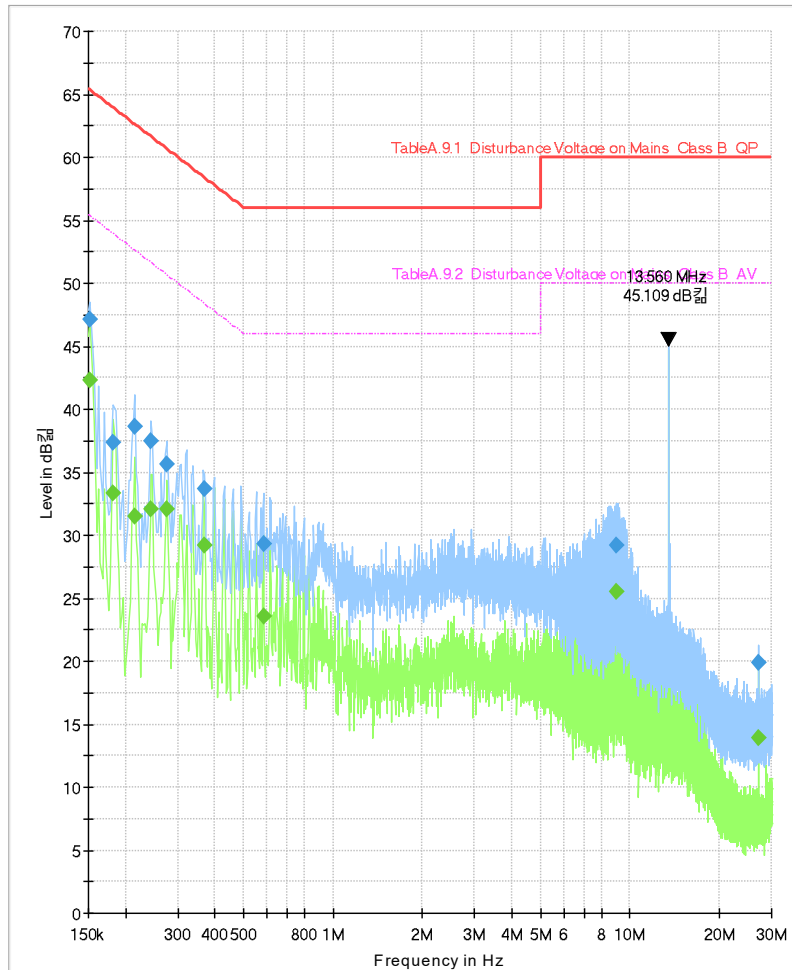
Frequency (MHz)	Corr. (dB)	Comment
0.152488	9.8	
0.152488	9.8	
0.182338	10.1	
0.182338	10.1	
0.214675	9.9	
0.214675	9.9	
0.244525	9.7	
0.244525	9.7	
0.276863	9.7	
0.276863	9.7	
0.368900	9.8	
0.368900	9.8	
0.582825	9.9	
0.582825	9.9	
9.017938	9.9	
9.017938	9.9	
27.121963	10.0	
27.121963	10.0	

Line Conducted Emissions Tabulated Data

Notes:

1. Measurements using CISPR quasi-peak mode & average mode.
2. The worst channel was investigated and the worst -case emission are reported. See attached Plots.
3. Lowest channel (2 402MHz) is the worst case.
4. *) Factor = LISN + Cable Loss
5. **) LINE : L = Line , N = Neutral
6. The limit is on the FCC §15.207(a) & RSS-Gen(8.8)

PLOTS OF AC Line EMISSIONS



8. TEST EQUIPMENT

No.	Instrument	Manufacture	Model	Serial No.	Calibration Date	Next Calibration Date
1	Signal & Spectrum Analyzer	KEYSIGHT	N9030B	MY57144327	2025-03-27	2026-03-27
2	Signal & Spectrum Analyzer	R&S	FSV40-N	101321	2025-05-12	2026-05-12
3	EMI TEST RECEIVER	R&S	ESW44	103318	2025-01-08	2026-01-08
4	Signal Generator	R&S	SMB100A	175861	2025-03-27	2026-03-27
5	10 dB Attenuator	API technologies corp	40A2W-10	1914	2025-07-02	2026-07-02
6	Temp&Humid Chamber	ESPEC	PL-4J	15018186	2025-07-03	2026-07-03
7	AC POWER SUPPLY	GW Instek	APS-7200	GES181345	2025-03-28	2026-03-28
8	Open Switch and Control Unit	R&S	OSP220	102977	N/A	N/A
9	Active Loop Antenna	R&S	HFH2-Z2E	101190	2025-01-13	2026-01-13
10	TRILOG Broadband Test Antenna	Schwarzbeck	VULB 9163	01431	2024-11-11	2026-11-11
11	BIAS UNIT	R&S	IN 600	101621	N/A	N/A
12	TWO-LINE V-NETWORK	R&S	ENV216	102829	2025-07-02	2026-07-02
13	EMI TEST RECEIVER	R&S	ESR3	102930	2025-07-02	2026-07-02
14	Humidity Temperature	Lutron	MHB-382SD	AK.26553	2024-10-16	2025-10-16
15	Humidity Temperature	DRETEC	O-230	NK-B-E-0157	2025-01-13	2026-01-13
16	DIGITAL MULTIMETER	EZ DIGITAL	DM-334	2111395	2024-10-08	2025-10-08

9. ACCURACY OF MEASUREMENT & DECISION RULE

9.1 Uncertainty Calculation

The Measurement Uncertainties stated were calculated in accordance with the requirements of measurement uncertainty contained in CISPR 16-4-2 with the confidence level of 95%

PARAMETER	UNCERTAINTY
Radiated Disturbance, Below 30 MHz	4.5 dB
Radiated Disturbance, 25Hz to 1 GHz	3.4 dB

9.2 Decision rule

The choice of whether or not to include the measurement uncertainty of the measuring system used in the test in the conformance determination.:

- ☐ Application of internal procedures used in type testing where traceability of measurement uncertainty is established.
- ☒ Applying the decision that the standard used for type testing does not require it.

END OF REPORT