HAIER US APPLIANCE SOLUTIONS, INC.

TEST REPORT

SCOPE OF WORK
RADIO TESTING – RFID MODULE (239D8341)

REPORT NUMBER
106491368ATL-003

ISSUE DATE
06 March 2026

REVISED DATE
04 August 2026

PAGES
23

DOCUMENT CONTROL NUMBER
Non-Specific Radio Report Shell Rev. January 2025

RADIO TEST REPORT

Report Number:	**106491368ATL-003**
Project Number:	**G106491368**
Revision Date:	**04 August 2026**
PMN:	**Talos RFID**
Model(s) Tested:	**239D8341**
FCC ID:	**ZKJ-239D8341**
IC:	**10229A-239D8341**
Standards:	**47 CFR Part 15 Subpart C, 15.225** **RSS-210, Issue 11** **ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024** **+ Errata to C63.10a-2024**

Test Location

Intertek
1950 Evergreen Blvd., Suite 100
Duluth, GA 30096 USA
FCC Designation: US1046
CAB Designator: US0128

Client

Haier US Appliance Solutions, Inc.
Appliance Park AP5-2N-65
Louisville, KY 40225 USA

Report prepared by

Jeremy Pickens / Senior Staff Engineer

Report reviewed by

Uri Spector / Sr. EMC Staff Engineer

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1 Introduction and Conclusion

The tests indicated in Section 2 were performed on the product constructed as described in Section 4. The remaining test sections are the verbatim text from the actual data sheets used during the investigation. These test sections include the test name, the specified test Method, a list of the actual Test Equipment Used, documentation Photos, Results and raw Data. No additions, deviations, or exclusions have been made from the standard(s) unless specifically noted.

Based on the results of our investigation, we have concluded the product tested **complies** with the requirements of the standard(s) indicated. The results obtained in this test report pertain only to the item(s) tested. Intertek does not make any claims of compliance for samples or variants which were not tested.

2 Test Summary

Section	Test Description	Test Specification		Result
		FCC	ISED	
5	Bandwidth	15.215(c)	RSS-GEN S6.7	Compliant
6	Field Strength / Spurious Emissions	15.225(a)(b)(c)(d) 15.209	RSS-210 B.6(a) RSS-GEN S8.9	Compliant
7	AC Mains Conducted Emissions	15.207	RSS-GEN S8.8	Compliant
8	Frequency Stability	15.225(e)	RSS-210 B.6(b)	Compliant
NA	Antenna Requirement	15.203	RSS-GEN S6.8	Compliant[1]

1) The antenna is an PCB loop which is not removable by the end user.

3 Client Information

This evaluation was performed at the request of:

Client: Haier US Appliance Solutions, Inc.
Appliance Park AP5-2N-65
Louisville, KY 40225 USA

Contact: Maegan Williams

Email: Maegan.Williams@geappliances.com

4 Description of Equipment Under Test

Manufacturer: Haier US Appliance Solutions, Inc.
Appliance Park AP5-2N-65
Louisville, KY 40225 USA

Equipment Under Test			
Description	**Manufacturer**	**Model Number**	**Serial Number**
RFID Module	Haier US Appliance Solutions, Inc.	239D8341	11705000551

Receive Date:	11 February 2026
Received Condition:	Good
Type:	Production

Description of Equipment Under Test (provided by client)
The RFID module is a 13.56MHz transceiver for use in appliances.

Certification Purpose
Original Limited Modular Approval Certification: The RFID radio is based on a chip down design.

Radio/Receiver Characteristics	
Frequency Range	13.56MHz
Field Strength (3m):	67.11dBµV/m (measured)
Field Strength (30m):	27.11dBµV/m (adjusted by 40*log(d1/d2))
Antenna Type	PCB Loop

Software

No.	Description of EUT Software
1	V0.1.71.51

4.1 Justification

All testing performed in this report was for the radio only. Once the system was powered, the RFID radio automatically went into a constant transmit state. Radiated measurements were recorded with the module oriented in all 3 axes.

4.2 Modifications Required for Compliance

No modifications were made during compliance testing in order to bring the product into compliance.

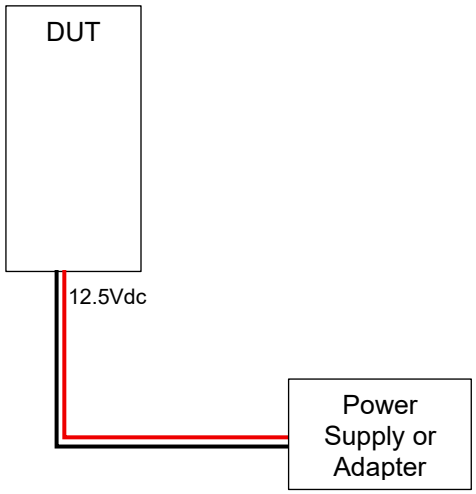
4.3 Additions, Deviations and Exclusions from Standards

No additions, deviations or exclusion have been made from standard.

4.4 Method

Configuration as required by ANSI C63.10.

4.5 EUT Block Diagram – Radiated Measurements



5 Bandwidth

5.1 Method

The procedures from ANSI C63.10 Clause 6.9.3 were used to measure the 99% Occupied Bandwidth.

TEST SITE: RF Bench

The RF bench consists of a Rohde & Schwarz TS8997 automated test system coupled with a temperature/humidity environmental chamber. The TS8997 system houses a switch matrix (OSP), along with a spectrum analyzer, vector network analyzer, and analog signal generator.

5.2 Test Equipment

Asset	Description	Manufacturer	Model	Serial	Cal Date	Cal Due
212164	Temperature/Pressure/Humidity Sensor	Extech	SD700	109402	07/08/2025	07/08/2026
213502	Spectrum Analyzer (2Hz-43.5GHz)	Rohde & Schwarz	FSW43	102972	08/01/2024	08/01/2026
213506-01	RF Test Cable	Huber+Suhner	Enviroflex 400	213506-01	VBU	VBU

Software Utilized

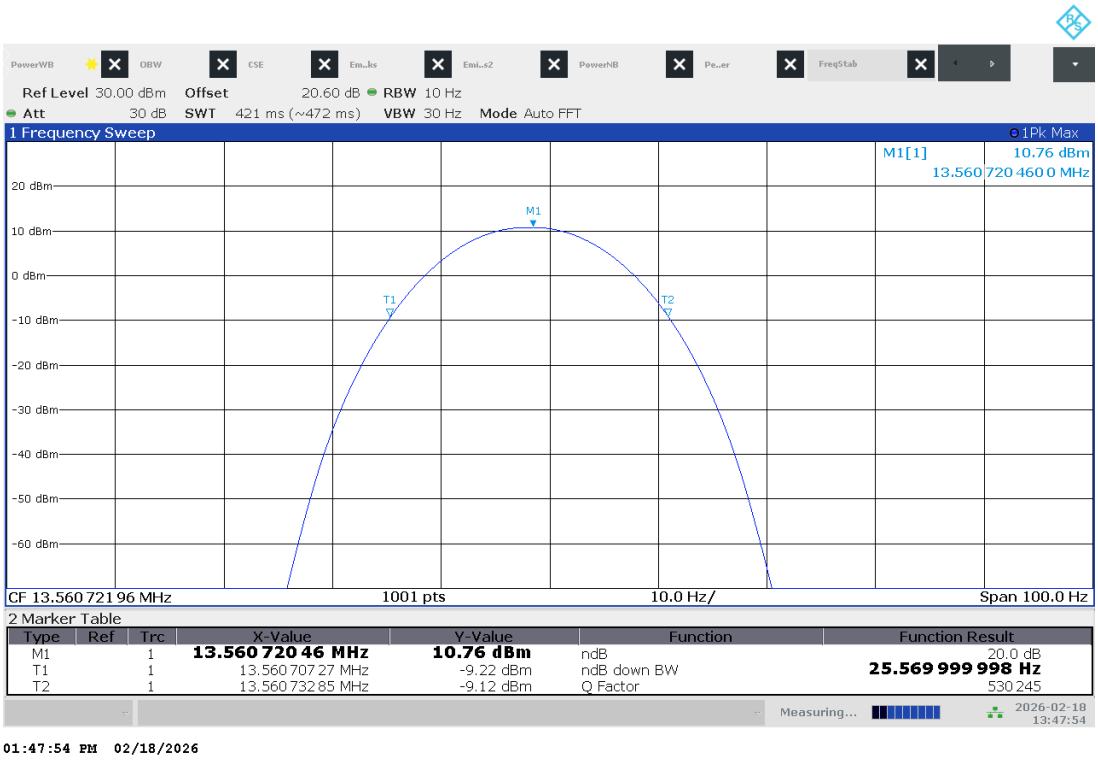
Name	Manufacturer	Version
RSCommander	Rohde & Schwarz	2.4.2 64-bit (2023)

5.3 Test Data

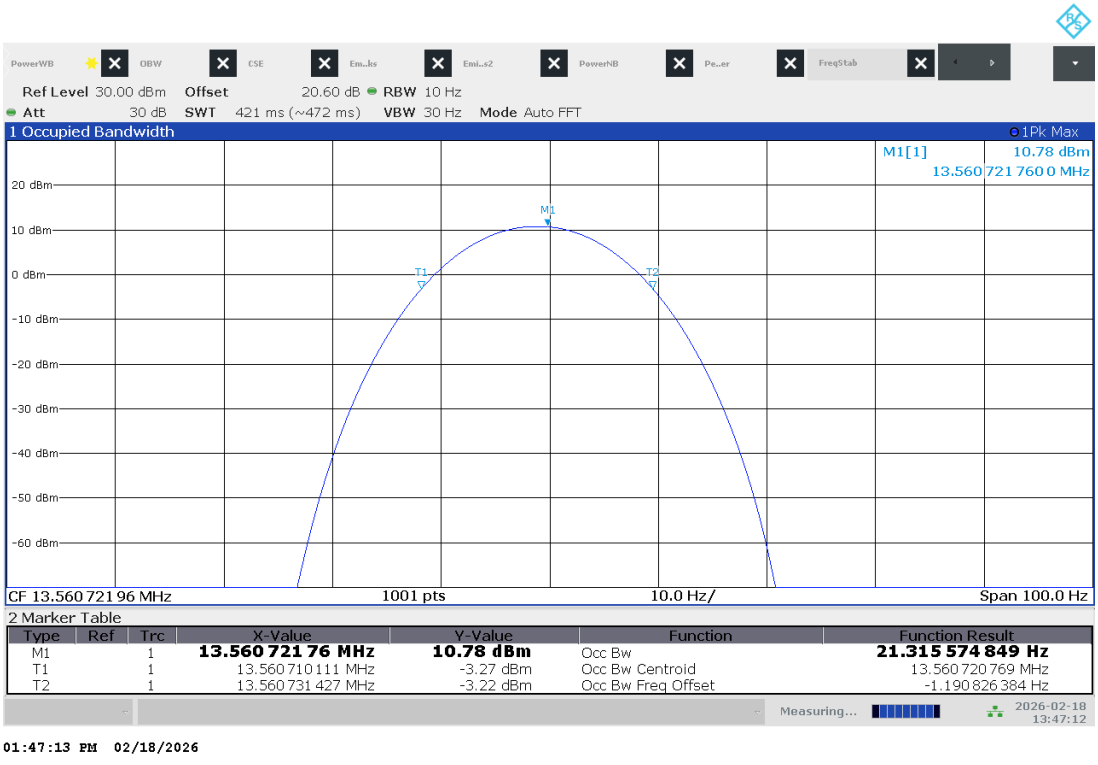
Frequency (MHz)	Bandwidth Measurement	F_{LOW} (MHz)	F_{HIGH} (MHZ)	Bandwidth (kHz)	Result
13.56	20dB	13.560707	13.560733	0.026	Compliant
13.56	99% OBW	13.560710	13.560731	0.021	Reported

BW Plots

20dB Bandwidth



99% Occupied Bandwidth



Note: Due to the CW nature of the fundamental, it was not possible to set the resolution bandwidth between 1 and 5% of the measured bandwidths.

Test Personnel:	Jeremy Pickens	Test Date:	18 February 2026
Supervising/Reviewing Engineer: (Where Applicable)		Ambient Temperature:	19.8ºC
Product Standard:	ANSI C63.10	Relative Humidity:	32.4%
Input Voltage:	120Vdc	Atmospheric Pressure:	98.8kPa

6 Field Strength of the Fundamental / Radiated Spurious Emissions

6.1 Method

Tests were performed in accordance with ANSI C63.10 using the following bandwidth settings:

Below 150 kHz	Pre-scans: RBW: 300 Hz / VBW: 1kHz; Finals: RBW: 200Hz
150 kHz to 30 MHz	Pre-scans: RBW: 10 kHz VBW: 30kHz; Finals: RBW: 9kHz
30 MHz to 1000 MHz	Pre-scans: RBW: 120 kHz VBW: 500kHz, Finals: RBW: 120kHz

TEST SITE: 10 Meter Chamber

10 Meter Semi-Anechoic Chamber The test site for radiated emissions is located at 1950 Evergreen Blvd, Suite 100, Duluth, Georgia 30096. It is a 10-meter semi-anechoic chamber manufactured by Panashield. Embedded in the floor is a 3-meter diameter turntable.

Limits – Fundamental

Frequency (MHz)	Limit (µV/m@30m)	Limit (dBµV/m@30m)	Limit (dBµV/m@3m)
< 13.11	30	29.5	69.5
13.110 - 13.410	106	40.5	80.5
13.41 - 13.553	334	50.5	90.5
13.553 - 13.567	15848	84	124
13.567 - 13.710	334	50.5	90.5
13.710 - 14.010	106	40.5	80.5
> 14.01	30	29.5	69.5

Limits – Spurious Emissions

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
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

RSS-GEN, Clause 8.9

Table 5 – General field strength limits at frequencies above 30 MHz	
Frequency (MHz)	**Field strength (µV/m at 3 m)**
30 – 88	100
88 – 216	150
216 – 960	200
Above 960	500

Table 6 – General field strength limits at frequencies below 30 MHz		
Frequency	**Magnetic field strength (H-Field) (µA/m)**	**Measurement distance (m)**
9 - 490 kHz[Note 1]	6.37/F (F in kHz)	300
490 - 1705 kHz	63.7/F (F in kHz)	30
1.705 - 30 MHz	0.08	30

Note 1: The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector.

Note: For measurements below 30MHz the limits were adjusted by 40dB per decade to account for measurements at 3 meters.

Example

30µV/m at 30 meters = 20*log (30) = 29.5dBµV/m
At 3 meters: 29.5dBµV/m + 40dB = 69.5dBµV/m.

Sample Calculation

The field strength was calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain (if any) from the measured reading. The basic equation with a sample calculation is as follows:

FS = RA + AF + CF - AG

Where FS = Field Strength in dBµV/m
RA = Receiver Amplitude (including preamplifier) in dBµV
CF = Cable Attenuation Factor in dB
AF = Antenna Factor in dB
AG = Amplifier Gain in dB

In the following table(s), the reading shown on the data table reflects the preamplifier gain. An example for the calculations in the following table is as follows.
Assume a receiver reading of 52.0 dBµV is obtained. The antenna factor of 7.4 dB and cable factor of 1.6 dB is added. The amplifier gain of 29 dB is subtracted, giving a field strength of 32 dBµV/m. This value in dBµV/m was converted to its corresponding level in µV/m.

FS = 32 dBµV/m
RA = 52.0 dBµV
CF = 1.6 dB
AF = 7.4 dB/m
AG = 29.0 dB

To convert from dBµV to µV or mV the following was used

UF = $10^{(NF / 20)}$ where UF = Net Reading in µV
NF = Net Reading in dBµV

Example

FS = RA + AF + CF – AG = 52.0 + 7.4 + 1.6 – 29.0 = 32.0dBµV/m
UF = $10^{(32\ dB\mu V/m\ /\ 20)}$ = 39.8 µV/m

6.2 Test Equipment

Asset	Description	Manufacturer	Model	Serial	Cal Date	Cal Due
200074	Preamplifier, 10 MHz to 2000 MHz	Mini-Circuits	ZKL-2	D011105	08/04/2025	08/04/2026
200162	EMI Receiver (20Hz-40GHz)	Rohde & Schwarz	ESU 40	100314	10/07/2025	10/07/2026
211262	Controller - Turntable and Mast	Sunol	SC99V	SC99V-1	VBU	VBU
211264	Mast - Antenna	Sunol	TWR95	NNN2	VBU	VBU
211386	Antenna, BiLog, 20-2000MHz	Chase	CBL6112B	2622	06/30/2025	06/30/2026
212166	Temperature/Pressure/Humidity Sensor	Extech	SD700	110392	04/02/2025	04/02/2026
213365	PreAmplifier 100Hz-30MHz	Com-Power	PAL-010	181492	06/18/2025	06/18/2026
213451	Omni -directional Comb Generator	Com-Power	CGO-520	281266	VBU	VBU
MM5	RF Coax Cable 9KHz-18GHz	Maury Microwave	UC-N-MM78	1514381	04/01/2025	04/01/2026
MM8	RF Coax Cable 9kHz-18GHz	Maury Microwave	UC-N-MM-267	1635289	06/18/2025	06/18/2026
MM12	RF Coax Cable 9kHz-18GHz	Fairview Microwave	SCE18110505-600CM	MM12	09/11/2025	09/11/2026
MM36	RF Coax Cable 9kHz-18GHz	Maury Microwave	UC-N-NM-36	16 32 10	06/18/2025	06/18/2026
MP10	RF Coax Cable 9KHz-18GHz	Fairview Microwave	FMCA1282-394	MP10	06/18/2025	06/18/2026
NYM-EMC-36	Antenna, Loop, Passive (10 kHz - 30 MHz)	EMCO	6512	9810-1228	07/14/2025	07/14/2026

Software Utilized

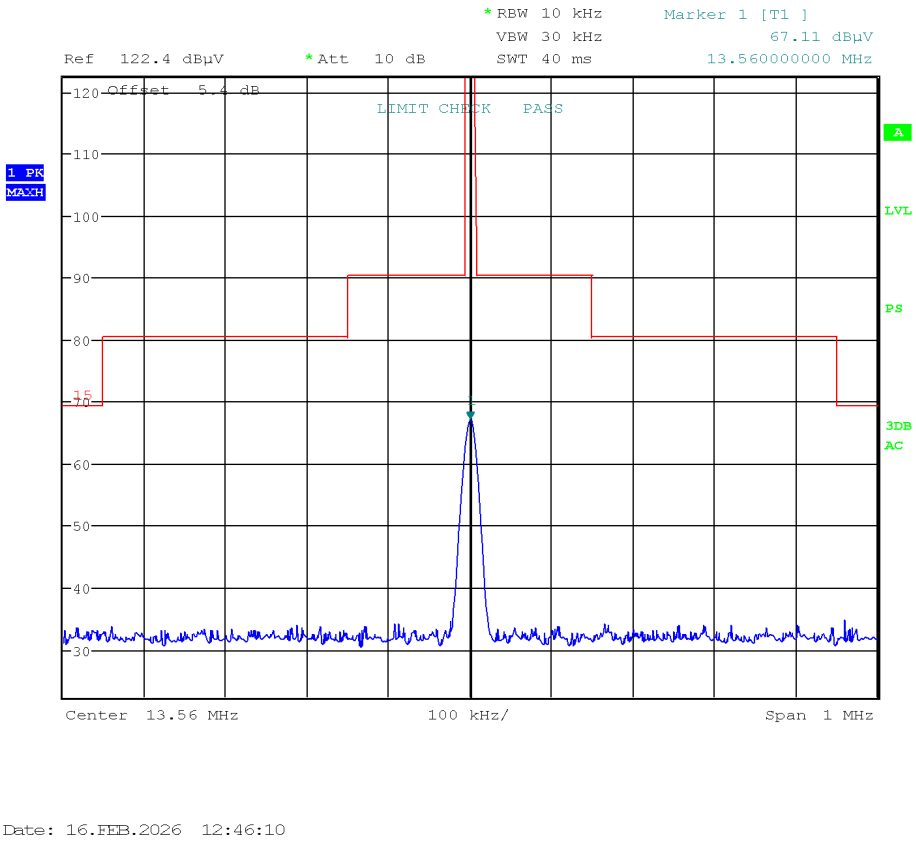
Name	Manufacturer	Version
BAT EMC	NEXIO	3.19.1.18

6.3 Results

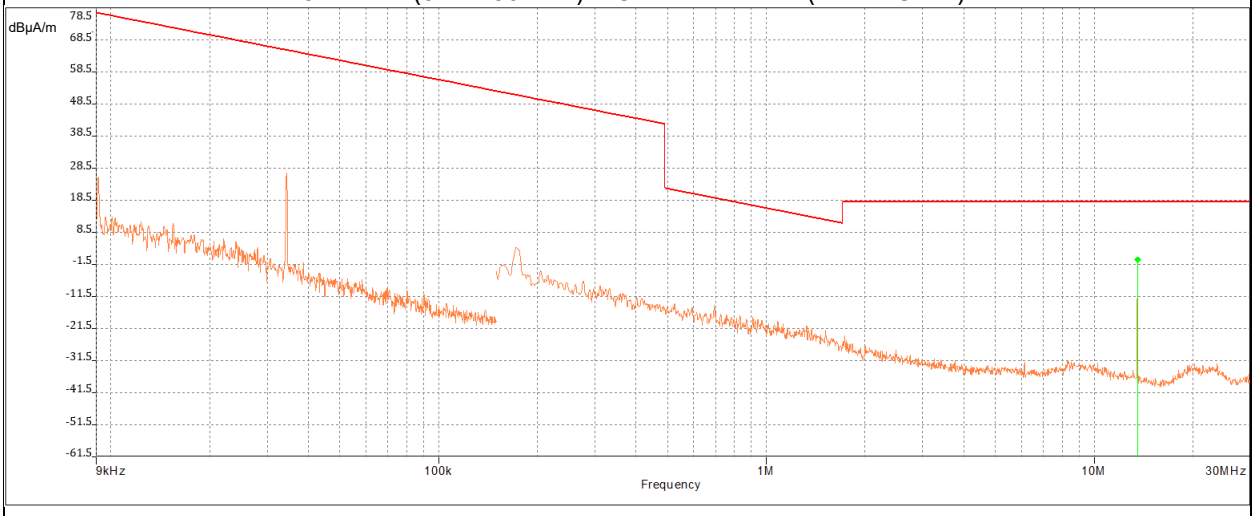
The sample tested was found to Comply.

6.4 Plots/Data

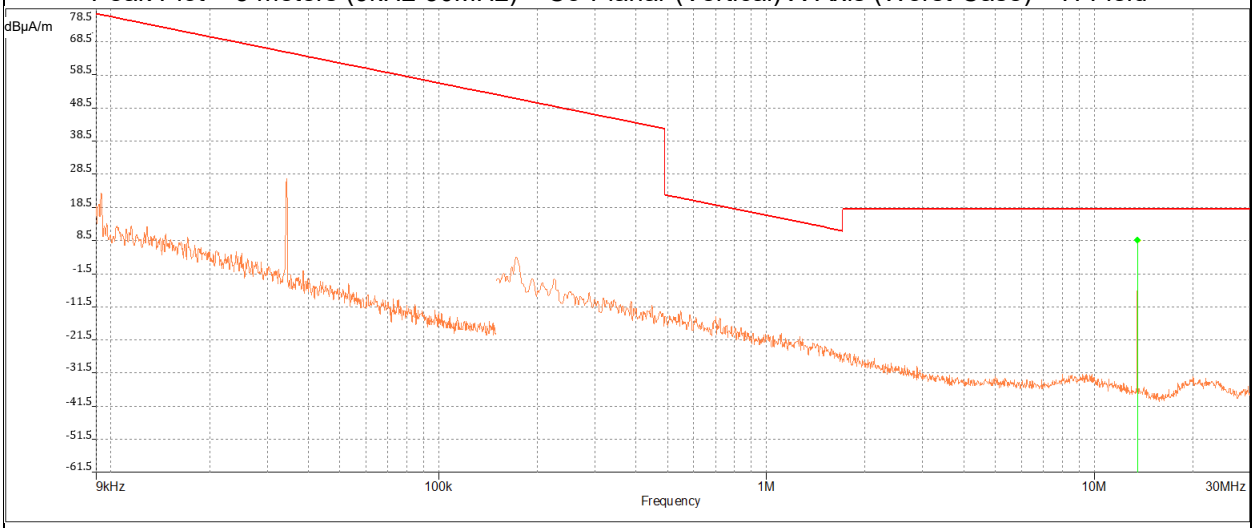
Fundamental (13.06 – 14.06MHz)



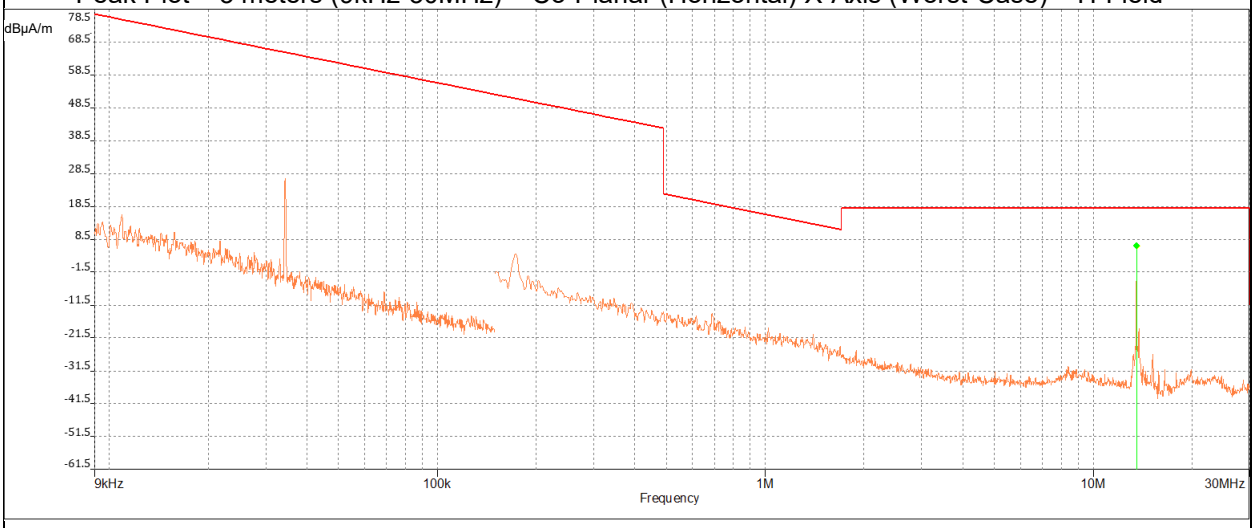
Peak Plot – 3 meters (9kHz-30MHz) – Co-Axial X-Axis (Worst-Case) – H-Field



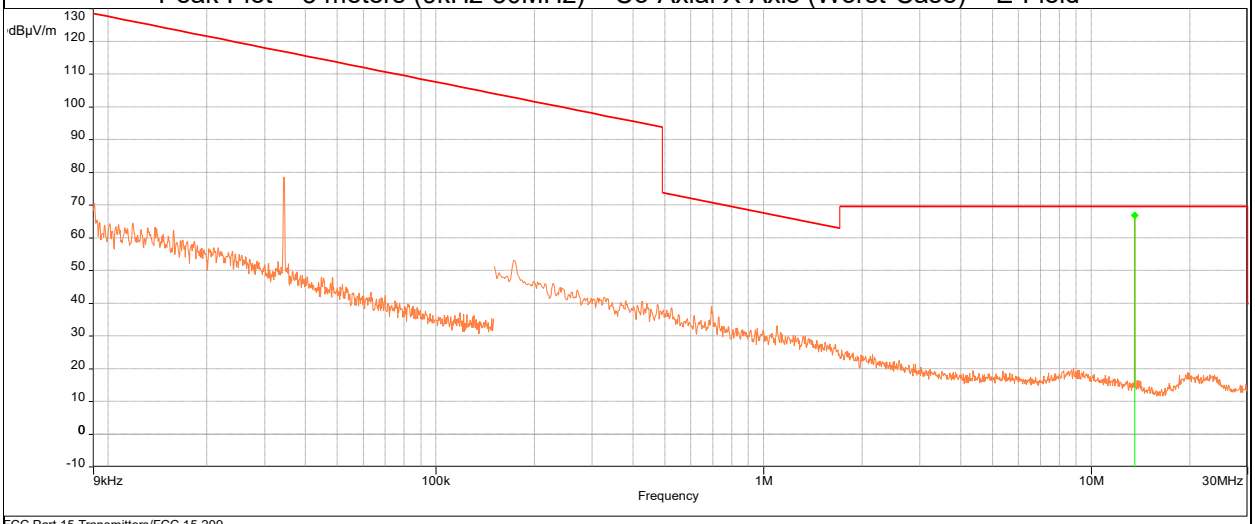
Peak Plot – 3 meters (9kHz-30MHz) – Co-Planar (Vertical) X-Axis (Worst-Case) – H-Field



Peak Plot – 3 meters (9kHz-30MHz) – Co-Planar (Horizontal) X-Axis (Worst-Case) – H-Field

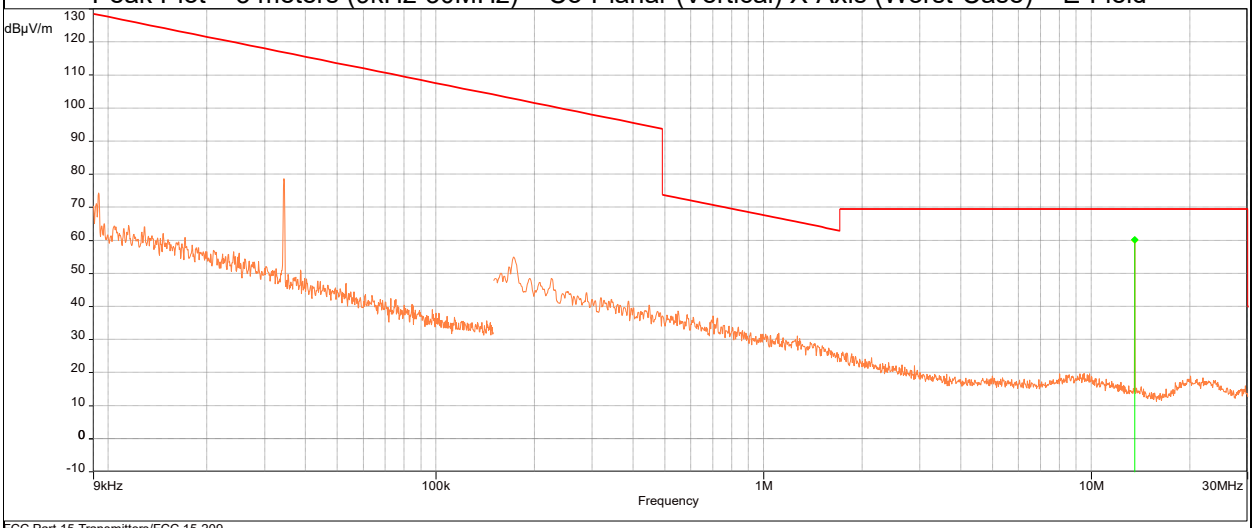


Peak Plot – 3 meters (9kHz-30MHz) – Co-Axial X-Axis (Worst-Case) – E-Field



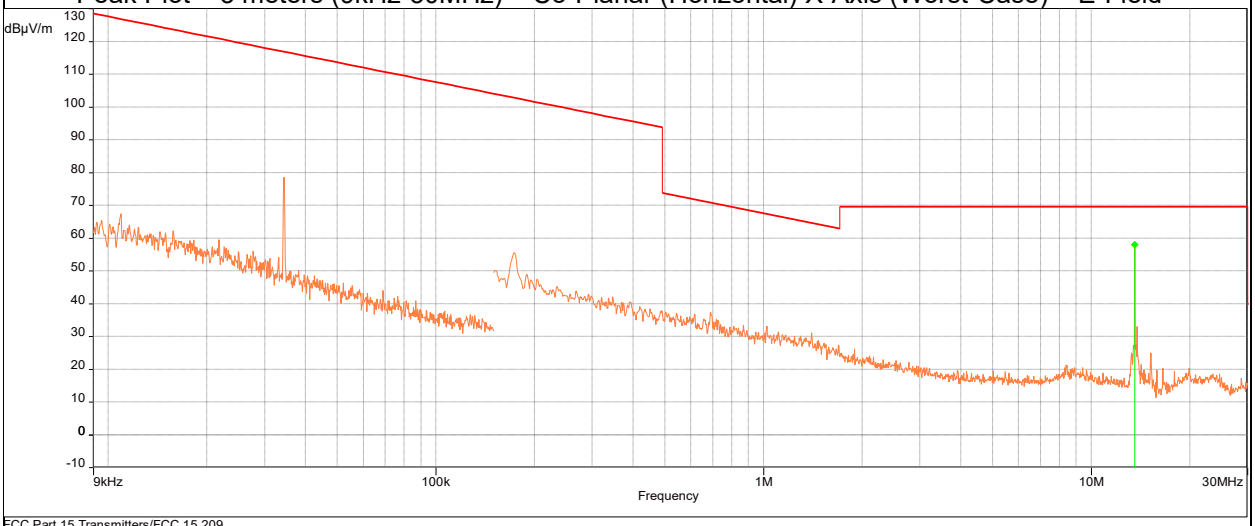
FCC Part 15 Transmitters/FCC 15.209

Peak Plot – 3 meters (9kHz-30MHz) – Co-Planar (Vertical) X-Axis (Worst-Case) – E-Field



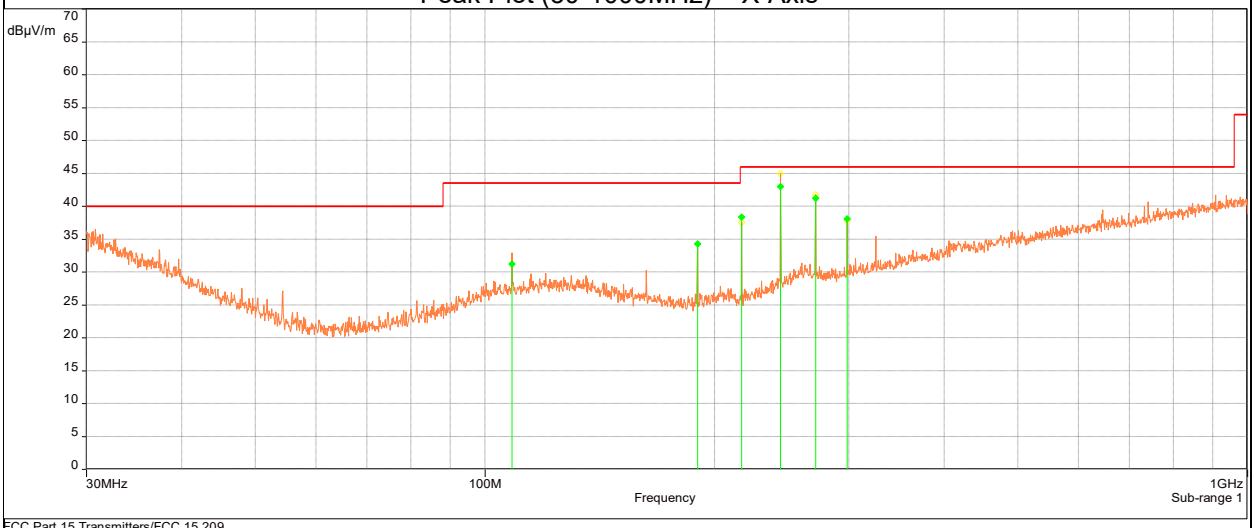
FCC Part 15 Transmitters/FCC 15.209

Peak Plot – 3 meters (9kHz-30MHz) – Co-Planar (Horizontal) X-Axis (Worst-Case) – E-Field



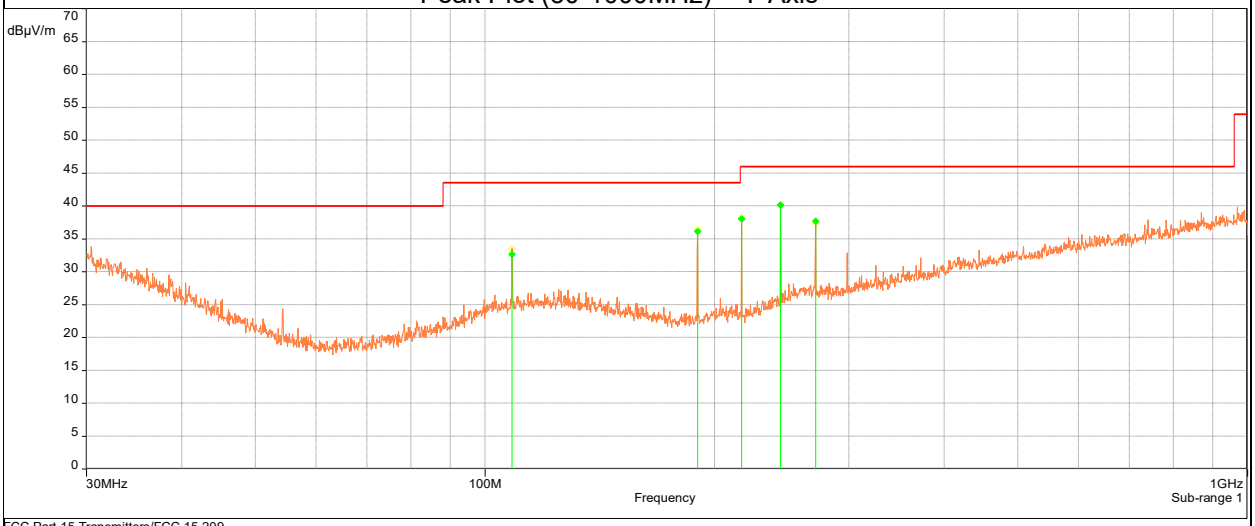
FCC Part 15 Transmitters/FCC 15.209

Peak Plot (30-1000MHz) – X-Axis



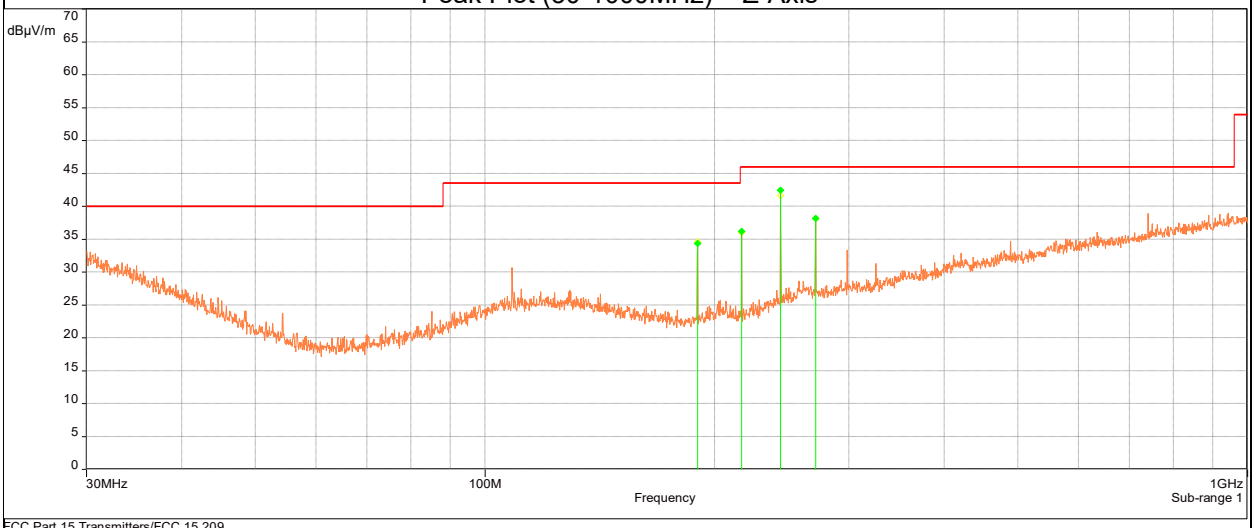
FCC Part 15 Transmitters/FCC 15.209

Peak Plot (30-1000MHz) – Y-Axis



FCC Part 15 Transmitters/FCC 15.209

Peak Plot (30-1000MHz) – Z-Axis



FCC Part 15 Transmitters/FCC 15.209

Tabular Data

Orientation	Frequency (MHz)	Level@3m (dBµV/m)	Level@30m (dBµV/m)	Limit@3m (dBµv/m)	Limit@30m (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Polarity	RBW (kHz)	Correction (dB)
X-Axis	13.560	67.11	27.11	124	84	-56.89	178	1	Co-Axial	9	5.42
X-Axis	13.560	60.15	20.15	124	84	-63.85	89	1	Co-Planar V	9	5.42
X-Axis	13.560	58.1	18.1	124	84	-65.9	163	1	Co-Planar H	9	5.42
Y-Axis	13.560	66.79	26.79	124	84	-57.21	182	1	Co-Axial	9	5.42
Y-Axis	13.560	60.01	20.01	124	84	-63.99	261	1	Co-Planar V	9	5.42
Y-Axis	13.560	56.73	16.73	124	84	-67.27	166	1	Co-Planar H	9	5.42
Z-Axis	13.560	51.45	11.45	124	84	-72.55	303	1	Co-Axial	9	5.42
Z-Axis	13.560	35.52	-4.48	124	84	-88.48	192	1	Co-Planar V	9	5.42
Z-Axis	13.560	55.4	15.4	124	84	-68.6	111	1	Co-Planar H	9	5.42

Note: Adjustments to the readings below 30MHz were applied using the equation 40*log(d1/d2)

Orientation	Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Polarity	RBW (kHz)	Correction (dB)
X-Axis	108.484	31.2	43.52	-12.32	106	3.08	Horizontal	120	-11.14
X-Axis	189.847	34.27	43.52	-9.25	302	1.91	Horizontal	120	-13.16
X-Axis	216.968	38.35	46.02	-7.67	245	1.48	Horizontal	120	-12.3
X-Axis	244.089	42.97	46.02	-3.05	256	1.29	Horizontal	120	-9.95
X-Axis	271.210	41.21	46.02	-4.81	248	1.09	Horizontal	120	-8.71
X-Axis	298.331	38.09	46.02	-7.93	242	1.03	Horizontal	120	-8.38
Y-Axis	108.484	32.69	43.52	-10.83	177	1.27	Vertical	120	-11.14
Y-Axis	189.847	36.11	43.52	-7.41	120	1.34	Horizontal	120	-13.16
Y-Axis	216.968	38.03	46.02	-7.99	350	1	Vertical	120	-12.3
Y-Axis	244.089	40.15	46.02	-5.87	115	1.21	Horizontal	120	-9.95
Y-Axis	271.210	37.66	46.02	-8.36	202	1	Vertical	120	-8.71
Z-Axis	189.847	34.38	43.52	-9.14	117	1.62	Horizontal	120	-13.16
Z-Axis	216.968	36.23	46.02	-9.79	121	1.6	Horizontal	120	-12.3
Z-Axis	244.089	42.47	46.02	-3.55	246	1.32	Horizontal	120	-9.95
Z-Axis	271.210	38.2	46.02	-7.82	230	1	Horizontal	120	-8.71

Test Personnel: Jeremy Pickens
Test Date: 16 February 2026

Supervising/Reviewing Engineer: (Where Applicable)

v

Product Standard: ANSI C63.10
Limit Applied: 15.209

Input Voltage: 120Vac, 60Hz

Pretest Verification w/ Ambient Signals or BB Source: BB

Ambient Temperature: 18.1ºC
Relative Humidity: 27.8%
Atmospheric Pressure: 98.6kPa

Deviations, Additions, or Exclusions: None

7 AC Mains Conducted Emissions

7.1 Method

Tests were performed in accordance with ANSI C63.10 Clause 6.2.

TEST SITE: 10 Meter Chamber

10 Meter Semi-Anechoic Chamber The test site for radiated emissions is located at 1950 Evergreen Blvd, Suite 100, Duluth, Georgia 30096. It is a 10-meter semi-anechoic chamber manufactured by Panashield. Embedded in the floor is a 3-meter diameter turntable.

Measurement Uncertainty

Measurement	Frequency Range	Expanded Uncertainty (k=2)	U_{CISPR}
AC Line Conducted Emissions	150 kHz - 30 MHz	2.8 dB	3.4dB
Telco Port Emissions	150 kHz - 30 MHz	2.4 dB	5.0dB

As shown in the table above our conducted emissions U_{lab} is less than the corresponding U_{CISPR} reference reference value in CISPR 16-4-2 Table 1, hence the compliance of the product is only based on the measured value, and no measurement uncertainty correction is required, based on CISPR 22 and CISPR 11 (for 2006 and later revisions) Clause 11.

Sample Calculations

The following calculations were used to determine the net line-conducted measurements:

NF = RF + LF + CF + AF

Where NF = Net Reading in dBμV
RF = Reading from receiver in dBμV
LF = LISN or ISN Correction Factor in dB
CF = Cable Correction Factor in dB
AF = Attenuator Loss Factor in dB

To convert from dBμV to μV or mV the following was used:

$UF = 10^{(NF / 20)}$ where UF = Net Reading in μV
NF = Net Reading in dBμV

Example:

NF = RF + LF + CF + AF = 28.5 + 0.2 + 0.4 + 20.0 = 49.1 dBμV
$UF = 10^{(49.1\ dB\mu V / 20)}$ = 285.1 μV

7.2 Test Equipment Used

Asset	Description	Manufacturer	Model	Serial	Cal Date	Cal Due
200162	EMI Receiver (20Hz-40GHz)	Rohde & Schwarz	ESU 40	100314	10/07/2025	10/07/2026
212166	Temperature/Pressure/Humidity Sensor	Extech	SD700	110392	04/02/2025	04/02/2026
213498	2-Line LISN	Rohde & Schwarz	ENV216	101577	10/15/2025	10/15/2026
MM8	RF Coax Cable 9kHz-18GHz	Maury Microwave	UC-N-MM-267	1635289	06/18/2025	06/18/2026

Software Utilized

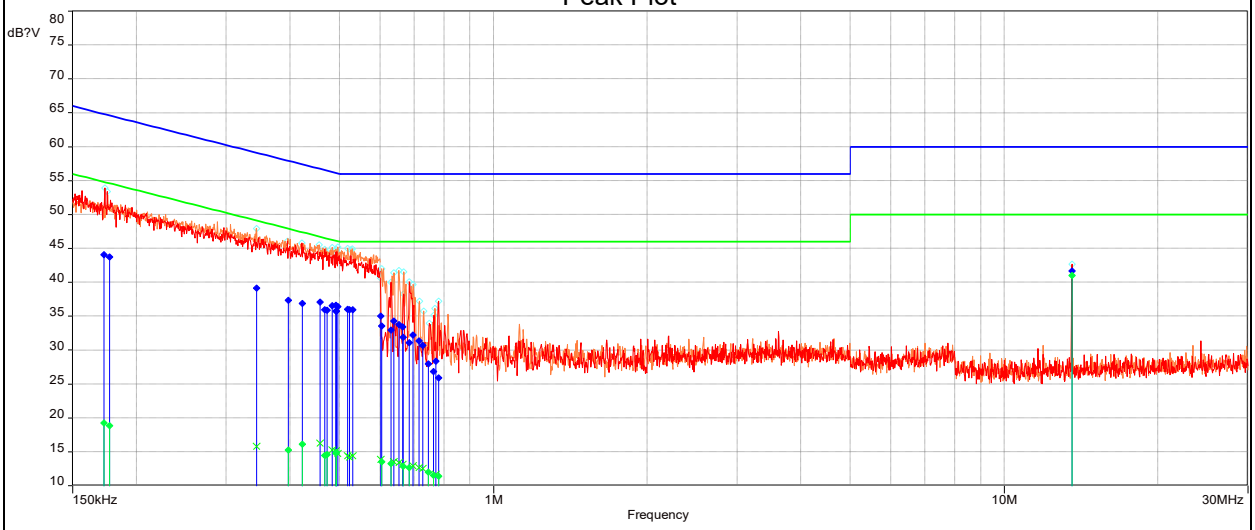
Name	Manufacturer	Version
EMC BAT	Nexio	3.19.1.18

7.3 Results

The sample tested was found to Comply.

7.4 Plots/Data

Peak Plot



Tabular Data

Frequency (MHz)	AVG Level (dBµV)	QP Level (dBµV)	Limit AVG (dBuV)	Limit QP (dBuV)	AVG Margin (dB)	QP Margin (dB)	Line	Correction (dB)
0.173	19.27	44.1	54.83	64.83	-35.56	-20.73	Phase 1	10.06
0.177	18.84	43.77	54.62	64.62	-35.78	-20.85	Phase 1	10.05
0.396	15.28	37.35	47.93	57.93	-32.65	-20.59	Phase 1	9.9
0.422	16.15	36.9	47.4	57.4	-31.26	-20.5	Phase 1	9.91
0.467	14.46	35.98	46.57	56.57	-32.1	-20.59	Phase 1	9.94
0.472	14.57	35.9	46.48	56.48	-31.91	-20.57	Phase 1	9.94
0.492	14.8	35.73	46.14	56.14	-31.34	-20.41	Phase 1	9.95
0.492	14.94	35.79	46.13	56.13	-31.19	-20.34	Phase 1	9.95
0.604	13.56	33.54	46	56	-32.44	-22.46	Phase 1	9.96
0.629	13.27	32.96	46	56	-32.73	-23.04	Phase 1	9.95
0.666	12.87	31.92	46	56	-33.13	-24.08	Phase 1	9.94
0.684	12.64	31.12	46	56	-33.36	-24.88	Phase 1	9.94
0.746	12	27.98	46	56	-34	-28.02	Phase 1	9.93
0.764	11.56	26.82	46	56	-34.44	-29.18	Phase 1	9.92
0.781	11.41	25.89	46	56	-34.59	-30.11	Phase 1	9.92
13.561	40.99	41.69	50	60	-9.01	-18.31	Phase 1	10.21
0.344	15.81	39.13	49.11	59.11	-33.3	-19.98	Phase 2	9.83
0.458	16.29	37.08	46.73	56.73	-30.44	-19.65	Phase 2	9.83
0.483	15.26	36.58	46.29	56.29	-31.02	-19.71	Phase 2	9.83
0.492	15.14	36.64	46.14	56.14	-31	-19.5	Phase 2	9.83
0.496	14.74	36.44	46.07	56.07	-31.33	-19.63	Phase 2	9.83
0.518	14.41	36.04	46	56	-31.59	-19.96	Phase 2	9.83
0.523	14.18	35.94	46	56	-31.82	-20.06	Phase 2	9.84
0.530	14.42	35.97	46	56	-31.58	-20.03	Phase 2	9.84
0.602	13.86	34.99	46	56	-32.14	-21.01	Phase 2	9.84
0.638	13.55	34.27	46	56	-32.45	-21.73	Phase 2	9.84
0.652	13.42	33.79	46	56	-32.58	-22.21	Phase 2	9.84
0.664	13.16	33.41	46	56	-32.84	-22.59	Phase 2	9.84
0.696	12.95	32.23	46	56	-33.05	-23.77	Phase 2	9.84
0.715	12.64	31.35	46	56	-33.36	-24.65	Phase 2	9.84
0.727	12.55	30.7	46	56	-33.45	-25.3	Phase 2	9.84
0.771	11.69	28.37	46	56	-34.31	-27.63	Phase 2	9.84

Test Personnel:	Jeremy Pickens	Test Date:	16 February 2026
Supervising/Reviewing Engineer: (Where Applicable)			
Product Standard:	ANSI C63.10	Limit Applied:	15.207
Input Voltage:	120Vac, 60Hz		
Pretest Verification w/ Ambient Signals or BB Source:	BB	Ambient Temperature:	18.1ºC
		Relative Humidity:	27.8%
		Atmospheric Pressure:	98.6kPa

Deviations, Additions, or Exclusions: None

8 Frequency Stability

8.1 Method

The methods defined in ANSI C63.10, Section 6.8 were applied for measuring the Frequency Stability. The DUT was placed within a temperature chamber, and a near field probe was used to couple the signal to the spectrum analyzer. Frequency measurements were made over the temperature range -20°C to +55°C. The nominal operating voltage was 120Vac and frequency was also measured at 85% and 115% of the nominal voltage at +20°C. For each temperature measured, a period of time sufficient to stabilize all components was allowed. At each temperature, the frequency was measured at startup, 2 min, 5 min, and 10 min after the EUT was energized. Worst-case for each temperature is reported.

TEST SITE: RF Bench

The RF bench consists of a Rohde & Schwarz TS8997 automated test system coupled with a temperature/humidity environmental chamber. Where applicable, 2.4 and 5GHz radio measurements are automated using the Rohde & Schwarz EMC32 test software. The TS8997 system houses a switch matrix (OSP), along with a spectrum analyzer, vector network analyzer, and analog signal generator.

8.2 Test Equipment

Asset	Description	Manufacturer	Model	Serial	Cal Date	Cal Due
212249	Temperature/ Humidity Probe	Vaisala	HMP80	X3116406	08/07/2025	08/07/2026
213502	Spectrum Analyzer (2Hz-43.5GHz)	Rohde & Schwarz	FSW43	102972	08/01/2024	08/01/2026
213505	Temperature/Humidity Chamber	Sanwood	SMC-64-LL	10301	VBU	VBU
213506-01	RF Test Cable	Huber+Suhner	Enviroflex 400	213506-01	VBU	VBU

Software Utilized

Name	Manufacturer	Version
None		

8.3 Results

The sample tested was found to Comply.

8.4 Test Data

Temperature °C	Input Voltage Vdc	Measured Carrier Frequency MCF_{MHz}	Frequency Error %	FCC Limit %	Frequency Error (ppm)	ISED Limit (ppm)	Verdict
-20	12.5	13.560797	0.0059%	+/-0.01	59	+/-100	Compliant
-10	12.5	13.560833	0.0061%	+/-0.01	61	+/-100	Compliant
0	12.5	13.560835	0.0062%	+/-0.01	62	+/-100	Compliant
10	12.5	13.560811	0.0060%	+/-0.01	60	+/-100	Compliant
20	12.5	13.560746	0.0055%	+/-0.01	55	+/-100	Compliant
30	12.5	13.560699	0.0052%	+/-0.01	52	+/-100	Compliant
40	12.5	13.560637	0.0047%	+/-0.01	47	+/-100	Compliant
50	12.5	13.560579	0.0043%	+/-0.01	43	+/-100	Compliant
55	12.5	13.560556	0.0041%	+/-0.01	41	+/-100	Compliant
20	**10.625**	13.560744	0.0055%	+/-0.01	55	+/-100	Compliant
20	**14.375**	13.560742	0.0055%	+/-0.01	55	+/-100	Compliant

Test Personnel: Jeremy Pickens

Test Date: 18 February 2026

Ambient Temperature: 19.8ºC

Reference Standard: ANSI C63.10

Relative Humidity: 32.4%

Atmospheric Pressure: 98.8kPa

9 Measurement Uncertainty

Parameter	Expanded Uncertainty for Normal k factor equal to 2
Radio Frequency	0.07
Total RF Power (Conducted)	0.65
Power Density (Conducted)	0.65
RF Spurious (Conducted)	1.8 dB
Radiated Emissions (9kHz-30MHz)	4.7 dB
Radiated Emissions (30MHz-1GHz)	4.1 dB
Radiated Emissions (1GHz-18GHz)	4.5dB
Radiated Emissions (18GHz-40GHz)	4.7 dB
AC Line Conducted Emissions	2.8 dB
Temperature	0.7°
Humidity	3.9%

10 Revision History

Revision Level	Date	Prepared By	Reviewed By	Notes
0	06 March 2026	JOP	US	Original Issue
1	08 April 2026	JOP	US	• Updated PMN reference
2	04 August 2026	JOP	US	• Added H-Field plots to show compliance with RSS-GEN, Clause 8.9, Table 6

END OF REPORT