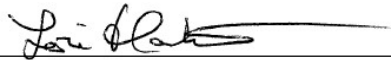


Element Materials Technology Denver-Longmont A.K.A. NTS Labs, LLC

Test Report for Electromagnetic Interference (EMI) Testing of the Vanguard Adapt

Prepared For

SLI Compliance | 4720 Independence Street | Wheat Ridge, CO 80033

Prepared ByElement Materials Technology Denver-Longmont | 1736 Vista View Drive | Longmont, CO 80504-5242 | 303-776-7249 | www.element.comLori Hartman
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Revision History

Rev.	Description	Issue Date
0	Initial Release	02/28/2025
1	Customer gave us a PN & SN correction	03/28/2025

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1.0 Introduction

This document presents the test procedures used and the results obtained during the performance of an Electromagnetic Interference (EMI) test program at Element Materials Technology Denver-Longmont (hereafter referred to as “Element”). The test program was conducted to assess the ability of the specified Equipment Under Test (EUT) to successfully satisfy the requirements defined in the test specification.

2.0 References

The following references listed below form a part of this document to the extent specified herein.

- Test Specification: FCC Part 15, Class B
- SLI Compliance Purchase Order 20240603-01 dated 06/03/2024.
- Element Quotation OP0647346 dated 09/26/2023.
- ISO/IEC 17025:2017(E) *General Requirements for the Competence of Testing and Calibration Laboratories*, dated 11/2017.

3.0 Product Selection and Description

SLI Compliance selected and provided the following test sample(s) to be used as the Equipment Under Test.

Table 3.0-1: Product Identification – Equipment Under Test (EUT)

Item	Qty.	Name/Description	Part Number	Serial Number
1	1	Vanguard Adapt	2007040 VV-700	A2520009001

3.1 Security Classification

Non-classified

4.0 General Test Requirements

4.1 Test Equipment

The instrumentation used in the performance of these tests is periodically calibrated and standardized within manufacturer's rated accuracies and are traceable to the National Institute of Standards and Technology. The calibration procedures and practices are in accordance with ISO 17025:2017. Certification of calibration is on file subject to inspection by authorized personnel.

4.2 Measurement Uncertainties

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below were calculated using the approach described in CISPR 16-4-2:2003 using a coverage factor of $k=2$, which gives a level of confidence of approximately 95%. The levels were found to be below levels of CISPR and therefore no adjustment of the data for measurement uncertainty is required.

Table 4.2-1: Measurement Uncertainties (Emissions)

Measurement Type	Measurement Unit	Frequency Range	Expanded Uncertainty
Conducted Emissions	dBuA	150kHz to 30MHz	.+/- 3.75 dB
Radiated Emissions	dBuV/m	30MHz to 1GHz	.+/- 6.32 dB
		1GHz to 6GHz	.+/- 9.59 dB
		6GHz to 18GHz	.+/- 7.58 dB
		18GHz to 40GHz	.+/- 6.08 dB

5.0 Test Description and Results

Table 5.0-1: Summary of Test Information & Results

Section	Test	Specification	Test Facility	Test Date	Part #	Serial #	Test Result
5.1	Radiated Emissions, 30 MHz - 1 GHz	FCC Part 15. Class B	Longmont	02/24/2025	2007040 VV-700	A2520009001	Passed
5.2	Radiated Emissions, 1 GHz - 15 GHz	FCC Part 15. Class B	Longmont	02/24/2025	2007040 VV-700	A2520009001	Passed
5.3	Conducted Emissions, 150 kHz - 30 MHz	FCC Part 15. Class B	Longmont	02/24/2025	2007040 VV-700	A2520009001	Passed

The decision rule for Test Results was based on the Test Specification used for testing.

5.1 Radiated Emissions, 30 MHz - 1 GHz

5.1.1 Test Procedure

The EUT was tested in accordance with FCC Part 15. Class B.

5.1.2 Test Result

The EUT passed the defined requirements.

5.1.3 Test Datasheets

Element Materials Technology				
Radiated Emissions, FCC Part 15, Class B				
Standard Referenced: <u>FCC Part 15, Class B</u>		Date: <u>2/24/2025</u>		
Temperature: <u>24°C</u>	Humidity: <u>16%</u>	Pressure: <u>835 mb</u>		
Input Voltage: <u>120Vac, 60Hz</u>		Pretest & Linearity Check: <u>Pass</u>		
Configuration of Unit: <u>Fully exercising all features of product</u>		Sweep Time Check: <u>Yes</u>		
Test Engineer / Technician: <u>Mike Tidquist</u>				
Date	Time	Log Entries	Initials	Result
2/24/25	1200-1330	Radiated Emissions, 1 GHz – 15 GHz. FCC Part 15. Class B. 120 VAC / 60 Hz	MT	Pass

Element Materials Technology	
Radiated Emissions, FCC Part 15, Class B	
Standard Referenced: FCC Part 15, Class B	Date: 2/24/2025
Temperature: 24°C Humidity: 16%	Pressure: 835 mb
Input Voltage: 120Vac, 60Hz	Pretest & Linearity Check: Pass
Configuration Fully exercising all features of of Unit: product	Sweep Time Check: Yes
Test Engineer / Technician: Mike Tidquist	

“Type” refers to the type of measurement performed. The type of measurement made is based on the requirements of the particular standard:

PK = Peak Measurement: RBW is 120kHz, VBW is 3 MHz

QP = Quasi-Peak Measurement: RBW is 120kHz, VBW is 3 MHz, and QP Detection is ENABLED

AV = Video Average Measurement: RBW is 1 MHz, VBW is 10 Hz

The “field strength” (FS) emissions level is attained by adding the received amplitude measured (RA), Antenna factor (AF), and cable factor (CF) minus the amplifier gain (AG). $FS = RA + AF + CF - AG$. Final measurements are made with the Azimuth, Polarity, Height, and EUT Cables positioned for maximum radiation. If applicable, cables positions are noted in the test log.

(Sample Calculation: $49.6 \text{ dBuV} + 11.4 \text{ dB/m} - 28.8 \text{ dB (CF/AG)} = 32.2 \text{ dBuV/m}$. Important Note: This is a sample calculation only for the purpose of demonstration, and does not reflect data in this report.)

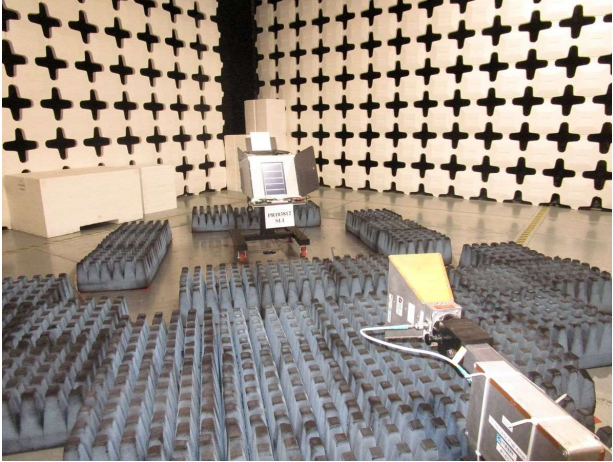
The “Azm/Pol/Hgt” indicates the turn-table azimuth, the antenna polarity, and the antenna height where the maximum emissions level was measured.

The “Margin” is with reference to the emissions limit. A positive number indicates that the emission measurement is below the limit. A negative number indicates that the emission measurement exceeds the limit.

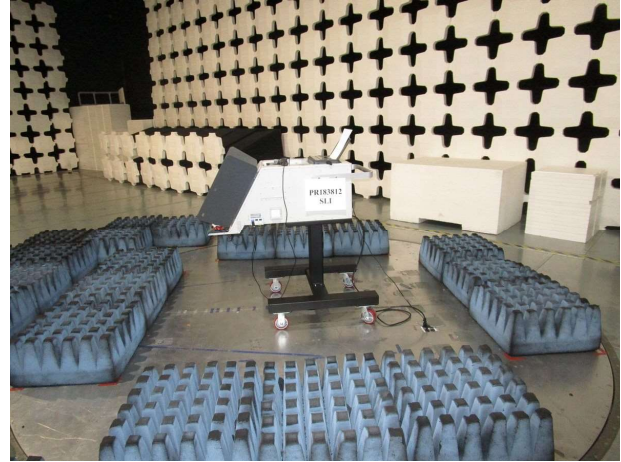
The PRESCAN is a peak measurement and is performed with the RBW set to 120 kHz, VBW set to 3 MHz (30 MHz to 1 GHz), and the RBW set to 1 MHz, VBW set to 3MHz (> 1 GHz)

The Antenna setup for >1GHz should match the setup that was used to meet SVSWR requirements. Refer to the SVSWR report stored in the calibration records for the chamber being used.

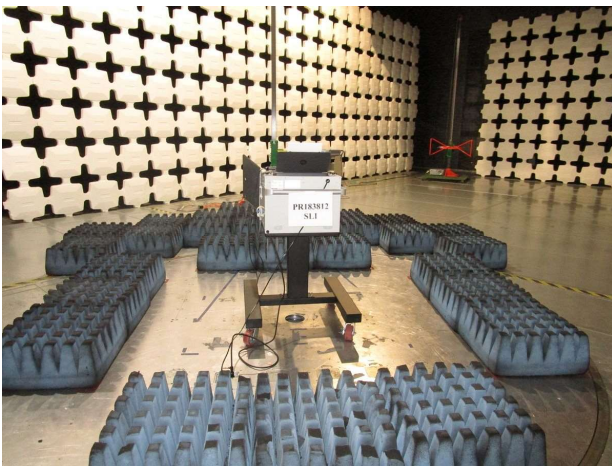
5.1.4 Test Photographs



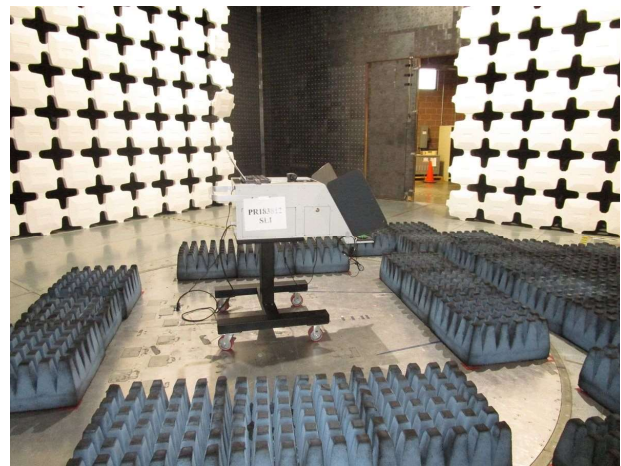
Radiated Emissions 1GHz - 15GHz Front



Radiated Emissions 1GHz - 15GHz Right



Radiated Emissions 1GHz - 15GHz Back

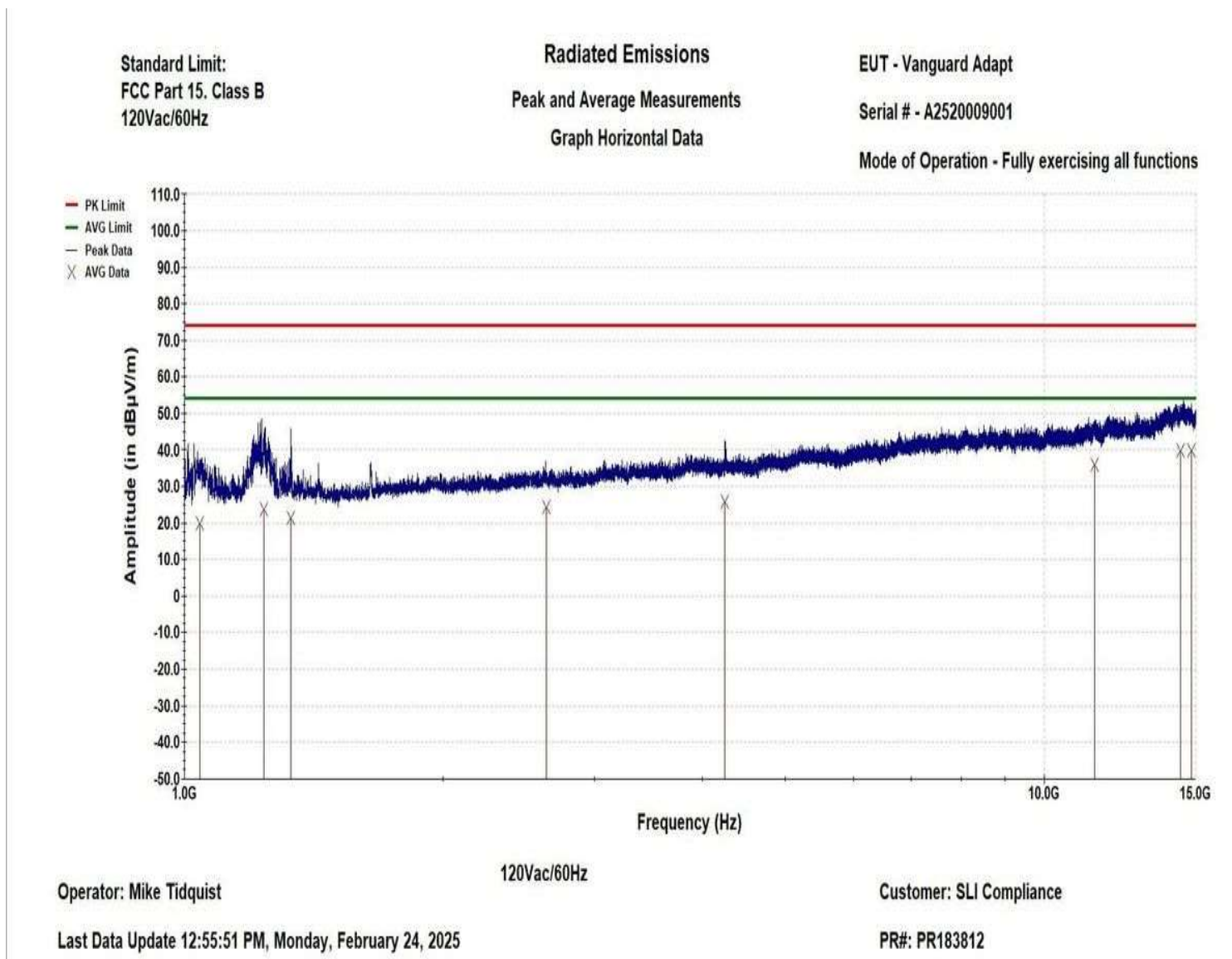


Radiated Emissions 1GHz - 15GHz Left

5.1.5 Test Data

Radiated Emissions Horizontal Average Measurements Table: Final Horizontal Average above 1GHz				
Operator: Mike Tidquist		EUT: Vanguard Adapt PR#: PR183812 Customer: SLI Compliance		
Frequency (MHz)	AVG (in dBuV)	Delta to AVG Limit (in dBuV)	Height (in cm)	Azimuth (in Degrees)
1.044 GHz	19.994	-34.006	351	334
1.238 GHz	23.850	-30.150	249	41
1.329 GHz	21.238	-32.762	156	120
2.635 GHz	24.296	-29.704	382	81
4.248 GHz	25.703	-28.297	361	165
11.433 GHz	35.846	-18.154	251	168
14.398 GHz	39.943	-14.057	166	165
14.812 GHz	39.882	-14.118	109	68
Standard Limit:				
FCC Part 15, Class B				
120Vac/60Hz				

Horizontal Average Data Table



Horizontal Data Graph

Radiated Emissions
Horizontal peak Measurements
Table: Final Horizontal Peak above 1GHz

Operator: Mike Tidquist

EUT: Vanguard Adapt

PR#: PR183812

Customer: SLI Compliance

Frequency (MHz)	Peak (in dBuV)	Delta to PK limit (in dBuV)	Height (in cm)	Azimuth (in Degrees)
1.044 GHz	45.603	-28.397	351	334
1.238 GHz	52.033	-21.967	249	41
1.329 GHz	52.320	-21.680	156	120
2.635 GHz	40.407	-33.593	382	81
4.248 GHz	44.509	-29.491	361	165
11.433 GHz	48.842	-25.158	251	168
14.398 GHz	52.984	-21.016	166	165
14.812 GHz	53.197	-20.803	109	68
Standard Limit:				
FCC Part 15, Class B				
120Vac/60Hz				

Horizontal Peak Data Table

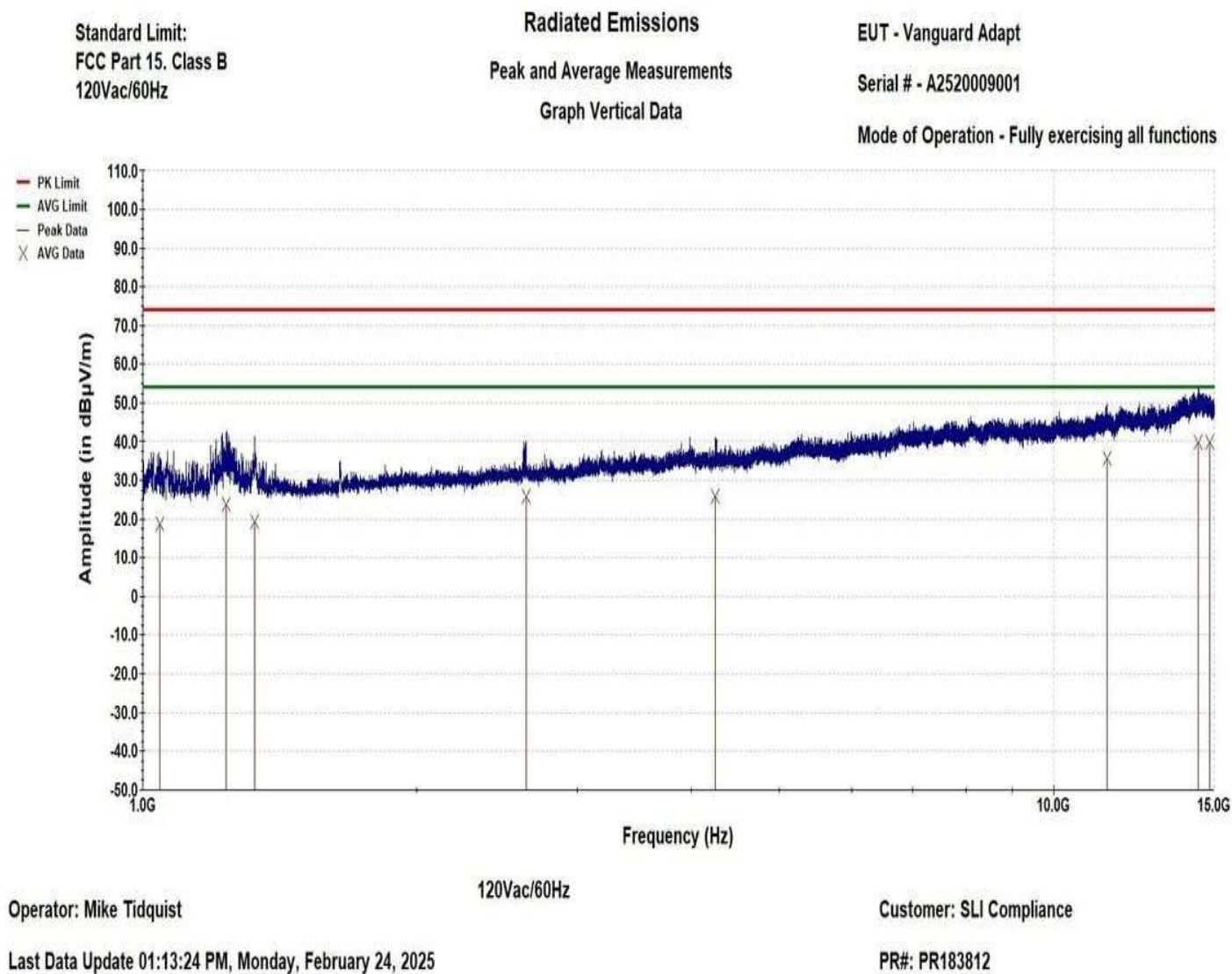
Radiated Emissions
Vertical Average Measurements
Table: Final Vertical Average above 1GHz

Operator: Mike Tidquist

EUT: Vanguard Adapt
PR#: PR183812
Customer: SLI Compliance

Frequency (MHz)	AVG (in dBuV)	Delta to AVG Limit (in dBuV)	Height (in cm)	Azimuth (in Degrees)
1.044 GHz	18.649	-35.351	388	70
1.236 GHz	23.623	-30.377	312	324
1.327 GHz	19.266	-34.734	221	267
2.635 GHz	25.684	-28.316	183	2
4.248 GHz	25.919	-28.081	138	59
11.432 GHz	35.760	-18.240	138	67
14.398 GHz	39.924	-14.076	312	283
14.812 GHz	39.886	-14.114	150	15
Standard Limit:				
FCC Part 15, Class B				
120Vac/60Hz				

Vertical Average Data Table



Vertical Data Graph

Radiated Emissions
Vertical peak Measurements
Table: Final Vertical Peak above 1GHz

Operator: Mike Tidquist

EUT: Vanguard Adapt
PR#: PR183812
Customer: SLI Compliance

Frequency (MHz)	Peak (in dBuV)	Delta to Pk Limit (in dBuV)	Height (in cm)	Azimuth (in Degrees)
1.044 GHz	45.319	-28.681	388	70
1.236 GHz	49.567	-24.433	312	324
1.327 GHz	47.991	-26.009	221	267
2.635 GHz	43.453	-30.547	183	2
4.248 GHz	49.957	-24.043	138	59
11.432 GHz	49.850	-24.150	138	67
14.398 GHz	53.396	-20.604	312	283
14.812 GHz	53.991	-20.009	150	15
Standard Limit:				
FCC Part 15, Class B				
120Vac/60Hz				

Vertical Peak Data Table

5.1.6 Test Equipment List

Table 5.1-1: Radiated Emissions, 30 MHz - 1 GHz Test Equipment List

Asset Number	Asset Type	Manufacturer	Model	Calibrated	Due
WC059439	Meter (Digital Multimeter)	Fluke	85	08/16/2024	08/16/2025
WC059452	Generator (Signal)	Com-Power	CGO - 505	08/27/2014	NCR
WC059739	Antenna (Biconilog)	Sunol Sciences	JB1	05/18/2021	05/11/2025
WC059748	Controller (System)	Sunol Sciences	SC104V	NCR	NCR
WC059822	Receiver	Keysight Technologies	N9038A	09/17/2024	09/17/2025
WC076938	Cable (Test)	National Technical Systems	RF Coax Cable	08/18/2023	08/18/2025
WC078465	Amplifier (Pre/RF/Low Noise)	Pasternack Enterprises	PE15A1013	10/05/2023	10/05/2025
WC078470	Software	ETS-Lindgren	C47213	NCR	NCR
WC078488	Meter (Hydrometer)	Extech Instruments	Datalogger 42270	02/19/2024	02/28/2025

Calibration Abbreviations

CAL: Calibration

NCR: No Calibration Required

5.2 Radiated Emissions, 1 GHz - 15 GHz

5.2.1 Test Procedure

The EUT was tested in accordance with FCC Part 15. Class B.

5.2.2 Test Result

The EUT passed the defined requirements.

5.2.3 Test Datasheets

Element Materials Technology				
Radiated Emissions, FCC Part 15, Class B				
Standard Referenced: <u>FCC Part 15, Class B</u>		Date: <u>2/24/2025</u>		
Temperature: <u>24°C</u>		Humidity: <u>16%</u>		Pressure: <u>835 mb</u>
Input Voltage: <u>120Vac, 60Hz</u>		Pretest & Linearity Check: <u>Pass</u>		
Configuration of Unit: <u>Fully exercising all features of product</u>		Sweep Time Check: <u>Yes</u>		
Test Engineer / Technician: <u>Mike Tidquist</u>				
Date	Time	Log Entries	Initials	Result
2/24/25	1200-1330	Radiated Emissions, 1 GHz – 15 GHz. FCC Part 15. Class B. 120 VAC / 60 Hz	MT	Pass

Element Materials Technology	
Radiated Emissions, FCC Part 15, Class B	
Standard Referenced: FCC Part 15, Class B	Date: 2/24/2025
Temperature: 24°C Humidity: 16%	Pressure: 835 mb
Input Voltage: 120Vac, 60Hz	Pretest & Linearity Check: Pass
Configuration Fully exercising all features of of Unit: product	Sweep Time Check: Yes
Test Engineer / Technician: Mike Tidquist	

“Type” refers to the type of measurement performed. The type of measurement made is based on the requirements of the particular standard:

PK = Peak Measurement: RBW is 120kHz, VBW is 3 MHz

QP = Quasi-Peak Measurement: RBW is 120kHz, VBW is 3 MHz, and QP Detection is ENABLED

AV = Video Average Measurement: RBW is 1 MHz, VBW is 10 Hz

The “field strength” (FS) emissions level is attained by adding the received amplitude measured (RA), Antenna factor (AF), and cable factor (CF) minus the amplifier gain (AG). $FS = RA + AF + CF - AG$. Final measurements are made with the Azimuth, Polarity, Height, and EUT Cables positioned for maximum radiation. If applicable, cables positions are noted in the test log.

(Sample Calculation: $49.6 \text{ dBuV} + 11.4 \text{ dB/m} - 28.8 \text{ dB (CF/AG)} = 32.2 \text{ dBuV/m}$. Important Note: This is a sample calculation only for the purpose of demonstration, and does not reflect data in this report.)

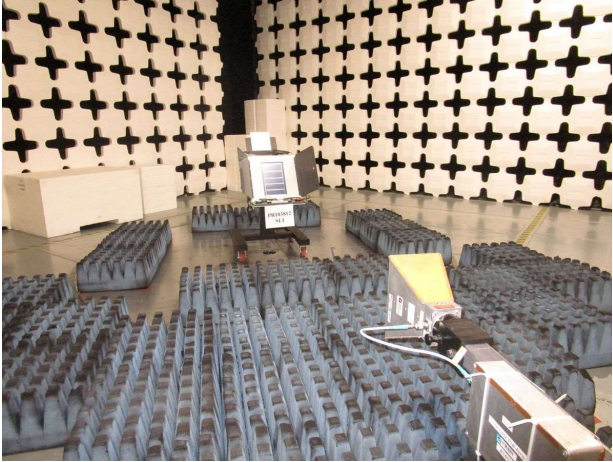
The “Azm/Pol/Hgt” indicates the turn-table azimuth, the antenna polarity, and the antenna height where the maximum emissions level was measured.

The “Margin” is with reference to the emissions limit. A positive number indicates that the emission measurement is below the limit. A negative number indicates that the emission measurement exceeds the limit.

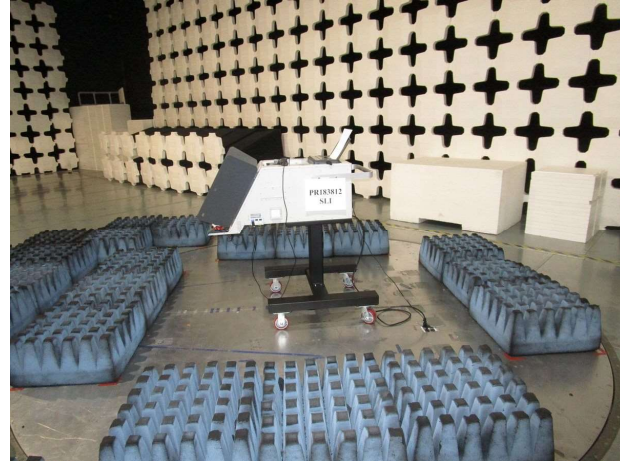
The PRESCAN is a peak measurement and is performed with the RBW set to 120 kHz, VBW set to 3 MHz (30 MHz to 1 GHz), and the RBW set to 1 MHz, VBW set to 3MHz (> 1 GHz)

The Antenna setup for >1GHz should match the setup that was used to meet SVSWR requirements. Refer to the SVSWR report stored in the calibration records for the chamber being used.

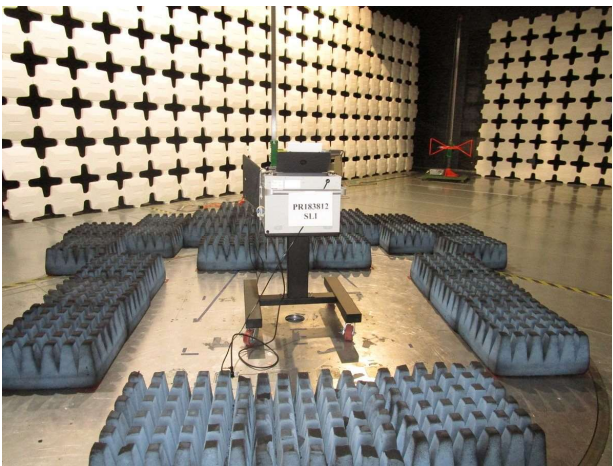
5.2.4 Test Photographs



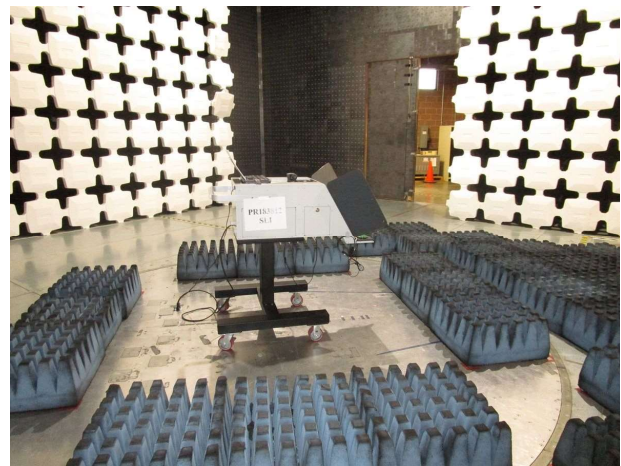
Radiated Emissions 1GHz - 15GHz Front



Radiated Emissions 1GHz - 15GHz Right



Radiated Emissions 1GHz - 15GHz Back

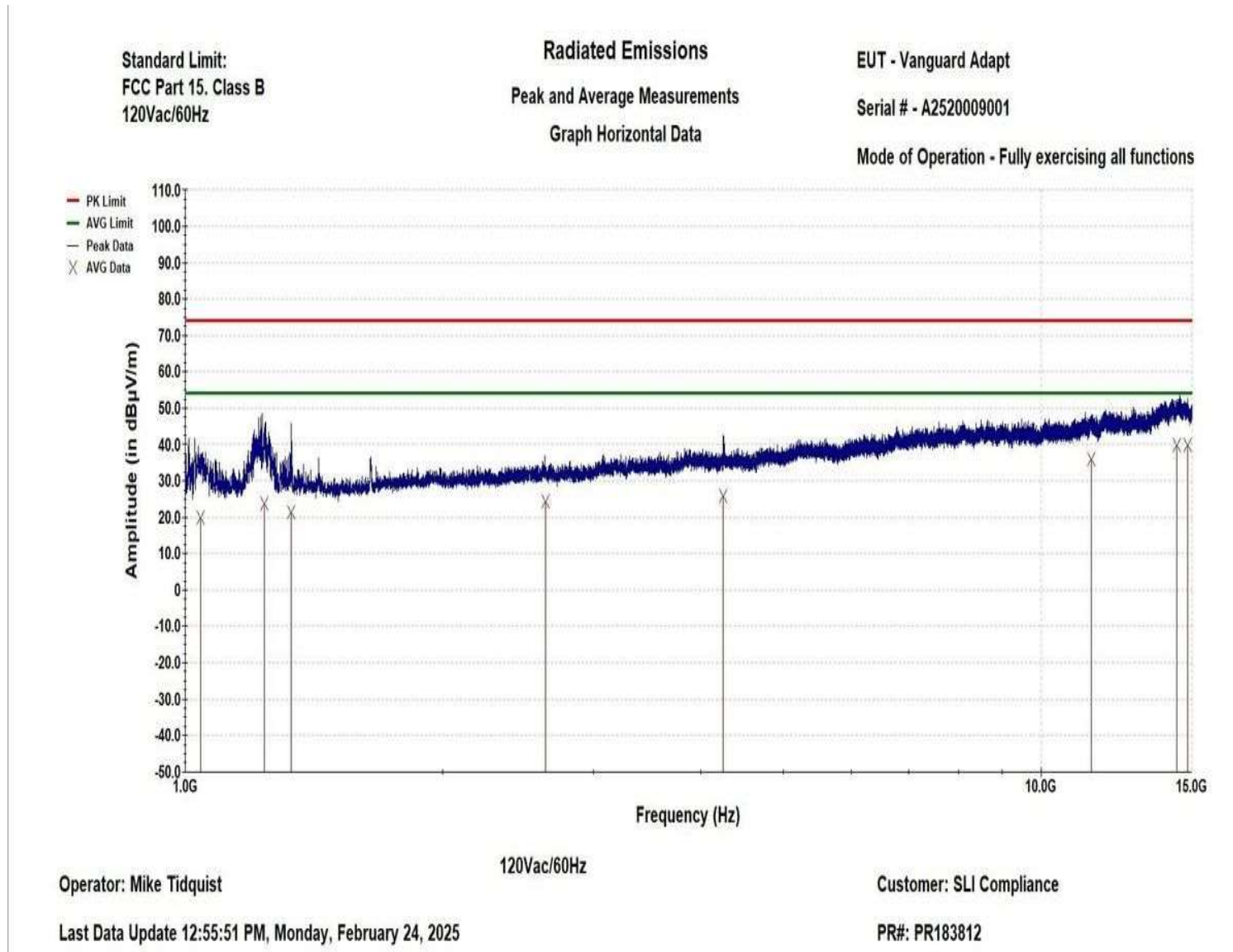


Radiated Emissions 1GHz - 15GHz Left

5.2.5 Test Data

Radiated Emissions Horizontal Average Measurements Table: Final Horizontal Average above 1GHz				
Operator: Mike Tidquist		EUT: Vanguard Adapt PR#: PR183812 Customer: SLI Compliance		
Frequency (MHz)	AVG (in dBuV)	Delta to AVG Limit (in dBuV)	Height (in cm)	Azimuth (in Degrees)
1.044 GHz	19.994	-34.006	351	334
1.238 GHz	23.850	-30.150	249	41
1.329 GHz	21.238	-32.762	156	120
2.635 GHz	24.296	-29.704	382	81
4.248 GHz	25.703	-28.297	361	165
11.433 GHz	35.846	-18.154	251	168
14.398 GHz	39.943	-14.057	166	165
14.812 GHz	39.882	-14.118	109	68
Standard Limit:				
FCC Part 15, Class B				
120Vac/60Hz				

Horizontal Average Data Table



Horizontal Data Graph

Radiated Emissions
Horizontal peak Measurements
Table: Final Horizontal Peak above 1GHz

Operator: Mike Tidquist

EUT: Vanguard Adapt
PR#: PR183812
Customer: SLI Compliance

Frequency (MHz)	Peak (in dBuV)	Delta to PK limit (in dBuV)	Height (in cm)	Azimuth (in Degrees)
1.044 GHz	45.603	-28.397	351	334
1.238 GHz	52.033	-21.967	249	41
1.329 GHz	52.320	-21.680	156	120
2.635 GHz	40.407	-33.593	382	81
4.248 GHz	44.509	-29.491	361	165
11.433 GHz	48.842	-25.158	251	168
14.398 GHz	52.984	-21.016	166	165
14.812 GHz	53.197	-20.803	109	68
Standard Limit:				
FCC Part 15, Class B				
120Vac/60Hz				

Horizontal Peak Data Table

Radiated Emissions
Vertical Average Measurements
Table: Final Vertical Average above 1GHz

Operator: Mike Tidquist

EUT: Vanguard Adapt

PR#: PR183812

Customer: SLI Compliance

Frequency (MHz)	AVG (in dBuV)	Delta to AVG Limit (in dBuV)	Height (in cm)	Azimuth (in Degrees)
1.044 GHz	18.649	-35.351	388	70
1.236 GHz	23.623	-30.377	312	324
1.327 GHz	19.266	-34.734	221	267
2.635 GHz	25.684	-28.316	183	2
4.248 GHz	25.919	-28.081	138	59
11.432 GHz	35.760	-18.240	138	67
14.398 GHz	39.924	-14.076	312	283
14.812 GHz	39.886	-14.114	150	15
Standard Limit:				
FCC Part 15, Class B				
120Vac/60Hz				

Vertical Average Data Table

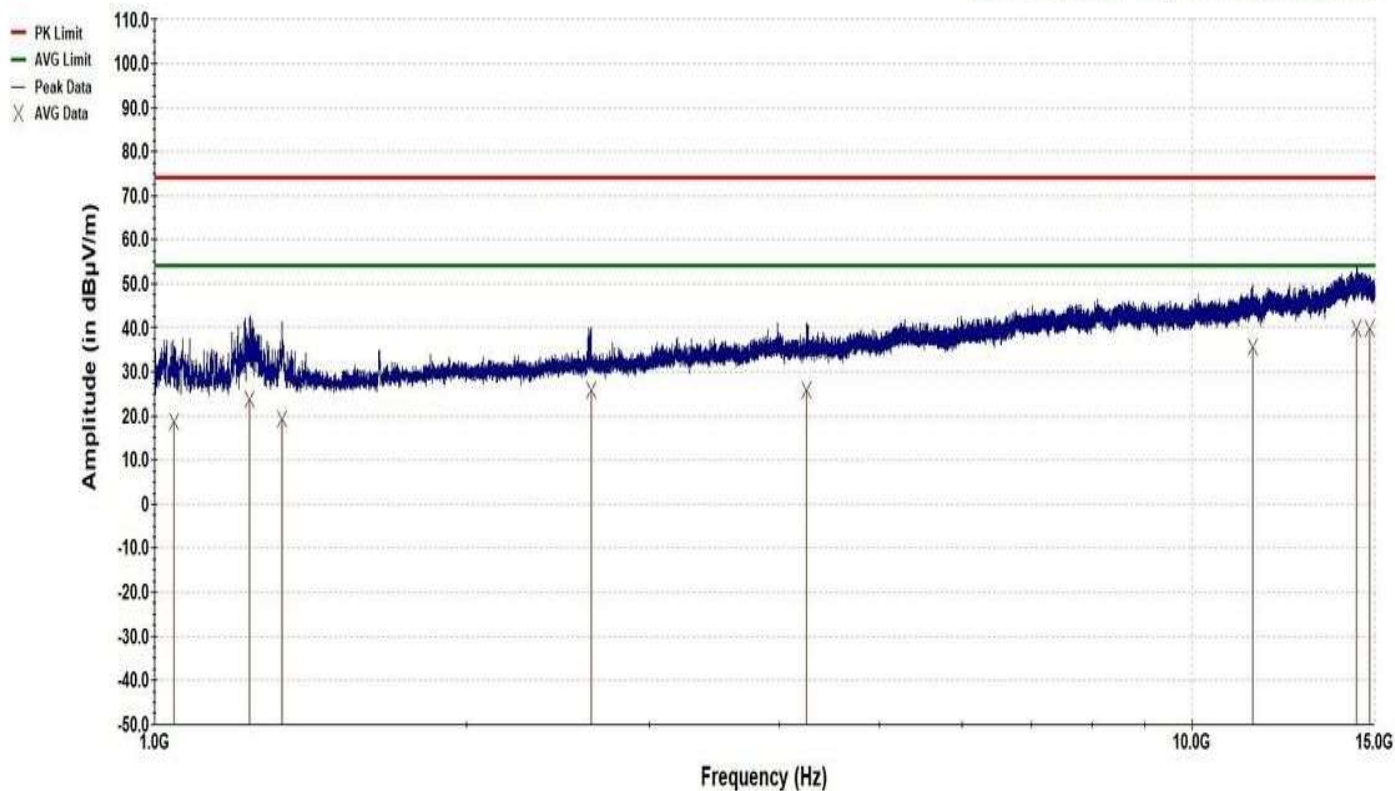
Standard Limit:
FCC Part 15, Class B
120Vac/60Hz

Radiated Emissions Peak and Average Measurements Graph Vertical Data

EUT - Vanguard Adapt

Serial # - A2520009001

Mode of Operation - Fully exercising all functions



Operator: Mike Tidquist

120Vac/60Hz

Customer: SLI Compliance

Last Data Update 01:13:24 PM, Monday, February 24, 2025

PR#: PR183812

Vertical Data Graph

Radiated Emissions
Vertical peak Measurements
Table: Final Vertical Peak above 1GHz

Operator: Mike Tidquist

EUT: Vanguard Adapt
PR#: PR183812
Customer: SLI Compliance

Frequency (MHz)	Peak (in dBuV)	Delta to Pk Limit (in dBuV)	Height (in cm)	Azimuth (in Degrees)
1.044 GHz	45.319	-28.681	388	70
1.236 GHz	49.567	-24.433	312	324
1.327 GHz	47.991	-26.009	221	267
2.635 GHz	43.453	-30.547	183	2
4.248 GHz	49.957	-24.043	138	59
11.432 GHz	49.850	-24.150	138	67
14.398 GHz	53.396	-20.604	312	283
14.812 GHz	53.991	-20.009	150	15
Standard Limit:				
FCC Part 15, Class B				
120Vac/60Hz				

Vertical Peak Data Table

5.2.6 Test Equipment List

Table 5.2-1: Radiated Emissions, 1 GHz - 15 GHz Test Equipment List

Asset Number	Asset Type	Manufacturer	Model	Calibrated	Due
WC059428	Antenna (Double Ridge Guide)	Sunol Sciences	DRH-118	02/20/2024	02/20/2026
WC059439	Meter (Digital Multimeter)	Fluke	85	08/16/2024	08/16/2025
WC059550	Amplifier (Pre/RF/Low Noise)	Ciao Wireless	1-18 GHZ	06/21/2024	06/21/2025
WC076859	Receiver	Rohde & Schwarz	ESW44	01/24/2025	01/24/2026
WC076925	Cable (Test)	Teledyne-taber	3 M RF Coax Cable	10/21/2024	10/21/2026
WC078470	Software	ETS-Lindgren	C47213	NCR	NCR
WC078488	Meter (Hydrometer)	Extech Instruments	Datalogger 42270	02/19/2024	02/28/2025
WC080805	Cable (Test)	Micro-Coax	UFA210A-0-0180-300300	06/21/2024	06/21/2025

Calibration Abbreviations

CAL: Calibration

NCR: No Calibration Required

5.3 Conducted Emissions, 150 kHz - 30 MHz

5.3.1 Test Procedure

The EUT was tested in accordance with FCC Part 15, Class B.

5.3.2 Test Result

The EUT passed the defined requirements.

5.3.3 Test Datasheets

Element Materials Technology				
Conducted Emissions, FCC Part 15, Class B				
Standard Referenced: <u>FCC Part 15, Class B</u>		Date: <u>2/24/2025</u>		
Temperature: <u>25°C</u>	Humidity: <u>16%</u>		Pressure: <u>835 mb</u>	
Input Voltage: <u>120Vac/60Hz</u>		LISN Bonding: <u>2.0 mΩ</u>		
Configuration of Unit: <u>Fully exercising all features of product</u>		Sweep Time Check: <u>Yes</u>		
Test Engineer: <u>Mike Tidquist</u>				
Date	Time	Log Entries	Initials	Result
2/24/25	1030-1100	Pretest verification and ambient scans completed	MT	Complete
	1100-1130	Conducted Emissions, 150 kHz – 30 MHz. FCC Part 15, Class B. 120 VAC / 60 Hz	MT	Pass

Element Materials Technology		
Conducted Emissions, FCC Part 15, Class B		
Standard Referenced: <u>FCC Part 15, Class B</u>		Date: <u>2/24/2025</u>
Temperature: <u>25°C</u>	Humidity: <u>16%</u>	Pressure: <u>835 mb</u>
Input Voltage: <u>120Vac/60Hz</u>		LISN Bonding: <u>2.0 mΩ</u>
Configuration of Unit: <u>Fully exercising all features of product</u>		Sweep Time Check: <u>Yes</u>
Test Engineer: <u>Mike Tidquist</u>		

“Type” refers to the type of measurement performed. The type of measurement made is based on the requirements of the particular standard:

PK = Peak Measurement: RBW is 9 kHz, VBW is 3 MHz

QP = Quasi-Peak Measurement: RBW is 9 kHz, VBW is 3 MHz, and QP Detection is ENABLED

AV = Video Average Measurement: RBW is 9 kHz, VBW is 10 Hz

The “CE Level” is attained by adding the conducted amplitude measured (CA), Attenuation Cal factor (ACF), cable factor (CF) plus the LISN Cal Factor (LCF). CE Level = CA + ACF + CF + LCF. If applicable, cables positions are noted in the test log. (Sample Calculation: -7.5 dBuV + 20.2 dB + 1.5 dB + 23.8 dB = 38 dBuV. **Important Note:** This is a sample calculation only for the purpose of demonstration, and does not reflect data in this report.)

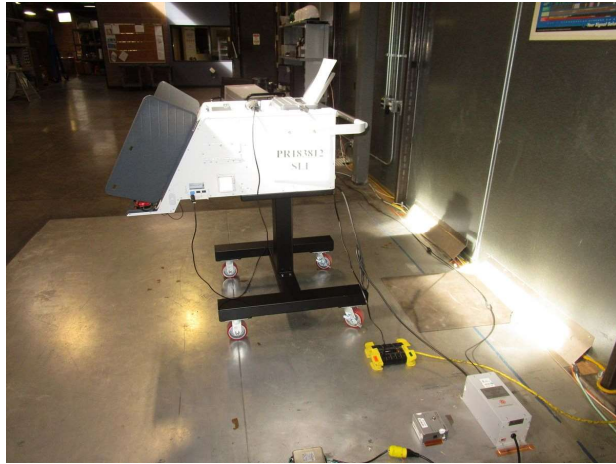
The “TestPoint” indicates which AC or DC input power line or which I/O cable the measurement was made on.

The “Margin” is with reference to the emissions limit. A positive number indicates that the emission measurement is below the limit. A negative number indicates that the emission measurement exceeds the limit.

5.3.4 Test Photographs



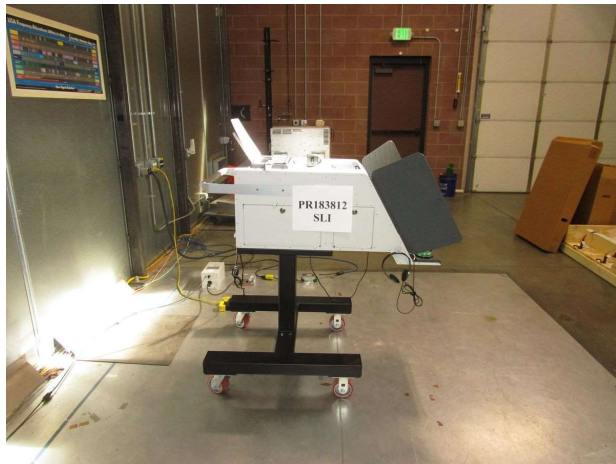
Conducted emissions Front



Conducted emissions Right



Conducted emissions Back



Conducted emissions Left

5.3.5 Test Data

Conducted Emissions Average Data Table

Operator: Mike Tidquist
11:16:24 AM, Monday, February 24, 2025

EUT: Vanguard Adapt
PR#: PR183812
Client: SLI Compliance

Frequency (MHz)	Amplitude (in dBμV)	Average Limit (in dBμV)	Delta to Average Limit (in dB)
173.04 KHz	54.08	55.34	-1.26
216.05 KHz	46.08	54.11	-8.03
520.83 KHz	35.40	46.00	-10.60
566.73 KHz	27.91	46.00	-18.09
1.16 MHz	28.83	46.00	-17.17
1.71 MHz	23.37	46.00	-22.63
9.44 MHz	31.41	50.00	-18.59
9.71 MHz	28.89	50.00	-21.11
AC LINE 1			
120Vac/60Hz			

Conducted Emissions Average Data Table L1

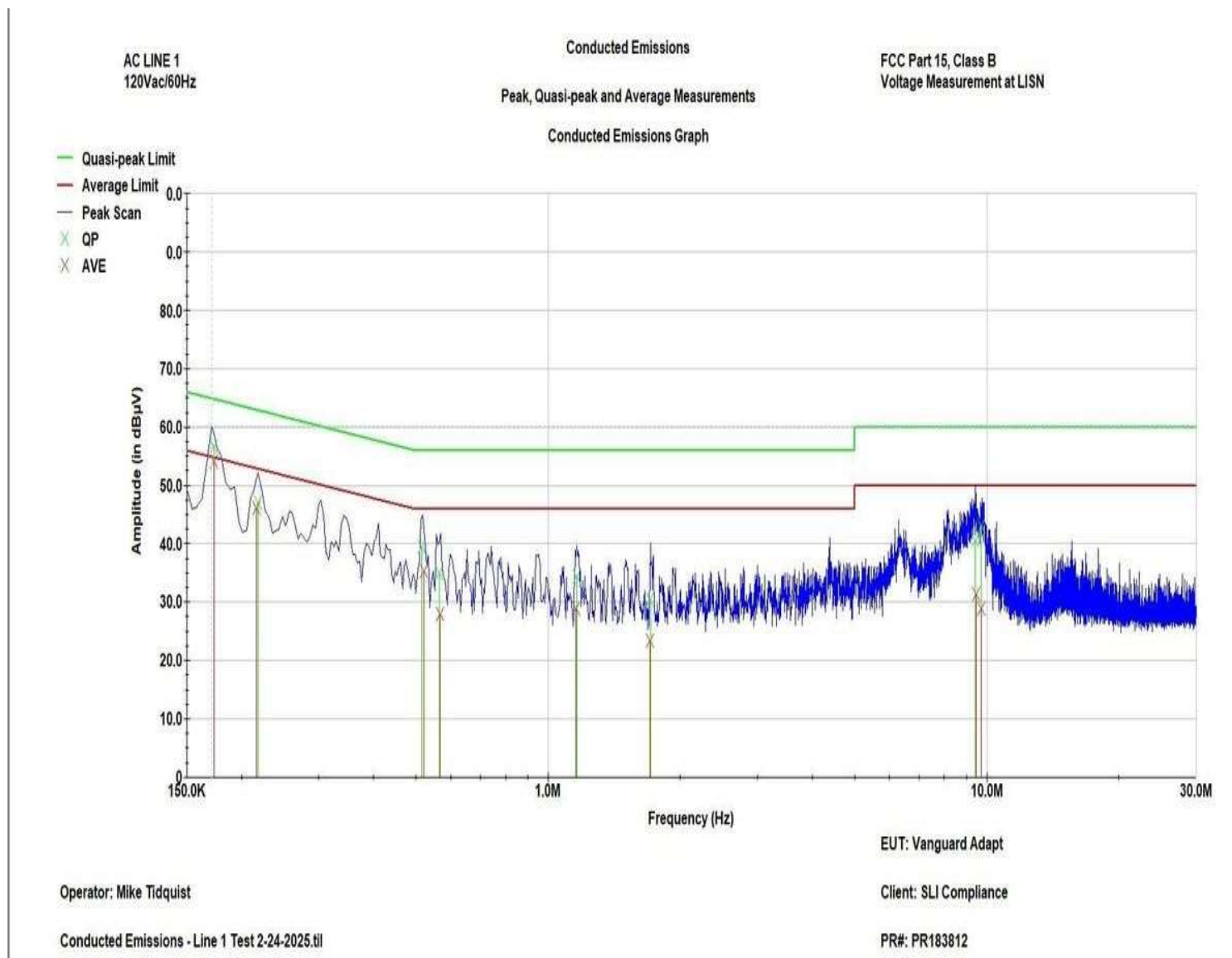
Conducted Emissions Average Data Table

Operator: Mike Tidquist
11:30:21 AM, Monday, February 24, 2025

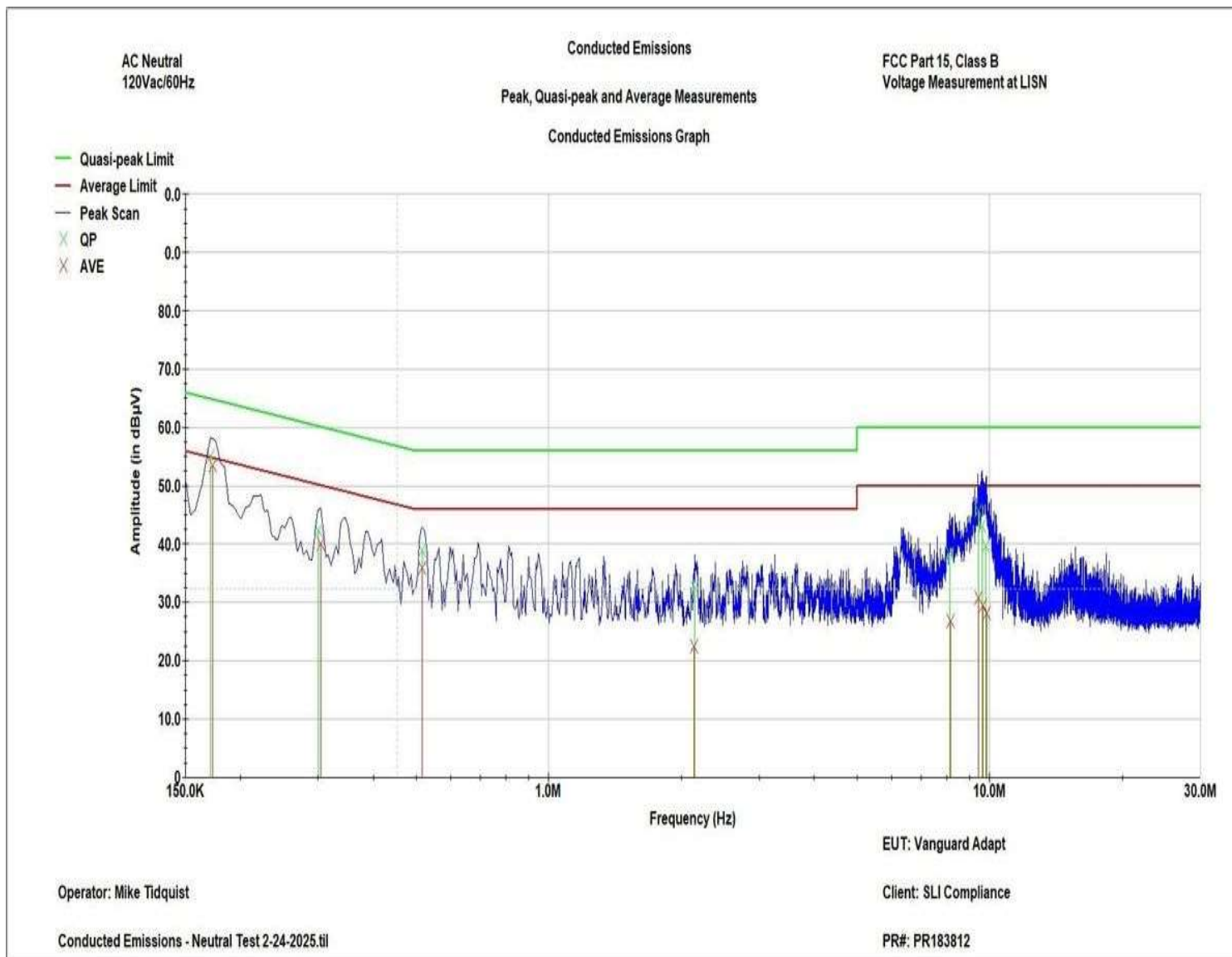
EUT: Vanguard Adapt
PR#: PR183812
Client: SLI Compliance

Frequency (MHz)	Amplitude (in dBμV)	Average Limit (in dBμV)	Delta to Average Limit (in dB)
173.04 KHz	53.44	55.34	-1.90
303.86 KHz	40.12	51.60	-11.49
515.68 KHz	35.95	46.00	-10.05
2.14 MHz	22.44	46.00	-23.56
8.13 MHz	26.89	50.00	-23.11
9.43 MHz	30.83	50.00	-19.17
9.64 MHz	29.42	50.00	-20.58
9.83 MHz	28.09	50.00	-21.91
AC Neutral			
120Vac/60Hz			

Conducted Emissions Average Data Table Neutral



Conducted Emissions Graph L1



Conducted Emissions Graph Neutral

Conducted Emissions Quasi-Peak Data Table

Operator: Mike Tidquist
11:14:02 AM, Monday, February 24, 2025

EUT: Vanguard Adapt
PR#: PR183812
Client: SLI Compliance

Frequency (MHz)	Amplitude (in dBμV)	Quasi-peak Limit (in dBμV)	Delta to Quasi-peak Limit (in dB)
173.04 KHz	56.71	65.34	-8.64
218.22 KHz	46.97	64.05	-17.08
515.70 KHz	39.42	56.00	-16.58
564.48 KHz	35.01	56.00	-20.99
1.16 MHz	34.39	56.00	-21.61
1.71 MHz	30.41	56.00	-25.59
9.42 MHz	40.66	60.00	-19.34
9.72 MHz	43.12	60.00	-16.88
AC LINE 1			
120Vac/60Hz			

Conducted Emissions Quasi Peak Data Table L1

Conducted Emissions
Quasi-Peak Data Table

Operator: Mike Tidquist
11:27:49 AM, Monday, February 24, 2025

EUT: Vanguard Adapt
PR#: PR183812
Client: SLI Compliance

Frequency (MHz)	Amplitude (in dBμV)	Quasi-peak Limit (in dBμV)	Delta to Quasi-peak Limit (in dB)
171.32 KHz	55.06	65.39	-10.33
300.84 KHz	42.25	61.69	-19.44
515.67 KHz	38.96	56.00	-17.04
2.15 MHz	32.48	56.00	-23.52
8.12 MHz	38.33	60.00	-21.67
9.42 MHz	45.74	60.00	-14.26
9.62 MHz	43.17	60.00	-16.83
9.81 MHz	39.60	60.00	-20.40
AC Neutral			
120Vac/60Hz			

Conducted Emissions Quasi Peak Data Table Neutral

5.3.6 Test Equipment List

Table 5.3-1: Conducted Emissions, 150 kHz - 30 MHz Test Equipment List

Asset Number	Asset Type	Manufacturer	Model	Calibrated	Due
WC059439	Meter (Digital Multimeter)	Fluke	85	08/16/2024	08/16/2025
WC059822	Receiver	Keysight Technologies	N9038A	09/17/2024	09/17/2025
WC076847	Network (LISN)	Solar Electronics	8012-50-R-25-BNC	10/10/2024	10/31/2025
WC078470	Software	ETS-Lindgren	C47213	NCR	NCR
WC078471	Cable (Test)	National Technical Systems	BNC Coaxial Cable	09/20/2023	09/20/2025
WC078488	Meter (Hydrometer)	Extech Instruments	Datalogger 42270	02/19/2024	02/28/2025
WC084270	Attenuator (Coaxial)	Pasternack Enterprises	PE7002-6	09/20/2023	09/20/2026

Calibration Abbreviations

CAL: Calibration

NCR: No Calibration Required

End of Test Report