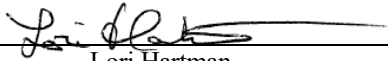


**Element Materials Technology Denver-Longmont
A.K.A. NTS Labs, LLC
Test Report for Electromagnetic Interference (EMI)
Testing of the Vanguard Boost, HP Printer, ATI, and
Headphones**

Prepared For

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

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Program Manager

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Revision History

Rev.	Description	Issue Date
0	Initial Release	05/02/2025

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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: VVSG 2.0
- SLI Compliance Purchase Order 20250319-01 dated 03/19/2025.
- Element Quotation OP0671387 dated 03/19/2025.
- 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	2	Vanguard Boost	VV-500 2007020	B2520006401, B2520006001
2	1	HP Printer	2Z600F	VNL0341878
3	1	ATI	2007080-A	N/A
4	1	Headphones	Headphones	N/A

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	VVSG 2.0	Longmont	04/18/2025	VV-500 2007020	B2520006401	Passed
					2Z600F,	VNL0341878	
					2007080-A	N/A	
					Headphones	N/A	
5.2	Radiated Emissions, 1 GHz - 15 GHz	VVSG 2.0	Longmont	04/21/2025	VV-500 2007020	B2520006401	Passed
					2Z600F	VNL0341878	
					2007080-A	N/A	
					Headphones	N/A	
5.3	Conducted Emissions, 150 kHz - 30 MHz	VVSG 2.0	Longmont	04/21/2025 - 04/21/2025	2Z600F	VNL0341878	Passed
					2007080-A,	N/A	
					VV-500 2007020	B2520006401	
					Headphones	N/A	

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 VVSG 2.0.

5.1.2 Test Result

The EUT passed the defined requirements.

5.1.3 Test Datasheets

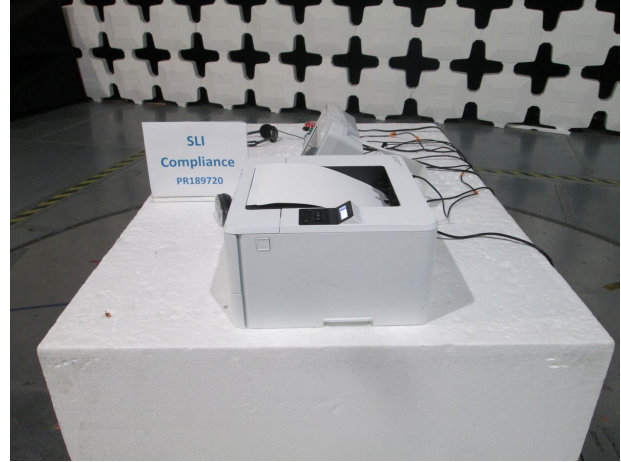
Element Materials Technology				
Radiated Emissions				
Standard Referenced:		FCC Part 15, Class B	Date: 4/18/2025	
Temperature: 24°C		Humidity: 17%	Pressure: 830 mb	
Input Voltage: 120Vac/60Hz		Pretest & Linearity Check: Pass		
Configuration of Unit: Fully exercising all features of product		Sweep Time Check: Ok		
Test Engineer / Technician: T. Wittig				
Date	Time	Log Entries	Initials	Result
4/18/2025	1134	Performed RE pre-tets verification and ambient scans	TW	Complete
	1215	Setup Vanguard Boost in 10 meter #2	TW	Complete
	1311	Begin Radiated Emissions, 30 MHz 1 GHz. FCC Part 15. Class B	TW	---
	1541	Completed RE testing 30 MHz to 1 GHz	TW	Pass

Element Materials Technology	
Radiated Emissions	
Standard Referenced: FCC Part 15, Class B	Date: 4/18/2025
Temperature: 24°C Humidity: 17%	Pressure: 830 mb
Input Voltage: 120Vac/60Hz	Pretest & Linearity Check: Pass
Configuration of Unit: Fully exercising all features of product	Sweep Time Check: Ok
Test Engineer / Technician: T. Wittig	
<p>"Type" refers to the type of measurement performed. The type of measurement made is based on the requirements of the particular standard:</p> <p>PK = Peak Measurement: RBW is 120kHz, VBW is 3 MHz</p> <p>QP = Quasi-Peak Measurement: RBW is 120kHz, VBW is 3 MHz, and QP Detection is ENABLED</p> <p>AV = Video Average Measurement: RBW is 1 MHz, VBW is 10 Hz</p> <p>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.)</p> <p>The "Azim/Pol/Hgt" indicates the turn-table azimuth, the antenna polarity, and the antenna height where the maximum emissions level was measured.</p> <p>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.</p> <p>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)</p> <p>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.</p>	

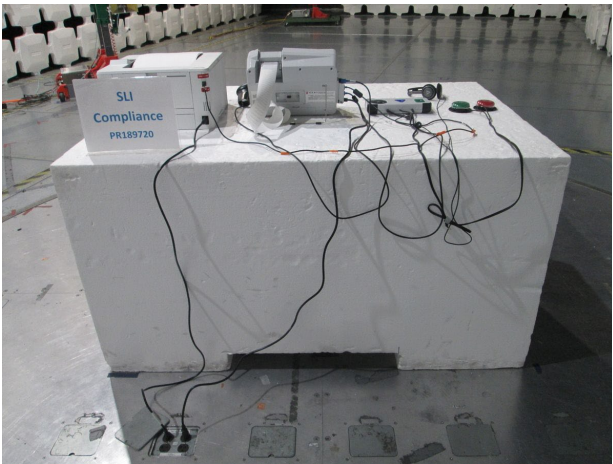
5.1.4 Test Photographs



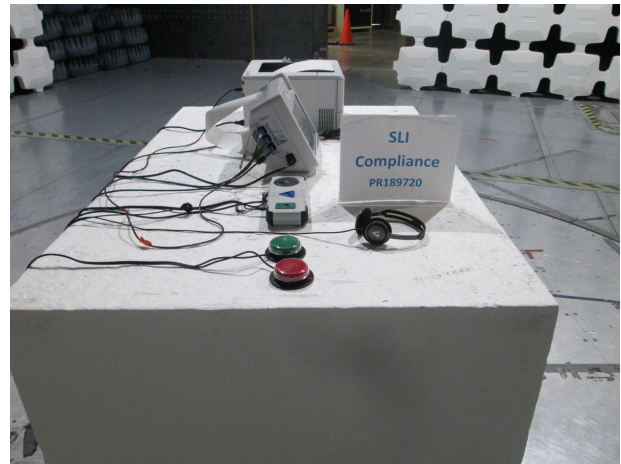
RE Test Setup Photos - Front



RE Test Setup Photos - Right

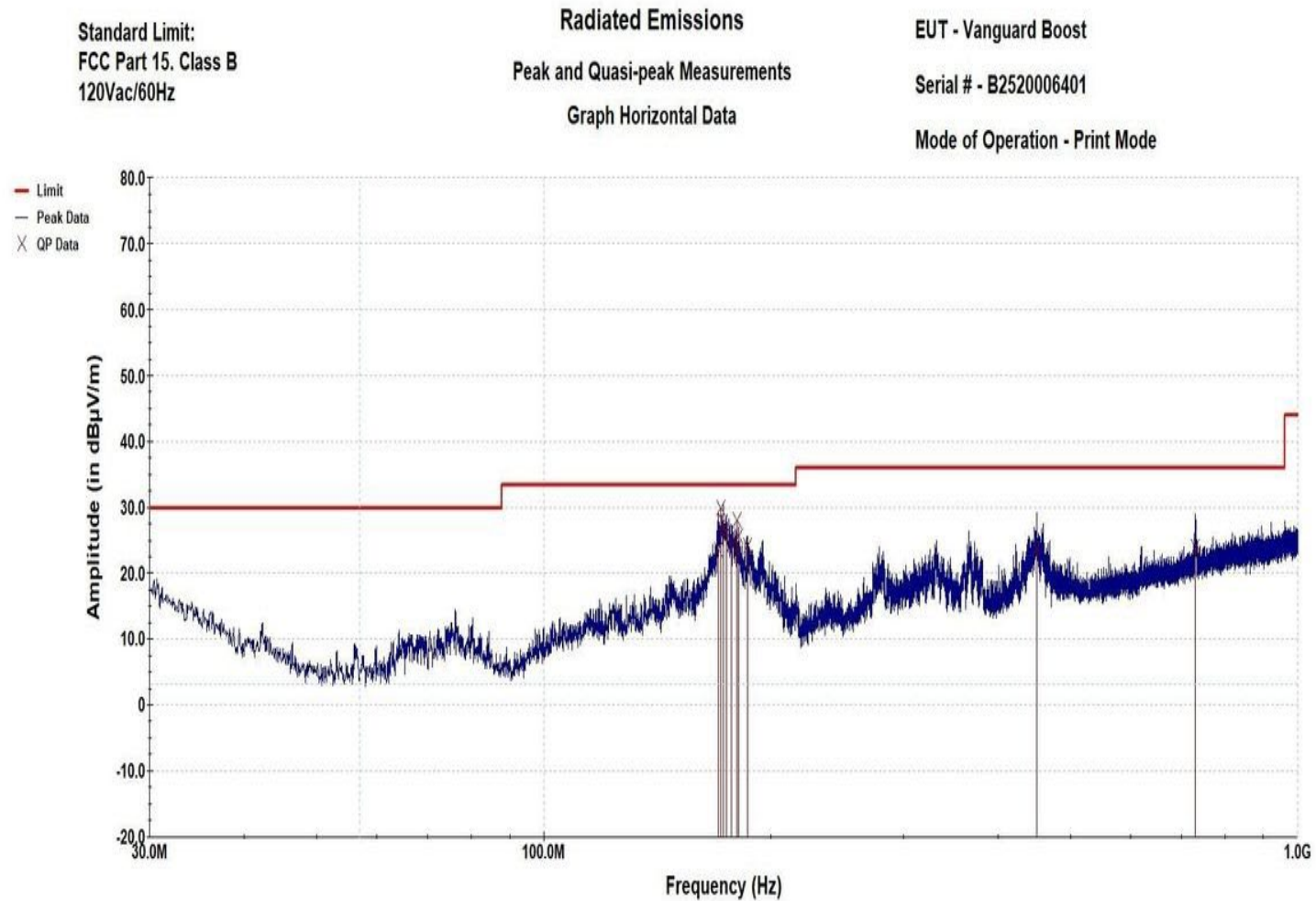


RE Test Setup Photos - Back



RE Test Setup Photos - Left

5.1.5 Test Data



Operator: T. Wittig

Customer: SLI Compliance

Last Data Update 02:11:44 PM, Friday, April 18, 2025

PR#: PR189720

Horizontal Data Graph

Radiated Emissions
Quasi-peak Measurements
Table: Horizontal Quasi-peaks below 1 GHz

Operator: T. Wittig

EUT: Vanguard Boost
PR#: PR189720
Customer: SLI Compliance

Frequency (MHz)	QP (in dBuV)	Delta QP to Limit (in dBuV)	Height (in cm)	Azimuth (in Degrees)
170.330 MHz	23.519	-10.001	393	-1
171.710 MHz	29.996	-3.524	401	302
172.930 MHz	27.676	-5.844	393	310
174.630 MHz	26.182	-7.338	344	154
177.190 MHz	24.551	-8.969	353	336
180.257 MHz	27.997	-5.523	393	355
181.060 MHz	25.520	-8.000	401	0
186.150 MHz	24.162	-9.358	382	12
450.950 MHz	23.768	-12.252	261	121
731.370 MHz	24.025	-11.995	110	168
Standard Limit:				
FCC Part 15, Class B				
120Vac/60Hz				

Horizontal Quasi-Peak Data Table

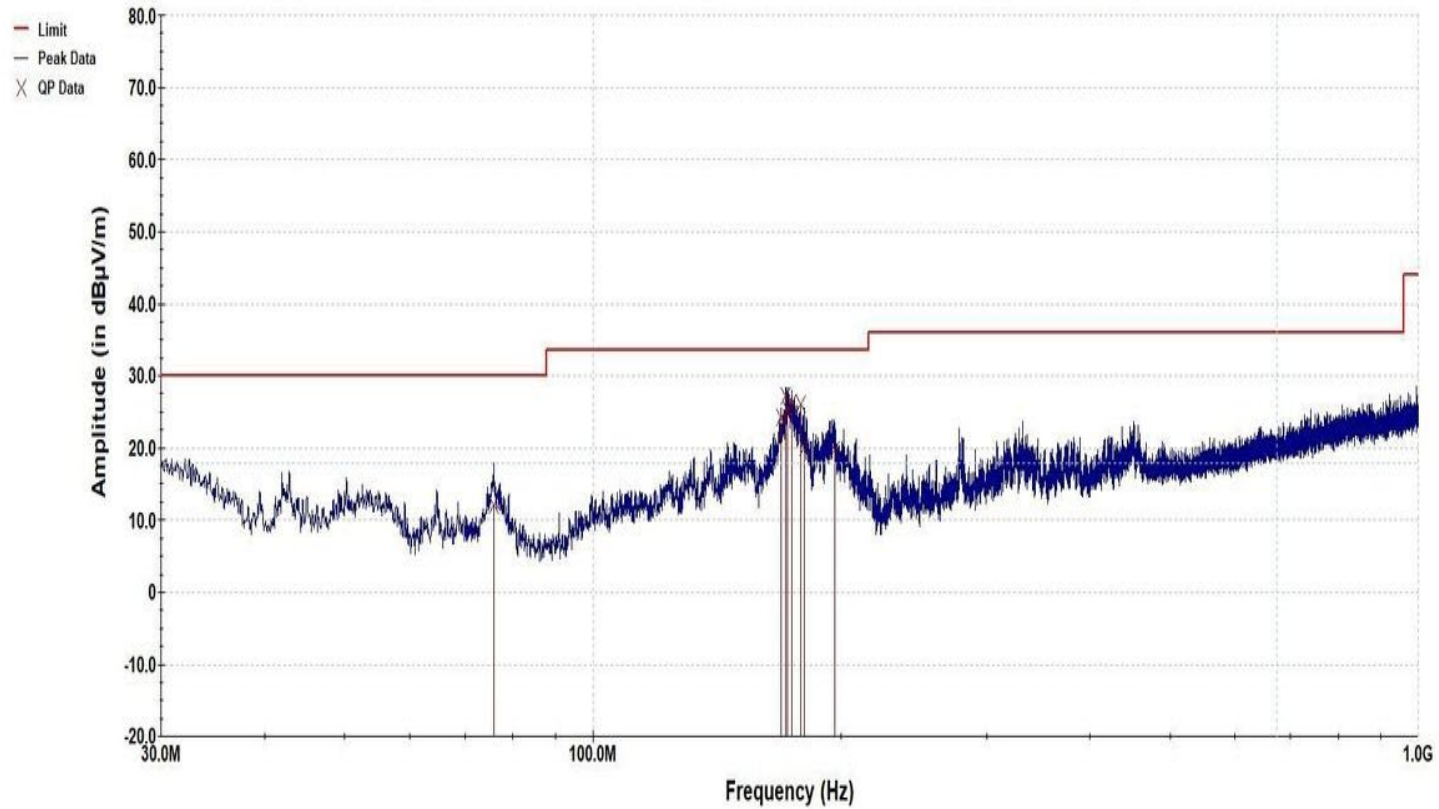
Standard Limit:
FCC Part 15, Class B
120Vac/60Hz

Radiated Emissions Peak and Quasi-peak Measurements Graph Vertical Data

EUT - Vanguard Boost

Serial # - B2520006401

Mode of Operation - Print Mode



Operator: T. Wittig

Customer: SLI Compliance

Last Data Update 02:51:16 PM, Friday, April 18, 2025

PR#: PR189720

Vertical Data Graph

Radiated Emissions
Quasi-peak Measurements
Table: Vertical Quasi-peaks below 1 GHz

Operator: T. Wittig

EUT: Vanguard Boost
PR#: PR189720
Customer: SLI Compliance

Frequency (MHz)	QP (in dBuV)	Delta QP to Limit (in dBuV)	Height (in cm)	Azimuth (in Degrees)
75.790 MHz	11.985	-18.015	401	45
168.890 MHz	24.210	-9.310	358	338
171.330 MHz	27.257	-6.263	148	310
172.170 MHz	25.400	-8.120	213	309
174.040 MHz	26.183	-7.337	142	322
178.630 MHz	26.038	-7.482	98	314
180.450 MHz	20.067	-13.453	381	314
196.170 MHz	19.645	-13.875	189	60
Standard Limit:				
FCC Part 15, Class B				
120Vac/60Hz				

Vertical Quasi-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
WC059421	Chamber (EMI, Semi-Anechoic)10 Meter	CIR Enterprises	10M2	02/12/2024	02/12/2026
WC059452	Generator (Signal)	Com-Power	CGO - 505	08/27/2014	NCR
WC059621	Meter (Digital Multimeter)	Fluke	87V	08/28/2023	05/07/2025
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
WC076923	Cable (Test)	Teledyne-taber	RF Coaxial Cable (2 meters)	07/09/2024	07/10/2026
WC078465	Amplifier (Pre/RF/Low Noise)	Pasternack Enterprises	PE15A1013	10/05/2023	10/05/2025
WC078470	Software	ETS-Lindgren	C47213	NCR	NCR
WC078489	Meter (Hydrometer)	Extech Instruments	Datalogger 42270	08/12/2024	08/31/2025

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 VVSG 2.0.

5.2.2 Test Result

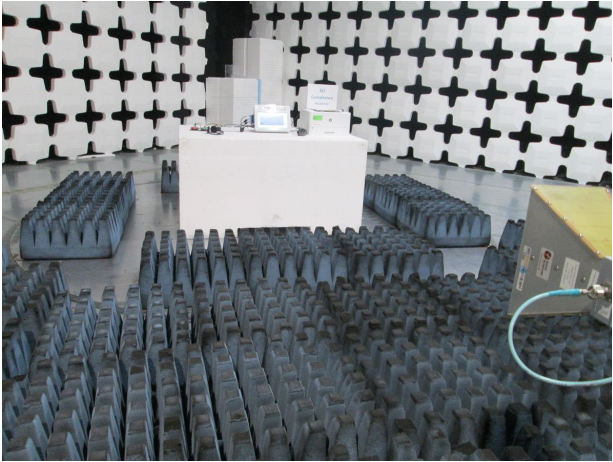
The EUT passed the defined requirements.

5.2.3 Test Datasheets

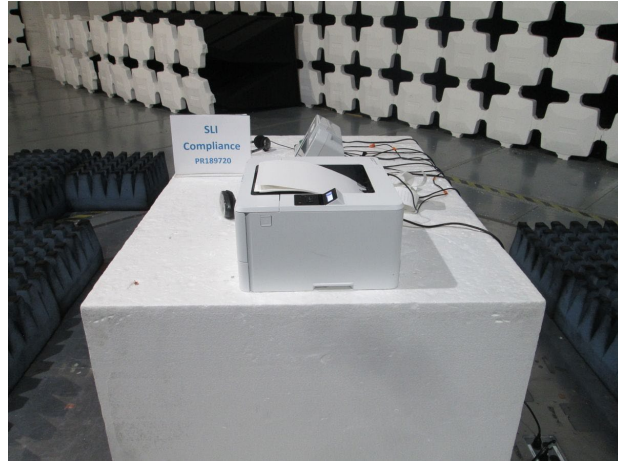
Element Materials Technology				
Radiated Emissions, FCC Part 15				
Standard Referenced: <u>VVSG 2.0</u>		Date: <u>4/21/2025</u>		
Temperature: <u>24°C</u>		Humidity: <u>18%</u>		Pressure: <u>833 mb</u>
Input Voltage: <u>120Vac/60Hz</u>		Pretest & Linearity Check: <u>Pass</u>		
Configuration of Unit: <u>Fully exercising all features of product</u>		Sweep Time Check: <u>Ok</u>		
Test Engineer / Technician: <u>T. Wittig</u>				
Date	Time	Log Entries	Initials	Result
4/21/2025	0705	Setup 10 meter chamber #2 for RE 1-15 GHz testing	TW	Complete
	0749	Begin Radiated Emissions, 1 GHz 15 GHz FCC Part 15. Class B.	TW	---
	1042	Completed RE testing 1-18 GHz	TW	Pass

Element Materials Technology			
Radiated Emissions, FCC Part 15			
Standard Referenced:	VVSG 2.0	Date:	4/21/2025
Temperature:	24°C	Humidity:	18%
		Pressure:	833 mb
Input Voltage:	120Vac/60Hz	Pretest & Linearity Check:	Pass
Configuration of Unit:	Fully exercising all features of product	Sweep Time Check:	Ok
Test Engineer / Technician:	T. Wittig		
<p>"Type" refers to the type of measurement performed. The type of measurement made is based on the requirements of the particular standard:</p> <p>PK = Peak Measurement: RBW is 120kHz, VBW is 3 MHz</p> <p>QP = Quasi-Peak Measurement: RBW is 120kHz, VBW is 3 MHz, and QP Detection is ENABLED</p> <p>AV = Video Average Measurement: RBW is 1 MHz, VBW is 10 Hz</p> <p>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.)</p> <p>The "Azim/Pol/Hgt" indicates the turn-table azimuth, the antenna polarity, and the antenna height where the maximum emissions level was measured.</p> <p>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.</p> <p>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)</p> <p>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.</p>			

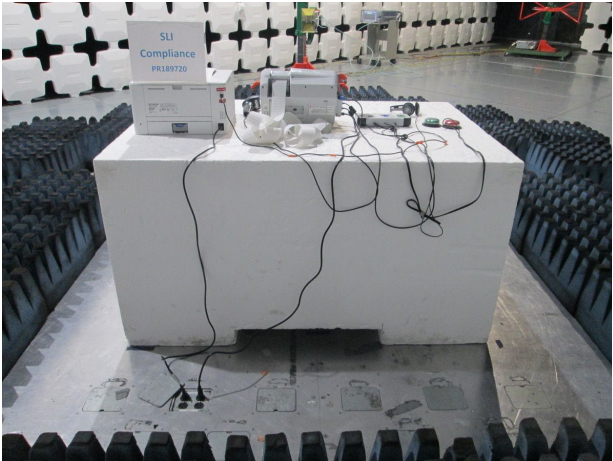
5.2.4 Test Photographs



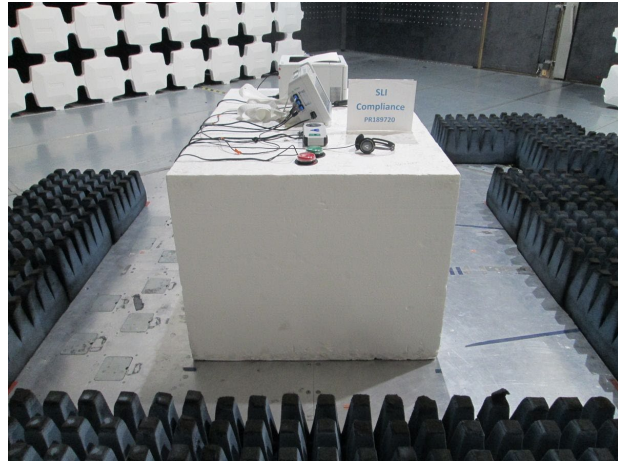
RE Test Setup Photo - Front



RE Test Setup Photo - Right

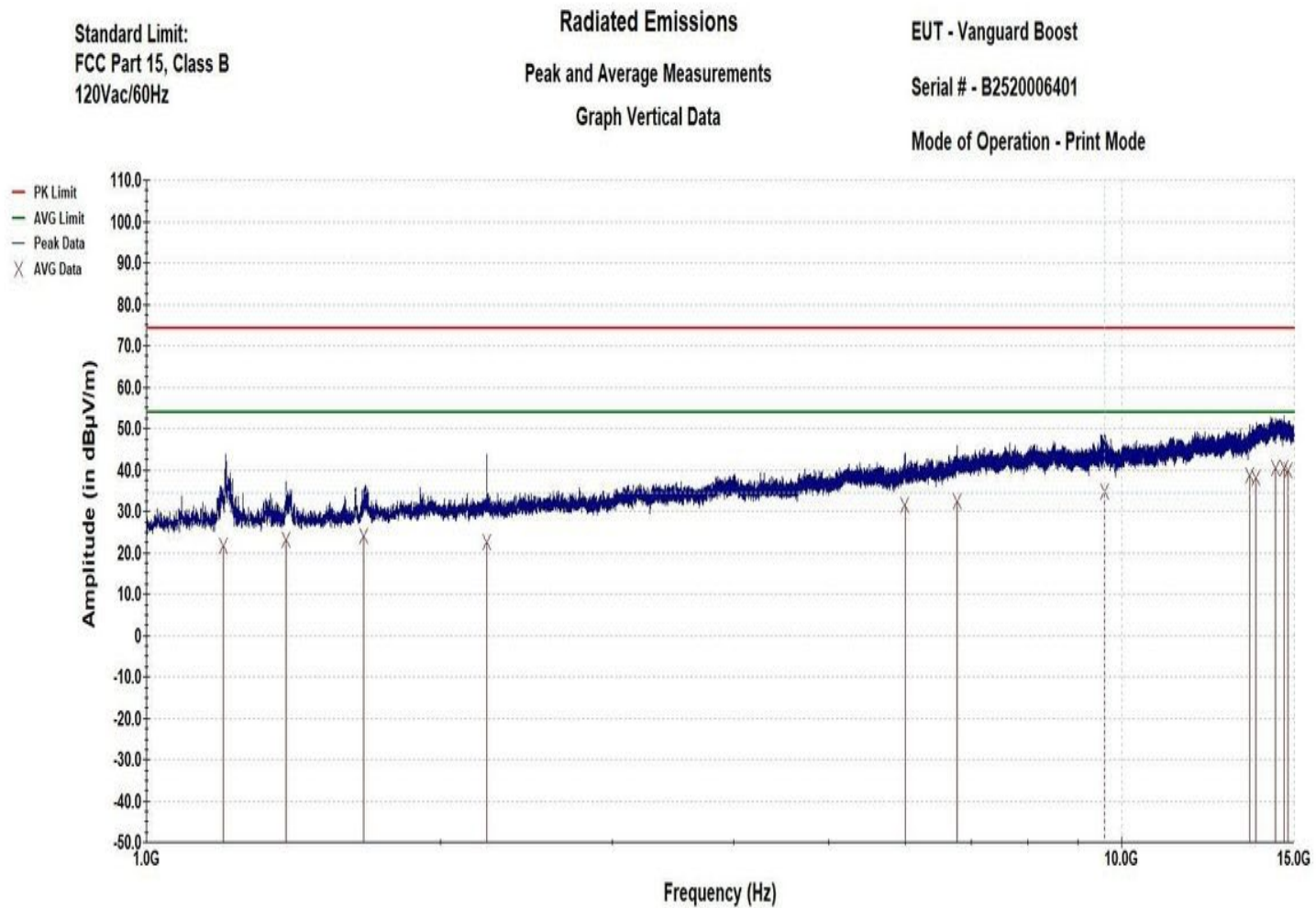


RE Test Setup Photo - Back



RE Test Setup Photo - Left

5.2.5 Test Data



Operator: T. Wittig

Customer: SLI Compliance

Last Data Update 10:25:31 AM, Monday, April 21, 2025

PR#: PR189720

01 RE 1GHz to 18 GHz Vertical Graph

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

Operator: T. Wittig

EUT: Vanguard Boost
PR#: PR189720
Customer: SLI Compliance

Frequency (MHz)	AVG (in dBuV)	Delta to AVG Limit (in dBuV)	Height (in cm)	Azimuth (in Degrees)
1.199 GHz	21.505	-32.495	177	224
1.390 GHz	23.154	-30.846	296	212
1.669 GHz	23.879	-30.121	312	154
2.229 GHz	22.425	-31.575	371	256
5.990 GHz	31.549	-22.451	215	168
6.771 GHz	32.495	-21.505	158	263
9.590 GHz	34.604	-19.396	150	144
13.500 GHz	38.653	-15.347	147	306
13.721 GHz	38.021	-15.979	341	321
14.372 GHz	40.375	-13.625	329	161
14.650 GHz	40.305	-13.695	326	303
14.800 GHz	39.739	-14.261	249	0
Standard Limit:				
FCC Part 15, Class B				
120Vac/60Hz				

02 RE 1GHz to 18 GHz Vertical AVG Table

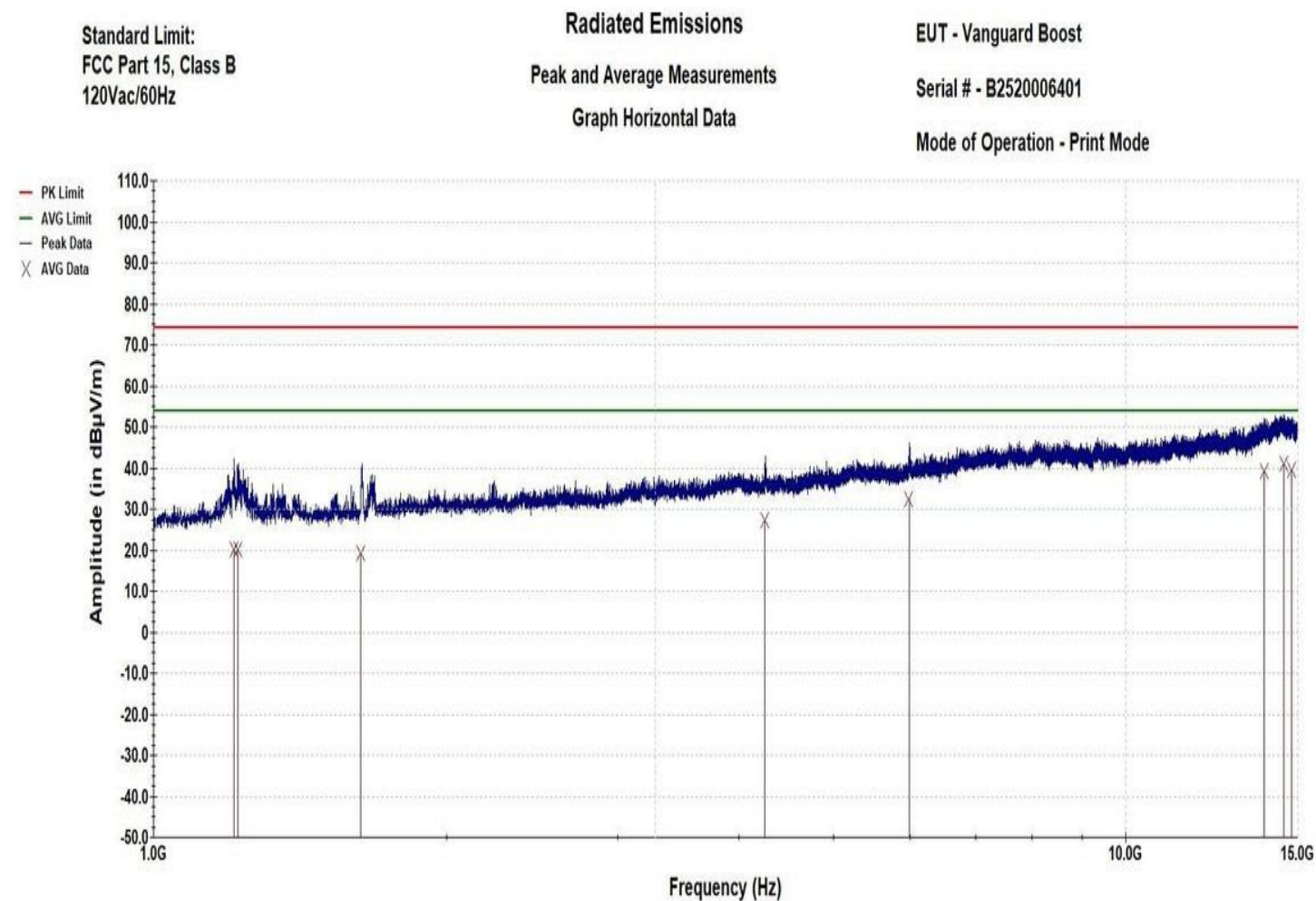
Radiated Emissions
Vertical peak Measurements
Table: Final Vertical Peak above 1GHz

Operator: T. Wittig

EUT: Vanguard Boost
PR#: PR189720
Customer: SLI Compliance

Frequency (MHz)	Peak (in dBuV)	Delta to Pk Limit (in dBuV)	Height (in cm)	Azimuth (in Degrees)
1.199 GHz	47.659	-26.341	177	224
1.390 GHz	41.935	-32.065	296	212
1.669 GHz	42.173	-31.827	312	154
2.229 GHz	41.382	-32.618	371	256
5.990 GHz	47.989	-26.011	215	168
6.771 GHz	45.462	-28.538	158	263
9.590 GHz	47.519	-26.481	150	144
13.500 GHz	51.924	-22.076	147	306
13.721 GHz	51.306	-22.694	341	321
14.372 GHz	53.237	-20.763	329	161
14.650 GHz	53.347	-20.653	326	303
14.800 GHz	52.682	-21.318	249	0
Standard Limit:				
FCC Part 15, Class B				
120Vac/60Hz				

03 RE 1GHz to 18 GHz Vertical Peak Table



Operator: T. Wittig

Customer: SLI Compliance

Last Data Update 09:39:50 AM, Monday, April 21, 2025

PR#: PR189720

04 RE 1GHz to 18 GHz Horizontal Graph

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

Operator: T. Wittig

EUT: Vanguard Boost
PR#: PR189720
Customer: SLI Compliance

Frequency (MHz)	AVG (in dBuV)	Delta to AVG Limit (in dBuV)	Height (in cm)	Azimuth (in Degrees)
1.210 GHz	20.200	-33.800	283	212
1.220 GHz	20.173	-33.827	354	191
1.631 GHz	19.352	-34.648	184	105
4.250 GHz	27.417	-26.583	133	257
5.979 GHz	32.342	-21.658	152	200
13.870 GHz	39.252	-14.748	274	93
14.519 GHz	40.992	-13.008	356	178
14.800 GHz	39.646	-14.354	325	166
Standard Limit:				
FCC Part 15, Class B				
120Vac/60Hz				

05 RE 1GHz to 18 GHz Horizontal AVG Table

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

Operator: T. Wittig

EUT: Vanguard Boost
PR#: PR189720
Customer: SLI Compliance

Frequency (MHz)	Peak (in dBuV)	Delta to PK limit (in dBuV)	Height (in cm)	Azimuth (in Degrees)
1.210 GHz	43.431	-30.569	283	212
1.220 GHz	44.165	-29.835	354	191
1.631 GHz	33.676	-40.324	184	105
4.250 GHz	52.094	-21.906	133	257
5.979 GHz	49.502	-24.498	152	200
13.870 GHz	52.296	-21.704	274	93
14.519 GHz	53.787	-20.213	356	178
14.800 GHz	52.490	-21.510	325	166
Standard Limit:				
FCC Part 15, Class B				
120Vac/60Hz				

06 RE 1GHz to 18 GHz Horizontal Peak 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
WC059421	Chamber (EMI, Semi-Anechoic)10 Meter	CIR Enterprises	10M2	02/12/2024	02/12/2026
WC059428	Antenna (Double Ridge Guide)	Sunol Sciences	DRH-118	02/20/2024	02/20/2026
WC059431	Controller (System)	Sunol Sciences	SC110V	NCR	NCR
WC059550	Amplifier (Pre/RF/Low Noise)	Ciao Wireless	1-18 GHZ	06/21/2024	06/21/2025
WC059621	Meter (Digital Multimeter)	Fluke	87V	08/28/2023	05/07/2025
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
WC078469	Software	ETS-Lindgren	C47213	NCR	NCR
WC078489	Meter (Hydrometer)	Extech Instruments	Datalogger 42270	08/12/2024	08/31/2025
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 VVSG 2.0.

5.3.2 Test Result

The EUT passed the defined requirements.

5.3.3 Test Datasheets

Element Materials Technology				
Conducted Emissions				
Standard Referenced: FCC Part 15, Class B		Date: 4/22/2025		
Temperature: 24°C	Humidity: 16%	Pressure: 834 mb		
Input Voltage: 120Vac/60Hz		LISN Bonding: 1.8 milliohms		
Configuration of Unit: Fully exercising all features of product		Sweep Time Check: Yes		
Test Engineer: T. Wittig				
Date	Time	Log Entries	Initials	Result
4/22/2025	1110	Performed CE pre-test verification and ambient scans prior to testing	TW	Complete
		Setup Vanguard Boost on GP #1 groundplane	TW	Complete
	1159	Begin Conducted Emissions, 150 kHz - 30 MHz. FCC Part 15. Class B	TW	---
	1306	Completed CE testing on the Boost only	TW	Pass

Element Materials Technology	
Conducted Emissions	
Standard Referenced: FCC Part 15, Class B	
Date: 4/22/2025	
Temperature: 24°C	Humidity: 16%
Pressure: 834 mb	
Input Voltage: 120Vac/60Hz	
LISN Bonding: 1.8 milliohms	
Configuration of Unit: Fully exercising all features of product	
Sweep Time Check: Yes	
Test Engineer: T. Wittig	
<p>"Type" refers to the type of measurement performed. The type of measurement made is based on the requirements of the particular standard:</p> <p>PK = Peak Measurement: RBW is 9 kHz, VBW is 3 MHz</p> <p>QP = Quasi-Peak Measurement: RBW is 9 kHz, VBW is 3 MHz, and QP Detection is ENABLED</p> <p>AV = Video Average Measurement: RBW is 9 kHz, VBW is 10 Hz</p> <p>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.)</p> <p>The "TestPoint" indicates which AC or DC input power line or which I/O cable the measurement was made on.</p> <p>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.</p>	

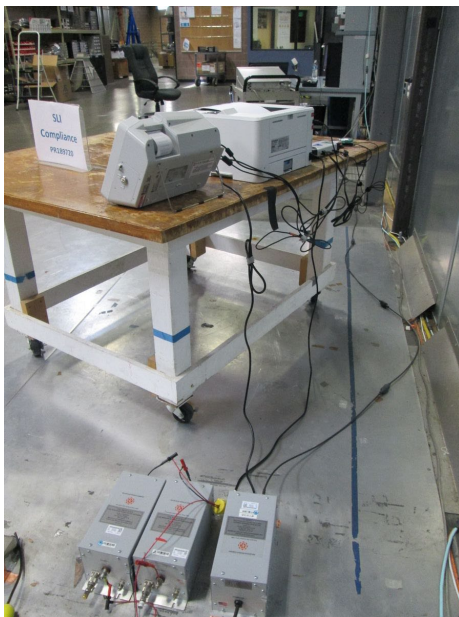
5.3.4 Test Photographs



CE Test Setup Photo - Front



CE Test Setup Photo - Right

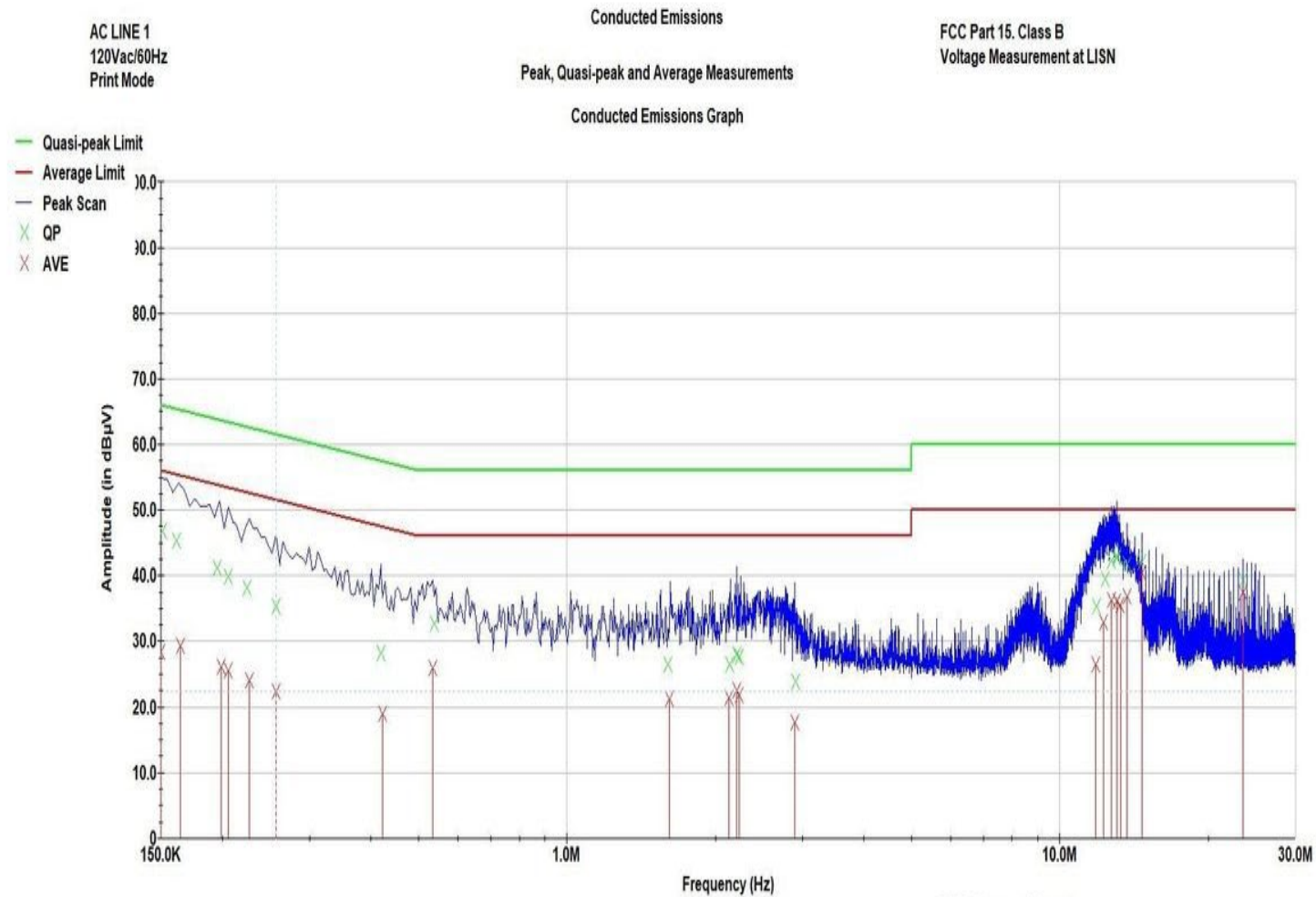


CE Test Setup Photo - Back



CE Test Setup Photo - Left

5.3.5 Test Data



EUT: Vanguard Boost

Operator: T. Wittig

Client: SLI Compliance

Commercial Conducted Emissions - AC LINE 1.0l

PR#: PR189720

01 Conducted Emissions Graph Line 1

Conducted Emissions Quasi-Peak Data Table			
Operator: T. Wittig 12:25:25 PM, Tuesday, April 22, 2025		EUT: Vanguard Boost PR#: PR189720 Client: SLI Compliance	
Frequency (MHz)	Amplitude (in dBµV)	Quasi-peak Limit (in dBµV)	Delta to Quasi-peak Limit (in dB)
150.75 KHz	46.83	65.98	-19.15
161.08 KHz	45.29	65.68	-20.39
194.94 KHz	41.13	64.72	-23.59
205.39 KHz	39.92	64.42	-24.50
224.44 KHz	38.06	63.87	-25.81
256.28 KHz	35.22	62.96	-27.74
418.91 KHz	28.20	58.32	-30.12
537.35 KHz	32.68	56.00	-23.32
1.60 MHz	26.40	56.00	-29.60
2.14 MHz	26.46	56.00	-29.54
2.21 MHz	27.94	56.00	-28.06
2.23 MHz	27.60	56.00	-28.40
2.91 MHz	23.85	56.00	-32.15
11.86 MHz	35.40	60.00	-24.60
12.36 MHz	39.39	60.00	-20.61
12.72 MHz	42.22	60.00	-17.78
13.05 MHz	42.71	60.00	-17.29
13.07 MHz	42.92	60.00	-17.08
13.70 MHz	41.68	60.00	-18.32
14.68 MHz	42.01	60.00	-17.99
23.48 MHz	39.23	60.00	-20.77
AC LINE 1			
120Vac/60Hz			
Print Mode			

02 Conducted Emissions Quasi-Peak Data Table Line 1

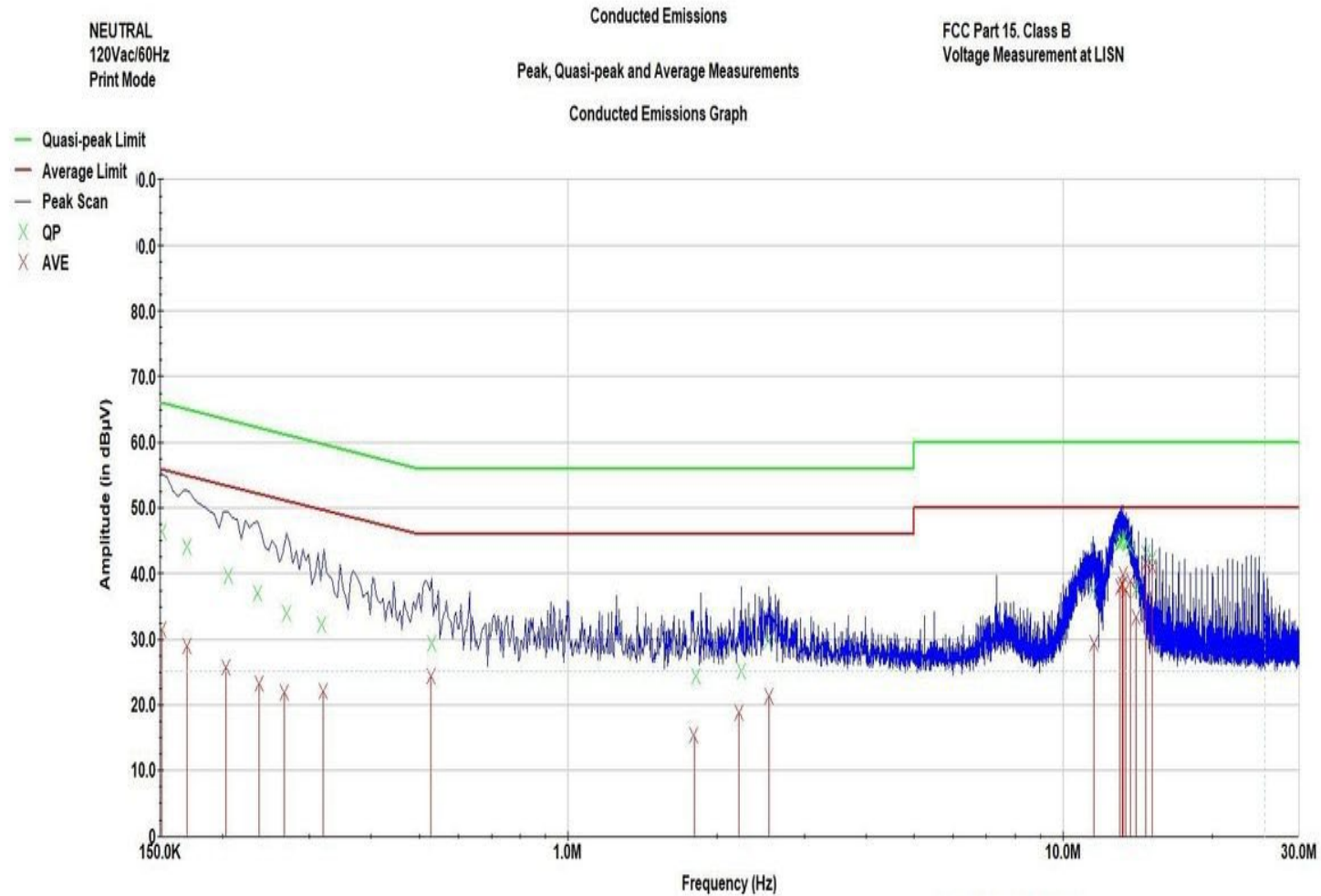
Conducted Emissions Average Data Table

Operator: T. Wittig
12:32:16 PM, Tuesday, April 22, 2025

EUT: Vanguard Boost
PR#: PR189720
Client: SLI Compliance

Frequency (MHz)	Amplitude (in dBμV)	Average Limit (in dBμV)	Delta to Average Limit (in dB)
150.00 KHz	28.45	56.00	-27.55
164.33 KHz	29.29	55.59	-26.30
198.87 KHz	26.03	54.60	-28.57
205.39 KHz	25.54	54.42	-28.87
226.68 KHz	23.97	53.81	-29.84
256.59 KHz	22.28	52.95	-30.68
422.80 KHz	18.89	48.21	-29.32
533.69 KHz	25.84	46.00	-20.16
1.61 MHz	21.22	46.00	-24.78
2.13 MHz	21.36	46.00	-24.64
2.21 MHz	22.58	46.00	-23.42
2.23 MHz	21.82	46.00	-24.18
2.89 MHz	17.67	46.00	-28.33
11.84 MHz	26.53	50.00	-23.47
12.23 MHz	32.79	50.00	-17.21
12.72 MHz	36.22	50.00	-13.78
13.03 MHz	36.02	50.00	-13.98
13.26 MHz	35.51	50.00	-14.49
13.70 MHz	36.80	50.00	-13.20
14.68 MHz	40.46	50.00	-9.54
23.49 MHz	37.45	50.00	-12.55
AC LINE 1			
120Vac/60Hz			
Print Mode			

03 Conducted Emissions Average Data Table Line 1



EUT: Vanguard Boost

Operator: T. Wittig

Client: SLI Compliance

Commercial Conducted Emissions - NEUTRAL.ttl

PR#: PR189720

04 Conducted Emissions Graph Neutral

Conducted Emissions
Quasi-Peak Data Table

Operator: T. Wittig
12:53:03 PM, Tuesday, April 22, 2025

EUT: Vanguard Boost
PR#: PR189720
Client: SLI Compliance

Frequency (MHz)	Amplitude (in dBμV)	Quasi-peak Limit (in dBμV)	Delta to Quasi-peak Limit (in dB)
150.75 KHz	46.31	65.98	-19.67
169.59 KHz	44.06	65.44	-21.38
205.39 KHz	39.67	64.42	-24.75
235.10 KHz	36.91	63.57	-26.66
269.39 KHz	33.97	62.59	-28.62
317.30 KHz	32.25	61.22	-28.97
529.49 KHz	29.42	56.00	-26.58
1.82 MHz	24.27	56.00	-31.73
2.24 MHz	25.19	56.00	-30.81
2.54 MHz	29.79	56.00	-26.21
11.50 MHz	37.39	60.00	-22.61
13.00 MHz	44.66	60.00	-15.34
13.06 MHz	44.82	60.00	-15.18
13.20 MHz	45.04	60.00	-14.96
13.21 MHz	45.63	60.00	-14.37
13.46 MHz	44.69	60.00	-15.31
13.70 MHz	43.93	60.00	-16.07
14.06 MHz	37.58	60.00	-22.42
14.68 MHz	43.05	60.00	-16.95
15.17 MHz	42.39	60.00	-17.61
NEUTRAL			
120Vac/60Hz			
Print Mode			

05 Conducted Emissions Quasi-Peak Data Table Neutral

Conducted Emissions
Average Data Table

Operator: T. Wittig
12:59:48 PM, Tuesday, April 22, 2025

EUT: Vanguard Boost
PR#: PR189720
Client: SLI Compliance

Frequency (MHz)	Amplitude (in dBμV)	Average Limit (in dBμV)	Delta to Average Limit (in dB)
150.75 KHz	31.51	55.98	-24.47
169.59 KHz	28.93	55.44	-26.51
203.35 KHz	25.64	54.48	-28.83
237.34 KHz	23.31	53.50	-30.19
266.71 KHz	21.85	52.67	-30.82
319.55 KHz	22.06	51.16	-29.10
528.70 KHz	24.29	46.00	-21.71
1.80 MHz	15.28	46.00	-30.72
2.21 MHz	18.91	46.00	-27.09
2.55 MHz	21.27	46.00	-24.73
11.55 MHz	29.29	50.00	-20.71
13.01 MHz	38.02	50.00	-11.98
13.16 MHz	38.24	50.00	-11.76
13.21 MHz	39.87	50.00	-10.13
13.21 MHz	39.84	50.00	-10.16
13.38 MHz	37.58	50.00	-12.42
13.70 MHz	38.98	50.00	-11.02
14.06 MHz	33.36	50.00	-16.64
14.68 MHz	41.60	50.00	-8.40
15.17 MHz	41.08	50.00	-8.92
NEUTRAL			
120Vac/60Hz			
Print Mode			

06 Conducted Emissions Average 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
WC059917	Ground Plane (Fixed)	National Technical Systems	GP1	02/03/2025	05/03/2025
WC059729	Power Supply (AC)	Pacific Power Source	TMX 140	NCR	NCR
WC059822	Receiver	Keysight Technologies	N9038A	09/17/2024	09/17/2025
WC070450	Meter (Digital Multimeter)	Fluke	87-5	05/13/2024	05/13/2025
WC075979	Network (LISN)	Solar Electronics	2602-50-TS-25-N	05/20/2024	05/31/2026
WC075988	Network (LISN)	Solar Electronics	2602-50-TS-25-N	07/03/2024	07/31/2026
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
WC078490	Meter (Hydrometer)	Extech Instruments	Datalogger 42270	03/17/2025	03/31/2026
WC078542	Meter (Milliohm)	Extech Instruments	380460	11/25/2024	11/30/2025
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