Test Report

Bureau Veritas Consumer Product Services

Report No	EW0277-2 Issue 2
Client	Amazon.com Services LLC
Address	300 Riverpark Drive North Reading, MA 01864
Phone	(978) 276-2815
Items tested	SRBRS ELF Badge Module
FCC ID	2AEZR-SRBRSELFR1
IC	10244A-SRBRSELF
HVIN	600-02357-001
PMN	SRBRS ELF Badge Module
FRN	0024656845
Equipment Type	Low Power Communication Device Transmitter
Equipment Code	DXX
Standards	CFR Title 47 FCC Part 15.249, RSS-210 Issue 10 Annex B.10
Test Dates	July 5, 2022 through July 12, 2022 and Sep 30, 2022
Results	As detailed within this report
Prepared by	Bryan Valcourt – EMC Test Engineer
Authorized by	Yunus Faziloglu – Wireless Manager
Issue Date	2022-10-04
Conditions of Issue	This Test Report is issued subject to the conditions stated in the '*Conditions of Testing*' section on page 17 of this report.

Contents

Form Final Report REV 2-16-07 (DW)

Product Tested - Configuration Documentation

EUT Configuration

Work Order: W0277
Company: Amazon.com Services LLC
Company Address: 300 River Park Drive
North Reading, MA, 01864
Contact: Dao Keopadith
Person Present: Yes

	MN	PN	SN
EUT:	SRBRS ELF Badge	600-02357-001 REV 04	27X214511253

EUT Description: SRBRS ELF Badge
EUT Max Frequency: 5800NHz
EUT Min Frequency: 0.125MHz
EUT ISM Frequency: N/A

Support Equipment:	MN	SN
Interconnecting Cable J1	690-01528	N/A

EUT Ports:

Port Label	Port Type	No. of ports	No. Populated	Cable Type	Shielded	Ferrites	Length	Max Length	In/Out NEBS Type	Unpopulated Reason
Interconnecting Port J1	Other	1	1	Other	Yes	No	1m	1m	Indoor	
USB	USB	1	0	USB	Yes	No	3M	5m	Indoor	Diagnostics only port

Software / Operating Mode Description:

Instal battery into EUT, plug in cable J1. On switch turn to left for one second, then turn to right. Then sensor on cable with vibrate and beep.

Performance Criteria:

This will only be Emissions, no Performance Criteria.

Note: This product contains also a 125kHz Transmitter and a certified 5GHz (5180-5825MHz) transmitter module, FCC ID: XF6-RS9113DB

Summary and Test Methodology

On July 5, 2022 through July 12, 2022 we tested the SRBRS ELF Badge Module for compliance with the following requirements:

CFR Title 47 FCC Part 15.249, RSS-210 Issue 10 Annex B.10

EUT transmits at 925MHz. Emissions were maximized by rotating the device around 3 orthogonal planes. EUT has an integral antenna.

Radiated emission testing was performed according to the procedures specified in ANSI C63.10-2013 and RSS-Gen Issue 5.

AC mains conducted emission testing was not required because the EUT is battery powered.

EUT operating voltage is 15VDC.

The following bandwidths were used during radiated spurious emissions testing.

Frequency	RBW	VBW
30-1000MHz	120kHz	300kHz
1-10GHz	1MHz	3MHz

We found that the product met the above limits. The test sample was received in good condition.

Compliance Statement

RSS-GEN	RSP-100	RSS 210	Part 15	Comments
6.4			15.15(b)	There are no controls accessible to the user that vary the output power.
	3.1		15.19	The label is shown in the label exhibit.
	3.2		15.21	Information to the user is shown in the instruction manual exhibit.
			15.27	No special accessories are required for compliance.
3.2			15.31	The EUT was tested in accordance with the measurement standards in this section.
6.13.2			15.33	Frequency range was investigated according to this section, unless noted in specific rule section under which the equipment operates.
6.13.1			15.35	The EUT emissions were measured using the measurement detector and bandwidth specified in this section, unless noted in specific rule section under which the equipment operates.
6.8			15.203	The antenna for this device is an internal surface-mount antenna with 1.4dBi gain.
8.10 8.9		7.3	15.205 15.209	The fundamental is not in a Restricted band and the spurious and harmonic emissions in the Restricted bands comply with the general emission limits of 15.209 or RSS-Gen as applicable
8.8			15.207	Not applicable since EUT is battery powered.
		B.10(a)	15.249(a)	The fundamental and harmonics meet the limits in 15.249(a)
		B.10(b)	15.249(d)	Spurious emissions meet the limits in 15.209.
6.7				99% emissions bandwidth plot is provided.

Modifications Required for Compliance

None.

Test Results

Fundamental Measurements

LIMITS

The field strength from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental Frequency	Field Strength of Fundamental (millivolts/meter)	Field Strength of Harmonics (microvolts/meter)
902 - 928 MHz	50	500
2400 - 2483.5 MHz	50	500
5725 - 5875 MHz	50	500
24.0 - 24.25 GHz	250	2500

[15.249(a)]

Radiated Emissions Table

Date: 11-Jul-22 **Company:** Amazon.com Services LLC **Work Order:** W0277
Engineer: Bryan Valcourt **EUT Desc:** SRBRS ELF Badge **EUT Operating Voltage/Frequency:** 15VDC
Temp: 23.7°C **Humidity:** 47% **Pressure:** 1006mBar
Frequency Range: 925MHz Fundamental **Measurement Distance:** 3 m
Notes: TX power set 10 **EUT Max Freq:** 925MHz

Antenna Polarization (H / V)	Frequency (MHz)	Reading (dBµV)	Preamp Factor (dB)	Antenna Factor (dB/m)	Cable Factor (dB)	Adjusted Reading (dBµV/m)	FCC 15.249 Limit (dBµV/m)	FCC 15.249 Margin (dB)	FCC 15.249 Result (Pass/Fail)	--- Limit (dBµV/m)	--- Margin (dB)	--- Result (Pass/Fail)
Quasi_Peaks												
X-Axis												
Horizontal	925.0	86.7	25.5	27.1	0.7	89.0	93.98	-4.98	Pass	---	---	---
Vertical	925.0	85.6	25.5	27.1	0.7	87.9	93.98	-6.08	Pass	---	---	---
Y-Axis												
Horizontal	925.0	83.6	25.5	27.1	0.7	85.9	93.98	-8.08	Pass	---	---	---
Vertical	925.0	83.8	25.5	27.1	0.7	86.1	93.98	-7.88	Pass	---	---	---
Z-Axis												
Horizontal	925.0	86.6	25.5	27.1	0.7	88.9	93.98	-5.08	Pass	---	---	---
Vertical	925.0	78.3	25.5	27.1	0.7	80.6	93.98	-13.38	Pass	---	---	---

Table Result: Pass by -4.98 dB ***Worst Freq:*** 925.0 MHz

Test Site: EMI Chamber 1 **Cable 1:** 'Asset #2681 **Cable 2:** Asset #2580 **Cable 3:** Asset #2464
Analyzer: MXE 1170725 **Preamp:** Asset #8447F_1 **Antenna:** Red-White **Preselector:** ---
CSsoft Radiated Emissions Calculator v 1.017.222

Adjusted Reading = Reading - Preamp Factor + Antenna Factor + Cable Factor

925MHz Peaks

Radiated Spurious Emissions

LIMITS

15.249 (d) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in § 15.209, whichever is the lesser attenuation.

MEASUREMENTS / RESULTS

Radiated Emissions Table

Date: 30-Sep-22 **Company:** Amazon.com Services LLC **Work Order:** W0277
Engineer: Matthew McCarthy **EUT Desc:** SRBRS ELF Badge **EUT Operating Voltage/Frequency:** 15VDC
Temp: 20.5°C **Humidity:** 54% **Pressure:** 1021mBar
Frequency Range: 925 Band Edge **Measurement Distance:** 3 m
Notes: TX power set 10 **EUT Max Freq:** 925MHz

Antenna Polarization (H / V)	Frequency (MHz)	Reading (dBµV)	Preamp Factor (dB)	Antenna Factor (dB/m)	Cable Factor (dB)	Adjusted Reading (dBµV/m)	--- Limit (dBµV/m)	--- Margin (dB)	--- Result (Pass/Fail)	FCC Class B Limit (dBµV/m)	FCC Class B Margin (dB)	FCC Class B Result (Pass/Fail)
X-Axis Peak												
V	902.0	34.0	25.5	28.6	1.8	38.9	---	---	---	46.0	-7.1	---
H	902.0	33.3	25.5	28.6	1.8	38.2	---	---	---	46.0	-7.8	---
				---			---	---	---	---		---
V	928.0	34.2	25.5	28.6	1.8	39.1	---	---	---	46.0	-6.9	---
H	928.0	33.3	25.5	28.6	1.8	38.2	---	---	---	46.0	-7.8	---

Table Result: Pass by -6.9 dB ***Worst Freq:*** 928.0 MHz

Test Site: EMI Chamber 1 **Cable 1:** Asset #2583 **Cable 2:** Asset #2610 **Cable 3:** Asset #2474
Analyzer: Asset #2093 **Preamp:** Asset #8447F **Antenna:** Red-Brown **Preselector:** ---
CSsoft Radiated Emissions Calculator v 1.017.222

Adjusted Reading = Reading - Preamp Factor + Antenna Factor + Cable Factor

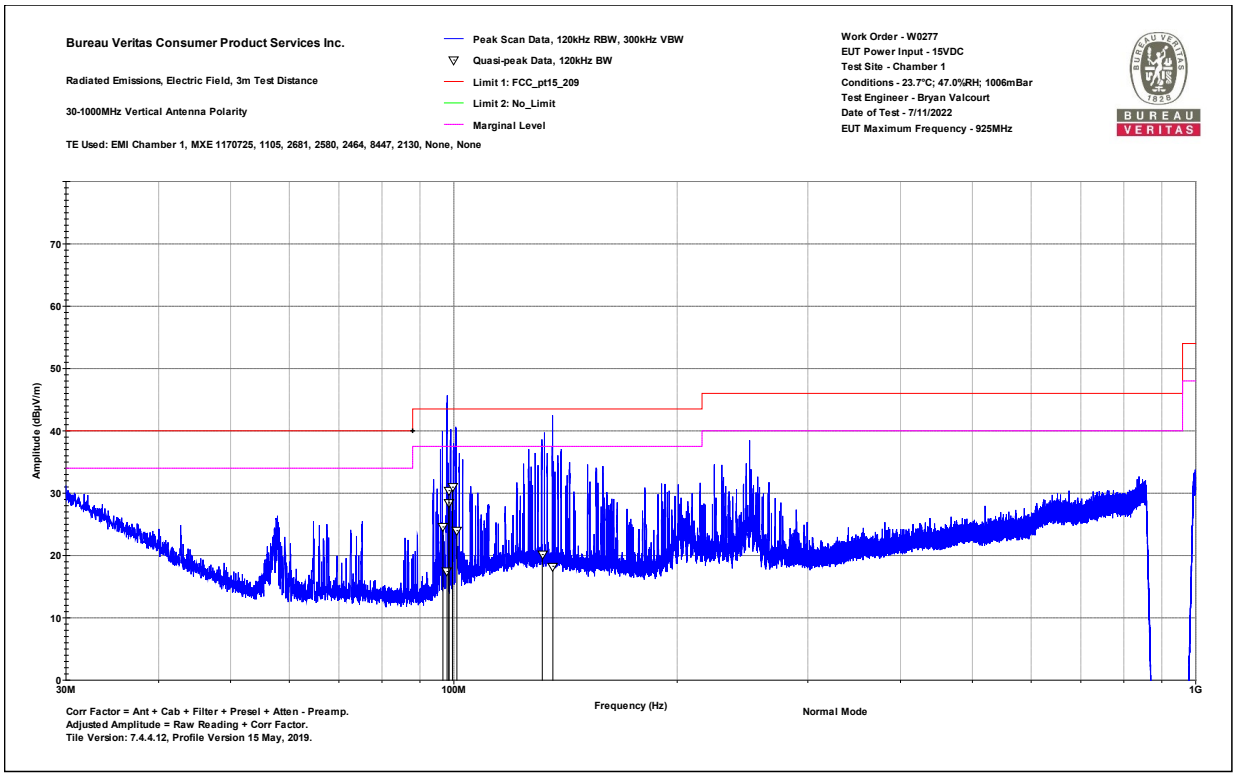
Radiated Band Edge Measurements

Bureau Veritas Consumer Product Services Inc.
Radiated Emissions Electric Field 3m Distance
30-1000MHz Vertical Data
Notes:
Normal Mode

Work Order - W0277
EUT Power Input - 15VDC
Test Site - Chamber 1
Conditions - 23.7°C; 47.0%RH; 1006mBar
Test Engineer - Bryan Valcourt
Date of Test - 7/11/2022

Frequency (MHz)	Raw QP Reading (dBµV)	Correction Factor (dB/m)	Adjusted QP Amplitude (dBµV/m)	Lim1: FCC_pt15_209 (dBµV/m)	Margin to Lim1 (dB)	Test Results Lim1 (Pass/Fail)	Worst Margin Lim1 (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
96.663	36.9	-12.3	24.6	43.5	-18.9	PASS		253	101
97.915	29.3	-11.9	17.4	43.5	-26.1	PASS		179	181
98.495	42.1	-11.7	30.4	43.5	-13.1	PASS		119	65
98.463	40.2	-11.7	28.5	43.5	-15	PASS		161	329
99.556	42.3	-11.4	31	43.5	-12.5	PASS	-12.5	103	195
100.94	34.9	-11	24	43.5	-19.5	PASS		233	197
131.593	27.3	-7.1	20.1	43.5	-23.4	PASS		376	47
135.955	25.6	-7.4	18.3	43.5	-25.2	PASS		187	8

X Axis 30-1000MHz Vertical Data Table



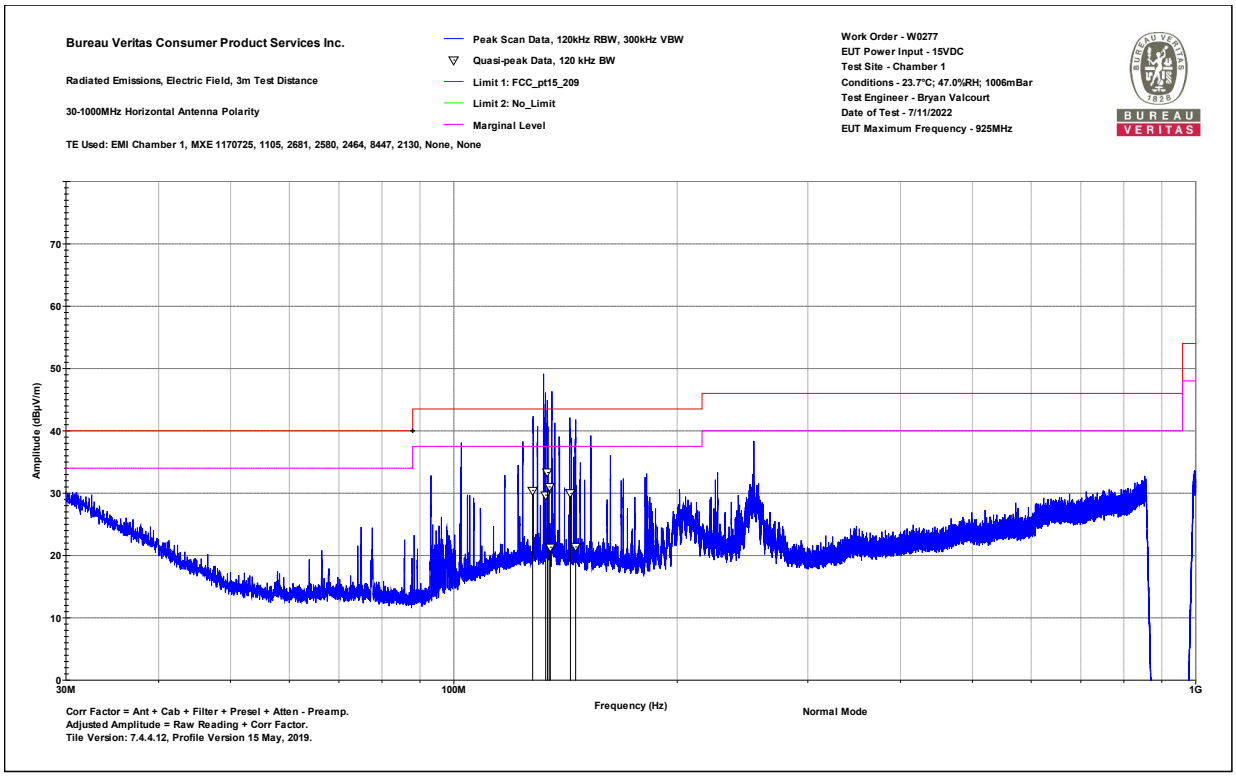
X Axis 30-1000MHz Vertical Plot

Bureau Veritas Consumer Product Services Inc.
Radiated Emissions Electric Field 3m Distance
30-1000MHz Horizontal Data
Notes:
Normal Mode

Work Order - W0277
EUT Power Input - 15VDC
Test Site - Chamber 1
Conditions - 23.7°C; 47.0%RH; 1006mBar
Test Engineer - Bryan Valcourt
Date of Test - 7/11/2022

Frequency (MHz)	Raw QP Reading (dBµV)	Correction Factor (dB/m)	Adjusted QP Amplitude (dBµV/m)	Lim1: FCC_pt15_209 (dbµV/m)	Margin to Lim1 (dB)	Test Results Lim1 (Pass/Fail)	Worst Margin Lim1 (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
127.7	37.5	-7.1	30.4	43.5	-13.1	PASS		202	16
132.977	36.8	-7.1	29.7	43.5	-13.8	PASS		142	309
133.74	40.5	-7.2	33.3	43.5	-10.2	PASS	-10.2	123	21
134.428	38.2	-7.2	31	43.5	-12.5	PASS		188	328
134.893	28.6	-7.3	21.3	43.5	-22.2	PASS		389	338
143.61	37.9	-7.9	30	43.5	-13.5	PASS		323	215
145.94	29.5	-8.1	21.4	43.5	-22.1	PASS		379	66

X Axis 30-1000MHz Horizontal Data Table



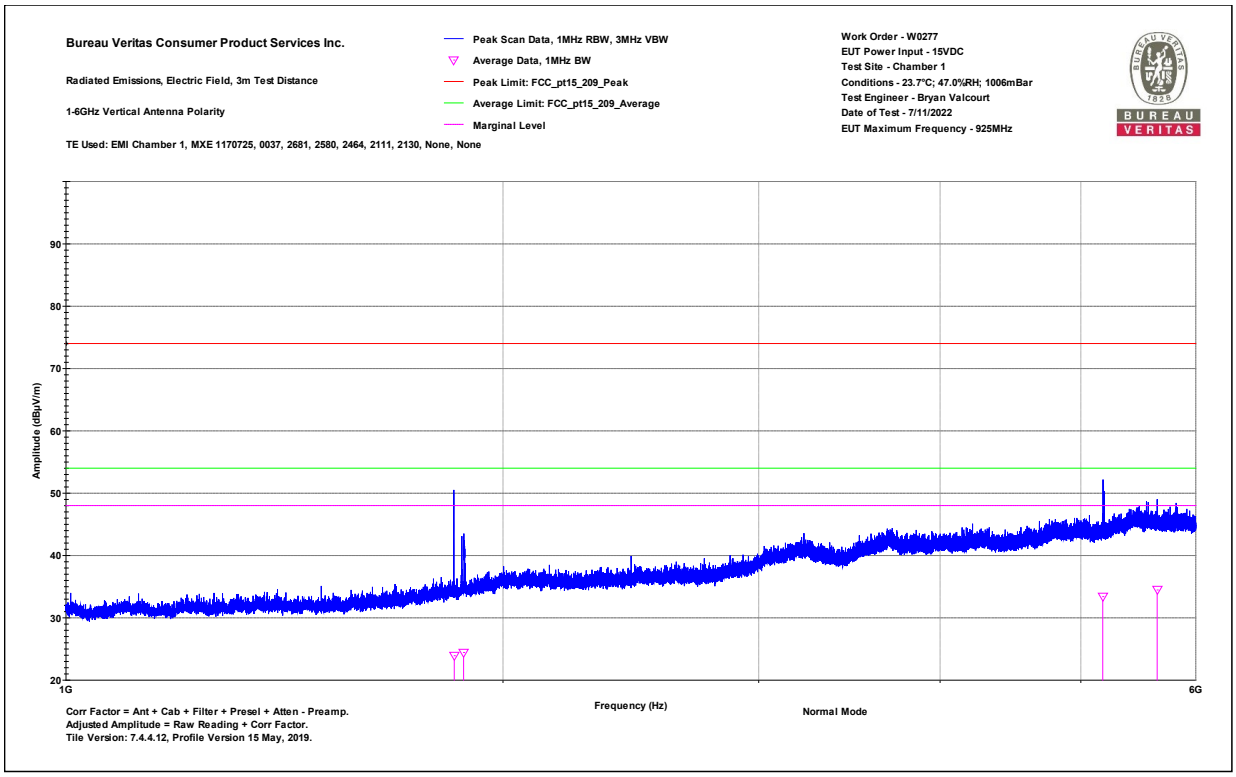
X Axis 30-1000MHz Horizontal Plot

Bureau Veritas Consumer Product Services Inc.
Radiated Emissions Electric Field 3m Distance
1-6GHz Vertical Data
Notes:
Normal Mode

Work Order - W0277
EUT Power Input - 15VDC
Test Site - Chamber 1
Conditions - 23.7°C; 47.0%RH; 1006mBar
Test Engineer - Bryan Valcourt
Date of Test - 7/11/2022

Frequency (MHz)	Raw Peak Reading (dBµV)	Raw Avg Reading (dBµV)	Correction Factor (dB/m)	Adjusted Peak Amplitude (dBµV/m)	Pk Lim: FCC_pt15_209_Peak (dBµV/m)	Peak Margin (dB)	Peak Results (Pass/Fail)	Worst Peak Margin (dB)	Adjusted Avg Amplitude (dBµV/m)	Av Lim: FCC_pt15_209_Average (dBµV/m)	Avg Margin (dB)	Avg Results (Pass/Fail)	Worst Avg Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
1851.1	44.4	35.8	-11.9	32.4	74	-41.6	PASS		23.9	54	-30.1	PASS		112	243
1878.9	45.1	36.2	-11.7	33.3	74	-40.7	PASS		24.4	54	-29.6	PASS		125	24
5177.3	45.6	36.2	-2.8	42.8	74	-31.2	PASS		33.4	54	-20.6	PASS		225	3
5643.7	44.9	36	-1.5	43.4	74	-30.6	PASS	-30.6	34.5	54	-19.5	PASS	-19.5	275	127

X Axis 1-6GHz Vertical Data Table

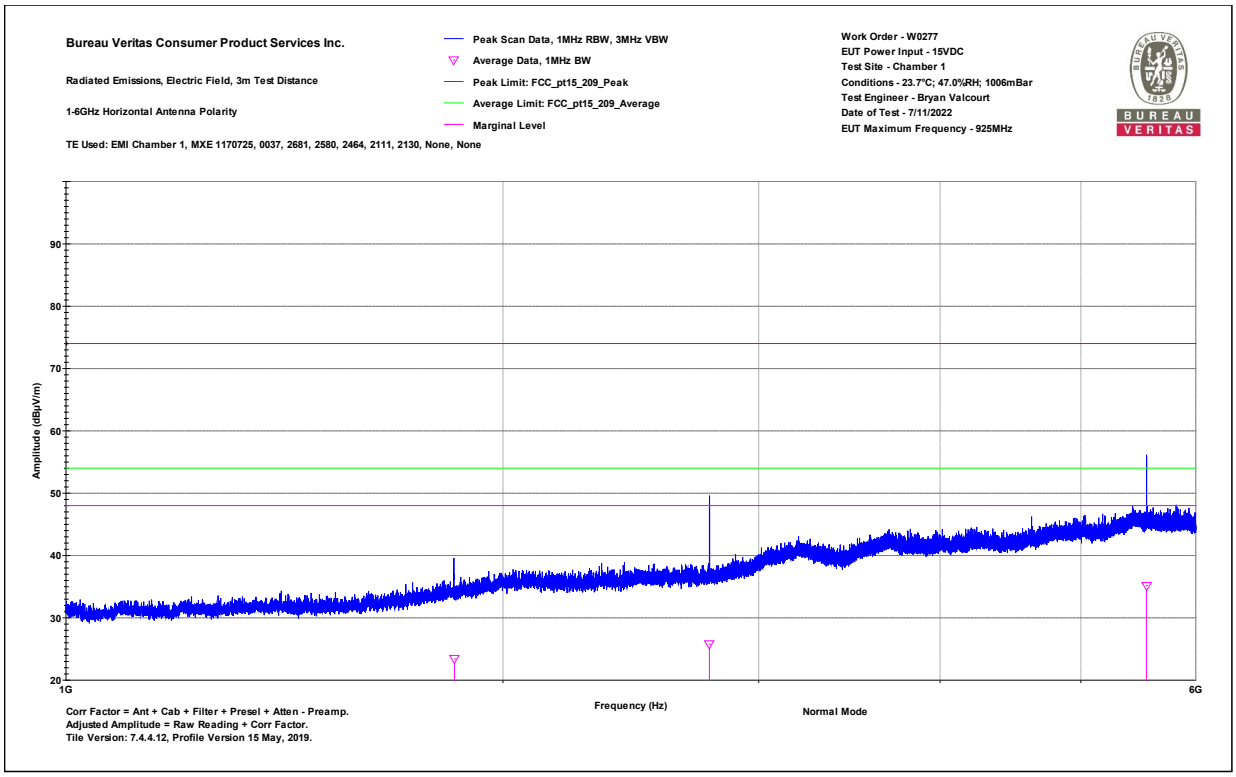


X Axis 1-6GHz Vertical Plot

Bureau Veritas Consumer Product Services Inc.	Work Order - W0277
Radiated Emissions Electric Field 3m Distance	EUT Power Input - 15VDC
1-6GHz Horizontal Data	Test Site - Chamber 1
Notes:	Conditions - 23.7°C; 47.0%RH; 1006mBar
Normal Mode	Test Engineer - Bryan Valcourt
	Date of Test - 7/11/2022

Frequency (MHz)	Raw Peak Reading (dBµV)	Raw Avg Reading (dBµV)	Correction Factor (dB/m)	Adjusted Peak Amplitude (dBµV/m)	Pk Lim: FCC_pt15_209_Peak (dBµV/m)	Peak Margin (dB)	Peak Results (Pass/Fail)	Worst Peak Margin (dB)	Adjusted Avg Amplitude (dBµV/m)	Av Lim: FCC_pt15_209_Average (dBµV/m)	Avg Margin (dB)	Avg Results (Pass/Fail)	Worst Average Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
1852	43.8	35.3	-11.9	31.9	74	-42.1	PASS		23.4	54	-30.6	PASS		213	250
2774.3	45.3	36.1	-10.3	35	74	-39	PASS		25.8	54	-28.2	PASS		125	22
5548.6	46.7	36.4	-1.3	45.4	74	-28.6	PASS	-28.6	35.2	54	-18.8	PASS	-18.8	125	42

X Axis 1-6GHz Horizontal Data Table

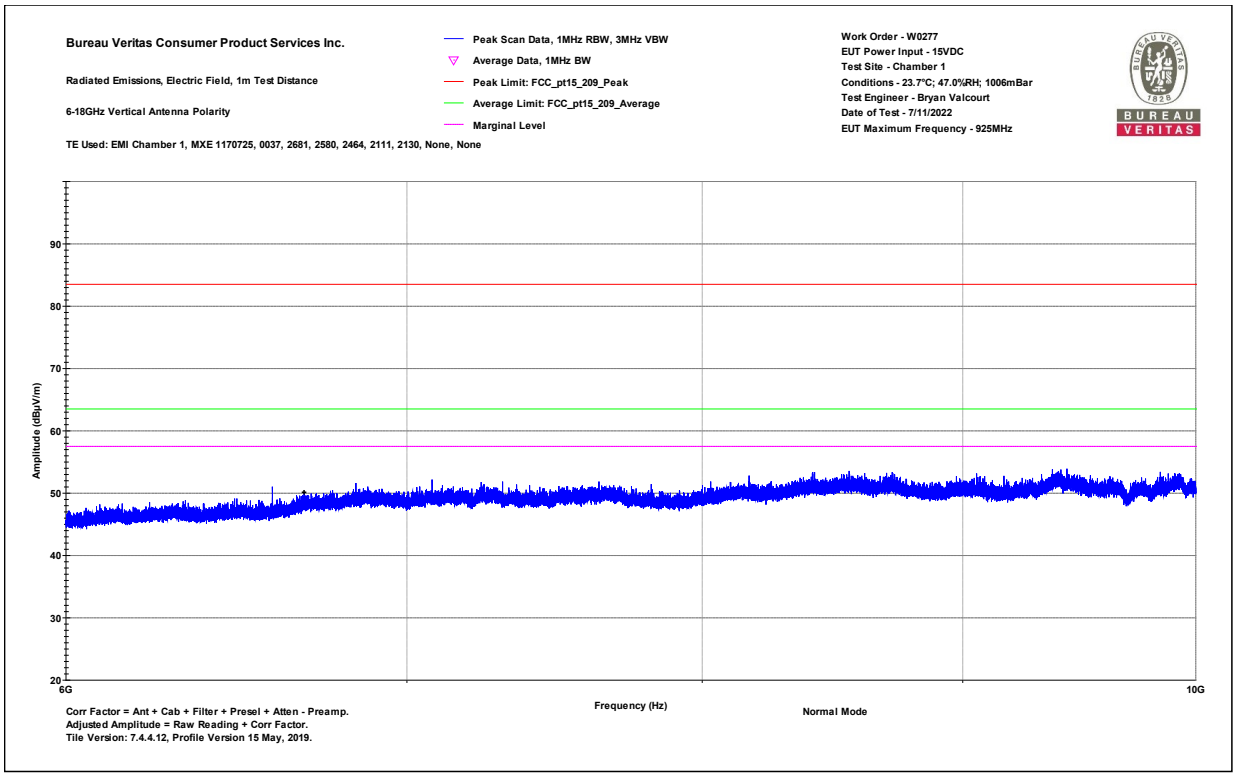


X Axis 1-6GHz Horizontal Plot

Bureau Veritas Consumer Product Services Inc.	Work Order - W0277
Radiated Emissions Electric Field 1m Distance	EUT Power Input - 15VDC
Top Peaks Vertical 6-18GHz	Test Site - Chamber 1
Notes:	Conditions - 23.7°C; 47.0%RH; 1006mBar
Normal Mode	Test Engineer - Bryan Valcourt
	Date of Test - 7/11/2022

Frequency (MHz)	Raw Peak Reading (dBµV)	Correction Factor (dB/m)	Adjusted Peak Amplitude (dBµV/m)	Pk Lim: FCC_pt15_209_Peak (dBµV/m)	Margin to Peak Limit (dB)	Peak Limit Test Results (Pass/Fail)	Peak Limit Worst Margin (dB)	Av Lim: FCC_pt15_209_Average (dBµV/m)	Margin to Avg Limit (dB)	Avg Limit Test Results (Pass/Fail)	Avg Limit Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
9434.4	48.1	5.9	53.9	83.5	-29.6	PASS	-29.6	63.5	-9.6	PASS	-9.6	175	3

X Axis 6-10GHz Vertical Data Table

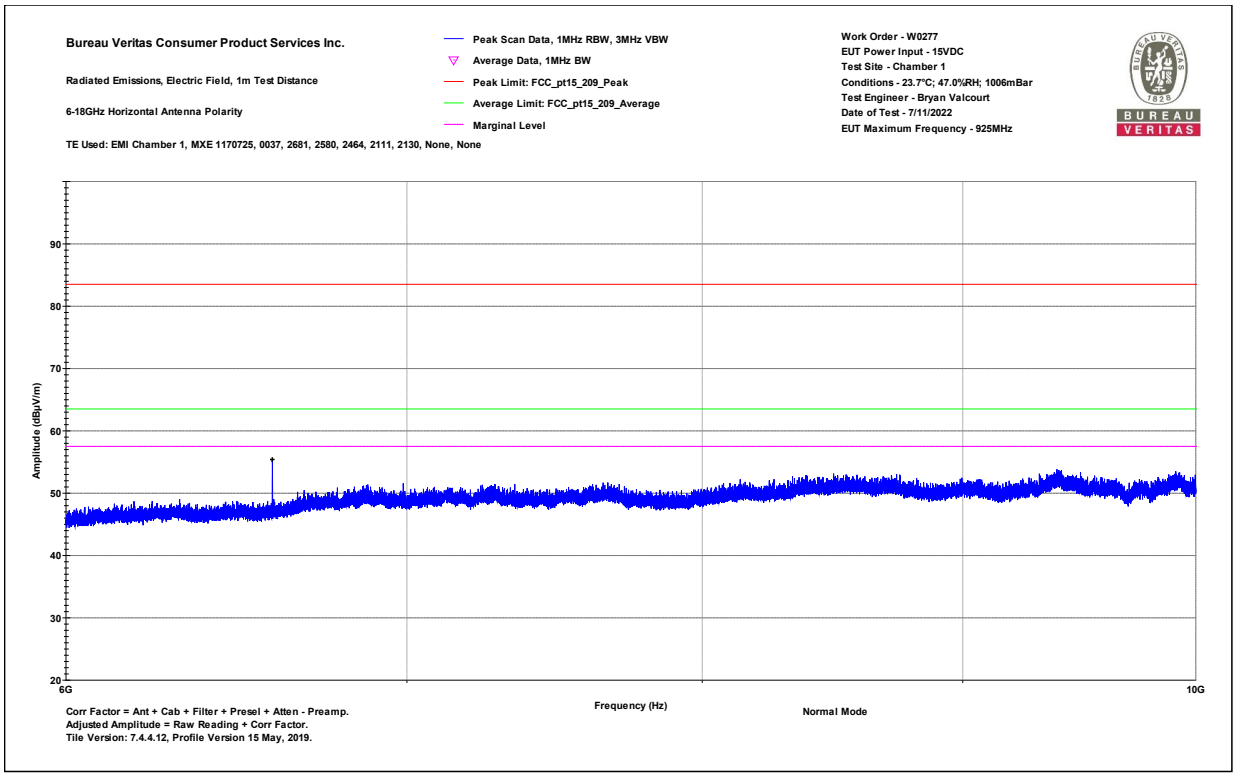


X Axis 6-10GHz Vertical Plot

Bureau Veritas Consumer Product Services Inc.	Work Order - W0277
Radiated Emissions Electric Field 1m Distance	EUT Power Input - 15VDC
Top Peaks Horizontal 6-18GHz	Test Site - Chamber 1
Notes:	Conditions - 23.7°C; 47.0%RH; 1006mBar
Normal Mode	Test Engineer - Bryan Valcourt
	Date of Test - 7/11/2022

Frequency (MHz)	Raw Peak Reading (dBµV)	Correction Factor (dB/m)	Adjusted Peak Amplitude (dBµV/m)	Pk Lim: FCC_pt15_209_Peak (dBµV/m)	Margin to Peak Limit (dB)	Peak Limit Test Results (Pass/Fail)	Peak Limit Worst Margin (dB)	Av Lim: FCC_pt15_209_Average (dBµV/m)	Margin to Avg Limit (dB)	Avg Limit Test Results (Pass/Fail)	Avg Limit Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
6587.1	54.9	0.5	55.4	83.5	-28.1	PASS	-28.1	63.5	-8.1	PASS	-8.1	125	122
9391.6	47.9	5.9	53.8	83.5	-29.7	PASS		63.5	-9.7	PASS		200	211

X Axis 6-10GHz Horizontal Data Table



X Axis 6-10GHz Horizontal Plot

Rev. 7/5/2022

Spectrum Analyzers / Receivers /Preselectors	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Rental MXE EMI Receiver(1170725)	20Hz-26.5GHz	N9038A	Agilent	MY51210151	1170725	I	2/3/2023	2/3/2022
2093 MXE EMI Receiver	20Hz-26.5GHz	N9038A	Agilent	MY51210181	2093	I	3/7/2023	3/7/2022

Radiated Emissions Sites	FCC Code	IC Code	VCCI Code	Range	Asset	Cat	Calibration Due	Calibrated on
EMI Chamber 1	719150	2762A-6	A-0015	30-1000MHz	1685	I	12/6/2022	12/6/2020
EMI Chamber 1	719150	2762A-6	A-0015	1-18GHz	1685	I	12/8/2022	12/8/2020

Preamps /Couplers Attenuators / Filters	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
8449B HF Preamp	1-18GHz	8449B	Agilent	1149055		II	11/10/2022	11/10/2021
8447F Rental PA	9KHz-1.3GHz	84477F	HP	3113A05395		II	10/18/2022	10/18/2021

Antennas	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Red-White Bilog	30-2000MHz	JB1	Sunol	A091604-1	1105	I	10/25/2023	11/25/2021
Yellow Horn	1-18GHz	3115	EMCO	9608-4898	37	I	10/20/2022	10/20/2020
Red-Brown Bilog	30-2000MHz	JB1	Sunol	A0032406	1218	I	4/28/2023	4/28/2021

Meteorological Meters/Chambers		MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Weather Clock (Pressure Only)		BA928	Oregon Scientific	C3166-1	831	I	11/23/2022	11/23/2020
Asset #2653		1235C97	Control Company	200435382	2653	I	7/23/2022	7/23/2020

Cables	Range	Mfr	Cat	Calibration Due	Calibrated on
Asset #2464	9KHz-18GHz	MegaPhase	II	11/9/2022	11/9/2021
Asset #2580	9KHz-18GHz	Pasternack	II	1/21/2023	1/21/2022
Asset #2681	9KHz-18GHz	Pasternack	II	1/21/2023	1/21/2022
Asset #2583	9KHz-18GHz	Pasternack	II	2/17/2023	2/17/2022
Asset #2610	9KHz-18GHz	Pasternack	II	3/16/2023	3/16/2022
Asset #2474	9KHz-18GHz	MegaPhase	II	11/9/2022	11/9/2021

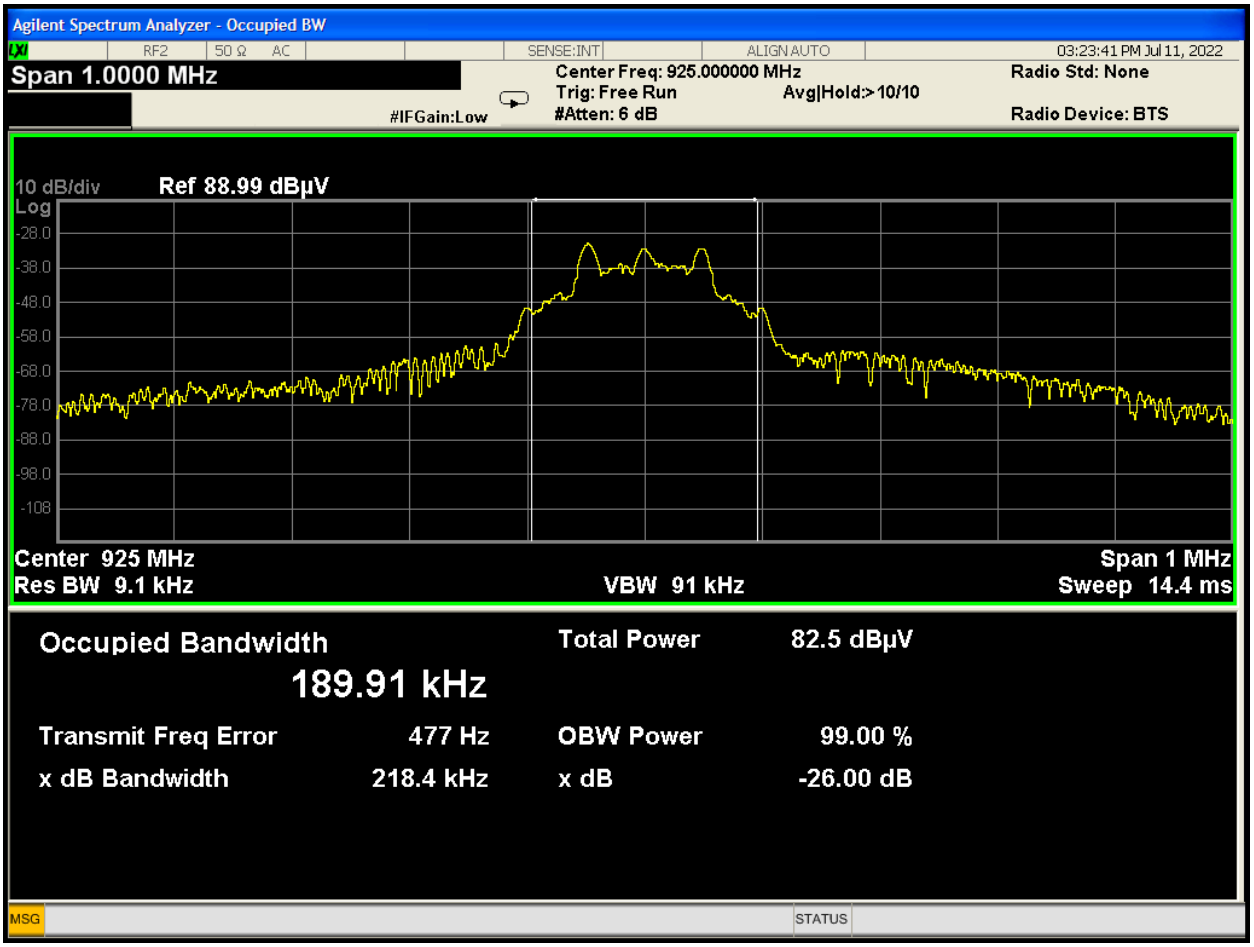
All equipment is calibrated using standards traceable to NIST or other nationally recognized calibration standard.

Test Equipment Used

Occupied Bandwidth

REQUIREMENT

When an occupied bandwidth is not specified in the applicable RSS, the transmitted signal bandwidth to be reported is its 99% emission bandwidth, as calculated or measured.
[RSS-GEN Issue 5 Section 6.7]



Occupied Bandwidth 925MHz radio X-Axis Worst Case

Measurement Uncertainty

The listed uncertainties are the worst case uncertainty for the entire range of measurement. Please note that the uncertainty values are provided for informational purposes only and are not used in determining the PASS/FAIL results. Values for measurement uncertainty are calculated per ETSI TR 100 028 (2001). This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Measurement	Expanded Uncertainty k=2	Maximum allowable uncertainty
Radiated Emissions (30-1000MHz) NIST CISPR	 5.6dB 4.6dB	 N/A 5.2dB (Ucispr)
Radiated Emissions (1-26.5GHz)	4.6dB	N/A
Radiated Emissions (above 26.5GHz)	4.9dB	N/A
Magnetic Radiated Emissions	5.6dB	N/A
Conducted Emissions NIST CISPR	 3.9dB 3.6dB	 N/A 3.6dB (Ucispr)
Telco Conducted Emissions (Current)	2.9dB	N/A
Telco Conducted Emissions (Voltage)	4.4dB	N/A
Electrostatic Discharge	11.5%	N/A
Radiated RF Immunity (Uniform Field)	1.6dB	N/A
Electrical Fast Transients	23.1%	N/A
Surge	23.1%	N/A
Conducted RF Immunity	3dB	N/A
Magnetic Immunity	12.8%	N/A
Dips and Interrupts	2.3V	N/A
Harmonics	3.5%	N/A
Flicker	3.5%	N/A
Radio frequency (@ 2.4GHz)	3.23×10^{-8}	1×10^{-7}
RF power, conducted	0.40dB	0.75dB
Maximum frequency deviation: • Within 300Hz and 6kHz of audio frequency / Within 6kHz and 25kHz of audio frequency	 3.4% 0.3dB	 5% 3dB
Adjacent channel power	1.9dB	3dB
Conducted spurious emission of transmitter, valid up to 12.75GHz	2.39dB	3dB
Conducted emission of receivers	1.3dB	3dB
Radiated emission of transmitter, valid up to 26.5GHz	3.9dB	6dB
Radiated emission of transmitter, valid up to 80GHz	3.3dB	6dB
Radiated emission of receiver, valid up to 26.5GHz	3.9dB	6dB
Radiated emission of receiver, valid up to 80GHz	3.3dB	6dB
Humidity	2.37%	5%
Temperature	0.7°C	1.0°C
Time	4.1%	10%
RF Power Density, Conducted	0.4dB	3dB
DC and low frequency voltages	1.3%	3%
Voltage (AC, <10kHz)	1.3%	2%
Voltage (DC)	0.62%	1%
The above reflects a 95% confidence level		

Conditions Of Testing

[Bureau Veritas Consumer Products Services, Inc., a Massachusetts corporation], and/or its affiliates (collectively, the "Company") will conduct, at the request of the Submitter ("**Client**"), the tests specified on the submitted Test Request Form or equivalent in accordance with, and subject to, the following terms and conditions (collectively, "**Conditions**"):

1. All orders for tests are subject to acceptance by the Company, and no order will constitute a binding commitment of the Company unless and until such order is accepted by it, as evidenced by the issuance of a written report ("**Test Report**") by the Company. The Test Report is issued solely by the Company, is intended for the exclusive use of Client and shall not be published, used for advertising purposes, copied or replicated for distribution to any other person or entity or otherwise publicly disclosed without the prior written consent of the Company. By submitting a request for services to the Company, Client consents to the disclosure to accreditation bodies of those records of Client relevant to the accreditation body's assessment of the Company's competence and compliance with relevant accreditation criteria. The Company shall not be liable for any loss or damage whatsoever resulting from the failure of the Company to provide its services within any time period for completion estimated by the Company. If Client anticipates using the Test Report in any legal proceeding, arbitration, dispute resolution forum or other proceeding, it shall so notify the Company prior to submitting the Test Report in such proceeding. The Company has no obligation to provide a fact or expert witness at such proceeding unless the Company agrees in advance to do so for a separate and additional fee.
2. The Test Report will set forth the findings of the Company solely with respect to the test samples identified therein. Unless specifically and expressly indicated in the Test Report, the results set forth in such Test Report are not intended to be indicative or representative of the quality or characteristics of the lot from which a test sample is taken, and Client shall not rely upon the Test Report as being so indicative or representative of the lot or of the tested product in general. The Test Report will reflect the findings of the Company at the time of testing only, and the Company shall have no obligation to update the Test Report after its issuance. The Test Report will set forth the results of the tests performed by the Company based upon the written information provided to the Company. The Test Report will be based solely on the samples and written information submitted to the Company by Client, and the Company shall not be obligated to conduct any independent investigation or inquiry with respect thereto.
3. The Company may, in its sole discretion, destroy samples which have been furnished to the Company for testing and which have not been destroyed in the course of testing. The Company may delegate the performance of all or a portion of the services contemplated hereunder to an affiliate, agent or subcontractor of the Company, and Client consents to such delegation.
4. These Conditions and the Test Report represent the entire understanding of the parties hereto with respect to the subject matter hereof and of the Test Report, and no modification, variance or extrapolation with respect thereto shall be permitted without the prior written consent of the Company.
5. The names, service marks, trademarks and copyrights of the Company and its affiliates, including the names "**BUREAU VERITAS**," "**BUREAU VERITAS CONSUMER PRODUCTS SERVICES**," "**BVCPS**", "**MTL**", "**ACTS**", "**MTL-ACTS**" and **CURTIS-STRAUS** (collectively, the "**Marks**") are and shall remain the sole property of the Company or its affiliates and shall not be used by Client except solely to the extent that Client obtains the prior written approval of the Company and then only in the manner prescribed by the Company. Client shall not contest the validity of the Marks or take any action that might impair the value or goodwill associated with the Marks or the image or reputation of the Company or its affiliates.
6. Payment in full shall be due 30 days after the date of invoice. Interest shall be due on overdue amounts from the due date until paid at an interest rate of 1.5% per month or, if less, the maximum rate permitted by law. The Company reserves the right, at any time and from time to time, to revoke any credit extended to Client. Client shall reimburse the Company for any costs it incurs in collecting past due amounts, including court costs and fees and expenses of attorneys and collection agencies. The Test Report may not be used or relied upon by Client if and for so long as Client fails to pay when due any invoice issued by the Company or any affiliate of it to Client or any affiliate or subsidiary of Client together with interest and penalties, if any, accrued thereon.
7. The Company disclaims any and all responsibility or liability arising out of or in connection with e-mail transmissions of such information.
8. Client understands and agrees that the Company is neither an insurer nor a guarantor, that the Company does not take the place of Client or any designer, manufacturer, agent, buyer, distributor or transportation or shipping company, and that the Company disclaims all liability in such capacities. Client further understands that if it seeks assurance against loss or damage, it should obtain appropriate insurance.
9. Client agrees that the Company, by providing the services, does not take the place of Client nor any third party, nor does the Company release them from any of their obligations, nor does the Company otherwise assume, abridge, abrogate or undertake to discharge any duty of any third party to Client or any duty of Client or any third party to any other third party, and Client will not release any third party from its obligations and duties with respect to the tested goods.
10. Client shall, on a timely basis, (a) provide adequate instructions to the Company in order to enable the Company to perform properly its services, (b) provide, or cause Client's suppliers and contractors to provide, the Company with all documents necessary to enable the Company to perform its services, (c) furnish the Company with all relevant information regarding Client's intended use and purposes of the tested goods, (d) advise the Company of essential dates and deadlines relevant to the tested goods and (e) fully exercise all rights and remedies available to Client against third parties in respect of the tested goods.
11. The Company shall undertake due care and ordinary skill in the performance of its services to Client, and the Company shall accept responsibility only were such skill has not been exercised and, even in such event, only to the extent of the limitation of liability set forth herein.
12. If Client desires to assert a claim arising from or relating to (i) the performance, purported performance or non-performance of any services by the Company or (ii) the sale, resale, manufacture, distribution or use of any tested goods, it must submit that claim to the Company in a writing that sets forth with particularity the basis for such claim within 60 days from discovery of the potential claim and not more than six months after the date of issuance of the Test Report to Client. Client waives any and all such claims including, without limitation, claims that the Test Report is inaccurate, incomplete or misleading or that additional or different testing is required, unless and then only to the extent that Client submits a written claim to the Company within both such time periods.
13. CLIENT SHALL, EXCEPT TO THE EXTENT OF COMPANY'S LIABILITY TO CLIENT HEREUNDER (WHICH IN NO EVENT SHALL EXCEED THE LIMITATION OF LIABILITY HEREIN), HOLD HARMLESS AND INDEMNIFY THE COMPANY, ITS AFFILIATES AND THEIR RESPECTIVE DIRECTORS, OFFICERS, EMPLOYEES, AGENTS AND SUBCONTRACTORS AGAINST

ALL ACTUAL OR ALLEGED THIRD PARTY CLAIMS FOR LOSS, DAMAGE OR EXPENSE OF WHATSOEVER NATURE AND HOWSOEVER ARISING FROM OR RELATING TO (i) THE PERFORMANCE, PURPORTED PERFORMANCE OR NON-PERFORMANCE OF ANY SERVICES BY THE COMPANY OR (ii) THE SALE, RESALE, MANUFACTURE, DISTRIBUTION OR USE OF ANY TESTED GOODS.

14. EXCEPT AS MAY OTHERWISE BE EXPRESSLY AGREED TO IN WRITING BY THE COMPANY AND NOTWITHSTANDING ANY PROVISION TO THE CONTRARY CONTAINED HEREIN OR IN ANY TEST REPORT, NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, IS MADE.

15. (A) IN NO EVENT WHATSOEVER SHALL THE COMPANY BE LIABLE FOR ANY CONSEQUENTIAL, SPECIAL, INCIDENTAL, EXEMPLARY OR PUNITIVE DAMAGES IN CONNECTION WITH, RELATING TO OR ARISING OUT OF THE TEST REPORT OR THE SERVICES PROVIDED BY THE COMPANY HEREUNDER, INCLUDING WITHOUT LIMITATION LOSS OF OR DAMAGE TO PROPERTY; LOSS OF INCOME, PROFIT OR USE; OR ANY CLAIMS OR DEMANDS MADE AGAINST CLIENT OR ANY OTHER PERSON BY ANY THIRD PARTY IN CONNECTION WITH, RELATING TO OR ARISING OUT OF THE SERVICES PROVIDED BY THE COMPANY HEREUNDER.

(B)NOTWITHSTANDING ANY PROVISION TO THE CONTRARY CONTAINED HEREIN, AND IN RECOGNITION OF THE RELATIVE RISKS AND BENEFITS TO CLIENT AND THE COMPANY ASSOCIATED WITH THE TESTING SERVICES CONTEMPLATED HEREBY, THE RISKS HAVE BEEN ALLOCATED SUCH THAT UNDER NO CIRCUMSTANCES WHATSOEVER SHALL THE LIABILITY OF THE COMPANY TO CLIENT OR ANY THIRD PARTY IN RESPECT OF ANY CLAIM FOR LOSS, DAMAGE OR EXPENSE, OF WHATSOEVER NATURE OR MAGNITUDE, AND HOWSOEVER ARISING, EXCEED AN AMOUNT EQUAL TO FIVE (5) TIMES THE AMOUNT OF THE FEES PAID TO THE COMPANY FOR THE SPECIFIC SERVICES WHICH GAVE RISE TO SUCH CLAIM OR U.S.$10,000, WHICHEVER IS THE LESSER AMOUNT.

16. The Company shall not be liable for any loss or damage resulting from any delay or failure in performance of its obligations hereunder resulting directly or indirectly from any event of force majeure or any event outside the control of the Company. If any such event occurs, the Company may immediately cancel or suspend its performance hereunder without incurring any liability whatsoever to Client.

17. Company's services, including these Conditions, shall be governed by, and construed in accordance with, the local laws of the country where the Company performs the tests or, in the case of tests performed in the United States of America, the laws of Massachusetts without regard to conflicts of laws principles. If any aspect(s) of these Conditions is found to be illegal or unenforceable, the validity, legality and enforceability of all remaining aspects of these Conditions shall not in any way be affected or impaired thereby. Any proceeding related to the subject matter hereof shall be brought, if at all, in the courts of the country where the Company performs the tests or, in the case of tests performed in the United States of America, in the courts of Massachusetts. Client waives the right to interpose any counterclaim or setoffs of any nature in any litigation arising hereunder.

Rev.160009121(2)_#684340 v13CS

Document Revision History

Issue No.	Summary of Changes	Date Issued	Prepared by	Approved by
1	Original Release	2022-08-11	BV	YF
2	Add radiated band edge measurements (p7); Update TEU (p14); Add “Document Revision History” (p19)	2022-10-04	HX	YF

END OF REPORT