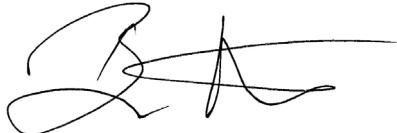




BUREAU  
VERITAS

Curtis-Straus LLC, a wholly owned subsidiary of BV CPS

# Test Report

Report No	EV0616
Client	Amazon Robotics LLC
Address	300 Riverpark Drive North Reading, MA 01864
Phone	978-276-2815
Items tested	SRBRS Badge Module
FCC ID	2AEZR-SRBRSBADGE
IC	10244A-SRBRSBADGE
FRN	0024656845
Equipment Type	Part 15 Low Power Transmitter Below 1705kHz
Equipment Code	DCD
Standards	CFR Title 47 FCC Part 15.209, RSS-210 Issue 9 Section 4.4
Test Dates	May 13-June 22, 2021
Results	As detailed within this report
Prepared by	 Bryan Valcourt – EMC Test Engineer
Authorized by	<hr/> – Sr. EMC Engineer
Issue Date	<u>07/06/2021</u>
Conditions of Issue	This Test Report is issued subject to the conditions stated in the 'Conditions of Testing' section on page 10 of this report.

Curtis-Straus LLC is accredited by the American Association for Laboratory Accreditation for the specific scope of accreditation under Certificate Number 1627-01. This report may contain data which is not covered by the A2LA accreditation.



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## Contents

Contents.....	3
Product Tested - Configuration Documentation .....	4
Summary and Test Methodology .....	5
Compliance Statement .....	6
Modifications Required for Compliance .....	6
Test Results .....	7
RADIATED EMISSIONS.....	7
Measurement Uncertainty.....	16
Conditions Of Testing .....	17

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



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**Product Tested - Configuration Documentation**

EUT Configuration																	
Work Order:	V0616																
Company:	Amazon Robotics LLC																
Company Address:	300 River Park Drive North Reading, MA, 01864																
Contact:	Dao Keopadith																
EUT:	MN			PN			SN										
EUT Description:	SRBRS ELF Badge			600-02357-001													
EUT Max Frequency:	5800 MHz																
EUT Min Frequency:	0.125 MHz																
EUT Components	MN			SN													
SRBRS ELF Badge	600-02357-001																
Port Label	Port Type	# ports	# populated	cable type	shielded	ferrites	length (m)	in/out	under test	comment							
Interconnecting Port J1	Other	1	1	other	Yes	No	1	in	yes								
USB Service Port	USB	1	1	USB	Yes	No	1	in	no	Service Port only							
Software Operating Mode Description:																	
Performance Criteria:																	
This is Emissions only no Criteria for Immunity																	

Note: This product contains also a 925Mhz Transmitter and a certified 5GHz (5180-5825MHz) transmitter module, FCC ID: XF6-RS9113DB



Reason for change

Original Release

Date Issued

August 31, 2021

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page 4 of 18



Testing Cert. No. 1627-01

## **Summary and Test Methodology**

On May 13-June 22, 2021 we tested the SRBRS Badge Module for compliance with the following requirements:

CFR Title 47 FCC Part 15.209, RSS-210 Issue 9 Section 4.4

EUT transmits at 125kHz. 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 4.

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.

<b>Frequency</b>	<b>RBW</b>	<b>VBW</b>
0.15-30MHz	9kHz	30kHz
30-1000MHz	120kHz	1MHz
1-25GHz	1MHz	3MHz

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



Reason for change

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page 5 of 18



## Compliance Statement

RSS-GEN	RSP-100	RSS 210	Part 15	Comments
6.3			15.15(b)	There are no controls accessible to the user that varies 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.
6.1, 6.5			15.31	The EUT was tested in accordance with the measurement standards in this section.
			15.33	Frequency range was investigated according to this section, unless noted in specific rule section under which the equipment operates.
8.1			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.
8.3			15.203	The antenna for this device is an internal tuned ferrite core.
8.10		4.4	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.
6.6				99% emissions bandwidth plot is provided.

## Modifications Required for Compliance

None.



Reason for change

Original Release

Date Issued

August 31, 2021

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page 6 of 18



## Test Results

### RADIATED EMISSIONS

Radiated Emissions Table															
Date: 20-May-21 Engineer: Bryan Valcourt Temp: 24.1°C      Humidity: 33%      Pressure: 1010mbar															
Work Order: V0616 EUT Operating Voltage/Frequency: 15VDC															
<b>Frequency Range:</b> 125kHz Fundamental										<b>Measurement Distance:</b> 3 m					
<b>Notes:</b> Peak readings. Average limit is calculated as Adjusted Reading - DCCF. DCCF = $20 \times \log(16.24/100) = -15.79$															
<b>FCC15.209</b>															
Antenna Polarization (H / V)	Frequency (MHz)	Reading (dB $\mu$ V)	Preamp Factor (dB)	Antenna Factor (dB/m)	Cable Factor (dB)	Adjusted Peak Reading (dB $\mu$ V/m)	Adjusted Ave Reading (dB $\mu$ V/m)	Peak Limit (dB $\mu$ V/m)	Margin (dB)	Result (Pass/Fail)	Ave Limit (dB $\mu$ V/m)	Margin (dB)			
X Axis Parallel	0.125	105.1	0.0	10.1	0.050	115.15	99.4	125.7	-10.6	Pass	105.70	-6.3			
Perpindicular	0.125	103.9	0.0	10.1	0.050	113.94	98.1	125.7	-11.8	Pass	105.70	-7.6			
Y-Axis Parallel	0.125	94.2	0.0	10.1	0.050	104.24	88.4	125.7	-21.5	Pass	105.70	-17.3			
Perpindicular	0.125	72.3	0.0	10.1	0.050	82.32	66.5	125.7	-43.4	Pass	105.70	-39.2			
Z-Axis Parallel	0.125	105.9	0.0	10.1	0.050	115.95	100.2	125.7	-9.8	Pass	105.70	-5.5			
Perpindicular	0.125	102.9	0.0	10.1	0.050	112.98	97.2	125.7	-12.7	Pass	105.70	-8.5			
<b>Test Site:</b> EMI Chamber 1 <b>Analyzer:</b> 1170725 <b>CSsoft Radiated Emissions Calculator</b> v 1.017.215															
<b>Cable 1:</b> Asset #2580 <b>Cable 2:</b> Asset #2682 <b>Cable 3:</b> Asset #2466 <b>Preselector:</b> --- <b>Antenna:</b> 1218															
Adjusted Reading = Reading - Preamp Factor + Antenna Factor + Cable Factor															
Copyright Curtis-Straus LLC 2000															

Bureau Veritas Consumer Product Services Inc. Radiated Emissions, Electric Field, 3m Measurement 9-150kHz Parallel Data Notes: Normal Mode SN21140003					Work Order - V0616 EUT Power Input - 15VDC Test Site - Chamber 1 Conditions - 24.3°C; 31.6%RH; 1013mBar Test Engineer - Bryan Valcourt Date of Test - 5/13/2021								
Frequency (MHz)	Raw Peak Reading (dB $\mu$ V)	Raw Avg Reading (dB $\mu$ V)	Raw QP Reading (dB $\mu$ V)	Correction Factor (dB/m)	Adjusted Peak Amplitude (dB $\mu$ V/m)	Lim: FCC_pt15_20_9_dB $\mu$ V/m (dB $\mu$ V/m)	Peak Margin (dB)	Peak Test Results (Pass/Fail)	Worst Peak Margin (dB)	Adjusted Avg Amplitude (dB $\mu$ V/m)	Avg Margin (dB)	Avg Test Results (Pass/Fail)	Worst Avg Margin (dB)
0.032699	28.2		35.4	13.2	41.4	117.3	-75.9	PASS		43.5	-73.8	PASS	
0.045741	29		33.4	11.6	40.6	114.5	-73.8	PASS		41	-73.5	PASS	
0.136002	26		35	10.1	36.1	104.9	-68.8	PASS	-68.8	45.5	-59.5	PASS	-59.5
0.147932	23.3		38.5	10.1	33.4	104.2	-70.8	PASS		33.4	-70.8	PASS	
0.148191	15		30.2	10.1	25.1	104.2	-79.1	PASS		31.6	-72.6	PASS	

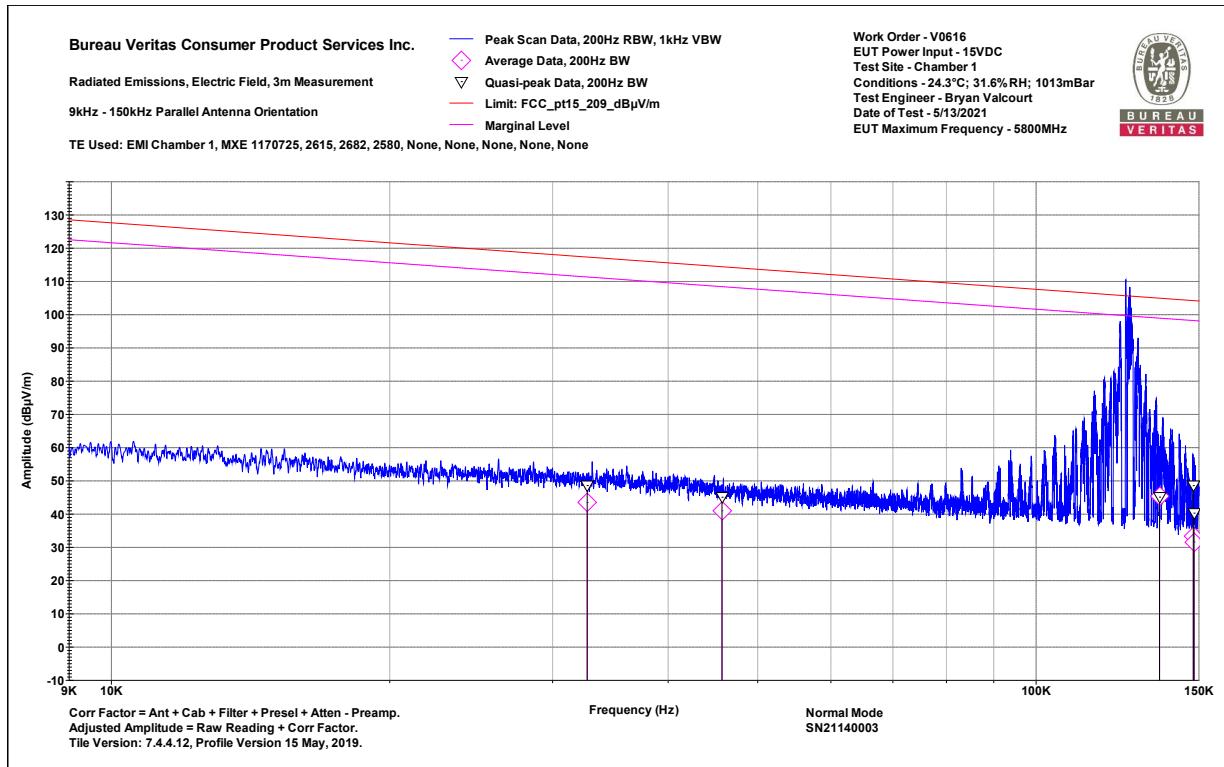
### X Axis 9-150kHz Parallel Data



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page 7 of 18



X Axis 9-150kHz Parallel Graph

Bureau Veritas Consumer Product Services Inc.	Work Order - V0616
Radiated Emissions, Electric Field, 3m Measurement	EUT Power Input - 15VDC
9-150kHz Perpendicular Data	Test Site - Chamber 1
Notes:	Conditions - 24.3°C; 31.6%RH; 1013mBar
Normal Mode	Test Engineer - Bryan Valcourt
SN21140003	Date of Test - 5/13/2021

Frequency (MHz)	Raw Peak Reading (dBµV)	Raw Avg Reading (dBµV)	Raw QP Reading (dBµV)	Correction Factor (dB/m)	Adjusted Peak Reading (dBµV/m)	Lim: FCC_pt15_209_dBµV/m (dBµV/m)	Peak Margin (dB)	Peak Test Results (Pass/Fail)	Worst Peak Margin (dB)	Adjusted Avg Amplitude (dBµV/m)	Avg Margin (dB)	Avg Test Results (Pass/Fail)	Worst Avg Margin (dB)
0.035986	28.4	30.5	34.6	12.8	41.3	116.5	-75.2	PASS		43.4	-73	PASS	
0.05016	28	28.2	33.2	11.1	39.1	113.6	-74.5	PASS		39.2	-74	PASS	
0.124056	27.3	75.3	84.2	10.1	37.4	105.7	-68.3	PASS		85.4	-20	PASS	-20.3
0.139119	26.3	32.6	35.2	10.1	36.4	104.7	-68.3	PASS		42.7	-62	PASS	
0.148399	27.3	22.1	34.5	10.1	37.4	104.2	-66.8	PASS	-66.8	32.2	-72	PASS	

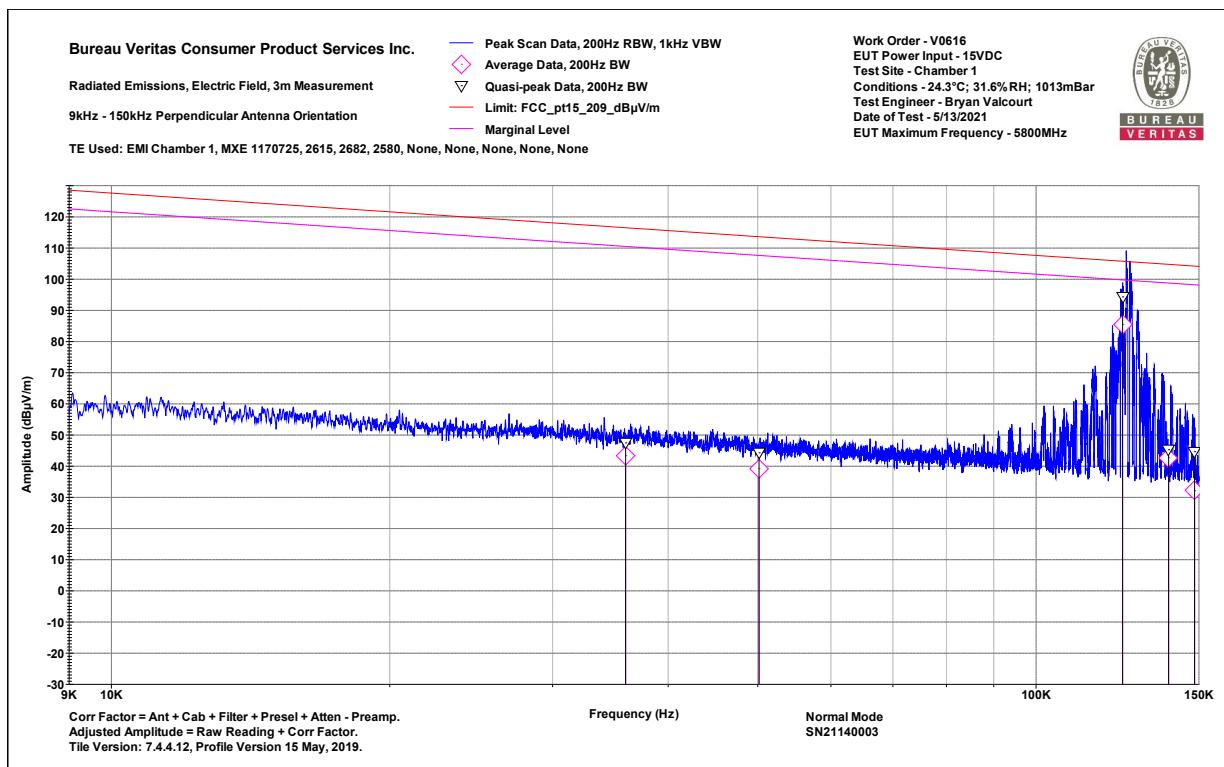
X Axis 9-150kHz Perpendicular Data



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page 8 of 18



X Axis 9-150kHz Perpendicular Graph

Curtis Straus - a Bureau Veritas Company  
Radiated Emissions Magnetic Field 3m Distance  
150-1000kHz Parallel Data  
Notes:  
Normal Mode  
SN21140003

Work Order - V0616  
EUT Power Input - 15VDC  
Test Site - Chamber 1  
Conditions - 24.0°C; 31.7%RH; 1013mBar  
Test Engineer - Bryan Valcourt  
Date of Test - 5/14/2021

Frequency (MHz)	Raw Peak Reading (dBµV)	Raw Avg Reading (dBµV)	Raw QP Reading (dBµV)	Correction Factor (dB/s)	Lim: FCC_pt15_209_dBµV/m (dBµA/m)	Adjusted Peak Amplitude (dBµA/m)	Peak Margin (dB)	Peak Test Results (Pass/Fail)	Worst Peak Margin (dB)	Adjusted Avg Amplitude (dBµA/m)	Avg Margin (dB)	Avg Test Results (Pass/Fail)	Worst Avg Margin (dB)
0.363	36	31.5	39.7	10	96.417	46	-50.4	PASS		41.5	-54.9	PASS	
0.488	29.4	27.2	34.4	10.2	93.841	39.6	-54.2	PASS		37.4	-56.4	PASS	
0.632	30.1	27.5	36	10.4	71.613	40.5	-31.1	PASS		37.9	-33.7	PASS	-33.7
0.667	30.7	24.2	31.5	10.4	71.138	41.1	-30	PASS		34.6	-36.5	PASS	
0.883	24.1	22.1	28.4	10.6	68.697	34.7	-34	PASS		32.7	-36	PASS	
0.958	27.5	19.9	26.9	10.7	67.99	38.2	-29.8	PASS	-29.8	30.6	-37.4	PASS	

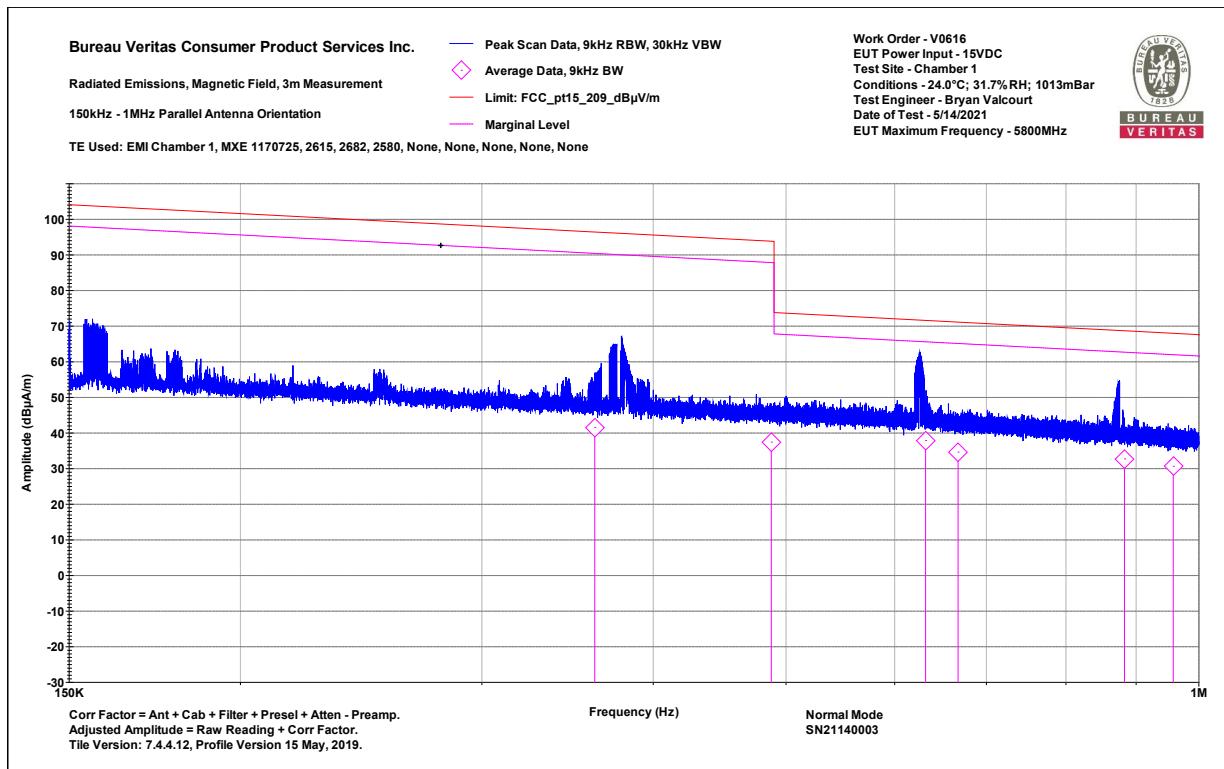
X Axis 150kHz-1MHz Parallel Data



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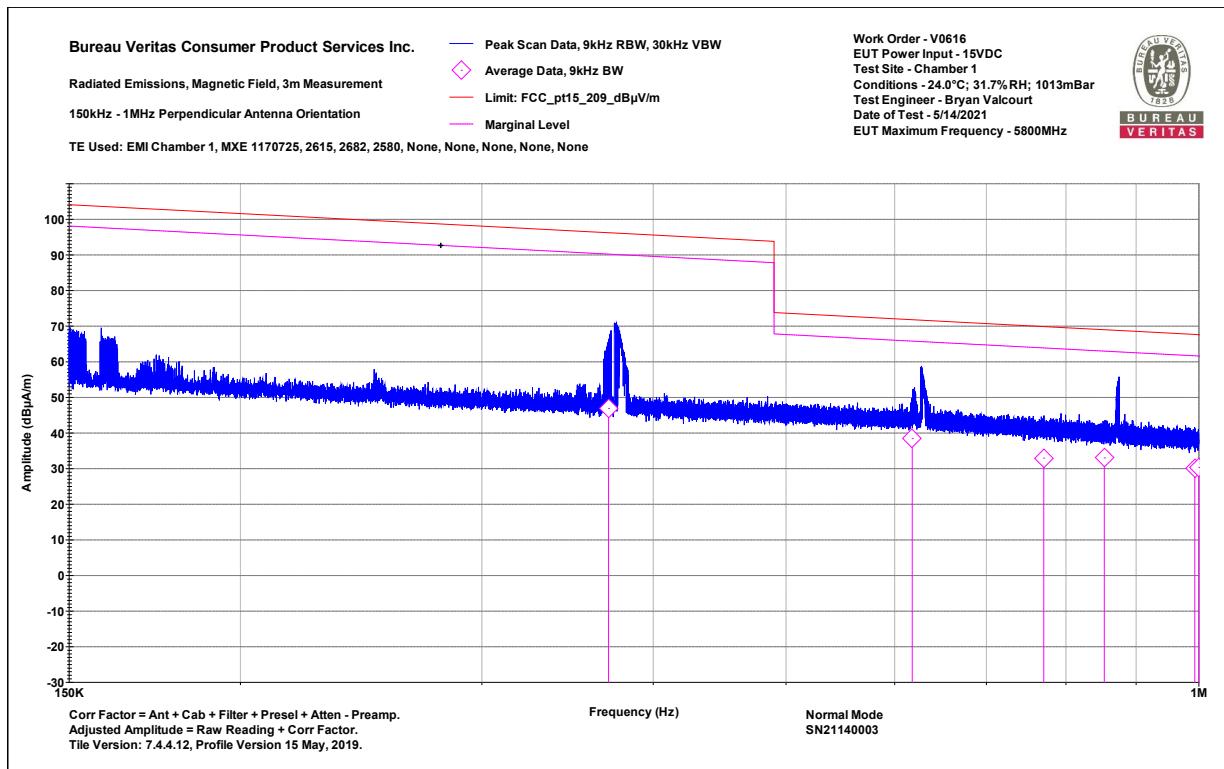


page 9 of 18



### X Axis 150kHz-1MHz Parallel Graph

X Axis 150kHz-1MHz Perpendicular Data

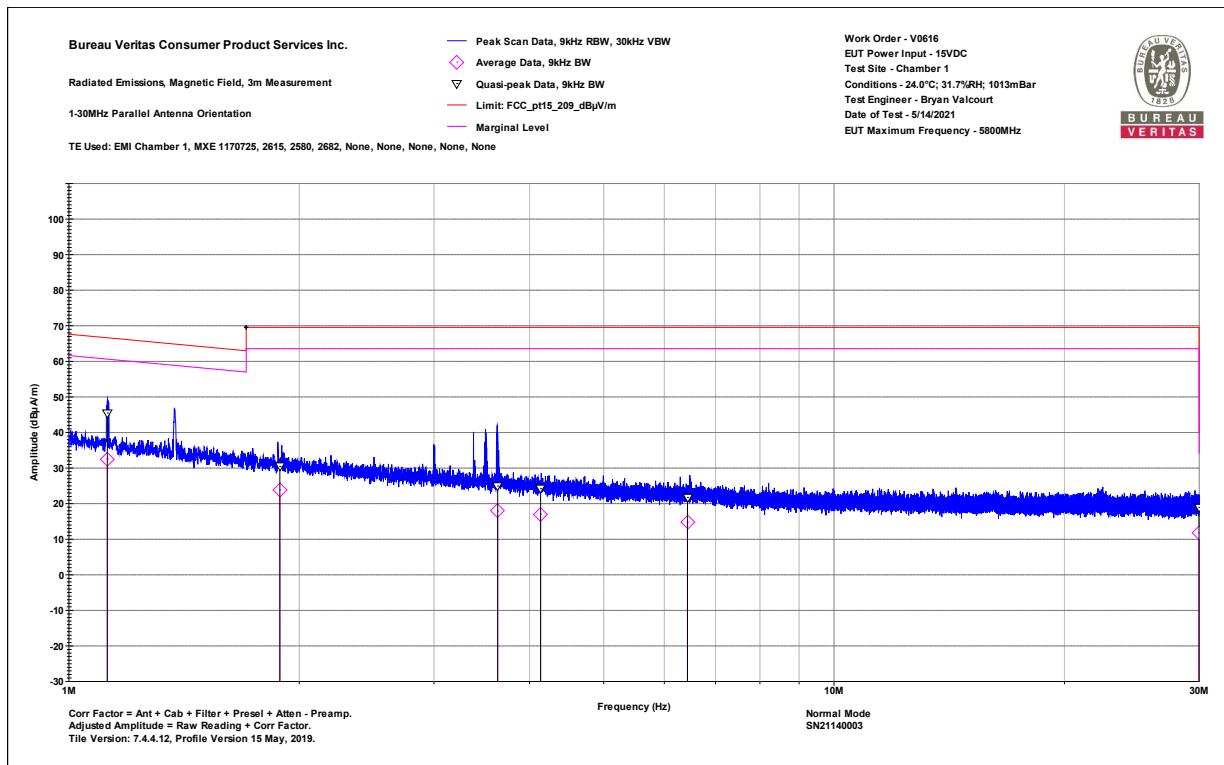


X Axis 150kHz-1MHz Perpendicular Graph

Bureau Veritas Consumer Product Services Inc. Radiated Emissions Magnetic Field 3m Distance 1-30MHz Parallel Data Notes: Normal Mode SN21140003	Work Order - V0616 EUT Power Input - 15VDC Test Site - Chamber 1 Conditions - 24.0°C; 31.7%RH; 1013mBar Test Engineer - Bryan Valcourt Date of Test - 5/14/2021																																																																																																	
<table border="1"> <thead> <tr> <th>Frequency (MHz)</th><th>Raw Peak Reading (dBµV)</th><th>Raw Avg Reading (dBµV)</th><th>Raw QP Reading (dBµV)</th><th>Correction Factor (dB/s)</th><th>Lim: FCC_pt15_209_dBµV/m (dBµA/m)</th><th>Adjusted Peak Amplitude (dBµA/m)</th><th>Peak Margin (dB)</th><th>Peak Test Results (Pass/Fail)</th><th>Worst Peak Margin (dB)</th><th>Adjusted Avg Amplitude (dBµA/m)</th><th>Avg Margin (dB)</th><th>Avg Test Results (Pass/Fail)</th><th>Worst Avg Margin (dB)</th></tr> </thead> <tbody> <tr> <td>1.123</td><td>23.5</td><td>21.8</td><td>34.7</td><td>10.8</td><td>66.6</td><td>34.3</td><td>-32.3</td><td>PASS</td><td>-32.3</td><td>32.6</td><td>-34</td><td>PASS</td><td>-34</td></tr> <tr> <td>1.887</td><td>19.6</td><td>13.2</td><td>19.7</td><td>10.7</td><td>69.5</td><td>30.3</td><td>-39.3</td><td>PASS</td><td></td><td>23.9</td><td>-45.7</td><td>PASS</td><td></td></tr> <tr> <td>3.634</td><td>14.3</td><td>7.1</td><td>14.1</td><td>10.8</td><td>69.5</td><td>25.1</td><td>-44.4</td><td>PASS</td><td></td><td>17.9</td><td>-51.6</td><td>PASS</td><td></td></tr> <tr> <td>4.135</td><td>13.1</td><td>6.1</td><td>13.3</td><td>10.9</td><td>69.5</td><td>24</td><td>-45.6</td><td>PASS</td><td></td><td>17</td><td>-52.6</td><td>PASS</td><td></td></tr> <tr> <td>6.432</td><td>12.6</td><td>3.8</td><td>10.8</td><td>11</td><td>69.5</td><td>23.6</td><td>-45.9</td><td>PASS</td><td></td><td>14.7</td><td>-54.8</td><td>PASS</td><td></td></tr> <tr> <td>29.989</td><td>9.2</td><td>3.2</td><td>10.3</td><td>8.6</td><td>69.5</td><td>17.8</td><td>-51.8</td><td>PASS</td><td></td><td>11.8</td><td>-57.7</td><td>PASS</td><td></td></tr> </tbody> </table>	Frequency (MHz)	Raw Peak Reading (dBµV)	Raw Avg Reading (dBµV)	Raw QP Reading (dBµV)	Correction Factor (dB/s)	Lim: FCC_pt15_209_dBµV/m (dBµA/m)	Adjusted Peak Amplitude (dBµA/m)	Peak Margin (dB)	Peak Test Results (Pass/Fail)	Worst Peak Margin (dB)	Adjusted Avg Amplitude (dBµA/m)	Avg Margin (dB)	Avg Test Results (Pass/Fail)	Worst Avg Margin (dB)	1.123	23.5	21.8	34.7	10.8	66.6	34.3	-32.3	PASS	-32.3	32.6	-34	PASS	-34	1.887	19.6	13.2	19.7	10.7	69.5	30.3	-39.3	PASS		23.9	-45.7	PASS		3.634	14.3	7.1	14.1	10.8	69.5	25.1	-44.4	PASS		17.9	-51.6	PASS		4.135	13.1	6.1	13.3	10.9	69.5	24	-45.6	PASS		17	-52.6	PASS		6.432	12.6	3.8	10.8	11	69.5	23.6	-45.9	PASS		14.7	-54.8	PASS		29.989	9.2	3.2	10.3	8.6	69.5	17.8	-51.8	PASS		11.8	-57.7	PASS	
Frequency (MHz)	Raw Peak Reading (dBµV)	Raw Avg Reading (dBµV)	Raw QP Reading (dBµV)	Correction Factor (dB/s)	Lim: FCC_pt15_209_dBµV/m (dBµA/m)	Adjusted Peak Amplitude (dBµA/m)	Peak Margin (dB)	Peak Test Results (Pass/Fail)	Worst Peak Margin (dB)	Adjusted Avg Amplitude (dBµA/m)	Avg Margin (dB)	Avg Test Results (Pass/Fail)	Worst Avg Margin (dB)																																																																																					
1.123	23.5	21.8	34.7	10.8	66.6	34.3	-32.3	PASS	-32.3	32.6	-34	PASS	-34																																																																																					
1.887	19.6	13.2	19.7	10.7	69.5	30.3	-39.3	PASS		23.9	-45.7	PASS																																																																																						
3.634	14.3	7.1	14.1	10.8	69.5	25.1	-44.4	PASS		17.9	-51.6	PASS																																																																																						
4.135	13.1	6.1	13.3	10.9	69.5	24	-45.6	PASS		17	-52.6	PASS																																																																																						
6.432	12.6	3.8	10.8	11	69.5	23.6	-45.9	PASS		14.7	-54.8	PASS																																																																																						
29.989	9.2	3.2	10.3	8.6	69.5	17.8	-51.8	PASS		11.8	-57.7	PASS																																																																																						

X Axis 1-30MHz Parallel Data





X Axis 1-30MHz Parallel Graph

Bureau Veritas Consumer Product Services Inc.	Work Order - V0616
Radiated Emissions Magnetic Field 3m Distance	EUT Power Input - 15VDC
1-30MHz Perpendicular Data	Test Site - Chamber 1
Notes:	Conditions - 24.0°C; 31.7%RH; 1013mBar
Normal Mode	Test Engineer - Bryan Valcourt
SN21140003	Date of Test - 5/14/2021

Frequency (MHz)	Raw Peak Reading (dB $\mu$ V)	Raw Avg Reading (dB $\mu$ V)	Raw QP Reading (dB $\mu$ V)	Correction Factor (dB/s)	Lim: FCC_pt15_209_dB $\mu$ V/m (dB $\mu$ A/m)	Adjusted Peak Amplitude (dB $\mu$ A/m)	Peak Margin (dB)	Peak Test Results (Pass/Fail)	Worst Peak Margin (dB)	Adjusted Avg Amplitude (dB $\mu$ A/m)	Avg Margin (dB)	Avg Test Results (Pass/Fail)	Worst Avg Margin (dB)
1.361	17.3	15.8	22.9	10.8	64.9	28.1	-36.9	PASS	-36.9	26.6	-38.4	PASS	-38.4
1.921	16.3	12.5	19.5	10.7	69.5	26.9	-42.6	PASS		23.2	-46.3	PASS	
3.139	10.2	8.2	15.3	10.7	69.5	20.9	-48.6	PASS		18.9	-50.6	PASS	
4.098	15.5	6.3	13.3	10.9	69.5	26.4	-43.2	PASS		17.1	-52.4	PASS	
4.944	12.3	5	12	10.9	69.5	23.1	-46.4	PASS		15.8	-53.7	PASS	
29.989	6	3.1	10.2	8.6	69.5	14.6	-54.9	PASS		11.7	-57.8	PASS	

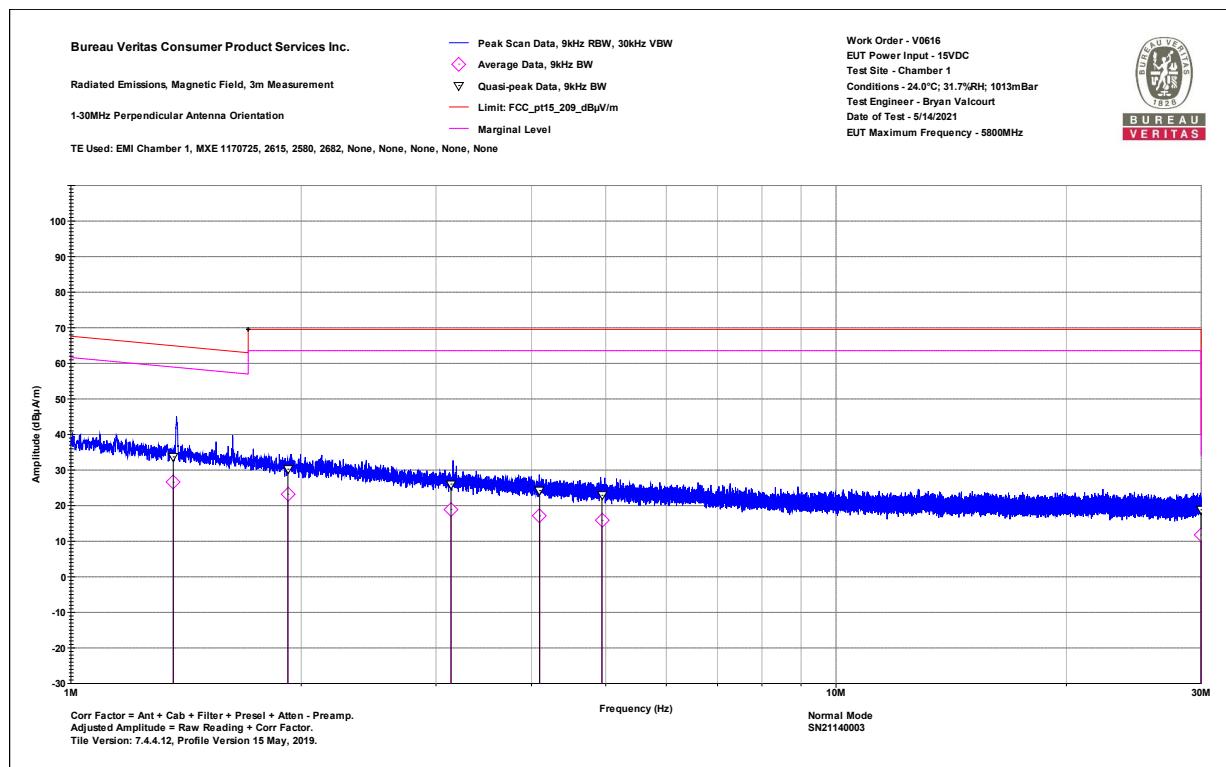
X Axis 1-30MHz Perpendicular Data



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page 12 of 18



X Axis 1-30MHz Perpendicular Graph

Rev. 6/9/2021									
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	12/7/2021	12/7/2020	
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	
2311 PA	1-1000MHz	PAM-103	COM-POWER	441174	2311	II	10/11/2021	10/11/2020	
8449B HF Preamp	1-18GHz	8449B	Agilent	1149055		II	11/8/2021	11/8/2020	
Antennas	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on	
Red-Brown Biolog	30-2000MHz	JB1	Sunol	A0032406	1218	I	4/28/2023	4/28/2021	
Blue Horn	1-18Ghz	3117	ETS	157647	1861	I	4/26/2023	4/26/2021	
2615 Active Loop Antenna	9KHz-30MHz	6502	EMCO	2049	2615	I	11/23/2022	11/23/2020	
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	8/3/2022	8/3/2020		
Cables	Range	Mfr			Cat	Calibration Due	Calibrated on		
Asset #2466	9KHz-18GHz	MegaPhase			II	11/7/2021	11/7/2020		
Asset #2580	9KHz-18GHz	Pasternack			II	1/17/2022	1/17/2021		
Asset #2584	9KHz-18GHz	Pasternack			II	11/7/2021	11/7/2020		
Asset #2681	9KHz-18GHz	Pasternack			II	1/17/2022	1/17/2021		
Asset #2682	9KHz-18GHz	Pasternack			II	1/23/2022	1/23/2021		

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

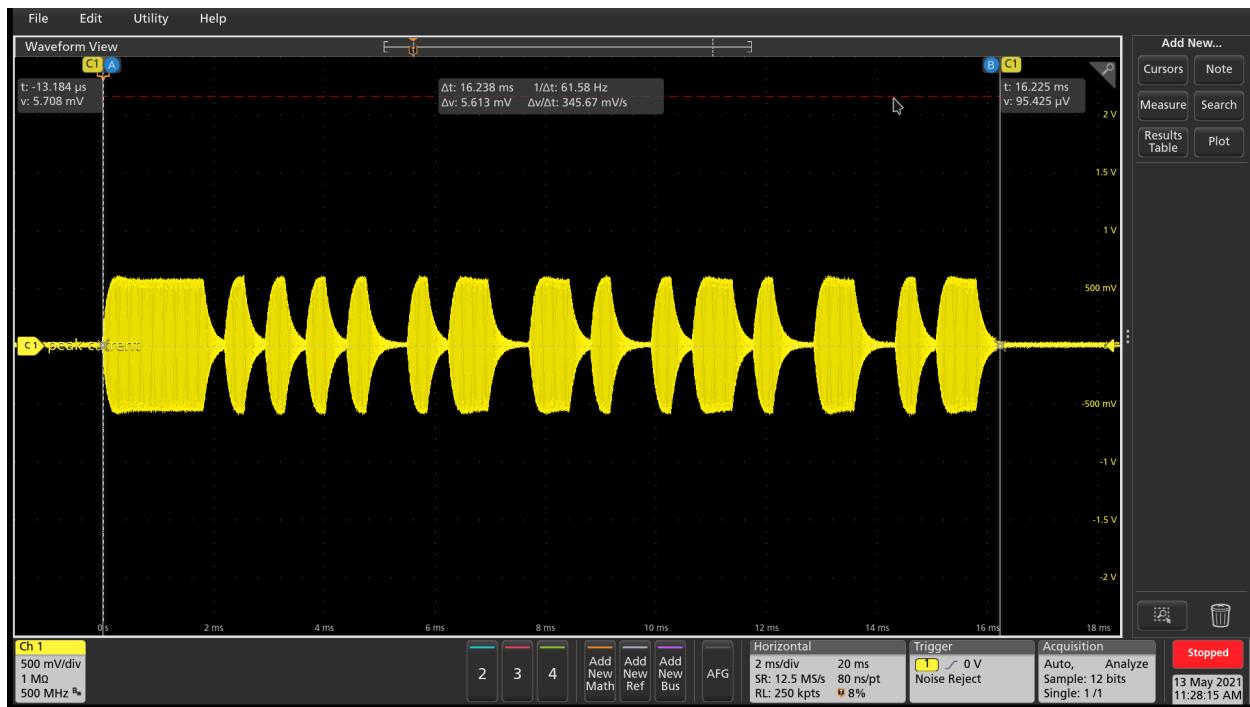
## Test Equipment Used



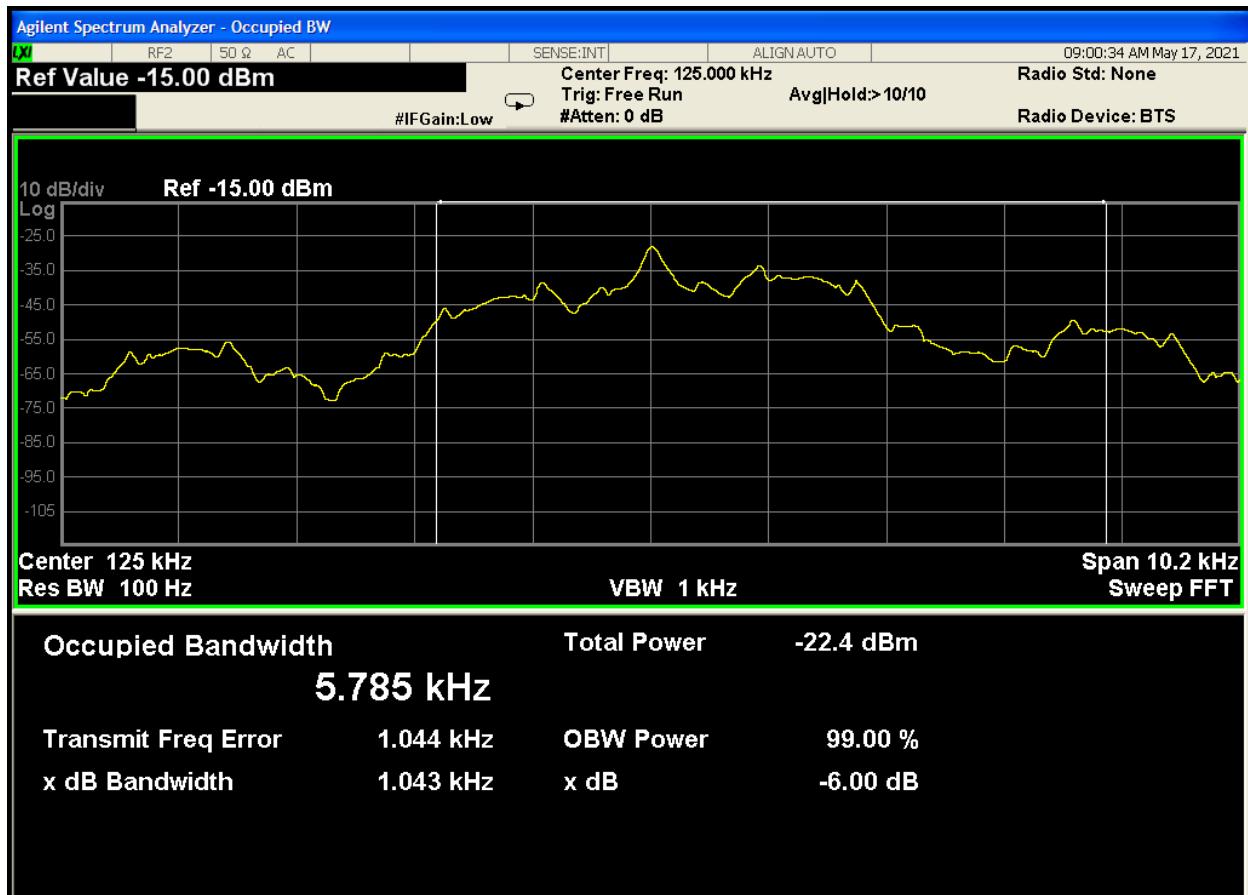
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## Duty-Cycle Correction Factor



## Occupied Bandwidth



## 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.

Measurement	Expanded Uncertainty k=2	Maximum allowable uncertainty
Radiated Emissions (30-1000MHz)		
NIST	5.6dB	N/A
CISPR	4.6dB	5.2dB (Ucispqr)
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	3.9dB	N/A
CISPR	3.6dB	3.6dB (Ucispqr)
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 x 10 <sup>-8</sup>	1 x 10 <sup>-7</sup>
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.

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page 18 of 18