
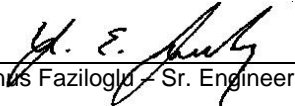




**BUREAU
VERITAS**

Test Report

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

Report No	ES2579-1
Client	Dermal Photonics
Address	100 Corporate Pl, Suite 303 Peabody, MA, 01960
Phone	603-264-3405
Items tested	Product Name: NIRA Laser, Model: 104-001
FCC ID	2ADZENIRC
FRN	0028133858
Equipment Type	Part 15 Low Power Communication Device Transmitter
Equipment Code	DXX
Emission Designator	1M26F1D
Standards	CFR Title 47 FCC Part 15.249, ISED Canada RSS-210 Issue 9 Annex B.10
Test Dates	Sep 19 to Dec 20, 2018
Results	As detailed within this report
Prepared by	 Christopher Hamel – Test Engineer
Authorized by	 Yunus Faziloglu – Sr. Engineer
Issue Date	2/14/2019
Conditions of Issue	This Test Report is issued subject to the conditions stated in the 'Conditions of Testing' section on page 19 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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Product Tested - Configuration Documentation

EUT Configuration			
Work Order:	S2579		
Company:	Dermal Photonics		
Company Address:	100 Corporate Pl, Suite 303 Peabody, MA, 01960		
Contact:	Felix Feldchtein		
	Model Number	Product Name	Serial Number
EUT:	104-001	NIRA Laser	Sample 1
EUT Description:	Skincare Laser		
EUT Max Frequency:	2480 MHz (Tx), 2488MHz (non-Tx)		
EUT Min Frequency:	2402 MHz		
Software Operating Mode Description:			
Test firmware allowing transmission of modulated signal on 3 channels (Low: 2402MHz, Mid: 2440MHz, High: 2480MHz)			



Summary and Test Methodology

This test report supports an application for certification of a transmitter operating pursuant to CFR Title 47 FCC Part 15.249, ISED Canada RSS-210 Issue 9 Annex B.10.

EUT is a transmitter that operates in the 2402MHz - 2480MHz frequency range.

Radiated emissions testing was performed according to the procedures specified in ANSI C63.10-2013. Emissions were maximized by rotating the device around three orthogonal axes (X, Y and Z) as well as varying the test antenna’s height and polarity. EUT antenna is internal, therefore could not be maximized separately.

Antenna Type: PCB Trace

Gain: 1.6dBi

The EUT operating voltage is 5V DC from battery. External USB power supply is provided with the EUT for charging. EUT cannot transmit during charging; therefore AC line conducted emissions requirements are not applicable.

Following bandwidths were used during radiated spurious emissions testing.

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

We found that the product met the above requirements without modification.

Note: Fundamental and band edges were measured with 0dBm power setting. Client confirmed that 0dBm is the maximum power setting that will be programmed in the product software. Other tests were performed at 3dBm power setting before the fundamental and band edge measurements. Since 3dBm setting would be worst case, those measurements were not repeated afterwards with 0dBm setting.

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 users 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	EUT uses a non-detachable internal PCB trace antenna.
8.10			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 and RSS-Gen.
8.8			15.207	N/A. 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 plots included.

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)]

MEASUREMENTS / RESULTS

Fundamental Measurement														
Date: 20-Dec-18			Company: Dermal Photonics						Work Order: S2579					
Engineer: Chris Hamel			EUT Desc: NIRA						EUT Operating Voltage/Frequency: 4.2V Battery					
Temp: 24.5°C			Humidity: 35%						Pressure: 1010mBar					
Frequency Range: 2400-2483.5									Measurement Distance: 3 m					
Notes: Worst case orientation and antenna polarity Peak readings meet the average limit									EUT Max Freq: 2480MHz					
Antenna Polarization (H/V)	Frequency (MHz)	Peak Reading (dBµV)	Average Reading (dBµV)	Preamp Factor (dB)	Antenna Factor (dB/m)	Cable Factor (dB)	Adjusted Peak Reading (dBµV/m)	Adjusted Ave Reading (dBµV/m)	FCC 15.249 Peak			FCC 15.249 Average		
									Limit (dBµV/m)	Margin (dB)	Result (Pass/Fail)	Limit (dBµV/m)	Margin (dB)	Result (Pass/Fail)
V Low	2402.0	55.0	--	0.0	32.2	3.2	90.4	--	114.0	-23.6	Pass	94.0	-3.6	Pass
V Mid	2440.0	55.2	--	0.0	32.3	3.2	90.7	--	114.0	-23.3	Pass	94.0	-3.3	Pass
V High	2480.0	50.5	--	0.0	32.4	3.1	86.0	--	114.0	-28.0	Pass	94.0	-8.0	Pass
Table Result:		Pass by -3.3 dB						Worst Freq:			2440.0 MHz			
Test Site: EMI Chamber 1			Cable 1: Asset #2480			Cable 2: Asset #2456			Cable 3: ---					
Analyzer: 2093			Preamp: None			Antenna: Blue Horn			Preselector: ---					
CSsoft Radiated Emissions Calculator v 1.017.211						Copyright Curtis-Straus LLC 2000								
Adjusted Reading = Reading - Preamp Factor + Antenna Factor + Cable Factor														



Band Edge Measurements

MEASUREMENTS / RESULTS

Band Edges														
Date: 20-Dec-18			Company: Dermal Photonics						Work Order: S2579					
Engineer: Chris Hamel			EUT Desc: NIRA						EUT Operating Voltage/Frequency: 4.2V Battery					
Temp: 24.5°C			Humidity: 35%						Pressure: 1010mBar					
Frequency Range: 2400-2483.5									Measurement Distance: 3 m					
Notes: Tested worst case orientation and antenna polarity									EUT Max Freq: 2480MHz					
Antenna Polarization (H / V)	Frequency (MHz)	Peak Reading (dBµV)	Average Reading (dBµV)	Preamp Factor (dB)	Antenna Factor (dB/m)	Cable Factor (dB)	Adjusted Peak Reading (dBµV/m)	Adjusted Average Reading (dBµV/m)	FCC Class B High Frequency - Peak			FCC Class B High Frequency - Average		
									Limit (dBµV/m)	Margin (dB)	Result (Pass/Fail)	Limit (dBµV/m)	Margin (dB)	Result (Pass/Fail)
Low Edge														
V	2400.0	28.7	16.9	0.0	32.2	3.2	64.1	52.3	74.0	-9.9	Pass	54.0	-1.7	Pass
V	2399.0	28.1	16.8	0.0	32.2	3.2	63.5	52.2	74.0	-10.5	Pass	54.0	-1.8	Pass
V	2398.1	27.4	16.7	0.0	32.2	3.2	62.8	52.1	74.0	-11.2	Pass	54.0	-1.9	Pass
High Edge														
V	2483.9	22.1	9.2	0.0	32.4	3.1	57.6	44.7	74.0	-16.4	Pass	54.0	-9.3	Pass
V	2485.6	20.1	8.9	0.0	32.4	3.1	55.6	44.4	74.0	-18.4	Pass	54.0	-9.6	Pass
V	2488.1	20.0	8.8	0.0	32.4	3.1	55.5	44.3	74.0	-18.5	Pass	54.0	-9.7	Pass
Table Result: Pass by -1.7 dB Worst Freq: 2400.0 MHz														
Test Site: EMI Chamber 1			Cable 1: Asset #2480						Cable 2: Asset #2456			Cable 3: ---		
Analyzer: Rental SA#3			Preamp: None						Antenna: Blue Horn			Preselector: ---		
CSsoft Radiated Emissions Calculator v 1.017.211 Copyright Curtis-Straus LLC 2000														
Adjusted Reading = Reading - Preamp Factor + Antenna Factor + Cable Factor														



Radiated Spurious Emissions

LIMITS

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. [15.249(d)]

MEASUREMENTS / RESULTS

Curtis Straus - a Bureau Veritas Company				Work Order - S2579									
Radiated Emissions Electric Field 3m Distance				EUT Power Input - 120Vac/60Hz									
Top Peaks Horizontal 30-1000MHz				Test Site - CH-2									
Operator: AKZ				Conditions - 24°C; 45%RH; 1010mBar									
Notes:													
Channel 0				EUT Maximum Frequency - 2488MHz									

Data Taken at 02:21:00 PM, Wednesday, September 19, 2018

Frequency (MHz)	Peak Reading (dBµV)	Correction Factor (dB/m)	Adjusted Peak Amplitude (dBµV/m)	Lim1: FCC_pt15_2 09 (dBµV/m)	Lim1 Margin (dB)	Lim1 Test Results (Pass/Fail)	Worst Margin Lim1 (dB)	Lim2: FCC_pt15_1 09_Class_B (dBµV/m)	Lim2 Margin (dB)	Lim2 Test Results (Pass/Fail)	Worst Margin Lim2 (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
30.024	32.4	-6.4	26	40	-14	PASS	-14	40	-14	PASS	-14	100	225
122.708	33.5	-14.2	19.3	43.5	-24.2	PASS		43.5	-24.2	PASS		100	135
171.814	35.8	-16	19.7	43.5	-23.8	PASS		43.5	-23.8	PASS		150	0
184.084	39.2	-16.3	23	43.5	-20.5	PASS		43.5	-20.6	PASS		150	225
466.403	37	-9.3	27.7	46	-18.3	PASS		46	-18.3	PASS		150	315
883.649	33.4	-2.7	30.7	46	-15.3	PASS		46	-15.3	PASS		200	225

Curtis Straus - a Bureau Veritas Company				Work Order - S2579									
Radiated Emissions Electric Field 3m Distance				EUT Power Input - 120Vac/60Hz									
Top Peaks Vertical 30-1000MHz				Test Site - CH-2									
Operator: AKZ				Conditions - 24°C; 45%RH; 1010mBar									
Notes:													
Channel 0				EUT Maximum Frequency - 2488MHz									

Data Taken at 02:21:00 PM, Wednesday, September 19, 2018

Frequency (MHz)	Peak Reading (dBµV)	Correction Factor (dB/m)	Adjusted Peak Amplitude (dBµV/m)	Lim1: FCC_pt15_2 09 (dBµV/m)	Lim1 Margin (dB)	Lim1 Test Results (Pass/Fail)	Worst Margin Lim1 (dB)	Lim2: FCC_pt15_1 09_Class_B (dBµV/m)	Lim2 Margin (dB)	Lim2 Test Results (Pass/Fail)	Worst Margin Lim2 (dB)	Antenna Height (cm)	Turntable Azimuth (degrees)
30.897	32.3	-7.1	25.3	40	-14.7	PASS		40	-14.7	PASS		200	180
196.355	35.5	-15	20.5	43.5	-23	PASS		43.5	-23	PASS		100	135
466.33	34.8	-9.3	25.5	46	-20.5	PASS		46	-20.5	PASS		200	0
819.095	36.7	-3.7	33.1	46	-12.9	PASS	-12.9	46	-13	PASS	-13	100	180
914.761	32.1	-2.2	29.9	46	-16.1	PASS		46	-16.1	PASS		200	0
995.926	32.2	-0.5	31.7	54	-22.3	PASS		54	-22.3	PASS		200	45

30-1000MHz Low Channel



Curtis Straus - a Bureau Veritas Company
 Radiated Emissions Electric Field 3m Distance
 Top Peaks Horizontal 30-1000MHz
 Operator: AKZ
 Notes:
 Channel 19

Work Order - S2579
 EUT Power Input - 120Vac/60Hz
 Test Site - CH-2
 Conditions - 24°C; 45%RH; 1010mBar
 EUT Maximum Frequency - 2488MHz

Data Taken at 01:47:53 PM, Wednesday, September 19, 2018

Frequency (MHz)	Peak Reading (dBµV)	Correction Factor (dB/m)	Adjusted Peak Amplitude (dBµV/m)	Lim1: FCC_pt15_2 09 (dBµV/m)	Lim1 Margin (dB)	Lim1 Test Results (Pass/Fail)	Worst Margin Lim1 (dB)	Lim2: FCC_pt15_1 09_Class_B (dBµV/m)	Lim2 Margin (dB)	Lim2 Test Results (Pass/Fail)	Worst Margin Lim2 (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
30.485	32.6	-6.8	25.9	40	-14.1	PASS		40	-14.1	PASS		150	135
466.379	37.6	-9.3	28.3	46	-17.7	PASS		46	-17.7	PASS		150	135
700.1	38.8	-5.3	33.5	46	-12.5	PASS		46	-12.5	PASS		150	315
701.749	37	-5.3	31.7	46	-14.3	PASS		46	-14.3	PASS		150	0
703.326	42.9	-5.3	37.7	46	-8.3	PASS	-8.3	46	-8.4	PASS	-8.4	100	315
883.649	32.9	-2.7	30.2	46	-15.8	PASS		46	-15.8	PASS		200	90

Curtis Straus - a Bureau Veritas Company
 Radiated Emissions Electric Field 3m Distance
 Top Peaks Vertical 30-1000MHz
 Operator: AKZ
 Notes:
 Channel 19

Work Order - S2579
 EUT Power Input - 120Vac/60Hz
 Test Site - CH-2
 Conditions - 24°C; 45%RH; 1010mBar
 EUT Maximum Frequency - 2488MHz

Data Taken at 01:47:53 PM, Wednesday, September 19, 2018

Frequency (MHz)	Peak Reading (dBµV)	Correction Factor (dB/m)	Adjusted Peak Amplitude (dBµV/m)	Lim1: FCC_pt15_2 09 (dBµV/m)	Lim1 Margin (dB)	Lim1 Test Results (Pass/Fail)	Worst Margin Lim1 (dB)	Lim2: FCC_pt15_1 09_Class_B (dBµV/m)	Lim2 Margin (dB)	Lim2 Test Results (Pass/Fail)	Worst Margin Lim2 (dB)	Antenna Height (cm)	Turntable Azimuth (degrees)
30.558	32.2	-6.8	25.4	40	-14.6	PASS		40	-14.6	PASS		200	45
466.379	34.5	-9.3	25.2	46	-20.8	PASS		46	-20.8	PASS		200	135
490.92	34.4	-8.9	25.5	46	-20.5	PASS		46	-20.5	PASS		200	90
701.095	41.3	-5.3	36	46	-10	PASS	-10	46	-10	PASS	-10	200	315
703.034	38.9	-5.3	33.6	46	-12.4	PASS		46	-12.4	PASS		200	315
936.95	31.7	-1.9	29.8	46	-16.2	PASS		46	-16.2	PASS		150	90

30-1000MHz Mid Channel



Curtis Straus - a Bureau Veritas Company
 Radiated Emissions Electric Field 3m Distance
 Top Peaks Horizontal 30-1000MHz
 Operator: AKZ
 Notes:
 Channel 39

Work Order - S2579
 EUT Power Input - 120Vac/60Hz
 Test Site - CH-2
 Conditions - 24°C; 45%RH; 1010mBar
 EUT Maximum Frequency - 2488MHz

Data Taken at 03:18:09 PM, Wednesday, September 19, 2018

Frequency (MHz)	Peak Reading (dBµV)	Correction Factor (dB/m)	Adjusted Peak Amplitude (dBµV/m)	Lim1: FCC_pt15_2 09 (dBµV/m)	Lim1 Margin (dB)	Lim1 Test Results (Pass/Fail)	Worst Margin Lim1 (dB)	Lim2: FCC_pt15_1 09_Class_B (dBµV/m)	Lim2 Margin (dB)	Lim2 Test Results (Pass/Fail)	Worst Margin Lim2 (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
30.073	32	-6.5	25.5	40	-14.5	PASS	-14.5	40	-14.5	PASS	-14.5	100	0
122.077	34.1	-14.2	19.9	43.5	-23.6	PASS		43.5	-23.6	PASS		100	225
184.084	39.7	-16.3	23.4	43.5	-20.1	PASS		43.5	-20.1	PASS		150	225
196.379	34.1	-15	19.1	43.5	-24.4	PASS		43.5	-24.4	PASS		150	180
466.354	37.5	-9.3	28.2	46	-17.8	PASS		46	-17.8	PASS		150	90
956.544	31.7	-1.8	29.8	46	-16.2	PASS		46	-16.2	PASS		150	0

Curtis Straus - a Bureau Veritas Company
 Radiated Emissions Electric Field 3m Distance
 Top Peaks Vertical 30-1000MHz
 Operator: AKZ
 Notes:
 Channel 39

Work Order - S2579
 EUT Power Input - 120Vac/60Hz
 Test Site - CH-2
 Conditions - 24°C; 45%RH; 1010mBar
 EUT Maximum Frequency - 2488MHz

Data Taken at 03:18:09 PM, Wednesday, September 19, 2018

Frequency (MHz)	Peak Reading (dBµV)	Correction Factor (dB/m)	Adjusted Peak Amplitude (dBµV/m)	Lim1: FCC_pt15_2 09 (dBµV/m)	Lim1 Margin (dB)	Lim1 Test Results (Pass/Fail)	Worst Margin Lim1 (dB)	Lim2: FCC_pt15_1 09_Class_B (dBµV/m)	Lim2 Margin (dB)	Lim2 Test Results (Pass/Fail)	Worst Margin Lim2 (dB)	Antenna Height (cm)	Turntable Azimuth (degrees)
30.461	33.1	-6.8	26.4	40	-13.6	PASS	-13.6	40	-13.6	PASS	-13.6	100	45
130.734	33.6	-14	19.6	43.5	-23.9	PASS		43.5	-24	PASS		150	0
196.379	36.7	-15	21.7	43.5	-21.8	PASS		43.5	-21.9	PASS		100	45
466.354	35.1	-9.3	25.8	46	-20.2	PASS		46	-20.2	PASS		200	180
490.896	34.3	-8.9	25.4	46	-20.6	PASS		46	-20.6	PASS		200	225
946.965	32.3	-1.8	30.5	46	-15.5	PASS		46	-15.5	PASS		150	45

30-1000MHz High Channel

Rev. 9/17/2018

Spectrum Analyzers / Receivers / Preselectors	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
2093 MXE EMI Receiver	20Hz-26.5GHz	N9038A	Agilent	MY51210181	2093	I	11/16/2018	11/16/2017
Radiated Emissions Sites	FCC Code	IC Code	VCCI Code	Range	Asset	Cat	Calibration Due	Calibrated on
EMI Chamber 2	719150	2762A-7	A-0015	30-1000MHz	1686	I	12/21/2018	12/21/2016
EMI Chamber 2	719150	2762A-7	A-0015	1-18GHz	1686	I	12/21/2018	12/21/2016
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	10/29/2018	10/29/2017
Antennas	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Red-White Bilog	30-2000MHz	JB1	Sunol	A091604-1	1105	I	8/21/2019	8/21/2017
Meteorological Meters/Chambers	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on	
Weather Clock (Pressure Only)	BA928	Oregon Scientific	C3166-1	831	I	5/15/2020	5/15/2018	
TH A#2082	HTC-1	HDE		2082	II	3/22/2019	3/22/2018	
Cables	Range	Mfr	Cat	Calibration Due	Calibrated on			
Asset #2051	9kHz - 18GHz	Florida RF	II	3/7/2019	3/7/2018			
Asset #2054	9kHz - 18GHz	Florida RF	II	10/31/2018	10/31/2017			
Asset #2466	9kHz-18GHz	MegaPhase	II	10/29/2018	10/29/2017			
2490(6dB)	9kHz-18GHz		II	11/27/2018	11/27/2017			

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



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Curtis Straus - a Bureau Veritas Company
 Radiated Emissions Electric Field 3m Distance
 Top Peaks Vertical 1-6GHz
 Operator: ZJ
 Notes:
 Low Channel

Work Order - S2579
 EUT Power Input - 120V/60Hz
 Test Site - CH-2
 Conditions - 22.8°C; 64%RH; 1003mBar

Data Taken at 11:02:52 PM, Wednesday, September 19, 2018

Frequency (MHz)	Raw Peak Reading (dBµV)	Correction Factor (dB/m)	Adjusted Peak Amplitude (dBµV/m)	Pk Lim: FCC_pt15_109_ClassB_Peak (dBµV/m)	Margin to Peak Limit (dB)	Peak Limit Test Results (Pass/Fail)	Peak Limit Worst Margin (dB)	Av Lim: FCC_pt15_109_ClassB_AVG (dBµV/m)	Margin to Average Limit (dB)	Average Limit Test Result (Pass/Fail)	Average Limit Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
1860.25	47.2	-1.4	45.7	74	-28.2	PASS		54	-8.2	PASS		200	23
1941.25	47.8	-0.9	46.9	74	-27.1	PASS		54	-7.1	PASS		200	23
2161.75	45.2	1.8	46.9	74	-27	PASS		54	-7	PASS		200	169
3061.63	46.4	2.2	48.6	74	-25.4	PASS		54	-5.4	PASS		100	42
5819.88	43.1	6.1	49.2	74	-24.7	PASS	-24.7	54	-4.7	PASS	-4.7	200	33

Curtis Straus - a Bureau Veritas Company
 Radiated Emissions Electric Field 3m Distance
 Top Peaks Horizontal 1-6GHz
 Operator: ZJ
 Notes:
 Low Channel

Work Order - S2579
 EUT Power Input - 120V/60Hz
 Test Site - CH-2
 Conditions - 22.8°C; 64%RH; 1003mBar

Data Taken at 06:46:35 PM, Wednesday, September 19, 2018

Frequency (MHz)	Peak Reading (dBµV)	Correction Factor (dB/m)	Adjusted Peak Amplitude (dBµV/m)	Pk Lim: FCC_pt15_109_ClassB_Peak (dBµV/m)	Lim1 Margin (dB)	Lim1 Test Results (Pass/Fail)	Worst Margin Lim1 (dB)	Pk Lim: FCC_pt15_109_ClassB_Avg (dBµV/m)	Lim2 Margin (dB)	Lim2 Test Results (Pass/Fail)	Worst Margin Lim2 (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
2173.63	44.6	1.9	46.5	74	-27.5	PASS		54	-7.5	PASS		200	169
2909.38	45.7	2.6	48.3	74	-25.7	PASS		54	-5.7	PASS		100	126
5963.13	43	6.1	49.1	74	-24.9	PASS	-24.9	54	-4.9	PASS	-4.9	300	298

1-6GHz Low Channel

Curtis Straus - a Bureau Veritas Company
 Radiated Emissions Electric Field 3m Distance
 1-6GHz Vertical Data
 Operator: ZJ
 Notes:
 Mid Channel

Work Order - S2579
 EUT Power Input - 120V/60Hz
 Test Site - CH-2
 Conditions - 22.8°C; 64%RH; 1003mBar

Data Taken at 09:26:55 PM, Wednesday, September 19, 2018

Frequency (MHz)	Raw Peak Reading (dBµV)	Raw Avg Reading (dBµV)	Correction Factor (dB/m)	Adjusted Peak Amplitude (dBµV/m)	Pk Lim: FCC_pt15_109_ClassB_Peak (dBµV/m)	Peak Margin (dB)	Peak Results (Pass/Fail)	Worst Peak Margin (dB)	Adjusted Avg Amplitude (dBµV/m)	Av Lim: FCC_pt15_109_ClassB_AVG (dBµV/m)	Avg Margin (dB)	Avg Results (Pass/Fail)	Worst Avg Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
2166.7	42.4	32.6	1.8	44.2	74	-29.8	PASS		34.4	54	-19.6	PASS		204	91
2939.9	42.1	32.7	2.6	44.7	74	-29.3	PASS		35.2	54	-18.8	PASS		222	92
5932.4	39.5	30.8	6.2	45.6	74	-28.4	PASS	-28.4	37	54	-17	PASS	-17	295	319



Curtis Straus - a Bureau Veritas Company
 Radiated Emissions Electric Field 3m Distance
 1-6GHz Horizontal Data
 Operator: ZJ
 Notes:
 Mid Channel

Work Order - S2579
 EUT Power Input - 120V/60Hz
 Test Site - CH-2
 Conditions - 22.8°C; 64%RH; 1003mBar

Data Taken at 09:55:51 PM, Wednesday, September 19, 2018

Frequency (MHz)	Raw Peak Reading (dBµV)	Raw Avg Reading (dBµV)	Correction Factor (dB/m)	Adjusted Peak Amplitude (dBµV/m)	Pk Lim: FCC_pt15_109_ClassB_Peak (dBµV/m)	Peak Margin (dB)	Peak Results (Pass/Fail)	Worst Peak Margin (dB)	Adjusted Avg Amplitude (dBµV/m)	Av Lim: FCC_pt15_109_ClassB_AVG (dBµV/m)	Avg Margin (dB)	Avg Results (Pass/Fail)	Worst Average Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
2132.6	41	32.7	1.5	42.5	74	-31.5	PASS		34.1	54	-19.8	PASS		275	2
3125.6	42.2	33	2.2	44.4	74	-29.5	PASS		35.2	54	-18.8	PASS		215	67
5263.3	39	30.9	4.9	43.9	74	-30.1	PASS		35.8	54	-18.2	PASS		196	202
5276.9	39.9	31	5	44.8	74	-29.1	PASS	-29.1	35.9	54	-18.1	PASS	-18.1	225	70

1-6GHz Mid Channel

Curtis Straus - a Bureau Veritas Company
 Radiated Emissions Electric Field 3m Distance
 Top Peaks Vertical 1-6GHz
 Operator: ZJ
 Notes:
 High Channel

Work Order - S2579
 EUT Power Input - 120V/60Hz
 Test Site - CH-2
 Conditions - 22.8°C; 64%RH; 1003mBar

Data Taken at 08:30:55 PM, Wednesday, September 19, 2018

Frequency (MHz)	Raw Peak Reading (dBµV)	Correction Factor (dB/m)	Adjusted Peak Amplitude (dBµV/m)	Pk Lim: FCC_pt15_109_ClassB_Peak (dBµV/m)	Margin to Peak Limit (dB)	Peak Limit Test Results (Pass/Fail)	Peak Limit Worst Margin (dB)	Av Lim: FCC_pt15_109_ClassB_AVG (dBµV/m)	Margin to Average Limit (dB)	Average Limit Test Result (Pass/Fail)	Average Limit Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
2177	44.5	1.9	46.4	74	-27.5	PASS		54	-7.5	PASS		100	21
3204	45.3	2.5	47.8	74	-26.1	PASS		54	-6.1	PASS		300	167
5919.25	42.6	6.2	48.8	74	-25.2	PASS	-25.2	54	-5.2	PASS	-5.2	100	10

Curtis Straus - a Bureau Veritas Company
 Radiated Emissions Electric Field 3m Distance
 Top Peaks Horizontal 1-6GHz
 Operator: ZJ
 Notes:
 High Channel

Work Order - S2579
 EUT Power Input - 120V/60Hz
 Test Site - CH-2
 Conditions - 22.8°C; 64%RH; 1003mBar

Data Taken at 08:30:55 PM, Wednesday, September 19, 2018

Frequency (MHz)	Raw Peak Reading (dBµV)	Correction Factor (dB/m)	Adjusted Peak Amplitude (dBµV/m)	Pk Lim: FCC_pt15_109_ClassB_Peak (dBµV/m)	Margin to Peak Limit (dB)	Peak Limit Test Results (Pass/Fail)	Peak Limit Worst Margin (dB)	Av Lim: FCC_pt15_109_ClassB_AVG (dBµV/m)	Margin to Avg Limit (dB)	Avg Limit Results (Pass/Fail)	Avg Limit Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
2168.13	44.4	1.8	46.2	74	-27.8	PASS		54	-7.8	PASS		200	242
2943.5	45.7	2.5	48.2	74	-25.8	PASS		54	-5.8	PASS		200	190
5285.5	45.5	5.1	50.5	74	-23.5	PASS	-23.5	54	-3.5	PASS	-3.5	300	73

1-6GHz High Channel



Rev. 9/19/2018

Spectrum Analyzers / Receivers /Preselectors		Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
2093 MXE EMI Receiver		20Hz-26.5GHz	N9038A	Agilent	MY51210181	2093	I	11/16/2018	11/16/2017
Radiated Emissions Sites		FCC Code	IC Code	VCCI Code	Range	Asset	Cat	Calibration Due	Calibrated on
EMI Chamber 2		719150	2762A-7	A-0015	1-18GHz	1686	I	12/21/2018	12/21/2016
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	10/29/2018	10/29/2017
2116 BRF		0.009-18000MHz	BRM50702	Micro-Tronics	G226	2116	II	11/8/2018	11/8/2017
Antennas		Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Blue Horn		1-18Ghz	3117	ETS	157647	1861	I	2/14/2019	2/14/2017
Meteorological Meters/Chambers		MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on	
Weather Clock (Pressure Only)		BA928	Oregon Scientific	C3166-1	831	I	5/15/2020	5/15/2018	
TH A#2077		HTC-1	HDE		2077	II	3/22/2019	3/22/2018	
Cables		Range	Mfr	Cat	Calibration Due	Calibrated on			
Asset #2051		9kHz - 18GHz	Florida RF	II	3/7/2019	3/7/2018			
Asset #2054		9kHz - 18GHz	Florida RF	II	10/31/2018	10/31/2017			
Asset #2466		9KHz-18GHz	MegaPhase	II	10/29/2018	10/29/2017			

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

Curtis Straus - a Bureau Veritas Company		Work Order - S2579
Radiated Emissions Electric Field 1m Distance		EUT Power Input - 5V DC
6-18GHz Vertical Data		Test Site - CH-2
Operator: ZJ		Conditions - 22.2°C; 42%RH; 1004mBar
Notes:		EUT Maximum Frequency - 2480MHz
Data Taken at 04:08:15 PM, Monday, September 24, 2018		

Frequency (MHz)	Raw Peak Reading (dBµV)	Raw Avg Reading (dBµV)	Correction Factor (dB/m)	Adjusted Peak Amplitude (dBµV/m)	Pk Lim: FCC_pt15_109_ClassB_Peak (dBµV/m)	Peak Margin (dB)	Peak Test Results (Pass/Fail)	Worst Peak Margin (dB)	Adjusted Avg Amplitude (dBµV/m)	Av Lim: FCC_pt15_109_ClassB_AVG (dBµV/m)	Avg Margin (dB)	Avg Test Results (Pass/Fail)	Worst Avg Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
10667.1	39.1	29.8	13	52.1	83.5	-31.4	PASS		42.8	63.5	-20.7	PASS		300	56
16463.6	40.3	31.4	18.1	58.4	83.5	-25.1	PASS		49.5	63.5	-14	PASS		191	94
17976.3	38.8	30.6	21.2	60	83.5	-23.5	PASS	-23.5	51.8	63.5	-11.7	PASS	-11.7	200	340

Curtis Straus - a Bureau Veritas Company		Work Order - S2579
Radiated Emissions Electric Field 1m Distance		EUT Power Input - 5V DC
6-18GHz Horizontal Data		Test Site - CH-2
Operator: ZJ		Conditions - 22.2°C; 42%RH; 1004mBar
Notes:		EUT Maximum Frequency - 2480MHz
Data Taken at 04:08:15 PM, Monday, September 24, 2018		

Frequency (MHz)	Raw Peak Reading (dBµV)	Raw Avg Reading (dBµV)	Correction Factor (dB/m)	Adjusted Peak Amplitude (dBµV/m)	Pk Lim: FCC_pt15_109_ClassB_Peak (dBµV/m)	Peak Margin (dB)	Peak Test Results (Pass/Fail)	Worst Peak Margin (dB)	Adjusted Avg Amplitude (dBµV/m)	Av Lim: FCC_pt15_109_ClassB_AVG (dBµV/m)	Avg Margin (dB)	Avg Test Results (Pass/Fail)	Worst Avg Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
7206.7	46.2	35	7.9	54.1	83.5	-29.4	PASS		42.9	63.5	-20.6	PASS		547	1
17948.4	39.7	30.8	20.8	60.5	83.5	-23	PASS	-23	51.6	63.5	-11.9	PASS	-11.9	175	242

6-18GHz Low Channel



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Curtis Straus - a Bureau Veritas Company
 Radiated Emissions Electric Field 1m Distance
 6-18GHz Vertical Data
 Operator: ZJ
 Notes:
 Mid Channel

Work Order - S2579
 EUT Power Input - 5V DC
 Test Site - CH-2
 Conditions - 22.2°C; 42%RH; 1004mBar
 EUT Maximum Frequency - 2480MHz

Data Taken at 03:29:02 PM, Monday, September 24, 2018

Frequency (MHz)	Raw Peak Reading (dBµV)	Raw Avg Reading (dBµV)	Correction Factor (dB/m)	Adjusted Peak Amplitude (dBµV/m)	Pk Lim: FCC_pt15_109_ClassB_Peak (dBµV/m)	Peak Margin (dB)	Peak Results (Pass/Fail)	Worst Peak Margin (dB)	Adjusted Avg Amplitude (dBµV/m)	Av Lim: FCC_pt15_109_ClassB_AVG (dBµV/m)	Avg Margin (dB)	Avg Results (Pass/Fail)	Worst Avg Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
7320.8	44	31.6	8	52	83.5	-31.5	PASS		39.6	63.5	-23.9	PASS		100	25
17673.9	39.9	30.7	20.2	60.1	83.5	-23.4	PASS	-23.4	50.8	63.5	-12.7	PASS	-12.7	124	140

Curtis Straus - a Bureau Veritas Company
 Radiated Emissions Electric Field 1m Distance
 6-18GHz Horizontal Data
 Operator: ZJ
 Notes:
 Mid Channel

Work Order - S2579
 EUT Power Input - 5V DC
 Test Site - CH-2
 Conditions - 22.2°C; 42%RH; 1004mBar
 EUT Maximum Frequency - 2480MHz

Data Taken at 03:29:02 PM, Monday, September 24, 2018

Frequency (MHz)	Raw Peak Reading (dBµV)	Raw Avg Reading (dBµV)	Correction Factor (dB/m)	Adjusted Peak Amplitude (dBµV/m)	Pk Lim: FCC_pt15_109_ClassB_Peak (dBµV/m)	Peak Margin (dB)	Peak Test Results (Pass/Fail)	Worst Peak Margin (dB)	Adjusted Avg Amplitude (dBµV/m)	Av Lim: FCC_pt15_109_ClassB_AVG (dBµV/m)	Avg Margin (dB)	Avg Test Results (Pass/Fail)	Worst Avg Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
7320.9	45.5	36	8	53.6	83.5	-29.9	PASS		44.1	63.5	-19.4	PASS		102	0
17984.2	40.1	30.3	21.3	61.4	83.5	-22.1	PASS	-22.1	51.6	63.5	-11.9	PASS	-11.9	125	270

6-18GHz Mid Channel

Curtis Straus - a Bureau Veritas Company
 Radiated Emissions Electric Field 1m Distance
 6-18GHz Vertical Data
 Operator: ZJ
 Notes:
 High Channel

Work Order - S2579
 EUT Power Input - 5V DC
 Test Site - CH-2
 Conditions - 22.2°C; 42%RH; 1004mBar
 EUT Maximum Frequency - 2480MHz

Data Taken at 04:46:22 PM, Monday, September 24, 2018

Frequency (MHz)	Raw Peak Reading (dBµV)	Raw Avg Reading (dBµV)	Correction Factor (dB/m)	Adjusted Peak Amplitude (dBµV/m)	Pk Lim: FCC_pt15_109_ClassB_Peak (dBµV/m)	Peak Margin (dB)	Peak Results (Pass/Fail)	Worst Peak Margin (dB)	Adjusted Avg Amplitude (dBµV/m)	Av Lim: FCC_pt15_109_ClassB_AVG (dBµV/m)	Avg Margin (dB)	Avg Results (Pass/Fail)	Worst Avg Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
7439.1	45	34.9	8	53	83.5	-30.5	PASS		43	63.5	-20.5	PASS		100	25
16481	40.2	31.4	18.2	58.4	83.5	-25.1	PASS		49.6	63.5	-13.9	PASS		100	73
17072.4	40.4	32	19.1	59.5	83.5	-24	PASS	-24	51.1	63.5	-12.4	PASS	-12.4	100	0

Curtis Straus - a Bureau Veritas Company
 Radiated Emissions Electric Field 1m Distance
 6-18GHz Horizontal Data
 Operator: ZJ
 Notes:
 High Channel

Work Order - S2579
 EUT Power Input - 5V DC
 Test Site - CH-2
 Conditions - 22.2°C; 42%RH; 1004mBar
 EUT Maximum Frequency - 2480MHz

Data Taken at 04:46:22 PM, Monday, September 24, 2018

Frequency (MHz)	Raw Peak Reading (dBµV)	Raw Avg Reading (dBµV)	Correction Factor (dB/m)	Adjusted Peak Amplitude (dBµV/m)	Pk Lim: FCC_pt15_109_ClassB_Peak (dBµV/m)	Peak Margin (dB)	Peak Test Results (Pass/Fail)	Worst Peak Margin (dB)	Adjusted Avg Amplitude (dBµV/m)	Av Lim: FCC_pt15_109_ClassB_AVG (dBµV/m)	Avg Margin (dB)	Avg Test Results (Pass/Fail)	Worst Avg Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
7440.6	49.4	39.7	8	57.4	83.5	-26.1	PASS		47.7	63.5	-15.8	PASS		103	174
17947.5	39.7	30.7	20.8	60.5	83.5	-23	PASS	-23	51.5	63.5	-12	PASS	-12	107	190

6-18GHz High Channel



Rev. 9/19/2018

Spectrum Analyzers / Receivers / Preselectors	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
2093 MXE EMI Receiver	20Hz-26.5GHz	N9038A	Agilent	MY51210181	2093	I	11/16/2018	11/16/2017
Radiated Emissions Sites	FCC Code	IC Code	VCCI Code	Range	Asset	Cat	Calibration Due	Calibrated on
EMI Chamber 2	719150	2762A-7	A-0015	1-18GHz	1686	I	12/21/2018	12/21/2016
Preamps / Couplers Attenuators / Filters	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
2111 HF Preamp	0.5-18GHz	PAM-118A	COM-POWER	551063	2111	II	11/19/2018	11/19/2017
2116 BRP	0.009-18000MHz	BRM50702	Micro-Tronics	G226	2116	II	11/8/2018	11/8/2017
Antennas	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Blue Horn	1-18GHz	3117	ETS	157647	1861	I	2/14/2019	2/14/2017
Meteorological Meters/Chambers	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on	
Weather Clock (Pressure Only)	BA928	Oregon Scientific	C3166-1	831	I	5/15/2020	5/15/2018	
TH A#2080	HTC-1	HDE		2080	II	3/22/2019	3/22/2018	
Cables	Range	Mfr	Cat	Calibration Due	Calibrated on			
Asset #2051	9kHz - 18GHz	Florida RF	II	3/7/2019	3/7/2018			
Asset #2054	9kHz - 18GHz	Florida RF	II	10/31/2018	10/31/2017			
Asset #2467	9KHz-18GHz	MegaPhase	II	10/29/2018	10/29/2017			

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

Radiated Emissions Table															
Date: 24-Sep-18			Company: Dermal Photonics						Work Order: S2579						
Engineer: Zachary Johnson			EUT Desc: NIRA						EUT Operating Voltage/Frequency: 5V DC						
Temp: 22.2°C			Humidity: 42%						Pressure: 1004mBar						
Frequency Range: 18-26.5GHz									Measurement Distance: 0.1 m						
Notes: Tested high, mid, and low channels									EUT Max Freq: 2480MHz						
Antenna Polarization (H/V)	Frequency (MHz)	Peak Reading (dBµV)	Average Reading (dBµV)	Preamp Factor (dB)	Antenna Factor (dB/m)	Cable Factor (dB)	Adjusted Peak Reading (dBµV/m)	Adjusted Avg Reading (dBµV/m)	FCC Class B High Frequency - Peak			FCC Class B High Frequency - Average			
									Limit (dBµV/m)	Margin (dB)	Result (Pass/Fail)	Limit (dBµV/m)	Margin (dB)	Result (Pass/Fail)	
H/V	No Emissions Found	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Table Result: Pass by --- dB Worst Freq: --- MHz															
Test Site: EMI Chamber 2			Cable 1: Asset #2324						Cable 2: ---			Cable 3: ---			
Analyzer: 1860 SA			Preamp: 18-26.5GHz						Antenna: 18-26.5GHz Horn			Preselector: ---			
CSsoft Radiated Emissions Calculator v 1.017.207 Copyright Curtis-Straus LLC 2000															
Adjusted Reading = Reading - Preamp Factor + Antenna Factor + Cable Factor															

18-26.5GHz All Channels

Rev. 9/19/2018

Spectrum Analyzers / Receivers / Preselectors	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
SA #2 (1860)	9kHz-26.5 GHz	E7405A	Agilent	MY45104916	1860	I	3/15/2019	3/15/2018
Preamps / Couplers Attenuators / Filters	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
HF (Yellow)	18-26.5GHz	AFS4-18002650-60-8P-4	CS	467559	1266	II	10/16/2018	10/16/2017
Antennas	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
HF (White) Horn	18-26.5GHz	801-WLM	Waveline	758	758	III	Verify before Use	date of test
Meteorological Meters/Chambers	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on	
Weather Clock (Pressure Only)	BA928	Oregon Scientific	C3166-1	831	I	5/15/2020	5/15/2018	
TH A#2080	HTC-1	HDE		2080	II	3/22/2019	3/22/2018	
Cables	Range	Mfr	Cat	Calibration Due	Calibrated on			
Asset #2324	1-26.5GHz	TM26-S1S1-120	MEGAPHASE	17139101 001	2324	II	8/9/2019	8/9/2018

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

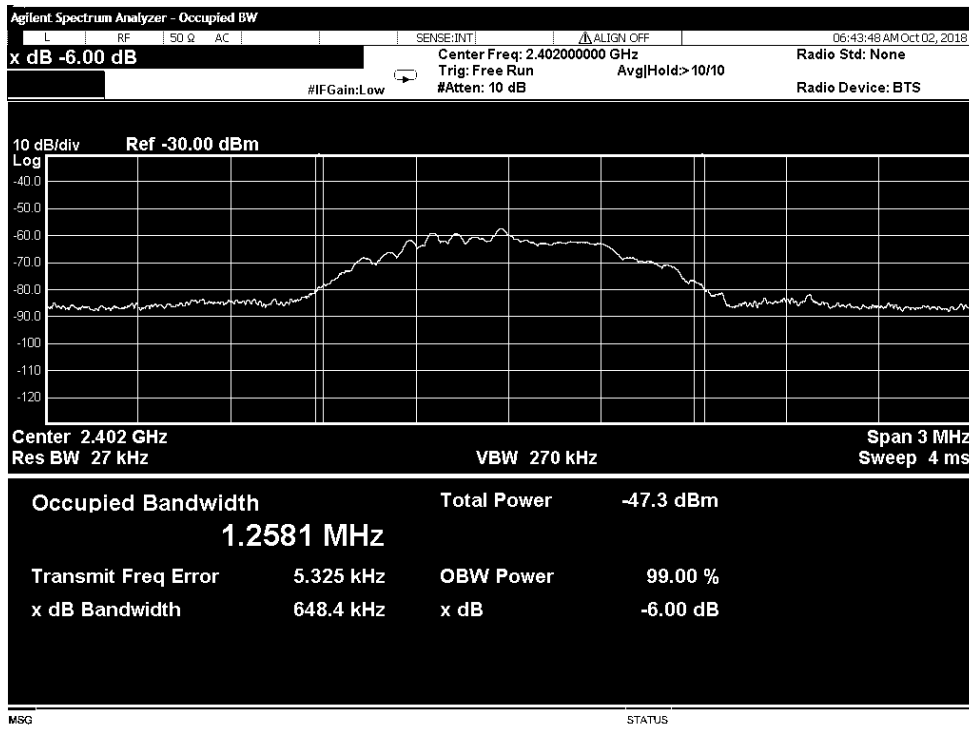


Occupied Bandwidth

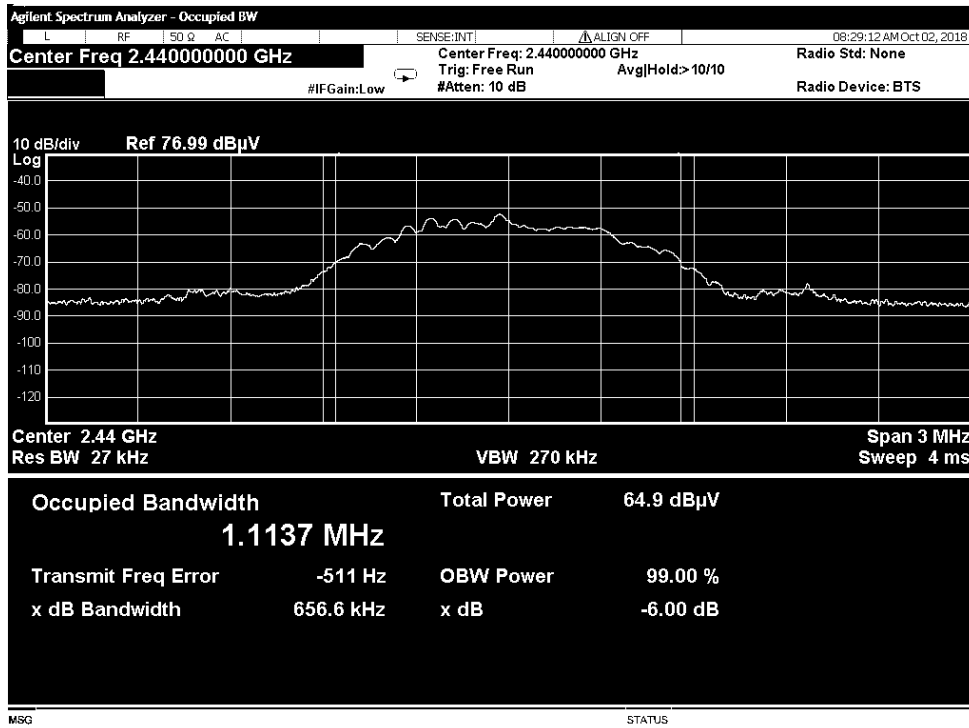
REQUIREMENT

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.

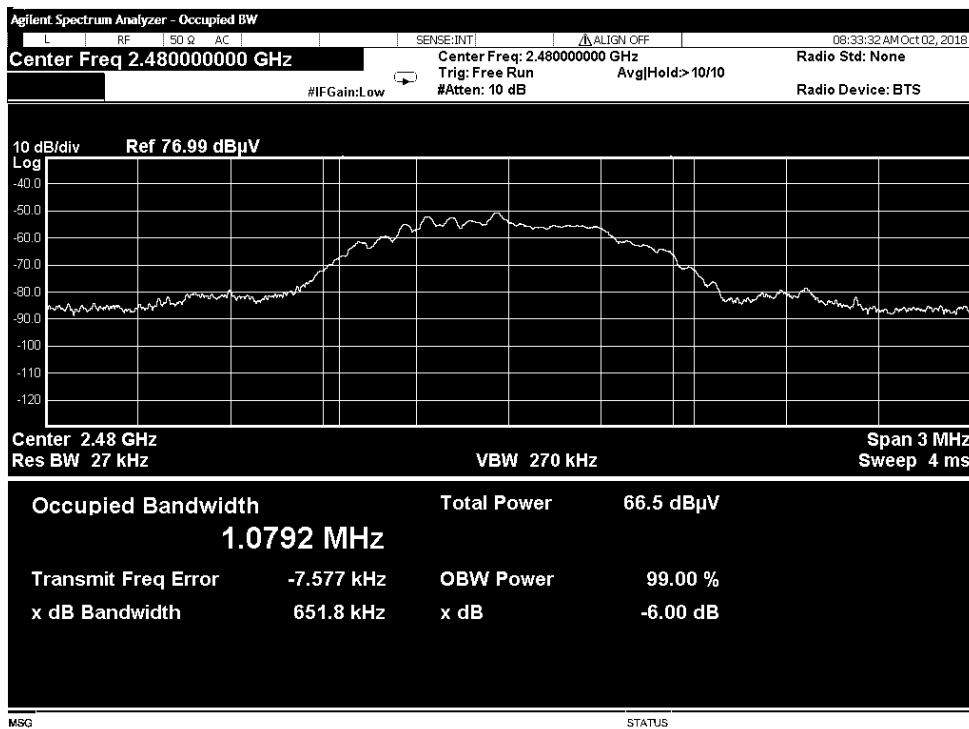
[RSS-Gen Issue 5 Section 6.7]



Low Channel



Mid Channel



High Channel



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 (Ucisprr)
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 (Ucisprr)
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%	5%
Adjacent channel power	0.3dB	3dB
Conducted spurious emission of transmitter, valid up to 12.75GHz	1.9dB	3dB
Conducted emission of receivers	2.39dB	3dB
Radiated emission of transmitter, valid up to 26.5GHz	1.3dB	3dB
Radiated emission of transmitter, valid up to 80GHz	3.9dB	6dB
Radiated emission of receiver, valid up to 26.5GHz	3.3dB	6dB
Radiated emission of receiver, valid up to 80GHz	3.9dB	6dB
Humidity	3.3dB	6dB
Temperature	2.37%	5%
Time	0.7°C	1.0°C
RF Power Density, Conducted	4.1%	10%
DC and low frequency voltages	0.4dB	3dB
Voltage (AC, <10kHz)	1.3%	3%
Voltage (DC)	1.3%	2%
	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 where 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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