Test Report

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

Report No	ER1112-1
Client	Ideal Industries, Inc.
Address	Becker Place Sycamore, IL 60178
Phone	815-895-1295
Items tested	SCDMET277
FCC ID	2AAMXSCDMET1000
IC ID	11250A-SCDMET1000
FRN	0002862225
Equipment Type	Digital Transmission System
Equipment Code	DTS
Emission Designator	755KG1D
FCC/IC Rule Parts	CFR Title 47 FCC Part 15.247, ISED Canada RSS-247 Issue 1
Test Dates	4/20/2017 -5/8/2017
Results	As detailed within this report
Prepared by	Zachary Johnson – Test Engineer
Authorized by	Yunus Fazilioglu – Sr. Engineer
Issue Date	7/26/2017
Conditions of Issue	This Test Report is issued subject to the conditions stated in the '*Conditions of Testing*' section on page 14 of this report.

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Form Final Report REV 12-07-15

Summary

This test report supports a Class II Permissive Change certification application for a transmitter operating pursuant to:
CFR Title 47 FCC Part 15.247 and ISED Canada RSS-247 Issue 1.

SCDMET277 printed circuit board is identical to the previously certified model SCDMET1000. The only difference is the power supply module between the two models.
Below are the different power supply modules for each variant.

Model Number	Ref Des	Manufacturer	Mfg Part Number
SCDMET1000	PS1	Recom	RAC02-12SC/277
SCDMET277	PS1	Recom	RAC02-12SE/277

SCDMET277 operates in the 902-928MHz frequency range and has a permanently installed wire antenna with 3dBi gain. It is powered by 120-277VAC at 60Hz.

We found that the product met the above requirements without modification. Test sample was received in good condition.

Test Methodology

All testing was performed according to the following rules/procedures/documents;
CFR Title 47 FCC Part 15.247, RSS-247 Issue 1, RSS-Gen Issue 4, FCC KDB 558074 D01 DTS Measurement Guidance v04 and ANSI C63.10-2013.

Radiated emissions were maximized by rotating the device around 3 orthogonal planes (X, Y and Z) as well as varying the test antenna's height and polarity. AC line conducted emissions testing was performed with a 50Ω/50µH LISN.

The following bandwidths were used during radiated spurious emissions testing.

Frequency	RBW	VBW
150kHz-30MHz	9kHz	30kHz
30-1000MHz	120kHz	1MHz
1-10GHz	1MHz	3MHz

Product Tested - Configuration Documentation

EUT Configuration			
Work Order:	R1112		
Company:	Ideal Industries		
Company Address:	Becker Place		
	Sycamore, IL 60178		
Contact:	Dan Harrist		
	MN	**PN**	**SN**
EUT:	SCDMET277	RAC02-12SE/277	Sample 1
EUT Description:	CFL Luminaire Controller - Metal Box		
EUT Tx Frequency:	902.7MHz - 927.3 MHz		

EUT Components	**MN**	**SN**
Radiated Sample	--	--
Conducted Sample	--	--

Port Label	Port Type	# ports	# populated	cable type	shielded	ferrites	length (m)	in/out	under test	comment
AC Mains	Power AC	1	1	Power AC	No	No	1.5	in	yes	
Antenna	other	1	1	other	No	No	0.1	in	yes	
Load	other	1	1	other	No	No	0.1	in	yes	Power output from Smart Connector
Dim	other	1	1	other	No	No	1	in	yes	0-10Vdc Dimming control

Software Operating Mode Description:

The EUT provides AC power and a 0-10V dimming control to an electronic ballast. The EUT will be mounted to a light fixture during normal operation. The EUT was set to transmit at Low(902.7MHz), Mid(915MHz), and High(927.3MHz) channels.

Statement of Conformity

The SCDMET-277 has been found to conform to the following parts of 47 CFR and RSS 247 as detailed below:

RSS-GEN	RSP-100	RSS 247	Part 15	Comments
6.3			15.15(b)	There are no controls accessible to the user that varies the output power to operate in violation of the regulatory requirements.
	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, 6.1, 6.5			15.31	The EUT was tested in accordance with the measurement standards in this section.
6.13			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 a permanently installed PCB 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 or RSS-Gen as applicable
8.8			15.207	EUT meets the AC Line conducted emissions requirements of this section.

Modifications Required for Compliance

None

Test Results

Radiated Spurious Emissions

Limits: Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).
[15.247(d)]

As part of this Class II permissive change filing, for all radiated emissions tests, only the low channel (902.7MHz) that passed with the lowest margin in original certification filing has been tested.

MEASUREMENTS / RESULTS

Curtis Straus - a Bureau Veritas Company
Radiated Emissions Electric Field 3m Distance
Top Peaks Horizontal 30-1000MHz
Operator: Nirak So
lient Present:
ompany:

Work Order - R1112
EUT Power Input - 120Vac 60Hz
Test Site - Chamber#2
Temp; Humid; Pres - 25°C; 29%RH; 1011mBar

Req. 1; Req. 2 - FCC Part 15.247

Frequency	Delta to Marginal Level	Peak Reading	Preamplifier Factor	Antenna Factor	Cable Factor	Adjusted Peak Level	Requirement 1 Limit	Requirement 1 Margin	Requirement 1 Results	Antenna Height	EUT Azimuth	Worst Margin Limit 1
MHz	dB	dBµV	dB	dB/m	dB	dBµV/m	dBµV/m	dB	Pass/Fail	centimeters	degrees	dB
319.933	-0.3	49.5	25	14	1.2	39.7	46	-6.3	PASS	100	135	
324.832	-0.6	49.2	25	14	1.2	39.4	46	-6.6	PASS	100	135	
328.081	-0.4	49.4	24.9	13.9	1.2	39.7	46	-6.4	PASS	100	135	
908.99	1.7	42.8	25.4	22.3	2.1	41.7	46	-4.3	PASS	100	0	-4.3
920.994	-0.3	40.4	25.1	22.4	2.1	39.8	46	-6.3	PASS	150	180	

EUT in Y Orientation. 902MHz TX chananel is used.

Curtis Straus - a Bureau Veritas Company
Radiated Emissions Electric Field 3m Distance
30-1000MHz Vertical Tabular Data
Operator: Nirak So
lient Present:
ompany:

Work Order - R1112
EUT Power Input - 120Va 60Hz
Test Site - Chamber#2
Temp; Humid; Pres - 25°C; 29%RH; 1011mBar

Req. 1; Req. 2 - FCC Part 15.247

Frequency	QP Reading	Preamplifier Gain	Antenna Factor	Cable Loss	QP Amplitude	Limit Req. 1	Margin Req. 1	Results Req. 1	Antenna Height	Turntable Azimuth	Worst Margin Limit 1
MHz	dBµV	dB	dB/m	dB	dBµV/m	dBµV/m	dB	pass/fail	centimeters	degrees	dB
30.513	39.6	25.2	21	0.4	35.7	40	-4.3	PASS	125	155	-4.3
39.024	42.7	25.2	13.9	0.4	31.8	40	-8.2	PASS	113	44	
45.746	47.9	25.2	9.7	0.4	32.8	40	-7.2	PASS	125	19	
323.894	48.2	25	14	1.2	38.4	46	-7.6	PASS	128	305	
326.078	47.2	24.9	14	1.2	37.5	46	-8.6	PASS	184	336	

EUT in Y Orientation. 902MHz TX chananel is used.

30-1000MHz

Rev. 4/17/2017

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	12/22/2017	12/22/2016
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**
Red	0.009-2000MHz	ZFL-1000-LN	CS	N/A	798	II	1/28/2018	1/28/2017
Antennas	**Range**	**MN**	**Mfr**	**SN**	**Asset**	**Cat**	**Calibration Due**	**Calibrated on**
Red-Brown Bilog	30-2000MHz	JB1	Sunol	A0032406	1218	I	1/13/2019	1/13/2017
Meteorological Meters		**MN**	**Mfr**	**SN**	**Asset**	**Cat**	**Calibration Due**	**Calibrated on**
Weather Clock (Pressure Only)		BA928	Oregon Scientific	C3166-1	831	I	4/28/2018	4/28/2016
TH A#2078		HTC-1	HDE		2078	II	3/23/2018	3/23/2017
Cables	**Range**		**Mfr**			**Cat**	**Calibration Due**	**Calibrated on**
Asset #2052	9kHz - 18GHz		Florida RF			II	3/5/2018	3/5/2017
Asset #2053	9kHz - 18GHz		Florida RF			II	10/1/3017	10/30/2016

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

Radiated Emissions Table

Date: 23-Apr-17 **Company:** Powercast Corporation **Work Order:** R1112
Engineer: Nirak So **EUT Desc:** SCDMET277 **EUT Operating Voltage/Frequency:** 120Vac, 60Hz
Temp: 25C **Humidity:** 26% **Pressure:** 1009mBar
Frequency Range: 1 to 6GHz **Measurement Distance:** 3 m
Notes: EUT is in Y position with 902.7MHz channel. **EUT Max Freq:** 927.3MHz

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 Limit (dBµV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	FCC Class B High Frequency - Average Limit (dBµV/m)	Average Margin (dB)	Average Result (Pass/Fail)
H	1805.4	32.2	32.2	17.8	27.4	3.3	45.1	45.1	74.0	-28.9	Pass	54.0	-8.9	Pass
H	2708.1	30.1	30.1	19.2	28.8	3.7	43.4	43.4	74.0	-30.6	Pass	54.0	-10.6	Pass
V	1805.4	32.1	32.1	17.8	27.4	3.3	45.0	45.0	74.0	-29.0	Pass	54.0	-9.0	Pass
V	2708.1	30.1	301.0	19.2	28.8	3.7	43.4	43.4	74.0	-30.6	Pass	54.0	-10.6	Pass

Table Result: Pass by -8.9 dB ***Worst Freq:*** 1805.4 MHz

Test Site: EMI Chamber 1 **Cable 1:** Asset #2052 **Cable 2:** Asset #2054 **Cable 3:** ---
Analyzer: Rental SA#5 **Preamp:** Brown **Antenna:** Orange Horn **Preselector:** ---
CSsoft Radiated Emissions Calculator v 1.017.186
Adjusted Reading = Reading - Preamp Factor + Antenna Factor + Cable Factor

1GHz-6GHz

Radiated Emissions Table

Date: 23-Apr-17 **Company:** Powercast Corporation **Work Order:** R1112
Engineer: Nirak So **EUT Desc:** SCDMET277 **EUT Operating Voltage/Frequency:** 120Vac, 60Hz
Temp: 25C **Humidity:** 26% **Pressure:** 1009mBar
Frequency Range: 6 to 10GHz **Measurement Distance:** 1 m
Notes: EUT is in Y position with 902.7MHz channel. **EUT Max Freq:** 927.3MHz

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 Limit (dBµV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	FCC Class B High Frequency - Average Limit (dBµV/m)	Average Margin (dB)	Average Result (Pass/Fail)
No emissions found.														

Table Result: by dB ***Worst Freq:*** MHz

Test Site: EMI Chamber 1 **Cable 1:** Asset #2052 **Cable 2:** Asset #2054 **Cable 3:** ---
Analyzer: Rental SA#5 **Preamp:** Brown **Antenna:** Orange Horn **Preselector:** ---
CSsoft Radiated Emissions Calculator v 1.017.186
Adjusted Reading = Reading - Preamp Factor + Antenna Factor + Cable Factor

6GHz-10GHz

Rev. 4/17/2017

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	8/9/2017	8/9/2016
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	II	12/21/2018	12/21/2016
Preamps /Couplers Attenuators / Filters	**Range**	**MN**	**Mfr**	**SN**	**Asset**	**Cat**	**Calibration Due**	**Calibrated on**
Brown	1-10GHz	CS	CS	N/A	1523	II	9/25/2017	9/25/2016
High Pass Filter	0.03-9 GHz	VHP-16	Mini-Circuits	NA	1288	II	1/7/2018	1/7/2017
Antennas	**Range**	**MN**	**Mfr**	**SN**	**Asset**	**Cat**	**Calibration Due**	**Calibrated on**
Orange Horn	1-18GHz	3115	EMCO	0004-6123	390	I	10/13/2018	10/13/2016
Meteorological Meters		**MN**	**Mfr**	**SN**	**Asset**	**Cat**	**Calibration Due**	**Calibrated on**
Weather Clock (Pressure Only)		BA928	Oregon Scientific	C3166-1	831	I	4/28/2018	4/28/2016
TH A#2080		HTC-1	HDE		2080	II	3/23/2018	3/23/2017
Cables	**Range**		**Mfr**			**Cat**	**Calibration Due**	**Calibrated on**
Asset #2052	9kHz - 18GHz		Florida RF			II	3/5/2018	3/5/2017
Asset #2054	9kHz - 18GHz		Florida RF			II	10/1/3017	10/30/2016

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

AC Line Conducted Emissions

Limits:

Frequency of emission (MHz)	Quasi-peak limit (dBµV)	Average limit (dBµV)
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

[47 CFR 15.207(a)]

MEASUREMENTS / RESULTS

Curtis Straus - a Bureau Veritas Company					Work Order # - R1112		
Conducted Emissions per CISPR 16-2-1					EUT Power Input - 120VAC/60 Hz		
Peak Detector Tabular Data - Voltage Measurement					Test Site - CEMI-5		
Operator: Michael Mehrmann					Temp; Humid; Pres - 21.4°C;32 %RH; 999mBar		
					EUT Line tested:120VAC/60Hz; Neutral		
					EUT Maximum Freq - MHz		
					Requirement - FCC/CISPR Class B		
Frequency	Raw Peak Rea	Correction Fa	Adjusted Pea	Quasi-peak L	Margin to th	Peak to QP	Worst Margin
MHz	dBµV	dB	dBµV	dBµV	dB	Pass/Fail	dB
0.204	26.2	20.7	46.9	63.4	-16.6	PASS	
0.371	21.6	20.7	42.2	58.5	-16.2	PASS	
0.419	24.4	20.7	45	57.5	-12.4	PASS	-12.4
0.454	20.8	20.7	41.5	56.8	-15.3	PASS	
19.688	22.5	21	43.5	60	-16.5	PASS	
28.263	22.4	21	43.4	60	-16.6	PASS	

120V Neutral Peak

Curtis Straus - a Bureau Veritas Company							Work Order # - R1112	
Conducte	CISPR Average Detector						EUT Power Input - 120VAC/60 Hz	
Quick Average Detector Tabular Data - Voltage Measurement							Test Site - CEMI-5	
Operator: Michael Mehrmann							Temp; Humid; Pres - 21.4°C;32 %RH; 999m	
							EUT Line tested:120VAC/60Hz; Neutral	
							EUT Maximum Freq - MHz	
							Requirement - FCC/CISPR Class B	
Frequency	Raw Avera	Correctior	Adjusted A	Average L	Average M	Average R	Worst Average Margin	
MHz	dBµV	dB	dBµV	dBµV	dB	Pass/Fail	dB	
0.154	24.5	20.7	45.2	55.8	-10.6	PASS		
0.204	22.3	20.7	43	53.5	-10.5	PASS		
0.417	19.2	20.7	39.9	47.5	-7.6	PASS	-7.6	
0.454	17.5	20.7	38.2	46.8	-8.6	PASS		
19.727	15.2	21	36.1	50	-13.9	PASS		
28.862	16.5	21	37.5	50	-12.5	PASS		

120V Neutral Average

Curtis Straus - a Bureau Veritas Company					Work Order # - R1112		
Conducted Emissions per CISPR 16-2-1					EUT Power Input - 120VAC/60 Hz		
Peak Detector Tabular Data - Voltage Measurement					Test Site - CEMI-5		
Operator: Michael Mehrmann					Temp; Humid; Pres - 21.4°C;32 %RH; 999mBar		
EUT Line tested:120VAC/60Hz; Phase					EUT Maximum Freq - MHz		
EUT Mode of Operation:					Requirement - FCC/CISPR Class B		
Frequency	Raw Peak Re	Correction Fac	Adjusted Pea	Quasi-peak l	Margin to the	Peak to QP Li	Worst Margin
MHz	dBµV	dB	dBµV	dBµV	dB	Pass/Fail	dB
0.423	27.1	20.7	47.8	57.4	-9.6	PASS	-9.6
0.452	24.7	20.7	45.4	56.8	-11.4	PASS	
0.858	22.8	20.7	43.5	56	-12.5	PASS	
11.524	23.7	20.9	44.5	60	-15.5	PASS	
14.25	23.3	20.9	44.2	60	-15.8	PASS	
19.764	23.4	21	44.4	60	-15.6	PASS	

120V Hot Peak

Curtis Straus - a Bureau Veritas Company							Work Order # - R1112			
Conducte	CISPR Average Detector						EUT Power Input - 120VAC/60 Hz			
Quick Average Detector Tabular Data - Voltage Measurement							Test Site - CEMI-5			
Operator: Michael Mehrmann							Temp; Humid; Pres - 21.4°C;32 %RH; 999m			
							EUT Line tested:120VAC/60Hz; Phase			
							EUT Maximum Freq - MHz			
							Requirement - FCC/CISPR Class B			
Frequency	Raw Aver	Correctior	Adjusted /	Average L	Average M	Average R	Worst Average Margin			
MHz	dBµV	dB	dBµV	dBµV	dB	Pass/Fail	dB			
0.411	21.7	20.7	42.4	47.6	-5.2	PASS	-5.2			
0.451	20.1	20.7	40.7	46.9	-6.1	PASS				
0.864	13.2	20.7	33.9	46	-12.1	PASS				
10.749	15.6	20.9	36.5	50	-13.5	PASS				
18.244	15.9	21	36.9	50	-13.1	PASS				
28.88	15.7	21	36.7	50	-13.3	PASS				

120V Hot Average

Curtis Straus - a Bureau Veritas Company						Work Order # - R1112				
Conducted Emissions per CISPR 16-2-1						EUT Power Input - 277VAC/50 Hz				
Peak Detector Tabular Data - Voltage Measurement						Test Site - CEMI-5				
Operator: Michael Mehrmann						Temp; Humid; Pres - 21.4°C;32 %RH; 999mBar				
						EUT Line tested:277VAC/50Hz; Neutral				
						EUT Maximum Freq - MHz				
						Requirement - FCC/CISPR Class B				
Frequency	Raw Peak	Correction	Adjusted	Quasi-pea	Margin to	Peak to Q	Worst Margin			
MHz	dBµV	dB	dBµV	dBµV	dB	Pass/Fail	dB			
0.445	31.8	20.7	52.5	57	-4.5	PASS	-4.5			
0.625	25.7	20.7	46.3	56	-9.7	PASS				
0.719	22.2	20.7	42.9	56	-13.1	PASS				
0.747	22.9	20.7	43.6	56	-12.4	PASS				
10.345	26	20.9	46.9	60	-13.1	PASS				
10.393	26.4	20.9	47.3	60	-12.7	PASS				

277V Neutral Peak

Curtis Straus - a Bureau Veritas Company						Work Order # - R1112				
Conducte	CISPR Average Detector					EUT Power Input - 277VAC/50 Hz				
Final Average Detector Tabular Data - Voltage Measurement						Test Site - CEMI-5				
Operator: Michael Mehrmann						Temp; Humid; Pres - 21.4°C;32 %RH; 999mBar				
						EUT Line tested:277VAC/50Hz; Neutral				
						EUT Maximum Freq - MHz				
						Requirement - FCC/CISPR Class B				
Frequency	Raw Avera	Correction	Adjusted	Average L	Average M	Average R	Worst Average Margin			
MHz	dBµV	dB	dBµV	dBµV	dB	Pass/Fail	dB			
0.154	2.2	20.7	22.9	55.8	-32.9	PASS				
0.155	2.1	20.7	22.8	55.8	-32.9	PASS				
0.44	12	20.7	32.6	47.1	-14.4	PASS	-14.4			
10.244	11.1	20.9	32	50	-18	PASS				
10.387	10.9	20.9	31.8	50	-18.2	PASS				
10.477	10.8	20.9	31.6	50	-18.4	PASS				

277V Neutral Average

Curtis Straus - a Bureau Veritas Company					Work Order # - R1112		
Conducted Emissions per CISPR 16-2-1					EUT Power Input - 277VAC/50 Hz		
Peak Detector Tabular Data - Voltage Measurement					Test Site - CEMI-5		
Operator: Michael Mehrmann					Temp; Humid; Pres - 21.4°C;32 %RH; 999mBar		
					EUT Line tested:277VAC/50Hz; Phase		
					EUT Maximum Freq - MHz		
					Requirement - FCC/CISPR Class B		
Frequency	Raw Peak R	Correction Fact	Adjusted Pea	Quasi-peak Lir	Margin to the	Peak to QP L	Worst Margin
MHz	dBµV	dB	dBµV	dBµV	dB	Pass/Fail	dB
0.431	28.2	20.7	48.9	57.2	-8.4	PASS	-8.4
0.622	26.3	20.7	47	56	-9	PASS	
0.651	25.9	20.7	46.6	56	-9.4	PASS	
0.814	26.9	20.7	47.6	56	-8.4	PASS	
10.106	28.1	20.9	49	60	-11	PASS	
10.306	28.3	20.9	49.2	60	-10.8	PASS	

277V Hot Peak

Curtis Straus - a Bureau Veritas Company						Work Order # - R1112		
Conducte(CISPR Average Detector						EUT Power Input - 277VAC/50 Hz		
Quick Average Detector Tabular Data - Voltage Measurement						Test Site - CEMI-5		
Operator: Michael Mehrmann						Temp; Humid; Pres - 21.4°C;32 %RH; 999m		
						EUT Line tested:277VAC/50Hz; Phase		
						EUT Maximum Freq - MHz		
						Requirement - FCC/CISPR Class B		
Frequency	Raw Avera	Correctior	Adjusted /	Average Li	Average M	Average R	Worst Average Margin	
MHz	dBµV	dB	dBµV	dBµV	dB	Pass/Fail	dB	
0.427	21.2	20.7	41.9	47.3	-5.4	PASS	-5.4	
0.801	17.1	20.7	37.7	46	-8.3	PASS		
0.837	17.1	20.7	37.8	46	-8.2	PASS		
10.136	19.9	20.9	40.8	50	-9.2	PASS		
10.425	20	20.9	40.9	50	-9.1	PASS		
11.384	19.9	20.9	40.7	50	-9.3	PASS		

277V Hot Average

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 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.

The complete list of the Approved Subcontractors Curtis-Straus may use to delegate the performance of work can be provided upon request.
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