



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

Report No EQ0060-1 Issue 2

Client Ideal Industries, Inc.

Address Becker Place

Sycamore, IL 60178

Phone 815-895-1295

Items tested | SCELV1000

FCC ID 2AAMXSCELV1000 11250A-SCELV1000

FRN 0002862225

Equipment Type Digital Transmission System

Equipment Code DTS T58KG1D

FCC/IC Rule Parts 47 CFR 15.247, RSS-247 issue 1

Test Dates January 14 and 15, 2016

Prepared by Uniform Triong - Test Engineer

Authorized by

Yunds Faziloolu – Sr. EMC Engineer

Issue Date 2/26/2016

Conditions of Issue

This Test Report is issued subject to the conditions stated in the 'Conditions of Testing' section on page 41 of this report.

Curti One



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Form Final Report REV 12-07-15



Summary

This test report supports an application for certification of a transmitter operating pursuant to 47 CFR 15.247 and RSS-247. The product is the SCELV1000. It is a transmitter that operates in the range 902-928MHz.

We found that the product met the above requirements without modifications. The test sample was received in good condition on January 14, 2016.

Release Control Record Reason for change Issue No.

> Original Release February 26, 2016





Date Issued

Test Methodology

All testing was performed according to the following rules/procedures/documents; CFR 47 Part 15.247, RSS-247 Issue 1, RSS-Gen Issue 4, FCC KDB 558074 D01 DTS Measurement Guidance v03r04 and ANSI C63.10-2013.

Radiated emissions were maximized by rotating the device around three orthogonal axes as well as varying the test antenna's height and polarity. AC line conducted emissions testing was performed with a $50\Omega/50\mu H$ LISN. The EUT operating voltage was 120/277VAC at 60Hz. RF measurements were performed at the antenna port.

The environmental conditions were as shown below.

Date	Temperature	Humidity
January 14, 2016	21°	30%RH
January 15, 2016	22°C	29%RH

The following bandwidths were used during radiated spurious and line conducted emissions.

The felletting sandmathe trene	acca daring radiated eparteds an	
Frequency	RBW	VBW
0.15-30MHz	9kHz	30kHz
30-1000MHz	120kHz	1MHz
1-25GHz	1MHz	3MHz



ACCREDITED

Product Tested - Configuration Documentation

					E	UT Configuration									
Work O	rder:	Q0060													
Com	pany:	Ideal In	dustries, Inc												
Company Ado	dress:	Becker	Becker Place												
		Sycamo	ore, IL 60178	3											
Con	ntact:	Tim Tu	nnell												
		MN PN SN													
	EUT:		SCI	ELV1000						010fcc()1				
EUT Descri	ption:	Line Di	imming Lum	inaire Controlle	r										
EUT TX Frequ	ency:	902.7-9	27.3 MHz												
Port Label	Port	Type	# ports	# populated	cable ty	pe shielded	ferrites	length (m	in/out	under test	comment				
120/277VAC Power	Powe	r AC	1	1	Power AC	C No	No	6	in	yes					

Software Operating Mode Description:

The EUT needs to be connected to the AC power lines. The EUT is rated up to 277V AC input. The EUT provides AC power and an AC dimming output. The EUT will be mounted to a light fixture during normal operation. The black wire is the AC hot. The white wire is the AC neutral. The red wire is the AC dimming output. A power cord is to be connected to the AC hot and neutral to allow the unit to be plugged into an outlet for testing.

Operating Frequency: 902 to 928MHz, channel(s) are factory programmed, for testing the EUT has test software allowing channel selection by power cycling EUT, EUT has the lowest channel (902.7MHz), mid channel (915MHz), highest channel (927.3MHz). Modulation: Digital Modulation Spread Spectrum



Statement of Conformity

The SCELV1000 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.
	4		15.21	Information to the user is shown in the instruction manual exhibit.
			15.27	
0.01				No special accessories are required for compliance.
3, 6.1			15.31	The EUT was tested in accordance with the
			45.00	measurement standards in this section.
6.13			15.33	Frequency range was investigated according to this
				section, unless noted in specific rule section under
			45.05	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
			45.000	under which the equipment operates.
8.3			15.203	The antenna for this device is integrated hardwired
				to the PCB with a gain of 4.55dBi.
8.10			15.205	The fundamental is not in a Restricted band and the
			15.209	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.
			15.247	The unit complies with the requirements of 15.247
		RSS 247		The unit complies with the requirements of RSS-247
6.6				Occupied Bandwidth measurements were made.

Modifications Required for Compliance

No modifications required for Compliance





Test Results

Bandwidth

LIMIT

The minimum 6 dB bandwidth shall be at least 500 kHz. [15.247(a) (2)]

MEASUREMENTS / RESULTS

DTS Bandwidth (Conducted) Ta	ble						
Date: 14-Jan-16	(Work Order: Q0060					
Engineer: Jason Haley		EUT Desc: SCELV1000 EUT Operating Voltage/Frequency:					120Vac/60Hz	
Temp: 20.2°C		Humidity: 35% Pressure: 1007mBar						
	Frequency Range:	902-928MHz						
Notes: Measured per	DTS Meas Guidance V0	3r04 Section 8.2						
						FCC Part 15.247(a) (2	2) Emission	
	Resolution Bandwidth	Video Bandwidth	Frequency Span	Detector Function	Measured DTS	Bandwidth		
Frequency	Setting	Setting	Setting		Bandwidth	Limit	Result	
(MHz)	(kHz)	(kHz)	(MHz)		(kHz)	(kHz minimum)	(Pass/Fail)	
902.7	100	300	2	Peak	662.5	500.0	Pass	
915.0	100	300	2	Peak	663.7	500.0	Pass	
927.3	100	300	2	Peak	663.6	500.0	Pass	
Table Result:	Pass							

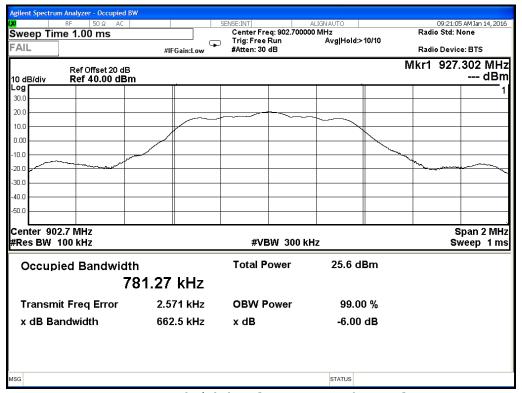
Rev. 1/12/2016								
Meteorological Meters		MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Weather Clock (Pressure Only)		BA928	Oregon Scientific	C3166-1	831	I	3/19/2016	3/19/2014
TH A#2084		HTC-1	HDE		2084	II	4/2/2016	4/2/2015
Spectrum Analyzers / Receivers / Preselectors	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
MXE EMI Receiver	20Hz-8.4GHz	N9038A	Agilent	MY53290009	1168255	I	6/16/2016	6/16/2015
Preamps /Couplers Attenuators / Filters	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
HF 20dB 50W Attenuator	0.009-18 GHz	PE 7019-20	Pasternack	1	791	II	7/31/2016	7/31/2015

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

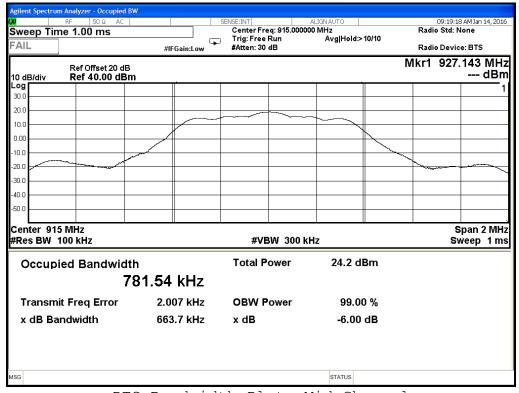




PLOTS

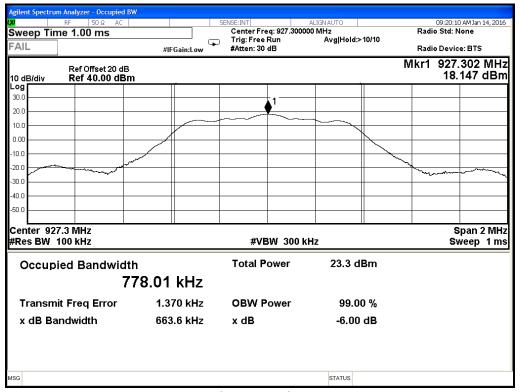


DTS Bandwidth Plot, Low Channel



DTS Bandwidth Plot, Mid Channel





DTS Bandwidth, High Channel



Peak Power

LIMIT

Conducted Output Power 1 Watt [15.247(b) (3)]

MEASUREMENTS / RESULTS

Date: 14-Jan-16	(Company: Ideal Indus	tries, Inc.			V	Vork Order:	Q0060			
Engineer: Jason Haley		EUT Desc: SCELV100	00		EUT Operat	EUT Operating Voltage/Frequency: 120/60					
Temp: 20.2°C		Humidity: 35%		Pressure: 1007mBar							
	Frequency Range:	902-928MHz									
Notes: Measured per	DTS Meas Guidance V03	3r04 Section 9.2.2, Me	thod AVGSA-1								
(trace averag	ing with the EUT transm	itting at full power th	roughout each sw	reep)							
						FCC Part	15.247 b 3.	Conducted			
	Resolution Bandwidth	Video Bandwidth	Frequency Span	Detector Function	Measured Power	(Output Pow	er			
Frequency	Setting	Setting	Setting		Level	Limit	Margin	Result			
(MHz)	(kHz)	(kHz)	(MHz)		(dBm)	(dBm)	(dB)	(Pass/Fai			
902.7	30	100	2	RMS	20.71	30.0	-9.3	Pass			
915.0	30	100	2	RMS	19.16	30.0	-10.8	Pass			
927.3	30	100	2	RMS	18.34	30.0	-11.7	Pass			

Rev. 1/12/2016

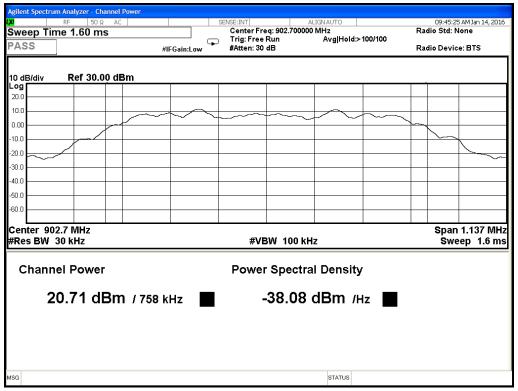
V. 1/12/2010								
Meteorological Meters		MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Weather Clock (Pressure Only)		BA928	Oregon Scientific	C3166-1	831	- 1	3/19/2016	3/19/2014
TH A#2084		HTC-1	HDE		2084	II	4/2/2016	4/2/2015
Spectrum Analyzers / Receivers / Preselectors	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
MXE EMI Receiver	20Hz-8.4GHz	N9038A	Agilent	MY53290009	1168255	- 1	6/16/2016	6/16/2015

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

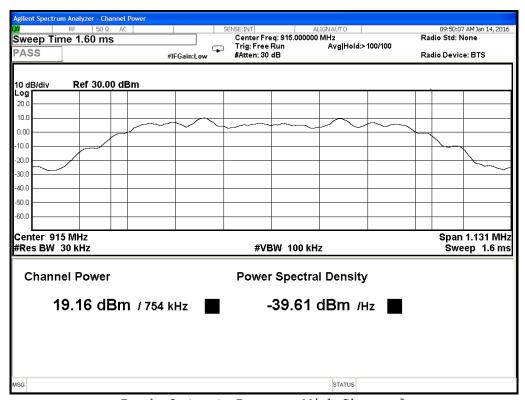




PLOTS



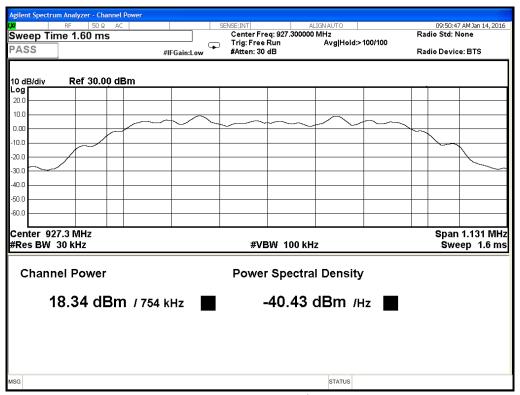
Peak Output Power, Low Channel



Peak Output Power, Mid Channel







Peak Output Power, High Channel



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)]

Testing has been performed on 3 channels (low, middle and high). Worst case results are shown in the following data tables.

MEASUREMENTS / RESULTS

Date:	15-Jan-16		Company:	Ideal Indus	tries, Inc.					V	ork Order:	Q0060
Engineer:	Jason Haley		EUT Desc:	SCELV100	00				EUT Operat	ing Voltage/	Frequency:	115/60
Temp:	22°C		Humidity:	27%		Pressure:	1007mBar		•			
	Freque	ncy Range:	30-1000MH	-lz					Measureme	nt Distance:	3 m	
Notes:	EUT transmitti	ng at 902MH	łz. Z-axis.						EU	Г Max Freq:	928MHz	
										F	CC Part 15.2	209
Antenna Polarization	Fra mua mau	Reading	Preamp Factor	Antenna Factor	Cable Factor	Adjusted Reading	Limit	Maurin	Result	Limit	Manuin	Result
(H/V)	Frequency (MHz)	(dBµV)	(dB)	(dB/m)	(dB)	neading (dBμV/m)	(dBµV/m)	Margin (dB)	(Pass/Fail)	(dBµV/m)	Margin (dB)	(Pass/Fail
V, pk	76.895372	43.0	25.3	8.4	0.5	26.6	(αδμν/π)	(UB)	(FdSS/FdII)	40.0	-13.4	Pass
V, pk V, pk	263.470272	40.8	25.4	12.5	1.0	28.9				46.0	-13.4	Pass
H, pk	302.13527	45.1	25.3	13.4	1.0	34.2				46.0	-11.8	Pass
H, pk	305.451104	46.9	25.3	13.5	1.0	36.1				46.0	-9.9	Pass
H, pk	308.648516	45.4	25.3	13.6	1.1	34.8				46.0	-11.2	Pass
V, pk	311.964351	47.2	25.3	13.8	1.1	36.8				46.0	-9.2	Pass
V, pk	321.497375	46.6	25.0	14.0	1.0	36.6				46.0	-9.4	Pass
V, pk	326.471126	46.7	25.0	13.9	1.1	36.7				46.0	-9.3	Pass
V, pk	337.721279	48.9	25.2	14.0	1.2	38.9				46.0	-7.1	Pass
H, pk	340.918691	44.2	25.2	14.0	1.2	34.2				46.0	-11.8	Pass
H, pk	342.635819	44.5	25.2	14.1	1.1	34.5				46.0	-11.5	Pass
V, pk	345.833231	48.3	25.1	14.1	1.1	38.4				46.0	-7.6	Pass
H, pk	350.806983	44.5	25.0	14.3	1.0	34.8				46.0	-11.2	Pass
QP Horz	757.2	39.5	24.8	20.9	1.8	37.4				46.0	-8.6	Pass
Tabl	e Result:	Pass	by	-7.1	dB				We	orst Freq:	337.72	MHz
	EMI Chamber Rental SA#5	2	Cable 1: Preamp:	Asset #20	52				Asset #2053 Red-White		Cable 3:	

Date:	15-Jan-16			Company:	Ideal Indus	tries, Inc.						'	Vork Order:	Q0060	
Engineer:	Jason Haley			EUT Desc:	SCELV100	ELV1000 EUT Operating Voltage/Frequency: 115/60							115/60		
Temp:	22°C			Humidity:	27%		Pressure: 1007mBar								
		Freque	ncy Range:	1-6GHz							Measureme	nt Distance:	3 m		
Notes:	Z-axis (worst o	case.)									EU	Γ Max Freq:	928MHz		
									FC	CC Part 15.2	09	F	CC Part 15.2	209	
Antenna		Peak	Average	Preamp	Antenna	Cable	Adjusted	Adjusted							
Polarization (H / V)	Frequency (MHz)	Reading (dBµV)	Reading (dBµV)	Factor (dB)	Factor (dB/m)	Factor (dB)	Peak Reading (dBμV/m)	Avg Reading (dBμV/m)	Limit (dBµV/m)	Margin (dB)	Result (Pass/Fail)	Limit (dBµV/m)	Margin (dB)	Result (Pass/Fail)	
V, low ch	2708.1	42.21	27.8	20.3	32.9	3.5	58.3	43.9	74.0	-15.7	Pass	54.0	-10.1	Pass	
H, low ch	2708.1	45.21	29.5	20.3	32.9	3.5	61.3	45.6	74.0	-12.7	Pass	54.0	-8.4	Pass	
H, mid ch	2745.0	47.09	31.2	20.2	33.0	3.5	63.4	47.5	74.0	-10.6	Pass	54.0	-6.5	Pass	
V, mid ch	2745.0	43.56	29.7	20.2	33.0	3.5	59.9	46.0	74.0	-14.1	Pass	54.0	-8.0	Pass	
V, high ch H, high ch	2781.9 2781.9	45.0 48.28	29.4 33.8	20.1 20.1	33.0 33.0	3.5 3.5	61.4 64.7	45.8 50.2	74.0 74.0	-12.6 -9.3	Pass Pass	54.0 54.0	-8.2 -3.8	Pass Pass	
Table	e Result:		Pass	by	-3.8	dB					We	orst Freq:	2781.9	MHz	
Test Site:	EMI Chamber	2		Cable 1:	Asset #205	52				Cable 2:	Asset #2053		Cable 3:		
	Asset #1328			Preamp: Asset #1517					Antenna: Blue Horn				Preselector:		





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Radiated Emissions Table Company: Ideal Industries, Inc. Date: 15-Jan-16 Work Order: Q0060 Engineer: Jason Haley EUT Desc: SCELV1000 EUT Operating Voltage/Frequency: 115/60 Temp: 22°C Humidity: 27% 1007mBar 6-10GHz Measurement Distance: 1 m Notes: No signals found. Peak readings were below the average limit. EUT Max Freq: 928 FCC Part 15.209 Antenna Peak Preamp Antenna Cable Adjusted Polarization Frequency Reading Factor Factor Factor Peak Reading Limit Margin Result Limit Margin Result (MHz) (dBµV) (dB) (dB/m) (dB) (dBµV/m) (dBµV/m (dB) (Pass/Fail) (dBµV/m) (Pass/Fail) Noise floor 7551.0 27.8 36.0 5.7 52.4 63.5 -11.1 Pass 17.1 Noise floor 10000.0 17.1 37.9 6.6 53.1 -10.4 Pass Table Result: Worst Freq: by -10.4 dB 10000.0 MHz Test Site: EMI Chamber 2 Cable 1: Asset #2052 Cable 2: Asset #2053 Analyzer: Asset #1328 Preamp: Asset #1517 Antenna: Blue Horn Preselector: ---CSsoft Radiated Emissions Calculator v 1.017.154

Range 9kHz-13.2 GHz	MN E4405B	Mfr Agilent	SN MY44210241	Asset 1328	Cat I	Calibration Due 8/19/2016	Calibrated on 8/19/2015
FCC Code 719150	IC Code 2762A-7	VCCI Code A-0015	Range 30-1000MHz		Cat II	Calibration Due 3/22/2017	Calibrated on 3/22/2015
Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
0.009-2000MHz	ZFL-1000-LN	CS	N/A	800	Ш	12/27/2016	12/27/2015
1-20GHz	CS	CS	N/A	1517	II	8/6/2016	8/6/2015
0.03-6.5 GHz	11SH10-1000/T3000-0/0	K&L	1	1310	II	1/7/2017	1/7/2016
Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
30-2000MHz	JB1	Sunol	A091604-1	1105	- 1	8/12/2017	8/12/2015
1-18Ghz	3117	ETS	157647	1861	I	2/8/2017	2/8/2015
	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
	BA928	Oregon Scientific	C3166-1	831	- 1	3/19/2016	3/19/2014
	HTC-1	HDE		2081	II	4/2/2016	4/2/2015
Range 9kHz - 18GHz 9kHz - 18GHz		Mfr Florida RF Florida RF			Cat 	Calibration Due 3/8/2016 3/8/2016	Calibrated on 3/8/2015 3/8/2015
	9kHz-13.2 GHz FCC Code 719150 Range 0.009-2000MHz 1-20GHz 0.03-6.5 GHz Range 30-2000MHz 1-18Ghz	9kHz-13.2 GHz E4405B FCC Code 719150 2762A-7 Range 0.009-2000MHz 1-20GHz 0.03-6.5 GHz 11SH10-1000/T3000-0/0 Range 30-2000MHz 1-18Ghz MN BA928 HTC-1 Range 9kHz - 18GHz	9kHz-13.2 GHz E4405B Agilent FCC Code IC Code VCCI Code 719150 2762A-7 A-0015 Range MN Mfr 0.009-2000MHz ZFL-1000-LN CS 1-20GHz CS CS 0.03-6.5 GHz 11SH10-1000/T3000-0/0 K&L Range MN Mfr 30-2000MHz JB1 Sunol 1-18Ghz 3117 ETS MN Mfr BA928 HTC-1 HDE Range Mfr Florida RF	9kHz-13.2 GHz E4405B Agilent MY44210241 FCC Code 719150 IC Code 2762A-7 VCCI Code A-0015 Range 30-1000MHz Range 0.009-2000MHz 1-20GHz MN ZFL-1000-LN Mfr SN N/A 0.03-6.5 GHz 30-2000MHz 11SH10-1000/T3000-0/0 K&L 1 Range 30-2000MHz 1-18Ghz MN JB1 JB1 JB1 JB1 Sunol JB1 Sunol T57647 SN A091604-1 T57647 MN BA928 HTC-1 Mfr Oregon Scientific HDE SN C3166-1 HDE Range 9kHz - 18GHz Mfr Florida RF	9kHz-13.2 GHz E4405B Agilent MY44210241 1328 FCC Code 719150 IC Code 2762A-7 VCCI Code A-0015 Range 30-1000MHz Range 30-1000MHz Asset Range 0.009-2000MHz 1-20GHz 0.03-6.5 GHz 11SH10-1000/T3000-0/0 CS CS CS CS N/A 1517 0.03-6.5 GHz 11SH10-1000/T3000-0/0 N/A K&L 1 1310 1517 1310 Range 30-2000MHz 1-18Ghz MN 3117 Mfr Cregon Scientific HDE A091604-1 157647 1105 1861 MN BA928 HTC-1 Mfr Oregon Scientific HDE C3166-1 831 2081 831 2081 Range 9kHz - 18GHz Mfr Florida RF Florida RF	9kHz-13.2 GHz E4405B Agilent MY44210241 1328 I FCC Code IC Code VCCI Code Range Cat 719150 2762A-7 A-0015 30-1000MHz II Range MN Mfr SN Asset Cat 0.009-2000MHz ZFL-1000-LN CS N/A 800 II 1-20GHz CS CS N/A 1517 II 0.03-6.5 GHz 11SH10-1000/T3000-0/0 K&L 1 1310 II Range MN Mfr SN Asset Cat 30-2000MHz JB1 Sunol A091604-1 1105 I 1-18Ghz 3117 ETS 157647 1861 I MN Mfr Oregon Scientific C3166-1 831 I BA928 HTC-1 HDE C3166-1 831 I Range Mfr Florida RF Cat Cat	9kHz-13.2 GHz E4405B Agilent MY44210241 1328 I 8/19/2016 FCC Code 719150 IC Code 2762A-7 VCCI Code A-0015 Range 30-1000MHz Cat II Calibration Due 3/22/2017 Range 0.009-2000MHz MN ZFL-1000-LN CS CS CS CS CS CS CS N/A N/A 1517 Calibration Due 1 2/27/2016 0.03-6.5 GHz 0.03-6.5 GHz 11SH10-1000/T3000-0/0 K&L 1 1310 II 8/6/2016 1 2/8/2017 Range 30-2000MHz MN JE1 MM Sunol Sunol Sunol Sunol HDE Asset Asset Cat Calibration Due Calibration Due BA928 HTC-1 SN Oregon Scientific HDE Asset Cat Calibration Due BA92016 Calibration Due Calibration Due Calibration Due Calibration Due Sunol BA92016 Range 9kHz - 18GHz Mfr Florida RF Florida RF Cat Calibration Due Calibration Due

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

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





Conducted Spurious Emissions

LIMITS

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth that contains the highest level of desired power based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB ...

[15.247(d)]

MEASUREMENTS / RESULTS

Band Edge Measurements

Date: 14-Jan-16	Company: Ideal Inc	dustries, Inc.		W	ork Order:	Q0060
Engineer: Jason Haley	EUT Desc: SCELV	1000	EUT O	perating Voltage/I	Frequency:	120/60
Temp: 20.2°C	Humidity: 35%	Pressure: 100	7mBar			
Frequ	uency Range: 902-928MHz					
Notes: Measured per DTS Mea	s Guidance V03r04 Section 11.0					
				FC	C Part 15.2	17 e
Band-Edge Emission	Band-edge Emission	In-band Emission Peak	Delta	-		
Frequency	Level	Level	Level	Limit	Margin	Resu
(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)	(Pass/F
900.37	-40.3	18.8	-59.1	-30.0	-29.1	Pass
900.658	-35.3	18.8	-54.1	-30.0	-24.1	Pass
901.21	-25.8	18.8	-44.6	-30.0	-14.6	Pass
901.84	-15.6	18.8	-34.4	-30.0	-4.4	Pass
902.0	-21.0	18.8	-39.8	-30.0	-9.8	Pass
928.0	-24.7	16.4	-41.1	-30.0	-11.1	Pass
928.17	-21.8	16.4	-38.2	-30.0	-8.2	Pass
928.745	-33.9	16.4	-50.3	-30.0	-20.3	Pass
929.365	-42.1	16.4	-58.5	-30.0	-28.5	Pass
930.9	-48.4	16.4	-64.8	-30.0	-34.8	Pass

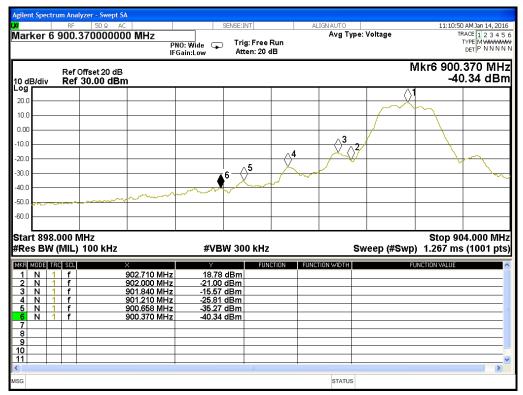
Rev. 1/12/2016								
Meteorological Meters		MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Weather Clock (Pressure Only)		BA928	Oregon Scientific	C3166-1	831	- 1	3/19/2016	3/19/2014
TH A#2084		HTC-1	HDE		2084	II	4/2/2016	4/2/2015
Spectrum Analyzers / Receivers / Preselectors	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
MXE EMI Receiver	20Hz-8.4GHz	N9038A	Agilent	MY53290009	1168255	I	6/16/2016	6/16/2015
Preamps /Couplers Attenuators / Filters	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
	nunge		14111	• • • • • • • • • • • • • • • • • • • •				oundida on

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

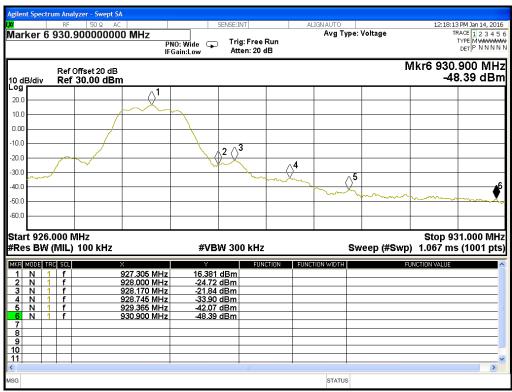




PLOTS



Band Edge, Lower Channel



Band Edge, Upper Channel



ACCREDITED
Testing Carl No. 1877-01

Conducted Spurious Emission

Non-Restricted Band Spurious Emissions Measurements (Conducted) Table

 Date: 14-Jan-16
 Company: Ideal Industries, Inc.

 Engineer: Jason Haley
 EUT Desc: SCELV1000

Work Order: Q0060 EUT Operating Voltage/Frequency: 120/60

Temp: 20.2°C Humidity: 35% Pressure: 1007mBar

Frequency Range: 9kHz to 9.3GHz

Notes: Non-Restricted Band Emissions measured per DTS Meas Guidance V03r04 Section 11.1 b, maximum conducted (average) output power.

					FC	C Part 15.2	47 d
UT Transmit	Spurious Emission	Spurious Emission	Maximum In-band Peak	Delta			
Band	Frequency	Level	PSD Level in 100kHz	Level	Limit	Margin	Result
	(MHz)	(dBm)	(dBm)	(dBc)	(dBc)	(dB)	(Pass/Fa
Low	0.0091	-63.6	18.5	-82.1	-30.0	-52.1	Pass
Low	0.1540	-59.8	18.5	-78.3	-30.0	-48.3	Pass
Low	901.8	-13.3	18.5	-31.8	-30.0	-1.8	Pass
Low	1805	-41.2	18.5	-59.7	-30.0	-29.7	Pass
Low	3156	-57.3	18.5	-75.8	-30.0	-45.8	Pass
Low	5758	-57.2	18.5	-75.7	-30.0	-45.7	Pass
Low	7223	-59.2	18.5	-77.7	-30.0	-47.7	Pass
Low	8739	-59.3	18.5	-77.8	-30.0	-47.8	Pass
Low	9127	-57.7	18.5	-76.2	-30.0	-46.2	Pass
Mid	0.0091	-64.5	18.5	-83.0	-30.0	-53.0	Pass
Mid	0.1500	-61.4	18.5	-79.9	-30.0	-49.9	Pass
Mid	786.7	-49.2	18.5	-67.7	-30.0	-37.7	Pass
Mid	1830.0	-43.1	18.5	-61.6	-30.0	-31.6	Pass
Mid	3176.0	-57.9	18.5	-76.4	-30.0	-46.4	Pass
Mid	6089.0	-58.6	18.5	-77.1	-30.0	-47.1	Pass
Mid	7015.0	-58.9	18.5	-77.4	-30.0	-47.4	Pass
Mid	8784.0	-59.8	18.5	-78.3	-30.0	-48.3	Pass
Mid	9109.0	-59.3	18.5	-77.8	-30.0	-47.8	Pass
High	0.0095	-65.6	18.5	-84.1	-30.0	-54.1	Pass
High	0.1500	-61.2	18.5	-79.7	-30.0	-49.7	Pass
High	794.0	-46.0	18.5	-64.5	-30.0	-34.5	Pass
High	928.2	-21.2	18.5	-39.7	-30.0	-9.7	Pass
High	3063	-58.5	18.5	-77.0	-30.0	-47.0	Pass
High	5631	-58.7	18.5	-77.2	-30.0	-47.2	Pass
High	7515	-58.9	18.5	-77.4	-30.0	-47.4	Pass
High	8811	-60.2	18.5	-78.7	-30.0	-48.7	Pass
High	8995	-60.0	18.5	-78.5	-30.0	-48.5	Pass

Rev. 1/12/2016

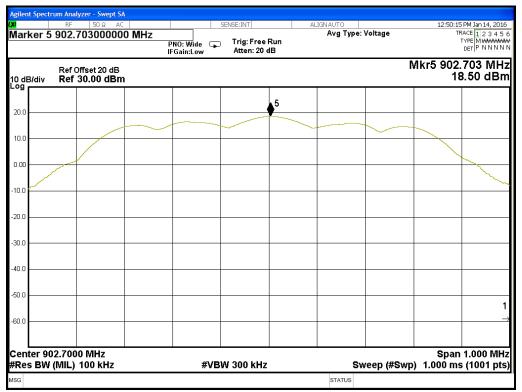
ev. 1/12/2016								
Meteorological Meters		MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Weather Clock (Pressure Only)		BA928	Oregon Scientific	C3166-1	831	- 1	3/19/2016	3/19/2014
TH A#2084		HTC-1	HDE		2084	II	4/2/2016	4/2/2015
Spectrum Analyzers / Receivers / Preselectors	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
MXE EMI Receiver	20Hz-8.4GHz	N9038A	Agilent	MY53290009	1168255	- 1	6/16/2016	6/16/2015
SA #5 (1178898)	9kHz-26.5GHz	E4407B	Agilent	US40241082	1178898	I	12/30/2016	12/30/2015
Preamps /Couplers Attenuators / Filters	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
HF 20dB 50W Attenuator	0.009-18 GHz	PE 7019-20	Pasternack	1	791	II	7/31/2016	7/31/2015

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

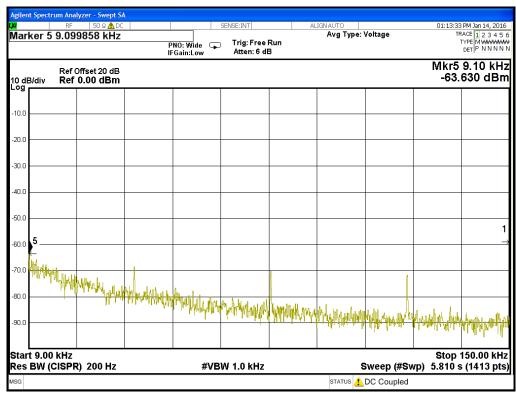




PLOTS



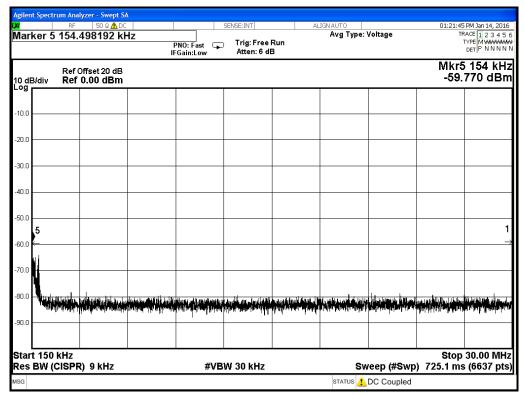
Conducted Emissions - Antenna Port, Reference Measurement



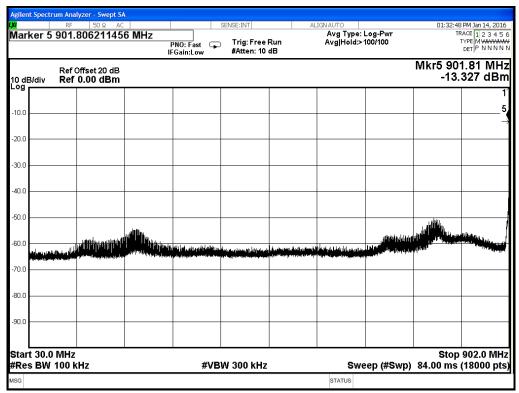
Conducted EMI at the Antenna port, 9-150kHz, low channel



ACCREDITED

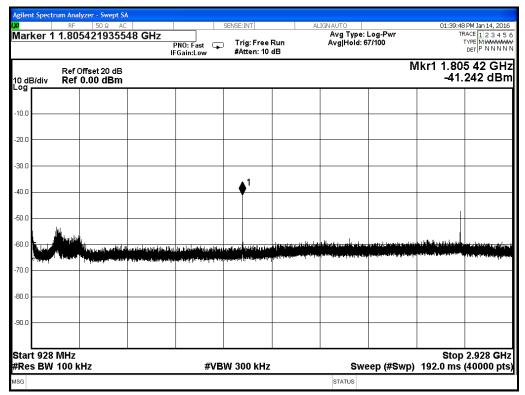


Conducted EMI at the Antenna port, 0.15-30MHz, low channel

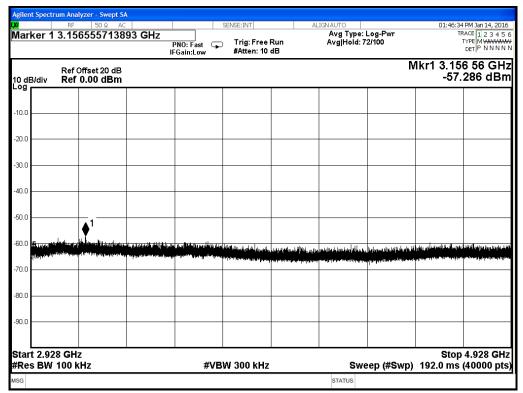


Conducted EMI at the Antenna port, 30-902MHz, low channel



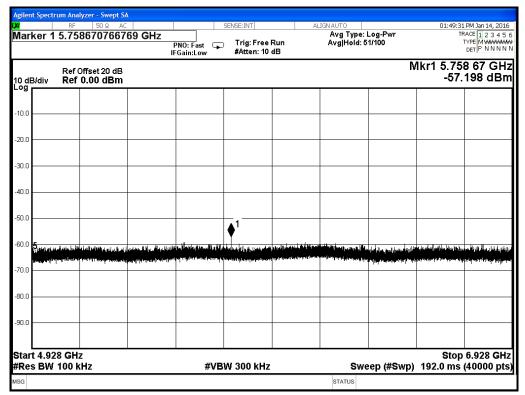


Conducted EMI at the Antenna port, 928-2928MHz, low channel

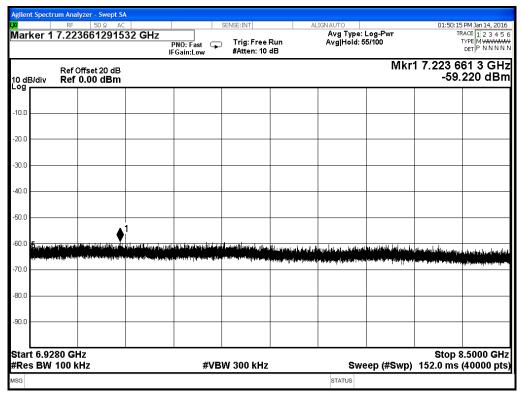


Conducted EMI at the Antenna port, 2928-4928MHz, low channel



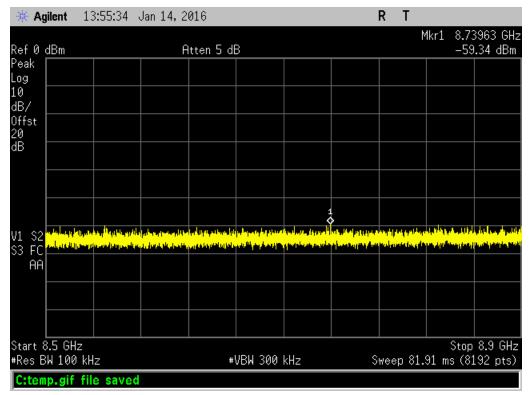


Conducted EMI at the Antenna port, 4928-6928MHz, low channel

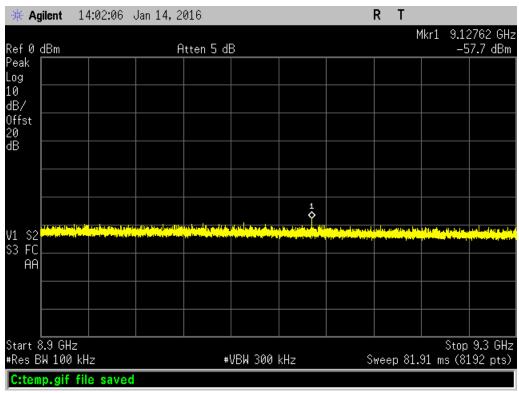


Conducted EMI at the Antenna port, 6928-8500MHz, low channel



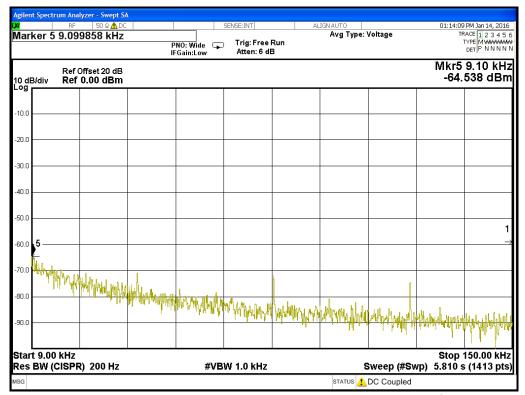


Conducted EMI at the Antenna port, 8.5-8.9GHz, low channel

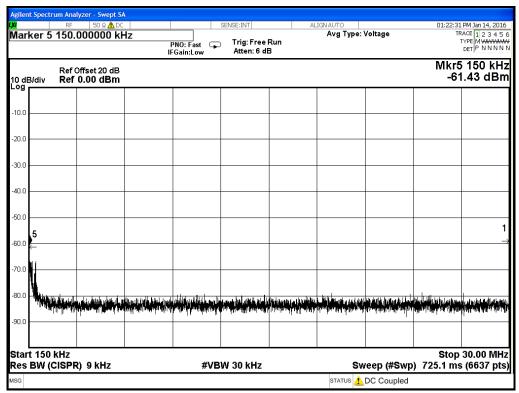


Conducted EMI at the Antenna port, 8.9-9.3GHz, low channel



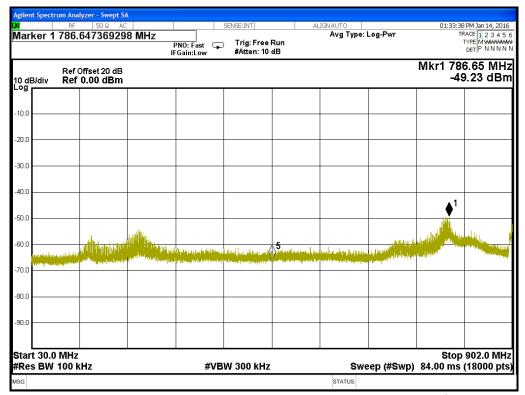


Conducted EMI at the Antenna port, 9-150kHz, mid channel

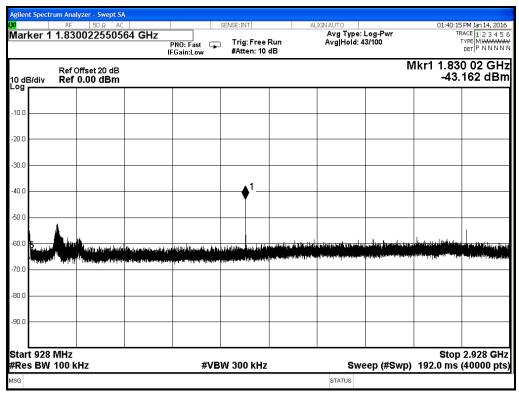


Conducted EMI at the Antenna port, 0.15-30MHz, mid channel



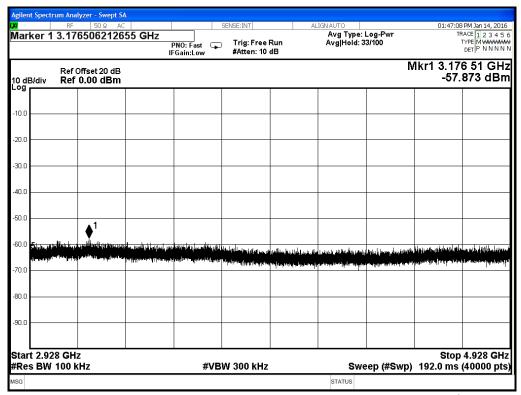


Conducted EMI at the Antenna port, 30-902MHz, mid channel

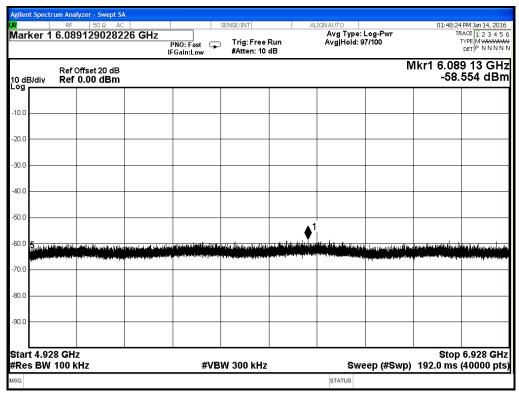


Conducted EMI at the Antenna port, 928-2928MHz, mid channel



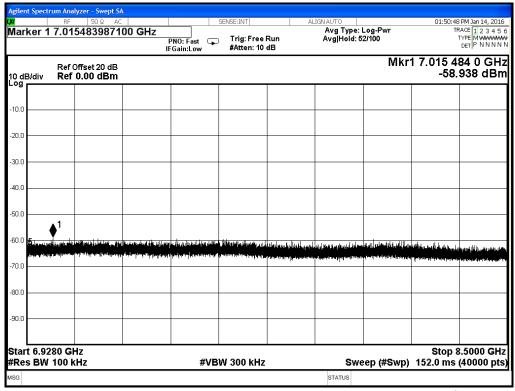


Conducted EMI at the Antenna port, 2928-4928MHz, mid channel

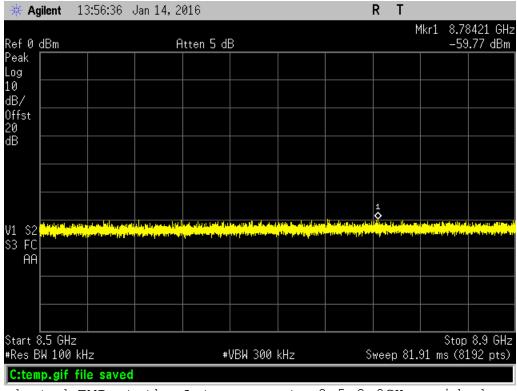


Conducted EMI at the Antenna port, 4928-6928MHz, mid channel



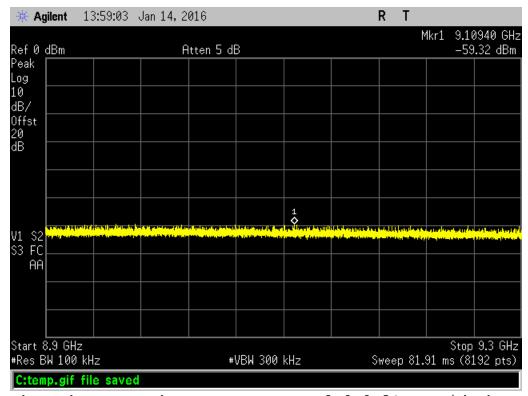


Conducted EMI at the Antenna port, 6928-8500MHz, mid channel

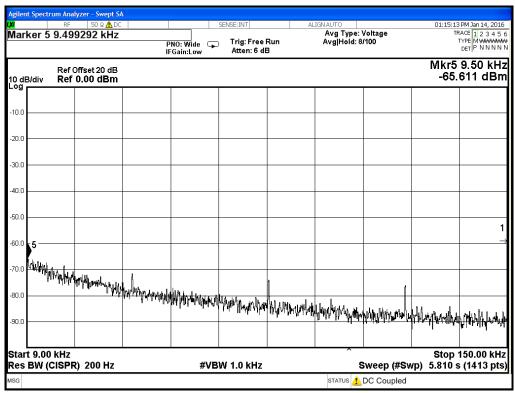


Conducted EMI at the Antenna port, 8.5-8.9GHz, mid channel



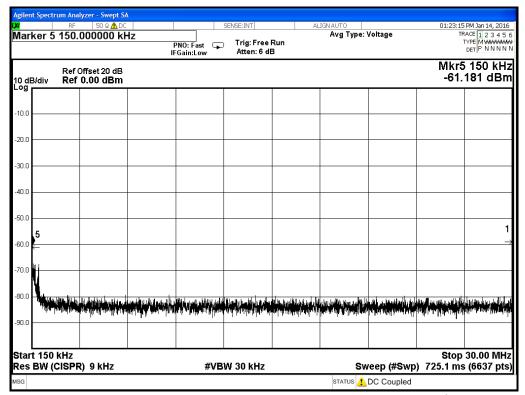


Conducted EMI at the Antenna port, 8.9-9.3GHz, mid channel

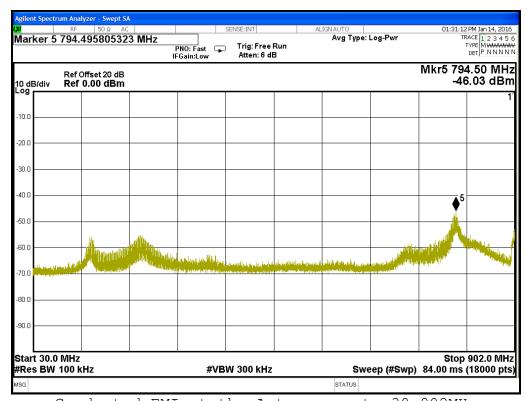


Conducted EMI at the Antenna port, 9-150kHz, high channel



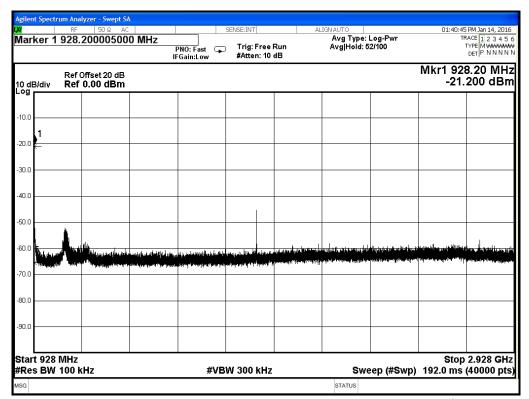


Conducted EMI at the Antenna port, 0.15-30MHz, high channel

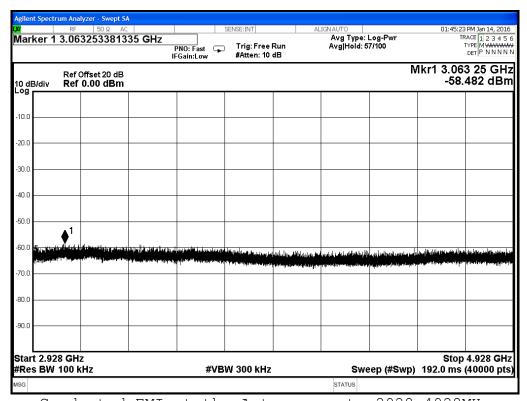


Conducted EMI at the Antenna port, 30-902MHz



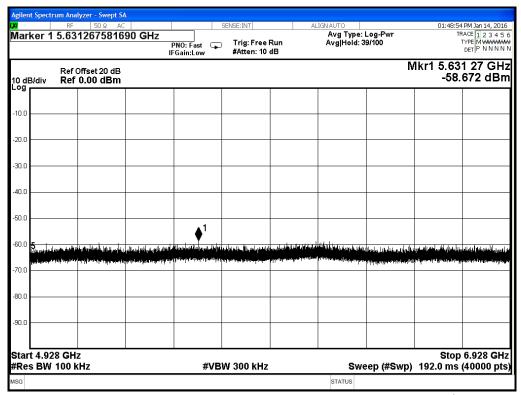


Conducted EMI at the Antenna port, 928-2928MHz, high channel

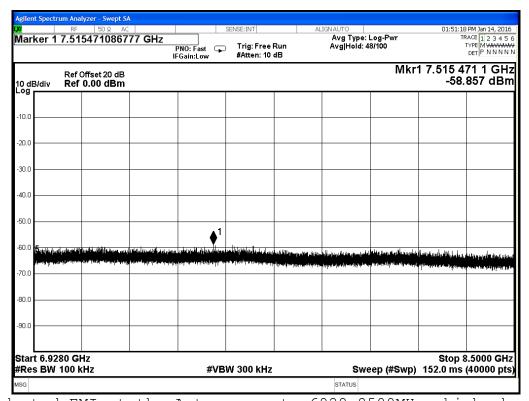


Conducted EMI at the Antenna port, 2928-4928MHz





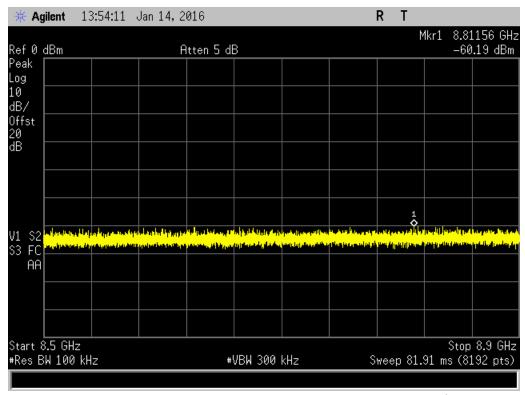
Conducted EMI at the Antenna port, 4928-6928MHz, high channel



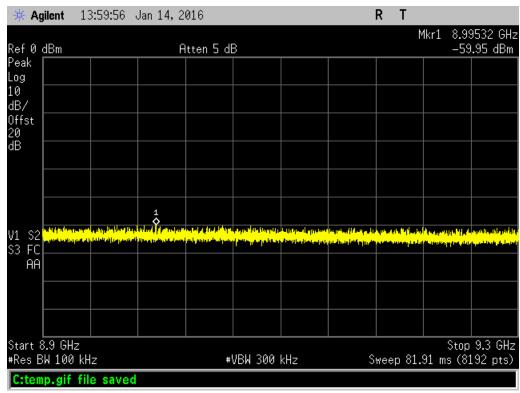
Conducted EMI at the Antenna port, 6928-8500MHz, high channel



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Conducted EMI at the Antenna port, 8.5-8.9GHz, high channel



Conducted EMI at the Antenna port, 8.9-9.3GHz, high channel



Power Spectral Density

LIMIT

...the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmission. [15.247(e)]

MEASUREMENTS / RESULTS

Date: 14-Jan-16		Company: Ideal Indus	stries, Inc.				Work Order:	Q0060		
Engineer: Jason Haley		EUT Desc: SCELV10	00		EUT Ope	ating Voltage	/Frequency:	120/60		
Temp: 20.2°C		Humidity: 35%		Pressure: 1007mBar						
	Frequency Range:	902-928MHz								
Notes: Measured pe	r DTS Meas Guidance V03	3r04 Section 10.3, Me	thod AVGPSD-1							
(trace average	ging with the EUT transm	itting at full power tl	hroughout each sw	eep)						
						FC	CC Part 15.24	7 e		
	Resolution Bandwidth	Video Bandwidth	Frequency Span	Detector Function	Measured					
Frequency	Setting	Setting	Setting		Level	Limit	Margin	Result		
(MHz)	(kHz)	(kHz)	(MHz)		(dBm)	(dBm)	(dB)	(Pass/Fai		
902.7	9	30	1.2	RMS	7.375	8.0	-0.6	Pass		
915.0	9	30	1.2	RMS	5.81	8.0	-2.2	Pass		
927.3	9	30	1.2	RMS	4.962	8.0 -3.0 Pass				

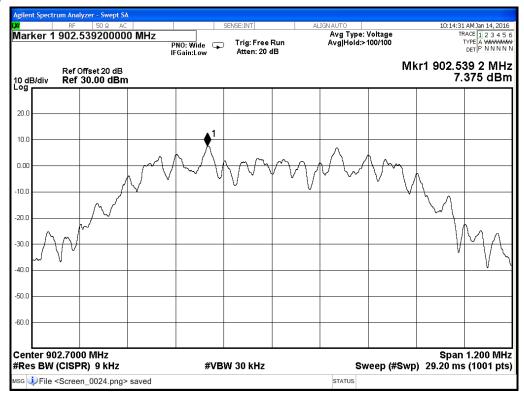
Rev. 1/12/2016								
Meteorological Meters		MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Weather Clock (Pressure Only) TH A#2084		BA928 HTC-1	Oregon Scientific HDE	C3166-1	831 2084	ı II	3/19/2016 4/2/2016	3/19/2014 4/2/2015
TT / WESST		11101	TIDE		2004		4/2/2010	4,2,2010
Spectrum Analyzers / Receivers / Preselectors MXE_EMI_Receiver	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
MAE EMI Receiver	20Hz-8.4GHz	N9038A	Agilent	MY53290009	1168233	'	6/16/2016	6/16/2015
Preamps / Couplers Attenuators / Filters	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
HF 20dB 50W Attenuator	0.009-18 GHz	PE 7019-20	Pasternack		791		7/31/2016	7/31/2015

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

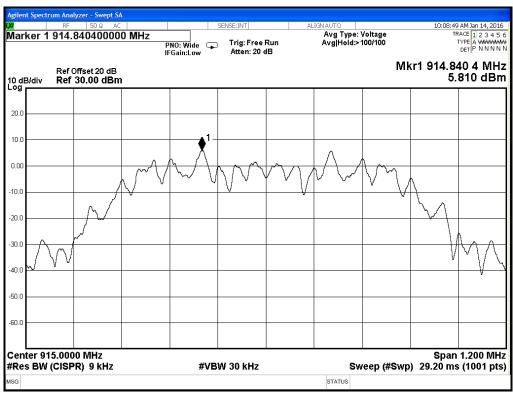




PLOTS

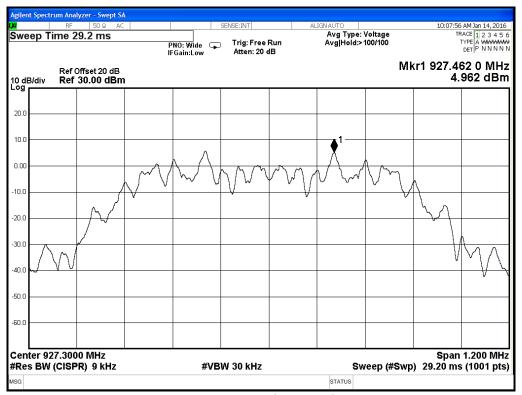


Power Spectral Density, Low Channel



Power Spectral Density, Mid Channel





Power Spectral Density, High Channel



AC Line Conducted Emissions LIMITS

Frequency of	Quasi-peak limit	Average limit
emission (MHz)	(dBµV)	(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

	te: 15-Jan-16							: Ideal Industrie	es, Inc.			١	Nork Order	: Q0060
	er: Nirak So							SCELV1000					_	
	np: 20.8 °C						Humidity:	: 36%					Pressure	: 1002 mB
Not	es: Verified that E	UT was trasmi	tting at 902M	Hz & 928MH:	z before star			: 0.15 to 30MH	łz	EUT I	nput Voltage	/Frequency:	120Vac. 60	Hz
	Quasi	-Peak	Ave	rage	LIS	SN					- par - compe			
	Read	dings	Read	dings					FCC 15.207					
Frequency	QP1	QP2	AVG1	AVG2	L1	L2	Factor	Factor	QP Limit	Margin	Result	AVG Limit	Margin	Result
(MHz)	(dBµV)	(dBµV)	(dBµV)	(dBµV)	(dB)	(dB)	(dB)	(dB)	(dBµV)	(dB)	(Pass/Fail)	(dBµV)	(dB)	(Pass/Fa
0.15	22.5	25.9	5.2	5.2	-0.1	-0.1	-0.1	-19.7	66.0	-20.3	Pass	56.0	-31.0	Pass
0.17	28.3	27.3	4.0	4.0	-0.1	-0.1	-0.1	-19.7	64.8	-16.7	Pass	54.8	-31.1	Pass
0.21	21.5	21.5	4.4	4.4	-0.1	-0.1	-0.1	-19.7	63.2	-22.0	Pass	53.2	-29.1	Pass
0.48	22.3	22.2	11.2	12.2	0.0	0.0	-0.1	-19.7	56.4	-14.4	Pass	46.4	-14.5	Pass
7.35	18.1	20.8	7.9	7.9	0.0	-0.1	-0.2	-19.6	60.0	-19.4	Pass	50.0	-22.3	Pass
22.30	11.2	11.1	5.0	5.0	-0.1	-0.1	-0.3	-19.7	60.0	-28.7	Pass	50.0	-24.9	Pass
Resul	t: Pass						Worst	Margin:	-14.5	dB	Freq	uency:	0.480	MHz
urement Device: LISN ASSET 1726(Line 1) LISN ASSET 1727(Line 2				(Line 2)		Cable:	CEMI-10			Spectrum	Analyzer:	Rental SA	· #5	

	15-Jan-16							Ideal Industrie	es, Inc.				Work Order	: Q0060
Engineer:								SCELV1000					_	
	20.8 °C Verified that E	IT was trasmit	tting at QOOM	U- 2. 029MU-	hoforo eta	tod the sec	Humidity:	36%					Pressure	: 1002 mBa
Notes.	verilled triat L	DT was trasilii	iting at 302ivii	12 & 320WII I2	Deloie Sta			0.15 to 30MH	lz	EUT I	nput Voltage	/Frequency: 2	77Vac. 60Hz	
	Quasi	-Peak	Ave	rage	LIS	SN	,				- par - canage	l		
	Read	lings	Read		Fac	tors	Cable	ATTN		FCC 15.207	,		FCC 15.207	
Frequency	QP1	QP2	AVG1	AVG2	L1	L2	Factor	Factor	QP Limit	Margin	Result	AVG Limit	Margin	Result
(MHz)	(dBµV)	(dBµV)	(dBµV)	(dBµV)	(dB)	(dB)	(dB)	(dB)	(dBµV)	(dB)	(Pass/Fail)	(dBµV)	(dB)	(Pass/Fa
0.48	26.4	27.8	18.0	21.2	0.0	0.0	-0.1	-19.7	56.4	-8.9	Pass	46.4	-5.5	Pass
0.43	24.4	27.4	12.5	16.0	0.0	0.0	-0.1	-19.7	57.2	-10.0	Pass	47.2	-11.4	Pass
0.72	20.8	21.8	9.1	12.3	0.0	0.0	-0.1	-19.6	56.0	-14.5	Pass	46.0	-14.0	Pass
0.92	20.1	22.5	6.6	7.2	0.0	0.0	-0.1	-19.7	56.0	-13.7	Pass	46.0	-19.0	Pass
0.37	21.5	23.9	10.0	13.2	0.0	0.0	-0.1	-19.7	58.5	-14.8	Pass	48.5	-15.6	Pass
1.73	16.8	18.5	3.7	3.7	-0.1	-0.1	-0.1	-19.6	56.0	-17.7	Pass	46.0	-22.5	Pass
7.30	18.3	19.8	8.3	8.3	-0.1	-0.1	-0.2	-19.6	60.0	-20.3	Pass	50.0	-21.8	Pass
Result:	Pass						Worst	Margin:	-5.5	dB	Freq	uency:	0.475	MHz
	nt Device: LISN Asset 1791							CEMI-10	0.0				Rental SA #5	





Rev. 1/14/2016 Spectrum Analyzers / Receivers / Preselectors SA #2 (1860)	Range 9kHz-26.5 GHz	MN E7405A	Mfr Agilent	SN MY45104916	Asset 1860	Cat 	Calibration Due 12/23/2016	Calibrated on 12/23/2015
LISNs/Measurement Probes	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
LISN Asset 1726	150kHz-30MHz	LI-150A	Com-Power	201092	1726	1	1/23/2016	1/23/2015
LISN Asset 1727	150kHz-30MHz	LI-150A	Com-Power	201093	1727	1	1/23/2016	1/23/2015
LISN Asset 1791	9KHz-30MHz	NNLK 8121	Schwarzbeck	NNLK 8121-603	1791	I	5/26/2016	5/26/2015
Conducted Test Sites (Mains / Telco)	FCC Code		VCCI Code				Calibration Due	
CEMI 6	719150		A-0015			III	NA	N/A
Meteorological Meters		MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Weather Clock (Pressure Only)		BA928	Oregon Scientific	C3166-1	831	- 1	3/19/2016	3/19/2014
TH A#2085		HTC-1	HDE		2085	Ш	4/2/2016	4/2/2015
Cables	Range		Mfr			Cat	Calibration Due	Calibrated on
CEMI-10	9kHz - 2GHz		C-S			Ш	4/4/2016	4/4/2015
Attenuators 20dB Attenuator-74	Range 9kHz-2GHz	MN	Mfr	SN N/A	Asset	Cat	Calibration Due 7/29/2016	Calibrated on 7/29/2015

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





Occupied Bandwidth

REQUIREMENT

When an occupied bandwidth is no specified in the applicable RSS, the transmitted signal bandwidth to be reported is to be its 99% emission bandwidth, as calculated or measured. [RSS-GEN 6.6]

MEASUREMENTS / RESULTS

Date: 14-Jan-16	Company: Ideal Industr	ries, Inc.		Work Order: Q0060
ingineer: Jason Haley	EUT Desc: SCELV1000)	EUT Operatin	g Voltage/Frequency: 120/60
Temp: 20.2°C	Humidity: 35%	Pressure:	1007mBar	
Fre	quency Range: 902-928MHz			
Notes:				
Frequency	Resolution Bandwidth	Video Bandwidth	Frequency Span	Occupied Bandwidth
Frequency (MHz)	Resolution Bandwidth Setting (kHz)	Video Bandwidth Setting (kHz)	Frequency Span Setting (M-tz)	Occupied Bandwidth
	Setting	Setting	Setting	·
(MHz)	Setting (kHz)	Setting (kHz)	Setting (MHz)	(MHz)

Rev. 1/12/2016

Meteorological Meters	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Weather Clock (Pressure Only)	BA928	egon Scienti	C3166-1	831	- 1	3/19/2016	3/19/2014
TH A#2084	HTC-1	HDE		2084	II	4/2/2016	4/2/2015

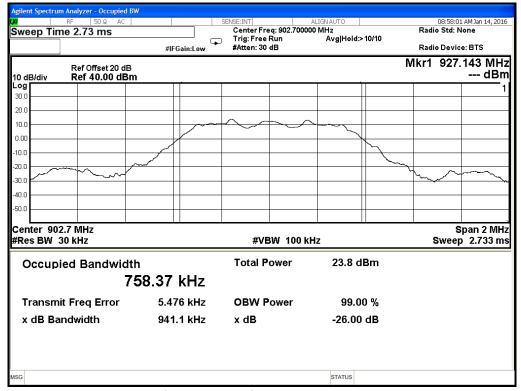
Spectrum Analyzers / Receivers / Preselectors MXE EMI Receiver	Range 20Hz-8.4GHz	MN N9038A	Mfr Agilent	SN MY53290009			Calibration Due 6/16/2016	Calibrated on 6/16/2015
Preamps / Couplers Attenuators / Filters HF 20dB 50W Attenuator	Range 0.009-18 GHz	MN PE 7019-20	Mfr Pasternack	SN 1	Asset 791	Cat II	Calibration Due 7/31/2016	Calibrated on 7/31/2015

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

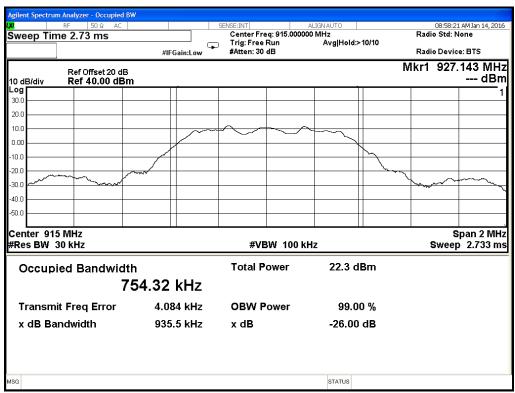




PLOTS

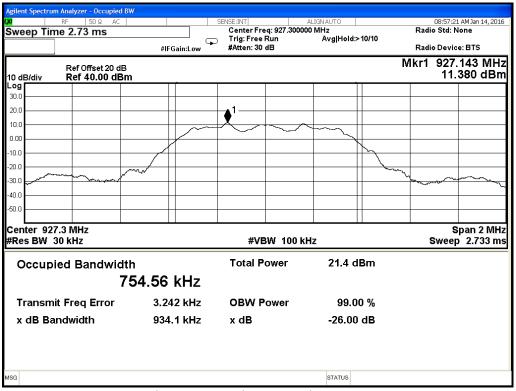


Occupied Bandwidth, Low Channel



Occupied Bandwidth, Mid Channel





Occupied Bandwidth, 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 Radiated Emissions (30-1000MHz)	Expanded Uncertainty k=2	Maximum allowable uncertainty
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 x 10 ⁻⁸	1 x 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
- 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 bergin
- 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 HERELINDER

(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. Rev.160009121(2) #684340 v14CS



