## Test Report



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

Report No EK1442-2

Client UltraClenz, LLC

Address 1440 W. Indiantown Rd. Suite 350

Jupiter, FL 33458

Phone 561-840-8405

Items tested Tag Assembly Z9O-FAS1503

FRN 0021282710

Equipment Type Security Device Transceiver

Equipment Code | DSR

FCC Rule Parts 47 CFR 15.231(a)

Test Dates December 22, 2010, April 30, 2012

Results As detailed within this report

Prepared by

Matthew Burman – Test Engineer

Authorized by

Mairaj Hussain - EMC Supervisor

Issue Date

June 13, 2012

Conditions of Issue

This Test Report is issued subject to the conditions stated in the 'Conditions of Testing' section on page 12 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.





#### **Contents**

Contents	2
Summary	
Test Methodology	
Product Tested - Configuration Documentation	4
Test Results	
Fundamental Emission	5
Bandwidth	
Harmonics and Spurious Emissions	
Timing Requirements	
Measurement Uncertainty	
Conditions Of Testing	

Form Final Report REV 7-20-07 (DW)



#### Summary

This test report supports an application for certification of a transmitter operating pursuant to 47 CFR 15.231(a). The product is the Tag Assembly. The operating frequency is 433.9MHz. It is powered by +3Vdc Coin cell batteries. Line Conducted Emissions was not performed.

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

#### Test Methodology

Testing was performed according to ANSI C63.4-2003 and ANSI C63.10-2009. Radiated emissions were maximized by rotating the device around its three orthogonal axes, as well as varying the test antenna's height and polarity. The EUT's antenna cannot be maximized separately. Fresh batteries were used for testing.

Frequency range investigated: 30MHz - 4.5GHz

Measurement distance: 30-4500MHz 3m

Release Control Record Reason for change Issue No.

1 Original Release Date Issued





## Product Tested - Configuration Documentation

				EUT Con	figuratio	n				
Company Address:	UltraClenz, I	liantown Rd. St 33458	iite 350							
		MN						SN		
EUT:		FAS-1503-00						Sample 1		
EUT Description: EUT Tx Frequency:		oly								
Support Equipment:		MN						SN		
none										
EUT Ports:										
Port Label	Port Type	No. of ports	No. Populated	Cable Type	Shielded	Ferrites	Length	Max Length	In/Out NEBS Type	Unpopulated Reason
No Cables Are Under Test										
Software / Operating Mode Descr	iption:									
EUT continues to transmit										



#### **Test Results**

### Fundamental Emission LIMIT

of Fundamental (microvolts/meter)	Field Strength of Spurious Emission (microvolts/meter)
3,750 to 12,500	375 to 1,250
	(microvolts/meter)

[15.231(a)]

Average Limit[dB $\mu$ V/m] = 20log(41.6667(F[in MHz]) - 7083.3333) @ 3m

Example Calculation:  $20\log(41.6667(433.9) - 7083.3333) = 80.8dB\mu V/m @ 3m$ 

#### **MEASUREMENT**

Date:	22-Dec-10		Company:	Ultraclenz							Work Order	: K1442		
Engineer	Matthew Burma	an	EUT Desc:	WiNET Ta	g Assemb	ly				EUT Operating	g Voltage/Frequency	: Battery Powered		
Temp:	19.7℃		Humidity:	23%		Pressure:	997mBar							
	Freque	ency Range:	433MHz						N	leasurement Distance: 3	m			
Notes	Worst case 10 DCCF = -33.9	0ms duty cyc	le = 2%	•										
Antenna	Fraguancy	Dooding	Preamp		Antenna	Cable	Adjusted					FCC 15.231(a)		
					Factor	Reading	Limit	Margin	Result	Limit	Margin	Result		
	Frequency	Reading	Factor	Factor		5		-			-			
Polarization (H / V)	Frequency (MHz)	(dBµV)	Factor (dB)	(dB/m)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	(Pass/Fail)	(dBµV/m)	(dB)	(Pass/Fail)		
	(MHz) 433.9	(dBμV) 72.6	(dB)	(dB/m) 17.0	(dB) 3.2	(dBµV/m) 92.8		-		(dBµV/m) 100.8	(dB) -8.0	(Pass/Fail) Pass		
(H / V)	(MHz)	(dBµV)	(dB)	(dB/m)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	(Pass/Fail)	(dBµV/m)	(dB)	(Pass/Fail)		
(H / V) Hpk Havg	(MHz) 433.9	(dBμV) 72.6	(dB)	(dB/m) 17.0	(dB) 3.2 3.2	(dBµV/m) 92.8	(dBµV/m)	(dB)	(Pass/Fail)	(dBµV/m) 100.8	(dB) -8.0	(Pass/Fail) Pass Pass		
Hpk Havg <b>Tab</b>	(MHz) 433.9 433.9	(dBμV) 72.6 38.7 Pass	0.0 0.0 0.0	(dB/m) 17.0 17.0	(dB) 3.2 3.2	(dBµV/m) 92.8	(dBµV/m)	(dB)	(Pass/Fail)	(dBµV/m) 100.8 80.8	(dB) -8.0 -21.9	(Pass/Fail) Pass Pass Pass		

Rev: 20-Dec-2010 <b>Spectrum Analyzers</b> / <b>Receivers</b> / <b>Preselectors</b> Rental SA #1 (Brown)	<b>Range</b> 9kHz-26.5GHz	<b>MN</b> E4407B	<b>Mfr</b> Agilent	<b>SN</b> SG44210511	<b>Asset</b> 1510	Cat I	Calibration Due 25-Mar-2011
Radiated Emissions Sites 1DCC-OATS-3M-I	<b>FCC Code</b> 719150	IC Code 2762A-8	VCCI Code R-3109			Cat II	<b>Calibration Due</b> 7-Jul-2011
Antennas Green-Red Bilog	Range 30-2000MHz	MN CBL6112B	<b>Mfr</b> Chase	<b>SN</b> 2435	Asset 990	Cat I	Calibration Due 30-Jun-2012
Meteorological Meters Temp./Humidity/Atm. Pressure Gauge 1DCC-OATS-3M-I Thermohygrometer		MN 7400 Perception II 35519-044	Mfr Davis Control Company	<b>SN</b> N/A 72457635	<b>Asset</b> 965 1334	Cat I II	Calibration Due 6-Apr-2011 18-Aug-2011
Cables REMI-14	<b>Range</b> 9kHz - 2GHz		Mfr C-S			Cat II	Calibration Due 17-Sep-2011

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





#### **Bandwidth**

#### LIMIT

"The bandwidth of the emission shall be no wider than 0.25% of the center frequency for devices operating above 70MHz and below 900MHz...Bandwidth is determined at the points 20dB down from the modulated carrier". [15.231(c)]

#### **MEASUREMENTS / RESULTS**

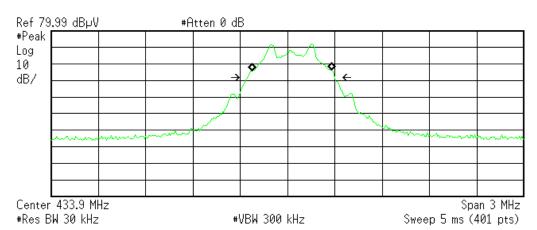
20dB Bar	ndwidth											
Date:	22-Dec-10		Company	Ultraclenz						Wo	k Orde	r: K1442
3	Matthew Burm	nan		WiNET Ta	g Assembly				EUT Operating	ng Voltage/Fre	equency	: Battery Powered
Temp:			Humidity:	23%		Pressure: 997mB	ar					
		ency Range:						Measi	rement Distance: 3	3 m		
Notes:	Limit = 0.25%	of center freq	uency									
		1	I	l	ı ı	1				FCC 15.2	31©	
	Frequency	Bandwidth							Limit	Margin		Result
	(MHz)	(MHz)							(MHz)	(MHz)		(Pass/Fail)
	433.0	0.550841							1.1	-0.5		Pass
	1DCC-OATS-	3M-I		EMIR-14			Cable 2				Cable 3	
Analyzer:	Rental SA#1		Preamp:	none			Antenna	: Grn-Red		Pre	selecto	':
Rev: 20-De	ec-2010											
Spectro	um Analyz	zers / Rec	eivers /	Presele	ctors	Range	MN	Mfr	SN	Asset	Cat	Calibration Due
	-	tal SA #1				9kHz-26.5GHz	E4407B	Agilent	SG4421051	1 1510	1	25-Mar-2011
	11011	tai Oi t ii i	(Biowii)			011 12 20.001 12	211075	rigiloni	001121001		•	LO Mai LOTT
	Radiat	ed Emiss	ions Si	tes		FCC Code	IC Code	VCCI Code			Cat	Calibration Due
		OCC-OAT		.03		719150	2762A-8	R-3109			II	7-Jul-2011
	16	JCC-OAT	3-3IVI-I			719150	2102A-0	N-3108			"	7-Jui-2011
		Antenn	as			Range	MN	Mfr	SN	Asset	Cat	Calibration Due
	G	reen-Red				30-2000MHz	CBL6112B	Chase	2435	990	1	30-Jun-2012
	· ·	ii CCII I ICU	Dilog			00 2000WII 12	OBLOTIZB	Onasc	2400	330	'	00 0dii 2012
	Mete	orologica	al Meter	s			MN	Mfr	SN	Asset	Cat	Calibration Due
To	mp./Humi						7400 Perception II	Davis	N/A	965	1	6-Apr-2011
							35519-044			1334	ii	
IL	OCC-OATS	S-SIVI-I III	emony	grometer			33319-044	Control Company	1245/635	1334	11	18-Aug-2011
		Cable	s			Range		Mfr			Cat	Calibration Due
		REMI-1	-			9kHz - 2GHz		C-S			II	17-Sep-2011
		I LEIVII-I	-			JNI IZ - ZGITZ		0-3			11	17-36p-2011

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



\* Agilent 12:33:16 Dec 22, 2010

R T



Occupied Bandwidth 504.2890 kHz

Occ BW % Pwr 99.00 % x dB -20.00 dB

Transmit Freq Error 24.718 kHz x dB Bandwidth 550.841 kHz

C:temp.gif file saved



# Harmonics and Spurious Emissions LIMIT

Fundamental	Field Strength	Field Strength
Frequency	of Fundamental	of Spurious
	(microvolts/meter)	Emission
		(microvolts/meter)
260 - 470 MHz	3,750 to 12,500	375 to 1,250
[15.231(a)]		

Average Limit[dB $\mu$ V/m] = 20log(41.6667(F[in MHz]) - 7083.3333) - 20 @ 3m

Example Calculation:  $20\log(41.6667(433.9) - 7083.3333) - 20 = 60.8$ **dB\muV/m** @ **3m** 

#### **MEASUREMENTS**

Date:	22-Dec-10		Company:	Ultraclenz							Work Order	: K1442	
Engineer:	Matthew Burma	an	EUT Desc:	WiNET Ta	g Assemb	ly				EUT Operating	Voltage/Frequency	: Battery Powered	
Temp:	19.7℃		Humidity:	23%		Pressure:	997mBar						
	Freque	ency Range	30-1000MH	łz					M	easurement Distance: 3 m	1		
	Worst case 10 DCCF = -33.9		ele = 2%										
Antenna			Preamp	Antenna	Cable	Adjusted				FCC Class B			
olarization	Frequency	Reading	Factor	Factor	Factor	Reading	Limit	Margin	Result	Limit	Margin	Result	
(H / V)	(MHz)	(dBµV)	(dB)	(dB/m)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	(Pass/Fail)	(dBµV/m)	(dB)	(Pass/Fail)	
Hpk	868.07	32.0	25.5	21.4	4.7	32.6				60.8	-28.2	Pass	
Havg	868.07	32.0	25.5	21.4	4.7	32.6				60.8	-28.2	Pass	
Tab	le Result:	Pass	by	-28.2	dB					Worst Freq:	868.07	MHz	
Test Site:	1DCC-OATS-3	BM-I	Cable 1:	EMIR-14				Cable 2:		Cable 3:			
Analyzer: Rental SA#1		Preamp: Red-White				Antenna: Grn-Red			Preselector:				

ev: 20-Dec-2010							
Spectrum Analyzers / Receivers / Preselectors	Range	MN	Mfr	SN	Asset	Cat	<b>Calibration Due</b>
Rental SA #1 (Brown)	9kHz-26.5GHz	E4407B	Agilent	SG44210511	1510	ı	25-Mar-2011
Radiated Emissions Sites	FCC Code	IC Code	VCCI Code			Cat	Calibration Due
1DCC-OATS-3M-I	719150	2762A-8	R-3109			II	7-Jul-2011
Preamps /Couplers Attenuators / Filters	Range	MN	Mfr	SN	Asset	Cat	Calibration Due
Red-White	0.009-2000MHz	ZFL-1000-LN	CS	N/A	1258	II	15-Sep-2011
Antennas	Range	MN	Mfr	SN	Asset	Cat	Calibration Due
Green-Red Bilog	30-2000MHz	CBL6112B	Chase	2435	990	-1	30-Jun-2012
Meteorological Meters		MN	Mfr	SN	Asset	Cat	Calibration Due
Temp./Humidity/Atm. Pressure Gauge		7400 Perception II	Davis	N/A	965	- 1	6-Apr-2011
1DCC-OATS-3M-I Thermohygrometer		35519-044	Control Company	72457635	1334	II	18-Aug-2011
Cables	Range		Mfr			Cat	Calibration Due
REMI-14	9kHz - 2GHz		C-S			Ш	17-Sep-2011

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

Date:	22-Dec-10		Company:	Ultraclenz							Work Order:	K1442		
Engineer:	Matthew Burma	an	EUT Desc:	WiNET Ta	Assembly	y				EUT Operatin	g Voltage/Frequency:	Battery Powered		
Temp:	19.7℃		Humidity:	23%		Pressure:	997mBar							
Frequency Range: 30-1000MHz									Measurement Distance: 3 m					
	No emissions f Non-Intentional													
Antenna			Preamp	Antenna	Cable	Adjusted					FCC Class B			
Polarization	Frequency	Reading	Factor	Factor	Factor	Reading	Limit	Margin	Result	Limit	Margin	Result		
(H / V)	(MHz)	(dBµV)	(dB)	(dB/m)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	(Pass/Fail)	(dBµV/m)	(dB)	(Pass/Fail)		
noise floor	216.5	32.6	25.6	10.5	2.1	19.6				46.0	-26.4	Pass		
noise floor	412.4	28.9	25.5	17.1	3.0	23.5				46.0	-22.5	Pass		
noise floor	525.9	25.5	25.5	18.2	3.5	21.7				46.0	-24.3	Pass		
noise floor	610.4	24.6	25.0	19.3	3.8	22.7				46.0	-23.3	Pass		
noise floor	793.2	23.3	25.1	20.6	4.5	23.3				46.0	-22.7	Pass		
noise floor	920.0	26.6	25.0	21.8	4.9	28.3				46.0	-17.7	Pass		
Tab	le Result:	Pass	by	-17.7	dB					Worst Freq:	920.0	MHz		
Test Site:	1DCC-OATS-3	M-I	Cable 1: EMIR-14			Cable 2:				Cable 3:				
	Rental SA#1		_	D 1340 %	I-White Antenna: Grn-Red Preselector:									





Rev: 20-Dec-2010 <b>Spectrum Analyzers</b> / <b>Receivers</b> / <b>Preselectors</b> Rental SA #1 (Brown)	<b>Range</b> 9kHz-26.5GHz	<b>MN</b> E4407B	<b>Mfr</b> Agilent	<b>SN</b> SG44210511	<b>Asset</b> 1510	Cat 	Calibration Due 25-Mar-2011
Radiated Emissions Sites	FCC Code	IC Code	VCCI Code			Cat	Calibration Due
1DCC-OATS-3M-I	719150	2762A-8	R-3109			Ш	7-Jul-2011
Preamps /Couplers Attenuators / Filters	Range	MN	Mfr	SN	Asset	Cat	Calibration Due
Red-White	0.009-2000MHz	ZFL-1000-LN	CS	N/A	1258	П	15-Sep-2011
Antennas	Range	MN	Mfr	SN	Asset	Cat	Calibration Due
Green-Red Bilog	30-2000MHz	CBL6112B	Chase	2435	990	- 1	30-Jun-2012
Meteorological Meters		MN	Mfr	SN	Asset	Cat	Calibration Due
Temp./Humidity/Atm. Pressure Gauge		7400 Perception II	Davis	N/A	965	1	6-Apr-2011
1DCC-OATS-3M-I Thermohygrometer		35519-044	Control Company	72457635	1334	II	18-Aug-2011
Cables	Range		Mfr			Cat	Calibration Due
REMI-14	9kHz - 2GHz		C-S			Ш	17-Sep-2011

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

	22-Dec-10 Matthew Burm	ian		Company: EUT Desc:		g Assemb	ly					EUT Operation	Work Order: ng Voltage/Frequency:			
Temp:	19.7℃			Humidity:	23%			Pressure:	997mBar							
Frequency Range: 1-4.5GHz										Measurement Distance: 3 m						
	Worst case 10 DCCF = -33.9		cle = 2%													
Antenna		Peak	Average	Preamp	Antenna	Cable	Adjusted	Adjusted	FCC Cla	Class B High Frequency - Peak		FCC Class B High Frequency - Average				
Polarization	Frequency	Reading	Reading	Factor	Factor	Factor	Peak Reading	Avg Reading	Limit	Margin	Result	Limit	Margin	Result		
(H / V)	(MHz)	(dBµV)	(dBµV)	(dB)	(dB/m)	(dB)	(dBµV/m)	(dBµV/m)	(dBµV/m)	(dB)	(Pass/Fail)	(dBµV/m)	(dB)	(Pass/Fail)		
Н	1301.56	61.7	27.8	20.8	24.7	1.1	66.7	32.8	74.0	-7.3	Pass	54.0	-21.2	Pass		
Н	1736.145	42.41	8.5	20.1	26.4	1.5	50.2	16.3	74.0	-23.8	Pass	54.0	-37.7	Pass		
H	2170.145	58.47	24.6	21.3	27.9	1.4	66.5	32.6	74.0	-7.5	Pass	54.0	-21.4	Pass		
Н	2604.145	39.45	5.6	21.7	28.7	1.6	48.1	14.2	74.0	-26.0	Pass	54.0	-39.9	Pass		
H	3038.145	39.61	5.7	21.2	30.2	1.6	50.2	16.3	74.0	-23.8	Pass	54.0	-37.7	Pass		
H - NF	3472.145	29.5	29.5	21.0	31.1	1.9	41.5	41.5	74.0	-32.5	Pass	54.0	-12.5	Pass		
H - NF	3906.145	32.88	32.9	20.5	32.3	2.0	46.7	46.7	74.0	-27.3	Pass	54.0	-7.3	Pass		
H - NF	4340.145	31.39	31.4	20.3	32.5	2.1	45.7	45.7	74.0	-28.3	Pass	54.0	-8.3	Pass		
Tab	le Result:		Pass	by	-7.3	dB						Worst Freq:	1301.56	MHz		
	1DCC-OATS-0	3M-I			EMIR-HIGI Asset #151				Cable 2: Antenna; Yellow Horn Preselector:							

Rev: 20-Dec-2010 Spectrum Analyzers / Receivers / Preselectors Rental SA #1 (Brown)	<b>Range</b> 9kHz-26.5GHz	<b>MN</b> E4407B	<b>Mfr</b> Agilent	<b>SN</b> SG44210511	<b>Asset</b> 1510	Cat I	Calibration Due 25-Mar-2011
Radiated Emissions Sites 1DCC-OATS-3M-I	FCC Code 719150	IC Code 2762A-8	VCCI Code R-3109			Cat II	Calibration Due 7-Jul-2011
Preamps /Couplers Attenuators / Filters 1517 HF Preamp	<b>Range</b> 1-18GHz	MN CS	Mfr CS	SN N/A	<b>Asset</b> 1517	Cat II	Calibration Due 1-Jun-2011
<b>Antennas</b> Yellow Horn	<b>Range</b> 1-18GHz	<b>MN</b> 3115	Mfr EMCO	<b>SN</b> 9608-4898	Asset 37	Cat I	Calibration Due 27-May-2011
Meteorological Meters Temp./Humidity/Atm. Pressure Gauge 1DCC-OATS-3M-I Thermohygrometer		MN 7400 Perception II 35519-044	Mfr Davis Control Company	<b>SN</b> N/A 72457635	<b>Asset</b> 965 1334	Cat I II	Calibration Due 6-Apr-2011 18-Aug-2011
<b>Cables</b> REMI-High-21	<b>Range</b> 9kHz - 26.5GHz		Mfr C-S			Cat II	Calibration Due 8-Jan-2011

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

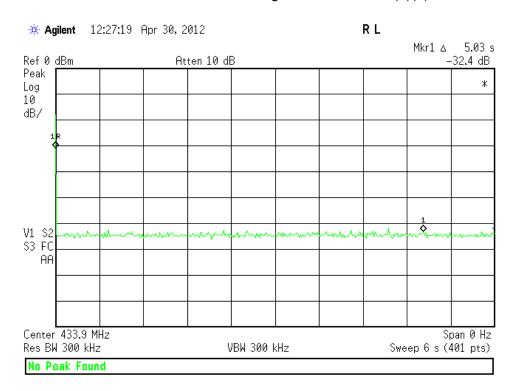
**Note:** 15.231(b)(3) states "Spurious emissions shall be attenuated to the average...limits shown in this table [15.231(e)] or to the general limits shown in Section 15.209, whichever limit permits a higher field strength." Since the emissions above meet the 15.209 limits, those limits are displayed in the data table to show worst case.

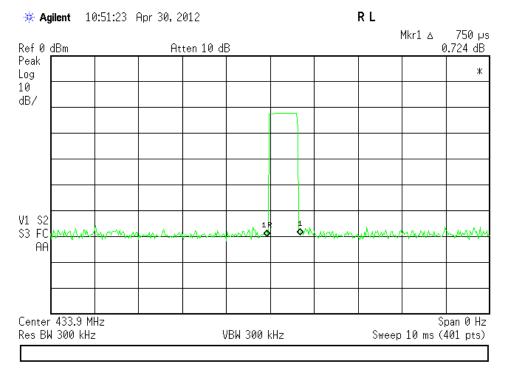




#### Timing Requirements

"A manually operated transmitter shall employ a switch that will automatically deactivate the transmitter within not more than 5 seconds of being released" 15.231(a)(1)









#### 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 x 10 <sup>-8</sup>	1 x 10 <sup>-7</sup>		
RF power, conducted	0.40dB	0.75dB		
Maximum frequency deviation:  • Within 300Hz and 6kHz of audio frequency / Within 6kHz and 25kHz of audio frequency	3.4% 0.3dB	5% 3dB		
Adjacent channel power	1.9dB	3dB		
Conducted spurious emission of transmitter, valid up to 12.75GHz	2.39dB	3dB		
Conducted emission of receivers	1.3dB	3dB		
Radiated emission of transmitter, valid up to 26.5GHz	3.9dB	6dB		
Radiated emission of transmitter, valid up to 80GHz	3.3dB	6dB		
Radiated emission of receiver, valid up to 26.5GHz	3.9dB	6dB		
Radiated emission of receiver, valid up to 80GHz	3.3dB	6dB		
Humidity	2.37%	5%		
Temperature	0.7℃	1.0℃		
Time	4.1%	10%		
RF Power Density, Conducted	0.4dB	3dB		
DC and low frequency voltages	1.3%	3%		
Voltage (AC, <10kHz)	1.3%	2%		
Voltage (DC)	0.62%	1%		
The above reflects a 95% confidence level				



#### Conditions Of Testing

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

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





- 13. CLIENT SHALL, EXCEPT TO THE EXTENT OF COMPANY'S LIABILITY TO CLIENT HEREUNDER (WHICH IN NO EVENT SHALL EXCEED THE LIMITATION OF LIABILITY HEREIN), HOLD HARMLESS AND INDEMNIFY THE COMPANY, ITS AFFILIATES AND THEIR RESPECTIVE DIRECTORS, OFFICERS, EMPLOYEES, AGENTS AND SUBCONTRACTORS AGAINST ALL ACTUAL OR ALLEGED THIRD PARTY CLAIMS FOR LOSS, DAMAGE OR EXPENSE OF WHATSOEVER NATURE AND HOWSOEVER ARISING FROM OR RELATING TO (i) THE PERFORMANCE, PURPORTED PERFORMANCE OR NON-PERFORMANCE OF ANY SERVICES BY THE COMPANY OR (ii) THE SALE, RESALE, MANUFACTURE, DISTRIBUTION OR USE OF ANY TESTED GOODS.
- 14. EXCEPT AS MAY OTHERWISE BE EXPRESSLY AGREED TO IN WRITING BY THE COMPANY AND NOTWITHSTANDING ANY PROVISION TO THE CONTRARY CONTAINED HEREIN OR IN ANY TEST REPORT, NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, IS MADE.
- 15. (A) IN NO EVENT WHATSOEVER SHALL THE COMPANY BE LIABLE FOR ANY CONSEQUENTIAL, SPECIAL, INCIDENTAL, EXEMPLARY OR PUNITIVE DAMAGES IN CONNECTION WITH, RELATING TO OR ARISING OUT OF THE TEST REPORT OR THE SERVICES PROVIDED BY THE COMPANY HEREUNDER, INCLUDING WITHOUT LIMITATION LOSS OF OR DAMAGE TO PROPERTY; LOSS OF INCOME, PROFIT OR USE; OR ANY CLAIMS OR DEMANDS MADE AGAINST CLIENT OR ANY OTHER PERSON BY ANY THIRD PARTY IN CONNECTION WITH, RELATING TO OR ARISING OUT OF THE SERVICES PROVIDED BY THE COMPANY HEREUNDER.

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

- 16. The Company shall not be liable for any loss or damage resulting from any delay or failure in performance of its obligations hereunder resulting directly or indirectly from any event of force majeure or any event outside the control of the Company. If any such event occurs, the Company may immediately cancel or suspend its performance hereunder without incurring any liability whatsoever to Client.
- 17. Company's services, including these Conditions, shall be governed by, and construed in accordance with, the local laws of the country where the Company performs the tests or, in the case of tests performed in the United States of America, the laws of Massachusetts without regard to conflicts of laws principles. If any aspect(s) of these Conditions is found to be illegal or unenforceable, the validity, legality and enforceability of all remaining aspects of these Conditions shall not in any way be affected or impaired thereby. Any proceeding related to the subject matter hereof shall be brought, if at all, in the courts of the country where the Company performs the tests or, in the case of tests performed in the United States of America, in the courts of Massachusetts. Client waives the right to interpose any counterclaim or setoffs of any nature in any litigation arising hereunder.

Rev.160009121(2)\_#684340 v13CS



