



Bureau Veritas Consumer Products Services Inc.

Report No	ET1200-4
Client	Hanchett Entry Systems, Inc.
Address	10027 S. 51st St. Ste. 102 Phoenix, AZ 85044
Phone	1-623-582-4626 x 7137
Items tested FCC ID IC FRN	Aperio V3 Wireless Reader (Model: R100-V3) VC3-R100V3 7160A-R100V3 0016550824
Equipment Code Emission Designator	DXX - Part 15 Low Power Communication Device Transmitter 2K72F1D
FCC/IC Rule Parts	CFR Title 47 FCC Part 15.225, ISED Canada RSS-210 Issue 9 Annex B.6
Test Dates	June 5 <sup>th</sup> to 10 <sup>th</sup> , 2019
Results	As detailed within this report
Prepared by	Christopher Hamel – EMC Engineer
Authorized by	Yundis Fazilogju – Sr. Engineer
Issue Date	7/29/19
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.

Bureau Veritas Consumer Products Services Inc.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 and Test Methodology	
Product Tested - Configuration Documentation	
Statement of Conformity	5
Modifications Required for Compliance	
Test Results	6
Fundamental Reading	6
Emission Mask	7
99% Occupied Bandwidth	7
Radiated Spurious Emissions	8
Temperature Stability	10
Measurement Uncertainty	
Conditions Of Testing	
lacktriangle	

Form Final Report REV 12-07-15



## Summary and Test Methodology

This test report supports an application for a Class II permissive change of a transmitter operating pursuant to:

CFR Title 47 FCC Part 15.225, ISED Canada RSS-210 Issue 9 Annex B.6

EUT is an RFID reader module operating at 13.56MHz. All testing was performed in accordance with ANSI C63.10 2013. Emissions were maximized around 3 orthogonal planes (X, Y and Z). Worst case results were recorded. EUT has an integral loop antenna.

EUT operating voltage is 3V DC via 2xAA batteries.

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

The environmental conditions during testing are documented on the associated data tables. Following bandwidths were used during emissions testing.

Frequency	RBW	VBW
9kHz-150kHz	200Hz	1kHz
150kHz-30MHz	9kHz	30kHz
30MHz-1GHz	120kHz	1MHz





# Product Tested - Configuration Documentation

	E	UT Configuration							
Work Order:	T1200	T1200							
Company:	Hanchett Entry Systems, Inc., DBA ASSA AB	LOY (EMS&OEM) Group Company							
Company Address:	10027 S. 51st St. Ste. 102								
	Phoenix, AZ, 85044								
Contact:	Baruch Spence								
	MN	MN PN SN							
EUT:	R100-V3								
EUT Description:	Aperio V3 Wireless Reader								
EUT TX Frequency:	13.56MHz								
	_	_							
Software Operating Mode D	escription:								
Client supplied software	_	_	_						
	_	_							
Performance Criteria:									
EUT shall continue to update of	card read events in a log displayed by EAC Simu	lator software.							



# Statement of Conformity

EUT complied with the following requirements:

RSS-GEN	RSP-100	RSS 210	Part 15	Comments
6.4			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.
3.2			15.31	The EUT was tested in accordance with the
				measurement standards in this section.
6.13.2			15.33	Frequency range was investigated according to this
				section, unless noted in specific rule section under
				which the equipment operates.
6.13.1			15.35	The EUT emissions were measured using the
				measurement detector and bandwidth specified in
				this section, unless noted in specific rule section
_				under which the equipment operates.
6.8			15.203	EUT has an integral loop antenna
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	N/A. EUT is battery powered.
			15.225	The unit complies with the requirements of 15.225
		Annex B.6		The unit complies with the requirements of RSS-210
				Annex B.6
6.7				Occupied Bandwidth measurements were made.

# Modifications Required for Compliance

None





# **Test Results**

# Fundamental Reading

(a) The field strength of any emissions within the band 13.553-13.567 MHz shall not exceed 15,848 microvolts/meter at 30 meters.

### **MEASUREMENTS / RESULTS**

Date:	05-Jun-19									V	ork Order:	T1200	
Engineer:	AKZ								<b>EUT Operat</b>	ing Voltage/	Frequency:	Battery	
Temp:	22°C		Humidity:	41%		Pressure:	1010mbar			_			
	Freque	ncy Range:	13.56MHz					Measurement Distance: 3 m					
Notes:													
								FCC 15.209			FCC 15.255	i	
Antenna Polarization	Frequency	Reading	Preamp Factor	Antenna Factor	Cable Factor	Adjusted 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	
ntenna Perpen	dicular	X- F /											
X	13.56	42.3	0.0	10.9	0.4	53.6	69.5	-15.9	Pass	124.0	-70.4	Pass	
Υ	13.56	48.9	0.0	10.9	0.4	60.2	69.5	-9.3	Pass	124.0	-63.8	Pass	
Z	13.56	49.5	0.0	10.9	0.4	60.8	69.5	-8.7	Pass	124.0	-63.2	Pass	
ntenna Parallel													
X	13.56	46.1	0.0	10.9	0.4	57.4	69.5	-12.1	Pass	124.0	-66.6	Pass	
Υ	13.56	51.5	0.0	10.9	0.4	62.8	69.5	-6.7	Pass	124.0	-61.2	Pass	
Z	13.56	51.0	0.0	10.9	0.4	62.3	69.5	-7.2	Pass	124.0	-61.7	Pass	
ntenna Ground													
Х	13.56	39.0	0.0	10.9	0.4	50.3	69.5	-19.2	Pass	124.0	-73.7	Pass	
Y	13.56	36.3	0.0	10.9	0.4	47.6	69.5	-21.9	Pass	124.0	-76.4	Pass	
Z	13.56	37.2	0.0	10.9	0.4	48.5	69.5	-21.0	Pass	124.0	-75.5	Pass	
Table	Result:	Pass	by	-61.2	dB				W	orst Freq:	13.56	MHz	
Test Site:	EMI Chamber	1	Cable 1:	Asset #24	56			Cable 2:	Asset #2586	; <u> </u>	Cable 3:		
Analyzer:	Asset #2093		Preamp:	None				Antenna:	Asset 2615	Loop F	reselector:		

### **Test Equipment Used**

Range	MN	Mfr	SN	Asset	Cat	Calibrated on	Calibration Due
20Hz-8.4GHz	N9038A	Agilent	MY53290009	1168255	1	8/23/2018	8/23/2019
FCC Code	IC Code	VCCI Code	Range	Asset	Cat	Calibrated on	Calibration Due
719150	2762A-6	A-0015	30-1000MHz	1685	1	12/7/2018	12/7/2020
Range	MN	Mfr	SN	Asset	Cat	Calibrated on	Calibration Due
9KHz-30MHz	6502	EMCO	2049	2615	1	10/30/2018	10/30/2019
	MN	Mfr	SN	Asset	Cat	Calibrated on	Calibration Due
	BA928	Oregon Scientific	C3166-1	831	- 1	5/15/2019	5/15/2020
	1235C97	Control Company	181683830	2659	1	4/3/2019	4/3/2020
Range		Mfr			Cat	Calibrated on	Calibration Due
9KHz-18GHz		MegaPhase			II	10/31/2018	10/31/2019
9KHz-18GHz		Florida RF			II	3/19/2019	3/19/2020
	20Hz-8.4GHz  FCC Code 719150  Range 9KHz-30MHz  Range 9KHz-18GHz	20Hz-8.4GHz N9038A  FCC Code IC Code 719150 2762A-6  Range MN 9KHz-30MHz 6502  MN BA928 1235C97  Range 9KHz-18GHz	20Hz-8.4GHz	20Hz-8.4GHz	20Hz-8.4GHz	20Hz-8.4GHz	20Hz-8.4GHz



ACCREDITED
Testing Cert. No. 1827-01

### Emission Mask

- (a) The field strength of any emissions within the band 13.553-13.567 MHz shall not exceed 15,848 microvolts/meter at 30 meters.
- (b) Within the bands 13.410-13.553 MHz and 13.567-13.710 MHz, the field strength of any emissions shall not exceed 334 microvolts/meter at 30 meters.
- (c) Within the bands 13.110-13.410 MHz and 13.710-14.010 MHz the field strength of any emissions shall not exceed 106 microvolts/meter at 30 meters.
- (d) The field strength of any emissions appearing outside of the 13.110-14.010 MHz band shall not exceed the general radiated emission limits in §15.209.

#### **MEASUREMENTS / RESULTS**

Not applicable. EUT passes 15.209 limits based on its fundamental readings.

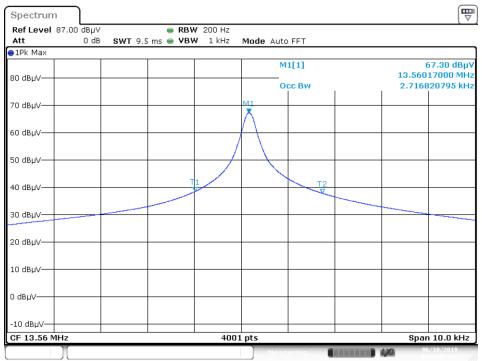
### 99% Occupied Bandwidth

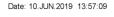
#### REQUIREMENT

When an occupied bandwidth is not specified in the applicable RSS, the transmitted signal bandwidth to be reported is its 99% emission bandwidth, as calculated or measured. [RSS-GEN 6.7]

99% Occupied Bandwidth = 2.72 kHz

Note: RBW used is higher than 5% of the OBW due to the narrowness of the emission being measured.







ACCREDITED
Testing Carl No. 1827-01

\_\_\_\_\_

# Radiated Spurious Emissions

The field strength of any emissions appearing outside of the 13.110-14.010 MHz band shall not exceed the general radiated emission limits in §15.209. [15.225(d)]

#### **MEASUREMENTS / RESULTS**

Date:	05-Jun-19									٧	Vork Order	: T1200
Engineer:	AKZ								<b>EUT Operat</b>	ing Voltage/	Frequency	: Battery
Temp:	21°C		Humidity:	41%		Pressure:	1010mbar					
	Freque	ncy Range:	9kHz-30Ml	Ηz					Measureme	nt Distance:	3 m	
Notes:												
								FCC 15.209				
Antenna			Preamp	Antenna	Cable	Adjusted			ı	1		
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)
90	0.009	51.8	0.0	19.7	0.0	71.5	128.5	-57.0	Pass			
90	1.0	15.4	0.0	10.7	0.2	26.3	67.6	-41.3	Pass			
0	29.6	12.1	0.0	8.1	0.5	20.7	69.5	-48.8	Pass			
Table	e Result:	Pass	by	-48.8	dB				We	orst Freq:	29.6	6 MHz
Test Site:	EMI Chamber	1	Cable 1:	Asset #24	56			Cable 2:	Asset #2586	;	Cable 3	:
Analyzer:	2093		Preamp:	None				Antenna:	Asset 2615 I	Loop F	reselector	
Ssoft Radiate	d Emissions Ca	alculator	v 1.017.215							Cop	yright Curtis-Str	aus LLC 2000
	ng = Reading -											

Bureau Veritas Consumer Product Services Inc.
Radiated Emissions Electric Field 3m Distance
Top Peaks Horizontal 30-1000MHz
Test Site - CH1
Notes:
Conditions - 22°C; 41%RH; 1010mBar
0
Test Engineer - AKZ

Data Taken at 05:08:57 PM, Wednesday, June 05, 2019

Frequency (MHz)	Peak Reading (dBμV)	Correction Factor (dB/m)	Adjusted Peak Amplitude (dBµV/m)	Lim2: FCC_pt15_209 (dBµV/m)	Lim2 Margin (dB)	Lim2 Test Results (Pass/Fail)	Worst Margin Lim2 (dB)
115.894	40.6	-11.2	29.4	43.5	-14.1	PASS	
123.484	43.2	-9.8	33.4	43.5	-10.1	PASS	-10.1
125.206	43.5	-10.4	33.1	43.5	-10.4	PASS	
129.158	39.8	-10.9	28.9	43.5	-14.6	PASS	
802.484	34.8	-1.7	33.1	46	-12.9	PASS	
885.419	32.7	-0.6	32.1	46	-13.9	PASS	





0

Bureau Veritas Consumer Product Services Inc. Radiated Emissions Electric Field 3m Distance 30-1000MHz Vertical Data Notes:

0

Work Order - T1200 EUT Power Input - Battery Test Site - CH1 Conditions - 22°C; 41%RH; 1010mBar Test Engineer - AKZ

0

Data Taken at 05:08:57 PM, Wednesday, June 05, 2019

Data Take	1 41 05.00.5	77 1 101, 0000	incoday, sa	110 05, 201.	,		
Frequency	Raw QP Reading	Correction Factor	Adjusted QP Amplitude	Lim2: FCC_pt15_2 09	Margin to Lim2	Test Results Lim2	Worst Margin Lim2
(MHz)	(dBμV)	(dB/m)	(dBµV/m)	(dBµV/m)	(dB)	(Pass/Fail)	(dB)
33.762	35.7	-6.4	29.3	40	-10.7	PASS	
35.636	40.6	-7.8	32.8	40	-7.2	PASS	
37.579	44.3	-9.2	35.1	40	-4.9	PASS	-4.9
40.579	45.5	-11.5	33.9	40	-6.1	PASS	
42.241	42.5	-12.7	29.8	40	-10.2	PASS	
48.568	43.7	-16.4	27.3	40	-12.7	PASS	

Rev. 6/20/2019	Danes	MN	Mfr	SN	Asset	Cat	Calibrated on	Calibration Due
Spectrum Analyzers / Receivers / Preselectors	Range							
Rental MXE EMI Receiver(1168255)	20Hz-8.4GHz		Agilent	MY53290009		1	8/23/2018	8/23/2019
2093 MXE EMI Receiver	20Hz-26.5GHz	N9038A	Agilent	MY51210181	2093	-	11/21/2018	11/21/2019
Radiated Emissions Sites	FCC Code	IC Code	VCCI Code	Range	Asset	Cat	Calibrated on	Calibration Du
EMI Chamber 1	719150	2762A-6	A-0015	30-1000MHz	1685	1	12/7/2019	12/7/2020
Preamps/Couplers Attenuators / Filters	Range	MN	Mfr	SN	Asset	Cat	Calibrated on	Calibration Du
185710 Rental PA	9KHz-1GHz	310	SONOMA INSTRUMENT	185710		II	4/16/2019	4/16/2020
Antennas	Range	MN	Mfr	SN	Asset	Cat	Calibrated on	Calibration Du
Red-Black Bilog	30-2000MHz	JB1	Sunol	A091604-2	1106	1	4/26/2019	4/26/2021
2615 Active Loop Antenna	9KHz-30MHz	6502	EMCO	2049	2615	1	10/30/2018	10/30/2019
Meteorological Meters/Chambers		MN	Mfr	SN	Asset	Cat	Calibrated on	Calibration Du
Weather Clock (Pressure Only)		BA928	Oregon Scientific	C3166-1	831	1	5/15/2019	5/15/2020
Asset #2659		1235C97	Control Company	181683830	2659	ı	4/3/2019	4/3/2020
Cables	Range		Mfr			Cat	Calibrated on	Calibration Du
Asset #2455	9KHz-18GHz		MegaPhase			II	10/29/2018	10/29/2019
Asset #2456	9KHz-18GHz		MegaPhase			II	10/31/2018	10/31/2019
Asset #2474	9KHz-18GHz		MegaPhase			II	10/31/2018	10/31/2019
Asset #2586	9KHz-18GHz		Florida RF			П	3/19/2019	3/19/2020

Test Equipment Used





# Temperature Stability

Limit: The frequency tolerance of the carrier signal shall be maintained within  $\pm 0.01\%$  of the operating frequency over a temperature variation of -20 degrees to +50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. [FCC 15.225]

#### **MEASUREMENTS / RESULTS**

13.56MHz \* 0.01% = 1356Hz Allowable tolerance

Freque	ency Stability	y Under	Extreme C	onditions	
<b>Date:</b> 6/6/20	)19			Work Order:	T1200
Engineer: Anna	Vancheva				
Nominal Voltage: 3V DC	Min Voltage:	2.7V DC	Max Voltage:	3.3V DC	
Temperature	Voltage	Amplitude	Amplitude Delta	Frequency	Frequency Delta
°C	V	(dBm)	(dB)	(MHz)	(MHz)
-20C	Nominal	52.33	-0.22	13.560000	0.000000
-10C	Nominal	53.98	1.43	13.560000	0.000000
0C	Nominal	51.67	-0.88	13.560000	0.000000
10C	Nominal	53.21	0.66	13.560000	0.000000
	Minimum	50.96	-1.59	13.560000	0.000000
Nominal (20C)	Nominal	52.55	Reference	13.560000	Reference
	Maximum	53.07	0.52	13.560000	0.000000
30C	Nominal	52.42	-0.13	13.560000	0.000000
40C	Nominal	53.89	1.34	13.560000	0.000000
50C	Nominal	51.68	-0.87	13.560000	0.000000
Test Site: Temp	/Hum Chamber #18	Antenna:	Small Loop	Analyzer:	2200
		Cable 1:	: CEMI-13	Voltmeter:	1866

### **Test Equipment Used**

Rev. 6/17/2019 Spectrum Analyzers / Receivers / Preselectors FSV40 Signal Analyzer	Range 10Hz-40GHz	MN FSV40	Mfr ROHDE & SCHWARZ	<b>SN</b> 101551	Asset 2200	Cat 	Calibration Due 10/1/2019	Calibrated on 10/1/2018
Antennas	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Small Loop	10kHz-30MHz	PLA-130/A	ARA	1024	755	- 1	7/23/2020	7/23/2018
Cables	Range		Mfr			Cat	Calibration Due	Calibrated on
CEMI-13	9kHz - 2GHz		C-S			II	4/10/2020	4/10/2019
Meteorological Meters/Chambers		MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Temp/Humidity Chamber #18		EPX-2H	Espec	137664	1645	- 1	1/2/2020	1/2/2019
RMS Voltmeters/Current Clamp		MN	Mnfr	SN	Asset	Cat	Calibration Due	Calibrated on
DMM		114	Fluke	25660084	1866	- 1	4/22/2020	4/22/2019

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





## 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°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		



ACCREDITED

Latino Cort No. 4827 of

### **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 Bureau Veritas Consumer Products Services Inc. (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.



ACCREDITED
Testing Cert. No. 1627-01

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 Bureau Veritas Consumer Products Services Inc.may use to delegate the performance of work can be provided upon request.

  Rev.160009121(2)\_#684340 v14CS



