



# Test Report



Bureau Veritas Consumer Products Services Inc.

Report No	ET1800-5
Client	Harman International Industries Inc. Mark Bowman
Address	30001 Cabot Dr. Novi, MI 48377
Phone	1-248-254-7751
Items tested	INFO3.5 CSM MY20
FCC ID	2AHPN-BE2843
IC	6434C-BE2843
Equipment Type	Part 15 Spread Spectrum Transmitter
Equipment Code	DSS
FCC/IC Rule Parts	CFR Title 47 FCC Part 15.247, ISED Canada RSS-247 Issue 2
Test Dates	07/13/2019 to 07/28/2019
Results	As detailed within this report
Prepared by	 _____ Christopher Hamel – EMC Engineer
Authorized by	 _____ Arik Zwirner – EMC Engineer
Issue Date	<u>7/30/19</u>
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.



**Curtis-Straus LLC, a wholly owned subsidiary of BV CPS**  
One Distribution Center Circle, #1 • Littleton, MA • TEL (978) 486-8880 • FAX (978) 486-8828



## Contents

Contents.....	2
Summary.....	3
Test Methodology.....	4
Product Tested - Configuration Documentation .....	5
Statement of Conformity.....	6
Test Results .....	7
Radiated Spurious Emissions .....	7
Measurement Uncertainty.....	11
Conditions Of Testing.....	12

Report REV Sep-08-2017 - YF



## Summary

This test report supports an application for certification of a transmitter operating pursuant to: CFR Title 47 FCC Part 15.247, ISED Canada RSS-247 Issue 2

The product is the INFO3.5 CSM MY20. It is a frequency hopping spread spectrum transmitter that operates in the 2402 – 2480 MHz frequency range.

Antenna Type: Non-detachable PCB trace

Gain: 5.98dBi

In INFO3.5 CSM MY20 2 resistors were moved on the main board. Software changes were also implemented that are not RF related. This report is a supplement to Bureau Veritas Consumer Products Services Inc. Test Report ES1636-3. Only radiated emissions in the 30MHz-1GHz frequency range were measured for this reason.

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

Modifications: None

Test samples were received in good condition.

Issue No.	Reason for change	Date Issued
1	Original Release	July 30, 2019

**Test Methodology**

All testing was performed according to the following rules/procedures/documents;  
 CFR Title 47 FCC Part 15.247, ISED Canada RSS-247 Issue 2, ISED Canada RSS-Gen Issue 5 and ANSI C63.10-2013.

Radiated emissions were maximized by rotating the device around 3 orthogonal planes (X, Y and Z) as well as varying the test antenna’s height and polarity. EUT antenna is internal and cannot be maximized separately.

EUT operating voltage is 13.8V DC from a vehicle battery only, therefore AC line conducted emissions requirements are not applicable.

<b>Frequency</b>	<b>RBW</b>	<b>VBW</b>
0.15-30MHz	9kHz	30kHz
30-1000MHz	120kHz	1MHz
1-25GHz	1MHz	3MHz



**Product Tested - Configuration Documentation**

EUT Configuration										
<b>Work Order:</b>	T1800									
<b>Company:</b>	Harman International Inc.									
<b>Company Address:</b>	30001 Cabot Dr. Novi MI 48377									
<b>Contact:</b>	Mark Bowman									
	MN			PN			SN			
<b>EUT:</b>	INFO3.5 CSM MY20			--			--			
<b>EUT Description:</b>	Automotive Infotainment Unit with Bluetooth/WLAN									
<b>EUT Max Frequency:</b>	5825 MHz									
<b>EUT Min Frequency:</b>	5825 MHz									
<b>EUT Components</b>	MN					SN				
Head Unit	INFO3.5 CSM MY20									
<b>Support Equipment</b>	MN					SN				
ADB Dev board										
Port Label	Port Type	# ports	# populated	cable type	shielded	ferrites	length (m)	in/out	under test	comment
USB Port	other	1	1	other	Yes	No	1.5	in	yes	
Power/Low speed signal	other	2	2	other	No	No	1	in	yes	
Display	other	1	1	other	Yes	No	1.5	in	yes	
Back up cam	other	1	1	other	Yes	No	2	in	yes	Orange Fakra
External 2.4G wifi	other	1	1	other	Yes	No		in	yes	Beige Fakra
GPS port	other	1	1	other	Yes	No	2	in	yes	Blue fakra Cable
AM/FM Antenna	other	2	2	other	Yes	No	2	in	yes	Black Fakra am and fm, Green FM only
Sdards	other	1	1	other	Yes	No	1.5	in	yes	Yellow Fakra Cable
<b>Software Operating Mode Description:</b>										
EUT placed in required Bluetooth test modes via R&S CMW communication tester.										



**Statement of Conformity**

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	No special accessories are required for compliance.
3, 6.1			15.31	The EUT was tested in accordance with the measurement standards in this section.
6.13			15.33	Frequency range was investigated according to this section, unless noted in specific rule section under which the equipment operates.
8.1			15.35	The EUT emissions were measured using the measurement detector and bandwidth specified in this section, unless noted in specific rule section under which the equipment operates.
8.3			15.203	EUT employs a non-detachable internal PCB trace antenna with 5.98dBi gain.
8.10			15.205 15.209	The fundamental is not in a Restricted band and the spurious and harmonic emissions in the Restricted bands comply with the general emission limits of 15.209 or RSS-Gen as applicable
8.8			15.207	The unit complies with AC line conducted emissions requirements.

Refer to Appendix A of this report for antenna port conducted measurements.



## Test Results

### Radiated Spurious Emissions

#### LIMITS

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

Radiated emissions were maximized by rotating the device around 3 orthogonal planes (X, Y and Z) and worst case emissions observed in X orientation. All the results below are for the worst case orientation only.

#### MEASUREMENTS / RESULTS

**Worst data rate DH1, Low channel 2402MHz, Mid channel 2441MHz, and High channel 2480MHz.**

Bureau Veritas Consumer Product Services Inc.	Work Order - T1800
Radiated Emissions Electric Field 3m Distance	EUT Power Input - 13.8V DC
30-1000MHz Vertical Data	Test Site - CH1
	Conditions - 24.2°C; 41%RH; 1010mBar
Notes:	Test Engineer - CCH
Bluetooth DH1 Low channel	EUT Maximum Frequency - 5835MHz

Data Taken at Thursday July 25, 2019

Frequency (MHz)	Raw QP Reading (dBµV)	Correction Factor (dB/m)	Adjusted QP Amplitude (dBµV/m)	Lim1: FCC_pt15_2 09 (dBµV/m)	Margin to Lim1 (dB)	Test Results Lim1 (Pass/Fail)	Worst Margin Lim1 (dB)
32.805	34.8	-5.8	29	40	-11	PASS	
621.433	37.8	-4.8	32.9	46	-13.1	PASS	
690.523	34.4	-3.9	30.5	46	-15.5	PASS	
759.571	38.8	-2.7	36.1	46	-9.9	PASS	-9.9
828.587	37.4	-1.9	35.5	46	-10.5	PASS	
966.678	28.5	0.5	29	54	-25	PASS	

Bureau Veritas Consumer Product Services Inc. Work Order - T1800  
 Radiated Emissions Electric Field 3m Distance EUT Power Input - 13.8V DC  
 30-1000MHz Horizontal Data Test Site - CH1  
 Conditions - 24.2°C; 41%RH; 1010mBar  
 Notes: Test Engineer - CCH  
 Bluetooth DH1 Low channel EUT Maximum Frequency - 5835MHz

Data Taken at Thursday July 25, 2019

Frequency (MHz)	Raw QP Reading (dBµV)	Correction Factor (dB/m)	Adjusted QP Amplitude (dBµV/m)	Lim1: FCC_pt15_2 09 (dbµV/m)	Margin to Lim1 (dB)	Test Results Lim1 (Pass/Fail)	Worst Margin Lim1 (dB)
32.776	33.6	-5.8	27.8	40	-12.2	PASS	
621.453	38.7	-4.8	33.8	46	-12.2	PASS	
690.483	33.7	-3.9	29.8	46	-16.2	PASS	
759.555	39.3	-2.7	36.6	46	-9.4	PASS	-9.4
828.615	36.3	-1.9	34.5	46	-11.5	PASS	
966.707	31.4	0.5	31.9	54	-22.1	PASS	

Bureau Veritas Consumer Product Services Inc. Work Order - T1800  
 Radiated Emissions Electric Field 3m Distance EUT Power Input - 13.8V DC  
 30-1000MHz Vertical Data Test Site - CH1  
 Conditions - 24.2°C; 41%RH; 1010mBar  
 Notes: Test Engineer - CCH  
 Bluetooth DH1 Middle channel EUT Maximum Frequency - 5835MHz

Data Taken at Thursday July 25, 2019

Frequency (MHz)	Raw QP Reading (dBµV)	Correction Factor (dB/m)	Adjusted QP Amplitude (dBµV/m)	Lim1: FCC_pt15_2 09 (dBµV/m)	Margin to Lim1 (dB)	Test Results Lim1 (Pass/Fail)	Worst Margin Lim1 (dB)
32.577	34.5	-5.7	28.9	40	-11.1	PASS	-11.1
525.55	31.9	-6.4	25.6	46	-20.4	PASS	
528.469	35.4	-6.3	29.1	46	-16.9	PASS	
552.419	40	-5.7	34.4	46	-11.6	PASS	
759.555	36.2	-2.7	33.5	46	-12.5	PASS	
966.688	30.4	0.5	31	54	-23	PASS	





Bureau Veritas Consumer Product Services Inc. Work Order - T1800  
 Radiated Emissions Electric Field 3m Distance EUT Power Input - 13.8V DC  
 30-1000MHz Horizontal Data Test Site - CH1  
 Conditions - 24.2°C; 41%RH; 1010mBar  
 Notes: Test Engineer - CCH  
 Bluetooth DH1 Middle channel EUT Maximum Frequency - 5835MHz

Data Taken at Thursday July 25, 2019

Frequency (MHz)	Raw QP Reading (dBµV)	Correction Factor (dB/m)	Adjusted QP Amplitude (dBµV/m)	Lim1: FCC_pt15_2 09 (dbµV/m)	Margin to Lim1 (dB)	Test Results Lim1 (Pass/Fail)	Worst Margin Lim1 (dB)
32.908	30.9	-5.9	25	40	-15	PASS	
524.484	30.4	-6.4	23.9	46	-22.1	PASS	
529.032	29.9	-6.3	23.6	46	-22.4	PASS	
529.771	31.4	-6.3	25.1	46	-20.9	PASS	
532.444	31.8	-6.1	25.7	46	-20.3	PASS	
552.405	36.7	-5.7	31	46	-15	PASS	-15

Bureau Veritas Consumer Product Services Inc. Work Order - T1800  
 Radiated Emissions Electric Field 3m Distance EUT Power Input - 13.8V DC  
 30-1000MHz Vertical Data Test Site - CH1  
 Conditions - 24.2°C; 41%RH; 1010mBar  
 Notes: Test Engineer - CCH  
 Bluetooth DH1 High channel EUT Maximum Frequency - 5835MHz

Data Taken at Thursday July 25, 2019

Frequency (MHz)	Raw QP Reading (dBµV)	Correction Factor (dB/m)	Adjusted QP Amplitude (dBµV/m)	Lim1: FCC_pt15_2 09 (dbµV/m)	Margin to Lim1 (dB)	Test Results Lim1 (Pass/Fail)	Worst Margin Lim1 (dB)
32.865	34.2	-5.9	28.3	40	-11.7	PASS	
529.482	30.6	-6.3	24.3	46	-21.7	PASS	
536.87	33.2	-6	27.2	46	-18.8	PASS	
538.213	33.8	-6	27.9	46	-18.1	PASS	
552.4	40.3	-5.7	34.6	46	-11.4	PASS	-11.4
897.655	30.8	-0.7	30.1	46	-15.9	PASS	



Bureau Veritas Consumer Product Services Inc. Work Order - T1800  
 Radiated Emissions Electric Field 3m Distance EUT Power Input - 13.8V DC  
 30-1000MHz Horizontal Data Test Site - CH1  
 Conditions - 24.2°C; 41%RH; 1010mBar  
 Notes: Test Engineer - CCH  
 Bluetooth DH1 High channel EUT Maximum Frequency - 5835MHz

Data Taken at Thursday July 25, 2019

Frequency (MHz)	Raw QP Reading (dBµV)	Correction Factor (dB/m)	Adjusted QP Amplitude (dBµV/m)	Lim1: FCC_pt15_2 09 (dbµV/m)	Margin to Lim1 (dB)	Test Results Lim1 (Pass/Fail)	Worst Margin Lim1 (dB)
530.223	35.4	-6.3	29.1	46	-16.9	PASS	
534.363	34.4	-6.1	28.3	46	-17.7	PASS	
538.764	35.4	-5.9	29.5	46	-16.5	PASS	
552.405	40.3	-5.7	34.6	46	-11.4	PASS	-11.4
759.575	33.7	-2.7	31	46	-15	PASS	
946.59	24.5	0.3	24.8	46	-21.2	PASS	

Rev. 7/24/2019								
Spectrum Analyzers / Receivers / Preselectors		Range	MN	Mfr	SN	Asset	Cat	Calibration Due
2093 MXE EMI Receiver		20Hz-26.5GHz	N9038A	Agilent	MY51210181	2093	I	11/21/2019
Rental MXE EMI Receiver(1170725)		20Hz-26.5GHz	N9038A	Agilent	MY51210151	1170725	I	5/30/2020
Radiated Emissions Sites		FCC Code	IC Code	VCCI Code	Range	Asset	Cat	Calibration Due
EMI Chamber 1		719150	2762A-6	A-0015	30-1000MHz	1685	I	12/7/2020
EMI Chamber 2		719150	2762A-7	A-0015	30-1000MHz	1686	I	12/7/2020
Preamps / Couplers Attenuators / Filters		Range	MN	Mfr	SN	Asset	Cat	Calibration Due
2311 PA		1-1000MHz	PAM-103	COM-POWER	441174	2311	II	10/29/2019
185710 Rental PA		9KHz-1GHz	310	SONOMA INSTRUMENT	185710		II	4/16/2020
Antennas		Range	MN	Mfr	SN	Asset	Cat	Calibration Due
Red-Black Bilog		30-2000MHz	JB1	Sunol	A091604-2	1106	I	4/26/2021
Red-Brown Bilog		30-2000MHz	JB1	Sunol	A0032406	1218	I	3/11/2021
Meteorological Meters/Chambers			MN	Mfr	SN	Asset	Cat	Calibration Due
Weather Clock (Pressure Only)			BA928	Oregon Scientific	C3166-1	831	I	5/15/2020
Asset #2659			1235C97	Control Company	181683830	2659	I	4/3/2020
Asset #2660			1235C97	Control Company	181659682	2660	I	4/3/2020
Cables		Range		Mfr			Cat	Calibration Due
Asset #2456		9KHz-18GHz		MegaPhase			II	10/31/2019
Asset #2464		9KHz-18GHz		MegaPhase			II	10/31/2019
Asset #2465		9KHz-18GHz		MegaPhase			II	10/31/2019
Asset #2466		9KHz-18GHz		MegaPhase			II	10/31/2019
Asset #2585		9KHz-18GHz		Pasternack			II	5/24/2020
Asset #2606		9KHz-18GHz		MegaPhase			II	4/2/2020

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

TEU



Curtis-Straus LLC, a wholly owned subsidiary of BV CPS  
 One Distribution Center Circle, #1 • Littleton, MA • TEL (978) 486-8880 • FAX (978) 486-8828



### Measurement Uncertainty

The listed uncertainties are the worst case uncertainty for the entire range of measurement. Please note that the uncertainty values are provided for informational purposes only and are not used in determining the PASS/FAIL results.

Measurement	Expanded Uncertainty k=2	Maximum allowable uncertainty
Radiated Emissions (30-1000MHz)		
NIST	5.6dB	N/A
CISPR	4.6dB	5.2dB (Ucisp)
Radiated Emissions (1-26.5GHz)	4.6dB	N/A
Radiated Emissions (above 26.5GHz)	4.9dB	N/A
Magnetic Radiated Emissions	5.6dB	N/A
Conducted Emissions		
NIST	3.9dB	N/A
CISPR	3.6dB	3.6dB (Ucisp)
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)	$3.23 \times 10^{-8}$	$1 \times 10^{-7}$
RF power, conducted	0.40dB	0.75dB
Maximum frequency deviation:		
• Within 300Hz and 6kHz of audio frequency / Within 6kHz and 25kHz of audio frequency	3.4%	5%
Adjacent channel power	0.3dB	3dB
Conducted spurious emission of transmitter, valid up to 12.75GHz	1.9dB	3dB
Conducted emission of receivers	2.39dB	3dB
Conducted emission of receivers	1.3dB	3dB
Radiated emission of transmitter, valid up to 26.5GHz	3.9dB	6dB
Radiated emission of transmitter, valid up to 80GHz	3.3dB	6dB
Radiated emission of receiver, valid up to 26.5GHz	3.9dB	6dB
Radiated emission of receiver, valid up to 80GHz	3.3dB	6dB
Humidity	2.37%	5%
Temperature	0.7°C	1.0°C
Time	4.1%	10%
RF Power Density, Conducted	0.4dB	3dB
DC and low frequency voltages	1.3%	3%
Voltage (AC, <10kHz)	1.3%	2%
Voltage (DC)	0.62%	1%
The above reflects a 95% confidence level		



## Conditions Of Testing

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

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



15. (A) IN NO EVENT WHATSOEVER SHALL THE COMPANY BE LIABLE FOR ANY CONSEQUENTIAL, SPECIAL, INCIDENTAL, EXEMPLARY OR PUNITIVE DAMAGES IN CONNECTION WITH, RELATING TO OR ARISING OUT OF THE TEST REPORT OR THE SERVICES PROVIDED BY THE COMPANY HEREUNDER, INCLUDING WITHOUT LIMITATION LOSS OF OR DAMAGE TO PROPERTY; LOSS OF INCOME, PROFIT OR USE; OR ANY CLAIMS OR DEMANDS MADE AGAINST CLIENT OR ANY OTHER PERSON BY ANY THIRD PARTY IN CONNECTION WITH, RELATING TO OR ARISING OUT OF THE SERVICES PROVIDED BY THE COMPANY HEREUNDER.

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

16. The Company shall not be liable for any loss or damage resulting from any delay or failure in performance of its obligations hereunder resulting directly or indirectly from any event of force majeure or any event outside the control of the Company. If any such event occurs, the Company may immediately cancel or suspend its performance hereunder without incurring any liability whatsoever to Client.

17. Company's services, including these Conditions, shall be governed by, and construed in accordance with, the local laws of the country where the Company performs the tests or, in the case of tests performed in the United States of America, the laws of Massachusetts without regard to conflicts of laws principles. If any aspect(s) of these Conditions is found to be illegal or unenforceable, the validity, legality and enforceability of all remaining aspects of these Conditions shall not in any way be affected or impaired thereby. Any proceeding related to the subject matter hereof shall be brought, if at all, in the courts of the country where the Company performs the tests or, in the case of tests performed in the United States of America, in the courts of Massachusetts. Client waives the right to interpose any counterclaim or setoffs of any nature in any litigation arising hereunder.

The complete list of the Approved Subcontractors Curtis-Straus may use to delegate the performance of work can be provided upon request.  
Rev.160009121(2)\_#684340 v14CS

