
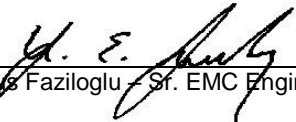




Test Report



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

Report No	ES0621-5
Client	Harman International Industries, Incorporated
Address	30001 Cabot Drive Novi MI 48377
Phone	1-248-785-2513
Items tested	PV602
FCC ID	2AHPN-BE2841
IC	6434C-BE2841
Testing For	Collocated Spurious Emissions
FCC/IC Rule Parts	CFR Title 47 FCC Part 15.247, ISED Canada RSS-247 Issue 2
Test Dates	03/30/2018 to 05/03/2018
Results	As detailed within this report
Prepared by	 Christopher Hamel – EMC Engineer
Authorized by	 Yunus Faziloglu – Sr. EMC Engineer
Issue Date	5/16/2018
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.

Contents

Contents2
Summary3
Test Methodology4
Product Tested - Configuration Documentation5
Statement of Conformity6
Test Results7
 Radiated Spurious Emissions7
Measurement Uncertainty11
Conditions Of Testing12

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 “PV602” automotive infotainment unit with Bluetooth and WLAN
 This report is for collocated spurious emissions measurements when 2.4GHz WLAN and Bluetooth radios are transmitting simultaneously.

There is no other simultaneous transmission configuration possible in the device.

There are two variants to the product with the same model number:

HVIN (Model)	FVIN	Remarks
PV602	SOC: BR_RC1_R12.0.0_R18102A	Tested variant
PV602	SOC: NA_18.1.1	No hardware differences from the tested variant above. Only non-RF related software differences as follows: <ul style="list-style-type: none"> • Updated AM/FM tuner range and step size for North American markets • Removal of backup camera from software (external camera will not be connected), rear view mirror will have RVC display instead (not connected to the head unit) • HMI tweaks to follow NHTSA guidelines

Test samples were received in good condition.

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

Test Methodology

All testing was performed according to the following rules/procedures/documents;
CFR 47 Part 15.247, RSS-247 Issue 2, RSS-Gen Issue 4, FCC KDB 558074 D01 DTS
Measurement Guidance v04 and ANSI C63.10-2013.

Radiated emissions were tested in the installation orientation of the device in a vehicle.
Emissions were maximized by rotating the device and varying the test antenna's height and
polarity.

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

Following bandwidths were used during radiated spurious emissions testing.

Frequency	RBW	VBW
30-1000MHz	120kHz	1MHz
1-25GHz	1MHz	3MHz

Product Tested - Configuration Documentation

EUT Configuration											
Work Order:	S0621										
Company:	Harman International Industries, Incorporated										
Company Address:	30001 Cabot Drive										
	Novi, MI, 48377										
Contact:	Sarah Rowland										
	MN			PN				SN			
EUT:	PV602										
EUT Description:	Car Stereo Head Unit										
EUT Max Frequency:	5825 MHz										
EUT Min Frequency:	5825 MHz										
EUT Components	MN						SN				
PV602	FCC										
PV602	FCC Conducted										
Support Equipment	MN						SN				
CS Supplied laptop											
USB to Ethernet converter											
Port Label	Port Type	# ports	# populated	cable type	shielded	ferrites	length (m)	in/out	under test	comment	
Power	other	2	2	other	No	No	1	in	yes		
FM/AM	other	1	1	Coaxial	Yes	No	0.1	in	yes		
Back up camera	other	1	1	other	No	No	1	in	yes		
USB	USB	1	1	USB	Yes	No	1	in	yes		
Vehicle port	other	1	1	other	No	No	1	in	yes		
Software Operating Mode Description:											
EUT will operate in constant TX mode for WiFi spurious emissions via client supplied test mode where channels and data rates are selectable.											
EUT will operate in constant TX mode for BT spurious emissions with a link to CMW communication tester where channels and packet types are selectable.											



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 PCB trace antennas.
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	N/A. Vehicle battery powered only.



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)]

MEASUREMENTS / RESULTS

Curtis Straus - a Bureau Veritas Company	Work Order - S0621
Radiated Emissions Electric Field 3m Distance	EUT Power Input - 13.8V DC
Top Peaks Horizontal 30-1000MHz	Test Site - CH 2
Operator: CCH	Conditions - 24.7°C; 21%RH; 1010mBar
Notes:	Witnessed by - N/A
2.4g 802.11b CH 6 1Mbps with Bluetooth CH 78 DH1	EUT Maximum Frequency - 5825MHz

Data Taken at .Thursday May 03, 2018

Frequency (MHz)	Peak Reading (dBµV)	Correction Factor (dB/m)	Adjusted Peak Amplitude (dBµV/m)	Lim1: FCC_pt15_2 09 (dBµV/m)	Lim1 Margin (dB)	Lim1 Test Results (Pass/Fail)	Worst Margin Lim1 (dB)	Lim2: FCC_pt15_2 09 (dBµV/m)	Lim2 Margin (dB)	Lim2 Test Results (Pass/Fail)	Worst Margin Lim2 (dB)
30.897	31.1	-2.1	29	40	-11	PASS	-11	40	-11	PASS	-11
70.716	32	-14.3	17.6	40	-22.4	PASS		40	-22.4	PASS	
122.732	29	-8.6	20.4	43.5	-23.1	PASS		43.5	-23.1	PASS	
466.354	31.1	-4.2	26.9	46	-19.1	PASS		46	-19.1	PASS	
927.274	27.8	3.1	30.8	46	-15.2	PASS		46	-15.2	PASS	

Curtis Straus - a Bureau Veritas Company	Work Order - S0621
Radiated Emissions Electric Field 3m Distance	EUT Power Input - 13.8V DC
Top Peaks Vertical 30-1000MHz	Test Site - CH 2
Operator: CCH	Conditions - 24.7°C; 21%RH; 1010mBar
Notes:	Witnessed by - N/A
2.4g 802.11b CH 6 1Mbps with Bluetooth CH 78 DH1	EUT Maximum Frequency - 5825MHz

Data Taken at .Thursday May 03, 2018

Frequency (MHz)	Peak Reading (dBµV)	Correction Factor (dB/m)	Adjusted Peak Amplitude (dBµV/m)	Lim1: FCC_pt15_2 09 (dBµV/m)	Lim1 Margin (dB)	Lim1 Test Results (Pass/Fail)	Worst Margin Lim1 (dB)	Lim2: FCC_pt15_2 09 (dBµV/m)	Lim2 Margin (dB)	Lim2 Test Results (Pass/Fail)	Worst Margin Lim2 (dB)
30.34	31.2	-1.6	29.6	40	-10.4	PASS	-10.4	40	-10.4	PASS	-10.4
50.249	35.2	-14.8	20.4	40	-19.6	PASS		40	-19.6	PASS	
70.498	34.3	-14.3	19.9	40	-20.1	PASS		40	-20.1	PASS	
74.572	31.7	-14.2	17.6	40	-22.4	PASS		40	-22.4	PASS	
104.496	32.2	-10.7	21.5	43.5	-22	PASS		43.5	-22	PASS	
916.337	28.1	3	31.1	46	-14.9	PASS		46	-14.9	PASS	

30-1000MHz



Curtis Straus - a Bureau Veritas Company						Work Order - S0621							
Radiated Emissions Electric Field 3m Distance						EUT Power Input - 13.8V DC							
1-6GHz Horizontal Data						Test Site - CH 2							
Operator: CCH						Conditions - 24.7°C; 21%RH; 1010mBar							
Notes:						Witnessed by - N/A							
2.4g 802.11b CH 6 1Mbps with Bluetooth CH 78 DH1						EUT Maximum Frequency - 5825MHz							
Data Taken at .Thursday May 03, 2018													
Frequency (MHz)	Raw Peak Reading (dBµV)	Raw Avg Reading (dBµV)	Correction Factor (dB/m)	Adjusted Peak Amplitude (dBµV/m)	Pk Lim: FCC_pt15_2 09_Peak (dBµV/m)	Peak Margin (dB)	Peak Results (Pass/Fail)	Worst Peak Margin (dB)	Adjusted Avg Amplitude (dBµV/m)	Av Lim: FCC_pt15_2 09_Average (dBµV/m)	Avg Margin (dB)	Avg Results (Pass/Fail)	Worst Average Margin (dB)
1438.9	37.5	27.3	4.9	42.4	74	-31.6	PASS		32.3	54	-21.7	PASS	
1865.4	37.2	27.9	8.2	45.4	74	-28.6	PASS		36.1	54	-17.9	PASS	
2153.1	35.8	25.4	11.4	47.2	74	-26.8	PASS		36.8	54	-17.2	PASS	
3181.3	36.3	26	12.4	48.7	74	-25.3	PASS		38.4	54	-15.6	PASS	
5896.9	34.4	24.9	14.4	48.8	74	-25.2	PASS	-25.2	39.3	54	-14.7	PASS	-14.7

Curtis Straus - a Bureau Veritas Company						Work Order - S0621							
Radiated Emissions Electric Field 3m Distance						EUT Power Input - 13.8V DC							
1-6GHz Vertical Data						Test Site - CH 2							
Operator: CCH						Conditions - 24.7°C; 21%RH; 1010mBar							
Notes:						Witnessed by - N/A							
2.4g 802.11b CH 6 1Mbps with Bluetooth CH 78 DH1						EUT Maximum Frequency - 5825MHz							
Data Taken at .Thursday May 03, 2018													
Frequency (MHz)	Raw Peak Reading (dBµV)	Raw Avg Reading (dBµV)	Correction Factor (dB/m)	Adjusted Peak Amplitude (dBµV/m)	Pk Lim: FCC_pt15_2 09_Peak (dBµV/m)	Peak Margin (dB)	Peak Results (Pass/Fail)	Worst Peak Margin (dB)	Adjusted Avg Amplitude (dBµV/m)	Av Lim: FCC_pt15_2 09_Average (dBµV/m)	Avg Margin (dB)	Avg Results (Pass/Fail)	Worst Avg Margin (dB)
1437.1	35	25.2	4.9	39.9	74	-34.1	PASS		30.1	54	-23.9	PASS	
1864.9	35.9	29.4	8.2	44.1	74	-29.9	PASS		37.6	54	-16.4	PASS	
2179.9	35.7	25.5	11.6	47.3	74	-26.7	PASS		37.1	54	-16.9	PASS	
2866	33.9	25	12.8	46.6	74	-27.4	PASS		37.8	54	-16.2	PASS	
5760.1	34.4	25.2	14.4	48.8	74	-25.2	PASS	-25.2	39.5	54	-14.5	PASS	-14.5

1-6GHz



Curtis Straus - a Bureau Veritas Company Radiated Emissions Electric Field 3m Distance 6-18GHz Horizontal Data Operator: CCH Notes: 2.4g 802.11b CH 6 1Mbps with Bluetooth CH 78 DH1						Work Order - S0621 EUT Power Input - 13.8V DC Test Site - CH 2 Conditions - 24.7°C; 21%RH; 1010mBar Witnessed by - N/A EUT Maximum Frequency - 5825MHz							
Data Taken at .Thursday May 03, 2018													
Frequency (MHz)	Raw Peak Reading (dBµV)	Raw Avg Reading (dBµV)	Correction Factor (dB/m)	Adjusted Peak Amplitude (dBµV/m)	Pk Lim: FCC_pt15_2 09_Peak (dBµV/m)	Peak Margin (dB)	Peak Results (Pass/Fail)	Worst Peak Margin (dB)	Adjusted Avg Amplitude (dBµV/m)	Av Lim: FCC_pt15_2 09_Average (dBµV/m)	Avg Margin (dB)	Avg Results (Pass/Fail)	Worst Average Margin (dB)
17946.3	39.5	30.7	19	58.6	83.5	-24.9	PASS	-24.9	49.7	63.5	-13.8	PASS	-13.8

Curtis Straus - a Bureau Veritas Company Radiated Emissions Electric Field 3m Distance 6-18GHz Vertical Data Operator: CCH Notes: 2.4g 802.11b CH 6 1Mbps with Bluetooth CH 78 DH1						Work Order - S0621 EUT Power Input - 13.8V DC Test Site - CH 2 Conditions - 24.7°C; 21%RH; 1010mBar Witnessed by - N/A EUT Maximum Frequency - 5825MHz							
Data Taken at .Thursday May 03, 2018													
Frequency (MHz)	Raw Peak Reading (dBµV)	Raw Avg Reading (dBµV)	Correction Factor (dB/m)	Adjusted Peak Amplitude (dBµV/m)	Pk Lim: FCC_pt15_2 09_Peak (dBµV/m)	Peak Margin (dB)	Peak Results (Pass/Fail)	Worst Peak Margin (dB)	Adjusted Avg Amplitude (dBµV/m)	Av Lim: FCC_pt15_2 09_Average (dBµV/m)	Avg Margin (dB)	Avg Results (Pass/Fail)	Worst Average Margin (dB)
17978.5	42	31.2	19.2	61.2	83.5	-22.3	PASS	-22.3	50.4	63.5	-13.1	PASS	-13.1

6-18GHz

Radiated Emissions Table															
Date: 03-May-18			Company: Harman International			Work Order: S0621									
Engineer: Chris Hamel			EUT Desc: PV602			EUT Operating Voltage/Frequency: 13.8V DC									
Temp: 24.7°C			Humidity: 21%			Pressure: 1010mBar			Measurement Distance: 0.1 m						
Frequency Range: 18-25GHz										EUT Max Freq: 5825MHz					
Notes: No Emissions Found 2.4g 802.11b 1Mbps CH1 with bluetooth DH1 CH39															
Antenna Polarization (H/V)	Frequency (MHz)	Peak Reading (dBµV)	Average Reading (dBµV)	Preamp Factor (dB)	Antenna Factor (dB/m)	Cable Factor (dB)	Adjusted Peak Reading (dBµV/m)	Adjusted Avg Reading (dBµV/m)	FCC Class B High Frequency - Peak			FCC Class B High Frequency - Average			
									Limit (dBµV/m)	Margin (dB)	Result (Pass/Fail)	Limit (dBµV/m)	Margin (dB)	Result (Pass/Fail)	
Table Result:		Pass				by		N/A dB			Worst Freq:		N/A MHz		
Test Site: EMI Chamber 2			Cable 1: Asset #2323			Cable 2: ---			Cable 3: ---						
Analyzer: 1170725			Preamp: 18-26.5GHz			Antenna: 18-26.5GHz Horn			Preselector: ---						
CSsoft Radiated Emissions Calculator v 1.017.203										Copyright Curtis-Straus LLC. 2000					
Adjusted Reading = Reading - Preamp Factor + Antenna Factor + Cable Factor															

18-25GHz



Rev. 5/2/2018

Spectrum Analyzers / Receivers / Preselectors									
	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on	
Rental M XE EMI Receiver(1170725)	20Hz-26.5GHz	N9038A	Agilent	MY51210151	1170725	I	4/10/2019	4/10/2018	
Radiated Emissions Sites									
	FCC Code	IC Code	VCCI Code	Range	Asset	Cat	Calibration Due	Calibrated on	
EMI Chamber 2	719150	2762A-7	A-0015	30-1000MHz	1686	I	12/21/2018	12/21/2016	
EMI Chamber 2	719150	2762A-7	A-0015	1-18GHz	1686	I	12/21/2018	12/21/2016	
Preamps / Couplers Attenuators / Filters									
	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on	
2444 PA	9KHz-6GHz	BBV9744	SCWARZBECK	67	2444	I	2/5/2019	2/5/2018	
2111 HF Preamp	0.5-18GHz	PAM-118A	COM-POWER	551063	2111	II	11/19/2018	11/19/2017	
HF (Yellow)	18-26.5GHz	AFS4-18002650-60-8P-4	CS	467559	1266	II	10/16/2018	10/16/2017	
Antennas									
	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on	
Red-Black Bilog	30-2000MHz	JB 1	Sunol	A091604-2	1106	I	2/28/2019	2/28/2017	
HF (White) Horn	18-26.5GHz	801-WLM	Waveline	758	758	III	Verify before Use	date of test	
Blue Horn	1-18GHz	3117	ETS	157647	1861	I	2/14/2019	2/14/2017	
Meteorological Meters/Chambers									
		MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on	
TH A#2084		HTC-1	HDE		2084	II	3/22/2019	3/22/2018	
Barometric A#2160		5396-0321	Monarch Instruments	4000060	2160	I	4/13/2019	4/13/2017	
Cables									
	Range		Mfr			Cat	Calibration Due	Calibrated on	
Asset #2458	9KHz-18GHz		MegaPhase			II	10/29/2018	10/29/2017	
Asset #2459	9KHz-18GHz		MegaPhase			II	10/29/2018	10/29/2017	
Asset #2465	9KHz-18GHz		MegaPhase			II	10/29/2018	10/29/2017	
Asset #2323	1-26.5GHz	TM26-S1S1-120	MEGAPHASE	17139101 002	2323	II	8/19/2018	8/19/2017	
2489(6dB)	9KHz-18GHz					II	11/27/2018	11/27/2017	

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

Test Equipment Used



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 (Ucisprr)
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 (Ucisprr)
Telco Conducted Emissions (Current)	2.9dB	N/A
Telco Conducted Emissions (Voltage)	4.4dB	N/A
Electrostatic Discharge	11.5%	N/A
Radiated RF Immunity (Uniform Field)	1.6dB	N/A
Electrical Fast Transients	23.1%	N/A
Surge	23.1%	N/A
Conducted RF Immunity	3dB	N/A
Magnetic Immunity	12.8%	N/A
Dips and Interrupts	2.3V	N/A
Harmonics	3.5%	N/A
Flicker	3.5%	N/A
Radio frequency (@ 2.4GHz)	3.23×10^{-8}	1×10^{-7}
RF power, conducted	0.40dB	0.75dB
Maximum frequency deviation:		
• Within 300Hz and 6kHz of audio frequency / Within 6kHz and 25kHz of audio frequency	3.4% 0.3dB	5% 3dB
Adjacent channel power	1.9dB	3dB
Conducted spurious emission of transmitter, valid up to 12.75GHz	2.39dB	3dB
Conducted emission of receivers	1.3dB	3dB
Radiated emission of transmitter, valid up to 26.5GHz	3.9dB	6dB
Radiated emission of transmitter, valid up to 80GHz	3.3dB	6dB
Radiated emission of receiver, valid up to 26.5GHz	3.9dB	6dB
Radiated emission of receiver, valid up to 80GHz	3.3dB	6dB
Humidity	2.37%	5%
Temperature	0.7°C	1.0°C
Time	4.1%	10%
RF Power Density, Conducted	0.4dB	3dB
DC and low frequency voltages	1.3%	3%
Voltage (AC, <10kHz)	1.3%	2%
Voltage (DC)	0.62%	1%
The above reflects a 95% confidence level		



Conditions Of Testing

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

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



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

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

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

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

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