

**APPENDIX I -
SPECIMEN TEST REPORT G19-02LC**

CONTRACT NUMBER 301013685 10.1

TEST REPORT ID#: G19-02LC

LARGE CHAMBER-TEST REPORT
Back to Back Configuration

Sample Data

Client Name : Elite International Forest Ltd.
 Sample Name: 5" White Oak Eng. Handscraped Natural
 Product Type: Flooring
 Thickness: 0.750 "
 Shipping/Storage: Original Boxes
 Condition of sample as received: Good condition
 Arrival Date : 2019-07-19
 Date of Manufacture: Unknown
 Selection Date: Unknown

Conditioning Data

Duration:	From : 2019-07-23	to :	2019-07-30		
Temperature Average:	24.0	°C	Temperature Range:	20.0	to 27.1 °C
Relative Humidity Average:	51.2	%	Relative Humidity Range:	27.7	to 64.5 %
Formaldehyde Background Conditioning:	0.01	ppm	Conditioning period :	167	h
Minimum Distance between panels:	6	"			

Large Chamber Data

Location:	1055 rue du P.E.P.S, Quebec city, Quebec	Date of Test:	2019-07-31
Technologist:	Mathieu Gosselin	Large Chamber Length:	4,48 m
Large Chamber Volume:	25,3 m ³ (893 ft ³)	Large Chamber Width:	2,72 m
Sample Size:	4 Panels of 44.5 " x 47.0 "	Large Chamber Height:	2,08 m
		Number of Surfaces Exposed:	N/A
Loading Ratio Implemented:	0.13 ft ² / ft ³	Number of Panels in Chamber:	4
Temperature Average:	24.8 °C	Temperature Range:	24.6 to 24.9 °C
Relative Humidity Average:	52.9 %	Relative Humidity Range:	52.3 to 53.6 %
Formaldehyde Background (in chamber) :	0.00 ppm	Formaldehyde Chamber Air Supply:	0.01 ppm
Air Change Rate:	0.503 per hour	Chamber is in Positive Pressure	

Spectrophotometer: Milton Roy Spectronic 601 / 030655
 Samples Read Undiluted or Diluted to a 100% Concentration

LARGE CHAMBER -TEST REPORT

Results

Large Chamber Air Sampling	Port	Formaldehyde Concentration	
		At Test	Corrected (To 25°C and 50% RH)
1.0 L/min * 60 min = 60 L	A	0.01 ppm	0.01 ppm
1.0 L/min * 60 min = 60 L	B	0.01 ppm	0.01 ppm
Reported Large Chamber Test Value:		0.01 ppm	0.01 ppm

Emission Rate (Corrected to 25 °C and 50 % RH): **0.011 mg/(m²·h)**

Tests results indicate a precision of within 0.03 ppm of the established norm for this Standard ASTM E1333-14.

Comments:

This test report in no way constitutes or implies product certification, approval or endorsement by FPInnovations, the Standards Council of Canada or any agency of the Canadian Government.

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* Also meets the requirements of ASTM D5582-14, modified for 16-20h conditioning. Accredited by the Standards Council of Canada.

Approuvé par QM	Date
Costel Barbuta	2019-07-24

LARGE CHAMBER TEST DATA

Client Name: Elite International Forest Ltd
 Sample configuration : Back to Back Configuration
 Product Type: Flooring
 Sample Name: 5" White Oak Eng. Handscrapped Natura
 Test number: G19-02LC
 Production Date: Unknown
 Reception manner: Original Boxes
 Condition of sample as received: Good condition

Size: 4 x 44.5 " x 47 "
 x " x "

Selection Date: Unknown
 Arrival Date: 2019-07-19
 Conditionning Starts : 2019-07-23 15:00
 Conditionning Ends : 2019-07-30 14:30

Equipment used for preparation:

Equipment	S/N	Calib. date	Int. Vérif. date	Indicate with (X)	
EPPENDORF Research plus (0.5 - 5 ml)	S/N H17160E	103952	2018-03-14	2019-05-21	<input type="checkbox"/>
EPPENDORF Research plus (100 - 1000µl)	S/N 336398A	103949	2018-03-15	2019-05-21	<input type="checkbox"/>
EPPENDORF Research plus	S/N 406906A	103950	2018-03-15	2019-05-21	<input checked="" type="checkbox"/>
Denver Instrument	S/N P4K2074004	103974	2018-05-08	2019-07-08	<input checked="" type="checkbox"/>
Mettler XS204	S/N B212793656	103989	2018-05-07	2019-07-08	<input checked="" type="checkbox"/>
Milton Roy Spectronic 601	S/N 483662	FCC#030655	2018-05-07	---	<input checked="" type="checkbox"/>
Gilibrator	S/N 0503058-S	FCC#034660	2019-05-23	N/A	<input checked="" type="checkbox"/>
Lufkin Pro Series - Measuring Tape	N/A	FCC#034952	N/A	2018-06-11	<input checked="" type="checkbox"/>

Date: 2019-07-31

Background Test: Date: 2019-07-30

Volume Sampled (Background)	Port	
	A	B
Air flow before (L/min):	1.003	1.006
Air flow after (L/min):	1.012	1.008
Mean flow (L/min):	1.008	1.007
Volume sampled (L):	60.5	60.4

Large Chamber Background (τ = 60 min)		
Port A (Out)	A1: 0.008	[HCHO]
T (°C): 24.5	A2: 0.011	(ppm):
RH (%): 50.9	AVG: 0.010	0.01
Port B (In)	B1: 0.003	[HCHO]
T (°C): 24.6	B2: 0.003	(ppm):
RH (%): 50.4	AVG: 0.003	0.00

Main Test:

Sampling Conditions	
Average Temperature (°C):	24.8
Average Relative Humidity (%):	52.9
Atm. Pressure (mm Hg):	760
Sampling Time (min):	60
Load Level (ft ² /ft ²):	0.13
Chamber Air Flowrate (LPM):	212.0

Volume Sampled (LC Test)		Port	
		A	B
Air flow before (L/min):		1.007	1.008
Air flow after (L/min):		1.005	1.006
Mean flow (L/min):		1.006	1.007
Volume sampled (L):		60.4	60.4

Absorbance Results			
Blank:	0.008	(Subtracted)	
	Port A	Port B	
A1:	0.007	B1:	0.009
A2:	0.007	B2:	0.009
A3:	0.006	B3:	0.008
AVG:	0.007	AVG:	0.009

Final Results		
[HCHO] Port A (ppm):	At test	Corrected
[HCHO] Port B (ppm):	0.01	0.01
Average [HCHO] (ppm):	0.01	0.01
Emission rate for 0.13 loading (mg/(m ² ·h)):		0.011

QA/QC Formaldehyde standard verification

Calibration Curve Date: 2019-07-05 (ref#: 1/74/2019-07-05)
 Solution A concentration: 1005 µg/ml

Cal Curve point check

Calibration Curve Equation (ABS vs µg)
 $y = 18.675 x + -0.0222$

Known Standard [HCHO]: 0.50 µg/mL

Absorbance results	
1	0.122
2	0.116
AVG:	0.119
[HCHO]:	0.55 µg/mL
Recovery:	109.5% YES

0.050 ml from solution A diluted in 100 ml.

Conditioning Room Background

Date: 2019-07-30

τ (min):	64	A1:	0.008
T (°C):	23.4	A2:	0.008
RH (%):	53.5	AVG:	0.008

Average [HCHO] (ppm): 0.01

Performed By: Mathieu Gosselin

Date: 2019-07-31