

LumiLab

Luminance Reflectance Value (LRV) Test Report

LRV Testing of Meganite 100% Acrylic Solid Surfaces

Dated: 06 November 2023

Reference: EG-231100-LL

LumiLab

LRV
Tests

Luminance
Contrast

Tested for: Forest One

Luminance Reflectance Value (LRV) Test Report

Background

Forest One has engaged LumiLab to:

- Undertake luminance reflective value testing of the samples provided to our office; and
- Prepare a Luminance Reflectance Value (LRV) Test Report, presenting the findings of the tests.

Description of Samples

Forty-six (46) samples of Meganite 100% Acrylic Solid Surfaces were provided, with five (5) samples of each.

Each sample measured 100mm long x 100mm wide x 12mm thick, with the exception of those identified with the '*' below, these measured 100mm long x 75mm wide x 12mm thick.

Photos of each sample are provided in Attachment 3.

Technical Reference

This report references Appendix B of Australian Standard (AS) 1428.1-2009 '*Design for access and mobility, Part 1: General requirements for access – New building work*' (**AS 1428.1**)

Laboratory Testing Equipment

LumiLab uses compliant testing apparatus meeting AS 1428.1 Appendix B requirements:

- Model: Konica Minolta CR-400 tristimulus colorimeter
- Illuminating and viewing system: Diffuse illumination/ $0 < \theta < 90^\circ$ (d/0) viewing angle, specular component included. Conforms to JIS Z 8722 condition c standard
- Light source: Pulsed xenon lamp
- Measurement time: 1 second
- Minimum measurement interval: 3 seconds
- Measurement / illumination area; \varnothing 8mm
- Observer: 2° Closely matches CIE 1931 Standard Observer
- Illuminant used: CIE Standard Illuminant D65
- Color space and colorimetric data: CIE for Yxy

Testing Methodology

The following is a summary of the testing methodology, conducted in accordance with requirements of AS 1428.1, Clause B3.3:

- The apparatus was firstly calibrated in accordance with the manufacturer's instructions.
- The tristimulus value 'Y' (LRV measurements) were taken in five (5) random locations in a dry condition.
- As surfaces are not all uniformly coloured, a further fifteen (35) random locations were measured across the five samples of each colour/finish.
- All areas with printing, marks, wear or discolouration were avoided during the testing process.
- The steps outlined above were repeated for each of the 46 groups of samples.
- All testing has been undertaken under dry conditions.
- These results are presented in Appendix 2.

Definitions

The following terms are used in this report:

Term	Definition
Luminance contrast	The light reflected from one surface or component, compared to the light reflected from another surface or component.
LRV	Luminance reflective value
Bowman-Sapolinski equation	To determine the luminance contrast between the samples tested, the LRVs are entered into the Bowman-Sapolinski equation: $C = 125 (Y_2 - Y_1) / (Y_1 + Y_2 + 25)$, where: C = luminance contrast Y1 and Y2 = LRV of each surface

Testing Conditions

The testing was undertaken under the following conditions:

Stage 1:

- Date tested: 22 October 2023
- Consultant: Lee Wilson
- Temperature: 21.9°C
- Humidity: 46%

Stage 2:

- Date tested: 29 October 2023
- Consultant: Lee Wilson
- Temperature: 21.6°C
- Humidity: 46%

All samples were tested on 22 October 2023, with the exception of those identified with the 'Δ' below, these were tested on 29 October 2023.

LRV Test Results

The following are the test results of the tristimulus value Y (LRV):

No.	Sample Name	Code	Mean LRV (Yd)	No.	Sample Name	Code	Mean LRV (Yd)
1	Dark Jet Black *	019X	4.86	24	Kauai Beach *	428A	58.66
2	Dark Starry Starry Night * Δ	508XS	4.77	25	Urban Terrazzo Δ	TT007S	11.35
3	Platinum Granite *	615A	28.65	26	Salmon Terrazzo *	859A	62.70
4	Light Gray Δ	035A	54.14	27	Sage Terrazzo *	860A	60.76
5	Urban Habitat *	704SA	63.25	28	Sapphire Terrazzo *	861A	61.59
6	Cloud Ash Δ	041A	73.89	29	Verde Terrazzo	TT008S	57.80
7	White Glow *	094A	67.54	30	Alpi Terrazzo	TT004	65.42
8	Starry White *	531SA	73.78	31	Fire *	088A	14.76
9	Antarctica *	DC103	84.51	32	Mt Vancouver	M002	4.84
10	Snow White	033A	86.98	33	Charcoal Concrete	M023	8.65
11	Bright White * Δ	001A	91.45	34	Crater Rock	M604	11.50
12	MediWhite * Δ	033Z	86.31	35	Taupe Concrete	M022	17.99
13	Dark Raven Boulder *	810X	5.33	36	Shadow Concrete	M021	24.21
14	Solar Eclipse * Δ	933SA	5.78	37	Mont Blanc	M050	45.29
15	Cinder Concrete *	302A	17.19	38	Modern Concrete	M024	44.38
16	Winter Boulder *	800A	47.66	39	Hazel Cream Δ	M039	63.26
17	Rice Pudding *	905A	67.82	40	Antique Shell Δ	M031	61.57
18	Sandy Shore *	246A	73.17	41	Mt Crema Carrara Δ	M009	71.23
19	Ivory *	072A	70.99	42	Storm Cloud	M032	64.20
20	Blanca Granite *	701A	76.30	43	Mt Carrara Δ	M007	87.05
21	Cotton Boulder *	846A	85.80	44	Soft Statuario	M802	82.20
22	Polar Mist *	290A	77.62	45	Verano White	M040	69.71
23	Ice Storm *	721SA	80.91	46	Mt Jade	M005	71.73

The test measurements for each sample are provided in Attachment 2.

Please contact the undersigned to discuss this report.

Yours sincerely,



Lee Wilson, Director / Access Consultant
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Attachment 1: Statement of Limitations

This report has been prepared in accordance with the agreement between the Client and Egress Group Pty Ltd / LumiLab. Within the limitations of the agreed-upon scope of services, this engagement has been undertaken and performed professionally, by generally accepted practices, using a degree of skill and care ordinarily exercised by members of its profession and consulting practice. No other warranty, expressed or implied, is made.

Egress Group Pty Ltd / LumiLab owns the intellectual property outlined in this report. The report shall only be presented in full and may not be used to support any other objective than those set out in the report, except where Egress Group Pty Ltd provides written approval. The report must not be copied, reproduced, adapted, rebranded, modified or altered in any way. The unauthorised use of this report in any form is prohibited.

It is important to note that the material tested is subject to surface and colour variations. The random nature of testing samples with surface variations will result in different results when retested or tested by different parties. Egress Group Pty Ltd / LumiLab cannot be held accountable or responsible for any variations in LRVs across different samples of the same material tested.

LumiLab is not currently accredited by the National Association of Testing Authorities (NATA).



Attachment 2: LRV Test Results Table

No.	Sample Name	Code	Dry LRV Measurements (Yd)					Mean Dry LRV (Yd)
1	Dark Jet Black	019X	4.86	4.89	5.36	4.82	5.08	4.86
			5.25	4.87	4.91	4.78	4.85	
			4.83	4.97	5.02	5.03	4.76	
			4.83	5.14	5.38	5.30	5.11	
			5.10	5.13	5.13	5.16	4.25	
			4.12	4.01	4.15	4.28	4.19	
			4.13	4.18	5.22	5.14	5.03	
			4.88	4.99	5.18	5.05	5.13	
2	Dark Starry Starry Night	508XS	5.14	4.67	4.82	4.94	4.84	4.77
			4.83	4.74	4.78	4.75	4.79	
			4.62	4.72	4.76	4.76	4.76	
			4.76	4.68	4.72	4.73	4.75	
			4.63	4.70	4.69	5.05	4.71	
			4.79	4.85	4.83	4.75	4.88	
			4.77	4.86	4.83	4.61	4.63	
			5.03	4.64	4.57	4.59	4.87	
3	Platinum Granite	615A	32.43	24.50	30.91	30.45	29.13	28.65
			38.20	32.89	26.16	30.37	27.10	
			22.07	28.75	26.52	27.19	26.39	
			23.43	28.23	29.92	29.81	27.00	
			31.61	26.47	26.72	28.68	35.68	
			28.69	25.73	27.18	26.64	28.21	
			27.04	29.16	28.37	26.25	29.63	
			30.09	30.03	30.73	27.86	29.92	
4	Light Gray	035A	54.03	54.16	53.91	54.04	54.26	54.14
			53.72	53.76	54.19	53.77	53.14	
			54.24	54.10	53.51	54.31	54.14	
			54.18	54.30	54.26	54.33	54.30	
			54.19	54.18	54.39	54.32	54.37	
			53.91	54.07	53.88	54.19	54.40	
			54.06	53.84	54.42	54.45	54.39	
			54.40	54.24	54.52	54.45	54.35	



No.	Sample Name	Code	Dry LRV Measurements (Yd)					Mean Dry LRV (Yd)
5	Urban Habitat	704SA	63.24	62.54	64.82	65.02	65.40	63.25
			60.34	62.58	63.76	62.44	62.98	
			64.45	58.81	63.39	63.95	63.16	
			63.63	59.06	64.49	63.85	60.79	
			63.60	63.09	62.96	61.49	63.86	
			63.77	62.18	63.74	64.47	64.80	
			64.70	64.31	64.38	64.21	62.85	
			65.14	63.27	63.40	63.20	61.92	
6	Cloud Ash	041A	73.87	73.47	73.82	73.91	73.83	73.89
			73.81	73.95	73.97	73.95	73.81	
			73.82	73.87	73.89	73.97	73.81	
			73.94	74.01	74.07	73.88	73.75	
			73.94	73.89	73.91	73.85	73.83	
			73.78	73.99	73.82	73.81	73.93	
			73.86	73.78	74.01	74.01	73.93	
			73.95	74.07	73.98	74.00	73.92	
7	White Glow	094A	66.94	67.35	67.36	67.77	67.79	67.54
			67.81	67.87	67.79	67.59	67.44	
			67.33	66.98	66.92	67.33	67.33	
			67.11	67.60	67.69	67.66	67.77	
			67.84	67.08	67.91	67.82	67.58	
			67.36	67.60	67.45	67.81	67.58	
			67.75	67.88	67.63	67.54	67.68	
			67.44	67.62	67.49	67.50	67.51	
8	Starry White	531SA	74.02	73.89	73.71	74.03	73.85	73.78
			74.05	73.83	73.99	73.78	73.57	
			73.58	73.36	73.74	73.58	73.35	
			73.93	73.80	73.77	73.77	73.68	
			73.81	73.89	73.92	73.81	73.95	
			73.97	73.95	73.91	73.53	73.84	
			73.97	73.74	73.59	73.78	73.78	
			73.71	73.47	73.72	74.06	73.41	
9	Antarctica	DC103	84.37	84.90	84.85	84.05	84.24	84.51
			83.98	84.05	83.71	85.10	84.58	
			84.57	85.62	84.64	85.23	85.32	
			84.57	84.76	84.83	84.98	84.99	
			84.73	85.03	84.79	84.58	83.55	
			84.18	83.49	83.53	84.38	84.64	
			82.43	83.73	84.89	84.70	85.49	
			84.32	84.90	84.72	84.06	84.85	



No.	Sample Name	Code	Dry LRV Measurements (Yd)					Mean Dry LRV (Yd)
10	Snow White	033A	86.74	86.96	86.99	86.67	86.63	86.98
			86.77	86.51	86.55	87.03	87.13	
			87.20	86.94	87.13	87.09	87.06	
			87.19	87.11	87.04	87.13	87.02	
			87.07	86.95	86.85	86.95	87.09	
			87.19	87.15	87.06	87.08	86.84	
			87.20	87.10	86.98	87.06	86.88	
			86.90	86.85	87.14	87.09	86.94	
11	Bright White	001A	91.82	91.78	91.57	91.71	91.74	91.45
			91.82	91.89	91.37	91.30	91.09	
			91.63	91.60	91.68	91.75	91.02	
			91.46	91.52	89.67	91.78	91.39	
			91.74	91.79	91.62	91.83	91.45	
			91.71	91.25	91.58	91.08	91.61	
			91.44	91.38	90.92	91.61	90.98	
			91.32	91.31	91.49	90.89	91.47	
12	MediWhite	033Z	86.65	86.84	86.70	86.76	86.96	86.31
			86.92	87.15	86.93	86.19	86.78	
			85.64	86.67	86.88	86.89	86.06	
			86.75	86.25	86.09	86.56	86.63	
			86.43	85.87	86.72	86.59	86.73	
			86.45	86.45	86.36	86.66	86.79	
			86.20	86.73	83.41	86.26	86.92	
			86.78	86.51	83.19	84.55	84.50	
13	Dark Raven Boulder	810X	6.74	5.38	4.56	4.70	4.76	5.33
			4.73	4.72	4.61	4.76	4.53	
			4.85	5.67	6.10	5.92	5.07	
			4.82	6.26	4.67	5.69	5.19	
			5.59	5.07	5.42	4.86	5.53	
			5.86	5.15	4.32	6.34	5.62	
			5.17	6.44	5.09	7.88	4.37	
			4.78	7.34	4.29	5.03	5.44	
14	Solar Eclipse	933SA	7.01	5.77	5.84	5.66	5.12	5.78
			5.91	4.93	4.91	5.12	5.17	
			7.63	5.99	7.90	6.41	4.90	
			5.47	7.19	7.36	5.38	4.73	
			6.30	5.52	4.87	6.37	4.90	
			5.55	5.84	5.41	5.92	6.05	
			4.95	4.77	6.08	5.92	8.10	
			6.78	4.97	4.80	4.83	4.96	



No.	Sample Name	Code	Dry LRV Measurements (Yd)					Mean Dry LRV (Yd)
15	Cinder Concrete	302A	16.82	17.23	17.21	17.15	17.13	17.19
			17.42	17.09	17.25	17.24	17.41	
			17.24	17.21	16.99	17.26	17.08	
			17.17	17.20	17.04	17.18	17.17	
			17.24	17.23	17.36	17.19	17.11	
			16.99	17.29	17.59	17.19	17.10	
			17.10	17.16	17.15	16.97	17.19	
			17.24	17.37	17.23	17.27	17.26	
16	Winter Boulder	800A	46.10	47.19	50.88	47.95	48.25	47.66
			47.29	48.86	49.40	47.15	49.76	
			47.45	45.60	47.30	47.34	48.72	
			46.89	48.32	47.70	48.21	47.44	
			49.24	47.50	46.17	47.57	49.18	
			44.77	46.98	46.66	47.33	47.58	
			49.27	46.50	47.20	47.10	46.88	
			47.89	48.67	47.25	47.27	47.61	
17	Rice Pudding	905A	66.37	69.45	68.91	67.86	67.33	67.82
			69.13	68.35	67.24	68.18	67.11	
			66.46	68.56	66.77	68.75	67.50	
			67.20	68.75	67.71	67.98	66.52	
			69.68	69.14	66.89	69.37	67.59	
			67.75	65.15	66.61	67.99	67.28	
			68.15	65.57	68.87	68.12	68.42	
			68.46	67.74	68.44	67.62	68.02	
18	Sandy Shore	246A	73.65	73.47	73.70	73.12	73.56	73.17
			73.14	73.19	73.52	73.77	73.21	
			73.38	73.10	72.89	73.09	73.07	
			73.38	72.67	73.01	73.55	72.48	
			72.61	72.70	72.79	73.07	73.30	
			73.06	73.53	73.07	73.10	73.43	
			73.65	72.26	73.43	73.09	73.40	
			73.23	73.22	72.47	72.72	73.70	
19	Ivory	072A	71.28	71.19	71.10	70.94	71.03	70.99
			71.21	71.26	71.09	70.51	70.66	
			70.54	71.12	71.12	70.43	70.55	
			71.00	70.99	70.95	70.99	70.95	
			71.02	71.09	71.04	70.95	71.02	
			70.98	71.02	70.52	70.56	70.91	
			70.98	70.92	71.27	71.28	71.07	
			71.31	70.91	71.29	71.27	71.25	



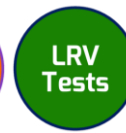
No.	Sample Name	Code	Dry LRV Measurements (Yd)					Mean Dry LRV (Yd)
20	Blanca Granite	701A	75.96	77.60	77.03	76.63	77.00	76.30
			75.36	75.86	75.75	75.88	75.44	
			76.95	76.98	76.44	74.70	75.68	
			75.14	75.44	76.49	75.41	75.46	
			76.65	75.84	77.26	73.35	76.18	
			76.45	78.15	77.14	76.97	76.70	
			76.55	75.39	76.17	76.95	76.84	
			77.37	76.25	77.43	77.05	76.05	
21	Cotton Boulder	846A	86.95	83.94	86.29	88.26	87.29	85.80
			87.37	85.72	84.63	82.80	85.01	
			80.04	87.26	87.25	82.70	85.65	
			86.49	86.20	83.42	87.00	86.44	
			86.07	87.02	86.73	87.48	83.88	
			87.60	83.42	86.51	86.44	84.51	
			83.84	88.14	85.63	85.14	86.14	
			85.66	86.76	86.83	87.47	85.92	
22	Polar Mist	290A	77.21	77.07	78.32	76.69	78.42	77.62
			78.58	77.48	76.54	77.36	77.53	
			78.20	77.60	77.98	78.20	79.47	
			78.57	76.81	78.31	78.39	77.55	
			76.71	77.03	77.59	76.12	77.04	
			77.96	75.70	77.93	77.71	77.10	
			78.98	78.39	74.54	76.47	78.40	
			78.16	77.44	78.41	78.84	78.10	
23	Ice Storm	721SA	81.18	82.64	81.00	81.96	80.89	80.91
			81.86	81.80	79.71	79.50	80.07	
			81.26	80.37	80.62	80.04	79.81	
			80.49	80.75	81.55	81.61	82.05	
			82.73	81.63	79.54	81.85	81.60	
			81.07	82.15	80.37	80.77	78.75	
			80.69	80.90	81.08	78.81	78.92	
			80.93	81.98	81.03	81.73	80.90	
24	Kauai Beach	428A	60.31	60.78	60.97	58.09	58.20	58.66
			61.43	55.34	59.76	53.24	59.16	
			59.85	58.97	57.76	55.44	58.82	
			59.87	58.69	56.71	59.90	54.91	
			52.83	60.37	58.98	56.75	61.17	
			59.22	60.50	58.36	60.39	60.03	
			60.11	60.00	55.71	57.02	60.10	
			54.84	61.85	58.96	61.00	59.83	



No.	Sample Name	Code	Dry LRV Measurements (Yd)					Mean Dry LRV (Yd)
25	Urban Terrazzo	TT007S	10.45	4.75	6.19	13.64	8.12	11.35
			19.12	12.32	8.93	8.85	10.87	
			4.57	4.92	10.27	11.04	11.74	
			4.59	8.83	16.40	5.24	44.15	
			4.18	16.49	17.71	10.92	15.95	
			5.74	12.61	4.90	12.13	13.77	
			8.78	22.50	10.39	9.81	15.01	
			5.05	10.26	8.55	10.99	13.41	
26	Salmon Terrazzo	859A	68.57	54.37	80.16	35.52	54.68	62.70
			55.49	59.28	73.34	57.50	58.48	
			69.57	68.90	62.49	55.84	67.06	
			48.53	60.41	59.88	69.36	55.40	
			65.77	66.92	69.56	66.81	66.42	
			53.93	64.96	60.63	63.37	65.27	
			65.56	64.89	71.20	64.34	69.85	
			63.91	61.90	55.50	65.16	67.38	
27	Sage Terrazzo	860A	55.90	68.23	54.08	66.00	76.65	60.76
			68.58	62.34	60.82	63.99	62.74	
			52.94	60.58	57.88	55.75	64.46	
			61.80	61.29	60.69	70.34	66.73	
			39.86	58.99	66.08	55.90	50.78	
			66.76	59.85	64.27	53.44	70.35	
			52.36	56.64	65.19	63.72	37.57	
			60.32	56.51	64.37	77.15	58.46	
28	Sapphire Terrazzo	861A	69.83	57.72	60.59	69.25	63.70	61.59
			51.95	49.80	62.48	69.01	54.40	
			56.58	64.65	67.43	67.54	54.17	
			64.21	52.79	61.61	69.67	60.49	
			65.74	53.27	54.63	59.60	63.82	
			58.70	61.81	58.06	62.95	62.47	
			61.10	45.73	65.51	65.26	67.70	
			71.71	61.80	64.21	67.08	64.42	
29	Verde Terrazzo	TT008S	60.73	58.44	59.33	58.95	59.34	57.80
			60.32	58.24	58.94	59.17	58.84	
			49.81	57.48	60.91	54.68	57.41	
			59.08	55.45	52.96	59.48	58.97	
			53.77	48.95	60.25	60.84	58.80	
			60.19	59.77	54.79	60.17	57.05	
			57.87	56.42	60.99	55.49	58.31	
			59.67	56.52	55.68	59.84	57.97	



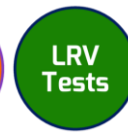
No.	Sample Name	Code	Dry LRV Measurements (Yd)					Mean Dry LRV (Yd)
30	Alpi Terrazzo	TT004	64.80	61.35	70.62	54.01	62.61	65.42
			65.05	75.16	56.55	50.03	66.38	
			68.77	69.36	58.50	66.31	67.03	
			56.75	66.24	71.98	72.59	67.45	
			72.71	67.10	69.74	63.93	58.98	
			65.38	59.65	65.18	72.77	66.57	
			59.05	74.03	69.13	65.75	62.45	
			68.03	61.88	59.88	72.10	71.05	
31	Fire	088A	14.82	14.83	14.68	14.75	14.54	14.76
			14.86	14.69	14.85	14.77	14.76	
			14.82	14.78	14.82	14.85	14.86	
			14.92	14.84	14.76	14.77	14.82	
			14.70	14.74	14.73	14.70	14.72	
			14.73	14.78	14.77	14.78	14.71	
			14.72	14.73	14.76	14.67	14.54	
			14.75	14.78	14.76	14.74	14.68	
32	Mt Vancouver	M002	4.00	3.68	4.52	3.92	6.47	4.84
			6.72	5.29	5.92	3.72	3.73	
			4.72	4.00	5.41	3.80	5.15	
			4.05	4.06	3.79	3.86	4.89	
			3.72	3.77	5.27	4.90	5.93	
			3.75	3.84	4.31	4.20	3.83	
			4.05	4.84	6.74	7.51	4.05	
			5.75	5.97	6.16	4.84	8.55	
33	Charcoal Concrete	M023	8.65	8.28	8.47	9.12	8.80	8.65
			8.73	8.68	8.26	9.07	8.48	
			8.37	8.36	8.66	8.52	8.92	
			8.74	9.26	8.56	8.75	8.52	
			8.77	8.74	8.48	8.59	8.21	
			8.53	8.73	9.25	8.50	8.52	
			8.72	8.53	8.52	8.53	8.89	
			8.91	8.54	8.60	8.61	8.53	
34	Crater Rock	M604	11.80	12.18	11.87	11.48	11.37	11.50
			11.12	11.22	11.66	11.15	11.57	
			10.32	11.11	11.20	11.24	10.88	
			12.45	11.21	12.39	11.58	11.49	
			10.63	11.01	10.98	11.00	11.08	
			12.37	11.91	11.76	9.50	11.98	
			12.12	11.79	11.75	11.82	12.39	
			12.21	11.44	11.89	11.56	11.57	



No.	Sample Name	Code	Dry LRV Measurements (Yd)					Mean Dry LRV (Yd)
35	Taupe Concrete	M022	17.82	18.41	17.84	18.33	18.54	17.99
			18.42	18.44	17.66	18.12	18.03	
			17.83	18.07	18.07	17.96	17.99	
			17.61	17.13	17.23	17.77	17.95	
			18.08	18.15	17.79	17.91	18.20	
			18.20	18.25	18.09	18.18	18.18	
			18.19	17.78	18.21	17.58	17.80	
			18.11	17.40	18.07	18.08	18.30	
36	Shadow Concrete	M021	24.06	24.42	24.29	24.06	24.13	24.21
			23.53	23.59	24.23	24.20	24.36	
			24.70	24.07	24.57	26.04	23.96	
			24.42	23.30	24.39	23.35	23.92	
			24.47	24.43	24.33	24.52	25.53	
			24.59	24.48	24.38	24.40	23.91	
			23.38	23.46	24.33	24.37	23.62	
			24.28	24.44	24.12	23.15	24.70	
37	Mont Blanc	M050	45.94	45.61	44.45	45.93	44.98	45.29
			46.14	44.94	45.12	44.24	45.56	
			44.82	44.58	44.30	43.90	44.26	
			47.16	45.10	44.33	44.53	49.96	
			51.34	46.07	44.20	44.72	44.48	
			44.78	43.52	43.46	43.63	43.49	
			44.11	46.70	47.24	46.48	45.91	
			45.39	44.27	44.65	45.04	46.21	
38	Modern Concrete	M024	43.13	44.28	44.66	44.14	43.84	44.38
			43.05	44.56	45.48	44.44	44.73	
			45.08	44.37	44.72	44.60	44.69	
			44.88	43.93	45.34	45.08	44.49	
			44.99	44.57	44.56	44.54	44.21	
			45.59	44.20	44.04	44.09	44.49	
			43.44	44.29	43.94	43.66	44.26	
			44.08	44.13	43.96	43.58	44.94	
39	Hazel Cream	M039	64.83	64.34	64.10	64.06	65.87	63.26
			63.52	64.90	64.77	62.89	68.04	
			62.50	65.68	65.53	63.23	63.09	
			61.66	61.11	60.83	67.90	70.04	
			62.79	61.70	60.65	66.54	63.21	
			60.92	60.84	63.62	61.91	61.81	
			62.59	62.80	61.72	62.64	60.96	
			63.12	61.64	62.35	58.31	61.46	



No.	Sample Name	Code	Dry LRV Measurements (Yd)					Mean Dry LRV (Yd)
40	Antique Shell	M031	56.78	60.54	61.43	63.28	62.76	61.57
			61.12	61.92	61.93	61.66	60.37	
			59.88	62.51	62.80	61.38	62.80	
			61.22	62.75	61.81	59.99	60.47	
			61.52	61.14	61.11	58.94	62.38	
			62.00	62.70	61.52	60.19	60.97	
			60.15	61.10	63.73	63.34	63.46	
			62.34	63.63	62.92	60.44	61.99	
41	Mt Crema Carrara	M009	70.28	71.54	74.74	55.33	73.14	71.23
			67.52	65.04	53.26	67.62	66.24	
			60.92	75.17	74.52	76.07	76.09	
			75.69	76.41	72.76	75.09	74.06	
			75.95	76.20	74.14	73.76	60.74	
			63.63	68.67	75.83	71.96	74.03	
			74.24	72.44	74.35	73.20	73.81	
			76.19	71.36	76.09	75.41	65.66	
42	Storm Cloud	M032	61.40	57.39	61.58	59.64	65.03	64.20
			60.11	61.95	63.92	65.20	65.38	
			65.84	66.82	65.55	62.97	60.79	
			58.39	60.28	62.01	62.30	58.25	
			61.21	66.81	61.47	63.18	66.98	
			67.69	67.44	64.89	67.34	66.40	
			66.91	65.96	66.44	66.78	66.75	
			67.41	67.47	66.09	67.56	68.36	
43	Mt Carrara	M007	89.42	89.60	87.87	89.22	88.97	87.05
			89.58	88.78	89.88	86.09	77.43	
			87.16	86.54	83.99	87.03	87.11	
			87.04	89.51	88.16	88.84	89.05	
			85.79	85.85	89.34	84.57	89.53	
			88.04	89.75	84.07	87.99	82.64	
			89.84	84.60	88.73	88.34	85.43	
			83.29	85.75	88.37	87.28	81.36	
44	Soft Statuario	M802	83.88	80.57	82.38	80.05	82.69	82.20
			83.76	81.34	82.48	82.16	82.97	
			82.42	82.58	82.10	82.67	80.96	
			82.92	82.33	82.47	82.05	81.84	
			82.61	82.12	82.03	82.53	79.60	
			82.67	81.81	82.56	82.87	79.66	
			82.45	82.78	82.61	82.14	82.65	
			82.60	82.63	82.63	81.85	82.63	



No.	Sample Name	Code	Dry LRV Measurements (Yd)					Mean Dry LRV (Yd)
45	Verano White	M040	71.34	69.54	68.83	69.61	69.49	69.71
			69.95	72.87	69.47	69.44	69.31	
			69.83	69.66	69.47	69.58	69.66	
			68.71	70.72	69.72	70.24	68.90	
			69.90	69.83	69.94	69.74	69.80	
			69.29	69.37	69.82	68.89	69.40	
			69.12	68.90	69.32	69.25	70.31	
			70.41	69.28	69.20	70.75	69.35	
46	Mt Jade	M005	71.03	70.98	71.25	71.13	70.69	71.73
			70.97	71.40	71.69	70.95	70.76	
			71.56	71.66	70.53	72.30	73.59	
			71.46	71.50	73.45	71.54	70.76	
			80.45	71.09	70.82	71.78	73.14	
			70.92	70.66	70.93	71.86	71.55	
			72.05	71.07	72.55	71.50	72.13	
			71.75	71.24	71.09	71.65	71.64	

Attachment 3: Photographs

No.	Sample Name	Code	Photograph 1	Photograph 2
1	Dark Jet Black	019X		
2	Dark Starry Starry Night	508XS		
3	Platinum Granite	615A		
4	Light Gray	035A		
5	Urban Habitat	704SA		
6	Cloud Ash	041A		

No.	Sample Name	Code	Photograph 1	Photograph 2
7	White Glow	094A		
8	Starry White	531SA		
9	Antarctica	DC103		
10	Snow White	033A		
11	Bright White	001A		
12	MediWhite	033Z		

No.	Sample Name	Code	Photograph 1	Photograph 2
13	Dark Raven Boulder	810X		
14	Solar Eclipse	933SA		
15	Cinder Concrete	302A		
16	Winter Boulder	800A		
17	Rice Pudding	905A		
18	Sandy Shore	246A		

No.	Sample Name	Code	Photograph 1	Photograph 2
19	Ivory	072A		
20	Blanca Granite	701A		
21	Cotton Boulder	846A		
22	Polar Mist	290A		
23	Ice Storm	721SA		
24	Kauai Beach	428A		

No.	Sample Name	Code	Photograph 1	Photograph 2
25	Urban Terrazzo	TT007S		
26	Salmon Terrazzo	859A		
27	Sage Terrazzo	860A		
28	Sapphire Terrazzo	861A		
29	Verde Terrazzo	TT008S		
30	Alpi Terrazzo	TT004		

No.	Sample Name	Code	Photograph 1	Photograph 2
31	Fire	088A		
32	Mt Vancouver	M002		
33	Charcoal Concrete	M023		
34	Crater Rock	M604		
35	Taupe Concrete	M022		
36	Shadow Concrete	M021		

No.	Sample Name	Code	Photograph 1	Photograph 2
37	Mont Blanc	M050		
38	Modern Concrete	M024		
39	Hazel Cream	M039		
40	Antique Shell	M031		
41	Mt Crema Carrara	M009		
42	Storm Cloud	M032		

No.	Sample Name	Code	Photograph 1	Photograph 2
43	Mt Carrara	M007		
44	Soft Statuario	M802		
45	Verano White	M040		
46	Mt Jade	M005		