

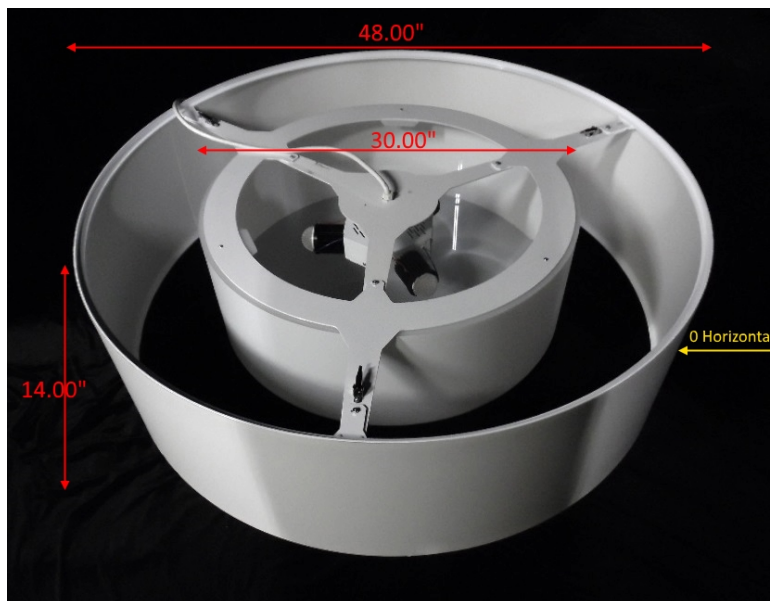
Report of Test

LLIA000901-049

Catalog Number: P54814L2/F11/D61/L413

Pendant mounted, formed white enamel steel and aluminum frame, white interior "lumenate" diffuser and exterior opaque "lumenate" shade, translucent white lower enclosure.

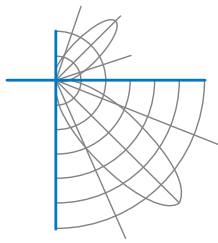
Three white LED modules with clear patterned hemispherical lenses below.
One ERP ESP050W-1200-42 and one ERP ESS030W-0620-42 LED drivers
120.0Vac, 60.00Hz, 0.6123A, 72.29W, 0.984PF, 12.0%THD(i)



Performance Summary

Total Light Output	5171 lm
Luminaire Power	72.3 W
Luminous Efficacy	71.5 lm/W

PREPARED FOR : Lumetta, Inc, 33 Minnesota Avenue, Warwick, RI 02888, USA



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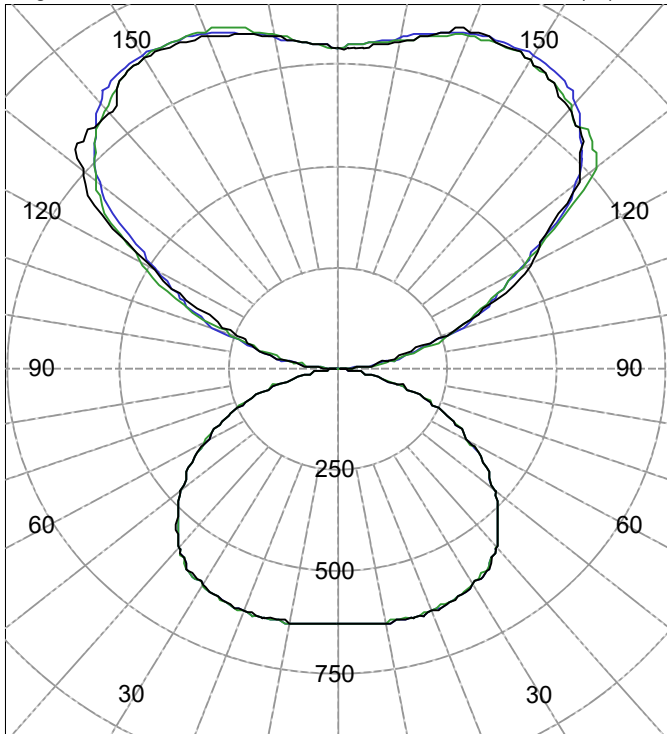
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Legend: C0/C180-Black, C45/C225-Green, C90/C270-Blue (cd)



C180-C270 (Symmetric about C0/C180) C0-C90

AVERAGE LUMINANCE (cd/m²)

Gamma	C0	C45	C90
45.0	456	456	456
55.0	393	393	394
65.0	312	311	312
75.0	188	190	189
85.0	34	35	33

INTENSITY SUMMARY (cd)

Gamma	C-Plane					Flux (lm)
	C0	C22.5	C45	C67.5	C90	
0.0	627	627	627	627	627	
5.0	628	628	628	628	628	60
10.0	634	633	633	632	633	
15.0	635	635	634	634	635	180
20.0	633	632	632	631	632	
25.0	627	626	624	625	626	289
30.0	615	614	613	613	614	
35.0	598	596	595	595	597	372
40.0	563	563	562	562	563	
45.0	517	516	517	517	517	398
50.0	463	463	463	463	463	
55.0	403	404	403	404	404	361
60.0	341	342	341	341	342	
65.0	277	276	276	276	277	273
70.0	208	208	209	209	209	
75.0	136	136	137	137	136	143
80.0	66	65	64	63	64	
85.0	18	19	19	18	18	24
90.0	4	4	3	3	2	

ZONAL FLUX AND PERCENTAGES

Zone	Flux (lm)	% Lamp	% Luminaire
0-30	529	N / A	10.2
0-40	901	N / A	17.4
0-60	1661	N / A	32.1
0-90	2101	N / A	40.6
40-90	1200	N / A	23.2
60-90	441	N / A	8.5
90-180	3069	N / A	59.4
0-180	5171	N / A	100.0

Total Light Output = 5,171 lm

Signed:

Authorized Signatory

Date of test

7-Mar-2018

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Intensity data (cd)

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
0.0	627	627	627	627	627
2.5	627	627	627	627	627
5.0	628	628	628	628	628
7.5	631	631	631	630	631
10.0	634	633	633	632	633
12.5	635	634	634	634	634
15.0	635	635	634	634	635
17.5	635	634	633	633	634
20.0	633	632	632	631	632
22.5	630	630	629	629	630
25.0	627	626	624	625	626
27.5	621	620	619	619	620
30.0	615	614	613	613	614
32.5	607	606	605	605	606
35.0	598	596	595	595	597
37.5	582	582	581	581	582
40.0	563	563	562	562	563
42.5	541	541	541	541	541
45.0	517	516	517	517	517
47.5	491	490	491	491	491
50.0	463	463	463	463	463
52.5	434	434	434	434	434
55.0	403	404	403	404	404
57.5	373	373	372	372	374
60.0	341	342	341	341	342
62.5	309	309	308	308	310
65.0	277	276	276	276	277
67.5	243	243	243	243	243
70.0	208	208	209	209	209
72.5	172	173	173	173	173
75.0	136	136	137	137	136
77.5	100	100	100	100	100
80.0	66	65	64	63	64
82.5	33	33	35	35	34
85.0	18	19	19	18	18
87.5	7	7	7	7	7
90.0	4	4	3	3	2



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120.0Vac, 60.00Hz, 0.6123A, 72.29W, 0.984PF, 12.0%THD(i)

Intensity data (cd)

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
90.0	4	4	3	3	2
92.5	12	11	11	11	11
95.0	45	44	44	42	40
97.5	83	83	95	87	85
100.0	119	124	127	123	126
102.5	149	154	165	150	162
105.0	186	191	223	190	198
107.5	233	251	258	214	247
110.0	284	308	293	238	305
112.5	337	365	331	279	348
115.0	391	412	375	337	389
117.5	461	450	416	407	417
120.0	508	482	468	471	463
122.5	540	525	524	544	517
125.0	578	553	602	632	575
127.5	649	608	696	709	652
130.0	714	680	764	746	710
132.5	743	723	793	795	755
135.0	790	756	814	803	787
137.5	807	799	811	804	811
140.0	823	835	826	814	846
142.5	839	858	847	839	871
145.0	856	873	859	855	882
147.5	867	880	868	867	888
150.0	876	882	874	876	890
152.5	880	885	879	880	889
155.0	882	883	878	877	886
157.5	884	878	877	873	883
160.0	884	875	871	867	878
162.5	872	864	859	855	870
165.0	852	849	845	843	855
167.5	833	834	833	832	841
170.0	817	821	822	821	828
172.5	806	811	812	811	816
175.0	796	802	804	801	806
177.5	791	796	798	794	797
180.0	790	790	790	790	790



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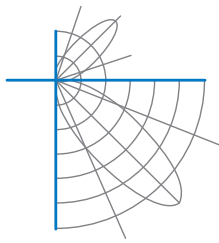
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120.0Vac, 60.00Hz, 0.6123A, 72.29W, 0.984PF, 12.0%THD(i)

Intensity data (cd)

Gamma	C-Plane				
	C90	C112.5	C135	C157.5	C180
0.0	627	627	627	627	627
2.5	627	627	626	626	626
5.0	628	628	628	627	627
7.5	631	631	631	630	630
10.0	633	634	633	633	632
12.5	634	635	635	634	634
15.0	635	636	635	634	634
17.5	634	635	635	634	633
20.0	632	634	633	632	632
22.5	630	631	631	629	629
25.0	626	627	627	625	625
27.5	620	622	622	620	620
30.0	614	616	615	614	613
32.5	606	608	608	606	606
35.0	597	599	598	597	596
37.5	582	583	583	582	582
40.0	563	564	564	564	564
42.5	541	542	542	542	542
45.0	517	517	518	518	519
47.5	491	491	492	492	492
50.0	463	463	464	464	465
52.5	434	434	435	435	435
55.0	404	404	405	405	404
57.5	374	373	374	374	373
60.0	342	342	342	343	342
62.5	310	310	310	310	309
65.0	277	277	277	277	276
67.5	243	244	244	244	243
70.0	209	209	209	209	209
72.5	173	172	173	173	173
75.0	136	135	136	136	137
77.5	100	99	99	99	99
80.0	64	65	65	63	62
82.5	34	32	32	33	34
85.0	18	17	17	17	17
87.5	7	7	7	6	6
90.0	2	3	3	3	3



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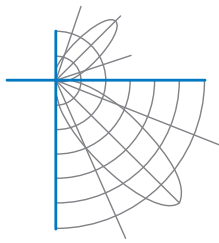
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Intensity data (cd)

Gamma	C-Plane				
	C90	C112.5	C135	C157.5	C180
90.0	2	3	3	3	3
92.5	11	10	10	10	10
95.0	40	39	40	42	46
97.5	85	76	77	87	86
100.0	126	113	116	138	132
102.5	162	147	150	162	161
105.0	198	189	183	229	197
107.5	247	250	222	287	220
110.0	305	294	271	329	244
112.5	348	340	343	363	286
115.0	389	401	411	388	354
117.5	417	460	467	414	417
120.0	463	510	512	454	481
122.5	517	566	553	521	555
125.0	575	634	627	602	653
127.5	652	711	679	682	723
130.0	710	751	716	763	760
132.5	755	787	750	803	808
135.0	787	798	785	831	812
137.5	811	803	807	836	813
140.0	846	820	822	832	813
142.5	871	835	844	863	822
145.0	882	849	863	884	864
147.5	888	867	877	892	874
150.0	890	884	886	893	883
152.5	889	895	888	889	882
155.0	886	898	888	882	879
157.5	883	895	886	876	875
160.0	878	888	884	871	870
162.5	870	877	875	864	859
165.0	855	860	863	854	849
167.5	841	845	850	846	840
170.0	828	829	835	835	829
172.5	816	815	819	822	818
175.0	806	801	805	809	806
177.5	797	792	796	800	796
180.0	790	790	790	790	790



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Coefficients Of Utilization - Zonal Cavity Method

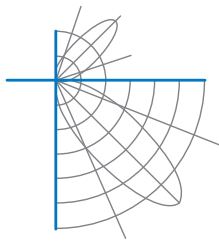
Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
	RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	
0	105	105	105	105	96	96	96	96	78	78	78	62	62	62	48	48	48	41
1	96	91	87	84	87	83	80	77	68	66	64	55	53	52	42	41	40	34
2	87	79	73	68	79	73	67	63	60	56	53	48	45	43	37	35	33	28
3	79	70	62	56	72	64	57	52	52	48	44	42	39	36	32	30	28	24
4	72	61	53	47	65	56	49	44	46	41	37	37	33	30	29	26	24	20
5	66	54	46	40	60	50	43	37	41	36	32	33	29	26	26	23	21	17
6	61	49	41	35	55	45	37	32	37	31	27	30	26	23	23	20	18	15
7	56	44	36	30	51	40	33	28	33	28	24	27	23	20	21	18	16	13
8	52	40	32	27	47	36	29	25	30	25	21	25	20	18	19	16	14	12
9	48	36	28	23	44	33	26	22	28	22	19	22	18	16	18	15	13	10
10	45	33	26	21	41	30	24	19	25	20	17	21	17	14	16	13	11	9

For absolute test reports, CUs are expressed as a percentage of total lumen output. Calculations were based on published IES procedures, and are based on the zonal cavity method. Basic assumptions: 1) Room surfaces are lambertian reflectors. 2) Incident flux on each surface is uniformly distributed. 3) The room is spectrally neutral. When luminaires are not evenly distributed throughout the room, or do not exhibit lateral symmetry, CU values may differ from actual performance.

Circle of Light Plot

Height(ft)	Illuminance at Nadir (fc)	Beam Width (across 50% Nadir Illum)	
		0-180	90-270
6.0	17.4	8.71	8.71
8.0	9.8	11.61	11.61
10.0	6.3	14.52	14.51
12.0	4.4	17.42	17.42
14.0	3.2	20.32	20.32
16.0	2.4	23.23	23.22

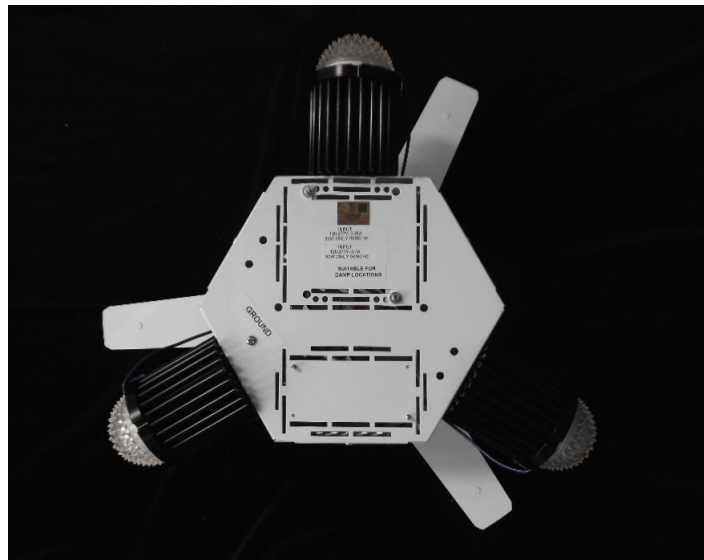
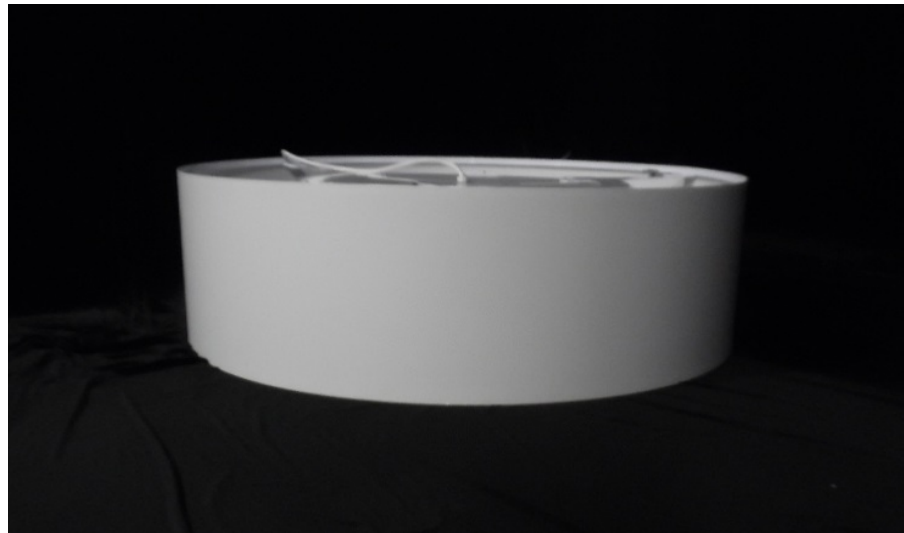


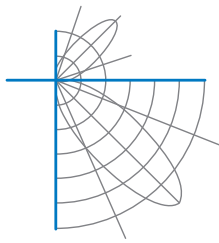
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Test Distance 9.5 m
Test Temperature 25.0 °C

Notes

The laboratory has not participated in the selection of samples to be tested. All testing is performed on the understanding that the significance of the report is limited to the extent that the test sample is representative of production units.

Tested in accordance with the applicable sections of publications: IES LM-79-08 (Sec. 12), IES LM-16-93, IES LM-58-13, CIE 13.3:1995, CIE 15:2004, ANSI C78.377:2015, ANSI C82.77-10:2014.

The luminous intensity values, and other derived quantities, contained in this report are based on the absolute data, as measured.

Prorating the performance of the sample for the use of other component combinations (such as lamp / LED / Ballast / driver), or for use in different environmental conditions than that tested, may produce erroneous results.

This report is free of erasures and corrections.

Photometric intensity values are reported using the CIE Gamma coordinate system as defined in CIE publication number 121.

This report may contain data that are not covered by the NVLAP accreditation. Quantities marked with * are not covered.

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