



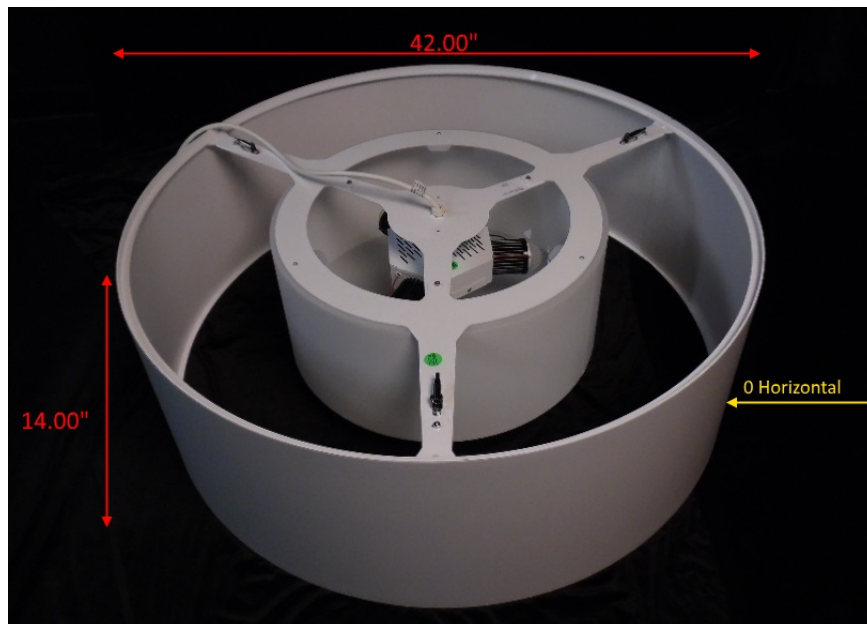
# Report of Test

## LLIA000901-047

Catalog Number: P54214L2/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, 0.6002A, 71.03W, 0.986PF, 10.6%THD(i)



### Performance Summary

Total Light Output	4758 lm
Luminaire Power	71.0 W
Luminous Efficacy	67.0 lm/W

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



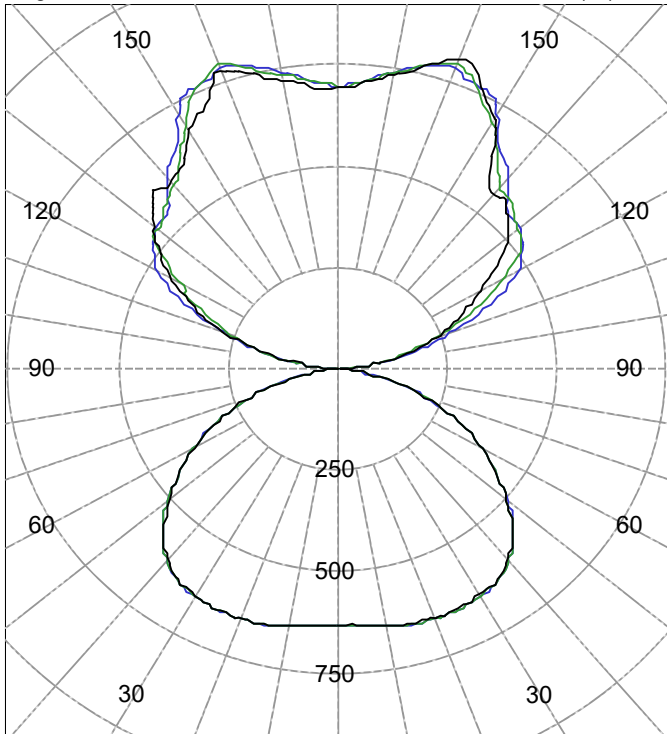
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Legend: C0/C180-Black, C45/C225-Green, C90/C270-Blue (cd)



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

**AVERAGE LUMINANCE (cd/m<sup>2</sup>)**

Gamma	C0	C45	C90
45.0	1781	1783	1788
55.0	1446	1441	1445
65.0	1058	1060	1060
75.0	576	574	568
85.0	111	109	101

**INTENSITY SUMMARY (cd)**

Gamma	C-Plane					Flux (lm)
	C0	C22.5	C45	C67.5	C90	
0.0	630	630	630	630	630	
5.0	632	632	633	634	633	61
10.0	641	642	643	644	643	
15.0	648	649	650	650	650	184
20.0	651	652	653	654	654	301
25.0	650	651	652	653	654	
30.0	644	645	647	648	648	397
35.0	632	634	635	637	637	
40.0	606	607	607	608	609	432
45.0	560	561	560	561	562	
50.0	502	503	502	502	504	392
55.0	439	438	438	438	439	
60.0	372	371	371	371	372	297
65.0	301	301	301	301	301	
70.0	228	228	228	228	227	153
75.0	147	147	147	147	145	
80.0	70	70	70	68	67	27
85.0	24	24	24	23	22	
90.0	4	4	5	4	3	

**ZONAL FLUX AND PERCENTAGES**

Zone	Flux (lm)	% Lamp	% Luminaire
0-30	546	N / A	11.5
0-40	943	N / A	19.8
0-60	1766	N / A	37.1
0-90	2243	N / A	47.1
40-90	1300	N / A	27.3
60-90	477	N / A	10.0
90-180	2515	N / A	52.9
0-180	4758	N / A	100.0

Total Light Output = 4,758 lm

Signed:

Authorized Signatory

Date of test

26-Feb-2018

Date of report

2-Mar-2018



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**Intensity data (cd)**

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
0.0	630	630	630	630	630
2.5	629	629	630	630	630
5.0	632	632	633	634	633
7.5	637	637	638	639	639
10.0	641	642	643	644	643
12.5	645	646	647	647	647
15.0	648	649	650	650	650
17.5	650	651	652	653	653
20.0	651	652	653	654	654
22.5	651	652	653	654	655
25.0	650	651	652	653	654
27.5	647	649	650	651	652
30.0	644	645	647	648	648
32.5	639	640	642	643	643
35.0	632	634	635	637	637
37.5	622	623	625	626	626
40.0	606	607	607	608	609
42.5	585	585	586	586	587
45.0	560	561	560	561	562
47.5	532	533	532	532	534
50.0	502	503	502	502	504
52.5	471	471	470	471	472
55.0	439	438	438	438	439
57.5	406	405	405	405	406
60.0	372	371	371	371	372
62.5	336	336	336	337	337
65.0	301	301	301	301	301
67.5	265	265	265	265	265
70.0	228	228	228	228	227
72.5	188	189	188	188	186
75.0	147	147	147	147	145
77.5	107	107	106	106	105
80.0	70	70	70	68	67
82.5	37	37	37	37	36
85.0	24	24	24	23	22
87.5	11	11	10	10	9
90.0	4	4	5	4	3



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**Intensity data (cd)**

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
90.0	4	4	5	4	3
92.5	10	11	11	11	11
95.0	44	43	43	43	43
97.5	78	78	77	77	78
100.0	114	121	113	116	123
102.5	157	205	152	154	179
105.0	193	220	185	185	209
107.5	222	262	220	222	245
110.0	250	306	260	264	286
112.5	281	359	296	306	337
115.0	309	401	346	341	384
117.5	338	436	386	376	435
120.0	365	461	426	413	469
122.5	400	486	467	447	490
125.0	441	514	503	480	511
127.5	479	529	527	515	525
130.0	507	539	536	533	540
132.5	530	540	548	552	542
135.0	544	544	561	562	548
137.5	568	564	573	568	578
140.0	555	595	578	574	606
142.5	567	624	601	590	633
145.0	611	654	630	606	650
147.5	666	701	667	649	681
150.0	708	745	699	687	719
152.5	737	786	722	714	758
155.0	769	791	750	740	763
157.5	807	796	784	775	769
160.0	805	804	798	796	784
162.5	792	790	791	785	783
165.0	772	773	775	770	770
167.5	749	758	756	750	756
170.0	734	744	739	733	741
172.5	722	731	725	719	726
175.0	709	717	710	705	711
177.5	697	705	699	694	701
180.0	695	695	695	695	695



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**Intensity data (cd)**

Gamma	C-Plane				
	C90	C112.5	C135	C157.5	C180
0.0	630	630	630	630	630
2.5	630	629	630	630	631
5.0	633	633	633	633	634
7.5	639	638	638	638	639
10.0	643	642	643	643	643
12.5	647	646	646	647	647
15.0	650	649	649	650	649
17.5	653	652	652	652	651
20.0	654	653	653	653	652
22.5	655	653	653	653	652
25.0	654	652	652	651	651
27.5	652	650	649	649	648
30.0	648	647	646	645	644
32.5	643	642	641	640	639
35.0	637	636	635	634	633
37.5	626	625	624	623	622
40.0	609	608	608	606	605
42.5	587	587	587	585	584
45.0	562	562	562	560	558
47.5	534	534	534	532	531
50.0	504	504	504	502	501
52.5	472	473	472	470	469
55.0	439	440	439	437	437
57.5	406	406	405	404	403
60.0	372	371	371	370	369
62.5	337	336	336	335	334
65.0	301	300	300	299	299
67.5	265	263	263	262	262
70.0	227	226	226	225	224
72.5	186	185	185	184	184
75.0	145	143	142	142	141
77.5	105	103	102	101	100
80.0	67	65	64	64	63
82.5	36	34	33	32	32
85.0	22	21	20	20	20
87.5	9	8	7	7	7
90.0	3	3	3	3	2



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**Intensity data (cd)**

Gamma	C-Plane				
	C90	C112.5	C135	C157.5	C180
90.0	3	3	3	3	2
92.5	11	11	11	11	11
95.0	43	44	43	41	44
97.5	78	79	76	76	79
100.0	123	116	113	115	119
102.5	179	154	162	163	159
105.0	209	188	199	201	195
107.5	245	225	237	234	243
110.0	286	255	269	281	294
112.5	337	278	305	335	326
115.0	384	308	345	383	359
117.5	435	349	388	431	396
120.0	469	388	406	474	435
122.5	490	424	451	497	461
125.0	511	459	488	515	492
127.5	525	494	528	533	522
130.0	540	523	534	542	545
132.5	542	565	537	552	571
135.0	548	573	557	568	596
137.5	578	571	573	586	603
140.0	606	570	583	602	593
142.5	633	570	598	617	605
145.0	650	599	624	653	614
147.5	681	639	657	675	644
150.0	719	681	690	699	676
152.5	758	711	730	726	696
155.0	763	747	763	756	716
157.5	769	781	778	761	749
160.0	784	792	797	778	779
162.5	783	780	785	773	768
165.0	770	764	765	760	751
167.5	756	748	746	745	733
170.0	741	734	733	731	721
172.5	726	723	724	721	710
175.0	711	710	712	709	697
177.5	701	700	703	701	689
180.0	695	695	695	695	695



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**Coefficients Of Utilization - Zonal Cavity Method**

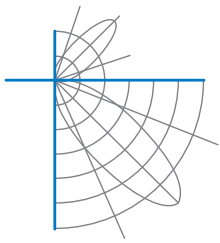
Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	106	106	106	106	98	98	98	98	82	82	82	67	67	67	53	53	53	47
1	97	93	89	85	89	85	82	79	71	69	67	59	57	56	47	46	45	39
2	88	81	74	69	81	74	69	64	62	58	55	51	48	46	41	39	37	33
3	80	71	63	57	73	65	59	53	55	50	46	45	41	38	36	34	31	27
4	73	62	54	48	67	57	50	45	48	43	39	40	36	33	32	29	27	23
5	67	55	47	41	61	51	44	38	43	37	33	36	31	28	29	26	23	20
6	61	49	41	35	56	46	38	33	38	33	29	32	28	24	26	23	20	17
7	57	44	36	31	52	41	34	29	35	29	25	29	25	21	23	20	18	15
8	53	40	32	27	48	37	30	25	32	26	22	26	22	19	21	18	16	13
9	49	36	29	24	45	34	27	22	29	23	19	24	20	17	20	16	14	12
10	45	33	26	21	42	31	24	20	26	21	17	22	18	15	18	15	13	11

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	17.5	9.11	9.15
8.0	9.8	12.15	12.20
10.0	6.3	15.18	15.25
12.0	4.4	18.22	18.30
14.0	3.2	21.25	21.35
16.0	2.5	24.29	24.40



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**Test Distance**            9.5 m  
**Test Temperature**      24.7 °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.

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