

Report of Test

LLIA000901-013

Catalog Number: P1035_X/F11/D61/L411

Pendant mounted, formed steel canopy, formed steel frame with white "lumenate" diffuser, external white steel decorative grille, no enclosure.

One white LED module with clear patterned hemispherical lens below.

One ERP ESS030W-0620-42 LED driver

120.0Vac, 60.00Hz, 0.2102A, 24.72W, 0.980PF, 12.1%THD(i)



Performance Summary

Total Light Output	1600 lm
Luminaire Power	24.7 W
Luminous Efficacy	64.8 lm/W

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



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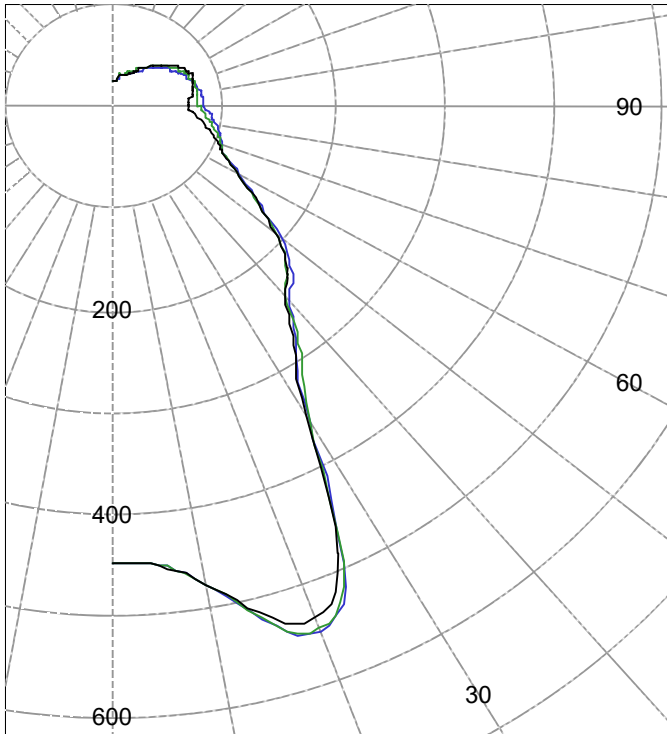
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Legend: C0-Black, C45-Green, C90-Blue (cd)



(Two plane symmetry) C0-C90

INTENSITY SUMMARY (cd)

Gamma	C-Plane					Flux (lm)
	C0	C22.5	C45	C67.5	C90	
0.0	448	448	448	448	448	
5.0	452	452	452	452	452	44
10.0	476	476	475	476	476	
15.0	515	517	519	519	523	147
20.0	534	540	546	547	548	
25.0	483	492	493	491	494	216
30.0	351	354	355	350	355	
35.0	285	290	296	288	288	182
40.0	241	243	242	242	247	
45.0	221	223	221	223	229	171
50.0	192	193	192	194	198	
55.0	157	156	156	158	159	141
60.0	129	128	128	129	131	
65.0	110	111	110	110	111	112
70.0	100	102	104	101	106	
75.0	90	92	96	92	100	100
80.0	81	83	90	85	94	
85.0	73	74	83	77	88	86
90.0	67	68	77	72	82	

AVERAGE LUMINANCE (cd / m²)

Gamma	C0	C45	C90
45.0	8140	8113	8411
55.0	5520	5508	5608
65.0	3839	3832	3878
75.0	3207	3419	3540
85.0	2723	3091	3279

ZONAL FLUX AND PERCENTAGES

Zone	Flux (lm)	% Lamp	% Luminaire
0-30	407	N / A	25.4
0-40	589	N / A	36.8
0-60	901	N / A	56.3
0-90	1199	N / A	74.9
40-90	609	N / A	38.1
60-90	297	N / A	18.6
90-180	402	N / A	25.1
0-180	1600	N / A	100.0

Total Light Output = 1,600 lm

Signed:

Authorized Signatory

Spacing Criterion 0 - 180 1.2
Spacing Criterion 90 - 270 1.2

Date of test 22-Dec-2017
Date of report 22-Dec-2017



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Intensity data (cd)

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
0.0	448	448	448	448	448
2.5	448	448	448	448	449
5.0	452	452	452	452	452
7.5	462	461	461	461	461
10.0	476	476	475	476	476
12.5	494	494	494	496	498
15.0	515	517	519	519	523
17.5	532	535	541	539	542
20.0	534	540	546	547	548
22.5	522	528	533	532	535
25.0	483	492	493	491	494
27.5	417	419	416	418	422
30.0	351	354	355	350	355
32.5	308	313	318	312	312
35.0	285	290	296	288	288
37.5	263	269	273	267	268
40.0	241	243	242	242	247
42.5	232	234	232	234	239
45.0	221	223	221	223	229
47.5	208	210	208	210	216
50.0	192	193	192	194	198
52.5	173	173	173	174	177
55.0	157	156	156	158	159
57.5	142	141	141	143	144
60.0	129	128	128	129	131
62.5	118	117	117	119	120
65.0	110	111	110	110	111
67.5	106	108	108	105	109
70.0	100	102	104	101	106
72.5	95	97	100	97	103
75.0	90	92	96	92	100
77.5	86	88	93	89	97
80.0	81	83	90	85	94
82.5	77	79	86	81	91
85.0	73	74	83	77	88
87.5	69	70	80	74	85
90.0	67	68	77	72	82



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Intensity data (cd)

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
90.0	67	68	77	72	82
92.5	68	69	77	72	81
95.0	69	70	77	73	81
97.5	70	71	77	74	81
100.0	72	72	77	74	80
102.5	73	73	77	75	79
105.0	74	74	77	75	79
107.5	75	75	77	76	77
110.0	76	76	76	76	75
112.5	77	77	76	76	74
115.0	77	78	75	74	71
117.5	77	77	73	73	70
120.0	75	75	72	71	68
122.5	73	73	70	69	66
125.0	70	71	67	66	64
127.5	68	68	65	64	62
130.0	65	65	63	61	60
132.5	62	62	60	59	58
135.0	59	60	58	57	55
137.5	56	57	55	54	53
140.0	53	54	53	52	51
142.5	51	51	50	50	49
145.0	48	48	48	48	46
147.5	45	46	45	46	44
150.0	42	43	43	44	41
152.5	40	41	42	42	40
155.0	38	39	41	40	38
157.5	35	37	39	39	37
160.0	33	35	38	37	36
162.5	32	34	36	36	34
165.0	32	33	33	35	33
167.5	32	33	32	34	32
170.0	32	33	33	34	32
172.5	32	31	32	32	29
175.0	29	29	29	29	29
177.5	26	26	26	27	27
180.0	25	25	25	25	25



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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	113	113	113	113	108	108	108	108	97	97	97	88	88	88	79	79	79	75
1	102	97	92	88	97	92	88	84	83	80	77	75	73	70	68	66	64	60
2	93	85	78	72	88	81	74	69	73	68	64	66	62	59	60	57	54	50
3	85	75	67	61	80	71	64	58	65	59	54	59	54	50	53	49	46	43
4	78	67	58	52	74	64	56	50	58	52	47	53	48	44	48	44	40	37
5	72	60	51	45	68	57	50	44	52	46	41	48	43	38	44	39	36	33
6	67	54	46	40	63	52	44	39	48	41	36	44	38	34	40	35	32	29
7	62	49	41	35	59	47	40	34	44	37	32	40	35	31	37	32	29	26
8	58	45	37	32	55	44	36	31	40	34	29	37	32	28	34	29	26	24
9	54	42	34	29	52	40	33	28	37	31	27	34	29	25	32	27	24	22
10	51	39	31	26	49	37	30	25	34	28	24	32	27	23	30	25	22	20

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	12.4	7.00	7.03
8.0	7.0	9.33	9.38
10.0	4.5	11.66	11.72
12.0	3.1	14.00	14.07
14.0	2.3	16.33	16.41
16.0	1.7	18.66	18.76



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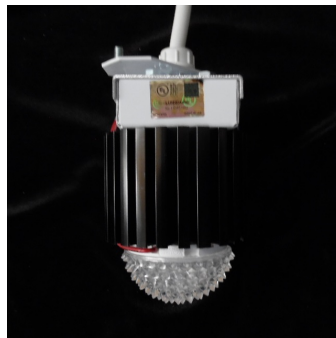
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Test Distance 9.5 m
Test Temperature 24.9 °C

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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