

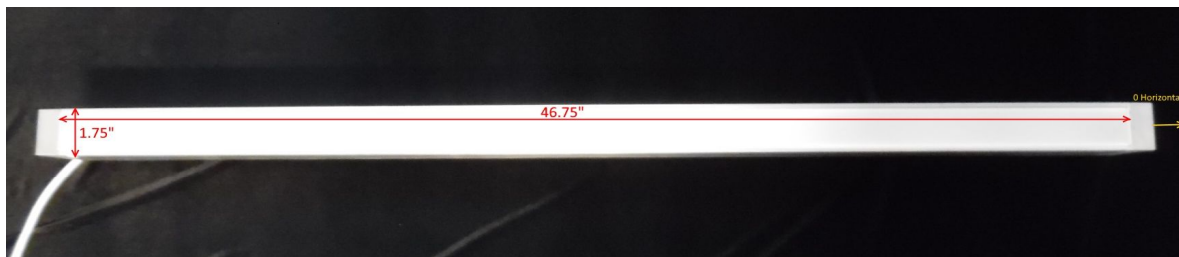
Report of Test

LLIA000530-007

Catalog Number: MLS2FR-X-HO-K40-4-X-LOH-X-120 (720mA)

Pendant mounted, extruded aluminum housing, white inner reflector, white plastic lens enclosure
92 white LEDs

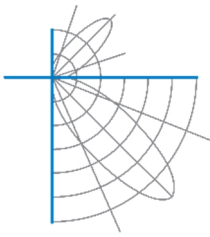
One Osram Optotronic OT30W/PROG1050C/UNV/DIM/L LED power supply, output set at 720mA
120.0Vac, 60.0Hz, 0.2345A, 28.15W, 0.996PF, 5.83%THD(i)



Performance Summary

Total Light Output	2706 lm
Luminaire Power	28.1 W
Luminous Efficacy	96.3 lm/W

PREPARED FOR : Precision Architectural Lighting, 4830 Timber Creek Drive, Houston, TX



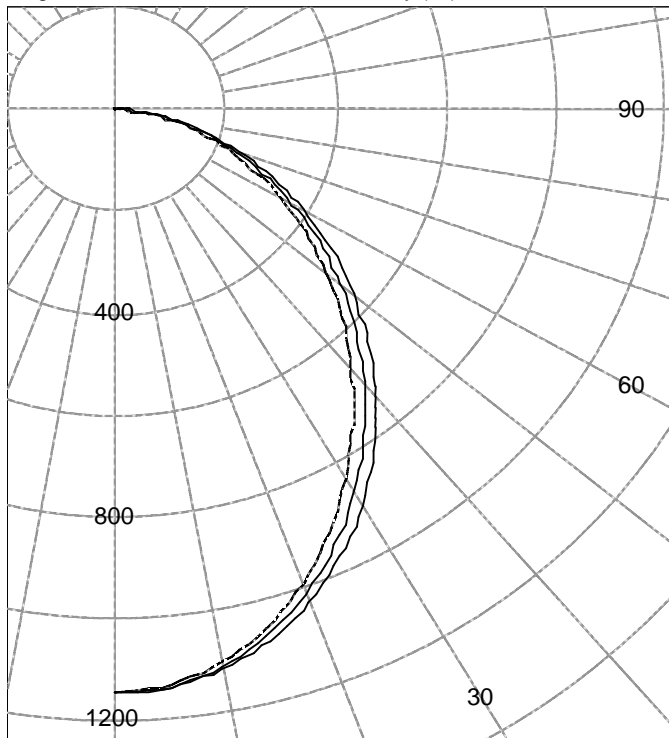
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Legend: C0-Solid, C45-Dashed, C90-Grey (cd)



(Two plane symmetry) C0-C90

INTENSITY SUMMARY (cd)

Gamma	C-Plane					Flux (lm)
	C0	C22.5	C45	C67.5	C90	
0.0	1147	1147	1147	1147	1147	
5.0	1140	1133	1141	1140	1134	108
10.0	1118	1109	1114	1110	1103	
15.0	1080	1071	1070	1062	1054	300
20.0	1030	1018	1013	1000	991	
25.0	969	955	944	926	916	433
30.0	898	882	867	846	835	
35.0	820	804	785	761	750	490
40.0	737	721	701	675	665	
45.0	651	637	617	591	581	475
50.0	564	553	533	507	499	
55.0	479	471	451	427	419	402
60.0	396	390	371	350	344	
65.0	315	311	293	277	272	291
70.0	237	235	220	208	203	
75.0	164	163	153	144	141	163
80.0	100	99	92	86	83	
85.0	45	44	38	33	31	44
90.0	0	0	0	0	0	

AVERAGE LUMINANCE (cd / m²)

Gamma	C0	C45	C90
45.0	17462	16543	15579
55.0	15847	14913	13868
65.0	14126	13167	12187
75.0	12042	11200	10312
85.0	9880	8257	6805

ZONAL FLUX AND PERCENTAGES

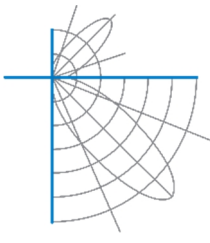
Zone	Flux (lm)	% Lamp	% Luminaire
0-30	841	N / A	31.1
0-40	1331	N / A	49.2
0-60	2208	N / A	81.6
0-90	2706	N / A	100.0
40-90	1374	N / A	50.8
60-90	497	N / A	18.4
90-180	0	N / A	0.0
0-180	2706	N / A	100.0

Total Light Output = 2,706 lm

Signed:

Michael L. Grather
Authorized Signatory

Date of test 7-Jan-2016
Date of report 12-Jan-2016



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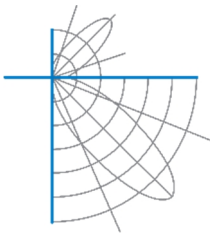
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Intensity data (cd)

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
0.0	1147	1147	1147	1147	1147
2.5	1146	1139	1148	1147	1142
5.0	1140	1133	1141	1140	1134
7.5	1131	1123	1129	1127	1121
10.0	1118	1109	1114	1110	1103
12.5	1101	1092	1094	1088	1081
15.0	1080	1071	1070	1062	1054
17.5	1057	1046	1043	1032	1024
20.0	1030	1018	1013	1000	991
22.5	1001	988	979	964	954
25.0	969	955	944	926	916
27.5	935	920	906	887	876
30.0	898	882	867	846	835
32.5	860	844	826	804	793
35.0	820	804	785	761	750
37.5	779	763	743	718	708
40.0	737	721	701	675	665
42.5	694	679	659	633	623
45.0	651	637	617	591	581
47.5	607	595	575	549	539
50.0	564	553	533	507	499
52.5	522	512	492	467	459
55.0	479	471	451	427	419
57.5	437	430	411	388	381
60.0	396	390	371	350	344
62.5	355	351	332	313	307
65.0	315	311	293	277	272
67.5	275	273	256	242	237
70.0	237	235	220	208	203
72.5	200	198	186	176	172
75.0	164	163	153	144	141
77.5	131	130	122	114	111
80.0	100	99	92	86	83
82.5	72	70	64	58	56
85.0	45	44	38	33	31
87.5	21	19	14	10	9
90.0	0	0	0	0	0



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Coefficients Of Utilization - Zonal Cavity Method

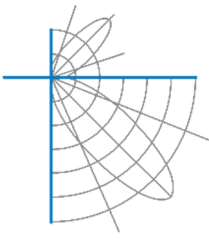
Effective Floor Cavity Reflectance 0.20

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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67
1	102	97	93	90	96	92	88	85	82	79	77	72	70	69	64	62	61	57
2	93	85	79	74	87	81	75	70	72	68	64	64	60	58	56	54	52	48
3	85	75	68	62	80	71	64	59	64	58	54	57	52	49	50	47	44	41
4	78	67	59	53	73	63	56	50	57	51	46	51	46	42	45	41	38	35
5	72	60	51	45	67	57	49	44	51	45	40	46	41	37	41	37	33	31
6	66	54	46	40	62	51	44	38	46	40	35	41	36	32	37	33	30	27
7	61	49	41	35	58	46	39	34	42	36	31	38	33	29	34	30	26	24
8	57	44	37	31	54	42	35	30	38	32	28	35	30	26	31	27	24	22
9	53	41	33	28	50	39	32	27	35	29	25	32	27	23	29	25	22	20
10	50	37	30	25	47	36	29	24	33	27	23	30	25	21	27	23	20	18

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	31.9	7.03	6.61
8.0	17.9	9.37	8.82
10.0	11.5	11.72	11.02
12.0	8.0	14.06	13.23
14.0	5.9	16.40	15.43
16.0	4.5	18.75	17.64

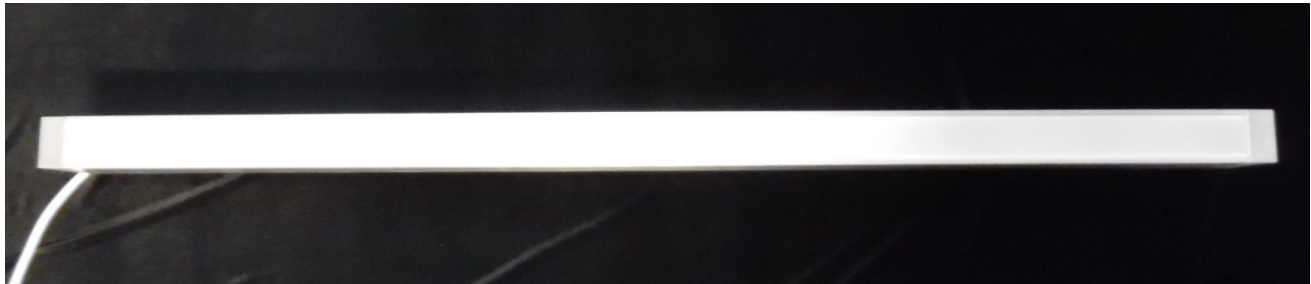
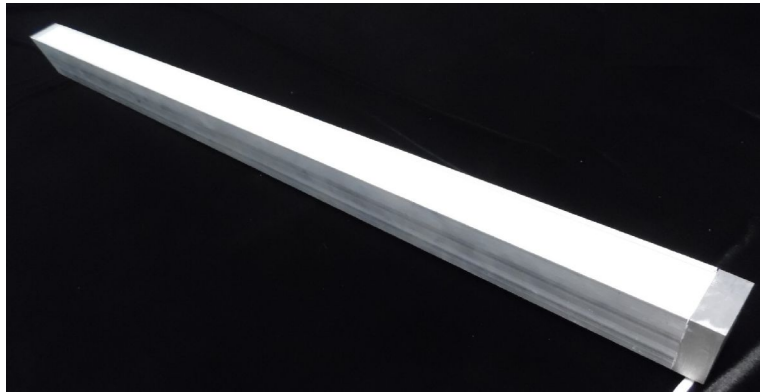


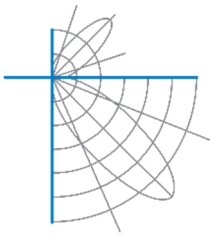
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Test Distance 9.5 m
Test Temperature 24.6 °C

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 C78.377:2011, ANSI C82.77:2002.

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.

This report must not be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, or any agency of the Federal Government.