

REPORT NUMBER: ITL80654

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ISSUE DATE: 02/12/14

PREPARED FOR: PRECISION ARCHITECTURAL LIGHTING

CATALOG NUMBER: MLP2-IASY/D-MO/HO-35K-4-XX-OP/LOH-UNV

LUMINAIRE: EXTRUDED METAL HOUSING WITH WHITE PAINTED GENERAL INTERIOR FINISH AND FABRICATED METAL END CAPS. TWO DISTINCT OPTICAL COMPARTMENTS EACH WITH FORMED WHITE PAINTED METAL REFLECTOR/CIRCUIT BOARD MOUNT, 4 CIRCUIT BOARDS EACH WITH 30 LEDS. EXTRUDED CLEAR PLASTIC BOTTOM LENS WITH WHITE SIDES AND HOLOGRAPHIC PLASTIC OVERLAY. OPEN TOP.

LAMPS: TWO HUNDRED FORTY WHITE LIGHT EMITTING DIODES (LEDS), 120 VERTICAL BASE-UP POSITION, 120 TILTED 45-DEGREES VERTICAL BASE-DOWN POSITION.

TOTAL INPUT WATTS = 65.2 AT 120.0 VOLTS

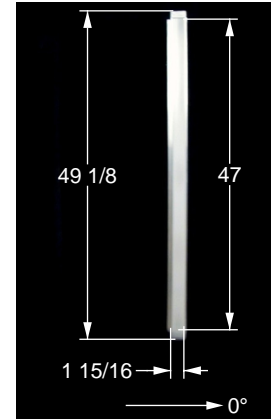
MOUNTING: WALL

LED DRIVER: OSRAM OT50W/PRG1400C/UNV/DIM/L, CLIENT STATES DRIVER PROGRAMMED FOR 800mA OUTPUT. OSRAM OT30W/PRG1050C/UNV/DIM/L, CLIENT STATES DRIVER PROGRAMMED FOR 500mA OUTPUT. BOTH DRIVERS HAVE MULTIPLE LEADS, ONLY LINE INPUT AND LED OUTPUT LEADS CONNECTED FOR THIS TEST.

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (120VAC, 60Hz) TO THE LED DRIVERS.

TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 35.0 FEET



CANDELA DISTRIBUTION

FLUX

	0.0	45.0	90.0	135.0	180.0	
0	1536	1536	1536	1536	1536	
5	1517	1516	1520	1516	1501	143
15	1307	1369	1431	1349	1283	380
25	991	1081	1198	1056	962	493
35	711	769	865	745	676	482
45	511	555	616	544	492	430
55	390	426	466	417	372	378
65	275	298	321	281	246	285
75	128	141	148	117	98	139
85	23	24	20	14	10	26
90	0	0	0	0	0	
95	3	3	21	38	47	32
105	13	619	145	80	86	219
115	906	734	303	119	127	409
125	967	816	472	144	157	445
135	998	890	610	245	175	453
145	1022	947	721	403	296	427
155	1044	1000	805	558	475	358
165	1017	972	857	710	639	237
175	930	918	882	833	805	83
180	879	879	879	879	879	

ZONAL LUMEN SUMMARY

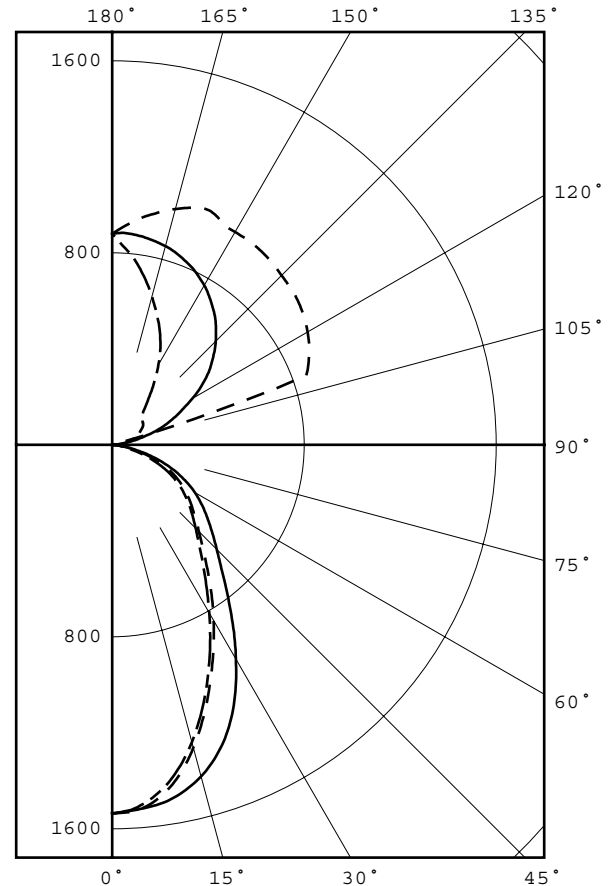
ZONE	LUMENS	%FIXT
0- 30	1017	18.8
0- 40	1498	27.6
0- 60	2306	42.5
0- 90	2756	50.8
90-120	660	12.2
90-130	1106	20.4
90-150	1986	36.6
90-180	2664	49.2
0-180	5419	100.0

EFFICACY = 83.1 lm/W

CIE TYPE - GENERAL DIFFUSE

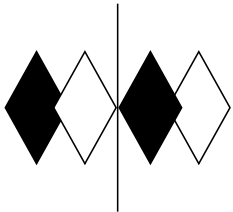
PLANE : 0-DEG 90-DEG 180-DEG

SPACING CRITERIA : 0.90 1.05 0.88



LEGEND:
0-deg -----
90-deg =====
180-deg -----

Checked M KLOPF
Approved R BEATTIE
Lighting Engineer



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INDEPENDENT TESTING LABORATORIES, INC.
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PLANE : 0-DEG 90-DEG
 LUMINOUS LENGTH : 1.937 47.000

LUMINANCE DATA IN CANDELA/SQ M

ANGLE IN DEG	AVERAGE 0-DEG	AVERAGE 90-DEG	AVERAGE 180-DEG
45	12301.	14828.	11843.
55	11574.	13829.	11039.
65	11076.	12929.	9908.
75	8418.	9733.	6445.
85	4492.	3906.	1953.



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CANDELA DISTRIBUTION
LATERAL ANGLE

	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5	180.0
0.0	1536	1536	1536	1536	1536	1536	1536	1536	1536
5.0	1517	1521	1516	1530	1520	1518	1516	1509	1501
10.0	1438	1448	1465	1482	1492	1470	1451	1427	1415
15.0	1307	1327	1369	1408	1431	1393	1349	1301	1283
20.0	1149	1179	1237	1302	1334	1282	1213	1147	1124
25.0	991	1021	1081	1159	1198	1137	1056	984	962
30.0	845	868	920	993	1031	972	893	828	809
35.0	711	728	769	830	865	812	745	691	676
40.0	597	612	647	694	722	682	630	585	571
45.0	511	524	555	593	616	586	544	504	492
50.0	444	458	487	517	535	513	477	443	430
55.0	390	400	426	454	466	448	417	385	372
60.0	335	343	367	388	398	381	353	325	313
65.0	275	281	298	316	321	306	281	256	246
70.0	204	209	222	236	237	222	199	178	170
75.0	128	131	141	149	148	136	117	104	98
80.0	66	65	70	73	69	63	52	46	43
85.0	23	23	24	23	20	18	14	12	10
90.0	0	0	0	0	0	0	0	0	0
95.0	3	3	3	4	21	27	38	45	47
100.0	7	8	8	298	78	46	58	65	66
105.0	13	63	619	377	145	65	80	85	86
110.0	862	818	677	456	228	82	101	106	107
115.0	906	864	734	527	303	116	119	127	127
120.0	940	900	777	593	386	169	129	144	146
125.0	967	929	816	655	472	241	144	152	157
130.0	986	950	857	748	544	313	185	159	161
135.0	998	970	890	813	610	383	245	186	175
140.0	1013	989	919	847	670	456	320	240	223
145.0	1022	1001	947	871	721	529	403	318	296
150.0	1024	1007	999	888	767	599	482	411	385
155.0	1044	1044	1000	901	805	668	558	496	475
160.0	1050	1034	989	909	834	726	633	574	557
165.0	1017	1004	972	912	857	776	710	655	639
170.0	976	968	947	905	872	817	779	742	725
175.0	930	927	918	894	882	849	833	815	805
180.0	879	879	879	879	879	879	879	879	879



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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	37
5- 10	106
10- 15	167
15- 20	213
20- 25	242
25- 30	252
30- 35	247
35- 40	235
40- 45	221
45- 50	209
50- 55	197
55- 60	181
60- 65	158
65- 70	127
70- 75	89
75- 80	50
80- 85	21
85- 90	5
90- 95	5
95-100	27
100-105	66
105-110	153
110-115	198
115-120	211
120-125	220
125-130	225
130-135	228
135-140	225
140-145	219
145-150	208
150-155	191
155-160	167
160-165	136
165-170	101
170-175	62
175-180	21

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	143
0- 20	523
0- 30	1017
0- 40	1498
0- 50	1928
0- 60	2306
0- 70	2591
0- 80	2730
0- 90	2756
0-100	2788
0-110	3007
0-120	3416
0-130	3861
0-140	4314
0-150	4741
0-160	5100
0-170	5336
0-180	5419



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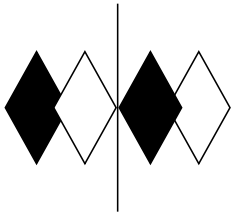
COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	10	0
0	107	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51
1	98	94	91	87	87	91	87	84	81	74	72	70	62	61	59	51	50	49	44
2	90	83	77	72	72	83	77	72	67	66	62	59	55	52	50	46	44	42	37
3	82	73	66	61	61	76	68	62	57	58	54	50	49	46	43	41	38	36	32
4	76	65	58	52	52	70	61	54	49	52	47	43	44	40	37	37	34	32	28
5	70	58	51	45	45	64	55	48	42	47	42	37	40	36	33	33	31	28	25
6	64	53	45	39	39	60	49	42	37	43	37	33	36	32	29	31	28	25	22
7	60	48	40	35	35	55	45	38	33	39	33	29	33	29	26	28	25	23	20
8	56	44	36	31	31	51	41	34	29	36	30	26	31	27	23	26	23	21	18
9	52	40	33	28	28	48	38	31	27	33	28	24	28	24	21	24	21	19	17
10	49	37	30	25	25	45	35	28	24	30	25	22	26	22	19	23	19	17	15

ALL CANDELA, LUMENS, LUMINANCE, AND VCP VALUES IN THIS REPORT ARE BASED ON ABSOLUTE PHOTOMETRY. THE COEFFICIENT OF UTILIZATION VALUES ARE BASED ON THE TOTAL ABSOLUTE LUMEN OUTPUT OF THIS TEST SAMPLE.

NOTE: THE ZONAL CAVITY CALCULATION TECHNIQUE IS ACCURATE WHEN LUMINAIRES WITH SYMMETRIC CANDELA DISTRIBUTIONS ARE EMPLOYED AND WHEN THE LUMINAIRES ARE LOCATED SYMMETRICALLY THROUGHOUT THE ROOM. THIS UNIT HAS SPECIAL CHARACTERISTICS AND THEREFORE THESE COEFFICIENTS SHOULD BE USED WITH CAUTION.



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