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ISSUE DATE: 02/17/14

PREPARED FOR: PRECISION ARCHITECTURAL LIGHTING

CATALOG NUMBER: MLP2-IASY/D-HO/MO-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 = 65.9 AT 120.0 VOLTS

MOUNTING: WALL

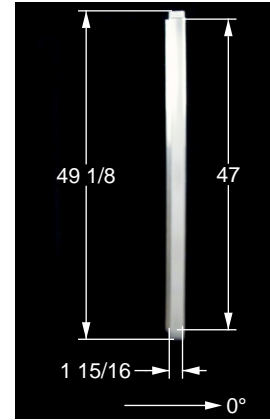
LED DRIVER: OSRAM OT50W/PRG1400C/UNV/DIM/L, CLIENT STATES DRIVER PROGRAMMED FOR 800mA OUTPUT.

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.

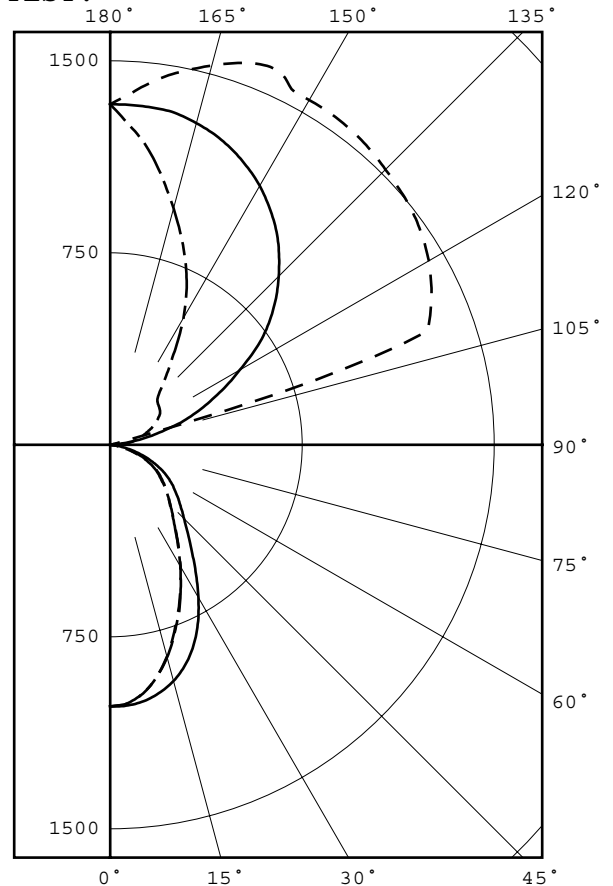
TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 35.0 FEET



CANDELA DISTRIBUTION

	0.0	45.0	90.0	135.0	180.0	FLUX
0	1022	1022	1022	1022	1022	
5	1004	1011	1018	1011	1003	95
15	856	903	955	905	859	253
25	645	706	801	709	649	327
35	460	500	575	500	457	319
45	333	363	408	364	330	284
55	252	279	308	279	247	250
65	175	193	212	191	170	189
75	77	87	98	82	70	92
85	12	13	12	10	8	16
90	0	0	0	0	0	
95	4	5	31	57	64	48
105	37	949	221	120	129	350
115	1385	1118	461	179	192	623
125	1475	1244	723	216	237	678
135	1521	1355	931	360	263	687
145	1553	1456	1100	601	431	647
155	1594	1517	1223	837	707	542
165	1534	1472	1301	1065	956	358
175	1402	1389	1329	1258	1218	125
180	1330	1330	1330	1330	1330	



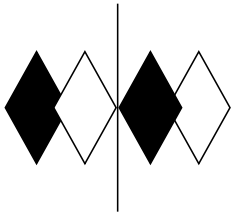
LEGEND:  
0-deg -----  
90-deg -----  
180-deg -----

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%FIXT
0- 30	675	11.5
0- 40	994	16.9
0- 60	1528	26.0
0- 90	1824	31.0
90-120	1021	17.4
90-130	1700	28.9
90-150	3033	51.6
90-180	4059	69.0
0-180	5883	100.0

EFFICACY = 89.3 lm/W  
CIE TYPE - SEMI-INDIRECT

Checked       M KLOPF        
Approved       R BEATTIE        
Lighting Engineer



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INDEPENDENT TESTING LABORATORIES, INC.  
 4066 CAMELOT CIRCLE, LONGMONT, CO 80504 USA

PHONE: (303) 442-1255 • FAX: (970) 535-3114 • E-MAIL: [itl@itlboulder.com](mailto:itl@itlboulder.com) • WEBSITE: [www.itlboulder.com](http://www.itlboulder.com)

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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	8016.	9821.	7944.
55	7478.	9140.	7330.
65	7048.	8538.	6847.
75	5064.	6445.	4604.
85	2344.	2344.	1562.



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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	1022	1022	1022	1022	1022	1022	1022	1022	1022
5.0	1004	1008	1011	1006	1018	1006	1011	1009	1003
10.0	946	954	971	979	996	979	971	957	946
15.0	856	869	903	931	955	932	905	876	859
20.0	749	765	811	857	891	860	817	775	753
25.0	645	659	706	761	801	765	709	665	649
30.0	549	558	599	653	689	654	599	560	547
35.0	460	467	500	544	575	545	500	467	457
40.0	388	396	421	456	479	457	421	394	385
45.0	333	341	363	391	408	391	364	338	330
50.0	290	298	319	341	354	342	319	297	289
55.0	252	261	279	299	308	299	279	257	247
60.0	216	222	239	256	263	254	238	218	212
65.0	175	181	193	208	212	205	191	174	170
70.0	127	132	142	155	156	151	138	123	119
75.0	77	79	87	97	98	93	82	72	70
80.0	37	39	41	46	45	43	37	33	32
85.0	12	12	13	14	12	12	10	8	8
90.0	0	0	0	0	0	0	0	0	0
95.0	4	4	5	7	31	40	57	64	64
100.0	11	12	13	454	116	69	88	97	98
105.0	37	224	949	576	221	99	120	127	129
110.0	1320	1255	1033	696	346	123	151	158	160
115.0	1385	1322	1118	804	461	172	179	190	192
120.0	1437	1377	1184	906	585	252	196	217	220
125.0	1475	1420	1244	1009	723	358	216	231	237
130.0	1502	1449	1305	1134	834	468	271	241	245
135.0	1521	1479	1355	1232	931	575	360	277	263
140.0	1541	1506	1398	1283	1022	683	476	356	330
145.0	1553	1523	1456	1318	1100	794	601	477	431
150.0	1555	1532	1518	1345	1168	897	721	615	572
155.0	1594	1589	1517	1366	1223	1002	837	743	707
160.0	1587	1571	1498	1379	1268	1094	951	863	831
165.0	1534	1526	1472	1382	1301	1171	1065	985	956
170.0	1474	1473	1436	1371	1324	1233	1171	1117	1092
175.0	1402	1408	1389	1353	1329	1283	1258	1230	1218
180.0	1330	1330	1330	1330	1330	1330	1330	1330	1330



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5-DEGREE  
ZONAL LUMEN SUMMARY

0- 5	24
5- 10	71
10- 15	111
15- 20	142
20- 25	160
25- 30	167
30- 35	164
35- 40	155
40- 45	146
45- 50	138
50- 55	130
55- 60	120
60- 65	105
65- 70	84
70- 75	59
75- 80	33
80- 85	13
85- 90	3
90- 95	7
95-100	41
100-105	108
105-110	243
110-115	302
115-120	321
120-125	335
125-130	343
130-135	345
135-140	341
140-145	332
145-150	315
150-155	289
155-160	253
160-165	206
165-170	152
170-175	94
175-180	32

10-DEGREE  
ZONAL LUMEN SUMMARY

0- 10	95
0- 20	348
0- 30	675
0- 40	994
0- 50	1278
0- 60	1528
0- 70	1717
0- 80	1808
0- 90	1824
0-100	1872
0-110	2222
0-120	2846
0-130	3524
0-140	4211
0-150	4858
0-160	5399
0-170	5758
0-180	5883



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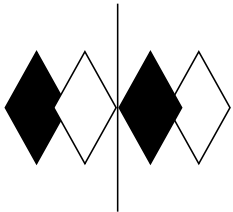
COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	31	
1	94	90	86	83	84	81	78	75	64	62	60	49	48	46	35	34	33	27	
2	86	79	73	68	77	71	66	62	57	53	50	43	41	39	31	30	28	23	
3	78	69	62	57	70	63	57	52	50	46	43	38	36	33	28	26	25	20	
4	72	62	54	48	64	56	49	44	45	40	36	34	31	29	25	23	21	17	
5	66	55	47	42	59	50	43	38	40	35	32	31	28	25	23	21	19	15	
6	61	49	42	36	54	45	38	33	36	31	28	28	25	22	21	18	17	14	
7	56	45	37	32	50	40	34	29	33	28	24	26	22	20	19	17	15	12	
8	52	40	33	28	47	37	30	26	30	25	22	24	20	18	17	15	14	11	
9	49	37	30	25	44	34	27	23	28	23	20	22	18	16	16	14	12	10	
10	45	34	27	22	41	31	25	21	25	21	18	20	17	14	15	13	11	9	

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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