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THE LIGHT CENTER OF THE INDUSTRY SINCE 1955



NVLAP LAB CODE: 200925-0

INDEPENDENT TESTING LABORATORIES, INC.
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REPORT NUMBER: ITL87376-GONIOPHOTOMETRY

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ISSUE DATE: 05/16/16

PREPARED FOR: OXYGEN LIGHTING

CATALOG NUMBER: 3-582

LUMINAIRE: FABRICATED WHITE PAINTED CIRCUIT BOARD/WALL MOUNT AND DRIVER COVERS, 2 WHITE CIRCUIT BOARDS EACH WITH 36 LEDS, FROSTED TRANSLUCENT WHITE ACRYLIC DIFFUSER, FABRICATED SPECULAR METAL FACEPLATE WITH ONE APERTURE PER CIRCUIT BOARD. DIFFUSER FROSTED SIDE OUT.

LAMPS: SEVENTY-TWO WHITE LIGHT EMITTING DIODES (LEDS), AIMED AT THE HORIZON.

INPUT ELECTRICAL: 120.0 VOLTS, 30.7 WATTS, 0.260 AMPS

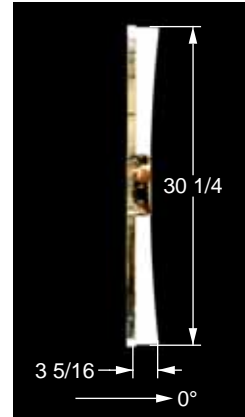
MOUNTING: WALL

LED DRIVERS: TWO L.T.F. DA12W350C1834D010-0000, 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 DRIVERS. ACRYLIC MATERIAL INFORMATION PROVIDED BY CLIENT.

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	157	157	157	157	157	
5	178	171	157	153	152	16
15	226	204	156	145	141	49
25	271	232	150	133	125	83
35	311	256	138	117	106	114
45	343	273	123	97	84	138
55	366	282	103	76	61	153
65	378	284	82	53	37	157
75	379	277	59	31	14	152
85	368	262	35	14	0	139
90	361	254	23	13	0	
95	363	258	34	15	0	138
105	370	270	58	34	19	150
115	368	276	80	56	41	155
125	356	275	101	78	63	150
135	333	266	120	98	85	135
145	302	249	135	116	106	111
155	262	226	146	131	124	81
165	219	198	152	143	138	48
175	173	166	153	150	149	15
180	153	153	153	153	153	

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%FIXT
0- 30	147	7.4
0- 40	261	13.2
0- 60	551	27.8
0- 90	999	50.4
90-120	442	22.3
90-130	593	29.9
90-150	839	42.3
90-180	982	49.6
0-180	1982	100.0

EFFICACY = 64.6 lm/W

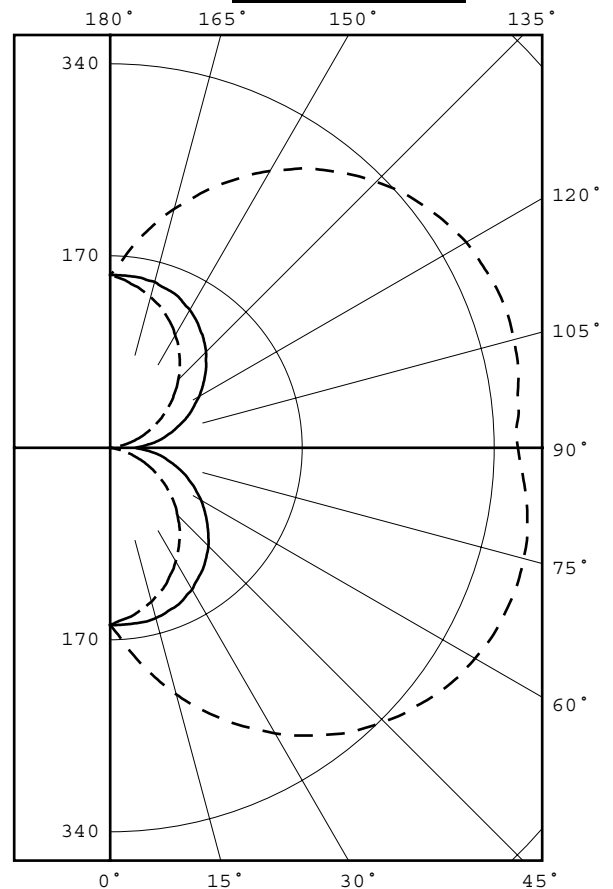
CIE TYPE - GENERAL DIFFUSE

PLANE : 0-DEG 90-DEG 180-DEG

SPACING CRITERIA : 2.66 1.36 1.11

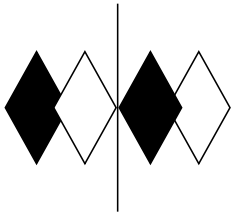
BEAM ANGLE (50%) : 163.9 X N/A DEGREES

FIELD ANGLE (10%) : 310.8 X 167.9 DEGREES



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

Checked M KLOPF
Approved R BEATTIE
Lighting Engineer



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LUMINANCE DATA IN CANDELA/SQ M

ANGLE IN DEG	AVERAGE 0-DEG	AVERAGE 90-DEG	AVERAGE 180-DEG
45	6171.	2622.	3657.
55	6327.	2156.	3047.
65	6478.	1736.	2247.
75	6639.	1304.	1129.
85	6804.	836.	0.



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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	157	157	157	157	157	157	157	157	157
5.0	178	176	171	164	157	155	153	152	152
10.0	202	198	188	172	157	152	149	148	147
15.0	226	220	204	179	156	149	145	142	141
20.0	249	242	218	185	153	145	140	136	134
25.0	271	262	232	190	150	139	133	128	125
30.0	292	281	245	193	145	132	125	120	116
35.0	311	298	256	196	138	125	117	110	106
40.0	329	313	265	196	131	116	107	100	96
45.0	343	327	273	196	123	107	97	89	84
50.0	355	338	278	194	113	97	87	78	73
55.0	366	346	282	191	103	87	76	66	61
60.0	373	351	284	186	93	76	65	54	49
65.0	378	356	284	180	82	65	53	43	37
70.0	380	356	281	174	71	54	42	32	25
75.0	379	355	277	166	59	43	31	21	14
80.0	375	350	271	157	48	32	21	11	4
85.0	368	343	262	148	35	23	14	6	0
90.0	361	336	254	139	23	20	13	6	0
95.0	363	338	258	145	34	24	15	6	0
100.0	367	343	265	154	47	34	24	14	8
105.0	370	346	270	162	58	44	34	24	19
110.0	371	347	274	169	69	55	45	35	30
115.0	368	346	276	176	80	66	56	46	41
120.0	364	343	277	182	91	77	67	58	52
125.0	356	337	275	186	101	87	78	69	63
130.0	346	328	271	189	111	97	88	80	74
135.0	333	317	266	191	120	106	98	90	85
140.0	318	304	258	191	128	115	108	100	96
145.0	302	289	249	190	135	124	116	110	106
150.0	283	272	238	188	141	131	124	119	115
155.0	262	254	226	185	146	137	131	127	124
160.0	241	234	212	180	149	143	138	134	132
165.0	219	214	198	174	152	146	143	140	138
170.0	196	192	182	167	153	149	146	145	144
175.0	173	171	166	159	153	151	150	149	149
180.0	153	153	153	153	153	153	153	153	153



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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	4
5- 10	12
10- 15	20
15- 20	29
20- 25	37
25- 30	46
30- 35	53
35- 40	60
40- 45	66
45- 50	71
50- 55	75
55- 60	78
60- 65	79
65- 70	79
70- 75	77
75- 80	74
80- 85	71
85- 90	68
90- 95	67
95-100	70
100-105	74
105-110	76
110-115	77
115-120	78
120-125	76
125-130	74
130-135	70
135-140	65
140-145	59
145-150	52
150-155	45
155-160	36
160-165	28
165-170	20
170-175	11
175-180	4

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	16
0- 20	65
0- 30	147
0- 40	261
0- 50	399
0- 60	551
0- 70	709
0- 80	860
0- 90	999
0-100	1137
0-110	1286
0-120	1441
0-130	1592
0-140	1727
0-150	1838
0-160	1919
0-170	1966
0-180	1982



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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	69	69	69	57	57	57	50
1	94	89	83	79	87	81	77	73	68	65	61	56	53	51	45	43	41	35	35
2	85	75	68	62	77	69	63	57	58	53	48	47	43	40	37	34	32	27	27
3	76	65	57	50	70	60	52	46	50	44	39	40	36	32	32	28	26	21	21
4	69	57	48	41	63	52	44	38	44	37	32	35	31	27	28	24	21	17	17
5	63	50	41	34	58	46	38	32	39	32	27	31	26	22	25	21	18	14	14
6	58	45	36	29	53	41	33	27	34	28	23	28	23	19	22	18	15	12	12
7	53	40	31	25	49	37	29	24	31	25	20	25	20	17	20	16	13	10	10
8	50	36	28	22	45	33	26	21	28	22	18	23	18	15	18	14	12	9	9
9	46	33	25	19	42	30	23	18	26	20	15	21	16	13	17	13	10	8	8
10	43	30	22	17	39	28	21	16	23	18	14	19	15	11	15	12	9	7	7

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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