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THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

NVLAP
NVLAP LAB CODE: 200925-0

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

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

REPORT NUMBER: ITL86715

PAGE: 1 OF 8

ISSUE DATE: 02/12/16

PREPARED FOR: FINELITE, INC.

CATALOG NUMBER: HP-WS-6W-2D-4'-V-8-35

LUMINAIRE: FABRICATED WHITE PAINTED METAL HOUSING, FLAT SEMI-DIFFUSE METAL REAR UPPER REFLECTOR, EXTRUDED WHITE PAINTED METAL LOWER REFLECTOR/HOUSING EXTENSION, FABRICATED WHITE PAINTED METAL CIRCUIT BOARD MOUNT/FORWARD REFLECTOR, 2 WHITE CIRCUIT BOARDS EACH WITH 80 LEDS, FROSTED HOLOGRAPHIC PLASTIC LENS. LENS FROSTED BOTH SIDES. VERTICAL PHOTOMETRIC CENTER LOCATED AT BACK BOTTOM EDGE OF HOUSING (CEILING HEIGHT).

LAMPS: ONE HUNDRED SIXTY WHITE LIGHT EMITTING DIODES (LEDS), VERTICAL BASE-UP POSITION.

INPUT ELECTRICAL: 277.0 VOLTS, 38.5 WATTS, 0.147 AMPS

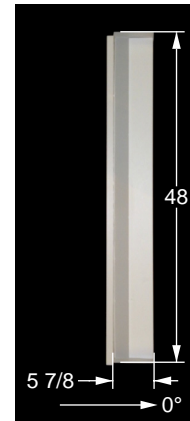
MOUNTING: RECESSED

LED DRIVER: OSRAM OT50W/PRG1400C/UNV/DIM/L, DRIVER HAS MULTIPLE LEADS, ONLY LINE INPUT AND LED OUTPUT LEADS CONNECTED FOR THIS TEST. CLIENT STATES DRIVER PROGRAMMED FOR 700mA OUTPUT.

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (277VAC, 60Hz) TO THE DRIVER.

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	1265	1265	1265	1265	1265	
5	1306	1284	1257	1223	1199	119
15	1359	1306	1194	1021	911	327
25	1344	1262	1081	750	579	466
35	1276	1167	927	480	276	522
45	1158	1033	749	227	37	502
55	970	866	564	29	4	438
65	736	649	382	5	1	342
75	501	413	209	2	0	227
85	288	215	54	0	0	114
90	191	131	0	0	0	
95	66	31	0	0	0	25
105	13	7	0	0	0	4
115	0	0	0	0	0	0
125	0	0	0	0	0	0
135	0	0	0	0	0	0
145	0	0	0	0	0	0
155	0	0	0	0	0	0
165	0	0	0	0	0	0
175	0	0	0	0	0	0
180	0	0	0	0	0	0

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%FIXT
0- 30	912	29.6
0- 40	1435	46.5
0- 60	2375	76.9
0- 90	3057	99.1
90-120	29	0.9
90-130	29	0.9
90-150	29	0.9
90-180	29	0.9
0-180	3086	100.0

EFFICACY (277V) = 80.2 lm/W

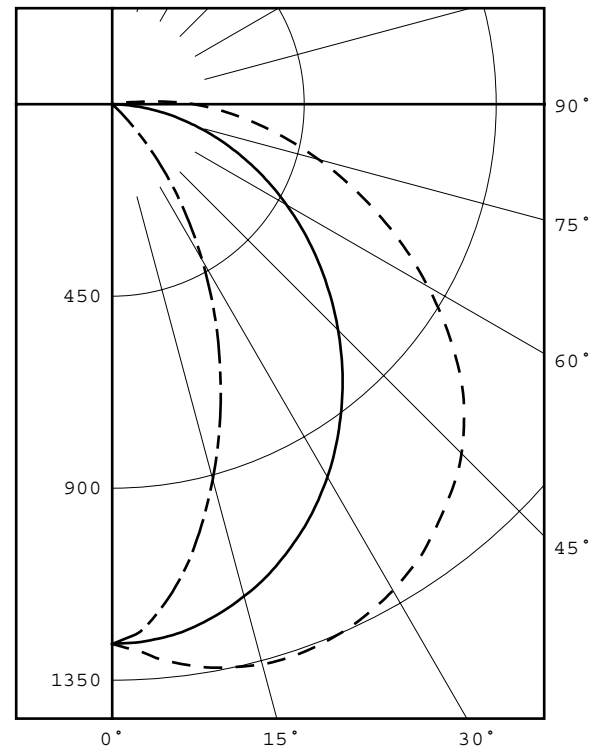
EFFICACY (120V) = 82.1 lm/W **

** THE EFFICACY AT 120 VOLTS IS BASED ON THE LUMENS FROM THIS REPORT AND THE WATTAGE MEASURED AT 120 VOLTS FROM ITL REPORT NUMBER ITL86716-THD.

CIE TYPE - DIRECT

PLANE : 0-DEG 90-DEG 180-DEG

SPACING CRITERIA : 1.52 1.19 0.71

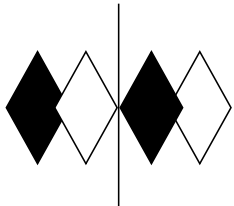


LEGEND:

0-deg -----
90-deg -----
180-deg -----

Checked B. HYRE

Approved R. BEATTIE
Lighting Engineer



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PAGE: 2 OF 8

CANDELA DISTRIBUTION
LATERAL ANGLE

	0.0	5.0	15.0	25.0	35.0	45.0	55.0	65.0	75.0	85.0	90.0	112.5	135.0	157.5
0.0	1265	1265	1265	1265	1265	1265	1265	1265	1265	1265	1265	1265	1265	1265
2.5	1281	1280	1279	1277	1276	1273	1272	1269	1267	1265	1263	1258	1250	1245
5.0	1306	1304	1302	1298	1292	1284	1277	1269	1264	1260	1257	1242	1223	1205
7.5	1325	1324	1321	1315	1308	1297	1284	1270	1260	1252	1248	1222	1183	1152
10.0	1341	1341	1336	1330	1320	1305	1289	1269	1250	1239	1233	1192	1136	1089
12.5	1351	1350	1346	1338	1326	1307	1286	1262	1238	1222	1215	1158	1081	1020
15.0	1359	1357	1351	1342	1329	1306	1281	1252	1223	1202	1194	1119	1021	945
17.5	1361	1359	1355	1343	1327	1301	1273	1239	1206	1180	1171	1077	957	867
20.0	1359	1356	1350	1339	1321	1291	1260	1221	1185	1153	1143	1031	890	787
22.5	1353	1350	1344	1331	1310	1278	1244	1202	1162	1125	1113	982	820	707
25.0	1344	1341	1335	1320	1296	1262	1224	1177	1135	1094	1081	930	750	628
27.5	1331	1328	1321	1304	1279	1243	1200	1150	1106	1061	1046	876	684	550
30.0	1316	1313	1304	1286	1259	1220	1175	1123	1075	1025	1009	821	614	474
32.5	1297	1294	1283	1264	1235	1195	1147	1092	1041	987	969	764	546	400
35.0	1276	1272	1261	1239	1209	1167	1116	1059	1006	949	927	707	480	329
37.5	1248	1247	1234	1212	1180	1136	1083	1025	968	908	884	650	414	261
40.0	1220	1219	1206	1183	1149	1104	1048	987	930	867	840	593	350	197
42.5	1192	1188	1174	1150	1116	1069	1012	949	890	824	795	537	289	136
45.0	1158	1153	1139	1115	1080	1033	973	910	849	781	749	482	227	81
47.5	1118	1115	1100	1079	1042	993	933	869	806	737	703	426	174	33
50.0	1075	1072	1060	1037	1001	953	892	826	763	692	656	373	122	10
52.5	1025	1023	1012	992	958	913	850	786	720	648	610	322	73	8
55.0	970	967	958	940	910	866	806	742	675	603	564	271	29	6
57.5	913	910	900	884	858	820	761	697	631	558	518	222	11	5
60.0	854	851	840	824	799	766	714	651	585	514	472	174	8	4
62.5	796	792	781	764	740	712	665	605	540	470	427	129	6	3
65.0	736	732	721	703	679	649	613	558	494	426	382	86	5	2
67.5	676	672	662	643	622	592	556	510	449	381	337	47	4	2
70.0	617	612	602	583	562	532	497	459	403	337	294	15	3	1
72.5	559	555	544	525	503	473	437	404	356	293	251	8	3	1
75.0	501	497	487	469	446	413	379	350	310	250	209	6	2	1
77.5	445	442	431	414	392	360	325	293	262	208	169	5	2	1
80.0	391	388	377	364	341	310	275	240	208	167	130	4	1	1
82.5	339	336	329	313	292	262	228	192	156	125	91	3	1	0
85.0	288	284	278	263	243	215	184	149	109	81	54	2	0	0
87.5	239	236	230	216	196	172	140	110	74	30	17	0	0	0
90.0	191	188	183	171	153	131	103	76	46	8	0	0	0	0
92.5	131	127	123	112	96	77	51	31	16	2	0	0	0	0
95.0	66	63	61	53	42	31	22	15	6	0	0	0	0	0
97.5	30	29	28	26	24	20	15	9	2	0	0	0	0	0
100.0	21	21	20	19	17	14	10	4	1	0	0	0	0	0
102.5	16	16	16	15	13	11	6	2	1	0	0	0	0	0
105.0	13	13	12	12	10	7	2	1	0	0	0	0	0	0
107.5	10	10	10	9	7	2	1	1	0	0	0	0	0	0
110.0	8	8	7	5	1	1	1	0	0	0	0	0	0	0
112.5	2	2	1	1	1	1	1	0	0	0	0	0	0	0
115.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
117.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
122.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
127.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
130.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
132.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
137.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
140.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
142.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
147.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
150.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
152.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
157.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0

THIS REPORT IS BASED ON PUBLISHED INDUSTRY PROCEDURES. FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE.



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CANDELA DISTRIBUTION
LATERAL ANGLE

	0.0	5.0	15.0	25.0	35.0	45.0	55.0	65.0	75.0	85.0	90.0	112.5	135.0	157.5
160.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
167.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
172.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
177.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
180.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



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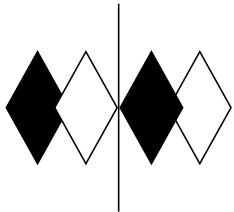
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PAGE: 4 OF 8

CANDELA DISTRIBUTION
LATERAL ANGLE

	180.0
0.0	1265
2.5	1244
5.0	1199
7.5	1140
10.0	1071
12.5	992
15.0	911
17.5	828
20.0	743
22.5	660
25.0	579
27.5	498
30.0	421
32.5	347
35.0	276
37.5	208
40.0	145
42.5	87
45.0	37
47.5	10
50.0	7
52.5	5
55.0	4
57.5	3
60.0	2
62.5	1
65.0	1
67.5	0
70.0	0
72.5	0
75.0	0
77.5	0
80.0	0
82.5	0
85.0	0
87.5	0
90.0	0
92.5	0
95.0	0
97.5	0
100.0	0
102.5	0
105.0	0
107.5	0
110.0	0
112.5	0
115.0	0
117.5	0
120.0	0
122.5	0
125.0	0
127.5	0
130.0	0
132.5	0
135.0	0
137.5	0
140.0	0
142.5	0
145.0	0
147.5	0
150.0	0
152.5	0
155.0	0
157.5	0



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PAGE: 5 OF 8

CANDELA DISTRIBUTION
LATERAL ANGLE

	180.0
160.0	0
162.5	0
165.0	0
167.5	0
170.0	0
172.5	0
175.0	0
177.5	0
180.0	0



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PAGE: 6 OF 8

5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	30
5- 10	89
10- 15	141
15- 20	186
20- 25	221
25- 30	245
30- 35	259
35- 40	263
40- 45	257
45- 50	245
50- 55	229
55- 60	209
60- 65	185
65- 70	157
70- 75	128
75- 80	99
80- 85	71
85- 90	44
90- 95	20
95-100	5
100-105	2
105-110	1
110-115	0
115-120	0
120-125	0
125-130	0
130-135	0
135-140	0
140-145	0
145-150	0
150-155	0
155-160	0
160-165	0
165-170	0
170-175	0
175-180	0

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	119
0- 20	446
0- 30	912
0- 40	1435
0- 50	1937
0- 60	2375
0- 70	2716
0- 80	2943
0- 90	3057
0-100	3083
0-110	3086
0-120	3086
0-130	3086
0-140	3086
0-150	3086
0-160	3086
0-170	3086
0-180	3086



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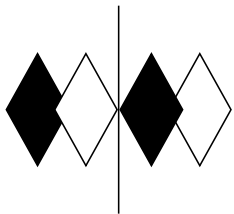
COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99
1	108	103	98	94	105	101	96	93	96	93	90	92	89	87	88	86	84	82
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	68
3	90	79	71	64	87	78	70	64	74	68	63	71	66	61	69	64	60	58
4	82	70	62	55	80	69	61	55	66	59	54	64	58	53	62	56	52	50
5	76	63	54	48	74	62	54	47	60	52	47	58	51	46	56	50	46	43
6	70	57	48	42	68	56	48	42	54	47	41	52	46	41	51	45	40	38
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34
8	61	48	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28
10	54	41	33	28	52	40	33	27	39	32	27	38	32	27	37	31	27	25

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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PAGE: 8 OF 8

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