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THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

NVLAP
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INDEPENDENT TESTING LABORATORIES, INC.
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REPORT NUMBER: ITL85170

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ISSUE DATE: 09/15/15

PREPARED FOR: FINELITE, INC.

CATALOG NUMBER: HPW-LED-4ft-FR-LED-V-8-35

LUMINAIRE: FABRICATED METAL HOUSING WITH WHITE PAINTED GENERAL INTERIOR FINISH, FORMED METAL FORWARD REFLECTOR WITH PREMIUM SPECULAR MICRO-DIMPLED FINISH, 4 WHITE CIRCUIT BOARDS EACH WITH 40 LEDS, FROSTED HOLOGRAPHIC PLASTIC LENS. LENS FROSTED SIDE OUT.

LAMPS: ONE HUNDRED SIXTY WHITE LIGHT EMITTING DIODES (LEDS), TILTED 42-DEGREES BELOW AIMED AT THE HORIZON.

INPUT ELECTRICAL: 277.0 VOLTS, 37.8 WATTS, 0.144 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

	0.0	45.0	90.0	135.0	180.0	FLUX
0	1416	1416	1416	1416	1416	
5	1620	1558	1410	1267	1208	135
15	1962	1801	1355	966	824	389
25	2083	1887	1247	675	489	587
35	2043	1819	1088	409	222	696
45	1847	1622	891	190	41	704
55	1504	1320	670	42	19	625
65	992	939	444	21	9	462
75	465	487	231	10	4	251
85	71	89	58	3	2	58
90	0	0	0	0	0	

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%FIXT
0- 30	1110	28.4
0- 40	1806	46.2
0- 60	3135	80.3
0- 90	3906	100.0
90-180	0	0.0
0-180	3906	100.0

EFFICACY (277V) = 103.3 lm/W

EFFICACY (120V) = 105.6 lm/W **

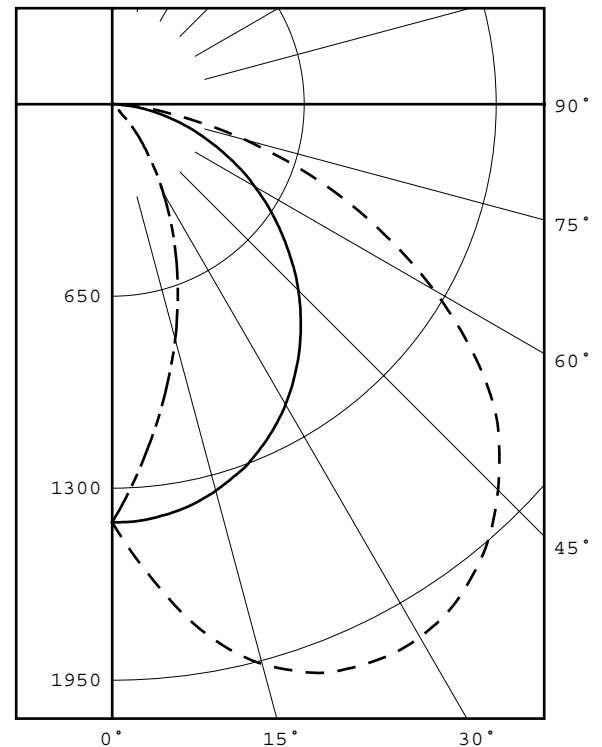
** THE EFFICACY AT 120 VOLTS IS BASED ON THE
LUMENS FROM THIS REPORT AND THE WATTAGE
MEASURED AT 120 VOLTS FROM ITL REPORT
NUMBER ITL85170-THD.

CIE TYPE - DIRECT

PLANE	: 0-DEG	90-DEG	180-DEG
SPACING CRITERIA	: 1.92	1.23	0.57
LUMINOUS LENGTH	: 5.750	46.937	

LUMINANCE DATA IN CANDELA/SQ M

ANGLE IN DEG	AVERAGE 0-DEG	AVERAGE 90-DEG	AVERAGE 180-DEG
45	15001.	7237.	333.
55	15059.	6709.	190.
65	13481.	6034.	122.
75	10318.	5126.	89.
85	4679.	3822.	132.



LEGEND:

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

Checked B. HYRE
Approved R. BEATTIE
Lighting Engineer



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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	1416	1416	1416	1416	1416	1416	1416	1416	1416
2.5	1518	1514	1487	1456	1415	1375	1343	1320	1312
5.0	1620	1609	1558	1491	1410	1331	1267	1224	1208
7.5	1725	1703	1627	1524	1401	1284	1191	1130	1108
10.0	1819	1791	1691	1550	1390	1236	1116	1038	1010
12.5	1898	1869	1750	1572	1374	1184	1041	948	915
15.0	1962	1929	1801	1589	1355	1132	966	860	824
17.5	2009	1975	1840	1602	1332	1077	891	773	734
20.0	2049	2011	1866	1611	1309	1021	818	691	649
22.5	2070	2032	1881	1613	1279	964	746	614	566
25.0	2083	2043	1887	1609	1247	906	675	536	489
27.5	2089	2044	1884	1599	1212	848	605	466	415
30.0	2083	2034	1869	1581	1174	790	537	395	345
32.5	2069	2016	1849	1556	1132	731	472	330	282
35.0	2043	1989	1819	1524	1088	673	409	270	222
37.5	2007	1954	1781	1484	1042	615	348	213	170
40.0	1965	1908	1735	1439	993	558	292	164	128
42.5	1910	1854	1683	1388	943	501	240	124	88
45.0	1847	1790	1622	1330	891	445	190	87	41
47.5	1778	1721	1555	1269	838	391	146	42	33
50.0	1705	1645	1481	1203	781	338	110	34	27
52.5	1614	1568	1402	1133	726	290	79	29	23
55.0	1504	1472	1320	1063	670	239	42	25	19
57.5	1383	1360	1234	987	614	194	34	21	16
60.0	1257	1240	1148	908	557	152	29	18	13
62.5	1126	1113	1047	829	503	116	25	15	11
65.0	992	983	939	744	444	84	21	13	9
67.5	861	858	826	664	388	57	18	11	8
70.0	728	729	713	587	334	34	15	9	6
72.5	594	599	599	513	283	27	12	8	5
75.0	465	473	487	430	231	22	10	6	4
77.5	342	355	377	348	183	17	8	5	4
80.0	229	244	271	266	137	13	6	4	3
82.5	148	149	174	185	96	9	5	3	2
85.0	71	76	89	107	58	6	3	2	2
87.5	11	13	18	37	26	2	1	1	1
90.0	0	0	0	0	0	0	0	0	0



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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	34
5- 10	101
10- 15	165
15- 20	224
20- 25	274
25- 30	313
30- 35	341
35- 40	355
40- 45	357
45- 50	347
50- 55	328
55- 60	297
60- 65	256
65- 70	206
70- 75	153
75- 80	98
80- 85	48
85- 90	10

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	135
0- 20	523
0- 30	1110
0- 40	1806
0- 50	2510
0- 60	3135
0- 70	3597
0- 80	3848
0- 90	3906



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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	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	81	76	82	78	74	79	76	73	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	48	42	69	56	48	42	55	47	41	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	29	40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	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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