

IES INDOOR REPORT

PHOTOMETRIC FILENAME : V2WAE51LH840-4-UNV.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] FO33039.PSO
[TESTLAB] DAY-BRITE PHOTOMETRIC LABORATORY
[ISSUE DATE] 6/23/14
[MANUFAC] DAY-BRITE / CFI
[LUMCAT] V2WAE51LH840-4-UNV
[LUMINAIRE] 4' VAPORLUME 2-LP3.2.1 4000K BOARDS 95W DRIVER 1.37K RESISTOR
[LAMP] LED. LUMINAIRE OUTPUT = 5187 LMS
[TEST DATE] 6/23/14

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5187
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	109
Total Luminaire Watts	47.4
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.24
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.34
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	4.08 ft
Luminous Width (90-270)	0.55 ft
Luminous Height	0.17 ft



LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	7119	5914	5940
55	6363	5953	5760
65	5418	5311	4493
75	4341	3334	3229
85	2544	1832	1687

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CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>	<u>202.5</u>
0.0	1760.18	1760.18	1760.18	1760.18	1760.18	1760.18	1760.18	1760.18	1760.18	1760.18
2.5	1755.69	1758.18	1756.77	1761.45	1760.29	1761.45	1756.77	1758.18	1755.69	1758.18
5.0	1755.44	1752.77	1747.28	1749.32	1746.90	1749.32	1747.28	1752.77	1755.44	1752.77
7.5	1747.50	1741.95	1734.68	1743.89	1738.73	1743.89	1734.68	1741.95	1747.50	1741.95
10.0	1731.39	1727.08	1722.45	1730.20	1729.95	1730.20	1722.45	1727.08	1731.39	1727.08
12.5	1712.97	1710.78	1707.57	1715.81	1706.71	1715.81	1707.57	1710.78	1712.97	1710.78
15.0	1696.12	1692.65	1691.70	1687.41	1687.60	1687.41	1691.70	1692.65	1696.12	1692.65
17.5	1673.16	1669.11	1665.63	1673.84	1659.90	1673.84	1665.63	1669.11	1673.16	1669.11
20.0	1641.66	1637.41	1643.09	1643.87	1628.23	1643.87	1643.09	1637.41	1641.66	1637.41
22.5	1604.64	1605.58	1606.06	1602.54	1593.91	1602.54	1606.06	1605.58	1604.64	1605.58
25.0	1564.35	1570.94	1567.10	1558.63	1547.04	1558.63	1567.10	1570.94	1564.35	1570.94
27.5	1520.87	1525.70	1520.14	1507.69	1502.37	1507.69	1520.14	1525.70	1520.87	1525.70
30.0	1470.75	1475.06	1471.11	1452.37	1440.20	1452.37	1471.11	1475.06	1470.75	1475.06
32.5	1414.23	1421.13	1419.45	1393.91	1384.45	1393.91	1419.45	1421.13	1414.23	1421.13
35.0	1355.56	1366.48	1351.27	1332.18	1322.80	1332.18	1351.27	1366.48	1355.56	1366.48
37.5	1295.54	1301.94	1283.65	1268.08	1264.18	1268.08	1283.65	1301.94	1295.54	1301.94
40.0	1231.14	1235.01	1218.76	1212.22	1208.79	1212.22	1218.76	1235.01	1231.14	1235.01
42.5	1164.62	1164.40	1152.65	1164.51	1169.07	1164.51	1152.65	1164.40	1164.62	1164.40
45.0	1094.25	1093.81	1089.07	1137.60	1147.28	1137.60	1089.07	1093.81	1094.25	1093.81
47.5	1022.32	1021.66	1032.27	1126.42	1130.37	1126.42	1032.27	1021.66	1022.32	1021.66
50.0	951.56	950.48	993.31	1112.70	1108.18	1112.70	993.31	950.48	951.56	950.48
52.5	880.40	876.56	974.92	1075.57	1067.07	1075.57	974.92	876.56	880.40	876.56
55.0	806.92	809.30	964.93	1016.46	993.81	1016.46	964.93	809.30	806.92	809.30
57.5	732.58	752.35	940.99	924.20	904.96	924.20	940.99	752.35	732.58	752.35
60.0	660.42	697.29	888.34	815.21	808.79	815.21	888.34	697.29	660.42	697.29
62.5	589.23	648.21	821.73	723.93	729.12	723.93	821.73	648.21	589.23	648.21
65.0	520.54	606.70	717.48	648.02	658.86	648.02	717.48	606.70	520.54	606.70
67.5	453.56	572.31	615.60	577.58	588.36	577.58	615.60	572.31	453.56	572.31
70.0	390.07	529.59	514.54	506.74	517.93	506.74	514.54	529.59	390.07	529.59
72.5	329.31	468.49	423.59	437.67	445.16	437.67	423.59	468.49	329.31	468.49
75.0	270.91	391.69	346.73	371.43	375.56	371.43	346.73	391.69	270.91	391.69
77.5	214.60	311.33	281.74	303.52	308.18	303.52	281.74	311.33	214.60	311.33
80.0	160.76	235.87	222.96	240.61	244.98	240.61	222.96	235.87	160.76	235.87
82.5	111.15	171.10	171.17	184.99	188.61	184.99	171.17	171.10	111.15	171.10
85.0	68.29	118.89	127.77	136.12	139.04	136.12	127.77	118.89	68.29	118.89
87.5	36.35	82.76	96.36	99.35	100.22	99.35	96.36	82.76	36.35	82.76
90.0	23.53	62.18	72.90	71.06	70.71	71.06	72.90	62.18	23.53	62.18
92.5	24.01	51.92	58.09	52.88	51.86	52.88	58.09	51.92	24.01	51.92
95.0	25.32	45.69	48.84	41.66	40.08	41.66	48.84	45.69	25.32	45.69
97.5	26.06	42.16	43.81	35.01	32.99	35.01	43.81	42.16	26.06	42.16
100.0	25.76	40.00	41.19	31.58	29.32	31.58	41.19	40.00	25.76	40.00
102.5	24.37	38.69	40.16	30.29	27.83	30.29	40.16	38.69	24.37	38.69
105.0	22.44	37.34	40.15	30.06	27.34	30.06	40.15	37.34	22.44	37.34
107.5	20.33	35.70	40.26	30.04	27.23	30.04	40.26	35.70	20.33	35.70
110.0	17.83	33.44	40.14	30.18	27.22	30.18	40.14	33.44	17.83	33.44
112.5	15.08	30.42	39.35	30.22	27.27	30.22	39.35	30.42	15.08	30.42
115.0	12.40	26.86	38.04	30.05	27.31	30.05	38.04	26.86	12.40	26.86
117.5	9.86	22.90	36.35	29.92	27.37	29.92	36.35	22.90	9.86	22.90
120.0	7.74	18.72	34.16	29.67	27.37	29.67	34.16	18.72	7.74	18.72
122.5	5.99	14.82	31.36	29.05	27.08	29.05	31.36	14.82	5.99	14.82
125.0	4.54	11.22	27.79	28.28	26.96	28.28	27.79	11.22	4.54	11.22
127.5	3.46	7.95	24.22	27.55	26.76	27.55	24.22	7.95	3.46	7.95
130.0	2.68	5.30	20.70	26.34	25.99	26.34	20.70	5.30	2.68	5.30
132.5	2.07	3.18	17.21	24.71	24.83	24.71	17.21	3.18	2.07	3.18

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CANDELA TABULATION - (Cont.)

135.0	1.59	1.57	13.87	22.49	23.16	22.49	13.87	1.57	1.59	1.57
137.5	1.23	0.94	10.72	19.83	20.85	19.83	10.72	0.94	1.23	0.94
140.0	0.89	0.62	7.85	16.57	18.12	16.57	7.85	0.62	0.89	0.62
142.5	0.59	0.36	5.32	13.15	15.17	13.15	5.32	0.36	0.59	0.36
145.0	0.38	0.14	3.19	9.92	12.06	9.92	3.19	0.14	0.38	0.14
147.5	0.18	0.00	1.44	6.93	9.00	6.93	1.44	0.00	0.18	0.00
150.0	0.02	0.00	0.27	4.37	6.16	4.37	0.27	0.00	0.02	0.00
152.5	0.00	0.00	0.00	2.23	3.69	2.23	0.00	0.00	0.00	0.00
155.0	0.00	0.00	0.00	0.71	1.72	0.71	0.00	0.00	0.00	0.00
157.5	0.00	0.00	0.00	0.09	0.57	0.09	0.00	0.00	0.00	0.00
160.0	0.00	0.00	0.01	0.03	0.05	0.03	0.01	0.00	0.00	0.00
162.5	0.00	0.03	0.02	0.04	0.03	0.04	0.02	0.03	0.00	0.03
165.0	0.01	0.01	0.01	0.03	0.04	0.03	0.01	0.01	0.01	0.01
167.5	0.00	0.00	0.00	0.03	0.01	0.03	0.00	0.00	0.00	0.00
170.0	0.00	0.00	0.00	0.07	0.05	0.07	0.00	0.00	0.00	0.00
172.5	0.02	0.01	0.03	0.06	0.07	0.06	0.03	0.01	0.02	0.01
175.0	0.04	0.05	0.10	0.09	0.12	0.09	0.10	0.05	0.04	0.05
177.5	0.08	0.09	0.10	0.09	0.17	0.09	0.10	0.09	0.08	0.09
180.0	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10

Vert. Angles **Horizontal Angles**

	<u>225.0</u>	<u>247.5</u>	<u>270.0</u>	<u>292.5</u>	<u>315.0</u>	<u>337.5</u>	<u>360.0</u>
0.0	1760.18	1760.18	1760.18	1760.18	1760.18	1760.18	1760.18
2.5	1756.77	1761.45	1760.29	1761.45	1756.77	1758.18	1755.69
5.0	1747.28	1749.32	1746.90	1749.32	1747.28	1752.77	1755.44
7.5	1734.68	1743.89	1738.73	1743.89	1734.68	1741.95	1747.50
10.0	1722.45	1730.20	1729.95	1730.20	1722.45	1727.08	1731.39
12.5	1707.57	1715.81	1706.71	1715.81	1707.57	1710.78	1712.97
15.0	1691.70	1687.41	1687.60	1687.41	1691.70	1692.65	1696.12
17.5	1665.63	1673.84	1659.90	1673.84	1665.63	1669.11	1673.16
20.0	1643.09	1643.87	1628.23	1643.87	1643.09	1637.41	1641.66
22.5	1606.06	1602.54	1593.91	1602.54	1606.06	1605.58	1604.64
25.0	1567.10	1558.63	1547.04	1558.63	1567.10	1570.94	1564.35
27.5	1520.14	1507.69	1502.37	1507.69	1520.14	1525.70	1520.87
30.0	1471.11	1452.37	1440.20	1452.37	1471.11	1475.06	1470.75
32.5	1419.45	1393.91	1384.45	1393.91	1419.45	1421.13	1414.23
35.0	1351.27	1332.18	1322.80	1332.18	1351.27	1366.48	1355.56
37.5	1283.65	1268.08	1264.18	1268.08	1283.65	1301.94	1295.54
40.0	1218.76	1212.22	1208.79	1212.22	1218.76	1235.01	1231.14
42.5	1152.65	1164.51	1169.07	1164.51	1152.65	1164.40	1164.62
45.0	1089.07	1137.60	1147.28	1137.60	1089.07	1093.81	1094.25
47.5	1032.27	1126.42	1130.37	1126.42	1032.27	1021.66	1022.32
50.0	993.31	1112.70	1108.18	1112.70	993.31	950.48	951.56
52.5	974.92	1075.57	1067.07	1075.57	974.92	876.56	880.40
55.0	964.93	1016.46	993.81	1016.46	964.93	809.30	806.92
57.5	940.99	924.20	904.96	924.20	940.99	752.35	732.58
60.0	888.34	815.21	808.79	815.21	888.34	697.29	660.42
62.5	821.73	723.93	729.12	723.93	821.73	648.21	589.23
65.0	717.48	648.02	658.86	648.02	717.48	606.70	520.54
67.5	615.60	577.58	588.36	577.58	615.60	572.31	453.56
70.0	514.54	506.74	517.93	506.74	514.54	529.59	390.07
72.5	423.59	437.67	445.16	437.67	423.59	468.49	329.31
75.0	346.73	371.43	375.56	371.43	346.73	391.69	270.91
77.5	281.74	303.52	308.18	303.52	281.74	311.33	214.60
80.0	222.96	240.61	244.98	240.61	222.96	235.87	160.76

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CANDELA TABULATION - (Cont.)

82.5	171.17	184.99	188.61	184.99	171.17	171.10	111.15
85.0	127.77	136.12	139.04	136.12	127.77	118.89	68.29
87.5	96.36	99.35	100.22	99.35	96.36	82.76	36.35
90.0	72.90	71.06	70.71	71.06	72.90	62.18	23.53
92.5	58.09	52.88	51.86	52.88	58.09	51.92	24.01
95.0	48.84	41.66	40.08	41.66	48.84	45.69	25.32
97.5	43.81	35.01	32.99	35.01	43.81	42.16	26.06
100.0	41.19	31.58	29.32	31.58	41.19	40.00	25.76
102.5	40.16	30.29	27.83	30.29	40.16	38.69	24.37
105.0	40.15	30.06	27.34	30.06	40.15	37.34	22.44
107.5	40.26	30.04	27.23	30.04	40.26	35.70	20.33
110.0	40.14	30.18	27.22	30.18	40.14	33.44	17.83
112.5	39.35	30.22	27.27	30.22	39.35	30.42	15.08
115.0	38.04	30.05	27.31	30.05	38.04	26.86	12.40
117.5	36.35	29.92	27.37	29.92	36.35	22.90	9.86
120.0	34.16	29.67	27.37	29.67	34.16	18.72	7.74
122.5	31.36	29.05	27.08	29.05	31.36	14.82	5.99
125.0	27.79	28.28	26.96	28.28	27.79	11.22	4.54
127.5	24.22	27.55	26.76	27.55	24.22	7.95	3.46
130.0	20.70	26.34	25.99	26.34	20.70	5.30	2.68
132.5	17.21	24.71	24.83	24.71	17.21	3.18	2.07
135.0	13.87	22.49	23.16	22.49	13.87	1.57	1.59
137.5	10.72	19.83	20.85	19.83	10.72	0.94	1.23
140.0	7.85	16.57	18.12	16.57	7.85	0.62	0.89
142.5	5.32	13.15	15.17	13.15	5.32	0.36	0.59
145.0	3.19	9.92	12.06	9.92	3.19	0.14	0.38
147.5	1.44	6.93	9.00	6.93	1.44	0.00	0.18
150.0	0.27	4.37	6.16	4.37	0.27	0.00	0.02
152.5	0.00	2.23	3.69	2.23	0.00	0.00	0.00
155.0	0.00	0.71	1.72	0.71	0.00	0.00	0.00
157.5	0.00	0.09	0.57	0.09	0.00	0.00	0.00
160.0	0.01	0.03	0.05	0.03	0.01	0.00	0.00
162.5	0.02	0.04	0.03	0.04	0.02	0.03	0.00
165.0	0.01	0.03	0.04	0.03	0.01	0.01	0.01
167.5	0.00	0.03	0.01	0.03	0.00	0.00	0.00
170.0	0.00	0.07	0.05	0.07	0.00	0.00	0.00
172.5	0.03	0.06	0.07	0.06	0.03	0.01	0.02
175.0	0.10	0.09	0.12	0.09	0.10	0.05	0.04
177.5	0.10	0.09	0.17	0.09	0.10	0.09	0.08
180.0	0.10	0.10	0.10	0.10	0.10	0.10	0.10

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	643.81	N.A.	12.40
0-30	1362.85	N.A.	26.30
0-40	2205.03	N.A.	42.50
0-60	3884.92	N.A.	74.90
0-80	4900.24	N.A.	94.50
0-90	5042.42	N.A.	97.20
10-90	4876.03	N.A.	94.00
20-40	1561.23	N.A.	30.10
20-50	2422.27	N.A.	46.70
40-70	2315.33	N.A.	44.60
60-80	1015.33	N.A.	19.60
70-80	379.88	N.A.	7.30
80-90	142.17	N.A.	2.70
90-110	84.03	N.A.	1.60
90-120	112.42	N.A.	2.20
90-130	131.17	N.A.	2.50
90-150	144.27	N.A.	2.80
90-180	144.59	N.A.	2.80
110-180	60.56	N.A.	1.20
0-180	5187.01	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	166.39
10-20	477.41
20-30	719.05
30-40	842.18
40-50	861.05
50-60	818.84
60-70	635.45
70-80	379.88
80-90	142.17
90-100	48.93
100-110	35.11
110-120	28.39
120-130	18.75
130-140	9.86
140-150	3.23
150-160	0.31
160-170	0.01
170-180	0.01

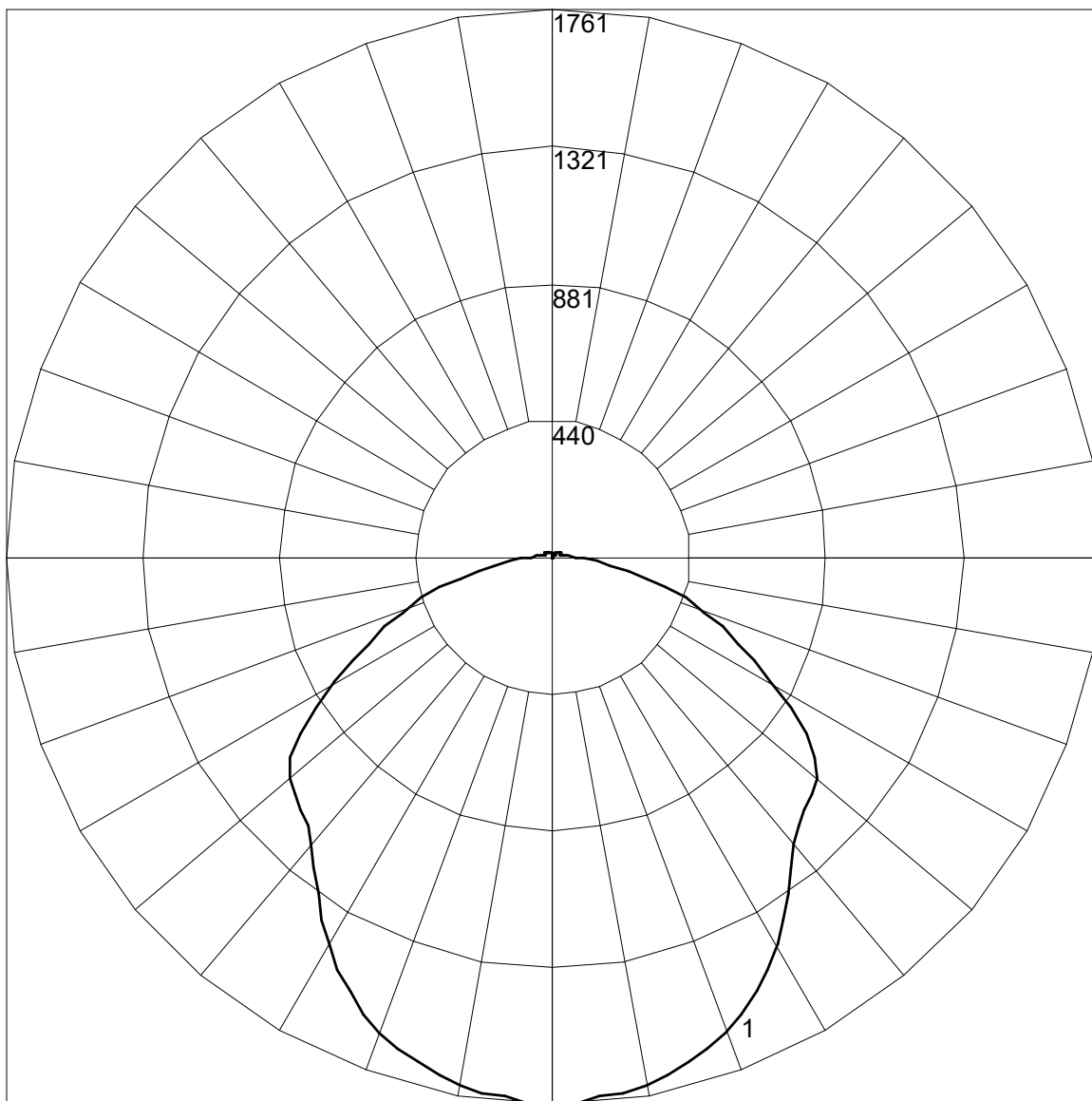
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	118	118	118	118	115	115	115	115	110	110	110	104	104	104	99	99	99	97
1	108	103	98	94	105	100	96	92	95	92	89	91	88	86	87	85	83	80
2	98	89	82	76	95	87	81	75	83	78	73	79	75	71	76	72	69	67
3	89	78	70	63	86	76	69	62	73	66	61	70	64	60	67	62	58	56
4	81	69	60	53	79	68	59	53	65	58	52	62	56	51	60	54	50	48
5	75	62	53	46	72	60	52	45	58	50	45	56	49	44	54	48	43	41
6	69	56	46	40	67	54	46	40	52	45	39	50	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	35	46	39	34	44	38	34	32
8	60	46	37	31	58	45	37	31	44	36	31	42	35	31	41	35	30	28
9	56	42	34	28	54	41	34	28	40	33	28	39	32	28	38	32	27	25
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	35	29	25	23

POLAR GRAPH



Maximum Candela = 1761.45 Located At Horizontal Angle = 67.5, Vertical Angle = 2.5
1 - Vertical Plane Through Horizontal Angles (90 - 270)