



**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : MWW-4-LED-HO-CW.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
[TEST]LED-3605A  
[TESTLAB]LSI INDUSTRIES, INC  
[ISSUE DATE]3/08/16  
[TEST DATE]11/15/12  
[MANUFACTURER]LSI INDUSTRIES, INC  
[LUMCAT]MWW-4-LED-HO-CW  
[ABSOLUTE]NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED  
[OTHER]TEST PROCEDURE: IESNA LM-79-08  
[OTHER]SCALED FROM ORIGINAL TEST DATA  
[\_SEARCH\_SOURCETYPE] LED  
[\_SEARCH\_APPLICATION] Indoor

**CHARACTERISTICS**

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4282
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	95
Total Luminaire Watts	45
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	2.44
Spacing Criterion (90-270)	1.36
Spacing Criterion (Diagonal)	1.76
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	0.50 ft
Luminous Width (90-270)	4.00 ft
Luminous Height	0.00 ft

**LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	13178	10479	5098
55	16224	12745	5165
65	21961	15924	5269
75	28774	24002	5519
85	39933	34351	5725

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : MWW-4-LED-HO-CW.IES**

**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>
<b>0.0</b>	887.40	887.40	887.40	887.40	887.40	887.40	887.40	887.40	887.40
<b>2.5</b>	895.52	899.00	904.80	905.96	914.08	887.40	867.68	853.76	844.48
<b>5.0</b>	948.88	947.72	941.92	924.52	911.76	866.52	831.72	808.52	795.76
<b>7.5</b>	1004.56	997.60	979.04	943.08	909.44	844.48	795.76	764.44	749.36
<b>10.0</b>	1062.56	1049.80	1016.16	959.32	904.80	822.44	760.96	725.00	709.92
<b>12.5</b>	1121.72	1103.16	1052.12	974.40	897.84	798.08	728.48	694.84	684.40
<b>15.0</b>	1182.04	1157.68	1089.24	988.32	889.72	773.72	700.64	679.76	670.48
<b>17.5</b>	1240.04	1209.88	1125.20	1001.08	880.44	749.36	683.24	663.52	653.08
<b>20.0</b>	1298.04	1260.92	1158.84	1011.52	868.84	723.84	668.16	647.28	634.52
<b>22.5</b>	1352.56	1310.80	1191.32	1019.64	856.08	699.48	650.76	628.72	615.96
<b>25.0</b>	1407.08	1358.36	1221.48	1026.60	841.00	676.28	633.36	609.00	596.24
<b>27.5</b>	1461.60	1404.76	1248.16	1032.40	825.92	655.40	613.64	588.12	576.52
<b>30.0</b>	1516.12	1450.00	1273.68	1034.72	808.52	638.00	593.92	568.40	555.64
<b>32.5</b>	1569.48	1495.24	1296.88	1034.72	788.80	619.44	573.04	547.52	535.92
<b>35.0</b>	1617.04	1538.16	1317.76	1032.40	767.92	599.72	551.00	525.48	515.04
<b>37.5</b>	1657.64	1576.44	1336.32	1028.92	745.88	578.84	527.80	504.60	495.32
<b>40.0</b>	1695.92	1606.60	1353.72	1020.80	722.68	556.80	504.60	483.72	469.80
<b>42.5</b>	1719.12	1634.44	1367.64	1011.52	697.16	532.44	482.56	455.88	426.88
<b>45.0</b>	1733.04	1649.52	1378.08	999.92	670.48	508.08	458.20	412.96	388.60
<b>47.5</b>	1740.00	1655.32	1382.72	987.16	642.64	482.56	435.00	375.84	349.16
<b>50.0</b>	1741.16	1653.00	1385.04	970.92	612.48	455.88	406.00	335.24	309.72
<b>52.5</b>	1736.52	1644.88	1376.92	952.36	581.16	429.20	370.04	295.80	271.44
<b>55.0</b>	1730.72	1634.44	1359.52	932.64	551.00	401.36	327.12	257.52	234.32
<b>57.5</b>	1724.92	1620.52	1337.48	910.60	517.36	378.16	286.52	220.40	199.52
<b>60.0</b>	1721.44	1607.76	1310.80	888.56	483.72	350.32	245.92	185.60	165.88
<b>62.5</b>	1723.76	1599.64	1280.64	863.04	448.92	321.32	207.64	151.96	134.56
<b>65.0</b>	1726.08	1596.16	1251.64	836.36	414.12	288.84	171.68	120.64	104.40
<b>67.5</b>	1726.08	1591.52	1222.64	805.04	379.32	248.24	136.88	99.76	85.84
<b>70.0</b>	1708.68	1583.40	1202.92	764.44	344.52	201.84	104.40	71.92	58.00
<b>72.5</b>	1591.52	1532.36	1182.04	719.20	306.24	157.76	84.68	45.24	32.48
<b>75.0</b>	1385.04	1360.68	1155.36	670.48	265.64	116.00	56.84	19.72	12.76
<b>77.5</b>	1182.04	1158.84	1059.08	627.56	223.88	91.64	30.16	10.44	8.12
<b>80.0</b>	1002.24	975.56	882.76	591.60	180.96	59.16	11.60	5.80	5.80
<b>82.5</b>	828.24	802.72	715.72	549.84	133.40	31.32	6.96	5.80	4.64
<b>85.0</b>	647.28	627.56	556.80	429.20	92.80	11.60	6.96	5.80	5.80
<b>87.5</b>	474.44	457.04	395.56	298.12	52.20	8.12	6.96	5.80	5.80
<b>90.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : MWW-4-LED-HO-CW.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	340.60	N.A.	8.00
0-30	766.75	N.A.	17.90
0-40	1346.74	N.A.	31.50
0-60	2756.94	N.A.	64.40
0-80	4016.73	N.A.	93.80
0-90	4281.85	N.A.	100.00
10-90	4197.00	N.A.	98.00
20-40	1006.14	N.A.	23.50
20-50	1694.9	N.A.	39.60
40-70	2103.52	N.A.	49.10
60-80	1259.8	N.A.	29.40
70-80	566.47	N.A.	13.20
80-90	265.12	N.A.	6.20
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	4281.85	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	84.85
10-20	255.75
20-30	426.15
30-40	579.99
40-50	688.76
50-60	721.43
60-70	693.32
70-80	566.47
80-90	265.12
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

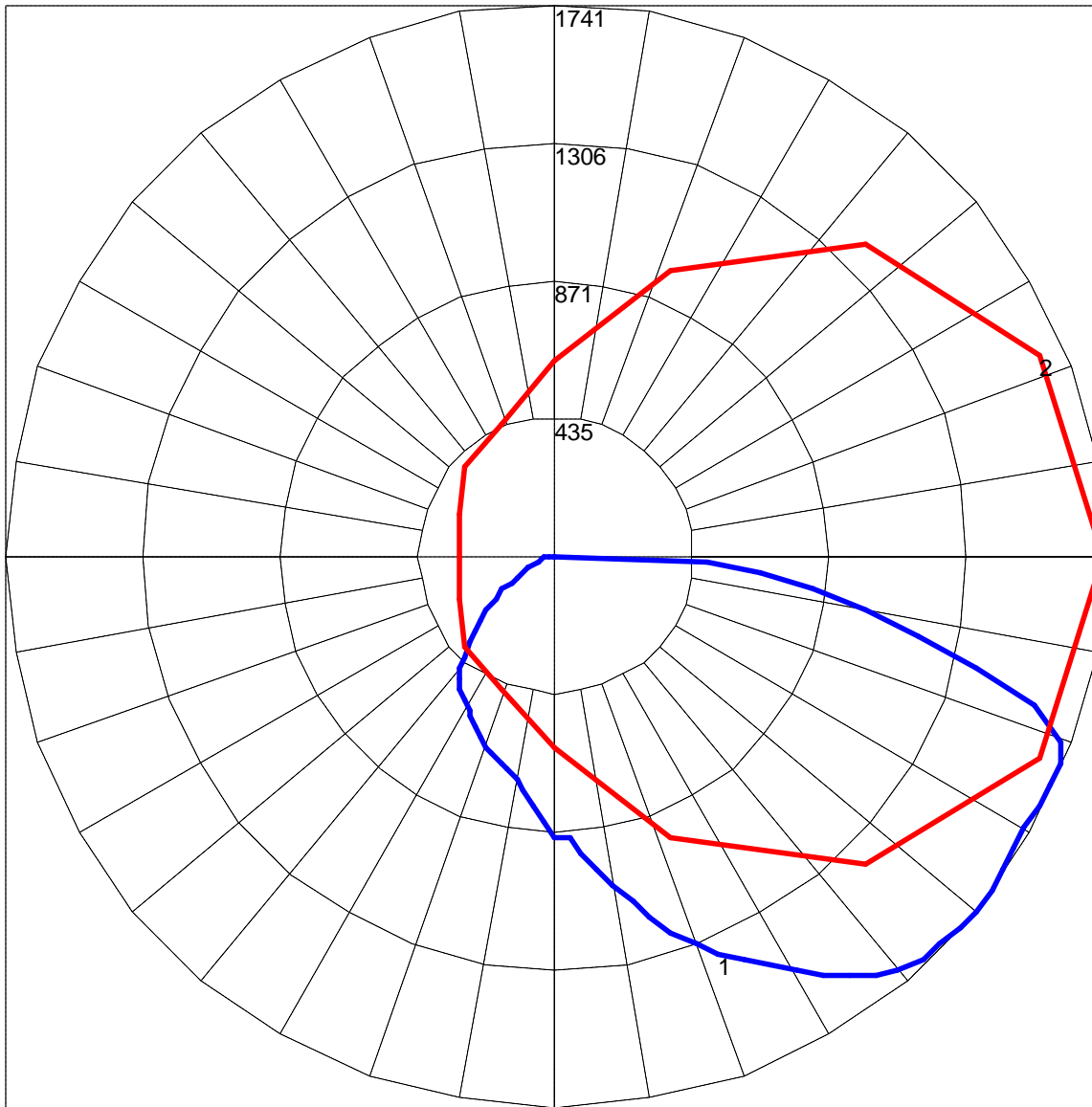
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : MWW-4-LED-HO-CW.IES**

**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	105	99	94	89	102	97	92	87	92	88	84	88	85	82	85	82	79	77
2	94	84	75	68	91	82	74	68	78	72	66	75	69	64	71	67	63	60
3	84	72	62	55	82	70	61	54	67	59	53	64	58	52	61	56	51	48
4	76	63	52	45	74	61	52	44	59	50	44	56	49	43	54	48	42	40
5	70	55	45	37	67	54	44	37	52	43	37	50	42	36	48	41	36	33
6	64	49	39	32	62	48	39	32	46	38	31	44	37	31	43	36	31	29
7	59	44	35	28	57	43	34	28	42	33	27	40	33	27	39	32	27	25
8	55	40	31	24	53	39	30	24	38	30	24	37	29	24	35	29	24	22
9	51	37	28	22	50	36	27	22	35	27	21	34	26	21	32	26	21	19
10	48	34	25	19	46	33	25	19	32	24	19	31	24	19	30	24	19	17

POLAR GRAPH



Maximum Candela = 1741.16 Located At Horizontal Angle = 0, Vertical Angle = 50  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (50) (Through Max. Cd.)