



IES INDOOR REPORT
PHOTOMETRIC FILENAME : WEL48A-50.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] RKS210907003-10
[ISSUE DATE] 2021/9/13 12:57
[MANUFAC] LAMAR LED
[LUMCAT] WEL48A-50
[LUMINAIRE] Direct Linear Ambient Luminaires
[LAMPCAT]
[LAMP]
[_VOLTAGE] 120.0 V
[_CURRENT] 0.370 A
[_POWERFACTOR] 0.999
[TESTLAB] Bay Area Compliance Laboratories Corp. (Kunshan).
[_TESTINST] GPM-1900
[_TESTDIST] 14.073 m
[_TESTTEMPERATURE] 25.3 °C
[_TESTHUMIDITY] 49
[_TESTOPERATOR] George
[BALLAST]
[BALLASTCAT]

CHARACTERISTICS

Lumens Per Lamp	6120 (1 lamp)
Total Lamp Lumens	6120
Luminaire Lumens	6120
Total Luminaire Efficiency	100 %
Luminaire Efficacy Rating (LER)	138
Total Luminaire Watts	44.38
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.18
Spacing Criterion (Diagonal)	1.32
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	1.21 m
Luminous Width (90-270)	0.17 m
Luminous Height	0.04 m

IES INDOOR REPORT
PHOTOMETRIC FILENAME : WEL48A-50.IES

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	8325	7224	6999
55	7446	6292	6170
65	6497	5336	5378
75	5266	4292	4598
85	3126	3026	3690

IES INDOOR REPORT
PHOTOMETRIC FILENAME : WEL48A-50.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>	<u>202.5</u>
0	2149.8	2149.8	2149.8	2149.8	2149.8	2149.8	2149.8	2149.8	2149.8	2149.8
1	2150.0	2148.8	2149.5	2149.3	2149.2	2149.0	2149.6	2149.0	2148.9	2148.6
2	2149.6	2147.7	2147.9	2147.6	2147.1	2146.8	2147.5	2147.1	2146.0	2147.3
3	2148.3	2145.7	2145.7	2144.9	2144.6	2144.1	2144.3	2144.1	2142.9	2144.9
4	2144.4	2142.9	2141.9	2141.2	2140.7	2140.4	2140.2	2140.4	2139.0	2141.1
5	2140.6	2138.8	2137.6	2136.4	2135.5	2135.6	2135.3	2135.3	2133.7	2136.3
6	2135.2	2132.8	2131.5	2130.1	2128.9	2129.1	2129.2	2129.0	2126.3	2130.8
7	2129.3	2125.9	2124.5	2122.7	2122.6	2121.7	2121.2	2122.4	2119.1	2124.3
8	2121.1	2118.7	2116.6	2114.5	2113.9	2113.9	2113.3	2113.4	2110.2	2116.5
9	2111.8	2109.4	2108.2	2105.5	2104.6	2105.0	2104.1	2104.4	2100.5	2108.1
10	2103.9	2100.4	2097.5	2094.9	2093.9	2094.5	2093.4	2095.2	2089.0	2098.4
11	2093.6	2089.8	2087.2	2085.1	2082.4	2083.0	2082.8	2083.7	2077.1	2087.9
12	2081.9	2077.8	2074.9	2071.6	2069.7	2070.2	2069.8	2071.7	2064.9	2077.0
13	2068.6	2066.1	2061.3	2057.6	2056.6	2057.0	2055.4	2057.7	2051.4	2064.9
14	2054.7	2051.5	2046.9	2043.5	2041.0	2042.1	2041.0	2044.5	2037.1	2049.7
15	2040.1	2037.3	2033.2	2027.7	2025.3	2026.7	2025.0	2027.6	2020.5	2035.9
16	2024.5	2021.0	2017.9	2013.0	2010.4	2011.0	2010.3	2013.0	2003.9	2020.6
17	2010.0	2005.8	1999.7	1997.1	1992.0	1993.8	1993.9	1995.1	1987.0	2004.7
18	1991.2	1987.2	1982.5	1977.4	1974.5	1975.9	1974.5	1978.5	1968.4	1985.8
19	1973.1	1968.4	1961.8	1959.7	1954.6	1957.7	1954.3	1957.8	1947.7	1966.8
20	1952.1	1949.3	1943.4	1938.4	1934.1	1935.9	1934.5	1939.0	1927.5	1948.2
21	1931.4	1929.0	1922.7	1916.5	1912.3	1915.9	1913.3	1917.4	1907.2	1928.3
22	1910.5	1908.6	1901.7	1896.7	1891.0	1894.6	1892.8	1894.9	1885.9	1906.2
23	1889.8	1885.6	1880.0	1873.9	1869.0	1870.8	1870.6	1874.1	1863.4	1884.9
24	1867.1	1864.4	1855.6	1851.8	1847.0	1849.0	1848.4	1850.4	1838.3	1862.2
25	1844.5	1841.3	1832.0	1827.4	1821.8	1825.3	1824.0	1827.1	1814.1	1839.4
26	1818.6	1815.6	1808.8	1803.8	1797.0	1800.2	1799.6	1801.8	1789.5	1815.5
27	1793.4	1790.0	1783.1	1779.7	1773.5	1774.6	1775.2	1777.1	1764.8	1788.4
28	1765.9	1764.4	1757.9	1753.1	1746.7	1750.1	1749.0	1751.9	1736.2	1763.2
29	1741.4	1740.2	1733.1	1728.4	1721.6	1726.2	1724.1	1723.9	1709.7	1737.1
30	1713.8	1713.0	1703.9	1700.7	1697.1	1699.0	1695.4	1698.0	1683.0	1710.5
31	1686.4	1683.8	1678.2	1673.8	1667.8	1673.5	1669.3	1669.7	1656.1	1680.7
32	1658.1	1656.1	1651.2	1648.2	1641.3	1643.3	1642.6	1641.3	1625.1	1653.4
33	1629.6	1628.6	1620.4	1620.9	1614.9	1617.0	1612.1	1613.0	1597.1	1625.5
34	1601.6	1599.6	1593.0	1592.7	1587.4	1589.2	1584.0	1582.4	1567.8	1596.9
35	1571.1	1570.1	1563.6	1565.0	1559.6	1560.8	1555.4	1555.1	1538.1	1565.5
36	1538.8	1541.5	1535.0	1534.3	1529.2	1533.2	1527.3	1523.6	1508.2	1536.1
37	1509.6	1510.0	1504.1	1506.7	1501.7	1502.8	1496.1	1495.2	1475.3	1506.7
38	1479.0	1480.7	1474.7	1475.6	1474.3	1475.0	1468.1	1461.6	1445.0	1476.3
39	1446.0	1451.7	1446.0	1447.3	1442.9	1446.8	1438.7	1432.5	1413.9	1446.5
40	1414.4	1417.8	1416.0	1418.0	1414.7	1417.6	1409.0	1401.8	1383.0	1413.0
41	1382.5	1386.8	1386.2	1389.1	1385.6	1386.0	1378.8	1370.8	1348.5	1382.9
42	1351.3	1356.1	1353.0	1360.2	1357.5	1357.1	1346.6	1340.5	1316.9	1351.4
43	1316.5	1326.1	1323.4	1329.1	1329.7	1328.5	1317.4	1307.0	1285.3	1320.9
44	1284.9	1291.7	1293.4	1299.9	1297.8	1296.8	1287.1	1276.2	1250.2	1286.9
45	1253.4	1260.9	1260.7	1271.3	1270.1	1268.3	1254.9	1246.5	1218.7	1256.0
46	1221.4	1230.2	1230.2	1239.7	1241.6	1239.7	1224.9	1215.3	1186.2	1224.6
47	1185.5	1198.1	1199.4	1210.4	1213.1	1210.3	1194.8	1180.5	1153.8	1193.4
48	1153.7	1163.9	1169.1	1182.2	1181.8	1181.6	1165.1	1149.9	1121.7	1162.1
49	1121.7	1133.8	1136.7	1153.4	1154.2	1150.5	1133.1	1119.5	1089.7	1128.1
50	1086.3	1102.5	1106.5	1122.1	1126.1	1122.2	1103.2	1084.9	1054.8	1096.6
51	1054.3	1068.5	1076.8	1093.9	1095.9	1094.1	1073.5	1054.2	1022.9	1065.4
52	1022.1	1037.1	1046.6	1065.3	1067.6	1065.6	1044.1	1023.0	991.6	1031.2
53	989.5	1005.6	1016.2	1036.3	1039.6	1034.3	1014.1	991.7	959.2	999.5

IES INDOOR REPORT
PHOTOMETRIC FILENAME : WEL48A-50.IES

CANDELA TABULATION - (Cont.)

54	957.2	973.8	982.8	1007.8	1011.9	1006.4	981.8	960.3	924.1	967.8
55	922.5	943.7	954.0	977.9	985.2	979.5	953.4	927.2	892.7	936.3
56	890.6	909.5	924.3	950.1	955.2	948.9	924.5	896.4	860.4	905.1
57	859.1	878.9	892.5	919.7	928.7	921.6	892.9	866.1	828.3	870.2
58	825.9	847.7	862.9	892.2	901.9	894.3	863.6	834.9	795.8	839.2
59	796.2	819.4	831.8	864.1	874.7	866.6	833.3	802.8	765.0	809.8
60	761.4	786.6	805.4	835.8	844.3	838.0	806.9	772.2	734.1	775.3
61	731.1	753.7	773.9	811.5	820.8	811.4	776.4	742.8	700.6	744.9
62	700.1	723.4	745.5	781.6	794.5	784.3	748.1	713.6	670.9	715.1
63	666.7	690.8	717.9	755.4	766.4	758.0	720.8	681.2	640.9	685.0
64	636.8	661.2	690.0	728.9	741.0	729.2	693.2	652.3	611.9	652.4
65	607.1	631.5	662.3	702.9	715.5	702.8	665.8	623.1	582.7	622.8
66	576.8	602.1	632.3	676.6	690.2	676.7	635.6	594.5	550.9	593.5
67	545.5	573.8	606.0	649.5	663.6	651.7	609.6	564.0	522.3	564.6
68	516.3	542.4	579.3	624.2	638.8	623.9	583.3	536.2	494.7	533.4
69	487.8	514.3	550.7	599.5	614.9	599.1	555.0	508.9	466.8	505.8
70	459.1	486.5	524.9	572.4	590.9	574.2	528.7	479.3	436.6	477.8
71	430.8	458.9	499.1	547.6	566.8	549.8	502.7	454.6	409.3	450.0
72	402.4	431.3	473.3	523.0	542.8	525.4	477.0	425.3	382.6	422.9
73	372.9	403.1	446.8	500.1	518.4	500.0	450.4	399.7	352.9	393.1
74	346.1	377.2	422.5	477.0	495.2	476.5	426.0	374.4	326.6	366.9
75	316.8	351.5	398.6	451.5	470.7	453.5	401.8	346.6	300.6	341.3
76	291.1	324.2	375.2	428.3	448.4	428.4	378.5	322.3	275.9	316.0
77	265.2	299.3	351.8	405.9	426.1	405.6	355.1	297.8	251.0	289.2
78	239.9	274.8	328.3	383.3	403.6	385.6	331.6	273.6	224.6	265.3
79	216.0	251.3	304.2	359.4	382.3	361.6	307.1	251.1	201.2	241.7
80	190.4	228.1	282.2	338.5	359.0	340.4	285.4	226.8	178.5	216.4
81	167.4	203.4	260.3	317.1	337.7	317.5	263.9	204.7	156.1	194.4
82	145.1	181.1	237.9	294.6	317.3	296.9	241.2	183.6	132.7	172.0
83	122.9	159.8	216.9	273.6	296.1	276.2	220.0	162.4	111.3	150.9
84	101.3	138.4	196.7	253.2	275.3	255.8	200.0	141.5	90.3	130.0
85	78.3	117.3	177.9	233.2	253.1	233.7	180.8	120.3	71.1	110.6
86	58.7	99.1	158.0	214.6	232.9	214.9	161.2	102.2	49.8	90.9
87	39.1	81.9	140.8	193.5	213.1	195.1	143.6	85.3	30.9	73.6
88	20.1	65.9	123.9	174.2	191.6	175.8	127.3	67.8	13.4	58.6
89	3.3	50.4	107.8	155.3	172.2	154.9	110.5	53.5	0.0	44.7
90	0.0	39.3	92.7	138.7	155.9	139.6	94.3	40.2	0.0	37.8
91	0.0	38.1	90.9	136.3	153.0	136.1	92.1	38.7	0.0	37.2
92	0.0	37.3	90.3	134.7	150.9	134.6	91.1	37.7	0.0	36.2
93	0.0	37.3	89.2	133.5	149.2	132.7	90.4	37.9	0.0	36.6
94	0.0	36.8	88.7	131.9	147.3	131.3	89.2	37.5	0.0	36.2
95	0.0	36.7	88.2	130.9	145.6	129.9	88.9	37.3	0.0	35.9
96	0.0	36.3	87.7	129.9	144.0	129.0	88.3	37.3	0.0	36.1
97	0.0	36.0	86.8	128.5	142.5	128.3	87.6	37.1	0.0	36.4
98	0.0	36.3	86.3	127.2	140.8	126.8	86.5	37.3	0.0	36.4
99	0.0	36.1	85.6	125.9	139.2	125.2	86.3	36.8	0.0	35.8
100	0.0	36.2	85.2	124.5	137.8	123.9	85.4	36.8	0.0	35.8
101	0.0	36.3	84.5	123.3	136.2	122.6	85.1	36.4	0.0	35.6
102	0.7	36.0	84.0	122.1	134.7	121.0	84.4	36.4	0.0	36.2
103	0.8	35.7	83.1	120.7	133.4	119.6	83.3	36.4	0.0	35.3
104	1.0	35.8	82.4	119.9	131.6	118.5	82.7	36.0	1.2	35.4
105	1.2	35.8	81.8	118.6	130.1	116.9	82.1	35.9	1.7	35.2
106	1.8	35.0	81.2	117.3	128.4	115.9	81.9	35.8	1.7	34.9
107	2.3	34.7	80.7	116.0	126.6	114.5	80.5	35.1	2.2	34.1
108	2.5	33.7	79.8	114.6	125.2	113.3	80.3	34.1	2.1	33.1
109	2.5	32.8	79.0	113.5	124.0	112.3	79.3	33.6	2.0	32.2

IES INDOOR REPORT
PHOTOMETRIC FILENAME : WEL48A-50.IES

CANDELA TABULATION - (Cont.)

110	2.5	32.8	78.5	112.4	122.3	110.7	78.6	32.4	2.2	32.3
111	2.7	32.1	77.6	111.0	120.6	109.6	77.8	32.4	2.8	31.6
112	2.5	31.7	76.2	109.6	119.4	108.2	76.4	31.6	2.9	31.9
113	3.1	32.0	74.3	108.2	118.0	106.9	74.1	32.0	2.9	31.6
114	3.6	31.9	71.7	107.4	116.4	105.5	71.5	31.8	3.8	32.0
115	3.6	32.0	70.2	105.6	115.0	104.3	69.9	32.0	3.5	31.6
116	4.0	32.4	68.6	104.5	113.2	103.1	68.4	32.0	4.1	31.6
117	4.4	32.4	66.9	102.7	111.4	101.6	66.9	31.7	4.2	31.6
118	5.0	32.0	66.4	100.8	110.0	100.0	66.1	32.1	4.5	31.2
119	5.1	32.2	65.9	98.4	108.2	97.4	65.3	32.2	4.9	31.5
120	5.6	32.2	65.5	95.4	106.3	94.6	65.2	31.9	5.2	31.1
121	6.0	32.6	64.3	93.9	104.0	92.5	64.5	31.9	5.6	30.3
122	6.5	31.8	64.2	92.0	101.2	90.5	63.7	31.6	6.3	29.7
123	7.2	30.5	63.5	90.6	99.1	89.2	63.1	30.0	6.2	29.4
124	7.1	30.3	63.0	88.6	97.6	87.6	62.3	30.0	6.8	29.2
125	7.6	29.7	62.8	87.4	96.4	86.0	62.7	29.6	6.7	29.0
126	7.9	29.2	62.5	86.2	95.2	84.9	62.7	28.9	7.7	28.9
127	8.7	29.0	62.1	85.2	93.3	83.8	62.0	29.0	8.0	29.0
128	8.9	29.0	62.5	84.1	92.1	82.7	61.9	28.7	7.9	28.9
129	9.3	28.4	61.7	82.7	90.9	81.4	61.5	28.6	8.4	28.8
130	9.5	28.4	61.1	81.2	89.6	80.0	60.9	28.1	9.2	28.4
131	9.9	28.3	60.4	80.3	87.6	78.8	60.6	27.9	9.6	28.2
132	10.6	28.4	59.9	79.7	86.6	78.6	59.9	27.5	9.9	27.5
133	10.8	28.2	59.4	78.9	84.9	78.2	58.9	27.2	10.0	27.7
134	10.9	27.7	58.9	78.3	84.4	77.4	57.8	27.0	10.6	27.0
135	11.4	27.7	58.0	77.3	83.9	76.9	57.4	26.6	10.8	27.3
136	11.5	27.1	56.9	76.9	83.1	76.4	56.8	26.3	11.1	26.4
137	11.6	27.1	56.7	76.0	82.4	75.0	55.9	26.1	11.2	26.5
138	12.6	26.9	56.0	74.9	81.3	73.8	54.9	25.5	11.6	27.2
139	12.7	26.8	55.3	73.5	79.9	72.8	53.3	25.5	12.2	28.2
140	13.0	26.5	52.2	72.6	78.2	71.2	49.6	25.5	12.3	28.4
141	13.1	26.1	49.7	71.3	77.3	69.7	47.8	25.2	12.4	28.4
142	13.5	26.5	48.4	69.9	75.7	68.7	46.2	25.9	12.8	28.1
143	13.4	27.5	47.2	68.5	74.5	67.5	45.0	26.8	12.9	27.5
144	13.9	29.0	46.5	67.4	72.6	66.1	44.0	26.8	13.4	27.1
145	14.1	29.5	45.4	66.3	71.7	64.4	43.1	26.8	13.9	27.0
146	14.7	30.1	45.1	65.1	70.3	62.5	41.8	26.4	14.1	25.7
147	15.1	30.9	44.4	62.7	68.4	58.0	40.4	25.3	13.9	25.5
148	15.0	30.9	43.6	58.6	66.5	54.8	39.9	24.7	13.9	25.0
149	15.4	31.1	43.0	55.8	63.0	52.4	38.0	24.4	14.7	24.6
150	15.8	31.0	41.8	54.4	58.2	51.2	36.7	24.4	14.6	24.4
151	16.0	30.7	41.1	52.4	55.7	49.4	35.1	24.1	15.2	24.0
152	16.2	30.9	40.7	51.5	53.7	47.9	33.5	24.2	15.6	24.3
153	16.1	30.8	39.4	50.2	51.9	46.4	31.6	24.1	15.4	24.1
154	16.7	31.1	38.8	48.5	50.5	44.6	30.2	23.7	16.2	24.4
155	17.3	31.1	38.1	46.8	49.1	42.9	30.1	23.9	16.5	24.2
156	17.7	31.1	37.1	45.5	47.1	41.0	31.2	23.8	16.5	24.2
157	18.4	31.1	36.3	44.2	45.2	39.7	30.6	23.4	17.1	24.0
158	18.6	30.8	35.4	42.4	44.0	38.2	29.6	22.7	17.5	24.2
159	19.1	30.5	35.0	41.5	41.6	36.4	28.7	22.9	17.7	23.6
160	19.4	30.5	36.0	39.6	40.1	34.2	27.8	21.9	18.2	23.2
161	19.5	30.1	37.4	38.4	38.3	34.2	26.8	21.8	18.0	22.9
162	19.6	30.0	37.5	36.8	37.0	33.9	26.3	21.5	18.0	22.5
163	19.5	29.5	36.6	37.2	36.4	32.0	25.3	21.1	18.1	22.3
164	19.7	29.3	36.4	38.8	37.6	30.4	25.1	21.2	18.3	22.0
165	20.2	29.0	35.4	38.4	36.6	29.2	24.2	21.1	18.4	21.6

IES INDOOR REPORT
PHOTOMETRIC FILENAME : WEL48A-50.IES

CANDELA TABULATION - (Cont.)

166	20.4	28.6	34.5	37.2	34.6	28.1	24.1	21.1	18.8	21.6
167	20.6	27.2	33.5	36.2	32.8	26.4	23.3	21.1	19.4	22.0
168	20.8	26.3	32.5	35.4	31.1	25.8	22.9	21.3	19.6	22.0
169	21.4	25.6	30.7	33.8	29.7	24.6	22.3	21.4	20.1	22.3
170	21.4	25.0	29.4	31.8	27.9	24.9	23.0	21.2	20.1	22.0
171	21.6	24.8	28.1	30.5	27.0	24.6	22.3	21.2	20.4	22.5
172	21.9	24.2	26.8	29.2	26.1	23.9	22.5	21.2	20.6	21.8
173	22.0	24.1	25.4	27.2	25.2	24.4	22.2	21.5	20.9	21.8
174	22.2	23.8	24.1	23.6	23.8	23.7	22.7	22.3	21.2	22.3
175	22.1	23.7	23.3	22.5	23.1	23.4	23.1	22.3	21.8	22.4
176	22.5	23.0	22.4	17.6	22.2	23.1	23.4	22.7	21.6	21.8
177	22.3	23.1	22.0	16.9	21.1	23.1	23.5	23.4	21.7	22.7
178	23.0	22.9	21.5	21.6	20.4	23.3	23.6	23.6	21.9	23.0
179	22.6	22.8	20.9	23.0	20.4	23.3	23.6	23.6	22.3	22.7
180	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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	2149.8	2149.8	2149.8	2149.8	2149.8	2149.8	2149.8
1	2149.2	2150.2	2150.0	2149.7	2150.4	2149.5	2150.0
2	2148.0	2150.1	2150.6	2150.2	2150.0	2148.4	2149.6
3	2146.3	2149.8	2150.1	2149.7	2148.7	2146.8	2148.3
4	2144.3	2147.6	2148.3	2147.7	2146.8	2143.5	2144.4
5	2140.3	2145.4	2145.7	2145.5	2143.9	2139.8	2140.6
6	2136.5	2141.2	2142.1	2141.8	2139.6	2134.3	2135.2
7	2130.4	2136.3	2137.0	2137.3	2134.2	2129.0	2129.3
8	2123.4	2130.6	2131.4	2131.0	2128.3	2122.1	2121.1
9	2116.3	2123.6	2124.2	2123.9	2121.2	2114.4	2111.8
10	2107.4	2115.4	2116.0	2115.9	2112.6	2105.4	2103.9
11	2097.8	2106.2	2106.8	2106.7	2103.7	2094.3	2093.6
12	2085.9	2095.3	2096.3	2097.2	2091.9	2083.6	2081.9
13	2073.7	2084.1	2085.7	2084.8	2080.5	2071.3	2068.6
14	2061.3	2071.4	2072.0	2073.0	2068.8	2058.7	2054.7
15	2047.6	2057.1	2059.4	2060.1	2055.3	2043.5	2040.1
16	2031.7	2043.1	2045.1	2045.7	2039.0	2029.4	2024.5
17	2016.3	2027.5	2029.6	2030.7	2023.9	2012.9	2010.0
18	1999.5	2011.6	2011.8	2013.2	2007.4	1996.5	1991.2
19	1982.4	1992.6	1994.8	1996.5	1990.3	1976.8	1973.1
20	1964.1	1974.9	1976.4	1979.0	1972.4	1958.4	1952.1
21	1942.9	1956.1	1958.0	1960.3	1950.5	1939.0	1931.4
22	1923.5	1936.0	1938.6	1938.7	1930.9	1918.4	1910.5
23	1902.8	1915.9	1915.7	1917.9	1910.2	1897.4	1889.8
24	1880.8	1892.5	1894.8	1897.2	1889.0	1873.1	1867.1
25	1856.3	1870.9	1873.0	1873.5	1864.5	1850.3	1844.5
26	1833.9	1848.1	1850.0	1850.9	1841.4	1826.7	1818.6
27	1810.1	1825.1	1824.9	1827.7	1817.9	1802.1	1793.4
28	1785.3	1800.8	1800.2	1803.6	1793.5	1774.4	1765.9
29	1760.7	1774.0	1776.1	1779.0	1767.9	1748.7	1741.4
30	1732.3	1748.4	1750.7	1754.4	1739.6	1722.2	1713.8
31	1706.5	1722.8	1725.6	1726.0	1713.8	1695.7	1686.4
32	1680.2	1697.1	1697.0	1700.1	1687.1	1665.5	1658.1
33	1652.8	1667.4	1670.7	1673.3	1659.9	1637.4	1629.6
34	1622.3	1640.7	1643.7	1646.7	1629.5	1609.2	1601.6
35	1594.2	1612.6	1616.4	1616.8	1601.5	1580.5	1571.1
36	1565.3	1584.7	1585.8	1589.0	1572.7	1550.9	1538.8

IES INDOOR REPORT
PHOTOMETRIC FILENAME : WEL48A-50.IES

CANDELA TABULATION - (Cont.)

37	1537.1	1553.6	1558.0	1560.8	1543.8	1518.7	1509.6
38	1504.3	1525.1	1529.3	1532.2	1511.7	1488.4	1479.0
39	1475.0	1496.2	1500.8	1500.7	1481.8	1457.5	1446.0
40	1445.4	1467.5	1472.4	1472.1	1452.4	1427.4	1414.4
41	1415.0	1437.9	1440.5	1442.8	1422.4	1393.5	1382.5
42	1384.6	1405.8	1411.3	1413.5	1389.1	1362.2	1351.3
43	1350.9	1376.0	1382.6	1381.1	1359.3	1331.5	1316.5
44	1320.2	1346.1	1350.5	1351.3	1328.3	1300.0	1284.9
45	1289.5	1313.6	1321.1	1321.6	1297.8	1265.6	1253.4
46	1258.6	1283.8	1291.5	1291.7	1264.1	1233.4	1221.4
47	1224.4	1253.7	1262.2	1262.1	1233.0	1201.6	1185.5
48	1193.1	1223.6	1232.2	1228.7	1202.1	1169.4	1153.7
49	1162.4	1194.2	1200.1	1199.2	1171.7	1138.2	1121.7
50	1132.1	1161.4	1171.4	1169.4	1138.2	1103.6	1086.3
51	1097.9	1131.5	1142.4	1136.5	1107.6	1072.1	1054.3
52	1067.5	1102.3	1113.5	1106.8	1077.3	1040.5	1022.1
53	1036.8	1072.3	1084.5	1077.4	1046.4	1008.6	989.5
54	1005.2	1039.7	1052.4	1047.4	1016.0	973.9	957.2
55	971.8	1010.1	1023.0	1017.7	982.4	942.1	922.5
56	941.6	980.9	994.6	985.1	951.8	910.5	890.6
57	911.2	951.6	963.2	956.4	921.9	879.0	859.1
58	881.2	919.9	935.1	927.2	892.1	844.7	825.9
59	851.3	891.3	906.8	898.4	862.3	816.7	796.2
60	821.0	862.4	879.1	866.9	829.6	784.0	761.4
61	789.8	835.7	847.1	836.4	800.5	750.1	731.1
62	760.4	804.2	821.8	810.9	771.2	720.0	700.1
63	728.3	776.1	794.0	783.0	738.8	689.5	666.7
64	699.3	748.1	766.8	752.0	709.6	659.9	636.8
65	670.4	720.7	739.3	724.2	680.9	630.3	607.1
66	642.2	693.4	710.2	696.9	652.4	597.6	576.8
67	611.4	663.7	683.7	669.9	621.6	568.5	545.5
68	584.0	637.4	658.0	640.8	594.3	539.7	516.3
69	556.9	611.2	629.6	614.8	566.4	511.4	487.8
70	530.0	582.5	604.5	588.7	539.4	480.7	459.1
71	503.6	556.9	579.5	562.6	510.3	452.9	430.8
72	474.5	531.5	554.2	534.8	483.8	425.8	402.4
73	448.4	506.5	527.3	509.3	457.8	396.1	372.9
74	423.4	479.1	503.2	484.6	432.4	369.7	346.1
75	398.6	455.2	479.4	460.0	404.7	343.7	316.8
76	371.6	430.6	455.8	433.7	379.9	318.3	291.1
77	348.0	407.9	432.3	410.3	355.6	293.2	265.2
78	324.8	384.1	407.3	387.3	331.9	266.7	239.9
79	301.4	359.2	384.4	364.0	305.9	242.5	216.0
80	276.4	336.7	361.8	339.3	282.6	219.5	190.4
81	254.0	314.6	339.5	316.9	260.1	196.6	167.4
82	232.2	292.6	315.4	294.8	237.8	172.3	145.1
83	210.9	268.8	293.4	273.2	216.1	150.9	122.9
84	190.3	247.4	271.4	252.0	195.4	130.4	101.3
85	168.6	226.7	249.8	231.0	173.5	111.0	78.3
86	150.3	206.7	226.5	209.0	155.3	91.3	58.7
87	133.3	184.3	205.6	188.4	136.9	74.5	39.1
88	116.1	164.8	185.5	168.6	118.7	60.3	20.1
89	98.6	146.8	167.0	148.6	102.2	46.7	3.3
90	93.1	140.8	160.3	143.6	97.1	41.6	0.0
91	91.0	138.7	158.4	141.2	95.6	40.5	0.0
92	90.3	136.5	156.7	139.6	94.2	40.1	0.0

IES INDOOR REPORT
PHOTOMETRIC FILENAME : WEL48A-50.IES

CANDELA TABULATION - (Cont.)

93	89.1	134.7	154.5	137.8	93.4	39.9	0.0
94	88.5	133.6	152.7	136.4	92.4	39.7	0.0
95	88.0	131.7	150.5	134.7	91.9	39.6	0.0
96	87.2	130.3	148.7	133.5	91.1	39.8	0.0
97	87.0	129.0	146.8	132.0	90.6	39.7	0.0
98	86.3	128.1	144.9	130.3	90.3	39.3	0.0
99	86.0	126.8	143.0	129.1	90.1	39.4	0.0
100	85.6	125.9	141.6	128.0	89.4	39.6	0.0
101	84.8	124.9	139.8	126.7	89.0	38.9	0.0
102	84.5	123.7	138.2	126.0	88.0	39.3	0.7
103	83.9	122.8	136.8	125.0	87.8	39.4	0.8
104	83.2	121.7	135.3	124.0	87.1	39.0	1.0
105	82.7	120.8	133.8	122.6	86.5	38.8	1.2
106	82.1	119.4	132.6	121.6	85.9	38.2	1.8
107	81.6	118.3	130.9	119.8	84.8	37.3	2.3
108	80.5	116.8	129.1	118.6	84.4	36.8	2.5
109	80.0	115.9	127.9	117.9	83.5	35.8	2.5
110	78.5	114.5	126.5	116.0	82.6	35.6	2.5
111	76.5	113.2	124.9	114.8	80.5	35.8	2.7
112	74.2	111.8	123.3	113.7	78.8	35.2	2.5
113	72.3	110.4	122.1	112.5	76.8	35.2	3.1
114	70.7	109.0	120.4	111.0	75.3	35.8	3.6
115	69.0	107.7	118.8	109.4	74.1	35.9	3.6
116	68.6	105.4	118.0	107.7	72.8	36.0	4.0
117	68.1	103.0	115.8	105.2	71.6	35.5	4.4
118	67.3	100.5	113.4	102.7	71.6	35.7	5.0
119	66.9	98.0	110.6	100.6	70.5	35.7	5.1
120	66.2	96.4	108.5	98.2	69.7	35.6	5.6
121	65.5	94.6	106.5	96.2	69.1	35.8	6.0
122	64.7	93.4	104.3	95.2	68.6	34.5	6.5
123	64.4	91.8	103.1	93.7	68.0	33.9	7.2
124	64.2	90.5	101.3	92.5	67.7	33.3	7.1
125	63.9	89.3	99.7	91.1	67.5	33.1	7.6
126	63.8	88.2	98.0	89.5	67.6	32.7	7.9
127	63.6	86.7	96.5	88.3	67.0	32.6	8.7
128	62.9	85.4	95.4	87.5	66.5	32.4	8.9
129	62.4	84.0	94.0	85.3	65.8	32.0	9.3
130	61.7	82.8	92.6	84.2	65.1	31.5	9.5
131	60.7	81.7	90.6	83.3	64.5	31.4	9.9
132	60.1	81.1	89.6	82.3	64.1	31.6	10.6
133	59.3	80.4	88.6	82.2	63.1	31.1	10.8
134	58.6	79.6	87.7	81.4	62.5	31.1	10.9
135	58.0	79.0	86.9	80.3	61.8	30.5	11.4
136	57.3	77.9	86.1	79.2	60.9	30.6	11.5
137	56.1	76.7	85.6	78.4	60.2	29.7	11.6
138	53.0	75.8	84.2	76.9	59.1	30.2	12.6
139	51.4	74.3	83.0	75.8	56.3	29.5	12.7
140	50.1	72.9	81.3	74.3	53.8	29.4	13.0
141	48.6	71.8	79.3	73.4	52.7	29.4	13.1
142	48.0	70.3	77.9	71.7	51.1	30.9	13.5
143	46.8	69.3	76.7	70.6	50.5	31.9	13.4
144	46.2	67.6	75.0	69.2	49.6	31.9	13.9
145	45.1	65.3	73.4	67.8	48.3	32.1	14.1
146	44.4	61.1	71.9	64.1	47.6	32.1	14.7
147	43.3	58.9	70.0	60.6	46.6	31.9	15.1
148	42.4	57.4	65.2	58.6	45.4	31.3	15.0

IES INDOOR REPORT
PHOTOMETRIC FILENAME : WEL48A-50.IES

CANDELA TABULATION - (Cont.)

149	40.9	56.2	62.4	57.0	44.4	31.4	15.4
150	40.1	54.1	60.3	55.9	43.6	30.6	15.8
151	38.7	52.9	58.6	54.4	42.8	30.9	16.0
152	37.3	51.2	57.3	52.9	41.2	30.9	16.2
153	36.0	49.8	55.3	51.4	40.4	30.7	16.1
154	34.9	48.3	53.4	49.6	39.4	30.0	16.7
155	34.9	47.2	51.7	48.7	38.4	29.8	17.3
156	35.2	45.4	50.1	46.7	39.0	30.0	17.7
157	34.5	43.7	48.4	45.3	40.5	29.3	18.4
158	33.7	42.5	46.5	43.8	40.8	29.2	18.6
159	32.7	41.0	44.9	42.1	40.3	29.1	19.1
160	32.0	39.9	43.1	40.7	39.4	28.8	19.4
161	31.6	40.8	41.5	41.3	38.5	28.3	19.5
162	31.0	39.7	41.7	42.9	37.4	27.8	19.6
163	29.7	37.8	43.0	42.1	36.9	27.5	19.5
164	28.5	36.4	42.5	41.1	36.1	27.3	19.7
165	27.5	35.3	41.1	40.1	35.5	26.9	20.2
166	27.1	34.1	39.8	39.0	34.7	26.1	20.4
167	27.0	32.4	38.0	37.9	33.5	26.1	20.6
168	26.4	30.9	36.6	36.9	32.5	25.6	20.8
169	25.5	29.4	35.4	35.0	31.4	25.3	21.4
170	26.0	28.1	31.5	33.7	29.9	24.9	21.4
171	25.2	27.2	29.9	32.5	28.5	24.8	21.6
172	24.8	25.3	28.3	31.0	27.2	24.8	21.9
173	23.9	24.4	27.2	28.7	26.5	24.9	22.0
174	23.9	23.6	25.6	27.3	25.8	24.8	22.2
175	23.5	22.6	24.6	25.9	25.4	24.4	22.1
176	23.4	22.8	23.6	24.9	24.9	24.7	22.5
177	22.8	22.2	21.9	23.4	24.8	24.0	22.3
178	22.7	21.9	19.0	21.8	24.2	23.8	23.0
179	23.1	21.2	21.2	21.1	23.2	23.2	22.6
180	0.0	0.0	0.0	0.0	0.0	0.0	0.0

IES INDOOR REPORT
PHOTOMETRIC FILENAME : WEL48A-50.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	777.57	12.70	12.70
0-30	1625.82	26.60	26.60
0-40	2611.43	42.70	42.70
0-60	4456.25	72.80	72.80
0-80	5540.35	90.50	90.50
0-90	5730.58	93.60	93.60
10-90	5527.58	90.30	90.30
20-40	1833.86	30.00	30.00
20-50	2816.29	46.00	46.00
40-70	2506.37	41.00	41.00
60-80	1084.1	17.70	17.70
70-80	422.55	6.90	6.90
80-90	190.23	3.10	3.10
90-110	171.75	2.80	2.80
90-120	239.02	3.90	3.90
90-130	292.13	4.80	4.80
90-150	361.87	5.90	5.90
90-180	389.39	6.40	6.40
110-180	217.64	3.60	3.60
0-180	6119.97	100.00	100.00

Total Luminaire Efficiency = 100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	203.00
10-20	574.57
20-30	848.25
30-40	985.61
40-50	982.43
50-60	862.39
60-70	661.55
70-80	422.55
80-90	190.23
90-100	90.99
100-110	80.76
110-120	67.27
120-130	53.11
130-140	41.22
140-150	28.53
150-160	16.69
160-170	8.51
170-180	2.31

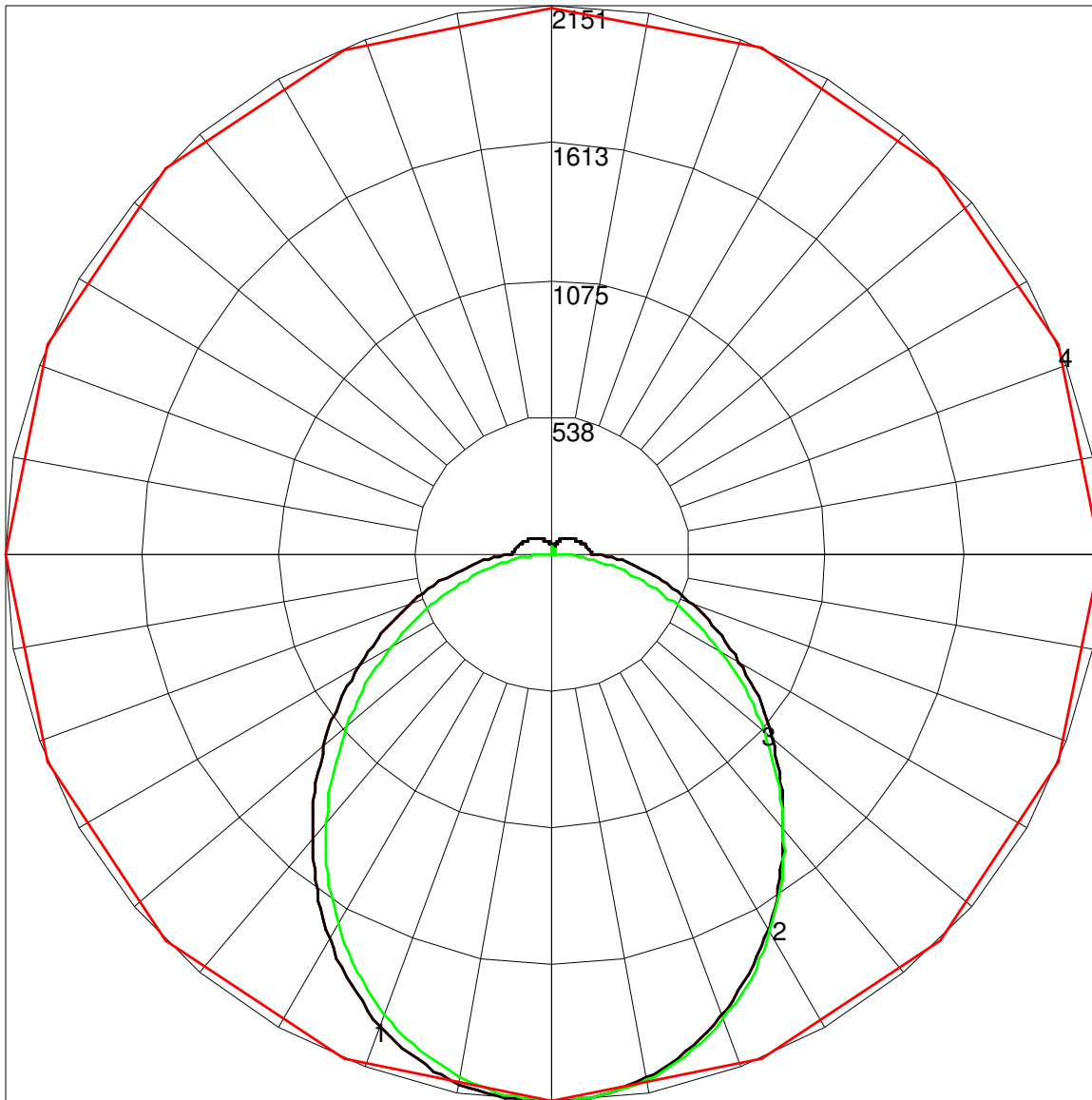
IES INDOOR REPORT
PHOTOMETRIC FILENAME : WEL48A-50.IES

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	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	94
1	107	102	97	93	103	99	95	91	94	90	87	89	86	84	84	82	80	77
2	97	89	82	76	94	86	80	75	82	77	72	78	73	69	74	70	67	64
3	89	78	70	63	86	76	68	62	72	66	60	69	63	59	65	61	57	54
4	81	69	61	54	78	68	59	53	64	57	52	61	55	50	58	53	49	47
5	75	62	53	46	72	60	52	46	58	50	45	55	49	44	53	47	43	40
6	69	56	47	41	67	55	46	40	52	45	39	50	43	38	48	42	38	35
7	64	51	42	36	62	50	41	36	47	40	35	45	39	34	44	38	34	31
8	60	46	38	32	58	45	37	32	44	36	31	42	35	31	40	34	30	28
9	56	43	34	29	54	42	34	29	40	33	28	39	32	28	37	31	27	25
10	52	39	31	26	51	39	31	26	37	30	26	36	30	25	34	29	25	23

POLAR GRAPH



Maximum Candela = 2150.6 Located At Horizontal Angle = 270, Vertical Angle = 2
1 - Vertical Plane Through Horizontal Angles (270 - 90) (Through Max. Cd.)
2 - Vertical Plane Through Horizontal Angles (90 - 270)
3 - Vertical Plane Through Horizontal Angles (0 - 180)
4 - Horizontal Cone Through Vertical Angle (2) (Through Max. Cd.)