

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P155588

Luminaire Tested: **TLM-E03-LED-E1-T3-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P155588  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33672)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: TLM-E03-LED-E1-T3-8030  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 3  
Light Source: (63) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7808.4 lumens  
Efficiency: N/A  
Efficacy: 103.8 lumens/watt  
Spacing Criteria (0/90/45): 1.97 / 4.22 / 2.62  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
CIE Type: Direct

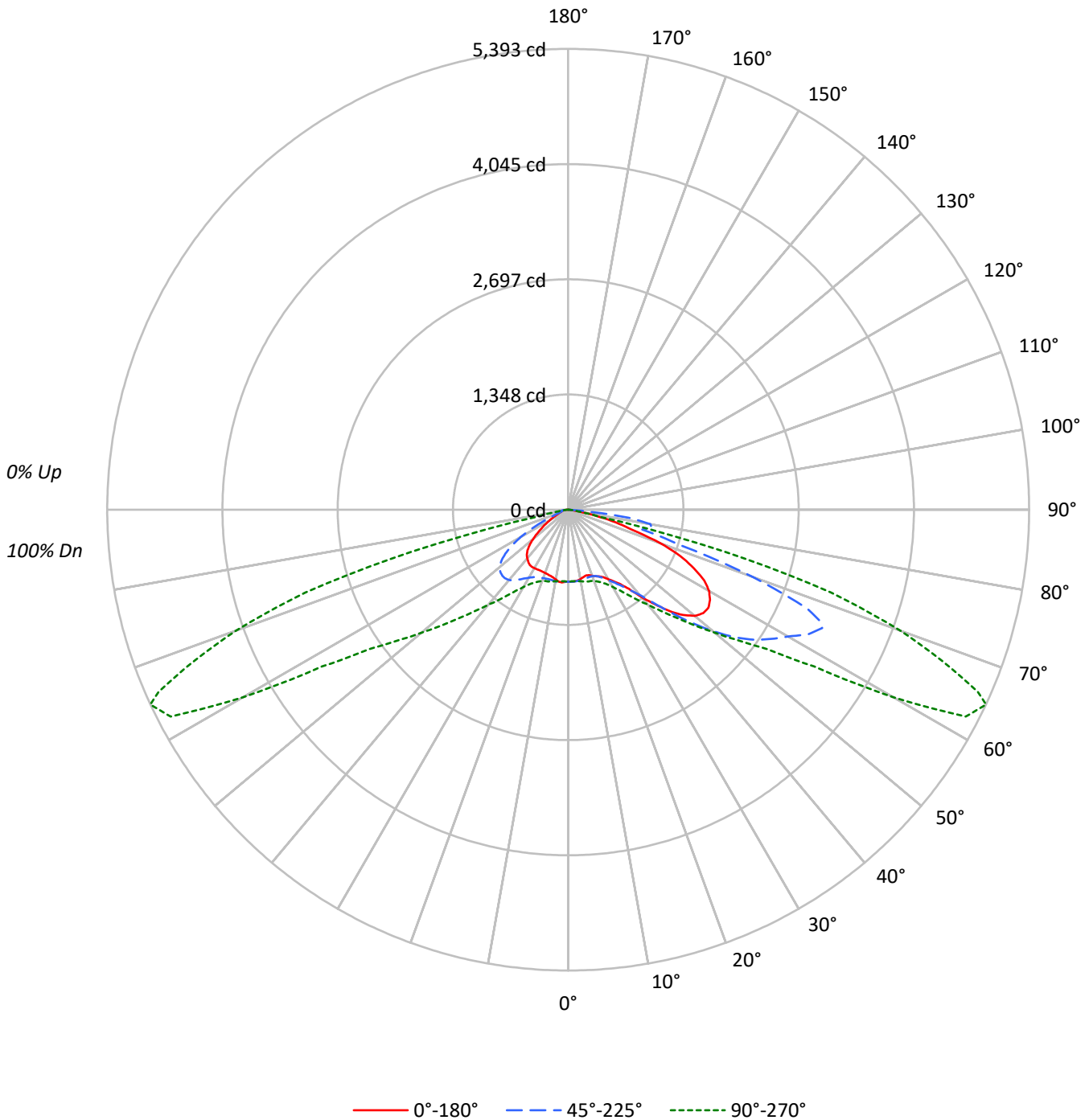
Input Watts (W): 75.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				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
RCR																		
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	92	82	73	65	89	80	71	64	76	69	63	72	66	61	69	64	60	57
3	81	68	57	49	79	66	56	49	63	55	48	60	53	47	57	51	46	43
4	73	57	46	38	70	56	46	38	53	44	37	51	43	36	48	41	36	33
5	65	49	38	30	63	48	38	30	46	37	29	44	35	29	42	34	29	26
6	59	43	32	24	57	42	32	24	40	31	24	38	30	24	36	29	23	21
7	54	38	28	20	52	37	27	20	35	27	20	34	26	20	32	25	20	17
8	50	34	24	17	48	33	24	17	32	23	17	30	23	17	29	22	17	14
9	46	31	21	15	45	30	21	15	29	20	15	28	20	15	27	20	14	12
10	43	28	19	13	42	27	19	13	26	18	13	25	18	13	24	18	13	11

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	18116	18116	18116
5°	18185	18165	18457
10°	18026	18579	18135
15°	17756	19394	17870
20°	18852	20360	18039
25°	20449	22333	18604
30°	23310	25974	19658
35°	27947	31852	20672
40°	37427	40771	20920
45°	51132	54296	20480
50°	64702	74964	18005
55°	75170	106720	14319
60°	81909	188743	10867
65°	82674	274720	8211
70°	72460	260201	6855
75°	47877	157463	7020
80°	17468	16005	8269
85°	2915	10621	9164



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.6	1.0
10°-20°	237.9	3.0
20°-30°	408.8	5.2
30°-40°	663.8	8.5
40°-50°	1108.1	14.2
50°-60°	1744.9	22.3
60°-70°	2379.4	30.5
70°-80°	1030.0	13.2
80°-90°	154.9	2.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	727.2	9.3
0°-40°	1391.0	17.8
0°-60°	4244.1	54.4
0°-90°	7808.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7808.4	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	842	842	842	842	842	
5°	842	843	841	851	854	80
15°	797	830	870	845	802	229
25°	861	866	940	873	783	403
35°	1063	1087	1212	998	787	689
45°	1680	1702	1783	1091	673	1291
55°	2003	2653	2843	899	382	1767
65°	1623	3279	5393	316	161	1576
75°	576	896	1893	85	84	615
85°	12	199	43	59	37	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	841.5	841.5	841.5	841.5	841.5	841.5	841.5	841.5	841.5	841.5	841.5
2.5°	844.8	848.2	844.8	845.7	846.5	845.7	844.8	844.8	842.3	844.0	845.7
5°	841.5	844.0	843.1	844.0	844.8	844.0	843.1	844.0	842.3	843.1	845.7
7.5°	837.2	836.4	837.2	838.9	840.6	840.6	840.6	841.5	840.6	840.6	843.1
10°	824.6	825.4	827.1	829.6	830.5	833.0	833.0	835.6	836.4	838.1	841.5
12.5°	808.5	809.4	811.1	812.8	817.0	821.2	821.2	827.1	829.6	833.9	839.8
15°	796.7	797.6	799.3	800.9	804.3	808.5	811.1	817.8	822.0	829.6	838.1
17.5°	803.5	802.6	804.3	805.2	805.2	808.5	808.5	813.6	818.7	825.4	836.4
20°	822.9	822.9	824.6	824.6	823.7	825.4	822.0	822.0	822.9	826.3	833.9
22.5°	842.3	841.5	844.8	846.5	847.4	849.9	846.5	845.7	841.5	838.9	841.5
25°	860.9	860.0	864.2	866.8	871.0	873.5	873.5	873.5	870.2	865.9	863.4
27.5°	889.6	889.6	893.8	896.3	899.7	904.8	907.3	907.3	908.1	902.2	898.0
30°	937.7	938.5	939.4	942.7	946.1	947.8	951.2	953.7	956.2	952.9	946.1
32.5°	995.1	990.0	990.0	995.1	999.3	1004.3	1006.0	1009.4	1014.5	1011.9	1011.1
35°	1063.4	1061.7	1060.1	1061.7	1066.8	1072.7	1079.5	1085.4	1082.0	1087.1	1084.5
37.5°	1164.7	1166.4	1167.2	1167.2	1166.4	1168.1	1171.5	1177.4	1175.7	1177.4	1180.7
40°	1331.8	1325.9	1320.0	1320.8	1312.4	1314.1	1300.6	1306.5	1307.3	1301.4	1304.0
42.5°	1498.9	1502.3	1504.8	1511.6	1505.7	1502.3	1489.6	1489.6	1482.9	1477.0	1475.3
45°	1679.5	1686.3	1687.1	1700.6	1695.6	1706.5	1715.8	1713.3	1702.3	1701.5	1689.7
47.5°	1823.9	1834.8	1846.7	1862.7	1875.3	1899.8	1928.5	1942.9	1951.3	1958.1	1944.6
50°	1931.9	1937.0	1967.3	1992.7	2020.5	2061.0	2100.7	2152.2	2193.5	2212.9	2231.5
52.5°	1990.1	2002.8	2035.7	2075.4	2124.3	2185.1	2249.2	2331.1	2402.0	2449.3	2491.5
55°	2002.8	2015.5	2052.6	2103.2	2169.9	2251.8	2343.8	2455.2	2561.5	2652.7	2741.3
57.5°	1967.3	1981.7	2021.4	2079.6	2158.1	2257.7	2373.3	2519.3	2666.2	2813.9	2944.7
60°	1902.4	1920.1	1956.4	2013.8	2100.7	2212.9	2351.4	2534.5	2740.4	2966.6	3217.3
62.5°	1795.2	1813.7	1847.5	1910.8	2000.3	2124.3	2284.7	2512.6	2803.7	3159.9	3604.7
65°	1623.0	1631.4	1672.8	1736.9	1816.3	1953.0	2129.4	2404.5	2783.5	3278.9	3891.6
66°	1545.3	1559.7	1585.0	1636.5	1712.5	1840.7	2018.0	2297.3	2706.7	3237.5	3884.0
67.5°	1423.8	1434.8	1451.7	1486.3	1532.7	1627.2	1795.2	2059.3	2472.0	3028.2	3722.8
70°	1151.2	1156.3	1179.1	1190.9	1206.9	1238.1	1298.9	1450.8	1772.4	2294.8	3004.6
72.5°	784.9	799.3	823.7	857.5	901.4	943.6	972.3	991.7	1060.9	1369.0	2001.9
75°	575.6	590.8	622.0	666.8	743.6	831.3	922.5	964.7	936.0	896.3	1114.9
77.5°	334.2	354.5	380.6	423.7	494.6	611.0	767.2	905.6	999.3	1005.2	954.6
80°	140.9	143.5	159.5	181.5	225.3	307.2	428.7	627.9	835.6	975.7	1008.6
82.5°	32.1	39.7	50.6	59.9	73.4	101.3	150.2	249.8	451.5	708.1	923.3
85°	11.8	11.8	16.0	23.6	27.0	30.4	39.7	63.3	108.0	199.2	415.2
87.5°	0.0	0.8	1.7	1.7	3.4	4.2	6.8	9.3	8.4	7.6	25.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	841.5	841.5	841.5	841.5	841.5	841.5	841.5	841.5	841.5	841.5	841.5
2.5°	844.0	843.1	841.5	841.5	841.5	841.5	839.8	840.6	838.9	839.8	839.8
5°	843.1	843.1	842.3	840.6	841.5	841.5	842.3	840.6	840.6	841.5	840.6
7.5°	843.1	842.3	842.3	842.3	843.1	842.3	843.1	843.1	843.1	844.0	844.0
10°	843.1	843.1	844.8	845.7	845.7	846.5	849.1	849.1	849.9	850.7	852.4
12.5°	844.0	847.4	849.9	852.4	853.3	855.0	859.2	859.2	860.9	863.4	864.2
15°	844.8	849.9	855.0	856.7	858.3	861.7	865.9	867.6	870.2	872.7	874.4
17.5°	844.0	850.7	856.7	859.2	861.7	865.9	871.0	872.7	876.1	879.4	882.8
20°	843.1	852.4	861.7	865.1	868.5	874.4	881.1	885.3	888.7	893.8	897.2
22.5°	848.2	859.2	871.8	876.9	882.8	890.4	899.7	904.8	909.0	914.0	916.6
25°	864.2	872.7	887.9	896.3	903.9	916.6	929.2	935.1	940.2	944.4	945.3
27.5°	891.3	893.8	912.4	923.3	934.3	954.6	969.7	974.0	983.2	986.6	985.8
30°	935.1	930.9	946.1	963.0	979.0	1006.9	1025.4	1036.4	1044.9	1044.9	1038.1
32.5°	998.4	991.7	995.9	1015.3	1033.9	1074.4	1096.3	1110.7	1116.6	1114.9	1100.6
35°	1081.2	1076.9	1074.4	1089.6	1119.1	1166.4	1195.1	1202.7	1212.0	1210.3	1191.7
37.5°	1179.1	1175.7	1175.7	1193.4	1222.1	1292.2	1323.4	1328.4	1327.6	1314.1	1279.5
40°	1294.7	1293.0	1285.4	1295.5	1320.0	1411.2	1453.4	1460.1	1450.8	1428.9	1388.4
42.5°	1460.9	1450.8	1427.2	1433.1	1451.7	1540.3	1595.1	1613.7	1604.4	1582.5	1516.7
45°	1677.9	1666.9	1627.2	1622.2	1632.3	1709.9	1780.8	1785.0	1783.4	1755.5	1677.9
47.5°	1932.7	1915.9	1873.7	1860.2	1856.8	1928.5	1996.9	2003.6	1999.4	1958.1	1854.2
50°	2208.7	2184.2	2156.4	2147.1	2133.6	2185.1	2254.3	2255.1	2238.3	2180.9	2083.8
52.5°	2503.3	2494.8	2489.8	2480.5	2474.6	2519.3	2561.5	2536.2	2510.9	2450.9	2366.6
55°	2800.4	2835.0	2870.4	2873.8	2883.9	2932.0	2931.2	2862.0	2843.4	2810.5	2726.9
57.5°	3116.0	3244.3	3355.7	3390.3	3424.1	3513.5	3505.1	3436.7	3413.1	3372.6	3303.4
60°	3545.6	3891.6	4213.2	4290.0	4343.2	4450.4	4440.2	4334.7	4383.7	4380.3	4290.8
62.5°	4147.4	4723.0	5204.9	5323.1	5360.2	5372.0	5307.9	5193.9	5242.0	5296.0	5020.9
65°	4555.0	5231.9	5726.5	5817.6	5822.7	5681.7	5539.1	5404.9	5393.1	5346.7	4953.4
66°	4564.3	5257.2	5753.5	5842.1	5810.9	5618.4	5437.8	5302.8	5244.6	5142.4	4734.8
67.5°	4400.6	5099.4	5633.6	5727.3	5659.0	5386.4	5137.4	4963.5	4849.6	4684.1	4324.6
70°	3695.8	4388.8	5047.1	5221.8	5243.7	4836.9	4491.7	4287.5	4133.9	3906.8	3597.1
72.5°	2748.0	3374.3	3954.9	4122.1	4207.3	3882.4	3591.2	3435.9	3225.7	2986.9	2766.6
75°	1722.6	2164.8	2553.9	2671.2	2591.1	2339.5	2164.8	2099.8	1893.1	1750.4	1650.0
77.5°	984.9	1123.4	1154.6	1109.8	1015.3	777.3	552.8	409.3	355.3	393.3	433.8
80°	961.3	881.1	702.2	617.8	559.6	384.9	226.2	155.3	129.1	132.5	143.5
82.5°	1041.5	1117.4	920.0	750.3	629.6	425.4	234.6	124.9	84.4	99.6	112.3
85°	676.9	941.9	848.2	714.9	579.0	363.8	193.3	65.0	43.0	56.5	77.6
87.5°	68.4	75.1	64.1	86.9	65.0	30.4	15.2	9.3	8.4	10.1	15.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	841.5	841.5	841.5	841.5	841.5	841.5	841.5	841.5	841.5	841.5	841.5
2.5°	840.6	840.6	841.5	842.3	843.1	844.0	844.0	844.0	844.0	845.7	844.8
5°	842.3	844.0	845.7	846.5	848.2	848.2	850.7	849.9	849.9	852.4	853.3
7.5°	845.7	848.2	851.6	850.7	854.1	853.3	855.0	855.0	852.4	853.3	851.6
10°	853.3	856.7	858.3	855.8	856.7	853.3	852.4	848.2	843.1	840.6	837.2
12.5°	865.9	869.3	869.3	865.1	860.0	852.4	846.5	837.2	829.6	825.4	821.2
15°	876.9	880.3	879.4	872.7	865.1	853.3	844.8	833.9	822.9	816.1	811.9
17.5°	885.3	887.0	884.5	875.2	866.8	855.8	847.4	835.6	822.9	814.5	806.9
20°	898.0	896.3	890.4	878.6	869.3	859.2	852.4	842.3	828.0	817.0	806.0
22.5°	916.6	909.8	898.9	886.2	876.9	867.6	860.9	849.9	835.6	822.0	809.4
25°	941.0	927.5	912.4	898.9	890.4	880.3	872.7	860.9	845.7	830.5	815.3
27.5°	976.5	952.9	933.5	921.6	912.4	899.7	890.4	875.2	859.2	841.5	824.6
30°	1016.2	984.1	965.5	956.2	946.1	932.6	918.3	898.9	880.3	860.9	840.6
32.5°	1067.6	1028.8	1011.1	1001.8	988.3	971.4	954.6	932.6	906.4	881.1	856.7
35°	1135.2	1095.5	1076.9	1062.6	1044.0	1022.1	997.6	968.1	932.6	898.9	867.6
37.5°	1207.8	1164.7	1147.0	1131.8	1103.9	1075.2	1040.6	997.6	949.5	904.8	865.9
40°	1299.7	1260.1	1237.3	1211.1	1178.2	1128.4	1074.4	1011.9	950.3	895.5	849.9
42.5°	1416.2	1376.5	1342.8	1301.4	1244.0	1167.2	1090.4	1009.4	935.1	872.7	823.7
45°	1570.7	1522.6	1464.3	1391.7	1298.9	1191.7	1091.3	993.4	906.4	837.2	784.9
47.5°	1759.7	1686.3	1590.9	1468.5	1335.2	1198.5	1077.8	961.3	861.7	786.6	728.4
50°	1984.2	1868.6	1711.6	1531.8	1353.8	1188.3	1044.0	913.2	798.4	718.2	649.0
52.5°	2240.8	2051.7	1820.5	1577.4	1352.9	1154.6	986.6	840.6	715.7	626.2	560.4
55°	2542.1	2261.1	1932.7	1611.2	1329.3	1092.1	898.9	738.5	613.6	530.9	470.1
57.5°	2983.5	2600.3	2128.5	1663.5	1282.0	995.9	779.8	616.1	506.4	427.9	376.4
60°	3790.4	3166.7	2481.3	1769.0	1209.4	855.0	640.6	485.3	393.3	330.0	295.4
62.5°	4398.0	3604.7	2672.1	1745.4	1063.4	681.1	475.2	353.6	289.5	246.4	224.5
65°	4311.1	3468.8	2468.7	1503.1	833.9	480.2	315.7	240.5	199.2	178.9	166.3
66°	4114.5	3291.6	2292.3	1352.9	720.8	399.2	259.9	201.7	171.3	157.0	148.5
67.5°	3741.4	2962.4	1976.6	1109.0	553.7	289.5	195.8	159.5	139.3	133.4	127.4
70°	3110.1	2362.3	1387.5	645.7	282.7	161.2	124.1	111.4	106.3	105.5	103.8
72.5°	2383.4	1671.9	817.0	305.5	146.9	107.2	96.2	92.0	90.3	90.3	91.2
75°	1460.9	939.4	361.2	149.4	103.0	90.3	85.2	83.6	82.7	83.6	82.7
77.5°	487.8	298.8	154.5	113.1	93.7	83.6	80.2	78.5	78.5	78.5	78.5
80°	149.4	130.0	118.2	104.7	88.6	79.3	74.3	73.4	74.3	75.1	72.6
82.5°	112.3	106.3	99.6	92.8	80.2	70.9	69.2	69.2	69.2	66.7	63.3
85°	82.7	81.9	67.5	63.3	59.1	59.1	59.1	59.1	56.5	52.3	49.0
87.5°	15.2	14.3	15.2	16.0	23.6	25.3	25.3	27.0	29.5	27.9	27.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





TEST NUMBER: P155588

CATALOG NUMBER: TLM-E03-LED-E1-T3-8030

**CANDELA DISTRIBUTION (continued):**

	160°	165°	170°	175°	180°
0°	841.5	841.5	841.5	841.5	841.5
2.5°	844.8	844.0	846.5	844.8	845.7
5°	852.4	851.6	853.3	851.6	854.1
7.5°	849.9	848.2	847.4	848.2	849.1
10°	832.2	830.5	829.6	828.8	829.6
12.5°	817.0	813.6	813.6	811.9	812.8
15°	806.0	803.5	802.6	800.9	801.8
17.5°	800.9	796.7	795.0	793.4	793.4
20°	797.6	792.5	790.0	788.3	787.4
22.5°	797.6	790.0	786.6	784.9	784.1
25°	800.9	791.7	786.6	784.1	783.2
27.5°	807.7	795.9	790.0	786.6	786.6
30°	819.5	804.3	795.9	791.7	790.8
32.5°	831.3	811.1	799.3	794.2	792.5
35°	837.2	811.1	796.7	788.3	786.6
37.5°	830.5	800.1	782.4	769.7	767.2
40°	809.4	777.3	757.9	746.1	744.4
42.5°	781.5	750.3	727.5	719.1	716.5
45°	743.6	706.4	683.6	671.8	672.7
47.5°	678.6	640.6	620.3	609.4	611.0
50°	601.8	564.6	546.9	535.1	537.6
52.5°	517.4	483.6	466.7	460.8	459.1
55°	428.7	402.6	390.8	384.0	381.5
57.5°	347.7	329.2	320.7	312.3	313.1
60°	274.3	265.0	262.5	253.2	252.4
62.5°	216.1	210.2	207.6	200.9	201.7
65°	163.7	162.0	163.7	159.5	161.2
66°	147.7	148.5	148.5	146.0	147.7
67.5°	127.4	129.1	131.7	129.1	130.8
70°	105.5	107.2	108.9	108.9	108.9
72.5°	92.0	93.7	94.5	94.5	94.5
75°	84.4	85.2	86.1	84.4	84.4
77.5°	79.3	79.3	77.6	76.8	76.0
80°	71.7	70.9	68.4	66.7	66.7
82.5°	59.9	58.2	56.5	54.0	54.0
85°	45.6	43.9	42.2	38.8	37.1
87.5°	23.6	24.5	23.6	19.4	16.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)