

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: P155579

Luminaire Tested: **TLM-E02-LED-E1-T3-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P155579  
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-E02-LED-E1-T3-7030  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 3  
Light Source: (42) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5633.4 lumens  
Efficiency: N/A  
Efficacy: 108.1 lumens/watt  
Spacing Criteria (0/90/45): 1.97 / 4.22 / 2.62  
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')  
CIE Type: Direct

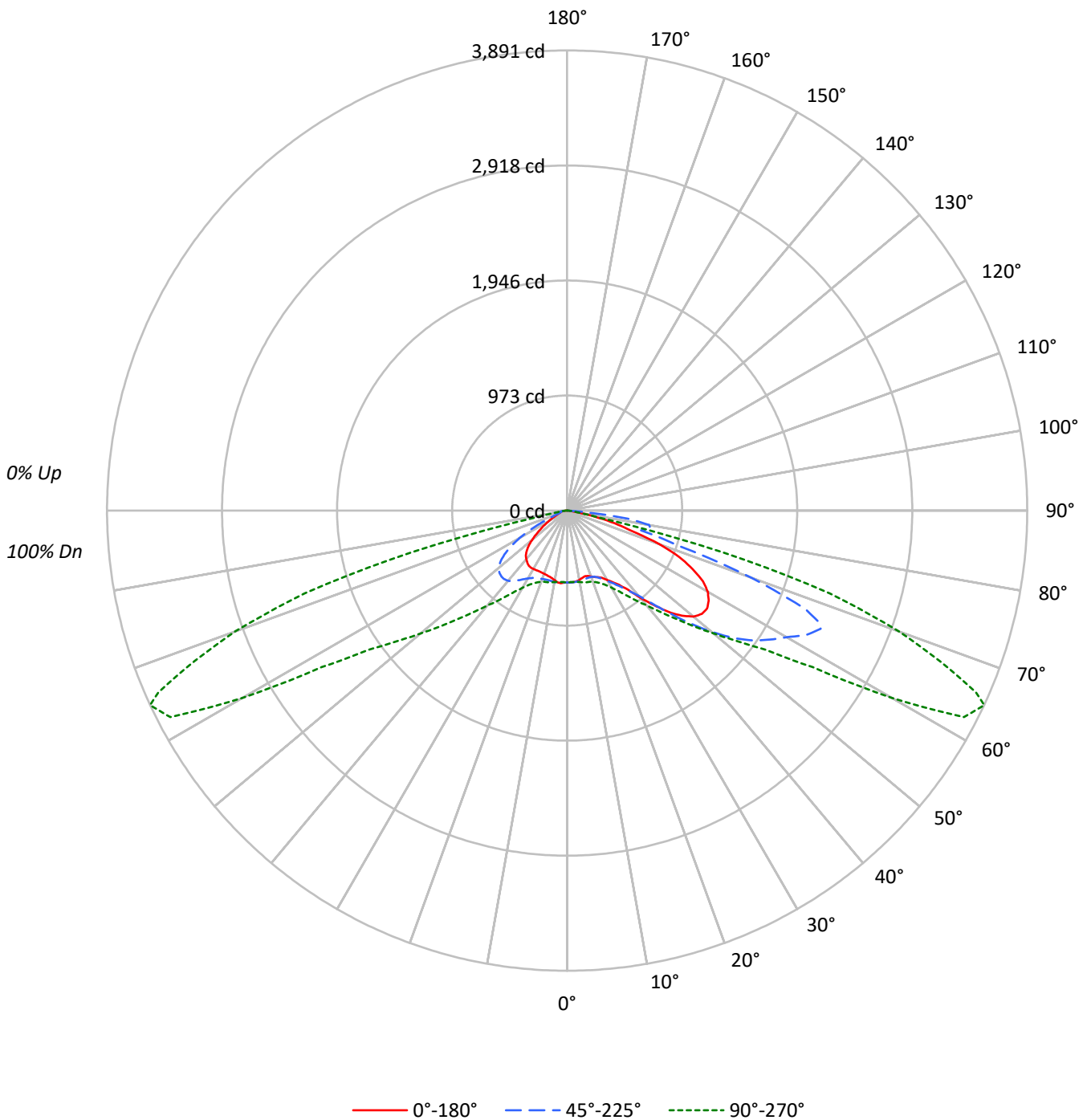
Input Watts (W): 52.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	19802	19802	19802
5°	19878	19858	20176
10°	19704	20310	19823
15°	19410	21200	19535
20°	20608	22257	19719
25°	22353	24412	20338
30°	25480	28391	21487
35°	30549	34818	22597
40°	40911	44568	22865
45°	55894	59349	22386
50°	70728	81942	19684
55°	82168	116658	15650
60°	89536	206315	11879
65°	90371	300302	8976
70°	79203	284427	7486
75°	52339	172126	7675
80°	19103	17507	9035
85°	3181	11639	10030



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.1	1.0
10°-20°	171.6	3.0
20°-30°	294.9	5.2
30°-40°	478.9	8.5
40°-50°	799.5	14.2
50°-60°	1258.9	22.3
60°-70°	1716.6	30.5
70°-80°	743.1	13.2
80°-90°	111.7	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°	524.7	9.3
0°-40°	1003.5	17.8
0°-60°	3061.9	54.4
0°-90°	5633.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5633.4	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	607	607	607	607	607	
5°	607	608	606	614	616	58
15°	575	598	628	610	578	165
25°	621	625	678	630	565	291
35°	767	784	874	720	568	497
45°	1212	1228	1287	787	485	931
55°	1445	1914	2051	648	275	1274
65°	1171	2366	3891	228	116	1137
75°	415	647	1366	62	61	444
85°	8	144	31	43	27	22
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°	607.1	607.1	607.1	607.1	607.1	607.1	607.1	607.1	607.1	607.1	607.1
2.5°	609.5	611.9	609.5	610.1	610.7	610.1	609.5	609.5	607.7	608.9	610.1
5°	607.1	608.9	608.3	608.9	609.5	608.9	608.3	608.9	607.7	608.3	610.1
7.5°	604.0	603.4	604.0	605.2	606.5	606.5	606.5	607.1	606.5	606.5	608.3
10°	594.9	595.5	596.7	598.5	599.2	601.0	601.0	602.8	603.4	604.6	607.1
12.5°	583.3	583.9	585.2	586.4	589.4	592.5	592.5	596.7	598.5	601.6	605.9
15°	574.8	575.4	576.6	577.8	580.3	583.3	585.2	590.0	593.1	598.5	604.6
17.5°	579.7	579.1	580.3	580.9	580.9	583.3	583.3	587.0	590.6	595.5	603.4
20°	593.7	593.7	594.9	594.9	594.3	595.5	593.1	593.1	593.7	596.1	601.6
22.5°	607.7	607.1	609.5	610.7	611.3	613.2	610.7	610.1	607.1	605.2	607.1
25°	621.1	620.5	623.5	625.3	628.4	630.2	630.2	630.2	627.8	624.7	622.9
27.5°	641.8	641.8	644.8	646.7	649.1	652.7	654.6	654.6	655.2	650.9	647.9
30°	676.5	677.1	677.7	680.1	682.6	683.8	686.2	688.1	689.9	687.4	682.6
32.5°	717.9	714.2	714.2	717.9	720.9	724.6	725.8	728.2	731.9	730.1	729.5
35°	767.2	766.0	764.8	766.0	769.6	773.9	778.8	783.0	780.6	784.3	782.4
37.5°	840.3	841.5	842.1	842.1	841.5	842.7	845.2	849.4	848.2	849.4	851.9
40°	960.8	956.6	952.3	952.9	946.8	948.1	938.3	942.6	943.2	938.9	940.8
42.5°	1081.4	1083.8	1085.7	1090.5	1086.3	1083.8	1074.7	1074.7	1069.8	1065.6	1064.4
45°	1211.7	1216.6	1217.2	1226.9	1223.3	1231.2	1237.9	1236.1	1228.2	1227.5	1219.0
47.5°	1315.8	1323.7	1332.3	1343.8	1353.0	1370.6	1391.3	1401.7	1407.8	1412.6	1402.9
50°	1393.8	1397.4	1419.3	1437.6	1457.7	1486.9	1515.6	1552.7	1582.5	1596.5	1609.9
52.5°	1435.8	1444.9	1468.7	1497.3	1532.6	1576.4	1622.7	1681.8	1732.9	1767.0	1797.5
55°	1444.9	1454.1	1480.8	1517.4	1565.5	1624.5	1690.9	1771.3	1848.0	1913.8	1977.7
57.5°	1419.3	1429.7	1458.3	1500.3	1557.0	1628.8	1712.2	1817.6	1923.5	2030.1	2124.5
60°	1372.5	1385.2	1411.4	1452.8	1515.6	1596.5	1696.4	1828.5	1977.1	2140.3	2321.1
62.5°	1295.1	1308.5	1332.9	1378.6	1443.1	1532.6	1648.3	1812.7	2022.8	2279.7	2600.6
65°	1170.9	1177.0	1206.8	1253.1	1310.4	1409.0	1536.3	1734.8	2008.2	2365.6	2807.6
66°	1114.9	1125.2	1143.5	1180.7	1235.5	1328.0	1455.9	1657.4	1952.7	2335.7	2802.2
67.5°	1027.2	1035.1	1047.3	1072.3	1105.8	1174.0	1295.1	1485.7	1783.5	2184.7	2685.9
70°	830.5	834.2	850.6	859.2	870.7	893.3	937.1	1046.7	1278.7	1655.6	2167.7
72.5°	566.3	576.6	594.3	618.6	650.3	680.8	701.5	715.5	765.4	987.6	1444.3
75°	415.3	426.2	448.8	481.0	536.4	599.8	665.5	696.0	675.3	646.7	804.4
77.5°	241.1	255.7	274.6	305.7	356.8	440.8	553.5	653.3	720.9	725.2	688.7
80°	101.7	103.5	115.1	130.9	162.6	221.6	309.3	453.0	602.8	703.9	727.6
82.5°	23.1	28.6	36.5	43.2	53.0	73.1	108.4	180.2	325.8	510.9	666.1
85°	8.5	8.5	11.6	17.0	19.5	21.9	28.6	45.7	77.9	143.7	299.6
87.5°	0.0	0.6	1.2	1.2	2.4	3.0	4.9	6.7	6.1	5.5	18.3
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°	607.1	607.1	607.1	607.1	607.1	607.1	607.1	607.1	607.1	607.1	607.1
2.5°	608.9	608.3	607.1	607.1	607.1	607.1	605.9	606.5	605.2	605.9	605.9
5°	608.3	608.3	607.7	606.5	607.1	607.1	607.7	606.5	606.5	607.1	606.5
7.5°	608.3	607.7	607.7	607.7	608.3	607.7	608.3	608.3	608.3	608.9	608.9
10°	608.3	608.3	609.5	610.1	610.1	610.7	612.6	612.6	613.2	613.8	615.0
12.5°	608.9	611.3	613.2	615.0	615.6	616.8	619.9	619.9	621.1	622.9	623.5
15°	609.5	613.2	616.8	618.0	619.3	621.7	624.7	625.9	627.8	629.6	630.8
17.5°	608.9	613.8	618.0	619.9	621.7	624.7	628.4	629.6	632.0	634.5	636.9
20°	608.3	615.0	621.7	624.1	626.6	630.8	635.7	638.7	641.2	644.8	647.3
22.5°	611.9	619.9	629.0	632.6	636.9	642.4	649.1	652.7	655.8	659.4	661.3
25°	623.5	629.6	640.6	646.7	652.1	661.3	670.4	674.7	678.3	681.4	682.0
27.5°	643.0	644.8	658.2	666.1	674.1	688.7	699.6	702.7	709.4	711.8	711.2
30°	674.7	671.6	682.6	694.8	706.3	726.4	739.8	747.7	753.8	753.8	748.9
32.5°	720.3	715.5	718.5	732.5	745.9	775.1	791.0	801.3	805.6	804.4	794.0
35°	780.0	777.0	775.1	786.1	807.4	841.5	862.2	867.7	874.4	873.2	859.8
37.5°	850.6	848.2	848.2	861.0	881.7	932.2	954.8	958.4	957.8	948.1	923.1
40°	934.1	932.8	927.4	934.7	952.3	1018.1	1048.5	1053.4	1046.7	1030.9	1001.6
42.5°	1054.0	1046.7	1029.7	1033.9	1047.3	1111.2	1150.8	1164.2	1157.5	1141.7	1094.2
45°	1210.5	1202.6	1174.0	1170.3	1177.6	1233.6	1284.8	1287.8	1286.6	1266.5	1210.5
47.5°	1394.4	1382.2	1351.8	1342.0	1339.6	1391.3	1440.7	1445.5	1442.5	1412.6	1337.8
50°	1593.5	1575.8	1555.7	1549.0	1539.3	1576.4	1626.4	1627.0	1614.8	1573.4	1503.4
52.5°	1806.0	1799.9	1796.3	1789.6	1785.3	1817.6	1848.0	1829.7	1811.5	1768.2	1707.4
55°	2020.3	2045.3	2070.9	2073.3	2080.6	2115.3	2114.7	2064.8	2051.4	2027.6	1967.4
57.5°	2248.1	2340.6	2421.0	2446.0	2470.3	2534.9	2528.8	2479.4	2462.4	2433.2	2383.2
60°	2558.0	2807.6	3039.6	3095.0	3133.4	3210.7	3203.4	3127.3	3162.6	3160.2	3095.6
62.5°	2992.1	3407.4	3755.1	3840.3	3867.1	3875.6	3829.4	3747.2	3781.9	3820.8	3622.3
65°	3286.2	3774.6	4131.4	4197.1	4200.8	4099.1	3996.2	3899.4	3890.9	3857.4	3573.6
66°	3292.9	3792.8	4150.9	4214.8	4192.3	4053.4	3923.1	3825.7	3783.7	3710.0	3415.9
67.5°	3174.8	3679.0	4064.4	4132.0	4082.7	3886.0	3706.4	3580.9	3498.7	3379.4	3120.0
70°	2666.4	3166.3	3641.2	3767.3	3783.1	3489.6	3240.6	3093.2	2982.4	2818.6	2595.1
72.5°	1982.6	2434.4	2853.3	2973.9	3035.4	2800.9	2590.9	2478.8	2327.2	2154.9	1996.0
75°	1242.8	1561.8	1842.5	1927.2	1869.3	1687.9	1561.8	1514.9	1365.8	1262.9	1190.4
77.5°	710.6	810.4	833.0	800.7	732.5	560.8	398.8	295.3	256.3	283.7	313.0
80°	693.5	635.7	506.6	445.7	403.7	277.7	163.2	112.0	93.2	95.6	103.5
82.5°	751.4	806.2	663.7	541.3	454.2	306.9	169.3	90.1	60.9	71.9	81.0
85°	488.3	679.5	611.9	515.7	417.7	262.4	139.4	46.9	31.1	40.8	56.0
87.5°	49.3	54.2	46.3	62.7	46.9	21.9	11.0	6.7	6.1	7.3	11.0
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°	607.1	607.1	607.1	607.1	607.1	607.1	607.1	607.1	607.1	607.1	607.1
2.5°	606.5	606.5	607.1	607.7	608.3	608.9	608.9	608.9	608.9	610.1	609.5
5°	607.7	608.9	610.1	610.7	611.9	611.9	613.8	613.2	613.2	615.0	615.6
7.5°	610.1	611.9	614.4	613.8	616.2	615.6	616.8	616.8	615.0	615.6	614.4
10°	615.6	618.0	619.3	617.4	618.0	615.6	615.0	611.9	608.3	606.5	604.0
12.5°	624.7	627.2	627.2	624.1	620.5	615.0	610.7	604.0	598.5	595.5	592.5
15°	632.6	635.1	634.5	629.6	624.1	615.6	609.5	601.6	593.7	588.8	585.8
17.5°	638.7	640.0	638.1	631.4	625.3	617.4	611.3	602.8	593.7	587.6	582.1
20°	647.9	646.7	642.4	633.9	627.2	619.9	615.0	607.7	597.3	589.4	581.5
22.5°	661.3	656.4	648.5	639.3	632.6	625.9	621.1	613.2	602.8	593.1	583.9
25°	678.9	669.2	658.2	648.5	642.4	635.1	629.6	621.1	610.1	599.2	588.2
27.5°	704.5	687.4	673.4	664.9	658.2	649.1	642.4	631.4	619.9	607.1	594.9
30°	733.1	710.0	696.6	689.9	682.6	672.8	662.5	648.5	635.1	621.1	606.5
32.5°	770.3	742.2	729.5	722.8	713.0	700.8	688.7	672.8	654.0	635.7	618.0
35°	819.0	790.4	777.0	766.6	753.2	737.4	719.7	698.4	672.8	648.5	625.9
37.5°	871.3	840.3	827.5	816.5	796.4	775.7	750.8	719.7	685.0	652.7	624.7
40°	937.7	909.1	892.6	873.8	850.0	814.1	775.1	730.1	685.6	646.0	613.2
42.5°	1021.7	993.1	968.8	938.9	897.5	842.1	786.7	728.2	674.7	629.6	594.3
45°	1133.2	1098.5	1056.4	1004.1	937.1	859.8	787.3	716.7	654.0	604.0	566.3
47.5°	1269.6	1216.6	1147.8	1059.5	963.3	864.6	777.6	693.5	621.7	567.5	525.5
50°	1431.5	1348.1	1234.8	1105.2	976.7	857.3	753.2	658.8	576.0	518.2	468.2
52.5°	1616.6	1480.2	1313.4	1138.0	976.1	833.0	711.8	606.5	516.3	451.8	404.3
55°	1834.0	1631.2	1394.4	1162.4	959.0	787.9	648.5	532.8	442.7	383.0	339.2
57.5°	2152.5	1876.0	1535.6	1200.1	924.9	718.5	562.6	444.5	365.3	308.7	271.6
60°	2734.6	2284.6	1790.2	1276.3	872.6	616.8	462.2	350.1	283.7	238.1	213.1
62.5°	3173.0	2600.6	1927.8	1259.2	767.2	491.4	342.8	255.1	208.9	177.8	162.0
65°	3110.3	2502.6	1781.0	1084.5	601.6	346.5	227.7	173.5	143.7	129.1	120.0
66°	2968.4	2374.7	1653.8	976.1	520.0	288.0	187.5	145.5	123.6	113.3	107.2
67.5°	2699.3	2137.2	1426.0	800.1	399.4	208.9	141.3	115.1	100.5	96.2	91.9
70°	2243.8	1704.3	1001.0	465.8	204.0	116.3	89.5	80.4	76.7	76.1	74.9
72.5°	1719.5	1206.2	589.4	220.4	105.9	77.3	69.4	66.4	65.2	65.2	65.8
75°	1054.0	677.7	260.6	107.8	74.3	65.2	61.5	60.3	59.7	60.3	59.7
77.5°	351.9	215.6	111.4	81.6	67.6	60.3	57.8	56.6	56.6	56.6	56.6
80°	107.8	93.8	85.2	75.5	63.9	57.2	53.6	53.0	53.6	54.2	52.4
82.5°	81.0	76.7	71.9	67.0	57.8	51.1	49.9	49.9	49.9	48.1	45.7
85°	59.7	59.1	48.7	45.7	42.6	42.6	42.6	42.6	40.8	37.8	35.3
87.5°	11.0	10.4	11.0	11.6	17.0	18.3	18.3	19.5	21.3	20.1	20.1
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: P155579

CATALOG NUMBER: TLM-E02-LED-E1-T3-7030

**CANDELA DISTRIBUTION (continued):**

	160°	165°	170°	175°	180°
0°	607.1	607.1	607.1	607.1	607.1
2.5°	609.5	608.9	610.7	609.5	610.1
5°	615.0	614.4	615.6	614.4	616.2
7.5°	613.2	611.9	611.3	611.9	612.6
10°	600.4	599.2	598.5	597.9	598.5
12.5°	589.4	587.0	587.0	585.8	586.4
15°	581.5	579.7	579.1	577.8	578.5
17.5°	577.8	574.8	573.6	572.4	572.4
20°	575.4	571.8	569.9	568.7	568.1
22.5°	575.4	569.9	567.5	566.3	565.7
25°	577.8	571.1	567.5	565.7	565.1
27.5°	582.7	574.2	569.9	567.5	567.5
30°	591.2	580.3	574.2	571.1	570.5
32.5°	599.8	585.2	576.6	573.0	571.8
35°	604.0	585.2	574.8	568.7	567.5
37.5°	599.2	577.2	564.5	555.3	553.5
40°	583.9	560.8	546.8	538.3	537.0
42.5°	563.8	541.3	524.9	518.8	517.0
45°	536.4	509.6	493.2	484.7	485.3
47.5°	489.6	462.2	447.5	439.6	440.8
50°	434.1	407.4	394.6	386.0	387.9
52.5°	373.3	348.9	336.7	332.5	331.2
55°	309.3	290.4	281.9	277.0	275.2
57.5°	250.9	237.5	231.4	225.3	225.9
60°	197.9	191.2	189.4	182.7	182.1
62.5°	155.9	151.6	149.8	144.9	145.5
65°	118.1	116.9	118.1	115.1	116.3
66°	106.6	107.2	107.2	105.3	106.6
67.5°	91.9	93.2	95.0	93.2	94.4
70°	76.1	77.3	78.5	78.5	78.5
72.5°	66.4	67.6	68.2	68.2	68.2
75°	60.9	61.5	62.1	60.9	60.9
77.5°	57.2	57.2	56.0	55.4	54.8
80°	51.8	51.1	49.3	48.1	48.1
82.5°	43.2	42.0	40.8	39.0	39.0
85°	32.9	31.7	30.4	28.0	26.8
87.5°	17.0	17.7	17.0	14.0	12.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)