

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: P155584

Luminaire Tested: **TLM-F02-LED-E1-T3-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P155584  
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-F02-LED-E1-T3-7030  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 3  
Light Source: (14) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

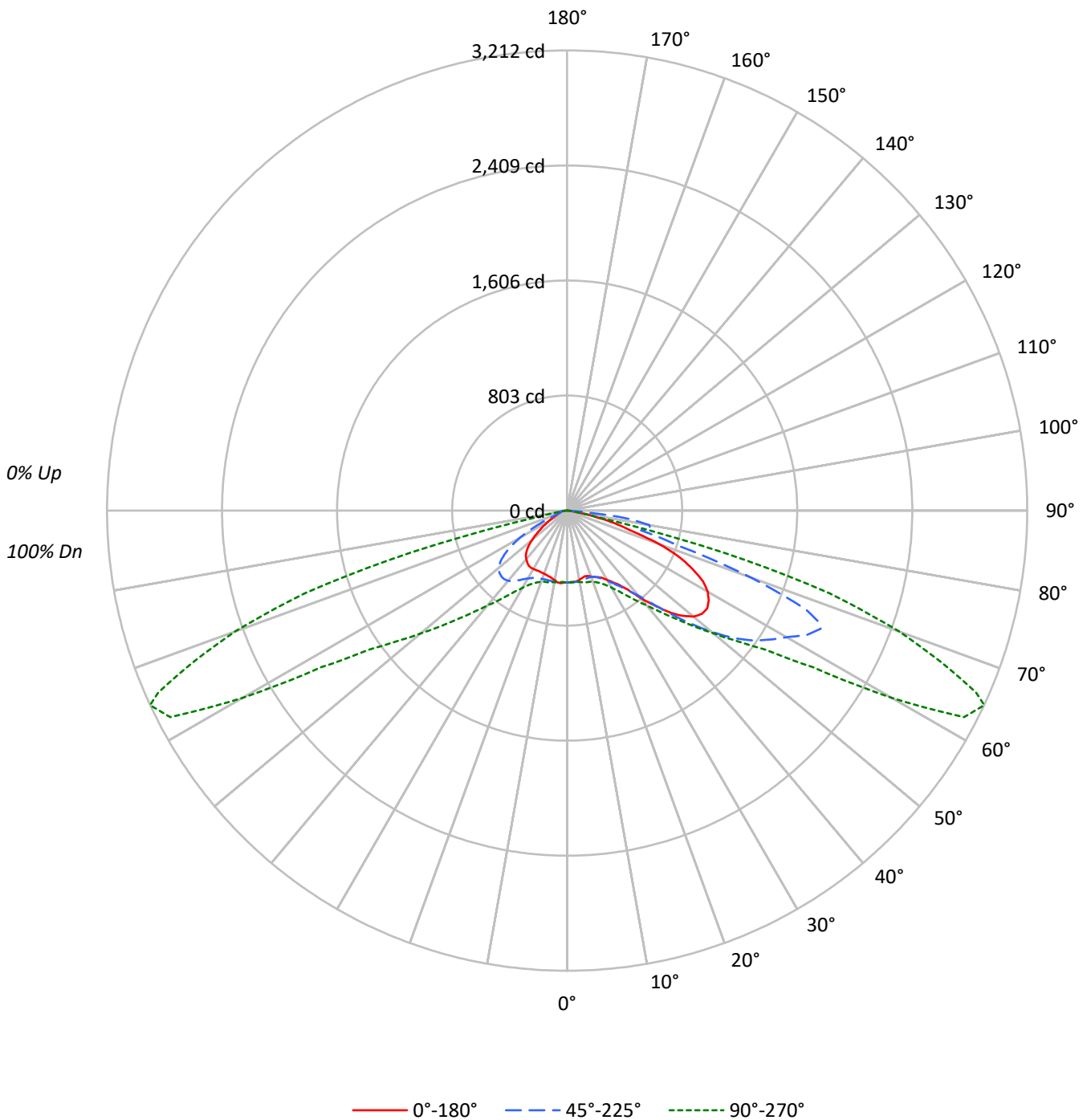
Lumens per Lamp: N/A  
Luminaire Lumens: 4650.5 lumens  
Efficiency: N/A  
Efficacy: 84.6 lumens/watt  
Spacing Criteria (0/90/45): 1.97 / 4.22 / 2.62  
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')  
CIE Type: Direct

Input Watts (W): 55  
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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CATALOG NUMBER: TLM-F02-LED-E1-T3-7030

### 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°	16348	16348	16348
5°	16411	16394	16656
10°	16266	16766	16365
15°	16023	17499	16124
20°	17012	18373	16280
25°	18452	20154	16789
30°	21035	23438	17740
35°	25221	28741	18655
40°	33774	36793	18876
45°	46143	48993	18479
50°	58387	67647	16248
55°	67832	96305	12920
60°	73912	170318	9805
65°	74603	247904	7409
70°	65385	234797	6180
75°	43202	142094	6339
80°	15760	14445	7457
85°	2620	9581	8271



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.0	1.0
10°-20°	141.7	3.0
20°-30°	243.5	5.2
30°-40°	395.3	8.5
40°-50°	660.0	14.2
50°-60°	1039.2	22.3
60°-70°	1417.1	30.5
70°-80°	613.5	13.2
80°-90°	92.2	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°	433.1	9.3
0°-40°	828.5	17.8
0°-60°	2527.7	54.4
0°-90°	4650.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4650.5	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	501	501	501	501	501	
5°	501	502	501	507	509	48
15°	474	494	518	503	478	136
25°	513	516	560	520	466	240
35°	633	647	722	594	468	410
45°	1000	1013	1062	650	401	769
55°	1193	1580	1694	535	227	1052
65°	967	1953	3212	188	96	939
75°	343	534	1128	51	50	366
85°	7	119	26	35	22	18
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°	501.2	501.2	501.2	501.2	501.2	501.2	501.2	501.2	501.2	501.2	501.2
2.5°	503.2	505.2	503.2	503.7	504.2	503.7	503.2	503.2	501.7	502.7	503.7
5°	501.2	502.7	502.2	502.7	503.2	502.7	502.2	502.7	501.7	502.2	503.7
7.5°	498.6	498.1	498.6	499.6	500.7	500.7	500.7	501.2	500.7	500.7	502.2
10°	491.1	491.6	492.6	494.1	494.6	496.1	496.1	497.6	498.1	499.1	501.2
12.5°	481.6	482.1	483.1	484.1	486.6	489.1	489.1	492.6	494.1	496.6	500.1
15°	474.5	475.0	476.0	477.0	479.0	481.6	483.1	487.1	489.6	494.1	499.1
17.5°	478.5	478.0	479.0	479.5	479.5	481.6	481.6	484.6	487.6	491.6	498.1
20°	490.1	490.1	491.1	491.1	490.6	491.6	489.6	489.6	490.1	492.1	496.6
22.5°	501.7	501.2	503.2	504.2	504.7	506.2	504.2	503.7	501.2	499.6	501.2
25°	512.7	512.2	514.7	516.2	518.7	520.3	520.3	520.3	518.2	515.7	514.2
27.5°	529.8	529.8	532.3	533.8	535.8	538.9	540.4	540.4	540.9	537.3	534.8
30°	558.5	559.0	559.5	561.5	563.5	564.5	566.5	568.0	569.5	567.5	563.5
32.5°	592.6	589.6	589.6	592.6	595.2	598.2	599.2	601.2	604.2	602.7	602.2
35°	633.4	632.3	631.3	632.3	635.4	638.9	642.9	646.4	644.4	647.4	645.9
37.5°	693.7	694.7	695.2	695.2	694.7	695.7	697.7	701.2	700.2	701.2	703.2
40°	793.2	789.7	786.2	786.7	781.6	782.6	774.6	778.1	778.6	775.1	776.6
42.5°	892.7	894.7	896.2	900.3	896.7	894.7	887.2	887.2	883.2	879.7	878.7
45°	1000.3	1004.3	1004.8	1012.9	1009.8	1016.4	1021.9	1020.4	1013.9	1013.4	1006.3
47.5°	1086.3	1092.8	1099.8	1109.4	1116.9	1131.5	1148.6	1157.1	1162.2	1166.2	1158.1
50°	1150.6	1153.6	1171.7	1186.8	1203.4	1227.5	1251.1	1281.8	1306.4	1318.0	1329.0
52.5°	1185.3	1192.8	1212.4	1236.0	1265.2	1301.4	1339.6	1388.4	1430.6	1458.7	1483.9
55°	1192.8	1200.4	1222.5	1252.6	1292.3	1341.1	1395.9	1462.2	1525.6	1579.9	1632.6
57.5°	1171.7	1180.3	1203.9	1238.6	1285.3	1344.6	1413.5	1500.4	1587.9	1675.9	1753.8
60°	1133.0	1143.6	1165.2	1199.4	1251.1	1318.0	1400.4	1509.5	1632.1	1766.9	1916.1
62.5°	1069.2	1080.2	1100.3	1138.0	1191.3	1265.2	1360.7	1496.4	1669.8	1882.0	2146.9
65°	966.6	971.6	996.3	1034.5	1081.7	1163.2	1268.2	1432.1	1657.8	1952.8	2317.8
66°	920.4	928.9	944.0	974.7	1019.9	1096.3	1201.9	1368.2	1612.0	1928.2	2313.3
67.5°	848.0	854.5	864.6	885.2	912.8	969.1	1069.2	1226.5	1472.3	1803.6	2217.2
70°	685.6	688.6	702.2	709.3	718.8	737.4	773.6	864.1	1055.6	1366.7	1789.5
72.5°	467.5	476.0	490.6	510.7	536.8	562.0	579.1	590.6	631.8	815.3	1192.3
75°	342.8	351.9	370.5	397.1	442.8	495.1	549.4	574.5	557.5	533.8	664.0
77.5°	199.1	211.1	226.7	252.3	294.6	363.9	456.9	539.4	595.2	598.7	568.5
80°	83.9	85.5	95.0	108.1	134.2	183.0	255.4	374.0	497.6	581.1	600.7
82.5°	19.1	23.6	30.2	35.7	43.7	60.3	89.5	148.8	268.9	421.7	549.9
85°	7.0	7.0	9.6	14.1	16.1	18.1	23.6	37.7	64.3	118.6	247.3
87.5°	0.0	0.5	1.0	1.0	2.0	2.5	4.0	5.5	5.0	4.5	15.1
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°	501.2	501.2	501.2	501.2	501.2	501.2	501.2	501.2	501.2	501.2	501.2
2.5°	502.7	502.2	501.2	501.2	501.2	501.2	500.1	500.7	499.6	500.1	500.1
5°	502.2	502.2	501.7	500.7	501.2	501.2	501.7	500.7	500.7	501.2	500.7
7.5°	502.2	501.7	501.7	501.7	502.2	501.7	502.2	502.2	502.2	502.7	502.7
10°	502.2	502.2	503.2	503.7	503.7	504.2	505.7	505.7	506.2	506.7	507.7
12.5°	502.7	504.7	506.2	507.7	508.2	509.2	511.7	511.7	512.7	514.2	514.7
15°	503.2	506.2	509.2	510.2	511.2	513.2	515.7	516.7	518.2	519.8	520.8
17.5°	502.7	506.7	510.2	511.7	513.2	515.7	518.7	519.8	521.8	523.8	525.8
20°	502.2	507.7	513.2	515.2	517.2	520.8	524.8	527.3	529.3	532.3	534.3
22.5°	505.2	511.7	519.3	522.3	525.8	530.3	535.8	538.9	541.4	544.4	545.9
25°	514.7	519.8	528.8	533.8	538.4	545.9	553.4	556.9	560.0	562.5	563.0
27.5°	530.8	532.3	543.4	549.9	556.4	568.5	577.6	580.1	585.6	587.6	587.1
30°	556.9	554.4	563.5	573.5	583.1	599.7	610.7	617.3	622.3	622.3	618.3
32.5°	594.6	590.6	593.1	604.7	615.8	639.9	653.0	661.5	665.0	664.0	655.5
35°	643.9	641.4	639.9	648.9	666.5	694.7	711.8	716.3	721.8	720.8	709.8
37.5°	702.2	700.2	700.2	710.8	727.9	769.6	788.2	791.2	790.7	782.6	762.0
40°	771.1	770.1	765.6	771.6	786.2	840.5	865.6	869.6	864.1	851.0	826.9
42.5°	870.1	864.1	850.0	853.5	864.6	917.4	950.0	961.1	955.6	942.5	903.3
45°	999.3	992.8	969.1	966.1	972.1	1018.4	1060.6	1063.1	1062.1	1045.5	999.3
47.5°	1151.1	1141.0	1115.9	1107.9	1105.9	1148.6	1189.3	1193.3	1190.8	1166.2	1104.3
50°	1315.5	1300.9	1284.3	1278.8	1270.7	1301.4	1342.6	1343.1	1333.1	1298.9	1241.1
52.5°	1490.9	1485.9	1482.9	1477.3	1473.8	1500.4	1525.6	1510.5	1495.4	1459.7	1409.5
55°	1667.8	1688.4	1709.6	1711.6	1717.6	1746.2	1745.7	1704.5	1693.5	1673.9	1624.1
57.5°	1855.8	1932.2	1998.6	2019.2	2039.3	2092.6	2087.6	2046.8	2032.8	2008.6	1967.4
60°	2111.7	2317.8	2509.3	2555.0	2586.7	2650.5	2644.5	2581.7	2610.8	2608.8	2555.5
62.5°	2470.1	2812.9	3099.9	3170.3	3192.4	3199.4	3161.2	3093.4	3122.0	3154.2	2990.3
65°	2712.9	3116.0	3410.6	3464.9	3467.9	3383.9	3299.0	3219.0	3212.0	3184.4	2950.1
66°	2718.4	3131.1	3426.6	3479.4	3460.8	3346.2	3238.7	3158.2	3123.5	3062.7	2819.9
67.5°	2620.9	3037.1	3355.3	3411.1	3370.4	3208.0	3059.7	2956.2	2888.3	2789.8	2575.6
70°	2201.2	2613.8	3005.9	3110.0	3123.0	2880.8	2675.2	2553.5	2462.0	2326.8	2142.3
72.5°	1636.7	2009.6	2355.5	2455.0	2505.8	2312.2	2138.8	2046.3	1921.2	1778.9	1647.7
75°	1025.9	1289.3	1521.1	1590.9	1543.2	1393.4	1289.3	1250.6	1127.5	1042.5	982.7
77.5°	586.6	669.0	687.6	661.0	604.7	463.0	329.2	243.8	211.6	234.2	258.4
80°	572.5	524.8	418.2	367.9	333.3	229.2	134.7	92.5	76.9	78.9	85.5
82.5°	620.3	665.5	547.9	446.9	375.0	253.3	139.7	74.4	50.3	59.3	66.9
85°	403.1	561.0	505.2	425.8	344.8	216.6	115.1	38.7	25.6	33.7	46.2
87.5°	40.7	44.7	38.2	51.8	38.7	18.1	9.0	5.5	5.0	6.0	9.0
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°	501.2	501.2	501.2	501.2	501.2	501.2	501.2	501.2	501.2	501.2	501.2
2.5°	500.7	500.7	501.2	501.7	502.2	502.7	502.7	502.7	502.7	503.7	503.2
5°	501.7	502.7	503.7	504.2	505.2	505.2	506.7	506.2	506.2	507.7	508.2
7.5°	503.7	505.2	507.2	506.7	508.7	508.2	509.2	509.2	507.7	508.2	507.2
10°	508.2	510.2	511.2	509.7	510.2	508.2	507.7	505.2	502.2	500.7	498.6
12.5°	515.7	517.7	517.7	515.2	512.2	507.7	504.2	498.6	494.1	491.6	489.1
15°	522.3	524.3	523.8	519.8	515.2	508.2	503.2	496.6	490.1	486.1	483.6
17.5°	527.3	528.3	526.8	521.3	516.2	509.7	504.7	497.6	490.1	485.1	480.5
20°	534.8	533.8	530.3	523.3	517.7	511.7	507.7	501.7	493.1	486.6	480.0
22.5°	545.9	541.9	535.3	527.8	522.3	516.7	512.7	506.2	497.6	489.6	482.1
25°	560.5	552.4	543.4	535.3	530.3	524.3	519.8	512.7	503.7	494.6	485.6
27.5°	581.6	567.5	555.9	548.9	543.4	535.8	530.3	521.3	511.7	501.2	491.1
30°	605.2	586.1	575.0	569.5	563.5	555.4	546.9	535.3	524.3	512.7	500.7
32.5°	635.9	612.7	602.2	596.7	588.6	578.6	568.5	555.4	539.9	524.8	510.2
35°	676.1	652.5	641.4	632.9	621.8	608.7	594.1	576.6	555.4	535.3	516.7
37.5°	719.3	693.7	683.1	674.1	657.5	640.4	619.8	594.1	565.5	538.9	515.7
40°	774.1	750.5	736.9	721.3	701.7	672.1	639.9	602.7	566.0	533.3	506.2
42.5°	843.5	819.8	799.7	775.1	740.9	695.2	649.4	601.2	556.9	519.8	490.6
45°	935.5	906.8	872.1	828.9	773.6	709.8	649.9	591.6	539.9	498.6	467.5
47.5°	1048.1	1004.3	947.5	874.6	795.2	713.8	641.9	572.5	513.2	468.5	433.8
50°	1181.8	1112.9	1019.4	912.3	806.3	707.7	621.8	543.9	475.5	427.8	386.5
52.5°	1334.6	1222.0	1084.2	939.5	805.8	687.6	587.6	500.7	426.3	373.0	333.8
55°	1514.0	1346.6	1151.1	959.6	791.7	650.4	535.3	439.8	365.4	316.2	280.0
57.5°	1776.9	1548.7	1267.7	990.7	763.5	593.1	464.5	366.9	301.6	254.8	224.2
60°	2257.5	1886.0	1477.8	1053.6	720.3	509.2	381.5	289.0	234.2	196.5	175.9
62.5°	2619.4	2146.9	1591.4	1039.5	633.4	405.6	283.0	210.6	172.4	146.8	133.7
65°	2567.6	2065.9	1470.3	895.2	496.6	286.0	188.0	143.3	118.6	106.6	99.0
66°	2450.5	1960.4	1365.2	805.8	429.3	237.8	154.8	120.1	102.0	93.5	88.5
67.5°	2228.3	1764.3	1177.2	660.5	329.7	172.4	116.6	95.0	82.9	79.4	75.9
70°	1852.3	1407.0	826.4	384.5	168.4	96.0	73.9	66.4	63.3	62.8	61.8
72.5°	1419.5	995.8	486.6	182.0	87.5	63.8	57.3	54.8	53.8	53.8	54.3
75°	870.1	559.5	215.1	89.0	61.3	53.8	50.8	49.8	49.3	49.8	49.3
77.5°	290.5	177.9	92.0	67.4	55.8	49.8	47.8	46.7	46.7	46.7	46.7
80°	89.0	77.4	70.4	62.3	52.8	47.3	44.2	43.7	44.2	44.7	43.2
82.5°	66.9	63.3	59.3	55.3	47.8	42.2	41.2	41.2	41.2	39.7	37.7
85°	49.3	48.8	40.2	37.7	35.2	35.2	35.2	35.2	33.7	31.2	29.2
87.5°	9.0	8.5	9.0	9.6	14.1	15.1	15.1	16.1	17.6	16.6	16.6
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: P155584

CATALOG NUMBER: TLM-F02-LED-E1-T3-7030

**CANDELA DISTRIBUTION (continued):**

	160°	165°	170°	175°	180°
0°	501.2	501.2	501.2	501.2	501.2
2.5°	503.2	502.7	504.2	503.2	503.7
5°	507.7	507.2	508.2	507.2	508.7
7.5°	506.2	505.2	504.7	505.2	505.7
10°	495.6	494.6	494.1	493.6	494.1
12.5°	486.6	484.6	484.6	483.6	484.1
15°	480.0	478.5	478.0	477.0	477.5
17.5°	477.0	474.5	473.5	472.5	472.5
20°	475.0	472.0	470.5	469.5	469.0
22.5°	475.0	470.5	468.5	467.5	467.0
25°	477.0	471.5	468.5	467.0	466.5
27.5°	481.0	474.0	470.5	468.5	468.5
30°	488.1	479.0	474.0	471.5	471.0
32.5°	495.1	483.1	476.0	473.0	472.0
35°	498.6	483.1	474.5	469.5	468.5
37.5°	494.6	476.5	466.0	458.4	456.9
40°	482.1	463.0	451.4	444.4	443.3
42.5°	465.5	446.9	433.3	428.3	426.8
45°	442.8	420.7	407.2	400.1	400.6
47.5°	404.1	381.5	369.5	362.9	363.9
50°	358.4	336.3	325.7	318.7	320.2
52.5°	308.1	288.0	278.0	274.5	273.4
55°	255.4	239.8	232.7	228.7	227.2
57.5°	207.1	196.0	191.0	186.0	186.5
60°	163.4	157.8	156.3	150.8	150.3
62.5°	128.7	125.2	123.7	119.6	120.1
65°	97.5	96.5	97.5	95.0	96.0
66°	88.0	88.5	88.5	87.0	88.0
67.5°	75.9	76.9	78.4	76.9	77.9
70°	62.8	63.8	64.8	64.8	64.8
72.5°	54.8	55.8	56.3	56.3	56.3
75°	50.3	50.8	51.3	50.3	50.3
77.5°	47.3	47.3	46.2	45.7	45.2
80°	42.7	42.2	40.7	39.7	39.7
82.5°	35.7	34.7	33.7	32.2	32.2
85°	27.1	26.1	25.1	23.1	22.1
87.5°	14.1	14.6	14.1	11.6	10.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)