

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: P155578

Luminaire Tested: **TLM-E02-LED-E1-T3-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P155578  
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-T3-8030  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 3  
Light Source: (42) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5205.6 lumens  
Efficiency: N/A  
Efficacy: 99.9 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

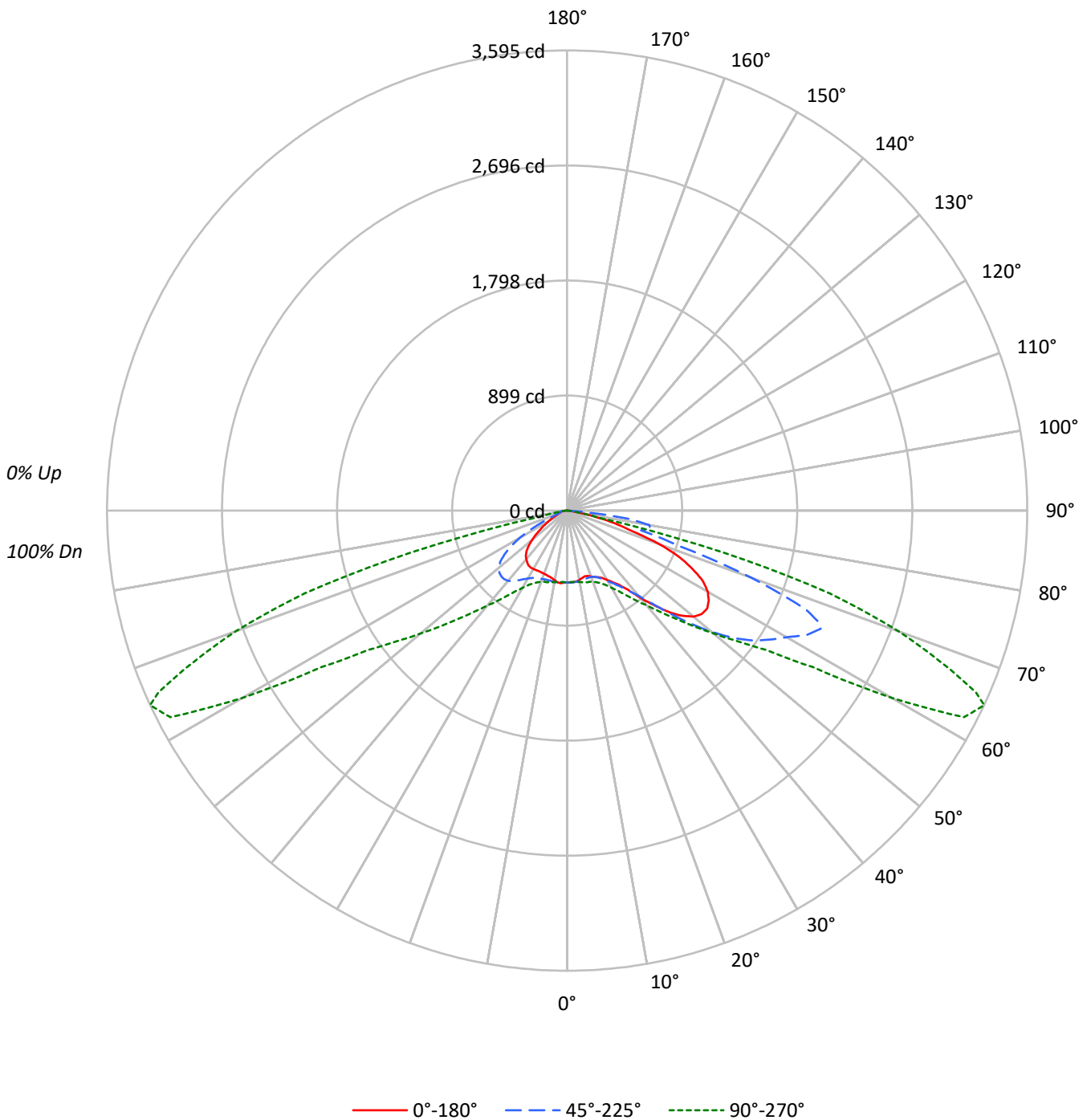
Input Watts (W): 52.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	18299	18299	18299
5°	18369	18349	18644
10°	18207	18766	18319
15°	17938	19589	18049
20°	19043	20566	18223
25°	20655	22558	18790
30°	23544	26237	19856
35°	28232	32174	20881
40°	37806	41183	21132
45°	51650	54842	20684
50°	65354	75721	18187
55°	75930	107798	14461
60°	82732	190652	10973
65°	83509	277495	8297
70°	73195	262826	6924
75°	48356	159045	7095
80°	17657	16173	8359
85°	2957	10741	9281



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.7	1.0
10°-20°	158.6	3.0
20°-30°	272.5	5.2
30°-40°	442.5	8.5
40°-50°	738.8	14.2
50°-60°	1163.3	22.3
60°-70°	1586.3	30.5
70°-80°	686.7	13.2
80°-90°	103.3	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°	484.8	9.3
0°-40°	927.3	17.8
0°-60°	2829.4	54.4
0°-90°	5205.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5205.6	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	561	561	561	561	561	
5°	561	562	560	567	569	53
15°	531	553	580	563	534	153
25°	574	577	627	582	522	269
35°	709	725	808	665	524	459
45°	1120	1134	1189	728	448	861
55°	1335	1768	1896	599	254	1178
65°	1082	2186	3595	210	108	1051
75°	384	598	1262	57	56	410
85°	8	133	29	39	25	21
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°	561.0	561.0	561.0	561.0	561.0	561.0	561.0	561.0	561.0	561.0	561.0
2.5°	563.2	565.5	563.2	563.8	564.3	563.8	563.2	563.2	561.5	562.7	563.8
5°	561.0	562.7	562.1	562.7	563.2	562.7	562.1	562.7	561.5	562.1	563.8
7.5°	558.2	557.6	558.2	559.3	560.4	560.4	560.4	561.0	560.4	560.4	562.1
10°	549.7	550.3	551.4	553.1	553.7	555.3	555.3	557.0	557.6	558.7	561.0
12.5°	539.0	539.6	540.7	541.8	544.7	547.5	547.5	551.4	553.1	555.9	559.8
15°	531.2	531.7	532.8	534.0	536.2	539.0	540.7	545.2	548.0	553.1	558.7
17.5°	535.7	535.1	536.2	536.8	536.8	539.0	539.0	542.4	545.8	550.3	557.6
20°	548.6	548.6	549.7	549.7	549.2	550.3	548.0	548.0	548.6	550.8	555.9
22.5°	561.5	561.0	563.2	564.3	564.9	566.6	564.3	563.8	561.0	559.3	561.0
25°	573.9	573.4	576.2	577.9	580.7	582.4	582.4	582.4	580.1	577.3	575.6
27.5°	593.0	593.0	595.9	597.5	599.8	603.2	604.9	604.9	605.4	601.5	598.7
30°	625.1	625.7	626.2	628.5	630.7	631.9	634.1	635.8	637.5	635.2	630.7
32.5°	663.4	660.0	660.0	663.4	666.2	669.6	670.7	672.9	676.3	674.6	674.1
35°	709.0	707.8	706.7	707.8	711.2	715.1	719.6	723.6	721.3	724.7	723.0
37.5°	776.5	777.6	778.2	778.2	777.6	778.7	781.0	784.9	783.8	784.9	787.2
40°	887.9	883.9	880.0	880.6	874.9	876.1	867.1	871.0	871.6	867.6	869.3
42.5°	999.3	1001.5	1003.2	1007.7	1003.8	1001.5	993.1	993.1	988.6	984.7	983.5
45°	1119.7	1124.2	1124.8	1133.8	1130.4	1137.7	1143.9	1142.2	1134.9	1134.3	1126.4
47.5°	1215.9	1223.2	1231.1	1241.8	1250.2	1266.5	1285.7	1295.2	1300.9	1305.4	1296.4
50°	1287.9	1291.3	1311.6	1328.4	1347.0	1374.0	1400.5	1434.8	1462.4	1475.3	1487.7
52.5°	1326.8	1335.2	1357.1	1383.6	1416.2	1456.7	1499.5	1554.1	1601.3	1632.8	1661.0
55°	1335.2	1343.6	1368.4	1402.2	1446.6	1501.2	1562.5	1636.8	1707.7	1768.4	1827.5
57.5°	1311.6	1321.1	1347.6	1386.4	1438.7	1505.1	1582.2	1679.5	1777.4	1875.9	1963.1
60°	1268.2	1280.1	1304.2	1342.5	1400.5	1475.3	1567.6	1689.7	1827.0	1977.8	2144.9
62.5°	1196.8	1209.2	1231.7	1273.9	1333.5	1416.2	1523.1	1675.0	1869.2	2106.6	2403.1
65°	1082.0	1087.6	1115.2	1158.0	1210.8	1302.0	1419.6	1603.0	1855.7	2185.9	2594.4
66°	1030.2	1039.8	1056.7	1091.0	1141.6	1227.2	1345.3	1531.6	1804.5	2158.4	2589.4
67.5°	949.2	956.5	967.8	990.8	1021.8	1084.8	1196.8	1372.9	1648.0	2018.8	2481.9
70°	767.5	770.8	786.0	793.9	804.6	825.4	865.9	967.2	1181.6	1529.9	2003.1
72.5°	523.3	532.8	549.2	571.7	600.9	629.1	648.2	661.1	707.3	912.6	1334.6
75°	383.7	393.9	414.7	444.5	495.7	554.2	615.0	643.1	624.0	597.5	743.3
77.5°	222.8	236.3	253.8	282.5	329.7	407.4	511.5	603.7	666.2	670.1	636.4
80°	94.0	95.7	106.3	121.0	150.2	204.8	285.8	418.6	557.0	650.4	672.4
82.5°	21.4	26.4	33.8	39.9	49.0	67.5	100.2	166.5	301.0	472.1	615.6
85°	7.9	7.9	10.7	15.8	18.0	20.3	26.4	42.2	72.0	132.8	276.8
87.5°	0.0	0.6	1.1	1.1	2.3	2.8	4.5	6.2	5.6	5.1	16.9
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°	561.0	561.0	561.0	561.0	561.0	561.0	561.0	561.0	561.0	561.0	561.0
2.5°	562.7	562.1	561.0	561.0	561.0	561.0	559.8	560.4	559.3	559.8	559.8
5°	562.1	562.1	561.5	560.4	561.0	561.0	561.5	560.4	560.4	561.0	560.4
7.5°	562.1	561.5	561.5	561.5	562.1	561.5	562.1	562.1	562.1	562.7	562.7
10°	562.1	562.1	563.2	563.8	563.8	564.3	566.0	566.0	566.6	567.2	568.3
12.5°	562.7	564.9	566.6	568.3	568.8	570.0	572.8	572.8	573.9	575.6	576.2
15°	563.2	566.6	570.0	571.1	572.2	574.5	577.3	578.4	580.1	581.8	582.9
17.5°	562.7	567.2	571.1	572.8	574.5	577.3	580.7	581.8	584.0	586.3	588.5
20°	562.1	568.3	574.5	576.7	579.0	582.9	587.4	590.2	592.5	595.9	598.1
22.5°	565.5	572.8	581.2	584.6	588.5	593.6	599.8	603.2	606.0	609.4	611.0
25°	576.2	581.8	591.9	597.5	602.6	611.0	619.5	623.4	626.8	629.6	630.2
27.5°	594.2	595.9	608.2	615.6	622.9	636.4	646.5	649.3	655.5	657.8	657.2
30°	623.4	620.6	630.7	642.0	652.7	671.3	683.6	690.9	696.6	696.6	692.1
32.5°	665.6	661.1	663.9	676.9	689.3	716.3	730.9	740.5	744.4	743.3	733.7
35°	720.8	718.0	716.3	726.4	746.1	777.6	796.7	801.8	808.0	806.9	794.5
37.5°	786.0	783.8	783.8	795.6	814.7	861.4	882.3	885.6	885.1	876.1	853.0
40°	863.1	862.0	856.9	863.7	880.0	940.8	968.9	973.4	967.2	952.6	925.6
42.5°	974.0	967.2	951.5	955.4	967.8	1026.9	1063.4	1075.8	1069.6	1055.0	1011.1
45°	1118.6	1111.3	1084.8	1081.4	1088.2	1140.0	1187.2	1190.0	1188.9	1170.3	1118.6
47.5°	1288.5	1277.2	1249.1	1240.1	1237.9	1285.7	1331.3	1335.8	1332.9	1305.4	1236.2
50°	1472.5	1456.2	1437.6	1431.4	1422.4	1456.7	1502.9	1503.4	1492.2	1453.9	1389.2
52.5°	1668.9	1663.2	1659.8	1653.7	1649.7	1679.5	1707.7	1690.8	1673.9	1634.0	1577.7
55°	1866.9	1890.0	1913.6	1915.9	1922.6	1954.7	1954.1	1908.0	1895.6	1873.7	1818.0
57.5°	2077.3	2162.9	2237.1	2260.2	2282.7	2342.4	2336.7	2291.2	2275.4	2248.4	2202.3
60°	2363.7	2594.4	2808.8	2860.0	2895.5	2966.9	2960.2	2889.8	2922.5	2920.2	2860.6
62.5°	2764.9	3148.6	3469.9	3548.7	3573.5	3581.3	3538.6	3462.6	3494.7	3530.7	3347.3
65°	3036.7	3487.9	3817.7	3878.4	3881.8	3787.8	3692.7	3603.3	3595.4	3564.5	3302.3
66°	3042.9	3504.8	3835.7	3894.7	3873.9	3745.6	3625.2	3535.2	3496.4	3428.3	3156.5
67.5°	2933.7	3399.6	3755.8	3818.2	3772.6	3590.9	3424.9	3309.0	3233.0	3122.8	2883.1
70°	2463.9	2925.8	3364.7	3481.2	3495.8	3224.6	2994.5	2858.3	2755.9	2604.6	2398.1
72.5°	1832.0	2249.5	2636.6	2748.0	2804.9	2588.2	2394.1	2290.6	2150.5	1991.3	1844.4
75°	1148.4	1443.2	1702.6	1780.8	1727.4	1559.7	1443.2	1399.9	1262.0	1167.0	1100.0
77.5°	656.6	748.9	769.7	739.9	676.9	518.2	368.5	272.9	236.9	262.2	289.2
80°	640.9	587.4	468.1	411.9	373.0	256.6	150.8	103.5	86.1	88.3	95.7
82.5°	694.3	745.0	613.3	500.2	419.7	283.6	156.4	83.3	56.3	66.4	74.8
85°	451.3	627.9	565.5	476.6	386.0	242.5	128.8	43.3	28.7	37.7	51.8
87.5°	45.6	50.1	42.8	58.0	43.3	20.3	10.1	6.2	5.6	6.8	10.1
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):**

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	561.0	561.0	561.0	561.0	561.0	561.0	561.0	561.0	561.0	561.0	561.0
2.5°	560.4	560.4	561.0	561.5	562.1	562.7	562.7	562.7	562.7	563.8	563.2
5°	561.5	562.7	563.8	564.3	565.5	565.5	567.2	566.6	566.6	568.3	568.8
7.5°	563.8	565.5	567.7	567.2	569.4	568.8	570.0	570.0	568.3	568.8	567.7
10°	568.8	571.1	572.2	570.5	571.1	568.8	568.3	565.5	562.1	560.4	558.2
12.5°	577.3	579.5	579.5	576.7	573.4	568.3	564.3	558.2	553.1	550.3	547.5
15°	584.6	586.9	586.3	581.8	576.7	568.8	563.2	555.9	548.6	544.1	541.3
17.5°	590.2	591.4	589.7	583.5	577.9	570.5	564.9	557.0	548.6	543.0	537.9
20°	598.7	597.5	593.6	585.7	579.5	572.8	568.3	561.5	552.0	544.7	537.3
22.5°	611.0	606.5	599.2	590.8	584.6	578.4	573.9	566.6	557.0	548.0	539.6
25°	627.4	618.4	608.2	599.2	593.6	586.9	581.8	573.9	563.8	553.7	543.5
27.5°	651.0	635.2	622.3	614.4	608.2	599.8	593.6	583.5	572.8	561.0	549.7
30°	677.4	656.1	643.7	637.5	630.7	621.7	612.2	599.2	586.9	573.9	560.4
32.5°	711.8	685.9	674.1	667.9	658.9	647.6	636.4	621.7	604.3	587.4	571.1
35°	756.8	730.3	718.0	708.4	696.0	681.4	665.1	645.4	621.7	599.2	578.4
37.5°	805.2	776.5	764.7	754.5	736.0	716.8	693.8	665.1	633.0	603.2	577.3
40°	866.5	840.1	824.9	807.4	785.5	752.3	716.3	674.6	633.6	597.0	566.6
42.5°	944.1	917.7	895.2	867.6	829.4	778.2	727.0	672.9	623.4	581.8	549.2
45°	1047.1	1015.0	976.2	927.8	865.9	794.5	727.5	662.3	604.3	558.2	523.3
47.5°	1173.1	1124.2	1060.6	979.0	890.1	799.0	718.5	640.9	574.5	524.4	485.6
50°	1322.8	1245.7	1141.1	1021.2	902.5	792.2	696.0	608.8	532.3	478.8	432.7
52.5°	1493.9	1367.8	1213.7	1051.6	901.9	769.7	657.8	560.4	477.1	417.5	373.6
55°	1694.7	1507.4	1288.5	1074.1	886.2	728.1	599.2	492.3	409.1	353.9	313.4
57.5°	1989.0	1733.6	1419.0	1109.0	854.7	663.9	519.9	410.7	337.6	285.3	250.9
60°	2526.9	2111.1	1654.2	1179.3	806.3	570.0	427.1	323.5	262.2	220.0	196.9
62.5°	2932.0	2403.1	1781.4	1163.6	709.0	454.1	316.8	235.8	193.0	164.3	149.7
65°	2874.1	2312.5	1645.8	1002.1	555.9	320.2	210.4	160.4	132.8	119.3	110.8
66°	2743.0	2194.4	1528.2	901.9	480.5	266.1	173.3	134.5	114.2	104.7	99.0
67.5°	2494.3	1974.9	1317.8	739.3	369.1	193.0	130.5	106.3	92.8	88.9	85.0
70°	2073.4	1574.9	925.0	430.4	188.5	107.5	82.7	74.3	70.9	70.3	69.2
72.5°	1589.0	1114.6	544.7	203.7	97.9	71.5	64.1	61.3	60.2	60.2	60.8
75°	974.0	626.2	240.8	99.6	68.6	60.2	56.8	55.7	55.1	55.7	55.1
77.5°	325.2	199.2	103.0	75.4	62.5	55.7	53.5	52.3	52.3	52.3	52.3
80°	99.6	86.6	78.8	69.8	59.1	52.9	49.5	49.0	49.5	50.1	48.4
82.5°	74.8	70.9	66.4	61.9	53.5	47.3	46.1	46.1	46.1	44.5	42.2
85°	55.1	54.6	45.0	42.2	39.4	39.4	39.4	39.4	37.7	34.9	32.6
87.5°	10.1	9.6	10.1	10.7	15.8	16.9	16.9	18.0	19.7	18.6	18.6
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: P155578

CATALOG NUMBER: TLM-E02-LED-E1-T3-8030

**CANDELA DISTRIBUTION (continued):**

	160°	165°	170°	175°	180°
0°	561.0	561.0	561.0	561.0	561.0
2.5°	563.2	562.7	564.3	563.2	563.8
5°	568.3	567.7	568.8	567.7	569.4
7.5°	566.6	565.5	564.9	565.5	566.0
10°	554.8	553.7	553.1	552.5	553.1
12.5°	544.7	542.4	542.4	541.3	541.8
15°	537.3	535.7	535.1	534.0	534.5
17.5°	534.0	531.2	530.0	528.9	528.9
20°	531.7	528.3	526.7	525.5	525.0
22.5°	531.7	526.7	524.4	523.3	522.7
25°	534.0	527.8	524.4	522.7	522.1
27.5°	538.5	530.6	526.7	524.4	524.4
30°	546.3	536.2	530.6	527.8	527.2
32.5°	554.2	540.7	532.8	529.5	528.3
35°	558.2	540.7	531.2	525.5	524.4
37.5°	553.7	533.4	521.6	513.1	511.5
40°	539.6	518.2	505.3	497.4	496.3
42.5°	521.0	500.2	485.0	479.4	477.7
45°	495.7	470.9	455.8	447.9	448.4
47.5°	452.4	427.1	413.6	406.2	407.4
50°	401.2	376.4	364.6	356.7	358.4
52.5°	344.9	322.4	311.2	307.2	306.1
55°	285.8	268.4	260.5	256.0	254.3
57.5°	231.8	219.4	213.8	208.2	208.7
60°	182.9	176.7	175.0	168.8	168.2
62.5°	144.0	140.1	138.4	133.9	134.5
65°	109.2	108.0	109.2	106.3	107.5
66°	98.5	99.0	99.0	97.3	98.5
67.5°	85.0	86.1	87.8	86.1	87.2
70°	70.3	71.5	72.6	72.6	72.6
72.5°	61.3	62.5	63.0	63.0	63.0
75°	56.3	56.8	57.4	56.3	56.3
77.5°	52.9	52.9	51.8	51.2	50.6
80°	47.8	47.3	45.6	44.5	44.5
82.5°	39.9	38.8	37.7	36.0	36.0
85°	30.4	29.3	28.1	25.9	24.8
87.5°	15.8	16.3	15.8	12.9	11.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)