

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: P155581

Luminaire Tested: **TLM-E02-LED-E1-T3-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P155581
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-T3-7050
Description: TALON MEDIUM LED SITE LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 3
Light Source: (42) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

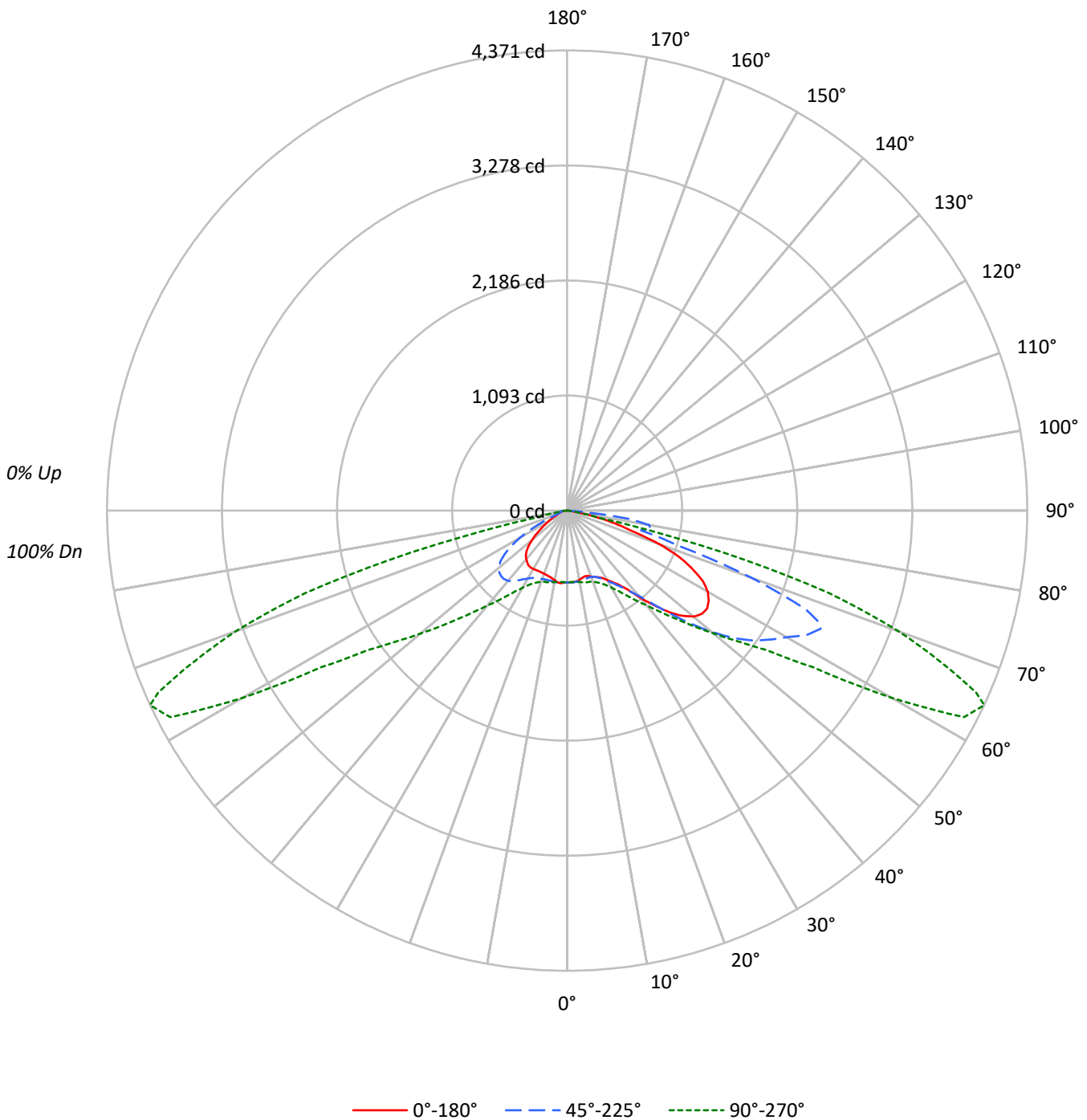
Lumens per Lamp: N/A
Luminaire Lumens: 6328.9 lumens
Efficiency: N/A
Efficacy: 121.5 lumens/watt
Spacing Criteria (0/90/45): 1.97 / 4.22 / 2.62
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
CIE Type: Direct

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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CATALOG NUMBER: TLM-E02-LED-E1-T3-7050

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°	22245	22245	22245
5°	22330	22307	22668
10°	22135	22817	22271
15°	21808	23817	21946
20°	23152	25003	22153
25°	25114	27428	22846
30°	28625	31898	24143
35°	34320	39114	25389
40°	45965	50069	25693
45°	62795	66674	25149
50°	79456	92061	22114
55°	92313	131057	17583
60°	100587	231789	13341
65°	101531	337372	10088
70°	88988	319541	8411
75°	58791	193374	8620
80°	21451	19667	10143
85°	3593	13061	11265



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.3	1.0
10°-20°	192.8	3.0
20°-30°	331.3	5.2
30°-40°	538.0	8.5
40°-50°	898.2	14.2
50°-60°	1414.3	22.3
60°-70°	1928.6	30.5
70°-80°	834.9	13.2
80°-90°	125.5	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°	589.4	9.3
0°-40°	1127.4	17.8
0°-60°	3439.9	54.4
0°-90°	6328.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6328.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	682	682	682	682	682	
5°	682	683	681	690	692	65
15°	646	672	705	685	650	186
25°	698	702	762	707	635	327
35°	862	881	982	809	638	558
45°	1361	1379	1445	884	545	1046
55°	1623	2150	2305	728	309	1432
65°	1316	2658	4371	256	131	1277
75°	466	726	1534	69	68	499
85°	10	161	35	48	30	25
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°	682.0	682.0	682.0	682.0	682.0	682.0	682.0	682.0	682.0	682.0	682.0
2.5°	684.8	687.5	684.8	685.4	686.1	685.4	684.8	684.8	682.7	684.1	685.4
5°	682.0	684.1	683.4	684.1	684.8	684.1	683.4	684.1	682.7	683.4	685.4
7.5°	678.6	677.9	678.6	680.0	681.3	681.3	681.3	682.0	681.3	681.3	683.4
10°	668.3	669.0	670.4	672.4	673.1	675.2	675.2	677.2	677.9	679.3	682.0
12.5°	655.3	656.0	657.4	658.8	662.2	665.6	665.6	670.4	672.4	675.9	680.6
15°	645.8	646.4	647.8	649.2	651.9	655.3	657.4	662.9	666.3	672.4	679.3
17.5°	651.2	650.6	651.9	652.6	652.6	655.3	655.3	659.4	663.5	669.0	677.9
20°	667.0	667.0	668.3	668.3	667.7	669.0	666.3	666.3	667.0	669.7	675.9
22.5°	682.7	682.0	684.8	686.1	686.8	688.9	686.1	685.4	682.0	680.0	682.0
25°	697.8	697.1	700.5	702.5	706.0	708.0	708.0	708.0	705.3	701.9	699.8
27.5°	721.0	721.0	724.4	726.5	729.2	733.3	735.4	735.4	736.1	731.3	727.9
30°	760.0	760.7	761.4	764.1	766.8	768.2	770.9	773.0	775.1	772.3	766.8
32.5°	806.5	802.4	802.4	806.5	809.9	814.0	815.4	818.1	822.3	820.2	819.5
35°	861.9	860.6	859.2	860.6	864.7	869.5	874.9	879.7	877.0	881.1	879.0
37.5°	944.0	945.4	946.1	946.1	945.4	946.8	949.5	954.3	952.9	954.3	957.0
40°	1079.5	1074.7	1069.9	1070.6	1063.7	1065.1	1054.2	1058.9	1059.6	1054.8	1056.9
42.5°	1214.9	1217.6	1219.7	1225.2	1220.4	1217.6	1207.4	1207.4	1201.9	1197.1	1195.8
45°	1361.3	1366.8	1367.5	1378.4	1374.3	1383.2	1390.7	1388.7	1379.8	1379.1	1369.5
47.5°	1478.3	1487.2	1496.7	1509.7	1520.0	1539.8	1563.1	1574.7	1581.6	1587.0	1576.1
50°	1565.8	1569.9	1594.6	1615.1	1637.7	1670.5	1702.7	1744.4	1777.9	1793.6	1808.7
52.5°	1613.0	1623.3	1650.0	1682.1	1721.8	1771.1	1823.0	1889.4	1946.9	1985.2	2019.4
55°	1623.3	1633.6	1663.7	1704.7	1758.7	1825.1	1899.7	1990.0	2076.2	2150.0	2221.9
57.5°	1594.6	1606.2	1638.3	1685.5	1749.2	1829.9	1923.6	2041.9	2161.0	2280.7	2386.7
60°	1541.9	1556.3	1585.7	1632.2	1702.7	1793.6	1905.8	2054.3	2221.2	2404.5	2607.7
62.5°	1455.0	1470.1	1497.4	1548.7	1621.2	1721.8	1851.8	2036.5	2272.5	2561.2	2921.7
65°	1315.5	1322.3	1355.8	1407.8	1472.1	1582.9	1725.9	1948.9	2256.1	2657.6	3154.2
66°	1252.5	1264.2	1284.7	1326.4	1388.0	1492.0	1635.6	1862.0	2193.8	2624.1	3148.1
67.5°	1154.0	1162.9	1176.6	1204.6	1242.3	1318.9	1455.0	1669.1	2003.6	2454.4	3017.4
70°	933.1	937.2	955.6	965.2	978.2	1003.5	1052.8	1175.9	1436.5	1860.0	2435.3
72.5°	636.2	647.8	667.7	695.0	730.6	764.8	788.0	803.8	859.9	1109.6	1622.6
75°	466.5	478.8	504.2	540.4	602.7	673.8	747.7	781.9	758.6	726.5	903.7
77.5°	270.9	287.3	308.5	343.4	400.9	495.3	621.8	734.0	809.9	814.7	773.7
80°	114.2	116.3	129.3	147.1	182.6	249.0	347.5	508.9	677.2	790.8	817.5
82.5°	26.0	32.2	41.0	48.6	59.5	82.1	121.8	202.5	366.0	573.9	748.4
85°	9.6	9.6	13.0	19.2	21.9	24.6	32.2	51.3	87.6	161.4	336.6
87.5°	0.0	0.7	1.4	1.4	2.7	3.4	5.5	7.5	6.8	6.2	20.5
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°	682.0	682.0	682.0	682.0	682.0	682.0	682.0	682.0	682.0	682.0	682.0
2.5°	684.1	683.4	682.0	682.0	682.0	682.0	680.6	681.3	680.0	680.6	680.6
5°	683.4	683.4	682.7	681.3	682.0	682.0	682.7	681.3	681.3	682.0	681.3
7.5°	683.4	682.7	682.7	682.7	683.4	682.7	683.4	683.4	683.4	684.1	684.1
10°	683.4	683.4	684.8	685.4	685.4	686.1	688.2	688.2	688.9	689.5	690.9
12.5°	684.1	686.8	688.9	690.9	691.6	693.0	696.4	696.4	697.8	699.8	700.5
15°	684.8	688.9	693.0	694.3	695.7	698.4	701.9	703.2	705.3	707.3	708.7
17.5°	684.1	689.5	694.3	696.4	698.4	701.9	706.0	707.3	710.1	712.8	715.5
20°	683.4	690.9	698.4	701.2	703.9	708.7	714.2	717.6	720.3	724.4	727.2
22.5°	687.5	696.4	706.6	710.7	715.5	721.7	729.2	733.3	736.7	740.8	742.9
25°	700.5	707.3	719.6	726.5	732.6	742.9	753.2	757.9	762.1	765.5	766.2
27.5°	722.4	724.4	739.5	748.4	757.3	773.7	786.0	789.4	796.9	799.7	799.0
30°	757.9	754.5	766.8	780.5	793.5	816.1	831.1	840.0	846.9	846.9	841.4
32.5°	809.3	803.8	807.2	822.9	838.0	870.8	888.6	900.2	905.0	903.7	892.0
35°	876.3	872.9	870.8	883.1	907.1	945.4	968.6	974.8	982.3	981.0	965.9
37.5°	955.6	952.9	952.9	967.3	990.5	1047.3	1072.6	1076.7	1076.0	1065.1	1037.1
40°	1049.4	1048.0	1041.8	1050.0	1069.9	1143.8	1178.0	1183.4	1175.9	1158.1	1125.3
42.5°	1184.1	1175.9	1156.8	1161.6	1176.6	1248.4	1292.9	1307.9	1300.4	1282.6	1229.3
45°	1359.9	1351.0	1318.9	1314.8	1323.0	1385.9	1443.4	1446.8	1445.4	1422.9	1359.9
47.5°	1566.5	1552.8	1518.6	1507.7	1505.0	1563.1	1618.5	1624.0	1620.6	1587.0	1502.9
50°	1790.2	1770.4	1747.8	1740.3	1729.3	1771.1	1827.2	1827.8	1814.2	1767.6	1689.0
52.5°	2029.0	2022.1	2018.0	2010.5	2005.7	2041.9	2076.2	2055.6	2035.1	1986.5	1918.1
55°	2269.7	2297.8	2326.5	2329.3	2337.5	2376.5	2375.8	2319.7	2304.6	2278.0	2210.2
57.5°	2525.6	2629.6	2719.9	2747.9	2775.3	2847.8	2840.9	2785.5	2766.4	2733.5	2677.5
60°	2873.8	3154.2	3414.9	3477.1	3520.2	3607.1	3598.9	3513.4	3553.1	3550.3	3477.8
62.5°	3361.5	3828.1	4218.7	4314.4	4344.5	4354.1	4302.1	4209.8	4248.8	4292.5	4069.5
65°	3691.9	4240.6	4641.4	4715.3	4719.4	4605.2	4489.6	4380.8	4371.2	4333.6	4014.8
66°	3699.5	4261.1	4663.3	4735.1	4709.8	4553.9	4407.5	4298.0	4250.8	4168.0	3837.6
67.5°	3566.7	4133.2	4566.2	4642.1	4586.7	4365.7	4163.9	4023.0	3930.7	3796.6	3505.2
70°	2995.5	3557.2	4090.7	4232.3	4250.1	3920.4	3640.6	3475.1	3350.6	3166.6	2915.5
72.5°	2227.3	2734.9	3205.6	3341.0	3410.1	3146.7	2910.7	2784.9	2614.5	2420.9	2242.4
75°	1396.2	1754.6	2070.0	2165.1	2100.1	1896.2	1754.6	1702.0	1534.4	1418.8	1337.4
77.5°	798.3	910.5	935.8	899.6	822.9	630.0	448.1	331.8	288.0	318.8	351.6
80°	779.2	714.2	569.1	500.7	453.5	311.9	183.3	125.9	104.7	107.4	116.3
82.5°	844.1	905.7	745.6	608.1	510.3	344.8	190.2	101.2	68.4	80.7	91.0
85°	548.6	763.4	687.5	579.4	469.3	294.8	156.7	52.7	34.9	45.8	62.9
87.5°	55.4	60.9	52.0	70.5	52.7	24.6	12.3	7.5	6.8	8.2	12.3
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	682.0	682.0	682.0	682.0	682.0	682.0	682.0	682.0	682.0	682.0	682.0
2.5°	681.3	681.3	682.0	682.7	683.4	684.1	684.1	684.1	684.1	685.4	684.8
5°	682.7	684.1	685.4	686.1	687.5	687.5	689.5	688.9	688.9	690.9	691.6
7.5°	685.4	687.5	690.2	689.5	692.3	691.6	693.0	693.0	690.9	691.6	690.2
10°	691.6	694.3	695.7	693.6	694.3	691.6	690.9	687.5	683.4	681.3	678.6
12.5°	701.9	704.6	704.6	701.2	697.1	690.9	686.1	678.6	672.4	669.0	665.6
15°	710.7	713.5	712.8	707.3	701.2	691.6	684.8	675.9	667.0	661.5	658.1
17.5°	717.6	719.0	716.9	709.4	702.5	693.6	686.8	677.2	667.0	660.1	654.0
20°	727.9	726.5	721.7	712.1	704.6	696.4	690.9	682.7	671.1	662.2	653.3
22.5°	742.9	737.4	728.5	718.3	710.7	703.2	697.8	688.9	677.2	666.3	656.0
25°	762.7	751.8	739.5	728.5	721.7	713.5	707.3	697.8	685.4	673.1	660.8
27.5°	791.5	772.3	756.6	747.0	739.5	729.2	721.7	709.4	696.4	682.0	668.3
30°	823.6	797.6	782.6	775.1	766.8	755.9	744.3	728.5	713.5	697.8	681.3
32.5°	865.3	833.9	819.5	812.0	801.0	787.4	773.7	755.9	734.7	714.2	694.3
35°	920.1	887.9	872.9	861.2	846.2	828.4	808.6	784.6	755.9	728.5	703.2
37.5°	978.9	944.0	929.7	917.3	894.8	871.5	843.5	808.6	769.6	733.3	701.9
40°	1053.5	1021.3	1002.8	981.6	955.0	914.6	870.8	820.2	770.3	725.8	688.9
42.5°	1147.9	1115.7	1088.4	1054.8	1008.3	946.1	883.8	818.1	757.9	707.3	667.7
45°	1273.1	1234.1	1186.9	1128.0	1052.8	965.9	884.5	805.2	734.7	678.6	636.2
47.5°	1426.3	1366.8	1289.5	1190.3	1082.2	971.4	873.6	779.2	698.4	637.6	590.4
50°	1608.2	1514.5	1387.3	1241.6	1097.2	963.2	846.2	740.2	647.1	582.1	526.1
52.5°	1816.2	1663.0	1475.5	1278.5	1096.6	935.8	799.7	681.3	580.1	507.6	454.2
55°	2060.4	1832.6	1566.5	1305.9	1077.4	885.2	728.5	598.6	497.3	430.3	381.0
57.5°	2418.2	2107.6	1725.2	1348.3	1039.1	807.2	632.1	499.4	410.4	346.8	305.1
60°	3072.2	2566.6	2011.2	1433.8	980.3	693.0	519.2	393.3	318.8	267.5	239.4
62.5°	3564.7	2921.7	2165.8	1414.7	861.9	552.0	385.1	286.6	234.6	199.7	182.0
65°	3494.2	2811.5	2000.9	1218.3	675.9	389.2	255.8	195.0	161.4	145.0	134.8
66°	3334.8	2667.9	1857.9	1096.6	584.2	323.6	210.7	163.5	138.9	127.2	120.4
67.5°	3032.5	2401.1	1602.1	898.9	448.8	234.6	158.7	129.3	112.9	108.1	103.3
70°	2520.8	1914.7	1124.6	523.3	229.2	130.7	100.6	90.3	86.2	85.5	84.1
72.5°	1931.8	1355.1	662.2	247.6	119.0	86.9	78.0	74.6	73.2	73.2	73.9
75°	1184.1	761.4	292.8	121.1	83.5	73.2	69.1	67.7	67.0	67.7	67.0
77.5°	395.4	242.2	125.2	91.7	75.9	67.7	65.0	63.6	63.6	63.6	63.6
80°	121.1	105.3	95.8	84.8	71.8	64.3	60.2	59.5	60.2	60.9	58.8
82.5°	91.0	86.2	80.7	75.2	65.0	57.5	56.1	56.1	56.1	54.0	51.3
85°	67.0	66.4	54.7	51.3	47.9	47.9	47.9	47.9	45.8	42.4	39.7
87.5°	12.3	11.6	12.3	13.0	19.2	20.5	20.5	21.9	23.9	22.6	22.6
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: P155581

CATALOG NUMBER: TLM-E02-LED-E1-T3-7050

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	682.0	682.0	682.0	682.0	682.0
2.5°	684.8	684.1	686.1	684.8	685.4
5°	690.9	690.2	691.6	690.2	692.3
7.5°	688.9	687.5	686.8	687.5	688.2
10°	674.5	673.1	672.4	671.8	672.4
12.5°	662.2	659.4	659.4	658.1	658.8
15°	653.3	651.2	650.6	649.2	649.9
17.5°	649.2	645.8	644.4	643.0	643.0
20°	646.4	642.3	640.3	638.9	638.2
22.5°	646.4	640.3	637.6	636.2	635.5
25°	649.2	641.7	637.6	635.5	634.8
27.5°	654.7	645.1	640.3	637.6	637.6
30°	664.2	651.9	645.1	641.7	641.0
32.5°	673.8	657.4	647.8	643.7	642.3
35°	678.6	657.4	645.8	638.9	637.6
37.5°	673.1	648.5	634.1	623.9	621.8
40°	656.0	630.0	614.3	604.7	603.4
42.5°	633.4	608.1	589.7	582.8	580.8
45°	602.7	572.6	554.1	544.5	545.2
47.5°	550.0	519.2	502.8	493.9	495.3
50°	487.7	457.6	443.3	433.7	435.8
52.5°	419.3	392.0	378.3	373.5	372.1
55°	347.5	326.3	316.7	311.3	309.2
57.5°	281.8	266.8	259.9	253.1	253.8
60°	222.3	214.8	212.7	205.2	204.5
62.5°	175.1	170.3	168.3	162.8	163.5
65°	132.7	131.3	132.7	129.3	130.7
66°	119.7	120.4	120.4	118.3	119.7
67.5°	103.3	104.7	106.7	104.7	106.0
70°	85.5	86.9	88.2	88.2	88.2
72.5°	74.6	75.9	76.6	76.6	76.6
75°	68.4	69.1	69.8	68.4	68.4
77.5°	64.3	64.3	62.9	62.3	61.6
80°	58.1	57.5	55.4	54.0	54.0
82.5°	48.6	47.2	45.8	43.8	43.8
85°	36.9	35.6	34.2	31.5	30.1
87.5°	19.2	19.8	19.2	15.7	13.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)