

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: P151819

Luminaire Tested: **TLM-E05-LED-E1-SL4-HSS-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P151819  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33728)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: TLM-E05-LED-E1-SL4-HSS-7030  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND  
HOUSE SIDE SHIELD  
Light Source: (105) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

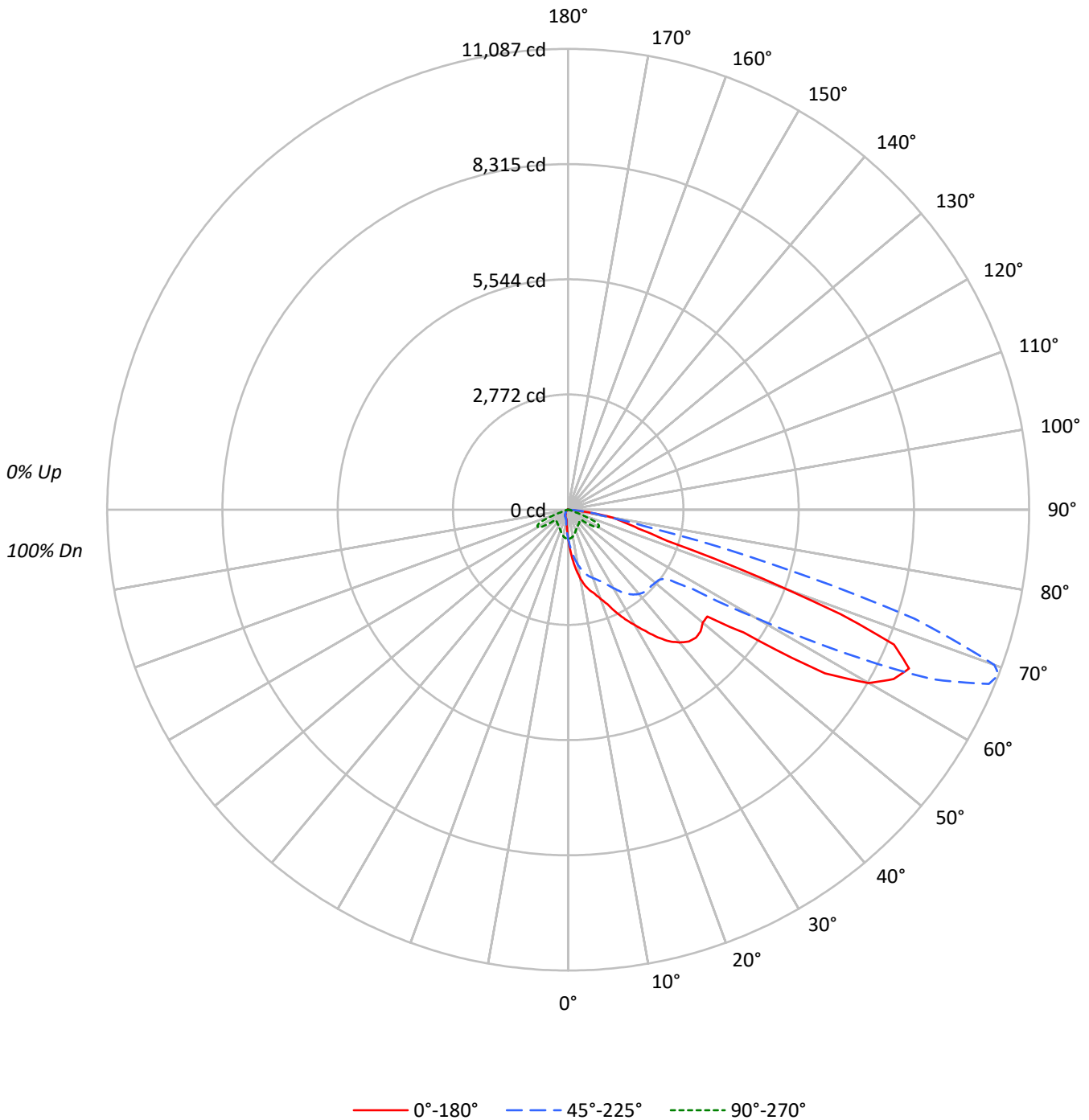
Lumens per Lamp: N/A  
Luminaire Lumens: 9292.5 lumens  
Efficiency: N/A  
Efficacy: 73.0 lumens/watt  
Spacing Criteria (0/90/45): 4.24 / 0.98 / 4.1  
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')  
CIE Type: Direct

Input Watts (W): 127.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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-E05-LED-E1-SL4-HSS-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	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					100			
1	105	99	93	88	102	96	91	86	92	87	83	88	84	81	84	81	78	76					76			
2	91	80	71	63	88	78	70	62	74	67	61	71	65	59	68	62	58	55					55			
3	80	66	55	47	77	64	54	46	61	52	45	58	51	44	55	49	43	41					41			
4	71	56	44	36	68	54	44	35	51	42	35	49	41	34	46	39	33	31					31			
5	64	48	36	28	61	46	36	28	44	35	27	42	33	27	40	32	27	24					24			
6	58	42	31	23	56	40	30	22	38	29	22	37	28	22	35	27	22	19					19			
7	53	37	26	19	51	36	26	19	34	25	18	32	24	18	31	24	18	16					16			
8	49	33	23	16	47	32	22	16	31	22	16	29	21	15	28	21	15	13					13			
9	45	30	20	14	44	29	20	14	28	19	13	27	19	13	25	18	13	11					11			
10	42	27	18	12	41	27	18	12	25	17	12	24	17	12	23	17	12	10					10			

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

	0°	90°	180°
0°	9101	9101	9101
5°	15557	8977	4776
10°	22151	8579	3067
15°	26937	7889	2779
20°	31429	7353	2521
25°	38903	7036	2222
30°	48008	6884	1891
35°	59334	6820	1591
40°	70585	6933	1469
45°	79791	7232	1508
50°	85258	7955	1382
55°	116505	13767	825
60°	216326	21834	591
65°	277563	23589	562
70°	209582	9756	633
75°	87261	3738	762
80°	79694	3525	1023
85°	7023	3169	1815



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.1	0.8
10°-20°	248.7	2.7
20°-30°	476.0	5.1
30°-40°	791.6	8.5
40°-50°	1071.1	11.5
50°-60°	1675.1	18.0
60°-70°	3443.9	37.1
70°-80°	1385.8	14.9
80°-90°	128.2	1.4
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°	796.8	8.6
0°-40°	1588.3	17.1
0°-60°	4334.5	46.6
0°-90°	9292.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9292.5	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	702	702	702	702	702	
5°	1195	1017	690	438	367	129
15°	2006	1591	588	218	207	573
25°	2719	1915	492	174	155	1273
35°	3748	2472	431	123	100	2350
45°	4351	2707	394	81	82	3325
55°	5153	2877	609	53	36	5196
65°	9045	9645	769	26	18	8286
75°	1742	5078	75	11	15	2334
85°	47	204	21	8	12	292
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°	701.8	701.8	701.8	701.8	701.8	701.8	701.8	701.8	701.8	701.8	701.8
2.5°	936.2	925.5	913.4	913.4	898.1	898.1	889.0	864.6	861.6	847.9	834.2
5°	1195.0	1185.8	1170.6	1156.9	1144.7	1123.4	1108.2	1079.3	1047.3	1016.9	989.5
7.5°	1447.7	1443.1	1415.7	1411.1	1391.3	1356.3	1325.9	1283.3	1228.5	1185.8	1135.6
10°	1682.1	1671.4	1665.3	1639.5	1610.5	1572.5	1525.3	1473.5	1409.6	1342.6	1271.1
12.5°	1867.8	1861.7	1834.3	1823.7	1793.2	1755.2	1695.8	1628.8	1564.9	1478.1	1394.4
15°	2006.3	1995.7	1977.4	1960.7	1924.1	1890.6	1835.8	1762.8	1685.1	1590.8	1490.3
17.5°	2122.0	2102.2	2097.7	2071.8	2033.7	1994.1	1933.3	1866.3	1774.9	1680.6	1571.0
20°	2277.3	2249.9	2240.8	2202.7	2158.6	2103.8	2033.7	1950.0	1854.1	1750.6	1637.9
22.5°	2460.0	2440.2	2420.4	2386.9	2330.6	2252.9	2150.9	2059.6	1937.8	1823.7	1701.9
25°	2718.7	2702.0	2670.0	2624.4	2554.3	2461.5	2338.2	2204.2	2061.1	1915.0	1771.9
27.5°	2969.9	2954.7	2931.9	2896.8	2817.7	2715.7	2563.5	2393.0	2211.8	2035.2	1876.9
30°	3205.9	3192.2	3169.3	3134.3	3064.3	2963.8	2791.8	2609.1	2383.8	2178.3	1988.1
32.5°	3460.1	3455.5	3429.6	3379.4	3318.5	3183.0	2995.8	2799.4	2571.1	2333.6	2111.4
35°	3747.8	3712.8	3688.4	3638.2	3534.7	3390.1	3170.8	2956.2	2715.7	2472.1	2224.0
37.5°	3991.3	3957.9	3927.4	3863.5	3737.1	3552.9	3304.8	3068.9	2820.7	2572.6	2319.9
40°	4169.4	4152.7	4116.2	4032.4	3890.9	3671.7	3403.8	3146.5	2896.8	2647.2	2397.5
42.5°	4301.9	4276.0	4234.9	4148.1	3980.7	3731.0	3443.3	3178.5	2931.9	2692.9	2447.8
45°	4350.6	4329.3	4291.2	4196.8	4015.7	3747.8	3441.8	3169.3	2933.4	2706.6	2481.3
47.5°	4321.7	4300.4	4266.9	4178.6	4000.5	3728.0	3414.4	3143.4	2918.2	2711.1	2511.7
50°	4225.8	4213.6	4187.7	4113.1	3953.3	3689.9	3390.1	3129.7	2915.1	2734.0	2554.3
52.5°	4216.6	4209.0	4177.1	4102.5	3939.6	3677.8	3387.0	3137.4	2941.0	2762.9	2584.8
55°	5152.8	5044.7	4802.7	4597.2	4259.3	3857.4	3540.8	3260.7	3050.6	2877.1	2752.2
57.5°	7323.5	7162.2	6844.0	6452.8	5676.5	4913.8	4303.4	3861.9	3644.3	3565.1	3612.3
60°	8340.4	8311.5	8261.3	8075.5	7678.2	7022.1	6291.5	5501.4	5184.8	5157.4	5253.3
62.5°	8823.0	8804.7	8819.9	8797.1	8673.8	8482.0	8271.9	7930.9	7617.3	7414.9	6985.6
65°	9045.2	9057.4	9144.2	9212.7	9227.9	9278.1	9431.9	9856.6	10167.1	9645.0	8453.1
67.5°	8480.5	8552.0	8751.4	9001.1	9293.3	9576.5	10033.2	10928.2	11566.1	10952.6	9259.9
69°	7020.6	7055.6	7542.8	8013.1	8727.1	9226.4	9888.5	11062.2	11779.2	11086.6	9195.9
70°	5527.3	5559.3	6081.4	6720.7	7927.9	8570.3	9436.4	10835.4	11579.8	10908.4	8867.1
72.5°	2493.4	2447.8	2632.0	2974.5	4286.7	5306.6	6821.2	8778.8	9553.6	8739.2	6634.0
75°	1741.5	1721.7	1741.5	1743.0	1947.0	2511.7	3169.3	4758.6	5885.0	5078.2	3169.3
77.5°	1348.7	1335.0	1321.3	1306.1	1330.4	1490.3	1554.2	1688.2	2192.0	2073.3	1208.7
80°	1067.1	1054.9	1088.4	1077.8	1077.8	1096.0	1083.8	1033.6	939.2	870.7	779.4
82.5°	496.3	499.3	499.3	541.9	653.0	762.6	797.7	747.4	663.7	564.8	455.2
85°	47.2	53.3	89.8	138.5	275.5	310.5	312.1	258.8	258.8	204.0	164.4
87.5°	0.0	1.5	1.5	1.5	13.7	38.1	32.0	9.1	4.6	4.6	7.6
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°	70°	75°	80°	85°	90°	95°	100°	105°
0°	701.8	701.8	701.8	701.8	701.8	701.8	701.8	701.8	701.8	701.8	701.8
2.5°	809.8	805.3	787.0	768.7	752.0	733.7	717.0	700.2	682.0	668.3	651.5
5°	946.8	913.4	875.3	838.8	802.2	764.2	724.6	689.6	653.0	619.6	587.6
7.5°	1085.4	1019.9	968.2	902.7	843.3	784.0	729.2	672.8	621.1	572.4	526.7
10°	1202.6	1123.4	1042.7	959.0	873.8	794.6	718.5	651.5	583.0	523.7	467.3
12.5°	1298.5	1198.0	1099.1	994.0	898.1	797.7	703.3	622.6	541.9	474.9	417.1
15°	1385.2	1269.6	1150.8	1029.0	907.3	793.1	688.1	587.6	505.4	429.3	363.8
17.5°	1455.3	1322.8	1188.9	1051.9	921.0	787.0	668.3	563.2	467.3	388.2	324.2
20°	1516.2	1377.6	1233.0	1079.3	930.1	785.5	651.5	532.8	433.8	350.1	287.7
22.5°	1572.5	1434.0	1278.7	1114.3	943.8	784.0	636.3	510.0	404.9	321.2	258.8
25°	1636.4	1490.3	1327.4	1150.8	968.2	790.0	627.2	491.7	379.0	293.8	235.9
27.5°	1708.0	1554.2	1385.2	1196.5	1000.1	802.2	624.1	471.9	356.2	267.9	217.7
30°	1808.4	1630.3	1443.1	1242.2	1029.0	815.9	621.1	459.7	333.4	248.1	199.4
32.5°	1896.7	1704.9	1507.0	1289.3	1061.0	829.6	619.6	443.0	312.1	228.3	185.7
35°	1989.6	1773.4	1561.8	1335.0	1088.4	844.8	618.0	430.8	292.3	208.5	172.0
37.5°	2070.3	1831.3	1604.5	1374.6	1118.9	858.5	619.6	420.1	274.0	191.8	159.8
40°	2138.8	1890.6	1651.6	1411.1	1150.8	879.9	621.1	409.5	255.7	176.6	149.2
42.5°	2199.7	1947.0	1701.9	1452.2	1187.4	904.2	630.2	400.4	240.5	162.9	138.5
45°	2246.8	1998.7	1756.7	1510.1	1246.7	943.8	647.0	394.3	225.3	150.7	129.4
47.5°	2295.6	2074.8	1849.5	1601.4	1333.5	1006.2	675.9	392.7	213.1	141.6	121.8
50°	2362.5	2150.9	1931.7	1694.3	1412.6	1070.1	710.9	394.3	197.9	132.4	114.2
52.5°	2411.2	2228.6	2038.3	1855.6	1601.4	1265.0	846.4	421.7	190.3	124.8	105.0
55°	2699.0	2667.0	2671.5	2702.0	2505.6	2152.5	1415.7	608.9	223.8	141.6	103.5
57.5°	3805.6	3918.3	3983.7	3982.2	3658.0	3033.8	1901.3	782.4	249.6	164.4	123.3
60°	5260.9	5175.7	5055.4	4758.6	4327.8	3463.1	2126.6	841.8	216.2	130.9	112.6
62.5°	6547.2	6047.9	5604.9	5123.9	4559.1	3612.3	2172.3	837.2	188.8	98.9	79.2
65°	7349.4	6451.3	5735.8	5133.0	4467.8	3487.5	2055.0	768.7	159.8	80.7	65.5
67.5°	7541.2	6233.6	5221.3	4452.6	3732.6	2714.2	1508.6	578.5	124.8	67.0	57.8
69°	7122.6	5541.0	4326.2	3454.0	2715.7	1800.8	933.1	365.3	95.9	60.9	53.3
70°	6551.8	4819.4	3524.0	2772.0	2010.9	1265.0	653.0	257.3	77.6	56.3	48.7
72.5°	4215.1	2531.5	1732.3	1205.6	829.6	503.9	255.7	115.7	59.4	47.2	39.6
75°	1634.9	936.2	678.9	516.0	403.4	280.1	155.3	74.6	50.2	39.6	30.4
77.5°	805.3	616.5	503.9	345.6	200.9	124.8	83.7	57.8	41.1	28.9	19.8
80°	636.3	423.2	252.7	156.8	118.7	89.8	63.9	47.2	30.4	18.3	13.7
82.5°	325.8	178.1	130.9	106.6	88.3	70.0	51.8	33.5	19.8	12.2	10.7
85°	102.0	74.6	67.0	65.5	60.9	50.2	36.5	21.3	12.2	7.6	7.6
87.5°	7.6	10.7	13.7	10.7	12.2	10.7	13.7	9.1	6.1	6.1	4.6
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	701.8	701.8	701.8	701.8	701.8	701.8	701.8	701.8	701.8	701.8	701.8
2.5°	639.3	621.1	604.3	593.7	573.9	566.3	558.7	555.6	541.9	545.0	532.8
5°	558.7	526.7	502.3	478.0	455.2	438.4	424.7	408.0	394.3	388.2	376.0
7.5°	485.6	444.5	412.5	386.7	359.3	337.9	319.7	307.5	295.3	283.1	277.0
10°	421.7	377.5	341.0	315.1	289.2	271.0	257.3	248.1	240.5	235.9	234.4
12.5°	362.3	319.7	286.2	263.3	243.6	234.4	228.3	223.8	222.2	220.7	220.7
15°	316.6	274.0	248.1	231.4	222.2	217.7	216.2	213.1	210.1	208.5	208.5
17.5°	274.0	242.0	223.8	214.6	210.1	207.0	204.0	200.9	197.9	196.4	196.4
20°	245.1	219.2	210.1	204.0	199.4	196.4	191.8	188.8	187.2	185.7	184.2
22.5°	222.2	205.5	199.4	194.8	188.8	184.2	181.1	178.1	175.1	173.5	172.0
25°	205.5	194.8	190.3	184.2	178.1	173.5	169.0	164.4	161.4	159.8	156.8
27.5°	193.3	185.7	179.6	172.0	165.9	161.4	156.8	152.2	149.2	146.1	144.6
30°	182.7	175.1	167.4	161.4	153.7	149.2	143.1	138.5	137.0	134.0	130.9
32.5°	172.0	164.4	156.8	149.2	141.6	135.5	132.4	126.3	123.3	121.8	118.7
35°	159.8	152.2	143.1	137.0	129.4	123.3	118.7	114.2	111.1	108.1	106.6
37.5°	149.2	140.0	130.9	123.3	117.2	111.1	106.6	102.0	98.9	95.9	94.4
40°	137.0	127.9	118.7	111.1	105.0	100.5	95.9	91.3	88.3	86.8	86.8
42.5°	126.3	115.7	106.6	100.5	95.9	89.8	85.2	80.7	79.2	77.6	79.2
45°	115.7	105.0	97.4	91.3	86.8	80.7	76.1	73.1	71.5	73.1	74.6
47.5°	106.6	95.9	88.3	83.7	79.2	74.6	70.0	67.0	67.0	70.0	73.1
50°	97.4	86.8	80.7	77.6	73.1	68.5	62.4	60.9	62.4	65.5	68.5
52.5°	88.3	76.1	71.5	70.0	65.5	60.9	56.3	54.8	56.3	59.4	57.8
55°	79.2	67.0	65.5	63.9	59.4	53.3	48.7	48.7	48.7	47.2	44.1
57.5°	76.1	59.4	57.8	56.3	51.8	45.7	42.6	39.6	38.1	33.5	32.0
60°	79.2	53.3	53.3	50.2	45.7	39.6	35.0	30.4	27.4	24.4	24.4
62.5°	63.9	48.7	47.2	44.1	38.1	32.0	27.4	22.8	21.3	19.8	19.8
65°	51.8	44.1	41.1	36.5	32.0	25.9	21.3	18.3	16.7	16.7	18.3
67.5°	47.2	39.6	35.0	30.4	25.9	19.8	16.7	15.2	15.2	16.7	16.7
69°	44.1	36.5	32.0	27.4	22.8	18.3	15.2	15.2	15.2	15.2	16.7
70°	41.1	35.0	30.4	25.9	19.8	15.2	13.7	13.7	15.2	15.2	16.7
72.5°	32.0	27.4	25.9	21.3	15.2	13.7	12.2	13.7	13.7	15.2	15.2
75°	24.4	19.8	19.8	16.7	12.2	10.7	10.7	12.2	12.2	13.7	13.7
77.5°	16.7	13.7	13.7	12.2	10.7	9.1	9.1	10.7	12.2	12.2	13.7
80°	12.2	10.7	9.1	10.7	9.1	7.6	9.1	10.7	10.7	12.2	12.2
82.5°	9.1	9.1	9.1	9.1	7.6	7.6	9.1	9.1	10.7	12.2	12.2
85°	7.6	7.6	7.6	7.6	7.6	7.6	7.6	9.1	9.1	10.7	10.7
87.5°	4.6	4.6	4.6	6.1	6.1	7.6	7.6	7.6	7.6	9.1	9.1
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: P151819

CATALOG NUMBER: TLM-E05-LED-E1-SL4-HSS-7030

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	701.8	701.8	701.8	701.8
2.5°	529.7	528.2	522.1	523.7
5°	371.4	362.3	368.4	366.9
7.5°	272.5	271.0	269.4	272.5
10°	232.9	232.9	231.4	232.9
12.5°	219.2	219.2	219.2	219.2
15°	208.5	208.5	207.0	207.0
17.5°	196.4	196.4	196.4	194.8
20°	184.2	182.7	182.7	182.7
22.5°	170.5	169.0	169.0	169.0
25°	156.8	155.3	155.3	155.3
27.5°	143.1	141.6	140.0	140.0
30°	129.4	127.9	126.3	126.3
32.5°	115.7	114.2	112.6	112.6
35°	103.5	103.5	102.0	100.5
37.5°	92.9	92.9	92.9	92.9
40°	85.2	86.8	86.8	86.8
42.5°	80.7	82.2	83.7	85.2
45°	77.6	80.7	82.2	82.2
47.5°	76.1	77.6	79.2	79.2
50°	70.0	68.5	68.5	68.5
52.5°	56.3	53.3	51.8	50.2
55°	41.1	39.6	36.5	36.5
57.5°	28.9	28.9	27.4	27.4
60°	22.8	22.8	21.3	22.8
62.5°	19.8	19.8	19.8	19.8
65°	18.3	18.3	18.3	18.3
67.5°	18.3	18.3	18.3	18.3
69°	16.7	16.7	16.7	16.7
70°	16.7	16.7	16.7	16.7
72.5°	15.2	15.2	15.2	15.2
75°	13.7	15.2	15.2	15.2
77.5°	13.7	13.7	13.7	13.7
80°	12.2	12.2	13.7	13.7
82.5°	12.2	12.2	12.2	12.2
85°	10.7	10.7	12.2	12.2
87.5°	9.1	9.1	10.7	10.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)