

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: P150669

Luminaire Tested: **TLM-E04-LED-E1-SL3-HSS-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P150669
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33727)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TLM-E04-LED-E1-SL3-HSS-7030
Description: TALON MEDIUM LED SITE LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND
HOUSE SIDE SHIELD
Light Source: (84) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

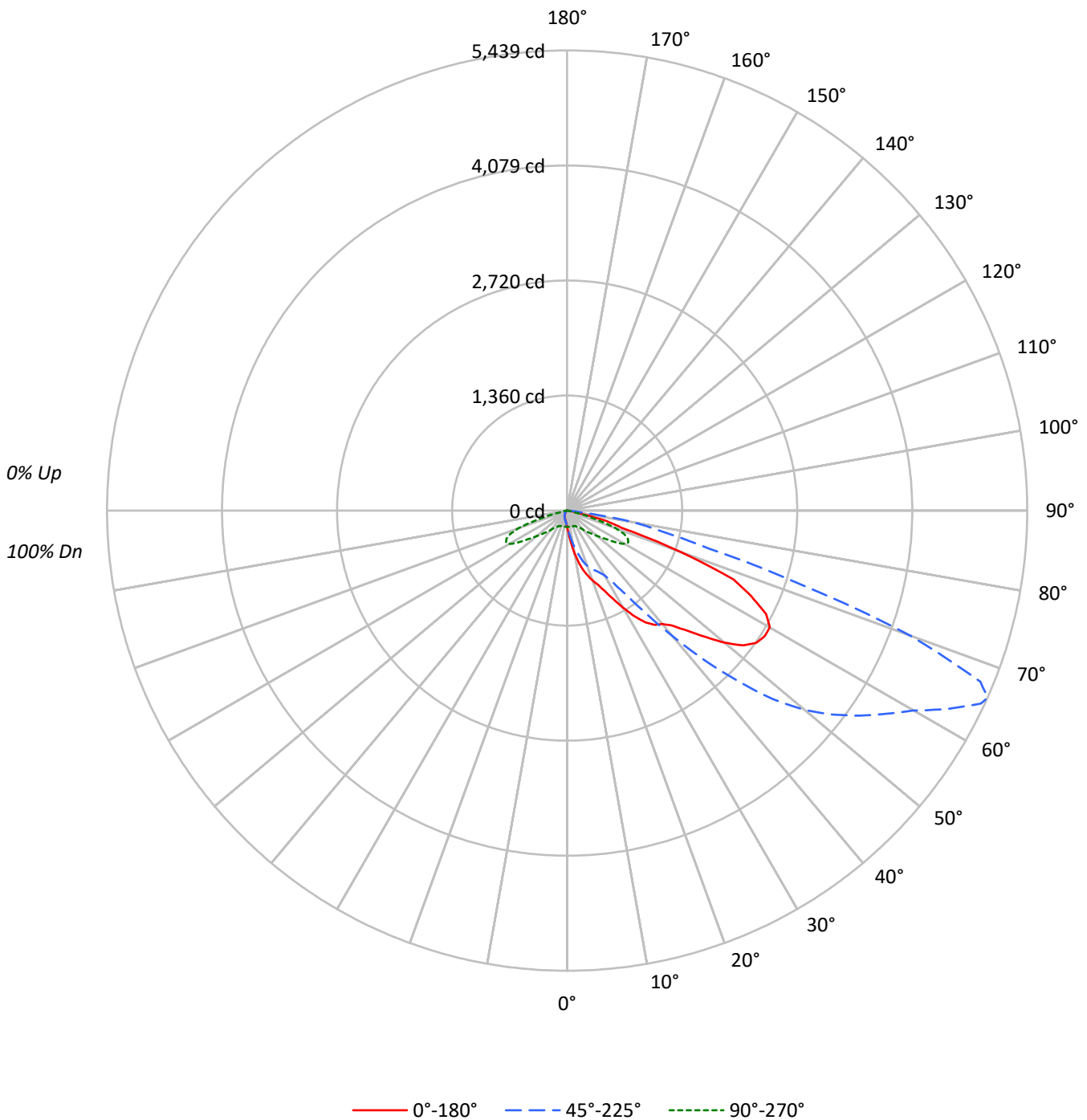
Lumens per Lamp: N/A
Luminaire Lumens: 6334.3 lumens
Efficiency: N/A
Efficacy: 65.2 lumens/watt
Spacing Criteria (0/90/45): 4.23 / 3.52 / 4.34
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 97.2
Input Voltage (V): NR
Input Current (A_{in}): 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	98	93	87	102	96	91	86	92	87	83	88	84	81	84	81	78	76
2	91	80	71	63	88	78	69	62	74	67	61	71	64	59	67	62	58	55
3	80	66	55	46	77	64	54	46	61	52	45	58	50	44	55	48	43	40
4	71	55	43	35	68	53	43	34	51	41	34	48	40	33	45	38	32	30
5	63	47	35	27	61	45	34	26	43	33	26	41	32	26	39	31	25	23
6	57	40	29	21	55	39	29	21	37	28	21	35	27	20	33	26	20	17
7	52	35	24	17	50	34	24	17	33	23	17	31	23	16	29	22	16	14
8	48	31	21	14	46	30	21	14	29	20	14	28	19	13	26	19	13	11
9	44	28	18	12	42	27	18	12	26	17	11	25	17	11	24	16	11	9
10	41	25	16	10	39	25	16	10	24	15	10	23	15	10	22	15	10	7

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	3072	3072	3072
5°	5146	3093	2258
10°	8444	3118	1887
15°	12052	3251	1600
20°	14990	3363	1375
25°	18544	3562	1166
30°	24647	3987	994
35°	31623	4717	835
40°	36676	6207	665
45°	45542	8384	498
50°	60662	11688	487
55°	76407	17090	546
60°	88862	25356	588
65°	91337	30115	646
70°	66757	28916	742
75°	30087	12588	981
80°	5412	3155	1462
85°	442	2811	2691



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.4	0.3
10°-20°	90.8	1.4
20°-30°	195.7	3.1
30°-40°	418.0	6.6
40°-50°	924.4	14.6
50°-60°	1566.6	24.7
60°-70°	2090.5	33.0
70°-80°	920.8	14.5
80°-90°	106.1	1.7
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°	307.9	4.9
0°-40°	725.9	11.5
0°-60°	3216.9	50.8
0°-90°	6334.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6334.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	191	191	191	191	191	
5°	319	270	192	145	140	36
15°	725	553	195	104	96	207
25°	1046	781	201	76	66	501
35°	1612	1208	240	51	43	1000
45°	2004	2844	369	30	22	1584
55°	2728	4226	610	15	20	2404
65°	2403	5395	792	11	17	2294
75°	485	1727	203	8	16	535
85°	2	36	15	7	15	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	191.2	191.2	191.2	191.2	191.2	191.2	191.2	191.2	191.2	191.2	191.2
2.5°	241.1	239.9	235.0	235.0	227.7	222.9	216.8	210.7	210.7	209.5	208.2
5°	319.1	311.8	310.5	297.1	286.2	270.4	255.7	236.3	233.8	231.4	230.2
7.5°	405.5	404.3	393.3	377.5	355.6	326.4	297.1	265.5	260.6	258.2	253.3
10°	517.6	511.5	496.9	470.1	437.2	398.2	350.7	300.8	294.7	289.8	287.4
12.5°	624.7	613.8	605.2	571.1	529.7	472.5	415.3	343.4	338.5	332.5	322.7
15°	724.6	714.8	700.2	671.0	624.7	552.9	485.9	398.2	386.0	377.5	370.2
17.5°	802.5	796.4	779.4	746.5	696.6	633.3	552.9	454.2	444.5	433.5	420.1
20°	876.8	868.3	841.5	796.4	742.9	694.1	632.0	527.3	513.9	500.5	485.9
22.5°	947.4	938.9	895.1	820.8	763.6	742.9	720.9	610.1	589.4	578.5	563.8
25°	1046.1	1027.8	959.6	841.5	764.8	780.6	818.4	717.3	697.8	682.0	658.8
27.5°	1178.8	1154.5	1047.3	871.9	769.6	822.0	930.4	847.6	826.9	808.6	783.0
30°	1328.6	1312.8	1184.9	945.0	805.0	882.9	1055.8	1013.2	988.9	966.9	936.5
32.5°	1479.6	1457.7	1331.1	1083.8	900.0	1001.0	1212.9	1205.6	1174.0	1153.3	1120.4
35°	1612.4	1601.4	1507.6	1311.6	1116.7	1208.1	1422.4	1430.9	1402.9	1381.0	1344.5
37.5°	1702.5	1702.5	1684.2	1556.3	1461.4	1529.6	1730.5	1731.7	1703.7	1653.8	1635.5
40°	1748.8	1762.2	1827.9	1852.3	1847.4	1935.1	2134.8	2112.9	2089.7	2064.2	2003.3
42.5°	1843.7	1855.9	1996.0	2164.0	2273.6	2389.3	2526.9	2519.6	2491.6	2445.3	2389.3
45°	2004.5	2020.3	2187.2	2453.9	2679.2	2843.6	2931.2	2897.1	2869.1	2825.3	2796.1
47.5°	2209.1	2239.5	2428.3	2758.3	3029.9	3301.5	3392.8	3302.7	3278.3	3244.2	3196.7
50°	2427.1	2456.3	2657.2	3034.8	3341.6	3665.6	3817.8	3665.6	3630.3	3619.3	3565.7
52.5°	2615.8	2640.2	2833.8	3247.9	3580.3	3960.3	4181.9	3981.0	3955.4	3918.9	3879.9
55°	2727.9	2747.4	2928.8	3350.2	3742.3	4225.8	4533.9	4357.3	4319.5	4304.9	4248.9
57.5°	2765.6	2785.1	2948.3	3363.6	3830.0	4468.1	4961.3	4967.4	4922.3	4870.0	4852.9
60°	2765.6	2787.5	2925.2	3330.7	3915.2	4726.3	5531.2	6039.1	5941.6	5931.9	5869.8
62.5°	2651.2	2671.9	2810.7	3229.6	4029.7	5074.6	6325.3	7221.6	7193.5	7130.2	7027.9
65°	2402.7	2414.9	2551.3	2971.4	3985.9	5394.9	7013.3	8008.3	7963.2	7839.0	7707.5
66°	2290.7	2300.4	2428.3	2824.1	3842.2	5438.7	7135.1	8106.9	8032.6	7927.9	7779.3
67.5°	2128.7	2145.8	2235.9	2550.1	3497.5	5286.5	7058.4	8037.5	7972.9	7846.3	7697.7
70°	1421.2	1409.0	1726.8	1957.0	2664.5	4307.4	6332.6	7216.7	7217.9	7158.2	7098.6
72.5°	674.7	682.0	774.5	1204.4	1743.9	2877.7	5040.5	5760.2	5843.0	5735.8	5661.6
75°	484.7	495.6	551.7	736.8	1040.0	1726.8	3267.4	4028.5	4030.9	3840.9	3671.7
77.5°	141.3	147.4	207.0	454.2	779.4	1165.4	1876.6	2239.5	2187.2	2050.8	1922.9
80°	58.5	58.5	60.9	144.9	313.0	791.6	1312.8	1724.4	1718.3	1666.0	1590.4
82.5°	21.9	23.1	29.2	59.7	74.3	194.8	875.6	1496.7	1493.0	1418.7	1365.2
85°	2.4	2.4	7.3	25.6	28.0	36.5	175.4	660.0	656.4	660.0	578.5
87.5°	0.0	0.0	1.2	2.4	3.7	4.9	7.3	25.6	28.0	26.8	24.4
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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CATALOG NUMBER: TLM-E04-LED-E1-SL3-HSS-7030

CANDELA DISTRIBUTION (continued):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	191.2	191.2	191.2	191.2	191.2	191.2	191.2	191.2	191.2	191.2	191.2
2.5°	208.2	205.8	205.8	204.6	204.6	204.6	203.4	202.2	202.2	200.9	199.7
5°	227.7	225.3	224.1	221.6	220.4	219.2	216.8	215.6	213.1	211.9	210.7
7.5°	250.9	246.0	244.8	241.1	237.5	235.0	232.6	228.9	226.5	221.6	220.4
10°	280.1	274.0	269.1	264.3	260.6	254.5	250.9	246.0	241.1	237.5	233.8
12.5°	317.8	309.3	302.0	297.1	288.6	281.3	274.0	270.4	260.6	255.7	249.6
15°	359.3	349.5	341.0	331.2	325.2	313.0	303.2	292.3	287.4	278.9	269.1
17.5°	412.8	397.0	383.6	373.9	361.7	349.5	338.5	327.6	313.0	303.2	291.1
20°	470.1	456.7	438.4	421.4	406.7	392.1	376.3	361.7	348.3	332.5	317.8
22.5°	543.1	523.7	501.7	484.7	465.2	449.4	427.4	408.0	386.0	365.3	348.3
25°	635.7	610.1	589.4	565.1	541.9	517.6	490.8	466.4	438.4	418.9	389.7
27.5°	750.2	725.8	697.8	666.1	643.0	606.5	571.1	540.7	507.8	477.4	444.5
30°	896.3	861.0	831.8	801.3	755.0	719.7	678.3	636.9	591.9	561.4	511.5
32.5°	1071.7	1033.9	990.1	946.2	903.6	853.7	802.5	751.4	701.5	645.4	594.3
35°	1286.0	1240.9	1191.0	1143.5	1077.8	1024.2	959.6	889.0	833.0	768.4	703.9
37.5°	1569.7	1495.5	1451.6	1401.7	1312.8	1239.7	1167.9	1097.2	998.6	930.4	839.1
40°	1925.3	1881.5	1809.7	1729.3	1648.9	1552.7	1455.3	1361.5	1247.0	1152.0	1046.1
42.5°	2343.0	2278.5	2205.4	2089.7	2008.2	1894.9	1784.1	1659.9	1519.8	1398.0	1273.8
45°	2735.2	2658.5	2602.4	2486.7	2401.5	2267.5	2133.6	2002.1	1840.1	1683.0	1539.3
47.5°	3159.0	3095.6	3003.1	2909.3	2822.9	2671.9	2526.9	2367.4	2196.9	2010.6	1824.3
50°	3531.6	3481.7	3418.4	3305.1	3208.9	3082.3	2911.8	2737.6	2522.1	2337.0	2125.1
52.5°	3848.2	3809.3	3720.4	3640.0	3553.5	3434.2	3282.0	3115.1	2882.5	2679.2	2438.0
55°	4222.1	4194.1	4116.2	4066.2	3989.5	3875.0	3732.6	3577.9	3331.9	3110.3	2837.5
57.5°	4834.7	4812.7	4744.6	4723.8	4648.3	4548.5	4373.1	4207.5	3920.1	3644.9	3333.1
60°	5849.1	5805.3	5705.4	5654.2	5494.7	5360.8	5133.0	4905.3	4558.2	4207.5	3832.4
62.5°	6935.4	6812.4	6622.4	6459.2	6232.7	6000.1	5695.7	5347.4	4940.6	4524.1	4093.0
65°	7521.1	7311.7	7071.8	6812.4	6518.9	6176.7	5793.1	5375.4	4938.2	4498.6	4043.1
66°	7588.1	7351.9	7097.3	6808.7	6482.4	6118.2	5728.5	5290.1	4835.9	4407.2	3951.8
67.5°	7504.1	7256.9	6987.7	6667.5	6314.3	5936.8	5527.6	5072.1	4634.9	4200.2	3756.9
70°	6915.9	6669.9	6430.0	6092.7	5716.4	5336.4	4949.1	4440.1	4026.0	3626.6	3232.0
72.5°	5522.7	5355.9	5118.4	4829.8	4463.2	4017.5	3694.8	3239.3	2880.1	2492.8	2187.2
75°	3451.2	3216.2	2922.7	2554.9	2274.9	1913.2	1724.4	1378.6	1174.0	994.9	822.0
77.5°	1764.6	1588.0	1382.2	1175.2	976.7	779.4	602.8	426.2	287.4	199.7	148.6
80°	1457.7	1301.8	1131.3	942.6	767.2	595.5	428.7	292.3	186.3	121.8	95.0
82.5°	1204.4	1072.9	920.7	745.3	593.1	467.6	325.2	211.9	131.5	85.2	67.0
85°	512.7	465.2	359.3	285.0	214.3	158.3	110.8	74.3	52.4	42.6	39.0
87.5°	21.9	24.4	23.1	18.3	13.4	13.4	12.2	9.7	9.7	9.7	9.7
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):

	80°	81°	82°	83°	84°	85°	95°	105°	115°	125°	135°
0°	191.2	191.2	191.2	191.2	191.2	191.2	191.2	191.2	191.2	191.2	191.2
2.5°	199.7	198.5	197.3	197.3	196.1	194.8	187.5	181.5	174.1	169.3	164.4
5°	208.2	207.0	204.6	203.4	200.9	199.7	183.9	170.5	159.5	151.0	144.9
7.5°	216.8	215.6	211.9	208.2	207.0	204.6	179.0	162.0	147.4	137.6	131.5
10°	227.7	224.1	220.4	215.6	211.9	208.2	174.1	152.2	136.4	127.9	121.8
12.5°	243.6	237.5	231.4	225.3	220.4	214.3	171.7	143.7	127.9	118.1	112.0
15°	261.8	253.3	246.0	238.7	230.2	224.1	166.8	136.4	120.6	110.8	103.5
17.5°	278.9	269.1	258.2	247.2	238.7	230.2	162.0	129.1	113.3	103.5	96.2
20°	303.2	288.6	275.2	261.8	249.6	238.7	154.7	121.8	107.2	96.2	88.9
22.5°	330.0	313.0	295.9	277.7	261.8	247.2	148.6	115.7	101.1	90.1	81.6
25°	364.1	343.4	320.3	297.1	278.9	259.4	142.5	109.6	95.0	84.0	75.5
27.5°	411.6	382.4	356.8	327.6	299.6	277.7	137.6	104.7	88.9	77.9	69.4
30°	476.2	433.5	393.3	361.7	328.8	297.1	132.7	98.6	84.0	71.9	62.1
32.5°	548.0	498.1	451.8	404.3	362.9	326.4	127.9	93.8	77.9	65.8	57.2
35°	636.9	573.6	511.5	456.7	406.7	358.0	123.0	88.9	73.1	59.7	51.1
37.5°	764.8	685.6	604.0	533.4	468.9	404.3	119.3	84.0	67.0	53.6	45.1
40°	940.1	837.8	738.0	641.8	557.8	477.4	114.5	79.2	62.1	48.7	40.2
42.5°	1130.1	1005.9	874.4	766.0	650.3	549.2	109.6	74.3	57.2	43.8	35.3
45°	1366.4	1211.7	1052.2	904.8	763.6	633.3	104.7	69.4	51.1	39.0	30.4
47.5°	1624.5	1427.3	1247.0	1061.9	893.9	738.0	98.6	65.8	46.3	34.1	26.8
50°	1890.0	1681.8	1454.1	1243.4	1043.7	842.7	92.6	59.7	41.4	30.4	21.9
52.5°	2176.2	1930.2	1697.6	1435.8	1203.2	980.3	86.5	54.8	37.8	26.8	18.3
55°	2540.3	2265.1	1992.3	1698.8	1418.7	1139.9	80.4	48.7	32.9	23.1	14.6
57.5°	2998.2	2671.9	2337.0	2005.7	1666.0	1349.3	75.5	42.6	28.0	19.5	12.2
60°	3430.5	3049.4	2643.8	2262.7	1879.1	1510.1	68.2	37.8	24.4	15.8	12.2
62.5°	3654.6	3219.9	2782.7	2362.5	1953.4	1567.3	60.9	31.7	20.7	13.4	11.0
65°	3599.8	3156.5	2732.7	2308.9	1908.3	1530.8	53.6	28.0	18.3	12.2	11.0
66°	3520.7	3082.3	2656.0	2252.9	1870.5	1491.8	49.9	26.8	17.0	12.2	9.7
67.5°	3347.7	2923.9	2517.2	2142.1	1767.0	1417.5	45.1	24.4	15.8	11.0	9.7
70°	2859.4	2474.6	2149.4	1815.7	1510.1	1194.7	36.5	20.7	13.4	9.7	9.7
72.5°	1892.5	1630.6	1413.9	1216.6	1016.9	789.1	30.4	17.0	11.0	9.7	8.5
75°	713.6	645.4	554.1	498.1	434.8	381.2	24.4	11.0	8.5	8.5	8.5
77.5°	126.7	116.9	103.5	95.0	87.7	80.4	19.5	7.3	7.3	8.5	8.5
80°	85.2	79.2	71.9	65.8	60.9	54.8	13.4	6.1	7.3	7.3	8.5
82.5°	60.9	57.2	53.6	48.7	45.1	40.2	8.5	6.1	7.3	7.3	7.3
85°	36.5	34.1	31.7	29.2	25.6	24.4	6.1	6.1	6.1	7.3	7.3
87.5°	9.7	8.5	9.7	9.7	7.3	8.5	4.9	4.9	4.9	6.1	6.1
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: P150669

CATALOG NUMBER: TLM-E04-LED-E1-SL3-HSS-7030

CANDELA DISTRIBUTION (continued):

	145°	155°	165°	175°	180°
0°	191.2	191.2	191.2	191.2	191.2
2.5°	162.0	162.0	159.5	163.2	163.2
5°	140.0	140.0	138.8	140.0	140.0
7.5°	127.9	126.7	126.7	126.7	127.9
10°	116.9	115.7	115.7	115.7	115.7
12.5°	107.2	105.9	104.7	105.9	105.9
15°	98.6	96.2	96.2	96.2	96.2
17.5°	91.3	88.9	87.7	87.7	87.7
20°	84.0	80.4	80.4	80.4	80.4
22.5°	76.7	73.1	73.1	73.1	73.1
25°	69.4	65.8	65.8	65.8	65.8
27.5°	63.3	59.7	59.7	59.7	59.7
30°	56.0	53.6	53.6	54.8	53.6
32.5°	51.1	47.5	47.5	48.7	48.7
35°	45.1	42.6	42.6	42.6	42.6
37.5°	39.0	36.5	36.5	36.5	36.5
40°	34.1	31.7	30.4	31.7	31.7
42.5°	29.2	26.8	25.6	25.6	25.6
45°	25.6	21.9	20.7	21.9	21.9
47.5°	20.7	18.3	18.3	19.5	19.5
50°	15.8	15.8	17.0	19.5	19.5
52.5°	14.6	14.6	17.0	19.5	19.5
55°	13.4	14.6	17.0	18.3	19.5
57.5°	12.2	14.6	17.0	18.3	18.3
60°	12.2	13.4	15.8	18.3	18.3
62.5°	11.0	12.2	14.6	17.0	17.0
65°	11.0	12.2	14.6	17.0	17.0
66°	11.0	12.2	14.6	17.0	17.0
67.5°	11.0	12.2	14.6	17.0	17.0
70°	11.0	12.2	14.6	15.8	15.8
72.5°	9.7	11.0	13.4	15.8	15.8
75°	9.7	11.0	13.4	15.8	15.8
77.5°	9.7	11.0	13.4	15.8	15.8
80°	9.7	11.0	13.4	14.6	15.8
82.5°	8.5	11.0	12.2	14.6	14.6
85°	8.5	9.7	12.2	13.4	14.6
87.5°	7.3	8.5	9.7	12.2	12.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)