

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: P150664

Luminaire Tested: **TLM-F03-LED-E1-SL3-HSS-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P150664
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-F03-LED-E1-SL3-HSS-7030
Description: TALON MEDIUM LED SITE LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND
HOUSE SIDE SHIELD
Light Source: (21) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3921.9 lumens
Efficiency: N/A
Efficacy: 50.1 lumens/watt
Spacing Criteria (0/90/45): 4.23 / 3.52 / 4.34
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
CIE Type: Direct

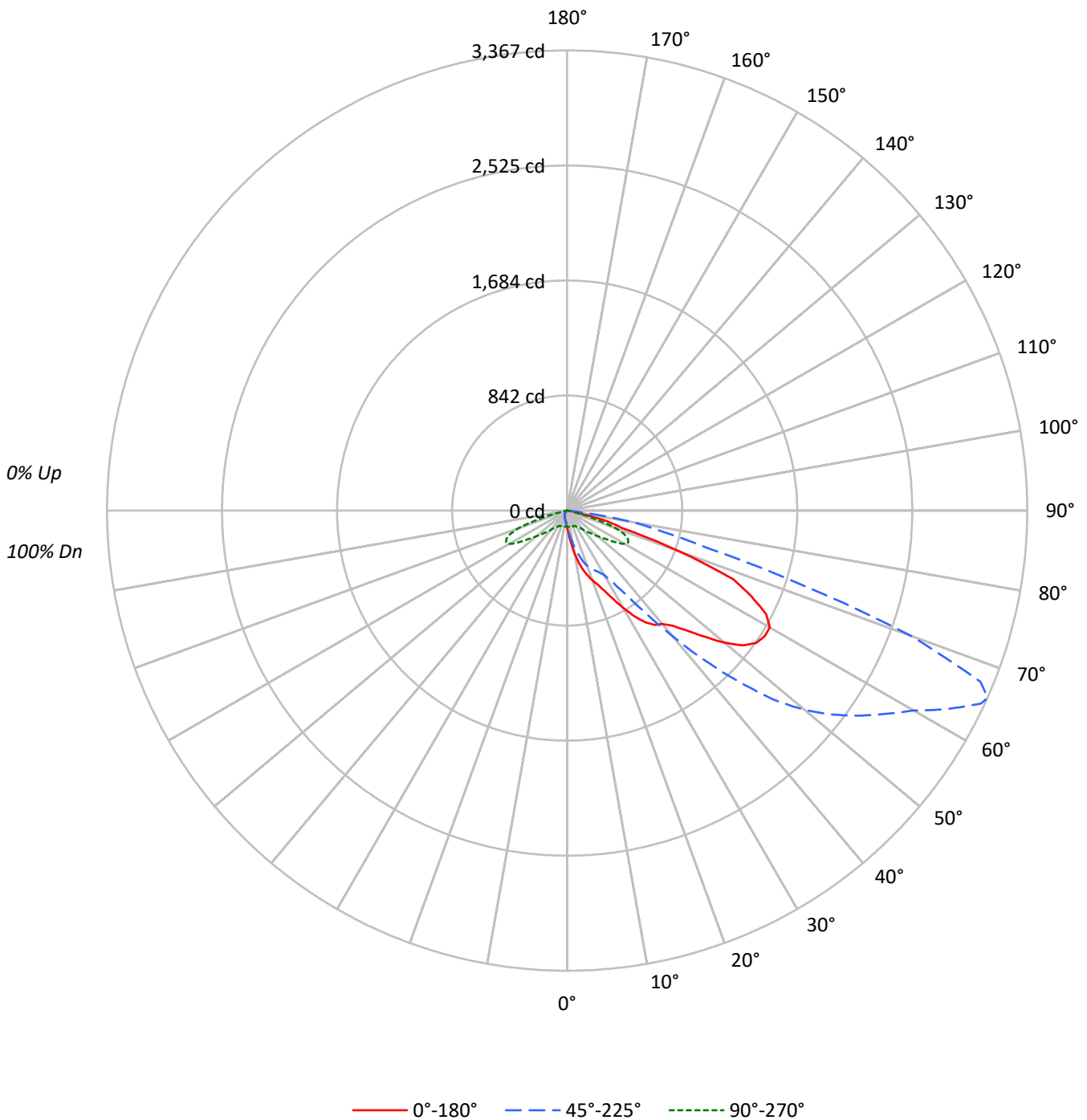
Input Watts (W): 78.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	2549	2549	2549
5°	4268	2567	1874
10°	7004	2587	1565
15°	9998	2697	1328
20°	12438	2790	1141
25°	15385	2955	967
30°	20448	3309	825
35°	26236	3914	694
40°	30427	5150	551
45°	37785	6955	414
50°	50327	9697	405
55°	63389	14178	454
60°	73724	21037	487
65°	75777	24986	540
70°	55384	23991	617
75°	24961	10443	815
80°	4488	2616	1215
85°	371	2334	2223



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.3	0.3
10°-20°	56.2	1.4
20°-30°	121.2	3.1
30°-40°	258.8	6.6
40°-50°	572.4	14.6
50°-60°	969.9	24.7
60°-70°	1294.3	33.0
70°-80°	570.1	14.5
80°-90°	65.7	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°	190.6	4.9
0°-40°	449.4	11.5
0°-60°	1991.7	50.8
0°-90°	3921.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3921.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	118	118	118	118	118	
5°	198	167	119	90	87	23
15°	449	342	121	64	60	128
25°	648	483	124	47	41	310
35°	998	748	149	32	26	619
45°	1241	1761	228	19	14	981
55°	1689	2616	378	9	12	1488
65°	1488	3340	490	7	11	1420
75°	300	1069	126	5	10	331
85°	2	23	9	4	9	9
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°	118.4	118.4	118.4	118.4	118.4	118.4	118.4	118.4	118.4	118.4	118.4
2.5°	149.3	148.5	145.5	145.5	141.0	138.0	134.2	130.4	130.4	129.7	128.9
5°	197.5	193.0	192.3	184.0	177.2	167.4	158.3	146.3	144.8	143.3	142.5
7.5°	251.1	250.3	243.5	233.7	220.2	202.1	184.0	164.4	161.4	159.8	156.8
10°	320.4	316.7	307.6	291.0	270.7	246.6	217.2	186.2	182.5	179.5	177.9
12.5°	386.8	380.0	374.7	353.6	328.0	292.5	257.1	212.6	209.6	205.8	199.8
15°	448.6	442.6	433.5	415.5	386.8	342.3	300.8	246.6	239.0	233.7	229.2
17.5°	496.9	493.1	482.6	462.2	431.3	392.1	342.3	281.2	275.2	268.4	260.1
20°	542.9	537.6	521.0	493.1	459.9	429.8	391.3	326.5	318.2	309.9	300.8
22.5°	586.6	581.3	554.2	508.2	472.8	459.9	446.4	377.8	364.9	358.1	349.1
25°	647.7	636.4	594.1	521.0	473.5	483.3	506.7	444.1	432.0	422.2	407.9
27.5°	729.9	714.8	648.4	539.9	476.5	508.9	576.1	524.8	512.0	500.7	484.8
30°	822.6	812.8	733.6	585.1	498.4	546.6	653.7	627.3	612.2	598.7	579.8
32.5°	916.1	902.5	824.1	671.1	557.2	619.8	751.0	746.5	726.8	714.0	693.7
35°	998.3	991.5	933.4	812.1	691.4	748.0	880.7	885.9	868.6	855.0	832.4
37.5°	1054.1	1054.1	1042.8	963.6	904.8	947.0	1071.4	1072.2	1054.8	1023.9	1012.6
40°	1082.7	1091.0	1131.7	1146.8	1143.8	1198.1	1321.8	1308.2	1293.9	1278.0	1240.3
42.5°	1141.5	1149.1	1235.8	1339.8	1407.7	1479.3	1564.5	1560.0	1542.7	1514.0	1479.3
45°	1241.1	1250.9	1354.2	1519.3	1658.8	1760.6	1814.9	1793.8	1776.4	1749.3	1731.2
47.5°	1367.7	1386.6	1503.5	1707.8	1875.9	2044.1	2100.6	2044.8	2029.8	2008.6	1979.2
50°	1502.7	1520.8	1645.2	1879.0	2069.0	2269.5	2363.8	2269.5	2247.7	2240.9	2207.7
52.5°	1619.6	1634.7	1754.5	2010.9	2216.7	2452.0	2589.2	2464.8	2449.0	2426.4	2402.2
55°	1688.9	1701.0	1813.4	2074.2	2317.0	2616.4	2807.1	2697.8	2674.4	2665.4	2630.7
57.5°	1712.3	1724.4	1825.4	2082.5	2371.3	2766.4	3071.8	3075.5	3047.6	3015.2	3004.7
60°	1712.3	1725.9	1811.1	2062.2	2424.1	2926.2	3424.6	3739.1	3678.7	3672.7	3634.2
62.5°	1641.4	1654.3	1740.2	1999.6	2495.0	3141.9	3916.2	4471.2	4453.8	4414.6	4351.3
65°	1487.6	1495.2	1579.6	1839.7	2467.8	3340.2	4342.2	4958.3	4930.4	4853.5	4772.0
66°	1418.3	1424.3	1503.5	1748.5	2378.8	3367.3	4417.6	5019.3	4973.3	4908.5	4816.5
67.5°	1318.0	1328.5	1384.3	1578.9	2165.5	3273.1	4370.1	4976.4	4936.4	4858.0	4766.0
70°	879.9	872.4	1069.2	1211.7	1649.7	2666.9	3920.8	4468.2	4468.9	4432.0	4395.0
72.5°	417.7	422.2	479.5	745.7	1079.7	1781.7	3120.8	3566.4	3617.7	3551.3	3505.3
75°	300.1	306.9	341.6	456.2	643.9	1069.2	2023.0	2494.2	2495.7	2378.1	2273.3
77.5°	87.5	91.2	128.2	281.2	482.6	721.6	1161.9	1386.6	1354.2	1269.7	1190.6
80°	36.2	36.2	37.7	89.7	193.8	490.1	812.8	1067.7	1063.9	1031.5	984.7
82.5°	13.6	14.3	18.1	36.9	46.0	120.6	542.1	926.7	924.4	878.4	845.2
85°	1.5	1.5	4.5	15.8	17.3	22.6	108.6	408.7	406.4	408.7	358.1
87.5°	0.0	0.0	0.8	1.5	2.3	3.0	4.5	15.8	17.3	16.6	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):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	118.4	118.4	118.4	118.4	118.4	118.4	118.4	118.4	118.4	118.4	118.4
2.5°	128.9	127.4	127.4	126.7	126.7	126.7	125.9	125.2	125.2	124.4	123.7
5°	141.0	139.5	138.7	137.2	136.5	135.7	134.2	133.5	131.9	131.2	130.4
7.5°	155.3	152.3	151.6	149.3	147.0	145.5	144.0	141.8	140.2	137.2	136.5
10°	173.4	169.6	166.6	163.6	161.4	157.6	155.3	152.3	149.3	147.0	144.8
12.5°	196.8	191.5	187.0	184.0	178.7	174.2	169.6	167.4	161.4	158.3	154.6
15°	222.4	216.4	211.1	205.1	201.3	193.8	187.7	181.0	177.9	172.7	166.6
17.5°	255.6	245.8	237.5	231.5	223.9	216.4	209.6	202.8	193.8	187.7	180.2
20°	291.0	282.7	271.4	260.9	251.8	242.8	233.0	223.9	215.6	205.8	196.8
22.5°	336.3	324.2	310.6	300.1	288.0	278.2	264.7	252.6	239.0	226.2	215.6
25°	393.6	377.8	364.9	349.9	335.5	320.4	303.9	288.8	271.4	259.4	241.3
27.5°	464.5	449.4	432.0	412.4	398.1	375.5	353.6	334.8	314.4	295.6	275.2
30°	554.9	533.1	515.0	496.1	467.5	445.6	420.0	394.3	366.4	347.6	316.7
32.5°	663.5	640.1	613.0	585.9	559.5	528.5	496.9	465.2	434.3	399.6	367.9
35°	796.2	768.3	737.4	708.0	667.3	634.1	594.1	550.4	515.7	475.8	435.8
37.5°	971.9	925.9	898.8	867.8	812.8	767.6	723.1	679.3	618.3	576.1	519.5
40°	1192.1	1164.9	1120.4	1070.7	1020.9	961.3	901.0	843.0	772.1	713.3	647.7
42.5°	1450.7	1410.7	1365.5	1293.9	1243.3	1173.2	1104.6	1027.7	941.0	865.6	788.7
45°	1693.5	1646.0	1611.3	1539.7	1486.9	1403.9	1321.0	1239.6	1139.3	1042.0	953.0
47.5°	1955.9	1916.7	1859.3	1801.3	1747.8	1654.3	1564.5	1465.8	1360.2	1244.8	1129.5
50°	2186.6	2155.7	2116.5	2046.3	1986.8	1908.4	1802.8	1695.0	1561.5	1446.9	1315.7
52.5°	2382.6	2358.5	2303.5	2253.7	2200.2	2126.3	2032.0	1928.7	1784.7	1658.8	1509.5
55°	2614.1	2596.8	2548.5	2517.6	2470.1	2399.2	2311.0	2215.2	2062.9	1925.7	1756.8
57.5°	2993.4	2979.8	2937.6	2924.7	2878.0	2816.2	2707.6	2605.0	2427.1	2256.7	2063.7
60°	3621.4	3594.3	3532.5	3500.8	3402.0	3319.1	3178.1	3037.1	2822.2	2605.0	2372.8
62.5°	4294.0	4217.8	4100.2	3999.2	3858.9	3714.9	3526.4	3310.8	3059.0	2801.1	2534.2
65°	4656.7	4527.0	4378.4	4217.8	4036.1	3824.3	3586.7	3328.1	3057.4	2785.3	2503.3
66°	4698.1	4551.9	4394.3	4215.6	4013.5	3788.1	3546.8	3275.3	2994.1	2728.7	2446.7
67.5°	4646.1	4493.0	4326.4	4128.1	3909.5	3675.7	3422.4	3140.4	2869.7	2600.5	2326.1
70°	4281.9	4129.6	3981.1	3772.2	3539.2	3304.0	3064.2	2749.1	2492.7	2245.4	2001.1
72.5°	3419.4	3316.1	3169.0	2990.3	2763.4	2487.4	2287.6	2005.6	1783.2	1543.4	1354.2
75°	2136.8	1991.3	1809.6	1581.9	1408.5	1184.5	1067.7	853.5	726.8	616.0	508.9
77.5°	1092.5	983.2	855.8	727.6	604.7	482.6	373.2	263.9	177.9	123.7	92.0
80°	902.5	806.0	700.5	583.6	475.0	368.7	265.4	181.0	115.4	75.4	58.8
82.5°	745.7	664.3	570.0	461.4	367.2	289.5	201.3	131.2	81.4	52.8	41.5
85°	317.4	288.0	222.4	176.4	132.7	98.0	68.6	46.0	32.4	26.4	24.1
87.5°	13.6	15.1	14.3	11.3	8.3	8.3	7.5	6.0	6.0	6.0	6.0
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):

	80°	81°	82°	83°	84°	85°	95°	105°	115°	125°	135°
0°	118.4	118.4	118.4	118.4	118.4	118.4	118.4	118.4	118.4	118.4	118.4
2.5°	123.7	122.9	122.1	122.1	121.4	120.6	116.1	112.3	107.8	104.8	101.8
5°	128.9	128.2	126.7	125.9	124.4	123.7	113.9	105.6	98.8	93.5	89.7
7.5°	134.2	133.5	131.2	128.9	128.2	126.7	110.8	100.3	91.2	85.2	81.4
10°	141.0	138.7	136.5	133.5	131.2	128.9	107.8	94.2	84.4	79.2	75.4
12.5°	150.8	147.0	143.3	139.5	136.5	132.7	106.3	89.0	79.2	73.1	69.4
15°	162.1	156.8	152.3	147.8	142.5	138.7	103.3	84.4	74.6	68.6	64.1
17.5°	172.7	166.6	159.8	153.1	147.8	142.5	100.3	79.9	70.1	64.1	59.6
20°	187.7	178.7	170.4	162.1	154.6	147.8	95.8	75.4	66.4	59.6	55.0
22.5°	204.3	193.8	183.2	171.9	162.1	153.1	92.0	71.6	62.6	55.8	50.5
25°	225.4	212.6	198.3	184.0	172.7	160.6	88.2	67.9	58.8	52.0	46.7
27.5°	254.8	236.8	220.9	202.8	185.5	171.9	85.2	64.8	55.0	48.3	43.0
30°	294.8	268.4	243.5	223.9	203.6	184.0	82.2	61.1	52.0	44.5	38.5
32.5°	339.3	308.4	279.7	250.3	224.7	202.1	79.2	58.1	48.3	40.7	35.4
35°	394.3	355.1	316.7	282.7	251.8	221.7	76.2	55.0	45.2	36.9	31.7
37.5°	473.5	424.5	374.0	330.2	290.3	250.3	73.9	52.0	41.5	33.2	27.9
40°	582.1	518.7	456.9	397.4	345.3	295.6	70.9	49.0	38.5	30.2	24.9
42.5°	699.7	622.8	541.4	474.3	402.6	340.1	67.9	46.0	35.4	27.1	21.9
45°	846.0	750.2	651.5	560.2	472.8	392.1	64.8	43.0	31.7	24.1	18.8
47.5°	1005.8	883.7	772.1	657.5	553.4	456.9	61.1	40.7	28.7	21.1	16.6
50°	1170.2	1041.3	900.3	769.8	646.2	521.8	57.3	36.9	25.6	18.8	13.6
52.5°	1347.4	1195.1	1051.1	889.0	744.9	607.0	53.5	33.9	23.4	16.6	11.3
55°	1572.8	1402.4	1233.5	1051.8	878.4	705.7	49.8	30.2	20.4	14.3	9.0
57.5°	1856.3	1654.3	1446.9	1241.8	1031.5	835.4	46.7	26.4	17.3	12.1	7.5
60°	2124.0	1888.0	1636.9	1400.9	1163.4	935.0	42.2	23.4	15.1	9.8	7.5
62.5°	2262.7	1993.6	1722.9	1462.7	1209.4	970.4	37.7	19.6	12.8	8.3	6.8
65°	2228.8	1954.4	1692.0	1429.6	1181.5	947.8	33.2	17.3	11.3	7.5	6.8
66°	2179.8	1908.4	1644.5	1394.9	1158.1	923.6	30.9	16.6	10.6	7.5	6.0
67.5°	2072.7	1810.3	1558.5	1326.3	1094.0	877.6	27.9	15.1	9.8	6.8	6.0
70°	1770.4	1532.1	1330.8	1124.2	935.0	739.7	22.6	12.8	8.3	6.0	6.0
72.5°	1171.7	1009.6	875.4	753.2	629.6	488.6	18.8	10.6	6.8	6.0	5.3
75°	441.8	399.6	343.1	308.4	269.2	236.0	15.1	6.8	5.3	5.3	5.3
77.5°	78.4	72.4	64.1	58.8	54.3	49.8	12.1	4.5	4.5	5.3	5.3
80°	52.8	49.0	44.5	40.7	37.7	33.9	8.3	3.8	4.5	4.5	5.3
82.5°	37.7	35.4	33.2	30.2	27.9	24.9	5.3	3.8	4.5	4.5	4.5
85°	22.6	21.1	19.6	18.1	15.8	15.1	3.8	3.8	3.8	4.5	4.5
87.5°	6.0	5.3	6.0	6.0	4.5	5.3	3.0	3.0	3.0	3.8	3.8
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: P150664

CATALOG NUMBER: TLM-F03-LED-E1-SL3-HSS-7030

CANDELA DISTRIBUTION (continued):

	145°	155°	165°	175°	180°
0°	118.4	118.4	118.4	118.4	118.4
2.5°	100.3	100.3	98.8	101.0	101.0
5°	86.7	86.7	86.0	86.7	86.7
7.5°	79.2	78.4	78.4	78.4	79.2
10°	72.4	71.6	71.6	71.6	71.6
12.5°	66.4	65.6	64.8	65.6	65.6
15°	61.1	59.6	59.6	59.6	59.6
17.5°	56.5	55.0	54.3	54.3	54.3
20°	52.0	49.8	49.8	49.8	49.8
22.5°	47.5	45.2	45.2	45.2	45.2
25°	43.0	40.7	40.7	40.7	40.7
27.5°	39.2	36.9	36.9	36.9	36.9
30°	34.7	33.2	33.2	33.9	33.2
32.5°	31.7	29.4	29.4	30.2	30.2
35°	27.9	26.4	26.4	26.4	26.4
37.5°	24.1	22.6	22.6	22.6	22.6
40°	21.1	19.6	18.8	19.6	19.6
42.5°	18.1	16.6	15.8	15.8	15.8
45°	15.8	13.6	12.8	13.6	13.6
47.5°	12.8	11.3	11.3	12.1	12.1
50°	9.8	9.8	10.6	12.1	12.1
52.5°	9.0	9.0	10.6	12.1	12.1
55°	8.3	9.0	10.6	11.3	12.1
57.5°	7.5	9.0	10.6	11.3	11.3
60°	7.5	8.3	9.8	11.3	11.3
62.5°	6.8	7.5	9.0	10.6	10.6
65°	6.8	7.5	9.0	10.6	10.6
66°	6.8	7.5	9.0	10.6	10.6
67.5°	6.8	7.5	9.0	10.6	10.6
70°	6.8	7.5	9.0	9.8	9.8
72.5°	6.0	6.8	8.3	9.8	9.8
75°	6.0	6.8	8.3	9.8	9.8
77.5°	6.0	6.8	8.3	9.8	9.8
80°	6.0	6.8	8.3	9.0	9.8
82.5°	5.3	6.8	7.5	9.0	9.0
85°	5.3	6.0	7.5	8.3	9.0
87.5°	4.5	5.3	6.0	7.5	7.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)