

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: P151803

Luminaire Tested: **TLM-F03-LED-E1-SL4-HSS-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P151803
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-F03-LED-E1-SL4-HSS-8030
Description: TALON MEDIUM LED SITE LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND
HOUSE SIDE SHIELD
Light Source: (21) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

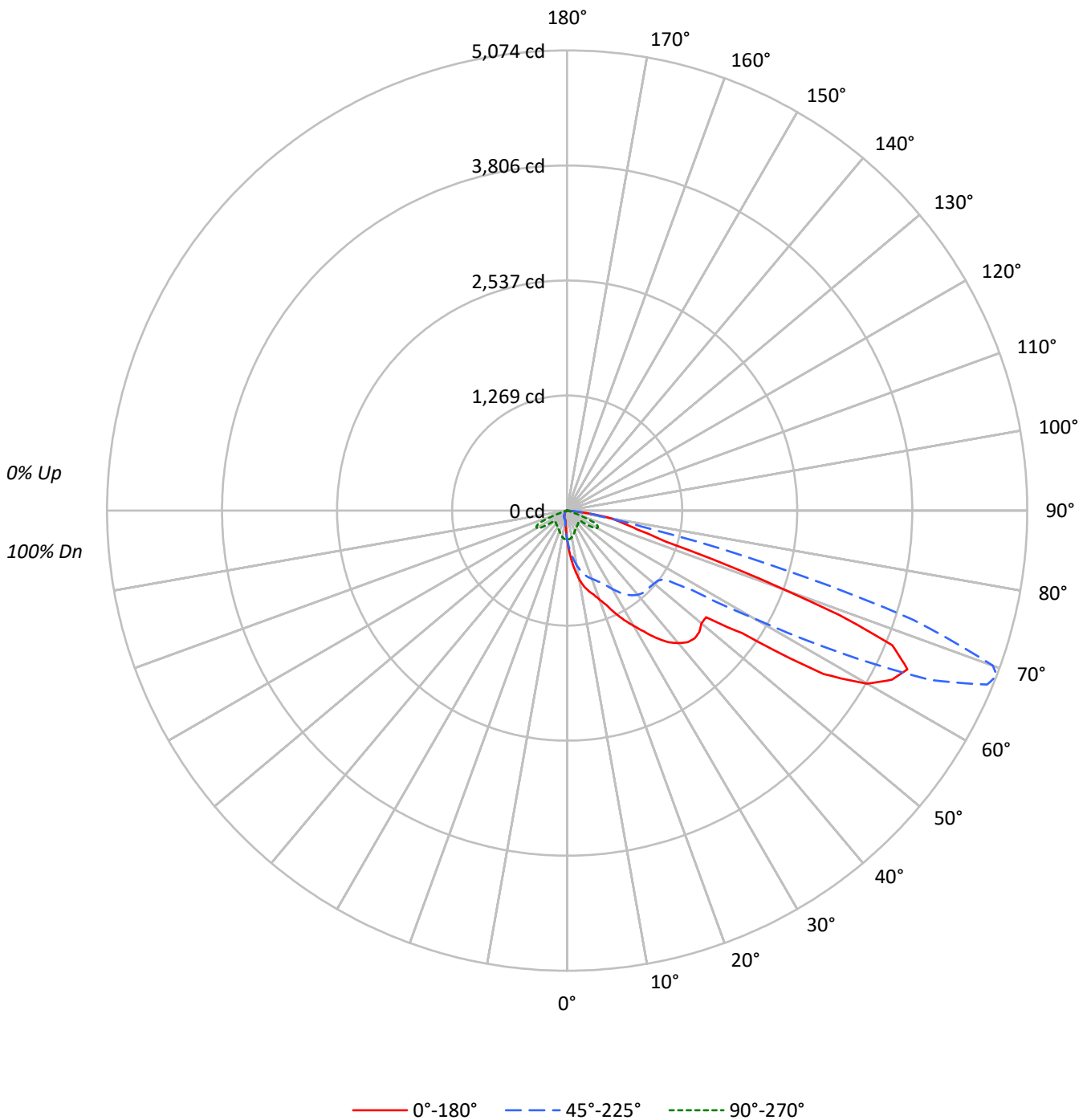
Lumens per Lamp: N/A
Luminaire Lumens: 4253.2 lumens
Efficiency: N/A
Efficacy: 54.3 lumens/watt
Spacing Criteria (0/90/45): 4.24 / 0.98 / 4.1
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
CIE Type: Direct

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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	105	99	93	88	102	96	91	86	92	87	83	88	84	81	84	81	78	76				
2	91	80	71	63	88	78	70	62	74	67	61	71	65	59	68	62	58	55				
3	80	66	55	47	77	64	54	46	61	52	45	58	51	44	55	49	43	41				
4	71	56	44	36	68	54	44	35	51	42	35	49	41	34	46	39	33	31				
5	64	48	36	28	61	46	36	28	44	35	27	42	33	27	40	32	27	24				
6	58	42	31	23	56	40	30	22	38	29	22	37	28	22	35	27	22	19				
7	53	37	26	19	51	36	26	19	34	25	18	32	24	18	31	24	18	16				
8	49	33	23	16	47	32	22	16	31	22	16	29	21	15	28	21	15	13				
9	45	30	20	14	44	29	20	14	28	19	13	27	19	13	25	18	13	11				
10	42	27	18	12	41	27	18	12	25	17	12	24	17	12	23	17	12	10				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	6915	6915	6915
5°	11819	6820	3628
10°	16830	6519	2330
15°	20466	5993	2113
20°	23879	5588	1915
25°	29559	5344	1689
30°	36474	5230	1437
35°	45082	5183	1209
40°	53631	5266	1116
45°	60625	5495	1145
50°	64776	6045	1052
55°	88517	10460	627
60°	164361	16589	452
65°	210888	17925	428
70°	159234	7408	485
75°	66301	2836	582
80°	60549	2678	781
85°	5335	2421	1383



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.0	0.8
10°-20°	113.8	2.7
20°-30°	217.9	5.1
30°-40°	362.3	8.5
40°-50°	490.2	11.5
50°-60°	766.7	18.0
60°-70°	1576.3	37.1
70°-80°	634.3	14.9
80°-90°	58.7	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°	364.7	8.6
0°-40°	727.0	17.1
0°-60°	1983.9	46.6
0°-90°	4253.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4253.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	321	321	321	321	321	
5°	547	465	316	201	168	59
15°	918	728	269	100	95	262
25°	1244	876	225	79	71	583
35°	1715	1132	197	56	46	1076
45°	1991	1239	180	37	38	1522
55°	2358	1317	279	24	17	2378
65°	4140	4414	352	12	8	3793
75°	797	2324	34	5	7	1069
85°	22	93	10	4	6	134
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°	321.2	321.2	321.2	321.2	321.2	321.2	321.2	321.2	321.2	321.2	321.2
2.5°	428.5	423.6	418.0	418.0	411.1	411.1	406.9	395.7	394.4	388.1	381.8
5°	546.9	542.8	535.8	529.5	523.9	514.2	507.2	494.0	479.4	465.4	452.9
7.5°	662.6	660.5	648.0	645.9	636.8	620.8	606.9	587.3	562.3	542.8	519.8
10°	769.9	765.0	762.2	750.4	737.1	719.7	698.1	674.4	645.2	614.5	581.8
12.5°	854.9	852.1	839.6	834.7	820.8	803.3	776.2	745.5	716.2	676.5	638.2
15°	918.3	913.4	905.1	897.4	880.7	865.3	840.3	806.8	771.3	728.1	682.1
17.5°	971.2	962.2	960.1	948.3	930.8	912.7	884.9	854.2	812.4	769.2	719.0
20°	1042.3	1029.8	1025.6	1008.2	988.0	962.9	930.8	892.5	848.6	801.2	749.7
22.5°	1125.9	1116.9	1107.8	1092.5	1066.7	1031.2	984.5	942.7	886.9	834.7	779.0
25°	1244.4	1236.7	1222.1	1201.2	1169.1	1126.6	1070.2	1008.9	943.4	876.5	811.0
27.5°	1359.3	1352.4	1341.9	1325.9	1289.7	1243.0	1173.3	1095.3	1012.4	931.5	859.1
30°	1467.3	1461.1	1450.6	1434.6	1402.5	1356.5	1277.8	1194.2	1091.1	997.0	909.9
32.5°	1583.7	1581.6	1569.7	1546.8	1518.9	1456.9	1371.2	1281.3	1176.8	1068.1	966.4
35°	1715.4	1699.3	1688.2	1665.2	1617.8	1551.6	1451.3	1353.1	1243.0	1131.5	1017.9
37.5°	1826.8	1811.5	1797.6	1768.3	1710.5	1626.2	1512.6	1404.6	1291.1	1177.5	1061.8
40°	1908.4	1900.7	1884.0	1845.7	1780.9	1680.5	1557.9	1440.2	1325.9	1211.6	1097.4
42.5°	1969.0	1957.1	1938.3	1898.6	1822.0	1707.7	1576.0	1454.8	1341.9	1232.5	1120.4
45°	1991.3	1981.5	1964.1	1920.9	1838.0	1715.4	1575.3	1450.6	1342.6	1238.8	1135.7
47.5°	1978.0	1968.3	1952.9	1912.5	1831.0	1706.3	1562.8	1438.8	1335.6	1240.9	1149.6
50°	1934.1	1928.6	1916.7	1882.6	1809.4	1688.9	1551.6	1432.5	1334.2	1251.3	1169.1
52.5°	1930.0	1926.5	1911.8	1877.7	1803.2	1683.3	1550.2	1436.0	1346.1	1264.6	1183.1
55°	2358.4	2309.0	2198.2	2104.1	1949.5	1765.5	1620.6	1492.4	1396.3	1316.8	1259.7
57.5°	3352.0	3278.1	3132.5	2953.5	2598.1	2249.1	1969.7	1767.6	1668.0	1631.8	1653.4
60°	3817.4	3804.2	3781.2	3696.2	3514.3	3214.0	2879.6	2518.0	2373.1	2360.5	2404.4
62.5°	4038.3	4029.9	4036.9	4026.4	3970.0	3882.2	3786.1	3630.0	3486.5	3393.8	3197.3
65°	4140.0	4145.6	4185.3	4216.6	4223.6	4246.6	4317.0	4511.4	4653.5	4414.5	3869.0
67.5°	3881.5	3914.3	4005.5	4119.8	4253.6	4383.2	4592.2	5001.9	5293.8	5013.0	4238.2
69°	3213.3	3229.4	3452.3	3667.6	3994.4	4222.9	4526.0	5063.2	5391.3	5074.3	4209.0
70°	2529.8	2544.5	2783.5	3076.1	3628.6	3922.6	4319.1	4959.4	5300.1	4992.8	4058.5
72.5°	1141.3	1120.4	1204.7	1361.4	1962.0	2428.8	3122.1	4018.1	4372.7	4000.0	3036.4
75°	797.1	788.0	797.1	797.8	891.1	1149.6	1450.6	2178.0	2693.6	2324.3	1450.6
77.5°	617.3	611.0	604.8	597.8	608.9	682.1	711.4	772.7	1003.3	949.0	553.2
80°	488.4	482.8	498.2	493.3	493.3	501.6	496.1	473.1	429.9	398.5	356.7
82.5°	227.1	228.5	228.5	248.0	298.9	349.1	365.1	342.1	303.8	258.5	208.3
85°	21.6	24.4	41.1	63.4	126.1	142.1	142.8	118.4	118.4	93.4	75.2
87.5°	0.0	0.7	0.7	0.7	6.3	17.4	14.6	4.2	2.1	2.1	3.5
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°	70°	75°	80°	85°	90°	95°	100°	105°
0°	321.2	321.2	321.2	321.2	321.2	321.2	321.2	321.2	321.2	321.2	321.2
2.5°	370.7	368.6	360.2	351.9	344.2	335.8	328.2	320.5	312.1	305.9	298.2
5°	433.4	418.0	400.6	383.9	367.2	349.8	331.6	315.6	298.9	283.6	268.9
7.5°	496.8	466.8	443.1	413.2	386.0	358.8	333.7	308.0	284.3	262.0	241.1
10°	550.4	514.2	477.3	438.9	399.9	363.7	328.9	298.2	266.8	239.7	213.9
12.5°	594.3	548.3	503.0	455.0	411.1	365.1	321.9	285.0	248.0	217.4	190.9
15°	634.0	581.1	526.7	471.0	415.3	363.0	314.9	268.9	231.3	196.5	166.5
17.5°	666.1	605.5	544.2	481.4	421.5	360.2	305.9	257.8	213.9	177.7	148.4
20°	693.9	630.5	564.4	494.0	425.7	359.5	298.2	243.9	198.6	160.2	131.7
22.5°	719.7	656.3	585.3	510.0	432.0	358.8	291.2	233.4	185.3	147.0	118.4
25°	749.0	682.1	607.6	526.7	443.1	361.6	287.1	225.0	173.5	134.5	108.0
27.5°	781.7	711.4	634.0	547.6	457.8	367.2	285.7	216.0	163.0	122.6	99.6
30°	827.7	746.2	660.5	568.5	471.0	373.5	284.3	210.4	152.6	113.6	91.3
32.5°	868.1	780.3	689.8	590.1	485.6	379.7	283.6	202.8	142.8	104.5	85.0
35°	910.6	811.7	714.9	611.0	498.2	386.7	282.9	197.2	133.8	95.5	78.7
37.5°	947.6	838.2	734.4	629.2	512.1	393.0	283.6	192.3	125.4	87.8	73.2
40°	978.9	865.3	756.0	645.9	526.7	402.7	284.3	187.4	117.1	80.8	68.3
42.5°	1006.8	891.1	779.0	664.7	543.5	413.9	288.4	183.2	110.1	74.6	63.4
45°	1028.4	914.8	804.0	691.2	570.6	432.0	296.1	180.5	103.1	69.0	59.2
47.5°	1050.7	949.7	846.5	733.0	610.3	460.5	309.4	179.8	97.5	64.8	55.7
50°	1081.3	984.5	884.2	775.5	646.6	489.8	325.4	180.5	90.6	60.6	52.3
52.5°	1103.6	1020.0	932.9	849.3	733.0	579.0	387.4	193.0	87.1	57.1	48.1
55°	1235.3	1220.7	1222.8	1236.7	1146.8	985.2	648.0	278.7	102.4	64.8	47.4
57.5°	1741.8	1793.4	1823.4	1822.7	1674.3	1388.6	870.2	358.1	114.3	75.2	56.4
60°	2407.9	2368.9	2313.9	2178.0	1980.8	1585.1	973.3	385.3	98.9	59.9	51.6
62.5°	2996.7	2768.1	2565.4	2345.2	2086.7	1653.4	994.2	383.2	86.4	45.3	36.2
65°	3363.8	2952.8	2625.3	2349.4	2044.9	1596.2	940.6	351.9	73.2	36.9	30.0
67.5°	3451.6	2853.1	2389.8	2038.0	1708.4	1242.3	690.5	264.8	57.1	30.7	26.5
69°	3260.0	2536.1	1980.1	1580.9	1243.0	824.2	427.1	167.2	43.9	27.9	24.4
70°	2998.7	2205.9	1612.9	1268.8	920.4	579.0	298.9	117.7	35.5	25.8	22.3
72.5°	1929.3	1158.7	792.9	551.8	379.7	230.6	117.1	53.0	27.2	21.6	18.1
75°	748.3	428.5	310.7	236.2	184.6	128.2	71.1	34.1	23.0	18.1	13.9
77.5°	368.6	282.2	230.6	158.2	92.0	57.1	38.3	26.5	18.8	13.2	9.1
80°	291.2	193.7	115.7	71.8	54.3	41.1	29.3	21.6	13.9	8.4	6.3
82.5°	149.1	81.5	59.9	48.8	40.4	32.0	23.7	15.3	9.1	5.6	4.9
85°	46.7	34.1	30.7	30.0	27.9	23.0	16.7	9.8	5.6	3.5	3.5
87.5°	3.5	4.9	6.3	4.9	5.6	4.9	6.3	4.2	2.8	2.8	2.1
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	321.2	321.2	321.2	321.2	321.2	321.2	321.2	321.2	321.2	321.2	321.2
2.5°	292.6	284.3	276.6	271.7	262.7	259.2	255.7	254.3	248.0	249.4	243.9
5°	255.7	241.1	229.9	218.8	208.3	200.7	194.4	186.7	180.5	177.7	172.1
7.5°	222.3	203.4	188.8	177.0	164.4	154.7	146.3	140.7	135.2	129.6	126.8
10°	193.0	172.8	156.1	144.2	132.4	124.0	117.7	113.6	110.1	108.0	107.3
12.5°	165.8	146.3	131.0	120.5	111.5	107.3	104.5	102.4	101.7	101.0	101.0
15°	144.9	125.4	113.6	105.9	101.7	99.6	98.9	97.5	96.1	95.5	95.5
17.5°	125.4	110.8	102.4	98.2	96.1	94.8	93.4	92.0	90.6	89.9	89.9
20°	112.2	100.3	96.1	93.4	91.3	89.9	87.8	86.4	85.7	85.0	84.3
22.5°	101.7	94.1	91.3	89.2	86.4	84.3	82.9	81.5	80.1	79.4	78.7
25°	94.1	89.2	87.1	84.3	81.5	79.4	77.3	75.2	73.9	73.2	71.8
27.5°	88.5	85.0	82.2	78.7	75.9	73.9	71.8	69.7	68.3	66.9	66.2
30°	83.6	80.1	76.6	73.9	70.4	68.3	65.5	63.4	62.7	61.3	59.9
32.5°	78.7	75.2	71.8	68.3	64.8	62.0	60.6	57.8	56.4	55.7	54.3
35°	73.2	69.7	65.5	62.7	59.2	56.4	54.3	52.3	50.9	49.5	48.8
37.5°	68.3	64.1	59.9	56.4	53.6	50.9	48.8	46.7	45.3	43.9	43.2
40°	62.7	58.5	54.3	50.9	48.1	46.0	43.9	41.8	40.4	39.7	39.7
42.5°	57.8	53.0	48.8	46.0	43.9	41.1	39.0	36.9	36.2	35.5	36.2
45°	53.0	48.1	44.6	41.8	39.7	36.9	34.8	33.4	32.7	33.4	34.1
47.5°	48.8	43.9	40.4	38.3	36.2	34.1	32.0	30.7	30.7	32.0	33.4
50°	44.6	39.7	36.9	35.5	33.4	31.4	28.6	27.9	28.6	30.0	31.4
52.5°	40.4	34.8	32.7	32.0	30.0	27.9	25.8	25.1	25.8	27.2	26.5
55°	36.2	30.7	30.0	29.3	27.2	24.4	22.3	22.3	22.3	21.6	20.2
57.5°	34.8	27.2	26.5	25.8	23.7	20.9	19.5	18.1	17.4	15.3	14.6
60°	36.2	24.4	24.4	23.0	20.9	18.1	16.0	13.9	12.5	11.1	11.1
62.5°	29.3	22.3	21.6	20.2	17.4	14.6	12.5	10.5	9.8	9.1	9.1
65°	23.7	20.2	18.8	16.7	14.6	11.8	9.8	8.4	7.7	7.7	8.4
67.5°	21.6	18.1	16.0	13.9	11.8	9.1	7.7	7.0	7.0	7.7	7.7
69°	20.2	16.7	14.6	12.5	10.5	8.4	7.0	7.0	7.0	7.0	7.7
70°	18.8	16.0	13.9	11.8	9.1	7.0	6.3	6.3	7.0	7.0	7.7
72.5°	14.6	12.5	11.8	9.8	7.0	6.3	5.6	6.3	6.3	7.0	7.0
75°	11.1	9.1	9.1	7.7	5.6	4.9	4.9	5.6	5.6	6.3	6.3
77.5°	7.7	6.3	6.3	5.6	4.9	4.2	4.2	4.9	5.6	5.6	6.3
80°	5.6	4.9	4.2	4.9	4.2	3.5	4.2	4.9	4.9	5.6	5.6
82.5°	4.2	4.2	4.2	4.2	3.5	3.5	4.2	4.2	4.9	5.6	5.6
85°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4.2	4.2	4.9	4.9
87.5°	2.1	2.1	2.1	2.8	2.8	3.5	3.5	3.5	3.5	4.2	4.2
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: P151803

CATALOG NUMBER: TLM-F03-LED-E1-SL4-HSS-8030

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	321.2	321.2	321.2	321.2
2.5°	242.5	241.8	239.0	239.7
5°	170.0	165.8	168.6	167.9
7.5°	124.7	124.0	123.3	124.7
10°	106.6	106.6	105.9	106.6
12.5°	100.3	100.3	100.3	100.3
15°	95.5	95.5	94.8	94.8
17.5°	89.9	89.9	89.9	89.2
20°	84.3	83.6	83.6	83.6
22.5°	78.0	77.3	77.3	77.3
25°	71.8	71.1	71.1	71.1
27.5°	65.5	64.8	64.1	64.1
30°	59.2	58.5	57.8	57.8
32.5°	53.0	52.3	51.6	51.6
35°	47.4	47.4	46.7	46.0
37.5°	42.5	42.5	42.5	42.5
40°	39.0	39.7	39.7	39.7
42.5°	36.9	37.6	38.3	39.0
45°	35.5	36.9	37.6	37.6
47.5°	34.8	35.5	36.2	36.2
50°	32.0	31.4	31.4	31.4
52.5°	25.8	24.4	23.7	23.0
55°	18.8	18.1	16.7	16.7
57.5°	13.2	13.2	12.5	12.5
60°	10.5	10.5	9.8	10.5
62.5°	9.1	9.1	9.1	9.1
65°	8.4	8.4	8.4	8.4
67.5°	8.4	8.4	8.4	8.4
69°	7.7	7.7	7.7	7.7
70°	7.7	7.7	7.7	7.7
72.5°	7.0	7.0	7.0	7.0
75°	6.3	7.0	7.0	7.0
77.5°	6.3	6.3	6.3	6.3
80°	5.6	5.6	6.3	6.3
82.5°	5.6	5.6	5.6	5.6
85°	4.9	4.9	5.6	5.6
87.5°	4.2	4.2	4.9	4.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)