

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: P151786

Luminaire Tested: **TLM-F01-LED-E1-SL4-HSS-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P151786
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-F01-LED-E1-SL4-HSS-7050
Description: TALON MEDIUM LED SITE LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND
HOUSE SIDE SHIELD
Light Source: (7) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

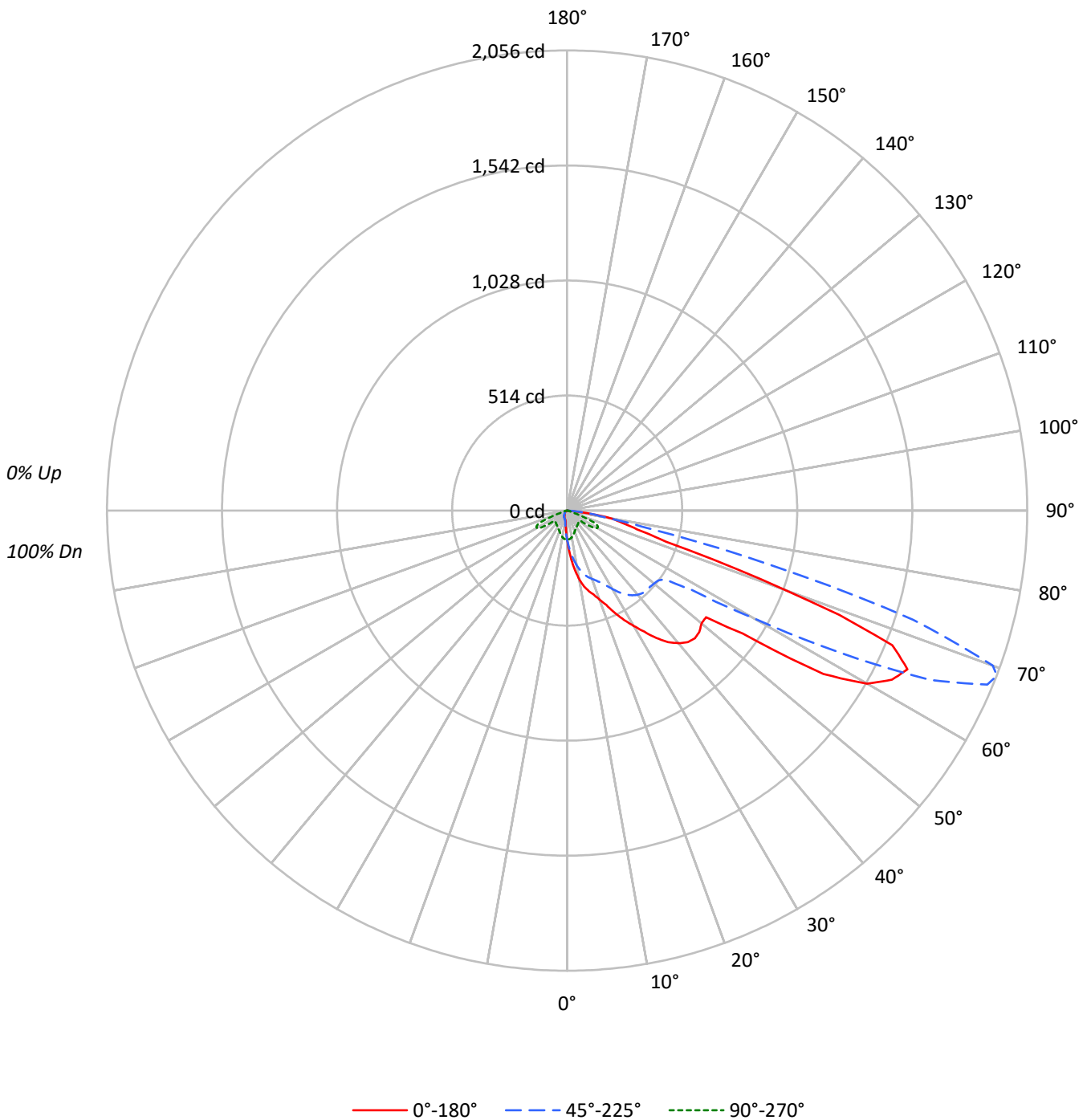
Lumens per Lamp: N/A
Luminaire Lumens: 1723.6 lumens
Efficiency: N/A
Efficacy: 66.5 lumens/watt
Spacing Criteria (0/90/45): 4.24 / 0.98 / 4.1
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 25.9
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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CATALOG NUMBER: TLM-F01-LED-E1-SL4-HSS-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	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°	8244	8244	8244
5°	14091	8129	4322
10°	20060	7767	2777
15°	24391	7145	2517
20°	28462	6657	2284
25°	35232	6371	2012
30°	43473	6236	1711
35°	53736	6176	1438
40°	63925	6282	1331
45°	72262	6546	1361
50°	77207	7201	1251
55°	105511	12463	751
60°	195903	19768	532
65°	251370	21364	509
70°	189792	8831	574
75°	79018	3376	685
80°	72160	3209	912
85°	6393	2906	1671



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.4	0.8
10°-20°	46.1	2.7
20°-30°	88.3	5.1
30°-40°	146.8	8.5
40°-50°	198.7	11.5
50°-60°	310.7	18.0
60°-70°	638.8	37.1
70°-80°	257.0	14.9
80°-90°	23.8	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°	147.8	8.6
0°-40°	294.6	17.1
0°-60°	804.0	46.6
0°-90°	1723.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1723.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	130	130	130	130	130	
5°	222	189	128	81	68	24
15°	372	295	109	40	38	106
25°	504	355	91	32	29	236
35°	695	459	80	23	19	436
45°	807	502	73	15	15	617
55°	956	534	113	10	7	964
65°	1678	1789	143	5	3	1537
75°	323	942	14	2	3	433
85°	9	38	4	1	2	54
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°	130.2	130.2	130.2	130.2	130.2	130.2	130.2	130.2	130.2	130.2	130.2
2.5°	173.7	171.7	169.4	169.4	166.6	166.6	164.9	160.4	159.8	157.3	154.7
5°	221.7	220.0	217.1	214.6	212.3	208.4	205.6	200.2	194.3	188.6	183.5
7.5°	268.5	267.7	262.6	261.7	258.1	251.6	245.9	238.0	227.9	220.0	210.6
10°	312.0	310.0	308.9	304.1	298.7	291.7	282.9	273.3	261.5	249.0	235.8
12.5°	346.5	345.3	340.2	338.3	332.6	325.6	314.5	302.1	290.3	274.2	258.6
15°	372.1	370.2	366.8	363.7	356.9	350.7	340.5	327.0	312.6	295.1	276.4
17.5°	393.6	389.9	389.1	384.3	377.2	369.9	358.6	346.2	329.2	311.7	291.4
20°	422.4	417.3	415.6	408.6	400.4	390.2	377.2	361.7	343.9	324.7	303.8
22.5°	456.3	452.6	449.0	442.7	432.3	417.9	399.0	382.0	359.4	338.3	315.7
25°	504.3	501.2	495.3	486.8	473.8	456.6	433.7	408.9	382.3	355.2	328.7
27.5°	550.9	548.1	543.8	537.3	522.6	503.7	475.5	443.9	410.3	377.5	348.1
30°	594.6	592.1	587.9	581.4	568.4	549.8	517.8	484.0	442.2	404.1	368.8
32.5°	641.8	641.0	636.2	626.8	615.5	590.4	555.7	519.3	476.9	432.9	391.6
35°	695.2	688.7	684.2	674.8	655.6	628.8	588.2	548.3	503.7	458.6	412.5
37.5°	740.3	734.1	728.5	716.6	693.2	659.0	613.0	569.2	523.2	477.2	430.3
40°	773.4	770.3	763.5	748.0	721.7	681.0	631.4	583.6	537.3	491.0	444.7
42.5°	797.9	793.1	785.5	769.4	738.4	692.1	638.7	589.6	543.8	499.5	454.0
45°	807.0	803.0	796.0	778.5	744.9	695.2	638.4	587.9	544.1	502.0	460.2
47.5°	801.6	797.7	791.5	775.1	742.0	691.5	633.3	583.1	541.3	502.9	465.9
50°	783.8	781.6	776.8	762.9	733.3	684.4	628.8	580.5	540.7	507.1	473.8
52.5°	782.1	780.7	774.8	761.0	730.7	682.2	628.2	581.9	545.5	512.5	479.4
55°	955.8	935.7	890.8	852.7	790.0	715.5	656.8	604.8	565.8	533.7	510.5
57.5°	1358.4	1328.5	1269.5	1196.9	1052.9	911.5	798.2	716.3	676.0	661.3	670.0
60°	1547.0	1541.7	1532.4	1497.9	1424.2	1302.5	1167.0	1020.4	961.7	956.6	974.4
62.5°	1636.6	1633.2	1636.0	1631.7	1608.9	1573.3	1534.3	1471.1	1412.9	1375.4	1295.7
65°	1677.8	1680.0	1696.1	1708.8	1711.7	1721.0	1749.5	1828.3	1885.9	1789.0	1567.9
67.5°	1573.0	1586.3	1623.3	1669.6	1723.8	1776.3	1861.0	2027.1	2145.4	2031.6	1717.6
69°	1302.2	1308.7	1399.1	1486.3	1618.8	1711.4	1834.2	2051.9	2184.9	2056.4	1705.7
70°	1025.2	1031.2	1128.0	1246.6	1470.5	1589.7	1750.3	2009.8	2147.9	2023.4	1644.7
72.5°	462.5	454.0	488.2	551.7	795.1	984.3	1265.2	1628.4	1772.1	1621.0	1230.5
75°	323.0	319.3	323.0	323.3	361.1	465.9	587.9	882.7	1091.6	941.9	587.9
77.5°	250.2	247.6	245.1	242.3	246.8	276.4	288.3	313.1	406.6	384.6	224.2
80°	197.9	195.7	201.9	199.9	199.9	203.3	201.0	191.7	174.2	161.5	144.6
82.5°	92.0	92.6	92.6	100.5	121.1	141.5	148.0	138.6	123.1	104.8	84.4
85°	8.8	9.9	16.7	25.7	51.1	57.6	57.9	48.0	48.0	37.8	30.5
87.5°	0.0	0.3	0.3	0.3	2.5	7.1	5.9	1.7	0.8	0.8	1.4
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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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	130.2	130.2	130.2	130.2	130.2	130.2	130.2	130.2	130.2	130.2	130.2
2.5°	150.2	149.4	146.0	142.6	139.5	136.1	133.0	129.9	126.5	124.0	120.8
5°	175.6	169.4	162.4	155.6	148.8	141.7	134.4	127.9	121.1	114.9	109.0
7.5°	201.3	189.2	179.6	167.4	156.4	145.4	135.2	124.8	115.2	106.2	97.7
10°	223.1	208.4	193.4	177.9	162.1	147.4	133.3	120.8	108.1	97.1	86.7
12.5°	240.9	222.2	203.9	184.4	166.6	148.0	130.4	115.5	100.5	88.1	77.4
15°	256.9	235.5	213.5	190.9	168.3	147.1	127.6	109.0	93.7	79.6	67.5
17.5°	269.9	245.4	220.5	195.1	170.8	146.0	124.0	104.5	86.7	72.0	60.1
20°	281.2	255.5	228.7	200.2	172.5	145.7	120.8	98.8	80.5	64.9	53.4
22.5°	291.7	266.0	237.2	206.7	175.1	145.4	118.0	94.6	75.1	59.6	48.0
25°	303.5	276.4	246.2	213.5	179.6	146.5	116.3	91.2	70.3	54.5	43.8
27.5°	316.8	288.3	256.9	221.9	185.5	148.8	115.8	87.5	66.1	49.7	40.4
30°	335.4	302.4	267.7	230.4	190.9	151.3	115.2	85.3	61.8	46.0	37.0
32.5°	351.8	316.2	279.5	239.2	196.8	153.9	114.9	82.2	57.9	42.4	34.4
35°	369.0	328.9	289.7	247.6	201.9	156.7	114.6	79.9	54.2	38.7	31.9
37.5°	384.0	339.7	297.6	255.0	207.5	159.3	114.9	77.9	50.8	35.6	29.6
40°	396.7	350.7	306.4	261.7	213.5	163.2	115.2	76.0	47.4	32.8	27.7
42.5°	408.0	361.1	315.7	269.4	220.2	167.7	116.9	74.3	44.6	30.2	25.7
45°	416.8	370.7	325.8	280.1	231.3	175.1	120.0	73.1	41.8	28.0	24.0
47.5°	425.8	384.9	343.1	297.0	247.3	186.6	125.4	72.8	39.5	26.3	22.6
50°	438.2	399.0	358.3	314.3	262.0	198.5	131.9	73.1	36.7	24.6	21.2
52.5°	447.3	413.4	378.1	344.2	297.0	234.6	157.0	78.2	35.3	23.2	19.5
55°	500.6	494.7	495.5	501.2	464.8	399.3	262.6	112.9	41.5	26.3	19.2
57.5°	705.9	726.8	738.9	738.6	678.5	562.7	352.7	145.1	46.3	30.5	22.9
60°	975.8	960.0	937.7	882.7	802.7	642.4	394.5	156.1	40.1	24.3	20.9
62.5°	1214.4	1121.8	1039.6	950.4	845.7	670.0	402.9	155.3	35.0	18.4	14.7
65°	1363.2	1196.6	1063.9	952.1	828.7	646.9	381.2	142.6	29.6	15.0	12.1
67.5°	1398.8	1156.3	968.5	825.9	692.3	503.4	279.8	107.3	23.2	12.4	10.7
69°	1321.2	1027.8	802.5	640.7	503.7	334.0	173.1	67.8	17.8	11.3	9.9
70°	1215.3	893.9	653.7	514.2	373.0	234.6	121.1	47.7	14.4	10.4	9.0
72.5°	781.9	469.6	321.3	223.6	153.9	93.5	47.4	21.5	11.0	8.8	7.3
75°	303.3	173.7	125.9	95.7	74.8	52.0	28.8	13.8	9.3	7.3	5.6
77.5°	149.4	114.4	93.5	64.1	37.3	23.2	15.5	10.7	7.6	5.4	3.7
80°	118.0	78.5	46.9	29.1	22.0	16.7	11.9	8.8	5.6	3.4	2.5
82.5°	60.4	33.0	24.3	19.8	16.4	13.0	9.6	6.2	3.7	2.3	2.0
85°	18.9	13.8	12.4	12.1	11.3	9.3	6.8	4.0	2.3	1.4	1.4
87.5°	1.4	2.0	2.5	2.0	2.3	2.0	2.5	1.7	1.1	1.1	0.8
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°	130.2	130.2	130.2	130.2	130.2	130.2	130.2	130.2	130.2	130.2	130.2
2.5°	118.6	115.2	112.1	110.1	106.4	105.0	103.6	103.1	100.5	101.1	98.8
5°	103.6	97.7	93.2	88.7	84.4	81.3	78.8	75.7	73.1	72.0	69.7
7.5°	90.1	82.4	76.5	71.7	66.6	62.7	59.3	57.0	54.8	52.5	51.4
10°	78.2	70.0	63.2	58.4	53.6	50.3	47.7	46.0	44.6	43.8	43.5
12.5°	67.2	59.3	53.1	48.8	45.2	43.5	42.4	41.5	41.2	40.9	40.9
15°	58.7	50.8	46.0	42.9	41.2	40.4	40.1	39.5	39.0	38.7	38.7
17.5°	50.8	44.9	41.5	39.8	39.0	38.4	37.8	37.3	36.7	36.4	36.4
20°	45.5	40.7	39.0	37.8	37.0	36.4	35.6	35.0	34.7	34.4	34.2
22.5°	41.2	38.1	37.0	36.1	35.0	34.2	33.6	33.0	32.5	32.2	31.9
25°	38.1	36.1	35.3	34.2	33.0	32.2	31.3	30.5	29.9	29.6	29.1
27.5°	35.9	34.4	33.3	31.9	30.8	29.9	29.1	28.2	27.7	27.1	26.8
30°	33.9	32.5	31.1	29.9	28.5	27.7	26.5	25.7	25.4	24.8	24.3
32.5°	31.9	30.5	29.1	27.7	26.3	25.1	24.6	23.4	22.9	22.6	22.0
35°	29.6	28.2	26.5	25.4	24.0	22.9	22.0	21.2	20.6	20.0	19.8
37.5°	27.7	26.0	24.3	22.9	21.7	20.6	19.8	18.9	18.4	17.8	17.5
40°	25.4	23.7	22.0	20.6	19.5	18.6	17.8	16.9	16.4	16.1	16.1
42.5°	23.4	21.5	19.8	18.6	17.8	16.7	15.8	15.0	14.7	14.4	14.7
45°	21.5	19.5	18.1	16.9	16.1	15.0	14.1	13.6	13.3	13.6	13.8
47.5°	19.8	17.8	16.4	15.5	14.7	13.8	13.0	12.4	12.4	13.0	13.6
50°	18.1	16.1	15.0	14.4	13.6	12.7	11.6	11.3	11.6	12.1	12.7
52.5°	16.4	14.1	13.3	13.0	12.1	11.3	10.4	10.2	10.4	11.0	10.7
55°	14.7	12.4	12.1	11.9	11.0	9.9	9.0	9.0	9.0	8.8	8.2
57.5°	14.1	11.0	10.7	10.4	9.6	8.5	7.9	7.3	7.1	6.2	5.9
60°	14.7	9.9	9.9	9.3	8.5	7.3	6.5	5.6	5.1	4.5	4.5
62.5°	11.9	9.0	8.8	8.2	7.1	5.9	5.1	4.2	4.0	3.7	3.7
65°	9.6	8.2	7.6	6.8	5.9	4.8	4.0	3.4	3.1	3.1	3.4
67.5°	8.8	7.3	6.5	5.6	4.8	3.7	3.1	2.8	2.8	3.1	3.1
69°	8.2	6.8	5.9	5.1	4.2	3.4	2.8	2.8	2.8	2.8	3.1
70°	7.6	6.5	5.6	4.8	3.7	2.8	2.5	2.5	2.8	2.8	3.1
72.5°	5.9	5.1	4.8	4.0	2.8	2.5	2.3	2.5	2.5	2.8	2.8
75°	4.5	3.7	3.7	3.1	2.3	2.0	2.0	2.3	2.3	2.5	2.5
77.5°	3.1	2.5	2.5	2.3	2.0	1.7	1.7	2.0	2.3	2.3	2.5
80°	2.3	2.0	1.7	2.0	1.7	1.4	1.7	2.0	2.0	2.3	2.3
82.5°	1.7	1.7	1.7	1.7	1.4	1.4	1.7	1.7	2.0	2.3	2.3
85°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.7	1.7	2.0	2.0
87.5°	0.8	0.8	0.8	1.1	1.1	1.4	1.4	1.4	1.4	1.7	1.7
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: P151786

CATALOG NUMBER: TLM-F01-LED-E1-SL4-HSS-7050

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	130.2	130.2	130.2	130.2
2.5°	98.3	98.0	96.8	97.1
5°	68.9	67.2	68.3	68.0
7.5°	50.5	50.3	50.0	50.5
10°	43.2	43.2	42.9	43.2
12.5°	40.7	40.7	40.7	40.7
15°	38.7	38.7	38.4	38.4
17.5°	36.4	36.4	36.4	36.1
20°	34.2	33.9	33.9	33.9
22.5°	31.6	31.3	31.3	31.3
25°	29.1	28.8	28.8	28.8
27.5°	26.5	26.3	26.0	26.0
30°	24.0	23.7	23.4	23.4
32.5°	21.5	21.2	20.9	20.9
35°	19.2	19.2	18.9	18.6
37.5°	17.2	17.2	17.2	17.2
40°	15.8	16.1	16.1	16.1
42.5°	15.0	15.2	15.5	15.8
45°	14.4	15.0	15.2	15.2
47.5°	14.1	14.4	14.7	14.7
50°	13.0	12.7	12.7	12.7
52.5°	10.4	9.9	9.6	9.3
55°	7.6	7.3	6.8	6.8
57.5°	5.4	5.4	5.1	5.1
60°	4.2	4.2	4.0	4.2
62.5°	3.7	3.7	3.7	3.7
65°	3.4	3.4	3.4	3.4
67.5°	3.4	3.4	3.4	3.4
69°	3.1	3.1	3.1	3.1
70°	3.1	3.1	3.1	3.1
72.5°	2.8	2.8	2.8	2.8
75°	2.5	2.8	2.8	2.8
77.5°	2.5	2.5	2.5	2.5
80°	2.3	2.3	2.5	2.5
82.5°	2.3	2.3	2.3	2.3
85°	2.0	2.0	2.3	2.3
87.5°	1.7	1.7	2.0	2.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)