

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: P151784

Luminaire Tested: **TLM-F01-LED-E1-SL4-HSS-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P151784
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-7030
Description: TALON MEDIUM LED SITE LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND
HOUSE SIDE SHIELD
Light Source: (7) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1534.2 lumens
Efficiency: N/A
Efficacy: 59.2 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

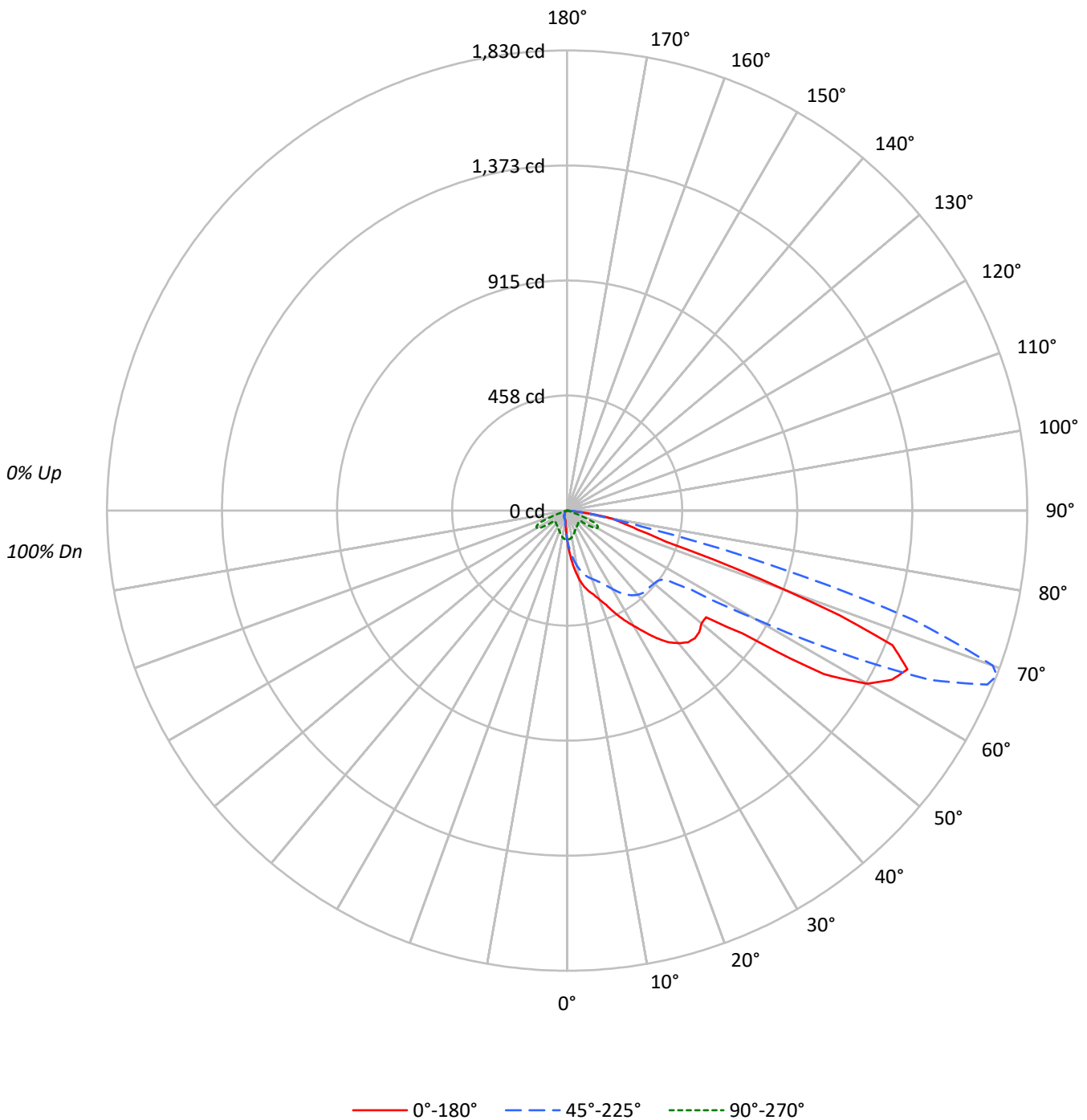
Input Watts (W): 25.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	7338	7338	7338
5°	12540	7239	3852
10°	17854	6918	2475
15°	21717	6358	2242
20°	25335	5930	2035
25°	31361	5673	1788
30°	38698	5549	1528
35°	47831	5496	1283
40°	56899	5587	1182
45°	64319	5829	1218
50°	68726	6413	1113
55°	93920	11094	662
60°	174375	17602	481
65°	223743	19012	449
70°	168947	7868	518
75°	70334	3009	612
80°	64248	2844	839
85°	5667	2543	1453



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	11.9	0.8
10°-20°	41.1	2.7
20°-30°	78.6	5.1
30°-40°	130.7	8.5
40°-50°	176.8	11.5
50°-60°	276.6	18.0
60°-70°	568.6	37.1
70°-80°	228.8	14.9
80°-90°	21.2	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°	131.6	8.6
0°-40°	262.2	17.1
0°-60°	715.7	46.6
0°-90°	1534.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1534.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	116	116	116	116	116	
5°	197	168	114	72	61	21
15°	331	263	97	36	34	95
25°	449	316	81	29	26	210
35°	619	408	71	20	17	388
45°	718	447	65	13	14	549
55°	851	475	100	9	6	858
65°	1493	1592	127	4	3	1368
75°	288	838	12	2	2	385
85°	8	34	4	1	2	48
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°	115.9	115.9	115.9	115.9	115.9	115.9	115.9	115.9	115.9	115.9	115.9
2.5°	154.6	152.8	150.8	150.8	148.3	148.3	146.8	142.8	142.3	140.0	137.7
5°	197.3	195.8	193.3	191.0	189.0	185.5	183.0	178.2	172.9	167.9	163.4
7.5°	239.0	238.3	233.7	233.0	229.7	223.9	218.9	211.9	202.8	195.8	187.5
10°	277.7	276.0	275.0	270.7	265.9	259.6	251.8	243.3	232.7	221.7	209.9
12.5°	308.4	307.4	302.9	301.1	296.1	289.8	280.0	268.9	258.4	244.0	230.2
15°	331.3	329.5	326.5	323.7	317.7	312.2	303.1	291.0	278.2	262.6	246.1
17.5°	350.4	347.1	346.3	342.1	335.8	329.2	319.2	308.1	293.1	277.5	259.4
20°	376.0	371.5	370.0	363.7	356.4	347.3	335.8	322.0	306.1	289.0	270.4
22.5°	406.2	402.9	399.6	394.1	384.8	372.0	355.1	340.1	319.9	301.1	281.0
25°	448.9	446.1	440.8	433.3	421.7	406.4	386.0	363.9	340.3	316.2	292.5
27.5°	490.3	487.8	484.1	478.3	465.2	448.4	423.2	395.1	365.2	336.0	309.9
30°	529.3	527.0	523.3	517.5	505.9	489.3	460.9	430.8	393.6	359.7	328.2
32.5°	571.3	570.5	566.2	558.0	547.9	525.5	494.6	462.2	424.5	385.3	348.6
35°	618.8	613.0	609.0	600.7	583.6	559.7	523.5	488.1	448.4	408.2	367.2
37.5°	659.0	653.5	648.4	637.9	617.0	586.6	545.6	506.7	465.7	424.7	383.0
40°	688.4	685.6	679.6	665.8	642.4	606.2	562.0	519.5	478.3	437.1	395.8
42.5°	710.3	706.0	699.2	684.9	657.2	616.0	568.5	524.8	484.1	444.6	404.1
45°	718.3	714.8	708.5	692.9	663.0	618.8	568.3	523.3	484.3	446.9	409.7
47.5°	713.5	710.0	704.5	689.9	660.5	615.5	563.7	519.0	481.8	447.6	414.7
50°	697.7	695.7	691.4	679.1	652.7	609.2	559.7	516.7	481.3	451.4	421.7
52.5°	696.2	694.9	689.7	677.3	650.4	607.2	559.2	518.0	485.6	456.2	426.8
55°	850.8	832.9	792.9	759.0	703.2	636.9	584.6	538.4	503.7	475.0	454.4
57.5°	1209.2	1182.5	1130.0	1065.4	937.2	811.3	710.5	637.6	601.7	588.6	596.4
60°	1377.0	1372.3	1364.0	1333.3	1267.7	1159.4	1038.8	908.3	856.0	851.5	867.3
62.5°	1456.7	1453.7	1456.2	1452.4	1432.1	1400.4	1365.7	1309.4	1257.7	1224.2	1153.4
65°	1493.4	1495.4	1509.7	1521.1	1523.6	1531.9	1557.2	1627.4	1678.6	1592.4	1395.6
67.5°	1400.2	1412.0	1444.9	1486.1	1534.4	1581.1	1656.5	1804.3	1909.6	1808.3	1528.8
69°	1159.1	1164.9	1245.3	1323.0	1440.9	1523.3	1632.6	1826.4	1944.8	1830.4	1518.3
70°	912.6	917.9	1004.1	1109.6	1308.9	1415.0	1558.0	1789.0	1911.9	1801.0	1464.0
72.5°	411.7	404.1	434.6	491.1	707.7	876.1	1126.2	1449.4	1577.4	1442.9	1095.3
75°	287.5	284.3	287.5	287.8	321.5	414.7	523.3	785.7	971.6	838.4	523.3
77.5°	222.7	220.4	218.2	215.6	219.7	246.1	256.6	278.7	361.9	342.3	199.6
80°	176.2	174.2	179.7	177.9	177.9	181.0	178.9	170.7	155.1	143.8	128.7
82.5°	81.9	82.4	82.4	89.5	107.8	125.9	131.7	123.4	109.6	93.2	75.1
85°	7.8	8.8	14.8	22.9	45.5	51.3	51.5	42.7	42.7	33.7	27.1
87.5°	0.0	0.3	0.3	0.3	2.3	6.3	5.3	1.5	0.8	0.8	1.3
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°	115.9	115.9	115.9	115.9	115.9	115.9	115.9	115.9	115.9	115.9	115.9
2.5°	133.7	133.0	129.9	126.9	124.2	121.1	118.4	115.6	112.6	110.3	107.6
5°	156.3	150.8	144.5	138.5	132.5	126.2	119.6	113.9	107.8	102.3	97.0
7.5°	179.2	168.4	159.8	149.0	139.2	129.4	120.4	111.1	102.5	94.5	87.0
10°	198.6	185.5	172.2	158.3	144.3	131.2	118.6	107.6	96.3	86.5	77.2
12.5°	214.4	197.8	181.5	164.1	148.3	131.7	116.1	102.8	89.5	78.4	68.9
15°	228.7	209.6	190.0	169.9	149.8	130.9	113.6	97.0	83.4	70.9	60.1
17.5°	240.3	218.4	196.3	173.7	152.1	129.9	110.3	93.0	77.2	64.1	53.5
20°	250.3	227.5	203.6	178.2	153.6	129.7	107.6	88.0	71.6	57.8	47.5
22.5°	259.6	236.8	211.1	184.0	155.8	129.4	105.1	84.2	66.9	53.0	42.7
25°	270.2	246.1	219.2	190.0	159.8	130.4	103.5	81.2	62.6	48.5	39.0
27.5°	282.0	256.6	228.7	197.5	165.1	132.5	103.0	77.9	58.8	44.2	35.9
30°	298.6	269.2	238.3	205.1	169.9	134.7	102.5	75.9	55.0	41.0	32.9
32.5°	313.2	281.5	248.8	212.9	175.2	137.0	102.3	73.1	51.5	37.7	30.7
35°	328.5	292.8	257.9	220.4	179.7	139.5	102.0	71.1	48.3	34.4	28.4
37.5°	341.8	302.4	264.9	227.0	184.7	141.8	102.3	69.4	45.2	31.7	26.4
40°	353.1	312.2	272.7	233.0	190.0	145.3	102.5	67.6	42.2	29.2	24.6
42.5°	363.2	321.5	281.0	239.8	196.0	149.3	104.1	66.1	39.7	26.9	22.9
45°	371.0	330.0	290.0	249.3	205.8	155.8	106.8	65.1	37.2	24.9	21.4
47.5°	379.0	342.6	305.4	264.4	220.2	166.1	111.6	64.8	35.2	23.4	20.1
50°	390.1	355.1	318.9	279.7	233.2	176.7	117.4	65.1	32.7	21.9	18.8
52.5°	398.1	367.9	336.5	306.4	264.4	208.9	139.7	69.6	31.4	20.6	17.3
55°	445.6	440.3	441.1	446.1	413.7	355.4	233.7	100.5	36.9	23.4	17.1
57.5°	628.3	646.9	657.7	657.5	603.9	500.9	313.9	129.2	41.2	27.1	20.4
60°	868.6	854.5	834.7	785.7	714.5	571.8	351.1	139.0	35.7	21.6	18.6
62.5°	1081.0	998.5	925.4	846.0	752.7	596.4	358.6	138.2	31.2	16.3	13.1
65°	1213.4	1065.1	947.0	847.5	737.7	575.8	339.3	126.9	26.4	13.3	10.8
67.5°	1245.1	1029.2	862.1	735.1	616.3	448.1	249.1	95.5	20.6	11.1	9.6
69°	1176.0	914.8	714.3	570.3	448.4	297.3	154.1	60.3	15.8	10.1	8.8
70°	1081.7	795.7	581.8	457.7	332.0	208.9	107.8	42.5	12.8	9.3	8.0
72.5°	695.9	418.0	286.0	199.1	137.0	83.2	42.2	19.1	9.8	7.8	6.5
75°	269.9	154.6	112.1	85.2	66.6	46.2	25.6	12.3	8.3	6.5	5.0
77.5°	133.0	101.8	83.2	57.1	33.2	20.6	13.8	9.6	6.8	4.8	3.3
80°	105.1	69.9	41.7	25.9	19.6	14.8	10.6	7.8	5.0	3.0	2.3
82.5°	53.8	29.4	21.6	17.6	14.6	11.6	8.5	5.5	3.3	2.0	1.8
85°	16.8	12.3	11.1	10.8	10.1	8.3	6.0	3.5	2.0	1.3	1.3
87.5°	1.3	1.8	2.3	1.8	2.0	1.8	2.3	1.5	1.0	1.0	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°	115.9	115.9	115.9	115.9	115.9	115.9	115.9	115.9	115.9	115.9	115.9
2.5°	105.6	102.5	99.8	98.0	94.8	93.5	92.2	91.7	89.5	90.0	88.0
5°	92.2	87.0	82.9	78.9	75.1	72.4	70.1	67.4	65.1	64.1	62.1
7.5°	80.2	73.4	68.1	63.8	59.3	55.8	52.8	50.8	48.8	46.7	45.7
10°	69.6	62.3	56.3	52.0	47.8	44.7	42.5	41.0	39.7	39.0	38.7
12.5°	59.8	52.8	47.3	43.5	40.2	38.7	37.7	36.9	36.7	36.4	36.4
15°	52.3	45.2	41.0	38.2	36.7	35.9	35.7	35.2	34.7	34.4	34.4
17.5°	45.2	40.0	36.9	35.4	34.7	34.2	33.7	33.2	32.7	32.4	32.4
20°	40.5	36.2	34.7	33.7	32.9	32.4	31.7	31.2	30.9	30.7	30.4
22.5°	36.7	33.9	32.9	32.2	31.2	30.4	29.9	29.4	28.9	28.7	28.4
25°	33.9	32.2	31.4	30.4	29.4	28.7	27.9	27.1	26.6	26.4	25.9
27.5°	31.9	30.7	29.7	28.4	27.4	26.6	25.9	25.1	24.6	24.1	23.9
30°	30.2	28.9	27.6	26.6	25.4	24.6	23.6	22.9	22.6	22.1	21.6
32.5°	28.4	27.1	25.9	24.6	23.4	22.4	21.9	20.9	20.4	20.1	19.6
35°	26.4	25.1	23.6	22.6	21.4	20.4	19.6	18.8	18.3	17.8	17.6
37.5°	24.6	23.1	21.6	20.4	19.4	18.3	17.6	16.8	16.3	15.8	15.6
40°	22.6	21.1	19.6	18.3	17.3	16.6	15.8	15.1	14.6	14.3	14.3
42.5°	20.9	19.1	17.6	16.6	15.8	14.8	14.1	13.3	13.1	12.8	13.1
45°	19.1	17.3	16.1	15.1	14.3	13.3	12.6	12.1	11.8	12.1	12.3
47.5°	17.6	15.8	14.6	13.8	13.1	12.3	11.6	11.1	11.1	11.6	12.1
50°	16.1	14.3	13.3	12.8	12.1	11.3	10.3	10.1	10.3	10.8	11.3
52.5°	14.6	12.6	11.8	11.6	10.8	10.1	9.3	9.0	9.3	9.8	9.6
55°	13.1	11.1	10.8	10.6	9.8	8.8	8.0	8.0	8.0	7.8	7.3
57.5°	12.6	9.8	9.6	9.3	8.5	7.5	7.0	6.5	6.3	5.5	5.3
60°	13.1	8.8	8.8	8.3	7.5	6.5	5.8	5.0	4.5	4.0	4.0
62.5°	10.6	8.0	7.8	7.3	6.3	5.3	4.5	3.8	3.5	3.3	3.3
65°	8.5	7.3	6.8	6.0	5.3	4.3	3.5	3.0	2.8	2.8	3.0
67.5°	7.8	6.5	5.8	5.0	4.3	3.3	2.8	2.5	2.5	2.8	2.8
69°	7.3	6.0	5.3	4.5	3.8	3.0	2.5	2.5	2.5	2.5	2.8
70°	6.8	5.8	5.0	4.3	3.3	2.5	2.3	2.3	2.5	2.5	2.8
72.5°	5.3	4.5	4.3	3.5	2.5	2.3	2.0	2.3	2.3	2.5	2.5
75°	4.0	3.3	3.3	2.8	2.0	1.8	1.8	2.0	2.0	2.3	2.3
77.5°	2.8	2.3	2.3	2.0	1.8	1.5	1.5	1.8	2.0	2.0	2.3
80°	2.0	1.8	1.5	1.8	1.5	1.3	1.5	1.8	1.8	2.0	2.0
82.5°	1.5	1.5	1.5	1.5	1.3	1.3	1.5	1.5	1.8	2.0	2.0
85°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.5	1.5	1.8	1.8
87.5°	0.8	0.8	0.8	1.0	1.0	1.3	1.3	1.3	1.3	1.5	1.5
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: P151784

CATALOG NUMBER: TLM-F01-LED-E1-SL4-HSS-7030

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	115.9	115.9	115.9	115.9
2.5°	87.5	87.2	86.2	86.5
5°	61.3	59.8	60.8	60.6
7.5°	45.0	44.7	44.5	45.0
10°	38.5	38.5	38.2	38.5
12.5°	36.2	36.2	36.2	36.2
15°	34.4	34.4	34.2	34.2
17.5°	32.4	32.4	32.4	32.2
20°	30.4	30.2	30.2	30.2
22.5°	28.1	27.9	27.9	27.9
25°	25.9	25.6	25.6	25.6
27.5°	23.6	23.4	23.1	23.1
30°	21.4	21.1	20.9	20.9
32.5°	19.1	18.8	18.6	18.6
35°	17.1	17.1	16.8	16.6
37.5°	15.3	15.3	15.3	15.3
40°	14.1	14.3	14.3	14.3
42.5°	13.3	13.6	13.8	14.1
45°	12.8	13.3	13.6	13.6
47.5°	12.6	12.8	13.1	13.1
50°	11.6	11.3	11.3	11.3
52.5°	9.3	8.8	8.5	8.3
55°	6.8	6.5	6.0	6.0
57.5°	4.8	4.8	4.5	4.5
60°	3.8	3.8	3.5	3.8
62.5°	3.3	3.3	3.3	3.3
65°	3.0	3.0	3.0	3.0
67.5°	3.0	3.0	3.0	3.0
69°	2.8	2.8	2.8	2.8
70°	2.8	2.8	2.8	2.8
72.5°	2.5	2.5	2.5	2.5
75°	2.3	2.5	2.5	2.5
77.5°	2.3	2.3	2.3	2.3
80°	2.0	2.0	2.3	2.3
82.5°	2.0	2.0	2.0	2.0
85°	1.8	1.8	2.0	2.0
87.5°	1.5	1.5	1.8	1.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)