

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: P151778

Luminaire Tested: **TLM-E01-LED-E1-SL4-HSS-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P151778
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-E01-LED-E1-SL4-HSS-8030
Description: TALON MEDIUM LED SITE LUMINAIRE
(1) 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

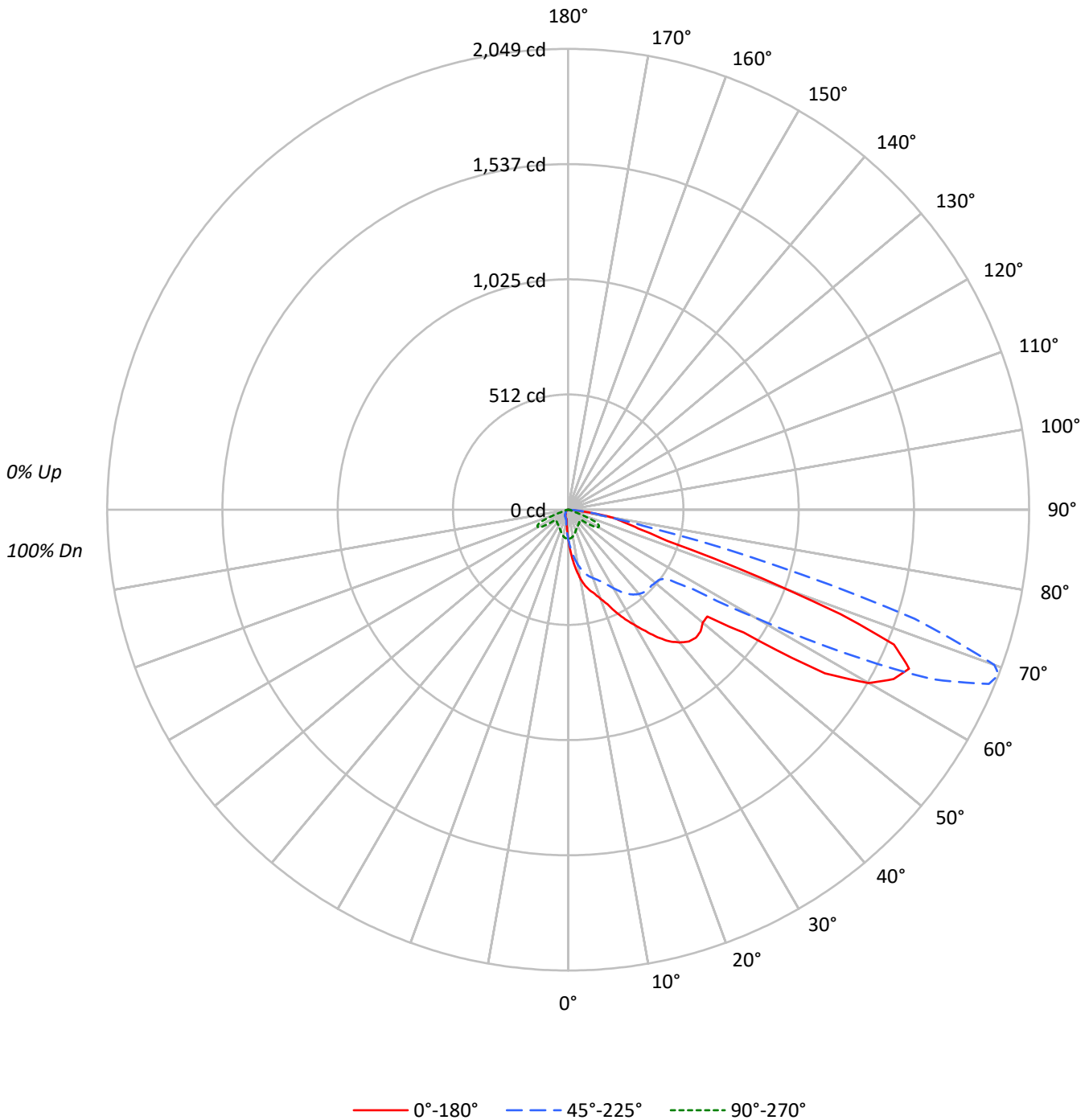
Lumens per Lamp: N/A
Luminaire Lumens: 1717.4 lumens
Efficiency: N/A
Efficacy: 69.5 lumens/watt
Spacing Criteria (0/90/45): 4.24 / 0.98 / 4.1
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 24.7
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



TEST NUMBER: P151778
CATALOG NUMBER: TLM-E01-LED-E1-SL4-HSS-8030

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°	8212	8212	8212
5°	14034	8097	4309
10°	19989	7741	2765
15°	24306	7119	2511
20°	28361	6637	2277
25°	35106	6351	2005
30°	43319	6215	1711
35°	53535	6153	1438
40°	63694	6257	1322
45°	71993	6528	1361
50°	76932	7181	1251
55°	105124	12419	751
60°	195194	19704	532
65°	250456	21290	509
70°	189107	8794	574
75°	78725	3376	685
80°	71905	3172	912
85°	6320	2833	1671



TEST NUMBER: P151778

CATALOG NUMBER: TLM-E01-LED-E1-SL4-HSS-8030

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.3	0.8
10°-20°	46.0	2.7
20°-30°	88.0	5.1
30°-40°	146.3	8.5
40°-50°	198.0	11.5
50°-60°	309.6	18.0
60°-70°	636.5	37.1
70°-80°	256.1	14.9
80°-90°	23.7	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°	147.3	8.6
0°-40°	293.5	17.1
0°-60°	801.1	46.6
0°-90°	1717.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1717.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	130	130	130	130	130	
5°	221	188	127	81	68	24
15°	371	294	109	40	38	106
25°	502	354	91	32	29	235
35°	693	457	80	23	19	434
45°	804	500	73	15	15	615
55°	952	532	112	10	7	960
65°	1672	1782	142	5	3	1531
75°	322	938	14	2	3	431
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°	129.7	129.7	129.7	129.7	129.7	129.7	129.7	129.7	129.7	129.7	129.7
2.5°	173.0	171.0	168.8	168.8	166.0	166.0	164.3	159.8	159.2	156.7	154.2
5°	220.8	219.2	216.3	213.8	211.6	207.6	204.8	199.5	193.6	187.9	182.9
7.5°	267.5	266.7	261.6	260.8	257.1	250.7	245.0	237.2	227.0	219.2	209.9
10°	310.9	308.9	307.8	303.0	297.6	290.6	281.9	272.3	260.5	248.1	234.9
12.5°	345.2	344.1	339.0	337.0	331.4	324.4	313.4	301.0	289.2	273.2	257.7
15°	370.8	368.8	365.4	362.4	355.6	349.4	339.3	325.8	311.4	294.0	275.4
17.5°	392.2	388.5	387.7	382.9	375.9	368.5	357.3	344.9	328.0	310.6	290.3
20°	420.9	415.8	414.1	407.1	398.9	388.8	375.9	360.4	342.7	323.5	302.7
22.5°	454.6	451.0	447.3	441.1	430.7	416.4	397.5	380.6	358.1	337.0	314.5
25°	502.5	499.4	493.5	485.0	472.1	454.9	432.1	407.4	380.9	353.9	327.5
27.5°	548.9	546.1	541.8	535.4	520.7	501.9	473.8	442.3	408.8	376.1	346.9
30°	592.5	589.9	585.7	579.3	566.3	547.8	516.0	482.2	440.6	402.6	367.4
32.5°	639.5	638.6	633.8	624.6	613.3	588.3	553.7	517.4	475.2	431.3	390.2
35°	692.6	686.2	681.7	672.4	653.2	626.5	586.0	546.3	501.9	456.9	411.0
37.5°	737.6	731.5	725.8	714.0	690.7	656.6	610.8	567.2	521.3	475.4	428.7
40°	770.6	767.5	760.7	745.2	719.1	678.6	629.1	581.5	535.4	489.2	443.1
42.5°	795.0	790.3	782.7	766.6	735.7	689.5	636.4	587.4	541.8	497.7	452.4
45°	804.0	800.1	793.1	775.6	742.1	692.6	636.1	585.7	542.1	500.2	458.6
47.5°	798.7	794.8	788.6	772.3	739.3	689.0	631.0	580.9	539.3	501.0	464.2
50°	781.0	778.7	773.9	760.2	730.6	681.9	626.5	578.4	538.7	505.3	472.1
52.5°	779.3	777.9	772.0	758.2	728.1	679.7	626.0	579.8	543.5	510.6	477.7
55°	952.3	932.3	887.6	849.6	787.2	712.9	654.4	602.6	563.8	531.7	508.6
57.5°	1353.5	1323.7	1264.9	1192.6	1049.1	908.1	795.3	713.7	673.5	658.9	667.6
60°	1541.4	1536.1	1526.8	1492.5	1419.0	1297.8	1162.7	1016.7	958.2	953.1	970.9
62.5°	1630.6	1627.2	1630.0	1625.8	1603.0	1567.6	1528.7	1465.7	1407.8	1370.4	1291.0
65°	1671.7	1673.9	1690.0	1702.6	1705.4	1714.7	1743.1	1821.6	1879.0	1782.5	1562.2
67.5°	1567.3	1580.5	1617.4	1663.5	1717.5	1769.8	1854.2	2019.7	2137.5	2024.2	1711.3
69°	1297.5	1304.0	1394.0	1480.9	1612.9	1705.1	1827.5	2044.4	2176.9	2048.9	1699.5
70°	1021.5	1027.4	1123.9	1242.1	1465.2	1583.9	1744.0	2002.5	2140.1	2016.0	1638.7
72.5°	460.8	452.4	486.4	549.7	792.2	980.7	1260.6	1622.4	1765.6	1615.1	1226.0
75°	321.8	318.2	321.8	322.1	359.8	464.2	585.7	879.4	1087.6	938.5	585.7
77.5°	249.3	246.7	244.2	241.4	245.9	275.4	287.2	312.0	405.1	383.2	223.4
80°	197.2	195.0	201.2	199.2	199.2	202.6	200.3	191.0	173.6	160.9	144.0
82.5°	91.7	92.3	92.3	100.2	120.7	140.9	147.4	138.1	122.7	104.4	84.1
85°	8.7	9.8	16.6	25.6	50.9	57.4	57.7	47.8	47.8	37.7	30.4
87.5°	0.0	0.3	0.3	0.3	2.5	7.0	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



TEST NUMBER: P151778

CATALOG NUMBER: TLM-E01-LED-E1-SL4-HSS-8030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	129.7	129.7	129.7	129.7	129.7	129.7	129.7	129.7	129.7	129.7	129.7
2.5°	149.7	148.8	145.4	142.1	139.0	135.6	132.5	129.4	126.0	123.5	120.4
5°	175.0	168.8	161.8	155.0	148.3	141.2	133.9	127.4	120.7	114.5	108.6
7.5°	200.6	188.5	178.9	166.8	155.9	144.9	134.8	124.3	114.8	105.8	97.3
10°	222.3	207.6	192.7	177.2	161.5	146.9	132.8	120.4	107.7	96.8	86.4
12.5°	240.0	221.4	203.1	183.7	166.0	147.4	130.0	115.1	100.2	87.8	77.1
15°	256.0	234.6	212.7	190.2	167.7	146.6	127.2	108.6	93.4	79.3	67.2
17.5°	269.0	244.5	219.7	194.4	170.2	145.4	123.5	104.1	86.4	71.7	59.9
20°	280.2	254.6	227.9	199.5	171.9	145.2	120.4	98.5	80.2	64.7	53.2
22.5°	290.6	265.0	236.3	205.9	174.4	144.9	117.6	94.2	74.8	59.4	47.8
25°	302.4	275.4	245.3	212.7	178.9	146.0	115.9	90.9	70.1	54.3	43.6
27.5°	315.7	287.2	256.0	221.1	184.8	148.3	115.3	87.2	65.8	49.5	40.2
30°	334.2	301.3	266.7	229.6	190.2	150.8	114.8	85.0	61.6	45.9	36.9
32.5°	350.5	315.1	278.5	238.3	196.1	153.3	114.5	81.9	57.7	42.2	34.3
35°	367.7	327.7	288.6	246.7	201.2	156.1	114.2	79.6	54.0	38.5	31.8
37.5°	382.6	338.4	296.5	254.0	206.8	158.7	114.5	77.6	50.6	35.4	29.5
40°	395.3	349.4	305.2	260.8	212.7	162.6	114.8	75.7	47.3	32.6	27.6
42.5°	406.5	359.8	314.5	268.4	219.4	167.1	116.5	74.0	44.5	30.1	25.6
45°	415.2	369.4	324.7	279.1	230.4	174.4	119.6	72.9	41.6	27.9	23.9
47.5°	424.2	383.5	341.8	296.0	246.4	186.0	124.9	72.6	39.4	26.2	22.5
50°	436.6	397.5	357.0	313.1	261.1	197.8	131.4	72.9	36.6	24.5	21.1
52.5°	445.6	411.9	376.7	342.9	296.0	233.8	156.4	77.9	35.2	23.1	19.4
55°	498.8	492.9	493.7	499.4	463.1	397.8	261.6	112.5	41.4	26.2	19.1
57.5°	703.3	724.1	736.2	736.0	676.0	560.7	351.4	144.6	46.1	30.4	22.8
60°	972.3	956.5	934.3	879.4	799.8	640.0	393.0	155.6	39.9	24.2	20.8
62.5°	1210.0	1117.7	1035.9	947.0	842.6	667.6	401.5	154.7	34.9	18.3	14.6
65°	1358.3	1192.3	1060.1	948.6	825.7	644.5	379.8	142.1	29.5	14.9	12.1
67.5°	1393.7	1152.0	965.0	822.9	689.8	501.6	278.8	106.9	23.1	12.4	10.7
69°	1316.3	1024.0	799.5	638.3	501.9	332.8	172.5	67.5	17.7	11.3	9.8
70°	1210.8	890.7	651.3	512.3	371.6	233.8	120.7	47.5	14.3	10.4	9.0
72.5°	779.0	467.9	320.2	222.8	153.3	93.1	47.3	21.4	11.0	8.7	7.3
75°	302.1	173.0	125.5	95.4	74.6	51.8	28.7	13.8	9.3	7.3	5.6
77.5°	148.8	113.9	93.1	63.9	37.1	23.1	15.5	10.7	7.6	5.3	3.7
80°	117.6	78.2	46.7	29.0	21.9	16.6	11.8	8.7	5.6	3.4	2.5
82.5°	60.2	32.9	24.2	19.7	16.3	12.9	9.6	6.2	3.7	2.3	2.0
85°	18.8	13.8	12.4	12.1	11.3	9.3	6.8	3.9	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



TEST NUMBER: P151778

CATALOG NUMBER: TLM-E01-LED-E1-SL4-HSS-8030

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	129.7	129.7	129.7	129.7	129.7	129.7	129.7	129.7	129.7	129.7	129.7
2.5°	118.2	114.8	111.7	109.7	106.1	104.7	103.2	102.7	100.2	100.7	98.5
5°	103.2	97.3	92.8	88.3	84.1	81.0	78.5	75.4	72.9	71.7	69.5
7.5°	89.7	82.1	76.2	71.5	66.4	62.5	59.1	56.8	54.6	52.3	51.2
10°	77.9	69.8	63.0	58.2	53.5	50.1	47.5	45.9	44.5	43.6	43.3
12.5°	67.0	59.1	52.9	48.7	45.0	43.3	42.2	41.4	41.1	40.8	40.8
15°	58.5	50.6	45.9	42.8	41.1	40.2	39.9	39.4	38.8	38.5	38.5
17.5°	50.6	44.7	41.4	39.7	38.8	38.3	37.7	37.1	36.6	36.3	36.3
20°	45.3	40.5	38.8	37.7	36.9	36.3	35.4	34.9	34.6	34.3	34.0
22.5°	41.1	38.0	36.9	36.0	34.9	34.0	33.5	32.9	32.4	32.1	31.8
25°	38.0	36.0	35.2	34.0	32.9	32.1	31.2	30.4	29.8	29.5	29.0
27.5°	35.7	34.3	33.2	31.8	30.7	29.8	29.0	28.1	27.6	27.0	26.7
30°	33.8	32.4	30.9	29.8	28.4	27.6	26.4	25.6	25.3	24.8	24.2
32.5°	31.8	30.4	29.0	27.6	26.2	25.0	24.5	23.4	22.8	22.5	21.9
35°	29.5	28.1	26.4	25.3	23.9	22.8	21.9	21.1	20.5	20.0	19.7
37.5°	27.6	25.9	24.2	22.8	21.7	20.5	19.7	18.8	18.3	17.7	17.4
40°	25.3	23.6	21.9	20.5	19.4	18.6	17.7	16.9	16.3	16.0	16.0
42.5°	23.4	21.4	19.7	18.6	17.7	16.6	15.8	14.9	14.6	14.3	14.6
45°	21.4	19.4	18.0	16.9	16.0	14.9	14.1	13.5	13.2	13.5	13.8
47.5°	19.7	17.7	16.3	15.5	14.6	13.8	12.9	12.4	12.4	12.9	13.5
50°	18.0	16.0	14.9	14.3	13.5	12.7	11.5	11.3	11.5	12.1	12.7
52.5°	16.3	14.1	13.2	12.9	12.1	11.3	10.4	10.1	10.4	11.0	10.7
55°	14.6	12.4	12.1	11.8	11.0	9.8	9.0	9.0	9.0	8.7	8.2
57.5°	14.1	11.0	10.7	10.4	9.6	8.4	7.9	7.3	7.0	6.2	5.9
60°	14.6	9.8	9.8	9.3	8.4	7.3	6.5	5.6	5.1	4.5	4.5
62.5°	11.8	9.0	8.7	8.2	7.0	5.9	5.1	4.2	3.9	3.7	3.7
65°	9.6	8.2	7.6	6.8	5.9	4.8	3.9	3.4	3.1	3.1	3.4
67.5°	8.7	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	3.9	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: P151778

CATALOG NUMBER: TLM-E01-LED-E1-SL4-HSS-8030

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	129.7	129.7	129.7	129.7
2.5°	97.9	97.6	96.5	96.8
5°	68.6	67.0	68.1	67.8
7.5°	50.4	50.1	49.8	50.4
10°	43.0	43.0	42.8	43.0
12.5°	40.5	40.5	40.5	40.5
15°	38.5	38.5	38.3	38.3
17.5°	36.3	36.3	36.3	36.0
20°	34.0	33.8	33.8	33.8
22.5°	31.5	31.2	31.2	31.2
25°	29.0	28.7	28.7	28.7
27.5°	26.4	26.2	25.9	25.9
30°	23.9	23.6	23.4	23.4
32.5°	21.4	21.1	20.8	20.8
35°	19.1	19.1	18.8	18.6
37.5°	17.2	17.2	17.2	17.2
40°	15.8	16.0	16.0	16.0
42.5°	14.9	15.2	15.5	15.8
45°	14.3	14.9	15.2	15.2
47.5°	14.1	14.3	14.6	14.6
50°	12.9	12.7	12.7	12.7
52.5°	10.4	9.8	9.6	9.3
55°	7.6	7.3	6.8	6.8
57.5°	5.3	5.3	5.1	5.1
60°	4.2	4.2	3.9	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)