

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: P152348

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P152348
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33680)
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-SL4-8030
Description: TALON MEDIUM LED SITE LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL
Light Source: (21) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

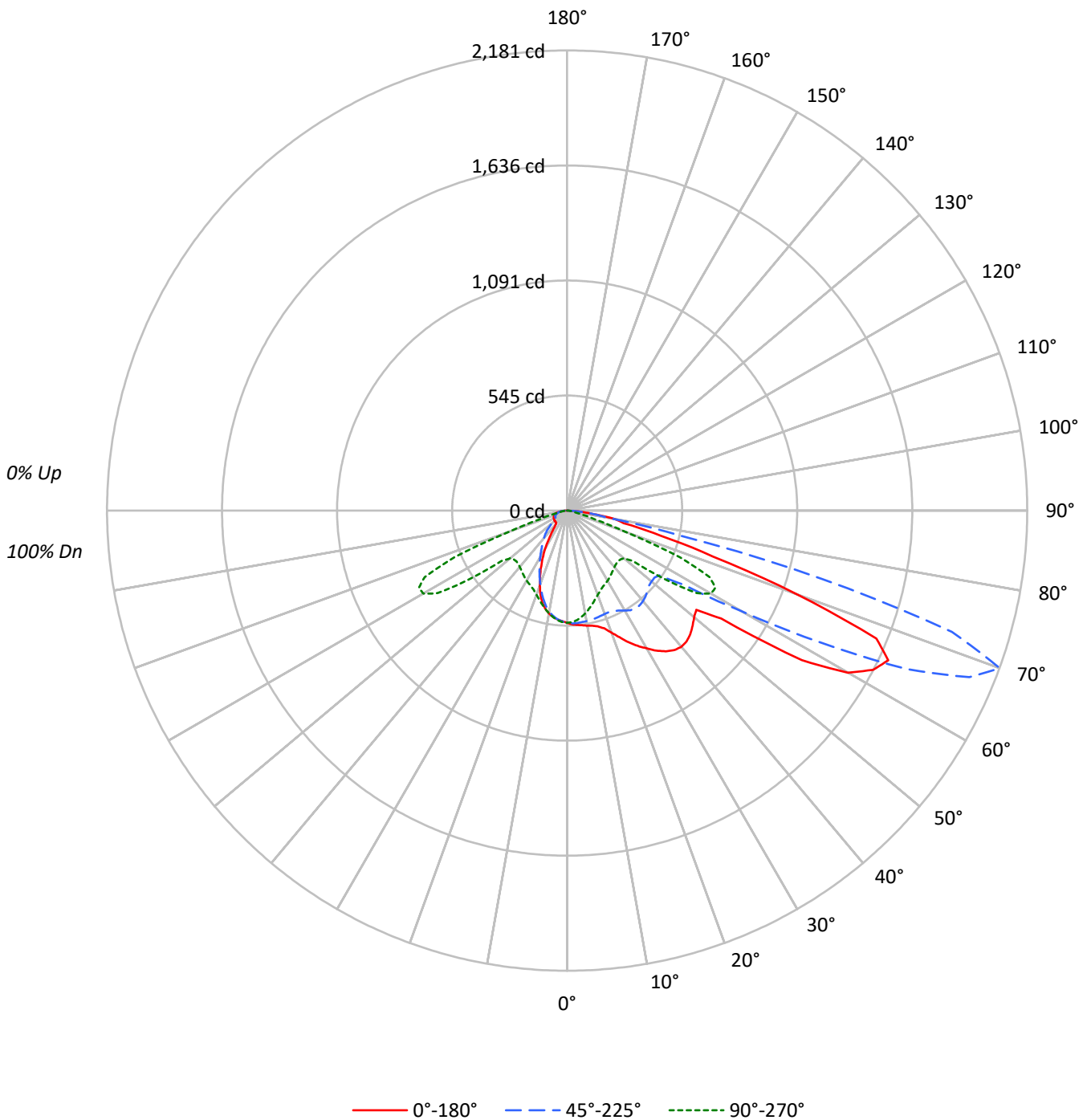
Lumens per Lamp: N/A
Luminaire Lumens: 2493.3 lumens
Efficiency: N/A
Efficacy: 100.9 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.07 / 1.36
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 24.7
Input Voltage (V): NR
Input Current (Ain): 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	106	100	94	89	103	97	92	88	93	89	85	89	86	82	85	82	80	78					78			
2	93	83	74	67	90	81	73	66	77	70	64	73	68	63	70	66	61	59					59			
3	83	70	59	51	80	68	58	51	65	57	50	62	55	49	59	53	48	45					45			
4	74	60	49	41	72	58	48	40	55	47	40	53	45	39	51	44	39	36					36			
5	67	52	41	33	65	51	41	33	48	40	33	46	38	32	44	37	32	29					29			
6	61	46	36	28	59	45	35	28	43	34	28	41	33	27	39	32	27	25					25			
7	57	41	31	24	55	40	31	24	39	30	24	37	29	23	36	29	23	21					21			
8	53	37	28	21	51	36	27	21	35	27	21	34	26	21	32	26	20	18					18			
9	49	34	25	19	47	33	25	19	32	24	18	31	24	18	30	23	18	16					16			
10	46	31	23	17	44	31	22	17	30	22	17	29	21	16	28	21	16	14					14			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	33685	33685	33685
5°	34582	33171	32955
10°	35600	31800	31851
15°	37272	30114	29675
20°	41480	28583	25423
25°	48094	27868	20323
30°	55127	28039	15178
35°	62934	28244	9871
40°	69645	28830	6811
45°	73990	30454	6805
50°	77375	34614	7565
55°	98446	63353	8257
60°	194624	99649	9257
65°	251595	111692	10413
70°	214062	52817	11719
75°	112534	19400	14458
80°	83719	10574	15679
85°	48456	10243	15765



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.7	2.0
10°-20°	136.1	5.5
20°-30°	201.4	8.1
30°-40°	254.5	10.2
40°-50°	287.9	11.5
50°-60°	409.6	16.4
60°-70°	762.9	30.6
70°-80°	349.6	14.0
80°-90°	41.5	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°	387.2	15.5
0°-40°	641.7	25.7
0°-60°	1339.2	53.7
0°-90°	2493.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2493.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	532	532	532	532	532	
5°	544	535	522	518	518	52
15°	569	528	459	435	453	164
25°	688	525	399	311	291	320
35°	814	567	365	208	128	509
45°	826	538	340	136	76	636
55°	892	535	574	69	75	937
65°	1679	1778	746	62	70	1548
75°	460	1250	79	49	59	566
85°	67	58	14	22	22	84
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°	532.0	532.0	532.0	532.0	532.0	532.0	532.0	532.0	532.0	532.0	532.0
2.5°	540.2	541.6	539.9	539.6	539.6	539.3	537.6	537.3	535.1	535.4	535.9
5°	544.1	544.7	543.5	543.2	542.7	541.6	540.2	538.5	536.8	535.1	533.7
7.5°	548.0	547.5	546.6	546.6	545.8	544.1	541.3	539.0	535.4	533.4	530.9
10°	553.7	552.8	551.7	551.1	549.7	547.2	543.2	540.2	535.7	531.7	527.5
12.5°	559.0	558.7	557.0	556.2	553.9	551.4	546.6	541.8	535.9	529.7	524.1
15°	568.6	567.4	565.8	564.1	560.4	557.0	549.7	544.1	535.7	527.5	518.8
17.5°	585.2	583.2	581.5	577.9	573.4	567.4	556.8	547.2	535.7	523.8	514.0
20°	615.6	611.3	609.1	604.3	596.4	585.7	569.1	553.7	536.5	521.3	508.1
22.5°	649.9	647.1	644.0	640.9	628.5	613.0	590.5	567.4	541.6	520.2	503.3
25°	688.4	684.8	683.1	677.7	666.2	648.5	617.8	585.7	553.1	524.7	503.3
27.5°	722.7	721.6	721.3	715.1	704.2	683.4	647.1	608.5	568.8	534.0	507.5
30°	754.0	752.8	752.3	748.9	736.2	711.5	672.1	628.8	586.0	546.9	515.4
32.5°	787.2	783.5	781.8	775.3	761.0	732.0	687.0	642.0	599.5	559.6	524.1
35°	814.2	811.1	807.7	798.4	778.2	743.8	693.5	646.5	604.9	566.6	528.6
37.5°	833.9	830.8	826.0	814.2	789.1	747.8	693.2	645.1	602.9	565.5	529.5
40°	842.6	839.5	834.4	819.5	791.1	745.5	687.9	638.6	597.0	559.6	526.1
42.5°	839.2	837.0	830.5	816.1	784.9	735.4	677.2	626.5	585.7	550.0	518.5
45°	826.3	824.6	818.4	803.2	770.8	719.1	661.4	611.3	572.2	538.2	508.4
47.5°	806.9	806.3	800.1	785.2	753.1	702.8	645.1	596.4	558.7	526.7	499.9
50°	785.5	782.7	779.6	765.8	736.5	688.7	633.3	587.1	551.1	522.4	496.3
52.5°	772.0	771.1	768.3	755.9	727.8	680.5	627.9	583.8	550.6	521.6	494.3
55°	891.8	893.8	867.9	814.2	766.9	703.0	644.0	600.9	564.3	535.1	515.1
57.5°	1319.2	1310.4	1266.0	1159.4	1039.0	880.0	765.5	696.0	650.7	655.8	665.9
60°	1536.9	1535.2	1527.1	1485.7	1405.5	1284.6	1150.4	996.5	947.5	952.9	956.8
62.5°	1634.2	1636.8	1643.0	1627.5	1606.4	1571.2	1504.3	1442.4	1376.8	1352.4	1286.8
65°	1679.3	1683.8	1697.8	1706.5	1714.7	1720.9	1747.3	1819.9	1867.8	1778.3	1570.1
67.5°	1586.1	1607.8	1654.2	1699.5	1740.0	1797.7	1887.2	2055.7	2173.0	2063.0	1761.1
70°	1156.3	1185.8	1239.0	1379.1	1528.7	1659.6	1832.9	2089.4	2266.4	2181.4	1808.4
72.5°	725.0	733.1	756.8	808.3	919.4	1087.3	1390.3	1775.2	1979.4	1911.6	1528.5
75°	460.0	462.8	461.9	473.8	492.6	529.2	649.0	1048.5	1356.0	1250.2	851.9
77.5°	274.0	278.2	279.9	283.6	292.6	305.5	315.4	356.7	568.6	552.0	309.2
80°	229.6	232.9	230.1	229.3	223.7	219.7	224.5	219.7	204.0	196.4	180.9
82.5°	121.5	121.3	120.4	128.6	145.2	158.1	168.0	165.7	149.9	127.7	108.3
85°	66.7	68.9	68.9	71.7	69.2	69.5	71.7	75.7	70.1	58.5	47.8
87.5°	5.6	8.7	7.0	8.7	11.8	8.4	8.2	8.2	7.0	5.1	4.5
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°	532.0	532.0	532.0	532.0	532.0	532.0	532.0	532.0	532.0	532.0	532.0
2.5°	534.5	534.0	532.8	532.0	532.0	530.6	529.7	529.2	528.9	527.8	527.8
5°	532.8	530.9	528.9	527.5	526.7	525.2	523.0	521.9	520.5	519.3	518.8
7.5°	529.2	525.5	522.4	520.2	517.4	515.1	512.3	509.8	507.2	506.1	505.6
10°	523.6	518.8	514.0	509.8	505.8	501.9	498.2	494.6	491.5	489.2	487.0
12.5°	518.2	510.9	504.7	498.5	492.3	487.5	482.5	477.1	472.6	468.4	467.3
15°	510.9	502.5	494.6	487.0	479.4	471.5	465.3	459.4	452.1	447.3	443.7
17.5°	504.1	494.0	484.5	475.4	466.2	458.0	448.7	440.8	433.5	426.2	420.9
20°	496.8	485.9	475.7	465.6	455.5	445.1	434.4	424.2	415.2	406.5	397.8
22.5°	490.4	479.1	469.3	458.3	447.0	435.2	422.8	410.2	399.8	388.5	378.4
25°	486.4	474.0	463.9	453.2	440.8	427.9	413.8	398.9	386.3	373.3	361.2
27.5°	486.4	470.4	460.0	449.3	436.6	422.8	407.4	391.0	376.7	362.4	347.4
30°	490.6	470.9	456.9	445.6	432.7	417.8	400.6	383.5	367.7	350.8	336.5
32.5°	494.6	472.1	454.6	440.3	425.4	410.7	393.3	375.0	357.6	341.5	326.3
35°	497.1	472.1	450.4	432.1	415.2	400.9	383.7	365.4	347.7	332.0	317.9
37.5°	497.4	469.8	443.7	422.8	405.1	390.2	373.9	356.7	339.8	325.2	313.4
40°	494.6	465.3	436.9	413.0	394.4	379.2	364.3	348.8	333.7	321.6	311.4
42.5°	489.5	460.5	430.4	405.1	385.7	369.9	356.2	342.9	329.7	319.3	310.9
45°	481.9	454.1	424.5	400.3	381.2	364.6	351.1	340.1	328.9	320.2	311.7
47.5°	475.2	451.8	426.5	403.4	383.5	366.3	352.5	343.2	334.5	328.6	317.1
50°	473.8	450.7	427.3	406.0	385.7	368.3	356.2	351.4	348.8	345.2	327.5
52.5°	469.8	450.4	433.5	421.7	408.8	400.6	388.0	392.5	389.6	376.7	344.6
55°	511.2	516.8	532.6	555.1	575.9	580.7	579.3	573.9	545.5	469.3	386.0
57.5°	702.8	734.6	764.4	777.6	775.9	761.0	750.3	728.6	687.6	594.7	467.6
60°	968.9	974.0	958.2	934.9	895.5	862.6	827.4	786.9	727.2	636.4	517.6
62.5°	1213.9	1145.9	1075.8	1010.0	950.1	897.7	848.8	792.2	714.6	619.8	511.2
65°	1387.0	1242.9	1132.4	1037.8	953.1	880.0	819.0	745.5	658.0	572.5	473.8
67.5°	1476.1	1255.3	1085.7	954.0	833.9	732.6	651.3	579.8	514.8	477.4	414.7
70°	1376.5	1065.4	829.1	680.3	536.5	430.2	339.8	285.3	266.4	301.9	314.0
72.5°	1025.7	693.5	493.2	381.5	292.3	232.9	178.6	140.4	114.2	119.8	155.6
75°	485.0	299.3	211.6	160.9	128.0	106.1	86.6	79.3	66.4	55.1	51.8
77.5°	188.8	137.6	113.7	83.3	59.1	47.5	40.5	39.1	39.9	38.8	38.3
80°	143.8	97.3	61.0	44.7	38.5	34.0	30.1	29.0	29.5	30.9	32.4
82.5°	80.2	50.1	37.1	32.4	29.0	24.8	22.5	20.8	21.1	22.8	25.9
85°	30.9	24.2	22.2	21.4	20.0	16.0	13.8	14.1	16.0	19.1	19.1
87.5°	3.4	3.4	4.5	3.4	3.4	3.4	3.1	3.7	3.9	5.1	5.9
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°	532.0	532.0	532.0	532.0	532.0	532.0	532.0	532.0	532.0	532.0	532.0
2.5°	527.2	527.2	527.2	526.7	526.9	525.8	525.8	525.0	526.4	525.5	525.2
5°	519.1	518.8	517.6	517.6	517.6	517.6	518.5	516.2	517.9	517.9	517.1
7.5°	505.3	505.3	502.2	503.9	503.3	504.1	505.3	504.1	505.8	507.0	506.1
10°	486.1	486.1	483.6	485.6	484.7	486.7	488.7	487.5	488.7	490.4	490.9
12.5°	465.0	463.9	461.7	462.5	462.5	463.6	464.5	465.9	467.3	469.5	470.7
15°	440.6	438.9	436.1	436.1	434.4	434.9	436.6	437.2	440.0	443.1	446.8
17.5°	415.5	411.3	408.2	404.6	401.7	404.0	406.0	407.4	409.6	414.4	416.9
20°	391.9	383.5	377.5	372.8	369.7	371.1	373.6	375.3	377.3	378.4	379.2
22.5°	368.5	359.0	350.8	344.9	339.8	341.3	340.1	339.3	340.7	337.0	336.8
25°	348.3	337.0	326.1	319.0	312.8	310.9	305.0	303.6	299.6	296.5	294.3
27.5°	333.7	319.0	306.9	298.8	288.9	281.6	274.0	266.4	262.2	257.1	254.6
30°	322.1	306.7	292.3	278.5	265.6	254.3	244.2	234.3	227.6	220.3	215.5
32.5°	311.4	297.1	279.6	260.8	243.4	230.7	217.5	206.2	195.5	186.0	178.9
35°	304.1	288.1	265.9	242.8	223.1	208.2	194.1	178.1	165.1	152.8	145.2
37.5°	300.2	280.5	253.2	227.6	205.7	188.8	171.3	152.8	137.0	125.5	113.9
40°	297.1	272.9	241.9	214.1	191.0	170.8	150.5	128.6	111.1	99.0	90.0
42.5°	293.7	264.5	232.1	203.4	177.8	154.2	129.7	106.3	89.7	81.3	77.4
45°	290.1	257.1	222.8	193.3	164.9	136.2	108.0	86.4	76.5	73.7	73.7
47.5°	289.2	252.4	216.1	183.4	150.2	115.3	88.1	74.6	71.7	72.3	73.4
50°	292.6	250.9	210.2	171.9	130.8	93.4	74.6	70.1	70.6	72.3	74.0
52.5°	300.7	252.1	204.0	155.9	107.7	77.1	68.9	68.6	70.3	72.9	74.6
55°	314.5	252.1	192.1	131.9	86.1	69.2	67.0	68.1	70.3	72.6	74.0
57.5°	344.1	249.5	171.3	105.5	72.0	66.4	66.4	67.8	69.8	72.0	73.1
60°	379.2	246.2	142.1	81.6	65.0	64.1	66.1	67.8	69.5	71.5	72.6
62.5°	381.5	237.4	112.5	67.5	61.3	62.7	65.8	68.1	68.6	70.1	71.5
65°	350.5	207.1	89.5	60.5	59.6	61.9	65.0	66.7	67.0	67.5	68.9
67.5°	306.9	168.8	72.3	57.1	58.0	60.5	62.2	63.6	64.4	65.8	66.1
70°	252.1	135.6	61.9	53.7	54.6	57.4	58.8	60.2	61.9	63.6	62.7
72.5°	178.6	105.5	54.3	50.1	51.2	53.7	55.4	56.5	58.0	59.6	58.5
75°	76.0	73.7	47.0	45.3	47.0	48.7	50.4	52.0	53.5	54.3	54.3
77.5°	38.8	43.3	40.5	40.5	41.6	43.3	44.7	46.4	47.3	48.1	49.2
80°	32.9	33.5	34.0	35.2	36.3	38.0	39.4	40.8	41.1	41.4	41.9
82.5°	27.3	28.4	29.0	30.7	31.5	32.1	32.9	32.9	33.5	33.5	32.6
85°	19.7	21.1	21.9	22.2	21.9	22.2	22.5	23.1	24.5	24.5	23.4
87.5°	5.6	5.3	6.8	7.0	7.6	8.7	9.8	11.8	12.4	12.9	12.9
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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CATALOG NUMBER: TLM-E01-LED-E1-SL4-8030

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	532.0	532.0	532.0	532.0
2.5°	525.0	525.5	524.4	524.7
5°	517.1	518.2	516.8	518.5
7.5°	507.0	508.6	508.4	508.1
10°	492.3	494.6	494.6	495.4
12.5°	473.8	475.2	476.3	476.9
15°	448.7	451.3	452.7	452.7
17.5°	418.6	420.3	421.2	420.0
20°	380.4	379.8	380.1	377.3
22.5°	336.2	337.0	334.5	335.1
25°	292.9	291.5	292.6	290.9
27.5°	250.9	251.2	248.1	249.5
30°	211.0	209.6	205.7	207.6
32.5°	172.5	168.8	164.6	162.0
35°	136.2	130.5	128.6	127.7
37.5°	106.9	100.7	98.7	96.5
40°	85.0	82.7	81.9	82.4
42.5°	76.2	76.2	76.8	77.1
45°	74.0	74.8	75.7	76.0
47.5°	74.3	75.1	76.2	76.5
50°	74.8	75.7	76.5	76.8
52.5°	75.1	75.1	75.7	76.0
55°	74.6	74.3	74.6	74.8
57.5°	73.4	72.9	73.1	74.0
60°	72.9	72.0	72.6	73.1
62.5°	71.5	71.2	71.7	72.0
65°	68.4	68.6	69.5	69.5
67.5°	65.5	65.8	66.1	66.4
70°	62.2	62.5	63.0	63.3
72.5°	58.2	59.4	60.2	61.3
75°	55.1	56.3	58.0	59.1
77.5°	49.8	50.6	52.6	54.0
80°	42.2	41.9	42.2	43.0
82.5°	32.4	32.4	32.1	31.8
85°	22.8	22.5	21.7	21.7
87.5°	12.4	12.1	11.8	11.3
90°	0.0	0.0	0.0	0.0

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