

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: P152349

Luminaire Tested: **TLM-E01-LED-E1-SL4-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P152349
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-SL4-7030
Description: TALON MEDIUM LED SITE LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL
Light Source: (21) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

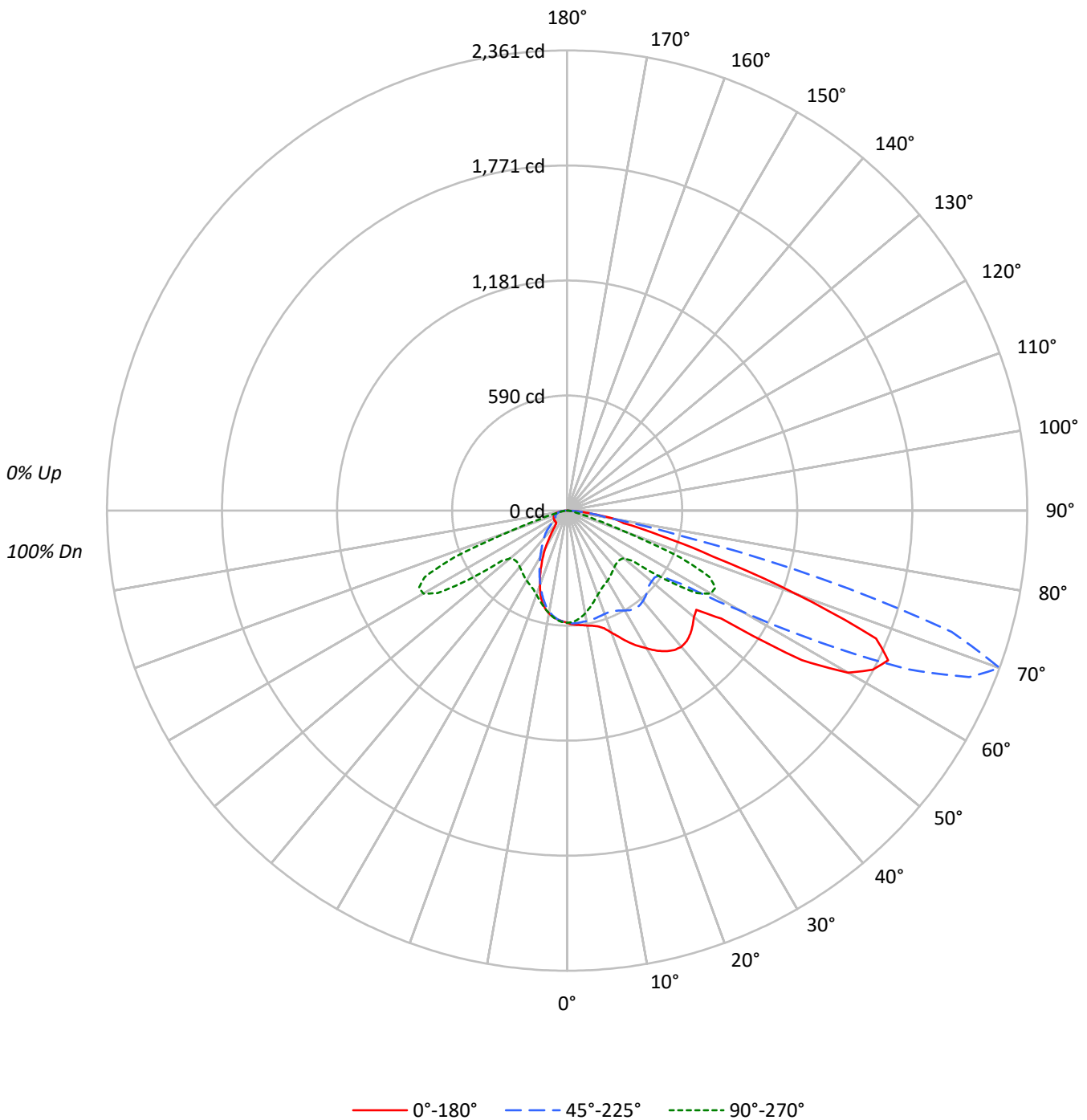
Lumens per Lamp: N/A
Luminaire Lumens: 2698.1 lumens
Efficiency: N/A
Efficacy: 109.2 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.07 / 1.36
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 24.7
Input Voltage (V): NR
Input Current (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	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°	36452	36452	36452
5°	37424	35898	35663
10°	38525	34410	34468
15°	40333	32592	32113
20°	44882	30934	27512
25°	52048	30160	21993
30°	59652	30342	16428
35°	68105	30571	10682
40°	75365	31202	7373
45°	80070	32961	7361
50°	83728	37461	8186
55°	106537	68563	8942
60°	210618	107829	10029
65°	272270	120876	11267
70°	231649	57149	12681
75°	121781	21014	15632
80°	90574	11449	16992
85°	52452	11043	17000



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.8	2.0
10°-20°	147.2	5.5
20°-30°	218.0	8.1
30°-40°	275.5	10.2
40°-50°	311.5	11.5
50°-60°	443.3	16.4
60°-70°	825.6	30.6
70°-80°	378.4	14.0
80°-90°	44.9	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°	419.0	15.5
0°-40°	694.4	25.7
0°-60°	1449.3	53.7
0°-90°	2698.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2698.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	576	576	576	576	576	
5°	589	579	565	560	561	56
15°	615	571	497	471	490	177
25°	745	568	432	336	315	346
35°	881	613	396	225	138	551
45°	894	582	368	147	82	688
55°	965	579	621	75	81	1014
65°	1817	1924	807	67	75	1676
75°	498	1353	86	53	64	612
85°	72	63	15	24	23	91
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°	575.7	575.7	575.7	575.7	575.7	575.7	575.7	575.7	575.7	575.7	575.7
2.5°	584.5	586.1	584.2	583.9	583.9	583.6	581.8	581.5	579.1	579.4	580.0
5°	588.8	589.4	588.2	587.9	587.3	586.1	584.5	582.7	580.9	579.1	577.5
7.5°	593.1	592.5	591.5	591.5	590.6	588.8	585.8	583.3	579.4	577.2	574.5
10°	599.2	598.2	597.0	596.4	594.9	592.2	587.9	584.5	579.7	575.4	570.8
12.5°	604.9	604.6	602.8	601.9	599.5	596.7	591.5	586.4	580.0	573.3	567.2
15°	615.3	614.1	612.2	610.4	606.5	602.8	594.9	588.8	579.7	570.8	561.4
17.5°	633.3	631.1	629.3	625.3	620.5	614.1	602.5	592.2	579.7	566.9	556.2
20°	666.1	661.6	659.1	654.0	645.4	633.9	615.9	599.2	580.6	564.1	549.8
22.5°	703.3	700.2	696.9	693.5	680.1	663.4	639.0	614.1	586.1	562.9	544.7
25°	745.0	741.0	739.2	733.4	720.9	701.8	668.6	633.9	598.5	567.8	544.7
27.5°	782.1	780.9	780.6	773.9	762.0	739.5	700.2	658.5	615.6	577.8	549.2
30°	815.9	814.7	814.1	810.4	796.7	770.0	727.3	680.4	634.2	591.9	557.8
32.5°	851.9	847.9	846.1	839.1	823.5	792.2	743.5	694.8	648.8	605.6	567.2
35°	881.1	877.7	874.1	864.0	842.1	805.0	750.5	699.6	654.6	613.2	572.1
37.5°	902.4	899.0	893.9	881.1	854.0	809.2	750.2	698.1	652.4	611.9	573.0
40°	911.8	908.5	903.0	886.9	856.1	806.8	744.4	691.1	646.0	605.6	569.3
42.5°	908.2	905.7	898.7	883.2	849.4	795.8	732.8	678.0	633.9	595.2	561.1
45°	894.2	892.3	885.6	869.2	834.2	778.2	715.8	661.6	619.3	582.4	550.1
47.5°	873.2	872.6	865.9	849.7	815.0	760.5	698.1	645.4	604.6	569.9	541.0
50°	850.0	847.0	843.6	828.7	797.1	745.3	685.3	635.4	596.4	565.4	537.0
52.5°	835.4	834.5	831.5	818.1	787.6	736.5	679.5	631.7	595.8	564.5	534.9
55°	965.1	967.2	939.2	881.1	829.9	760.8	696.9	650.3	610.7	579.1	557.4
57.5°	1427.6	1418.1	1370.0	1254.6	1124.3	952.3	828.4	753.2	704.2	709.7	720.6
60°	1663.2	1661.4	1652.6	1607.8	1521.0	1390.1	1244.9	1078.4	1025.4	1031.2	1035.4
62.5°	1768.6	1771.3	1778.0	1761.2	1738.4	1700.4	1627.9	1560.9	1490.0	1463.5	1392.6
65°	1817.3	1822.1	1837.4	1846.8	1855.6	1862.3	1890.9	1969.5	2021.2	1924.4	1699.1
67.5°	1716.5	1739.9	1790.2	1839.2	1883.0	1945.4	2042.3	2224.6	2351.6	2232.5	1905.9
70°	1251.3	1283.3	1340.8	1492.4	1654.4	1796.0	1983.5	2261.2	2452.7	2360.7	1957.0
72.5°	784.6	793.4	819.0	874.7	994.9	1176.7	1504.6	1921.1	2142.1	2068.7	1654.1
75°	497.8	500.8	499.9	512.7	533.1	572.7	702.4	1134.7	1467.4	1353.0	921.9
77.5°	296.5	301.1	302.9	306.9	316.6	330.6	341.3	386.0	615.3	597.3	334.6
80°	248.4	252.1	249.0	248.1	242.0	237.8	243.0	237.8	220.7	212.5	195.8
82.5°	131.5	131.2	130.3	139.1	157.1	171.1	181.8	179.3	162.3	138.2	117.2
85°	72.2	74.6	74.6	77.6	74.9	75.2	77.6	81.9	75.8	63.3	51.8
87.5°	6.1	9.4	7.6	9.4	12.8	9.1	8.8	8.8	7.6	5.5	4.9
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	575.7	575.7	575.7	575.7	575.7	575.7	575.7	575.7	575.7	575.7	575.7
2.5°	578.5	577.8	576.6	575.7	575.7	574.2	573.3	572.7	572.4	571.1	571.1
5°	576.6	574.5	572.4	570.8	569.9	568.4	566.0	564.8	563.2	562.0	561.4
7.5°	572.7	568.7	565.4	562.9	559.9	557.4	554.4	551.7	548.9	547.7	547.1
10°	566.6	561.4	556.2	551.7	547.4	543.1	539.2	535.2	531.9	529.4	527.0
12.5°	560.8	552.9	546.2	539.5	532.8	527.6	522.1	516.3	511.5	506.9	505.7
15°	552.9	543.7	535.2	527.0	518.8	510.3	503.6	497.2	489.3	484.1	480.1
17.5°	545.6	534.6	524.3	514.5	504.5	495.6	485.6	477.1	469.2	461.2	455.5
20°	537.7	525.8	514.8	503.9	492.9	481.6	470.1	459.1	449.4	439.9	430.5
22.5°	530.7	518.5	507.8	495.9	483.8	471.0	457.6	443.9	432.6	420.4	409.5
25°	526.4	513.0	502.0	490.5	477.1	463.1	447.8	431.7	418.0	404.0	390.9
27.5°	526.4	509.0	497.8	486.2	472.5	457.6	440.8	423.2	407.7	392.1	376.0
30°	531.0	509.6	494.4	482.2	468.2	452.1	433.5	415.0	397.9	379.6	364.1
32.5°	535.2	510.9	492.0	476.5	460.3	444.5	425.6	405.8	387.0	369.6	353.2
35°	538.0	510.9	487.4	467.6	449.4	433.8	415.3	395.5	376.3	359.3	344.0
37.5°	538.3	508.4	480.1	457.6	438.4	422.3	404.6	386.0	367.8	351.9	339.2
40°	535.2	503.6	472.8	446.9	426.8	410.4	394.3	377.5	361.1	348.0	337.0
42.5°	529.7	498.4	465.8	438.4	417.4	400.4	385.4	371.1	356.8	345.6	336.4
45°	521.5	491.4	459.4	433.2	412.5	394.6	380.0	368.1	355.9	346.5	337.3
47.5°	514.2	488.9	461.5	436.6	415.0	396.4	381.5	371.4	362.0	355.6	343.1
50°	512.7	487.7	462.5	439.3	417.4	398.5	385.4	380.3	377.5	373.6	354.4
52.5°	508.4	487.4	469.2	456.4	442.4	433.5	419.8	424.7	421.7	407.7	373.0
55°	553.2	559.3	576.3	600.7	623.2	628.4	626.9	621.1	590.3	507.8	417.7
57.5°	760.5	794.9	827.2	841.5	839.7	823.5	812.0	788.5	744.1	643.6	506.0
60°	1048.5	1054.0	1037.0	1011.7	969.1	933.4	895.4	851.5	787.0	688.7	560.2
62.5°	1313.7	1240.0	1164.2	1093.0	1028.1	971.5	918.5	857.3	773.3	670.7	553.2
65°	1500.9	1345.1	1225.4	1123.1	1031.5	952.3	886.3	806.8	712.1	619.6	512.7
67.5°	1597.4	1358.5	1174.9	1032.4	902.4	792.8	704.8	627.5	557.1	516.7	448.8
70°	1489.7	1153.0	897.2	736.2	580.6	465.5	367.8	308.7	288.3	326.7	339.8
72.5°	1110.0	750.5	533.7	412.8	316.3	252.1	193.3	151.9	123.6	129.7	168.4
75°	524.9	323.9	228.9	174.1	138.5	114.8	93.8	85.9	71.9	59.7	56.0
77.5°	204.3	148.9	123.0	90.1	63.9	51.5	43.8	42.3	43.2	42.0	41.4
80°	155.6	105.3	66.1	48.4	41.7	36.8	32.6	31.4	32.0	33.5	35.0
82.5°	86.8	54.2	40.2	35.0	31.4	26.8	24.4	22.5	22.8	24.7	28.0
85°	33.5	26.2	24.1	23.1	21.6	17.4	14.9	15.2	17.4	20.7	20.7
87.5°	3.7	3.7	4.9	3.7	3.7	3.7	3.3	4.0	4.3	5.5	6.4
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	575.7	575.7	575.7	575.7	575.7	575.7	575.7	575.7	575.7	575.7	575.7
2.5°	570.5	570.5	570.5	569.9	570.2	569.0	569.0	568.1	569.6	568.7	568.4
5°	561.7	561.4	560.2	560.2	560.2	560.2	561.1	558.7	560.5	560.5	559.6
7.5°	546.8	546.8	543.4	545.3	544.7	545.6	546.8	545.6	547.4	548.6	547.7
10°	526.1	526.1	523.3	525.5	524.6	526.7	528.8	527.6	528.8	530.7	531.3
12.5°	503.3	502.0	499.6	500.5	500.5	501.7	502.6	504.2	505.7	508.1	509.3
15°	476.8	474.9	471.9	471.9	470.1	470.7	472.5	473.1	476.2	479.5	483.5
17.5°	449.7	445.1	441.8	437.8	434.8	437.2	439.3	440.8	443.3	448.5	451.2
20°	424.1	415.0	408.6	403.4	400.0	401.6	404.3	406.1	408.3	409.5	410.4
22.5°	398.8	388.5	379.6	373.3	367.8	369.3	368.1	367.2	368.7	364.7	364.4
25°	376.9	364.7	352.9	345.2	338.5	336.4	330.0	328.5	324.2	320.9	318.5
27.5°	361.1	345.2	332.2	323.3	312.7	304.8	296.5	288.3	283.7	278.3	275.5
30°	348.6	331.9	316.3	301.4	287.4	275.2	264.3	253.6	246.3	238.4	233.2
32.5°	337.0	321.5	302.6	282.2	263.3	249.6	235.3	223.2	211.6	201.2	193.6
35°	329.1	311.8	287.7	262.7	241.4	225.3	210.1	192.7	178.7	165.3	157.1
37.5°	324.8	303.5	274.0	246.3	222.6	204.3	185.4	165.3	148.3	135.8	123.3
40°	321.5	295.3	261.8	231.7	206.7	184.8	162.9	139.1	120.3	107.2	97.4
42.5°	317.8	286.2	251.2	220.1	192.4	166.8	140.4	115.1	97.1	88.0	83.7
45°	313.9	278.3	241.1	209.2	178.4	147.4	116.9	93.5	82.8	79.8	79.8
47.5°	313.0	273.1	233.8	198.5	162.6	124.8	95.3	80.7	77.6	78.2	79.5
50°	316.6	271.6	227.4	186.0	141.6	101.1	80.7	75.8	76.4	78.2	80.1
52.5°	325.5	272.8	220.7	168.7	116.6	83.4	74.6	74.3	76.1	78.9	80.7
55°	340.4	272.8	207.9	142.8	93.2	74.9	72.5	73.7	76.1	78.5	80.1
57.5°	372.3	270.0	185.4	114.2	77.9	71.9	71.9	73.4	75.5	77.9	79.2
60°	410.4	266.4	153.7	88.3	70.3	69.4	71.5	73.4	75.2	77.3	78.5
62.5°	412.8	257.0	121.8	73.1	66.4	67.9	71.2	73.7	74.3	75.8	77.3
65°	379.3	224.1	96.8	65.5	64.5	67.0	70.3	72.2	72.5	73.1	74.6
67.5°	332.2	182.7	78.2	61.8	62.7	65.5	67.3	68.8	69.7	71.2	71.5
70°	272.8	146.7	67.0	58.1	59.1	62.1	63.6	65.2	67.0	68.8	67.9
72.5°	193.3	114.2	58.8	54.2	55.4	58.1	60.0	61.2	62.7	64.5	63.3
75°	82.2	79.8	50.8	49.0	50.8	52.7	54.5	56.3	57.8	58.8	58.8
77.5°	42.0	46.9	43.8	43.8	45.1	46.9	48.4	50.2	51.1	52.1	53.3
80°	35.6	36.2	36.8	38.1	39.3	41.1	42.6	44.1	44.4	44.8	45.4
82.5°	29.5	30.7	31.4	33.2	34.1	34.7	35.6	35.6	36.2	36.2	35.3
85°	21.3	22.8	23.7	24.1	23.7	24.1	24.4	25.0	26.5	26.5	25.3
87.5°	6.1	5.8	7.3	7.6	8.2	9.4	10.7	12.8	13.4	14.0	14.0
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-SL4-7030

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	575.7	575.7	575.7	575.7
2.5°	568.1	568.7	567.5	567.8
5°	559.6	560.8	559.3	561.1
7.5°	548.6	550.4	550.1	549.8
10°	532.8	535.2	535.2	536.1
12.5°	512.7	514.2	515.4	516.0
15°	485.6	488.3	489.9	489.9
17.5°	453.0	454.8	455.8	454.5
20°	411.6	411.0	411.3	408.3
22.5°	363.8	364.7	362.0	362.6
25°	316.9	315.4	316.6	314.8
27.5°	271.6	271.9	268.5	270.0
30°	228.3	226.8	222.6	224.7
32.5°	186.6	182.7	178.1	175.4
35°	147.4	141.3	139.1	138.2
37.5°	115.7	109.0	106.9	104.4
40°	91.9	89.5	88.6	89.2
42.5°	82.5	82.5	83.1	83.4
45°	80.1	81.0	81.9	82.2
47.5°	80.4	81.3	82.5	82.8
50°	81.0	81.9	82.8	83.1
52.5°	81.3	81.3	81.9	82.2
55°	80.7	80.4	80.7	81.0
57.5°	79.5	78.9	79.2	80.1
60°	78.9	77.9	78.5	79.2
62.5°	77.3	77.0	77.6	77.9
65°	74.0	74.3	75.2	75.2
67.5°	70.9	71.2	71.5	71.9
70°	67.3	67.6	68.2	68.5
72.5°	63.0	64.2	65.2	66.4
75°	59.7	60.9	62.7	63.9
77.5°	53.9	54.8	56.9	58.5
80°	45.7	45.4	45.7	46.6
82.5°	35.0	35.0	34.7	34.4
85°	24.7	24.4	23.4	23.4
87.5°	13.4	13.1	12.8	12.2
90°	0.0	0.0	0.0	0.0

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