

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: P152350

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P152350
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
Description: TALON MEDIUM LED SITE LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL
Light Source: (21) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

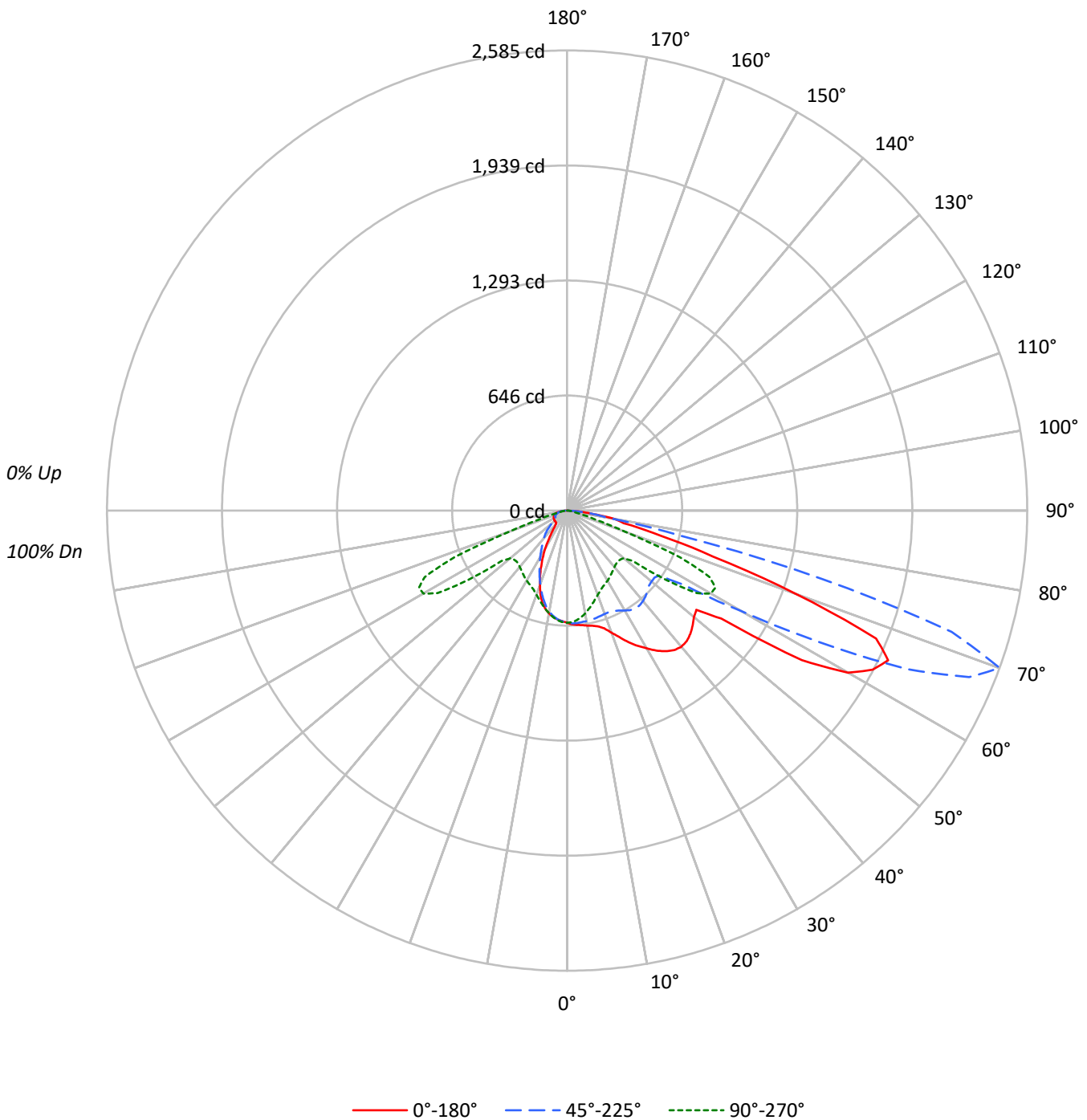
Lumens per Lamp: N/A
Luminaire Lumens: 2954.1 lumens
Efficiency: N/A
Efficacy: 119.6 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.07 / 1.36
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
CIE Type: Direct

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°	39909	39909	39909
5°	40976	39299	39044
10°	42177	37676	37741
15°	44162	35679	35155
20°	49141	33872	30119
25°	56987	33024	24082
30°	65311	33215	17986
35°	74567	33469	11695
40°	82514	34161	8075
45°	87664	36086	8059
50°	91678	41007	8964
55°	116649	75065	9792
60°	230601	118061	10979
65°	298099	132337	12330
70°	253624	62573	13885
75°	133328	22996	17125
80°	99179	12507	18596
85°	57392	12132	18671



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.9	2.0
10°-20°	161.2	5.5
20°-30°	238.6	8.1
30°-40°	301.6	10.2
40°-50°	341.1	11.5
50°-60°	485.4	16.4
60°-70°	903.9	30.6
70°-80°	414.3	14.0
80°-90°	49.2	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°	458.7	15.5
0°-40°	760.3	25.7
0°-60°	1586.7	53.7
0°-90°	2954.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2954.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	630	630	630	630	630	
5°	645	634	618	613	614	62
15°	674	625	544	515	536	194
25°	816	622	473	368	345	379
35°	965	671	433	247	151	603
45°	979	638	403	161	90	753
55°	1057	634	680	82	89	1110
65°	1990	2107	883	73	82	1835
75°	545	1481	94	58	70	670
85°	79	69	17	26	26	99
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°	630.3	630.3	630.3	630.3	630.3	630.3	630.3	630.3	630.3	630.3	630.3
2.5°	640.0	641.7	639.7	639.3	639.3	639.0	637.0	636.7	634.0	634.3	635.0
5°	644.7	645.3	644.0	643.7	643.0	641.7	640.0	638.0	636.0	634.0	632.3
7.5°	649.3	648.7	647.7	647.7	646.7	644.7	641.3	638.7	634.3	632.0	629.0
10°	656.0	655.0	653.7	653.0	651.3	648.3	643.7	640.0	634.7	630.0	625.0
12.5°	662.3	662.0	660.0	659.0	656.3	653.3	647.7	642.0	635.0	627.7	621.0
15°	673.7	672.3	670.3	668.3	664.0	660.0	651.3	644.7	634.7	625.0	614.7
17.5°	693.3	691.0	689.0	684.7	679.3	672.3	659.7	648.3	634.7	620.7	609.0
20°	729.3	724.3	721.7	716.0	706.7	694.0	674.3	656.0	635.7	617.7	602.0
22.5°	770.0	766.7	763.0	759.3	744.7	726.3	699.7	672.3	641.7	616.3	596.3
25°	815.7	811.3	809.3	803.0	789.3	768.3	732.0	694.0	655.3	621.7	596.3
27.5°	856.3	855.0	854.7	847.3	834.3	809.7	766.7	721.0	674.0	632.7	601.3
30°	893.3	892.0	891.3	887.3	872.3	843.0	796.3	745.0	694.3	648.0	610.7
32.5°	932.7	928.3	926.3	918.7	901.7	867.3	814.0	760.7	710.3	663.0	621.0
35°	964.7	961.0	957.0	946.0	922.0	881.3	821.7	766.0	716.7	671.3	626.3
37.5°	988.0	984.3	978.7	964.7	935.0	886.0	821.3	764.3	714.3	670.0	627.3
40°	998.3	994.7	988.7	971.0	937.3	883.3	815.0	756.7	707.3	663.0	623.3
42.5°	994.3	991.7	984.0	967.0	930.0	871.3	802.3	742.3	694.0	651.7	614.3
45°	979.0	977.0	969.7	951.7	913.3	852.0	783.7	724.3	678.0	637.7	602.3
47.5°	956.0	955.3	948.0	930.3	892.3	832.7	764.3	706.7	662.0	624.0	592.3
50°	930.7	927.3	923.7	907.3	872.7	816.0	750.3	695.7	653.0	619.0	588.0
52.5°	914.7	913.7	910.3	895.7	862.3	806.3	744.0	691.7	652.3	618.0	585.7
55°	1056.7	1059.0	1028.3	964.7	908.7	833.0	763.0	712.0	668.7	634.0	610.3
57.5°	1563.0	1552.7	1500.0	1373.7	1231.0	1042.7	907.0	824.7	771.0	777.0	789.0
60°	1821.0	1819.0	1809.3	1760.3	1665.3	1522.0	1363.0	1180.7	1122.7	1129.0	1133.7
62.5°	1936.3	1939.3	1946.7	1928.3	1903.3	1861.7	1782.3	1709.0	1631.3	1602.3	1524.7
65°	1989.7	1995.0	2011.7	2022.0	2031.7	2039.0	2070.3	2156.3	2213.0	2107.0	1860.3
67.5°	1879.3	1905.0	1960.0	2013.7	2061.7	2130.0	2236.0	2435.7	2574.7	2444.3	2086.7
70°	1370.0	1405.0	1468.0	1634.0	1811.3	1966.3	2171.7	2475.7	2685.3	2584.7	2142.7
72.5°	859.0	868.7	896.7	957.7	1089.3	1288.3	1647.3	2103.3	2345.3	2265.0	1811.0
75°	545.0	548.3	547.3	561.3	583.7	627.0	769.0	1242.3	1606.7	1481.3	1009.3
77.5°	324.7	329.7	331.7	336.0	346.7	362.0	373.7	422.7	673.7	654.0	366.3
80°	272.0	276.0	272.7	271.7	265.0	260.3	266.0	260.3	241.7	232.7	214.3
82.5°	144.0	143.7	142.7	152.3	172.0	187.3	199.0	196.3	177.7	151.3	128.3
85°	79.0	81.7	81.7	85.0	82.0	82.3	85.0	89.7	83.0	69.3	56.7
87.5°	6.7	10.3	8.3	10.3	14.0	10.0	9.7	9.7	8.3	6.0	5.3
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°	630.3	630.3	630.3	630.3	630.3	630.3	630.3	630.3	630.3	630.3	630.3
2.5°	633.3	632.7	631.3	630.3	630.3	628.7	627.7	627.0	626.7	625.3	625.3
5°	631.3	629.0	626.7	625.0	624.0	622.3	619.7	618.3	616.7	615.3	614.7
7.5°	627.0	622.7	619.0	616.3	613.0	610.3	607.0	604.0	601.0	599.7	599.0
10°	620.3	614.7	609.0	604.0	599.3	594.7	590.3	586.0	582.3	579.7	577.0
12.5°	614.0	605.3	598.0	590.7	583.3	577.7	571.7	565.3	560.0	555.0	553.7
15°	605.3	595.3	586.0	577.0	568.0	558.7	551.3	544.3	535.7	530.0	525.7
17.5°	597.3	585.3	574.0	563.3	552.3	542.7	531.7	522.3	513.7	505.0	498.7
20°	588.7	575.7	563.7	551.7	539.7	527.3	514.7	502.7	492.0	481.7	471.3
22.5°	581.0	567.7	556.0	543.0	529.7	515.7	501.0	486.0	473.7	460.3	448.3
25°	576.3	561.7	549.7	537.0	522.3	507.0	490.3	472.7	457.7	442.3	428.0
27.5°	576.3	557.3	545.0	532.3	517.3	501.0	482.7	463.3	446.3	429.3	411.7
30°	581.3	558.0	541.3	528.0	512.7	495.0	474.7	454.3	435.7	415.7	398.7
32.5°	586.0	559.3	538.7	521.7	504.0	486.7	466.0	444.3	423.7	404.7	386.7
35°	589.0	559.3	533.7	512.0	492.0	475.0	454.7	433.0	412.0	393.3	376.7
37.5°	589.3	556.7	525.7	501.0	480.0	462.3	443.0	422.7	402.7	385.3	371.3
40°	586.0	551.3	517.7	489.3	467.3	449.3	431.7	413.3	395.3	381.0	369.0
42.5°	580.0	545.7	510.0	480.0	457.0	438.3	422.0	406.3	390.7	378.3	368.3
45°	571.0	538.0	503.0	474.3	451.7	432.0	416.0	403.0	389.7	379.3	369.3
47.5°	563.0	535.3	505.3	478.0	454.3	434.0	417.7	406.7	396.3	389.3	375.7
50°	561.3	534.0	506.3	481.0	457.0	436.3	422.0	416.3	413.3	409.0	388.0
52.5°	556.7	533.7	513.7	499.7	484.3	474.7	459.7	465.0	461.7	446.3	408.3
55°	605.7	612.3	631.0	657.7	682.3	688.0	686.3	680.0	646.3	556.0	457.3
57.5°	832.7	870.3	905.7	921.3	919.3	901.7	889.0	863.3	814.7	704.7	554.0
60°	1148.0	1154.0	1135.3	1107.7	1061.0	1022.0	980.3	932.3	861.7	754.0	613.3
62.5°	1438.3	1357.7	1274.7	1196.7	1125.7	1063.7	1005.7	938.7	846.7	734.3	605.7
65°	1643.3	1472.7	1341.7	1229.7	1129.3	1042.7	970.3	883.3	779.7	678.3	561.3
67.5°	1749.0	1487.3	1286.3	1130.3	988.0	868.0	771.7	687.0	610.0	565.7	491.3
70°	1631.0	1262.3	982.3	806.0	635.7	509.7	402.7	338.0	315.7	357.7	372.0
72.5°	1215.3	821.7	584.3	452.0	346.3	276.0	211.7	166.3	135.3	142.0	184.3
75°	574.7	354.7	250.7	190.7	151.7	125.7	102.7	94.0	78.7	65.3	61.3
77.5°	223.7	163.0	134.7	98.7	70.0	56.3	48.0	46.3	47.3	46.0	45.3
80°	170.3	115.3	72.3	53.0	45.7	40.3	35.7	34.3	35.0	36.7	38.3
82.5°	95.0	59.3	44.0	38.3	34.3	29.3	26.7	24.7	25.0	27.0	30.7
85°	36.7	28.7	26.3	25.3	23.7	19.0	16.3	16.7	19.0	22.7	22.7
87.5°	4.0	4.0	5.3	4.0	4.0	4.0	3.7	4.3	4.7	6.0	7.0
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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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	630.3	630.3	630.3	630.3	630.3	630.3	630.3	630.3	630.3	630.3	630.3
2.5°	624.7	624.7	624.7	624.0	624.3	623.0	623.0	622.0	623.7	622.7	622.3
5°	615.0	614.7	613.3	613.3	613.3	613.3	614.3	611.7	613.7	613.7	612.7
7.5°	598.7	598.7	595.0	597.0	596.3	597.3	598.7	597.3	599.3	600.7	599.7
10°	576.0	576.0	573.0	575.3	574.3	576.7	579.0	577.7	579.0	581.0	581.7
12.5°	551.0	549.7	547.0	548.0	548.0	549.3	550.3	552.0	553.7	556.3	557.7
15°	522.0	520.0	516.7	516.7	514.7	515.3	517.3	518.0	521.3	525.0	529.3
17.5°	492.3	487.3	483.7	479.3	476.0	478.7	481.0	482.7	485.3	491.0	494.0
20°	464.3	454.3	447.3	441.7	438.0	439.7	442.7	444.7	447.0	448.3	449.3
22.5°	436.7	425.3	415.7	408.7	402.7	404.3	403.0	402.0	403.7	399.3	399.0
25°	412.7	399.3	386.3	378.0	370.7	368.3	361.3	359.7	355.0	351.3	348.7
27.5°	395.3	378.0	363.7	354.0	342.3	333.7	324.7	315.7	310.7	304.7	301.7
30°	381.7	363.3	346.3	330.0	314.7	301.3	289.3	277.7	269.7	261.0	255.3
32.5°	369.0	352.0	331.3	309.0	288.3	273.3	257.7	244.3	231.7	220.3	212.0
35°	360.3	341.3	315.0	287.7	264.3	246.7	230.0	211.0	195.7	181.0	172.0
37.5°	355.7	332.3	300.0	269.7	243.7	223.7	203.0	181.0	162.3	148.7	135.0
40°	352.0	323.3	286.7	253.7	226.3	202.3	178.3	152.3	131.7	117.3	106.7
42.5°	348.0	313.3	275.0	241.0	210.7	182.7	153.7	126.0	106.3	96.3	91.7
45°	343.7	304.7	264.0	229.0	195.3	161.3	128.0	102.3	90.7	87.3	87.3
47.5°	342.7	299.0	256.0	217.3	178.0	136.7	104.3	88.3	85.0	85.7	87.0
50°	346.7	297.3	249.0	203.7	155.0	110.7	88.3	83.0	83.7	85.7	87.7
52.5°	356.3	298.7	241.7	184.7	127.7	91.3	81.7	81.3	83.3	86.3	88.3
55°	372.7	298.7	227.7	156.3	102.0	82.0	79.3	80.7	83.3	86.0	87.7
57.5°	407.7	295.7	203.0	125.0	85.3	78.7	78.7	80.3	82.7	85.3	86.7
60°	449.3	291.7	168.3	96.7	77.0	76.0	78.3	80.3	82.3	84.7	86.0
62.5°	452.0	281.3	133.3	80.0	72.7	74.3	78.0	80.7	81.3	83.0	84.7
65°	415.3	245.3	106.0	71.7	70.7	73.3	77.0	79.0	79.3	80.0	81.7
67.5°	363.7	200.0	85.7	67.7	68.7	71.7	73.7	75.3	76.3	78.0	78.3
70°	298.7	160.7	73.3	63.7	64.7	68.0	69.7	71.3	73.3	75.3	74.3
72.5°	211.7	125.0	64.3	59.3	60.7	63.7	65.7	67.0	68.7	70.7	69.3
75°	90.0	87.3	55.7	53.7	55.7	57.7	59.7	61.7	63.3	64.3	64.3
77.5°	46.0	51.3	48.0	48.0	49.3	51.3	53.0	55.0	56.0	57.0	58.3
80°	39.0	39.7	40.3	41.7	43.0	45.0	46.7	48.3	48.7	49.0	49.7
82.5°	32.3	33.7	34.3	36.3	37.3	38.0	39.0	39.0	39.7	39.7	38.7
85°	23.3	25.0	26.0	26.3	26.0	26.3	26.7	27.3	29.0	29.0	27.7
87.5°	6.7	6.3	8.0	8.3	9.0	10.3	11.7	14.0	14.7	15.3	15.3
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: P152350

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

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	630.3	630.3	630.3	630.3
2.5°	622.0	622.7	621.3	621.7
5°	612.7	614.0	612.3	614.3
7.5°	600.7	602.7	602.3	602.0
10°	583.3	586.0	586.0	587.0
12.5°	561.3	563.0	564.3	565.0
15°	531.7	534.7	536.3	536.3
17.5°	496.0	498.0	499.0	497.7
20°	450.7	450.0	450.3	447.0
22.5°	398.3	399.3	396.3	397.0
25°	347.0	345.3	346.7	344.7
27.5°	297.3	297.7	294.0	295.7
30°	250.0	248.3	243.7	246.0
32.5°	204.3	200.0	195.0	192.0
35°	161.3	154.7	152.3	151.3
37.5°	126.7	119.3	117.0	114.3
40°	100.7	98.0	97.0	97.7
42.5°	90.3	90.3	91.0	91.3
45°	87.7	88.7	89.7	90.0
47.5°	88.0	89.0	90.3	90.7
50°	88.7	89.7	90.7	91.0
52.5°	89.0	89.0	89.7	90.0
55°	88.3	88.0	88.3	88.7
57.5°	87.0	86.3	86.7	87.7
60°	86.3	85.3	86.0	86.7
62.5°	84.7	84.3	85.0	85.3
65°	81.0	81.3	82.3	82.3
67.5°	77.7	78.0	78.3	78.7
70°	73.7	74.0	74.7	75.0
72.5°	69.0	70.3	71.3	72.7
75°	65.3	66.7	68.7	70.0
77.5°	59.0	60.0	62.3	64.0
80°	50.0	49.7	50.0	51.0
82.5°	38.3	38.3	38.0	37.7
85°	27.0	26.7	25.7	25.7
87.5°	14.7	14.3	14.0	13.3
90°	0.0	0.0	0.0	0.0

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