

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: P150069

Luminaire Tested: **TLM-E01-LED-E1-SL2-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P150069
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33678)
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-SL2-7030
Description: TALON MEDIUM LED SITE LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ SPILL LIGHT CONTROL
Light Source: (21) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

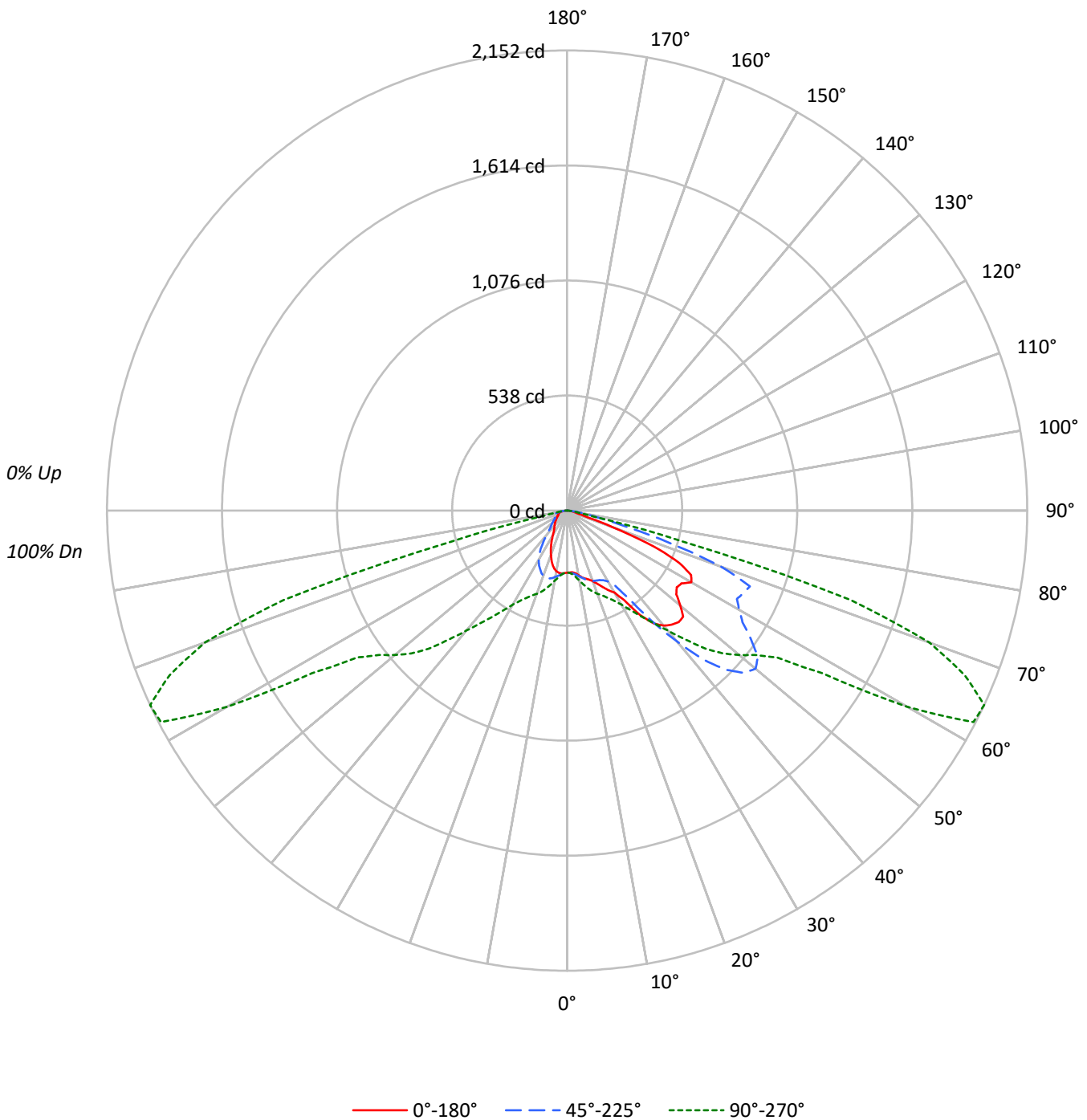
Lumens per Lamp: N/A
Luminaire Lumens: 2790.4 lumens
Efficiency: N/A
Efficacy: 113.0 lumens/watt
Spacing Criteria (0/90/45): 1.99 / 4.45 / 2.31
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
CIE Type: Direct

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	90	103	98	93	88	93	89	85	89	86	83	85	83	80	78					78			
2	93	83	74	67	90	81	73	66	77	70	64	74	68	63	70	66	61	59					59			
3	82	69	59	51	80	68	58	51	64	56	50	61	54	49	59	53	48	45					45			
4	74	59	48	40	71	57	47	40	55	46	39	52	45	38	50	43	38	35					35			
5	66	51	40	32	64	50	39	32	47	38	31	45	37	31	43	36	30	28					28			
6	60	44	34	26	58	43	33	26	41	32	26	40	32	25	38	31	25	23					23			
7	55	39	29	22	53	38	29	22	37	28	22	35	27	21	34	27	21	19					19			
8	51	35	25	19	49	34	25	19	33	24	18	32	24	18	30	23	18	16					16			
9	47	32	22	16	46	31	22	16	30	22	16	29	21	16	28	21	16	14					14			
10	44	29	20	14	42	28	20	14	27	19	14	26	19	14	25	19	14	12					12			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	18387	18387	18387
5°	18400	19080	18769
10°	19693	21397	18536
15°	21573	24706	17240
20°	23651	27875	14891
25°	27589	31459	12317
30°	32367	37061	9724
35°	46146	46733	8116
40°	58057	60470	7546
45°	66057	81754	7172
50°	68047	103528	6777
55°	69027	132015	6590
60°	84934	232247	6560
65°	86761	322400	6892
70°	41598	333710	7831
75°	11474	137414	9541
80°	9663	19216	9444
85°	6393	11914	10171



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.9	1.0
10°-20°	94.4	3.4
20°-30°	163.1	5.8
30°-40°	269.9	9.7
40°-50°	457.8	16.4
50°-60°	608.2	21.8
60°-70°	785.7	28.2
70°-80°	329.5	11.8
80°-90°	52.9	1.9
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°	286.3	10.3
0°-40°	556.3	19.9
0°-60°	1622.2	58.1
0°-90°	2790.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2790.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	290	290	290	290	290	
5°	290	294	300	298	295	28
15°	329	333	377	328	263	94
25°	395	359	450	301	176	184
35°	597	498	605	213	105	370
45°	738	1053	913	109	80	560
55°	625	1049	1196	74	60	579
65°	579	910	2152	59	46	523
75°	47	262	562	62	39	75
85°	9	22	16	19	14	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	64°
0°	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4
2.5°	289.5	290.4	289.8	290.4	291.1	291.4	292.0	291.7	291.7	292.0	291.4
5°	289.5	289.5	290.4	292.0	292.6	294.4	296.5	296.2	296.5	296.2	296.8
7.5°	295.6	295.3	296.2	298.1	298.7	301.4	305.1	305.7	306.3	306.3	307.2
10°	306.3	306.0	306.9	307.8	308.7	310.8	316.0	318.2	318.5	318.8	320.0
12.5°	319.7	319.4	318.2	318.2	317.8	321.8	328.8	332.8	333.4	334.6	335.5
15°	329.1	328.2	326.4	325.2	326.7	333.1	343.4	348.0	348.6	349.5	351.9
17.5°	338.2	337.3	333.4	330.3	332.5	342.8	356.8	361.7	362.9	363.8	366.6
20°	351.0	350.4	344.6	337.3	336.7	350.1	367.2	373.6	374.5	375.7	378.4
22.5°	370.5	367.8	361.1	347.4	340.7	354.4	374.5	383.3	384.5	385.7	389.4
25°	394.9	393.7	382.1	361.1	347.1	358.6	382.4	393.3	395.2	396.7	401.6
27.5°	420.1	418.3	405.8	378.4	358.3	367.2	394.9	407.4	409.8	412.2	416.8
30°	442.7	442.1	431.7	401.9	376.6	383.3	415.0	430.2	432.9	436.0	440.2
32.5°	495.6	495.9	485.3	454.8	420.8	412.5	443.9	466.7	467.9	471.6	479.2
35°	597.0	598.2	594.3	570.2	531.9	498.1	501.1	523.7	524.9	527.9	535.2
37.5°	664.9	667.4	679.5	687.1	667.7	652.1	613.5	604.6	605.6	603.7	602.2
40°	702.4	706.0	738.0	777.6	798.9	799.2	782.4	743.5	728.5	724.3	706.0
42.5°	723.7	729.8	775.1	842.7	903.9	945.9	956.3	913.0	902.1	882.6	847.6
45°	737.7	745.0	798.6	891.1	981.2	1052.8	1106.7	1087.5	1080.2	1068.3	1036.0
47.5°	735.2	741.0	796.7	907.6	1021.7	1123.4	1219.0	1238.8	1230.0	1226.9	1205.0
50°	690.8	696.0	752.6	866.8	999.5	1150.2	1290.3	1346.3	1346.3	1352.1	1345.4
52.5°	643.3	647.6	699.0	801.6	927.7	1124.0	1329.8	1422.7	1434.9	1444.9	1460.8
55°	625.3	630.5	669.5	757.2	866.5	1049.1	1343.2	1479.9	1502.5	1519.5	1555.4
57.5°	633.9	639.0	666.7	733.1	830.5	972.7	1343.8	1557.0	1600.5	1635.5	1708.3
60°	670.7	675.6	698.7	755.3	821.1	928.6	1318.0	1679.7	1749.1	1814.8	1936.0
62.5°	653.7	659.7	693.5	792.2	891.4	895.1	1224.5	1774.6	1886.4	1983.5	2176.2
65°	579.1	585.5	611.9	704.2	895.7	909.7	1086.0	1776.5	1915.3	2046.5	2254.5
67.5°	439.6	442.1	463.1	537.0	716.4	925.8	943.5	1566.1	1698.2	1844.7	2059.3
70°	224.7	228.9	235.0	296.5	461.2	765.1	810.8	1154.2	1322.5	1473.8	1731.7
72.5°	77.9	79.5	85.6	113.3	224.7	502.0	709.7	791.0	892.6	1034.2	1332.9
75°	46.9	46.9	49.0	57.2	102.6	261.5	631.4	646.0	659.7	707.2	902.7
77.5°	37.1	37.8	37.8	39.3	56.9	134.3	479.5	600.7	602.5	607.1	640.0
80°	26.5	27.7	30.1	31.4	36.8	73.7	269.1	527.3	563.2	580.6	604.6
82.5°	19.8	21.0	25.6	27.1	28.6	41.1	120.9	363.8	429.3	464.0	548.6
85°	8.8	10.4	17.4	19.2	20.1	21.9	56.6	103.5	119.0	133.7	176.3
87.5°	1.5	1.5	2.7	4.0	5.8	5.5	12.5	17.7	18.0	21.0	23.4
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):

	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°	75°
0°	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4
2.5°	291.4	291.4	291.4	291.1	291.4	291.4	291.4	291.4	291.7	291.7	291.7
5°	297.8	297.1	297.4	297.4	297.4	297.1	297.8	297.4	297.8	298.7	298.4
7.5°	307.2	307.8	308.1	308.4	308.4	308.4	308.7	309.3	309.3	310.2	309.9
10°	321.2	320.9	321.2	322.1	323.0	323.3	324.2	323.9	324.5	325.8	327.0
12.5°	336.1	336.7	337.6	338.5	340.1	340.4	341.3	341.6	343.4	343.4	344.6
15°	352.9	353.2	355.0	355.3	357.1	357.7	359.3	359.9	362.0	362.3	363.5
17.5°	368.1	368.7	369.6	370.5	372.6	373.6	374.8	376.0	377.8	378.4	380.6
20°	380.3	381.5	381.8	383.6	385.4	386.7	387.9	389.1	390.9	391.8	394.0
22.5°	391.2	392.4	393.3	394.9	396.1	397.9	398.5	400.7	402.5	404.0	405.8
25°	403.1	404.9	405.8	408.6	409.5	411.3	412.8	415.0	417.4	419.2	421.7
27.5°	419.8	422.6	423.8	426.8	429.0	429.9	432.3	435.4	437.5	439.6	442.1
30°	443.0	448.2	449.1	451.2	455.2	455.8	458.8	461.2	464.6	466.7	468.9
32.5°	478.9	485.3	485.9	488.3	491.7	492.9	495.3	498.1	503.3	504.2	507.5
35°	534.0	536.7	539.2	540.1	542.8	544.4	546.2	549.2	554.4	553.8	557.4
37.5°	600.1	601.0	601.3	598.2	598.9	596.1	599.5	600.1	601.9	603.4	607.1
40°	694.5	685.0	683.8	676.5	669.2	665.2	663.7	657.6	659.1	659.7	662.8
42.5°	832.4	814.1	798.9	788.5	770.6	761.7	749.9	740.4	733.1	735.9	737.1
45°	1007.1	980.9	956.6	924.9	901.5	884.7	863.7	844.8	836.3	832.4	837.2
47.5°	1181.6	1158.4	1129.8	1097.2	1060.1	1032.4	997.4	966.6	945.3	937.4	941.7
50°	1332.3	1311.0	1289.3	1270.2	1226.9	1196.8	1149.0	1109.1	1075.6	1058.6	1054.0
52.5°	1457.4	1446.1	1434.6	1418.4	1383.7	1353.6	1315.5	1276.3	1231.8	1197.1	1185.2
55°	1569.1	1575.8	1570.0	1570.4	1556.7	1537.5	1505.2	1476.0	1444.9	1405.6	1389.2
57.5°	1732.0	1771.6	1779.5	1799.3	1809.0	1819.4	1828.5	1811.2	1803.3	1774.0	1774.3
60°	1988.7	2046.5	2096.7	2142.4	2179.9	2216.4	2254.8	2271.8	2290.7	2299.5	2329.7
62.5°	2261.8	2316.9	2391.8	2453.0	2487.4	2534.9	2576.6	2603.7	2636.8	2672.2	2718.1
65°	2329.3	2395.7	2442.9	2483.7	2517.8	2543.1	2565.9	2598.2	2625.9	2681.9	2736.1
67.5°	2156.1	2209.1	2252.3	2292.5	2319.0	2340.3	2360.7	2382.0	2429.5	2480.4	2534.9
70°	1850.8	1914.7	1986.2	2038.3	2051.4	2069.7	2089.1	2116.8	2140.6	2193.9	2235.3
72.5°	1486.9	1578.9	1639.5	1711.6	1727.1	1754.9	1765.8	1787.4	1791.7	1820.6	1831.6
75°	1036.3	1141.7	1202.6	1255.6	1265.9	1250.7	1256.8	1180.4	1160.9	1145.0	1132.2
77.5°	684.1	712.4	722.2	713.6	672.8	640.9	606.8	573.3	576.9	549.8	502.3
80°	608.3	614.7	605.9	597.3	573.9	540.4	509.6	478.3	462.8	446.3	422.0
82.5°	591.9	616.5	619.3	608.9	590.3	553.8	516.7	470.1	430.5	394.0	356.8
85°	197.9	240.8	260.0	278.0	283.4	289.8	267.9	238.1	202.2	178.1	139.4
87.5°	25.3	31.4	36.2	31.1	36.2	42.6	30.7	34.4	34.7	21.6	16.1
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):

	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	86°
0°	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4
2.5°	292.0	291.7	291.7	291.7	291.4	291.7	291.7	291.7	291.7	291.7	291.4
5°	298.7	298.7	299.6	299.9	299.3	299.0	299.3	299.6	299.6	299.3	299.6
7.5°	311.1	311.5	312.1	313.0	312.4	312.7	313.0	312.7	313.6	313.9	313.6
10°	327.0	327.6	329.1	329.4	329.1	330.3	330.6	330.0	330.6	330.6	331.9
12.5°	345.2	345.9	347.7	348.3	348.9	349.2	350.1	350.4	351.3	351.9	352.9
15°	365.0	365.6	366.9	369.0	369.6	370.2	370.8	372.6	373.0	374.2	375.1
17.5°	381.8	382.7	384.5	386.0	387.0	388.5	389.1	391.2	391.8	393.7	395.2
20°	395.2	396.7	398.2	400.0	401.6	403.4	404.0	406.1	407.4	408.3	410.1
22.5°	407.4	409.2	411.3	413.4	414.7	417.1	418.0	418.9	421.7	422.9	424.7
25°	423.2	425.0	427.4	430.2	431.4	434.5	435.4	436.9	439.9	441.1	443.9
27.5°	444.8	447.2	449.1	451.8	453.3	455.5	457.6	459.4	462.2	464.0	467.0
30°	471.9	473.7	476.8	478.9	481.3	484.4	486.8	488.6	490.2	492.9	496.3
32.5°	511.8	512.1	513.0	518.2	520.6	523.0	526.4	527.9	530.4	533.1	536.7
35°	561.4	564.1	566.3	568.7	571.5	574.2	575.4	580.0	582.1	585.8	589.4
37.5°	610.7	611.0	615.9	617.4	619.9	622.6	626.9	631.4	636.9	640.6	646.3
40°	663.7	666.1	672.2	675.3	678.3	685.0	688.4	695.7	704.8	710.0	719.7
42.5°	740.4	744.1	755.0	759.9	767.2	778.2	785.2	795.2	798.9	811.4	815.9
45°	840.9	852.2	868.0	878.3	891.4	903.3	909.4	914.0	919.4	929.2	928.0
47.5°	949.6	964.2	981.9	1003.2	1011.7	1025.7	1033.6	1042.4	1037.6	1035.1	1032.7
50°	1061.0	1078.1	1101.5	1120.7	1133.8	1142.3	1149.0	1147.8	1137.4	1131.9	1116.7
52.5°	1184.9	1195.0	1217.2	1233.6	1241.5	1243.4	1241.9	1232.7	1223.0	1205.6	1187.7
55°	1374.9	1370.3	1379.2	1386.8	1384.3	1392.9	1370.9	1362.4	1338.4	1315.8	1291.8
57.5°	1760.9	1767.0	1717.7	1695.5	1691.5	1699.4	1660.8	1655.9	1597.8	1590.4	1550.0
60°	2325.4	2355.2	2316.6	2294.9	2236.5	2217.3	2174.1	2156.1	2100.4	2055.3	1998.4
62.5°	2749.8	2776.9	2793.0	2762.3	2728.2	2677.9	2612.5	2540.0	2481.0	2411.9	2351.6
65°	2788.2	2843.0	2880.1	2894.4	2870.4	2815.3	2734.6	2643.2	2552.8	2466.0	2389.9
67.5°	2608.8	2657.8	2715.4	2766.8	2769.9	2734.0	2665.2	2572.3	2467.9	2360.7	2271.5
70°	2300.7	2362.2	2412.5	2466.7	2504.4	2483.7	2449.3	2364.1	2255.7	2172.3	2069.7
72.5°	1871.2	1897.0	1909.2	1962.5	1963.1	1925.3	1901.0	1853.8	1766.4	1707.4	1629.1
75°	1092.7	1035.7	975.2	922.5	879.6	861.6	781.8	768.4	714.8	681.7	633.0
77.5°	450.6	399.7	334.3	279.8	225.9	201.5	166.2	150.7	130.6	121.8	116.0
80°	386.3	338.2	288.9	241.7	199.7	157.7	122.7	95.3	74.9	63.6	59.1
82.5°	315.4	286.5	252.1	226.5	193.6	162.3	137.0	106.3	79.5	58.5	44.8
85°	113.9	93.5	75.2	69.1	55.1	45.4	38.1	32.6	26.8	21.3	18.9
87.5°	12.8	12.2	7.0	6.7	7.6	5.5	6.4	5.8	4.9	4.3	4.6
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: P150069

CATALOG NUMBER: TLM-E01-LED-E1-SL2-7030

CANDELA DISTRIBUTION (continued):

	87°	88°	89°	90°	95°	105°	115°	125°	135°	145°	155°
0°	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4	290.4
2.5°	291.4	291.4	291.7	291.7	292.0	292.3	292.9	292.6	292.6	292.9	292.9
5°	299.6	300.5	300.2	300.2	300.2	300.5	300.8	299.6	298.4	297.1	296.5
7.5°	313.9	314.5	315.1	314.5	315.1	314.8	314.2	310.8	306.9	302.0	298.7
10°	332.5	332.5	333.1	332.8	334.0	333.1	331.2	323.6	315.1	304.8	297.1
12.5°	352.6	354.7	353.8	354.1	356.5	354.1	349.8	338.5	323.3	306.6	293.2
15°	376.3	377.2	377.8	376.9	378.4	376.3	368.7	350.7	328.5	305.1	285.3
17.5°	395.8	396.1	396.4	397.0	399.1	396.7	383.6	359.3	329.7	298.1	271.9
20°	411.0	412.5	413.7	413.7	416.8	413.1	395.8	363.5	325.8	286.5	254.8
22.5°	426.8	428.1	429.6	429.9	433.8	430.2	405.8	362.6	315.4	270.0	235.0
25°	446.3	447.5	448.8	450.3	455.8	450.6	415.9	358.9	301.1	250.6	213.7
27.5°	468.9	471.6	472.5	474.9	481.3	473.4	424.4	353.5	285.3	228.0	191.2
30°	499.0	502.3	503.6	506.9	515.7	498.4	429.3	344.0	265.2	205.2	167.1
32.5°	539.5	544.1	547.7	551.4	561.4	523.3	429.9	330.3	241.7	179.6	144.0
35°	592.5	599.5	602.2	604.6	614.1	550.4	427.1	309.9	213.1	153.4	125.7
37.5°	651.8	658.8	660.7	661.9	663.7	573.6	420.4	278.9	180.8	130.6	111.1
40°	724.9	731.0	733.4	731.6	721.9	591.5	405.5	242.6	149.5	115.1	102.0
42.5°	814.1	823.2	824.1	815.9	783.7	601.6	375.7	200.0	124.8	103.8	95.0
45°	924.6	924.0	918.8	913.0	850.9	597.6	334.0	162.9	109.3	95.0	88.6
47.5°	1023.9	1013.5	1005.6	988.5	910.3	574.5	280.1	134.9	99.9	88.3	83.1
50°	1105.2	1086.3	1069.5	1051.0	954.5	533.4	226.5	114.5	91.0	82.5	77.9
52.5°	1169.4	1146.6	1127.1	1108.8	997.1	487.7	185.7	99.6	82.5	76.7	72.2
55°	1269.9	1247.0	1216.0	1195.9	1062.2	445.7	159.2	87.7	74.3	70.6	66.1
57.5°	1524.1	1504.0	1466.8	1414.8	1229.7	429.9	144.3	78.5	67.6	65.5	61.8
60°	1968.0	1935.4	1887.0	1834.0	1570.0	440.5	132.4	72.2	63.0	61.2	58.5
62.5°	2302.9	2245.6	2190.8	2141.8	1842.2	440.2	116.9	67.3	59.7	58.8	56.0
65°	2316.6	2258.4	2203.3	2151.9	1848.3	391.8	98.6	63.0	59.1	58.8	54.2
67.5°	2193.6	2130.5	2077.3	2012.4	1711.0	306.3	79.2	60.3	61.5	60.9	53.6
70°	1992.6	1910.4	1866.6	1802.6	1505.8	214.3	65.2	61.2	66.7	64.8	54.5
72.5°	1564.0	1501.9	1435.2	1390.7	1178.8	135.5	54.8	61.8	68.8	65.8	56.9
75°	582.1	598.9	571.5	561.7	598.9	79.5	48.7	57.5	61.5	56.9	51.8
77.5°	117.5	112.3	106.6	105.3	136.1	49.0	44.8	49.9	47.2	41.7	42.0
80°	56.3	54.8	53.0	52.7	50.5	40.8	41.4	42.6	35.6	32.3	34.4
82.5°	37.4	35.3	34.7	33.5	34.1	36.5	39.3	36.5	27.4	25.6	31.1
85°	17.4	16.7	16.4	16.4	18.3	32.9	32.6	26.8	18.9	18.3	31.1
87.5°	4.3	4.3	4.6	4.3	4.9	9.7	8.5	8.2	7.0	7.9	14.6
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: P150069

CATALOG NUMBER: TLM-E01-LED-E1-SL2-7030

CANDELA DISTRIBUTION (continued):

	165°	175°	180°
0°	290.4	290.4	290.4
2.5°	292.6	292.9	292.6
5°	295.3	295.3	295.3
7.5°	295.3	294.4	294.1
10°	291.1	288.3	288.3
12.5°	283.7	279.2	278.6
15°	270.0	264.0	263.0
17.5°	252.7	244.5	243.0
20°	233.2	222.9	221.0
22.5°	211.9	200.0	199.1
25°	190.9	178.7	176.3
27.5°	167.4	155.6	154.4
30°	144.0	133.7	133.0
32.5°	124.2	117.8	116.6
35°	110.2	106.6	105.0
37.5°	101.1	98.3	98.0
40°	94.1	91.6	91.3
42.5°	88.3	86.2	85.9
45°	82.5	80.7	80.1
47.5°	76.7	74.9	74.6
50°	71.5	69.1	68.8
52.5°	66.7	64.2	63.6
55°	62.1	59.7	59.7
57.5°	58.1	55.7	55.4
60°	54.5	52.1	51.8
62.5°	51.8	48.7	48.4
65°	49.6	46.6	46.0
67.5°	48.4	44.8	43.8
70°	50.5	43.8	42.3
72.5°	50.8	42.9	40.8
75°	49.0	40.5	39.0
77.5°	42.9	36.2	34.7
80°	37.1	28.0	25.9
82.5°	35.3	22.8	19.8
85°	27.4	14.9	14.0
87.5°	15.5	8.2	6.7
90°	0.0	0.0	0.0

(END OF REPORT)