

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: P152948

Luminaire Tested: **TLM-E04-LED-E1-SLL-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P152948  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33681)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: TLM-E04-LED-E1-SLL-8030  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(4) LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR LEFT  
Light Source: (84) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9393.5 lumens  
Efficiency: N/A  
Efficacy: 96.6 lumens/watt  
Spacing Criteria (0/90/45): 1.93 / 2.48 / 2.44  
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')  
CIE Type: Direct

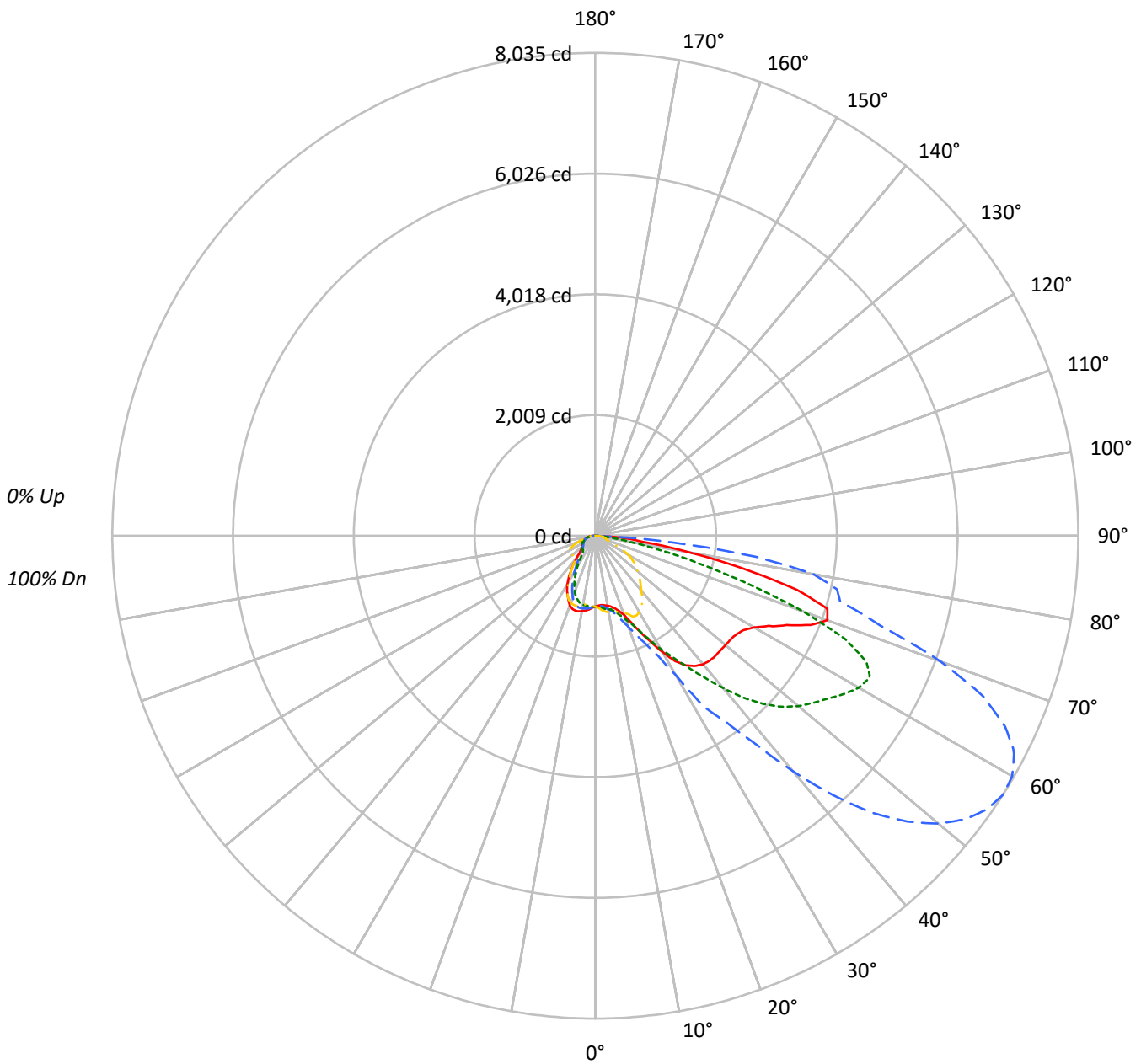
Input Watts (W): 97.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot



— 0°-180°    - - 45°-225°    - - - 90°-270°    - - - 135°-315°



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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	105	99	93	88	102	97	91	87	92	88	84	88	85	81	84	82	79	77					77			
2	93	82	73	66	90	80	72	65	76	70	64	73	67	62	70	65	61	58					58			
3	82	69	59	51	80	68	58	50	64	56	49	61	54	48	59	53	47	45					45			
4	74	59	48	40	71	58	48	40	55	46	39	52	45	39	50	44	38	35					35			
5	67	51	41	33	64	50	40	32	48	39	32	46	38	32	44	37	31	29					29			
6	61	45	35	27	59	44	34	27	42	33	27	40	32	26	39	32	26	24					24			
7	56	40	30	23	54	39	30	23	38	29	23	36	28	22	35	27	22	20					20			
8	52	36	26	20	50	35	26	20	34	25	19	33	25	19	31	24	19	17					17			
9	48	33	23	17	46	32	23	17	31	23	17	30	22	17	29	22	17	15					15			
10	45	30	21	15	43	29	21	15	28	20	15	27	20	15	26	20	15	13					13			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	18965	18965	18965	18965
5°	18638	19454	19872	18965
10°	19276	20230	20762	19038
15°	20794	21861	21467	18530
20°	24029	25376	21164	17085
25°	31457	31080	19309	14422
30°	41459	40331	17223	11168
35°	51645	52196	13793	7637
40°	58529	69409	10100	6680
45°	64175	89894	7593	7005
50°	70652	110197	7256	7173
55°	80090	132224	7408	7344
60°	97952	162603	8062	8062
65°	133598	189209	8511	8386
70°	192935	172215	8986	8883
75°	215212	111482	9919	9361
80°	147113	54141	11352	10103
85°	95410	26341	13696	12442



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	114.9	1.2
10°-20°	357.9	3.8
20°-30°	635.8	6.8
30°-40°	1001.2	10.7
40°-50°	1473.5	15.7
50°-60°	1957.2	20.8
60°-70°	2155.9	23.0
70°-80°	1352.6	14.4
80°-90°	344.5	3.7
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°	1108.6	11.8
0°-40°	2109.8	22.5
0°-60°	5540.5	59.0
0°-90°	9393.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9393.5	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1180	1180	1180	1180	1180	
5°	1156	1206	1232	1176	1156	111
15°	1250	1314	1291	1114	1250	362
25°	1775	1753	1089	814	1775	838
35°	2633	2661	703	389	2633	1632
45°	2825	3957	334	308	2825	2184
55°	2859	4721	264	262	2859	2594
65°	3514	4977	224	221	3514	3538
75°	3467	1796	160	151	3467	3391
85°	518	143	74	68	518	598
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°	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5
2.5°	1164.7	1167.0	1167.0	1165.8	1165.8	1168.1	1167.0	1165.8	1162.5	1167.0	1167.0
5°	1155.7	1158.0	1158.0	1160.2	1162.5	1164.7	1164.7	1167.0	1165.8	1170.3	1173.7
7.5°	1167.0	1169.2	1173.7	1179.3	1182.7	1190.6	1190.6	1196.2	1198.5	1201.8	1200.7
10°	1181.6	1187.2	1197.3	1206.3	1213.1	1222.1	1228.9	1236.7	1236.7	1240.1	1242.4
12.5°	1207.5	1213.1	1224.3	1235.6	1245.7	1257.0	1267.1	1275.0	1282.9	1285.1	1289.6
15°	1250.2	1257.0	1273.9	1289.6	1302.0	1316.6	1330.1	1345.9	1360.5	1363.9	1366.1
17.5°	1314.4	1327.9	1340.3	1368.4	1386.4	1405.5	1426.9	1449.4	1453.9	1477.5	1483.2
20°	1405.5	1422.4	1433.7	1468.5	1498.9	1523.7	1555.2	1581.1	1591.2	1613.7	1636.2
22.5°	1563.1	1559.7	1576.6	1611.5	1634.0	1683.5	1710.5	1737.5	1751.0	1784.8	1802.8
25°	1774.6	1792.6	1829.8	1833.1	1854.5	1911.9	1946.8	1973.8	1974.9	1985.1	2004.2
27.5°	1982.8	2057.1	2115.6	2147.1	2204.5	2257.4	2255.1	2293.4	2233.8	2246.1	2264.1
30°	2234.9	2358.7	2469.0	2543.2	2601.7	2663.6	2694.0	2715.4	2689.5	2678.3	2656.9
32.5°	2471.2	2644.5	2814.4	2946.1	3055.2	3157.7	3225.2	3255.6	3291.6	3382.7	3415.3
35°	2633.3	2878.6	3090.1	3280.3	3462.6	3625.8	3743.9	3811.5	3785.6	3773.2	3766.5
37.5°	2730.0	3029.4	3293.8	3562.8	3772.1	4016.3	4199.7	4377.5	4418.0	4347.1	4312.2
40°	2790.8	3145.3	3485.1	3802.5	4073.7	4388.8	4616.1	4882.8	5085.3	5112.3	5029.1
42.5°	2820.1	3222.9	3619.0	3978.0	4344.9	4730.9	5018.9	5341.9	5644.6	5852.8	5801.0
45°	2824.6	3273.6	3716.9	4136.7	4573.3	5031.3	5402.7	5760.5	6165.6	6522.4	6532.5
47.5°	2824.6	3311.8	3784.5	4251.5	4778.1	5292.4	5697.5	6120.6	6616.9	7038.9	7168.3
50°	2826.8	3337.7	3847.5	4341.5	4934.5	5512.9	5971.0	6470.6	6992.7	7451.9	7701.7
52.5°	2836.9	3356.8	3897.0	4405.6	5035.8	5668.2	6183.6	6759.8	7279.7	7751.2	8074.2
55°	2859.4	3383.8	3933.0	4445.0	5103.3	5769.5	6337.8	6957.9	7465.4	7943.6	8394.9
57.5°	2922.5	3431.1	3976.9	4479.9	5140.5	5835.9	6445.8	7043.4	7536.3	8034.8	8564.8
60°	3048.5	3531.3	4052.3	4549.7	5202.4	5958.6	6497.6	6986.0	7484.5	8007.8	8603.1
62.5°	3249.9	3687.7	4156.9	4667.8	5379.0	6148.8	6458.2	6814.9	7280.8	7851.4	8466.9
63°	3319.7	3721.4	4180.6	4693.7	5427.4	6183.6	6441.3	6764.3	7239.2	7801.9	8418.5
65°	3514.4	3871.1	4293.1	4824.3	5626.6	6218.5	6309.7	6501.0	6951.1	7519.4	8132.7
67.5°	3877.9	4234.6	4535.0	5044.8	5794.3	6081.2	5901.2	5924.8	6395.2	6983.7	7535.2
70°	4107.4	4532.8	4689.2	5072.9	5763.9	5877.6	5372.3	5059.4	5436.4	6107.1	6589.9
72.5°	4047.8	4536.2	4519.3	4698.2	5156.2	5262.0	4738.7	4245.8	4469.8	4970.5	5283.4
75°	3467.1	4051.2	3927.4	3891.4	4052.3	4122.1	3729.3	3653.9	3936.4	4214.3	4218.8
77.5°	2496.0	3138.5	2993.4	2785.2	2773.9	2934.8	2987.7	3481.7	3899.2	4118.7	4021.9
80°	1590.1	2286.7	2135.9	1772.4	1766.8	1976.1	2440.8	3112.6	3554.9	3677.5	3425.5
82.5°	830.5	1496.7	1554.1	1330.1	1522.6	1869.2	2322.7	2508.3	2676.0	2692.9	2395.8
85°	517.6	920.5	1082.6	1117.4	1375.1	1657.6	1654.2	1589.0	1514.7	1296.4	1172.6
87.5°	58.5	115.9	175.6	166.5	223.9	314.0	391.6	229.6	160.9	58.5	81.0
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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5
2.5°	1169.2	1170.3	1171.5	1171.5	1177.1	1176.0	1177.1	1179.3	1182.7	1185.0	1187.2
5°	1178.2	1178.2	1182.7	1186.1	1192.8	1197.3	1199.6	1206.3	1214.2	1212.0	1218.7
7.5°	1207.5	1206.3	1210.8	1213.1	1218.7	1226.6	1225.5	1231.1	1237.9	1240.1	1245.7
10°	1246.9	1243.5	1243.5	1241.2	1242.4	1240.1	1240.1	1240.1	1244.6	1243.5	1248.0
12.5°	1287.4	1286.2	1284.0	1277.2	1277.2	1268.2	1263.7	1258.1	1257.0	1249.1	1250.2
15°	1370.6	1370.6	1366.1	1352.6	1341.4	1333.5	1322.3	1314.4	1303.1	1288.5	1280.6
17.5°	1492.2	1476.4	1470.8	1468.5	1450.5	1443.8	1419.0	1393.1	1380.8	1360.5	1349.3
20°	1640.7	1637.3	1614.8	1603.6	1581.1	1549.6	1518.1	1484.3	1464.0	1439.3	1425.8
22.5°	1808.4	1783.6	1772.4	1755.5	1720.6	1684.6	1637.3	1592.3	1560.8	1543.9	1533.8
25°	2004.2	1979.4	1968.2	1945.7	1902.9	1864.7	1806.1	1753.3	1725.1	1697.0	1681.2
27.5°	2264.1	2240.5	2227.0	2168.5	2153.9	2090.8	2018.8	1946.8	1909.7	1868.0	1841.0
30°	2652.4	2653.5	2583.7	2512.8	2439.7	2330.5	2255.1	2174.1	2113.4	2053.7	1994.1
32.5°	3308.4	3140.8	3011.4	2859.4	2700.8	2584.9	2491.5	2394.7	2310.3	2223.6	2124.6
35°	3709.1	3628.0	3460.4	3182.4	3022.6	2881.9	2778.4	2661.4	2557.9	2404.8	2254.0
37.5°	4161.4	3973.5	3769.8	3615.7	3434.5	3271.3	3098.0	2965.2	2786.3	2580.4	2366.6
40°	4822.0	4553.0	4307.7	4100.7	3866.6	3695.6	3502.0	3309.6	3072.1	2773.9	2480.2
42.5°	5511.8	5233.9	4909.8	4640.8	4365.1	4164.8	3925.1	3655.0	3306.2	2937.1	2578.1
45°	6235.4	5864.0	5475.8	5147.2	4860.3	4611.6	4314.5	3956.6	3531.3	3083.4	2669.3
47.5°	6948.9	6522.4	6059.9	5706.5	5332.9	5029.1	4664.5	4212.1	3706.8	3221.8	2760.4
50°	7577.9	7167.2	6610.1	6161.1	5783.0	5408.3	4953.7	4409.0	3845.2	3341.1	2842.6
52.5°	8120.3	7767.0	7180.7	6613.5	6178.0	5757.1	5186.6	4567.7	3984.8	3451.4	2910.1
55°	8518.7	8283.5	7743.3	7040.0	6525.7	6023.8	5383.5	4720.7	4116.4	3539.1	2954.0
57.5°	8819.1	8688.6	8225.0	7441.7	6845.3	6282.7	5587.2	4904.1	4247.0	3614.5	2974.2
60°	8983.4	9019.4	8589.6	7792.8	7127.8	6498.7	5790.9	5060.6	4343.7	3658.4	2963.0
62.5°	8967.7	9188.2	8863.0	8008.9	7292.1	6627.0	5928.2	5133.7	4330.2	3588.6	2860.6
63°	8937.3	9193.9	8893.4	8023.5	7302.2	6631.5	5931.6	5123.6	4302.1	3554.9	2820.1
65°	8675.1	9064.5	8867.5	7957.1	7212.2	6547.1	5860.7	4977.3	4104.0	3373.7	2611.9
67.5°	7972.9	8460.2	8403.9	7487.9	6785.7	6198.3	5498.3	4505.8	3614.5	2928.1	2213.5
70°	6812.7	7270.7	7280.8	6512.2	5925.9	5349.8	4768.0	3666.3	2865.1	2269.8	1650.8
72.5°	5221.5	5516.3	5618.7	5112.3	4719.6	4314.5	3792.3	2661.4	2042.5	1543.9	1074.7
75°	4043.3	3962.3	3961.1	3747.3	3587.5	3389.5	2815.6	1796.0	1341.4	1003.8	657.2
77.5°	3634.8	3274.7	2925.8	2669.3	2541.0	2474.6	1846.7	1082.6	791.1	577.3	378.1
80°	2997.9	2466.7	1992.9	1716.1	1605.8	1682.4	1029.7	585.2	433.2	328.6	245.3
82.5°	2067.2	1716.1	1304.2	1080.3	927.3	970.0	526.7	299.3	200.3	183.4	151.9
85°	1076.9	944.1	796.7	684.2	604.3	531.2	273.5	142.9	83.3	73.1	66.4
87.5°	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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°	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5
2.5°	1190.6	1189.5	1191.7	1192.8	1196.2	1198.5	1199.6	1197.3	1200.7	1204.1	1201.8
5°	1222.1	1230.0	1231.1	1234.5	1234.5	1241.2	1241.2	1241.2	1240.1	1241.2	1239.0
7.5°	1249.1	1259.2	1260.4	1264.9	1266.0	1273.9	1270.5	1272.7	1272.7	1267.1	1264.9
10°	1252.5	1262.6	1268.2	1273.9	1281.7	1291.9	1291.9	1297.5	1297.5	1293.0	1291.9
12.5°	1253.6	1261.5	1267.1	1275.0	1286.2	1300.9	1308.7	1316.6	1320.0	1318.9	1315.5
15°	1277.2	1277.2	1278.4	1285.1	1293.0	1311.0	1322.3	1331.3	1336.9	1334.6	1329.0
17.5°	1339.1	1330.1	1323.4	1312.1	1314.4	1323.4	1330.1	1338.0	1339.1	1336.9	1327.9
20°	1411.2	1399.9	1383.0	1365.0	1356.0	1349.3	1344.8	1344.8	1341.4	1330.1	1315.5
22.5°	1513.6	1498.9	1475.3	1448.3	1430.3	1408.9	1383.0	1358.3	1331.3	1304.2	1272.7
25°	1655.3	1635.1	1610.3	1568.7	1530.4	1485.4	1432.5	1377.4	1313.2	1257.0	1210.8
27.5°	1798.3	1753.3	1689.1	1631.7	1560.8	1493.3	1417.9	1350.4	1268.2	1200.7	1150.1
30°	1916.4	1830.9	1738.6	1647.5	1554.1	1462.9	1372.9	1291.9	1201.8	1133.2	1083.7
32.5°	2007.6	1889.4	1761.1	1641.8	1527.1	1415.7	1312.1	1222.1	1130.9	1060.1	1007.2
35°	2092.0	1927.7	1764.5	1617.1	1475.3	1359.4	1242.4	1144.5	1047.7	973.4	916.0
37.5°	2155.0	1945.7	1744.2	1570.9	1407.8	1278.4	1159.1	1058.9	959.9	878.9	813.6
40°	2195.5	1934.4	1700.4	1504.6	1327.9	1191.7	1070.2	966.7	871.0	782.1	703.3
42.5°	2228.1	1919.8	1656.5	1443.8	1264.9	1116.3	991.4	880.0	783.2	686.4	599.8
45°	2276.5	1931.1	1637.3	1401.0	1208.6	1052.2	914.9	799.0	697.7	603.2	519.9
47.5°	2323.8	1936.7	1609.2	1348.1	1137.7	985.8	846.2	733.7	630.2	543.5	467.0
50°	2366.6	1933.3	1565.3	1280.6	1069.1	919.4	784.3	671.8	569.4	489.5	417.5
52.5°	2386.8	1914.2	1511.3	1215.3	1013.9	860.9	723.6	614.4	513.1	437.7	371.4
55°	2384.6	1864.7	1440.4	1153.5	953.1	799.0	663.9	555.9	464.8	395.0	337.6
57.5°	2350.8	1788.1	1365.0	1084.8	873.2	722.5	594.2	489.5	413.0	354.5	306.1
60°	2279.9	1690.2	1266.0	984.7	773.1	627.9	507.5	417.5	355.6	310.6	279.1
62.5°	2147.1	1549.6	1142.2	845.1	638.1	505.3	400.6	342.1	296.0	269.0	254.3
63°	2107.7	1511.3	1089.3	811.4	606.5	477.1	378.1	317.3	283.6	259.9	246.4
65°	1911.9	1323.4	911.5	654.9	471.5	368.0	303.8	257.7	237.4	227.3	226.2
67.5°	1548.4	1040.9	644.8	449.0	320.7	265.6	232.9	213.8	204.8	202.6	204.8
70°	1087.1	657.2	409.6	298.2	237.4	213.8	199.2	191.3	185.7	186.8	189.1
72.5°	693.2	393.9	281.3	226.2	200.3	187.9	181.2	178.9	177.8	176.7	176.7
75°	395.0	262.2	216.1	195.8	182.3	172.2	166.5	164.3	165.4	166.5	164.3
77.5°	261.1	216.1	192.4	178.9	166.5	155.3	151.9	150.8	153.0	155.3	155.3
80°	205.9	192.4	178.9	165.4	145.2	137.3	139.5	140.7	139.5	140.7	137.3
82.5°	145.2	142.9	146.3	140.7	120.4	113.7	111.4	112.5	110.3	110.3	108.0
85°	67.5	67.5	70.9	70.9	68.6	69.8	75.4	82.1	85.5	82.1	77.6
87.5°	0.0	0.0	0.0	0.0	0.0	10.1	20.3	29.3	31.5	39.4	38.3
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: P152948

CATALOG NUMBER: TLM-E04-LED-E1-SLL-8030

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5
2.5°	1198.5	1200.7	1199.6	1198.5	1200.7	1198.5	1199.6	1198.5	1198.5	1197.3	1197.3
5°	1236.7	1240.1	1233.4	1232.2	1230.0	1224.3	1224.3	1222.1	1222.1	1217.6	1214.2
7.5°	1261.5	1262.6	1257.0	1255.9	1250.2	1244.6	1240.1	1235.6	1234.5	1231.1	1224.3
10°	1285.1	1282.9	1278.4	1272.7	1267.1	1259.2	1253.6	1248.0	1246.9	1241.2	1233.4
12.5°	1305.4	1304.2	1295.2	1289.6	1280.6	1272.7	1266.0	1259.2	1255.9	1249.1	1237.9
15°	1318.9	1312.1	1300.9	1290.7	1280.6	1271.6	1263.7	1255.9	1252.5	1244.6	1233.4
17.5°	1313.2	1300.9	1286.2	1273.9	1260.4	1249.1	1242.4	1234.5	1228.9	1224.3	1208.6
20°	1293.0	1275.0	1252.5	1237.9	1219.8	1205.2	1200.7	1192.8	1188.3	1171.5	1151.2
22.5°	1240.1	1214.2	1186.1	1164.7	1144.5	1129.8	1118.6	1110.7	1099.4	1089.3	1057.8
25°	1173.7	1144.5	1115.2	1089.3	1062.3	1039.8	1019.5	1000.4	994.8	973.4	943.0
27.5°	1109.6	1076.9	1047.7	1017.3	982.4	954.3	919.4	892.4	874.4	851.9	823.7
30°	1040.9	1008.3	968.9	928.4	887.9	857.5	818.1	785.5	763.0	739.3	713.5
32.5°	954.3	914.9	867.6	822.6	785.5	749.5	710.1	678.6	656.1	634.7	609.9
35°	855.2	803.5	752.8	703.3	663.9	633.6	598.7	575.0	559.3	540.2	514.3
37.5°	741.6	683.1	629.1	590.8	555.9	526.7	501.9	487.3	470.4	460.3	444.5
40°	626.8	569.4	516.5	481.6	452.4	435.5	422.0	418.6	407.4	393.9	383.7
42.5°	525.5	470.4	418.6	390.5	371.4	366.9	360.1	360.1	354.5	344.3	337.6
45°	456.9	399.5	354.5	334.2	324.1	323.0	319.6	319.6	318.5	314.0	306.1
47.5°	407.4	355.6	320.7	308.3	306.1	303.8	300.5	299.3	298.2	294.8	290.3
50°	362.4	318.5	296.0	290.3	291.5	288.1	284.7	281.3	280.2	276.8	272.3
52.5°	320.7	289.2	274.6	271.2	271.2	271.2	269.0	269.0	266.7	265.6	261.1
55°	297.1	273.5	265.6	264.5	263.3	262.2	259.9	259.9	257.7	256.6	250.9
57.5°	276.8	262.2	257.7	255.4	254.3	252.1	250.9	250.9	250.9	250.9	244.2
60°	261.1	254.3	253.2	250.9	249.8	245.3	243.1	241.9	243.1	244.2	237.4
62.5°	244.2	243.1	241.9	239.7	238.6	234.1	230.7	228.4	230.7	232.9	231.8
63°	239.7	238.6	238.6	237.4	236.3	230.7	227.3	225.1	227.3	229.6	229.6
65°	223.9	225.1	225.1	223.9	222.8	219.4	214.9	212.7	213.8	217.2	218.3
67.5°	207.1	208.2	207.1	208.2	207.1	204.8	201.4	199.2	198.1	199.2	200.3
70°	191.3	193.6	192.4	191.3	190.2	190.2	187.9	184.6	183.4	182.3	182.3
72.5°	177.8	177.8	175.6	175.6	174.4	174.4	172.2	168.8	167.7	167.7	165.4
75°	163.2	163.2	159.8	159.8	157.5	158.7	156.4	153.0	151.9	151.9	150.8
77.5°	154.2	150.8	145.2	144.0	142.9	142.9	141.8	138.4	137.3	137.3	136.2
80°	136.2	129.4	123.8	122.7	123.8	126.0	126.0	123.8	123.8	123.8	123.8
82.5°	105.8	103.5	100.2	97.9	97.9	101.3	105.8	108.0	110.3	112.5	112.5
85°	77.6	78.8	77.6	74.3	73.1	76.5	81.0	85.5	86.6	91.2	90.0
87.5°	41.6	42.8	39.4	38.3	41.6	43.9	48.4	49.5	51.8	52.9	54.0
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: P152948

CATALOG NUMBER: TLM-E04-LED-E1-SLL-8030

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5
2.5°	1196.2	1195.1	1196.2	1194.0	1194.0	1191.7	1189.5	1188.3	1186.1	1185.0	1182.7
5°	1216.5	1213.1	1209.7	1208.6	1204.1	1199.6	1196.2	1190.6	1186.1	1178.2	1176.0
7.5°	1230.0	1222.1	1217.6	1216.5	1209.7	1206.3	1198.5	1191.7	1185.0	1174.8	1171.5
10°	1235.6	1227.7	1219.8	1216.5	1208.6	1203.0	1195.1	1185.0	1179.3	1169.2	1167.0
12.5°	1242.4	1227.7	1215.3	1206.3	1195.1	1182.7	1174.8	1169.2	1161.3	1155.7	1153.5
15°	1230.0	1210.8	1191.7	1174.8	1156.8	1143.3	1135.4	1126.4	1117.4	1114.1	1114.1
17.5°	1196.2	1171.5	1138.8	1117.4	1098.3	1083.7	1073.6	1064.6	1063.4	1058.9	1061.2
20°	1126.4	1093.8	1062.3	1046.5	1035.3	1026.3	1016.2	1011.7	1008.3	1001.5	999.3
22.5°	1029.7	1002.7	980.2	968.9	959.9	948.6	939.6	926.1	922.8	916.0	912.6
25°	922.8	901.4	882.3	874.4	868.7	853.0	847.4	829.4	817.0	809.1	813.6
27.5°	815.9	800.1	782.1	772.0	768.6	754.0	748.3	728.1	718.0	718.0	706.7
30°	705.6	690.9	679.7	668.4	666.2	648.2	633.6	625.7	614.4	609.9	602.0
32.5°	602.0	587.4	578.4	572.8	563.8	549.2	534.5	521.0	503.0	496.3	492.9
35°	506.4	495.1	483.9	479.4	467.0	451.3	433.2	422.0	400.6	392.7	389.4
37.5°	433.2	419.7	411.9	399.5	387.1	370.2	356.7	346.6	338.7	335.3	335.3
40°	374.7	364.6	355.6	345.5	335.3	326.3	319.6	317.3	316.2	316.2	318.5
42.5°	330.8	321.8	317.3	311.7	308.3	308.3	307.2	308.3	309.5	310.6	314.0
45°	301.6	296.0	293.7	292.6	294.8	297.1	298.2	300.5	305.0	307.2	308.3
47.5°	285.8	281.3	280.2	281.3	284.7	289.2	293.7	297.1	300.5	301.6	302.7
50°	270.1	264.5	262.2	264.5	269.0	275.7	279.1	284.7	287.0	289.2	287.0
52.5°	256.6	252.1	250.9	250.9	255.4	259.9	264.5	269.0	270.1	270.1	269.0
55°	245.3	241.9	238.6	240.8	244.2	248.7	255.4	258.8	261.1	262.2	262.2
57.5°	236.3	232.9	229.6	231.8	235.2	239.7	246.4	249.8	252.1	255.4	256.6
60°	229.6	225.1	221.7	225.1	228.4	235.2	240.8	244.2	249.8	250.9	250.9
62.5°	222.8	218.3	212.7	216.1	216.1	219.4	225.1	229.6	235.2	237.4	237.4
63°	221.7	217.2	211.6	213.8	213.8	216.1	220.6	225.1	231.8	234.1	232.9
65°	212.7	211.6	205.9	205.9	203.7	205.9	209.3	213.8	217.2	220.6	220.6
67.5°	198.1	196.9	195.8	195.8	195.8	198.1	200.3	203.7	207.1	209.3	208.2
70°	181.2	181.2	181.2	182.3	182.3	184.6	185.7	184.6	187.9	190.2	189.1
72.5°	166.5	165.4	164.3	166.5	165.4	165.4	167.7	166.5	169.9	169.9	171.0
75°	150.8	149.7	149.7	150.8	148.5	146.3	147.4	147.4	148.5	148.5	150.8
77.5°	137.3	137.3	137.3	136.2	133.9	132.8	131.7	131.7	131.7	131.7	132.8
80°	124.9	124.9	124.9	123.8	121.5	119.3	117.0	115.9	114.8	109.2	109.2
82.5°	112.5	112.5	112.5	112.5	111.4	109.2	105.8	96.8	92.3	87.8	88.9
85°	88.9	91.2	93.4	96.8	95.7	95.7	88.9	77.6	70.9	66.4	67.5
87.5°	57.4	50.6	50.6	49.5	47.3	45.0	45.0	38.3	31.5	28.1	29.3
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: P152948

CATALOG NUMBER: TLM-E04-LED-E1-SLL-8030

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5
2.5°	1182.7	1180.5	1178.2	1178.2	1174.8	1174.8	1172.6	1177.1	1172.6	1169.2	1169.2
5°	1173.7	1171.5	1164.7	1163.6	1159.1	1159.1	1159.1	1156.8	1156.8	1154.6	1153.5
7.5°	1168.1	1162.5	1156.8	1153.5	1153.5	1151.2	1155.7	1153.5	1154.6	1154.6	1155.7
10°	1163.6	1159.1	1156.8	1155.7	1155.7	1159.1	1162.5	1163.6	1162.5	1163.6	1163.6
12.5°	1152.3	1154.6	1155.7	1160.2	1165.8	1172.6	1180.5	1181.6	1183.8	1183.8	1186.1
15°	1116.3	1121.9	1128.7	1140.0	1154.6	1169.2	1183.8	1196.2	1207.5	1213.1	1217.6
17.5°	1065.7	1071.3	1083.7	1096.1	1115.2	1136.6	1161.3	1182.7	1206.3	1227.7	1249.1
20°	997.0	1006.0	1009.4	1031.9	1054.4	1083.7	1112.9	1146.7	1187.2	1227.7	1269.4
22.5°	908.1	918.3	934.0	952.0	975.7	1011.7	1046.5	1099.4	1153.5	1210.8	1276.1
25°	809.1	820.4	833.9	853.0	876.6	914.9	965.5	1021.8	1088.2	1163.6	1244.6
27.5°	706.7	718.0	729.2	742.7	769.7	810.2	869.9	928.4	1001.5	1083.7	1178.2
30°	604.3	605.4	612.2	629.1	657.2	710.1	754.0	827.1	903.6	990.3	1099.4
32.5°	491.8	490.6	498.5	513.1	540.2	590.8	644.8	715.7	791.1	900.3	1012.8
35°	391.6	391.6	406.2	420.9	451.3	487.3	534.5	597.5	686.4	787.7	900.3
37.5°	338.7	346.6	355.6	370.2	393.9	422.0	463.6	518.8	588.5	685.3	788.9
40°	321.8	326.3	334.2	347.7	368.0	393.9	424.2	465.9	519.9	597.5	692.1
42.5°	315.1	316.2	320.7	330.8	348.8	374.7	406.2	443.4	483.9	539.0	621.2
45°	308.3	307.2	309.5	317.3	332.0	361.2	397.2	437.7	478.3	524.4	591.9
47.5°	302.7	302.7	302.7	306.1	319.6	348.8	390.5	437.7	486.1	537.9	604.3
50°	287.0	285.8	285.8	288.1	298.2	329.7	379.2	436.6	499.6	567.2	642.6
52.5°	269.0	269.0	270.1	271.2	280.2	311.7	366.9	436.6	515.4	605.4	699.9
55°	263.3	264.5	265.6	264.5	271.2	298.2	353.4	429.9	522.1	635.8	761.8
57.5°	258.8	261.1	261.1	259.9	264.5	287.0	339.8	416.4	516.5	647.1	805.7
60°	252.1	252.1	252.1	248.7	250.9	271.2	319.6	395.0	498.5	636.9	812.5
62.5°	237.4	237.4	235.2	234.1	232.9	248.7	292.6	363.5	465.9	609.9	795.6
63°	234.1	232.9	232.9	229.6	229.6	244.2	287.0	359.0	456.9	603.2	788.9
65°	221.7	221.7	221.7	219.4	218.3	229.6	264.5	327.5	422.0	571.7	755.1
67.5°	208.2	209.3	207.1	205.9	204.8	211.6	238.6	288.1	368.0	505.3	692.1
70°	189.1	190.2	190.2	189.1	187.9	192.4	209.3	247.6	305.0	420.9	589.7
72.5°	172.2	174.4	174.4	176.7	176.7	180.1	186.8	205.9	244.2	328.6	463.6
75°	154.2	155.3	157.5	159.8	157.5	156.4	157.5	172.2	191.3	243.1	330.8
77.5°	138.4	141.8	141.8	140.7	137.3	135.0	135.0	141.8	157.5	184.6	236.3
80°	114.8	120.4	121.5	118.2	114.8	114.8	117.0	121.5	131.7	151.9	178.9
82.5°	92.3	97.9	99.0	100.2	99.0	102.4	102.4	103.5	109.2	124.9	146.3
85°	70.9	75.4	78.8	79.9	81.0	82.1	81.0	75.4	78.8	88.9	99.0
87.5°	31.5	32.6	30.4	31.5	30.4	31.5	32.6	27.0	25.9	34.9	36.0
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: P152948

CATALOG NUMBER: TLM-E04-LED-E1-SLL-8030

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5
2.5°	1168.1	1168.1	1169.2	1167.0	1167.0	1168.1	1164.7
5°	1150.1	1154.6	1154.6	1154.6	1152.3	1154.6	1155.7
7.5°	1154.6	1158.0	1160.2	1160.2	1159.1	1163.6	1167.0
10°	1160.2	1165.8	1168.1	1168.1	1168.1	1173.7	1181.6
12.5°	1181.6	1186.1	1189.5	1189.5	1191.7	1198.5	1207.5
15°	1221.0	1226.6	1226.6	1225.5	1232.2	1240.1	1250.2
17.5°	1264.9	1280.6	1288.5	1287.4	1293.0	1303.1	1314.4
20°	1306.5	1350.4	1369.5	1383.0	1388.6	1402.2	1405.5
22.5°	1341.4	1414.5	1467.4	1512.4	1533.8	1547.3	1563.1
25°	1329.0	1428.0	1522.6	1614.8	1680.1	1746.5	1774.6
27.5°	1278.4	1402.2	1525.9	1661.0	1779.1	1897.3	1982.8
30°	1216.5	1365.0	1531.6	1722.9	1909.7	2090.8	2234.9
32.5°	1145.6	1330.1	1543.9	1780.3	2025.6	2263.0	2471.2
35°	1056.7	1263.7	1513.6	1785.9	2075.1	2363.2	2633.3
37.5°	944.1	1173.7	1442.7	1745.4	2077.3	2407.1	2730.0
40°	831.6	1060.1	1352.6	1686.9	2048.1	2417.2	2790.8
42.5°	752.8	958.8	1261.5	1612.6	2000.8	2401.4	2820.1
45°	698.8	885.6	1180.5	1545.1	1950.2	2373.3	2824.6
47.5°	694.3	854.1	1127.6	1495.6	1909.7	2348.5	2824.6
50°	732.6	871.0	1109.6	1470.8	1892.8	2340.7	2826.8
52.5°	804.6	938.5	1142.2	1489.9	1906.3	2350.8	2836.9
55°	891.3	1040.9	1230.0	1556.3	1963.7	2384.6	2859.4
57.5°	970.0	1159.1	1379.6	1684.6	2068.3	2470.1	2922.5
60°	1016.2	1260.4	1538.3	1864.7	2247.3	2640.0	3048.5
62.5°	1021.8	1316.6	1679.0	2060.5	2464.5	2834.7	3249.9
63°	1017.3	1321.1	1697.0	2097.6	2510.6	2883.1	3319.7
65°	992.5	1322.3	1747.6	2228.1	2670.4	3086.8	3514.4
67.5°	929.5	1286.2	1765.6	2330.5	2871.8	3354.6	3877.9
70°	820.4	1183.8	1712.7	2332.8	2949.5	3504.3	4107.4
72.5°	659.4	989.2	1484.3	2122.4	2744.7	3356.8	4047.8
75°	482.8	727.0	1121.9	1644.1	2239.4	2794.2	3467.1
77.5°	320.7	470.4	756.2	1171.5	1605.8	2010.9	2496.0
80°	220.6	291.5	442.3	704.5	982.4	1179.3	1590.1
82.5°	162.0	192.4	245.3	360.1	472.6	581.8	830.5
85°	101.3	110.3	122.7	177.8	254.3	343.2	517.6
87.5°	27.0	28.1	25.9	34.9	55.1	52.9	58.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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