

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: P152950

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P152950  
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  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(4) LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR LEFT  
Light Source: (84) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

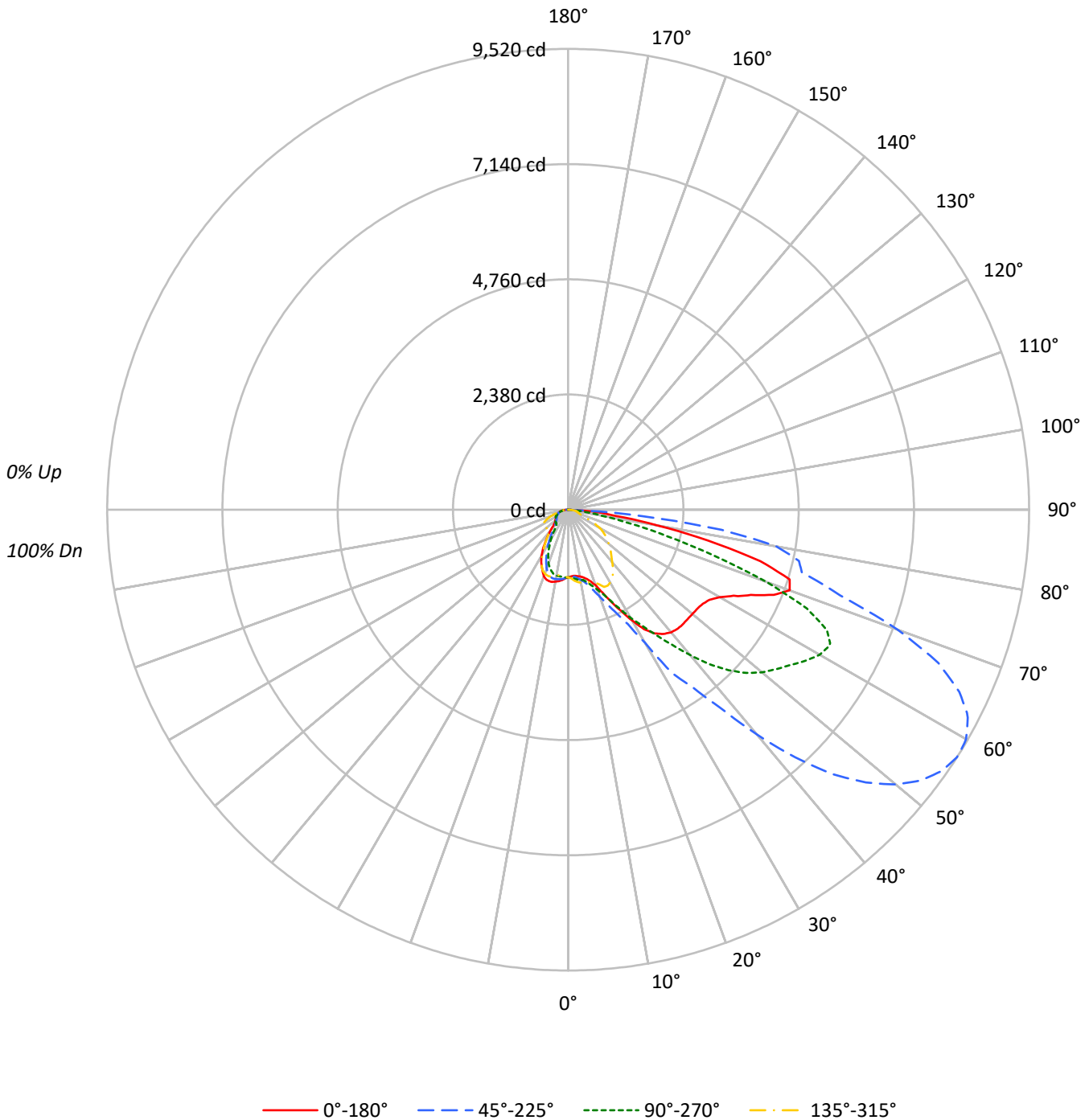
Lumens per Lamp: N/A  
Luminaire Lumens: 11129.8 lumens  
Efficiency: N/A  
Efficacy: 114.5 lumens/watt  
Spacing Criteria (0/90/45): 1.93 / 2.48 / 2.44  
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')  
CIE Type: Direct

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

### 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	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°	22471	22471	22471	22471
5°	22083	23050	23545	22470
10°	22839	23969	24601	22557
15°	24637	25901	25436	21955
20°	28471	30068	25076	20242
25°	37273	36823	22879	17088
30°	49123	47787	20406	13232
35°	61191	61844	16343	9047
40°	69348	82238	11969	7913
45°	76037	106512	8997	8300
50°	83711	130566	8598	8498
55°	94896	156665	8775	8703
60°	116057	192658	9553	9553
65°	158292	224182	10085	9933
70°	228601	204049	10649	10522
75°	254994	132090	11750	11092
80°	174304	64143	13443	11963
85°	113050	31207	16221	14747



TEST NUMBER: P152950

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

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.1	1.2
10°-20°	424.0	3.8
20°-30°	753.3	6.8
30°-40°	1186.3	10.7
40°-50°	1745.9	15.7
50°-60°	2319.0	20.8
60°-70°	2554.4	23.0
70°-80°	1602.6	14.4
80°-90°	408.2	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°	1313.5	11.8
0°-40°	2499.8	22.5
0°-60°	6564.7	59.0
0°-90°	11129.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11129.8	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1399	1399	1399	1399	1399	
5°	1369	1429	1460	1393	1369	132
15°	1481	1557	1529	1320	1481	429
25°	2103	2077	1291	964	2103	992
35°	3120	3153	833	461	3120	1933
45°	3347	4688	396	365	3347	2587
55°	3388	5593	313	311	3388	3073
65°	4164	5897	265	261	4164	4192
75°	4108	2128	189	179	4108	4017
85°	613	169	88	80	613	709
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°	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7
2.5°	1380.0	1382.7	1382.7	1381.3	1381.3	1384.0	1382.7	1381.3	1377.3	1382.7	1382.7
5°	1369.3	1372.0	1372.0	1374.7	1377.3	1380.0	1380.0	1382.7	1381.3	1386.7	1390.7
7.5°	1382.7	1385.3	1390.7	1397.3	1401.3	1410.7	1410.7	1417.3	1420.0	1424.0	1422.7
10°	1400.0	1406.7	1418.7	1429.3	1437.3	1448.0	1456.0	1465.3	1465.3	1469.3	1472.0
12.5°	1430.7	1437.3	1450.7	1464.0	1476.0	1489.3	1501.3	1510.7	1520.0	1522.7	1528.0
15°	1481.3	1489.3	1509.3	1528.0	1542.7	1560.0	1576.0	1594.7	1612.0	1616.0	1618.7
17.5°	1557.3	1573.3	1588.0	1621.3	1642.7	1665.3	1690.7	1717.3	1722.7	1750.7	1757.3
20°	1665.3	1685.3	1698.7	1740.0	1776.0	1805.3	1842.7	1873.3	1885.3	1912.0	1938.7
22.5°	1852.0	1848.0	1868.0	1909.3	1936.0	1994.7	2026.7	2058.7	2074.7	2114.7	2136.0
25°	2102.7	2124.0	2168.0	2172.0	2197.3	2265.3	2306.7	2338.7	2340.0	2352.0	2374.7
27.5°	2349.3	2437.3	2506.7	2544.0	2612.0	2674.7	2672.0	2717.3	2646.7	2661.3	2682.7
30°	2648.0	2794.7	2925.3	3013.3	3082.7	3156.0	3192.0	3217.3	3186.7	3173.3	3148.0
32.5°	2928.0	3133.3	3334.7	3490.7	3620.0	3741.3	3821.3	3857.3	3900.0	4008.0	4046.7
35°	3120.0	3410.7	3661.3	3886.7	4102.7	4296.0	4436.0	4516.0	4485.3	4470.7	4462.7
37.5°	3234.7	3589.3	3902.7	4221.3	4469.3	4758.7	4976.0	5186.7	5234.7	5150.7	5109.3
40°	3306.7	3726.7	4129.3	4505.3	4826.7	5200.0	5469.3	5785.3	6025.3	6057.3	5958.7
42.5°	3341.3	3818.7	4288.0	4713.3	5148.0	5605.3	5946.7	6329.3	6688.0	6934.7	6873.3
45°	3346.7	3878.7	4404.0	4901.3	5418.7	5961.3	6401.3	6825.3	7305.3	7728.0	7740.0
47.5°	3346.7	3924.0	4484.0	5037.3	5661.3	6270.7	6750.7	7252.0	7840.0	8340.0	8493.3
50°	3349.3	3954.7	4558.7	5144.0	5846.7	6532.0	7074.7	7666.7	8285.3	8829.3	9125.3
52.5°	3361.3	3977.3	4617.3	5220.0	5966.7	6716.0	7326.7	8009.3	8625.3	9184.0	9566.7
55°	3388.0	4009.3	4660.0	5266.7	6046.7	6836.0	7509.3	8244.0	8845.3	9412.0	9946.7
57.5°	3462.7	4065.3	4712.0	5308.0	6090.7	6914.7	7637.3	8345.3	8929.3	9520.0	10148.0
60°	3612.0	4184.0	4801.3	5390.7	6164.0	7060.0	7698.7	8277.3	8868.0	9488.0	10193.3
62.5°	3850.7	4369.3	4925.3	5530.7	6373.3	7285.3	7652.0	8074.7	8626.7	9302.7	10032.0
63°	3933.3	4409.3	4953.3	5561.3	6430.7	7326.7	7632.0	8014.7	8577.3	9244.0	9974.7
65°	4164.0	4586.7	5086.7	5716.0	6666.7	7368.0	7476.0	7702.7	8236.0	8909.3	9636.0
67.5°	4594.7	5017.3	5373.3	5977.3	6865.3	7205.3	6992.0	7020.0	7577.3	8274.7	8928.0
70°	4866.7	5370.7	5556.0	6010.7	6829.3	6964.0	6365.3	5994.7	6441.3	7236.0	7808.0
72.5°	4796.0	5374.7	5354.7	5566.7	6109.3	6234.7	5614.7	5030.7	5296.0	5889.3	6260.0
75°	4108.0	4800.0	4653.3	4610.7	4801.3	4884.0	4418.7	4329.3	4664.0	4993.3	4998.7
77.5°	2957.3	3718.7	3546.7	3300.0	3286.7	3477.3	3540.0	4125.3	4620.0	4880.0	4765.3
80°	1884.0	2709.3	2530.7	2100.0	2093.3	2341.3	2892.0	3688.0	4212.0	4357.3	4058.7
82.5°	984.0	1773.3	1841.3	1576.0	1804.0	2214.7	2752.0	2972.0	3170.7	3190.7	2838.7
85°	613.3	1090.7	1282.7	1324.0	1629.3	1964.0	1960.0	1882.7	1794.7	1536.0	1389.3
87.5°	69.3	137.3	208.0	197.3	265.3	372.0	464.0	272.0	190.7	69.3	96.0
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-E04-LED-E1-SLL

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7
2.5°	1385.3	1386.7	1388.0	1388.0	1394.7	1393.3	1394.7	1397.3	1401.3	1404.0	1406.7
5°	1396.0	1396.0	1401.3	1405.3	1413.3	1418.7	1421.3	1429.3	1438.7	1436.0	1444.0
7.5°	1430.7	1429.3	1434.7	1437.3	1444.0	1453.3	1452.0	1458.7	1466.7	1469.3	1476.0
10°	1477.3	1473.3	1473.3	1470.7	1472.0	1469.3	1469.3	1469.3	1474.7	1473.3	1478.7
12.5°	1525.3	1524.0	1521.3	1513.3	1513.3	1502.7	1497.3	1490.7	1489.3	1480.0	1481.3
15°	1624.0	1624.0	1618.7	1602.7	1589.3	1580.0	1566.7	1557.3	1544.0	1526.7	1517.3
17.5°	1768.0	1749.3	1742.7	1740.0	1718.7	1710.7	1681.3	1650.7	1636.0	1612.0	1598.7
20°	1944.0	1940.0	1913.3	1900.0	1873.3	1836.0	1798.7	1758.7	1734.7	1705.3	1689.3
22.5°	2142.7	2113.3	2100.0	2080.0	2038.7	1996.0	1940.0	1886.7	1849.3	1829.3	1817.3
25°	2374.7	2345.3	2332.0	2305.3	2254.7	2209.3	2140.0	2077.3	2044.0	2010.7	1992.0
27.5°	2682.7	2654.7	2638.7	2569.3	2552.0	2477.3	2392.0	2306.7	2262.7	2213.3	2181.3
30°	3142.7	3144.0	3061.3	2977.3	2890.7	2761.3	2672.0	2576.0	2504.0	2433.3	2362.7
32.5°	3920.0	3721.3	3568.0	3388.0	3200.0	3062.7	2952.0	2837.3	2737.3	2634.7	2517.3
35°	4394.7	4298.7	4100.0	3770.7	3581.3	3414.7	3292.0	3153.3	3030.7	2849.3	2670.7
37.5°	4930.7	4708.0	4466.7	4284.0	4069.3	3876.0	3670.7	3513.3	3301.3	3057.3	2804.0
40°	5713.3	5394.7	5104.0	4858.7	4581.3	4378.7	4149.3	3921.3	3640.0	3286.7	2938.7
42.5°	6530.7	6201.3	5817.3	5498.7	5172.0	4934.7	4650.7	4330.7	3917.3	3480.0	3054.7
45°	7388.0	6948.0	6488.0	6098.7	5758.7	5464.0	5112.0	4688.0	4184.0	3653.3	3162.7
47.5°	8233.3	7728.0	7180.0	6761.3	6318.7	5958.7	5526.7	4990.7	4392.0	3817.3	3270.7
50°	8978.7	8492.0	7832.0	7300.0	6852.0	6408.0	5869.3	5224.0	4556.0	3958.7	3368.0
52.5°	9621.3	9202.7	8508.0	7836.0	7320.0	6821.3	6145.3	5412.0	4721.3	4089.3	3448.0
55°	10093.3	9814.7	9174.7	8341.3	7732.0	7137.3	6378.7	5593.3	4877.3	4193.3	3500.0
57.5°	10449.3	10294.7	9745.3	8817.3	8110.7	7444.0	6620.0	5810.7	5032.0	4282.7	3524.0
60°	10644.0	10686.7	10177.3	9233.3	8445.3	7700.0	6861.3	5996.0	5146.7	4334.7	3510.7
62.5°	10625.3	10886.7	10501.3	9489.3	8640.0	7852.0	7024.0	6082.7	5130.7	4252.0	3389.3
63°	10589.3	10893.3	10537.3	9506.7	8652.0	7857.3	7028.0	6070.7	5097.3	4212.0	3341.3
65°	10278.7	10740.0	10506.7	9428.0	8545.3	7757.3	6944.0	5897.3	4862.7	3997.3	3094.7
67.5°	9446.7	10024.0	9957.3	8872.0	8040.0	7344.0	6514.7	5338.7	4282.7	3469.3	2622.7
70°	8072.0	8614.7	8626.7	7716.0	7021.3	6338.7	5649.3	4344.0	3394.7	2689.3	1956.0
72.5°	6186.7	6536.0	6657.3	6057.3	5592.0	5112.0	4493.3	3153.3	2420.0	1829.3	1273.3
75°	4790.7	4694.7	4693.3	4440.0	4250.7	4016.0	3336.0	2128.0	1589.3	1189.3	778.7
77.5°	4306.7	3880.0	3466.7	3162.7	3010.7	2932.0	2188.0	1282.7	937.3	684.0	448.0
80°	3552.0	2922.7	2361.3	2033.3	1902.7	1993.3	1220.0	693.3	513.3	389.3	290.7
82.5°	2449.3	2033.3	1545.3	1280.0	1098.7	1149.3	624.0	354.7	237.3	217.3	180.0
85°	1276.0	1118.7	944.0	810.7	716.0	629.3	324.0	169.3	98.7	86.7	78.7
87.5°	0.0	1.3	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



TEST NUMBER: P152950

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

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7
2.5°	1410.7	1409.3	1412.0	1413.3	1417.3	1420.0	1421.3	1418.7	1422.7	1426.7	1424.0
5°	1448.0	1457.3	1458.7	1462.7	1462.7	1470.7	1470.7	1470.7	1469.3	1470.7	1468.0
7.5°	1480.0	1492.0	1493.3	1498.7	1500.0	1509.3	1505.3	1508.0	1508.0	1501.3	1498.7
10°	1484.0	1496.0	1502.7	1509.3	1518.7	1530.7	1530.7	1537.3	1537.3	1532.0	1530.7
12.5°	1485.3	1494.7	1501.3	1510.7	1524.0	1541.3	1550.7	1560.0	1564.0	1562.7	1558.7
15°	1513.3	1513.3	1514.7	1522.7	1532.0	1553.3	1566.7	1577.3	1584.0	1581.3	1574.7
17.5°	1586.7	1576.0	1568.0	1554.7	1557.3	1568.0	1576.0	1585.3	1586.7	1584.0	1573.3
20°	1672.0	1658.7	1638.7	1617.3	1606.7	1598.7	1593.3	1593.3	1589.3	1576.0	1558.7
22.5°	1793.3	1776.0	1748.0	1716.0	1694.7	1669.3	1638.7	1609.3	1577.3	1545.3	1508.0
25°	1961.3	1937.3	1908.0	1858.7	1813.3	1760.0	1697.3	1632.0	1556.0	1489.3	1434.7
27.5°	2130.7	2077.3	2001.3	1933.3	1849.3	1769.3	1680.0	1600.0	1502.7	1422.7	1362.7
30°	2270.7	2169.3	2060.0	1952.0	1841.3	1733.3	1626.7	1530.7	1424.0	1342.7	1284.0
32.5°	2378.7	2238.7	2086.7	1945.3	1809.3	1677.3	1554.7	1448.0	1340.0	1256.0	1193.3
35°	2478.7	2284.0	2090.7	1916.0	1748.0	1610.7	1472.0	1356.0	1241.3	1153.3	1085.3
37.5°	2553.3	2305.3	2066.7	1861.3	1668.0	1514.7	1373.3	1254.7	1137.3	1041.3	964.0
40°	2601.3	2292.0	2014.7	1782.7	1573.3	1412.0	1268.0	1145.3	1032.0	926.7	833.3
42.5°	2640.0	2274.7	1962.7	1710.7	1498.7	1322.7	1174.7	1042.7	928.0	813.3	710.7
45°	2697.3	2288.0	1940.0	1660.0	1432.0	1246.7	1084.0	946.7	826.7	714.7	616.0
47.5°	2753.3	2294.7	1906.7	1597.3	1348.0	1168.0	1002.7	869.3	746.7	644.0	553.3
50°	2804.0	2290.7	1854.7	1517.3	1266.7	1089.3	929.3	796.0	674.7	580.0	494.7
52.5°	2828.0	2268.0	1790.7	1440.0	1201.3	1020.0	857.3	728.0	608.0	518.7	440.0
55°	2825.3	2209.3	1706.7	1366.7	1129.3	946.7	786.7	658.7	550.7	468.0	400.0
57.5°	2785.3	2118.7	1617.3	1285.3	1034.7	856.0	704.0	580.0	489.3	420.0	362.7
60°	2701.3	2002.7	1500.0	1166.7	916.0	744.0	601.3	494.7	421.3	368.0	330.7
62.5°	2544.0	1836.0	1353.3	1001.3	756.0	598.7	474.7	405.3	350.7	318.7	301.3
63°	2497.3	1790.7	1290.7	961.3	718.7	565.3	448.0	376.0	336.0	308.0	292.0
65°	2265.3	1568.0	1080.0	776.0	558.7	436.0	360.0	305.3	281.3	269.3	268.0
67.5°	1834.7	1233.3	764.0	532.0	380.0	314.7	276.0	253.3	242.7	240.0	242.7
70°	1288.0	778.7	485.3	353.3	281.3	253.3	236.0	226.7	220.0	221.3	224.0
72.5°	821.3	466.7	333.3	268.0	237.3	222.7	214.7	212.0	210.7	209.3	209.3
75°	468.0	310.7	256.0	232.0	216.0	204.0	197.3	194.7	196.0	197.3	194.7
77.5°	309.3	256.0	228.0	212.0	197.3	184.0	180.0	178.7	181.3	184.0	184.0
80°	244.0	228.0	212.0	196.0	172.0	162.7	165.3	166.7	165.3	166.7	162.7
82.5°	172.0	169.3	173.3	166.7	142.7	134.7	132.0	133.3	130.7	130.7	128.0
85°	80.0	80.0	84.0	84.0	81.3	82.7	89.3	97.3	101.3	97.3	92.0
87.5°	0.0	0.0	0.0	0.0	0.0	12.0	24.0	34.7	37.3	46.7	45.3
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: P152950

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

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7
2.5°	1420.0	1422.7	1421.3	1420.0	1422.7	1420.0	1421.3	1420.0	1420.0	1418.7	1418.7
5°	1465.3	1469.3	1461.3	1460.0	1457.3	1450.7	1450.7	1448.0	1448.0	1442.7	1438.7
7.5°	1494.7	1496.0	1489.3	1488.0	1481.3	1474.7	1469.3	1464.0	1462.7	1458.7	1450.7
10°	1522.7	1520.0	1514.7	1508.0	1501.3	1492.0	1485.3	1478.7	1477.3	1470.7	1461.3
12.5°	1546.7	1545.3	1534.7	1528.0	1517.3	1508.0	1500.0	1492.0	1488.0	1480.0	1466.7
15°	1562.7	1554.7	1541.3	1529.3	1517.3	1506.7	1497.3	1488.0	1484.0	1474.7	1461.3
17.5°	1556.0	1541.3	1524.0	1509.3	1493.3	1480.0	1472.0	1462.7	1456.0	1450.7	1432.0
20°	1532.0	1510.7	1484.0	1466.7	1445.3	1428.0	1422.7	1413.3	1408.0	1388.0	1364.0
22.5°	1469.3	1438.7	1405.3	1380.0	1356.0	1338.7	1325.3	1316.0	1302.7	1290.7	1253.3
25°	1390.7	1356.0	1321.3	1290.7	1258.7	1232.0	1208.0	1185.3	1178.7	1153.3	1117.3
27.5°	1314.7	1276.0	1241.3	1205.3	1164.0	1130.7	1089.3	1057.3	1036.0	1009.3	976.0
30°	1233.3	1194.7	1148.0	1100.0	1052.0	1016.0	969.3	930.7	904.0	876.0	845.3
32.5°	1130.7	1084.0	1028.0	974.7	930.7	888.0	841.3	804.0	777.3	752.0	722.7
35°	1013.3	952.0	892.0	833.3	786.7	750.7	709.3	681.3	662.7	640.0	609.3
37.5°	878.7	809.3	745.3	700.0	658.7	624.0	594.7	577.3	557.3	545.3	526.7
40°	742.7	674.7	612.0	570.7	536.0	516.0	500.0	496.0	482.7	466.7	454.7
42.5°	622.7	557.3	496.0	462.7	440.0	434.7	426.7	426.7	420.0	408.0	400.0
45°	541.3	473.3	420.0	396.0	384.0	382.7	378.7	378.7	377.3	372.0	362.7
47.5°	482.7	421.3	380.0	365.3	362.7	360.0	356.0	354.7	353.3	349.3	344.0
50°	429.3	377.3	350.7	344.0	345.3	341.3	337.3	333.3	332.0	328.0	322.7
52.5°	380.0	342.7	325.3	321.3	321.3	321.3	318.7	318.7	316.0	314.7	309.3
55°	352.0	324.0	314.7	313.3	312.0	310.7	308.0	308.0	305.3	304.0	297.3
57.5°	328.0	310.7	305.3	302.7	301.3	298.7	297.3	297.3	297.3	297.3	289.3
60°	309.3	301.3	300.0	297.3	296.0	290.7	288.0	286.7	288.0	289.3	281.3
62.5°	289.3	288.0	286.7	284.0	282.7	277.3	273.3	270.7	273.3	276.0	274.7
63°	284.0	282.7	282.7	281.3	280.0	273.3	269.3	266.7	269.3	272.0	272.0
65°	265.3	266.7	266.7	265.3	264.0	260.0	254.7	252.0	253.3	257.3	258.7
67.5°	245.3	246.7	245.3	246.7	245.3	242.7	238.7	236.0	234.7	236.0	237.3
70°	226.7	229.3	228.0	226.7	225.3	225.3	222.7	218.7	217.3	216.0	216.0
72.5°	210.7	210.7	208.0	208.0	206.7	206.7	204.0	200.0	198.7	198.7	196.0
75°	193.3	193.3	189.3	189.3	186.7	188.0	185.3	181.3	180.0	180.0	178.7
77.5°	182.7	178.7	172.0	170.7	169.3	169.3	168.0	164.0	162.7	162.7	161.3
80°	161.3	153.3	146.7	145.3	146.7	149.3	149.3	146.7	146.7	146.7	146.7
82.5°	125.3	122.7	118.7	116.0	116.0	120.0	125.3	128.0	130.7	133.3	133.3
85°	92.0	93.3	92.0	88.0	86.7	90.7	96.0	101.3	102.7	108.0	106.7
87.5°	49.3	50.7	46.7	45.3	49.3	52.0	57.3	58.7	61.3	62.7	64.0
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: P152950

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

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7
2.5°	1417.3	1416.0	1417.3	1414.7	1414.7	1412.0	1409.3	1408.0	1405.3	1404.0	1401.3
5°	1441.3	1437.3	1433.3	1432.0	1426.7	1421.3	1417.3	1410.7	1405.3	1396.0	1393.3
7.5°	1457.3	1448.0	1442.7	1441.3	1433.3	1429.3	1420.0	1412.0	1404.0	1392.0	1388.0
10°	1464.0	1454.7	1445.3	1441.3	1432.0	1425.3	1416.0	1404.0	1397.3	1385.3	1382.7
12.5°	1472.0	1454.7	1440.0	1429.3	1416.0	1401.3	1392.0	1385.3	1376.0	1369.3	1366.7
15°	1457.3	1434.7	1412.0	1392.0	1370.7	1354.7	1345.3	1334.7	1324.0	1320.0	1320.0
17.5°	1417.3	1388.0	1349.3	1324.0	1301.3	1284.0	1272.0	1261.3	1260.0	1254.7	1257.3
20°	1334.7	1296.0	1258.7	1240.0	1226.7	1216.0	1204.0	1198.7	1194.7	1186.7	1184.0
22.5°	1220.0	1188.0	1161.3	1148.0	1137.3	1124.0	1113.3	1097.3	1093.3	1085.3	1081.3
25°	1093.3	1068.0	1045.3	1036.0	1029.3	1010.7	1004.0	982.7	968.0	958.7	964.0
27.5°	966.7	948.0	926.7	914.7	910.7	893.3	886.7	862.7	850.7	850.7	837.3
30°	836.0	818.7	805.3	792.0	789.3	768.0	750.7	741.3	728.0	722.7	713.3
32.5°	713.3	696.0	685.3	678.7	668.0	650.7	633.3	617.3	596.0	588.0	584.0
35°	600.0	586.7	573.3	568.0	553.3	534.7	513.3	500.0	474.7	465.3	461.3
37.5°	513.3	497.3	488.0	473.3	458.7	438.7	422.7	410.7	401.3	397.3	397.3
40°	444.0	432.0	421.3	409.3	397.3	386.7	378.7	376.0	374.7	374.7	377.3
42.5°	392.0	381.3	376.0	369.3	365.3	365.3	364.0	365.3	366.7	368.0	372.0
45°	357.3	350.7	348.0	346.7	349.3	352.0	353.3	356.0	361.3	364.0	365.3
47.5°	338.7	333.3	332.0	333.3	337.3	342.7	348.0	352.0	356.0	357.3	358.7
50°	320.0	313.3	310.7	313.3	318.7	326.7	330.7	337.3	340.0	342.7	340.0
52.5°	304.0	298.7	297.3	297.3	302.7	308.0	313.3	318.7	320.0	320.0	318.7
55°	290.7	286.7	282.7	285.3	289.3	294.7	302.7	306.7	309.3	310.7	310.7
57.5°	280.0	276.0	272.0	274.7	278.7	284.0	292.0	296.0	298.7	302.7	304.0
60°	272.0	266.7	262.7	266.7	270.7	278.7	285.3	289.3	296.0	297.3	297.3
62.5°	264.0	258.7	252.0	256.0	256.0	260.0	266.7	272.0	278.7	281.3	281.3
63°	262.7	257.3	250.7	253.3	253.3	256.0	261.3	266.7	274.7	277.3	276.0
65°	252.0	250.7	244.0	244.0	241.3	244.0	248.0	253.3	257.3	261.3	261.3
67.5°	234.7	233.3	232.0	232.0	232.0	234.7	237.3	241.3	245.3	248.0	246.7
70°	214.7	214.7	214.7	216.0	216.0	218.7	220.0	218.7	222.7	225.3	224.0
72.5°	197.3	196.0	194.7	197.3	196.0	196.0	198.7	197.3	201.3	201.3	202.7
75°	178.7	177.3	177.3	178.7	176.0	173.3	174.7	174.7	176.0	176.0	178.7
77.5°	162.7	162.7	162.7	161.3	158.7	157.3	156.0	156.0	156.0	156.0	157.3
80°	148.0	148.0	148.0	146.7	144.0	141.3	138.7	137.3	136.0	129.3	129.3
82.5°	133.3	133.3	133.3	133.3	132.0	129.3	125.3	114.7	109.3	104.0	105.3
85°	105.3	108.0	110.7	114.7	113.3	113.3	105.3	92.0	84.0	78.7	80.0
87.5°	68.0	60.0	60.0	58.7	56.0	53.3	53.3	45.3	37.3	33.3	34.7
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: P152950

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

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7
2.5°	1401.3	1398.7	1396.0	1396.0	1392.0	1392.0	1389.3	1394.7	1389.3	1385.3	1385.3
5°	1390.7	1388.0	1380.0	1378.7	1373.3	1373.3	1373.3	1370.7	1370.7	1368.0	1366.7
7.5°	1384.0	1377.3	1370.7	1366.7	1366.7	1364.0	1369.3	1366.7	1368.0	1368.0	1369.3
10°	1378.7	1373.3	1370.7	1369.3	1369.3	1373.3	1377.3	1378.7	1377.3	1378.7	1378.7
12.5°	1365.3	1368.0	1369.3	1374.7	1381.3	1389.3	1398.7	1400.0	1402.7	1402.7	1405.3
15°	1322.7	1329.3	1337.3	1350.7	1368.0	1385.3	1402.7	1417.3	1430.7	1437.3	1442.7
17.5°	1262.7	1269.3	1284.0	1298.7	1321.3	1346.7	1376.0	1401.3	1429.3	1454.7	1480.0
20°	1181.3	1192.0	1196.0	1222.7	1249.3	1284.0	1318.7	1358.7	1406.7	1454.7	1504.0
22.5°	1076.0	1088.0	1106.7	1128.0	1156.0	1198.7	1240.0	1302.7	1366.7	1434.7	1512.0
25°	958.7	972.0	988.0	1010.7	1038.7	1084.0	1144.0	1210.7	1289.3	1378.7	1474.7
27.5°	837.3	850.7	864.0	880.0	912.0	960.0	1030.7	1100.0	1186.7	1284.0	1396.0
30°	716.0	717.3	725.3	745.3	778.7	841.3	893.3	980.0	1070.7	1173.3	1302.7
32.5°	582.7	581.3	590.7	608.0	640.0	700.0	764.0	848.0	937.3	1066.7	1200.0
35°	464.0	464.0	481.3	498.7	534.7	577.3	633.3	708.0	813.3	933.3	1066.7
37.5°	401.3	410.7	421.3	438.7	466.7	500.0	549.3	614.7	697.3	812.0	934.7
40°	381.3	386.7	396.0	412.0	436.0	466.7	502.7	552.0	616.0	708.0	820.0
42.5°	373.3	374.7	380.0	392.0	413.3	444.0	481.3	525.3	573.3	638.7	736.0
45°	365.3	364.0	366.7	376.0	393.3	428.0	470.7	518.7	566.7	621.3	701.3
47.5°	358.7	358.7	358.7	362.7	378.7	413.3	462.7	518.7	576.0	637.3	716.0
50°	340.0	338.7	338.7	341.3	353.3	390.7	449.3	517.3	592.0	672.0	761.3
52.5°	318.7	318.7	320.0	321.3	332.0	369.3	434.7	517.3	610.7	717.3	829.3
55°	312.0	313.3	314.7	313.3	321.3	353.3	418.7	509.3	618.7	753.3	902.7
57.5°	306.7	309.3	309.3	308.0	313.3	340.0	402.7	493.3	612.0	766.7	954.7
60°	298.7	298.7	298.7	294.7	297.3	321.3	378.7	468.0	590.7	754.7	962.7
62.5°	281.3	281.3	278.7	277.3	276.0	294.7	346.7	430.7	552.0	722.7	942.7
63°	277.3	276.0	276.0	272.0	272.0	289.3	340.0	425.3	541.3	714.7	934.7
65°	262.7	262.7	262.7	260.0	258.7	272.0	313.3	388.0	500.0	677.3	894.7
67.5°	246.7	248.0	245.3	244.0	242.7	250.7	282.7	341.3	436.0	598.7	820.0
70°	224.0	225.3	225.3	224.0	222.7	228.0	248.0	293.3	361.3	498.7	698.7
72.5°	204.0	206.7	206.7	209.3	209.3	213.3	221.3	244.0	289.3	389.3	549.3
75°	182.7	184.0	186.7	189.3	186.7	185.3	186.7	204.0	226.7	288.0	392.0
77.5°	164.0	168.0	168.0	166.7	162.7	160.0	160.0	168.0	186.7	218.7	280.0
80°	136.0	142.7	144.0	140.0	136.0	136.0	138.7	144.0	156.0	180.0	212.0
82.5°	109.3	116.0	117.3	118.7	117.3	121.3	121.3	122.7	129.3	148.0	173.3
85°	84.0	89.3	93.3	94.7	96.0	97.3	96.0	89.3	93.3	105.3	117.3
87.5°	37.3	38.7	36.0	37.3	36.0	37.3	38.7	32.0	30.7	41.3	42.7
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: P152950

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

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7	1398.7
2.5°	1384.0	1384.0	1385.3	1382.7	1382.7	1384.0	1380.0
5°	1362.7	1368.0	1368.0	1368.0	1365.3	1368.0	1369.3
7.5°	1368.0	1372.0	1374.7	1374.7	1373.3	1378.7	1382.7
10°	1374.7	1381.3	1384.0	1384.0	1384.0	1390.7	1400.0
12.5°	1400.0	1405.3	1409.3	1409.3	1412.0	1420.0	1430.7
15°	1446.7	1453.3	1453.3	1452.0	1460.0	1469.3	1481.3
17.5°	1498.7	1517.3	1526.7	1525.3	1532.0	1544.0	1557.3
20°	1548.0	1600.0	1622.7	1638.7	1645.3	1661.3	1665.3
22.5°	1589.3	1676.0	1738.7	1792.0	1817.3	1833.3	1852.0
25°	1574.7	1692.0	1804.0	1913.3	1990.7	2069.3	2102.7
27.5°	1514.7	1661.3	1808.0	1968.0	2108.0	2248.0	2349.3
30°	1441.3	1617.3	1814.7	2041.3	2262.7	2477.3	2648.0
32.5°	1357.3	1576.0	1829.3	2109.3	2400.0	2681.3	2928.0
35°	1252.0	1497.3	1793.3	2116.0	2458.7	2800.0	3120.0
37.5°	1118.7	1390.7	1709.3	2068.0	2461.3	2852.0	3234.7
40°	985.3	1256.0	1602.7	1998.7	2426.7	2864.0	3306.7
42.5°	892.0	1136.0	1494.7	1910.7	2370.7	2845.3	3341.3
45°	828.0	1049.3	1398.7	1830.7	2310.7	2812.0	3346.7
47.5°	822.7	1012.0	1336.0	1772.0	2262.7	2782.7	3346.7
50°	868.0	1032.0	1314.7	1742.7	2242.7	2773.3	3349.3
52.5°	953.3	1112.0	1353.3	1765.3	2258.7	2785.3	3361.3
55°	1056.0	1233.3	1457.3	1844.0	2326.7	2825.3	3388.0
57.5°	1149.3	1373.3	1634.7	1996.0	2450.7	2926.7	3462.7
60°	1204.0	1493.3	1822.7	2209.3	2662.7	3128.0	3612.0
62.5°	1210.7	1560.0	1989.3	2441.3	2920.0	3358.7	3850.7
63°	1205.3	1565.3	2010.7	2485.3	2974.7	3416.0	3933.3
65°	1176.0	1566.7	2070.7	2640.0	3164.0	3657.3	4164.0
67.5°	1101.3	1524.0	2092.0	2761.3	3402.7	3974.7	4594.7
70°	972.0	1402.7	2029.3	2764.0	3494.7	4152.0	4866.7
72.5°	781.3	1172.0	1758.7	2514.7	3252.0	3977.3	4796.0
75°	572.0	861.3	1329.3	1948.0	2653.3	3310.7	4108.0
77.5°	380.0	557.3	896.0	1388.0	1902.7	2382.7	2957.3
80°	261.3	345.3	524.0	834.7	1164.0	1397.3	1884.0
82.5°	192.0	228.0	290.7	426.7	560.0	689.3	984.0
85°	120.0	130.7	145.3	210.7	301.3	406.7	613.3
87.5°	32.0	33.3	30.7	41.3	65.3	62.7	69.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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