

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: P152371

Luminaire Tested: **TLM-E03-LED-E1-SL4-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P152371  
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-E03-LED-E1-SL4-7050  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL  
Light Source: (63) 5000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

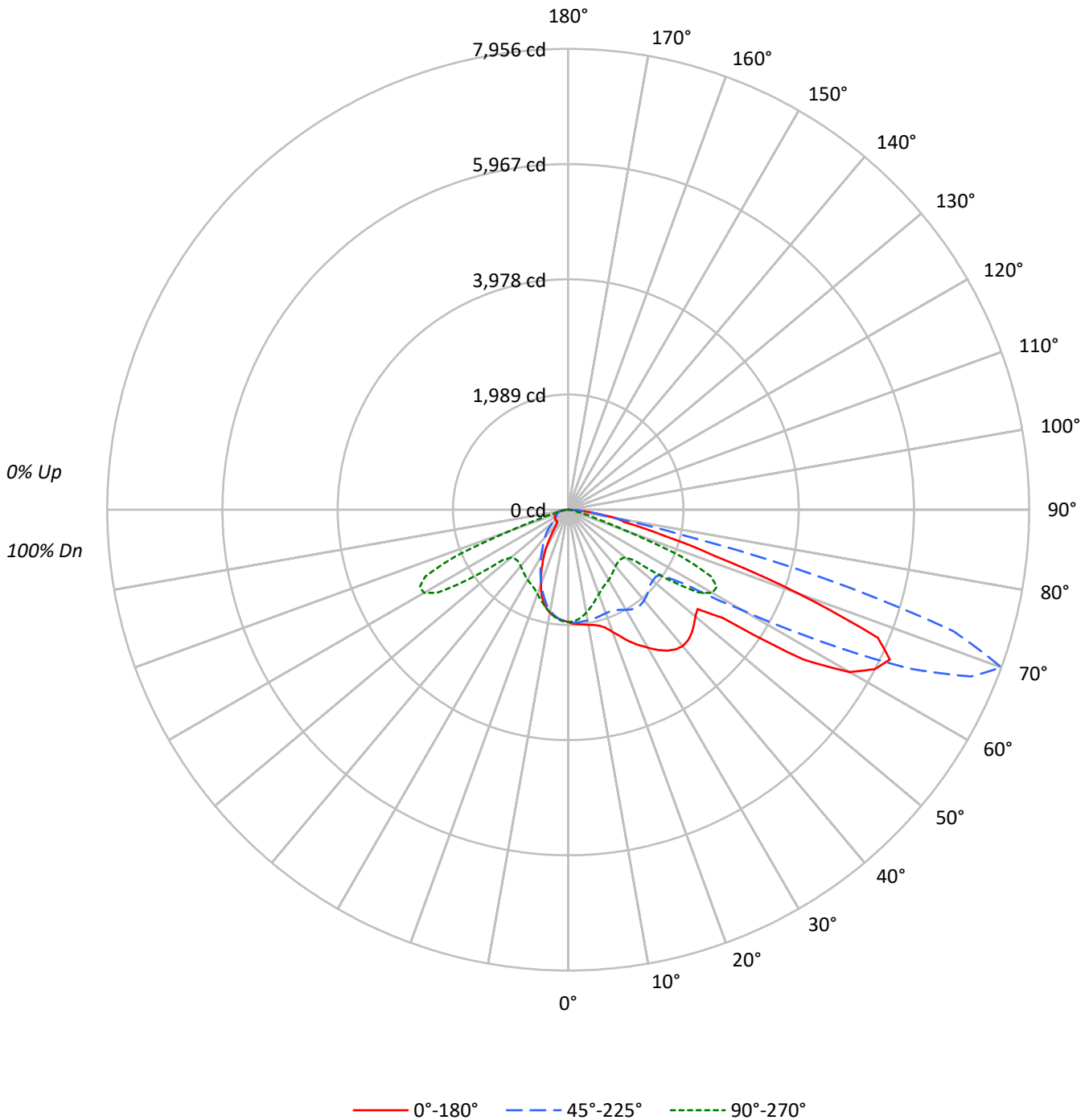
Lumens per Lamp: N/A  
Luminaire Lumens: 9093.7 lumens  
Efficiency: N/A  
Efficacy: 120.9 lumens/watt  
Spacing Criteria (0/90/45): 1.36 / 1.07 / 1.36  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
CIE Type: Direct

Input Watts (W): 75.2  
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



TEST NUMBER: P152371  
CATALOG NUMBER: TLM-E03-LED-E1-SL4-7050

### Luminous Intensity Polar Plot





TEST NUMBER: P152371

CATALOG NUMBER: TLM-E03-LED-E1-SL4-7050

**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°	41773	41773	41773
5°	42885	41133	40867
10°	44144	39433	39501
15°	46219	37345	36796
20°	51434	35450	31523
25°	59642	34561	25202
30°	68360	34767	18825
35°	78040	35029	12244
40°	86365	35758	8448
45°	91752	37770	8433
50°	95949	42923	9381
55°	122086	78567	10243
60°	241353	123570	11487
65°	311992	138514	12908
70°	265450	65492	14534
75°	139546	24071	17925
80°	103803	13104	19464
85°	60071	12671	19513



TEST NUMBER: P152371

CATALOG NUMBER: TLM-E03-LED-E1-SL4-7050

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	181.3	2.0
10°-20°	496.3	5.5
20°-30°	734.6	8.1
30°-40°	928.4	10.2
40°-50°	1049.9	11.5
50°-60°	1494.1	16.4
60°-70°	2782.6	30.6
70°-80°	1275.3	14.0
80°-90°	151.4	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°	1412.1	15.5
0°-40°	2340.5	25.7
0°-60°	4884.5	53.7
0°-90°	9093.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9093.7	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1940	1940	1940	1940	1940	
5°	1984	1952	1903	1888	1891	190
15°	2074	1924	1676	1586	1651	597
25°	2511	1914	1455	1134	1061	1166
35°	2970	2067	1333	759	466	1856
45°	3014	1963	1241	497	277	2318
55°	3253	1952	2093	252	273	3418
65°	6125	6486	2719	226	253	5648
75°	1678	4560	289	178	216	2063
85°	243	213	51	81	79	306
90°	0	0	0	0	0	



TEST NUMBER: P152371

CATALOG NUMBER: TLM-E03-LED-E1-SL4-7050

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1940.4	1940.4	1940.4	1940.4	1940.4	1940.4	1940.4	1940.4	1940.4	1940.4	1940.4
2.5°	1970.1	1975.3	1969.1	1968.1	1968.1	1967.0	1960.9	1959.9	1951.7	1952.7	1954.7
5°	1984.5	1986.5	1982.4	1981.4	1979.4	1975.3	1970.1	1964.0	1957.8	1951.7	1946.5
7.5°	1998.9	1996.8	1993.7	1993.7	1990.6	1984.5	1974.2	1966.0	1952.7	1945.5	1936.3
10°	2019.4	2016.3	2012.2	2010.1	2005.0	1995.8	1981.4	1970.1	1953.7	1939.3	1923.9
12.5°	2038.9	2037.8	2031.7	2028.6	2020.4	2011.2	1993.7	1976.3	1954.7	1932.2	1911.6
15°	2073.8	2069.7	2063.5	2057.3	2044.0	2031.7	2005.0	1984.5	1953.7	1923.9	1892.1
17.5°	2134.3	2127.1	2121.0	2107.6	2091.2	2069.7	2030.7	1995.8	1953.7	1910.6	1874.7
20°	2245.1	2229.7	2221.5	2204.1	2175.3	2136.4	2075.8	2019.4	1956.8	1901.4	1853.1
22.5°	2370.3	2360.0	2348.8	2337.5	2292.3	2235.9	2153.8	2069.7	1975.3	1897.3	1835.7
25°	2510.9	2497.5	2491.4	2471.9	2429.8	2365.2	2253.3	2136.4	2017.3	1913.7	1835.7
27.5°	2636.1	2632.0	2630.9	2608.4	2568.3	2492.4	2360.0	2219.5	2074.8	1947.5	1851.1
30°	2750.0	2745.9	2743.8	2731.5	2685.3	2595.0	2451.4	2293.3	2137.4	1994.7	1879.8
32.5°	2871.0	2857.7	2851.5	2827.9	2775.6	2669.9	2505.7	2341.6	2186.6	2040.9	1911.6
35°	2969.5	2958.3	2945.9	2912.1	2838.2	2713.0	2529.3	2358.0	2206.1	2066.6	1928.1
37.5°	3041.4	3030.1	3012.6	2969.5	2878.2	2727.4	2528.3	2352.9	2198.9	2062.5	1931.1
40°	3073.2	3061.9	3043.4	2989.0	2885.4	2719.2	2508.8	2329.3	2177.4	2040.9	1918.8
42.5°	3060.9	3052.7	3029.1	2976.7	2862.8	2682.2	2469.8	2285.1	2136.4	2006.0	1891.1
45°	3013.7	3007.5	2984.9	2929.5	2811.5	2622.7	2412.4	2229.7	2087.1	1962.9	1854.2
47.5°	2942.9	2940.8	2918.2	2863.9	2746.9	2563.2	2352.9	2175.3	2037.8	1920.9	1823.4
50°	2864.9	2854.6	2843.3	2793.1	2686.3	2511.9	2309.8	2141.5	2010.1	1905.5	1810.0
52.5°	2815.6	2812.6	2802.3	2757.1	2654.5	2482.1	2290.3	2129.2	2008.1	1902.4	1802.9
55°	3252.8	3259.9	3165.5	2969.5	2797.2	2564.2	2348.8	2191.8	2058.4	1951.7	1878.8
57.5°	4811.4	4779.6	4617.5	4228.6	3789.4	3209.7	2792.0	2538.6	2373.4	2391.9	2428.8
60°	5605.6	5599.5	5569.7	5418.9	5126.4	4685.2	4195.7	3634.5	3455.9	3475.4	3489.8
62.5°	5960.6	5969.9	5992.5	5936.0	5859.1	5730.8	5486.6	5260.8	5021.8	4932.5	4693.4
65°	6124.8	6141.2	6192.5	6224.4	6254.1	6276.7	6373.1	6637.9	6812.3	6486.0	5726.7
67.5°	5785.2	5864.2	6033.5	6198.7	6346.5	6556.8	6883.1	7497.8	7925.6	7524.4	6423.4
70°	4217.3	4325.0	4519.0	5030.0	5575.9	6053.0	6685.1	7620.9	8266.3	7956.4	6595.8
72.5°	2644.3	2674.0	2760.2	2948.0	3353.3	3965.9	5071.0	6474.7	7219.7	6972.4	5574.8
75°	1677.7	1687.9	1684.9	1728.0	1796.7	1930.1	2367.2	3824.3	4945.8	4560.0	3107.0
77.5°	999.4	1014.8	1021.0	1034.3	1067.1	1114.4	1150.3	1301.1	2073.8	2013.2	1127.7
80°	837.3	849.6	839.4	836.3	815.8	801.4	818.8	801.4	743.9	716.2	659.8
82.5°	443.3	442.3	439.2	468.9	529.5	576.7	612.6	604.4	546.9	465.9	395.1
85°	243.2	251.4	251.4	261.7	252.4	253.4	261.7	276.0	255.5	213.4	174.4
87.5°	20.5	31.8	25.7	31.8	43.1	30.8	29.8	29.8	25.7	18.5	16.4
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: P152371

CATALOG NUMBER: TLM-E03-LED-E1-SL4-7050

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1940.4	1940.4	1940.4	1940.4	1940.4	1940.4	1940.4	1940.4	1940.4	1940.4	1940.4
2.5°	1949.6	1947.5	1943.4	1940.4	1940.4	1935.2	1932.2	1930.1	1929.1	1925.0	1925.0
5°	1943.4	1936.3	1929.1	1923.9	1920.9	1915.7	1907.5	1903.4	1898.3	1894.2	1892.1
7.5°	1930.1	1916.8	1905.5	1897.3	1887.0	1878.8	1868.5	1859.3	1850.1	1846.0	1843.9
10°	1909.6	1892.1	1874.7	1859.3	1844.9	1830.6	1817.2	1803.9	1792.6	1784.4	1776.2
12.5°	1890.1	1863.4	1840.8	1818.3	1795.7	1778.2	1759.8	1740.3	1723.9	1708.5	1704.4
15°	1863.4	1832.6	1803.9	1776.2	1748.5	1719.8	1697.2	1675.6	1649.0	1631.5	1618.2
17.5°	1838.8	1801.8	1767.0	1734.1	1700.3	1670.5	1636.6	1607.9	1581.2	1554.5	1535.1
20°	1812.1	1772.1	1735.1	1698.2	1661.3	1623.3	1584.3	1547.4	1514.5	1482.7	1450.9
22.5°	1788.5	1747.5	1711.5	1671.5	1630.5	1587.4	1542.2	1496.1	1458.1	1417.1	1380.1
25°	1774.1	1729.0	1692.0	1653.1	1607.9	1560.7	1509.4	1455.0	1408.8	1361.6	1317.5
27.5°	1774.1	1715.6	1677.7	1638.7	1592.5	1542.2	1485.8	1426.3	1374.0	1321.6	1267.2
30°	1789.5	1717.7	1666.4	1625.4	1578.2	1523.8	1461.2	1398.6	1341.1	1279.6	1227.2
32.5°	1803.9	1721.8	1658.2	1605.9	1551.5	1498.1	1434.5	1367.8	1304.2	1245.7	1190.3
35°	1813.1	1721.8	1642.8	1576.1	1514.5	1462.2	1399.6	1332.9	1268.3	1210.8	1159.5
37.5°	1814.2	1713.6	1618.2	1542.2	1477.6	1423.2	1363.7	1301.1	1239.5	1186.2	1143.1
40°	1803.9	1697.2	1593.5	1506.3	1438.6	1383.2	1328.8	1272.4	1217.0	1172.8	1135.9
42.5°	1785.4	1679.7	1569.9	1477.6	1406.8	1349.3	1299.0	1250.8	1202.6	1164.6	1133.8
45°	1757.7	1656.1	1548.4	1460.1	1390.4	1329.8	1280.6	1240.6	1199.5	1167.7	1136.9
47.5°	1733.1	1647.9	1555.6	1471.4	1398.6	1336.0	1285.7	1251.8	1220.0	1198.5	1156.4
50°	1728.0	1643.8	1558.7	1480.7	1406.8	1343.2	1299.0	1281.6	1272.4	1259.0	1194.4
52.5°	1713.6	1642.8	1581.2	1538.1	1490.9	1461.2	1415.0	1431.4	1421.2	1374.0	1257.0
55°	1864.4	1885.0	1942.4	2024.5	2100.4	2117.9	2112.8	2093.3	1989.6	1711.5	1407.8
57.5°	2563.2	2679.2	2787.9	2836.2	2830.0	2775.6	2736.6	2657.6	2507.8	2169.2	1705.4
60°	3533.9	3552.4	3494.9	3409.7	3266.1	3146.0	3017.8	2870.0	2652.5	2321.1	1888.0
62.5°	4427.6	4179.3	3923.8	3683.7	3465.2	3274.3	3095.8	2889.5	2606.3	2260.5	1864.4
65°	5058.7	4533.3	4130.1	3785.3	3476.4	3209.7	2987.0	2719.2	2400.1	2088.1	1728.0
67.5°	5384.0	4578.5	3959.7	3479.5	3041.4	2672.0	2375.4	2114.8	1877.8	1741.3	1512.5
70°	5020.7	3885.9	3023.9	2481.1	1956.8	1568.9	1239.5	1040.5	971.7	1101.0	1145.1
72.5°	3741.2	2529.3	1798.8	1391.4	1066.1	849.6	651.6	512.0	416.6	437.1	567.4
75°	1769.0	1091.8	771.6	586.9	466.9	386.8	316.0	289.4	242.2	201.1	188.8
77.5°	688.5	501.8	414.5	303.7	215.5	173.4	147.8	142.6	145.7	141.6	139.6
80°	524.3	355.0	222.7	163.2	140.6	124.2	109.8	105.7	107.7	112.9	118.0
82.5°	292.4	182.6	135.4	118.0	105.7	90.3	82.1	75.9	77.0	83.1	94.4
85°	112.9	88.2	81.1	78.0	72.9	58.5	50.3	51.3	58.5	69.8	69.8
87.5°	12.3	12.3	16.4	12.3	12.3	12.3	11.3	13.3	14.4	18.5	21.5
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: P152371

CATALOG NUMBER: TLM-E03-LED-E1-SL4-7050

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1940.4	1940.4	1940.4	1940.4	1940.4	1940.4	1940.4	1940.4	1940.4	1940.4	1940.4
2.5°	1922.9	1922.9	1922.9	1920.9	1921.9	1917.8	1917.8	1914.7	1919.8	1916.8	1915.7
5°	1893.2	1892.1	1888.0	1888.0	1888.0	1888.0	1891.1	1882.9	1889.1	1889.1	1886.0
7.5°	1842.9	1842.9	1831.6	1837.8	1835.7	1838.8	1842.9	1838.8	1844.9	1849.0	1846.0
10°	1773.1	1773.1	1763.9	1771.1	1768.0	1775.2	1782.3	1778.2	1782.3	1788.5	1790.6
12.5°	1696.2	1692.0	1683.8	1686.9	1686.9	1691.0	1694.1	1699.2	1704.4	1712.6	1716.7
15°	1606.9	1600.7	1590.5	1590.5	1584.3	1586.4	1592.5	1594.6	1604.8	1616.1	1629.5
17.5°	1515.6	1500.2	1488.9	1475.5	1465.3	1473.5	1480.7	1485.8	1494.0	1511.5	1520.7
20°	1429.4	1398.6	1377.0	1359.6	1348.3	1353.4	1362.7	1368.8	1376.0	1380.1	1383.2
22.5°	1344.2	1309.3	1279.6	1258.0	1239.5	1244.7	1240.6	1237.5	1242.6	1229.3	1228.2
25°	1270.3	1229.3	1189.3	1163.6	1141.0	1133.8	1112.3	1107.2	1092.8	1081.5	1073.3
27.5°	1217.0	1163.6	1119.5	1089.7	1053.8	1027.1	999.4	971.7	956.3	937.9	928.6
30°	1174.9	1118.5	1066.1	1015.8	968.6	927.6	890.7	854.7	830.1	803.4	786.0
32.5°	1135.9	1083.6	1019.9	951.2	887.6	841.4	793.2	752.1	713.1	678.3	652.6
35°	1109.2	1050.7	969.7	885.5	813.7	759.3	708.0	649.5	602.3	557.2	529.5
37.5°	1094.9	1023.0	923.5	830.1	750.1	688.5	624.9	557.2	499.7	457.6	415.6
40°	1083.6	995.3	882.5	780.9	696.7	622.8	549.0	468.9	405.3	361.2	328.4
42.5°	1071.3	964.5	846.5	741.9	648.5	562.3	473.0	387.9	327.3	296.5	282.2
45°	1057.9	937.9	812.7	704.9	601.3	496.6	394.0	315.0	279.1	268.8	268.8
47.5°	1054.8	920.4	788.0	669.0	547.9	420.7	321.2	271.9	261.7	263.7	267.8
50°	1067.1	915.3	766.5	627.0	477.1	340.7	271.9	255.5	257.6	263.7	269.9
52.5°	1096.9	919.4	743.9	568.5	393.0	281.2	251.4	250.4	256.5	265.8	271.9
55°	1147.2	919.4	700.8	481.2	314.0	252.4	244.2	248.3	256.5	264.7	269.9
57.5°	1254.9	910.2	624.9	384.8	262.7	242.2	242.2	247.3	254.5	262.7	266.8
60°	1383.2	897.8	518.2	297.6	237.0	234.0	241.1	247.3	253.4	260.6	264.7
62.5°	1391.4	866.0	410.4	246.3	223.7	228.8	240.1	248.3	250.4	255.5	260.6
65°	1278.5	755.2	326.3	220.6	217.5	225.7	237.0	243.2	244.2	246.3	251.4
67.5°	1119.5	615.7	263.7	208.3	211.4	220.6	226.8	231.9	235.0	240.1	241.1
70°	919.4	494.6	225.7	196.0	199.1	209.3	214.5	219.6	225.7	231.9	228.8
72.5°	651.6	384.8	198.0	182.6	186.8	196.0	202.1	206.2	211.4	217.5	213.4
75°	277.0	268.8	171.4	165.2	171.4	177.5	183.7	189.8	195.0	198.0	198.0
77.5°	141.6	158.0	147.8	147.8	151.9	158.0	163.2	169.3	172.4	175.5	179.6
80°	120.1	122.1	124.2	128.3	132.4	138.5	143.7	148.8	149.8	150.8	152.9
82.5°	99.5	103.6	105.7	111.8	114.9	117.0	120.1	120.1	122.1	122.1	119.0
85°	71.8	77.0	80.0	81.1	80.0	81.1	82.1	84.1	89.3	89.3	85.2
87.5°	20.5	19.5	24.6	25.7	27.7	31.8	35.9	43.1	45.1	47.2	47.2
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: P152371

CATALOG NUMBER: TLM-E03-LED-E1-SL4-7050

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	1940.4	1940.4	1940.4	1940.4
2.5°	1914.7	1916.8	1912.7	1913.7
5°	1886.0	1890.1	1885.0	1891.1
7.5°	1849.0	1855.2	1854.2	1853.1
10°	1795.7	1803.9	1803.9	1807.0
12.5°	1728.0	1733.1	1737.2	1739.2
15°	1636.6	1645.9	1651.0	1651.0
17.5°	1526.8	1533.0	1536.1	1532.0
20°	1387.3	1385.2	1386.3	1376.0
22.5°	1226.2	1229.3	1220.0	1222.1
25°	1068.2	1063.0	1067.1	1061.0
27.5°	915.3	916.3	905.0	910.2
30°	769.6	764.4	750.1	757.3
32.5°	629.0	615.7	600.3	591.0
35°	496.6	476.1	468.9	465.9
37.5°	389.9	367.3	360.2	352.0
40°	309.9	301.7	298.6	300.6
42.5°	278.1	278.1	280.1	281.2
45°	269.9	272.9	276.0	277.0
47.5°	270.9	274.0	278.1	279.1
50°	272.9	276.0	279.1	280.1
52.5°	274.0	274.0	276.0	277.0
55°	271.9	270.9	271.9	272.9
57.5°	267.8	265.8	266.8	269.9
60°	265.8	262.7	264.7	266.8
62.5°	260.6	259.6	261.7	262.7
65°	249.3	250.4	253.4	253.4
67.5°	239.1	240.1	241.1	242.2
70°	226.8	227.8	229.8	230.9
72.5°	212.4	216.5	219.6	223.7
75°	201.1	205.2	211.4	215.5
77.5°	181.6	184.7	191.9	197.0
80°	153.9	152.9	153.9	157.0
82.5°	118.0	118.0	117.0	115.9
85°	83.1	82.1	79.0	79.0
87.5°	45.1	44.1	43.1	41.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)