

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: P156663

Luminaire Tested: **TLM-F06-LED-E1-T4-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P156663  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33673)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: TLM-F06-LED-E1-T4-8030  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(6) LIGHTBARS WITH AccuLED OPTICS - TYPE 4  
Light Source: (42) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12633.4 lumens  
Efficiency: N/A  
Efficacy: 80.7 lumens/watt  
Spacing Criteria (0/90/45): 1.73 / 2.02 / 2.64  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
CIE Type: Direct

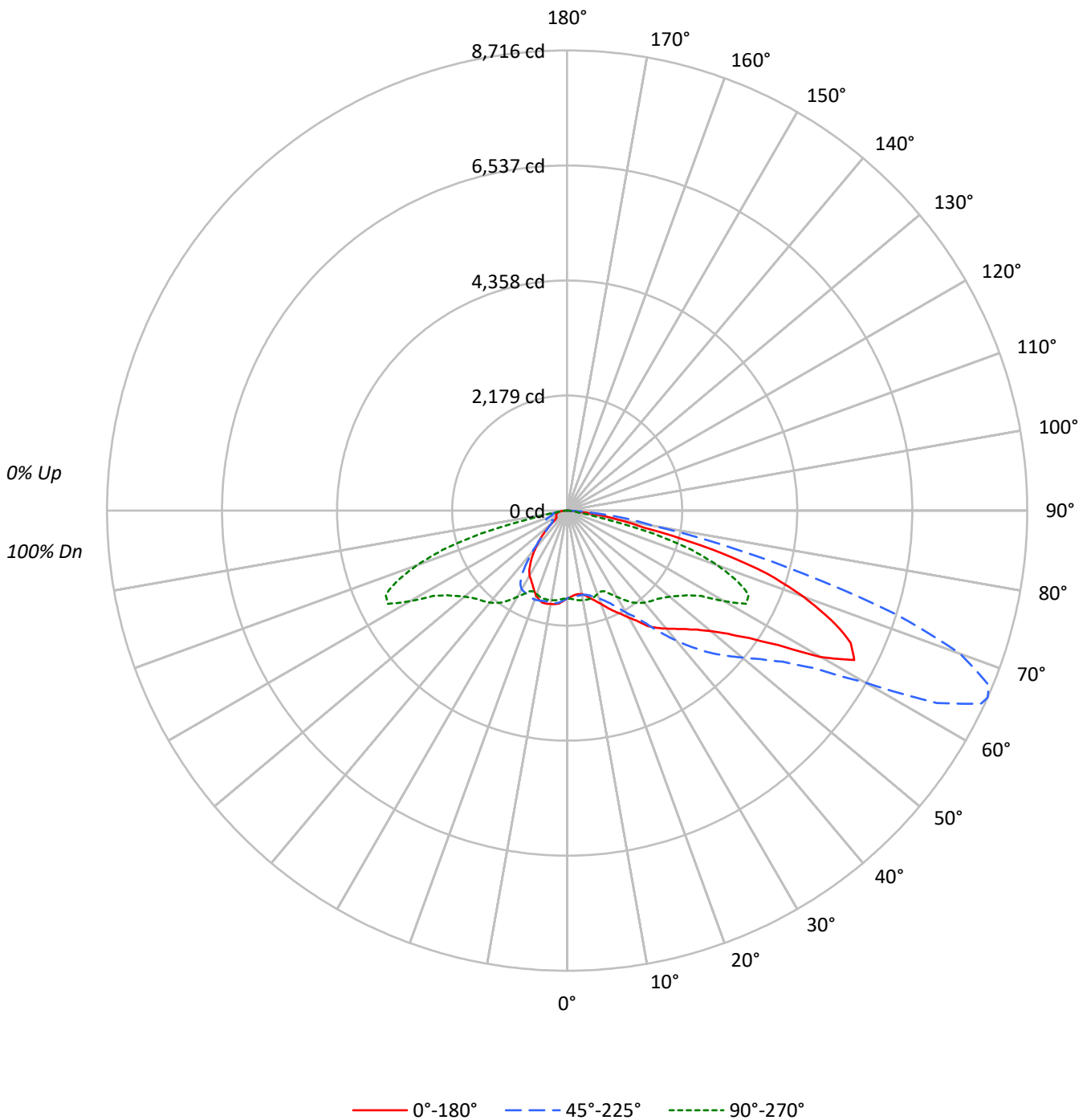
Input Watts (W): 156.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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CATALOG NUMBER: TLM-F06-LED-E1-T4-8030

### 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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	105	99	93	88	102	96	91	87	92	88	84	88	84	81	84	81	79	76
2	92	81	72	65	89	79	71	64	76	69	62	72	66	61	69	64	59	57
3	82	68	58	49	79	66	57	49	63	55	48	60	53	47	57	51	46	43
4	73	58	47	39	70	57	46	38	54	45	38	51	43	37	49	42	36	34
5	66	50	39	31	64	49	39	31	47	38	31	45	36	30	42	35	30	27
6	60	44	34	26	58	43	33	26	41	32	25	39	31	25	38	30	25	22
7	55	39	29	22	53	38	29	22	37	28	22	35	27	21	34	27	21	19
8	51	35	26	19	49	35	25	19	33	25	19	32	24	18	31	23	18	16
9	47	32	23	16	46	31	23	16	30	22	16	29	22	16	28	21	16	14
10	44	29	21	15	43	29	20	15	28	20	14	27	19	14	26	19	14	12

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

	0°	90°	180°
0°	17924	17924	17924
5°	17345	18309	19091
10°	17546	18855	19632
15°	19224	19239	20140
20°	21549	19282	19633
25°	24941	20042	18386
30°	29097	23469	17683
35°	35102	27869	15912
40°	41020	31993	13138
45°	48342	36210	9991
50°	59434	42469	6394
55°	79053	52405	4785
60°	119363	73856	5040
65°	150943	96535	5820
70°	149720	95384	6930
75°	118744	70642	8517
80°	60202	14858	10625
85°	8781	12214	13598



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	161.7	1.3
10°-20°	490.9	3.9
20°-30°	845.6	6.7
30°-40°	1279.4	10.1
40°-50°	1658.3	13.1
50°-60°	2286.2	18.1
60°-70°	3552.0	28.1
70°-80°	2065.5	16.3
80°-90°	293.7	2.3
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°	1498.3	11.9
0°-40°	2777.7	22.0
0°-60°	6722.1	53.2
0°-90°	12633.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12633.4	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1665	1665	1665	1665	1665	
5°	1605	1629	1694	1750	1767	153
15°	1725	1665	1726	1771	1807	494
25°	2100	1941	1688	1764	1548	979
35°	2671	2610	2121	1497	1211	1669
45°	3176	3801	2379	627	656	2482
55°	4212	4990	2792	323	255	3902
65°	5926	8652	3790	457	228	5609
75°	2855	4651	1699	287	205	2940
85°	71	485	99	117	110	307
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	47.5°
0°	1665.2	1665.2	1665.2	1665.2	1665.2	1665.2	1665.2	1665.2	1665.2	1665.2	1665.2
2.5°	1634.5	1640.1	1635.9	1637.3	1637.3	1638.7	1638.7	1640.1	1638.7	1642.9	1645.7
5°	1605.3	1608.1	1606.7	1609.5	1612.2	1617.8	1616.4	1623.4	1624.8	1629.0	1635.9
7.5°	1594.1	1591.3	1592.7	1596.9	1599.7	1602.5	1605.3	1610.9	1615.0	1624.8	1630.4
10°	1605.3	1603.9	1605.3	1608.1	1608.1	1609.5	1606.7	1612.2	1615.0	1623.4	1629.0
12.5°	1651.3	1651.3	1648.5	1648.5	1645.7	1642.9	1635.9	1631.8	1630.4	1631.8	1634.5
15°	1725.1	1722.3	1716.8	1712.6	1707.0	1697.2	1687.5	1679.1	1673.6	1665.2	1662.4
17.5°	1797.6	1793.4	1787.8	1782.2	1775.3	1765.5	1750.2	1740.4	1725.1	1715.4	1709.8
20°	1881.2	1872.8	1865.9	1858.9	1845.0	1842.2	1826.8	1810.1	1792.0	1769.7	1766.9
22.5°	1989.9	1975.9	1967.6	1963.4	1949.5	1945.3	1920.2	1896.5	1874.2	1845.0	1838.0
25°	2100.0	2086.0	2081.8	2076.3	2066.5	2060.9	2037.3	2010.8	1981.5	1941.1	1932.7
27.5°	2207.3	2208.7	2197.5	2201.7	2198.9	2189.1	2165.5	2139.0	2116.7	2069.3	2059.6
30°	2341.0	2332.7	2327.1	2335.5	2325.7	2327.1	2306.2	2292.3	2256.0	2228.2	2208.7
32.5°	2480.4	2479.0	2487.3	2492.9	2491.5	2488.7	2472.0	2458.1	2426.0	2385.6	2377.3
35°	2671.3	2679.6	2686.6	2711.7	2711.7	2729.8	2713.1	2696.4	2658.7	2610.0	2593.2
37.5°	2800.9	2803.7	2831.5	2865.0	2906.8	2945.8	2956.9	2961.1	2945.8	2909.6	2884.5
40°	2919.3	2924.9	2969.5	3021.0	3082.4	3159.0	3205.0	3225.9	3230.1	3213.3	3159.0
42.5°	3037.8	3046.1	3092.1	3167.4	3252.4	3349.9	3430.7	3482.3	3511.5	3511.5	3479.5
45°	3175.7	3186.9	3237.0	3319.2	3418.2	3540.8	3652.3	3751.2	3798.6	3801.4	3770.7
47.5°	3338.8	3348.5	3407.0	3490.6	3592.4	3716.4	3857.1	3970.0	4057.8	4063.4	4038.3
50°	3549.2	3563.1	3611.9	3687.1	3791.6	3917.0	4057.8	4215.3	4307.2	4329.5	4303.0
52.5°	3827.9	3830.7	3871.1	3940.7	4042.5	4162.3	4311.4	4482.8	4604.0	4622.1	4578.9
55°	4212.5	4208.3	4234.8	4310.0	4386.6	4480.0	4634.7	4827.0	4962.2	4990.0	4945.4
57.5°	4735.0	4730.8	4753.1	4771.2	4914.8	5005.3	5157.2	5341.2	5472.2	5553.0	5476.3
60°	5544.6	5540.4	5576.7	5682.6	5789.9	5922.3	6070.0	6290.1	6474.1	6497.8	6422.5
62.5°	6131.3	6152.2	6231.6	6355.6	6573.0	6832.2	7102.5	7392.4	7770.0	7889.8	7853.6
65°	5926.4	5968.2	6078.3	6266.4	6556.3	6914.4	7338.0	7863.4	8369.2	8652.1	8643.7
66°	5742.5	5788.5	5923.6	6104.8	6411.4	6802.9	7265.6	7838.3	8404.0	8716.2	8735.7
67.5°	5408.1	5459.6	5592.0	5806.6	6104.8	6521.4	7018.9	7641.8	8281.4	8645.1	8696.7
70°	4757.3	4815.8	4912.0	5089.0	5383.0	5755.0	6279.0	6836.4	7506.6	7923.3	7986.0
72.5°	3977.0	4028.5	4135.8	4280.7	4521.8	4755.9	5167.0	5578.1	6057.4	6532.6	6486.6
75°	2855.2	2877.5	2941.6	3099.1	3228.7	3439.1	3769.3	4106.6	4434.0	4651.4	4682.1
77.5°	1484.0	1542.6	1633.1	1807.3	1948.1	2137.6	2352.2	2605.8	2845.5	3044.7	2990.4
80°	971.2	996.3	1077.2	1166.3	1269.5	1390.7	1534.2	1629.0	1659.6	1647.1	1659.6
82.5°	560.2	606.2	713.5	781.7	858.4	900.2	1014.4	1123.1	1184.5	1107.8	1079.9
85°	71.1	92.0	289.8	365.1	418.0	480.7	515.6	581.1	542.1	484.9	590.8
87.5°	15.3	13.9	19.5	41.8	43.2	36.2	68.3	72.5	44.6	22.3	27.9
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):**

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	1665.2	1665.2	1665.2	1665.2	1665.2	1665.2	1665.2	1665.2	1665.2	1665.2	1665.2
2.5°	1648.5	1649.9	1652.7	1656.8	1659.6	1662.4	1665.2	1669.4	1672.2	1675.0	1680.5
5°	1641.5	1647.1	1652.7	1658.2	1665.2	1676.3	1683.3	1688.9	1694.5	1705.6	1709.8
7.5°	1637.3	1647.1	1655.4	1665.2	1676.3	1686.1	1698.6	1705.6	1714.0	1720.9	1729.3
10°	1634.5	1648.5	1656.8	1670.8	1683.3	1693.1	1707.0	1715.4	1725.1	1733.5	1737.7
12.5°	1640.1	1647.1	1655.4	1669.4	1684.7	1698.6	1714.0	1720.9	1729.3	1736.3	1737.7
15°	1663.8	1663.8	1665.2	1676.3	1691.7	1702.8	1715.4	1722.3	1726.5	1730.7	1730.7
17.5°	1707.0	1697.2	1690.3	1691.7	1701.4	1708.4	1715.4	1715.4	1712.6	1711.2	1708.4
20°	1757.2	1744.6	1730.7	1720.9	1718.1	1712.6	1708.4	1694.5	1683.3	1673.6	1666.6
22.5°	1829.6	1810.1	1790.6	1772.5	1755.8	1734.9	1711.2	1683.3	1656.8	1638.7	1627.6
25°	1918.8	1903.5	1879.8	1851.9	1831.0	1792.0	1761.3	1720.9	1687.5	1663.8	1644.3
27.5°	2045.6	2027.5	2005.2	1980.1	1949.5	1906.3	1868.6	1821.3	1780.9	1746.0	1720.9
30°	2203.1	2179.4	2162.7	2132.0	2111.1	2062.3	2024.7	1966.2	1888.2	1832.4	1797.6
32.5°	2364.7	2338.2	2324.3	2300.6	2276.9	2247.7	2190.5	2100.0	1999.6	1909.1	1849.1
35°	2580.7	2552.8	2527.8	2506.9	2472.0	2417.7	2367.5	2258.8	2120.9	1994.1	1893.7
37.5°	2852.4	2806.5	2743.7	2690.8	2629.5	2551.4	2474.8	2363.3	2205.9	2041.4	1907.7
40°	3142.3	3061.5	2972.3	2873.3	2767.4	2654.6	2566.8	2453.9	2276.9	2081.8	1897.9
42.5°	3444.7	3316.5	3192.4	3053.1	2905.4	2771.6	2657.3	2533.3	2329.9	2093.0	1858.9
45°	3744.3	3600.7	3412.6	3230.1	3043.3	2877.5	2749.3	2610.0	2378.7	2097.2	1807.3
47.5°	3992.3	3844.6	3630.0	3401.5	3179.9	2991.8	2841.3	2690.8	2444.1	2126.4	1794.8
50°	4254.3	4074.5	3836.2	3565.9	3315.1	3104.7	2944.4	2788.3	2536.1	2201.7	1835.2
52.5°	4539.9	4333.7	4055.0	3752.6	3478.1	3242.6	3068.4	2908.2	2653.2	2307.6	1911.8
55°	4888.3	4636.1	4333.7	3992.3	3698.3	3437.7	3245.4	3055.9	2792.5	2433.0	2008.0
57.5°	5420.6	5111.3	4771.2	4382.5	4056.4	3748.4	3518.5	3299.7	3008.5	2619.7	2139.0
60°	6383.5	6053.2	5611.5	5140.5	4757.3	4397.8	4060.6	3788.8	3430.7	2987.6	2428.8
62.5°	7763.0	7324.1	6734.6	6075.5	5573.9	5055.5	4675.1	4271.0	3826.5	3348.5	2770.2
65°	8529.4	7997.1	7208.4	6443.4	5798.2	5235.3	4751.7	4283.5	3790.2	3333.2	2849.6
66°	8624.2	8069.6	7250.2	6444.8	5767.6	5189.3	4680.7	4195.7	3691.3	3255.1	2816.2
67.5°	8585.2	8018.0	7173.6	6323.6	5635.2	5013.7	4488.4	3985.3	3482.3	3075.4	2704.7
70°	7945.6	7407.7	6578.6	5755.0	5101.5	4488.4	3986.7	3492.0	3030.8	2682.4	2409.3
72.5°	6598.1	6138.2	5417.8	4771.2	4258.4	3752.6	3327.6	2855.2	2465.1	2207.3	2045.6
75°	4762.9	4484.2	3827.9	3457.2	3007.1	2671.3	2258.8	1978.7	1698.6	1573.2	1545.4
77.5°	3008.5	2633.7	2217.0	1825.4	1500.8	1244.4	968.5	822.1	685.6	671.7	811.0
80°	1523.1	1371.2	1056.3	841.7	707.9	572.7	452.9	342.8	239.7	288.4	345.6
82.5°	997.7	831.9	652.1	536.5	466.8	387.4	301.0	209.0	153.3	172.8	236.9
85°	539.3	459.8	370.7	292.6	236.9	211.8	142.1	100.3	98.9	105.9	135.2
87.5°	39.0	39.0	30.7	27.9	33.4	27.9	25.1	25.1	23.7	25.1	33.4
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):**

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	1665.2	1665.2	1665.2	1665.2	1665.2	1665.2	1665.2	1665.2	1665.2	1665.2	1665.2
2.5°	1683.3	1687.5	1688.9	1695.9	1700.0	1702.8	1705.6	1705.6	1707.0	1711.2	1712.6
5°	1715.4	1722.3	1730.7	1736.3	1739.1	1747.4	1750.2	1750.2	1753.0	1758.6	1762.7
7.5°	1734.9	1744.6	1753.0	1755.8	1761.3	1764.1	1768.3	1771.1	1771.1	1776.7	1779.5
10°	1741.8	1747.4	1755.8	1755.8	1761.3	1761.3	1765.5	1766.9	1766.9	1772.5	1776.7
12.5°	1741.8	1744.6	1751.6	1751.6	1755.8	1757.2	1762.7	1766.9	1768.3	1775.3	1780.9
15°	1733.5	1736.3	1741.8	1743.2	1753.0	1758.6	1771.1	1779.5	1779.5	1786.4	1789.2
17.5°	1709.8	1716.8	1727.9	1739.1	1757.2	1769.7	1785.0	1792.0	1786.4	1782.2	1778.1
20°	1670.8	1683.3	1709.8	1737.7	1769.7	1786.4	1794.8	1787.8	1768.3	1748.8	1736.3
22.5°	1631.8	1656.8	1701.4	1743.2	1779.5	1790.6	1786.4	1761.3	1729.3	1705.6	1688.9
25°	1649.9	1679.1	1722.3	1760.0	1783.6	1780.9	1764.1	1729.3	1694.5	1663.8	1635.9
27.5°	1725.1	1757.2	1780.9	1793.4	1790.6	1771.1	1744.6	1705.6	1663.8	1623.4	1584.4
30°	1796.2	1812.9	1818.5	1808.7	1786.4	1754.4	1720.9	1676.3	1620.6	1570.4	1525.9
32.5°	1828.2	1811.5	1785.0	1758.6	1722.3	1694.5	1648.5	1599.7	1530.0	1470.1	1425.5
35°	1828.2	1761.3	1694.5	1638.7	1584.4	1549.5	1496.6	1431.1	1367.0	1316.8	1282.0
37.5°	1787.8	1659.6	1549.5	1459.0	1390.7	1353.1	1273.6	1215.1	1160.8	1144.0	1121.7
40°	1714.0	1524.5	1365.6	1247.2	1160.8	1105.0	1025.6	985.2	964.3	955.9	951.7
42.5°	1615.0	1374.0	1162.2	1015.8	922.5	859.8	806.8	781.7	780.3	779.0	779.0
45°	1509.1	1212.3	964.3	790.1	707.9	652.1	627.1	617.3	625.7	624.3	625.7
47.5°	1443.6	1089.7	783.1	597.8	535.1	498.9	486.3	490.5	497.5	494.7	494.7
50°	1435.3	1027.0	661.9	465.4	418.0	399.9	397.1	397.1	401.3	398.5	397.1
52.5°	1465.9	1017.2	599.2	399.9	362.3	347.0	344.2	342.8	341.4	333.0	326.1
55°	1518.9	1039.5	581.1	383.2	344.2	327.5	323.3	320.5	314.9	303.8	291.2
57.5°	1624.8	1109.2	597.8	391.6	349.8	335.8	331.6	331.6	320.5	302.4	284.3
60°	1879.8	1286.2	666.1	423.6	376.2	362.3	365.1	363.7	347.0	320.5	292.6
62.5°	2208.7	1517.5	755.3	468.2	409.7	406.9	420.8	418.0	390.2	349.8	309.4
65°	2360.5	1626.2	780.3	478.0	416.6	429.2	457.1	454.3	419.4	363.7	312.1
66°	2363.3	1626.2	769.2	469.6	406.9	422.2	450.1	448.7	413.9	358.1	306.6
67.5°	2306.2	1581.6	737.1	452.9	387.4	398.5	423.6	422.2	390.2	344.2	295.4
70°	2091.6	1415.8	654.9	423.6	360.9	355.3	363.7	358.1	337.2	305.2	271.7
72.5°	1792.0	1188.6	571.3	401.3	342.8	320.5	314.9	310.7	294.0	275.9	255.0
75°	1411.6	940.6	501.6	384.6	326.1	296.8	287.1	281.5	270.3	257.8	241.1
77.5°	870.9	673.0	437.5	362.3	313.5	284.3	277.3	268.9	252.2	236.9	224.3
80°	388.8	416.6	359.5	316.3	280.1	253.6	242.5	229.9	213.2	203.4	196.5
82.5°	259.2	268.9	260.6	236.9	211.8	190.9	174.2	174.2	171.4	163.0	160.2
85°	165.8	167.2	161.6	146.3	136.6	124.0	117.1	118.4	124.0	122.6	121.2
87.5°	37.6	37.6	44.6	41.8	48.8	51.6	55.7	59.9	68.3	68.3	72.5
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: P156663

CATALOG NUMBER: TLM-F06-LED-E1-T4-8030

**CANDELA DISTRIBUTION (continued):**

	160°	165°	170°	175°	180°
0°	1665.2	1665.2	1665.2	1665.2	1665.2
2.5°	1714.0	1716.8	1719.5	1715.4	1716.8
5°	1762.7	1761.3	1768.3	1764.1	1766.9
7.5°	1778.1	1779.5	1785.0	1785.0	1786.4
10°	1779.5	1782.2	1789.2	1793.4	1796.2
12.5°	1786.4	1792.0	1803.2	1805.9	1805.9
15°	1792.0	1794.8	1801.8	1804.5	1807.3
17.5°	1772.5	1766.9	1769.7	1771.1	1769.7
20°	1723.7	1718.1	1716.8	1711.2	1714.0
22.5°	1670.8	1655.4	1645.7	1634.5	1634.5
25°	1606.7	1583.0	1563.5	1544.0	1548.1
27.5°	1546.8	1516.1	1496.6	1484.0	1481.3
30°	1488.2	1456.2	1438.1	1422.7	1422.7
32.5°	1390.7	1368.4	1344.7	1334.9	1333.6
35°	1255.5	1241.6	1222.1	1217.9	1210.9
37.5°	1103.6	1099.4	1082.7	1081.3	1074.4
40°	944.8	947.6	942.0	939.2	935.0
42.5°	785.9	799.9	797.1	795.7	792.9
45°	634.0	643.8	645.2	649.4	656.3
47.5°	498.9	501.6	504.4	503.0	504.4
50°	390.2	383.2	381.8	377.6	381.8
52.5°	314.9	303.8	298.2	292.6	289.8
55°	277.3	266.2	260.6	257.8	255.0
57.5°	267.5	256.4	248.0	242.5	241.1
60°	270.3	253.6	242.5	235.5	234.1
62.5°	277.3	255.0	239.7	232.7	231.3
65°	275.9	252.2	238.3	229.9	228.5
66°	271.7	249.4	235.5	228.5	227.1
67.5°	264.8	245.3	232.7	227.1	224.3
70°	252.2	239.7	229.9	223.0	220.2
72.5°	241.1	231.3	223.0	216.0	214.6
75°	228.5	220.2	211.8	206.2	204.8
77.5°	213.2	204.8	199.3	195.1	193.7
80°	188.1	182.5	177.0	171.4	171.4
82.5°	156.1	151.9	146.3	142.1	140.7
85°	119.8	119.8	115.7	111.5	110.1
87.5°	71.1	69.7	69.7	65.5	65.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)