

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: P156664

Luminaire Tested: **TLM-F06-LED-E1-T4-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P156664
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-T4-7030
Description: TALON MEDIUM LED SITE LUMINAIRE
(6) LIGHTBARS WITH AccuLED OPTICS - TYPE 4
Light Source: (42) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13671.6 lumens
Efficiency: N/A
Efficacy: 87.4 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

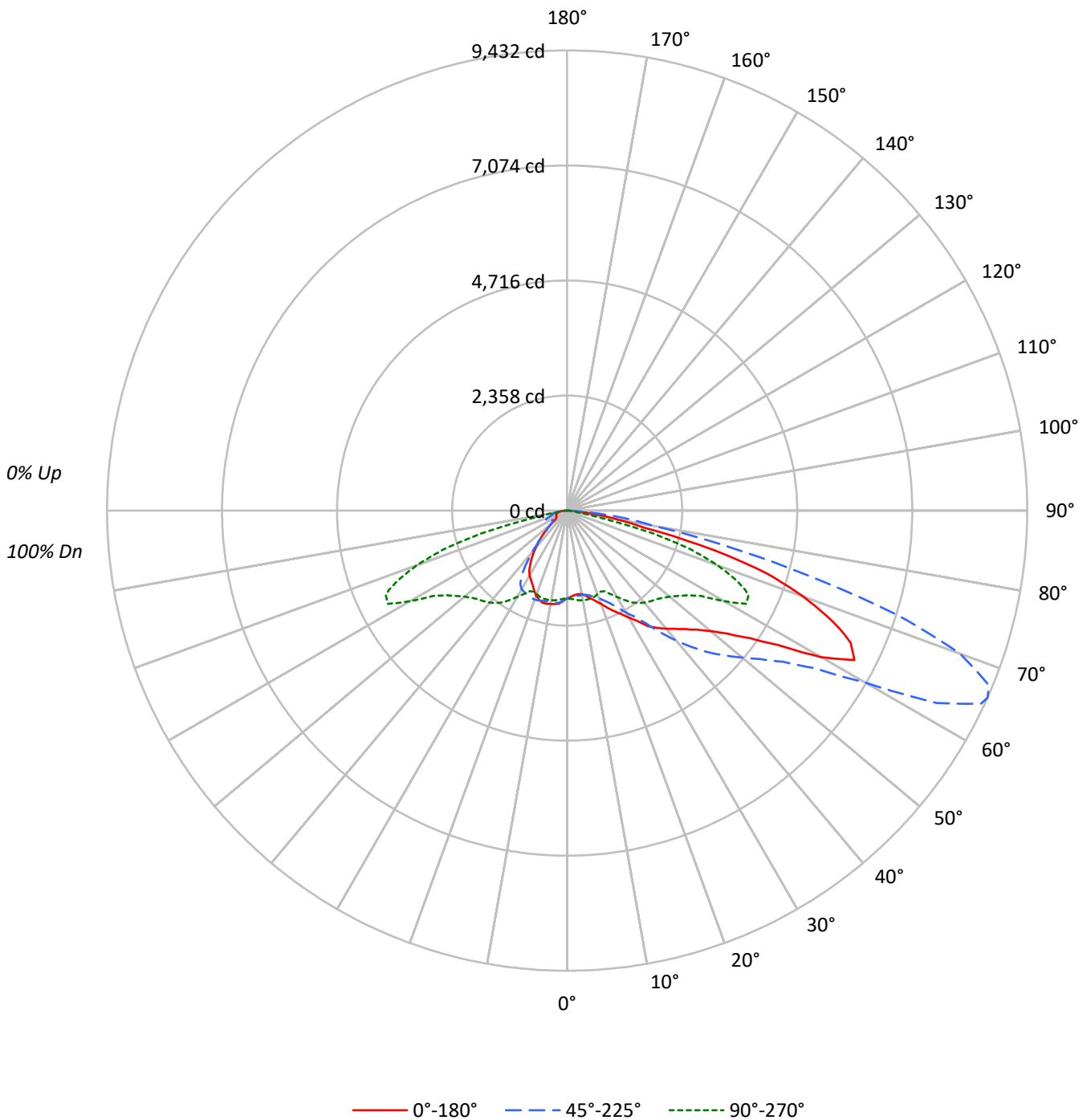
Input Watts (W): 156.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P156664

CATALOG NUMBER: TLM-F06-LED-E1-T4-7030

Luminous Intensity Polar Plot





TEST NUMBER: P156664

CATALOG NUMBER: TLM-F06-LED-E1-T4-7030

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°	19397	19397	19397
5°	18771	19813	20660
10°	18988	20405	21246
15°	20804	20821	21796
20°	23320	20866	21246
25°	26990	21689	19898
30°	31488	25396	19137
35°	37986	30160	17219
40°	44391	34624	14219
45°	52315	39184	10813
50°	64317	45959	6919
55°	85548	56712	5180
60°	129173	79926	5453
65°	163349	104469	6299
70°	162025	103224	7500
75°	128505	76448	9220
80°	65154	16079	11499
85°	9497	13227	14709



TEST NUMBER: P156664

CATALOG NUMBER: TLM-F06-LED-E1-T4-7030

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.0	1.3
10°-20°	531.3	3.9
20°-30°	915.1	6.7
30°-40°	1384.5	10.1
40°-50°	1794.5	13.1
50°-60°	2474.1	18.1
60°-70°	3843.9	28.1
70°-80°	2235.3	16.3
80°-90°	317.9	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°	1621.4	11.9
0°-40°	3005.9	22.0
0°-60°	7274.6	53.2
0°-90°	13671.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13671.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1802	1802	1802	1802	1802	
5°	1737	1763	1834	1894	1912	166
15°	1867	1802	1868	1917	1956	535
25°	2272	2101	1826	1909	1675	1060
35°	2891	2824	2295	1620	1310	1807
45°	3437	4114	2574	679	710	2686
55°	4559	5400	3022	350	276	4222
65°	6414	9363	4102	495	247	6070
75°	3090	5034	1838	311	222	3182
85°	77	525	107	127	119	333
90°	0	0	0	0	0	



TEST NUMBER: P156664

CATALOG NUMBER: TLM-F06-LED-E1-T4-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	47.5°
0°	1802.0	1802.0	1802.0	1802.0	1802.0	1802.0	1802.0	1802.0	1802.0	1802.0	1802.0
2.5°	1768.9	1774.9	1770.4	1771.9	1771.9	1773.4	1773.4	1774.9	1773.4	1777.9	1780.9
5°	1737.2	1740.2	1738.7	1741.7	1744.7	1750.8	1749.3	1756.8	1758.3	1762.8	1770.4
7.5°	1725.1	1722.1	1723.6	1728.2	1731.2	1734.2	1737.2	1743.2	1747.8	1758.3	1764.3
10°	1737.2	1735.7	1737.2	1740.2	1740.2	1741.7	1738.7	1744.7	1747.8	1756.8	1762.8
12.5°	1787.0	1787.0	1783.9	1783.9	1780.9	1777.9	1770.4	1765.9	1764.3	1765.9	1768.9
15°	1866.9	1863.9	1857.8	1853.3	1847.3	1836.7	1826.2	1817.1	1811.1	1802.0	1799.0
17.5°	1945.3	1940.8	1934.7	1928.7	1921.2	1910.6	1894.0	1883.5	1866.9	1856.3	1850.3
20°	2035.8	2026.7	2019.2	2011.7	1996.6	1993.6	1977.0	1958.9	1939.3	1915.1	1912.1
22.5°	2153.4	2138.3	2129.3	2124.8	2109.7	2105.1	2078.0	2052.4	2028.2	1996.6	1989.0
25°	2272.5	2257.5	2252.9	2246.9	2236.3	2230.3	2204.7	2176.0	2144.4	2100.6	2091.6
27.5°	2388.7	2390.2	2378.1	2382.6	2379.6	2369.0	2343.4	2314.8	2290.6	2239.4	2228.8
30°	2533.4	2524.4	2518.3	2527.4	2516.8	2518.3	2495.7	2480.6	2441.4	2411.3	2390.2
32.5°	2684.2	2682.7	2691.8	2697.8	2696.3	2693.3	2675.2	2660.1	2625.4	2581.7	2572.6
35°	2890.8	2899.9	2907.4	2934.5	2934.5	2954.1	2936.1	2918.0	2877.2	2824.5	2806.4
37.5°	3031.1	3034.1	3064.2	3100.4	3145.7	3187.9	3199.9	3204.5	3187.9	3148.7	3121.5
40°	3159.2	3165.3	3213.5	3269.3	3335.7	3418.6	3468.4	3491.0	3495.5	3477.4	3418.6
42.5°	3287.4	3296.5	3346.2	3427.7	3519.6	3625.2	3712.7	3768.5	3800.1	3800.1	3765.4
45°	3436.7	3448.8	3503.1	3592.0	3699.1	3831.8	3952.4	4059.5	4110.8	4113.8	4080.6
47.5°	3613.1	3623.7	3687.0	3777.5	3887.6	4021.8	4174.1	4296.3	4391.3	4397.3	4370.1
50°	3840.8	3855.9	3908.7	3990.1	4103.2	4239.0	4391.3	4561.7	4661.2	4685.3	4656.7
52.5°	4142.4	4145.5	4189.2	4264.6	4374.7	4504.4	4665.7	4851.2	4982.4	5002.0	4955.2
55°	4558.6	4554.1	4582.8	4664.2	4747.1	4848.2	5015.6	5223.7	5369.9	5400.1	5351.8
57.5°	5124.1	5119.6	5143.7	5163.3	5318.7	5416.7	5581.1	5780.1	5921.9	6009.3	5926.4
60°	6000.3	5995.8	6035.0	6149.6	6265.7	6408.9	6568.8	6807.1	7006.1	7031.7	6950.3
62.5°	6635.1	6657.8	6743.7	6877.9	7113.2	7393.7	7686.2	7999.9	8408.5	8538.2	8499.0
65°	6413.5	6458.7	6577.8	6781.4	7095.1	7482.6	7941.1	8509.6	9057.0	9363.1	9354.0
66°	6214.4	6264.2	6410.5	6606.5	6938.2	7362.0	7862.6	8482.4	9094.7	9432.5	9453.6
67.5°	5852.5	5908.3	6051.6	6283.8	6606.5	7057.4	7595.7	8269.8	8962.0	9355.6	9411.3
70°	5148.3	5211.6	5315.7	5507.2	5825.4	6228.0	6795.0	7398.2	8123.5	8574.4	8642.3
72.5°	4303.8	4359.6	4475.7	4632.5	4893.4	5146.8	5591.6	6036.5	6555.2	7069.4	7019.7
75°	3089.9	3114.0	3183.4	3353.8	3494.0	3721.7	4079.1	4444.0	4798.4	5033.7	5066.8
77.5°	1606.0	1669.3	1767.4	1955.9	2108.2	2313.3	2545.5	2819.9	3079.3	3295.0	3236.1
80°	1051.1	1078.2	1165.7	1262.2	1373.8	1505.0	1660.3	1762.8	1796.0	1782.4	1796.0
82.5°	606.2	656.0	772.1	846.0	928.9	974.2	1097.8	1215.4	1281.8	1198.8	1168.7
85°	76.9	99.5	313.7	395.1	452.4	520.3	558.0	628.8	586.6	524.8	639.4
87.5°	16.6	15.1	21.1	45.2	46.7	39.2	73.9	78.4	48.3	24.1	30.2
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: P156664

CATALOG NUMBER: TLM-F06-LED-E1-T4-7030

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	1802.0	1802.0	1802.0	1802.0	1802.0	1802.0	1802.0	1802.0	1802.0	1802.0	1802.0
2.5°	1783.9	1785.5	1788.5	1793.0	1796.0	1799.0	1802.0	1806.6	1809.6	1812.6	1818.6
5°	1776.4	1782.4	1788.5	1794.5	1802.0	1814.1	1821.6	1827.7	1833.7	1845.8	1850.3
7.5°	1771.9	1782.4	1791.5	1802.0	1814.1	1824.7	1838.2	1845.8	1854.8	1862.4	1871.4
10°	1768.9	1783.9	1793.0	1808.1	1821.6	1832.2	1847.3	1856.3	1866.9	1875.9	1880.5
12.5°	1774.9	1782.4	1791.5	1806.6	1823.2	1838.2	1854.8	1862.4	1871.4	1879.0	1880.5
15°	1800.5	1800.5	1802.0	1814.1	1830.7	1842.8	1856.3	1863.9	1868.4	1872.9	1872.9
17.5°	1847.3	1836.7	1829.2	1830.7	1841.3	1848.8	1856.3	1856.3	1853.3	1851.8	1848.8
20°	1901.6	1888.0	1872.9	1862.4	1859.3	1853.3	1848.8	1833.7	1821.6	1811.1	1803.6
22.5°	1980.0	1958.9	1937.8	1918.2	1900.1	1877.4	1851.8	1821.6	1793.0	1773.4	1761.3
25°	2076.5	2059.9	2034.3	2004.1	1981.5	1939.3	1906.1	1862.4	1826.2	1800.5	1779.4
27.5°	2213.7	2194.1	2170.0	2142.8	2109.7	2062.9	2022.2	1970.9	1927.2	1889.5	1862.4
30°	2384.1	2358.5	2340.4	2307.2	2284.6	2231.8	2191.1	2127.8	2043.3	1983.0	1945.3
32.5°	2559.1	2530.4	2515.3	2489.7	2464.1	2432.4	2370.6	2272.5	2164.0	2065.9	2001.1
35°	2792.8	2762.6	2735.5	2712.9	2675.2	2616.4	2562.1	2444.4	2295.2	2157.9	2049.4
37.5°	3086.8	3037.1	2969.2	2911.9	2845.6	2761.1	2678.2	2557.5	2387.1	2209.2	2064.4
40°	3400.5	3313.0	3216.5	3109.5	2994.9	2872.7	2777.7	2655.6	2464.1	2252.9	2053.9
42.5°	3727.7	3589.0	3454.8	3304.0	3144.2	2999.4	2875.7	2741.5	2521.4	2265.0	2011.7
45°	4052.0	3896.6	3693.1	3495.5	3293.4	3114.0	2975.3	2824.5	2574.1	2269.5	1955.9
47.5°	4320.4	4160.5	3928.3	3681.0	3441.2	3237.6	3074.8	2911.9	2645.0	2301.2	1942.3
50°	4603.9	4409.4	4151.5	3858.9	3587.5	3359.8	3186.4	3017.5	2744.5	2382.6	1986.0
52.5°	4913.0	4689.8	4388.2	4061.0	3763.9	3509.1	3320.6	3147.2	2871.2	2497.2	2069.0
55°	5290.0	5017.1	4689.8	4320.4	4002.2	3720.2	3512.1	3307.0	3022.0	2632.9	2173.0
57.5°	5866.1	5531.3	5163.3	4742.6	4389.7	4056.5	3807.7	3570.9	3255.7	2835.0	2314.8
60°	6908.1	6550.7	6072.7	5563.0	5148.3	4759.2	4394.3	4100.2	3712.7	3233.1	2628.4
62.5°	8401.0	7926.0	7288.1	6574.8	6031.9	5471.0	5059.3	4622.0	4140.9	3623.7	2997.9
65°	9230.4	8654.3	7800.8	6972.9	6274.7	5665.5	5142.2	4635.6	4101.7	3607.1	3083.8
66°	9332.9	8732.8	7846.1	6974.4	6241.6	5615.7	5065.3	4540.5	3994.7	3522.7	3047.6
67.5°	9290.7	8677.0	7763.1	6843.2	6098.3	5425.7	4857.2	4312.8	3768.5	3328.1	2927.0
70°	8598.5	8016.5	7119.2	6228.0	5520.7	4857.2	4314.4	3779.0	3279.9	2902.9	2607.3
72.5°	7140.3	6642.7	5863.1	5163.3	4608.4	4061.0	3601.1	3089.9	2667.6	2388.7	2213.7
75°	5154.3	4852.7	4142.4	3741.3	3254.2	2890.8	2444.4	2141.3	1838.2	1702.5	1672.4
77.5°	3255.7	2850.1	2399.2	1975.5	1624.1	1346.6	1048.1	889.7	741.9	726.8	877.6
80°	1648.2	1483.9	1143.1	910.8	766.1	619.8	490.1	371.0	259.4	312.2	374.0
82.5°	1079.7	900.3	705.7	580.6	505.2	419.2	325.7	226.2	165.9	187.0	256.4
85°	583.6	497.6	401.1	316.7	256.4	229.2	153.8	108.6	107.1	114.6	146.3
87.5°	42.2	42.2	33.2	30.2	36.2	30.2	27.1	27.1	25.6	27.1	36.2
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: P156664

CATALOG NUMBER: TLM-F06-LED-E1-T4-7030

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	1802.0	1802.0	1802.0	1802.0	1802.0	1802.0	1802.0	1802.0	1802.0	1802.0	1802.0
2.5°	1821.6	1826.2	1827.7	1835.2	1839.7	1842.8	1845.8	1845.8	1847.3	1851.8	1853.3
5°	1856.3	1863.9	1872.9	1879.0	1882.0	1891.0	1894.0	1894.0	1897.0	1903.1	1907.6
7.5°	1877.4	1888.0	1897.0	1900.1	1906.1	1909.1	1913.6	1916.7	1916.7	1922.7	1925.7
10°	1885.0	1891.0	1900.1	1900.1	1906.1	1906.1	1910.6	1912.1	1912.1	1918.2	1922.7
12.5°	1885.0	1888.0	1895.5	1895.5	1900.1	1901.6	1907.6	1912.1	1913.6	1921.2	1927.2
15°	1875.9	1879.0	1885.0	1886.5	1897.0	1903.1	1916.7	1925.7	1925.7	1933.2	1936.3
17.5°	1850.3	1857.8	1869.9	1882.0	1901.6	1915.1	1931.7	1939.3	1933.2	1928.7	1924.2
20°	1808.1	1821.6	1850.3	1880.5	1915.1	1933.2	1942.3	1934.7	1913.6	1892.5	1879.0
22.5°	1765.9	1793.0	1841.3	1886.5	1925.7	1937.8	1933.2	1906.1	1871.4	1845.8	1827.7
25°	1785.5	1817.1	1863.9	1904.6	1930.2	1927.2	1909.1	1871.4	1833.7	1800.5	1770.4
27.5°	1866.9	1901.6	1927.2	1940.8	1937.8	1916.7	1888.0	1845.8	1800.5	1756.8	1714.6
30°	1943.8	1961.9	1967.9	1957.4	1933.2	1898.6	1862.4	1814.1	1753.8	1699.5	1651.2
32.5°	1978.5	1960.4	1931.7	1903.1	1863.9	1833.7	1783.9	1731.2	1655.8	1590.9	1542.7
35°	1978.5	1906.1	1833.7	1773.4	1714.6	1676.9	1619.6	1548.7	1479.3	1425.0	1387.3
37.5°	1934.7	1796.0	1676.9	1578.9	1505.0	1464.3	1378.3	1315.0	1256.2	1238.1	1213.9
40°	1854.8	1649.7	1477.8	1349.6	1256.2	1195.8	1109.9	1066.1	1043.5	1034.5	1030.0
42.5°	1747.8	1486.9	1257.7	1099.3	998.3	930.4	873.1	846.0	844.5	843.0	843.0
45°	1633.1	1311.9	1043.5	855.0	766.1	705.7	678.6	668.0	677.1	675.6	677.1
47.5°	1562.3	1179.2	847.5	646.9	579.1	539.9	526.3	530.8	538.4	535.3	535.3
50°	1553.2	1111.4	716.3	503.7	452.4	432.8	429.8	429.8	434.3	431.3	429.8
52.5°	1586.4	1100.8	648.4	432.8	392.1	375.5	372.5	371.0	369.5	360.4	352.9
55°	1643.7	1125.0	628.8	414.7	372.5	354.4	349.9	346.8	340.8	328.7	315.2
57.5°	1758.3	1200.4	646.9	423.7	378.5	363.4	358.9	358.9	346.8	327.2	307.6
60°	2034.3	1391.9	720.8	458.4	407.2	392.1	395.1	393.6	375.5	346.8	316.7
62.5°	2390.2	1642.2	817.3	506.7	443.3	440.3	455.4	452.4	422.2	378.5	334.8
65°	2554.5	1759.8	844.5	517.2	450.9	464.5	494.6	491.6	453.9	393.6	337.8
66°	2557.5	1759.8	832.4	508.2	440.3	456.9	487.1	485.6	447.9	387.6	331.8
67.5°	2495.7	1711.6	797.7	490.1	419.2	431.3	458.4	456.9	422.2	372.5	319.7
70°	2263.5	1532.1	708.8	458.4	390.6	384.5	393.6	387.6	364.9	330.2	294.1
72.5°	1939.3	1286.3	618.3	434.3	371.0	346.8	340.8	336.3	318.2	298.6	276.0
75°	1527.6	1017.9	542.9	416.2	352.9	321.2	310.6	304.6	292.5	279.0	260.9
77.5°	942.5	728.4	473.5	392.1	339.3	307.6	300.1	291.0	272.9	256.4	242.8
80°	420.7	450.9	389.1	342.3	303.1	274.5	262.4	248.8	230.7	220.2	212.6
82.5°	280.5	291.0	282.0	256.4	229.2	206.6	188.5	188.5	185.5	176.4	173.4
85°	179.5	181.0	174.9	158.3	147.8	134.2	126.7	128.2	134.2	132.7	131.2
87.5°	40.7	40.7	48.3	45.2	52.8	55.8	60.3	64.8	73.9	73.9	78.4
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: P156664

CATALOG NUMBER: TLM-F06-LED-E1-T4-7030

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	1802.0	1802.0	1802.0	1802.0	1802.0
2.5°	1854.8	1857.8	1860.9	1856.3	1857.8
5°	1907.6	1906.1	1913.6	1909.1	1912.1
7.5°	1924.2	1925.7	1931.7	1931.7	1933.2
10°	1925.7	1928.7	1936.3	1940.8	1943.8
12.5°	1933.2	1939.3	1951.3	1954.4	1954.4
15°	1939.3	1942.3	1949.8	1952.8	1955.9
17.5°	1918.2	1912.1	1915.1	1916.7	1915.1
20°	1865.4	1859.3	1857.8	1851.8	1854.8
22.5°	1808.1	1791.5	1780.9	1768.9	1768.9
25°	1738.7	1713.1	1692.0	1670.8	1675.4
27.5°	1673.9	1640.7	1619.6	1606.0	1603.0
30°	1610.5	1575.8	1556.2	1539.7	1539.7
32.5°	1505.0	1480.8	1455.2	1444.7	1443.1
35°	1358.7	1343.6	1322.5	1318.0	1310.4
37.5°	1194.3	1189.8	1171.7	1170.2	1162.7
40°	1022.4	1025.4	1019.4	1016.4	1011.9
42.5°	850.5	865.6	862.6	861.1	858.0
45°	686.1	696.7	698.2	702.7	710.3
47.5°	539.9	542.9	545.9	544.4	545.9
50°	422.2	414.7	413.2	408.7	413.2
52.5°	340.8	328.7	322.7	316.7	313.7
55°	300.1	288.0	282.0	279.0	276.0
57.5°	289.5	277.5	268.4	262.4	260.9
60°	292.5	274.5	262.4	254.8	253.3
62.5°	300.1	276.0	259.4	251.8	250.3
65°	298.6	272.9	257.9	248.8	247.3
66°	294.1	269.9	254.8	247.3	245.8
67.5°	286.5	265.4	251.8	245.8	242.8
70°	272.9	259.4	248.8	241.3	238.3
72.5°	260.9	250.3	241.3	233.7	232.2
75°	247.3	238.3	229.2	223.2	221.7
77.5°	230.7	221.7	215.6	211.1	209.6
80°	203.6	197.5	191.5	185.5	185.5
82.5°	168.9	164.4	158.3	153.8	152.3
85°	129.7	129.7	125.2	120.6	119.1
87.5°	76.9	75.4	75.4	70.9	70.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)