

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: P156666

Luminaire Tested: **TLM-F06-LED-E1-T4-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P156666
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-T4-7050
Description: TALON MEDIUM LED SITE LUMINAIRE
(6) LIGHTBARS WITH AccuLED OPTICS - TYPE 4
Light Source: (42) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15359.4 lumens
Efficiency: N/A
Efficacy: 98.1 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

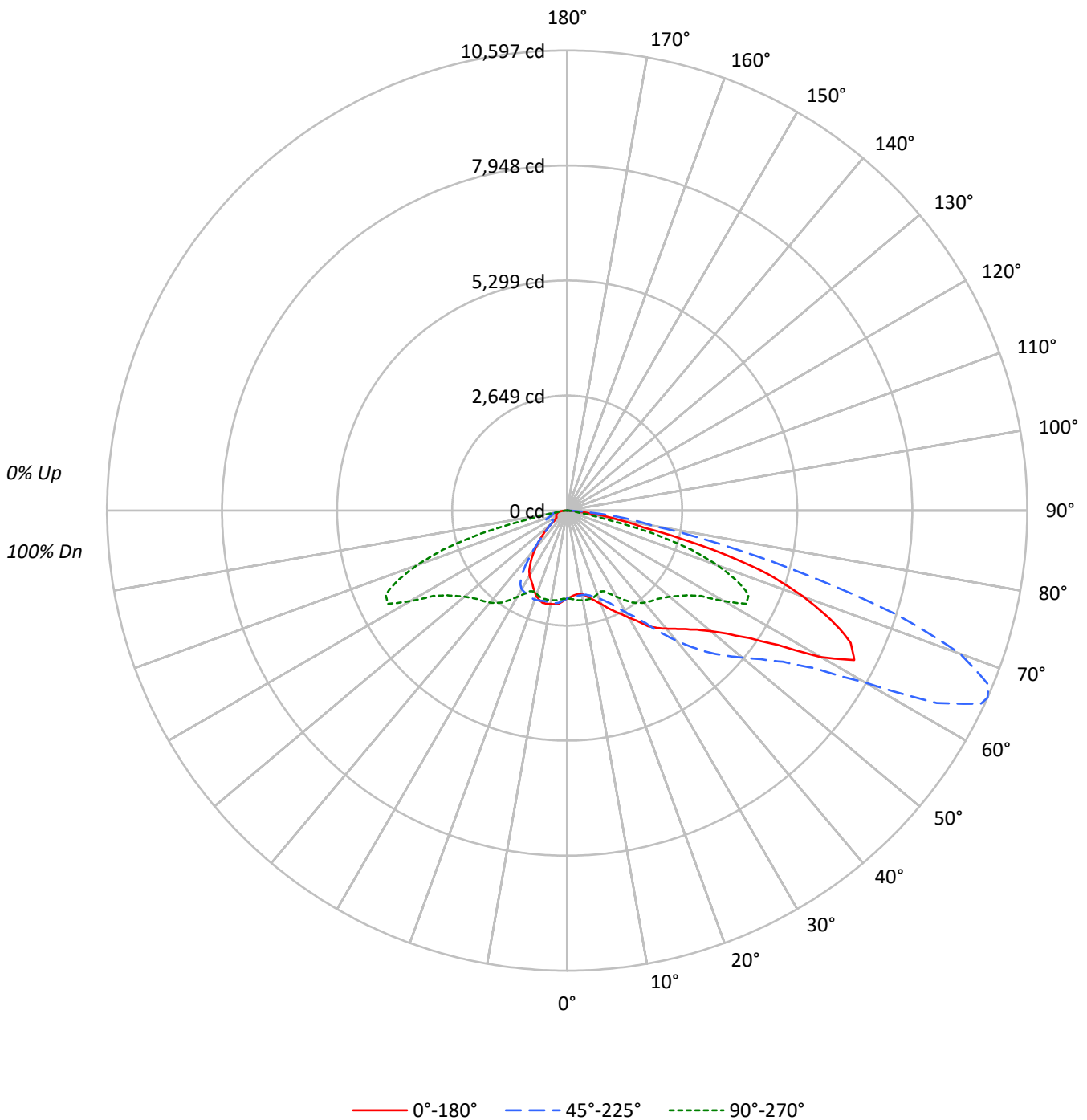
Input Watts (W): 156.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	21792	21792	21792
5°	21088	22259	23211
10°	21332	22925	23869
15°	23373	23392	24486
20°	26198	23442	23869
25°	30322	24366	22354
30°	35376	28532	21499
35°	42676	33882	19345
40°	49871	38897	15974
45°	58774	44022	12146
50°	72258	51634	7773
55°	96110	63714	5818
60°	145119	89793	6127
65°	183514	117366	7075
70°	182025	115966	8425
75°	144366	85889	10356
80°	73194	18063	12918
85°	10671	14857	16525



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.6	1.3
10°-20°	596.9	3.9
20°-30°	1028.1	6.7
30°-40°	1555.5	10.1
40°-50°	2016.1	13.1
50°-60°	2779.5	18.1
60°-70°	4318.5	28.1
70°-80°	2511.2	16.3
80°-90°	357.1	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°	1821.6	11.9
0°-40°	3377.0	22.0
0°-60°	8172.6	53.2
0°-90°	15359.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15359.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2024	2024	2024	2024	2024	
5°	1952	1980	2060	2128	2148	186
15°	2097	2024	2099	2153	2197	601
25°	2553	2360	2052	2145	1882	1190
35°	3248	3173	2578	1820	1472	2030
45°	3861	4622	2892	762	798	3018
55°	5121	6067	3395	393	310	4743
65°	7205	10519	4608	556	278	6819
75°	3471	5655	2065	349	249	3575
85°	86	590	120	142	134	374
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°	2024.5	2024.5	2024.5	2024.5	2024.5	2024.5	2024.5	2024.5	2024.5	2024.5	2024.5
2.5°	1987.2	1994.0	1988.9	1990.6	1990.6	1992.3	1992.3	1994.0	1992.3	1997.4	2000.8
5°	1951.7	1955.1	1953.4	1956.7	1960.1	1966.9	1965.2	1973.7	1975.4	1980.5	1988.9
7.5°	1938.1	1934.7	1936.4	1941.5	1944.9	1948.3	1951.7	1958.4	1963.5	1975.4	1982.2
10°	1951.7	1950.0	1951.7	1955.1	1955.1	1956.7	1953.4	1960.1	1963.5	1973.7	1980.5
12.5°	2007.6	2007.6	2004.2	2004.2	2000.8	1997.4	1988.9	1983.9	1982.2	1983.9	1987.2
15°	2097.4	2094.0	2087.2	2082.1	2075.3	2063.5	2051.6	2041.5	2034.7	2024.5	2021.1
17.5°	2185.5	2180.4	2173.6	2166.8	2158.3	2146.5	2127.9	2116.0	2097.4	2085.5	2078.7
20°	2287.1	2276.9	2268.5	2260.0	2243.1	2239.7	2221.0	2200.7	2178.7	2151.6	2148.2
22.5°	2419.2	2402.3	2392.1	2387.1	2370.1	2365.0	2334.5	2305.7	2278.6	2243.1	2234.6
25°	2553.1	2536.1	2531.1	2524.3	2512.4	2505.6	2476.8	2444.7	2409.1	2360.0	2349.8
27.5°	2683.5	2685.2	2671.7	2676.8	2673.4	2661.5	2632.7	2600.5	2573.4	2515.8	2504.0
30°	2846.2	2836.0	2829.2	2839.4	2827.5	2829.2	2803.8	2786.9	2742.8	2708.9	2685.2
32.5°	3015.6	3013.9	3024.1	3030.8	3029.1	3025.8	3005.4	2988.5	2949.5	2900.4	2890.2
35°	3247.7	3257.9	3266.3	3296.8	3296.8	3318.8	3298.5	3278.2	3232.4	3173.1	3152.8
37.5°	3405.2	3408.6	3442.5	3483.2	3534.0	3581.4	3595.0	3600.1	3581.4	3537.4	3506.9
40°	3549.2	3556.0	3610.2	3672.9	3747.5	3840.6	3896.5	3922.0	3927.0	3906.7	3840.6
42.5°	3693.2	3703.4	3759.3	3850.8	3954.1	4072.7	4171.0	4233.7	4269.3	4269.3	4230.3
45°	3861.0	3874.5	3935.5	4035.5	4155.8	4304.8	4440.4	4560.7	4618.3	4621.6	4584.4
47.5°	4059.2	4071.0	4142.2	4243.8	4367.5	4518.3	4689.4	4826.6	4933.4	4940.1	4909.7
50°	4315.0	4331.9	4391.2	4482.7	4609.8	4762.3	4933.4	5124.8	5236.6	5263.7	5231.5
52.5°	4653.8	4657.2	4706.4	4791.1	4914.7	5060.4	5241.7	5450.1	5597.5	5619.5	5567.0
55°	5121.4	5116.3	5148.5	5240.0	5333.2	5446.7	5634.7	5868.5	6032.9	6066.8	6012.5
57.5°	5756.7	5751.6	5778.7	5800.8	5975.3	6085.4	6270.1	6493.7	6652.9	6751.2	6658.0
60°	6741.0	6735.9	6780.0	6908.7	7039.2	7200.1	7379.7	7647.4	7871.0	7899.8	7808.3
62.5°	7454.3	7479.7	7576.2	7727.0	7991.3	8306.4	8635.1	8987.5	9446.6	9592.3	9548.2
65°	7205.2	7256.0	7389.9	7618.6	7971.0	8406.4	8921.4	9560.1	10175.1	10519.0	10508.8
66°	6981.6	7037.5	7201.8	7422.1	7794.8	8270.8	8833.3	9529.6	10217.4	10596.9	10620.6
67.5°	6575.0	6637.7	6798.6	7059.5	7422.1	7928.6	8533.4	9290.7	10068.3	10510.5	10573.2
70°	5783.8	5855.0	5971.9	6187.0	6544.5	6996.8	7633.8	8311.5	9126.4	9632.9	9709.2
72.5°	4835.1	4897.8	5028.2	5204.4	5497.5	5782.1	6281.9	6781.7	7364.5	7942.2	7886.3
75°	3471.3	3498.4	3576.4	3767.8	3925.3	4181.2	4582.7	4992.7	5390.8	5655.1	5692.3
77.5°	1804.3	1875.4	1985.5	2197.3	2368.4	2598.8	2859.7	3168.1	3459.5	3701.7	3635.6
80°	1180.8	1211.3	1309.6	1418.0	1543.4	1690.8	1865.3	1980.5	2017.7	2002.5	2017.7
82.5°	681.0	737.0	867.4	950.4	1043.6	1094.4	1233.3	1365.5	1440.0	1346.9	1313.0
85°	86.4	111.8	352.4	443.9	508.2	584.5	626.8	706.5	659.0	589.6	718.3
87.5°	18.6	16.9	23.7	50.8	52.5	44.0	83.0	88.1	54.2	27.1	33.9
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°	2024.5	2024.5	2024.5	2024.5	2024.5	2024.5	2024.5	2024.5	2024.5	2024.5	2024.5
2.5°	2004.2	2005.9	2009.3	2014.3	2017.7	2021.1	2024.5	2029.6	2033.0	2036.4	2043.1
5°	1995.7	2002.5	2009.3	2016.0	2024.5	2038.1	2046.5	2053.3	2060.1	2073.6	2078.7
7.5°	1990.6	2002.5	2012.7	2024.5	2038.1	2049.9	2065.2	2073.6	2083.8	2092.3	2102.4
10°	1987.2	2004.2	2014.3	2031.3	2046.5	2058.4	2075.3	2085.5	2097.4	2107.5	2112.6
12.5°	1994.0	2002.5	2012.7	2029.6	2048.2	2065.2	2083.8	2092.3	2102.4	2110.9	2112.6
15°	2022.8	2022.8	2024.5	2038.1	2056.7	2070.3	2085.5	2094.0	2099.1	2104.1	2104.1
17.5°	2075.3	2063.5	2055.0	2056.7	2068.6	2077.0	2085.5	2085.5	2082.1	2080.4	2077.0
20°	2136.3	2121.1	2104.1	2092.3	2088.9	2082.1	2077.0	2060.1	2046.5	2034.7	2026.2
22.5°	2224.4	2200.7	2177.0	2155.0	2134.6	2109.2	2080.4	2046.5	2014.3	1992.3	1978.8
25°	2332.8	2314.2	2285.4	2251.5	2226.1	2178.7	2141.4	2092.3	2051.6	2022.8	1999.1
27.5°	2487.0	2465.0	2437.9	2407.4	2370.1	2317.6	2271.9	2214.3	2165.1	2122.8	2092.3
30°	2678.5	2649.7	2629.3	2592.1	2566.6	2507.3	2461.6	2390.4	2295.6	2227.8	2185.5
32.5°	2875.0	2842.8	2825.8	2797.0	2768.2	2732.7	2663.2	2553.1	2431.1	2321.0	2248.1
35°	3137.6	3103.7	3073.2	3047.8	3005.4	2939.4	2878.4	2746.2	2578.5	2424.3	2302.4
37.5°	3467.9	3412.0	3335.8	3271.4	3196.9	3102.0	3008.8	2873.3	2681.8	2481.9	2319.3
40°	3820.3	3722.1	3613.6	3493.3	3364.6	3227.4	3120.6	2983.4	2768.2	2531.1	2307.4
42.5°	4187.9	4032.1	3881.3	3711.9	3532.3	3369.7	3230.7	3080.0	2832.6	2544.6	2260.0
45°	4552.2	4377.7	4149.0	3927.0	3700.0	3498.4	3342.6	3173.1	2891.9	2549.7	2197.3
47.5°	4853.7	4674.2	4413.3	4135.4	3866.1	3637.3	3454.4	3271.4	2971.5	2585.3	2182.1
50°	5172.2	4953.7	4664.0	4335.3	4030.4	3774.6	3579.7	3390.0	3083.4	2676.8	2231.2
52.5°	5519.5	5268.8	4930.0	4562.3	4228.6	3942.3	3730.5	3535.7	3225.7	2805.5	2324.4
55°	5943.1	5636.4	5268.8	4853.7	4496.3	4179.5	3945.7	3715.3	3395.1	2958.0	2441.3
57.5°	6590.2	6214.1	5800.8	5328.1	4931.7	4557.3	4277.7	4011.8	3657.7	3185.0	2600.5
60°	7760.9	7359.4	6822.3	6249.7	5783.8	5346.7	4936.8	4606.4	4171.0	3632.3	2952.9
62.5°	9438.1	8904.5	8187.8	7386.5	6776.6	6146.4	5683.9	5192.6	4652.1	4071.0	3368.0
65°	10369.9	9722.7	8763.8	7833.8	7049.4	6364.9	5777.1	5207.8	4608.1	4052.4	3464.5
66°	10485.1	9810.8	8814.7	7835.4	7012.1	6309.0	5690.7	5101.1	4487.8	3957.5	3423.9
67.5°	10437.7	9748.1	8721.5	7688.1	6851.1	6095.6	5456.9	4845.3	4233.7	3739.0	3288.3
70°	9660.1	9006.1	7998.1	6996.8	6202.3	5456.9	4847.0	4245.5	3684.8	3261.2	2929.2
72.5°	8021.8	7462.7	6586.9	5800.8	5177.3	4562.3	4045.6	3471.3	2997.0	2683.5	2487.0
75°	5790.6	5451.8	4653.8	4203.2	3656.0	3247.7	2746.2	2405.7	2065.2	1912.7	1878.8
77.5°	3657.7	3201.9	2695.4	2219.3	1824.6	1512.9	1177.4	999.5	833.5	816.6	986.0
80°	1851.7	1667.0	1284.2	1023.3	860.6	696.3	550.6	416.8	291.4	350.7	420.1
82.5°	1213.0	1011.4	792.9	652.2	567.5	471.0	365.9	254.1	186.4	210.1	288.0
85°	655.6	559.1	450.6	355.8	288.0	257.5	172.8	122.0	120.3	128.8	164.3
87.5°	47.4	47.4	37.3	33.9	40.7	33.9	30.5	30.5	28.8	30.5	40.7
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°	2024.5	2024.5	2024.5	2024.5	2024.5	2024.5	2024.5	2024.5	2024.5	2024.5	2024.5
2.5°	2046.5	2051.6	2053.3	2061.8	2066.9	2070.3	2073.6	2073.6	2075.3	2080.4	2082.1
5°	2085.5	2094.0	2104.1	2110.9	2114.3	2124.5	2127.9	2127.9	2131.2	2138.0	2143.1
7.5°	2109.2	2121.1	2131.2	2134.6	2141.4	2144.8	2149.9	2153.3	2153.3	2160.0	2163.4
10°	2117.7	2124.5	2134.6	2134.6	2141.4	2141.4	2146.5	2148.2	2148.2	2155.0	2160.0
12.5°	2117.7	2121.1	2129.5	2129.5	2134.6	2136.3	2143.1	2148.2	2149.9	2158.3	2165.1
15°	2107.5	2110.9	2117.7	2119.4	2131.2	2138.0	2153.3	2163.4	2163.4	2171.9	2175.3
17.5°	2078.7	2087.2	2100.7	2114.3	2136.3	2151.6	2170.2	2178.7	2171.9	2166.8	2161.7
20°	2031.3	2046.5	2078.7	2112.6	2151.6	2171.9	2182.1	2173.6	2149.9	2126.2	2110.9
22.5°	1983.9	2014.3	2068.6	2119.4	2163.4	2177.0	2171.9	2141.4	2102.4	2073.6	2053.3
25°	2005.9	2041.5	2094.0	2139.7	2168.5	2165.1	2144.8	2102.4	2060.1	2022.8	1988.9
27.5°	2097.4	2136.3	2165.1	2180.4	2177.0	2153.3	2121.1	2073.6	2022.8	1973.7	1926.2
30°	2183.8	2204.1	2210.9	2199.0	2171.9	2132.9	2092.3	2038.1	1970.3	1909.3	1855.1
32.5°	2222.7	2202.4	2170.2	2138.0	2094.0	2060.1	2004.2	1944.9	1860.2	1787.3	1733.1
35°	2222.7	2141.4	2060.1	1992.3	1926.2	1883.9	1819.5	1739.9	1662.0	1601.0	1558.6
37.5°	2173.6	2017.7	1883.9	1773.8	1690.8	1645.0	1548.5	1477.3	1411.2	1390.9	1363.8
40°	2083.8	1853.4	1660.3	1516.3	1411.2	1343.5	1246.9	1197.8	1172.4	1162.2	1157.1
42.5°	1963.5	1670.4	1412.9	1235.0	1121.5	1045.3	980.9	950.4	948.7	947.0	947.0
45°	1834.8	1473.9	1172.4	960.6	860.6	792.9	762.4	750.5	760.7	759.0	760.7
47.5°	1755.1	1324.8	952.1	726.8	650.6	606.5	591.3	596.3	604.8	601.4	601.4
50°	1745.0	1248.6	804.7	565.8	508.2	486.2	482.8	482.8	487.9	484.5	482.8
52.5°	1782.2	1236.7	728.5	486.2	440.5	421.8	418.5	416.8	415.1	404.9	396.4
55°	1846.6	1263.8	706.5	465.9	418.5	398.1	393.0	389.7	382.9	369.3	354.1
57.5°	1975.4	1348.5	726.8	476.1	425.2	408.3	403.2	403.2	389.7	367.6	345.6
60°	2285.4	1563.7	809.8	515.0	457.4	440.5	443.9	442.2	421.8	389.7	355.8
62.5°	2685.2	1844.9	918.2	569.2	498.1	494.7	511.6	508.2	474.4	425.2	376.1
65°	2869.9	1977.1	948.7	581.1	506.6	521.8	555.7	552.3	509.9	442.2	379.5
66°	2873.3	1977.1	935.2	570.9	494.7	513.3	547.2	545.5	503.2	435.4	372.7
67.5°	2803.8	1922.9	896.2	550.6	471.0	484.5	515.0	513.3	474.4	418.5	359.2
70°	2542.9	1721.3	796.3	515.0	438.8	432.0	442.2	435.4	410.0	371.0	330.4
72.5°	2178.7	1445.1	694.6	487.9	416.8	389.7	382.9	377.8	357.5	335.4	310.0
75°	1716.2	1143.6	609.9	467.6	396.4	360.9	349.0	342.2	328.7	313.4	293.1
77.5°	1058.8	818.3	532.0	440.5	381.2	345.6	337.1	327.0	306.6	288.0	272.8
80°	472.7	506.6	437.1	384.6	340.5	308.3	294.8	279.5	259.2	247.3	238.9
82.5°	315.1	327.0	316.8	288.0	257.5	232.1	211.8	211.8	208.4	198.2	194.8
85°	201.6	203.3	196.5	177.9	166.0	150.8	142.3	144.0	150.8	149.1	147.4
87.5°	45.7	45.7	54.2	50.8	59.3	62.7	67.8	72.8	83.0	83.0	88.1
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: P156666

CATALOG NUMBER: TLM-F06-LED-E1-T4-7050

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	2024.5	2024.5	2024.5	2024.5	2024.5
2.5°	2083.8	2087.2	2090.6	2085.5	2087.2
5°	2143.1	2141.4	2149.9	2144.8	2148.2
7.5°	2161.7	2163.4	2170.2	2170.2	2171.9
10°	2163.4	2166.8	2175.3	2180.4	2183.8
12.5°	2171.9	2178.7	2192.2	2195.6	2195.6
15°	2178.7	2182.1	2190.5	2193.9	2197.3
17.5°	2155.0	2148.2	2151.6	2153.3	2151.6
20°	2095.7	2088.9	2087.2	2080.4	2083.8
22.5°	2031.3	2012.7	2000.8	1987.2	1987.2
25°	1953.4	1924.6	1900.8	1877.1	1882.2
27.5°	1880.5	1843.2	1819.5	1804.3	1800.9
30°	1809.4	1770.4	1748.4	1729.7	1729.7
32.5°	1690.8	1663.7	1634.9	1623.0	1621.3
35°	1526.4	1509.5	1485.8	1480.7	1472.2
37.5°	1341.8	1336.7	1316.4	1314.7	1306.2
40°	1148.6	1152.0	1145.2	1141.9	1136.8
42.5°	955.5	972.4	969.1	967.4	964.0
45°	770.8	782.7	784.4	789.5	797.9
47.5°	606.5	609.9	613.3	611.6	613.3
50°	474.4	465.9	464.2	459.1	464.2
52.5°	382.9	369.3	362.5	355.8	352.4
55°	337.1	323.6	316.8	313.4	310.0
57.5°	325.3	311.7	301.6	294.8	293.1
60°	328.7	308.3	294.8	286.3	284.6
62.5°	337.1	310.0	291.4	282.9	281.2
65°	335.4	306.6	289.7	279.5	277.8
66°	330.4	303.3	286.3	277.8	276.1
67.5°	321.9	298.2	282.9	276.1	272.8
70°	306.6	291.4	279.5	271.1	267.7
72.5°	293.1	281.2	271.1	262.6	260.9
75°	277.8	267.7	257.5	250.7	249.0
77.5°	259.2	249.0	242.3	237.2	235.5
80°	228.7	221.9	215.2	208.4	208.4
82.5°	189.7	184.7	177.9	172.8	171.1
85°	145.7	145.7	140.6	135.5	133.8
87.5°	86.4	84.7	84.7	79.6	79.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)