

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: P152394

Luminaire Tested: **TLM-F05-LED-E1-SL4-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P152394
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-F05-LED-E1-SL4-7030
Description: TALON MEDIUM LED SITE LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL
Light Source: (35) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

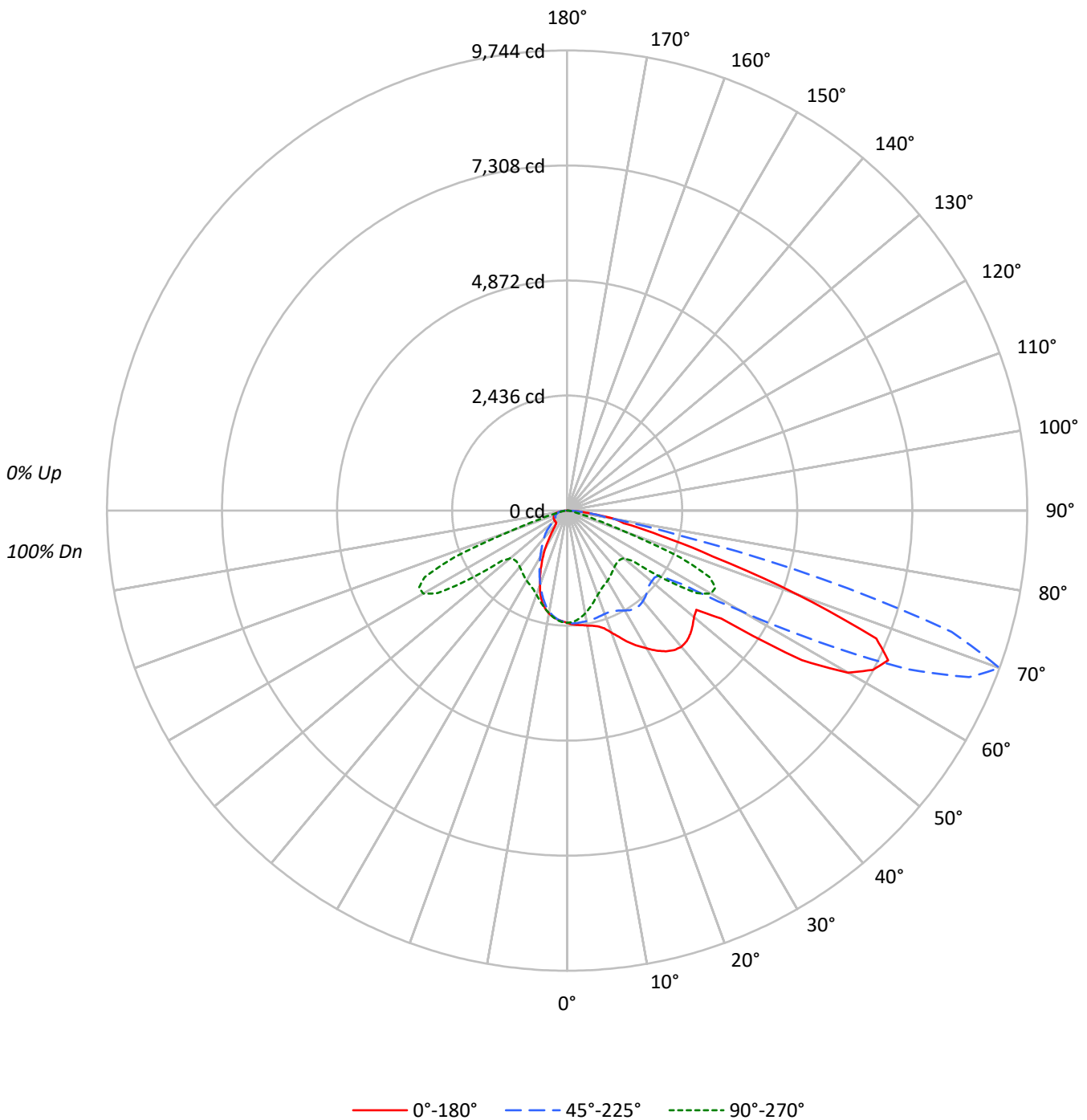
Lumens per Lamp: N/A
Luminaire Lumens: 11136.9 lumens
Efficiency: N/A
Efficacy: 83.5 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.07 / 1.36
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 133.3
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: P152394
CATALOG NUMBER: TLM-F05-LED-E1-SL4-7030

Luminous Intensity Polar Plot





TEST NUMBER: P152394

CATALOG NUMBER: TLM-F05-LED-E1-SL4-7030

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	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°	30817	30817	30817
5°	31639	30347	30150
10°	32567	29092	29142
15°	34098	27552	27147
20°	37947	26153	23257
25°	44001	25498	18593
30°	50432	25649	13888
35°	57577	25844	9032
40°	63717	26381	6233
45°	67690	27864	6223
50°	70788	31667	6922
55°	90069	57963	7559
60°	178061	91166	8474
65°	230178	102188	9525
70°	195840	48315	10719
75°	102949	17758	13223
80°	76580	9664	14362
85°	44312	9344	14404



TEST NUMBER: P152394

CATALOG NUMBER: TLM-F05-LED-E1-SL4-7030

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	222.0	2.0
10°-20°	607.7	5.5
20°-30°	899.7	8.1
30°-40°	1137.0	10.2
40°-50°	1285.8	11.5
50°-60°	1829.8	16.4
60°-70°	3407.8	30.6
70°-80°	1561.8	14.0
80°-90°	185.4	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°	1729.4	15.5
0°-40°	2866.4	25.7
0°-60°	5982.0	53.7
0°-90°	11136.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11136.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2376	2376	2376	2376	2376	
5°	2430	2390	2331	2312	2316	233
15°	2540	2356	2052	1943	2022	731
25°	3075	2344	1782	1389	1299	1428
35°	3637	2531	1632	930	570	2273
45°	3691	2404	1519	608	339	2839
55°	3984	2390	2564	309	334	4186
65°	7501	7943	3330	276	310	6917
75°	2055	5585	354	217	264	2526
85°	298	261	63	99	97	375
90°	0	0	0	0	0	



TEST NUMBER: P152394

CATALOG NUMBER: TLM-F05-LED-E1-SL4-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2376.3	2376.3	2376.3	2376.3	2376.3	2376.3	2376.3	2376.3	2376.3	2376.3	2376.3
2.5°	2412.8	2419.1	2411.5	2410.3	2410.3	2409.0	2401.5	2400.2	2390.2	2391.4	2393.9
5°	2430.4	2432.9	2427.9	2426.6	2424.1	2419.1	2412.8	2405.2	2397.7	2390.2	2383.9
7.5°	2448.0	2445.5	2441.7	2441.7	2437.9	2430.4	2417.8	2407.8	2391.4	2382.6	2371.3
10°	2473.1	2469.3	2464.3	2461.8	2455.5	2444.2	2426.6	2412.8	2392.7	2375.1	2356.2
12.5°	2497.0	2495.7	2488.2	2484.4	2474.4	2463.0	2441.7	2420.3	2393.9	2366.3	2341.1
15°	2539.7	2534.7	2527.1	2519.6	2503.3	2488.2	2455.5	2430.4	2392.7	2356.2	2317.3
17.5°	2613.8	2605.0	2597.5	2581.2	2561.1	2534.7	2486.9	2444.2	2392.7	2339.9	2295.9
20°	2749.6	2730.7	2720.7	2699.3	2664.1	2616.4	2542.2	2473.1	2396.4	2328.6	2269.5
22.5°	2902.9	2890.3	2876.5	2862.7	2807.4	2738.3	2637.7	2534.7	2419.1	2323.6	2248.2
25°	3075.0	3058.7	3051.2	3027.3	2975.8	2896.6	2759.6	2616.4	2470.6	2343.7	2248.2
27.5°	3228.3	3223.3	3222.1	3194.4	3145.4	3052.4	2890.3	2718.1	2541.0	2385.1	2267.0
30°	3367.8	3362.8	3360.3	3345.2	3288.7	3178.1	3002.2	2808.6	2617.6	2442.9	2302.2
32.5°	3516.1	3499.8	3492.2	3463.3	3399.3	3269.8	3068.8	2867.7	2677.9	2499.5	2341.1
35°	3636.8	3622.9	3607.9	3566.4	3475.9	3322.6	3097.7	2887.8	2701.8	2530.9	2361.3
37.5°	3724.7	3710.9	3689.5	3636.8	3524.9	3340.2	3096.4	2881.5	2693.0	2525.9	2365.0
40°	3763.7	3749.9	3727.2	3660.6	3533.7	3330.1	3072.5	2852.6	2666.6	2499.5	2349.9
42.5°	3748.6	3738.6	3709.6	3645.6	3506.1	3284.9	3024.8	2798.6	2616.4	2456.8	2316.0
45°	3690.8	3683.3	3655.6	3587.8	3443.2	3212.0	2954.4	2730.7	2556.0	2404.0	2270.8
47.5°	3604.1	3601.6	3573.9	3507.3	3364.1	3139.1	2881.5	2664.1	2495.7	2352.5	2233.1
50°	3508.6	3496.0	3482.2	3420.6	3289.9	3076.3	2828.7	2622.6	2461.8	2333.6	2216.7
52.5°	3448.3	3444.5	3431.9	3376.6	3251.0	3039.9	2804.9	2607.6	2459.3	2329.8	2207.9
55°	3983.6	3992.4	3876.8	3636.8	3425.6	3140.4	2876.5	2684.2	2520.9	2390.2	2300.9
57.5°	5892.5	5853.5	5655.0	5178.7	4640.8	3930.8	3419.4	3109.0	2906.6	2929.3	2974.5
60°	6865.1	6857.6	6821.1	6636.4	6278.3	5737.9	5138.5	4451.1	4232.4	4256.3	4273.9
62.5°	7299.9	7311.2	7338.9	7269.8	7175.5	7018.4	6719.3	6442.9	6150.1	6040.7	5747.9
65°	7501.0	7521.1	7583.9	7622.9	7659.3	7687.0	7805.1	8129.3	8342.9	7943.3	7013.4
67.5°	7085.0	7181.8	7389.1	7591.5	7772.4	8030.0	8429.6	9182.4	9706.4	9215.1	7866.7
70°	5164.9	5296.8	5534.3	6160.1	6828.7	7413.0	8187.1	9333.2	10123.6	9744.1	8077.8
72.5°	3238.4	3274.8	3380.4	3610.4	4106.8	4857.0	6210.4	7929.5	8841.8	8539.0	6827.4
75°	2054.6	2067.2	2063.4	2116.2	2200.4	2363.8	2899.1	4683.6	6057.1	5584.6	3805.2
77.5°	1224.0	1242.8	1250.4	1266.7	1306.9	1364.7	1408.7	1593.4	2539.7	2465.6	1381.1
80°	1025.4	1040.5	1027.9	1024.2	999.0	981.4	1002.8	981.4	911.1	877.1	808.0
82.5°	542.9	541.6	537.8	574.3	648.4	706.2	750.2	740.2	669.8	570.5	483.8
85°	297.8	307.9	307.9	320.4	309.1	310.4	320.4	338.0	312.9	261.4	213.6
87.5°	25.1	39.0	31.4	39.0	52.8	37.7	36.4	36.4	31.4	22.6	20.1
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: P152394

CATALOG NUMBER: TLM-F05-LED-E1-SL4-7030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2376.3	2376.3	2376.3	2376.3	2376.3	2376.3	2376.3	2376.3	2376.3	2376.3	2376.3
2.5°	2387.6	2385.1	2380.1	2376.3	2376.3	2370.1	2366.3	2363.8	2362.5	2357.5	2357.5
5°	2380.1	2371.3	2362.5	2356.2	2352.5	2346.2	2336.1	2331.1	2324.8	2319.8	2317.3
7.5°	2363.8	2347.4	2333.6	2323.6	2311.0	2300.9	2288.4	2277.1	2265.8	2260.7	2258.2
10°	2338.6	2317.3	2295.9	2277.1	2259.5	2241.9	2225.5	2209.2	2195.4	2185.3	2175.3
12.5°	2314.8	2282.1	2254.4	2226.8	2199.1	2177.8	2155.2	2131.3	2111.2	2092.3	2087.3
15°	2282.1	2244.4	2209.2	2175.3	2141.3	2106.2	2078.5	2052.1	2019.4	1998.1	1981.7
17.5°	2251.9	2206.7	2164.0	2123.7	2082.3	2045.8	2004.4	1969.2	1936.5	1903.8	1880.0
20°	2219.3	2170.2	2125.0	2079.8	2034.5	1988.0	1940.3	1895.0	1854.8	1815.9	1776.9
22.5°	2190.4	2140.1	2096.1	2047.1	1996.8	1944.0	1888.8	1832.2	1785.7	1735.4	1690.2
25°	2172.8	2117.5	2072.2	2024.5	1969.2	1911.4	1848.5	1781.9	1725.4	1667.6	1613.5
27.5°	2172.8	2101.1	2054.6	2006.9	1950.3	1888.8	1819.6	1746.8	1682.7	1618.6	1552.0
30°	2191.6	2103.6	2040.8	1990.5	1932.7	1866.1	1789.5	1712.8	1642.4	1567.0	1503.0
32.5°	2209.2	2108.7	2030.8	1966.7	1900.1	1834.7	1756.8	1675.1	1597.2	1525.6	1457.7
35°	2220.5	2108.7	2011.9	1930.2	1854.8	1790.7	1714.1	1632.4	1553.2	1482.9	1420.0
37.5°	2221.8	2098.6	1981.7	1888.8	1809.6	1743.0	1670.1	1593.4	1518.0	1452.7	1399.9
40°	2209.2	2078.5	1951.6	1844.8	1761.8	1694.0	1627.4	1558.3	1490.4	1436.4	1391.1
42.5°	2186.6	2057.1	1922.7	1809.6	1722.9	1652.5	1590.9	1531.9	1472.8	1426.3	1388.6
45°	2152.7	2028.2	1896.3	1788.2	1702.8	1628.6	1568.3	1519.3	1469.0	1430.1	1392.4
47.5°	2122.5	2018.2	1905.1	1802.0	1712.8	1636.2	1574.6	1533.1	1494.2	1467.8	1416.3
50°	2116.2	2013.2	1908.9	1813.4	1722.9	1645.0	1590.9	1569.6	1558.3	1541.9	1462.7
52.5°	2098.6	2011.9	1936.5	1883.7	1825.9	1789.5	1732.9	1753.0	1740.5	1682.7	1539.4
55°	2283.3	2308.5	2378.8	2479.4	2572.4	2593.7	2587.5	2563.6	2436.7	2096.1	1724.1
57.5°	3139.1	3281.1	3414.3	3473.4	3465.9	3399.3	3351.5	3254.7	3071.3	2656.6	2088.6
60°	4327.9	4350.5	4280.2	4175.9	3999.9	3852.9	3695.8	3514.9	3248.5	2842.6	2312.2
62.5°	5422.5	5118.4	4805.5	4511.4	4243.7	4010.0	3791.3	3538.7	3191.9	2768.4	2283.3
65°	6195.3	5551.9	5058.0	4635.8	4257.5	3930.8	3658.1	3330.1	2939.3	2557.3	2116.2
67.5°	6593.7	5607.2	4849.4	4261.3	3724.7	3272.3	2909.2	2590.0	2299.7	2132.5	1852.3
70°	6148.8	4759.0	3703.4	3038.6	2396.4	1921.4	1518.0	1274.2	1190.1	1348.4	1402.4
72.5°	4581.8	3097.7	2202.9	1704.0	1305.7	1040.5	798.0	627.1	510.2	535.3	694.9
75°	2166.5	1337.1	945.0	718.8	571.8	473.8	387.0	354.4	296.6	246.3	231.2
77.5°	843.2	614.5	507.7	372.0	263.9	212.4	181.0	174.7	178.4	173.4	170.9
80°	642.2	434.8	272.7	199.8	172.2	152.1	134.5	129.4	131.9	138.2	144.5
82.5°	358.1	223.7	165.9	144.5	129.4	110.6	100.5	93.0	94.2	101.8	115.6
85°	138.2	108.1	99.3	95.5	89.2	71.6	61.6	62.8	71.6	85.5	85.5
87.5°	15.1	15.1	20.1	15.1	15.1	15.1	13.8	16.3	17.6	22.6	26.4
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: P152394

CATALOG NUMBER: TLM-F05-LED-E1-SL4-7030

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2376.3	2376.3	2376.3	2376.3	2376.3	2376.3	2376.3	2376.3	2376.3	2376.3	2376.3
2.5°	2355.0	2355.0	2355.0	2352.5	2353.7	2348.7	2348.7	2344.9	2351.2	2347.4	2346.2
5°	2318.5	2317.3	2312.2	2312.2	2312.2	2312.2	2316.0	2306.0	2313.5	2313.5	2309.7
7.5°	2257.0	2257.0	2243.1	2250.7	2248.2	2251.9	2257.0	2251.9	2259.5	2264.5	2260.7
10°	2171.5	2171.5	2160.2	2169.0	2165.2	2174.0	2182.8	2177.8	2182.8	2190.4	2192.9
12.5°	2077.3	2072.2	2062.2	2065.9	2065.9	2071.0	2074.7	2081.0	2087.3	2097.4	2102.4
15°	1967.9	1960.4	1947.8	1947.8	1940.3	1942.8	1950.3	1952.8	1965.4	1979.2	1995.6
17.5°	1856.1	1837.2	1823.4	1807.1	1794.5	1804.6	1813.4	1819.6	1829.7	1851.1	1862.4
20°	1750.5	1712.8	1686.4	1665.1	1651.2	1657.5	1668.8	1676.4	1685.2	1690.2	1694.0
22.5°	1646.2	1603.5	1567.0	1540.7	1518.0	1524.3	1519.3	1515.5	1521.8	1505.5	1504.2
25°	1555.7	1505.5	1456.5	1425.0	1397.4	1388.6	1362.2	1355.9	1338.3	1324.5	1314.5
27.5°	1490.4	1425.0	1371.0	1334.6	1290.6	1257.9	1224.0	1190.1	1171.2	1148.6	1137.3
30°	1438.9	1369.8	1305.7	1244.1	1186.3	1136.0	1090.8	1046.8	1016.6	984.0	962.6
32.5°	1391.1	1327.0	1249.1	1164.9	1087.0	1030.5	971.4	921.1	873.4	830.6	799.2
35°	1358.4	1286.8	1187.5	1084.5	996.5	929.9	867.1	795.5	737.7	682.4	648.4
37.5°	1340.9	1252.9	1131.0	1016.6	918.6	843.2	765.3	682.4	612.0	560.5	508.9
40°	1327.0	1219.0	1080.7	956.3	853.3	762.8	672.3	574.3	496.4	442.3	402.1
42.5°	1311.9	1181.3	1036.7	908.6	794.2	688.6	579.3	475.0	400.9	363.2	345.6
45°	1295.6	1148.6	995.3	863.3	736.4	608.2	482.6	385.8	341.8	329.2	329.2
47.5°	1291.8	1127.2	965.1	819.3	671.1	515.2	393.3	333.0	320.4	323.0	328.0
50°	1306.9	1120.9	938.7	767.8	584.3	417.2	333.0	312.9	315.4	323.0	330.5
52.5°	1343.4	1126.0	911.1	696.2	481.3	344.3	307.9	306.6	314.2	325.5	333.0
55°	1404.9	1126.0	858.3	589.4	384.5	309.1	299.1	304.1	314.2	324.2	330.5
57.5°	1536.9	1114.7	765.3	471.2	321.7	296.6	296.6	302.9	311.7	321.7	326.7
60°	1694.0	1099.6	634.6	364.4	290.3	286.5	295.3	302.9	310.4	319.2	324.2
62.5°	1704.0	1060.6	502.7	301.6	274.0	280.2	294.1	304.1	306.6	312.9	319.2
65°	1565.8	924.9	399.6	270.2	266.4	276.5	290.3	297.8	299.1	301.6	307.9
67.5°	1371.0	754.0	323.0	255.1	258.9	270.2	277.7	284.0	287.8	294.1	295.3
70°	1126.0	605.7	276.5	240.0	243.8	256.4	262.6	268.9	276.5	284.0	280.2
72.5°	798.0	471.2	242.5	223.7	228.7	240.0	247.6	252.6	258.9	266.4	261.4
75°	339.3	329.2	209.9	202.3	209.9	217.4	224.9	232.5	238.8	242.5	242.5
77.5°	173.4	193.5	181.0	181.0	186.0	193.5	199.8	207.3	211.1	214.9	219.9
80°	147.0	149.5	152.1	157.1	162.1	169.6	175.9	182.2	183.5	184.7	187.2
82.5°	121.9	126.9	129.4	137.0	140.7	143.3	147.0	147.0	149.5	149.5	145.8
85°	88.0	94.2	98.0	99.3	98.0	99.3	100.5	103.0	109.3	109.3	104.3
87.5°	25.1	23.9	30.2	31.4	33.9	39.0	44.0	52.8	55.3	57.8	57.8
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: P152394

CATALOG NUMBER: TLM-F05-LED-E1-SL4-7030

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2376.3	2376.3	2376.3	2376.3
2.5°	2344.9	2347.4	2342.4	2343.7
5°	2309.7	2314.8	2308.5	2316.0
7.5°	2264.5	2272.0	2270.8	2269.5
10°	2199.1	2209.2	2209.2	2213.0
12.5°	2116.2	2122.5	2127.5	2130.0
15°	2004.4	2015.7	2022.0	2022.0
17.5°	1869.9	1877.4	1881.2	1876.2
20°	1699.0	1696.5	1697.7	1685.2
22.5°	1501.7	1505.5	1494.2	1496.7
25°	1308.2	1301.9	1306.9	1299.4
27.5°	1120.9	1122.2	1108.4	1114.7
30°	942.5	936.2	918.6	927.4
32.5°	770.3	754.0	735.1	723.8
35°	608.2	583.1	574.3	570.5
37.5°	477.5	449.9	441.1	431.0
40°	379.5	369.5	365.7	368.2
42.5°	340.6	340.6	343.1	344.3
45°	330.5	334.3	338.0	339.3
47.5°	331.8	335.5	340.6	341.8
50°	334.3	338.0	341.8	343.1
52.5°	335.5	335.5	338.0	339.3
55°	333.0	331.8	333.0	334.3
57.5°	328.0	325.5	326.7	330.5
60°	325.5	321.7	324.2	326.7
62.5°	319.2	317.9	320.4	321.7
65°	305.4	306.6	310.4	310.4
67.5°	292.8	294.1	295.3	296.6
70°	277.7	279.0	281.5	282.7
72.5°	260.1	265.2	268.9	274.0
75°	246.3	251.3	258.9	263.9
77.5°	222.4	226.2	235.0	241.3
80°	188.5	187.2	188.5	192.3
82.5°	144.5	144.5	143.3	142.0
85°	101.8	100.5	96.8	96.8
87.5°	55.3	54.0	52.8	50.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)