

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: P155595

Luminaire Tested: **TLM-F03-LED-E1-T3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P155595
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33672)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TLM-F03-LED-E1-T3
Description: TALON MEDIUM LED SITE LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 3
Light Source: (21) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

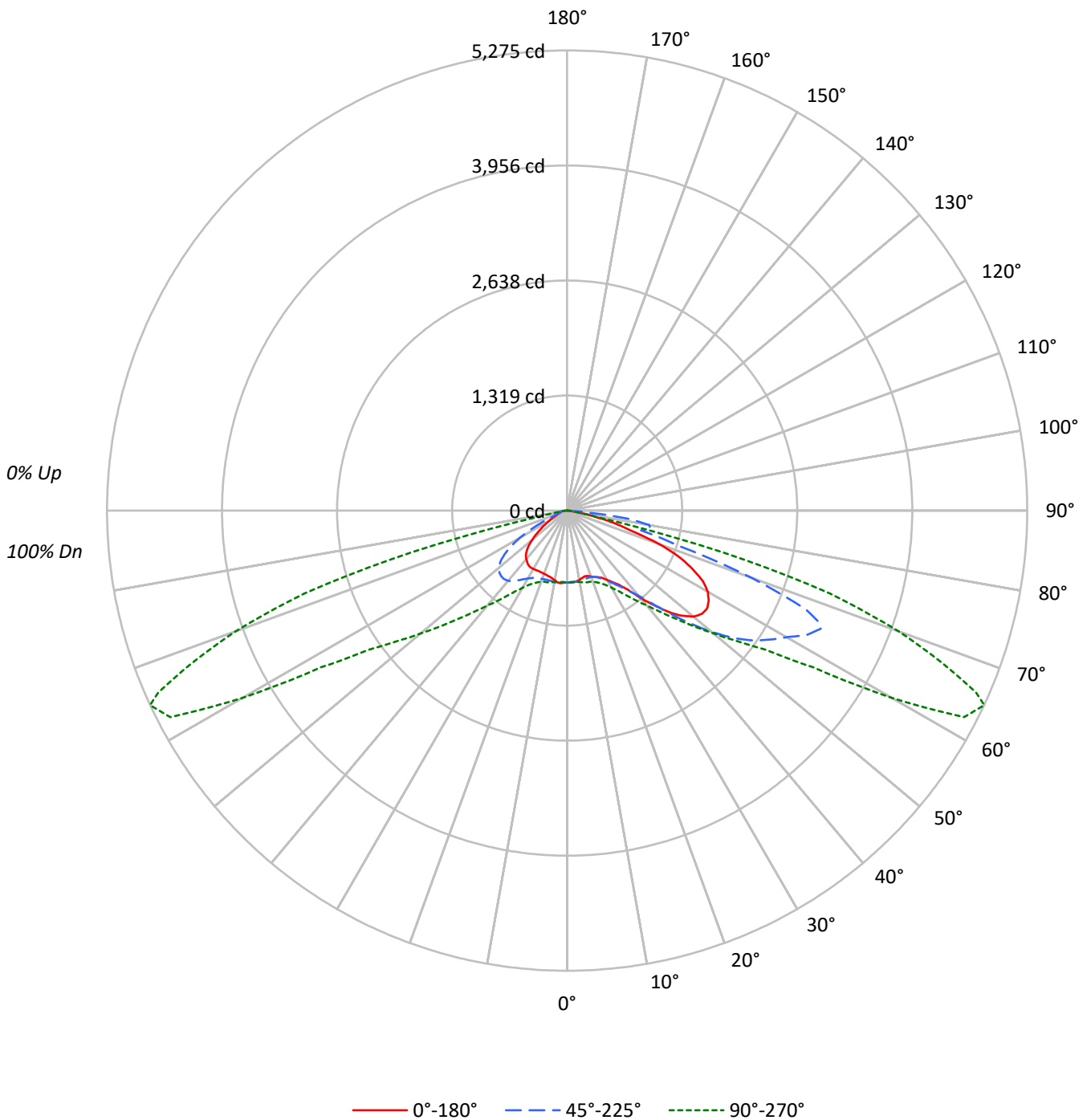
Lumens per Lamp: N/A
Luminaire Lumens: 7637.6 lumens
Efficiency: N/A
Efficacy: 97.5 lumens/watt
Spacing Criteria (0/90/45): 1.97 / 4.22 / 2.62
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 78.3
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



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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	94	89	102	97	92	87	92	88	84		88	85	82		85	82	79	77
2	92	82	73	65	89	80	71	64	76	69	63		72	66	61		69	64	60	57
3	81	68	57	49	79	66	56	49	63	55	48		60	53	47		57	51	46	43
4	73	57	46	38	70	56	46	38	53	44	37		51	43	36		48	41	36	33
5	65	49	38	30	63	48	38	30	46	37	29		44	35	29		42	34	29	26
6	59	43	32	24	57	42	32	24	40	31	24		38	30	24		36	29	23	21
7	54	38	28	20	52	37	27	20	35	27	20		34	26	20		32	25	20	17
8	50	34	24	17	48	33	24	17	32	23	17		30	23	17		29	22	17	14
9	46	31	21	15	45	30	21	15	29	20	15		28	20	15		27	20	14	12
10	43	28	19	13	42	27	19	13	26	18	13		25	18	13		24	18	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	17717	17717	17717
5°	17785	17768	18053
10°	17630	18172	17739
15°	17368	18969	17478
20°	18440	19915	17645
25°	20000	21844	18197
30°	22800	25405	19228
35°	27337	31156	20220
40°	36609	39880	20461
45°	50015	53105	20030
50°	63285	73323	17613
55°	73526	104386	14003
60°	80114	184614	10626
65°	80866	268709	8033
70°	70874	254504	6703
75°	46829	154019	6870
80°	17096	15658	8083
85°	2865	10399	8966



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.8	1.0
10°-20°	232.6	3.0
20°-30°	399.8	5.2
30°-40°	649.2	8.5
40°-50°	1083.9	14.2
50°-60°	1706.8	22.3
60°-70°	2327.4	30.5
70°-80°	1007.5	13.2
80°-90°	151.5	2.0
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°	711.3	9.3
0°-40°	1360.6	17.8
0°-60°	4151.2	54.4
0°-90°	7637.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7637.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	823	823	823	823	823	
5°	823	825	822	832	835	78
15°	779	812	851	826	784	224
25°	842	847	920	854	766	395
35°	1040	1063	1186	976	769	674
45°	1643	1664	1744	1067	658	1263
55°	1959	2595	2781	879	373	1728
65°	1588	3207	5275	309	158	1541
75°	563	877	1852	83	83	602
85°	12	195	42	58	36	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	823.0	823.0	823.0	823.0	823.0	823.0	823.0	823.0	823.0	823.0	823.0
2.5°	826.4	829.7	826.4	827.2	828.0	827.2	826.4	826.4	823.9	825.5	827.2
5°	823.0	825.5	824.7	825.5	826.4	825.5	824.7	825.5	823.9	824.7	827.2
7.5°	818.9	818.1	818.9	820.6	822.2	822.2	822.2	823.0	822.2	822.2	824.7
10°	806.5	807.4	809.0	811.5	812.3	814.8	814.8	817.3	818.1	819.7	823.0
12.5°	790.9	791.7	793.3	795.0	799.1	803.2	803.2	809.0	811.5	815.6	821.4
15°	779.3	780.1	781.8	783.4	786.7	790.9	793.3	799.9	804.1	811.5	819.7
17.5°	785.9	785.1	786.7	787.6	787.6	790.9	790.9	795.8	800.8	807.4	818.1
20°	804.9	804.9	806.5	806.5	805.7	807.4	804.1	804.1	804.9	808.2	815.6
22.5°	823.9	823.0	826.4	828.0	828.8	831.3	828.0	827.2	823.0	820.6	823.0
25°	842.0	841.2	845.3	847.8	851.9	854.4	854.4	854.4	851.1	847.0	844.5
27.5°	870.1	870.1	874.2	876.7	880.0	885.0	887.4	887.4	888.3	882.5	878.4
30°	917.2	918.0	918.8	922.1	925.4	927.1	930.4	932.8	935.3	932.0	925.4
32.5°	973.3	968.3	968.3	973.3	977.4	982.4	984.0	987.3	992.3	989.8	989.0
35°	1040.2	1038.5	1036.9	1038.5	1043.5	1049.2	1055.8	1061.6	1058.3	1063.3	1060.8
37.5°	1139.2	1140.9	1141.7	1141.7	1140.9	1142.5	1145.8	1151.6	1150.0	1151.6	1154.9
40°	1302.7	1296.9	1291.1	1291.9	1283.7	1285.3	1272.1	1277.9	1278.7	1273.0	1275.4
42.5°	1466.1	1469.4	1471.9	1478.5	1472.7	1469.4	1457.1	1457.1	1450.4	1444.7	1443.0
45°	1642.8	1649.4	1650.2	1663.4	1658.5	1669.2	1678.3	1675.8	1665.1	1664.3	1652.7
47.5°	1784.0	1794.7	1806.2	1821.9	1834.3	1858.3	1886.3	1900.4	1908.6	1915.2	1902.0
50°	1889.6	1894.6	1924.3	1949.1	1976.3	2015.9	2054.7	2105.1	2145.5	2164.5	2182.7
52.5°	1946.6	1959.0	1991.2	2030.0	2077.8	2137.3	2200.0	2280.1	2349.4	2395.7	2436.9
55°	1959.0	1971.4	2007.7	2057.2	2122.4	2202.5	2292.5	2401.5	2505.5	2594.6	2681.3
57.5°	1924.3	1938.3	1977.1	2034.1	2110.9	2208.3	2321.4	2464.2	2607.8	2752.3	2880.3
60°	1860.7	1878.1	1913.6	1969.7	2054.7	2164.5	2299.9	2479.1	2680.5	2901.7	3146.9
62.5°	1755.9	1774.1	1807.1	1869.0	1956.5	2077.8	2234.7	2457.6	2742.4	3090.8	3525.8
65°	1587.5	1595.7	1636.2	1698.9	1776.5	1910.3	2082.8	2351.9	2722.6	3207.2	3806.5
66°	1511.5	1525.6	1550.3	1600.7	1675.0	1800.5	1973.8	2247.1	2647.5	3166.7	3799.1
67.5°	1392.7	1403.4	1419.9	1453.7	1499.2	1591.6	1755.9	2014.3	2418.0	2962.0	3641.4
70°	1126.0	1131.0	1153.3	1164.8	1180.5	1211.0	1270.5	1419.1	1733.6	2244.6	2938.9
72.5°	767.7	781.8	805.7	838.7	881.7	922.9	951.0	970.0	1037.7	1339.0	1958.1
75°	563.0	577.9	608.4	652.2	727.3	813.1	902.3	943.6	915.5	876.7	1090.5
77.5°	326.9	346.7	372.3	414.4	483.8	597.7	750.4	885.8	977.4	983.2	933.7
80°	137.9	140.3	156.0	177.5	220.4	300.5	419.4	614.2	817.3	954.3	986.5
82.5°	31.4	38.8	49.5	58.6	71.8	99.1	146.9	244.4	441.7	692.6	903.1
85°	11.6	11.6	15.7	23.1	26.4	29.7	38.8	61.9	105.7	194.8	406.2
87.5°	0.0	0.8	1.7	1.7	3.3	4.1	6.6	9.1	8.3	7.4	24.8
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):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	823.0	823.0	823.0	823.0	823.0	823.0	823.0	823.0	823.0	823.0	823.0
2.5°	825.5	824.7	823.0	823.0	823.0	823.0	821.4	822.2	820.6	821.4	821.4
5°	824.7	824.7	823.9	822.2	823.0	823.0	823.9	822.2	822.2	823.0	822.2
7.5°	824.7	823.9	823.9	823.9	824.7	823.9	824.7	824.7	824.7	825.5	825.5
10°	824.7	824.7	826.4	827.2	827.2	828.0	830.5	830.5	831.3	832.1	833.8
12.5°	825.5	828.8	831.3	833.8	834.6	836.3	840.4	840.4	842.0	844.5	845.3
15°	826.4	831.3	836.3	837.9	839.6	842.9	847.0	848.6	851.1	853.6	855.2
17.5°	825.5	832.1	837.9	840.4	842.9	847.0	851.9	853.6	856.9	860.2	863.5
20°	824.7	833.8	842.9	846.2	849.5	855.2	861.8	866.0	869.3	874.2	877.5
22.5°	829.7	840.4	852.8	857.7	863.5	870.9	880.0	885.0	889.1	894.0	896.5
25°	845.3	853.6	868.5	876.7	884.1	896.5	908.9	914.7	919.6	923.8	924.6
27.5°	871.8	874.2	892.4	903.1	913.9	933.7	948.5	952.7	961.7	965.0	964.2
30°	914.7	910.6	925.4	941.9	957.6	984.9	1003.0	1013.7	1022.0	1022.0	1015.4
32.5°	976.6	970.0	974.1	993.1	1011.3	1050.9	1072.4	1086.4	1092.2	1090.5	1076.5
35°	1057.5	1053.4	1050.9	1065.8	1094.6	1140.9	1168.9	1176.4	1185.5	1183.8	1165.6
37.5°	1153.3	1150.0	1150.0	1167.3	1195.4	1263.9	1294.4	1299.4	1298.6	1285.3	1251.5
40°	1266.4	1264.7	1257.3	1267.2	1291.1	1380.3	1421.6	1428.2	1419.1	1397.6	1358.0
42.5°	1429.0	1419.1	1396.0	1401.7	1419.9	1506.6	1560.2	1578.4	1569.3	1547.9	1483.5
45°	1641.1	1630.4	1591.6	1586.7	1596.6	1672.5	1741.9	1746.0	1744.3	1717.1	1641.1
47.5°	1890.5	1873.9	1832.7	1819.5	1816.2	1886.3	1953.2	1959.8	1955.7	1915.2	1813.7
50°	2160.4	2136.5	2109.2	2100.1	2086.9	2137.3	2205.0	2205.8	2189.3	2133.2	2038.2
52.5°	2448.5	2440.3	2435.3	2426.2	2420.4	2464.2	2505.5	2480.7	2455.9	2397.3	2314.8
55°	2739.1	2772.9	2807.6	2810.9	2820.8	2867.9	2867.0	2799.4	2781.2	2749.0	2667.3
57.5°	3047.8	3173.3	3282.3	3316.1	3349.2	3436.7	3428.4	3361.5	3338.4	3298.8	3231.1
60°	3468.0	3806.5	4121.0	4196.1	4248.2	4353.0	4343.1	4239.9	4287.8	4284.5	4197.0
62.5°	4056.6	4619.6	5091.0	5206.6	5242.9	5254.5	5191.7	5080.3	5127.3	5180.2	4911.0
65°	4455.4	5117.4	5601.2	5690.3	5695.3	5557.4	5417.9	5286.7	5275.1	5229.7	4845.0
66°	4464.4	5142.2	5627.6	5714.3	5683.7	5495.5	5318.9	5186.8	5129.8	5029.9	4631.2
67.5°	4304.3	4987.8	5510.4	5602.0	5535.1	5268.5	5025.0	4854.9	4743.5	4581.7	4230.0
70°	3615.0	4292.7	4936.6	5107.5	5129.0	4731.1	4393.4	4193.7	4043.4	3821.4	3518.4
72.5°	2687.9	3300.4	3868.4	4031.9	4115.2	3797.4	3512.6	3360.7	3155.2	2921.5	2706.1
75°	1684.9	2117.5	2498.0	2612.8	2534.4	2288.4	2117.5	2053.9	1851.7	1712.1	1613.9
77.5°	963.4	1098.8	1129.3	1085.6	993.1	760.3	540.7	400.4	347.5	384.7	424.3
80°	940.3	861.8	686.8	604.3	547.3	376.4	221.2	151.9	126.3	129.6	140.3
82.5°	1018.7	1093.0	899.8	733.9	615.8	416.1	229.5	122.2	82.6	97.4	109.8
85°	662.1	921.3	829.7	699.2	566.3	355.8	189.0	63.6	42.1	55.3	75.9
87.5°	66.9	73.5	62.7	85.0	63.6	29.7	14.9	9.1	8.3	9.9	14.9
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	823.0	823.0	823.0	823.0	823.0	823.0	823.0	823.0	823.0	823.0	823.0
2.5°	822.2	822.2	823.0	823.9	824.7	825.5	825.5	825.5	825.5	827.2	826.4
5°	823.9	825.5	827.2	828.0	829.7	829.7	832.1	831.3	831.3	833.8	834.6
7.5°	827.2	829.7	833.0	832.1	835.4	834.6	836.3	836.3	833.8	834.6	833.0
10°	834.6	837.9	839.6	837.1	837.9	834.6	833.8	829.7	824.7	822.2	818.9
12.5°	847.0	850.3	850.3	846.2	841.2	833.8	828.0	818.9	811.5	807.4	803.2
15°	857.7	861.0	860.2	853.6	846.2	834.6	826.4	815.6	804.9	798.3	794.2
17.5°	866.0	867.6	865.2	856.1	847.8	837.1	828.8	817.3	804.9	796.6	789.2
20°	878.4	876.7	870.9	859.4	850.3	840.4	833.8	823.9	809.8	799.1	788.4
22.5°	896.5	889.9	879.2	866.8	857.7	848.6	842.0	831.3	817.3	804.1	791.7
25°	920.5	907.3	892.4	879.2	870.9	861.0	853.6	842.0	827.2	812.3	797.5
27.5°	955.1	932.0	913.0	901.5	892.4	880.0	870.9	856.1	840.4	823.0	806.5
30°	993.9	962.6	944.4	935.3	925.4	912.2	898.2	879.2	861.0	842.0	822.2
32.5°	1044.3	1006.3	989.0	979.9	966.7	950.2	933.7	912.2	886.6	861.8	837.9
35°	1110.3	1071.5	1053.4	1039.3	1021.2	999.7	975.8	946.9	912.2	879.2	848.6
37.5°	1181.3	1139.2	1121.9	1107.0	1079.8	1051.7	1017.9	975.8	928.7	885.0	847.0
40°	1271.3	1232.5	1210.2	1184.6	1152.4	1103.7	1050.9	989.8	929.5	875.9	831.3
42.5°	1385.2	1346.4	1313.4	1273.0	1216.8	1141.7	1066.6	987.3	914.7	853.6	805.7
45°	1536.3	1489.2	1432.3	1361.3	1270.5	1165.6	1067.4	971.6	886.6	818.9	767.7
47.5°	1721.2	1649.4	1556.1	1436.4	1306.0	1172.2	1054.2	940.3	842.9	769.4	712.4
50°	1940.8	1827.7	1674.2	1498.3	1324.1	1162.3	1021.2	893.2	780.9	702.5	634.8
52.5°	2191.8	2006.9	1780.7	1542.9	1323.3	1129.3	965.0	822.2	700.0	612.5	548.1
55°	2486.5	2211.6	1890.5	1575.9	1300.2	1068.2	879.2	722.3	600.2	519.3	459.8
57.5°	2918.2	2543.4	2082.0	1627.1	1254.0	974.1	762.8	602.6	495.3	418.5	368.2
60°	3707.4	3097.4	2427.0	1730.3	1183.0	836.3	626.6	474.7	384.7	322.8	288.9
62.5°	4301.8	3525.8	2613.6	1707.2	1040.2	666.2	464.8	345.9	283.2	241.1	219.6
65°	4216.8	3392.9	2414.7	1470.3	815.6	469.7	308.7	235.3	194.8	175.0	162.6
66°	4024.4	3219.5	2242.1	1323.3	705.0	390.5	254.3	197.3	167.6	153.5	145.3
67.5°	3659.6	2897.6	1933.4	1084.7	541.5	283.2	191.5	156.0	136.2	130.4	124.7
70°	3042.1	2310.6	1357.2	631.5	276.6	157.7	121.4	109.0	104.0	103.2	101.5
72.5°	2331.3	1635.4	799.1	298.8	143.6	104.8	94.1	90.0	88.3	88.3	89.2
75°	1429.0	918.8	353.3	146.1	100.7	88.3	83.4	81.7	80.9	81.7	80.9
77.5°	477.2	292.2	151.1	110.6	91.6	81.7	78.4	76.8	76.8	76.8	76.8
80°	146.1	127.1	115.6	102.4	86.7	77.6	72.6	71.8	72.6	73.5	71.0
82.5°	109.8	104.0	97.4	90.8	78.4	69.3	67.7	67.7	67.7	65.2	61.9
85°	80.9	80.1	66.0	61.9	57.8	57.8	57.8	57.8	55.3	51.2	47.9
87.5°	14.9	14.0	14.9	15.7	23.1	24.8	24.8	26.4	28.9	27.2	27.2
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: P155595

CATALOG NUMBER: TLM-F03-LED-E1-T3

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	823.0	823.0	823.0	823.0	823.0
2.5°	826.4	825.5	828.0	826.4	827.2
5°	833.8	833.0	834.6	833.0	835.4
7.5°	831.3	829.7	828.8	829.7	830.5
10°	814.0	812.3	811.5	810.7	811.5
12.5°	799.1	795.8	795.8	794.2	795.0
15°	788.4	785.9	785.1	783.4	784.2
17.5°	783.4	779.3	777.6	776.0	776.0
20°	780.1	775.2	772.7	771.0	770.2
22.5°	780.1	772.7	769.4	767.7	766.9
25°	783.4	774.3	769.4	766.9	766.1
27.5°	790.0	778.5	772.7	769.4	769.4
30°	801.6	786.7	778.5	774.3	773.5
32.5°	813.1	793.3	781.8	776.8	775.2
35°	818.9	793.3	779.3	771.0	769.4
37.5°	812.3	782.6	765.3	752.9	750.4
40°	791.7	760.3	741.3	729.8	728.1
42.5°	764.4	733.9	711.6	703.3	700.9
45°	727.3	691.0	668.7	657.1	657.9
47.5°	663.7	626.6	606.8	596.0	597.7
50°	588.6	552.3	534.9	523.4	525.9
52.5°	506.0	473.0	456.5	450.7	449.1
55°	419.4	393.8	382.2	375.6	373.1
57.5°	340.1	322.0	313.7	305.4	306.3
60°	268.3	259.2	256.7	247.7	246.8
62.5°	211.3	205.6	203.1	196.5	197.3
65°	160.2	158.5	160.2	156.0	157.7
66°	144.5	145.3	145.3	142.8	144.5
67.5°	124.7	126.3	128.8	126.3	128.0
70°	103.2	104.8	106.5	106.5	106.5
72.5°	90.0	91.6	92.5	92.5	92.5
75°	82.6	83.4	84.2	82.6	82.6
77.5°	77.6	77.6	75.9	75.1	74.3
80°	70.2	69.3	66.9	65.2	65.2
82.5°	58.6	57.0	55.3	52.8	52.8
85°	44.6	42.9	41.3	38.0	36.3
87.5°	23.1	23.9	23.1	19.0	16.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)