

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: P155596

Luminaire Tested: **TLM-F03-LED-E1-T3-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P155596
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-T3-7050
Description: TALON MEDIUM LED SITE LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 3
Light Source: (21) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7836.9 lumens
Efficiency: N/A
Efficacy: 100.1 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

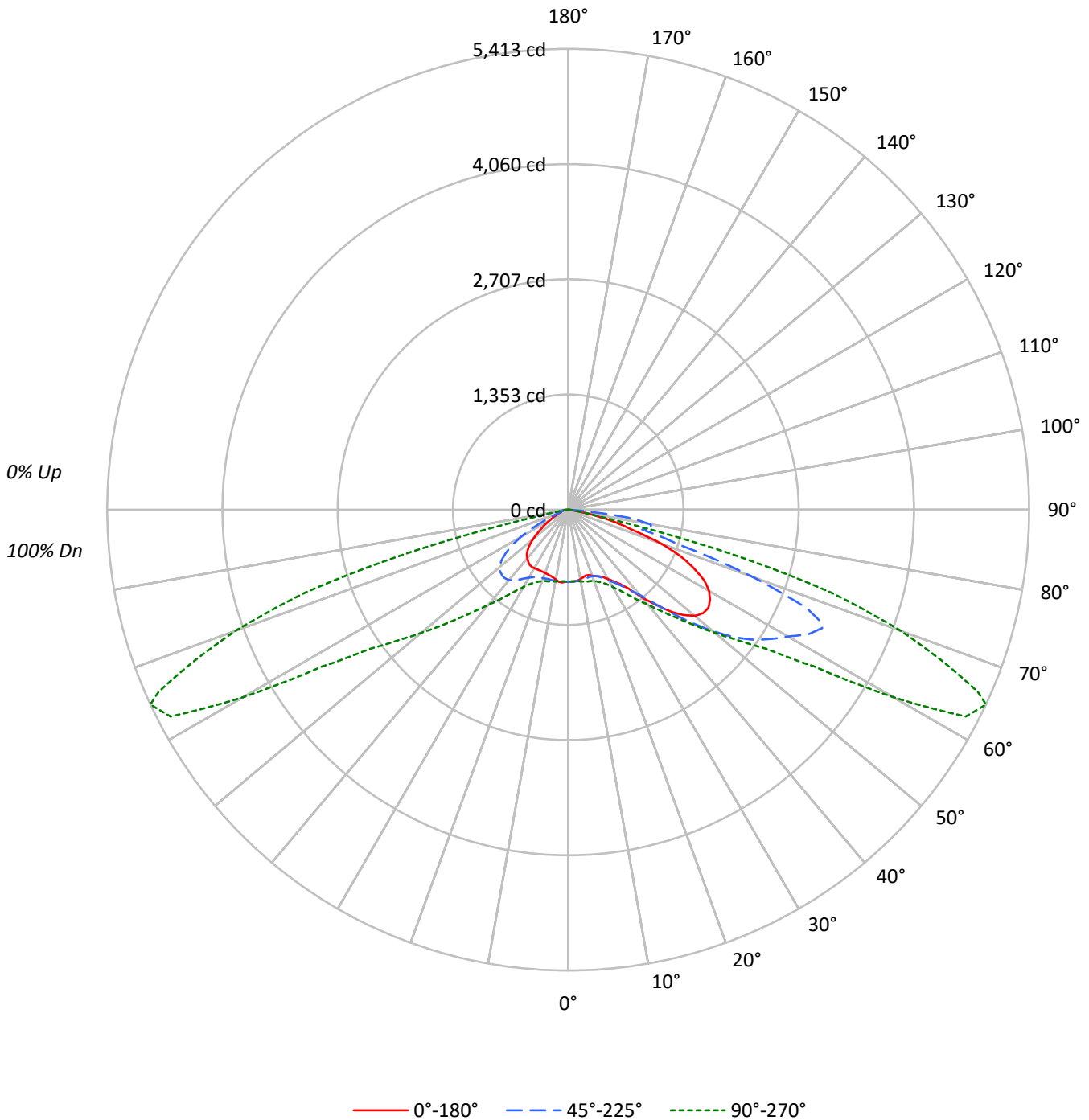
Input Watts (W): 78.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	18180	18180	18180
5°	18250	18232	18524
10°	18091	18647	18203
15°	17821	19463	17935
20°	18921	20435	18105
25°	20523	22414	18672
30°	23394	26069	19730
35°	28049	31968	20749
40°	37565	40920	20995
45°	51321	54493	20553
50°	64940	75235	18072
55°	75444	107111	14371
60°	82206	189432	10906
65°	82975	275724	8242
70°	72725	261151	6880
75°	48051	158037	7045
80°	17542	16067	8294
85°	2939	10671	9213



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.9	1.0
10°-20°	238.7	3.0
20°-30°	410.3	5.2
30°-40°	666.2	8.5
40°-50°	1112.2	14.2
50°-60°	1751.3	22.3
60°-70°	2388.1	30.5
70°-80°	1033.8	13.2
80°-90°	155.4	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°	729.9	9.3
0°-40°	1396.1	17.8
0°-60°	4259.6	54.4
0°-90°	7836.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7836.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	844	844	844	844	844	
5°	844	846	844	854	857	80
15°	800	833	873	848	805	230
25°	864	869	944	876	786	405
35°	1067	1091	1216	1001	790	691
45°	1686	1708	1790	1095	675	1296
55°	2010	2662	2854	902	383	1773
65°	1629	3291	5413	317	162	1582
75°	578	900	1900	86	85	618
85°	12	200	43	59	37	31
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°	844.5	844.5	844.5	844.5	844.5	844.5	844.5	844.5	844.5	844.5	844.5
2.5°	847.9	851.3	847.9	848.8	849.6	848.8	847.9	847.9	845.4	847.1	848.8
5°	844.5	847.1	846.2	847.1	847.9	847.1	846.2	847.1	845.4	846.2	848.8
7.5°	840.3	839.5	840.3	842.0	843.7	843.7	843.7	844.5	843.7	843.7	846.2
10°	827.6	828.4	830.1	832.7	833.5	836.1	836.1	838.6	839.5	841.1	844.5
12.5°	811.5	812.3	814.0	815.7	820.0	824.2	824.2	830.1	832.7	836.9	842.8
15°	799.6	800.5	802.2	803.9	807.3	811.5	814.0	820.8	825.1	832.7	841.1
17.5°	806.4	805.6	807.3	808.1	808.1	811.5	811.5	816.6	821.7	828.4	839.5
20°	825.9	825.9	827.6	827.6	826.7	828.4	825.1	825.1	825.9	829.3	836.9
22.5°	845.4	844.5	847.9	849.6	850.5	853.0	849.6	848.8	844.5	842.0	844.5
25°	864.0	863.2	867.4	869.9	874.2	876.7	876.7	876.7	873.3	869.1	866.6
27.5°	892.8	892.8	897.1	899.6	903.0	908.1	910.6	910.6	911.5	905.5	901.3
30°	941.1	941.9	942.8	946.2	949.6	951.3	954.7	957.2	959.7	956.3	949.6
32.5°	998.7	993.6	993.6	998.7	1002.9	1008.0	1009.7	1013.1	1018.2	1015.6	1014.8
35°	1067.3	1065.6	1063.9	1065.6	1070.7	1076.6	1083.4	1089.3	1086.0	1091.0	1088.5
37.5°	1169.0	1170.7	1171.5	1171.5	1170.7	1172.4	1175.7	1181.7	1180.0	1181.7	1185.1
40°	1336.7	1330.8	1324.8	1325.7	1317.2	1318.9	1305.3	1311.3	1312.1	1306.2	1308.7
42.5°	1504.4	1507.8	1510.3	1517.1	1511.2	1507.8	1495.1	1495.1	1488.3	1482.4	1480.7
45°	1685.7	1692.5	1693.3	1706.9	1701.8	1712.8	1722.1	1719.6	1708.6	1707.7	1695.8
47.5°	1830.5	1841.5	1853.4	1869.5	1882.2	1906.8	1935.6	1950.0	1958.4	1965.2	1951.7
50°	1939.0	1944.0	1974.5	1999.9	2027.9	2068.6	2108.4	2160.0	2201.5	2221.0	2239.7
52.5°	1997.4	2010.1	2043.1	2083.0	2132.1	2193.1	2257.5	2339.6	2410.8	2458.2	2500.6
55°	2010.1	2022.8	2060.1	2110.9	2177.8	2260.0	2352.3	2464.1	2570.9	2662.4	2751.3
57.5°	1974.5	1988.9	2028.7	2087.2	2166.0	2265.9	2382.0	2528.5	2675.9	2824.2	2955.4
60°	1909.3	1927.1	1963.5	2021.1	2108.4	2221.0	2360.0	2543.8	2750.5	2977.5	3229.1
62.5°	1801.7	1820.4	1854.2	1917.8	2007.6	2132.1	2293.0	2521.7	2814.0	3171.5	3617.9
65°	1628.9	1637.4	1678.9	1743.3	1822.9	1960.1	2137.2	2413.3	2793.7	3290.9	3905.9
66°	1551.0	1565.4	1590.8	1642.5	1718.7	1847.5	2025.4	2305.7	2716.6	3249.4	3898.2
67.5°	1429.0	1440.0	1457.0	1491.7	1538.3	1633.2	1801.7	2066.9	2481.1	3039.3	3736.5
70°	1155.4	1160.5	1183.4	1195.2	1211.3	1242.7	1303.6	1456.1	1778.9	2303.2	3015.6
72.5°	787.8	802.2	826.7	860.6	904.7	947.0	975.8	995.3	1064.8	1374.0	2009.3
75°	577.7	593.0	624.3	669.2	746.3	834.4	925.9	968.2	939.4	899.6	1119.0
77.5°	335.4	355.8	382.0	425.2	496.4	613.3	770.0	908.9	1002.9	1008.9	958.0
80°	141.5	144.0	160.1	182.1	226.2	308.3	430.3	630.2	838.6	979.2	1012.3
82.5°	32.2	39.8	50.8	60.1	73.7	101.6	150.8	250.7	453.2	710.7	926.7
85°	11.9	11.9	16.1	23.7	27.1	30.5	39.8	63.5	108.4	199.9	416.8
87.5°	0.0	0.8	1.7	1.7	3.4	4.2	6.8	9.3	8.5	7.6	25.4
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):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	844.5	844.5	844.5	844.5	844.5	844.5	844.5	844.5	844.5	844.5	844.5
2.5°	847.1	846.2	844.5	844.5	844.5	844.5	842.8	843.7	842.0	842.8	842.8
5°	846.2	846.2	845.4	843.7	844.5	844.5	845.4	843.7	843.7	844.5	843.7
7.5°	846.2	845.4	845.4	845.4	846.2	845.4	846.2	846.2	846.2	847.1	847.1
10°	846.2	846.2	847.9	848.8	848.8	849.6	852.2	852.2	853.0	853.9	855.5
12.5°	847.1	850.5	853.0	855.5	856.4	858.1	862.3	862.3	864.0	866.6	867.4
15°	847.9	853.0	858.1	859.8	861.5	864.9	869.1	870.8	873.3	875.9	877.6
17.5°	847.1	853.9	859.8	862.3	864.9	869.1	874.2	875.9	879.3	882.7	886.0
20°	846.2	855.5	864.9	868.3	871.6	877.6	884.3	888.6	892.0	897.1	900.4
22.5°	851.3	862.3	875.0	880.1	886.0	893.7	903.0	908.1	912.3	917.4	919.9
25°	867.4	875.9	891.1	899.6	907.2	919.9	932.6	938.6	943.6	947.9	948.7
27.5°	894.5	897.1	915.7	926.7	937.7	958.0	973.3	977.5	986.8	990.2	989.4
30°	938.6	934.3	949.6	966.5	982.6	1010.6	1029.2	1040.2	1048.7	1048.7	1041.9
32.5°	1002.1	995.3	999.5	1019.0	1037.7	1078.3	1100.4	1114.8	1120.7	1119.0	1104.6
35°	1085.1	1080.9	1078.3	1093.6	1123.2	1170.7	1199.5	1207.1	1216.4	1214.7	1196.1
37.5°	1183.4	1180.0	1180.0	1197.8	1226.6	1296.9	1328.2	1333.3	1332.4	1318.9	1284.2
40°	1299.4	1297.7	1290.1	1300.3	1324.8	1416.3	1458.7	1465.4	1456.1	1434.1	1393.4
42.5°	1466.3	1456.1	1432.4	1438.3	1457.0	1545.9	1601.0	1619.6	1610.3	1588.3	1522.2
45°	1684.0	1673.0	1633.2	1628.1	1638.2	1716.2	1787.3	1791.6	1789.9	1761.9	1684.0
47.5°	1939.8	1922.9	1880.5	1867.0	1863.6	1935.6	2004.2	2011.0	2006.7	1965.2	1861.0
50°	2216.8	2192.2	2164.3	2155.0	2141.4	2193.1	2262.5	2263.4	2246.4	2188.8	2091.4
52.5°	2512.4	2504.0	2498.9	2489.6	2483.6	2528.5	2570.9	2545.5	2520.0	2459.9	2375.2
55°	2810.6	2845.3	2880.9	2884.3	2894.5	2942.7	2941.9	2872.4	2853.8	2820.8	2736.9
57.5°	3127.4	3256.2	3368.0	3402.7	3436.6	3526.4	3517.9	3449.3	3425.6	3384.9	3315.5
60°	3558.6	3905.9	4228.6	4305.7	4359.1	4466.6	4456.5	4350.6	4399.7	4396.3	4306.5
62.5°	4162.5	4740.2	5223.9	5342.5	5379.8	5391.6	5327.3	5212.9	5261.2	5315.4	5039.3
65°	4571.7	5251.0	5747.4	5838.9	5844.0	5702.5	5559.4	5424.7	5412.8	5366.2	4971.5
66°	4581.0	5276.4	5774.5	5863.5	5832.1	5639.0	5457.7	5322.2	5263.7	5161.2	4752.1
67.5°	4416.7	5118.0	5654.2	5748.3	5679.6	5406.0	5156.1	4981.7	4867.3	4701.3	4340.4
70°	3709.3	4404.8	5065.5	5240.9	5262.9	4854.6	4508.1	4303.1	4149.0	3921.1	3610.2
72.5°	2758.1	3386.6	3969.4	4137.1	4222.7	3896.5	3604.3	3448.4	3237.5	2997.8	2776.7
75°	1728.9	2172.7	2563.3	2681.0	2600.5	2348.1	2172.7	2107.5	1900.0	1756.8	1656.0
77.5°	988.5	1127.5	1158.8	1113.9	1019.0	780.2	554.8	410.8	356.6	394.7	435.4
80°	964.8	884.3	704.8	620.1	561.6	386.3	227.0	155.9	129.6	133.0	144.0
82.5°	1045.3	1121.5	923.3	753.1	631.9	426.9	235.5	125.4	84.7	100.0	112.7
85°	679.4	945.3	851.3	717.5	581.1	365.1	194.0	65.2	43.2	56.8	77.9
87.5°	68.6	75.4	64.4	87.2	65.2	30.5	15.2	9.3	8.5	10.2	15.2
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°	844.5	844.5	844.5	844.5	844.5	844.5	844.5	844.5	844.5	844.5	844.5
2.5°	843.7	843.7	844.5	845.4	846.2	847.1	847.1	847.1	847.1	848.8	847.9
5°	845.4	847.1	848.8	849.6	851.3	851.3	853.9	853.0	853.0	855.5	856.4
7.5°	848.8	851.3	854.7	853.9	857.2	856.4	858.1	858.1	855.5	856.4	854.7
10°	856.4	859.8	861.5	858.9	859.8	856.4	855.5	851.3	846.2	843.7	840.3
12.5°	869.1	872.5	872.5	868.3	863.2	855.5	849.6	840.3	832.7	828.4	824.2
15°	880.1	883.5	882.7	875.9	868.3	856.4	847.9	836.9	825.9	819.1	814.9
17.5°	888.6	890.3	887.7	878.4	869.9	858.9	850.5	838.6	825.9	817.4	809.8
20°	901.3	899.6	893.7	881.8	872.5	862.3	855.5	845.4	831.0	820.0	809.0
22.5°	919.9	913.1	902.1	889.4	880.1	870.8	864.0	853.0	838.6	825.1	812.3
25°	944.5	930.9	915.7	902.1	893.7	883.5	875.9	864.0	848.8	833.5	818.3
27.5°	980.1	956.3	936.9	925.0	915.7	903.0	893.7	878.4	862.3	844.5	827.6
30°	1019.9	987.7	969.1	959.7	949.6	936.0	921.6	902.1	883.5	864.0	843.7
32.5°	1071.6	1032.6	1014.8	1005.5	991.9	975.0	958.0	936.0	909.8	884.3	859.8
35°	1139.3	1099.5	1080.9	1066.5	1047.8	1025.8	1001.2	971.6	936.0	902.1	870.8
37.5°	1212.2	1169.0	1151.2	1135.9	1108.0	1079.2	1044.4	1001.2	953.0	908.1	869.1
40°	1304.5	1264.7	1241.8	1215.6	1182.5	1132.5	1078.3	1015.6	953.8	898.7	853.0
42.5°	1421.4	1381.6	1347.7	1306.2	1248.6	1171.5	1094.4	1013.1	938.6	875.9	826.7
45°	1576.4	1528.1	1469.7	1396.8	1303.6	1196.1	1095.3	997.0	909.8	840.3	787.8
47.5°	1766.2	1692.5	1596.7	1473.9	1340.1	1202.8	1081.7	964.8	864.9	789.5	731.0
50°	1991.5	1875.4	1717.9	1537.4	1358.7	1192.7	1047.8	916.5	801.3	720.9	651.4
52.5°	2249.0	2059.2	1827.1	1583.2	1357.9	1158.8	990.2	843.7	718.3	628.5	562.5
55°	2551.4	2269.3	1939.8	1617.1	1334.1	1096.1	902.1	741.2	615.8	532.8	471.8
57.5°	2994.4	2609.8	2136.3	1669.6	1286.7	999.5	782.7	618.4	508.2	429.5	377.8
60°	3804.2	3178.2	2490.4	1775.5	1213.9	858.1	642.9	487.1	394.7	331.2	296.5
62.5°	4414.1	3617.9	2681.8	1751.8	1067.3	683.6	476.9	354.9	290.5	247.3	225.3
65°	4326.9	3481.5	2477.7	1508.6	836.9	482.0	316.8	241.4	199.9	179.6	166.9
66°	4129.5	3303.6	2300.7	1357.9	723.4	400.7	260.9	202.5	172.0	157.6	149.1
67.5°	3755.1	2973.2	1983.9	1113.1	555.7	290.5	196.5	160.1	139.8	133.8	127.9
70°	3121.5	2371.0	1392.6	648.0	283.8	161.8	124.5	111.8	106.7	105.9	104.2
72.5°	2392.1	1678.1	820.0	306.6	147.4	107.6	96.6	92.3	90.6	90.6	91.5
75°	1466.3	942.8	362.5	149.9	103.3	90.6	85.6	83.9	83.0	83.9	83.0
77.5°	489.6	299.9	155.0	113.5	94.0	83.9	80.5	78.8	78.8	78.8	78.8
80°	149.9	130.4	118.6	105.0	88.9	79.6	74.5	73.7	74.5	75.4	72.8
82.5°	112.7	106.7	100.0	93.2	80.5	71.2	69.5	69.5	69.5	66.9	63.5
85°	83.0	82.2	67.8	63.5	59.3	59.3	59.3	59.3	56.8	52.5	49.1
87.5°	15.2	14.4	15.2	16.1	23.7	25.4	25.4	27.1	29.6	28.0	28.0
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: P155596

CATALOG NUMBER: TLM-F03-LED-E1-T3-7050

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	844.5	844.5	844.5	844.5	844.5
2.5°	847.9	847.1	849.6	847.9	848.8
5°	855.5	854.7	856.4	854.7	857.2
7.5°	853.0	851.3	850.5	851.3	852.2
10°	835.2	833.5	832.7	831.8	832.7
12.5°	820.0	816.6	816.6	814.9	815.7
15°	809.0	806.4	805.6	803.9	804.7
17.5°	803.9	799.6	797.9	796.3	796.3
20°	800.5	795.4	792.9	791.2	790.3
22.5°	800.5	792.9	789.5	787.8	786.9
25°	803.9	794.6	789.5	786.9	786.1
27.5°	810.7	798.8	792.9	789.5	789.5
30°	822.5	807.3	798.8	794.6	793.7
32.5°	834.4	814.0	802.2	797.1	795.4
35°	840.3	814.0	799.6	791.2	789.5
37.5°	833.5	803.0	785.2	772.5	770.0
40°	812.3	780.2	760.7	748.8	747.1
42.5°	784.4	753.1	730.2	721.7	719.2
45°	746.3	709.0	686.1	674.3	675.1
47.5°	681.0	642.9	622.6	611.6	613.3
50°	604.0	566.7	548.9	537.0	539.6
52.5°	519.3	485.4	468.4	462.5	460.8
55°	430.3	404.1	392.2	385.4	382.9
57.5°	349.0	330.4	321.9	313.4	314.3
60°	275.3	266.0	263.4	254.1	253.3
62.5°	216.9	210.9	208.4	201.6	202.5
65°	164.3	162.6	164.3	160.1	161.8
66°	148.2	149.1	149.1	146.5	148.2
67.5°	127.9	129.6	132.1	129.6	131.3
70°	105.9	107.6	109.3	109.3	109.3
72.5°	92.3	94.0	94.9	94.9	94.9
75°	84.7	85.6	86.4	84.7	84.7
77.5°	79.6	79.6	77.9	77.1	76.2
80°	72.0	71.2	68.6	66.9	66.9
82.5°	60.1	58.4	56.8	54.2	54.2
85°	45.7	44.0	42.4	39.0	37.3
87.5°	23.7	24.6	23.7	19.5	16.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)