

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: P155589

Luminaire Tested: **TLM-E03-LED-E1-T3-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P155589
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-E03-LED-E1-T3-7030
Description: TALON MEDIUM LED SITE LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 3
Light Source: (63) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8450.1 lumens
Efficiency: N/A
Efficacy: 112.4 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

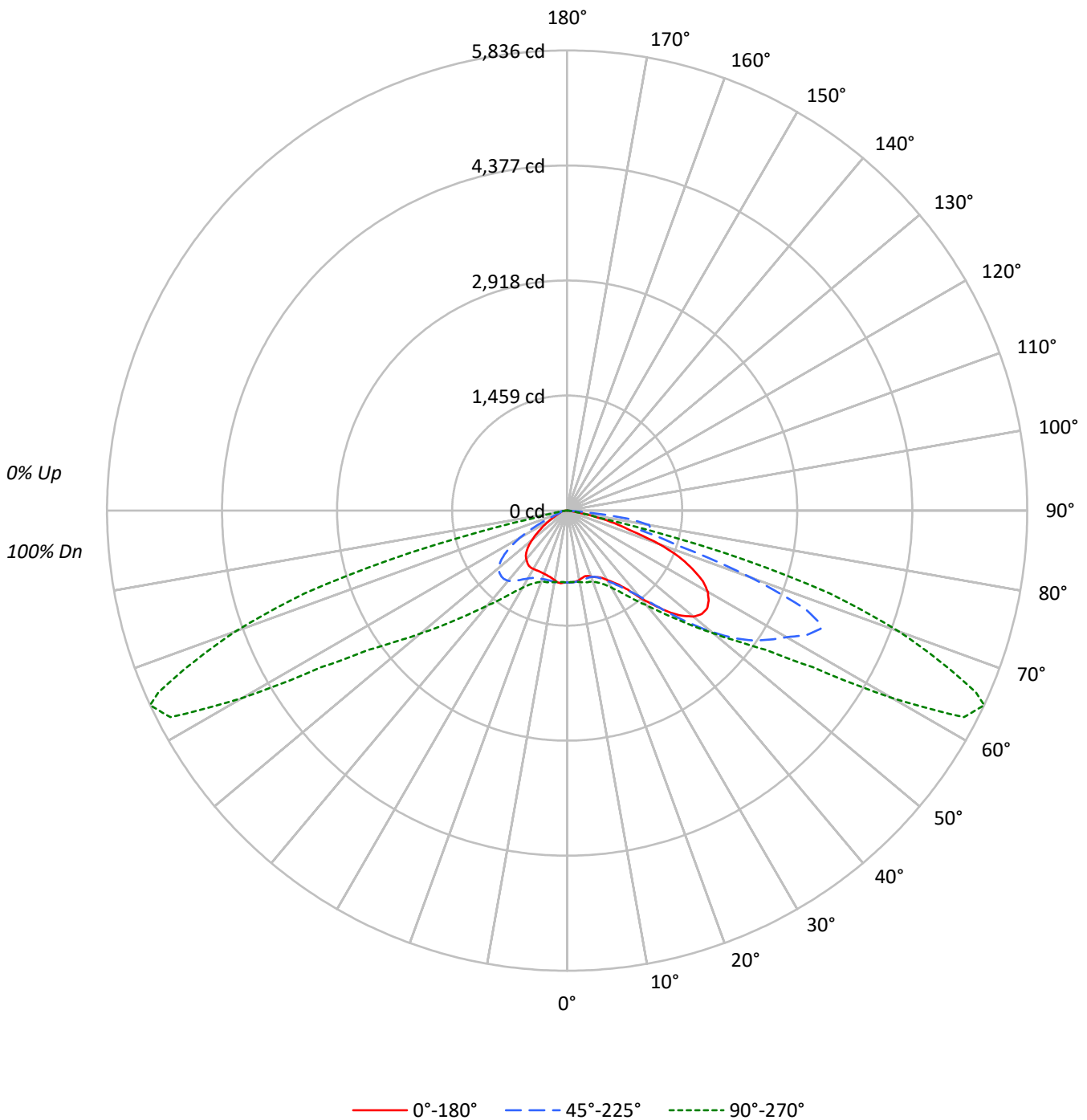
Input Watts (W): 75.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	19603	19603	19603
5°	19678	19659	19974
10°	19506	20105	19626
15°	19216	20988	19339
20°	20401	22034	19523
25°	22129	24169	20133
30°	25224	28107	21274
35°	30244	34470	22370
40°	40504	44121	22639
45°	55337	58756	22161
50°	70020	81123	19485
55°	81348	115492	15493
60°	88639	204252	11759
65°	89470	297296	8884
70°	78415	281583	7415
75°	51811	170397	7594
80°	18906	17319	8951
85°	3162	11510	9930



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.2	1.0
10°-20°	257.4	3.0
20°-30°	442.4	5.2
30°-40°	718.3	8.5
40°-50°	1199.2	14.2
50°-60°	1888.3	22.3
60°-70°	2575.0	30.5
70°-80°	1114.7	13.2
80°-90°	167.6	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°	787.0	9.3
0°-40°	1505.3	17.8
0°-60°	4592.9	54.4
0°-90°	8450.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8450.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	911	911	911	911	911	
5°	911	912	910	921	924	86
15°	862	898	942	914	868	248
25°	932	937	1018	944	848	436
35°	1151	1176	1312	1080	851	746
45°	1818	1841	1930	1181	728	1397
55°	2167	2871	3077	973	413	1912
65°	1756	3548	5836	342	174	1705
75°	623	970	2049	92	91	666
85°	13	216	47	64	40	34
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°	910.6	910.6	910.6	910.6	910.6	910.6	910.6	910.6	910.6	910.6	910.6
2.5°	914.3	917.9	914.3	915.2	916.1	915.2	914.3	914.3	911.5	913.4	915.2
5°	910.6	913.4	912.4	913.4	914.3	913.4	912.4	913.4	911.5	912.4	915.2
7.5°	906.0	905.1	906.0	907.9	909.7	909.7	909.7	910.6	909.7	909.7	912.4
10°	892.3	893.3	895.1	897.8	898.7	901.5	901.5	904.2	905.1	907.0	910.6
12.5°	875.0	875.9	877.7	879.6	884.1	888.7	888.7	895.1	897.8	902.4	908.8
15°	862.2	863.1	864.9	866.8	870.4	875.0	877.7	885.0	889.6	897.8	907.0
17.5°	869.5	868.6	870.4	871.3	871.3	875.0	875.0	880.5	885.9	893.3	905.1
20°	890.5	890.5	892.3	892.3	891.4	893.3	889.6	889.6	890.5	894.2	902.4
22.5°	911.5	910.6	914.3	916.1	917.0	919.7	916.1	915.2	910.6	907.9	910.6
25°	931.6	930.7	935.3	938.0	942.6	945.3	945.3	945.3	941.7	937.1	934.4
27.5°	962.7	962.7	967.2	970.0	973.6	979.1	981.9	981.9	982.8	976.4	971.8
30°	1014.7	1015.6	1016.6	1020.2	1023.9	1025.7	1029.3	1032.1	1034.8	1031.2	1023.9
32.5°	1076.8	1071.4	1071.4	1076.8	1081.4	1086.9	1088.7	1092.4	1097.8	1095.1	1094.2
35°	1150.8	1149.0	1147.2	1149.0	1154.5	1160.9	1168.2	1174.6	1170.9	1176.4	1173.7
37.5°	1260.4	1262.3	1263.2	1263.2	1262.3	1264.1	1267.7	1274.1	1272.3	1274.1	1277.8
40°	1441.3	1434.9	1428.5	1429.4	1420.3	1422.1	1407.5	1413.9	1414.8	1408.4	1411.1
42.5°	1622.1	1625.8	1628.5	1635.8	1629.4	1625.8	1612.1	1612.1	1604.8	1598.4	1596.5
45°	1817.6	1824.9	1825.8	1840.4	1834.9	1846.8	1856.8	1854.1	1842.2	1841.3	1828.5
47.5°	1973.8	1985.6	1998.4	2015.8	2029.5	2056.0	2087.0	2102.5	2111.7	2119.0	2104.4
50°	2090.7	2096.1	2129.0	2156.4	2186.6	2230.4	2273.3	2329.0	2373.8	2394.8	2414.9
52.5°	2153.7	2167.4	2203.0	2245.9	2298.9	2364.7	2434.1	2522.7	2599.4	2650.5	2696.2
55°	2167.4	2181.1	2221.3	2276.1	2348.2	2436.8	2536.4	2656.9	2772.0	2870.7	2966.6
57.5°	2129.0	2144.5	2187.5	2250.5	2335.4	2443.2	2568.3	2726.4	2885.3	3045.1	3186.7
60°	2058.7	2077.9	2117.1	2179.3	2273.3	2394.8	2544.6	2742.8	2965.6	3210.4	3481.7
62.5°	1942.7	1962.8	1999.3	2067.8	2164.6	2298.9	2472.4	2719.0	3034.1	3419.6	3900.9
65°	1756.4	1765.5	1810.3	1879.7	1965.5	2113.5	2304.4	2602.1	3012.2	3548.4	4211.5
66°	1672.3	1687.9	1715.3	1771.0	1853.2	1992.0	2183.8	2486.1	2929.1	3503.6	4203.2
67.5°	1540.8	1552.7	1571.0	1608.4	1658.6	1760.9	1942.7	2228.6	2675.2	3277.1	4028.8
70°	1245.8	1251.3	1276.0	1288.7	1306.1	1339.9	1405.6	1570.0	1918.0	2483.4	3251.5
72.5°	849.4	864.9	891.4	928.0	975.5	1021.1	1052.2	1073.2	1148.1	1481.5	2166.5
75°	622.9	639.3	673.1	721.5	804.7	899.7	998.3	1044.0	1012.9	970.0	1206.5
77.5°	361.7	383.6	411.9	458.5	535.2	661.3	830.2	980.0	1081.4	1087.8	1033.0
80°	152.5	155.3	172.6	196.4	243.9	332.5	464.0	679.5	904.2	1055.8	1091.5
82.5°	34.7	42.9	54.8	64.8	79.5	109.6	162.6	270.4	488.6	766.3	999.2
85°	12.8	12.8	17.4	25.6	29.2	32.9	42.9	68.5	116.9	215.6	449.4
87.5°	0.0	0.9	1.8	1.8	3.7	4.6	7.3	10.0	9.1	8.2	27.4
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°	910.6	910.6	910.6	910.6	910.6	910.6	910.6	910.6	910.6	910.6	910.6
2.5°	913.4	912.4	910.6	910.6	910.6	910.6	908.8	909.7	907.9	908.8	908.8
5°	912.4	912.4	911.5	909.7	910.6	910.6	911.5	909.7	909.7	910.6	909.7
7.5°	912.4	911.5	911.5	911.5	912.4	911.5	912.4	912.4	912.4	913.4	913.4
10°	912.4	912.4	914.3	915.2	915.2	916.1	918.8	918.8	919.7	920.7	922.5
12.5°	913.4	917.0	919.7	922.5	923.4	925.2	929.8	929.8	931.6	934.4	935.3
15°	914.3	919.7	925.2	927.1	928.9	932.5	937.1	938.9	941.7	944.4	946.2
17.5°	913.4	920.7	927.1	929.8	932.5	937.1	942.6	944.4	948.1	951.7	955.4
20°	912.4	922.5	932.5	936.2	939.8	946.2	953.5	958.1	961.8	967.2	970.9
22.5°	917.9	929.8	943.5	949.0	955.4	963.6	973.6	979.1	983.7	989.2	991.9
25°	935.3	944.4	960.8	970.0	978.2	991.9	1005.6	1012.0	1017.5	1022.0	1023.0
27.5°	964.5	967.2	987.3	999.2	1011.1	1033.0	1049.4	1054.0	1064.1	1067.7	1066.8
30°	1012.0	1007.4	1023.9	1042.1	1059.5	1089.6	1109.7	1121.6	1130.7	1130.7	1123.4
32.5°	1080.5	1073.2	1077.8	1098.8	1118.9	1162.7	1186.4	1202.0	1208.4	1206.5	1191.0
35°	1170.0	1165.4	1162.7	1179.1	1211.1	1262.3	1293.3	1301.5	1311.6	1309.7	1289.7
37.5°	1276.0	1272.3	1272.3	1291.5	1322.5	1398.3	1432.1	1437.6	1436.7	1422.1	1384.6
40°	1401.1	1399.3	1391.0	1402.0	1428.5	1527.1	1572.8	1580.1	1570.0	1546.3	1502.5
42.5°	1581.0	1570.0	1544.5	1550.9	1571.0	1666.9	1726.2	1746.3	1736.3	1712.5	1641.3
45°	1815.7	1803.9	1760.9	1755.5	1766.4	1850.4	1927.2	1931.7	1929.9	1899.8	1815.7
47.5°	2091.6	2073.3	2027.6	2013.0	2009.4	2087.0	2161.0	2168.3	2163.7	2119.0	2006.6
50°	2390.2	2363.8	2333.6	2323.6	2308.9	2364.7	2439.6	2440.5	2422.2	2360.1	2255.1
52.5°	2709.0	2699.9	2694.4	2684.3	2677.9	2726.4	2772.0	2744.6	2717.2	2652.4	2561.0
55°	3030.5	3067.9	3106.3	3110.0	3120.9	3173.0	3172.1	3097.2	3077.1	3041.5	2951.0
57.5°	3372.1	3510.9	3631.5	3668.9	3705.5	3802.3	3793.1	3719.2	3693.6	3649.7	3574.9
60°	3837.0	4211.5	4559.4	4642.6	4700.1	4816.1	4805.1	4691.0	4743.9	4740.3	4643.5
62.5°	4488.2	5111.1	5632.6	5760.5	5800.7	5813.5	5744.1	5620.8	5672.8	5731.3	5433.5
65°	4929.4	5661.9	6197.1	6295.7	6301.2	6148.7	5994.3	5849.1	5836.3	5786.1	5360.5
66°	4939.4	5689.3	6226.3	6322.2	6288.4	6080.2	5884.7	5738.6	5675.6	5565.0	5123.9
67.5°	4762.2	5518.5	6096.6	6198.0	6124.0	5829.0	5559.6	5371.4	5248.1	5069.1	4680.0
70°	3999.6	4749.4	5461.8	5650.9	5674.6	5234.4	4860.9	4639.8	4473.6	4227.9	3892.7
72.5°	2973.9	3651.6	4280.0	4460.8	4553.1	4201.4	3886.3	3718.2	3490.8	3232.3	2994.0
75°	1864.1	2342.7	2763.8	2890.8	2804.0	2531.8	2342.7	2272.4	2048.6	1894.3	1785.6
77.5°	1065.9	1215.7	1249.5	1201.1	1098.8	841.2	598.2	443.0	384.5	425.6	469.5
80°	1040.3	953.5	759.9	668.6	605.6	416.5	244.8	168.1	139.7	143.4	155.3
82.5°	1127.1	1209.3	995.6	812.0	681.4	460.3	253.9	135.2	91.3	107.8	121.5
85°	732.5	1019.3	917.9	773.6	626.6	393.7	209.2	70.3	46.6	61.2	84.0
87.5°	74.0	81.3	69.4	94.1	70.3	32.9	16.4	10.0	9.1	11.0	16.4
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	910.6	910.6	910.6	910.6	910.6	910.6	910.6	910.6	910.6	910.6	910.6
2.5°	909.7	909.7	910.6	911.5	912.4	913.4	913.4	913.4	913.4	915.2	914.3
5°	911.5	913.4	915.2	916.1	917.9	917.9	920.7	919.7	919.7	922.5	923.4
7.5°	915.2	917.9	921.6	920.7	924.3	923.4	925.2	925.2	922.5	923.4	921.6
10°	923.4	927.1	928.9	926.1	927.1	923.4	922.5	917.9	912.4	909.7	906.0
12.5°	937.1	940.8	940.8	936.2	930.7	922.5	916.1	906.0	897.8	893.3	888.7
15°	949.0	952.6	951.7	944.4	936.2	923.4	914.3	902.4	890.5	883.2	878.6
17.5°	958.1	959.9	957.2	947.1	938.0	926.1	917.0	904.2	890.5	881.4	873.2
20°	971.8	970.0	963.6	950.8	940.8	929.8	922.5	911.5	896.0	884.1	872.2
22.5°	991.9	984.6	972.7	959.0	949.0	938.9	931.6	919.7	904.2	889.6	875.9
25°	1018.4	1003.8	987.3	972.7	963.6	952.6	944.4	931.6	915.2	898.7	882.3
27.5°	1056.7	1031.2	1010.2	997.4	987.3	973.6	963.6	947.1	929.8	910.6	892.3
30°	1099.7	1065.0	1044.9	1034.8	1023.9	1009.3	993.7	972.7	952.6	931.6	909.7
32.5°	1155.4	1113.4	1094.2	1084.1	1069.5	1051.3	1033.0	1009.3	980.9	953.5	927.1
35°	1228.5	1185.5	1165.4	1149.9	1129.8	1106.1	1079.6	1047.6	1009.3	972.7	938.9
37.5°	1307.0	1260.4	1241.2	1224.8	1194.7	1163.6	1126.2	1079.6	1027.5	979.1	937.1
40°	1406.6	1363.6	1339.0	1310.7	1275.0	1221.1	1162.7	1095.1	1028.4	969.1	919.7
42.5°	1532.6	1489.7	1453.1	1408.4	1346.3	1263.2	1180.0	1092.4	1012.0	944.4	891.4
45°	1699.7	1647.7	1584.7	1506.1	1405.6	1289.7	1181.0	1075.0	980.9	906.0	849.4
47.5°	1904.3	1824.9	1721.7	1589.2	1444.9	1297.0	1166.3	1040.3	932.5	851.2	788.2
50°	2147.3	2022.2	1852.3	1657.7	1465.0	1286.0	1129.8	988.2	864.0	777.3	702.4
52.5°	2424.9	2220.4	1970.1	1707.1	1464.1	1249.5	1067.7	909.7	774.5	677.7	606.5
55°	2751.0	2446.9	2091.6	1743.6	1438.5	1181.9	972.7	799.2	664.0	574.5	508.7
57.5°	3228.7	2814.0	2303.5	1800.2	1387.4	1077.8	843.9	666.7	548.0	463.1	407.4
60°	4101.9	3426.9	2685.2	1914.4	1308.8	925.2	693.2	525.2	425.6	357.1	319.7
62.5°	4759.5	3900.9	2891.7	1888.8	1150.8	737.1	514.2	382.7	313.3	266.7	243.0
65°	4665.4	3753.9	2671.5	1626.7	902.4	519.7	341.6	260.3	215.6	193.6	179.9
66°	4452.6	3562.1	2480.7	1464.1	780.0	432.0	281.3	218.3	185.4	169.9	160.7
67.5°	4048.9	3205.9	2139.1	1200.1	599.2	313.3	211.9	172.6	150.7	144.3	137.9
70°	3365.7	2556.5	1501.5	698.7	306.0	174.4	134.3	120.6	115.1	114.2	112.3
72.5°	2579.3	1809.3	884.1	330.6	158.9	116.0	104.1	99.6	97.7	97.7	98.6
75°	1581.0	1016.6	390.9	161.7	111.4	97.7	92.2	90.4	89.5	90.4	89.5
77.5°	527.9	323.3	167.1	122.4	101.4	90.4	86.8	84.9	84.9	84.9	84.9
80°	161.7	140.7	127.9	113.3	95.9	85.9	80.4	79.5	80.4	81.3	78.5
82.5°	121.5	115.1	107.8	100.5	86.8	76.7	74.9	74.9	74.9	72.2	68.5
85°	89.5	88.6	73.1	68.5	63.9	63.9	63.9	63.9	61.2	56.6	53.0
87.5°	16.4	15.5	16.4	17.4	25.6	27.4	27.4	29.2	32.0	30.1	30.1
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: P155589

CATALOG NUMBER: TLM-E03-LED-E1-T3-7030

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	910.6	910.6	910.6	910.6	910.6
2.5°	914.3	913.4	916.1	914.3	915.2
5°	922.5	921.6	923.4	921.6	924.3
7.5°	919.7	917.9	917.0	917.9	918.8
10°	900.6	898.7	897.8	896.9	897.8
12.5°	884.1	880.5	880.5	878.6	879.6
15°	872.2	869.5	868.6	866.8	867.7
17.5°	866.8	862.2	860.4	858.5	858.5
20°	863.1	857.6	854.9	853.1	852.2
22.5°	863.1	854.9	851.2	849.4	848.5
25°	866.8	856.7	851.2	848.5	847.6
27.5°	874.1	861.3	854.9	851.2	851.2
30°	886.9	870.4	861.3	856.7	855.8
32.5°	899.7	877.7	864.9	859.5	857.6
35°	906.0	877.7	862.2	853.1	851.2
37.5°	898.7	865.9	846.7	833.0	830.2
40°	875.9	841.2	820.2	807.4	805.6
42.5°	845.8	812.0	787.3	778.2	775.4
45°	804.7	764.5	739.8	727.0	727.9
47.5°	734.3	693.2	671.3	659.4	661.3
50°	651.2	611.0	591.9	579.1	581.8
52.5°	559.9	523.3	505.1	498.7	496.9
55°	464.0	435.7	422.9	415.6	412.8
57.5°	376.3	356.2	347.1	337.9	338.9
60°	296.8	286.8	284.1	274.0	273.1
62.5°	233.8	227.4	224.7	217.4	218.3
65°	177.2	175.4	177.2	172.6	174.4
66°	159.8	160.7	160.7	158.0	159.8
67.5°	137.9	139.7	142.5	139.7	141.6
70°	114.2	116.0	117.8	117.8	117.8
72.5°	99.6	101.4	102.3	102.3	102.3
75°	91.3	92.2	93.2	91.3	91.3
77.5°	85.9	85.9	84.0	83.1	82.2
80°	77.6	76.7	74.0	72.2	72.2
82.5°	64.8	63.0	61.2	58.5	58.5
85°	49.3	47.5	45.7	42.0	40.2
87.5°	25.6	26.5	25.6	21.0	18.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)