

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: P152374

Luminaire Tested: **TLM-F03-LED-E1-SL4-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P152374
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-F03-LED-E1-SL4-7030
Description: TALON MEDIUM LED SITE LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL
Light Source: (21) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

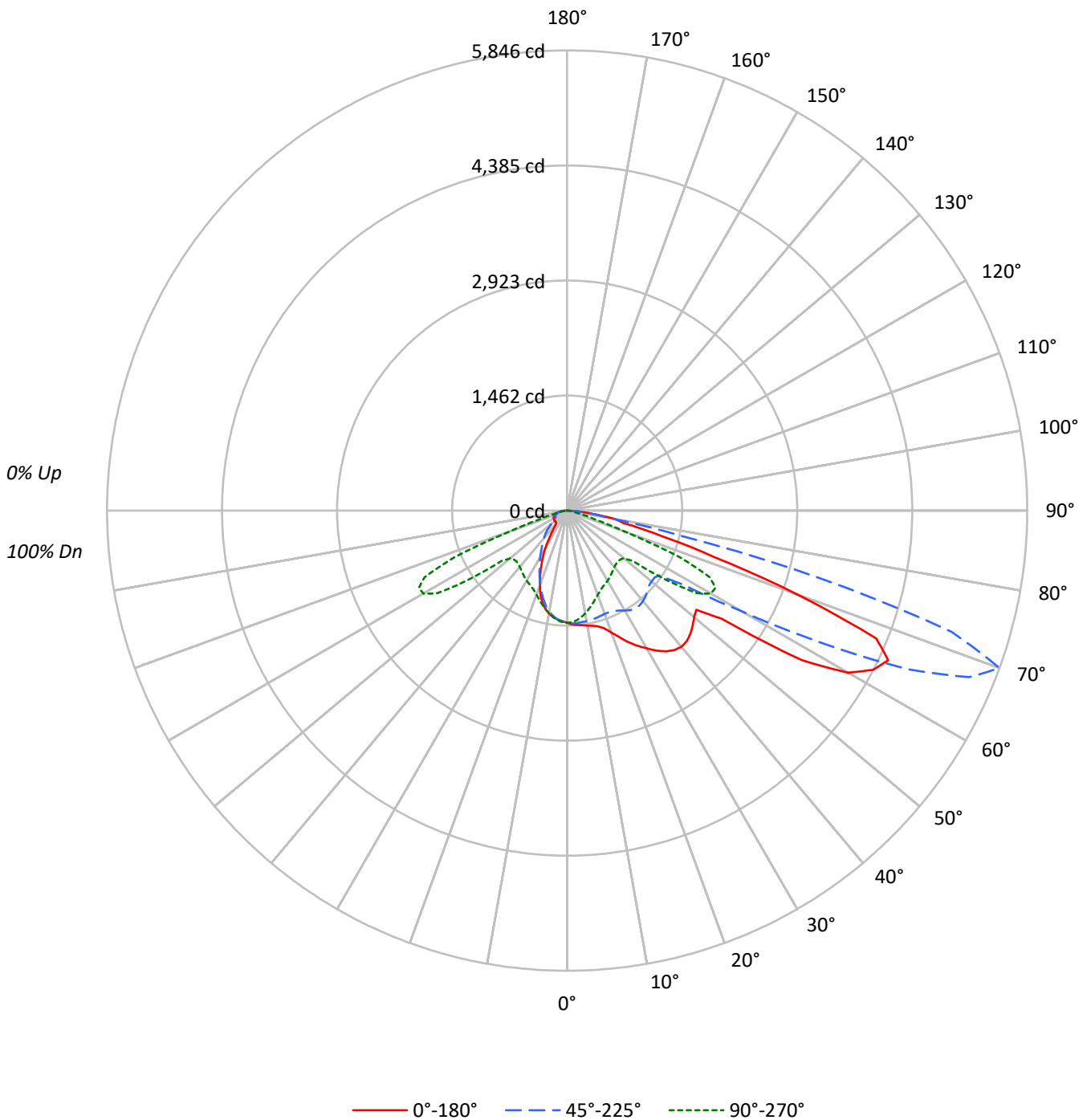
Lumens per Lamp: N/A
Luminaire Lumens: 6682.2 lumens
Efficiency: N/A
Efficacy: 85.3 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.07 / 1.36
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
CIE Type: Direct

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	106	100	94	89	103	97	92	88	93	89	85	89	86	82	85	82	80	78
2	93	83	74	67	90	81	73	66	77	70	64	73	68	63	70	66	61	59
3	83	70	59	51	80	68	58	51	65	57	50	62	55	49	59	53	48	45
4	74	60	49	41	72	58	48	40	55	47	40	53	45	39	51	44	39	36
5	67	52	41	33	65	51	41	33	48	40	33	46	38	32	44	37	32	29
6	61	46	36	28	59	45	35	28	43	34	28	41	33	27	39	32	27	25
7	57	41	31	24	55	40	31	24	39	30	24	37	29	23	36	29	23	21
8	53	37	28	21	51	36	27	21	35	27	21	34	26	21	32	26	20	18
9	49	34	25	19	47	33	25	19	32	24	18	31	24	18	30	23	18	16
10	46	31	23	17	44	31	22	17	30	22	17	29	21	16	28	21	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	30694	30694	30694
5°	31512	30226	30029
10°	32438	28975	29026
15°	33961	27442	27039
20°	37794	26048	23164
25°	43825	25397	18518
30°	50231	25547	13831
35°	57347	25739	8996
40°	63461	26276	6208
45°	67420	27754	6199
50°	70503	31539	6893
55°	89710	57729	7529
60°	177351	90800	8439
65°	229257	101782	9485
70°	195055	48120	10675
75°	102541	17683	13167
80°	76281	9633	14307
85°	44140	9312	14351



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.2	2.0
10°-20°	364.6	5.5
20°-30°	539.8	8.1
30°-40°	682.2	10.2
40°-50°	771.5	11.5
50°-60°	1097.9	16.4
60°-70°	2044.7	30.6
70°-80°	937.1	14.0
80°-90°	111.2	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°	1037.7	15.5
0°-40°	1719.8	25.7
0°-60°	3589.2	53.7
0°-90°	6682.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6682.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1426	1426	1426	1426	1426	
5°	1458	1434	1399	1387	1390	140
15°	1524	1414	1231	1166	1213	439
25°	1845	1406	1069	833	780	857
35°	2182	1518	979	558	342	1364
45°	2214	1442	912	365	204	1704
55°	2390	1434	1538	186	201	2511
65°	4501	4766	1998	166	186	4150
75°	1233	3351	213	130	158	1516
85°	179	157	38	60	58	225
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°	1425.8	1425.8	1425.8	1425.8	1425.8	1425.8	1425.8	1425.8	1425.8	1425.8	1425.8
2.5°	1447.7	1451.4	1446.9	1446.2	1446.2	1445.4	1440.9	1440.1	1434.1	1434.8	1436.4
5°	1458.2	1459.7	1456.7	1456.0	1454.5	1451.4	1447.7	1443.1	1438.6	1434.1	1430.3
7.5°	1468.8	1467.3	1465.0	1465.0	1462.7	1458.2	1450.7	1444.7	1434.8	1429.6	1422.8
10°	1483.9	1481.6	1478.6	1477.1	1473.3	1466.5	1456.0	1447.7	1435.6	1425.0	1413.7
12.5°	1498.2	1497.4	1492.9	1490.6	1484.6	1477.8	1465.0	1452.2	1436.4	1419.8	1404.7
15°	1523.8	1520.8	1516.3	1511.8	1502.0	1492.9	1473.3	1458.2	1435.6	1413.7	1390.4
17.5°	1568.3	1563.0	1558.5	1548.7	1536.6	1520.8	1492.2	1466.5	1435.6	1403.9	1377.5
20°	1649.7	1638.4	1632.4	1619.6	1598.5	1569.8	1525.3	1483.9	1437.9	1397.1	1361.7
22.5°	1741.7	1734.2	1725.9	1717.6	1684.4	1643.0	1582.6	1520.8	1451.4	1394.1	1348.9
25°	1845.0	1835.2	1830.7	1816.4	1785.5	1738.0	1655.8	1569.8	1482.4	1406.2	1348.9
27.5°	1937.0	1934.0	1933.2	1916.7	1887.2	1831.5	1734.2	1630.9	1524.6	1431.1	1360.2
30°	2020.7	2017.7	2016.2	2007.1	1973.2	1906.8	1801.3	1685.2	1570.6	1465.8	1381.3
32.5°	2109.7	2099.9	2095.3	2078.0	2039.6	1961.9	1841.3	1720.6	1606.8	1499.7	1404.7
35°	2182.1	2173.8	2164.7	2139.8	2085.5	1993.6	1858.6	1732.7	1621.1	1518.5	1416.8
37.5°	2234.8	2226.5	2213.7	2182.1	2115.0	2004.1	1857.8	1728.9	1615.8	1515.5	1419.0
40°	2258.2	2249.9	2236.3	2196.4	2120.2	1998.1	1843.5	1711.6	1600.0	1499.7	1410.0
42.5°	2249.2	2243.1	2225.8	2187.3	2103.6	1970.9	1814.9	1679.1	1569.8	1474.1	1389.6
45°	2214.5	2210.0	2193.4	2152.7	2065.9	1927.2	1772.6	1638.4	1533.6	1442.4	1362.5
47.5°	2162.5	2160.9	2144.4	2104.4	2018.4	1883.5	1728.9	1598.5	1497.4	1411.5	1339.8
50°	2105.1	2097.6	2089.3	2052.4	1974.0	1845.8	1697.2	1573.6	1477.1	1400.2	1330.0
52.5°	2069.0	2066.7	2059.2	2026.0	1950.6	1823.9	1682.9	1564.5	1475.6	1397.9	1324.8
55°	2390.2	2395.4	2326.1	2182.1	2055.4	1884.2	1725.9	1610.5	1512.5	1434.1	1380.6
57.5°	3535.5	3512.1	3393.0	3107.2	2784.5	2358.5	2051.6	1865.4	1744.0	1757.6	1784.7
60°	4119.1	4114.5	4092.7	3981.8	3767.0	3442.7	3083.1	2670.6	2539.5	2553.8	2564.3
62.5°	4379.9	4386.7	4403.3	4361.9	4305.3	4211.1	4031.6	3865.7	3690.0	3624.4	3448.8
65°	4500.6	4512.7	4550.4	4573.7	4595.6	4612.2	4683.1	4877.6	5005.8	4766.0	4208.0
67.5°	4251.0	4309.1	4433.5	4554.9	4663.4	4818.0	5057.8	5509.4	5823.8	5529.0	4720.0
70°	3098.9	3178.1	3320.6	3696.1	4097.2	4447.8	4912.3	5599.9	6074.2	5846.5	4846.7
72.5°	1943.0	1964.9	2028.2	2166.2	2464.1	2914.2	3726.2	4757.7	5305.1	5123.4	4096.4
75°	1232.8	1240.3	1238.1	1269.7	1320.2	1418.3	1739.5	2810.1	3634.2	3350.7	2283.1
77.5°	734.4	745.7	750.2	760.0	784.2	818.8	845.2	956.1	1523.8	1479.3	828.6
80°	615.3	624.3	616.8	614.5	599.4	588.9	601.7	588.9	546.6	526.3	484.8
82.5°	325.7	325.0	322.7	344.6	389.1	423.7	450.1	444.1	401.9	342.3	290.3
85°	178.7	184.7	184.7	192.3	185.5	186.2	192.3	202.8	187.7	156.8	128.2
87.5°	15.1	23.4	18.8	23.4	31.7	22.6	21.9	21.9	18.8	13.6	12.1
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°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1425.8	1425.8	1425.8	1425.8	1425.8	1425.8	1425.8	1425.8	1425.8	1425.8	1425.8
2.5°	1432.6	1431.1	1428.1	1425.8	1425.8	1422.0	1419.8	1418.3	1417.5	1414.5	1414.5
5°	1428.1	1422.8	1417.5	1413.7	1411.5	1407.7	1401.7	1398.7	1394.9	1391.9	1390.4
7.5°	1418.3	1408.5	1400.2	1394.1	1386.6	1380.6	1373.0	1366.2	1359.5	1356.4	1354.9
10°	1403.2	1390.4	1377.5	1366.2	1355.7	1345.1	1335.3	1325.5	1317.2	1311.2	1305.2
12.5°	1388.9	1369.3	1352.7	1336.1	1319.5	1306.7	1293.1	1278.8	1266.7	1255.4	1252.4
15°	1369.3	1346.6	1325.5	1305.2	1284.8	1263.7	1247.1	1231.3	1211.7	1198.8	1189.0
17.5°	1351.2	1324.0	1298.4	1274.2	1249.4	1227.5	1202.6	1181.5	1161.9	1142.3	1128.0
20°	1331.6	1302.1	1275.0	1247.9	1220.7	1192.8	1164.2	1137.0	1112.9	1089.5	1066.1
22.5°	1314.2	1284.1	1257.7	1228.3	1198.1	1166.4	1133.3	1099.3	1071.4	1041.3	1014.1
25°	1303.7	1270.5	1243.3	1214.7	1181.5	1146.8	1109.1	1069.2	1035.2	1000.5	968.1
27.5°	1303.7	1260.7	1232.8	1204.1	1170.2	1133.3	1091.8	1048.1	1009.6	971.1	931.2
30°	1315.0	1262.2	1224.5	1194.3	1159.6	1119.7	1073.7	1027.7	985.5	940.2	901.8
32.5°	1325.5	1265.2	1218.5	1180.0	1140.0	1100.8	1054.1	1005.1	958.3	915.3	874.6
35°	1332.3	1265.2	1207.1	1158.1	1112.9	1074.4	1028.4	979.4	931.9	889.7	852.0
37.5°	1333.1	1259.2	1189.0	1133.3	1085.8	1045.8	1002.1	956.1	910.8	871.6	839.9
40°	1325.5	1247.1	1171.0	1106.9	1057.1	1016.4	976.4	935.0	894.2	861.8	834.7
42.5°	1311.9	1234.3	1153.6	1085.8	1033.7	991.5	954.6	919.1	883.7	855.8	833.2
45°	1291.6	1216.9	1137.8	1072.9	1021.7	977.2	941.0	911.6	881.4	858.0	835.4
47.5°	1273.5	1210.9	1143.1	1081.2	1027.7	981.7	944.8	919.9	896.5	880.7	849.8
50°	1269.7	1207.9	1145.3	1088.0	1033.7	987.0	954.6	941.7	935.0	925.1	877.6
52.5°	1259.2	1207.1	1161.9	1130.2	1095.6	1073.7	1039.8	1051.8	1044.3	1009.6	923.6
55°	1370.0	1385.1	1427.3	1487.6	1543.4	1556.2	1552.5	1538.1	1462.0	1257.7	1034.5
57.5°	1883.5	1968.7	2048.6	2084.0	2079.5	2039.6	2010.9	1952.8	1842.8	1593.9	1253.1
60°	2596.8	2610.3	2568.1	2505.5	2400.0	2311.7	2217.5	2108.9	1949.1	1705.5	1387.3
62.5°	3253.5	3071.0	2883.3	2706.8	2546.2	2406.0	2274.8	2123.2	1915.1	1661.0	1370.0
65°	3717.2	3331.1	3034.8	2781.5	2554.5	2358.5	2194.9	1998.1	1763.6	1534.4	1269.7
67.5°	3956.2	3364.3	2909.7	2556.8	2234.8	1963.4	1745.5	1554.0	1379.8	1279.5	1111.4
70°	3689.3	2855.4	2222.0	1823.2	1437.9	1152.9	910.8	764.5	714.0	809.0	841.5
72.5°	2749.1	1858.6	1321.8	1022.4	783.4	624.3	478.8	376.2	306.1	321.2	417.0
75°	1299.9	802.2	567.0	431.3	343.1	284.3	232.2	212.6	177.9	147.8	138.7
77.5°	505.9	368.7	304.6	223.2	158.3	127.4	108.6	104.8	107.1	104.1	102.5
80°	385.3	260.9	163.6	119.9	103.3	91.2	80.7	77.7	79.2	82.9	86.7
82.5°	214.9	134.2	99.5	86.7	77.7	66.4	60.3	55.8	56.5	61.1	69.4
85°	82.9	64.8	59.6	57.3	53.5	43.0	36.9	37.7	43.0	51.3	51.3
87.5°	9.0	9.0	12.1	9.0	9.0	9.0	8.3	9.8	10.6	13.6	15.8
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1425.8	1425.8	1425.8	1425.8	1425.8	1425.8	1425.8	1425.8	1425.8	1425.8	1425.8
2.5°	1413.0	1413.0	1413.0	1411.5	1412.2	1409.2	1409.2	1407.0	1410.7	1408.5	1407.7
5°	1391.1	1390.4	1387.3	1387.3	1387.3	1387.3	1389.6	1383.6	1388.1	1388.1	1385.8
7.5°	1354.2	1354.2	1345.9	1350.4	1348.9	1351.2	1354.2	1351.2	1355.7	1358.7	1356.4
10°	1302.9	1302.9	1296.1	1301.4	1299.1	1304.4	1309.7	1306.7	1309.7	1314.2	1315.7
12.5°	1246.4	1243.3	1237.3	1239.6	1239.6	1242.6	1244.8	1248.6	1252.4	1258.4	1261.4
15°	1180.8	1176.2	1168.7	1168.7	1164.2	1165.7	1170.2	1171.7	1179.2	1187.5	1197.3
17.5°	1113.6	1102.3	1094.0	1084.2	1076.7	1082.7	1088.0	1091.8	1097.8	1110.6	1117.4
20°	1050.3	1027.7	1011.9	999.0	990.7	994.5	1001.3	1005.8	1011.1	1014.1	1016.4
22.5°	987.7	962.1	940.2	924.4	910.8	914.6	911.6	909.3	913.1	903.3	902.5
25°	933.4	903.3	873.9	855.0	838.4	833.2	817.3	813.6	803.0	794.7	788.7
27.5°	894.2	855.0	822.6	800.7	774.4	754.7	734.4	714.0	702.7	689.2	682.4
30°	863.3	821.9	783.4	746.5	711.8	681.6	654.5	628.1	610.0	590.4	577.6
32.5°	834.7	796.2	749.5	699.0	652.2	618.3	582.8	552.7	524.0	498.4	479.5
35°	815.1	772.1	712.5	650.7	597.9	558.0	520.3	477.3	442.6	409.4	389.1
37.5°	804.5	751.7	678.6	610.0	551.2	505.9	459.2	409.4	367.2	336.3	305.4
40°	796.2	731.4	648.4	573.8	512.0	457.7	403.4	344.6	297.8	265.4	241.3
42.5°	787.2	708.8	622.0	545.1	476.5	413.2	347.6	285.0	240.5	217.9	207.3
45°	777.4	689.2	597.2	518.0	441.8	364.9	289.5	231.5	205.1	197.5	197.5
47.5°	775.1	676.3	579.1	491.6	402.6	309.1	236.0	199.8	192.3	193.8	196.8
50°	784.2	672.6	563.2	460.7	350.6	250.3	199.8	187.7	189.3	193.8	198.3
52.5°	806.0	675.6	546.6	417.7	288.8	206.6	184.7	184.0	188.5	195.3	199.8
55°	843.0	675.6	515.0	353.6	230.7	185.5	179.5	182.5	188.5	194.5	198.3
57.5°	922.1	668.8	459.2	282.7	193.0	177.9	177.9	181.7	187.0	193.0	196.0
60°	1016.4	659.7	380.8	218.7	174.2	171.9	177.2	181.7	186.2	191.5	194.5
62.5°	1022.4	636.4	301.6	181.0	164.4	168.1	176.4	182.5	184.0	187.7	191.5
65°	939.5	554.9	239.8	162.1	159.8	165.9	174.2	178.7	179.5	181.0	184.7
67.5°	822.6	452.4	193.8	153.1	155.3	162.1	166.6	170.4	172.7	176.4	177.2
70°	675.6	363.4	165.9	144.0	146.3	153.8	157.6	161.4	165.9	170.4	168.1
72.5°	478.8	282.7	145.5	134.2	137.2	144.0	148.5	151.6	155.3	159.8	156.8
75°	203.6	197.5	125.9	121.4	125.9	130.4	135.0	139.5	143.3	145.5	145.5
77.5°	104.1	116.1	108.6	108.6	111.6	116.1	119.9	124.4	126.7	128.9	131.9
80°	88.2	89.7	91.2	94.2	97.3	101.8	105.6	109.3	110.1	110.8	112.3
82.5°	73.1	76.2	77.7	82.2	84.4	86.0	88.2	88.2	89.7	89.7	87.5
85°	52.8	56.5	58.8	59.6	58.8	59.6	60.3	61.8	65.6	65.6	62.6
87.5°	15.1	14.3	18.1	18.8	20.4	23.4	26.4	31.7	33.2	34.7	34.7
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: P152374

CATALOG NUMBER: TLM-F03-LED-E1-SL4-7030

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1425.8	1425.8	1425.8	1425.8
2.5°	1407.0	1408.5	1405.4	1406.2
5°	1385.8	1388.9	1385.1	1389.6
7.5°	1358.7	1363.2	1362.5	1361.7
10°	1319.5	1325.5	1325.5	1327.8
12.5°	1269.7	1273.5	1276.5	1278.0
15°	1202.6	1209.4	1213.2	1213.2
17.5°	1121.9	1126.5	1128.7	1125.7
20°	1019.4	1017.9	1018.6	1011.1
22.5°	901.0	903.3	896.5	898.0
25°	784.9	781.1	784.2	779.6
27.5°	672.6	673.3	665.0	668.8
30°	565.5	561.7	551.2	556.4
32.5°	462.2	452.4	441.1	434.3
35°	364.9	349.9	344.6	342.3
37.5°	286.5	269.9	264.7	258.6
40°	227.7	221.7	219.4	220.9
42.5°	204.3	204.3	205.8	206.6
45°	198.3	200.6	202.8	203.6
47.5°	199.1	201.3	204.3	205.1
50°	200.6	202.8	205.1	205.8
52.5°	201.3	201.3	202.8	203.6
55°	199.8	199.1	199.8	200.6
57.5°	196.8	195.3	196.0	198.3
60°	195.3	193.0	194.5	196.0
62.5°	191.5	190.8	192.3	193.0
65°	183.2	184.0	186.2	186.2
67.5°	175.7	176.4	177.2	177.9
70°	166.6	167.4	168.9	169.6
72.5°	156.1	159.1	161.4	164.4
75°	147.8	150.8	155.3	158.3
77.5°	133.5	135.7	141.0	144.8
80°	113.1	112.3	113.1	115.4
82.5°	86.7	86.7	86.0	85.2
85°	61.1	60.3	58.1	58.1
87.5°	33.2	32.4	31.7	30.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)