

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: P152373

Luminaire Tested: **TLM-F03-LED-E1-SL4-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P152373
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-SL4-8030
Description: TALON MEDIUM LED SITE LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL
Light Source: (21) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

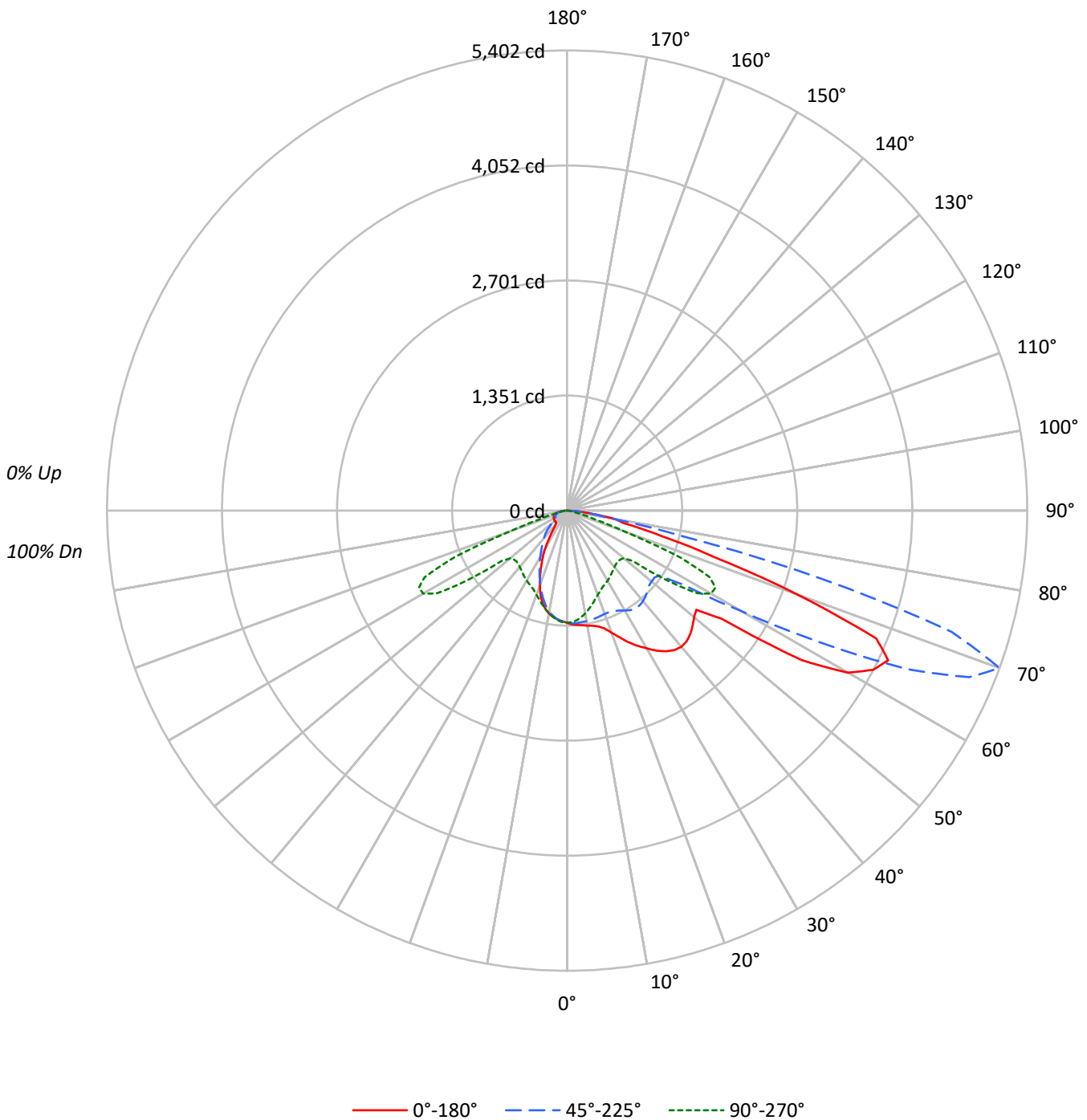
Lumens per Lamp: N/A
Luminaire Lumens: 6174.7 lumens
Efficiency: N/A
Efficacy: 78.9 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.07 / 1.36
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
CIE Type: Direct

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	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°	28363	28363	28363
5°	29120	27929	27749
10°	29974	26776	26822
15°	31383	25358	24984
20°	34925	24071	21404
25°	40497	23468	17112
30°	46418	23608	12782
35°	52992	23787	8313
40°	58642	24281	5736
45°	62299	25647	5727
50°	65151	29144	6370
55°	82898	53345	6955
60°	163883	83907	7802
65°	211846	94049	8767
70°	180244	44469	9869
75°	94755	16344	12169
80°	70479	8901	13216
85°	40780	8596	13239



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.1	2.0
10°-20°	337.0	5.5
20°-30°	498.8	8.1
30°-40°	630.4	10.2
40°-50°	712.9	11.5
50°-60°	1014.5	16.4
60°-70°	1889.4	30.6
70°-80°	865.9	14.0
80°-90°	102.8	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°	958.9	15.5
0°-40°	1589.2	25.7
0°-60°	3316.6	53.7
0°-90°	6174.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6174.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1318	1318	1318	1318	1318	
5°	1348	1325	1292	1282	1284	129
15°	1408	1306	1138	1077	1121	405
25°	1705	1299	988	770	720	792
35°	2016	1403	905	516	316	1260
45°	2046	1333	842	337	188	1574
55°	2209	1325	1421	171	185	2321
65°	4159	4404	1846	153	172	3835
75°	1139	3096	196	120	146	1401
85°	165	145	35	55	54	208
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°	1317.5	1317.5	1317.5	1317.5	1317.5	1317.5	1317.5	1317.5	1317.5	1317.5	1317.5
2.5°	1337.7	1341.2	1337.0	1336.3	1336.3	1335.6	1331.5	1330.8	1325.2	1325.9	1327.3
5°	1347.5	1348.9	1346.1	1345.4	1344.0	1341.2	1337.7	1333.6	1329.4	1325.2	1321.7
7.5°	1357.2	1355.8	1353.8	1353.8	1351.7	1347.5	1340.5	1334.9	1325.9	1321.0	1314.7
10°	1371.2	1369.1	1366.3	1364.9	1361.4	1355.2	1345.4	1337.7	1326.6	1316.8	1306.4
12.5°	1384.4	1383.7	1379.5	1377.4	1371.9	1365.6	1353.8	1341.9	1327.3	1312.0	1298.0
15°	1408.1	1405.3	1401.1	1397.0	1387.9	1379.5	1361.4	1347.5	1326.6	1306.4	1284.8
17.5°	1449.2	1444.3	1440.2	1431.1	1419.9	1405.3	1378.8	1355.2	1326.6	1297.3	1272.9
20°	1524.5	1514.0	1508.4	1496.6	1477.1	1450.6	1409.5	1371.2	1328.7	1291.1	1258.3
22.5°	1609.5	1602.5	1594.8	1587.2	1556.5	1518.2	1462.4	1405.3	1341.2	1288.3	1246.5
25°	1704.9	1695.9	1691.7	1678.4	1649.9	1606.0	1530.0	1450.6	1369.8	1299.4	1246.5
27.5°	1789.9	1787.1	1786.4	1771.1	1743.9	1692.4	1602.5	1507.0	1408.8	1322.4	1256.9
30°	1867.3	1864.5	1863.1	1854.7	1823.4	1762.0	1664.5	1557.2	1451.3	1354.5	1276.4
32.5°	1949.5	1940.4	1936.2	1920.2	1884.7	1812.9	1701.4	1590.0	1484.7	1385.8	1298.0
35°	2016.4	2008.7	2000.3	1977.3	1927.2	1842.2	1717.5	1601.1	1498.0	1403.2	1309.2
37.5°	2065.1	2057.5	2045.6	2016.4	1954.3	1851.9	1716.8	1597.6	1493.1	1400.4	1311.3
40°	2086.7	2079.1	2066.5	2029.6	1959.2	1846.3	1703.5	1581.6	1478.5	1385.8	1302.9
42.5°	2078.4	2072.8	2056.8	2021.2	1943.9	1821.3	1677.0	1551.6	1450.6	1362.1	1284.1
45°	2046.3	2042.1	2026.8	1989.2	1909.1	1780.9	1638.0	1514.0	1417.2	1332.9	1259.0
47.5°	1998.2	1996.8	1981.5	1944.6	1865.2	1740.4	1597.6	1477.1	1383.7	1304.3	1238.1
50°	1945.3	1938.3	1930.7	1896.5	1824.1	1705.6	1568.4	1454.1	1364.9	1293.8	1229.0
52.5°	1911.8	1909.8	1902.8	1872.1	1802.5	1685.4	1555.1	1445.7	1363.5	1291.7	1224.2
55°	2208.7	2213.5	2149.4	2016.4	1899.3	1741.1	1594.8	1488.2	1397.7	1325.2	1275.7
57.5°	3267.0	3245.4	3135.3	2871.2	2573.0	2179.4	1895.8	1723.7	1611.5	1624.1	1649.2
60°	3806.3	3802.1	3781.9	3679.5	3480.9	3181.3	2849.0	2467.8	2346.6	2359.8	2369.6
62.5°	4047.3	4053.6	4068.9	4030.6	3978.4	3891.3	3725.4	3572.2	3409.8	3349.2	3186.9
65°	4158.8	4170.0	4204.8	4226.4	4246.6	4261.9	4327.4	4507.2	4625.6	4404.1	3888.5
67.5°	3928.2	3981.8	4096.8	4209.0	4309.3	4452.1	4673.7	5091.0	5381.6	5109.2	4361.6
70°	2863.6	2936.7	3068.4	3415.4	3786.1	4110.0	4539.2	5174.7	5612.9	5402.5	4478.6
72.5°	1795.5	1815.7	1874.2	2001.7	2276.9	2692.9	3443.3	4396.4	4902.2	4734.3	3785.4
75°	1139.2	1146.1	1144.0	1173.3	1220.0	1310.6	1607.4	2596.7	3358.3	3096.3	2109.7
77.5°	678.6	689.1	693.3	702.3	724.6	756.7	781.0	883.5	1408.1	1367.0	765.7
80°	568.5	576.9	569.9	567.8	553.9	544.2	556.0	544.2	505.1	486.3	448.0
82.5°	301.0	300.3	298.2	318.4	359.5	391.6	416.0	410.4	371.4	316.3	268.2
85°	165.1	170.7	170.7	177.7	171.4	172.1	177.7	187.4	173.5	144.9	118.4
87.5°	13.9	21.6	17.4	21.6	29.3	20.9	20.2	20.2	17.4	12.5	11.1
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°	1317.5	1317.5	1317.5	1317.5	1317.5	1317.5	1317.5	1317.5	1317.5	1317.5	1317.5
2.5°	1323.8	1322.4	1319.6	1317.5	1317.5	1314.0	1312.0	1310.6	1309.9	1307.1	1307.1
5°	1319.6	1314.7	1309.9	1306.4	1304.3	1300.8	1295.2	1292.4	1289.0	1286.2	1284.8
7.5°	1310.6	1301.5	1293.8	1288.3	1281.3	1275.7	1268.8	1262.5	1256.2	1253.4	1252.0
10°	1296.6	1284.8	1272.9	1262.5	1252.7	1243.0	1233.9	1224.9	1217.2	1211.6	1206.0
12.5°	1283.4	1265.3	1249.9	1234.6	1219.3	1207.4	1194.9	1181.7	1170.5	1160.1	1157.3
15°	1265.3	1244.4	1224.9	1206.0	1187.2	1167.7	1152.4	1137.8	1119.7	1107.8	1098.8
17.5°	1248.6	1223.5	1199.8	1177.5	1154.5	1134.3	1111.3	1091.8	1073.7	1055.6	1042.3
20°	1230.4	1203.3	1178.2	1153.1	1128.0	1102.2	1075.8	1050.7	1028.4	1006.8	985.2
22.5°	1214.4	1186.5	1162.2	1135.0	1107.1	1077.8	1047.2	1015.8	990.1	962.2	937.1
25°	1204.7	1174.0	1148.9	1122.4	1091.8	1059.7	1024.9	988.0	956.6	924.6	894.6
27.5°	1204.7	1164.9	1139.2	1112.7	1081.3	1047.2	1008.9	968.5	932.9	897.4	860.5
30°	1215.1	1166.3	1131.5	1103.6	1071.6	1034.7	992.2	949.7	910.6	868.8	833.3
32.5°	1224.9	1169.1	1125.9	1090.4	1053.5	1017.2	974.0	928.7	885.6	845.8	808.2
35°	1231.1	1169.1	1115.5	1070.2	1028.4	992.8	950.3	905.1	861.2	822.1	787.3
37.5°	1231.8	1163.5	1098.8	1047.2	1003.3	966.4	926.0	883.5	841.7	805.4	776.2
40°	1224.9	1152.4	1082.0	1022.8	976.8	939.2	902.3	864.0	826.3	796.4	771.3
42.5°	1212.3	1140.6	1066.0	1003.3	955.2	916.2	882.1	849.3	816.6	790.8	769.9
45°	1193.5	1124.5	1051.4	991.5	944.1	903.0	869.5	842.4	814.5	792.9	772.0
47.5°	1176.8	1119.0	1056.3	999.1	949.7	907.1	873.0	850.0	828.4	813.8	785.2
50°	1173.3	1116.2	1058.3	1005.4	955.2	912.0	882.1	870.2	864.0	854.9	811.0
52.5°	1163.5	1115.5	1073.7	1044.4	1012.4	992.2	960.8	971.9	965.0	932.9	853.5
55°	1266.0	1279.9	1318.9	1374.7	1426.2	1438.1	1434.6	1421.3	1351.0	1162.2	955.9
57.5°	1740.4	1819.2	1893.0	1925.8	1921.6	1884.7	1858.2	1804.5	1702.8	1472.9	1158.0
60°	2399.6	2412.1	2373.1	2315.3	2217.7	2136.2	2049.1	1948.8	1801.1	1576.0	1282.0
62.5°	3006.4	2837.8	2664.3	2501.3	2352.9	2223.3	2102.1	1962.0	1769.7	1534.9	1266.0
65°	3434.9	3078.2	2804.4	2570.3	2360.5	2179.4	2028.2	1846.3	1629.7	1417.9	1173.3
67.5°	3655.8	3108.8	2688.7	2362.6	2065.1	1814.3	1612.9	1436.0	1275.0	1182.4	1027.0
70°	3409.1	2638.5	2053.3	1684.7	1328.7	1065.3	841.7	706.5	659.8	747.6	777.6
72.5°	2540.3	1717.5	1221.4	944.8	723.9	576.9	442.4	347.7	282.9	296.8	385.3
75°	1201.2	741.3	523.9	398.5	317.0	262.7	214.6	196.5	164.4	136.6	128.2
77.5°	467.5	340.7	281.5	206.2	146.3	117.7	100.3	96.8	98.9	96.1	94.8
80°	356.0	241.1	151.2	110.8	95.5	84.3	74.6	71.8	73.2	76.6	80.1
82.5°	198.6	124.0	92.0	80.1	71.8	61.3	55.7	51.6	52.3	56.4	64.1
85°	76.6	59.9	55.0	53.0	49.5	39.7	34.1	34.8	39.7	47.4	47.4
87.5°	8.4	8.4	11.1	8.4	8.4	8.4	7.7	9.1	9.8	12.5	14.6
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°	1317.5	1317.5	1317.5	1317.5	1317.5	1317.5	1317.5	1317.5	1317.5	1317.5	1317.5
2.5°	1305.7	1305.7	1305.7	1304.3	1305.0	1302.2	1302.2	1300.1	1303.6	1301.5	1300.8
5°	1285.5	1284.8	1282.0	1282.0	1282.0	1282.0	1284.1	1278.5	1282.7	1282.7	1280.6
7.5°	1251.3	1251.3	1243.7	1247.9	1246.5	1248.6	1251.3	1248.6	1252.7	1255.5	1253.4
10°	1204.0	1204.0	1197.7	1202.6	1200.5	1205.4	1210.2	1207.4	1210.2	1214.4	1215.8
12.5°	1151.7	1148.9	1143.3	1145.4	1145.4	1148.2	1150.3	1153.8	1157.3	1162.9	1165.6
15°	1091.1	1086.9	1079.9	1079.9	1075.8	1077.2	1081.3	1082.7	1089.7	1097.4	1106.4
17.5°	1029.1	1018.6	1011.0	1001.9	994.9	1000.5	1005.4	1008.9	1014.4	1026.3	1032.6
20°	970.6	949.7	935.0	923.2	915.5	919.0	925.3	929.4	934.3	937.1	939.2
22.5°	912.7	889.0	868.8	854.2	841.7	845.1	842.4	840.3	843.7	834.7	834.0
25°	862.6	834.7	807.5	790.1	774.8	769.9	755.3	751.8	742.0	734.4	728.8
27.5°	826.3	790.1	760.1	739.9	715.5	697.4	678.6	659.8	649.4	636.8	630.5
30°	797.8	759.4	723.9	689.8	657.7	629.8	604.8	580.4	563.7	545.5	533.7
32.5°	771.3	735.8	692.6	645.9	602.7	571.3	538.6	510.7	484.2	460.5	443.1
35°	753.2	713.5	658.4	601.3	552.5	515.6	480.7	441.0	409.0	378.3	359.5
37.5°	743.4	694.6	627.1	563.7	509.3	467.5	424.3	378.3	339.3	310.7	282.2
40°	735.8	675.8	599.2	530.2	473.1	422.9	372.8	318.4	275.2	245.3	223.0
42.5°	727.4	654.9	574.8	503.7	440.3	381.8	321.2	263.4	222.3	201.4	191.6
45°	718.3	636.8	551.8	478.7	408.3	337.2	267.5	213.9	189.5	182.5	182.5
47.5°	716.2	625.0	535.1	454.3	372.1	285.7	218.1	184.6	177.7	179.1	181.8
50°	724.6	621.5	520.5	425.7	324.0	231.3	184.6	173.5	174.9	179.1	183.2
52.5°	744.8	624.3	505.1	386.0	266.8	190.9	170.7	170.0	174.2	180.5	184.6
55°	779.0	624.3	475.9	326.8	213.2	171.4	165.8	168.6	174.2	179.8	183.2
57.5°	852.1	618.0	424.3	261.3	178.4	164.4	164.4	167.9	172.8	178.4	181.2
60°	939.2	609.6	351.9	202.1	160.9	158.9	163.7	167.9	172.1	177.0	179.8
62.5°	944.8	588.0	278.7	167.2	151.9	155.4	163.0	168.6	170.0	173.5	177.0
65°	868.1	512.8	221.6	149.8	147.7	153.3	160.9	165.1	165.8	167.2	170.7
67.5°	760.1	418.0	179.1	141.4	143.5	149.8	154.0	157.5	159.6	163.0	163.7
70°	624.3	335.8	153.3	133.1	135.2	142.1	145.6	149.1	153.3	157.5	155.4
72.5°	442.4	261.3	134.5	124.0	126.8	133.1	137.3	140.0	143.5	147.7	144.9
75°	188.1	182.5	116.4	112.2	116.4	120.5	124.7	128.9	132.4	134.5	134.5
77.5°	96.1	107.3	100.3	100.3	103.1	107.3	110.8	115.0	117.1	119.1	121.9
80°	81.5	82.9	84.3	87.1	89.9	94.1	97.5	101.0	101.7	102.4	103.8
82.5°	67.6	70.4	71.8	75.9	78.0	79.4	81.5	81.5	82.9	82.9	80.8
85°	48.8	52.3	54.3	55.0	54.3	55.0	55.7	57.1	60.6	60.6	57.8
87.5°	13.9	13.2	16.7	17.4	18.8	21.6	24.4	29.3	30.7	32.0	32.0
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: P152373

CATALOG NUMBER: TLM-F03-LED-E1-SL4-8030

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1317.5	1317.5	1317.5	1317.5
2.5°	1300.1	1301.5	1298.7	1299.4
5°	1280.6	1283.4	1279.9	1284.1
7.5°	1255.5	1259.7	1259.0	1258.3
10°	1219.3	1224.9	1224.9	1227.0
12.5°	1173.3	1176.8	1179.6	1181.0
15°	1111.3	1117.6	1121.0	1121.0
17.5°	1036.7	1040.9	1043.0	1040.2
20°	942.0	940.6	941.3	934.3
22.5°	832.6	834.7	828.4	829.8
25°	725.3	721.8	724.6	720.4
27.5°	621.5	622.2	614.5	618.0
30°	522.6	519.1	509.3	514.2
32.5°	427.1	418.0	407.6	401.3
35°	337.2	323.3	318.4	316.3
37.5°	264.8	249.4	244.6	239.0
40°	210.4	204.8	202.8	204.1
42.5°	188.8	188.8	190.2	190.9
45°	183.2	185.3	187.4	188.1
47.5°	183.9	186.0	188.8	189.5
50°	185.3	187.4	189.5	190.2
52.5°	186.0	186.0	187.4	188.1
55°	184.6	183.9	184.6	185.3
57.5°	181.8	180.5	181.2	183.2
60°	180.5	178.4	179.8	181.2
62.5°	177.0	176.3	177.7	178.4
65°	169.3	170.0	172.1	172.1
67.5°	162.3	163.0	163.7	164.4
70°	154.0	154.7	156.1	156.8
72.5°	144.2	147.0	149.1	151.9
75°	136.6	139.3	143.5	146.3
77.5°	123.3	125.4	130.3	133.8
80°	104.5	103.8	104.5	106.6
82.5°	80.1	80.1	79.4	78.7
85°	56.4	55.7	53.6	53.6
87.5°	30.7	30.0	29.3	27.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)