

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: P151213

Luminaire Tested: **TLM-F01-LED-E1-SL3-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P151213
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33679)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TLM-F01-LED-E1-SL3-8030
Description: TALON MEDIUM LED SITE LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL
Light Source: (7) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

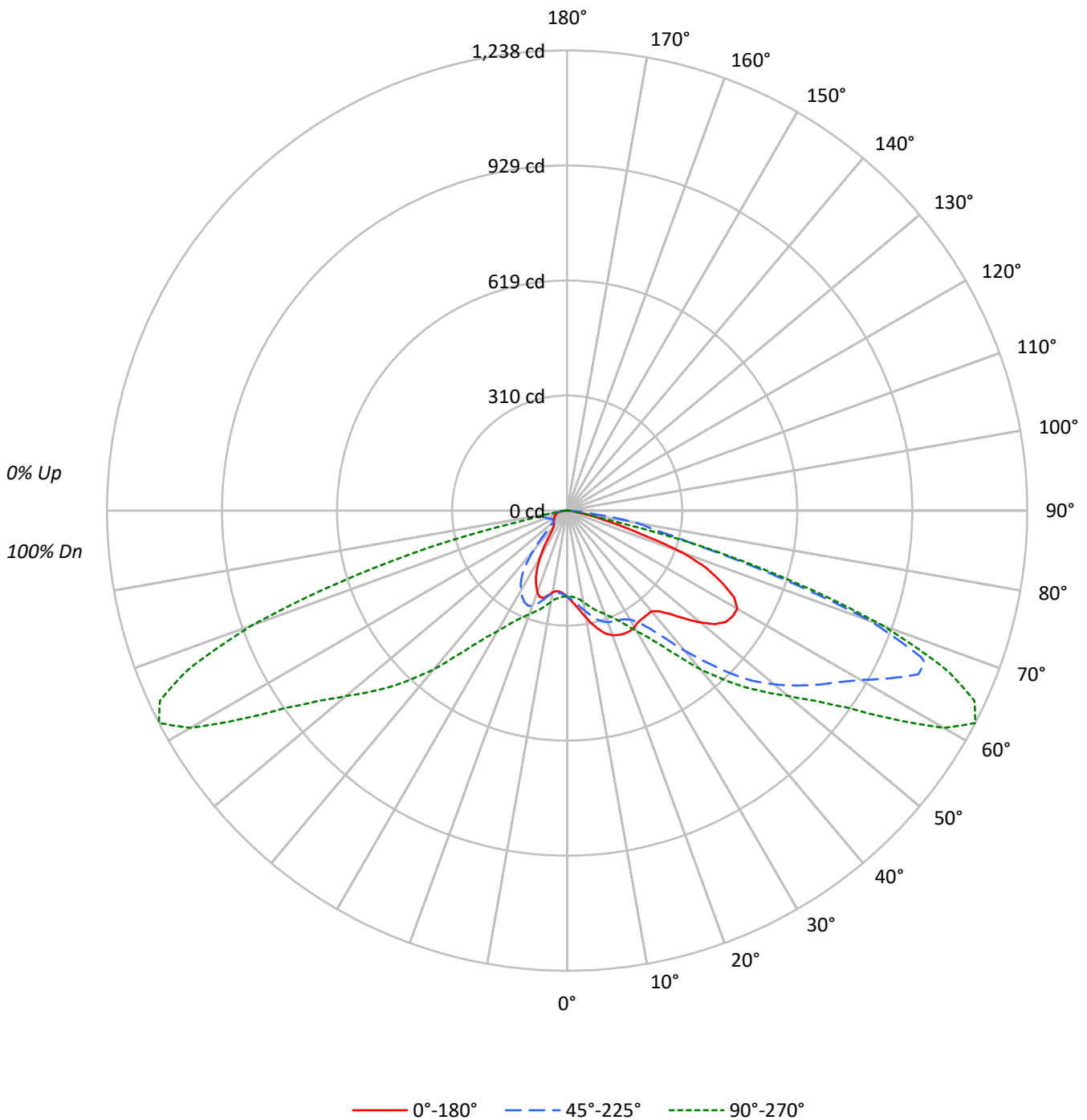
Lumens per Lamp: N/A
Luminaire Lumens: 2115.4 lumens
Efficiency: N/A
Efficacy: 81.7 lumens/watt
Spacing Criteria (0/90/45): 1.44 / 3.92 / 2.51
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 25.9
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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CATALOG NUMBER: TLM-F01-LED-E1-SL3-8030

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	85	82	85	82	80	77
2	93	82	74	66	90	80	72	65	77	70	64	73	67	62	70	65	61	58
3	82	69	59	50	79	67	58	50	64	56	49	61	54	48	58	52	47	44
4	73	59	48	39	71	57	47	39	54	46	38	52	44	38	49	43	37	35
5	66	51	40	32	64	49	39	31	47	38	31	45	37	31	43	36	30	28
6	60	44	34	26	58	43	33	26	41	32	26	39	31	25	38	31	25	23
7	55	39	29	22	53	38	29	22	37	28	22	35	27	21	34	27	21	19
8	51	35	25	19	49	35	25	19	33	25	18	32	24	18	30	23	18	16
9	47	32	23	16	46	31	22	16	30	22	16	29	21	16	28	21	16	14
10	44	29	20	14	43	29	20	14	28	20	14	27	19	14	26	19	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	14633	14633	14633
5°	16252	14911	13932
10°	18787	16009	14363
15°	21724	17948	15942
20°	24035	19985	15774
25°	25507	22782	13826
30°	26474	27351	10543
35°	27355	34273	6423
40°	29218	46030	4687
45°	35289	59994	4513
50°	46100	76410	4551
55°	57579	102111	4714
60°	66914	148048	5027
65°	68828	181104	5603
70°	61259	166688	6183
75°	29430	94210	7217
80°	10173	13054	7366
85°	4577	8064	7410



TEST NUMBER: P151213

CATALOG NUMBER: TLM-F01-LED-E1-SL3-8030

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.0	1.1
10°-20°	78.9	3.7
20°-30°	139.3	6.6
30°-40°	199.9	9.5
40°-50°	303.7	14.4
50°-60°	447.1	21.1
60°-70°	594.2	28.1
70°-80°	290.7	13.7
80°-90°	38.6	1.8
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°	241.2	11.4
0°-40°	441.1	20.9
0°-60°	1191.9	56.3
0°-90°	2115.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2115.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	231	231	231	231	231	
5°	256	248	235	223	219	26
15°	331	302	274	248	243	94
25°	365	325	326	272	198	168
35°	354	387	443	210	83	223
45°	394	618	670	76	50	311
55°	522	818	925	46	43	460
65°	459	1042	1209	51	37	446
75°	120	359	385	59	30	150
85°	6	20	11	14	10	9
90°	0	0	0	0	0	



TEST NUMBER: P151213

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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	64°
0°	231.1	231.1	231.1	231.1	231.1	231.1	231.1	231.1	231.1	231.1	231.1
2.5°	242.0	242.2	241.8	241.5	240.1	238.7	237.8	236.7	236.7	236.7	236.2
5°	255.7	254.8	255.5	253.8	251.1	248.5	245.9	243.9	243.4	243.4	242.5
7.5°	272.2	271.0	270.6	268.2	264.1	260.3	255.2	253.1	252.0	251.5	251.1
10°	292.2	292.2	289.1	285.2	279.6	273.1	267.5	263.8	263.6	263.6	261.5
12.5°	312.6	313.1	309.1	305.2	296.1	287.5	281.0	276.8	276.6	275.7	274.5
15°	331.4	330.3	327.7	321.9	311.9	301.7	293.6	289.4	288.4	287.5	286.8
17.5°	347.0	345.8	342.6	335.1	324.7	312.6	302.6	298.2	297.7	297.3	296.3
20°	356.7	355.8	351.2	342.6	331.6	319.3	308.7	305.6	304.7	304.7	304.2
22.5°	362.3	360.9	354.2	342.8	332.1	323.1	314.2	312.4	311.7	311.9	311.9
25°	365.1	363.9	354.4	338.1	327.9	325.4	321.7	320.5	320.7	321.0	321.4
27.5°	365.6	363.9	352.8	332.1	322.6	329.8	332.3	334.2	334.2	335.1	336.8
30°	362.1	360.2	349.5	327.5	320.3	338.6	348.8	353.7	355.6	355.1	358.8
32.5°	356.0	354.9	346.3	327.5	326.8	356.0	374.1	381.1	382.0	382.5	386.7
35°	353.9	353.7	350.0	338.6	347.0	386.7	414.3	419.7	420.8	420.8	423.8
37.5°	353.5	354.6	358.8	359.5	382.5	432.2	468.4	476.6	476.6	478.9	478.9
40°	353.5	356.0	371.8	390.6	425.9	491.4	541.6	550.9	550.9	553.4	552.0
42.5°	367.2	370.9	396.9	432.7	480.7	552.5	610.1	620.6	621.3	620.6	622.6
45°	394.1	397.4	429.0	480.3	537.2	618.0	675.6	688.1	685.6	687.2	687.9
47.5°	429.9	435.0	471.0	532.3	592.2	678.6	749.0	760.4	759.4	760.1	757.1
50°	468.0	473.3	513.5	583.9	647.0	727.4	808.0	824.9	823.3	824.5	826.1
52.5°	501.6	504.9	543.7	622.6	688.6	772.9	853.3	874.4	878.1	878.6	879.7
55°	521.6	525.6	561.1	641.9	718.8	817.5	905.1	937.1	944.3	946.2	951.3
57.5°	528.6	532.8	565.1	644.7	735.3	859.3	977.3	1033.7	1039.8	1049.7	1066.0
60°	528.4	532.8	560.9	638.4	752.0	911.1	1089.7	1184.2	1214.9	1225.1	1248.3
62.5°	506.8	511.9	540.4	619.4	773.4	977.3	1256.9	1402.3	1441.8	1460.4	1485.4
65°	459.4	463.1	489.8	571.1	767.3	1042.5	1396.7	1578.1	1614.1	1641.3	1686.1
67°	417.3	419.7	440.6	514.0	708.3	1044.9	1440.8	1621.8	1653.1	1681.9	1728.1
67.5°	406.7	411.5	427.8	496.5	686.3	1031.6	1437.8	1615.0	1647.1	1677.0	1725.8
70°	330.9	337.9	346.0	392.3	539.5	867.9	1331.2	1498.4	1526.5	1554.4	1622.5
72.5°	204.1	216.7	218.3	247.6	351.2	599.9	1077.2	1263.6	1284.8	1304.8	1374.4
75°	120.3	122.2	128.0	151.7	206.0	358.6	722.7	938.7	958.2	968.0	1022.6
77.5°	67.1	69.0	73.9	94.3	158.4	241.5	420.8	551.6	563.4	575.7	566.9
80°	27.9	30.4	32.7	38.1	74.1	190.7	289.4	350.7	358.4	365.6	374.6
82.5°	13.5	14.4	17.7	20.2	26.9	78.3	226.9	304.0	313.1	323.5	344.7
85°	6.3	7.0	9.8	11.6	13.0	19.7	75.9	147.9	160.5	162.8	167.0
87.5°	0.5	0.5	1.2	1.6	2.3	2.6	7.9	11.1	12.5	11.4	14.4
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: P151213

CATALOG NUMBER: TLM-F01-LED-E1-SL3-8030

CANDELA DISTRIBUTION (continued):

	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°	75°
0°	231.1	231.1	231.1	231.1	231.1	231.1	231.1	231.1	231.1	231.1	231.1
2.5°	236.0	235.7	235.3	235.3	235.0	235.0	235.0	234.6	234.6	234.6	234.3
5°	242.2	242.0	241.3	241.3	240.8	240.8	240.1	239.9	239.4	239.4	239.2
7.5°	250.4	250.1	249.2	249.2	248.5	248.3	247.8	247.1	247.1	246.6	246.2
10°	261.5	260.8	260.6	259.4	259.7	259.2	258.7	258.0	257.6	257.1	256.6
12.5°	274.0	274.0	272.9	272.2	272.7	272.2	271.3	271.0	270.3	270.3	269.6
15°	285.9	285.9	285.4	284.5	284.7	284.0	283.8	283.3	282.4	282.6	282.4
17.5°	296.1	296.1	295.4	295.0	295.0	294.3	294.5	294.0	293.6	293.3	292.6
20°	304.2	304.2	303.8	303.3	303.5	303.5	302.8	302.8	302.8	302.4	302.4
22.5°	312.1	312.4	312.4	312.4	312.6	312.8	312.6	313.1	312.8	313.3	313.3
25°	322.6	323.3	323.7	323.7	324.9	325.1	325.4	326.1	326.1	326.8	327.0
27.5°	338.1	338.6	340.5	340.9	341.2	343.0	343.3	344.2	345.1	345.3	345.6
30°	359.5	360.7	362.1	363.0	363.0	365.3	366.3	365.8	368.3	369.0	370.0
32.5°	388.1	389.0	390.4	391.3	392.3	393.4	393.7	394.8	396.9	398.8	397.6
35°	424.1	426.4	424.1	426.6	427.3	429.0	428.5	429.9	430.8	431.5	431.3
37.5°	476.3	475.2	474.7	473.8	472.2	477.7	474.9	474.7	473.3	477.3	474.7
40°	545.1	545.8	546.5	542.8	540.7	540.7	540.0	537.4	536.3	539.7	539.3
42.5°	616.8	617.5	614.3	612.0	606.6	605.9	602.7	602.0	600.8	602.7	600.8
45°	682.1	682.6	675.4	676.5	672.3	673.0	667.9	670.0	667.2	669.1	672.6
47.5°	755.0	756.0	749.7	752.2	748.1	745.5	745.3	746.7	743.6	745.5	746.4
50°	821.2	820.1	816.8	817.5	815.6	816.1	813.3	815.9	812.4	816.1	815.6
52.5°	880.0	878.6	877.9	880.2	878.6	878.6	877.0	878.1	878.6	884.2	885.3
55°	951.3	952.4	953.6	957.8	959.6	956.6	959.6	965.4	965.7	978.9	986.1
57.5°	1065.8	1073.9	1078.1	1080.6	1091.6	1090.4	1097.4	1111.3	1112.7	1143.3	1161.2
60°	1265.5	1279.9	1293.6	1286.2	1308.2	1315.0	1319.2	1345.2	1353.3	1382.3	1397.9
62.5°	1517.7	1519.3	1540.7	1534.0	1546.5	1543.5	1548.6	1560.5	1571.1	1595.1	1609.7
65°	1693.8	1701.4	1709.8	1701.2	1701.0	1690.7	1684.2	1684.0	1690.5	1695.6	1711.9
67°	1741.6	1749.3	1751.4	1745.1	1736.0	1723.0	1711.0	1704.7	1700.5	1702.8	1713.0
67.5°	1741.1	1748.3	1750.9	1744.9	1732.3	1721.4	1708.6	1701.4	1695.9	1697.0	1705.6
70°	1642.2	1657.8	1666.1	1668.0	1666.4	1647.3	1636.4	1629.9	1625.3	1613.9	1613.2
72.5°	1391.4	1410.2	1416.7	1427.1	1431.8	1403.7	1391.8	1399.0	1382.8	1346.8	1348.4
75°	1021.6	1023.0	1001.2	997.0	981.5	917.8	898.8	881.4	853.5	810.1	769.2
77.5°	532.5	532.3	507.2	494.4	475.9	437.5	435.7	404.6	382.7	343.0	328.6
80°	378.3	384.4	392.7	396.9	390.4	375.5	355.1	333.0	307.7	282.9	253.1
82.5°	351.9	355.6	360.0	343.7	334.7	313.8	298.2	266.2	248.3	219.9	190.0
85°	171.2	182.5	173.7	163.5	160.0	125.2	121.0	101.0	91.7	75.5	70.4
87.5°	10.9	13.5	12.1	10.9	9.5	5.3	7.2	5.1	5.3	3.9	3.5
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: P151213

CATALOG NUMBER: TLM-F01-LED-E1-SL3-8030

CANDELA DISTRIBUTION (continued):

	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	86°
0°	231.1	231.1	231.1	231.1	231.1	231.1	231.1	231.1	231.1	231.1	231.1
2.5°	234.3	234.1	233.9	233.6	233.4	233.4	233.2	232.9	232.7	232.2	232.2
5°	238.7	238.7	238.5	238.1	238.1	237.6	236.9	236.7	236.7	236.2	235.7
7.5°	245.9	245.7	245.3	245.0	244.6	244.1	243.6	243.2	242.9	242.2	242.0
10°	256.9	256.4	255.2	254.8	254.5	254.1	253.6	253.1	252.5	252.0	251.8
12.5°	269.2	268.9	268.0	268.5	267.3	266.8	266.4	265.2	265.7	264.8	264.3
15°	281.5	281.7	281.2	281.2	280.3	279.6	279.2	278.2	278.0	277.5	277.1
17.5°	292.4	292.9	292.2	291.7	291.2	290.8	289.8	288.9	288.9	288.0	287.5
20°	302.4	302.8	302.6	302.2	301.5	301.2	300.8	300.1	300.1	299.6	298.9
22.5°	313.8	314.0	314.0	313.8	313.1	313.3	312.8	312.1	312.4	311.4	311.4
25°	327.5	327.9	328.4	328.6	328.2	328.4	327.9	327.5	327.2	327.5	327.2
27.5°	346.3	346.7	348.1	347.0	348.1	348.4	347.7	346.7	347.4	348.6	347.9
30°	371.1	370.7	372.5	372.8	372.5	372.8	372.3	371.6	372.1	374.1	373.0
32.5°	399.0	399.9	400.4	400.9	401.6	402.5	401.8	401.1	402.2	401.6	403.2
35°	432.7	434.8	435.5	434.8	435.2	436.9	436.6	436.9	439.2	436.9	439.9
37.5°	475.2	477.3	478.9	478.0	479.1	479.1	481.0	486.1	482.8	487.0	490.3
40°	537.0	540.2	540.4	540.2	541.4	542.8	544.6	550.2	546.5	550.9	553.9
42.5°	600.6	604.5	605.9	603.6	606.2	609.2	609.4	614.3	614.5	615.2	616.8
45°	672.3	675.8	678.6	677.5	677.7	681.6	680.7	685.4	681.9	681.9	682.8
47.5°	748.8	752.0	753.9	755.7	753.4	756.9	758.5	757.6	753.4	752.5	746.9
50°	818.4	821.2	824.0	829.1	828.9	830.5	831.7	827.5	826.6	821.5	815.2
52.5°	892.3	899.5	905.8	916.4	918.1	923.6	921.5	914.6	913.4	905.1	896.7
55°	995.2	1015.8	1024.9	1041.4	1052.5	1052.3	1047.7	1046.5	1037.7	1020.9	1011.0
57.5°	1174.2	1206.5	1222.1	1243.4	1246.9	1244.8	1238.8	1228.1	1212.8	1184.7	1166.6
60°	1432.7	1452.7	1470.8	1475.9	1478.5	1474.5	1453.4	1429.7	1399.7	1361.0	1328.7
62.5°	1628.0	1648.5	1661.9	1659.9	1643.8	1623.6	1592.7	1553.0	1511.0	1467.6	1419.3
65°	1727.4	1736.0	1733.9	1717.7	1690.3	1655.0	1609.9	1560.9	1511.5	1460.1	1410.0
67°	1722.1	1722.3	1708.2	1676.6	1641.5	1597.2	1542.1	1488.7	1430.6	1376.7	1317.1
67.5°	1712.6	1711.6	1691.9	1657.3	1619.4	1573.7	1516.6	1461.3	1401.1	1346.8	1285.0
70°	1604.8	1591.8	1547.2	1491.9	1439.2	1377.4	1317.5	1254.1	1186.3	1139.6	1068.6
72.5°	1318.7	1274.8	1197.9	1140.1	1083.7	1002.8	965.4	886.7	839.1	809.4	755.7
75°	763.6	726.9	667.5	613.4	586.0	538.1	515.4	457.5	445.4	445.0	426.4
77.5°	291.5	254.3	216.0	174.0	147.9	117.5	103.6	92.7	84.3	90.1	81.8
80°	218.5	179.8	140.5	102.2	72.9	53.9	46.2	42.7	40.6	39.0	37.9
82.5°	162.8	128.4	99.6	65.0	45.5	34.4	29.7	27.9	26.9	25.3	23.9
85°	55.0	44.1	34.8	24.2	19.0	15.6	14.4	13.9	13.2	12.1	11.4
87.5°	3.0	2.8	3.0	2.3	2.8	2.3	2.6	2.6	2.6	2.3	2.3
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: P151213

CATALOG NUMBER: TLM-F01-LED-E1-SL3-8030

CANDELA DISTRIBUTION (continued):

	87°	88°	89°	90°	95°	105°	115°	125°	135°	145°	155°
0°	231.1	231.1	231.1	231.1	231.1	231.1	231.1	231.1	231.1	231.1	231.1
2.5°	232.0	232.0	232.0	231.5	230.9	229.5	228.1	226.9	225.7	225.0	224.6
5°	235.5	235.0	234.8	234.6	232.9	230.2	227.6	225.3	223.0	221.1	220.4
7.5°	241.8	240.8	240.6	239.9	237.8	233.6	229.9	226.2	223.0	220.4	219.2
10°	251.3	251.3	249.9	249.0	246.6	241.1	235.7	230.9	226.4	223.7	223.0
12.5°	263.4	263.4	262.2	261.5	258.7	251.5	245.0	239.2	235.0	232.2	232.0
15°	275.9	275.7	274.7	273.8	270.8	263.1	256.6	251.5	248.0	244.8	243.9
17.5°	287.1	287.1	285.9	285.0	281.9	275.4	269.6	265.9	262.0	255.2	250.1
20°	298.2	298.4	297.5	296.6	294.0	288.4	285.9	282.2	273.4	258.7	246.6
22.5°	310.5	311.4	310.3	309.4	307.3	304.9	304.0	295.2	276.6	253.1	235.5
25°	326.3	327.9	326.5	326.1	324.9	325.6	322.8	302.4	272.0	241.1	219.0
27.5°	347.9	347.9	348.1	348.1	347.7	350.2	340.0	302.6	261.7	225.5	199.3
30°	373.2	374.6	374.1	374.1	376.0	377.6	349.5	297.5	248.7	206.2	175.1
32.5°	403.6	404.8	405.3	403.2	410.6	402.2	353.0	288.2	232.7	182.3	146.3
35°	440.3	442.0	443.1	443.4	448.2	423.6	351.2	274.5	209.7	152.4	114.7
37.5°	488.2	491.4	494.0	495.1	495.4	441.7	346.0	256.4	179.8	118.9	85.5
40°	551.8	555.3	554.6	556.9	543.7	452.4	334.4	230.2	142.6	87.3	66.0
42.5°	613.1	613.6	614.5	612.4	585.5	458.0	318.2	198.1	106.8	65.3	56.4
45°	681.6	677.7	673.3	670.0	624.0	460.1	295.9	159.1	75.5	54.8	52.3
47.5°	746.0	740.6	731.6	722.3	658.4	456.8	267.3	119.1	57.4	50.2	49.5
50°	809.1	799.2	786.4	775.7	691.4	451.9	235.7	85.9	50.2	47.8	47.1
52.5°	887.4	870.7	854.0	840.0	734.4	444.3	202.5	65.3	47.1	46.0	45.1
55°	994.7	971.5	944.5	925.0	792.7	432.7	167.7	55.3	45.8	44.8	43.4
57.5°	1143.3	1108.5	1078.1	1046.3	872.3	420.8	137.7	51.3	45.5	44.1	42.3
60°	1295.2	1253.4	1214.6	1169.1	953.6	409.0	116.8	50.9	46.2	44.1	41.3
62.5°	1374.2	1331.0	1284.3	1238.1	988.7	381.1	102.4	51.6	47.8	44.8	41.3
65°	1356.1	1303.4	1256.0	1208.8	948.0	328.4	86.6	52.5	51.1	47.6	42.0
67°	1265.0	1210.0	1164.5	1119.4	857.4	275.0	74.3	53.4	54.6	50.9	43.4
67.5°	1233.0	1177.9	1133.1	1089.2	830.7	263.8	71.3	53.9	55.3	51.8	43.9
70°	1022.3	981.9	934.3	900.4	672.6	195.3	58.5	54.8	59.5	57.1	46.0
72.5°	735.8	697.2	661.4	642.6	495.4	136.6	49.2	53.9	62.0	60.2	46.9
75°	391.1	388.8	375.8	385.1	306.6	89.2	43.4	50.4	59.2	55.0	43.7
77.5°	79.0	81.3	95.5	94.1	98.9	49.7	37.2	43.2	45.8	40.4	35.5
80°	36.7	36.0	35.3	35.8	35.1	31.8	30.2	33.9	31.8	26.0	23.7
82.5°	22.8	22.3	21.6	21.4	23.7	25.3	26.5	26.7	21.1	18.1	17.4
85°	10.9	10.9	10.7	11.1	13.9	20.7	22.3	19.7	14.2	13.0	12.3
87.5°	2.1	2.1	2.3	2.1	2.8	4.9	5.6	6.5	5.3	5.6	6.3
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: P151213

CATALOG NUMBER: TLM-F01-LED-E1-SL3-8030

CANDELA DISTRIBUTION (continued):

	165°	175°	180°
0°	231.1	231.1	231.1
2.5°	224.1	223.7	223.7
5°	219.5	219.2	219.2
7.5°	218.3	218.5	218.3
10°	222.7	222.5	223.4
12.5°	232.5	233.2	232.9
15°	242.7	243.2	243.2
17.5°	245.7	244.1	243.9
20°	237.8	234.8	234.1
22.5°	223.0	217.4	217.6
25°	204.1	197.4	197.9
27.5°	182.3	175.1	174.9
30°	156.1	148.2	144.2
32.5°	124.5	115.0	115.0
35°	93.6	85.9	83.1
37.5°	71.1	66.7	65.3
40°	59.2	57.1	56.7
42.5°	53.9	53.2	53.0
45°	51.1	50.6	50.4
47.5°	48.5	48.3	48.1
50°	46.7	46.4	46.2
52.5°	45.1	44.6	44.4
55°	42.7	42.7	42.7
57.5°	41.3	41.3	41.1
60°	39.9	39.7	39.7
62.5°	38.8	38.3	38.6
65°	38.1	37.4	37.4
67°	37.6	36.2	36.2
67.5°	37.6	35.8	35.8
70°	36.9	33.9	33.4
72.5°	36.2	31.8	31.1
75°	34.4	30.2	29.5
77.5°	29.5	26.9	26.5
80°	22.8	19.7	20.2
82.5°	16.5	14.2	13.9
85°	11.8	10.2	10.2
87.5°	6.3	5.3	5.6
90°	0.0	0.0	0.0

(END OF REPORT)