

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: P150654

Luminaire Tested: **TLM-F02-LED-E1-SL3-HSS-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P150654
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33727)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TLM-F02-LED-E1-SL3-HSS-7030
Description: TALON MEDIUM LED SITE LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND
HOUSE SIDE SHIELD
Light Source: (14) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2614.5 lumens
Efficiency: N/A
Efficacy: 47.5 lumens/watt
Spacing Criteria (0/90/45): 4.23 / 3.52 / 4.34
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
CIE Type: Direct

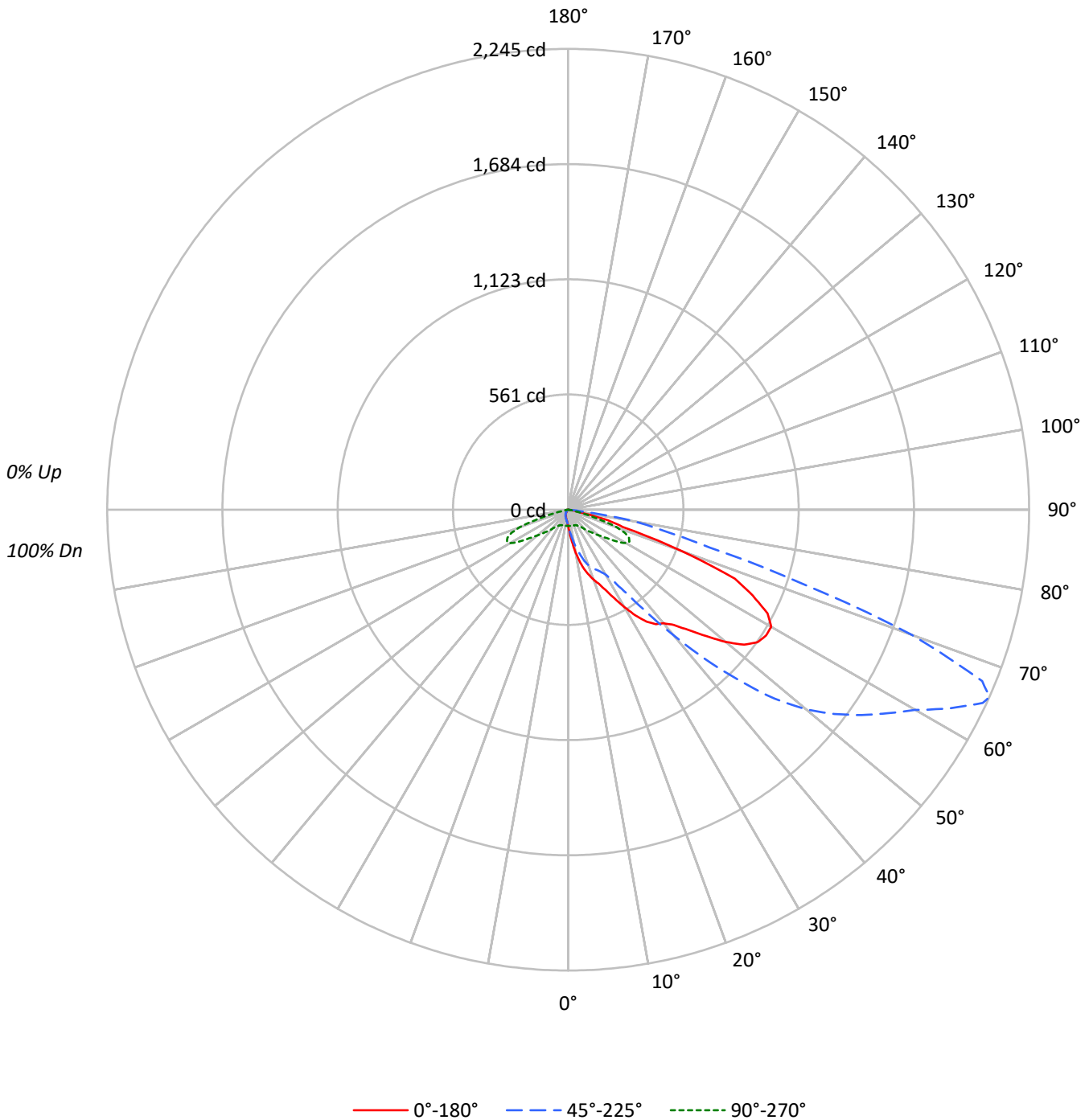
Input Watts (W): 55
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	93	87	102	96	91	86	92	87	83	88	84	81	84	81	78	76
2	91	80	71	63	88	78	69	62	74	67	61	71	64	59	67	62	58	55
3	80	66	55	46	77	64	54	46	61	52	45	58	50	44	55	48	43	40
4	71	55	43	35	68	53	43	34	51	41	34	48	40	33	45	38	32	30
5	63	47	35	27	61	45	34	26	43	33	26	41	32	26	39	31	25	23
6	57	40	29	21	55	39	29	21	37	28	21	35	27	20	33	26	20	17
7	52	35	24	17	50	34	24	17	33	23	17	31	23	16	29	22	16	14
8	48	31	21	14	46	30	21	14	29	20	14	28	19	13	26	19	13	11
9	44	28	18	12	42	27	18	12	26	17	11	25	17	11	24	16	11	9
10	41	25	16	10	39	25	16	10	24	15	10	23	15	10	22	15	10	7

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	2574	2574	2574
5°	4312	2592	1893
10°	7075	2615	1583
15°	10100	2725	1341
20°	12562	2817	1152
25°	15540	2985	975
30°	20655	3341	832
35°	26500	3954	701
40°	30734	5201	558
45°	38167	7025	415
50°	50836	9794	406
55°	64033	14322	455
60°	74467	21247	489
65°	76548	25234	540
70°	55943	24233	620
75°	25218	10548	819
80°	4527	2639	1221
85°	374	2358	2245



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	8.8	0.3
10°-20°	37.5	1.4
20°-30°	80.8	3.1
30°-40°	172.5	6.6
40°-50°	381.6	14.6
50°-60°	646.6	24.7
60°-70°	862.9	33.0
70°-80°	380.1	14.5
80°-90°	43.8	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°	127.1	4.9
0°-40°	299.6	11.5
0°-60°	1327.8	50.8
0°-90°	2614.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2614.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	79	79	79	79	79	
5°	132	112	79	60	58	15
15°	299	228	81	43	40	85
25°	432	322	83	31	27	207
35°	666	499	99	21	18	413
45°	827	1174	152	13	9	654
55°	1126	1744	252	6	8	992
65°	992	2227	327	4	7	947
75°	200	713	84	4	6	221
85°	1	15	6	3	6	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9
2.5°	99.5	99.0	97.0	97.0	94.0	92.0	89.5	87.0	87.0	86.5	86.0
5°	131.7	128.7	128.2	122.6	118.1	111.6	105.6	97.5	96.5	95.5	95.0
7.5°	167.4	166.9	162.4	155.8	146.8	134.7	122.6	109.6	107.6	106.6	104.6
10°	213.6	211.1	205.1	194.0	180.5	164.4	144.8	124.2	121.6	119.6	118.6
12.5°	257.9	253.3	249.8	235.7	218.7	195.0	171.4	141.8	139.7	137.2	133.2
15°	299.1	295.1	289.0	277.0	257.9	228.2	200.6	164.4	159.3	155.8	152.8
17.5°	331.3	328.7	321.7	308.1	287.5	261.4	228.2	187.5	183.5	178.9	173.4
20°	361.9	358.4	347.3	328.7	306.6	286.5	260.9	217.7	212.1	206.6	200.6
22.5°	391.1	387.6	369.5	338.8	315.2	306.6	297.6	251.8	243.3	238.8	232.7
25°	431.8	424.2	396.1	347.3	315.7	322.2	337.8	296.1	288.0	281.5	271.9
27.5°	486.6	476.5	432.3	359.9	317.7	339.3	384.0	349.9	341.3	333.8	323.2
30°	548.4	541.9	489.1	390.1	332.3	364.4	435.8	418.2	408.2	399.1	386.5
32.5°	610.7	601.7	549.4	447.4	371.5	413.2	500.7	497.6	484.6	476.0	462.4
35°	665.5	661.0	622.3	541.4	460.9	498.6	587.1	590.6	579.1	570.0	554.9
37.5°	702.7	702.7	695.2	642.4	603.2	631.3	714.3	714.8	703.2	682.6	675.1
40°	721.8	727.4	754.5	764.5	762.5	798.7	881.2	872.1	862.6	852.0	826.9
42.5°	761.0	766.1	823.9	893.2	938.5	986.2	1043.0	1040.0	1028.4	1009.3	986.2
45°	827.4	833.9	902.8	1012.9	1105.9	1173.7	1209.9	1195.8	1184.3	1166.2	1154.1
47.5°	911.8	924.4	1002.3	1138.5	1250.6	1362.7	1400.4	1363.2	1353.2	1339.1	1319.5
50°	1001.8	1013.9	1096.8	1252.6	1379.3	1513.0	1575.8	1513.0	1498.4	1493.9	1471.8
52.5°	1079.7	1089.8	1169.7	1340.6	1477.8	1634.7	1726.1	1643.2	1632.6	1617.6	1601.5
55°	1126.0	1134.0	1208.9	1382.8	1544.7	1744.2	1871.4	1798.5	1782.9	1776.9	1753.8
57.5°	1141.5	1149.6	1216.9	1388.4	1580.9	1844.3	2047.8	2050.4	2031.8	2010.1	2003.1
60°	1141.5	1150.6	1207.4	1374.8	1616.1	1950.8	2283.1	2492.7	2452.5	2448.5	2422.8
62.5°	1094.3	1102.8	1160.1	1333.1	1663.3	2094.6	2610.8	2980.8	2969.2	2943.1	2900.9
65°	991.8	996.8	1053.1	1226.5	1645.2	2226.8	2894.8	3305.5	3286.9	3235.6	3181.3
66°	945.5	949.5	1002.3	1165.7	1585.9	2244.9	2945.1	3346.2	3315.6	3272.3	3211.0
67.5°	878.7	885.7	922.9	1052.6	1443.6	2182.1	2913.4	3317.6	3290.9	3238.7	3177.3
70°	586.6	581.6	712.8	807.8	1099.8	1777.9	2613.8	2978.8	2979.3	2954.6	2930.0
72.5°	278.5	281.5	319.7	497.1	719.8	1187.8	2080.5	2377.6	2411.8	2367.5	2336.9
75°	200.1	204.6	227.7	304.1	429.3	712.8	1348.6	1662.8	1663.8	1585.4	1515.5
77.5°	58.3	60.8	85.5	187.5	321.7	481.0	774.6	924.4	902.8	846.5	793.7
80°	24.1	24.1	25.1	59.8	129.2	326.7	541.9	711.8	709.3	687.6	656.5
82.5°	9.0	9.6	12.1	24.6	30.7	80.4	361.4	617.8	616.3	585.6	563.5
85°	1.0	1.0	3.0	10.6	11.6	15.1	72.4	272.4	270.9	272.4	238.8
87.5°	0.0	0.0	0.5	1.0	1.5	2.0	3.0	10.6	11.6	11.1	10.1
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):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9
2.5°	86.0	84.9	84.9	84.4	84.4	84.4	83.9	83.4	83.4	82.9	82.4
5°	94.0	93.0	92.5	91.5	91.0	90.5	89.5	89.0	88.0	87.5	87.0
7.5°	103.5	101.5	101.0	99.5	98.0	97.0	96.0	94.5	93.5	91.5	91.0
10°	115.6	113.1	111.1	109.1	107.6	105.1	103.5	101.5	99.5	98.0	96.5
12.5°	131.2	127.7	124.7	122.6	119.1	116.1	113.1	111.6	107.6	105.6	103.0
15°	148.3	144.3	140.7	136.7	134.2	129.2	125.2	120.6	118.6	115.1	111.1
17.5°	170.4	163.9	158.3	154.3	149.3	144.3	139.7	135.2	129.2	125.2	120.1
20°	194.0	188.5	181.0	173.9	167.9	161.9	155.3	149.3	143.8	137.2	131.2
22.5°	224.2	216.1	207.1	200.1	192.0	185.5	176.4	168.4	159.3	150.8	143.8
25°	262.4	251.8	243.3	233.2	223.7	213.6	202.6	192.5	181.0	172.9	160.9
27.5°	309.6	299.6	288.0	275.0	265.4	250.3	235.7	223.2	209.6	197.0	183.5
30°	370.0	355.4	343.3	330.8	311.7	297.1	280.0	262.9	244.3	231.7	211.1
32.5°	442.3	426.8	408.7	390.6	373.0	352.4	331.3	310.1	289.5	266.4	245.3
35°	530.8	512.2	491.6	472.0	444.9	422.7	396.1	366.9	343.8	317.2	290.5
37.5°	647.9	617.3	599.2	578.6	541.9	511.7	482.1	452.9	412.2	384.0	346.3
40°	794.7	776.6	747.0	713.8	680.6	640.9	600.7	562.0	514.7	475.5	431.8
42.5°	967.1	940.5	910.3	862.6	828.9	782.1	736.4	685.1	627.3	577.1	525.8
45°	1129.0	1097.3	1074.2	1026.4	991.3	936.0	880.7	826.4	759.5	694.7	635.4
47.5°	1303.9	1277.8	1239.6	1200.9	1165.2	1102.8	1043.0	977.2	906.8	829.9	753.0
50°	1457.7	1437.1	1411.0	1364.2	1324.5	1272.2	1201.9	1130.0	1041.0	964.6	877.1
52.5°	1588.4	1572.3	1535.6	1502.5	1466.8	1417.5	1354.7	1285.8	1189.8	1105.9	1006.3
55°	1742.7	1731.2	1699.0	1678.4	1646.7	1599.5	1540.7	1476.8	1375.3	1283.8	1171.2
57.5°	1995.6	1986.5	1958.4	1949.8	1918.7	1877.4	1805.1	1736.7	1618.1	1504.5	1375.8
60°	2414.3	2396.2	2355.0	2333.9	2268.0	2212.7	2118.7	2024.7	1881.5	1736.7	1581.9
62.5°	2862.7	2811.9	2733.5	2666.1	2572.6	2476.6	2351.0	2207.2	2039.3	1867.4	1689.4
65°	3104.4	3018.0	2919.0	2811.9	2690.8	2549.5	2391.2	2218.8	2038.3	1856.8	1668.8
66°	3132.1	3034.6	2929.5	2810.4	2675.7	2525.4	2364.5	2183.6	1996.1	1819.1	1631.1
67.5°	3097.4	2995.4	2884.3	2752.1	2606.3	2450.5	2281.6	2093.6	1913.1	1733.7	1550.7
70°	2854.6	2753.1	2654.1	2514.8	2359.5	2202.7	2042.8	1832.7	1661.8	1496.9	1334.1
72.5°	2279.6	2210.7	2112.7	1993.6	1842.3	1658.3	1525.1	1337.1	1188.8	1028.9	902.8
75°	1424.5	1327.5	1206.4	1054.6	939.0	789.7	711.8	569.0	484.6	410.7	339.3
77.5°	728.4	655.5	570.5	485.1	403.1	321.7	248.8	175.9	118.6	82.4	61.3
80°	601.7	537.3	467.0	389.1	316.7	245.8	176.9	120.6	76.9	50.3	39.2
82.5°	497.1	442.8	380.0	307.6	244.8	193.0	134.2	87.5	54.3	35.2	27.6
85°	211.6	192.0	148.3	117.6	88.5	65.3	45.7	30.7	21.6	17.6	16.1
87.5°	9.0	10.1	9.6	7.5	5.5	5.5	5.0	4.0	4.0	4.0	4.0
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):

	80°	81°	82°	83°	84°	85°	95°	105°	115°	125°	135°
0°	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9
2.5°	82.4	81.9	81.4	81.4	80.9	80.4	77.4	74.9	71.9	69.9	67.9
5°	86.0	85.5	84.4	83.9	82.9	82.4	75.9	70.4	65.8	62.3	59.8
7.5°	89.5	89.0	87.5	86.0	85.5	84.4	73.9	66.9	60.8	56.8	54.3
10°	94.0	92.5	91.0	89.0	87.5	86.0	71.9	62.8	56.3	52.8	50.3
12.5°	100.5	98.0	95.5	93.0	91.0	88.5	70.9	59.3	52.8	48.8	46.2
15°	108.1	104.6	101.5	98.5	95.0	92.5	68.9	56.3	49.8	45.7	42.7
17.5°	115.1	111.1	106.6	102.0	98.5	95.0	66.9	53.3	46.7	42.7	39.7
20°	125.2	119.1	113.6	108.1	103.0	98.5	63.8	50.3	44.2	39.7	36.7
22.5°	136.2	129.2	122.1	114.6	108.1	102.0	61.3	47.8	41.7	37.2	33.7
25°	150.3	141.8	132.2	122.6	115.1	107.1	58.8	45.2	39.2	34.7	31.2
27.5°	169.9	157.8	147.3	135.2	123.7	114.6	56.8	43.2	36.7	32.2	28.7
30°	196.5	178.9	162.4	149.3	135.7	122.6	54.8	40.7	34.7	29.7	25.6
32.5°	226.2	205.6	186.5	166.9	149.8	134.7	52.8	38.7	32.2	27.1	23.6
35°	262.9	236.8	211.1	188.5	167.9	147.8	50.8	36.7	30.2	24.6	21.1
37.5°	315.7	283.0	249.3	220.2	193.5	166.9	49.3	34.7	27.6	22.1	18.6
40°	388.1	345.8	304.6	264.9	230.2	197.0	47.3	32.7	25.6	20.1	16.6
42.5°	466.5	415.2	360.9	316.2	268.4	226.7	45.2	30.7	23.6	18.1	14.6
45°	564.0	500.1	434.3	373.5	315.2	261.4	43.2	28.7	21.1	16.1	12.6
47.5°	670.6	589.1	514.7	438.3	369.0	304.6	40.7	27.1	19.1	14.1	11.1
50°	780.1	694.2	600.2	513.2	430.8	347.8	38.2	24.6	17.1	12.6	9.0
52.5°	898.3	796.7	700.7	592.6	496.6	404.6	35.7	22.6	15.6	11.1	7.5
55°	1048.6	935.0	822.4	701.2	585.6	470.5	33.2	20.1	13.6	9.6	6.0
57.5°	1237.6	1102.8	964.6	827.9	687.6	556.9	31.2	17.6	11.6	8.0	5.0
60°	1416.0	1258.7	1091.3	933.9	775.6	623.3	28.1	15.6	10.1	6.5	5.0
62.5°	1508.5	1329.0	1148.6	975.2	806.3	646.9	25.1	13.1	8.5	5.5	4.5
65°	1485.9	1302.9	1128.0	953.0	787.7	631.8	22.1	11.6	7.5	5.0	4.5
66°	1453.2	1272.2	1096.3	929.9	772.1	615.8	20.6	11.1	7.0	5.0	4.0
67.5°	1381.8	1206.9	1039.0	884.2	729.4	585.1	18.6	10.1	6.5	4.5	4.0
70°	1180.3	1021.4	887.2	749.5	623.3	493.1	15.1	8.5	5.5	4.0	4.0
72.5°	781.1	673.1	583.6	502.2	419.7	325.7	12.6	7.0	4.5	4.0	3.5
75°	294.6	266.4	228.7	205.6	179.5	157.3	10.1	4.5	3.5	3.5	3.5
77.5°	52.3	48.3	42.7	39.2	36.2	33.2	8.0	3.0	3.0	3.5	3.5
80°	35.2	32.7	29.7	27.1	25.1	22.6	5.5	2.5	3.0	3.0	3.5
82.5°	25.1	23.6	22.1	20.1	18.6	16.6	3.5	2.5	3.0	3.0	3.0
85°	15.1	14.1	13.1	12.1	10.6	10.1	2.5	2.5	2.5	3.0	3.0
87.5°	4.0	3.5	4.0	4.0	3.0	3.5	2.0	2.0	2.0	2.5	2.5
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: P150654

CATALOG NUMBER: TLM-F02-LED-E1-SL3-HSS-7030

CANDELA DISTRIBUTION (continued):

	145°	155°	165°	175°	180°
0°	78.9	78.9	78.9	78.9	78.9
2.5°	66.9	66.9	65.8	67.4	67.4
5°	57.8	57.8	57.3	57.8	57.8
7.5°	52.8	52.3	52.3	52.3	52.8
10°	48.3	47.8	47.8	47.8	47.8
12.5°	44.2	43.7	43.2	43.7	43.7
15°	40.7	39.7	39.7	39.7	39.7
17.5°	37.7	36.7	36.2	36.2	36.2
20°	34.7	33.2	33.2	33.2	33.2
22.5°	31.7	30.2	30.2	30.2	30.2
25°	28.7	27.1	27.1	27.1	27.1
27.5°	26.1	24.6	24.6	24.6	24.6
30°	23.1	22.1	22.1	22.6	22.1
32.5°	21.1	19.6	19.6	20.1	20.1
35°	18.6	17.6	17.6	17.6	17.6
37.5°	16.1	15.1	15.1	15.1	15.1
40°	14.1	13.1	12.6	13.1	13.1
42.5°	12.1	11.1	10.6	10.6	10.6
45°	10.6	9.0	8.5	9.0	9.0
47.5°	8.5	7.5	7.5	8.0	8.0
50°	6.5	6.5	7.0	8.0	8.0
52.5°	6.0	6.0	7.0	8.0	8.0
55°	5.5	6.0	7.0	7.5	8.0
57.5°	5.0	6.0	7.0	7.5	7.5
60°	5.0	5.5	6.5	7.5	7.5
62.5°	4.5	5.0	6.0	7.0	7.0
65°	4.5	5.0	6.0	7.0	7.0
66°	4.5	5.0	6.0	7.0	7.0
67.5°	4.5	5.0	6.0	7.0	7.0
70°	4.5	5.0	6.0	6.5	6.5
72.5°	4.0	4.5	5.5	6.5	6.5
75°	4.0	4.5	5.5	6.5	6.5
77.5°	4.0	4.5	5.5	6.5	6.5
80°	4.0	4.5	5.5	6.0	6.5
82.5°	3.5	4.5	5.0	6.0	6.0
85°	3.5	4.0	5.0	5.5	6.0
87.5°	3.0	3.5	4.0	5.0	5.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)