

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: P150663

Luminaire Tested: **TLM-F03-LED-E1-SL3-HSS-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P150663
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-F03-LED-E1-SL3-HSS-8030
Description: TALON MEDIUM LED SITE LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND
HOUSE SIDE SHIELD
Light Source: (21) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

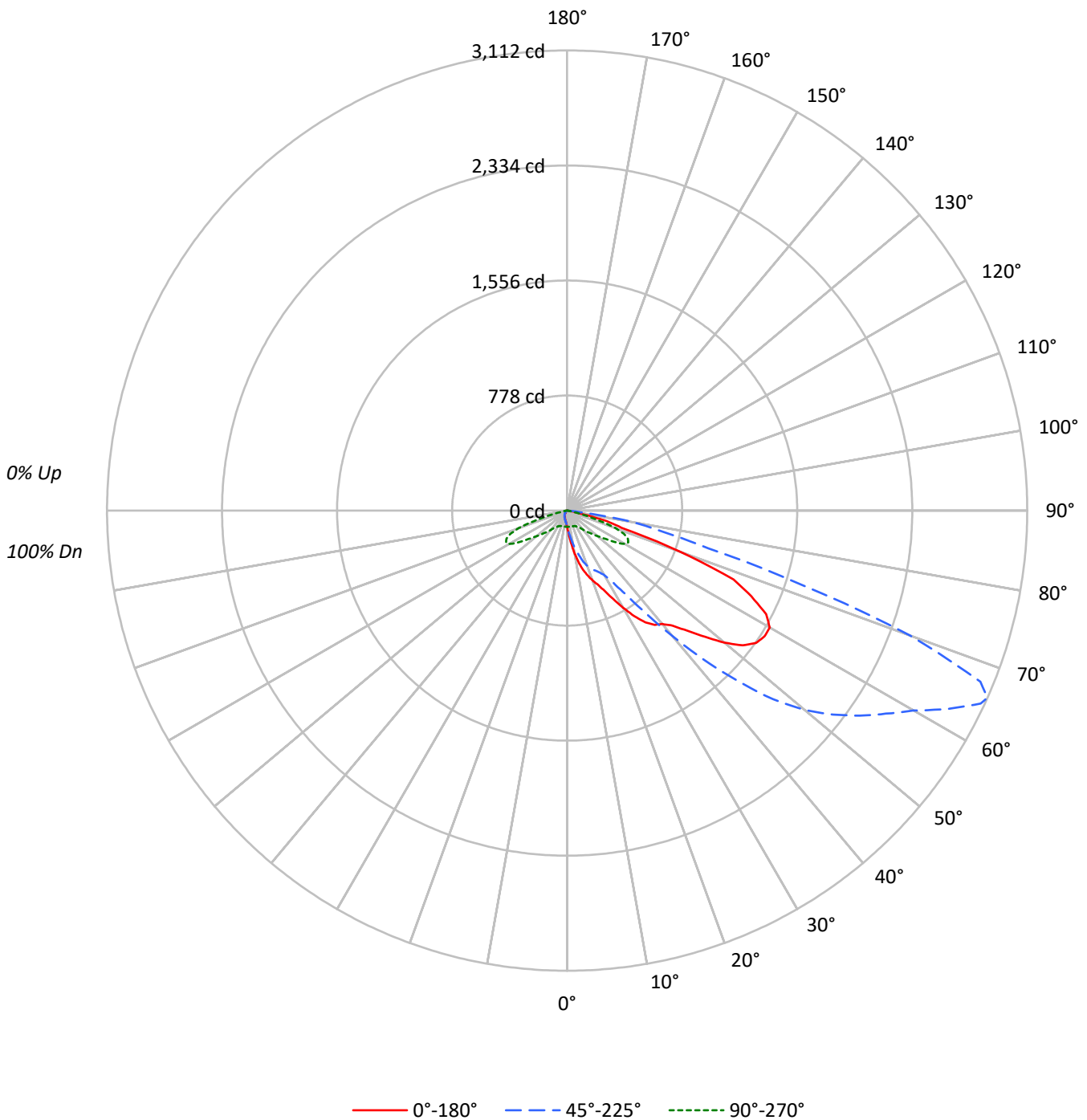
Lumens per Lamp: N/A
Luminaire Lumens: 3624.1 lumens
Efficiency: N/A
Efficacy: 46.3 lumens/watt
Spacing Criteria (0/90/45): 4.23 / 3.52 / 4.34
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 78.3
Input Voltage (V): NR
Input Current (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



TEST NUMBER: P150663
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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	105	98	93	87	102	96	91	86	92	87	83	88	84	81	84	81	78	76					76			
2	91	80	71	63	88	78	69	62	74	67	61	71	64	59	67	62	58	55					55			
3	80	66	55	46	77	64	54	46	61	52	45	58	50	44	55	48	43	40					40			
4	71	55	43	35	68	53	43	34	51	41	34	48	40	33	45	38	32	30					30			
5	63	47	35	27	61	45	34	26	43	33	26	41	32	26	39	31	25	23					23			
6	57	40	29	21	55	39	29	21	37	28	21	35	27	20	33	26	20	17					17			
7	52	35	24	17	50	34	24	17	33	23	17	31	23	16	29	22	16	14					14			
8	48	31	21	14	46	30	21	14	29	20	14	28	19	13	26	19	13	11					11			
9	44	28	18	12	42	27	18	12	26	17	11	25	17	11	24	16	11	9					9			
10	41	25	16	10	39	25	16	10	24	15	10	23	15	10	22	15	10	7					7			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	2355	2355	2355
5°	3944	2372	1731
10°	6473	2390	1447
15°	9240	2493	1226
20°	11491	2578	1054
25°	14216	2730	893
30°	18895	3056	763
35°	24244	3616	641
40°	28117	4758	509
45°	34914	6427	381
50°	46506	8961	372
55°	58577	13101	417
60°	68127	19440	452
65°	70026	23088	499
70°	51179	22169	573
75°	23065	9649	757
80°	4141	2424	1128
85°	346	2149	2075



TEST NUMBER: P150663

CATALOG NUMBER: TLM-F03-LED-E1-SL3-HSS-8030

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	12.2	0.3
10°-20°	51.9	1.4
20°-30°	112.0	3.1
30°-40°	239.2	6.6
40°-50°	528.9	14.6
50°-60°	896.3	24.7
60°-70°	1196.0	33.0
70°-80°	526.9	14.5
80°-90°	60.7	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°	176.2	4.9
0°-40°	415.3	11.5
0°-60°	1840.5	50.8
0°-90°	3624.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3624.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	109	109	109	109	109	
5°	182	155	110	83	80	21
15°	415	316	112	59	55	118
25°	598	447	115	43	38	287
35°	922	691	138	29	24	572
45°	1147	1627	211	17	12	906
55°	1561	2418	349	8	11	1375
65°	1375	3086	453	6	10	1312
75°	277	988	116	5	9	306
85°	1	21	9	4	8	8
90°	0	0	0	0	0	



TEST NUMBER: P150663

CATALOG NUMBER: TLM-F03-LED-E1-SL3-HSS-8030

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	109.4	109.4	109.4	109.4	109.4	109.4	109.4	109.4	109.4	109.4	109.4
2.5°	138.0	137.3	134.5	134.5	130.3	127.5	124.0	120.5	120.5	119.8	119.1
5°	182.5	178.4	177.7	170.0	163.7	154.7	146.3	135.2	133.8	132.4	131.7
7.5°	232.0	231.3	225.0	216.0	203.4	186.7	170.0	151.9	149.1	147.7	144.9
10°	296.1	292.6	284.3	268.9	250.1	227.8	200.7	172.1	168.6	165.8	164.4
12.5°	357.4	351.2	346.3	326.8	303.1	270.3	237.6	196.5	193.7	190.2	184.6
15°	414.6	409.0	400.6	383.9	357.4	316.3	278.0	227.8	220.9	216.0	211.8
17.5°	459.1	455.7	445.9	427.1	398.5	362.3	316.3	259.9	254.3	248.0	240.4
20°	501.6	496.8	481.4	455.7	425.0	397.1	361.6	301.7	294.0	286.4	278.0
22.5°	542.1	537.2	512.1	469.6	436.9	425.0	412.5	349.1	337.2	330.9	322.6
25°	598.5	588.0	549.0	481.4	437.5	446.6	468.2	410.4	399.2	390.2	376.9
27.5°	674.4	660.5	599.2	498.9	440.3	470.3	532.3	484.9	473.1	462.6	448.0
30°	760.1	751.1	677.9	540.7	460.5	505.1	604.1	579.7	565.7	553.2	535.8
32.5°	846.5	834.0	761.5	620.1	514.9	572.7	693.9	689.8	671.7	659.8	641.0
35°	922.5	916.2	862.6	750.4	638.9	691.2	813.8	818.7	802.6	790.1	769.2
37.5°	974.0	974.0	963.6	890.4	836.1	875.1	990.1	990.8	974.7	946.2	935.7
40°	1000.5	1008.2	1045.8	1059.7	1056.9	1107.1	1221.4	1208.8	1195.6	1181.0	1146.1
42.5°	1054.9	1061.8	1141.9	1238.1	1300.8	1367.0	1445.7	1441.5	1425.5	1399.0	1367.0
45°	1146.8	1155.9	1251.3	1403.9	1532.8	1626.9	1677.0	1657.5	1641.5	1616.4	1599.7
47.5°	1263.9	1281.3	1389.3	1578.1	1733.5	1888.9	1941.1	1889.5	1875.6	1856.1	1828.9
50°	1388.6	1405.3	1520.3	1736.3	1911.8	2097.2	2184.3	2097.2	2077.0	2070.7	2040.0
52.5°	1496.6	1510.5	1621.3	1858.2	2048.4	2265.8	2392.6	2277.6	2263.0	2242.1	2219.8
55°	1560.7	1571.8	1675.6	1916.7	2141.1	2417.7	2593.9	2492.9	2471.3	2463.0	2430.9
57.5°	1582.3	1593.4	1686.8	1924.4	2191.2	2556.3	2838.5	2842.0	2816.2	2786.2	2776.5
60°	1582.3	1594.8	1673.6	1905.6	2240.0	2704.0	3164.6	3455.1	3399.4	3393.8	3358.3
62.5°	1516.8	1528.6	1608.1	1847.7	2305.5	2903.3	3618.8	4131.6	4115.6	4079.4	4020.9
65°	1374.7	1381.6	1459.7	1700.0	2280.4	3086.5	4012.5	4581.7	4556.0	4484.9	4409.6
66°	1310.6	1316.1	1389.3	1615.7	2198.2	3111.6	4082.2	4638.2	4595.7	4535.7	4450.7
67.5°	1217.9	1227.6	1279.2	1459.0	2001.0	3024.5	4038.3	4598.5	4561.5	4489.1	4404.1
70°	813.1	806.1	988.0	1119.7	1524.5	2464.4	3623.0	4128.9	4129.6	4095.4	4061.3
72.5°	386.0	390.2	443.1	689.1	997.7	1646.4	2883.8	3295.6	3342.9	3281.6	3239.1
75°	277.3	283.6	315.6	421.5	595.0	988.0	1869.3	2304.8	2306.2	2197.5	2100.7
77.5°	80.8	84.3	118.4	259.9	445.9	666.8	1073.7	1281.3	1251.3	1173.3	1100.1
80°	33.4	33.4	34.8	82.9	179.1	452.9	751.1	986.6	983.1	953.1	909.9
82.5°	12.5	13.2	16.7	34.1	42.5	111.5	501.0	856.3	854.2	811.7	781.0
85°	1.4	1.4	4.2	14.6	16.0	20.9	100.3	377.6	375.5	377.6	330.9
87.5°	0.0	0.0	0.7	1.4	2.1	2.8	4.2	14.6	16.0	15.3	13.9
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: P150663

CATALOG NUMBER: TLM-F03-LED-E1-SL3-HSS-8030

CANDELA DISTRIBUTION (continued):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	109.4	109.4	109.4	109.4	109.4	109.4	109.4	109.4	109.4	109.4	109.4
2.5°	119.1	117.7	117.7	117.1	117.1	117.1	116.4	115.7	115.7	115.0	114.3
5°	130.3	128.9	128.2	126.8	126.1	125.4	124.0	123.3	121.9	121.2	120.5
7.5°	143.5	140.7	140.0	138.0	135.9	134.5	133.1	131.0	129.6	126.8	126.1
10°	160.2	156.8	154.0	151.2	149.1	145.6	143.5	140.7	138.0	135.9	133.8
12.5°	181.8	177.0	172.8	170.0	165.1	160.9	156.8	154.7	149.1	146.3	142.8
15°	205.5	200.0	195.1	189.5	186.0	179.1	173.5	167.2	164.4	159.6	154.0
17.5°	236.2	227.1	219.5	213.9	206.9	200.0	193.7	187.4	179.1	173.5	166.5
20°	268.9	261.3	250.8	241.1	232.7	224.3	215.3	206.9	199.3	190.2	181.8
22.5°	310.7	299.6	287.1	277.3	266.2	257.1	244.6	233.4	220.9	209.0	199.3
25°	363.7	349.1	337.2	323.3	310.0	296.1	280.8	266.8	250.8	239.7	223.0
27.5°	429.2	415.3	399.2	381.1	367.9	347.0	326.8	309.4	290.5	273.1	254.3
30°	512.8	492.6	475.9	458.5	432.0	411.8	388.1	364.4	338.6	321.2	292.6
32.5°	613.1	591.5	566.4	541.4	517.0	488.4	459.1	429.9	401.3	369.3	340.0
35°	735.8	710.0	681.4	654.2	616.6	586.0	549.0	508.6	476.6	439.6	402.7
37.5°	898.1	855.6	830.5	801.9	751.1	709.3	668.2	627.8	571.3	532.3	480.1
40°	1101.5	1076.5	1035.3	989.4	943.4	888.3	832.6	779.0	713.5	659.1	598.5
42.5°	1340.5	1303.6	1261.8	1195.6	1148.9	1084.1	1020.7	949.7	869.5	799.9	728.8
45°	1564.9	1521.0	1488.9	1422.7	1374.0	1297.3	1220.7	1145.4	1052.8	962.9	880.7
47.5°	1807.3	1771.1	1718.1	1664.5	1615.0	1528.6	1445.7	1354.5	1256.9	1150.3	1043.7
50°	2020.5	1992.0	1955.7	1890.9	1835.9	1763.4	1665.9	1566.3	1442.9	1337.0	1215.8
52.5°	2201.7	2179.4	2128.5	2082.5	2033.1	1964.8	1877.7	1782.2	1649.2	1532.8	1394.9
55°	2415.6	2399.6	2355.0	2326.4	2282.5	2217.0	2135.5	2047.0	1906.3	1779.5	1623.4
57.5°	2766.0	2753.5	2714.5	2702.6	2659.4	2602.3	2502.0	2407.2	2242.8	2085.3	1907.0
60°	3346.4	3321.3	3264.2	3234.9	3143.7	3067.0	2936.7	2806.5	2607.9	2407.2	2192.6
62.5°	3967.9	3897.5	3788.8	3695.5	3565.9	3432.8	3258.6	3059.4	2826.7	2588.4	2341.7
65°	4303.0	4183.2	4045.9	3897.5	3729.6	3533.8	3314.4	3075.4	2825.3	2573.7	2313.2
66°	4341.4	4206.2	4060.6	3895.4	3708.7	3500.4	3277.4	3026.6	2766.7	2521.5	2260.9
67.5°	4293.3	4151.8	3997.9	3814.6	3612.6	3396.6	3162.5	2901.9	2651.8	2403.0	2149.4
70°	3956.8	3816.0	3678.8	3485.8	3270.5	3053.1	2831.5	2540.3	2303.4	2074.9	1849.1
72.5°	3159.7	3064.2	2928.4	2763.3	2553.5	2298.5	2113.9	1853.3	1647.8	1426.2	1251.3
75°	1974.5	1840.1	1672.2	1461.8	1301.5	1094.6	986.6	788.7	671.7	569.2	470.3
77.5°	1009.6	908.5	790.8	672.3	558.8	445.9	344.9	243.9	164.4	114.3	85.0
80°	834.0	744.8	647.3	539.3	438.9	340.7	245.3	167.2	106.6	69.7	54.3
82.5°	689.1	613.8	526.7	426.4	339.3	267.5	186.0	121.2	75.2	48.8	38.3
85°	293.3	266.2	205.5	163.0	122.6	90.6	63.4	42.5	30.0	24.4	22.3
87.5°	12.5	13.9	13.2	10.5	7.7	7.7	7.0	5.6	5.6	5.6	5.6
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: P150663

CATALOG NUMBER: TLM-F03-LED-E1-SL3-HSS-8030

CANDELA DISTRIBUTION (continued):

	80°	81°	82°	83°	84°	85°	95°	105°	115°	125°	135°
0°	109.4	109.4	109.4	109.4	109.4	109.4	109.4	109.4	109.4	109.4	109.4
2.5°	114.3	113.6	112.9	112.9	112.2	111.5	107.3	103.8	99.6	96.8	94.1
5°	119.1	118.4	117.1	116.4	115.0	114.3	105.2	97.5	91.3	86.4	82.9
7.5°	124.0	123.3	121.2	119.1	118.4	117.1	102.4	92.7	84.3	78.7	75.2
10°	130.3	128.2	126.1	123.3	121.2	119.1	99.6	87.1	78.0	73.2	69.7
12.5°	139.3	135.9	132.4	128.9	126.1	122.6	98.2	82.2	73.2	67.6	64.1
15°	149.8	144.9	140.7	136.6	131.7	128.2	95.5	78.0	69.0	63.4	59.2
17.5°	159.6	154.0	147.7	141.4	136.6	131.7	92.7	73.9	64.8	59.2	55.0
20°	173.5	165.1	157.5	149.8	142.8	136.6	88.5	69.7	61.3	55.0	50.9
22.5°	188.8	179.1	169.3	158.9	149.8	141.4	85.0	66.2	57.8	51.6	46.7
25°	208.3	196.5	183.2	170.0	159.6	148.4	81.5	62.7	54.3	48.1	43.2
27.5°	235.5	218.8	204.1	187.4	171.4	158.9	78.7	59.9	50.9	44.6	39.7
30°	272.4	248.0	225.0	206.9	188.1	170.0	75.9	56.4	48.1	41.1	35.5
32.5°	313.5	285.0	258.5	231.3	207.6	186.7	73.2	53.6	44.6	37.6	32.7
35°	364.4	328.2	292.6	261.3	232.7	204.8	70.4	50.9	41.8	34.1	29.3
37.5°	437.5	392.3	345.6	305.2	268.2	231.3	68.3	48.1	38.3	30.7	25.8
40°	537.9	479.4	422.2	367.2	319.1	273.1	65.5	45.3	35.5	27.9	23.0
42.5°	646.6	575.5	500.3	438.2	372.1	314.2	62.7	42.5	32.7	25.1	20.2
45°	781.7	693.3	602.0	517.7	436.9	362.3	59.9	39.7	29.3	22.3	17.4
47.5°	929.4	816.6	713.5	607.6	511.4	422.2	56.4	37.6	26.5	19.5	15.3
50°	1081.3	962.2	831.9	711.4	597.1	482.1	53.0	34.1	23.7	17.4	12.5
52.5°	1245.1	1104.3	971.2	821.5	688.4	560.9	49.5	31.4	21.6	15.3	10.5
55°	1453.4	1295.9	1139.9	971.9	811.7	652.1	46.0	27.9	18.8	13.2	8.4
57.5°	1715.4	1528.6	1337.0	1147.5	953.1	772.0	43.2	24.4	16.0	11.1	7.0
60°	1962.7	1744.6	1512.6	1294.5	1075.1	864.0	39.0	21.6	13.9	9.1	7.0
62.5°	2090.9	1842.2	1592.0	1351.7	1117.6	896.7	34.8	18.1	11.8	7.7	6.3
65°	2059.6	1805.9	1563.5	1321.0	1091.8	875.8	30.7	16.0	10.5	7.0	6.3
66°	2014.3	1763.4	1519.6	1289.0	1070.2	853.5	28.6	15.3	9.8	7.0	5.6
67.5°	1915.3	1672.9	1440.2	1225.6	1011.0	811.0	25.8	13.9	9.1	6.3	5.6
70°	1635.9	1415.8	1229.7	1038.8	864.0	683.5	20.9	11.8	7.7	5.6	5.6
72.5°	1082.7	932.9	808.9	696.0	581.8	451.5	17.4	9.8	6.3	5.6	4.9
75°	408.3	369.3	317.0	285.0	248.7	218.1	13.9	6.3	4.9	4.9	4.9
77.5°	72.5	66.9	59.2	54.3	50.2	46.0	11.1	4.2	4.2	4.9	4.9
80°	48.8	45.3	41.1	37.6	34.8	31.4	7.7	3.5	4.2	4.2	4.9
82.5°	34.8	32.7	30.7	27.9	25.8	23.0	4.9	3.5	4.2	4.2	4.2
85°	20.9	19.5	18.1	16.7	14.6	13.9	3.5	3.5	3.5	4.2	4.2
87.5°	5.6	4.9	5.6	5.6	4.2	4.9	2.8	2.8	2.8	3.5	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: P150663

CATALOG NUMBER: TLM-F03-LED-E1-SL3-HSS-8030

CANDELA DISTRIBUTION (continued):

	145°	155°	165°	175°	180°
0°	109.4	109.4	109.4	109.4	109.4
2.5°	92.7	92.7	91.3	93.4	93.4
5°	80.1	80.1	79.4	80.1	80.1
7.5°	73.2	72.5	72.5	72.5	73.2
10°	66.9	66.2	66.2	66.2	66.2
12.5°	61.3	60.6	59.9	60.6	60.6
15°	56.4	55.0	55.0	55.0	55.0
17.5°	52.3	50.9	50.2	50.2	50.2
20°	48.1	46.0	46.0	46.0	46.0
22.5°	43.9	41.8	41.8	41.8	41.8
25°	39.7	37.6	37.6	37.6	37.6
27.5°	36.2	34.1	34.1	34.1	34.1
30°	32.0	30.7	30.7	31.4	30.7
32.5°	29.3	27.2	27.2	27.9	27.9
35°	25.8	24.4	24.4	24.4	24.4
37.5°	22.3	20.9	20.9	20.9	20.9
40°	19.5	18.1	17.4	18.1	18.1
42.5°	16.7	15.3	14.6	14.6	14.6
45°	14.6	12.5	11.8	12.5	12.5
47.5°	11.8	10.5	10.5	11.1	11.1
50°	9.1	9.1	9.8	11.1	11.1
52.5°	8.4	8.4	9.8	11.1	11.1
55°	7.7	8.4	9.8	10.5	11.1
57.5°	7.0	8.4	9.8	10.5	10.5
60°	7.0	7.7	9.1	10.5	10.5
62.5°	6.3	7.0	8.4	9.8	9.8
65°	6.3	7.0	8.4	9.8	9.8
66°	6.3	7.0	8.4	9.8	9.8
67.5°	6.3	7.0	8.4	9.8	9.8
70°	6.3	7.0	8.4	9.1	9.1
72.5°	5.6	6.3	7.7	9.1	9.1
75°	5.6	6.3	7.7	9.1	9.1
77.5°	5.6	6.3	7.7	9.1	9.1
80°	5.6	6.3	7.7	8.4	9.1
82.5°	4.9	6.3	7.0	8.4	8.4
85°	4.9	5.6	7.0	7.7	8.4
87.5°	4.2	4.9	5.6	7.0	7.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)