

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: P155583

Luminaire Tested: **TLM-F02-LED-E1-T3-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P155583
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33672)
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-T3-8030
Description: TALON MEDIUM LED SITE LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 3
Light Source: (14) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

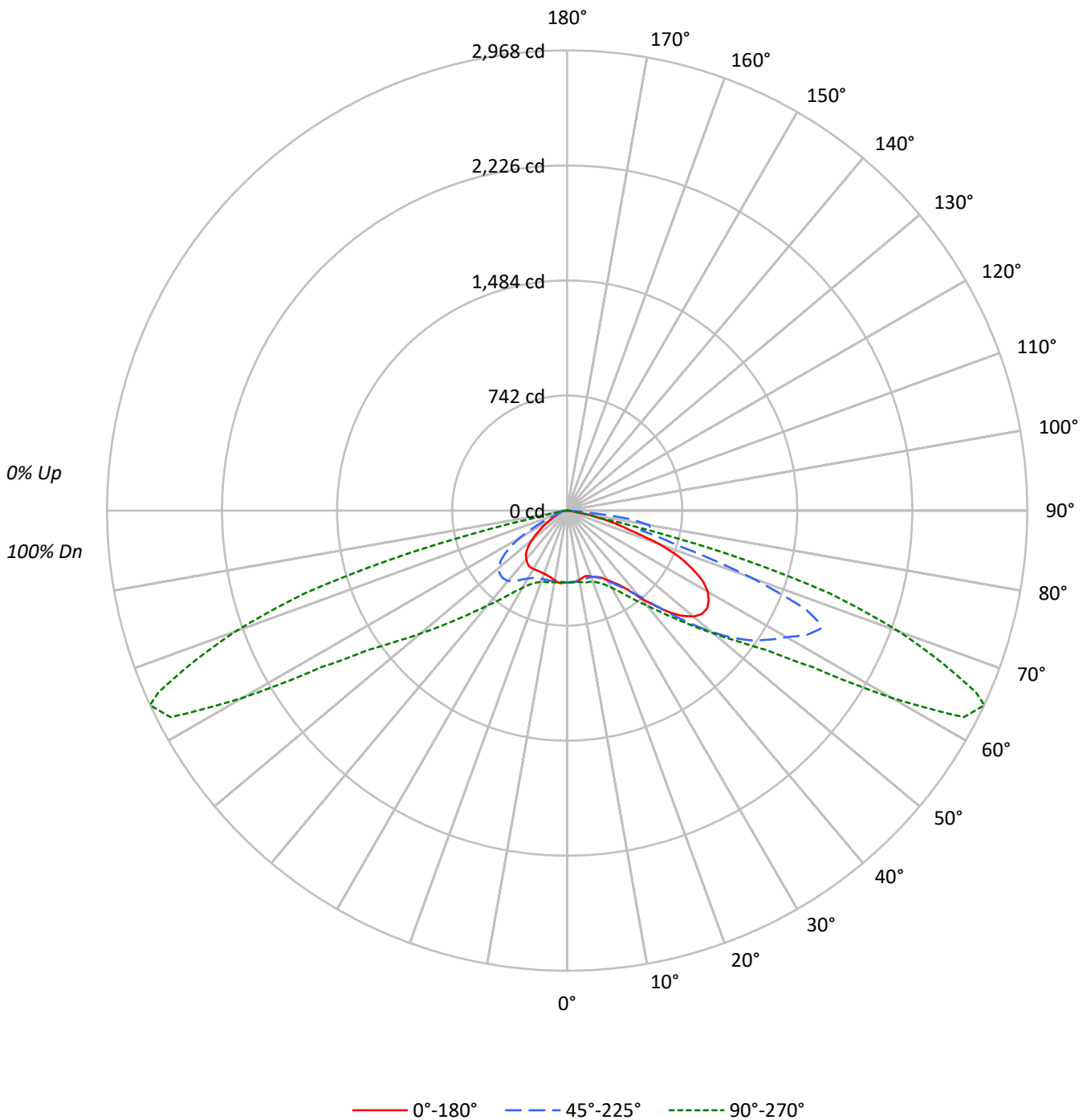
Lumens per Lamp: N/A
Luminaire Lumens: 4297.4 lumens
Efficiency: N/A
Efficacy: 78.1 lumens/watt
Spacing Criteria (0/90/45): 1.97 / 4.22 / 2.62
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 55
Input Voltage (V): NR
Input Current (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-F02-LED-E1-T3-8030

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	105	99	94	89	102	97	92	87	92	88	84	88	85	82	85	82	79
2	92	82	73	65	89	80	71	64	76	69	63	72	66	61	69	64	60
3	81	68	57	49	79	66	56	49	63	55	48	60	53	47	57	51	46
4	73	57	46	38	70	56	46	38	53	44	37	51	43	36	48	41	36
5	65	49	38	30	63	48	38	30	46	37	29	44	35	29	42	34	29
6	59	43	32	24	57	42	32	24	40	31	24	38	30	24	36	29	23
7	54	38	28	20	52	37	27	20	35	27	20	34	26	20	32	25	20
8	50	34	24	17	48	33	24	17	32	23	17	30	23	17	29	22	17
9	46	31	21	15	45	30	21	15	29	20	15	28	20	15	27	20	14
10	43	28	19	13	42	27	19	13	26	18	13	25	18	13	24	18	13

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	15105	15105	15105
5°	15163	15147	15392
10°	15030	15491	15123
15°	14808	16172	14902
20°	15721	16977	15044
25°	17052	18621	15512
30°	19435	21657	16391
35°	23306	26559	17238
40°	31211	34000	17445
45°	42637	45275	17077
50°	53952	62507	15015
55°	62679	88992	11937
60°	68302	157388	9061
65°	68938	229080	6846
70°	60425	216973	5713
75°	39925	131306	5848
80°	14576	13355	6894
85°	2433	8870	7635



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.4	1.0
10°-20°	130.9	3.0
20°-30°	225.0	5.2
30°-40°	365.3	8.5
40°-50°	609.9	14.2
50°-60°	960.3	22.3
60°-70°	1309.5	30.5
70°-80°	566.9	13.2
80°-90°	85.2	2.0
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°	400.2	9.3
0°-40°	765.5	17.8
0°-60°	2335.7	54.4
0°-90°	4297.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4297.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	463	463	463	463	463	
5°	463	464	463	468	470	44
15°	438	457	479	465	441	126
25°	474	477	517	480	431	222
35°	585	598	667	549	433	379
45°	924	936	982	601	370	711
55°	1102	1460	1565	495	210	972
65°	893	1804	2968	174	89	867
75°	317	493	1042	47	46	339
85°	6	110	24	32	20	17
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°	463.1	463.1	463.1	463.1	463.1	463.1	463.1	463.1	463.1	463.1	463.1
2.5°	465.0	466.8	465.0	465.4	465.9	465.4	465.0	465.0	463.6	464.5	465.4
5°	463.1	464.5	464.0	464.5	465.0	464.5	464.0	464.5	463.6	464.0	465.4
7.5°	460.8	460.3	460.8	461.7	462.6	462.6	462.6	463.1	462.6	462.6	464.0
10°	453.8	454.3	455.2	456.6	457.1	458.5	458.5	459.8	460.3	461.2	463.1
12.5°	445.0	445.4	446.4	447.3	449.6	451.9	451.9	455.2	456.6	458.9	462.2
15°	438.5	438.9	439.9	440.8	442.7	445.0	446.4	450.1	452.4	456.6	461.2
17.5°	442.2	441.7	442.7	443.1	443.1	445.0	445.0	447.8	450.6	454.3	460.3
20°	452.9	452.9	453.8	453.8	453.3	454.3	452.4	452.4	452.9	454.7	458.9
22.5°	463.6	463.1	465.0	465.9	466.3	467.7	465.9	465.4	463.1	461.7	463.1
25°	473.8	473.3	475.6	477.0	479.4	480.7	480.7	480.7	478.9	476.6	475.2
27.5°	489.6	489.6	491.9	493.3	495.1	497.9	499.3	499.3	499.8	496.5	494.2
30°	516.0	516.5	517.0	518.8	520.7	521.6	523.5	524.9	526.3	524.4	520.7
32.5°	547.6	544.8	544.8	547.6	550.0	552.7	553.7	555.5	558.3	556.9	556.5
35°	585.3	584.3	583.4	584.3	587.1	590.4	594.1	597.3	595.5	598.3	596.9
37.5°	641.0	641.9	642.4	642.4	641.9	642.9	644.7	648.0	647.0	648.0	649.8
40°	733.0	729.7	726.5	726.9	722.3	723.2	715.8	719.0	719.5	716.2	717.6
42.5°	824.9	826.8	828.2	831.9	828.7	826.8	819.8	819.8	816.1	812.9	811.9
45°	924.3	928.1	928.5	935.9	933.2	939.2	944.3	942.9	936.9	936.4	929.9
47.5°	1003.8	1009.8	1016.3	1025.1	1032.1	1045.6	1061.4	1069.3	1073.9	1077.6	1070.2
50°	1063.2	1066.0	1082.7	1096.7	1112.0	1134.3	1156.1	1184.5	1207.2	1217.9	1228.1
52.5°	1095.3	1102.2	1120.4	1142.2	1169.1	1202.6	1237.9	1282.9	1321.9	1348.0	1371.2
55°	1102.2	1109.2	1129.6	1157.5	1194.2	1239.3	1289.9	1351.2	1409.7	1459.9	1508.7
57.5°	1082.7	1090.6	1112.5	1144.5	1187.7	1242.5	1306.1	1386.5	1467.3	1548.6	1620.6
60°	1047.0	1056.7	1076.7	1108.3	1156.1	1217.9	1294.1	1394.9	1508.2	1632.7	1770.6
62.5°	988.0	998.2	1016.8	1051.6	1100.8	1169.1	1257.4	1382.8	1543.0	1739.1	1983.8
65°	893.2	897.9	920.6	955.9	999.6	1074.8	1171.9	1323.3	1531.9	1804.5	2141.8
66°	850.5	858.4	872.3	900.6	942.5	1013.1	1110.6	1264.3	1489.6	1781.8	2137.6
67.5°	783.6	789.6	798.9	818.0	843.5	895.5	988.0	1133.4	1360.5	1666.6	2048.9
70°	633.6	636.4	648.9	655.4	664.2	681.4	714.9	798.5	975.4	1262.9	1653.6
72.5°	432.0	439.9	453.3	471.9	496.1	519.3	535.1	545.8	583.9	753.4	1101.8
75°	316.8	325.1	342.3	366.9	409.2	457.5	507.7	530.9	515.1	493.3	613.6
77.5°	183.9	195.1	209.5	233.2	272.2	336.3	422.2	498.4	550.0	553.2	525.3
80°	77.6	79.0	87.8	99.9	124.0	169.1	236.0	345.6	459.8	537.0	555.1
82.5°	17.7	21.8	27.9	33.0	40.4	55.7	82.7	137.5	248.5	389.7	508.2
85°	6.5	6.5	8.8	13.0	14.9	16.7	21.8	34.8	59.5	109.6	228.5
87.5°	0.0	0.5	0.9	0.9	1.9	2.3	3.7	5.1	4.6	4.2	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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	463.1	463.1	463.1	463.1	463.1	463.1	463.1	463.1	463.1	463.1	463.1
2.5°	464.5	464.0	463.1	463.1	463.1	463.1	462.2	462.6	461.7	462.2	462.2
5°	464.0	464.0	463.6	462.6	463.1	463.1	463.6	462.6	462.6	463.1	462.6
7.5°	464.0	463.6	463.6	463.6	464.0	463.6	464.0	464.0	464.0	464.5	464.5
10°	464.0	464.0	465.0	465.4	465.4	465.9	467.3	467.3	467.7	468.2	469.1
12.5°	464.5	466.3	467.7	469.1	469.6	470.5	472.9	472.9	473.8	475.2	475.6
15°	465.0	467.7	470.5	471.5	472.4	474.2	476.6	477.5	478.9	480.3	481.2
17.5°	464.5	468.2	471.5	472.9	474.2	476.6	479.4	480.3	482.1	484.0	485.9
20°	464.0	469.1	474.2	476.1	478.0	481.2	484.9	487.3	489.1	491.9	493.8
22.5°	466.8	472.9	479.8	482.6	485.9	490.0	495.1	497.9	500.3	503.0	504.4
25°	475.6	480.3	488.6	493.3	497.5	504.4	511.4	514.7	517.4	519.8	520.2
27.5°	490.5	491.9	502.1	508.2	514.2	525.3	533.7	536.0	541.1	543.0	542.5
30°	514.7	512.3	520.7	530.0	538.8	554.1	564.4	570.4	575.0	575.0	571.3
32.5°	549.5	545.8	548.1	558.8	569.0	591.3	603.4	611.3	614.5	613.6	605.7
35°	595.0	592.7	591.3	599.7	615.9	641.9	657.7	661.9	667.0	666.1	655.9
37.5°	648.9	647.0	647.0	656.8	672.6	711.1	728.3	731.1	730.6	723.2	704.2
40°	712.5	711.6	707.4	713.0	726.5	776.6	799.9	803.6	798.5	786.4	764.1
42.5°	804.0	798.5	785.5	788.7	798.9	847.7	877.9	888.1	883.0	870.9	834.7
45°	923.4	917.4	895.5	892.8	898.3	941.1	980.1	982.4	981.5	966.1	923.4
47.5°	1063.7	1054.4	1031.2	1023.7	1021.9	1061.4	1099.0	1102.7	1100.4	1077.6	1020.5
50°	1215.6	1202.1	1186.8	1181.7	1174.2	1202.6	1240.7	1241.1	1231.8	1200.2	1146.8
52.5°	1377.7	1373.0	1370.2	1365.1	1361.9	1386.5	1409.7	1395.8	1381.9	1348.9	1302.4
55°	1541.2	1560.2	1579.7	1581.6	1587.2	1613.6	1613.2	1575.1	1564.9	1546.8	1500.8
57.5°	1714.9	1785.5	1846.8	1865.9	1884.4	1933.7	1929.0	1891.4	1878.4	1856.1	1818.0
60°	1951.3	2141.8	2318.7	2361.0	2390.3	2449.3	2443.7	2385.6	2412.6	2410.7	2361.5
62.5°	2282.5	2599.3	2864.5	2929.5	2950.0	2956.5	2921.2	2858.5	2884.9	2914.7	2763.3
65°	2506.9	2879.4	3151.6	3201.7	3204.5	3126.9	3048.5	2974.6	2968.1	2942.5	2726.1
66°	2512.0	2893.3	3166.4	3215.2	3198.0	3092.1	2992.7	2918.4	2886.3	2830.1	2605.8
67.5°	2421.9	2806.5	3100.5	3152.0	3114.4	2964.4	2827.4	2731.7	2669.0	2577.9	2380.0
70°	2034.0	2415.3	2777.7	2873.8	2885.9	2662.0	2472.0	2359.6	2275.1	2150.1	1979.7
72.5°	1512.4	1857.0	2176.6	2268.6	2315.5	2136.7	1976.4	1890.9	1775.3	1643.8	1522.6
75°	948.0	1191.4	1405.5	1470.1	1426.0	1287.6	1191.4	1155.7	1041.9	963.4	908.1
77.5°	542.1	618.2	635.4	610.8	558.8	427.8	304.2	225.3	195.6	216.5	238.7
80°	529.1	484.9	386.5	340.0	308.0	211.8	124.5	85.5	71.1	72.9	79.0
82.5°	573.2	615.0	506.3	412.9	346.5	234.1	129.1	68.7	46.4	54.8	61.8
85°	372.5	518.4	466.8	393.4	318.6	200.2	106.4	35.8	23.7	31.1	42.7
87.5°	37.6	41.3	35.3	47.8	35.8	16.7	8.4	5.1	4.6	5.6	8.4
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	463.1	463.1	463.1	463.1	463.1	463.1	463.1	463.1	463.1	463.1	463.1
2.5°	462.6	462.6	463.1	463.6	464.0	464.5	464.5	464.5	464.5	465.4	465.0
5°	463.6	464.5	465.4	465.9	466.8	466.8	468.2	467.7	467.7	469.1	469.6
7.5°	465.4	466.8	468.7	468.2	470.1	469.6	470.5	470.5	469.1	469.6	468.7
10°	469.6	471.5	472.4	471.0	471.5	469.6	469.1	466.8	464.0	462.6	460.8
12.5°	476.6	478.4	478.4	476.1	473.3	469.1	465.9	460.8	456.6	454.3	451.9
15°	482.6	484.5	484.0	480.3	476.1	469.6	465.0	458.9	452.9	449.2	446.8
17.5°	487.3	488.2	486.8	481.7	477.0	471.0	466.3	459.8	452.9	448.2	444.1
20°	494.2	493.3	490.0	483.5	478.4	472.9	469.1	463.6	455.7	449.6	443.6
22.5°	504.4	500.7	494.7	487.7	482.6	477.5	473.8	467.7	459.8	452.4	445.4
25°	517.9	510.5	502.1	494.7	490.0	484.5	480.3	473.8	465.4	457.1	448.7
27.5°	537.4	524.4	513.7	507.2	502.1	495.1	490.0	481.7	472.9	463.1	453.8
30°	559.2	541.6	531.4	526.3	520.7	513.3	505.4	494.7	484.5	473.8	462.6
32.5°	587.6	566.2	556.5	551.4	543.9	534.6	525.3	513.3	498.9	484.9	471.5
35°	624.7	602.9	592.7	584.8	574.6	562.5	549.0	532.8	513.3	494.7	477.5
37.5°	664.7	641.0	631.2	622.9	607.6	591.8	572.7	549.0	522.6	497.9	476.6
40°	715.3	693.5	680.9	666.5	648.4	621.0	591.3	556.9	523.0	492.8	467.7
42.5°	779.4	757.6	739.0	716.2	684.7	642.4	600.1	555.5	514.7	480.3	453.3
45°	864.4	837.9	805.9	765.9	714.9	655.9	600.6	546.7	498.9	460.8	432.0
47.5°	968.5	928.1	875.6	808.2	734.8	659.6	593.2	529.1	474.2	432.9	400.9
50°	1092.0	1028.4	942.0	843.1	745.0	654.0	574.6	502.6	439.4	395.3	357.2
52.5°	1233.2	1129.2	1001.9	868.1	744.6	635.4	543.0	462.6	393.9	344.7	308.4
55°	1399.0	1244.4	1063.7	886.7	731.6	601.1	494.7	406.4	337.7	292.2	258.7
57.5°	1642.0	1431.1	1171.4	915.5	705.6	548.1	429.2	339.1	278.7	235.5	207.2
60°	2086.0	1742.8	1365.6	973.6	665.6	470.5	352.5	267.1	216.5	181.6	162.6
62.5°	2420.5	1983.8	1470.6	960.6	585.3	374.8	261.5	194.6	159.3	135.6	123.6
65°	2372.6	1909.1	1358.6	827.3	458.9	264.3	173.7	132.4	109.6	98.5	91.5
66°	2264.4	1811.5	1261.6	744.6	396.7	219.7	143.1	111.0	94.3	86.4	81.8
67.5°	2059.1	1630.4	1087.8	610.3	304.7	159.3	107.8	87.8	76.6	73.4	70.1
70°	1711.6	1300.1	763.6	355.3	155.6	88.7	68.3	61.3	58.5	58.1	57.1
72.5°	1311.7	920.2	449.6	168.1	80.8	59.0	53.0	50.6	49.7	49.7	50.2
75°	804.0	517.0	198.8	82.2	56.7	49.7	46.9	46.0	45.5	46.0	45.5
77.5°	268.5	164.4	85.0	62.2	51.6	46.0	44.1	43.2	43.2	43.2	43.2
80°	82.2	71.5	65.0	57.6	48.8	43.7	40.9	40.4	40.9	41.3	39.9
82.5°	61.8	58.5	54.8	51.1	44.1	39.0	38.1	38.1	38.1	36.7	34.8
85°	45.5	45.1	37.2	34.8	32.5	32.5	32.5	32.5	31.1	28.8	26.9
87.5°	8.4	7.9	8.4	8.8	13.0	13.9	13.9	14.9	16.3	15.3	15.3
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: P155583

CATALOG NUMBER: TLM-F02-LED-E1-T3-8030

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	463.1	463.1	463.1	463.1	463.1
2.5°	465.0	464.5	465.9	465.0	465.4
5°	469.1	468.7	469.6	468.7	470.1
7.5°	467.7	466.8	466.3	466.8	467.3
10°	458.0	457.1	456.6	456.1	456.6
12.5°	449.6	447.8	447.8	446.8	447.3
15°	443.6	442.2	441.7	440.8	441.3
17.5°	440.8	438.5	437.5	436.6	436.6
20°	438.9	436.2	434.8	433.8	433.4
22.5°	438.9	434.8	432.9	432.0	431.5
25°	440.8	435.7	432.9	431.5	431.0
27.5°	444.5	438.0	434.8	432.9	432.9
30°	451.0	442.7	438.0	435.7	435.2
32.5°	457.5	446.4	439.9	437.1	436.2
35°	460.8	446.4	438.5	433.8	432.9
37.5°	457.1	440.3	430.6	423.6	422.2
40°	445.4	427.8	417.1	410.6	409.7
42.5°	430.1	412.9	400.4	395.7	394.4
45°	409.2	388.8	376.2	369.7	370.2
47.5°	373.5	352.5	341.4	335.4	336.3
50°	331.2	310.7	301.0	294.5	295.9
52.5°	284.7	266.2	256.9	253.6	252.7
55°	236.0	221.6	215.1	211.3	209.9
57.5°	191.4	181.2	176.5	171.9	172.3
60°	151.0	145.8	144.5	139.3	138.9
62.5°	118.9	115.7	114.3	110.5	111.0
65°	90.1	89.2	90.1	87.8	88.7
66°	81.3	81.8	81.8	80.4	81.3
67.5°	70.1	71.1	72.5	71.1	72.0
70°	58.1	59.0	59.9	59.9	59.9
72.5°	50.6	51.6	52.0	52.0	52.0
75°	46.4	46.9	47.4	46.4	46.4
77.5°	43.7	43.7	42.7	42.3	41.8
80°	39.5	39.0	37.6	36.7	36.7
82.5°	33.0	32.0	31.1	29.7	29.7
85°	25.1	24.2	23.2	21.4	20.4
87.5°	13.0	13.5	13.0	10.7	9.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)