

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: P150678

Luminaire Tested: **TLM-E05-LED-E1-SL3-HSS-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P150678
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-E05-LED-E1-SL3-HSS-8030
Description: TALON MEDIUM LED SITE LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND
HOUSE SIDE SHIELD
Light Source: (105) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7316.6 lumens
Efficiency: N/A
Efficacy: 57.5 lumens/watt
Spacing Criteria (0/90/45): 4.23 / 3.52 / 4.34
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')
CIE Type: Direct

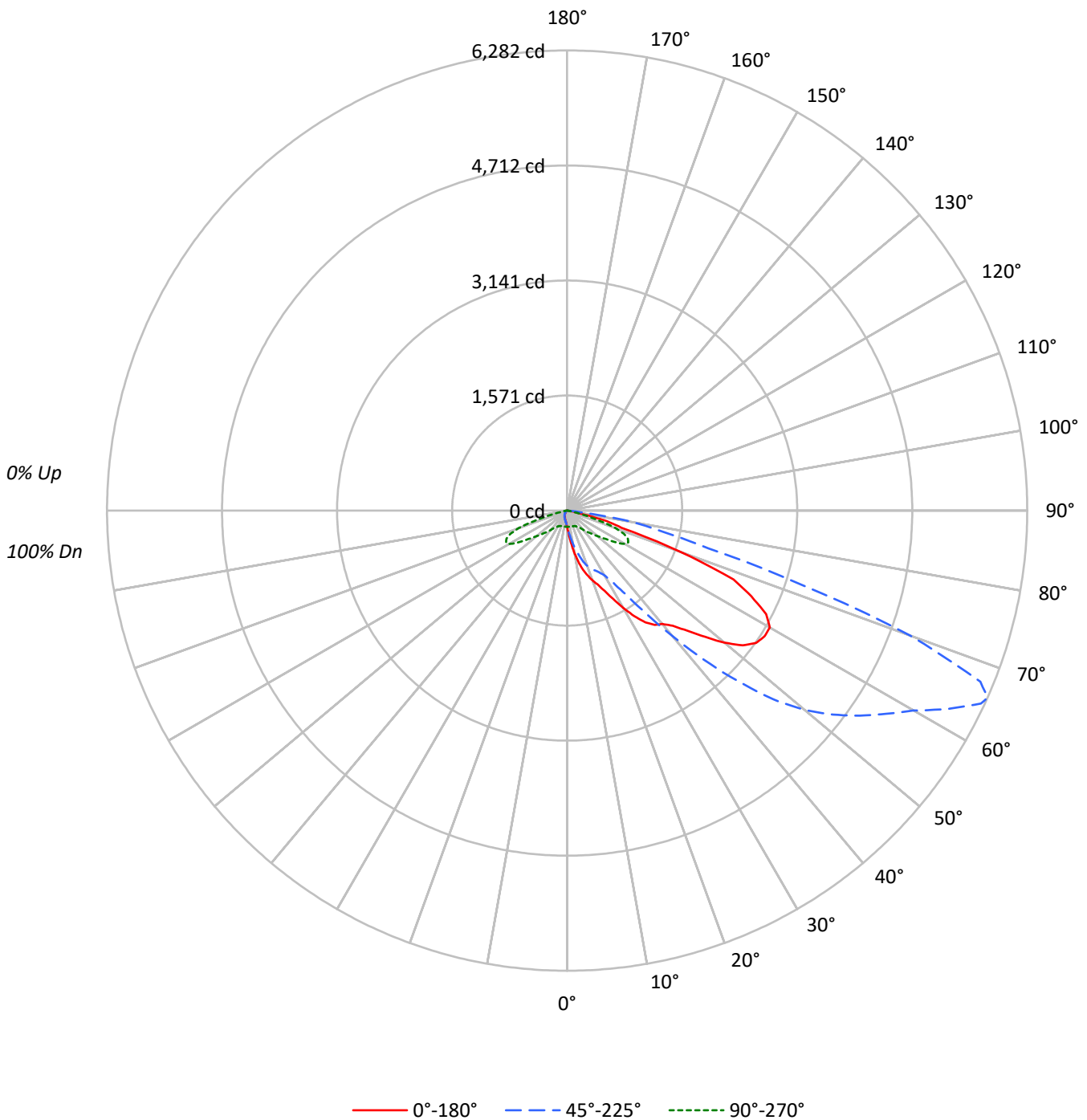
Input Watts (W): 127.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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°	2863	2863	2863
5°	4797	2884	2106
10°	7872	2908	1759
15°	11238	3031	1492
20°	13978	3135	1281
25°	17290	3321	1088
30°	22982	3717	927
35°	29485	4399	779
40°	34197	5786	620
45°	42463	7818	464
50°	56562	10898	454
55°	71242	15933	509
60°	82856	23642	547
65°	85164	28079	605
70°	62245	26961	694
75°	28050	11735	917
80°	5041	2943	1367
85°	417	2611	2515



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.7	0.3
10°-20°	104.8	1.4
20°-30°	226.1	3.1
30°-40°	482.8	6.6
40°-50°	1067.8	14.6
50°-60°	1809.5	24.7
60°-70°	2414.7	33.0
70°-80°	1063.6	14.5
80°-90°	122.5	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°	355.6	4.9
0°-40°	838.5	11.5
0°-60°	3715.8	50.8
0°-90°	7316.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7316.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	221	221	221	221	221	
5°	368	312	222	167	162	42
15°	837	639	226	120	111	239
25°	1208	902	232	87	76	579
35°	1862	1395	278	59	49	1155
45°	2315	3284	426	35	25	1830
55°	3151	4881	705	17	22	2777
65°	2775	6232	915	13	20	2650
75°	560	1995	234	10	18	618
85°	3	42	18	8	17	17
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°	220.8	220.8	220.8	220.8	220.8	220.8	220.8	220.8	220.8	220.8	220.8
2.5°	278.5	277.1	271.5	271.5	263.0	257.4	250.4	243.4	243.4	241.9	240.5
5°	368.5	360.1	358.7	343.2	330.6	312.3	295.4	272.9	270.1	267.3	265.9
7.5°	468.4	467.0	454.3	436.1	410.7	377.0	343.2	306.7	301.0	298.2	292.6
10°	597.8	590.8	573.9	543.0	505.0	460.0	405.1	347.4	340.4	334.8	332.0
12.5°	721.6	709.0	699.1	659.7	611.9	545.8	479.7	396.7	391.0	384.0	372.8
15°	837.0	825.7	808.8	775.1	721.6	638.6	561.3	460.0	445.9	436.1	427.6
17.5°	927.0	920.0	900.3	862.3	804.6	731.5	638.6	524.7	513.4	500.8	485.3
20°	1012.8	1002.9	972.0	920.0	858.1	801.8	730.1	609.1	593.6	578.1	561.3
22.5°	1094.4	1084.5	1033.9	948.1	882.0	858.1	832.7	704.7	680.8	668.2	651.3
25°	1208.3	1187.2	1108.4	972.0	883.4	901.7	945.3	828.5	806.0	787.7	761.0
27.5°	1361.6	1333.5	1209.7	1007.2	889.0	949.5	1074.7	979.0	955.1	934.0	904.5
30°	1534.7	1516.4	1368.7	1091.6	929.8	1019.8	1219.6	1170.3	1142.2	1116.9	1081.7
32.5°	1709.1	1683.8	1537.5	1251.9	1039.5	1156.3	1401.0	1392.6	1356.0	1332.1	1294.1
35°	1862.4	1849.7	1741.4	1515.0	1289.9	1395.4	1643.0	1652.8	1620.5	1595.1	1552.9
37.5°	1966.5	1966.5	1945.4	1797.7	1688.0	1766.8	1998.9	2000.3	1967.9	1910.2	1889.1
40°	2020.0	2035.4	2111.4	2139.5	2133.9	2235.2	2465.9	2440.5	2413.8	2384.3	2313.9
42.5°	2129.7	2143.7	2305.5	2499.6	2626.2	2759.9	2918.8	2910.4	2878.0	2824.6	2759.9
45°	2315.3	2333.6	2526.3	2834.4	3094.6	3284.5	3385.8	3346.4	3314.1	3263.4	3229.7
47.5°	2551.7	2586.8	2804.9	3186.1	3499.7	3813.4	3918.9	3814.8	3786.7	3747.3	3692.5
50°	2803.5	2837.2	3069.3	3505.4	3859.9	4234.0	4409.9	4234.0	4193.2	4180.6	4118.7
52.5°	3021.5	3049.6	3273.3	3751.5	4135.6	4574.4	4830.4	4598.3	4568.8	4526.6	4481.6
55°	3150.9	3173.4	3383.0	3869.7	4322.6	4881.1	5237.0	5033.0	4989.4	4972.5	4907.8
57.5°	3194.5	3217.0	3405.5	3885.2	4423.9	5161.0	5730.7	5737.7	5685.7	5625.2	5605.5
60°	3194.5	3219.8	3378.8	3847.2	4522.4	5459.2	6389.0	6975.6	6863.1	6851.8	6780.1
62.5°	3062.3	3086.2	3246.6	3730.4	4654.6	5861.5	7306.1	8341.4	8309.1	8235.9	8117.8
65°	2775.3	2789.4	2946.9	3432.2	4604.0	6231.5	8100.9	9250.1	9198.1	9054.6	8902.7
66°	2645.9	2657.2	2804.9	3262.0	4438.0	6282.1	8241.6	9364.1	9278.3	9157.3	8985.7
67.5°	2458.8	2478.5	2582.6	2945.5	4039.9	6106.3	8153.0	9283.9	9209.3	9063.1	8891.4
70°	1641.6	1627.5	1994.6	2260.5	3077.8	4975.3	7314.6	8335.8	8337.2	8268.3	8199.4
72.5°	779.3	787.7	894.6	1391.2	2014.3	3323.9	5822.1	6653.5	6749.1	6625.3	6539.5
75°	559.8	572.5	637.2	851.0	1201.3	1994.6	3774.0	4653.2	4656.0	4436.6	4241.1
77.5°	163.2	170.2	239.1	524.7	900.3	1346.2	2167.7	2586.8	2526.3	2368.8	2221.1
80°	67.5	67.5	70.3	167.4	361.5	914.3	1516.4	1991.8	1984.8	1924.3	1837.1
82.5°	25.3	26.7	33.8	68.9	85.8	225.1	1011.4	1728.8	1724.6	1638.7	1576.9
85°	2.8	2.8	8.4	29.5	32.4	42.2	202.6	762.4	758.2	762.4	668.2
87.5°	0.0	0.0	1.4	2.8	4.2	5.6	8.4	29.5	32.4	30.9	28.1
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°	220.8	220.8	220.8	220.8	220.8	220.8	220.8	220.8	220.8	220.8	220.8
2.5°	240.5	237.7	237.7	236.3	236.3	236.3	234.9	233.5	233.5	232.1	230.7
5°	263.0	260.2	258.8	256.0	254.6	253.2	250.4	249.0	246.2	244.8	243.4
7.5°	289.8	284.1	282.7	278.5	274.3	271.5	268.7	264.5	261.6	256.0	254.6
10°	323.5	316.5	310.9	305.2	301.0	294.0	289.8	284.1	278.5	274.3	270.1
12.5°	367.1	357.3	348.8	343.2	333.4	324.9	316.5	312.3	301.0	295.4	288.4
15°	415.0	403.7	393.9	382.6	375.6	361.5	350.3	337.6	332.0	322.1	310.9
17.5°	476.9	458.6	443.1	431.8	417.8	403.7	391.0	378.4	361.5	350.3	336.2
20°	543.0	527.5	506.4	486.7	469.8	452.9	434.7	417.8	402.3	384.0	367.1
22.5°	627.4	604.9	579.5	559.8	537.3	519.1	493.7	471.2	445.9	422.0	402.3
25°	734.3	704.7	680.8	652.7	626.0	597.8	566.9	538.7	506.4	483.9	450.1
27.5°	866.5	838.4	806.0	769.4	742.7	700.5	659.7	624.6	586.6	551.4	513.4
30°	1035.3	994.5	960.7	925.6	872.1	831.3	783.5	735.7	683.6	648.5	590.8
32.5°	1237.9	1194.2	1143.6	1093.0	1043.7	986.1	927.0	867.9	810.2	745.5	686.4
35°	1485.4	1433.4	1375.7	1320.8	1244.9	1183.0	1108.4	1026.9	962.1	887.6	813.0
37.5°	1813.2	1727.4	1676.7	1619.1	1516.4	1432.0	1349.0	1267.4	1153.5	1074.7	969.2
40°	2223.9	2173.3	2090.3	1997.4	1904.6	1793.5	1680.9	1572.6	1440.4	1330.7	1208.3
42.5°	2706.4	2631.8	2547.4	2413.8	2319.6	2188.7	2060.7	1917.3	1755.5	1614.8	1471.4
45°	3159.3	3070.7	3006.0	2872.4	2773.9	2619.2	2464.5	2312.5	2125.5	1944.0	1778.0
47.5°	3648.9	3575.7	3468.8	3360.5	3260.6	3086.2	2918.8	2734.5	2537.6	2322.4	2107.2
50°	4079.3	4021.6	3948.5	3817.7	3706.5	3560.2	3363.3	3162.2	2913.2	2699.4	2454.6
52.5°	4445.0	4400.0	4297.3	4204.5	4104.6	3966.8	3790.9	3598.2	3329.5	3094.6	2816.1
55°	4876.9	4844.5	4754.5	4696.8	4608.2	4476.0	4311.4	4132.7	3848.6	3592.6	3277.5
57.5°	5584.4	5559.1	5480.3	5456.4	5369.2	5253.8	5051.3	4860.0	4528.0	4210.1	3850.0
60°	6756.1	6705.5	6590.2	6531.1	6346.8	6192.1	5929.0	5666.0	5265.1	4860.0	4426.7
62.5°	8010.9	7868.8	7649.4	7460.9	7199.2	6930.6	6578.9	6176.6	5706.8	5225.7	4727.8
65°	8687.5	8445.5	8168.4	7868.8	7529.8	7134.5	6691.4	6209.0	5704.0	5196.2	4670.1
66°	8764.8	8492.0	8198.0	7864.6	7487.6	7067.0	6616.9	6110.5	5585.8	5090.7	4564.6
67.5°	8667.8	8382.2	8071.4	7701.4	7293.5	6857.4	6384.8	5858.7	5353.7	4851.5	4339.5
70°	7988.4	7704.2	7427.1	7037.5	6602.8	6163.9	5716.6	5128.7	4650.4	4189.0	3733.3
72.5°	6379.2	6186.5	5912.2	5578.8	5155.4	4640.5	4267.8	3741.7	3326.7	2879.4	2526.3
75°	3986.5	3715.0	3376.0	2951.2	2627.6	2209.8	1991.8	1592.3	1356.0	1149.2	949.5
77.5°	2038.2	1834.3	1596.5	1357.4	1128.1	900.3	696.3	492.3	332.0	230.7	171.6
80°	1683.8	1503.7	1306.8	1088.7	886.2	687.9	495.1	337.6	215.2	140.7	109.7
82.5°	1391.2	1239.3	1063.4	860.9	685.0	540.2	375.6	244.8	151.9	98.5	77.4
85°	592.2	537.3	415.0	329.2	247.6	182.9	128.0	85.8	60.5	49.2	45.0
87.5°	25.3	28.1	26.7	21.1	15.5	15.5	14.1	11.3	11.3	11.3	11.3
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°	220.8	220.8	220.8	220.8	220.8	220.8	220.8	220.8	220.8	220.8	220.8
2.5°	230.7	229.3	227.9	227.9	226.5	225.1	216.6	209.6	201.2	195.5	189.9
5°	240.5	239.1	236.3	234.9	232.1	230.7	212.4	196.9	184.3	174.4	167.4
7.5°	250.4	249.0	244.8	240.5	239.1	236.3	206.8	187.1	170.2	159.0	151.9
10°	263.0	258.8	254.6	249.0	244.8	240.5	201.2	175.8	157.5	147.7	140.7
12.5°	281.3	274.3	267.3	260.2	254.6	247.6	198.3	166.0	147.7	136.4	129.4
15°	302.4	292.6	284.1	275.7	265.9	258.8	192.7	157.5	139.3	128.0	119.6
17.5°	322.1	310.9	298.2	285.6	275.7	265.9	187.1	149.1	130.8	119.6	111.1
20°	350.3	333.4	317.9	302.4	288.4	275.7	178.6	140.7	123.8	111.1	102.7
22.5°	381.2	361.5	341.8	320.7	302.4	285.6	171.6	133.6	116.8	104.1	94.2
25°	420.6	396.7	369.9	343.2	322.1	299.6	164.6	126.6	109.7	97.1	87.2
27.5°	475.4	441.7	412.1	378.4	346.0	320.7	159.0	121.0	102.7	90.0	80.2
30°	550.0	500.8	454.3	417.8	379.8	343.2	153.3	113.9	97.1	83.0	71.7
32.5°	633.0	575.3	521.9	467.0	419.2	377.0	147.7	108.3	90.0	76.0	66.1
35°	735.7	662.5	590.8	527.5	469.8	413.6	142.1	102.7	84.4	68.9	59.1
37.5°	883.4	791.9	697.7	616.1	541.6	467.0	137.9	97.1	77.4	61.9	52.0
40°	1085.9	967.8	852.4	741.3	644.2	551.4	132.2	91.4	71.7	56.3	46.4
42.5°	1305.4	1161.9	1010.0	884.8	751.2	634.4	126.6	85.8	66.1	50.6	40.8
45°	1578.3	1399.6	1215.3	1045.1	882.0	731.5	121.0	80.2	59.1	45.0	35.2
47.5°	1876.5	1648.6	1440.4	1226.6	1032.5	852.4	113.9	76.0	53.5	39.4	30.9
50°	2183.1	1942.6	1679.5	1436.2	1205.5	973.4	106.9	68.9	47.8	35.2	25.3
52.5°	2513.7	2229.5	1960.9	1658.4	1389.8	1132.4	99.9	63.3	43.6	30.9	21.1
55°	2934.3	2616.4	2301.3	1962.3	1638.7	1316.6	92.8	56.3	38.0	26.7	16.9
57.5°	3463.2	3086.2	2699.4	2316.8	1924.3	1558.6	87.2	49.2	32.4	22.5	14.1
60°	3962.5	3522.3	3053.8	2613.6	2170.5	1744.2	78.8	43.6	28.1	18.3	14.1
62.5°	4221.4	3719.2	3214.2	2728.9	2256.3	1810.4	70.3	36.6	23.9	15.5	12.7
65°	4158.1	3646.0	3156.5	2667.0	2204.2	1768.2	61.9	32.4	21.1	14.1	12.7
66°	4066.6	3560.2	3067.9	2602.3	2160.6	1723.1	57.7	30.9	19.7	14.1	11.3
67.5°	3866.9	3377.4	2907.5	2474.3	2041.1	1637.3	52.0	28.1	18.3	12.7	11.3
70°	3302.8	2858.3	2482.7	2097.3	1744.2	1379.9	42.2	23.9	15.5	11.3	11.3
72.5°	2185.9	1883.5	1633.1	1405.2	1174.6	911.5	35.2	19.7	12.7	11.3	9.8
75°	824.3	745.5	640.0	575.3	502.2	440.3	28.1	12.7	9.8	9.8	9.8
77.5°	146.3	135.0	119.6	109.7	101.3	92.8	22.5	8.4	8.4	9.8	9.8
80°	98.5	91.4	83.0	76.0	70.3	63.3	15.5	7.0	8.4	8.4	9.8
82.5°	70.3	66.1	61.9	56.3	52.0	46.4	9.8	7.0	8.4	8.4	8.4
85°	42.2	39.4	36.6	33.8	29.5	28.1	7.0	7.0	7.0	8.4	8.4
87.5°	11.3	9.8	11.3	11.3	8.4	9.8	5.6	5.6	5.6	7.0	7.0
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: P150678

CATALOG NUMBER: TLM-E05-LED-E1-SL3-HSS-8030

CANDELA DISTRIBUTION (continued):

	145°	155°	165°	175°	180°
0°	220.8	220.8	220.8	220.8	220.8
2.5°	187.1	187.1	184.3	188.5	188.5
5°	161.8	161.8	160.4	161.8	161.8
7.5°	147.7	146.3	146.3	146.3	147.7
10°	135.0	133.6	133.6	133.6	133.6
12.5°	123.8	122.4	121.0	122.4	122.4
15°	113.9	111.1	111.1	111.1	111.1
17.5°	105.5	102.7	101.3	101.3	101.3
20°	97.1	92.8	92.8	92.8	92.8
22.5°	88.6	84.4	84.4	84.4	84.4
25°	80.2	76.0	76.0	76.0	76.0
27.5°	73.1	68.9	68.9	68.9	68.9
30°	64.7	61.9	61.9	63.3	61.9
32.5°	59.1	54.9	54.9	56.3	56.3
35°	52.0	49.2	49.2	49.2	49.2
37.5°	45.0	42.2	42.2	42.2	42.2
40°	39.4	36.6	35.2	36.6	36.6
42.5°	33.8	30.9	29.5	29.5	29.5
45°	29.5	25.3	23.9	25.3	25.3
47.5°	23.9	21.1	21.1	22.5	22.5
50°	18.3	18.3	19.7	22.5	22.5
52.5°	16.9	16.9	19.7	22.5	22.5
55°	15.5	16.9	19.7	21.1	22.5
57.5°	14.1	16.9	19.7	21.1	21.1
60°	14.1	15.5	18.3	21.1	21.1
62.5°	12.7	14.1	16.9	19.7	19.7
65°	12.7	14.1	16.9	19.7	19.7
66°	12.7	14.1	16.9	19.7	19.7
67.5°	12.7	14.1	16.9	19.7	19.7
70°	12.7	14.1	16.9	18.3	18.3
72.5°	11.3	12.7	15.5	18.3	18.3
75°	11.3	12.7	15.5	18.3	18.3
77.5°	11.3	12.7	15.5	18.3	18.3
80°	11.3	12.7	15.5	16.9	18.3
82.5°	9.8	12.7	14.1	16.9	16.9
85°	9.8	11.3	14.1	15.5	16.9
87.5°	8.4	9.8	11.3	14.1	14.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)