

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: P150661

Luminaire Tested: **TLM-E03-LED-E1-SL3-HSS-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P150661
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-E03-LED-E1-SL3-HSS-7050
Description: TALON MEDIUM LED SITE LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND
HOUSE SIDE SHIELD
Light Source: (63) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

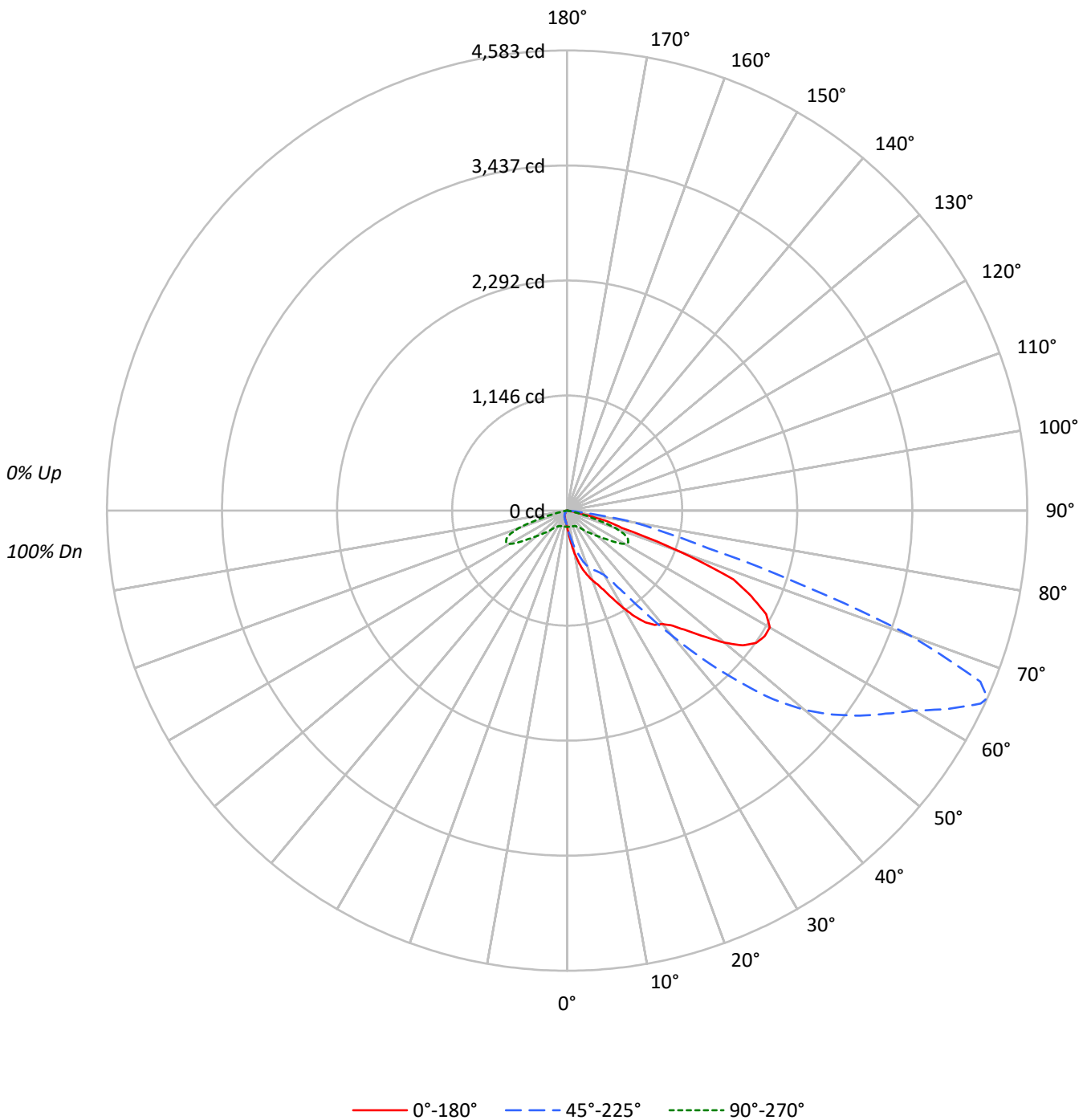
Lumens per Lamp: N/A
Luminaire Lumens: 5337.3 lumens
Efficiency: N/A
Efficacy: 71.0 lumens/watt
Spacing Criteria (0/90/45): 4.23 / 3.52 / 4.34
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 75.2
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°	3468	3468	3468
5°	5809	3492	2550
10°	9533	3522	2131
15°	13606	3671	1807
20°	16925	3796	1551
25°	20936	4023	1316
30°	27829	4502	1121
35°	35705	5326	943
40°	41409	7007	750
45°	51422	9465	563
50°	68490	13197	549
55°	86269	19294	616
60°	100333	28630	663
65°	103126	33999	734
70°	75374	32649	837
75°	33970	14211	1106
80°	6112	3564	1649
85°	519	3162	3038



TEST NUMBER: P150661

CATALOG NUMBER: TLM-E03-LED-E1-SL3-HSS-7050

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	18.0	0.3
10°-20°	76.5	1.4
20°-30°	164.9	3.1
30°-40°	352.2	6.6
40°-50°	778.9	14.6
50°-60°	1320.0	24.7
60°-70°	1761.4	33.0
70°-80°	775.9	14.5
80°-90°	89.4	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°	259.4	4.9
0°-40°	611.6	11.5
0°-60°	2710.5	50.8
0°-90°	5337.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5337.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	161	161	161	161	161	
5°	269	228	162	122	118	31
15°	610	466	165	87	81	174
25°	881	658	169	64	55	422
35°	1359	1018	203	43	36	843
45°	1689	2396	311	26	18	1335
55°	2298	3561	514	12	16	2026
65°	2024	4546	667	9	14	1933
75°	408	1455	171	7	13	451
85°	2	31	13	6	12	12
90°	0	0	0	0	0	



TEST NUMBER: P150661

CATALOG NUMBER: TLM-E03-LED-E1-SL3-HSS-7050

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	161.1	161.1	161.1	161.1	161.1	161.1	161.1	161.1	161.1	161.1	161.1
2.5°	203.2	202.1	198.0	198.0	191.9	187.8	182.6	177.5	177.5	176.5	175.5
5°	268.8	262.7	261.7	250.4	241.1	227.8	215.5	199.1	197.0	195.0	193.9
7.5°	341.7	340.7	331.4	318.1	299.6	275.0	250.4	223.7	219.6	217.5	213.4
10°	436.1	431.0	418.7	396.1	368.4	335.5	295.5	253.4	248.3	244.2	242.2
12.5°	526.4	517.2	510.0	481.2	446.4	398.1	349.9	289.4	285.3	280.1	271.9
15°	610.5	602.3	590.0	565.4	526.4	465.9	409.4	335.5	325.3	318.1	311.9
17.5°	676.2	671.1	656.7	629.0	586.9	533.6	465.9	382.7	374.5	365.3	354.0
20°	738.8	731.6	709.0	671.1	625.9	584.9	532.5	444.3	433.0	421.7	409.4
22.5°	798.3	791.1	754.2	691.6	643.4	625.9	607.5	514.1	496.6	487.4	475.1
25°	881.4	866.0	808.6	709.0	644.4	657.7	689.5	604.4	588.0	574.6	555.1
27.5°	993.3	972.7	882.5	734.7	648.5	692.6	783.9	714.2	696.7	681.3	659.8
30°	1119.5	1106.1	998.4	796.3	678.3	743.9	889.6	853.7	833.2	814.7	789.1
32.5°	1246.7	1228.2	1121.5	913.2	758.3	843.5	1022.0	1015.8	989.2	971.7	944.0
35°	1358.6	1349.3	1270.3	1105.1	940.9	1017.9	1198.5	1205.7	1182.1	1163.6	1132.8
37.5°	1434.5	1434.5	1419.1	1311.4	1231.3	1288.8	1458.1	1459.1	1435.5	1393.5	1378.1
40°	1473.5	1484.8	1540.2	1560.7	1556.6	1630.5	1798.8	1780.3	1760.8	1739.2	1687.9
42.5°	1553.5	1563.8	1681.8	1823.4	1915.7	2013.2	2129.2	2123.0	2099.4	2060.4	2013.2
45°	1689.0	1702.3	1842.9	2067.6	2257.4	2396.0	2469.8	2441.1	2417.5	2380.6	2355.9
47.5°	1861.4	1887.0	2046.1	2324.1	2553.0	2781.8	2858.7	2782.8	2762.3	2733.5	2693.5
50°	2045.0	2069.7	2239.0	2557.1	2815.6	3088.6	3216.8	3088.6	3058.8	3049.6	3004.4
52.5°	2204.1	2224.6	2387.7	2736.6	3016.8	3336.9	3523.6	3354.3	3332.8	3302.0	3269.2
55°	2298.5	2314.9	2467.8	2822.8	3153.2	3560.6	3820.2	3671.4	3639.6	3627.3	3580.1
57.5°	2330.3	2346.7	2484.2	2834.1	3227.1	3764.8	4180.4	4185.5	4147.5	4103.4	4089.0
60°	2330.3	2348.8	2464.7	2806.4	3298.9	3982.3	4660.6	5088.5	5006.4	4998.2	4945.8
62.5°	2233.8	2251.3	2368.3	2721.2	3395.4	4275.8	5329.6	6084.8	6061.2	6007.8	5921.7
65°	2024.5	2034.8	2149.7	2503.7	3358.4	4545.6	5909.3	6747.7	6709.7	6605.0	6494.2
66°	1930.1	1938.3	2046.1	2379.5	3237.4	4582.6	6012.0	6830.8	6768.2	6679.9	6554.8
67.5°	1793.6	1808.0	1883.9	2148.7	2947.0	4454.3	5947.3	6772.3	6717.9	6611.2	6486.0
70°	1197.5	1187.2	1455.0	1649.0	2245.1	3629.3	5335.7	6080.7	6081.7	6031.4	5981.2
72.5°	568.5	574.6	652.6	1014.8	1469.4	2424.7	4247.1	4853.5	4923.3	4833.0	4770.4
75°	408.4	417.6	464.8	620.8	876.3	1455.0	2753.0	3394.4	3396.4	3236.3	3093.7
77.5°	119.0	124.2	174.4	382.7	656.7	982.0	1581.2	1887.0	1842.9	1728.0	1620.2
80°	49.3	49.3	51.3	122.1	263.7	667.0	1106.1	1453.0	1447.8	1403.7	1340.1
82.5°	18.5	19.5	24.6	50.3	62.6	164.2	737.8	1261.1	1258.0	1195.4	1150.3
85°	2.1	2.1	6.2	21.5	23.6	30.8	147.8	556.1	553.1	556.1	487.4
87.5°	0.0	0.0	1.0	2.1	3.1	4.1	6.2	21.5	23.6	22.6	20.5
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: P150661

CATALOG NUMBER: TLM-E03-LED-E1-SL3-HSS-7050

CANDELA DISTRIBUTION (continued):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	161.1	161.1	161.1	161.1	161.1	161.1	161.1	161.1	161.1	161.1	161.1
2.5°	175.5	173.4	173.4	172.4	172.4	172.4	171.4	170.3	170.3	169.3	168.3
5°	191.9	189.8	188.8	186.8	185.7	184.7	182.6	181.6	179.6	178.5	177.5
7.5°	211.4	207.3	206.2	203.2	200.1	198.0	196.0	192.9	190.9	186.8	185.7
10°	236.0	230.9	226.8	222.7	219.6	214.5	211.4	207.3	203.2	200.1	197.0
12.5°	267.8	260.6	254.5	250.4	243.2	237.0	230.9	227.8	219.6	215.5	210.4
15°	302.7	294.5	287.3	279.1	274.0	263.7	255.5	246.3	242.2	235.0	226.8
17.5°	347.8	334.5	323.2	315.0	304.8	294.5	285.3	276.0	263.7	255.5	245.2
20°	396.1	384.8	369.4	355.0	342.7	330.4	317.1	304.8	293.5	280.1	267.8
22.5°	457.6	441.2	422.8	408.4	392.0	378.6	360.2	343.7	325.3	307.8	293.5
25°	535.6	514.1	496.6	476.1	456.6	436.1	413.5	393.0	369.4	353.0	328.4
27.5°	632.1	611.6	588.0	561.3	541.8	511.0	481.2	455.6	427.9	402.2	374.5
30°	755.2	725.5	700.8	675.2	636.2	606.4	571.5	536.7	498.7	473.0	431.0
32.5°	903.0	871.2	834.2	797.3	761.4	719.3	676.2	633.1	591.0	543.8	500.7
35°	1083.6	1045.6	1003.5	963.5	908.1	863.0	808.6	749.1	701.9	647.5	593.1
37.5°	1322.6	1260.1	1223.1	1181.0	1106.1	1044.6	984.0	924.5	841.4	783.9	707.0
40°	1622.3	1585.3	1524.8	1457.1	1389.3	1308.3	1226.2	1147.2	1050.7	970.7	881.4
42.5°	1974.2	1919.8	1858.3	1760.8	1692.0	1596.6	1503.2	1398.6	1280.6	1178.0	1073.3
45°	2304.6	2240.0	2192.8	2095.3	2023.5	1910.6	1797.7	1686.9	1550.4	1418.1	1297.0
47.5°	2661.7	2608.4	2530.4	2451.4	2378.5	2251.3	2129.2	1994.7	1851.1	1694.1	1537.1
50°	2975.7	2933.6	2880.3	2784.9	2703.8	2597.1	2453.4	2306.7	2125.1	1969.1	1790.6
52.5°	3242.5	3209.7	3134.8	3067.0	2994.2	2893.6	2765.4	2624.8	2428.8	2257.4	2054.3
55°	3557.5	3533.9	3468.2	3426.2	3361.5	3265.1	3145.0	3014.7	2807.4	2620.7	2390.8
57.5°	4073.6	4055.2	3997.7	3980.3	3916.6	3832.5	3684.7	3545.2	3303.0	3071.1	2808.5
60°	4928.4	4891.4	4807.3	4764.2	4629.8	4516.9	4325.0	4133.2	3840.7	3545.2	3229.2
62.5°	5843.7	5740.0	5580.0	5442.5	5251.6	5055.6	4799.1	4505.6	4162.9	3812.0	3448.7
65°	6337.2	6160.7	5958.6	5740.0	5492.7	5204.4	4881.2	4529.2	4160.9	3790.4	3406.7
66°	6393.7	6194.6	5980.1	5737.0	5462.0	5155.2	4826.8	4457.4	4074.7	3713.5	3329.7
67.5°	6322.9	6114.6	5887.8	5617.9	5320.4	5002.3	4657.5	4273.7	3905.4	3539.0	3165.5
70°	5827.3	5620.0	5417.8	5133.6	4816.5	4496.4	4170.1	3741.2	3392.3	3055.7	2723.3
72.5°	4653.4	4512.8	4312.7	4069.5	3760.7	3385.1	3113.2	2729.4	2426.7	2100.4	1842.9
75°	2908.0	2709.9	2462.7	2152.8	1916.8	1612.0	1453.0	1161.6	989.2	838.3	692.6
77.5°	1486.8	1338.0	1164.6	990.2	822.9	656.7	507.9	359.1	242.2	168.3	125.2
80°	1228.2	1096.9	953.3	794.2	646.4	501.8	361.2	246.3	157.0	102.6	80.0
82.5°	1014.8	904.0	775.7	628.0	499.7	394.0	274.0	178.5	110.8	71.8	56.4
85°	432.0	392.0	302.7	240.1	180.6	133.4	93.4	62.6	44.1	35.9	32.8
87.5°	18.5	20.5	19.5	15.4	11.3	11.3	10.3	8.2	8.2	8.2	8.2
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: P150661

CATALOG NUMBER: TLM-E03-LED-E1-SL3-HSS-7050

CANDELA DISTRIBUTION (continued):

	80°	81°	82°	83°	84°	85°	95°	105°	115°	125°	135°
0°	161.1	161.1	161.1	161.1	161.1	161.1	161.1	161.1	161.1	161.1	161.1
2.5°	168.3	167.3	166.2	166.2	165.2	164.2	158.0	152.9	146.7	142.6	138.5
5°	175.5	174.4	172.4	171.4	169.3	168.3	154.9	143.7	134.4	127.2	122.1
7.5°	182.6	181.6	178.5	175.5	174.4	172.4	150.8	136.5	124.2	115.9	110.8
10°	191.9	188.8	185.7	181.6	178.5	175.5	146.7	128.3	114.9	107.7	102.6
12.5°	205.2	200.1	195.0	189.8	185.7	180.6	144.7	121.1	107.7	99.5	94.4
15°	220.6	213.4	207.3	201.1	193.9	188.8	140.6	114.9	101.6	93.4	87.2
17.5°	235.0	226.8	217.5	208.3	201.1	193.9	136.5	108.8	95.4	87.2	81.1
20°	255.5	243.2	231.9	220.6	210.4	201.1	130.3	102.6	90.3	81.1	74.9
22.5°	278.1	263.7	249.3	234.0	220.6	208.3	125.2	97.5	85.2	75.9	68.7
25°	306.8	289.4	269.9	250.4	235.0	218.6	120.1	92.3	80.0	70.8	63.6
27.5°	346.8	322.2	300.6	276.0	252.4	234.0	115.9	88.2	74.9	65.7	58.5
30°	401.2	365.3	331.4	304.8	277.0	250.4	111.8	83.1	70.8	60.5	52.3
32.5°	461.7	419.7	380.7	340.7	305.8	275.0	107.7	79.0	65.7	55.4	48.2
35°	536.7	483.3	431.0	384.8	342.7	301.7	103.6	74.9	61.6	50.3	43.1
37.5°	644.4	577.7	508.9	449.4	395.1	340.7	100.6	70.8	56.4	45.1	38.0
40°	792.2	706.0	621.8	540.8	470.0	402.2	96.5	66.7	52.3	41.0	33.9
42.5°	952.2	847.6	736.7	645.4	547.9	462.8	92.3	62.6	48.2	36.9	29.8
45°	1151.3	1021.0	886.6	762.4	643.4	533.6	88.2	58.5	43.1	32.8	25.7
47.5°	1368.8	1202.6	1050.7	894.8	753.2	621.8	83.1	55.4	39.0	28.7	22.6
50°	1592.5	1417.1	1225.2	1047.7	879.4	710.1	78.0	50.3	34.9	25.7	18.5
52.5°	1833.7	1626.4	1430.4	1209.8	1013.8	826.0	72.9	46.2	31.8	22.6	15.4
55°	2140.5	1908.6	1678.7	1431.4	1195.4	960.4	67.7	41.0	27.7	19.5	12.3
57.5°	2526.3	2251.3	1969.1	1690.0	1403.7	1136.9	63.6	35.9	23.6	16.4	10.3
60°	2890.5	2569.4	2227.7	1906.5	1583.3	1272.4	57.5	31.8	20.5	13.3	10.3
62.5°	3079.3	2713.0	2344.7	1990.6	1645.9	1320.6	51.3	26.7	17.4	11.3	9.2
65°	3033.2	2659.7	2302.6	1945.5	1607.9	1289.8	45.1	23.6	15.4	10.3	9.2
66°	2966.5	2597.1	2237.9	1898.3	1576.1	1257.0	42.1	22.6	14.4	10.3	8.2
67.5°	2820.8	2463.7	2121.0	1804.9	1488.9	1194.4	38.0	20.5	13.3	9.2	8.2
70°	2409.3	2085.0	1811.1	1529.9	1272.4	1006.6	30.8	17.4	11.3	8.2	8.2
72.5°	1594.6	1374.0	1191.3	1025.1	856.8	664.9	25.7	14.4	9.2	8.2	7.2
75°	601.3	543.8	466.9	419.7	366.3	321.2	20.5	9.2	7.2	7.2	7.2
77.5°	106.7	98.5	87.2	80.0	73.9	67.7	16.4	6.2	6.2	7.2	7.2
80°	71.8	66.7	60.5	55.4	51.3	46.2	11.3	5.1	6.2	6.2	7.2
82.5°	51.3	48.2	45.1	41.0	38.0	33.9	7.2	5.1	6.2	6.2	6.2
85°	30.8	28.7	26.7	24.6	21.5	20.5	5.1	5.1	5.1	6.2	6.2
87.5°	8.2	7.2	8.2	8.2	6.2	7.2	4.1	4.1	4.1	5.1	5.1
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: P150661

CATALOG NUMBER: TLM-E03-LED-E1-SL3-HSS-7050

CANDELA DISTRIBUTION (continued):

	145°	155°	165°	175°	180°
0°	161.1	161.1	161.1	161.1	161.1
2.5°	136.5	136.5	134.4	137.5	137.5
5°	118.0	118.0	117.0	118.0	118.0
7.5°	107.7	106.7	106.7	106.7	107.7
10°	98.5	97.5	97.5	97.5	97.5
12.5°	90.3	89.3	88.2	89.3	89.3
15°	83.1	81.1	81.1	81.1	81.1
17.5°	77.0	74.9	73.9	73.9	73.9
20°	70.8	67.7	67.7	67.7	67.7
22.5°	64.6	61.6	61.6	61.6	61.6
25°	58.5	55.4	55.4	55.4	55.4
27.5°	53.4	50.3	50.3	50.3	50.3
30°	47.2	45.1	45.1	46.2	45.1
32.5°	43.1	40.0	40.0	41.0	41.0
35°	38.0	35.9	35.9	35.9	35.9
37.5°	32.8	30.8	30.8	30.8	30.8
40°	28.7	26.7	25.7	26.7	26.7
42.5°	24.6	22.6	21.5	21.5	21.5
45°	21.5	18.5	17.4	18.5	18.5
47.5°	17.4	15.4	15.4	16.4	16.4
50°	13.3	13.3	14.4	16.4	16.4
52.5°	12.3	12.3	14.4	16.4	16.4
55°	11.3	12.3	14.4	15.4	16.4
57.5°	10.3	12.3	14.4	15.4	15.4
60°	10.3	11.3	13.3	15.4	15.4
62.5°	9.2	10.3	12.3	14.4	14.4
65°	9.2	10.3	12.3	14.4	14.4
66°	9.2	10.3	12.3	14.4	14.4
67.5°	9.2	10.3	12.3	14.4	14.4
70°	9.2	10.3	12.3	13.3	13.3
72.5°	8.2	9.2	11.3	13.3	13.3
75°	8.2	9.2	11.3	13.3	13.3
77.5°	8.2	9.2	11.3	13.3	13.3
80°	8.2	9.2	11.3	12.3	13.3
82.5°	7.2	9.2	10.3	12.3	12.3
85°	7.2	8.2	10.3	11.3	12.3
87.5°	6.2	7.2	8.2	10.3	10.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)