

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: P150641

Luminaire Tested: **TLM-E01-LED-E1-SL3-HSS-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P150641  
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-E01-LED-E1-SL3-HSS-7050  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND  
HOUSE SIDE SHIELD  
Light Source: (21) 5000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1779.1 lumens  
Efficiency: N/A  
Efficacy: 72.0 lumens/watt  
Spacing Criteria (0/90/45): 4.23 / 3.52 / 4.34  
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')  
CIE Type: Direct

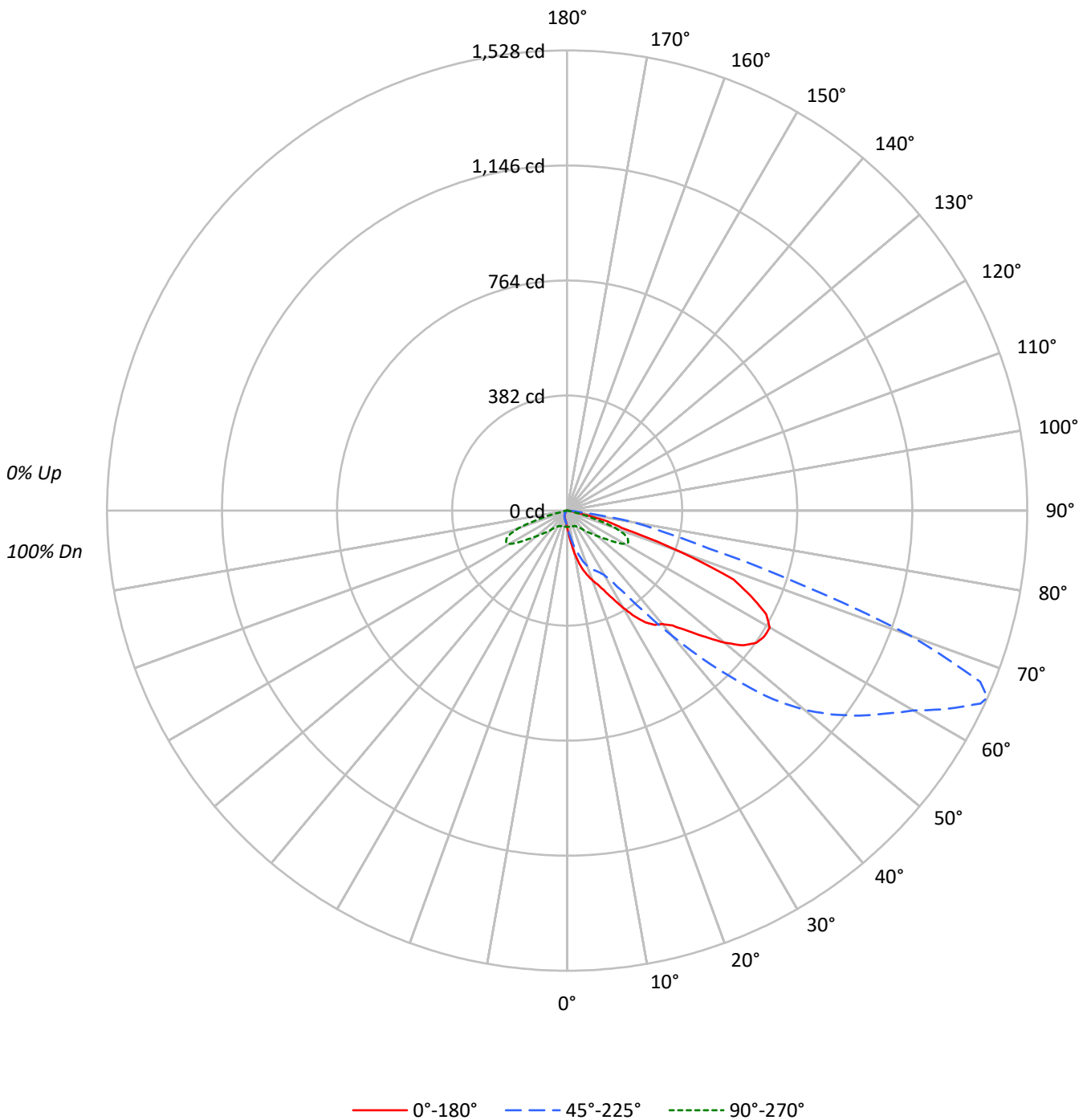
Input Watts (W): 24.7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3400	3400	3400
5°	5695	3423	2498
10°	9348	3453	2090
15°	13340	3599	1770
20°	16596	3719	1523
25°	20526	3944	1292
30°	27286	4416	1097
35°	35007	5221	928
40°	40600	6873	736
45°	50413	9281	555
50°	67150	12938	542
55°	84581	18915	607
60°	98370	28068	646
65°	101099	33328	719
70°	73903	32008	815
75°	33295	13932	1076
80°	5980	3500	1604
85°	509	3088	2979



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	6.0	0.3
10°-20°	25.5	1.4
20°-30°	55.0	3.1
30°-40°	117.4	6.6
40°-50°	259.6	14.6
50°-60°	440.0	24.7
60°-70°	587.1	33.0
70°-80°	258.6	14.5
80°-90°	29.8	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°	86.5	4.9
0°-40°	203.9	11.5
0°-60°	903.5	50.8
0°-90°	1779.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1779.1	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	54	54	54	54	54	
5°	90	76	54	41	39	10
15°	204	155	55	29	27	58
25°	294	219	56	21	18	141
35°	453	339	68	14	12	281
45°	563	799	104	9	6	445
55°	766	1187	171	4	6	675
65°	675	1515	222	3	5	644
75°	136	485	57	2	4	150
85°	1	10	4	2	4	4
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°	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7
2.5°	67.7	67.4	66.0	66.0	64.0	62.6	60.9	59.2	59.2	58.8	58.5
5°	89.6	87.6	87.2	83.5	80.4	75.9	71.8	66.4	65.7	65.0	64.6
7.5°	113.9	113.6	110.5	106.0	99.9	91.7	83.5	74.6	73.2	72.5	71.1
10°	145.4	143.7	139.6	132.0	122.8	111.8	98.5	84.5	82.8	81.4	80.7
12.5°	175.5	172.4	170.0	160.4	148.8	132.7	116.6	96.5	95.1	93.4	90.6
15°	203.5	200.8	196.7	188.5	175.5	155.3	136.5	111.8	108.4	106.0	104.0
17.5°	225.4	223.7	218.9	209.7	195.6	177.9	155.3	127.6	124.8	121.8	118.0
20°	246.3	243.9	236.3	223.7	208.6	195.0	177.5	148.1	144.3	140.6	136.5
22.5°	266.1	263.7	251.4	230.5	214.5	208.6	202.5	171.4	165.5	162.5	158.4
25°	293.8	288.7	269.5	236.3	214.8	219.2	229.8	201.5	196.0	191.5	185.0
27.5°	331.1	324.2	294.2	244.9	216.2	230.9	261.3	238.1	232.2	227.1	219.9
30°	373.2	368.7	332.8	265.4	226.1	248.0	296.5	284.6	277.7	271.6	263.0
32.5°	415.6	409.4	373.8	304.4	252.8	281.2	340.7	338.6	329.7	323.9	314.7
35°	452.9	449.8	423.4	368.4	313.6	339.3	399.5	401.9	394.0	387.9	377.6
37.5°	478.2	478.2	473.0	437.1	410.4	429.6	486.0	486.4	478.5	464.5	459.4
40°	491.2	494.9	513.4	520.2	518.9	543.5	599.6	593.4	586.9	579.7	562.6
42.5°	517.8	521.3	560.6	607.8	638.6	671.1	709.7	707.7	699.8	686.8	671.1
45°	563.0	567.4	614.3	689.2	752.5	798.7	823.3	813.7	805.8	793.5	785.3
47.5°	620.5	629.0	682.0	774.7	851.0	927.3	952.9	927.6	920.8	911.2	897.8
50°	681.7	689.9	746.3	852.4	938.5	1029.5	1072.3	1029.5	1019.6	1016.5	1001.5
52.5°	734.7	741.5	795.9	912.2	1005.6	1112.3	1174.5	1118.1	1110.9	1100.7	1089.7
55°	766.2	771.6	822.6	940.9	1051.1	1186.9	1273.4	1223.8	1213.2	1209.1	1193.4
57.5°	776.8	782.2	828.1	944.7	1075.7	1254.9	1393.5	1395.2	1382.5	1367.8	1363.0
60°	776.8	782.9	821.6	935.5	1099.6	1327.4	1553.5	1696.2	1668.8	1666.1	1648.6
62.5°	744.6	750.4	789.4	907.1	1131.8	1425.3	1776.5	2028.3	2020.4	2002.6	1973.9
65°	674.8	678.3	716.6	834.6	1119.5	1515.2	1969.8	2249.2	2236.6	2201.7	2164.7
66°	643.4	646.1	682.0	793.2	1079.1	1527.5	2004.0	2276.9	2256.1	2226.6	2184.9
67.5°	597.9	602.7	628.0	716.2	982.3	1484.8	1982.4	2257.4	2239.3	2203.7	2162.0
70°	399.2	395.7	485.0	549.7	748.4	1209.8	1778.6	2026.9	2027.2	2010.5	1993.7
72.5°	189.5	191.5	217.5	338.3	489.8	808.2	1415.7	1617.8	1641.1	1611.0	1590.1
75°	136.1	139.2	154.9	206.9	292.1	485.0	917.7	1131.5	1132.1	1078.8	1031.2
77.5°	39.7	41.4	58.1	127.6	218.9	327.3	527.1	629.0	614.3	576.0	540.1
80°	16.4	16.4	17.1	40.7	87.9	222.3	368.7	484.3	482.6	467.9	446.7
82.5°	6.2	6.5	8.2	16.8	20.9	54.7	245.9	420.4	419.3	398.5	383.4
85°	0.7	0.7	2.1	7.2	7.9	10.3	49.3	185.4	184.4	185.4	162.5
87.5°	0.0	0.0	0.3	0.7	1.0	1.4	2.1	7.2	7.9	7.5	6.8
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°	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7
2.5°	58.5	57.8	57.8	57.5	57.5	57.5	57.1	56.8	56.8	56.4	56.1
5°	64.0	63.3	62.9	62.3	61.9	61.6	60.9	60.5	59.9	59.5	59.2
7.5°	70.5	69.1	68.7	67.7	66.7	66.0	65.3	64.3	63.6	62.3	61.9
10°	78.7	77.0	75.6	74.2	73.2	71.5	70.5	69.1	67.7	66.7	65.7
12.5°	89.3	86.9	84.8	83.5	81.1	79.0	77.0	75.9	73.2	71.8	70.1
15°	100.9	98.2	95.8	93.0	91.3	87.9	85.2	82.1	80.7	78.3	75.6
17.5°	115.9	111.5	107.7	105.0	101.6	98.2	95.1	92.0	87.9	85.2	81.7
20°	132.0	128.3	123.1	118.3	114.2	110.1	105.7	101.6	97.8	93.4	89.3
22.5°	152.5	147.1	140.9	136.1	130.7	126.2	120.1	114.6	108.4	102.6	97.8
25°	178.5	171.4	165.5	158.7	152.2	145.4	137.8	131.0	123.1	117.7	109.5
27.5°	210.7	203.9	196.0	187.1	180.6	170.3	160.4	151.9	142.6	134.1	124.8
30°	251.7	241.8	233.6	225.1	212.1	202.1	190.5	178.9	166.2	157.7	143.7
32.5°	301.0	290.4	278.1	265.8	253.8	239.8	225.4	211.0	197.0	181.3	166.9
35°	361.2	348.5	334.5	321.2	302.7	287.7	269.5	249.7	234.0	215.8	197.7
37.5°	440.9	420.0	407.7	393.7	368.7	348.2	328.0	308.2	280.5	261.3	235.7
40°	540.8	528.4	508.3	485.7	463.1	436.1	408.7	382.4	350.2	323.6	293.8
42.5°	658.1	639.9	619.4	586.9	564.0	532.2	501.1	466.2	426.9	392.7	357.8
45°	768.2	746.7	730.9	698.4	674.5	636.9	599.2	562.3	516.8	472.7	432.3
47.5°	887.2	869.5	843.5	817.1	792.8	750.4	709.7	664.9	617.0	564.7	512.4
50°	991.9	977.9	960.1	928.3	901.3	865.7	817.8	768.9	708.4	656.4	596.9
52.5°	1080.8	1069.9	1044.9	1022.3	998.1	964.5	921.8	874.9	809.6	752.5	684.8
55°	1185.8	1178.0	1156.1	1142.1	1120.5	1088.4	1048.3	1004.9	935.8	873.6	796.9
57.5°	1357.9	1351.7	1332.6	1326.8	1305.5	1277.5	1228.2	1181.7	1101.0	1023.7	936.2
60°	1642.8	1630.5	1602.4	1588.1	1543.3	1505.6	1441.7	1377.7	1280.2	1181.7	1076.4
62.5°	1947.9	1913.3	1860.0	1814.2	1750.5	1685.2	1599.7	1501.9	1387.6	1270.7	1149.6
65°	2112.4	2053.6	1986.2	1913.3	1830.9	1734.8	1627.1	1509.7	1387.0	1263.5	1135.6
66°	2131.2	2064.9	1993.4	1912.3	1820.7	1718.4	1608.9	1485.8	1358.2	1237.8	1109.9
67.5°	2107.6	2038.2	1962.6	1872.6	1773.5	1667.4	1552.5	1424.6	1301.8	1179.7	1055.2
70°	1942.4	1873.3	1805.9	1711.2	1605.5	1498.8	1390.0	1247.1	1130.8	1018.6	907.8
72.5°	1551.1	1504.3	1437.6	1356.5	1253.6	1128.4	1037.7	909.8	808.9	700.1	614.3
75°	969.3	903.3	820.9	717.6	638.9	537.3	484.3	387.2	329.7	279.4	230.9
77.5°	495.6	446.0	388.2	330.1	274.3	218.9	169.3	119.7	80.7	56.1	41.7
80°	409.4	365.6	317.8	264.7	215.5	167.3	120.4	82.1	52.3	34.2	26.7
82.5°	338.3	301.3	258.6	209.3	166.6	131.3	91.3	59.5	36.9	23.9	18.8
85°	144.0	130.7	100.9	80.0	60.2	44.5	31.1	20.9	14.7	12.0	10.9
87.5°	6.2	6.8	6.5	5.1	3.8	3.8	3.4	2.7	2.7	2.7	2.7
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°	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7
2.5°	56.1	55.8	55.4	55.4	55.1	54.7	52.7	51.0	48.9	47.5	46.2
5°	58.5	58.1	57.5	57.1	56.4	56.1	51.6	47.9	44.8	42.4	40.7
7.5°	60.9	60.5	59.5	58.5	58.1	57.5	50.3	45.5	41.4	38.6	36.9
10°	64.0	62.9	61.9	60.5	59.5	58.5	48.9	42.8	38.3	35.9	34.2
12.5°	68.4	66.7	65.0	63.3	61.9	60.2	48.2	40.4	35.9	33.2	31.5
15°	73.5	71.1	69.1	67.0	64.6	62.9	46.9	38.3	33.9	31.1	29.1
17.5°	78.3	75.6	72.5	69.4	67.0	64.6	45.5	36.3	31.8	29.1	27.0
20°	85.2	81.1	77.3	73.5	70.1	67.0	43.4	34.2	30.1	27.0	25.0
22.5°	92.7	87.9	83.1	78.0	73.5	69.4	41.7	32.5	28.4	25.3	22.9
25°	102.3	96.5	90.0	83.5	78.3	72.9	40.0	30.8	26.7	23.6	21.2
27.5°	115.6	107.4	100.2	92.0	84.1	78.0	38.6	29.4	25.0	21.9	19.5
30°	133.7	121.8	110.5	101.6	92.3	83.5	37.3	27.7	23.6	20.2	17.4
32.5°	153.9	139.9	126.9	113.6	101.9	91.7	35.9	26.3	21.9	18.5	16.1
35°	178.9	161.1	143.7	128.3	114.2	100.6	34.5	25.0	20.5	16.8	14.4
37.5°	214.8	192.6	169.6	149.8	131.7	113.6	33.5	23.6	18.8	15.0	12.7
40°	264.1	235.3	207.3	180.3	156.7	134.1	32.2	22.2	17.4	13.7	11.3
42.5°	317.4	282.5	245.6	215.1	182.6	154.3	30.8	20.9	16.1	12.3	9.9
45°	383.8	340.3	295.5	254.1	214.5	177.9	29.4	19.5	14.4	10.9	8.6
47.5°	456.3	400.9	350.2	298.3	251.1	207.3	27.7	18.5	13.0	9.6	7.5
50°	530.8	472.4	408.4	349.2	293.1	236.7	26.0	16.8	11.6	8.6	6.2
52.5°	611.2	542.1	476.8	403.3	337.9	275.3	24.3	15.4	10.6	7.5	5.1
55°	713.5	636.2	559.6	477.1	398.5	320.1	22.6	13.7	9.2	6.5	4.1
57.5°	842.1	750.4	656.4	563.3	467.9	379.0	21.2	12.0	7.9	5.5	3.4
60°	963.5	856.5	742.6	635.5	527.8	424.1	19.2	10.6	6.8	4.4	3.4
62.5°	1026.4	904.3	781.6	663.5	548.6	440.2	17.1	8.9	5.8	3.8	3.1
65°	1011.1	886.6	767.5	648.5	536.0	429.9	15.0	7.9	5.1	3.4	3.1
66°	988.8	865.7	746.0	632.8	525.4	419.0	14.0	7.5	4.8	3.4	2.7
67.5°	940.3	821.2	707.0	601.6	496.3	398.1	12.7	6.8	4.4	3.1	2.7
70°	803.1	695.0	603.7	510.0	424.1	335.5	10.3	5.8	3.8	2.7	2.7
72.5°	531.5	458.0	397.1	341.7	285.6	221.6	8.6	4.8	3.1	2.7	2.4
75°	200.4	181.3	155.6	139.9	122.1	107.1	6.8	3.1	2.4	2.4	2.4
77.5°	35.6	32.8	29.1	26.7	24.6	22.6	5.5	2.1	2.1	2.4	2.4
80°	23.9	22.2	20.2	18.5	17.1	15.4	3.8	1.7	2.1	2.1	2.4
82.5°	17.1	16.1	15.0	13.7	12.7	11.3	2.4	1.7	2.1	2.1	2.1
85°	10.3	9.6	8.9	8.2	7.2	6.8	1.7	1.7	1.7	2.1	2.1
87.5°	2.7	2.4	2.7	2.7	2.1	2.4	1.4	1.4	1.4	1.7	1.7
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: P150641

CATALOG NUMBER: TLM-E01-LED-E1-SL3-HSS-7050

**CANDELA DISTRIBUTION (continued):**

	145°	155°	165°	175°	180°
0°	53.7	53.7	53.7	53.7	53.7
2.5°	45.5	45.5	44.8	45.8	45.8
5°	39.3	39.3	39.0	39.3	39.3
7.5°	35.9	35.6	35.6	35.6	35.9
10°	32.8	32.5	32.5	32.5	32.5
12.5°	30.1	29.8	29.4	29.8	29.8
15°	27.7	27.0	27.0	27.0	27.0
17.5°	25.7	25.0	24.6	24.6	24.6
20°	23.6	22.6	22.6	22.6	22.6
22.5°	21.5	20.5	20.5	20.5	20.5
25°	19.5	18.5	18.5	18.5	18.5
27.5°	17.8	16.8	16.8	16.8	16.8
30°	15.7	15.0	15.0	15.4	15.0
32.5°	14.4	13.3	13.3	13.7	13.7
35°	12.7	12.0	12.0	12.0	12.0
37.5°	10.9	10.3	10.3	10.3	10.3
40°	9.6	8.9	8.6	8.9	8.9
42.5°	8.2	7.5	7.2	7.2	7.2
45°	7.2	6.2	5.8	6.2	6.2
47.5°	5.8	5.1	5.1	5.5	5.5
50°	4.4	4.4	4.8	5.5	5.5
52.5°	4.1	4.1	4.8	5.5	5.5
55°	3.8	4.1	4.8	5.1	5.5
57.5°	3.4	4.1	4.8	5.1	5.1
60°	3.4	3.8	4.4	5.1	5.1
62.5°	3.1	3.4	4.1	4.8	4.8
65°	3.1	3.4	4.1	4.8	4.8
66°	3.1	3.4	4.1	4.8	4.8
67.5°	3.1	3.4	4.1	4.8	4.8
70°	3.1	3.4	4.1	4.4	4.4
72.5°	2.7	3.1	3.8	4.4	4.4
75°	2.7	3.1	3.8	4.4	4.4
77.5°	2.7	3.1	3.8	4.4	4.4
80°	2.7	3.1	3.8	4.1	4.4
82.5°	2.4	3.1	3.4	4.1	4.1
85°	2.4	2.7	3.4	3.8	4.1
87.5°	2.1	2.4	2.7	3.4	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)