

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: P150665

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P150665
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
Description: TALON MEDIUM LED SITE LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND
HOUSE SIDE SHIELD
Light Source: (21) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4294.0 lumens
Efficiency: N/A
Efficacy: 54.8 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

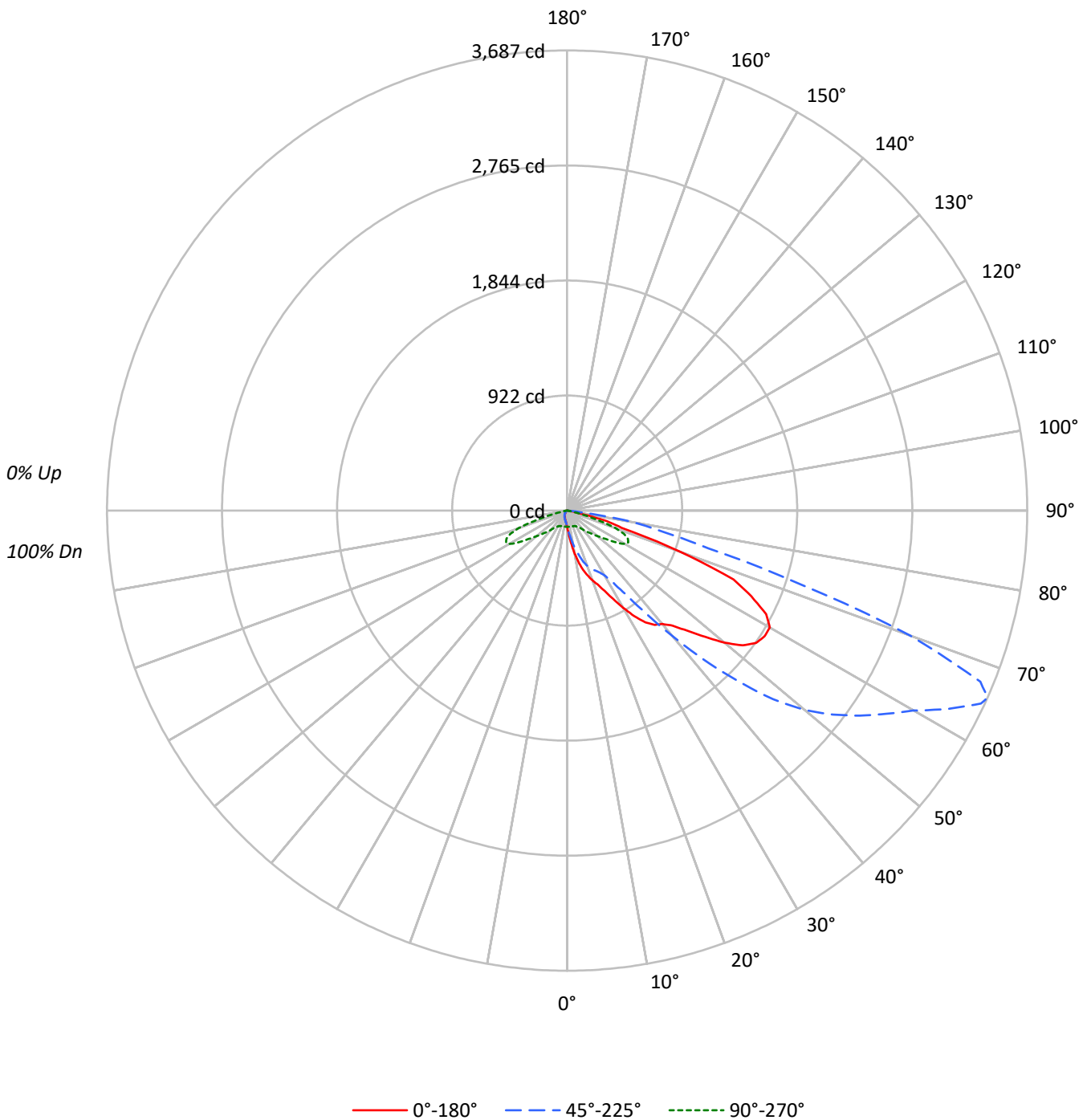
Input Watts (W): 78.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2790	2790	2790
5°	4674	2810	2051
10°	7668	2834	1714
15°	10947	2953	1453
20°	13617	3054	1249
25°	16843	3235	1059
30°	22387	3622	902
35°	28725	4285	760
40°	33316	5637	604
45°	41369	7616	454
50°	55103	10617	442
55°	69405	15523	495
60°	80721	23033	534
65°	82970	27354	591
70°	60639	26266	673
75°	27332	11433	890
80°	4909	2864	1327
85°	420	2544	2445



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	14.5	0.3
10°-20°	61.5	1.4
20°-30°	132.7	3.1
30°-40°	283.4	6.6
40°-50°	626.7	14.6
50°-60°	1062.0	24.7
60°-70°	1417.1	33.0
70°-80°	624.2	14.5
80°-90°	71.9	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°	208.7	4.9
0°-40°	492.1	11.5
0°-60°	2180.7	50.8
0°-90°	4294.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4294.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	130	130	130	130	130	
5°	216	183	130	98	95	25
15°	491	375	132	70	65	140
25°	709	529	136	51	45	340
35°	1093	819	163	35	29	678
45°	1359	1928	250	21	15	1074
55°	1849	2865	414	10	13	1630
65°	1629	3657	537	7	12	1555
75°	329	1171	137	6	11	363
85°	2	25	10	5	10	10
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°	129.6	129.6	129.6	129.6	129.6	129.6	129.6	129.6	129.6	129.6	129.6
2.5°	163.5	162.6	159.3	159.3	154.4	151.1	146.9	142.8	142.8	142.0	141.2
5°	216.3	211.3	210.5	201.4	194.0	183.3	173.4	160.2	158.5	156.8	156.0
7.5°	274.9	274.1	266.6	255.9	241.1	221.2	201.4	180.0	176.7	175.0	171.7
10°	350.8	346.7	336.8	318.7	296.4	269.9	237.8	203.9	199.8	196.5	194.8
12.5°	423.5	416.1	410.3	387.2	359.1	320.3	281.5	232.8	229.5	225.4	218.8
15°	491.2	484.6	474.7	454.9	423.5	374.8	329.4	269.9	261.7	255.9	251.0
17.5°	544.0	539.9	528.3	506.0	472.2	429.3	374.8	307.9	301.3	293.9	284.8
20°	594.4	588.6	570.4	539.9	503.6	470.5	428.4	357.5	348.4	339.3	329.4
22.5°	642.3	636.5	606.8	556.4	517.6	503.6	488.7	413.6	399.6	392.1	382.2
25°	709.1	696.7	650.5	570.4	518.4	529.2	554.8	486.2	473.0	462.3	446.6
27.5°	799.1	782.6	710.0	591.1	521.7	557.2	630.7	574.6	560.5	548.1	530.8
30°	900.6	889.9	803.2	640.6	545.7	598.5	715.7	686.8	670.3	655.5	634.8
32.5°	1003.0	988.2	902.3	734.7	610.1	678.6	822.2	817.3	795.8	781.8	759.5
35°	1093.0	1085.6	1022.0	889.1	757.0	818.9	964.2	970.0	951.0	936.1	911.4
37.5°	1154.1	1154.1	1141.7	1055.0	990.6	1036.9	1173.1	1173.9	1154.9	1121.1	1108.7
40°	1185.5	1194.5	1239.1	1255.6	1252.3	1311.8	1447.1	1432.3	1416.6	1399.3	1358.0
42.5°	1249.8	1258.1	1353.0	1467.0	1541.3	1619.7	1713.0	1708.0	1689.0	1657.7	1619.7
45°	1358.8	1369.5	1482.6	1663.4	1816.2	1927.6	1987.0	1963.9	1944.9	1915.2	1895.4
47.5°	1497.5	1518.1	1646.1	1869.8	2053.9	2238.0	2299.9	2238.8	2222.3	2199.2	2167.0
50°	1645.3	1665.1	1801.3	2057.2	2265.2	2484.8	2588.0	2484.8	2460.9	2453.5	2417.1
52.5°	1773.2	1789.7	1921.0	2201.7	2427.0	2684.6	2834.9	2698.6	2681.3	2656.5	2630.1
55°	1849.2	1862.4	1985.4	2271.0	2536.8	2864.6	3073.4	2953.7	2928.1	2918.2	2880.3
57.5°	1874.8	1888.0	1998.6	2280.1	2596.3	3028.9	3363.2	3367.3	3336.8	3301.3	3289.7
60°	1874.8	1889.6	1982.9	2257.8	2654.1	3203.9	3749.5	4093.8	4027.7	4021.1	3979.0
62.5°	1797.2	1811.2	1905.3	2189.3	2731.7	3440.0	4287.8	4895.4	4876.4	4833.4	4764.1
65°	1628.8	1637.0	1729.5	2014.3	2701.9	3657.1	4754.2	5428.7	5398.1	5313.9	5224.7
66°	1552.8	1559.4	1646.1	1914.4	2604.5	3686.8	4836.8	5495.5	5445.2	5374.2	5273.5
67.5°	1443.0	1454.6	1515.7	1728.6	2370.9	3583.6	4784.7	5448.5	5404.7	5318.9	5218.1
70°	963.4	955.1	1170.6	1326.6	1806.2	2919.9	4292.7	4892.1	4892.9	4852.4	4812.0
72.5°	457.3	462.3	525.0	816.4	1182.2	1950.7	3416.8	3904.7	3960.9	3888.2	3837.9
75°	328.6	336.0	374.0	499.4	705.0	1170.6	2214.9	2730.8	2732.5	2603.7	2489.0
77.5°	95.8	99.9	140.3	307.9	528.3	790.0	1272.1	1518.1	1482.6	1390.2	1303.5
80°	39.6	39.6	41.3	98.2	212.2	536.6	889.9	1168.9	1164.8	1129.3	1078.1
82.5°	14.9	15.7	19.8	40.5	50.4	132.1	593.6	1014.6	1012.1	961.7	925.4
85°	1.7	1.7	5.0	17.3	19.0	24.8	118.9	447.4	445.0	447.4	392.1
87.5°	0.0	0.0	0.8	1.7	2.5	3.3	5.0	17.3	19.0	18.2	16.5
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°	129.6	129.6	129.6	129.6	129.6	129.6	129.6	129.6	129.6	129.6	129.6
2.5°	141.2	139.5	139.5	138.7	138.7	138.7	137.9	137.0	137.0	136.2	135.4
5°	154.4	152.7	151.9	150.2	149.4	148.6	146.9	146.1	144.5	143.6	142.8
7.5°	170.1	166.8	165.9	163.5	161.0	159.3	157.7	155.2	153.5	150.2	149.4
10°	189.9	185.7	182.4	179.1	176.7	172.5	170.1	166.8	163.5	161.0	158.5
12.5°	215.5	209.7	204.7	201.4	195.6	190.7	185.7	183.3	176.7	173.4	169.2
15°	243.5	236.9	231.1	224.5	220.4	212.2	205.6	198.1	194.8	189.0	182.4
17.5°	279.9	269.1	260.0	253.4	245.2	236.9	229.5	222.1	212.2	205.6	197.3
20°	318.7	309.6	297.2	285.6	275.7	265.8	255.1	245.2	236.1	225.4	215.5
22.5°	368.2	355.0	340.1	328.6	315.4	304.6	289.8	276.6	261.7	247.7	236.1
25°	430.9	413.6	399.6	383.0	367.4	350.8	332.7	316.2	297.2	284.0	264.2
27.5°	508.5	492.0	473.0	451.6	435.9	411.1	387.2	366.5	344.2	323.6	301.3
30°	607.6	583.6	563.8	543.2	511.8	487.9	459.8	431.7	401.2	380.6	346.7
32.5°	726.5	700.9	671.2	641.4	612.5	578.7	544.0	509.3	475.5	437.5	402.9
35°	871.8	841.2	807.4	775.2	730.6	694.3	650.5	602.6	564.7	520.9	477.2
37.5°	1064.1	1013.7	984.0	950.2	889.9	840.4	791.7	743.8	676.9	630.7	568.8
40°	1305.2	1275.4	1226.7	1172.2	1117.8	1052.5	986.5	922.9	845.3	780.9	709.1
42.5°	1588.3	1544.6	1495.0	1416.6	1361.3	1284.5	1209.4	1125.2	1030.3	947.7	863.5
45°	1854.1	1802.1	1764.1	1685.7	1627.9	1537.1	1446.3	1357.2	1247.4	1140.9	1043.5
47.5°	2141.4	2098.5	2035.7	1972.2	1913.6	1811.2	1713.0	1604.8	1489.2	1362.9	1236.6
50°	2394.0	2360.2	2317.2	2240.5	2175.3	2089.4	1973.8	1855.8	1709.7	1584.2	1440.5
52.5°	2608.7	2582.2	2522.0	2467.5	2408.9	2328.0	2224.8	2111.7	1954.0	1816.2	1652.7
55°	2862.1	2843.1	2790.3	2756.4	2704.4	2626.8	2530.2	2425.4	2258.6	2108.4	1923.5
57.5°	3277.3	3262.5	3216.2	3202.2	3151.0	3083.3	2964.5	2852.2	2657.4	2470.8	2259.5
60°	3965.0	3935.3	3867.6	3832.9	3724.8	3634.0	3479.6	3325.2	3089.9	2852.2	2597.9
62.5°	4701.4	4618.0	4489.2	4378.6	4225.0	4067.4	3861.0	3624.9	3349.2	3066.8	2774.6
65°	5098.4	4956.5	4793.8	4618.0	4419.0	4187.1	3927.0	3643.9	3347.5	3049.5	2740.7
66°	5143.8	4983.7	4811.2	4615.5	4394.3	4147.4	3883.3	3586.1	3278.2	2987.6	2678.8
67.5°	5086.9	4919.3	4736.9	4519.7	4280.3	4024.4	3747.1	3438.3	3141.9	2847.2	2546.7
70°	4688.2	4521.4	4358.8	4130.1	3875.0	3617.5	3354.9	3009.9	2729.2	2458.4	2190.9
72.5°	3743.8	3630.7	3469.7	3274.0	3025.5	2723.4	2504.6	2195.9	1952.4	1689.8	1482.6
75°	2339.5	2180.2	1981.3	1732.0	1542.1	1296.9	1168.9	934.5	795.8	674.5	557.2
77.5°	1196.2	1076.5	937.0	796.6	662.1	528.3	408.6	288.9	194.8	135.4	100.7
80°	988.2	882.5	766.9	639.0	520.1	403.7	290.6	198.1	126.3	82.6	64.4
82.5°	816.4	727.3	624.1	505.2	402.0	317.0	220.4	143.6	89.2	57.8	45.4
85°	347.5	315.4	243.5	193.2	145.3	107.3	75.1	50.4	35.5	28.9	26.4
87.5°	14.9	16.5	15.7	12.4	9.1	9.1	8.3	6.6	6.6	6.6	6.6
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°	129.6	129.6	129.6	129.6	129.6	129.6	129.6	129.6	129.6	129.6	129.6
2.5°	135.4	134.6	133.7	133.7	132.9	132.1	127.1	123.0	118.1	114.7	111.4
5°	141.2	140.3	138.7	137.9	136.2	135.4	124.7	115.6	108.1	102.4	98.2
7.5°	146.9	146.1	143.6	141.2	140.3	138.7	121.4	109.8	99.9	93.3	89.2
10°	154.4	151.9	149.4	146.1	143.6	141.2	118.1	103.2	92.5	86.7	82.6
12.5°	165.1	161.0	156.8	152.7	149.4	145.3	116.4	97.4	86.7	80.1	75.9
15°	177.5	171.7	166.8	161.8	156.0	151.9	113.1	92.5	81.7	75.1	70.2
17.5°	189.0	182.4	175.0	167.6	161.8	156.0	109.8	87.5	76.8	70.2	65.2
20°	205.6	195.6	186.6	177.5	169.2	161.8	104.8	82.6	72.6	65.2	60.3
22.5°	223.7	212.2	200.6	188.2	177.5	167.6	100.7	78.4	68.5	61.1	55.3
25°	246.8	232.8	217.1	201.4	189.0	175.8	96.6	74.3	64.4	57.0	51.2
27.5°	279.0	259.2	241.9	222.1	203.1	188.2	93.3	71.0	60.3	52.8	47.1
30°	322.8	293.9	266.6	245.2	222.9	201.4	90.0	66.9	57.0	48.7	42.1
32.5°	371.5	337.6	306.3	274.1	246.0	221.2	86.7	63.6	52.8	44.6	38.8
35°	431.7	388.8	346.7	309.6	275.7	242.7	83.4	60.3	49.5	40.5	34.7
37.5°	518.4	464.8	409.5	361.6	317.8	274.1	80.9	57.0	45.4	36.3	30.5
40°	637.3	568.0	500.3	435.1	378.1	323.6	77.6	53.7	42.1	33.0	27.2
42.5°	766.1	681.9	592.7	519.3	440.8	372.3	74.3	50.4	38.8	29.7	23.9
45°	926.2	821.4	713.3	613.4	517.6	429.3	71.0	47.1	34.7	26.4	20.6
47.5°	1101.3	967.5	845.3	719.9	605.9	500.3	66.9	44.6	31.4	23.1	18.2
50°	1281.2	1140.0	985.7	842.9	707.5	571.3	62.7	40.5	28.1	20.6	14.9
52.5°	1475.2	1308.5	1150.8	973.3	815.6	664.5	58.6	37.1	25.6	18.2	12.4
55°	1722.0	1535.5	1350.6	1151.6	961.7	772.7	54.5	33.0	22.3	15.7	9.9
57.5°	2032.4	1811.2	1584.2	1359.6	1129.3	914.7	51.2	28.9	19.0	13.2	8.3
60°	2325.5	2067.1	1792.2	1533.8	1273.8	1023.7	46.2	25.6	16.5	10.7	8.3
62.5°	2477.4	2182.7	1886.3	1601.5	1324.1	1062.5	41.3	21.5	14.0	9.1	7.4
65°	2440.3	2139.8	1852.5	1565.2	1293.6	1037.7	36.3	19.0	12.4	8.3	7.4
66°	2386.6	2089.4	1800.5	1527.2	1268.0	1011.3	33.8	18.2	11.6	8.3	6.6
67.5°	2269.4	1982.1	1706.4	1452.1	1197.8	960.9	30.5	16.5	10.7	7.4	6.6
70°	1938.3	1677.5	1457.1	1230.9	1023.7	809.8	24.8	14.0	9.1	6.6	6.6
72.5°	1282.9	1105.4	958.4	824.7	689.3	534.9	20.6	11.6	7.4	6.6	5.8
75°	483.8	437.5	375.6	337.6	294.7	258.4	16.5	7.4	5.8	5.8	5.8
77.5°	85.9	79.3	70.2	64.4	59.4	54.5	13.2	5.0	5.0	5.8	5.8
80°	57.8	53.7	48.7	44.6	41.3	37.1	9.1	4.1	5.0	5.0	5.8
82.5°	41.3	38.8	36.3	33.0	30.5	27.2	5.8	4.1	5.0	5.0	5.0
85°	24.8	23.1	21.5	19.8	17.3	16.5	4.1	4.1	4.1	5.0	5.0
87.5°	6.6	5.8	6.6	6.6	5.0	5.8	3.3	3.3	3.3	4.1	4.1
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: P150665

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

CANDELA DISTRIBUTION (continued):

	145°	155°	165°	175°	180°
0°	129.6	129.6	129.6	129.6	129.6
2.5°	109.8	109.8	108.1	110.6	110.6
5°	94.9	94.9	94.1	94.9	94.9
7.5°	86.7	85.9	85.9	85.9	86.7
10°	79.3	78.4	78.4	78.4	78.4
12.5°	72.6	71.8	71.0	71.8	71.8
15°	66.9	65.2	65.2	65.2	65.2
17.5°	61.9	60.3	59.4	59.4	59.4
20°	57.0	54.5	54.5	54.5	54.5
22.5°	52.0	49.5	49.5	49.5	49.5
25°	47.1	44.6	44.6	44.6	44.6
27.5°	42.9	40.5	40.5	40.5	40.5
30°	38.0	36.3	36.3	37.1	36.3
32.5°	34.7	32.2	32.2	33.0	33.0
35°	30.5	28.9	28.9	28.9	28.9
37.5°	26.4	24.8	24.8	24.8	24.8
40°	23.1	21.5	20.6	21.5	21.5
42.5°	19.8	18.2	17.3	17.3	17.3
45°	17.3	14.9	14.0	14.9	14.9
47.5°	14.0	12.4	12.4	13.2	13.2
50°	10.7	10.7	11.6	13.2	13.2
52.5°	9.9	9.9	11.6	13.2	13.2
55°	9.1	9.9	11.6	12.4	13.2
57.5°	8.3	9.9	11.6	12.4	12.4
60°	8.3	9.1	10.7	12.4	12.4
62.5°	7.4	8.3	9.9	11.6	11.6
65°	7.4	8.3	9.9	11.6	11.6
66°	7.4	8.3	9.9	11.6	11.6
67.5°	7.4	8.3	9.9	11.6	11.6
70°	7.4	8.3	9.9	10.7	10.7
72.5°	6.6	7.4	9.1	10.7	10.7
75°	6.6	7.4	9.1	10.7	10.7
77.5°	6.6	7.4	9.1	10.7	10.7
80°	6.6	7.4	9.1	9.9	10.7
82.5°	5.8	7.4	8.3	9.9	9.9
85°	5.8	6.6	8.3	9.1	9.9
87.5°	5.0	5.8	6.6	8.3	8.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)