

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: P150683

Luminaire Tested: **TLM-F05-LED-E1-SL3-HSS-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P150683
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-F05-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: (35) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6040.1 lumens
Efficiency: N/A
Efficacy: 45.3 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

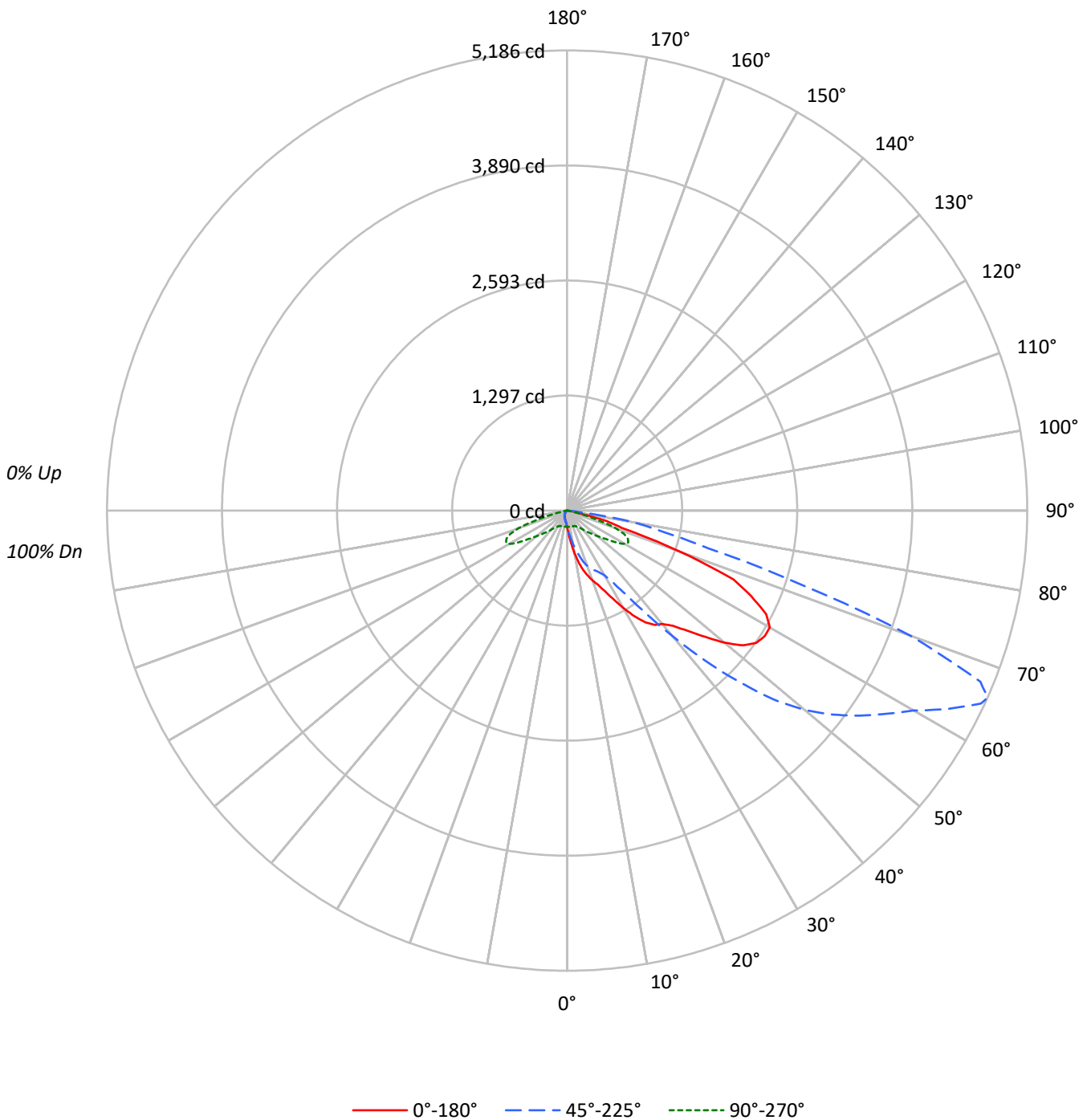
Input Watts (W): 133.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2364	2364	2364
5°	3960	2380	1738
10°	6499	2401	1453
15°	9276	2503	1231
20°	11539	2588	1057
25°	14273	2742	897
30°	18972	3069	765
35°	24341	3631	643
40°	28230	4777	511
45°	35056	6453	383
50°	46692	8997	375
55°	58811	13153	421
60°	68399	19516	451
65°	70305	23180	500
70°	51386	22258	573
75°	23159	9688	757
80°	4160	2431	1128
85°	342	2158	2068



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	20.4	0.3
10°-20°	86.5	1.4
20°-30°	186.6	3.1
30°-40°	398.6	6.6
40°-50°	881.5	14.6
50°-60°	1493.8	24.7
60°-70°	1993.4	33.0
70°-80°	878.1	14.5
80°-90°	101.1	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°	293.6	4.9
0°-40°	692.2	11.5
0°-60°	3067.5	50.8
0°-90°	6040.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6040.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	182	182	182	182	182	
5°	304	258	183	138	134	35
15°	691	527	186	99	92	197
25°	998	744	192	72	63	478
35°	1538	1152	229	49	41	953
45°	1911	2712	352	29	21	1511
55°	2601	4030	582	14	19	2292
65°	2291	5144	755	10	16	2187
75°	462	1647	193	8	15	510
85°	2	35	14	7	14	14
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°	182.3	182.3	182.3	182.3	182.3	182.3	182.3	182.3	182.3	182.3	182.3
2.5°	229.9	228.8	224.1	224.1	217.1	212.5	206.7	200.9	200.9	199.7	198.6
5°	304.2	297.3	296.1	283.3	272.9	257.8	243.9	225.3	223.0	220.6	219.5
7.5°	386.7	385.5	375.1	360.0	339.1	311.2	283.3	253.1	248.5	246.2	241.5
10°	493.5	487.7	473.8	448.2	416.9	379.7	334.4	286.8	281.0	276.4	274.0
12.5°	595.7	585.3	577.1	544.6	505.1	450.6	396.0	327.5	322.8	317.0	307.7
15°	690.9	681.6	667.7	639.8	595.7	527.2	463.3	379.7	368.1	360.0	353.0
17.5°	765.2	759.4	743.2	711.8	664.2	603.8	527.2	433.1	423.8	413.4	400.6
20°	836.1	828.0	802.4	759.4	708.3	661.9	602.7	502.8	490.0	477.3	463.3
22.5°	903.4	895.3	853.5	782.7	728.1	708.3	687.4	581.8	562.0	551.6	537.6
25°	997.5	980.1	915.0	802.4	729.2	744.3	780.3	684.0	665.4	650.3	628.2
27.5°	1124.1	1100.8	998.7	831.4	733.9	783.8	887.2	808.2	788.5	771.1	746.7
30°	1266.9	1251.8	1129.9	901.1	767.6	841.9	1006.8	966.1	942.9	922.0	893.0
32.5°	1410.9	1390.0	1269.2	1033.5	858.1	954.5	1156.6	1149.6	1119.4	1099.7	1068.3
35°	1537.5	1527.0	1437.6	1250.6	1064.8	1151.9	1356.3	1364.4	1337.7	1316.8	1282.0
37.5°	1623.4	1623.4	1606.0	1484.0	1393.5	1458.5	1650.1	1651.3	1624.6	1576.9	1559.5
40°	1667.5	1680.3	1743.0	1766.2	1761.6	1845.2	2035.6	2014.7	1992.7	1968.3	1910.2
42.5°	1758.1	1769.7	1903.2	2063.5	2168.0	2278.3	2409.5	2402.6	2375.9	2331.7	2278.3
45°	1911.4	1926.5	2085.6	2339.9	2554.7	2711.5	2795.1	2762.6	2735.8	2694.0	2666.2
47.5°	2106.5	2135.5	2315.5	2630.2	2889.1	3148.1	3235.2	3149.2	3126.0	3093.5	3048.2
50°	2314.3	2342.2	2533.8	2893.8	3186.4	3495.3	3640.4	3495.3	3461.6	3451.2	3400.1
52.5°	2494.3	2517.5	2702.2	3097.0	3414.0	3776.3	3987.6	3796.0	3771.7	3736.8	3699.7
55°	2601.1	2619.7	2792.7	3194.5	3568.4	4029.5	4323.2	4154.9	4118.9	4104.9	4051.5
57.5°	2637.1	2655.7	2811.3	3207.3	3652.1	4260.5	4730.8	4736.6	4693.7	4643.7	4627.5
60°	2637.1	2658.0	2789.3	3176.0	3733.3	4506.7	5274.3	5758.5	5665.6	5656.3	5597.1
62.5°	2528.0	2547.7	2680.1	3079.6	3842.5	4838.8	6031.4	6886.1	6859.4	6799.0	6701.4
65°	2291.1	2302.7	2432.8	2833.4	3800.7	5144.2	6687.5	7636.2	7593.3	7474.8	7349.4
66°	2184.3	2193.6	2315.5	2692.9	3663.7	5186.0	6803.6	7730.3	7659.4	7559.6	7417.9
67.5°	2029.8	2046.1	2132.0	2431.6	3335.0	5040.9	6730.5	7664.1	7602.5	7481.8	7340.1
70°	1355.2	1343.5	1646.6	1866.1	2540.8	4107.3	6038.4	6881.4	6882.6	6825.7	6768.8
72.5°	643.3	650.3	738.5	1148.5	1662.9	2744.0	4806.3	5492.6	5571.6	5469.4	5398.5
75°	462.2	472.6	526.0	702.5	991.7	1646.6	3115.6	3841.3	3843.7	3662.5	3501.1
77.5°	134.7	140.5	197.4	433.1	743.2	1111.3	1789.4	2135.5	2085.6	1955.5	1833.6
80°	55.7	55.7	58.1	138.2	298.4	754.8	1251.8	1644.3	1638.5	1588.6	1516.6
82.5°	20.9	22.1	27.9	56.9	70.8	185.8	834.9	1427.1	1423.7	1352.8	1301.7
85°	2.3	2.3	7.0	24.4	26.7	34.8	167.2	629.4	625.9	629.4	551.6
87.5°	0.0	0.0	1.2	2.3	3.5	4.6	7.0	24.4	26.7	25.5	23.2
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°	182.3	182.3	182.3	182.3	182.3	182.3	182.3	182.3	182.3	182.3	182.3
2.5°	198.6	196.2	196.2	195.1	195.1	195.1	193.9	192.8	192.8	191.6	190.4
5°	217.1	214.8	213.7	211.3	210.2	209.0	206.7	205.5	203.2	202.1	200.9
7.5°	239.2	234.6	233.4	229.9	226.4	224.1	221.8	218.3	216.0	211.3	210.2
10°	267.1	261.3	256.6	252.0	248.5	242.7	239.2	234.6	229.9	226.4	223.0
12.5°	303.1	295.0	288.0	283.3	275.2	268.2	261.3	257.8	248.5	243.9	238.1
15°	342.6	333.3	325.1	315.9	310.0	298.4	289.1	278.7	274.0	265.9	256.6
17.5°	393.7	378.6	365.8	356.5	344.9	333.3	322.8	312.4	298.4	289.1	277.5
20°	448.2	435.5	418.0	401.8	387.8	373.9	358.8	344.9	332.1	317.0	303.1
22.5°	517.9	499.3	478.4	462.2	443.6	428.5	407.6	389.0	368.1	348.4	332.1
25°	606.2	581.8	562.0	538.8	516.7	493.5	468.0	444.7	418.0	399.5	371.6
27.5°	715.3	692.1	665.4	635.2	613.1	578.3	544.6	515.6	484.2	455.2	423.8
30°	854.7	821.0	793.1	764.1	720.0	686.3	646.8	607.3	564.4	535.3	487.7
32.5°	1021.9	985.9	944.1	902.3	861.6	814.0	765.2	716.5	668.9	615.4	566.7
35°	1226.3	1183.3	1135.7	1090.4	1027.7	976.6	915.0	847.7	794.3	732.7	671.2
37.5°	1496.8	1426.0	1384.2	1336.6	1251.8	1182.1	1113.6	1046.3	952.2	887.2	800.1
40°	1835.9	1794.1	1725.6	1648.9	1572.3	1480.6	1387.7	1298.3	1189.1	1098.5	997.5
42.5°	2234.2	2172.7	2103.0	1992.7	1914.9	1806.9	1701.2	1582.8	1449.2	1333.1	1214.6
45°	2608.1	2535.0	2481.5	2371.2	2289.9	2162.2	2034.5	1909.1	1754.6	1604.8	1467.8
47.5°	3012.2	2951.8	2863.6	2774.2	2691.7	2547.7	2409.5	2257.4	2094.9	1917.2	1739.5
50°	3367.6	3319.9	3259.6	3151.6	3059.8	2939.1	2776.5	2610.4	2404.9	2228.4	2026.3
52.5°	3669.5	3632.3	3547.5	3470.9	3388.5	3274.7	3129.5	2970.4	2748.6	2554.7	2324.8
55°	4026.0	3999.3	3924.9	3877.3	3804.2	3695.0	3559.2	3411.7	3177.1	2965.8	2705.7
57.5°	4610.1	4589.2	4524.1	4504.4	4432.4	4337.2	4170.0	4012.0	3738.0	3475.5	3178.3
60°	5577.4	5535.6	5440.3	5391.6	5239.5	5111.7	4894.6	4677.4	4346.5	4012.0	3654.4
62.5°	6613.2	6495.9	6314.7	6159.1	5943.2	5721.4	5431.1	5098.9	4711.1	4314.0	3902.9
65°	7171.7	6972.0	6743.2	6495.9	6216.0	5889.7	5524.0	5125.7	4708.8	4289.6	3855.3
66°	7235.6	7010.3	6767.6	6492.4	6181.2	5834.0	5462.4	5044.4	4611.2	4202.5	3768.2
67.5°	7155.5	6919.7	6663.1	6357.7	6021.0	5661.0	5270.8	4836.5	4419.6	4005.1	3582.4
70°	6594.6	6360.0	6131.3	5809.6	5450.8	5088.5	4719.2	4233.8	3839.0	3458.1	3081.9
72.5°	5266.2	5107.1	4880.6	4605.4	4255.9	3830.9	3523.2	3088.9	2746.3	2377.0	2085.6
75°	3290.9	3066.8	2786.9	2436.3	2169.2	1824.3	1644.3	1314.5	1119.4	948.7	783.8
77.5°	1682.6	1514.2	1318.0	1120.6	931.3	743.2	574.8	406.4	274.0	190.4	141.7
80°	1390.0	1241.4	1078.8	898.8	731.6	567.8	408.8	278.7	177.7	116.1	90.6
82.5°	1148.5	1023.0	877.9	710.7	565.5	445.9	310.0	202.1	125.4	81.3	63.9
85°	488.9	443.6	342.6	271.7	204.4	151.0	105.7	70.8	49.9	40.6	37.2
87.5°	20.9	23.2	22.1	17.4	12.8	12.8	11.6	9.3	9.3	9.3	9.3
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°	182.3	182.3	182.3	182.3	182.3	182.3	182.3	182.3	182.3	182.3	182.3
2.5°	190.4	189.3	188.1	188.1	187.0	185.8	178.8	173.0	166.1	161.4	156.8
5°	198.6	197.4	195.1	193.9	191.6	190.4	175.3	162.6	152.1	144.0	138.2
7.5°	206.7	205.5	202.1	198.6	197.4	195.1	170.7	154.4	140.5	131.2	125.4
10°	217.1	213.7	210.2	205.5	202.1	198.6	166.1	145.2	130.1	121.9	116.1
12.5°	232.2	226.4	220.6	214.8	210.2	204.4	163.7	137.0	121.9	112.6	106.8
15°	249.7	241.5	234.6	227.6	219.5	213.7	159.1	130.1	115.0	105.7	98.7
17.5°	265.9	256.6	246.2	235.7	227.6	219.5	154.4	123.1	108.0	98.7	91.7
20°	289.1	275.2	262.4	249.7	238.1	227.6	147.5	116.1	102.2	91.7	84.8
22.5°	314.7	298.4	282.2	264.8	249.7	235.7	141.7	110.3	96.4	85.9	77.8
25°	347.2	327.5	305.4	283.3	265.9	247.3	135.9	104.5	90.6	80.1	72.0
27.5°	392.5	364.6	340.2	312.4	285.7	264.8	131.2	99.9	84.8	74.3	66.2
30°	454.0	413.4	375.1	344.9	313.5	283.3	126.6	94.1	80.1	68.5	59.2
32.5°	522.6	474.9	430.8	385.5	346.0	311.2	121.9	89.4	74.3	62.7	54.6
35°	607.3	546.9	487.7	435.5	387.8	341.4	117.3	84.8	69.7	56.9	48.8
37.5°	729.2	653.8	576.0	508.6	447.1	385.5	113.8	80.1	63.9	51.1	43.0
40°	896.5	798.9	703.7	612.0	531.8	455.2	109.2	75.5	59.2	46.4	38.3
42.5°	1077.6	959.2	833.8	730.4	620.1	523.7	104.5	70.8	54.6	41.8	33.7
45°	1302.9	1155.4	1003.3	862.8	728.1	603.8	99.9	66.2	48.8	37.2	29.0
47.5°	1549.1	1361.0	1189.1	1012.6	852.3	703.7	94.1	62.7	44.1	32.5	25.5
50°	1802.2	1603.7	1386.5	1185.6	995.2	803.6	88.3	56.9	39.5	29.0	20.9
52.5°	2075.1	1840.5	1618.7	1369.1	1147.3	934.8	82.4	52.3	36.0	25.5	17.4
55°	2422.3	2159.9	1899.8	1619.9	1352.8	1086.9	76.6	46.4	31.4	22.1	13.9
57.5°	2858.9	2547.7	2228.4	1912.5	1588.6	1286.6	72.0	40.6	26.7	18.6	11.6
60°	3271.2	2907.7	2521.0	2157.6	1791.8	1439.9	65.0	36.0	23.2	15.1	11.6
62.5°	3484.8	3070.3	2653.4	2252.8	1862.6	1494.5	58.1	30.2	19.7	12.8	10.5
65°	3432.6	3009.9	2605.8	2201.7	1819.6	1459.7	51.1	26.7	17.4	11.6	10.5
66°	3357.1	2939.1	2532.6	2148.3	1783.6	1422.5	47.6	25.5	16.3	11.6	9.3
67.5°	3192.2	2788.1	2400.3	2042.6	1684.9	1351.7	43.0	23.2	15.1	10.5	9.3
70°	2726.6	2359.6	2049.6	1731.4	1439.9	1139.2	34.8	19.7	12.8	9.3	9.3
72.5°	1804.5	1554.9	1348.2	1160.1	969.6	752.5	29.0	16.3	10.5	9.3	8.1
75°	680.5	615.4	528.4	474.9	414.6	363.5	23.2	10.5	8.1	8.1	8.1
77.5°	120.8	111.5	98.7	90.6	83.6	76.6	18.6	7.0	7.0	8.1	8.1
80°	81.3	75.5	68.5	62.7	58.1	52.3	12.8	5.8	7.0	7.0	8.1
82.5°	58.1	54.6	51.1	46.4	43.0	38.3	8.1	5.8	7.0	7.0	7.0
85°	34.8	32.5	30.2	27.9	24.4	23.2	5.8	5.8	5.8	7.0	7.0
87.5°	9.3	8.1	9.3	9.3	7.0	8.1	4.6	4.6	4.6	5.8	5.8
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: P150683

CATALOG NUMBER: TLM-F05-LED-E1-SL3-HSS-8030

CANDELA DISTRIBUTION (continued):

	145°	155°	165°	175°	180°
0°	182.3	182.3	182.3	182.3	182.3
2.5°	154.4	154.4	152.1	155.6	155.6
5°	133.5	133.5	132.4	133.5	133.5
7.5°	121.9	120.8	120.8	120.8	121.9
10°	111.5	110.3	110.3	110.3	110.3
12.5°	102.2	101.0	99.9	101.0	101.0
15°	94.1	91.7	91.7	91.7	91.7
17.5°	87.1	84.8	83.6	83.6	83.6
20°	80.1	76.6	76.6	76.6	76.6
22.5°	73.2	69.7	69.7	69.7	69.7
25°	66.2	62.7	62.7	62.7	62.7
27.5°	60.4	56.9	56.9	56.9	56.9
30°	53.4	51.1	51.1	52.3	51.1
32.5°	48.8	45.3	45.3	46.4	46.4
35°	43.0	40.6	40.6	40.6	40.6
37.5°	37.2	34.8	34.8	34.8	34.8
40°	32.5	30.2	29.0	30.2	30.2
42.5°	27.9	25.5	24.4	24.4	24.4
45°	24.4	20.9	19.7	20.9	20.9
47.5°	19.7	17.4	17.4	18.6	18.6
50°	15.1	15.1	16.3	18.6	18.6
52.5°	13.9	13.9	16.3	18.6	18.6
55°	12.8	13.9	16.3	17.4	18.6
57.5°	11.6	13.9	16.3	17.4	17.4
60°	11.6	12.8	15.1	17.4	17.4
62.5°	10.5	11.6	13.9	16.3	16.3
65°	10.5	11.6	13.9	16.3	16.3
66°	10.5	11.6	13.9	16.3	16.3
67.5°	10.5	11.6	13.9	16.3	16.3
70°	10.5	11.6	13.9	15.1	15.1
72.5°	9.3	10.5	12.8	15.1	15.1
75°	9.3	10.5	12.8	15.1	15.1
77.5°	9.3	10.5	12.8	15.1	15.1
80°	9.3	10.5	12.8	13.9	15.1
82.5°	8.1	10.5	11.6	13.9	13.9
85°	8.1	9.3	11.6	12.8	13.9
87.5°	7.0	8.1	9.3	11.6	11.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)