

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: P152354

Luminaire Tested: **TLM-F01-LED-E1-SL4-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P152354
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33680)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TLM-F01-LED-E1-SL4-7030
Description: TALON MEDIUM LED SITE LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL
Light Source: (7) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2227.4 lumens
Efficiency: N/A
Efficacy: 86.0 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.07 / 1.36
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
CIE Type: Direct

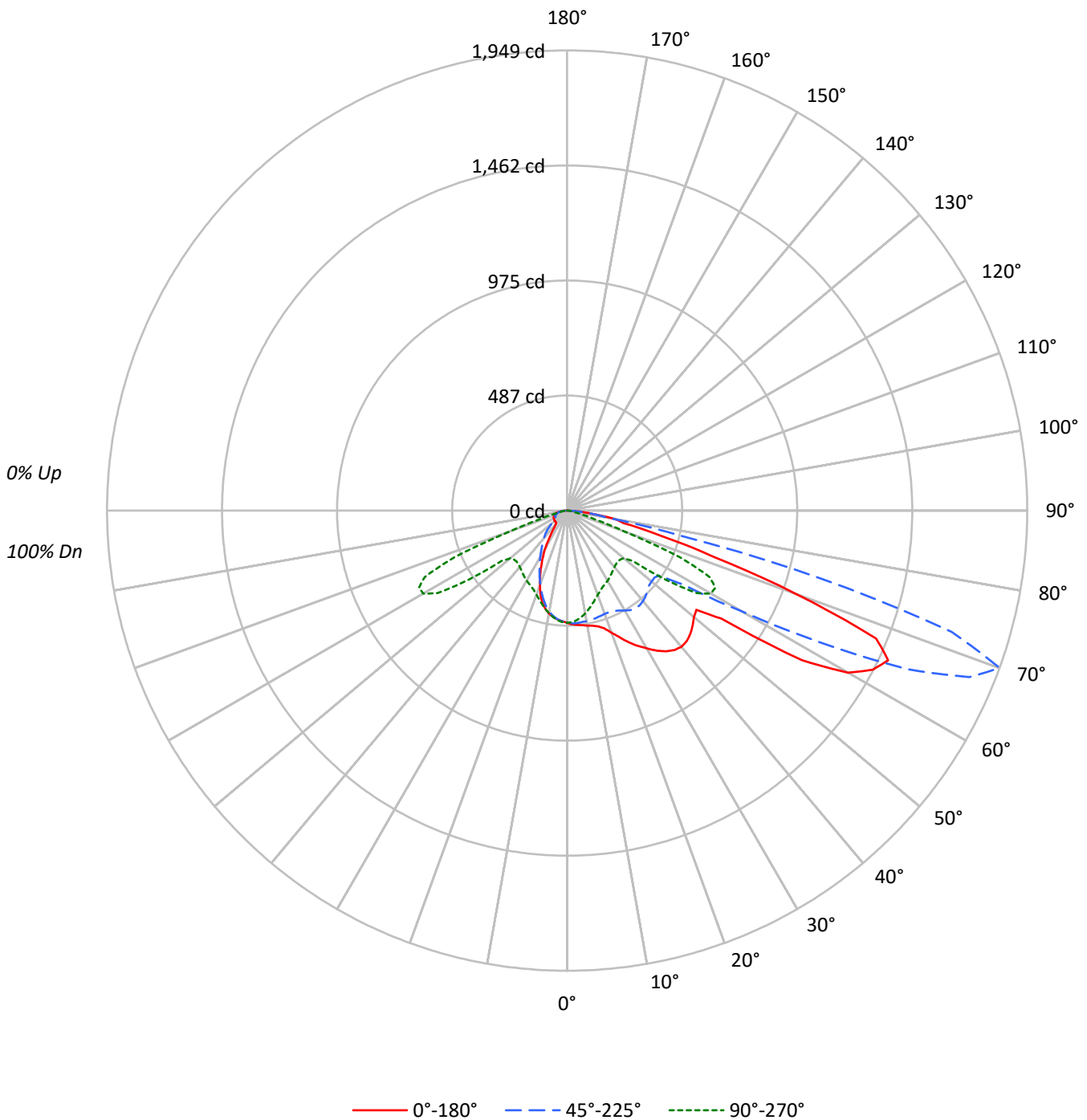
Input Watts (W): 25.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	100	94	89	103	97	92	88	93	89	85	89	86	82	85	82	80	78					78			
2	93	83	74	67	90	81	73	66	77	70	64	73	68	63	70	66	61	59					59			
3	83	70	59	51	80	68	58	51	65	57	50	62	55	49	59	53	48	45					45			
4	74	60	49	41	72	58	48	40	55	47	40	53	45	39	51	44	39	36					36			
5	67	52	41	33	65	51	41	33	48	40	33	46	38	32	44	37	32	29					29			
6	61	46	36	28	59	45	35	28	43	34	28	41	33	27	39	32	27	25					25			
7	57	41	31	24	55	40	31	24	39	30	24	37	29	23	36	29	23	21					21			
8	53	37	28	21	51	36	27	21	35	27	21	34	26	21	32	26	20	18					18			
9	49	34	25	19	47	33	25	19	32	24	18	31	24	18	30	23	18	16					16			
10	46	31	23	17	44	31	22	17	30	22	17	29	21	16	28	21	16	14					14			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	30095	30095	30095
5°	30896	29631	29441
10°	31800	28405	28456
15°	33293	26902	26509
20°	37053	25537	22707
25°	42966	24899	18157
30°	49248	25048	13562
35°	56225	25237	8819
40°	62214	25763	6083
45°	66101	27212	6080
50°	69120	30920	6757
55°	87948	56597	7385
60°	173869	89024	8269
65°	224762	99781	9304
70°	191236	47170	10460
75°	100522	17345	12917
80°	74785	9444	14038
85°	43298	9154	14094



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.4	2.0
10°-20°	121.5	5.5
20°-30°	179.9	8.1
30°-40°	227.4	10.2
40°-50°	257.2	11.5
50°-60°	366.0	16.4
60°-70°	681.6	30.6
70°-80°	312.4	14.0
80°-90°	37.1	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°	345.9	15.5
0°-40°	573.3	25.7
0°-60°	1196.4	53.7
0°-90°	2227.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2227.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	475	475	475	475	475	
5°	486	478	466	462	463	47
15°	508	471	410	389	404	146
25°	615	469	356	278	260	286
35°	727	506	326	186	114	455
45°	738	481	304	122	68	568
55°	797	478	513	62	67	837
65°	1500	1589	666	55	62	1383
75°	411	1117	71	44	53	505
85°	60	52	13	20	19	75
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	475.3	475.3	475.3	475.3	475.3	475.3	475.3	475.3	475.3	475.3	475.3
2.5°	482.6	483.8	482.3	482.1	482.1	481.8	480.3	480.0	478.0	478.3	478.8
5°	486.1	486.6	485.6	485.3	484.8	483.8	482.6	481.0	479.5	478.0	476.8
7.5°	489.6	489.1	488.3	488.3	487.6	486.1	483.6	481.6	478.3	476.5	474.3
10°	494.6	493.9	492.9	492.4	491.1	488.8	485.3	482.6	478.5	475.0	471.2
12.5°	499.4	499.1	497.6	496.9	494.9	492.6	488.3	484.1	478.8	473.3	468.2
15°	507.9	506.9	505.4	503.9	500.7	497.6	491.1	486.1	478.5	471.2	463.5
17.5°	522.8	521.0	519.5	516.2	512.2	506.9	497.4	488.8	478.5	468.0	459.2
20°	549.9	546.1	544.1	539.9	532.8	523.3	508.4	494.6	479.3	465.7	453.9
22.5°	580.6	578.1	575.3	572.5	561.5	547.7	527.5	506.9	483.8	464.7	449.6
25°	615.0	611.7	610.2	605.5	595.2	579.3	551.9	523.3	494.1	468.7	449.6
27.5°	645.7	644.7	644.4	638.9	629.1	610.5	578.1	543.6	508.2	477.0	453.4
30°	673.6	672.6	672.1	669.0	657.7	635.6	600.4	561.7	523.5	488.6	460.4
32.5°	703.2	700.0	698.4	692.7	679.9	654.0	613.8	573.5	535.6	499.9	468.2
35°	727.4	724.6	721.6	713.3	695.2	664.5	619.5	577.6	540.4	506.2	472.3
37.5°	744.9	742.2	737.9	727.4	705.0	668.0	619.3	576.3	538.6	505.2	473.0
40°	752.7	750.0	745.4	732.1	706.7	666.0	614.5	570.5	533.3	499.9	470.0
42.5°	749.7	747.7	741.9	729.1	701.2	657.0	605.0	559.7	523.3	491.4	463.2
45°	738.2	736.7	731.1	717.6	688.6	642.4	590.9	546.1	511.2	480.8	454.2
47.5°	720.8	720.3	714.8	701.5	672.8	627.8	576.3	532.8	499.1	470.5	446.6
50°	701.7	699.2	696.4	684.1	658.0	615.3	565.7	524.5	492.4	466.7	443.3
52.5°	689.7	688.9	686.4	675.3	650.2	608.0	561.0	521.5	491.9	466.0	441.6
55°	796.7	798.5	775.4	727.4	685.1	628.1	575.3	536.8	504.2	478.0	460.2
57.5°	1178.5	1170.7	1131.0	1035.7	928.2	786.2	683.9	621.8	581.3	585.9	594.9
60°	1373.0	1371.5	1364.2	1327.3	1255.7	1147.6	1027.7	890.2	846.5	851.3	854.8
62.5°	1460.0	1462.2	1467.8	1454.0	1435.1	1403.7	1343.9	1288.6	1230.0	1208.1	1149.6
65°	1500.2	1504.2	1516.8	1524.6	1531.9	1537.4	1561.0	1625.9	1668.6	1588.7	1402.7
67.5°	1417.0	1436.4	1477.8	1518.3	1554.5	1606.0	1685.9	1836.5	1941.3	1843.0	1573.3
70°	1033.0	1059.4	1106.9	1232.0	1365.7	1482.6	1637.4	1866.6	2024.7	1948.8	1615.6
72.5°	647.7	655.0	676.1	722.1	821.4	971.4	1242.1	1585.9	1768.4	1707.8	1365.5
75°	410.9	413.4	412.7	423.2	440.1	472.8	579.8	936.7	1211.4	1116.9	761.0
77.5°	244.8	248.6	250.1	253.3	261.4	272.9	281.7	318.7	507.9	493.1	276.2
80°	205.1	208.1	205.6	204.8	199.8	196.3	200.6	196.3	182.2	175.4	161.6
82.5°	108.6	108.3	107.6	114.9	129.7	141.2	150.0	148.0	134.0	114.1	96.8
85°	59.6	61.6	61.6	64.1	61.8	62.1	64.1	67.6	62.6	52.3	42.7
87.5°	5.0	7.8	6.3	7.8	10.6	7.5	7.3	7.3	6.3	4.5	4.0
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	475.3	475.3	475.3	475.3	475.3	475.3	475.3	475.3	475.3	475.3	475.3
2.5°	477.5	477.0	476.0	475.3	475.3	474.0	473.3	472.8	472.5	471.5	471.5
5°	476.0	474.3	472.5	471.2	470.5	469.2	467.2	466.2	465.0	464.0	463.5
7.5°	472.8	469.5	466.7	464.7	462.2	460.2	457.7	455.4	453.2	452.1	451.6
10°	467.7	463.5	459.2	455.4	451.9	448.4	445.1	441.8	439.1	437.1	435.1
12.5°	463.0	456.4	450.9	445.4	439.8	435.6	431.0	426.3	422.2	418.5	417.5
15°	456.4	448.9	441.8	435.1	428.3	421.2	415.7	410.4	403.9	399.6	396.3
17.5°	450.4	441.3	432.8	424.7	416.5	409.2	400.9	393.8	387.3	380.8	376.0
20°	443.9	434.0	425.0	416.0	406.9	397.6	388.1	379.0	371.0	363.2	355.4
22.5°	438.1	428.0	419.2	409.4	399.4	388.8	377.8	366.4	357.1	347.1	338.0
25°	434.6	423.5	414.4	404.9	393.8	382.3	369.7	356.4	345.1	333.5	322.7
27.5°	434.6	420.2	410.9	401.4	390.1	377.8	363.9	349.4	336.5	323.7	310.4
30°	438.3	420.7	408.2	398.1	386.5	373.2	357.9	342.6	328.5	313.4	300.6
32.5°	441.8	421.7	406.2	393.3	380.0	366.9	351.4	335.0	319.4	305.1	291.5
35°	444.1	421.7	402.4	386.0	371.0	358.1	342.8	326.5	310.6	296.6	284.0
37.5°	444.4	419.7	396.3	377.8	361.9	348.6	334.0	318.7	303.6	290.5	280.0
40°	441.8	415.7	390.3	369.0	352.4	338.8	325.5	311.7	298.1	287.3	278.2
42.5°	437.3	411.4	384.5	361.9	344.6	330.5	318.2	306.4	294.6	285.3	277.7
45°	430.5	405.6	379.3	357.6	340.6	325.7	313.7	303.9	293.8	286.0	278.5
47.5°	424.5	403.6	381.0	360.4	342.6	327.2	314.9	306.6	298.8	293.6	283.3
50°	423.2	402.6	381.8	362.7	344.6	329.0	318.2	313.9	311.7	308.4	292.5
52.5°	419.7	402.4	387.3	376.7	365.2	357.9	346.6	350.6	348.1	336.5	307.9
55°	456.7	461.7	475.8	495.9	514.5	518.7	517.5	512.7	487.3	419.2	344.8
57.5°	627.8	656.2	682.9	694.7	693.2	679.9	670.3	650.9	614.3	531.3	417.7
60°	865.6	870.1	856.0	835.2	800.0	770.6	739.2	703.0	649.7	568.5	462.4
62.5°	1084.5	1023.7	961.1	902.3	848.7	802.0	758.3	707.7	638.4	553.7	456.7
65°	1239.1	1110.4	1011.6	927.2	851.5	786.2	731.6	666.0	587.9	511.5	423.2
67.5°	1318.7	1121.4	969.9	852.3	744.9	654.5	581.8	518.0	459.9	426.5	370.5
70°	1229.8	951.8	740.7	607.7	479.3	384.3	303.6	254.8	238.0	269.7	280.5
72.5°	916.4	619.5	440.6	340.8	261.1	208.1	159.6	125.4	102.0	107.1	139.0
75°	433.3	267.4	189.0	143.8	114.4	94.8	77.4	70.9	59.3	49.3	46.2
77.5°	168.6	122.9	101.5	74.4	52.8	42.5	36.2	34.9	35.7	34.7	34.2
80°	128.4	87.0	54.5	40.0	34.4	30.4	26.9	25.9	26.4	27.6	28.9
82.5°	71.6	44.7	33.2	28.9	25.9	22.1	20.1	18.6	18.8	20.4	23.1
85°	27.6	21.6	19.9	19.1	17.8	14.3	12.3	12.6	14.3	17.1	17.1
87.5°	3.0	3.0	4.0	3.0	3.0	3.0	2.8	3.3	3.5	4.5	5.3
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	475.3	475.3	475.3	475.3	475.3	475.3	475.3	475.3	475.3	475.3	475.3
2.5°	471.0	471.0	471.0	470.5	470.7	469.7	469.7	469.0	470.2	469.5	469.2
5°	463.7	463.5	462.4	462.4	462.4	462.4	463.2	461.2	462.7	462.7	461.9
7.5°	451.4	451.4	448.6	450.1	449.6	450.4	451.4	450.4	451.9	452.9	452.1
10°	434.3	434.3	432.0	433.8	433.0	434.8	436.6	435.6	436.6	438.1	438.6
12.5°	415.5	414.4	412.4	413.2	413.2	414.2	414.9	416.2	417.5	419.5	420.5
15°	393.6	392.1	389.6	389.6	388.1	388.6	390.1	390.6	393.1	395.8	399.1
17.5°	371.2	367.4	364.7	361.4	358.9	360.9	362.7	363.9	365.9	370.2	372.5
20°	350.1	342.6	337.3	333.0	330.2	331.5	333.8	335.3	337.0	338.0	338.8
22.5°	329.2	320.7	313.4	308.1	303.6	304.9	303.9	303.1	304.4	301.1	300.8
25°	311.1	301.1	291.3	285.0	279.5	277.7	272.4	271.2	267.7	264.9	262.9
27.5°	298.1	285.0	274.2	266.9	258.1	251.6	244.8	238.0	234.2	229.7	227.5
30°	287.8	274.0	261.1	248.8	237.3	227.2	218.2	209.4	203.3	196.8	192.5
32.5°	278.2	265.4	249.8	233.0	217.4	206.1	194.3	184.2	174.7	166.1	159.8
35°	271.7	257.4	237.5	216.9	199.3	186.0	173.4	159.1	147.5	136.5	129.7
37.5°	268.2	250.6	226.2	203.3	183.7	168.6	153.1	136.5	122.4	112.1	101.8
40°	265.4	243.8	216.1	191.3	170.7	152.6	134.5	114.9	99.3	88.5	80.4
42.5°	262.4	236.3	207.3	181.7	158.8	137.7	115.9	95.0	80.2	72.6	69.1
45°	259.1	229.7	199.1	172.7	147.3	121.6	96.5	77.2	68.4	65.8	65.8
47.5°	258.4	225.4	193.0	163.9	134.2	103.0	78.7	66.6	64.1	64.6	65.6
50°	261.4	224.2	187.7	153.6	116.9	83.4	66.6	62.6	63.1	64.6	66.1
52.5°	268.7	225.2	182.2	139.2	96.3	68.9	61.6	61.3	62.8	65.1	66.6
55°	281.0	225.2	171.7	117.9	76.9	61.8	59.8	60.8	62.8	64.8	66.1
57.5°	307.4	222.9	153.1	94.2	64.3	59.3	59.3	60.6	62.3	64.3	65.3
60°	338.8	219.9	126.9	72.9	58.1	57.3	59.1	60.6	62.1	63.8	64.8
62.5°	340.8	212.1	100.5	60.3	54.8	56.0	58.8	60.8	61.3	62.6	63.8
65°	313.2	185.0	79.9	54.0	53.3	55.3	58.1	59.6	59.8	60.3	61.6
67.5°	274.2	150.8	64.6	51.0	51.8	54.0	55.5	56.8	57.6	58.8	59.1
70°	225.2	121.1	55.3	48.0	48.8	51.3	52.5	53.8	55.3	56.8	56.0
72.5°	159.6	94.2	48.5	44.7	45.7	48.0	49.5	50.5	51.8	53.3	52.3
75°	67.9	65.8	42.0	40.5	42.0	43.5	45.0	46.5	47.8	48.5	48.5
77.5°	34.7	38.7	36.2	36.2	37.2	38.7	40.0	41.5	42.2	43.0	44.0
80°	29.4	29.9	30.4	31.4	32.4	33.9	35.2	36.4	36.7	36.9	37.4
82.5°	24.4	25.4	25.9	27.4	28.1	28.7	29.4	29.4	29.9	29.9	29.2
85°	17.6	18.8	19.6	19.9	19.6	19.9	20.1	20.6	21.9	21.9	20.9
87.5°	5.0	4.8	6.0	6.3	6.8	7.8	8.8	10.6	11.1	11.6	11.6
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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CATALOG NUMBER: TLM-F01-LED-E1-SL4-7030

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	475.3	475.3	475.3	475.3
2.5°	469.0	469.5	468.5	468.7
5°	461.9	463.0	461.7	463.2
7.5°	452.9	454.4	454.2	453.9
10°	439.8	441.8	441.8	442.6
12.5°	423.2	424.5	425.5	426.0
15°	400.9	403.1	404.4	404.4
17.5°	374.0	375.5	376.2	375.2
20°	339.8	339.3	339.5	337.0
22.5°	300.3	301.1	298.8	299.3
25°	261.6	260.4	261.4	259.9
27.5°	224.2	224.4	221.7	222.9
30°	188.5	187.2	183.7	185.5
32.5°	154.1	150.8	147.0	144.8
35°	121.6	116.6	114.9	114.1
37.5°	95.5	90.0	88.2	86.2
40°	75.9	73.9	73.1	73.6
42.5°	68.1	68.1	68.6	68.9
45°	66.1	66.9	67.6	67.9
47.5°	66.4	67.1	68.1	68.4
50°	66.9	67.6	68.4	68.6
52.5°	67.1	67.1	67.6	67.9
55°	66.6	66.4	66.6	66.9
57.5°	65.6	65.1	65.3	66.1
60°	65.1	64.3	64.8	65.3
62.5°	63.8	63.6	64.1	64.3
65°	61.1	61.3	62.1	62.1
67.5°	58.6	58.8	59.1	59.3
70°	55.5	55.8	56.3	56.5
72.5°	52.0	53.0	53.8	54.8
75°	49.3	50.3	51.8	52.8
77.5°	44.5	45.2	47.0	48.3
80°	37.7	37.4	37.7	38.5
82.5°	28.9	28.9	28.7	28.4
85°	20.4	20.1	19.4	19.4
87.5°	11.1	10.8	10.6	10.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)