

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: P152355

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P152355
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
Description: TALON MEDIUM LED SITE LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL
Light Source: (7) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

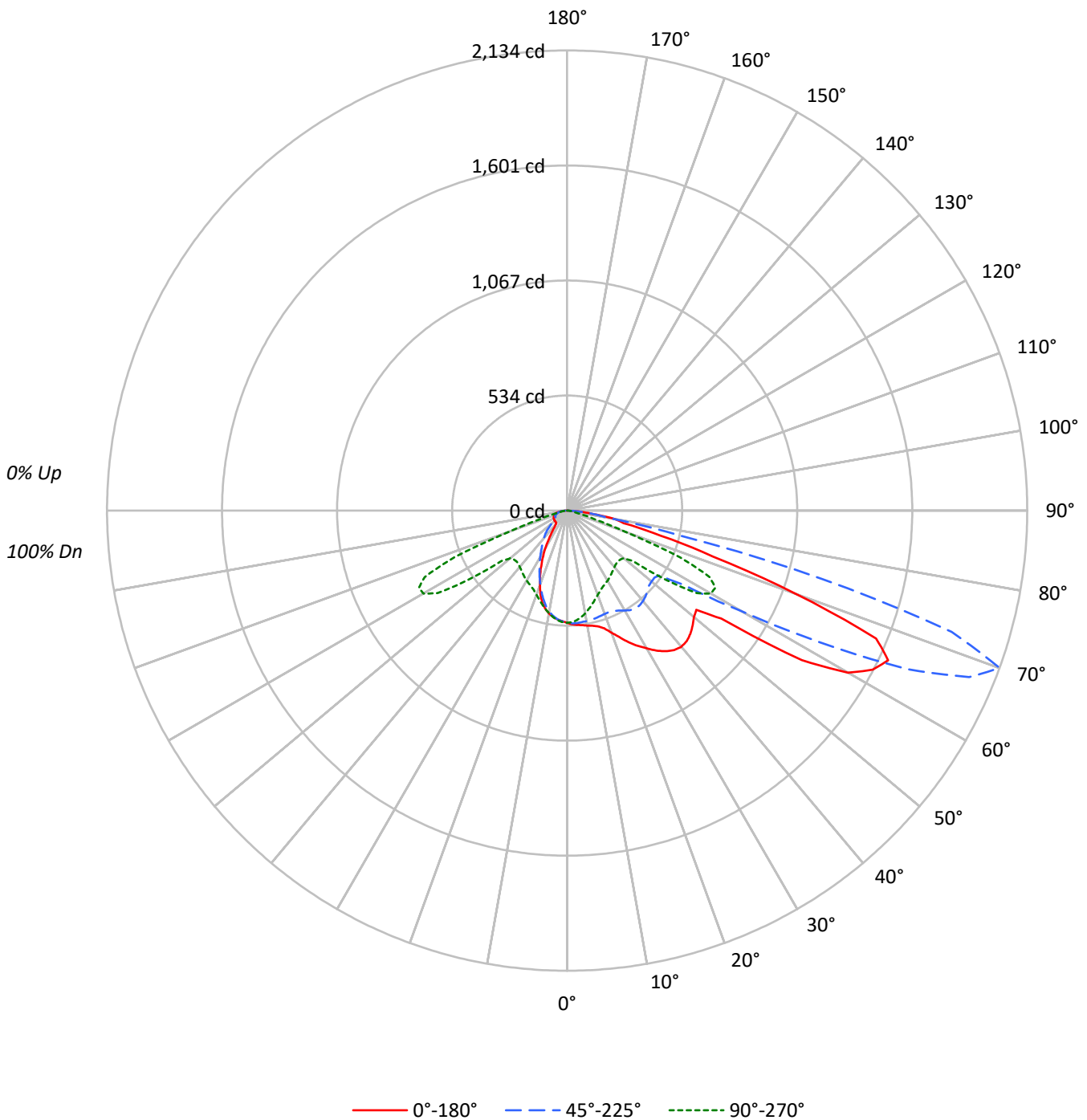
Lumens per Lamp: N/A
Luminaire Lumens: 2438.7 lumens
Efficiency: N/A
Efficacy: 94.2 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.07 / 1.36
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	106	100	94	89	103	97	92	88	93	89	85	89	86	82	85	82	80	78
2	93	83	74	67	90	81	73	66	77	70	64	73	68	63	70	66	61	59
3	83	70	59	51	80	68	58	51	65	57	50	62	55	49	59	53	48	45
4	74	60	49	41	72	58	48	40	55	47	40	53	45	39	51	44	39	36
5	67	52	41	33	65	51	41	33	48	40	33	46	38	32	44	37	32	29
6	61	46	36	28	59	45	35	28	43	34	28	41	33	27	39	32	27	25
7	57	41	31	24	55	40	31	24	39	30	24	37	29	23	36	29	23	21
8	53	37	28	21	51	36	27	21	35	27	21	34	26	21	32	26	20	18
9	49	34	25	19	47	33	25	19	32	24	18	31	24	18	30	23	18	16
10	46	31	23	17	44	31	22	17	30	22	17	29	21	16	28	21	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	32950	32950	32950
5°	33826	32441	32231
10°	34815	31105	31157
15°	36453	29459	29026
20°	40570	27963	24863
25°	47046	27260	19876
30°	53920	27424	14849
35°	61559	27633	9654
40°	68116	28202	6662
45°	72369	29791	6653
50°	75681	33856	7398
55°	96293	61973	8081
60°	190369	97470	9054
65°	246081	109250	10188
70°	209379	51650	11459
75°	110063	18984	14140
80°	81859	10319	15351
85°	47367	10025	15401



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.6	2.0
10°-20°	133.1	5.5
20°-30°	197.0	8.1
30°-40°	249.0	10.2
40°-50°	281.6	11.5
50°-60°	400.7	16.4
60°-70°	746.2	30.6
70°-80°	342.0	14.0
80°-90°	40.6	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°	378.7	15.5
0°-40°	627.7	25.7
0°-60°	1309.9	53.7
0°-90°	2438.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2438.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	520	520	520	520	520	
5°	532	523	510	506	507	51
15°	556	516	449	425	443	160
25°	673	513	390	304	284	313
35°	796	554	358	204	125	498
45°	808	526	333	133	74	622
55°	872	523	561	68	73	917
65°	1642	1739	729	60	68	1515
75°	450	1223	78	48	58	553
85°	65	57	14	22	21	82
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°	520.4	520.4	520.4	520.4	520.4	520.4	520.4	520.4	520.4	520.4	520.4
2.5°	528.3	529.7	528.1	527.8	527.8	527.5	525.9	525.6	523.4	523.7	524.2
5°	532.2	532.7	531.6	531.4	530.8	529.7	528.3	526.7	525.0	523.4	522.0
7.5°	536.0	535.5	534.7	534.7	533.8	532.2	529.4	527.2	523.7	521.7	519.3
10°	541.5	540.7	539.6	539.1	537.7	535.2	531.4	528.3	523.9	520.1	516.0
12.5°	546.8	546.5	544.8	544.0	541.8	539.3	534.7	530.0	524.2	518.2	512.7
15°	556.1	555.0	553.4	551.7	548.1	544.8	537.7	532.2	523.9	516.0	507.4
17.5°	572.4	570.4	568.8	565.2	560.8	555.0	544.6	535.2	523.9	512.4	502.7
20°	602.1	598.0	595.8	591.1	583.4	572.9	556.7	541.5	524.8	509.9	497.0
22.5°	635.7	632.9	629.9	626.8	614.7	599.6	577.6	555.0	529.7	508.8	492.3
25°	673.4	669.8	668.1	662.9	651.6	634.3	604.3	572.9	541.0	513.2	492.3
27.5°	706.9	705.8	705.5	699.5	688.8	668.4	632.9	595.2	556.4	522.3	496.4
30°	737.5	736.4	735.8	732.5	720.1	695.9	657.4	615.0	573.2	534.9	504.1
32.5°	769.9	766.4	764.7	758.4	744.3	716.0	672.0	627.9	586.4	547.3	512.7
35°	796.4	793.3	790.0	780.9	761.1	727.6	678.3	632.4	591.6	554.2	517.1
37.5°	815.6	812.6	807.9	796.4	771.9	731.4	678.0	631.0	589.7	553.1	517.9
40°	824.1	821.1	816.2	801.6	773.8	729.2	672.8	624.6	583.9	547.3	514.6
42.5°	820.8	818.6	812.3	798.3	767.7	719.3	662.3	612.8	572.9	538.0	507.1
45°	808.2	806.5	800.5	785.6	754.0	703.3	646.9	598.0	559.7	526.4	497.2
47.5°	789.2	788.7	782.6	768.0	736.6	687.4	631.0	583.4	546.5	515.1	489.0
50°	768.3	765.5	762.5	749.0	720.4	673.6	619.4	574.3	539.1	511.0	485.4
52.5°	755.1	754.3	751.5	739.4	711.9	665.6	614.2	571.0	538.5	510.2	483.5
55°	872.3	874.2	848.9	796.4	750.1	687.7	629.9	587.8	552.0	523.4	503.8
57.5°	1290.3	1281.8	1238.3	1134.0	1016.2	860.7	748.8	680.8	636.5	641.4	651.3
60°	1503.3	1501.6	1493.6	1453.2	1374.8	1256.4	1125.2	974.7	926.8	932.0	935.9
62.5°	1598.5	1601.0	1607.0	1591.9	1571.2	1536.9	1471.4	1410.8	1346.7	1322.8	1258.7
65°	1642.5	1646.9	1660.7	1669.2	1677.2	1683.2	1709.1	1780.1	1826.9	1739.4	1535.8
67.5°	1551.4	1572.6	1618.0	1662.3	1702.0	1758.4	1845.9	2010.7	2125.5	2017.9	1722.6
70°	1131.0	1159.9	1211.9	1348.9	1495.3	1623.3	1792.8	2043.7	2216.8	2133.7	1768.8
72.5°	709.1	717.1	740.2	790.6	899.3	1063.6	1359.9	1736.4	1936.1	1869.8	1495.0
75°	449.9	452.7	451.8	463.4	481.8	517.6	634.8	1025.6	1326.3	1222.9	833.2
77.5°	268.0	272.1	273.8	277.4	286.2	298.8	308.5	348.9	556.1	539.9	302.4
80°	224.5	227.8	225.1	224.3	218.8	214.9	219.6	214.9	199.5	192.1	176.9
82.5°	118.9	118.6	117.8	125.8	142.0	154.6	164.3	162.1	146.7	124.9	105.9
85°	65.2	67.4	67.4	70.2	67.7	68.0	70.2	74.0	68.5	57.2	46.8
87.5°	5.5	8.5	6.9	8.5	11.6	8.3	8.0	8.0	6.9	5.0	4.4
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°	520.4	520.4	520.4	520.4	520.4	520.4	520.4	520.4	520.4	520.4	520.4
2.5°	522.8	522.3	521.2	520.4	520.4	519.0	518.2	517.6	517.3	516.2	516.2
5°	521.2	519.3	517.3	516.0	515.1	513.8	511.6	510.4	509.1	508.0	507.4
7.5°	517.6	514.0	511.0	508.8	506.0	503.8	501.1	498.6	496.1	495.0	494.5
10°	512.1	507.4	502.7	498.6	494.8	490.9	487.3	483.8	480.7	478.5	476.3
12.5°	506.9	499.7	493.7	487.6	481.6	476.9	471.9	466.7	462.3	458.2	457.1
15°	499.7	491.5	483.8	476.3	468.9	461.2	455.1	449.4	442.2	437.5	434.0
17.5°	493.1	483.2	473.9	465.0	456.0	448.0	438.9	431.2	424.0	416.9	411.7
20°	486.0	475.2	465.3	455.4	445.5	435.3	424.9	415.0	406.2	397.6	389.1
22.5°	479.6	468.6	459.0	448.3	437.3	425.7	413.6	401.2	391.0	380.0	370.1
25°	475.8	463.7	453.8	443.3	431.2	418.5	404.8	390.2	377.8	365.2	353.3
27.5°	475.8	460.1	449.9	439.5	427.1	413.6	398.5	382.5	368.5	354.4	339.8
30°	479.9	460.6	446.9	435.9	423.2	408.6	391.8	375.1	359.7	343.1	329.1
32.5°	483.8	461.7	444.7	430.6	416.1	401.8	384.7	366.8	349.7	334.1	319.2
35°	486.2	461.7	440.6	422.7	406.2	392.1	375.3	357.5	340.1	324.7	310.9
37.5°	486.5	459.5	434.0	413.6	396.3	381.7	365.7	348.9	332.4	318.1	306.5
40°	483.8	455.1	427.3	404.0	385.8	370.9	356.4	341.2	326.4	314.5	304.6
42.5°	478.8	450.5	421.0	396.3	377.3	361.9	348.4	335.4	322.5	312.3	304.1
45°	471.4	444.1	415.2	391.6	372.9	356.6	343.4	332.7	321.7	313.1	304.9
47.5°	464.8	441.9	417.2	394.6	375.1	358.3	344.8	335.7	327.2	321.4	310.1
50°	463.4	440.8	418.0	397.1	377.3	360.2	348.4	343.7	341.2	337.6	320.3
52.5°	459.5	440.6	424.0	412.5	399.8	391.8	379.5	383.9	381.1	368.5	337.1
55°	500.0	505.5	520.9	542.9	563.3	568.0	566.6	561.4	533.6	459.0	377.5
57.5°	687.4	718.5	747.7	760.6	758.9	744.3	733.9	712.7	672.5	581.7	457.3
60°	947.7	952.7	937.2	914.4	875.9	843.7	809.3	769.7	711.3	622.4	506.3
62.5°	1187.4	1120.8	1052.3	987.9	929.3	878.1	830.2	774.9	698.9	606.2	500.0
65°	1356.6	1215.7	1107.6	1015.1	932.3	860.7	801.0	729.2	643.6	560.0	463.4
67.5°	1443.8	1227.8	1061.9	933.1	815.6	716.6	637.0	567.1	503.6	467.0	405.6
70°	1346.4	1042.1	810.9	665.4	524.8	420.7	332.4	279.0	260.6	295.3	307.1
72.5°	1003.3	678.3	482.4	373.1	285.9	227.8	174.7	137.3	111.7	117.2	152.2
75°	474.4	292.8	206.9	157.4	125.2	103.7	84.8	77.6	64.9	53.9	50.6
77.5°	184.6	134.6	111.2	81.5	57.8	46.5	39.6	38.2	39.1	38.0	37.4
80°	140.6	95.2	59.7	43.8	37.7	33.3	29.4	28.3	28.9	30.3	31.6
82.5°	78.4	49.0	36.3	31.6	28.3	24.2	22.0	20.4	20.6	22.3	25.3
85°	30.3	23.7	21.7	20.9	19.5	15.7	13.5	13.8	15.7	18.7	18.7
87.5°	3.3	3.3	4.4	3.3	3.3	3.3	3.0	3.6	3.9	5.0	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



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	520.4	520.4	520.4	520.4	520.4	520.4	520.4	520.4	520.4	520.4	520.4
2.5°	515.7	515.7	515.7	515.1	515.4	514.3	514.3	513.5	514.9	514.0	513.8
5°	507.7	507.4	506.3	506.3	506.3	506.3	507.1	504.9	506.6	506.6	505.8
7.5°	494.2	494.2	491.2	492.8	492.3	493.1	494.2	493.1	494.8	495.9	495.0
10°	475.5	475.5	473.0	475.0	474.1	476.1	478.0	476.9	478.0	479.6	480.2
12.5°	454.9	453.8	451.6	452.4	452.4	453.5	454.3	455.7	457.1	459.3	460.4
15°	430.9	429.3	426.5	426.5	424.9	425.4	427.1	427.6	430.4	433.4	437.0
17.5°	406.4	402.3	399.3	395.7	392.9	395.2	397.1	398.5	400.7	405.3	407.8
20°	383.3	375.1	369.3	364.6	361.6	363.0	365.4	367.1	369.0	370.1	370.9
22.5°	360.5	351.1	343.1	337.4	332.4	333.8	332.7	331.9	333.2	329.7	329.4
25°	340.7	329.7	318.9	312.0	306.0	304.1	298.3	296.9	293.1	290.0	287.8
27.5°	326.4	312.0	300.2	292.2	282.6	275.5	268.0	260.6	256.5	251.5	249.0
30°	315.1	299.9	285.9	272.4	259.8	248.8	238.9	229.2	222.6	215.5	210.8
32.5°	304.6	290.6	273.5	255.1	238.0	225.6	212.7	201.7	191.2	181.9	175.0
35°	297.5	281.8	260.0	237.5	218.2	203.6	189.9	174.2	161.5	149.4	142.0
37.5°	293.6	274.3	247.7	222.6	201.2	184.6	167.6	149.4	134.0	122.7	111.4
40°	290.6	266.9	236.7	209.4	186.8	167.0	147.2	125.8	108.7	96.9	88.1
42.5°	287.3	258.7	227.0	199.0	173.9	150.8	126.9	104.0	87.8	79.5	75.7
45°	283.7	251.5	217.9	189.0	161.3	133.2	105.7	84.5	74.8	72.1	72.1
47.5°	282.9	246.8	211.3	179.4	146.9	112.8	86.1	72.9	70.2	70.7	71.8
50°	286.2	245.5	205.6	168.1	128.0	91.4	72.9	68.5	69.1	70.7	72.4
52.5°	294.2	246.6	199.5	152.4	105.4	75.4	67.4	67.1	68.8	71.3	72.9
55°	307.6	246.6	187.9	129.1	84.2	67.7	65.5	66.6	68.8	71.0	72.4
57.5°	336.5	244.1	167.6	103.2	70.4	64.9	64.9	66.3	68.2	70.4	71.5
60°	370.9	240.8	139.0	79.8	63.6	62.7	64.7	66.3	68.0	69.9	71.0
62.5°	373.1	232.2	110.1	66.0	60.0	61.4	64.4	66.6	67.1	68.5	69.9
65°	342.9	202.5	87.5	59.2	58.3	60.5	63.6	65.2	65.5	66.0	67.4
67.5°	300.2	165.1	70.7	55.9	56.7	59.2	60.8	62.2	63.0	64.4	64.7
70°	246.6	132.6	60.5	52.6	53.4	56.1	57.5	58.9	60.5	62.2	61.4
72.5°	174.7	103.2	53.1	49.0	50.1	52.6	54.2	55.3	56.7	58.3	57.2
75°	74.3	72.1	46.0	44.3	46.0	47.6	49.3	50.9	52.3	53.1	53.1
77.5°	38.0	42.4	39.6	39.6	40.7	42.4	43.8	45.4	46.2	47.1	48.2
80°	32.2	32.7	33.3	34.4	35.5	37.1	38.5	39.9	40.2	40.5	41.0
82.5°	26.7	27.8	28.3	30.0	30.8	31.4	32.2	32.2	32.7	32.7	31.9
85°	19.3	20.6	21.5	21.7	21.5	21.7	22.0	22.6	23.9	23.9	22.8
87.5°	5.5	5.2	6.6	6.9	7.4	8.5	9.6	11.6	12.1	12.7	12.7
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: P152355

CATALOG NUMBER: TLM-F01-LED-E1-SL4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	520.4	520.4	520.4	520.4
2.5°	513.5	514.0	512.9	513.2
5°	505.8	506.9	505.5	507.1
7.5°	495.9	497.5	497.2	497.0
10°	481.6	483.8	483.8	484.6
12.5°	463.4	464.8	465.9	466.4
15°	438.9	441.4	442.8	442.8
17.5°	409.5	411.1	411.9	410.8
20°	372.0	371.5	371.8	369.0
22.5°	328.8	329.7	327.2	327.7
25°	286.5	285.1	286.2	284.5
27.5°	245.5	245.7	242.7	244.1
30°	206.4	205.0	201.2	203.1
32.5°	168.7	165.1	161.0	158.5
35°	133.2	127.7	125.8	124.9
37.5°	104.6	98.5	96.6	94.4
40°	83.1	80.9	80.1	80.6
42.5°	74.6	74.6	75.1	75.4
45°	72.4	73.2	74.0	74.3
47.5°	72.6	73.5	74.6	74.8
50°	73.2	74.0	74.8	75.1
52.5°	73.5	73.5	74.0	74.3
55°	72.9	72.6	72.9	73.2
57.5°	71.8	71.3	71.5	72.4
60°	71.3	70.4	71.0	71.5
62.5°	69.9	69.6	70.2	70.4
65°	66.9	67.1	68.0	68.0
67.5°	64.1	64.4	64.7	64.9
70°	60.8	61.1	61.6	61.9
72.5°	57.0	58.1	58.9	60.0
75°	53.9	55.0	56.7	57.8
77.5°	48.7	49.5	51.5	52.8
80°	41.3	41.0	41.3	42.1
82.5°	31.6	31.6	31.4	31.1
85°	22.3	22.0	21.2	21.2
87.5°	12.1	11.8	11.6	11.0
90°	0.0	0.0	0.0	0.0

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