

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: P156613

Luminaire Tested: **TLM-F01-LED-E1-T4-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P156613
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33673)
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-T4-8030
Description: TALON MEDIUM LED SITE LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 4
Light Source: (7) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

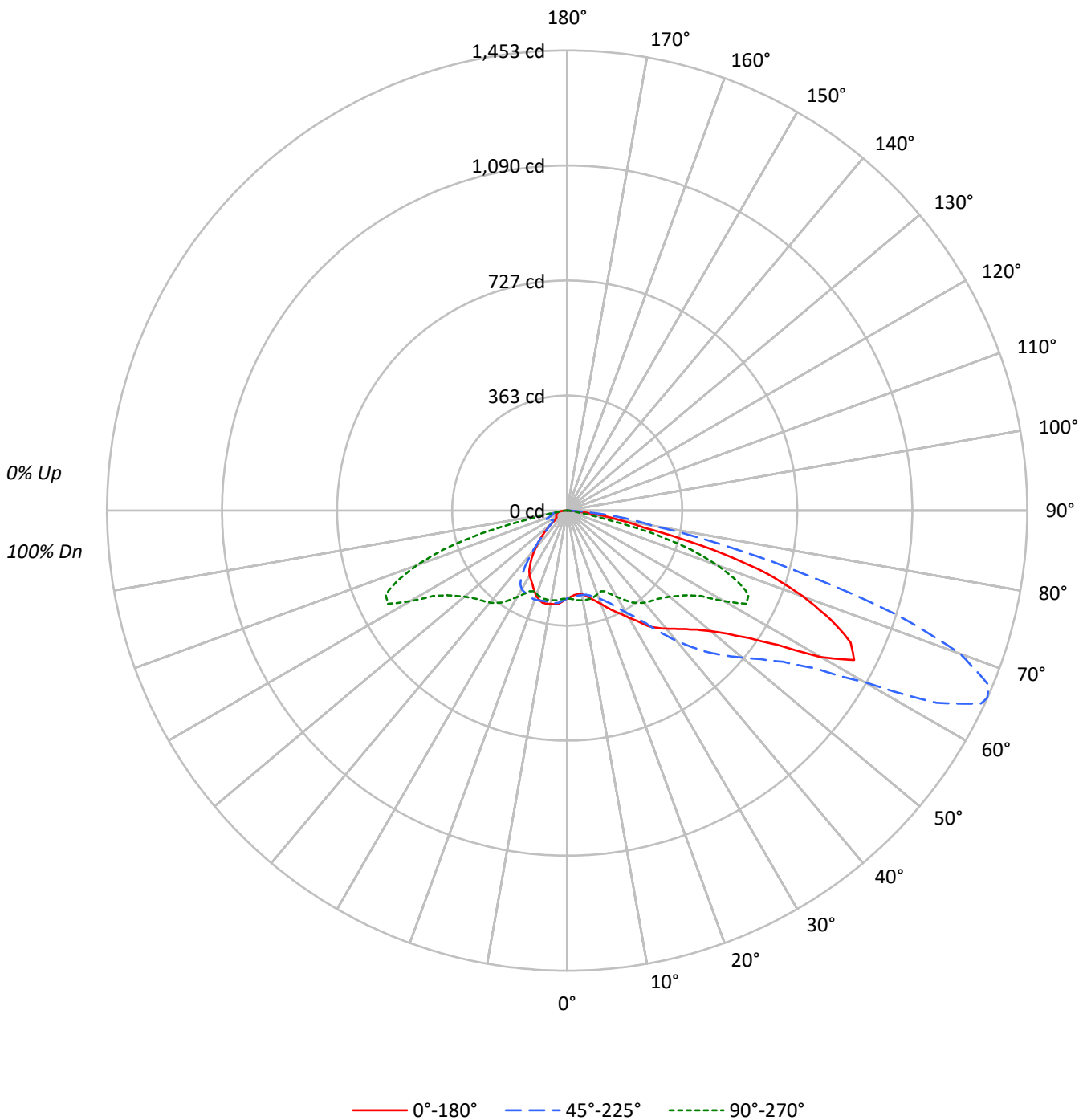
Lumens per Lamp: N/A
Luminaire Lumens: 2105.6 lumens
Efficiency: N/A
Efficacy: 81.3 lumens/watt
Spacing Criteria (0/90/45): 1.73 / 2.02 / 2.64
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P156613
CATALOG NUMBER: TLM-F01-LED-E1-T4-8030

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	99	93	88	102	96	91	87	92	88	84	88	84	81	84	81	79	76					76			
2	92	81	72	65	89	79	71	64	76	69	62	72	66	61	69	64	59	57					57			
3	82	68	58	49	79	66	57	49	63	55	48	60	53	47	57	51	46	43					43			
4	73	58	47	39	70	57	46	38	54	45	38	51	43	37	49	42	36	34					34			
5	66	50	39	31	64	49	39	31	47	38	31	45	36	30	42	35	30	27					27			
6	60	44	34	26	58	43	33	26	41	32	25	39	31	25	38	30	25	22					22			
7	55	39	29	22	53	38	29	22	37	28	22	35	27	21	34	27	21	19					19			
8	51	35	26	19	49	35	25	19	33	25	19	32	24	18	31	23	18	16					16			
9	47	32	23	16	46	31	23	16	30	22	16	29	22	16	28	21	16	14					14			
10	44	29	21	15	43	29	20	15	28	20	14	27	19	14	26	19	14	12					12			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	17571	17571	17571
5°	17002	17949	18718
10°	17199	18485	19250
15°	18846	18866	19744
20°	21124	18907	19251
25°	24452	19645	18025
30°	28528	23008	17335
35°	34412	27324	15598
40°	40220	31367	12878
45°	47396	35495	9796
50°	58265	41638	6265
55°	77505	51376	4692
60°	117023	72409	4939
65°	147978	94642	5708
70°	146787	93508	6794
75°	116424	69257	8342
80°	59033	14549	10428
85°	8572	11987	13295



TEST NUMBER: P156613

CATALOG NUMBER: TLM-F01-LED-E1-T4-8030

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.9	1.3
10°-20°	81.8	3.9
20°-30°	140.9	6.7
30°-40°	213.2	10.1
40°-50°	276.4	13.1
50°-60°	381.0	18.1
60°-70°	592.0	28.1
70°-80°	344.3	16.3
80°-90°	49.0	2.3
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°	249.7	11.9
0°-40°	462.9	22.0
0°-60°	1120.4	53.2
0°-90°	2105.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2105.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	278	278	278	278	278	
5°	268	272	282	292	294	26
15°	288	278	288	295	301	82
25°	350	324	281	294	258	163
35°	445	435	354	249	202	278
45°	529	634	396	104	109	414
55°	702	832	465	54	42	650
65°	988	1442	632	76	38	935
75°	476	775	283	48	34	490
85°	12	81	16	20	18	51
90°	0	0	0	0	0	



TEST NUMBER: P156613

CATALOG NUMBER: TLM-F01-LED-E1-T4-8030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	47.5°
0°	277.5	277.5	277.5	277.5	277.5	277.5	277.5	277.5	277.5	277.5	277.5
2.5°	272.4	273.4	272.7	272.9	272.9	273.1	273.1	273.4	273.1	273.8	274.3
5°	267.5	268.0	267.8	268.2	268.7	269.6	269.4	270.6	270.8	271.5	272.7
7.5°	265.7	265.2	265.5	266.2	266.6	267.1	267.5	268.5	269.2	270.8	271.7
10°	267.5	267.3	267.5	268.0	268.0	268.2	267.8	268.7	269.2	270.6	271.5
12.5°	275.2	275.2	274.7	274.7	274.3	273.8	272.7	272.0	271.7	272.0	272.4
15°	287.5	287.1	286.1	285.4	284.5	282.9	281.2	279.9	278.9	277.5	277.1
17.5°	299.6	298.9	298.0	297.0	295.9	294.3	291.7	290.1	287.5	285.9	285.0
20°	313.5	312.1	311.0	309.8	307.5	307.0	304.5	301.7	298.7	295.0	294.5
22.5°	331.6	329.3	327.9	327.2	324.9	324.2	320.0	316.1	312.4	307.5	306.3
25°	350.0	347.7	347.0	346.0	344.4	343.5	339.5	335.1	330.3	323.5	322.1
27.5°	367.9	368.1	366.3	366.9	366.5	364.9	360.9	356.5	352.8	344.9	343.3
30°	390.2	388.8	387.8	389.2	387.6	387.8	384.4	382.0	376.0	371.4	368.1
32.5°	413.4	413.2	414.6	415.5	415.3	414.8	412.0	409.7	404.3	397.6	396.2
35°	445.2	446.6	447.8	451.9	451.9	455.0	452.2	449.4	443.1	435.0	432.2
37.5°	466.8	467.3	471.9	477.5	484.5	491.0	492.8	493.5	491.0	484.9	480.7
40°	486.6	487.5	494.9	503.5	513.7	526.5	534.2	537.6	538.3	535.6	526.5
42.5°	506.3	507.7	515.4	527.9	542.1	558.3	571.8	580.4	585.3	585.3	579.9
45°	529.3	531.1	539.5	553.2	569.7	590.1	608.7	625.2	633.1	633.6	628.5
47.5°	556.5	558.1	567.8	581.8	598.7	619.4	642.9	661.7	676.3	677.2	673.0
50°	591.5	593.9	602.0	614.5	631.9	652.8	676.3	702.5	717.9	721.6	717.2
52.5°	638.0	638.4	645.2	656.8	673.7	693.7	718.6	747.1	767.3	770.4	763.2
55°	702.1	701.4	705.8	718.3	731.1	746.7	772.4	804.5	827.0	831.7	824.2
57.5°	789.2	788.5	792.2	795.2	819.1	834.2	859.5	890.2	912.0	925.5	912.7
60°	924.1	923.4	929.4	947.1	965.0	987.0	1011.7	1048.4	1079.0	1083.0	1070.4
62.5°	1021.9	1025.4	1038.6	1059.3	1095.5	1138.7	1183.8	1232.1	1295.0	1315.0	1308.9
65°	987.7	994.7	1013.1	1044.4	1092.7	1152.4	1223.0	1310.6	1394.9	1442.0	1440.6
66°	957.1	964.7	987.3	1017.5	1068.6	1133.8	1210.9	1306.4	1400.7	1452.7	1455.9
67.5°	901.3	909.9	932.0	967.8	1017.5	1086.9	1169.8	1273.6	1380.2	1440.8	1449.4
70°	792.9	802.6	818.7	848.2	897.2	959.2	1046.5	1139.4	1251.1	1320.5	1331.0
72.5°	662.8	671.4	689.3	713.5	753.6	792.7	861.2	929.7	1009.6	1088.8	1081.1
75°	475.9	479.6	490.3	516.5	538.1	573.2	628.2	684.4	739.0	775.2	780.3
77.5°	247.3	257.1	272.2	301.2	324.7	356.3	392.0	434.3	474.2	507.5	498.4
80°	161.9	166.1	179.5	194.4	211.6	231.8	255.7	271.5	276.6	274.5	276.6
82.5°	93.4	101.0	118.9	130.3	143.1	150.0	169.1	187.2	197.4	184.6	180.0
85°	11.8	15.3	48.3	60.8	69.7	80.1	85.9	96.8	90.3	80.8	98.5
87.5°	2.6	2.3	3.3	7.0	7.2	6.0	11.4	12.1	7.4	3.7	4.6
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: P156613

CATALOG NUMBER: TLM-F01-LED-E1-T4-8030

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	277.5	277.5	277.5	277.5	277.5	277.5	277.5	277.5	277.5	277.5	277.5
2.5°	274.7	275.0	275.4	276.1	276.6	277.1	277.5	278.2	278.7	279.2	280.1
5°	273.6	274.5	275.4	276.4	277.5	279.4	280.6	281.5	282.4	284.3	285.0
7.5°	272.9	274.5	275.9	277.5	279.4	281.0	283.1	284.3	285.7	286.8	288.2
10°	272.4	274.7	276.1	278.5	280.6	282.2	284.5	285.9	287.5	288.9	289.6
12.5°	273.4	274.5	275.9	278.2	280.8	283.1	285.7	286.8	288.2	289.4	289.6
15°	277.3	277.3	277.5	279.4	281.9	283.8	285.9	287.1	287.8	288.4	288.4
17.5°	284.5	282.9	281.7	281.9	283.6	284.7	285.9	285.9	285.4	285.2	284.7
20°	292.9	290.8	288.4	286.8	286.4	285.4	284.7	282.4	280.6	278.9	277.8
22.5°	304.9	301.7	298.4	295.4	292.6	289.1	285.2	280.6	276.1	273.1	271.3
25°	319.8	317.2	313.3	308.7	305.2	298.7	293.6	286.8	281.2	277.3	274.0
27.5°	340.9	337.9	334.2	330.0	324.9	317.7	311.4	303.5	296.8	291.0	286.8
30°	367.2	363.2	360.4	355.3	351.9	343.7	337.5	327.7	314.7	305.4	299.6
32.5°	394.1	389.7	387.4	383.4	379.5	374.6	365.1	350.0	333.3	318.2	308.2
35°	430.1	425.5	421.3	417.8	412.0	402.9	394.6	376.5	353.5	332.3	315.6
37.5°	475.4	467.7	457.3	448.5	438.2	425.2	412.5	393.9	367.6	340.2	317.9
40°	523.7	510.2	495.4	478.9	461.2	442.4	427.8	409.0	379.5	347.0	316.3
42.5°	574.1	552.7	532.1	508.8	484.2	461.9	442.9	422.2	388.3	348.8	309.8
45°	624.0	600.1	568.8	538.3	507.2	479.6	458.2	435.0	396.4	349.5	301.2
47.5°	665.4	640.8	605.0	566.9	530.0	498.6	473.5	448.5	407.4	354.4	299.1
50°	709.0	679.1	639.4	594.3	552.5	517.4	490.7	464.7	422.7	366.9	305.9
52.5°	756.7	722.3	675.8	625.4	579.7	540.4	511.4	484.7	442.2	384.6	318.6
55°	814.7	772.7	722.3	665.4	616.4	572.9	540.9	509.3	465.4	405.5	334.7
57.5°	903.4	851.9	795.2	730.4	676.1	624.7	586.4	550.0	501.4	436.6	356.5
60°	1063.9	1008.9	935.3	856.8	792.9	733.0	676.8	631.5	571.8	497.9	404.8
62.5°	1293.8	1220.7	1122.4	1012.6	929.0	842.6	779.2	711.8	637.7	558.1	461.7
65°	1421.6	1332.9	1201.4	1073.9	966.4	872.5	792.0	713.9	631.7	555.5	474.9
66°	1437.4	1344.9	1208.4	1074.1	961.3	864.9	780.1	699.3	615.2	542.5	469.4
67.5°	1430.9	1336.3	1195.6	1053.9	939.2	835.6	748.1	664.2	580.4	512.6	450.8
70°	1324.3	1234.6	1096.4	959.2	850.2	748.1	664.5	582.0	505.1	447.1	401.6
72.5°	1099.7	1023.0	903.0	795.2	709.7	625.4	554.6	475.9	410.8	367.9	340.9
75°	793.8	747.4	638.0	576.2	501.2	445.2	376.5	329.8	283.1	262.2	257.6
77.5°	501.4	438.9	369.5	304.2	250.1	207.4	161.4	137.0	114.3	111.9	135.2
80°	253.8	228.5	176.0	140.3	118.0	95.5	75.5	57.1	39.9	48.1	57.6
82.5°	166.3	138.7	108.7	89.4	77.8	64.6	50.2	34.8	25.5	28.8	39.5
85°	89.9	76.6	61.8	48.8	39.5	35.3	23.7	16.7	16.5	17.7	22.5
87.5°	6.5	6.5	5.1	4.6	5.6	4.6	4.2	4.2	3.9	4.2	5.6
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: P156613

CATALOG NUMBER: TLM-F01-LED-E1-T4-8030

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	277.5	277.5	277.5	277.5	277.5	277.5	277.5	277.5	277.5	277.5	277.5
2.5°	280.6	281.2	281.5	282.6	283.3	283.8	284.3	284.3	284.5	285.2	285.4
5°	285.9	287.1	288.4	289.4	289.8	291.2	291.7	291.7	292.2	293.1	293.8
7.5°	289.1	290.8	292.2	292.6	293.6	294.0	294.7	295.2	295.2	296.1	296.6
10°	290.3	291.2	292.6	292.6	293.6	293.6	294.3	294.5	294.5	295.4	296.1
12.5°	290.3	290.8	291.9	291.9	292.6	292.9	293.8	294.5	294.7	295.9	296.8
15°	288.9	289.4	290.3	290.5	292.2	293.1	295.2	296.6	296.6	297.7	298.2
17.5°	285.0	286.1	288.0	289.8	292.9	295.0	297.5	298.7	297.7	297.0	296.3
20°	278.5	280.6	285.0	289.6	295.0	297.7	299.1	298.0	294.7	291.5	289.4
22.5°	272.0	276.1	283.6	290.5	296.6	298.4	297.7	293.6	288.2	284.3	281.5
25°	275.0	279.9	287.1	293.3	297.3	296.8	294.0	288.2	282.4	277.3	272.7
27.5°	287.5	292.9	296.8	298.9	298.4	295.2	290.8	284.3	277.3	270.6	264.1
30°	299.4	302.2	303.1	301.5	297.7	292.4	286.8	279.4	270.1	261.7	254.3
32.5°	304.7	301.9	297.5	293.1	287.1	282.4	274.7	266.6	255.0	245.0	237.6
35°	304.7	293.6	282.4	273.1	264.1	258.3	249.4	238.5	227.8	219.5	213.7
37.5°	298.0	276.6	258.3	243.2	231.8	225.5	212.3	202.5	193.5	190.7	187.0
40°	285.7	254.1	227.6	207.9	193.5	184.2	170.9	164.2	160.7	159.3	158.6
42.5°	269.2	229.0	193.7	169.3	153.7	143.3	134.5	130.3	130.1	129.8	129.8
45°	251.5	202.1	160.7	131.7	118.0	108.7	104.5	102.9	104.3	104.0	104.3
47.5°	240.6	181.6	130.5	99.6	89.2	83.1	81.1	81.8	82.9	82.4	82.4
50°	239.2	171.2	110.3	77.6	69.7	66.7	66.2	66.2	66.9	66.4	66.2
52.5°	244.3	169.5	99.9	66.7	60.4	57.8	57.4	57.1	56.9	55.5	54.3
55°	253.1	173.3	96.8	63.9	57.4	54.6	53.9	53.4	52.5	50.6	48.5
57.5°	270.8	184.9	99.6	65.3	58.3	56.0	55.3	55.3	53.4	50.4	47.4
60°	313.3	214.4	111.0	70.6	62.7	60.4	60.8	60.6	57.8	53.4	48.8
62.5°	368.1	252.9	125.9	78.0	68.3	67.8	70.1	69.7	65.0	58.3	51.6
65°	393.4	271.0	130.1	79.7	69.4	71.5	76.2	75.7	69.9	60.6	52.0
66°	393.9	271.0	128.2	78.3	67.8	70.4	75.0	74.8	69.0	59.7	51.1
67.5°	384.4	263.6	122.9	75.5	64.6	66.4	70.6	70.4	65.0	57.4	49.2
70°	348.6	236.0	109.2	70.6	60.2	59.2	60.6	59.7	56.2	50.9	45.3
72.5°	298.7	198.1	95.2	66.9	57.1	53.4	52.5	51.8	49.0	46.0	42.5
75°	235.3	156.8	83.6	64.1	54.3	49.5	47.8	46.9	45.1	43.0	40.2
77.5°	145.2	112.2	72.9	60.4	52.3	47.4	46.2	44.8	42.0	39.5	37.4
80°	64.8	69.4	59.9	52.7	46.7	42.3	40.4	38.3	35.5	33.9	32.7
82.5°	43.2	44.8	43.4	39.5	35.3	31.8	29.0	29.0	28.6	27.2	26.7
85°	27.6	27.9	26.9	24.4	22.8	20.7	19.5	19.7	20.7	20.4	20.2
87.5°	6.3	6.3	7.4	7.0	8.1	8.6	9.3	10.0	11.4	11.4	12.1
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: P156613

CATALOG NUMBER: TLM-F01-LED-E1-T4-8030

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	277.5	277.5	277.5	277.5	277.5
2.5°	285.7	286.1	286.6	285.9	286.1
5°	293.8	293.6	294.7	294.0	294.5
7.5°	296.3	296.6	297.5	297.5	297.7
10°	296.6	297.0	298.2	298.9	299.4
12.5°	297.7	298.7	300.5	301.0	301.0
15°	298.7	299.1	300.3	300.8	301.2
17.5°	295.4	294.5	295.0	295.2	295.0
20°	287.3	286.4	286.1	285.2	285.7
22.5°	278.5	275.9	274.3	272.4	272.4
25°	267.8	263.8	260.6	257.3	258.0
27.5°	257.8	252.7	249.4	247.3	246.9
30°	248.0	242.7	239.7	237.1	237.1
32.5°	231.8	228.1	224.1	222.5	222.3
35°	209.3	206.9	203.7	203.0	201.8
37.5°	183.9	183.2	180.5	180.2	179.1
40°	157.5	157.9	157.0	156.5	155.8
42.5°	131.0	133.3	132.8	132.6	132.1
45°	105.7	107.3	107.5	108.2	109.4
47.5°	83.1	83.6	84.1	83.8	84.1
50°	65.0	63.9	63.6	62.9	63.6
52.5°	52.5	50.6	49.7	48.8	48.3
55°	46.2	44.4	43.4	43.0	42.5
57.5°	44.6	42.7	41.3	40.4	40.2
60°	45.1	42.3	40.4	39.2	39.0
62.5°	46.2	42.5	39.9	38.8	38.6
65°	46.0	42.0	39.7	38.3	38.1
66°	45.3	41.6	39.2	38.1	37.9
67.5°	44.1	40.9	38.8	37.9	37.4
70°	42.0	39.9	38.3	37.2	36.7
72.5°	40.2	38.6	37.2	36.0	35.8
75°	38.1	36.7	35.3	34.4	34.1
77.5°	35.5	34.1	33.2	32.5	32.3
80°	31.4	30.4	29.5	28.6	28.6
82.5°	26.0	25.3	24.4	23.7	23.5
85°	20.0	20.0	19.3	18.6	18.3
87.5°	11.8	11.6	11.6	10.9	10.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)