

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: P150073

Luminaire Tested: **TLM-F01-LED-E1-SL2-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P150073
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33678)
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-SL2-8030
Description: TALON MEDIUM LED SITE LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ SPILL LIGHT CONTROL
Light Source: (7) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

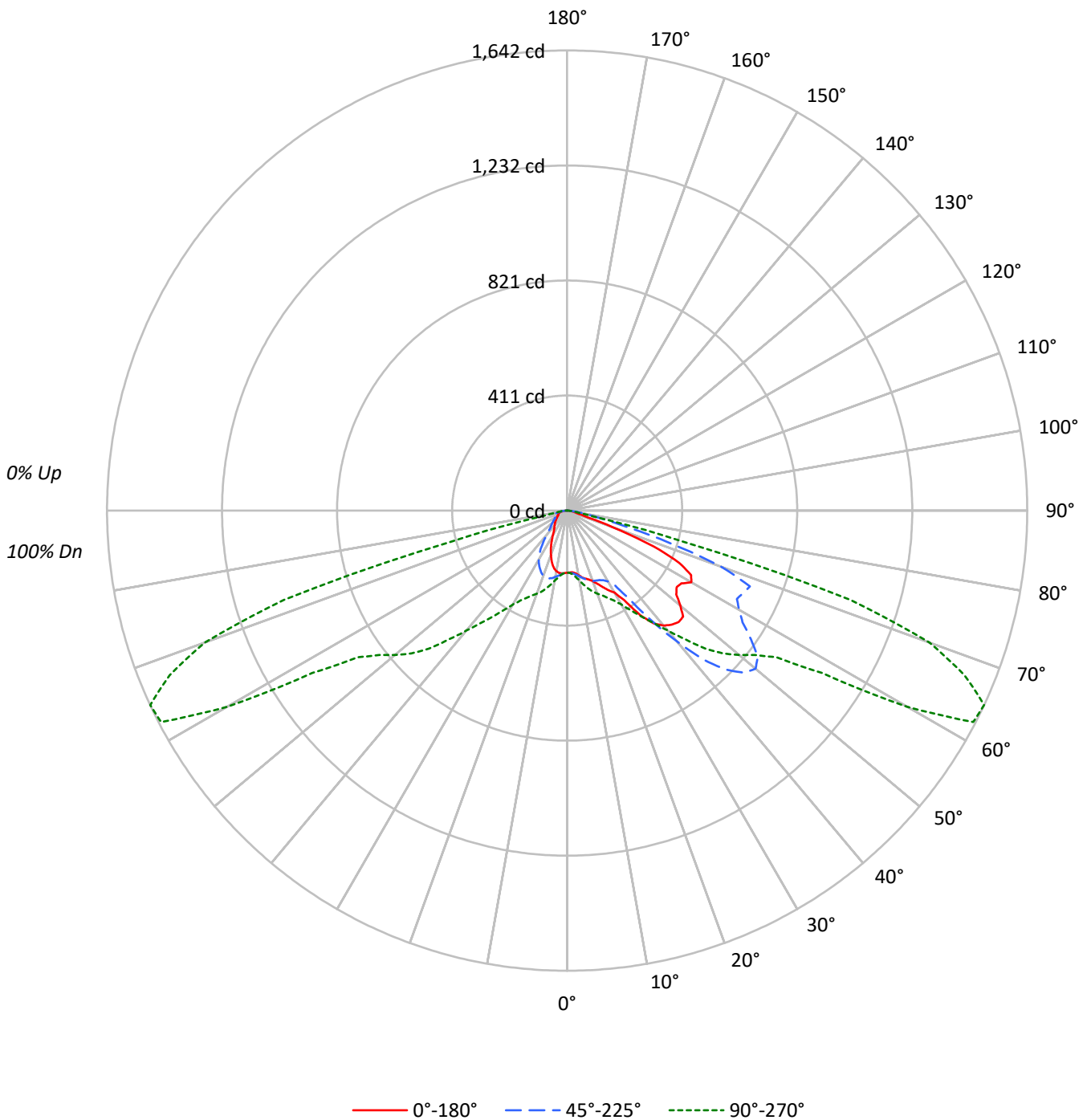
Lumens per Lamp: N/A
Luminaire Lumens: 2128.6 lumens
Efficiency: N/A
Efficacy: 82.2 lumens/watt
Spacing Criteria (0/90/45): 1.99 / 4.45 / 2.31
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
CIE Type: Direct

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	90	103	98	93	88	93	89	85	89	86	83	85	83	80	78					78			
2	93	83	74	67	90	81	73	66	77	70	64	74	68	63	70	66	61	59					59			
3	82	69	59	51	80	68	58	51	64	56	50	61	54	49	59	53	48	45					45			
4	74	59	48	40	71	57	47	40	55	46	39	52	45	38	50	43	38	35					35			
5	66	51	40	32	64	50	39	32	47	38	31	45	37	31	43	36	30	28					28			
6	60	44	34	26	58	43	33	26	41	32	26	40	32	25	38	31	25	23					23			
7	55	39	29	22	53	38	29	22	37	28	22	35	27	21	34	27	21	19					19			
8	51	35	25	19	49	34	25	19	33	24	18	32	24	18	30	23	18	16					16			
9	47	32	22	16	46	31	22	16	30	22	16	29	21	16	28	21	16	14					14			
10	44	29	20	14	42	28	20	14	27	19	14	26	19	14	25	19	14	12					12			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	14031	14031	14031
5°	14040	14555	14320
10°	15019	16318	14138
15°	16460	18846	13156
20°	18045	21265	11360
25°	21043	23998	9397
30°	24690	28273	7421
35°	35201	35649	6191
40°	44286	46130	5761
45°	50386	62367	5471
50°	51912	78971	5171
55°	52656	100709	5023
60°	64786	177161	5002
65°	66176	245931	5259
70°	31731	254568	5980
75°	8758	104828	7266
80°	7366	14658	7183
85°	4867	9081	7773



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.0	1.0
10°-20°	72.0	3.4
20°-30°	124.4	5.8
30°-40°	205.9	9.7
40°-50°	349.2	16.4
50°-60°	464.0	21.8
60°-70°	599.3	28.2
70°-80°	251.4	11.8
80°-90°	40.4	1.9
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°	218.4	10.3
0°-40°	424.3	19.9
0°-60°	1237.5	58.1
0°-90°	2128.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2128.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	222	222	222	222	222	
5°	221	225	229	228	225	22
15°	251	254	288	251	201	72
25°	301	274	344	230	134	141
35°	455	380	461	163	80	282
45°	563	803	696	83	61	427
55°	477	800	912	57	46	442
65°	442	694	1642	45	35	399
75°	36	200	428	47	30	58
85°	7	17	12	14	11	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	64°
0°	221.6	221.6	221.6	221.6	221.6	221.6	221.6	221.6	221.6	221.6	221.6
2.5°	220.9	221.6	221.1	221.6	222.0	222.3	222.7	222.5	222.5	222.7	222.3
5°	220.9	220.9	221.6	222.7	223.2	224.6	226.2	226.0	226.2	226.0	226.4
7.5°	225.5	225.3	226.0	227.4	227.8	229.9	232.7	233.2	233.6	233.6	234.3
10°	233.6	233.4	234.1	234.8	235.5	237.1	241.1	242.7	242.9	243.2	244.1
12.5°	243.9	243.6	242.7	242.7	242.5	245.5	250.8	253.8	254.3	255.2	255.9
15°	251.1	250.4	249.0	248.0	249.2	254.1	262.0	265.5	265.9	266.6	268.5
17.5°	258.0	257.3	254.3	252.0	253.6	261.5	272.2	275.9	276.8	277.5	279.6
20°	267.8	267.3	262.9	257.3	256.9	267.1	280.1	285.0	285.7	286.6	288.7
22.5°	282.6	280.6	275.4	265.0	259.9	270.3	285.7	292.4	293.3	294.3	297.0
25°	301.2	300.3	291.5	275.4	264.8	273.6	291.7	300.1	301.5	302.6	306.3
27.5°	320.5	319.1	309.6	288.7	273.4	280.1	301.2	310.7	312.6	314.5	317.9
30°	337.7	337.2	329.3	306.6	287.3	292.4	316.6	328.2	330.3	332.6	335.8
32.5°	378.1	378.3	370.2	347.0	321.0	314.7	338.6	356.0	357.0	359.7	365.6
35°	455.4	456.4	453.3	435.0	405.7	380.0	382.3	399.5	400.4	402.7	408.3
37.5°	507.2	509.1	518.4	524.2	509.3	497.5	468.0	461.2	461.9	460.5	459.4
40°	535.8	538.6	563.0	593.2	609.4	609.6	596.9	567.1	555.8	552.5	538.6
42.5°	552.0	556.7	591.3	642.9	689.5	721.6	729.5	696.5	688.1	673.3	646.6
45°	562.7	568.3	609.2	679.8	748.5	803.1	844.2	829.6	824.0	814.9	790.3
47.5°	560.9	565.3	607.8	692.3	779.4	857.0	929.9	945.0	938.3	935.9	919.2
50°	527.0	530.9	574.1	661.2	762.5	877.4	984.3	1027.0	1027.0	1031.4	1026.3
52.5°	490.7	494.0	533.2	611.5	707.7	857.4	1014.4	1085.3	1094.6	1102.2	1114.3
55°	477.0	481.0	510.7	577.6	661.0	800.3	1024.7	1128.9	1146.1	1159.1	1186.5
57.5°	483.5	487.5	508.6	559.2	633.6	742.0	1025.1	1187.7	1220.9	1247.6	1303.1
60°	511.6	515.4	533.0	576.2	626.4	708.3	1005.4	1281.3	1334.2	1384.4	1476.8
62.5°	498.6	503.3	529.1	604.3	680.0	682.8	934.1	1353.8	1439.0	1513.1	1660.1
65°	441.7	446.6	466.8	537.2	683.3	693.9	828.4	1355.2	1461.1	1561.2	1719.8
67.5°	335.4	337.2	353.2	409.7	546.5	706.3	719.7	1194.7	1295.5	1407.2	1570.9
70°	171.4	174.6	179.3	226.2	351.9	583.6	618.5	880.4	1008.9	1124.3	1321.0
72.5°	59.5	60.6	65.3	86.4	171.4	383.0	541.4	603.4	680.9	788.9	1016.8
75°	35.8	35.8	37.4	43.7	78.3	199.5	481.7	492.8	503.3	539.5	688.6
77.5°	28.3	28.8	28.8	30.0	43.4	102.4	365.8	458.2	459.6	463.1	488.2
80°	20.2	21.1	23.0	23.9	28.1	56.2	205.3	402.2	429.7	442.9	461.2
82.5°	15.1	16.0	19.5	20.7	21.8	31.4	92.2	277.5	327.5	353.9	418.5
85°	6.7	7.9	13.2	14.6	15.3	16.7	43.2	79.0	90.8	102.0	134.5
87.5°	1.2	1.2	2.1	3.0	4.4	4.2	9.5	13.5	13.7	16.0	17.9
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):

	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°	75°
0°	221.6	221.6	221.6	221.6	221.6	221.6	221.6	221.6	221.6	221.6	221.6
2.5°	222.3	222.3	222.3	222.0	222.3	222.3	222.3	222.3	222.5	222.5	222.5
5°	227.1	226.7	226.9	226.9	226.9	226.7	227.1	226.9	227.1	227.8	227.6
7.5°	234.3	234.8	235.0	235.3	235.3	235.3	235.5	236.0	236.0	236.7	236.4
10°	245.0	244.8	245.0	245.7	246.4	246.6	247.3	247.1	247.6	248.5	249.4
12.5°	256.4	256.9	257.6	258.3	259.4	259.7	260.3	260.6	262.0	262.0	262.9
15°	269.2	269.4	270.8	271.0	272.4	272.9	274.0	274.5	276.1	276.4	277.3
17.5°	280.8	281.2	281.9	282.6	284.3	285.0	285.9	286.8	288.2	288.7	290.3
20°	290.1	291.0	291.2	292.6	294.0	295.0	295.9	296.8	298.2	298.9	300.5
22.5°	298.4	299.4	300.1	301.2	302.2	303.5	304.0	305.6	307.0	308.2	309.6
25°	307.5	308.9	309.6	311.7	312.4	313.8	314.9	316.6	318.4	319.8	321.7
27.5°	320.3	322.4	323.3	325.6	327.2	327.9	329.8	332.1	333.7	335.4	337.2
30°	337.9	341.9	342.6	344.2	347.2	347.7	350.0	351.9	354.4	356.0	357.7
32.5°	365.3	370.2	370.7	372.5	375.1	376.0	377.9	380.0	383.9	384.6	387.2
35°	407.4	409.4	411.3	412.0	414.1	415.3	416.6	419.0	422.9	422.5	425.2
37.5°	457.8	458.5	458.7	456.4	456.8	454.7	457.3	457.8	459.1	460.3	463.1
40°	529.8	522.6	521.6	516.0	510.5	507.5	506.3	501.6	502.8	503.3	505.6
42.5°	635.0	621.0	609.4	601.5	587.8	581.1	572.0	564.8	559.2	561.3	562.3
45°	768.3	748.3	729.7	705.6	687.7	674.9	658.9	644.5	638.0	635.0	638.7
47.5°	901.3	883.7	861.9	837.0	808.7	787.5	760.8	737.4	721.1	715.1	718.3
50°	1016.3	1000.0	983.6	968.9	935.9	913.0	876.5	846.1	820.5	807.5	804.0
52.5°	1111.8	1103.2	1094.3	1082.0	1055.6	1032.6	1003.5	973.6	939.7	913.2	904.1
55°	1197.0	1202.1	1197.7	1197.9	1187.5	1172.8	1148.2	1125.9	1102.2	1072.3	1059.7
57.5°	1321.2	1351.4	1357.5	1372.6	1380.0	1387.9	1394.9	1381.6	1375.6	1353.3	1353.5
60°	1517.0	1561.2	1599.5	1634.3	1662.9	1690.7	1720.0	1733.0	1747.4	1754.1	1777.1
62.5°	1725.3	1767.4	1824.5	1871.2	1897.4	1933.7	1965.5	1986.2	2011.5	2038.4	2073.5
65°	1776.9	1827.5	1863.5	1894.7	1920.7	1939.9	1957.4	1982.0	2003.1	2045.8	2087.2
67.5°	1644.8	1685.2	1718.1	1748.8	1769.0	1785.3	1800.8	1817.1	1853.3	1892.1	1933.7
70°	1411.8	1460.6	1515.2	1554.9	1564.9	1578.8	1593.7	1614.8	1632.9	1673.6	1705.1
72.5°	1134.3	1204.4	1250.6	1305.7	1317.5	1338.7	1347.0	1363.5	1366.8	1388.8	1397.2
75°	790.6	870.9	917.4	957.8	965.7	954.1	958.7	900.4	885.6	873.5	863.7
77.5°	521.9	543.5	550.9	544.4	513.3	488.9	462.9	437.3	440.1	419.4	383.2
80°	464.0	468.9	462.2	455.7	437.8	412.2	388.8	364.9	353.0	340.5	321.9
82.5°	451.5	470.3	472.4	464.5	450.3	422.5	394.1	358.6	328.4	300.5	272.2
85°	151.0	183.7	198.3	212.0	216.2	221.1	204.4	181.6	154.2	135.9	106.4
87.5°	19.3	23.9	27.6	23.7	27.6	32.5	23.5	26.2	26.5	16.5	12.3
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):

	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	86°
0°	221.6	221.6	221.6	221.6	221.6	221.6	221.6	221.6	221.6	221.6	221.6
2.5°	222.7	222.5	222.5	222.5	222.3	222.5	222.5	222.5	222.5	222.5	222.3
5°	227.8	227.8	228.5	228.8	228.3	228.1	228.3	228.5	228.5	228.3	228.5
7.5°	237.4	237.6	238.1	238.7	238.3	238.5	238.7	238.5	239.2	239.4	239.2
10°	249.4	249.9	251.1	251.3	251.1	252.0	252.2	251.8	252.2	252.2	253.1
12.5°	263.4	263.8	265.2	265.7	266.2	266.4	267.1	267.3	268.0	268.5	269.2
15°	278.5	278.9	279.9	281.5	281.9	282.4	282.9	284.3	284.5	285.4	286.1
17.5°	291.2	291.9	293.3	294.5	295.2	296.3	296.8	298.4	298.9	300.3	301.5
20°	301.5	302.6	303.8	305.2	306.3	307.7	308.2	309.8	310.7	311.4	312.8
22.5°	310.7	312.1	313.8	315.4	316.3	318.2	318.9	319.6	321.7	322.6	324.0
25°	322.8	324.2	326.1	328.2	329.1	331.4	332.1	333.3	335.6	336.5	338.6
27.5°	339.3	341.2	342.6	344.7	345.8	347.4	349.1	350.5	352.5	353.9	356.3
30°	360.0	361.4	363.7	365.3	367.2	369.5	371.4	372.8	373.9	376.0	378.6
32.5°	390.4	390.6	391.3	395.3	397.1	399.0	401.6	402.7	404.6	406.7	409.4
35°	428.3	430.4	432.0	433.8	435.9	438.0	438.9	442.4	444.1	446.8	449.6
37.5°	465.9	466.1	469.8	471.0	472.9	474.9	478.2	481.7	485.9	488.6	493.1
40°	506.3	508.2	512.8	515.1	517.4	522.6	525.1	530.7	537.6	541.6	549.0
42.5°	564.8	567.6	576.0	579.7	585.3	593.6	599.0	606.6	609.4	618.9	622.4
45°	641.5	650.1	662.1	670.0	680.0	689.1	693.7	697.2	701.4	708.8	707.9
47.5°	724.4	735.5	749.0	765.2	771.8	782.4	788.5	795.2	791.5	789.6	787.8
50°	809.4	822.4	840.3	854.9	864.9	871.4	876.5	875.6	867.7	863.5	851.9
52.5°	903.9	911.6	928.5	941.1	947.1	948.5	947.3	940.4	932.9	919.7	906.0
55°	1048.8	1045.3	1052.1	1057.9	1056.0	1062.5	1045.8	1039.3	1020.9	1003.8	985.4
57.5°	1343.3	1348.0	1310.3	1293.4	1290.4	1296.4	1266.9	1263.2	1218.8	1213.2	1182.4
60°	1773.9	1796.6	1767.2	1750.7	1706.1	1691.4	1658.5	1644.8	1602.3	1567.9	1524.5
62.5°	2097.6	2118.3	2130.6	2107.2	2081.1	2042.8	1992.9	1937.6	1892.6	1839.8	1793.9
65°	2126.9	2168.7	2197.0	2208.0	2189.6	2147.6	2086.0	2016.4	1947.4	1881.2	1823.1
67.5°	1990.1	2027.5	2071.4	2110.6	2113.0	2085.6	2033.1	1962.2	1882.6	1800.8	1732.8
70°	1755.1	1802.0	1840.3	1881.7	1910.4	1894.7	1868.4	1803.4	1720.7	1657.1	1578.8
72.5°	1427.4	1447.1	1456.4	1497.1	1497.5	1468.7	1450.1	1414.1	1347.5	1302.4	1242.7
75°	833.5	790.1	743.9	703.7	671.0	657.3	596.4	586.2	545.3	520.0	482.8
77.5°	343.7	304.9	255.0	213.4	172.3	153.7	126.8	115.0	99.6	92.9	88.5
80°	294.7	258.0	220.4	184.4	152.4	120.3	93.6	72.7	57.1	48.5	45.1
82.5°	240.6	218.5	192.3	172.8	147.7	123.8	104.5	81.1	60.6	44.6	34.1
85°	86.9	71.3	57.4	52.7	42.0	34.6	29.0	24.9	20.4	16.3	14.4
87.5°	9.8	9.3	5.3	5.1	5.8	4.2	4.9	4.4	3.7	3.3	3.5
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):

	87°	88°	89°	90°	95°	105°	115°	125°	135°	145°	155°
0°	221.6	221.6	221.6	221.6	221.6	221.6	221.6	221.6	221.6	221.6	221.6
2.5°	222.3	222.3	222.5	222.5	222.7	223.0	223.4	223.2	223.2	223.4	223.4
5°	228.5	229.2	229.0	229.0	229.0	229.2	229.5	228.5	227.6	226.7	226.2
7.5°	239.4	239.9	240.4	239.9	240.4	240.1	239.7	237.1	234.1	230.4	227.8
10°	253.6	253.6	254.1	253.8	254.8	254.1	252.7	246.9	240.4	232.5	226.7
12.5°	268.9	270.6	269.9	270.1	272.0	270.1	266.8	258.3	246.6	233.9	223.7
15°	287.1	287.8	288.2	287.5	288.7	287.1	281.2	267.5	250.6	232.7	217.6
17.5°	301.9	302.2	302.4	302.8	304.5	302.6	292.6	274.0	251.5	227.4	207.4
20°	313.5	314.7	315.6	315.6	317.9	315.2	301.9	277.3	248.5	218.5	194.4
22.5°	325.6	326.5	327.7	327.9	330.9	328.2	309.6	276.6	240.6	206.0	179.3
25°	340.5	341.4	342.3	343.5	347.7	343.7	317.2	273.8	229.7	191.1	163.0
27.5°	357.7	359.7	360.4	362.3	367.2	361.1	323.7	269.6	217.6	174.0	145.8
30°	380.6	383.2	384.1	386.7	393.4	380.2	327.5	262.4	202.3	156.5	127.5
32.5°	411.5	415.0	417.8	420.6	428.3	399.2	327.9	252.0	184.4	137.0	109.9
35°	451.9	457.3	459.4	461.2	468.4	419.9	325.8	236.4	162.6	117.1	95.9
37.5°	497.2	502.6	504.0	504.9	506.3	437.5	320.7	212.7	138.0	99.6	84.8
40°	553.0	557.6	559.5	558.1	550.7	451.3	309.4	185.1	114.0	87.8	77.8
42.5°	621.0	628.0	628.7	622.4	597.8	458.9	286.6	152.6	95.2	79.2	72.5
45°	705.3	704.9	700.9	696.5	649.1	455.9	254.8	124.3	83.4	72.5	67.6
47.5°	781.0	773.1	767.1	754.1	694.4	438.2	213.7	102.9	76.2	67.4	63.4
50°	843.1	828.7	815.9	801.7	728.1	406.9	172.8	87.3	69.4	62.9	59.5
52.5°	892.1	874.6	859.8	845.8	760.6	372.1	141.7	75.9	62.9	58.5	55.0
55°	968.7	951.3	927.6	912.3	810.3	340.0	121.5	66.9	56.7	53.9	50.4
57.5°	1162.6	1147.3	1119.0	1079.2	938.0	327.9	110.1	59.9	51.6	49.9	47.1
60°	1501.2	1476.4	1439.5	1399.0	1197.7	336.1	101.0	55.0	48.1	46.7	44.6
62.5°	1756.7	1713.0	1671.2	1633.8	1405.3	335.8	89.2	51.3	45.5	44.8	42.7
65°	1767.2	1722.8	1680.8	1641.5	1410.0	298.9	75.2	48.1	45.1	44.8	41.3
67.5°	1673.3	1625.3	1584.6	1535.1	1305.2	233.6	60.4	46.0	46.9	46.4	40.9
70°	1520.0	1457.3	1423.9	1375.1	1148.7	163.5	49.7	46.7	50.9	49.5	41.6
72.5°	1193.0	1145.7	1094.8	1060.9	899.3	103.3	41.8	47.1	52.5	50.2	43.4
75°	444.1	456.8	435.9	428.5	456.8	60.6	37.2	43.9	46.9	43.4	39.5
77.5°	89.6	85.7	81.3	80.4	103.8	37.4	34.1	38.1	36.0	31.8	32.0
80°	43.0	41.8	40.4	40.2	38.6	31.1	31.6	32.5	27.2	24.6	26.2
82.5°	28.6	26.9	26.5	25.5	26.0	27.9	30.0	27.9	20.9	19.5	23.7
85°	13.2	12.8	12.5	12.5	13.9	25.1	24.9	20.4	14.4	13.9	23.7
87.5°	3.3	3.3	3.5	3.3	3.7	7.4	6.5	6.3	5.3	6.0	11.1
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: P150073

CATALOG NUMBER: TLM-F01-LED-E1-SL2-8030

CANDELA DISTRIBUTION (continued):

	165°	175°	180°
0°	221.6	221.6	221.6
2.5°	223.2	223.4	223.2
5°	225.3	225.3	225.3
7.5°	225.3	224.6	224.3
10°	222.0	219.9	219.9
12.5°	216.5	213.0	212.5
15°	206.0	201.4	200.7
17.5°	192.8	186.5	185.3
20°	177.9	170.0	168.6
22.5°	161.6	152.6	151.9
25°	145.6	136.3	134.5
27.5°	127.7	118.7	117.7
30°	109.9	102.0	101.5
32.5°	94.8	89.9	88.9
35°	84.1	81.3	80.1
37.5°	77.1	75.0	74.8
40°	71.8	69.9	69.7
42.5°	67.4	65.7	65.5
45°	62.9	61.5	61.1
47.5°	58.5	57.1	56.9
50°	54.6	52.7	52.5
52.5°	50.9	49.0	48.5
55°	47.4	45.5	45.5
57.5°	44.4	42.5	42.3
60°	41.6	39.7	39.5
62.5°	39.5	37.2	36.9
65°	37.9	35.5	35.1
67.5°	36.9	34.1	33.4
70°	38.6	33.4	32.3
72.5°	38.8	32.7	31.1
75°	37.4	30.9	29.7
77.5°	32.7	27.6	26.5
80°	28.3	21.4	19.7
82.5°	26.9	17.4	15.1
85°	20.9	11.4	10.7
87.5°	11.8	6.3	5.1
90°	0.0	0.0	0.0

(END OF REPORT)