

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: P153525

Luminaire Tested: **TLM-F04-LED-E1-SLR**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P153525
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33681)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TLM-F04-LED-E1-SLR
Description: TALON MEDIUM LED SITE LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR RIGHT
Light Source: (28) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

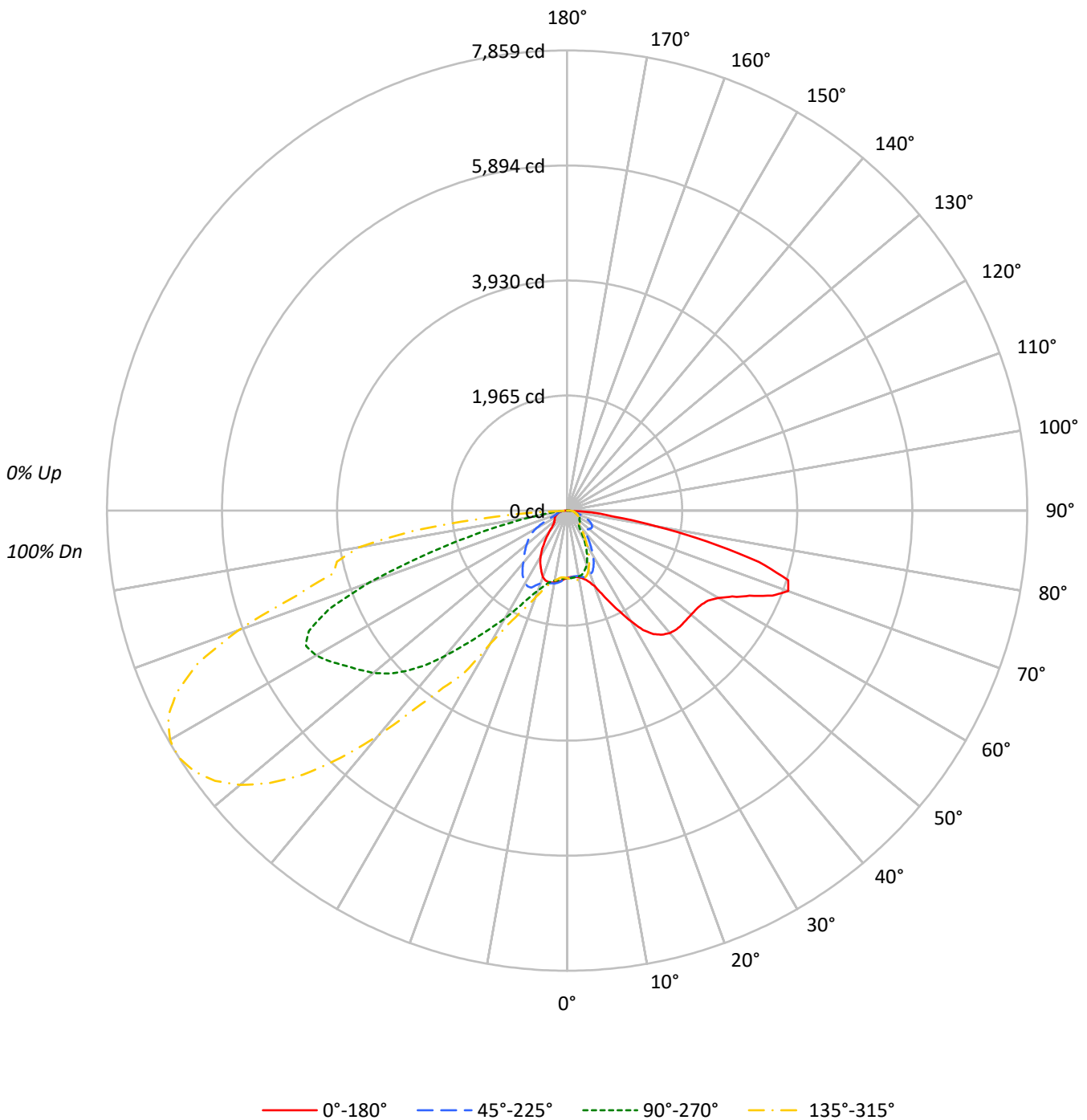
Lumens per Lamp: N/A
Luminaire Lumens: 9187.9 lumens
Efficiency: N/A
Efficacy: 89.9 lumens/watt
Spacing Criteria (0/90/45): 1.93 / 2.48 / 2.48
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 102.2
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	105	99	93	88	102	97	91	87	92	88	84	88	85	81	84	82	79	77					77			
2	93	82	73	66	90	80	72	65	76	70	64	73	67	62	70	65	61	58					58			
3	82	69	59	51	80	68	58	50	64	56	49	61	54	48	59	53	47	45					45			
4	74	59	48	40	71	58	48	40	55	46	39	52	45	39	50	44	38	35					35			
5	67	51	41	33	64	50	40	32	48	39	32	46	38	32	44	37	31	29					29			
6	61	45	35	27	59	44	34	27	42	33	27	40	32	26	39	32	26	24					24			
7	56	40	30	23	54	39	30	23	38	29	23	36	28	22	35	27	22	20					20			
8	52	36	26	20	50	35	26	20	34	25	19	33	25	19	31	24	19	17					17			
9	48	33	23	17	46	32	23	17	31	23	17	30	22	17	29	22	17	15					15			
10	45	30	21	15	43	29	21	15	28	20	15	27	20	15	26	20	15	13					13			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	18549	18549	18549	18549
5°	18230	18549	19438	19030
10°	18853	18620	20309	19788
15°	20340	18124	20998	21382
20°	23504	16710	20701	24821
25°	30769	14107	18887	30399
30°	40552	10925	16846	39450
35°	50514	7468	13491	51055
40°	57247	6533	9880	67891
45°	62771	6852	7427	87929
50°	69107	7016	7098	107785
55°	78340	7184	7246	129331
60°	95808	7888	7888	159042
65°	130674	8200	8325	185069
70°	188717	8685	8789	168448
75°	210506	9156	9702	109043
80°	143893	9881	11102	52957
85°	93327	12166	13382	25770



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.4	1.2
10°-20°	350.1	3.8
20°-30°	621.9	6.8
30°-40°	979.3	10.7
40°-50°	1441.2	15.7
50°-60°	1914.4	20.8
60°-70°	2108.7	23.0
70°-80°	1323.0	14.4
80°-90°	337.0	3.7
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°	1084.3	11.8
0°-40°	2063.6	22.5
0°-60°	5419.3	59.0
0°-90°	9187.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9187.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1155	1155	1155	1155	1155	
5°	1130	1150	1205	1180	1130	109
15°	1223	1090	1262	1286	1223	354
25°	1736	796	1066	1715	1736	819
35°	2576	381	688	2603	2576	1596
45°	2763	302	327	3870	2763	2136
55°	2797	256	259	4617	2797	2537
65°	3438	216	219	4868	3438	3461
75°	3391	148	156	1757	3391	3316
85°	506	66	73	140	506	585
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°	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6
2.5°	1139.2	1142.5	1141.4	1141.4	1143.6	1142.5	1142.5	1143.6	1143.6	1146.9	1151.3
5°	1130.4	1129.3	1127.1	1129.3	1129.3	1129.3	1124.9	1128.2	1129.3	1131.5	1131.5
7.5°	1141.4	1138.1	1133.7	1134.8	1134.8	1132.6	1129.3	1130.4	1129.3	1129.3	1128.2
10°	1155.7	1148.0	1142.5	1142.5	1142.5	1140.3	1134.8	1138.1	1138.1	1137.0	1138.1
12.5°	1181.1	1172.2	1165.6	1163.4	1163.4	1160.1	1155.7	1160.1	1157.9	1157.9	1155.7
15°	1222.9	1213.0	1205.3	1198.7	1199.8	1199.8	1194.3	1191.0	1186.6	1181.1	1170.0
17.5°	1285.6	1274.6	1264.7	1259.2	1260.3	1252.6	1237.2	1221.8	1200.9	1180.0	1156.8
20°	1374.8	1371.5	1358.3	1352.8	1339.6	1320.8	1277.9	1241.6	1200.9	1161.2	1121.6
22.5°	1528.9	1513.5	1500.3	1479.3	1435.3	1383.6	1312.0	1248.2	1184.4	1128.2	1075.4
25°	1735.8	1708.3	1643.3	1579.5	1489.2	1396.8	1299.9	1217.4	1138.1	1064.4	999.4
27.5°	1939.4	1855.8	1740.2	1624.6	1492.5	1371.5	1250.4	1152.4	1060.0	979.6	908.1
30°	2186.0	2045.1	1867.9	1685.2	1498.1	1335.1	1189.9	1075.4	968.6	883.9	809.0
32.5°	2417.1	2213.5	1981.3	1741.3	1510.2	1301.0	1120.5	990.6	880.6	773.8	700.0
35°	2575.6	2311.5	2029.7	1746.8	1480.4	1236.1	1033.6	880.6	770.5	671.4	584.5
37.5°	2670.3	2354.4	2031.9	1707.2	1411.1	1148.0	923.5	771.6	670.3	575.7	507.4
40°	2729.7	2364.3	2003.3	1649.9	1323.0	1036.9	813.4	676.9	584.5	508.5	455.7
42.5°	2758.4	2348.9	1957.0	1577.3	1233.9	937.8	736.4	607.6	527.2	473.3	433.7
45°	2762.8	2321.4	1907.5	1511.3	1154.6	866.3	683.5	579.0	512.9	467.8	428.2
47.5°	2762.8	2297.2	1867.9	1462.8	1102.9	835.4	679.1	591.1	526.1	475.5	428.2
50°	2765.0	2289.5	1851.4	1438.6	1085.3	851.9	716.6	628.5	554.8	488.7	427.1
52.5°	2774.9	2299.4	1864.6	1457.3	1117.2	918.0	787.0	684.6	592.2	504.1	427.1
55°	2796.9	2332.4	1920.7	1522.3	1203.1	1018.1	871.8	745.2	621.9	510.7	420.5
57.5°	2858.5	2416.0	2023.1	1647.7	1349.5	1133.7	948.8	788.1	632.9	505.2	407.3
60°	2981.8	2582.2	2198.1	1823.9	1504.7	1232.8	993.9	794.7	623.0	487.6	386.3
62.5°	3178.8	2772.7	2410.5	2015.4	1642.2	1287.8	999.4	778.2	596.6	455.7	355.5
63°	3247.1	2820.0	2455.7	2051.7	1659.9	1292.2	995.0	771.6	590.0	446.9	351.1
65°	3437.5	3019.2	2612.0	2179.4	1709.4	1293.3	970.8	738.6	559.2	412.8	320.3
67.5°	3793.0	3281.2	2809.0	2279.5	1727.0	1258.1	909.2	676.9	494.2	359.9	281.8
70°	4017.6	3427.6	2884.9	2281.8	1675.3	1157.9	802.4	576.8	411.7	298.3	242.2
72.5°	3959.2	3283.4	2684.6	2075.9	1451.8	967.5	645.0	453.5	321.4	238.9	201.4
75°	3391.3	2733.0	2190.4	1608.1	1097.4	711.1	472.2	323.6	237.8	187.1	168.4
77.5°	2441.4	1967.0	1570.7	1145.8	739.7	460.1	313.7	231.1	180.5	154.1	138.7
80°	1555.3	1153.5	960.9	689.0	432.6	285.1	215.7	175.0	148.6	128.8	118.9
82.5°	812.3	569.1	462.3	352.2	240.0	188.2	158.5	143.1	122.2	106.8	101.3
85°	506.3	335.7	248.8	173.9	120.0	107.9	99.1	96.9	87.0	77.0	73.7
87.5°	57.2	51.7	53.9	34.1	25.3	27.5	26.4	35.2	34.1	25.3	26.4
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°	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6
2.5°	1146.9	1149.1	1149.1	1152.4	1152.4	1154.6	1156.8	1156.8	1159.0	1160.1	1162.3
5°	1133.7	1133.7	1133.7	1138.1	1139.2	1145.8	1148.0	1150.2	1152.4	1160.1	1164.5
7.5°	1130.4	1126.0	1128.2	1128.2	1131.5	1137.0	1142.5	1145.8	1149.1	1159.0	1165.6
10°	1137.0	1133.7	1130.4	1130.4	1131.5	1133.7	1138.1	1141.4	1143.6	1153.5	1159.0
12.5°	1154.6	1146.9	1140.3	1134.8	1130.4	1129.3	1127.1	1128.2	1130.4	1135.9	1143.6
15°	1157.9	1143.6	1129.3	1115.0	1104.0	1097.4	1091.9	1089.7	1089.7	1093.0	1101.8
17.5°	1135.9	1111.7	1090.8	1072.1	1060.0	1047.9	1042.4	1038.0	1035.8	1040.2	1041.3
20°	1088.6	1060.0	1031.4	1009.3	987.3	984.0	975.2	977.4	979.6	986.2	989.5
22.5°	1023.7	989.5	954.3	931.2	913.6	898.2	888.3	892.7	896.0	902.6	905.9
25°	944.4	894.9	857.4	834.3	815.6	802.4	791.4	795.8	791.4	799.1	811.2
27.5°	850.8	792.5	752.9	726.5	713.3	702.2	691.2	691.2	702.2	702.2	712.2
30°	737.5	694.5	642.8	615.3	598.8	592.2	591.1	588.9	596.6	601.0	612.0
32.5°	630.7	577.9	528.3	501.9	487.6	479.9	481.0	482.1	485.4	492.0	509.6
35°	522.8	476.6	441.4	411.7	397.4	383.0	383.0	380.8	384.1	391.8	412.8
37.5°	453.5	412.8	385.2	362.1	347.8	339.0	331.3	328.0	328.0	331.3	339.0
40°	415.0	385.2	359.9	340.1	326.9	319.2	314.8	311.5	309.3	309.3	310.4
42.5°	397.4	366.5	341.2	323.6	313.7	309.3	308.2	307.1	303.8	302.7	301.6
45°	388.5	353.3	324.7	310.4	302.7	300.5	301.6	301.6	300.5	298.3	293.9
47.5°	381.9	341.2	312.6	299.4	296.1	296.1	296.1	296.1	295.0	293.9	290.6
50°	370.9	322.5	291.7	281.8	279.6	279.6	280.7	280.7	282.9	280.7	278.5
52.5°	358.8	304.9	274.1	265.3	264.2	263.1	263.1	263.1	264.2	264.2	263.1
55°	345.6	291.7	265.3	258.7	259.8	258.7	257.6	256.5	256.5	255.4	253.2
57.5°	332.4	280.7	258.7	254.3	255.4	255.4	253.2	251.0	249.9	246.6	244.4
60°	312.6	265.3	245.5	243.3	246.6	246.6	246.6	245.5	245.5	244.4	238.9
62.5°	286.2	243.3	227.8	228.9	230.0	232.2	232.2	232.2	232.2	230.0	224.5
63°	280.7	238.9	224.5	224.5	227.8	227.8	228.9	227.8	228.9	226.7	220.1
65°	258.7	224.5	213.5	214.6	216.8	216.8	216.8	215.7	215.7	212.4	209.1
67.5°	233.3	206.9	200.3	201.4	202.5	204.7	203.6	203.6	204.7	202.5	199.2
70°	204.7	188.2	183.8	184.9	186.0	186.0	184.9	184.9	186.0	183.8	180.5
72.5°	182.7	176.1	172.8	172.8	170.6	170.6	168.4	167.3	166.2	166.2	162.9
75°	154.1	153.0	154.1	156.3	154.1	151.9	150.8	147.5	145.3	145.3	144.2
77.5°	132.1	132.1	134.3	137.6	138.7	138.7	135.4	129.9	128.8	128.8	128.8
80°	114.5	112.3	112.3	115.6	118.9	117.8	112.3	106.8	106.8	112.3	113.4
82.5°	100.2	100.2	96.9	98.0	96.9	95.8	90.3	87.0	85.9	90.3	94.7
85°	79.3	80.4	79.3	78.1	77.0	73.7	69.3	66.0	64.9	69.3	75.9
87.5°	31.9	30.8	29.7	30.8	29.7	31.9	30.8	28.6	27.5	30.8	37.4
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6
2.5°	1163.4	1165.6	1167.8	1167.8	1170.0	1168.9	1170.0	1171.1	1171.1	1172.2	1172.2
5°	1170.0	1173.3	1177.7	1182.2	1183.3	1186.6	1189.9	1187.7	1191.0	1195.4	1195.4
7.5°	1172.2	1180.0	1183.3	1189.9	1191.0	1195.4	1203.1	1197.6	1204.2	1207.5	1208.6
10°	1168.9	1176.6	1182.2	1189.9	1193.2	1200.9	1208.6	1206.4	1214.1	1219.6	1220.7
12.5°	1149.1	1156.8	1168.9	1180.0	1188.8	1200.9	1215.2	1210.8	1221.8	1228.4	1231.7
15°	1110.6	1118.3	1131.5	1149.1	1165.6	1184.4	1203.1	1206.4	1217.4	1225.1	1228.4
17.5°	1050.1	1060.0	1074.3	1093.0	1113.9	1145.8	1170.0	1182.2	1197.6	1202.0	1207.5
20°	993.9	1003.8	1012.6	1023.7	1039.1	1069.9	1101.8	1126.0	1145.8	1162.3	1166.7
22.5°	919.1	927.9	938.9	947.7	958.7	980.7	1007.1	1034.7	1065.5	1075.4	1086.4
25°	828.8	834.3	849.7	855.2	862.9	881.7	902.6	922.4	952.1	973.0	978.5
27.5°	732.0	737.5	751.8	755.1	765.0	782.6	798.0	805.7	833.2	855.2	872.9
30°	619.7	634.0	651.6	653.8	664.8	675.8	690.1	697.8	723.2	746.3	768.3
32.5°	522.8	537.1	551.5	560.3	565.8	574.6	588.9	596.6	620.8	641.7	663.7
35°	423.8	441.4	456.8	468.9	473.3	484.3	495.3	503.0	528.3	547.0	562.5
37.5°	348.9	362.1	378.6	390.7	402.9	410.6	423.8	434.8	450.2	460.1	476.6
40°	312.6	319.2	328.0	337.9	347.8	356.6	366.5	375.3	385.2	398.5	409.5
42.5°	300.5	301.6	301.6	304.9	310.4	314.8	323.6	330.2	336.8	346.7	352.2
45°	291.7	290.6	288.4	286.2	287.3	289.5	295.0	299.4	307.1	311.5	312.6
47.5°	287.3	282.9	278.5	275.2	274.1	275.2	279.6	284.0	288.4	291.7	292.8
50°	273.0	269.7	263.1	258.7	256.5	258.7	264.2	266.4	270.8	274.1	275.2
52.5°	258.7	254.3	249.9	245.5	245.5	246.6	251.0	255.4	259.8	260.9	263.1
55°	249.9	243.3	238.9	235.5	233.3	236.7	240.0	245.5	251.0	252.1	254.3
57.5°	241.1	234.4	230.0	226.7	224.5	227.8	231.1	238.9	245.5	245.5	245.5
60°	235.5	230.0	223.4	220.1	216.8	220.1	224.5	232.2	238.9	237.8	236.7
62.5°	220.1	214.6	211.3	211.3	208.0	213.5	217.9	226.7	227.8	225.6	223.4
63°	215.7	211.3	209.1	209.1	206.9	212.4	216.8	224.5	224.5	222.3	220.1
65°	204.7	201.4	199.2	201.4	201.4	206.9	208.0	213.5	212.4	209.1	208.0
67.5°	195.9	193.7	191.5	191.5	191.5	192.6	193.7	195.9	194.8	193.7	194.8
70°	181.6	180.5	178.3	178.3	177.2	177.2	177.2	178.3	178.3	179.4	180.5
72.5°	164.0	161.8	161.8	162.9	160.7	161.8	162.9	161.8	164.0	164.0	165.1
75°	144.2	143.1	145.3	147.5	146.4	146.4	147.5	147.5	148.6	148.6	149.7
77.5°	128.8	129.9	131.0	133.2	134.3	134.3	134.3	133.2	134.3	134.3	135.4
80°	114.5	116.7	118.9	121.1	122.2	122.2	122.2	121.1	121.1	121.1	121.1
82.5°	103.5	106.8	109.0	110.1	110.1	110.1	110.1	110.1	110.1	107.9	105.7
85°	87.0	93.6	93.6	94.7	91.4	89.2	87.0	88.1	89.2	84.8	83.7
87.5°	44.0	44.0	46.2	48.4	49.5	49.5	56.1	52.8	51.7	50.6	48.4
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: P153525

CATALOG NUMBER: TLM-F04-LED-E1-SLR

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6
2.5°	1173.3	1172.2	1174.4	1172.2	1173.3	1174.4	1172.2	1175.5	1177.7	1174.4	1171.1
5°	1197.6	1197.6	1203.1	1205.3	1206.4	1213.0	1209.7	1211.9	1214.1	1213.0	1214.1
7.5°	1213.0	1217.4	1222.9	1228.4	1229.5	1235.0	1233.9	1237.2	1239.4	1244.9	1244.9
10°	1226.2	1231.7	1239.4	1244.9	1250.4	1254.8	1257.0	1263.6	1264.7	1269.1	1269.1
12.5°	1238.3	1244.9	1252.6	1261.4	1266.9	1275.7	1276.8	1286.7	1290.0	1291.1	1287.8
15°	1236.1	1243.8	1252.6	1262.5	1272.4	1283.4	1290.0	1299.9	1305.4	1307.6	1302.1
17.5°	1215.2	1221.8	1232.8	1246.0	1258.1	1272.4	1284.5	1298.8	1307.6	1309.8	1308.7
20°	1174.4	1178.8	1193.2	1210.8	1225.1	1247.1	1264.7	1286.7	1301.0	1312.0	1315.3
22.5°	1094.1	1105.1	1119.4	1139.2	1160.1	1187.7	1213.0	1244.9	1275.7	1302.1	1328.5
25°	997.2	1017.0	1039.1	1065.5	1090.8	1119.4	1148.0	1184.4	1229.5	1284.5	1347.3
27.5°	899.3	933.4	960.9	995.0	1024.8	1053.4	1085.3	1124.9	1174.4	1240.5	1320.8
30°	800.2	838.7	868.5	908.1	947.7	986.2	1018.1	1060.0	1108.4	1175.5	1263.6
32.5°	694.5	733.1	768.3	804.6	848.6	894.9	933.4	985.1	1036.9	1106.2	1195.4
35°	585.6	619.7	649.4	687.9	736.4	785.9	836.5	896.0	952.1	1024.8	1119.4
37.5°	490.9	515.1	543.7	577.9	615.3	668.1	725.4	795.8	859.6	938.9	1035.8
40°	412.8	426.0	442.5	471.1	505.2	557.0	613.1	687.9	765.0	851.9	945.5
42.5°	352.2	358.8	363.2	381.9	409.5	460.1	514.0	586.7	671.4	766.1	860.7
45°	312.6	315.9	317.0	326.9	346.7	390.7	446.9	508.5	590.0	682.4	781.5
47.5°	293.9	297.2	299.4	301.6	313.7	347.8	398.5	456.8	531.6	616.4	717.7
50°	278.5	281.8	285.1	284.0	289.5	311.5	354.4	408.4	478.8	557.0	657.1
52.5°	263.1	265.3	265.3	265.3	268.6	282.9	313.7	363.2	428.2	501.9	601.0
55°	254.3	256.5	257.6	258.7	259.8	267.5	290.6	330.2	386.3	454.6	543.7
57.5°	245.5	246.6	248.8	249.9	252.1	256.5	270.8	299.4	346.7	404.0	478.8
60°	237.8	240.0	244.4	245.5	247.7	248.8	255.4	273.0	303.8	347.8	408.4
62.5°	225.6	228.9	233.3	234.4	236.7	237.8	238.9	248.8	263.1	289.5	334.6
63°	222.3	225.6	231.1	232.2	233.3	233.3	234.4	241.1	254.3	277.4	310.4
65°	210.2	214.6	217.9	219.0	220.1	220.1	219.0	221.2	222.3	232.2	252.1
67.5°	197.0	200.3	202.5	203.6	202.5	203.6	202.5	200.3	198.1	200.3	209.1
70°	183.8	186.0	186.0	187.1	188.2	189.3	187.1	184.9	182.7	181.6	187.1
72.5°	168.4	170.6	170.6	171.7	171.7	173.9	173.9	172.8	172.8	173.9	175.0
75°	153.0	155.2	154.1	156.3	156.3	159.6	159.6	160.7	162.9	161.8	160.7
77.5°	138.7	139.8	139.8	140.9	142.0	147.5	150.8	151.9	151.9	149.7	147.5
80°	123.3	123.3	121.1	120.0	121.1	126.6	133.2	134.3	137.6	136.5	137.6
82.5°	103.5	99.1	95.8	95.8	98.0	101.3	103.5	105.7	107.9	107.9	110.1
85°	79.3	74.8	71.5	72.6	75.9	77.0	75.9	75.9	80.4	83.7	80.4
87.5°	47.3	42.9	40.7	37.4	38.5	41.8	40.7	37.4	38.5	30.8	28.6
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: P153525

CATALOG NUMBER: TLM-F04-LED-E1-SLR

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6
2.5°	1173.3	1172.2	1170.0	1166.7	1165.6	1163.4	1164.5	1161.2	1159.0	1156.8	1153.5
5°	1214.1	1214.1	1207.5	1207.5	1204.2	1203.1	1195.4	1192.1	1185.5	1187.7	1180.0
7.5°	1242.7	1246.0	1238.3	1237.2	1232.8	1231.7	1221.8	1218.5	1213.0	1210.8	1204.2
10°	1263.6	1263.6	1253.7	1246.0	1240.5	1235.0	1225.1	1220.7	1216.3	1217.4	1213.0
12.5°	1280.1	1272.4	1258.1	1247.1	1239.4	1233.9	1226.2	1222.9	1221.8	1229.5	1230.6
15°	1293.3	1282.3	1264.7	1257.0	1250.4	1249.3	1249.3	1252.6	1260.3	1274.6	1285.6
17.5°	1301.0	1294.4	1285.6	1283.4	1294.4	1301.0	1309.8	1319.7	1330.7	1350.6	1362.7
20°	1315.3	1319.7	1326.3	1335.1	1352.8	1369.3	1380.3	1394.6	1407.8	1432.0	1451.8
22.5°	1352.8	1378.1	1399.0	1416.6	1443.0	1466.1	1480.4	1500.3	1510.2	1526.7	1557.5
25°	1401.2	1452.9	1497.0	1534.4	1575.1	1599.3	1619.1	1644.4	1659.9	1687.4	1714.9
27.5°	1386.9	1460.6	1526.7	1596.0	1652.2	1714.9	1758.9	1800.7	1827.2	1867.9	1904.2
30°	1342.9	1430.9	1520.1	1611.4	1700.6	1790.8	1874.5	1950.4	2008.8	2067.1	2126.6
32.5°	1283.4	1384.7	1493.6	1605.9	1722.6	1848.1	1963.6	2078.1	2175.0	2259.7	2342.3
35°	1215.2	1329.6	1443.0	1581.7	1725.9	1885.5	2046.2	2204.7	2352.2	2501.9	2603.2
37.5°	1133.7	1250.4	1377.0	1536.6	1706.1	1903.1	2107.8	2314.8	2523.9	2725.3	2900.3
40°	1046.8	1165.6	1298.8	1471.6	1663.2	1892.1	2147.5	2425.9	2713.2	3004.9	3237.2
42.5°	969.7	1091.9	1237.2	1412.2	1620.2	1877.8	2179.4	2521.7	2872.8	3233.9	3575.1
45°	894.9	1029.2	1182.2	1370.4	1601.5	1888.8	2226.7	2610.9	3015.9	3454.0	3870.1
47.5°	827.7	964.2	1112.8	1318.6	1574.0	1894.3	2272.9	2700.0	3151.3	3625.7	4119.9
50°	767.2	899.3	1045.7	1252.6	1531.1	1891.0	2314.8	2780.4	3268.0	3761.1	4312.5
52.5°	707.8	842.0	991.7	1188.8	1478.2	1872.3	2334.6	2846.4	3375.8	3897.6	4467.7
55°	649.4	781.5	932.3	1128.2	1408.9	1823.9	2332.4	2889.3	3461.7	4026.4	4617.4
57.5°	581.2	706.6	854.1	1061.1	1335.1	1749.0	2299.4	2909.1	3535.4	4154.0	4796.9
60°	496.4	614.2	756.2	963.1	1238.3	1653.3	2230.0	2898.1	3578.4	4248.7	4949.8
62.5°	391.8	494.2	624.1	826.6	1117.2	1515.7	2100.1	2798.0	3510.1	4235.5	5021.4
63°	369.8	466.7	593.3	793.6	1065.5	1478.2	2061.6	2758.4	3477.1	4208.0	5011.5
65°	297.2	359.9	461.2	640.6	891.6	1294.4	1870.1	2554.7	3299.9	4014.3	4868.4
67.5°	227.8	259.8	313.7	439.2	630.7	1018.1	1514.6	2165.1	2864.0	3535.4	4407.2
70°	194.8	209.1	232.2	291.7	400.7	642.8	1063.3	1614.7	2220.1	2802.4	3586.1
72.5°	177.2	183.8	195.9	221.2	275.2	385.2	678.0	1051.2	1510.2	1997.8	2603.2
75°	162.9	168.4	178.3	191.5	211.3	256.5	386.3	642.8	981.8	1312.0	1756.7
77.5°	148.6	151.9	162.9	175.0	188.2	211.3	255.4	369.8	564.7	773.8	1058.9
80°	136.5	134.3	142.0	161.8	175.0	188.2	201.4	240.0	321.4	423.8	572.4
82.5°	109.0	111.2	117.8	137.6	143.1	139.8	142.0	148.6	179.4	195.9	292.8
85°	73.7	68.2	67.1	69.3	69.3	66.0	66.0	64.9	71.5	81.5	139.8
87.5°	19.8	9.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: P153525

CATALOG NUMBER: TLM-F04-LED-E1-SLR

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6
2.5°	1151.3	1150.2	1151.3	1145.8	1145.8	1144.7	1143.6	1141.4	1141.4	1137.0	1140.3
5°	1173.3	1171.1	1166.7	1160.1	1156.8	1152.4	1152.4	1148.0	1144.7	1140.3	1141.4
7.5°	1198.7	1199.8	1192.1	1186.6	1184.4	1180.0	1181.1	1174.4	1175.5	1172.2	1170.0
10°	1213.0	1213.0	1215.2	1214.1	1216.3	1216.3	1219.6	1215.2	1213.0	1209.7	1209.7
12.5°	1236.1	1240.5	1249.3	1249.3	1255.9	1258.1	1259.2	1261.4	1257.0	1254.8	1247.1
15°	1293.3	1304.3	1312.0	1323.0	1336.2	1340.7	1340.7	1336.2	1334.0	1330.7	1316.4
17.5°	1388.0	1412.2	1418.8	1436.4	1438.6	1444.1	1459.5	1450.7	1445.2	1422.1	1417.7
20°	1484.8	1515.7	1546.5	1568.5	1579.5	1601.5	1604.8	1600.4	1578.4	1556.4	1546.5
22.5°	1601.5	1647.7	1683.0	1717.1	1733.6	1744.6	1768.8	1763.3	1745.7	1712.7	1699.5
25°	1766.6	1823.9	1861.3	1903.1	1925.1	1936.1	1960.3	1960.3	1941.6	1931.7	1930.6
27.5°	1974.7	2045.1	2106.7	2121.0	2178.3	2191.5	2214.6	2214.6	2197.0	2184.9	2243.2
30°	2205.8	2279.5	2386.3	2457.9	2527.2	2595.5	2594.3	2598.8	2619.7	2630.7	2656.0
32.5°	2436.9	2528.3	2641.7	2796.9	2945.5	3072.1	3236.1	3340.6	3308.7	3219.5	3184.3
35°	2717.6	2818.9	2956.5	3112.8	3384.7	3548.7	3627.9	3684.0	3690.6	3702.8	3728.1
37.5°	3030.2	3199.7	3359.3	3536.5	3687.3	3886.6	4070.4	4217.9	4252.0	4321.3	4281.7
40°	3425.4	3614.7	3782.0	4011.0	4213.5	4453.4	4716.5	4919.0	5000.5	4974.1	4775.9
42.5°	3839.2	4073.7	4269.6	4539.3	4802.4	5119.4	5391.2	5674.1	5724.7	5521.1	5225.0
45°	4220.1	4510.7	4753.9	5034.6	5356.0	5735.7	6099.0	6389.6	6379.7	6030.7	5634.5
47.5°	4562.4	4919.0	5216.2	5581.6	5927.3	6379.7	6796.8	7011.5	6884.9	6472.1	5986.7
50°	4845.3	5290.0	5656.5	6026.3	6465.5	7010.4	7412.1	7533.2	7288.8	6839.7	6329.0
52.5°	5073.1	5631.2	6042.8	6468.8	7023.6	7597.0	7942.7	7897.5	7581.6	7120.4	6611.9
55°	5265.7	5892.0	6383.0	6886.0	7573.9	8102.3	8332.3	8211.2	7769.8	7302.0	6805.6
57.5°	5465.0	6145.2	6695.6	7278.9	8045.0	8498.5	8626.2	8377.4	7859.0	7371.4	6889.3
60°	5664.2	6356.5	6971.8	7622.3	8401.6	8822.1	8786.9	8414.9	7832.6	7320.8	6833.1
62.5°	5798.5	6482.0	7132.5	7833.7	8669.1	8987.2	8771.5	8281.7	7679.6	7121.5	6665.8
63°	5801.8	6486.4	7142.4	7848.0	8698.8	8992.7	8741.8	8234.3	7631.2	7080.8	6616.3
65°	5732.4	6403.9	7054.4	7783.0	8673.5	8866.1	8485.3	7954.8	7354.9	6799.0	6358.7
67.5°	5378.0	6062.7	6637.2	7324.1	8220.0	8275.1	7798.5	7370.3	6830.9	6255.3	5795.2
70°	4663.7	5232.7	5796.3	6369.8	7121.5	7111.6	6663.6	6445.7	5973.5	5317.5	4948.7
72.5°	3709.4	4220.1	4616.3	5000.5	5495.8	5395.6	5107.2	5167.8	4861.8	4372.0	4152.9
75°	2754.0	3315.3	3509.0	3665.3	3874.5	3875.6	3954.8	4126.5	4122.1	3850.2	3574.0
77.5°	1806.2	2420.4	2485.4	2610.9	2861.8	3203.0	3555.3	3933.9	4028.6	3813.9	3405.6
80°	1007.1	1645.5	1570.7	1678.6	1949.3	2412.7	2932.3	3350.5	3597.1	3477.1	3044.5
82.5°	515.1	948.8	907.0	1056.7	1275.7	1678.6	2022.0	2343.4	2634.0	2617.5	2453.5
85°	267.5	519.5	591.1	669.2	779.3	923.5	1053.4	1146.9	1268.0	1481.5	1554.2
87.5°	0.0	0.0	0.0	0.0	0.0	1.1	0.0	79.3	57.2	157.4	224.5
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: P153525

CATALOG NUMBER: TLM-F04-LED-E1-SLR

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6	1154.6
2.5°	1141.4	1142.5	1140.3	1140.3	1141.4	1141.4	1139.2
5°	1139.2	1139.2	1137.0	1134.8	1132.6	1132.6	1130.4
7.5°	1164.5	1164.5	1156.8	1153.5	1148.0	1143.6	1141.4
10°	1202.0	1195.4	1186.6	1180.0	1171.1	1161.2	1155.7
12.5°	1239.4	1229.5	1218.5	1208.6	1197.6	1186.6	1181.1
15°	1301.0	1287.8	1273.5	1261.4	1246.0	1229.5	1222.9
17.5°	1395.7	1374.8	1356.1	1338.5	1310.9	1298.8	1285.6
20°	1521.2	1490.3	1466.1	1436.4	1402.3	1391.3	1374.8
22.5°	1673.1	1646.6	1598.2	1576.2	1542.1	1525.6	1528.9
25°	1904.2	1870.1	1814.0	1793.0	1789.7	1753.4	1735.8
27.5°	2205.8	2208.0	2156.3	2100.1	2069.3	2012.1	1939.4
30°	2635.1	2605.4	2544.8	2487.6	2414.9	2307.1	2186.0
32.5°	3154.6	3088.6	2988.4	2881.6	2752.9	2586.6	2417.1
35°	3662.0	3546.5	3386.9	3208.5	3022.5	2815.6	2575.6
37.5°	4107.8	3928.4	3689.5	3484.8	3221.7	2963.1	2670.3
40°	4515.1	4292.7	3984.5	3719.3	3408.9	3076.5	2729.7
42.5°	4909.1	4627.3	4249.8	3891.0	3539.9	3152.4	2758.4
45°	5284.5	4921.2	4473.2	4046.2	3635.6	3201.9	2762.8
47.5°	5572.8	5176.6	4673.6	4158.4	3701.7	3239.4	2762.8
50°	5840.3	5392.3	4826.6	4246.5	3763.3	3264.7	2765.0
52.5°	6048.3	5544.2	4925.6	4309.2	3811.7	3283.4	2774.9
55°	6199.1	5643.3	4991.7	4347.8	3846.9	3309.8	2796.9
57.5°	6304.8	5708.2	5028.0	4381.9	3889.9	3356.0	2858.5
60°	6355.4	5828.2	5088.5	4450.1	3963.6	3454.0	2981.8
62.5°	6316.9	6014.2	5261.3	4565.7	4066.0	3607.0	3178.8
63°	6300.4	6048.3	5308.7	4591.0	4089.1	3640.0	3247.1
65°	6171.6	6082.5	5503.5	4718.7	4199.2	3786.4	3437.5
67.5°	5772.1	5948.2	5667.5	4934.4	4435.8	4141.9	3793.0
70°	5254.7	5749.0	5637.8	4962.0	4586.6	4433.6	4017.6
72.5°	4635.0	5146.9	5043.4	4595.4	4420.4	4436.9	3959.2
75°	3647.7	4031.9	3963.6	3806.2	3841.4	3962.5	3391.3
77.5°	2922.4	2870.6	2713.2	2724.2	2927.9	3069.9	2441.4
80°	2387.4	1932.8	1728.1	1733.6	2089.1	2236.6	1555.3
82.5°	2271.8	1828.3	1489.2	1301.0	1520.1	1463.9	812.3
85°	1618.0	1621.3	1345.1	1093.0	1058.9	900.4	506.3
87.5°	383.0	307.1	219.0	162.9	171.7	113.4	57.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)