

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: P152956

Luminaire Tested: **TLM-F04-LED-E1-SLL-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P152956
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-SLL-7050
Description: TALON MEDIUM LED SITE LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR LEFT
Light Source: (28) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

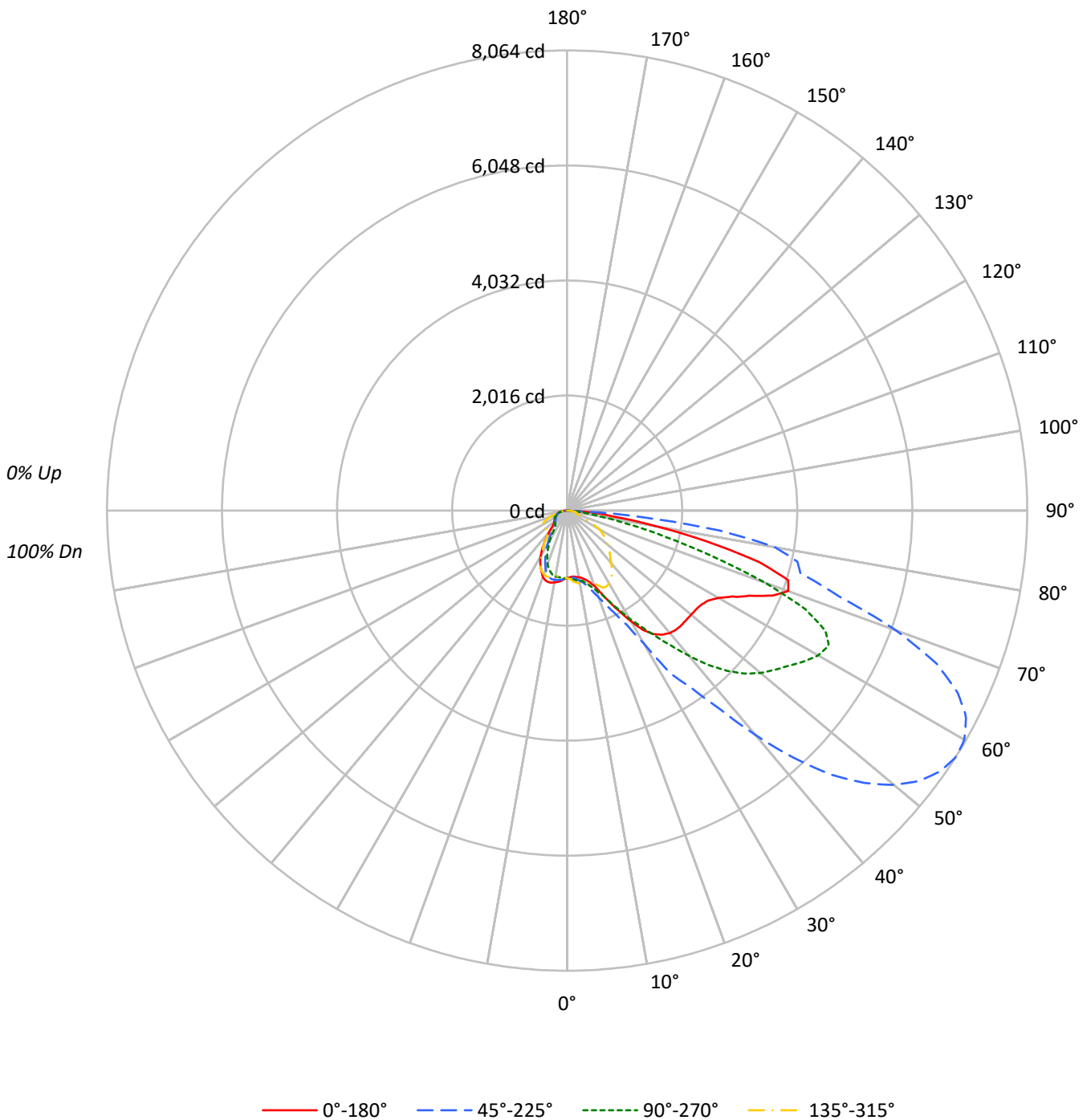
Lumens per Lamp: N/A
Luminaire Lumens: 9427.8 lumens
Efficiency: N/A
Efficacy: 92.2 lumens/watt
Spacing Criteria (0/90/45): 1.93 / 2.48 / 2.44
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P152956
CATALOG NUMBER: TLM-F04-LED-E1-SLL-7050

Luminous Intensity Polar Plot





TEST NUMBER: P152956

CATALOG NUMBER: TLM-F04-LED-E1-SLL-7050

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	19034	19034	19034	19034
5°	18706	19526	19944	19035
10°	19346	20304	20839	19106
15°	20870	21941	21547	18597
20°	24118	25469	21241	17146
25°	31572	31193	19380	14475
30°	41612	40480	17286	11208
35°	51834	52387	13844	7665
40°	58743	69663	10138	6703
45°	64409	90224	7620	7032
50°	70909	110599	7283	7198
55°	80384	132709	7434	7372
60°	98308	163197	8094	8094
65°	134084	189901	8546	8416
70°	193639	172845	9019	8911
75°	216000	111892	9956	9392
80°	147649	54336	11389	10140
85°	95760	26433	13733	12498



TEST NUMBER: P152956

CATALOG NUMBER: TLM-F04-LED-E1-SLL-7050

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.3	1.2
10°-20°	359.2	3.8
20°-30°	638.1	6.8
30°-40°	1004.9	10.7
40°-50°	1478.9	15.7
50°-60°	1964.4	20.8
60°-70°	2163.8	23.0
70°-80°	1357.5	14.4
80°-90°	345.8	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°	1112.6	11.8
0°-40°	2117.5	22.5
0°-60°	5560.8	59.0
0°-90°	9427.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9427.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1185	1185	1185	1185	1185	
5°	1160	1211	1237	1180	1160	112
15°	1255	1319	1296	1118	1255	363
25°	1781	1760	1093	817	1781	841
35°	2643	2671	706	391	2643	1638
45°	2835	3971	335	310	2835	2192
55°	2870	4738	265	263	2870	2603
65°	3527	4996	225	221	3527	3551
75°	3480	1803	160	151	3480	3403
85°	520	143	74	68	520	601
90°	0	0	0	0	0	



TEST NUMBER: P152956

CATALOG NUMBER: TLM-F04-LED-E1-SLL-7050

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8
2.5°	1169.0	1171.2	1171.2	1170.1	1170.1	1172.4	1171.2	1170.1	1166.7	1171.2	1171.2
5°	1159.9	1162.2	1162.2	1164.4	1166.7	1169.0	1169.0	1171.2	1170.1	1174.6	1178.0
7.5°	1171.2	1173.5	1178.0	1183.6	1187.0	1194.9	1194.9	1200.6	1202.8	1206.2	1205.1
10°	1185.9	1191.6	1201.7	1210.8	1217.5	1226.6	1233.3	1241.2	1241.2	1244.6	1246.9
12.5°	1211.9	1217.5	1228.8	1240.1	1250.3	1261.6	1271.7	1279.6	1287.6	1289.8	1294.3
15°	1254.8	1261.6	1278.5	1294.3	1306.8	1321.4	1335.0	1350.8	1365.5	1368.9	1371.1
17.5°	1319.2	1332.7	1345.2	1373.4	1391.5	1410.7	1432.1	1454.7	1459.2	1482.9	1488.6
20°	1410.7	1427.6	1438.9	1473.9	1504.4	1529.3	1560.9	1586.9	1597.0	1619.6	1642.2
22.5°	1568.8	1565.4	1582.3	1617.3	1639.9	1689.6	1716.7	1743.8	1757.4	1791.3	1809.4
25°	1781.1	1799.2	1836.5	1839.8	1861.3	1918.9	1953.9	1981.0	1982.2	1992.3	2011.5
27.5°	1990.1	2064.6	2123.3	2155.0	2212.6	2265.6	2263.4	2301.8	2241.9	2254.4	2272.4
30°	2243.1	2367.3	2478.0	2552.5	2611.3	2673.4	2703.9	2725.3	2699.3	2688.1	2666.6
32.5°	2480.2	2654.2	2824.7	2956.9	3066.4	3169.2	3237.0	3267.5	3303.6	3395.1	3427.8
35°	2642.9	2889.1	3101.4	3292.3	3475.3	3639.0	3757.6	3825.4	3799.4	3787.0	3780.2
37.5°	2740.0	3040.4	3305.9	3575.8	3785.9	4031.0	4215.0	4393.5	4434.2	4363.0	4328.0
40°	2801.0	3156.8	3497.9	3816.4	4088.6	4404.8	4632.9	4900.6	5103.9	5131.0	5047.4
42.5°	2830.4	3234.7	3632.3	3992.5	4360.7	4748.1	5037.3	5361.4	5665.2	5874.2	5822.2
45°	2834.9	3285.5	3730.5	4151.8	4590.0	5049.7	5422.4	5781.6	6188.2	6546.2	6556.4
47.5°	2834.9	3323.9	3798.3	4267.0	4795.6	5311.7	5718.3	6143.0	6641.1	7064.6	7194.5
50°	2837.1	3349.9	3861.5	4357.4	4952.6	5533.1	5992.8	6494.2	7018.3	7479.1	7729.8
52.5°	2847.3	3369.1	3911.2	4421.7	5054.2	5689.0	6206.2	6784.5	7306.3	7779.5	8103.7
55°	2869.9	3396.2	3947.4	4461.3	5122.0	5790.6	6361.0	6983.3	7492.7	7972.7	8425.6
57.5°	2933.1	3443.6	3991.4	4496.3	5159.3	5857.2	6469.4	7069.1	7563.8	8064.2	8596.1
60°	3059.6	3544.2	4067.1	4566.3	5221.4	5980.4	6521.4	7011.5	7511.9	8037.1	8634.5
62.5°	3261.8	3701.2	4172.1	4684.9	5398.7	6171.2	6481.8	6839.9	7307.4	7880.1	8497.9
63°	3331.8	3735.0	4195.8	4710.9	5447.3	6206.2	6464.9	6789.0	7265.6	7830.4	8449.3
65°	3527.2	3885.3	4308.8	4841.9	5647.2	6241.3	6332.7	6524.7	6976.5	7546.9	8162.4
67.5°	3892.0	4250.1	4551.6	5063.3	5815.5	6103.5	5922.8	5946.5	6418.6	7009.3	7562.7
70°	4122.4	4549.4	4706.4	5091.5	5785.0	5899.0	5391.9	5077.9	5456.3	6129.4	6614.0
72.5°	4062.6	4552.7	4535.8	4715.4	5175.1	5281.2	4756.0	4261.4	4486.1	4988.7	5302.7
75°	3479.8	4066.0	3941.7	3905.6	4067.1	4137.1	3742.9	3667.3	3950.8	4229.7	4234.2
77.5°	2505.1	3150.0	3004.3	2795.3	2784.1	2945.6	2998.6	3494.5	3913.5	4133.7	4036.6
80°	1595.9	2295.0	2143.7	1778.9	1773.2	1983.3	2449.7	3124.0	3567.9	3691.0	3438.0
82.5°	833.5	1502.1	1559.7	1335.0	1528.1	1876.0	2331.2	2517.5	2685.8	2702.7	2404.6
85°	519.5	923.9	1086.5	1121.5	1380.2	1663.7	1660.3	1594.8	1520.2	1301.1	1176.9
87.5°	58.7	116.3	176.2	167.2	224.8	315.1	393.0	230.4	161.5	58.7	81.3
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: P152956

CATALOG NUMBER: TLM-F04-LED-E1-SLL-7050

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8
2.5°	1173.5	1174.6	1175.7	1175.7	1181.4	1180.3	1181.4	1183.6	1187.0	1189.3	1191.6
5°	1182.5	1182.5	1187.0	1190.4	1197.2	1201.7	1204.0	1210.8	1218.7	1216.4	1223.2
7.5°	1211.9	1210.8	1215.3	1217.5	1223.2	1231.1	1230.0	1235.6	1242.4	1244.6	1250.3
10°	1251.4	1248.0	1248.0	1245.8	1246.9	1244.6	1244.6	1244.6	1249.2	1248.0	1252.5
12.5°	1292.1	1290.9	1288.7	1281.9	1281.9	1272.9	1268.4	1262.7	1261.6	1253.7	1254.8
15°	1375.7	1375.7	1371.1	1357.6	1346.3	1338.4	1327.1	1319.2	1307.9	1293.2	1285.3
17.5°	1497.6	1481.8	1476.2	1473.9	1455.8	1449.1	1424.2	1398.2	1385.8	1365.5	1354.2
20°	1646.7	1643.3	1620.7	1609.4	1586.9	1555.2	1523.6	1489.7	1469.4	1444.5	1431.0
22.5°	1815.0	1790.2	1778.9	1761.9	1726.9	1690.8	1643.3	1598.1	1566.5	1549.6	1539.4
25°	2011.5	1986.7	1975.4	1952.8	1909.9	1871.5	1812.7	1759.7	1731.4	1703.2	1687.4
27.5°	2272.4	2248.7	2235.2	2176.4	2161.7	2098.5	2026.2	1953.9	1916.6	1874.9	1847.8
30°	2662.1	2663.2	2593.2	2522.0	2448.6	2339.1	2263.4	2182.1	2121.1	2061.2	2001.4
32.5°	3320.5	3152.3	3022.4	2869.9	2710.6	2594.3	2500.6	2403.4	2318.7	2231.8	2132.4
35°	3722.6	3641.3	3473.0	3194.0	3033.7	2892.5	2788.6	2671.1	2567.2	2413.6	2262.3
37.5°	4176.6	3988.0	3783.6	3628.9	3447.0	3283.3	3109.3	2976.1	2796.5	2589.8	2375.2
40°	4839.6	4569.7	4323.5	4115.7	3880.7	3709.1	3514.8	3321.7	3083.4	2784.1	2489.3
42.5°	5532.0	5253.0	4927.7	4657.8	4381.1	4180.0	3939.5	3668.4	3318.3	2947.8	2587.5
45°	6258.2	5885.5	5495.8	5166.0	4878.0	4628.4	4330.3	3971.1	3544.2	3094.6	2679.0
47.5°	6974.3	6546.2	6082.0	5727.4	5352.4	5047.4	4681.5	4227.5	3720.4	3233.6	2770.5
50°	7605.6	7193.4	6634.3	6183.7	5804.2	5428.1	4971.8	4425.1	3859.3	3353.3	2853.0
52.5°	8150.0	7795.4	7206.9	6637.7	6200.6	5778.2	5205.6	4584.4	3999.3	3464.0	2920.7
55°	8549.8	8313.8	7771.6	7065.7	6549.6	6045.9	5403.2	4738.0	4131.5	3552.1	2964.8
57.5°	8851.4	8720.4	8255.0	7468.9	6870.3	6305.6	5607.6	4922.1	4262.5	3627.7	2985.1
60°	9016.3	9052.4	8621.0	7821.3	7153.8	6522.5	5812.1	5079.1	4359.6	3671.8	2973.8
62.5°	9000.5	9221.8	8895.4	8038.2	7318.7	6651.2	5949.9	5152.5	4346.1	3601.8	2871.0
63°	8970.0	9227.5	8925.9	8052.9	7328.9	6655.8	5953.2	5142.3	4317.8	3567.9	2830.4
65°	8706.8	9097.6	8899.9	7986.2	7238.5	6571.0	5882.1	4995.5	4119.0	3386.0	2621.4
67.5°	8002.0	8491.1	8434.6	7515.3	6810.5	6220.9	5518.4	4522.3	3627.7	2938.8	2221.6
70°	6837.6	7297.3	7307.4	6536.0	5947.6	5369.3	4785.4	3679.7	2875.5	2278.1	1656.9
72.5°	5240.6	5536.5	5639.3	5131.0	4736.8	4330.3	3806.2	2671.1	2049.9	1549.6	1078.6
75°	4058.1	3976.7	3975.6	3761.0	3600.6	3401.9	2825.8	1802.6	1346.3	1007.5	659.6
77.5°	3648.1	3286.7	2936.5	2679.0	2550.3	2483.6	1853.4	1086.5	794.0	579.4	379.5
80°	3008.8	2475.7	2000.2	1722.4	1611.7	1688.5	1033.4	587.3	434.8	329.8	246.2
82.5°	2074.8	1722.4	1309.0	1084.3	930.7	973.6	528.6	300.4	201.0	184.1	152.5
85°	1080.9	947.6	799.6	686.7	606.5	533.1	274.5	143.4	83.6	73.4	66.6
87.5°	0.0	1.1	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: P152956

CATALOG NUMBER: TLM-F04-LED-E1-SLL-7050

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8
2.5°	1194.9	1193.8	1196.1	1197.2	1200.6	1202.8	1204.0	1201.7	1205.1	1208.5	1206.2
5°	1226.6	1234.5	1235.6	1239.0	1239.0	1245.8	1245.8	1245.8	1244.6	1245.8	1243.5
7.5°	1253.7	1263.8	1265.0	1269.5	1270.6	1278.5	1275.1	1277.4	1277.4	1271.7	1269.5
10°	1257.1	1267.2	1272.9	1278.5	1286.4	1296.6	1296.6	1302.2	1302.2	1297.7	1296.6
12.5°	1258.2	1266.1	1271.7	1279.6	1290.9	1305.6	1313.5	1321.4	1324.8	1323.7	1320.3
15°	1281.9	1281.9	1283.0	1289.8	1297.7	1315.8	1327.1	1336.1	1341.8	1339.5	1333.9
17.5°	1344.0	1335.0	1328.2	1316.9	1319.2	1328.2	1335.0	1342.9	1344.0	1341.8	1332.7
20°	1416.3	1405.0	1388.1	1370.0	1361.0	1354.2	1349.7	1349.7	1346.3	1335.0	1320.3
22.5°	1519.1	1504.4	1480.7	1453.6	1435.5	1414.1	1388.1	1363.2	1336.1	1309.0	1277.4
25°	1661.4	1641.1	1616.2	1574.4	1536.0	1490.9	1437.8	1382.4	1318.0	1261.6	1215.3
27.5°	1804.8	1759.7	1695.3	1637.7	1566.5	1498.8	1423.1	1355.3	1272.9	1205.1	1154.3
30°	1923.4	1837.6	1745.0	1653.5	1559.7	1468.3	1377.9	1296.6	1206.2	1137.3	1087.6
32.5°	2014.9	1896.3	1767.6	1647.8	1532.6	1420.8	1316.9	1226.6	1135.1	1063.9	1010.8
35°	2099.6	1934.7	1771.0	1623.0	1480.7	1364.4	1246.9	1148.6	1051.5	977.0	919.4
37.5°	2162.9	1952.8	1750.6	1576.7	1412.9	1283.0	1163.3	1062.8	963.4	882.1	816.6
40°	2203.5	1941.5	1706.6	1510.1	1332.7	1196.1	1074.1	970.2	874.2	785.0	705.9
42.5°	2236.3	1926.8	1662.5	1449.1	1269.5	1120.4	995.0	883.2	786.1	689.0	602.0
45°	2284.8	1938.1	1643.3	1406.1	1213.0	1056.0	918.2	801.9	700.2	605.4	521.8
47.5°	2332.3	1943.8	1615.1	1353.1	1141.9	989.4	849.3	736.4	632.5	545.5	468.7
50°	2375.2	1940.4	1571.0	1285.3	1073.0	922.7	787.2	674.3	571.5	491.3	419.0
52.5°	2395.5	1921.2	1516.8	1219.8	1017.6	864.0	726.2	616.7	515.0	439.3	372.7
55°	2393.3	1871.5	1445.7	1157.7	956.6	801.9	666.4	557.9	466.5	396.4	338.8
57.5°	2359.4	1794.7	1370.0	1088.8	876.4	725.1	596.3	491.3	414.5	355.8	307.2
60°	2288.2	1696.4	1270.6	988.3	775.9	630.2	509.4	419.0	356.9	311.7	280.1
62.5°	2155.0	1555.2	1146.4	848.2	640.4	507.1	402.1	343.3	297.0	269.9	255.3
63°	2115.4	1516.8	1093.3	814.3	608.8	478.9	379.5	318.5	284.6	260.9	247.3
65°	1918.9	1328.2	914.8	657.3	473.2	369.3	304.9	258.6	238.3	228.1	227.0
67.5°	1554.1	1044.7	647.2	450.6	321.9	266.5	233.8	214.6	205.6	203.3	205.6
70°	1091.0	659.6	411.1	299.3	238.3	214.6	199.9	192.0	186.4	187.5	189.7
72.5°	695.7	395.3	282.4	227.0	201.0	188.6	181.8	179.6	178.5	177.3	177.3
75°	396.4	263.2	216.9	196.5	183.0	172.8	167.2	164.9	166.0	167.2	164.9
77.5°	262.0	216.9	193.1	179.6	167.2	155.9	152.5	151.3	153.6	155.9	155.9
80°	206.7	193.1	179.6	166.0	145.7	137.8	140.0	141.2	140.0	141.2	137.8
82.5°	145.7	143.4	146.8	141.2	120.8	114.1	111.8	112.9	110.7	110.7	108.4
85°	67.8	67.8	71.2	71.2	68.9	70.0	75.7	82.4	85.8	82.4	77.9
87.5°	0.0	0.0	0.0	0.0	0.0	10.2	20.3	29.4	31.6	39.5	38.4
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: P152956

CATALOG NUMBER: TLM-F04-LED-E1-SLL-7050

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8
2.5°	1202.8	1205.1	1204.0	1202.8	1205.1	1202.8	1204.0	1202.8	1202.8	1201.7	1201.7
5°	1241.2	1244.6	1237.9	1236.7	1234.5	1228.8	1228.8	1226.6	1226.6	1222.0	1218.7
7.5°	1266.1	1267.2	1261.6	1260.4	1254.8	1249.2	1244.6	1240.1	1239.0	1235.6	1228.8
10°	1289.8	1287.6	1283.0	1277.4	1271.7	1263.8	1258.2	1252.5	1251.4	1245.8	1237.9
12.5°	1310.1	1309.0	1300.0	1294.3	1285.3	1277.4	1270.6	1263.8	1260.4	1253.7	1242.4
15°	1323.7	1316.9	1305.6	1295.5	1285.3	1276.3	1268.4	1260.4	1257.1	1249.2	1237.9
17.5°	1318.0	1305.6	1290.9	1278.5	1265.0	1253.7	1246.9	1239.0	1233.3	1228.8	1213.0
20°	1297.7	1279.6	1257.1	1242.4	1224.3	1209.6	1205.1	1197.2	1192.7	1175.7	1155.4
22.5°	1244.6	1218.7	1190.4	1169.0	1148.6	1134.0	1122.7	1114.8	1103.5	1093.3	1061.7
25°	1178.0	1148.6	1119.3	1093.3	1066.2	1043.6	1023.3	1004.1	998.4	977.0	946.5
27.5°	1113.6	1080.9	1051.5	1021.0	986.0	957.8	922.7	895.6	877.6	855.0	826.7
30°	1044.7	1012.0	972.4	931.8	891.1	860.6	821.1	788.3	765.8	742.0	716.1
32.5°	957.8	918.2	870.8	825.6	788.3	752.2	712.7	681.0	658.5	637.0	612.2
35°	858.4	806.4	755.6	705.9	666.4	635.9	600.9	577.1	561.3	542.1	516.2
37.5°	744.3	685.6	631.4	593.0	557.9	528.6	503.7	489.0	472.1	461.9	446.1
40°	629.1	571.5	518.4	483.4	454.0	437.1	423.5	420.1	408.9	395.3	385.1
42.5°	527.4	472.1	420.1	391.9	372.7	368.2	361.4	361.4	355.8	345.6	338.8
45°	458.6	400.9	355.8	335.4	325.3	324.1	320.8	320.8	319.6	315.1	307.2
47.5°	408.9	356.9	321.9	309.5	307.2	304.9	301.6	300.4	299.3	295.9	291.4
50°	363.7	319.6	297.0	291.4	292.5	289.1	285.7	282.4	281.2	277.8	273.3
52.5°	321.9	290.3	275.6	272.2	272.2	272.2	269.9	269.9	267.7	266.5	262.0
55°	298.2	274.5	266.5	265.4	264.3	263.2	260.9	260.9	258.6	257.5	251.9
57.5°	277.8	263.2	258.6	256.4	255.3	253.0	251.9	251.9	251.9	251.9	245.1
60°	262.0	255.3	254.1	251.9	250.7	246.2	244.0	242.8	244.0	245.1	238.3
62.5°	245.1	244.0	242.8	240.6	239.4	234.9	231.5	229.3	231.5	233.8	232.7
63°	240.6	239.4	239.4	238.3	237.2	231.5	228.1	225.9	228.1	230.4	230.4
65°	224.8	225.9	225.9	224.8	223.6	220.2	215.7	213.5	214.6	218.0	219.1
67.5°	207.8	208.9	207.8	208.9	207.8	205.6	202.2	199.9	198.8	199.9	201.0
70°	192.0	194.3	193.1	192.0	190.9	190.9	188.6	185.2	184.1	183.0	183.0
72.5°	178.5	178.5	176.2	176.2	175.1	175.1	172.8	169.4	168.3	168.3	166.0
75°	163.8	163.8	160.4	160.4	158.1	159.3	157.0	153.6	152.5	152.5	151.3
77.5°	154.7	151.3	145.7	144.6	143.4	143.4	142.3	138.9	137.8	137.8	136.7
80°	136.7	129.9	124.2	123.1	124.2	126.5	126.5	124.2	124.2	124.2	124.2
82.5°	106.2	103.9	100.5	98.3	98.3	101.6	106.2	108.4	110.7	112.9	112.9
85°	77.9	79.1	77.9	74.5	73.4	76.8	81.3	85.8	87.0	91.5	90.4
87.5°	41.8	42.9	39.5	38.4	41.8	44.0	48.6	49.7	52.0	53.1	54.2
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: P152956

CATALOG NUMBER: TLM-F04-LED-E1-SLL-7050

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8
2.5°	1200.6	1199.5	1200.6	1198.3	1198.3	1196.1	1193.8	1192.7	1190.4	1189.3	1187.0
5°	1220.9	1217.5	1214.1	1213.0	1208.5	1204.0	1200.6	1194.9	1190.4	1182.5	1180.3
7.5°	1234.5	1226.6	1222.0	1220.9	1214.1	1210.8	1202.8	1196.1	1189.3	1179.1	1175.7
10°	1240.1	1232.2	1224.3	1220.9	1213.0	1207.4	1199.5	1189.3	1183.6	1173.5	1171.2
12.5°	1246.9	1232.2	1219.8	1210.8	1199.5	1187.0	1179.1	1173.5	1165.6	1159.9	1157.7
15°	1234.5	1215.3	1196.1	1179.1	1161.1	1147.5	1139.6	1130.6	1121.5	1118.1	1118.1
17.5°	1200.6	1175.7	1143.0	1121.5	1102.3	1087.6	1077.5	1068.4	1067.3	1062.8	1065.1
20°	1130.6	1097.8	1066.2	1050.4	1039.1	1030.0	1019.9	1015.4	1012.0	1005.2	1002.9
22.5°	1033.4	1006.3	983.7	972.4	963.4	952.1	943.1	929.5	926.1	919.4	916.0
25°	926.1	904.7	885.5	877.6	871.9	856.1	850.5	832.4	820.0	812.1	816.6
27.5°	818.8	803.0	785.0	774.8	771.4	756.7	751.1	730.7	720.6	720.6	709.3
30°	708.2	693.5	682.2	670.9	668.6	650.6	635.9	628.0	616.7	612.2	604.2
32.5°	604.2	589.6	580.5	574.9	565.8	551.2	536.5	522.9	504.9	498.1	494.7
35°	508.2	497.0	485.7	481.1	468.7	452.9	434.8	423.5	402.1	394.2	390.8
37.5°	434.8	421.3	413.4	400.9	388.5	371.6	358.0	347.9	340.0	336.6	336.6
40°	376.1	365.9	356.9	346.7	336.6	327.5	320.8	318.5	317.4	317.4	319.6
42.5°	332.1	323.0	318.5	312.9	309.5	309.5	308.3	309.5	310.6	311.7	315.1
45°	302.7	297.0	294.8	293.7	295.9	298.2	299.3	301.6	306.1	308.3	309.5
47.5°	286.9	282.4	281.2	282.4	285.7	290.3	294.8	298.2	301.6	302.7	303.8
50°	271.1	265.4	263.2	265.4	269.9	276.7	280.1	285.7	288.0	290.3	288.0
52.5°	257.5	253.0	251.9	251.9	256.4	260.9	265.4	269.9	271.1	271.1	269.9
55°	246.2	242.8	239.4	241.7	245.1	249.6	256.4	259.8	262.0	263.2	263.2
57.5°	237.2	233.8	230.4	232.7	236.1	240.6	247.3	250.7	253.0	256.4	257.5
60°	230.4	225.9	222.5	225.9	229.3	236.1	241.7	245.1	250.7	251.9	251.9
62.5°	223.6	219.1	213.5	216.9	216.9	220.2	225.9	230.4	236.1	238.3	238.3
63°	222.5	218.0	212.3	214.6	214.6	216.9	221.4	225.9	232.7	234.9	233.8
65°	213.5	212.3	206.7	206.7	204.4	206.7	210.1	214.6	218.0	221.4	221.4
67.5°	198.8	197.7	196.5	196.5	196.5	198.8	201.0	204.4	207.8	210.1	208.9
70°	181.8	181.8	181.8	183.0	183.0	185.2	186.4	185.2	188.6	190.9	189.7
72.5°	167.2	166.0	164.9	167.2	166.0	166.0	168.3	167.2	170.5	170.5	171.7
75°	151.3	150.2	150.2	151.3	149.1	146.8	148.0	148.0	149.1	149.1	151.3
77.5°	137.8	137.8	137.8	136.7	134.4	133.3	132.1	132.1	132.1	132.1	133.3
80°	125.4	125.4	125.4	124.2	122.0	119.7	117.5	116.3	115.2	109.6	109.6
82.5°	112.9	112.9	112.9	112.9	111.8	109.6	106.2	97.1	92.6	88.1	89.2
85°	89.2	91.5	93.7	97.1	96.0	96.0	89.2	77.9	71.2	66.6	67.8
87.5°	57.6	50.8	50.8	49.7	47.4	45.2	45.2	38.4	31.6	28.2	29.4
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: P152956

CATALOG NUMBER: TLM-F04-LED-E1-SLL-7050

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8
2.5°	1187.0	1184.8	1182.5	1182.5	1179.1	1179.1	1176.9	1181.4	1176.9	1173.5	1173.5
5°	1178.0	1175.7	1169.0	1167.8	1163.3	1163.3	1163.3	1161.1	1161.1	1158.8	1157.7
7.5°	1172.4	1166.7	1161.1	1157.7	1157.7	1155.4	1159.9	1157.7	1158.8	1158.8	1159.9
10°	1167.8	1163.3	1161.1	1159.9	1159.9	1163.3	1166.7	1167.8	1166.7	1167.8	1167.8
12.5°	1156.5	1158.8	1159.9	1164.4	1170.1	1176.9	1184.8	1185.9	1188.2	1188.2	1190.4
15°	1120.4	1126.0	1132.8	1144.1	1158.8	1173.5	1188.2	1200.6	1211.9	1217.5	1222.0
17.5°	1069.6	1075.2	1087.6	1100.1	1119.3	1140.7	1165.6	1187.0	1210.8	1232.2	1253.7
20°	1000.7	1009.7	1013.1	1035.7	1058.3	1087.6	1117.0	1150.9	1191.6	1232.2	1274.0
22.5°	911.5	921.6	937.4	955.5	979.2	1015.4	1050.4	1103.5	1157.7	1215.3	1280.8
25°	812.1	823.4	836.9	856.1	879.8	918.2	969.1	1025.5	1092.2	1167.8	1249.2
27.5°	709.3	720.6	731.9	745.4	772.5	813.2	873.1	931.8	1005.2	1087.6	1182.5
30°	606.5	607.6	614.4	631.4	659.6	712.7	756.7	830.1	906.9	993.9	1103.5
32.5°	493.6	492.4	500.3	515.0	542.1	593.0	647.2	718.3	794.0	903.5	1016.5
35°	393.0	393.0	407.7	422.4	452.9	489.0	536.5	599.7	689.0	790.6	903.5
37.5°	340.0	347.9	356.9	371.6	395.3	423.5	465.3	520.7	590.7	687.8	791.7
40°	323.0	327.5	335.4	349.0	369.3	395.3	425.8	467.6	521.8	599.7	694.6
42.5°	316.2	317.4	321.9	332.1	350.1	376.1	407.7	445.0	485.7	541.0	623.4
45°	309.5	308.3	310.6	318.5	333.2	362.5	398.7	439.3	480.0	526.3	594.1
47.5°	303.8	303.8	303.8	307.2	320.8	350.1	391.9	439.3	487.9	539.9	606.5
50°	288.0	286.9	286.9	289.1	299.3	330.9	380.6	438.2	501.5	569.2	644.9
52.5°	269.9	269.9	271.1	272.2	281.2	312.9	368.2	438.2	517.3	607.6	702.5
55°	264.3	265.4	266.5	265.4	272.2	299.3	354.6	431.4	524.1	638.1	764.6
57.5°	259.8	262.0	262.0	260.9	265.4	288.0	341.1	417.9	518.4	649.4	808.7
60°	253.0	253.0	253.0	249.6	251.9	272.2	320.8	396.4	500.3	639.3	815.5
62.5°	238.3	238.3	236.1	234.9	233.8	249.6	293.7	364.8	467.6	612.2	798.5
63°	234.9	233.8	233.8	230.4	230.4	245.1	288.0	360.3	458.6	605.4	791.7
65°	222.5	222.5	222.5	220.2	219.1	230.4	265.4	328.7	423.5	573.8	757.9
67.5°	208.9	210.1	207.8	206.7	205.6	212.3	239.4	289.1	369.3	507.1	694.6
70°	189.7	190.9	190.9	189.7	188.6	193.1	210.1	248.5	306.1	422.4	591.8
72.5°	172.8	175.1	175.1	177.3	177.3	180.7	187.5	206.7	245.1	329.8	465.3
75°	154.7	155.9	158.1	160.4	158.1	157.0	158.1	172.8	192.0	244.0	332.1
77.5°	138.9	142.3	142.3	141.2	137.8	135.5	135.5	142.3	158.1	185.2	237.2
80°	115.2	120.8	122.0	118.6	115.2	115.2	117.5	122.0	132.1	152.5	179.6
82.5°	92.6	98.3	99.4	100.5	99.4	102.8	102.8	103.9	109.6	125.4	146.8
85°	71.2	75.7	79.1	80.2	81.3	82.4	81.3	75.7	79.1	89.2	99.4
87.5°	31.6	32.8	30.5	31.6	30.5	31.6	32.8	27.1	26.0	35.0	36.1
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: P152956

CATALOG NUMBER: TLM-F04-LED-E1-SLL-7050

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8	1184.8
2.5°	1172.4	1172.4	1173.5	1171.2	1171.2	1172.4	1169.0
5°	1154.3	1158.8	1158.8	1158.8	1156.5	1158.8	1159.9
7.5°	1158.8	1162.2	1164.4	1164.4	1163.3	1167.8	1171.2
10°	1164.4	1170.1	1172.4	1172.4	1172.4	1178.0	1185.9
12.5°	1185.9	1190.4	1193.8	1193.8	1196.1	1202.8	1211.9
15°	1225.4	1231.1	1231.1	1230.0	1236.7	1244.6	1254.8
17.5°	1269.5	1285.3	1293.2	1292.1	1297.7	1307.9	1319.2
20°	1311.3	1355.3	1374.5	1388.1	1393.7	1407.3	1410.7
22.5°	1346.3	1419.7	1472.8	1518.0	1539.4	1553.0	1568.8
25°	1333.9	1433.3	1528.1	1620.7	1686.2	1752.9	1781.1
27.5°	1283.0	1407.3	1531.5	1667.0	1785.6	1904.2	1990.1
30°	1220.9	1370.0	1537.2	1729.2	1916.6	2098.5	2243.1
32.5°	1149.8	1335.0	1549.6	1786.8	2033.0	2271.3	2480.2
35°	1060.5	1268.4	1519.1	1792.4	2082.7	2371.8	2642.9
37.5°	947.6	1178.0	1447.9	1751.8	2084.9	2415.9	2740.0
40°	834.7	1063.9	1357.6	1693.0	2055.6	2426.0	2801.0
42.5°	755.6	962.3	1266.1	1618.5	2008.1	2410.2	2830.4
45°	701.4	888.9	1184.8	1550.7	1957.3	2382.0	2834.9
47.5°	696.9	857.2	1131.7	1501.0	1916.6	2357.1	2834.9
50°	735.3	874.2	1113.6	1476.2	1899.7	2349.2	2837.1
52.5°	807.5	941.9	1146.4	1495.4	1913.3	2359.4	2847.3
55°	894.5	1044.7	1234.5	1562.0	1970.9	2393.3	2869.9
57.5°	973.6	1163.3	1384.7	1690.8	2075.9	2479.1	2933.1
60°	1019.9	1265.0	1543.9	1871.5	2255.5	2649.7	3059.6
62.5°	1025.5	1321.4	1685.1	2068.0	2473.5	2845.0	3261.8
63°	1021.0	1326.0	1703.2	2105.3	2519.8	2893.6	3331.8
65°	996.2	1327.1	1754.0	2236.3	2680.1	3098.0	3527.2
67.5°	932.9	1290.9	1772.1	2339.1	2882.3	3366.8	3892.0
70°	823.4	1188.2	1719.0	2341.3	2960.2	3517.1	4122.4
72.5°	661.8	992.8	1489.7	2130.1	2754.7	3369.1	4062.6
75°	484.5	729.6	1126.0	1650.1	2247.6	2804.4	3479.8
77.5°	321.9	472.1	759.0	1175.7	1611.7	2018.3	2505.1
80°	221.4	292.5	443.9	707.0	986.0	1183.6	1595.9
82.5°	162.6	193.1	246.2	361.4	474.4	583.9	833.5
85°	101.6	110.7	123.1	178.5	255.3	344.5	519.5
87.5°	27.1	28.2	26.0	35.0	55.3	53.1	58.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)