

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: P152963

Luminaire Tested: **TLM-F05-LED-E1-SLL-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P152963
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-F05-LED-E1-SLL-8030
Description: TALON MEDIUM LED SITE LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR LEFT
Light Source: (35) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9693.2 lumens
Efficiency: N/A
Efficacy: 72.7 lumens/watt
Spacing Criteria (0/90/45): 1.93 / 2.48 / 2.44
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')
CIE Type: Direct

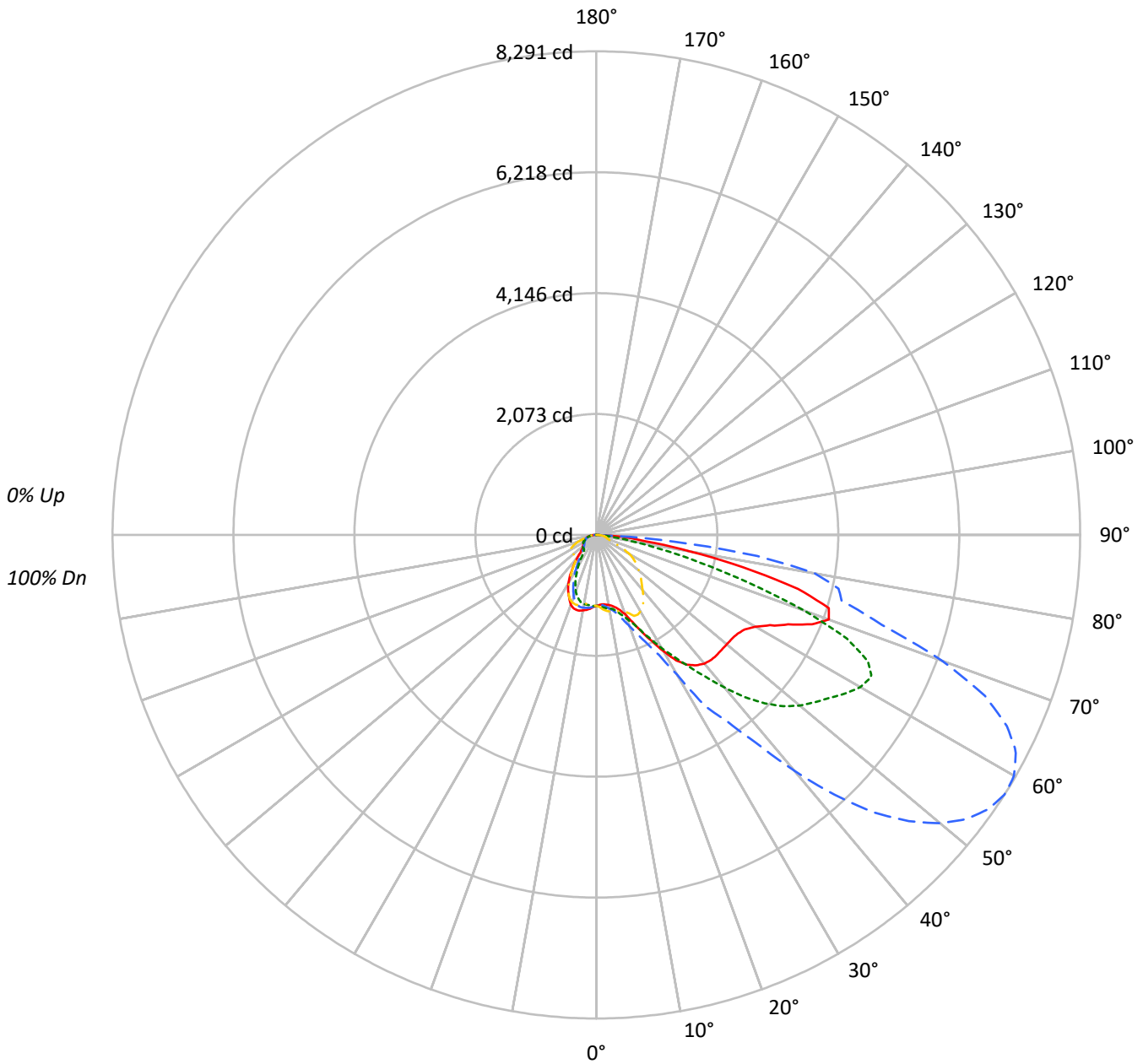
Input Watts (W): 133.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P152963

CATALOG NUMBER: TLM-F05-LED-E1-SLL-8030

Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - - - 90°-270° - - - 135°-315°



TEST NUMBER: P152963

CATALOG NUMBER: TLM-F05-LED-E1-SLL-8030

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	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°	15797	15797	15797	15797
5°	15525	16205	16553	15797
10°	16057	16852	17294	15858
15°	17321	18210	17882	15435
20°	20017	21139	17628	14231
25°	26205	25888	16085	12014
30°	34535	33596	14346	9304
35°	43019	43479	11491	6361
40°	48753	57817	8414	5563
45°	53457	74882	6326	5836
50°	58852	91793	6045	5974
55°	66715	110140	6170	6118
60°	81593	135444	6718	6718
65°	111284	157608	7092	6984
70°	160714	143454	7485	7398
75°	179267	92863	8263	7797
80°	122540	45094	9455	8409
85°	79488	21948	11398	10371



TEST NUMBER: P152963

CATALOG NUMBER: TLM-F05-LED-E1-SLL-8030

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.6	1.2
10°-20°	369.3	3.8
20°-30°	656.1	6.8
30°-40°	1033.2	10.7
40°-50°	1520.5	15.7
50°-60°	2019.7	20.8
60°-70°	2224.7	23.0
70°-80°	1395.7	14.4
80°-90°	355.5	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°	1144.0	11.8
0°-40°	2177.1	22.5
0°-60°	5717.3	59.0
0°-90°	9693.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9693.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1218	1218	1218	1218	1218	
5°	1193	1245	1272	1214	1193	115
15°	1290	1356	1332	1150	1290	374
25°	1831	1809	1124	840	1831	864
35°	2717	2746	726	402	2717	1684
45°	2915	4083	345	318	2915	2253
55°	2951	4871	273	271	2951	2676
65°	3626	5136	231	228	3626	3651
75°	3578	1853	165	156	3578	3499
85°	534	148	77	70	534	618
90°	0	0	0	0	0	



TEST NUMBER: P152963

CATALOG NUMBER: TLM-F05-LED-E1-SLL-8030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1
2.5°	1201.9	1204.2	1204.2	1203.0	1203.0	1205.4	1204.2	1203.0	1199.5	1204.2	1204.2
5°	1192.6	1194.9	1194.9	1197.2	1199.5	1201.9	1201.9	1204.2	1203.0	1207.7	1211.2
7.5°	1204.2	1206.5	1211.2	1217.0	1220.4	1228.6	1228.6	1234.4	1236.7	1240.2	1239.0
10°	1219.3	1225.1	1235.5	1244.8	1251.8	1261.1	1268.1	1276.2	1276.2	1279.7	1282.0
12.5°	1246.0	1251.8	1263.4	1275.0	1285.5	1297.1	1307.5	1315.7	1323.8	1326.1	1330.8
15°	1290.1	1297.1	1314.5	1330.8	1343.5	1358.6	1372.6	1388.8	1403.9	1407.4	1409.7
17.5°	1356.3	1370.2	1383.0	1412.1	1430.6	1450.4	1472.4	1495.7	1500.3	1524.7	1530.5
20°	1450.4	1467.8	1479.4	1515.4	1546.8	1572.3	1604.8	1631.5	1642.0	1665.2	1688.4
22.5°	1612.9	1609.5	1626.9	1662.9	1686.1	1737.2	1765.1	1792.9	1806.9	1841.7	1860.3
25°	1831.3	1849.8	1888.2	1891.6	1913.7	1972.9	2008.9	2036.8	2038.0	2048.4	2068.1
27.5°	2046.1	2122.7	2183.1	2215.6	2274.8	2329.4	2327.1	2366.6	2305.0	2317.8	2336.4
30°	2306.2	2433.9	2547.7	2624.4	2684.8	2748.6	2780.0	2802.0	2775.3	2763.7	2741.7
32.5°	2550.1	2728.9	2904.2	3040.1	3152.7	3258.4	3328.1	3359.4	3396.6	3490.6	3524.3
35°	2717.3	2970.4	3188.7	3385.0	3573.1	3741.5	3863.4	3933.1	3906.4	3893.6	3886.6
37.5°	2817.1	3126.0	3398.9	3676.4	3892.4	4144.4	4333.7	4517.2	4559.0	4485.8	4449.8
40°	2879.8	3245.6	3596.3	3923.8	4203.6	4528.8	4763.3	5038.6	5247.6	5275.4	5189.5
42.5°	2910.0	3325.8	3734.5	4104.9	4483.5	4881.8	5179.1	5512.3	5824.7	6039.5	5986.1
45°	2914.7	3378.0	3835.5	4268.7	4719.2	5191.8	5575.0	5944.3	6362.4	6730.5	6740.9
47.5°	2914.7	3417.5	3905.2	4387.1	4930.6	5461.2	5879.3	6315.9	6828.0	7263.5	7397.0
50°	2917.0	3444.2	3970.2	4480.0	5092.0	5688.8	6161.5	6677.0	7215.9	7689.6	7947.4
52.5°	2927.5	3463.9	4021.3	4546.2	5196.5	5849.1	6380.9	6975.5	7512.0	7998.5	8331.8
55°	2950.7	3491.8	4058.5	4586.8	5266.2	5953.6	6540.0	7179.9	7703.6	8197.1	8662.7
57.5°	3015.7	3540.6	4103.8	4622.8	5304.5	6022.1	6651.5	7268.1	7776.7	8291.2	8838.1
60°	3145.8	3643.9	4181.6	4694.8	5368.3	6148.7	6704.9	7208.9	7723.3	8263.3	8877.6
62.5°	3353.6	3805.3	4289.6	4816.8	5550.7	6344.9	6664.3	7032.4	7513.1	8101.9	8737.1
63°	3425.6	3840.2	4314.0	4843.5	5600.6	6380.9	6646.9	6980.1	7470.2	8050.8	8687.1
65°	3626.5	3994.6	4430.1	4978.2	5806.1	6416.9	6511.0	6708.4	7172.9	7759.3	8392.2
67.5°	4001.6	4369.7	4679.7	5205.8	5979.2	6275.3	6089.5	6113.9	6599.2	7206.6	7775.6
70°	4238.5	4677.4	4838.8	5234.8	5947.8	6065.1	5543.7	5220.9	5609.9	6302.0	6800.1
72.5°	4176.9	4680.9	4663.5	4848.1	5320.7	5429.9	4889.9	4381.3	4612.4	5129.1	5452.0
75°	3577.7	4180.4	4052.7	4015.5	4181.6	4253.6	3848.3	3770.5	4062.0	4348.8	4353.4
77.5°	2575.6	3238.7	3088.9	2874.0	2862.4	3028.5	3083.1	3592.8	4023.6	4250.1	4150.2
80°	1640.8	2359.6	2204.0	1828.9	1823.1	2039.1	2518.7	3212.0	3668.3	3794.9	3534.8
82.5°	857.0	1544.4	1603.7	1372.6	1571.1	1928.8	2396.8	2588.4	2761.4	2778.8	2472.2
85°	534.2	949.9	1117.1	1153.1	1419.0	1710.5	1707.0	1639.7	1563.0	1337.7	1210.0
87.5°	60.4	119.6	181.2	171.9	231.1	324.0	404.1	236.9	166.1	60.4	83.6
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: P152963

CATALOG NUMBER: TLM-F05-LED-E1-SLL-8030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1
2.5°	1206.5	1207.7	1208.8	1208.8	1214.6	1213.5	1214.6	1217.0	1220.4	1222.8	1225.1
5°	1215.8	1215.8	1220.4	1223.9	1230.9	1235.5	1237.9	1244.8	1253.0	1250.6	1257.6
7.5°	1246.0	1244.8	1249.5	1251.8	1257.6	1265.7	1264.6	1270.4	1277.3	1279.7	1285.5
10°	1286.6	1283.2	1283.2	1280.8	1282.0	1279.7	1279.7	1279.7	1284.3	1283.2	1287.8
12.5°	1328.4	1327.3	1325.0	1318.0	1318.0	1308.7	1304.1	1298.3	1297.1	1289.0	1290.1
15°	1414.4	1414.4	1409.7	1395.8	1384.2	1376.1	1364.4	1356.3	1344.7	1329.6	1321.5
17.5°	1539.8	1523.5	1517.7	1515.4	1496.8	1489.9	1464.3	1437.6	1424.8	1403.9	1392.3
20°	1693.1	1689.6	1666.4	1654.7	1631.5	1599.0	1566.5	1531.7	1510.8	1485.2	1471.3
22.5°	1866.1	1840.5	1828.9	1811.5	1775.5	1738.4	1689.6	1643.1	1610.6	1593.2	1582.8
25°	2068.1	2042.6	2031.0	2007.8	1963.6	1924.2	1863.8	1809.2	1780.2	1751.1	1734.9
27.5°	2336.4	2312.0	2298.1	2237.7	2222.6	2157.6	2083.2	2008.9	1970.6	1927.6	1899.8
30°	2737.0	2738.2	2666.2	2593.0	2517.5	2404.9	2327.1	2243.5	2180.8	2119.2	2057.7
32.5°	3414.0	3241.0	3107.4	2950.7	2786.9	2667.3	2571.0	2471.1	2384.0	2294.6	2192.4
35°	3827.4	3743.8	3570.8	3283.9	3119.1	2973.9	2867.1	2746.3	2639.5	2481.5	2325.9
37.5°	4294.2	4100.3	3890.1	3731.0	3544.1	3375.7	3196.9	3059.8	2875.2	2662.7	2442.1
40°	4975.9	4698.3	4445.2	4231.5	3990.0	3813.5	3613.7	3415.2	3170.1	2862.4	2559.3
42.5°	5687.7	5400.9	5066.4	4788.9	4504.4	4297.7	4050.4	3771.7	3411.7	3030.8	2660.4
45°	6434.4	6051.1	5650.5	5311.4	5015.3	4758.7	4452.1	4082.9	3643.9	3181.8	2754.4
47.5°	7170.6	6730.5	6253.2	5888.6	5503.0	5189.5	4813.3	4346.5	3825.1	3324.6	2848.5
50°	7819.7	7395.8	6821.0	6357.7	5967.5	5580.9	5111.7	4549.7	3967.9	3447.7	2933.3
52.5°	8379.4	8014.8	7409.8	6824.5	6375.1	5940.8	5352.1	4713.4	4111.9	3561.5	3002.9
55°	8790.5	8547.8	7990.4	7264.6	6733.9	6216.0	5555.3	4871.3	4247.8	3652.1	3048.2
57.5°	9100.5	8965.8	8487.4	7679.2	7063.7	6483.1	5765.5	5060.6	4382.5	3729.9	3069.1
60°	9270.1	9307.2	8863.6	8041.5	7355.2	6706.1	5975.7	5222.0	4482.3	3775.1	3057.5
62.5°	9253.8	9481.4	9145.8	8264.4	7524.7	6838.5	6117.3	5297.5	4468.4	3703.1	2951.8
63°	9222.5	9487.2	9177.2	8279.5	7535.2	6843.1	6120.8	5287.1	4439.4	3668.3	2910.0
65°	8951.9	9353.7	9150.5	8211.0	7442.3	6756.0	6047.7	5136.1	4235.0	3481.4	2695.2
67.5°	8227.3	8730.1	8672.0	7726.8	7002.2	6396.0	5673.7	4649.5	3729.9	3021.5	2284.1
70°	7030.1	7502.7	7513.1	6720.0	6115.0	5520.5	4920.1	3783.3	2956.5	2342.2	1703.5
72.5°	5388.1	5692.3	5798.0	5275.4	4870.2	4452.1	3913.3	2746.3	2107.6	1593.2	1109.0
75°	4172.3	4088.7	4087.5	3866.9	3702.0	3497.6	2905.4	1853.3	1384.2	1035.8	678.2
77.5°	3750.8	3379.2	3019.2	2754.4	2622.0	2553.5	1905.6	1117.1	816.3	595.7	390.2
80°	3093.5	2545.4	2056.5	1770.9	1657.1	1736.0	1062.5	603.8	447.1	339.1	253.1
82.5°	2133.2	1770.9	1345.9	1114.8	956.9	1001.0	543.5	308.9	206.7	189.3	156.8
85°	1111.3	974.3	822.1	706.0	623.6	548.1	282.2	147.5	85.9	75.5	68.5
87.5°	0.0	1.2	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: P152963

CATALOG NUMBER: TLM-F05-LED-E1-SLL-8030

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1
2.5°	1228.6	1227.4	1229.7	1230.9	1234.4	1236.7	1237.9	1235.5	1239.0	1242.5	1240.2
5°	1261.1	1269.2	1270.4	1273.9	1273.9	1280.8	1280.8	1280.8	1279.7	1280.8	1278.5
7.5°	1289.0	1299.4	1300.6	1305.2	1306.4	1314.5	1311.0	1313.3	1313.3	1307.5	1305.2
10°	1292.4	1302.9	1308.7	1314.5	1322.6	1333.1	1333.1	1338.9	1338.9	1334.2	1333.1
12.5°	1293.6	1301.7	1307.5	1315.7	1327.3	1342.4	1350.5	1358.6	1362.1	1361.0	1357.5
15°	1318.0	1318.0	1319.2	1326.1	1334.2	1352.8	1364.4	1373.7	1379.5	1377.2	1371.4
17.5°	1381.9	1372.6	1365.6	1354.0	1356.3	1365.6	1372.6	1380.7	1381.9	1379.5	1370.2
20°	1456.2	1444.6	1427.1	1408.6	1399.3	1392.3	1387.7	1387.7	1384.2	1372.6	1357.5
22.5°	1561.8	1546.8	1522.4	1494.5	1475.9	1453.9	1427.1	1401.6	1373.7	1345.9	1313.3
25°	1708.2	1687.3	1661.7	1618.7	1579.3	1532.8	1478.2	1421.3	1355.2	1297.1	1249.5
27.5°	1855.6	1809.2	1743.0	1683.8	1610.6	1540.9	1463.1	1393.5	1308.7	1239.0	1186.8
30°	1977.6	1889.3	1794.1	1700.0	1603.7	1509.6	1416.7	1333.1	1240.2	1169.4	1118.3
32.5°	2071.6	1949.7	1817.3	1694.2	1575.8	1460.8	1354.0	1261.1	1167.0	1093.9	1039.3
35°	2158.7	1989.2	1820.8	1668.7	1522.4	1402.8	1282.0	1181.0	1081.1	1004.5	945.2
37.5°	2223.7	2007.8	1799.9	1621.1	1452.7	1319.2	1196.1	1092.7	990.5	906.9	839.6
40°	2265.6	1996.1	1754.6	1552.6	1370.2	1229.7	1104.3	997.5	898.8	807.1	725.8
42.5°	2299.2	1981.1	1709.3	1489.9	1305.2	1151.9	1023.0	908.1	808.2	708.3	618.9
45°	2349.2	1992.7	1689.6	1445.7	1247.2	1085.7	944.1	824.5	720.0	622.4	536.5
47.5°	2397.9	1998.5	1660.6	1391.1	1174.0	1017.2	873.2	757.1	650.3	560.9	481.9
50°	2442.1	1995.0	1615.3	1321.5	1103.2	948.7	809.4	693.3	587.6	505.1	430.8
52.5°	2463.0	1975.2	1559.5	1254.1	1046.3	888.3	746.7	634.0	529.5	451.7	383.2
55°	2460.6	1924.2	1486.4	1190.3	983.6	824.5	685.1	573.6	479.6	407.6	348.4
57.5°	2425.8	1845.2	1408.6	1119.4	901.1	745.5	613.1	505.1	426.2	365.8	315.9
60°	2352.6	1744.2	1306.4	1016.1	797.8	648.0	523.7	430.8	366.9	320.5	288.0
62.5°	2215.6	1599.0	1178.6	872.1	658.4	521.4	413.4	353.0	305.4	277.5	262.4
63°	2175.0	1559.5	1124.1	837.2	625.9	492.4	390.2	327.5	292.6	268.2	254.3
65°	1972.9	1365.6	940.6	675.8	486.6	379.7	313.5	265.9	245.0	234.6	233.4
67.5°	1597.8	1074.1	665.4	463.3	330.9	274.0	240.4	220.6	211.3	209.0	211.3
70°	1121.7	678.2	422.7	307.7	245.0	220.6	205.5	197.4	191.6	192.8	195.1
72.5°	715.3	406.4	290.3	233.4	206.7	193.9	187.0	184.6	183.5	182.3	182.3
75°	407.6	270.6	223.0	202.1	188.1	177.7	171.9	169.5	170.7	171.9	169.5
77.5°	269.4	223.0	198.6	184.6	171.9	160.2	156.8	155.6	157.9	160.2	160.2
80°	212.5	198.6	184.6	170.7	149.8	141.7	144.0	145.2	144.0	145.2	141.7
82.5°	149.8	147.5	151.0	145.2	124.3	117.3	115.0	116.1	113.8	113.8	111.5
85°	69.7	69.7	73.2	73.2	70.8	72.0	77.8	84.8	88.3	84.8	80.1
87.5°	0.0	0.0	0.0	0.0	0.0	10.5	20.9	30.2	32.5	40.6	39.5
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: P152963

CATALOG NUMBER: TLM-F05-LED-E1-SLL-8030

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1
2.5°	1236.7	1239.0	1237.9	1236.7	1239.0	1236.7	1237.9	1236.7	1236.7	1235.5	1235.5
5°	1276.2	1279.7	1272.7	1271.5	1269.2	1263.4	1263.4	1261.1	1261.1	1256.4	1253.0
7.5°	1301.7	1302.9	1297.1	1295.9	1290.1	1284.3	1279.7	1275.0	1273.9	1270.4	1263.4
10°	1326.1	1323.8	1319.2	1313.3	1307.5	1299.4	1293.6	1287.8	1286.6	1280.8	1272.7
12.5°	1347.0	1345.9	1336.6	1330.8	1321.5	1313.3	1306.4	1299.4	1295.9	1289.0	1277.3
15°	1361.0	1354.0	1342.4	1331.9	1321.5	1312.2	1304.1	1295.9	1292.4	1284.3	1272.7
17.5°	1355.2	1342.4	1327.3	1314.5	1300.6	1289.0	1282.0	1273.9	1268.1	1263.4	1247.2
20°	1334.2	1315.7	1292.4	1277.3	1258.8	1243.7	1239.0	1230.9	1226.3	1208.8	1187.9
22.5°	1279.7	1253.0	1223.9	1201.9	1181.0	1165.9	1154.3	1146.1	1134.5	1124.1	1091.6
25°	1211.2	1181.0	1150.8	1124.1	1096.2	1073.0	1052.1	1032.3	1026.5	1004.5	973.1
27.5°	1145.0	1111.3	1081.1	1049.7	1013.8	984.7	948.7	920.9	902.3	879.0	850.0
30°	1074.1	1040.5	999.8	958.0	916.2	884.9	844.2	810.5	787.3	762.9	736.2
32.5°	984.7	944.1	895.3	848.9	810.5	773.4	732.7	700.2	677.0	654.9	629.4
35°	882.5	829.1	776.9	725.8	685.1	653.8	617.8	593.4	577.1	557.4	530.7
37.5°	765.2	704.9	649.1	609.6	573.6	543.5	517.9	502.8	485.4	474.9	458.7
40°	646.8	587.6	533.0	497.0	466.8	449.4	435.5	432.0	420.4	406.4	396.0
42.5°	542.3	485.4	432.0	402.9	383.2	378.6	371.6	371.6	365.8	355.3	348.4
45°	471.5	412.2	365.8	344.9	334.4	333.3	329.8	329.8	328.6	324.0	315.9
47.5°	420.4	366.9	330.9	318.2	315.9	313.5	310.0	308.9	307.7	304.2	299.6
50°	373.9	328.6	305.4	299.6	300.8	297.3	293.8	290.3	289.1	285.7	281.0
52.5°	330.9	298.4	283.3	279.9	279.9	279.9	277.5	277.5	275.2	274.0	269.4
55°	306.6	282.2	274.0	272.9	271.7	270.6	268.2	268.2	265.9	264.8	259.0
57.5°	285.7	270.6	265.9	263.6	262.4	260.1	259.0	259.0	259.0	259.0	252.0
60°	269.4	262.4	261.3	259.0	257.8	253.1	250.8	249.7	250.8	252.0	245.0
62.5°	252.0	250.8	249.7	247.3	246.2	241.5	238.1	235.7	238.1	240.4	239.2
63°	247.3	246.2	246.2	245.0	243.9	238.1	234.6	232.2	234.6	236.9	236.9
65°	231.1	232.2	232.2	231.1	229.9	226.4	221.8	219.5	220.6	224.1	225.3
67.5°	213.7	214.8	213.7	214.8	213.7	211.3	207.9	205.5	204.4	205.5	206.7
70°	197.4	199.7	198.6	197.4	196.2	196.2	193.9	190.4	189.3	188.1	188.1
72.5°	183.5	183.5	181.2	181.2	180.0	180.0	177.7	174.2	173.0	173.0	170.7
75°	168.4	168.4	164.9	164.9	162.6	163.7	161.4	157.9	156.8	156.8	155.6
77.5°	159.1	155.6	149.8	148.6	147.5	147.5	146.3	142.8	141.7	141.7	140.5
80°	140.5	133.5	127.7	126.6	127.7	130.1	130.1	127.7	127.7	127.7	127.7
82.5°	109.2	106.8	103.3	101.0	101.0	104.5	109.2	111.5	113.8	116.1	116.1
85°	80.1	81.3	80.1	76.6	75.5	79.0	83.6	88.3	89.4	94.1	92.9
87.5°	43.0	44.1	40.6	39.5	43.0	45.3	49.9	51.1	53.4	54.6	55.7
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: P152963

CATALOG NUMBER: TLM-F05-LED-E1-SLL-8030

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1
2.5°	1234.4	1233.2	1234.4	1232.1	1232.1	1229.7	1227.4	1226.3	1223.9	1222.8	1220.4
5°	1255.3	1251.8	1248.3	1247.2	1242.5	1237.9	1234.4	1228.6	1223.9	1215.8	1213.5
7.5°	1269.2	1261.1	1256.4	1255.3	1248.3	1244.8	1236.7	1229.7	1222.8	1212.3	1208.8
10°	1275.0	1266.9	1258.8	1255.3	1247.2	1241.4	1233.2	1222.8	1217.0	1206.5	1204.2
12.5°	1282.0	1266.9	1254.1	1244.8	1233.2	1220.4	1212.3	1206.5	1198.4	1192.6	1190.3
15°	1269.2	1249.5	1229.7	1212.3	1193.7	1179.8	1171.7	1162.4	1153.1	1149.6	1149.6
17.5°	1234.4	1208.8	1175.2	1153.1	1133.4	1118.3	1107.8	1098.5	1097.4	1092.7	1095.0
20°	1162.4	1128.7	1096.2	1079.9	1068.3	1059.0	1048.6	1043.9	1040.5	1033.5	1031.2
22.5°	1062.5	1034.7	1011.4	999.8	990.5	978.9	969.6	955.7	952.2	945.2	941.8
25°	952.2	930.1	910.4	902.3	896.5	880.2	874.4	855.8	843.1	834.9	839.6
27.5°	841.9	825.6	807.1	796.6	793.1	778.0	772.2	751.3	740.9	740.9	729.2
30°	728.1	713.0	701.4	689.8	687.4	668.9	653.8	645.6	634.0	629.4	621.3
32.5°	621.3	606.2	596.9	591.1	581.8	566.7	551.6	537.6	519.1	512.1	508.6
35°	522.6	510.9	499.3	494.7	481.9	465.7	447.1	435.5	413.4	405.3	401.8
37.5°	447.1	433.1	425.0	412.2	399.5	382.0	368.1	357.7	349.5	346.0	346.0
40°	386.7	376.2	366.9	356.5	346.0	336.8	329.8	327.5	326.3	326.3	328.6
42.5°	341.4	332.1	327.5	321.7	318.2	318.2	317.0	318.2	319.3	320.5	324.0
45°	311.2	305.4	303.1	301.9	304.2	306.6	307.7	310.0	314.7	317.0	318.2
47.5°	295.0	290.3	289.1	290.3	293.8	298.4	303.1	306.6	310.0	311.2	312.4
50°	278.7	272.9	270.6	272.9	277.5	284.5	288.0	293.8	296.1	298.4	296.1
52.5°	264.8	260.1	259.0	259.0	263.6	268.2	272.9	277.5	278.7	278.7	277.5
55°	253.1	249.7	246.2	248.5	252.0	256.6	263.6	267.1	269.4	270.6	270.6
57.5°	243.9	240.4	236.9	239.2	242.7	247.3	254.3	257.8	260.1	263.6	264.8
60°	236.9	232.2	228.8	232.2	235.7	242.7	248.5	252.0	257.8	259.0	259.0
62.5°	229.9	225.3	219.5	223.0	223.0	226.4	232.2	236.9	242.7	245.0	245.0
63°	228.8	224.1	218.3	220.6	220.6	223.0	227.6	232.2	239.2	241.5	240.4
65°	219.5	218.3	212.5	212.5	210.2	212.5	216.0	220.6	224.1	227.6	227.6
67.5°	204.4	203.2	202.1	202.1	202.1	204.4	206.7	210.2	213.7	216.0	214.8
70°	187.0	187.0	187.0	188.1	188.1	190.4	191.6	190.4	193.9	196.2	195.1
72.5°	171.9	170.7	169.5	171.9	170.7	170.7	173.0	171.9	175.3	175.3	176.5
75°	155.6	154.4	154.4	155.6	153.3	151.0	152.1	152.1	153.3	153.3	155.6
77.5°	141.7	141.7	141.7	140.5	138.2	137.0	135.9	135.9	135.9	135.9	137.0
80°	128.9	128.9	128.9	127.7	125.4	123.1	120.8	119.6	118.4	112.6	112.6
82.5°	116.1	116.1	116.1	116.1	115.0	112.6	109.2	99.9	95.2	90.6	91.7
85°	91.7	94.1	96.4	99.9	98.7	98.7	91.7	80.1	73.2	68.5	69.7
87.5°	59.2	52.3	52.3	51.1	48.8	46.4	46.4	39.5	32.5	29.0	30.2
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: P152963

CATALOG NUMBER: TLM-F05-LED-E1-SLL-8030

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1
2.5°	1220.4	1218.1	1215.8	1215.8	1212.3	1212.3	1210.0	1214.6	1210.0	1206.5	1206.5
5°	1211.2	1208.8	1201.9	1200.7	1196.1	1196.1	1196.1	1193.7	1193.7	1191.4	1190.3
7.5°	1205.4	1199.5	1193.7	1190.3	1190.3	1187.9	1192.6	1190.3	1191.4	1191.4	1192.6
10°	1200.7	1196.1	1193.7	1192.6	1192.6	1196.1	1199.5	1200.7	1199.5	1200.7	1200.7
12.5°	1189.1	1191.4	1192.6	1197.2	1203.0	1210.0	1218.1	1219.3	1221.6	1221.6	1223.9
15°	1151.9	1157.7	1164.7	1176.3	1191.4	1206.5	1221.6	1234.4	1246.0	1251.8	1256.4
17.5°	1099.7	1105.5	1118.3	1131.0	1150.8	1172.8	1198.4	1220.4	1244.8	1266.9	1289.0
20°	1028.8	1038.1	1041.6	1064.8	1088.1	1118.3	1148.5	1183.3	1225.1	1266.9	1309.9
22.5°	937.1	947.6	963.8	982.4	1006.8	1043.9	1079.9	1134.5	1190.3	1249.5	1316.8
25°	834.9	846.5	860.5	880.2	904.6	944.1	996.3	1054.4	1122.9	1200.7	1284.3
27.5°	729.2	740.9	752.5	766.4	794.3	836.1	897.6	958.0	1033.5	1118.3	1215.8
30°	623.6	624.7	631.7	649.1	678.2	732.7	778.0	853.5	932.5	1021.9	1134.5
32.5°	507.5	506.3	514.4	529.5	557.4	609.6	665.4	738.5	816.3	929.0	1045.1
35°	404.1	404.1	419.2	434.3	465.7	502.8	551.6	616.6	708.3	812.9	929.0
37.5°	349.5	357.7	366.9	382.0	406.4	435.5	478.4	535.3	607.3	707.2	814.0
40°	332.1	336.8	344.9	358.8	379.7	406.4	437.8	480.7	536.5	616.6	714.2
42.5°	325.1	326.3	330.9	341.4	360.0	386.7	419.2	457.5	499.3	556.2	641.0
45°	318.2	317.0	319.3	327.5	342.6	372.8	409.9	451.7	493.5	541.1	610.8
47.5°	312.4	312.4	312.4	315.9	329.8	360.0	402.9	451.7	501.6	555.1	623.6
50°	296.1	295.0	295.0	297.3	307.7	340.2	391.3	450.6	515.6	585.3	663.1
52.5°	277.5	277.5	278.7	279.9	289.1	321.7	378.6	450.6	531.8	624.7	722.3
55°	271.7	272.9	274.0	272.9	279.9	307.7	364.6	443.6	538.8	656.1	786.1
57.5°	267.1	269.4	269.4	268.2	272.9	296.1	350.7	429.7	533.0	667.7	831.4
60°	260.1	260.1	260.1	256.6	259.0	279.9	329.8	407.6	514.4	657.3	838.4
62.5°	245.0	245.0	242.7	241.5	240.4	256.6	301.9	375.1	480.7	629.4	821.0
63°	241.5	240.4	240.4	236.9	236.9	252.0	296.1	370.4	471.5	622.4	814.0
65°	228.8	228.8	228.8	226.4	225.3	236.9	272.9	337.9	435.5	589.9	779.2
67.5°	214.8	216.0	213.7	212.5	211.3	218.3	246.2	297.3	379.7	521.4	714.2
70°	195.1	196.2	196.2	195.1	193.9	198.6	216.0	255.5	314.7	434.3	608.5
72.5°	177.7	180.0	180.0	182.3	182.3	185.8	192.8	212.5	252.0	339.1	478.4
75°	159.1	160.2	162.6	164.9	162.6	161.4	162.6	177.7	197.4	250.8	341.4
77.5°	142.8	146.3	146.3	145.2	141.7	139.3	139.3	146.3	162.6	190.4	243.9
80°	118.4	124.3	125.4	121.9	118.4	118.4	120.8	125.4	135.9	156.8	184.6
82.5°	95.2	101.0	102.2	103.3	102.2	105.7	105.7	106.8	112.6	128.9	151.0
85°	73.2	77.8	81.3	82.4	83.6	84.8	83.6	77.8	81.3	91.7	102.2
87.5°	32.5	33.7	31.4	32.5	31.4	32.5	33.7	27.9	26.7	36.0	37.2
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: P152963

CATALOG NUMBER: TLM-F05-LED-E1-SLL-8030

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1	1218.1
2.5°	1205.4	1205.4	1206.5	1204.2	1204.2	1205.4	1201.9
5°	1186.8	1191.4	1191.4	1191.4	1189.1	1191.4	1192.6
7.5°	1191.4	1194.9	1197.2	1197.2	1196.1	1200.7	1204.2
10°	1197.2	1203.0	1205.4	1205.4	1205.4	1211.2	1219.3
12.5°	1219.3	1223.9	1227.4	1227.4	1229.7	1236.7	1246.0
15°	1259.9	1265.7	1265.7	1264.6	1271.5	1279.7	1290.1
17.5°	1305.2	1321.5	1329.6	1328.4	1334.2	1344.7	1356.3
20°	1348.2	1393.5	1413.2	1427.1	1433.0	1446.9	1450.4
22.5°	1384.2	1459.7	1514.2	1560.7	1582.8	1596.7	1612.9
25°	1371.4	1473.6	1571.1	1666.4	1733.7	1802.2	1831.3
27.5°	1319.2	1446.9	1574.6	1714.0	1835.9	1957.8	2046.1
30°	1255.3	1408.6	1580.4	1777.8	1970.6	2157.6	2306.2
32.5°	1182.1	1372.6	1593.2	1837.1	2090.2	2335.2	2550.1
35°	1090.4	1304.1	1561.8	1842.9	2141.3	2438.6	2717.3
37.5°	974.3	1211.2	1488.7	1801.1	2143.6	2483.9	2817.1
40°	858.1	1093.9	1395.8	1740.7	2113.4	2494.3	2879.8
42.5°	776.9	989.4	1301.7	1664.0	2064.7	2478.1	2910.0
45°	721.1	913.9	1218.1	1594.4	2012.4	2449.0	2914.7
47.5°	716.5	881.4	1163.5	1543.3	1970.6	2423.5	2914.7
50°	756.0	898.8	1145.0	1517.7	1953.2	2415.3	2917.0
52.5°	830.3	968.5	1178.6	1537.5	1967.1	2425.8	2927.5
55°	919.7	1074.1	1269.2	1606.0	2026.3	2460.6	2950.7
57.5°	1001.0	1196.1	1423.7	1738.4	2134.3	2548.9	3015.7
60°	1048.6	1300.6	1587.4	1924.2	2319.0	2724.2	3145.8
62.5°	1054.4	1358.6	1732.5	2126.2	2543.1	2925.1	3353.6
63°	1049.7	1363.3	1751.1	2164.5	2590.7	2975.1	3425.6
65°	1024.2	1364.4	1803.4	2299.2	2755.6	3185.2	3626.5
67.5°	959.2	1327.3	1822.0	2404.9	2963.4	3461.6	4001.6
70°	846.5	1221.6	1767.4	2407.2	3043.6	3616.1	4238.5
72.5°	680.5	1020.7	1531.7	2190.1	2832.2	3463.9	4176.9
75°	498.2	750.2	1157.7	1696.6	2310.8	2883.3	3577.7
77.5°	330.9	485.4	780.3	1208.8	1657.1	2075.1	2575.6
80°	227.6	300.8	456.4	726.9	1013.8	1217.0	1640.8
82.5°	167.2	198.6	253.1	371.6	487.7	600.4	857.0
85°	104.5	113.8	126.6	183.5	262.4	354.2	534.2
87.5°	27.9	29.0	26.7	36.0	56.9	54.6	60.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)