

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: P152949

Luminaire Tested: **TLM-E04-LED-E1-SLL-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P152949
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-E04-LED-E1-SLL-7030
Description: TALON MEDIUM LED SITE LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR LEFT
Light Source: (84) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10165.4 lumens
Efficiency: N/A
Efficacy: 104.6 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

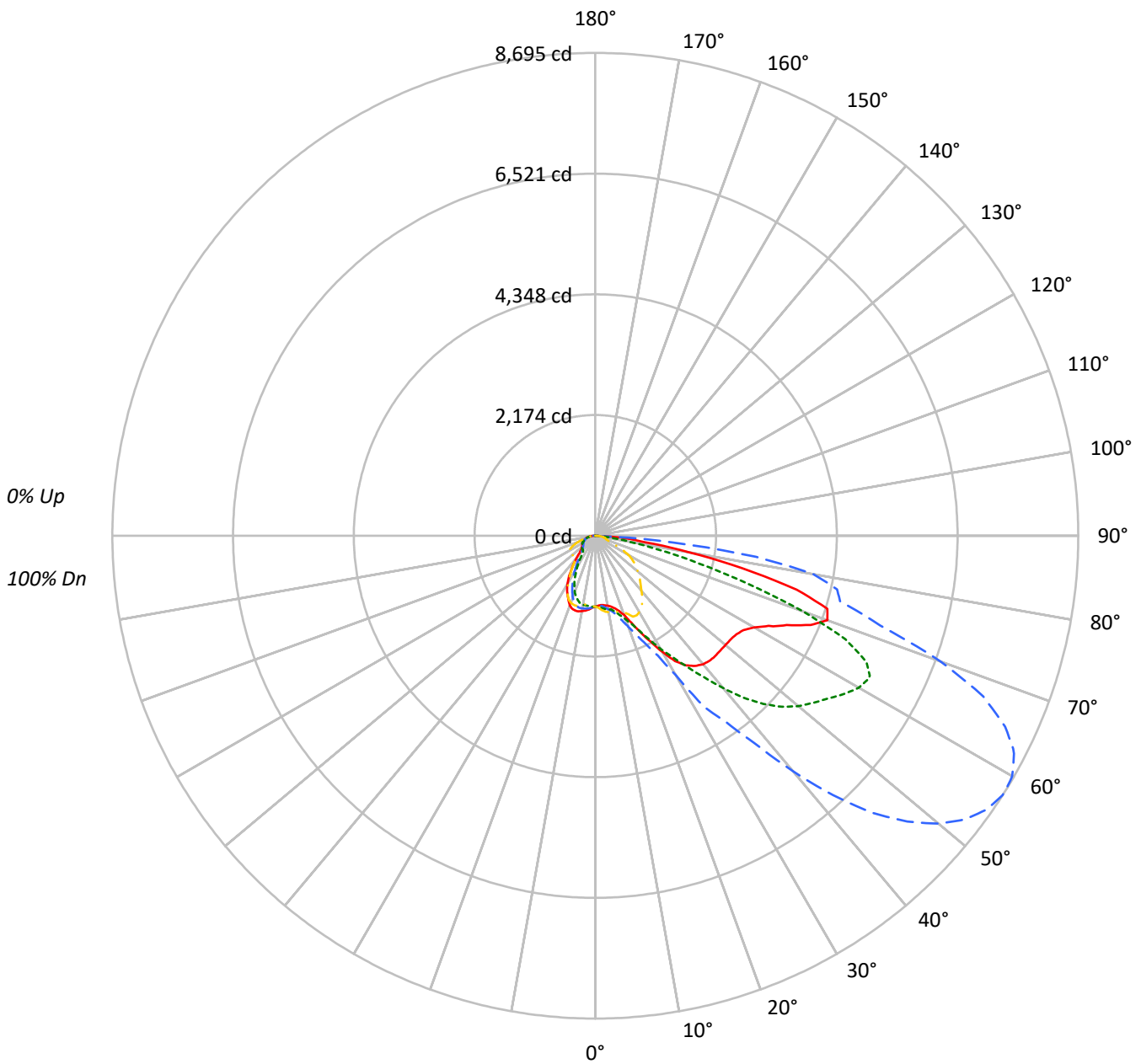
Input Watts (W): 97.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot



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



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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°	20524	20524	20524	20524
5°	20170	21054	21505	20523
10°	20860	21893	22468	20602
15°	22503	23658	23232	20052
20°	26004	27462	22903	18488
25°	34043	33632	20896	15608
30°	44867	43647	18638	12086
35°	55889	56486	14927	8265
40°	63338	75114	10931	7227
45°	69449	97283	8218	7582
50°	76458	119252	7853	7760
55°	86672	143092	8016	7946
60°	106000	175963	8727	8727
65°	144576	204757	9211	9074
70°	208793	186368	9723	9611
75°	232896	120644	10732	10130
80°	159205	58592	12277	10926
85°	103262	28516	14820	13475



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.4	1.2
10°-20°	387.3	3.8
20°-30°	688.1	6.8
30°-40°	1083.5	10.7
40°-50°	1594.6	15.7
50°-60°	2118.1	20.8
60°-70°	2333.0	23.0
70°-80°	1463.7	14.4
80°-90°	372.8	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°	1199.7	11.8
0°-40°	2283.2	22.5
0°-60°	5995.8	59.0
0°-90°	10165.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10165.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1278	1278	1278	1278	1278	
5°	1251	1306	1334	1273	1251	121
15°	1353	1422	1397	1206	1353	392
25°	1920	1897	1179	880	1920	906
35°	2850	2880	761	421	2850	1766
45°	3057	4282	362	334	3057	2363
55°	3094	5109	286	284	3094	2807
65°	3803	5386	242	239	3803	3829
75°	3752	1944	173	163	3752	3669
85°	560	155	80	73	560	648
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°	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5
2.5°	1260.4	1262.9	1262.9	1261.6	1261.6	1264.1	1262.9	1261.6	1258.0	1262.9	1262.9
5°	1250.7	1253.1	1253.1	1255.6	1258.0	1260.4	1260.4	1262.9	1261.6	1266.5	1270.2
7.5°	1262.9	1265.3	1270.2	1276.3	1279.9	1288.4	1288.4	1294.5	1297.0	1300.6	1299.4
10°	1278.7	1284.8	1295.7	1305.5	1312.8	1322.5	1329.8	1338.4	1338.4	1342.0	1344.5
12.5°	1306.7	1312.8	1325.0	1337.1	1348.1	1360.3	1371.2	1379.8	1388.3	1390.7	1395.6
15°	1353.0	1360.3	1378.6	1395.6	1409.0	1424.8	1439.4	1456.5	1472.3	1476.0	1478.4
17.5°	1422.4	1437.0	1450.4	1480.8	1500.3	1521.0	1544.2	1568.5	1573.4	1599.0	1605.1
20°	1521.0	1539.3	1551.5	1589.2	1622.1	1648.9	1683.0	1711.0	1722.0	1746.3	1770.7
22.5°	1691.5	1687.9	1706.1	1743.9	1768.2	1821.8	1851.1	1880.3	1894.9	1931.4	1950.9
25°	1920.5	1940.0	1980.1	1983.8	2006.9	2069.0	2106.8	2136.0	2137.2	2148.2	2168.9
27.5°	2145.8	2226.1	2289.5	2323.6	2385.7	2442.9	2440.5	2481.9	2417.3	2430.7	2450.2
30°	2418.6	2552.5	2671.9	2752.2	2815.6	2882.5	2915.4	2938.6	2910.5	2898.4	2875.2
32.5°	2674.3	2861.8	3045.7	3188.2	3306.3	3417.1	3490.2	3523.1	3562.1	3660.7	3696.0
35°	2849.7	3115.1	3344.1	3549.9	3747.2	3923.8	4051.6	4124.7	4096.7	4083.3	4076.0
37.5°	2954.4	3278.3	3564.5	3855.6	4082.1	4346.3	4544.8	4737.2	4781.1	4704.4	4666.6
40°	3020.1	3403.8	3771.5	4114.9	4408.4	4749.4	4995.4	5284.0	5503.2	5532.5	5442.4
42.5°	3051.8	3487.8	3916.4	4304.9	4701.9	5119.6	5431.4	5780.9	6108.5	6333.8	6277.8
45°	3056.7	3542.6	4022.4	4476.6	4949.1	5444.8	5846.7	6233.9	6672.3	7058.4	7069.3
47.5°	3056.7	3584.0	4095.5	4600.9	5170.8	5727.3	6165.7	6623.6	7160.7	7617.3	7757.4
50°	3059.1	3612.0	4163.7	4698.3	5340.1	5966.0	6461.6	7002.4	7567.4	8064.3	8334.6
52.5°	3070.1	3632.7	4217.2	4767.7	5449.7	6134.1	6691.8	7315.3	7878.0	8388.2	8737.7
55°	3094.4	3661.9	4256.2	4810.3	5522.7	6243.7	6858.7	7529.7	8078.9	8596.5	9084.8
57.5°	3162.6	3713.1	4303.7	4848.1	5562.9	6315.5	6975.6	7622.2	8155.6	8695.1	9268.7
60°	3299.0	3821.5	4385.3	4923.6	5629.9	6448.3	7031.6	7560.1	8099.6	8665.9	9310.1
62.5°	3517.0	3990.7	4498.6	5051.4	5821.1	6654.1	6989.0	7375.0	7879.2	8496.6	9162.7
63°	3592.5	4027.3	4524.1	5079.4	5873.5	6691.8	6970.7	7320.2	7834.1	8443.0	9110.4
65°	3803.2	4189.2	4645.9	5220.7	6089.0	6729.6	6828.2	7035.2	7522.4	8137.3	8801.0
67.5°	4196.5	4582.6	4907.7	5459.4	6270.5	6581.0	6386.1	6411.7	6920.8	7557.7	8154.4
70°	4445.0	4905.3	5074.6	5489.8	6237.6	6360.6	5813.8	5475.2	5883.2	6609.0	7131.4
72.5°	4380.4	4909.0	4890.7	5084.3	5580.0	5694.4	5128.2	4594.8	4837.1	5379.0	5717.6
75°	3752.0	4384.1	4250.1	4211.2	4385.3	4460.8	4035.8	3954.2	4259.9	4560.7	4565.5
77.5°	2701.1	3396.4	3239.3	3014.1	3001.9	3176.0	3233.3	3767.9	4219.7	4457.1	4352.4
80°	1720.8	2474.6	2311.4	1918.0	1911.9	2138.5	2641.4	3368.4	3847.0	3979.8	3707.0
82.5°	898.7	1619.7	1681.8	1439.4	1647.7	2022.8	2513.5	2714.5	2895.9	2914.2	2592.7
85°	560.2	996.2	1171.5	1209.3	1488.2	1793.8	1790.2	1719.5	1639.2	1402.9	1268.9
87.5°	63.3	125.4	190.0	180.2	242.3	339.8	423.8	248.4	174.1	63.3	87.7
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°	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5
2.5°	1265.3	1266.5	1267.7	1267.7	1273.8	1272.6	1273.8	1276.3	1279.9	1282.3	1284.8
5°	1275.0	1275.0	1279.9	1283.6	1290.9	1295.7	1298.2	1305.5	1314.0	1311.6	1318.9
7.5°	1306.7	1305.5	1310.4	1312.8	1318.9	1327.4	1326.2	1332.3	1339.6	1342.0	1348.1
10°	1349.3	1345.7	1345.7	1343.2	1344.5	1342.0	1342.0	1342.0	1346.9	1345.7	1350.5
12.5°	1393.2	1391.9	1389.5	1382.2	1382.2	1372.5	1367.6	1361.5	1360.3	1351.8	1353.0
15°	1483.3	1483.3	1478.4	1463.8	1451.6	1443.1	1430.9	1422.4	1410.2	1394.4	1385.9
17.5°	1614.8	1597.8	1591.7	1589.2	1569.7	1562.4	1535.6	1507.6	1494.2	1472.3	1460.1
20°	1775.6	1771.9	1747.5	1735.4	1711.0	1676.9	1642.8	1606.3	1584.4	1557.6	1543.0
22.5°	1957.0	1930.2	1918.0	1899.8	1862.0	1823.0	1771.9	1723.2	1689.1	1670.8	1659.9
25°	2168.9	2142.1	2129.9	2105.6	2059.3	2017.9	1954.6	1897.3	1866.9	1836.4	1819.4
27.5°	2450.2	2424.6	2410.0	2346.7	2330.9	2262.7	2184.7	2106.8	2066.6	2021.5	1992.3
30°	2870.4	2871.6	2796.1	2719.3	2640.2	2522.1	2440.5	2352.8	2287.0	2222.5	2157.9
32.5°	3580.3	3398.9	3258.8	3094.4	2922.7	2797.3	2696.2	2591.5	2500.1	2406.4	2299.2
35°	4013.9	3926.2	3744.7	3443.9	3271.0	3118.8	3006.7	2880.1	2768.1	2602.4	2439.3
37.5°	4503.4	4300.1	4079.6	3912.8	3716.7	3540.1	3352.6	3208.9	3015.3	2792.4	2561.0
40°	5218.3	4927.2	4661.7	4437.7	4184.4	3999.3	3789.8	3581.6	3324.6	3001.9	2684.0
42.5°	5964.8	5664.0	5313.3	5022.2	4723.8	4507.1	4247.7	3955.4	3577.9	3178.5	2790.0
45°	6747.8	6346.0	5925.8	5570.2	5259.7	4990.5	4669.0	4281.8	3821.5	3336.8	2888.6
47.5°	7519.9	7058.4	6557.9	6175.5	5771.2	5442.4	5047.8	4558.2	4011.4	3486.6	2987.3
50°	8200.7	7756.2	7153.4	6667.5	6258.3	5852.7	5360.8	4771.3	4161.2	3615.6	3076.2
52.5°	8787.6	8405.3	7770.8	7157.0	6685.7	6230.3	5612.8	4943.1	4312.2	3735.0	3149.2
55°	9218.7	8964.2	8379.7	7618.6	7062.0	6518.9	5826.0	5108.7	4454.7	3830.0	3196.7
57.5°	9543.9	9402.6	8900.9	8053.3	7407.9	6799.0	6046.4	5307.2	4596.0	3911.6	3218.6
60°	9721.7	9760.7	9295.5	8433.3	7713.5	7032.8	6266.8	5476.4	4700.7	3959.1	3206.5
62.5°	9704.7	9943.3	9591.4	8667.1	7891.3	7171.6	6415.4	5555.6	4686.1	3883.6	3095.6
63°	9671.8	9949.4	9624.3	8682.9	7902.3	7176.5	6419.0	5544.6	4655.7	3847.0	3051.8
65°	9388.0	9809.4	9596.3	8611.1	7804.9	7085.2	6342.3	5386.3	4441.3	3651.0	2826.5
67.5°	8628.1	9155.4	9094.5	8103.2	7343.3	6707.6	5950.2	4876.1	3911.6	3168.7	2395.4
70°	7372.6	7868.2	7879.2	7047.4	6412.9	5789.4	5159.8	3967.6	3100.5	2456.3	1786.5
72.5°	5650.6	5969.7	6080.5	5532.5	5107.5	4669.0	4104.0	2880.1	2210.3	1670.8	1163.0
75°	4375.6	4287.9	4286.7	4055.3	3882.3	3668.0	3046.9	1943.6	1451.6	1086.3	711.2
77.5°	3933.5	3543.8	3166.3	2888.6	2749.8	2677.9	1998.4	1171.5	856.1	624.7	409.2
80°	3244.2	2669.4	2156.7	1857.1	1737.8	1820.6	1114.3	633.3	468.9	355.6	265.5
82.5°	2237.1	1857.1	1411.4	1169.1	1003.5	1049.7	569.9	323.9	216.8	198.5	164.4
85°	1165.4	1021.7	862.2	740.4	654.0	574.8	295.9	154.7	90.1	79.2	71.9
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



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5
2.5°	1288.4	1287.2	1289.7	1290.9	1294.5	1297.0	1298.2	1295.7	1299.4	1303.0	1300.6
5°	1322.5	1331.1	1332.3	1335.9	1335.9	1343.2	1343.2	1343.2	1342.0	1343.2	1340.8
7.5°	1351.8	1362.7	1363.9	1368.8	1370.0	1378.6	1374.9	1377.3	1377.3	1371.2	1368.8
10°	1355.4	1366.4	1372.5	1378.6	1387.1	1398.0	1398.0	1404.1	1404.1	1399.3	1398.0
12.5°	1356.6	1365.2	1371.2	1379.8	1391.9	1407.8	1416.3	1424.8	1428.5	1427.3	1423.6
15°	1382.2	1382.2	1383.4	1390.7	1399.3	1418.7	1430.9	1440.7	1446.7	1444.3	1438.2
17.5°	1449.2	1439.4	1432.1	1420.0	1422.4	1432.1	1439.4	1448.0	1449.2	1446.7	1437.0
20°	1527.1	1514.9	1496.7	1477.2	1467.4	1460.1	1455.3	1455.3	1451.6	1439.4	1423.6
22.5°	1637.9	1622.1	1596.5	1567.3	1547.8	1524.7	1496.7	1469.9	1440.7	1411.4	1377.3
25°	1791.4	1769.5	1742.7	1697.6	1656.2	1607.5	1550.3	1490.6	1421.2	1360.3	1310.4
27.5°	1946.0	1897.3	1827.9	1765.8	1689.1	1616.0	1534.4	1461.4	1372.5	1299.4	1244.6
30°	2073.9	1981.4	1881.5	1782.9	1681.8	1583.1	1485.7	1398.0	1300.6	1226.3	1172.7
32.5°	2172.6	2044.7	1905.9	1776.8	1652.6	1532.0	1420.0	1322.5	1223.9	1147.2	1089.9
35°	2263.9	2086.1	1909.5	1750.0	1596.5	1471.1	1344.5	1238.5	1133.8	1053.4	991.3
37.5°	2332.1	2105.6	1887.6	1700.0	1523.5	1383.4	1254.3	1146.0	1038.8	951.1	880.5
40°	2375.9	2093.4	1840.1	1628.2	1437.0	1289.7	1158.1	1046.1	942.6	846.4	761.1
42.5°	2411.2	2077.6	1792.6	1562.4	1368.8	1208.1	1072.9	952.3	847.6	742.9	649.1
45°	2463.6	2089.7	1771.9	1516.2	1307.9	1138.6	990.1	864.6	755.0	652.7	562.6
47.5°	2514.8	2095.8	1741.5	1458.9	1231.2	1066.8	915.8	794.0	682.0	588.2	505.4
50°	2561.0	2092.2	1694.0	1385.9	1156.9	994.9	848.8	727.0	616.2	529.7	451.8
52.5°	2583.0	2071.5	1635.5	1315.2	1097.2	931.6	783.0	664.9	555.3	473.7	401.9
55°	2580.5	2017.9	1558.8	1248.2	1031.5	864.6	718.5	601.6	503.0	427.4	365.3
57.5°	2544.0	1935.1	1477.2	1174.0	945.0	781.8	643.0	529.7	446.9	383.6	331.2
60°	2467.3	1829.1	1370.0	1065.6	836.6	679.5	549.2	451.8	384.8	336.1	302.0
62.5°	2323.6	1676.9	1236.1	914.6	690.5	546.8	433.5	370.2	320.3	291.1	275.2
63°	2280.9	1635.5	1178.8	878.0	656.4	516.3	409.2	343.4	306.9	281.3	266.7
65°	2069.0	1432.1	986.4	708.8	510.3	398.2	328.8	278.9	257.0	246.0	244.8
67.5°	1675.7	1126.5	697.8	485.9	347.1	287.4	252.1	231.4	221.6	219.2	221.6
70°	1176.4	711.2	443.3	322.7	257.0	231.4	215.6	207.0	200.9	202.2	204.6
72.5°	750.2	426.2	304.5	244.8	216.8	203.4	196.1	193.6	192.4	191.2	191.2
75°	427.4	283.7	233.8	211.9	197.3	186.3	180.2	177.8	179.0	180.2	177.8
77.5°	282.5	233.8	208.2	193.6	180.2	168.1	164.4	163.2	165.6	168.1	168.1
80°	222.9	208.2	193.6	179.0	157.1	148.6	151.0	152.2	151.0	152.2	148.6
82.5°	157.1	154.7	158.3	152.2	130.3	123.0	120.6	121.8	119.3	119.3	116.9
85°	73.1	73.1	76.7	76.7	74.3	75.5	81.6	88.9	92.6	88.9	84.0
87.5°	0.0	0.0	0.0	0.0	0.0	11.0	21.9	31.7	34.1	42.6	41.4
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: P152949

CATALOG NUMBER: TLM-E04-LED-E1-SLL-7030

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5
2.5°	1297.0	1299.4	1298.2	1297.0	1299.4	1297.0	1298.2	1297.0	1297.0	1295.7	1295.7
5°	1338.4	1342.0	1334.7	1333.5	1331.1	1325.0	1325.0	1322.5	1322.5	1317.7	1314.0
7.5°	1365.2	1366.4	1360.3	1359.1	1353.0	1346.9	1342.0	1337.1	1335.9	1332.3	1325.0
10°	1390.7	1388.3	1383.4	1377.3	1371.2	1362.7	1356.6	1350.5	1349.3	1343.2	1334.7
12.5°	1412.6	1411.4	1401.7	1395.6	1385.9	1377.3	1370.0	1362.7	1359.1	1351.8	1339.6
15°	1427.3	1420.0	1407.8	1396.8	1385.9	1376.1	1367.6	1359.1	1355.4	1346.9	1334.7
17.5°	1421.2	1407.8	1391.9	1378.6	1363.9	1351.8	1344.5	1335.9	1329.8	1325.0	1307.9
20°	1399.3	1379.8	1355.4	1339.6	1320.1	1304.3	1299.4	1290.9	1286.0	1267.7	1245.8
22.5°	1342.0	1314.0	1283.6	1260.4	1238.5	1222.7	1210.5	1202.0	1189.8	1178.8	1144.7
25°	1270.2	1238.5	1206.8	1178.8	1149.6	1125.2	1103.3	1082.6	1076.5	1053.4	1020.5
27.5°	1200.8	1165.4	1133.8	1100.9	1063.1	1032.7	994.9	965.7	946.2	921.9	891.4
30°	1126.5	1091.1	1048.5	1004.7	960.8	928.0	885.3	850.0	825.7	800.1	772.1
32.5°	1032.7	990.1	938.9	890.2	850.0	811.1	768.4	734.3	710.0	686.8	660.0
35°	925.5	869.5	814.7	761.1	718.5	685.6	647.9	622.3	605.2	584.5	556.5
37.5°	802.5	739.2	680.8	639.3	601.6	569.9	543.1	527.3	509.0	498.1	481.0
40°	678.3	616.2	559.0	521.2	489.6	471.3	456.7	453.0	440.8	426.2	415.3
42.5°	568.7	509.0	453.0	422.6	401.9	397.0	389.7	389.7	383.6	372.6	365.3
45°	494.4	432.3	383.6	361.7	350.7	349.5	345.9	345.9	344.6	339.8	331.2
47.5°	440.8	384.8	347.1	333.7	331.2	328.8	325.2	323.9	322.7	319.1	314.2
50°	392.1	344.6	320.3	314.2	315.4	311.8	308.1	304.5	303.2	299.6	294.7
52.5°	347.1	313.0	297.1	293.5	293.5	293.5	291.1	291.1	288.6	287.4	282.5
55°	321.5	295.9	287.4	286.2	285.0	283.7	281.3	281.3	278.9	277.7	271.6
57.5°	299.6	283.7	278.9	276.4	275.2	272.8	271.6	271.6	271.6	271.6	264.3
60°	282.5	275.2	274.0	271.6	270.4	265.5	263.0	261.8	263.0	264.3	257.0
62.5°	264.3	263.0	261.8	259.4	258.2	253.3	249.6	247.2	249.6	252.1	250.9
63°	259.4	258.2	258.2	257.0	255.7	249.6	246.0	243.6	246.0	248.4	248.4
65°	242.3	243.6	243.6	242.3	241.1	237.5	232.6	230.2	231.4	235.0	236.3
67.5°	224.1	225.3	224.1	225.3	224.1	221.6	218.0	215.6	214.3	215.6	216.8
70°	207.0	209.5	208.2	207.0	205.8	205.8	203.4	199.7	198.5	197.3	197.3
72.5°	192.4	192.4	190.0	190.0	188.8	188.8	186.3	182.7	181.5	181.5	179.0
75°	176.6	176.6	172.9	172.9	170.5	171.7	169.3	165.6	164.4	164.4	163.2
77.5°	166.8	163.2	157.1	155.9	154.7	154.7	153.4	149.8	148.6	148.6	147.4
80°	147.4	140.0	134.0	132.7	134.0	136.4	136.4	134.0	134.0	134.0	134.0
82.5°	114.5	112.0	108.4	105.9	105.9	109.6	114.5	116.9	119.3	121.8	121.8
85°	84.0	85.2	84.0	80.4	79.2	82.8	87.7	92.6	93.8	98.6	97.4
87.5°	45.1	46.3	42.6	41.4	45.1	47.5	52.4	53.6	56.0	57.2	58.5
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: P152949

CATALOG NUMBER: TLM-E04-LED-E1-SLL-7030

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5
2.5°	1294.5	1293.3	1294.5	1292.1	1292.1	1289.7	1287.2	1286.0	1283.6	1282.3	1279.9
5°	1316.4	1312.8	1309.1	1307.9	1303.0	1298.2	1294.5	1288.4	1283.6	1275.0	1272.6
7.5°	1331.1	1322.5	1317.7	1316.4	1309.1	1305.5	1297.0	1289.7	1282.3	1271.4	1267.7
10°	1337.1	1328.6	1320.1	1316.4	1307.9	1301.8	1293.3	1282.3	1276.3	1265.3	1262.9
12.5°	1344.5	1328.6	1315.2	1305.5	1293.3	1279.9	1271.4	1265.3	1256.8	1250.7	1248.2
15°	1331.1	1310.4	1289.7	1271.4	1251.9	1237.3	1228.8	1219.0	1209.3	1205.6	1205.6
17.5°	1294.5	1267.7	1232.4	1209.3	1188.6	1172.7	1161.8	1152.0	1150.8	1146.0	1148.4
20°	1219.0	1183.7	1149.6	1132.6	1120.4	1110.6	1099.7	1094.8	1091.1	1083.8	1081.4
22.5°	1114.3	1085.1	1060.7	1048.5	1038.8	1026.6	1016.9	1002.2	998.6	991.3	987.6
25°	998.6	975.5	954.8	946.2	940.1	923.1	917.0	897.5	884.1	875.6	880.5
27.5°	882.9	865.9	846.4	835.4	831.8	815.9	809.8	787.9	777.0	777.0	764.8
30°	763.6	747.7	735.6	723.4	720.9	701.5	685.6	677.1	664.9	660.0	651.5
32.5°	651.5	635.7	625.9	619.9	610.1	594.3	578.5	563.8	544.4	537.0	533.4
35°	548.0	535.8	523.7	518.8	505.4	488.3	468.9	456.7	433.5	425.0	421.4
37.5°	468.9	454.2	445.7	432.3	418.9	400.7	386.0	375.1	366.6	362.9	362.9
40°	405.5	394.6	384.8	373.9	362.9	353.2	345.9	343.4	342.2	342.2	344.6
42.5°	358.0	348.3	343.4	337.3	333.7	333.7	332.5	333.7	334.9	336.1	339.8
45°	326.4	320.3	317.8	316.6	319.1	321.5	322.7	325.2	330.0	332.5	333.7
47.5°	309.3	304.5	303.2	304.5	308.1	313.0	317.8	321.5	325.2	326.4	327.6
50°	292.3	286.2	283.7	286.2	291.1	298.4	302.0	308.1	310.5	313.0	310.5
52.5°	277.7	272.8	271.6	271.6	276.4	281.3	286.2	291.1	292.3	292.3	291.1
55°	265.5	261.8	258.2	260.6	264.3	269.1	276.4	280.1	282.5	283.7	283.7
57.5°	255.7	252.1	248.4	250.9	254.5	259.4	266.7	270.4	272.8	276.4	277.7
60°	248.4	243.6	239.9	243.6	247.2	254.5	260.6	264.3	270.4	271.6	271.6
62.5°	241.1	236.3	230.2	233.8	233.8	237.5	243.6	248.4	254.5	257.0	257.0
63°	239.9	235.0	228.9	231.4	231.4	233.8	238.7	243.6	250.9	253.3	252.1
65°	230.2	228.9	222.9	222.9	220.4	222.9	226.5	231.4	235.0	238.7	238.7
67.5°	214.3	213.1	211.9	211.9	211.9	214.3	216.8	220.4	224.1	226.5	225.3
70°	196.1	196.1	196.1	197.3	197.3	199.7	200.9	199.7	203.4	205.8	204.6
72.5°	180.2	179.0	177.8	180.2	179.0	179.0	181.5	180.2	183.9	183.9	185.1
75°	163.2	162.0	162.0	163.2	160.7	158.3	159.5	159.5	160.7	160.7	163.2
77.5°	148.6	148.6	148.6	147.4	144.9	143.7	142.5	142.5	142.5	142.5	143.7
80°	135.2	135.2	135.2	134.0	131.5	129.1	126.7	125.4	124.2	118.1	118.1
82.5°	121.8	121.8	121.8	121.8	120.6	118.1	114.5	104.7	99.9	95.0	96.2
85°	96.2	98.6	101.1	104.7	103.5	103.5	96.2	84.0	76.7	71.9	73.1
87.5°	62.1	54.8	54.8	53.6	51.1	48.7	48.7	41.4	34.1	30.4	31.7
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: P152949

CATALOG NUMBER: TLM-E04-LED-E1-SLL-7030

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5
2.5°	1279.9	1277.5	1275.0	1275.0	1271.4	1271.4	1268.9	1273.8	1268.9	1265.3	1265.3
5°	1270.2	1267.7	1260.4	1259.2	1254.3	1254.3	1254.3	1251.9	1251.9	1249.5	1248.2
7.5°	1264.1	1258.0	1251.9	1248.2	1248.2	1245.8	1250.7	1248.2	1249.5	1249.5	1250.7
10°	1259.2	1254.3	1251.9	1250.7	1250.7	1254.3	1258.0	1259.2	1258.0	1259.2	1259.2
12.5°	1247.0	1249.5	1250.7	1255.6	1261.6	1268.9	1277.5	1278.7	1281.1	1281.1	1283.6
15°	1208.1	1214.1	1221.5	1233.6	1249.5	1265.3	1281.1	1294.5	1306.7	1312.8	1317.7
17.5°	1153.3	1159.3	1172.7	1186.1	1206.8	1230.0	1256.8	1279.9	1305.5	1328.6	1351.8
20°	1079.0	1088.7	1092.4	1116.7	1141.1	1172.7	1204.4	1240.9	1284.8	1328.6	1373.7
22.5°	982.8	993.7	1010.8	1030.3	1055.8	1094.8	1132.6	1189.8	1248.2	1310.4	1381.0
25°	875.6	887.8	902.4	923.1	948.7	990.1	1044.9	1105.8	1177.6	1259.2	1346.9
27.5°	764.8	777.0	789.1	803.7	833.0	876.8	941.4	1004.7	1083.8	1172.7	1275.0
30°	654.0	655.2	662.5	680.8	711.2	768.4	815.9	895.1	977.9	1071.7	1189.8
32.5°	532.2	531.0	539.5	555.3	584.5	639.3	697.8	774.5	856.1	974.2	1096.0
35°	423.8	423.8	439.6	455.5	488.3	527.3	578.5	646.7	742.9	852.5	974.2
37.5°	366.6	375.1	384.8	400.7	426.2	456.7	501.7	561.4	636.9	741.6	853.7
40°	348.3	353.2	361.7	376.3	398.2	426.2	459.1	504.2	562.6	646.7	748.9
42.5°	341.0	342.2	347.1	358.0	377.5	405.5	439.6	479.8	523.7	583.3	672.2
45°	333.7	332.5	334.9	343.4	359.3	390.9	429.9	473.7	517.6	567.5	640.6
47.5°	327.6	327.6	327.6	331.2	345.9	377.5	422.6	473.7	526.1	582.1	654.0
50°	310.5	309.3	309.3	311.8	322.7	356.8	410.4	472.5	540.7	613.8	695.4
52.5°	291.1	291.1	292.3	293.5	303.2	337.3	397.0	472.5	557.8	655.2	757.5
55°	285.0	286.2	287.4	286.2	293.5	322.7	382.4	465.2	565.1	688.1	824.5
57.5°	280.1	282.5	282.5	281.3	286.2	310.5	367.8	450.6	559.0	700.2	871.9
60°	272.8	272.8	272.8	269.1	271.6	293.5	345.9	427.4	539.5	689.3	879.3
62.5°	257.0	257.0	254.5	253.3	252.1	269.1	316.6	393.3	504.2	660.0	861.0
63°	253.3	252.1	252.1	248.4	248.4	264.3	310.5	388.5	494.4	652.7	853.7
65°	239.9	239.9	239.9	237.5	236.3	248.4	286.2	354.4	456.7	618.6	817.1
67.5°	225.3	226.5	224.1	222.9	221.6	228.9	258.2	311.8	398.2	546.8	748.9
70°	204.6	205.8	205.8	204.6	203.4	208.2	226.5	267.9	330.0	455.5	638.1
72.5°	186.3	188.8	188.8	191.2	191.2	194.8	202.2	222.9	264.3	355.6	501.7
75°	166.8	168.1	170.5	172.9	170.5	169.3	170.5	186.3	207.0	263.0	358.0
77.5°	149.8	153.4	153.4	152.2	148.6	146.1	146.1	153.4	170.5	199.7	255.7
80°	124.2	130.3	131.5	127.9	124.2	124.2	126.7	131.5	142.5	164.4	193.6
82.5°	99.9	105.9	107.2	108.4	107.2	110.8	110.8	112.0	118.1	135.2	158.3
85°	76.7	81.6	85.2	86.5	87.7	88.9	87.7	81.6	85.2	96.2	107.2
87.5°	34.1	35.3	32.9	34.1	32.9	34.1	35.3	29.2	28.0	37.8	39.0
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: P152949

CATALOG NUMBER: TLM-E04-LED-E1-SLL-7030

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5	1277.5
2.5°	1264.1	1264.1	1265.3	1262.9	1262.9	1264.1	1260.4
5°	1244.6	1249.5	1249.5	1249.5	1247.0	1249.5	1250.7
7.5°	1249.5	1253.1	1255.6	1255.6	1254.3	1259.2	1262.9
10°	1255.6	1261.6	1264.1	1264.1	1264.1	1270.2	1278.7
12.5°	1278.7	1283.6	1287.2	1287.2	1289.7	1297.0	1306.7
15°	1321.3	1327.4	1327.4	1326.2	1333.5	1342.0	1353.0
17.5°	1368.8	1385.9	1394.4	1393.2	1399.3	1410.2	1422.4
20°	1413.9	1461.4	1482.1	1496.7	1502.8	1517.4	1521.0
22.5°	1451.6	1530.8	1588.0	1636.7	1659.9	1674.5	1691.5
25°	1438.2	1545.4	1647.7	1747.5	1818.2	1890.0	1920.5
27.5°	1383.4	1517.4	1651.3	1797.5	1925.3	2053.2	2145.8
30°	1316.4	1477.2	1657.4	1864.5	2066.6	2262.7	2418.6
32.5°	1239.7	1439.4	1670.8	1926.6	2192.0	2449.0	2674.3
35°	1143.5	1367.6	1637.9	1932.6	2245.6	2557.4	2849.7
37.5°	1021.7	1270.2	1561.2	1888.8	2248.1	2604.9	2954.4
40°	900.0	1147.2	1463.8	1825.5	2216.4	2615.8	3020.1
42.5°	814.7	1037.6	1365.2	1745.1	2165.2	2598.8	3051.8
45°	756.3	958.4	1277.5	1672.0	2110.4	2568.3	3056.7
47.5°	751.4	924.3	1220.2	1618.5	2066.6	2541.5	3056.7
50°	792.8	942.6	1200.8	1591.7	2048.3	2533.0	3059.1
52.5°	870.7	1015.6	1236.1	1612.4	2063.0	2544.0	3070.1
55°	964.5	1126.5	1331.1	1684.2	2125.1	2580.5	3094.4
57.5°	1049.7	1254.3	1493.0	1823.0	2238.3	2673.1	3162.6
60°	1099.7	1363.9	1664.7	2017.9	2431.9	2857.0	3299.0
62.5°	1105.8	1424.8	1817.0	2229.8	2667.0	3067.6	3517.0
63°	1100.9	1429.7	1836.4	2270.0	2716.9	3120.0	3592.5
65°	1074.1	1430.9	1891.2	2411.2	2889.8	3340.4	3803.2
67.5°	1005.9	1391.9	1910.7	2522.1	3107.8	3630.3	4196.5
70°	887.8	1281.1	1853.5	2524.5	3191.9	3792.2	4445.0
72.5°	713.6	1070.4	1606.3	2296.8	2970.2	3632.7	4380.4
75°	522.4	786.7	1214.1	1779.2	2423.4	3023.8	3752.0
77.5°	347.1	509.0	818.4	1267.7	1737.8	2176.2	2701.1
80°	238.7	315.4	478.6	762.3	1063.1	1276.3	1720.8
82.5°	175.4	208.2	265.5	389.7	511.5	629.6	898.7
85°	109.6	119.3	132.7	192.4	275.2	371.4	560.2
87.5°	29.2	30.4	28.0	37.8	59.7	57.2	63.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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