

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: P152953

Luminaire Tested: **TLM-F04-LED-E1-SLL-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P152953
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-8030
Description: TALON MEDIUM LED SITE LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR LEFT
Light Source: (28) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

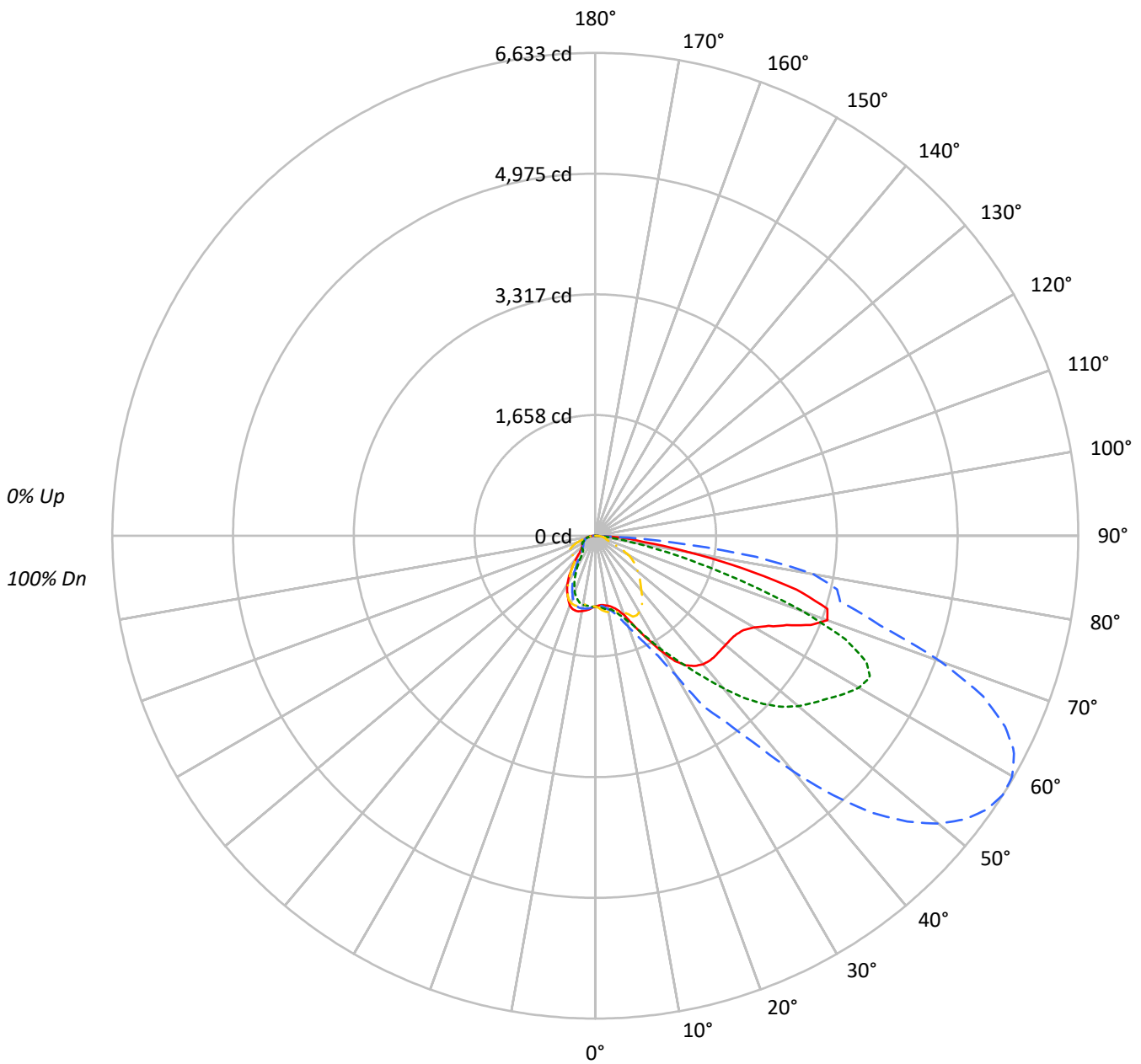
Lumens per Lamp: N/A
Luminaire Lumens: 7754.5 lumens
Efficiency: N/A
Efficacy: 75.9 lumens/watt
Spacing Criteria (0/90/45): 1.93 / 2.48 / 2.44
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')
CIE Type: Direct

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: P152953
CATALOG NUMBER: TLM-F04-LED-E1-SLL-8030

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°	15656	15656	15656	15656
5°	15387	16061	16404	15656
10°	15912	16700	17140	15716
15°	17166	18046	17722	15297
20°	19837	20948	17471	14103
25°	25969	25657	15941	11907
30°	34226	33295	14217	9220
35°	42633	43088	11387	6303
40°	48318	57298	8338	5514
45°	52976	74211	6268	5782
50°	58325	90969	5991	5921
55°	66116	109156	6114	6064
60°	80861	134231	6658	6658
65°	110287	156197	7029	6922
70°	159274	142167	7417	7332
75°	177664	92035	8187	7728
80°	121439	44695	9372	8336
85°	78765	21751	11300	10267



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.9	1.2
10°-20°	295.4	3.8
20°-30°	524.9	6.8
30°-40°	826.5	10.7
40°-50°	1216.4	15.7
50°-60°	1615.7	20.8
60°-70°	1779.7	23.0
70°-80°	1116.6	14.4
80°-90°	284.4	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°	915.2	11.8
0°-40°	1741.7	22.5
0°-60°	4573.8	59.0
0°-90°	7754.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7754.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	974	974	974	974	974	
5°	954	996	1017	971	954	92
15°	1032	1085	1066	920	1032	299
25°	1465	1447	899	672	1465	691
35°	2174	2197	581	321	2174	1347
45°	2332	3266	276	254	2332	1803
55°	2360	3897	218	216	2360	2141
65°	2901	4109	185	182	2901	2921
75°	2862	1483	132	124	2862	2799
85°	427	118	61	56	427	494
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°	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5
2.5°	961.5	963.4	963.4	962.4	962.4	964.3	963.4	962.4	959.6	963.4	963.4
5°	954.1	955.9	955.9	957.8	959.6	961.5	961.5	963.4	962.4	966.1	968.9
7.5°	963.4	965.2	968.9	973.6	976.4	982.9	982.9	987.5	989.4	992.2	991.2
10°	975.4	980.1	988.4	995.9	1001.4	1008.9	1014.4	1020.9	1020.9	1023.7	1025.6
12.5°	996.8	1001.4	1010.7	1020.0	1028.4	1037.7	1046.0	1052.5	1059.0	1060.9	1064.6
15°	1032.1	1037.7	1051.6	1064.6	1074.8	1086.9	1098.1	1111.1	1123.1	1125.9	1127.8
17.5°	1085.0	1096.2	1106.4	1129.6	1144.5	1160.3	1177.9	1196.5	1200.2	1219.8	1224.4
20°	1160.3	1174.2	1183.5	1212.3	1237.4	1257.8	1283.9	1305.2	1313.6	1332.2	1350.7
22.5°	1290.4	1287.6	1301.5	1330.3	1348.9	1389.8	1412.1	1434.3	1445.5	1473.4	1488.2
25°	1465.0	1479.9	1510.5	1513.3	1531.0	1578.3	1607.1	1629.4	1630.4	1638.7	1654.5
27.5°	1636.9	1698.2	1746.5	1772.5	1819.9	1863.5	1861.7	1893.3	1844.0	1854.2	1869.1
30°	1845.0	1947.1	2038.2	2099.5	2147.8	2198.9	2224.0	2241.6	2220.3	2211.0	2193.3
32.5°	2040.0	2183.1	2323.4	2432.1	2522.2	2606.7	2662.5	2687.5	2717.3	2792.5	2819.5
35°	2173.8	2376.3	2551.0	2708.0	2858.5	2993.2	3090.7	3146.5	3125.1	3114.9	3109.3
37.5°	2253.7	2500.8	2719.1	2941.2	3113.9	3315.5	3467.0	3613.7	3647.2	3588.7	3559.9
40°	2303.9	2596.5	2877.1	3139.0	3362.9	3623.0	3810.7	4030.8	4198.1	4220.4	4151.6
42.5°	2328.0	2660.6	2987.6	3283.9	3586.8	3905.4	4143.3	4409.9	4659.8	4831.6	4788.9
45°	2331.7	2702.4	3068.4	3414.9	3775.4	4153.5	4460.0	4755.5	5089.9	5384.4	5392.7
47.5°	2331.7	2734.0	3124.2	3509.7	3944.5	4369.0	4703.4	5052.7	5462.4	5810.8	5917.6
50°	2333.6	2755.4	3176.2	3584.0	4073.6	4551.1	4929.2	5341.6	5772.7	6151.7	6357.9
52.5°	2342.0	2771.1	3217.1	3637.0	4157.2	4679.3	5104.7	5580.4	6009.6	6398.8	6665.4
55°	2360.5	2793.4	3246.8	3669.5	4212.9	4762.9	5232.0	5743.9	6162.9	6557.7	6930.2
57.5°	2412.6	2832.5	3283.0	3698.3	4243.6	4817.7	5321.2	5814.5	6221.4	6632.9	7070.5
60°	2516.6	2915.1	3345.3	3755.9	4294.7	4919.0	5363.9	5767.1	6178.7	6610.6	7102.1
62.5°	2682.9	3044.3	3431.7	3853.4	4440.5	5076.0	5331.4	5625.9	6010.5	6481.5	6989.7
63°	2740.5	3072.1	3451.2	3874.8	4480.5	5104.7	5317.5	5584.1	5976.1	6440.6	6949.7
65°	2901.2	3195.7	3544.1	3982.5	4644.9	5133.5	5208.8	5366.7	5738.3	6207.4	6713.7
67.5°	3201.3	3495.8	3743.8	4164.6	4783.3	5020.2	4871.6	4891.1	5279.4	5765.3	6220.5
70°	3390.8	3741.9	3871.1	4187.8	4758.2	4852.1	4435.0	4176.7	4487.9	5041.6	5440.1
72.5°	3341.5	3744.7	3730.8	3878.5	4256.6	4343.9	3911.9	3505.0	3689.9	4103.3	4361.6
75°	2862.2	3344.3	3242.1	3212.4	3345.3	3402.9	3078.6	3016.4	3249.6	3479.0	3482.7
77.5°	2060.5	2590.9	2471.1	2299.2	2289.9	2422.8	2466.4	2874.3	3218.9	3400.1	3320.2
80°	1312.6	1887.7	1763.2	1463.1	1458.5	1631.3	2015.0	2569.6	2934.7	3035.9	2827.8
82.5°	685.6	1235.5	1282.9	1098.1	1256.9	1543.0	1917.4	2070.7	2209.1	2223.1	1977.8
85°	427.3	759.9	893.7	922.5	1135.2	1368.4	1365.6	1311.7	1250.4	1070.2	968.0
87.5°	48.3	95.7	144.9	137.5	184.9	259.2	323.3	189.5	132.8	48.3	66.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5
2.5°	965.2	966.1	967.1	967.1	971.7	970.8	971.7	973.6	976.4	978.2	980.1
5°	972.6	972.6	976.4	979.1	984.7	988.4	990.3	995.9	1002.4	1000.5	1006.1
7.5°	996.8	995.9	999.6	1001.4	1006.1	1012.6	1011.7	1016.3	1021.9	1023.7	1028.4
10°	1029.3	1026.5	1026.5	1024.7	1025.6	1023.7	1023.7	1023.7	1027.5	1026.5	1030.2
12.5°	1062.8	1061.8	1060.0	1054.4	1054.4	1047.0	1043.2	1038.6	1037.7	1031.2	1032.1
15°	1131.5	1131.5	1127.8	1116.6	1107.3	1100.8	1091.6	1085.0	1075.8	1063.7	1057.2
17.5°	1231.8	1218.8	1214.2	1212.3	1197.5	1191.9	1171.4	1150.1	1139.9	1123.1	1113.8
20°	1354.5	1351.7	1333.1	1323.8	1305.2	1279.2	1253.2	1225.3	1208.6	1188.2	1177.0
22.5°	1492.9	1472.4	1463.1	1449.2	1420.4	1390.7	1351.7	1314.5	1288.5	1274.6	1266.2
25°	1654.5	1634.1	1624.8	1606.2	1570.9	1539.3	1491.0	1447.4	1424.1	1400.9	1387.9
27.5°	1869.1	1849.6	1838.5	1790.1	1778.1	1726.0	1666.6	1607.1	1576.5	1542.1	1519.8
30°	2189.6	2190.5	2132.9	2074.4	2014.0	1923.9	1861.7	1794.8	1744.6	1695.4	1646.2
32.5°	2731.2	2592.8	2486.0	2360.5	2229.6	2133.9	2056.8	1976.9	1907.2	1835.7	1753.9
35°	3061.9	2995.0	2856.6	2627.2	2495.2	2379.1	2293.7	2197.0	2111.6	1985.2	1860.7
37.5°	3435.4	3280.2	3112.1	2984.8	2835.2	2700.5	2557.5	2447.9	2300.2	2130.2	1953.6
40°	3980.7	3758.7	3556.1	3385.2	3192.0	3050.8	2891.0	2732.1	2536.1	2289.9	2047.5
42.5°	4550.1	4320.7	4053.1	3831.1	3603.5	3438.2	3240.3	3017.3	2729.3	2424.6	2128.3
45°	5147.5	4840.9	4520.4	4249.2	4012.3	3807.0	3561.7	3266.3	2915.1	2545.4	2203.5
47.5°	5736.5	5384.4	5002.6	4710.9	4402.4	4151.6	3850.6	3477.2	3060.1	2659.7	2278.8
50°	6255.8	5916.7	5456.8	5086.2	4774.0	4464.7	4089.4	3639.7	3174.3	2758.1	2346.6
52.5°	6703.5	6411.8	5927.8	5459.6	5100.1	4752.7	4281.7	3770.7	3289.5	2849.2	2402.3
55°	7032.4	6838.2	6392.3	5811.7	5387.2	4972.8	4444.2	3897.1	3398.2	2921.6	2438.6
57.5°	7280.4	7172.7	6789.9	6143.3	5651.0	5186.5	4612.4	4048.5	3506.0	2983.9	2455.3
60°	7416.1	7445.8	7090.9	6433.2	5884.2	5364.9	4780.5	4177.6	3585.9	3020.1	2446.0
62.5°	7403.0	7585.1	7316.7	6611.6	6019.8	5470.8	4893.9	4238.0	3574.7	2962.5	2361.5
63°	7378.0	7589.8	7341.7	6623.6	6028.2	5474.5	4896.7	4229.6	3551.5	2934.7	2328.0
65°	7161.5	7482.9	7320.4	6568.8	5953.8	5404.8	4838.1	4108.9	3388.0	2785.1	2156.2
67.5°	6581.8	6984.1	6937.6	6181.4	5601.8	5116.8	4539.0	3719.6	2983.9	2417.2	1827.3
70°	5624.0	6002.1	6010.5	5376.0	4892.0	4416.4	3936.1	3026.6	2365.2	1873.8	1362.8
72.5°	4310.5	4553.9	4638.4	4220.4	3896.1	3561.7	3130.7	2197.0	1686.1	1274.6	887.2
75°	3337.8	3270.9	3270.0	3093.5	2961.6	2798.1	2324.3	1482.7	1107.3	828.7	542.5
77.5°	3000.6	2703.3	2415.3	2203.5	2097.6	2042.8	1524.5	893.7	653.1	476.6	312.1
80°	2474.8	2036.3	1645.2	1416.7	1325.7	1388.8	850.0	483.1	357.7	271.3	202.5
82.5°	1706.5	1416.7	1076.7	891.8	765.5	800.8	434.8	247.1	165.4	151.4	125.4
85°	889.0	779.4	657.7	564.8	498.9	438.5	225.7	118.0	68.7	60.4	54.8
87.5°	0.0	0.9	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



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5
2.5°	982.9	981.9	983.8	984.7	987.5	989.4	990.3	988.4	991.2	994.0	992.2
5°	1008.9	1015.4	1016.3	1019.1	1019.1	1024.7	1024.7	1024.7	1023.7	1024.7	1022.8
7.5°	1031.2	1039.5	1040.5	1044.2	1045.1	1051.6	1048.8	1050.7	1050.7	1046.0	1044.2
10°	1034.0	1042.3	1047.0	1051.6	1058.1	1066.5	1066.5	1071.1	1071.1	1067.4	1066.5
12.5°	1034.9	1041.4	1046.0	1052.5	1061.8	1073.9	1080.4	1086.9	1089.7	1088.8	1086.0
15°	1054.4	1054.4	1055.3	1060.9	1067.4	1082.3	1091.6	1099.0	1103.6	1101.8	1097.1
17.5°	1105.5	1098.1	1092.5	1083.2	1085.0	1092.5	1098.1	1104.6	1105.5	1103.6	1096.2
20°	1164.9	1155.7	1141.7	1126.9	1119.4	1113.8	1110.1	1110.1	1107.3	1098.1	1086.0
22.5°	1249.5	1237.4	1217.9	1195.6	1180.7	1163.1	1141.7	1121.3	1099.0	1076.7	1050.7
25°	1366.5	1349.8	1329.4	1295.0	1263.4	1226.3	1182.6	1137.1	1084.1	1037.7	999.6
27.5°	1484.5	1447.4	1394.4	1347.0	1288.5	1232.8	1170.5	1114.8	1047.0	991.2	949.4
30°	1582.1	1511.5	1435.3	1360.0	1282.9	1207.7	1133.4	1066.5	992.2	935.5	894.6
32.5°	1657.3	1559.8	1453.9	1355.4	1260.6	1168.7	1083.2	1008.9	933.6	875.1	831.4
35°	1727.0	1591.3	1456.6	1334.9	1217.9	1122.2	1025.6	944.8	864.9	803.6	756.2
37.5°	1779.0	1606.2	1439.9	1296.9	1162.2	1055.3	956.9	874.2	792.4	725.5	671.7
40°	1812.4	1596.9	1403.7	1242.0	1096.2	983.8	883.5	798.0	719.0	645.6	580.6
42.5°	1839.4	1584.8	1367.5	1191.9	1044.2	921.5	818.4	726.5	646.6	566.7	495.1
45°	1879.3	1594.1	1351.7	1156.6	997.7	868.6	755.3	659.6	576.0	497.9	429.2
47.5°	1918.3	1598.8	1328.4	1112.9	939.2	813.8	698.6	605.7	520.2	448.7	385.5
50°	1953.6	1596.0	1292.2	1057.2	882.5	759.0	647.5	554.6	470.1	404.1	344.7
52.5°	1970.4	1580.2	1247.6	1003.3	837.0	710.7	597.3	507.2	423.6	361.4	306.6
55°	1968.5	1539.3	1189.1	952.2	786.8	659.6	548.1	458.9	383.7	326.1	278.7
57.5°	1940.6	1476.2	1126.9	895.5	720.9	596.4	490.5	404.1	340.9	292.6	252.7
60°	1882.1	1395.3	1045.1	812.9	638.2	518.4	419.0	344.7	293.6	256.4	230.4
62.5°	1772.5	1279.2	942.9	697.7	526.7	417.1	330.7	282.4	244.3	222.0	209.9
63°	1740.0	1247.6	899.3	669.8	500.7	393.9	312.1	262.0	234.1	214.6	203.4
65°	1578.3	1092.5	752.5	540.7	389.2	303.8	250.8	212.7	196.0	187.7	186.7
67.5°	1278.3	859.3	532.3	370.7	264.8	219.2	192.3	176.5	169.1	167.2	169.1
70°	897.4	542.5	338.1	246.2	196.0	176.5	164.4	157.9	153.3	154.2	156.1
72.5°	572.3	325.1	232.2	186.7	165.4	155.1	149.6	147.7	146.8	145.8	145.8
75°	326.1	216.5	178.4	161.6	150.5	142.1	137.5	135.6	136.6	137.5	135.6
77.5°	215.5	178.4	158.9	147.7	137.5	128.2	125.4	124.5	126.3	128.2	128.2
80°	170.0	158.9	147.7	136.6	119.8	113.3	115.2	116.1	115.2	116.1	113.3
82.5°	119.8	118.0	120.8	116.1	99.4	93.8	92.0	92.9	91.0	91.0	89.2
85°	55.7	55.7	58.5	58.5	56.7	57.6	62.2	67.8	70.6	67.8	64.1
87.5°	0.0	0.0	0.0	0.0	0.0	8.4	16.7	24.2	26.0	32.5	31.6
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: P152953

CATALOG NUMBER: TLM-F04-LED-E1-SLL-8030

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5
2.5°	989.4	991.2	990.3	989.4	991.2	989.4	990.3	989.4	989.4	988.4	988.4
5°	1020.9	1023.7	1018.2	1017.2	1015.4	1010.7	1010.7	1008.9	1008.9	1005.2	1002.4
7.5°	1041.4	1042.3	1037.7	1036.7	1032.1	1027.5	1023.7	1020.0	1019.1	1016.3	1010.7
10°	1060.9	1059.0	1055.3	1050.7	1046.0	1039.5	1034.9	1030.2	1029.3	1024.7	1018.2
12.5°	1077.6	1076.7	1069.3	1064.6	1057.2	1050.7	1045.1	1039.5	1036.7	1031.2	1021.9
15°	1088.8	1083.2	1073.9	1065.5	1057.2	1049.7	1043.2	1036.7	1034.0	1027.5	1018.2
17.5°	1084.1	1073.9	1061.8	1051.6	1040.5	1031.2	1025.6	1019.1	1014.4	1010.7	997.7
20°	1067.4	1052.5	1034.0	1021.9	1007.0	994.9	991.2	984.7	981.0	967.1	950.3
22.5°	1023.7	1002.4	979.1	961.5	944.8	932.7	923.4	916.9	907.6	899.3	873.2
25°	968.9	944.8	920.6	899.3	877.0	858.4	841.7	825.9	821.2	803.6	778.5
27.5°	916.0	889.0	864.9	839.8	811.0	787.8	759.0	736.7	721.8	703.2	680.0
30°	859.3	832.4	799.9	766.4	733.0	707.9	675.4	648.4	629.8	610.3	589.0
32.5°	787.8	755.3	716.2	679.1	648.4	618.7	586.2	560.2	541.6	523.9	503.5
35°	706.0	663.3	621.5	580.6	548.1	523.0	494.2	474.7	461.7	445.9	424.5
37.5°	612.2	563.9	519.3	487.7	458.9	434.8	414.3	402.2	388.3	380.0	366.9
40°	517.4	470.1	426.4	397.6	373.5	359.5	348.4	345.6	336.3	325.1	316.8
42.5°	433.8	388.3	345.6	322.4	306.6	302.8	297.3	297.3	292.6	284.3	278.7
45°	377.2	329.8	292.6	275.9	267.5	266.6	263.8	263.8	262.9	259.2	252.7
47.5°	336.3	293.6	264.8	254.5	252.7	250.8	248.0	247.1	246.2	243.4	239.7
50°	299.1	262.9	244.3	239.7	240.6	237.8	235.0	232.2	231.3	228.5	224.8
52.5°	264.8	238.7	226.7	223.9	223.9	223.9	222.0	222.0	220.2	219.2	215.5
55°	245.3	225.7	219.2	218.3	217.4	216.5	214.6	214.6	212.7	211.8	207.2
57.5°	228.5	216.5	212.7	210.9	209.9	208.1	207.2	207.2	207.2	207.2	201.6
60°	215.5	209.9	209.0	207.2	206.2	202.5	200.7	199.7	200.7	201.6	196.0
62.5°	201.6	200.7	199.7	197.9	196.9	193.2	190.4	188.6	190.4	192.3	191.4
63°	197.9	196.9	196.9	196.0	195.1	190.4	187.7	185.8	187.7	189.5	189.5
65°	184.9	185.8	185.8	184.9	183.9	181.2	177.4	175.6	176.5	179.3	180.2
67.5°	170.9	171.9	170.9	171.9	170.9	169.1	166.3	164.4	163.5	164.4	165.4
70°	157.9	159.8	158.9	157.9	157.0	157.0	155.1	152.4	151.4	150.5	150.5
72.5°	146.8	146.8	144.9	144.9	144.0	144.0	142.1	139.3	138.4	138.4	136.6
75°	134.7	134.7	131.9	131.9	130.1	131.0	129.1	126.3	125.4	125.4	124.5
77.5°	127.3	124.5	119.8	118.9	118.0	118.0	117.1	114.3	113.3	113.3	112.4
80°	112.4	106.8	102.2	101.3	102.2	104.0	104.0	102.2	102.2	102.2	102.2
82.5°	87.3	85.5	82.7	80.8	80.8	83.6	87.3	89.2	91.0	92.9	92.9
85°	64.1	65.0	64.1	61.3	60.4	63.2	66.9	70.6	71.5	75.2	74.3
87.5°	34.4	35.3	32.5	31.6	34.4	36.2	39.9	40.9	42.7	43.7	44.6
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: P152953

CATALOG NUMBER: TLM-F04-LED-E1-SLL-8030

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5
2.5°	987.5	986.6	987.5	985.6	985.6	983.8	981.9	981.0	979.1	978.2	976.4
5°	1004.2	1001.4	998.7	997.7	994.0	990.3	987.5	982.9	979.1	972.6	970.8
7.5°	1015.4	1008.9	1005.2	1004.2	998.7	995.9	989.4	983.8	978.2	969.9	967.1
10°	1020.0	1013.5	1007.0	1004.2	997.7	993.1	986.6	978.2	973.6	965.2	963.4
12.5°	1025.6	1013.5	1003.3	995.9	986.6	976.4	969.9	965.2	958.7	954.1	952.2
15°	1015.4	999.6	983.8	969.9	955.0	943.8	937.3	929.9	922.5	919.7	919.7
17.5°	987.5	967.1	940.1	922.5	906.7	894.6	886.2	878.8	877.9	874.2	876.0
20°	929.9	903.0	877.0	864.0	854.7	847.2	838.9	835.2	832.4	826.8	824.9
22.5°	850.0	827.7	809.1	799.9	792.4	783.1	775.7	764.6	761.8	756.2	753.4
25°	761.8	744.1	728.3	721.8	717.2	704.2	699.5	684.7	674.4	667.9	671.7
27.5°	673.5	660.5	645.6	637.3	634.5	622.4	617.8	601.1	592.7	592.7	583.4
30°	582.5	570.4	561.1	551.8	550.0	535.1	523.0	516.5	507.2	503.5	497.0
32.5°	497.0	484.9	477.5	472.9	465.4	453.3	441.3	430.1	415.3	409.7	406.9
35°	418.0	408.8	399.5	395.7	385.5	372.5	357.7	348.4	330.7	324.2	321.4
37.5°	357.7	346.5	340.0	329.8	319.6	305.6	294.5	286.1	279.6	276.8	276.8
40°	309.4	301.0	293.6	285.2	276.8	269.4	263.8	262.0	261.0	261.0	262.9
42.5°	273.1	265.7	262.0	257.3	254.5	254.5	253.6	254.5	255.5	256.4	259.2
45°	249.0	244.3	242.5	241.5	243.4	245.3	246.2	248.0	251.8	253.6	254.5
47.5°	236.0	232.2	231.3	232.2	235.0	238.7	242.5	245.3	248.0	249.0	249.9
50°	223.0	218.3	216.5	218.3	222.0	227.6	230.4	235.0	236.9	238.7	236.9
52.5°	211.8	208.1	207.2	207.2	210.9	214.6	218.3	222.0	223.0	223.0	222.0
55°	202.5	199.7	196.9	198.8	201.6	205.3	210.9	213.7	215.5	216.5	216.5
57.5°	195.1	192.3	189.5	191.4	194.2	197.9	203.4	206.2	208.1	210.9	211.8
60°	189.5	185.8	183.0	185.8	188.6	194.2	198.8	201.6	206.2	207.2	207.2
62.5°	183.9	180.2	175.6	178.4	178.4	181.2	185.8	189.5	194.2	196.0	196.0
63°	183.0	179.3	174.6	176.5	176.5	178.4	182.1	185.8	191.4	193.2	192.3
65°	175.6	174.6	170.0	170.0	168.1	170.0	172.8	176.5	179.3	182.1	182.1
67.5°	163.5	162.6	161.6	161.6	161.6	163.5	165.4	168.1	170.9	172.8	171.9
70°	149.6	149.6	149.6	150.5	150.5	152.4	153.3	152.4	155.1	157.0	156.1
72.5°	137.5	136.6	135.6	137.5	136.6	136.6	138.4	137.5	140.3	140.3	141.2
75°	124.5	123.6	123.6	124.5	122.6	120.8	121.7	121.7	122.6	122.6	124.5
77.5°	113.3	113.3	113.3	112.4	110.5	109.6	108.7	108.7	108.7	108.7	109.6
80°	103.1	103.1	103.1	102.2	100.3	98.5	96.6	95.7	94.8	90.1	90.1
82.5°	92.9	92.9	92.9	92.9	92.0	90.1	87.3	79.9	76.2	72.5	73.4
85°	73.4	75.2	77.1	79.9	79.0	79.0	73.4	64.1	58.5	54.8	55.7
87.5°	47.4	41.8	41.8	40.9	39.0	37.2	37.2	31.6	26.0	23.2	24.2
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: P152953

CATALOG NUMBER: TLM-F04-LED-E1-SLL-8030

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5	974.5
2.5°	976.4	974.5	972.6	972.6	969.9	969.9	968.0	971.7	968.0	965.2	965.2
5°	968.9	967.1	961.5	960.6	956.9	956.9	956.9	955.0	955.0	953.1	952.2
7.5°	964.3	959.6	955.0	952.2	952.2	950.3	954.1	952.2	953.1	953.1	954.1
10°	960.6	956.9	955.0	954.1	954.1	956.9	959.6	960.6	959.6	960.6	960.6
12.5°	951.3	953.1	954.1	957.8	962.4	968.0	974.5	975.4	977.3	977.3	979.1
15°	921.5	926.2	931.8	941.1	953.1	965.2	977.3	987.5	996.8	1001.4	1005.2
17.5°	879.7	884.4	894.6	904.8	920.6	938.3	958.7	976.4	995.9	1013.5	1031.2
20°	823.1	830.5	833.3	851.9	870.5	894.6	918.8	946.6	980.1	1013.5	1047.9
22.5°	749.7	758.0	771.1	785.9	805.4	835.2	864.0	907.6	952.2	999.6	1053.5
25°	667.9	677.2	688.4	704.2	723.7	755.3	797.1	843.5	898.3	960.6	1027.5
27.5°	583.4	592.7	602.0	613.1	635.4	668.9	718.1	766.4	826.8	894.6	972.6
30°	498.9	499.8	505.4	519.3	542.5	586.2	622.4	682.8	746.0	817.5	907.6
32.5°	406.0	405.0	411.5	423.6	445.9	487.7	532.3	590.8	653.1	743.2	836.1
35°	323.3	323.3	335.4	347.4	372.5	402.2	441.3	493.3	566.7	650.3	743.2
37.5°	279.6	286.1	293.6	305.6	325.1	348.4	382.7	428.3	485.9	565.7	651.2
40°	265.7	269.4	275.9	287.1	303.8	325.1	350.2	384.6	429.2	493.3	571.3
42.5°	260.1	261.0	264.8	273.1	288.0	309.4	335.4	366.0	399.5	445.0	512.8
45°	254.5	253.6	255.5	262.0	274.0	298.2	327.9	361.4	394.8	432.9	488.6
47.5°	249.9	249.9	249.9	252.7	263.8	288.0	322.4	361.4	401.3	444.1	498.9
50°	236.9	236.0	236.0	237.8	246.2	272.2	313.1	360.4	412.5	468.2	530.4
52.5°	222.0	222.0	223.0	223.9	231.3	257.3	302.8	360.4	425.5	499.8	577.8
55°	217.4	218.3	219.2	218.3	223.9	246.2	291.7	354.9	431.0	524.9	628.9
57.5°	213.7	215.5	215.5	214.6	218.3	236.9	280.6	343.7	426.4	534.2	665.2
60°	208.1	208.1	208.1	205.3	207.2	223.9	263.8	326.1	411.5	525.8	670.7
62.5°	196.0	196.0	194.2	193.2	192.3	205.3	241.5	300.1	384.6	503.5	656.8
63°	193.2	192.3	192.3	189.5	189.5	201.6	236.9	296.3	377.2	497.9	651.2
65°	183.0	183.0	183.0	181.2	180.2	189.5	218.3	270.3	348.4	471.9	623.3
67.5°	171.9	172.8	170.9	170.0	169.1	174.6	196.9	237.8	303.8	417.1	571.3
70°	156.1	157.0	157.0	156.1	155.1	158.9	172.8	204.4	251.8	347.4	486.8
72.5°	142.1	144.0	144.0	145.8	145.8	148.6	154.2	170.0	201.6	271.3	382.7
75°	127.3	128.2	130.1	131.9	130.1	129.1	130.1	142.1	157.9	200.7	273.1
77.5°	114.3	117.1	117.1	116.1	113.3	111.5	111.5	117.1	130.1	152.4	195.1
80°	94.8	99.4	100.3	97.5	94.8	94.8	96.6	100.3	108.7	125.4	147.7
82.5°	76.2	80.8	81.8	82.7	81.8	84.5	84.5	85.5	90.1	103.1	120.8
85°	58.5	62.2	65.0	66.0	66.9	67.8	66.9	62.2	65.0	73.4	81.8
87.5°	26.0	26.9	25.1	26.0	25.1	26.0	26.9	22.3	21.4	28.8	29.7
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: P152953

CATALOG NUMBER: TLM-F04-LED-E1-SLL-8030

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	974.5	974.5	974.5	974.5	974.5	974.5	974.5
2.5°	964.3	964.3	965.2	963.4	963.4	964.3	961.5
5°	949.4	953.1	953.1	953.1	951.3	953.1	954.1
7.5°	953.1	955.9	957.8	957.8	956.9	960.6	963.4
10°	957.8	962.4	964.3	964.3	964.3	968.9	975.4
12.5°	975.4	979.1	981.9	981.9	983.8	989.4	996.8
15°	1007.9	1012.6	1012.6	1011.7	1017.2	1023.7	1032.1
17.5°	1044.2	1057.2	1063.7	1062.8	1067.4	1075.8	1085.0
20°	1078.5	1114.8	1130.6	1141.7	1146.4	1157.5	1160.3
22.5°	1107.3	1167.7	1211.4	1248.6	1266.2	1277.3	1290.4
25°	1097.1	1178.9	1256.9	1333.1	1387.0	1441.8	1465.0
27.5°	1055.3	1157.5	1259.7	1371.2	1468.7	1566.3	1636.9
30°	1004.2	1126.9	1264.3	1422.3	1576.5	1726.0	1845.0
32.5°	945.7	1098.1	1274.6	1469.6	1672.2	1868.2	2040.0
35°	872.3	1043.2	1249.5	1474.3	1713.0	1950.9	2173.8
37.5°	779.4	968.9	1191.0	1440.8	1714.9	1987.1	2253.7
40°	686.5	875.1	1116.6	1392.5	1690.7	1995.5	2303.9
42.5°	621.5	791.5	1041.4	1331.2	1651.7	1982.4	2328.0
45°	576.9	731.1	974.5	1275.5	1609.9	1959.2	2331.7
47.5°	573.2	705.1	930.8	1234.6	1576.5	1938.8	2331.7
50°	604.8	719.0	916.0	1214.2	1562.5	1932.3	2333.6
52.5°	664.2	774.8	942.9	1230.0	1573.7	1940.6	2342.0
55°	735.8	859.3	1015.4	1284.8	1621.1	1968.5	2360.5
57.5°	800.8	956.9	1138.9	1390.7	1707.5	2039.1	2412.6
60°	838.9	1040.5	1269.9	1539.3	1855.2	2179.4	2516.6
62.5°	843.5	1086.9	1386.0	1701.0	2034.5	2340.1	2682.9
63°	839.8	1090.6	1400.9	1731.6	2072.6	2380.0	2740.5
65°	819.4	1091.6	1442.7	1839.4	2204.5	2548.2	2901.2
67.5°	767.3	1061.8	1457.6	1923.9	2370.8	2769.3	3201.3
70°	677.2	977.3	1413.9	1925.8	2434.9	2892.8	3390.8
72.5°	544.4	816.6	1225.3	1752.1	2265.8	2771.1	3341.5
75°	398.5	600.1	926.2	1357.2	1848.7	2306.7	2862.2
77.5°	264.8	388.3	624.3	967.1	1325.7	1660.1	2060.5
80°	182.1	240.6	365.1	581.5	811.0	973.6	1312.6
82.5°	133.8	158.9	202.5	297.3	390.2	480.3	685.6
85°	83.6	91.0	101.3	146.8	209.9	283.3	427.3
87.5°	22.3	23.2	21.4	28.8	45.5	43.7	48.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)