

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: P155612

Luminaire Tested: **TLM-E05-LED-E1-T3-7060**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P155612
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33672)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TLM-E05-LED-E1-T3-7060
Description: TALON MEDIUM LED SITE LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 3
Light Source: (105) 5700K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15822.1 lumens
Efficiency: N/A
Efficacy: 124.3 lumens/watt
Spacing Criteria (0/90/45): 1.97 / 4.22 / 2.62
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')
CIE Type: Direct

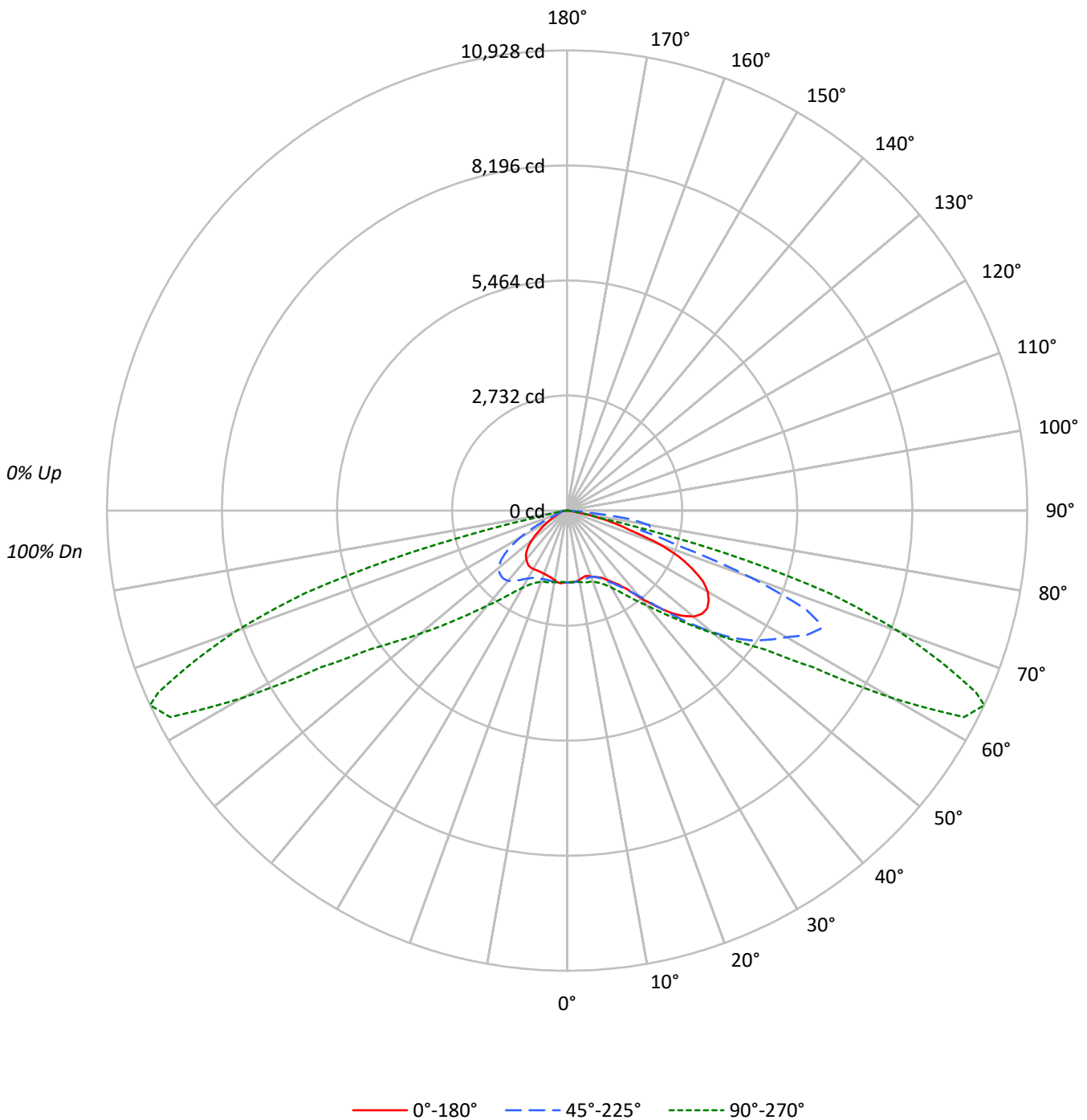
Input Watts (W): 127.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P155612

CATALOG NUMBER: TLM-E05-LED-E1-T3-7060

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	105	99	94	89	102	97	92	87	92	88	84	88	85	82	85	82	79	77
2	92	82	73	65	89	80	71	64	76	69	63	72	66	61	69	64	60	57
3	81	68	57	49	79	66	56	49	63	55	48	60	53	47	57	51	46	43
4	73	57	46	38	70	56	46	38	53	44	37	51	43	36	48	41	36	33
5	65	49	38	30	63	48	38	30	46	37	29	44	35	29	42	34	29	26
6	59	43	32	24	57	42	32	24	40	31	24	38	30	24	36	29	23	21
7	54	38	28	20	52	37	27	20	35	27	20	34	26	20	32	25	20	17
8	50	34	24	17	48	33	24	17	32	23	17	30	23	17	29	22	17	14
9	46	31	21	15	45	30	21	15	29	20	15	28	20	15	27	20	14	12
10	43	28	19	13	42	27	19	13	26	18	13	25	18	13	24	18	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	22111	22111	22111
5°	22196	22174	22530
10°	22002	22678	22138
15°	21675	23673	21813
20°	23012	24853	22021
25°	24961	27261	22709
30°	28452	31705	23996
35°	34114	38879	25234
40°	45687	49769	25536
45°	62416	66275	24998
50°	78979	91504	21979
55°	91756	130270	17478
60°	99980	230392	13262
65°	100918	335339	10022
70°	88450	317613	8365
75°	58439	192204	8568
80°	21329	19545	10090
85°	3556	12975	11190



TEST NUMBER: P155612

CATALOG NUMBER: TLM-E05-LED-E1-T3-7060

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.3	1.0
10°-20°	482.0	3.0
20°-30°	828.3	5.2
30°-40°	1345.0	8.5
40°-50°	2245.4	14.2
50°-60°	3535.8	22.3
60°-70°	4821.4	30.5
70°-80°	2087.1	13.2
80°-90°	313.8	2.0
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°	1473.6	9.3
0°-40°	2818.6	17.8
0°-60°	8599.8	54.4
0°-90°	15822.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15822.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1705	1705	1705	1705	1705	
5°	1705	1708	1703	1724	1731	162
15°	1614	1681	1763	1712	1625	464
25°	1744	1755	1905	1768	1587	817
35°	2155	2203	2456	2021	1594	1396
45°	3403	3448	3614	2211	1363	2616
55°	4058	5375	5762	1821	773	3579
65°	3289	6644	10928	640	327	3193
75°	1166	1816	3836	173	171	1247
85°	24	404	87	120	75	63
90°	0	0	0	0	0	



TEST NUMBER: P155612

CATALOG NUMBER: TLM-E05-LED-E1-T3-7060

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1705.0	1705.0	1705.0	1705.0	1705.0	1705.0	1705.0	1705.0	1705.0	1705.0	1705.0
2.5°	1711.9	1718.7	1711.9	1713.6	1715.3	1713.6	1711.9	1711.9	1706.8	1710.2	1713.6
5°	1705.0	1710.2	1708.5	1710.2	1711.9	1710.2	1708.5	1710.2	1706.8	1708.5	1713.6
7.5°	1696.5	1694.8	1696.5	1699.9	1703.3	1703.3	1703.3	1705.0	1703.3	1703.3	1708.5
10°	1670.8	1672.6	1676.0	1681.1	1682.8	1687.9	1687.9	1693.1	1694.8	1698.2	1705.0
12.5°	1638.3	1640.1	1643.5	1646.9	1655.5	1664.0	1664.0	1676.0	1681.1	1689.7	1701.6
15°	1614.4	1616.1	1619.5	1623.0	1629.8	1638.3	1643.5	1657.2	1665.7	1681.1	1698.2
17.5°	1628.1	1626.4	1629.8	1631.5	1631.5	1638.3	1638.3	1648.6	1658.9	1672.6	1694.8
20°	1667.4	1667.4	1670.8	1670.8	1669.1	1672.6	1665.7	1665.7	1667.4	1674.3	1689.7
22.5°	1706.8	1705.0	1711.9	1715.3	1717.0	1722.1	1715.3	1713.6	1705.0	1699.9	1705.0
25°	1744.4	1742.7	1751.2	1756.4	1764.9	1770.0	1770.0	1770.0	1763.2	1754.6	1749.5
27.5°	1802.5	1802.5	1811.1	1816.2	1823.0	1833.3	1838.4	1838.4	1840.1	1828.2	1819.6
30°	1900.0	1901.7	1903.4	1910.3	1917.1	1920.5	1927.4	1932.5	1937.6	1930.8	1917.1
32.5°	2016.3	2006.0	2006.0	2016.3	2024.8	2035.1	2038.5	2045.4	2055.6	2050.5	2048.8
35°	2154.8	2151.4	2148.0	2151.4	2161.7	2173.6	2187.3	2199.3	2192.4	2202.7	2197.6
37.5°	2360.0	2363.5	2365.2	2365.2	2363.5	2366.9	2373.7	2385.7	2382.3	2385.7	2392.5
40°	2698.7	2686.7	2674.7	2676.4	2659.3	2662.7	2635.4	2647.4	2649.1	2637.1	2642.2
42.5°	3037.3	3044.1	3049.2	3062.9	3051.0	3044.1	3018.5	3018.5	3004.8	2992.8	2989.4
45°	3403.2	3416.9	3418.6	3446.0	3435.7	3458.0	3476.8	3471.7	3449.4	3447.7	3423.8
47.5°	3695.7	3717.9	3741.9	3774.4	3800.0	3849.6	3907.8	3936.8	3953.9	3967.6	3940.2
50°	3914.6	3924.9	3986.4	4037.7	4094.2	4176.2	4256.6	4360.9	4444.7	4484.1	4521.7
52.5°	4032.6	4058.2	4124.9	4205.3	4304.5	4427.6	4557.6	4723.5	4867.2	4962.9	5048.4
55°	4058.2	4083.9	4159.1	4261.8	4396.9	4562.7	4749.2	4974.9	5190.4	5375.1	5554.7
57.5°	3986.4	4015.5	4095.9	4213.9	4372.9	4574.7	4809.0	5104.9	5402.4	5701.7	5966.8
60°	3854.7	3890.6	3964.2	4080.5	4256.6	4484.1	4764.5	5135.7	5552.9	6011.3	6519.2
62.5°	3637.5	3675.2	3743.6	3871.8	4053.1	4304.5	4629.4	5091.2	5681.2	6402.9	7304.2
65°	3288.7	3305.8	3389.6	3519.5	3680.3	3957.3	4314.8	4872.3	5640.2	6644.0	7885.6
66°	3131.3	3160.4	3211.7	3316.0	3469.9	3729.9	4089.0	4655.1	5484.5	6560.2	7870.2
67.5°	2885.1	2907.3	2941.5	3011.6	3105.7	3297.2	3637.5	4172.8	5009.1	6136.1	7543.6
70°	2332.7	2342.9	2389.1	2413.1	2445.6	2508.8	2632.0	2939.8	3591.4	4650.0	6088.2
72.5°	1590.5	1619.5	1669.1	1737.5	1826.5	1912.0	1970.1	2009.5	2149.7	2773.9	4056.5
75°	1166.3	1197.1	1260.4	1351.0	1506.7	1684.5	1869.2	1954.7	1896.6	1816.2	2259.1
77.5°	677.2	718.3	771.3	858.5	1002.2	1238.2	1554.5	1835.0	2024.8	2036.8	1934.2
80°	285.6	290.7	323.2	367.7	456.6	622.5	868.8	1272.4	1693.1	1977.0	2043.7
82.5°	65.0	80.4	102.6	121.4	148.8	205.2	304.4	506.2	914.9	1434.8	1870.9
85°	23.9	23.9	32.5	47.9	54.7	61.6	80.4	128.3	218.9	403.6	841.4
87.5°	0.0	1.7	3.4	3.4	6.8	8.6	13.7	18.8	17.1	15.4	51.3
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: P155612

CATALOG NUMBER: TLM-E05-LED-E1-T3-7060

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	1705.0	1705.0	1705.0	1705.0	1705.0	1705.0	1705.0	1705.0	1705.0	1705.0	1705.0
2.5°	1710.2	1708.5	1705.0	1705.0	1705.0	1705.0	1701.6	1703.3	1699.9	1701.6	1701.6
5°	1708.5	1708.5	1706.8	1703.3	1705.0	1705.0	1706.8	1703.3	1703.3	1705.0	1703.3
7.5°	1708.5	1706.8	1706.8	1706.8	1708.5	1706.8	1708.5	1708.5	1708.5	1710.2	1710.2
10°	1708.5	1708.5	1711.9	1713.6	1713.6	1715.3	1720.4	1720.4	1722.1	1723.9	1727.3
12.5°	1710.2	1717.0	1722.1	1727.3	1729.0	1732.4	1741.0	1741.0	1744.4	1749.5	1751.2
15°	1711.9	1722.1	1732.4	1735.8	1739.2	1746.1	1754.6	1758.1	1763.2	1768.3	1771.7
17.5°	1710.2	1723.9	1735.8	1741.0	1746.1	1754.6	1764.9	1768.3	1775.2	1782.0	1788.8
20°	1708.5	1727.3	1746.1	1752.9	1759.8	1771.7	1785.4	1794.0	1800.8	1811.1	1817.9
22.5°	1718.7	1741.0	1766.6	1776.9	1788.8	1804.2	1823.0	1833.3	1841.9	1852.1	1857.3
25°	1751.2	1768.3	1799.1	1816.2	1831.6	1857.3	1882.9	1894.9	1905.1	1913.7	1915.4
27.5°	1805.9	1811.1	1848.7	1870.9	1893.2	1934.2	1965.0	1973.5	1992.4	1999.2	1997.5
30°	1894.9	1886.3	1917.1	1951.3	1983.8	2040.2	2077.9	2100.1	2117.2	2117.2	2103.5
32.5°	2023.1	2009.5	2018.0	2057.3	2095.0	2177.1	2221.5	2250.6	2262.6	2259.1	2230.1
35°	2190.7	2182.2	2177.1	2207.8	2267.7	2363.5	2421.6	2437.0	2455.8	2452.4	2414.8
37.5°	2389.1	2382.3	2382.3	2418.2	2476.3	2618.3	2681.6	2691.8	2690.1	2662.7	2592.6
40°	2623.4	2620.0	2604.6	2625.1	2674.7	2859.4	2944.9	2958.6	2939.8	2895.3	2813.2
42.5°	2960.3	2939.8	2891.9	2903.9	2941.5	3121.1	3232.2	3269.9	3251.0	3206.6	3073.2
45°	3399.8	3377.6	3297.2	3287.0	3307.5	3464.8	3608.5	3617.0	3613.6	3557.2	3399.8
47.5°	3916.3	3882.1	3796.6	3769.2	3762.4	3907.8	4046.3	4060.0	4051.4	3967.6	3757.3
50°	4475.5	4425.9	4369.5	4350.7	4323.3	4427.6	4567.9	4569.6	4535.4	4419.1	4222.4
52.5°	5072.4	5055.3	5045.0	5026.2	5014.2	5104.9	5190.4	5139.1	5087.8	4966.4	4795.3
55°	5674.4	5744.5	5816.3	5823.1	5843.7	5941.2	5939.4	5799.2	5761.6	5694.9	5525.6
57.5°	6314.0	6573.9	6799.7	6869.8	6938.2	7119.5	7102.4	6963.8	6916.0	6833.9	6693.6
60°	7184.4	7885.6	8537.2	8692.8	8800.6	9017.8	8997.2	8783.5	8882.7	8875.8	8694.5
62.5°	8403.8	9570.1	10546.7	10786.1	10861.3	10885.3	10755.3	10524.4	10621.9	10731.4	10173.8
65°	9229.8	10601.4	11603.5	11788.2	11798.5	11512.9	11223.9	10952.0	10928.0	10834.0	10037.0
66°	9248.6	10652.7	11658.3	11837.8	11774.6	11384.6	11018.7	10745.0	10627.0	10420.1	9594.1
67.5°	8916.9	10332.9	11415.4	11605.3	11466.7	10914.3	10409.8	10057.5	9826.7	9491.5	8762.9
70°	7488.9	8892.9	10226.9	10580.9	10625.3	9801.0	9101.6	8687.7	8376.4	7916.4	7288.8
72.5°	5568.3	6837.3	8013.9	8352.5	8525.2	7866.8	7276.8	6962.1	6536.3	6052.3	5606.0
75°	3490.5	4386.6	5175.0	5412.7	5250.2	4740.6	4386.6	4254.9	3835.9	3546.9	3343.4
77.5°	1995.8	2276.2	2339.5	2248.9	2057.3	1575.1	1120.2	829.4	720.0	796.9	879.0
80°	1947.9	1785.4	1422.9	1251.8	1133.8	779.8	458.3	314.7	261.7	268.5	290.7
82.5°	2110.4	2264.3	1864.1	1520.3	1275.8	861.9	475.4	253.1	171.0	201.8	227.5
85°	1371.6	1908.6	1718.7	1448.5	1173.2	737.1	391.6	131.7	87.2	114.6	157.3
87.5°	138.5	152.2	130.0	176.1	131.7	61.6	30.8	18.8	17.1	20.5	30.8
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: P155612

CATALOG NUMBER: TLM-E05-LED-E1-T3-7060

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	1705.0	1705.0	1705.0	1705.0	1705.0	1705.0	1705.0	1705.0	1705.0	1705.0	1705.0
2.5°	1703.3	1703.3	1705.0	1706.8	1708.5	1710.2	1710.2	1710.2	1710.2	1713.6	1711.9
5°	1706.8	1710.2	1713.6	1715.3	1718.7	1718.7	1723.9	1722.1	1722.1	1727.3	1729.0
7.5°	1713.6	1718.7	1725.6	1723.9	1730.7	1729.0	1732.4	1732.4	1727.3	1729.0	1725.6
10°	1729.0	1735.8	1739.2	1734.1	1735.8	1729.0	1727.3	1718.7	1708.5	1703.3	1696.5
12.5°	1754.6	1761.5	1761.5	1752.9	1742.7	1727.3	1715.3	1696.5	1681.1	1672.6	1664.0
15°	1776.9	1783.7	1782.0	1768.3	1752.9	1729.0	1711.9	1689.7	1667.4	1653.7	1645.2
17.5°	1794.0	1797.4	1792.3	1773.5	1756.4	1734.1	1717.0	1693.1	1667.4	1650.3	1634.9
20°	1819.6	1816.2	1804.2	1780.3	1761.5	1741.0	1727.3	1706.8	1677.7	1655.5	1633.2
22.5°	1857.3	1843.6	1821.3	1795.7	1776.9	1758.1	1744.4	1722.1	1693.1	1665.7	1640.1
25°	1906.8	1879.5	1848.7	1821.3	1804.2	1783.7	1768.3	1744.4	1713.6	1682.8	1652.0
27.5°	1978.7	1930.8	1891.5	1867.5	1848.7	1823.0	1804.2	1773.5	1741.0	1705.0	1670.8
30°	2059.1	1994.1	1956.4	1937.6	1917.1	1889.7	1860.7	1821.3	1783.7	1744.4	1703.3
32.5°	2163.4	2084.7	2048.8	2030.0	2002.6	1968.4	1934.2	1889.7	1836.7	1785.4	1735.8
35°	2300.2	2219.8	2182.2	2153.1	2115.5	2071.0	2021.4	1961.6	1889.7	1821.3	1758.1
37.5°	2447.3	2360.0	2324.1	2293.3	2236.9	2178.8	2108.6	2021.4	1923.9	1833.3	1754.6
40°	2633.7	2553.3	2507.1	2454.1	2387.4	2286.5	2177.1	2050.5	1925.7	1814.5	1722.1
42.5°	2869.7	2789.3	2720.9	2637.1	2520.8	2365.2	2209.5	2045.4	1894.9	1768.3	1669.1
45°	3182.6	3085.2	2967.2	2820.1	2632.0	2414.8	2211.3	2012.9	1836.7	1696.5	1590.5
47.5°	3565.7	3416.9	3223.7	2975.7	2705.5	2428.4	2183.9	1947.9	1746.1	1593.9	1475.9
50°	4020.6	3786.3	3468.2	3104.0	2743.1	2407.9	2115.5	1850.4	1617.8	1455.4	1315.1
52.5°	4540.5	4157.4	3688.8	3196.3	2741.4	2339.5	1999.2	1703.3	1450.2	1269.0	1135.6
55°	5151.0	4581.6	3916.3	3264.7	2693.5	2213.0	1821.3	1496.4	1243.3	1075.7	952.6
57.5°	6045.5	5269.1	4313.1	3370.8	2597.8	2018.0	1580.2	1248.4	1026.1	867.1	762.7
60°	7680.4	6416.6	5027.9	3584.5	2450.7	1732.4	1298.0	983.4	796.9	668.7	598.6
62.5°	8911.7	7304.2	5414.4	3536.6	2154.8	1380.1	962.8	716.6	586.6	499.4	454.9
65°	8735.6	7028.8	5002.3	3045.8	1689.7	973.1	639.6	487.4	403.6	362.6	336.9
66°	8337.1	6669.7	4644.8	2741.4	1460.5	808.9	526.7	408.7	347.2	318.1	301.0
67.5°	7581.2	6002.7	4005.2	2247.2	1121.9	586.6	396.8	323.2	282.2	270.2	258.2
70°	6302.0	4786.8	2811.5	1308.3	572.9	326.6	251.4	225.7	215.5	213.8	210.4
72.5°	4829.5	3387.9	1655.5	619.1	297.6	217.2	195.0	186.4	183.0	183.0	184.7
75°	2960.3	1903.4	732.0	302.7	208.6	183.0	172.7	169.3	167.6	169.3	167.6
77.5°	988.5	605.4	313.0	229.2	189.8	169.3	162.5	159.0	159.0	159.0	159.0
80°	302.7	263.4	239.4	212.1	179.6	160.8	150.5	148.8	150.5	152.2	147.1
82.5°	227.5	215.5	201.8	188.1	162.5	143.7	140.2	140.2	140.2	135.1	128.3
85°	167.6	165.9	136.8	128.3	119.7	119.7	119.7	119.7	114.6	106.0	99.2
87.5°	30.8	29.1	30.8	32.5	47.9	51.3	51.3	54.7	59.9	56.4	56.4
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: P155612

CATALOG NUMBER: TLM-E05-LED-E1-T3-7060

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	1705.0	1705.0	1705.0	1705.0	1705.0
2.5°	1711.9	1710.2	1715.3	1711.9	1713.6
5°	1727.3	1725.6	1729.0	1725.6	1730.7
7.5°	1722.1	1718.7	1717.0	1718.7	1720.4
10°	1686.2	1682.8	1681.1	1679.4	1681.1
12.5°	1655.5	1648.6	1648.6	1645.2	1646.9
15°	1633.2	1628.1	1626.4	1623.0	1624.7
17.5°	1623.0	1614.4	1611.0	1607.6	1607.6
20°	1616.1	1605.9	1600.7	1597.3	1595.6
22.5°	1616.1	1600.7	1593.9	1590.5	1588.8
25°	1623.0	1604.1	1593.9	1588.8	1587.0
27.5°	1636.6	1612.7	1600.7	1593.9	1593.9
30°	1660.6	1629.8	1612.7	1604.1	1602.4
32.5°	1684.5	1643.5	1619.5	1609.3	1605.9
35°	1696.5	1643.5	1614.4	1597.3	1593.9
37.5°	1682.8	1621.2	1585.3	1559.7	1554.5
40°	1640.1	1575.1	1535.7	1511.8	1508.4
42.5°	1583.6	1520.3	1474.2	1457.1	1451.9
45°	1506.7	1431.4	1385.2	1361.3	1363.0
47.5°	1375.0	1298.0	1257.0	1234.7	1238.2
50°	1219.4	1144.1	1108.2	1084.3	1089.4
52.5°	1048.3	979.9	945.7	933.8	930.3
55°	868.8	815.8	791.8	778.1	773.0
57.5°	704.6	667.0	649.9	632.8	634.5
60°	555.8	537.0	531.9	513.1	511.3
62.5°	437.8	425.8	420.7	407.0	408.7
65°	331.8	328.4	331.8	323.2	326.6
66°	299.3	301.0	301.0	295.9	299.3
67.5°	258.2	261.7	266.8	261.7	265.1
70°	213.8	217.2	220.6	220.6	220.6
72.5°	186.4	189.8	191.5	191.5	191.5
75°	171.0	172.7	174.4	171.0	171.0
77.5°	160.8	160.8	157.3	155.6	153.9
80°	145.4	143.7	138.5	135.1	135.1
82.5°	121.4	118.0	114.6	109.5	109.5
85°	92.3	88.9	85.5	78.7	75.2
87.5°	47.9	49.6	47.9	39.3	34.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)