

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: io LED

Report Number: P135852

Luminaire Tested: **LD6A30D010TE ERM6A30927 6LM121LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P135852
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23357-R2)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6A30D010TE ERM6A30927 6LM121LI
Description: PORTFOLIO 6 INCH 50 DEGREE CUTOFF RECESSED DOUBLE WALL WASH LUMINAIRE
SPECULAR CLEAR TRIM AND SPECULAR CLEAR KICKER
Light Source: (1) HIGH LUMEN LED 2700K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2497.0 lumens
Efficiency: N/A
Efficacy: 55.0 lumens/watt
Spacing Criteria (0/90/45): 0.86 / 1.02 / 0.97
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

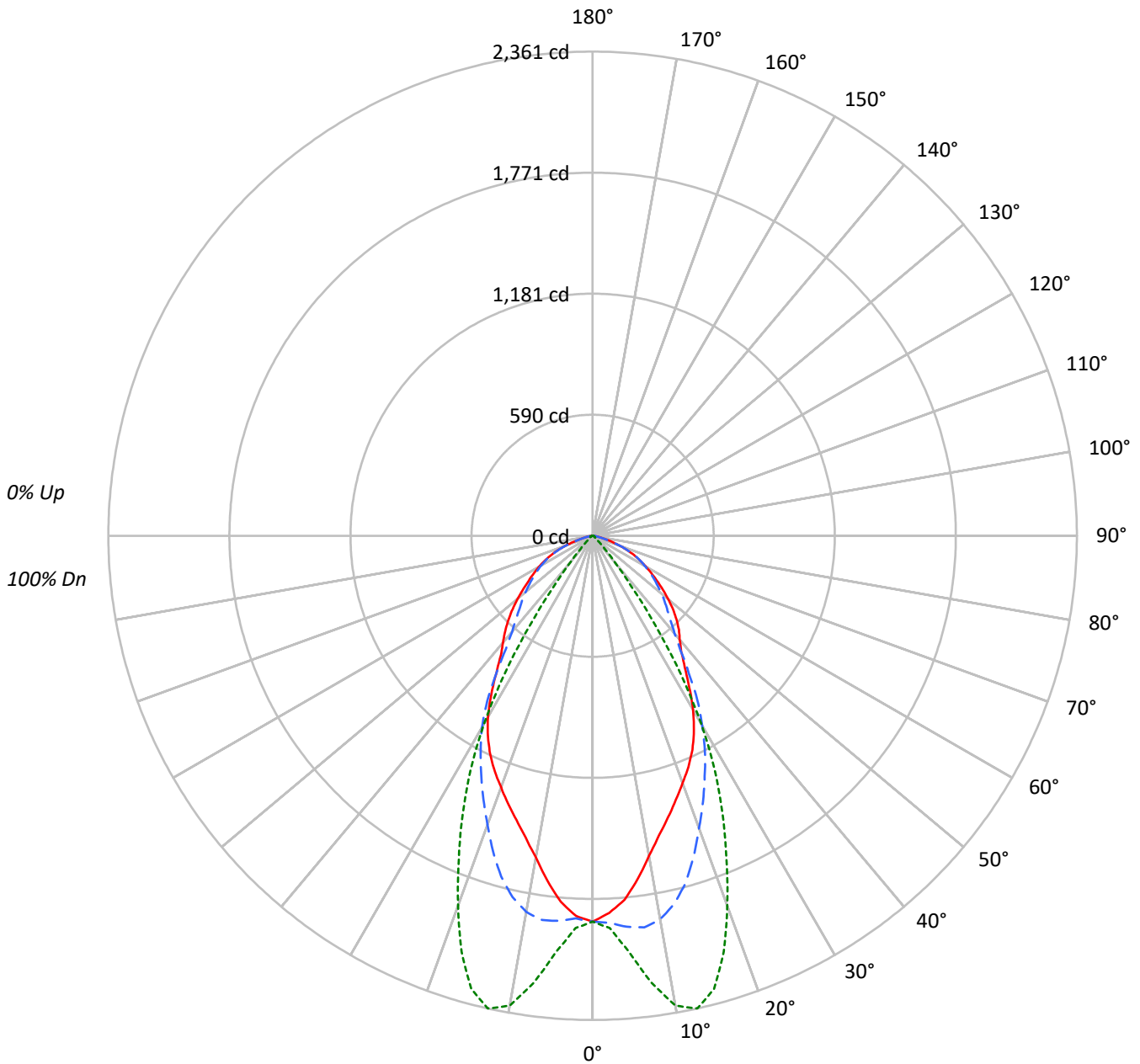
Input Watts (W): 45.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	0					
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100								
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90								
2	104	98	93	89	102	96	91	87	93	89	86	90	87	84	87	84	82	80								
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73	72								
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64								
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58								
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53								
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49								
8	71	59	52	47	69	59	52	47	58	51	47	57	51	47	55	50	47	45								
9	67	56	49	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42								
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	122763	122763	122763
5°	116729	133311	117292
10°	104942	154117	105498
15°	96011	154475	96936
20°	89069	133252	90617
25°	82869	107992	84964
30°	73714	79891	76938
35°	62258	42235	65260
40°	56235	14129	57836
45°	53347	4890	53504
50°	48789	2081	48272
55°	43587	1558	43188
60°	38831	1566	39288
65°	34332	1575	34595
70°	26438	1297	26114
75°	16385	857	15528
80°	8378	639	7702
85°	3818	0	3818



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.6	7.3
10°-20°	498.4	20.0
20°-30°	599.8	24.0
30°-40°	466.1	18.7
40°-50°	311.9	12.5
50°-60°	234.7	9.4
60°-70°	150.7	6.0
70°-80°	48.2	1.9
80°-90°	4.5	0.2
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°	1280.8	51.3
0°-40°	1746.9	70.0
0°-60°	2293.6	91.9
0°-90°	2497.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2497.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1882	1882	1882	1882	1882	
5°	1782	1914	2036	1885	1791	164
15°	1422	1752	2287	1721	1435	400
25°	1151	1293	1500	1286	1180	525
35°	782	818	530	818	819	497
45°	578	517	53	505	580	444
55°	383	363	14	354	380	344
65°	222	224	10	219	224	218
75°	65	62	3	58	62	75
85°	5	5	0	5	5	8
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°	1881.7	1881.7	1881.7	1881.7	1881.7	1881.7	1881.7	1881.7	1881.7	1881.7	1881.7
2.5°	1840.6	1856.0	1850.9	1874.8	1857.8	1856.0	1868.0	1874.8	1876.6	1888.5	1888.5
5°	1782.4	1799.6	1794.4	1825.3	1818.4	1825.3	1850.9	1869.7	1886.8	1914.2	1931.3
7.5°	1686.7	1707.2	1710.6	1741.4	1744.8	1763.6	1804.7	1842.3	1878.2	1926.2	1967.2
10°	1584.1	1604.6	1609.7	1643.9	1654.2	1679.8	1732.9	1780.7	1832.1	1898.8	1960.4
12.5°	1495.0	1515.6	1522.4	1556.7	1568.6	1597.8	1654.2	1707.2	1765.4	1838.9	1912.5
15°	1421.5	1440.3	1447.2	1478.0	1489.9	1517.3	1570.4	1621.7	1678.1	1751.7	1823.5
17.5°	1349.7	1368.5	1373.6	1401.0	1409.6	1433.5	1481.4	1525.9	1573.7	1638.7	1703.7
20°	1282.9	1300.1	1303.5	1327.4	1332.6	1351.4	1390.8	1426.7	1466.0	1517.3	1570.4
22.5°	1219.7	1236.7	1238.5	1259.0	1260.8	1276.1	1308.6	1336.0	1363.4	1404.4	1442.1
25°	1151.2	1168.4	1170.1	1187.2	1188.9	1199.1	1224.8	1245.3	1264.1	1293.3	1318.9
27.5°	1069.1	1086.3	1091.4	1103.4	1105.1	1111.9	1134.1	1147.8	1166.6	1185.4	1195.8
30°	978.5	993.9	1000.7	1011.0	1012.7	1022.9	1043.5	1053.8	1065.7	1069.1	1072.6
32.5°	877.6	894.6	901.5	910.1	915.2	925.4	944.2	949.4	952.8	951.1	932.3
35°	781.7	797.1	804.0	814.2	817.7	824.5	839.9	838.2	833.1	817.7	783.4
37.5°	709.9	721.9	728.8	735.6	737.2	740.7	749.2	742.5	728.8	703.1	658.5
40°	660.3	672.2	674.0	680.8	679.1	679.1	680.8	668.9	651.8	620.9	569.6
42.5°	622.7	632.9	632.9	639.7	634.6	631.2	631.2	617.6	595.3	562.8	511.5
45°	578.2	586.8	588.4	591.9	586.8	583.3	583.3	569.6	549.1	516.6	465.3
47.5°	532.0	540.6	540.6	545.7	540.6	537.1	537.1	525.2	506.3	477.2	429.4
50°	480.7	489.3	490.9	494.4	490.9	489.3	490.9	479.0	463.6	437.9	395.1
52.5°	431.1	439.6	439.6	443.1	439.6	439.6	441.3	432.8	419.1	398.6	360.9
55°	383.2	390.0	393.4	396.9	391.8	391.8	393.4	388.3	378.1	362.6	330.1
57.5°	338.7	345.6	347.2	350.7	347.2	348.9	350.7	345.6	340.5	328.4	302.8
60°	297.6	304.5	306.2	308.0	306.2	306.2	308.0	306.2	302.8	294.3	272.0
62.5°	260.0	265.1	266.9	270.2	266.9	265.1	268.6	266.9	265.1	260.0	244.6
65°	222.4	225.8	227.5	229.3	225.8	222.4	225.8	225.8	227.5	224.1	212.1
67.5°	181.3	184.8	184.8	184.8	179.6	177.9	181.3	181.3	184.8	183.1	174.5
70°	138.6	140.2	140.2	140.2	133.4	133.4	135.1	135.1	138.6	138.6	133.4
72.5°	99.2	97.5	97.5	95.8	94.0	90.7	90.7	92.4	95.8	95.8	92.4
75°	65.0	63.3	61.6	61.6	59.9	56.4	56.4	58.2	59.9	61.6	59.9
77.5°	39.4	37.6	37.6	35.9	35.9	34.2	34.2	34.2	35.9	35.9	35.9
80°	22.3	20.5	20.5	20.5	18.8	18.8	18.8	18.8	18.8	20.5	18.8
82.5°	12.0	10.2	10.2	10.2	10.2	10.2	8.6	10.2	10.2	10.2	10.2
85°	5.1	5.1	5.1	5.1	3.4	3.4	3.4	3.4	3.4	5.1	5.1
87.5°	0.0	0.0	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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1881.7	1881.7	1881.7	1881.7	1881.7	1881.7	1881.7	1881.7	1881.7	1881.7	1881.7
2.5°	1883.4	1900.5	1888.5	1926.2	1900.5	1914.2	1933.0	1914.2	1919.3	1931.3	1907.3
5°	1941.6	1972.4	1975.7	2027.0	2006.6	2030.5	2056.2	2035.6	2039.1	2047.6	2016.8
7.5°	2001.4	2056.2	2081.8	2153.7	2148.6	2187.9	2218.7	2198.1	2198.1	2199.9	2153.7
10°	2018.6	2098.9	2146.8	2235.8	2249.4	2305.9	2340.1	2326.4	2323.0	2317.9	2254.6
12.5°	1980.9	2080.1	2141.7	2240.9	2268.3	2335.0	2365.8	2360.7	2355.5	2345.2	2271.7
15°	1893.7	1996.3	2061.3	2158.8	2193.0	2261.4	2287.1	2287.1	2282.0	2271.7	2193.0
17.5°	1765.4	1861.2	1921.0	2006.6	2040.7	2104.1	2121.2	2126.3	2121.2	2110.9	2039.1
20°	1619.9	1700.4	1748.2	1818.4	1845.7	1900.5	1910.7	1919.3	1915.9	1907.3	1844.1
22.5°	1478.0	1541.2	1577.2	1638.7	1649.1	1695.3	1698.6	1705.5	1703.7	1700.4	1649.1
25°	1348.0	1390.8	1411.2	1457.4	1460.9	1495.0	1493.4	1500.2	1498.5	1498.5	1459.2
27.5°	1211.1	1236.7	1242.0	1271.0	1264.1	1289.8	1293.3	1289.8	1291.5	1293.3	1264.1
30°	1074.2	1079.4	1064.0	1067.4	1048.6	1064.0	1048.6	1060.5	1060.5	1065.7	1048.6
32.5°	918.6	903.2	862.1	841.6	809.1	809.1	800.6	800.6	800.6	809.1	805.7
35°	752.7	715.1	651.8	607.2	561.0	549.1	547.4	530.3	533.7	545.7	554.3
37.5°	610.7	554.3	470.4	407.1	352.4	328.4	319.9	306.2	311.3	325.0	345.6
40°	509.7	441.3	343.8	270.2	215.6	188.2	174.5	165.9	171.1	188.2	213.8
42.5°	446.5	371.2	266.9	189.9	138.6	112.9	99.2	92.4	97.5	112.9	143.7
45°	400.3	321.6	215.6	140.2	94.0	70.1	58.2	53.0	56.4	70.1	95.8
47.5°	364.4	283.9	179.6	107.7	66.7	46.2	35.9	30.8	34.2	46.2	66.7
50°	331.9	253.2	152.3	85.5	51.3	34.2	23.9	20.5	23.9	32.5	49.6
52.5°	302.8	225.8	130.0	70.1	39.4	27.4	18.8	15.4	17.1	25.7	39.4
55°	277.1	205.2	114.6	59.9	34.2	23.9	17.1	13.7	17.1	22.3	34.2
57.5°	253.2	184.8	100.9	51.3	29.1	20.5	15.4	13.7	15.4	20.5	29.1
60°	229.3	164.2	88.9	44.5	25.7	18.8	13.7	12.0	13.7	17.1	25.7
62.5°	205.2	145.4	77.0	37.6	22.3	15.4	12.0	10.2	12.0	15.4	22.3
65°	177.9	123.2	65.0	32.5	18.8	13.7	10.2	10.2	10.2	13.7	18.8
67.5°	147.1	100.9	51.3	25.7	15.4	12.0	8.6	8.6	8.6	12.0	15.4
70°	112.9	75.2	39.4	20.5	12.0	8.6	6.8	6.8	6.8	8.6	12.0
72.5°	78.7	53.0	27.4	15.4	8.6	6.8	5.1	5.1	5.1	6.8	8.6
75°	49.6	34.2	18.8	10.2	6.8	5.1	3.4	3.4	3.4	5.1	6.8
77.5°	29.1	20.5	12.0	6.8	3.4	3.4	1.7	1.7	1.7	3.4	3.4
80°	15.4	12.0	6.8	3.4	1.7	1.7	1.7	1.7	1.7	1.7	1.7
82.5°	8.6	5.1	3.4	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
85°	3.4	1.7	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	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°	1881.7	1881.7	1881.7	1881.7	1881.7	1881.7	1881.7	1881.7	1881.7	1881.7	1881.7
2.5°	1900.5	1907.3	1905.6	1869.7	1866.3	1868.0	1844.1	1852.6	1861.2	1852.6	1854.3
5°	1992.9	1991.2	1970.6	1919.3	1898.8	1885.1	1845.7	1838.9	1833.8	1815.0	1808.1
7.5°	2114.3	2090.4	2047.6	1970.6	1927.9	1890.3	1832.1	1803.0	1782.4	1749.9	1731.1
10°	2198.1	2150.2	2086.9	1986.0	1921.0	1862.9	1787.6	1743.1	1709.0	1666.1	1638.7
12.5°	2210.1	2143.5	2069.9	1951.8	1876.6	1804.7	1722.6	1673.0	1633.6	1587.4	1561.8
15°	2133.1	2064.7	1987.8	1869.7	1794.4	1720.9	1642.2	1592.5	1553.3	1508.7	1486.5
17.5°	1987.8	1924.4	1856.0	1746.6	1681.6	1614.8	1544.7	1501.9	1467.7	1433.5	1411.2
20°	1803.0	1753.4	1696.9	1604.6	1553.3	1498.5	1443.7	1409.6	1383.9	1354.8	1337.7
22.5°	1619.9	1582.3	1541.2	1467.7	1430.0	1390.8	1348.0	1324.0	1305.2	1282.9	1271.0
25°	1443.7	1418.1	1392.4	1336.0	1313.7	1286.4	1255.6	1238.5	1226.5	1211.1	1202.6
27.5°	1260.8	1252.2	1245.3	1209.5	1200.9	1182.1	1161.5	1151.2	1142.7	1132.4	1125.5
30°	1062.3	1067.4	1094.8	1076.0	1084.6	1079.4	1070.9	1064.0	1060.5	1052.0	1043.5
32.5°	838.2	874.1	913.5	918.6	944.2	956.3	954.5	956.3	957.9	951.1	944.2
35°	600.4	658.5	720.2	747.6	790.3	817.7	827.9	838.2	845.1	843.3	838.2
37.5°	400.3	479.0	552.5	600.4	656.9	694.5	716.7	733.9	744.1	747.6	747.6
40°	266.9	342.1	439.6	501.2	564.5	610.7	636.4	658.5	674.0	680.8	684.2
42.5°	188.2	268.6	367.8	437.9	502.9	552.5	581.6	605.6	620.9	629.5	632.9
45°	138.6	215.6	318.2	390.0	456.8	504.6	533.7	555.9	571.4	579.9	585.1
47.5°	106.1	181.3	280.6	354.1	420.8	465.3	492.7	513.2	526.9	533.7	537.1
50°	83.8	152.3	249.7	323.3	384.9	425.9	449.9	467.0	479.0	484.1	487.5
52.5°	68.4	131.7	224.1	294.3	352.4	388.3	407.1	420.8	431.1	434.5	437.9
55°	58.2	114.6	201.9	270.2	323.3	354.1	367.8	379.7	384.9	388.3	390.0
57.5°	51.3	100.9	183.1	248.1	295.9	321.6	331.9	340.5	342.1	345.6	347.2
60°	44.5	87.3	162.5	224.1	266.9	289.1	294.3	301.1	301.1	302.8	304.5
62.5°	37.6	75.2	142.0	200.1	237.7	256.6	260.0	261.8	261.8	261.8	263.4
65°	30.8	63.3	119.8	172.7	207.0	218.9	220.7	222.4	218.9	218.9	220.7
67.5°	25.7	49.6	95.8	142.0	169.4	179.6	177.9	177.9	172.7	172.7	174.5
70°	18.8	37.6	71.9	107.7	128.3	135.1	131.7	131.7	126.5	126.5	128.3
72.5°	13.7	27.4	49.6	73.6	88.9	92.4	88.9	88.9	85.5	85.5	87.3
75°	10.2	17.1	32.5	47.9	56.4	58.2	56.4	54.8	53.0	53.0	54.8
77.5°	6.8	12.0	18.8	27.4	32.5	34.2	32.5	32.5	30.8	32.5	32.5
80°	3.4	6.8	10.2	15.4	17.1	18.8	18.8	18.8	17.1	17.1	18.8
82.5°	1.7	3.4	5.1	6.8	8.6	10.2	8.6	8.6	8.6	8.6	8.6
85°	0.0	1.7	1.7	3.4	3.4	5.1	3.4	3.4	3.4	3.4	3.4
87.5°	0.0	0.0	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: P135852

CATALOG NUMBER: LD6A30D010TE ERM6A30927 6LM121LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1881.7	1881.7	1881.7	1881.7
2.5°	1850.9	1842.3	1830.4	1856.0
5°	1797.9	1780.7	1767.1	1791.0
7.5°	1714.1	1690.1	1671.2	1695.3
10°	1618.2	1590.9	1570.4	1592.5
12.5°	1534.4	1507.1	1489.9	1507.1
15°	1460.9	1435.2	1419.8	1435.2
17.5°	1389.0	1366.8	1353.1	1370.2
20°	1320.6	1301.8	1289.8	1305.2
22.5°	1257.3	1240.2	1229.9	1245.3
25°	1190.6	1178.6	1166.6	1180.3
27.5°	1117.1	1103.4	1096.5	1105.1
30°	1033.2	1019.5	1014.4	1021.3
32.5°	934.0	920.3	915.2	920.3
35°	831.4	819.4	812.6	819.4
37.5°	744.1	733.9	728.8	733.9
40°	682.6	677.4	672.2	679.1
42.5°	634.6	629.5	626.0	631.2
45°	585.1	578.2	574.7	579.9
47.5°	535.4	528.5	525.2	528.5
50°	484.1	475.6	473.8	475.6
52.5°	432.8	425.9	422.5	424.3
55°	386.6	381.5	378.1	379.7
57.5°	345.6	338.7	337.0	338.7
60°	304.5	301.1	299.4	301.1
62.5°	263.4	261.8	263.4	263.4
65°	222.4	222.4	224.1	224.1
67.5°	177.9	181.3	183.1	183.1
70°	131.7	135.1	136.9	136.9
72.5°	88.9	92.4	94.0	95.8
75°	56.4	59.9	61.6	61.6
77.5°	34.2	35.9	35.9	37.6
80°	18.8	20.5	20.5	20.5
82.5°	10.2	10.2	10.2	12.0
85°	5.1	5.1	5.1	5.1
87.5°	0.0	1.7	1.7	1.7
90°	0.0	0.0	0.0	0.0



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













(END OF REPORT)