

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: P136450

Luminaire Tested: **LD6A30D010TE ERW6A30835 6LW111H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136450
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23375)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6A30D010TE ERW6A30835 6LW111H
Description: PORTFOLIO 6 INCH 60 DEGREE CUTOFF RECESSED SINGLE WALL WASH LUMINAIRE
SEMI-SPECULAR CLEAR TRIM AND SPECULAR CLEAR KICKER
Light Source: (1) HIGH LUMEN LED 3500K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2852.0 lumens
Efficiency: N/A
Efficacy: 62.8 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.17 / 1.12
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

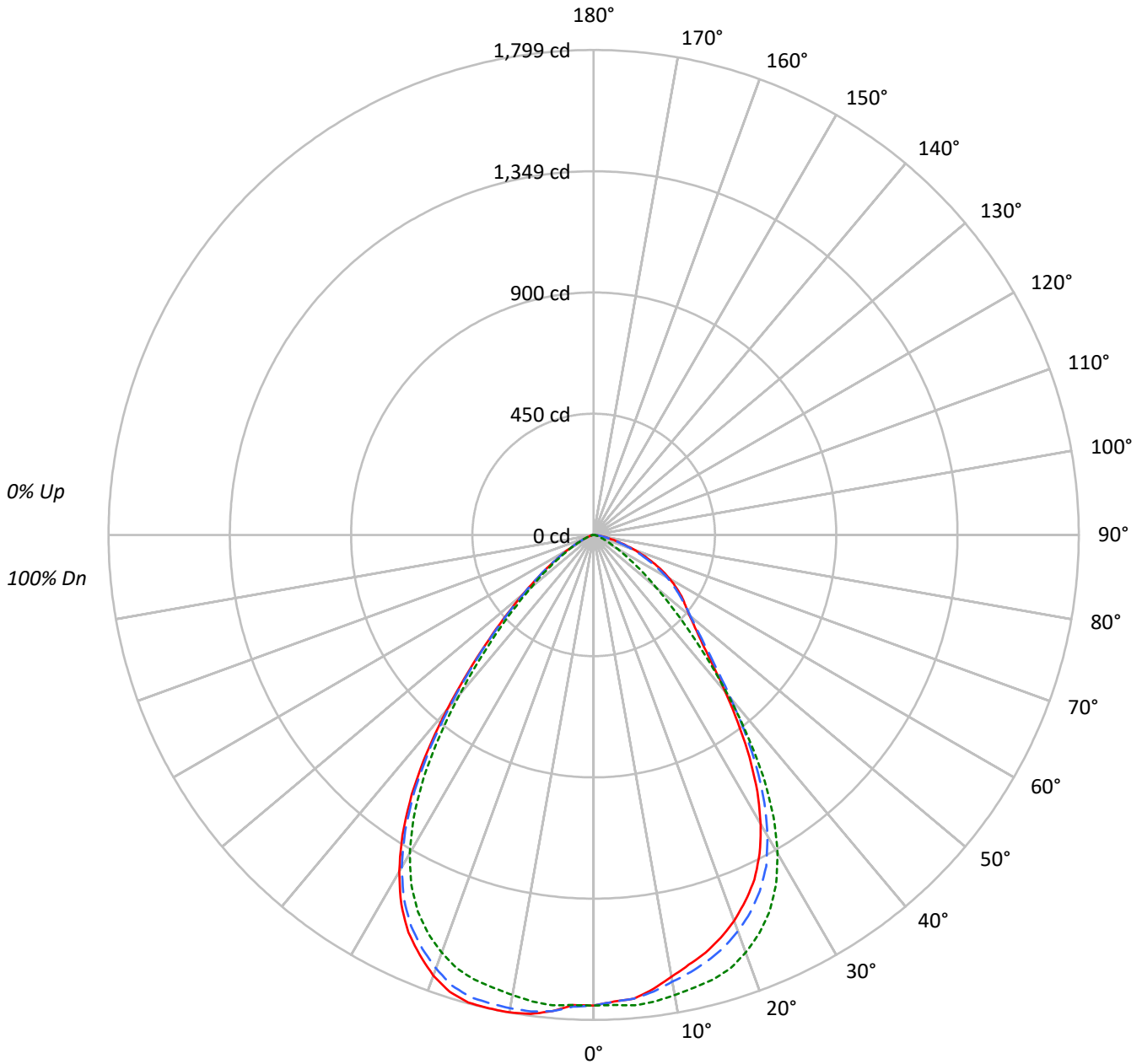
Input Watts (W): 45.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	98	98	96	95	95	93	92	90																			
2	104	98	93	89	102	96	92	88	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	69	66	64																			
5	85	74	67	62	83	73	67	61	71	65	61	70	64	60	68	63	60	58																			
6	79	68	61	56	78	68	61	55	66	60	55	64	59	55	63	58	54	52																			
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48																			
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44																			
9	66	54	47	42	65	54	47	42	53	46	42	52	46	42	51	46	42	40																			
10	62	51	44	39	61	50	43	39	49	43	39	48	43	39	48	42	39	37																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	113871	113871	113871
5°	113075	114719	116153
10°	110242	114800	119152
15°	108378	115355	121272
20°	105759	114444	120749
25°	101549	111008	117084
30°	93315	102740	108631
35°	80218	87441	93669
40°	64470	65799	71931
45°	52526	45597	50505
50°	46983	30479	34600
55°	45190	19928	22771
60°	42446	12657	14288
65°	37667	7719	8213
70°	30425	4769	4769
75°	21300	3151	3151
80°	14089	2367	2367
85°	7036	2321	2321



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.2	5.8
10°-20°	479.1	16.8
20°-30°	697.7	24.5
30°-40°	676.8	23.7
40°-50°	427.8	15.0
50°-60°	238.2	8.4
60°-70°	118.0	4.1
70°-80°	41.6	1.5
80°-90°	6.5	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°	1343.1	47.1
0°-40°	2019.9	70.8
0°-60°	2685.9	94.2
0°-90°	2852.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2852.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1745	1745	1745	1745	1745	
5°	1727	1727	1752	1774	1774	163
15°	1605	1636	1708	1774	1796	451
25°	1411	1458	1542	1602	1626	644
35°	1007	1054	1098	1157	1176	624
45°	569	585	494	541	547	450
55°	397	388	175	200	200	354
65°	244	225	50	53	53	240
75°	84	78	12	12	12	94
85°	9	9	3	3	3	14
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°	1745.4	1745.4	1745.4	1745.4	1745.4	1745.4	1745.4	1745.4	1745.4	1745.4	1745.4
2.5°	1732.9	1717.3	1723.5	1720.4	1723.5	1720.4	1729.8	1720.4	1726.6	1732.9	1720.4
5°	1726.6	1711.0	1714.1	1714.1	1714.1	1714.1	1723.5	1714.1	1720.4	1726.6	1717.3
7.5°	1698.5	1686.0	1689.1	1689.1	1689.1	1689.1	1698.5	1692.2	1698.5	1707.9	1698.5
10°	1664.1	1651.6	1657.8	1657.8	1657.8	1657.8	1670.3	1664.1	1670.3	1682.8	1673.5
12.5°	1632.8	1623.4	1629.7	1629.7	1629.7	1632.8	1642.2	1639.1	1645.3	1661.0	1651.6
15°	1604.6	1595.3	1601.5	1601.5	1601.5	1604.6	1614.0	1617.2	1623.4	1635.9	1629.7
17.5°	1567.1	1557.7	1567.1	1567.1	1564.0	1570.2	1582.8	1582.8	1589.0	1604.6	1601.5
20°	1523.3	1513.9	1523.3	1523.3	1520.2	1526.4	1539.0	1542.1	1548.3	1564.0	1560.9
22.5°	1470.1	1467.0	1470.1	1476.4	1473.3	1476.4	1488.9	1492.0	1498.3	1517.1	1513.9
25°	1410.7	1407.6	1413.8	1417.0	1413.8	1417.0	1429.5	1432.6	1438.9	1457.6	1457.6
27.5°	1332.5	1329.4	1338.8	1338.8	1338.8	1345.0	1354.4	1360.7	1363.8	1385.7	1382.6
30°	1238.7	1235.5	1241.8	1244.9	1244.9	1244.9	1257.4	1266.8	1270.0	1288.7	1288.7
32.5°	1129.2	1129.2	1132.3	1138.6	1135.5	1141.7	1151.1	1157.3	1163.6	1179.2	1179.2
35°	1007.2	1010.3	1013.5	1019.7	1016.6	1019.7	1029.1	1035.4	1038.5	1054.1	1051.0
37.5°	879.0	882.1	885.2	888.3	888.3	891.5	900.9	904.0	907.1	919.6	913.4
40°	757.0	757.0	760.1	766.4	763.2	769.5	775.7	778.9	778.9	788.2	782.0
42.5°	650.6	653.7	656.9	660.0	660.0	663.1	669.4	672.5	672.5	675.6	666.3
45°	569.3	572.4	572.4	578.7	578.7	581.8	584.9	588.1	584.9	584.9	575.5
47.5°	509.9	513.0	516.1	519.2	519.2	522.4	525.5	525.5	522.4	519.2	506.7
50°	462.9	469.2	469.2	472.3	475.5	478.6	478.6	478.6	472.3	469.2	450.4
52.5°	428.5	431.7	434.8	437.9	437.9	441.0	444.2	441.0	434.8	425.4	406.6
55°	397.3	400.4	403.5	406.6	406.6	406.6	406.6	403.5	397.3	387.9	369.1
57.5°	362.8	366.0	369.1	372.2	372.2	372.2	372.2	369.1	362.8	350.3	328.4
60°	325.3	328.4	331.6	334.7	334.7	334.7	331.6	328.4	322.2	312.8	290.9
62.5°	284.6	287.8	290.9	290.9	290.9	287.8	287.8	284.6	278.4	269.0	247.1
65°	244.0	244.0	247.1	247.1	247.1	247.1	244.0	240.9	234.6	225.2	209.6
67.5°	200.2	203.3	203.3	203.3	203.3	203.3	200.2	200.2	193.9	184.6	172.0
70°	159.5	159.5	162.7	162.7	162.7	162.7	159.5	159.5	153.3	147.0	134.5
72.5°	118.9	118.9	118.9	122.0	122.0	122.0	118.9	118.9	115.7	109.5	100.1
75°	84.5	84.5	84.5	87.6	87.6	87.6	87.6	84.5	81.3	78.2	71.9
77.5°	56.3	59.4	56.3	56.3	56.3	59.4	56.3	56.3	56.3	53.2	46.9
80°	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	34.4	34.4	31.3
82.5°	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9	21.9	18.8	18.8
85°	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
87.5°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
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°	1745.4	1745.4	1745.4	1745.4	1745.4	1745.4	1745.4	1745.4	1745.4	1745.4	1745.4
2.5°	1729.8	1736.0	1742.3	1736.0	1726.6	1745.4	1742.3	1745.4	1742.3	1736.0	1754.8
5°	1726.6	1732.9	1742.3	1736.0	1729.8	1748.5	1745.4	1751.7	1751.7	1745.4	1764.2
7.5°	1707.9	1714.1	1729.8	1723.5	1717.3	1736.0	1739.2	1745.4	1748.5	1742.3	1764.2
10°	1686.0	1692.2	1707.9	1704.7	1701.6	1723.5	1726.6	1732.9	1736.0	1732.9	1754.8
12.5°	1664.1	1673.5	1689.1	1686.0	1686.0	1707.9	1711.0	1720.4	1726.6	1723.5	1748.5
15°	1642.2	1654.7	1673.5	1670.3	1670.3	1695.4	1698.5	1707.9	1714.1	1714.1	1739.2
17.5°	1614.0	1626.5	1645.3	1642.2	1648.4	1667.2	1673.5	1686.0	1692.2	1689.1	1717.3
20°	1573.4	1589.0	1607.8	1604.6	1607.8	1632.8	1639.1	1648.4	1654.7	1654.7	1679.7
22.5°	1526.4	1542.1	1560.9	1557.7	1564.0	1582.8	1589.0	1601.5	1607.8	1604.6	1629.7
25°	1470.1	1485.8	1501.4	1501.4	1504.6	1526.4	1532.7	1542.1	1551.5	1548.3	1570.2
27.5°	1395.1	1410.7	1426.4	1423.2	1426.4	1448.3	1454.5	1463.9	1473.3	1470.1	1492.0
30°	1298.1	1313.7	1326.3	1323.1	1326.3	1348.2	1351.3	1363.8	1373.2	1373.2	1391.9
32.5°	1185.5	1201.1	1207.4	1201.1	1207.4	1223.0	1229.3	1241.8	1248.1	1251.2	1270.0
35°	1057.3	1066.6	1069.8	1063.5	1063.5	1079.1	1085.4	1097.9	1104.2	1107.3	1122.9
37.5°	916.5	922.8	916.5	907.1	910.2	916.5	925.9	935.3	944.6	947.8	963.4
40°	778.9	775.7	766.4	750.7	747.6	757.0	763.2	772.6	778.9	785.1	794.5
42.5°	656.9	650.6	631.9	613.1	610.0	610.0	613.1	622.5	628.7	631.9	644.4
45°	559.9	547.4	519.2	497.3	484.8	488.0	488.0	494.2	497.3	503.6	513.0
47.5°	484.8	462.9	428.5	400.4	387.9	384.7	384.7	387.9	391.0	397.3	403.5
50°	425.4	397.3	356.6	325.3	309.7	303.4	303.4	300.3	306.5	309.7	315.9
52.5°	378.5	344.1	297.2	262.7	244.0	237.7	234.6	234.6	234.6	237.7	244.0
55°	334.7	297.2	247.1	212.7	190.8	184.6	178.3	175.2	178.3	181.4	184.6
57.5°	297.2	256.5	206.4	168.9	150.1	140.8	134.5	131.4	131.4	134.5	137.6
60°	259.6	219.0	168.9	134.5	115.7	106.4	100.1	97.0	97.0	100.1	100.1
62.5°	219.0	181.4	137.6	106.4	87.6	78.2	71.9	71.9	68.8	68.8	71.9
65°	184.6	150.1	112.6	84.5	65.7	59.4	53.2	50.0	50.0	46.9	50.0
67.5°	150.1	122.0	90.7	65.7	50.0	43.8	37.5	37.5	34.4	34.4	34.4
70°	118.9	97.0	71.9	50.0	40.7	31.3	28.2	25.0	25.0	25.0	25.0
72.5°	87.6	71.9	53.2	37.5	28.2	25.0	21.9	18.8	15.6	15.6	15.6
75°	62.6	50.0	37.5	28.2	21.9	18.8	15.6	12.5	12.5	12.5	12.5
77.5°	43.8	34.4	28.2	18.8	15.6	12.5	9.4	9.4	9.4	9.4	6.3
80°	28.2	21.9	18.8	12.5	9.4	9.4	6.3	6.3	6.3	6.3	6.3
82.5°	15.6	12.5	9.4	9.4	6.3	6.3	3.1	3.1	3.1	3.1	3.1
85°	6.3	6.3	6.3	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
87.5°	3.1	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°	1745.4	1745.4	1745.4	1745.4	1745.4	1745.4	1745.4	1745.4	1745.4	1745.4	1745.4
2.5°	1736.0	1748.5	1748.5	1754.8	1745.4	1751.7	1761.0	1757.9	1748.5	1751.7	1754.8
5°	1748.5	1761.0	1764.2	1773.6	1764.2	1773.6	1786.1	1782.9	1773.6	1779.8	1782.9
7.5°	1748.5	1764.2	1770.4	1779.8	1773.6	1782.9	1798.6	1795.5	1786.1	1792.3	1798.6
10°	1742.3	1757.9	1767.3	1776.7	1770.4	1782.9	1795.5	1795.5	1789.2	1795.5	1804.8
12.5°	1736.0	1751.7	1761.0	1770.4	1764.2	1779.8	1795.5	1792.3	1789.2	1795.5	1804.8
15°	1726.6	1742.3	1751.7	1761.0	1757.9	1773.6	1789.2	1789.2	1782.9	1792.3	1801.7
17.5°	1704.7	1720.4	1732.9	1739.2	1736.0	1751.7	1767.3	1767.3	1761.0	1770.4	1779.8
20°	1667.2	1682.8	1695.4	1701.6	1698.5	1711.0	1726.6	1729.8	1723.5	1732.9	1742.3
22.5°	1620.3	1632.8	1645.3	1651.6	1648.4	1661.0	1676.6	1679.7	1673.5	1682.8	1689.1
25°	1564.0	1573.4	1585.9	1592.1	1589.0	1601.5	1617.2	1617.2	1614.0	1620.3	1626.5
27.5°	1485.8	1498.3	1507.7	1513.9	1513.9	1523.3	1535.8	1539.0	1535.8	1542.1	1551.5
30°	1388.8	1395.1	1407.6	1410.7	1413.8	1423.2	1435.7	1435.7	1432.6	1438.9	1448.3
32.5°	1266.8	1276.2	1285.6	1288.7	1291.9	1301.2	1310.6	1313.7	1310.6	1316.9	1326.3
35°	1122.9	1132.3	1141.7	1144.8	1148.0	1157.3	1166.7	1169.9	1166.7	1173.0	1182.4
37.5°	963.4	969.7	979.1	982.2	988.4	994.7	1001.0	1007.2	1004.1	1010.3	1016.6
40°	800.8	803.9	813.3	816.4	822.7	828.9	835.2	838.3	838.3	841.4	844.6
42.5°	647.5	653.7	660.0	663.1	669.4	672.5	678.8	681.9	681.9	685.0	688.2
45°	516.1	522.4	528.6	531.8	538.0	541.1	544.3	547.4	544.3	544.3	550.5
47.5°	406.6	412.9	419.1	422.3	425.4	428.5	431.7	431.7	431.7	434.8	434.8
50°	319.1	322.2	328.4	328.4	334.7	334.7	337.8	337.8	337.8	337.8	340.9
52.5°	247.1	250.2	256.5	256.5	259.6	262.7	262.7	262.7	262.7	265.9	262.7
55°	187.7	190.8	193.9	193.9	200.2	200.2	200.2	200.2	200.2	200.2	200.2
57.5°	140.8	143.9	147.0	147.0	147.0	150.1	147.0	150.1	150.1	150.1	150.1
60°	103.2	106.4	106.4	106.4	109.5	109.5	109.5	109.5	109.5	109.5	109.5
62.5°	71.9	71.9	75.1	75.1	75.1	78.2	75.1	75.1	78.2	78.2	75.1
65°	50.0	50.0	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2
67.5°	34.4	34.4	34.4	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5
70°	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
72.5°	15.6	15.6	15.6	15.6	18.8	18.8	18.8	18.8	18.8	18.8	18.8
75°	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
77.5°	6.3	6.3	9.4	9.4	9.4	6.3	6.3	6.3	9.4	9.4	6.3
80°	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
82.5°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
85°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	0.0	3.1	3.1	3.1
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



TEST NUMBER: P136450

CATALOG NUMBER: LD6A30D010TE ERW6A30835 6LW111H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1745.4	1745.4	1745.4	1745.4
2.5°	1754.8	1751.7	1754.8	1745.4
5°	1782.9	1779.8	1786.1	1773.6
7.5°	1801.7	1798.6	1804.8	1792.3
10°	1804.8	1804.8	1811.1	1798.6
12.5°	1804.8	1804.8	1811.1	1798.6
15°	1804.8	1801.7	1808.0	1795.5
17.5°	1782.9	1782.9	1789.2	1776.7
20°	1742.3	1742.3	1748.5	1739.2
22.5°	1692.2	1692.2	1695.4	1686.0
25°	1629.7	1626.5	1632.8	1626.5
27.5°	1551.5	1548.3	1551.5	1545.2
30°	1445.1	1442.0	1448.3	1442.0
32.5°	1326.3	1320.0	1326.3	1320.0
35°	1179.2	1173.0	1179.2	1176.1
37.5°	1016.6	1010.3	1016.6	1013.5
40°	844.6	841.4	847.7	844.6
42.5°	688.2	681.9	688.2	685.0
45°	550.5	544.3	550.5	547.4
47.5°	434.8	431.7	437.9	434.8
50°	340.9	337.8	340.9	340.9
52.5°	262.7	259.6	262.7	262.7
55°	200.2	197.1	200.2	200.2
57.5°	150.1	147.0	150.1	150.1
60°	109.5	109.5	109.5	109.5
62.5°	78.2	75.1	78.2	78.2
65°	53.2	53.2	53.2	53.2
67.5°	37.5	37.5	37.5	37.5
70°	25.0	25.0	25.0	25.0
72.5°	18.8	18.8	18.8	15.6
75°	12.5	12.5	12.5	12.5
77.5°	9.4	6.3	9.4	9.4
80°	6.3	6.3	6.3	6.3
82.5°	3.1	3.1	3.1	3.1
85°	3.1	3.1	3.1	3.1
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0



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













(END OF REPORT)