

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: P136571

Luminaire Tested: **LD6A30D010TE ERW6A30840 6LW121LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136571
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23360)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6A30D010TE ERW6A30840 6LW121LI
Description: PORTFOLIO 6 INCH 60 DEGREE CUTOFF RECESSED DOUBLE WALL WASH LUMINAIRE
SPECULAR CLEAR TRIM AND SPECULAR CLEAR KICKER
Light Source: (1) HIGH LUMEN LED 4000K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3039.0 lumens
Efficiency: N/A
Efficacy: 66.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.24 / 1.14
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

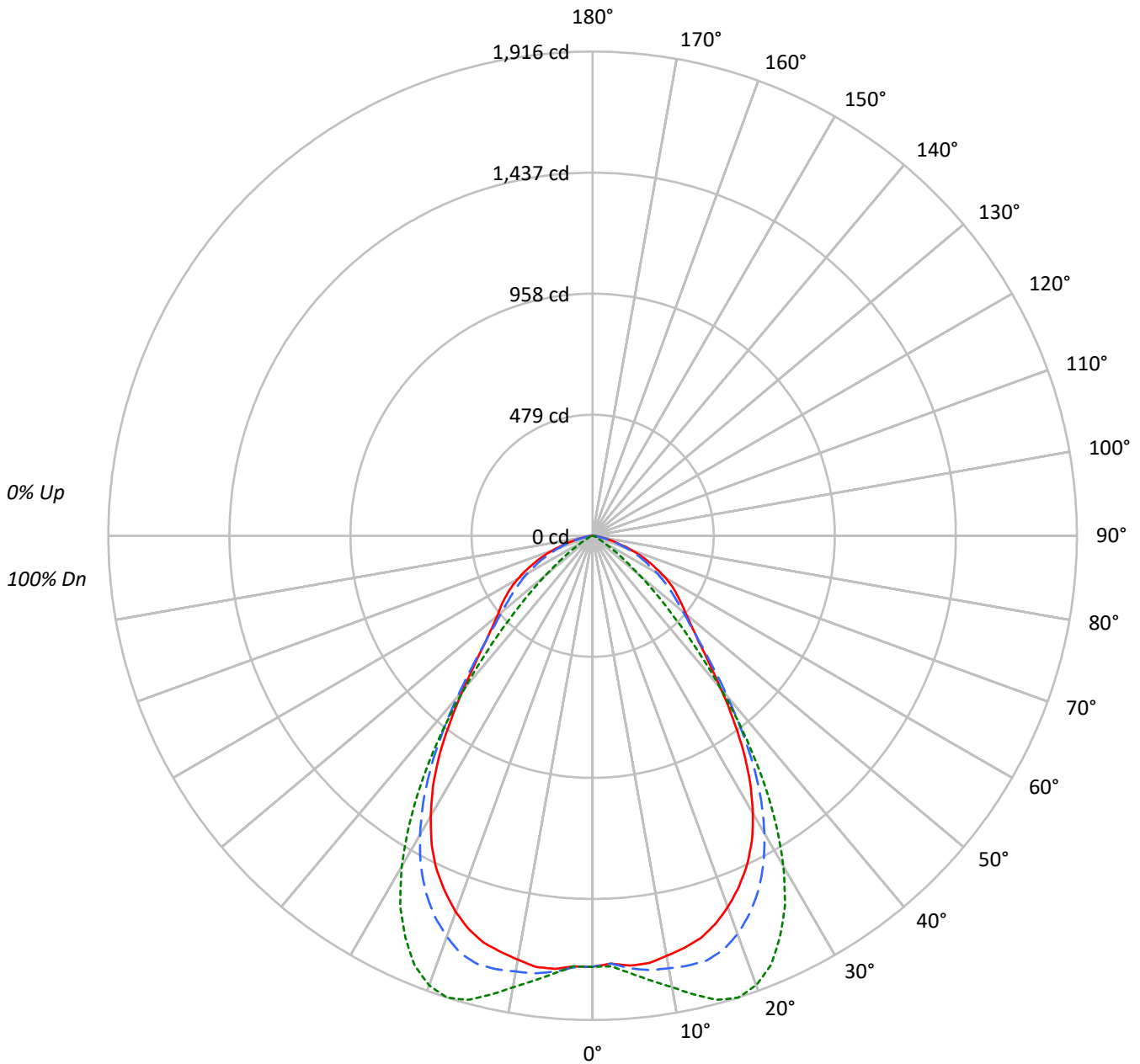
Input Watts (W): 45.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P136571

CATALOG NUMBER: LD6A30D010TE ERW6A30840 6LW121LI

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	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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89					89			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79			
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70					70			
4	90	80	73	67	88	79	72	67	77	71	66	74	69	65	72	68	65	63					63			
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56					56			
6	78	67	60	54	77	66	59	54	65	58	54	63	57	53	62	57	53	51					51			
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46					46			
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42					42			
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	40	39					39			
10	61	49	42	38	60	49	42	38	48	42	38	47	42	37	46	41	37	36					36			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	111261	111261	111261
5°	111824	113821	112682
10°	111825	120179	112832
15°	111363	128404	112539
20°	108585	131385	109946
25°	103817	126204	105069
30°	95530	113723	96517
35°	82814	93207	84025
40°	67059	67059	67988
45°	54786	42543	55792
50°	49013	24288	49896
55°	46271	12375	47750
60°	43424	5389	44559
65°	37945	3026	39288
70°	30711	2499	31951
75°	21376	1638	21930
80°	13075	827	13075
85°	6512	1647	6512



TEST NUMBER: P136571

CATALOG NUMBER: LD6A30D010TE ERW6A30840 6LW121LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.8	5.5
10°-20°	497.1	16.4
20°-30°	723.2	23.8
30°-40°	687.2	22.6
40°-50°	445.2	14.7
50°-60°	279.3	9.2
60°-70°	167.0	5.5
70°-80°	65.1	2.1
80°-90°	8.9	0.3
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°	1386.1	45.6
0°-40°	2073.3	68.2
0°-60°	2797.9	92.1
0°-90°	3039.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3039.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1705	1705	1705	1705	1705	
5°	1708	1718	1738	1732	1721	162
15°	1649	1740	1901	1755	1666	463
25°	1442	1551	1753	1560	1460	659
35°	1040	1109	1170	1114	1055	644
45°	594	602	461	605	605	469
55°	407	374	109	378	420	365
65°	246	215	20	220	254	243
75°	85	74	6	76	87	94
85°	9	9	2	9	9	13
90°	0	0	0	0	0	



TEST NUMBER: P136571

CATALOG NUMBER: LD6A30D010TE ERW6A30840 6LW121LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1705.4	1705.4	1705.4	1705.4	1705.4	1705.4	1705.4	1705.4	1705.4	1705.4	1705.4
2.5°	1694.5	1683.6	1714.1	1696.7	1698.8	1720.6	1703.2	1696.7	1718.4	1694.5	1705.4
5°	1707.5	1698.8	1729.3	1714.1	1716.2	1738.0	1722.8	1716.2	1740.2	1718.4	1729.3
7.5°	1705.4	1698.8	1727.1	1714.1	1716.2	1742.3	1727.1	1724.9	1753.2	1733.6	1748.9
10°	1688.0	1679.3	1709.7	1698.8	1703.2	1731.5	1718.4	1718.4	1751.0	1738.0	1759.7
12.5°	1670.6	1661.9	1692.3	1683.6	1688.0	1718.4	1709.7	1714.1	1751.0	1742.3	1770.6
15°	1648.8	1640.1	1672.7	1664.0	1668.4	1701.0	1696.7	1701.0	1742.3	1740.2	1772.8
17.5°	1611.8	1607.5	1635.8	1631.4	1635.8	1668.4	1666.2	1672.7	1718.4	1718.4	1759.7
20°	1564.0	1557.5	1587.9	1583.6	1585.7	1618.4	1618.4	1624.9	1672.7	1677.1	1718.4
22.5°	1507.4	1503.1	1533.5	1527.0	1531.4	1561.8	1561.8	1568.3	1614.0	1620.5	1664.0
25°	1442.2	1437.8	1466.1	1463.9	1466.1	1496.5	1494.4	1503.1	1546.6	1550.9	1592.3
27.5°	1363.9	1357.3	1385.6	1385.6	1387.8	1416.1	1416.1	1420.4	1459.6	1463.9	1503.1
30°	1268.1	1261.6	1287.7	1289.9	1289.9	1318.2	1318.2	1320.4	1357.3	1359.5	1394.3
32.5°	1159.4	1159.4	1179.0	1181.1	1181.1	1207.2	1209.4	1209.4	1242.0	1242.0	1270.3
35°	1039.8	1041.9	1057.2	1059.3	1061.5	1085.4	1085.4	1083.3	1111.5	1109.4	1133.3
37.5°	911.4	911.4	926.6	928.8	928.8	950.6	950.6	948.4	972.3	965.8	983.2
40°	787.4	787.4	800.5	804.8	802.7	820.1	820.1	817.9	835.3	826.6	835.3
42.5°	678.7	683.0	691.7	693.9	691.7	706.9	704.8	702.6	715.6	702.6	704.8
45°	593.8	598.2	604.7	606.9	604.7	615.6	613.4	609.1	615.6	602.5	596.0
47.5°	530.8	532.9	543.8	541.6	539.5	548.2	548.2	539.5	541.6	524.2	511.2
50°	482.9	485.1	493.8	493.8	489.4	498.1	493.8	485.1	482.9	463.3	443.7
52.5°	443.7	445.9	454.6	454.6	450.3	456.8	452.4	439.4	437.2	417.6	393.7
55°	406.8	408.9	417.6	417.6	413.3	417.6	411.1	400.2	395.9	374.1	348.0
57.5°	374.1	372.0	378.5	378.5	374.1	376.3	372.0	361.1	352.4	332.8	306.7
60°	332.8	330.6	335.0	335.0	330.6	332.8	328.5	315.4	311.1	291.5	265.4
62.5°	287.1	287.1	291.5	291.5	287.1	287.1	285.0	271.9	267.6	250.1	228.4
65°	245.8	245.8	250.1	250.1	245.8	248.0	243.6	234.9	230.6	215.3	195.8
67.5°	204.5	204.5	206.6	206.6	204.5	204.5	202.3	195.8	189.2	178.4	161.0
70°	161.0	161.0	163.1	163.1	161.0	161.0	161.0	154.4	152.3	141.4	128.3
72.5°	119.6	119.6	121.8	121.8	121.8	124.0	121.8	117.5	113.1	106.6	95.7
75°	84.8	84.8	84.8	87.0	84.8	84.8	87.0	82.7	80.5	74.0	67.4
77.5°	56.6	56.6	56.6	56.6	56.6	58.7	56.6	56.6	54.4	50.0	45.7
80°	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	32.6	32.6	28.3
82.5°	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	17.4	15.2
85°	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	6.5
87.5°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
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: P136571

CATALOG NUMBER: LD6A30D010TE ERW6A30840 6LW121LI

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1705.4	1705.4	1705.4	1705.4	1705.4	1705.4	1705.4	1705.4	1705.4	1705.4	1705.4
2.5°	1703.2	1705.4	1705.4	1711.9	1718.4	1701.0	1709.7	1705.4	1701.0	1718.4	1707.5
5°	1731.5	1733.6	1733.6	1742.3	1751.0	1731.5	1740.2	1738.0	1733.6	1748.9	1738.0
7.5°	1753.2	1759.7	1764.1	1775.0	1785.9	1768.4	1779.3	1775.0	1772.8	1788.0	1772.8
10°	1768.4	1781.5	1788.0	1805.4	1820.7	1803.3	1818.5	1814.1	1812.0	1825.0	1807.6
12.5°	1785.9	1803.3	1820.7	1840.2	1862.0	1846.8	1866.3	1859.8	1859.8	1870.7	1848.9
15°	1796.7	1818.5	1842.4	1870.7	1896.8	1885.9	1907.7	1901.1	1901.1	1909.8	1885.9
17.5°	1785.9	1814.1	1842.4	1875.0	1905.5	1899.0	1922.9	1916.4	1914.2	1922.9	1894.6
20°	1748.9	1781.5	1814.1	1846.8	1881.6	1877.2	1903.3	1892.4	1894.6	1899.0	1870.7
22.5°	1690.1	1724.9	1757.6	1792.4	1825.0	1822.8	1846.8	1840.2	1838.1	1844.6	1814.1
25°	1620.5	1651.0	1681.4	1711.9	1744.5	1740.2	1764.1	1753.2	1755.4	1757.6	1731.5
27.5°	1527.0	1555.3	1579.2	1605.3	1635.8	1629.2	1653.2	1648.8	1642.3	1644.5	1622.7
30°	1411.7	1435.6	1453.0	1474.8	1498.7	1492.2	1513.9	1509.6	1505.2	1505.2	1492.2
32.5°	1281.2	1298.6	1309.5	1324.7	1342.1	1335.6	1353.0	1348.6	1344.3	1344.3	1335.6
35°	1135.5	1146.3	1146.3	1155.0	1168.1	1157.2	1172.4	1170.3	1163.7	1165.9	1163.7
37.5°	976.7	981.0	972.3	972.3	981.0	965.8	978.8	978.8	972.3	974.5	974.5
40°	822.2	820.1	802.7	794.0	794.0	778.7	789.6	787.4	783.1	785.3	789.6
42.5°	685.2	672.1	648.2	630.8	626.5	609.1	615.6	613.4	609.1	613.4	619.9
45°	569.9	546.0	513.4	489.4	478.5	461.1	463.3	461.1	459.0	463.3	474.2
47.5°	478.5	445.9	404.6	374.1	358.9	339.3	339.3	337.2	337.2	348.0	354.6
50°	406.8	367.6	319.8	285.0	263.2	245.8	241.4	239.3	241.4	250.1	263.2
52.5°	352.4	304.5	252.3	215.3	191.4	171.8	167.5	165.3	167.5	176.2	189.2
55°	304.5	254.5	200.1	158.8	132.7	115.3	108.8	108.8	108.8	119.6	132.7
57.5°	261.0	211.0	156.6	115.3	91.4	74.0	67.4	65.3	69.6	76.1	89.2
60°	224.0	176.2	124.0	87.0	63.1	47.9	41.3	41.3	41.3	50.0	63.1
62.5°	191.4	147.9	100.1	65.3	45.7	32.6	26.1	26.1	28.3	32.6	45.7
65°	163.1	126.2	84.8	56.6	37.0	26.1	21.8	19.6	21.8	26.1	37.0
67.5°	134.9	104.4	71.8	47.9	32.6	21.8	19.6	17.4	17.4	23.9	30.5
70°	106.6	82.7	58.7	39.2	26.1	17.4	15.2	13.1	15.2	19.6	26.1
72.5°	80.5	63.1	43.5	30.5	19.6	15.2	10.9	10.9	10.9	15.2	19.6
75°	56.6	45.7	32.6	21.8	13.1	8.7	8.7	6.5	8.7	10.9	13.1
77.5°	37.0	30.5	21.8	13.1	8.7	6.5	4.4	4.4	4.4	6.5	8.7
80°	23.9	19.6	13.1	8.7	6.5	4.4	2.2	2.2	2.2	4.4	4.4
82.5°	13.1	10.9	6.5	4.4	4.4	2.2	2.2	2.2	2.2	2.2	2.2
85°	6.5	4.4	4.4	2.2	2.2	2.2	0.0	2.2	2.2	2.2	2.2
87.5°	2.2	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: P136571

CATALOG NUMBER: LD6A30D010TE ERW6A30840 6LW121LI

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1705.4	1705.4	1705.4	1705.4	1705.4	1705.4	1705.4	1705.4	1705.4	1705.4	1705.4
2.5°	1709.7	1703.2	1711.9	1718.4	1716.2	1709.7	1720.6	1703.2	1709.7	1703.2	1692.3
5°	1740.2	1733.6	1740.2	1744.5	1742.3	1731.5	1740.2	1724.9	1729.3	1720.6	1709.7
7.5°	1772.8	1764.1	1766.3	1768.4	1761.9	1746.7	1753.2	1733.6	1735.8	1724.9	1711.9
10°	1803.3	1790.2	1788.0	1783.7	1770.6	1751.0	1753.2	1729.3	1727.1	1711.9	1696.7
12.5°	1842.4	1820.7	1812.0	1803.3	1783.7	1757.6	1753.2	1724.9	1720.6	1703.2	1685.8
15°	1870.7	1846.8	1831.5	1814.1	1788.0	1755.4	1746.7	1714.1	1705.4	1685.8	1668.4
17.5°	1877.2	1846.8	1825.0	1803.3	1772.8	1733.6	1720.6	1685.8	1674.9	1653.2	1635.8
20°	1848.9	1816.3	1792.4	1764.1	1733.6	1688.0	1674.9	1637.9	1624.9	1605.3	1587.9
22.5°	1794.6	1757.6	1733.6	1705.4	1674.9	1631.4	1616.2	1581.4	1568.3	1548.8	1531.4
25°	1716.2	1681.4	1657.5	1631.4	1603.1	1559.6	1546.6	1513.9	1503.1	1483.5	1466.1
27.5°	1607.5	1574.9	1561.8	1535.7	1509.6	1472.6	1459.6	1431.3	1420.4	1407.4	1387.8
30°	1477.0	1448.7	1442.2	1418.2	1398.7	1366.0	1355.2	1331.2	1320.4	1309.5	1292.1
32.5°	1326.9	1305.1	1305.1	1285.6	1272.5	1246.4	1237.7	1218.1	1209.4	1200.7	1185.5
35°	1157.2	1142.0	1150.7	1137.6	1131.1	1113.7	1107.2	1092.0	1085.4	1078.9	1063.7
37.5°	976.7	965.8	983.2	985.4	985.4	970.1	965.8	957.1	952.7	946.2	933.2
40°	798.3	796.1	822.2	826.6	839.6	830.9	833.1	826.6	822.2	817.9	809.2
42.5°	633.0	641.7	674.3	693.9	706.9	706.9	713.5	711.3	709.1	704.8	698.2
45°	491.6	509.0	548.2	572.1	598.2	604.7	615.6	615.6	617.8	615.6	609.1
47.5°	376.3	402.4	448.1	485.1	513.4	526.4	541.6	546.0	548.2	548.2	543.8
50°	285.0	317.6	369.8	411.1	450.3	467.7	485.1	491.6	500.3	498.1	493.8
52.5°	215.3	252.3	308.9	358.9	400.2	419.8	439.4	448.1	456.8	456.8	454.6
55°	158.8	197.9	258.9	311.1	354.6	378.5	398.1	406.8	417.6	419.8	417.6
57.5°	115.3	154.4	213.2	269.7	311.1	337.2	356.7	365.4	376.3	378.5	378.5
60°	84.8	124.0	180.5	232.7	271.9	298.0	313.2	324.1	332.8	337.2	337.2
62.5°	65.3	100.1	152.3	200.1	234.9	256.7	271.9	280.6	289.3	291.5	293.7
65°	54.4	84.8	128.3	169.7	200.1	219.7	232.7	241.4	248.0	250.1	250.1
67.5°	45.7	71.8	106.6	139.2	165.3	180.5	191.4	197.9	204.5	206.6	206.6
70°	37.0	56.6	84.8	110.9	130.5	143.6	152.3	158.8	163.1	163.1	163.1
72.5°	28.3	43.5	63.1	82.7	97.9	108.8	115.3	117.5	121.8	121.8	121.8
75°	19.6	30.5	45.7	58.7	67.4	76.1	80.5	82.7	84.8	87.0	84.8
77.5°	13.1	19.6	28.3	37.0	45.7	50.0	52.2	54.4	56.6	56.6	56.6
80°	8.7	13.1	17.4	23.9	28.3	30.5	32.6	32.6	34.8	34.8	34.8
82.5°	4.4	6.5	10.9	13.1	15.2	17.4	17.4	17.4	19.6	19.6	17.4
85°	2.2	2.2	4.4	6.5	6.5	8.7	8.7	8.7	8.7	8.7	8.7
87.5°	0.0	0.0	0.0	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
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: P136571

CATALOG NUMBER: LD6A30D010TE ERW6A30840 6LW121LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1705.4	1705.4	1705.4	1705.4
2.5°	1696.7	1701.0	1683.6	1705.4
5°	1711.9	1716.2	1698.8	1720.6
7.5°	1714.1	1716.2	1698.8	1720.6
10°	1698.8	1698.8	1681.4	1703.2
12.5°	1685.8	1683.6	1664.0	1685.8
15°	1666.2	1664.0	1644.5	1666.2
17.5°	1633.6	1631.4	1611.8	1631.4
20°	1583.6	1581.4	1564.0	1583.6
22.5°	1529.2	1524.8	1507.4	1524.8
25°	1466.1	1461.7	1444.3	1459.6
27.5°	1385.6	1381.3	1363.9	1379.1
30°	1289.9	1283.4	1270.3	1281.2
32.5°	1181.1	1176.8	1161.6	1174.6
35°	1061.5	1055.0	1044.1	1055.0
37.5°	931.0	926.6	915.8	922.3
40°	804.8	802.7	794.0	798.3
42.5°	696.1	691.7	685.2	689.5
45°	609.1	606.9	600.4	604.7
47.5°	543.8	541.6	535.1	539.5
50°	495.9	493.8	489.4	491.6
52.5°	456.8	454.6	450.3	456.8
55°	422.0	419.8	413.3	419.8
57.5°	382.8	380.7	374.1	382.8
60°	339.3	339.3	332.8	341.5
62.5°	295.8	295.8	291.5	298.0
65°	254.5	252.3	250.1	254.5
67.5°	208.8	206.6	206.6	211.0
70°	165.3	163.1	163.1	167.5
72.5°	124.0	121.8	121.8	124.0
75°	87.0	84.8	84.8	87.0
77.5°	56.6	56.6	56.6	56.6
80°	34.8	34.8	34.8	34.8
82.5°	19.6	19.6	17.4	19.6
85°	8.7	8.7	8.7	8.7
87.5°	2.2	2.2	2.2	2.2
90°	0.0	0.0	0.0	0.0



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













(END OF REPORT)