

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: P135973

Luminaire Tested: **LD6A30D010TE ERM6A30930 6LM121H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P135973
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23373)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6A30D010TE ERM6A30930 6LM121H
Description: PORTFOLIO 6 INCH 50 DEGREE CUTOFF RECESSED DOUBLE WALL WASH LUMINAIRE
SEMI-SPECULAR CLEAR TRIM AND SPECULAR CLEAR KICKER
Light Source: (1) HIGH LUMEN LED 3000K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2521.7 lumens
Efficiency: N/A
Efficacy: 55.5 lumens/watt
Spacing Criteria (0/90/45): 0.96 / 1.06 / 1.01
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

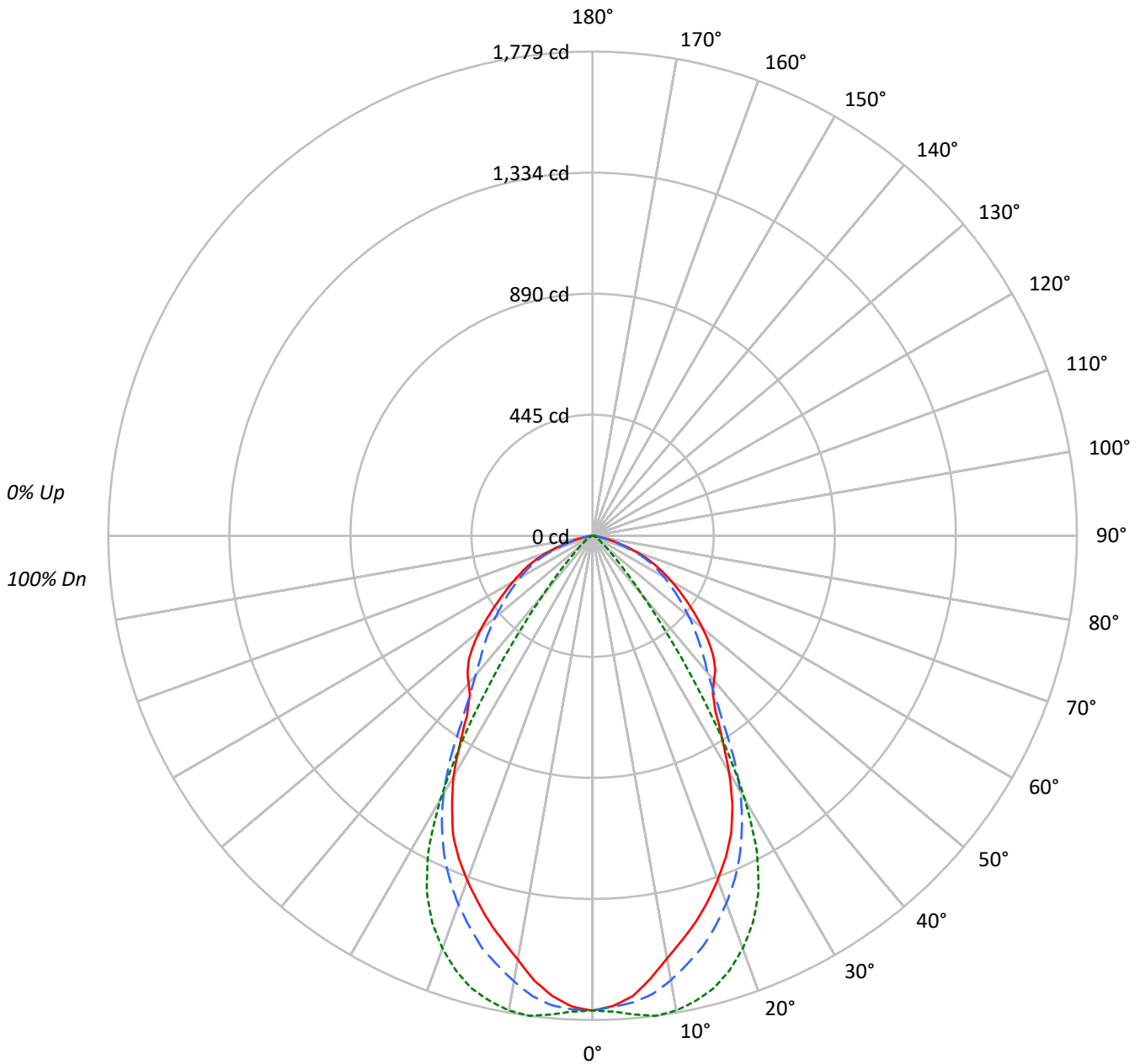
Input Watts (W): 45.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89					89			
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79					79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70					70			
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62					62			
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	74	62	55	49	72	61	54	49	60	53	49	59	53	49	57	52	48	47					47			
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	53	48	44	43					43			
9	65	54	46	42	64	53	46	41	52	46	41	51	45	41	50	45	41	39					39			
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36					36			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	113825	113825	113825
5°	111156	115635	111156
10°	104405	117324	104756
15°	99152	116240	99152
20°	93318	111980	93505
25°	86699	103774	87275
30°	75446	84381	77036
35°	62552	51012	64018
40°	59028	23795	60374
45°	57868	11182	59326
50°	53499	5887	54575
55°	48261	3890	48557
60°	43672	3092	44024
65°	39056	2439	40276
70°	32161	2003	33172
75°	21275	1336	21275
80°	11872	977	11872
85°	7860	0	5914



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.8	6.5
10°-20°	441.5	17.5
20°-30°	590.1	23.4
30°-40°	488.0	19.4
40°-50°	350.2	13.9
50°-60°	257.3	10.2
60°-70°	166.1	6.6
70°-80°	58.9	2.3
80°-90°	6.8	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°	1194.4	47.4
0°-40°	1682.4	66.7
0°-60°	2289.9	90.8
0°-90°	2521.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2521.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1745	1745	1745	1745	1745	
5°	1697	1721	1766	1732	1697	158
15°	1468	1563	1721	1568	1468	412
25°	1204	1284	1442	1291	1212	547
35°	785	833	640	841	804	505
45°	627	554	121	561	643	479
55°	424	377	34	382	427	381
65°	253	234	16	237	261	249
75°	84	69	5	69	84	96
85°	10	5	0	5	8	13
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°	1744.7	1744.7	1744.7	1744.7	1744.7	1744.7	1744.7	1744.7	1744.7	1744.7	1744.7
2.5°	1728.9	1715.7	1726.2	1715.7	1718.4	1728.9	1731.5	1736.8	1739.4	1731.5	1731.5
5°	1697.3	1684.1	1697.3	1686.7	1692.0	1705.2	1707.8	1718.4	1723.7	1721.0	1726.2
7.5°	1639.3	1628.7	1641.9	1634.0	1641.9	1660.4	1668.2	1681.5	1692.0	1697.3	1705.2
10°	1576.0	1565.5	1578.7	1570.7	1584.0	1605.1	1612.9	1628.7	1644.6	1657.7	1670.9
12.5°	1520.7	1510.1	1518.0	1515.4	1528.5	1547.1	1560.2	1578.7	1597.1	1610.3	1628.7
15°	1468.0	1457.4	1468.0	1462.7	1473.2	1494.3	1507.5	1526.0	1547.1	1562.9	1584.0
17.5°	1407.4	1396.8	1404.7	1402.1	1412.6	1431.0	1444.3	1462.7	1483.8	1502.3	1523.3
20°	1344.1	1333.5	1341.5	1336.2	1346.8	1367.9	1378.4	1399.4	1417.9	1436.3	1454.8
22.5°	1278.2	1267.7	1278.2	1270.3	1286.1	1299.3	1309.9	1331.0	1346.8	1365.2	1381.0
25°	1204.4	1193.8	1201.8	1196.5	1207.1	1222.9	1230.8	1251.9	1265.1	1283.5	1299.3
27.5°	1112.2	1099.0	1114.8	1104.3	1117.4	1130.7	1138.5	1157.0	1172.8	1188.6	1201.8
30°	1001.5	991.0	1006.8	998.8	1014.7	1025.2	1035.7	1054.2	1067.4	1085.8	1088.5
32.5°	885.5	880.2	893.5	888.2	904.0	914.6	922.4	940.8	951.4	961.9	954.1
35°	785.4	780.1	793.3	790.7	803.8	811.7	819.6	830.2	830.2	832.8	811.7
37.5°	724.7	722.1	732.7	730.0	740.5	748.5	748.5	751.1	745.8	732.7	701.0
40°	693.1	690.5	698.4	695.8	703.6	706.3	703.6	698.4	682.6	656.3	614.1
42.5°	666.8	661.5	666.8	664.1	669.4	672.1	664.1	656.3	635.2	603.5	553.5
45°	627.2	621.9	629.9	624.6	629.9	629.9	621.9	611.4	587.7	553.5	500.8
47.5°	579.8	574.6	582.4	577.2	582.4	582.4	574.6	564.0	540.3	506.0	453.3
50°	527.1	521.9	527.1	524.4	529.7	532.4	521.9	513.9	492.8	461.2	408.5
52.5°	474.4	469.1	474.4	474.4	477.0	477.0	469.1	463.8	445.4	416.4	368.9
55°	424.3	419.1	426.9	424.3	426.9	426.9	419.1	413.8	400.6	376.9	332.1
57.5°	376.9	374.2	379.5	376.9	376.9	376.9	371.6	368.9	358.4	337.4	300.5
60°	334.7	329.4	332.1	332.1	332.1	334.7	329.4	326.8	318.9	303.1	268.8
62.5°	292.5	289.9	292.5	289.9	289.9	292.5	289.9	287.2	282.0	268.8	239.8
65°	253.0	247.7	253.0	250.3	250.3	250.3	247.7	247.7	242.5	234.5	208.2
67.5°	210.8	208.2	210.8	208.2	205.6	205.6	203.0	203.0	200.3	195.0	171.3
70°	168.6	163.4	166.1	160.8	163.4	158.1	158.1	155.5	152.8	150.2	131.7
72.5°	123.9	121.2	121.2	116.0	116.0	113.3	110.7	110.7	108.1	108.1	94.9
75°	84.4	84.4	81.7	76.4	79.1	73.8	73.8	73.8	71.1	68.6	60.6
77.5°	55.3	52.7	52.7	50.0	50.0	44.8	47.5	44.8	44.8	42.2	36.9
80°	31.6	31.6	31.6	29.0	29.0	26.4	26.4	26.4	23.7	23.7	21.1
82.5°	18.4	18.4	18.4	15.8	15.8	15.8	15.8	13.1	13.1	13.1	10.5
85°	10.5	7.9	7.9	7.9	7.9	7.9	7.9	5.3	5.3	5.3	5.3
87.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	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°	1744.7	1744.7	1744.7	1744.7	1744.7	1744.7	1744.7	1744.7	1744.7	1744.7	1744.7
2.5°	1742.1	1739.4	1736.8	1747.3	1749.9	1742.1	1742.1	1749.9	1755.2	1742.1	1739.4
5°	1739.4	1742.1	1742.1	1755.2	1763.2	1757.9	1757.9	1765.7	1771.0	1755.2	1749.9
7.5°	1726.2	1734.2	1739.4	1757.9	1771.0	1768.4	1771.0	1779.0	1781.6	1765.7	1757.9
10°	1697.3	1707.8	1718.4	1742.1	1757.9	1760.5	1763.2	1771.0	1776.3	1755.2	1744.7
12.5°	1657.7	1673.5	1689.3	1715.7	1734.2	1736.8	1744.7	1749.9	1752.6	1734.2	1721.0
15°	1612.9	1634.0	1649.8	1678.8	1699.9	1705.2	1713.1	1721.0	1721.0	1699.9	1686.7
17.5°	1557.6	1576.0	1597.1	1626.1	1649.8	1655.1	1665.7	1673.5	1673.5	1652.4	1634.0
20°	1489.0	1510.1	1528.5	1560.2	1586.6	1594.5	1605.1	1612.9	1612.9	1594.5	1570.7
22.5°	1417.9	1439.0	1457.4	1486.5	1512.7	1520.7	1528.5	1539.1	1536.5	1520.7	1499.6
25°	1333.5	1352.0	1365.2	1394.2	1415.2	1423.2	1433.7	1441.6	1439.0	1423.2	1404.7
27.5°	1230.8	1244.0	1246.6	1265.1	1283.5	1291.4	1299.3	1307.2	1304.6	1291.4	1275.6
30°	1112.2	1109.6	1096.3	1096.3	1104.3	1109.6	1114.8	1120.1	1117.4	1109.6	1099.0
32.5°	961.9	943.5	909.3	890.8	882.9	882.9	882.9	888.2	885.5	882.9	882.9
35°	801.2	761.6	708.9	669.4	648.3	640.5	635.2	640.5	637.8	640.5	651.0
37.5°	669.4	611.4	540.3	487.5	453.3	437.5	426.9	429.6	429.6	437.5	456.0
40°	571.9	498.1	419.1	353.1	313.6	292.5	279.4	279.4	282.0	292.5	316.3
42.5°	498.1	416.4	329.4	266.2	218.8	197.7	184.5	181.9	184.5	197.7	221.4
45°	440.2	353.1	266.2	197.7	158.1	134.4	123.9	121.2	123.9	137.0	158.1
47.5°	390.0	303.1	221.4	152.8	113.3	94.9	84.4	81.7	87.0	97.5	116.0
50°	347.9	263.6	181.9	121.2	87.0	68.6	60.6	58.0	60.6	71.1	87.0
52.5°	308.3	229.3	152.8	94.9	65.9	52.7	44.8	42.2	44.8	52.7	68.6
55°	276.7	203.0	131.7	79.1	52.7	42.2	36.9	34.2	36.9	42.2	55.3
57.5°	247.7	179.2	113.3	65.9	44.8	34.2	29.0	29.0	29.0	34.2	44.8
60°	221.4	158.1	97.5	55.3	36.9	29.0	23.7	23.7	23.7	29.0	36.9
62.5°	197.7	139.7	84.4	47.5	31.6	23.7	21.1	21.1	21.1	23.7	31.6
65°	168.6	118.6	71.1	39.5	26.4	21.1	18.4	15.8	18.4	21.1	26.4
67.5°	139.7	97.5	58.0	31.6	21.1	15.8	13.1	13.1	13.1	15.8	21.1
70°	108.1	76.4	44.8	23.7	15.8	13.1	10.5	10.5	10.5	13.1	15.8
72.5°	73.8	52.7	31.6	18.4	13.1	10.5	7.9	7.9	7.9	10.5	13.1
75°	47.5	34.2	21.1	13.1	7.9	7.9	5.3	5.3	5.3	7.9	7.9
77.5°	29.0	21.1	13.1	7.9	5.3	5.3	5.3	5.3	5.3	5.3	5.3
80°	15.8	13.1	7.9	5.3	5.3	2.6	2.6	2.6	2.6	2.6	2.6
82.5°	7.9	7.9	5.3	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
85°	2.6	2.6	2.6	2.6	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°	1744.7	1744.7	1744.7	1744.7	1744.7	1744.7	1744.7	1744.7	1744.7	1744.7	1744.7
2.5°	1739.4	1744.7	1747.3	1736.8	1739.4	1742.1	1726.2	1728.9	1721.0	1736.8	1728.9
5°	1747.3	1749.9	1752.6	1736.8	1734.2	1731.5	1713.1	1710.4	1699.9	1713.1	1705.2
7.5°	1749.9	1744.7	1744.7	1721.0	1713.1	1705.2	1681.5	1673.5	1660.4	1665.7	1655.1
10°	1736.8	1726.2	1718.4	1689.3	1676.2	1663.0	1634.0	1623.5	1605.1	1607.6	1594.5
12.5°	1707.8	1694.6	1681.5	1649.8	1634.0	1615.6	1586.6	1570.7	1552.3	1552.3	1536.5
15°	1670.9	1655.1	1639.3	1607.6	1586.6	1568.1	1533.8	1518.0	1499.6	1497.0	1483.8
17.5°	1618.2	1599.8	1584.0	1547.1	1526.0	1504.9	1473.2	1454.8	1436.3	1436.3	1420.5
20°	1554.9	1533.8	1515.4	1481.2	1460.1	1441.6	1404.7	1388.9	1373.1	1370.5	1357.3
22.5°	1481.2	1460.1	1444.3	1412.6	1388.9	1370.5	1338.8	1325.7	1309.9	1307.2	1291.4
25°	1388.9	1370.5	1354.6	1328.3	1307.2	1291.4	1262.4	1246.6	1236.0	1236.0	1222.9
27.5°	1265.1	1249.3	1246.6	1225.5	1209.7	1199.1	1175.4	1164.9	1151.7	1151.7	1135.9
30°	1099.0	1101.6	1112.2	1106.9	1101.6	1096.3	1075.2	1072.7	1056.8	1054.2	1035.7
32.5°	896.1	914.6	943.5	959.3	967.2	972.5	967.2	961.9	948.8	946.1	925.1
35°	680.0	716.9	764.3	796.0	822.2	840.7	848.6	848.6	843.3	840.7	822.2
37.5°	492.8	548.2	611.4	664.1	706.3	740.5	756.4	766.9	766.9	766.9	759.1
40°	361.1	426.9	500.8	569.3	621.9	666.8	690.5	708.9	714.2	722.1	716.9
42.5°	268.8	340.0	419.1	498.1	558.8	608.8	640.5	661.5	674.7	682.6	682.6
45°	205.6	276.7	358.4	442.8	506.0	561.4	593.0	616.7	629.9	640.5	640.5
47.5°	158.1	226.7	308.3	392.7	458.6	513.9	545.5	566.6	579.8	590.3	590.3
50°	123.9	187.2	266.2	347.9	413.8	466.5	495.5	516.6	527.1	535.0	537.7
52.5°	100.2	158.1	234.5	313.6	374.2	421.7	445.4	463.8	474.4	479.7	482.3
55°	81.7	137.0	208.2	279.4	337.4	382.2	403.3	416.4	424.3	429.6	429.6
57.5°	68.6	118.6	184.5	253.0	308.3	342.6	361.1	371.6	376.9	382.2	382.2
60°	58.0	102.8	163.4	226.7	276.7	308.3	321.6	329.4	334.7	337.4	337.4
62.5°	50.0	87.0	142.3	200.3	245.1	274.1	284.7	289.9	292.5	292.5	295.2
65°	42.2	73.8	121.2	173.9	210.8	237.2	245.1	247.7	247.7	250.3	253.0
67.5°	31.6	58.0	97.5	142.3	173.9	195.0	203.0	203.0	203.0	203.0	205.6
70°	26.4	44.8	73.8	108.1	134.4	150.2	155.5	155.5	155.5	155.5	158.1
72.5°	18.4	31.6	52.7	76.4	97.5	108.1	108.1	110.7	108.1	108.1	113.3
75°	13.1	21.1	34.2	50.0	60.6	68.6	71.1	71.1	71.1	71.1	73.8
77.5°	7.9	13.1	21.1	29.0	39.5	42.2	44.8	44.8	44.8	44.8	47.5
80°	5.3	7.9	13.1	18.4	21.1	23.7	26.4	26.4	26.4	26.4	26.4
82.5°	2.6	5.3	7.9	7.9	10.5	13.1	13.1	13.1	13.1	13.1	15.8
85°	0.0	2.6	2.6	5.3	5.3	5.3	5.3	5.3	5.3	5.3	7.9
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: P135973

CATALOG NUMBER: LD6A30D010TE ERM6A30930 6LM121H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1744.7	1744.7	1744.7	1744.7
2.5°	1713.1	1731.5	1718.4	1731.5
5°	1686.7	1702.6	1686.7	1697.3
7.5°	1634.0	1647.1	1631.3	1647.1
10°	1570.7	1584.0	1568.1	1581.3
12.5°	1512.7	1523.3	1507.5	1523.3
15°	1460.1	1470.6	1454.8	1468.0
17.5°	1399.4	1407.4	1394.2	1407.4
20°	1336.2	1344.1	1333.5	1346.8
22.5°	1272.9	1283.5	1270.3	1283.5
25°	1201.8	1209.7	1196.5	1212.4
27.5°	1117.4	1122.7	1109.6	1117.4
30°	1014.7	1017.3	1006.8	1022.6
32.5°	906.6	906.6	890.8	906.6
35°	806.5	803.8	793.3	803.8
37.5°	743.2	743.2	735.3	740.5
40°	706.3	708.9	698.4	708.9
42.5°	674.7	680.0	672.1	680.0
45°	635.2	640.5	632.5	643.0
47.5°	585.1	590.3	585.1	593.0
50°	529.7	535.0	529.7	537.7
52.5°	474.4	479.7	474.4	479.7
55°	424.3	426.9	421.7	426.9
57.5°	376.9	379.5	374.2	379.5
60°	332.1	337.4	332.1	337.4
62.5°	292.5	295.2	295.2	297.8
65°	250.3	260.9	258.3	260.9
67.5°	208.2	216.1	216.1	218.8
70°	160.8	166.1	171.3	173.9
72.5°	113.3	121.2	123.9	126.5
75°	73.8	81.7	81.7	84.4
77.5°	47.5	52.7	52.7	52.7
80°	29.0	31.6	29.0	31.6
82.5°	15.8	15.8	15.8	18.4
85°	7.9	7.9	7.9	7.9
87.5°	2.6	2.6	2.6	2.6
90°	0.0	0.0	0.0	0.0



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













(END OF REPORT)