

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: P135968

Luminaire Tested: **LD6A30D010TE ERM6A30827 6LM121H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P135968
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 ERM6A30827 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 2700K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2638.0 lumens
Efficiency: N/A
Efficacy: 58.1 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

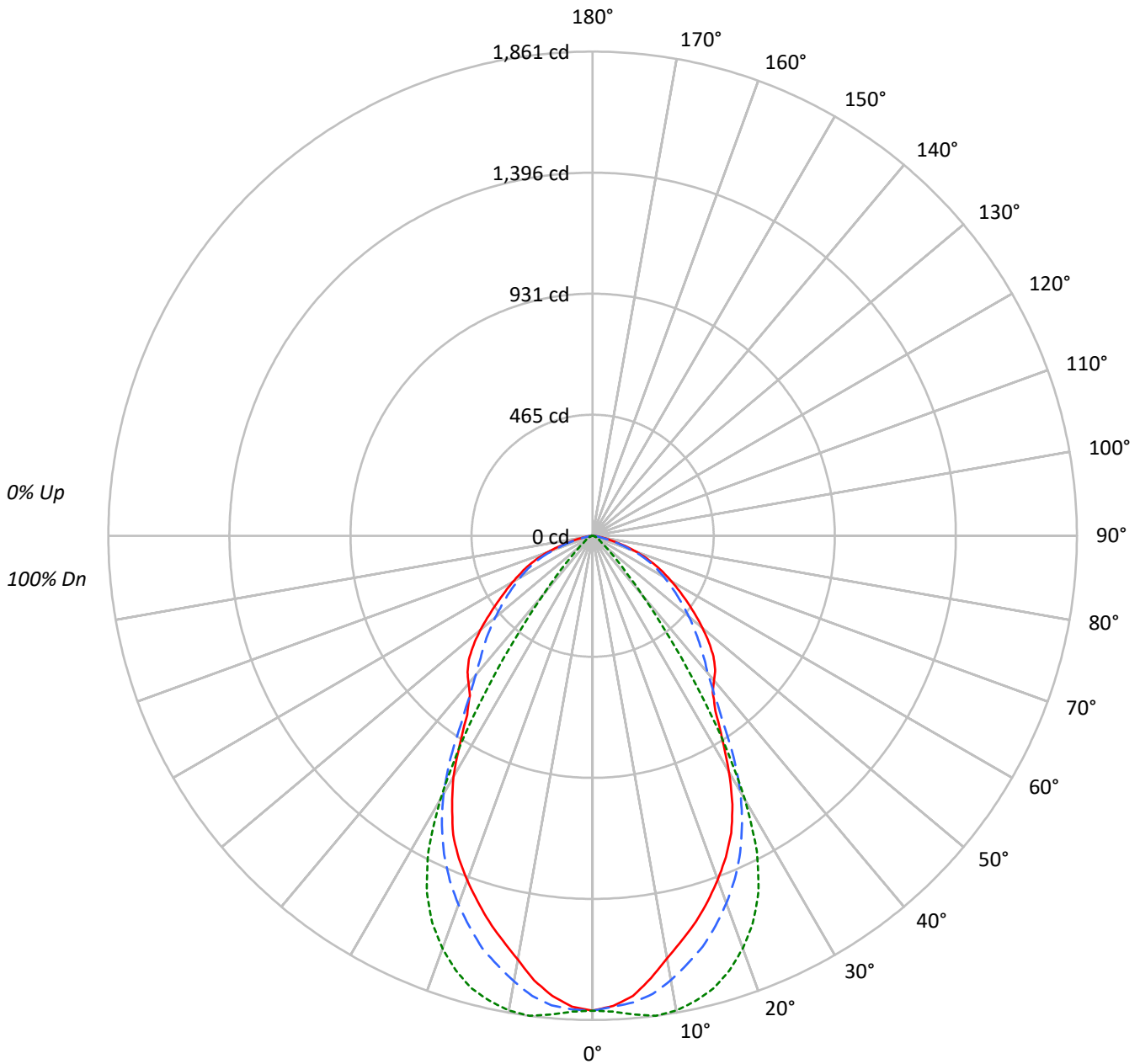
Input Watts (W): 45.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				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				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°	119077	119077	119077
5°	116277	120973	116277
10°	109222	122736	109586
15°	103724	121596	103724
20°	97622	117145	97810
25°	90701	108561	91291
30°	78927	88268	80584
35°	65436	53362	66973
40°	61754	24885	63159
45°	60544	11699	62066
50°	55965	6161	57082
55°	50491	4072	50798
60°	45681	3236	46047
65°	40862	2547	42128
70°	33668	2098	34717
75°	22233	1386	22233
80°	12436	1052	12436
85°	8234	0	6213



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.3	6.5
10°-20°	461.9	17.5
20°-30°	617.4	23.4
30°-40°	510.5	19.4
40°-50°	366.3	13.9
50°-60°	269.2	10.2
60°-70°	173.8	6.6
70°-80°	61.6	2.3
80°-90°	7.1	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°	1249.5	47.4
0°-40°	1759.9	66.7
0°-60°	2395.5	90.8
0°-90°	2638.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2638.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1825	1825	1825	1825	1825	
5°	1776	1800	1847	1811	1776	165
15°	1536	1635	1800	1640	1536	431
25°	1260	1343	1508	1351	1268	572
35°	822	871	670	880	841	529
45°	656	579	127	587	673	501
55°	444	394	36	400	447	399
65°	265	245	16	248	273	261
75°	88	72	6	72	88	100
85°	11	6	0	6	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°	1825.2	1825.2	1825.2	1825.2	1825.2	1825.2	1825.2	1825.2	1825.2	1825.2	1825.2
2.5°	1808.6	1794.8	1805.9	1794.8	1797.6	1808.6	1811.4	1816.9	1819.6	1811.4	1811.4
5°	1775.5	1761.7	1775.5	1764.5	1770.0	1783.8	1786.6	1797.6	1803.1	1800.3	1805.9
7.5°	1714.9	1703.9	1717.6	1709.4	1717.6	1736.9	1745.2	1759.0	1770.0	1775.5	1783.8
10°	1648.7	1637.7	1651.5	1643.2	1657.0	1679.0	1687.3	1703.9	1720.4	1734.2	1748.0
12.5°	1590.8	1579.8	1588.1	1585.3	1599.1	1618.4	1632.2	1651.5	1670.8	1684.6	1703.9
15°	1535.7	1524.6	1535.7	1530.2	1541.2	1563.2	1577.0	1596.3	1618.4	1634.9	1657.0
17.5°	1472.3	1461.2	1469.5	1466.7	1477.8	1497.1	1510.9	1530.2	1552.2	1571.5	1593.6
20°	1406.1	1395.1	1403.3	1397.8	1408.8	1430.9	1441.9	1464.0	1483.3	1502.6	1521.9
22.5°	1337.2	1326.1	1337.2	1328.9	1345.4	1359.2	1370.2	1392.3	1408.8	1428.1	1444.7
25°	1260.0	1248.9	1257.2	1251.7	1262.7	1279.3	1287.5	1309.6	1323.4	1342.7	1359.2
27.5°	1163.5	1149.7	1166.2	1155.2	1169.0	1182.8	1191.0	1210.3	1226.9	1243.4	1257.2
30°	1047.7	1036.6	1053.2	1044.9	1061.5	1072.5	1083.5	1102.8	1116.6	1135.9	1138.7
32.5°	926.4	920.9	934.6	929.1	945.7	956.7	965.0	984.3	995.3	1006.3	998.0
35°	821.6	816.1	829.9	827.1	840.9	849.2	857.4	868.5	868.5	871.2	849.2
37.5°	758.2	755.4	766.5	763.7	774.7	783.0	783.0	785.8	780.2	766.5	733.4
40°	725.1	722.3	730.6	727.9	736.1	738.9	736.1	730.6	714.1	686.5	642.4
42.5°	697.5	692.0	697.5	694.8	700.3	703.0	694.8	686.5	664.4	631.4	579.0
45°	656.2	650.7	658.9	653.4	658.9	658.9	650.7	639.6	614.8	579.0	523.8
47.5°	606.5	601.0	609.3	603.8	609.3	609.3	601.0	590.0	565.2	529.4	474.2
50°	551.4	545.9	551.4	548.7	554.2	556.9	545.9	537.6	515.6	482.5	427.3
52.5°	496.3	490.8	496.3	496.3	499.0	499.0	490.8	485.2	465.9	435.6	386.0
55°	443.9	438.4	446.6	443.9	446.6	446.6	438.4	432.9	419.1	394.3	347.4
57.5°	394.3	391.5	397.0	394.3	394.3	394.3	388.7	386.0	375.0	352.9	314.3
60°	350.1	344.6	347.4	347.4	347.4	350.1	344.6	341.9	333.6	317.1	281.2
62.5°	306.0	303.3	306.0	303.3	303.3	306.0	303.3	300.5	295.0	281.2	250.9
65°	264.7	259.2	264.7	261.9	261.9	261.9	259.2	259.2	253.6	245.4	217.8
67.5°	220.6	217.8	220.6	217.8	215.0	215.0	212.3	212.3	209.5	204.0	179.2
70°	176.5	170.9	173.7	168.2	170.9	165.4	165.4	162.7	159.9	157.2	137.9
72.5°	129.6	126.8	126.8	121.3	121.3	118.6	115.8	115.8	113.0	113.0	99.3
75°	88.2	88.2	85.5	80.0	82.7	77.2	77.2	77.2	74.4	71.7	63.4
77.5°	57.9	55.1	55.1	52.4	52.4	46.9	49.6	46.9	46.9	44.1	38.6
80°	33.1	33.1	33.1	30.3	30.3	27.6	27.6	27.6	24.8	24.8	22.1
82.5°	19.3	19.3	19.3	16.5	16.5	16.5	16.5	13.8	13.8	13.8	11.0
85°	11.0	8.3	8.3	8.3	8.3	8.3	8.3	5.5	5.5	5.5	5.5
87.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	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°	1825.2	1825.2	1825.2	1825.2	1825.2	1825.2	1825.2	1825.2	1825.2	1825.2	1825.2
2.5°	1822.4	1819.6	1816.9	1827.9	1830.7	1822.4	1822.4	1830.7	1836.2	1822.4	1819.6
5°	1819.6	1822.4	1822.4	1836.2	1844.5	1838.9	1838.9	1847.2	1852.7	1836.2	1830.7
7.5°	1805.9	1814.1	1819.6	1838.9	1852.7	1850.0	1852.7	1861.0	1863.8	1847.2	1838.9
10°	1775.5	1786.6	1797.6	1822.4	1838.9	1841.7	1844.5	1852.7	1858.2	1836.2	1825.2
12.5°	1734.2	1750.7	1767.3	1794.8	1814.1	1816.9	1825.2	1830.7	1833.4	1814.1	1800.3
15°	1687.3	1709.4	1725.9	1756.2	1778.3	1783.8	1792.1	1800.3	1800.3	1778.3	1764.5
17.5°	1629.4	1648.7	1670.8	1701.1	1725.9	1731.4	1742.5	1750.7	1750.7	1728.7	1709.4
20°	1557.7	1579.8	1599.1	1632.2	1659.7	1668.0	1679.0	1687.3	1687.3	1668.0	1643.2
22.5°	1483.3	1505.3	1524.6	1555.0	1582.5	1590.8	1599.1	1610.1	1607.4	1590.8	1568.8
25°	1395.1	1414.4	1428.1	1458.5	1480.5	1488.8	1499.8	1508.1	1505.3	1488.8	1469.5
27.5°	1287.5	1301.3	1304.1	1323.4	1342.7	1351.0	1359.2	1367.5	1364.7	1351.0	1334.4
30°	1163.5	1160.7	1146.9	1146.9	1155.2	1160.7	1166.2	1171.7	1169.0	1160.7	1149.7
32.5°	1006.3	987.0	951.2	931.9	923.6	923.6	923.6	929.1	926.4	923.6	923.6
35°	838.1	796.8	741.6	700.3	678.2	670.0	664.4	670.0	667.2	670.0	681.0
37.5°	700.3	639.6	565.2	510.1	474.2	457.7	446.6	449.4	449.4	457.7	477.0
40°	598.3	521.1	438.4	369.4	328.1	306.0	292.2	292.2	295.0	306.0	330.8
42.5°	521.1	435.6	344.6	278.5	228.8	206.8	193.0	190.2	193.0	206.8	231.6
45°	460.4	369.4	278.5	206.8	165.4	140.6	129.6	126.8	129.6	143.4	165.4
47.5°	408.0	317.1	231.6	159.9	118.6	99.3	88.2	85.5	91.0	102.0	121.3
50°	363.9	275.7	190.2	126.8	91.0	71.7	63.4	60.7	63.4	74.4	91.0
52.5°	322.6	239.9	159.9	99.3	68.9	55.1	46.9	44.1	46.9	55.1	71.7
55°	289.5	212.3	137.9	82.7	55.1	44.1	38.6	35.8	38.6	44.1	57.9
57.5°	259.2	187.5	118.6	68.9	46.9	35.8	30.3	30.3	30.3	35.8	46.9
60°	231.6	165.4	102.0	57.9	38.6	30.3	24.8	24.8	24.8	30.3	38.6
62.5°	206.8	146.1	88.2	49.6	33.1	24.8	22.1	22.1	22.1	24.8	33.1
65°	176.5	124.1	74.4	41.4	27.6	22.1	19.3	16.5	19.3	22.1	27.6
67.5°	146.1	102.0	60.7	33.1	22.1	16.5	13.8	13.8	13.8	16.5	22.1
70°	113.0	80.0	46.9	24.8	16.5	13.8	11.0	11.0	11.0	13.8	16.5
72.5°	77.2	55.1	33.1	19.3	13.8	11.0	8.3	8.3	8.3	11.0	13.8
75°	49.6	35.8	22.1	13.8	8.3	8.3	5.5	5.5	5.5	8.3	8.3
77.5°	30.3	22.1	13.8	8.3	5.5	5.5	5.5	5.5	5.5	5.5	5.5
80°	16.5	13.8	8.3	5.5	5.5	2.8	2.8	2.8	2.8	2.8	2.8
82.5°	8.3	8.3	5.5	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
85°	2.8	2.8	2.8	2.8	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°	1825.2	1825.2	1825.2	1825.2	1825.2	1825.2	1825.2	1825.2	1825.2	1825.2	1825.2
2.5°	1819.6	1825.2	1827.9	1816.9	1819.6	1822.4	1805.9	1808.6	1800.3	1816.9	1808.6
5°	1827.9	1830.7	1833.4	1816.9	1814.1	1811.4	1792.1	1789.3	1778.3	1792.1	1783.8
7.5°	1830.7	1825.2	1825.2	1800.3	1792.1	1783.8	1759.0	1750.7	1736.9	1742.5	1731.4
10°	1816.9	1805.9	1797.6	1767.3	1753.5	1739.7	1709.4	1698.3	1679.0	1681.8	1668.0
12.5°	1786.6	1772.8	1759.0	1725.9	1709.4	1690.1	1659.7	1643.2	1623.9	1623.9	1607.4
15°	1748.0	1731.4	1714.9	1681.8	1659.7	1640.4	1604.6	1588.1	1568.8	1566.0	1552.2
17.5°	1692.8	1673.5	1657.0	1618.4	1596.3	1574.3	1541.2	1521.9	1502.6	1502.6	1486.0
20°	1626.7	1604.6	1585.3	1549.5	1527.4	1508.1	1469.5	1453.0	1436.4	1433.7	1419.9
22.5°	1549.5	1527.4	1510.9	1477.8	1453.0	1433.7	1400.6	1386.8	1370.2	1367.5	1351.0
25°	1453.0	1433.7	1417.1	1389.5	1367.5	1351.0	1320.6	1304.1	1293.1	1293.1	1279.3
27.5°	1323.4	1306.8	1304.1	1282.0	1265.5	1254.5	1229.6	1218.6	1204.8	1204.8	1188.3
30°	1149.7	1152.4	1163.5	1158.0	1152.4	1146.9	1124.9	1122.1	1105.6	1102.8	1083.5
32.5°	937.4	956.7	987.0	1003.6	1011.8	1017.3	1011.8	1006.3	992.5	989.8	967.7
35°	711.3	749.9	799.5	832.6	860.2	879.5	887.8	887.8	882.3	879.5	860.2
37.5°	515.6	573.5	639.6	694.8	738.9	774.7	791.3	802.3	802.3	802.3	794.0
40°	377.7	446.6	523.8	595.5	650.7	697.5	722.3	741.6	747.2	755.4	749.9
42.5°	281.2	355.7	438.4	521.1	584.5	636.9	670.0	692.0	705.8	714.1	714.1
45°	215.0	289.5	375.0	463.2	529.4	587.2	620.3	645.1	658.9	670.0	670.0
47.5°	165.4	237.1	322.6	410.8	479.7	537.6	570.7	592.8	606.5	617.6	617.6
50°	129.6	195.7	278.5	363.9	432.9	488.0	518.3	540.4	551.4	559.7	562.4
52.5°	104.8	165.4	245.4	328.1	391.5	441.1	465.9	485.2	496.3	501.8	504.5
55°	85.5	143.4	217.8	292.2	352.9	399.8	421.8	435.6	443.9	449.4	449.4
57.5°	71.7	124.1	193.0	264.7	322.6	358.4	377.7	388.7	394.3	399.8	399.8
60°	60.7	107.5	170.9	237.1	289.5	322.6	336.4	344.6	350.1	352.9	352.9
62.5°	52.4	91.0	148.9	209.5	256.4	286.7	297.8	303.3	306.0	306.0	308.8
65°	44.1	77.2	126.8	182.0	220.6	248.1	256.4	259.2	259.2	261.9	264.7
67.5°	33.1	60.7	102.0	148.9	182.0	204.0	212.3	212.3	212.3	212.3	215.0
70°	27.6	46.9	77.2	113.0	140.6	157.2	162.7	162.7	162.7	162.7	165.4
72.5°	19.3	33.1	55.1	80.0	102.0	113.0	113.0	115.8	113.0	113.0	118.6
75°	13.8	22.1	35.8	52.4	63.4	71.7	74.4	74.4	74.4	74.4	77.2
77.5°	8.3	13.8	22.1	30.3	41.4	44.1	46.9	46.9	46.9	46.9	49.6
80°	5.5	8.3	13.8	19.3	22.1	24.8	27.6	27.6	27.6	27.6	27.6
82.5°	2.8	5.5	8.3	8.3	11.0	13.8	13.8	13.8	13.8	13.8	16.5
85°	0.0	2.8	2.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	8.3
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: P135968

CATALOG NUMBER: LD6A30D010TE ERM6A30827 6LM121H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1825.2	1825.2	1825.2	1825.2
2.5°	1792.1	1811.4	1797.6	1811.4
5°	1764.5	1781.0	1764.5	1775.5
7.5°	1709.4	1723.2	1706.6	1723.2
10°	1643.2	1657.0	1640.4	1654.2
12.5°	1582.5	1593.6	1577.0	1593.6
15°	1527.4	1538.4	1521.9	1535.7
17.5°	1464.0	1472.3	1458.5	1472.3
20°	1397.8	1406.1	1395.1	1408.8
22.5°	1331.7	1342.7	1328.9	1342.7
25°	1257.2	1265.5	1251.7	1268.2
27.5°	1169.0	1174.5	1160.7	1169.0
30°	1061.5	1064.2	1053.2	1069.7
32.5°	948.4	948.4	931.9	948.4
35°	843.7	840.9	829.9	840.9
37.5°	777.5	777.5	769.2	774.7
40°	738.9	741.6	730.6	741.6
42.5°	705.8	711.3	703.0	711.3
45°	664.4	670.0	661.7	672.7
47.5°	612.1	617.6	612.1	620.3
50°	554.2	559.7	554.2	562.4
52.5°	496.3	501.8	496.3	501.8
55°	443.9	446.6	441.1	446.6
57.5°	394.3	397.0	391.5	397.0
60°	347.4	352.9	347.4	352.9
62.5°	306.0	308.8	308.8	311.5
65°	261.9	272.9	270.2	272.9
67.5°	217.8	226.1	226.1	228.8
70°	168.2	173.7	179.2	182.0
72.5°	118.6	126.8	129.6	132.3
75°	77.2	85.5	85.5	88.2
77.5°	49.6	55.1	55.1	55.1
80°	30.3	33.1	30.3	33.1
82.5°	16.5	16.5	16.5	19.3
85°	8.3	8.3	8.3	8.3
87.5°	2.8	2.8	2.8	2.8
90°	0.0	0.0	0.0	0.0



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













(END OF REPORT)