

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: P136454

Luminaire Tested: **LD6A30D010TE ERW6A30935 6LW111H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136454
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 ERW6A30935 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: 2603.9 lumens
Efficiency: N/A
Efficacy: 57.4 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

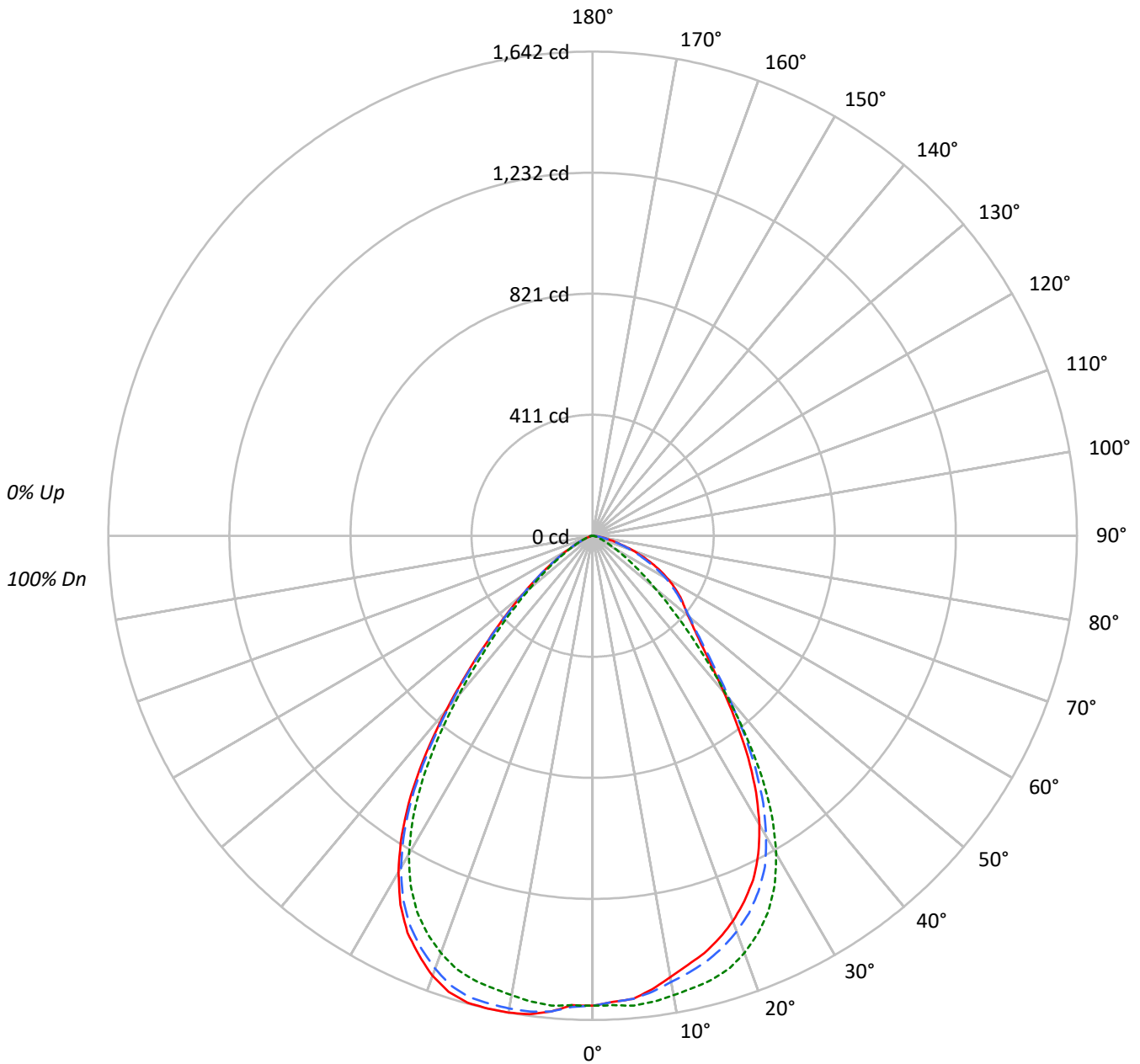
Input Watts (W): 45.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	103967	103967	103967
5°	103238	104738	106048
10°	100649	104809	108784
15°	98949	105318	110722
20°	96560	104489	110244
25°	92717	101348	106898
30°	85195	93798	99176
35°	73241	79835	85522
40°	58858	60076	65671
45°	47959	41630	46114
50°	42892	27830	31586
55°	41255	18199	20792
60°	38753	11561	13048
65°	34394	7039	7503
70°	27773	4349	4349
75°	19435	2874	2874
80°	12849	2179	2179
85°	6438	2096	2096



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.7	5.8
10°-20°	437.4	16.8
20°-30°	637.0	24.5
30°-40°	617.9	23.7
40°-50°	390.6	15.0
50°-60°	217.5	8.4
60°-70°	107.7	4.1
70°-80°	38.0	1.5
80°-90°	6.0	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°	1226.2	47.1
0°-40°	1844.2	70.8
0°-60°	2452.2	94.2
0°-90°	2603.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2603.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1594	1594	1594	1594	1594	
5°	1576	1576	1599	1619	1619	148
15°	1465	1494	1559	1619	1639	412
25°	1288	1331	1408	1462	1485	588
35°	920	962	1002	1057	1074	570
45°	520	534	451	494	500	411
55°	363	354	160	183	183	323
65°	223	206	46	49	49	219
75°	77	71	11	11	11	86
85°	9	9	3	3	3	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°	1593.6	1593.6	1593.6	1593.6	1593.6	1593.6	1593.6	1593.6	1593.6	1593.6	1593.6
2.5°	1582.1	1567.9	1573.6	1570.7	1573.6	1570.7	1579.3	1570.7	1576.4	1582.1	1570.7
5°	1576.4	1562.1	1565.0	1565.0	1565.0	1565.0	1573.6	1565.0	1570.7	1576.4	1567.9
7.5°	1550.7	1539.3	1542.1	1542.1	1542.1	1542.1	1550.7	1545.0	1550.7	1559.3	1550.7
10°	1519.3	1507.9	1513.6	1513.6	1513.6	1513.6	1525.0	1519.3	1525.0	1536.4	1527.9
12.5°	1490.7	1482.2	1487.9	1487.9	1487.9	1490.7	1499.3	1496.5	1502.2	1516.5	1507.9
15°	1465.0	1456.5	1462.2	1462.2	1462.2	1465.0	1473.6	1476.5	1482.2	1493.6	1487.9
17.5°	1430.8	1422.2	1430.8	1430.8	1427.9	1433.6	1445.1	1445.1	1450.8	1465.0	1462.2
20°	1390.8	1382.2	1390.8	1390.8	1387.9	1393.6	1405.1	1407.9	1413.6	1427.9	1425.1
22.5°	1342.2	1339.4	1342.2	1348.0	1345.1	1348.0	1359.4	1362.2	1367.9	1385.1	1382.2
25°	1288.0	1285.1	1290.8	1293.7	1290.8	1293.7	1305.1	1308.0	1313.7	1330.8	1330.8
27.5°	1216.6	1213.7	1222.3	1222.3	1222.3	1228.0	1236.6	1242.3	1245.1	1265.1	1262.3
30°	1130.9	1128.0	1133.8	1136.6	1136.6	1136.6	1148.0	1156.6	1159.5	1176.6	1176.6
32.5°	1031.0	1031.0	1033.8	1039.5	1036.7	1042.4	1051.0	1056.6	1062.4	1076.6	1076.6
35°	919.6	922.4	925.3	931.0	928.2	931.0	939.6	945.3	948.2	962.4	959.6
37.5°	802.5	805.4	808.2	811.0	811.0	813.9	822.5	825.4	828.2	839.6	833.9
40°	691.1	691.1	694.0	699.7	696.8	702.6	708.2	711.1	711.1	719.6	714.0
42.5°	594.0	596.8	599.7	602.6	602.6	605.4	611.2	614.0	614.0	616.8	608.3
45°	519.8	522.6	522.6	528.4	528.4	531.2	534.0	536.9	534.0	534.0	525.4
47.5°	465.5	468.4	471.2	474.0	474.0	477.0	479.8	479.8	477.0	474.0	462.6
50°	422.6	428.4	428.4	431.2	434.1	437.0	437.0	437.0	431.2	428.4	411.2
52.5°	391.2	394.1	397.0	399.8	399.8	402.6	405.6	402.6	397.0	388.4	371.2
55°	362.7	365.6	368.4	371.2	371.2	371.2	371.2	368.4	362.7	354.2	337.0
57.5°	331.2	334.2	337.0	339.8	339.8	339.8	339.8	337.0	331.2	319.8	299.8
60°	297.0	299.8	302.8	305.6	305.6	305.6	302.8	299.8	294.2	285.6	265.6
62.5°	259.8	262.8	265.6	265.6	265.6	262.8	262.8	259.8	254.2	245.6	225.6
65°	222.8	222.8	225.6	225.6	225.6	225.6	222.8	219.9	214.2	205.6	191.4
67.5°	182.8	185.6	185.6	185.6	185.6	185.6	182.8	182.8	177.0	168.5	157.0
70°	145.6	145.6	148.5	148.5	148.5	148.5	145.6	145.6	140.0	134.2	122.8
72.5°	108.6	108.6	108.6	111.4	111.4	111.4	108.6	108.6	105.6	100.0	91.4
75°	77.1	77.1	77.1	80.0	80.0	80.0	80.0	77.1	74.2	71.4	65.6
77.5°	51.4	54.2	51.4	51.4	51.4	54.2	51.4	51.4	51.4	48.6	42.8
80°	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	31.4	31.4	28.6
82.5°	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	17.2	17.2
85°	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
87.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
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°	1593.6	1593.6	1593.6	1593.6	1593.6	1593.6	1593.6	1593.6	1593.6	1593.6	1593.6
2.5°	1579.3	1585.0	1590.7	1585.0	1576.4	1593.6	1590.7	1593.6	1590.7	1585.0	1602.1
5°	1576.4	1582.1	1590.7	1585.0	1579.3	1596.4	1593.6	1599.3	1599.3	1593.6	1610.7
7.5°	1559.3	1565.0	1579.3	1573.6	1567.9	1585.0	1587.9	1593.6	1596.4	1590.7	1610.7
10°	1539.3	1545.0	1559.3	1556.4	1553.6	1573.6	1576.4	1582.1	1585.0	1582.1	1602.1
12.5°	1519.3	1527.9	1542.1	1539.3	1539.3	1559.3	1562.1	1570.7	1576.4	1573.6	1596.4
15°	1499.3	1510.7	1527.9	1525.0	1525.0	1547.9	1550.7	1559.3	1565.0	1565.0	1587.9
17.5°	1473.6	1485.0	1502.2	1499.3	1505.0	1522.2	1527.9	1539.3	1545.0	1542.1	1567.9
20°	1436.5	1450.8	1467.9	1465.0	1467.9	1490.7	1496.5	1505.0	1510.7	1510.7	1533.6
22.5°	1393.6	1407.9	1425.1	1422.2	1427.9	1445.1	1450.8	1462.2	1467.9	1465.0	1487.9
25°	1342.2	1356.5	1370.8	1370.8	1373.7	1393.6	1399.4	1407.9	1416.5	1413.6	1433.6
27.5°	1273.7	1288.0	1302.3	1299.4	1302.3	1322.3	1328.0	1336.5	1345.1	1342.2	1362.2
30°	1185.2	1199.4	1210.9	1208.0	1210.9	1230.9	1233.7	1245.1	1253.7	1253.7	1270.8
32.5°	1082.4	1096.6	1102.4	1096.6	1102.4	1116.6	1122.4	1133.8	1139.5	1142.3	1159.5
35°	965.3	973.8	976.7	971.0	971.0	985.2	991.0	1002.4	1008.1	1011.0	1025.2
37.5°	836.8	842.5	836.8	828.2	831.0	836.8	845.3	853.9	862.4	865.3	879.6
40°	711.1	708.2	699.7	685.4	682.6	691.1	696.8	705.4	711.1	716.8	725.4
42.5°	599.7	594.0	576.9	559.8	556.9	556.9	559.8	568.3	574.0	576.9	588.3
45°	511.2	499.8	474.0	454.0	442.6	445.5	445.5	451.2	454.0	459.8	468.4
47.5°	442.6	422.6	391.2	365.6	354.2	351.2	351.2	354.2	357.0	362.7	368.4
50°	388.4	362.7	325.6	297.0	282.8	277.0	277.0	274.2	279.8	282.8	288.4
52.5°	345.6	314.2	271.3	239.8	222.8	217.0	214.2	214.2	214.2	217.0	222.8
55°	305.6	271.3	225.6	194.2	174.2	168.5	162.8	160.0	162.8	165.6	168.5
57.5°	271.3	234.2	188.4	154.2	137.0	128.6	122.8	120.0	120.0	122.8	125.6
60°	237.0	199.9	154.2	122.8	105.6	97.1	91.4	88.6	88.6	91.4	91.4
62.5°	199.9	165.6	125.6	97.1	80.0	71.4	65.6	65.6	62.8	62.8	65.6
65°	168.5	137.0	102.8	77.1	60.0	54.2	48.6	45.6	45.6	42.8	45.6
67.5°	137.0	111.4	82.8	60.0	45.6	40.0	34.2	34.2	31.4	31.4	31.4
70°	108.6	88.6	65.6	45.6	37.2	28.6	25.7	22.8	22.8	22.8	22.8
72.5°	80.0	65.6	48.6	34.2	25.7	22.8	20.0	17.2	14.2	14.2	14.2
75°	57.2	45.6	34.2	25.7	20.0	17.2	14.2	11.4	11.4	11.4	11.4
77.5°	40.0	31.4	25.7	17.2	14.2	11.4	8.6	8.6	8.6	8.6	5.8
80°	25.7	20.0	17.2	11.4	8.6	8.6	5.8	5.8	5.8	5.8	5.8
82.5°	14.2	11.4	8.6	8.6	5.8	5.8	2.8	2.8	2.8	2.8	2.8
85°	5.8	5.8	5.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
87.5°	2.8	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°	1593.6	1593.6	1593.6	1593.6	1593.6	1593.6	1593.6	1593.6	1593.6	1593.6	1593.6
2.5°	1585.0	1596.4	1596.4	1602.1	1593.6	1599.3	1607.8	1605.0	1596.4	1599.3	1602.1
5°	1596.4	1607.8	1610.7	1619.3	1610.7	1619.3	1630.7	1627.8	1619.3	1625.0	1627.8
7.5°	1596.4	1610.7	1616.4	1625.0	1619.3	1627.8	1642.1	1639.3	1630.7	1636.4	1642.1
10°	1590.7	1605.0	1613.5	1622.1	1616.4	1627.8	1639.3	1639.3	1633.5	1639.3	1647.8
12.5°	1585.0	1599.3	1607.8	1616.4	1610.7	1625.0	1639.3	1636.4	1633.5	1639.3	1647.8
15°	1576.4	1590.7	1599.3	1607.8	1605.0	1619.3	1633.5	1633.5	1627.8	1636.4	1645.0
17.5°	1556.4	1570.7	1582.1	1587.9	1585.0	1599.3	1613.5	1613.5	1607.8	1616.4	1625.0
20°	1522.2	1536.4	1547.9	1553.6	1550.7	1562.1	1576.4	1579.3	1573.6	1582.1	1590.7
22.5°	1479.3	1490.7	1502.2	1507.9	1505.0	1516.5	1530.7	1533.6	1527.9	1536.4	1542.1
25°	1427.9	1436.5	1447.9	1453.6	1450.8	1462.2	1476.5	1476.5	1473.6	1479.3	1485.0
27.5°	1356.5	1367.9	1376.5	1382.2	1382.2	1390.8	1402.2	1405.1	1402.2	1407.9	1416.5
30°	1268.0	1273.7	1285.1	1288.0	1290.8	1299.4	1310.8	1310.8	1308.0	1313.7	1322.3
32.5°	1156.6	1165.2	1173.8	1176.6	1179.5	1188.0	1196.6	1199.4	1196.6	1202.3	1210.9
35°	1025.2	1033.8	1042.4	1045.2	1048.1	1056.6	1065.2	1068.1	1065.2	1070.9	1079.5
37.5°	879.6	885.3	893.9	896.7	902.4	908.2	913.9	919.6	916.7	922.4	928.2
40°	731.1	734.0	742.5	745.4	751.1	756.8	762.5	765.4	765.4	768.2	771.1
42.5°	591.2	596.8	602.6	605.4	611.2	614.0	619.7	622.6	622.6	625.4	628.3
45°	471.2	477.0	482.6	485.5	491.2	494.0	496.9	499.8	496.9	496.9	502.6
47.5°	371.2	377.0	382.6	385.6	388.4	391.2	394.1	394.1	394.1	397.0	397.0
50°	291.3	294.2	299.8	299.8	305.6	305.6	308.4	308.4	308.4	308.4	311.2
52.5°	225.6	228.4	234.2	234.2	237.0	239.8	239.8	239.8	239.8	242.8	239.8
55°	171.4	174.2	177.0	177.0	182.8	182.8	182.8	182.8	182.8	182.8	182.8
57.5°	128.6	131.4	134.2	134.2	134.2	137.0	134.2	137.0	137.0	137.0	137.0
60°	94.2	97.1	97.1	97.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0
62.5°	65.6	65.6	68.6	68.6	68.6	71.4	68.6	68.6	71.4	71.4	68.6
65°	45.6	45.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6
67.5°	31.4	31.4	31.4	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2
70°	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8
72.5°	14.2	14.2	14.2	14.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2
75°	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4
77.5°	5.8	5.8	8.6	8.6	8.6	5.8	5.8	5.8	8.6	8.6	5.8
80°	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
82.5°	2.8	2.8	2.8	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	2.8	2.8	2.8	0.0	2.8	2.8	2.8
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: P136454

CATALOG NUMBER: LD6A30D010TE ERW6A30935 6LW111H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1593.6	1593.6	1593.6	1593.6
2.5°	1602.1	1599.3	1602.1	1593.6
5°	1627.8	1625.0	1630.7	1619.3
7.5°	1645.0	1642.1	1647.8	1636.4
10°	1647.8	1647.8	1653.5	1642.1
12.5°	1647.8	1647.8	1653.5	1642.1
15°	1647.8	1645.0	1650.7	1639.3
17.5°	1627.8	1627.8	1633.5	1622.1
20°	1590.7	1590.7	1596.4	1587.9
22.5°	1545.0	1545.0	1547.9	1539.3
25°	1487.9	1485.0	1490.7	1485.0
27.5°	1416.5	1413.6	1416.5	1410.8
30°	1319.4	1316.5	1322.3	1316.5
32.5°	1210.9	1205.2	1210.9	1205.2
35°	1076.6	1070.9	1076.6	1073.8
37.5°	928.2	922.4	928.2	925.3
40°	771.1	768.2	774.0	771.1
42.5°	628.3	622.6	628.3	625.4
45°	502.6	496.9	502.6	499.8
47.5°	397.0	394.1	399.8	397.0
50°	311.2	308.4	311.2	311.2
52.5°	239.8	237.0	239.8	239.8
55°	182.8	180.0	182.8	182.8
57.5°	137.0	134.2	137.0	137.0
60°	100.0	100.0	100.0	100.0
62.5°	71.4	68.6	71.4	71.4
65°	48.6	48.6	48.6	48.6
67.5°	34.2	34.2	34.2	34.2
70°	22.8	22.8	22.8	22.8
72.5°	17.2	17.2	17.2	14.2
75°	11.4	11.4	11.4	11.4
77.5°	8.6	5.8	8.6	8.6
80°	5.8	5.8	5.8	5.8
82.5°	2.8	2.8	2.8	2.8
85°	2.8	2.8	2.8	2.8
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)