

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: P136448

Luminaire Tested: **LD6A30D010TE ERW6A30827 6LW111H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P136448  
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 ERW6A30827 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 2700K  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

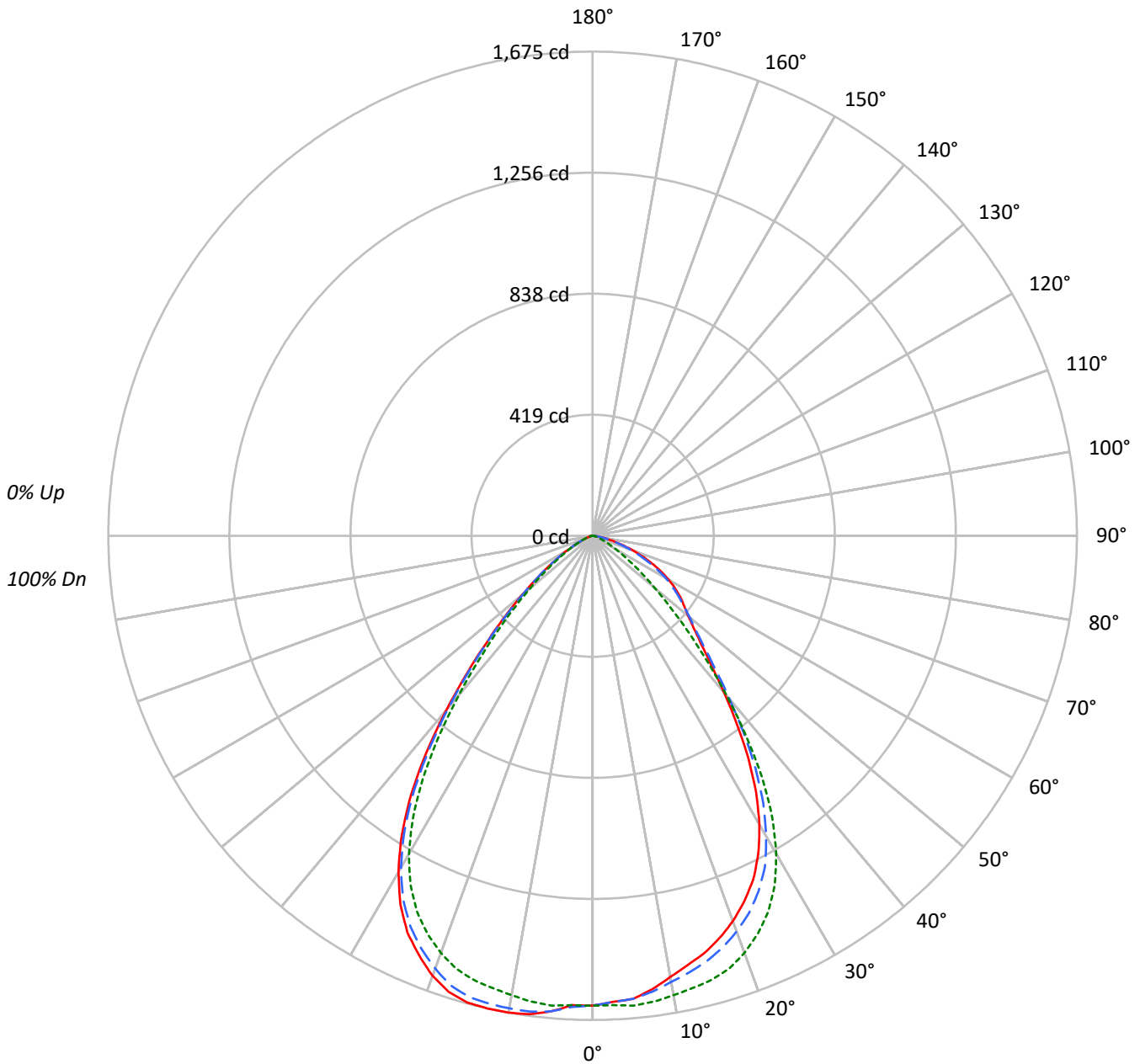
Lumens per Lamp: N/A  
Luminaire Lumens: 2656.0 lumens  
Efficiency: N/A  
Efficacy: 58.5 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.17 / 1.12  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 45.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	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°	106049	106049	106049
5°	105308	106834	108170
10°	102663	106910	110964
15°	100935	107426	112937
20°	98490	106585	112445
25°	94574	103378	109043
30°	86905	95681	101165
35°	74706	81436	87234
40°	60033	61277	66983
45°	48918	42469	47036
50°	43755	28378	32225
55°	42085	18552	21202
60°	39536	11782	13309
65°	35073	7194	7641
70°	28346	4444	4444
75°	19838	2949	2949
80°	13150	2179	2179
85°	6512	2171	2171



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	154.8	5.8
10°-20°	446.2	16.8
20°-30°	649.8	24.5
30°-40°	630.3	23.7
40°-50°	398.4	15.0
50°-60°	221.8	8.4
60°-70°	109.9	4.1
70°-80°	38.7	1.5
80°-90°	6.1	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°	1250.8	47.1
0°-40°	1881.1	70.8
0°-60°	2501.3	94.2
0°-90°	2656.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2656.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1626	1626	1626	1626	1626	
5°	1608	1608	1631	1652	1652	151
15°	1494	1524	1590	1652	1672	420
25°	1314	1358	1436	1492	1515	599
35°	938	982	1022	1078	1095	581
45°	530	545	460	504	510	419
55°	370	361	163	186	186	330
65°	227	210	47	50	50	223
75°	79	73	12	12	12	88
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°	1625.5	1625.5	1625.5	1625.5	1625.5	1625.5	1625.5	1625.5	1625.5	1625.5	1625.5
2.5°	1613.8	1599.2	1605.1	1602.2	1605.1	1602.2	1610.9	1602.2	1608.0	1613.8	1602.2
5°	1608.0	1593.4	1596.3	1596.3	1596.3	1596.3	1605.1	1596.3	1602.2	1608.0	1599.2
7.5°	1581.8	1570.1	1573.0	1573.0	1573.0	1573.0	1581.8	1575.9	1581.8	1590.5	1581.8
10°	1549.7	1538.1	1543.9	1543.9	1543.9	1543.9	1555.5	1549.7	1555.5	1567.2	1558.5
12.5°	1520.6	1511.8	1517.7	1517.7	1517.7	1520.6	1529.3	1526.4	1532.2	1546.8	1538.1
15°	1494.4	1485.6	1491.5	1491.5	1491.5	1494.4	1503.1	1506.0	1511.8	1523.5	1517.7
17.5°	1459.4	1450.7	1459.4	1459.4	1456.5	1462.3	1474.0	1474.0	1479.8	1494.4	1491.5
20°	1418.6	1409.9	1418.6	1418.6	1415.7	1421.5	1433.2	1436.1	1441.9	1456.5	1453.6
22.5°	1369.1	1366.2	1369.1	1374.9	1372.0	1374.9	1386.6	1389.5	1395.3	1412.8	1409.9
25°	1313.8	1310.9	1316.7	1319.6	1316.7	1319.6	1331.2	1334.2	1340.0	1357.5	1357.5
27.5°	1240.9	1238.0	1246.8	1246.8	1246.8	1252.6	1261.3	1267.2	1270.1	1290.5	1287.5
30°	1153.6	1150.6	1156.5	1159.4	1159.4	1159.4	1171.0	1179.8	1182.7	1200.2	1200.2
32.5°	1051.6	1051.6	1054.5	1060.3	1057.4	1063.2	1072.0	1077.8	1083.6	1098.2	1098.2
35°	938.0	940.9	943.8	949.6	946.7	949.6	958.4	964.2	967.1	981.7	978.8
37.5°	818.6	821.5	824.4	827.3	827.3	830.2	838.9	841.9	844.8	856.4	850.6
40°	704.9	704.9	707.9	713.7	710.8	716.6	722.4	725.3	725.3	734.1	728.3
42.5°	605.9	608.8	611.7	614.6	614.6	617.6	623.4	626.3	626.3	629.2	620.5
45°	530.2	533.1	533.1	538.9	538.9	541.8	544.7	547.6	544.7	544.7	536.0
47.5°	474.8	477.7	480.6	483.6	483.6	486.5	489.4	489.4	486.5	483.6	471.9
50°	431.1	437.0	437.0	439.9	442.8	445.7	445.7	445.7	439.9	437.0	419.5
52.5°	399.1	402.0	404.9	407.8	407.8	410.7	413.6	410.7	404.9	396.2	378.7
55°	370.0	372.9	375.8	378.7	378.7	378.7	378.7	375.8	370.0	361.2	343.7
57.5°	337.9	340.8	343.7	346.6	346.6	346.6	346.6	343.7	337.9	326.3	305.9
60°	303.0	305.9	308.8	311.7	311.7	311.7	308.8	305.9	300.0	291.3	270.9
62.5°	265.1	268.0	270.9	270.9	270.9	268.0	268.0	265.1	259.3	250.5	230.1
65°	227.2	227.2	230.1	230.1	230.1	230.1	227.2	224.3	218.5	209.7	195.2
67.5°	186.4	189.3	189.3	189.3	189.3	189.3	186.4	186.4	180.6	171.9	160.2
70°	148.6	148.6	151.5	151.5	151.5	151.5	148.6	148.6	142.7	136.9	125.3
72.5°	110.7	110.7	110.7	113.6	113.6	113.6	110.7	110.7	107.8	102.0	93.2
75°	78.7	78.7	78.7	81.6	81.6	81.6	81.6	78.7	75.7	72.8	67.0
77.5°	52.4	55.3	52.4	52.4	52.4	55.3	52.4	52.4	52.4	49.5	43.7
80°	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	32.0	32.0	29.1
82.5°	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	17.5	17.5
85°	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7
87.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
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°	1625.5	1625.5	1625.5	1625.5	1625.5	1625.5	1625.5	1625.5	1625.5	1625.5	1625.5
2.5°	1610.9	1616.7	1622.5	1616.7	1608.0	1625.5	1622.5	1625.5	1622.5	1616.7	1634.2
5°	1608.0	1613.8	1622.5	1616.7	1610.9	1628.4	1625.5	1631.3	1631.3	1625.5	1642.9
7.5°	1590.5	1596.3	1610.9	1605.1	1599.2	1616.7	1619.6	1625.5	1628.4	1622.5	1642.9
10°	1570.1	1575.9	1590.5	1587.6	1584.7	1605.1	1608.0	1613.8	1616.7	1613.8	1634.2
12.5°	1549.7	1558.5	1573.0	1570.1	1570.1	1590.5	1593.4	1602.2	1608.0	1605.1	1628.4
15°	1529.3	1541.0	1558.5	1555.5	1555.5	1578.8	1581.8	1590.5	1596.3	1596.3	1619.6
17.5°	1503.1	1514.8	1532.2	1529.3	1535.2	1552.6	1558.5	1570.1	1575.9	1573.0	1599.2
20°	1465.2	1479.8	1497.3	1494.4	1497.3	1520.6	1526.4	1535.2	1541.0	1541.0	1564.3
22.5°	1421.5	1436.1	1453.6	1450.7	1456.5	1474.0	1479.8	1491.5	1497.3	1494.4	1517.7
25°	1369.1	1383.7	1398.2	1398.2	1401.2	1421.5	1427.4	1436.1	1444.9	1441.9	1462.3
27.5°	1299.2	1313.8	1328.3	1325.4	1328.3	1348.7	1354.5	1363.3	1372.0	1369.1	1389.5
30°	1208.9	1223.5	1235.1	1232.2	1235.1	1255.5	1258.4	1270.1	1278.8	1278.8	1296.3
32.5°	1104.0	1118.6	1124.4	1118.6	1124.4	1139.0	1144.8	1156.5	1162.3	1165.2	1182.7
35°	984.6	993.3	996.2	990.4	990.4	1005.0	1010.8	1022.5	1028.3	1031.2	1045.8
37.5°	853.5	859.3	853.5	844.8	847.7	853.5	862.2	871.0	879.7	882.6	897.2
40°	725.3	722.4	713.7	699.1	696.2	704.9	710.8	719.5	725.3	731.2	739.9
42.5°	611.7	605.9	588.4	570.9	568.0	568.0	570.9	579.7	585.5	588.4	600.1
45°	521.4	509.8	483.6	463.2	451.5	454.4	454.4	460.3	463.2	469.0	477.7
47.5°	451.5	431.1	399.1	372.9	361.2	358.3	358.3	361.2	364.1	370.0	375.8
50°	396.2	370.0	332.1	303.0	288.4	282.6	282.6	279.6	285.5	288.4	294.2
52.5°	352.5	320.4	276.7	244.7	227.2	221.4	218.5	218.5	218.5	221.4	227.2
55°	311.7	276.7	230.1	198.1	177.7	171.9	166.0	163.1	166.0	169.0	171.9
57.5°	276.7	238.9	192.3	157.3	139.8	131.1	125.3	122.3	122.3	125.3	128.2
60°	241.8	203.9	157.3	125.3	107.8	99.0	93.2	90.3	90.3	93.2	93.2
62.5°	203.9	169.0	128.2	99.0	81.6	72.8	67.0	67.0	64.1	64.1	67.0
65°	171.9	139.8	104.9	78.7	61.2	55.3	49.5	46.6	46.6	43.7	46.6
67.5°	139.8	113.6	84.5	61.2	46.6	40.8	35.0	35.0	32.0	32.0	32.0
70°	110.7	90.3	67.0	46.6	37.9	29.1	26.2	23.3	23.3	23.3	23.3
72.5°	81.6	67.0	49.5	35.0	26.2	23.3	20.4	17.5	14.6	14.6	14.6
75°	58.3	46.6	35.0	26.2	20.4	17.5	14.6	11.7	11.7	11.7	11.7
77.5°	40.8	32.0	26.2	17.5	14.6	11.7	8.7	8.7	8.7	8.7	5.8
80°	26.2	20.4	17.5	11.7	8.7	8.7	5.8	5.8	5.8	5.8	5.8
82.5°	14.6	11.7	8.7	8.7	5.8	5.8	2.9	2.9	2.9	2.9	2.9
85°	5.8	5.8	5.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
87.5°	2.9	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°	1625.5	1625.5	1625.5	1625.5	1625.5	1625.5	1625.5	1625.5	1625.5	1625.5	1625.5
2.5°	1616.7	1628.4	1628.4	1634.2	1625.5	1631.3	1640.0	1637.1	1628.4	1631.3	1634.2
5°	1628.4	1640.0	1642.9	1651.7	1642.9	1651.7	1663.3	1660.4	1651.7	1657.5	1660.4
7.5°	1628.4	1642.9	1648.8	1657.5	1651.7	1660.4	1675.0	1672.1	1663.3	1669.2	1675.0
10°	1622.5	1637.1	1645.8	1654.6	1648.8	1660.4	1672.1	1672.1	1666.2	1672.1	1680.8
12.5°	1616.7	1631.3	1640.0	1648.8	1642.9	1657.5	1672.1	1669.2	1666.2	1672.1	1680.8
15°	1608.0	1622.5	1631.3	1640.0	1637.1	1651.7	1666.2	1666.2	1660.4	1669.2	1677.9
17.5°	1587.6	1602.2	1613.8	1619.6	1616.7	1631.3	1645.8	1645.8	1640.0	1648.8	1657.5
20°	1552.6	1567.2	1578.8	1584.7	1581.8	1593.4	1608.0	1610.9	1605.1	1613.8	1622.5
22.5°	1508.9	1520.6	1532.2	1538.1	1535.2	1546.8	1561.4	1564.3	1558.5	1567.2	1573.0
25°	1456.5	1465.2	1476.9	1482.7	1479.8	1491.5	1506.0	1506.0	1503.1	1508.9	1514.8
27.5°	1383.7	1395.3	1404.1	1409.9	1409.9	1418.6	1430.3	1433.2	1430.3	1436.1	1444.9
30°	1293.4	1299.2	1310.9	1313.8	1316.7	1325.4	1337.1	1337.1	1334.2	1340.0	1348.7
32.5°	1179.8	1188.5	1197.2	1200.2	1203.1	1211.8	1220.5	1223.5	1220.5	1226.4	1235.1
35°	1045.8	1054.5	1063.2	1066.2	1069.1	1077.8	1086.6	1089.5	1086.6	1092.4	1101.1
37.5°	897.2	903.0	911.8	914.7	920.5	926.3	932.2	938.0	935.1	940.9	946.7
40°	745.7	748.6	757.4	760.3	766.1	771.9	777.8	780.7	780.7	783.6	786.5
42.5°	603.0	608.8	614.6	617.6	623.4	626.3	632.1	635.0	635.0	637.9	640.9
45°	480.6	486.5	492.3	495.2	501.0	503.9	506.9	509.8	506.9	506.9	512.7
47.5°	378.7	384.5	390.3	393.3	396.2	399.1	402.0	402.0	402.0	404.9	404.9
50°	297.1	300.0	305.9	305.9	311.7	311.7	314.6	314.6	314.6	314.6	317.5
52.5°	230.1	233.0	238.9	238.9	241.8	244.7	244.7	244.7	244.7	247.6	244.7
55°	174.8	177.7	180.6	180.6	186.4	186.4	186.4	186.4	186.4	186.4	186.4
57.5°	131.1	134.0	136.9	136.9	136.9	139.8	136.9	139.8	139.8	139.8	139.8
60°	96.1	99.0	99.0	99.0	102.0	102.0	102.0	102.0	102.0	102.0	102.0
62.5°	67.0	67.0	69.9	69.9	69.9	72.8	69.9	69.9	72.8	72.8	69.9
65°	46.6	46.6	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5
67.5°	32.0	32.0	32.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0
70°	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.3
72.5°	14.6	14.6	14.6	14.6	17.5	17.5	17.5	17.5	17.5	17.5	17.5
75°	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7
77.5°	5.8	5.8	8.7	8.7	8.7	5.8	5.8	5.8	8.7	8.7	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°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
85°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	0.0	2.9	2.9	2.9
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: P136448

CATALOG NUMBER: LD6A30D010TE ERW6A30827 6LW111H

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	1625.5	1625.5	1625.5	1625.5
2.5°	1634.2	1631.3	1634.2	1625.5
5°	1660.4	1657.5	1663.3	1651.7
7.5°	1677.9	1675.0	1680.8	1669.2
10°	1680.8	1680.8	1686.6	1675.0
12.5°	1680.8	1680.8	1686.6	1675.0
15°	1680.8	1677.9	1683.7	1672.1
17.5°	1660.4	1660.4	1666.2	1654.6
20°	1622.5	1622.5	1628.4	1619.6
22.5°	1575.9	1575.9	1578.8	1570.1
25°	1517.7	1514.8	1520.6	1514.8
27.5°	1444.9	1441.9	1444.9	1439.0
30°	1345.8	1342.9	1348.7	1342.9
32.5°	1235.1	1229.3	1235.1	1229.3
35°	1098.2	1092.4	1098.2	1095.3
37.5°	946.7	940.9	946.7	943.8
40°	786.5	783.6	789.4	786.5
42.5°	640.9	635.0	640.9	637.9
45°	512.7	506.9	512.7	509.8
47.5°	404.9	402.0	407.8	404.9
50°	317.5	314.6	317.5	317.5
52.5°	244.7	241.8	244.7	244.7
55°	186.4	183.5	186.4	186.4
57.5°	139.8	136.9	139.8	139.8
60°	102.0	102.0	102.0	102.0
62.5°	72.8	69.9	72.8	72.8
65°	49.5	49.5	49.5	49.5
67.5°	35.0	35.0	35.0	35.0
70°	23.3	23.3	23.3	23.3
72.5°	17.5	17.5	17.5	14.6
75°	11.7	11.7	11.7	11.7
77.5°	8.7	5.8	8.7	8.7
80°	5.8	5.8	5.8	5.8
82.5°	2.9	2.9	2.9	2.9
85°	2.9	2.9	2.9	2.9
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)