

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: P136455

Luminaire Tested: **LD6A30D010TE ERW6A30940 6LW111H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P136455  
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 ERW6A30940 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 4000K  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

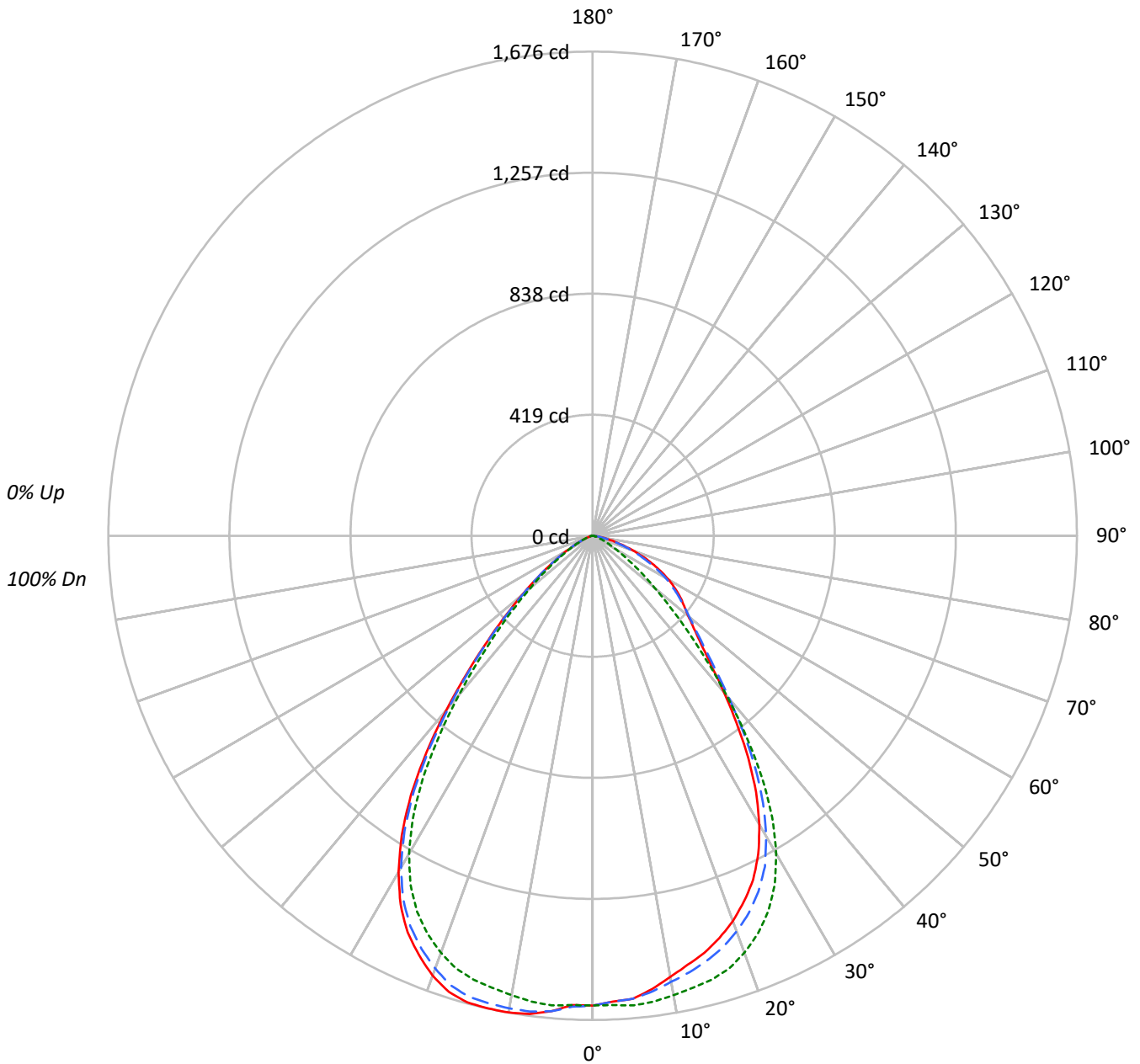
Lumens per Lamp: N/A  
Luminaire Lumens: 2656.8 lumens  
Efficiency: N/A  
Efficacy: 58.5 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.17 / 1.12  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 45.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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									
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°	106081	106081	106081
5°	105340	106866	108202
10°	102696	106943	110997
15°	100969	107459	112971
20°	98525	106620	112480
25°	94603	103414	109072
30°	86927	95704	101195
35°	74730	81452	87258
40°	60059	61294	67000
45°	48937	42478	47046
50°	43775	28389	32235
55°	42085	18563	21213
60°	39536	11782	13309
65°	35073	7209	7657
70°	28346	4444	4444
75°	19838	2949	2949
80°	13150	2179	2179
85°	6587	2171	2171



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	154.8	5.8
10°-20°	446.3	16.8
20°-30°	650.0	24.5
30°-40°	630.5	23.7
40°-50°	398.5	15.0
50°-60°	221.9	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°	1251.2	47.1
0°-40°	1881.7	70.8
0°-60°	2502.1	94.2
0°-90°	2656.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2656.8	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1626	1626	1626	1626	1626	
5°	1608	1608	1632	1652	1652	152
15°	1495	1524	1591	1652	1673	421
25°	1314	1358	1437	1492	1515	600
35°	938	982	1023	1078	1096	582
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°	1626.0	1626.0	1626.0	1626.0	1626.0	1626.0	1626.0	1626.0	1626.0	1626.0	1626.0
2.5°	1614.3	1599.8	1605.6	1602.7	1605.6	1602.7	1611.4	1602.7	1608.5	1614.3	1602.7
5°	1608.5	1593.9	1596.8	1596.8	1596.8	1596.8	1605.6	1596.8	1602.7	1608.5	1599.8
7.5°	1582.2	1570.6	1573.6	1573.6	1573.6	1573.6	1582.2	1576.4	1582.2	1591.0	1582.2
10°	1550.2	1538.6	1544.3	1544.3	1544.3	1544.3	1556.0	1550.2	1556.0	1567.7	1558.9
12.5°	1521.1	1512.3	1518.1	1518.1	1518.1	1521.1	1529.8	1526.9	1532.7	1547.3	1538.6
15°	1494.9	1486.1	1491.9	1491.9	1491.9	1494.9	1503.6	1506.4	1512.3	1524.0	1518.1
17.5°	1459.9	1451.1	1459.9	1459.9	1457.0	1462.8	1474.4	1474.4	1480.2	1494.9	1491.9
20°	1419.1	1410.3	1419.1	1419.1	1416.2	1422.0	1433.7	1436.6	1442.4	1457.0	1454.0
22.5°	1369.5	1366.7	1369.5	1375.3	1372.4	1375.3	1387.0	1390.0	1395.8	1413.2	1410.3
25°	1314.2	1311.3	1317.1	1320.0	1317.1	1320.0	1331.7	1334.5	1340.4	1357.9	1357.9
27.5°	1241.3	1238.4	1247.2	1247.2	1247.2	1253.0	1261.8	1267.5	1270.4	1290.9	1288.0
30°	1153.9	1151.0	1156.9	1159.8	1159.8	1159.8	1171.4	1180.1	1183.1	1200.5	1200.5
32.5°	1052.0	1052.0	1054.9	1060.6	1057.7	1063.6	1072.3	1078.2	1084.0	1098.5	1098.5
35°	938.3	941.2	944.1	950.0	947.1	950.0	958.6	964.5	967.4	982.0	979.1
37.5°	818.8	821.7	824.6	827.5	827.5	830.5	839.2	842.2	845.1	856.7	850.8
40°	705.2	705.2	708.1	713.9	711.0	716.8	722.6	725.6	725.6	734.3	728.5
42.5°	606.0	609.0	611.9	614.8	614.8	617.7	623.6	626.5	626.5	629.4	620.7
45°	530.4	533.3	533.3	539.0	539.0	542.0	544.9	547.8	544.9	544.9	536.2
47.5°	474.9	477.9	480.8	483.7	483.7	486.6	489.6	489.6	486.6	483.7	472.0
50°	431.3	437.1	437.1	440.0	442.9	445.8	445.8	445.8	440.0	437.1	419.6
52.5°	399.2	402.1	405.0	407.9	407.9	410.8	413.8	410.8	405.0	396.3	378.8
55°	370.0	373.0	375.9	378.8	378.8	378.8	378.8	375.9	370.0	361.4	343.8
57.5°	338.0	340.9	343.8	346.8	346.8	346.8	346.8	343.8	338.0	326.4	305.9
60°	303.0	305.9	308.9	311.8	311.8	311.8	308.9	305.9	300.1	291.4	271.0
62.5°	265.1	268.1	271.0	271.0	271.0	268.1	268.1	265.1	259.4	250.6	230.2
65°	227.2	227.2	230.2	230.2	230.2	230.2	227.2	224.4	218.6	209.8	195.2
67.5°	186.5	189.4	189.4	189.4	189.4	189.4	186.5	186.5	180.7	171.9	160.2
70°	148.6	148.6	151.6	151.6	151.6	151.6	148.6	148.6	142.8	137.0	125.3
72.5°	110.7	110.7	110.7	113.7	113.7	113.7	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	75.8	72.9	67.0
77.5°	52.4	55.3	52.4	52.4	52.4	55.3	52.4	52.4	52.4	49.6	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	17.4	17.4
85°	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8
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°	1626.0	1626.0	1626.0	1626.0	1626.0	1626.0	1626.0	1626.0	1626.0	1626.0	1626.0
2.5°	1611.4	1617.2	1623.0	1617.2	1608.5	1626.0	1623.0	1626.0	1623.0	1617.2	1634.7
5°	1608.5	1614.3	1623.0	1617.2	1611.4	1628.9	1626.0	1631.8	1631.8	1626.0	1643.5
7.5°	1591.0	1596.8	1611.4	1605.6	1599.8	1617.2	1620.1	1626.0	1628.9	1623.0	1643.5
10°	1570.6	1576.4	1591.0	1588.1	1585.2	1605.6	1608.5	1614.3	1617.2	1614.3	1634.7
12.5°	1550.2	1558.9	1573.6	1570.6	1570.6	1591.0	1593.9	1602.7	1608.5	1605.6	1628.9
15°	1529.8	1541.4	1558.9	1556.0	1556.0	1579.3	1582.2	1591.0	1596.8	1596.8	1620.1
17.5°	1503.6	1515.2	1532.7	1529.8	1535.7	1553.1	1558.9	1570.6	1576.4	1573.6	1599.8
20°	1465.7	1480.2	1497.8	1494.9	1497.8	1521.1	1526.9	1535.7	1541.4	1541.4	1564.8
22.5°	1422.0	1436.6	1454.0	1451.1	1457.0	1474.4	1480.2	1491.9	1497.8	1494.9	1518.1
25°	1369.5	1384.1	1398.7	1398.7	1401.6	1422.0	1427.8	1436.6	1445.3	1442.4	1462.8
27.5°	1299.6	1314.2	1328.8	1325.9	1328.8	1349.1	1355.0	1363.7	1372.4	1369.5	1390.0
30°	1209.3	1223.9	1235.5	1232.6	1235.5	1255.9	1258.8	1270.4	1279.2	1279.2	1296.7
32.5°	1104.4	1119.0	1124.8	1119.0	1124.8	1139.3	1145.2	1156.9	1162.6	1165.5	1183.1
35°	984.9	993.6	996.5	990.7	990.7	1005.3	1011.1	1022.7	1028.6	1031.5	1046.1
37.5°	853.7	859.6	853.7	845.1	848.0	853.7	862.5	871.3	880.0	882.9	897.5
40°	725.6	722.6	713.9	699.4	696.4	705.2	711.0	719.7	725.6	731.4	740.2
42.5°	611.9	606.0	588.6	571.2	568.3	568.3	571.2	579.8	585.7	588.6	600.3
45°	521.6	509.9	483.7	463.3	451.7	454.6	454.6	460.4	463.3	469.1	477.9
47.5°	451.7	431.3	399.2	373.0	361.4	358.4	358.4	361.4	364.2	370.0	375.9
50°	396.3	370.0	332.1	303.0	288.5	282.7	282.7	279.7	285.6	288.5	294.3
52.5°	352.6	320.6	276.8	244.8	227.2	221.5	218.6	218.6	218.6	221.5	227.2
55°	311.8	276.8	230.2	198.1	177.8	171.9	166.1	163.2	166.1	169.0	171.9
57.5°	276.8	238.9	192.3	157.3	139.9	131.1	125.3	122.3	122.3	125.3	128.2
60°	241.9	204.0	157.3	125.3	107.8	99.1	93.2	90.3	90.3	93.2	93.2
62.5°	204.0	169.0	128.2	99.1	81.6	72.9	67.0	67.0	64.1	64.1	67.0
65°	171.9	139.9	104.9	78.7	61.2	55.3	49.6	46.7	46.7	43.7	46.7
67.5°	139.9	113.7	84.5	61.2	46.7	40.8	35.0	35.0	32.0	32.0	32.0
70°	110.7	90.3	67.0	46.7	37.9	29.1	26.2	23.3	23.3	23.3	23.3
72.5°	81.6	67.0	49.6	35.0	26.2	23.3	20.4	17.4	14.6	14.6	14.6
75°	58.2	46.7	35.0	26.2	20.4	17.4	14.6	11.7	11.7	11.7	11.7
77.5°	40.8	32.0	26.2	17.4	14.6	11.7	8.8	8.8	8.8	8.8	5.8
80°	26.2	20.4	17.4	11.7	8.8	8.8	5.8	5.8	5.8	5.8	5.8
82.5°	14.6	11.7	8.8	8.8	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°	1626.0	1626.0	1626.0	1626.0	1626.0	1626.0	1626.0	1626.0	1626.0	1626.0	1626.0
2.5°	1617.2	1628.9	1628.9	1634.7	1626.0	1631.8	1640.6	1637.6	1628.9	1631.8	1634.7
5°	1628.9	1640.6	1643.5	1652.2	1643.5	1652.2	1663.9	1660.9	1652.2	1658.0	1660.9
7.5°	1628.9	1643.5	1649.2	1658.0	1652.2	1660.9	1675.5	1672.6	1663.9	1669.7	1675.5
10°	1623.0	1637.6	1646.3	1655.1	1649.2	1660.9	1672.6	1672.6	1666.8	1672.6	1681.3
12.5°	1617.2	1631.8	1640.6	1649.2	1643.5	1658.0	1672.6	1669.7	1666.8	1672.6	1681.3
15°	1608.5	1623.0	1631.8	1640.6	1637.6	1652.2	1666.8	1666.8	1660.9	1669.7	1678.5
17.5°	1588.1	1602.7	1614.3	1620.1	1617.2	1631.8	1646.3	1646.3	1640.6	1649.2	1658.0
20°	1553.1	1567.7	1579.3	1585.2	1582.2	1593.9	1608.5	1611.4	1605.6	1614.3	1623.0
22.5°	1509.4	1521.1	1532.7	1538.6	1535.7	1547.3	1561.9	1564.8	1558.9	1567.7	1573.6
25°	1457.0	1465.7	1477.3	1483.2	1480.2	1491.9	1506.4	1506.4	1503.6	1509.4	1515.2
27.5°	1384.1	1395.8	1404.5	1410.3	1410.3	1419.1	1430.8	1433.7	1430.8	1436.6	1445.3
30°	1293.8	1299.6	1311.3	1314.2	1317.1	1325.9	1337.5	1337.5	1334.5	1340.4	1349.1
32.5°	1180.1	1188.9	1197.6	1200.5	1203.4	1212.2	1221.0	1223.9	1221.0	1226.8	1235.5
35°	1046.1	1054.9	1063.6	1066.5	1069.4	1078.2	1086.9	1089.8	1086.9	1092.7	1101.4
37.5°	897.5	903.3	912.1	915.0	920.8	926.6	932.4	938.3	935.4	941.2	947.1
40°	745.9	748.8	757.6	760.5	766.4	772.2	778.1	780.9	780.9	783.8	786.7
42.5°	603.2	609.0	614.8	617.7	623.6	626.5	632.3	635.3	635.3	638.2	641.0
45°	480.8	486.6	492.5	495.4	501.2	504.1	507.0	509.9	507.0	507.0	512.8
47.5°	378.8	384.6	390.5	393.4	396.3	399.2	402.1	402.1	402.1	405.0	405.0
50°	297.2	300.1	305.9	305.9	311.8	311.8	314.7	314.7	314.7	314.7	317.6
52.5°	230.2	233.1	238.9	238.9	241.9	244.8	244.8	244.8	244.8	247.7	244.8
55°	174.8	177.8	180.7	180.7	186.5	186.5	186.5	186.5	186.5	186.5	186.5
57.5°	131.1	134.0	137.0	137.0	137.0	139.9	137.0	139.9	139.9	139.9	139.9
60°	96.1	99.1	99.1	99.1	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	72.9	69.9	69.9	72.9	72.9	69.9
65°	46.7	46.7	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6
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	17.4	17.4	17.4	17.4	17.4	17.4	17.4
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	8.8	8.8	8.8	5.8	5.8	5.8	8.8	8.8	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: P136455

CATALOG NUMBER: LD6A30D010TE ERW6A30940 6LW111H

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	1626.0	1626.0	1626.0	1626.0
2.5°	1634.7	1631.8	1634.7	1626.0
5°	1660.9	1658.0	1663.9	1652.2
7.5°	1678.5	1675.5	1681.3	1669.7
10°	1681.3	1681.3	1687.1	1675.5
12.5°	1681.3	1681.3	1687.1	1675.5
15°	1681.3	1678.5	1684.2	1672.6
17.5°	1660.9	1660.9	1666.8	1655.1
20°	1623.0	1623.0	1628.9	1620.1
22.5°	1576.4	1576.4	1579.3	1570.6
25°	1518.1	1515.2	1521.1	1515.2
27.5°	1445.3	1442.4	1445.3	1439.4
30°	1346.2	1343.3	1349.1	1343.3
32.5°	1235.5	1229.6	1235.5	1229.6
35°	1098.5	1092.7	1098.5	1095.6
37.5°	947.1	941.2	947.1	944.1
40°	786.7	783.8	789.7	786.7
42.5°	641.0	635.3	641.0	638.2
45°	512.8	507.0	512.8	509.9
47.5°	405.0	402.1	407.9	405.0
50°	317.6	314.7	317.6	317.6
52.5°	244.8	241.9	244.8	244.8
55°	186.5	183.6	186.5	186.5
57.5°	139.9	137.0	139.9	139.9
60°	102.0	102.0	102.0	102.0
62.5°	72.9	69.9	72.9	72.9
65°	49.6	49.6	49.6	49.6
67.5°	35.0	35.0	35.0	35.0
70°	23.3	23.3	23.3	23.3
72.5°	17.4	17.4	17.4	14.6
75°	11.7	11.7	11.7	11.7
77.5°	8.8	5.8	8.8	8.8
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)