

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: P136453

Luminaire Tested: **LD6A30D010TE ERW6A30930 6LW111H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136453
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 ERW6A30930 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 3000K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2539.1 lumens
Efficiency: N/A
Efficacy: 55.9 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

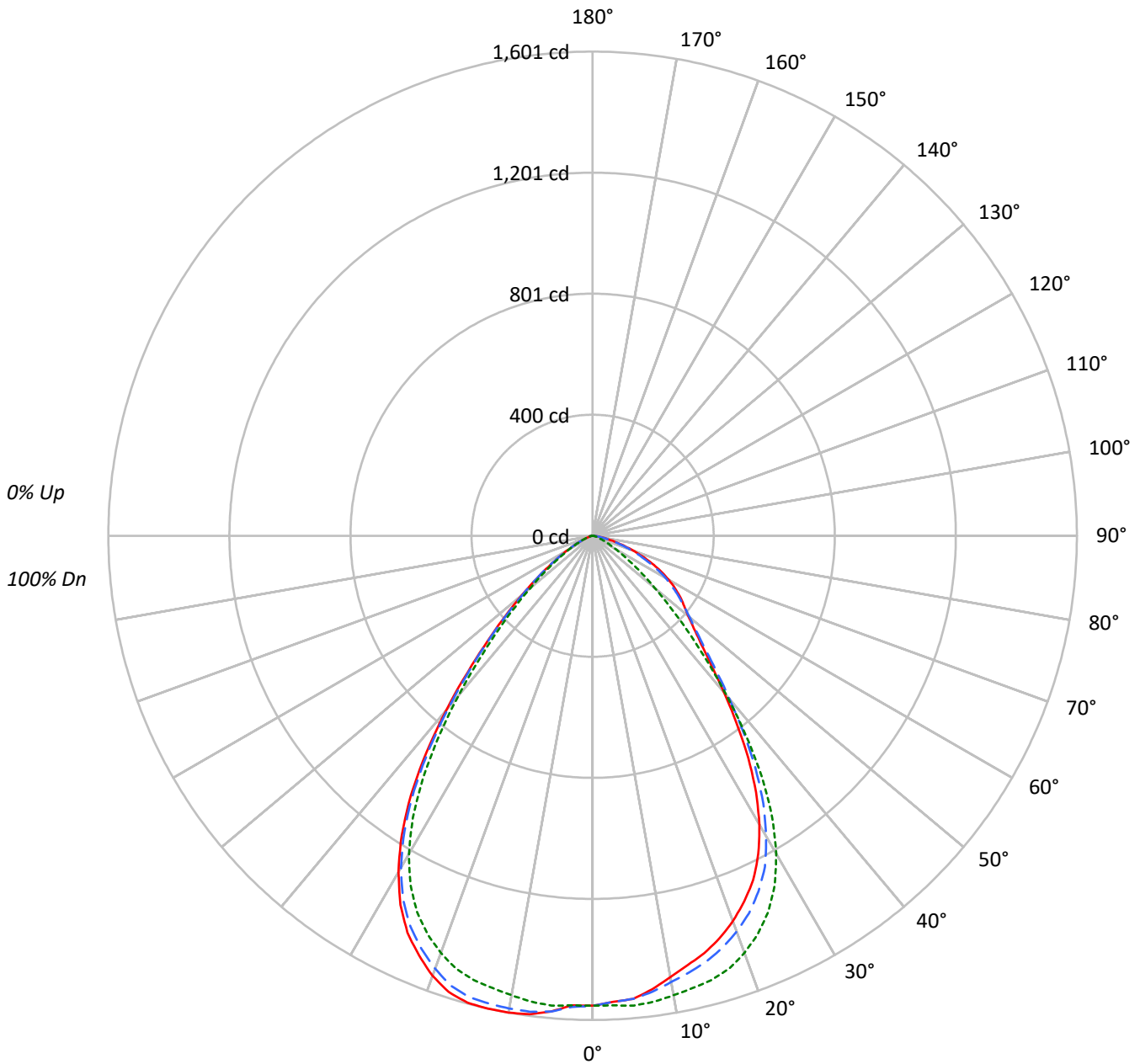
Input Watts (W): 45.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	101377	101377	101377
5°	100671	102131	103402
10°	98145	102206	106075
15°	96491	102698	107966
20°	94158	101892	107502
25°	90406	98828	104242
30°	83070	91462	96713
35°	71417	77852	83387
40°	57393	58585	64036
45°	46759	40596	44970
50°	41827	27130	30814
55°	40231	17733	20269
60°	37787	11274	12722
65°	33530	6885	7317
70°	27106	4254	4254
75°	18956	2798	2798
80°	12549	2104	2104
85°	6288	2096	2096



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.0	5.8
10°-20°	426.5	16.8
20°-30°	621.2	24.5
30°-40°	602.6	23.7
40°-50°	380.8	15.0
50°-60°	212.1	8.4
60°-70°	105.1	4.1
70°-80°	37.0	1.5
80°-90°	5.8	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°	1195.7	47.1
0°-40°	1798.2	70.8
0°-60°	2391.2	94.2
0°-90°	2539.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2539.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1554	1554	1554	1554	1554	
5°	1537	1537	1560	1579	1579	145
15°	1429	1456	1520	1579	1598	402
25°	1256	1298	1373	1426	1448	573
35°	897	938	978	1030	1047	556
45°	507	521	440	482	487	401
55°	354	345	156	178	178	315
65°	217	200	45	47	47	214
75°	75	70	11	11	11	84
85°	8	8	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°	1553.9	1553.9	1553.9	1553.9	1553.9	1553.9	1553.9	1553.9	1553.9	1553.9	1553.9
2.5°	1542.8	1528.8	1534.4	1531.6	1534.4	1531.6	1540.0	1531.6	1537.2	1542.8	1531.6
5°	1537.2	1523.2	1526.1	1526.1	1526.1	1526.1	1534.4	1526.1	1531.6	1537.2	1528.8
7.5°	1512.1	1501.0	1503.8	1503.8	1503.8	1503.8	1512.1	1506.5	1512.1	1520.5	1512.1
10°	1481.5	1470.4	1476.0	1476.0	1476.0	1476.0	1487.1	1481.5	1487.1	1498.2	1489.8
12.5°	1453.7	1445.3	1450.8	1450.8	1450.8	1453.7	1462.0	1459.2	1464.8	1478.7	1470.4
15°	1428.6	1420.3	1425.8	1425.8	1425.8	1428.6	1437.0	1439.7	1445.3	1456.4	1450.8
17.5°	1395.2	1386.8	1395.2	1395.2	1392.4	1398.0	1409.1	1409.1	1414.7	1428.6	1425.8
20°	1356.2	1347.8	1356.2	1356.2	1353.3	1358.9	1370.0	1372.9	1378.4	1392.4	1389.6
22.5°	1308.8	1306.0	1308.8	1314.4	1311.6	1314.4	1325.5	1328.3	1333.9	1350.6	1347.8
25°	1255.9	1253.1	1258.7	1261.5	1258.7	1261.5	1272.6	1275.4	1280.9	1297.6	1297.6
27.5°	1186.3	1183.5	1191.8	1191.8	1191.8	1197.4	1205.8	1211.4	1214.1	1233.6	1230.8
30°	1102.7	1100.0	1105.6	1108.3	1108.3	1108.3	1119.4	1127.8	1130.6	1147.3	1147.3
32.5°	1005.3	1005.3	1008.0	1013.6	1010.9	1016.4	1024.8	1030.3	1035.9	1049.9	1049.9
35°	896.7	899.5	902.2	907.8	905.1	907.8	916.2	921.8	924.5	938.5	935.6
37.5°	782.5	785.3	788.1	790.8	790.8	793.7	802.0	804.8	807.5	818.7	813.1
40°	673.9	673.9	676.7	682.3	679.5	685.0	690.6	693.4	693.4	701.7	696.2
42.5°	579.2	582.0	584.8	587.6	587.6	590.3	595.9	598.7	598.7	601.5	593.2
45°	506.8	509.6	509.6	515.2	515.2	517.9	520.8	523.5	520.8	520.8	512.4
47.5°	453.9	456.7	459.5	462.3	462.3	465.1	467.8	467.8	465.1	462.3	451.1
50°	412.1	417.7	417.7	420.5	423.3	426.1	426.1	426.1	420.5	417.7	401.0
52.5°	381.5	384.3	387.1	389.9	389.9	392.7	395.4	392.7	387.1	378.7	362.0
55°	353.7	356.4	359.3	362.0	362.0	362.0	362.0	359.3	353.7	345.3	328.6
57.5°	323.0	325.8	328.6	331.4	331.4	331.4	331.4	328.6	323.0	311.9	292.4
60°	289.6	292.4	295.2	298.0	298.0	298.0	295.2	292.4	286.9	278.5	259.0
62.5°	253.4	256.2	259.0	259.0	259.0	256.2	256.2	253.4	247.9	239.5	220.0
65°	217.2	217.2	220.0	220.0	220.0	220.0	217.2	214.5	208.9	200.5	186.6
67.5°	178.2	181.0	181.0	181.0	181.0	181.0	178.2	178.2	172.6	164.3	153.2
70°	142.1	142.1	144.8	144.8	144.8	144.8	142.1	142.1	136.5	130.9	119.8
72.5°	105.8	105.8	105.8	108.6	108.6	108.6	105.8	105.8	103.1	97.5	89.1
75°	75.2	75.2	75.2	78.0	78.0	78.0	78.0	75.2	72.4	69.7	64.1
77.5°	50.1	53.0	50.1	50.1	50.1	53.0	50.1	50.1	50.1	47.4	41.8
80°	33.4	33.4	33.4	33.4	33.4	33.4	33.4	33.4	30.7	30.7	27.8
82.5°	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	16.7	16.7
85°	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4
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°	1553.9	1553.9	1553.9	1553.9	1553.9	1553.9	1553.9	1553.9	1553.9	1553.9	1553.9
2.5°	1540.0	1545.5	1551.1	1545.5	1537.2	1553.9	1551.1	1553.9	1551.1	1545.5	1562.2
5°	1537.2	1542.8	1551.1	1545.5	1540.0	1556.7	1553.9	1559.5	1559.5	1553.9	1570.6
7.5°	1520.5	1526.1	1540.0	1534.4	1528.8	1545.5	1548.4	1553.9	1556.7	1551.1	1570.6
10°	1501.0	1506.5	1520.5	1517.7	1514.9	1534.4	1537.2	1542.8	1545.5	1542.8	1562.2
12.5°	1481.5	1489.8	1503.8	1501.0	1501.0	1520.5	1523.2	1531.6	1537.2	1534.4	1556.7
15°	1462.0	1473.1	1489.8	1487.1	1487.1	1509.4	1512.1	1520.5	1526.1	1526.1	1548.4
17.5°	1437.0	1448.1	1464.8	1462.0	1467.6	1484.3	1489.8	1501.0	1506.5	1503.8	1528.8
20°	1400.7	1414.7	1431.4	1428.6	1431.4	1453.7	1459.2	1467.6	1473.1	1473.1	1495.4
22.5°	1358.9	1372.9	1389.6	1386.8	1392.4	1409.1	1414.7	1425.8	1431.4	1428.6	1450.8
25°	1308.8	1322.8	1336.6	1336.6	1339.5	1358.9	1364.5	1372.9	1381.2	1378.4	1398.0
27.5°	1242.0	1255.9	1269.8	1267.1	1269.8	1289.3	1294.9	1303.2	1311.6	1308.8	1328.3
30°	1155.7	1169.6	1180.7	1178.0	1180.7	1200.2	1203.0	1214.1	1222.5	1222.5	1239.2
32.5°	1055.4	1069.3	1074.9	1069.3	1074.9	1088.8	1094.4	1105.6	1111.1	1113.9	1130.6
35°	941.2	949.6	952.4	946.8	946.8	960.7	966.3	977.5	983.0	985.8	999.7
37.5°	815.9	821.5	815.9	807.5	810.4	815.9	824.3	832.7	841.0	843.8	857.7
40°	693.4	690.6	682.3	668.3	665.6	673.9	679.5	687.9	693.4	699.0	707.3
42.5°	584.8	579.2	562.5	545.8	543.1	543.1	545.8	554.2	559.8	562.5	573.6
45°	498.5	487.4	462.3	442.8	431.7	434.4	434.4	440.0	442.8	448.4	456.7
47.5°	431.7	412.1	381.5	356.4	345.3	342.6	342.6	345.3	348.1	353.7	359.3
50°	378.7	353.7	317.5	289.6	275.7	270.2	270.2	267.3	272.9	275.7	281.3
52.5°	337.0	306.3	264.6	233.9	217.2	211.6	208.9	208.9	208.9	211.6	217.2
55°	298.0	264.6	220.0	189.4	169.9	164.3	158.8	155.9	158.8	161.5	164.3
57.5°	264.6	228.3	183.8	150.4	133.7	125.4	119.8	117.0	117.0	119.8	122.5
60°	231.2	194.9	150.4	119.8	103.1	94.7	89.1	86.4	86.4	89.1	89.1
62.5°	194.9	161.5	122.5	94.7	78.0	69.7	64.1	64.1	61.3	61.3	64.1
65°	164.3	133.7	100.2	75.2	58.5	53.0	47.4	44.6	44.6	41.8	44.6
67.5°	133.7	108.6	80.8	58.5	44.6	39.0	33.4	33.4	30.7	30.7	30.7
70°	105.8	86.4	64.1	44.6	36.2	27.8	25.1	22.3	22.3	22.3	22.3
72.5°	78.0	64.1	47.4	33.4	25.1	22.3	19.5	16.7	14.0	14.0	14.0
75°	55.7	44.6	33.4	25.1	19.5	16.7	14.0	11.1	11.1	11.1	11.1
77.5°	39.0	30.7	25.1	16.7	14.0	11.1	8.4	8.4	8.4	8.4	5.6
80°	25.1	19.5	16.7	11.1	8.4	8.4	5.6	5.6	5.6	5.6	5.6
82.5°	14.0	11.1	8.4	8.4	5.6	5.6	2.8	2.8	2.8	2.8	2.8
85°	5.6	5.6	5.6	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°	1553.9	1553.9	1553.9	1553.9	1553.9	1553.9	1553.9	1553.9	1553.9	1553.9	1553.9
2.5°	1545.5	1556.7	1556.7	1562.2	1553.9	1559.5	1567.8	1565.1	1556.7	1559.5	1562.2
5°	1556.7	1567.8	1570.6	1578.9	1570.6	1578.9	1590.1	1587.3	1578.9	1584.5	1587.3
7.5°	1556.7	1570.6	1576.2	1584.5	1578.9	1587.3	1601.2	1598.5	1590.1	1595.7	1601.2
10°	1551.1	1565.1	1573.4	1581.8	1576.2	1587.3	1598.5	1598.5	1592.9	1598.5	1606.8
12.5°	1545.5	1559.5	1567.8	1576.2	1570.6	1584.5	1598.5	1595.7	1592.9	1598.5	1606.8
15°	1537.2	1551.1	1559.5	1567.8	1565.1	1578.9	1592.9	1592.9	1587.3	1595.7	1604.0
17.5°	1517.7	1531.6	1542.8	1548.4	1545.5	1559.5	1573.4	1573.4	1567.8	1576.2	1584.5
20°	1484.3	1498.2	1509.4	1514.9	1512.1	1523.2	1537.2	1540.0	1534.4	1542.8	1551.1
22.5°	1442.5	1453.7	1464.8	1470.4	1467.6	1478.7	1492.7	1495.4	1489.8	1498.2	1503.8
25°	1392.4	1400.7	1411.9	1417.4	1414.7	1425.8	1439.7	1439.7	1437.0	1442.5	1448.1
27.5°	1322.8	1333.9	1342.2	1347.8	1347.8	1356.2	1367.3	1370.0	1367.3	1372.9	1381.2
30°	1236.4	1242.0	1253.1	1255.9	1258.7	1267.1	1278.2	1278.2	1275.4	1280.9	1289.3
32.5°	1127.8	1136.1	1144.5	1147.3	1150.1	1158.4	1166.8	1169.6	1166.8	1172.4	1180.7
35°	999.7	1008.0	1016.4	1019.2	1022.0	1030.3	1038.7	1041.5	1038.7	1044.3	1052.6
37.5°	857.7	863.2	871.6	874.4	879.9	885.5	891.1	896.7	893.9	899.5	905.1
40°	712.9	715.7	724.0	726.8	732.4	738.0	743.5	746.3	746.3	749.1	751.9
42.5°	576.5	582.0	587.6	590.3	595.9	598.7	604.3	607.1	607.1	609.9	612.6
45°	459.5	465.1	470.7	473.4	479.0	481.8	484.5	487.4	484.5	484.5	490.1
47.5°	362.0	367.6	373.1	376.0	378.7	381.5	384.3	384.3	384.3	387.1	387.1
50°	284.0	286.9	292.4	292.4	298.0	298.0	300.7	300.7	300.7	300.7	303.6
52.5°	220.0	222.8	228.3	228.3	231.2	233.9	233.9	233.9	233.9	236.7	233.9
55°	167.1	169.9	172.6	172.6	178.2	178.2	178.2	178.2	178.2	178.2	178.2
57.5°	125.4	128.1	130.9	130.9	130.9	133.7	130.9	133.7	133.7	133.7	133.7
60°	91.9	94.7	94.7	94.7	97.5	97.5	97.5	97.5	97.5	97.5	97.5
62.5°	64.1	64.1	66.8	66.8	66.8	69.7	66.8	66.8	69.7	69.7	66.8
65°	44.6	44.6	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4
67.5°	30.7	30.7	30.7	33.4	33.4	33.4	33.4	33.4	33.4	33.4	33.4
70°	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3
72.5°	14.0	14.0	14.0	14.0	16.7	16.7	16.7	16.7	16.7	16.7	16.7
75°	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1
77.5°	5.6	5.6	8.4	8.4	8.4	5.6	5.6	5.6	8.4	8.4	5.6
80°	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
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: P136453

CATALOG NUMBER: LD6A30D010TE ERW6A30930 6LW111H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1553.9	1553.9	1553.9	1553.9
2.5°	1562.2	1559.5	1562.2	1553.9
5°	1587.3	1584.5	1590.1	1578.9
7.5°	1604.0	1601.2	1606.8	1595.7
10°	1606.8	1606.8	1612.4	1601.2
12.5°	1606.8	1606.8	1612.4	1601.2
15°	1606.8	1604.0	1609.6	1598.5
17.5°	1587.3	1587.3	1592.9	1581.8
20°	1551.1	1551.1	1556.7	1548.4
22.5°	1506.5	1506.5	1509.4	1501.0
25°	1450.8	1448.1	1453.7	1448.1
27.5°	1381.2	1378.4	1381.2	1375.6
30°	1286.5	1283.8	1289.3	1283.8
32.5°	1180.7	1175.1	1180.7	1175.1
35°	1049.9	1044.3	1049.9	1047.0
37.5°	905.1	899.5	905.1	902.2
40°	751.9	749.1	754.7	751.9
42.5°	612.6	607.1	612.6	609.9
45°	490.1	484.5	490.1	487.4
47.5°	387.1	384.3	389.9	387.1
50°	303.6	300.7	303.6	303.6
52.5°	233.9	231.2	233.9	233.9
55°	178.2	175.5	178.2	178.2
57.5°	133.7	130.9	133.7	133.7
60°	97.5	97.5	97.5	97.5
62.5°	69.7	66.8	69.7	69.7
65°	47.4	47.4	47.4	47.4
67.5°	33.4	33.4	33.4	33.4
70°	22.3	22.3	22.3	22.3
72.5°	16.7	16.7	16.7	14.0
75°	11.1	11.1	11.1	11.1
77.5°	8.4	5.6	8.4	8.4
80°	5.6	5.6	5.6	5.6
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)