

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: P136452

Luminaire Tested: **LD6A30D010TE ERW6A30927 6LW111H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136452
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 ERW6A30927 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: 2424.9 lumens
Efficiency: N/A
Efficacy: 53.4 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

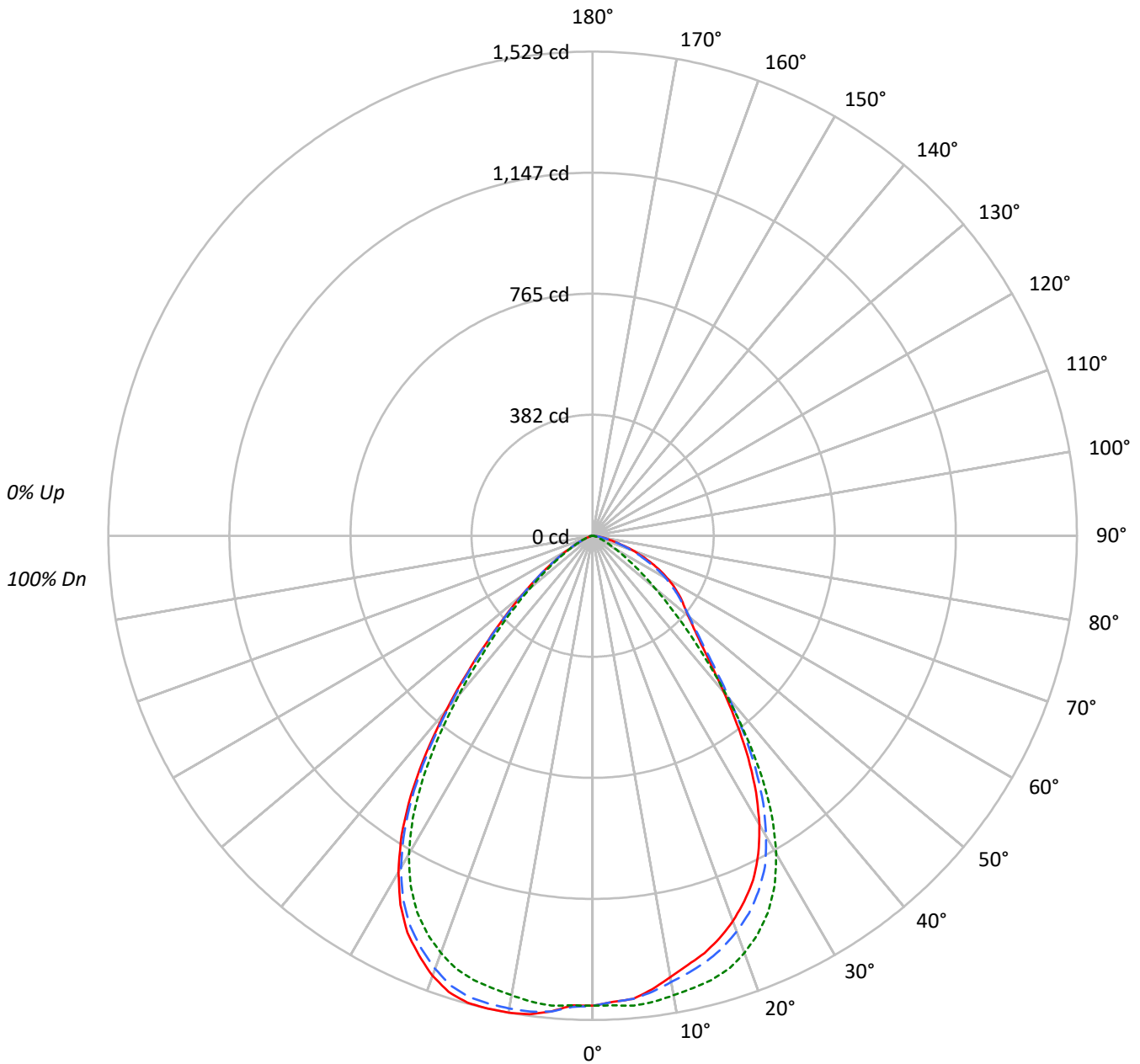
Input Watts (W): 45.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				90
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80				80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73	72				72
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64				64
5	85	74	67	62	83	73	67	61	71	65	61	70	64	60	68	63	60	58				58
6	79	68	61	56	78	68	61	55	66	60	55	64	59	55	63	58	54	52				52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48				48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44				44
9	66	54	47	42	65	54	47	42	53	46	42	52	46	42	51	46	42	40				40
10	62	51	44	39	61	50	43	39	49	43	39	48	43	39	48	42	39	37				37

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	96824	96824	96824
5°	96146	97541	98759
10°	93733	97608	101312
15°	92154	98078	103110
20°	89923	97310	102663
25°	86346	94387	99555
30°	79341	87357	92366
35°	68207	74348	79644
40°	54813	55945	61157
45°	44665	38779	42940
50°	39949	25912	29424
55°	38423	16936	19359
60°	36091	10752	12148
65°	32017	6561	6978
70°	25885	4063	4063
75°	18124	2697	2697
80°	12023	1991	1991
85°	5914	1946	1946



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.3	5.8
10°-20°	407.4	16.8
20°-30°	593.3	24.5
30°-40°	575.5	23.7
40°-50°	363.7	15.0
50°-60°	202.5	8.4
60°-70°	100.3	4.1
70°-80°	35.4	1.5
80°-90°	5.5	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°	1141.9	47.1
0°-40°	1717.4	70.8
0°-60°	2283.7	94.2
0°-90°	2424.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2424.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1484	1484	1484	1484	1484	
5°	1468	1468	1489	1508	1508	138
15°	1364	1391	1452	1508	1527	384
25°	1200	1239	1311	1362	1383	547
35°	856	896	934	984	1000	531
45°	484	497	420	460	465	383
55°	338	330	149	170	170	301
65°	207	192	42	45	45	204
75°	72	66	11	11	11	80
85°	8	8	3	3	3	12
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°	1484.1	1484.1	1484.1	1484.1	1484.1	1484.1	1484.1	1484.1	1484.1	1484.1	1484.1
2.5°	1473.4	1460.1	1465.5	1462.8	1465.5	1462.8	1470.8	1462.8	1468.1	1473.4	1462.8
5°	1468.1	1454.8	1457.4	1457.4	1457.4	1457.4	1465.5	1457.4	1462.8	1468.1	1460.1
7.5°	1444.2	1433.5	1436.1	1436.1	1436.1	1436.1	1444.2	1438.8	1444.2	1452.1	1444.2
10°	1414.9	1404.3	1409.6	1409.6	1409.6	1409.6	1420.2	1414.9	1420.2	1430.9	1422.9
12.5°	1388.3	1380.3	1385.7	1385.7	1385.7	1388.3	1396.3	1393.6	1398.9	1412.2	1404.3
15°	1364.4	1356.4	1361.7	1361.7	1361.7	1364.4	1372.3	1375.0	1380.3	1391.0	1385.7
17.5°	1332.4	1324.5	1332.4	1332.4	1329.8	1335.1	1345.8	1345.8	1351.1	1364.4	1361.7
20°	1295.2	1287.2	1295.2	1295.2	1292.5	1297.8	1308.5	1311.2	1316.5	1329.8	1327.1
22.5°	1250.0	1247.3	1250.0	1255.3	1252.6	1255.3	1266.0	1268.6	1273.9	1289.9	1287.2
25°	1199.5	1196.9	1202.1	1204.8	1202.1	1204.8	1215.4	1218.1	1223.4	1239.4	1239.4
27.5°	1132.9	1130.3	1138.3	1138.3	1138.3	1143.6	1151.6	1157.0	1159.6	1178.2	1175.5
30°	1053.2	1050.5	1055.9	1058.5	1058.5	1058.5	1069.1	1077.2	1079.8	1095.8	1095.8
32.5°	960.1	960.1	962.8	968.1	965.4	970.7	978.7	984.0	989.3	1002.7	1002.7
35°	856.4	859.0	861.7	867.0	864.3	867.0	875.0	880.3	883.0	896.3	893.6
37.5°	747.4	750.0	752.7	755.3	755.3	758.0	765.9	768.7	771.3	781.9	776.6
40°	643.6	643.6	646.3	651.6	649.0	654.3	659.6	662.2	662.2	670.2	664.9
42.5°	553.2	555.8	558.5	561.1	561.1	563.9	569.2	571.8	571.8	574.5	566.5
45°	484.1	486.7	486.7	492.0	492.0	494.7	497.3	500.0	497.3	497.3	489.4
47.5°	433.5	436.1	438.8	441.5	441.5	444.2	446.8	446.8	444.2	441.5	430.8
50°	393.6	399.0	399.0	401.6	404.3	406.9	406.9	406.9	401.6	399.0	383.0
52.5°	364.4	367.0	369.7	372.3	372.3	375.0	377.6	375.0	369.7	361.7	345.8
55°	337.8	340.5	343.1	345.8	345.8	345.8	345.8	343.1	337.8	329.8	313.8
57.5°	308.5	311.2	313.8	316.4	316.4	316.4	316.4	313.8	308.5	297.9	279.3
60°	276.6	279.3	281.9	284.6	284.6	284.6	281.9	279.3	273.9	266.0	247.3
62.5°	242.0	244.7	247.3	247.3	247.3	244.7	244.7	242.0	236.7	228.7	210.1
65°	207.4	207.4	210.1	210.1	210.1	210.1	207.4	204.8	199.5	191.5	178.2
67.5°	170.2	172.8	172.8	172.8	172.8	172.8	170.2	170.2	164.9	156.9	146.3
70°	135.7	135.7	138.3	138.3	138.3	138.3	135.7	135.7	130.3	125.0	114.4
72.5°	101.1	101.1	101.1	103.7	103.7	103.7	101.1	101.1	98.4	93.1	85.1
75°	71.9	71.9	71.9	74.5	74.5	74.5	74.5	71.9	69.1	66.5	61.2
77.5°	47.8	50.5	47.8	47.8	47.8	50.5	47.8	47.8	47.8	45.2	39.9
80°	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	29.2	29.2	26.6
82.5°	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6	16.0	16.0
85°	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
87.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
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°	1484.1	1484.1	1484.1	1484.1	1484.1	1484.1	1484.1	1484.1	1484.1	1484.1	1484.1
2.5°	1470.8	1476.0	1481.3	1476.0	1468.1	1484.1	1481.3	1484.1	1481.3	1476.0	1492.0
5°	1468.1	1473.4	1481.3	1476.0	1470.8	1486.7	1484.1	1489.4	1489.4	1484.1	1500.0
7.5°	1452.1	1457.4	1470.8	1465.5	1460.1	1476.0	1478.7	1484.1	1486.7	1481.3	1500.0
10°	1433.5	1438.8	1452.1	1449.5	1446.8	1465.5	1468.1	1473.4	1476.0	1473.4	1492.0
12.5°	1414.9	1422.9	1436.1	1433.5	1433.5	1452.1	1454.8	1462.8	1468.1	1465.5	1486.7
15°	1396.3	1406.9	1422.9	1420.2	1420.2	1441.4	1444.2	1452.1	1457.4	1457.4	1478.7
17.5°	1372.3	1383.0	1398.9	1396.3	1401.6	1417.5	1422.9	1433.5	1438.8	1436.1	1460.1
20°	1337.7	1351.1	1367.0	1364.4	1367.0	1388.3	1393.6	1401.6	1406.9	1406.9	1428.2
22.5°	1297.8	1311.2	1327.1	1324.5	1329.8	1345.8	1351.1	1361.7	1367.0	1364.4	1385.7
25°	1250.0	1263.3	1276.6	1276.6	1279.3	1297.8	1303.2	1311.2	1319.2	1316.5	1335.1
27.5°	1186.2	1199.5	1212.7	1210.1	1212.7	1231.4	1236.7	1244.7	1252.6	1250.0	1268.6
30°	1103.7	1117.1	1127.6	1125.0	1127.6	1146.3	1148.9	1159.6	1167.5	1167.5	1183.5
32.5°	1008.0	1021.3	1026.6	1021.3	1026.6	1039.9	1045.2	1055.9	1061.2	1063.8	1079.8
35°	898.9	906.9	909.5	904.2	904.2	917.6	922.9	933.5	938.8	941.5	954.8
37.5°	779.2	784.5	779.2	771.3	774.0	779.2	787.2	795.2	803.2	805.8	819.1
40°	662.2	659.6	651.6	638.3	635.6	643.6	649.0	656.9	662.2	667.6	675.5
42.5°	558.5	553.2	537.2	521.2	518.6	518.6	521.2	529.3	534.6	537.2	547.9
45°	476.0	465.4	441.5	422.9	412.2	414.9	414.9	420.3	422.9	428.2	436.1
47.5°	412.2	393.6	364.4	340.5	329.8	327.1	327.1	329.8	332.4	337.8	343.1
50°	361.7	337.8	303.2	276.6	263.3	258.0	258.0	255.3	260.7	263.3	268.6
52.5°	321.8	292.5	252.6	223.4	207.4	202.1	199.5	199.5	199.5	202.1	207.4
55°	284.6	252.6	210.1	180.9	162.2	156.9	151.6	148.9	151.6	154.3	156.9
57.5°	252.6	218.1	175.6	143.6	127.6	119.7	114.4	111.7	111.7	114.4	117.0
60°	220.8	186.2	143.6	114.4	98.4	90.4	85.1	82.4	82.4	85.1	85.1
62.5°	186.2	154.3	117.0	90.4	74.5	66.5	61.2	61.2	58.5	58.5	61.2
65°	156.9	127.6	95.8	71.9	55.9	50.5	45.2	42.5	42.5	39.9	42.5
67.5°	127.6	103.7	77.1	55.9	42.5	37.3	32.0	32.0	29.2	29.2	29.2
70°	101.1	82.4	61.2	42.5	34.6	26.6	23.9	21.3	21.3	21.3	21.3
72.5°	74.5	61.2	45.2	32.0	23.9	21.3	18.6	16.0	13.3	13.3	13.3
75°	53.2	42.5	32.0	23.9	18.6	16.0	13.3	10.7	10.7	10.7	10.7
77.5°	37.3	29.2	23.9	16.0	13.3	10.7	7.9	7.9	7.9	7.9	5.3
80°	23.9	18.6	16.0	10.7	7.9	7.9	5.3	5.3	5.3	5.3	5.3
82.5°	13.3	10.7	7.9	7.9	5.3	5.3	2.6	2.6	2.6	2.6	2.6
85°	5.3	5.3	5.3	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
87.5°	2.6	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°	1484.1	1484.1	1484.1	1484.1	1484.1	1484.1	1484.1	1484.1	1484.1	1484.1	1484.1
2.5°	1476.0	1486.7	1486.7	1492.0	1484.1	1489.4	1497.3	1494.7	1486.7	1489.4	1492.0
5°	1486.7	1497.3	1500.0	1508.0	1500.0	1508.0	1518.6	1515.9	1508.0	1513.3	1515.9
7.5°	1486.7	1500.0	1505.4	1513.3	1508.0	1515.9	1529.3	1526.6	1518.6	1524.0	1529.3
10°	1481.3	1494.7	1502.6	1510.6	1505.4	1515.9	1526.6	1526.6	1521.2	1526.6	1534.6
12.5°	1476.0	1489.4	1497.3	1505.4	1500.0	1513.3	1526.6	1524.0	1521.2	1526.6	1534.6
15°	1468.1	1481.3	1489.4	1497.3	1494.7	1508.0	1521.2	1521.2	1515.9	1524.0	1531.9
17.5°	1449.5	1462.8	1473.4	1478.7	1476.0	1489.4	1502.6	1502.6	1497.3	1505.4	1513.3
20°	1417.5	1430.9	1441.4	1446.8	1444.2	1454.8	1468.1	1470.8	1465.5	1473.4	1481.3
22.5°	1377.6	1388.3	1398.9	1404.3	1401.6	1412.2	1425.6	1428.2	1422.9	1430.9	1436.1
25°	1329.8	1337.7	1348.4	1353.7	1351.1	1361.7	1375.0	1375.0	1372.3	1377.6	1383.0
27.5°	1263.3	1273.9	1281.9	1287.2	1287.2	1295.2	1305.9	1308.5	1305.9	1311.2	1319.2
30°	1180.9	1186.2	1196.9	1199.5	1202.1	1210.1	1220.8	1220.8	1218.1	1223.4	1231.4
32.5°	1077.2	1085.1	1093.0	1095.8	1098.4	1106.4	1114.3	1117.1	1114.3	1119.7	1127.6
35°	954.8	962.8	970.7	973.4	976.1	984.0	992.1	994.7	992.1	997.4	1005.3
37.5°	819.1	824.4	832.5	835.1	840.4	845.7	851.1	856.4	853.7	859.0	864.3
40°	680.8	683.5	691.5	694.2	699.4	704.7	710.1	712.8	712.8	715.4	718.1
42.5°	550.5	555.8	561.1	563.9	569.2	571.8	577.1	579.8	579.8	582.4	585.1
45°	438.8	444.2	449.5	452.1	457.4	460.1	462.8	465.4	462.8	462.8	468.1
47.5°	345.8	351.0	356.3	359.1	361.7	364.4	367.0	367.0	367.0	369.7	369.7
50°	271.3	273.9	279.3	279.3	284.6	284.6	287.2	287.2	287.2	287.2	289.9
52.5°	210.1	212.7	218.1	218.1	220.8	223.4	223.4	223.4	223.4	226.1	223.4
55°	159.6	162.2	164.9	164.9	170.2	170.2	170.2	170.2	170.2	170.2	170.2
57.5°	119.7	122.3	125.0	125.0	125.0	127.6	125.0	127.6	127.6	127.6	127.6
60°	87.7	90.4	90.4	90.4	93.1	93.1	93.1	93.1	93.1	93.1	93.1
62.5°	61.2	61.2	63.8	63.8	63.8	66.5	63.8	63.8	66.5	66.5	63.8
65°	42.5	42.5	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2
67.5°	29.2	29.2	29.2	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0
70°	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3
72.5°	13.3	13.3	13.3	13.3	16.0	16.0	16.0	16.0	16.0	16.0	16.0
75°	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7
77.5°	5.3	5.3	7.9	7.9	7.9	5.3	5.3	5.3	7.9	7.9	5.3
80°	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
82.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
85°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	0.0	2.6	2.6	2.6
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: P136452

CATALOG NUMBER: LD6A30D010TE ERW6A30927 6LW111H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1484.1	1484.1	1484.1	1484.1
2.5°	1492.0	1489.4	1492.0	1484.1
5°	1515.9	1513.3	1518.6	1508.0
7.5°	1531.9	1529.3	1534.6	1524.0
10°	1534.6	1534.6	1539.9	1529.3
12.5°	1534.6	1534.6	1539.9	1529.3
15°	1534.6	1531.9	1537.2	1526.6
17.5°	1515.9	1515.9	1521.2	1510.6
20°	1481.3	1481.3	1486.7	1478.7
22.5°	1438.8	1438.8	1441.4	1433.5
25°	1385.7	1383.0	1388.3	1383.0
27.5°	1319.2	1316.5	1319.2	1313.8
30°	1228.7	1226.1	1231.4	1226.1
32.5°	1127.6	1122.4	1127.6	1122.4
35°	1002.7	997.4	1002.7	1000.0
37.5°	864.3	859.0	864.3	861.7
40°	718.1	715.4	720.7	718.1
42.5°	585.1	579.8	585.1	582.4
45°	468.1	462.8	468.1	465.4
47.5°	369.7	367.0	372.3	369.7
50°	289.9	287.2	289.9	289.9
52.5°	223.4	220.8	223.4	223.4
55°	170.2	167.5	170.2	170.2
57.5°	127.6	125.0	127.6	127.6
60°	93.1	93.1	93.1	93.1
62.5°	66.5	63.8	66.5	66.5
65°	45.2	45.2	45.2	45.2
67.5°	32.0	32.0	32.0	32.0
70°	21.3	21.3	21.3	21.3
72.5°	16.0	16.0	16.0	13.3
75°	10.7	10.7	10.7	10.7
77.5°	7.9	5.3	7.9	7.9
80°	5.3	5.3	5.3	5.3
82.5°	2.6	2.6	2.6	2.6
85°	2.6	2.6	2.6	2.6
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)