

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: P208841

Luminaire Tested: **LDSQA6A30930D010TE LARL15SP 6LSQA1H 30°**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208841
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29054)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA6A30930D010TE LARL15SP 6LSQA1H 30°
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT, 30° Tilt
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1725.6 lumens
Efficiency: N/A
Efficacy: 38.7 lumens/watt
Spacing Criteria (0/90/45): 2.18 / 0.62 / 1.12
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

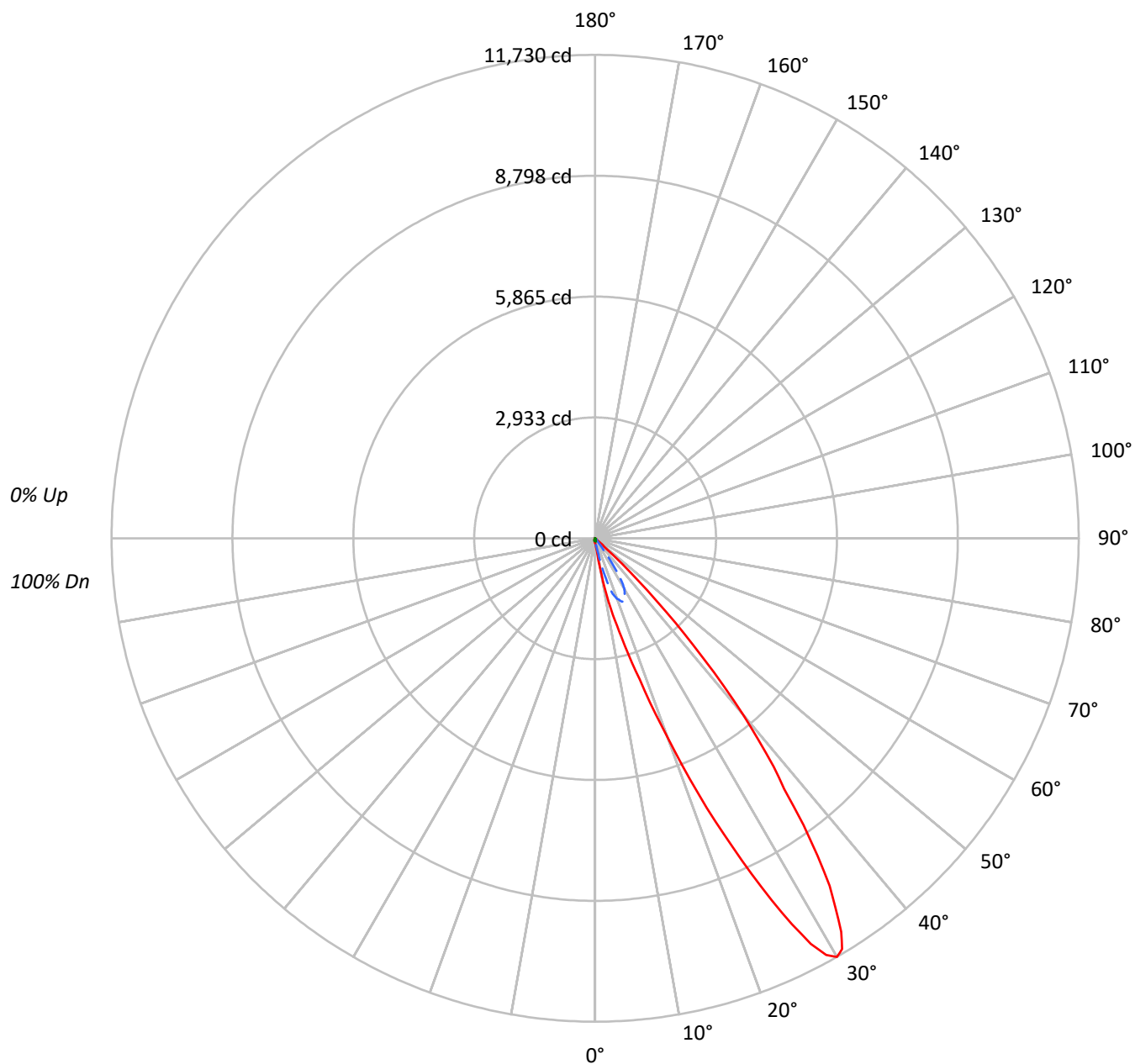
Input Watts (W): 44.62
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	113	109	106	104	110	107	105	102	103	101	99		99	98	96		96
2	106	100	95	91	103	98	94	90	95	91	88		92	89	86		89
3	99	91	86	81	97	90	85	80	87	83	79		85	81	78		82
4	93	84	77	72	91	82	76	72	80	75	71		78	73	70		76
5	86	77	70	64	85	75	69	64	74	68	63		72	67	63		70
6	81	70	63	58	79	69	62	58	68	62	57		66	61	57		65
7	75	64	57	52	74	64	57	52	62	56	51		61	55	51		60
8	70	59	52	47	69	58	52	47	57	51	47		56	50	46		55
9	66	54	47	42	65	54	47	42	53	46	42		52	46	42		51
10	62	50	43	38	60	50	43	38	49	42	38		48	42	38		47

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	4870	4870	4870
5°	7512	4612	3704
10°	40279	4101	3074
15°	111066	3316	2630
20°	235848	2479	2296
25°	426914	1805	1995
30°	583183	1327	1770
35°	494339	936	1614
40°	313793	635	1546
45°	108755	493	1425
50°	6658	382	1246
55°	1156	300	968
60°	276	276	629
65°	163	326	489
70°	201	403	504
75°	0	532	532
80°	0	793	397
85°	0	1581	395



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	14.1	0.8
10°-20°	177.4	10.3
20°-30°	616.7	35.7
30°-40°	676.1	39.2
40°-50°	223.0	12.9
50°-60°	9.3	0.5
60°-70°	4.0	0.2
70°-80°	3.1	0.2
80°-90°	2.0	0.1
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°	808.2	46.8
0°-40°	1484.3	86.0
0°-60°	1716.5	99.5
0°-90°	1725.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1725.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	113	113	113	113	113	
5°	174	141	107	91	86	37
15°	2492	1016	74	60	59	828
25°	8986	1666	38	37	42	4206
35°	9405	555	18	23	31	5653
45°	1786	28	8	16	23	1574
55°	15	3	4	10	13	22
65°	2	2	3	6	5	2
75°	0	2	3	4	3	1
85°	0	2	3	2	1	0
90°	0	0	0	0	0	



TEST NUMBER: P208841

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CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
0°	113.1	113.1	113.1	113.1	113.1	113.1	113.1	113.1	113.1	113.1	113.1
2.5°	134.2	133.4	133.4	133.4	132.5	130.9	130.9	131.7	131.7	130.9	131.7
5°	173.8	172.1	171.3	170.5	167.3	166.5	163.3	165.7	163.3	160.8	160.8
7.5°	318.4	317.6	303.9	295.0	279.6	261.9	257.0	257.8	246.5	236.0	229.5
10°	921.3	923.0	882.6	898.7	840.5	817.1	772.6	756.5	716.1	682.1	640.9
11°	1232.5	1230.9	1180.0	1195.3	1136.3	1103.2	1053.1	1027.2	976.3	942.4	890.6
12°	1568.7	1519.4	1502.4	1517.0	1456.4	1412.7	1352.1	1319.0	1255.9	1221.2	1159.0
13°	1901.7	1887.1	1830.6	1844.3	1782.1	1686.7	1661.7	1622.1	1548.5	1507.3	1437.8
14°	2190.2	2136.9	2119.1	2128.0	2066.6	1976.0	1951.0	1938.9	1825.7	1781.3	1703.7
15°	2491.7	2427.0	2402.0	2368.8	2332.5	2225.0	2188.6	2165.2	2048.0	1973.6	1923.5
17.5°	3587.6	3496.3	3434.8	3359.7	3279.7	3080.9	2998.4	2920.0	2714.7	2616.1	2467.4
20°	5147.4	5007.6	4850.0	4686.8	4530.0	4179.2	3975.5	3757.3	3476.9	3242.5	3064.7
21°	5902.3	5735.0	5545.1	5422.2	5127.2	4698.9	4424.1	4112.9	3752.5	3462.3	3238.5
22°	6693.5	6502.8	6344.4	6163.3	5754.4	5243.6	4898.5	4499.2	4032.9	3674.9	3392.0
23°	7462.1	7246.3	7056.4	6835.8	6363.0	5771.4	5361.6	4885.6	4323.9	3878.6	3528.6
24°	8196.0	7972.1	7753.9	7463.7	6922.2	6268.4	5786.7	5244.4	4601.1	4074.1	3657.1
25°	8986.4	8724.5	8442.5	8001.2	7450.8	6711.3	6156.9	5556.4	4847.6	4254.4	3765.4
26°	9773.6	9468.1	9045.4	8596.0	7938.1	7110.5	6478.5	5809.3	5057.7	4399.0	3845.4
27°	10512.3	10184.9	9688.7	9073.7	8375.4	7452.4	6743.6	6009.8	5204.0	4492.8	3882.6
28°	11144.3	10783.8	10231.0	9530.3	8701.1	7703.8	6919.0	6127.8	5274.3	4528.3	3887.4
29°	11560.5	11200.8	10605.2	9826.9	8885.4	7828.2	6988.5	6153.6	5270.3	4507.3	3854.3
30°	11730.2	11367.3	10758.8	9923.9	8920.1	7830.6	6960.2	6099.5	5200.0	4441.1	3788.8
31°	11630.8	11282.5	10665.0	9824.5	8797.3	7717.5	6841.4	5962.9	5060.1	4323.9	3691.0
32°	11263.9	10944.6	10351.4	9551.3	8544.3	7490.4	6636.9	5760.8	4862.9	4171.1	3569.0
33°	10704.6	10438.7	9832.6	9094.7	8206.5	7211.6	6388.0	5555.6	4625.3	3984.4	3438.9
34°	10168.8	9776.0	9238.5	8583.1	7773.3	6849.5	6079.3	5232.3	4373.2	3779.1	3290.2
35°	9405.0	9053.5	8557.2	7996.3	7269.0	6407.4	5637.2	4917.1	4091.1	3581.1	3134.2
36°	8599.2	8289.7	7929.3	7426.5	6730.7	5945.9	5241.2	4530.0	3801.0	3360.5	2969.3
37°	7614.9	7545.4	7210.0	6790.5	6169.0	5444.0	4781.3	4166.3	3529.4	3156.8	2788.3
38°	7033.8	6805.9	6498.7	6129.4	5520.0	4939.7	4337.6	3801.0	3282.9	2966.1	2582.2
39°	6294.3	6101.9	5819.0	5486.9	4962.3	4414.4	3924.6	3496.3	3079.2	2773.7	2359.9
40°	5583.0	5423.0	5163.6	4878.3	4402.3	3951.3	3568.2	3228.0	2877.2	2568.5	2140.1
42.5°	3520.5	3441.3	3334.6	3295.8	3125.3	3008.1	2868.3	2671.9	2363.2	2015.7	1716.6
45°	1786.1	1735.2	1733.6	1812.8	1866.9	1872.6	1859.7	1809.6	1609.1	1509.7	1243.8
47.5°	300.7	286.1	295.0	348.3	423.5	514.8	616.7	741.9	876.1	847.8	653.0
50°	99.4	96.2	93.8	96.2	92.9	95.4	93.8	91.3	82.4	86.5	88.9
51°	61.4	65.5	63.0	64.7	63.8	66.3	66.3	65.5	59.8	55.8	50.9
52°	42.0	42.8	43.6	44.5	43.6	44.5	45.3	45.3	43.6	42.0	38.0
53°	29.9	29.9	30.7	30.7	30.7	31.5	31.5	31.5	30.7	30.7	29.9
54°	21.0	21.8	21.8	21.8	21.8	22.6	22.6	22.6	23.4	22.6	22.6
55°	15.4	15.4	15.4	15.4	15.4	15.4	16.2	16.2	17.0	17.0	16.2
57.5°	6.5	6.5	5.7	6.5	6.5	6.5	6.5	7.3	7.3	8.1	8.1
60°	3.2	3.2	3.2	3.2	2.4	3.2	3.2	3.2	3.2	4.0	4.0



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
63°	1.6	1.6	1.6	1.6	1.6	1.6	0.8	1.6	1.6	1.6	1.6
64°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.8
65°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.8
66°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	0.8	0.8
67.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	0.8
70°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
72.5°	1.6	0.8	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.8
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8
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):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
0°	113.1	113.1	113.1	113.1	113.1	113.1	113.1	113.1	113.1	113.1	113.1
2.5°	129.3	130.9	128.5	130.1	126.9	126.9	124.5	125.3	124.5	122.8	122.8
5°	156.8	156.8	152.7	152.7	147.9	145.5	141.4	141.4	139.0	135.0	134.2
7.5°	215.0	206.9	198.0	194.8	185.1	178.6	171.3	168.1	160.8	154.4	149.5
10°	575.4	522.1	469.6	437.2	358.0	300.7	257.8	228.7	207.7	182.7	173.0
11°	811.4	743.5	674.8	607.8	530.2	451.8	402.5	324.9	275.6	219.8	193.2
12°	1066.8	986.8	903.6	827.6	734.7	636.1	568.2	469.6	400.1	307.1	242.5
13°	1328.7	1238.2	1138.8	1059.6	954.5	841.3	734.7	643.3	556.8	435.6	341.1
14°	1580.8	1484.7	1375.6	1292.3	1174.3	1051.5	931.0	830.0	725.0	580.3	463.9
15°	1805.5	1736.8	1598.6	1516.2	1389.3	1258.4	1124.2	1015.9	891.4	730.6	596.5
17.5°	2275.9	2149.0	1980.1	1898.5	1772.4	1659.2	1513.8	1416.0	1262.4	1092.7	944.8
20°	2830.3	2643.6	2414.9	2242.8	2024.5	1825.7	1642.3	1565.5	1470.1	1354.5	1216.3
21°	2982.3	2781.0	2531.3	2355.9	2132.0	1927.6	1711.8	1589.7	1485.5	1385.3	1269.7
22°	3093.0	2880.4	2617.8	2435.1	2204.8	2001.9	1781.3	1635.0	1496.0	1382.8	1278.6
23°	3186.7	2960.4	2687.3	2488.4	2247.6	2038.3	1816.8	1671.4	1517.8	1377.2	1264.0
24°	3271.6	3023.5	2736.6	2523.2	2269.4	2051.2	1821.7	1677.8	1528.3	1380.4	1244.6
25°	3335.4	3063.1	2764.9	2541.0	2274.3	2047.2	1810.4	1665.7	1516.2	1369.9	1222.8
26°	3379.1	3081.7	2772.9	2540.2	2264.6	2031.0	1786.9	1640.6	1487.1	1331.9	1187.2
27°	3392.8	3076.8	2761.6	2521.6	2240.3	1999.5	1747.3	1593.0	1441.8	1286.7	1139.6
28°	3379.1	3057.4	2735.8	2485.2	2199.9	1947.8	1683.5	1529.9	1393.3	1236.5	1081.4
29°	3341.1	3022.7	2688.1	2431.1	2136.1	1863.7	1601.9	1469.3	1337.6	1160.6	983.6
30°	3282.1	2959.6	2619.4	2351.9	2041.5	1757.8	1528.3	1413.5	1245.4	1037.7	847.0
31°	3199.7	2878.0	2530.5	2246.8	1915.4	1654.4	1464.5	1309.3	1101.6	875.3	680.5
32°	3099.4	2781.0	2401.2	2107.0	1791.0	1572.8	1351.3	1150.1	919.7	682.9	496.2
33°	2992.0	2656.6	2253.3	1959.9	1684.3	1463.7	1188.1	953.7	716.1	480.1	312.8
34°	2867.5	2503.8	2087.6	1812.0	1564.7	1299.6	994.1	741.1	510.8	291.8	160.8
35°	2717.2	2315.5	1922.7	1684.3	1393.3	1082.2	781.5	555.2	320.0	147.1	87.3
36°	2535.3	2121.5	1779.7	1520.2	1192.9	868.8	564.1	354.0	172.1	86.5	68.7
37°	2304.2	1962.3	1629.3	1324.6	976.3	652.2	363.7	192.4	98.6	70.3	58.2
38°	2104.6	1815.2	1468.5	1111.3	752.4	446.9	220.6	108.3	77.6	59.0	48.5
39°	1932.4	1657.6	1257.6	886.6	536.6	270.7	121.2	82.4	64.7	48.5	41.2
40°	1782.1	1432.9	1034.5	665.1	345.1	150.3	87.3	68.7	52.5	40.4	33.1
42.5°	1307.7	909.2	479.3	215.0	101.0	75.2	55.0	43.6	33.9	25.1	21.0
45°	776.7	408.9	144.7	88.1	63.8	47.7	34.8	27.5	21.0	15.4	12.9
47.5°	283.7	103.4	71.1	53.3	40.4	29.9	21.8	17.0	12.9	8.9	7.3
50°	58.2	50.1	38.8	31.5	23.4	17.8	12.9	9.7	7.3	5.7	4.8
51°	44.5	38.8	31.5	25.1	18.6	14.5	10.5	8.1	6.5	4.8	4.0
52°	33.9	29.9	24.2	20.2	15.4	11.3	8.1	6.5	4.8	3.2	3.2
53°	26.7	23.4	18.6	15.4	12.1	8.9	6.5	4.8	4.0	3.2	3.2
54°	20.2	17.8	14.5	12.1	9.7	7.3	4.8	4.0	3.2	3.2	2.4
55°	14.5	13.7	11.3	8.9	7.3	5.7	4.0	3.2	3.2	2.4	2.4
57.5°	7.3	6.5	5.7	4.8	4.0	3.2	2.4	2.4	2.4	2.4	1.6
60°	4.0	3.2	3.2	3.2	2.4	2.4	2.4	1.6	1.6	2.4	2.4



TEST NUMBER: P208841

CATALOG NUMBER: LDSQA6A30930D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
63°	1.6	1.6	1.6	1.6	2.4	1.6	1.6	1.6	2.4	2.4	2.4
64°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.4	2.4	2.4	2.4
65°	0.8	1.6	1.6	1.6	1.6	1.6	1.6	2.4	2.4	2.4	2.4
66°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.4	2.4	2.4	2.4
67.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.4	2.4	2.4	2.4
70°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.4	2.4	2.4	2.4
72.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.4	2.4	2.4	2.4
75°	0.8	0.8	1.6	1.6	1.6	1.6	1.6	2.4	2.4	2.4	2.4
77.5°	0.8	0.8	1.6	1.6	1.6	1.6	1.6	2.4	2.4	2.4	2.4
80°	0.8	0.8	0.8	1.6	1.6	1.6	1.6	2.4	2.4	2.4	2.4
82.5°	0.8	0.8	0.8	1.6	1.6	1.6	1.6	2.4	2.4	2.4	2.4
85°	0.8	0.8	0.8	1.6	1.6	1.6	1.6	2.4	2.4	2.4	2.4
87.5°	0.8	0.8	0.8	1.6	1.6	1.6	1.6	2.4	2.4	2.4	2.4
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: P208841

CATALOG NUMBER: LDSQA6A30930D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	113.1	113.1	113.1	113.1	113.1	113.1	113.1	113.1	113.1	113.1	113.1
2.5°	120.4	122.0	120.4	118.8	118.0	118.0	117.2	114.8	115.6	114.8	114.8
5°	130.1	130.9	127.7	125.3	123.7	122.0	120.4	117.2	116.4	115.6	114.8
7.5°	143.1	142.2	135.8	131.7	127.7	124.5	121.2	117.2	115.6	113.1	111.5
10°	161.6	156.0	145.5	138.2	132.5	126.1	121.2	114.8	111.5	108.3	105.9
11°	169.7	161.6	151.1	141.4	134.2	126.9	121.2	113.1	109.1	105.9	102.6
12°	194.8	173.0	156.0	145.5	135.8	127.7	120.4	112.3	107.5	102.6	99.4
13°	252.2	201.2	166.5	147.9	138.2	128.5	119.6	110.7	105.1	99.4	96.2
14°	345.9	258.6	192.4	156.8	139.0	128.5	118.8	109.1	102.6	97.0	92.9
15°	458.2	347.5	244.9	178.6	142.2	127.7	117.2	106.7	99.4	92.9	88.9
17.5°	771.8	627.2	470.4	334.6	206.9	139.8	110.7	98.6	89.7	82.4	77.6
20°	1034.5	868.0	691.0	522.1	358.0	223.1	127.7	89.7	79.2	71.1	66.3
21°	1091.9	935.9	748.4	571.4	401.7	258.6	144.7	89.7	75.2	67.1	62.2
22°	1121.8	971.5	784.0	603.7	431.6	283.7	162.4	90.5	71.1	63.0	57.4
23°	1116.9	979.5	797.7	613.4	445.3	295.8	169.7	91.3	67.1	59.0	53.3
24°	1087.8	957.7	784.0	602.1	441.3	292.6	167.3	89.7	63.0	55.0	50.1
25°	1051.5	914.9	746.8	571.4	415.4	272.4	155.2	84.1	59.8	51.7	46.9
26°	1010.2	872.0	695.1	517.2	373.4	238.4	130.9	74.4	55.0	47.7	43.6
27°	960.9	816.3	631.2	459.9	315.2	192.4	105.1	63.0	50.9	43.6	40.4
28°	887.4	737.1	549.6	383.9	252.2	145.5	79.2	54.1	46.9	40.4	37.2
29°	777.5	625.5	447.7	299.8	185.1	100.2	60.6	48.5	42.0	36.4	33.9
30°	640.1	494.6	332.2	206.1	118.8	67.9	49.3	42.8	37.2	33.1	31.5
31°	484.9	351.6	215.0	118.8	71.1	50.1	43.6	37.2	33.1	29.9	29.1
32°	320.0	212.6	114.0	68.7	51.7	43.6	38.0	33.1	29.9	27.5	26.7
33°	171.3	97.8	65.5	51.7	43.6	38.0	33.1	29.1	26.7	25.1	24.2
34°	87.3	63.8	53.3	44.5	37.2	33.1	29.1	25.9	24.2	22.6	21.8
35°	64.7	55.0	46.1	38.0	32.3	29.1	25.9	23.4	21.8	20.2	20.2
36°	55.0	46.1	38.0	33.1	29.1	25.9	23.4	20.2	19.4	18.6	17.8
37°	46.1	39.6	33.1	28.3	25.1	22.6	20.2	18.6	17.0	16.2	16.2
38°	38.8	33.9	28.3	24.2	21.8	20.2	17.8	16.2	15.4	14.5	14.5
39°	32.3	28.3	24.2	21.0	18.6	17.0	15.4	14.5	13.7	12.9	12.9
40°	26.7	24.2	20.2	17.8	16.2	14.5	13.7	12.9	12.1	11.3	12.1
42.5°	17.0	14.5	12.9	12.1	10.5	10.5	9.7	8.9	8.9	8.9	8.9
45°	9.7	8.9	8.1	8.1	7.3	7.3	7.3	6.5	7.3	7.3	7.3
47.5°	5.7	5.7	4.8	4.8	4.8	4.8	4.8	4.8	4.8	5.7	5.7
50°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	4.0	4.0
51°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	4.0
52°	3.2	3.2	3.2	2.4	2.4	2.4	2.4	2.4	3.2	3.2	3.2
53°	2.4	3.2	2.4	2.4	2.4	2.4	2.4	2.4	3.2	3.2	3.2
54°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	3.2	3.2
55°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	3.2	3.2
57.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	3.2
60°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	3.2



TEST NUMBER: P208841

CATALOG NUMBER: LDSQA6A30930D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
63°	2.4	2.4	2.4	2.4	2.4	3.2	2.4	2.4	2.4	3.2	3.2
64°	2.4	2.4	2.4	2.4	2.4	3.2	2.4	2.4	2.4	2.4	3.2
65°	2.4	2.4	3.2	3.2	3.2	3.2	2.4	2.4	2.4	2.4	3.2
66°	2.4	2.4	3.2	3.2	3.2	3.2	3.2	2.4	2.4	3.2	3.2
67.5°	2.4	3.2	3.2	3.2	3.2	3.2	3.2	2.4	3.2	3.2	3.2
70°	2.4	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
72.5°	2.4	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
75°	2.4	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
77.5°	2.4	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
80°	2.4	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
82.5°	2.4	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
85°	2.4	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
87.5°	2.4	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
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: P208841

CATALOG NUMBER: LDSQA6A30930D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
0°	113.1	113.1	113.1	113.1	113.1	113.1	113.1	113.1
2.5°	112.3	111.5	110.7	110.7	104.3	101.0	97.0	97.0
5°	110.7	109.9	108.3	106.7	96.2	91.3	86.5	85.7
7.5°	107.5	105.1	102.6	101.0	88.1	82.4	77.6	76.8
10°	101.0	97.8	95.4	93.8	80.0	74.4	70.3	70.3
11°	97.8	94.6	92.1	89.7	76.0	71.1	67.9	67.9
12°	94.6	91.3	88.1	86.5	72.7	68.7	65.5	64.7
13°	91.3	87.3	84.9	82.4	69.5	65.5	63.0	63.0
14°	88.1	84.1	80.8	78.4	66.3	62.2	60.6	60.6
15°	83.2	79.2	76.8	74.4	62.2	59.8	58.2	59.0
17.5°	71.9	68.7	66.3	63.8	54.1	53.3	53.3	54.1
20°	61.4	58.2	55.8	54.1	46.9	47.7	48.5	50.1
21°	57.4	54.1	51.7	50.1	44.5	45.3	46.9	48.5
22°	53.3	50.9	48.5	46.9	42.0	42.8	45.3	46.9
23°	49.3	46.9	45.3	43.6	39.6	41.2	43.6	45.3
24°	46.1	43.6	42.0	40.4	37.2	38.8	42.0	43.6
25°	42.8	40.4	38.8	38.0	34.8	37.2	40.4	42.0
26°	39.6	38.0	36.4	35.6	33.1	35.6	38.8	41.2
27°	36.4	34.8	33.9	33.1	30.7	33.9	37.2	39.6
28°	33.9	32.3	31.5	30.7	29.1	32.3	36.4	38.0
29°	31.5	29.9	29.1	28.3	27.5	30.7	34.8	37.2
30°	29.1	28.3	26.7	26.7	25.9	29.9	33.1	35.6
31°	26.7	25.9	25.1	24.2	24.2	28.3	32.3	34.8
32°	25.1	24.2	23.4	22.6	23.4	26.7	30.7	33.9
33°	22.6	21.8	21.8	21.0	21.8	25.9	29.9	33.1
34°	20.2	20.2	19.4	19.4	21.0	25.1	29.1	31.5
35°	18.6	17.8	17.8	17.8	20.2	23.4	28.3	30.7
36°	17.0	17.0	16.2	16.2	19.4	22.6	27.5	29.9
37°	15.4	15.4	15.4	14.5	17.8	21.8	25.9	29.1
38°	13.7	13.7	13.7	13.7	17.0	21.0	25.9	29.1
39°	12.1	12.1	12.9	12.9	16.2	20.2	24.2	28.3
40°	11.3	11.3	11.3	11.3	15.4	19.4	23.4	27.5
42.5°	8.9	8.9	9.7	9.7	13.7	17.8	21.8	25.1
45°	7.3	7.3	8.1	8.1	12.1	16.2	19.4	23.4
47.5°	5.7	5.7	6.5	6.5	10.5	14.5	17.8	21.0
50°	4.0	4.8	4.8	5.7	9.7	12.9	15.4	18.6
51°	4.0	4.0	4.8	4.8	8.9	12.1	14.5	17.8
52°	4.0	4.0	4.8	4.8	8.1	11.3	13.7	16.2
53°	3.2	4.0	4.0	4.8	8.1	11.3	12.9	15.4
54°	3.2	3.2	4.0	4.0	8.1	10.5	12.9	13.7
55°	3.2	3.2	4.0	4.0	7.3	10.5	12.1	12.9
57.5°	3.2	3.2	3.2	3.2	6.5	8.9	10.5	10.5
60°	3.2	3.2	3.2	3.2	6.5	8.1	9.7	7.3



TEST NUMBER: P208841

CATALOG NUMBER: LDSQA6A30930D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
63°	3.2	3.2	3.2	3.2	5.7	7.3	7.3	5.7
64°	3.2	3.2	3.2	3.2	5.7	7.3	7.3	5.7
65°	3.2	3.2	3.2	3.2	5.7	6.5	6.5	4.8
66°	3.2	3.2	3.2	3.2	5.7	6.5	6.5	4.8
67.5°	3.2	3.2	3.2	3.2	4.8	5.7	5.7	4.8
70°	3.2	3.2	3.2	3.2	4.8	5.7	4.8	4.0
72.5°	3.2	3.2	3.2	3.2	4.8	4.8	4.0	3.2
75°	3.2	3.2	3.2	3.2	4.0	4.0	3.2	3.2
77.5°	3.2	3.2	3.2	3.2	4.0	4.0	3.2	2.4
80°	3.2	3.2	3.2	3.2	4.0	3.2	2.4	1.6
82.5°	3.2	3.2	3.2	3.2	3.2	2.4	1.6	1.6
85°	3.2	3.2	3.2	3.2	3.2	2.4	1.6	0.8
87.5°	3.2	3.2	3.2	3.2	3.2	2.4	0.8	0.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180° - - 45°-225° - - - 90°-270°







61°	3.2	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	3.2	3.2
62°	2.4	2.4	2.4	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6





61°	3.2	2.4	2.4	2.4	2.4	2.4	2.4	1.6	1.6	2.4	2.4
62°	2.4	2.4	2.4	2.4	2.4	2.4	1.6	1.6	1.6	2.4	2.4





61°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	3.2
62°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4





61°	3.2	3.2	3.2	3.2	5.7	8.1	8.9	6.5
62°	3.2	3.2	3.2	3.2	5.7	7.3	8.1	5.7



(END OF REPORT)