

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: P208813

Luminaire Tested: **LDSQA6A10830D010TE LARL15SP 6LSQA1H 30°**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208813
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: LDSQA6A10830D010TE LARL15SP 6LSQA1H 30°
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT, 30° Tilt
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 831.8 lumens
Efficiency: N/A
Efficacy: 60.6 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

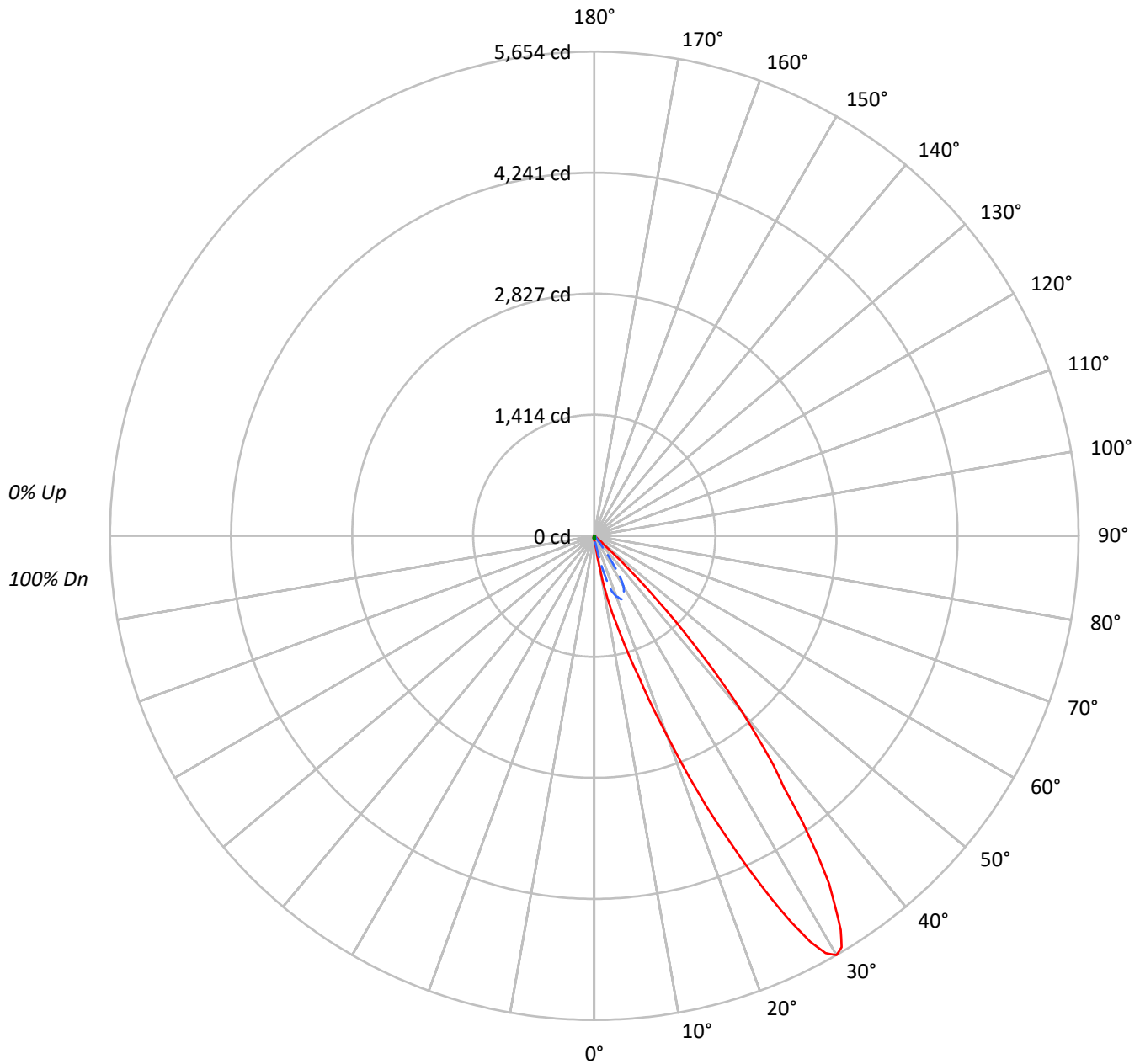
Input Watts (W): 13.73
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	2347	2347	2347
5°	3622	2222	1785
10°	19416	1976	1482
15°	53534	1596	1266
20°	113681	1196	1109
25°	205775	869	964
30°	281101	641	850
35°	238276	452	778
40°	151254	309	742
45°	52420	237	688
50°	3208	181	603
55°	555	143	465
60°	138	138	301
65°	82	163	234
70°	101	201	239
75°	0	266	266
80°	0	397	198
85°	0	790	198



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	6.8	0.8
10°-20°	85.5	10.3
20°-30°	297.3	35.7
30°-40°	325.9	39.2
40°-50°	107.5	12.9
50°-60°	4.5	0.5
60°-70°	1.9	0.2
70°-80°	1.5	0.2
80°-90°	1.0	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°	389.6	46.8
0°-40°	715.4	86.0
0°-60°	827.4	99.5
0°-90°	831.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	831.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	54	54	54	54	54	
5°	84	68	51	44	41	18
15°	1201	490	36	29	28	399
25°	4332	803	18	18	20	2027
35°	4533	268	9	11	15	2725
45°	861	13	4	8	11	758
55°	7	2	2	5	6	11
65°	1	1	2	3	2	1
75°	0	1	2	2	2	0
85°	0	1	2	1	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
0°	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5
2.5°	64.7	64.3	64.3	64.3	63.9	63.1	63.1	63.5	63.5	63.1	63.5
5°	83.8	83.0	82.6	82.2	80.6	80.2	78.7	79.9	78.7	77.5	77.5
7.5°	153.5	153.1	146.5	142.2	134.8	126.2	123.9	124.3	118.8	113.8	110.6
10°	444.1	444.9	425.4	433.2	405.1	393.8	372.4	364.6	345.1	328.8	308.9
11°	594.1	593.3	568.8	576.2	547.7	531.7	507.6	495.1	470.6	454.2	429.3
12°	756.1	732.4	724.2	731.2	702.0	680.9	651.7	635.8	605.4	588.6	558.6
13°	916.6	909.6	882.4	889.0	859.0	813.0	800.9	781.8	746.4	726.5	693.0
14°	1055.7	1030.0	1021.4	1025.7	996.1	952.5	940.4	934.6	880.0	858.6	821.2
15°	1201.0	1169.8	1157.8	1141.8	1124.3	1072.5	1054.9	1043.6	987.1	951.3	927.1
17.5°	1729.3	1685.2	1655.6	1619.4	1580.8	1485.0	1445.3	1407.5	1308.5	1261.0	1189.3
20°	2481.1	2413.7	2337.7	2259.1	2183.5	2014.4	1916.2	1811.1	1675.9	1562.9	1477.2
21°	2844.9	2764.3	2672.8	2613.5	2471.4	2264.9	2132.4	1982.5	1808.7	1668.9	1561.0
22°	3226.3	3134.4	3058.0	2970.8	2773.7	2527.5	2361.1	2168.7	1943.9	1771.3	1635.0
23°	3596.8	3492.8	3401.2	3294.9	3067.0	2781.8	2584.3	2354.9	2084.1	1869.5	1700.8
24°	3950.5	3842.6	3737.4	3597.6	3336.6	3021.4	2789.2	2527.8	2217.8	1963.8	1762.8
25°	4331.5	4205.3	4069.3	3856.6	3591.3	3234.9	2967.7	2678.2	2336.6	2050.6	1815.0
26°	4710.9	4563.7	4359.9	4143.3	3826.2	3427.3	3122.7	2800.1	2437.9	2120.4	1853.5
27°	5067.0	4909.2	4670.0	4373.6	4037.0	3592.1	3250.5	2896.8	2508.4	2165.6	1871.4
28°	5371.6	5197.9	4931.4	4593.7	4194.0	3713.3	3335.0	2953.6	2542.3	2182.7	1873.8
29°	5572.2	5398.9	5111.8	4736.6	4282.8	3773.3	3368.5	2966.1	2540.3	2172.6	1857.8
30°	5654.1	5479.1	5185.8	4783.4	4299.6	3774.4	3354.9	2940.0	2506.4	2140.6	1826.3
31°	5606.1	5438.2	5140.6	4735.5	4240.3	3719.9	3297.6	2874.2	2439.0	2084.1	1779.1
32°	5429.3	5275.4	4989.5	4603.8	4118.4	3610.4	3199.1	2776.8	2344.0	2010.5	1720.3
33°	5159.7	5031.5	4739.4	4383.7	3955.6	3476.0	3079.1	2677.8	2229.4	1920.5	1657.6
34°	4901.4	4712.1	4453.0	4137.1	3746.8	3301.5	2930.3	2522.0	2107.9	1821.6	1585.9
35°	4533.3	4363.8	4124.6	3854.3	3503.7	3088.4	2717.2	2370.1	1971.9	1726.1	1510.7
36°	4144.9	3995.7	3822.0	3579.7	3244.2	2866.0	2526.3	2183.5	1832.1	1619.8	1431.2
37°	3670.4	3636.9	3475.3	3273.1	2973.5	2624.1	2304.6	2008.2	1701.2	1521.6	1344.0
38°	3390.3	3280.5	3132.4	2954.4	2660.7	2381.0	2090.8	1832.1	1582.4	1429.7	1244.6
39°	3033.9	2941.2	2804.8	2644.7	2391.9	2127.8	1891.7	1685.2	1484.2	1337.0	1137.5
40°	2691.1	2613.9	2488.9	2351.4	2121.9	1904.6	1719.9	1555.9	1386.8	1238.0	1031.6
42.5°	1696.9	1658.7	1607.3	1588.6	1506.4	1449.9	1382.5	1287.9	1139.1	971.6	827.4
45°	860.9	836.4	835.6	873.8	899.9	902.6	896.4	872.2	775.6	727.7	599.5
47.5°	144.9	137.9	142.2	167.9	204.1	248.1	297.2	357.6	422.3	408.6	314.8
50°	47.9	46.4	45.2	46.4	44.8	46.0	45.2	44.0	39.7	41.7	42.9
51°	29.6	31.6	30.4	31.2	30.8	31.9	31.9	31.6	28.8	26.9	24.5
52°	20.3	20.6	21.0	21.4	21.0	21.4	21.8	21.8	21.0	20.3	18.3
53°	14.4	14.4	14.8	14.8	14.8	15.2	15.2	15.2	14.8	14.8	14.4
54°	10.1	10.5	10.5	10.5	10.5	10.9	10.9	10.9	11.3	10.9	10.9
55°	7.4	7.4	7.4	7.4	7.4	7.4	7.8	7.8	8.2	8.2	7.8
57.5°	3.1	3.1	2.7	3.1	3.1	3.1	3.1	3.5	3.5	3.9	3.9
60°	1.6	1.6	1.6	1.6	1.2	1.6	1.6	1.6	1.6	1.9	1.9



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
63°	0.8	0.8	0.8	0.8	0.8	0.8	0.4	0.8	0.8	0.8	0.8
64°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4
65°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4
66°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.4	0.4
67.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.4
70°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
72.5°	0.8	0.4	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4
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°	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5
2.5°	62.3	63.1	61.9	62.7	61.2	61.2	60.0	60.4	60.0	59.2	59.2
5°	75.6	75.6	73.6	73.6	71.3	70.1	68.2	68.2	67.0	65.1	64.7
7.5°	103.6	99.7	95.4	93.9	89.2	86.1	82.6	81.0	77.5	74.4	72.1
10°	277.4	251.7	226.3	210.8	172.6	144.9	124.3	110.2	100.1	88.0	83.4
11°	391.1	358.4	325.3	292.9	255.6	217.8	194.0	156.6	132.8	106.0	93.1
12°	514.2	475.7	435.5	398.9	354.1	306.6	273.9	226.3	192.8	148.0	116.9
13°	640.4	596.8	548.9	510.7	460.1	405.5	354.1	310.1	268.4	210.0	164.4
14°	762.0	715.6	663.0	622.9	566.0	506.8	448.8	400.1	349.4	279.7	223.6
15°	870.3	837.2	770.5	730.8	669.7	606.5	541.9	489.7	429.7	352.2	287.5
17.5°	1097.0	1035.8	954.4	915.1	854.3	799.8	729.6	682.5	608.5	526.7	455.4
20°	1364.2	1274.2	1164.0	1081.0	975.8	880.0	791.6	754.6	708.6	652.9	586.3
21°	1437.5	1340.5	1220.1	1135.6	1027.7	929.1	825.1	766.3	716.0	667.7	612.0
22°	1490.8	1388.4	1261.8	1173.7	1062.7	964.9	858.6	788.1	721.1	666.5	616.3
23°	1536.0	1427.0	1295.3	1199.5	1083.4	982.5	875.7	805.6	731.6	663.8	609.3
24°	1576.9	1457.3	1319.0	1216.2	1093.9	988.7	878.1	808.7	736.7	665.4	599.9
25°	1607.7	1476.4	1332.7	1224.8	1096.2	986.8	872.6	802.9	730.8	660.3	589.4
26°	1628.7	1485.4	1336.6	1224.4	1091.5	979.0	861.3	790.8	716.8	642.0	572.3
27°	1635.4	1483.0	1331.1	1215.4	1079.9	963.8	842.2	767.8	695.0	620.2	549.3
28°	1628.7	1473.7	1318.7	1197.9	1060.4	938.8	811.5	737.4	671.6	596.0	521.2
29°	1610.4	1456.9	1295.7	1171.8	1029.6	898.3	772.1	708.2	644.7	559.4	474.1
30°	1582.0	1426.6	1262.6	1133.6	984.0	847.3	736.7	681.3	600.3	500.2	408.3
31°	1542.3	1387.2	1219.7	1083.0	923.3	797.4	705.9	631.1	531.0	421.9	328.0
32°	1494.0	1340.5	1157.4	1015.6	863.3	758.1	651.3	554.3	443.3	329.2	239.2
33°	1442.1	1280.5	1086.1	944.7	811.8	705.5	572.7	459.7	345.1	231.4	150.8
34°	1382.2	1206.9	1006.2	873.4	754.2	626.4	479.2	357.2	246.2	140.6	77.5
35°	1309.7	1116.1	926.8	811.8	671.6	521.6	376.7	267.6	154.3	70.9	42.1
36°	1222.0	1022.6	857.8	732.8	575.0	418.8	271.9	170.6	83.0	41.7	33.1
37°	1110.6	945.8	785.4	638.5	470.6	314.4	175.3	92.7	47.5	33.9	28.0
38°	1014.4	874.9	707.8	535.6	362.7	215.4	106.3	52.2	37.4	28.4	23.4
39°	931.4	799.0	606.2	427.3	258.7	130.5	58.4	39.7	31.2	23.4	19.9
40°	859.0	690.7	498.6	320.6	166.3	72.5	42.1	33.1	25.3	19.5	16.0
42.5°	630.3	438.3	231.0	103.6	48.7	36.2	26.5	21.0	16.4	12.1	10.1
45°	374.4	197.1	69.7	42.5	30.8	23.0	16.8	13.2	10.1	7.4	6.2
47.5°	136.7	49.9	34.3	25.7	19.5	14.4	10.5	8.2	6.2	4.3	3.5
50°	28.0	24.2	18.7	15.2	11.3	8.6	6.2	4.7	3.5	2.7	2.3
51°	21.4	18.7	15.2	12.1	9.0	7.0	5.1	3.9	3.1	2.3	1.9
52°	16.4	14.4	11.7	9.7	7.4	5.5	3.9	3.1	2.3	1.6	1.6
53°	12.9	11.3	9.0	7.4	5.8	4.3	3.1	2.3	1.9	1.6	1.6
54°	9.7	8.6	7.0	5.8	4.7	3.5	2.3	1.9	1.6	1.6	1.2
55°	7.0	6.6	5.5	4.3	3.5	2.7	1.9	1.6	1.6	1.2	1.2
57.5°	3.5	3.1	2.7	2.3	1.9	1.6	1.2	1.2	1.2	1.2	0.8
60°	1.9	1.6	1.6	1.6	1.2	1.2	1.2	0.8	0.8	1.2	1.2



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CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
63°	0.8	0.8	0.8	0.8	1.2	0.8	0.8	0.8	1.2	1.2	1.2
64°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2
65°	0.4	0.8	0.8	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2
66°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2
67.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2
70°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2
72.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2
75°	0.4	0.4	0.8	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2
77.5°	0.4	0.4	0.8	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2
80°	0.4	0.4	0.4	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2
82.5°	0.4	0.4	0.4	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2
85°	0.4	0.4	0.4	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2
87.5°	0.4	0.4	0.4	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2
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: P208813

CATALOG NUMBER: LDSQA6A10830D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5
2.5°	58.0	58.8	58.0	57.3	56.9	56.9	56.5	55.3	55.7	55.3	55.3
5°	62.7	63.1	61.6	60.4	59.6	58.8	58.0	56.5	56.1	55.7	55.3
7.5°	69.0	68.6	65.4	63.5	61.6	60.0	58.4	56.5	55.7	54.5	53.8
10°	77.9	75.2	70.1	66.6	63.9	60.8	58.4	55.3	53.8	52.2	51.0
11°	81.8	77.9	72.8	68.2	64.7	61.2	58.4	54.5	52.6	51.0	49.5
12°	93.9	83.4	75.2	70.1	65.4	61.6	58.0	54.1	51.8	49.5	47.9
13°	121.5	97.0	80.2	71.3	66.6	61.9	57.7	53.4	50.6	47.9	46.4
14°	166.7	124.7	92.7	75.6	67.0	61.9	57.3	52.6	49.5	46.7	44.8
15°	220.9	167.5	118.0	86.1	68.6	61.6	56.5	51.4	47.9	44.8	42.9
17.5°	372.0	302.3	226.7	161.3	99.7	67.4	53.4	47.5	43.2	39.7	37.4
20°	498.6	418.4	333.1	251.7	172.6	107.5	61.6	43.2	38.2	34.3	31.9
21°	526.3	451.1	360.7	275.4	193.6	124.7	69.7	43.2	36.2	32.3	30.0
22°	540.7	468.2	377.9	291.0	208.0	136.7	78.3	43.6	34.3	30.4	27.7
23°	538.4	472.1	384.5	295.7	214.6	142.6	81.8	44.0	32.3	28.4	25.7
24°	524.3	461.6	377.9	290.2	212.7	141.0	80.6	43.2	30.4	26.5	24.2
25°	506.8	441.0	360.0	275.4	200.2	131.3	74.8	40.5	28.8	24.9	22.6
26°	486.9	420.3	335.0	249.3	180.0	114.9	63.1	35.8	26.5	23.0	21.0
27°	463.2	393.5	304.2	221.7	151.9	92.7	50.6	30.4	24.5	21.0	19.5
28°	427.7	355.3	264.9	185.0	121.5	70.1	38.2	26.1	22.6	19.5	17.9
29°	374.8	301.5	215.8	144.5	89.2	48.3	29.2	23.4	20.3	17.5	16.4
30°	308.5	238.4	160.1	99.3	57.3	32.7	23.8	20.6	17.9	16.0	15.2
31°	233.7	169.5	103.6	57.3	34.3	24.2	21.0	17.9	16.0	14.4	14.0
32°	154.3	102.5	54.9	33.1	24.9	21.0	18.3	16.0	14.4	13.2	12.9
33°	82.6	47.1	31.6	24.9	21.0	18.3	16.0	14.0	12.9	12.1	11.7
34°	42.1	30.8	25.7	21.4	17.9	16.0	14.0	12.5	11.7	10.9	10.5
35°	31.2	26.5	22.2	18.3	15.6	14.0	12.5	11.3	10.5	9.7	9.7
36°	26.5	22.2	18.3	16.0	14.0	12.5	11.3	9.7	9.3	9.0	8.6
37°	22.2	19.1	16.0	13.6	12.1	10.9	9.7	9.0	8.2	7.8	7.8
38°	18.7	16.4	13.6	11.7	10.5	9.7	8.6	7.8	7.4	7.0	7.0
39°	15.6	13.6	11.7	10.1	9.0	8.2	7.4	7.0	6.6	6.2	6.2
40°	12.9	11.7	9.7	8.6	7.8	7.0	6.6	6.2	5.8	5.5	5.8
42.5°	8.2	7.0	6.2	5.8	5.1	5.1	4.7	4.3	4.3	4.3	4.3
45°	4.7	4.3	3.9	3.9	3.5	3.5	3.5	3.1	3.5	3.5	3.5
47.5°	2.7	2.7	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.7	2.7
50°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.9	1.9
51°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.9
52°	1.6	1.6	1.6	1.2	1.2	1.2	1.2	1.2	1.6	1.6	1.6
53°	1.2	1.6	1.2	1.2	1.2	1.2	1.2	1.2	1.6	1.6	1.6
54°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.6	1.6
55°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.6	1.6
57.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.6
60°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.6



TEST NUMBER: P208813

CATALOG NUMBER: LDSQA6A10830D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
63°	1.2	1.2	1.2	1.2	1.2	1.6	1.2	1.2	1.2	1.6	1.6
64°	1.2	1.2	1.2	1.2	1.2	1.6	1.2	1.2	1.2	1.2	1.6
65°	1.2	1.2	1.6	1.6	1.6	1.6	1.2	1.2	1.2	1.2	1.6
66°	1.2	1.2	1.6	1.6	1.6	1.6	1.6	1.2	1.2	1.6	1.6
67.5°	1.2	1.6	1.6	1.6	1.6	1.6	1.6	1.2	1.6	1.6	1.6
70°	1.2	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
72.5°	1.2	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
75°	1.2	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
77.5°	1.2	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
80°	1.2	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
82.5°	1.2	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
85°	1.2	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
87.5°	1.2	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
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: P208813

CATALOG NUMBER: LDSQA6A10830D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
0°	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5
2.5°	54.1	53.8	53.4	53.4	50.3	48.7	46.7	46.7
5°	53.4	53.0	52.2	51.4	46.4	44.0	41.7	41.3
7.5°	51.8	50.6	49.5	48.7	42.5	39.7	37.4	37.0
10°	48.7	47.1	46.0	45.2	38.6	35.8	33.9	33.9
11°	47.1	45.6	44.4	43.2	36.6	34.3	32.7	32.7
12°	45.6	44.0	42.5	41.7	35.1	33.1	31.6	31.2
13°	44.0	42.1	40.9	39.7	33.5	31.6	30.4	30.4
14°	42.5	40.5	39.0	37.8	31.9	30.0	29.2	29.2
15°	40.1	38.2	37.0	35.8	30.0	28.8	28.0	28.4
17.5°	34.7	33.1	31.9	30.8	26.1	25.7	25.7	26.1
20°	29.6	28.0	26.9	26.1	22.6	23.0	23.4	24.2
21°	27.7	26.1	24.9	24.2	21.4	21.8	22.6	23.4
22°	25.7	24.5	23.4	22.6	20.3	20.6	21.8	22.6
23°	23.8	22.6	21.8	21.0	19.1	19.9	21.0	21.8
24°	22.2	21.0	20.3	19.5	17.9	18.7	20.3	21.0
25°	20.6	19.5	18.7	18.3	16.8	17.9	19.5	20.3
26°	19.1	18.3	17.5	17.1	16.0	17.1	18.7	19.9
27°	17.5	16.8	16.4	16.0	14.8	16.4	17.9	19.1
28°	16.4	15.6	15.2	14.8	14.0	15.6	17.5	18.3
29°	15.2	14.4	14.0	13.6	13.2	14.8	16.8	17.9
30°	14.0	13.6	12.9	12.9	12.5	14.4	16.0	17.1
31°	12.9	12.5	12.1	11.7	11.7	13.6	15.6	16.8
32°	12.1	11.7	11.3	10.9	11.3	12.9	14.8	16.4
33°	10.9	10.5	10.5	10.1	10.5	12.5	14.4	16.0
34°	9.7	9.7	9.3	9.3	10.1	12.1	14.0	15.2
35°	9.0	8.6	8.6	8.6	9.7	11.3	13.6	14.8
36°	8.2	8.2	7.8	7.8	9.3	10.9	13.2	14.4
37°	7.4	7.4	7.4	7.0	8.6	10.5	12.5	14.0
38°	6.6	6.6	6.6	6.6	8.2	10.1	12.5	14.0
39°	5.8	5.8	6.2	6.2	7.8	9.7	11.7	13.6
40°	5.5	5.5	5.5	5.5	7.4	9.3	11.3	13.2
42.5°	4.3	4.3	4.7	4.7	6.6	8.6	10.5	12.1
45°	3.5	3.5	3.9	3.9	5.8	7.8	9.3	11.3
47.5°	2.7	2.7	3.1	3.1	5.1	7.0	8.6	10.1
50°	1.9	2.3	2.3	2.7	4.7	6.2	7.4	9.0
51°	1.9	1.9	2.3	2.3	4.3	5.8	7.0	8.6
52°	1.9	1.9	2.3	2.3	3.9	5.5	6.6	7.8
53°	1.6	1.9	1.9	2.3	3.9	5.5	6.2	7.4
54°	1.6	1.6	1.9	1.9	3.9	5.1	6.2	6.6
55°	1.6	1.6	1.9	1.9	3.5	5.1	5.8	6.2
57.5°	1.6	1.6	1.6	1.6	3.1	4.3	5.1	5.1
60°	1.6	1.6	1.6	1.6	3.1	3.9	4.7	3.5



TEST NUMBER: P208813

CATALOG NUMBER: LDSQA6A10830D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
63°	1.6	1.6	1.6	1.6	2.7	3.5	3.5	2.7
64°	1.6	1.6	1.6	1.6	2.7	3.5	3.5	2.7
65°	1.6	1.6	1.6	1.6	2.7	3.1	3.1	2.3
66°	1.6	1.6	1.6	1.6	2.7	3.1	3.1	2.3
67.5°	1.6	1.6	1.6	1.6	2.3	2.7	2.7	2.3
70°	1.6	1.6	1.6	1.6	2.3	2.7	2.3	1.9
72.5°	1.6	1.6	1.6	1.6	2.3	2.3	1.9	1.6
75°	1.6	1.6	1.6	1.6	1.9	1.9	1.6	1.6
77.5°	1.6	1.6	1.6	1.6	1.9	1.9	1.6	1.2
80°	1.6	1.6	1.6	1.6	1.9	1.6	1.2	0.8
82.5°	1.6	1.6	1.6	1.6	1.6	1.2	0.8	0.8
85°	1.6	1.6	1.6	1.6	1.6	1.2	0.8	0.4
87.5°	1.6	1.6	1.6	1.6	1.6	1.2	0.4	0.4
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°	1.6	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.6	1.6
62°	1.2	1.2	1.2	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8





61°	1.6	1.2	1.2	1.2	1.2	1.2	1.2	0.8	0.8	1.2	1.2
62°	1.2	1.2	1.2	1.2	1.2	1.2	0.8	0.8	0.8	1.2	1.2





61°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.6
62°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2





61°	1.6	1.6	1.6	1.6	2.7	3.9	4.3	3.1
62°	1.6	1.6	1.6	1.6	2.7	3.5	3.9	2.7



(END OF REPORT)