

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: P208873

Luminaire Tested: **LDSQA6A30930D010TE LARL20NF 6LSQA1H 30°**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208873
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29056)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA6A30930D010TE LARL20NF 6LSQA1H 30°
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 20° NARROW FLOOD, 30° Tilt
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2190.4 lumens
Efficiency: N/A
Efficacy: 49.1 lumens/watt
Spacing Criteria (0/90/45): 2.38 / 0.63 / 1.23
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

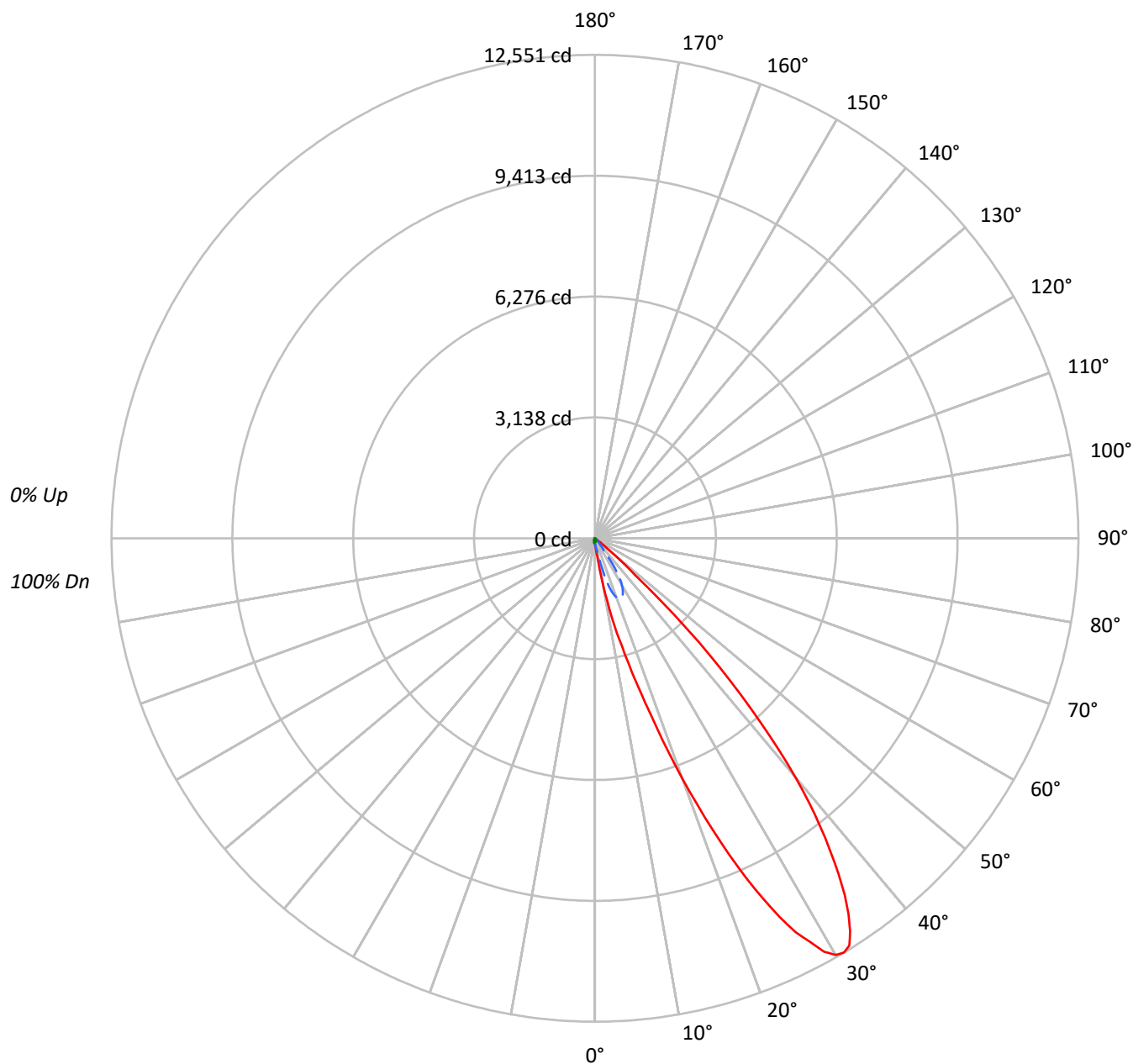
Input Watts (W): 44.62
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P208873

CATALOG NUMBER: LDSQA6A30930D010TE LARL20NF 6LSQA1H 30°

Luminous Intensity Polar Plot





TEST NUMBER: P208873

CATALOG NUMBER: LDSQA6A30930D010TE LARL20NF 6LSQA1H 30°

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	50	30	10	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	100		
1	112	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91		
2	105	100	95	91	103	98	94	90	95	91	88	92	89	86	89	86	84	82		
3	99	91	85	80	96	89	84	80	87	82	78	84	80	77	82	79	76	74		
4	92	83	76	71	90	82	75	71	79	74	70	77	73	69	75	71	68	66		
5	86	76	69	63	84	75	68	63	73	67	62	71	66	62	69	65	61	60		
6	80	69	62	57	78	68	61	56	67	61	56	65	60	56	64	59	55	53		
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48		
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43		
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	41	39		
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	6359	6359	6359
5°	12694	6168	4171
10°	57085	5395	3117
15°	149659	4413	2505
20°	304714	3345	2117
25°	490316	2470	1796
30°	621052	1750	1586
35°	594089	1146	1414
40°	455526	708	1321
45°	231674	463	1224
50°	35528	335	1065
55°	4662	315	758
60°	508	293	508
65°	82	346	428
70°	101	529	529
75°	0	699	416
80°	0	843	422
85°	0	1680	395



TEST NUMBER: P208873

CATALOG NUMBER: LDSQA6A30930D010TE LARL20NF 6LSQA1H 30°

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.7	0.9
10°-20°	216.6	9.9
20°-30°	709.2	32.4
30°-40°	863.2	39.4
40°-50°	350.7	16.0
50°-60°	20.8	1.0
60°-70°	4.1	0.2
70°-80°	3.6	0.2
80°-90°	2.6	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°	945.5	43.2
0°-40°	1808.7	82.6
0°-60°	2180.2	99.5
0°-90°	2190.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2190.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	148	148	148	148	148	
5°	294	224	143	106	96	56
15°	3358	1120	99	60	56	1092
25°	10321	1666	52	35	38	4743
35°	11303	666	22	21	27	6836
45°	3805	76	8	13	20	2919
55°	62	8	4	9	10	107
65°	1	2	3	6	4	1
75°	0	2	4	5	2	0
85°	0	2	3	3	1	0
90°	0	0	0	0	0	



TEST NUMBER: P208873

CATALOG NUMBER: LDSQA6A30930D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
0°	147.7	147.7	147.7	147.7	147.7	147.7	147.7	147.7	147.7	147.7	147.7
2.5°	208.1	198.9	203.1	202.2	198.9	199.7	201.4	198.0	199.7	194.7	195.5
5°	293.7	280.3	287.8	279.4	283.6	279.4	279.4	274.4	270.2	269.4	265.2
7.5°	512.7	480.0	490.1	454.0	459.9	448.1	437.2	425.5	405.3	395.2	373.4
10°	1305.7	1213.4	1235.3	1156.4	1154.7	1127.0	1075.8	1040.6	965.9	913.0	837.5
11°	1651.5	1588.6	1607.9	1521.4	1517.2	1479.5	1419.0	1325.1	1283.1	1212.6	1118.6
12°	2103.0	1997.2	2009.0	1914.1	1904.9	1854.6	1786.6	1670.8	1620.4	1534.8	1424.1
13°	2513.3	2419.3	2420.2	2317.0	2306.0	2242.3	2167.6	2027.4	1971.2	1875.5	1742.1
14°	2890.1	2818.8	2804.5	2749.1	2690.4	2615.7	2536.8	2378.2	2316.1	2208.7	2056.0
15°	3357.5	3218.2	3190.5	3120.9	3049.5	2955.6	2859.1	2677.8	2609.0	2490.7	2338.8
17.5°	4736.3	4564.2	4488.7	4346.9	4212.6	4032.2	3823.3	3501.9	3343.3	3130.9	2893.5
20°	6650.4	6379.4	6227.5	6000.1	5783.6	5488.2	5127.3	4621.3	4386.3	3975.2	3585.8
21°	7408.2	7174.9	6984.4	6728.5	6472.5	6122.6	5693.8	5158.4	4795.9	4315.0	3858.5
22°	8173.5	7952.0	7729.6	7448.5	7162.3	6753.6	6259.4	5638.4	5202.9	4641.5	4115.3
23°	8927.1	8702.2	8531.0	8145.8	7820.2	7359.5	6811.5	6101.6	5595.6	4951.9	4357.0
24°	9650.5	9404.6	9191.4	8802.9	8434.5	7921.8	7331.8	6551.4	5974.9	5248.2	4581.0
25°	10321.0	10049.9	9788.1	9388.6	8988.4	8428.6	7790.9	6958.4	6320.6	5516.7	4785.0
26°	10937.8	10567.7	10283.2	9914.0	9459.1	8871.7	8194.5	7310.0	6618.5	5740.8	4945.2
27°	11472.3	11098.0	10771.6	10376.3	9868.6	9235.9	8527.7	7562.6	6854.3	5908.6	5056.8
28°	11860.8	11544.5	11168.5	10743.1	10185.0	9486.8	8753.4	7764.0	6996.2	5995.9	5103.0
29°	12272.9	11912.9	11474.8	10991.5	10383.9	9644.6	8877.6	7868.9	7054.9	6016.0	5093.8
30°	12491.9	12160.4	11645.2	11118.2	10469.5	9694.9	8904.4	7884.8	7036.4	5967.3	5033.3
31°	12550.6	12241.0	11670.3	11120.7	10442.6	9645.4	8838.1	7802.6	6936.6	5854.1	4920.9
32°	12465.9	12156.2	11563.8	11013.3	10319.3	9507.0	8692.1	7655.8	6773.8	5684.5	4760.6
33°	12161.3	11910.4	11338.9	10809.4	10131.3	9301.4	8477.3	7416.6	6520.4	5464.7	4567.6
34°	11771.9	11537.8	11010.8	10467.8	9833.4	9019.4	8181.1	7127.1	6229.2	5194.5	4338.5
35°	11302.8	11072.0	10586.1	10046.6	9439.0	8644.3	7801.8	6763.7	5885.1	4889.0	4084.2
36°	10749.8	10509.8	10060.8	9547.2	8994.2	8191.1	7352.8	6345.8	5494.1	4556.7	3812.4
37°	10141.4	9899.7	9498.6	9022.8	8475.6	7680.9	6850.2	5885.1	5081.2	4211.8	3527.9
38°	9499.4	9274.5	8910.3	8435.3	7894.1	7113.7	6300.5	5463.8	4660.8	3862.7	3240.0
39°	8840.7	8604.0	8260.8	7794.2	7262.2	6491.8	5727.3	4979.6	4298.2	3519.5	2975.7
40°	8104.7	7881.5	7483.7	7117.8	6584.1	5850.7	5153.3	4445.1	3895.4	3189.7	2735.7
42.5°	5995.0	5820.5	5608.2	5233.1	4838.7	4312.5	3824.9	3334.0	2934.6	2534.3	2201.1
45°	3804.8	3676.4	3567.3	3334.0	3174.6	2878.4	2626.6	2375.7	2186.9	1977.1	1607.0
47.5°	1408.1	1347.7	1309.1	1206.7	1197.5	1102.7	1093.4	1214.3	1285.6	1210.1	910.5
50°	530.4	515.3	506.0	474.1	452.3	408.7	375.9	351.6	302.1	267.7	240.0
51°	348.3	337.3	321.4	318.9	309.7	285.3	270.2	265.2	231.6	195.5	167.8
52°	221.5	214.8	204.8	205.6	200.6	185.5	180.4	188.0	170.4	150.2	130.1
53°	139.3	135.9	129.2	129.2	128.4	118.3	116.6	123.4	120.0	110.8	99.0
54°	90.6	89.8	83.9	84.8	84.8	78.9	78.0	80.6	79.7	76.4	70.5
55°	62.1	61.3	60.4	57.9	56.2	54.5	54.5	55.4	54.5	52.9	49.5
57.5°	21.8	21.0	21.8	21.0	21.0	21.8	21.0	22.7	23.5	23.5	21.8
60°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	7.6	8.4	8.4	8.4



TEST NUMBER: P208873

CATALOG NUMBER: LDSQA6A30930D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
63°	1.7	1.7	1.7	1.7	1.7	1.7	0.8	0.8	1.7	1.7	1.7
64°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.7
65°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.7
66°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
67.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
70°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.7
72.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.7
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.8
77.5°	0.0	0.0	0.0	0.0	0.0	0.8	0.8	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	0.8	0.8	0.8	0.8	0.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.8	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



TEST NUMBER: P208873

CATALOG NUMBER: LDSQA6A30930D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
0°	147.7	147.7	147.7	147.7	147.7	147.7	147.7	147.7	147.7	147.7	147.7
2.5°	193.0	193.8	190.5	189.7	188.8	184.6	182.1	179.6	177.1	172.9	174.5
5°	258.5	258.5	250.9	245.9	243.4	234.1	229.9	224.1	217.3	212.3	209.8
7.5°	360.8	355.0	338.2	325.6	318.0	299.6	288.7	272.7	263.5	253.4	247.6
10°	765.3	725.9	643.6	584.9	529.5	462.4	401.1	353.3	322.2	299.6	285.3
11°	1031.3	979.3	874.4	793.0	720.8	625.2	531.2	441.4	376.8	337.3	308.0
12°	1323.4	1256.2	1130.4	1029.7	941.5	821.5	701.5	583.2	490.1	416.2	355.8
13°	1627.2	1540.7	1394.7	1278.9	1177.4	1038.9	896.2	754.4	641.1	540.4	449.0
14°	1928.4	1822.7	1662.4	1529.0	1414.8	1260.4	1098.5	940.7	808.1	681.4	569.8
15°	2202.0	2086.2	1945.2	1770.7	1647.3	1449.2	1296.5	1119.5	968.4	821.5	691.5
17.5°	2692.9	2536.8	2370.7	2190.2	2072.8	1877.2	1683.4	1469.4	1286.4	1104.3	929.8
20°	3232.5	2953.9	2680.3	2411.8	2241.4	2033.3	1843.7	1632.2	1439.2	1232.7	1043.1
21°	3444.8	3125.9	2792.8	2491.5	2298.5	2076.1	1879.7	1660.7	1457.6	1237.8	1038.1
22°	3646.2	3265.2	2890.9	2558.6	2348.0	2120.6	1909.1	1679.2	1462.7	1231.9	1022.9
23°	3830.0	3399.5	2981.6	2617.4	2384.1	2142.4	1924.2	1686.7	1460.2	1218.5	1000.3
24°	3997.0	3522.8	3058.8	2661.0	2405.9	2149.1	1922.5	1680.9	1447.6	1198.3	969.2
25°	4141.3	3620.2	3115.0	2684.5	2411.8	2145.8	1914.1	1665.8	1422.4	1163.9	933.2
26°	4250.4	3682.3	3141.9	2687.9	2403.4	2134.9	1894.8	1638.1	1383.0	1117.8	884.5
27°	4313.3	3704.9	3141.9	2673.6	2386.6	2114.7	1863.8	1595.3	1331.8	1060.7	824.1
28°	4324.2	3694.9	3119.2	2644.2	2354.7	2079.5	1818.5	1540.7	1271.3	992.7	757.8
29°	4295.7	3654.6	3070.5	2593.9	2307.7	2034.1	1759.7	1471.9	1199.2	918.1	689.0
30°	4225.2	3580.7	2998.4	2530.1	2251.5	1974.6	1685.9	1395.5	1117.8	840.8	610.1
31°	4115.3	3474.2	2906.0	2452.9	2181.8	1903.2	1604.5	1307.4	1026.3	745.2	524.5
32°	3969.3	3324.8	2803.7	2364.8	2104.6	1821.8	1503.0	1195.0	905.5	628.5	425.5
33°	3797.2	3178.8	2689.5	2270.0	2020.7	1710.2	1362.8	1027.1	757.8	498.5	322.2
34°	3600.9	3021.9	2567.0	2170.1	1910.8	1546.6	1188.3	854.3	595.8	364.2	227.4
35°	3383.5	2854.9	2438.6	2052.6	1737.1	1346.9	988.5	665.5	431.3	246.7	171.2
36°	3151.9	2667.7	2291.8	1884.8	1529.0	1122.8	777.1	479.2	286.2	183.8	147.7
37°	2933.7	2504.9	2139.9	1674.1	1294.0	888.7	567.3	319.7	209.0	160.3	130.9
38°	2728.1	2348.0	1941.8	1440.9	1052.3	666.3	373.4	235.8	181.3	141.0	115.8
39°	2536.0	2190.2	1710.2	1190.8	810.6	469.9	271.1	202.2	157.8	125.0	102.4
40°	2350.5	1964.5	1457.6	970.9	590.8	328.1	228.3	178.7	139.3	109.9	86.4
42.5°	1763.1	1262.1	807.3	442.2	277.8	214.0	162.8	125.9	92.3	68.0	52.0
45°	1106.9	642.0	346.6	248.4	193.8	145.2	105.7	75.5	55.4	41.1	32.7
47.5°	503.5	276.1	214.8	166.2	125.0	86.4	62.1	45.3	33.6	26.0	19.3
50°	184.6	156.9	127.6	94.8	68.8	49.5	36.1	26.9	20.1	15.1	10.9
51°	144.3	125.9	101.5	71.3	54.5	40.3	29.4	21.8	15.9	11.7	8.4
52°	113.3	99.9	78.0	55.4	42.8	31.9	23.5	16.8	11.7	9.2	6.7
53°	87.3	76.4	58.7	42.8	33.6	25.2	18.5	13.4	9.2	6.7	5.0
54°	64.6	56.2	43.6	32.7	26.0	19.3	13.4	10.1	6.7	5.0	4.2
55°	46.2	41.1	32.7	26.0	20.1	15.1	10.1	7.6	5.0	3.4	3.4
57.5°	19.3	18.5	15.1	12.6	10.1	7.6	5.0	3.4	3.4	2.5	3.4
60°	7.6	7.6	6.7	5.0	4.2	3.4	2.5	2.5	2.5	2.5	2.5



TEST NUMBER: P208873

CATALOG NUMBER: LDSQA6A30930D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
63°	1.7	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3.4
64°	1.7	1.7	1.7	1.7	2.5	2.5	2.5	2.5	2.5	2.5	3.4
65°	1.7	1.7	1.7	1.7	1.7	2.5	2.5	2.5	2.5	2.5	3.4
66°	1.7	1.7	1.7	1.7	1.7	2.5	2.5	2.5	2.5	2.5	3.4
67.5°	1.7	1.7	1.7	1.7	1.7	2.5	2.5	2.5	2.5	3.4	3.4
70°	1.7	1.7	1.7	1.7	1.7	2.5	2.5	2.5	2.5	3.4	3.4
72.5°	1.7	1.7	1.7	1.7	1.7	2.5	2.5	2.5	3.4	3.4	3.4
75°	0.8	1.7	1.7	1.7	1.7	2.5	2.5	2.5	3.4	3.4	3.4
77.5°	0.8	1.7	1.7	1.7	2.5	2.5	2.5	2.5	3.4	3.4	3.4
80°	0.8	1.7	1.7	1.7	1.7	2.5	2.5	2.5	3.4	3.4	3.4
82.5°	0.8	1.7	1.7	1.7	1.7	2.5	2.5	2.5	3.4	3.4	3.4
85°	0.8	1.7	1.7	1.7	1.7	2.5	2.5	2.5	3.4	3.4	3.4
87.5°	0.8	1.7	1.7	1.7	1.7	2.5	2.5	2.5	3.4	3.4	3.4
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: P208873

CATALOG NUMBER: LDSQA6A30930D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	147.7	147.7	147.7	147.7	147.7	147.7	147.7	147.7	147.7	147.7	147.7
2.5°	172.0	172.0	166.2	164.5	163.6	162.0	157.8	157.8	155.2	151.9	150.2
5°	203.9	202.2	193.0	188.0	183.8	178.7	170.4	167.0	162.0	156.9	152.7
7.5°	235.0	229.1	214.8	207.3	201.4	193.0	182.1	174.5	166.2	157.8	151.9
10°	266.0	254.3	234.1	221.5	210.6	198.9	185.5	177.1	166.2	155.2	146.9
11°	278.6	263.5	240.8	224.9	212.3	198.9	185.5	174.5	164.5	153.6	144.3
12°	302.9	274.4	247.6	229.9	214.0	198.9	183.8	172.0	161.1	150.2	141.0
13°	352.5	299.6	255.1	234.1	216.5	198.9	182.1	169.5	157.8	146.9	136.8
14°	442.2	351.6	275.2	238.3	217.3	198.9	180.4	165.3	153.6	141.8	132.6
15°	543.8	431.3	316.4	253.4	218.2	197.2	177.1	161.1	148.5	136.8	127.6
17.5°	754.4	603.4	448.1	329.0	239.2	192.2	164.5	148.5	134.3	122.5	111.6
20°	840.0	664.6	490.1	352.5	247.6	183.8	150.2	133.4	118.3	106.6	97.3
21°	829.1	652.9	477.5	336.5	231.6	172.0	142.7	126.7	112.4	99.9	91.5
22°	806.4	625.2	448.1	307.1	212.3	160.3	135.9	119.2	105.7	94.0	85.6
23°	776.2	585.7	414.6	276.1	192.2	149.4	129.2	112.4	99.9	88.1	80.6
24°	738.5	546.3	375.9	245.0	172.9	141.0	121.7	105.7	93.1	83.1	75.5
25°	696.5	505.2	334.8	219.0	161.1	132.6	113.3	98.2	87.3	78.0	70.5
26°	645.3	456.5	296.2	194.7	146.9	123.4	104.9	91.5	81.4	73.0	65.5
27°	586.6	406.2	253.4	169.5	135.1	114.1	97.3	85.6	76.4	68.0	60.4
28°	533.7	349.9	217.3	151.1	125.9	104.9	90.6	79.7	71.3	62.9	56.2
29°	467.4	296.2	185.5	136.8	115.8	98.2	83.9	73.8	65.5	57.1	51.2
30°	401.1	245.0	158.6	125.0	105.7	89.8	77.2	68.0	59.6	52.9	47.8
31°	332.3	203.1	139.3	115.0	96.5	83.1	71.3	62.9	54.5	48.7	43.6
32°	254.3	166.2	124.2	104.1	88.1	74.7	65.5	57.1	49.5	44.5	39.4
33°	191.3	140.1	112.4	94.0	79.7	68.8	59.6	51.2	45.3	40.3	36.1
34°	152.7	125.0	101.5	84.8	72.2	62.1	52.9	46.2	40.3	36.1	31.9
35°	134.3	112.4	90.6	76.4	64.6	54.5	47.0	41.1	36.1	31.9	28.5
36°	119.2	100.7	80.6	68.0	56.2	47.8	41.1	36.1	31.0	27.7	25.2
37°	106.6	89.0	71.3	58.7	48.7	42.0	36.1	31.0	26.9	24.3	22.7
38°	95.7	76.4	60.4	50.4	42.0	36.1	31.0	26.9	23.5	21.0	19.3
39°	81.4	64.6	50.4	42.8	35.2	30.2	26.0	23.5	20.1	18.5	16.8
40°	68.0	53.7	42.0	35.2	30.2	25.2	22.7	19.3	17.6	15.9	14.3
42.5°	42.0	33.6	26.9	22.7	19.3	16.8	15.1	13.4	11.7	10.9	10.1
45°	26.0	21.0	16.8	14.3	11.7	10.9	10.1	8.4	8.4	7.6	7.6
47.5°	15.1	12.6	9.2	8.4	6.7	6.7	5.9	5.9	5.0	5.9	5.0
50°	8.4	5.9	5.0	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
51°	6.7	5.0	4.2	3.4	3.4	3.4	3.4	3.4	3.4	4.2	4.2
52°	5.0	4.2	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
53°	4.2	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
54°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
55°	3.4	3.4	3.4	3.4	3.4	2.5	3.4	3.4	3.4	3.4	3.4
57.5°	3.4	3.4	2.5	2.5	3.4	2.5	3.4	3.4	3.4	3.4	3.4
60°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4



TEST NUMBER: P208873

CATALOG NUMBER: LDSQA6A30930D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
63°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
64°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
65°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
66°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
67.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
70°	3.4	3.4	3.4	4.2	4.2	4.2	4.2	3.4	3.4	3.4	3.4
72.5°	3.4	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	3.4
75°	3.4	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
77.5°	3.4	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
80°	3.4	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
82.5°	3.4	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
85°	3.4	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
87.5°	3.4	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
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: P208873

CATALOG NUMBER: LDSQA6A30930D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
0°	147.7	147.7	147.7	147.7	147.7	147.7	147.7	147.7
2.5°	149.4	149.4	148.5	146.9	134.3	123.4	116.6	115.8
5°	150.2	148.5	145.2	142.7	120.0	105.7	97.3	96.5
7.5°	146.9	143.5	139.3	134.3	106.6	91.5	83.9	82.2
10°	141.0	135.1	130.1	123.4	94.0	79.7	73.0	71.3
11°	136.8	130.9	125.9	119.2	89.0	75.5	68.8	68.0
12°	133.4	126.7	120.0	114.1	83.9	71.3	65.5	64.6
13°	128.4	121.7	115.8	109.1	79.7	68.0	62.1	61.3
14°	124.2	116.6	110.8	104.9	75.5	63.8	59.6	58.7
15°	119.2	111.6	104.9	99.0	71.3	60.4	57.1	56.2
17.5°	105.7	97.3	91.5	85.6	61.3	52.9	50.4	51.2
20°	89.8	83.1	78.0	73.0	52.0	46.2	45.3	46.2
21°	83.9	78.0	73.8	68.8	48.7	43.6	43.6	44.5
22°	78.9	73.0	68.8	63.8	46.2	41.1	41.1	42.8
23°	73.8	68.0	63.8	59.6	42.8	39.4	39.4	41.1
24°	68.8	63.8	59.6	55.4	40.3	36.9	37.8	39.4
25°	63.8	59.6	55.4	52.0	37.8	35.2	36.1	37.8
26°	60.4	55.4	52.0	47.8	35.2	33.6	34.4	36.9
27°	55.4	51.2	47.8	44.5	33.6	31.9	33.6	35.2
28°	52.0	47.8	44.5	41.1	31.0	30.2	31.9	34.4
29°	47.8	44.5	41.1	38.6	29.4	28.5	31.0	32.7
30°	43.6	40.3	37.8	35.2	27.7	26.9	29.4	31.9
31°	40.3	37.8	35.2	32.7	26.0	26.0	28.5	31.0
32°	36.9	34.4	31.9	29.4	24.3	24.3	27.7	29.4
33°	33.6	31.0	28.5	26.9	22.7	23.5	26.0	28.5
34°	29.4	27.7	26.0	24.3	21.0	21.8	25.2	27.7
35°	26.9	25.2	23.5	21.8	20.1	21.0	24.3	26.9
36°	23.5	22.7	21.0	20.1	18.5	20.1	23.5	26.0
37°	21.0	20.1	18.5	17.6	17.6	19.3	22.7	25.2
38°	18.5	17.6	16.8	15.9	16.8	18.5	21.8	24.3
39°	15.9	15.1	15.1	14.3	15.9	17.6	21.0	23.5
40°	14.3	13.4	13.4	12.6	15.1	16.8	20.1	23.5
42.5°	10.1	10.1	10.1	10.1	12.6	15.1	18.5	21.8
45°	7.6	7.6	7.6	7.6	10.9	13.4	15.9	20.1
47.5°	5.9	5.9	5.9	5.9	10.1	12.6	15.1	17.6
50°	4.2	4.2	5.0	5.0	9.2	10.9	13.4	15.9
51°	4.2	4.2	4.2	5.0	8.4	10.9	12.6	15.1
52°	4.2	4.2	4.2	4.2	8.4	10.1	11.7	13.4
53°	3.4	4.2	4.2	4.2	7.6	10.1	10.9	12.6
54°	3.4	3.4	3.4	4.2	7.6	9.2	10.1	11.7
55°	3.4	3.4	3.4	4.2	6.7	9.2	10.1	10.1
57.5°	3.4	3.4	3.4	3.4	6.7	8.4	9.2	8.4
60°	3.4	3.4	3.4	3.4	5.9	7.6	8.4	5.9



TEST NUMBER: P208873

CATALOG NUMBER: LDSQA6A30930D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
63°	3.4	3.4	3.4	3.4	5.9	6.7	6.7	5.0
64°	3.4	3.4	3.4	3.4	5.9	6.7	6.7	5.0
65°	3.4	3.4	3.4	3.4	5.9	5.9	5.9	4.2
66°	3.4	3.4	3.4	3.4	5.9	5.9	5.9	4.2
67.5°	3.4	3.4	3.4	3.4	5.9	5.9	5.0	4.2
70°	3.4	3.4	3.4	4.2	5.0	5.0	5.0	4.2
72.5°	3.4	3.4	3.4	4.2	5.0	5.0	4.2	3.4
75°	4.2	4.2	4.2	4.2	5.0	5.0	4.2	2.5
77.5°	4.2	4.2	4.2	4.2	5.0	4.2	3.4	2.5
80°	4.2	4.2	3.4	3.4	4.2	4.2	2.5	1.7
82.5°	4.2	4.2	3.4	3.4	4.2	3.4	2.5	1.7
85°	4.2	4.2	3.4	3.4	4.2	3.4	1.7	0.8
87.5°	4.2	3.4	3.4	3.4	4.2	3.4	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°	2.5	2.5	2.5	2.5	3.4	2.5	3.4	4.2	5.0	5.0	5.0
62°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	2.5	2.5	2.5	3.4





61°	5.0	5.0	4.2	4.2	3.4	2.5	2.5	2.5	2.5	2.5	2.5
62°	3.4	3.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3.4





61°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
62°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4





61°	3.4	3.4	3.4	3.4	5.9	7.6	7.6	5.9
62°	3.4	3.4	3.4	3.4	5.9	6.7	7.6	5.0



(END OF REPORT)