

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: P208870

Luminaire Tested: **LDSQA6A30835D010TE LARL20NF 6LSQA1H 30°**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208870
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: LDSQA6A30835D010TE 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 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2710.0 lumens
Efficiency: N/A
Efficacy: 60.7 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

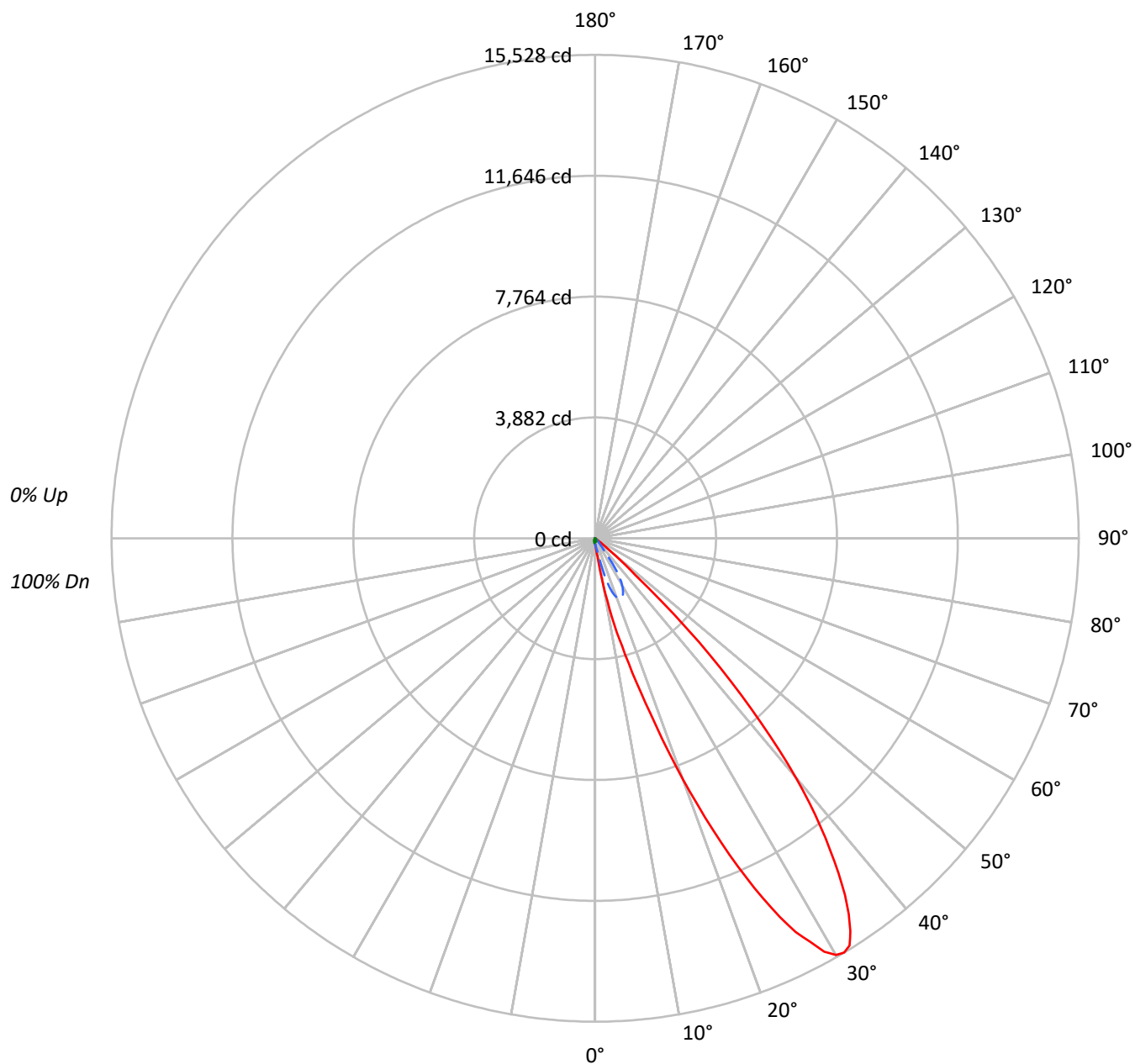
Input Watts (W): 44.62
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P208870

CATALOG NUMBER: LDSQA6A30835D010TE LARL20NF 6LSQA1H 30°

Luminous Intensity Polar Plot





TEST NUMBER: P208870

CATALOG NUMBER: LDSQA6A30835D010TE LARL20NF 6LSQA1H 30°

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	7866	7866	7866
5°	15706	7628	5160
10°	70629	6672	3856
15°	185162	5460	3102
20°	376998	4137	2616
25°	606622	3059	2219
30°	768372	2168	1964
35°	735011	1419	1745
40°	563581	877	1636
45°	286627	566	1516
50°	43954	415	1320
55°	5765	390	938
60°	629	362	629
65°	102	428	530
70°	126	655	655
75°	0	865	516
80°	0	1041	521
85°	0	2075	494



TEST NUMBER: P208870

CATALOG NUMBER: LDSQA6A30835D010TE LARL20NF 6LSQA1H 30°

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.4	0.9
10°-20°	268.0	9.9
20°-30°	877.4	32.4
30°-40°	1068.0	39.4
40°-50°	433.9	16.0
50°-60°	25.8	1.0
60°-70°	5.0	0.2
70°-80°	4.4	0.2
80°-90°	3.2	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°	1169.8	43.2
0°-40°	2237.7	82.6
0°-60°	2697.4	99.5
0°-90°	2710.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2710.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	183	183	183	183	183	
5°	363	277	176	131	119	69
15°	4154	1385	122	75	70	1352
25°	12769	2061	64	44	47	5868
35°	13984	823	27	26	33	8458
45°	4707	93	9	17	25	3611
55°	77	9	5	11	12	132
65°	1	3	4	7	5	2
75°	0	3	5	6	3	0
85°	0	3	4	4	1	0
90°	0	0	0	0	0	



TEST NUMBER: P208870

CATALOG NUMBER: LDSQA6A30835D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
0°	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7
2.5°	257.5	246.1	251.3	250.2	246.1	247.1	249.2	245.0	247.1	240.9	241.9
5°	363.4	346.8	356.1	345.7	350.9	345.7	345.7	339.5	334.3	333.3	328.1
7.5°	634.4	593.9	606.3	561.7	568.9	554.4	540.9	526.4	501.5	489.0	462.0
10°	1615.5	1501.3	1528.3	1430.7	1428.6	1394.3	1331.0	1287.4	1195.0	1129.6	1036.2
11°	2043.2	1965.4	1989.2	1882.3	1877.1	1830.4	1755.6	1639.4	1587.5	1500.2	1384.0
12°	2601.8	2471.0	2485.5	2368.2	2356.8	2294.5	2210.4	2067.1	2004.8	1898.9	1761.9
13°	3109.5	2993.2	2994.2	2866.5	2853.1	2774.1	2681.7	2508.4	2438.8	2320.4	2155.4
14°	3575.7	3487.4	3469.8	3401.2	3328.6	3236.2	3138.6	2942.3	2865.5	2732.6	2543.7
15°	4154.0	3981.6	3947.3	3861.2	3772.9	3656.6	3537.2	3313.0	3227.9	3081.5	2893.5
17.5°	5859.8	5646.9	5553.5	5378.0	5211.9	4988.7	4730.2	4332.5	4136.3	3873.6	3579.8
20°	8228.0	7892.6	7704.7	7423.3	7155.5	6790.0	6343.6	5717.5	5426.8	4918.1	4436.3
21°	9165.5	8876.9	8641.2	8324.5	8007.9	7574.9	7044.4	6382.0	5933.5	5338.6	4773.8
22°	10112.3	9838.2	9563.1	9215.3	8861.3	8355.7	7744.1	6975.9	6437.0	5742.4	5091.5
23°	11044.7	10766.4	10554.6	10078.1	9675.2	9105.3	8427.3	7549.0	6922.9	6126.6	5390.5
24°	11939.6	11635.4	11371.7	10891.0	10435.2	9800.9	9071.0	8105.4	7392.2	6493.1	5667.7
25°	12769.2	12433.8	12109.9	11615.7	11120.5	10428.0	9638.9	8609.0	7819.9	6825.3	5920.0
26°	13532.3	13074.4	12722.4	12265.6	11702.9	10976.1	10138.3	9044.0	8188.5	7102.5	6118.3
27°	14193.6	13730.6	13326.7	12837.7	12209.6	11426.7	10550.5	9356.5	8480.2	7310.2	6256.4
28°	14674.3	14282.9	13817.8	13291.4	12601.0	11737.2	10829.8	9605.7	8655.7	7418.1	6313.5
29°	15184.1	14738.7	14196.7	13598.7	12847.0	11932.4	10983.4	9735.5	8728.4	7443.1	6302.0
30°	15455.1	15045.0	14407.5	13755.5	12952.9	11994.6	11016.6	9755.2	8705.5	7382.8	6227.3
31°	15527.7	15144.6	14438.6	13758.6	12919.7	11933.4	10934.6	9653.4	8582.0	7242.7	6088.2
32°	15422.9	15039.8	14306.8	13625.7	12767.1	11762.1	10754.0	9471.8	8380.6	7033.0	5889.9
33°	15046.0	14735.6	14028.5	13373.4	12534.5	11507.7	10488.2	9175.9	8067.0	6760.9	5651.1
34°	14564.3	14274.6	13622.6	12950.9	12166.0	11158.9	10121.7	8817.7	7706.8	6426.6	5367.6
35°	13983.9	13698.4	13097.2	12429.7	11678.0	10694.8	9652.4	8368.1	7281.1	6048.7	5053.1
36°	13299.7	13002.8	12447.3	11811.9	11127.7	10134.1	9097.0	7851.1	6797.3	5637.6	4716.7
37°	12547.0	12248.0	11751.7	11163.0	10486.1	9502.9	8475.1	7281.1	6286.5	5210.9	4364.7
38°	11752.7	11474.5	11023.9	10436.3	9766.6	8801.1	7795.0	6759.9	5766.3	4779.0	4008.6
39°	10937.7	10645.0	10220.3	9643.1	8984.8	8031.7	7085.9	6160.8	5317.8	4354.3	3681.6
40°	10027.2	9751.0	9258.9	8806.3	8145.9	7238.5	6375.8	5499.5	4819.5	3946.3	3384.6
42.5°	7417.1	7201.2	6938.5	6474.4	5986.4	5335.5	4732.2	4124.9	3630.7	3135.4	2723.3
45°	4707.3	4548.5	4413.5	4124.9	3927.6	3561.1	3249.7	2939.2	2705.6	2446.1	1988.2
47.5°	1742.1	1667.4	1619.6	1493.0	1481.6	1364.2	1352.8	1502.3	1590.6	1497.1	1126.5
50°	656.2	637.5	626.1	586.6	559.6	505.6	465.1	435.0	373.8	331.2	296.9
51°	430.9	417.4	397.6	394.5	383.1	353.0	334.3	328.1	286.6	241.9	207.6
52°	274.1	265.8	253.3	254.4	248.1	229.4	223.2	232.6	210.8	185.8	160.9
53°	172.3	168.2	159.9	159.9	158.8	146.4	144.3	152.6	148.5	137.0	122.5
54°	112.1	111.1	103.8	104.9	104.9	97.6	96.6	99.7	98.6	94.5	87.2
55°	76.8	75.8	74.8	71.6	69.6	67.5	67.5	68.5	67.5	65.4	61.3
57.5°	27.0	26.0	27.0	26.0	26.0	27.0	26.0	28.0	29.1	29.1	27.0
60°	7.3	7.3	7.3	7.3	7.3	7.3	7.3	9.3	10.4	10.4	10.4



TEST NUMBER: P208870

CATALOG NUMBER: LDSQA6A30835D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
63°	2.1	2.1	2.1	2.1	2.1	2.1	1.0	1.0	2.1	2.1	2.1
64°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.1
65°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.1
66°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
67.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
70°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.1
72.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.1
75°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0
77.5°	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0
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: P208870

CATALOG NUMBER: LDSQA6A30835D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
0°	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7
2.5°	238.8	239.8	235.7	234.6	233.6	228.4	225.3	222.2	219.1	213.9	216.0
5°	319.8	319.8	310.4	304.2	301.1	289.7	284.5	277.2	268.9	262.7	259.6
7.5°	446.4	439.2	418.4	402.8	393.5	370.6	357.2	337.4	326.0	313.5	306.3
10°	946.9	898.1	796.3	723.6	655.1	572.1	496.3	437.1	398.7	370.6	353.0
11°	1276.0	1211.6	1081.8	981.1	891.8	773.5	657.2	546.1	466.2	417.4	381.0
12°	1637.3	1554.2	1398.5	1273.9	1164.9	1016.4	868.0	721.6	606.3	515.0	440.2
13°	2013.1	1906.2	1725.5	1582.3	1456.6	1285.3	1108.8	933.4	793.2	668.6	555.5
14°	2385.8	2255.0	2056.7	1891.7	1750.5	1559.4	1359.0	1163.9	999.8	843.0	705.0
15°	2724.3	2581.0	2406.6	2190.7	2038.0	1793.0	1604.1	1385.0	1198.1	1016.4	855.5
17.5°	3331.7	3138.6	2933.0	2709.8	2564.4	2322.5	2082.7	1817.9	1591.6	1366.3	1150.4
20°	3999.3	3654.6	3316.1	2983.9	2773.1	2515.6	2281.0	2019.4	1780.6	1525.2	1290.5
21°	4261.9	3867.4	3455.2	3082.5	2843.7	2568.6	2325.6	2054.7	1803.4	1531.4	1284.3
22°	4511.1	4039.7	3576.7	3165.6	2905.0	2623.6	2362.0	2077.5	1809.6	1524.1	1265.6
23°	4738.5	4205.9	3688.8	3238.2	2949.6	2650.6	2380.7	2086.8	1806.5	1507.5	1237.6
24°	4945.1	4358.5	3784.3	3292.2	2976.6	2658.9	2378.6	2079.6	1790.9	1482.6	1199.2
25°	5123.7	4478.9	3853.9	3321.3	2983.9	2654.7	2368.2	2060.9	1759.8	1440.0	1154.5
26°	5258.6	4555.7	3887.1	3325.4	2973.5	2641.3	2344.3	2026.6	1711.0	1382.9	1094.3
27°	5336.5	4583.8	3887.1	3307.8	2952.7	2616.3	2305.9	1973.7	1647.7	1312.3	1019.5
28°	5350.0	4571.3	3859.1	3271.5	2913.3	2572.7	2249.8	1906.2	1572.9	1228.2	937.5
29°	5314.7	4521.5	3798.9	3209.2	2855.1	2516.7	2177.2	1821.1	1483.6	1135.8	852.4
30°	5227.5	4430.1	3709.6	3130.3	2785.6	2443.0	2085.8	1726.6	1382.9	1040.3	754.8
31°	5091.5	4298.3	3595.4	3034.7	2699.4	2354.7	1985.1	1617.6	1269.8	921.9	648.9
32°	4910.8	4113.5	3468.7	2925.7	2603.9	2254.0	1859.5	1478.4	1120.2	777.6	526.4
33°	4698.0	3932.8	3327.5	2808.4	2500.1	2115.9	1686.1	1270.8	937.5	616.7	398.7
34°	4455.0	3738.7	3175.9	2684.9	2364.0	1913.5	1470.1	1056.9	737.1	450.6	281.4
35°	4186.1	3532.1	3017.1	2539.5	2149.1	1666.4	1223.0	823.3	533.6	305.2	211.8
36°	3899.6	3300.5	2835.4	2331.9	1891.7	1389.1	961.4	592.8	354.0	227.4	182.7
37°	3629.6	3099.1	2647.5	2071.3	1600.9	1099.5	701.8	395.6	258.5	198.3	162.0
38°	3375.3	2905.0	2402.5	1782.6	1301.9	824.4	462.0	291.7	224.3	174.4	143.3
39°	3137.5	2709.8	2115.9	1473.2	1002.9	581.4	335.3	250.2	195.2	154.7	126.7
40°	2908.1	2430.5	1803.4	1201.2	730.9	405.9	282.4	221.1	172.3	136.0	106.9
42.5°	2181.3	1561.5	998.8	547.1	343.7	264.7	201.4	155.7	114.2	84.1	64.4
45°	1369.4	794.2	428.8	307.3	239.8	179.6	130.8	93.4	68.5	50.9	40.5
47.5°	622.9	341.6	265.8	205.6	154.7	106.9	76.8	56.1	41.5	32.2	23.9
50°	228.4	194.1	157.8	117.3	85.1	61.3	44.6	33.2	24.9	18.7	13.5
51°	178.6	155.7	125.6	88.2	67.5	49.8	36.3	27.0	19.7	14.5	10.4
52°	140.2	123.5	96.6	68.5	52.9	39.5	29.1	20.8	14.5	11.4	8.3
53°	108.0	94.5	72.7	52.9	41.5	31.1	22.8	16.6	11.4	8.3	6.2
54°	79.9	69.6	54.0	40.5	32.2	23.9	16.6	12.5	8.3	6.2	5.2
55°	57.1	50.9	40.5	32.2	24.9	18.7	12.5	9.3	6.2	4.2	4.2
57.5°	23.9	22.8	18.7	15.6	12.5	9.3	6.2	4.2	4.2	3.1	4.2
60°	9.3	9.3	8.3	6.2	5.2	4.2	3.1	3.1	3.1	3.1	3.1



TEST NUMBER: P208870

CATALOG NUMBER: LDSQA6A30835D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
63°	2.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	4.2
64°	2.1	2.1	2.1	2.1	3.1	3.1	3.1	3.1	3.1	3.1	4.2
65°	2.1	2.1	2.1	2.1	2.1	3.1	3.1	3.1	3.1	3.1	4.2
66°	2.1	2.1	2.1	2.1	2.1	3.1	3.1	3.1	3.1	3.1	4.2
67.5°	2.1	2.1	2.1	2.1	2.1	3.1	3.1	3.1	3.1	4.2	4.2
70°	2.1	2.1	2.1	2.1	2.1	3.1	3.1	3.1	3.1	4.2	4.2
72.5°	2.1	2.1	2.1	2.1	2.1	3.1	3.1	3.1	4.2	4.2	4.2
75°	1.0	2.1	2.1	2.1	2.1	3.1	3.1	3.1	4.2	4.2	4.2
77.5°	1.0	2.1	2.1	2.1	3.1	3.1	3.1	3.1	4.2	4.2	4.2
80°	1.0	2.1	2.1	2.1	2.1	3.1	3.1	3.1	4.2	4.2	4.2
82.5°	1.0	2.1	2.1	2.1	2.1	3.1	3.1	3.1	4.2	4.2	4.2
85°	1.0	2.1	2.1	2.1	2.1	3.1	3.1	3.1	4.2	4.2	4.2
87.5°	1.0	2.1	2.1	2.1	2.1	3.1	3.1	3.1	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: P208870

CATALOG NUMBER: LDSQA6A30835D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7
2.5°	212.8	212.8	205.6	203.5	202.5	200.4	195.2	195.2	192.1	187.9	185.8
5°	252.3	250.2	238.8	232.6	227.4	221.1	210.8	206.6	200.4	194.1	189.0
7.5°	290.7	283.4	265.8	256.4	249.2	238.8	225.3	216.0	205.6	195.2	187.9
10°	329.1	314.6	289.7	274.1	260.6	246.1	229.4	219.1	205.6	192.1	181.7
11°	344.7	326.0	298.0	278.2	262.7	246.1	229.4	216.0	203.5	190.0	178.6
12°	374.8	339.5	306.3	284.5	264.7	246.1	227.4	212.8	199.3	185.8	174.4
13°	436.1	370.6	315.6	289.7	267.9	246.1	225.3	209.7	195.2	181.7	169.2
14°	547.1	435.0	340.5	294.9	268.9	246.1	223.2	204.5	190.0	175.5	164.0
15°	672.8	533.6	391.4	313.5	269.9	244.0	219.1	199.3	183.8	169.2	157.8
17.5°	933.4	746.5	554.4	407.0	295.9	237.8	203.5	183.8	166.1	151.6	138.1
20°	1039.3	822.3	606.3	436.1	306.3	227.4	185.8	165.1	146.4	131.9	120.4
21°	1025.8	807.7	590.8	416.3	286.6	212.8	176.5	156.8	139.1	123.5	113.2
22°	997.7	773.5	554.4	380.0	262.7	198.3	168.2	147.4	130.8	116.3	105.9
23°	960.4	724.7	512.9	341.6	237.8	184.8	159.9	139.1	123.5	109.0	99.7
24°	913.6	675.9	465.1	303.2	213.9	174.4	150.5	130.8	115.2	102.8	93.4
25°	861.7	625.0	414.3	271.0	199.3	164.0	140.2	121.5	108.0	96.6	87.2
26°	798.4	564.8	366.5	240.9	181.7	152.6	129.8	113.2	100.7	90.3	81.0
27°	725.7	502.5	313.5	209.7	167.2	141.2	120.4	105.9	94.5	84.1	74.8
28°	660.3	432.9	268.9	186.9	155.7	129.8	112.1	98.6	88.2	77.9	69.6
29°	578.3	366.5	229.4	169.2	143.3	121.5	103.8	91.4	81.0	70.6	63.3
30°	496.3	303.2	196.2	154.7	130.8	111.1	95.5	84.1	73.7	65.4	59.2
31°	411.1	251.3	172.3	142.2	119.4	102.8	88.2	77.9	67.5	60.2	54.0
32°	314.6	205.6	153.7	128.7	109.0	92.4	81.0	70.6	61.3	55.0	48.8
33°	236.7	173.4	139.1	116.3	98.6	85.1	73.7	63.3	56.1	49.8	44.6
34°	189.0	154.7	125.6	104.9	89.3	76.8	65.4	57.1	49.8	44.6	39.5
35°	166.1	139.1	112.1	94.5	79.9	67.5	58.1	50.9	44.6	39.5	35.3
36°	147.4	124.6	99.7	84.1	69.6	59.2	50.9	44.6	38.4	34.3	31.1
37°	131.9	110.1	88.2	72.7	60.2	51.9	44.6	38.4	33.2	30.1	28.0
38°	118.4	94.5	74.8	62.3	51.9	44.6	38.4	33.2	29.1	26.0	23.9
39°	100.7	79.9	62.3	52.9	43.6	37.4	32.2	29.1	24.9	22.8	20.8
40°	84.1	66.4	51.9	43.6	37.4	31.1	28.0	23.9	21.8	19.7	17.6
42.5°	51.9	41.5	33.2	28.0	23.9	20.8	18.7	16.6	14.5	13.5	12.5
45°	32.2	26.0	20.8	17.6	14.5	13.5	12.5	10.4	10.4	9.3	9.3
47.5°	18.7	15.6	11.4	10.4	8.3	8.3	7.3	7.3	6.2	7.3	6.2
50°	10.4	7.3	6.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
51°	8.3	6.2	5.2	4.2	4.2	4.2	4.2	4.2	4.2	5.2	5.2
52°	6.2	5.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
53°	5.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
54°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
55°	4.2	4.2	4.2	4.2	4.2	3.1	4.2	4.2	4.2	4.2	4.2
57.5°	4.2	4.2	3.1	3.1	4.2	3.1	4.2	4.2	4.2	4.2	4.2
60°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2



TEST NUMBER: P208870

CATALOG NUMBER: LDSQA6A30835D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
63°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
64°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
65°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
66°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
67.5°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
70°	4.2	4.2	4.2	5.2	5.2	5.2	5.2	4.2	4.2	4.2	4.2
72.5°	4.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	4.2
75°	4.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
77.5°	4.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
80°	4.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
82.5°	4.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
85°	4.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
87.5°	4.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
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: P208870

CATALOG NUMBER: LDSQA6A30835D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
0°	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7
2.5°	184.8	184.8	183.8	181.7	166.1	152.6	144.3	143.3
5°	185.8	183.8	179.6	176.5	148.5	130.8	120.4	119.4
7.5°	181.7	177.5	172.3	166.1	131.9	113.2	103.8	101.7
10°	174.4	167.2	160.9	152.6	116.3	98.6	90.3	88.2
11°	169.2	162.0	155.7	147.4	110.1	93.4	85.1	84.1
12°	165.1	156.8	148.5	141.2	103.8	88.2	81.0	79.9
13°	158.8	150.5	143.3	135.0	98.6	84.1	76.8	75.8
14°	153.7	144.3	137.0	129.8	93.4	78.9	73.7	72.7
15°	147.4	138.1	129.8	122.5	88.2	74.8	70.6	69.6
17.5°	130.8	120.4	113.2	105.9	75.8	65.4	62.3	63.3
20°	111.1	102.8	96.6	90.3	64.4	57.1	56.1	57.1
21°	103.8	96.6	91.4	85.1	60.2	54.0	54.0	55.0
22°	97.6	90.3	85.1	78.9	57.1	50.9	50.9	52.9
23°	91.4	84.1	78.9	73.7	52.9	48.8	48.8	50.9
24°	85.1	78.9	73.7	68.5	49.8	45.7	46.7	48.8
25°	78.9	73.7	68.5	64.4	46.7	43.6	44.6	46.7
26°	74.8	68.5	64.4	59.2	43.6	41.5	42.6	45.7
27°	68.5	63.3	59.2	55.0	41.5	39.5	41.5	43.6
28°	64.4	59.2	55.0	50.9	38.4	37.4	39.5	42.6
29°	59.2	55.0	50.9	47.8	36.3	35.3	38.4	40.5
30°	54.0	49.8	46.7	43.6	34.3	33.2	36.3	39.5
31°	49.8	46.7	43.6	40.5	32.2	32.2	35.3	38.4
32°	45.7	42.6	39.5	36.3	30.1	30.1	34.3	36.3
33°	41.5	38.4	35.3	33.2	28.0	29.1	32.2	35.3
34°	36.3	34.3	32.2	30.1	26.0	27.0	31.1	34.3
35°	33.2	31.1	29.1	27.0	24.9	26.0	30.1	33.2
36°	29.1	28.0	26.0	24.9	22.8	24.9	29.1	32.2
37°	26.0	24.9	22.8	21.8	21.8	23.9	28.0	31.1
38°	22.8	21.8	20.8	19.7	20.8	22.8	27.0	30.1
39°	19.7	18.7	18.7	17.6	19.7	21.8	26.0	29.1
40°	17.6	16.6	16.6	15.6	18.7	20.8	24.9	29.1
42.5°	12.5	12.5	12.5	12.5	15.6	18.7	22.8	27.0
45°	9.3	9.3	9.3	9.3	13.5	16.6	19.7	24.9
47.5°	7.3	7.3	7.3	7.3	12.5	15.6	18.7	21.8
50°	5.2	5.2	6.2	6.2	11.4	13.5	16.6	19.7
51°	5.2	5.2	5.2	6.2	10.4	13.5	15.6	18.7
52°	5.2	5.2	5.2	5.2	10.4	12.5	14.5	16.6
53°	4.2	5.2	5.2	5.2	9.3	12.5	13.5	15.6
54°	4.2	4.2	4.2	5.2	9.3	11.4	12.5	14.5
55°	4.2	4.2	4.2	5.2	8.3	11.4	12.5	12.5
57.5°	4.2	4.2	4.2	4.2	8.3	10.4	11.4	10.4
60°	4.2	4.2	4.2	4.2	7.3	9.3	10.4	7.3



TEST NUMBER: P208870

CATALOG NUMBER: LDSQA6A30835D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
63°	4.2	4.2	4.2	4.2	7.3	8.3	8.3	6.2
64°	4.2	4.2	4.2	4.2	7.3	8.3	8.3	6.2
65°	4.2	4.2	4.2	4.2	7.3	7.3	7.3	5.2
66°	4.2	4.2	4.2	4.2	7.3	7.3	7.3	5.2
67.5°	4.2	4.2	4.2	4.2	7.3	7.3	6.2	5.2
70°	4.2	4.2	4.2	5.2	6.2	6.2	6.2	5.2
72.5°	4.2	4.2	4.2	5.2	6.2	6.2	5.2	4.2
75°	5.2	5.2	5.2	5.2	6.2	6.2	5.2	3.1
77.5°	5.2	5.2	5.2	5.2	6.2	5.2	4.2	3.1
80°	5.2	5.2	4.2	4.2	5.2	5.2	3.1	2.1
82.5°	5.2	5.2	4.2	4.2	5.2	4.2	3.1	2.1
85°	5.2	5.2	4.2	4.2	5.2	4.2	2.1	1.0
87.5°	5.2	4.2	4.2	4.2	5.2	4.2	1.0	1.0
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°	3.1	3.1	3.1	3.1	4.2	3.1	4.2	5.2	6.2	6.2	6.2
62°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	3.1	3.1	3.1	4.2





61°	6.2	6.2	5.2	5.2	4.2	3.1	3.1	3.1	3.1	3.1	3.1
62°	4.2	4.2	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	4.2





61°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
62°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2





61°	4.2	4.2	4.2	4.2	7.3	9.3	9.3	7.3
62°	4.2	4.2	4.2	4.2	7.3	8.3	9.3	6.2



(END OF REPORT)