

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: P208862

Luminaire Tested: **LDSQA6A20835D010TE LARL20NF 6LSQA1H 30°**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208862
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: LDSQA6A20835D010TE 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: 1947.8 lumens
Efficiency: N/A
Efficacy: 67.6 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

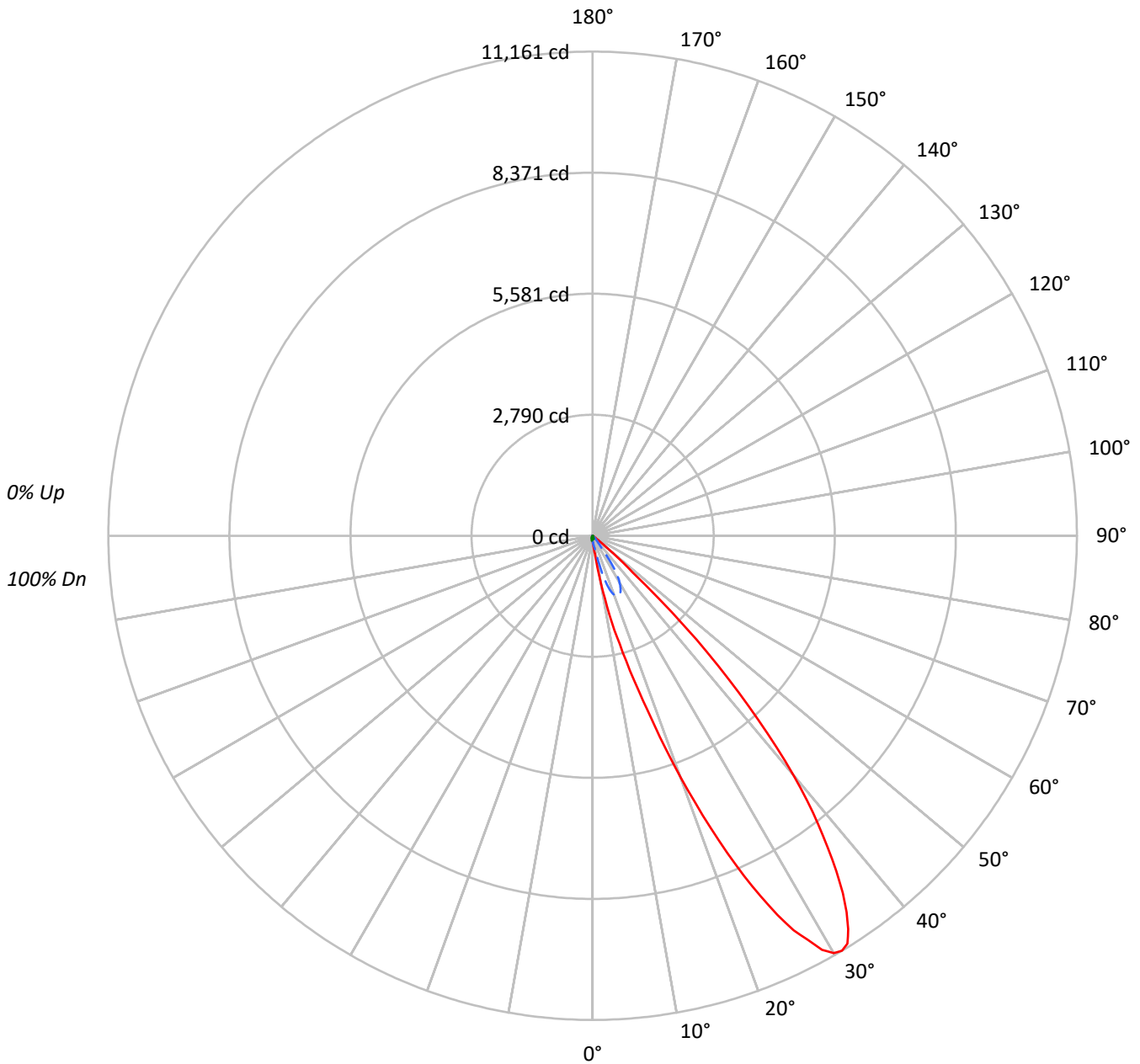
Input Watts (W): 28.81
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P208862

CATALOG NUMBER: LDSQA6A20835D010TE LARL20NF 6LSQA1H 30°

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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																			
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°	5653	5653	5653
5°	11289	5485	3708
10°	50763	4796	2772
15°	133086	3927	2229
20°	270964	2974	1879
25°	436007	2200	1596
30°	552265	1556	1412
35°	528288	1020	1256
40°	405076	629	1175
45°	206015	408	1090
50°	31589	301	951
55°	4144	278	676
60°	448	258	448
65°	71	306	377
70°	88	466	466
75°	0	616	366
80°	0	744	372
85°	0	1482	346



TEST NUMBER: P208862

CATALOG NUMBER: LDSQA6A20835D010TE LARL20NF 6LSQA1H 30°

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.6	0.9
10°-20°	192.6	9.9
20°-30°	630.6	32.4
30°-40°	767.6	39.4
40°-50°	311.8	16.0
50°-60°	18.5	1.0
60°-70°	3.6	0.2
70°-80°	3.2	0.2
80°-90°	2.3	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°	840.8	43.2
0°-40°	1608.4	82.6
0°-60°	1938.7	99.5
0°-90°	1947.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1947.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	131	131	131	131	131	
5°	261	199	127	94	86	49
15°	2986	996	88	54	50	971
25°	9178	1481	46	31	34	4218
35°	10051	592	19	19	24	6079
45°	3383	67	7	12	18	2596
55°	55	7	4	8	9	95
65°	1	2	3	5	4	1
75°	0	2	4	4	2	0
85°	0	2	3	3	1	0
90°	0	0	0	0	0	



TEST NUMBER: P208862

CATALOG NUMBER: LDSQA6A20835D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
0°	131.3	131.3	131.3	131.3	131.3	131.3	131.3	131.3	131.3	131.3	131.3
2.5°	185.1	176.9	180.6	179.8	176.9	177.6	179.1	176.1	177.6	173.1	173.9
5°	261.2	249.2	256.0	248.5	252.2	248.5	248.5	244.0	240.3	239.5	235.8
7.5°	455.9	426.8	435.8	403.7	408.9	398.5	388.8	378.3	360.4	351.5	332.1
10°	1161.1	1079.0	1098.4	1028.3	1026.8	1002.2	956.7	925.3	858.9	811.9	744.7
11°	1468.6	1412.6	1429.8	1352.9	1349.2	1315.6	1261.9	1178.3	1141.0	1078.3	994.7
12°	1870.0	1776.0	1786.5	1702.1	1693.9	1649.2	1588.7	1485.7	1441.0	1364.8	1266.3
13°	2234.9	2151.4	2152.1	2060.3	2050.6	1993.9	1927.5	1802.9	1752.9	1667.8	1549.2
14°	2570.0	2506.6	2493.9	2444.6	2392.4	2326.0	2255.8	2114.8	2059.6	1964.1	1828.3
15°	2985.7	2861.8	2837.2	2775.2	2711.8	2628.2	2542.4	2381.2	2320.0	2214.8	2079.7
17.5°	4211.7	4058.7	3991.6	3865.5	3746.1	3585.6	3399.8	3114.0	2973.0	2784.2	2573.0
20°	5913.8	5672.8	5537.7	5335.5	5143.0	4880.3	4559.4	4109.5	3900.5	3534.9	3188.6
21°	6587.7	6380.2	6210.8	5983.2	5755.6	5444.5	5063.1	4587.1	4264.7	3837.1	3431.1
22°	7268.2	7071.2	6873.5	6623.5	6369.0	6005.6	5566.1	5013.9	4626.6	4127.4	3659.5
23°	7938.4	7738.4	7586.1	7243.6	6954.1	6544.4	6057.1	5425.8	4975.8	4403.5	3874.4
24°	8581.6	8363.0	8173.4	7827.9	7500.3	7044.4	6519.8	5825.8	5313.1	4666.9	4073.7
25°	9177.8	8936.8	8704.0	8348.8	7992.8	7495.1	6928.0	6187.7	5620.6	4905.7	4255.0
26°	9726.3	9397.2	9144.3	8815.9	8411.5	7889.1	7286.9	6500.4	5885.5	5104.9	4397.5
27°	10201.7	9868.8	9578.6	9227.1	8775.6	8213.0	7583.2	6725.0	6095.2	5254.2	4496.8
28°	10547.2	10265.8	9931.5	9553.2	9057.0	8436.1	7783.9	6904.1	6221.3	5331.8	4537.8
29°	10913.6	10593.4	10203.9	9774.1	9233.8	8576.4	7894.3	6997.4	6273.5	5349.7	4529.6
30°	11108.3	10813.6	10355.4	9886.8	9309.9	8621.2	7918.2	7011.5	6257.1	5306.4	4475.9
31°	11160.6	10885.2	10377.8	9889.0	9286.0	8577.1	7859.3	6938.4	6168.3	5205.7	4375.9
32°	11085.2	10809.8	10283.0	9793.5	9176.3	8454.0	7729.4	6807.8	6023.5	5054.9	4233.3
33°	10814.3	10591.2	10083.0	9612.1	9009.2	8271.2	7538.4	6595.1	5798.2	4859.4	4061.7
34°	10468.1	10259.9	9791.2	9308.4	8744.3	8020.4	7275.0	6337.7	5539.2	4619.1	3858.0
35°	10050.9	9845.7	9413.6	8933.8	8393.6	7686.9	6937.7	6014.6	5233.3	4347.5	3631.9
36°	9559.2	9345.7	8946.5	8489.8	7998.1	7283.9	6538.4	5643.0	4885.5	4052.0	3390.1
37°	9018.1	8803.2	8446.5	8023.4	7536.9	6830.2	6091.4	5233.3	4518.4	3745.3	3137.1
38°	8447.3	8247.3	7923.4	7501.1	7019.8	6325.8	5602.7	4858.7	4144.5	3434.9	2881.2
39°	7861.5	7651.1	7345.9	6931.0	6457.8	5772.8	5093.0	4428.1	3822.2	3129.7	2646.1
40°	7207.1	7008.6	6654.8	6329.5	5854.9	5202.7	4582.6	3952.8	3464.0	2836.4	2432.7
42.5°	5331.0	5175.8	4987.0	4653.5	4302.7	3834.9	3401.3	2964.8	2609.6	2253.6	1957.4
45°	3383.4	3269.2	3172.2	2964.8	2823.0	2559.6	2335.7	2112.6	1944.7	1758.1	1429.0
47.5°	1252.2	1198.4	1164.1	1073.1	1064.9	980.5	972.3	1079.8	1143.2	1076.1	809.7
50°	471.6	458.2	450.0	421.6	402.2	363.4	334.3	312.7	268.6	238.0	213.4
51°	309.7	300.0	285.8	283.6	275.4	253.7	240.3	235.8	206.0	173.9	149.2
52°	197.0	191.0	182.1	182.8	178.3	164.9	160.4	167.2	151.5	133.6	115.7
53°	123.9	120.9	114.9	114.9	114.2	105.2	103.7	109.7	106.7	98.5	88.1
54°	80.6	79.8	74.6	75.4	75.4	70.1	69.4	71.6	70.9	67.9	62.7
55°	55.2	54.5	53.7	51.5	50.0	48.5	48.5	49.3	48.5	47.0	44.0
57.5°	19.4	18.7	19.4	18.7	18.7	19.4	18.7	20.1	20.9	20.9	19.4
60°	5.2	5.2	5.2	5.2	5.2	5.2	5.2	6.7	7.5	7.5	7.5



TEST NUMBER: P208862

CATALOG NUMBER: LDSQA6A20835D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
63°	1.5	1.5	1.5	1.5	1.5	1.5	0.7	0.7	1.5	1.5	1.5
64°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.5
65°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.5
66°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
67.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
70°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.5
72.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.5
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.7
77.5°	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.7	0.7
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.7
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.7
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°	131.3	131.3	131.3	131.3	131.3	131.3	131.3	131.3	131.3	131.3	131.3
2.5°	171.6	172.4	169.4	168.6	167.9	164.2	161.9	159.7	157.5	153.7	155.2
5°	229.8	229.8	223.1	218.6	216.4	208.2	204.5	199.2	193.3	188.8	186.6
7.5°	320.9	315.7	300.7	289.5	282.8	266.4	256.7	242.5	234.3	225.4	220.1
10°	680.6	645.5	572.4	520.1	470.9	411.2	356.7	314.2	286.6	266.4	253.7
11°	917.1	870.8	777.6	705.2	641.0	555.9	472.4	392.5	335.1	300.0	273.9
12°	1176.8	1117.1	1005.2	915.6	837.3	730.6	623.8	518.6	435.8	370.1	316.4
13°	1446.9	1370.1	1240.2	1137.2	1047.0	923.8	797.0	670.9	570.1	480.6	399.2
14°	1714.8	1620.8	1478.3	1359.6	1258.1	1120.8	976.8	836.5	718.6	605.9	506.7
15°	1958.1	1855.1	1729.8	1574.5	1464.8	1288.7	1152.9	995.5	861.1	730.6	614.9
17.5°	2394.6	2255.8	2108.1	1947.7	1843.2	1669.3	1496.9	1306.6	1144.0	982.0	826.8
20°	2874.5	2626.7	2383.4	2144.7	1993.2	1808.1	1639.5	1451.4	1279.8	1096.2	927.6
21°	3063.3	2779.7	2483.4	2215.5	2043.9	1846.2	1671.5	1476.8	1296.2	1100.7	923.1
22°	3242.4	2903.6	2570.8	2275.2	2087.9	1885.7	1697.7	1493.2	1300.7	1095.5	909.7
23°	3405.8	3023.0	2651.3	2327.5	2120.0	1905.1	1711.1	1499.9	1298.4	1083.5	889.5
24°	3554.3	3132.7	2720.0	2366.3	2139.4	1911.1	1709.6	1494.7	1287.2	1065.6	861.9
25°	3682.6	3219.2	2770.0	2387.2	2144.7	1908.1	1702.1	1481.3	1264.9	1035.0	829.8
26°	3779.6	3274.4	2793.9	2390.2	2137.2	1898.4	1685.0	1456.6	1229.8	994.0	786.5
27°	3835.6	3294.6	2793.9	2377.5	2122.3	1880.5	1657.4	1418.6	1184.3	943.2	732.8
28°	3845.3	3285.6	2773.7	2351.4	2093.9	1849.1	1617.1	1370.1	1130.5	882.8	673.8
29°	3819.9	3249.8	2730.4	2306.6	2052.1	1808.9	1564.8	1308.9	1066.4	816.4	612.7
30°	3757.3	3184.1	2666.3	2249.9	2002.1	1755.9	1499.2	1241.0	994.0	747.7	542.5
31°	3659.5	3089.4	2584.2	2181.2	1940.2	1692.4	1426.8	1162.6	912.6	662.6	466.4
32°	3529.7	2956.5	2493.1	2102.9	1871.5	1620.1	1336.5	1062.6	805.2	558.9	378.3
33°	3376.7	2826.7	2391.7	2018.5	1796.9	1520.8	1211.9	913.4	673.8	443.3	286.6
34°	3202.1	2687.2	2282.7	1929.7	1699.2	1375.3	1056.7	759.7	529.8	323.9	202.2
35°	3008.8	2538.7	2168.5	1825.3	1544.7	1197.7	879.1	591.8	383.6	219.4	152.2
36°	2802.8	2372.3	2037.9	1676.0	1359.6	998.5	691.0	426.1	254.5	163.4	131.3
37°	2608.8	2227.5	1902.9	1488.7	1150.7	790.3	504.4	284.3	185.8	142.5	116.4
38°	2426.0	2087.9	1726.8	1281.3	935.8	592.5	332.1	209.7	161.2	125.4	103.0
39°	2255.1	1947.7	1520.8	1058.9	720.9	417.9	241.0	179.8	140.3	111.2	91.0
40°	2090.2	1746.9	1296.2	863.4	525.3	291.8	203.0	158.9	123.9	97.8	76.9
42.5°	1567.8	1122.3	717.9	393.3	247.0	190.3	144.8	111.9	82.1	60.4	46.3
45°	984.3	570.9	308.2	220.9	172.4	129.1	94.0	67.2	49.3	36.6	29.1
47.5°	447.7	245.5	191.0	147.8	111.2	76.9	55.2	40.3	29.8	23.1	17.2
50°	164.2	139.5	113.4	84.3	61.2	44.0	32.1	23.9	17.9	13.4	9.7
51°	128.4	111.9	90.3	63.4	48.5	35.8	26.1	19.4	14.2	10.4	7.5
52°	100.7	88.8	69.4	49.3	38.1	28.4	20.9	14.9	10.4	8.2	6.0
53°	77.6	67.9	52.2	38.1	29.8	22.4	16.4	11.9	8.2	6.0	4.5
54°	57.5	50.0	38.8	29.1	23.1	17.2	11.9	9.0	6.0	4.5	3.7
55°	41.0	36.6	29.1	23.1	17.9	13.4	9.0	6.7	4.5	3.0	3.0
57.5°	17.2	16.4	13.4	11.2	9.0	6.7	4.5	3.0	3.0	2.2	3.0
60°	6.7	6.7	6.0	4.5	3.7	3.0	2.2	2.2	2.2	2.2	2.2



TEST NUMBER: P208862

CATALOG NUMBER: LDSQA6A20835D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
63°	1.5	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	3.0
64°	1.5	1.5	1.5	1.5	2.2	2.2	2.2	2.2	2.2	2.2	3.0
65°	1.5	1.5	1.5	1.5	1.5	2.2	2.2	2.2	2.2	2.2	3.0
66°	1.5	1.5	1.5	1.5	1.5	2.2	2.2	2.2	2.2	2.2	3.0
67.5°	1.5	1.5	1.5	1.5	1.5	2.2	2.2	2.2	2.2	3.0	3.0
70°	1.5	1.5	1.5	1.5	1.5	2.2	2.2	2.2	2.2	3.0	3.0
72.5°	1.5	1.5	1.5	1.5	1.5	2.2	2.2	2.2	3.0	3.0	3.0
75°	0.7	1.5	1.5	1.5	1.5	2.2	2.2	2.2	3.0	3.0	3.0
77.5°	0.7	1.5	1.5	1.5	2.2	2.2	2.2	2.2	3.0	3.0	3.0
80°	0.7	1.5	1.5	1.5	1.5	2.2	2.2	2.2	3.0	3.0	3.0
82.5°	0.7	1.5	1.5	1.5	1.5	2.2	2.2	2.2	3.0	3.0	3.0
85°	0.7	1.5	1.5	1.5	1.5	2.2	2.2	2.2	3.0	3.0	3.0
87.5°	0.7	1.5	1.5	1.5	1.5	2.2	2.2	2.2	3.0	3.0	3.0
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: P208862

CATALOG NUMBER: LDSQA6A20835D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	131.3	131.3	131.3	131.3	131.3	131.3	131.3	131.3	131.3	131.3	131.3
2.5°	153.0	153.0	147.8	146.3	145.5	144.0	140.3	140.3	138.1	135.1	133.6
5°	181.3	179.8	171.6	167.2	163.4	158.9	151.5	148.5	144.0	139.5	135.8
7.5°	208.9	203.7	191.0	184.3	179.1	171.6	161.9	155.2	147.8	140.3	135.1
10°	236.6	226.1	208.2	197.0	187.3	176.9	164.9	157.5	147.8	138.1	130.6
11°	247.7	234.3	214.2	200.0	188.8	176.9	164.9	155.2	146.3	136.6	128.4
12°	269.4	244.0	220.1	204.5	190.3	176.9	163.4	153.0	143.3	133.6	125.4
13°	313.4	266.4	226.9	208.2	192.5	176.9	161.9	150.7	140.3	130.6	121.6
14°	393.3	312.7	244.8	211.9	193.3	176.9	160.4	147.0	136.6	126.1	117.9
15°	483.6	383.6	281.3	225.4	194.0	175.4	157.5	143.3	132.1	121.6	113.4
17.5°	670.9	536.5	398.5	292.5	212.7	170.9	146.3	132.1	119.4	108.9	99.2
20°	747.0	591.0	435.8	313.4	220.1	163.4	133.6	118.7	105.2	94.8	86.6
21°	737.3	580.6	424.6	299.2	206.0	153.0	126.9	112.7	100.0	88.8	81.3
22°	717.1	555.9	398.5	273.1	188.8	142.5	120.9	106.0	94.0	83.6	76.1
23°	690.3	520.9	368.6	245.5	170.9	132.8	114.9	100.0	88.8	78.4	71.6
24°	656.7	485.8	334.3	217.9	153.7	125.4	108.2	94.0	82.8	73.9	67.2
25°	619.4	449.2	297.7	194.8	143.3	117.9	100.7	87.3	77.6	69.4	62.7
26°	573.8	405.9	263.4	173.1	130.6	109.7	93.3	81.3	72.4	64.9	58.2
27°	521.6	361.2	225.4	150.7	120.1	101.5	86.6	76.1	67.9	60.4	53.7
28°	474.6	311.2	193.3	134.3	111.9	93.3	80.6	70.9	63.4	56.0	50.0
29°	415.6	263.4	164.9	121.6	103.0	87.3	74.6	65.7	58.2	50.7	45.5
30°	356.7	217.9	141.0	111.2	94.0	79.8	68.7	60.4	53.0	47.0	42.5
31°	295.5	180.6	123.9	102.2	85.8	73.9	63.4	56.0	48.5	43.3	38.8
32°	226.1	147.8	110.4	92.5	78.4	66.4	58.2	50.7	44.0	39.6	35.1
33°	170.1	124.6	100.0	83.6	70.9	61.2	53.0	45.5	40.3	35.8	32.1
34°	135.8	111.2	90.3	75.4	64.2	55.2	47.0	41.0	35.8	32.1	28.4
35°	119.4	100.0	80.6	67.9	57.5	48.5	41.8	36.6	32.1	28.4	25.4
36°	106.0	89.5	71.6	60.4	50.0	42.5	36.6	32.1	27.6	24.6	22.4
37°	94.8	79.1	63.4	52.2	43.3	37.3	32.1	27.6	23.9	21.6	20.1
38°	85.1	67.9	53.7	44.8	37.3	32.1	27.6	23.9	20.9	18.7	17.2
39°	72.4	57.5	44.8	38.1	31.3	26.9	23.1	20.9	17.9	16.4	14.9
40°	60.4	47.8	37.3	31.3	26.9	22.4	20.1	17.2	15.7	14.2	12.7
42.5°	37.3	29.8	23.9	20.1	17.2	14.9	13.4	11.9	10.4	9.7	9.0
45°	23.1	18.7	14.9	12.7	10.4	9.7	9.0	7.5	7.5	6.7	6.7
47.5°	13.4	11.2	8.2	7.5	6.0	6.0	5.2	5.2	4.5	5.2	4.5
50°	7.5	5.2	4.5	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
51°	6.0	4.5	3.7	3.0	3.0	3.0	3.0	3.0	3.0	3.7	3.7
52°	4.5	3.7	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
53°	3.7	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
54°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
55°	3.0	3.0	3.0	3.0	3.0	2.2	3.0	3.0	3.0	3.0	3.0
57.5°	3.0	3.0	2.2	2.2	3.0	2.2	3.0	3.0	3.0	3.0	3.0
60°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0



TEST NUMBER: P208862

CATALOG NUMBER: LDSQA6A20835D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
63°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
64°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
65°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
66°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
67.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
70°	3.0	3.0	3.0	3.7	3.7	3.7	3.7	3.0	3.0	3.0	3.0
72.5°	3.0	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.0
75°	3.0	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
77.5°	3.0	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
80°	3.0	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
82.5°	3.0	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
85°	3.0	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
87.5°	3.0	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
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: P208862

CATALOG NUMBER: LDSQA6A20835D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
0°	131.3	131.3	131.3	131.3	131.3	131.3	131.3	131.3
2.5°	132.8	132.8	132.1	130.6	119.4	109.7	103.7	103.0
5°	133.6	132.1	129.1	126.9	106.7	94.0	86.6	85.8
7.5°	130.6	127.6	123.9	119.4	94.8	81.3	74.6	73.1
10°	125.4	120.1	115.7	109.7	83.6	70.9	64.9	63.4
11°	121.6	116.4	111.9	106.0	79.1	67.2	61.2	60.4
12°	118.7	112.7	106.7	101.5	74.6	63.4	58.2	57.5
13°	114.2	108.2	103.0	97.0	70.9	60.4	55.2	54.5
14°	110.4	103.7	98.5	93.3	67.2	56.7	53.0	52.2
15°	106.0	99.2	93.3	88.1	63.4	53.7	50.7	50.0
17.5°	94.0	86.6	81.3	76.1	54.5	47.0	44.8	45.5
20°	79.8	73.9	69.4	64.9	46.3	41.0	40.3	41.0
21°	74.6	69.4	65.7	61.2	43.3	38.8	38.8	39.6
22°	70.1	64.9	61.2	56.7	41.0	36.6	36.6	38.1
23°	65.7	60.4	56.7	53.0	38.1	35.1	35.1	36.6
24°	61.2	56.7	53.0	49.3	35.8	32.8	33.6	35.1
25°	56.7	53.0	49.3	46.3	33.6	31.3	32.1	33.6
26°	53.7	49.3	46.3	42.5	31.3	29.8	30.6	32.8
27°	49.3	45.5	42.5	39.6	29.8	28.4	29.8	31.3
28°	46.3	42.5	39.6	36.6	27.6	26.9	28.4	30.6
29°	42.5	39.6	36.6	34.3	26.1	25.4	27.6	29.1
30°	38.8	35.8	33.6	31.3	24.6	23.9	26.1	28.4
31°	35.8	33.6	31.3	29.1	23.1	23.1	25.4	27.6
32°	32.8	30.6	28.4	26.1	21.6	21.6	24.6	26.1
33°	29.8	27.6	25.4	23.9	20.1	20.9	23.1	25.4
34°	26.1	24.6	23.1	21.6	18.7	19.4	22.4	24.6
35°	23.9	22.4	20.9	19.4	17.9	18.7	21.6	23.9
36°	20.9	20.1	18.7	17.9	16.4	17.9	20.9	23.1
37°	18.7	17.9	16.4	15.7	15.7	17.2	20.1	22.4
38°	16.4	15.7	14.9	14.2	14.9	16.4	19.4	21.6
39°	14.2	13.4	13.4	12.7	14.2	15.7	18.7	20.9
40°	12.7	11.9	11.9	11.2	13.4	14.9	17.9	20.9
42.5°	9.0	9.0	9.0	9.0	11.2	13.4	16.4	19.4
45°	6.7	6.7	6.7	6.7	9.7	11.9	14.2	17.9
47.5°	5.2	5.2	5.2	5.2	9.0	11.2	13.4	15.7
50°	3.7	3.7	4.5	4.5	8.2	9.7	11.9	14.2
51°	3.7	3.7	3.7	4.5	7.5	9.7	11.2	13.4
52°	3.7	3.7	3.7	3.7	7.5	9.0	10.4	11.9
53°	3.0	3.7	3.7	3.7	6.7	9.0	9.7	11.2
54°	3.0	3.0	3.0	3.7	6.7	8.2	9.0	10.4
55°	3.0	3.0	3.0	3.7	6.0	8.2	9.0	9.0
57.5°	3.0	3.0	3.0	3.0	6.0	7.5	8.2	7.5
60°	3.0	3.0	3.0	3.0	5.2	6.7	7.5	5.2



TEST NUMBER: P208862

CATALOG NUMBER: LDSQA6A20835D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
63°	3.0	3.0	3.0	3.0	5.2	6.0	6.0	4.5
64°	3.0	3.0	3.0	3.0	5.2	6.0	6.0	4.5
65°	3.0	3.0	3.0	3.0	5.2	5.2	5.2	3.7
66°	3.0	3.0	3.0	3.0	5.2	5.2	5.2	3.7
67.5°	3.0	3.0	3.0	3.0	5.2	5.2	4.5	3.7
70°	3.0	3.0	3.0	3.7	4.5	4.5	4.5	3.7
72.5°	3.0	3.0	3.0	3.7	4.5	4.5	3.7	3.0
75°	3.7	3.7	3.7	3.7	4.5	4.5	3.7	2.2
77.5°	3.7	3.7	3.7	3.7	4.5	3.7	3.0	2.2
80°	3.7	3.7	3.0	3.0	3.7	3.7	2.2	1.5
82.5°	3.7	3.7	3.0	3.0	3.7	3.0	2.2	1.5
85°	3.7	3.7	3.0	3.0	3.7	3.0	1.5	0.7
87.5°	3.7	3.0	3.0	3.0	3.7	3.0	0.7	0.7
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°	2.2	2.2	2.2	2.2	3.0	2.2	3.0	3.7	4.5	4.5	4.5
62°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.2	2.2	2.2	3.0





61°	4.5	4.5	3.7	3.7	3.0	2.2	2.2	2.2	2.2	2.2	2.2
62°	3.0	3.0	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	3.0





61°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
62°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0





61°	3.0	3.0	3.0	3.0	5.2	6.7	6.7	5.2
62°	3.0	3.0	3.0	3.0	5.2	6.0	6.7	4.5



(END OF REPORT)