

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: P208859

Luminaire Tested: **LDSQA6A15940D010TE LARL20NF 6LSQA1H 30°**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208859
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: LDSQA6A15940D010TE 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 / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1416.6 lumens
Efficiency: N/A
Efficacy: 65.0 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

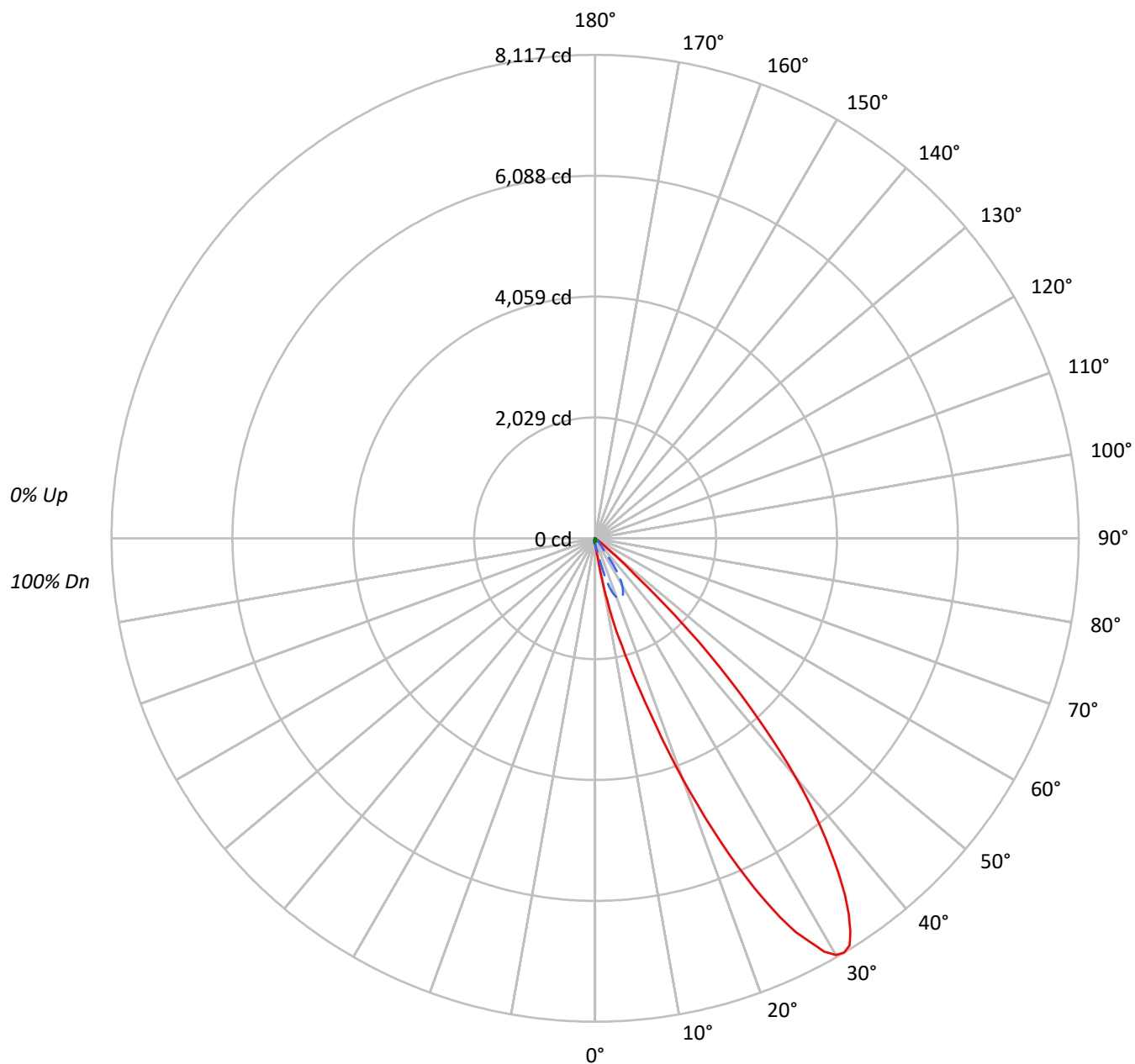
Input Watts (W): 21.79
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	4112	4112	4112
5°	8212	3989	2697
10°	36921	3489	2015
15°	96789	2853	1623
20°	197072	2163	1365
25°	317107	1596	1159
30°	401659	1134	1024
35°	384223	741	915
40°	294605	455	854
45°	149832	298	792
50°	22975	221	690
55°	3018	203	488
60°	327	189	327
65°	51	224	275
70°	63	340	340
75°	0	449	266
80°	0	545	273
85°	0	1087	247



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	12.8	0.9
10°-20°	140.1	9.9
20°-30°	458.6	32.4
30°-40°	558.3	39.4
40°-50°	226.8	16.0
50°-60°	13.5	1.0
60°-70°	2.6	0.2
70°-80°	2.3	0.2
80°-90°	1.7	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°	611.5	43.2
0°-40°	1169.8	82.6
0°-60°	1410.0	99.5
0°-90°	1416.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1416.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	96	96	96	96	96	
5°	190	145	92	68	62	36
15°	2171	724	64	39	36	707
25°	6675	1077	34	23	24	3068
35°	7310	430	14	14	17	4421
45°	2461	49	5	9	13	1888
55°	40	5	3	6	6	69
65°	0	2	2	4	3	1
75°	0	2	3	3	2	0
85°	0	2	2	2	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°	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
2.5°	134.6	128.6	131.3	130.8	128.6	129.2	130.3	128.1	129.2	125.9	126.5
5°	190.0	181.3	186.2	180.7	183.4	180.7	180.7	177.5	174.8	174.2	171.5
7.5°	331.6	310.4	317.0	293.6	297.4	289.8	282.8	275.2	262.1	255.6	241.5
10°	844.5	784.8	798.9	747.9	746.8	728.9	695.8	673.0	624.7	590.5	541.6
11°	1068.1	1027.4	1039.9	984.0	981.2	956.8	917.7	857.0	829.8	784.2	723.5
12°	1360.1	1291.7	1299.3	1238.0	1232.0	1199.4	1155.5	1080.6	1048.0	992.6	921.0
13°	1625.5	1564.7	1565.2	1498.5	1491.4	1450.2	1401.9	1311.2	1274.9	1213.0	1126.7
14°	1869.1	1823.0	1813.8	1778.0	1740.0	1691.7	1640.7	1538.1	1497.9	1428.5	1329.7
15°	2171.4	2081.4	2063.4	2018.4	1972.3	1911.5	1849.1	1731.8	1687.3	1610.8	1512.6
17.5°	3063.1	2951.9	2903.0	2811.3	2724.5	2607.8	2472.7	2264.8	2162.2	2024.9	1871.3
20°	4301.1	4125.8	4027.6	3880.5	3740.5	3549.4	3316.1	2988.8	2836.8	2570.9	2319.1
21°	4791.2	4640.3	4517.1	4351.6	4186.0	3959.7	3682.4	3336.1	3101.7	2790.7	2495.5
22°	5286.1	5142.9	4999.0	4817.2	4632.2	4367.9	4048.2	3646.6	3364.9	3001.8	2661.5
23°	5773.5	5628.1	5517.3	5268.2	5057.7	4759.7	4405.3	3946.2	3618.9	3202.6	2817.8
24°	6241.3	6082.3	5944.5	5693.2	5454.9	5123.3	4741.8	4237.1	3864.2	3394.2	2962.7
25°	6675.0	6499.7	6330.4	6072.0	5813.1	5451.1	5038.7	4500.3	4087.8	3567.9	3094.6
26°	7073.9	6834.5	6650.6	6411.8	6117.6	5737.7	5299.7	4727.7	4280.5	3712.8	3198.3
27°	7419.6	7177.5	6966.4	6710.8	6382.5	5973.2	5515.2	4891.0	4433.0	3821.3	3270.5
28°	7670.9	7466.3	7223.1	6948.0	6587.1	6135.5	5661.2	5021.3	4524.7	3877.8	3300.3
29°	7937.4	7704.5	7421.2	7108.6	6715.7	6237.5	5741.5	5089.1	4562.7	3890.8	3294.3
30°	8079.0	7864.6	7531.4	7190.6	6771.0	6270.1	5758.9	5099.5	4550.8	3859.3	3255.3
31°	8117.0	7916.7	7547.7	7192.2	6753.7	6238.1	5716.0	5046.3	4486.2	3786.1	3182.5
32°	8062.2	7861.9	7478.8	7122.7	6673.9	6148.5	5621.6	4951.3	4380.9	3676.4	3078.9
33°	7865.2	7702.9	7333.3	6990.9	6552.3	6015.6	5482.6	4796.6	4217.0	3534.2	2954.1
34°	7613.4	7461.9	7121.1	6770.0	6359.7	5833.2	5291.0	4609.4	4028.7	3359.5	2805.9
35°	7310.0	7160.7	6846.5	6497.5	6104.6	5590.6	5045.7	4374.4	3806.1	3161.9	2641.4
36°	6952.3	6797.1	6506.7	6174.6	5816.9	5297.5	4755.4	4104.1	3553.2	2947.0	2465.6
37°	6558.8	6402.5	6143.1	5835.4	5481.5	4967.6	4430.3	3806.1	3286.2	2723.9	2281.6
38°	6143.7	5998.2	5762.7	5455.5	5105.4	4600.7	4074.8	3533.7	3014.3	2498.2	2095.5
39°	5717.6	5564.6	5342.6	5040.8	4696.7	4198.5	3704.1	3220.5	2779.8	2276.2	1924.5
40°	5241.6	5097.3	4840.0	4603.4	4258.2	3783.9	3332.9	2874.8	2519.3	2062.9	1769.3
42.5°	3877.2	3764.3	3627.0	3384.4	3129.4	2789.1	2473.7	2156.2	1897.9	1639.0	1423.6
45°	2460.7	2377.7	2307.1	2156.2	2053.1	1861.5	1698.7	1536.5	1414.3	1278.7	1039.3
47.5°	910.7	871.6	846.7	780.4	774.5	713.1	707.2	785.3	831.5	782.6	588.9
50°	343.0	333.2	327.3	306.6	292.5	264.3	243.1	227.4	195.4	173.1	155.2
51°	225.2	218.2	207.9	206.2	200.3	184.5	174.8	171.5	149.8	126.5	108.5
52°	143.3	138.9	132.4	133.0	129.7	119.9	116.7	121.6	110.2	97.1	84.1
53°	90.1	87.9	83.6	83.6	83.0	76.5	75.4	79.8	77.6	71.6	64.0
54°	58.6	58.1	54.3	54.8	54.8	51.0	50.5	52.1	51.6	49.4	45.6
55°	40.2	39.6	39.1	37.4	36.4	35.3	35.3	35.8	35.3	34.2	32.0
57.5°	14.1	13.6	14.1	13.6	13.6	14.1	13.6	14.7	15.2	15.2	14.1
60°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	4.9	5.4	5.4	5.4



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
63°	1.1	1.1	1.1	1.1	1.1	1.1	0.5	0.5	1.1	1.1	1.1
64°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.1
65°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.1
66°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
67.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
70°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.1
72.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.1
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5
77.5°	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5
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°	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
2.5°	124.8	125.4	123.2	122.7	122.1	119.4	117.8	116.1	114.5	111.8	112.9
5°	167.2	167.2	162.3	159.0	157.4	151.4	148.7	144.9	140.6	137.3	135.7
7.5°	233.4	229.6	218.7	210.6	205.7	193.8	186.7	176.4	170.4	163.9	160.1
10°	495.0	469.5	416.3	378.3	342.5	299.0	259.4	228.5	208.4	193.8	184.5
11°	667.0	633.4	565.5	512.9	466.2	404.3	343.5	285.5	243.7	218.2	199.2
12°	855.9	812.5	731.1	665.9	608.9	531.3	453.7	377.2	317.0	269.2	230.1
13°	1052.3	996.4	902.0	827.1	761.4	671.9	579.6	487.9	414.6	349.5	290.4
14°	1247.2	1178.8	1075.1	988.8	915.0	815.2	710.4	608.4	522.6	440.7	368.5
15°	1424.1	1349.2	1258.0	1145.2	1065.4	937.3	838.5	724.0	626.3	531.3	447.2
17.5°	1741.6	1640.7	1533.2	1416.5	1340.5	1214.1	1088.7	950.3	832.0	714.2	601.3
20°	2090.6	1910.4	1733.5	1559.8	1449.6	1315.0	1192.4	1055.6	930.8	797.3	674.6
21°	2227.9	2021.7	1806.2	1611.4	1486.5	1342.7	1215.7	1074.1	942.7	800.5	671.4
22°	2358.1	2111.7	1869.7	1654.8	1518.5	1371.5	1234.7	1086.0	946.0	796.7	661.6
23°	2477.0	2198.6	1928.3	1692.8	1541.9	1385.6	1244.5	1090.9	944.3	788.0	646.9
24°	2585.0	2278.4	1978.2	1721.0	1556.0	1389.9	1243.4	1087.1	936.2	775.0	626.8
25°	2678.4	2341.3	2014.6	1736.2	1559.8	1387.7	1238.0	1077.3	919.9	752.8	603.5
26°	2748.9	2381.5	2032.0	1738.4	1554.4	1380.7	1225.5	1059.4	894.4	722.9	572.0
27°	2789.6	2396.1	2032.0	1729.1	1543.5	1367.7	1205.4	1031.7	861.3	686.0	533.0
28°	2796.7	2389.6	2017.3	1710.1	1522.9	1344.9	1176.1	996.4	822.2	642.0	490.1
29°	2778.2	2363.6	1985.8	1677.6	1492.5	1315.6	1138.1	951.9	775.6	593.7	445.6
30°	2732.6	2315.8	1939.2	1636.3	1456.1	1277.0	1090.3	902.6	722.9	543.8	394.6
31°	2661.5	2246.9	1879.5	1586.4	1411.1	1230.9	1037.7	845.6	663.8	481.9	339.2
32°	2567.1	2150.3	1813.2	1529.4	1361.2	1178.3	972.0	772.8	585.6	406.5	275.2
33°	2455.8	2055.8	1739.4	1468.1	1306.9	1106.1	881.4	664.3	490.1	322.4	208.4
34°	2328.8	1954.4	1660.2	1403.5	1235.8	1000.2	768.5	552.5	385.3	235.5	147.1
35°	2188.3	1846.4	1577.2	1327.5	1123.4	871.1	639.3	430.4	279.0	159.6	110.7
36°	2038.5	1725.3	1482.2	1219.0	988.8	726.2	502.6	309.9	185.1	118.9	95.5
37°	1897.4	1620.0	1384.0	1082.7	836.9	574.7	366.9	206.8	135.1	103.7	84.7
38°	1764.4	1518.5	1255.9	931.9	680.6	430.9	241.5	152.5	117.2	91.2	74.9
39°	1640.1	1416.5	1106.1	770.1	524.3	303.9	175.3	130.8	102.0	80.9	66.2
40°	1520.2	1270.5	942.7	627.9	382.1	212.2	147.6	115.6	90.1	71.1	55.9
42.5°	1140.3	816.3	522.1	286.0	179.6	138.4	105.3	81.4	59.7	44.0	33.6
45°	715.9	415.2	224.1	160.6	125.4	93.9	68.4	48.8	35.8	26.6	21.2
47.5°	325.6	178.6	138.9	107.5	80.9	55.9	40.2	29.3	21.7	16.8	12.5
50°	119.4	101.5	82.5	61.3	44.5	32.0	23.3	17.4	13.0	9.8	7.1
51°	93.3	81.4	65.7	46.1	35.3	26.1	19.0	14.1	10.3	7.6	5.4
52°	73.3	64.6	50.5	35.8	27.7	20.6	15.2	10.9	7.6	6.0	4.3
53°	56.4	49.4	38.0	27.7	21.7	16.3	11.9	8.7	6.0	4.3	3.3
54°	41.8	36.4	28.2	21.2	16.8	12.5	8.7	6.5	4.3	3.3	2.7
55°	29.8	26.6	21.2	16.8	13.0	9.8	6.5	4.9	3.3	2.2	2.2
57.5°	12.5	11.9	9.8	8.1	6.5	4.9	3.3	2.2	2.2	1.6	2.2
60°	4.9	4.9	4.3	3.3	2.7	2.2	1.6	1.6	1.6	1.6	1.6



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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°	1.1	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.2
64°	1.1	1.1	1.1	1.1	1.6	1.6	1.6	1.6	1.6	1.6	2.2
65°	1.1	1.1	1.1	1.1	1.1	1.6	1.6	1.6	1.6	1.6	2.2
66°	1.1	1.1	1.1	1.1	1.1	1.6	1.6	1.6	1.6	1.6	2.2
67.5°	1.1	1.1	1.1	1.1	1.1	1.6	1.6	1.6	1.6	2.2	2.2
70°	1.1	1.1	1.1	1.1	1.1	1.6	1.6	1.6	1.6	2.2	2.2
72.5°	1.1	1.1	1.1	1.1	1.1	1.6	1.6	1.6	2.2	2.2	2.2
75°	0.5	1.1	1.1	1.1	1.1	1.6	1.6	1.6	2.2	2.2	2.2
77.5°	0.5	1.1	1.1	1.1	1.6	1.6	1.6	1.6	2.2	2.2	2.2
80°	0.5	1.1	1.1	1.1	1.1	1.6	1.6	1.6	2.2	2.2	2.2
82.5°	0.5	1.1	1.1	1.1	1.1	1.6	1.6	1.6	2.2	2.2	2.2
85°	0.5	1.1	1.1	1.1	1.1	1.6	1.6	1.6	2.2	2.2	2.2
87.5°	0.5	1.1	1.1	1.1	1.1	1.6	1.6	1.6	2.2	2.2	2.2
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: P208859

CATALOG NUMBER: LDSQA6A15940D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
2.5°	111.3	111.3	107.5	106.4	105.8	104.7	102.0	102.0	100.4	98.2	97.1
5°	131.9	130.8	124.8	121.6	118.9	115.6	110.2	108.0	104.7	101.5	98.8
7.5°	152.0	148.2	138.9	134.1	130.3	124.8	117.8	112.9	107.5	102.0	98.2
10°	172.0	164.4	151.4	143.3	136.2	128.6	119.9	114.5	107.5	100.4	95.0
11°	180.2	170.4	155.8	145.5	137.3	128.6	119.9	112.9	106.4	99.3	93.3
12°	195.9	177.5	160.1	148.7	138.4	128.6	118.9	111.3	104.2	97.1	91.2
13°	227.9	193.8	165.0	151.4	140.0	128.6	117.8	109.6	102.0	95.0	88.5
14°	286.0	227.4	178.0	154.1	140.6	128.6	116.7	106.9	99.3	91.7	85.8
15°	351.7	279.0	204.6	163.9	141.1	127.5	114.5	104.2	96.1	88.5	82.5
17.5°	487.9	390.2	289.8	212.7	154.7	124.3	106.4	96.1	86.8	79.2	72.2
20°	543.3	429.8	317.0	227.9	160.1	118.9	97.1	86.3	76.5	68.9	63.0
21°	536.2	422.2	308.8	217.6	149.8	111.3	92.3	82.0	72.7	64.6	59.2
22°	521.6	404.3	289.8	198.6	137.3	103.7	87.9	77.1	68.4	60.8	55.4
23°	502.0	378.8	268.1	178.6	124.3	96.6	83.6	72.7	64.6	57.0	52.1
24°	477.6	353.3	243.1	158.5	111.8	91.2	78.7	68.4	60.2	53.7	48.8
25°	450.5	326.7	216.5	141.7	104.2	85.8	73.3	63.5	56.4	50.5	45.6
26°	417.4	295.2	191.6	125.9	95.0	79.8	67.8	59.2	52.6	47.2	42.3
27°	379.4	262.7	163.9	109.6	87.4	73.8	63.0	55.4	49.4	44.0	39.1
28°	345.2	226.3	140.6	97.7	81.4	67.8	58.6	51.6	46.1	40.7	36.4
29°	302.3	191.6	119.9	88.5	74.9	63.5	54.3	47.8	42.3	36.9	33.1
30°	259.4	158.5	102.6	80.9	68.4	58.1	49.9	44.0	38.5	34.2	30.9
31°	214.9	131.3	90.1	74.4	62.4	53.7	46.1	40.7	35.3	31.5	28.2
32°	164.4	107.5	80.3	67.3	57.0	48.3	42.3	36.9	32.0	28.8	25.5
33°	123.7	90.6	72.7	60.8	51.6	44.5	38.5	33.1	29.3	26.1	23.3
34°	98.8	80.9	65.7	54.8	46.7	40.2	34.2	29.8	26.1	23.3	20.6
35°	86.8	72.7	58.6	49.4	41.8	35.3	30.4	26.6	23.3	20.6	18.5
36°	77.1	65.1	52.1	44.0	36.4	30.9	26.6	23.3	20.1	17.9	16.3
37°	68.9	57.5	46.1	38.0	31.5	27.1	23.3	20.1	17.4	15.7	14.7
38°	61.9	49.4	39.1	32.6	27.1	23.3	20.1	17.4	15.2	13.6	12.5
39°	52.6	41.8	32.6	27.7	22.8	19.5	16.8	15.2	13.0	11.9	10.9
40°	44.0	34.7	27.1	22.8	19.5	16.3	14.7	12.5	11.4	10.3	9.2
42.5°	27.1	21.7	17.4	14.7	12.5	10.9	9.8	8.7	7.6	7.1	6.5
45°	16.8	13.6	10.9	9.2	7.6	7.1	6.5	5.4	5.4	4.9	4.9
47.5°	9.8	8.1	6.0	5.4	4.3	4.3	3.8	3.8	3.3	3.8	3.3
50°	5.4	3.8	3.3	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
51°	4.3	3.3	2.7	2.2	2.2	2.2	2.2	2.2	2.2	2.7	2.7
52°	3.3	2.7	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
53°	2.7	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
54°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
55°	2.2	2.2	2.2	2.2	2.2	1.6	2.2	2.2	2.2	2.2	2.2
57.5°	2.2	2.2	1.6	1.6	2.2	1.6	2.2	2.2	2.2	2.2	2.2
60°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2



TEST NUMBER: P208859

CATALOG NUMBER: LDSQA6A15940D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
63°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
64°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
65°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
66°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
67.5°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
70°	2.2	2.2	2.2	2.7	2.7	2.7	2.7	2.2	2.2	2.2	2.2
72.5°	2.2	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.2
75°	2.2	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
77.5°	2.2	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
80°	2.2	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
82.5°	2.2	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
85°	2.2	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
87.5°	2.2	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
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: P208859

CATALOG NUMBER: LDSQA6A15940D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
0°	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
2.5°	96.6	96.6	96.1	95.0	86.8	79.8	75.4	74.9
5°	97.1	96.1	93.9	92.3	77.6	68.4	63.0	62.4
7.5°	95.0	92.8	90.1	86.8	68.9	59.2	54.3	53.2
10°	91.2	87.4	84.1	79.8	60.8	51.6	47.2	46.1
11°	88.5	84.7	81.4	77.1	57.5	48.8	44.5	44.0
12°	86.3	82.0	77.6	73.8	54.3	46.1	42.3	41.8
13°	83.0	78.7	74.9	70.6	51.6	44.0	40.2	39.6
14°	80.3	75.4	71.6	67.8	48.8	41.2	38.5	38.0
15°	77.1	72.2	67.8	64.0	46.1	39.1	36.9	36.4
17.5°	68.4	63.0	59.2	55.4	39.6	34.2	32.6	33.1
20°	58.1	53.7	50.5	47.2	33.6	29.8	29.3	29.8
21°	54.3	50.5	47.8	44.5	31.5	28.2	28.2	28.8
22°	51.0	47.2	44.5	41.2	29.8	26.6	26.6	27.7
23°	47.8	44.0	41.2	38.5	27.7	25.5	25.5	26.6
24°	44.5	41.2	38.5	35.8	26.1	23.9	24.4	25.5
25°	41.2	38.5	35.8	33.6	24.4	22.8	23.3	24.4
26°	39.1	35.8	33.6	30.9	22.8	21.7	22.3	23.9
27°	35.8	33.1	30.9	28.8	21.7	20.6	21.7	22.8
28°	33.6	30.9	28.8	26.6	20.1	19.5	20.6	22.3
29°	30.9	28.8	26.6	25.0	19.0	18.5	20.1	21.2
30°	28.2	26.1	24.4	22.8	17.9	17.4	19.0	20.6
31°	26.1	24.4	22.8	21.2	16.8	16.8	18.5	20.1
32°	23.9	22.3	20.6	19.0	15.7	15.7	17.9	19.0
33°	21.7	20.1	18.5	17.4	14.7	15.2	16.8	18.5
34°	19.0	17.9	16.8	15.7	13.6	14.1	16.3	17.9
35°	17.4	16.3	15.2	14.1	13.0	13.6	15.7	17.4
36°	15.2	14.7	13.6	13.0	11.9	13.0	15.2	16.8
37°	13.6	13.0	11.9	11.4	11.4	12.5	14.7	16.3
38°	11.9	11.4	10.9	10.3	10.9	11.9	14.1	15.7
39°	10.3	9.8	9.8	9.2	10.3	11.4	13.6	15.2
40°	9.2	8.7	8.7	8.1	9.8	10.9	13.0	15.2
42.5°	6.5	6.5	6.5	6.5	8.1	9.8	11.9	14.1
45°	4.9	4.9	4.9	4.9	7.1	8.7	10.3	13.0
47.5°	3.8	3.8	3.8	3.8	6.5	8.1	9.8	11.4
50°	2.7	2.7	3.3	3.3	6.0	7.1	8.7	10.3
51°	2.7	2.7	2.7	3.3	5.4	7.1	8.1	9.8
52°	2.7	2.7	2.7	2.7	5.4	6.5	7.6	8.7
53°	2.2	2.7	2.7	2.7	4.9	6.5	7.1	8.1
54°	2.2	2.2	2.2	2.7	4.9	6.0	6.5	7.6
55°	2.2	2.2	2.2	2.7	4.3	6.0	6.5	6.5
57.5°	2.2	2.2	2.2	2.2	4.3	5.4	6.0	5.4
60°	2.2	2.2	2.2	2.2	3.8	4.9	5.4	3.8



TEST NUMBER: P208859

CATALOG NUMBER: LDSQA6A15940D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
63°	2.2	2.2	2.2	2.2	3.8	4.3	4.3	3.3
64°	2.2	2.2	2.2	2.2	3.8	4.3	4.3	3.3
65°	2.2	2.2	2.2	2.2	3.8	3.8	3.8	2.7
66°	2.2	2.2	2.2	2.2	3.8	3.8	3.8	2.7
67.5°	2.2	2.2	2.2	2.2	3.8	3.8	3.3	2.7
70°	2.2	2.2	2.2	2.7	3.3	3.3	3.3	2.7
72.5°	2.2	2.2	2.2	2.7	3.3	3.3	2.7	2.2
75°	2.7	2.7	2.7	2.7	3.3	3.3	2.7	1.6
77.5°	2.7	2.7	2.7	2.7	3.3	2.7	2.2	1.6
80°	2.7	2.7	2.2	2.2	2.7	2.7	1.6	1.1
82.5°	2.7	2.7	2.2	2.2	2.7	2.2	1.6	1.1
85°	2.7	2.7	2.2	2.2	2.7	2.2	1.1	0.5
87.5°	2.7	2.2	2.2	2.2	2.7	2.2	0.5	0.5
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	1.6	1.6	1.6	2.2	1.6	2.2	2.7	3.3	3.3	3.3
62°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.6	1.6	1.6	2.2





61°	3.3	3.3	2.7	2.7	2.2	1.6	1.6	1.6	1.6	1.6	1.6
62°	2.2	2.2	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.2





61°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
62°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2





61°	2.2	2.2	2.2	2.2	3.8	4.9	4.9	3.8
62°	2.2	2.2	2.2	2.2	3.8	4.3	4.9	3.3



(END OF REPORT)