

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: P208847

Luminaire Tested: **LDSQA6A10840D010TE LARL20NF 6LSQA1H 30°**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208847
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: LDSQA6A10840D010TE 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 / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1127.1 lumens
Efficiency: N/A
Efficacy: 82.1 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

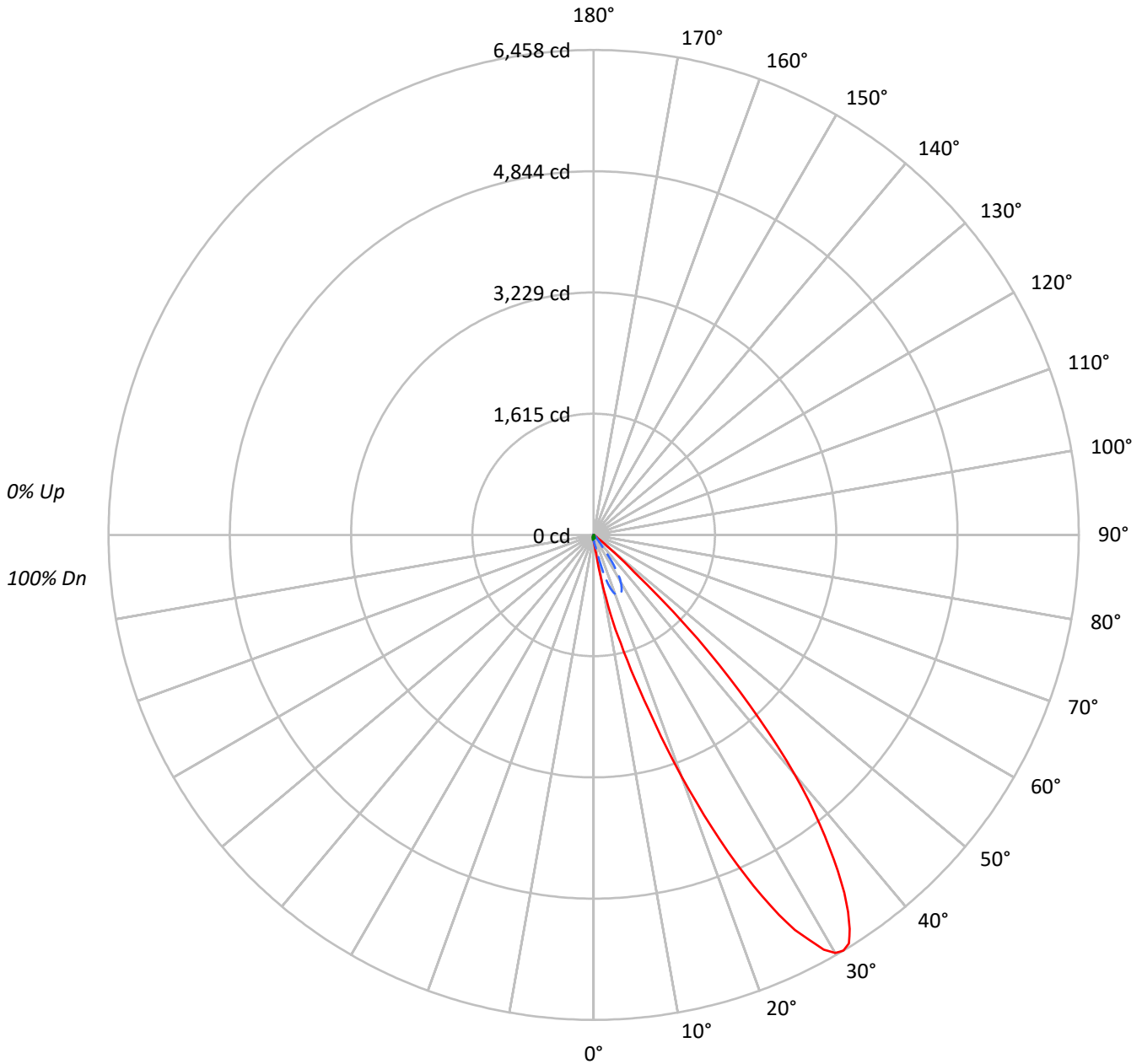
Input Watts (W): 13.73
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	79	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°	3272	3272	3272
5°	6531	3172	2148
10°	29375	2776	1605
15°	77011	2273	1288
20°	156797	1723	1086
25°	252298	1273	922
30°	319572	900	815
35°	305696	589	725
40°	234398	365	680
45°	119210	237	633
50°	18280	174	549
55°	2402	165	390
60°	258	146	258
65°	41	173	224
70°	50	277	277
75°	0	366	216
80°	0	422	223
85°	0	840	198



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	10.2	0.9
10°-20°	111.4	9.9
20°-30°	364.9	32.4
30°-40°	444.2	39.4
40°-50°	180.5	16.0
50°-60°	10.7	1.0
60°-70°	2.1	0.2
70°-80°	1.8	0.2
80°-90°	1.3	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°	486.5	43.2
0°-40°	930.7	82.6
0°-60°	1121.9	99.5
0°-90°	1127.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1127.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	76	76	76	76	76	
5°	151	115	73	54	50	29
15°	1728	576	51	31	29	562
25°	5311	857	27	18	19	2441
35°	5816	342	11	11	14	3518
45°	1958	39	4	7	10	1502
55°	32	4	2	5	5	55
65°	0	1	2	3	2	1
75°	0	1	2	3	1	0
85°	0	1	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°	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0
2.5°	107.1	102.3	104.5	104.1	102.3	102.8	103.6	101.9	102.8	100.2	100.6
5°	151.1	144.2	148.1	143.8	146.0	143.8	143.8	141.2	139.0	138.6	136.5
7.5°	263.8	247.0	252.2	233.6	236.6	230.6	225.0	218.9	208.6	203.4	192.2
10°	671.9	624.4	635.6	595.0	594.2	579.9	553.6	535.4	497.0	469.8	430.9
11°	849.8	817.4	827.3	782.9	780.7	761.3	730.2	681.8	660.2	624.0	575.6
12°	1082.1	1027.7	1033.7	985.0	980.2	954.3	919.3	859.7	833.8	789.8	732.8
13°	1293.3	1244.9	1245.3	1192.2	1186.6	1153.8	1115.4	1043.2	1014.3	965.1	896.4
14°	1487.1	1450.4	1443.1	1414.6	1384.4	1345.9	1305.4	1223.7	1191.8	1136.5	1057.9
15°	1727.7	1656.0	1641.7	1605.9	1569.2	1520.8	1471.2	1377.9	1342.5	1281.6	1203.4
17.5°	2437.1	2348.6	2309.7	2236.8	2167.7	2074.8	1967.3	1801.9	1720.3	1611.1	1488.9
20°	3422.1	3282.6	3204.4	3087.4	2976.0	2824.0	2638.3	2378.0	2257.1	2045.5	1845.1
21°	3812.0	3692.0	3593.9	3462.2	3330.5	3150.5	2929.8	2654.3	2467.8	2220.4	1985.5
22°	4205.8	4091.8	3977.4	3832.7	3685.5	3475.2	3220.9	2901.3	2677.2	2388.3	2117.6
23°	4593.6	4477.8	4389.8	4191.6	4024.0	3787.0	3505.0	3139.7	2879.3	2548.1	2241.9
24°	4965.8	4839.3	4729.6	4529.7	4340.1	4076.3	3772.7	3371.1	3074.5	2700.5	2357.2
25°	5310.8	5171.3	5036.6	4831.1	4625.1	4337.1	4008.9	3580.5	3252.4	2838.7	2462.2
26°	5628.2	5437.8	5291.4	5101.4	4867.3	4565.1	4216.6	3761.5	3405.7	2954.0	2544.6
27°	5903.2	5710.7	5542.7	5339.3	5078.1	4752.5	4388.0	3891.4	3527.0	3040.4	2602.1
28°	6103.2	5940.4	5746.9	5528.0	5240.8	4881.6	4504.2	3995.1	3600.0	3085.3	2625.8
29°	6315.2	6129.9	5904.5	5655.8	5343.2	4962.8	4568.1	4049.1	3630.2	3095.6	2621.1
30°	6427.9	6257.3	5992.2	5721.0	5387.2	4988.7	4581.9	4057.3	3620.7	3070.6	2590.0
31°	6458.1	6298.8	6005.1	5722.3	5373.4	4963.2	4547.8	4014.9	3569.3	3012.3	2532.1
32°	6414.5	6255.2	5950.3	5667.0	5309.9	4891.9	4472.7	3939.4	3485.6	2925.1	2449.6
33°	6257.8	6128.6	5834.6	5562.1	5213.2	4786.2	4362.1	3816.3	3355.1	2811.9	2350.3
34°	6057.4	5936.9	5665.7	5386.4	5059.9	4641.1	4209.7	3667.3	3205.3	2672.9	2232.4
35°	5816.0	5697.3	5447.3	5169.6	4857.0	4448.0	4014.5	3480.4	3028.3	2515.7	2101.6
36°	5531.5	5408.0	5176.9	4912.7	4628.1	4214.9	3783.5	3265.3	2827.0	2344.7	1961.7
37°	5218.4	5094.0	4887.6	4642.8	4361.3	3952.3	3524.8	3028.3	2614.6	2167.2	1815.3
38°	4888.1	4772.3	4584.9	4340.5	4062.0	3660.4	3242.0	2811.5	2398.3	1987.6	1667.2
39°	4549.1	4427.3	4250.7	4010.6	3736.9	3340.5	2947.1	2562.3	2211.7	1811.0	1531.2
40°	4170.4	4055.5	3850.9	3662.6	3388.0	3010.6	2651.7	2287.3	2004.5	1641.3	1407.7
42.5°	3084.8	2995.0	2885.8	2692.8	2489.8	2219.1	1968.2	1715.6	1510.0	1304.1	1132.6
45°	1957.8	1891.7	1835.6	1715.6	1633.5	1481.1	1351.6	1222.4	1125.3	1017.3	826.9
47.5°	724.6	693.5	673.6	620.9	616.2	567.4	562.6	624.8	661.5	622.7	468.5
50°	272.9	265.1	260.4	244.0	232.7	210.3	193.4	180.9	155.5	137.7	123.5
51°	179.2	173.6	165.4	164.1	159.3	146.8	139.0	136.5	119.2	100.6	86.4
52°	114.0	110.5	105.4	105.8	103.2	95.4	92.8	96.7	87.7	77.3	66.9
53°	71.7	70.0	66.5	66.5	66.1	60.9	60.0	63.5	61.7	57.0	51.0
54°	46.6	46.2	43.2	43.6	43.6	40.6	40.2	41.5	41.0	39.3	36.3
55°	32.0	31.5	31.1	29.8	28.9	28.1	28.1	28.5	28.1	27.2	25.5
57.5°	11.2	10.8	11.2	10.8	10.8	11.2	10.8	11.7	12.1	12.1	11.2
60°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.9	4.3	4.3	4.3



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
63°	0.9	0.9	0.9	0.9	0.9	0.9	0.4	0.4	0.9	0.9	0.9
64°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.9
65°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.9
66°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
67.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
70°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.9
72.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.9
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4
77.5°	0.0	0.0	0.0	0.0	0.0	0.4	0.4	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	0.4	0.4	0.4	0.4	0.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.4	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°	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0
2.5°	99.3	99.7	98.0	97.6	97.2	95.0	93.7	92.4	91.1	89.0	89.8
5°	133.0	133.0	129.1	126.5	125.2	120.5	118.3	115.3	111.8	109.2	108.0
7.5°	185.7	182.7	174.0	167.5	163.7	154.2	148.5	140.3	135.6	130.4	127.4
10°	393.8	373.5	331.2	301.0	272.5	237.9	206.4	181.8	165.8	154.2	146.8
11°	530.7	503.9	449.9	408.1	370.9	321.7	273.3	227.1	193.9	173.6	158.5
12°	681.0	646.4	581.6	529.8	484.5	422.7	361.0	300.1	252.2	214.2	183.1
13°	837.3	792.8	717.7	658.1	605.8	534.6	461.2	388.2	329.9	278.1	231.0
14°	992.3	937.9	855.4	786.8	728.0	648.6	565.2	484.1	415.8	350.6	293.2
15°	1133.1	1073.5	1000.9	911.1	847.6	745.7	667.1	576.0	498.3	422.7	355.8
17.5°	1385.7	1305.4	1219.9	1127.0	1066.6	966.0	866.2	756.1	662.0	568.3	478.4
20°	1663.3	1520.0	1379.2	1241.0	1153.4	1046.3	948.7	839.9	740.5	634.3	536.7
21°	1772.6	1608.5	1437.1	1282.0	1182.7	1068.3	967.2	854.5	750.0	636.9	534.1
22°	1876.2	1680.2	1487.6	1316.6	1208.2	1091.2	982.4	864.0	752.6	633.9	526.4
23°	1970.8	1749.3	1534.2	1346.8	1226.8	1102.4	990.1	867.9	751.3	627.0	514.7
24°	2056.7	1812.7	1573.9	1369.3	1238.0	1105.9	989.3	864.9	744.9	616.6	498.7
25°	2131.0	1862.8	1602.9	1381.4	1241.0	1104.1	985.0	857.1	731.9	598.9	480.2
26°	2187.1	1894.8	1616.7	1383.1	1236.7	1098.5	975.0	842.9	711.6	575.2	455.1
27°	2219.5	1906.4	1616.7	1375.7	1228.1	1088.2	959.0	820.9	685.3	545.8	424.0
28°	2225.1	1901.2	1605.0	1360.6	1211.7	1070.0	935.7	792.8	654.2	510.8	389.9
29°	2210.4	1880.5	1580.0	1334.7	1187.5	1046.7	905.5	757.4	617.1	472.4	354.5
30°	2174.2	1842.5	1542.8	1301.9	1158.5	1016.0	867.5	718.1	575.2	432.7	313.9
31°	2117.6	1787.7	1495.3	1262.2	1122.7	979.3	825.6	672.8	528.1	383.4	269.9
32°	2042.4	1710.8	1442.7	1216.8	1083.0	937.5	773.4	614.9	465.9	323.4	218.9
33°	1953.9	1635.7	1383.9	1168.0	1039.8	880.0	701.3	528.5	389.9	256.5	165.8
34°	1852.9	1554.9	1320.9	1116.7	983.2	795.8	611.4	439.6	306.6	187.4	117.0
35°	1741.0	1469.0	1254.8	1056.2	893.8	693.1	508.7	342.4	221.9	127.0	88.1
36°	1621.9	1372.7	1179.3	969.8	786.8	577.8	399.9	246.6	147.2	94.6	76.0
37°	1509.6	1288.9	1101.1	861.5	665.8	457.3	291.9	164.5	107.5	82.5	67.4
38°	1403.8	1208.2	999.2	741.4	541.5	342.9	192.2	121.3	93.3	72.5	59.6
39°	1304.9	1127.0	880.0	612.7	417.1	241.8	139.5	104.1	81.2	64.3	52.7
40°	1209.5	1010.9	750.0	499.6	304.0	168.8	117.5	92.0	71.7	56.6	44.5
42.5°	907.2	649.4	415.4	227.6	142.9	110.1	83.8	64.8	47.5	35.0	26.8
45°	569.6	330.3	178.3	127.8	99.7	74.7	54.4	38.9	28.5	21.2	16.8
47.5°	259.1	142.1	110.5	85.5	64.3	44.5	32.0	23.3	17.3	13.4	9.9
50°	95.0	80.7	65.6	48.8	35.4	25.5	18.6	13.8	10.4	7.8	5.6
51°	74.3	64.8	52.2	36.7	28.1	20.7	15.1	11.2	8.2	6.0	4.3
52°	58.3	51.4	40.2	28.5	22.0	16.4	12.1	8.6	6.0	4.7	3.5
53°	44.9	39.3	30.2	22.0	17.3	13.0	9.5	6.9	4.7	3.5	2.6
54°	33.2	28.9	22.5	16.8	13.4	9.9	6.9	5.2	3.5	2.6	2.2
55°	23.7	21.2	16.8	13.4	10.4	7.8	5.2	3.9	2.6	1.7	1.7
57.5°	9.9	9.5	7.8	6.5	5.2	3.9	2.6	1.7	1.7	1.3	1.7
60°	3.9	3.9	3.5	2.6	2.2	1.7	1.3	1.3	1.3	1.3	1.3



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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°	0.9	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.7
64°	0.9	0.9	0.9	0.9	1.3	1.3	1.3	1.3	1.3	1.3	1.7
65°	0.9	0.9	0.9	0.9	0.9	1.3	1.3	1.3	1.3	1.3	1.7
66°	0.9	0.9	0.9	0.9	0.9	1.3	1.3	1.3	1.3	1.3	1.7
67.5°	0.9	0.9	0.9	0.9	0.9	1.3	1.3	1.3	1.3	1.7	1.7
70°	0.9	0.9	0.9	0.9	0.9	1.3	1.3	1.3	1.3	1.7	1.7
72.5°	0.9	0.9	0.9	0.9	0.9	1.3	1.3	1.3	1.7	1.7	1.7
75°	0.4	0.9	0.9	0.9	0.9	1.3	1.3	1.3	1.7	1.7	1.7
77.5°	0.4	0.9	0.9	0.9	1.3	1.3	1.3	1.3	1.7	1.7	1.7
80°	0.4	0.9	0.9	0.9	0.9	1.3	1.3	1.3	1.7	1.7	1.7
82.5°	0.4	0.9	0.9	0.9	0.9	1.3	1.3	1.3	1.7	1.7	1.7
85°	0.4	0.9	0.9	0.9	0.9	1.3	1.3	1.3	1.7	1.7	1.7
87.5°	0.4	0.9	0.9	0.9	0.9	1.3	1.3	1.3	1.7	1.7	1.7
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: P208847

CATALOG NUMBER: LDSQA6A10840D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0
2.5°	88.5	88.5	85.5	84.6	84.2	83.3	81.2	81.2	79.9	78.2	77.3
5°	104.9	104.1	99.3	96.7	94.6	92.0	87.7	85.9	83.3	80.7	78.6
7.5°	120.9	117.9	110.5	106.7	103.6	99.3	93.7	89.8	85.5	81.2	78.2
10°	136.9	130.8	120.5	114.0	108.4	102.3	95.4	91.1	85.5	79.9	75.6
11°	143.4	135.6	123.9	115.7	109.2	102.3	95.4	89.8	84.6	79.0	74.3
12°	155.9	141.2	127.4	118.3	110.1	102.3	94.6	88.5	82.9	77.3	72.5
13°	181.4	154.2	131.3	120.5	111.4	102.3	93.7	87.2	81.2	75.6	70.4
14°	227.6	180.9	141.6	122.6	111.8	102.3	92.8	85.1	79.0	73.0	68.2
15°	279.8	221.9	162.8	130.4	112.3	101.5	91.1	82.9	76.4	70.4	65.6
17.5°	388.2	310.5	230.6	169.3	123.1	98.9	84.6	76.4	69.1	63.0	57.4
20°	432.2	342.0	252.2	181.4	127.4	94.6	77.3	68.7	60.9	54.8	50.1
21°	426.6	335.9	245.7	173.2	119.2	88.5	73.4	65.2	57.9	51.4	47.1
22°	415.0	321.7	230.6	158.0	109.2	82.5	70.0	61.3	54.4	48.4	44.0
23°	399.4	301.4	213.3	142.1	98.9	76.9	66.5	57.9	51.4	45.3	41.5
24°	380.0	281.1	193.4	126.1	89.0	72.5	62.6	54.4	47.9	42.7	38.9
25°	358.4	259.9	172.3	112.7	82.9	68.2	58.3	50.5	44.9	40.2	36.3
26°	332.1	234.9	152.4	100.2	75.6	63.5	54.0	47.1	41.9	37.6	33.7
27°	301.8	209.0	130.4	87.2	69.5	58.7	50.1	44.0	39.3	35.0	31.1
28°	274.6	180.1	111.8	77.7	64.8	54.0	46.6	41.0	36.7	32.4	28.9
29°	240.5	152.4	95.4	70.4	59.6	50.5	43.2	38.0	33.7	29.4	26.3
30°	206.4	126.1	81.6	64.3	54.4	46.2	39.7	35.0	30.7	27.2	24.6
31°	171.0	104.5	71.7	59.2	49.7	42.7	36.7	32.4	28.1	25.0	22.5
32°	130.8	85.5	63.9	53.5	45.3	38.4	33.7	29.4	25.5	22.9	20.3
33°	98.5	72.1	57.9	48.4	41.0	35.4	30.7	26.3	23.3	20.7	18.6
34°	78.6	64.3	52.2	43.6	37.1	32.0	27.2	23.7	20.7	18.6	16.4
35°	69.1	57.9	46.6	39.3	33.2	28.1	24.2	21.2	18.6	16.4	14.7
36°	61.3	51.8	41.5	35.0	28.9	24.6	21.2	18.6	16.0	14.2	13.0
37°	54.8	45.8	36.7	30.2	25.0	21.6	18.6	16.0	13.8	12.5	11.7
38°	49.2	39.3	31.1	25.9	21.6	18.6	16.0	13.8	12.1	10.8	9.9
39°	41.9	33.2	25.9	22.0	18.1	15.5	13.4	12.1	10.4	9.5	8.6
40°	35.0	27.6	21.6	18.1	15.5	13.0	11.7	9.9	9.1	8.2	7.3
42.5°	21.6	17.3	13.8	11.7	9.9	8.6	7.8	6.9	6.0	5.6	5.2
45°	13.4	10.8	8.6	7.3	6.0	5.6	5.2	4.3	4.3	3.9	3.9
47.5°	7.8	6.5	4.7	4.3	3.5	3.5	3.0	3.0	2.6	3.0	2.6
50°	4.3	3.0	2.6	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
51°	3.5	2.6	2.2	1.7	1.7	1.7	1.7	1.7	1.7	2.2	2.2
52°	2.6	2.2	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
53°	2.2	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
54°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
55°	1.7	1.7	1.7	1.7	1.7	1.3	1.7	1.7	1.7	1.7	1.7
57.5°	1.7	1.7	1.3	1.3	1.7	1.3	1.7	1.7	1.7	1.7	1.7
60°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7



TEST NUMBER: P208847

CATALOG NUMBER: LDSQA6A10840D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
63°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
64°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
65°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
66°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
67.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
70°	1.7	1.7	1.7	2.2	2.2	2.2	2.2	1.7	1.7	1.7	1.7
72.5°	1.7	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	1.7
75°	1.7	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
77.5°	1.7	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
80°	1.7	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
82.5°	1.7	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
85°	1.7	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
87.5°	1.7	2.2	2.2	2.2	2.2	2.2	2.2	2.2	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: P208847

CATALOG NUMBER: LDSQA6A10840D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
0°	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0
2.5°	76.9	76.9	76.4	75.6	69.1	63.5	60.0	59.6
5°	77.3	76.4	74.7	73.4	61.7	54.4	50.1	49.7
7.5°	75.6	73.8	71.7	69.1	54.8	47.1	43.2	42.3
10°	72.5	69.5	66.9	63.5	48.4	41.0	37.6	36.7
11°	70.4	67.4	64.8	61.3	45.8	38.9	35.4	35.0
12°	68.7	65.2	61.7	58.7	43.2	36.7	33.7	33.2
13°	66.1	62.6	59.6	56.1	41.0	35.0	32.0	31.5
14°	63.9	60.0	57.0	54.0	38.9	32.8	30.7	30.2
15°	61.3	57.4	54.0	51.0	36.7	31.1	29.4	28.9
17.5°	54.4	50.1	47.1	44.0	31.5	27.2	25.9	26.3
20°	46.2	42.7	40.2	37.6	26.8	23.7	23.3	23.7
21°	43.2	40.2	38.0	35.4	25.0	22.5	22.5	22.9
22°	40.6	37.6	35.4	32.8	23.7	21.2	21.2	22.0
23°	38.0	35.0	32.8	30.7	22.0	20.3	20.3	21.2
24°	35.4	32.8	30.7	28.5	20.7	19.0	19.4	20.3
25°	32.8	30.7	28.5	26.8	19.4	18.1	18.6	19.4
26°	31.1	28.5	26.8	24.6	18.1	17.3	17.7	19.0
27°	28.5	26.3	24.6	22.9	17.3	16.4	17.3	18.1
28°	26.8	24.6	22.9	21.2	16.0	15.5	16.4	17.7
29°	24.6	22.9	21.2	19.9	15.1	14.7	16.0	16.8
30°	22.5	20.7	19.4	18.1	14.2	13.8	15.1	16.4
31°	20.7	19.4	18.1	16.8	13.4	13.4	14.7	16.0
32°	19.0	17.7	16.4	15.1	12.5	12.5	14.2	15.1
33°	17.3	16.0	14.7	13.8	11.7	12.1	13.4	14.7
34°	15.1	14.2	13.4	12.5	10.8	11.2	13.0	14.2
35°	13.8	13.0	12.1	11.2	10.4	10.8	12.5	13.8
36°	12.1	11.7	10.8	10.4	9.5	10.4	12.1	13.4
37°	10.8	10.4	9.5	9.1	9.1	9.9	11.7	13.0
38°	9.5	9.1	8.6	8.2	8.6	9.5	11.2	12.5
39°	8.2	7.8	7.8	7.3	8.2	9.1	10.8	12.1
40°	7.3	6.9	6.9	6.5	7.8	8.6	10.4	12.1
42.5°	5.2	5.2	5.2	5.2	6.5	7.8	9.5	11.2
45°	3.9	3.9	3.9	3.9	5.6	6.9	8.2	10.4
47.5°	3.0	3.0	3.0	3.0	5.2	6.5	7.8	9.1
50°	2.2	2.2	2.6	2.6	4.7	5.6	6.9	8.2
51°	2.2	2.2	2.2	2.6	4.3	5.6	6.5	7.8
52°	2.2	2.2	2.2	2.2	4.3	5.2	6.0	6.9
53°	1.7	2.2	2.2	2.2	3.9	5.2	5.6	6.5
54°	1.7	1.7	1.7	2.2	3.9	4.7	5.2	6.0
55°	1.7	1.7	1.7	2.2	3.5	4.7	5.2	5.2
57.5°	1.7	1.7	1.7	1.7	3.5	4.3	4.7	4.3
60°	1.7	1.7	1.7	1.7	3.0	3.9	4.3	3.0



TEST NUMBER: P208847

CATALOG NUMBER: LDSQA6A10840D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
63°	1.7	1.7	1.7	1.7	3.0	3.5	3.5	2.6
64°	1.7	1.7	1.7	1.7	3.0	3.5	3.5	2.6
65°	1.7	1.7	1.7	1.7	3.0	3.0	3.0	2.2
66°	1.7	1.7	1.7	1.7	3.0	3.0	3.0	2.2
67.5°	1.7	1.7	1.7	1.7	3.0	3.0	2.6	2.2
70°	1.7	1.7	1.7	2.2	2.6	2.6	2.6	2.2
72.5°	1.7	1.7	1.7	2.2	2.6	2.6	2.2	1.7
75°	2.2	2.2	2.2	2.2	2.6	2.6	2.2	1.3
77.5°	2.2	2.2	2.2	2.2	2.6	2.2	1.7	1.3
80°	2.2	2.2	1.7	1.7	2.2	2.2	1.3	0.9
82.5°	2.2	2.2	1.7	1.7	2.2	1.7	1.3	0.9
85°	2.2	2.2	1.7	1.7	2.2	1.7	0.9	0.4
87.5°	2.2	1.7	1.7	1.7	2.2	1.7	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°	1.3	1.3	1.3	1.3	1.7	1.3	1.7	2.2	2.6	2.6	2.6
62°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.3	1.3	1.3	1.7





61°	2.6	2.6	2.2	2.2	1.7	1.3	1.3	1.3	1.3	1.3	1.3
62°	1.7	1.7	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.7





61°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
62°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7





61°	1.7	1.7	1.7	1.7	3.0	3.9	3.9	3.0
62°	1.7	1.7	1.7	1.7	3.0	3.5	3.9	2.6



(END OF REPORT)