

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: P208831

Luminaire Tested: **LDSQA6A20840D010TE LARL15SP 6LSQA1H 30°**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208831
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29054)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA6A20840D010TE LARL15SP 6LSQA1H 30°
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT, 30° Tilt
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1609.3 lumens
Efficiency: N/A
Efficacy: 55.9 lumens/watt
Spacing Criteria (0/90/45): 2.18 / 0.62 / 1.12
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

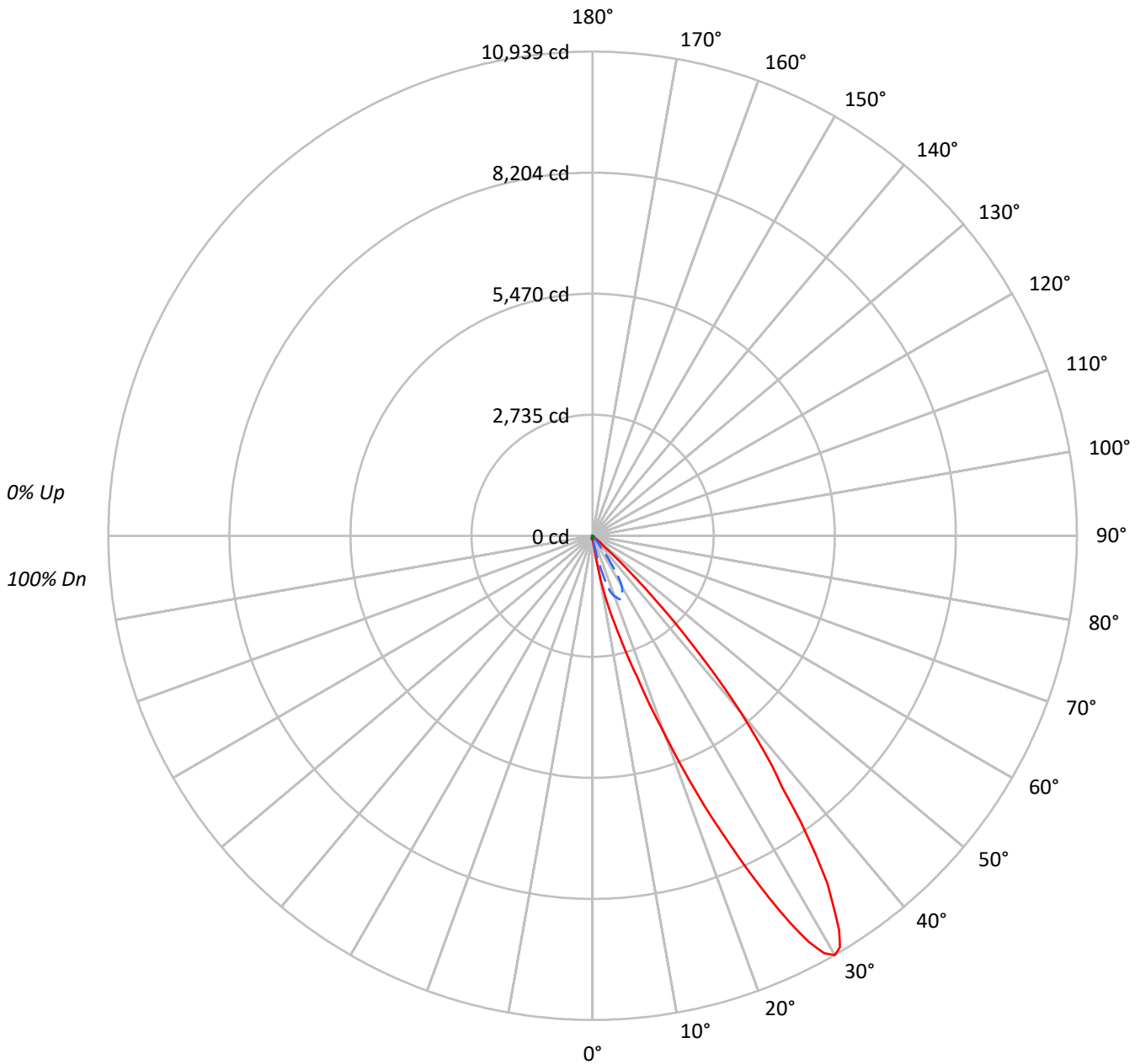
Input Watts (W): 28.81
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	113	109	106	104	110	107	105	102	103	101	99	99	98	96	96	95	93	91																			
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	87	85	83																			
3	99	91	86	81	97	90	85	80	87	83	79	85	81	78	82	79	76	75																			
4	93	84	77	72	91	82	76	72	80	75	71	78	73	70	76	72	69	67																			
5	86	76	70	64	85	75	69	64	74	68	63	72	67	63	70	66	62	61																			
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55																			
7	75	64	57	52	74	64	57	52	62	56	51	61	55	51	60	55	51	49																			
8	70	59	52	47	69	58	52	47	57	51	47	56	50	46	55	50	46	44																			
9	66	54	47	42	65	54	47	42	53	46	42	52	46	42	51	46	42	40																			
10	62	50	43	38	60	50	43	38	49	42	38	48	42	38	47	42	38	36																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	4542	4542	4542
5°	7002	4300	3453
10°	37564	3821	2868
15°	103573	3089	2452
20°	219940	2314	2140
25°	398111	1682	1862
30°	543843	1238	1651
35°	460988	873	1503
40°	292627	596	1439
45°	101418	457	1333
50°	6209	355	1159
55°	1073	285	908
60°	258	258	586
65°	153	306	458
70°	189	378	478
75°	0	499	499
80°	0	744	372
85°	0	1482	395



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.1	0.8
10°-20°	165.5	10.3
20°-30°	575.1	35.7
30°-40°	630.5	39.2
40°-50°	207.9	12.9
50°-60°	8.6	0.5
60°-70°	3.7	0.2
70°-80°	2.9	0.2
80°-90°	1.9	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°	753.7	46.8
0°-40°	1384.1	86.0
0°-60°	1600.7	99.5
0°-90°	1609.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1609.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	106	106	106	106	106	
5°	162	132	100	85	80	34
15°	2324	947	69	56	55	772
25°	8380	1553	35	35	39	3922
35°	8770	518	17	22	29	5272
45°	1666	26	8	15	22	1467
55°	14	3	4	10	12	20
65°	2	2	3	6	4	2
75°	0	2	3	4	3	1
85°	0	2	3	2	1	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°	105.5	105.5	105.5	105.5	105.5	105.5	105.5	105.5	105.5	105.5	105.5
2.5°	125.1	124.4	124.4	124.4	123.6	122.1	122.1	122.8	122.8	122.1	122.8
5°	162.0	160.5	159.8	159.0	156.0	155.3	152.2	154.5	152.2	150.0	150.0
7.5°	296.9	296.2	283.4	275.1	260.8	244.2	239.7	240.4	229.9	220.1	214.0
10°	859.2	860.7	823.0	838.1	783.8	762.0	720.5	705.4	667.8	636.1	597.7
11°	1149.4	1147.8	1100.4	1114.7	1059.7	1028.8	982.0	957.9	910.4	878.8	830.6
12°	1462.9	1416.9	1401.1	1414.6	1358.1	1317.4	1260.9	1230.0	1171.2	1138.8	1080.8
13°	1773.4	1759.8	1707.1	1719.9	1661.9	1572.9	1549.6	1512.6	1444.0	1405.6	1340.8
14°	2042.5	1992.7	1976.1	1984.4	1927.1	1842.7	1819.4	1808.1	1702.6	1661.1	1588.7
15°	2323.6	2263.3	2239.9	2209.0	2175.1	2074.9	2041.0	2019.1	1909.8	1840.5	1793.7
17.5°	3345.6	3260.4	3203.1	3133.0	3058.4	2873.0	2796.1	2723.0	2531.6	2439.6	2301.0
20°	4800.2	4669.8	4522.8	4370.6	4224.4	3897.3	3707.3	3503.8	3242.3	3023.7	2857.9
21°	5504.1	5348.1	5171.0	5056.4	4781.3	4381.9	4125.6	3835.5	3499.3	3228.7	3020.0
22°	6241.9	6064.1	5916.4	5747.5	5366.2	4889.8	4568.0	4195.7	3760.8	3427.0	3163.2
23°	6958.7	6757.5	6580.3	6374.6	5933.7	5382.0	4999.9	4556.0	4032.2	3616.9	3290.5
24°	7643.0	7434.3	7230.8	6960.2	6455.2	5845.5	5396.3	4890.6	4290.7	3799.3	3410.4
25°	8380.1	8135.9	7872.9	7461.4	6948.1	6258.5	5741.5	5181.5	4520.5	3967.3	3511.4
26°	9114.2	8829.3	8435.1	8016.1	7402.6	6630.8	6041.5	5417.4	4716.5	4102.3	3586.0
27°	9803.1	9497.8	9035.1	8461.5	7810.3	6949.6	6288.7	5604.3	4852.9	4189.7	3620.7
28°	10392.4	10056.3	9540.8	8887.3	8114.1	7184.0	6452.2	5714.4	4918.5	4222.8	3625.2
29°	10780.6	10445.2	9889.7	9163.9	8285.9	7300.1	6517.0	5738.5	4914.7	4203.3	3594.3
30°	10938.9	10600.5	10032.9	9254.4	8318.3	7302.4	6490.7	5688.0	4849.2	4141.4	3533.2
31°	10846.1	10521.3	9945.5	9161.7	8203.8	7196.9	6379.9	5560.6	4718.8	4032.2	3442.0
32°	10504.0	10206.3	9653.1	8906.9	7967.9	6985.1	6189.2	5372.2	4534.9	3889.7	3328.2
33°	9982.4	9734.5	9169.2	8481.1	7652.8	6725.1	5957.1	5180.8	4313.3	3715.6	3206.9
34°	9482.8	9116.5	8615.3	8004.0	7248.9	6387.4	5669.2	4879.3	4078.1	3524.2	3068.2
35°	8770.5	8442.7	7979.9	7456.9	6778.6	5975.1	5256.9	4585.4	3815.1	3339.5	2922.8
36°	8019.1	7730.5	7394.3	6925.5	6276.6	5544.8	4887.6	4224.4	3544.5	3133.8	2769.0
37°	7101.1	7036.3	6723.5	6332.4	5752.8	5076.8	4458.7	3885.2	3291.3	2943.9	2600.2
38°	6559.2	6346.7	6060.3	5715.9	5147.6	4606.5	4045.0	3544.5	3061.4	2766.0	2408.0
39°	5869.6	5690.3	5426.5	5116.7	4627.6	4116.6	3659.9	3260.4	2871.5	2586.6	2200.7
40°	5206.4	5057.2	4815.2	4549.2	4105.3	3684.7	3327.5	3010.2	2683.1	2395.2	1995.7
42.5°	3283.0	3209.2	3109.7	3073.5	2914.5	2805.2	2674.8	2491.7	2203.7	1879.7	1600.8
45°	1665.6	1618.1	1616.6	1690.5	1741.0	1746.3	1734.2	1687.5	1500.6	1407.9	1159.9
47.5°	280.4	266.8	275.1	324.8	394.9	480.1	575.1	691.9	817.0	790.6	609.0
50°	92.7	89.7	87.4	89.7	86.7	88.9	87.4	85.2	76.9	80.6	82.9
51°	57.3	61.0	58.8	60.3	59.5	61.8	61.8	61.0	55.8	52.0	47.5
52°	39.2	39.9	40.7	41.5	40.7	41.5	42.2	42.2	40.7	39.2	35.4
53°	27.9	27.9	28.6	28.6	28.6	29.4	29.4	29.4	28.6	28.6	27.9
54°	19.6	20.3	20.3	20.3	20.3	21.1	21.1	21.1	21.9	21.1	21.1
55°	14.3	14.3	14.3	14.3	14.3	14.3	15.1	15.1	15.8	15.8	15.1
57.5°	6.0	6.0	5.3	6.0	6.0	6.0	6.0	6.8	6.8	7.5	7.5
60°	3.0	3.0	3.0	3.0	2.3	3.0	3.0	3.0	3.0	3.8	3.8



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
63°	1.5	1.5	1.5	1.5	1.5	1.5	0.8	1.5	1.5	1.5	1.5
64°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.8	0.8	0.8	0.8
65°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.8	0.8	0.8	0.8
66°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.8	0.8
67.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.8
70°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
72.5°	1.5	0.8	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.8	0.8	0.8	0.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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



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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°	105.5	105.5	105.5	105.5	105.5	105.5	105.5	105.5	105.5	105.5	105.5
2.5°	120.6	122.1	119.8	121.3	118.3	118.3	116.1	116.8	116.1	114.6	114.6
5°	146.2	146.2	142.4	142.4	137.9	135.7	131.9	131.9	129.6	125.9	125.1
7.5°	200.5	192.9	184.7	181.6	172.6	166.6	159.8	156.8	150.0	144.0	139.4
10°	536.6	486.9	437.9	407.7	333.9	280.4	240.4	213.3	193.7	170.3	161.3
11°	756.7	693.4	629.3	566.8	494.4	421.3	375.3	303.0	257.0	205.0	180.1
12°	994.9	920.2	842.6	771.8	685.1	593.1	529.8	437.9	373.1	286.4	226.1
13°	1239.0	1154.6	1061.9	988.1	890.1	784.6	685.1	599.9	519.3	406.2	318.1
14°	1474.2	1384.5	1282.8	1205.1	1095.1	980.5	868.2	774.0	676.0	541.1	432.6
15°	1683.7	1619.6	1490.8	1413.9	1295.6	1173.5	1048.4	947.4	831.3	681.3	556.2
17.5°	2122.4	2004.0	1846.5	1770.4	1652.8	1547.3	1411.6	1320.4	1177.2	1019.0	881.0
20°	2639.4	2465.3	2252.0	2091.5	1888.0	1702.6	1531.5	1459.9	1370.9	1263.2	1134.3
21°	2781.1	2593.4	2360.5	2197.0	1988.2	1797.5	1596.3	1482.5	1385.3	1291.8	1184.0
22°	2884.3	2686.1	2441.2	2270.8	2056.0	1866.9	1661.1	1524.7	1395.1	1289.5	1192.3
23°	2971.7	2760.7	2506.0	2320.6	2096.0	1900.8	1694.3	1558.6	1415.4	1284.3	1178.7
24°	3050.9	2819.5	2551.9	2353.0	2116.3	1912.8	1698.8	1564.6	1425.2	1287.3	1160.7
25°	3110.4	2856.4	2578.3	2369.6	2120.8	1909.1	1688.2	1553.3	1413.9	1277.5	1140.3
26°	3151.1	2873.8	2585.9	2368.8	2111.8	1894.0	1666.4	1530.0	1386.8	1242.1	1107.1
27°	3163.9	2869.2	2575.3	2351.5	2089.2	1864.6	1629.4	1485.5	1344.6	1199.9	1062.7
28°	3151.1	2851.2	2551.2	2317.6	2051.5	1816.4	1569.9	1426.7	1299.3	1153.1	1008.4
29°	3115.7	2818.7	2506.7	2267.1	1992.0	1738.0	1493.8	1370.2	1247.3	1082.3	917.2
30°	3060.7	2760.0	2442.7	2193.2	1903.8	1639.2	1425.2	1318.2	1161.4	967.7	789.9
31°	2983.8	2683.8	2359.8	2095.2	1786.2	1542.8	1365.7	1221.0	1027.3	816.2	634.6
32°	2890.3	2593.4	2239.2	1964.8	1670.1	1466.7	1260.1	1072.5	857.7	636.9	462.8
33°	2790.1	2477.3	2101.2	1827.7	1570.7	1364.9	1107.9	889.3	667.8	447.7	291.7
34°	2674.0	2334.9	1946.7	1689.7	1459.1	1211.9	927.0	691.1	476.3	272.1	150.0
35°	2533.9	2159.3	1793.0	1570.7	1299.3	1009.2	728.8	517.8	298.5	137.2	81.4
36°	2364.3	1978.4	1659.6	1417.7	1112.4	810.2	526.1	330.1	160.5	80.6	64.1
37°	2148.7	1829.9	1519.4	1235.3	910.4	608.2	339.2	179.4	91.9	65.6	54.3
38°	1962.6	1692.8	1369.4	1036.3	701.7	416.8	205.8	101.0	72.4	55.0	45.2
39°	1802.0	1545.8	1172.7	826.8	500.4	252.5	113.1	76.9	60.3	45.2	38.4
40°	1661.9	1336.3	964.7	620.3	321.8	140.2	81.4	64.1	49.0	37.7	30.9
42.5°	1219.4	847.9	446.9	200.5	94.2	70.1	51.2	40.7	31.7	23.4	19.6
45°	724.3	381.4	134.9	82.2	59.5	44.5	32.4	25.6	19.6	14.3	12.1
47.5°	264.5	96.5	66.3	49.7	37.7	27.9	20.3	15.8	12.1	8.3	6.8
50°	54.3	46.7	36.2	29.4	21.9	16.6	12.1	9.0	6.8	5.3	4.5
51°	41.5	36.2	29.4	23.4	17.3	13.6	9.8	7.5	6.0	4.5	3.8
52°	31.7	27.9	22.6	18.8	14.3	10.6	7.5	6.0	4.5	3.0	3.0
53°	24.9	21.9	17.3	14.3	11.3	8.3	6.0	4.5	3.8	3.0	3.0
54°	18.8	16.6	13.6	11.3	9.0	6.8	4.5	3.8	3.0	3.0	2.3
55°	13.6	12.8	10.6	8.3	6.8	5.3	3.8	3.0	3.0	2.3	2.3
57.5°	6.8	6.0	5.3	4.5	3.8	3.0	2.3	2.3	2.3	2.3	1.5
60°	3.8	3.0	3.0	3.0	2.3	2.3	2.3	1.5	1.5	2.3	2.3



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CATALOG NUMBER: LDSQA6A20840D010TE LARL15SP 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	1.5	1.5	1.5	2.3	1.5	1.5	1.5	2.3	2.3	2.3
64°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.3	2.3	2.3	2.3
65°	0.8	1.5	1.5	1.5	1.5	1.5	1.5	2.3	2.3	2.3	2.3
66°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.3	2.3	2.3	2.3
67.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.3	2.3	2.3	2.3
70°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.3	2.3	2.3	2.3
72.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.3	2.3	2.3	2.3
75°	0.8	0.8	1.5	1.5	1.5	1.5	1.5	2.3	2.3	2.3	2.3
77.5°	0.8	0.8	1.5	1.5	1.5	1.5	1.5	2.3	2.3	2.3	2.3
80°	0.8	0.8	0.8	1.5	1.5	1.5	1.5	2.3	2.3	2.3	2.3
82.5°	0.8	0.8	0.8	1.5	1.5	1.5	1.5	2.3	2.3	2.3	2.3
85°	0.8	0.8	0.8	1.5	1.5	1.5	1.5	2.3	2.3	2.3	2.3
87.5°	0.8	0.8	0.8	1.5	1.5	1.5	1.5	2.3	2.3	2.3	2.3
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: P208831

CATALOG NUMBER: LDSQA6A20840D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	105.5	105.5	105.5	105.5	105.5	105.5	105.5	105.5	105.5	105.5	105.5
2.5°	112.3	113.8	112.3	110.8	110.0	110.0	109.3	107.0	107.8	107.0	107.0
5°	121.3	122.1	119.1	116.8	115.3	113.8	112.3	109.3	108.5	107.8	107.0
7.5°	133.4	132.6	126.6	122.8	119.1	116.1	113.1	109.3	107.8	105.5	104.0
10°	150.7	145.5	135.7	128.9	123.6	117.6	113.1	107.0	104.0	101.0	98.7
11°	158.3	150.7	140.9	131.9	125.1	118.3	113.1	105.5	101.7	98.7	95.7
12°	181.6	161.3	145.5	135.7	126.6	119.1	112.3	104.8	100.2	95.7	92.7
13°	235.1	187.7	155.3	137.9	128.9	119.8	111.5	103.3	98.0	92.7	89.7
14°	322.6	241.2	179.4	146.2	129.6	119.8	110.8	101.7	95.7	90.4	86.7
15°	427.3	324.1	228.4	166.6	132.6	119.1	109.3	99.5	92.7	86.7	82.9
17.5°	719.8	584.9	438.6	312.0	192.9	130.4	103.3	91.9	83.7	76.9	72.4
20°	964.7	809.4	644.4	486.9	333.9	208.0	119.1	83.7	73.9	66.3	61.8
21°	1018.2	872.8	697.9	532.8	374.6	241.2	134.9	83.7	70.1	62.6	58.0
22°	1046.1	905.9	731.1	563.0	402.5	264.5	151.5	84.4	66.3	58.8	53.5
23°	1041.6	913.5	743.9	572.0	415.3	275.8	158.3	85.2	62.6	55.0	49.7
24°	1014.4	893.1	731.1	561.5	411.5	272.8	156.0	83.7	58.8	51.2	46.7
25°	980.5	853.2	696.4	532.8	387.4	254.0	144.7	78.4	55.8	48.2	43.7
26°	942.1	813.2	648.2	482.4	348.2	222.3	122.1	69.3	51.2	44.5	40.7
27°	896.1	761.2	588.6	428.8	293.9	179.4	98.0	58.8	47.5	40.7	37.7
28°	827.5	687.4	512.5	358.0	235.1	135.7	73.9	50.5	43.7	37.7	34.7
29°	725.0	583.3	417.5	279.6	172.6	93.5	56.5	45.2	39.2	33.9	31.7
30°	596.9	461.2	309.8	192.2	110.8	63.3	46.0	39.9	34.7	30.9	29.4
31°	452.2	327.8	200.5	110.8	66.3	46.7	40.7	34.7	30.9	27.9	27.1
32°	298.5	198.2	106.3	64.1	48.2	40.7	35.4	30.9	27.9	25.6	24.9
33°	159.8	91.2	61.0	48.2	40.7	35.4	30.9	27.1	24.9	23.4	22.6
34°	81.4	59.5	49.7	41.5	34.7	30.9	27.1	24.1	22.6	21.1	20.3
35°	60.3	51.2	43.0	35.4	30.1	27.1	24.1	21.9	20.3	18.8	18.8
36°	51.2	43.0	35.4	30.9	27.1	24.1	21.9	18.8	18.1	17.3	16.6
37°	43.0	36.9	30.9	26.4	23.4	21.1	18.8	17.3	15.8	15.1	15.1
38°	36.2	31.7	26.4	22.6	20.3	18.8	16.6	15.1	14.3	13.6	13.6
39°	30.1	26.4	22.6	19.6	17.3	15.8	14.3	13.6	12.8	12.1	12.1
40°	24.9	22.6	18.8	16.6	15.1	13.6	12.8	12.1	11.3	10.6	11.3
42.5°	15.8	13.6	12.1	11.3	9.8	9.8	9.0	8.3	8.3	8.3	8.3
45°	9.0	8.3	7.5	7.5	6.8	6.8	6.8	6.0	6.8	6.8	6.8
47.5°	5.3	5.3	4.5	4.5	4.5	4.5	4.5	4.5	4.5	5.3	5.3
50°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.8	3.8
51°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.8
52°	3.0	3.0	3.0	2.3	2.3	2.3	2.3	2.3	3.0	3.0	3.0
53°	2.3	3.0	2.3	2.3	2.3	2.3	2.3	2.3	3.0	3.0	3.0
54°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	3.0	3.0
55°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	3.0	3.0
57.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	3.0
60°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	3.0



TEST NUMBER: P208831

CATALOG NUMBER: LDSQA6A20840D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
63°	2.3	2.3	2.3	2.3	2.3	3.0	2.3	2.3	2.3	3.0	3.0
64°	2.3	2.3	2.3	2.3	2.3	3.0	2.3	2.3	2.3	2.3	3.0
65°	2.3	2.3	3.0	3.0	3.0	3.0	2.3	2.3	2.3	2.3	3.0
66°	2.3	2.3	3.0	3.0	3.0	3.0	3.0	2.3	2.3	3.0	3.0
67.5°	2.3	3.0	3.0	3.0	3.0	3.0	3.0	2.3	3.0	3.0	3.0
70°	2.3	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
72.5°	2.3	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
75°	2.3	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
77.5°	2.3	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
80°	2.3	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
82.5°	2.3	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
85°	2.3	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
87.5°	2.3	3.0	3.0	3.0	3.0	3.0	3.0	3.0	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: P208831

CATALOG NUMBER: LDSQA6A20840D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
0°	105.5	105.5	105.5	105.5	105.5	105.5	105.5	105.5
2.5°	104.8	104.0	103.3	103.3	97.2	94.2	90.4	90.4
5°	103.3	102.5	101.0	99.5	89.7	85.2	80.6	79.9
7.5°	100.2	98.0	95.7	94.2	82.2	76.9	72.4	71.6
10°	94.2	91.2	88.9	87.4	74.6	69.3	65.6	65.6
11°	91.2	88.2	85.9	83.7	70.8	66.3	63.3	63.3
12°	88.2	85.2	82.2	80.6	67.8	64.1	61.0	60.3
13°	85.2	81.4	79.1	76.9	64.8	61.0	58.8	58.8
14°	82.2	78.4	75.4	73.1	61.8	58.0	56.5	56.5
15°	77.6	73.9	71.6	69.3	58.0	55.8	54.3	55.0
17.5°	67.1	64.1	61.8	59.5	50.5	49.7	49.7	50.5
20°	57.3	54.3	52.0	50.5	43.7	44.5	45.2	46.7
21°	53.5	50.5	48.2	46.7	41.5	42.2	43.7	45.2
22°	49.7	47.5	45.2	43.7	39.2	39.9	42.2	43.7
23°	46.0	43.7	42.2	40.7	36.9	38.4	40.7	42.2
24°	43.0	40.7	39.2	37.7	34.7	36.2	39.2	40.7
25°	39.9	37.7	36.2	35.4	32.4	34.7	37.7	39.2
26°	36.9	35.4	33.9	33.2	30.9	33.2	36.2	38.4
27°	33.9	32.4	31.7	30.9	28.6	31.7	34.7	36.9
28°	31.7	30.1	29.4	28.6	27.1	30.1	33.9	35.4
29°	29.4	27.9	27.1	26.4	25.6	28.6	32.4	34.7
30°	27.1	26.4	24.9	24.9	24.1	27.9	30.9	33.2
31°	24.9	24.1	23.4	22.6	22.6	26.4	30.1	32.4
32°	23.4	22.6	21.9	21.1	21.9	24.9	28.6	31.7
33°	21.1	20.3	20.3	19.6	20.3	24.1	27.9	30.9
34°	18.8	18.8	18.1	18.1	19.6	23.4	27.1	29.4
35°	17.3	16.6	16.6	16.6	18.8	21.9	26.4	28.6
36°	15.8	15.8	15.1	15.1	18.1	21.1	25.6	27.9
37°	14.3	14.3	14.3	13.6	16.6	20.3	24.1	27.1
38°	12.8	12.8	12.8	12.8	15.8	19.6	24.1	27.1
39°	11.3	11.3	12.1	12.1	15.1	18.8	22.6	26.4
40°	10.6	10.6	10.6	10.6	14.3	18.1	21.9	25.6
42.5°	8.3	8.3	9.0	9.0	12.8	16.6	20.3	23.4
45°	6.8	6.8	7.5	7.5	11.3	15.1	18.1	21.9
47.5°	5.3	5.3	6.0	6.0	9.8	13.6	16.6	19.6
50°	3.8	4.5	4.5	5.3	9.0	12.1	14.3	17.3
51°	3.8	3.8	4.5	4.5	8.3	11.3	13.6	16.6
52°	3.8	3.8	4.5	4.5	7.5	10.6	12.8	15.1
53°	3.0	3.8	3.8	4.5	7.5	10.6	12.1	14.3
54°	3.0	3.0	3.8	3.8	7.5	9.8	12.1	12.8
55°	3.0	3.0	3.8	3.8	6.8	9.8	11.3	12.1
57.5°	3.0	3.0	3.0	3.0	6.0	8.3	9.8	9.8
60°	3.0	3.0	3.0	3.0	6.0	7.5	9.0	6.8



TEST NUMBER: P208831

CATALOG NUMBER: LDSQA6A20840D010TE LARL15SP 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	5.3	6.8	6.8	5.3
64°	3.0	3.0	3.0	3.0	5.3	6.8	6.8	5.3
65°	3.0	3.0	3.0	3.0	5.3	6.0	6.0	4.5
66°	3.0	3.0	3.0	3.0	5.3	6.0	6.0	4.5
67.5°	3.0	3.0	3.0	3.0	4.5	5.3	5.3	4.5
70°	3.0	3.0	3.0	3.0	4.5	5.3	4.5	3.8
72.5°	3.0	3.0	3.0	3.0	4.5	4.5	3.8	3.0
75°	3.0	3.0	3.0	3.0	3.8	3.8	3.0	3.0
77.5°	3.0	3.0	3.0	3.0	3.8	3.8	3.0	2.3
80°	3.0	3.0	3.0	3.0	3.8	3.0	2.3	1.5
82.5°	3.0	3.0	3.0	3.0	3.0	2.3	1.5	1.5
85°	3.0	3.0	3.0	3.0	3.0	2.3	1.5	0.8
87.5°	3.0	3.0	3.0	3.0	3.0	2.3	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°	3.0	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	3.0	3.0
62°	2.3	2.3	2.3	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5





61°	3.0	2.3	2.3	2.3	2.3	2.3	2.3	1.5	1.5	2.3	2.3
62°	2.3	2.3	2.3	2.3	2.3	2.3	1.5	1.5	1.5	2.3	2.3





61°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	3.0
62°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3





61°	3.0	3.0	3.0	3.0	5.3	7.5	8.3	6.0
62°	3.0	3.0	3.0	3.0	5.3	6.8	7.5	5.3



(END OF REPORT)