

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: P208867

Luminaire Tested: **LDSQA6A20940D010TE LARL20NF 6LSQA1H 30°**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P208867  
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: LDSQA6A20940D010TE 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: 1716.2 lumens  
Efficiency: N/A  
Efficacy: 59.6 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

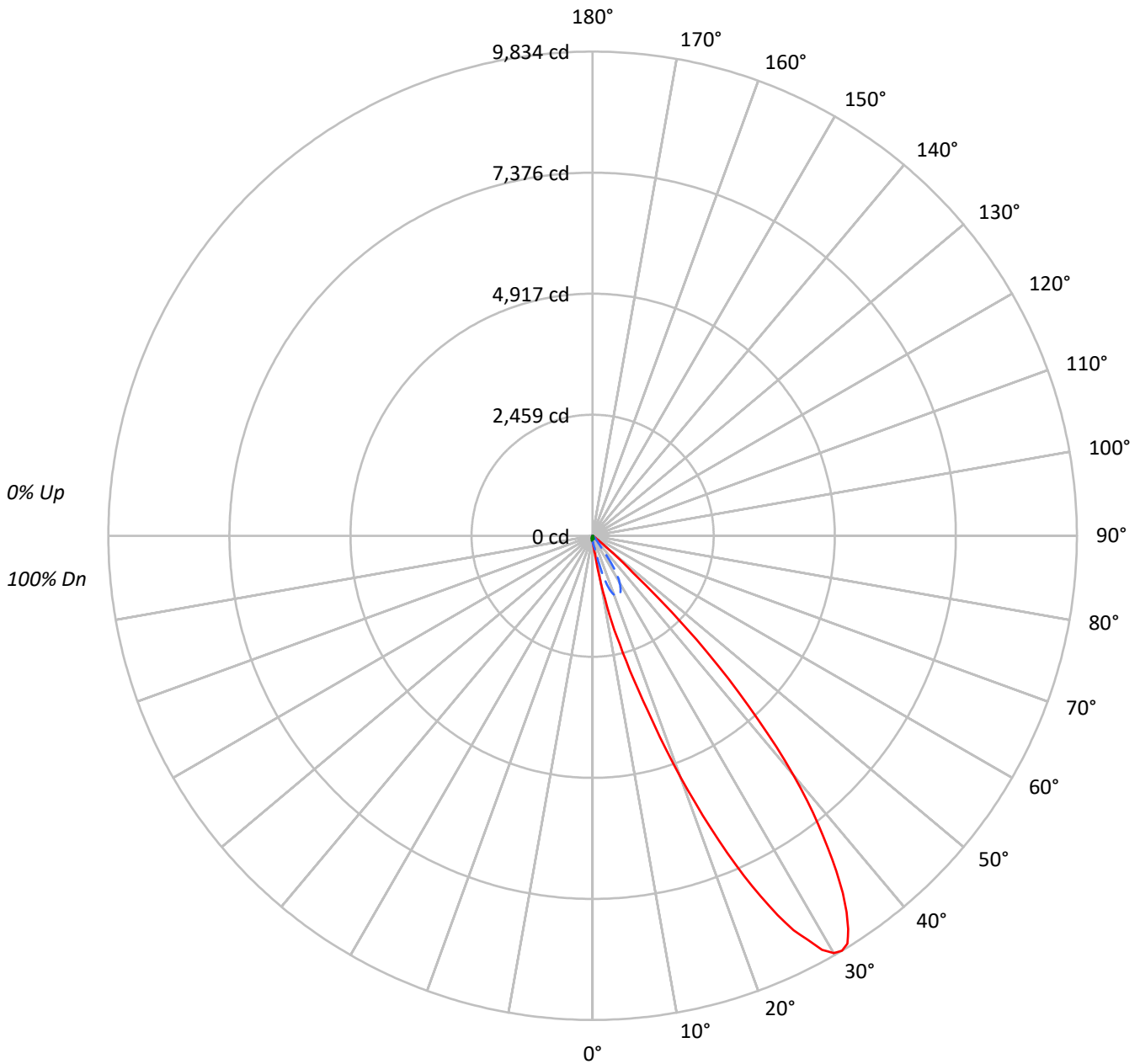
Input Watts (W): 28.81  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	4982	4982	4982
5°	9945	4832	3267
10°	44730	4228	2444
15°	117258	3459	1966
20°	238744	2621	1659
25°	384163	1938	1406
30°	486594	1372	1243
35°	465472	899	1104
40°	356908	556	1034
45°	181519	359	962
50°	27831	261	837
55°	3656	248	593
60°	396	224	396
65°	71	265	336
70°	88	415	415
75°	0	549	333
80°	0	645	322
85°	0	1284	346



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	15.5	0.9
10°-20°	169.7	9.9
20°-30°	555.6	32.4
30°-40°	676.3	39.4
40°-50°	274.8	16.0
50°-60°	16.3	1.0
60°-70°	3.2	0.2
70°-80°	2.8	0.2
80°-90°	2.0	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°	740.8	43.2
0°-40°	1417.1	82.6
0°-60°	1708.2	99.5
0°-90°	1716.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1716.2	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	116	116	116	116	116	
5°	230	176	112	83	76	43
15°	2631	877	78	47	44	856
25°	8086	1305	41	28	30	3716
35°	8856	521	17	16	21	5356
45°	2981	59	6	10	16	2287
55°	49	6	3	7	8	84
65°	1	2	3	5	3	1
75°	0	2	3	4	2	0
85°	0	2	3	3	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°	115.7	115.7	115.7	115.7	115.7	115.7	115.7	115.7	115.7	115.7	115.7
2.5°	163.1	155.8	159.1	158.5	155.8	156.5	157.8	155.2	156.5	152.5	153.2
5°	230.1	219.6	225.5	218.9	222.2	218.9	218.9	215.0	211.7	211.1	207.8
7.5°	401.7	376.1	384.0	355.7	360.3	351.1	342.6	333.3	317.6	309.7	292.6
10°	1023.1	950.7	967.8	906.0	904.7	883.0	842.9	815.3	756.8	715.4	656.2
11°	1293.9	1244.6	1259.8	1192.0	1188.7	1159.2	1111.8	1038.2	1005.3	950.1	876.4
12°	1647.7	1564.8	1574.0	1499.7	1492.5	1453.1	1399.8	1309.1	1269.6	1202.6	1115.8
13°	1969.2	1895.6	1896.2	1815.3	1806.8	1756.8	1698.3	1588.5	1544.5	1469.5	1365.0
14°	2264.4	2208.5	2197.3	2153.9	2107.9	2049.4	1987.6	1863.3	1814.7	1730.5	1610.9
15°	2630.6	2521.5	2499.8	2445.2	2389.3	2315.7	2240.1	2098.1	2044.1	1951.4	1832.4
17.5°	3710.9	3576.1	3516.9	3405.8	3300.6	3159.3	2995.5	2743.7	2619.5	2453.1	2267.0
20°	5210.6	4998.3	4879.3	4701.1	4531.4	4300.0	4017.3	3620.8	3436.7	3114.5	2809.5
21°	5804.3	5621.6	5472.3	5271.8	5071.2	4797.1	4461.1	4041.6	3757.6	3380.8	3023.2
22°	6404.0	6230.4	6056.2	5835.9	5611.7	5291.5	4904.2	4417.7	4076.5	3636.6	3224.3
23°	6994.4	6818.2	6684.1	6382.3	6127.2	5766.2	5336.9	4780.6	4384.2	3879.9	3413.7
24°	7561.2	7368.5	7201.5	6897.1	6608.5	6206.7	5744.5	5133.0	4681.3	4112.0	3589.3
25°	8086.5	7874.1	7669.0	7356.0	7042.4	6603.9	6104.2	5451.9	4952.2	4322.4	3749.0
26°	8569.8	8279.8	8056.9	7767.6	7411.3	6951.0	6420.4	5727.4	5185.6	4497.9	3874.6
27°	8988.6	8695.3	8439.6	8129.9	7732.1	7236.4	6681.4	5925.3	5370.4	4629.4	3962.1
28°	9293.0	9045.1	8750.6	8417.2	7980.0	7433.0	6858.3	6083.1	5481.5	4697.8	3998.2
29°	9615.8	9333.8	8990.6	8611.8	8135.8	7556.6	6955.6	6165.3	5527.5	4713.6	3991.0
30°	9787.4	9527.7	9124.0	8711.1	8202.9	7596.0	6976.7	6177.8	5513.1	4675.4	3943.6
31°	9833.5	9590.8	9143.8	8713.1	8181.8	7557.2	6924.7	6113.4	5434.8	4586.7	3855.5
32°	9767.1	9524.4	9060.2	8628.9	8085.2	7448.7	6810.3	5998.3	5307.3	4453.9	3730.0
33°	9528.4	9331.8	8884.0	8469.2	7937.9	7287.6	6642.0	5810.9	5108.7	4281.6	3578.7
34°	9223.3	9039.9	8627.0	8201.6	7704.5	7066.7	6409.9	5584.1	4880.6	4069.9	3399.2
35°	8855.8	8675.0	8294.3	7871.5	7395.5	6772.8	6112.7	5299.4	4611.0	3830.6	3200.0
36°	8422.5	8234.4	7882.7	7480.3	7047.0	6417.8	5761.0	4972.0	4304.6	3570.2	2987.0
37°	7945.8	7756.4	7442.2	7069.4	6640.7	6018.0	5367.1	4611.0	3981.1	3300.0	2764.1
38°	7442.8	7266.6	6981.3	6609.1	6185.0	5573.6	4936.5	4280.9	3651.7	3026.4	2538.6
39°	6926.7	6741.3	6472.4	6106.8	5689.9	5086.4	4487.4	3901.6	3367.7	2757.5	2331.5
40°	6350.1	6175.2	5863.5	5576.9	5158.7	4584.0	4037.7	3482.7	3052.1	2499.1	2143.4
42.5°	4697.1	4560.4	4394.0	4100.1	3791.1	3378.9	2996.9	2612.2	2299.3	1985.6	1724.6
45°	2981.1	2880.5	2795.0	2612.2	2487.3	2255.2	2058.0	1861.4	1713.4	1549.1	1259.1
47.5°	1103.3	1055.9	1025.7	945.5	938.2	863.9	856.7	951.4	1007.3	948.1	713.4
50°	415.5	403.7	396.5	371.5	354.4	320.2	294.6	275.5	236.7	209.7	188.0
51°	272.9	264.3	251.8	249.8	242.6	223.5	211.7	207.8	181.5	153.2	131.5
52°	173.6	168.3	160.4	161.1	157.1	145.3	141.4	147.3	133.5	117.7	101.9
53°	109.1	106.5	101.3	101.3	100.6	92.7	91.4	96.7	94.0	86.8	77.6
54°	71.0	70.4	65.7	66.4	66.4	61.8	61.1	63.1	62.5	59.8	55.2
55°	48.7	48.0	47.3	45.4	44.1	42.7	42.7	43.4	42.7	41.4	38.8
57.5°	17.1	16.4	17.1	16.4	16.4	17.1	16.4	17.8	18.4	18.4	17.1
60°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	5.9	6.6	6.6	6.6



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**CANDELA DISTRIBUTION (continued):**

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
63°	1.3	1.3	1.3	1.3	1.3	1.3	0.7	0.7	1.3	1.3	1.3
64°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.3
65°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.3
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	1.3
72.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.3
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°	115.7	115.7	115.7	115.7	115.7	115.7	115.7	115.7	115.7	115.7	115.7
2.5°	151.2	151.9	149.3	148.6	147.9	144.6	142.7	140.7	138.7	135.4	136.8
5°	202.5	202.5	196.6	192.6	190.7	183.4	180.2	175.6	170.3	166.3	164.4
7.5°	282.7	278.1	265.0	255.1	249.2	234.7	226.2	213.7	206.5	198.6	194.0
10°	599.6	568.7	504.3	458.3	414.9	362.3	314.3	276.8	252.5	234.7	223.5
11°	808.1	767.3	685.1	621.3	564.8	489.8	416.2	345.8	295.2	264.3	241.3
12°	1036.9	984.3	885.6	806.7	737.7	643.7	549.7	457.0	384.0	326.1	278.8
13°	1274.9	1207.2	1092.8	1002.0	922.5	814.0	702.2	591.1	502.3	423.4	351.8
14°	1510.9	1428.1	1302.5	1198.0	1108.5	987.6	860.7	737.0	633.2	533.9	446.4
15°	1725.3	1634.5	1524.1	1387.3	1290.7	1135.5	1015.8	877.1	758.7	643.7	541.8
17.5°	2109.9	1987.6	1857.4	1716.1	1624.0	1470.8	1318.9	1151.3	1007.9	865.3	728.5
20°	2532.7	2314.4	2100.0	1889.6	1756.2	1593.1	1444.5	1278.8	1127.6	965.9	817.3
21°	2699.0	2449.2	2188.1	1952.1	1800.9	1626.6	1472.8	1301.2	1142.1	969.8	813.3
22°	2856.8	2558.3	2265.1	2004.7	1839.7	1661.5	1495.8	1315.6	1146.0	965.2	801.5
23°	3000.8	2663.5	2336.1	2050.7	1867.9	1678.6	1507.6	1321.6	1144.0	954.7	783.7
24°	3131.6	2760.2	2396.6	2084.9	1885.0	1683.8	1506.3	1317.0	1134.2	938.9	759.4
25°	3244.7	2836.4	2440.6	2103.3	1889.6	1681.2	1499.7	1305.1	1114.5	911.9	731.1
26°	3330.2	2885.1	2461.7	2105.9	1883.1	1672.7	1484.6	1283.4	1083.5	875.8	693.0
27°	3379.5	2902.8	2461.7	2094.8	1869.9	1656.9	1460.3	1249.9	1043.4	831.1	645.7
28°	3388.1	2894.9	2443.9	2071.8	1844.9	1629.3	1424.8	1207.2	996.1	777.8	593.7
29°	3365.7	2863.4	2405.8	2032.3	1808.1	1593.8	1378.8	1153.2	939.6	719.3	539.8
30°	3310.5	2805.5	2349.2	1982.3	1764.1	1547.1	1320.9	1093.4	875.8	658.8	478.0
31°	3224.3	2722.0	2276.9	1921.9	1709.5	1491.2	1257.1	1024.4	804.1	583.9	410.9
32°	3109.9	2605.0	2196.7	1852.8	1649.0	1427.4	1177.6	936.3	709.4	492.5	333.3
33°	2975.2	2490.6	2107.3	1778.5	1583.2	1340.0	1067.8	804.8	593.7	390.6	252.5
34°	2821.3	2367.6	2011.3	1700.3	1497.1	1211.8	931.0	669.3	466.8	285.4	178.2
35°	2651.0	2236.8	1910.7	1608.2	1361.0	1055.3	774.5	521.4	338.0	193.3	134.1
36°	2469.5	2090.2	1795.6	1476.7	1198.0	879.7	608.8	375.4	224.2	144.0	115.7
37°	2298.6	1962.6	1676.6	1311.7	1013.9	696.3	444.5	250.5	163.7	125.6	102.6
38°	2137.5	1839.7	1521.4	1128.9	824.5	522.0	292.6	184.8	142.0	110.5	90.7
39°	1986.9	1716.1	1340.0	933.0	635.1	368.2	212.4	158.5	123.6	98.0	80.2
40°	1841.6	1539.2	1142.1	760.7	462.9	257.1	178.8	140.0	109.1	86.1	67.7
42.5°	1381.4	988.9	632.5	346.5	217.6	167.7	127.6	98.6	72.3	53.3	40.8
45°	867.2	503.0	271.5	194.6	151.9	113.7	82.8	59.2	43.4	32.2	25.6
47.5°	394.5	216.3	168.3	130.2	98.0	67.7	48.7	35.5	26.3	20.4	15.1
50°	144.6	123.0	99.9	74.3	53.9	38.8	28.3	21.0	15.8	11.8	8.5
51°	113.1	98.6	79.6	55.9	42.7	31.6	23.0	17.1	12.5	9.2	6.6
52°	88.8	78.2	61.1	43.4	33.5	25.0	18.4	13.1	9.2	7.2	5.3
53°	68.4	59.8	46.0	33.5	26.3	19.7	14.5	10.5	7.2	5.3	3.9
54°	50.6	44.1	34.2	25.6	20.4	15.1	10.5	7.9	5.3	3.9	3.3
55°	36.2	32.2	25.6	20.4	15.8	11.8	7.9	5.9	3.9	2.6	2.6
57.5°	15.1	14.5	11.8	9.9	7.9	5.9	3.9	2.6	2.6	2.0	2.6
60°	5.9	5.9	5.3	3.9	3.3	2.6	2.0	2.0	2.0	2.0	2.0





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**CANDELA DISTRIBUTION (continued):**

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
63°	1.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.6
64°	1.3	1.3	1.3	1.3	2.0	2.0	2.0	2.0	2.0	2.0	2.6
65°	1.3	1.3	1.3	1.3	1.3	2.0	2.0	2.0	2.0	2.0	2.6
66°	1.3	1.3	1.3	1.3	1.3	2.0	2.0	2.0	2.0	2.0	2.6
67.5°	1.3	1.3	1.3	1.3	1.3	2.0	2.0	2.0	2.0	2.6	2.6
70°	1.3	1.3	1.3	1.3	1.3	2.0	2.0	2.0	2.0	2.6	2.6
72.5°	1.3	1.3	1.3	1.3	1.3	2.0	2.0	2.0	2.6	2.6	2.6
75°	0.7	1.3	1.3	1.3	1.3	2.0	2.0	2.0	2.6	2.6	2.6
77.5°	0.7	1.3	1.3	1.3	2.0	2.0	2.0	2.0	2.6	2.6	2.6
80°	0.7	1.3	1.3	1.3	1.3	2.0	2.0	2.0	2.6	2.6	2.6
82.5°	0.7	1.3	1.3	1.3	1.3	2.0	2.0	2.0	2.6	2.6	2.6
85°	0.7	1.3	1.3	1.3	1.3	2.0	2.0	2.0	2.6	2.6	2.6
87.5°	0.7	1.3	1.3	1.3	1.3	2.0	2.0	2.0	2.6	2.6	2.6
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: P208867

CATALOG NUMBER: LDSQA6A20940D010TE LARL20NF 6LSQA1H 30°

**CANDELA DISTRIBUTION (continued):**

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	115.7	115.7	115.7	115.7	115.7	115.7	115.7	115.7	115.7	115.7	115.7
2.5°	134.8	134.8	130.2	128.9	128.2	126.9	123.6	123.6	121.6	119.0	117.7
5°	159.8	158.5	151.2	147.3	144.0	140.0	133.5	130.8	126.9	123.0	119.7
7.5°	184.1	179.5	168.3	162.4	157.8	151.2	142.7	136.8	130.2	123.6	119.0
10°	208.4	199.2	183.4	173.6	165.0	155.8	145.3	138.7	130.2	121.6	115.1
11°	218.3	206.5	188.7	176.2	166.3	155.8	145.3	136.8	128.9	120.3	113.1
12°	237.4	215.0	194.0	180.2	167.7	155.8	144.0	134.8	126.2	117.7	110.5
13°	276.1	234.7	199.9	183.4	169.6	155.8	142.7	132.8	123.6	115.1	107.2
14°	346.5	275.5	215.7	186.7	170.3	155.8	141.4	129.5	120.3	111.1	103.9
15°	426.1	338.0	247.9	198.6	170.9	154.5	138.7	126.2	116.4	107.2	99.9
17.5°	591.1	472.7	351.1	257.7	187.4	150.6	128.9	116.4	105.2	96.0	87.4
20°	658.2	520.7	384.0	276.1	194.0	144.0	117.7	104.5	92.7	83.5	76.3
21°	649.6	511.5	374.1	263.7	181.5	134.8	111.8	99.3	88.1	78.2	71.7
22°	631.9	489.8	351.1	240.6	166.3	125.6	106.5	93.4	82.8	73.6	67.1
23°	608.2	458.9	324.8	216.3	150.6	117.0	101.3	88.1	78.2	69.0	63.1
24°	578.6	428.0	294.6	192.0	135.4	110.5	95.3	82.8	73.0	65.1	59.2
25°	545.7	395.8	262.3	171.6	126.2	103.9	88.8	76.9	68.4	61.1	55.2
26°	505.6	357.7	232.1	152.5	115.1	96.7	82.2	71.7	63.8	57.2	51.3
27°	459.6	318.2	198.6	132.8	105.9	89.4	76.3	67.1	59.8	53.3	47.3
28°	418.2	274.2	170.3	118.3	98.6	82.2	71.0	62.5	55.9	49.3	44.1
29°	366.2	232.1	145.3	107.2	90.7	76.9	65.7	57.9	51.3	44.7	40.1
30°	314.3	192.0	124.3	98.0	82.8	70.4	60.5	53.3	46.7	41.4	37.5
31°	260.4	159.1	109.1	90.1	75.6	65.1	55.9	49.3	42.7	38.1	34.2
32°	199.2	130.2	97.3	81.5	69.0	58.5	51.3	44.7	38.8	34.8	30.9
33°	149.9	109.8	88.1	73.6	62.5	53.9	46.7	40.1	35.5	31.6	28.3
34°	119.7	98.0	79.6	66.4	56.5	48.7	41.4	36.2	31.6	28.3	25.0
35°	105.2	88.1	71.0	59.8	50.6	42.7	36.8	32.2	28.3	25.0	22.4
36°	93.4	78.9	63.1	53.3	44.1	37.5	32.2	28.3	24.3	21.7	19.7
37°	83.5	69.7	55.9	46.0	38.1	32.9	28.3	24.3	21.0	19.1	17.8
38°	75.0	59.8	47.3	39.4	32.9	28.3	24.3	21.0	18.4	16.4	15.1
39°	63.8	50.6	39.4	33.5	27.6	23.7	20.4	18.4	15.8	14.5	13.1
40°	53.3	42.1	32.9	27.6	23.7	19.7	17.8	15.1	13.8	12.5	11.2
42.5°	32.9	26.3	21.0	17.8	15.1	13.1	11.8	10.5	9.2	8.5	7.9
45°	20.4	16.4	13.1	11.2	9.2	8.5	7.9	6.6	6.6	5.9	5.9
47.5°	11.8	9.9	7.2	6.6	5.3	5.3	4.6	4.6	3.9	4.6	3.9
50°	6.6	4.6	3.9	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
51°	5.3	3.9	3.3	2.6	2.6	2.6	2.6	2.6	2.6	3.3	3.3
52°	3.9	3.3	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
53°	3.3	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
54°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
55°	2.6	2.6	2.6	2.6	2.6	2.0	2.6	2.6	2.6	2.6	2.6
57.5°	2.6	2.6	2.0	2.0	2.6	2.0	2.6	2.6	2.6	2.6	2.6
60°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6



TEST NUMBER: P208867

CATALOG NUMBER: LDSQA6A20940D010TE LARL20NF 6LSQA1H 30°

**CANDELA DISTRIBUTION (continued):**

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
63°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
64°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
65°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
66°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
67.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
70°	2.6	2.6	2.6	3.3	3.3	3.3	3.3	2.6	2.6	2.6	2.6
72.5°	2.6	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	2.6
75°	2.6	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
77.5°	2.6	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
80°	2.6	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
82.5°	2.6	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
85°	2.6	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
87.5°	2.6	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
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: P208867

CATALOG NUMBER: LDSQA6A20940D010TE LARL20NF 6LSQA1H 30°

**CANDELA DISTRIBUTION (continued):**

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
0°	115.7	115.7	115.7	115.7	115.7	115.7	115.7	115.7
2.5°	117.0	117.0	116.4	115.1	105.2	96.7	91.4	90.7
5°	117.7	116.4	113.7	111.8	94.0	82.8	76.3	75.6
7.5°	115.1	112.4	109.1	105.2	83.5	71.7	65.7	64.4
10°	110.5	105.9	101.9	96.7	73.6	62.5	57.2	55.9
11°	107.2	102.6	98.6	93.4	69.7	59.2	53.9	53.3
12°	104.5	99.3	94.0	89.4	65.7	55.9	51.3	50.6
13°	100.6	95.3	90.7	85.5	62.5	53.3	48.7	48.0
14°	97.3	91.4	86.8	82.2	59.2	50.0	46.7	46.0
15°	93.4	87.4	82.2	77.6	55.9	47.3	44.7	44.1
17.5°	82.8	76.3	71.7	67.1	48.0	41.4	39.4	40.1
20°	70.4	65.1	61.1	57.2	40.8	36.2	35.5	36.2
21°	65.7	61.1	57.9	53.9	38.1	34.2	34.2	34.8
22°	61.8	57.2	53.9	50.0	36.2	32.2	32.2	33.5
23°	57.9	53.3	50.0	46.7	33.5	30.9	30.9	32.2
24°	53.9	50.0	46.7	43.4	31.6	28.9	29.6	30.9
25°	50.0	46.7	43.4	40.8	29.6	27.6	28.3	29.6
26°	47.3	43.4	40.8	37.5	27.6	26.3	27.0	28.9
27°	43.4	40.1	37.5	34.8	26.3	25.0	26.3	27.6
28°	40.8	37.5	34.8	32.2	24.3	23.7	25.0	27.0
29°	37.5	34.8	32.2	30.2	23.0	22.4	24.3	25.6
30°	34.2	31.6	29.6	27.6	21.7	21.0	23.0	25.0
31°	31.6	29.6	27.6	25.6	20.4	20.4	22.4	24.3
32°	28.9	27.0	25.0	23.0	19.1	19.1	21.7	23.0
33°	26.3	24.3	22.4	21.0	17.8	18.4	20.4	22.4
34°	23.0	21.7	20.4	19.1	16.4	17.1	19.7	21.7
35°	21.0	19.7	18.4	17.1	15.8	16.4	19.1	21.0
36°	18.4	17.8	16.4	15.8	14.5	15.8	18.4	20.4
37°	16.4	15.8	14.5	13.8	13.8	15.1	17.8	19.7
38°	14.5	13.8	13.1	12.5	13.1	14.5	17.1	19.1
39°	12.5	11.8	11.8	11.2	12.5	13.8	16.4	18.4
40°	11.2	10.5	10.5	9.9	11.8	13.1	15.8	18.4
42.5°	7.9	7.9	7.9	7.9	9.9	11.8	14.5	17.1
45°	5.9	5.9	5.9	5.9	8.5	10.5	12.5	15.8
47.5°	4.6	4.6	4.6	4.6	7.9	9.9	11.8	13.8
50°	3.3	3.3	3.9	3.9	7.2	8.5	10.5	12.5
51°	3.3	3.3	3.3	3.9	6.6	8.5	9.9	11.8
52°	3.3	3.3	3.3	3.3	6.6	7.9	9.2	10.5
53°	2.6	3.3	3.3	3.3	5.9	7.9	8.5	9.9
54°	2.6	2.6	2.6	3.3	5.9	7.2	7.9	9.2
55°	2.6	2.6	2.6	3.3	5.3	7.2	7.9	7.9
57.5°	2.6	2.6	2.6	2.6	5.3	6.6	7.2	6.6
60°	2.6	2.6	2.6	2.6	4.6	5.9	6.6	4.6



TEST NUMBER: P208867

CATALOG NUMBER: LDSQA6A20940D010TE LARL20NF 6LSQA1H 30°

**CANDELA DISTRIBUTION (continued):**

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
63°	2.6	2.6	2.6	2.6	4.6	5.3	5.3	3.9
64°	2.6	2.6	2.6	2.6	4.6	5.3	5.3	3.9
65°	2.6	2.6	2.6	2.6	4.6	4.6	4.6	3.3
66°	2.6	2.6	2.6	2.6	4.6	4.6	4.6	3.3
67.5°	2.6	2.6	2.6	2.6	4.6	4.6	3.9	3.3
70°	2.6	2.6	2.6	3.3	3.9	3.9	3.9	3.3
72.5°	2.6	2.6	2.6	3.3	3.9	3.9	3.3	2.6
75°	3.3	3.3	3.3	3.3	3.9	3.9	3.3	2.0
77.5°	3.3	3.3	3.3	3.3	3.9	3.3	2.6	2.0
80°	3.3	3.3	2.6	2.6	3.3	3.3	2.0	1.3
82.5°	3.3	3.3	2.6	2.6	3.3	2.6	2.0	1.3
85°	3.3	3.3	2.6	2.6	3.3	2.6	1.3	0.7
87.5°	3.3	2.6	2.6	2.6	3.3	2.6	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°	2.0	2.0	2.0	2.0	2.6	2.0	2.6	3.3	3.9	3.9	3.9
62°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	2.0	2.0	2.0	2.6





61°	3.9	3.9	3.3	3.3	2.6	2.0	2.0	2.0	2.0	2.0	2.0
62°	2.6	2.6	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.6





61°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
62°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6







61°	2.6	2.6	2.6	2.6	4.6	5.9	5.9	4.6
62°	2.6	2.6	2.6	2.6	4.6	5.3	5.9	3.9



(END OF REPORT)