

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: P208851

Luminaire Tested: **LDSQA6A10940D010TE LARL20NF 6LSQA1H 30°**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P208851  
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: LDSQA6A10940D010TE 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: 947.0 lumens  
Efficiency: N/A  
Efficacy: 69.0 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

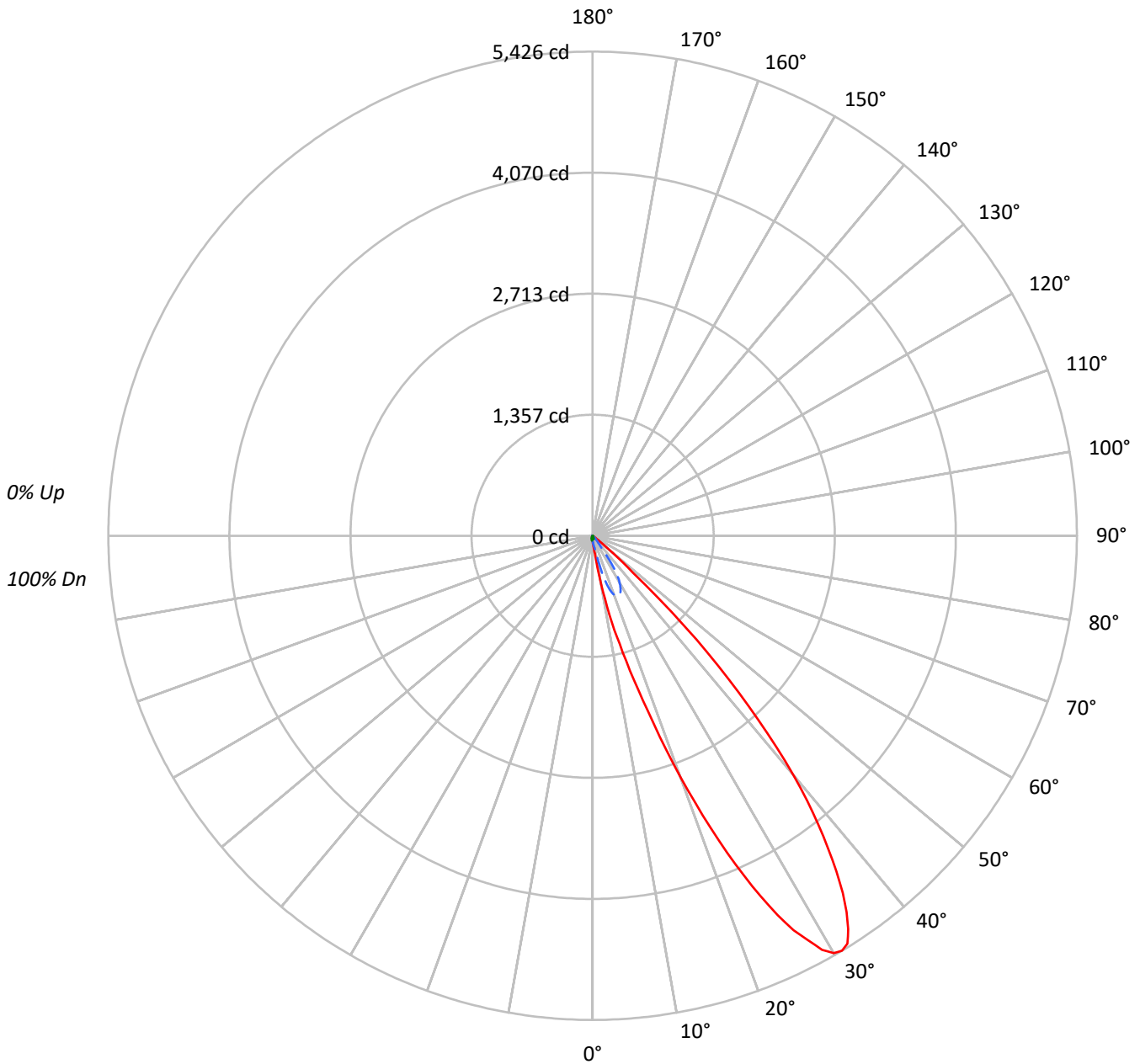
Input Watts (W): 13.73  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2751	2751	2751
5°	5489	2667	1802
10°	24680	2330	1347
15°	64704	1908	1083
20°	131738	1448	916
25°	211979	1069	774
30°	268498	756	686
35°	256841	494	610
40°	196937	304	573
45°	100158	201	530
50°	15359	147	462
55°	2012	135	330
60°	215	129	215
65°	41	153	183
70°	50	227	227
75°	0	299	183
80°	0	372	174
85°	0	741	198



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	8.5	0.9
10°-20°	93.6	9.9
20°-30°	306.6	32.4
30°-40°	373.2	39.4
40°-50°	151.6	16.0
50°-60°	9.0	1.0
60°-70°	1.8	0.2
70°-80°	1.6	0.2
80°-90°	1.1	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°	408.8	43.2
0°-40°	782.0	82.6
0°-60°	942.6	99.5
0°-90°	947.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	947.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	64	64	64	64	64	
5°	127	97	62	46	42	24
15°	1452	484	43	26	24	472
25°	4462	720	22	15	16	2051
35°	4886	288	9	9	12	2955
45°	1645	33	3	6	9	1262
55°	27	3	2	4	4	46
65°	0	1	2	2	2	1
75°	0	1	2	2	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°	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
2.5°	90.0	86.0	87.8	87.4	86.0	86.3	87.1	85.6	86.3	84.2	84.5
5°	127.0	121.2	124.4	120.8	122.6	120.8	120.8	118.6	116.8	116.5	114.6
7.5°	221.7	207.5	211.9	196.3	198.8	193.7	189.0	183.9	175.2	170.9	161.4
10°	564.5	524.6	534.0	499.9	499.2	487.2	465.1	449.9	417.6	394.7	362.1
11°	714.0	686.8	695.1	657.8	655.9	639.6	613.5	572.9	554.7	524.2	483.6
12°	909.2	863.5	868.5	827.5	823.6	801.8	772.4	722.3	700.6	663.6	615.7
13°	1086.6	1045.9	1046.3	1001.7	997.0	969.4	937.1	876.5	852.2	810.9	753.2
14°	1249.5	1218.6	1212.5	1188.5	1163.1	1130.8	1096.7	1028.2	1001.3	954.9	888.9
15°	1451.6	1391.3	1379.4	1349.2	1318.4	1277.8	1236.1	1157.7	1127.9	1076.8	1011.1
17.5°	2047.6	1973.3	1940.6	1879.3	1821.2	1743.2	1652.9	1514.0	1445.4	1353.6	1250.9
20°	2875.2	2758.0	2692.3	2594.0	2500.4	2372.7	2216.7	1997.9	1896.3	1718.6	1550.2
21°	3202.8	3101.9	3019.6	2908.9	2798.3	2647.0	2461.6	2230.1	2073.4	1865.5	1668.1
22°	3533.7	3437.9	3341.7	3220.2	3096.5	2919.8	2706.1	2437.6	2249.3	2006.6	1779.2
23°	3859.4	3762.2	3688.2	3521.7	3380.9	3181.7	2944.8	2637.9	2419.1	2140.9	1883.6
24°	4172.2	4065.9	3973.7	3805.8	3646.5	3424.8	3169.8	2832.4	2583.1	2268.9	1980.5
25°	4462.1	4344.9	4231.7	4059.0	3885.9	3643.9	3368.2	3008.3	2732.6	2385.0	2068.7
26°	4728.7	4568.7	4445.7	4286.1	4089.5	3835.5	3542.7	3160.3	2861.4	2481.9	2138.0
27°	4959.8	4798.0	4656.9	4486.0	4266.5	3993.0	3686.8	3269.5	2963.3	2554.5	2186.2
28°	5127.8	4991.0	4828.5	4644.5	4403.3	4101.4	3784.3	3356.6	3024.6	2592.2	2206.2
29°	5305.9	5150.3	4960.9	4751.9	4489.3	4169.6	3838.0	3402.0	3050.0	2600.9	2202.2
30°	5400.6	5257.3	5034.5	4806.7	4526.3	4191.4	3849.7	3408.9	3042.1	2579.9	2176.1
31°	5426.0	5292.1	5045.4	4807.8	4514.7	4170.0	3821.0	3373.3	2998.9	2530.9	2127.4
32°	5389.4	5255.5	4999.4	4761.4	4461.3	4110.1	3757.9	3309.8	2928.5	2457.6	2058.2
33°	5257.7	5149.2	4902.1	4673.2	4380.1	4021.3	3665.0	3206.4	2818.9	2362.5	1974.7
34°	5089.3	4988.1	4760.3	4525.5	4251.3	3899.4	3536.9	3081.2	2693.1	2245.7	1875.7
35°	4886.5	4786.8	4576.7	4343.4	4080.8	3737.2	3372.9	2924.2	2544.3	2113.7	1765.7
36°	4647.4	4543.7	4349.6	4127.6	3888.5	3541.3	3178.8	2743.5	2375.2	1970.0	1648.2
37°	4384.4	4279.9	4106.5	3900.8	3664.3	3320.7	2961.5	2544.3	2196.7	1820.9	1525.2
38°	4106.9	4009.6	3852.2	3646.8	3412.8	3075.4	2723.9	2362.2	2015.0	1670.0	1400.8
39°	3822.1	3719.8	3571.4	3369.7	3139.7	2806.6	2476.1	2152.8	1858.3	1521.6	1286.5
40°	3503.9	3407.4	3235.4	3077.3	2846.5	2529.4	2227.9	1921.7	1684.1	1379.0	1182.7
42.5°	2591.8	2516.4	2424.6	2262.4	2091.9	1864.4	1653.6	1441.4	1268.7	1095.7	951.6
45°	1644.9	1589.4	1542.3	1441.4	1372.5	1244.4	1135.6	1027.1	945.5	854.8	694.8
47.5°	608.8	582.7	566.0	521.7	517.7	476.7	472.7	525.0	555.8	523.2	393.6
50°	229.3	222.8	218.8	205.0	195.5	176.7	162.5	152.0	130.6	115.7	103.8
51°	150.6	145.8	139.0	137.9	133.9	123.4	116.8	114.6	100.1	84.5	72.6
52°	95.8	92.9	88.5	88.9	86.7	80.2	78.0	81.3	73.6	64.9	56.2
53°	60.2	58.8	55.9	55.9	55.5	51.2	50.4	53.3	51.9	47.9	42.8
54°	39.2	38.8	36.3	36.6	36.6	34.1	33.7	34.8	34.5	33.0	30.5
55°	26.8	26.5	26.1	25.0	24.3	23.6	23.6	23.9	23.6	22.9	21.4
57.5°	9.4	9.1	9.4	9.1	9.1	9.4	9.1	9.8	10.2	10.2	9.4
60°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3.3	3.6	3.6	3.6



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**CANDELA DISTRIBUTION (continued):**

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
63°	0.7	0.7	0.7	0.7	0.7	0.7	0.4	0.4	0.7	0.7	0.7
64°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.7
65°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.7
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	0.7
72.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.7
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°	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
2.5°	83.4	83.8	82.4	82.0	81.6	79.8	78.7	77.6	76.6	74.7	75.5
5°	111.7	111.7	108.5	106.3	105.2	101.2	99.4	96.9	94.0	91.8	90.7
7.5°	156.0	153.5	146.2	140.8	137.5	129.5	124.8	117.9	113.9	109.6	107.0
10°	330.9	313.8	278.3	252.9	228.9	199.9	173.4	152.7	139.3	129.5	123.4
11°	445.9	423.4	378.0	342.8	311.6	270.3	229.7	190.8	162.9	145.8	133.1
12°	572.1	543.1	488.7	445.2	407.1	355.2	303.3	252.1	211.9	179.9	153.8
13°	703.5	666.1	603.0	552.9	509.0	449.1	387.5	326.2	277.2	233.6	194.1
14°	833.7	788.0	718.7	661.0	611.7	544.9	474.9	406.7	349.4	294.6	246.3
15°	952.0	901.9	841.0	765.5	712.2	626.6	560.5	484.0	418.7	355.2	298.9
17.5°	1164.2	1096.7	1024.9	946.9	896.1	811.6	727.8	635.3	556.2	477.4	402.0
20°	1397.5	1277.0	1158.8	1042.7	969.0	879.1	797.1	705.6	622.2	533.0	451.0
21°	1489.3	1351.4	1207.4	1077.1	993.7	897.6	812.7	718.0	630.2	535.1	448.8
22°	1576.4	1411.6	1249.8	1106.2	1015.1	916.8	825.4	726.0	632.4	532.6	442.3
23°	1655.8	1469.7	1289.0	1131.6	1030.7	926.2	831.9	729.2	631.3	526.8	432.5
24°	1728.0	1523.0	1322.4	1150.4	1040.1	929.1	831.2	726.7	625.8	518.1	419.0
25°	1790.4	1565.1	1346.7	1160.6	1042.7	927.7	827.5	720.2	614.9	503.2	403.4
26°	1837.6	1592.0	1358.3	1162.0	1039.1	923.0	819.2	708.2	597.9	483.2	382.4
27°	1864.8	1601.8	1358.3	1155.9	1031.8	914.3	805.8	689.7	575.8	458.6	356.3
28°	1869.5	1597.4	1348.5	1143.2	1018.0	899.0	786.2	666.1	549.6	429.2	327.6
29°	1857.2	1580.0	1327.5	1121.4	997.7	879.4	760.8	636.3	518.4	396.9	297.9
30°	1826.7	1548.1	1296.3	1093.8	973.4	853.7	728.9	603.3	483.2	363.5	263.8
31°	1779.2	1502.0	1256.4	1060.5	943.3	822.8	693.7	565.2	443.7	322.2	226.7
32°	1716.0	1437.4	1212.1	1022.4	909.9	787.6	649.8	516.6	391.5	271.7	183.9
33°	1641.7	1374.3	1162.8	981.4	873.6	739.4	589.2	444.1	327.6	215.5	139.3
34°	1556.8	1306.4	1109.8	938.2	826.1	668.6	513.7	369.3	257.6	157.5	98.3
35°	1462.8	1234.2	1054.3	887.4	751.0	582.3	427.4	287.7	186.5	106.7	74.0
36°	1362.7	1153.3	990.8	814.8	661.0	485.4	336.0	207.2	123.7	79.5	63.9
37°	1268.3	1083.0	925.1	723.8	559.4	384.2	245.3	138.2	90.3	69.3	56.6
38°	1179.5	1015.1	839.5	622.9	454.9	288.1	161.4	101.9	78.4	61.0	50.1
39°	1096.4	946.9	739.4	514.8	350.5	203.2	117.2	87.4	68.2	54.1	44.3
40°	1016.2	849.3	630.2	419.8	255.4	141.9	98.7	77.3	60.2	47.5	37.4
42.5°	762.2	545.6	349.0	191.2	120.1	92.5	70.4	54.4	39.9	29.4	22.5
45°	478.5	277.5	149.8	107.4	83.8	62.8	45.7	32.7	23.9	17.8	14.1
47.5°	217.7	119.4	92.9	71.8	54.1	37.4	26.8	19.6	14.5	11.2	8.3
50°	79.8	67.8	55.1	41.0	29.7	21.4	15.6	11.6	8.7	6.5	4.7
51°	62.4	54.4	43.9	30.8	23.6	17.4	12.7	9.4	6.9	5.1	3.6
52°	49.0	43.2	33.7	23.9	18.5	13.8	10.2	7.3	5.1	4.0	2.9
53°	37.7	33.0	25.4	18.5	14.5	10.9	8.0	5.8	4.0	2.9	2.2
54°	27.9	24.3	18.9	14.1	11.2	8.3	5.8	4.4	2.9	2.2	1.8
55°	20.0	17.8	14.1	11.2	8.7	6.5	4.4	3.3	2.2	1.5	1.5
57.5°	8.3	8.0	6.5	5.4	4.4	3.3	2.2	1.5	1.5	1.1	1.5
60°	3.3	3.3	2.9	2.2	1.8	1.5	1.1	1.1	1.1	1.1	1.1





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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°	0.7	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.5
64°	0.7	0.7	0.7	0.7	1.1	1.1	1.1	1.1	1.1	1.1	1.5
65°	0.7	0.7	0.7	0.7	0.7	1.1	1.1	1.1	1.1	1.1	1.5
66°	0.7	0.7	0.7	0.7	0.7	1.1	1.1	1.1	1.1	1.1	1.5
67.5°	0.7	0.7	0.7	0.7	0.7	1.1	1.1	1.1	1.1	1.5	1.5
70°	0.7	0.7	0.7	0.7	0.7	1.1	1.1	1.1	1.1	1.5	1.5
72.5°	0.7	0.7	0.7	0.7	0.7	1.1	1.1	1.1	1.5	1.5	1.5
75°	0.4	0.7	0.7	0.7	0.7	1.1	1.1	1.1	1.5	1.5	1.5
77.5°	0.4	0.7	0.7	0.7	1.1	1.1	1.1	1.1	1.5	1.5	1.5
80°	0.4	0.7	0.7	0.7	0.7	1.1	1.1	1.1	1.5	1.5	1.5
82.5°	0.4	0.7	0.7	0.7	0.7	1.1	1.1	1.1	1.5	1.5	1.5
85°	0.4	0.7	0.7	0.7	0.7	1.1	1.1	1.1	1.5	1.5	1.5
87.5°	0.4	0.7	0.7	0.7	0.7	1.1	1.1	1.1	1.5	1.5	1.5
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: P208851

CATALOG NUMBER: LDSQA6A10940D010TE LARL20NF 6LSQA1H 30°

**CANDELA DISTRIBUTION (continued):**

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
2.5°	74.4	74.4	71.8	71.1	70.7	70.0	68.2	68.2	67.1	65.7	64.9
5°	88.2	87.4	83.4	81.3	79.5	77.3	73.6	72.2	70.0	67.8	66.0
7.5°	101.6	99.0	92.9	89.6	87.1	83.4	78.7	75.5	71.8	68.2	65.7
10°	115.0	109.9	101.2	95.8	91.1	86.0	80.2	76.6	71.8	67.1	63.5
11°	120.4	113.9	104.1	97.2	91.8	86.0	80.2	75.5	71.1	66.4	62.4
12°	131.0	118.6	107.0	99.4	92.5	86.0	79.5	74.4	69.7	64.9	61.0
13°	152.4	129.5	110.3	101.2	93.6	86.0	78.7	73.3	68.2	63.5	59.1
14°	191.2	152.0	119.0	103.0	94.0	86.0	78.0	71.5	66.4	61.3	57.3
15°	235.1	186.5	136.8	109.6	94.3	85.3	76.6	69.7	64.2	59.1	55.1
17.5°	326.2	260.9	193.7	142.2	103.4	83.1	71.1	64.2	58.0	53.0	48.3
20°	363.2	287.3	211.9	152.4	107.0	79.5	64.9	57.7	51.2	46.1	42.1
21°	358.4	282.3	206.4	145.5	100.1	74.4	61.7	54.8	48.6	43.2	39.5
22°	348.6	270.3	193.7	132.8	91.8	69.3	58.8	51.5	45.7	40.6	37.0
23°	335.6	253.2	179.2	119.4	83.1	64.6	55.9	48.6	43.2	38.1	34.8
24°	319.3	236.2	162.5	105.9	74.7	61.0	52.6	45.7	40.3	35.9	32.7
25°	301.1	218.4	144.8	94.7	69.7	57.3	49.0	42.4	37.7	33.7	30.5
26°	279.0	197.4	128.1	84.2	63.5	53.3	45.3	39.5	35.2	31.6	28.3
27°	253.6	175.6	109.6	73.3	58.4	49.3	42.1	37.0	33.0	29.4	26.1
28°	230.7	151.3	94.0	65.3	54.4	45.3	39.2	34.5	30.8	27.2	24.3
29°	202.1	128.1	80.2	59.1	50.1	42.4	36.3	31.9	28.3	24.7	22.1
30°	173.4	105.9	68.6	54.1	45.7	38.8	33.4	29.4	25.8	22.9	20.7
31°	143.7	87.8	60.2	49.7	41.7	35.9	30.8	27.2	23.6	21.0	18.9
32°	109.9	71.8	53.7	45.0	38.1	32.3	28.3	24.7	21.4	19.2	17.1
33°	82.7	60.6	48.6	40.6	34.5	29.7	25.8	22.1	19.6	17.4	15.6
34°	66.0	54.1	43.9	36.6	31.2	26.8	22.9	20.0	17.4	15.6	13.8
35°	58.0	48.6	39.2	33.0	27.9	23.6	20.3	17.8	15.6	13.8	12.3
36°	51.5	43.5	34.8	29.4	24.3	20.7	17.8	15.6	13.4	12.0	10.9
37°	46.1	38.5	30.8	25.4	21.0	18.1	15.6	13.4	11.6	10.5	9.8
38°	41.4	33.0	26.1	21.8	18.1	15.6	13.4	11.6	10.2	9.1	8.3
39°	35.2	27.9	21.8	18.5	15.2	13.1	11.2	10.2	8.7	8.0	7.3
40°	29.4	23.2	18.1	15.2	13.1	10.9	9.8	8.3	7.6	6.9	6.2
42.5°	18.1	14.5	11.6	9.8	8.3	7.3	6.5	5.8	5.1	4.7	4.4
45°	11.2	9.1	7.3	6.2	5.1	4.7	4.4	3.6	3.6	3.3	3.3
47.5°	6.5	5.4	4.0	3.6	2.9	2.9	2.5	2.5	2.2	2.5	2.2
50°	3.6	2.5	2.2	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
51°	2.9	2.2	1.8	1.5	1.5	1.5	1.5	1.5	1.5	1.8	1.8
52°	2.2	1.8	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
53°	1.8	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
54°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
55°	1.5	1.5	1.5	1.5	1.5	1.1	1.5	1.5	1.5	1.5	1.5
57.5°	1.5	1.5	1.1	1.1	1.5	1.1	1.5	1.5	1.5	1.5	1.5
60°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5



TEST NUMBER: P208851

CATALOG NUMBER: LDSQA6A10940D010TE LARL20NF 6LSQA1H 30°

**CANDELA DISTRIBUTION (continued):**

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
63°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
64°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
65°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
66°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
67.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
70°	1.5	1.5	1.5	1.8	1.8	1.8	1.8	1.5	1.5	1.5	1.5
72.5°	1.5	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.5
75°	1.5	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
77.5°	1.5	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
80°	1.5	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
82.5°	1.5	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
85°	1.5	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
87.5°	1.5	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
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: P208851

CATALOG NUMBER: LDSQA6A10940D010TE LARL20NF 6LSQA1H 30°

**CANDELA DISTRIBUTION (continued):**

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
0°	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
2.5°	64.6	64.6	64.2	63.5	58.0	53.3	50.4	50.1
5°	64.9	64.2	62.8	61.7	51.9	45.7	42.1	41.7
7.5°	63.5	62.0	60.2	58.0	46.1	39.5	36.3	35.6
10°	61.0	58.4	56.2	53.3	40.6	34.5	31.6	30.8
11°	59.1	56.6	54.4	51.5	38.5	32.7	29.7	29.4
12°	57.7	54.8	51.9	49.3	36.3	30.8	28.3	27.9
13°	55.5	52.6	50.1	47.2	34.5	29.4	26.8	26.5
14°	53.7	50.4	47.9	45.3	32.7	27.6	25.8	25.4
15°	51.5	48.3	45.3	42.8	30.8	26.1	24.7	24.3
17.5°	45.7	42.1	39.5	37.0	26.5	22.9	21.8	22.1
20°	38.8	35.9	33.7	31.6	22.5	20.0	19.6	20.0
21°	36.3	33.7	31.9	29.7	21.0	18.9	18.9	19.2
22°	34.1	31.6	29.7	27.6	20.0	17.8	17.8	18.5
23°	31.9	29.4	27.6	25.8	18.5	17.1	17.1	17.8
24°	29.7	27.6	25.8	23.9	17.4	16.0	16.3	17.1
25°	27.6	25.8	23.9	22.5	16.3	15.2	15.6	16.3
26°	26.1	23.9	22.5	20.7	15.2	14.5	14.9	16.0
27°	23.9	22.1	20.7	19.2	14.5	13.8	14.5	15.2
28°	22.5	20.7	19.2	17.8	13.4	13.1	13.8	14.9
29°	20.7	19.2	17.8	16.7	12.7	12.3	13.4	14.1
30°	18.9	17.4	16.3	15.2	12.0	11.6	12.7	13.8
31°	17.4	16.3	15.2	14.1	11.2	11.2	12.3	13.4
32°	16.0	14.9	13.8	12.7	10.5	10.5	12.0	12.7
33°	14.5	13.4	12.3	11.6	9.8	10.2	11.2	12.3
34°	12.7	12.0	11.2	10.5	9.1	9.4	10.9	12.0
35°	11.6	10.9	10.2	9.4	8.7	9.1	10.5	11.6
36°	10.2	9.8	9.1	8.7	8.0	8.7	10.2	11.2
37°	9.1	8.7	8.0	7.6	7.6	8.3	9.8	10.9
38°	8.0	7.6	7.3	6.9	7.3	8.0	9.4	10.5
39°	6.9	6.5	6.5	6.2	6.9	7.6	9.1	10.2
40°	6.2	5.8	5.8	5.4	6.5	7.3	8.7	10.2
42.5°	4.4	4.4	4.4	4.4	5.4	6.5	8.0	9.4
45°	3.3	3.3	3.3	3.3	4.7	5.8	6.9	8.7
47.5°	2.5	2.5	2.5	2.5	4.4	5.4	6.5	7.6
50°	1.8	1.8	2.2	2.2	4.0	4.7	5.8	6.9
51°	1.8	1.8	1.8	2.2	3.6	4.7	5.4	6.5
52°	1.8	1.8	1.8	1.8	3.6	4.4	5.1	5.8
53°	1.5	1.8	1.8	1.8	3.3	4.4	4.7	5.4
54°	1.5	1.5	1.5	1.8	3.3	4.0	4.4	5.1
55°	1.5	1.5	1.5	1.8	2.9	4.0	4.4	4.4
57.5°	1.5	1.5	1.5	1.5	2.9	3.6	4.0	3.6
60°	1.5	1.5	1.5	1.5	2.5	3.3	3.6	2.5



TEST NUMBER: P208851

CATALOG NUMBER: LDSQA6A10940D010TE LARL20NF 6LSQA1H 30°

**CANDELA DISTRIBUTION (continued):**

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
63°	1.5	1.5	1.5	1.5	2.5	2.9	2.9	2.2
64°	1.5	1.5	1.5	1.5	2.5	2.9	2.9	2.2
65°	1.5	1.5	1.5	1.5	2.5	2.5	2.5	1.8
66°	1.5	1.5	1.5	1.5	2.5	2.5	2.5	1.8
67.5°	1.5	1.5	1.5	1.5	2.5	2.5	2.2	1.8
70°	1.5	1.5	1.5	1.8	2.2	2.2	2.2	1.8
72.5°	1.5	1.5	1.5	1.8	2.2	2.2	1.8	1.5
75°	1.8	1.8	1.8	1.8	2.2	2.2	1.8	1.1
77.5°	1.8	1.8	1.8	1.8	2.2	1.8	1.5	1.1
80°	1.8	1.8	1.5	1.5	1.8	1.8	1.1	0.7
82.5°	1.8	1.8	1.5	1.5	1.8	1.5	1.1	0.7
85°	1.8	1.8	1.5	1.5	1.8	1.5	0.7	0.4
87.5°	1.8	1.5	1.5	1.5	1.8	1.5	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°	1.1	1.1	1.1	1.1	1.5	1.1	1.5	1.8	2.2	2.2	2.2
62°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.1	1.1	1.1	1.5





61°	2.2	2.2	1.8	1.8	1.5	1.1	1.1	1.1	1.1	1.1	1.1
62°	1.5	1.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.5





61°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
62°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5







61°	1.5	1.5	1.5	1.5	2.5	3.3	3.3	2.5
62°	1.5	1.5	1.5	1.5	2.5	2.9	3.3	2.2



(END OF REPORT)