

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: P208815

Luminaire Tested: **LDSQA6A10840D010TE LARL15SP 6LSQA1H 30°**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P208815  
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: LDSQA6A10840D010TE 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: 888.0 lumens  
Efficiency: N/A  
Efficacy: 64.7 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

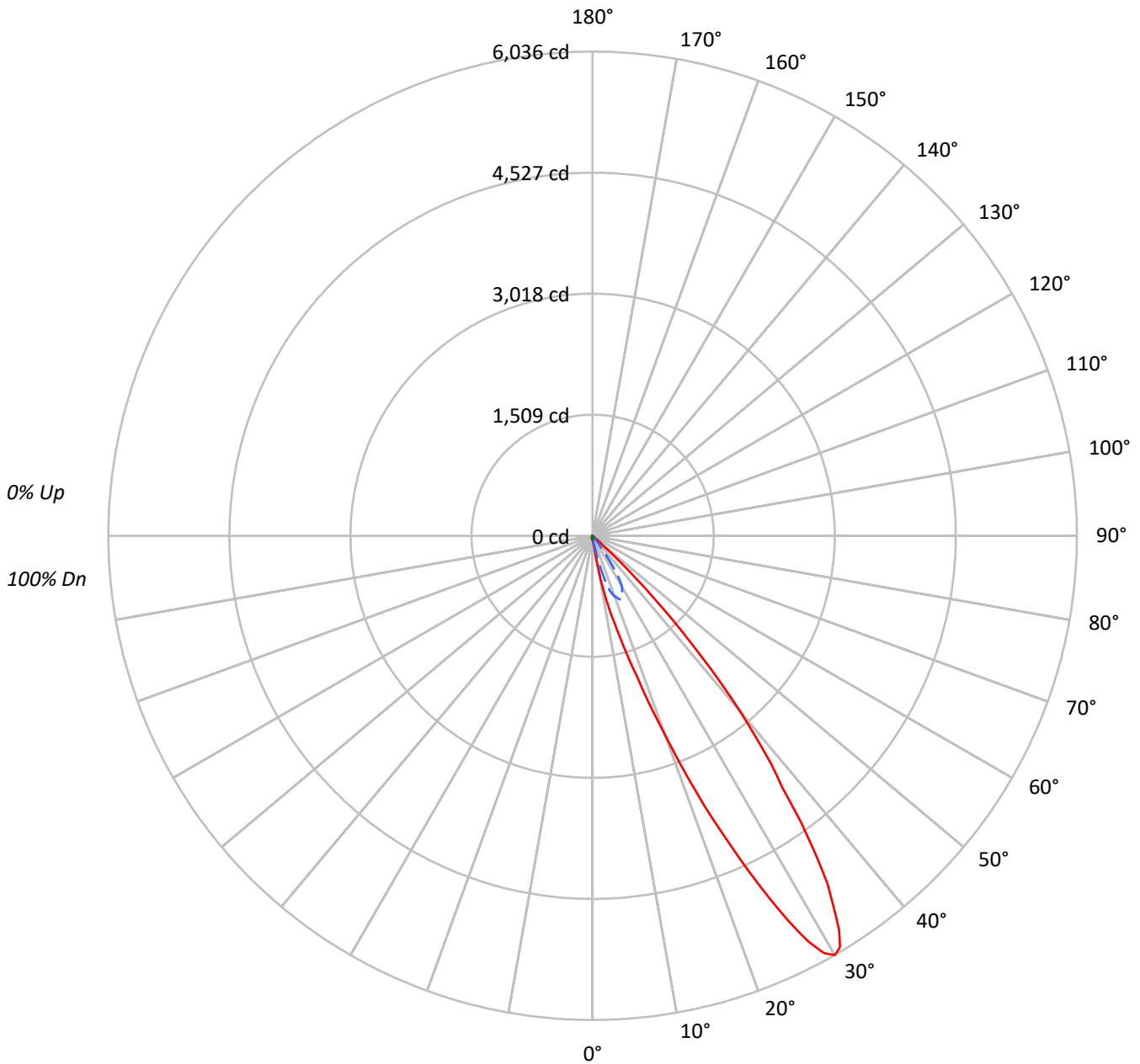
Input Watts (W): 13.73  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2506	2506	2506
5°	3864	2373	1906
10°	20728	2107	1583
15°	57149	1707	1355
20°	121360	1278	1182
25°	219676	926	1026
30°	300088	681	910
35°	254370	478	830
40°	161466	326	792
45°	55964	256	737
50°	3430	194	643
55°	593	158	503
60°	146	146	319
65°	82	173	255
70°	101	214	264
75°	0	283	283
80°	0	422	198
85°	0	840	198



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	7.2	0.8
10°-20°	91.3	10.3
20°-30°	317.3	35.7
30°-40°	347.9	39.2
40°-50°	114.7	12.9
50°-60°	4.8	0.5
60°-70°	2.0	0.2
70°-80°	1.6	0.2
80°-90°	1.0	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°	415.9	46.8
0°-40°	763.8	86.0
0°-60°	883.3	99.5
0°-90°	888.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	888.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	58	58	58	58	58	
5°	89	73	55	47	44	19
15°	1282	523	38	31	30	426
25°	4624	857	20	19	22	2164
35°	4840	286	9	12	16	2909
45°	919	14	4	8	12	810
55°	8	2	2	5	7	11
65°	1	1	2	3	2	1
75°	0	1	2	2	2	0
85°	0	1	2	1	0	0
90°	0	0	0	0	0	



TEST NUMBER: P208815

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**CANDELA DISTRIBUTION (FULL):**

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
0°	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2
2.5°	69.0	68.6	68.6	68.6	68.2	67.4	67.4	67.8	67.8	67.4	67.8
5°	89.4	88.6	88.2	87.7	86.1	85.7	84.0	85.3	84.0	82.8	82.8
7.5°	163.9	163.4	156.4	151.8	143.9	134.7	132.2	132.7	126.8	121.4	118.1
10°	474.1	474.9	454.1	462.4	432.5	420.4	397.6	389.3	368.5	351.0	329.8
11°	634.2	633.4	607.2	615.1	584.7	567.7	541.9	528.6	502.4	484.9	458.3
12°	807.2	781.8	773.1	780.6	749.4	726.9	695.8	678.7	646.3	628.4	596.4
13°	978.5	971.1	941.9	949.0	917.0	867.9	855.0	834.7	796.8	775.6	739.8
14°	1127.0	1099.6	1090.4	1095.0	1063.4	1016.8	1003.9	997.7	939.5	916.6	876.7
15°	1282.1	1248.9	1236.0	1218.9	1200.2	1144.9	1126.2	1114.1	1053.8	1015.6	989.8
17.5°	1846.1	1799.1	1767.5	1728.8	1687.6	1585.3	1542.9	1502.5	1396.9	1346.2	1269.7
20°	2648.7	2576.7	2495.6	2411.6	2331.0	2150.5	2045.7	1933.4	1789.1	1668.5	1577.0
21°	3037.1	2951.0	2853.3	2790.1	2638.3	2417.9	2276.5	2116.4	1930.9	1781.6	1666.4
22°	3444.2	3346.1	3264.6	3171.4	2961.0	2698.2	2520.6	2315.2	2075.2	1891.0	1745.4
23°	3839.7	3728.7	3631.0	3517.4	3274.2	2969.7	2758.9	2513.9	2224.9	1995.8	1815.7
24°	4217.3	4102.2	3989.9	3840.6	3561.9	3225.5	2977.6	2698.6	2367.6	2096.4	1881.8
25°	4624.1	4489.3	4344.2	4117.1	3833.9	3453.4	3168.1	2859.1	2494.4	2189.1	1937.5
26°	5029.1	4871.9	4654.4	4423.2	4084.7	3658.8	3333.6	2989.3	2602.5	2263.6	1978.7
27°	5409.2	5240.8	4985.5	4669.0	4309.7	3834.7	3470.0	3092.4	2677.8	2311.8	1997.8
28°	5734.4	5549.0	5264.5	4904.0	4477.3	3964.1	3560.3	3153.1	2714.0	2330.1	2000.3
29°	5948.6	5763.6	5457.1	5056.6	4572.1	4028.1	3596.0	3166.4	2711.9	2319.3	1983.3
30°	6036.0	5849.2	5536.1	5106.5	4590.0	4029.4	3581.5	3138.6	2675.7	2285.2	1949.6
31°	5984.8	5805.6	5487.8	5055.3	4526.8	3971.2	3520.3	3068.3	2603.8	2224.9	1899.3
32°	5796.0	5631.7	5326.5	4914.8	4396.6	3854.3	3415.1	2964.3	2502.3	2146.3	1836.5
33°	5508.2	5371.4	5059.5	4679.8	4222.8	3710.8	3287.0	2858.7	2380.0	2050.2	1769.5
34°	5232.5	5030.4	4753.8	4416.6	3999.8	3524.5	3128.2	2692.3	2250.3	1944.6	1693.0
35°	4839.5	4658.6	4403.2	4114.6	3740.3	3297.0	2900.7	2530.2	2105.1	1842.7	1612.7
36°	4424.9	4265.6	4080.1	3821.4	3463.4	3059.6	2696.9	2331.0	1955.8	1729.2	1527.9
37°	3918.3	3882.6	3710.0	3494.1	3174.3	2801.3	2460.3	2143.8	1816.1	1624.4	1434.8
38°	3619.3	3502.1	3344.0	3154.0	2840.4	2541.8	2232.0	1955.8	1689.3	1526.2	1328.7
39°	3238.8	3139.8	2994.3	2823.3	2553.4	2271.5	2019.5	1799.1	1584.5	1427.3	1214.3
40°	2872.8	2790.5	2657.0	2510.2	2265.2	2033.2	1836.1	1661.0	1480.5	1321.6	1101.2
42.5°	1811.5	1770.8	1715.9	1695.9	1608.2	1547.9	1475.9	1374.9	1216.0	1037.2	883.3
45°	919.1	892.9	892.0	932.8	960.7	963.6	956.9	931.1	828.0	776.8	640.0
47.5°	154.7	147.2	151.8	179.2	217.9	264.9	317.3	381.8	450.8	436.2	336.0
50°	51.2	49.5	48.2	49.5	47.8	49.1	48.2	47.0	42.4	44.5	45.7
51°	31.6	33.7	32.4	33.3	32.9	34.1	34.1	33.7	30.8	28.7	26.2
52°	21.6	22.0	22.5	22.9	22.5	22.9	23.3	23.3	22.5	21.6	19.5
53°	15.4	15.4	15.8	15.8	15.8	16.2	16.2	16.2	15.8	15.8	15.4
54°	10.8	11.2	11.2	11.2	11.2	11.6	11.6	11.6	12.1	11.6	11.6
55°	7.9	7.9	7.9	7.9	7.9	7.9	8.3	8.3	8.7	8.7	8.3
57.5°	3.3	3.3	2.9	3.3	3.3	3.3	3.3	3.7	3.7	4.2	4.2
60°	1.7	1.7	1.7	1.7	1.2	1.7	1.7	1.7	1.7	2.1	2.1



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**CANDELA DISTRIBUTION (continued):**

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
63°	0.8	0.8	0.8	0.8	0.8	0.8	0.4	0.8	0.8	0.8	0.8
64°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4
65°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4
66°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.4	0.4
67.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.4
70°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
72.5°	0.8	0.4	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.4	0.4	0.4	0.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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°	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2
2.5°	66.5	67.4	66.1	67.0	65.3	65.3	64.0	64.5	64.0	63.2	63.2
5°	80.7	80.7	78.6	78.6	76.1	74.9	72.8	72.8	71.5	69.5	69.0
7.5°	110.6	106.5	101.9	100.2	95.2	91.9	88.2	86.5	82.8	79.4	76.9
10°	296.1	268.7	241.6	225.0	184.2	154.7	132.7	117.7	106.9	94.0	89.0
11°	417.5	382.6	347.3	312.7	272.8	232.5	207.1	167.2	141.8	113.1	99.4
12°	548.9	507.8	464.9	425.9	378.0	327.3	292.4	241.6	205.9	158.0	124.8
13°	683.7	637.1	586.0	545.2	491.1	432.9	378.0	331.0	286.5	224.2	175.5
14°	813.4	764.0	707.8	665.0	604.3	541.0	479.1	427.1	373.0	298.6	238.7
15°	929.1	893.7	822.6	780.2	714.9	647.5	578.5	522.7	458.7	375.9	306.9
17.5°	1171.1	1105.8	1018.9	976.9	912.0	853.8	778.9	728.6	649.6	562.3	486.2
20°	1456.4	1360.3	1242.6	1154.0	1041.8	939.5	845.0	805.5	756.5	697.0	625.9
21°	1534.6	1431.0	1302.5	1212.3	1097.1	991.9	880.8	818.0	764.4	712.8	653.3
22°	1591.5	1482.2	1347.0	1253.0	1134.5	1030.1	916.6	841.3	769.8	711.6	657.9
23°	1639.8	1523.3	1382.8	1280.5	1156.5	1048.8	934.9	860.0	781.0	708.6	650.4
24°	1683.4	1555.8	1408.1	1298.3	1167.8	1055.5	937.4	863.3	786.4	710.3	640.4
25°	1716.3	1576.2	1422.7	1307.5	1170.3	1053.4	931.6	857.1	780.2	704.9	629.2
26°	1738.8	1585.7	1426.9	1307.1	1165.3	1045.1	919.5	844.2	765.2	685.4	610.9
27°	1745.8	1583.2	1421.0	1297.5	1152.8	1028.9	899.1	819.7	741.9	662.1	586.4
28°	1738.8	1573.2	1407.7	1278.8	1132.0	1002.2	866.3	787.2	717.0	636.3	556.4
29°	1719.2	1555.4	1383.2	1250.9	1099.1	959.0	824.3	756.1	688.3	597.2	506.1
30°	1688.9	1522.9	1347.8	1210.2	1050.5	904.5	786.4	727.4	640.9	534.0	435.8
31°	1646.4	1480.9	1302.1	1156.1	985.6	851.3	753.6	673.7	566.8	450.4	350.2
32°	1594.9	1431.0	1235.6	1084.2	921.6	809.3	695.3	591.8	473.3	351.4	255.3
33°	1539.6	1367.0	1159.4	1008.5	866.7	753.1	611.3	490.7	368.5	247.0	160.9
34°	1475.5	1288.4	1074.2	932.4	805.1	668.7	511.5	381.4	262.8	150.1	82.8
35°	1398.2	1191.5	989.4	866.7	717.0	556.9	402.1	285.7	164.7	75.7	44.9
36°	1304.6	1091.7	915.7	782.3	613.8	447.1	290.3	182.2	88.6	44.5	35.3
37°	1185.6	1009.7	838.4	681.6	502.4	335.6	187.1	99.0	50.7	36.2	29.9
38°	1082.9	934.0	755.6	571.8	387.2	230.0	113.5	55.7	39.9	30.4	25.0
39°	994.3	853.0	647.1	456.2	276.1	139.3	62.4	42.4	33.3	25.0	21.2
40°	917.0	737.3	532.3	342.3	177.6	77.4	44.9	35.3	27.0	20.8	17.1
42.5°	672.9	467.9	246.6	110.6	52.0	38.7	28.3	22.5	17.5	12.9	10.8
45°	399.7	210.4	74.4	45.3	32.9	24.5	17.9	14.1	10.8	7.9	6.7
47.5°	146.0	53.2	36.6	27.4	20.8	15.4	11.2	8.7	6.7	4.6	3.7
50°	29.9	25.8	20.0	16.2	12.1	9.1	6.7	5.0	3.7	2.9	2.5
51°	22.9	20.0	16.2	12.9	9.6	7.5	5.4	4.2	3.3	2.5	2.1
52°	17.5	15.4	12.5	10.4	7.9	5.8	4.2	3.3	2.5	1.7	1.7
53°	13.7	12.1	9.6	7.9	6.2	4.6	3.3	2.5	2.1	1.7	1.7
54°	10.4	9.1	7.5	6.2	5.0	3.7	2.5	2.1	1.7	1.7	1.2
55°	7.5	7.1	5.8	4.6	3.7	2.9	2.1	1.7	1.7	1.2	1.2
57.5°	3.7	3.3	2.9	2.5	2.1	1.7	1.2	1.2	1.2	1.2	0.8
60°	2.1	1.7	1.7	1.7	1.2	1.2	1.2	0.8	0.8	1.2	1.2





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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°	0.8	0.8	0.8	0.8	1.2	0.8	0.8	0.8	1.2	1.2	1.2
64°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2
65°	0.4	0.8	0.8	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2
66°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2
67.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2
70°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2
72.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2
75°	0.4	0.4	0.8	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2
77.5°	0.4	0.4	0.8	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2
80°	0.4	0.4	0.4	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2
82.5°	0.4	0.4	0.4	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2
85°	0.4	0.4	0.4	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2
87.5°	0.4	0.4	0.4	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2
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: P208815

CATALOG NUMBER: LDSQA6A10840D010TE LARL15SP 6LSQA1H 30°

**CANDELA DISTRIBUTION (continued):**

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2
2.5°	62.0	62.8	62.0	61.1	60.7	60.7	60.3	59.1	59.5	59.1	59.1
5°	67.0	67.4	65.7	64.5	63.6	62.8	62.0	60.3	59.9	59.5	59.1
7.5°	73.6	73.2	69.9	67.8	65.7	64.0	62.4	60.3	59.5	58.2	57.4
10°	83.2	80.3	74.9	71.1	68.2	64.9	62.4	59.1	57.4	55.7	54.5
11°	87.3	83.2	77.8	72.8	69.0	65.3	62.4	58.2	56.1	54.5	52.8
12°	100.2	89.0	80.3	74.9	69.9	65.7	62.0	57.8	55.3	52.8	51.2
13°	129.8	103.6	85.7	76.1	71.1	66.1	61.5	57.0	54.1	51.2	49.5
14°	178.0	133.1	99.0	80.7	71.5	66.1	61.1	56.1	52.8	49.9	47.8
15°	235.8	178.8	126.0	91.9	73.2	65.7	60.3	54.9	51.2	47.8	45.7
17.5°	397.2	322.7	242.0	172.2	106.5	71.9	57.0	50.7	46.2	42.4	39.9
20°	532.3	446.6	355.6	268.7	184.2	114.8	65.7	46.2	40.8	36.6	34.1
21°	561.8	481.6	385.1	294.0	206.7	133.1	74.4	46.2	38.7	34.5	32.0
22°	577.2	499.9	403.4	310.7	222.1	146.0	83.6	46.6	36.6	32.4	29.5
23°	574.7	504.0	410.5	315.6	229.1	152.2	87.3	47.0	34.5	30.4	27.4
24°	559.8	492.8	403.4	309.8	227.1	150.5	86.1	46.2	32.4	28.3	25.8
25°	541.0	470.8	384.3	294.0	213.8	140.1	79.8	43.3	30.8	26.6	24.1
26°	519.8	448.7	357.6	266.2	192.1	122.7	67.4	38.3	28.3	24.5	22.5
27°	494.5	420.0	324.8	236.6	162.2	99.0	54.1	32.4	26.2	22.5	20.8
28°	456.6	379.3	282.8	197.5	129.8	74.9	40.8	27.9	24.1	20.8	19.1
29°	400.1	321.9	230.4	154.3	95.2	51.6	31.2	25.0	21.6	18.7	17.5
30°	329.4	254.5	170.9	106.0	61.1	34.9	25.4	22.0	19.1	17.1	16.2
31°	249.5	180.9	110.6	61.1	36.6	25.8	22.5	19.1	17.1	15.4	15.0
32°	164.7	109.4	58.6	35.3	26.6	22.5	19.5	17.1	15.4	14.1	13.7
33°	88.2	50.3	33.7	26.6	22.5	19.5	17.1	15.0	13.7	12.9	12.5
34°	44.9	32.9	27.4	22.9	19.1	17.1	15.0	13.3	12.5	11.6	11.2
35°	33.3	28.3	23.7	19.5	16.6	15.0	13.3	12.1	11.2	10.4	10.4
36°	28.3	23.7	19.5	17.1	15.0	13.3	12.1	10.4	10.0	9.6	9.1
37°	23.7	20.4	17.1	14.6	12.9	11.6	10.4	9.6	8.7	8.3	8.3
38°	20.0	17.5	14.6	12.5	11.2	10.4	9.1	8.3	7.9	7.5	7.5
39°	16.6	14.6	12.5	10.8	9.6	8.7	7.9	7.5	7.1	6.7	6.7
40°	13.7	12.5	10.4	9.1	8.3	7.5	7.1	6.7	6.2	5.8	6.2
42.5°	8.7	7.5	6.7	6.2	5.4	5.4	5.0	4.6	4.6	4.6	4.6
45°	5.0	4.6	4.2	4.2	3.7	3.7	3.7	3.3	3.7	3.7	3.7
47.5°	2.9	2.9	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.9	2.9
50°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	2.1	2.1
51°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	2.1
52°	1.7	1.7	1.7	1.2	1.2	1.2	1.2	1.2	1.7	1.7	1.7
53°	1.2	1.7	1.2	1.2	1.2	1.2	1.2	1.2	1.7	1.7	1.7
54°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.7	1.7
55°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.7	1.7
57.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.7
60°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.7



TEST NUMBER: P208815

CATALOG NUMBER: LDSQA6A10840D010TE LARL15SP 6LSQA1H 30°

**CANDELA DISTRIBUTION (continued):**

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
63°	1.2	1.2	1.2	1.2	1.2	1.7	1.2	1.2	1.2	1.7	1.7
64°	1.2	1.2	1.2	1.2	1.2	1.7	1.2	1.2	1.2	1.2	1.7
65°	1.2	1.2	1.7	1.7	1.7	1.7	1.2	1.2	1.2	1.2	1.7
66°	1.2	1.2	1.7	1.7	1.7	1.7	1.7	1.2	1.2	1.7	1.7
67.5°	1.2	1.7	1.7	1.7	1.7	1.7	1.7	1.2	1.7	1.7	1.7
70°	1.2	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
72.5°	1.2	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
75°	1.2	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
77.5°	1.2	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
80°	1.2	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
82.5°	1.2	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
85°	1.2	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
87.5°	1.2	1.7	1.7	1.7	1.7	1.7	1.7	1.7	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: P208815

CATALOG NUMBER: LDSQA6A10840D010TE LARL15SP 6LSQA1H 30°

**CANDELA DISTRIBUTION (continued):**

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
0°	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2
2.5°	57.8	57.4	57.0	57.0	53.6	52.0	49.9	49.9
5°	57.0	56.6	55.7	54.9	49.5	47.0	44.5	44.1
7.5°	55.3	54.1	52.8	52.0	45.3	42.4	39.9	39.5
10°	52.0	50.3	49.1	48.2	41.2	38.3	36.2	36.2
11°	50.3	48.7	47.4	46.2	39.1	36.6	34.9	34.9
12°	48.7	47.0	45.3	44.5	37.4	35.3	33.7	33.3
13°	47.0	44.9	43.7	42.4	35.8	33.7	32.4	32.4
14°	45.3	43.3	41.6	40.3	34.1	32.0	31.2	31.2
15°	42.8	40.8	39.5	38.3	32.0	30.8	29.9	30.4
17.5°	37.0	35.3	34.1	32.9	27.9	27.4	27.4	27.9
20°	31.6	29.9	28.7	27.9	24.1	24.5	25.0	25.8
21°	29.5	27.9	26.6	25.8	22.9	23.3	24.1	25.0
22°	27.4	26.2	25.0	24.1	21.6	22.0	23.3	24.1
23°	25.4	24.1	23.3	22.5	20.4	21.2	22.5	23.3
24°	23.7	22.5	21.6	20.8	19.1	20.0	21.6	22.5
25°	22.0	20.8	20.0	19.5	17.9	19.1	20.8	21.6
26°	20.4	19.5	18.7	18.3	17.1	18.3	20.0	21.2
27°	18.7	17.9	17.5	17.1	15.8	17.5	19.1	20.4
28°	17.5	16.6	16.2	15.8	15.0	16.6	18.7	19.5
29°	16.2	15.4	15.0	14.6	14.1	15.8	17.9	19.1
30°	15.0	14.6	13.7	13.7	13.3	15.4	17.1	18.3
31°	13.7	13.3	12.9	12.5	12.5	14.6	16.6	17.9
32°	12.9	12.5	12.1	11.6	12.1	13.7	15.8	17.5
33°	11.6	11.2	11.2	10.8	11.2	13.3	15.4	17.1
34°	10.4	10.4	10.0	10.0	10.8	12.9	15.0	16.2
35°	9.6	9.1	9.1	9.1	10.4	12.1	14.6	15.8
36°	8.7	8.7	8.3	8.3	10.0	11.6	14.1	15.4
37°	7.9	7.9	7.9	7.5	9.1	11.2	13.3	15.0
38°	7.1	7.1	7.1	7.1	8.7	10.8	13.3	15.0
39°	6.2	6.2	6.7	6.7	8.3	10.4	12.5	14.6
40°	5.8	5.8	5.8	5.8	7.9	10.0	12.1	14.1
42.5°	4.6	4.6	5.0	5.0	7.1	9.1	11.2	12.9
45°	3.7	3.7	4.2	4.2	6.2	8.3	10.0	12.1
47.5°	2.9	2.9	3.3	3.3	5.4	7.5	9.1	10.8
50°	2.1	2.5	2.5	2.9	5.0	6.7	7.9	9.6
51°	2.1	2.1	2.5	2.5	4.6	6.2	7.5	9.1
52°	2.1	2.1	2.5	2.5	4.2	5.8	7.1	8.3
53°	1.7	2.1	2.1	2.5	4.2	5.8	6.7	7.9
54°	1.7	1.7	2.1	2.1	4.2	5.4	6.7	7.1
55°	1.7	1.7	2.1	2.1	3.7	5.4	6.2	6.7
57.5°	1.7	1.7	1.7	1.7	3.3	4.6	5.4	5.4
60°	1.7	1.7	1.7	1.7	3.3	4.2	5.0	3.7



TEST NUMBER: P208815

CATALOG NUMBER: LDSQA6A10840D010TE LARL15SP 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	2.9	3.7	3.7	2.9
64°	1.7	1.7	1.7	1.7	2.9	3.7	3.7	2.9
65°	1.7	1.7	1.7	1.7	2.9	3.3	3.3	2.5
66°	1.7	1.7	1.7	1.7	2.9	3.3	3.3	2.5
67.5°	1.7	1.7	1.7	1.7	2.5	2.9	2.9	2.5
70°	1.7	1.7	1.7	1.7	2.5	2.9	2.5	2.1
72.5°	1.7	1.7	1.7	1.7	2.5	2.5	2.1	1.7
75°	1.7	1.7	1.7	1.7	2.1	2.1	1.7	1.7
77.5°	1.7	1.7	1.7	1.7	2.1	2.1	1.7	1.2
80°	1.7	1.7	1.7	1.7	2.1	1.7	1.2	0.8
82.5°	1.7	1.7	1.7	1.7	1.7	1.2	0.8	0.8
85°	1.7	1.7	1.7	1.7	1.7	1.2	0.8	0.4
87.5°	1.7	1.7	1.7	1.7	1.7	1.2	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°	1.7	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.7	1.7
62°	1.2	1.2	1.2	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8





61°	1.7	1.2	1.2	1.2	1.2	1.2	1.2	0.8	0.8	1.2	1.2
62°	1.2	1.2	1.2	1.2	1.2	1.2	0.8	0.8	0.8	1.2	1.2





61°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.7
62°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2







61°	1.7	1.7	1.7	1.7	2.9	4.2	4.6	3.3
62°	1.7	1.7	1.7	1.7	2.9	3.7	4.2	2.9



(END OF REPORT)