

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: P208836

Luminaire Tested: **LDSQA6A30827D010TE LARL15SP 6LSQA1H 30°**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208836
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: LDSQA6A30827D010TE 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 / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2054.9 lumens
Efficiency: N/A
Efficacy: 46.1 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

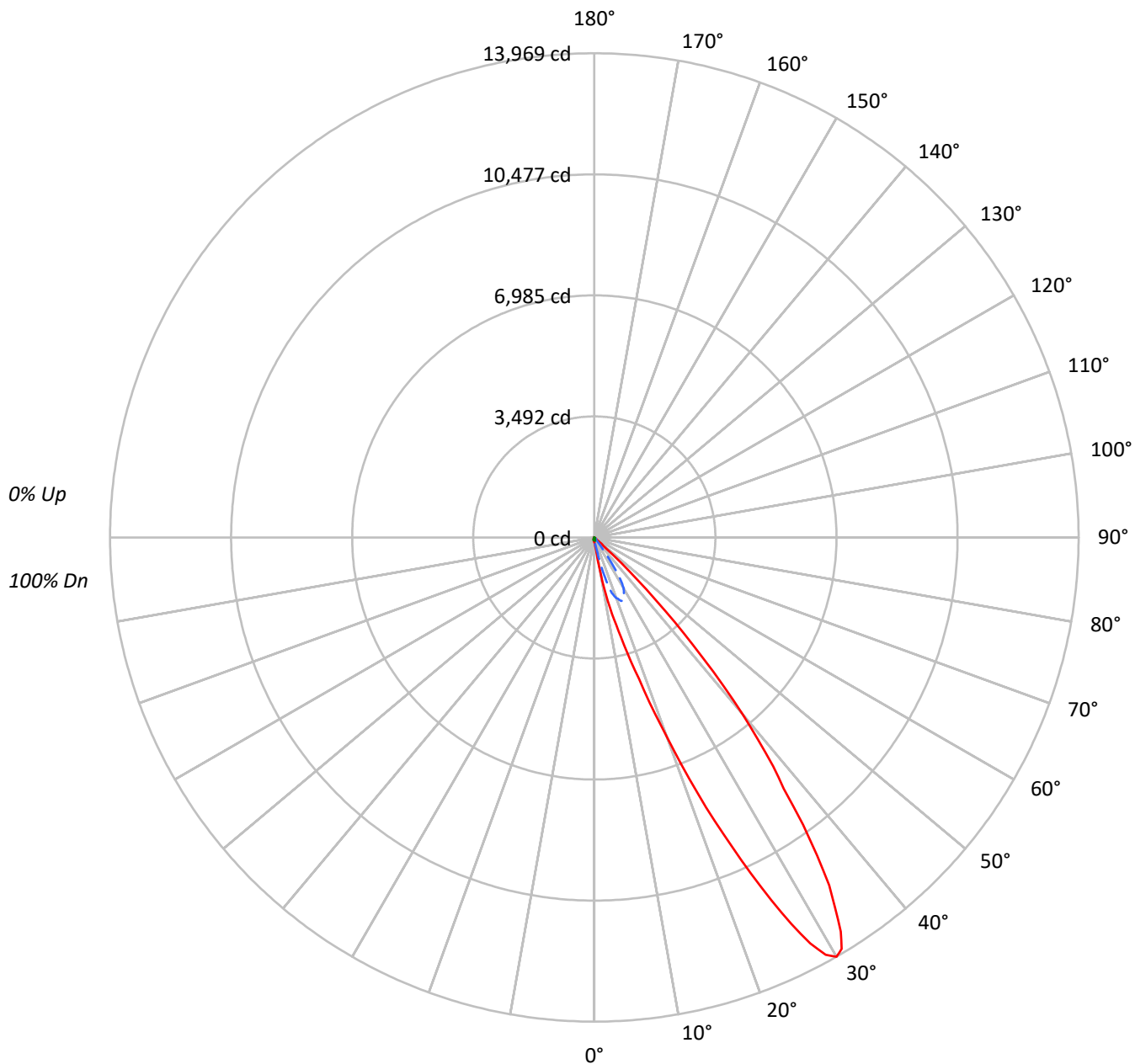
Input Watts (W): 44.62
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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	77	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°	5800	5800	5800
5°	8942	5489	4408
10°	47969	4879	3659
15°	132261	3945	3134
20°	280856	2955	2735
25°	508383	2147	2375
30°	694473	1581	2103
35°	588676	1114	1924
40°	373680	759	1838
45°	129513	585	1699
50°	7931	449	1480
55°	1374	360	1156
60°	327	327	749
65°	194	387	591
70°	239	478	604
75°	0	632	632
80°	0	942	471
85°	0	1877	494



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	16.7	0.8
10°-20°	211.3	10.3
20°-30°	734.4	35.7
30°-40°	805.1	39.2
40°-50°	265.5	12.9
50°-60°	11.0	0.5
60°-70°	4.8	0.2
70°-80°	3.7	0.2
80°-90°	2.4	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°	962.4	46.8
0°-40°	1767.5	86.0
0°-60°	2044.1	99.5
0°-90°	2054.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2054.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	135	135	135	135	135	
5°	207	168	127	109	102	44
15°	2967	1210	88	71	70	986
25°	10701	1984	45	44	50	5008
35°	11200	661	21	28	37	6732
45°	2127	33	10	19	28	1874
55°	18	4	5	12	15	26
65°	2	3	4	8	6	2
75°	0	3	4	5	4	1
85°	0	3	4	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°	134.7	134.7	134.7	134.7	134.7	134.7	134.7	134.7	134.7	134.7	134.7
2.5°	159.8	158.8	158.8	158.8	157.8	155.9	155.9	156.9	156.9	155.9	156.9
5°	206.9	205.0	204.0	203.1	199.2	198.3	194.4	197.3	194.4	191.5	191.5
7.5°	379.2	378.2	361.9	351.3	333.0	311.8	306.1	307.0	293.5	281.0	273.3
10°	1097.2	1099.1	1051.0	1070.2	1000.9	973.0	920.1	900.8	852.7	812.3	763.2
11°	1467.7	1465.8	1405.1	1423.4	1353.2	1313.7	1254.0	1223.2	1162.6	1122.2	1060.6
12°	1868.1	1809.4	1789.2	1806.5	1734.3	1682.3	1610.1	1570.7	1495.6	1454.2	1380.1
13°	2264.6	2247.3	2179.9	2196.3	2122.2	2008.6	1978.8	1931.6	1844.0	1794.9	1712.2
14°	2608.2	2544.7	2523.5	2534.1	2460.9	2353.1	2323.3	2308.9	2174.1	2121.2	2028.8
15°	2967.2	2890.2	2860.3	2820.9	2777.6	2649.6	2606.3	2578.4	2438.8	2350.3	2290.6
17.5°	4272.2	4163.5	4090.3	4000.8	3905.5	3668.8	3570.6	3477.3	3232.8	3115.4	2938.3
20°	6129.7	5963.2	5775.5	5581.1	5394.4	4976.7	4734.2	4474.3	4140.4	3861.3	3649.5
21°	7028.6	6829.4	6603.2	6456.9	6105.7	5595.6	5268.3	4897.8	4468.6	4123.1	3856.5
22°	7970.8	7743.7	7555.1	7339.5	6852.5	6244.2	5833.3	5357.9	4802.5	4376.2	4039.3
23°	8886.1	8629.2	8403.0	8140.2	7577.2	6872.7	6384.8	5817.9	5149.0	4618.7	4202.0
24°	9760.0	9493.4	9233.6	8888.0	8243.2	7464.6	6891.0	6245.2	5479.1	4851.6	4355.0
25°	10701.3	10389.4	10053.5	9528.1	8872.6	7992.0	7331.8	6616.7	5772.7	5066.2	4484.0
26°	11638.7	11274.9	10771.5	10236.4	9453.0	8467.5	7714.8	6918.0	6022.9	5238.5	4579.2
27°	12518.3	12128.5	11537.6	10805.2	9973.7	8874.6	8030.5	7156.6	6197.1	5350.2	4623.5
28°	13271.0	12841.7	12183.4	11349.0	10361.5	9173.9	8239.4	7297.1	6280.8	5392.5	4629.3
29°	13766.6	13338.3	12629.0	11702.2	10581.0	9322.1	8322.1	7327.9	6276.0	5367.5	4589.8
30°	13968.7	13536.6	12811.9	11817.7	10622.3	9325.0	8288.5	7263.5	6192.3	5288.6	4511.9
31°	13850.3	13435.5	12700.2	11699.3	10476.1	9190.2	8147.0	7100.8	6025.8	5149.0	4395.4
32°	13413.4	13033.2	12326.8	11374.0	10174.8	8919.8	7903.5	6860.2	5790.9	4967.1	4250.1
33°	12747.4	12430.8	11708.9	10830.2	9772.5	8587.8	7607.1	6615.7	5508.0	4744.8	4095.1
34°	12109.3	11641.6	11001.5	10221.0	9256.7	8156.6	7239.4	6230.8	5207.7	4500.3	3918.1
35°	11199.8	10781.1	10190.2	9522.3	8656.1	7630.1	6713.0	5855.4	4871.8	4264.5	3732.3
36°	10240.3	9871.6	9442.4	8843.8	8015.1	7080.6	6241.4	5394.4	4526.3	4001.8	3536.0
37°	9068.0	8985.3	8585.8	8086.3	7346.2	6482.9	5693.7	4961.3	4202.9	3759.3	3320.4
38°	8376.0	8104.6	7738.9	7299.1	6573.4	5882.4	5165.4	4526.3	3909.4	3532.1	3075.0
39°	7495.4	7266.3	6929.5	6533.9	5909.3	5256.8	4673.6	4163.5	3666.9	3303.1	2810.3
40°	6648.5	6457.9	6149.0	5809.2	5242.4	4705.3	4249.1	3843.9	3426.3	3058.6	2548.5
42.5°	4192.3	4098.0	3971.0	3924.8	3721.7	3582.2	3415.7	3181.8	2814.1	2400.3	2044.2
45°	2127.0	2066.3	2064.4	2158.7	2223.2	2230.0	2214.6	2154.9	1916.2	1797.8	1481.2
47.5°	358.0	340.7	351.3	414.8	504.3	613.1	734.3	883.5	1043.3	1009.6	777.6
50°	118.4	114.5	111.6	114.5	110.7	113.6	111.6	108.8	98.2	103.0	105.9
51°	73.1	78.0	75.1	77.0	76.0	78.9	78.9	78.0	71.2	66.4	60.6
52°	50.0	51.0	52.0	52.9	52.0	52.9	53.9	53.9	52.0	50.0	45.2
53°	35.6	35.6	36.6	36.6	36.6	37.5	37.5	37.5	36.6	36.6	35.6
54°	25.0	26.0	26.0	26.0	26.0	26.9	26.9	26.9	27.9	26.9	26.9
55°	18.3	18.3	18.3	18.3	18.3	18.3	19.2	19.2	20.2	20.2	19.2
57.5°	7.7	7.7	6.7	7.7	7.7	7.7	7.7	8.7	8.7	9.6	9.6
60°	3.8	3.8	3.8	3.8	2.9	3.8	3.8	3.8	3.8	4.8	4.8



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
63°	1.9	1.9	1.9	1.9	1.9	1.9	1.0	1.9	1.9	1.9	1.9
64°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.0	1.0	1.0	1.0
65°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.0	1.0	1.0	1.0
66°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.0	1.0
67.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.0
70°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
72.5°	1.9	1.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
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°	134.7	134.7	134.7	134.7	134.7	134.7	134.7	134.7	134.7	134.7	134.7
2.5°	154.0	155.9	153.0	155.0	151.1	151.1	148.2	149.2	148.2	146.3	146.3
5°	186.7	186.7	181.9	181.9	176.1	173.2	168.4	168.4	165.5	160.7	159.8
7.5°	256.0	246.4	235.8	231.9	220.4	212.7	204.0	200.2	191.5	183.8	178.0
10°	685.3	621.7	559.2	520.7	426.4	358.0	307.0	272.4	247.3	217.5	206.0
11°	966.3	885.4	803.6	723.7	631.4	538.0	479.3	386.9	328.2	261.8	230.0
12°	1270.4	1175.1	1076.0	985.5	874.8	757.4	676.6	559.2	476.4	365.7	288.7
13°	1582.2	1474.4	1356.1	1261.7	1136.6	1001.9	874.8	766.1	663.1	518.8	406.1
14°	1882.5	1768.0	1638.1	1538.9	1398.4	1252.1	1108.7	988.4	863.3	691.0	552.4
15°	2150.1	2068.3	1903.7	1805.5	1654.4	1498.5	1338.7	1209.8	1061.6	870.0	710.3
17.5°	2710.2	2559.1	2358.0	2260.7	2110.6	1975.9	1802.6	1686.2	1503.3	1301.2	1125.1
20°	3370.4	3148.1	2875.7	2670.7	2410.9	2174.1	1955.7	1864.2	1750.7	1613.0	1448.5
21°	3551.4	3311.7	3014.3	2805.5	2538.9	2295.4	2038.4	1893.1	1768.9	1649.6	1512.0
22°	3683.2	3430.1	3117.3	2899.8	2625.5	2383.9	2121.2	1947.0	1781.5	1646.7	1522.6
23°	3794.9	3525.4	3200.1	2963.3	2676.5	2427.2	2163.5	1990.3	1807.4	1640.0	1505.2
24°	3895.9	3600.5	3258.8	3004.7	2702.5	2442.6	2169.3	1998.0	1820.0	1643.8	1482.1
25°	3972.0	3647.6	3292.5	3025.9	2708.3	2437.8	2155.8	1983.6	1805.5	1631.3	1456.2
26°	4023.9	3669.7	3302.1	3024.9	2696.7	2418.6	2127.9	1953.7	1770.9	1586.1	1413.8
27°	4040.3	3664.0	3288.6	3002.8	2667.9	2381.1	2080.8	1897.0	1717.0	1532.2	1357.0
28°	4023.9	3640.9	3257.8	2959.5	2619.7	2319.5	2004.7	1821.9	1659.2	1472.5	1287.7
29°	3978.7	3599.5	3201.0	2895.0	2543.7	2219.4	1907.5	1749.7	1592.8	1382.1	1171.3
30°	3908.4	3524.4	3119.2	2800.7	2431.1	2093.3	1820.0	1683.3	1483.1	1235.8	1008.6
31°	3810.3	3427.2	3013.4	2675.6	2281.0	1970.1	1743.9	1559.1	1311.8	1042.3	810.4
32°	3690.9	3311.7	2859.4	2509.1	2132.7	1872.9	1609.2	1369.5	1095.2	813.3	590.9
33°	3562.9	3163.5	2683.3	2333.9	2005.7	1743.0	1414.8	1135.7	852.7	571.7	372.5
34°	3414.7	2981.6	2486.0	2157.8	1863.3	1547.6	1183.8	882.5	608.3	347.4	191.5
35°	3235.7	2757.4	2289.6	2005.7	1659.2	1288.7	930.7	661.2	381.1	175.2	103.9
36°	3019.1	2526.4	2119.3	1810.3	1420.5	1034.6	671.8	421.5	205.0	103.0	81.8
37°	2743.9	2336.8	1940.3	1577.4	1162.6	776.7	433.1	229.1	117.4	83.7	69.3
38°	2506.2	2161.6	1748.7	1323.3	896.0	532.2	262.7	129.0	92.4	70.3	57.7
39°	2301.2	1973.9	1497.5	1055.8	639.1	322.4	144.4	98.2	77.0	57.7	49.1
40°	2122.2	1706.4	1231.9	792.1	411.0	179.0	103.9	81.8	62.6	48.1	39.5
42.5°	1557.2	1082.7	570.7	256.0	120.3	89.5	65.4	52.0	40.4	29.8	25.0
45°	924.9	487.0	172.3	104.9	76.0	56.8	41.4	32.7	25.0	18.3	15.4
47.5°	337.8	123.2	84.7	63.5	48.1	35.6	26.0	20.2	15.4	10.6	8.7
50°	69.3	59.7	46.2	37.5	27.9	21.2	15.4	11.5	8.7	6.7	5.8
51°	52.9	46.2	37.5	29.8	22.1	17.3	12.5	9.6	7.7	5.8	4.8
52°	40.4	35.6	28.9	24.1	18.3	13.5	9.6	7.7	5.8	3.8	3.8
53°	31.8	27.9	22.1	18.3	14.4	10.6	7.7	5.8	4.8	3.8	3.8
54°	24.1	21.2	17.3	14.4	11.5	8.7	5.8	4.8	3.8	3.8	2.9
55°	17.3	16.4	13.5	10.6	8.7	6.7	4.8	3.8	3.8	2.9	2.9
57.5°	8.7	7.7	6.7	5.8	4.8	3.8	2.9	2.9	2.9	2.9	1.9
60°	4.8	3.8	3.8	3.8	2.9	2.9	2.9	1.9	1.9	2.9	2.9



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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°	1.9	1.9	1.9	1.9	2.9	1.9	1.9	1.9	2.9	2.9	2.9
64°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.9	2.9	2.9	2.9
65°	1.0	1.9	1.9	1.9	1.9	1.9	1.9	2.9	2.9	2.9	2.9
66°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.9	2.9	2.9	2.9
67.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.9	2.9	2.9	2.9
70°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.9	2.9	2.9	2.9
72.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.9	2.9	2.9	2.9
75°	1.0	1.0	1.9	1.9	1.9	1.9	1.9	2.9	2.9	2.9	2.9
77.5°	1.0	1.0	1.9	1.9	1.9	1.9	1.9	2.9	2.9	2.9	2.9
80°	1.0	1.0	1.0	1.9	1.9	1.9	1.9	2.9	2.9	2.9	2.9
82.5°	1.0	1.0	1.0	1.9	1.9	1.9	1.9	2.9	2.9	2.9	2.9
85°	1.0	1.0	1.0	1.9	1.9	1.9	1.9	2.9	2.9	2.9	2.9
87.5°	1.0	1.0	1.0	1.9	1.9	1.9	1.9	2.9	2.9	2.9	2.9
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: P208836

CATALOG NUMBER: LDSQA6A30827D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	134.7	134.7	134.7	134.7	134.7	134.7	134.7	134.7	134.7	134.7	134.7
2.5°	143.4	145.3	143.4	141.5	140.5	140.5	139.6	136.7	137.6	136.7	136.7
5°	155.0	155.9	152.1	149.2	147.3	145.3	143.4	139.6	138.6	137.6	136.7
7.5°	170.4	169.4	161.7	156.9	152.1	148.2	144.4	139.6	137.6	134.7	132.8
10°	192.5	185.7	173.2	164.6	157.8	150.1	144.4	136.7	132.8	129.0	126.1
11°	202.1	192.5	180.0	168.4	159.8	151.1	144.4	134.7	129.9	126.1	122.2
12°	231.9	206.0	185.7	173.2	161.7	152.1	143.4	133.8	128.0	122.2	118.4
13°	300.3	239.6	198.3	176.1	164.6	153.0	142.4	131.9	125.1	118.4	114.5
14°	411.9	308.0	229.1	186.7	165.5	153.0	141.5	129.9	122.2	115.5	110.7
15°	545.7	413.8	291.6	212.7	169.4	152.1	139.6	127.0	118.4	110.7	105.9
17.5°	919.1	746.8	560.1	398.4	246.4	166.5	131.9	117.4	106.8	98.2	92.4
20°	1231.9	1033.7	822.9	621.7	426.4	265.6	152.1	106.8	94.3	84.7	78.9
21°	1300.2	1114.5	891.2	680.4	478.3	308.0	172.3	106.8	89.5	79.9	74.1
22°	1335.9	1156.8	933.6	718.9	513.9	337.8	193.4	107.8	84.7	75.1	68.3
23°	1330.1	1166.5	949.9	730.5	530.3	352.2	202.1	108.8	79.9	70.3	63.5
24°	1295.4	1140.5	933.6	717.0	525.5	348.4	199.2	106.8	75.1	65.4	59.7
25°	1252.1	1089.5	889.3	680.4	494.7	324.3	184.8	100.1	71.2	61.6	55.8
26°	1203.0	1038.5	827.7	616.0	444.6	283.9	155.9	88.5	65.4	56.8	52.0
27°	1144.3	972.1	751.7	547.6	375.3	229.1	125.1	75.1	60.6	52.0	48.1
28°	1056.7	877.7	654.5	457.2	300.3	173.2	94.3	64.5	55.8	48.1	44.3
29°	925.9	744.9	533.2	357.1	220.4	119.3	72.2	57.7	50.0	43.3	40.4
30°	762.2	589.0	395.6	245.4	141.5	80.8	58.7	51.0	44.3	39.5	37.5
31°	577.5	418.7	256.0	141.5	84.7	59.7	52.0	44.3	39.5	35.6	34.6
32°	381.1	253.1	135.7	81.8	61.6	52.0	45.2	39.5	35.6	32.7	31.8
33°	204.0	116.5	78.0	61.6	52.0	45.2	39.5	34.6	31.8	29.8	28.9
34°	103.9	76.0	63.5	52.9	44.3	39.5	34.6	30.8	28.9	26.9	26.0
35°	77.0	65.4	54.9	45.2	38.5	34.6	30.8	27.9	26.0	24.1	24.1
36°	65.4	54.9	45.2	39.5	34.6	30.8	27.9	24.1	23.1	22.1	21.2
37°	54.9	47.2	39.5	33.7	29.8	26.9	24.1	22.1	20.2	19.2	19.2
38°	46.2	40.4	33.7	28.9	26.0	24.1	21.2	19.2	18.3	17.3	17.3
39°	38.5	33.7	28.9	25.0	22.1	20.2	18.3	17.3	16.4	15.4	15.4
40°	31.8	28.9	24.1	21.2	19.2	17.3	16.4	15.4	14.4	13.5	14.4
42.5°	20.2	17.3	15.4	14.4	12.5	12.5	11.5	10.6	10.6	10.6	10.6
45°	11.5	10.6	9.6	9.6	8.7	8.7	8.7	7.7	8.7	8.7	8.7
47.5°	6.7	6.7	5.8	5.8	5.8	5.8	5.8	5.8	5.8	6.7	6.7
50°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	4.8	4.8
51°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	4.8
52°	3.8	3.8	3.8	2.9	2.9	2.9	2.9	2.9	3.8	3.8	3.8
53°	2.9	3.8	2.9	2.9	2.9	2.9	2.9	2.9	3.8	3.8	3.8
54°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.8	3.8
55°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.8	3.8
57.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.8
60°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.8



TEST NUMBER: P208836

CATALOG NUMBER: LDSQA6A30827D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
63°	2.9	2.9	2.9	2.9	2.9	3.8	2.9	2.9	2.9	3.8	3.8
64°	2.9	2.9	2.9	2.9	2.9	3.8	2.9	2.9	2.9	2.9	3.8
65°	2.9	2.9	3.8	3.8	3.8	3.8	2.9	2.9	2.9	2.9	3.8
66°	2.9	2.9	3.8	3.8	3.8	3.8	3.8	2.9	2.9	3.8	3.8
67.5°	2.9	3.8	3.8	3.8	3.8	3.8	3.8	2.9	3.8	3.8	3.8
70°	2.9	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
72.5°	2.9	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
75°	2.9	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
77.5°	2.9	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
80°	2.9	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
82.5°	2.9	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
85°	2.9	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
87.5°	2.9	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
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: P208836

CATALOG NUMBER: LDSQA6A30827D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
0°	134.7	134.7	134.7	134.7	134.7	134.7	134.7	134.7
2.5°	133.8	132.8	131.9	131.9	124.2	120.3	115.5	115.5
5°	131.9	130.9	129.0	127.0	114.5	108.8	103.0	102.0
7.5°	128.0	125.1	122.2	120.3	104.9	98.2	92.4	91.4
10°	120.3	116.5	113.6	111.6	95.3	88.5	83.7	83.7
11°	116.5	112.6	109.7	106.8	90.5	84.7	80.8	80.8
12°	112.6	108.8	104.9	103.0	86.6	81.8	78.0	77.0
13°	108.8	103.9	101.1	98.2	82.8	78.0	75.1	75.1
14°	104.9	100.1	96.2	93.4	78.9	74.1	72.2	72.2
15°	99.1	94.3	91.4	88.5	74.1	71.2	69.3	70.3
17.5°	85.7	81.8	78.9	76.0	64.5	63.5	63.5	64.5
20°	73.1	69.3	66.4	64.5	55.8	56.8	57.7	59.7
21°	68.3	64.5	61.6	59.7	52.9	53.9	55.8	57.7
22°	63.5	60.6	57.7	55.8	50.0	51.0	53.9	55.8
23°	58.7	55.8	53.9	52.0	47.2	49.1	52.0	53.9
24°	54.9	52.0	50.0	48.1	44.3	46.2	50.0	52.0
25°	51.0	48.1	46.2	45.2	41.4	44.3	48.1	50.0
26°	47.2	45.2	43.3	42.3	39.5	42.3	46.2	49.1
27°	43.3	41.4	40.4	39.5	36.6	40.4	44.3	47.2
28°	40.4	38.5	37.5	36.6	34.6	38.5	43.3	45.2
29°	37.5	35.6	34.6	33.7	32.7	36.6	41.4	44.3
30°	34.6	33.7	31.8	31.8	30.8	35.6	39.5	42.3
31°	31.8	30.8	29.8	28.9	28.9	33.7	38.5	41.4
32°	29.8	28.9	27.9	26.9	27.9	31.8	36.6	40.4
33°	26.9	26.0	26.0	25.0	26.0	30.8	35.6	39.5
34°	24.1	24.1	23.1	23.1	25.0	29.8	34.6	37.5
35°	22.1	21.2	21.2	21.2	24.1	27.9	33.7	36.6
36°	20.2	20.2	19.2	19.2	23.1	26.9	32.7	35.6
37°	18.3	18.3	18.3	17.3	21.2	26.0	30.8	34.6
38°	16.4	16.4	16.4	16.4	20.2	25.0	30.8	34.6
39°	14.4	14.4	15.4	15.4	19.2	24.1	28.9	33.7
40°	13.5	13.5	13.5	13.5	18.3	23.1	27.9	32.7
42.5°	10.6	10.6	11.5	11.5	16.4	21.2	26.0	29.8
45°	8.7	8.7	9.6	9.6	14.4	19.2	23.1	27.9
47.5°	6.7	6.7	7.7	7.7	12.5	17.3	21.2	25.0
50°	4.8	5.8	5.8	6.7	11.5	15.4	18.3	22.1
51°	4.8	4.8	5.8	5.8	10.6	14.4	17.3	21.2
52°	4.8	4.8	5.8	5.8	9.6	13.5	16.4	19.2
53°	3.8	4.8	4.8	5.8	9.6	13.5	15.4	18.3
54°	3.8	3.8	4.8	4.8	9.6	12.5	15.4	16.4
55°	3.8	3.8	4.8	4.8	8.7	12.5	14.4	15.4
57.5°	3.8	3.8	3.8	3.8	7.7	10.6	12.5	12.5
60°	3.8	3.8	3.8	3.8	7.7	9.6	11.5	8.7



TEST NUMBER: P208836

CATALOG NUMBER: LDSQA6A30827D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
63°	3.8	3.8	3.8	3.8	6.7	8.7	8.7	6.7
64°	3.8	3.8	3.8	3.8	6.7	8.7	8.7	6.7
65°	3.8	3.8	3.8	3.8	6.7	7.7	7.7	5.8
66°	3.8	3.8	3.8	3.8	6.7	7.7	7.7	5.8
67.5°	3.8	3.8	3.8	3.8	5.8	6.7	6.7	5.8
70°	3.8	3.8	3.8	3.8	5.8	6.7	5.8	4.8
72.5°	3.8	3.8	3.8	3.8	5.8	5.8	4.8	3.8
75°	3.8	3.8	3.8	3.8	4.8	4.8	3.8	3.8
77.5°	3.8	3.8	3.8	3.8	4.8	4.8	3.8	2.9
80°	3.8	3.8	3.8	3.8	4.8	3.8	2.9	1.9
82.5°	3.8	3.8	3.8	3.8	3.8	2.9	1.9	1.9
85°	3.8	3.8	3.8	3.8	3.8	2.9	1.9	1.0
87.5°	3.8	3.8	3.8	3.8	3.8	2.9	1.0	1.0
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°	3.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.8	3.8
62°	2.9	2.9	2.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9





61°	3.8	2.9	2.9	2.9	2.9	2.9	2.9	1.9	1.9	2.9	2.9
62°	2.9	2.9	2.9	2.9	2.9	2.9	1.9	1.9	1.9	2.9	2.9





61°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.8
62°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9





61°	3.8	3.8	3.8	3.8	6.7	9.6	10.6	7.7
62°	3.8	3.8	3.8	3.8	6.7	8.7	9.6	6.7



(END OF REPORT)