

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: P208833

Luminaire Tested: **LDSQA6A20930D010TE LARL15SP 6LSQA1H 30°**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208833
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: LDSQA6A20930D010TE LARL15SP 6LSQA1H 30°
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT, 30° Tilt
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1240.3 lumens
Efficiency: N/A
Efficacy: 43.1 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

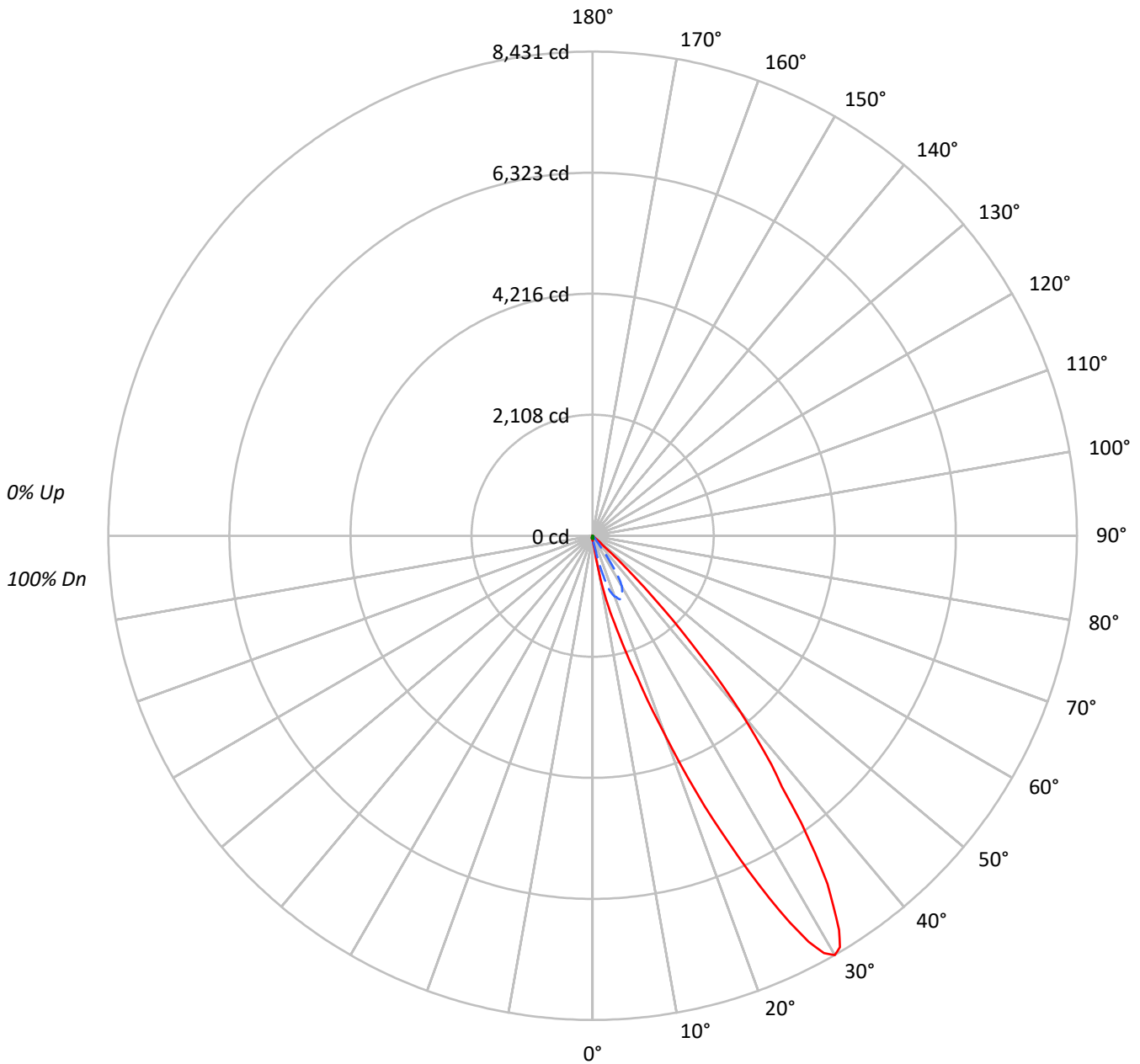
Input Watts (W): 28.81
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	3500	3500	3500
5°	5398	3315	2662
10°	28951	2947	2208
15°	79828	2380	1890
20°	169516	1782	1649
25°	306846	1297	1435
30°	419164	955	1273
35°	355309	673	1162
40°	225540	455	1113
45°	78170	353	1023
50°	4783	275	898
55°	826	218	698
60°	198	198	448
65°	122	234	357
70°	151	290	365
75°	0	383	383
80°	0	570	298
85°	0	1136	296



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	10.1	0.8
10°-20°	127.5	10.3
20°-30°	443.2	35.7
30°-40°	485.9	39.2
40°-50°	160.3	12.9
50°-60°	6.6	0.5
60°-70°	2.9	0.2
70°-80°	2.2	0.2
80°-90°	1.5	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°	580.9	46.8
0°-40°	1066.8	86.0
0°-60°	1233.7	99.5
0°-90°	1240.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1240.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	81	81	81	81	81	
5°	125	102	77	66	62	26
15°	1791	730	53	43	42	595
25°	6459	1197	27	27	30	3023
35°	6760	399	13	17	22	4063
45°	1284	20	6	12	17	1131
55°	11	2	3	8	9	16
65°	1	2	2	5	4	1
75°	0	2	2	3	2	0
85°	0	2	2	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°	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
2.5°	96.4	95.8	95.8	95.8	95.3	94.1	94.1	94.7	94.7	94.1	94.7
5°	124.9	123.7	123.1	122.6	120.2	119.7	117.3	119.1	117.3	115.6	115.6
7.5°	228.9	228.3	218.4	212.0	201.0	188.2	184.7	185.3	177.2	169.6	165.0
10°	662.2	663.4	634.3	646.0	604.1	587.3	555.3	543.7	514.7	490.3	460.6
11°	885.9	884.7	848.1	859.1	816.7	792.9	756.9	738.3	701.7	677.3	640.1
12°	1127.5	1092.1	1079.9	1090.3	1046.8	1015.4	971.8	948.0	902.7	877.7	833.0
13°	1366.8	1356.4	1315.7	1325.6	1280.9	1212.3	1194.3	1165.9	1113.0	1083.4	1033.4
14°	1574.2	1535.9	1523.1	1529.5	1485.3	1420.3	1402.3	1393.6	1312.2	1280.3	1224.5
15°	1790.9	1744.4	1726.4	1702.6	1676.5	1599.2	1573.1	1556.2	1472.0	1418.5	1382.5
17.5°	2578.6	2512.9	2468.8	2414.8	2357.3	2214.4	2155.1	2098.8	1951.2	1880.4	1773.5
20°	3699.7	3599.2	3485.9	3368.6	3255.9	3003.8	2857.4	2700.6	2499.0	2330.5	2202.7
21°	4242.3	4122.0	3985.5	3897.2	3685.2	3377.3	3179.8	2956.2	2697.1	2488.5	2327.6
22°	4811.0	4673.9	4560.0	4429.9	4136.0	3768.8	3520.8	3233.8	2898.7	2641.3	2438.0
23°	5363.4	5208.3	5071.8	4913.2	4573.4	4148.2	3853.6	3511.5	3107.8	2787.7	2536.2
24°	5890.8	5729.9	5573.1	5364.6	4975.4	4505.4	4159.2	3769.4	3307.0	2928.3	2628.5
25°	6459.0	6270.7	6068.0	5750.8	5355.3	4823.7	4425.2	3993.6	3484.2	3057.8	2706.4
26°	7024.7	6805.2	6501.4	6178.4	5705.5	5110.7	4656.4	4175.5	3635.2	3161.8	2763.9
27°	7555.7	7320.4	6963.8	6521.7	6019.8	5356.4	4847.0	4319.5	3740.4	3229.2	2790.6
28°	8009.9	7750.9	7353.5	6849.9	6253.9	5537.1	4973.0	4404.3	3790.9	3254.7	2794.1
29°	8309.1	8050.6	7622.5	7063.1	6386.3	5626.5	5023.0	4422.9	3788.0	3239.6	2770.3
30°	8431.1	8170.3	7732.9	7132.8	6411.3	5628.3	5002.7	4384.0	3737.5	3192.0	2723.2
31°	8359.6	8109.3	7665.5	7061.3	6323.0	5547.0	4917.3	4285.8	3637.0	3107.8	2652.9
32°	8095.9	7866.5	7440.1	6865.0	6141.2	5383.7	4770.3	4140.6	3495.2	2998.0	2565.2
33°	7693.9	7502.8	7067.2	6536.8	5898.4	5183.3	4591.4	3993.1	3324.5	2863.8	2471.7
34°	7308.8	7026.5	6640.2	6169.1	5587.0	4923.1	4369.5	3760.7	3143.2	2716.3	2364.8
35°	6759.9	6507.2	6150.5	5747.4	5224.6	4605.3	4051.7	3534.2	2940.5	2573.9	2252.7
36°	6180.7	5958.2	5699.1	5337.8	4837.7	4273.6	3767.1	3255.9	2731.9	2415.4	2134.2
37°	5473.2	5423.2	5182.2	4880.7	4434.0	3912.9	3436.6	2994.5	2536.8	2269.0	2004.1
38°	5055.5	4891.7	4671.0	4405.5	3967.5	3550.4	3117.7	2731.9	2359.6	2131.9	1856.0
39°	4524.0	4385.7	4182.4	3943.7	3566.7	3172.8	2820.8	2512.9	2213.2	1993.6	1696.2
40°	4012.8	3897.8	3711.3	3506.3	3164.1	2840.0	2564.6	2320.1	2068.0	1846.1	1538.2
42.5°	2530.4	2473.4	2396.8	2368.9	2246.3	2162.1	2061.6	1920.4	1698.5	1448.7	1233.8
45°	1283.8	1247.2	1246.0	1302.9	1341.9	1345.9	1336.6	1300.6	1156.6	1085.1	894.0
47.5°	216.1	205.6	212.0	250.4	304.4	370.0	443.2	533.3	629.7	609.4	469.4
50°	71.4	69.1	67.4	69.1	66.8	68.5	67.4	65.6	59.3	62.2	63.9
51°	44.1	47.1	45.3	46.5	45.9	47.6	47.6	47.1	43.0	40.1	36.6
52°	30.2	30.8	31.4	31.9	31.4	31.9	32.5	32.5	31.4	30.2	27.3
53°	21.5	21.5	22.1	22.1	22.1	22.7	22.7	22.7	22.1	22.1	21.5
54°	15.1	15.7	15.7	15.7	15.7	16.3	16.3	16.3	16.8	16.3	16.3
55°	11.0	11.0	11.0	11.0	11.0	11.0	11.6	11.6	12.2	12.2	11.6
57.5°	4.6	4.6	4.1	4.6	4.6	4.6	4.6	5.2	5.2	5.8	5.8
60°	2.3	2.3	2.3	2.3	1.7	2.3	2.3	2.3	2.3	2.9	2.9



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
63°	1.2	1.2	1.2	1.2	1.2	1.2	0.6	1.2	1.2	1.2	1.2
64°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	0.6	0.6	0.6	0.6
65°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	0.6	0.6	0.6	0.6
66°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	0.6	0.6
67.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	0.6
70°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
72.5°	1.2	0.6	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.6	0.6
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.6	0.6
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.6	0.6	0.6
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.6	0.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.6	0.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.6	0.6
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°	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
2.5°	92.9	94.1	92.4	93.5	91.2	91.2	89.5	90.0	89.5	88.3	88.3
5°	112.7	112.7	109.8	109.8	106.3	104.6	101.7	101.7	99.9	97.0	96.4
7.5°	154.5	148.7	142.3	140.0	133.0	128.4	123.1	120.8	115.6	111.0	107.5
10°	413.6	375.3	337.5	314.3	257.3	216.1	185.3	164.4	149.3	131.3	124.3
11°	583.2	534.4	485.0	436.8	381.1	324.7	289.3	233.5	198.1	158.0	138.8
12°	766.8	709.3	649.4	594.8	528.0	457.2	408.4	337.5	287.5	220.7	174.3
13°	955.0	889.9	818.5	761.6	686.0	604.7	528.0	462.4	400.2	313.1	245.1
14°	1136.2	1067.1	988.7	928.8	844.0	755.7	669.2	596.6	521.1	417.1	333.4
15°	1297.7	1248.3	1149.0	1089.8	998.6	904.5	808.0	730.2	640.7	525.1	428.7
17.5°	1635.8	1544.6	1423.2	1364.5	1273.9	1192.6	1088.0	1017.7	907.4	785.4	679.1
20°	2034.3	1900.1	1735.7	1612.0	1455.1	1312.2	1180.4	1125.2	1056.6	973.6	874.2
21°	2143.5	1998.9	1819.4	1693.3	1532.4	1385.4	1230.3	1142.6	1067.7	995.7	912.6
22°	2223.1	2070.3	1881.5	1750.2	1584.7	1438.9	1280.3	1175.1	1075.2	993.9	919.0
23°	2290.5	2127.8	1931.5	1788.6	1615.5	1465.0	1305.8	1201.3	1090.9	989.8	908.5
24°	2351.5	2173.1	1966.9	1813.6	1631.1	1474.3	1309.3	1205.9	1098.5	992.2	894.6
25°	2397.3	2201.6	1987.2	1826.3	1634.6	1471.4	1301.2	1197.2	1089.8	984.6	878.9
26°	2428.7	2214.9	1993.0	1825.7	1627.7	1459.8	1284.4	1179.2	1068.8	957.3	853.3
27°	2438.6	2211.5	1984.9	1812.4	1610.2	1437.1	1255.9	1144.9	1036.3	924.8	819.1
28°	2428.7	2197.5	1966.3	1786.2	1581.2	1400.0	1210.0	1099.6	1001.5	888.8	777.2
29°	2401.4	2172.5	1932.1	1747.3	1535.3	1339.5	1151.3	1056.1	961.4	834.2	706.9
30°	2359.0	2127.2	1882.7	1690.4	1467.3	1263.4	1098.5	1016.0	895.2	745.9	608.8
31°	2299.8	2068.6	1818.8	1614.9	1376.7	1189.1	1052.6	941.0	791.8	629.1	489.1
32°	2227.7	1998.9	1725.8	1514.4	1287.3	1130.4	971.3	826.6	661.1	490.9	356.7
33°	2150.5	1909.4	1619.5	1408.7	1210.6	1052.0	853.9	685.5	514.7	345.1	224.8
34°	2061.0	1799.6	1500.4	1302.4	1124.6	934.1	714.5	532.7	367.1	209.7	115.6
35°	1953.0	1664.3	1381.9	1210.6	1001.5	777.8	561.7	399.1	230.0	105.7	62.7
36°	1822.3	1524.8	1279.1	1092.7	857.4	624.5	405.5	254.4	123.7	62.2	49.4
37°	1656.1	1410.4	1171.1	952.1	701.7	468.8	261.4	138.3	70.9	50.5	41.8
38°	1512.6	1304.7	1055.5	798.7	540.8	321.2	158.6	77.8	55.8	42.4	34.9
39°	1388.9	1191.4	903.9	637.2	385.7	194.6	87.1	59.3	46.5	34.9	29.6
40°	1280.9	1029.9	743.5	478.1	248.0	108.0	62.7	49.4	37.8	29.0	23.8
42.5°	939.9	653.5	344.5	154.5	72.6	54.0	39.5	31.4	24.4	18.0	15.1
45°	558.2	293.9	104.0	63.3	45.9	34.3	25.0	19.8	15.1	11.0	9.3
47.5°	203.9	74.4	51.1	38.3	29.0	21.5	15.7	12.2	9.3	6.4	5.2
50°	41.8	36.0	27.9	22.7	16.8	12.8	9.3	7.0	5.2	4.1	3.5
51°	31.9	27.9	22.7	18.0	13.4	10.5	7.6	5.8	4.6	3.5	2.9
52°	24.4	21.5	17.4	14.5	11.0	8.1	5.8	4.6	3.5	2.3	2.3
53°	19.2	16.8	13.4	11.0	8.7	6.4	4.6	3.5	2.9	2.3	2.3
54°	14.5	12.8	10.5	8.7	7.0	5.2	3.5	2.9	2.3	2.3	1.7
55°	10.5	9.9	8.1	6.4	5.2	4.1	2.9	2.3	2.3	1.7	1.7
57.5°	5.2	4.6	4.1	3.5	2.9	2.3	1.7	1.7	1.7	1.7	1.2
60°	2.9	2.3	2.3	2.3	1.7	1.7	1.7	1.2	1.2	1.7	1.7



TEST NUMBER: P208833

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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°	1.2	1.2	1.2	1.2	1.7	1.2	1.2	1.2	1.7	1.7	1.7
64°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.7	1.7	1.7	1.7
65°	0.6	1.2	1.2	1.2	1.2	1.2	1.2	1.7	1.7	1.7	1.7
66°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.7	1.7	1.7	1.7
67.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.7	1.7	1.7	1.7
70°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.7	1.7	1.7	1.7
72.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.7	1.7	1.7	1.7
75°	0.6	0.6	1.2	1.2	1.2	1.2	1.2	1.7	1.7	1.7	1.7
77.5°	0.6	0.6	1.2	1.2	1.2	1.2	1.2	1.7	1.7	1.7	1.7
80°	0.6	0.6	0.6	1.2	1.2	1.2	1.2	1.7	1.7	1.7	1.7
82.5°	0.6	0.6	0.6	1.2	1.2	1.2	1.2	1.7	1.7	1.7	1.7
85°	0.6	0.6	0.6	1.2	1.2	1.2	1.2	1.7	1.7	1.7	1.7
87.5°	0.6	0.6	0.6	1.2	1.2	1.2	1.2	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: P208833

CATALOG NUMBER: LDSQA6A20930D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
2.5°	86.6	87.7	86.6	85.4	84.8	84.8	84.2	82.5	83.1	82.5	82.5
5°	93.5	94.1	91.8	90.0	88.9	87.7	86.6	84.2	83.6	83.1	82.5
7.5°	102.8	102.2	97.6	94.7	91.8	89.5	87.1	84.2	83.1	81.3	80.2
10°	116.2	112.1	104.6	99.3	95.3	90.6	87.1	82.5	80.2	77.8	76.1
11°	122.0	116.2	108.6	101.7	96.4	91.2	87.1	81.3	78.4	76.1	73.8
12°	140.0	124.3	112.1	104.6	97.6	91.8	86.6	80.7	77.3	73.8	71.4
13°	181.2	144.6	119.7	106.3	99.3	92.4	86.0	79.6	75.5	71.4	69.1
14°	248.6	185.9	138.3	112.7	99.9	92.4	85.4	78.4	73.8	69.7	66.8
15°	329.4	249.8	176.0	128.4	102.2	91.8	84.2	76.7	71.4	66.8	63.9
17.5°	554.8	450.8	338.1	240.5	148.7	100.5	79.6	70.9	64.5	59.3	55.8
20°	743.5	623.9	496.7	375.3	257.3	160.3	91.8	64.5	56.9	51.1	47.6
21°	784.8	672.7	537.9	410.7	288.7	185.9	104.0	64.5	54.0	48.2	44.7
22°	806.3	698.2	563.5	433.9	310.2	203.9	116.8	65.1	51.1	45.3	41.2
23°	802.8	704.0	573.3	440.9	320.1	212.6	122.0	65.6	48.2	42.4	38.3
24°	781.9	688.4	563.5	432.8	317.2	210.3	120.2	64.5	45.3	39.5	36.0
25°	755.7	657.6	536.7	410.7	298.6	195.8	111.5	60.4	43.0	37.2	33.7
26°	726.1	626.8	499.6	371.8	268.4	171.4	94.1	53.4	39.5	34.3	31.4
27°	690.7	586.7	453.7	330.5	226.5	138.3	75.5	45.3	36.6	31.4	29.0
28°	637.8	529.8	395.0	275.9	181.2	104.6	56.9	38.9	33.7	29.0	26.7
29°	558.8	449.6	321.8	215.5	133.0	72.0	43.6	34.9	30.2	26.1	24.4
30°	460.1	355.5	238.7	148.1	85.4	48.8	35.4	30.8	26.7	23.8	22.7
31°	348.5	252.7	154.5	85.4	51.1	36.0	31.4	26.7	23.8	21.5	20.9
32°	230.0	152.8	81.9	49.4	37.2	31.4	27.3	23.8	21.5	19.8	19.2
33°	123.1	70.3	47.1	37.2	31.4	27.3	23.8	20.9	19.2	18.0	17.4
34°	62.7	45.9	38.3	31.9	26.7	23.8	20.9	18.6	17.4	16.3	15.7
35°	46.5	39.5	33.1	27.3	23.2	20.9	18.6	16.8	15.7	14.5	14.5
36°	39.5	33.1	27.3	23.8	20.9	18.6	16.8	14.5	13.9	13.4	12.8
37°	33.1	28.5	23.8	20.3	18.0	16.3	14.5	13.4	12.2	11.6	11.6
38°	27.9	24.4	20.3	17.4	15.7	14.5	12.8	11.6	11.0	10.5	10.5
39°	23.2	20.3	17.4	15.1	13.4	12.2	11.0	10.5	9.9	9.3	9.3
40°	19.2	17.4	14.5	12.8	11.6	10.5	9.9	9.3	8.7	8.1	8.7
42.5°	12.2	10.5	9.3	8.7	7.6	7.6	7.0	6.4	6.4	6.4	6.4
45°	7.0	6.4	5.8	5.8	5.2	5.2	5.2	4.6	5.2	5.2	5.2
47.5°	4.1	4.1	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4.1	4.1
50°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.9	2.9
51°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.9
52°	2.3	2.3	2.3	1.7	1.7	1.7	1.7	1.7	2.3	2.3	2.3
53°	1.7	2.3	1.7	1.7	1.7	1.7	1.7	1.7	2.3	2.3	2.3
54°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	2.3	2.3
55°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	2.3	2.3
57.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	2.3
60°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	2.3



TEST NUMBER: P208833

CATALOG NUMBER: LDSQA6A20930D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
63°	1.7	1.7	1.7	1.7	1.7	2.3	1.7	1.7	1.7	2.3	2.3
64°	1.7	1.7	1.7	1.7	1.7	2.3	1.7	1.7	1.7	1.7	2.3
65°	1.7	1.7	2.3	2.3	2.3	2.3	1.7	1.7	1.7	1.7	2.3
66°	1.7	1.7	2.3	2.3	2.3	2.3	2.3	1.7	1.7	2.3	2.3
67.5°	1.7	2.3	2.3	2.3	2.3	2.3	2.3	1.7	2.3	2.3	2.3
70°	1.7	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
72.5°	1.7	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
75°	1.7	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
77.5°	1.7	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
80°	1.7	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
82.5°	1.7	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
85°	1.7	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
87.5°	1.7	2.3	2.3	2.3	2.3	2.3	2.3	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: P208833

CATALOG NUMBER: LDSQA6A20930D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
0°	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
2.5°	80.7	80.2	79.6	79.6	74.9	72.6	69.7	69.7
5°	79.6	79.0	77.8	76.7	69.1	65.6	62.2	61.6
7.5°	77.3	75.5	73.8	72.6	63.3	59.3	55.8	55.2
10°	72.6	70.3	68.5	67.4	57.5	53.4	50.5	50.5
11°	70.3	68.0	66.2	64.5	54.6	51.1	48.8	48.8
12°	68.0	65.6	63.3	62.2	52.3	49.4	47.1	46.5
13°	65.6	62.7	61.0	59.3	50.0	47.1	45.3	45.3
14°	63.3	60.4	58.1	56.3	47.6	44.7	43.6	43.6
15°	59.8	56.9	55.2	53.4	44.7	43.0	41.8	42.4
17.5°	51.7	49.4	47.6	45.9	38.9	38.3	38.3	38.9
20°	44.1	41.8	40.1	38.9	33.7	34.3	34.9	36.0
21°	41.2	38.9	37.2	36.0	31.9	32.5	33.7	34.9
22°	38.3	36.6	34.9	33.7	30.2	30.8	32.5	33.7
23°	35.4	33.7	32.5	31.4	28.5	29.6	31.4	32.5
24°	33.1	31.4	30.2	29.0	26.7	27.9	30.2	31.4
25°	30.8	29.0	27.9	27.3	25.0	26.7	29.0	30.2
26°	28.5	27.3	26.1	25.6	23.8	25.6	27.9	29.6
27°	26.1	25.0	24.4	23.8	22.1	24.4	26.7	28.5
28°	24.4	23.2	22.7	22.1	20.9	23.2	26.1	27.3
29°	22.7	21.5	20.9	20.3	19.8	22.1	25.0	26.7
30°	20.9	20.3	19.2	19.2	18.6	21.5	23.8	25.6
31°	19.2	18.6	18.0	17.4	17.4	20.3	23.2	25.0
32°	18.0	17.4	16.8	16.3	16.8	19.2	22.1	24.4
33°	16.3	15.7	15.7	15.1	15.7	18.6	21.5	23.8
34°	14.5	14.5	13.9	13.9	15.1	18.0	20.9	22.7
35°	13.4	12.8	12.8	12.8	14.5	16.8	20.3	22.1
36°	12.2	12.2	11.6	11.6	13.9	16.3	19.8	21.5
37°	11.0	11.0	11.0	10.5	12.8	15.7	18.6	20.9
38°	9.9	9.9	9.9	9.9	12.2	15.1	18.6	20.9
39°	8.7	8.7	9.3	9.3	11.6	14.5	17.4	20.3
40°	8.1	8.1	8.1	8.1	11.0	13.9	16.8	19.8
42.5°	6.4	6.4	7.0	7.0	9.9	12.8	15.7	18.0
45°	5.2	5.2	5.8	5.8	8.7	11.6	13.9	16.8
47.5°	4.1	4.1	4.6	4.6	7.6	10.5	12.8	15.1
50°	2.9	3.5	3.5	4.1	7.0	9.3	11.0	13.4
51°	2.9	2.9	3.5	3.5	6.4	8.7	10.5	12.8
52°	2.9	2.9	3.5	3.5	5.8	8.1	9.9	11.6
53°	2.3	2.9	2.9	3.5	5.8	8.1	9.3	11.0
54°	2.3	2.3	2.9	2.9	5.8	7.6	9.3	9.9
55°	2.3	2.3	2.9	2.9	5.2	7.6	8.7	9.3
57.5°	2.3	2.3	2.3	2.3	4.6	6.4	7.6	7.6
60°	2.3	2.3	2.3	2.3	4.6	5.8	7.0	5.2



TEST NUMBER: P208833

CATALOG NUMBER: LDSQA6A20930D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
63°	2.3	2.3	2.3	2.3	4.1	5.2	5.2	4.1
64°	2.3	2.3	2.3	2.3	4.1	5.2	5.2	4.1
65°	2.3	2.3	2.3	2.3	4.1	4.6	4.6	3.5
66°	2.3	2.3	2.3	2.3	4.1	4.6	4.6	3.5
67.5°	2.3	2.3	2.3	2.3	3.5	4.1	4.1	3.5
70°	2.3	2.3	2.3	2.3	3.5	4.1	3.5	2.9
72.5°	2.3	2.3	2.3	2.3	3.5	3.5	2.9	2.3
75°	2.3	2.3	2.3	2.3	2.9	2.9	2.3	2.3
77.5°	2.3	2.3	2.3	2.3	2.9	2.9	2.3	1.7
80°	2.3	2.3	2.3	2.3	2.9	2.3	1.7	1.2
82.5°	2.3	2.3	2.3	2.3	2.3	1.7	1.2	1.2
85°	2.3	2.3	2.3	2.3	2.3	1.7	1.2	0.6
87.5°	2.3	2.3	2.3	2.3	2.3	1.7	0.6	0.6
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°	2.3	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	2.3	2.3
62°	1.7	1.7	1.7	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2





61°	2.3	1.7	1.7	1.7	1.7	1.7	1.7	1.2	1.2	1.7	1.7
62°	1.7	1.7	1.7	1.7	1.7	1.7	1.2	1.2	1.2	1.7	1.7





61°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	2.3
62°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7





61°	2.3	2.3	2.3	2.3	4.1	5.8	6.4	4.6
62°	2.3	2.3	2.3	2.3	4.1	5.2	5.8	4.1



(END OF REPORT)