

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: P208827

Luminaire Tested: **LDSQA6A15940D010TE LARL15SP 6LSQA1H 30°**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208827
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: LDSQA6A15940D010TE 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 / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1116.0 lumens
Efficiency: N/A
Efficacy: 51.2 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

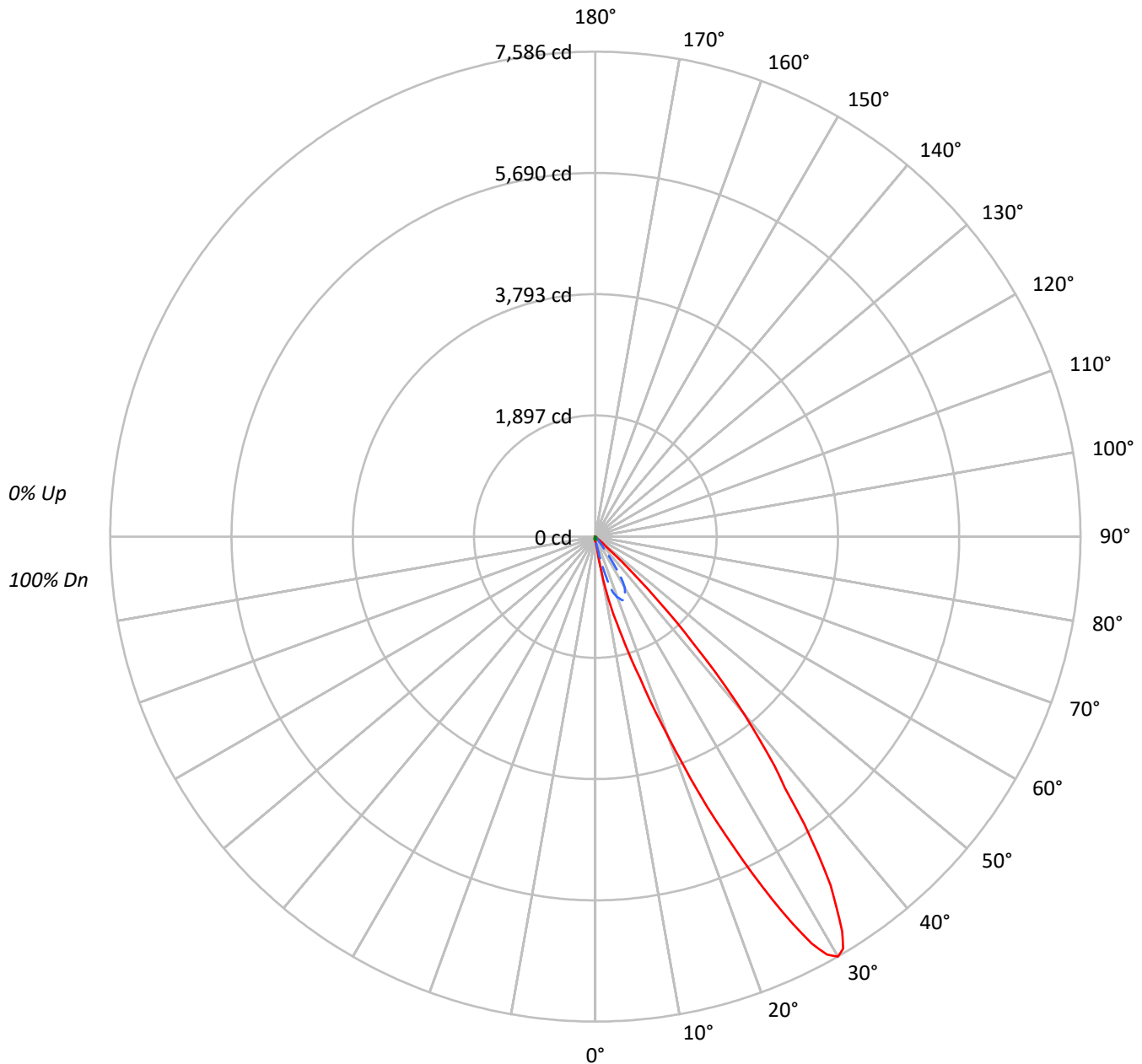
Input Watts (W): 21.79
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	3152	3152	3152
5°	4858	2982	2394
10°	26053	2649	1989
15°	71832	2144	1703
20°	152531	1604	1485
25°	276104	1169	1292
30°	377168	855	1143
35°	319709	604	1046
40°	202946	410	1000
45°	70340	317	926
50°	4307	248	804
55°	743	195	631
60°	181	181	405
65°	102	214	316
70°	126	264	327
75°	0	349	349
80°	0	521	248
85°	0	1037	247



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	9.1	0.8
10°-20°	114.8	10.3
20°-30°	398.8	35.7
30°-40°	437.2	39.2
40°-50°	144.2	12.9
50°-60°	6.0	0.5
60°-70°	2.6	0.2
70°-80°	2.0	0.2
80°-90°	1.3	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°	522.7	46.8
0°-40°	959.9	86.0
0°-60°	1110.1	99.5
0°-90°	1116.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1116.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	73	73	73	73	73	
5°	112	92	69	59	55	24
15°	1612	657	48	39	38	536
25°	5812	1077	25	24	27	2720
35°	6083	359	12	15	20	3656
45°	1155	18	5	10	15	1018
55°	10	2	3	7	8	14
65°	1	2	2	4	3	1
75°	0	2	2	3	2	0
85°	0	2	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°	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2
2.5°	86.8	86.2	86.2	86.2	85.7	84.7	84.7	85.2	85.2	84.7	85.2
5°	112.4	111.3	110.8	110.3	108.2	107.7	105.6	107.2	105.6	104.0	104.0
7.5°	205.9	205.4	196.5	190.8	180.9	169.4	166.2	166.7	159.4	152.6	148.4
10°	595.9	596.9	570.8	581.2	543.6	528.4	499.7	489.2	463.1	441.2	414.5
11°	797.1	796.1	763.1	773.1	734.9	713.5	681.1	664.3	631.4	609.5	576.0
12°	1014.6	982.7	971.7	981.1	941.9	913.7	874.5	853.0	812.3	789.8	749.5
13°	1229.9	1220.5	1183.9	1192.8	1152.5	1090.9	1074.7	1049.1	1001.5	974.8	929.9
14°	1416.5	1382.0	1370.5	1376.3	1336.5	1278.0	1261.8	1253.9	1180.8	1152.0	1101.8
15°	1611.5	1569.7	1553.5	1532.0	1508.5	1439.0	1415.5	1400.3	1324.5	1276.4	1244.0
17.5°	2320.2	2261.2	2221.5	2172.8	2121.1	1992.5	1939.2	1888.5	1755.7	1692.0	1595.8
20°	3329.0	3238.6	3136.7	3031.1	2929.7	2702.9	2571.1	2430.0	2248.6	2097.1	1982.1
21°	3817.2	3709.0	3586.2	3506.8	3316.0	3039.0	2861.2	2660.0	2426.9	2239.2	2094.4
22°	4329.0	4205.6	4103.2	3986.1	3721.6	3391.2	3168.1	2909.8	2608.3	2376.7	2193.8
23°	4826.0	4686.5	4563.7	4421.0	4115.2	3732.6	3467.6	3159.7	2796.4	2508.4	2282.1
24°	5300.7	5155.9	5014.7	4827.1	4476.9	4054.0	3742.5	3391.8	2975.7	2634.9	2365.2
25°	5811.9	5642.5	5460.1	5174.7	4818.7	4340.5	3981.9	3593.5	3135.1	2751.5	2435.2
26°	6321.0	6123.4	5850.0	5559.4	5133.9	4598.7	4189.9	3757.1	3271.0	2845.0	2487.0
27°	6798.7	6587.0	6266.1	5868.3	5416.7	4819.8	4361.4	3886.8	3365.6	2905.7	2511.0
28°	7207.5	6974.3	6616.8	6163.6	5627.3	4982.3	4474.8	3963.1	3411.1	2928.7	2514.2
29°	7476.6	7244.0	6858.8	6355.5	5746.5	5062.8	4519.7	3979.8	3408.5	2915.1	2492.7
30°	7586.4	7351.7	6958.1	6418.2	5769.0	5064.4	4501.5	3944.8	3363.0	2872.2	2450.4
31°	7522.1	7296.8	6897.5	6353.9	5689.5	4991.2	4424.6	3856.4	3272.6	2796.4	2387.2
32°	7284.8	7078.3	6694.7	6177.2	5525.9	4844.3	4292.4	3725.8	3145.1	2697.6	2308.2
33°	6923.1	6751.1	6359.1	5881.9	5307.5	4664.0	4131.4	3593.0	2991.4	2576.9	2224.1
34°	6576.6	6322.5	5974.9	5551.0	5027.3	4429.8	3931.7	3383.9	2828.3	2444.1	2127.9
35°	6082.6	5855.2	5534.3	5171.6	4701.1	4143.9	3645.8	3180.1	2645.9	2316.1	2027.0
36°	5561.5	5361.3	5128.2	4803.1	4353.0	3845.5	3389.7	2929.7	2458.2	2173.4	1920.4
37°	4924.8	4879.9	4663.0	4391.7	3989.7	3520.9	3092.3	2694.5	2282.6	2041.6	1803.3
38°	4549.0	4401.6	4203.0	3964.1	3570.0	3194.7	2805.3	2458.2	2123.2	1918.3	1670.0
39°	4070.8	3946.4	3763.4	3548.6	3209.4	2855.0	2538.2	2261.2	1991.5	1793.9	1526.3
40°	3610.8	3507.3	3339.5	3155.0	2847.1	2555.5	2307.7	2087.6	1860.8	1661.1	1384.1
42.5°	2276.9	2225.6	2156.6	2131.6	2021.3	1945.5	1855.0	1728.0	1528.4	1303.6	1110.2
45°	1155.2	1122.2	1121.2	1172.4	1207.4	1211.1	1202.7	1170.3	1040.7	976.4	804.4
47.5°	194.4	185.0	190.8	225.3	273.9	333.0	398.8	479.8	566.6	548.3	422.3
50°	64.3	62.2	60.6	62.2	60.1	61.7	60.6	59.1	53.3	55.9	57.5
51°	39.7	42.3	40.8	41.8	41.3	42.9	42.9	42.3	38.7	36.1	32.9
52°	27.2	27.7	28.2	28.7	28.2	28.7	29.3	29.3	28.2	27.2	24.6
53°	19.3	19.3	19.9	19.9	19.9	20.4	20.4	20.4	19.9	19.9	19.3
54°	13.6	14.1	14.1	14.1	14.1	14.6	14.6	14.6	15.2	14.6	14.6
55°	9.9	9.9	9.9	9.9	9.9	9.9	10.5	10.5	11.0	11.0	10.5
57.5°	4.2	4.2	3.7	4.2	4.2	4.2	4.2	4.7	4.7	5.2	5.2
60°	2.1	2.1	2.1	2.1	1.6	2.1	2.1	2.1	2.1	2.6	2.6



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
63°	1.0	1.0	1.0	1.0	1.0	1.0	0.5	1.0	1.0	1.0	1.0
64°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5
65°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5
66°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5
67.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5
70°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
72.5°	1.0	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5
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°	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2
2.5°	83.6	84.7	83.1	84.2	82.1	82.1	80.5	81.0	80.5	79.4	79.4
5°	101.4	101.4	98.8	98.8	95.7	94.1	91.5	91.5	89.9	87.3	86.8
7.5°	139.0	133.8	128.1	126.0	119.7	115.5	110.8	108.7	104.0	99.8	96.7
10°	372.2	337.7	303.7	282.8	231.6	194.4	166.7	147.9	134.3	118.1	111.9
11°	524.8	480.9	436.5	393.1	342.9	292.2	260.3	210.1	178.2	142.2	124.9
12°	690.0	638.2	584.4	535.2	475.1	411.4	367.5	303.7	258.7	198.6	156.8
13°	859.3	800.8	736.5	685.3	617.3	544.1	475.1	416.1	360.1	281.7	220.6
14°	1022.4	960.2	889.6	835.8	759.5	680.0	602.1	536.8	468.9	375.3	300.0
15°	1167.7	1123.3	1033.9	980.6	898.5	813.8	727.1	657.0	576.5	472.5	385.7
17.5°	1471.9	1389.8	1280.6	1227.8	1146.3	1073.1	979.0	915.8	816.5	706.7	611.0
20°	1830.5	1709.7	1561.8	1450.5	1309.4	1180.8	1062.1	1012.5	950.8	876.0	786.7
21°	1928.7	1798.6	1637.1	1523.7	1378.9	1246.6	1107.1	1028.1	960.7	895.9	821.2
22°	2000.4	1862.9	1693.0	1574.9	1425.9	1294.7	1152.0	1057.4	967.5	894.3	826.9
23°	2061.0	1914.6	1738.0	1609.4	1453.6	1318.2	1175.0	1080.9	981.6	890.7	817.5
24°	2115.9	1955.4	1769.8	1631.9	1467.7	1326.6	1178.2	1085.1	988.4	892.8	805.0
25°	2157.2	1981.0	1788.1	1643.4	1470.9	1324.0	1170.8	1077.3	980.6	886.0	790.8
26°	2185.4	1993.0	1793.4	1642.8	1464.6	1313.5	1155.7	1061.1	961.8	861.4	767.8
27°	2194.3	1989.9	1786.1	1630.8	1448.9	1293.1	1130.1	1030.2	932.5	832.1	737.0
28°	2185.4	1977.4	1769.3	1607.3	1422.8	1259.7	1088.8	989.5	901.1	799.7	699.4
29°	2160.8	1954.9	1738.5	1572.3	1381.5	1205.3	1036.0	950.3	865.1	750.6	636.1
30°	2122.7	1914.1	1694.1	1521.0	1320.3	1136.9	988.4	914.2	805.5	671.1	547.8
31°	2069.4	1861.3	1636.6	1453.1	1238.8	1070.0	947.1	846.8	712.4	566.1	440.1
32°	2004.5	1798.6	1552.9	1362.7	1158.3	1017.2	873.9	743.8	594.8	441.7	320.9
33°	1935.0	1718.1	1457.3	1267.5	1089.3	946.6	768.4	616.8	463.1	310.5	202.3
34°	1854.5	1619.3	1350.1	1171.9	1011.9	840.5	642.9	479.3	330.3	188.7	104.0
35°	1757.3	1497.5	1243.5	1089.3	901.1	699.9	505.4	359.1	207.0	95.1	56.5
36°	1639.7	1372.1	1151.0	983.2	771.5	561.9	364.8	228.9	111.3	55.9	44.4
37°	1490.2	1269.1	1053.8	856.7	631.4	421.8	235.2	124.4	63.8	45.5	37.6
38°	1361.1	1174.0	949.7	718.7	486.6	289.1	142.7	70.0	50.2	38.2	31.4
39°	1249.8	1072.0	813.3	573.4	347.1	175.1	78.4	53.3	41.8	31.4	26.7
40°	1152.5	926.7	669.1	430.2	223.2	97.2	56.5	44.4	34.0	26.1	21.4
42.5°	845.7	588.0	310.0	139.0	65.3	48.6	35.5	28.2	22.0	16.2	13.6
45°	502.3	264.5	93.6	57.0	41.3	30.8	22.5	17.8	13.6	9.9	8.4
47.5°	183.5	66.9	46.0	34.5	26.1	19.3	14.1	11.0	8.4	5.7	4.7
50°	37.6	32.4	25.1	20.4	15.2	11.5	8.4	6.3	4.7	3.7	3.1
51°	28.7	25.1	20.4	16.2	12.0	9.4	6.8	5.2	4.2	3.1	2.6
52°	22.0	19.3	15.7	13.1	9.9	7.3	5.2	4.2	3.1	2.1	2.1
53°	17.2	15.2	12.0	9.9	7.8	5.7	4.2	3.1	2.6	2.1	2.1
54°	13.1	11.5	9.4	7.8	6.3	4.7	3.1	2.6	2.1	2.1	1.6
55°	9.4	8.9	7.3	5.7	4.7	3.7	2.6	2.1	2.1	1.6	1.6
57.5°	4.7	4.2	3.7	3.1	2.6	2.1	1.6	1.6	1.6	1.6	1.0
60°	2.6	2.1	2.1	2.1	1.6	1.6	1.6	1.0	1.0	1.6	1.6



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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°	1.0	1.0	1.0	1.0	1.6	1.0	1.0	1.0	1.6	1.6	1.6
64°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.6	1.6	1.6	1.6
65°	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.6	1.6	1.6	1.6
66°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.6	1.6	1.6	1.6
67.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.6	1.6	1.6	1.6
70°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.6	1.6	1.6	1.6
72.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.6	1.6	1.6	1.6
75°	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.6	1.6	1.6	1.6
77.5°	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.6	1.6	1.6	1.6
80°	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.6	1.6	1.6	1.6
82.5°	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.6	1.6	1.6	1.6
85°	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.6	1.6	1.6	1.6
87.5°	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.6	1.6	1.6	1.6
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: P208827

CATALOG NUMBER: LDSQA6A15940D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2
2.5°	77.9	78.9	77.9	76.8	76.3	76.3	75.8	74.2	74.7	74.2	74.2
5°	84.2	84.7	82.6	81.0	80.0	78.9	77.9	75.8	75.3	74.7	74.2
7.5°	92.5	92.0	87.8	85.2	82.6	80.5	78.4	75.8	74.7	73.2	72.1
10°	104.5	100.9	94.1	89.4	85.7	81.5	78.4	74.2	72.1	70.0	68.5
11°	109.8	104.5	97.7	91.5	86.8	82.1	78.4	73.2	70.6	68.5	66.4
12°	126.0	111.9	100.9	94.1	87.8	82.6	77.9	72.7	69.5	66.4	64.3
13°	163.1	130.2	107.7	95.7	89.4	83.1	77.4	71.6	68.0	64.3	62.2
14°	223.7	167.3	124.4	101.4	89.9	83.1	76.8	70.6	66.4	62.7	60.1
15°	296.4	224.8	158.4	115.5	92.0	82.6	75.8	69.0	64.3	60.1	57.5
17.5°	499.2	405.6	304.2	216.4	133.8	90.4	71.6	63.8	58.0	53.3	50.2
20°	669.1	561.4	446.9	337.7	231.6	144.3	82.6	58.0	51.2	46.0	42.9
21°	706.2	605.3	484.0	369.5	259.8	167.3	93.6	58.0	48.6	43.4	40.2
22°	725.5	628.3	507.0	390.5	279.1	183.5	105.1	58.5	46.0	40.8	37.1
23°	722.4	633.5	515.9	396.7	288.0	191.3	109.8	59.1	43.4	38.2	34.5
24°	703.5	619.4	507.0	389.4	285.4	189.2	108.2	58.0	40.8	35.5	32.4
25°	680.0	591.7	483.0	369.5	268.7	176.1	100.4	54.4	38.7	33.5	30.3
26°	653.4	564.0	449.5	334.5	241.5	154.2	84.7	48.1	35.5	30.8	28.2
27°	621.5	527.9	408.2	297.4	203.9	124.4	68.0	40.8	32.9	28.2	26.1
28°	573.9	476.7	355.4	248.3	163.1	94.1	51.2	35.0	30.3	26.1	24.0
29°	502.8	404.6	289.6	193.9	119.7	64.8	39.2	31.4	27.2	23.5	22.0
30°	414.0	319.9	214.8	133.3	76.8	43.9	31.9	27.7	24.0	21.4	20.4
31°	313.6	227.4	139.0	76.8	46.0	32.4	28.2	24.0	21.4	19.3	18.8
32°	207.0	137.5	73.7	44.4	33.5	28.2	24.6	21.4	19.3	17.8	17.2
33°	110.8	63.2	42.3	33.5	28.2	24.6	21.4	18.8	17.2	16.2	15.7
34°	56.5	41.3	34.5	28.7	24.0	21.4	18.8	16.7	15.7	14.6	14.1
35°	41.8	35.5	29.8	24.6	20.9	18.8	16.7	15.2	14.1	13.1	13.1
36°	35.5	29.8	24.6	21.4	18.8	16.7	15.2	13.1	12.5	12.0	11.5
37°	29.8	25.6	21.4	18.3	16.2	14.6	13.1	12.0	11.0	10.5	10.5
38°	25.1	22.0	18.3	15.7	14.1	13.1	11.5	10.5	9.9	9.4	9.4
39°	20.9	18.3	15.7	13.6	12.0	11.0	9.9	9.4	8.9	8.4	8.4
40°	17.2	15.7	13.1	11.5	10.5	9.4	8.9	8.4	7.8	7.3	7.8
42.5°	11.0	9.4	8.4	7.8	6.8	6.8	6.3	5.7	5.7	5.7	5.7
45°	6.3	5.7	5.2	5.2	4.7	4.7	4.7	4.2	4.7	4.7	4.7
47.5°	3.7	3.7	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.7	3.7
50°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.6	2.6
51°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.6
52°	2.1	2.1	2.1	1.6	1.6	1.6	1.6	1.6	2.1	2.1	2.1
53°	1.6	2.1	1.6	1.6	1.6	1.6	1.6	1.6	2.1	2.1	2.1
54°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.1	2.1
55°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.1	2.1
57.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.1
60°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.1



TEST NUMBER: P208827

CATALOG NUMBER: LDSQA6A15940D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
63°	1.6	1.6	1.6	1.6	1.6	2.1	1.6	1.6	1.6	2.1	2.1
64°	1.6	1.6	1.6	1.6	1.6	2.1	1.6	1.6	1.6	1.6	2.1
65°	1.6	1.6	2.1	2.1	2.1	2.1	1.6	1.6	1.6	1.6	2.1
66°	1.6	1.6	2.1	2.1	2.1	2.1	2.1	1.6	1.6	2.1	2.1
67.5°	1.6	2.1	2.1	2.1	2.1	2.1	2.1	1.6	2.1	2.1	2.1
70°	1.6	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
72.5°	1.6	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
75°	1.6	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
77.5°	1.6	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
80°	1.6	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
82.5°	1.6	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
85°	1.6	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
87.5°	1.6	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
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: P208827

CATALOG NUMBER: LDSQA6A15940D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
0°	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2
2.5°	72.7	72.1	71.6	71.6	67.4	65.3	62.7	62.7
5°	71.6	71.1	70.0	69.0	62.2	59.1	55.9	55.4
7.5°	69.5	68.0	66.4	65.3	57.0	53.3	50.2	49.7
10°	65.3	63.2	61.7	60.6	51.7	48.1	45.5	45.5
11°	63.2	61.2	59.6	58.0	49.1	46.0	43.9	43.9
12°	61.2	59.1	57.0	55.9	47.0	44.4	42.3	41.8
13°	59.1	56.5	54.9	53.3	45.0	42.3	40.8	40.8
14°	57.0	54.4	52.3	50.7	42.9	40.2	39.2	39.2
15°	53.8	51.2	49.7	48.1	40.2	38.7	37.6	38.2
17.5°	46.5	44.4	42.9	41.3	35.0	34.5	34.5	35.0
20°	39.7	37.6	36.1	35.0	30.3	30.8	31.4	32.4
21°	37.1	35.0	33.5	32.4	28.7	29.3	30.3	31.4
22°	34.5	32.9	31.4	30.3	27.2	27.7	29.3	30.3
23°	31.9	30.3	29.3	28.2	25.6	26.7	28.2	29.3
24°	29.8	28.2	27.2	26.1	24.0	25.1	27.2	28.2
25°	27.7	26.1	25.1	24.6	22.5	24.0	26.1	27.2
26°	25.6	24.6	23.5	23.0	21.4	23.0	25.1	26.7
27°	23.5	22.5	22.0	21.4	19.9	22.0	24.0	25.6
28°	22.0	20.9	20.4	19.9	18.8	20.9	23.5	24.6
29°	20.4	19.3	18.8	18.3	17.8	19.9	22.5	24.0
30°	18.8	18.3	17.2	17.2	16.7	19.3	21.4	23.0
31°	17.2	16.7	16.2	15.7	15.7	18.3	20.9	22.5
32°	16.2	15.7	15.2	14.6	15.2	17.2	19.9	22.0
33°	14.6	14.1	14.1	13.6	14.1	16.7	19.3	21.4
34°	13.1	13.1	12.5	12.5	13.6	16.2	18.8	20.4
35°	12.0	11.5	11.5	11.5	13.1	15.2	18.3	19.9
36°	11.0	11.0	10.5	10.5	12.5	14.6	17.8	19.3
37°	9.9	9.9	9.9	9.4	11.5	14.1	16.7	18.8
38°	8.9	8.9	8.9	8.9	11.0	13.6	16.7	18.8
39°	7.8	7.8	8.4	8.4	10.5	13.1	15.7	18.3
40°	7.3	7.3	7.3	7.3	9.9	12.5	15.2	17.8
42.5°	5.7	5.7	6.3	6.3	8.9	11.5	14.1	16.2
45°	4.7	4.7	5.2	5.2	7.8	10.5	12.5	15.2
47.5°	3.7	3.7	4.2	4.2	6.8	9.4	11.5	13.6
50°	2.6	3.1	3.1	3.7	6.3	8.4	9.9	12.0
51°	2.6	2.6	3.1	3.1	5.7	7.8	9.4	11.5
52°	2.6	2.6	3.1	3.1	5.2	7.3	8.9	10.5
53°	2.1	2.6	2.6	3.1	5.2	7.3	8.4	9.9
54°	2.1	2.1	2.6	2.6	5.2	6.8	8.4	8.9
55°	2.1	2.1	2.6	2.6	4.7	6.8	7.8	8.4
57.5°	2.1	2.1	2.1	2.1	4.2	5.7	6.8	6.8
60°	2.1	2.1	2.1	2.1	4.2	5.2	6.3	4.7



TEST NUMBER: P208827

CATALOG NUMBER: LDSQA6A15940D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
63°	2.1	2.1	2.1	2.1	3.7	4.7	4.7	3.7
64°	2.1	2.1	2.1	2.1	3.7	4.7	4.7	3.7
65°	2.1	2.1	2.1	2.1	3.7	4.2	4.2	3.1
66°	2.1	2.1	2.1	2.1	3.7	4.2	4.2	3.1
67.5°	2.1	2.1	2.1	2.1	3.1	3.7	3.7	3.1
70°	2.1	2.1	2.1	2.1	3.1	3.7	3.1	2.6
72.5°	2.1	2.1	2.1	2.1	3.1	3.1	2.6	2.1
75°	2.1	2.1	2.1	2.1	2.6	2.6	2.1	2.1
77.5°	2.1	2.1	2.1	2.1	2.6	2.6	2.1	1.6
80°	2.1	2.1	2.1	2.1	2.6	2.1	1.6	1.0
82.5°	2.1	2.1	2.1	2.1	2.1	1.6	1.0	1.0
85°	2.1	2.1	2.1	2.1	2.1	1.6	1.0	0.5
87.5°	2.1	2.1	2.1	2.1	2.1	1.6	0.5	0.5
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°	2.1	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.1	2.1
62°	1.6	1.6	1.6	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0





61°	2.1	1.6	1.6	1.6	1.6	1.6	1.6	1.0	1.0	1.6	1.6
62°	1.6	1.6	1.6	1.6	1.6	1.6	1.0	1.0	1.0	1.6	1.6





61°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.1
62°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6





61°	2.1	2.1	2.1	2.1	3.7	5.2	5.7	4.2
62°	2.1	2.1	2.1	2.1	3.7	4.7	5.2	3.7



(END OF REPORT)