

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: P208843

Luminaire Tested: **LDSQA6A30940D010TE LARL15SP 6LSQA1H 30°**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208843
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: LDSQA6A30940D010TE 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: 1881.1 lumens
Efficiency: N/A
Efficacy: 42.2 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

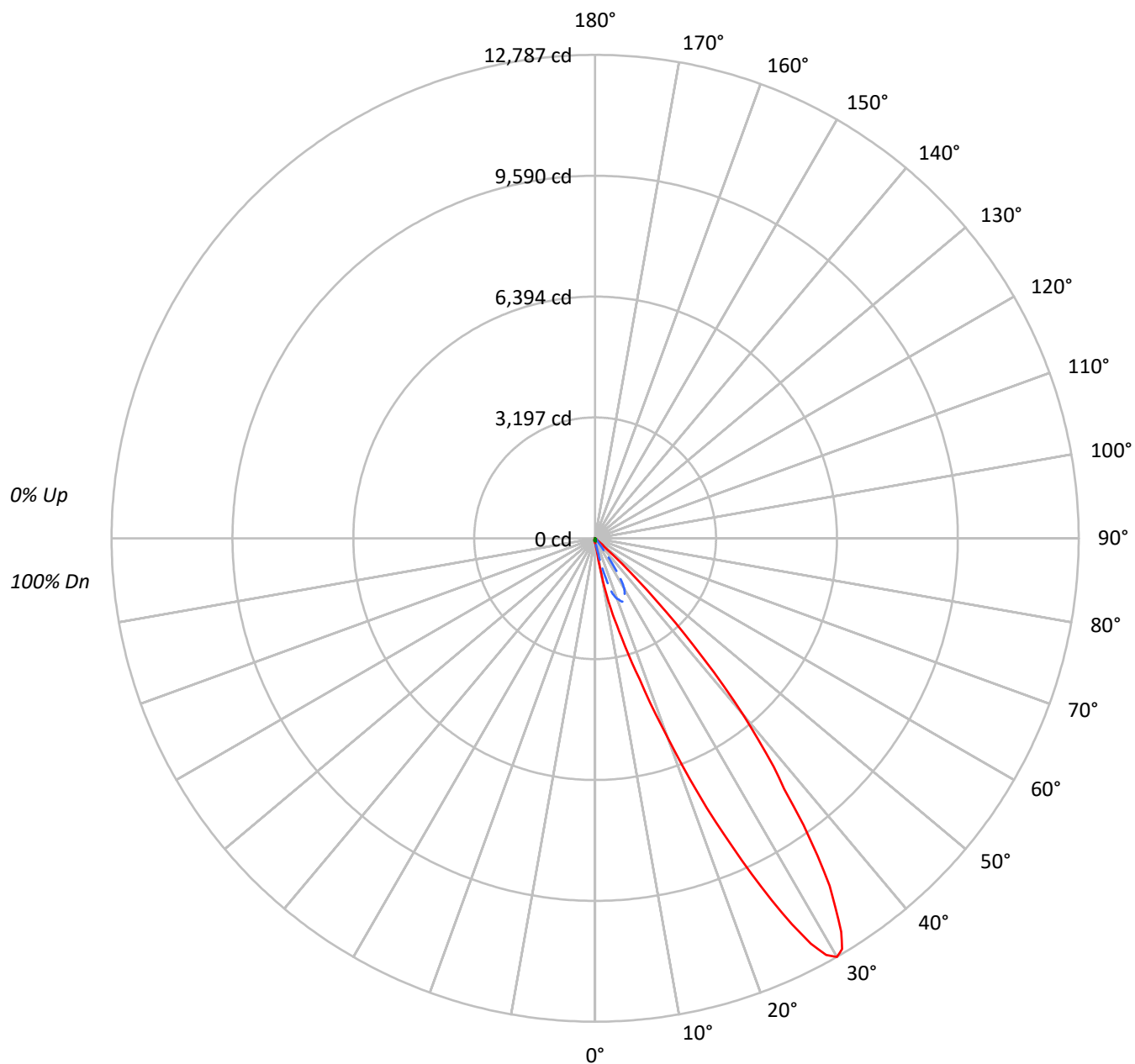
Input Watts (W): 44.62
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	5309	5309	5309
5°	8186	5027	4037
10°	43912	4468	3349
15°	121073	3615	2866
20°	257099	2703	2502
25°	465375	1967	2176
30°	635724	1447	1929
35°	538874	1020	1761
40°	342065	691	1686
45°	118553	536	1553
50°	7261	415	1360
55°	1254	330	1058
60°	301	301	680
65°	183	357	540
70°	227	441	554
75°	0	582	582
80°	0	868	446
85°	0	1729	445



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	15.3	0.8
10°-20°	193.4	10.3
20°-30°	672.3	35.7
30°-40°	737.0	39.2
40°-50°	243.1	12.9
50°-60°	10.1	0.5
60°-70°	4.4	0.2
70°-80°	3.4	0.2
80°-90°	2.2	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°	881.0	46.8
0°-40°	1618.0	86.0
0°-60°	1871.1	99.5
0°-90°	1881.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1881.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	123	123	123	123	123	
5°	189	154	116	100	93	40
15°	2716	1107	81	65	64	903
25°	9796	1816	41	40	46	4585
35°	10252	605	19	26	34	6162
45°	1947	30	9	18	26	1715
55°	17	4	4	12	14	24
65°	2	3	4	7	5	2
75°	0	3	4	4	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°	123.3	123.3	123.3	123.3	123.3	123.3	123.3	123.3	123.3	123.3	123.3
2.5°	146.2	145.4	145.4	145.4	144.5	142.7	142.7	143.6	143.6	142.7	143.6
5°	189.4	187.7	186.8	185.9	182.4	181.5	178.0	180.6	178.0	175.3	175.3
7.5°	347.1	346.2	331.3	321.6	304.8	285.4	280.2	281.0	268.7	257.3	250.2
10°	1004.4	1006.1	962.1	979.7	916.3	890.7	842.2	824.6	780.6	743.6	698.6
11°	1343.5	1341.8	1286.3	1303.0	1238.7	1202.6	1148.0	1119.8	1064.3	1027.3	970.9
12°	1710.0	1656.3	1637.8	1653.7	1587.6	1540.0	1473.9	1437.8	1369.1	1331.2	1263.4
13°	2073.0	2057.2	1995.5	2010.5	1942.6	1838.7	1811.4	1768.2	1688.0	1643.1	1567.3
14°	2387.5	2329.4	2310.0	2319.7	2252.7	2154.1	2126.8	2113.5	1990.2	1941.7	1857.2
15°	2716.2	2645.7	2618.4	2582.2	2542.6	2425.4	2385.8	2360.2	2232.5	2151.4	2096.8
17.5°	3910.8	3811.3	3744.3	3662.4	3575.1	3358.4	3268.6	3183.1	2959.3	2851.8	2689.7
20°	5611.2	5458.7	5286.9	5109.0	4938.1	4555.7	4333.7	4095.8	3790.1	3534.6	3340.8
21°	6434.0	6251.7	6044.6	5910.7	5589.1	5122.2	4822.7	4483.5	4090.5	3774.3	3530.2
22°	7296.5	7088.6	6915.9	6718.6	6272.8	5716.0	5339.8	4904.6	4396.2	4006.0	3697.6
23°	8134.4	7899.1	7692.1	7451.6	6936.2	6291.3	5844.6	5325.7	4713.4	4228.0	3846.5
24°	8934.3	8690.3	8452.4	8136.1	7545.9	6833.1	6308.0	5716.9	5015.6	4441.2	3986.6
25°	9796.0	9510.5	9203.0	8722.0	8122.0	7315.9	6711.5	6057.0	5284.3	4637.6	4104.6
26°	10654.1	10321.0	9860.3	9370.4	8653.3	7751.1	7062.2	6332.7	5513.4	4795.3	4191.9
27°	11459.3	11102.5	10561.6	9891.1	9129.9	8123.8	7351.2	6551.2	5672.8	4897.5	4232.4
28°	12148.3	11755.3	11152.7	10388.9	9485.0	8397.8	7542.3	6679.8	5749.5	4936.3	4237.7
29°	12602.0	12209.9	11560.6	10712.2	9685.8	8533.5	7618.1	6708.0	5745.1	4913.4	4201.5
30°	12787.0	12391.4	11728.0	10817.9	9723.7	8536.1	7587.3	6649.0	5668.4	4841.2	4130.2
31°	12678.6	12298.9	11625.8	10709.6	9589.8	8412.8	7457.8	6500.1	5516.0	4713.4	4023.6
32°	12278.7	11930.7	11284.0	10411.8	9314.1	8165.2	7234.9	6279.8	5301.0	4546.9	3890.5
33°	11669.0	11379.1	10718.4	9914.0	8945.8	7861.3	6963.5	6056.1	5042.0	4343.4	3748.7
34°	11084.9	10656.7	10070.8	9356.3	8473.6	7466.6	6627.0	5703.7	4767.2	4119.6	3586.6
35°	10252.3	9869.1	9328.1	8716.7	7923.8	6984.7	6145.1	5360.1	4459.7	3903.8	3416.6
36°	9374.0	9036.5	8643.6	8095.6	7337.1	6481.6	5713.4	4938.1	4143.4	3663.2	3236.8
37°	8300.9	8225.1	7859.5	7402.3	6724.8	5934.5	5212.1	4541.6	3847.4	3441.2	3039.5
38°	7667.4	7419.0	7084.2	6681.6	6017.3	5384.7	4728.4	4143.4	3578.7	3233.3	2814.8
39°	6861.3	6651.6	6343.3	5981.2	5409.4	4812.1	4278.2	3811.3	3356.7	3023.6	2572.6
40°	6086.0	5911.6	5628.8	5317.8	4798.9	4307.3	3889.7	3518.8	3136.4	2799.9	2332.9
42.5°	3837.7	3751.3	3635.1	3592.8	3406.9	3279.1	3126.7	2912.6	2576.1	2197.2	1871.3
45°	1947.0	1891.5	1889.8	1976.1	2035.1	2041.3	2027.2	1972.6	1754.1	1645.7	1355.9
47.5°	327.7	311.9	321.6	379.7	461.7	561.2	672.2	808.8	955.0	924.2	711.9
50°	108.4	104.8	102.2	104.8	101.3	104.0	102.2	99.6	89.9	94.3	96.9
51°	67.0	71.4	68.7	70.5	69.6	72.2	72.2	71.4	65.2	60.8	55.5
52°	45.8	46.7	47.6	48.5	47.6	48.5	49.3	49.3	47.6	45.8	41.4
53°	32.6	32.6	33.5	33.5	33.5	34.4	34.4	34.4	33.5	33.5	32.6
54°	22.9	23.8	23.8	23.8	23.8	24.7	24.7	24.7	25.5	24.7	24.7
55°	16.7	16.7	16.7	16.7	16.7	16.7	17.6	17.6	18.5	18.5	17.6
57.5°	7.0	7.0	6.2	7.0	7.0	7.0	7.0	7.9	7.9	8.8	8.8
60°	3.5	3.5	3.5	3.5	2.6	3.5	3.5	3.5	3.5	4.4	4.4



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
63°	1.8	1.8	1.8	1.8	1.8	1.8	0.9	1.8	1.8	1.8	1.8
64°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	0.9	0.9	0.9	0.9
65°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	0.9	0.9	0.9	0.9
66°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	0.9	0.9
67.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	0.9
70°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
72.5°	1.8	0.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9
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°	123.3	123.3	123.3	123.3	123.3	123.3	123.3	123.3	123.3	123.3	123.3
2.5°	141.0	142.7	140.1	141.8	138.3	138.3	135.7	136.6	135.7	133.9	133.9
5°	170.9	170.9	166.5	166.5	161.2	158.6	154.2	154.2	151.5	147.1	146.2
7.5°	234.3	225.5	215.8	212.3	201.8	194.7	186.8	183.3	175.3	168.3	163.0
10°	627.3	569.1	511.9	476.6	390.3	327.7	281.0	249.3	226.4	199.1	188.5
11°	884.5	810.5	735.6	662.5	577.9	492.5	438.7	354.2	300.4	239.6	210.6
12°	1162.9	1075.7	985.0	902.2	800.8	693.4	619.4	511.9	436.1	334.8	264.3
13°	1448.4	1349.7	1241.3	1155.0	1040.5	917.1	800.8	701.3	607.0	474.9	371.8
14°	1723.3	1618.4	1499.5	1408.7	1280.1	1146.2	1014.9	904.8	790.3	632.6	505.7
15°	1968.2	1893.3	1742.6	1652.8	1514.5	1371.7	1225.5	1107.4	971.8	796.4	650.2
17.5°	2480.9	2342.6	2158.5	2069.5	1932.1	1808.7	1650.1	1543.5	1376.1	1191.1	1029.9
20°	3085.3	2881.8	2632.5	2444.8	2206.9	1990.2	1790.2	1706.5	1602.6	1476.6	1325.9
21°	3250.9	3031.6	2759.3	2568.1	2324.1	2101.2	1866.0	1732.9	1619.3	1510.1	1384.1
22°	3371.6	3139.9	2853.6	2654.5	2403.4	2182.3	1941.7	1782.3	1630.8	1507.4	1393.8
23°	3473.8	3227.1	2929.4	2712.6	2450.1	2221.9	1980.5	1821.9	1654.5	1501.2	1377.9
24°	3566.3	3295.9	2983.1	2750.5	2473.9	2236.0	1985.8	1829.0	1666.0	1504.8	1356.8
25°	3635.9	3339.0	3013.9	2769.9	2479.2	2231.6	1973.5	1815.8	1652.8	1493.3	1333.0
26°	3683.5	3359.3	3022.8	2769.0	2468.6	2214.0	1947.9	1788.5	1621.1	1451.9	1294.2
27°	3698.5	3354.0	3010.4	2748.8	2442.2	2179.6	1904.7	1736.5	1571.7	1402.6	1242.2
28°	3683.5	3332.9	2982.2	2709.1	2398.1	2123.2	1835.1	1667.8	1518.9	1347.9	1178.8
29°	3642.1	3295.0	2930.2	2650.1	2328.5	2031.6	1746.2	1601.7	1458.1	1265.1	1072.2
30°	3577.8	3226.3	2855.4	2563.7	2225.4	1916.2	1666.0	1540.9	1357.6	1131.2	923.3
31°	3487.9	3137.3	2758.4	2449.2	2088.0	1803.4	1596.4	1427.2	1200.8	954.1	741.8
32°	3378.7	3031.6	2617.5	2296.8	1952.3	1714.4	1473.1	1253.7	1002.6	744.5	540.9
33°	3261.5	2895.9	2456.3	2136.5	1836.0	1595.5	1295.1	1039.6	780.6	523.3	341.0
34°	3125.8	2729.4	2275.7	1975.2	1705.6	1416.7	1083.6	807.9	556.8	318.0	175.3
35°	2962.0	2524.1	2095.9	1836.0	1518.9	1179.7	851.9	605.3	348.9	160.3	95.1
36°	2763.7	2312.7	1940.0	1657.2	1300.4	947.1	614.9	385.9	187.7	94.3	74.9
37°	2511.8	2139.1	1776.1	1444.0	1064.3	711.0	396.5	209.7	107.5	76.6	63.4
38°	2294.2	1978.8	1600.8	1211.4	820.2	487.2	240.5	118.1	84.6	64.3	52.9
39°	2106.5	1807.0	1370.9	966.5	585.0	295.1	132.2	89.9	70.5	52.9	44.9
40°	1942.6	1562.0	1127.7	725.1	376.2	163.9	95.1	74.9	57.3	44.1	36.1
42.5°	1425.5	991.1	522.4	234.3	110.1	81.9	59.9	47.6	37.0	27.3	22.9
45°	846.7	445.8	157.7	96.0	69.6	52.0	37.9	30.0	22.9	16.7	14.1
47.5°	309.2	112.8	77.5	58.1	44.1	32.6	23.8	18.5	14.1	9.7	7.9
50°	63.4	54.6	42.3	34.4	25.5	19.4	14.1	10.6	7.9	6.2	5.3
51°	48.5	42.3	34.4	27.3	20.3	15.9	11.5	8.8	7.0	5.3	4.4
52°	37.0	32.6	26.4	22.0	16.7	12.3	8.8	7.0	5.3	3.5	3.5
53°	29.1	25.5	20.3	16.7	13.2	9.7	7.0	5.3	4.4	3.5	3.5
54°	22.0	19.4	15.9	13.2	10.6	7.9	5.3	4.4	3.5	3.5	2.6
55°	15.9	15.0	12.3	9.7	7.9	6.2	4.4	3.5	3.5	2.6	2.6
57.5°	7.9	7.0	6.2	5.3	4.4	3.5	2.6	2.6	2.6	2.6	1.8
60°	4.4	3.5	3.5	3.5	2.6	2.6	2.6	1.8	1.8	2.6	2.6



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CATALOG NUMBER: LDSQA6A30940D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
63°	1.8	1.8	1.8	1.8	2.6	1.8	1.8	1.8	2.6	2.6	2.6
64°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.6	2.6	2.6	2.6
65°	0.9	1.8	1.8	1.8	1.8	1.8	1.8	2.6	2.6	2.6	2.6
66°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.6	2.6	2.6	2.6
67.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.6	2.6	2.6	2.6
70°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.6	2.6	2.6	2.6
72.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.6	2.6	2.6	2.6
75°	0.9	0.9	1.8	1.8	1.8	1.8	1.8	2.6	2.6	2.6	2.6
77.5°	0.9	0.9	1.8	1.8	1.8	1.8	1.8	2.6	2.6	2.6	2.6
80°	0.9	0.9	0.9	1.8	1.8	1.8	1.8	2.6	2.6	2.6	2.6
82.5°	0.9	0.9	0.9	1.8	1.8	1.8	1.8	2.6	2.6	2.6	2.6
85°	0.9	0.9	0.9	1.8	1.8	1.8	1.8	2.6	2.6	2.6	2.6
87.5°	0.9	0.9	0.9	1.8	1.8	1.8	1.8	2.6	2.6	2.6	2.6
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: P208843

CATALOG NUMBER: LDSQA6A30940D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	123.3	123.3	123.3	123.3	123.3	123.3	123.3	123.3	123.3	123.3	123.3
2.5°	131.3	133.0	131.3	129.5	128.6	128.6	127.7	125.1	126.0	125.1	125.1
5°	141.8	142.7	139.2	136.6	134.8	133.0	131.3	127.7	126.9	126.0	125.1
7.5°	155.9	155.1	148.0	143.6	139.2	135.7	132.2	127.7	126.0	123.3	121.6
10°	176.2	170.0	158.6	150.7	144.5	137.4	132.2	125.1	121.6	118.1	115.4
11°	185.0	176.2	164.7	154.2	146.2	138.3	132.2	123.3	118.9	115.4	111.9
12°	212.3	188.5	170.0	158.6	148.0	139.2	131.3	122.5	117.2	111.9	108.4
13°	274.9	219.4	181.5	161.2	150.7	140.1	130.4	120.7	114.5	108.4	104.8
14°	377.1	281.9	209.7	170.9	151.5	140.1	129.5	118.9	111.9	105.7	101.3
15°	499.5	378.8	266.9	194.7	155.1	139.2	127.7	116.3	108.4	101.3	96.9
17.5°	841.4	683.7	512.7	364.7	225.5	152.4	120.7	107.5	97.8	89.9	84.6
20°	1127.7	946.2	753.3	569.1	390.3	243.2	139.2	97.8	86.3	77.5	72.2
21°	1190.2	1020.2	815.8	622.9	437.9	281.9	157.7	97.8	81.9	73.1	67.8
22°	1222.8	1059.0	854.6	658.1	470.5	309.2	177.1	98.7	77.5	68.7	62.6
23°	1217.6	1067.8	869.6	668.7	485.4	322.5	185.0	99.6	73.1	64.3	58.1
24°	1185.8	1044.0	854.6	656.4	481.0	318.9	182.4	97.8	68.7	59.9	54.6
25°	1146.2	997.3	814.1	622.9	452.8	296.9	169.2	91.6	65.2	56.4	51.1
26°	1101.3	950.6	757.7	563.8	407.0	259.9	142.7	81.1	59.9	52.0	47.6
27°	1047.5	889.8	688.1	501.3	343.6	209.7	114.5	68.7	55.5	47.6	44.1
28°	967.4	803.5	599.1	418.5	274.9	158.6	86.3	59.0	51.1	44.1	40.5
29°	847.5	681.9	488.1	326.9	201.8	109.2	66.1	52.9	45.8	39.6	37.0
30°	697.8	539.2	362.1	224.7	129.5	74.0	53.7	46.7	40.5	36.1	34.4
31°	528.6	383.2	234.3	129.5	77.5	54.6	47.6	40.5	36.1	32.6	31.7
32°	348.9	231.7	124.2	74.9	56.4	47.6	41.4	36.1	32.6	30.0	29.1
33°	186.8	106.6	71.4	56.4	47.6	41.4	36.1	31.7	29.1	27.3	26.4
34°	95.1	69.6	58.1	48.5	40.5	36.1	31.7	28.2	26.4	24.7	23.8
35°	70.5	59.9	50.2	41.4	35.2	31.7	28.2	25.5	23.8	22.0	22.0
36°	59.9	50.2	41.4	36.1	31.7	28.2	25.5	22.0	21.1	20.3	19.4
37°	50.2	43.2	36.1	30.8	27.3	24.7	22.0	20.3	18.5	17.6	17.6
38°	42.3	37.0	30.8	26.4	23.8	22.0	19.4	17.6	16.7	15.9	15.9
39°	35.2	30.8	26.4	22.9	20.3	18.5	16.7	15.9	15.0	14.1	14.1
40°	29.1	26.4	22.0	19.4	17.6	15.9	15.0	14.1	13.2	12.3	13.2
42.5°	18.5	15.9	14.1	13.2	11.5	11.5	10.6	9.7	9.7	9.7	9.7
45°	10.6	9.7	8.8	8.8	7.9	7.9	7.9	7.0	7.9	7.9	7.9
47.5°	6.2	6.2	5.3	5.3	5.3	5.3	5.3	5.3	5.3	6.2	6.2
50°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4.4	4.4
51°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4.4
52°	3.5	3.5	3.5	2.6	2.6	2.6	2.6	2.6	3.5	3.5	3.5
53°	2.6	3.5	2.6	2.6	2.6	2.6	2.6	2.6	3.5	3.5	3.5
54°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	3.5	3.5
55°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	3.5	3.5
57.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	3.5
60°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	3.5



TEST NUMBER: P208843

CATALOG NUMBER: LDSQA6A30940D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
63°	2.6	2.6	2.6	2.6	2.6	3.5	2.6	2.6	2.6	3.5	3.5
64°	2.6	2.6	2.6	2.6	2.6	3.5	2.6	2.6	2.6	2.6	3.5
65°	2.6	2.6	3.5	3.5	3.5	3.5	2.6	2.6	2.6	2.6	3.5
66°	2.6	2.6	3.5	3.5	3.5	3.5	3.5	2.6	2.6	3.5	3.5
67.5°	2.6	3.5	3.5	3.5	3.5	3.5	3.5	2.6	3.5	3.5	3.5
70°	2.6	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
72.5°	2.6	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
75°	2.6	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
77.5°	2.6	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
80°	2.6	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
82.5°	2.6	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
85°	2.6	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
87.5°	2.6	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
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: P208843

CATALOG NUMBER: LDSQA6A30940D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
0°	123.3	123.3	123.3	123.3	123.3	123.3	123.3	123.3
2.5°	122.5	121.6	120.7	120.7	113.7	110.1	105.7	105.7
5°	120.7	119.8	118.1	116.3	104.8	99.6	94.3	93.4
7.5°	117.2	114.5	111.9	110.1	96.0	89.9	84.6	83.7
10°	110.1	106.6	104.0	102.2	87.2	81.1	76.6	76.6
11°	106.6	103.1	100.4	97.8	82.8	77.5	74.0	74.0
12°	103.1	99.6	96.0	94.3	79.3	74.9	71.4	70.5
13°	99.6	95.1	92.5	89.9	75.8	71.4	68.7	68.7
14°	96.0	91.6	88.1	85.5	72.2	67.8	66.1	66.1
15°	90.7	86.3	83.7	81.1	67.8	65.2	63.4	64.3
17.5°	78.4	74.9	72.2	69.6	59.0	58.1	58.1	59.0
20°	67.0	63.4	60.8	59.0	51.1	52.0	52.9	54.6
21°	62.6	59.0	56.4	54.6	48.5	49.3	51.1	52.9
22°	58.1	55.5	52.9	51.1	45.8	46.7	49.3	51.1
23°	53.7	51.1	49.3	47.6	43.2	44.9	47.6	49.3
24°	50.2	47.6	45.8	44.1	40.5	42.3	45.8	47.6
25°	46.7	44.1	42.3	41.4	37.9	40.5	44.1	45.8
26°	43.2	41.4	39.6	38.8	36.1	38.8	42.3	44.9
27°	39.6	37.9	37.0	36.1	33.5	37.0	40.5	43.2
28°	37.0	35.2	34.4	33.5	31.7	35.2	39.6	41.4
29°	34.4	32.6	31.7	30.8	30.0	33.5	37.9	40.5
30°	31.7	30.8	29.1	29.1	28.2	32.6	36.1	38.8
31°	29.1	28.2	27.3	26.4	26.4	30.8	35.2	37.9
32°	27.3	26.4	25.5	24.7	25.5	29.1	33.5	37.0
33°	24.7	23.8	23.8	22.9	23.8	28.2	32.6	36.1
34°	22.0	22.0	21.1	21.1	22.9	27.3	31.7	34.4
35°	20.3	19.4	19.4	19.4	22.0	25.5	30.8	33.5
36°	18.5	18.5	17.6	17.6	21.1	24.7	30.0	32.6
37°	16.7	16.7	16.7	15.9	19.4	23.8	28.2	31.7
38°	15.0	15.0	15.0	15.0	18.5	22.9	28.2	31.7
39°	13.2	13.2	14.1	14.1	17.6	22.0	26.4	30.8
40°	12.3	12.3	12.3	12.3	16.7	21.1	25.5	30.0
42.5°	9.7	9.7	10.6	10.6	15.0	19.4	23.8	27.3
45°	7.9	7.9	8.8	8.8	13.2	17.6	21.1	25.5
47.5°	6.2	6.2	7.0	7.0	11.5	15.9	19.4	22.9
50°	4.4	5.3	5.3	6.2	10.6	14.1	16.7	20.3
51°	4.4	4.4	5.3	5.3	9.7	13.2	15.9	19.4
52°	4.4	4.4	5.3	5.3	8.8	12.3	15.0	17.6
53°	3.5	4.4	4.4	5.3	8.8	12.3	14.1	16.7
54°	3.5	3.5	4.4	4.4	8.8	11.5	14.1	15.0
55°	3.5	3.5	4.4	4.4	7.9	11.5	13.2	14.1
57.5°	3.5	3.5	3.5	3.5	7.0	9.7	11.5	11.5
60°	3.5	3.5	3.5	3.5	7.0	8.8	10.6	7.9



TEST NUMBER: P208843

CATALOG NUMBER: LDSQA6A30940D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
63°	3.5	3.5	3.5	3.5	6.2	7.9	7.9	6.2
64°	3.5	3.5	3.5	3.5	6.2	7.9	7.9	6.2
65°	3.5	3.5	3.5	3.5	6.2	7.0	7.0	5.3
66°	3.5	3.5	3.5	3.5	6.2	7.0	7.0	5.3
67.5°	3.5	3.5	3.5	3.5	5.3	6.2	6.2	5.3
70°	3.5	3.5	3.5	3.5	5.3	6.2	5.3	4.4
72.5°	3.5	3.5	3.5	3.5	5.3	5.3	4.4	3.5
75°	3.5	3.5	3.5	3.5	4.4	4.4	3.5	3.5
77.5°	3.5	3.5	3.5	3.5	4.4	4.4	3.5	2.6
80°	3.5	3.5	3.5	3.5	4.4	3.5	2.6	1.8
82.5°	3.5	3.5	3.5	3.5	3.5	2.6	1.8	1.8
85°	3.5	3.5	3.5	3.5	3.5	2.6	1.8	0.9
87.5°	3.5	3.5	3.5	3.5	3.5	2.6	0.9	0.9
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°	3.5	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	3.5	3.5
62°	2.6	2.6	2.6	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8





61°	3.5	2.6	2.6	2.6	2.6	2.6	2.6	1.8	1.8	2.6	2.6
62°	2.6	2.6	2.6	2.6	2.6	2.6	1.8	1.8	1.8	2.6	2.6





61°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	3.5
62°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6





61°	3.5	3.5	3.5	3.5	6.2	8.8	9.7	7.0
62°	3.5	3.5	3.5	3.5	6.2	7.9	8.8	6.2



(END OF REPORT)