

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: P208869

Luminaire Tested: **LDSQA6A30830D010TE LARL20NF 6LSQA1H 30°**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208869
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29056)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA6A30830D010TE LARL20NF 6LSQA1H 30°
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 20° NARROW FLOOD, 30° Tilt
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2662.1 lumens
Efficiency: N/A
Efficacy: 59.7 lumens/watt
Spacing Criteria (0/90/45): 2.38 / 0.63 / 1.23
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

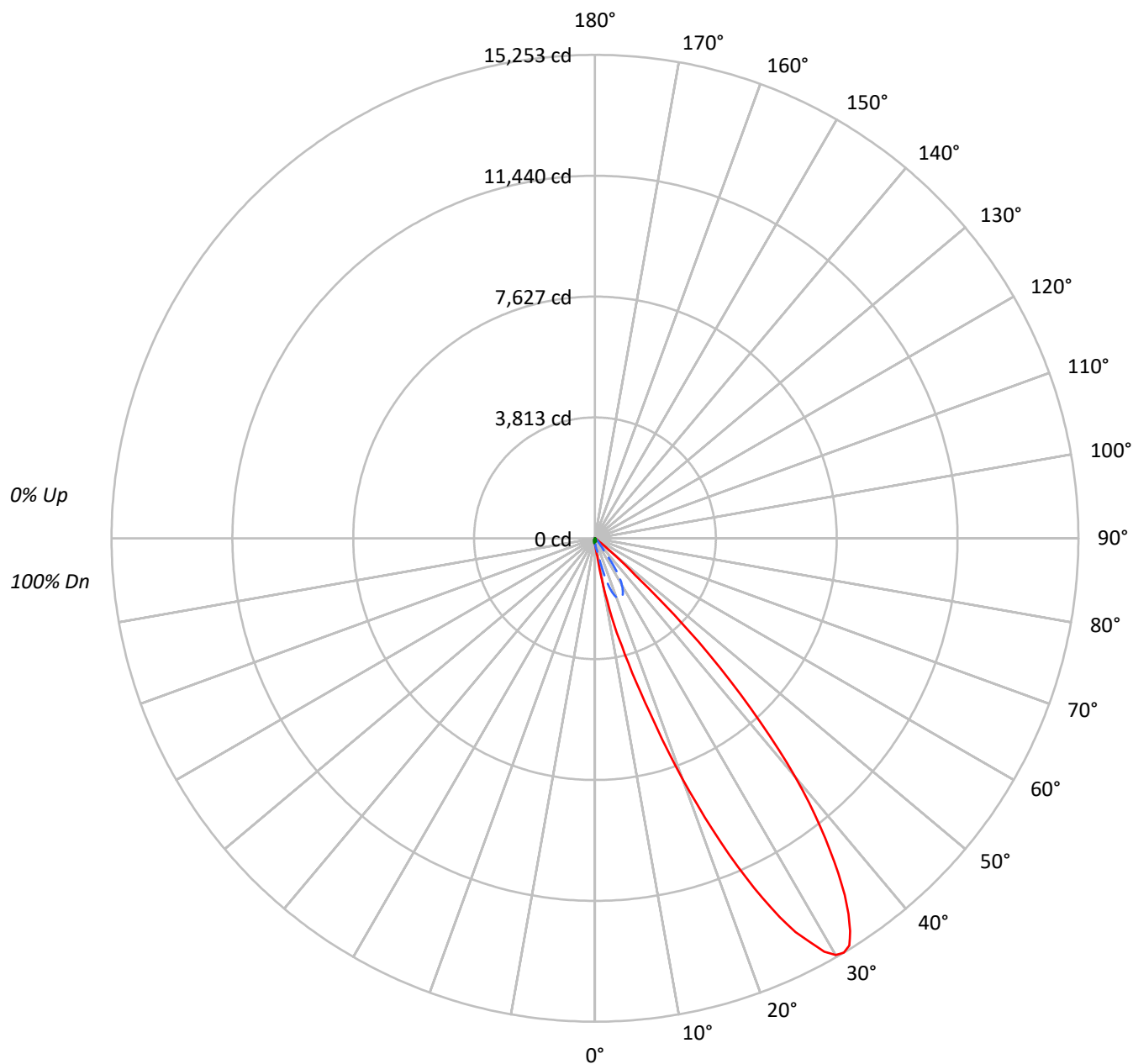
Input Watts (W): 44.62
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	112	109	106	104	110	107	104	102		103	101	99		99	97	96		96	94	93
2	105	100	95	91	103	98	94	90		95	91	88		92	89	86		89	86	84
3	99	91	85	80	96	89	84	80		87	82	78		84	80	77		82	79	76
4	92	83	76	71	90	82	75	71		79	74	70		77	73	69		75	71	68
5	86	76	69	63	84	75	68	63		73	67	62		71	66	62		69	65	61
6	80	69	62	57	78	68	61	56		67	61	56		65	60	56		64	59	55
7	75	63	56	51	73	63	56	51		61	55	50		60	54	50		59	54	50
8	70	58	51	46	68	57	50	46		56	50	45		55	49	45		54	49	45
9	65	53	46	41	64	53	46	41		52	45	41		51	45	41		50	44	41
10	61	49	42	37	60	48	42	37		48	41	37		47	41	37		46	41	37

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	7728	7728	7728
5°	15430	7494	5070
10°	69379	6554	3791
15°	181891	5362	3044
20°	370336	4064	2570
25°	595905	3002	2181
30°	754799	2128	1929
35°	722029	1393	1713
40°	553627	860	1607
45°	281567	560	1492
50°	43177	409	1299
55°	5667	383	916
60°	611	353	611
65°	102	418	520
70°	126	642	642
75°	0	848	516
80°	0	1017	496
85°	0	2025	494



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.0	0.9
10°-20°	263.2	9.9
20°-30°	861.9	32.4
30°-40°	1049.1	39.4
40°-50°	426.2	16.0
50°-60°	25.3	1.0
60°-70°	4.9	0.2
70°-80°	4.3	0.2
80°-90°	3.1	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°	1149.1	43.2
0°-40°	2198.2	82.6
0°-60°	2649.7	99.5
0°-90°	2662.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2662.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	180	180	180	180	180	
5°	357	272	173	128	117	67
15°	4081	1360	120	73	68	1328
25°	12544	2024	63	43	46	5764
35°	13737	809	26	26	33	8308
45°	4624	92	9	16	24	3548
55°	76	9	5	11	12	130
65°	1	3	4	7	5	2
75°	0	3	5	6	3	0
85°	0	3	4	4	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°	179.5	179.5	179.5	179.5	179.5	179.5	179.5	179.5	179.5	179.5	179.5
2.5°	252.9	241.7	246.8	245.8	241.7	242.7	244.8	240.7	242.7	236.6	237.6
5°	357.0	340.6	349.8	339.6	344.7	339.6	339.6	333.5	328.4	327.4	322.3
7.5°	623.2	583.4	595.6	551.8	558.9	544.6	531.4	517.1	492.6	480.4	453.9
10°	1586.9	1474.8	1501.3	1405.4	1403.4	1369.7	1307.5	1264.7	1173.9	1109.6	1017.8
11°	2007.1	1930.6	1954.1	1849.1	1844.0	1798.1	1724.6	1610.4	1559.4	1473.7	1359.5
12°	2555.8	2427.3	2441.6	2326.4	2315.1	2254.0	2171.3	2030.6	1969.4	1865.4	1730.7
13°	3054.6	2940.3	2941.4	2815.9	2802.7	2725.1	2634.4	2464.0	2395.7	2279.4	2117.3
14°	3512.5	3425.8	3408.5	3341.2	3269.8	3179.0	3083.1	2890.4	2814.9	2684.3	2498.7
15°	4080.6	3911.3	3877.6	3793.0	3706.3	3592.0	3474.8	3254.5	3170.8	3027.0	2842.4
17.5°	5756.2	5547.2	5455.4	5283.0	5119.8	4900.6	4646.6	4256.0	4063.2	3805.2	3516.6
20°	8082.6	7753.2	7568.6	7292.2	7029.1	6670.1	6231.5	5616.5	5331.0	4831.2	4358.0
21°	9003.6	8720.0	8488.5	8177.5	7866.4	7441.1	6919.9	6269.3	5828.7	5244.3	4689.4
22°	9933.7	9664.5	9394.2	9052.5	8704.7	8208.1	7607.3	6852.6	6323.3	5641.0	5001.5
23°	10849.6	10576.2	10368.2	9900.1	9504.3	8944.4	8278.4	7415.6	6800.6	6018.4	5295.3
24°	11728.7	11429.9	11170.8	10698.6	10250.9	9627.7	8910.8	7962.3	7261.6	6378.4	5567.6
25°	12543.6	12214.2	11896.0	11410.5	10924.0	10243.8	9468.6	8456.9	7681.8	6704.7	5815.4
26°	13293.2	12843.4	12497.7	12049.0	11496.2	10782.3	9959.2	8884.2	8043.9	6977.1	6010.2
27°	13942.9	13488.0	13091.3	12610.9	11993.9	11224.9	10364.1	9191.2	8330.4	7181.0	6145.8
28°	14415.1	14030.6	13573.7	13056.6	12378.4	11529.8	10638.5	9436.0	8502.8	7287.1	6201.9
29°	14915.9	14478.3	13945.9	13358.5	12620.1	11721.6	10789.4	9563.5	8574.2	7311.6	6190.7
30°	15182.1	14779.2	14153.0	13512.5	12724.1	11782.8	10822.0	9582.9	8551.8	7252.4	6117.3
31°	15253.4	14877.1	14183.6	13515.6	12691.5	11722.6	10741.5	9482.9	8430.4	7114.7	5980.6
32°	15150.4	14774.1	14054.1	13385.0	12541.6	11554.3	10564.0	9304.4	8232.5	6908.7	5785.8
33°	14780.2	14475.3	13780.7	13137.2	12313.1	11304.4	10302.9	9013.8	7924.5	6641.5	5551.2
34°	14307.0	14022.4	13381.9	12722.1	11951.0	10961.8	9942.9	8661.9	7570.6	6313.1	5272.8
35°	13736.9	13456.4	12865.9	12210.1	11471.7	10505.9	9481.9	8220.3	7152.5	5941.9	4963.8
36°	13064.8	12773.1	12227.4	11603.3	10931.2	9955.1	8936.3	7712.4	6677.2	5538.0	4633.4
37°	12325.3	12031.6	11544.1	10965.8	10300.9	9335.0	8325.3	7152.5	6175.4	5118.8	4287.6
38°	11545.1	11271.8	10829.2	10251.9	9594.1	8645.6	7657.3	6640.5	5664.5	4694.5	3937.8
39°	10744.5	10456.9	10039.8	9472.7	8826.1	7889.9	6960.7	6052.0	5223.9	4277.4	3616.5
40°	9850.1	9578.8	9095.4	8650.7	8002.0	7110.7	6263.1	5402.3	4734.3	3876.6	3324.8
42.5°	7286.1	7073.9	6815.9	6360.0	5880.7	5241.2	4648.6	4052.0	3566.5	3080.1	2675.2
45°	4624.2	4468.1	4335.5	4052.0	3858.2	3498.2	3192.2	2887.3	2657.8	2402.9	1953.1
47.5°	1711.4	1637.9	1591.0	1466.6	1455.4	1340.1	1328.9	1475.8	1562.5	1470.7	1106.6
50°	644.6	626.2	615.0	576.2	549.7	496.7	456.9	427.3	367.2	325.3	291.7
51°	423.3	410.0	390.6	387.6	376.3	346.8	328.4	322.3	281.5	237.6	204.0
52°	269.3	261.1	248.9	249.9	243.8	225.4	219.3	228.5	207.0	182.6	158.1
53°	169.3	165.2	157.1	157.1	156.0	143.8	141.8	149.9	145.8	134.6	120.3
54°	110.1	109.1	102.0	103.0	103.0	95.9	94.8	97.9	96.9	92.8	85.7
55°	75.5	74.5	73.4	70.4	68.3	66.3	66.3	67.3	66.3	64.3	60.2
57.5°	26.5	25.5	26.5	25.5	25.5	26.5	25.5	27.5	28.6	28.6	26.5
60°	7.1	7.1	7.1	7.1	7.1	7.1	7.1	9.2	10.2	10.2	10.2



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
63°	2.0	2.0	2.0	2.0	2.0	2.0	1.0	1.0	2.0	2.0	2.0
64°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0
65°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0
66°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
67.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
70°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0
72.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0
77.5°	0.0	0.0	0.0	0.0	0.0	1.0	1.0	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	1.0	1.0	1.0	1.0	1.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	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°	179.5	179.5	179.5	179.5	179.5	179.5	179.5	179.5	179.5	179.5	179.5
2.5°	234.6	235.6	231.5	230.5	229.5	224.4	221.3	218.3	215.2	210.1	212.1
5°	314.1	314.1	304.9	298.8	295.8	284.5	279.4	272.3	264.2	258.0	255.0
7.5°	438.6	431.4	411.0	395.7	386.5	364.1	350.8	331.5	320.2	308.0	300.9
10°	930.1	882.2	782.3	710.9	643.5	562.0	487.5	429.4	391.6	364.1	346.8
11°	1253.4	1190.2	1062.7	963.8	876.1	759.8	645.6	536.5	457.9	410.0	374.3
12°	1608.4	1526.8	1373.8	1251.4	1144.3	998.5	852.6	708.8	595.6	505.9	432.4
13°	1977.6	1872.5	1695.1	1554.3	1430.9	1262.6	1089.2	916.9	779.2	656.8	545.6
14°	2343.7	2215.2	2020.4	1858.2	1719.5	1531.9	1335.0	1143.3	982.2	828.1	692.5
15°	2676.2	2535.4	2364.1	2152.0	2002.0	1761.3	1575.7	1360.5	1177.0	998.5	840.4
17.5°	3272.8	3083.1	2881.2	2661.9	2519.1	2281.5	2045.9	1785.8	1563.5	1342.2	1130.0
20°	3928.6	3590.0	3257.5	2931.2	2724.1	2471.2	2240.7	1983.7	1749.1	1498.2	1267.7
21°	4186.6	3799.1	3394.2	3028.0	2793.5	2523.2	2284.5	2018.4	1771.5	1504.3	1261.6
22°	4431.4	3968.4	3513.5	3109.6	2853.6	2577.3	2320.2	2040.8	1777.7	1497.2	1243.2
23°	4654.8	4131.6	3623.7	3181.0	2897.5	2603.8	2338.6	2050.0	1774.6	1480.9	1215.7
24°	4857.7	4281.5	3717.5	3234.1	2924.0	2611.9	2336.6	2042.8	1759.3	1456.4	1178.0
25°	5033.1	4399.8	3785.8	3262.6	2931.2	2607.9	2326.4	2024.5	1728.7	1414.6	1134.1
26°	5165.7	4475.3	3818.5	3266.7	2921.0	2594.6	2302.9	1990.8	1680.8	1358.5	1075.0
27°	5242.2	4502.8	3818.5	3249.4	2900.6	2570.1	2265.2	1938.8	1618.6	1289.1	1001.5
28°	5255.5	4490.6	3790.9	3213.7	2861.8	2527.3	2210.1	1872.5	1545.1	1206.5	921.0
29°	5220.8	4441.6	3731.8	3152.5	2804.7	2472.2	2138.7	1788.9	1457.4	1115.8	837.3
30°	5135.1	4351.9	3644.1	3075.0	2736.4	2399.8	2049.0	1696.1	1358.5	1021.9	741.5
31°	5001.5	4222.3	3531.9	2981.1	2651.7	2313.1	1950.0	1589.0	1247.3	905.7	637.4
32°	4824.1	4040.8	3407.4	2874.0	2557.9	2214.2	1826.6	1452.3	1100.5	763.9	517.1
33°	4615.0	3863.3	3268.7	2758.8	2455.9	2078.5	1656.3	1248.3	921.0	605.8	391.6
34°	4376.3	3672.6	3119.8	2637.4	2322.3	1879.7	1444.2	1038.2	724.1	442.6	276.4
35°	4112.2	3469.7	2963.8	2494.6	2111.2	1636.9	1201.4	808.8	524.2	299.8	208.1
36°	3830.7	3242.2	2785.3	2290.7	1858.2	1364.6	944.4	582.4	347.8	223.4	179.5
37°	3565.5	3044.4	2600.7	2034.7	1572.7	1080.1	689.4	388.6	254.0	194.8	159.1
38°	3315.7	2853.6	2360.0	1751.1	1278.9	809.8	453.9	286.6	220.3	171.3	140.7
39°	3082.1	2661.9	2078.5	1447.2	985.2	571.1	329.4	245.8	191.7	152.0	124.4
40°	2856.7	2387.6	1771.5	1180.0	718.0	398.8	277.4	217.2	169.3	133.6	105.0
42.5°	2142.8	1533.9	981.1	537.5	337.6	260.1	197.9	153.0	112.2	82.6	63.2
45°	1345.2	780.2	421.2	301.9	235.6	176.4	128.5	91.8	67.3	50.0	39.8
47.5°	611.9	335.5	261.1	201.9	152.0	105.0	75.5	55.1	40.8	31.6	23.5
50°	224.4	190.7	155.0	115.2	83.6	60.2	43.9	32.6	24.5	18.4	13.3
51°	175.4	153.0	123.4	86.7	66.3	49.0	35.7	26.5	19.4	14.3	10.2
52°	137.7	121.4	94.8	67.3	52.0	38.8	28.6	20.4	14.3	11.2	8.2
53°	106.1	92.8	71.4	52.0	40.8	30.6	22.4	16.3	11.2	8.2	6.1
54°	78.5	68.3	53.0	39.8	31.6	23.5	16.3	12.2	8.2	6.1	5.1
55°	56.1	50.0	39.8	31.6	24.5	18.4	12.2	9.2	6.1	4.1	4.1
57.5°	23.5	22.4	18.4	15.3	12.2	9.2	6.1	4.1	4.1	3.1	4.1
60°	9.2	9.2	8.2	6.1	5.1	4.1	3.1	3.1	3.1	3.1	3.1



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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°	2.0	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	4.1
64°	2.0	2.0	2.0	2.0	3.1	3.1	3.1	3.1	3.1	3.1	4.1
65°	2.0	2.0	2.0	2.0	2.0	3.1	3.1	3.1	3.1	3.1	4.1
66°	2.0	2.0	2.0	2.0	2.0	3.1	3.1	3.1	3.1	3.1	4.1
67.5°	2.0	2.0	2.0	2.0	2.0	3.1	3.1	3.1	3.1	4.1	4.1
70°	2.0	2.0	2.0	2.0	2.0	3.1	3.1	3.1	3.1	4.1	4.1
72.5°	2.0	2.0	2.0	2.0	2.0	3.1	3.1	3.1	4.1	4.1	4.1
75°	1.0	2.0	2.0	2.0	2.0	3.1	3.1	3.1	4.1	4.1	4.1
77.5°	1.0	2.0	2.0	2.0	3.1	3.1	3.1	3.1	4.1	4.1	4.1
80°	1.0	2.0	2.0	2.0	2.0	3.1	3.1	3.1	4.1	4.1	4.1
82.5°	1.0	2.0	2.0	2.0	2.0	3.1	3.1	3.1	4.1	4.1	4.1
85°	1.0	2.0	2.0	2.0	2.0	3.1	3.1	3.1	4.1	4.1	4.1
87.5°	1.0	2.0	2.0	2.0	2.0	3.1	3.1	3.1	4.1	4.1	4.1
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: P208869

CATALOG NUMBER: LDSQA6A30830D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	179.5	179.5	179.5	179.5	179.5	179.5	179.5	179.5	179.5	179.5	179.5
2.5°	209.1	209.1	201.9	199.9	198.9	196.8	191.7	191.7	188.7	184.6	182.6
5°	247.8	245.8	234.6	228.5	223.4	217.2	207.0	203.0	196.8	190.7	185.6
7.5°	285.6	278.4	261.1	251.9	244.8	234.6	221.3	212.1	201.9	191.7	184.6
10°	323.3	309.0	284.5	269.3	256.0	241.7	225.4	215.2	201.9	188.7	178.5
11°	338.6	320.2	292.7	273.3	258.0	241.7	225.4	212.1	199.9	186.6	175.4
12°	368.2	333.5	300.9	279.4	260.1	241.7	223.4	209.1	195.8	182.6	171.3
13°	428.4	364.1	310.0	284.5	263.1	241.7	221.3	206.0	191.7	178.5	166.2
14°	537.5	427.3	334.5	289.6	264.2	241.7	219.3	200.9	186.6	172.4	161.1
15°	660.9	524.2	384.5	308.0	265.2	239.7	215.2	195.8	180.5	166.2	155.0
17.5°	916.9	733.3	544.6	399.8	290.7	233.6	199.9	180.5	163.2	148.9	135.6
20°	1020.9	807.8	595.6	428.4	300.9	223.4	182.6	162.2	143.8	129.5	118.3
21°	1007.6	793.5	580.3	409.0	281.5	209.1	173.4	154.0	136.7	121.4	111.2
22°	980.1	759.8	544.6	373.3	258.0	194.8	165.2	144.8	128.5	114.2	104.0
23°	943.4	711.9	503.8	335.5	233.6	181.5	157.1	136.7	121.4	107.1	97.9
24°	897.5	663.9	456.9	297.8	210.1	171.3	147.9	128.5	113.2	101.0	91.8
25°	846.5	614.0	406.9	266.2	195.8	161.1	137.7	119.3	106.1	94.8	85.7
26°	784.3	554.8	360.0	236.6	178.5	149.9	127.5	111.2	98.9	88.7	79.6
27°	712.9	493.6	308.0	206.0	164.2	138.7	118.3	104.0	92.8	82.6	73.4
28°	648.6	425.3	264.2	183.6	153.0	127.5	110.1	96.9	86.7	76.5	68.3
29°	568.1	360.0	225.4	166.2	140.7	119.3	102.0	89.8	79.6	69.4	62.2
30°	487.5	297.8	192.8	152.0	128.5	109.1	93.8	82.6	72.4	64.3	58.1
31°	403.9	246.8	169.3	139.7	117.3	101.0	86.7	76.5	66.3	59.2	53.0
32°	309.0	201.9	150.9	126.5	107.1	90.8	79.6	69.4	60.2	54.1	47.9
33°	232.5	170.3	136.7	114.2	96.9	83.6	72.4	62.2	55.1	49.0	43.9
34°	185.6	152.0	123.4	103.0	87.7	75.5	64.3	56.1	49.0	43.9	38.8
35°	163.2	136.7	110.1	92.8	78.5	66.3	57.1	50.0	43.9	38.8	34.7
36°	144.8	122.4	97.9	82.6	68.3	58.1	50.0	43.9	37.7	33.7	30.6
37°	129.5	108.1	86.7	71.4	59.2	51.0	43.9	37.7	32.6	29.6	27.5
38°	116.3	92.8	73.4	61.2	51.0	43.9	37.7	32.6	28.6	25.5	23.5
39°	98.9	78.5	61.2	52.0	42.8	36.7	31.6	28.6	24.5	22.4	20.4
40°	82.6	65.3	51.0	42.8	36.7	30.6	27.5	23.5	21.4	19.4	17.3
42.5°	51.0	40.8	32.6	27.5	23.5	20.4	18.4	16.3	14.3	13.3	12.2
45°	31.6	25.5	20.4	17.3	14.3	13.3	12.2	10.2	10.2	9.2	9.2
47.5°	18.4	15.3	11.2	10.2	8.2	8.2	7.1	7.1	6.1	7.1	6.1
50°	10.2	7.1	6.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
51°	8.2	6.1	5.1	4.1	4.1	4.1	4.1	4.1	4.1	5.1	5.1
52°	6.1	5.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
53°	5.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
54°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
55°	4.1	4.1	4.1	4.1	4.1	3.1	4.1	4.1	4.1	4.1	4.1
57.5°	4.1	4.1	3.1	3.1	4.1	3.1	4.1	4.1	4.1	4.1	4.1
60°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1



TEST NUMBER: P208869

CATALOG NUMBER: LDSQA6A30830D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
63°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
64°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
65°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
66°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
67.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
70°	4.1	4.1	4.1	5.1	5.1	5.1	5.1	4.1	4.1	4.1	4.1
72.5°	4.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	4.1
75°	4.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
77.5°	4.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
80°	4.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
82.5°	4.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
85°	4.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
87.5°	4.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
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: P208869

CATALOG NUMBER: LDSQA6A30830D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
0°	179.5	179.5	179.5	179.5	179.5	179.5	179.5	179.5
2.5°	181.5	181.5	180.5	178.5	163.2	149.9	141.8	140.7
5°	182.6	180.5	176.4	173.4	145.8	128.5	118.3	117.3
7.5°	178.5	174.4	169.3	163.2	129.5	111.2	102.0	99.9
10°	171.3	164.2	158.1	149.9	114.2	96.9	88.7	86.7
11°	166.2	159.1	153.0	144.8	108.1	91.8	83.6	82.6
12°	162.2	154.0	145.8	138.7	102.0	86.7	79.6	78.5
13°	156.0	147.9	140.7	132.6	96.9	82.6	75.5	74.5
14°	150.9	141.8	134.6	127.5	91.8	77.5	72.4	71.4
15°	144.8	135.6	127.5	120.3	86.7	73.4	69.4	68.3
17.5°	128.5	118.3	111.2	104.0	74.5	64.3	61.2	62.2
20°	109.1	101.0	94.8	88.7	63.2	56.1	55.1	56.1
21°	102.0	94.8	89.8	83.6	59.2	53.0	53.0	54.1
22°	95.9	88.7	83.6	77.5	56.1	50.0	50.0	52.0
23°	89.8	82.6	77.5	72.4	52.0	47.9	47.9	50.0
24°	83.6	77.5	72.4	67.3	49.0	44.9	45.9	47.9
25°	77.5	72.4	67.3	63.2	45.9	42.8	43.9	45.9
26°	73.4	67.3	63.2	58.1	42.8	40.8	41.8	44.9
27°	67.3	62.2	58.1	54.1	40.8	38.8	40.8	42.8
28°	63.2	58.1	54.1	50.0	37.7	36.7	38.8	41.8
29°	58.1	54.1	50.0	46.9	35.7	34.7	37.7	39.8
30°	53.0	49.0	45.9	42.8	33.7	32.6	35.7	38.8
31°	49.0	45.9	42.8	39.8	31.6	31.6	34.7	37.7
32°	44.9	41.8	38.8	35.7	29.6	29.6	33.7	35.7
33°	40.8	37.7	34.7	32.6	27.5	28.6	31.6	34.7
34°	35.7	33.7	31.6	29.6	25.5	26.5	30.6	33.7
35°	32.6	30.6	28.6	26.5	24.5	25.5	29.6	32.6
36°	28.6	27.5	25.5	24.5	22.4	24.5	28.6	31.6
37°	25.5	24.5	22.4	21.4	21.4	23.5	27.5	30.6
38°	22.4	21.4	20.4	19.4	20.4	22.4	26.5	29.6
39°	19.4	18.4	18.4	17.3	19.4	21.4	25.5	28.6
40°	17.3	16.3	16.3	15.3	18.4	20.4	24.5	28.6
42.5°	12.2	12.2	12.2	12.2	15.3	18.4	22.4	26.5
45°	9.2	9.2	9.2	9.2	13.3	16.3	19.4	24.5
47.5°	7.1	7.1	7.1	7.1	12.2	15.3	18.4	21.4
50°	5.1	5.1	6.1	6.1	11.2	13.3	16.3	19.4
51°	5.1	5.1	5.1	6.1	10.2	13.3	15.3	18.4
52°	5.1	5.1	5.1	5.1	10.2	12.2	14.3	16.3
53°	4.1	5.1	5.1	5.1	9.2	12.2	13.3	15.3
54°	4.1	4.1	4.1	5.1	9.2	11.2	12.2	14.3
55°	4.1	4.1	4.1	5.1	8.2	11.2	12.2	12.2
57.5°	4.1	4.1	4.1	4.1	8.2	10.2	11.2	10.2
60°	4.1	4.1	4.1	4.1	7.1	9.2	10.2	7.1



TEST NUMBER: P208869

CATALOG NUMBER: LDSQA6A30830D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
63°	4.1	4.1	4.1	4.1	7.1	8.2	8.2	6.1
64°	4.1	4.1	4.1	4.1	7.1	8.2	8.2	6.1
65°	4.1	4.1	4.1	4.1	7.1	7.1	7.1	5.1
66°	4.1	4.1	4.1	4.1	7.1	7.1	7.1	5.1
67.5°	4.1	4.1	4.1	4.1	7.1	7.1	6.1	5.1
70°	4.1	4.1	4.1	5.1	6.1	6.1	6.1	5.1
72.5°	4.1	4.1	4.1	5.1	6.1	6.1	5.1	4.1
75°	5.1	5.1	5.1	5.1	6.1	6.1	5.1	3.1
77.5°	5.1	5.1	5.1	5.1	6.1	5.1	4.1	3.1
80°	5.1	5.1	4.1	4.1	5.1	5.1	3.1	2.0
82.5°	5.1	5.1	4.1	4.1	5.1	4.1	3.1	2.0
85°	5.1	5.1	4.1	4.1	5.1	4.1	2.0	1.0
87.5°	5.1	4.1	4.1	4.1	5.1	4.1	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°	3.1	3.1	3.1	3.1	4.1	3.1	4.1	5.1	6.1	6.1	6.1
62°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.1	3.1	3.1	4.1





61°	6.1	6.1	5.1	5.1	4.1	3.1	3.1	3.1	3.1	3.1	3.1
62°	4.1	4.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	4.1





61°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
62°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1





61°	4.1	4.1	4.1	4.1	7.1	9.2	9.2	7.1
62°	4.1	4.1	4.1	4.1	7.1	8.2	9.2	6.1



(END OF REPORT)