

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: P208854

Luminaire Tested: **LDSQA6A15835D010TE LARL20NF 6LSQA1H 30°**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208854
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: LDSQA6A15835D010TE 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 / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1607.8 lumens
Efficiency: N/A
Efficacy: 73.8 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

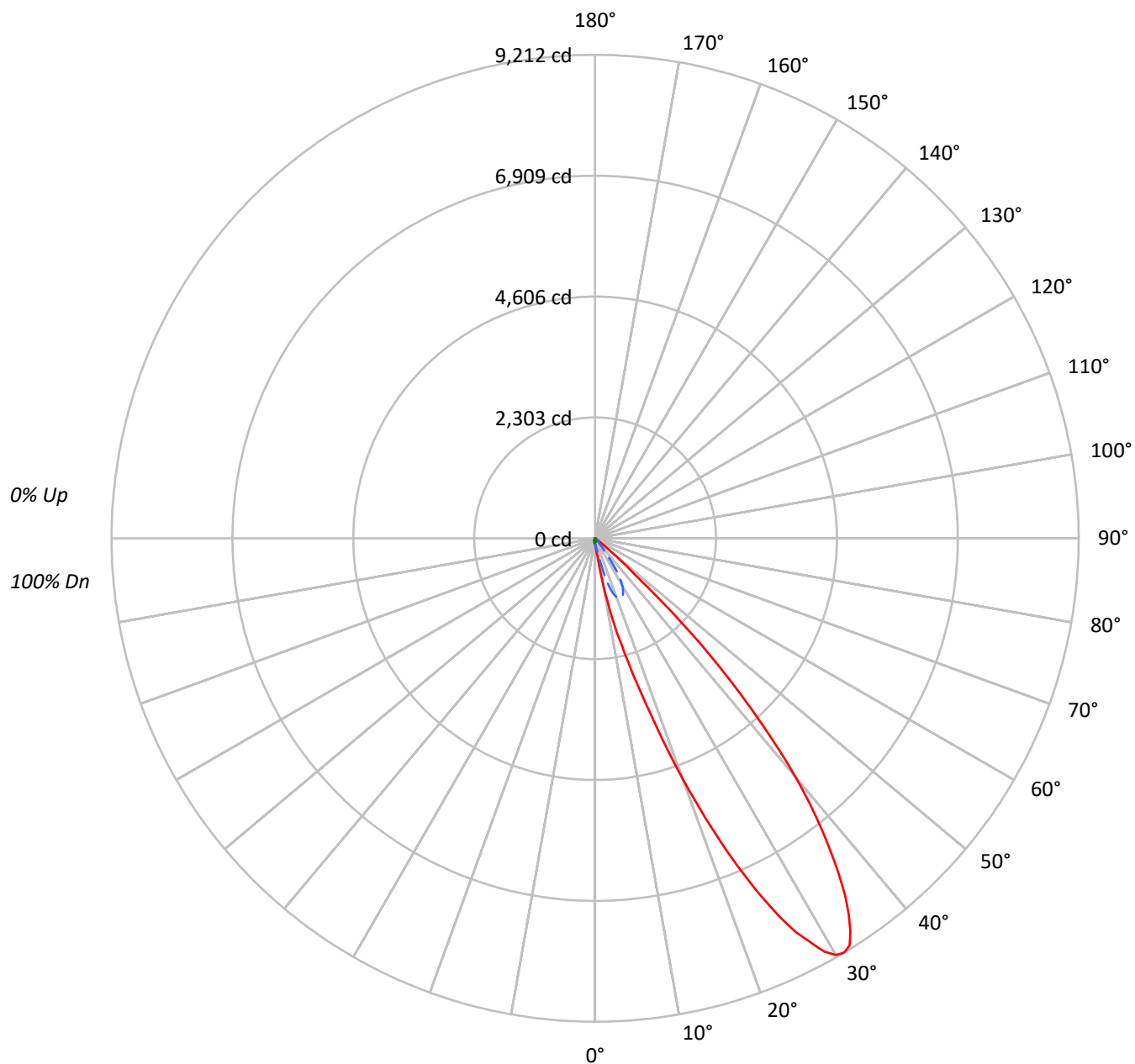
Input Watts (W): 21.79
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
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°	4667	4667	4667
5°	9318	4525	3060
10°	41905	3957	2291
15°	109854	3241	1841
20°	223669	2456	1553
25°	359901	1815	1316
30°	455865	1288	1163
35°	436074	841	1035
40°	334365	517	967
45°	170053	335	901
50°	26076	248	784
55°	3423	233	555
60°	370	215	370
65°	61	255	316
70°	76	390	390
75°	0	516	299
80°	0	620	298
85°	0	1235	296



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	14.5	0.9
10°-20°	159.0	9.9
20°-30°	520.5	32.4
30°-40°	633.6	39.4
40°-50°	257.4	16.0
50°-60°	15.3	1.0
60°-70°	3.0	0.2
70°-80°	2.6	0.2
80°-90°	1.9	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°	694.0	43.2
0°-40°	1327.6	82.6
0°-60°	1600.3	99.5
0°-90°	1607.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1607.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	108	108	108	108	108	
5°	216	164	105	78	71	41
15°	2464	822	73	44	41	802
25°	7576	1223	38	26	28	3482
35°	8296	488	16	15	20	5018
45°	2793	55	6	10	15	2143
55°	46	6	3	7	7	79
65°	1	2	2	4	3	1
75°	0	2	3	4	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°	108.4	108.4	108.4	108.4	108.4	108.4	108.4	108.4	108.4	108.4	108.4
2.5°	152.8	146.0	149.1	148.4	146.0	146.6	147.8	145.4	146.6	142.9	143.5
5°	215.6	205.7	211.3	205.1	208.2	205.1	205.1	201.4	198.3	197.7	194.6
7.5°	376.4	352.3	359.7	333.2	337.6	328.9	320.9	312.3	297.5	290.1	274.1
10°	958.5	890.7	906.7	848.8	847.6	827.2	789.7	763.8	709.0	670.2	614.7
11°	1212.2	1166.0	1180.2	1116.8	1113.7	1086.0	1041.6	972.6	941.8	890.1	821.1
12°	1543.6	1466.0	1474.6	1405.0	1398.3	1361.3	1311.4	1226.4	1189.4	1126.6	1045.3
13°	1844.8	1775.8	1776.5	1700.7	1692.7	1645.9	1591.1	1488.2	1446.9	1376.7	1278.8
14°	2121.4	2069.0	2058.6	2017.9	1974.8	1920.0	1862.1	1745.7	1700.1	1621.2	1509.1
15°	2464.5	2362.2	2341.9	2290.8	2238.4	2169.4	2098.6	1965.6	1915.1	1828.2	1716.7
17.5°	3476.5	3350.3	3294.8	3190.7	3092.2	2959.7	2806.4	2570.4	2454.0	2298.2	2123.9
20°	4881.6	4682.6	4571.1	4404.2	4245.3	4028.4	3763.6	3392.2	3219.7	2917.9	2632.0
21°	5437.8	5266.6	5126.7	4938.9	4751.0	4494.1	4179.4	3786.4	3520.3	3167.3	2832.2
22°	5999.6	5836.9	5673.7	5467.4	5257.3	4957.3	4594.5	4138.7	3819.0	3406.9	3020.7
23°	6552.7	6387.6	6262.0	5979.2	5740.2	5402.1	4999.8	4478.7	4107.3	3634.8	3198.1
24°	7083.7	6903.2	6746.7	6461.5	6191.1	5814.8	5381.7	4808.9	4385.7	3852.3	3362.6
25°	7575.8	7376.9	7184.7	6891.5	6597.7	6186.8	5718.7	5107.6	4639.5	4049.4	3512.3
26°	8028.6	7756.9	7548.1	7277.1	6943.2	6512.0	6015.0	5365.7	4858.2	4213.9	3629.9
27°	8420.9	8146.2	7906.6	7616.5	7243.8	6779.4	6259.5	5551.1	5031.2	4337.1	3711.8
28°	8706.1	8473.9	8198.0	7885.7	7476.0	6963.6	6425.2	5699.0	5135.3	4401.1	3745.7
29°	9008.6	8744.3	8422.8	8068.0	7622.0	7079.4	6516.4	5776.0	5178.5	4415.9	3738.9
30°	9169.3	8926.0	8547.8	8161.0	7684.9	7116.3	6536.1	5787.7	5164.9	4380.2	3694.6
31°	9212.5	8985.2	8566.3	8162.8	7665.1	7080.0	6487.4	5727.3	5091.6	4297.0	3612.1
32°	9150.2	8923.0	8488.1	8084.0	7574.6	6978.3	6380.2	5619.5	4972.1	4172.6	3494.4
33°	8926.6	8742.5	8323.0	7934.3	7436.6	6827.4	6222.5	5444.0	4786.1	4011.2	3352.7
34°	8640.8	8469.0	8082.2	7683.6	7217.9	6620.5	6005.1	5231.4	4572.4	3812.9	3184.6
35°	8296.5	8127.1	7770.5	7374.4	6928.4	6345.1	5726.7	4964.7	4319.8	3588.6	2997.9
36°	7890.6	7714.4	7384.9	7007.9	6602.0	6012.5	5397.1	4658.0	4032.8	3344.7	2798.4
37°	7444.0	7266.6	6972.2	6622.9	6221.3	5638.0	5028.2	4319.8	3729.7	3091.6	2589.5
38°	6972.8	6807.7	6540.4	6191.7	5794.4	5221.6	4624.7	4010.6	3421.1	2835.3	2378.3
39°	6489.3	6315.5	6063.6	5721.1	5330.6	4765.2	4204.0	3655.2	3155.0	2583.4	2184.2
40°	5949.0	5785.2	5493.2	5224.7	4832.9	4294.5	3782.7	3262.8	2859.3	2341.3	2008.1
42.5°	4400.5	4272.4	4116.5	3841.2	3551.7	3165.5	2807.6	2447.3	2154.1	1860.2	1615.7
45°	2792.8	2698.6	2618.5	2447.3	2330.2	2112.8	1928.0	1743.8	1605.2	1451.2	1179.6
47.5°	1033.6	989.2	960.9	885.8	879.0	809.4	802.6	891.3	943.7	888.2	668.3
50°	389.3	378.2	371.4	348.0	332.0	300.0	276.0	258.1	221.7	196.5	176.2
51°	255.6	247.6	235.9	234.1	227.3	209.4	198.3	194.6	170.0	143.5	123.2
52°	162.6	157.7	150.3	150.9	147.2	136.1	132.4	138.0	125.0	110.3	95.5
53°	102.3	99.8	94.9	94.9	94.2	86.9	85.6	90.5	88.1	81.3	72.7
54°	66.5	65.9	61.6	62.2	62.2	57.9	57.3	59.1	58.5	56.1	51.7
55°	45.6	45.0	44.3	42.5	41.3	40.0	40.0	40.7	40.0	38.8	36.3
57.5°	16.0	15.4	16.0	15.4	15.4	16.0	15.4	16.6	17.2	17.2	16.0
60°	4.3	4.3	4.3	4.3	4.3	4.3	4.3	5.5	6.2	6.2	6.2



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
63°	1.2	1.2	1.2	1.2	1.2	1.2	0.6	0.6	1.2	1.2	1.2
64°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.2
65°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.2
66°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
67.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
70°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.2
72.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.2
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.6	0.6	0.6
77.5°	0.0	0.0	0.0	0.0	0.0	0.6	0.6	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	0.6	0.6	0.6	0.6	0.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.6	0.6	0.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.6	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°	108.4	108.4	108.4	108.4	108.4	108.4	108.4	108.4	108.4	108.4	108.4
2.5°	141.7	142.3	139.8	139.2	138.6	135.5	133.7	131.8	130.0	126.9	128.1
5°	189.7	189.7	184.2	180.5	178.6	171.9	168.8	164.5	159.5	155.8	154.0
7.5°	264.9	260.6	248.2	239.0	233.5	219.9	211.9	200.2	193.4	186.0	181.7
10°	561.8	532.8	472.4	429.3	388.7	339.4	294.4	259.3	236.5	219.9	209.4
11°	757.0	718.8	641.8	582.1	529.1	458.9	389.9	324.0	276.6	247.6	226.1
12°	971.4	922.1	829.7	755.8	691.1	603.0	515.0	428.1	359.7	305.5	261.2
13°	1194.4	1130.9	1023.7	938.7	864.2	762.6	657.9	553.8	470.6	396.7	329.5
14°	1415.5	1337.9	1220.2	1122.3	1038.5	925.2	806.3	690.5	593.2	500.2	418.2
15°	1616.3	1531.3	1427.8	1299.7	1209.2	1063.8	951.7	821.7	710.8	603.0	507.6
17.5°	1976.7	1862.1	1740.1	1607.7	1521.4	1377.9	1235.6	1078.6	944.3	810.6	682.5
20°	2372.7	2168.2	1967.4	1770.3	1645.3	1492.5	1353.3	1198.1	1056.4	904.9	765.7
21°	2528.6	2294.5	2050.0	1828.8	1687.1	1523.9	1379.8	1219.0	1069.9	908.6	762.0
22°	2676.4	2396.7	2122.0	1878.1	1723.5	1556.6	1401.3	1232.6	1073.6	904.2	750.9
23°	2811.3	2495.3	2188.5	1921.2	1750.0	1572.6	1412.4	1238.1	1071.8	894.4	734.2
24°	2933.9	2585.8	2245.2	1953.2	1766.0	1577.5	1411.2	1233.8	1062.5	879.6	711.4
25°	3039.8	2657.3	2286.5	1970.5	1770.3	1575.0	1405.0	1222.7	1044.1	854.4	685.0
26°	3119.9	2702.9	2306.2	1973.0	1764.1	1567.0	1390.9	1202.4	1015.1	820.5	649.2
27°	3166.1	2719.5	2306.2	1962.5	1751.8	1552.2	1368.1	1171.0	977.5	778.6	604.9
28°	3174.1	2712.1	2289.6	1940.9	1728.4	1526.4	1334.8	1130.9	933.2	728.7	556.2
29°	3153.2	2682.6	2253.8	1904.0	1693.9	1493.1	1291.7	1080.4	880.2	673.9	505.7
30°	3101.4	2628.3	2200.9	1857.2	1652.6	1449.4	1237.5	1024.4	820.5	617.2	447.8
31°	3020.7	2550.1	2133.1	1800.5	1601.5	1397.0	1177.7	959.7	753.3	547.0	385.0
32°	2913.5	2440.5	2058.0	1735.8	1544.9	1337.3	1103.2	877.1	664.6	461.4	312.3
33°	2787.3	2333.3	1974.2	1666.2	1483.3	1255.3	1000.3	753.9	556.2	365.9	236.5
34°	2643.1	2218.1	1884.3	1592.9	1402.6	1135.2	872.2	627.1	437.3	267.3	166.9
35°	2483.6	2095.5	1790.0	1506.7	1275.1	988.6	725.6	488.5	316.6	181.1	125.7
36°	2313.6	1958.2	1682.2	1383.5	1122.3	824.2	570.4	351.7	210.0	134.9	108.4
37°	2153.4	1838.7	1570.7	1228.9	949.8	652.3	416.4	234.7	153.4	117.7	96.1
38°	2002.5	1723.5	1425.4	1057.6	772.4	489.1	274.1	173.1	133.0	103.5	85.0
39°	1861.5	1607.7	1255.3	874.1	595.0	344.9	199.0	148.4	115.8	91.8	75.1
40°	1725.3	1442.0	1069.9	712.7	433.6	240.8	167.5	131.2	102.3	80.7	63.4
42.5°	1294.2	926.4	592.6	324.6	203.9	157.1	119.5	92.4	67.8	49.9	38.2
45°	812.5	471.2	254.4	182.3	142.3	106.6	77.6	55.4	40.7	30.2	24.0
47.5°	369.6	202.7	157.7	122.0	91.8	63.4	45.6	33.3	24.6	19.1	14.2
50°	135.5	115.2	93.6	69.6	50.5	36.3	26.5	19.7	14.8	11.1	8.0
51°	105.9	92.4	74.5	52.4	40.0	29.6	21.6	16.0	11.7	8.6	6.2
52°	83.2	73.3	57.3	40.7	31.4	23.4	17.2	12.3	8.6	6.8	4.9
53°	64.1	56.1	43.1	31.4	24.6	18.5	13.6	9.9	6.8	4.9	3.7
54°	47.4	41.3	32.0	24.0	19.1	14.2	9.9	7.4	4.9	3.7	3.1
55°	33.9	30.2	24.0	19.1	14.8	11.1	7.4	5.5	3.7	2.5	2.5
57.5°	14.2	13.6	11.1	9.2	7.4	5.5	3.7	2.5	2.5	1.8	2.5
60°	5.5	5.5	4.9	3.7	3.1	2.5	1.8	1.8	1.8	1.8	1.8



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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	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.5
64°	1.2	1.2	1.2	1.2	1.8	1.8	1.8	1.8	1.8	1.8	2.5
65°	1.2	1.2	1.2	1.2	1.2	1.8	1.8	1.8	1.8	1.8	2.5
66°	1.2	1.2	1.2	1.2	1.2	1.8	1.8	1.8	1.8	1.8	2.5
67.5°	1.2	1.2	1.2	1.2	1.2	1.8	1.8	1.8	1.8	2.5	2.5
70°	1.2	1.2	1.2	1.2	1.2	1.8	1.8	1.8	1.8	2.5	2.5
72.5°	1.2	1.2	1.2	1.2	1.2	1.8	1.8	1.8	2.5	2.5	2.5
75°	0.6	1.2	1.2	1.2	1.2	1.8	1.8	1.8	2.5	2.5	2.5
77.5°	0.6	1.2	1.2	1.2	1.8	1.8	1.8	1.8	2.5	2.5	2.5
80°	0.6	1.2	1.2	1.2	1.2	1.8	1.8	1.8	2.5	2.5	2.5
82.5°	0.6	1.2	1.2	1.2	1.2	1.8	1.8	1.8	2.5	2.5	2.5
85°	0.6	1.2	1.2	1.2	1.2	1.8	1.8	1.8	2.5	2.5	2.5
87.5°	0.6	1.2	1.2	1.2	1.2	1.8	1.8	1.8	2.5	2.5	2.5
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: P208854

CATALOG NUMBER: LDSQA6A15835D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	108.4	108.4	108.4	108.4	108.4	108.4	108.4	108.4	108.4	108.4	108.4
2.5°	126.3	126.3	122.0	120.7	120.1	118.9	115.8	115.8	114.0	111.5	110.3
5°	149.7	148.4	141.7	138.0	134.9	131.2	125.0	122.6	118.9	115.2	112.1
7.5°	172.5	168.2	157.7	152.1	147.8	141.7	133.7	128.1	122.0	115.8	111.5
10°	195.3	186.6	171.9	162.6	154.6	146.0	136.1	130.0	122.0	114.0	107.8
11°	204.5	193.4	176.8	165.1	155.8	146.0	136.1	128.1	120.7	112.7	105.9
12°	222.4	201.4	181.7	168.8	157.1	146.0	134.9	126.3	118.3	110.3	103.5
13°	258.7	219.9	187.3	171.9	158.9	146.0	133.7	124.4	115.8	107.8	100.4
14°	324.6	258.1	202.0	174.9	159.5	146.0	132.4	121.3	112.7	104.1	97.3
15°	399.1	316.6	232.2	186.0	160.2	144.8	130.0	118.3	109.0	100.4	93.6
17.5°	553.8	442.9	328.9	241.5	175.6	141.1	120.7	109.0	98.6	89.9	81.9
20°	616.6	487.8	359.7	258.7	181.7	134.9	110.3	97.9	86.9	78.2	71.5
21°	608.6	479.2	350.5	247.0	170.0	126.3	104.7	93.0	82.5	73.3	67.1
22°	591.9	458.9	328.9	225.4	155.8	117.7	99.8	87.5	77.6	69.0	62.8
23°	569.8	429.9	304.3	202.7	141.1	109.6	94.9	82.5	73.3	64.7	59.1
24°	542.1	401.0	276.0	179.9	126.9	103.5	89.3	77.6	68.4	61.0	55.4
25°	511.3	370.8	245.8	160.8	118.3	97.3	83.2	72.1	64.1	57.3	51.7
26°	473.7	335.1	217.4	142.9	107.8	90.5	77.0	67.1	59.7	53.6	48.0
27°	430.6	298.1	186.0	124.4	99.2	83.8	71.5	62.8	56.1	49.9	44.3
28°	391.8	256.9	159.5	110.9	92.4	77.0	66.5	58.5	52.4	46.2	41.3
29°	343.1	217.4	136.1	100.4	85.0	72.1	61.6	54.2	48.0	41.9	37.6
30°	294.4	179.9	116.4	91.8	77.6	65.9	56.7	49.9	43.7	38.8	35.1
31°	243.9	149.1	102.3	84.4	70.8	61.0	52.4	46.2	40.0	35.7	32.0
32°	186.6	122.0	91.2	76.4	64.7	54.8	48.0	41.9	36.3	32.6	29.0
33°	140.4	102.9	82.5	69.0	58.5	50.5	43.7	37.6	33.3	29.6	26.5
34°	112.1	91.8	74.5	62.2	53.0	45.6	38.8	33.9	29.6	26.5	23.4
35°	98.6	82.5	66.5	56.1	47.4	40.0	34.5	30.2	26.5	23.4	20.9
36°	87.5	73.9	59.1	49.9	41.3	35.1	30.2	26.5	22.8	20.3	18.5
37°	78.2	65.3	52.4	43.1	35.7	30.8	26.5	22.8	19.7	17.9	16.6
38°	70.2	56.1	44.3	37.0	30.8	26.5	22.8	19.7	17.2	15.4	14.2
39°	59.7	47.4	37.0	31.4	25.9	22.2	19.1	17.2	14.8	13.6	12.3
40°	49.9	39.4	30.8	25.9	22.2	18.5	16.6	14.2	12.9	11.7	10.5
42.5°	30.8	24.6	19.7	16.6	14.2	12.3	11.1	9.9	8.6	8.0	7.4
45°	19.1	15.4	12.3	10.5	8.6	8.0	7.4	6.2	6.2	5.5	5.5
47.5°	11.1	9.2	6.8	6.2	4.9	4.9	4.3	4.3	3.7	4.3	3.7
50°	6.2	4.3	3.7	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
51°	4.9	3.7	3.1	2.5	2.5	2.5	2.5	2.5	2.5	3.1	3.1
52°	3.7	3.1	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
53°	3.1	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
54°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
55°	2.5	2.5	2.5	2.5	2.5	1.8	2.5	2.5	2.5	2.5	2.5
57.5°	2.5	2.5	1.8	1.8	2.5	1.8	2.5	2.5	2.5	2.5	2.5
60°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5



TEST NUMBER: P208854

CATALOG NUMBER: LDSQA6A15835D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
63°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
64°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
65°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
66°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
67.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
70°	2.5	2.5	2.5	3.1	3.1	3.1	3.1	2.5	2.5	2.5	2.5
72.5°	2.5	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	2.5
75°	2.5	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
77.5°	2.5	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
80°	2.5	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
82.5°	2.5	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
85°	2.5	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
87.5°	2.5	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
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: P208854

CATALOG NUMBER: LDSQA6A15835D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
0°	108.4	108.4	108.4	108.4	108.4	108.4	108.4	108.4
2.5°	109.6	109.6	109.0	107.8	98.6	90.5	85.6	85.0
5°	110.3	109.0	106.6	104.7	88.1	77.6	71.5	70.8
7.5°	107.8	105.3	102.3	98.6	78.2	67.1	61.6	60.4
10°	103.5	99.2	95.5	90.5	69.0	58.5	53.6	52.4
11°	100.4	96.1	92.4	87.5	65.3	55.4	50.5	49.9
12°	97.9	93.0	88.1	83.8	61.6	52.4	48.0	47.4
13°	94.2	89.3	85.0	80.1	58.5	49.9	45.6	45.0
14°	91.2	85.6	81.3	77.0	55.4	46.8	43.7	43.1
15°	87.5	81.9	77.0	72.7	52.4	44.3	41.9	41.3
17.5°	77.6	71.5	67.1	62.8	45.0	38.8	37.0	37.6
20°	65.9	61.0	57.3	53.6	38.2	33.9	33.3	33.9
21°	61.6	57.3	54.2	50.5	35.7	32.0	32.0	32.6
22°	57.9	53.6	50.5	46.8	33.9	30.2	30.2	31.4
23°	54.2	49.9	46.8	43.7	31.4	29.0	29.0	30.2
24°	50.5	46.8	43.7	40.7	29.6	27.1	27.7	29.0
25°	46.8	43.7	40.7	38.2	27.7	25.9	26.5	27.7
26°	44.3	40.7	38.2	35.1	25.9	24.6	25.3	27.1
27°	40.7	37.6	35.1	32.6	24.6	23.4	24.6	25.9
28°	38.2	35.1	32.6	30.2	22.8	22.2	23.4	25.3
29°	35.1	32.6	30.2	28.3	21.6	20.9	22.8	24.0
30°	32.0	29.6	27.7	25.9	20.3	19.7	21.6	23.4
31°	29.6	27.7	25.9	24.0	19.1	19.1	20.9	22.8
32°	27.1	25.3	23.4	21.6	17.9	17.9	20.3	21.6
33°	24.6	22.8	20.9	19.7	16.6	17.2	19.1	20.9
34°	21.6	20.3	19.1	17.9	15.4	16.0	18.5	20.3
35°	19.7	18.5	17.2	16.0	14.8	15.4	17.9	19.7
36°	17.2	16.6	15.4	14.8	13.6	14.8	17.2	19.1
37°	15.4	14.8	13.6	12.9	12.9	14.2	16.6	18.5
38°	13.6	12.9	12.3	11.7	12.3	13.6	16.0	17.9
39°	11.7	11.1	11.1	10.5	11.7	12.9	15.4	17.2
40°	10.5	9.9	9.9	9.2	11.1	12.3	14.8	17.2
42.5°	7.4	7.4	7.4	7.4	9.2	11.1	13.6	16.0
45°	5.5	5.5	5.5	5.5	8.0	9.9	11.7	14.8
47.5°	4.3	4.3	4.3	4.3	7.4	9.2	11.1	12.9
50°	3.1	3.1	3.7	3.7	6.8	8.0	9.9	11.7
51°	3.1	3.1	3.1	3.7	6.2	8.0	9.2	11.1
52°	3.1	3.1	3.1	3.1	6.2	7.4	8.6	9.9
53°	2.5	3.1	3.1	3.1	5.5	7.4	8.0	9.2
54°	2.5	2.5	2.5	3.1	5.5	6.8	7.4	8.6
55°	2.5	2.5	2.5	3.1	4.9	6.8	7.4	7.4
57.5°	2.5	2.5	2.5	2.5	4.9	6.2	6.8	6.2
60°	2.5	2.5	2.5	2.5	4.3	5.5	6.2	4.3



TEST NUMBER: P208854

CATALOG NUMBER: LDSQA6A15835D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
63°	2.5	2.5	2.5	2.5	4.3	4.9	4.9	3.7
64°	2.5	2.5	2.5	2.5	4.3	4.9	4.9	3.7
65°	2.5	2.5	2.5	2.5	4.3	4.3	4.3	3.1
66°	2.5	2.5	2.5	2.5	4.3	4.3	4.3	3.1
67.5°	2.5	2.5	2.5	2.5	4.3	4.3	3.7	3.1
70°	2.5	2.5	2.5	3.1	3.7	3.7	3.7	3.1
72.5°	2.5	2.5	2.5	3.1	3.7	3.7	3.1	2.5
75°	3.1	3.1	3.1	3.1	3.7	3.7	3.1	1.8
77.5°	3.1	3.1	3.1	3.1	3.7	3.1	2.5	1.8
80°	3.1	3.1	2.5	2.5	3.1	3.1	1.8	1.2
82.5°	3.1	3.1	2.5	2.5	3.1	2.5	1.8	1.2
85°	3.1	3.1	2.5	2.5	3.1	2.5	1.2	0.6
87.5°	3.1	2.5	2.5	2.5	3.1	2.5	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°	1.8	1.8	1.8	1.8	2.5	1.8	2.5	3.1	3.7	3.7	3.7
62°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.8	1.8	1.8	2.5





61°	3.7	3.7	3.1	3.1	2.5	1.8	1.8	1.8	1.8	1.8	1.8
62°	2.5	2.5	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.5





61°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
62°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5





61°	2.5	2.5	2.5	2.5	4.3	5.5	5.5	4.3
62°	2.5	2.5	2.5	2.5	4.3	4.9	5.5	3.7



(END OF REPORT)