

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: P208865

Luminaire Tested: **LDSQA6A20930D010TE LARL20NF 6LSQA1H 30°**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208865
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: LDSQA6A20930D010TE 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 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1574.3 lumens
Efficiency: N/A
Efficacy: 54.6 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

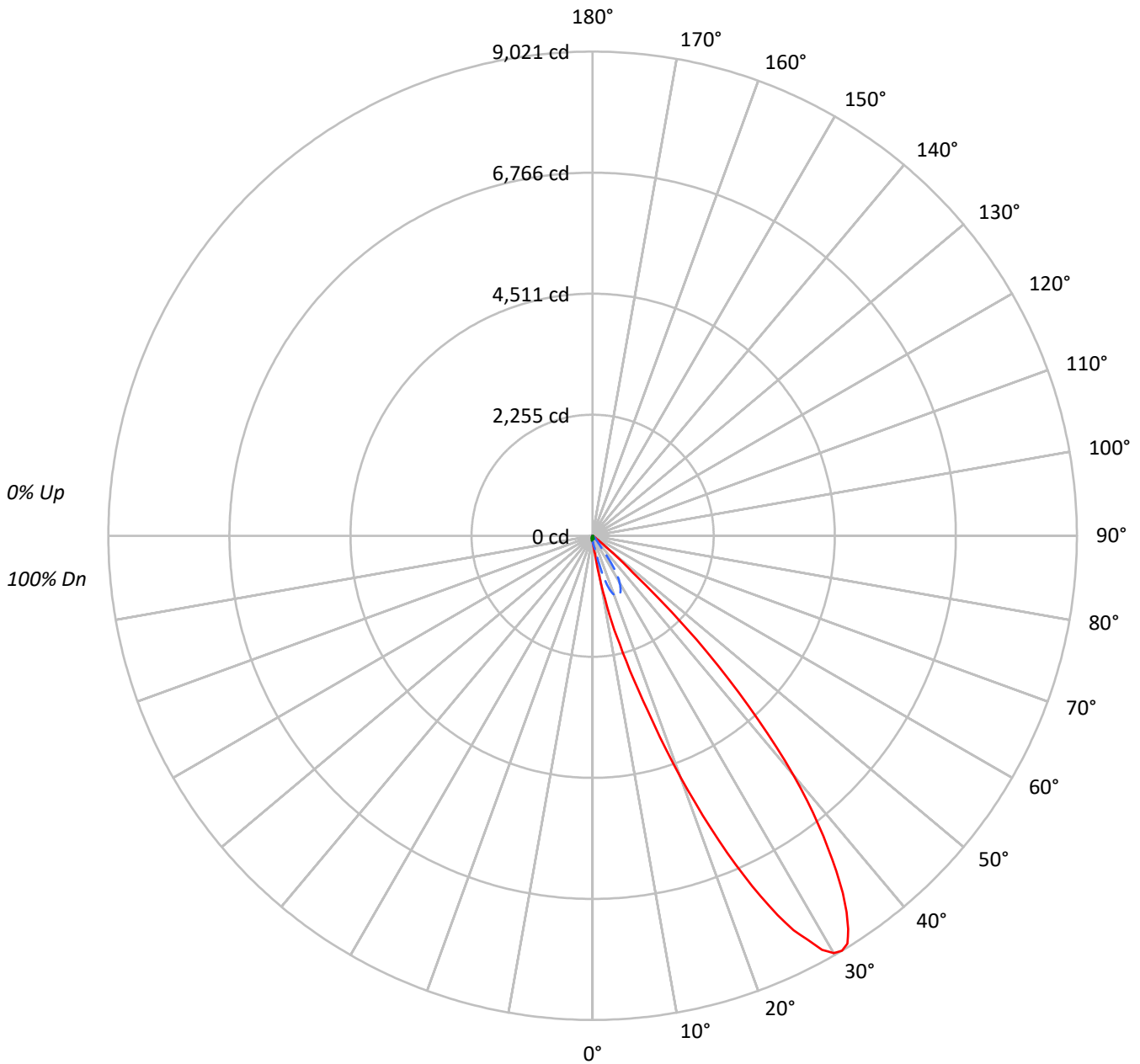
Input Watts (W): 28.81
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91																			
2	105	100	95	91	103	98	94	90	95	91	88	92	89	86	89	86	84	82																			
3	99	91	85	80	96	89	84	80	87	82	78	84	80	77	82	79	76	74																			
4	92	83	76	71	90	82	75	71	79	74	70	77	73	69	75	71	68	66																			
5	86	76	69	63	84	75	68	63	73	67	62	71	66	62	69	65	61	60																			
6	80	69	62	57	78	68	61	56	67	61	56	65	60	56	64	59	55	53																			
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48																			
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43																			
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	41	39																			
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	4573	4573	4573
5°	9124	4430	2999
10°	41031	3878	2243
15°	107567	3174	1801
20°	219014	2405	1521
25°	352414	1777	1287
30°	446384	1258	1139
35°	427002	825	1014
40°	327412	506	950
45°	166516	329	883
50°	25534	241	770
55°	3348	225	540
60°	362	207	362
65°	61	245	306
70°	76	378	378
75°	0	499	299
80°	0	595	298
85°	0	1186	296



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	14.2	0.9
10°-20°	155.7	9.9
20°-30°	509.7	32.4
30°-40°	620.4	39.4
40°-50°	252.1	16.0
50°-60°	15.0	1.0
60°-70°	2.9	0.2
70°-80°	2.6	0.2
80°-90°	1.8	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°	679.6	43.2
0°-40°	1300.0	82.6
0°-60°	1567.0	99.5
0°-90°	1574.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1574.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	106	106	106	106	106	
5°	211	161	102	76	69	40
15°	2413	805	71	43	40	785
25°	7418	1197	37	25	27	3409
35°	8124	478	16	15	19	4913
45°	2735	54	5	10	14	2098
55°	45	5	3	7	7	77
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°	106.2	106.2	106.2	106.2	106.2	106.2	106.2	106.2	106.2	106.2	106.2
2.5°	149.6	142.9	146.0	145.4	142.9	143.6	144.8	142.3	143.6	139.9	140.5
5°	211.1	201.5	206.9	200.9	203.9	200.9	200.9	197.2	194.2	193.6	190.6
7.5°	368.5	345.0	352.2	326.3	330.5	322.1	314.2	305.8	291.3	284.1	268.4
10°	938.5	872.2	887.8	831.1	829.9	810.0	773.2	747.9	694.2	656.2	601.9
11°	1187.0	1141.8	1155.6	1093.5	1090.5	1063.4	1019.9	952.4	922.2	871.6	804.0
12°	1511.5	1435.5	1444.0	1375.8	1369.2	1333.0	1284.1	1200.9	1164.7	1103.2	1023.6
13°	1806.4	1738.9	1739.5	1665.3	1657.5	1611.6	1557.9	1457.2	1416.8	1348.0	1252.1
14°	2077.3	2026.0	2015.7	1975.9	1933.7	1880.0	1823.3	1709.3	1664.7	1587.5	1477.7
15°	2413.2	2313.1	2293.2	2243.1	2191.9	2124.3	2054.9	1924.7	1875.2	1790.2	1681.0
17.5°	3404.2	3280.6	3226.3	3124.3	3027.8	2898.2	2748.0	2517.0	2403.0	2250.4	2079.7
20°	4780.0	4585.2	4476.0	4312.6	4156.9	3944.6	3685.3	3321.6	3152.7	2857.1	2577.3
21°	5324.6	5157.0	5020.1	4836.1	4652.1	4400.6	4092.4	3707.6	3447.0	3101.4	2773.3
22°	5874.7	5715.5	5555.7	5353.6	5147.9	4854.2	4498.9	4052.6	3739.6	3336.0	2957.9
23°	6416.4	6254.7	6131.7	5854.8	5620.8	5289.7	4895.8	4385.5	4021.8	3559.2	3131.6
24°	6936.3	6759.5	6606.3	6327.1	6062.3	5693.8	5269.8	4708.8	4294.5	3772.1	3292.6
25°	7418.2	7223.4	7035.2	6748.1	6460.4	6058.1	5599.7	5001.4	4543.0	3965.1	3439.2
26°	7861.5	7595.5	7391.0	7125.7	6798.8	6376.5	5889.8	5254.1	4757.1	4126.2	3554.4
27°	8245.7	7976.7	7742.1	7458.0	7093.1	6638.3	6129.3	5435.6	4926.6	4246.8	3634.6
28°	8525.0	8297.6	8027.4	7721.6	7320.5	6818.7	6291.5	5580.4	5028.5	4309.5	3667.8
29°	8821.1	8562.4	8247.5	7900.1	7463.4	6932.0	6380.8	5655.8	5070.7	4324.0	3661.1
30°	8978.6	8740.3	8370.0	7991.2	7524.9	6968.2	6400.1	5667.2	5057.4	4289.0	3617.7
31°	9020.8	8798.2	8388.1	7993.0	7505.6	6932.7	6352.4	5608.1	4985.7	4207.6	3536.9
32°	8959.9	8737.3	8311.5	7915.8	7417.0	6833.1	6247.5	5502.6	4868.7	4085.8	3421.7
33°	8740.9	8560.6	8149.8	7769.2	7281.9	6685.4	6093.1	5330.7	4686.5	3927.7	3283.0
34°	8461.0	8292.8	7914.0	7523.7	7067.8	6482.7	5880.1	5122.6	4477.2	3733.5	3118.3
35°	8123.9	7958.0	7608.8	7221.0	6784.3	6213.1	5607.5	4861.4	4229.9	3514.0	2935.6
36°	7726.4	7553.9	7231.2	6862.1	6464.6	5887.4	5284.8	4561.1	3948.8	3275.1	2740.1
37°	7289.1	7115.4	6827.1	6485.1	6091.9	5520.7	4923.5	4229.9	3652.1	3027.2	2535.7
38°	6827.7	6666.1	6404.3	6062.9	5673.9	5112.9	4528.5	3927.1	3349.9	2776.3	2328.8
39°	6354.2	6184.1	5937.4	5602.1	5219.7	4666.0	4116.5	3579.1	3089.4	2529.6	2138.8
40°	5825.3	5664.8	5378.9	5116.0	4732.3	4205.2	3704.0	3194.9	2799.8	2292.6	1966.3
42.5°	4308.9	4183.5	4030.9	3761.3	3477.8	3099.6	2749.2	2396.3	2109.2	1821.5	1582.1
45°	2734.7	2642.4	2564.0	2396.3	2281.7	2068.8	1887.9	1707.5	1571.8	1421.0	1155.0
47.5°	1012.1	968.7	940.9	867.3	860.7	792.5	785.9	872.8	924.0	869.7	654.4
50°	381.2	370.3	363.7	340.8	325.1	293.7	270.2	252.7	217.1	192.4	172.5
51°	250.3	242.5	231.0	229.2	222.6	205.1	194.2	190.6	166.5	140.5	120.6
52°	159.2	154.4	147.2	147.8	144.2	133.3	129.7	135.1	122.4	108.0	93.5
53°	100.1	97.7	92.9	92.9	92.3	85.0	83.8	88.7	86.3	79.6	71.2
54°	65.1	64.5	60.3	60.9	60.9	56.7	56.1	57.9	57.3	54.9	50.7
55°	44.6	44.0	43.4	41.6	40.4	39.2	39.2	39.8	39.2	38.0	35.6
57.5°	15.7	15.1	15.7	15.1	15.1	15.7	15.1	16.3	16.9	16.9	15.7
60°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	5.4	6.0	6.0	6.0



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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°	106.2	106.2	106.2	106.2	106.2	106.2	106.2	106.2	106.2	106.2	106.2
2.5°	138.7	139.3	136.9	136.3	135.7	132.7	130.9	129.1	127.3	124.2	125.5
5°	185.8	185.8	180.3	176.7	174.9	168.3	165.3	161.0	156.2	152.6	150.8
7.5°	259.4	255.1	243.1	234.0	228.6	215.3	207.5	196.0	189.4	182.2	177.9
10°	550.1	521.7	462.6	420.4	380.6	332.3	288.3	253.9	231.6	215.3	205.1
11°	741.3	703.9	628.5	570.0	518.1	449.3	381.8	317.3	270.8	242.5	221.4
12°	951.2	902.9	812.4	740.1	676.7	590.5	504.2	419.2	352.2	299.2	255.7
13°	1169.5	1107.4	1002.4	919.2	846.2	746.7	644.2	542.2	460.8	388.4	322.7
14°	1386.0	1310.1	1194.8	1098.9	1016.9	905.9	789.5	676.1	580.8	489.8	409.5
15°	1582.7	1499.4	1398.1	1272.7	1184.0	1041.6	931.9	804.6	696.0	590.5	497.0
17.5°	1935.5	1823.3	1703.9	1574.2	1489.8	1349.3	1209.9	1056.1	924.6	793.8	668.3
20°	2323.3	2123.1	1926.5	1733.5	1611.0	1461.4	1325.1	1173.1	1034.4	886.0	749.7
21°	2475.9	2246.7	2007.3	1790.8	1652.0	1492.2	1351.1	1193.6	1047.7	889.7	746.1
22°	2620.7	2346.9	2077.9	1839.0	1687.6	1524.2	1372.2	1206.9	1051.3	885.4	735.2
23°	2752.8	2443.4	2143.0	1881.2	1713.6	1539.9	1383.0	1212.3	1049.5	875.8	719.0
24°	2872.8	2532.0	2198.5	1912.6	1729.2	1544.7	1381.8	1208.1	1040.4	861.3	696.6
25°	2976.6	2602.0	2238.9	1929.5	1733.5	1542.3	1375.8	1197.3	1022.3	836.6	670.7
26°	3055.0	2646.6	2258.2	1931.9	1727.4	1534.4	1361.9	1177.4	994.0	803.4	635.7
27°	3100.2	2662.9	2258.2	1921.6	1715.4	1519.9	1339.6	1146.6	957.2	762.4	592.3
28°	3108.1	2655.7	2241.9	1900.5	1692.5	1494.6	1307.0	1107.4	913.8	713.5	544.6
29°	3087.5	2626.7	2206.9	1864.3	1658.7	1462.0	1264.8	1057.9	861.9	659.9	495.2
30°	3036.9	2573.7	2155.1	1818.5	1618.3	1419.2	1211.7	1003.0	803.4	604.4	438.5
31°	2957.9	2497.1	2088.7	1763.0	1568.2	1368.0	1153.2	939.7	737.7	535.6	377.0
32°	2852.9	2389.7	2015.1	1699.7	1512.7	1309.4	1080.2	858.9	650.8	451.8	305.8
33°	2729.3	2284.7	1933.1	1631.5	1452.4	1229.2	979.5	738.3	544.6	358.3	231.6
34°	2588.1	2172.0	1845.0	1559.8	1373.4	1111.6	854.1	614.0	428.2	261.8	163.5
35°	2431.9	2051.9	1752.8	1475.3	1248.5	968.1	710.5	478.3	310.0	177.3	123.0
36°	2265.4	1917.4	1647.2	1354.7	1098.9	807.0	558.5	344.4	205.7	132.1	106.2
37°	2108.6	1800.4	1538.0	1203.3	930.1	638.7	407.7	229.8	150.2	115.2	94.1
38°	1960.9	1687.6	1395.7	1035.6	756.4	478.9	268.4	169.5	130.3	101.3	83.2
39°	1822.7	1574.2	1229.2	855.9	582.6	337.8	194.8	145.4	113.4	89.9	73.6
40°	1689.4	1412.0	1047.7	697.8	424.6	235.8	164.1	128.5	100.1	79.0	62.1
42.5°	1267.2	907.1	580.2	317.9	199.6	153.8	117.0	90.5	66.3	48.9	37.4
45°	795.6	461.4	249.1	178.5	139.3	104.3	76.0	54.3	39.8	29.6	23.5
47.5°	361.9	198.4	154.4	119.4	89.9	62.1	44.6	32.6	24.1	18.7	13.9
50°	132.7	112.8	91.7	68.2	49.5	35.6	25.9	19.3	14.5	10.9	7.8
51°	103.7	90.5	73.0	51.3	39.2	29.0	21.1	15.7	11.5	8.4	6.0
52°	81.4	71.8	56.1	39.8	30.8	22.9	16.9	12.1	8.4	6.6	4.8
53°	62.7	54.9	42.2	30.8	24.1	18.1	13.3	9.7	6.6	4.8	3.6
54°	46.4	40.4	31.4	23.5	18.7	13.9	9.7	7.2	4.8	3.6	3.0
55°	33.2	29.6	23.5	18.7	14.5	10.9	7.2	5.4	3.6	2.4	2.4
57.5°	13.9	13.3	10.9	9.0	7.2	5.4	3.6	2.4	2.4	1.8	2.4
60°	5.4	5.4	4.8	3.6	3.0	2.4	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	2.4
64°	1.2	1.2	1.2	1.2	1.8	1.8	1.8	1.8	1.8	1.8	2.4
65°	1.2	1.2	1.2	1.2	1.2	1.8	1.8	1.8	1.8	1.8	2.4
66°	1.2	1.2	1.2	1.2	1.2	1.8	1.8	1.8	1.8	1.8	2.4
67.5°	1.2	1.2	1.2	1.2	1.2	1.8	1.8	1.8	1.8	2.4	2.4
70°	1.2	1.2	1.2	1.2	1.2	1.8	1.8	1.8	1.8	2.4	2.4
72.5°	1.2	1.2	1.2	1.2	1.2	1.8	1.8	1.8	2.4	2.4	2.4
75°	0.6	1.2	1.2	1.2	1.2	1.8	1.8	1.8	2.4	2.4	2.4
77.5°	0.6	1.2	1.2	1.2	1.8	1.8	1.8	1.8	2.4	2.4	2.4
80°	0.6	1.2	1.2	1.2	1.2	1.8	1.8	1.8	2.4	2.4	2.4
82.5°	0.6	1.2	1.2	1.2	1.2	1.8	1.8	1.8	2.4	2.4	2.4
85°	0.6	1.2	1.2	1.2	1.2	1.8	1.8	1.8	2.4	2.4	2.4
87.5°	0.6	1.2	1.2	1.2	1.2	1.8	1.8	1.8	2.4	2.4	2.4
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: P208865

CATALOG NUMBER: LDSQA6A20930D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	106.2	106.2	106.2	106.2	106.2	106.2	106.2	106.2	106.2	106.2	106.2
2.5°	123.6	123.6	119.4	118.2	117.6	116.4	113.4	113.4	111.6	109.2	108.0
5°	146.6	145.4	138.7	135.1	132.1	128.5	122.4	120.0	116.4	112.8	109.8
7.5°	168.9	164.7	154.4	149.0	144.8	138.7	130.9	125.5	119.4	113.4	109.2
10°	191.2	182.8	168.3	159.2	151.4	142.9	133.3	127.3	119.4	111.6	105.6
11°	200.2	189.4	173.1	161.6	152.6	142.9	133.3	125.5	118.2	110.4	103.7
12°	217.7	197.2	177.9	165.3	153.8	142.9	132.1	123.6	115.8	108.0	101.3
13°	253.3	215.3	183.4	168.3	155.6	142.9	130.9	121.8	113.4	105.6	98.3
14°	317.9	252.7	197.8	171.3	156.2	142.9	129.7	118.8	110.4	101.9	95.3
15°	390.8	310.0	227.4	182.2	156.8	141.7	127.3	115.8	106.8	98.3	91.7
17.5°	542.2	433.7	322.1	236.4	171.9	138.1	118.2	106.8	96.5	88.1	80.2
20°	603.8	477.7	352.2	253.3	177.9	132.1	108.0	95.9	85.0	76.6	70.0
21°	595.9	469.3	343.2	241.9	166.5	123.6	102.5	91.1	80.8	71.8	65.7
22°	579.6	449.3	322.1	220.8	152.6	115.2	97.7	85.6	76.0	67.6	61.5
23°	557.9	421.0	298.0	198.4	138.1	107.4	92.9	80.8	71.8	63.3	57.9
24°	530.8	392.7	270.2	176.1	124.2	101.3	87.5	76.0	67.0	59.7	54.3
25°	500.6	363.1	240.7	157.4	115.8	95.3	81.4	70.6	62.7	56.1	50.7
26°	463.8	328.1	212.9	139.9	105.6	88.7	75.4	65.7	58.5	52.5	47.0
27°	421.6	291.9	182.2	121.8	97.1	82.0	70.0	61.5	54.9	48.9	43.4
28°	383.6	251.5	156.2	108.6	90.5	75.4	65.1	57.3	51.3	45.2	40.4
29°	336.0	212.9	133.3	98.3	83.2	70.6	60.3	53.1	47.0	41.0	36.8
30°	288.3	176.1	114.0	89.9	76.0	64.5	55.5	48.9	42.8	38.0	34.4
31°	238.8	146.0	100.1	82.6	69.4	59.7	51.3	45.2	39.2	35.0	31.4
32°	182.8	119.4	89.3	74.8	63.3	53.7	47.0	41.0	35.6	32.0	28.3
33°	137.5	100.7	80.8	67.6	57.3	49.5	42.8	36.8	32.6	29.0	25.9
34°	109.8	89.9	73.0	60.9	51.9	44.6	38.0	33.2	29.0	25.9	22.9
35°	96.5	80.8	65.1	54.9	46.4	39.2	33.8	29.6	25.9	22.9	20.5
36°	85.6	72.4	57.9	48.9	40.4	34.4	29.6	25.9	22.3	19.9	18.1
37°	76.6	63.9	51.3	42.2	35.0	30.2	25.9	22.3	19.3	17.5	16.3
38°	68.8	54.9	43.4	36.2	30.2	25.9	22.3	19.3	16.9	15.1	13.9
39°	58.5	46.4	36.2	30.8	25.3	21.7	18.7	16.9	14.5	13.3	12.1
40°	48.9	38.6	30.2	25.3	21.7	18.1	16.3	13.9	12.7	11.5	10.3
42.5°	30.2	24.1	19.3	16.3	13.9	12.1	10.9	9.7	8.4	7.8	7.2
45°	18.7	15.1	12.1	10.3	8.4	7.8	7.2	6.0	6.0	5.4	5.4
47.5°	10.9	9.0	6.6	6.0	4.8	4.8	4.2	4.2	3.6	4.2	3.6
50°	6.0	4.2	3.6	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
51°	4.8	3.6	3.0	2.4	2.4	2.4	2.4	2.4	2.4	3.0	3.0
52°	3.6	3.0	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
53°	3.0	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
54°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
55°	2.4	2.4	2.4	2.4	2.4	1.8	2.4	2.4	2.4	2.4	2.4
57.5°	2.4	2.4	1.8	1.8	2.4	1.8	2.4	2.4	2.4	2.4	2.4
60°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4



TEST NUMBER: P208865

CATALOG NUMBER: LDSQA6A20930D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
63°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
64°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
65°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
66°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
67.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
70°	2.4	2.4	2.4	3.0	3.0	3.0	3.0	2.4	2.4	2.4	2.4
72.5°	2.4	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.4
75°	2.4	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
77.5°	2.4	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
80°	2.4	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
82.5°	2.4	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
85°	2.4	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
87.5°	2.4	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
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: P208865

CATALOG NUMBER: LDSQA6A20930D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
0°	106.2	106.2	106.2	106.2	106.2	106.2	106.2	106.2
2.5°	107.4	107.4	106.8	105.6	96.5	88.7	83.8	83.2
5°	108.0	106.8	104.3	102.5	86.3	76.0	70.0	69.4
7.5°	105.6	103.1	100.1	96.5	76.6	65.7	60.3	59.1
10°	101.3	97.1	93.5	88.7	67.6	57.3	52.5	51.3
11°	98.3	94.1	90.5	85.6	63.9	54.3	49.5	48.9
12°	95.9	91.1	86.3	82.0	60.3	51.3	47.0	46.4
13°	92.3	87.5	83.2	78.4	57.3	48.9	44.6	44.0
14°	89.3	83.8	79.6	75.4	54.3	45.8	42.8	42.2
15°	85.6	80.2	75.4	71.2	51.3	43.4	41.0	40.4
17.5°	76.0	70.0	65.7	61.5	44.0	38.0	36.2	36.8
20°	64.5	59.7	56.1	52.5	37.4	33.2	32.6	33.2
21°	60.3	56.1	53.1	49.5	35.0	31.4	31.4	32.0
22°	56.7	52.5	49.5	45.8	33.2	29.6	29.6	30.8
23°	53.1	48.9	45.8	42.8	30.8	28.3	28.3	29.6
24°	49.5	45.8	42.8	39.8	29.0	26.5	27.1	28.3
25°	45.8	42.8	39.8	37.4	27.1	25.3	25.9	27.1
26°	43.4	39.8	37.4	34.4	25.3	24.1	24.7	26.5
27°	39.8	36.8	34.4	32.0	24.1	22.9	24.1	25.3
28°	37.4	34.4	32.0	29.6	22.3	21.7	22.9	24.7
29°	34.4	32.0	29.6	27.7	21.1	20.5	22.3	23.5
30°	31.4	29.0	27.1	25.3	19.9	19.3	21.1	22.9
31°	29.0	27.1	25.3	23.5	18.7	18.7	20.5	22.3
32°	26.5	24.7	22.9	21.1	17.5	17.5	19.9	21.1
33°	24.1	22.3	20.5	19.3	16.3	16.9	18.7	20.5
34°	21.1	19.9	18.7	17.5	15.1	15.7	18.1	19.9
35°	19.3	18.1	16.9	15.7	14.5	15.1	17.5	19.3
36°	16.9	16.3	15.1	14.5	13.3	14.5	16.9	18.7
37°	15.1	14.5	13.3	12.7	12.7	13.9	16.3	18.1
38°	13.3	12.7	12.1	11.5	12.1	13.3	15.7	17.5
39°	11.5	10.9	10.9	10.3	11.5	12.7	15.1	16.9
40°	10.3	9.7	9.7	9.0	10.9	12.1	14.5	16.9
42.5°	7.2	7.2	7.2	7.2	9.0	10.9	13.3	15.7
45°	5.4	5.4	5.4	5.4	7.8	9.7	11.5	14.5
47.5°	4.2	4.2	4.2	4.2	7.2	9.0	10.9	12.7
50°	3.0	3.0	3.6	3.6	6.6	7.8	9.7	11.5
51°	3.0	3.0	3.0	3.6	6.0	7.8	9.0	10.9
52°	3.0	3.0	3.0	3.0	6.0	7.2	8.4	9.7
53°	2.4	3.0	3.0	3.0	5.4	7.2	7.8	9.0
54°	2.4	2.4	2.4	3.0	5.4	6.6	7.2	8.4
55°	2.4	2.4	2.4	3.0	4.8	6.6	7.2	7.2
57.5°	2.4	2.4	2.4	2.4	4.8	6.0	6.6	6.0
60°	2.4	2.4	2.4	2.4	4.2	5.4	6.0	4.2



TEST NUMBER: P208865

CATALOG NUMBER: LDSQA6A20930D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
63°	2.4	2.4	2.4	2.4	4.2	4.8	4.8	3.6
64°	2.4	2.4	2.4	2.4	4.2	4.8	4.8	3.6
65°	2.4	2.4	2.4	2.4	4.2	4.2	4.2	3.0
66°	2.4	2.4	2.4	2.4	4.2	4.2	4.2	3.0
67.5°	2.4	2.4	2.4	2.4	4.2	4.2	3.6	3.0
70°	2.4	2.4	2.4	3.0	3.6	3.6	3.6	3.0
72.5°	2.4	2.4	2.4	3.0	3.6	3.6	3.0	2.4
75°	3.0	3.0	3.0	3.0	3.6	3.6	3.0	1.8
77.5°	3.0	3.0	3.0	3.0	3.6	3.0	2.4	1.8
80°	3.0	3.0	2.4	2.4	3.0	3.0	1.8	1.2
82.5°	3.0	3.0	2.4	2.4	3.0	2.4	1.8	1.2
85°	3.0	3.0	2.4	2.4	3.0	2.4	1.2	0.6
87.5°	3.0	2.4	2.4	2.4	3.0	2.4	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	2.4	1.8	2.4	3.0	3.6	3.6	3.6
62°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.8	1.8	1.8	2.4





61°	3.6	3.6	3.0	3.0	2.4	1.8	1.8	1.8	1.8	1.8	1.8
62°	2.4	2.4	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.4





61°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
62°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4





61°	2.4	2.4	2.4	2.4	4.2	5.4	5.4	4.2
62°	2.4	2.4	2.4	2.4	4.2	4.8	5.4	3.6



(END OF REPORT)