

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: P208863

Luminaire Tested: **LDSQA6A20840D010TE LARL20NF 6LSQA1H 30°**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P208863  
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: LDSQA6A20840D010TE 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 / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2042.6 lumens  
Efficiency: N/A  
Efficacy: 70.9 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

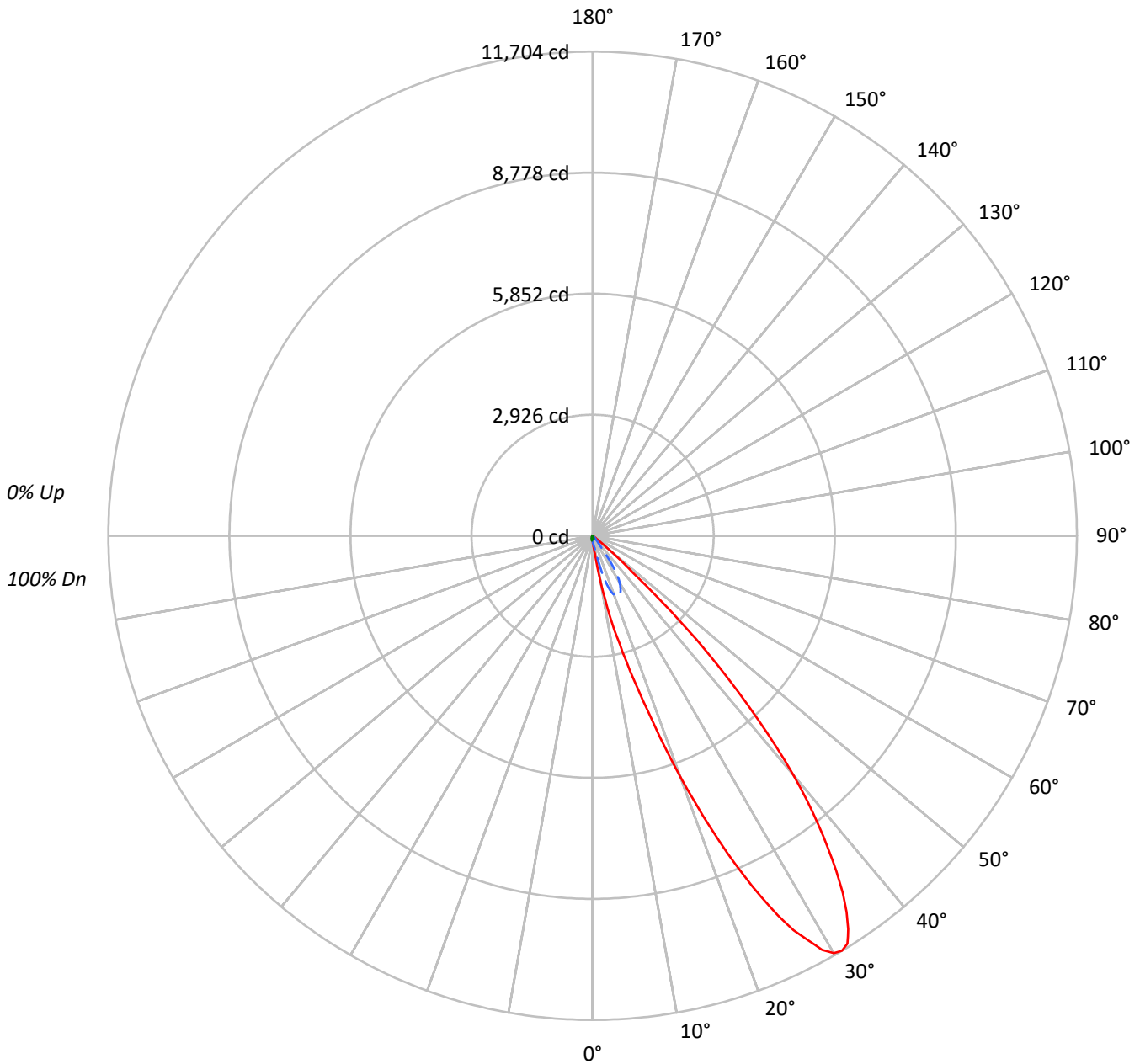
Input Watts (W): 28.81  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P208863

CATALOG NUMBER: LDSQA6A20840D010TE LARL20NF 6LSQA1H 30°

### Luminous Intensity Polar Plot





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CATALOG NUMBER: LDSQA6A20840D010TE LARL20NF 6LSQA1H 30°

**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°	5929	5929	5929
5°	11838	5748	3890
10°	53238	5028	2907
15°	139563	4114	2336
20°	284160	3120	1970
25°	457237	2304	1672
30°	579151	1636	1477
35°	554011	1067	1314
40°	424793	658	1231
45°	216043	426	1145
50°	33130	315	998
55°	4346	293	706
60°	474	267	474
65°	82	316	397
70°	101	491	491
75°	0	649	383
80°	0	769	397
85°	0	1531	395



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CATALOG NUMBER: LDSQA6A20840D010TE LARL20NF 6LSQA1H 30°

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	18.4	0.9
10°-20°	202.0	9.9
20°-30°	661.3	32.4
30°-40°	805.0	39.4
40°-50°	327.0	16.0
50°-60°	19.4	1.0
60°-70°	3.8	0.2
70°-80°	3.3	0.2
80°-90°	2.4	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°	881.7	43.2
0°-40°	1686.7	82.6
0°-60°	2033.1	99.5
0°-90°	2042.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2042.6	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	138	138	138	138	138	
5°	274	209	133	99	90	52
15°	3131	1044	92	56	52	1019
25°	9625	1553	48	33	35	4423
35°	10540	621	20	20	25	6375
45°	3548	70	7	12	19	2722
55°	58	7	4	9	9	100
65°	1	2	3	6	4	1
75°	0	2	4	5	2	0
85°	0	2	3	3	1	0
90°	0	0	0	0	0	



TEST NUMBER: P208863

CATALOG NUMBER: LDSQA6A20840D010TE LARL20NF 6LSQA1H 30°

**CANDELA DISTRIBUTION (FULL):**

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
0°	137.7	137.7	137.7	137.7	137.7	137.7	137.7	137.7	137.7	137.7	137.7
2.5°	194.1	185.5	189.4	188.6	185.5	186.2	187.8	184.7	186.2	181.6	182.3
5°	273.9	261.4	268.4	260.6	264.5	260.6	260.6	255.9	252.0	251.2	247.3
7.5°	478.1	447.6	457.0	423.4	428.8	417.9	407.7	396.8	378.0	368.6	348.2
10°	1217.7	1131.6	1151.9	1078.4	1076.8	1051.0	1003.2	970.4	900.7	851.4	781.0
11°	1540.1	1481.4	1499.4	1418.8	1414.9	1379.6	1323.3	1235.7	1196.5	1130.8	1043.1
12°	1961.1	1862.5	1873.4	1785.0	1776.4	1729.5	1666.1	1558.1	1511.1	1431.3	1328.0
13°	2343.8	2256.1	2256.9	2160.6	2150.5	2091.0	2021.3	1890.7	1838.2	1749.0	1624.6
14°	2695.1	2628.6	2615.3	2563.7	2508.9	2439.2	2365.7	2217.8	2159.9	2059.7	1917.3
15°	3131.0	3001.1	2975.3	2910.3	2843.8	2756.2	2666.2	2497.1	2433.0	2322.6	2181.0
17.5°	4416.8	4256.3	4185.9	4053.6	3928.4	3760.2	3565.3	3265.6	3117.7	2919.7	2698.3
20°	6201.8	5949.0	5807.4	5595.3	5393.4	5117.9	4781.4	4309.5	4090.4	3707.0	3343.9
21°	6908.4	6690.9	6513.2	6274.5	6035.9	5709.5	5309.7	4810.4	4472.3	4023.9	3598.2
22°	7622.1	7415.5	7208.1	6946.0	6679.1	6298.0	5837.1	5258.0	4851.9	4328.3	3837.7
23°	8324.8	8115.1	7955.5	7596.3	7292.7	6863.0	6352.0	5690.0	5218.1	4617.9	4063.0
24°	8999.4	8770.1	8571.3	8209.0	7865.5	7387.3	6837.2	6109.4	5571.8	4894.1	4272.0
25°	9624.7	9371.9	9127.7	8755.3	8382.0	7860.0	7265.3	6489.0	5894.2	5144.5	4462.1
26°	10199.9	9854.7	9589.5	9245.1	8821.0	8273.2	7641.7	6816.9	6172.0	5353.5	4611.6
27°	10698.3	10349.3	10044.9	9676.3	9202.9	8612.8	7952.3	7052.4	6391.9	5510.0	4715.7
28°	11060.7	10765.6	10415.1	10018.3	9497.9	8846.8	8162.9	7240.2	6524.2	5591.4	4758.7
29°	11444.9	11109.2	10700.7	10249.9	9683.4	8993.9	8278.7	7338.0	6579.0	5610.2	4750.1
30°	11649.1	11340.0	10859.5	10368.1	9763.2	9040.9	8303.7	7352.9	6561.7	5564.8	4693.8
31°	11703.9	11415.2	10883.0	10370.4	9738.1	8994.7	8241.9	7276.2	6468.6	5459.1	4588.9
32°	11624.9	11336.1	10783.6	10270.3	9623.1	8865.6	8105.7	7139.3	6316.8	5301.0	4439.4
33°	11340.8	11106.8	10573.9	10080.1	9447.8	8673.9	7905.4	6916.2	6080.5	5096.0	4259.5
34°	10977.7	10759.4	10267.9	9761.6	9170.0	8410.9	7629.2	6646.3	5808.9	4844.0	4045.8
35°	10540.3	10325.1	9872.0	9368.8	8802.2	8061.1	7275.4	6307.4	5488.1	4559.2	3808.7
36°	10024.6	9800.7	9382.1	8903.2	8387.4	7638.5	6856.8	5917.7	5123.4	4249.3	3555.2
37°	9457.2	9231.8	8857.8	8414.1	7903.8	7162.7	6388.0	5488.1	4738.4	3927.7	3289.9
38°	8858.5	8648.8	8309.2	7866.3	7361.5	6633.7	5875.4	5095.2	4346.3	3602.1	3021.5
39°	8244.2	8023.6	7703.5	7268.4	6772.3	6053.9	5341.0	4643.7	4008.3	3282.0	2774.9
40°	7557.9	7349.8	6978.8	6637.7	6139.9	5456.0	4805.7	4145.2	3632.6	2974.5	2551.1
42.5°	5590.6	5427.8	5229.8	4880.0	4512.2	4021.6	3566.9	3109.1	2736.6	2363.3	2052.6
45°	3548.1	3428.4	3326.7	3109.1	2960.4	2684.2	2449.4	2215.4	2039.3	1843.7	1498.6
47.5°	1313.1	1256.8	1220.8	1125.3	1116.7	1028.3	1019.7	1132.4	1198.9	1128.4	849.1
50°	494.6	480.5	471.9	442.1	421.8	381.1	350.6	327.9	281.7	249.6	223.8
51°	324.8	314.6	299.7	297.4	288.8	266.1	252.0	247.3	216.0	182.3	156.5
52°	206.6	200.3	190.9	191.7	187.0	172.9	168.2	175.3	158.9	140.1	121.3
53°	129.9	126.8	120.5	120.5	119.7	110.3	108.8	115.0	111.9	103.3	92.3
54°	84.5	83.7	78.3	79.0	79.0	73.6	72.8	75.1	74.3	71.2	65.7
55°	57.9	57.1	56.3	54.0	52.4	50.9	50.9	51.6	50.9	49.3	46.2
57.5°	20.3	19.6	20.3	19.6	19.6	20.3	19.6	21.1	21.9	21.9	20.3
60°	5.5	5.5	5.5	5.5	5.5	5.5	5.5	7.0	7.8	7.8	7.8



TEST NUMBER: P208863

CATALOG NUMBER: LDSQA6A20840D010TE LARL20NF 6LSQA1H 30°

**CANDELA DISTRIBUTION (continued):**

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
63°	1.6	1.6	1.6	1.6	1.6	1.6	0.8	0.8	1.6	1.6	1.6
64°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6
65°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6
66°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
67.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
70°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6
72.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.8
77.5°	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.8	0.8
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.8
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.8
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°	137.7	137.7	137.7	137.7	137.7	137.7	137.7	137.7	137.7	137.7	137.7
2.5°	180.0	180.8	177.6	176.9	176.1	172.2	169.8	167.5	165.1	161.2	162.8
5°	241.0	241.0	234.0	229.3	226.9	218.3	214.4	208.9	202.7	198.0	195.6
7.5°	336.5	331.0	315.4	303.6	296.6	279.4	269.2	254.3	245.7	236.3	230.9
10°	713.7	676.9	600.2	545.4	493.8	431.2	374.1	329.5	300.5	279.4	266.1
11°	961.8	913.2	815.4	739.5	672.2	583.0	495.4	411.6	351.4	314.6	287.2
12°	1234.1	1171.5	1054.1	960.2	878.0	766.1	654.2	543.9	457.0	388.1	331.8
13°	1517.4	1436.8	1300.6	1192.6	1097.9	968.8	835.8	703.5	597.9	504.0	418.7
14°	1798.3	1699.7	1550.2	1425.8	1319.4	1175.4	1024.4	877.2	753.6	635.4	531.4
15°	2053.4	1945.4	1814.0	1651.2	1536.2	1351.5	1209.1	1043.9	903.1	766.1	644.8
17.5°	2511.2	2365.7	2210.7	2042.5	1932.9	1750.6	1569.8	1370.3	1199.7	1029.8	867.1
20°	3014.4	2754.6	2499.5	2249.1	2090.2	1896.1	1719.3	1522.1	1342.1	1149.6	972.7
21°	3212.4	2915.0	2604.4	2323.4	2143.4	1936.0	1752.9	1548.7	1359.3	1154.3	968.0
22°	3400.2	3044.9	2695.9	2386.0	2189.6	1977.5	1780.3	1565.9	1364.0	1148.8	953.9
23°	3571.6	3170.1	2780.4	2440.8	2223.2	1997.9	1794.4	1572.9	1361.6	1136.3	932.8
24°	3727.3	3285.2	2852.4	2481.5	2243.6	2004.1	1792.8	1567.5	1349.9	1117.5	903.9
25°	3861.9	3376.0	2904.9	2503.4	2249.1	2001.0	1785.0	1553.4	1326.4	1085.4	870.2
26°	3963.7	3433.9	2929.9	2506.5	2241.2	1990.8	1767.0	1527.6	1289.7	1042.4	824.8
27°	4022.3	3455.0	2929.9	2493.2	2225.6	1972.0	1738.1	1487.6	1241.9	989.2	768.5
28°	4032.5	3445.6	2908.8	2465.8	2195.9	1939.2	1695.8	1436.8	1185.6	925.8	706.6
29°	4005.9	3408.0	2863.4	2418.9	2152.0	1896.9	1641.0	1372.6	1118.3	856.1	642.5
30°	3940.2	3339.2	2796.1	2359.4	2099.6	1841.4	1572.2	1301.4	1042.4	784.1	568.9
31°	3837.7	3239.8	2710.0	2287.4	2034.6	1774.8	1496.2	1219.2	957.1	694.9	489.1
32°	3701.5	3100.5	2614.5	2205.2	1962.7	1698.9	1401.6	1114.4	844.4	586.1	396.8
33°	3541.1	2964.3	2508.1	2116.8	1884.4	1594.9	1270.9	957.9	706.6	464.8	300.5
34°	3358.0	2818.0	2393.8	2023.7	1781.9	1442.3	1108.1	796.6	555.6	339.6	212.1
35°	3155.3	2662.3	2274.1	1914.1	1619.9	1256.0	921.9	620.6	402.2	230.1	159.6
36°	2939.3	2487.7	2137.2	1757.6	1425.8	1047.1	724.6	446.8	266.9	171.4	137.7
37°	2735.8	2335.9	1995.5	1561.2	1206.7	828.7	529.0	298.2	194.9	149.5	122.1
38°	2544.1	2189.6	1810.8	1343.7	981.3	621.4	348.2	219.9	169.0	131.5	108.0
39°	2364.9	2042.5	1594.9	1110.4	756.0	438.2	252.8	188.6	147.1	116.6	95.5
40°	2191.9	1832.0	1359.3	905.4	550.9	306.0	212.9	166.7	129.9	102.5	80.6
42.5°	1644.2	1177.0	752.8	412.4	259.0	199.6	151.8	117.4	86.1	63.4	48.5
45°	1032.2	598.7	323.2	231.6	180.8	135.4	98.6	70.4	51.6	38.3	30.5
47.5°	469.5	257.5	200.3	154.9	116.6	80.6	57.9	42.3	31.3	24.3	18.0
50°	172.2	146.3	118.9	88.4	64.2	46.2	33.6	25.0	18.8	14.1	10.2
51°	134.6	117.4	94.7	66.5	50.9	37.6	27.4	20.3	14.9	11.0	7.8
52°	105.6	93.1	72.8	51.6	39.9	29.7	21.9	15.7	11.0	8.6	6.3
53°	81.4	71.2	54.8	39.9	31.3	23.5	17.2	12.5	8.6	6.3	4.7
54°	60.3	52.4	40.7	30.5	24.3	18.0	12.5	9.4	6.3	4.7	3.9
55°	43.0	38.3	30.5	24.3	18.8	14.1	9.4	7.0	4.7	3.1	3.1
57.5°	18.0	17.2	14.1	11.7	9.4	7.0	4.7	3.1	3.1	2.3	3.1
60°	7.0	7.0	6.3	4.7	3.9	3.1	2.3	2.3	2.3	2.3	2.3





TEST NUMBER: P208863

CATALOG NUMBER: LDSQA6A20840D010TE LARL20NF 6LSQA1H 30°

**CANDELA DISTRIBUTION (continued):**

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
63°	1.6	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	3.1
64°	1.6	1.6	1.6	1.6	2.3	2.3	2.3	2.3	2.3	2.3	3.1
65°	1.6	1.6	1.6	1.6	1.6	2.3	2.3	2.3	2.3	2.3	3.1
66°	1.6	1.6	1.6	1.6	1.6	2.3	2.3	2.3	2.3	2.3	3.1
67.5°	1.6	1.6	1.6	1.6	1.6	2.3	2.3	2.3	2.3	3.1	3.1
70°	1.6	1.6	1.6	1.6	1.6	2.3	2.3	2.3	2.3	3.1	3.1
72.5°	1.6	1.6	1.6	1.6	1.6	2.3	2.3	2.3	3.1	3.1	3.1
75°	0.8	1.6	1.6	1.6	1.6	2.3	2.3	2.3	3.1	3.1	3.1
77.5°	0.8	1.6	1.6	1.6	2.3	2.3	2.3	2.3	3.1	3.1	3.1
80°	0.8	1.6	1.6	1.6	1.6	2.3	2.3	2.3	3.1	3.1	3.1
82.5°	0.8	1.6	1.6	1.6	1.6	2.3	2.3	2.3	3.1	3.1	3.1
85°	0.8	1.6	1.6	1.6	1.6	2.3	2.3	2.3	3.1	3.1	3.1
87.5°	0.8	1.6	1.6	1.6	1.6	2.3	2.3	2.3	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: P208863

CATALOG NUMBER: LDSQA6A20840D010TE LARL20NF 6LSQA1H 30°

**CANDELA DISTRIBUTION (continued):**

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	137.7	137.7	137.7	137.7	137.7	137.7	137.7	137.7	137.7	137.7	137.7
2.5°	160.4	160.4	154.9	153.4	152.6	151.0	147.1	147.1	144.8	141.6	140.1
5°	190.2	188.6	180.0	175.3	171.4	166.7	158.9	155.7	151.0	146.3	142.4
7.5°	219.1	213.6	200.3	193.3	187.8	180.0	169.8	162.8	154.9	147.1	141.6
10°	248.1	237.1	218.3	206.6	196.4	185.5	172.9	165.1	154.9	144.8	136.9
11°	259.8	245.7	224.6	209.7	198.0	185.5	172.9	162.8	153.4	143.2	134.6
12°	282.5	255.9	230.9	214.4	199.6	185.5	171.4	160.4	150.3	140.1	131.5
13°	328.7	279.4	237.9	218.3	201.9	185.5	169.8	158.1	147.1	136.9	127.6
14°	412.4	327.9	256.7	222.2	202.7	185.5	168.2	154.2	143.2	132.3	123.6
15°	507.1	402.2	295.0	236.3	203.5	183.9	165.1	150.3	138.5	127.6	118.9
17.5°	703.5	562.7	417.9	306.8	223.0	179.2	153.4	138.5	125.2	114.3	104.1
20°	783.3	619.8	457.0	328.7	230.9	171.4	140.1	124.4	110.3	99.4	90.8
21°	773.2	608.8	445.3	313.8	216.0	160.4	133.0	118.2	104.9	93.1	85.3
22°	752.0	583.0	417.9	286.4	198.0	149.5	126.8	111.1	98.6	87.6	79.8
23°	723.9	546.2	386.6	257.5	179.2	139.3	120.5	104.9	93.1	82.2	75.1
24°	688.7	509.4	350.6	228.5	161.2	131.5	113.5	98.6	86.9	77.5	70.4
25°	649.5	471.1	312.2	204.2	150.3	123.6	105.6	91.6	81.4	72.8	65.7
26°	601.8	425.7	276.2	181.6	136.9	115.0	97.8	85.3	75.9	68.1	61.0
27°	547.0	378.8	236.3	158.1	126.0	106.4	90.8	79.8	71.2	63.4	56.3
28°	497.7	326.3	202.7	140.9	117.4	97.8	84.5	74.3	66.5	58.7	52.4
29°	435.9	276.2	172.9	127.6	108.0	91.6	78.3	68.9	61.0	53.2	47.7
30°	374.1	228.5	147.9	116.6	98.6	83.7	72.0	63.4	55.6	49.3	44.6
31°	309.9	189.4	129.9	107.2	90.0	77.5	66.5	58.7	50.9	45.4	40.7
32°	237.1	154.9	115.8	97.0	82.2	69.6	61.0	53.2	46.2	41.5	36.8
33°	178.4	130.7	104.9	87.6	74.3	64.2	55.6	47.7	42.3	37.6	33.6
34°	142.4	116.6	94.7	79.0	67.3	57.9	49.3	43.0	37.6	33.6	29.7
35°	125.2	104.9	84.5	71.2	60.3	50.9	43.8	38.3	33.6	29.7	26.6
36°	111.1	93.9	75.1	63.4	52.4	44.6	38.3	33.6	29.0	25.8	23.5
37°	99.4	83.0	66.5	54.8	45.4	39.1	33.6	29.0	25.0	22.7	21.1
38°	89.2	71.2	56.3	47.0	39.1	33.6	29.0	25.0	21.9	19.6	18.0
39°	75.9	60.3	47.0	39.9	32.9	28.2	24.3	21.9	18.8	17.2	15.7
40°	63.4	50.1	39.1	32.9	28.2	23.5	21.1	18.0	16.4	14.9	13.3
42.5°	39.1	31.3	25.0	21.1	18.0	15.7	14.1	12.5	11.0	10.2	9.4
45°	24.3	19.6	15.7	13.3	11.0	10.2	9.4	7.8	7.8	7.0	7.0
47.5°	14.1	11.7	8.6	7.8	6.3	6.3	5.5	5.5	4.7	5.5	4.7
50°	7.8	5.5	4.7	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
51°	6.3	4.7	3.9	3.1	3.1	3.1	3.1	3.1	3.1	3.9	3.9
52°	4.7	3.9	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
53°	3.9	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
54°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
55°	3.1	3.1	3.1	3.1	3.1	2.3	3.1	3.1	3.1	3.1	3.1
57.5°	3.1	3.1	2.3	2.3	3.1	2.3	3.1	3.1	3.1	3.1	3.1
60°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1



TEST NUMBER: P208863

CATALOG NUMBER: LDSQA6A20840D010TE LARL20NF 6LSQA1H 30°

**CANDELA DISTRIBUTION (continued):**

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
63°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
64°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
65°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
66°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
67.5°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
70°	3.1	3.1	3.1	3.9	3.9	3.9	3.9	3.1	3.1	3.1	3.1
72.5°	3.1	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.1
75°	3.1	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
77.5°	3.1	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
80°	3.1	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
82.5°	3.1	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
85°	3.1	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
87.5°	3.1	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
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: P208863

CATALOG NUMBER: LDSQA6A20840D010TE LARL20NF 6LSQA1H 30°

**CANDELA DISTRIBUTION (continued):**

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
0°	137.7	137.7	137.7	137.7	137.7	137.7	137.7	137.7
2.5°	139.3	139.3	138.5	136.9	125.2	115.0	108.8	108.0
5°	140.1	138.5	135.4	133.0	111.9	98.6	90.8	90.0
7.5°	136.9	133.8	129.9	125.2	99.4	85.3	78.3	76.7
10°	131.5	126.0	121.3	115.0	87.6	74.3	68.1	66.5
11°	127.6	122.1	117.4	111.1	83.0	70.4	64.2	63.4
12°	124.4	118.2	111.9	106.4	78.3	66.5	61.0	60.3
13°	119.7	113.5	108.0	101.7	74.3	63.4	57.9	57.1
14°	115.8	108.8	103.3	97.8	70.4	59.5	55.6	54.8
15°	111.1	104.1	97.8	92.3	66.5	56.3	53.2	52.4
17.5°	98.6	90.8	85.3	79.8	57.1	49.3	47.0	47.7
20°	83.7	77.5	72.8	68.1	48.5	43.0	42.3	43.0
21°	78.3	72.8	68.9	64.2	45.4	40.7	40.7	41.5
22°	73.6	68.1	64.2	59.5	43.0	38.3	38.3	39.9
23°	68.9	63.4	59.5	55.6	39.9	36.8	36.8	38.3
24°	64.2	59.5	55.6	51.6	37.6	34.4	35.2	36.8
25°	59.5	55.6	51.6	48.5	35.2	32.9	33.6	35.2
26°	56.3	51.6	48.5	44.6	32.9	31.3	32.1	34.4
27°	51.6	47.7	44.6	41.5	31.3	29.7	31.3	32.9
28°	48.5	44.6	41.5	38.3	29.0	28.2	29.7	32.1
29°	44.6	41.5	38.3	36.0	27.4	26.6	29.0	30.5
30°	40.7	37.6	35.2	32.9	25.8	25.0	27.4	29.7
31°	37.6	35.2	32.9	30.5	24.3	24.3	26.6	29.0
32°	34.4	32.1	29.7	27.4	22.7	22.7	25.8	27.4
33°	31.3	29.0	26.6	25.0	21.1	21.9	24.3	26.6
34°	27.4	25.8	24.3	22.7	19.6	20.3	23.5	25.8
35°	25.0	23.5	21.9	20.3	18.8	19.6	22.7	25.0
36°	21.9	21.1	19.6	18.8	17.2	18.8	21.9	24.3
37°	19.6	18.8	17.2	16.4	16.4	18.0	21.1	23.5
38°	17.2	16.4	15.7	14.9	15.7	17.2	20.3	22.7
39°	14.9	14.1	14.1	13.3	14.9	16.4	19.6	21.9
40°	13.3	12.5	12.5	11.7	14.1	15.7	18.8	21.9
42.5°	9.4	9.4	9.4	9.4	11.7	14.1	17.2	20.3
45°	7.0	7.0	7.0	7.0	10.2	12.5	14.9	18.8
47.5°	5.5	5.5	5.5	5.5	9.4	11.7	14.1	16.4
50°	3.9	3.9	4.7	4.7	8.6	10.2	12.5	14.9
51°	3.9	3.9	3.9	4.7	7.8	10.2	11.7	14.1
52°	3.9	3.9	3.9	3.9	7.8	9.4	11.0	12.5
53°	3.1	3.9	3.9	3.9	7.0	9.4	10.2	11.7
54°	3.1	3.1	3.1	3.9	7.0	8.6	9.4	11.0
55°	3.1	3.1	3.1	3.9	6.3	8.6	9.4	9.4
57.5°	3.1	3.1	3.1	3.1	6.3	7.8	8.6	7.8
60°	3.1	3.1	3.1	3.1	5.5	7.0	7.8	5.5



TEST NUMBER: P208863

CATALOG NUMBER: LDSQA6A20840D010TE LARL20NF 6LSQA1H 30°

**CANDELA DISTRIBUTION (continued):**

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
63°	3.1	3.1	3.1	3.1	5.5	6.3	6.3	4.7
64°	3.1	3.1	3.1	3.1	5.5	6.3	6.3	4.7
65°	3.1	3.1	3.1	3.1	5.5	5.5	5.5	3.9
66°	3.1	3.1	3.1	3.1	5.5	5.5	5.5	3.9
67.5°	3.1	3.1	3.1	3.1	5.5	5.5	4.7	3.9
70°	3.1	3.1	3.1	3.9	4.7	4.7	4.7	3.9
72.5°	3.1	3.1	3.1	3.9	4.7	4.7	3.9	3.1
75°	3.9	3.9	3.9	3.9	4.7	4.7	3.9	2.3
77.5°	3.9	3.9	3.9	3.9	4.7	3.9	3.1	2.3
80°	3.9	3.9	3.1	3.1	3.9	3.9	2.3	1.6
82.5°	3.9	3.9	3.1	3.1	3.9	3.1	2.3	1.6
85°	3.9	3.9	3.1	3.1	3.9	3.1	1.6	0.8
87.5°	3.9	3.1	3.1	3.1	3.9	3.1	0.8	0.8
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°	2.3	2.3	2.3	2.3	3.1	2.3	3.1	3.9	4.7	4.7	4.7
62°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.3	2.3	2.3	3.1





61°	4.7	4.7	3.9	3.9	3.1	2.3	2.3	2.3	2.3	2.3	2.3
62°	3.1	3.1	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	3.1





61°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
62°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1







61°	3.1	3.1	3.1	3.1	5.5	7.0	7.0	5.5
62°	3.1	3.1	3.1	3.1	5.5	6.3	7.0	4.7



(END OF REPORT)