

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: P208853

Luminaire Tested: **LDSQA6A15830D010TE LARL20NF 6LSQA1H 30°**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208853
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: LDSQA6A15830D010TE 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: 1579.4 lumens
Efficiency: N/A
Efficacy: 72.5 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

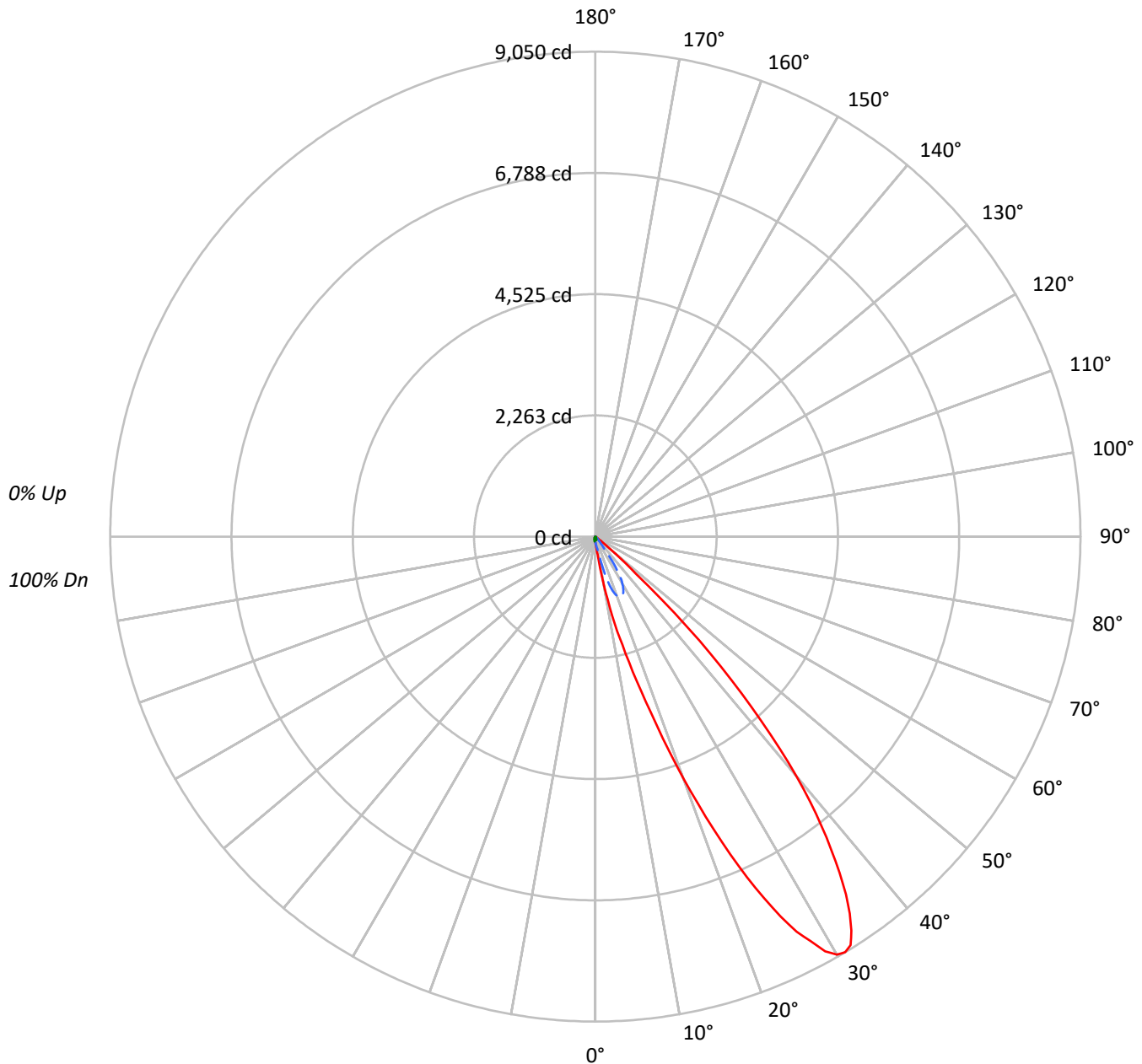
Input Watts (W): 21.79
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4585	4585	4585
5°	9154	4447	3008
10°	41162	3887	2247
15°	107915	3183	1805
20°	219715	2410	1526
25°	353545	1781	1292
30°	447815	1263	1143
35°	428374	825	1020
40°	328463	511	950
45°	167051	329	883
50°	25614	241	770
55°	3363	225	548
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°	156.2	9.9
20°-30°	511.3	32.4
30°-40°	622.4	39.4
40°-50°	252.9	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°	681.7	43.2
0°-40°	1304.2	82.6
0°-60°	1572.1	99.5
0°-90°	1579.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1579.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	106	106	106	106	106	
5°	212	162	103	76	70	40
15°	2421	807	71	44	40	788
25°	7442	1201	38	25	27	3420
35°	8150	480	16	15	19	4929
45°	2744	54	5	10	14	2105
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°	106.5	106.5	106.5	106.5	106.5	106.5	106.5	106.5	106.5	106.5	106.5
2.5°	150.1	143.4	146.4	145.8	143.4	144.0	145.2	142.8	144.0	140.4	141.0
5°	211.8	202.1	207.5	201.5	204.5	201.5	201.5	197.9	194.8	194.2	191.2
7.5°	369.7	346.1	353.4	327.4	331.6	323.1	315.3	306.8	292.3	285.0	269.3
10°	941.5	875.0	890.7	833.8	832.6	812.6	775.7	750.3	696.5	658.3	603.9
11°	1190.8	1145.4	1159.4	1097.0	1094.0	1066.8	1023.2	955.4	925.2	874.4	806.6
12°	1516.4	1440.1	1448.6	1380.2	1373.6	1337.2	1288.2	1204.7	1168.4	1106.7	1026.8
13°	1812.2	1744.5	1745.1	1670.7	1662.8	1616.8	1562.9	1461.9	1421.4	1352.4	1256.2
14°	2083.9	2032.5	2022.2	1982.3	1939.9	1886.1	1829.2	1714.8	1670.0	1592.6	1482.5
15°	2421.0	2320.5	2300.6	2250.3	2198.9	2131.1	2061.5	1930.8	1881.2	1795.9	1686.4
17.5°	3415.1	3291.1	3236.6	3134.4	3037.6	2907.5	2756.8	2525.0	2410.7	2257.6	2086.3
20°	4795.3	4599.9	4490.4	4326.4	4170.3	3957.3	3697.1	3332.2	3162.8	2866.3	2585.5
21°	5341.7	5173.5	5036.2	4851.6	4667.1	4414.7	4105.5	3719.5	3458.1	3111.4	2782.2
22°	5893.6	5733.8	5573.5	5370.8	5164.4	4869.8	4513.4	4065.6	3751.6	3346.8	2967.4
23°	6436.9	6274.8	6151.3	5873.6	5638.8	5306.6	4911.5	4399.6	4034.7	3570.6	3141.6
24°	6958.5	6781.2	6627.5	6347.4	6081.8	5712.0	5286.7	4723.9	4308.2	3784.2	3303.2
25°	7442.0	7246.6	7057.8	6769.7	6481.1	6077.5	5617.7	5017.4	4557.5	3977.9	3450.2
26°	7886.7	7619.9	7414.8	7148.5	6820.6	6397.0	5908.7	5270.9	4772.3	4139.4	3565.8
27°	8272.2	8002.3	7766.9	7481.9	7115.9	6659.6	6148.9	5453.1	4942.4	4260.4	3646.3
28°	8552.3	8324.2	8053.1	7746.4	7344.0	6840.5	6311.7	5598.3	5044.6	4323.4	3679.6
29°	8849.4	8589.9	8274.0	7925.5	7487.4	6954.3	6401.2	5673.9	5087.0	4337.9	3672.9
30°	9007.4	8768.4	8396.8	8016.8	7549.1	6990.6	6420.6	5685.4	5073.7	4302.8	3629.3
31°	9049.7	8826.4	8415.0	8018.6	7529.7	6954.9	6372.8	5626.1	5001.7	4221.1	3548.2
32°	8988.6	8765.3	8338.1	7941.2	7440.8	6855.1	6267.5	5520.2	4884.3	4098.9	3432.7
33°	8769.0	8588.0	8176.0	7794.2	7305.2	6706.8	6112.6	5347.8	4701.5	3940.3	3293.5
34°	8488.2	8319.4	7939.4	7547.9	7090.4	6503.5	5899.0	5139.0	4491.6	3745.5	3128.3
35°	8150.0	7983.6	7633.2	7244.1	6806.0	6233.0	5625.5	4877.0	4243.5	3525.3	2945.0
36°	7751.2	7578.1	7254.4	6884.1	6485.4	5906.3	5301.8	4575.7	3961.5	3285.6	2748.9
37°	7312.5	7138.2	6849.0	6505.9	6111.4	5538.4	4939.3	4243.5	3663.8	3036.9	2543.8
38°	6849.6	6687.5	6424.8	6082.4	5692.1	5129.3	4543.0	3939.7	3360.7	2785.2	2336.3
39°	6374.6	6204.0	5956.5	5620.1	5236.4	4681.0	4129.7	3590.6	3099.3	2537.7	2145.6
40°	5844.0	5683.0	5396.2	5132.4	4747.5	4218.7	3715.9	3205.2	2808.8	2299.9	1972.6
42.5°	4322.8	4196.9	4043.8	3773.3	3488.9	3109.6	2758.0	2404.0	2116.0	1827.4	1587.2
45°	2743.5	2650.9	2572.2	2404.0	2289.1	2075.5	1893.9	1713.0	1576.9	1425.6	1158.7
47.5°	1015.3	971.8	943.9	870.1	863.5	795.1	788.4	875.6	927.0	872.5	656.5
50°	382.4	371.5	364.9	341.9	326.1	294.7	271.1	253.5	217.8	193.0	173.1
51°	251.1	243.2	231.7	229.9	223.3	205.7	194.8	191.2	167.0	141.0	121.0
52°	159.7	154.9	147.6	148.2	144.6	133.7	130.1	135.5	122.8	108.3	93.8
53°	100.4	98.0	93.2	93.2	92.6	85.3	84.1	88.9	86.5	79.9	71.4
54°	65.3	64.7	60.5	61.1	61.1	56.9	56.3	58.1	57.5	55.1	50.8
55°	44.8	44.2	43.6	41.8	40.5	39.3	39.3	39.9	39.3	38.1	35.7
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	6.1	6.1	6.1



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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°	106.5	106.5	106.5	106.5	106.5	106.5	106.5	106.5	106.5	106.5	106.5
2.5°	139.2	139.8	137.4	136.8	136.1	133.1	131.3	129.5	127.7	124.6	125.9
5°	186.4	186.4	180.9	177.3	175.5	168.8	165.8	161.6	156.7	153.1	151.3
7.5°	260.2	256.0	243.9	234.8	229.3	216.0	208.2	196.7	190.0	182.7	178.5
10°	551.8	523.4	464.1	421.7	381.8	333.4	289.2	254.7	232.4	216.0	205.7
11°	743.7	706.1	630.5	571.8	519.8	450.8	383.0	318.3	271.7	243.2	222.1
12°	954.2	905.8	815.1	742.4	678.9	592.4	505.9	420.5	353.4	300.1	256.6
13°	1173.3	1110.9	1005.7	922.2	848.9	749.1	646.2	544.0	462.3	389.7	323.7
14°	1390.5	1314.3	1198.7	1102.5	1020.2	908.8	792.1	678.3	582.7	491.3	410.9
15°	1587.8	1504.3	1402.6	1276.7	1187.8	1045.0	934.9	807.2	698.3	592.4	498.6
17.5°	1941.7	1829.2	1709.4	1579.3	1494.6	1353.6	1213.8	1059.5	927.6	796.3	670.4
20°	2330.8	2129.9	1932.7	1739.0	1616.2	1466.1	1329.4	1176.9	1037.7	888.9	752.1
21°	2483.9	2254.0	2013.7	1796.5	1657.3	1497.0	1355.4	1197.5	1051.0	892.5	748.5
22°	2629.1	2354.4	2084.5	1844.9	1693.0	1529.1	1376.6	1210.8	1054.7	888.3	737.6
23°	2761.6	2451.2	2149.9	1887.3	1719.1	1544.8	1387.5	1216.2	1052.9	878.6	721.3
24°	2882.0	2540.2	2205.6	1918.7	1734.8	1549.6	1386.3	1212.0	1043.8	864.1	698.9
25°	2986.1	2610.4	2246.1	1935.7	1739.0	1547.2	1380.2	1201.1	1025.6	839.3	672.9
26°	3064.8	2655.1	2265.5	1938.1	1733.0	1539.3	1366.3	1181.1	997.2	806.0	637.8
27°	3110.2	2671.5	2265.5	1927.8	1720.9	1524.8	1343.9	1150.3	960.3	764.8	594.2
28°	3118.0	2664.2	2249.1	1906.6	1697.9	1499.4	1311.2	1110.9	916.7	715.8	546.4
29°	3097.5	2635.2	2214.0	1870.3	1664.0	1466.7	1268.9	1061.3	864.7	662.0	496.8
30°	3046.6	2581.9	2162.0	1824.3	1623.5	1423.8	1215.6	1006.3	806.0	606.3	439.9
31°	2967.4	2505.1	2095.4	1768.7	1573.2	1372.3	1156.9	942.7	740.0	537.3	378.2
32°	2862.1	2397.4	2021.6	1705.1	1517.6	1313.6	1083.7	861.6	652.9	453.2	306.8
33°	2738.0	2292.1	1939.3	1636.8	1457.1	1233.2	982.7	740.6	546.4	359.4	232.4
34°	2596.4	2178.9	1851.0	1564.8	1377.8	1115.2	856.8	616.0	429.6	262.6	164.0
35°	2439.7	2058.5	1758.4	1480.0	1252.5	971.2	712.8	479.8	311.0	177.9	123.4
36°	2272.7	1923.6	1652.5	1359.0	1102.5	809.6	560.3	345.5	206.3	132.5	106.5
37°	2115.4	1806.2	1543.0	1207.2	933.0	640.8	409.0	230.5	150.7	115.6	94.4
38°	1967.1	1693.0	1400.2	1038.9	758.8	480.4	269.3	170.0	130.7	101.7	83.5
39°	1828.6	1579.3	1233.2	858.6	584.5	338.9	195.4	145.8	113.8	90.2	73.8
40°	1694.9	1416.5	1051.0	700.1	426.0	236.6	164.6	128.9	100.4	79.3	62.3
42.5°	1271.3	910.1	582.1	318.9	200.3	154.3	117.4	90.8	66.6	49.0	37.5
45°	798.1	462.9	249.9	179.1	139.8	104.7	76.2	54.5	39.9	29.6	23.6
47.5°	363.1	199.1	154.9	119.8	90.2	62.3	44.8	32.7	24.2	18.8	13.9
50°	133.1	113.2	92.0	68.4	49.6	35.7	26.0	19.4	14.5	10.9	7.9
51°	104.1	90.8	73.2	51.4	39.3	29.0	21.2	15.7	11.5	8.5	6.1
52°	81.7	72.0	56.3	39.9	30.9	23.0	16.9	12.1	8.5	6.7	4.8
53°	62.9	55.1	42.4	30.9	24.2	18.2	13.3	9.7	6.7	4.8	3.6
54°	46.6	40.5	31.5	23.6	18.8	13.9	9.7	7.3	4.8	3.6	3.0
55°	33.3	29.6	23.6	18.8	14.5	10.9	7.3	5.4	3.6	2.4	2.4
57.5°	13.9	13.3	10.9	9.1	7.3	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: P208853

CATALOG NUMBER: LDSQA6A15830D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	106.5	106.5	106.5	106.5	106.5	106.5	106.5	106.5	106.5	106.5	106.5
2.5°	124.0	124.0	119.8	118.6	118.0	116.8	113.8	113.8	111.9	109.5	108.3
5°	147.0	145.8	139.2	135.5	132.5	128.9	122.8	120.4	116.8	113.2	110.1
7.5°	169.4	165.2	154.9	149.5	145.2	139.2	131.3	125.9	119.8	113.8	109.5
10°	191.8	183.3	168.8	159.7	151.9	143.4	133.7	127.7	119.8	111.9	105.9
11°	200.9	190.0	173.7	162.2	153.1	143.4	133.7	125.9	118.6	110.7	104.1
12°	218.4	197.9	178.5	165.8	154.3	143.4	132.5	124.0	116.2	108.3	101.7
13°	254.1	216.0	183.9	168.8	156.1	143.4	131.3	122.2	113.8	105.9	98.6
14°	318.9	253.5	198.5	171.8	156.7	143.4	130.1	119.2	110.7	102.3	95.6
15°	392.1	311.0	228.1	182.7	157.3	142.2	127.7	116.2	107.1	98.6	92.0
17.5°	544.0	435.1	323.1	237.2	172.5	138.6	118.6	107.1	96.8	88.3	80.5
20°	605.7	479.2	353.4	254.1	178.5	132.5	108.3	96.2	85.3	76.8	70.2
21°	597.8	470.8	344.3	242.6	167.0	124.0	102.9	91.4	81.1	72.0	66.0
22°	581.5	450.8	323.1	221.5	153.1	115.6	98.0	85.9	76.2	67.8	61.7
23°	559.7	422.4	298.9	199.1	138.6	107.7	93.2	81.1	72.0	63.5	58.1
24°	532.5	393.9	271.1	176.7	124.6	101.7	87.7	76.2	67.2	59.9	54.5
25°	502.2	364.3	241.4	157.9	116.2	95.6	81.7	70.8	62.9	56.3	50.8
26°	465.3	329.2	213.6	140.4	105.9	88.9	75.6	66.0	58.7	52.6	47.2
27°	423.0	292.9	182.7	122.2	97.4	82.3	70.2	61.7	55.1	49.0	43.6
28°	384.8	252.3	156.7	108.9	90.8	75.6	65.3	57.5	51.4	45.4	40.5
29°	337.0	213.6	133.7	98.6	83.5	70.8	60.5	53.2	47.2	41.1	36.9
30°	289.2	176.7	114.4	90.2	76.2	64.7	55.7	49.0	43.0	38.1	34.5
31°	239.6	146.4	100.4	82.9	69.6	59.9	51.4	45.4	39.3	35.1	31.5
32°	183.3	119.8	89.6	75.0	63.5	53.9	47.2	41.1	35.7	32.1	28.4
33°	138.0	101.0	81.1	67.8	57.5	49.6	43.0	36.9	32.7	29.0	26.0
34°	110.1	90.2	73.2	61.1	52.0	44.8	38.1	33.3	29.0	26.0	23.0
35°	96.8	81.1	65.3	55.1	46.6	39.3	33.9	29.6	26.0	23.0	20.6
36°	85.9	72.6	58.1	49.0	40.5	34.5	29.6	26.0	22.4	20.0	18.2
37°	76.8	64.1	51.4	42.4	35.1	30.3	26.0	22.4	19.4	17.5	16.3
38°	69.0	55.1	43.6	36.3	30.3	26.0	22.4	19.4	16.9	15.1	13.9
39°	58.7	46.6	36.3	30.9	25.4	21.8	18.8	16.9	14.5	13.3	12.1
40°	49.0	38.7	30.3	25.4	21.8	18.2	16.3	13.9	12.7	11.5	10.3
42.5°	30.3	24.2	19.4	16.3	13.9	12.1	10.9	9.7	8.5	7.9	7.3
45°	18.8	15.1	12.1	10.3	8.5	7.9	7.3	6.1	6.1	5.4	5.4
47.5°	10.9	9.1	6.7	6.1	4.8	4.8	4.2	4.2	3.6	4.2	3.6
50°	6.1	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: P208853

CATALOG NUMBER: LDSQA6A15830D010TE 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: P208853

CATALOG NUMBER: LDSQA6A15830D010TE LARL20NF 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
0°	106.5	106.5	106.5	106.5	106.5	106.5	106.5	106.5
2.5°	107.7	107.7	107.1	105.9	96.8	88.9	84.1	83.5
5°	108.3	107.1	104.7	102.9	86.5	76.2	70.2	69.6
7.5°	105.9	103.5	100.4	96.8	76.8	66.0	60.5	59.3
10°	101.7	97.4	93.8	88.9	67.8	57.5	52.6	51.4
11°	98.6	94.4	90.8	85.9	64.1	54.5	49.6	49.0
12°	96.2	91.4	86.5	82.3	60.5	51.4	47.2	46.6
13°	92.6	87.7	83.5	78.7	57.5	49.0	44.8	44.2
14°	89.6	84.1	79.9	75.6	54.5	46.0	43.0	42.4
15°	85.9	80.5	75.6	71.4	51.4	43.6	41.1	40.5
17.5°	76.2	70.2	66.0	61.7	44.2	38.1	36.3	36.9
20°	64.7	59.9	56.3	52.6	37.5	33.3	32.7	33.3
21°	60.5	56.3	53.2	49.6	35.1	31.5	31.5	32.1
22°	56.9	52.6	49.6	46.0	33.3	29.6	29.6	30.9
23°	53.2	49.0	46.0	43.0	30.9	28.4	28.4	29.6
24°	49.6	46.0	43.0	39.9	29.0	26.6	27.2	28.4
25°	46.0	43.0	39.9	37.5	27.2	25.4	26.0	27.2
26°	43.6	39.9	37.5	34.5	25.4	24.2	24.8	26.6
27°	39.9	36.9	34.5	32.1	24.2	23.0	24.2	25.4
28°	37.5	34.5	32.1	29.6	22.4	21.8	23.0	24.8
29°	34.5	32.1	29.6	27.8	21.2	20.6	22.4	23.6
30°	31.5	29.0	27.2	25.4	20.0	19.4	21.2	23.0
31°	29.0	27.2	25.4	23.6	18.8	18.8	20.6	22.4
32°	26.6	24.8	23.0	21.2	17.5	17.5	20.0	21.2
33°	24.2	22.4	20.6	19.4	16.3	16.9	18.8	20.6
34°	21.2	20.0	18.8	17.5	15.1	15.7	18.2	20.0
35°	19.4	18.2	16.9	15.7	14.5	15.1	17.5	19.4
36°	16.9	16.3	15.1	14.5	13.3	14.5	16.9	18.8
37°	15.1	14.5	13.3	12.7	12.7	13.9	16.3	18.2
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	9.1	10.9	12.1	14.5	16.9
42.5°	7.3	7.3	7.3	7.3	9.1	10.9	13.3	15.7
45°	5.4	5.4	5.4	5.4	7.9	9.7	11.5	14.5
47.5°	4.2	4.2	4.2	4.2	7.3	9.1	10.9	12.7
50°	3.0	3.0	3.6	3.6	6.7	7.9	9.7	11.5
51°	3.0	3.0	3.0	3.6	6.1	7.9	9.1	10.9
52°	3.0	3.0	3.0	3.0	6.1	7.3	8.5	9.7
53°	2.4	3.0	3.0	3.0	5.4	7.3	7.9	9.1
54°	2.4	2.4	2.4	3.0	5.4	6.7	7.3	8.5
55°	2.4	2.4	2.4	3.0	4.8	6.7	7.3	7.3
57.5°	2.4	2.4	2.4	2.4	4.8	6.1	6.7	6.1
60°	2.4	2.4	2.4	2.4	4.2	5.4	6.1	4.2



TEST NUMBER: P208853

CATALOG NUMBER: LDSQA6A15830D010TE 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)