

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: P208839

Luminaire Tested: **LDSQA6A30840D010TE LARL15SP 6LSQA1H 30°**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208839
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29054)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA6A30840D010TE LARL15SP 6LSQA1H 30°
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT, 30° Tilt
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2238.9 lumens
Efficiency: N/A
Efficacy: 50.2 lumens/watt
Spacing Criteria (0/90/45): 2.18 / 0.62 / 1.12
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

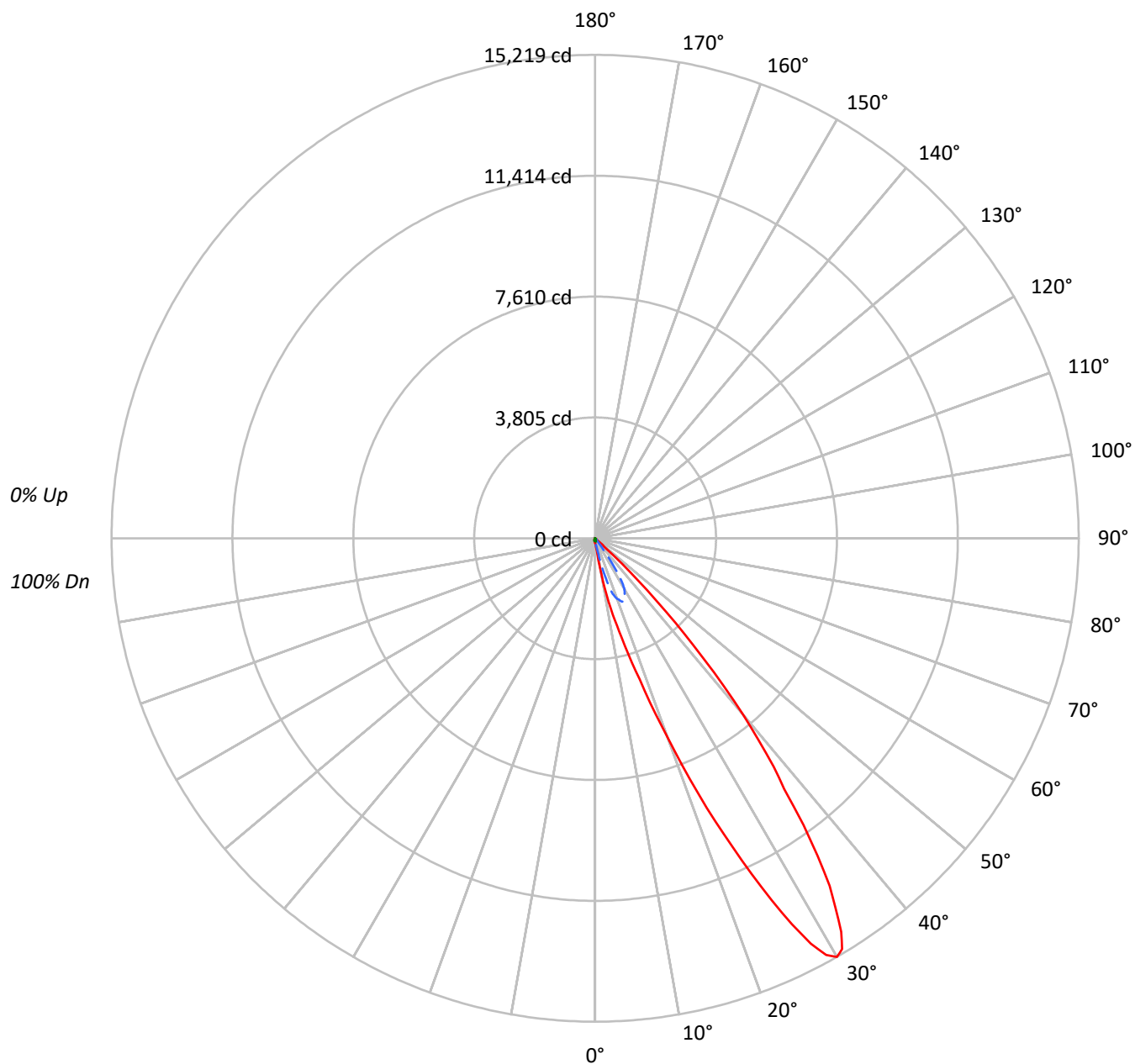
Input Watts (W): 44.62
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	113	109	106	104	110	107	105	102		103	101	99		99	98	96		96	95	93
2	106	100	95	91	103	98	94	90		95	91	88		92	89	86		89	87	85
3	99	91	86	81	97	90	85	80		87	83	79		85	81	78		82	79	76
4	93	84	77	72	91	82	76	72		80	75	71		78	73	70		76	72	69
5	86	77	70	64	85	75	69	64		74	68	63		72	67	63		70	66	62
6	81	70	63	58	79	69	62	58		68	62	57		66	61	57		65	60	56
7	75	64	57	52	74	64	57	52		62	56	51		61	55	51		60	55	51
8	70	59	52	47	69	58	52	47		57	51	47		56	50	46		55	50	46
9	66	54	47	42	65	54	47	42		53	46	42		52	46	42		51	46	42
10	62	50	43	38	60	50	43	38		49	42	38		48	42	38		47	42	38

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	6321	6321	6321
5°	9742	5982	4806
10°	52263	5316	3987
15°	144100	4301	3410
20°	306001	3221	2978
25°	553894	2342	2589
30°	756649	1720	2292
35°	641379	1214	2092
40°	407133	826	2007
45°	141106	639	1851
50°	8641	489	1614
55°	1494	390	1261
60°	362	362	809
65°	214	428	642
70°	264	529	655
75°	0	699	699
80°	0	1041	521
85°	0	2075	494



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	18.3	0.8
10°-20°	230.2	10.3
20°-30°	800.1	35.7
30°-40°	877.2	39.2
40°-50°	289.3	12.9
50°-60°	12.0	0.5
60°-70°	5.2	0.2
70°-80°	4.0	0.2
80°-90°	2.6	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°	1048.6	46.8
0°-40°	1925.8	86.0
0°-60°	2227.1	99.5
0°-90°	2238.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2238.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	147	147	147	147	147	
5°	225	184	138	118	111	48
15°	3233	1318	96	78	76	1074
25°	11659	2161	49	48	54	5457
35°	12202	720	23	30	40	7334
45°	2317	36	10	21	30	2042
55°	20	4	5	14	17	28
65°	2	3	4	8	6	2
75°	0	3	4	5	4	1
85°	0	3	4	3	1	0
90°	0	0	0	0	0	



TEST NUMBER: P208839

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CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
0°	146.8	146.8	146.8	146.8	146.8	146.8	146.8	146.8	146.8	146.8	146.8
2.5°	174.1	173.0	173.0	173.0	172.0	169.9	169.9	170.9	170.9	169.9	170.9
5°	225.4	223.4	222.3	221.3	217.1	216.0	211.8	215.0	211.8	208.7	208.7
7.5°	413.1	412.1	394.3	382.7	362.8	339.7	333.5	334.5	319.8	306.2	297.8
10°	1195.4	1197.5	1145.1	1166.0	1090.5	1060.1	1002.5	981.5	929.1	885.0	831.5
11°	1599.1	1597.0	1530.9	1550.9	1474.3	1431.3	1366.3	1332.8	1266.7	1222.7	1155.5
12°	2035.3	1971.4	1949.3	1968.2	1889.6	1832.9	1754.3	1711.3	1629.5	1584.4	1503.7
13°	2467.3	2448.5	2375.1	2392.9	2312.1	2188.4	2155.9	2104.5	2009.1	1955.6	1865.4
14°	2841.7	2772.5	2749.4	2760.9	2681.3	2563.8	2531.3	2515.6	2368.8	2311.1	2210.4
15°	3232.8	3148.9	3116.4	3073.4	3026.2	2886.8	2839.6	2809.2	2657.1	2560.7	2495.7
17.5°	4654.7	4536.2	4456.5	4359.0	4255.2	3997.2	3890.3	3788.6	3522.2	3394.3	3201.4
20°	6678.5	6497.1	6292.6	6080.8	5877.4	5422.3	5158.0	4874.9	4511.0	4207.0	3976.3
21°	7657.9	7440.8	7194.4	7035.0	6652.3	6096.5	5740.0	5336.3	4868.6	4492.2	4201.7
22°	8684.4	8437.0	8231.5	7996.6	7466.0	6803.3	6355.5	5837.5	5232.5	4768.0	4400.9
23°	9681.7	9401.7	9155.3	8869.0	8255.6	7488.0	6956.4	6338.7	5610.0	5032.2	4578.2
24°	10633.8	10343.3	10060.2	9683.8	8981.2	8132.9	7507.9	6804.3	5969.6	5286.0	4744.9
25°	11659.3	11319.6	10953.6	10381.1	9667.0	8707.5	7988.2	7209.1	6289.5	5519.8	4885.4
26°	12680.6	12284.3	11735.8	11152.8	10299.3	9225.5	8405.5	7537.3	6562.1	5707.5	4989.2
27°	13639.0	13214.4	12570.5	11772.5	10866.6	9669.1	8749.5	7797.3	6751.9	5829.1	5037.4
28°	14459.0	13991.4	13274.1	12365.0	11289.1	9995.2	8977.0	7950.4	6843.1	5875.3	5043.7
29°	14999.1	14532.4	13759.6	12749.8	11528.2	10156.7	9067.2	7984.0	6837.9	5848.0	5000.7
30°	15219.3	14748.5	13958.9	12875.7	11573.3	10159.8	9030.5	7913.7	6746.6	5762.0	4915.8
31°	15090.3	14638.4	13837.2	12746.7	11413.9	10013.0	8876.3	7736.5	6565.2	5610.0	4788.9
32°	14614.2	14200.0	13430.4	12392.3	11085.7	9718.4	8611.0	7474.4	6309.4	5411.8	4630.6
33°	13888.6	13543.6	12757.2	11799.8	10647.4	9356.6	8288.1	7208.0	6001.1	5169.6	4461.8
34°	13193.4	12683.8	11986.5	11136.1	10085.4	8886.8	7887.5	6788.6	5673.9	4903.2	4268.8
35°	12202.5	11746.3	11102.5	10374.8	9431.0	8313.2	7313.9	6379.6	5308.0	4646.3	4066.4
36°	11157.0	10755.4	10287.7	9635.5	8732.7	7714.5	6800.1	5877.4	4931.5	4360.0	3852.5
37°	9879.8	9789.7	9354.5	8810.3	8003.9	7063.3	6203.5	5405.5	4579.2	4095.8	3617.6
38°	9125.9	8830.2	8431.7	7952.5	7161.9	6409.0	5627.8	4931.5	4259.4	3848.3	3350.3
39°	8166.4	7916.9	7549.9	7118.9	6438.4	5727.4	5092.0	4536.2	3995.1	3598.8	3061.9
40°	7243.7	7036.1	6699.5	6329.3	5711.7	5126.6	4629.5	4188.1	3733.0	3332.4	2776.7
42.5°	4567.7	4464.9	4326.5	4276.2	4054.9	3902.9	3721.5	3466.6	3066.1	2615.2	2227.2
45°	2317.4	2251.3	2249.2	2352.0	2422.2	2429.6	2412.8	2347.8	2087.7	1958.8	1613.8
47.5°	390.1	371.2	382.7	451.9	549.5	668.0	800.1	962.6	1136.7	1100.0	847.3
50°	129.0	124.8	121.6	124.8	120.6	123.7	121.6	118.5	107.0	112.2	115.3
51°	79.7	84.9	81.8	83.9	82.8	86.0	86.0	84.9	77.6	72.4	66.1
52°	54.5	55.6	56.6	57.7	56.6	57.7	58.7	58.7	56.6	54.5	49.3
53°	38.8	38.8	39.8	39.8	39.8	40.9	40.9	40.9	39.8	39.8	38.8
54°	27.3	28.3	28.3	28.3	28.3	29.4	29.4	29.4	30.4	29.4	29.4
55°	19.9	19.9	19.9	19.9	19.9	19.9	21.0	21.0	22.0	22.0	21.0
57.5°	8.4	8.4	7.3	8.4	8.4	8.4	8.4	9.4	9.4	10.5	10.5
60°	4.2	4.2	4.2	4.2	3.1	4.2	4.2	4.2	4.2	5.2	5.2



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
63°	2.1	2.1	2.1	2.1	2.1	2.1	1.0	2.1	2.1	2.1	2.1
64°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	1.0	1.0	1.0	1.0
65°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	1.0	1.0	1.0	1.0
66°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	1.0	1.0
67.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	1.0
70°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
72.5°	2.1	1.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	1.0	1.0	1.0	1.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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°	146.8	146.8	146.8	146.8	146.8	146.8	146.8	146.8	146.8	146.8	146.8
2.5°	167.8	169.9	166.7	168.8	164.6	164.6	161.5	162.5	161.5	159.4	159.4
5°	203.4	203.4	198.2	198.2	191.9	188.7	183.5	183.5	180.4	175.1	174.1
7.5°	278.9	268.4	256.9	252.7	240.1	231.7	222.3	218.1	208.7	200.3	194.0
10°	746.6	677.4	609.2	567.3	464.5	390.1	334.5	296.8	269.5	237.0	224.4
11°	1052.8	964.7	875.6	788.5	687.9	586.2	522.2	421.5	357.6	285.2	250.6
12°	1384.1	1280.3	1172.3	1073.8	953.2	825.2	737.2	609.2	519.1	398.5	314.6
13°	1723.9	1606.4	1477.5	1374.7	1238.4	1091.6	953.2	834.7	722.5	565.2	442.5
14°	2051.0	1926.3	1784.7	1676.7	1523.6	1364.2	1208.0	1076.9	940.6	752.9	601.9
15°	2342.6	2253.4	2074.1	1967.2	1802.5	1632.7	1458.6	1318.1	1156.6	947.9	773.9
17.5°	2952.8	2788.2	2569.1	2463.1	2299.6	2152.8	1964.0	1837.1	1637.9	1417.7	1225.8
20°	3672.2	3429.9	3133.2	2909.8	2626.7	2368.8	2130.7	2031.1	1907.4	1757.4	1578.1
21°	3869.3	3608.2	3284.2	3056.6	2766.2	2500.9	2220.9	2062.6	1927.3	1797.3	1647.3
22°	4013.0	3737.2	3396.4	3159.4	2860.6	2597.4	2311.1	2121.3	1940.9	1794.1	1658.9
23°	4134.6	3841.0	3486.6	3228.6	2916.1	2644.6	2357.2	2168.5	1969.3	1786.8	1640.0
24°	4244.7	3922.8	3550.5	3273.7	2944.4	2661.3	2363.5	2176.9	1982.9	1791.0	1614.8
25°	4327.5	3974.2	3587.2	3296.8	2950.7	2656.1	2348.8	2161.1	1967.2	1777.4	1586.5
26°	4384.2	3998.3	3597.7	3295.7	2938.2	2635.1	2318.4	2128.6	1929.4	1728.1	1540.4
27°	4402.0	3992.0	3583.0	3271.6	2906.7	2594.2	2267.1	2066.8	1870.7	1669.4	1478.5
28°	4384.2	3966.8	3549.5	3224.4	2854.3	2527.1	2184.2	1985.0	1807.8	1604.3	1403.0
29°	4334.9	3921.7	3487.6	3154.2	2771.4	2418.1	2078.3	1906.3	1735.4	1505.8	1276.1
30°	4258.3	3839.9	3398.5	3051.4	2648.7	2280.7	1982.9	1834.0	1615.9	1346.4	1098.9
31°	4151.4	3734.0	3283.1	2915.1	2485.2	2146.5	1900.0	1698.7	1429.2	1135.6	882.9
32°	4021.4	3608.2	3115.4	2733.7	2323.7	2040.6	1753.2	1492.1	1193.3	886.1	643.8
33°	3881.9	3446.7	2923.5	2542.8	2185.3	1899.0	1541.4	1237.3	929.1	622.9	405.8
34°	3720.4	3248.5	2708.5	2350.9	2030.1	1686.1	1289.8	961.6	662.7	378.5	208.7
35°	3525.4	3004.2	2494.6	2185.3	1807.8	1404.1	1014.0	720.4	415.2	190.8	113.2
36°	3289.4	2752.6	2309.0	1972.4	1547.7	1127.2	731.9	459.3	223.4	112.2	89.1
37°	2989.5	2546.0	2114.0	1718.6	1266.7	846.2	471.9	249.6	127.9	91.2	75.5
38°	2730.5	2355.1	1905.3	1441.8	976.2	579.9	286.3	140.5	100.7	76.5	62.9
39°	2507.2	2150.7	1631.6	1150.3	696.3	351.3	157.3	107.0	83.9	62.9	53.5
40°	2312.1	1859.2	1342.2	863.0	447.7	195.0	113.2	89.1	68.2	52.4	43.0
42.5°	1696.6	1179.7	621.8	278.9	131.1	97.5	71.3	56.6	44.0	32.5	27.3
45°	1007.7	530.6	187.7	114.3	82.8	61.9	45.1	35.7	27.3	19.9	16.8
47.5°	368.1	134.2	92.3	69.2	52.4	38.8	28.3	22.0	16.8	11.5	9.4
50°	75.5	65.0	50.3	40.9	30.4	23.1	16.8	12.6	9.4	7.3	6.3
51°	57.7	50.3	40.9	32.5	24.1	18.9	13.6	10.5	8.4	6.3	5.2
52°	44.0	38.8	31.5	26.2	19.9	14.7	10.5	8.4	6.3	4.2	4.2
53°	34.6	30.4	24.1	19.9	15.7	11.5	8.4	6.3	5.2	4.2	4.2
54°	26.2	23.1	18.9	15.7	12.6	9.4	6.3	5.2	4.2	4.2	3.1
55°	18.9	17.8	14.7	11.5	9.4	7.3	5.2	4.2	4.2	3.1	3.1
57.5°	9.4	8.4	7.3	6.3	5.2	4.2	3.1	3.1	3.1	3.1	2.1
60°	5.2	4.2	4.2	4.2	3.1	3.1	3.1	2.1	2.1	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°	2.1	2.1	2.1	2.1	3.1	2.1	2.1	2.1	3.1	3.1	3.1
64°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	3.1	3.1	3.1	3.1
65°	1.0	2.1	2.1	2.1	2.1	2.1	2.1	3.1	3.1	3.1	3.1
66°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	3.1	3.1	3.1	3.1
67.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	3.1	3.1	3.1	3.1
70°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	3.1	3.1	3.1	3.1
72.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	3.1	3.1	3.1	3.1
75°	1.0	1.0	2.1	2.1	2.1	2.1	2.1	3.1	3.1	3.1	3.1
77.5°	1.0	1.0	2.1	2.1	2.1	2.1	2.1	3.1	3.1	3.1	3.1
80°	1.0	1.0	1.0	2.1	2.1	2.1	2.1	3.1	3.1	3.1	3.1
82.5°	1.0	1.0	1.0	2.1	2.1	2.1	2.1	3.1	3.1	3.1	3.1
85°	1.0	1.0	1.0	2.1	2.1	2.1	2.1	3.1	3.1	3.1	3.1
87.5°	1.0	1.0	1.0	2.1	2.1	2.1	2.1	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: P208839

CATALOG NUMBER: LDSQA6A30840D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	146.8	146.8	146.8	146.8	146.8	146.8	146.8	146.8	146.8	146.8	146.8
2.5°	156.2	158.3	156.2	154.1	153.1	153.1	152.0	148.9	149.9	148.9	148.9
5°	168.8	169.9	165.7	162.5	160.4	158.3	156.2	152.0	151.0	149.9	148.9
7.5°	185.6	184.6	176.2	170.9	165.7	161.5	157.3	152.0	149.9	146.8	144.7
10°	209.7	202.4	188.7	179.3	172.0	163.6	157.3	148.9	144.7	140.5	137.4
11°	220.2	209.7	196.1	183.5	174.1	164.6	157.3	146.8	141.6	137.4	133.2
12°	252.7	224.4	202.4	188.7	176.2	165.7	156.2	145.8	139.5	133.2	129.0
13°	327.2	261.1	216.0	191.9	179.3	166.7	155.2	143.7	136.3	129.0	124.8
14°	448.8	335.5	249.6	203.4	180.4	166.7	154.1	141.6	133.2	125.8	120.6
15°	594.6	450.9	317.7	231.7	184.6	165.7	152.0	138.4	129.0	120.6	115.3
17.5°	1001.4	813.7	610.3	434.1	268.4	181.4	143.7	127.9	116.4	107.0	100.7
20°	1342.2	1126.2	896.5	677.4	464.5	289.4	165.7	116.4	102.8	92.3	86.0
21°	1416.6	1214.3	971.0	741.4	521.2	335.5	187.7	116.4	97.5	87.0	80.7
22°	1455.4	1260.4	1017.1	783.3	559.9	368.1	210.8	117.4	92.3	81.8	74.5
23°	1449.2	1270.9	1035.0	795.9	577.8	383.8	220.2	118.5	87.0	76.5	69.2
24°	1411.4	1242.6	1017.1	781.2	572.5	379.6	217.1	116.4	81.8	71.3	65.0
25°	1364.2	1187.0	968.9	741.4	539.0	353.4	201.3	109.1	77.6	67.1	60.8
26°	1310.7	1131.4	901.8	671.1	484.4	309.3	169.9	96.5	71.3	61.9	56.6
27°	1246.8	1059.1	819.0	596.6	409.0	249.6	136.3	81.8	66.1	56.6	52.4
28°	1151.4	956.3	713.0	498.1	327.2	188.7	102.8	70.3	60.8	52.4	48.2
29°	1008.7	811.6	580.9	389.0	240.1	130.0	78.6	62.9	54.5	47.2	44.0
30°	830.5	641.7	431.0	267.4	154.1	88.1	64.0	55.6	48.2	43.0	40.9
31°	629.2	456.1	278.9	154.1	92.3	65.0	56.6	48.2	43.0	38.8	37.7
32°	415.2	275.8	147.9	89.1	67.1	56.6	49.3	43.0	38.8	35.7	34.6
33°	222.3	126.9	84.9	67.1	56.6	49.3	43.0	37.7	34.6	32.5	31.5
34°	113.2	82.8	69.2	57.7	48.2	43.0	37.7	33.6	31.5	29.4	28.3
35°	83.9	71.3	59.8	49.3	41.9	37.7	33.6	30.4	28.3	26.2	26.2
36°	71.3	59.8	49.3	43.0	37.7	33.6	30.4	26.2	25.2	24.1	23.1
37°	59.8	51.4	43.0	36.7	32.5	29.4	26.2	24.1	22.0	21.0	21.0
38°	50.3	44.0	36.7	31.5	28.3	26.2	23.1	21.0	19.9	18.9	18.9
39°	41.9	36.7	31.5	27.3	24.1	22.0	19.9	18.9	17.8	16.8	16.8
40°	34.6	31.5	26.2	23.1	21.0	18.9	17.8	16.8	15.7	14.7	15.7
42.5°	22.0	18.9	16.8	15.7	13.6	13.6	12.6	11.5	11.5	11.5	11.5
45°	12.6	11.5	10.5	10.5	9.4	9.4	9.4	8.4	9.4	9.4	9.4
47.5°	7.3	7.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	7.3	7.3
50°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	5.2	5.2
51°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	5.2
52°	4.2	4.2	4.2	3.1	3.1	3.1	3.1	3.1	4.2	4.2	4.2
53°	3.1	4.2	3.1	3.1	3.1	3.1	3.1	3.1	4.2	4.2	4.2
54°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	4.2	4.2
55°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	4.2	4.2
57.5°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	4.2
60°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	4.2



TEST NUMBER: P208839

CATALOG NUMBER: LDSQA6A30840D010TE LARL15SP 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	4.2	3.1	3.1	3.1	4.2	4.2
64°	3.1	3.1	3.1	3.1	3.1	4.2	3.1	3.1	3.1	3.1	4.2
65°	3.1	3.1	4.2	4.2	4.2	4.2	3.1	3.1	3.1	3.1	4.2
66°	3.1	3.1	4.2	4.2	4.2	4.2	4.2	3.1	3.1	4.2	4.2
67.5°	3.1	4.2	4.2	4.2	4.2	4.2	4.2	3.1	4.2	4.2	4.2
70°	3.1	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
72.5°	3.1	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
75°	3.1	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
77.5°	3.1	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
80°	3.1	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
82.5°	3.1	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
85°	3.1	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
87.5°	3.1	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
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: P208839

CATALOG NUMBER: LDSQA6A30840D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
0°	146.8	146.8	146.8	146.8	146.8	146.8	146.8	146.8
2.5°	145.8	144.7	143.7	143.7	135.3	131.1	125.8	125.8
5°	143.7	142.6	140.5	138.4	124.8	118.5	112.2	111.2
7.5°	139.5	136.3	133.2	131.1	114.3	107.0	100.7	99.6
10°	131.1	126.9	123.7	121.6	103.8	96.5	91.2	91.2
11°	126.9	122.7	119.5	116.4	98.6	92.3	88.1	88.1
12°	122.7	118.5	114.3	112.2	94.4	89.1	84.9	83.9
13°	118.5	113.2	110.1	107.0	90.2	84.9	81.8	81.8
14°	114.3	109.1	104.9	101.7	86.0	80.7	78.6	78.6
15°	108.0	102.8	99.6	96.5	80.7	77.6	75.5	76.5
17.5°	93.3	89.1	86.0	82.8	70.3	69.2	69.2	70.3
20°	79.7	75.5	72.4	70.3	60.8	61.9	62.9	65.0
21°	74.5	70.3	67.1	65.0	57.7	58.7	60.8	62.9
22°	69.2	66.1	62.9	60.8	54.5	55.6	58.7	60.8
23°	64.0	60.8	58.7	56.6	51.4	53.5	56.6	58.7
24°	59.8	56.6	54.5	52.4	48.2	50.3	54.5	56.6
25°	55.6	52.4	50.3	49.3	45.1	48.2	52.4	54.5
26°	51.4	49.3	47.2	46.1	43.0	46.1	50.3	53.5
27°	47.2	45.1	44.0	43.0	39.8	44.0	48.2	51.4
28°	44.0	41.9	40.9	39.8	37.7	41.9	47.2	49.3
29°	40.9	38.8	37.7	36.7	35.7	39.8	45.1	48.2
30°	37.7	36.7	34.6	34.6	33.6	38.8	43.0	46.1
31°	34.6	33.6	32.5	31.5	31.5	36.7	41.9	45.1
32°	32.5	31.5	30.4	29.4	30.4	34.6	39.8	44.0
33°	29.4	28.3	28.3	27.3	28.3	33.6	38.8	43.0
34°	26.2	26.2	25.2	25.2	27.3	32.5	37.7	40.9
35°	24.1	23.1	23.1	23.1	26.2	30.4	36.7	39.8
36°	22.0	22.0	21.0	21.0	25.2	29.4	35.7	38.8
37°	19.9	19.9	19.9	18.9	23.1	28.3	33.6	37.7
38°	17.8	17.8	17.8	17.8	22.0	27.3	33.6	37.7
39°	15.7	15.7	16.8	16.8	21.0	26.2	31.5	36.7
40°	14.7	14.7	14.7	14.7	19.9	25.2	30.4	35.7
42.5°	11.5	11.5	12.6	12.6	17.8	23.1	28.3	32.5
45°	9.4	9.4	10.5	10.5	15.7	21.0	25.2	30.4
47.5°	7.3	7.3	8.4	8.4	13.6	18.9	23.1	27.3
50°	5.2	6.3	6.3	7.3	12.6	16.8	19.9	24.1
51°	5.2	5.2	6.3	6.3	11.5	15.7	18.9	23.1
52°	5.2	5.2	6.3	6.3	10.5	14.7	17.8	21.0
53°	4.2	5.2	5.2	6.3	10.5	14.7	16.8	19.9
54°	4.2	4.2	5.2	5.2	10.5	13.6	16.8	17.8
55°	4.2	4.2	5.2	5.2	9.4	13.6	15.7	16.8
57.5°	4.2	4.2	4.2	4.2	8.4	11.5	13.6	13.6
60°	4.2	4.2	4.2	4.2	8.4	10.5	12.6	9.4



TEST NUMBER: P208839

CATALOG NUMBER: LDSQA6A30840D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
63°	4.2	4.2	4.2	4.2	7.3	9.4	9.4	7.3
64°	4.2	4.2	4.2	4.2	7.3	9.4	9.4	7.3
65°	4.2	4.2	4.2	4.2	7.3	8.4	8.4	6.3
66°	4.2	4.2	4.2	4.2	7.3	8.4	8.4	6.3
67.5°	4.2	4.2	4.2	4.2	6.3	7.3	7.3	6.3
70°	4.2	4.2	4.2	4.2	6.3	7.3	6.3	5.2
72.5°	4.2	4.2	4.2	4.2	6.3	6.3	5.2	4.2
75°	4.2	4.2	4.2	4.2	5.2	5.2	4.2	4.2
77.5°	4.2	4.2	4.2	4.2	5.2	5.2	4.2	3.1
80°	4.2	4.2	4.2	4.2	5.2	4.2	3.1	2.1
82.5°	4.2	4.2	4.2	4.2	4.2	3.1	2.1	2.1
85°	4.2	4.2	4.2	4.2	4.2	3.1	2.1	1.0
87.5°	4.2	4.2	4.2	4.2	4.2	3.1	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°	4.2	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	4.2	4.2
62°	3.1	3.1	3.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1





61°	4.2	3.1	3.1	3.1	3.1	3.1	3.1	2.1	2.1	3.1	3.1
62°	3.1	3.1	3.1	3.1	3.1	3.1	2.1	2.1	2.1	3.1	3.1





61°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	4.2
62°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1





61°	4.2	4.2	4.2	4.2	7.3	10.5	11.5	8.4
62°	4.2	4.2	4.2	4.2	7.3	9.4	10.5	7.3



(END OF REPORT)