

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: P208828

Luminaire Tested: **LDSQA6A20827D010TE LARL15SP 6LSQA1H 30°**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208828
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: LDSQA6A20827D010TE 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 / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1477.1 lumens
Efficiency: N/A
Efficacy: 51.3 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

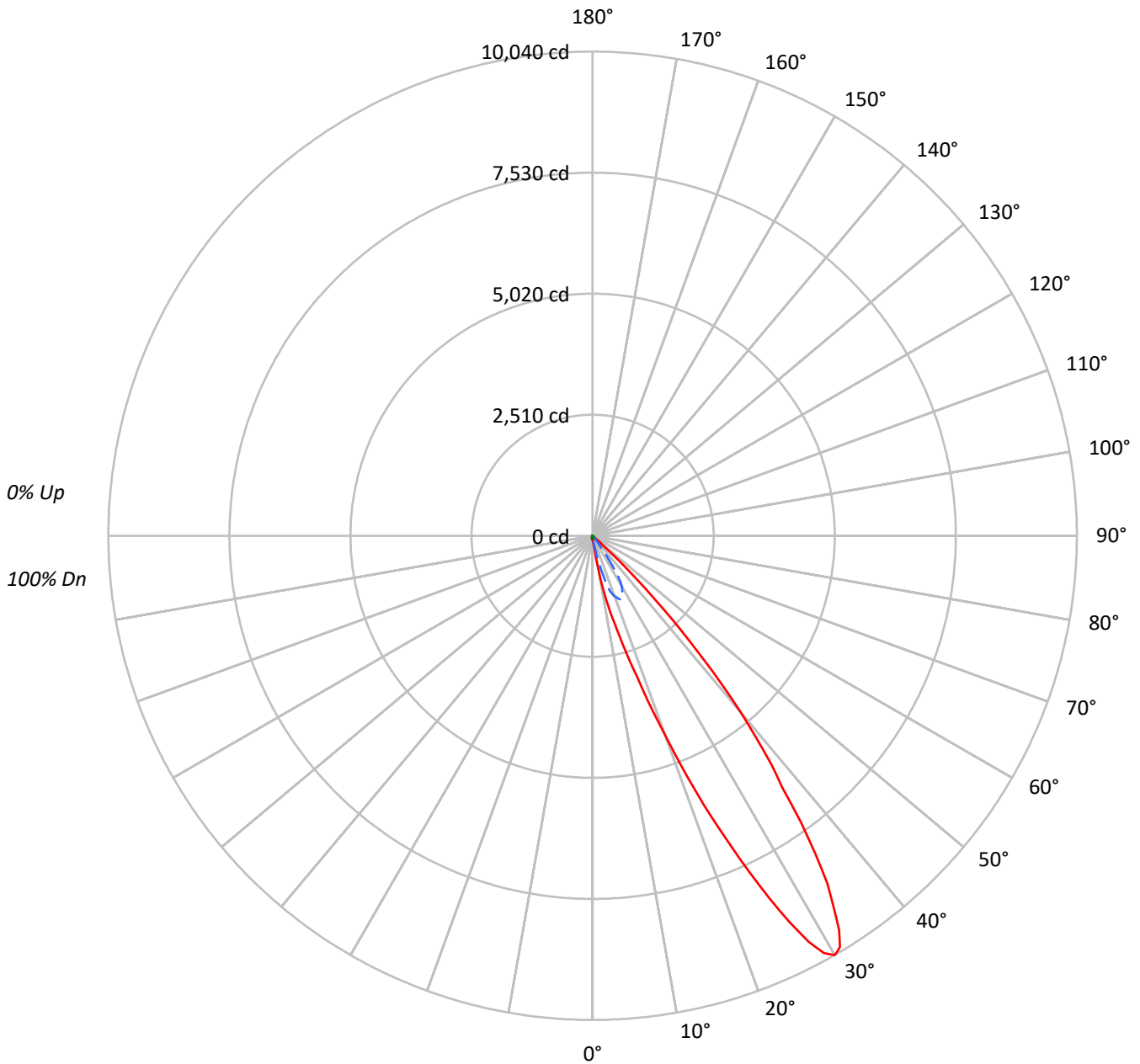
Input Watts (W): 28.81
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P208828

CATALOG NUMBER: LDSQA6A20827D010TE LARL15SP 6LSQA1H 30°

Luminous Intensity Polar Plot





TEST NUMBER: P208828

CATALOG NUMBER: LDSQA6A20827D010TE LARL15SP 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	113	109	106	104	110	107	105	102	103	101	99	99	98	96	96	95	93	91																			
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	87	85	83																			
3	99	91	86	81	97	90	85	80	87	83	79	85	81	78	82	79	76	75																			
4	93	84	77	72	91	82	76	72	80	75	71	78	73	70	76	72	69	67																			
5	86	76	70	64	85	75	69	64	74	68	63	72	67	63	70	66	62	61																			
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55																			
7	75	64	57	52	74	64	57	52	62	56	51	61	55	51	60	55	51	49																			
8	70	59	52	47	69	58	52	47	57	51	47	56	50	46	55	50	46	44																			
9	66	54	47	42	65	54	47	42	53	46	42	52	46	42	51	46	42	40																			
10	62	50	43	38	60	50	43	38	49	42	38	48	42	38	47	42	38	36																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	4168	4168	4168
5°	6427	3946	3168
10°	34477	3506	2632
15°	95064	2835	2251
20°	201864	2121	1966
25°	365398	1544	1710
30°	499153	1134	1511
35°	423113	799	1382
40°	268582	545	1321
45°	93088	420	1224
50°	5700	322	1065
55°	983	263	833
60°	241	241	534
65°	143	285	428
70°	176	352	441
75°	0	466	466
80°	0	694	347
85°	0	1383	346



TEST NUMBER: P208828

CATALOG NUMBER: LDSQA6A20827D010TE LARL15SP 6LSQA1H 30°

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	12.0	0.8
10°-20°	151.9	10.3
20°-30°	527.8	35.7
30°-40°	578.7	39.2
40°-50°	190.8	12.9
50°-60°	7.9	0.5
60°-70°	3.4	0.2
70°-80°	2.7	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°	691.8	46.8
0°-40°	1270.4	86.0
0°-60°	1469.2	99.5
0°-90°	1477.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1477.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	97	97	97	97	97	
5°	149	121	91	78	73	31
15°	2133	870	64	51	50	709
25°	7692	1426	32	32	36	3600
35°	8050	475	15	20	26	4838
45°	1529	24	7	14	20	1347
55°	13	3	4	9	11	19
65°	1	2	3	6	4	2
75°	0	2	3	4	3	1
85°	0	2	3	2	1	0
90°	0	0	0	0	0	



TEST NUMBER: P208828

CATALOG NUMBER: LDSQA6A20827D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
0°	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
2.5°	114.8	114.1	114.1	114.1	113.4	112.1	112.1	112.8	112.8	112.1	112.8
5°	148.7	147.3	146.7	146.0	143.2	142.5	139.7	141.8	139.7	137.7	137.7
7.5°	272.5	271.9	260.1	252.5	239.3	224.1	220.0	220.7	211.0	202.0	196.5
10°	788.6	790.0	755.4	769.2	719.4	699.4	661.3	647.5	612.9	583.8	548.6
11°	1054.9	1053.5	1010.0	1023.1	972.6	944.2	901.3	879.2	835.6	806.6	762.3
12°	1342.7	1300.5	1286.0	1298.4	1246.5	1209.2	1157.3	1128.9	1075.0	1045.2	992.0
13°	1627.7	1615.2	1566.8	1578.6	1525.3	1443.7	1422.2	1388.3	1325.4	1290.1	1230.6
14°	1874.6	1829.0	1813.8	1821.4	1768.8	1691.3	1669.9	1659.5	1562.7	1524.6	1458.2
15°	2132.7	2077.3	2055.9	2027.5	1996.4	1904.4	1873.3	1853.2	1752.9	1689.2	1646.4
17.5°	3070.7	2992.5	2939.9	2875.6	2807.1	2636.9	2566.4	2499.3	2323.6	2239.2	2111.9
20°	4405.7	4286.1	4151.2	4011.4	3877.2	3577.0	3402.7	3215.9	2975.9	2775.3	2623.1
21°	5051.8	4908.6	4746.1	4640.9	4388.4	4021.8	3786.6	3520.3	3211.8	2963.4	2771.8
22°	5729.0	5565.8	5430.2	5275.3	4925.2	4488.1	4192.7	3851.0	3451.8	3145.4	2903.3
23°	6386.9	6202.2	6039.6	5850.8	5446.1	4939.8	4589.0	4181.6	3700.8	3319.7	3020.2
24°	7015.0	6823.4	6636.6	6388.3	5924.8	5365.2	4952.9	4488.7	3938.1	3487.1	3130.2
25°	7691.5	7467.4	7226.0	6848.3	6377.2	5744.3	5269.7	4755.8	4149.1	3641.4	3222.8
26°	8365.3	8103.8	7742.0	7357.4	6794.3	6086.0	5545.0	4972.3	4329.0	3765.2	3291.3
27°	8997.6	8717.4	8292.7	7766.2	7168.6	6378.6	5771.9	5143.8	4454.2	3845.4	3323.2
28°	9538.5	9230.0	8756.8	8157.1	7447.3	6593.7	5922.0	5244.8	4514.3	3875.9	3327.3
29°	9894.7	9586.9	9077.1	8411.0	7605.1	6700.3	5981.5	5267.0	4510.9	3857.9	3298.9
30°	10040.0	9729.4	9208.5	8494.0	7634.8	6702.3	5957.3	5220.6	4450.7	3801.1	3242.9
31°	9954.9	9656.8	9128.3	8408.9	7529.7	6605.5	5855.6	5103.7	4331.0	3700.8	3159.2
32°	9640.9	9367.6	8859.9	8175.1	7313.1	6411.1	5680.6	4930.8	4162.2	3570.1	3054.8
33°	9162.2	8934.6	8415.8	7784.2	7024.0	6172.5	5467.6	4755.1	3958.9	3410.3	2943.4
34°	8703.6	8367.4	7907.4	7346.4	6653.2	5862.6	5203.3	4478.4	3743.0	3234.6	2816.1
35°	8049.9	7748.9	7324.2	6844.1	6221.6	5484.2	4824.9	4208.6	3501.6	3065.1	2682.6
36°	7360.2	7095.2	6786.7	6356.5	5760.9	5089.2	4486.0	3877.2	3253.3	2876.3	2541.5
37°	6517.6	6458.1	6171.1	5812.1	5280.1	4659.6	4092.4	3566.0	3020.9	2702.0	2386.5
38°	6020.3	5825.2	5562.3	5246.2	4724.6	4228.0	3712.6	3253.3	2809.9	2538.7	2210.1
39°	5387.3	5222.7	4980.6	4696.3	4247.3	3778.3	3359.1	2992.5	2635.6	2374.1	2019.9
40°	4778.6	4641.6	4419.6	4175.4	3767.9	3382.0	3054.1	2762.8	2462.6	2198.4	1831.7
42.5°	3013.2	2945.5	2854.1	2820.9	2675.0	2574.7	2455.0	2286.9	2022.7	1725.2	1469.3
45°	1528.8	1485.2	1483.8	1551.6	1597.9	1602.8	1591.7	1548.8	1377.3	1292.2	1064.6
47.5°	257.3	244.9	252.5	298.1	362.5	440.6	527.8	635.0	749.9	725.6	558.9
50°	85.1	82.3	80.2	82.3	79.6	81.6	80.2	78.2	70.6	74.0	76.1
51°	52.6	56.0	54.0	55.3	54.6	56.7	56.7	56.0	51.2	47.7	43.6
52°	36.0	36.7	37.4	38.0	37.4	38.0	38.7	38.7	37.4	36.0	32.5
53°	25.6	25.6	26.3	26.3	26.3	27.0	27.0	27.0	26.3	26.3	25.6
54°	18.0	18.7	18.7	18.7	18.7	19.4	19.4	19.4	20.1	19.4	19.4
55°	13.1	13.1	13.1	13.1	13.1	13.1	13.8	13.8	14.5	14.5	13.8
57.5°	5.5	5.5	4.8	5.5	5.5	5.5	5.5	6.2	6.2	6.9	6.9
60°	2.8	2.8	2.8	2.8	2.1	2.8	2.8	2.8	2.8	3.5	3.5



TEST NUMBER: P208828

CATALOG NUMBER: LDSQA6A20827D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
63°	1.4	1.4	1.4	1.4	1.4	1.4	0.7	1.4	1.4	1.4	1.4
64°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7
65°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7
66°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.7	0.7
67.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.7
70°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
72.5°	1.4	0.7	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.7	0.7
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.7	0.7
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.7
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.7	0.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.7	0.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.7	0.7
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: P208828

CATALOG NUMBER: LDSQA6A20827D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
0°	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
2.5°	110.7	112.1	110.0	111.4	108.6	108.6	106.5	107.2	106.5	105.1	105.1
5°	134.2	134.2	130.7	130.7	126.6	124.5	121.1	121.1	119.0	115.5	114.8
7.5°	184.0	177.1	169.5	166.7	158.4	152.9	146.7	143.9	137.7	132.1	128.0
10°	492.5	446.9	401.9	374.2	306.4	257.3	220.7	195.8	177.8	156.3	148.0
11°	694.5	636.4	577.6	520.2	453.8	386.7	344.5	278.1	235.9	188.2	165.3
12°	913.1	844.6	773.4	708.3	628.8	544.4	486.3	401.9	342.4	262.9	207.5
13°	1137.2	1059.8	974.7	906.9	817.0	720.1	628.8	550.6	476.6	372.9	291.9
14°	1353.1	1270.7	1177.4	1106.1	1005.1	900.0	796.9	710.4	620.5	496.7	397.1
15°	1545.4	1486.6	1368.3	1297.7	1189.1	1077.0	962.2	869.5	763.0	625.3	510.5
17.5°	1948.0	1839.4	1694.8	1624.9	1517.0	1420.2	1295.6	1211.9	1080.5	935.2	808.7
20°	2422.5	2262.7	2066.9	1919.6	1732.8	1562.7	1405.6	1339.9	1258.3	1159.4	1041.1
21°	2552.5	2380.3	2166.6	2016.4	1824.8	1649.8	1465.1	1360.7	1271.4	1185.7	1086.7
22°	2647.3	2465.4	2240.6	2084.2	1887.1	1713.5	1524.6	1399.4	1280.4	1183.6	1094.3
23°	2727.6	2533.9	2300.1	2129.9	1923.7	1744.6	1555.0	1430.5	1299.1	1178.7	1081.9
24°	2800.2	2587.8	2342.3	2159.6	1942.4	1755.7	1559.2	1436.1	1308.1	1181.5	1065.3
25°	2854.8	2621.7	2366.5	2174.9	1946.6	1752.2	1549.5	1425.7	1297.7	1172.5	1046.6
26°	2892.2	2637.6	2373.4	2174.2	1938.3	1738.4	1529.5	1404.2	1272.8	1140.0	1016.2
27°	2904.0	2633.5	2363.7	2158.3	1917.5	1711.4	1495.6	1363.4	1234.1	1101.3	975.4
28°	2892.2	2616.9	2341.6	2127.1	1882.9	1667.1	1440.9	1309.5	1192.6	1058.4	925.6
29°	2859.7	2587.1	2300.8	2080.8	1828.3	1595.2	1371.0	1257.6	1144.8	993.3	841.9
30°	2809.2	2533.2	2242.0	2013.0	1747.4	1504.5	1308.1	1209.9	1066.0	888.2	725.0
31°	2738.6	2463.3	2165.9	1923.1	1639.4	1416.0	1253.4	1120.6	942.9	749.2	582.5
32°	2652.8	2380.3	2055.2	1803.4	1532.9	1346.1	1156.6	984.4	787.2	584.5	424.7
33°	2560.8	2273.8	1928.6	1677.5	1441.6	1252.8	1016.9	816.3	612.9	410.9	267.7
34°	2454.3	2143.0	1786.8	1550.9	1339.2	1112.3	850.8	634.3	437.2	249.7	137.7
35°	2325.7	1981.9	1645.7	1441.6	1192.6	926.2	668.9	475.2	273.9	125.9	74.7
36°	2170.0	1815.8	1523.2	1301.2	1021.0	743.6	482.8	303.0	147.3	74.0	58.8
37°	1972.2	1679.6	1394.6	1133.8	835.6	558.2	311.3	164.6	84.4	60.2	49.8
38°	1801.3	1553.7	1256.9	951.2	644.0	382.5	188.8	92.7	66.4	50.5	41.5
39°	1654.0	1418.8	1076.4	758.8	459.3	231.7	103.8	70.6	55.3	41.5	35.3
40°	1525.3	1226.5	885.4	569.3	295.4	128.7	74.7	58.8	45.0	34.6	28.4
42.5°	1119.2	778.2	410.2	184.0	86.5	64.3	47.0	37.4	29.1	21.4	18.0
45°	664.8	350.0	123.8	75.4	54.6	40.8	29.7	23.5	18.0	13.1	11.1
47.5°	242.8	88.5	60.9	45.7	34.6	25.6	18.7	14.5	11.1	7.6	6.2
50°	49.8	42.9	33.2	27.0	20.1	15.2	11.1	8.3	6.2	4.8	4.2
51°	38.0	33.2	27.0	21.4	15.9	12.5	9.0	6.9	5.5	4.2	3.5
52°	29.1	25.6	20.8	17.3	13.1	9.7	6.9	5.5	4.2	2.8	2.8
53°	22.8	20.1	15.9	13.1	10.4	7.6	5.5	4.2	3.5	2.8	2.8
54°	17.3	15.2	12.5	10.4	8.3	6.2	4.2	3.5	2.8	2.8	2.1
55°	12.5	11.8	9.7	7.6	6.2	4.8	3.5	2.8	2.8	2.1	2.1
57.5°	6.2	5.5	4.8	4.2	3.5	2.8	2.1	2.1	2.1	2.1	1.4
60°	3.5	2.8	2.8	2.8	2.1	2.1	2.1	1.4	1.4	2.1	2.1



TEST NUMBER: P208828

CATALOG NUMBER: LDSQA6A20827D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
63°	1.4	1.4	1.4	1.4	2.1	1.4	1.4	1.4	2.1	2.1	2.1
64°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.1	2.1	2.1	2.1
65°	0.7	1.4	1.4	1.4	1.4	1.4	1.4	2.1	2.1	2.1	2.1
66°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.1	2.1	2.1	2.1
67.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.1	2.1	2.1	2.1
70°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.1	2.1	2.1	2.1
72.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.1	2.1	2.1	2.1
75°	0.7	0.7	1.4	1.4	1.4	1.4	1.4	2.1	2.1	2.1	2.1
77.5°	0.7	0.7	1.4	1.4	1.4	1.4	1.4	2.1	2.1	2.1	2.1
80°	0.7	0.7	0.7	1.4	1.4	1.4	1.4	2.1	2.1	2.1	2.1
82.5°	0.7	0.7	0.7	1.4	1.4	1.4	1.4	2.1	2.1	2.1	2.1
85°	0.7	0.7	0.7	1.4	1.4	1.4	1.4	2.1	2.1	2.1	2.1
87.5°	0.7	0.7	0.7	1.4	1.4	1.4	1.4	2.1	2.1	2.1	2.1
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: P208828

CATALOG NUMBER: LDSQA6A20827D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
2.5°	103.1	104.5	103.1	101.7	101.0	101.0	100.3	98.2	98.9	98.2	98.2
5°	111.4	112.1	109.3	107.2	105.8	104.5	103.1	100.3	99.6	98.9	98.2
7.5°	122.4	121.7	116.2	112.8	109.3	106.5	103.8	100.3	98.9	96.8	95.5
10°	138.3	133.5	124.5	118.3	113.4	107.9	103.8	98.2	95.5	92.7	90.6
11°	145.3	138.3	129.4	121.1	114.8	108.6	103.8	96.8	93.4	90.6	87.9
12°	166.7	148.0	133.5	124.5	116.2	109.3	103.1	96.2	92.0	87.9	85.1
13°	215.8	172.2	142.5	126.6	118.3	110.0	102.4	94.8	89.9	85.1	82.3
14°	296.1	221.4	164.6	134.2	119.0	110.0	101.7	93.4	87.9	83.0	79.6
15°	392.2	297.5	209.6	152.9	121.7	109.3	100.3	91.3	85.1	79.6	76.1
17.5°	660.6	536.8	402.6	286.4	177.1	119.7	94.8	84.4	76.8	70.6	66.4
20°	885.4	742.9	591.4	446.9	306.4	190.9	109.3	76.8	67.8	60.9	56.7
21°	934.6	801.0	640.6	489.1	343.8	221.4	123.8	76.8	64.3	57.4	53.3
22°	960.1	831.5	671.0	516.7	369.4	242.8	139.0	77.5	60.9	54.0	49.1
23°	956.0	838.4	682.8	525.0	381.2	253.2	145.3	78.2	57.4	50.5	45.7
24°	931.1	819.7	671.0	515.4	377.7	250.4	143.2	76.8	54.0	47.0	42.9
25°	900.0	783.1	639.2	489.1	355.6	233.1	132.8	71.9	51.2	44.3	40.1
26°	864.7	746.4	594.9	442.7	319.6	204.1	112.1	63.6	47.0	40.8	37.4
27°	822.5	698.7	540.3	393.6	269.8	164.6	89.9	54.0	43.6	37.4	34.6
28°	759.5	630.9	470.4	328.6	215.8	124.5	67.8	46.3	40.1	34.6	31.8
29°	665.5	535.4	383.2	256.6	158.4	85.8	51.9	41.5	36.0	31.1	29.1
30°	547.9	423.3	284.3	176.4	101.7	58.1	42.2	36.7	31.8	28.4	27.0
31°	415.0	300.9	184.0	101.7	60.9	42.9	37.4	31.8	28.4	25.6	24.9
32°	273.9	181.9	97.5	58.8	44.3	37.4	32.5	28.4	25.6	23.5	22.8
33°	146.7	83.7	56.0	44.3	37.4	32.5	28.4	24.9	22.8	21.4	20.8
34°	74.7	54.6	45.7	38.0	31.8	28.4	24.9	22.1	20.8	19.4	18.7
35°	55.3	47.0	39.4	32.5	27.7	24.9	22.1	20.1	18.7	17.3	17.3
36°	47.0	39.4	32.5	28.4	24.9	22.1	20.1	17.3	16.6	15.9	15.2
37°	39.4	33.9	28.4	24.2	21.4	19.4	17.3	15.9	14.5	13.8	13.8
38°	33.2	29.1	24.2	20.8	18.7	17.3	15.2	13.8	13.1	12.5	12.5
39°	27.7	24.2	20.8	18.0	15.9	14.5	13.1	12.5	11.8	11.1	11.1
40°	22.8	20.8	17.3	15.2	13.8	12.5	11.8	11.1	10.4	9.7	10.4
42.5°	14.5	12.5	11.1	10.4	9.0	9.0	8.3	7.6	7.6	7.6	7.6
45°	8.3	7.6	6.9	6.9	6.2	6.2	6.2	5.5	6.2	6.2	6.2
47.5°	4.8	4.8	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.8	4.8
50°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	3.5	3.5
51°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	3.5
52°	2.8	2.8	2.8	2.1	2.1	2.1	2.1	2.1	2.8	2.8	2.8
53°	2.1	2.8	2.1	2.1	2.1	2.1	2.1	2.1	2.8	2.8	2.8
54°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.8	2.8
55°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.8	2.8
57.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.8
60°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.8



TEST NUMBER: P208828

CATALOG NUMBER: LDSQA6A20827D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
63°	2.1	2.1	2.1	2.1	2.1	2.8	2.1	2.1	2.1	2.8	2.8
64°	2.1	2.1	2.1	2.1	2.1	2.8	2.1	2.1	2.1	2.1	2.8
65°	2.1	2.1	2.8	2.8	2.8	2.8	2.1	2.1	2.1	2.1	2.8
66°	2.1	2.1	2.8	2.8	2.8	2.8	2.8	2.1	2.1	2.8	2.8
67.5°	2.1	2.8	2.8	2.8	2.8	2.8	2.8	2.1	2.8	2.8	2.8
70°	2.1	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
72.5°	2.1	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
75°	2.1	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
77.5°	2.1	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
80°	2.1	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
82.5°	2.1	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
85°	2.1	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
87.5°	2.1	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
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: P208828

CATALOG NUMBER: LDSQA6A20827D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
0°	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
2.5°	96.2	95.5	94.8	94.8	89.2	86.5	83.0	83.0
5°	94.8	94.1	92.7	91.3	82.3	78.2	74.0	73.3
7.5°	92.0	89.9	87.9	86.5	75.4	70.6	66.4	65.7
10°	86.5	83.7	81.6	80.2	68.5	63.6	60.2	60.2
11°	83.7	80.9	78.9	76.8	65.0	60.9	58.1	58.1
12°	80.9	78.2	75.4	74.0	62.3	58.8	56.0	55.3
13°	78.2	74.7	72.6	70.6	59.5	56.0	54.0	54.0
14°	75.4	71.9	69.2	67.1	56.7	53.3	51.9	51.9
15°	71.2	67.8	65.7	63.6	53.3	51.2	49.8	50.5
17.5°	61.6	58.8	56.7	54.6	46.3	45.7	45.7	46.3
20°	52.6	49.8	47.7	46.3	40.1	40.8	41.5	42.9
21°	49.1	46.3	44.3	42.9	38.0	38.7	40.1	41.5
22°	45.7	43.6	41.5	40.1	36.0	36.7	38.7	40.1
23°	42.2	40.1	38.7	37.4	33.9	35.3	37.4	38.7
24°	39.4	37.4	36.0	34.6	31.8	33.2	36.0	37.4
25°	36.7	34.6	33.2	32.5	29.7	31.8	34.6	36.0
26°	33.9	32.5	31.1	30.4	28.4	30.4	33.2	35.3
27°	31.1	29.7	29.1	28.4	26.3	29.1	31.8	33.9
28°	29.1	27.7	27.0	26.3	24.9	27.7	31.1	32.5
29°	27.0	25.6	24.9	24.2	23.5	26.3	29.7	31.8
30°	24.9	24.2	22.8	22.8	22.1	25.6	28.4	30.4
31°	22.8	22.1	21.4	20.8	20.8	24.2	27.7	29.7
32°	21.4	20.8	20.1	19.4	20.1	22.8	26.3	29.1
33°	19.4	18.7	18.7	18.0	18.7	22.1	25.6	28.4
34°	17.3	17.3	16.6	16.6	18.0	21.4	24.9	27.0
35°	15.9	15.2	15.2	15.2	17.3	20.1	24.2	26.3
36°	14.5	14.5	13.8	13.8	16.6	19.4	23.5	25.6
37°	13.1	13.1	13.1	12.5	15.2	18.7	22.1	24.9
38°	11.8	11.8	11.8	11.8	14.5	18.0	22.1	24.9
39°	10.4	10.4	11.1	11.1	13.8	17.3	20.8	24.2
40°	9.7	9.7	9.7	9.7	13.1	16.6	20.1	23.5
42.5°	7.6	7.6	8.3	8.3	11.8	15.2	18.7	21.4
45°	6.2	6.2	6.9	6.9	10.4	13.8	16.6	20.1
47.5°	4.8	4.8	5.5	5.5	9.0	12.5	15.2	18.0
50°	3.5	4.2	4.2	4.8	8.3	11.1	13.1	15.9
51°	3.5	3.5	4.2	4.2	7.6	10.4	12.5	15.2
52°	3.5	3.5	4.2	4.2	6.9	9.7	11.8	13.8
53°	2.8	3.5	3.5	4.2	6.9	9.7	11.1	13.1
54°	2.8	2.8	3.5	3.5	6.9	9.0	11.1	11.8
55°	2.8	2.8	3.5	3.5	6.2	9.0	10.4	11.1
57.5°	2.8	2.8	2.8	2.8	5.5	7.6	9.0	9.0
60°	2.8	2.8	2.8	2.8	5.5	6.9	8.3	6.2



TEST NUMBER: P208828

CATALOG NUMBER: LDSQA6A20827D010TE LARL15SP 6LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	112.5°	135°	157.5°	180°
63°	2.8	2.8	2.8	2.8	4.8	6.2	6.2	4.8
64°	2.8	2.8	2.8	2.8	4.8	6.2	6.2	4.8
65°	2.8	2.8	2.8	2.8	4.8	5.5	5.5	4.2
66°	2.8	2.8	2.8	2.8	4.8	5.5	5.5	4.2
67.5°	2.8	2.8	2.8	2.8	4.2	4.8	4.8	4.2
70°	2.8	2.8	2.8	2.8	4.2	4.8	4.2	3.5
72.5°	2.8	2.8	2.8	2.8	4.2	4.2	3.5	2.8
75°	2.8	2.8	2.8	2.8	3.5	3.5	2.8	2.8
77.5°	2.8	2.8	2.8	2.8	3.5	3.5	2.8	2.1
80°	2.8	2.8	2.8	2.8	3.5	2.8	2.1	1.4
82.5°	2.8	2.8	2.8	2.8	2.8	2.1	1.4	1.4
85°	2.8	2.8	2.8	2.8	2.8	2.1	1.4	0.7
87.5°	2.8	2.8	2.8	2.8	2.8	2.1	0.7	0.7
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°	2.8	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.8	2.8
62°	2.1	2.1	2.1	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4





61°	2.8	2.1	2.1	2.1	2.1	2.1	2.1	1.4	1.4	2.1	2.1
62°	2.1	2.1	2.1	2.1	2.1	2.1	1.4	1.4	1.4	2.1	2.1





61°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.8
62°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1





61°	2.8	2.8	2.8	2.8	4.8	6.9	7.6	5.5
62°	2.8	2.8	2.8	2.8	4.8	6.2	6.9	4.8



(END OF REPORT)