

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: P182780

Luminaire Tested: **LDSQA4A09935D010TE LAR15SP 4LSQAL1H 30°**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182780
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26802)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA4A09935D010TE LAR15SP 4LSQAL1H 30°
Description: PORTFOLIO 4" SQUARE LENSED ADJUSTABLE, SELF-FLANGED, 15° SPOT, 30° Tilt
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 797.0 lumens
Efficiency: N/A
Efficacy: 57.6 lumens/watt
Spacing Criteria (0/90/45): 2.26 / 0.62 / 1.11
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

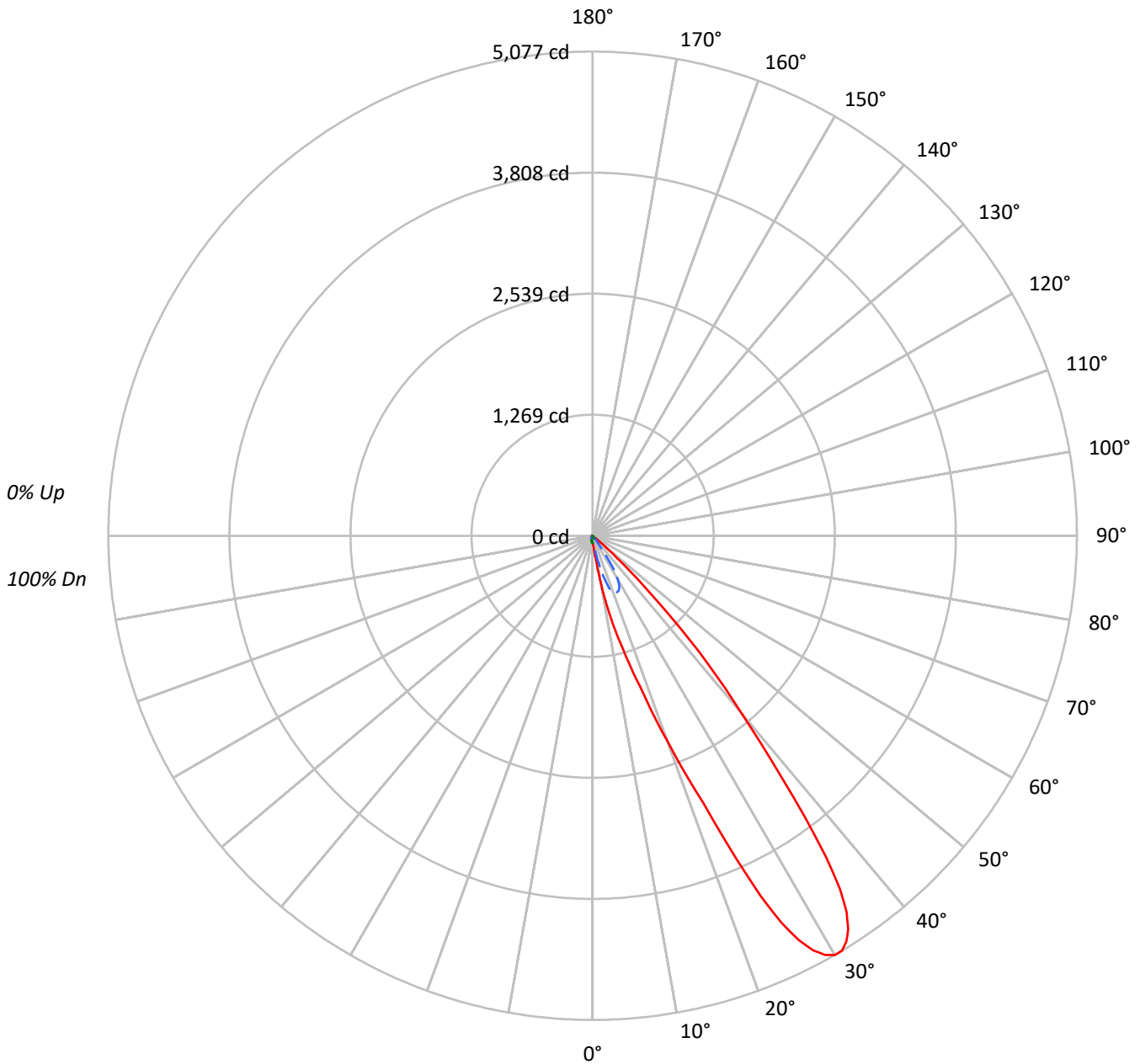
Input Watts (W): 13.84
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P182780

CATALOG NUMBER: LDSQA4A09935D010TE LAR15SP 4LSQAL1H 30°

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	105	102	103	101	99	99	98	96	96	94	93	91																			
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	87	84	83																			
3	99	91	85	81	97	90	85	80	87	83	79	85	81	78	82	79	76	75																			
4	93	84	77	72	91	82	76	71	80	75	71	78	73	70	76	72	69	67																			
5	86	76	69	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	63	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°	7285	7285	7285
5°	11572	6924	5981
10°	50700	6138	5096
15°	123872	4964	4433
20°	236330	3691	4062
25°	445390	2651	3549
30°	567902	1879	3121
35°	534218	1147	2673
40°	306468	784	2289
45°	118302	548	1945
50°	15734	407	1598
55°	2398	372	1351
60°	678	349	1124
65°	413	413	802
70°	255	510	623
75°	337	487	487
80°	0	725	502
85°	0	1445	445



TEST NUMBER: P182780

CATALOG NUMBER: LDSQA4A09935D010TE LAR15SP 4LSQAL1H 30°

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	9.4	1.2
10°-20°	85.4	10.7
20°-30°	272.4	34.2
30°-40°	315.6	39.6
40°-50°	102.6	12.9
50°-60°	6.5	0.8
60°-70°	2.4	0.3
70°-80°	1.7	0.2
80°-90°	1.0	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°	367.2	46.1
0°-40°	682.8	85.7
0°-60°	792.0	99.4
0°-90°	797.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	797.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	75	75	75	75	75	
5°	119	100	71	62	62	23
15°	1235	445	50	42	44	392
25°	4167	640	25	26	33	1872
35°	4517	153	10	15	23	2599
45°	864	19	4	9	14	771
55°	14	4	2	5	8	22
65°	2	1	2	4	4	2
75°	1	1	1	2	1	1
85°	0	1	1	1	0	0
90°	0	0	0	0	0	



TEST NUMBER: P182780

CATALOG NUMBER: LDSQA4A09935D010TE LAR15SP 4LSQAL1H 30°

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2
2.5°	91.6	92.5	92.5	91.1	91.1	89.8	88.9	88.5	88.0	86.7	86.3
5°	119.0	119.9	120.3	116.8	115.5	112.8	110.6	108.4	105.7	102.6	99.5
7.5°	229.6	211.0	214.1	187.6	182.7	171.2	161.9	147.3	136.7	126.1	117.7
10°	515.4	497.7	494.6	455.7	417.2	388.4	357.4	303.9	255.3	203.5	161.5
12.5°	883.0	856.9	842.3	765.8	720.6	678.2	630.8	547.2	453.9	374.3	291.1
15°	1235.1	1232.9	1180.7	1095.3	1009.5	957.3	896.3	792.7	682.2	560.9	445.0
17.5°	1660.3	1677.5	1588.2	1421.4	1285.6	1200.6	1116.6	954.7	816.6	699.0	572.0
20°	2292.4	2246.4	2090.3	1829.2	1599.7	1471.8	1341.3	1102.9	905.1	762.7	633.9
22.5°	3035.2	2999.8	2707.8	2272.5	1908.4	1728.8	1549.2	1239.1	981.6	797.2	645.9
25°	4166.8	4021.3	3454.6	2748.1	2191.6	1937.2	1706.7	1327.6	1016.2	801.6	640.1
26°	4514.1	4411.9	3758.0	2937.0	2278.7	1994.7	1746.1	1345.7	1018.8	797.6	629.1
27°	4760.5	4682.6	4010.6	3075.9	2342.0	2034.5	1771.7	1353.2	1012.6	789.2	614.0
28°	4922.8	4860.5	4201.3	3176.3	2380.5	2055.7	1784.1	1351.5	1000.2	774.6	592.8
29°	5025.9	4965.7	4312.8	3233.4	2394.2	2059.3	1781.0	1338.2	980.3	752.9	562.3
30°	5076.8	5011.3	4350.4	3239.6	2379.1	2038.9	1757.6	1309.0	952.9	726.8	528.6
31°	5077.2	5004.7	4319.0	3191.8	2334.4	1995.6	1716.0	1260.3	917.1	695.9	483.5
32°	5018.4	4943.6	4214.1	3094.9	2264.6	1941.2	1660.3	1210.8	879.5	661.4	418.5
33°	4919.7	4831.3	4032.3	2960.4	2175.2	1866.9	1593.5	1155.5	841.9	606.1	333.1
34°	4760.5	4639.7	3778.4	2797.2	2067.3	1780.1	1516.9	1095.8	803.8	529.1	238.0
35°	4517.2	4346.8	3484.6	2616.7	1951.8	1686.4	1430.7	1033.4	757.4	434.0	152.6
36°	4165.0	3945.2	3179.0	2430.0	1832.8	1587.7	1343.1	973.2	683.9	329.1	100.0
37°	3705.4	3511.6	2886.5	2242.0	1709.4	1482.4	1263.0	912.6	593.7	230.0	81.4
38°	3233.4	3090.5	2600.8	2055.3	1581.5	1368.7	1165.7	849.4	495.0	151.3	68.1
39°	2807.8	2712.2	2321.2	1870.4	1449.7	1269.2	1068.4	768.9	389.7	107.5	57.5
40°	2423.4	2357.5	2050.9	1681.9	1317.9	1148.9	976.8	670.2	280.9	85.8	48.2
42.5°	1652.7	1620.0	1434.6	1210.4	975.0	878.1	769.3	403.0	111.5	54.4	29.2
45°	863.5	849.4	782.1	708.7	635.7	610.5	494.6	180.9	62.8	31.9	18.6
47.5°	336.2	337.1	278.7	238.0	226.1	210.1	159.3	65.0	35.4	19.5	12.4
50°	104.4	112.4	103.5	97.8	74.8	62.4	51.8	32.3	19.0	11.9	8.0
51°	64.1	68.1	64.1	64.1	52.6	46.0	39.4	24.8	15.0	9.7	7.1
52°	41.6	43.8	41.6	38.9	36.3	32.7	28.3	18.6	11.9	8.0	5.8
53°	28.3	29.6	28.3	26.5	24.3	22.6	19.9	13.7	9.7	6.6	4.9
54°	19.9	20.8	19.9	18.6	17.3	15.9	14.6	10.6	8.0	5.8	4.4
55°	14.2	15.0	14.6	13.7	12.4	11.9	11.1	8.4	6.6	4.9	3.5
57.5°	6.6	7.1	7.1	6.6	6.6	6.2	5.8	5.3	4.0	3.1	2.7
60°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	2.7	2.2	2.2
61°	2.7	2.7	2.7	2.7	2.7	2.7	3.1	2.7	2.2	2.2	1.8
62°	2.2	2.2	2.2	2.2	2.2	2.7	2.7	2.2	2.2	1.8	1.8
63°	1.8	1.8	1.8	1.8	2.2	2.2	2.2	2.2	1.8	1.8	1.8
64°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.3
65°	1.8	1.8	1.3	1.3	1.3	1.8	1.3	1.8	1.3	1.3	1.3
66°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3



TEST NUMBER: P182780

CATALOG NUMBER: LDSQA4A09935D010TE LAR15SP 4LSQAL1H 30°

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
72.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.3
75°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.3
77.5°	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.9	0.9	1.3
80°	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.9	0.9	0.9
82.5°	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.9	0.9
85°	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.9	0.9	0.9
87.5°	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.9	0.9
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2
2.5°	83.6	81.4	80.5	79.6	79.2	78.3	77.0	75.6	75.2	73.4	71.7
5°	94.2	90.2	87.1	84.1	83.2	81.0	78.3	75.2	73.9	71.2	69.0
7.5°	106.6	98.7	92.9	87.6	85.4	82.7	77.9	73.9	71.2	67.2	64.6
10°	127.4	108.8	97.8	88.5	84.9	81.4	75.2	69.9	66.4	62.4	59.3
12.5°	201.7	141.1	106.2	88.9	84.1	78.7	71.2	65.0	60.6	56.2	53.5
15°	318.1	215.0	137.6	93.3	82.3	74.3	65.5	58.4	54.0	49.5	46.9
17.5°	424.7	289.3	179.6	104.0	83.2	70.3	58.4	51.3	46.5	42.5	40.7
20°	476.0	324.3	200.0	106.2	77.9	62.8	50.4	43.8	39.4	35.8	34.1
22.5°	480.9	322.1	187.6	90.7	64.6	53.1	42.5	36.3	32.7	30.1	28.3
25°	457.9	285.8	150.4	66.8	50.4	44.2	34.9	29.6	27.0	24.8	23.4
26°	440.2	265.0	132.3	58.0	46.0	40.3	31.9	27.4	24.8	23.0	21.7
27°	415.8	240.7	111.0	50.0	42.5	36.3	29.2	25.2	23.0	21.7	20.3
28°	386.6	216.8	92.0	44.2	38.5	32.7	27.0	23.0	21.2	19.9	18.6
29°	355.2	185.4	72.1	39.8	34.5	29.6	24.3	20.8	19.0	18.1	17.3
30°	311.0	144.2	55.3	35.8	31.0	26.5	22.1	19.0	17.7	16.8	15.9
31°	248.6	99.1	44.7	31.9	27.9	23.9	19.9	17.3	15.9	15.0	14.6
32°	178.3	61.0	38.9	28.3	24.8	21.7	17.3	15.5	14.2	13.7	13.3
33°	109.7	50.0	34.5	25.2	21.7	19.0	15.5	13.7	12.8	12.4	11.9
34°	72.1	43.4	30.5	21.7	19.0	16.4	13.3	11.9	11.5	11.1	11.1
35°	61.0	38.5	26.5	18.6	15.9	14.2	11.5	10.6	10.2	9.7	10.2
36°	52.6	33.6	22.1	15.9	13.7	11.9	10.2	9.3	8.8	8.8	9.3
37°	46.5	28.3	18.6	13.3	11.9	10.6	8.8	8.4	8.0	8.0	8.4
38°	39.4	23.0	15.5	11.5	10.2	8.8	8.0	7.5	7.5	7.5	8.0
39°	32.3	19.5	13.3	9.7	8.8	8.0	7.1	6.6	6.6	7.1	7.1
40°	26.5	16.4	11.1	8.4	7.5	7.1	6.2	6.2	6.2	6.2	6.6
42.5°	17.3	11.1	8.0	6.2	5.8	5.3	4.9	4.9	4.9	4.9	5.3
45°	11.5	8.0	6.2	4.9	4.4	4.0	4.0	3.5	4.0	4.0	4.4
47.5°	8.0	5.8	4.4	3.5	3.1	2.7	2.7	2.7	3.1	3.5	3.5
50°	5.8	4.0	3.1	2.2	2.2	2.2	2.2	2.2	2.7	2.7	3.1
51°	4.9	3.5	2.7	2.2	2.2	1.8	1.8	1.8	2.2	2.7	3.1
52°	4.0	3.1	2.2	1.8	1.8	1.8	1.8	1.8	2.2	2.2	2.7
53°	3.5	2.7	2.2	1.8	1.8	1.8	1.8	1.8	2.2	2.2	2.7
54°	3.1	2.2	1.8	1.8	1.8	1.3	1.3	1.8	1.8	2.2	2.7
55°	2.7	2.2	1.8	1.8	1.3	1.3	1.3	1.3	1.8	2.2	2.2
57.5°	2.2	1.8	1.8	1.3	1.3	1.3	1.3	1.3	1.8	1.8	2.2
60°	1.8	1.8	1.8	1.3	1.3	1.3	1.3	1.3	1.8	1.8	2.2
61°	1.8	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.8	1.8	2.2
62°	1.8	1.3	1.8	1.8	1.8	1.3	1.3	1.3	1.8	1.8	2.2
63°	1.8	1.8	1.8	1.8	1.8	1.3	1.3	1.3	1.8	1.8	1.8
64°	1.8	1.8	1.8	1.8	1.8	1.8	1.3	1.3	1.8	1.8	2.2
65°	1.3	1.8	1.8	1.8	1.8	1.8	1.3	1.3	1.8	1.8	2.2
66°	1.3	1.8	1.8	1.8	1.8	1.8	1.8	1.3	1.8	1.8	1.8



TEST NUMBER: P182780

CATALOG NUMBER: LDSQA4A09935D010TE LAR15SP 4LSQAL1H 30°

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
72.5°	1.3	1.3	1.8	1.8	1.8	1.8	1.8	1.3	1.3	1.8	1.8
75°	1.3	1.3	1.8	1.8	1.8	1.8	1.8	1.3	1.3	1.3	1.8
77.5°	1.3	1.3	1.8	1.8	1.8	1.8	1.8	1.3	1.3	1.3	1.8
80°	1.3	1.3	1.8	1.8	1.8	1.8	1.3	1.3	1.3	1.3	1.3
82.5°	1.3	1.3	1.3	1.8	1.8	1.3	1.3	1.3	1.3	1.3	1.3
85°	1.3	1.3	1.3	1.8	1.8	1.3	1.3	1.3	1.3	1.3	1.3
87.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2
2.5°	70.8	70.8	70.3	69.5	70.3	69.5	68.6	68.1	67.7	67.2	66.4
5°	67.2	66.8	65.9	65.5	65.5	64.6	63.7	62.8	62.4	61.9	61.0
7.5°	62.8	62.4	61.0	60.6	60.6	59.7	58.4	58.0	57.5	57.1	56.2
10°	57.5	57.1	55.7	55.3	55.3	54.4	53.5	52.6	52.2	51.8	50.9
12.5°	51.3	50.9	50.0	49.5	49.5	48.7	47.8	47.3	47.3	46.9	46.5
15°	45.1	44.7	43.8	43.8	43.8	42.9	42.5	42.0	42.5	42.5	42.0
17.5°	38.9	38.5	37.6	37.6	37.6	37.6	37.2	37.2	37.6	38.0	38.0
20°	32.7	32.3	32.3	31.9	32.3	32.7	32.3	32.7	33.6	34.1	34.5
22.5°	27.0	27.0	27.0	27.0	27.4	27.9	27.9	28.8	29.6	30.1	31.0
25°	22.6	22.6	23.0	23.0	23.4	23.9	24.3	24.8	26.1	27.0	27.4
26°	20.8	21.2	21.2	21.7	22.1	22.6	23.0	23.4	24.8	25.7	26.1
27°	19.5	19.5	19.9	20.3	20.8	21.2	21.7	22.6	23.4	24.3	25.2
28°	18.1	18.1	18.6	19.0	19.5	19.9	20.3	21.2	22.1	23.4	23.9
29°	16.8	17.3	17.3	17.7	18.1	18.6	19.5	19.9	21.2	22.1	23.0
30°	15.5	15.9	16.4	16.4	16.8	17.3	18.1	19.0	19.9	21.2	21.7
31°	14.6	15.0	15.0	15.5	15.9	16.4	17.3	18.1	19.0	19.9	20.8
32°	13.3	14.2	14.2	14.2	14.6	15.5	16.4	16.8	18.1	19.0	19.5
33°	12.4	12.8	13.3	13.3	13.7	14.6	15.5	15.9	17.3	18.1	18.6
34°	11.5	11.9	12.4	12.4	12.8	13.7	14.6	15.0	16.4	16.8	17.7
35°	10.6	11.1	11.5	11.5	11.9	12.8	13.7	14.2	15.0	15.9	16.8
36°	9.7	10.2	10.6	11.1	11.5	12.4	12.8	13.7	14.2	15.0	15.9
37°	8.8	9.3	10.2	10.2	11.1	11.5	12.4	12.8	13.7	14.2	15.0
38°	8.0	8.8	9.3	9.7	10.2	11.1	11.5	11.9	12.8	13.7	14.2
39°	7.5	8.4	8.8	9.3	9.7	10.2	10.6	11.5	11.9	12.8	13.3
40°	7.1	7.5	8.4	8.4	9.3	9.7	10.2	10.6	11.5	11.9	12.8
42.5°	5.8	6.6	7.1	7.5	8.0	8.4	8.8	9.3	9.7	10.6	11.1
45°	4.9	5.8	6.2	6.2	6.6	7.1	7.5	8.0	8.8	9.3	9.7
47.5°	4.0	4.9	5.3	5.8	5.8	6.2	6.6	7.1	7.5	8.0	8.4
50°	3.5	4.0	4.4	4.9	5.3	5.3	5.8	6.2	6.6	7.1	7.1
51°	3.5	4.0	4.4	4.4	4.9	5.3	5.8	5.8	6.2	6.6	6.6
52°	3.1	3.5	4.0	4.4	4.9	4.9	5.3	5.8	5.8	6.2	6.6
53°	3.1	3.5	4.0	4.0	4.4	4.9	4.9	5.3	5.8	5.8	6.2
54°	2.7	3.5	4.0	4.0	4.4	4.4	4.9	5.3	5.3	5.3	5.8
55°	2.7	3.1	3.5	4.0	4.0	4.4	4.4	4.9	4.9	5.3	5.3
57.5°	2.7	3.1	3.5	3.5	4.0	4.0	4.4	4.4	4.4	4.4	4.9
60°	2.2	2.7	3.1	3.5	3.5	4.0	4.0	4.0	4.0	4.0	4.4
61°	2.2	2.7	3.1	3.1	3.5	3.5	4.0	4.0	4.0	4.0	4.0
62°	2.2	2.7	3.1	3.1	3.5	3.5	3.5	4.0	4.0	4.0	4.0
63°	2.2	2.7	3.1	3.1	3.5	3.5	3.5	3.5	3.5	3.5	4.0
64°	2.2	2.7	3.1	3.1	3.5	3.5	3.5	3.5	3.5	3.5	3.5
65°	2.2	2.7	3.1	3.1	3.1	3.5	3.5	3.5	3.5	3.5	3.5
66°	2.2	2.7	3.1	3.1	3.1	3.1	3.5	3.5	3.5	3.5	3.1



TEST NUMBER: P182780

CATALOG NUMBER: LDSQA4A09935D010TE LAR15SP 4LSQAL1H 30°

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
72.5°	1.8	2.2	2.2	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.2
75°	1.8	2.2	2.2	2.2	2.7	2.7	2.7	2.2	2.2	2.2	2.2
77.5°	1.8	1.8	2.2	2.2	2.2	2.2	2.2	2.2	2.2	1.8	1.8
80°	1.8	1.8	1.8	2.2	2.2	2.2	2.2	1.8	1.8	1.8	1.3
82.5°	1.3	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.3	1.3	1.3
85°	1.3	1.8	1.8	1.8	1.8	1.8	1.8	1.3	1.3	1.3	0.9
87.5°	1.3	1.3	1.3	1.8	1.8	1.8	1.3	1.3	0.9	0.9	0.9
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: P182780

CATALOG NUMBER: LDSQA4A09935D010TE LAR15SP 4LSQAL1H 30°

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2
2.5°	67.2	67.7	67.2	67.2	66.4	66.8	65.9	67.2
5°	61.5	61.9	61.5	61.5	60.6	60.6	60.2	61.5
7.5°	56.6	57.1	56.2	56.2	55.3	55.7	55.3	56.2
10°	51.8	51.8	51.8	51.3	50.9	51.3	50.9	51.8
12.5°	46.9	47.3	47.3	47.3	46.9	46.9	46.5	47.8
15°	42.9	43.4	43.8	43.8	43.4	43.8	43.4	44.2
17.5°	39.4	40.3	40.3	40.7	40.7	41.1	41.1	42.0
20°	35.8	37.2	37.2	37.6	37.6	38.5	38.5	39.4
22.5°	32.3	33.6	34.1	34.1	34.5	35.4	35.4	36.3
25°	29.2	30.5	31.0	31.0	31.4	32.3	32.3	33.2
26°	27.9	29.2	29.6	30.1	30.5	31.4	31.4	32.3
27°	26.5	27.9	28.3	28.8	29.2	30.1	30.1	31.0
28°	25.7	27.0	27.4	27.9	28.3	29.2	29.2	29.6
29°	24.3	25.7	26.1	26.5	27.0	27.9	27.9	28.8
30°	23.4	24.3	24.8	25.2	25.7	27.0	27.0	27.9
31°	22.1	23.4	23.9	24.3	24.8	25.7	25.7	27.0
32°	21.2	22.1	22.6	23.0	23.9	24.3	24.8	25.7
33°	19.9	21.2	21.7	22.1	22.6	23.4	23.9	24.8
34°	19.0	19.9	20.8	21.2	21.7	22.6	23.0	23.9
35°	18.1	19.0	19.5	19.9	20.8	21.7	21.7	22.6
36°	17.3	18.1	18.6	19.0	19.9	20.8	20.8	21.7
37°	16.4	17.3	17.7	18.1	19.0	19.9	19.9	20.8
38°	15.5	16.4	16.8	17.3	18.1	19.0	19.5	20.3
39°	14.6	15.9	16.4	16.8	17.3	18.1	18.6	19.0
40°	14.2	15.0	15.5	15.9	16.4	17.3	17.7	18.1
42.5°	11.9	13.3	13.7	14.2	14.6	15.0	15.5	15.9
45°	10.6	11.5	11.5	11.9	12.4	13.3	13.3	14.2
47.5°	9.3	9.7	10.2	10.2	10.6	11.5	11.5	11.9
50°	8.0	8.4	8.8	8.8	9.3	9.7	10.2	10.6
51°	7.5	8.0	8.0	8.4	8.8	9.3	9.7	10.2
52°	7.1	7.5	7.5	8.0	8.4	8.8	8.8	9.3
53°	6.6	7.1	7.1	7.5	7.5	8.4	8.4	8.8
54°	6.2	6.6	6.6	7.1	7.1	8.0	8.0	8.4
55°	5.8	6.2	6.6	6.6	6.6	7.1	7.5	8.0
57.5°	5.3	5.8	5.8	5.8	6.2	6.2	6.6	6.6
60°	4.4	4.9	4.9	4.9	5.3	5.3	5.3	5.8
61°	4.4	4.4	4.9	4.9	4.4	4.4	4.4	4.9
62°	4.0	4.4	4.4	4.0	4.0	4.0	4.0	4.4
63°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
64°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
65°	3.5	3.5	3.5	3.5	3.5	3.5	3.1	3.5
66°	3.1	3.5	3.5	3.1	3.1	3.1	3.1	3.1



TEST NUMBER: P182780

CATALOG NUMBER: LDSQA4A09935D010TE LAR15SP 4LSQAL1H 30°

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
72.5°	2.2	2.2	2.2	2.2	2.2	1.8	1.8	1.8
75°	2.2	1.8	1.8	1.8	1.8	1.8	1.8	1.3
77.5°	1.8	1.8	1.8	1.8	1.3	1.3	1.3	1.3
80°	1.3	1.3	1.3	1.3	1.3	1.3	0.9	0.9
82.5°	1.3	0.9	0.9	0.9	0.9	0.9	0.9	0.9
85°	0.9	0.9	0.9	0.9	0.4	0.4	0.4	0.4
87.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - - 90°-270°







67.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.3	1.3
70°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.3	1.3





67.5°	1.3	1.3	1.8	1.8	1.8	1.8	1.3	1.3	1.3	1.8	1.8
70°	1.3	1.8	1.8	1.8	1.8	1.8	1.8	1.3	1.3	1.8	1.8





67.5°	2.2	2.7	2.7	2.7	3.1	3.1	3.1	3.1	3.1	3.1	3.1
70°	2.2	2.2	2.7	2.7	2.7	3.1	3.1	2.7	2.7	2.7	2.7





67.5°	3.1	3.1	3.1	3.1	2.7	2.7	2.7	2.7
70°	2.7	2.7	2.7	2.7	2.2	2.2	2.2	2.2



(END OF REPORT)