

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: P182700

Luminaire Tested: **LDSQA4A28935D010TE LAR15SP 4LSQA1H 30°**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182700
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26799)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA4A28935D010TE LAR15SP 4LSQA1H 30°
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
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: 2165.0 lumens
Efficiency: N/A
Efficacy: 48.7 lumens/watt
Spacing Criteria (0/90/45): 2.24 / 0.6 / 1.1
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

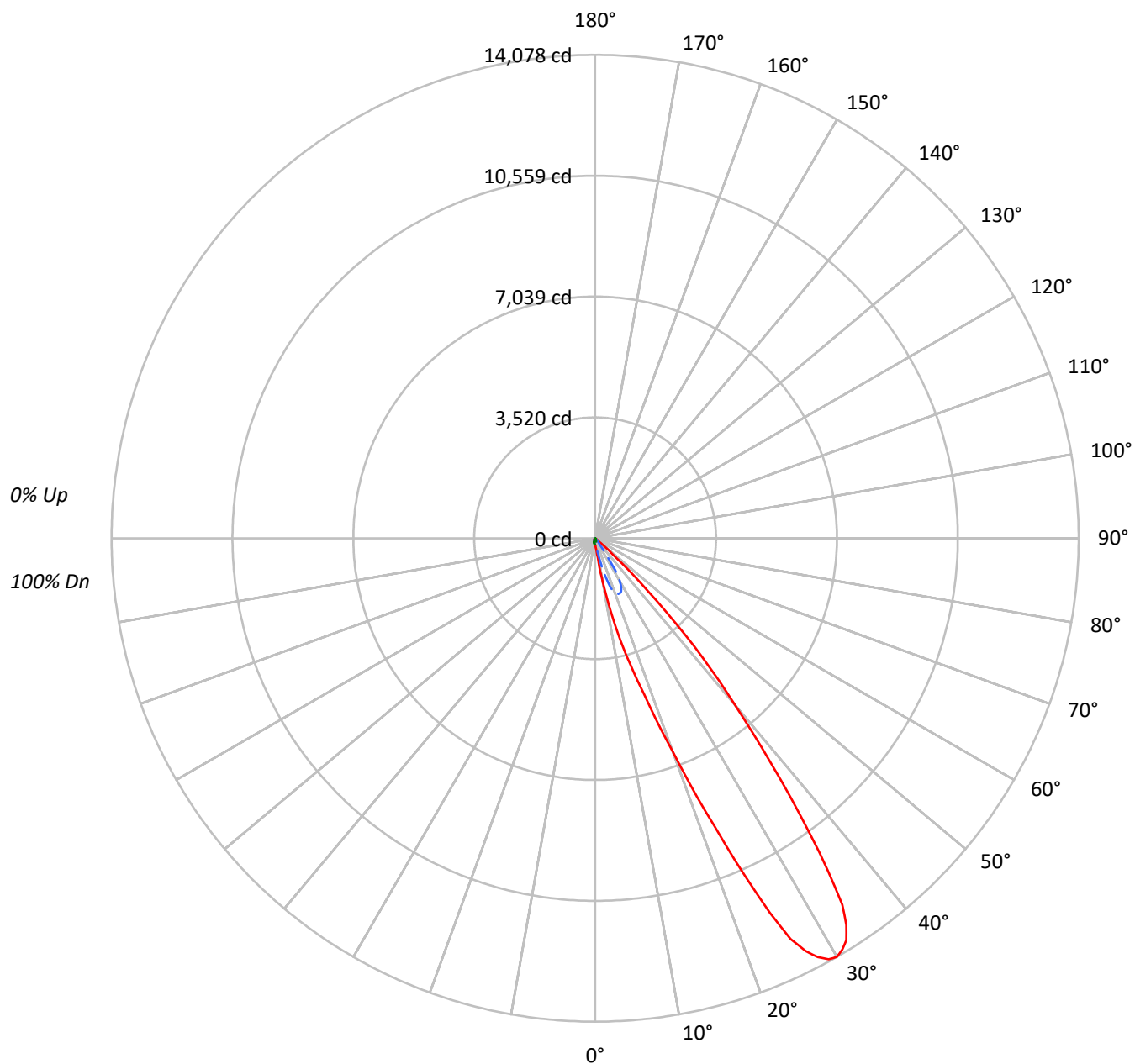
Input Watts (W): 44.49
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P182700

CATALOG NUMBER: LDSQA4A28935D010TE LAR15SP 4LSQA1H 30°

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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	113	109	107	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	92	86	81	97	90	85	80	87	83	79	85	81	78	83	79	77	75		
4	93	84	77	72	91	83	76	72	80	75	71	78	74	70	76	72	69	67		
5	87	77	70	65	85	76	69	64	74	68	64	72	67	63	70	66	63	61		
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55		
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50		
8	71	59	52	47	69	59	52	47	57	51	47	56	51	47	55	50	46	45		
9	66	55	48	43	65	54	47	43	53	47	43	52	46	42	51	46	42	41		
10	62	50	43	39	61	50	43	39	49	43	39	48	42	38	47	42	38	37		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	18077	18077	18077
5°	30107	17067	14567
10°	128402	14952	12641
15°	355428	11885	11213
20°	681731	8412	10021
25°	1285376	5612	8840
30°	1574817	3747	7752
35°	1398614	2507	6611
40°	797115	1695	5514
45°	290761	1384	4590
50°	31996	1010	3873
55°	4712	760	3209
60°	1085	872	2596
65°	779	1032	1788
70°	623	1275	1586
75°	823	1684	1273
80°	0	2510	1227
85°	0	3779	1223



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CATALOG NUMBER: LDSQA4A28935D010TE LAR15SP 4LSQA1H 30°

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.5	1.1
10°-20°	234.6	10.8
20°-30°	770.5	35.6
30°-40°	845.0	39.0
40°-50°	263.9	12.2
50°-60°	14.5	0.7
60°-70°	5.8	0.3
70°-80°	4.4	0.2
80°-90°	2.8	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°	1028.6	47.5
0°-40°	1873.6	86.5
0°-60°	2152.0	99.4
0°-90°	2165.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2165.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	187	187	187	187	187	
5°	310	248	176	155	150	58
15°	3544	1139	118	106	112	1113
25°	12025	1749	52	65	83	5360
35°	11826	344	21	37	56	6914
45°	2122	36	10	21	34	1948
55°	28	7	4	12	19	44
65°	3	3	4	9	8	3
75°	2	3	4	7	3	1
85°	0	3	3	3	1	0
90°	0	0	0	0	0	



TEST NUMBER: P182700

CATALOG NUMBER: LDSQA4A28935D010TE LAR15SP 4LSQA1H 30°

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	186.6	186.6	186.6	186.6	186.6	186.6	186.6	186.6	186.6	186.6	186.6
2.5°	230.2	232.5	233.6	228.0	229.1	226.9	229.1	224.6	216.8	219.0	212.3
5°	309.6	305.1	304.0	295.0	292.8	288.3	288.3	278.3	263.8	261.5	248.1
7.5°	547.6	524.1	504.0	473.9	444.8	422.4	413.5	377.7	338.6	324.1	292.8
10°	1305.3	1300.9	1250.6	1155.6	1046.1	966.7	920.9	782.3	606.8	499.6	387.8
12.5°	2376.0	2353.6	2282.1	2107.8	1918.9	1800.4	1707.7	1428.3	1167.9	958.9	687.3
15°	3543.9	3453.3	3348.3	3077.8	2813.0	2658.7	2526.9	2191.6	1788.1	1487.5	1138.8
17.5°	4791.1	4831.3	4576.5	4110.5	3640.0	3398.6	3175.1	2659.9	2218.4	1905.5	1513.2
20°	6612.8	6527.8	6079.7	5307.4	4613.4	4209.9	3892.5	3149.4	2483.3	2093.2	1722.2
22.5°	9074.8	8804.3	7930.4	6623.9	5523.1	4963.2	4512.8	3511.5	2705.7	2189.3	1755.7
25°	12025.2	11774.9	10156.6	7890.2	6261.8	5536.5	4924.1	3741.7	2795.1	2205.0	1749.0
26°	12988.6	12616.4	10978.0	8340.5	6488.7	5681.8	5025.8	3786.4	2797.3	2192.7	1720.0
27°	13487.0	13195.3	11657.5	8706.0	6644.0	5773.4	5082.8	3797.6	2775.0	2164.8	1675.3
28°	13815.6	13542.9	12087.8	8945.2	6723.4	5809.2	5099.5	3773.0	2724.7	2115.6	1604.9
29°	14019.0	13731.8	12297.9	9053.6	6729.0	5793.6	5068.2	3708.1	2656.5	2056.4	1523.3
30°	14078.2	13767.5	12303.5	9008.9	6646.3	5709.7	4980.0	3603.1	2573.8	1981.5	1432.7
31°	13973.2	13652.4	12101.2	8805.5	6476.4	5546.6	4841.4	3464.5	2471.0	1902.1	1293.0
32°	13798.8	13373.0	11677.6	8467.9	6243.9	5349.9	4668.2	3313.6	2361.5	1801.5	1096.4
33°	13427.8	12913.7	11029.4	8044.4	5964.6	5124.1	4465.9	3146.0	2257.5	1628.3	814.7
34°	12870.1	12220.8	10234.8	7551.5	5648.3	4842.5	4233.4	2990.7	2149.1	1399.2	557.7
35°	11826.3	11221.7	9357.5	7026.3	5307.4	4569.8	3977.5	2787.3	2001.6	1122.1	344.2
36°	10658.4	10213.6	8507.1	6492.1	4958.7	4287.1	3713.7	2637.5	1783.7	825.9	233.6
37°	9464.8	9070.3	7704.6	5966.8	4608.9	3974.1	3445.5	2467.6	1524.4	551.0	187.8
38°	8328.2	8015.3	6942.4	5450.5	4245.7	3646.7	3163.9	2286.6	1245.0	354.3	154.2
39°	7284.4	7049.7	6195.9	4950.9	3881.4	3325.9	2893.4	2058.6	949.9	252.6	128.5
40°	6303.2	6137.8	5476.2	4458.0	3519.3	3010.8	2648.7	1782.5	659.4	200.0	103.9
42.5°	4287.1	4245.7	3853.4	3208.6	2614.0	2316.8	2094.4	1002.5	253.7	120.7	58.1
45°	2122.3	2151.4	1994.9	1835.1	1711.0	1620.5	1319.9	418.0	140.8	65.9	35.8
47.5°	751.0	752.1	647.1	576.7	551.0	548.7	399.0	147.5	74.9	40.2	25.7
50°	212.3	229.1	215.7	220.2	172.1	146.4	119.6	71.5	38.0	25.7	16.8
51°	130.8	140.8	131.9	136.3	118.5	106.2	89.4	53.6	30.2	21.2	15.6
52°	83.8	89.4	84.9	86.1	79.3	69.3	60.3	39.1	24.6	17.9	13.4
53°	57.0	60.3	57.0	57.0	52.5	49.2	42.5	29.1	20.1	14.5	10.1
54°	39.1	40.2	40.2	40.2	36.9	34.6	30.2	22.4	16.8	13.4	8.9
55°	27.9	29.1	27.9	27.9	26.8	24.6	22.4	16.8	13.4	11.2	6.7
57.5°	12.3	12.3	12.3	13.4	12.3	12.3	11.2	10.1	8.9	6.7	4.5
60°	5.6	5.6	5.6	5.6	6.7	6.7	6.7	6.7	5.6	4.5	4.5
61°	4.5	4.5	4.5	4.5	4.5	5.6	5.6	5.6	4.5	4.5	3.4
62°	3.4	3.4	3.4	3.4	4.5	4.5	4.5	4.5	4.5	3.4	3.4
63°	3.4	3.4	3.4	3.4	3.4	3.4	4.5	4.5	3.4	3.4	3.4
64°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
65°	3.4	2.2	2.2	2.2	2.2	3.4	3.4	3.4	3.4	3.4	3.4
66°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	3.4	3.4



TEST NUMBER: P182700

CATALOG NUMBER: LDSQA4A28935D010TE LAR15SP 4LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
72.5°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	3.4
75°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	3.4
77.5°	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	2.2	2.2	3.4
80°	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	2.2	2.2	3.4
82.5°	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	2.2	2.2	3.4
85°	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	2.2	2.2	3.4
87.5°	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	2.2	2.2	3.4
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°	186.6	186.6	186.6	186.6	186.6	186.6	186.6	186.6	186.6	186.6	186.6
2.5°	207.9	206.8	201.2	195.6	196.7	194.5	192.2	188.9	186.6	181.0	181.0
5°	236.9	231.3	219.0	207.9	206.8	202.3	195.6	188.9	183.3	175.5	173.2
7.5°	270.5	254.8	234.7	216.8	213.5	206.8	194.5	185.5	175.5	165.4	162.0
10°	318.5	281.6	247.0	220.2	213.5	203.4	187.8	175.5	164.3	152.0	147.5
12.5°	489.5	347.6	262.6	220.2	207.9	195.6	176.6	162.0	148.6	135.2	130.8
15°	815.8	555.4	333.0	220.2	197.8	183.3	159.8	145.3	130.8	118.5	114.0
17.5°	1126.5	790.1	463.8	248.1	198.9	168.8	139.7	124.1	111.8	99.5	96.1
20°	1306.5	920.9	549.9	276.0	196.7	152.0	119.6	102.8	90.5	81.6	78.2
22.5°	1329.9	926.5	530.9	247.0	165.4	126.3	99.5	83.8	73.8	65.9	63.7
25°	1267.3	818.1	424.7	175.5	122.9	102.8	78.2	67.1	59.2	52.5	51.4
26°	1219.3	753.3	369.9	145.3	108.4	91.6	70.4	60.3	53.6	48.1	46.9
27°	1151.1	684.0	316.3	120.7	96.1	82.7	62.6	54.8	49.2	43.6	43.6
28°	1074.0	609.1	254.8	101.7	86.1	73.8	57.0	49.2	43.6	40.2	40.2
29°	981.2	500.7	186.6	88.3	76.0	64.8	50.3	43.6	39.1	36.9	36.9
30°	843.8	363.2	128.5	77.1	65.9	57.0	44.7	39.1	35.8	33.5	33.5
31°	659.4	223.5	100.6	67.1	58.1	50.3	40.2	34.6	32.4	30.2	31.3
32°	449.3	139.7	86.1	58.1	51.4	43.6	35.8	31.3	29.1	27.9	27.9
33°	255.9	116.2	74.9	50.3	43.6	38.0	31.3	27.9	26.8	25.7	25.7
34°	169.9	99.5	64.8	42.5	35.8	32.4	26.8	24.6	23.5	23.5	23.5
35°	143.1	86.1	52.5	35.8	31.3	27.9	23.5	22.4	21.2	21.2	22.4
36°	120.7	71.5	42.5	30.2	26.8	24.6	21.2	20.1	19.0	19.0	20.1
37°	101.7	57.0	35.8	25.7	22.4	21.2	19.0	17.9	17.9	17.9	19.0
38°	82.7	45.8	30.2	22.4	20.1	17.9	16.8	15.6	15.6	16.8	17.9
39°	64.8	36.9	24.6	19.0	16.8	15.6	14.5	14.5	14.5	14.5	15.6
40°	51.4	31.3	21.2	16.8	14.5	14.5	13.4	12.3	13.4	13.4	15.6
42.5°	32.4	22.4	15.6	12.3	11.2	11.2	10.1	10.1	10.1	11.2	12.3
45°	23.5	17.9	12.3	10.1	8.9	7.8	7.8	7.8	8.9	10.1	11.2
47.5°	17.9	12.3	8.9	6.7	5.6	5.6	5.6	5.6	6.7	7.8	8.9
50°	12.3	7.8	5.6	4.5	4.5	4.5	4.5	4.5	5.6	6.7	7.8
51°	10.1	6.7	5.6	4.5	4.5	3.4	3.4	4.5	5.6	5.6	6.7
52°	7.8	5.6	4.5	3.4	3.4	3.4	3.4	4.5	4.5	5.6	6.7
53°	6.7	5.6	4.5	3.4	3.4	3.4	3.4	3.4	4.5	5.6	6.7
54°	5.6	4.5	3.4	3.4	3.4	3.4	3.4	3.4	4.5	5.6	6.7
55°	4.5	4.5	3.4	3.4	3.4	3.4	3.4	3.4	4.5	4.5	5.6
57.5°	4.5	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	4.5	5.6
60°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	4.5	5.6
61°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	4.5	5.6
62°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	4.5	5.6
63°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	4.5	4.5	5.6
64°	3.4	3.4	3.4	3.4	4.5	4.5	3.4	3.4	4.5	4.5	5.6
65°	3.4	3.4	4.5	4.5	4.5	4.5	3.4	3.4	4.5	4.5	5.6
66°	3.4	4.5	4.5	4.5	4.5	4.5	3.4	3.4	4.5	4.5	5.6



TEST NUMBER: P182700

CATALOG NUMBER: LDSQA4A28935D010TE LAR15SP 4LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
72.5°	3.4	4.5	4.5	4.5	4.5	4.5	4.5	3.4	4.5	4.5	4.5
75°	3.4	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
77.5°	3.4	4.5	4.5	4.5	4.5	4.5	4.5	3.4	3.4	4.5	4.5
80°	3.4	4.5	4.5	4.5	4.5	4.5	4.5	3.4	3.4	4.5	4.5
82.5°	3.4	4.5	4.5	4.5	4.5	4.5	4.5	3.4	3.4	3.4	4.5
85°	3.4	3.4	4.5	4.5	4.5	4.5	4.5	3.4	3.4	3.4	3.4
87.5°	3.4	3.4	4.5	4.5	4.5	4.5	3.4	3.4	3.4	3.4	3.4
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: P182700

CATALOG NUMBER: LDSQA4A28935D010TE LAR15SP 4LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	186.6	186.6	186.6	186.6	186.6	186.6	186.6	186.6	186.6	186.6	186.6
2.5°	178.8	175.5	173.2	172.1	173.2	171.0	167.6	168.8	167.6	166.5	166.5
5°	169.9	164.3	162.0	160.9	160.9	159.8	155.3	156.5	155.3	154.2	154.2
7.5°	157.6	153.1	149.8	148.6	148.6	147.5	143.1	145.3	143.1	141.9	143.1
10°	143.1	138.6	137.5	135.2	135.2	134.1	130.8	131.9	130.8	130.8	130.8
12.5°	127.4	122.9	121.8	120.7	121.8	120.7	117.3	119.6	118.5	118.5	119.6
15°	110.6	107.3	107.3	106.2	107.3	106.2	105.1	106.2	106.2	106.2	108.4
17.5°	93.9	91.6	91.6	90.5	91.6	91.6	90.5	93.9	93.9	96.1	98.3
20°	77.1	74.9	76.0	76.0	78.2	78.2	78.2	81.6	82.7	84.9	88.3
22.5°	63.7	62.6	63.7	63.7	65.9	67.1	67.1	70.4	73.8	76.0	79.3
25°	51.4	51.4	53.6	53.6	54.8	57.0	58.1	62.6	64.8	67.1	70.4
26°	48.1	48.1	49.2	50.3	51.4	53.6	54.8	59.2	61.5	63.7	67.1
27°	43.6	43.6	45.8	46.9	48.1	50.3	52.5	55.9	58.1	61.5	63.7
28°	40.2	40.2	42.5	43.6	44.7	48.1	49.2	52.5	54.8	58.1	61.5
29°	36.9	38.0	40.2	40.2	42.5	44.7	45.8	50.3	52.5	54.8	58.1
30°	34.6	35.8	36.9	38.0	39.1	41.4	43.6	46.9	49.2	51.4	54.8
31°	32.4	33.5	34.6	35.8	36.9	39.1	41.4	44.7	46.9	49.2	52.5
32°	30.2	30.2	32.4	33.5	34.6	36.9	39.1	42.5	44.7	46.9	50.3
33°	27.9	29.1	30.2	31.3	32.4	34.6	36.9	39.1	41.4	44.7	48.1
34°	25.7	26.8	29.1	30.2	31.3	33.5	34.6	36.9	39.1	42.5	44.7
35°	23.5	25.7	26.8	27.9	29.1	31.3	32.4	35.8	36.9	40.2	42.5
36°	22.4	23.5	25.7	26.8	27.9	29.1	30.2	33.5	35.8	38.0	40.2
37°	20.1	22.4	23.5	24.6	25.7	27.9	29.1	31.3	33.5	35.8	38.0
38°	19.0	20.1	22.4	23.5	24.6	25.7	26.8	30.2	31.3	33.5	35.8
39°	17.9	19.0	21.2	22.4	22.4	24.6	25.7	27.9	29.1	31.3	34.6
40°	16.8	17.9	20.1	20.1	21.2	23.5	24.6	26.8	27.9	30.2	32.4
42.5°	14.5	15.6	16.8	17.9	19.0	20.1	21.2	23.5	24.6	25.7	27.9
45°	12.3	13.4	15.6	15.6	16.8	17.9	19.0	20.1	21.2	23.5	24.6
47.5°	10.1	12.3	13.4	14.5	14.5	15.6	16.8	17.9	19.0	20.1	21.2
50°	8.9	10.1	11.2	12.3	12.3	13.4	14.5	15.6	15.6	16.8	19.0
51°	8.9	10.1	11.2	11.2	12.3	13.4	13.4	14.5	15.6	15.6	16.8
52°	7.8	8.9	10.1	11.2	11.2	12.3	13.4	13.4	14.5	15.6	16.8
53°	7.8	8.9	10.1	10.1	11.2	12.3	12.3	13.4	13.4	14.5	15.6
54°	7.8	8.9	10.1	10.1	11.2	11.2	12.3	12.3	13.4	13.4	14.5
55°	6.7	7.8	8.9	10.1	10.1	11.2	11.2	12.3	12.3	13.4	13.4
57.5°	6.7	7.8	8.9	8.9	8.9	10.1	10.1	11.2	11.2	11.2	12.3
60°	6.7	7.8	7.8	8.9	8.9	10.1	10.1	10.1	10.1	11.2	11.2
61°	6.7	6.7	7.8	8.9	8.9	8.9	10.1	10.1	10.1	10.1	11.2
62°	6.7	6.7	7.8	7.8	8.9	8.9	8.9	10.1	10.1	10.1	10.1
63°	5.6	6.7	7.8	7.8	8.9	8.9	8.9	8.9	8.9	10.1	10.1
64°	5.6	6.7	7.8	7.8	7.8	8.9	8.9	8.9	8.9	8.9	8.9
65°	5.6	6.7	7.8	7.8	7.8	8.9	8.9	8.9	8.9	8.9	8.9
66°	5.6	6.7	7.8	7.8	7.8	8.9	8.9	8.9	8.9	8.9	8.9



TEST NUMBER: P182700

CATALOG NUMBER: LDSQA4A28935D010TE LAR15SP 4LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
72.5°	5.6	5.6	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
75°	5.6	5.6	5.6	6.7	6.7	6.7	6.7	6.7	6.7	5.6	5.6
77.5°	4.5	4.5	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	4.5
80°	4.5	4.5	5.6	5.6	5.6	5.6	5.6	5.6	4.5	4.5	4.5
82.5°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	3.4	3.4
85°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	3.4	3.4	2.2
87.5°	3.4	4.5	4.5	4.5	4.5	4.5	3.4	3.4	3.4	2.2	2.2
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: P182700

CATALOG NUMBER: LDSQA4A28935D010TE LAR15SP 4LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	186.6	186.6	186.6	186.6	186.6	186.6	186.6	186.6
2.5°	167.6	164.3	163.2	163.2	164.3	163.2	164.3	163.2
5°	154.2	150.9	150.9	149.8	150.9	149.8	150.9	149.8
7.5°	143.1	139.7	139.7	139.7	139.7	139.7	140.8	139.7
10°	131.9	128.5	128.5	127.4	128.5	128.5	129.6	128.5
12.5°	120.7	118.5	118.5	117.3	119.6	118.5	120.7	119.6
15°	110.6	108.4	108.4	109.5	110.6	110.6	111.8	111.8
17.5°	100.6	100.6	100.6	101.7	102.8	103.9	105.1	103.9
20°	91.6	91.6	92.8	93.9	95.0	96.1	97.2	97.2
22.5°	82.7	82.7	83.8	86.1	88.3	89.4	90.5	90.5
25°	73.8	74.9	76.0	77.1	80.5	81.6	82.7	82.7
26°	70.4	71.5	73.8	74.9	77.1	78.2	80.5	80.5
27°	68.2	69.3	70.4	71.5	74.9	76.0	78.2	77.1
28°	64.8	65.9	67.1	69.3	71.5	73.8	74.9	74.9
29°	61.5	63.7	64.8	65.9	69.3	70.4	71.5	71.5
30°	59.2	60.3	61.5	63.7	65.9	68.2	69.3	69.3
31°	55.9	58.1	59.2	60.3	63.7	64.8	67.1	67.1
32°	53.6	54.8	55.9	58.1	60.3	62.6	63.7	63.7
33°	50.3	52.5	53.6	54.8	58.1	60.3	61.5	60.3
34°	48.1	50.3	50.3	52.5	54.8	57.0	58.1	58.1
35°	45.8	46.9	48.1	50.3	52.5	54.8	55.9	55.9
36°	43.6	44.7	45.8	48.1	50.3	52.5	53.6	53.6
37°	41.4	42.5	43.6	44.7	48.1	50.3	51.4	51.4
38°	39.1	40.2	41.4	43.6	45.8	46.9	49.2	49.2
39°	36.9	38.0	39.1	41.4	43.6	44.7	46.9	45.8
40°	34.6	36.9	36.9	39.1	41.4	42.5	44.7	43.6
42.5°	30.2	31.3	32.4	33.5	35.8	38.0	39.1	39.1
45°	26.8	27.9	29.1	30.2	31.3	32.4	34.6	33.5
47.5°	22.4	23.5	24.6	25.7	26.8	27.9	29.1	29.1
50°	20.1	20.1	21.2	21.2	23.5	24.6	25.7	25.7
51°	17.9	19.0	20.1	20.1	22.4	22.4	23.5	23.5
52°	17.9	17.9	19.0	19.0	20.1	21.2	22.4	22.4
53°	16.8	16.8	17.9	17.9	19.0	20.1	21.2	21.2
54°	15.6	15.6	16.8	16.8	17.9	19.0	20.1	20.1
55°	14.5	14.5	15.6	15.6	16.8	17.9	19.0	19.0
57.5°	12.3	13.4	13.4	14.5	14.5	15.6	15.6	16.8
60°	11.2	12.3	12.3	12.3	13.4	13.4	13.4	13.4
61°	11.2	11.2	11.2	12.3	12.3	11.2	12.3	11.2
62°	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2
63°	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
64°	10.1	8.9	8.9	8.9	8.9	8.9	8.9	8.9
65°	8.9	8.9	8.9	8.9	8.9	8.9	8.9	7.8
66°	8.9	8.9	7.8	8.9	7.8	7.8	7.8	7.8



TEST NUMBER: P182700

CATALOG NUMBER: LDSQA4A28935D010TE LAR15SP 4LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
72.5°	5.6	5.6	5.6	5.6	5.6	4.5	4.5	4.5
75°	5.6	5.6	5.6	4.5	4.5	4.5	4.5	3.4
77.5°	4.5	4.5	4.5	4.5	3.4	3.4	3.4	3.4
80°	3.4	3.4	3.4	3.4	3.4	3.4	2.2	2.2
82.5°	3.4	2.2	2.2	2.2	2.2	2.2	2.2	2.2
85°	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1
87.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
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°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	3.4	3.4
70°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	3.4	3.4





67.5°	3.4	4.5	4.5	4.5	4.5	4.5	4.5	3.4	4.5	4.5	5.6
70°	3.4	4.5	4.5	4.5	4.5	4.5	4.5	3.4	4.5	4.5	4.5





67.5°	5.6	6.7	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
70°	5.6	6.7	6.7	6.7	7.8	7.8	7.8	7.8	7.8	7.8	7.8





67.5°	7.8	7.8	7.8	7.8	7.8	6.7	6.7	6.7
70°	6.7	6.7	6.7	6.7	6.7	5.6	5.6	5.6



(END OF REPORT)