

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: P182796

Luminaire Tested: **LDSQA4A28935D010TE LAR15SP 4LSQAL1H 30°**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182796
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: LDSQA4A28935D010TE 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: 2014.1 lumens
Efficiency: N/A
Efficacy: 45.3 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

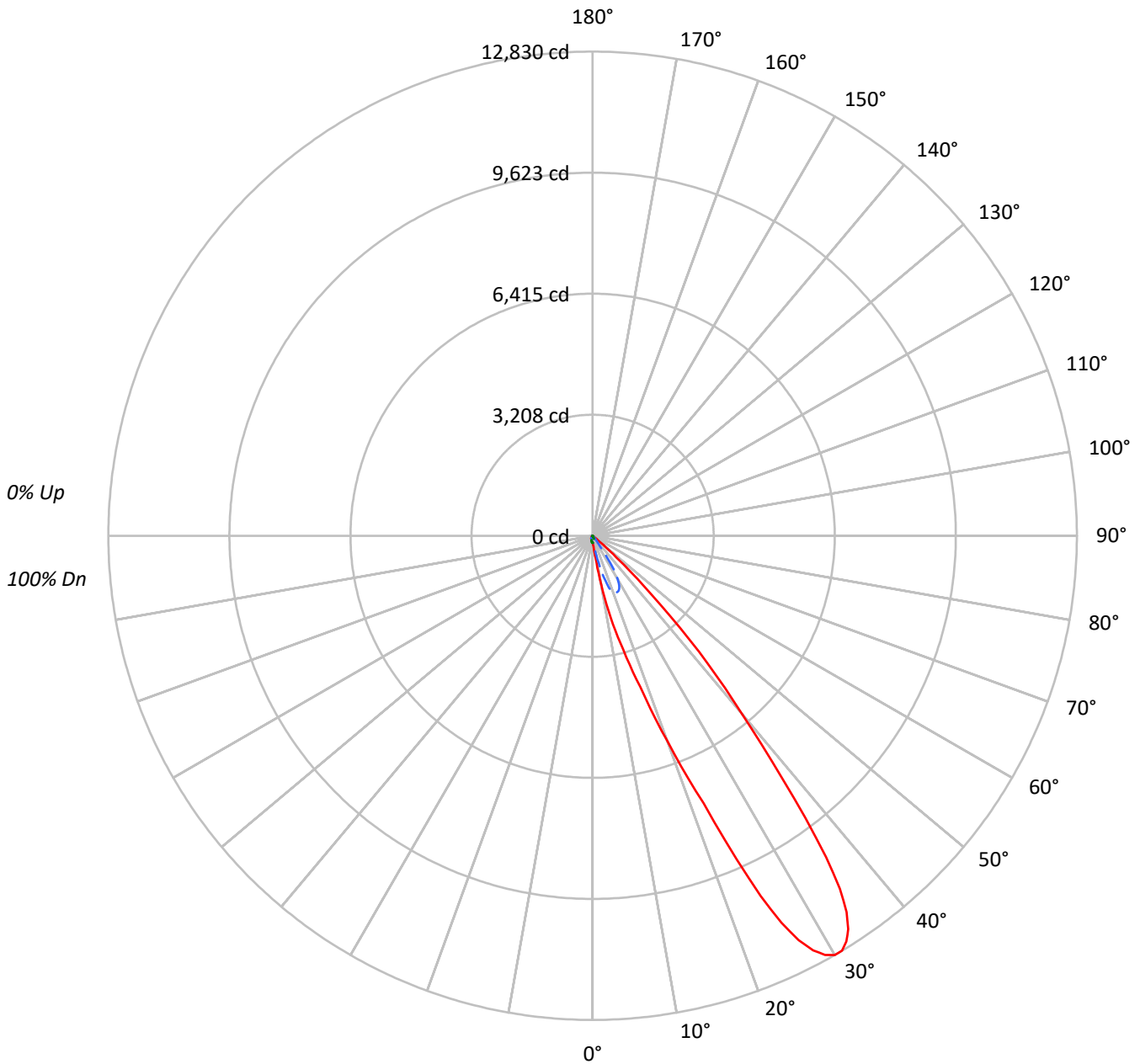
Input Watts (W): 44.49
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	18406	18406	18406
5°	29242	17504	15112
10°	128117	15503	12867
15°	313034	12557	11213
20°	597216	9340	10258
25°	1125511	6691	8957
30°	1435090	4754	7875
35°	1349973	2909	6741
40°	774440	1985	5792
45°	298967	1384	4905
50°	39758	1010	4039
55°	6047	946	3395
60°	1724	872	2809
65°	1032	1032	2040
70°	623	1275	1586
75°	823	1273	1273
80°	0	1897	1227
85°	0	3779	1223



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.7	1.2
10°-20°	215.8	10.7
20°-30°	688.3	34.2
30°-40°	797.6	39.6
40°-50°	259.4	12.9
50°-60°	16.4	0.8
60°-70°	6.0	0.3
70°-80°	4.3	0.2
80°-90°	2.5	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°	927.9	46.1
0°-40°	1725.6	85.7
0°-60°	2001.4	99.4
0°-90°	2014.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2014.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	190	190	190	190	190	
5°	301	252	180	158	155	58
15°	3121	1125	125	107	112	990
25°	10530	1618	63	66	84	4731
35°	11415	386	25	38	57	6568
45°	2182	47	10	22	36	1949
55°	36	9	6	12	20	55
65°	4	3	4	9	9	4
75°	2	3	3	6	3	1
85°	0	2	3	3	1	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0
2.5°	231.4	233.6	233.6	230.3	230.3	226.9	224.7	223.6	222.5	219.1	218.0
5°	300.7	303.0	304.1	295.1	291.8	285.1	279.5	273.9	267.2	259.4	251.5
7.5°	580.2	533.2	541.1	474.0	461.7	432.6	409.2	372.3	345.4	318.6	297.4
10°	1302.4	1257.6	1249.8	1151.4	1054.2	981.5	903.3	768.0	645.0	514.2	408.0
12.5°	2231.4	2165.4	2128.5	1935.1	1821.1	1713.8	1594.1	1382.9	1147.0	945.8	735.6
15°	3121.2	3115.6	2983.7	2767.9	2551.1	2419.2	2264.9	2003.3	1723.8	1417.5	1124.6
17.5°	4195.5	4239.1	4013.3	3591.8	3248.6	3034.0	2821.6	2412.5	2063.7	1766.3	1445.5
20°	5793.0	5676.8	5282.1	4622.6	4042.4	3719.3	3389.5	2787.0	2287.2	1927.3	1602.0
22.5°	7670.0	7580.6	6842.7	5742.7	4822.7	4368.8	3914.9	3131.3	2480.6	2014.5	1632.2
25°	10529.6	10161.8	8729.8	6944.5	5538.1	4895.3	4312.9	3354.9	2567.8	2025.7	1617.6
26°	11407.2	11148.9	9496.7	7421.8	5758.4	5040.7	4412.4	3400.7	2574.5	2015.6	1589.7
27°	12029.8	11833.1	10135.0	7772.8	5918.2	5141.3	4477.2	3419.7	2558.9	1994.4	1551.7
28°	12440.1	12282.5	10616.8	8026.6	6015.5	5194.9	4508.5	3415.2	2527.6	1957.5	1498.0
29°	12700.6	12548.6	10898.5	8170.8	6050.1	5203.9	4500.7	3381.7	2477.3	1902.7	1420.9
30°	12829.1	12663.7	10993.5	8186.5	6012.1	5152.5	4441.5	3307.9	2408.0	1836.7	1335.9
31°	12830.3	12646.9	10914.2	8065.7	5899.2	5042.9	4336.4	3184.9	2317.4	1758.5	1221.9
32°	12681.6	12492.7	10649.2	7820.9	5722.6	4905.4	4195.5	3059.7	2222.4	1671.3	1057.5
33°	12432.3	12208.7	10189.8	7481.1	5496.8	4717.6	4026.7	2920.0	2127.4	1531.5	841.8
34°	12029.8	11724.7	9548.1	7068.6	5224.0	4498.5	3833.3	2769.1	2031.2	1337.0	601.4
35°	11415.0	10984.6	8805.8	6612.4	4932.2	4261.5	3615.3	2611.4	1913.9	1096.7	385.7
36°	10525.1	9969.5	8033.3	6140.7	4631.5	4012.2	3394.0	2459.4	1728.3	831.7	252.6
37°	9363.6	8874.0	7294.4	5665.6	4319.6	3746.1	3191.6	2306.3	1500.2	581.3	205.7
38°	8170.8	7809.7	6572.2	5193.8	3996.5	3458.8	2945.7	2146.4	1250.9	382.3	172.2
39°	7095.4	6853.9	5865.7	4726.5	3663.4	3207.3	2699.8	1942.9	984.9	271.7	145.3
40°	6123.9	5957.3	5182.6	4250.3	3330.3	2903.2	2468.3	1693.6	709.9	216.9	121.9
42.5°	4176.5	4093.8	3625.4	3058.6	2463.9	2219.1	1944.0	1018.4	281.7	137.5	73.8
45°	2182.2	2146.4	1976.5	1790.9	1606.4	1542.7	1249.8	457.2	158.7	80.5	47.0
47.5°	849.6	851.8	704.3	601.4	571.3	531.0	402.4	164.3	89.4	49.2	31.3
50°	263.8	283.9	261.6	247.1	188.9	157.6	130.8	81.6	48.1	30.2	20.1
51°	162.1	172.2	162.1	162.1	133.0	116.3	99.5	62.6	38.0	24.6	17.9
52°	105.1	110.7	105.1	98.4	91.7	82.7	71.5	47.0	30.2	20.1	14.5
53°	71.5	74.9	71.5	67.1	61.5	57.0	50.3	34.7	24.6	16.8	12.3
54°	50.3	52.5	50.3	47.0	43.6	40.2	36.9	26.8	20.1	14.5	11.2
55°	35.8	38.0	36.9	34.7	31.3	30.2	27.9	21.2	16.8	12.3	8.9
57.5°	16.8	17.9	17.9	16.8	16.8	15.7	14.5	13.4	10.1	7.8	6.7
60°	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	6.7	5.6	5.6
61°	6.7	6.7	6.7	6.7	6.7	6.7	7.8	6.7	5.6	5.6	4.5
62°	5.6	5.6	5.6	5.6	5.6	6.7	6.7	5.6	5.6	4.5	4.5
63°	4.5	4.5	4.5	4.5	5.6	5.6	5.6	5.6	4.5	4.5	4.5
64°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	3.4
65°	4.5	4.5	3.4	3.4	3.4	4.5	3.4	4.5	3.4	3.4	3.4
66°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4



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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	1.1	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	2.2
82.5°	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	2.2	2.2
85°	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	2.2	2.2	2.2
87.5°	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0
2.5°	211.3	205.7	203.5	201.2	200.1	197.9	194.5	191.2	190.0	185.6	181.1
5°	238.1	228.1	220.2	212.4	210.2	204.6	197.9	190.0	186.7	180.0	174.4
7.5°	269.4	249.3	234.8	221.3	215.8	209.0	196.8	186.7	180.0	169.9	163.2
10°	322.0	275.0	247.1	223.6	214.6	205.7	190.0	176.6	167.7	157.6	149.8
12.5°	509.8	356.6	268.3	224.7	212.4	199.0	180.0	164.3	153.2	142.0	135.3
15°	803.8	543.3	347.7	235.9	207.9	187.8	165.5	147.6	136.4	125.2	118.5
17.5°	1073.2	731.1	453.9	262.7	210.2	177.7	147.6	129.7	117.4	107.3	102.8
20°	1202.9	819.4	505.3	268.3	196.8	158.7	127.4	110.7	99.5	90.6	86.1
22.5°	1215.2	813.8	474.0	229.2	163.2	134.1	107.3	91.7	82.7	76.0	71.5
25°	1157.0	722.2	380.1	168.8	127.4	111.8	88.3	74.9	68.2	62.6	59.2
26°	1112.3	669.6	334.3	146.4	116.3	101.7	80.5	69.3	62.6	58.1	54.8
27°	1050.8	608.1	280.6	126.3	107.3	91.7	73.8	63.7	58.1	54.8	51.4
28°	977.1	547.8	232.5	111.8	97.3	82.7	68.2	58.1	53.7	50.3	47.0
29°	897.7	468.4	182.2	100.6	87.2	74.9	61.5	52.5	48.1	45.8	43.6
30°	785.9	364.4	139.7	90.6	78.3	67.1	55.9	48.1	44.7	42.5	40.2
31°	628.3	250.4	112.9	80.5	70.4	60.4	50.3	43.6	40.2	38.0	36.9
32°	450.5	154.3	98.4	71.5	62.6	54.8	43.6	39.1	35.8	34.7	33.5
33°	277.2	126.3	87.2	63.7	54.8	48.1	39.1	34.7	32.4	31.3	30.2
34°	182.2	109.6	77.1	54.8	48.1	41.4	33.5	30.2	29.1	27.9	27.9
35°	154.3	97.3	67.1	47.0	40.2	35.8	29.1	26.8	25.7	24.6	25.7
36°	133.0	85.0	55.9	40.2	34.7	30.2	25.7	23.5	22.4	22.4	23.5
37°	117.4	71.5	47.0	33.5	30.2	26.8	22.4	21.2	20.1	20.1	21.2
38°	99.5	58.1	39.1	29.1	25.7	22.4	20.1	19.0	19.0	19.0	20.1
39°	81.6	49.2	33.5	24.6	22.4	20.1	17.9	16.8	16.8	17.9	17.9
40°	67.1	41.4	27.9	21.2	19.0	17.9	15.7	15.7	15.7	15.7	16.8
42.5°	43.6	27.9	20.1	15.7	14.5	13.4	12.3	12.3	12.3	12.3	13.4
45°	29.1	20.1	15.7	12.3	11.2	10.1	10.1	8.9	10.1	10.1	11.2
47.5°	20.1	14.5	11.2	8.9	7.8	6.7	6.7	6.7	7.8	8.9	8.9
50°	14.5	10.1	7.8	5.6	5.6	5.6	5.6	5.6	6.7	6.7	7.8
51°	12.3	8.9	6.7	5.6	5.6	4.5	4.5	4.5	5.6	6.7	7.8
52°	10.1	7.8	5.6	4.5	4.5	4.5	4.5	4.5	5.6	5.6	6.7
53°	8.9	6.7	5.6	4.5	4.5	4.5	4.5	4.5	5.6	5.6	6.7
54°	7.8	5.6	4.5	4.5	4.5	3.4	3.4	4.5	4.5	5.6	6.7
55°	6.7	5.6	4.5	4.5	3.4	3.4	3.4	3.4	4.5	5.6	5.6
57.5°	5.6	4.5	4.5	3.4	3.4	3.4	3.4	3.4	4.5	4.5	5.6
60°	4.5	4.5	4.5	3.4	3.4	3.4	3.4	3.4	4.5	4.5	5.6
61°	4.5	3.4	3.4	3.4	3.4	3.4	3.4	3.4	4.5	4.5	5.6
62°	4.5	3.4	4.5	4.5	4.5	3.4	3.4	3.4	4.5	4.5	5.6
63°	4.5	4.5	4.5	4.5	4.5	3.4	3.4	3.4	4.5	4.5	4.5
64°	4.5	4.5	4.5	4.5	4.5	4.5	3.4	3.4	4.5	4.5	5.6
65°	3.4	4.5	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	4.5	3.4	4.5	4.5	4.5



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CANDELA DISTRIBUTION (continued):

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



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CATALOG NUMBER: LDSQA4A28935D010TE LAR15SP 4LSQAL1H 30°

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0
2.5°	178.9	178.9	177.7	175.5	177.7	175.5	173.3	172.2	171.0	169.9	167.7
5°	169.9	168.8	166.6	165.5	165.5	163.2	161.0	158.7	157.6	156.5	154.3
7.5°	158.7	157.6	154.3	153.2	153.2	150.9	147.6	146.4	145.3	144.2	142.0
10°	145.3	144.2	140.9	139.7	139.7	137.5	135.3	133.0	131.9	130.8	128.6
12.5°	129.7	128.6	126.3	125.2	125.2	123.0	120.7	119.6	119.6	118.5	117.4
15°	114.0	112.9	110.7	110.7	110.7	108.4	107.3	106.2	107.3	107.3	106.2
17.5°	98.4	97.3	95.0	95.0	95.0	95.0	93.9	93.9	95.0	96.1	96.1
20°	82.7	81.6	81.6	80.5	81.6	82.7	81.6	82.7	85.0	86.1	87.2
22.5°	68.2	68.2	68.2	68.2	69.3	70.4	70.4	72.7	74.9	76.0	78.3
25°	57.0	57.0	58.1	58.1	59.2	60.4	61.5	62.6	66.0	68.2	69.3
26°	52.5	53.7	53.7	54.8	55.9	57.0	58.1	59.2	62.6	64.8	66.0
27°	49.2	49.2	50.3	51.4	52.5	53.7	54.8	57.0	59.2	61.5	63.7
28°	45.8	45.8	47.0	48.1	49.2	50.3	51.4	53.7	55.9	59.2	60.4
29°	42.5	43.6	43.6	44.7	45.8	47.0	49.2	50.3	53.7	55.9	58.1
30°	39.1	40.2	41.4	41.4	42.5	43.6	45.8	48.1	50.3	53.7	54.8
31°	36.9	38.0	38.0	39.1	40.2	41.4	43.6	45.8	48.1	50.3	52.5
32°	33.5	35.8	35.8	35.8	36.9	39.1	41.4	42.5	45.8	48.1	49.2
33°	31.3	32.4	33.5	33.5	34.7	36.9	39.1	40.2	43.6	45.8	47.0
34°	29.1	30.2	31.3	31.3	32.4	34.7	36.9	38.0	41.4	42.5	44.7
35°	26.8	27.9	29.1	29.1	30.2	32.4	34.7	35.8	38.0	40.2	42.5
36°	24.6	25.7	26.8	27.9	29.1	31.3	32.4	34.7	35.8	38.0	40.2
37°	22.4	23.5	25.7	25.7	27.9	29.1	31.3	32.4	34.7	35.8	38.0
38°	20.1	22.4	23.5	24.6	25.7	27.9	29.1	30.2	32.4	34.7	35.8
39°	19.0	21.2	22.4	23.5	24.6	25.7	26.8	29.1	30.2	32.4	33.5
40°	17.9	19.0	21.2	21.2	23.5	24.6	25.7	26.8	29.1	30.2	32.4
42.5°	14.5	16.8	17.9	19.0	20.1	21.2	22.4	23.5	24.6	26.8	27.9
45°	12.3	14.5	15.7	15.7	16.8	17.9	19.0	20.1	22.4	23.5	24.6
47.5°	10.1	12.3	13.4	14.5	14.5	15.7	16.8	17.9	19.0	20.1	21.2
50°	8.9	10.1	11.2	12.3	13.4	13.4	14.5	15.7	16.8	17.9	17.9
51°	8.9	10.1	11.2	11.2	12.3	13.4	14.5	14.5	15.7	16.8	16.8
52°	7.8	8.9	10.1	11.2	12.3	12.3	13.4	14.5	14.5	15.7	16.8
53°	7.8	8.9	10.1	10.1	11.2	12.3	12.3	13.4	14.5	14.5	15.7
54°	6.7	8.9	10.1	10.1	11.2	11.2	12.3	13.4	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	10.1	10.1	11.2	11.2	11.2	11.2	12.3
60°	5.6	6.7	7.8	8.9	8.9	10.1	10.1	10.1	10.1	10.1	11.2
61°	5.6	6.7	7.8	7.8	8.9	8.9	10.1	10.1	10.1	10.1	10.1
62°	5.6	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	8.9	10.1
64°	5.6	6.7	7.8	7.8	8.9	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	7.8	8.9	8.9	8.9	8.9	7.8



TEST NUMBER: P182796

CATALOG NUMBER: LDSQA4A28935D010TE LAR15SP 4LSQAL1H 30°

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
72.5°	4.5	5.6	5.6	6.7	6.7	6.7	6.7	6.7	6.7	6.7	5.6
75°	4.5	5.6	5.6	5.6	6.7	6.7	6.7	5.6	5.6	5.6	5.6
77.5°	4.5	4.5	5.6	5.6	5.6	5.6	5.6	5.6	5.6	4.5	4.5
80°	4.5	4.5	4.5	5.6	5.6	5.6	5.6	4.5	4.5	4.5	3.4
82.5°	3.4	4.5	4.5	4.5	4.5	4.5	4.5	4.5	3.4	3.4	3.4
85°	3.4	4.5	4.5	4.5	4.5	4.5	4.5	3.4	3.4	3.4	2.2
87.5°	3.4	3.4	3.4	4.5	4.5	4.5	3.4	3.4	2.2	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: P182796

CATALOG NUMBER: LDSQA4A28935D010TE LAR15SP 4LSQAL1H 30°

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	190.0	190.0	190.0	190.0	190.0	190.0	190.0	190.0
2.5°	169.9	171.0	169.9	169.9	167.7	168.8	166.6	169.9
5°	155.4	156.5	155.4	155.4	153.2	153.2	152.0	155.4
7.5°	143.1	144.2	142.0	142.0	139.7	140.9	139.7	142.0
10°	130.8	130.8	130.8	129.7	128.6	129.7	128.6	130.8
12.5°	118.5	119.6	119.6	119.6	118.5	118.5	117.4	120.7
15°	108.4	109.6	110.7	110.7	109.6	110.7	109.6	111.8
17.5°	99.5	101.7	101.7	102.8	102.8	104.0	104.0	106.2
20°	90.6	93.9	93.9	95.0	95.0	97.3	97.3	99.5
22.5°	81.6	85.0	86.1	86.1	87.2	89.4	89.4	91.7
25°	73.8	77.1	78.3	78.3	79.4	81.6	81.6	83.8
26°	70.4	73.8	74.9	76.0	77.1	79.4	79.4	81.6
27°	67.1	70.4	71.5	72.7	73.8	76.0	76.0	78.3
28°	64.8	68.2	69.3	70.4	71.5	73.8	73.8	74.9
29°	61.5	64.8	66.0	67.1	68.2	70.4	70.4	72.7
30°	59.2	61.5	62.6	63.7	64.8	68.2	68.2	70.4
31°	55.9	59.2	60.4	61.5	62.6	64.8	64.8	68.2
32°	53.7	55.9	57.0	58.1	60.4	61.5	62.6	64.8
33°	50.3	53.7	54.8	55.9	57.0	59.2	60.4	62.6
34°	48.1	50.3	52.5	53.7	54.8	57.0	58.1	60.4
35°	45.8	48.1	49.2	50.3	52.5	54.8	54.8	57.0
36°	43.6	45.8	47.0	48.1	50.3	52.5	52.5	54.8
37°	41.4	43.6	44.7	45.8	48.1	50.3	50.3	52.5
38°	39.1	41.4	42.5	43.6	45.8	48.1	49.2	51.4
39°	36.9	40.2	41.4	42.5	43.6	45.8	47.0	48.1
40°	35.8	38.0	39.1	40.2	41.4	43.6	44.7	45.8
42.5°	30.2	33.5	34.7	35.8	36.9	38.0	39.1	40.2
45°	26.8	29.1	29.1	30.2	31.3	33.5	33.5	35.8
47.5°	23.5	24.6	25.7	25.7	26.8	29.1	29.1	30.2
50°	20.1	21.2	22.4	22.4	23.5	24.6	25.7	26.8
51°	19.0	20.1	20.1	21.2	22.4	23.5	24.6	25.7
52°	17.9	19.0	19.0	20.1	21.2	22.4	22.4	23.5
53°	16.8	17.9	17.9	19.0	19.0	21.2	21.2	22.4
54°	15.7	16.8	16.8	17.9	17.9	20.1	20.1	21.2
55°	14.5	15.7	16.8	16.8	16.8	17.9	19.0	20.1
57.5°	13.4	14.5	14.5	14.5	15.7	15.7	16.8	16.8
60°	11.2	12.3	12.3	12.3	13.4	13.4	13.4	14.5
61°	11.2	11.2	12.3	12.3	11.2	11.2	11.2	12.3
62°	10.1	11.2	11.2	10.1	10.1	10.1	10.1	11.2
63°	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
64°	8.9	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	7.8	8.9
66°	7.8	8.9	8.9	7.8	7.8	7.8	7.8	7.8



TEST NUMBER: P182796

CATALOG NUMBER: LDSQA4A28935D010TE LAR15SP 4LSQAL1H 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	4.5	4.5	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	1.1	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	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	2.2	3.4	3.4





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





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





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



(END OF REPORT)