

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: P182794

Luminaire Tested: **LDSQA4A28927D010TE LAR15SP 4LSQAL1H 30°**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182794
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: LDSQA4A28927D010TE LAR15SP 4LSQAL1H 30°
Description: PORTFOLIO 4" SQUARE LENSED ADJUSTABLE, SELF-FLANGED, 15° SPOT, 30° Tilt
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1906.7 lumens
Efficiency: N/A
Efficacy: 42.9 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

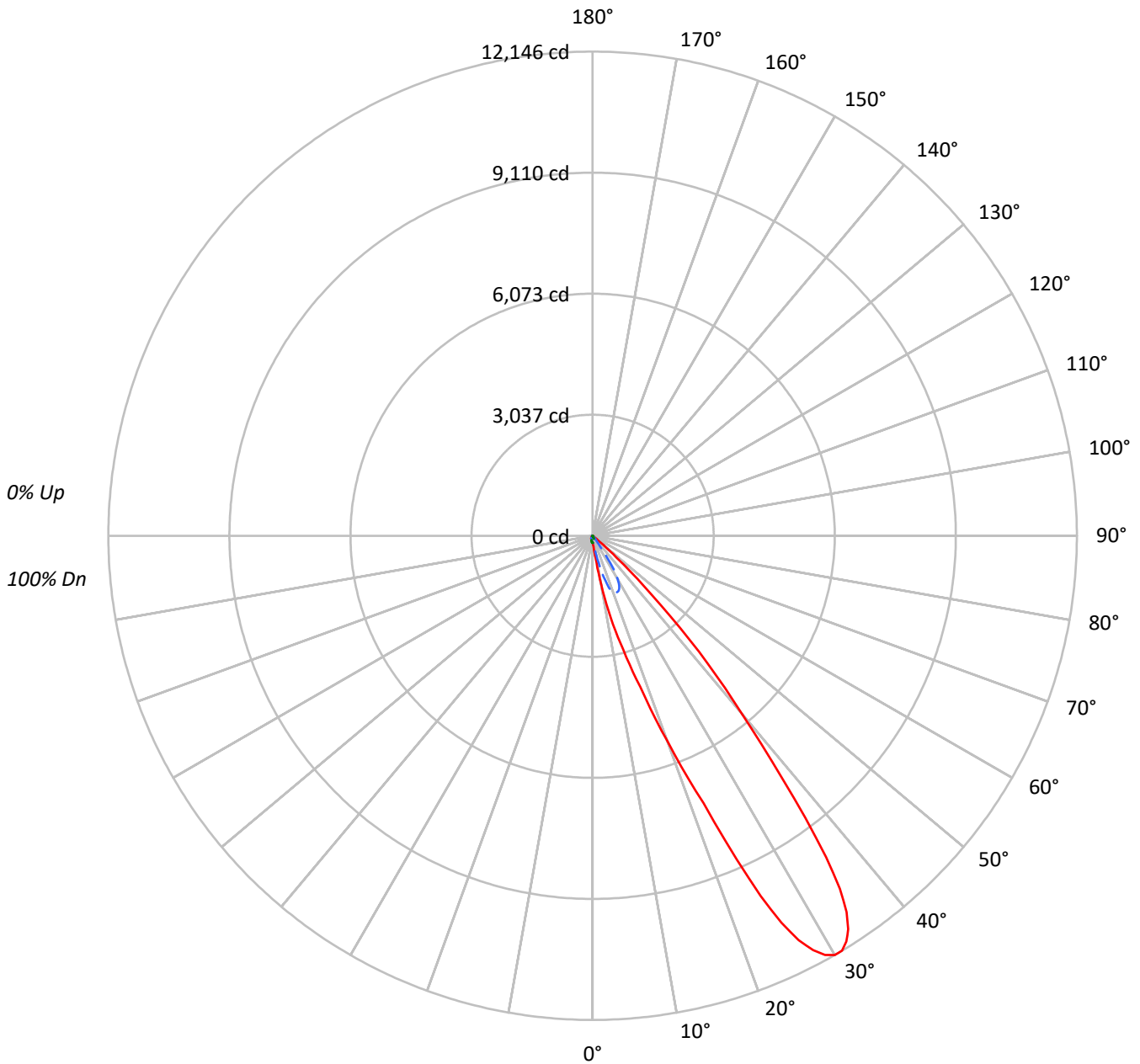
Input Watts (W): 44.49
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	112	109	106	104	110	107	105	102	103	101	99	99	98	96	96	94	93	91					91			
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	87	84	83					83			
3	99	91	85	81	97	90	85	80	87	83	79	85	81	78	82	79	76	75					75			
4	93	84	77	72	91	82	76	72	80	75	71	78	73	70	76	72	69	67					67			
5	86	76	69	64	85	75	69	64	74	68	63	72	67	63	70	66	62	61					61			
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55					55			
7	75	64	57	52	74	63	57	52	62	56	51	61	55	51	60	55	51	49					49			
8	70	59	52	47	69	58	52	47	57	51	47	56	50	46	55	50	46	44					44			
9	66	54	47	42	65	54	47	42	53	46	42	52	46	42	51	46	42	40					40			
10	62	50	43	38	60	50	43	38	49	42	38	48	42	38	47	42	38	36					36			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	17428	17428	17428
5°	27686	16571	14305
10°	121280	14677	12178
15°	296345	11885	10611
20°	565371	8835	9711
25°	1065492	6339	8487
30°	1358565	4497	7461
35°	1277986	2756	6386
40°	733150	1872	5488
45°	283020	1302	4644
50°	37648	949	3828
55°	5726	895	3209
60°	1647	814	2674
65°	963	963	1948
70°	595	1190	1501
75°	786	1198	1198
80°	0	1785	1172
85°	0	3557	1223



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.5	1.2
10°-20°	204.3	10.7
20°-30°	651.6	34.2
30°-40°	755.1	39.6
40°-50°	245.5	12.9
50°-60°	15.5	0.8
60°-70°	5.6	0.3
70°-80°	4.0	0.2
80°-90°	2.4	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°	878.4	46.1
0°-40°	1633.5	85.7
0°-60°	1894.6	99.4
0°-90°	1906.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1906.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	180	180	180	180	180	
5°	285	238	170	149	147	55
15°	2955	1065	118	102	106	937
25°	9968	1531	59	62	79	4479
35°	10806	365	23	36	54	6218
45°	2066	44	10	21	34	1845
55°	34	8	5	12	19	52
65°	4	3	4	8	8	4
75°	2	3	3	5	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°	179.9	179.9	179.9	179.9	179.9	179.9	179.9	179.9	179.9	179.9	179.9
2.5°	219.1	221.2	221.2	218.0	218.0	214.8	212.7	211.7	210.6	207.4	206.4
5°	284.7	286.8	287.9	279.4	276.2	269.9	264.6	259.3	252.9	245.5	238.1
7.5°	549.3	504.8	512.2	448.7	437.1	409.6	387.3	352.4	327.0	301.6	281.5
10°	1232.9	1190.6	1183.2	1090.0	998.0	929.2	855.1	727.1	610.6	486.8	386.3
12.5°	2112.4	2049.9	2015.0	1831.9	1724.0	1622.4	1509.1	1309.1	1085.8	895.3	696.4
15°	2954.8	2949.5	2824.6	2620.3	2415.0	2290.2	2144.1	1896.5	1631.9	1341.9	1064.6
17.5°	3971.8	4013.1	3799.3	3400.3	3075.4	2872.2	2671.1	2283.8	1953.6	1672.1	1368.4
20°	5484.1	5374.0	5000.5	4376.1	3826.8	3521.0	3208.8	2638.3	2165.3	1824.5	1516.5
22.5°	7261.0	7176.3	6477.8	5436.5	4565.5	4135.8	3706.2	2964.3	2348.4	1907.1	1545.1
25°	9968.1	9619.9	8264.2	6574.1	5242.8	4634.3	4082.9	3175.9	2430.9	1917.6	1531.4
26°	10798.9	10554.4	8990.2	7026.0	5451.3	4771.9	4177.1	3219.3	2437.3	1908.1	1504.9
27°	11388.3	11202.1	9594.5	7358.3	5602.6	4867.1	4238.5	3237.3	2422.4	1888.0	1468.9
28°	11776.7	11627.5	10050.6	7598.6	5694.7	4917.9	4268.1	3233.1	2392.8	1853.1	1418.1
29°	12023.3	11879.4	10317.3	7735.1	5727.5	4926.4	4260.7	3201.3	2345.2	1801.2	1345.1
30°	12145.0	11988.4	10407.3	7749.9	5691.5	4877.7	4204.6	3131.5	2279.6	1738.8	1264.7
31°	12146.1	11972.5	10332.2	7635.6	5584.6	4774.0	4105.1	3015.1	2193.8	1664.7	1156.7
32°	12005.3	11826.5	10081.3	7403.8	5417.4	4643.8	3971.8	2896.6	2103.9	1582.2	1001.1
33°	11769.3	11557.7	9646.4	7082.1	5203.6	4466.0	3812.0	2764.3	2013.9	1449.9	796.9
34°	11388.3	11099.4	9038.9	6691.6	4945.4	4258.6	3628.9	2621.4	1922.9	1265.7	569.4
35°	10806.3	10398.8	8336.2	6259.8	4669.2	4034.2	3422.5	2472.2	1811.8	1038.2	365.1
36°	9963.9	9437.9	7604.9	5813.2	4384.5	3798.2	3213.0	2328.3	1636.1	787.4	239.2
37°	8864.3	8400.8	6905.4	5363.4	4089.3	3546.4	3021.4	2183.3	1420.2	550.3	194.7
38°	7735.1	7393.3	6221.7	4916.8	3783.4	3274.4	2788.6	2031.9	1184.2	361.9	163.0
39°	6717.0	6488.4	5552.9	4474.5	3468.0	3036.3	2555.8	1839.3	932.4	257.2	137.6
40°	5797.4	5639.7	4906.3	4023.6	3152.7	2748.4	2336.7	1603.3	672.0	205.3	115.4
42.5°	3953.8	3875.5	3432.1	2895.5	2332.5	2100.7	1840.4	964.1	266.7	130.2	69.8
45°	2065.8	2031.9	1871.1	1695.4	1520.8	1460.4	1183.2	432.8	150.3	76.2	44.4
47.5°	804.3	806.4	666.7	569.4	540.8	502.7	381.0	155.6	84.7	46.6	29.6
50°	249.8	268.8	247.6	233.9	178.9	149.2	123.8	77.3	45.5	28.6	19.0
51°	153.5	163.0	153.5	153.5	125.9	110.1	94.2	59.3	36.0	23.3	16.9
52°	99.5	104.8	99.5	93.1	86.8	78.3	67.7	44.4	28.6	19.0	13.8
53°	67.7	70.9	67.7	63.5	58.2	54.0	47.6	32.8	23.3	15.9	11.6
54°	47.6	49.7	47.6	44.4	41.3	38.1	34.9	25.4	19.0	13.8	10.6
55°	33.9	36.0	34.9	32.8	29.6	28.6	26.5	20.1	15.9	11.6	8.5
57.5°	15.9	16.9	16.9	15.9	15.9	14.8	13.8	12.7	9.5	7.4	6.3
60°	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	6.3	5.3	5.3
61°	6.3	6.3	6.3	6.3	6.3	6.3	7.4	6.3	5.3	5.3	4.2
62°	5.3	5.3	5.3	5.3	5.3	6.3	6.3	5.3	5.3	4.2	4.2
63°	4.2	4.2	4.2	4.2	5.3	5.3	5.3	5.3	4.2	4.2	4.2
64°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	3.2
65°	4.2	4.2	3.2	3.2	3.2	4.2	3.2	4.2	3.2	3.2	3.2
66°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
72.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	3.2
75°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	3.2
77.5°	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	2.1	2.1	3.2
80°	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	2.1	2.1	2.1
82.5°	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	2.1	2.1
85°	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	2.1	2.1	2.1
87.5°	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	179.9	179.9	179.9	179.9	179.9	179.9	179.9	179.9	179.9	179.9	179.9
2.5°	200.0	194.7	192.6	190.5	189.4	187.3	184.1	181.0	179.9	175.7	171.4
5°	225.4	215.9	208.5	201.1	199.0	193.7	187.3	179.9	176.7	170.4	165.1
7.5°	255.0	236.0	222.2	209.5	204.3	197.9	186.3	176.7	170.4	160.9	154.5
10°	304.8	260.3	233.9	211.7	203.2	194.7	179.9	167.2	158.7	149.2	141.8
12.5°	482.6	337.6	254.0	212.7	201.1	188.4	170.4	155.6	145.0	134.4	128.1
15°	760.9	514.3	329.1	223.3	196.8	177.8	156.6	139.7	129.1	118.5	112.2
17.5°	1016.0	692.1	429.7	248.7	199.0	168.3	139.7	122.8	111.1	101.6	97.4
20°	1138.7	775.7	478.4	254.0	186.3	150.3	120.6	104.8	94.2	85.7	81.5
22.5°	1150.4	770.4	448.7	217.0	154.5	127.0	101.6	86.8	78.3	72.0	67.7
25°	1095.3	683.7	359.8	159.8	120.6	105.8	83.6	70.9	64.6	59.3	56.1
26°	1053.0	633.9	316.4	138.6	110.1	96.3	76.2	65.6	59.3	55.0	51.9
27°	994.8	575.7	265.6	119.6	101.6	86.8	69.8	60.3	55.0	51.9	48.7
28°	925.0	518.6	220.1	105.8	92.1	78.3	64.6	55.0	50.8	47.6	44.4
29°	849.8	443.4	172.5	95.2	82.5	70.9	58.2	49.7	45.5	43.4	41.3
30°	744.0	345.0	132.3	85.7	74.1	63.5	52.9	45.5	42.3	40.2	38.1
31°	594.8	237.1	106.9	76.2	66.7	57.1	47.6	41.3	38.1	36.0	34.9
32°	426.5	146.0	93.1	67.7	59.3	51.9	41.3	37.0	33.9	32.8	31.7
33°	262.5	119.6	82.5	60.3	51.9	45.5	37.0	32.8	30.7	29.6	28.6
34°	172.5	103.7	73.0	51.9	45.5	39.2	31.7	28.6	27.5	26.5	26.5
35°	146.0	92.1	63.5	44.4	38.1	33.9	27.5	25.4	24.3	23.3	24.3
36°	125.9	80.4	52.9	38.1	32.8	28.6	24.3	22.2	21.2	21.2	22.2
37°	111.1	67.7	44.4	31.7	28.6	25.4	21.2	20.1	19.0	19.0	20.1
38°	94.2	55.0	37.0	27.5	24.3	21.2	19.0	18.0	18.0	18.0	19.0
39°	77.3	46.6	31.7	23.3	21.2	19.0	16.9	15.9	15.9	16.9	16.9
40°	63.5	39.2	26.5	20.1	18.0	16.9	14.8	14.8	14.8	14.8	15.9
42.5°	41.3	26.5	19.0	14.8	13.8	12.7	11.6	11.6	11.6	11.6	12.7
45°	27.5	19.0	14.8	11.6	10.6	9.5	9.5	8.5	9.5	9.5	10.6
47.5°	19.0	13.8	10.6	8.5	7.4	6.3	6.3	6.3	7.4	8.5	8.5
50°	13.8	9.5	7.4	5.3	5.3	5.3	5.3	5.3	6.3	6.3	7.4
51°	11.6	8.5	6.3	5.3	5.3	4.2	4.2	4.2	5.3	6.3	7.4
52°	9.5	7.4	5.3	4.2	4.2	4.2	4.2	4.2	5.3	5.3	6.3
53°	8.5	6.3	5.3	4.2	4.2	4.2	4.2	4.2	5.3	5.3	6.3
54°	7.4	5.3	4.2	4.2	4.2	3.2	3.2	4.2	4.2	5.3	6.3
55°	6.3	5.3	4.2	4.2	3.2	3.2	3.2	3.2	4.2	5.3	5.3
57.5°	5.3	4.2	4.2	3.2	3.2	3.2	3.2	3.2	4.2	4.2	5.3
60°	4.2	4.2	4.2	3.2	3.2	3.2	3.2	3.2	4.2	4.2	5.3
61°	4.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	4.2	4.2	5.3
62°	4.2	3.2	4.2	4.2	4.2	3.2	3.2	3.2	4.2	4.2	5.3
63°	4.2	4.2	4.2	4.2	4.2	3.2	3.2	3.2	4.2	4.2	4.2
64°	4.2	4.2	4.2	4.2	4.2	4.2	3.2	3.2	4.2	4.2	5.3
65°	3.2	4.2	4.2	4.2	4.2	4.2	3.2	3.2	4.2	4.2	5.3
66°	3.2	4.2	4.2	4.2	4.2	4.2	4.2	3.2	4.2	4.2	4.2



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
72.5°	3.2	3.2	4.2	4.2	4.2	4.2	4.2	3.2	3.2	4.2	4.2
75°	3.2	3.2	4.2	4.2	4.2	4.2	4.2	3.2	3.2	3.2	4.2
77.5°	3.2	3.2	4.2	4.2	4.2	4.2	4.2	3.2	3.2	3.2	4.2
80°	3.2	3.2	4.2	4.2	4.2	4.2	3.2	3.2	3.2	3.2	3.2
82.5°	3.2	3.2	3.2	4.2	4.2	3.2	3.2	3.2	3.2	3.2	3.2
85°	3.2	3.2	3.2	4.2	4.2	3.2	3.2	3.2	3.2	3.2	3.2
87.5°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
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: P182794

CATALOG NUMBER: LDSQA4A28927D010TE LAR15SP 4LSQAL1H 30°

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	179.9	179.9	179.9	179.9	179.9	179.9	179.9	179.9	179.9	179.9	179.9
2.5°	169.3	169.3	168.3	166.2	168.3	166.2	164.0	163.0	161.9	160.9	158.7
5°	160.9	159.8	157.7	156.6	156.6	154.5	152.4	150.3	149.2	148.2	146.0
7.5°	150.3	149.2	146.0	145.0	145.0	142.9	139.7	138.6	137.6	136.5	134.4
10°	137.6	136.5	133.3	132.3	132.3	130.2	128.1	125.9	124.9	123.8	121.7
12.5°	122.8	121.7	119.6	118.5	118.5	116.4	114.3	113.2	113.2	112.2	111.1
15°	107.9	106.9	104.8	104.8	104.8	102.7	101.6	100.5	101.6	101.6	100.5
17.5°	93.1	92.1	90.0	90.0	90.0	90.0	88.9	88.9	90.0	91.0	91.0
20°	78.3	77.3	77.3	76.2	77.3	78.3	77.3	78.3	80.4	81.5	82.5
22.5°	64.6	64.6	64.6	64.6	65.6	66.7	66.7	68.8	70.9	72.0	74.1
25°	54.0	54.0	55.0	55.0	56.1	57.1	58.2	59.3	62.4	64.6	65.6
26°	49.7	50.8	50.8	51.9	52.9	54.0	55.0	56.1	59.3	61.4	62.4
27°	46.6	46.6	47.6	48.7	49.7	50.8	51.9	54.0	56.1	58.2	60.3
28°	43.4	43.4	44.4	45.5	46.6	47.6	48.7	50.8	52.9	56.1	57.1
29°	40.2	41.3	41.3	42.3	43.4	44.4	46.6	47.6	50.8	52.9	55.0
30°	37.0	38.1	39.2	39.2	40.2	41.3	43.4	45.5	47.6	50.8	51.9
31°	34.9	36.0	36.0	37.0	38.1	39.2	41.3	43.4	45.5	47.6	49.7
32°	31.7	33.9	33.9	33.9	34.9	37.0	39.2	40.2	43.4	45.5	46.6
33°	29.6	30.7	31.7	31.7	32.8	34.9	37.0	38.1	41.3	43.4	44.4
34°	27.5	28.6	29.6	29.6	30.7	32.8	34.9	36.0	39.2	40.2	42.3
35°	25.4	26.5	27.5	27.5	28.6	30.7	32.8	33.9	36.0	38.1	40.2
36°	23.3	24.3	25.4	26.5	27.5	29.6	30.7	32.8	33.9	36.0	38.1
37°	21.2	22.2	24.3	24.3	26.5	27.5	29.6	30.7	32.8	33.9	36.0
38°	19.0	21.2	22.2	23.3	24.3	26.5	27.5	28.6	30.7	32.8	33.9
39°	18.0	20.1	21.2	22.2	23.3	24.3	25.4	27.5	28.6	30.7	31.7
40°	16.9	18.0	20.1	20.1	22.2	23.3	24.3	25.4	27.5	28.6	30.7
42.5°	13.8	15.9	16.9	18.0	19.0	20.1	21.2	22.2	23.3	25.4	26.5
45°	11.6	13.8	14.8	14.8	15.9	16.9	18.0	19.0	21.2	22.2	23.3
47.5°	9.5	11.6	12.7	13.8	13.8	14.8	15.9	16.9	18.0	19.0	20.1
50°	8.5	9.5	10.6	11.6	12.7	12.7	13.8	14.8	15.9	16.9	16.9
51°	8.5	9.5	10.6	10.6	11.6	12.7	13.8	13.8	14.8	15.9	15.9
52°	7.4	8.5	9.5	10.6	11.6	11.6	12.7	13.8	13.8	14.8	15.9
53°	7.4	8.5	9.5	9.5	10.6	11.6	11.6	12.7	13.8	13.8	14.8
54°	6.3	8.5	9.5	9.5	10.6	10.6	11.6	12.7	12.7	12.7	13.8
55°	6.3	7.4	8.5	9.5	9.5	10.6	10.6	11.6	11.6	12.7	12.7
57.5°	6.3	7.4	8.5	8.5	9.5	9.5	10.6	10.6	10.6	10.6	11.6
60°	5.3	6.3	7.4	8.5	8.5	9.5	9.5	9.5	9.5	9.5	10.6
61°	5.3	6.3	7.4	7.4	8.5	8.5	9.5	9.5	9.5	9.5	9.5
62°	5.3	6.3	7.4	7.4	8.5	8.5	8.5	9.5	9.5	9.5	9.5
63°	5.3	6.3	7.4	7.4	8.5	8.5	8.5	8.5	8.5	8.5	9.5
64°	5.3	6.3	7.4	7.4	8.5	8.5	8.5	8.5	8.5	8.5	8.5
65°	5.3	6.3	7.4	7.4	7.4	8.5	8.5	8.5	8.5	8.5	8.5
66°	5.3	6.3	7.4	7.4	7.4	7.4	8.5	8.5	8.5	8.5	7.4



TEST NUMBER: P182794

CATALOG NUMBER: LDSQA4A28927D010TE LAR15SP 4LSQAL1H 30°

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
72.5°	4.2	5.3	5.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	5.3
75°	4.2	5.3	5.3	5.3	6.3	6.3	6.3	5.3	5.3	5.3	5.3
77.5°	4.2	4.2	5.3	5.3	5.3	5.3	5.3	5.3	5.3	4.2	4.2
80°	4.2	4.2	4.2	5.3	5.3	5.3	5.3	4.2	4.2	4.2	3.2
82.5°	3.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	3.2	3.2	3.2
85°	3.2	4.2	4.2	4.2	4.2	4.2	4.2	3.2	3.2	3.2	2.1
87.5°	3.2	3.2	3.2	4.2	4.2	4.2	3.2	3.2	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: P182794

CATALOG NUMBER: LDSQA4A28927D010TE LAR15SP 4LSQAL1H 30°

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	179.9	179.9	179.9	179.9	179.9	179.9	179.9	179.9
2.5°	160.9	161.9	160.9	160.9	158.7	159.8	157.7	160.9
5°	147.1	148.2	147.1	147.1	145.0	145.0	143.9	147.1
7.5°	135.5	136.5	134.4	134.4	132.3	133.3	132.3	134.4
10°	123.8	123.8	123.8	122.8	121.7	122.8	121.7	123.8
12.5°	112.2	113.2	113.2	113.2	112.2	112.2	111.1	114.3
15°	102.7	103.7	104.8	104.8	103.7	104.8	103.7	105.8
17.5°	94.2	96.3	96.3	97.4	97.4	98.4	98.4	100.5
20°	85.7	88.9	88.9	90.0	90.0	92.1	92.1	94.2
22.5°	77.3	80.4	81.5	81.5	82.5	84.7	84.7	86.8
25°	69.8	73.0	74.1	74.1	75.1	77.3	77.3	79.4
26°	66.7	69.8	70.9	72.0	73.0	75.1	75.1	77.3
27°	63.5	66.7	67.7	68.8	69.8	72.0	72.0	74.1
28°	61.4	64.6	65.6	66.7	67.7	69.8	69.8	70.9
29°	58.2	61.4	62.4	63.5	64.6	66.7	66.7	68.8
30°	56.1	58.2	59.3	60.3	61.4	64.6	64.6	66.7
31°	52.9	56.1	57.1	58.2	59.3	61.4	61.4	64.6
32°	50.8	52.9	54.0	55.0	57.1	58.2	59.3	61.4
33°	47.6	50.8	51.9	52.9	54.0	56.1	57.1	59.3
34°	45.5	47.6	49.7	50.8	51.9	54.0	55.0	57.1
35°	43.4	45.5	46.6	47.6	49.7	51.9	51.9	54.0
36°	41.3	43.4	44.4	45.5	47.6	49.7	49.7	51.9
37°	39.2	41.3	42.3	43.4	45.5	47.6	47.6	49.7
38°	37.0	39.2	40.2	41.3	43.4	45.5	46.6	48.7
39°	34.9	38.1	39.2	40.2	41.3	43.4	44.4	45.5
40°	33.9	36.0	37.0	38.1	39.2	41.3	42.3	43.4
42.5°	28.6	31.7	32.8	33.9	34.9	36.0	37.0	38.1
45°	25.4	27.5	27.5	28.6	29.6	31.7	31.7	33.9
47.5°	22.2	23.3	24.3	24.3	25.4	27.5	27.5	28.6
50°	19.0	20.1	21.2	21.2	22.2	23.3	24.3	25.4
51°	18.0	19.0	19.0	20.1	21.2	22.2	23.3	24.3
52°	16.9	18.0	18.0	19.0	20.1	21.2	21.2	22.2
53°	15.9	16.9	16.9	18.0	18.0	20.1	20.1	21.2
54°	14.8	15.9	15.9	16.9	16.9	19.0	19.0	20.1
55°	13.8	14.8	15.9	15.9	15.9	16.9	18.0	19.0
57.5°	12.7	13.8	13.8	13.8	14.8	14.8	15.9	15.9
60°	10.6	11.6	11.6	11.6	12.7	12.7	12.7	13.8
61°	10.6	10.6	11.6	11.6	10.6	10.6	10.6	11.6
62°	9.5	10.6	10.6	9.5	9.5	9.5	9.5	10.6
63°	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
64°	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
65°	8.5	8.5	8.5	8.5	8.5	8.5	7.4	8.5
66°	7.4	8.5	8.5	7.4	7.4	7.4	7.4	7.4



TEST NUMBER: P182794

CATALOG NUMBER: LDSQA4A28927D010TE LAR15SP 4LSQAL1H 30°

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
72.5°	5.3	5.3	5.3	5.3	5.3	4.2	4.2	4.2
75°	5.3	4.2	4.2	4.2	4.2	4.2	4.2	3.2
77.5°	4.2	4.2	4.2	4.2	3.2	3.2	3.2	3.2
80°	3.2	3.2	3.2	3.2	3.2	3.2	2.1	2.1
82.5°	3.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1
85°	2.1	2.1	2.1	2.1	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°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	3.2	3.2
70°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	3.2	3.2





67.5°	3.2	3.2	4.2	4.2	4.2	4.2	3.2	3.2	3.2	4.2	4.2
70°	3.2	4.2	4.2	4.2	4.2	4.2	4.2	3.2	3.2	4.2	4.2





67.5°	5.3	6.3	6.3	6.3	7.4	7.4	7.4	7.4	7.4	7.4	7.4
70°	5.3	5.3	6.3	6.3	6.3	7.4	7.4	6.3	6.3	6.3	6.3





67.5°	7.4	7.4	7.4	7.4	6.3	6.3	6.3	6.3
70°	6.3	6.3	6.3	6.3	5.3	5.3	5.3	5.3



(END OF REPORT)