

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: P182773

Luminaire Tested: **LDSQA4A18940D010TE LAR15SP 4LSQAL1H 30°**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182773
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: LDSQA4A18940D010TE LAR15SP 4LSQAL1H 30°
Description: PORTFOLIO 4" SQUARE LENSED ADJUSTABLE, SELF-FLANGED, 15° SPOT, 30° Tilt
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1587.7 lumens
Efficiency: N/A
Efficacy: 54.5 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

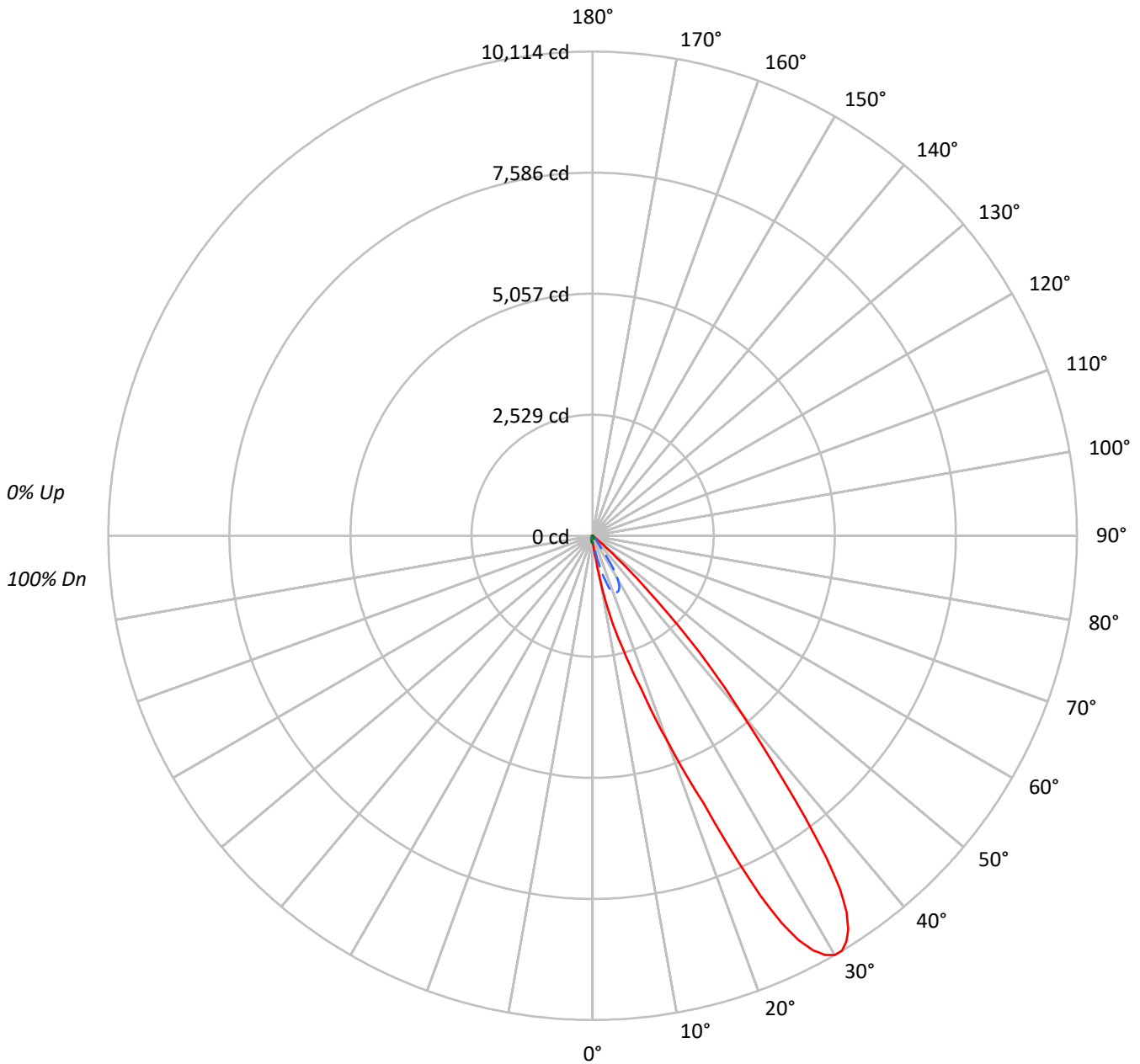
Input Watts (W): 29.12
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	72	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°	14512	14512	14512
5°	23057	13799	11913
10°	100996	12227	10142
15°	246770	9899	8836
20°	470793	7361	8082
25°	887253	5280	7065
30°	1131306	3747	6208
35°	1064202	2294	5310
40°	610507	1555	4565
45°	235672	1082	3863
50°	31348	799	3195
55°	4763	743	2685
60°	1376	678	2228
65°	802	802	1628
70°	510	991	1246
75°	674	973	973
80°	0	1450	1004
85°	0	2890	1000



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	18.7	1.2
10°-20°	170.2	10.7
20°-30°	542.6	34.2
30°-40°	628.8	39.6
40°-50°	204.5	12.9
50°-60°	12.9	0.8
60°-70°	4.7	0.3
70°-80°	3.3	0.2
80°-90°	2.0	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°	731.5	46.1
0°-40°	1360.3	85.7
0°-60°	1577.7	99.4
0°-90°	1587.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1587.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	150	150	150	150	150	
5°	237	198	142	124	122	46
15°	2460	886	99	85	88	780
25°	8301	1275	49	52	66	3730
35°	8999	304	19	30	45	5178
45°	1720	37	8	18	28	1536
55°	28	7	4	10	16	44
65°	4	3	4	7	7	3
75°	2	3	3	4	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°	149.8	149.8	149.8	149.8	149.8	149.8	149.8	149.8	149.8	149.8	149.8
2.5°	182.4	184.2	184.2	181.5	181.5	178.9	177.1	176.3	175.4	172.7	171.8
5°	237.1	238.8	239.7	232.7	230.0	224.7	220.3	215.9	210.6	204.5	198.3
7.5°	457.4	420.4	426.5	373.7	364.0	341.0	322.5	293.5	272.3	251.2	234.4
10°	1026.7	991.4	985.3	907.7	831.0	773.7	712.1	605.4	508.5	405.4	321.7
12.5°	1759.0	1707.0	1677.9	1525.5	1435.6	1351.0	1256.7	1090.1	904.2	745.5	579.9
15°	2460.5	2456.1	2352.1	2182.0	2011.0	1907.1	1785.4	1579.2	1358.9	1117.4	886.5
17.5°	3307.4	3341.7	3163.7	2831.5	2560.9	2391.7	2224.3	1901.8	1626.8	1392.4	1139.5
20°	4566.7	4475.1	4164.0	3644.0	3186.6	2932.0	2672.0	2197.0	1803.1	1519.3	1262.8
22.5°	6046.3	5975.8	5394.2	4527.0	3801.8	3444.0	3086.2	2468.4	1955.5	1588.0	1286.6
25°	8300.6	8010.7	6881.8	5474.4	4365.8	3859.0	3399.9	2644.7	2024.3	1596.8	1275.2
26°	8992.4	8788.8	7486.3	5850.7	4539.4	3973.6	3478.3	2680.8	2029.5	1588.9	1253.2
27°	9483.3	9328.2	7989.5	6127.4	4665.4	4052.9	3529.5	2695.8	2017.2	1572.2	1223.2
28°	9806.7	9682.4	8369.3	6327.5	4742.1	4095.2	3554.1	2692.3	1992.5	1543.1	1180.9
29°	10012.0	9892.2	8591.4	6441.1	4769.4	4102.3	3548.0	2665.8	1952.9	1499.9	1120.1
30°	10113.4	9982.9	8666.3	6453.5	4739.4	4061.7	3501.3	2607.7	1898.2	1447.9	1053.1
31°	10114.2	9969.7	8603.8	6358.3	4650.4	3975.4	3418.4	2510.7	1826.9	1386.2	963.2
32°	9997.0	9848.1	8394.9	6165.3	4511.2	3867.0	3307.4	2412.0	1751.9	1317.5	833.7
33°	9800.5	9624.3	8032.7	5897.4	4333.2	3718.9	3174.3	2301.9	1677.0	1207.3	663.6
34°	9483.3	9242.7	7526.9	5572.2	4118.1	3546.2	3021.8	2182.9	1601.3	1054.0	474.1
35°	8998.6	8659.3	6941.7	5212.7	3888.1	3359.4	2850.0	2058.6	1508.7	864.5	304.0
36°	8297.1	7859.1	6332.8	4840.8	3651.1	3162.9	2675.5	1938.8	1362.4	655.7	199.2
37°	7381.5	6995.5	5750.2	4466.2	3405.2	2953.1	2516.0	1818.0	1182.7	458.3	162.2
38°	6441.1	6156.5	5180.9	4094.3	3150.5	2726.6	2322.1	1692.0	986.1	301.4	135.7
39°	5593.4	5403.0	4624.0	3726.0	2887.9	2528.3	2128.2	1531.6	776.4	214.1	114.6
40°	4827.6	4696.2	4085.5	3350.6	2625.3	2288.6	1945.8	1335.1	559.6	171.0	96.1
42.5°	3292.4	3227.2	2857.9	2411.1	1942.3	1749.3	1532.5	802.8	222.1	108.4	58.2
45°	1720.2	1692.0	1558.1	1411.8	1266.4	1216.1	985.3	360.4	125.1	63.5	37.0
47.5°	669.8	671.5	555.2	474.1	450.3	418.6	317.3	129.5	70.5	38.8	24.7
50°	208.0	223.8	206.2	194.8	148.9	124.3	103.1	64.3	37.9	23.8	15.9
51°	127.8	135.7	127.8	127.8	104.9	91.7	78.4	49.4	30.0	19.4	14.1
52°	82.8	87.2	82.8	77.6	72.3	65.2	56.4	37.0	23.8	15.9	11.5
53°	56.4	59.0	56.4	52.9	48.5	44.9	39.7	27.3	19.4	13.2	9.7
54°	39.7	41.4	39.7	37.0	34.4	31.7	29.1	21.2	15.9	11.5	8.8
55°	28.2	30.0	29.1	27.3	24.7	23.8	22.0	16.7	13.2	9.7	7.1
57.5°	13.2	14.1	14.1	13.2	13.2	12.3	11.5	10.6	7.9	6.2	5.3
60°	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	5.3	4.4	4.4
61°	5.3	5.3	5.3	5.3	5.3	5.3	6.2	5.3	4.4	4.4	3.5
62°	4.4	4.4	4.4	4.4	4.4	5.3	5.3	4.4	4.4	3.5	3.5
63°	3.5	3.5	3.5	3.5	4.4	4.4	4.4	4.4	3.5	3.5	3.5
64°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	2.6
65°	3.5	3.5	2.6	2.6	2.6	3.5	2.6	3.5	2.6	2.6	2.6
66°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
72.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.6
75°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.6
77.5°	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9	1.8	1.8	2.6
80°	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	1.8	1.8	1.8
82.5°	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9	1.8	1.8
85°	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	1.8	1.8	1.8
87.5°	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.9	0.9	1.8	1.8
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°	149.8	149.8	149.8	149.8	149.8	149.8	149.8	149.8	149.8	149.8	149.8
2.5°	166.6	162.2	160.4	158.6	157.7	156.0	153.3	150.7	149.8	146.3	142.8
5°	187.7	179.8	173.6	167.4	165.7	161.3	156.0	149.8	147.2	141.9	137.5
7.5°	212.4	196.5	185.1	174.5	170.1	164.8	155.1	147.2	141.9	134.0	128.7
10°	253.8	216.8	194.8	176.3	169.2	162.2	149.8	139.2	132.2	124.3	118.1
12.5°	401.9	281.1	211.5	177.1	167.4	156.9	141.9	129.5	120.7	111.9	106.6
15°	633.6	428.3	274.1	185.9	163.9	148.1	130.4	116.3	107.5	98.7	93.4
17.5°	846.0	576.3	357.8	207.1	165.7	140.1	116.3	102.2	92.5	84.6	81.1
20°	948.2	646.0	398.3	211.5	155.1	125.1	100.5	87.2	78.4	71.4	67.9
22.5°	957.9	641.6	373.7	180.7	128.7	105.8	84.6	72.3	65.2	59.9	56.4
25°	912.1	569.3	299.6	133.1	100.5	88.1	69.6	59.0	53.8	49.4	46.7
26°	876.9	527.9	263.5	115.4	91.7	80.2	63.5	54.6	49.4	45.8	43.2
27°	828.4	479.4	221.2	99.6	84.6	72.3	58.2	50.2	45.8	43.2	40.5
28°	770.2	431.8	183.3	88.1	76.7	65.2	53.8	45.8	42.3	39.7	37.0
29°	707.7	369.2	143.6	79.3	68.7	59.0	48.5	41.4	37.9	36.1	34.4
30°	619.5	287.3	110.2	71.4	61.7	52.9	44.1	37.9	35.3	33.5	31.7
31°	495.3	197.4	89.0	63.5	55.5	47.6	39.7	34.4	31.7	30.0	29.1
32°	355.1	121.6	77.6	56.4	49.4	43.2	34.4	30.8	28.2	27.3	26.4
33°	218.6	99.6	68.7	50.2	43.2	37.9	30.8	27.3	25.6	24.7	23.8
34°	143.6	86.4	60.8	43.2	37.9	32.6	26.4	23.8	22.9	22.0	22.0
35°	121.6	76.7	52.9	37.0	31.7	28.2	22.9	21.2	20.3	19.4	20.3
36°	104.9	67.0	44.1	31.7	27.3	23.8	20.3	18.5	17.6	17.6	18.5
37°	92.5	56.4	37.0	26.4	23.8	21.2	17.6	16.7	15.9	15.9	16.7
38°	78.4	45.8	30.8	22.9	20.3	17.6	15.9	15.0	15.0	15.0	15.9
39°	64.3	38.8	26.4	19.4	17.6	15.9	14.1	13.2	13.2	14.1	14.1
40°	52.9	32.6	22.0	16.7	15.0	14.1	12.3	12.3	12.3	12.3	13.2
42.5°	34.4	22.0	15.9	12.3	11.5	10.6	9.7	9.7	9.7	9.7	10.6
45°	22.9	15.9	12.3	9.7	8.8	7.9	7.9	7.1	7.9	7.9	8.8
47.5°	15.9	11.5	8.8	7.1	6.2	5.3	5.3	5.3	6.2	7.1	7.1
50°	11.5	7.9	6.2	4.4	4.4	4.4	4.4	4.4	5.3	5.3	6.2
51°	9.7	7.1	5.3	4.4	4.4	3.5	3.5	3.5	4.4	5.3	6.2
52°	7.9	6.2	4.4	3.5	3.5	3.5	3.5	3.5	4.4	4.4	5.3
53°	7.1	5.3	4.4	3.5	3.5	3.5	3.5	3.5	4.4	4.4	5.3
54°	6.2	4.4	3.5	3.5	3.5	2.6	2.6	3.5	3.5	4.4	5.3
55°	5.3	4.4	3.5	3.5	2.6	2.6	2.6	2.6	3.5	4.4	4.4
57.5°	4.4	3.5	3.5	2.6	2.6	2.6	2.6	2.6	3.5	3.5	4.4
60°	3.5	3.5	3.5	2.6	2.6	2.6	2.6	2.6	3.5	3.5	4.4
61°	3.5	2.6	2.6	2.6	2.6	2.6	2.6	2.6	3.5	3.5	4.4
62°	3.5	2.6	3.5	3.5	3.5	2.6	2.6	2.6	3.5	3.5	4.4
63°	3.5	3.5	3.5	3.5	3.5	2.6	2.6	2.6	3.5	3.5	3.5
64°	3.5	3.5	3.5	3.5	3.5	3.5	2.6	2.6	3.5	3.5	4.4
65°	2.6	3.5	3.5	3.5	3.5	3.5	2.6	2.6	3.5	3.5	4.4
66°	2.6	3.5	3.5	3.5	3.5	3.5	3.5	2.6	3.5	3.5	3.5



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
72.5°	2.6	2.6	3.5	3.5	3.5	3.5	3.5	2.6	2.6	3.5	3.5
75°	2.6	2.6	3.5	3.5	3.5	3.5	3.5	2.6	2.6	2.6	3.5
77.5°	2.6	2.6	3.5	3.5	3.5	3.5	3.5	2.6	2.6	2.6	3.5
80°	2.6	2.6	3.5	3.5	3.5	3.5	2.6	2.6	2.6	2.6	2.6
82.5°	2.6	2.6	2.6	3.5	3.5	2.6	2.6	2.6	2.6	2.6	2.6
85°	2.6	2.6	2.6	3.5	3.5	2.6	2.6	2.6	2.6	2.6	2.6
87.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
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: LDSQA4A18940D010TE LAR15SP 4LSQAL1H 30°

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	149.8	149.8	149.8	149.8	149.8	149.8	149.8	149.8	149.8	149.8	149.8
2.5°	141.0	141.0	140.1	138.4	140.1	138.4	136.6	135.7	134.8	134.0	132.2
5°	134.0	133.1	131.3	130.4	130.4	128.7	126.9	125.1	124.3	123.4	121.6
7.5°	125.1	124.3	121.6	120.7	120.7	119.0	116.3	115.4	114.6	113.7	111.9
10°	114.6	113.7	111.0	110.2	110.2	108.4	106.6	104.9	104.0	103.1	101.3
12.5°	102.2	101.3	99.6	98.7	98.7	96.9	95.2	94.3	94.3	93.4	92.5
15°	89.9	89.0	87.2	87.2	87.2	85.5	84.6	83.7	84.6	84.6	83.7
17.5°	77.6	76.7	74.9	74.9	74.9	74.9	74.0	74.0	74.9	75.8	75.8
20°	65.2	64.3	64.3	63.5	64.3	65.2	64.3	65.2	67.0	67.9	68.7
22.5°	53.8	53.8	53.8	53.8	54.6	55.5	55.5	57.3	59.0	59.9	61.7
25°	44.9	44.9	45.8	45.8	46.7	47.6	48.5	49.4	52.0	53.8	54.6
26°	41.4	42.3	42.3	43.2	44.1	44.9	45.8	46.7	49.4	51.1	52.0
27°	38.8	38.8	39.7	40.5	41.4	42.3	43.2	44.9	46.7	48.5	50.2
28°	36.1	36.1	37.0	37.9	38.8	39.7	40.5	42.3	44.1	46.7	47.6
29°	33.5	34.4	34.4	35.3	36.1	37.0	38.8	39.7	42.3	44.1	45.8
30°	30.8	31.7	32.6	32.6	33.5	34.4	36.1	37.9	39.7	42.3	43.2
31°	29.1	30.0	30.0	30.8	31.7	32.6	34.4	36.1	37.9	39.7	41.4
32°	26.4	28.2	28.2	28.2	29.1	30.8	32.6	33.5	36.1	37.9	38.8
33°	24.7	25.6	26.4	26.4	27.3	29.1	30.8	31.7	34.4	36.1	37.0
34°	22.9	23.8	24.7	24.7	25.6	27.3	29.1	30.0	32.6	33.5	35.3
35°	21.2	22.0	22.9	22.9	23.8	25.6	27.3	28.2	30.0	31.7	33.5
36°	19.4	20.3	21.2	22.0	22.9	24.7	25.6	27.3	28.2	30.0	31.7
37°	17.6	18.5	20.3	20.3	22.0	22.9	24.7	25.6	27.3	28.2	30.0
38°	15.9	17.6	18.5	19.4	20.3	22.0	22.9	23.8	25.6	27.3	28.2
39°	15.0	16.7	17.6	18.5	19.4	20.3	21.2	22.9	23.8	25.6	26.4
40°	14.1	15.0	16.7	16.7	18.5	19.4	20.3	21.2	22.9	23.8	25.6
42.5°	11.5	13.2	14.1	15.0	15.9	16.7	17.6	18.5	19.4	21.2	22.0
45°	9.7	11.5	12.3	12.3	13.2	14.1	15.0	15.9	17.6	18.5	19.4
47.5°	7.9	9.7	10.6	11.5	11.5	12.3	13.2	14.1	15.0	15.9	16.7
50°	7.1	7.9	8.8	9.7	10.6	10.6	11.5	12.3	13.2	14.1	14.1
51°	7.1	7.9	8.8	8.8	9.7	10.6	11.5	11.5	12.3	13.2	13.2
52°	6.2	7.1	7.9	8.8	9.7	9.7	10.6	11.5	11.5	12.3	13.2
53°	6.2	7.1	7.9	7.9	8.8	9.7	9.7	10.6	11.5	11.5	12.3
54°	5.3	7.1	7.9	7.9	8.8	8.8	9.7	10.6	10.6	10.6	11.5
55°	5.3	6.2	7.1	7.9	7.9	8.8	8.8	9.7	9.7	10.6	10.6
57.5°	5.3	6.2	7.1	7.1	7.9	7.9	8.8	8.8	8.8	8.8	9.7
60°	4.4	5.3	6.2	7.1	7.1	7.9	7.9	7.9	7.9	7.9	8.8
61°	4.4	5.3	6.2	6.2	7.1	7.1	7.9	7.9	7.9	7.9	7.9
62°	4.4	5.3	6.2	6.2	7.1	7.1	7.1	7.9	7.9	7.9	7.9
63°	4.4	5.3	6.2	6.2	7.1	7.1	7.1	7.1	7.1	7.1	7.9
64°	4.4	5.3	6.2	6.2	7.1	7.1	7.1	7.1	7.1	7.1	7.1
65°	4.4	5.3	6.2	6.2	6.2	7.1	7.1	7.1	7.1	7.1	7.1
66°	4.4	5.3	6.2	6.2	6.2	6.2	7.1	7.1	7.1	7.1	6.2



TEST NUMBER: P182773

CATALOG NUMBER: LDSQA4A18940D010TE LAR15SP 4LSQAL1H 30°

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
72.5°	3.5	4.4	4.4	5.3	5.3	5.3	5.3	5.3	5.3	5.3	4.4
75°	3.5	4.4	4.4	4.4	5.3	5.3	5.3	4.4	4.4	4.4	4.4
77.5°	3.5	3.5	4.4	4.4	4.4	4.4	4.4	4.4	4.4	3.5	3.5
80°	3.5	3.5	3.5	4.4	4.4	4.4	4.4	3.5	3.5	3.5	2.6
82.5°	2.6	3.5	3.5	3.5	3.5	3.5	3.5	3.5	2.6	2.6	2.6
85°	2.6	3.5	3.5	3.5	3.5	3.5	3.5	2.6	2.6	2.6	1.8
87.5°	2.6	2.6	2.6	3.5	3.5	3.5	2.6	2.6	1.8	1.8	1.8
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: P182773

CATALOG NUMBER: LDSQA4A18940D010TE LAR15SP 4LSQAL1H 30°

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	149.8	149.8	149.8	149.8	149.8	149.8	149.8	149.8
2.5°	134.0	134.8	134.0	134.0	132.2	133.1	131.3	134.0
5°	122.5	123.4	122.5	122.5	120.7	120.7	119.9	122.5
7.5°	112.8	113.7	111.9	111.9	110.2	111.0	110.2	111.9
10°	103.1	103.1	103.1	102.2	101.3	102.2	101.3	103.1
12.5°	93.4	94.3	94.3	94.3	93.4	93.4	92.5	95.2
15°	85.5	86.4	87.2	87.2	86.4	87.2	86.4	88.1
17.5°	78.4	80.2	80.2	81.1	81.1	82.0	82.0	83.7
20°	71.4	74.0	74.0	74.9	74.9	76.7	76.7	78.4
22.5°	64.3	67.0	67.9	67.9	68.7	70.5	70.5	72.3
25°	58.2	60.8	61.7	61.7	62.6	64.3	64.3	66.1
26°	55.5	58.2	59.0	59.9	60.8	62.6	62.6	64.3
27°	52.9	55.5	56.4	57.3	58.2	59.9	59.9	61.7
28°	51.1	53.8	54.6	55.5	56.4	58.2	58.2	59.0
29°	48.5	51.1	52.0	52.9	53.8	55.5	55.5	57.3
30°	46.7	48.5	49.4	50.2	51.1	53.8	53.8	55.5
31°	44.1	46.7	47.6	48.5	49.4	51.1	51.1	53.8
32°	42.3	44.1	44.9	45.8	47.6	48.5	49.4	51.1
33°	39.7	42.3	43.2	44.1	44.9	46.7	47.6	49.4
34°	37.9	39.7	41.4	42.3	43.2	44.9	45.8	47.6
35°	36.1	37.9	38.8	39.7	41.4	43.2	43.2	44.9
36°	34.4	36.1	37.0	37.9	39.7	41.4	41.4	43.2
37°	32.6	34.4	35.3	36.1	37.9	39.7	39.7	41.4
38°	30.8	32.6	33.5	34.4	36.1	37.9	38.8	40.5
39°	29.1	31.7	32.6	33.5	34.4	36.1	37.0	37.9
40°	28.2	30.0	30.8	31.7	32.6	34.4	35.3	36.1
42.5°	23.8	26.4	27.3	28.2	29.1	30.0	30.8	31.7
45°	21.2	22.9	22.9	23.8	24.7	26.4	26.4	28.2
47.5°	18.5	19.4	20.3	20.3	21.2	22.9	22.9	23.8
50°	15.9	16.7	17.6	17.6	18.5	19.4	20.3	21.2
51°	15.0	15.9	15.9	16.7	17.6	18.5	19.4	20.3
52°	14.1	15.0	15.0	15.9	16.7	17.6	17.6	18.5
53°	13.2	14.1	14.1	15.0	15.0	16.7	16.7	17.6
54°	12.3	13.2	13.2	14.1	14.1	15.9	15.9	16.7
55°	11.5	12.3	13.2	13.2	13.2	14.1	15.0	15.9
57.5°	10.6	11.5	11.5	11.5	12.3	12.3	13.2	13.2
60°	8.8	9.7	9.7	9.7	10.6	10.6	10.6	11.5
61°	8.8	8.8	9.7	9.7	8.8	8.8	8.8	9.7
62°	7.9	8.8	8.8	7.9	7.9	7.9	7.9	8.8
63°	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
64°	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1
65°	7.1	7.1	7.1	7.1	7.1	7.1	6.2	7.1
66°	6.2	7.1	7.1	6.2	6.2	6.2	6.2	6.2



TEST NUMBER: P182773

CATALOG NUMBER: LDSQA4A18940D010TE LAR15SP 4LSQAL1H 30°

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
72.5°	4.4	4.4	4.4	4.4	4.4	3.5	3.5	3.5
75°	4.4	3.5	3.5	3.5	3.5	3.5	3.5	2.6
77.5°	3.5	3.5	3.5	3.5	2.6	2.6	2.6	2.6
80°	2.6	2.6	2.6	2.6	2.6	2.6	1.8	1.8
82.5°	2.6	1.8	1.8	1.8	1.8	1.8	1.8	1.8
85°	1.8	1.8	1.8	1.8	0.9	0.9	0.9	0.9
87.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
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°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.6	2.6
70°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.6	2.6





67.5°	2.6	2.6	3.5	3.5	3.5	3.5	2.6	2.6	2.6	3.5	3.5
70°	2.6	3.5	3.5	3.5	3.5	3.5	3.5	2.6	2.6	3.5	3.5





67.5°	4.4	5.3	5.3	5.3	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
70°	4.4	4.4	5.3	5.3	5.3	6.2	6.2	5.3	5.3	5.3	5.3	5.3





67.5°	6.2	6.2	6.2	6.2	5.3	5.3	5.3	5.3
70°	5.3	5.3	5.3	5.3	4.4	4.4	4.4	4.4



(END OF REPORT)