

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: P182786

Luminaire Tested: **LDSQA4A13927D010TE LAR15SP 4LSQAL1H 30°**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182786
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: LDSQA4A13927D010TE 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: 1117.4 lumens
Efficiency: N/A
Efficacy: 50.2 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

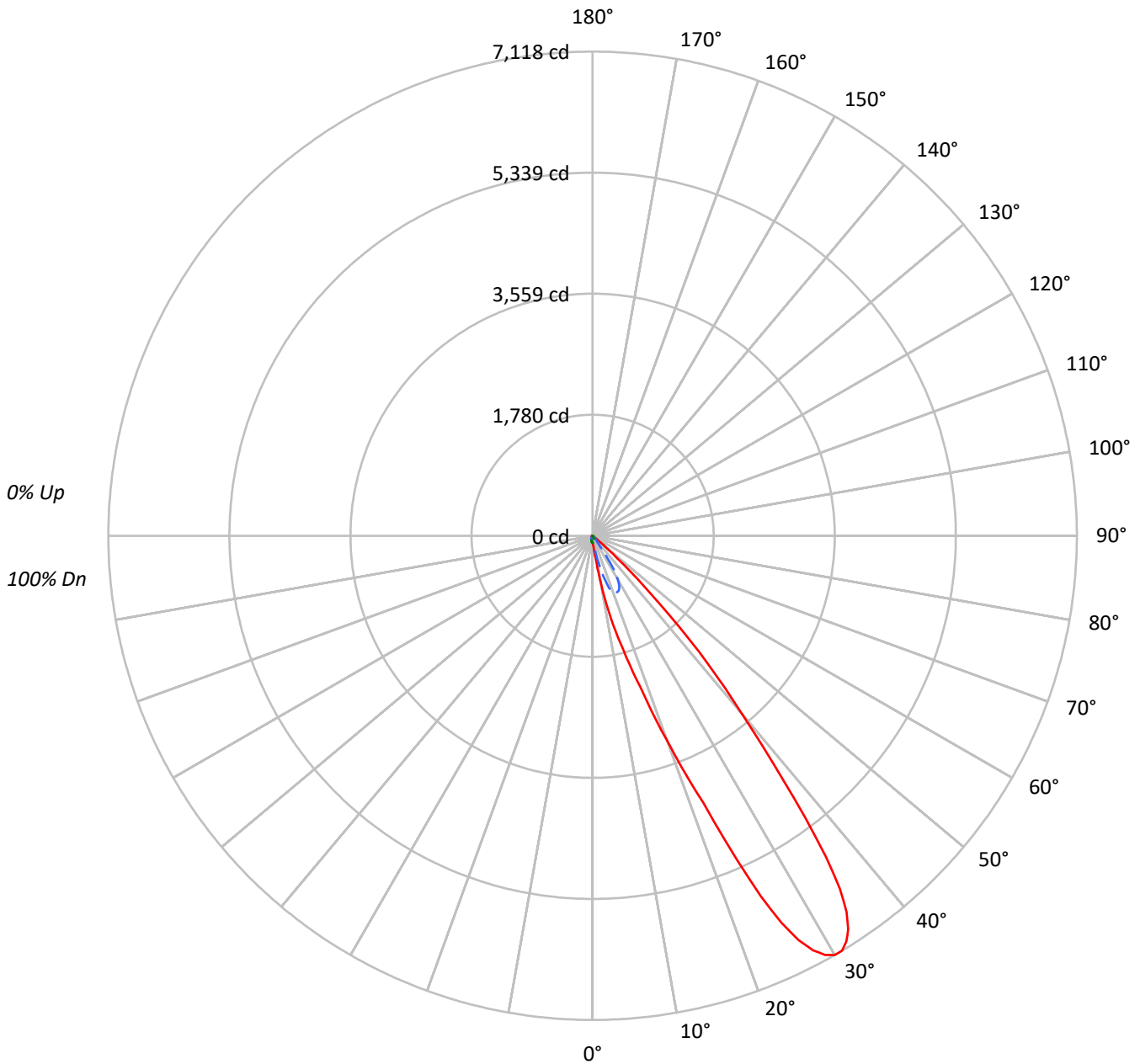
Input Watts (W): 22.27
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	10211	10211	10211
5°	16221	9715	8383
10°	71072	8598	7142
15°	173667	6970	6218
20°	331330	5175	5691
25°	624410	3709	4970
30°	796167	2640	4374
35°	748936	1608	3737
40°	429642	1100	3212
45°	165855	767	2713
50°	22064	558	2246
55°	3344	524	1892
60°	969	484	1569
65°	573	573	1146
70°	340	708	878
75°	449	711	711
80°	0	1060	669
85°	0	2112	667



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.2	1.2
10°-20°	119.7	10.7
20°-30°	381.9	34.2
30°-40°	442.5	39.6
40°-50°	143.9	12.9
50°-60°	9.1	0.8
60°-70°	3.3	0.3
70°-80°	2.4	0.2
80°-90°	1.4	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°	514.8	46.1
0°-40°	957.3	85.7
0°-60°	1110.3	99.4
0°-90°	1117.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1117.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	105	105	105	105	105	
5°	167	140	100	87	86	32
15°	1732	624	70	60	62	549
25°	5842	897	35	37	46	2625
35°	6333	214	14	21	32	3644
45°	1211	26	6	12	20	1081
55°	20	5	3	7	11	31
65°	2	2	2	5	5	2
75°	1	2	2	3	2	1
85°	0	1	2	2	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°	105.4	105.4	105.4	105.4	105.4	105.4	105.4	105.4	105.4	105.4	105.4
2.5°	128.4	129.6	129.6	127.8	127.8	125.9	124.7	124.0	123.4	121.6	120.9
5°	166.8	168.1	168.7	163.7	161.9	158.2	155.0	151.9	148.2	143.9	139.5
7.5°	321.9	295.8	300.2	263.0	256.1	240.0	227.0	206.5	191.6	176.8	165.0
10°	722.5	697.7	693.4	638.8	584.8	544.5	501.1	426.1	357.9	285.3	226.4
12.5°	1237.9	1201.3	1180.9	1073.6	1010.3	950.8	884.4	767.2	636.3	524.7	408.1
15°	1731.6	1728.5	1655.3	1535.6	1415.3	1342.1	1256.5	1111.4	956.3	786.4	623.9
17.5°	2327.6	2351.8	2226.5	1992.7	1802.3	1683.2	1565.4	1338.4	1144.9	979.9	801.9
20°	3213.9	3149.4	2930.4	2564.5	2242.6	2063.4	1880.4	1546.2	1268.9	1069.2	888.7
22.5°	4255.2	4205.6	3796.2	3186.0	2675.5	2423.7	2171.9	1737.2	1376.2	1117.6	905.5
25°	5841.6	5637.6	4843.1	3852.7	3072.5	2715.8	2392.7	1861.2	1424.6	1123.8	897.4
26°	6328.5	6185.2	5268.6	4117.5	3194.6	2796.5	2447.9	1886.6	1428.3	1118.2	881.9
27°	6673.9	6564.8	5622.7	4312.2	3283.3	2852.3	2483.9	1897.2	1419.6	1106.4	860.8
28°	6901.6	6814.1	5890.0	4453.0	3337.3	2882.1	2501.3	1894.7	1402.3	1086.0	831.1
29°	7046.1	6961.7	6046.3	4533.0	3356.5	2887.0	2496.9	1876.1	1374.4	1055.6	788.3
30°	7117.4	7025.6	6099.0	4541.7	3335.4	2858.5	2464.0	1835.2	1335.9	1019.0	741.1
31°	7118.0	7016.3	6055.0	4474.7	3272.8	2797.7	2405.7	1766.9	1285.7	975.6	677.9
32°	7035.5	6930.7	5908.0	4338.9	3174.8	2721.4	2327.6	1697.5	1233.0	927.2	586.7
33°	6897.2	6773.2	5653.1	4150.4	3049.5	2617.2	2234.0	1620.0	1180.2	849.7	467.0
34°	6673.9	6504.6	5297.1	3921.5	2898.2	2495.7	2126.7	1536.2	1126.9	741.8	333.7
35°	6332.8	6094.1	4885.3	3668.5	2736.3	2364.2	2005.7	1448.8	1061.8	608.4	214.0
36°	5839.2	5530.9	4456.7	3406.7	2569.5	2225.9	1882.9	1364.4	958.8	461.4	140.2
37°	5194.8	4923.1	4046.8	3143.2	2396.4	2078.3	1770.7	1279.5	832.3	322.5	114.1
38°	4533.0	4332.7	3646.1	2881.4	2217.2	1918.9	1634.2	1190.8	694.0	212.1	95.5
39°	3936.4	3802.4	3254.2	2622.2	2032.4	1779.3	1497.8	1077.9	546.4	150.7	80.6
40°	3397.4	3305.0	2875.2	2358.0	1847.6	1610.7	1369.4	939.6	393.8	120.3	67.6
42.5°	2317.1	2271.2	2011.3	1696.9	1366.9	1231.1	1078.5	565.0	156.3	76.3	40.9
45°	1210.6	1190.8	1096.5	993.6	891.2	855.9	693.4	253.7	88.1	44.7	26.0
47.5°	471.3	472.6	390.7	333.7	316.9	294.6	223.3	91.2	49.6	27.3	17.4
50°	146.4	157.5	145.1	137.1	104.8	87.4	72.6	45.3	26.7	16.7	11.2
51°	89.9	95.5	89.9	89.9	73.8	64.5	55.2	34.7	21.1	13.6	9.9
52°	58.3	61.4	58.3	54.6	50.9	45.9	39.7	26.0	16.7	11.2	8.1
53°	39.7	41.6	39.7	37.2	34.1	31.6	27.9	19.2	13.6	9.3	6.8
54°	27.9	29.1	27.9	26.0	24.2	22.3	20.5	14.9	11.2	8.1	6.2
55°	19.8	21.1	20.5	19.2	17.4	16.7	15.5	11.8	9.3	6.8	5.0
57.5°	9.3	9.9	9.9	9.3	9.3	8.7	8.1	7.4	5.6	4.3	3.7
60°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	3.7	3.1	3.1
61°	3.7	3.7	3.7	3.7	3.7	3.7	4.3	3.7	3.1	3.1	2.5
62°	3.1	3.1	3.1	3.1	3.1	3.7	3.7	3.1	3.1	2.5	2.5
63°	2.5	2.5	2.5	2.5	3.1	3.1	3.1	3.1	2.5	2.5	2.5
64°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	1.9
65°	2.5	2.5	1.9	1.9	1.9	2.5	1.9	2.5	1.9	1.9	1.9
66°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
72.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.9
75°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.9
77.5°	0.0	0.0	0.0	0.6	0.6	0.6	0.6	0.6	1.2	1.2	1.9
80°	0.0	0.0	0.0	0.0	0.6	0.6	0.6	0.6	1.2	1.2	1.2
82.5°	0.0	0.0	0.0	0.0	0.6	0.6	0.6	0.6	0.6	1.2	1.2
85°	0.0	0.0	0.0	0.0	0.6	0.6	0.6	0.6	1.2	1.2	1.2
87.5°	0.0	0.0	0.0	0.0	0.6	0.6	0.6	0.6	0.6	1.2	1.2
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°	105.4	105.4	105.4	105.4	105.4	105.4	105.4	105.4	105.4	105.4	105.4
2.5°	117.2	114.1	112.9	111.6	111.0	109.8	107.9	106.1	105.4	103.0	100.5
5°	132.1	126.5	122.2	117.8	116.6	113.5	109.8	105.4	103.6	99.9	96.8
7.5°	149.5	138.3	130.2	122.8	119.7	116.0	109.2	103.6	99.9	94.3	90.5
10°	178.6	152.6	137.1	124.0	119.1	114.1	105.4	98.0	93.0	87.4	83.1
12.5°	282.8	197.8	148.8	124.7	117.8	110.4	99.9	91.2	85.0	78.8	75.0
15°	445.9	301.4	192.9	130.9	115.4	104.2	91.8	81.9	75.7	69.5	65.7
17.5°	595.4	405.6	251.8	145.7	116.6	98.6	81.9	71.9	65.1	59.5	57.1
20°	667.3	454.6	280.3	148.8	109.2	88.1	70.7	61.4	55.2	50.2	47.8
22.5°	674.2	451.5	263.0	127.1	90.5	74.4	59.5	50.9	45.9	42.2	39.7
25°	641.9	400.6	210.9	93.6	70.7	62.0	49.0	41.6	37.8	34.7	32.9
26°	617.1	371.5	185.4	81.2	64.5	56.4	44.7	38.5	34.7	32.3	30.4
27°	583.0	337.4	155.7	70.1	59.5	50.9	40.9	35.4	32.3	30.4	28.5
28°	542.1	303.9	129.0	62.0	54.0	45.9	37.8	32.3	29.8	27.9	26.0
29°	498.0	259.9	101.1	55.8	48.4	41.6	34.1	29.1	26.7	25.4	24.2
30°	436.0	202.2	77.5	50.2	43.4	37.2	31.0	26.7	24.8	23.6	22.3
31°	348.6	138.9	62.6	44.7	39.1	33.5	27.9	24.2	22.3	21.1	20.5
32°	249.9	85.6	54.6	39.7	34.7	30.4	24.2	21.7	19.8	19.2	18.6
33°	153.8	70.1	48.4	35.4	30.4	26.7	21.7	19.2	18.0	17.4	16.7
34°	101.1	60.8	42.8	30.4	26.7	22.9	18.6	16.7	16.1	15.5	15.5
35°	85.6	54.0	37.2	26.0	22.3	19.8	16.1	14.9	14.3	13.6	14.3
36°	73.8	47.1	31.0	22.3	19.2	16.7	14.3	13.0	12.4	12.4	13.0
37°	65.1	39.7	26.0	18.6	16.7	14.9	12.4	11.8	11.2	11.2	11.8
38°	55.2	32.3	21.7	16.1	14.3	12.4	11.2	10.5	10.5	10.5	11.2
39°	45.3	27.3	18.6	13.6	12.4	11.2	9.9	9.3	9.3	9.9	9.9
40°	37.2	22.9	15.5	11.8	10.5	9.9	8.7	8.7	8.7	8.7	9.3
42.5°	24.2	15.5	11.2	8.7	8.1	7.4	6.8	6.8	6.8	6.8	7.4
45°	16.1	11.2	8.7	6.8	6.2	5.6	5.6	5.0	5.6	5.6	6.2
47.5°	11.2	8.1	6.2	5.0	4.3	3.7	3.7	3.7	4.3	5.0	5.0
50°	8.1	5.6	4.3	3.1	3.1	3.1	3.1	3.1	3.7	3.7	4.3
51°	6.8	5.0	3.7	3.1	3.1	2.5	2.5	2.5	3.1	3.7	4.3
52°	5.6	4.3	3.1	2.5	2.5	2.5	2.5	2.5	3.1	3.1	3.7
53°	5.0	3.7	3.1	2.5	2.5	2.5	2.5	2.5	3.1	3.1	3.7
54°	4.3	3.1	2.5	2.5	2.5	1.9	1.9	2.5	2.5	3.1	3.7
55°	3.7	3.1	2.5	2.5	1.9	1.9	1.9	1.9	2.5	3.1	3.1
57.5°	3.1	2.5	2.5	1.9	1.9	1.9	1.9	1.9	2.5	2.5	3.1
60°	2.5	2.5	2.5	1.9	1.9	1.9	1.9	1.9	2.5	2.5	3.1
61°	2.5	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.5	2.5	3.1
62°	2.5	1.9	2.5	2.5	2.5	1.9	1.9	1.9	2.5	2.5	3.1
63°	2.5	2.5	2.5	2.5	2.5	1.9	1.9	1.9	2.5	2.5	2.5
64°	2.5	2.5	2.5	2.5	2.5	2.5	1.9	1.9	2.5	2.5	3.1
65°	1.9	2.5	2.5	2.5	2.5	2.5	1.9	1.9	2.5	2.5	3.1
66°	1.9	2.5	2.5	2.5	2.5	2.5	2.5	1.9	2.5	2.5	2.5



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
72.5°	1.9	1.9	2.5	2.5	2.5	2.5	2.5	1.9	1.9	2.5	2.5
75°	1.9	1.9	2.5	2.5	2.5	2.5	2.5	1.9	1.9	1.9	2.5
77.5°	1.9	1.9	2.5	2.5	2.5	2.5	2.5	1.9	1.9	1.9	2.5
80°	1.9	1.9	2.5	2.5	2.5	2.5	1.9	1.9	1.9	1.9	1.9
82.5°	1.9	1.9	1.9	2.5	2.5	1.9	1.9	1.9	1.9	1.9	1.9
85°	1.9	1.9	1.9	2.5	2.5	1.9	1.9	1.9	1.9	1.9	1.9
87.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
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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CATALOG NUMBER: LDSQA4A13927D010TE LAR15SP 4LSQAL1H 30°

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	105.4	105.4	105.4	105.4	105.4	105.4	105.4	105.4	105.4	105.4	105.4
2.5°	99.2	99.2	98.6	97.4	98.6	97.4	96.1	95.5	94.9	94.3	93.0
5°	94.3	93.6	92.4	91.8	91.8	90.5	89.3	88.1	87.4	86.8	85.6
7.5°	88.1	87.4	85.6	85.0	85.0	83.7	81.9	81.2	80.6	80.0	78.8
10°	80.6	80.0	78.1	77.5	77.5	76.3	75.0	73.8	73.2	72.6	71.3
12.5°	71.9	71.3	70.1	69.5	69.5	68.2	67.0	66.4	66.4	65.7	65.1
15°	63.3	62.6	61.4	61.4	61.4	60.2	59.5	58.9	59.5	59.5	58.9
17.5°	54.6	54.0	52.7	52.7	52.7	52.7	52.1	52.1	52.7	53.3	53.3
20°	45.9	45.3	45.3	44.7	45.3	45.9	45.3	45.9	47.1	47.8	48.4
22.5°	37.8	37.8	37.8	37.8	38.5	39.1	39.1	40.3	41.6	42.2	43.4
25°	31.6	31.6	32.3	32.3	32.9	33.5	34.1	34.7	36.6	37.8	38.5
26°	29.1	29.8	29.8	30.4	31.0	31.6	32.3	32.9	34.7	36.0	36.6
27°	27.3	27.3	27.9	28.5	29.1	29.8	30.4	31.6	32.9	34.1	35.4
28°	25.4	25.4	26.0	26.7	27.3	27.9	28.5	29.8	31.0	32.9	33.5
29°	23.6	24.2	24.2	24.8	25.4	26.0	27.3	27.9	29.8	31.0	32.3
30°	21.7	22.3	22.9	22.9	23.6	24.2	25.4	26.7	27.9	29.8	30.4
31°	20.5	21.1	21.1	21.7	22.3	22.9	24.2	25.4	26.7	27.9	29.1
32°	18.6	19.8	19.8	19.8	20.5	21.7	22.9	23.6	25.4	26.7	27.3
33°	17.4	18.0	18.6	18.6	19.2	20.5	21.7	22.3	24.2	25.4	26.0
34°	16.1	16.7	17.4	17.4	18.0	19.2	20.5	21.1	22.9	23.6	24.8
35°	14.9	15.5	16.1	16.1	16.7	18.0	19.2	19.8	21.1	22.3	23.6
36°	13.6	14.3	14.9	15.5	16.1	17.4	18.0	19.2	19.8	21.1	22.3
37°	12.4	13.0	14.3	14.3	15.5	16.1	17.4	18.0	19.2	19.8	21.1
38°	11.2	12.4	13.0	13.6	14.3	15.5	16.1	16.7	18.0	19.2	19.8
39°	10.5	11.8	12.4	13.0	13.6	14.3	14.9	16.1	16.7	18.0	18.6
40°	9.9	10.5	11.8	11.8	13.0	13.6	14.3	14.9	16.1	16.7	18.0
42.5°	8.1	9.3	9.9	10.5	11.2	11.8	12.4	13.0	13.6	14.9	15.5
45°	6.8	8.1	8.7	8.7	9.3	9.9	10.5	11.2	12.4	13.0	13.6
47.5°	5.6	6.8	7.4	8.1	8.1	8.7	9.3	9.9	10.5	11.2	11.8
50°	5.0	5.6	6.2	6.8	7.4	7.4	8.1	8.7	9.3	9.9	9.9
51°	5.0	5.6	6.2	6.2	6.8	7.4	8.1	8.1	8.7	9.3	9.3
52°	4.3	5.0	5.6	6.2	6.8	6.8	7.4	8.1	8.1	8.7	9.3
53°	4.3	5.0	5.6	5.6	6.2	6.8	6.8	7.4	8.1	8.1	8.7
54°	3.7	5.0	5.6	5.6	6.2	6.2	6.8	7.4	7.4	7.4	8.1
55°	3.7	4.3	5.0	5.6	5.6	6.2	6.2	6.8	6.8	7.4	7.4
57.5°	3.7	4.3	5.0	5.0	5.6	5.6	6.2	6.2	6.2	6.2	6.8
60°	3.1	3.7	4.3	5.0	5.0	5.6	5.6	5.6	5.6	5.6	6.2
61°	3.1	3.7	4.3	4.3	5.0	5.0	5.6	5.6	5.6	5.6	5.6
62°	3.1	3.7	4.3	4.3	5.0	5.0	5.0	5.6	5.6	5.6	5.6
63°	3.1	3.7	4.3	4.3	5.0	5.0	5.0	5.0	5.0	5.0	5.6
64°	3.1	3.7	4.3	4.3	5.0	5.0	5.0	5.0	5.0	5.0	5.0
65°	3.1	3.7	4.3	4.3	4.3	5.0	5.0	5.0	5.0	5.0	5.0
66°	3.1	3.7	4.3	4.3	4.3	4.3	5.0	5.0	5.0	5.0	4.3



TEST NUMBER: P182786

CATALOG NUMBER: LDSQA4A13927D010TE LAR15SP 4LSQAL1H 30°

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
72.5°	2.5	3.1	3.1	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.1
75°	2.5	3.1	3.1	3.1	3.7	3.7	3.7	3.1	3.1	3.1	3.1
77.5°	2.5	2.5	3.1	3.1	3.1	3.1	3.1	3.1	3.1	2.5	2.5
80°	2.5	2.5	2.5	3.1	3.1	3.1	3.1	2.5	2.5	2.5	1.9
82.5°	1.9	2.5	2.5	2.5	2.5	2.5	2.5	2.5	1.9	1.9	1.9
85°	1.9	2.5	2.5	2.5	2.5	2.5	2.5	1.9	1.9	1.9	1.2
87.5°	1.9	1.9	1.9	2.5	2.5	2.5	1.9	1.9	1.2	1.2	1.2
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: P182786

CATALOG NUMBER: LDSQA4A13927D010TE LAR15SP 4LSQAL1H 30°

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	105.4	105.4	105.4	105.4	105.4	105.4	105.4	105.4
2.5°	94.3	94.9	94.3	94.3	93.0	93.6	92.4	94.3
5°	86.2	86.8	86.2	86.2	85.0	85.0	84.3	86.2
7.5°	79.4	80.0	78.8	78.8	77.5	78.1	77.5	78.8
10°	72.6	72.6	72.6	71.9	71.3	71.9	71.3	72.6
12.5°	65.7	66.4	66.4	66.4	65.7	65.7	65.1	67.0
15°	60.2	60.8	61.4	61.4	60.8	61.4	60.8	62.0
17.5°	55.2	56.4	56.4	57.1	57.1	57.7	57.7	58.9
20°	50.2	52.1	52.1	52.7	52.7	54.0	54.0	55.2
22.5°	45.3	47.1	47.8	47.8	48.4	49.6	49.6	50.9
25°	40.9	42.8	43.4	43.4	44.0	45.3	45.3	46.5
26°	39.1	40.9	41.6	42.2	42.8	44.0	44.0	45.3
27°	37.2	39.1	39.7	40.3	40.9	42.2	42.2	43.4
28°	36.0	37.8	38.5	39.1	39.7	40.9	40.9	41.6
29°	34.1	36.0	36.6	37.2	37.8	39.1	39.1	40.3
30°	32.9	34.1	34.7	35.4	36.0	37.8	37.8	39.1
31°	31.0	32.9	33.5	34.1	34.7	36.0	36.0	37.8
32°	29.8	31.0	31.6	32.3	33.5	34.1	34.7	36.0
33°	27.9	29.8	30.4	31.0	31.6	32.9	33.5	34.7
34°	26.7	27.9	29.1	29.8	30.4	31.6	32.3	33.5
35°	25.4	26.7	27.3	27.9	29.1	30.4	30.4	31.6
36°	24.2	25.4	26.0	26.7	27.9	29.1	29.1	30.4
37°	22.9	24.2	24.8	25.4	26.7	27.9	27.9	29.1
38°	21.7	22.9	23.6	24.2	25.4	26.7	27.3	28.5
39°	20.5	22.3	22.9	23.6	24.2	25.4	26.0	26.7
40°	19.8	21.1	21.7	22.3	22.9	24.2	24.8	25.4
42.5°	16.7	18.6	19.2	19.8	20.5	21.1	21.7	22.3
45°	14.9	16.1	16.1	16.7	17.4	18.6	18.6	19.8
47.5°	13.0	13.6	14.3	14.3	14.9	16.1	16.1	16.7
50°	11.2	11.8	12.4	12.4	13.0	13.6	14.3	14.9
51°	10.5	11.2	11.2	11.8	12.4	13.0	13.6	14.3
52°	9.9	10.5	10.5	11.2	11.8	12.4	12.4	13.0
53°	9.3	9.9	9.9	10.5	10.5	11.8	11.8	12.4
54°	8.7	9.3	9.3	9.9	9.9	11.2	11.2	11.8
55°	8.1	8.7	9.3	9.3	9.3	9.9	10.5	11.2
57.5°	7.4	8.1	8.1	8.1	8.7	8.7	9.3	9.3
60°	6.2	6.8	6.8	6.8	7.4	7.4	7.4	8.1
61°	6.2	6.2	6.8	6.8	6.2	6.2	6.2	6.8
62°	5.6	6.2	6.2	5.6	5.6	5.6	5.6	6.2
63°	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
64°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
65°	5.0	5.0	5.0	5.0	5.0	5.0	4.3	5.0
66°	4.3	5.0	5.0	4.3	4.3	4.3	4.3	4.3



TEST NUMBER: P182786

CATALOG NUMBER: LDSQA4A13927D010TE LAR15SP 4LSQAL1H 30°

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
72.5°	3.1	3.1	3.1	3.1	3.1	2.5	2.5	2.5
75°	3.1	2.5	2.5	2.5	2.5	2.5	2.5	1.9
77.5°	2.5	2.5	2.5	2.5	1.9	1.9	1.9	1.9
80°	1.9	1.9	1.9	1.9	1.9	1.9	1.2	1.2
82.5°	1.9	1.2	1.2	1.2	1.2	1.2	1.2	1.2
85°	1.2	1.2	1.2	1.2	0.6	0.6	0.6	0.6
87.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
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°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.9	1.9
70°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.9	1.9





67.5°	1.9	1.9	2.5	2.5	2.5	2.5	1.9	1.9	1.9	2.5	2.5
70°	1.9	2.5	2.5	2.5	2.5	2.5	2.5	1.9	1.9	2.5	2.5





67.5°	3.1	3.7	3.7	3.7	4.3	4.3	4.3	4.3	4.3	4.3	4.3
70°	3.1	3.1	3.7	3.7	3.7	4.3	4.3	3.7	3.7	3.7	3.7





67.5°	4.3	4.3	4.3	4.3	3.7	3.7	3.7	3.7
70°	3.7	3.7	3.7	3.7	3.1	3.1	3.1	3.1



(END OF REPORT)