

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: P182781

Luminaire Tested: **LDSQA4A09940D010TE LAR15SP 4LSQAL1H 30°**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182781
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: LDSQA4A09940D010TE 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: 860.6 lumens
Efficiency: N/A
Efficacy: 62.2 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

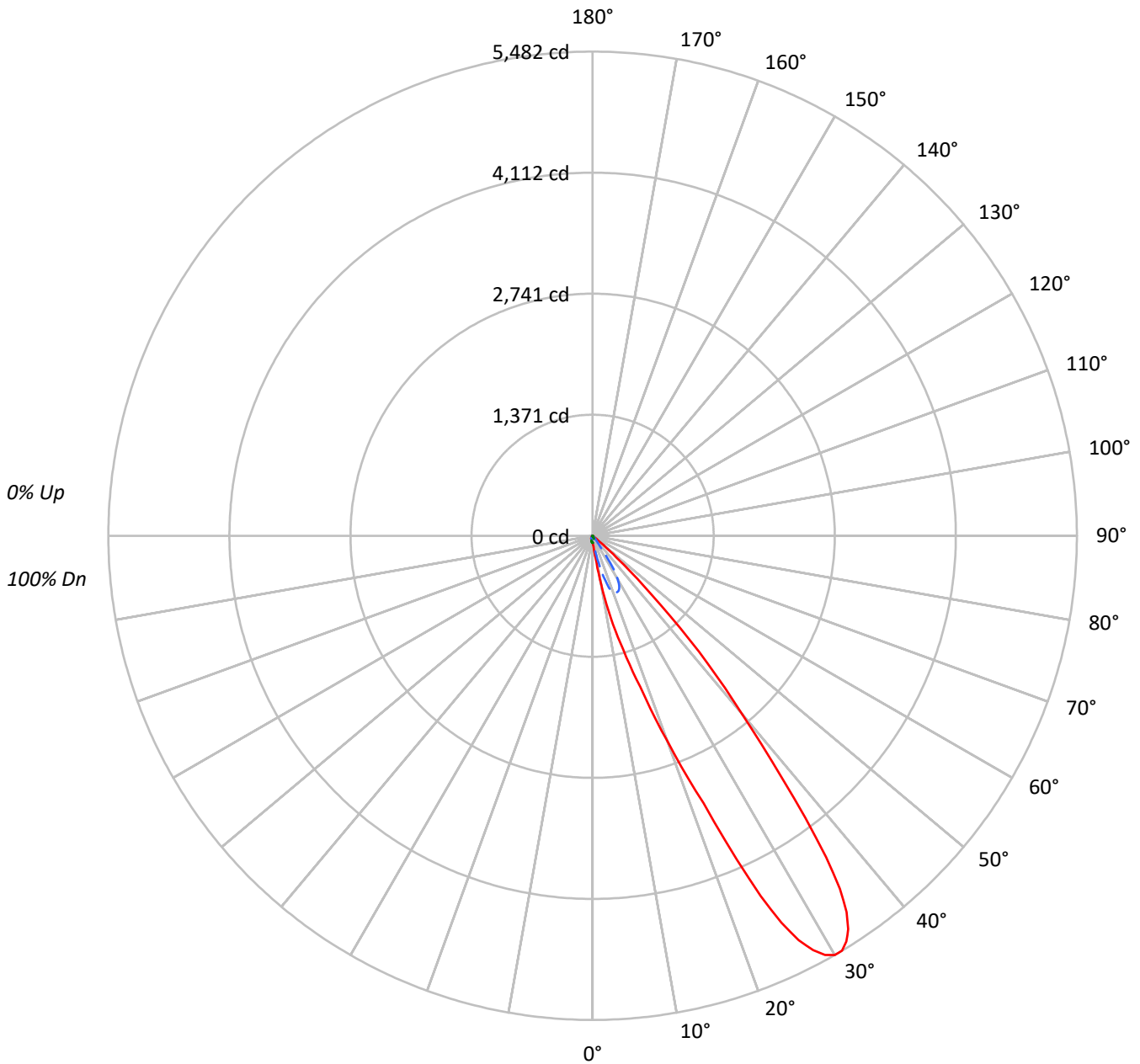
Input Watts (W): 13.84
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	7866	7866	7866
5°	12496	7478	6457
10°	54743	6620	5499
15°	133751	5366	4794
20°	255175	3990	4381
25°	480899	2854	3827
30°	613172	2036	3367
35°	576804	1242	2886
40°	330900	847	2479
45°	127741	589	2096
50°	16985	437	1733
55°	2584	405	1453
60°	736	368	1201
65°	436	436	871
70°	283	538	680
75°	374	524	524
80°	0	781	558
85°	0	1556	556



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	10.1	1.2
10°-20°	92.2	10.7
20°-30°	294.1	34.2
30°-40°	340.8	39.6
40°-50°	110.8	12.9
50°-60°	7.0	0.8
60°-70°	2.5	0.3
70°-80°	1.8	0.2
80°-90°	1.1	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°	396.5	46.1
0°-40°	737.3	85.7
0°-60°	855.1	99.4
0°-90°	860.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	860.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	81	81	81	81	81	
5°	128	108	77	67	66	25
15°	1334	480	54	46	48	423
25°	4499	691	27	28	36	2022
35°	4877	165	10	16	24	2806
45°	932	20	4	10	15	833
55°	15	4	2	5	9	24
65°	2	1	2	4	4	2
75°	1	1	1	2	1	1
85°	0	1	1	1	0	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°	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2
2.5°	98.9	99.8	99.8	98.4	98.4	97.0	96.0	95.5	95.1	93.6	93.1
5°	128.5	129.4	129.9	126.1	124.7	121.8	119.4	117.0	114.2	110.8	107.5
7.5°	247.9	227.8	231.2	202.5	197.3	184.9	174.8	159.1	147.6	136.1	127.1
10°	556.5	537.4	534.0	492.0	450.4	419.4	385.9	328.1	275.6	219.7	174.3
12.5°	953.4	925.2	909.4	826.8	778.1	732.2	681.1	590.9	490.1	404.1	314.3
15°	1333.6	1331.2	1274.9	1182.7	1090.0	1033.6	967.7	856.0	736.5	605.7	480.5
17.5°	1792.6	1811.3	1714.8	1534.7	1388.1	1296.3	1205.6	1030.8	881.7	754.7	617.6
20°	2475.2	2425.5	2256.9	1975.1	1727.2	1589.1	1448.2	1190.8	977.3	823.5	684.5
22.5°	3277.2	3239.0	2923.7	2453.7	2060.6	1866.7	1672.7	1337.9	1059.9	860.7	697.4
25°	4499.0	4341.8	3730.0	2967.2	2366.3	2091.6	1842.8	1433.4	1097.2	865.5	691.2
26°	4874.0	4763.6	4057.6	3171.1	2460.4	2153.7	1885.3	1453.0	1100.0	861.2	679.2
27°	5140.0	5055.9	4330.4	3321.1	2528.7	2196.7	1913.0	1461.1	1093.3	852.1	663.0
28°	5315.3	5248.0	4536.3	3429.5	2570.2	2219.6	1926.4	1459.2	1080.0	836.4	640.1
29°	5426.6	5361.6	4656.6	3491.2	2585.0	2223.5	1923.0	1444.9	1058.5	813.0	607.1
30°	5481.5	5410.8	4697.2	3497.8	2568.8	2201.5	1897.7	1413.4	1028.9	784.8	570.8
31°	5482.0	5403.7	4663.3	3446.3	2520.6	2154.7	1852.8	1360.8	990.2	751.3	522.1
32°	5418.5	5337.8	4550.1	3341.6	2445.1	2095.9	1792.6	1307.3	949.6	714.1	451.9
33°	5312.0	5216.4	4353.8	3196.4	2348.6	2015.7	1720.5	1247.6	909.0	654.4	359.7
34°	5140.0	5009.6	4079.6	3020.2	2232.1	1922.1	1637.9	1183.1	867.9	571.3	257.0
35°	4877.3	4693.4	3762.5	2825.3	2107.4	1820.8	1544.7	1115.8	817.7	468.6	164.8
36°	4497.1	4259.7	3432.4	2623.7	1978.9	1714.3	1450.1	1050.8	738.4	355.4	107.9
37°	4000.8	3791.6	3116.7	2420.7	1845.6	1600.6	1363.7	985.4	641.0	248.4	87.9
38°	3491.2	3336.9	2808.1	2219.2	1707.6	1477.9	1258.6	917.1	534.5	163.4	73.6
39°	3031.7	2928.5	2506.2	2019.5	1565.3	1370.4	1153.5	830.2	420.8	116.1	62.1
40°	2616.6	2545.4	2214.4	1816.0	1422.9	1240.5	1054.7	723.6	303.3	92.7	52.1
42.5°	1784.5	1749.2	1549.0	1306.9	1052.7	948.1	830.6	435.1	120.4	58.8	31.5
45°	932.4	917.1	844.5	765.2	686.4	659.2	534.0	195.4	67.8	34.4	20.1
47.5°	363.0	364.0	300.9	257.0	244.1	226.9	172.0	70.2	38.2	21.0	13.4
50°	112.7	121.3	111.8	105.6	80.7	67.3	55.9	34.9	20.5	12.9	8.6
51°	69.3	73.6	69.3	69.3	56.8	49.7	42.5	26.7	16.2	10.5	7.6
52°	44.9	47.3	44.9	42.0	39.2	35.3	30.6	20.1	12.9	8.6	6.2
53°	30.6	32.0	30.6	28.7	26.3	24.4	21.5	14.8	10.5	7.2	5.3
54°	21.5	22.4	21.5	20.1	18.6	17.2	15.8	11.5	8.6	6.2	4.8
55°	15.3	16.2	15.8	14.8	13.4	12.9	11.9	9.1	7.2	5.3	3.8
57.5°	7.2	7.6	7.6	7.2	7.2	6.7	6.2	5.7	4.3	3.3	2.9
60°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	2.9	2.4	2.4
61°	2.9	2.9	2.9	2.9	2.9	2.9	3.3	2.9	2.4	2.4	1.9
62°	2.4	2.4	2.4	2.4	2.4	2.9	2.9	2.4	2.4	1.9	1.9
63°	1.9	1.9	1.9	1.9	2.4	2.4	2.4	2.4	1.9	1.9	1.9
64°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.4
65°	1.9	1.9	1.4	1.4	1.4	1.9	1.4	1.9	1.4	1.4	1.4
66°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
72.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.4
75°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.4
77.5°	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.4
80°	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	1.0	1.0	1.0
82.5°	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	1.0	1.0
85°	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	1.0	1.0	1.0
87.5°	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	1.0	1.0
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°	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2
2.5°	90.3	87.9	86.9	86.0	85.5	84.5	83.1	81.7	81.2	79.3	77.4
5°	101.7	97.4	94.1	90.8	89.8	87.4	84.5	81.2	79.8	76.9	74.5
7.5°	115.1	106.5	100.3	94.6	92.2	89.3	84.1	79.8	76.9	72.6	69.7
10°	137.6	117.5	105.6	95.5	91.7	87.9	81.2	75.5	71.6	67.3	64.0
12.5°	217.8	152.4	114.6	96.0	90.8	85.0	76.9	70.2	65.4	60.7	57.8
15°	343.4	232.1	148.5	100.8	88.8	80.2	70.7	63.0	58.3	53.5	50.6
17.5°	458.5	312.4	193.9	112.2	89.8	75.9	63.0	55.4	50.2	45.9	43.9
20°	514.0	350.1	215.9	114.6	84.1	67.8	54.5	47.3	42.5	38.7	36.8
22.5°	519.2	347.7	202.5	97.9	69.7	57.3	45.9	39.2	35.3	32.5	30.6
25°	494.4	308.6	162.4	72.1	54.5	47.8	37.7	32.0	29.1	26.7	25.3
26°	475.3	286.1	142.8	62.6	49.7	43.5	34.4	29.6	26.7	24.8	23.4
27°	449.0	259.8	119.9	54.0	45.9	39.2	31.5	27.2	24.8	23.4	22.0
28°	417.5	234.0	99.4	47.8	41.6	35.3	29.1	24.8	22.9	21.5	20.1
29°	383.6	200.1	77.9	43.0	37.3	32.0	26.3	22.4	20.5	19.6	18.6
30°	335.8	155.7	59.7	38.7	33.4	28.7	23.9	20.5	19.1	18.2	17.2
31°	268.4	107.0	48.2	34.4	30.1	25.8	21.5	18.6	17.2	16.2	15.8
32°	192.5	65.9	42.0	30.6	26.7	23.4	18.6	16.7	15.3	14.8	14.3
33°	118.5	54.0	37.3	27.2	23.4	20.5	16.7	14.8	13.9	13.4	12.9
34°	77.9	46.8	33.0	23.4	20.5	17.7	14.3	12.9	12.4	11.9	11.9
35°	65.9	41.6	28.7	20.1	17.2	15.3	12.4	11.5	11.0	10.5	11.0
36°	56.8	36.3	23.9	17.2	14.8	12.9	11.0	10.0	9.6	9.6	10.0
37°	50.2	30.6	20.1	14.3	12.9	11.5	9.6	9.1	8.6	8.6	9.1
38°	42.5	24.8	16.7	12.4	11.0	9.6	8.6	8.1	8.1	8.1	8.6
39°	34.9	21.0	14.3	10.5	9.6	8.6	7.6	7.2	7.2	7.6	7.6
40°	28.7	17.7	11.9	9.1	8.1	7.6	6.7	6.7	6.7	6.7	7.2
42.5°	18.6	11.9	8.6	6.7	6.2	5.7	5.3	5.3	5.3	5.3	5.7
45°	12.4	8.6	6.7	5.3	4.8	4.3	4.3	3.8	4.3	4.3	4.8
47.5°	8.6	6.2	4.8	3.8	3.3	2.9	2.9	2.9	3.3	3.8	3.8
50°	6.2	4.3	3.3	2.4	2.4	2.4	2.4	2.4	2.9	2.9	3.3
51°	5.3	3.8	2.9	2.4	2.4	1.9	1.9	1.9	2.4	2.9	3.3
52°	4.3	3.3	2.4	1.9	1.9	1.9	1.9	1.9	2.4	2.4	2.9
53°	3.8	2.9	2.4	1.9	1.9	1.9	1.9	1.9	2.4	2.4	2.9
54°	3.3	2.4	1.9	1.9	1.9	1.4	1.4	1.9	1.9	2.4	2.9
55°	2.9	2.4	1.9	1.9	1.4	1.4	1.4	1.4	1.9	2.4	2.4
57.5°	2.4	1.9	1.9	1.4	1.4	1.4	1.4	1.4	1.9	1.9	2.4
60°	1.9	1.9	1.9	1.4	1.4	1.4	1.4	1.4	1.9	1.9	2.4
61°	1.9	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.9	1.9	2.4
62°	1.9	1.4	1.9	1.9	1.9	1.4	1.4	1.4	1.9	1.9	2.4
63°	1.9	1.9	1.9	1.9	1.9	1.4	1.4	1.4	1.9	1.9	1.9
64°	1.9	1.9	1.9	1.9	1.9	1.9	1.4	1.4	1.9	1.9	2.4
65°	1.4	1.9	1.9	1.9	1.9	1.9	1.4	1.4	1.9	1.9	2.4
66°	1.4	1.9	1.9	1.9	1.9	1.9	1.9	1.4	1.9	1.9	1.9



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
72.5°	1.4	1.4	1.9	1.9	1.9	1.9	1.9	1.4	1.4	1.9	1.9
75°	1.4	1.4	1.9	1.9	1.9	1.9	1.9	1.4	1.4	1.4	1.9
77.5°	1.4	1.4	1.9	1.9	1.9	1.9	1.9	1.4	1.4	1.4	1.9
80°	1.4	1.4	1.9	1.9	1.9	1.9	1.4	1.4	1.4	1.4	1.4
82.5°	1.4	1.4	1.4	1.9	1.9	1.4	1.4	1.4	1.4	1.4	1.4
85°	1.4	1.4	1.4	1.9	1.9	1.4	1.4	1.4	1.4	1.4	1.4
87.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
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: LDSQA4A09940D010TE LAR15SP 4LSQAL1H 30°

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2
2.5°	76.4	76.4	75.9	75.0	75.9	75.0	74.0	73.6	73.1	72.6	71.6
5°	72.6	72.1	71.2	70.7	70.7	69.7	68.8	67.8	67.3	66.9	65.9
7.5°	67.8	67.3	65.9	65.4	65.4	64.5	63.0	62.6	62.1	61.6	60.7
10°	62.1	61.6	60.2	59.7	59.7	58.8	57.8	56.8	56.4	55.9	54.9
12.5°	55.4	54.9	54.0	53.5	53.5	52.5	51.6	51.1	51.1	50.6	50.2
15°	48.7	48.2	47.3	47.3	47.3	46.3	45.9	45.4	45.9	45.9	45.4
17.5°	42.0	41.6	40.6	40.6	40.6	40.6	40.1	40.1	40.6	41.1	41.1
20°	35.3	34.9	34.9	34.4	34.9	35.3	34.9	35.3	36.3	36.8	37.3
22.5°	29.1	29.1	29.1	29.1	29.6	30.1	30.1	31.0	32.0	32.5	33.4
25°	24.4	24.4	24.8	24.8	25.3	25.8	26.3	26.7	28.2	29.1	29.6
26°	22.4	22.9	22.9	23.4	23.9	24.4	24.8	25.3	26.7	27.7	28.2
27°	21.0	21.0	21.5	22.0	22.4	22.9	23.4	24.4	25.3	26.3	27.2
28°	19.6	19.6	20.1	20.5	21.0	21.5	22.0	22.9	23.9	25.3	25.8
29°	18.2	18.6	18.6	19.1	19.6	20.1	21.0	21.5	22.9	23.9	24.8
30°	16.7	17.2	17.7	17.7	18.2	18.6	19.6	20.5	21.5	22.9	23.4
31°	15.8	16.2	16.2	16.7	17.2	17.7	18.6	19.6	20.5	21.5	22.4
32°	14.3	15.3	15.3	15.3	15.8	16.7	17.7	18.2	19.6	20.5	21.0
33°	13.4	13.9	14.3	14.3	14.8	15.8	16.7	17.2	18.6	19.6	20.1
34°	12.4	12.9	13.4	13.4	13.9	14.8	15.8	16.2	17.7	18.2	19.1
35°	11.5	11.9	12.4	12.4	12.9	13.9	14.8	15.3	16.2	17.2	18.2
36°	10.5	11.0	11.5	11.9	12.4	13.4	13.9	14.8	15.3	16.2	17.2
37°	9.6	10.0	11.0	11.0	11.9	12.4	13.4	13.9	14.8	15.3	16.2
38°	8.6	9.6	10.0	10.5	11.0	11.9	12.4	12.9	13.9	14.8	15.3
39°	8.1	9.1	9.6	10.0	10.5	11.0	11.5	12.4	12.9	13.9	14.3
40°	7.6	8.1	9.1	9.1	10.0	10.5	11.0	11.5	12.4	12.9	13.9
42.5°	6.2	7.2	7.6	8.1	8.6	9.1	9.6	10.0	10.5	11.5	11.9
45°	5.3	6.2	6.7	6.7	7.2	7.6	8.1	8.6	9.6	10.0	10.5
47.5°	4.3	5.3	5.7	6.2	6.2	6.7	7.2	7.6	8.1	8.6	9.1
50°	3.8	4.3	4.8	5.3	5.7	5.7	6.2	6.7	7.2	7.6	7.6
51°	3.8	4.3	4.8	4.8	5.3	5.7	6.2	6.2	6.7	7.2	7.2
52°	3.3	3.8	4.3	4.8	5.3	5.3	5.7	6.2	6.2	6.7	7.2
53°	3.3	3.8	4.3	4.3	4.8	5.3	5.3	5.7	6.2	6.2	6.7
54°	2.9	3.8	4.3	4.3	4.8	4.8	5.3	5.7	5.7	5.7	6.2
55°	2.9	3.3	3.8	4.3	4.3	4.8	4.8	5.3	5.3	5.7	5.7
57.5°	2.9	3.3	3.8	3.8	4.3	4.3	4.8	4.8	4.8	4.8	5.3
60°	2.4	2.9	3.3	3.8	3.8	4.3	4.3	4.3	4.3	4.3	4.8
61°	2.4	2.9	3.3	3.3	3.8	3.8	4.3	4.3	4.3	4.3	4.3
62°	2.4	2.9	3.3	3.3	3.8	3.8	3.8	4.3	4.3	4.3	4.3
63°	2.4	2.9	3.3	3.3	3.8	3.8	3.8	3.8	3.8	3.8	4.3
64°	2.4	2.9	3.3	3.3	3.8	3.8	3.8	3.8	3.8	3.8	3.8
65°	2.4	2.9	3.3	3.3	3.3	3.8	3.8	3.8	3.8	3.8	3.8
66°	2.4	2.9	3.3	3.3	3.3	3.3	3.8	3.8	3.8	3.8	3.3



TEST NUMBER: P182781

CATALOG NUMBER: LDSQA4A09940D010TE LAR15SP 4LSQAL1H 30°

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
72.5°	1.9	2.4	2.4	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.4
75°	1.9	2.4	2.4	2.4	2.9	2.9	2.9	2.4	2.4	2.4	2.4
77.5°	1.9	1.9	2.4	2.4	2.4	2.4	2.4	2.4	2.4	1.9	1.9
80°	1.9	1.9	1.9	2.4	2.4	2.4	2.4	1.9	1.9	1.9	1.4
82.5°	1.4	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.4	1.4	1.4
85°	1.4	1.9	1.9	1.9	1.9	1.9	1.9	1.4	1.4	1.4	1.0
87.5°	1.4	1.4	1.4	1.9	1.9	1.9	1.4	1.4	1.0	1.0	1.0
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: P182781

CATALOG NUMBER: LDSQA4A09940D010TE LAR15SP 4LSQAL1H 30°

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2
2.5°	72.6	73.1	72.6	72.6	71.6	72.1	71.2	72.6
5°	66.4	66.9	66.4	66.4	65.4	65.4	65.0	66.4
7.5°	61.1	61.6	60.7	60.7	59.7	60.2	59.7	60.7
10°	55.9	55.9	55.9	55.4	54.9	55.4	54.9	55.9
12.5°	50.6	51.1	51.1	51.1	50.6	50.6	50.2	51.6
15°	46.3	46.8	47.3	47.3	46.8	47.3	46.8	47.8
17.5°	42.5	43.5	43.5	43.9	43.9	44.4	44.4	45.4
20°	38.7	40.1	40.1	40.6	40.6	41.6	41.6	42.5
22.5°	34.9	36.3	36.8	36.8	37.3	38.2	38.2	39.2
25°	31.5	33.0	33.4	33.4	33.9	34.9	34.9	35.8
26°	30.1	31.5	32.0	32.5	33.0	33.9	33.9	34.9
27°	28.7	30.1	30.6	31.0	31.5	32.5	32.5	33.4
28°	27.7	29.1	29.6	30.1	30.6	31.5	31.5	32.0
29°	26.3	27.7	28.2	28.7	29.1	30.1	30.1	31.0
30°	25.3	26.3	26.7	27.2	27.7	29.1	29.1	30.1
31°	23.9	25.3	25.8	26.3	26.7	27.7	27.7	29.1
32°	22.9	23.9	24.4	24.8	25.8	26.3	26.7	27.7
33°	21.5	22.9	23.4	23.9	24.4	25.3	25.8	26.7
34°	20.5	21.5	22.4	22.9	23.4	24.4	24.8	25.8
35°	19.6	20.5	21.0	21.5	22.4	23.4	23.4	24.4
36°	18.6	19.6	20.1	20.5	21.5	22.4	22.4	23.4
37°	17.7	18.6	19.1	19.6	20.5	21.5	21.5	22.4
38°	16.7	17.7	18.2	18.6	19.6	20.5	21.0	22.0
39°	15.8	17.2	17.7	18.2	18.6	19.6	20.1	20.5
40°	15.3	16.2	16.7	17.2	17.7	18.6	19.1	19.6
42.5°	12.9	14.3	14.8	15.3	15.8	16.2	16.7	17.2
45°	11.5	12.4	12.4	12.9	13.4	14.3	14.3	15.3
47.5°	10.0	10.5	11.0	11.0	11.5	12.4	12.4	12.9
50°	8.6	9.1	9.6	9.6	10.0	10.5	11.0	11.5
51°	8.1	8.6	8.6	9.1	9.6	10.0	10.5	11.0
52°	7.6	8.1	8.1	8.6	9.1	9.6	9.6	10.0
53°	7.2	7.6	7.6	8.1	8.1	9.1	9.1	9.6
54°	6.7	7.2	7.2	7.6	7.6	8.6	8.6	9.1
55°	6.2	6.7	7.2	7.2	7.2	7.6	8.1	8.6
57.5°	5.7	6.2	6.2	6.2	6.7	6.7	7.2	7.2
60°	4.8	5.3	5.3	5.3	5.7	5.7	5.7	6.2
61°	4.8	4.8	5.3	5.3	4.8	4.8	4.8	5.3
62°	4.3	4.8	4.8	4.3	4.3	4.3	4.3	4.8
63°	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
64°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
65°	3.8	3.8	3.8	3.8	3.8	3.8	3.3	3.8
66°	3.3	3.8	3.8	3.3	3.3	3.3	3.3	3.3



TEST NUMBER: P182781

CATALOG NUMBER: LDSQA4A09940D010TE LAR15SP 4LSQAL1H 30°

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
72.5°	2.4	2.4	2.4	2.4	2.4	1.9	1.9	1.9
75°	2.4	1.9	1.9	1.9	1.9	1.9	1.9	1.4
77.5°	1.9	1.9	1.9	1.9	1.4	1.4	1.4	1.4
80°	1.4	1.4	1.4	1.4	1.4	1.4	1.0	1.0
82.5°	1.4	1.0	1.0	1.0	1.0	1.0	1.0	1.0
85°	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5
87.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.4	1.4
70°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.4	1.4





67.5°	1.4	1.4	1.9	1.9	1.9	1.9	1.4	1.4	1.4	1.9	1.9
70°	1.4	1.9	1.9	1.9	1.9	1.9	1.9	1.4	1.4	1.9	1.9





67.5°	2.4	2.9	2.9	2.9	3.3	3.3	3.3	3.3	3.3	3.3	3.3
70°	2.4	2.4	2.9	2.9	2.9	3.3	3.3	2.9	2.9	2.9	2.9





67.5°	3.3	3.3	3.3	3.3	2.9	2.9	2.9	2.9
70°	2.9	2.9	2.9	2.9	2.4	2.4	2.4	2.4



(END OF REPORT)