

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: P182672

Luminaire Tested: **LDSQA4A18835D010TE LAR15SP 4LSQA1H 30°**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182672
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26799)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA4A18835D010TE LAR15SP 4LSQA1H 30°
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT, 30° Tilt
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1937.0 lumens
Efficiency: N/A
Efficacy: 66.5 lumens/watt
Spacing Criteria (0/90/45): 2.24 / 0.6 / 1.1
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

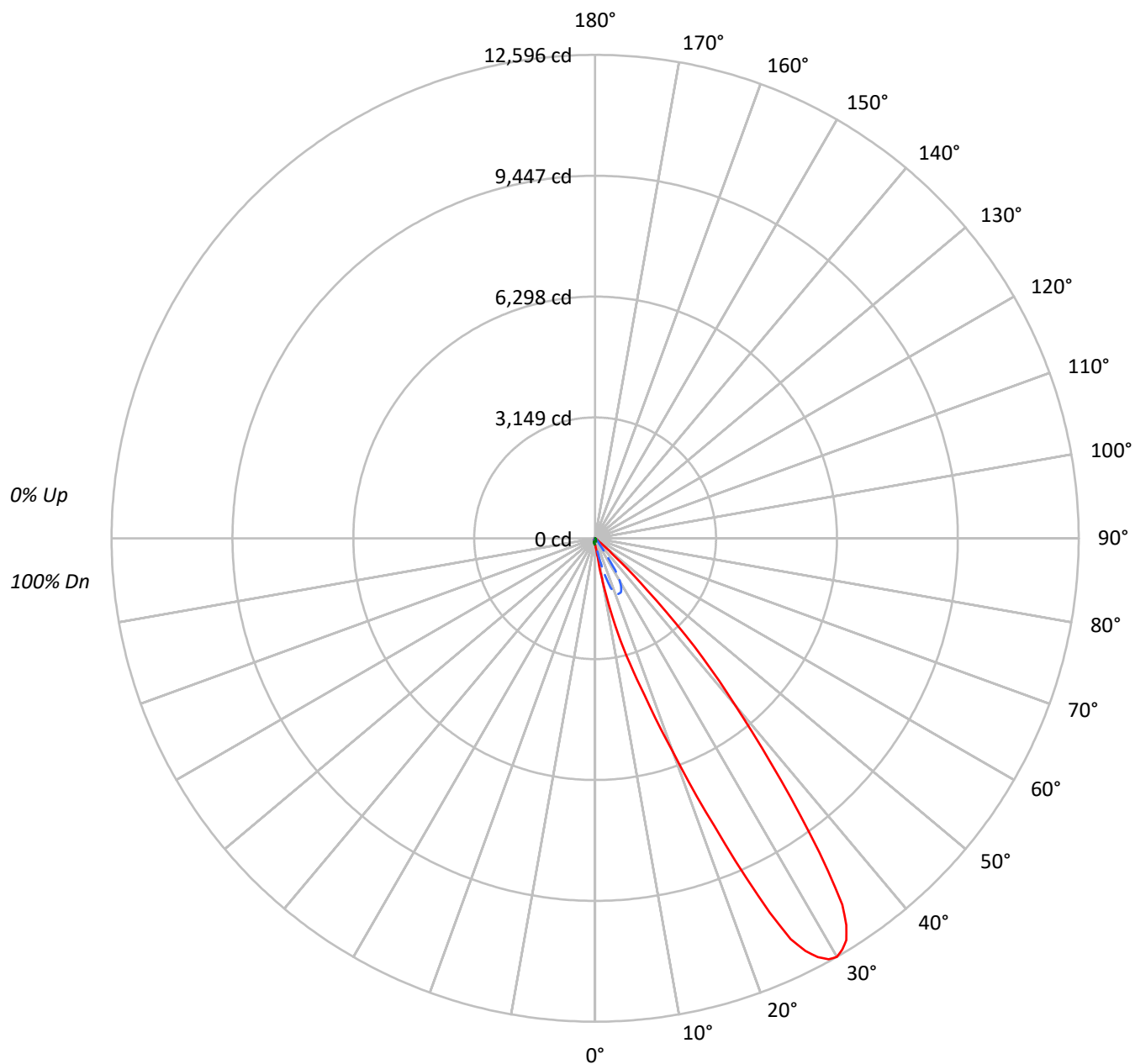
Input Watts (W): 29.12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P182672

CATALOG NUMBER: LDSQA4A18835D010TE LAR15SP 4LSQA1H 30°

Luminous Intensity Polar Plot





TEST NUMBER: P182672

CATALOG NUMBER: LDSQA4A18835D010TE LAR15SP 4LSQA1H 30°

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	113	109	107	104	110	107	105	102	103	101	99	99	98	96	96	95	93	91		
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	87	85	83		
3	99	92	86	81	97	90	85	80	87	83	79	85	81	78	83	79	77	75		
4	93	84	77	72	91	83	76	72	80	75	71	78	74	70	76	72	69	67		
5	87	77	70	65	85	76	69	64	74	68	64	72	67	63	70	66	63	61		
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55		
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50		
8	71	59	52	47	69	59	52	47	57	51	47	56	51	47	55	50	46	45		
9	66	55	48	43	65	54	47	43	53	47	43	52	46	42	51	46	42	41		
10	62	50	43	39	61	50	43	39	49	43	39	48	42	38	47	42	38	37		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	16178	16178	16178
5°	26937	15268	13031
10°	114886	13378	11313
15°	317998	10631	10029
20°	609948	7526	8969
25°	1150032	5024	7910
30°	1408993	3356	6935
35°	1251341	2247	5913
40°	713182	1518	4932
45°	260140	1233	4110
50°	28635	904	3466
55°	4222	676	2871
60°	969	775	2325
65°	688	917	1605
70°	566	1133	1416
75°	749	1497	1123
80°	0	2232	1116
85°	0	3335	1112



TEST NUMBER: P182672

CATALOG NUMBER: LDSQA4A18835D010TE LAR15SP 4LSQA1H 30°

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.0	1.1
10°-20°	209.9	10.8
20°-30°	689.4	35.6
30°-40°	756.0	39.0
40°-50°	236.1	12.2
50°-60°	12.9	0.7
60°-70°	5.2	0.3
70°-80°	4.0	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°	920.3	47.5
0°-40°	1676.3	86.5
0°-60°	1925.4	99.4
0°-90°	1937.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1937.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	167	167	167	167	167	
5°	277	222	157	139	134	51
15°	3171	1019	106	95	100	996
25°	10759	1565	47	58	74	4796
35°	10581	308	19	33	50	6186
45°	1899	32	9	19	30	1743
55°	25	6	4	11	17	39
65°	3	3	4	8	7	3
75°	2	3	4	6	3	1
85°	0	3	3	3	1	0
90°	0	0	0	0	0	



TEST NUMBER: P182672

CATALOG NUMBER: LDSQA4A18835D010TE LAR15SP 4LSQA1H 30°

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	167.0	167.0	167.0	167.0	167.0	167.0	167.0	167.0	167.0	167.0	167.0
2.5°	206.0	208.0	209.0	204.0	205.0	203.0	205.0	201.0	194.0	196.0	190.0
5°	277.0	273.0	272.0	264.0	262.0	258.0	258.0	249.0	236.0	234.0	222.0
7.5°	490.0	469.0	451.0	424.0	398.0	378.0	370.0	338.0	303.0	290.0	262.0
10°	1167.9	1163.9	1118.9	1033.9	935.9	864.9	823.9	699.9	543.0	447.0	347.0
12.5°	2125.8	2105.8	2041.8	1885.8	1716.8	1610.9	1527.9	1277.9	1044.9	857.9	614.9
15°	3170.7	3089.7	2995.7	2753.7	2516.8	2378.8	2260.8	1960.8	1599.9	1330.9	1018.9
17.5°	4286.6	4322.6	4094.6	3677.7	3256.7	3040.7	2840.7	2379.8	1984.8	1704.8	1353.9
20°	5916.5	5840.5	5439.5	4748.6	4127.6	3766.7	3482.7	2817.7	2221.8	1872.8	1540.9
22.5°	8119.3	7877.3	7095.4	5926.5	4941.5	4440.6	4037.6	3141.7	2420.8	1958.8	1570.9
25°	10759.0	10535.0	9087.2	7059.4	5602.5	4953.5	4405.6	3347.7	2500.8	1972.8	1564.9
26°	11620.9	11288.0	9822.1	7462.3	5805.5	5083.5	4496.6	3387.7	2502.8	1961.8	1538.9
27°	12066.9	11805.9	10430.0	7789.3	5944.5	5165.5	4547.6	3397.7	2482.8	1936.8	1498.9
28°	12360.9	12116.9	10815.0	8003.3	6015.5	5197.5	4562.6	3375.7	2437.8	1892.8	1435.9
29°	12542.9	12285.9	11003.0	8100.3	6020.5	5183.5	4534.6	3317.7	2376.8	1839.8	1362.9
30°	12595.8	12317.9	11008.0	8060.3	5946.5	5108.5	4455.6	3223.7	2302.8	1772.8	1281.9
31°	12501.9	12214.9	10827.0	7878.3	5794.5	4962.5	4331.6	3099.7	2210.8	1701.8	1156.9
32°	12345.9	11964.9	10448.0	7576.3	5586.5	4786.6	4176.6	2964.7	2112.8	1611.9	980.9
33°	12013.9	11553.9	9868.1	7197.3	5336.5	4584.6	3995.6	2814.7	2019.8	1456.9	728.9
34°	11514.9	10934.0	9157.2	6756.4	5053.5	4332.6	3787.7	2675.8	1922.8	1251.9	499.0
35°	10581.0	10040.1	8372.2	6286.4	4748.6	4088.6	3558.7	2493.8	1790.8	1003.9	308.0
36°	9536.1	9138.2	7611.3	5808.5	4436.6	3835.6	3322.7	2359.8	1595.9	738.9	209.0
37°	8468.2	8115.3	6893.4	5338.5	4123.6	3555.7	3082.7	2207.8	1363.9	493.0	168.0
38°	7451.3	7171.3	6211.4	4876.6	3798.7	3262.7	2830.7	2045.8	1113.9	317.0	138.0
39°	6517.4	6307.4	5543.5	4429.6	3472.7	2975.7	2588.8	1841.8	849.9	226.0	115.0
40°	5639.5	5491.5	4899.6	3988.6	3148.7	2693.8	2369.8	1594.9	589.9	179.0	93.0
42.5°	3835.6	3798.7	3447.7	2870.7	2338.8	2072.8	1873.8	896.9	227.0	108.0	52.0
45°	1898.8	1924.8	1784.8	1641.9	1530.9	1449.9	1180.9	374.0	126.0	59.0	32.0
47.5°	671.9	672.9	578.9	516.0	493.0	491.0	357.0	132.0	67.0	36.0	23.0
50°	190.0	205.0	193.0	197.0	154.0	131.0	107.0	64.0	34.0	23.0	15.0
51°	117.0	126.0	118.0	122.0	106.0	95.0	80.0	48.0	27.0	19.0	14.0
52°	75.0	80.0	76.0	77.0	71.0	62.0	54.0	35.0	22.0	16.0	12.0
53°	51.0	54.0	51.0	51.0	47.0	44.0	38.0	26.0	18.0	13.0	9.0
54°	35.0	36.0	36.0	36.0	33.0	31.0	27.0	20.0	15.0	12.0	8.0
55°	25.0	26.0	25.0	25.0	24.0	22.0	20.0	15.0	12.0	10.0	6.0
57.5°	11.0	11.0	11.0	12.0	11.0	11.0	10.0	9.0	8.0	6.0	4.0
60°	5.0	5.0	5.0	5.0	6.0	6.0	6.0	6.0	5.0	4.0	4.0
61°	4.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	4.0	4.0	3.0
62°	3.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0	3.0	3.0
63°	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	3.0	3.0	3.0
64°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
65°	3.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0	3.0	3.0	3.0
66°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0



TEST NUMBER: P182672

CATALOG NUMBER: LDSQA4A18835D010TE LAR15SP 4LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
72.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0
75°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0
77.5°	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	2.0	2.0	3.0
80°	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	2.0	2.0	3.0
82.5°	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	2.0	2.0	3.0
85°	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	2.0	2.0	3.0
87.5°	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	2.0	2.0	3.0
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: P182672

CATALOG NUMBER: LDSQA4A18835D010TE LAR15SP 4LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	167.0	167.0	167.0	167.0	167.0	167.0	167.0	167.0	167.0	167.0	167.0
2.5°	186.0	185.0	180.0	175.0	176.0	174.0	172.0	169.0	167.0	162.0	162.0
5°	212.0	207.0	196.0	186.0	185.0	181.0	175.0	169.0	164.0	157.0	155.0
7.5°	242.0	228.0	210.0	194.0	191.0	185.0	174.0	166.0	157.0	148.0	145.0
10°	285.0	252.0	221.0	197.0	191.0	182.0	168.0	157.0	147.0	136.0	132.0
12.5°	438.0	311.0	235.0	197.0	186.0	175.0	158.0	145.0	133.0	121.0	117.0
15°	729.9	497.0	298.0	197.0	177.0	164.0	143.0	130.0	117.0	106.0	102.0
17.5°	1007.9	706.9	415.0	222.0	178.0	151.0	125.0	111.0	100.0	89.0	86.0
20°	1168.9	823.9	492.0	247.0	176.0	136.0	107.0	92.0	81.0	73.0	70.0
22.5°	1189.9	828.9	475.0	221.0	148.0	113.0	89.0	75.0	66.0	59.0	57.0
25°	1133.9	731.9	380.0	157.0	110.0	92.0	70.0	60.0	53.0	47.0	46.0
26°	1090.9	673.9	331.0	130.0	97.0	82.0	63.0	54.0	48.0	43.0	42.0
27°	1029.9	611.9	283.0	108.0	86.0	74.0	56.0	49.0	44.0	39.0	39.0
28°	960.9	545.0	228.0	91.0	77.0	66.0	51.0	44.0	39.0	36.0	36.0
29°	877.9	448.0	167.0	79.0	68.0	58.0	45.0	39.0	35.0	33.0	33.0
30°	754.9	325.0	115.0	69.0	59.0	51.0	40.0	35.0	32.0	30.0	30.0
31°	589.9	200.0	90.0	60.0	52.0	45.0	36.0	31.0	29.0	27.0	28.0
32°	402.0	125.0	77.0	52.0	46.0	39.0	32.0	28.0	26.0	25.0	25.0
33°	229.0	104.0	67.0	45.0	39.0	34.0	28.0	25.0	24.0	23.0	23.0
34°	152.0	89.0	58.0	38.0	32.0	29.0	24.0	22.0	21.0	21.0	21.0
35°	128.0	77.0	47.0	32.0	28.0	25.0	21.0	20.0	19.0	19.0	20.0
36°	108.0	64.0	38.0	27.0	24.0	22.0	19.0	18.0	17.0	17.0	18.0
37°	91.0	51.0	32.0	23.0	20.0	19.0	17.0	16.0	16.0	16.0	17.0
38°	74.0	41.0	27.0	20.0	18.0	16.0	15.0	14.0	14.0	15.0	16.0
39°	58.0	33.0	22.0	17.0	15.0	14.0	13.0	13.0	13.0	13.0	14.0
40°	46.0	28.0	19.0	15.0	13.0	13.0	12.0	11.0	12.0	12.0	14.0
42.5°	29.0	20.0	14.0	11.0	10.0	10.0	9.0	9.0	9.0	10.0	11.0
45°	21.0	16.0	11.0	9.0	8.0	7.0	7.0	7.0	8.0	9.0	10.0
47.5°	16.0	11.0	8.0	6.0	5.0	5.0	5.0	5.0	6.0	7.0	8.0
50°	11.0	7.0	5.0	4.0	4.0	4.0	4.0	4.0	5.0	6.0	7.0
51°	9.0	6.0	5.0	4.0	4.0	3.0	3.0	4.0	5.0	5.0	6.0
52°	7.0	5.0	4.0	3.0	3.0	3.0	3.0	4.0	4.0	5.0	6.0
53°	6.0	5.0	4.0	3.0	3.0	3.0	3.0	3.0	4.0	5.0	6.0
54°	5.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	5.0	6.0
55°	4.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	5.0
57.5°	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	5.0
60°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	5.0
61°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	5.0
62°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	5.0
63°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	5.0
64°	3.0	3.0	3.0	3.0	4.0	4.0	3.0	3.0	4.0	4.0	5.0
65°	3.0	3.0	4.0	4.0	4.0	4.0	3.0	3.0	4.0	4.0	5.0
66°	3.0	4.0	4.0	4.0	4.0	4.0	3.0	3.0	4.0	4.0	5.0



TEST NUMBER: P182672

CATALOG NUMBER: LDSQA4A18835D010TE LAR15SP 4LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
72.5°	3.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0
75°	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
77.5°	3.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.0	4.0	4.0
80°	3.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.0	4.0	4.0
82.5°	3.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.0	3.0	4.0
85°	3.0	3.0	4.0	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0
87.5°	3.0	3.0	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0
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: P182672

CATALOG NUMBER: LDSQA4A18835D010TE LAR15SP 4LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	167.0	167.0	167.0	167.0	167.0	167.0	167.0	167.0	167.0	167.0	167.0
2.5°	160.0	157.0	155.0	154.0	155.0	153.0	150.0	151.0	150.0	149.0	149.0
5°	152.0	147.0	145.0	144.0	144.0	143.0	139.0	140.0	139.0	138.0	138.0
7.5°	141.0	137.0	134.0	133.0	133.0	132.0	128.0	130.0	128.0	127.0	128.0
10°	128.0	124.0	123.0	121.0	121.0	120.0	117.0	118.0	117.0	117.0	117.0
12.5°	114.0	110.0	109.0	108.0	109.0	108.0	105.0	107.0	106.0	106.0	107.0
15°	99.0	96.0	96.0	95.0	96.0	95.0	94.0	95.0	95.0	95.0	97.0
17.5°	84.0	82.0	82.0	81.0	82.0	82.0	81.0	84.0	84.0	86.0	88.0
20°	69.0	67.0	68.0	68.0	70.0	70.0	70.0	73.0	74.0	76.0	79.0
22.5°	57.0	56.0	57.0	57.0	59.0	60.0	60.0	63.0	66.0	68.0	71.0
25°	46.0	46.0	48.0	48.0	49.0	51.0	52.0	56.0	58.0	60.0	63.0
26°	43.0	43.0	44.0	45.0	46.0	48.0	49.0	53.0	55.0	57.0	60.0
27°	39.0	39.0	41.0	42.0	43.0	45.0	47.0	50.0	52.0	55.0	57.0
28°	36.0	36.0	38.0	39.0	40.0	43.0	44.0	47.0	49.0	52.0	55.0
29°	33.0	34.0	36.0	36.0	38.0	40.0	41.0	45.0	47.0	49.0	52.0
30°	31.0	32.0	33.0	34.0	35.0	37.0	39.0	42.0	44.0	46.0	49.0
31°	29.0	30.0	31.0	32.0	33.0	35.0	37.0	40.0	42.0	44.0	47.0
32°	27.0	27.0	29.0	30.0	31.0	33.0	35.0	38.0	40.0	42.0	45.0
33°	25.0	26.0	27.0	28.0	29.0	31.0	33.0	35.0	37.0	40.0	43.0
34°	23.0	24.0	26.0	27.0	28.0	30.0	31.0	33.0	35.0	38.0	40.0
35°	21.0	23.0	24.0	25.0	26.0	28.0	29.0	32.0	33.0	36.0	38.0
36°	20.0	21.0	23.0	24.0	25.0	26.0	27.0	30.0	32.0	34.0	36.0
37°	18.0	20.0	21.0	22.0	23.0	25.0	26.0	28.0	30.0	32.0	34.0
38°	17.0	18.0	20.0	21.0	22.0	23.0	24.0	27.0	28.0	30.0	32.0
39°	16.0	17.0	19.0	20.0	20.0	22.0	23.0	25.0	26.0	28.0	31.0
40°	15.0	16.0	18.0	18.0	19.0	21.0	22.0	24.0	25.0	27.0	29.0
42.5°	13.0	14.0	15.0	16.0	17.0	18.0	19.0	21.0	22.0	23.0	25.0
45°	11.0	12.0	14.0	14.0	15.0	16.0	17.0	18.0	19.0	21.0	22.0
47.5°	9.0	11.0	12.0	13.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0
50°	8.0	9.0	10.0	11.0	11.0	12.0	13.0	14.0	14.0	15.0	17.0
51°	8.0	9.0	10.0	10.0	11.0	12.0	12.0	13.0	14.0	14.0	15.0
52°	7.0	8.0	9.0	10.0	10.0	11.0	12.0	12.0	13.0	14.0	15.0
53°	7.0	8.0	9.0	9.0	10.0	11.0	11.0	12.0	12.0	13.0	14.0
54°	7.0	8.0	9.0	9.0	10.0	10.0	11.0	11.0	12.0	12.0	13.0
55°	6.0	7.0	8.0	9.0	9.0	10.0	10.0	11.0	11.0	12.0	12.0
57.5°	6.0	7.0	8.0	8.0	8.0	9.0	9.0	10.0	10.0	10.0	11.0
60°	6.0	7.0	7.0	8.0	8.0	9.0	9.0	9.0	9.0	10.0	10.0
61°	6.0	6.0	7.0	8.0	8.0	8.0	9.0	9.0	9.0	9.0	10.0
62°	6.0	6.0	7.0	7.0	8.0	8.0	8.0	9.0	9.0	9.0	9.0
63°	5.0	6.0	7.0	7.0	8.0	8.0	8.0	8.0	8.0	9.0	9.0
64°	5.0	6.0	7.0	7.0	7.0	8.0	8.0	8.0	8.0	8.0	8.0
65°	5.0	6.0	7.0	7.0	7.0	8.0	8.0	8.0	8.0	8.0	8.0
66°	5.0	6.0	7.0	7.0	7.0	8.0	8.0	8.0	8.0	8.0	8.0



TEST NUMBER: P182672

CATALOG NUMBER: LDSQA4A18835D010TE LAR15SP 4LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
72.5°	5.0	5.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
75°	5.0	5.0	5.0	6.0	6.0	6.0	6.0	6.0	6.0	5.0	5.0
77.5°	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0
80°	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	4.0	4.0
82.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.0
85°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.0	2.0
87.5°	3.0	4.0	4.0	4.0	4.0	4.0	3.0	3.0	3.0	2.0	2.0
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: P182672

CATALOG NUMBER: LDSQA4A18835D010TE LAR15SP 4LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	167.0	167.0	167.0	167.0	167.0	167.0	167.0	167.0
2.5°	150.0	147.0	146.0	146.0	147.0	146.0	147.0	146.0
5°	138.0	135.0	135.0	134.0	135.0	134.0	135.0	134.0
7.5°	128.0	125.0	125.0	125.0	125.0	125.0	126.0	125.0
10°	118.0	115.0	115.0	114.0	115.0	115.0	116.0	115.0
12.5°	108.0	106.0	106.0	105.0	107.0	106.0	108.0	107.0
15°	99.0	97.0	97.0	98.0	99.0	99.0	100.0	100.0
17.5°	90.0	90.0	90.0	91.0	92.0	93.0	94.0	93.0
20°	82.0	82.0	83.0	84.0	85.0	86.0	87.0	87.0
22.5°	74.0	74.0	75.0	77.0	79.0	80.0	81.0	81.0
25°	66.0	67.0	68.0	69.0	72.0	73.0	74.0	74.0
26°	63.0	64.0	66.0	67.0	69.0	70.0	72.0	72.0
27°	61.0	62.0	63.0	64.0	67.0	68.0	70.0	69.0
28°	58.0	59.0	60.0	62.0	64.0	66.0	67.0	67.0
29°	55.0	57.0	58.0	59.0	62.0	63.0	64.0	64.0
30°	53.0	54.0	55.0	57.0	59.0	61.0	62.0	62.0
31°	50.0	52.0	53.0	54.0	57.0	58.0	60.0	60.0
32°	48.0	49.0	50.0	52.0	54.0	56.0	57.0	57.0
33°	45.0	47.0	48.0	49.0	52.0	54.0	55.0	54.0
34°	43.0	45.0	45.0	47.0	49.0	51.0	52.0	52.0
35°	41.0	42.0	43.0	45.0	47.0	49.0	50.0	50.0
36°	39.0	40.0	41.0	43.0	45.0	47.0	48.0	48.0
37°	37.0	38.0	39.0	40.0	43.0	45.0	46.0	46.0
38°	35.0	36.0	37.0	39.0	41.0	42.0	44.0	44.0
39°	33.0	34.0	35.0	37.0	39.0	40.0	42.0	41.0
40°	31.0	33.0	33.0	35.0	37.0	38.0	40.0	39.0
42.5°	27.0	28.0	29.0	30.0	32.0	34.0	35.0	35.0
45°	24.0	25.0	26.0	27.0	28.0	29.0	31.0	30.0
47.5°	20.0	21.0	22.0	23.0	24.0	25.0	26.0	26.0
50°	18.0	18.0	19.0	19.0	21.0	22.0	23.0	23.0
51°	16.0	17.0	18.0	18.0	20.0	20.0	21.0	21.0
52°	16.0	16.0	17.0	17.0	18.0	19.0	20.0	20.0
53°	15.0	15.0	16.0	16.0	17.0	18.0	19.0	19.0
54°	14.0	14.0	15.0	15.0	16.0	17.0	18.0	18.0
55°	13.0	13.0	14.0	14.0	15.0	16.0	17.0	17.0
57.5°	11.0	12.0	12.0	13.0	13.0	14.0	14.0	15.0
60°	10.0	11.0	11.0	11.0	12.0	12.0	12.0	12.0
61°	10.0	10.0	10.0	11.0	11.0	10.0	11.0	10.0
62°	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
63°	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
64°	9.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
65°	8.0	8.0	8.0	8.0	8.0	8.0	8.0	7.0
66°	8.0	8.0	7.0	8.0	7.0	7.0	7.0	7.0



TEST NUMBER: P182672

CATALOG NUMBER: LDSQA4A18835D010TE LAR15SP 4LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
72.5°	5.0	5.0	5.0	5.0	5.0	4.0	4.0	4.0
75°	5.0	5.0	5.0	4.0	4.0	4.0	4.0	3.0
77.5°	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0
80°	3.0	3.0	3.0	3.0	3.0	3.0	2.0	2.0
82.5°	3.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
85°	2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0
87.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180° - - 45°-225° - - - 90°-270°







67.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0
70°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0





67.5°	3.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	5.0
70°	3.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0





67.5°	5.0	6.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
70°	5.0	6.0	6.0	6.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0





67.5°	7.0	7.0	7.0	7.0	7.0	6.0	6.0	6.0
70°	6.0	6.0	6.0	6.0	6.0	5.0	5.0	5.0



(END OF REPORT)