

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: P182684

Luminaire Tested: **LDSQA4A09935D010TE LAR15SP 4LSQA1H 30°**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182684
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: LDSQA4A09935D010TE LAR15SP 4LSQA1H 30°
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT, 30° Tilt
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 856.7 lumens
Efficiency: N/A
Efficacy: 61.9 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

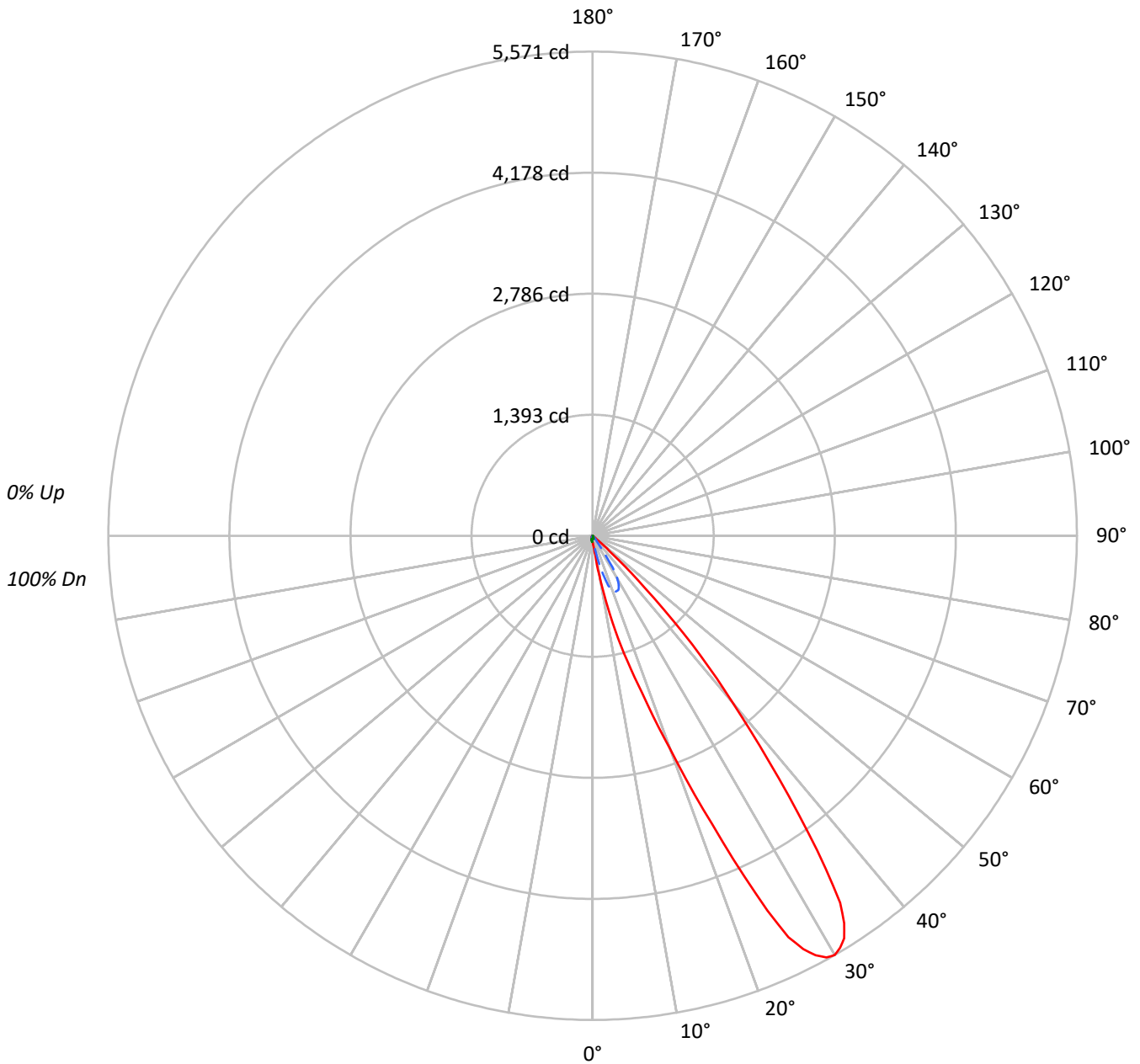
Input Watts (W): 13.84
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	7159	7159	7159
5°	11913	6749	5767
10°	50818	5912	5007
15°	140651	4704	4433
20°	269773	3330	3969
25°	508648	2223	3495
30°	623195	1488	3065
35°	553459	993	2614
40°	315434	670	2175
45°	115055	548	1822
50°	12660	407	1537
55°	1875	304	1267
60°	426	349	1027
65°	298	413	711
70°	255	510	623
75°	337	674	487
80°	0	1004	502
85°	0	1445	445



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	9.3	1.1
10°-20°	92.8	10.8
20°-30°	304.9	35.6
30°-40°	334.4	39.0
40°-50°	104.4	12.2
50°-60°	5.7	0.7
60°-70°	2.3	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°	407.0	47.5
0°-40°	741.4	86.5
0°-60°	851.6	99.4
0°-90°	856.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	856.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	74	74	74	74	74	
5°	122	98	69	62	59	23
15°	1402	451	47	42	44	441
25°	4759	692	21	26	33	2121
35°	4680	136	8	15	22	2736
45°	840	14	4	8	13	771
55°	11	3	2	5	8	17
65°	1	1	2	4	3	1
75°	1	1	2	3	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°	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9
2.5°	91.1	92.0	92.4	90.2	90.7	89.8	90.7	88.9	85.8	86.7	84.0
5°	122.5	120.7	120.3	116.8	115.9	114.1	114.1	110.1	104.4	103.5	98.2
7.5°	216.7	207.4	199.5	187.5	176.0	167.2	163.6	149.5	134.0	128.3	115.9
10°	516.6	514.8	494.9	457.3	413.9	382.5	364.4	309.6	240.1	197.7	153.5
12.5°	940.2	931.4	903.1	834.1	759.3	712.5	675.8	565.2	462.2	379.5	272.0
15°	1402.4	1366.6	1325.0	1218.0	1113.2	1052.1	999.9	867.3	707.6	588.6	450.7
17.5°	1895.9	1911.9	1811.0	1626.6	1440.4	1344.9	1256.4	1052.6	877.9	754.0	598.8
20°	2616.8	2583.2	2405.9	2100.3	1825.6	1666.0	1540.4	1246.3	982.7	828.3	681.5
22.5°	3591.1	3484.1	3138.2	2621.2	2185.6	1964.0	1785.8	1389.6	1070.7	866.4	694.8
25°	4758.6	4659.6	4019.2	3122.3	2477.9	2190.9	1948.6	1480.7	1106.1	872.6	692.1
26°	5139.9	4992.6	4344.3	3300.5	2567.7	2248.4	1988.8	1498.4	1107.0	867.7	680.6
27°	5337.1	5221.7	4613.1	3445.2	2629.2	2284.7	2011.4	1502.8	1098.1	856.6	662.9
28°	5467.1	5359.2	4783.4	3539.8	2660.6	2298.8	2018.0	1493.0	1078.2	837.2	635.1
29°	5547.6	5434.0	4866.6	3582.7	2662.8	2292.6	2005.6	1467.4	1051.2	813.7	602.8
30°	5571.1	5448.1	4868.8	3565.0	2630.1	2259.5	1970.7	1425.8	1018.5	784.1	567.0
31°	5529.5	5402.6	4788.7	3484.5	2562.9	2194.9	1915.8	1371.0	977.8	752.7	511.7
32°	5460.5	5292.0	4621.1	3351.0	2470.9	2117.1	1847.3	1311.3	934.5	712.9	433.9
33°	5313.7	5110.2	4364.6	3183.3	2360.3	2027.7	1767.2	1244.9	893.4	644.4	322.4
34°	5093.0	4836.0	4050.2	2988.3	2235.1	1916.3	1675.3	1183.5	850.5	553.7	220.7
35°	4679.9	4440.7	3703.0	2780.4	2100.3	1808.4	1574.0	1103.0	792.1	444.0	136.2
36°	4217.8	4041.7	3366.4	2569.0	1962.3	1696.5	1469.6	1043.7	705.8	326.8	92.4
37°	3745.4	3589.3	3048.9	2361.2	1823.9	1572.7	1363.5	976.5	603.2	218.0	74.3
38°	3295.7	3171.8	2747.3	2156.9	1680.1	1443.1	1252.0	904.8	492.7	140.2	61.0
39°	2882.6	2789.7	2451.9	1959.2	1535.9	1316.1	1145.0	814.6	375.9	99.9	50.9
40°	2494.3	2428.9	2167.0	1764.1	1392.7	1191.4	1048.1	705.4	260.9	79.2	41.1
42.5°	1696.5	1680.1	1524.9	1269.7	1034.4	916.8	828.8	396.7	100.4	47.8	23.0
45°	839.8	851.3	789.4	726.2	677.1	641.3	522.3	165.4	55.7	26.1	14.2
47.5°	297.2	297.6	256.1	228.2	218.0	217.1	157.9	58.4	29.6	15.9	10.2
50°	84.0	90.7	85.4	87.1	68.1	57.9	47.3	28.3	15.0	10.2	6.6
51°	51.7	55.7	52.2	54.0	46.9	42.0	35.4	21.2	11.9	8.4	6.2
52°	33.2	35.4	33.6	34.1	31.4	27.4	23.9	15.5	9.7	7.1	5.3
53°	22.6	23.9	22.6	22.6	20.8	19.5	16.8	11.5	8.0	5.7	4.0
54°	15.5	15.9	15.9	15.9	14.6	13.7	11.9	8.8	6.6	5.3	3.5
55°	11.1	11.5	11.1	11.1	10.6	9.7	8.8	6.6	5.3	4.4	2.7
57.5°	4.9	4.9	4.9	5.3	4.9	4.9	4.4	4.0	3.5	2.7	1.8
60°	2.2	2.2	2.2	2.2	2.7	2.7	2.7	2.7	2.2	1.8	1.8
61°	1.8	1.8	1.8	1.8	1.8	2.2	2.2	2.2	1.8	1.8	1.3
62°	1.3	1.3	1.3	1.3	1.8	1.8	1.8	1.8	1.8	1.3	1.3
63°	1.3	1.3	1.3	1.3	1.3	1.3	1.8	1.8	1.3	1.3	1.3
64°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
65°	1.3	0.9	0.9	0.9	0.9	1.3	1.3	1.3	1.3	1.3	1.3
66°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.3	1.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
72.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.3
75°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.3
77.5°	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.9	0.9	1.3
80°	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.9	0.9	1.3
82.5°	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.9	0.9	1.3
85°	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.9	0.9	1.3
87.5°	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.9	0.9	1.3
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°	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9
2.5°	82.3	81.8	79.6	77.4	77.8	77.0	76.1	74.7	73.9	71.6	71.6
5°	93.8	91.5	86.7	82.3	81.8	80.0	77.4	74.7	72.5	69.4	68.5
7.5°	107.0	100.8	92.9	85.8	84.5	81.8	77.0	73.4	69.4	65.5	64.1
10°	126.0	111.4	97.7	87.1	84.5	80.5	74.3	69.4	65.0	60.1	58.4
12.5°	193.7	137.5	103.9	87.1	82.3	77.4	69.9	64.1	58.8	53.5	51.7
15°	322.8	219.8	131.8	87.1	78.3	72.5	63.2	57.5	51.7	46.9	45.1
17.5°	445.8	312.7	183.5	98.2	78.7	66.8	55.3	49.1	44.2	39.4	38.0
20°	517.0	364.4	217.6	109.2	77.8	60.1	47.3	40.7	35.8	32.3	31.0
22.5°	526.3	366.6	210.1	97.7	65.5	50.0	39.4	33.2	29.2	26.1	25.2
25°	501.5	323.7	168.1	69.4	48.6	40.7	31.0	26.5	23.4	20.8	20.3
26°	482.5	298.1	146.4	57.5	42.9	36.3	27.9	23.9	21.2	19.0	18.6
27°	455.5	270.7	125.2	47.8	38.0	32.7	24.8	21.7	19.5	17.2	17.2
28°	425.0	241.0	100.8	40.2	34.1	29.2	22.6	19.5	17.2	15.9	15.9
29°	388.3	198.1	73.9	34.9	30.1	25.7	19.9	17.2	15.5	14.6	14.6
30°	333.9	143.7	50.9	30.5	26.1	22.6	17.7	15.5	14.2	13.3	13.3
31°	260.9	88.5	39.8	26.5	23.0	19.9	15.9	13.7	12.8	11.9	12.4
32°	177.8	55.3	34.1	23.0	20.3	17.2	14.2	12.4	11.5	11.1	11.1
33°	101.3	46.0	29.6	19.9	17.2	15.0	12.4	11.1	10.6	10.2	10.2
34°	67.2	39.4	25.7	16.8	14.2	12.8	10.6	9.7	9.3	9.3	9.3
35°	56.6	34.1	20.8	14.2	12.4	11.1	9.3	8.8	8.4	8.4	8.8
36°	47.8	28.3	16.8	11.9	10.6	9.7	8.4	8.0	7.5	7.5	8.0
37°	40.2	22.6	14.2	10.2	8.8	8.4	7.5	7.1	7.1	7.1	7.5
38°	32.7	18.1	11.9	8.8	8.0	7.1	6.6	6.2	6.2	6.6	7.1
39°	25.7	14.6	9.7	7.5	6.6	6.2	5.7	5.7	5.7	5.7	6.2
40°	20.3	12.4	8.4	6.6	5.7	5.7	5.3	4.9	5.3	5.3	6.2
42.5°	12.8	8.8	6.2	4.9	4.4	4.4	4.0	4.0	4.0	4.4	4.9
45°	9.3	7.1	4.9	4.0	3.5	3.1	3.1	3.1	3.5	4.0	4.4
47.5°	7.1	4.9	3.5	2.7	2.2	2.2	2.2	2.2	2.7	3.1	3.5
50°	4.9	3.1	2.2	1.8	1.8	1.8	1.8	1.8	2.2	2.7	3.1
51°	4.0	2.7	2.2	1.8	1.8	1.3	1.3	1.8	2.2	2.2	2.7
52°	3.1	2.2	1.8	1.3	1.3	1.3	1.3	1.8	1.8	2.2	2.7
53°	2.7	2.2	1.8	1.3	1.3	1.3	1.3	1.3	1.8	2.2	2.7
54°	2.2	1.8	1.3	1.3	1.3	1.3	1.3	1.3	1.8	2.2	2.7
55°	1.8	1.8	1.3	1.3	1.3	1.3	1.3	1.3	1.8	1.8	2.2
57.5°	1.8	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.8	2.2
60°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.8	2.2
61°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.8	2.2
62°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.8	2.2
63°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.8	1.8	2.2
64°	1.3	1.3	1.3	1.3	1.8	1.8	1.3	1.3	1.8	1.8	2.2
65°	1.3	1.3	1.8	1.8	1.8	1.8	1.3	1.3	1.8	1.8	2.2
66°	1.3	1.8	1.8	1.8	1.8	1.8	1.3	1.3	1.8	1.8	2.2



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
72.5°	1.3	1.8	1.8	1.8	1.8	1.8	1.8	1.3	1.8	1.8	1.8
75°	1.3	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
77.5°	1.3	1.8	1.8	1.8	1.8	1.8	1.8	1.3	1.3	1.8	1.8
80°	1.3	1.8	1.8	1.8	1.8	1.8	1.8	1.3	1.3	1.8	1.8
82.5°	1.3	1.8	1.8	1.8	1.8	1.8	1.8	1.3	1.3	1.3	1.8
85°	1.3	1.3	1.8	1.8	1.8	1.8	1.8	1.3	1.3	1.3	1.3
87.5°	1.3	1.3	1.8	1.8	1.8	1.8	1.3	1.3	1.3	1.3	1.3
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: LDSQA4A09935D010TE LAR15SP 4LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9
2.5°	70.8	69.4	68.5	68.1	68.5	67.7	66.3	66.8	66.3	65.9	65.9
5°	67.2	65.0	64.1	63.7	63.7	63.2	61.5	61.9	61.5	61.0	61.0
7.5°	62.4	60.6	59.3	58.8	58.8	58.4	56.6	57.5	56.6	56.2	56.6
10°	56.6	54.8	54.4	53.5	53.5	53.1	51.7	52.2	51.7	51.7	51.7
12.5°	50.4	48.6	48.2	47.8	48.2	47.8	46.4	47.3	46.9	46.9	47.3
15°	43.8	42.5	42.5	42.0	42.5	42.0	41.6	42.0	42.0	42.0	42.9
17.5°	37.1	36.3	36.3	35.8	36.3	36.3	35.8	37.1	37.1	38.0	38.9
20°	30.5	29.6	30.1	30.1	31.0	31.0	31.0	32.3	32.7	33.6	34.9
22.5°	25.2	24.8	25.2	25.2	26.1	26.5	26.5	27.9	29.2	30.1	31.4
25°	20.3	20.3	21.2	21.2	21.7	22.6	23.0	24.8	25.7	26.5	27.9
26°	19.0	19.0	19.5	19.9	20.3	21.2	21.7	23.4	24.3	25.2	26.5
27°	17.2	17.2	18.1	18.6	19.0	19.9	20.8	22.1	23.0	24.3	25.2
28°	15.9	15.9	16.8	17.2	17.7	19.0	19.5	20.8	21.7	23.0	24.3
29°	14.6	15.0	15.9	15.9	16.8	17.7	18.1	19.9	20.8	21.7	23.0
30°	13.7	14.2	14.6	15.0	15.5	16.4	17.2	18.6	19.5	20.3	21.7
31°	12.8	13.3	13.7	14.2	14.6	15.5	16.4	17.7	18.6	19.5	20.8
32°	11.9	11.9	12.8	13.3	13.7	14.6	15.5	16.8	17.7	18.6	19.9
33°	11.1	11.5	11.9	12.4	12.8	13.7	14.6	15.5	16.4	17.7	19.0
34°	10.2	10.6	11.5	11.9	12.4	13.3	13.7	14.6	15.5	16.8	17.7
35°	9.3	10.2	10.6	11.1	11.5	12.4	12.8	14.2	14.6	15.9	16.8
36°	8.8	9.3	10.2	10.6	11.1	11.5	11.9	13.3	14.2	15.0	15.9
37°	8.0	8.8	9.3	9.7	10.2	11.1	11.5	12.4	13.3	14.2	15.0
38°	7.5	8.0	8.8	9.3	9.7	10.2	10.6	11.9	12.4	13.3	14.2
39°	7.1	7.5	8.4	8.8	8.8	9.7	10.2	11.1	11.5	12.4	13.7
40°	6.6	7.1	8.0	8.0	8.4	9.3	9.7	10.6	11.1	11.9	12.8
42.5°	5.7	6.2	6.6	7.1	7.5	8.0	8.4	9.3	9.7	10.2	11.1
45°	4.9	5.3	6.2	6.2	6.6	7.1	7.5	8.0	8.4	9.3	9.7
47.5°	4.0	4.9	5.3	5.7	5.7	6.2	6.6	7.1	7.5	8.0	8.4
50°	3.5	4.0	4.4	4.9	4.9	5.3	5.7	6.2	6.2	6.6	7.5
51°	3.5	4.0	4.4	4.4	4.9	5.3	5.3	5.7	6.2	6.2	6.6
52°	3.1	3.5	4.0	4.4	4.4	4.9	5.3	5.3	5.7	6.2	6.6
53°	3.1	3.5	4.0	4.0	4.4	4.9	4.9	5.3	5.3	5.7	6.2
54°	3.1	3.5	4.0	4.0	4.4	4.4	4.9	4.9	5.3	5.3	5.7
55°	2.7	3.1	3.5	4.0	4.0	4.4	4.4	4.9	4.9	5.3	5.3
57.5°	2.7	3.1	3.5	3.5	3.5	4.0	4.0	4.4	4.4	4.4	4.9
60°	2.7	3.1	3.1	3.5	3.5	4.0	4.0	4.0	4.0	4.4	4.4
61°	2.7	2.7	3.1	3.5	3.5	3.5	4.0	4.0	4.0	4.0	4.4
62°	2.7	2.7	3.1	3.1	3.5	3.5	3.5	4.0	4.0	4.0	4.0
63°	2.2	2.7	3.1	3.1	3.5	3.5	3.5	3.5	3.5	4.0	4.0
64°	2.2	2.7	3.1	3.1	3.1	3.5	3.5	3.5	3.5	3.5	3.5
65°	2.2	2.7	3.1	3.1	3.1	3.5	3.5	3.5	3.5	3.5	3.5
66°	2.2	2.7	3.1	3.1	3.1	3.5	3.5	3.5	3.5	3.5	3.5



TEST NUMBER: P182684

CATALOG NUMBER: LDSQA4A09935D010TE LAR15SP 4LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
72.5°	2.2	2.2	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
75°	2.2	2.2	2.2	2.7	2.7	2.7	2.7	2.7	2.7	2.2	2.2
77.5°	1.8	1.8	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	1.8
80°	1.8	1.8	2.2	2.2	2.2	2.2	2.2	2.2	1.8	1.8	1.8
82.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.3	1.3
85°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.3	1.3	0.9
87.5°	1.3	1.8	1.8	1.8	1.8	1.8	1.3	1.3	1.3	0.9	0.9
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: P182684

CATALOG NUMBER: LDSQA4A09935D010TE LAR15SP 4LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9
2.5°	66.3	65.0	64.6	64.6	65.0	64.6	65.0	64.6
5°	61.0	59.7	59.7	59.3	59.7	59.3	59.7	59.3
7.5°	56.6	55.3	55.3	55.3	55.3	55.3	55.7	55.3
10°	52.2	50.9	50.9	50.4	50.9	50.9	51.3	50.9
12.5°	47.8	46.9	46.9	46.4	47.3	46.9	47.8	47.3
15°	43.8	42.9	42.9	43.3	43.8	43.8	44.2	44.2
17.5°	39.8	39.8	39.8	40.2	40.7	41.1	41.6	41.1
20°	36.3	36.3	36.7	37.1	37.6	38.0	38.5	38.5
22.5°	32.7	32.7	33.2	34.1	34.9	35.4	35.8	35.8
25°	29.2	29.6	30.1	30.5	31.8	32.3	32.7	32.7
26°	27.9	28.3	29.2	29.6	30.5	31.0	31.8	31.8
27°	27.0	27.4	27.9	28.3	29.6	30.1	31.0	30.5
28°	25.7	26.1	26.5	27.4	28.3	29.2	29.6	29.6
29°	24.3	25.2	25.7	26.1	27.4	27.9	28.3	28.3
30°	23.4	23.9	24.3	25.2	26.1	27.0	27.4	27.4
31°	22.1	23.0	23.4	23.9	25.2	25.7	26.5	26.5
32°	21.2	21.7	22.1	23.0	23.9	24.8	25.2	25.2
33°	19.9	20.8	21.2	21.7	23.0	23.9	24.3	23.9
34°	19.0	19.9	19.9	20.8	21.7	22.6	23.0	23.0
35°	18.1	18.6	19.0	19.9	20.8	21.7	22.1	22.1
36°	17.2	17.7	18.1	19.0	19.9	20.8	21.2	21.2
37°	16.4	16.8	17.2	17.7	19.0	19.9	20.3	20.3
38°	15.5	15.9	16.4	17.2	18.1	18.6	19.5	19.5
39°	14.6	15.0	15.5	16.4	17.2	17.7	18.6	18.1
40°	13.7	14.6	14.6	15.5	16.4	16.8	17.7	17.2
42.5°	11.9	12.4	12.8	13.3	14.2	15.0	15.5	15.5
45°	10.6	11.1	11.5	11.9	12.4	12.8	13.7	13.3
47.5°	8.8	9.3	9.7	10.2	10.6	11.1	11.5	11.5
50°	8.0	8.0	8.4	8.4	9.3	9.7	10.2	10.2
51°	7.1	7.5	8.0	8.0	8.8	8.8	9.3	9.3
52°	7.1	7.1	7.5	7.5	8.0	8.4	8.8	8.8
53°	6.6	6.6	7.1	7.1	7.5	8.0	8.4	8.4
54°	6.2	6.2	6.6	6.6	7.1	7.5	8.0	8.0
55°	5.7	5.7	6.2	6.2	6.6	7.1	7.5	7.5
57.5°	4.9	5.3	5.3	5.7	5.7	6.2	6.2	6.6
60°	4.4	4.9	4.9	4.9	5.3	5.3	5.3	5.3
61°	4.4	4.4	4.4	4.9	4.9	4.4	4.9	4.4
62°	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
63°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
64°	4.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5
65°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.1
66°	3.5	3.5	3.1	3.5	3.1	3.1	3.1	3.1



TEST NUMBER: P182684

CATALOG NUMBER: LDSQA4A09935D010TE LAR15SP 4LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
72.5°	2.2	2.2	2.2	2.2	2.2	1.8	1.8	1.8
75°	2.2	2.2	2.2	1.8	1.8	1.8	1.8	1.3
77.5°	1.8	1.8	1.8	1.8	1.3	1.3	1.3	1.3
80°	1.3	1.3	1.3	1.3	1.3	1.3	0.9	0.9
82.5°	1.3	0.9	0.9	0.9	0.9	0.9	0.9	0.9
85°	0.9	0.9	0.9	0.9	0.9	0.4	0.4	0.4
87.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
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°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.3	1.3
70°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.3	1.3





67.5°	1.3	1.8	1.8	1.8	1.8	1.8	1.8	1.3	1.8	1.8	2.2
70°	1.3	1.8	1.8	1.8	1.8	1.8	1.8	1.3	1.8	1.8	1.8





67.5°	2.2	2.7	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
70°	2.2	2.7	2.7	2.7	3.1	3.1	3.1	3.1	3.1	3.1	3.1





67.5°	3.1	3.1	3.1	3.1	3.1	2.7	2.7	2.7
70°	2.7	2.7	2.7	2.7	2.7	2.2	2.2	2.2



(END OF REPORT)