

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: P182674

Luminaire Tested: **LDSQA4A18927D010TE LAR15SP 4LSQA1H 30°**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182674
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: LDSQA4A18927D010TE 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 / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1496.3 lumens
Efficiency: N/A
Efficacy: 51.4 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

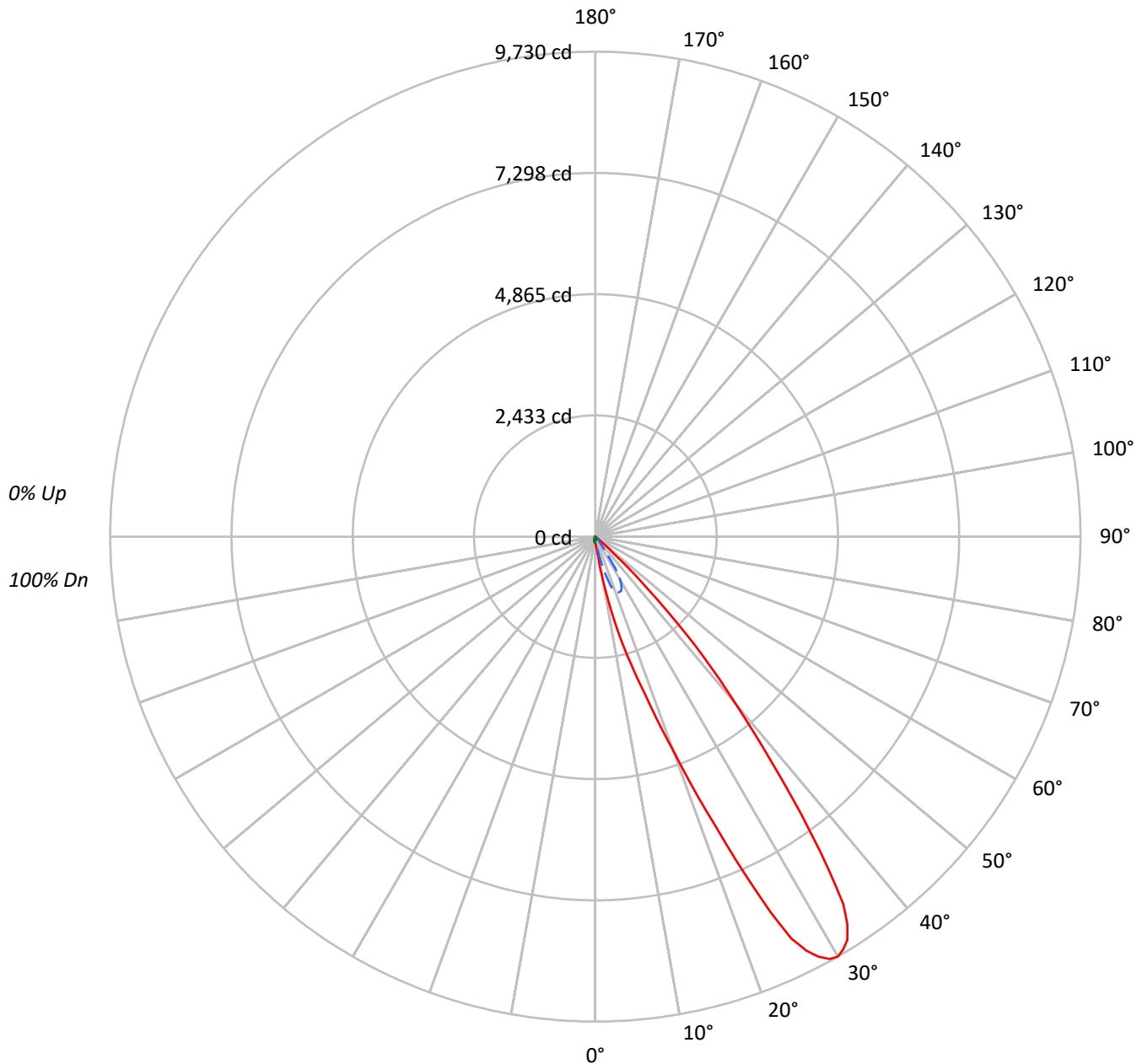
Input Watts (W): 29.12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
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°	12497	12497	12497
5°	20811	11796	10065
10°	88749	10339	8735
15°	245657	8214	7743
20°	471185	5814	6928
25°	888418	3880	6114
30°	1088463	2595	5358
35°	966682	1738	4565
40°	550944	1176	3807
45°	200969	959	3178
50°	22124	693	2683
55°	3260	524	2213
60°	756	601	1802
65°	527	711	1238
70°	425	878	1105
75°	561	1160	861
80°	0	1729	837
85°	0	2556	889



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	16.2	1.1
10°-20°	162.1	10.8
20°-30°	532.6	35.6
30°-40°	584.0	39.0
40°-50°	182.4	12.2
50°-60°	10.0	0.7
60°-70°	4.0	0.3
70°-80°	3.1	0.2
80°-90°	1.9	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°	710.9	47.5
0°-40°	1295.0	86.5
0°-60°	1487.4	99.4
0°-90°	1496.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1496.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	129	129	129	129	129	
5°	214	172	121	107	104	40
15°	2449	787	82	73	77	770
25°	8312	1209	36	45	57	3705
35°	8174	238	15	26	39	4779
45°	1467	25	7	15	23	1347
55°	19	5	3	8	13	30
65°	2	2	3	6	5	2
75°	2	2	3	5	2	1
85°	0	2	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°	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0
2.5°	159.1	160.7	161.4	157.6	158.4	156.8	158.4	155.3	149.9	151.4	146.8
5°	214.0	210.9	210.1	203.9	202.4	199.3	199.3	192.3	182.3	180.8	171.5
7.5°	378.5	362.3	348.4	327.5	307.4	292.0	285.8	261.1	234.0	224.0	202.4
10°	902.2	899.1	864.4	798.7	723.0	668.2	636.5	540.7	419.4	345.3	268.0
12.5°	1642.2	1626.8	1577.3	1456.8	1326.3	1244.4	1180.3	987.2	807.2	662.8	475.1
15°	2449.4	2386.8	2314.2	2127.3	1944.2	1837.6	1746.5	1514.8	1235.9	1028.1	787.1
17.5°	3311.5	3339.3	3163.1	2841.0	2515.8	2349.0	2194.5	1838.4	1533.3	1317.0	1045.9
20°	4570.5	4511.8	4202.1	3668.3	3188.6	2909.8	2690.4	2176.7	1716.4	1446.8	1190.3
22.5°	6272.2	6085.3	5481.2	4578.3	3817.4	3430.4	3119.1	2427.0	1870.1	1513.2	1213.5
25°	8311.5	8138.4	7019.9	5453.4	4328.0	3826.7	3403.4	2586.1	1931.9	1524.0	1208.9
26°	8977.3	8720.1	7587.7	5764.7	4484.8	3927.1	3473.7	2617.0	1933.4	1515.5	1188.8
27°	9321.8	9120.2	8057.3	6017.3	4592.2	3990.4	3513.1	2624.8	1918.0	1496.2	1157.9
28°	9548.9	9360.4	8354.7	6182.6	4647.0	4015.1	3524.6	2607.8	1883.2	1462.2	1109.2
29°	9689.5	9491.0	8499.9	6257.5	4650.9	4004.3	3503.0	2563.0	1836.1	1421.3	1052.8
30°	9730.4	9515.7	8503.8	6226.6	4593.7	3946.4	3442.0	2490.4	1778.9	1369.5	990.3
31°	9657.8	9436.1	8364.0	6086.1	4476.3	3833.6	3346.2	2394.6	1707.9	1314.7	893.7
32°	9537.3	9243.0	8071.2	5852.8	4315.6	3697.7	3226.5	2290.3	1632.2	1245.2	757.8
33°	9280.9	8925.6	7623.2	5560.0	4122.5	3541.6	3086.7	2174.4	1560.3	1125.4	563.1
34°	8895.4	8446.6	7074.0	5219.4	3903.9	3347.0	2926.0	2067.1	1485.4	967.1	385.4
35°	8174.0	7756.1	6467.7	4856.3	3668.3	3158.5	2749.1	1926.5	1383.4	775.5	237.9
36°	7366.8	7059.3	5879.8	4487.1	3427.3	2963.1	2566.8	1823.0	1232.8	570.8	161.4
37°	6541.8	6269.1	5325.2	4124.1	3185.5	2746.8	2381.4	1705.6	1053.6	380.8	129.8
38°	5756.2	5539.9	4798.4	3767.2	2934.5	2520.5	2186.8	1580.4	860.5	244.9	106.6
39°	5034.8	4872.6	4282.4	3421.9	2682.7	2298.8	1999.9	1422.8	656.6	174.6	88.8
40°	4356.6	4242.2	3785.0	3081.3	2432.4	2081.0	1830.7	1232.0	455.7	138.3	71.8
42.5°	2963.1	2934.5	2663.4	2217.7	1806.7	1601.3	1447.6	692.9	175.3	83.4	40.2
45°	1466.9	1486.9	1378.8	1268.3	1182.6	1120.0	912.3	288.9	97.3	45.6	24.7
47.5°	519.1	519.9	447.2	398.6	380.8	379.3	275.8	102.0	51.8	27.8	17.8
50°	146.8	158.4	149.1	152.2	119.0	101.2	82.7	49.4	26.3	17.8	11.6
51°	90.4	97.3	91.1	94.2	81.9	73.4	61.8	37.1	20.9	14.7	10.8
52°	57.9	61.8	58.7	59.5	54.8	47.9	41.7	27.0	17.0	12.4	9.3
53°	39.4	41.7	39.4	39.4	36.3	34.0	29.4	20.1	13.9	10.0	7.0
54°	27.0	27.8	27.8	27.8	25.5	23.9	20.9	15.4	11.6	9.3	6.2
55°	19.3	20.1	19.3	19.3	18.5	17.0	15.4	11.6	9.3	7.7	4.6
57.5°	8.5	8.5	8.5	9.3	8.5	8.5	7.7	7.0	6.2	4.6	3.1
60°	3.9	3.9	3.9	3.9	4.6	4.6	4.6	4.6	3.9	3.1	3.1
61°	3.1	3.1	3.1	3.1	3.1	3.9	3.9	3.9	3.1	3.1	2.3
62°	2.3	2.3	2.3	2.3	3.1	3.1	3.1	3.1	3.1	2.3	2.3
63°	2.3	2.3	2.3	2.3	2.3	2.3	3.1	3.1	2.3	2.3	2.3
64°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
65°	2.3	1.5	1.5	1.5	1.5	2.3	2.3	2.3	2.3	2.3	2.3
66°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.3	2.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
72.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.3
75°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.3
77.5°	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8	1.5	1.5	2.3
80°	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8	1.5	1.5	2.3
82.5°	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8	1.5	1.5	2.3
85°	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8	1.5	1.5	2.3
87.5°	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8	1.5	1.5	2.3
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°	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0
2.5°	143.7	142.9	139.0	135.2	135.9	134.4	132.9	130.5	129.0	125.1	125.1
5°	163.8	159.9	151.4	143.7	142.9	139.8	135.2	130.5	126.7	121.3	119.7
7.5°	186.9	176.1	162.2	149.9	147.5	142.9	134.4	128.2	121.3	114.3	112.0
10°	220.1	194.7	170.7	152.2	147.5	140.6	129.8	121.3	113.5	105.1	102.0
12.5°	338.3	240.2	181.5	152.2	143.7	135.2	122.0	112.0	102.7	93.5	90.4
15°	563.9	383.9	230.2	152.2	136.7	126.7	110.5	100.4	90.4	81.9	78.8
17.5°	778.6	546.1	320.6	171.5	137.5	116.6	96.6	85.7	77.2	68.7	66.4
20°	903.0	636.5	380.0	190.8	135.9	105.1	82.7	71.1	62.6	56.4	54.1
22.5°	919.2	640.4	366.9	170.7	114.3	87.3	68.7	57.9	51.0	45.6	44.0
25°	875.9	565.4	293.5	121.3	85.0	71.1	54.1	46.3	40.9	36.3	35.5
26°	842.7	520.6	255.7	100.4	74.9	63.3	48.7	41.7	37.1	33.2	32.4
27°	795.6	472.7	218.6	83.4	66.4	57.2	43.3	37.8	34.0	30.1	30.1
28°	742.3	421.0	176.1	70.3	59.5	51.0	39.4	34.0	30.1	27.8	27.8
29°	678.2	346.1	129.0	61.0	52.5	44.8	34.8	30.1	27.0	25.5	25.5
30°	583.2	251.0	88.8	53.3	45.6	39.4	30.9	27.0	24.7	23.2	23.2
31°	455.7	154.5	69.5	46.3	40.2	34.8	27.8	23.9	22.4	20.9	21.6
32°	310.5	96.6	59.5	40.2	35.5	30.1	24.7	21.6	20.1	19.3	19.3
33°	176.9	80.3	51.8	34.8	30.1	26.3	21.6	19.3	18.5	17.8	17.8
34°	117.4	68.7	44.8	29.4	24.7	22.4	18.5	17.0	16.2	16.2	16.2
35°	98.9	59.5	36.3	24.7	21.6	19.3	16.2	15.4	14.7	14.7	15.4
36°	83.4	49.4	29.4	20.9	18.5	17.0	14.7	13.9	13.1	13.1	13.9
37°	70.3	39.4	24.7	17.8	15.4	14.7	13.1	12.4	12.4	12.4	13.1
38°	57.2	31.7	20.9	15.4	13.9	12.4	11.6	10.8	10.8	11.6	12.4
39°	44.8	25.5	17.0	13.1	11.6	10.8	10.0	10.0	10.0	10.0	10.8
40°	35.5	21.6	14.7	11.6	10.0	10.0	9.3	8.5	9.3	9.3	10.8
42.5°	22.4	15.4	10.8	8.5	7.7	7.7	7.0	7.0	7.0	7.7	8.5
45°	16.2	12.4	8.5	7.0	6.2	5.4	5.4	5.4	6.2	7.0	7.7
47.5°	12.4	8.5	6.2	4.6	3.9	3.9	3.9	3.9	4.6	5.4	6.2
50°	8.5	5.4	3.9	3.1	3.1	3.1	3.1	3.1	3.9	4.6	5.4
51°	7.0	4.6	3.9	3.1	3.1	2.3	2.3	3.1	3.9	3.9	4.6
52°	5.4	3.9	3.1	2.3	2.3	2.3	2.3	3.1	3.1	3.9	4.6
53°	4.6	3.9	3.1	2.3	2.3	2.3	2.3	2.3	3.1	3.9	4.6
54°	3.9	3.1	2.3	2.3	2.3	2.3	2.3	2.3	3.1	3.9	4.6
55°	3.1	3.1	2.3	2.3	2.3	2.3	2.3	2.3	3.1	3.1	3.9
57.5°	3.1	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	3.1	3.9
60°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	3.1	3.9
61°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	3.1	3.9
62°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	3.1	3.9
63°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	3.1	3.1	3.9
64°	2.3	2.3	2.3	2.3	3.1	3.1	2.3	2.3	3.1	3.1	3.9
65°	2.3	2.3	3.1	3.1	3.1	3.1	2.3	2.3	3.1	3.1	3.9
66°	2.3	3.1	3.1	3.1	3.1	3.1	2.3	2.3	3.1	3.1	3.9



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
72.5°	2.3	3.1	3.1	3.1	3.1	3.1	3.1	2.3	3.1	3.1	3.1
75°	2.3	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
77.5°	2.3	3.1	3.1	3.1	3.1	3.1	3.1	2.3	2.3	3.1	3.1
80°	2.3	3.1	3.1	3.1	3.1	3.1	3.1	2.3	2.3	3.1	3.1
82.5°	2.3	3.1	3.1	3.1	3.1	3.1	3.1	2.3	2.3	2.3	3.1
85°	2.3	2.3	3.1	3.1	3.1	3.1	3.1	2.3	2.3	2.3	2.3
87.5°	2.3	2.3	3.1	3.1	3.1	3.1	2.3	2.3	2.3	2.3	2.3
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: P182674

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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0
2.5°	123.6	121.3	119.7	119.0	119.7	118.2	115.9	116.6	115.9	115.1	115.1
5°	117.4	113.5	112.0	111.2	111.2	110.5	107.4	108.1	107.4	106.6	106.6
7.5°	108.9	105.8	103.5	102.7	102.7	102.0	98.9	100.4	98.9	98.1	98.9
10°	98.9	95.8	95.0	93.5	93.5	92.7	90.4	91.1	90.4	90.4	90.4
12.5°	88.1	85.0	84.2	83.4	84.2	83.4	81.1	82.7	81.9	81.9	82.7
15°	76.5	74.2	74.2	73.4	74.2	73.4	72.6	73.4	73.4	73.4	74.9
17.5°	64.9	63.3	63.3	62.6	63.3	63.3	62.6	64.9	64.9	66.4	68.0
20°	53.3	51.8	52.5	52.5	54.1	54.1	54.1	56.4	57.2	58.7	61.0
22.5°	44.0	43.3	44.0	44.0	45.6	46.3	46.3	48.7	51.0	52.5	54.8
25°	35.5	35.5	37.1	37.1	37.8	39.4	40.2	43.3	44.8	46.3	48.7
26°	33.2	33.2	34.0	34.8	35.5	37.1	37.8	40.9	42.5	44.0	46.3
27°	30.1	30.1	31.7	32.4	33.2	34.8	36.3	38.6	40.2	42.5	44.0
28°	27.8	27.8	29.4	30.1	30.9	33.2	34.0	36.3	37.8	40.2	42.5
29°	25.5	26.3	27.8	27.8	29.4	30.9	31.7	34.8	36.3	37.8	40.2
30°	23.9	24.7	25.5	26.3	27.0	28.6	30.1	32.4	34.0	35.5	37.8
31°	22.4	23.2	23.9	24.7	25.5	27.0	28.6	30.9	32.4	34.0	36.3
32°	20.9	20.9	22.4	23.2	23.9	25.5	27.0	29.4	30.9	32.4	34.8
33°	19.3	20.1	20.9	21.6	22.4	23.9	25.5	27.0	28.6	30.9	33.2
34°	17.8	18.5	20.1	20.9	21.6	23.2	23.9	25.5	27.0	29.4	30.9
35°	16.2	17.8	18.5	19.3	20.1	21.6	22.4	24.7	25.5	27.8	29.4
36°	15.4	16.2	17.8	18.5	19.3	20.1	20.9	23.2	24.7	26.3	27.8
37°	13.9	15.4	16.2	17.0	17.8	19.3	20.1	21.6	23.2	24.7	26.3
38°	13.1	13.9	15.4	16.2	17.0	17.8	18.5	20.9	21.6	23.2	24.7
39°	12.4	13.1	14.7	15.4	15.4	17.0	17.8	19.3	20.1	21.6	23.9
40°	11.6	12.4	13.9	13.9	14.7	16.2	17.0	18.5	19.3	20.9	22.4
42.5°	10.0	10.8	11.6	12.4	13.1	13.9	14.7	16.2	17.0	17.8	19.3
45°	8.5	9.3	10.8	10.8	11.6	12.4	13.1	13.9	14.7	16.2	17.0
47.5°	7.0	8.5	9.3	10.0	10.0	10.8	11.6	12.4	13.1	13.9	14.7
50°	6.2	7.0	7.7	8.5	8.5	9.3	10.0	10.8	10.8	11.6	13.1
51°	6.2	7.0	7.7	7.7	8.5	9.3	9.3	10.0	10.8	10.8	11.6
52°	5.4	6.2	7.0	7.7	7.7	8.5	9.3	9.3	10.0	10.8	11.6
53°	5.4	6.2	7.0	7.0	7.7	8.5	8.5	9.3	9.3	10.0	10.8
54°	5.4	6.2	7.0	7.0	7.7	7.7	8.5	8.5	9.3	9.3	10.0
55°	4.6	5.4	6.2	7.0	7.0	7.7	7.7	8.5	8.5	9.3	9.3
57.5°	4.6	5.4	6.2	6.2	6.2	7.0	7.0	7.7	7.7	7.7	8.5
60°	4.6	5.4	5.4	6.2	6.2	7.0	7.0	7.0	7.0	7.7	7.7
61°	4.6	4.6	5.4	6.2	6.2	6.2	7.0	7.0	7.0	7.0	7.7
62°	4.6	4.6	5.4	5.4	6.2	6.2	6.2	7.0	7.0	7.0	7.0
63°	3.9	4.6	5.4	5.4	6.2	6.2	6.2	6.2	6.2	7.0	7.0
64°	3.9	4.6	5.4	5.4	5.4	6.2	6.2	6.2	6.2	6.2	6.2
65°	3.9	4.6	5.4	5.4	5.4	6.2	6.2	6.2	6.2	6.2	6.2
66°	3.9	4.6	5.4	5.4	5.4	6.2	6.2	6.2	6.2	6.2	6.2



TEST NUMBER: P182674

CATALOG NUMBER: LDSQA4A18927D010TE LAR15SP 4LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
72.5°	3.9	3.9	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
75°	3.9	3.9	3.9	4.6	4.6	4.6	4.6	4.6	4.6	3.9	3.9
77.5°	3.1	3.1	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.1
80°	3.1	3.1	3.9	3.9	3.9	3.9	3.9	3.9	3.1	3.1	3.1
82.5°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	2.3	2.3
85°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	2.3	2.3	1.5
87.5°	2.3	3.1	3.1	3.1	3.1	3.1	2.3	2.3	2.3	1.5	1.5
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: P182674

CATALOG NUMBER: LDSQA4A18927D010TE LAR15SP 4LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0
2.5°	115.9	113.5	112.8	112.8	113.5	112.8	113.5	112.8
5°	106.6	104.3	104.3	103.5	104.3	103.5	104.3	103.5
7.5°	98.9	96.6	96.6	96.6	96.6	96.6	97.3	96.6
10°	91.1	88.8	88.8	88.1	88.8	88.8	89.6	88.8
12.5°	83.4	81.9	81.9	81.1	82.7	81.9	83.4	82.7
15°	76.5	74.9	74.9	75.7	76.5	76.5	77.2	77.2
17.5°	69.5	69.5	69.5	70.3	71.1	71.8	72.6	71.8
20°	63.3	63.3	64.1	64.9	65.7	66.4	67.2	67.2
22.5°	57.2	57.2	57.9	59.5	61.0	61.8	62.6	62.6
25°	51.0	51.8	52.5	53.3	55.6	56.4	57.2	57.2
26°	48.7	49.4	51.0	51.8	53.3	54.1	55.6	55.6
27°	47.1	47.9	48.7	49.4	51.8	52.5	54.1	53.3
28°	44.8	45.6	46.3	47.9	49.4	51.0	51.8	51.8
29°	42.5	44.0	44.8	45.6	47.9	48.7	49.4	49.4
30°	40.9	41.7	42.5	44.0	45.6	47.1	47.9	47.9
31°	38.6	40.2	40.9	41.7	44.0	44.8	46.3	46.3
32°	37.1	37.8	38.6	40.2	41.7	43.3	44.0	44.0
33°	34.8	36.3	37.1	37.8	40.2	41.7	42.5	41.7
34°	33.2	34.8	34.8	36.3	37.8	39.4	40.2	40.2
35°	31.7	32.4	33.2	34.8	36.3	37.8	38.6	38.6
36°	30.1	30.9	31.7	33.2	34.8	36.3	37.1	37.1
37°	28.6	29.4	30.1	30.9	33.2	34.8	35.5	35.5
38°	27.0	27.8	28.6	30.1	31.7	32.4	34.0	34.0
39°	25.5	26.3	27.0	28.6	30.1	30.9	32.4	31.7
40°	23.9	25.5	25.5	27.0	28.6	29.4	30.9	30.1
42.5°	20.9	21.6	22.4	23.2	24.7	26.3	27.0	27.0
45°	18.5	19.3	20.1	20.9	21.6	22.4	23.9	23.2
47.5°	15.4	16.2	17.0	17.8	18.5	19.3	20.1	20.1
50°	13.9	13.9	14.7	14.7	16.2	17.0	17.8	17.8
51°	12.4	13.1	13.9	13.9	15.4	15.4	16.2	16.2
52°	12.4	12.4	13.1	13.1	13.9	14.7	15.4	15.4
53°	11.6	11.6	12.4	12.4	13.1	13.9	14.7	14.7
54°	10.8	10.8	11.6	11.6	12.4	13.1	13.9	13.9
55°	10.0	10.0	10.8	10.8	11.6	12.4	13.1	13.1
57.5°	8.5	9.3	9.3	10.0	10.0	10.8	10.8	11.6
60°	7.7	8.5	8.5	8.5	9.3	9.3	9.3	9.3
61°	7.7	7.7	7.7	8.5	8.5	7.7	8.5	7.7
62°	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
63°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
64°	7.0	6.2	6.2	6.2	6.2	6.2	6.2	6.2
65°	6.2	6.2	6.2	6.2	6.2	6.2	6.2	5.4
66°	6.2	6.2	5.4	6.2	5.4	5.4	5.4	5.4



TEST NUMBER: P182674

CATALOG NUMBER: LDSQA4A18927D010TE LAR15SP 4LSQA1H 30°

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
72.5°	3.9	3.9	3.9	3.9	3.9	3.1	3.1	3.1
75°	3.9	3.9	3.9	3.1	3.1	3.1	3.1	2.3
77.5°	3.1	3.1	3.1	3.1	2.3	2.3	2.3	2.3
80°	2.3	2.3	2.3	2.3	2.3	2.3	1.5	1.5
82.5°	2.3	1.5	1.5	1.5	1.5	1.5	1.5	1.5
85°	1.5	1.5	1.5	1.5	1.5	0.8	0.8	0.8
87.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
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°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.3	2.3
70°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.3	2.3





67.5°	2.3	3.1	3.1	3.1	3.1	3.1	3.1	2.3	3.1	3.1	3.9
70°	2.3	3.1	3.1	3.1	3.1	3.1	3.1	2.3	3.1	3.1	3.1





67.5°	3.9	4.6	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
70°	3.9	4.6	4.6	4.6	5.4	5.4	5.4	5.4	5.4	5.4	5.4





67.5°	5.4	5.4	5.4	5.4	5.4	4.6	4.6	4.6
70°	4.6	4.6	4.6	4.6	4.6	3.9	3.9	3.9



(END OF REPORT)