

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: P182797

Luminaire Tested: **LDSQA4A28940D010TE LAR15SP 4LSQAL1H 30°**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182797
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: LDSQA4A28940D010TE 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: 2174.6 lumens
Efficiency: N/A
Efficacy: 48.9 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

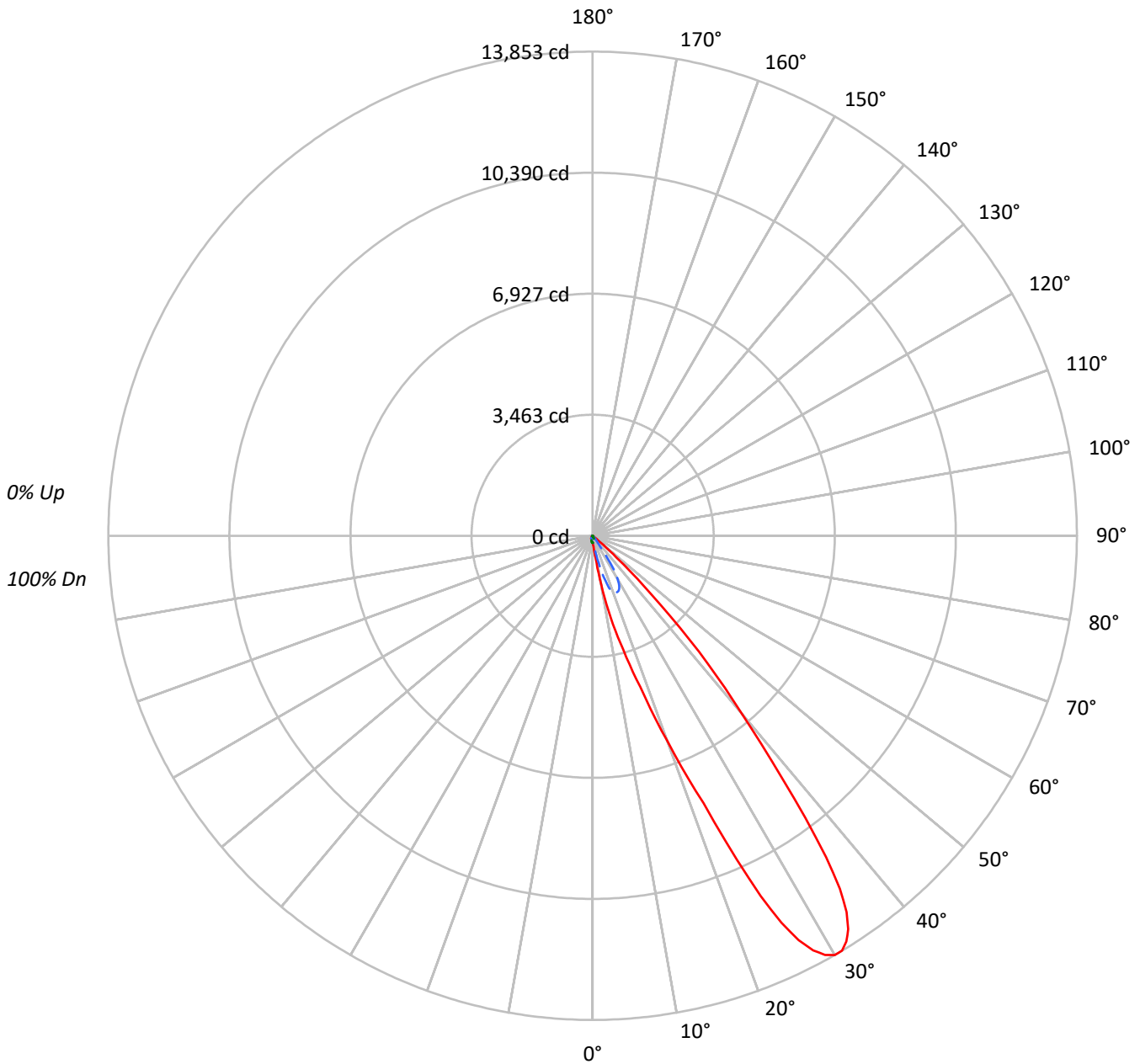
Input Watts (W): 44.49
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	112	109	106	104	110	107	105	102	103	101	99	99	98	96	96	94	93	91					91			
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	87	84	83					83			
3	99	91	86	81	97	90	85	80	87	83	79	85	81	78	82	79	76	75					75			
4	93	84	77	72	91	82	76	72	80	75	71	78	73	70	76	72	69	67					67			
5	86	76	69	64	85	75	69	64	74	68	63	72	67	63	70	66	62	61					61			
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55					55			
7	75	64	57	52	74	63	57	52	62	56	51	61	55	51	60	55	51	49					49			
8	70	59	52	47	69	58	52	47	57	51	47	56	50	46	55	50	46	44					44			
9	66	54	47	42	65	54	47	42	53	46	42	52	46	42	51	46	42	40					40			
10	62	50	43	38	60	50	43	38	49	42	38	48	42	38	47	42	38	36					36			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	19879	19879	19879
5°	31576	18895	16318
10°	138328	16743	13890
15°	337987	13560	12105
20°	644834	10082	11072
25°	1215245	7226	9674
30°	1549514	5134	8502
35°	1457604	3146	7285
40°	836179	2137	6260
45°	322792	1493	5288
50°	42938	1085	4371
55°	6519	1013	3665
60°	1879	930	3042
65°	1100	1100	2223
70°	680	1360	1699
75°	898	1347	1347
80°	0	2008	1339
85°	0	4001	1334



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.6	1.2
10°-20°	233.1	10.7
20°-30°	743.2	34.2
30°-40°	861.2	39.6
40°-50°	280.1	12.9
50°-60°	17.7	0.8
60°-70°	6.4	0.3
70°-80°	4.6	0.2
80°-90°	2.7	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°	1001.9	46.1
0°-40°	1863.1	85.7
0°-60°	2160.9	99.4
0°-90°	2174.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2174.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	205	205	205	205	205	
5°	325	272	194	170	168	63
15°	3370	1214	135	116	121	1068
25°	11369	1747	68	71	90	5108
35°	12325	416	27	41	62	7091
45°	2356	51	11	24	39	2104
55°	39	10	6	13	22	60
65°	5	4	5	10	10	4
75°	2	4	4	6	4	2
85°	0	2	4	4	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°	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2
2.5°	249.9	252.3	252.3	248.6	248.6	245.0	242.6	241.4	240.2	236.6	235.4
5°	324.7	327.1	328.3	318.7	315.0	307.8	301.8	295.7	288.5	280.0	271.6
7.5°	626.5	575.8	584.2	511.8	498.5	467.1	441.8	401.9	373.0	344.0	321.1
10°	1406.2	1357.9	1349.5	1243.2	1138.2	1059.8	975.3	829.2	696.5	555.2	440.6
12.5°	2409.2	2338.0	2298.2	2089.4	1966.3	1850.4	1721.2	1493.1	1238.4	1021.2	794.2
15°	3370.0	3364.0	3221.6	2988.6	2754.5	2612.0	2445.5	2163.0	1861.3	1530.5	1214.3
17.5°	4530.0	4577.1	4333.3	3878.2	3507.6	3275.9	3046.6	2604.8	2228.2	1907.1	1560.7
20°	6254.9	6129.3	5703.2	4991.1	4364.6	4015.8	3659.7	3009.1	2469.6	2080.9	1729.7
22.5°	8281.5	8184.9	7388.3	6200.5	5207.2	4717.1	4227.0	3380.9	2678.4	2175.1	1762.3
25°	11369.1	10972.0	9425.8	7498.1	5979.7	5285.6	4656.7	3622.3	2772.6	2187.2	1746.6
26°	12316.6	12037.8	10253.8	8013.5	6217.4	5442.5	4764.2	3671.8	2779.8	2176.3	1716.4
27°	12988.9	12776.5	10943.0	8392.5	6390.1	5551.2	4834.2	3692.3	2762.9	2153.4	1675.4
28°	13431.9	13261.7	11463.2	8666.5	6495.1	5609.1	4868.0	3687.5	2729.1	2113.5	1617.4
29°	13713.1	13549.0	11767.4	8822.2	6532.5	5618.8	4859.5	3651.3	2674.8	2054.4	1534.1
30°	13852.0	13673.3	11870.0	8839.1	6491.4	5563.2	4795.6	3571.6	2600.0	1983.2	1442.4
31°	13853.2	13655.2	11784.3	8708.8	6369.5	5444.9	4682.1	3438.8	2502.2	1898.7	1319.3
32°	13692.6	13488.6	11498.2	8444.4	6178.8	5296.5	4530.0	3303.7	2399.6	1804.5	1141.9
33°	13423.5	13182.1	11002.1	8077.5	5935.0	5093.7	4347.7	3152.8	2297.0	1653.6	908.9
34°	12988.9	12659.4	10309.3	7632.1	5640.5	4857.1	4138.9	2989.8	2193.2	1443.6	649.4
35°	12325.1	11860.3	9507.8	7139.6	5325.4	4601.2	3903.6	2819.6	2066.4	1184.1	416.4
36°	11364.3	10764.4	8673.8	6630.3	5000.8	4332.1	3664.6	2655.5	1866.1	898.0	272.8
37°	10110.1	9581.5	7875.9	6117.3	4664.0	4044.8	3446.1	2490.1	1619.8	627.7	222.1
38°	8822.2	8432.4	7096.2	5607.9	4315.2	3734.6	3180.5	2317.5	1350.7	412.8	185.9
39°	7661.1	7400.3	6333.3	5103.4	3955.5	3463.0	2915.0	2097.8	1063.4	293.3	156.9
40°	6612.1	6432.3	5595.8	4589.2	3595.8	3134.7	2665.1	1828.7	766.5	234.2	131.6
42.5°	4509.5	4420.2	3914.4	3302.5	2660.3	2396.0	2099.0	1099.6	304.2	148.5	79.7
45°	2356.1	2317.5	2134.0	1933.7	1734.5	1665.7	1349.5	493.7	171.4	86.9	50.7
47.5°	917.3	919.8	760.4	649.4	616.8	573.3	434.5	177.4	96.6	53.1	33.8
50°	284.9	306.6	282.4	266.8	204.0	170.2	141.2	88.1	51.9	32.6	21.7
51°	175.0	185.9	175.0	175.0	143.6	125.5	107.4	67.6	41.0	26.6	19.3
52°	113.5	119.5	113.5	106.2	99.0	89.3	77.3	50.7	32.6	21.7	15.7
53°	77.3	80.9	77.3	72.4	66.4	61.6	54.3	37.4	26.6	18.1	13.3
54°	54.3	56.7	54.3	50.7	47.1	43.5	39.8	29.0	21.7	15.7	12.1
55°	38.6	41.0	39.8	37.4	33.8	32.6	30.2	22.9	18.1	13.3	9.7
57.5°	18.1	19.3	19.3	18.1	18.1	16.9	15.7	14.5	10.9	8.4	7.2
60°	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	7.2	6.0	6.0
61°	7.2	7.2	7.2	7.2	7.2	7.2	8.4	7.2	6.0	6.0	4.8
62°	6.0	6.0	6.0	6.0	6.0	7.2	7.2	6.0	6.0	4.8	4.8
63°	4.8	4.8	4.8	4.8	6.0	6.0	6.0	6.0	4.8	4.8	4.8
64°	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	3.6
65°	4.8	4.8	3.6	3.6	3.6	4.8	3.6	4.8	3.6	3.6	3.6
66°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
72.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	3.6
75°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	3.6
77.5°	0.0	0.0	0.0	1.2	1.2	1.2	1.2	1.2	2.4	2.4	3.6
80°	0.0	0.0	0.0	0.0	1.2	1.2	1.2	1.2	2.4	2.4	2.4
82.5°	0.0	0.0	0.0	0.0	1.2	1.2	1.2	1.2	1.2	2.4	2.4
85°	0.0	0.0	0.0	0.0	1.2	1.2	1.2	1.2	2.4	2.4	2.4
87.5°	0.0	0.0	0.0	0.0	1.2	1.2	1.2	1.2	1.2	2.4	2.4
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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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2
2.5°	228.1	222.1	219.7	217.3	216.1	213.6	210.0	206.4	205.2	200.4	195.5
5°	257.1	246.2	237.8	229.3	226.9	220.9	213.6	205.2	201.6	194.3	188.3
7.5°	290.9	269.2	253.5	239.0	233.0	225.7	212.4	201.6	194.3	183.5	176.2
10°	347.6	296.9	266.8	241.4	231.8	222.1	205.2	190.7	181.1	170.2	161.7
12.5°	550.4	385.0	289.7	242.6	229.3	214.9	194.3	177.4	165.4	153.3	146.1
15°	867.9	586.6	375.4	254.7	224.5	202.8	178.6	159.3	147.3	135.2	127.9
17.5°	1158.8	789.4	490.1	283.7	226.9	191.9	159.3	140.0	126.7	115.9	111.0
20°	1298.8	884.8	545.6	289.7	212.4	171.4	137.6	119.5	107.4	97.8	92.9
22.5°	1312.0	878.7	511.8	247.4	176.2	144.8	115.9	99.0	89.3	82.1	77.3
25°	1249.3	779.7	410.4	182.3	137.6	120.7	95.4	80.9	73.6	67.6	64.0
26°	1201.0	723.0	360.9	158.1	125.5	109.8	86.9	74.8	67.6	62.8	59.1
27°	1134.6	656.6	303.0	136.4	115.9	99.0	79.7	68.8	62.8	59.1	55.5
28°	1055.0	591.4	251.1	120.7	105.0	89.3	73.6	62.8	57.9	54.3	50.7
29°	969.3	505.7	196.7	108.6	94.1	80.9	66.4	56.7	51.9	49.5	47.1
30°	848.5	393.5	150.9	97.8	84.5	72.4	60.4	51.9	48.3	45.9	43.5
31°	678.4	270.4	121.9	86.9	76.0	65.2	54.3	47.1	43.5	41.0	39.8
32°	486.4	166.6	106.2	77.3	67.6	59.1	47.1	42.2	38.6	37.4	36.2
33°	299.3	136.4	94.1	68.8	59.1	51.9	42.2	37.4	35.0	33.8	32.6
34°	196.7	118.3	83.3	59.1	51.9	44.7	36.2	32.6	31.4	30.2	30.2
35°	166.6	105.0	72.4	50.7	43.5	38.6	31.4	29.0	27.8	26.6	27.8
36°	143.6	91.7	60.4	43.5	37.4	32.6	27.8	25.3	24.1	24.1	25.3
37°	126.7	77.3	50.7	36.2	32.6	29.0	24.1	22.9	21.7	21.7	22.9
38°	107.4	62.8	42.2	31.4	27.8	24.1	21.7	20.5	20.5	20.5	21.7
39°	88.1	53.1	36.2	26.6	24.1	21.7	19.3	18.1	18.1	19.3	19.3
40°	72.4	44.7	30.2	22.9	20.5	19.3	16.9	16.9	16.9	16.9	18.1
42.5°	47.1	30.2	21.7	16.9	15.7	14.5	13.3	13.3	13.3	13.3	14.5
45°	31.4	21.7	16.9	13.3	12.1	10.9	10.9	9.7	10.9	10.9	12.1
47.5°	21.7	15.7	12.1	9.7	8.4	7.2	7.2	7.2	8.4	9.7	9.7
50°	15.7	10.9	8.4	6.0	6.0	6.0	6.0	6.0	7.2	7.2	8.4
51°	13.3	9.7	7.2	6.0	6.0	4.8	4.8	4.8	6.0	7.2	8.4
52°	10.9	8.4	6.0	4.8	4.8	4.8	4.8	4.8	6.0	6.0	7.2
53°	9.7	7.2	6.0	4.8	4.8	4.8	4.8	4.8	6.0	6.0	7.2
54°	8.4	6.0	4.8	4.8	4.8	3.6	3.6	4.8	4.8	6.0	7.2
55°	7.2	6.0	4.8	4.8	3.6	3.6	3.6	3.6	4.8	6.0	6.0
57.5°	6.0	4.8	4.8	3.6	3.6	3.6	3.6	3.6	4.8	4.8	6.0
60°	4.8	4.8	4.8	3.6	3.6	3.6	3.6	3.6	4.8	4.8	6.0
61°	4.8	3.6	3.6	3.6	3.6	3.6	3.6	3.6	4.8	4.8	6.0
62°	4.8	3.6	4.8	4.8	4.8	3.6	3.6	3.6	4.8	4.8	6.0
63°	4.8	4.8	4.8	4.8	4.8	3.6	3.6	3.6	4.8	4.8	4.8
64°	4.8	4.8	4.8	4.8	4.8	4.8	3.6	3.6	4.8	4.8	6.0
65°	3.6	4.8	4.8	4.8	4.8	4.8	3.6	3.6	4.8	4.8	6.0
66°	3.6	4.8	4.8	4.8	4.8	4.8	4.8	3.6	4.8	4.8	4.8



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
72.5°	3.6	3.6	4.8	4.8	4.8	4.8	4.8	3.6	3.6	4.8	4.8
75°	3.6	3.6	4.8	4.8	4.8	4.8	4.8	3.6	3.6	3.6	4.8
77.5°	3.6	3.6	4.8	4.8	4.8	4.8	4.8	3.6	3.6	3.6	4.8
80°	3.6	3.6	4.8	4.8	4.8	4.8	3.6	3.6	3.6	3.6	3.6
82.5°	3.6	3.6	3.6	4.8	4.8	3.6	3.6	3.6	3.6	3.6	3.6
85°	3.6	3.6	3.6	4.8	4.8	3.6	3.6	3.6	3.6	3.6	3.6
87.5°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
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: LDSQA4A28940D010TE LAR15SP 4LSQAL1H 30°

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2
2.5°	193.1	193.1	191.9	189.5	191.9	189.5	187.1	185.9	184.7	183.5	181.1
5°	183.5	182.3	179.8	178.6	178.6	176.2	173.8	171.4	170.2	169.0	166.6
7.5°	171.4	170.2	166.6	165.4	165.4	162.9	159.3	158.1	156.9	155.7	153.3
10°	156.9	155.7	152.1	150.9	150.9	148.5	146.1	143.6	142.4	141.2	138.8
12.5°	140.0	138.8	136.4	135.2	135.2	132.8	130.4	129.2	129.2	127.9	126.7
15°	123.1	121.9	119.5	119.5	119.5	117.1	115.9	114.7	115.9	115.9	114.7
17.5°	106.2	105.0	102.6	102.6	102.6	102.6	101.4	101.4	102.6	103.8	103.8
20°	89.3	88.1	88.1	86.9	88.1	89.3	88.1	89.3	91.7	92.9	94.1
22.5°	73.6	73.6	73.6	73.6	74.8	76.0	76.0	78.5	80.9	82.1	84.5
25°	61.6	61.6	62.8	62.8	64.0	65.2	66.4	67.6	71.2	73.6	74.8
26°	56.7	57.9	57.9	59.1	60.4	61.6	62.8	64.0	67.6	70.0	71.2
27°	53.1	53.1	54.3	55.5	56.7	57.9	59.1	61.6	64.0	66.4	68.8
28°	49.5	49.5	50.7	51.9	53.1	54.3	55.5	57.9	60.4	64.0	65.2
29°	45.9	47.1	47.1	48.3	49.5	50.7	53.1	54.3	57.9	60.4	62.8
30°	42.2	43.5	44.7	44.7	45.9	47.1	49.5	51.9	54.3	57.9	59.1
31°	39.8	41.0	41.0	42.2	43.5	44.7	47.1	49.5	51.9	54.3	56.7
32°	36.2	38.6	38.6	38.6	39.8	42.2	44.7	45.9	49.5	51.9	53.1
33°	33.8	35.0	36.2	36.2	37.4	39.8	42.2	43.5	47.1	49.5	50.7
34°	31.4	32.6	33.8	33.8	35.0	37.4	39.8	41.0	44.7	45.9	48.3
35°	29.0	30.2	31.4	31.4	32.6	35.0	37.4	38.6	41.0	43.5	45.9
36°	26.6	27.8	29.0	30.2	31.4	33.8	35.0	37.4	38.6	41.0	43.5
37°	24.1	25.3	27.8	27.8	30.2	31.4	33.8	35.0	37.4	38.6	41.0
38°	21.7	24.1	25.3	26.6	27.8	30.2	31.4	32.6	35.0	37.4	38.6
39°	20.5	22.9	24.1	25.3	26.6	27.8	29.0	31.4	32.6	35.0	36.2
40°	19.3	20.5	22.9	22.9	25.3	26.6	27.8	29.0	31.4	32.6	35.0
42.5°	15.7	18.1	19.3	20.5	21.7	22.9	24.1	25.3	26.6	29.0	30.2
45°	13.3	15.7	16.9	16.9	18.1	19.3	20.5	21.7	24.1	25.3	26.6
47.5°	10.9	13.3	14.5	15.7	15.7	16.9	18.1	19.3	20.5	21.7	22.9
50°	9.7	10.9	12.1	13.3	14.5	14.5	15.7	16.9	18.1	19.3	19.3
51°	9.7	10.9	12.1	12.1	13.3	14.5	15.7	15.7	16.9	18.1	18.1
52°	8.4	9.7	10.9	12.1	13.3	13.3	14.5	15.7	15.7	16.9	18.1
53°	8.4	9.7	10.9	10.9	12.1	13.3	13.3	14.5	15.7	15.7	16.9
54°	7.2	9.7	10.9	10.9	12.1	12.1	13.3	14.5	14.5	14.5	15.7
55°	7.2	8.4	9.7	10.9	10.9	12.1	12.1	13.3	13.3	14.5	14.5
57.5°	7.2	8.4	9.7	9.7	10.9	10.9	12.1	12.1	12.1	12.1	13.3
60°	6.0	7.2	8.4	9.7	9.7	10.9	10.9	10.9	10.9	10.9	12.1
61°	6.0	7.2	8.4	8.4	9.7	9.7	10.9	10.9	10.9	10.9	10.9
62°	6.0	7.2	8.4	8.4	9.7	9.7	9.7	10.9	10.9	10.9	10.9
63°	6.0	7.2	8.4	8.4	9.7	9.7	9.7	9.7	9.7	9.7	10.9
64°	6.0	7.2	8.4	8.4	9.7	9.7	9.7	9.7	9.7	9.7	9.7
65°	6.0	7.2	8.4	8.4	8.4	9.7	9.7	9.7	9.7	9.7	9.7
66°	6.0	7.2	8.4	8.4	8.4	8.4	9.7	9.7	9.7	9.7	8.4



TEST NUMBER: P182797

CATALOG NUMBER: LDSQA4A28940D010TE LAR15SP 4LSQAL1H 30°

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
72.5°	4.8	6.0	6.0	7.2	7.2	7.2	7.2	7.2	7.2	7.2	6.0
75°	4.8	6.0	6.0	6.0	7.2	7.2	7.2	6.0	6.0	6.0	6.0
77.5°	4.8	4.8	6.0	6.0	6.0	6.0	6.0	6.0	6.0	4.8	4.8
80°	4.8	4.8	4.8	6.0	6.0	6.0	6.0	4.8	4.8	4.8	3.6
82.5°	3.6	4.8	4.8	4.8	4.8	4.8	4.8	4.8	3.6	3.6	3.6
85°	3.6	4.8	4.8	4.8	4.8	4.8	4.8	3.6	3.6	3.6	2.4
87.5°	3.6	3.6	3.6	4.8	4.8	4.8	3.6	3.6	2.4	2.4	2.4
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: P182797

CATALOG NUMBER: LDSQA4A28940D010TE LAR15SP 4LSQAL1H 30°

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	205.2	205.2	205.2	205.2	205.2	205.2	205.2	205.2
2.5°	183.5	184.7	183.5	183.5	181.1	182.3	179.8	183.5
5°	167.8	169.0	167.8	167.8	165.4	165.4	164.2	167.8
7.5°	154.5	155.7	153.3	153.3	150.9	152.1	150.9	153.3
10°	141.2	141.2	141.2	140.0	138.8	140.0	138.8	141.2
12.5°	127.9	129.2	129.2	129.2	127.9	127.9	126.7	130.4
15°	117.1	118.3	119.5	119.5	118.3	119.5	118.3	120.7
17.5°	107.4	109.8	109.8	111.0	111.0	112.3	112.3	114.7
20°	97.8	101.4	101.4	102.6	102.6	105.0	105.0	107.4
22.5°	88.1	91.7	92.9	92.9	94.1	96.6	96.6	99.0
25°	79.7	83.3	84.5	84.5	85.7	88.1	88.1	90.5
26°	76.0	79.7	80.9	82.1	83.3	85.7	85.7	88.1
27°	72.4	76.0	77.3	78.5	79.7	82.1	82.1	84.5
28°	70.0	73.6	74.8	76.0	77.3	79.7	79.7	80.9
29°	66.4	70.0	71.2	72.4	73.6	76.0	76.0	78.5
30°	64.0	66.4	67.6	68.8	70.0	73.6	73.6	76.0
31°	60.4	64.0	65.2	66.4	67.6	70.0	70.0	73.6
32°	57.9	60.4	61.6	62.8	65.2	66.4	67.6	70.0
33°	54.3	57.9	59.1	60.4	61.6	64.0	65.2	67.6
34°	51.9	54.3	56.7	57.9	59.1	61.6	62.8	65.2
35°	49.5	51.9	53.1	54.3	56.7	59.1	59.1	61.6
36°	47.1	49.5	50.7	51.9	54.3	56.7	56.7	59.1
37°	44.7	47.1	48.3	49.5	51.9	54.3	54.3	56.7
38°	42.2	44.7	45.9	47.1	49.5	51.9	53.1	55.5
39°	39.8	43.5	44.7	45.9	47.1	49.5	50.7	51.9
40°	38.6	41.0	42.2	43.5	44.7	47.1	48.3	49.5
42.5°	32.6	36.2	37.4	38.6	39.8	41.0	42.2	43.5
45°	29.0	31.4	31.4	32.6	33.8	36.2	36.2	38.6
47.5°	25.3	26.6	27.8	27.8	29.0	31.4	31.4	32.6
50°	21.7	22.9	24.1	24.1	25.3	26.6	27.8	29.0
51°	20.5	21.7	21.7	22.9	24.1	25.3	26.6	27.8
52°	19.3	20.5	20.5	21.7	22.9	24.1	24.1	25.3
53°	18.1	19.3	19.3	20.5	20.5	22.9	22.9	24.1
54°	16.9	18.1	18.1	19.3	19.3	21.7	21.7	22.9
55°	15.7	16.9	18.1	18.1	18.1	19.3	20.5	21.7
57.5°	14.5	15.7	15.7	15.7	16.9	16.9	18.1	18.1
60°	12.1	13.3	13.3	13.3	14.5	14.5	14.5	15.7
61°	12.1	12.1	13.3	13.3	12.1	12.1	12.1	13.3
62°	10.9	12.1	12.1	10.9	10.9	10.9	10.9	12.1
63°	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
64°	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
65°	9.7	9.7	9.7	9.7	9.7	9.7	8.4	9.7
66°	8.4	9.7	9.7	8.4	8.4	8.4	8.4	8.4



TEST NUMBER: P182797

CATALOG NUMBER: LDSQA4A28940D010TE LAR15SP 4LSQAL1H 30°

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
72.5°	6.0	6.0	6.0	6.0	6.0	4.8	4.8	4.8
75°	6.0	4.8	4.8	4.8	4.8	4.8	4.8	3.6
77.5°	4.8	4.8	4.8	4.8	3.6	3.6	3.6	3.6
80°	3.6	3.6	3.6	3.6	3.6	3.6	2.4	2.4
82.5°	3.6	2.4	2.4	2.4	2.4	2.4	2.4	2.4
85°	2.4	2.4	2.4	2.4	1.2	1.2	1.2	1.2
87.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
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°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	3.6	3.6
70°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	3.6	3.6





67.5°	3.6	3.6	4.8	4.8	4.8	4.8	3.6	3.6	3.6	4.8	4.8
70°	3.6	4.8	4.8	4.8	4.8	4.8	4.8	3.6	3.6	4.8	4.8





67.5°	6.0	7.2	7.2	7.2	8.4	8.4	8.4	8.4	8.4	8.4	8.4
70°	6.0	6.0	7.2	7.2	7.2	8.4	8.4	7.2	7.2	7.2	7.2





67.5°	8.4	8.4	8.4	8.4	7.2	7.2	7.2	7.2
70°	7.2	7.2	7.2	7.2	6.0	6.0	6.0	6.0



(END OF REPORT)