

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: P208802

Luminaire Tested: **LDSQA6A20935D010TE LAR35FL 6LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208802
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29057)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA6A20935D010TE LAR35FL 6LSQA1H
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 35° FLOOD
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1911.5 lumens
Efficiency: N/A
Efficacy: 66.3 lumens/watt
Spacing Criteria (0/90/45): 0.6 / 0.59 / 0.55
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

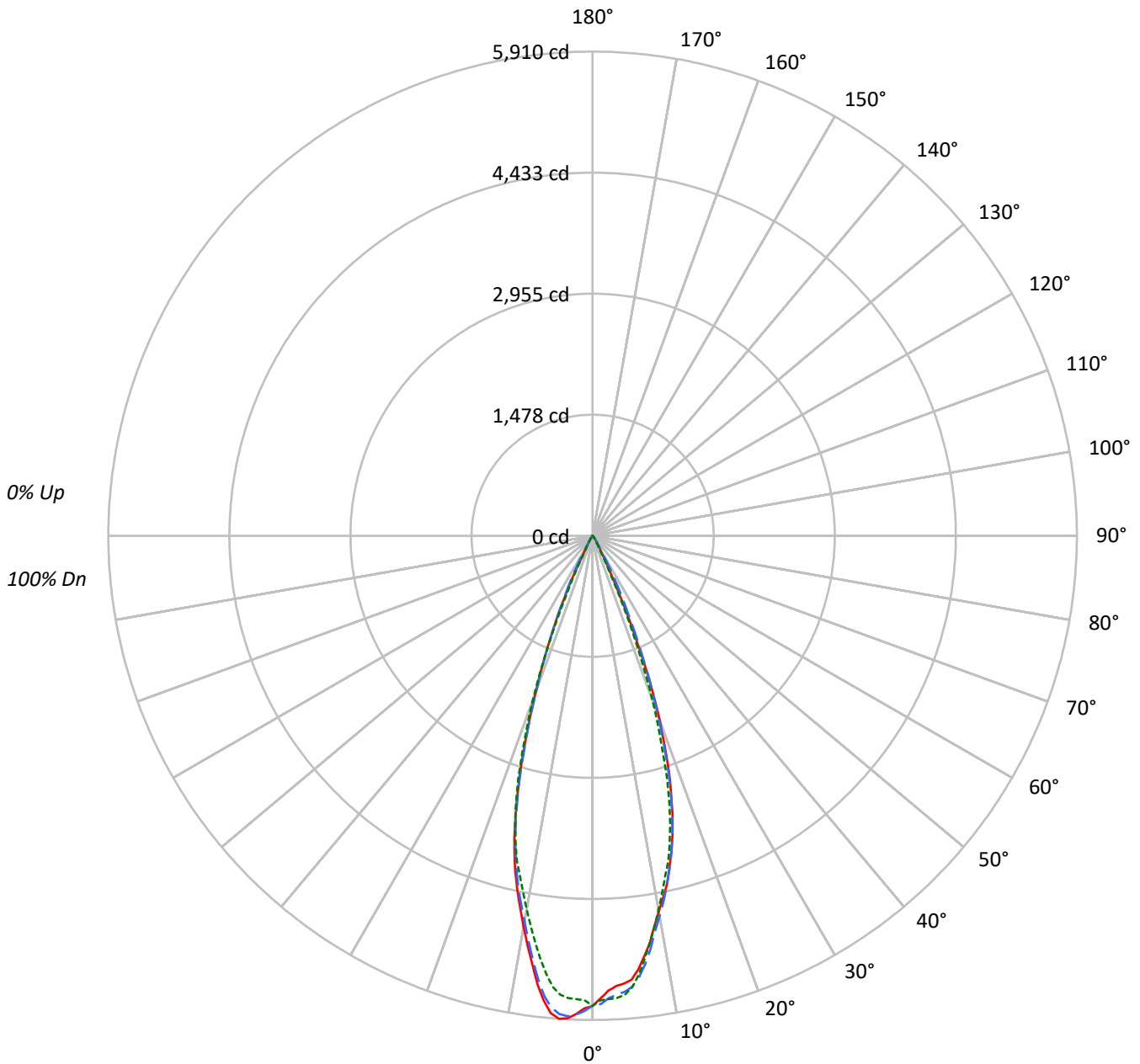
Input Watts (W): 28.81
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				100															
1	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96				96															
2	111	107	104	102	109	106	103	101	103	100	98	100	98	96	97	96	94	93				93															
3	107	103	99	96	106	101	98	95	99	96	94	96	94	92	94	92	91	90				90															
4	104	98	94	91	102	97	93	91	95	92	90	93	91	89	92	89	88	86				86															
5	101	94	90	87	99	94	90	87	92	89	86	90	88	85	89	87	85	83				83															
6	97	91	87	84	96	90	86	83	89	85	83	88	85	82	87	84	82	81				81															
7	94	88	83	80	93	87	83	80	86	82	80	85	82	79	84	81	79	78				78															
8	92	85	80	77	91	84	80	77	83	80	77	82	79	77	82	79	76	75				75															
9	89	82	78	75	88	82	78	75	81	77	75	80	77	74	79	76	74	73				73															
10	86	79	75	72	86	79	75	72	78	75	72	78	74	72	77	74	72	71				71															

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	247101	247101	247101
5°	235070	239150	252786
10°	203665	202563	211971
15°	168175	162898	163575
20°	109379	97452	92884
25°	32875	25126	33459
30°	7174	5220	5538
35°	2560	1572	1724
40°	759	495	596
45°	213	140	177
50°	40	40	80
55°	45	0	90
60°	52	0	0
65°	61	0	0
70°	76	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	505.5	26.4
10°-20°	981.3	51.3
20°-30°	387.7	20.3
30°-40°	31.9	1.7
40°-50°	4.4	0.2
50°-60°	0.5	0.0
60°-70°	0.1	0.0
70°-80°	0.0	0.0
80°-90°	0.0	0.0
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°	1874.6	98.1
0°-40°	1906.4	99.7
0°-60°	1911.3	100.0
0°-90°	1911.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1911.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5739	5739	5739	5739	5739	
5°	5439	5526	5533	5782	5849	492
15°	3773	3763	3654	3624	3670	1008
25°	692	935	529	775	704	389
35°	49	49	30	42	33	36
45°	4	8	2	6	3	4
55°	1	1	0	1	1	1
65°	1	0	0	0	0	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	5739.1	5739.1	5739.1	5739.1	5739.1	5739.1	5739.1	5739.1	5739.1
1°	5646.5	5582.0	5716.8	5711.5	5669.3	5788.4	5800.7	5877.5	5768.4
2°	5555.6	5504.5	5646.5	5661.1	5661.1	5809.5	5848.2	5944.3	5844.1
3°	5502.8	5460.6	5608.3	5647.0	5651.1	5816.5	5873.4	5981.3	5899.2
4°	5479.9	5441.2	5581.4	5611.3	5617.1	5791.9	5851.7	5974.8	5910.3
5°	5438.9	5395.5	5525.7	5530.3	5533.3	5712.1	5781.9	5903.9	5848.8
6°	5322.8	5299.9	5418.9	5393.1	5384.9	5576.1	5647.0	5760.8	5705.1
7°	5170.9	5155.6	5267.6	5228.4	5207.8	5386.1	5451.8	5559.7	5515.7
8°	5015.5	4978.5	5085.3	5051.3	5016.7	5170.3	5227.8	5327.5	5286.4
9°	4821.4	4802.6	4881.8	4870.6	4823.7	4981.5	5002.6	5099.9	5066.5
10°	4658.4	4635.5	4715.3	4694.1	4633.2	4771.0	4785.6	4878.9	4848.4
11°	4500.0	4470.1	4538.2	4511.2	4442.6	4566.3	4576.3	4663.1	4632.0
12°	4354.6	4305.9	4359.3	4327.1	4254.3	4363.4	4368.1	4449.6	4420.9
13°	4162.3	4130.0	4172.2	4137.6	4091.3	4152.9	4143.5	4220.9	4194.5
14°	3977.0	3936.5	3975.2	3933.6	3884.9	3926.0	3899.0	3966.4	3945.9
15°	3772.9	3732.4	3762.9	3711.9	3654.5	3669.7	3624.5	3687.3	3669.7
16°	3535.4	3494.9	3521.3	3459.2	3391.2	3382.4	3322.5	3377.7	3359.5
17°	3267.4	3238.1	3256.3	3178.3	3106.8	3076.3	2997.1	3045.8	3027.6
18°	3012.3	2954.9	2962.5	2875.7	2766.6	2747.9	2658.7	2705.1	2686.9
19°	2678.1	2651.1	2655.2	2557.3	2447.1	2412.5	2323.9	2365.0	2344.4
20°	2387.2	2346.2	2342.7	2236.5	2126.9	2090.5	2004.9	2047.1	2027.2
21°	2054.7	2080.0	2036.0	1924.0	1788.5	1792.0	1716.4	1720.5	1734.0
22°	1680.6	1772.7	1735.2	1602.6	1433.2	1511.2	1443.1	1447.8	1459.6
23°	1310.6	1406.2	1440.2	1279.5	1095.4	1250.8	1196.8	1200.4	1208.0
24°	972.8	1107.7	1168.7	984.6	788.7	1006.3	975.8	979.9	971.7
25°	692.0	850.3	935.3	727.1	528.9	781.7	775.2	781.7	704.3
26°	467.4	640.9	737.7	510.2	327.2	577.6	616.9	602.8	456.8
27°	299.1	487.3	567.0	333.7	207.6	397.6	460.3	456.2	262.1
28°	210.5	338.4	418.7	205.2	160.1	249.8	329.0	300.2	167.7
29°	177.7	219.9	292.0	146.0	130.2	147.8	220.5	175.3	137.2
30°	144.3	146.0	191.8	117.9	105.0	105.6	140.7	114.9	111.4
32.5°	88.0	87.4	82.7	69.2	61.6	61.6	68.6	66.3	65.7
35°	48.7	53.4	49.3	41.6	29.9	36.9	41.6	39.3	32.8
37.5°	26.4	31.1	34.0	22.9	16.4	21.7	28.1	22.9	18.8
40°	13.5	17.0	24.0	12.9	8.8	12.3	19.4	12.9	10.6
42.5°	7.0	9.4	15.2	7.0	4.1	7.0	12.3	7.0	5.3
45°	3.5	4.7	8.2	3.5	2.3	3.5	6.5	4.1	2.9
47.5°	1.8	2.3	4.1	1.8	0.6	1.8	3.5	1.8	1.8
50°	0.6	1.2	2.3	0.6	0.6	0.6	1.8	1.2	1.2
52.5°	0.6	0.6	1.2	0.6	0.0	0.6	1.2	0.6	1.2
55°	0.6	0.6	0.6	0.0	0.0	0.6	0.6	0.6	1.2
57.5°	0.6	0.6	0.6	0.0	0.0	0.0	0.6	0.6	1.2
60°	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.6	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	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°







62.5°	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)