

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: P208794

Luminaire Tested: **LDSQA6A15935D010TE LAR35FL 6LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208794
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: LDSQA6A15935D010TE 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: 1577.8 lumens
Efficiency: N/A
Efficacy: 72.4 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

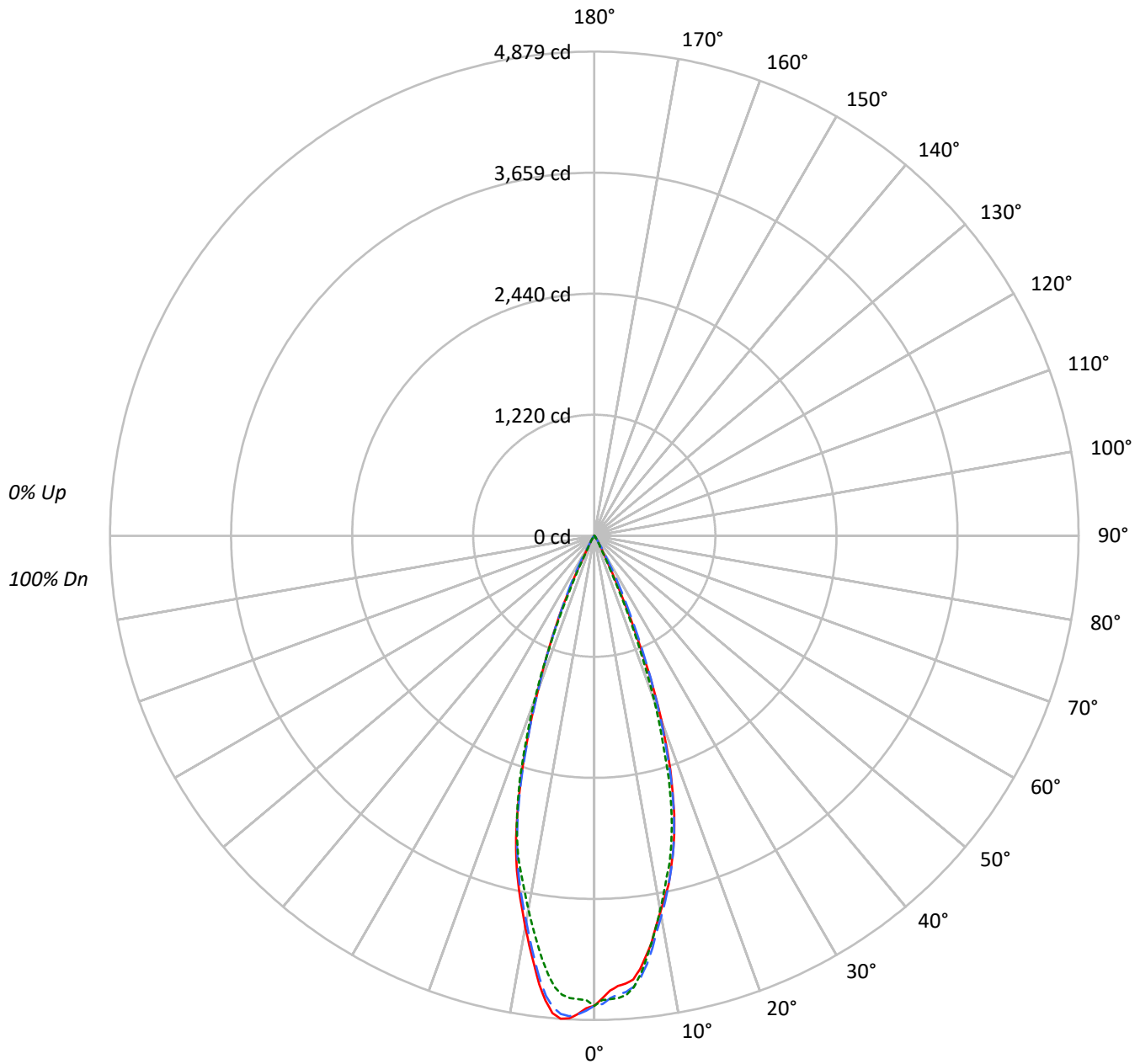
Input Watts (W): 21.79
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	203968	203968	203968
5°	194037	197404	208658
10°	168112	167202	174971
15°	138818	134463	135021
20°	90286	80440	76669
25°	27136	20741	27616
30°	5921	4305	4574
35°	2113	1298	1424
40°	624	410	489
45°	177	116	146
50°	33	33	67
55°	38	0	75
60°	43	0	0
65°	51	0	0
70°	63	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°	417.3	26.4
10°-20°	810.0	51.3
20°-30°	320.0	20.3
30°-40°	26.3	1.7
40°-50°	3.6	0.2
50°-60°	0.4	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°	1547.3	98.1
0°-40°	1573.7	99.7
0°-60°	1577.7	100.0
0°-90°	1577.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1577.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4737	4737	4737	4737	4737	
5°	4490	4561	4567	4773	4828	406
15°	3114	3106	3017	2992	3029	832
25°	571	772	437	640	581	321
35°	40	41	25	34	27	30
45°	3	7	2	5	2	3
55°	0	0	0	0	1	0
65°	0	0	0	0	0	0
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°	4737.3	4737.3	4737.3	4737.3	4737.3	4737.3	4737.3	4737.3	4737.3
1°	4660.9	4607.6	4718.9	4714.6	4679.7	4778.0	4788.2	4851.6	4761.5
2°	4585.8	4543.7	4660.9	4673.0	4673.0	4795.4	4827.4	4906.7	4824.0
3°	4542.3	4507.4	4629.4	4661.3	4664.7	4801.2	4848.2	4937.2	4869.5
4°	4523.4	4491.4	4607.1	4631.8	4636.7	4780.9	4830.3	4931.9	4878.7
5°	4489.5	4453.7	4561.1	4565.0	4567.4	4715.1	4772.7	4873.3	4827.8
6°	4393.7	4374.8	4473.0	4451.7	4445.0	4602.8	4661.3	4755.2	4709.3
7°	4268.3	4255.7	4348.2	4315.7	4298.8	4445.9	4500.2	4589.2	4552.9
8°	4140.0	4109.5	4197.6	4169.5	4141.0	4267.8	4315.2	4397.5	4363.6
9°	3979.8	3964.3	4029.7	4020.5	3981.7	4111.9	4129.4	4209.7	4182.1
10°	3845.2	3826.4	3892.2	3874.8	3824.4	3938.2	3950.3	4027.2	4002.1
11°	3714.5	3689.9	3746.0	3723.7	3667.1	3769.2	3777.5	3849.1	3823.5
12°	3594.5	3554.3	3598.4	3571.8	3511.7	3601.8	3605.6	3672.9	3649.2
13°	3435.7	3409.1	3444.0	3415.4	3377.2	3428.0	3420.2	3484.1	3462.4
14°	3282.8	3249.4	3281.3	3247.0	3206.8	3240.7	3218.4	3274.1	3257.1
15°	3114.3	3080.9	3106.1	3064.0	3016.6	3029.1	2991.9	3043.7	3029.1
16°	2918.3	2884.9	2906.7	2855.4	2799.2	2792.0	2742.6	2788.1	2773.1
17°	2697.1	2672.9	2687.9	2623.5	2564.5	2539.3	2473.9	2514.1	2499.1
18°	2486.5	2439.1	2445.4	2373.7	2283.7	2268.2	2194.7	2232.9	2217.9
19°	2210.6	2188.4	2191.7	2110.9	2019.9	1991.4	1918.3	1952.1	1935.2
20°	1970.5	1936.7	1933.8	1846.1	1755.6	1725.6	1654.9	1689.8	1673.3
21°	1696.1	1716.9	1680.6	1588.1	1476.3	1479.2	1416.8	1420.2	1431.3
22°	1387.3	1463.3	1432.3	1322.9	1183.0	1247.4	1191.2	1195.1	1204.8
23°	1081.8	1160.7	1188.8	1056.2	904.2	1032.5	987.9	990.8	997.1
24°	803.0	914.4	964.7	812.7	651.0	830.6	805.4	808.8	802.1
25°	571.2	701.9	772.0	600.2	436.6	645.2	639.9	645.2	581.3
26°	385.8	529.1	608.9	421.1	270.1	476.8	509.2	497.6	377.1
27°	246.9	402.2	468.1	275.4	171.4	328.2	380.0	376.6	216.4
28°	173.8	279.3	345.6	169.4	132.1	206.2	271.5	247.8	138.4
29°	146.7	181.5	241.1	120.5	107.5	122.0	182.0	144.7	113.3
30°	119.1	120.5	158.3	97.3	86.6	87.1	116.2	94.9	92.0
32.5°	72.6	72.1	68.3	57.1	50.8	50.8	56.6	54.7	54.2
35°	40.2	44.0	40.7	34.4	24.7	30.5	34.4	32.4	27.1
37.5°	21.8	25.7	28.1	18.9	13.6	17.9	23.2	18.9	15.5
40°	11.1	14.0	19.8	10.6	7.3	10.2	16.0	10.6	8.7
42.5°	5.8	7.7	12.6	5.8	3.4	5.8	10.2	5.8	4.4
45°	2.9	3.9	6.8	2.9	1.9	2.9	5.3	3.4	2.4
47.5°	1.5	1.9	3.4	1.5	0.5	1.5	2.9	1.5	1.5
50°	0.5	1.0	1.9	0.5	0.5	0.5	1.5	1.0	1.0
52.5°	0.5	0.5	1.0	0.5	0.0	0.5	1.0	0.5	1.0
55°	0.5	0.5	0.5	0.0	0.0	0.5	0.5	0.5	1.0
57.5°	0.5	0.5	0.5	0.0	0.0	0.0	0.5	0.5	1.0
60°	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.5	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.5	0.5	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°	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)