

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: P182517

Luminaire Tested: **LDSQA4A18940D010TE LAR15SP 4LSQAL1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182517
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26796)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA4A18940D010TE LAR15SP 4LSQAL1H
Description: PORTFOLIO 4" SQUARE LENSED ADJUSTABLE, SELF-FLANGED, 15° SPOT
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1712.0 lumens
Efficiency: N/A
Efficacy: 58.8 lumens/watt
Spacing Criteria (0/90/45): 0.31 / 0.32 / 0.36
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

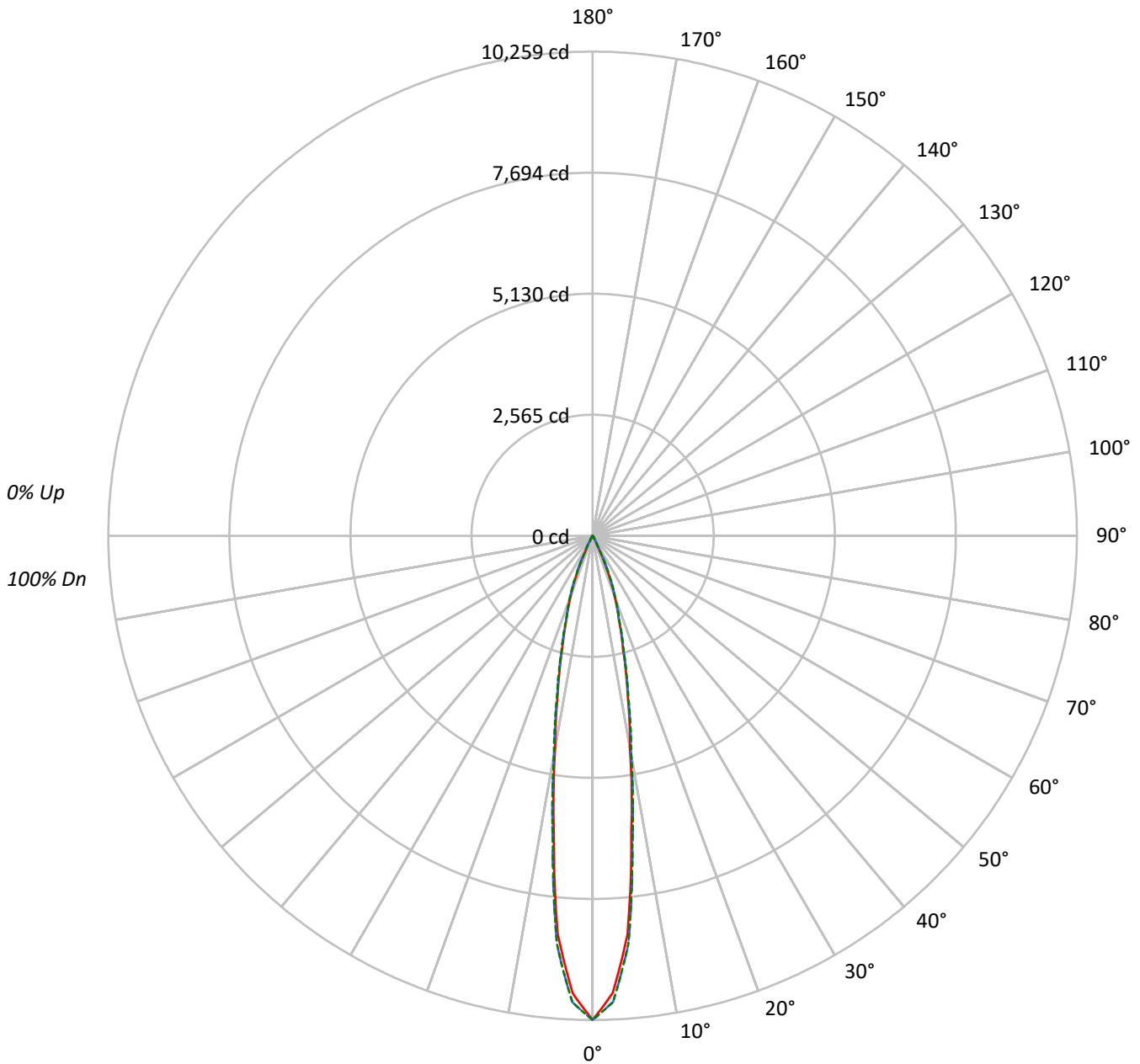
Input Watts (W): 29.12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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	110	113	111	109	108	107	106	105	103	102	102	100	99	99	97				97															
2	112	108	105	103	110	107	104	102	103	101	100	101	99	98	98	97	96	94				94															
3	108	104	100	98	107	103	99	97	100	98	95	98	96	94	96	94	93	91				91															
4	105	100	96	94	104	99	96	93	97	94	92	95	93	91	94	92	90	89				89															
5	102	97	93	90	101	96	92	90	94	91	89	93	90	88	92	89	87	86				86															
6	100	94	90	87	98	93	89	87	92	89	86	91	88	86	89	87	85	84				84															
7	97	91	87	84	96	90	87	84	89	86	84	88	85	83	87	85	83	82				82															
8	95	88	85	82	94	88	84	82	87	84	81	86	83	81	85	83	81	80				80															
9	92	86	82	80	92	86	82	80	85	82	79	84	81	79	84	81	79	78				78															
10	90	84	80	78	89	84	80	78	83	80	77	82	79	77	82	79	77	76				76															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	993806	993806	993806
5°	824330	845676	844470
10°	449177	462437	464778
15°	249749	256910	258234
20°	140804	144804	146618
25°	42382	62445	42200
30°	7987	11432	7987
35°	3441	5310	3548
40°	1669	2782	1669
45°	1082	1452	849
50°	663	799	392
55°	439	439	304
60°	349	174	174
65°	206	206	206
70°	0	255	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	683.0	39.9
10°-20°	728.0	42.5
20°-30°	265.5	15.5
30°-40°	25.3	1.5
40°-50°	7.0	0.4
50°-60°	2.1	0.1
60°-70°	0.9	0.1
70°-80°	0.2	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°	1676.6	97.9
0°-40°	1701.9	99.4
0°-60°	1710.9	99.9
0°-90°	1712.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1712.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10259	10259	10259	10259	10259	
5°	8477	8691	8696	8606	8684	670
15°	2490	2549	2562	2556	2575	712
25°	396	574	584	579	395	229
35°	29	35	45	35	30	21
45°	8	8	11	8	6	6
55°	3	3	3	2	2	2
65°	1	1	1	1	1	1
75°	0	1	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°
0°	10258.6	10258.6	10258.6	10258.6	10258.6
2.5°	9699.0	9903.5	9888.5	9842.7	9888.5
5°	8476.8	8691.0	8696.3	8605.5	8683.9
7.5°	6301.2	6466.9	6496.0	6407.0	6466.0
10°	4566.2	4714.3	4701.0	4683.4	4724.8
12.5°	3411.0	3485.9	3478.0	3497.4	3500.0
15°	2490.2	2549.2	2561.6	2556.3	2574.8
17.5°	1833.7	1865.4	1859.3	1869.0	1876.0
20°	1365.8	1416.0	1404.6	1413.4	1422.2
22.5°	905.8	998.4	986.9	1001.0	993.1
25°	396.5	573.6	584.2	578.9	394.8
27.5°	121.6	205.3	263.5	200.9	121.6
30°	71.4	85.5	102.2	83.7	71.4
32.5°	44.9	53.8	64.3	52.9	44.1
35°	29.1	35.2	44.9	35.2	30.0
37.5°	19.4	23.8	31.7	23.8	20.3
40°	13.2	15.9	22.0	16.7	13.2
42.5°	9.7	11.5	15.0	11.5	8.8
45°	7.9	7.9	10.6	7.9	6.2
47.5°	6.2	6.2	7.0	5.3	4.4
50°	4.4	4.4	5.3	3.5	2.6
52.5°	2.6	3.5	3.5	2.6	1.8
55°	2.6	2.6	2.6	1.8	1.8
57.5°	1.8	1.8	1.8	0.9	0.9
60°	1.8	1.8	0.9	0.9	0.9
62.5°	0.9	0.9	0.9	0.9	0.9
65°	0.9	0.9	0.9	0.9	0.9
67.5°	0.9	0.9	0.9	0.9	0.9
70°	0.0	0.9	0.9	0.0	0.0
72.5°	0.0	0.9	0.0	0.0	0.0
75°	0.0	0.9	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)