

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: P182416

Luminaire Tested: **LDSQA4A18835D010TE LAR15SP 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182416
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26794)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA4A18835D010TE LAR15SP 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2092.0 lumens
Efficiency: N/A
Efficacy: 71.8 lumens/watt
Spacing Criteria (0/90/45): 0.32 / 0.32 / 0.36
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

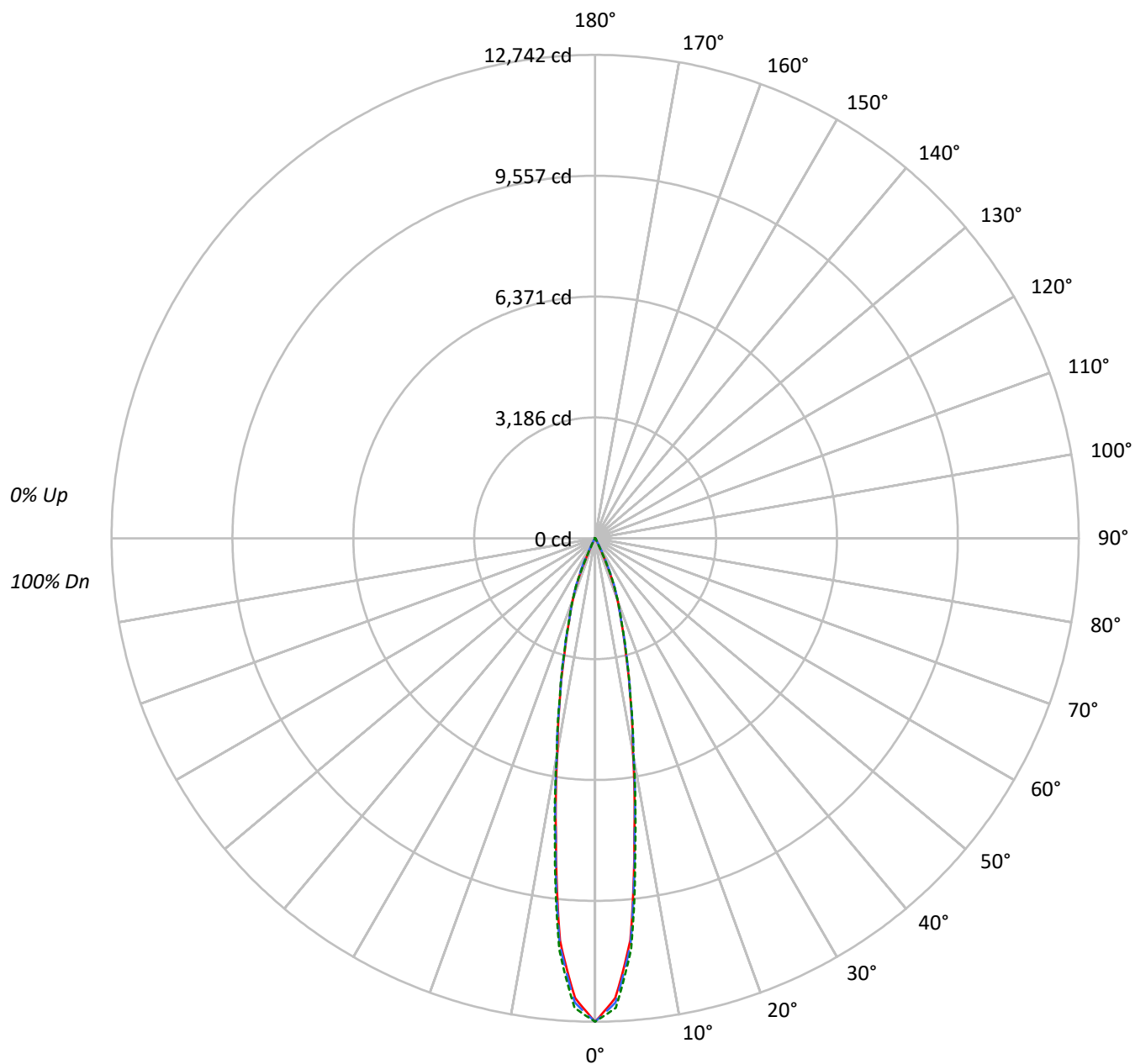
Input Watts (W): 29.12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					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	100	100
1	115	113	111	110	113	111	110	108	107	106	105	104	103	102	100	99	99	97	97	97
2	112	108	105	103	110	107	104	102	104	102	100	101	99	98	98	97	96	94	94	94
3	108	104	101	98	107	103	100	97	100	98	96	98	96	94	96	94	93	92	92	92
4	105	100	97	94	104	99	96	93	97	95	92	96	93	91	94	92	90	89	89	89
5	103	97	93	90	101	96	93	90	95	92	89	93	91	89	92	90	88	87	87	87
6	100	94	90	87	99	93	90	87	92	89	87	91	88	86	90	87	86	85	85	85
7	97	91	88	85	96	91	87	85	90	87	84	89	86	84	88	85	83	82	82	82
8	95	89	85	82	94	88	85	82	88	84	82	87	84	82	86	83	81	80	80	80
9	93	87	83	80	92	86	83	80	85	82	80	85	82	80	84	81	79	79	79	79
10	91	84	81	78	90	84	81	78	83	80	78	83	80	78	82	80	78	77	77	77

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1234425	1234425	1234425
5°	1034663	1043415	1058575
10°	562902	571263	573428
15°	311269	316283	317487
20°	176268	176783	177814
25°	48090	75347	47235
30°	7718	11746	7495
35°	2602	4376	2484
40°	1138	1770	1138
45°	685	822	548
50°	452	452	301
55°	338	338	169
60°	194	194	194
65°	229	229	229
70°	283	283	283
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	849.4	40.6
10°-20°	898.2	42.9
20°-30°	316.0	15.1
30°-40°	21.3	1.0
40°-50°	4.4	0.2
50°-60°	1.5	0.1
60°-70°	1.0	0.0
70°-80°	0.4	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°	2063.5	98.6
0°-40°	2084.8	99.7
0°-60°	2090.7	99.9
0°-90°	2092.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2092.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	12742	12742	12742	12742	12742	
5°	10640	10800	10730	10750	10886	840
15°	3104	3156	3154	3147	3166	889
25°	450	683	705	672	442	278
35°	22	27	37	27	21	17
45°	5	5	6	5	4	4
55°	2	2	2	1	1	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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	12742.4	12742.4	12742.4	12742.4	12742.4
2.5°	12130.5	12289.5	12249.5	12223.5	12390.4
5°	10639.7	10799.6	10729.7	10749.6	10885.6
7.5°	7910.0	8045.0	7973.0	8003.0	8107.0
10°	5722.3	5856.3	5807.3	5823.3	5829.3
12.5°	4266.5	4325.5	4286.5	4297.5	4317.5
15°	3103.6	3155.6	3153.6	3146.6	3165.6
17.5°	2277.7	2302.7	2277.7	2276.7	2289.7
20°	1709.8	1744.8	1714.8	1718.8	1724.8
22.5°	1148.9	1218.8	1206.8	1191.9	1175.9
25°	449.9	682.9	704.9	671.9	441.9
27.5°	129.0	213.0	303.0	209.0	125.0
30°	69.0	82.0	105.0	80.0	67.0
32.5°	37.0	47.0	60.0	46.0	36.0
35°	22.0	27.0	37.0	27.0	21.0
37.5°	14.0	17.0	23.0	17.0	14.0
40°	9.0	11.0	14.0	11.0	9.0
42.5°	7.0	8.0	9.0	7.0	6.0
45°	5.0	5.0	6.0	5.0	4.0
47.5°	4.0	4.0	4.0	3.0	3.0
50°	3.0	3.0	3.0	2.0	2.0
52.5°	2.0	2.0	2.0	2.0	2.0
55°	2.0	2.0	2.0	1.0	1.0
57.5°	2.0	1.0	1.0	1.0	1.0
60°	1.0	1.0	1.0	1.0	1.0
62.5°	1.0	1.0	1.0	1.0	1.0
65°	1.0	1.0	1.0	1.0	1.0
67.5°	1.0	1.0	1.0	1.0	0.0
70°	1.0	1.0	1.0	1.0	1.0
72.5°	1.0	1.0	1.0	0.0	0.0
75°	0.0	1.0	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)