

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: P182442

Luminaire Tested: **LDSQA4A28927D010TE LAR15SP 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182442
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: LDSQA4A28927D010TE LAR15SP 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2213.6 lumens
Efficiency: N/A
Efficacy: 49.8 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

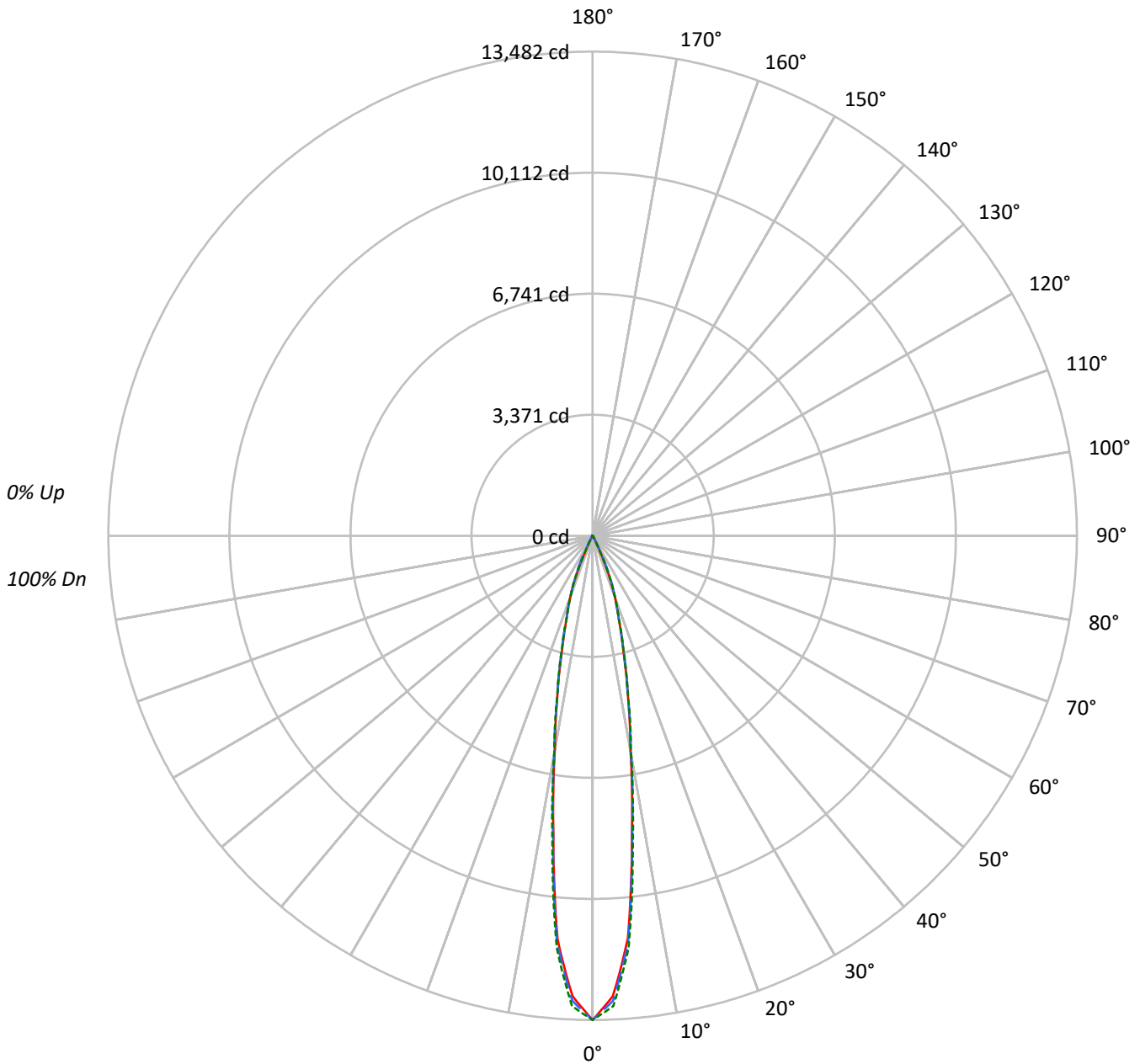
Input Watts (W): 44.49
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				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	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	115	113	111	110	113	111	110	108	107	106	105	104	103	102	100	99	99	97	97	97	97
2	112	108	105	103	110	107	104	102	104	102	100	101	99	98	98	97	96	94	94	94	94
3	108	104	101	98	107	103	100	97	100	98	96	98	96	94	96	94	93	92	92	92	92
4	105	100	97	94	104	99	96	93	97	95	92	96	93	91	94	92	90	89	89	89	89
5	103	97	93	90	101	96	93	90	95	92	89	93	91	89	92	90	88	87	87	87	87
6	100	94	90	87	99	93	90	87	92	89	87	91	88	86	90	87	86	85	85	85	85
7	97	91	88	85	96	91	87	85	90	87	84	89	86	84	88	85	83	82	82	82	82
8	95	89	85	82	94	88	85	82	88	84	82	87	84	82	86	83	81	80	80	80	80
9	93	87	83	80	92	86	83	80	85	82	80	85	82	80	84	81	79	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	77

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1306123	1306123	1306123
5°	1094760	1104018	1120064
10°	595600	604444	606736
15°	329352	334657	335931
20°	186505	187051	188144
25°	50890	79729	49982
30°	8166	12428	7931
35°	2756	4624	2625
40°	1201	1872	1201
45°	726	863	575
50°	482	482	316
55°	355	355	186
60°	213	213	213
65°	252	252	252
70°	312	312	312
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	898.7	40.6
10°-20°	950.3	42.9
20°-30°	334.4	15.1
30°-40°	22.5	1.0
40°-50°	4.7	0.2
50°-60°	1.6	0.1
60°-70°	1.1	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°	2183.4	98.6
0°-40°	2205.9	99.7
0°-60°	2212.1	99.9
0°-90°	2213.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2213.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	13482	13482	13482	13482	13482	
5°	11258	11427	11353	11374	11518	888
15°	3284	3339	3337	3329	3350	941
25°	476	723	746	711	468	295
35°	23	29	39	29	22	18
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	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	13482.5	13482.5	13482.5	13482.5	13482.5
2.5°	12835.1	13003.3	12961.0	12933.5	13110.1
5°	11257.7	11426.9	11352.9	11374.0	11517.9
7.5°	8369.5	8512.3	8436.1	8467.8	8577.9
10°	6054.7	6196.4	6144.6	6161.5	6167.9
12.5°	4514.3	4576.7	4535.4	4547.1	4568.2
15°	3283.9	3338.9	3336.8	3329.4	3349.5
17.5°	2410.0	2436.5	2410.0	2409.0	2422.7
20°	1809.1	1846.1	1814.4	1818.6	1825.0
22.5°	1215.6	1289.6	1276.9	1261.1	1244.2
25°	476.1	722.6	745.9	710.9	467.6
27.5°	136.5	225.3	320.6	221.1	132.2
30°	73.0	86.8	111.1	84.6	70.9
32.5°	39.1	49.7	63.5	48.7	38.1
35°	23.3	28.6	39.1	28.6	22.2
37.5°	14.8	18.0	24.3	18.0	14.8
40°	9.5	11.6	14.8	11.6	9.5
42.5°	7.4	8.5	9.5	7.4	6.3
45°	5.3	5.3	6.3	5.3	4.2
47.5°	4.2	4.2	4.2	3.2	3.2
50°	3.2	3.2	3.2	2.1	2.1
52.5°	2.1	2.1	2.1	2.1	2.1
55°	2.1	2.1	2.1	1.1	1.1
57.5°	2.1	1.1	1.1	1.1	1.1
60°	1.1	1.1	1.1	1.1	1.1
62.5°	1.1	1.1	1.1	1.1	1.1
65°	1.1	1.1	1.1	1.1	1.1
67.5°	1.1	1.1	1.1	1.1	0.0
70°	1.1	1.1	1.1	1.1	1.1
72.5°	1.1	1.1	1.1	0.0	0.0
75°	0.0	1.1	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)