

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: P182429

Luminaire Tested: **LDSQA4A09940D010TE LAR15SP 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182429
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: LDSQA4A09940D010TE LAR15SP 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
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: 999.1 lumens
Efficiency: N/A
Efficacy: 72.2 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

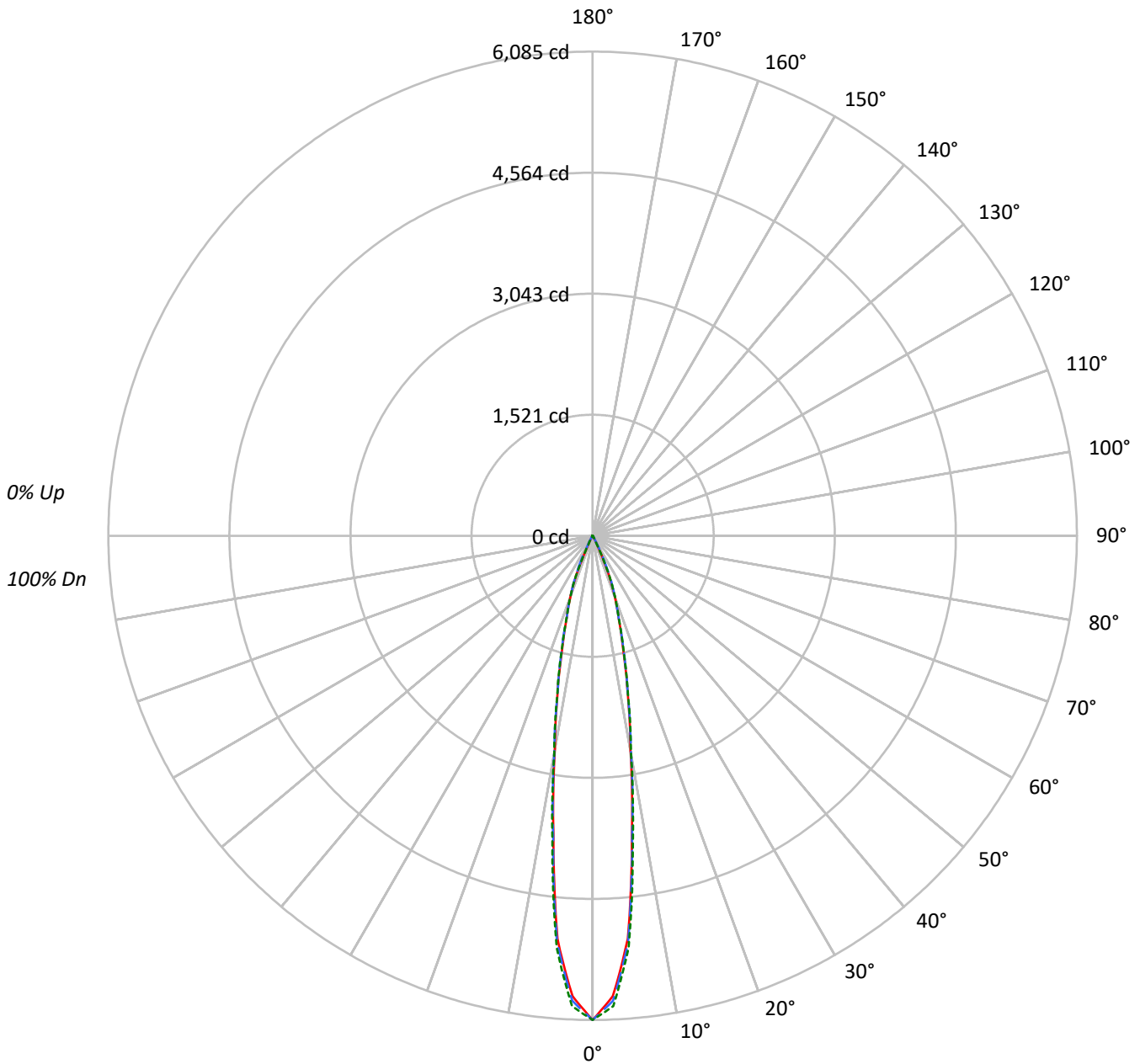
Input Watts (W): 13.84
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
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	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	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	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	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	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	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	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	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	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	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	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	77	77	77		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	589506	589506	589506
5°	494104	498286	505531
10°	268815	272809	273842
15°	148644	151041	151623
20°	84175	84423	84917
25°	22971	35979	22565
30°	3680	5604	3580
35°	1242	2093	1183
40°	544	847	544
45°	329	397	260
50°	211	211	151
55°	169	169	84
60°	97	97	97
65°	115	115	115
70°	142	142	142
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	405.6	40.6
10°-20°	428.9	42.9
20°-30°	150.9	15.1
30°-40°	10.2	1.0
40°-50°	2.1	0.2
50°-60°	0.7	0.1
60°-70°	0.5	0.0
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°	985.4	98.6
0°-40°	995.6	99.7
0°-60°	998.4	99.9
0°-90°	999.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	999.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6085	6085	6085	6085	6085	
5°	5081	5157	5124	5134	5198	401
15°	1482	1507	1506	1503	1512	425
25°	215	326	337	321	211	133
35°	10	13	18	13	10	8
45°	2	2	3	2	2	2
55°	1	1	1	0	0	1
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°
0°	6085.2	6085.2	6085.2	6085.2	6085.2
2.5°	5793.0	5868.9	5849.8	5837.4	5917.1
5°	5081.0	5157.4	5124.0	5133.6	5198.5
7.5°	3777.5	3841.9	3807.5	3821.9	3871.5
10°	2732.7	2796.7	2773.3	2780.9	2783.8
12.5°	2037.5	2065.6	2047.0	2052.3	2061.8
15°	1482.1	1507.0	1506.0	1502.7	1511.8
17.5°	1087.7	1099.7	1087.7	1087.3	1093.5
20°	816.5	833.2	818.9	820.8	823.7
22.5°	548.6	582.1	576.3	569.2	561.5
25°	214.9	326.1	336.6	320.9	211.1
27.5°	61.6	101.7	144.7	99.8	59.7
30°	32.9	39.2	50.1	38.2	32.0
32.5°	17.7	22.4	28.6	22.0	17.2
35°	10.5	12.9	17.7	12.9	10.0
37.5°	6.7	8.1	11.0	8.1	6.7
40°	4.3	5.3	6.7	5.3	4.3
42.5°	3.3	3.8	4.3	3.3	2.9
45°	2.4	2.4	2.9	2.4	1.9
47.5°	1.9	1.9	1.9	1.4	1.4
50°	1.4	1.4	1.4	1.0	1.0
52.5°	1.0	1.0	1.0	1.0	1.0
55°	1.0	1.0	1.0	0.5	0.5
57.5°	1.0	0.5	0.5	0.5	0.5
60°	0.5	0.5	0.5	0.5	0.5
62.5°	0.5	0.5	0.5	0.5	0.5
65°	0.5	0.5	0.5	0.5	0.5
67.5°	0.5	0.5	0.5	0.5	0.0
70°	0.5	0.5	0.5	0.5	0.5
72.5°	0.5	0.5	0.5	0.0	0.0
75°	0.0	0.5	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)