

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: P182435

Luminaire Tested: **LDSQA4A13930D010TE LAR15SP 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182435
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: LDSQA4A13930D010TE LAR15SP 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1357.1 lumens
Efficiency: N/A
Efficacy: 60.9 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

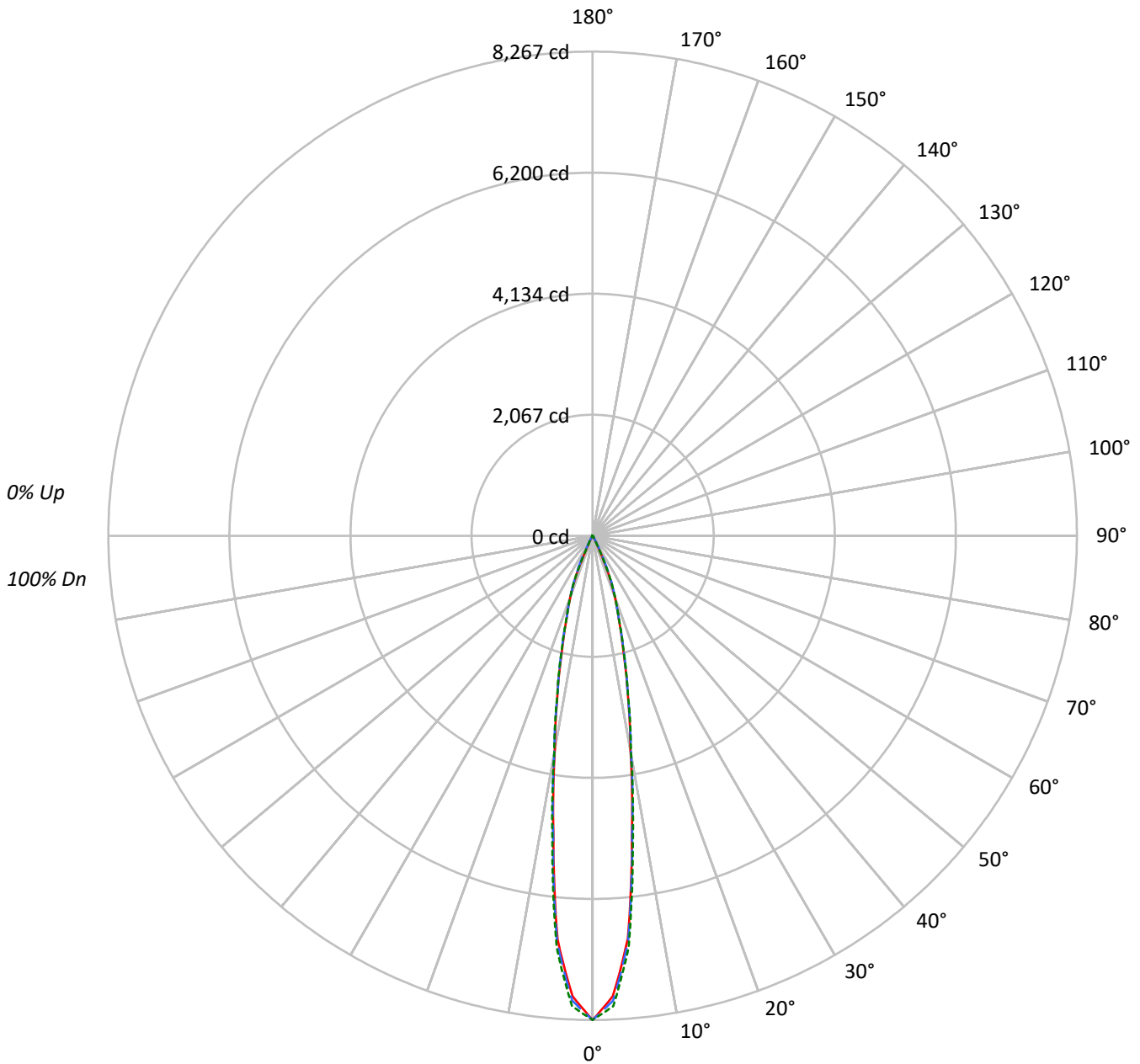
Input Watts (W): 22.27
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	800869	800869	800869
5°	671266	676945	686777
10°	365198	370618	372025
15°	201950	205199	205981
20°	114361	114691	115361
25°	31201	48881	30645
30°	5011	7618	4866
35°	1691	2838	1608
40°	733	1151	733
45°	438	534	356
50°	286	286	196
55°	220	220	101
60°	116	116	116
65°	138	138	138
70°	170	170	170
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	551.0	40.6
10°-20°	582.7	42.9
20°-30°	205.0	15.1
30°-40°	13.8	1.0
40°-50°	2.9	0.2
50°-60°	0.9	0.1
60°-70°	0.6	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°	1338.8	98.6
0°-40°	1352.6	99.7
0°-60°	1356.3	99.9
0°-90°	1357.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1357.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8267	8267	8267	8267	8267	
5°	6903	7007	6961	6974	7062	545
15°	2014	2047	2046	2041	2054	577
25°	292	443	457	436	287	181
35°	14	18	24	18	14	11
45°	3	3	4	3	3	3
55°	1	1	1	1	1	1
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°	8267.0	8267.0	8267.0	8267.0	8267.0
2.5°	7870.0	7973.1	7947.2	7930.3	8038.6
5°	6902.8	7006.6	6961.2	6974.1	7062.3
7.5°	5131.8	5219.4	5172.7	5192.2	5259.6
10°	3712.5	3799.4	3767.6	3778.0	3781.9
12.5°	2768.0	2806.3	2781.0	2788.1	2801.1
15°	2013.6	2047.3	2046.0	2041.4	2053.8
17.5°	1477.7	1493.9	1477.7	1477.1	1485.5
20°	1109.3	1132.0	1112.5	1115.1	1119.0
22.5°	745.4	790.8	783.0	773.2	762.9
25°	291.9	443.1	457.3	435.9	286.7
27.5°	83.7	138.2	196.6	135.6	81.1
30°	44.8	53.2	68.1	51.9	43.5
32.5°	24.0	30.5	38.9	29.8	23.4
35°	14.3	17.5	24.0	17.5	13.6
37.5°	9.1	11.0	14.9	11.0	9.1
40°	5.8	7.1	9.1	7.1	5.8
42.5°	4.5	5.2	5.8	4.5	3.9
45°	3.2	3.2	3.9	3.2	2.6
47.5°	2.6	2.6	2.6	1.9	1.9
50°	1.9	1.9	1.9	1.3	1.3
52.5°	1.3	1.3	1.3	1.3	1.3
55°	1.3	1.3	1.3	0.6	0.6
57.5°	1.3	0.6	0.6	0.6	0.6
60°	0.6	0.6	0.6	0.6	0.6
62.5°	0.6	0.6	0.6	0.6	0.6
65°	0.6	0.6	0.6	0.6	0.6
67.5°	0.6	0.6	0.6	0.6	0.0
70°	0.6	0.6	0.6	0.6	0.6
72.5°	0.6	0.6	0.6	0.0	0.0
75°	0.0	0.6	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)