

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: P182438

Luminaire Tested: **LDSQA4A28827D010TE LAR15SP 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182438
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: LDSQA4A28827D010TE LAR15SP 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2757.9 lumens
Efficiency: N/A
Efficacy: 62.0 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

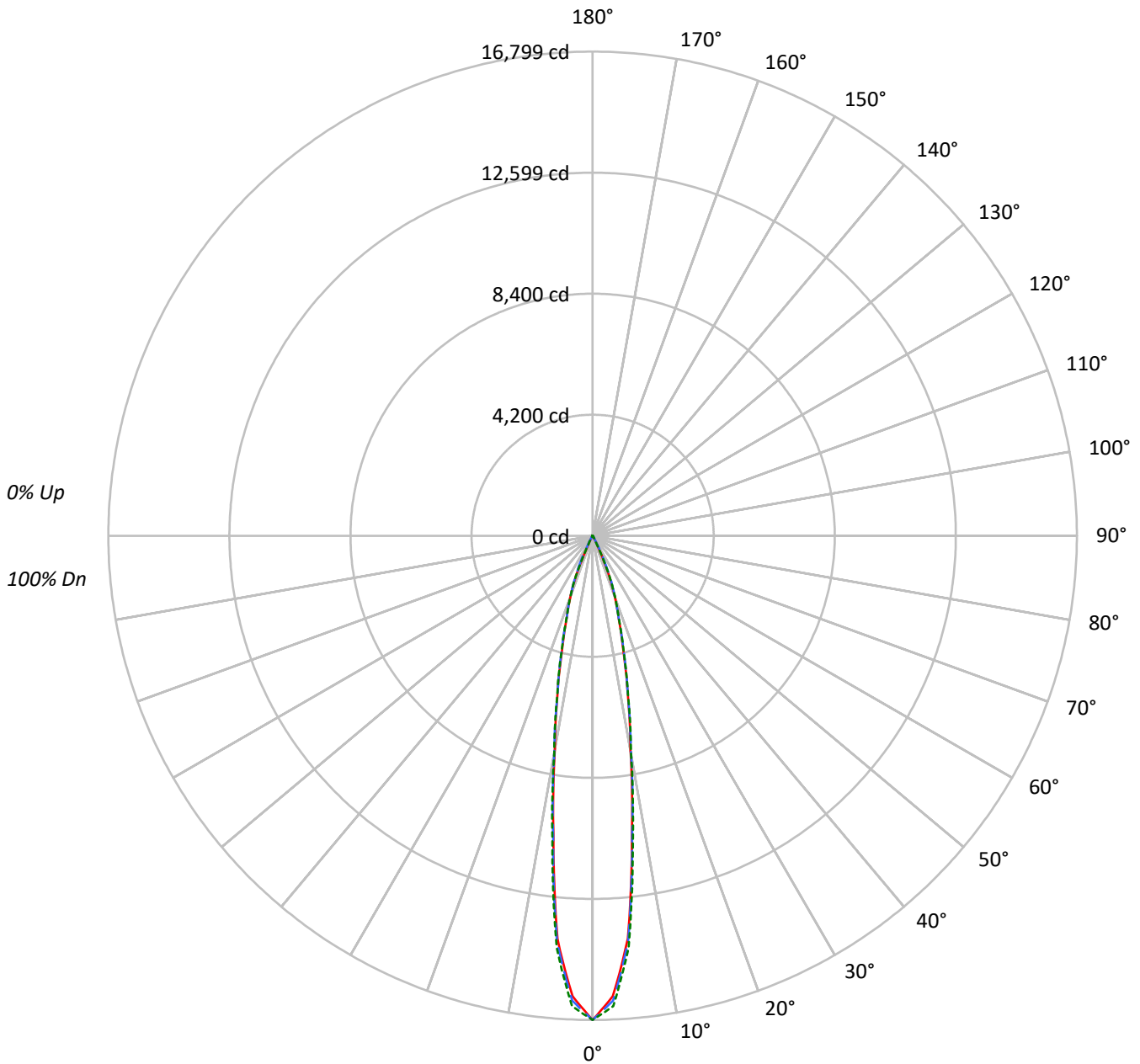
Input Watts (W): 44.49
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P182438

CATALOG NUMBER: LDSQA4A28827D010TE LAR15SP 4LSQA1H

Luminous Intensity Polar Plot





TEST NUMBER: P182438

CATALOG NUMBER: LDSQA4A28827D010TE LAR15SP 4LSQA1H

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	105	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°	1627381	1627381	1627381
5°	1364023	1375557	1395550
10°	742083	753110	755963
15°	410358	416967	418552
20°	232381	233051	234412
25°	63407	99333	62274
30°	10179	15482	9877
35°	3430	5771	3276
40°	1505	2340	1505
45°	904	1082	726
50°	603	603	392
55°	439	439	220
60°	252	252	252
65°	298	298	298
70°	368	368	368
75°	0	0	0
80°	0	0	0
85°	0	0	0



TEST NUMBER: P182438

CATALOG NUMBER: LDSQA4A28827D010TE LAR15SP 4LSQA1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1119.7	40.6
10°-20°	1184.1	42.9
20°-30°	416.6	15.1
30°-40°	28.1	1.0
40°-50°	5.8	0.2
50°-60°	1.9	0.1
60°-70°	1.2	0.0
70°-80°	0.5	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°	2720.4	98.6
0°-40°	2748.5	99.7
0°-60°	2756.2	99.9
0°-90°	2757.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2757.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	16799	16799	16799	16799	16799	
5°	14027	14238	14145	14172	14351	1107
15°	4092	4160	4158	4148	4173	1172
25°	593	900	929	886	583	367
35°	29	36	49	36	28	22
45°	7	7	8	7	5	6
55°	3	3	3	1	1	2
65°	1	1	1	1	1	1
75°	0	1	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P182438

CATALOG NUMBER: LDSQA4A28827D010TE LAR15SP 4LSQA1H

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	16798.7	16798.7	16798.7	16798.7	16798.7
2.5°	15991.9	16201.5	16148.8	16114.5	16334.7
5°	14026.6	14237.5	14145.2	14171.6	14350.8
7.5°	10428.0	10605.9	10511.0	10550.6	10687.7
10°	7543.8	7720.5	7655.9	7677.0	7684.9
12.5°	5624.6	5702.4	5651.0	5665.5	5691.8
15°	4091.6	4160.1	4157.5	4148.3	4173.3
17.5°	3002.8	3035.7	3002.8	3001.5	3018.6
20°	2254.1	2300.2	2260.6	2265.9	2273.8
22.5°	1514.6	1606.8	1591.0	1571.2	1550.2
25°	593.2	900.3	929.3	885.8	582.6
27.5°	170.0	280.8	399.4	275.5	164.8
30°	91.0	108.1	138.4	105.5	88.3
32.5°	48.8	62.0	79.1	60.6	47.5
35°	29.0	35.6	48.8	35.6	27.7
37.5°	18.5	22.4	30.3	22.4	18.5
40°	11.9	14.5	18.5	14.5	11.9
42.5°	9.2	10.5	11.9	9.2	7.9
45°	6.6	6.6	7.9	6.6	5.3
47.5°	5.3	5.3	5.3	4.0	4.0
50°	4.0	4.0	4.0	2.6	2.6
52.5°	2.6	2.6	2.6	2.6	2.6
55°	2.6	2.6	2.6	1.3	1.3
57.5°	2.6	1.3	1.3	1.3	1.3
60°	1.3	1.3	1.3	1.3	1.3
62.5°	1.3	1.3	1.3	1.3	1.3
65°	1.3	1.3	1.3	1.3	1.3
67.5°	1.3	1.3	1.3	1.3	0.0
70°	1.3	1.3	1.3	1.3	1.3
72.5°	1.3	1.3	1.3	0.0	0.0
75°	0.0	1.3	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



Report Generated By E9808895 / USPTCWHP6082093





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







(END OF REPORT)