

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: P1212389

Luminaire Tested: **LDSQA4A35940D010TE LAR15SP 4LSQAL1H**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: P1212389
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26796)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA4A35940D010TE LAR15SP 4LSQAL1H
Description: PORTFOLIO 4" SQUARE LENSED ADJUSTABLE, SELF-FLANGED, 15° SPOT
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

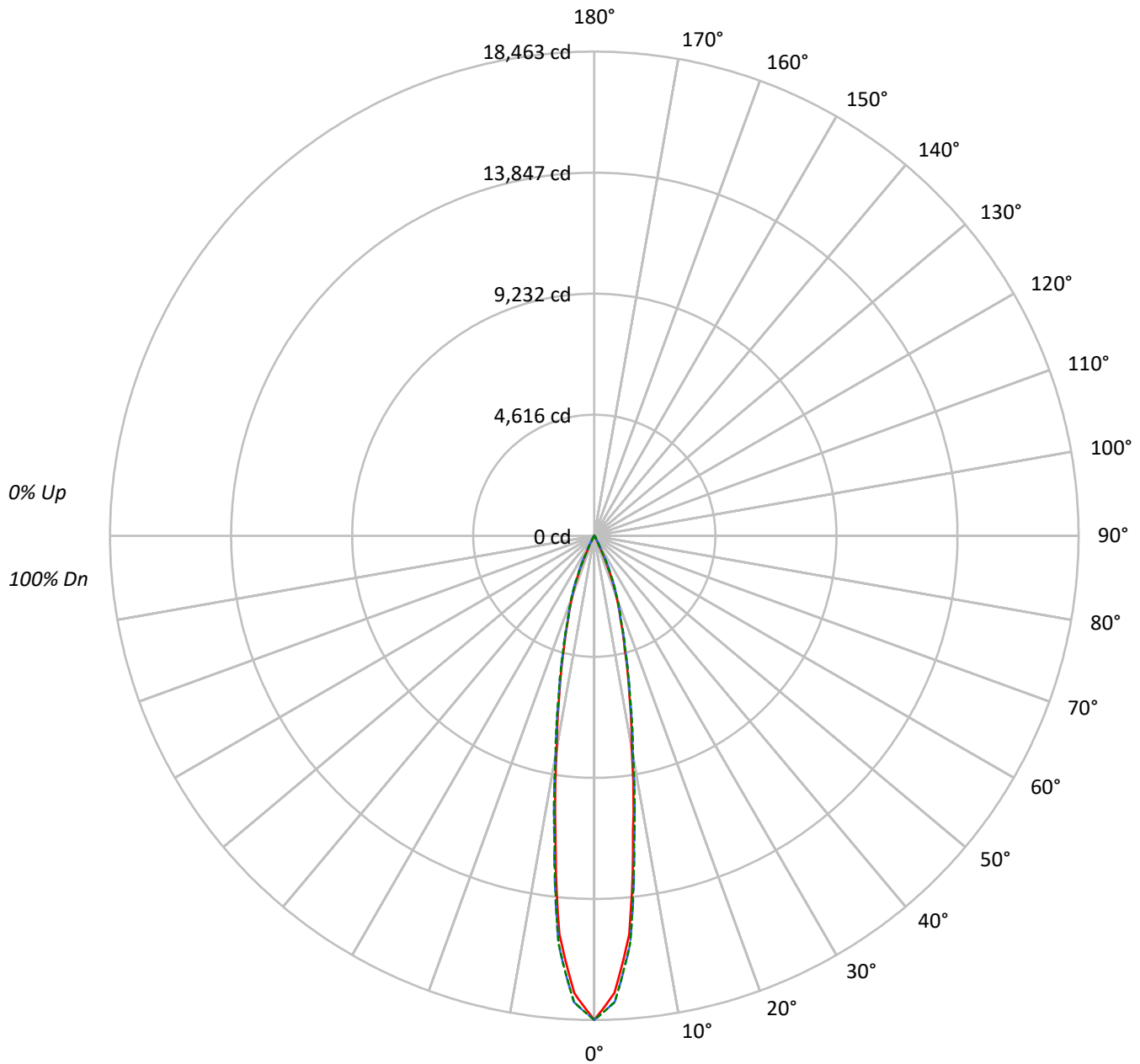
Lumens per Lamp: N/A
Luminaire Lumens: 3081.1 lumens
Efficiency: N/A
Efficacy: 64.6 lumens/watt
Spacing Criteria (0/90/45): 0.31 / 0.32 / 0.36
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 47.7
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

TEST NUMBER: P1212389

CATALOG NUMBER: LDSQA4A35940D010TE LAR15SP 4LSQAL1H

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P1212389

CATALOG NUMBER: LDSQA4A35940D010TE LAR15SP 4LSQAL1H

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	109	108	107	106	105	103	102	102	100	99	99	97	97	97
2	112	108	105	103	110	107	104	102	103	101	100	101	99	98	98	97	96	94	94	94
3	108	104	100	98	107	103	99	97	100	98	95	98	96	94	96	94	93	91	91	91
4	105	100	96	94	104	99	96	93	97	94	92	95	93	91	94	92	90	89	89	89
5	102	97	93	90	101	96	92	90	94	91	89	93	90	88	92	89	87	86	86	86
6	100	94	90	87	98	93	89	87	92	89	86	91	88	86	89	87	85	84	84	84
7	97	91	87	84	96	90	87	84	89	86	84	88	85	83	87	85	83	82	82	82
8	95	88	85	82	94	88	84	82	87	84	81	86	83	81	85	83	81	80	80	80
9	92	86	82	80	92	86	82	80	85	82	79	84	81	79	84	81	79	78	78	78
10	90	84	80	78	89	84	80	78	83	80	77	82	79	77	82	79	77	76	76	76

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1788582	1788582	1788582
5°	1483596	1521999	1519840
10°	808404	832278	836498
15°	449482	462370	464757
20°	253412	260598	263886
25°	76277	112395	75945
30°	14374	20583	14374
35°	6185	9579	6374
40°	3010	5021	3010
45°	1959	2617	1507
50°	1191	1432	708
55°	794	794	524
60°	601	310	310
65°	367	367	367
70°	0	453	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



TEST NUMBER: P1212389

CATALOG NUMBER: LDSQA4A35940D010TE LAR15SP 4LSQAL1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1229.2	39.9
10°-20°	1310.3	42.5
20°-30°	477.9	15.5
30°-40°	45.6	1.5
40°-50°	12.5	0.4
50°-60°	3.7	0.1
60°-70°	1.6	0.1
70°-80°	0.3	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°	3017.4	97.9
0°-40°	3062.9	99.4
0°-60°	3079.2	99.9
0°-90°	3081.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3081.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	18463	18463	18463	18463	18463	
5°	15256	15642	15651	15488	15629	1205
15°	4482	4588	4610	4601	4634	1282
25°	714	1032	1052	1042	710	412
35°	52	63	81	63	54	37
45°	14	14	19	14	11	11
55°	5	5	5	3	3	4
65°	2	2	2	2	2	2
75°	0	2	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P1212389

CATALOG NUMBER: LDSQA4A35940D010TE LAR15SP 4LSQAL1H

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	18462.7	18462.7	18462.7	18462.7	18462.7
2.5°	17455.8	17823.8	17796.7	17714.3	17796.7
5°	15256.2	15641.6	15651.1	15487.8	15628.9
7.5°	11340.6	11638.8	11691.0	11530.9	11637.1
10°	8218.0	8484.5	8460.7	8428.9	8503.6
12.5°	6138.9	6273.7	6259.5	6294.4	6299.0
15°	4481.7	4588.0	4610.2	4600.6	4634.0
17.5°	3300.3	3357.3	3346.2	3363.7	3376.3
20°	2458.1	2548.5	2527.8	2543.8	2559.7
22.5°	1630.3	1796.7	1776.2	1801.5	1787.3
25°	713.6	1032.4	1051.5	1041.9	710.5
27.5°	218.9	369.5	474.2	361.6	218.9
30°	128.5	153.9	184.0	150.7	128.5
32.5°	81.0	96.7	115.8	95.1	79.2
35°	52.3	63.4	81.0	63.4	53.9
37.5°	35.0	42.9	57.0	42.9	36.5
40°	23.8	28.5	39.7	30.1	23.8
42.5°	17.4	20.7	26.9	20.7	15.9
45°	14.3	14.3	19.1	14.3	11.0
47.5°	11.0	11.0	12.8	9.5	7.9
50°	7.9	7.9	9.5	6.3	4.7
52.5°	4.7	6.3	6.3	4.7	3.1
55°	4.7	4.7	4.7	3.1	3.1
57.5°	3.1	3.1	3.1	1.6	1.6
60°	3.1	3.1	1.6	1.6	1.6
62.5°	1.6	1.6	1.6	1.6	1.6
65°	1.6	1.6	1.6	1.6	1.6
67.5°	1.6	1.6	1.6	1.6	1.6
70°	0.0	1.6	1.6	0.0	0.0
72.5°	0.0	1.6	0.0	0.0	0.0
75°	0.0	1.6	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

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



Report Generated By 670245859 / DESKTOP-T8S5UU9

Classified

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269

Scaled Data Report



Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



— 0°-180° - - 45°-225° - - - 90°-270°

Classified

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269

Scaled Data Report



Classified

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269

Scaled Data Report



Classified

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)