

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: P1212319

Luminaire Tested: **LDSQA4A30935D010TE LAR15SP 4LSQAL1H**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: P1212319
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: LDSQA4A30935D010TE LAR15SP 4LSQAL1H
Description: PORTFOLIO 4" SQUARE LENSED ADJUSTABLE, SELF-FLANGED, 15° SPOT
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

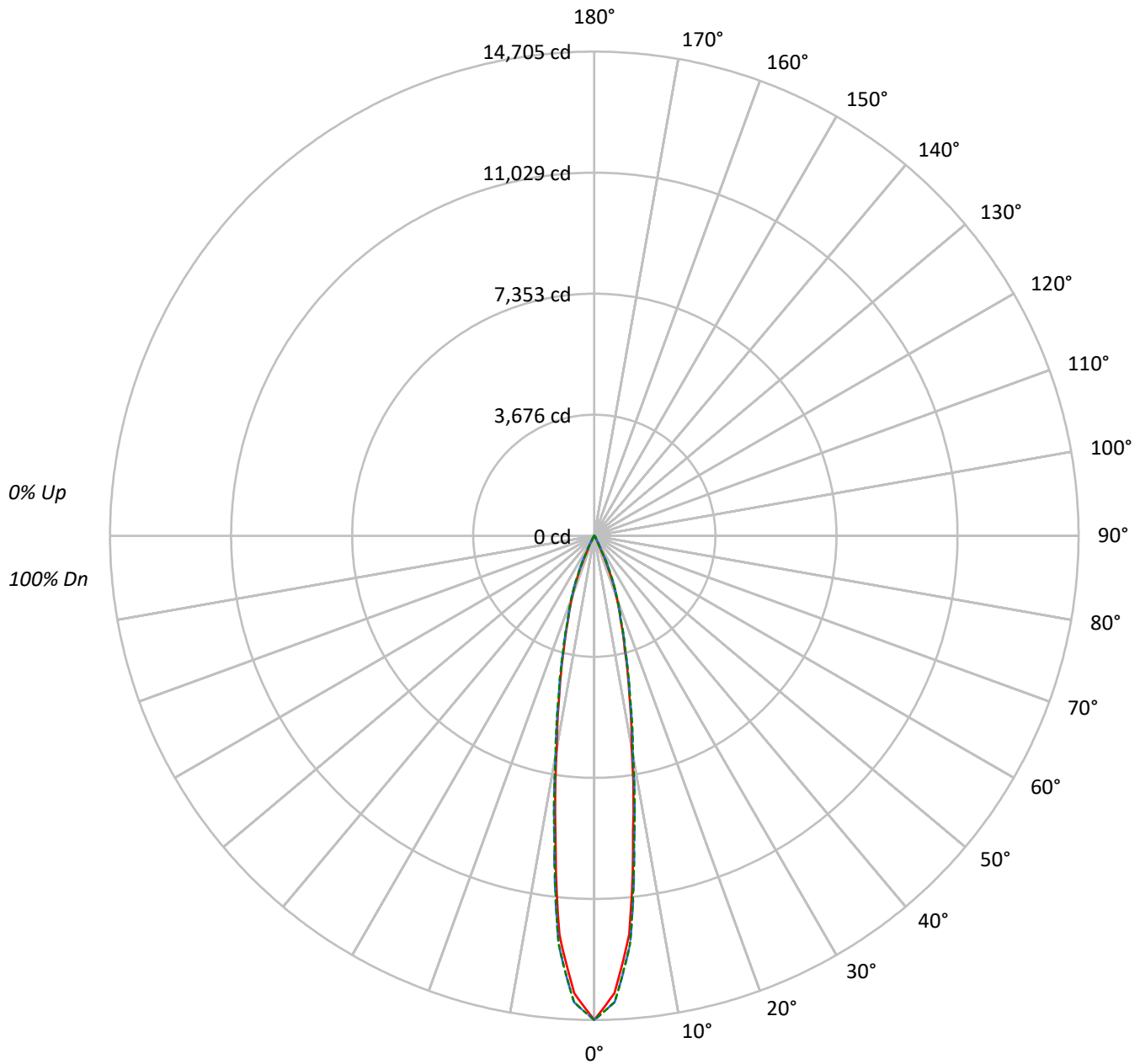
Lumens per Lamp: N/A
Luminaire Lumens: 2453.9 lumens
Efficiency: N/A
Efficacy: 61.7 lumens/watt
Spacing Criteria (0/90/45): 0.31 / 0.32 / 0.36
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 39.8
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: P1212319

CATALOG NUMBER: LDSQA4A30935D010TE LAR15SP 4LSQAL1H

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P1212319

CATALOG NUMBER: LDSQA4A30935D010TE LAR15SP 4LSQAL1H

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
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		
1	115	113	111	110	113	111	109	108	107	106	105	103	102	102	100	99	99	97		
2	112	108	105	103	110	107	104	102	103	101	100	101	99	98	98	97	96	94		
3	108	104	100	98	107	103	99	97	100	98	95	98	96	94	96	94	93	91		
4	105	100	96	94	104	99	96	93	97	94	92	95	93	91	94	92	90	89		
5	102	97	93	90	101	96	92	90	94	91	89	93	90	88	92	89	87	86		
6	100	94	90	87	98	93	89	87	92	89	86	91	88	86	89	87	85	84		
7	97	91	87	84	96	90	87	84	89	86	84	88	85	83	87	85	83	82		
8	95	88	85	82	94	88	84	82	87	84	81	86	83	81	85	83	81	80		
9	92	86	82	80	92	86	82	80	85	82	79	84	81	79	84	81	79	78		
10	90	84	80	78	89	84	80	78	83	80	77	82	79	77	82	79	77	76		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1424553	1424553	1424553
5°	1181640	1212223	1210512
10°	643870	662875	666240
15°	358005	368255	370161
20°	201835	207567	210165
25°	60756	89510	60489
30°	11443	16399	11443
35°	4932	7616	5073
40°	2403	3984	2403
45°	1562	2069	1206
50°	949	1145	573
55°	642	642	422
60°	484	233	233
65°	275	275	275
70°	0	340	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



TEST NUMBER: P1212319

CATALOG NUMBER: LDSQA4A30935D010TE LAR15SP 4LSQAL1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	979.0	39.9
10°-20°	1043.6	42.5
20°-30°	380.6	15.5
30°-40°	36.3	1.5
40°-50°	10.0	0.4
50°-60°	3.0	0.1
60°-70°	1.2	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°	2403.2	97.9
0°-40°	2439.5	99.4
0°-60°	2452.5	99.9
0°-90°	2453.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2453.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	14705	14705	14705	14705	14705	
5°	12151	12458	12466	12336	12448	960
15°	3570	3654	3672	3664	3691	1021
25°	568	822	837	830	566	328
35°	42	50	64	50	43	30
45°	11	11	15	11	9	9
55°	4	4	4	2	2	3
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

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P1212319

CATALOG NUMBER: LDSQA4A30935D010TE LAR15SP 4LSQAL1H

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	14705.0	14705.0	14705.0	14705.0	14705.0
2.5°	13903.1	14196.1	14174.6	14109.0	14174.6
5°	12151.1	12458.0	12465.6	12335.5	12448.0
7.5°	9032.4	9270.0	9311.7	9184.1	9268.7
10°	6545.4	6757.6	6738.6	6713.4	6772.8
12.5°	4889.5	4996.9	4985.4	5013.2	5017.1
15°	3569.6	3654.2	3671.8	3664.3	3690.8
17.5°	2628.5	2674.0	2665.1	2679.0	2689.2
20°	1957.8	2029.8	2013.4	2026.0	2038.6
22.5°	1298.5	1431.1	1414.6	1434.9	1423.6
25°	568.4	822.3	837.4	829.9	565.9
27.5°	174.4	294.3	377.6	288.0	174.4
30°	102.3	122.5	146.6	120.0	102.3
32.5°	64.4	77.1	92.2	75.8	63.2
35°	41.7	50.5	64.4	50.5	42.9
37.5°	27.8	34.1	45.4	34.1	29.0
40°	19.0	22.7	31.5	24.0	19.0
42.5°	13.9	16.4	21.5	16.4	12.7
45°	11.4	11.4	15.1	11.4	8.8
47.5°	8.8	8.8	10.1	7.6	6.3
50°	6.3	6.3	7.6	5.1	3.8
52.5°	3.8	5.1	5.1	3.8	2.5
55°	3.8	3.8	3.8	2.5	2.5
57.5°	2.5	2.5	2.5	1.2	1.2
60°	2.5	2.5	1.2	1.2	1.2
62.5°	1.2	1.2	1.2	1.2	1.2
65°	1.2	1.2	1.2	1.2	1.2
67.5°	1.2	1.2	1.2	1.2	1.2
70°	0.0	1.2	1.2	0.0	0.0
72.5°	0.0	1.2	0.0	0.0	0.0
75°	0.0	1.2	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)