

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: P1212095

Luminaire Tested: **LDSQA4A10935D010TE LAR15SP 4LSQAL1H**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: P1212095
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: LDSQA4A10935D010TE 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

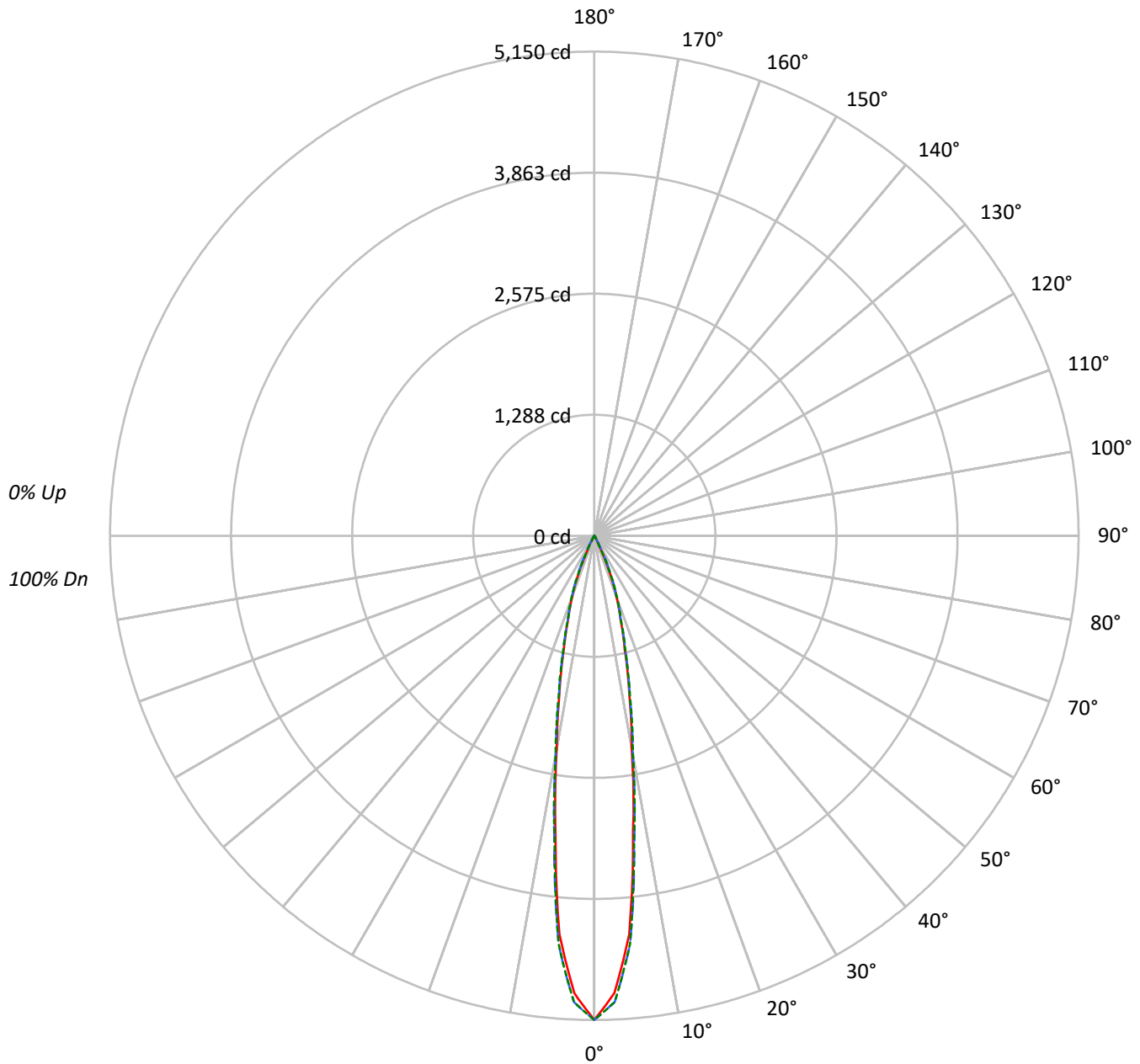
Lumens per Lamp: N/A
Luminaire Lumens: 859.3 lumens
Efficiency: N/A
Efficacy: 69.3 lumens/watt
Spacing Criteria (0/90/45): 0.31 / 0.32 / 0.36
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 12.4
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: P1212095

CATALOG NUMBER: LDSQA4A10935D010TE LAR15SP 4LSQAL1H

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P1212095

CATALOG NUMBER: LDSQA4A10935D010TE 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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	115	113	111	110	113	111	109	108	107	106	105		103	102	102		100
2	112	108	105	103	110	107	104	102	103	101	100		101	99	98		98
3	108	104	100	98	107	103	99	97	100	98	95		98	96	94		96
4	105	100	96	94	104	99	96	93	97	94	92		95	93	91		94
5	102	97	93	90	101	96	92	90	94	91	89		93	90	88		92
6	100	94	90	87	98	93	89	87	92	89	86		91	88	86		89
7	97	91	87	84	96	90	87	84	89	86	84		88	85	83		87
8	95	88	85	82	94	88	84	82	87	84	81		86	83	81		85
9	92	86	82	80	92	86	82	80	85	82	79		84	81	79		84
10	90	84	80	78	89	84	80	78	83	80	77		82	79	77		82

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	498879	498879	498879
5°	413809	424515	423912
10°	225483	232143	233314
15°	125366	128967	129628
20°	70680	72691	73598
25°	21282	31351	21186
30°	4005	5739	4005
35°	1727	2673	1774
40°	835	1404	835
45°	548	726	425
50°	332	407	196
55°	220	220	152
60°	174	78	78
65°	92	92	92
70°	0	113	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



TEST NUMBER: P1212095

CATALOG NUMBER: LDSQA4A10935D010TE LAR15SP 4LSQAL1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	342.9	39.9
10°-20°	365.5	42.5
20°-30°	133.3	15.5
30°-40°	12.7	1.5
40°-50°	3.5	0.4
50°-60°	1.0	0.1
60°-70°	0.4	0.0
70°-80°	0.1	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°	841.6	97.9
0°-40°	854.3	99.4
0°-60°	858.9	99.9
0°-90°	859.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	859.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5150	5150	5150	5150	5150	
5°	4255	4363	4365	4320	4359	336
15°	1250	1280	1286	1283	1292	358
25°	199	288	293	291	198	115
35°	15	18	23	18	15	10
45°	4	4	5	4	3	3
55°	1	1	1	1	1	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	

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P1212095

CATALOG NUMBER: LDSQA4A10935D010TE LAR15SP 4LSQAL1H

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5149.7	5149.7	5149.7	5149.7	5149.7
2.5°	4868.8	4971.4	4963.9	4940.9	4963.9
5°	4255.3	4362.8	4365.4	4319.8	4359.2
7.5°	3163.1	3246.3	3260.9	3216.2	3245.9
10°	2292.2	2366.5	2359.9	2351.0	2371.8
12.5°	1712.3	1749.9	1745.9	1755.6	1757.0
15°	1250.0	1279.7	1285.9	1283.2	1292.5
17.5°	920.5	936.4	933.3	938.2	941.7
20°	685.6	710.8	705.1	709.5	713.9
22.5°	454.7	501.2	495.4	502.5	498.5
25°	199.1	288.0	293.3	290.6	198.2
27.5°	61.0	103.1	132.3	100.9	61.0
30°	35.8	42.9	51.3	42.0	35.8
32.5°	22.6	27.0	32.3	26.5	22.1
35°	14.6	17.7	22.6	17.7	15.0
37.5°	9.7	11.9	15.9	11.9	10.2
40°	6.6	8.0	11.1	8.4	6.6
42.5°	4.9	5.8	7.5	5.8	4.4
45°	4.0	4.0	5.3	4.0	3.1
47.5°	3.1	3.1	3.5	2.7	2.2
50°	2.2	2.2	2.7	1.8	1.3
52.5°	1.3	1.8	1.8	1.3	0.9
55°	1.3	1.3	1.3	0.9	0.9
57.5°	0.9	0.9	0.9	0.4	0.4
60°	0.9	0.9	0.4	0.4	0.4
62.5°	0.4	0.4	0.4	0.4	0.4
65°	0.4	0.4	0.4	0.4	0.4
67.5°	0.4	0.4	0.4	0.4	0.4
70°	0.0	0.4	0.4	0.0	0.0
72.5°	0.0	0.4	0.0	0.0	0.0
75°	0.0	0.4	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)