

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: P1212315

Luminaire Tested: **LDSQA4A30935D010TE LAR15SP 4LSQA1H-LSF-20**

Issue Date: 3/3/2020

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

**Test Information**

Test Method: LM-41-14
Report Number: P1212315
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26829)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA4A30935D010TE LAR15SP 4LSQA1H-LSF-20
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT WITH SOLITE LENS
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

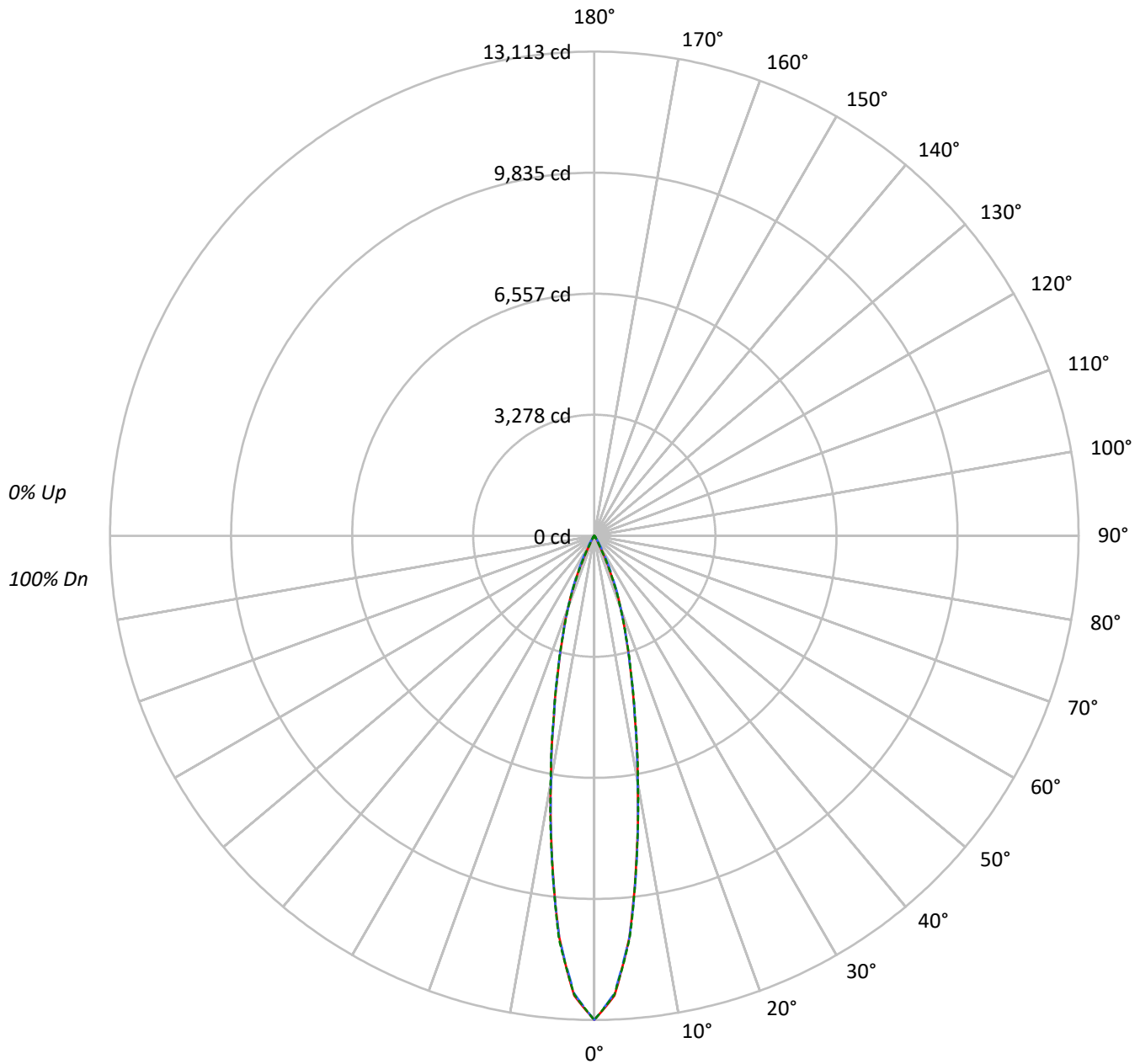
Lumens per Lamp: N/A
Luminaire Lumens: 2486.7 lumens
Efficiency: N/A
Efficacy: 62.5 lumens/watt
Spacing Criteria (0/90/45): 0.35 / 0.35 / 0.39
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

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: P1212315

CATALOG NUMBER: LDSQA4A30935D010TE LAR15SP 4LSQA1H-LSF-20

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P1212315

CATALOG NUMBER: LDSQA4A30935D010TE LAR15SP 4LSQA1H-LSF-20

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	100	100
1	115	113	111	109	113	111	109	108	107	106	104	103	102	101	100	99	98	97	97	97
2	111	108	105	102	109	106	104	101	103	101	99	100	99	97	98	96	95	94	94	94
3	108	103	100	97	106	102	99	96	100	97	95	97	95	93	95	93	92	91	91	91
4	105	99	96	93	103	98	95	92	96	93	91	95	92	90	93	91	89	88	88	88
5	102	96	92	89	100	95	91	89	93	90	88	92	89	87	91	88	86	85	85	85
6	99	93	89	86	98	92	88	85	91	87	85	89	87	84	88	86	84	83	83	83
7	96	90	86	83	95	89	85	83	88	85	82	87	84	82	86	83	81	80	80	80
8	94	87	83	80	93	87	83	80	86	82	80	85	82	80	84	81	79	78	78	78
9	91	85	81	78	90	84	80	78	83	80	78	83	80	77	82	79	77	76	76	76
10	89	82	78	76	88	82	78	76	81	78	76	81	78	75	80	77	75	74	74	74

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1270357	1270357	1270357
5°	1060666	1060666	1065703
10°	664479	662993	669692
15°	379207	381353	381985
20°	214680	214031	213113
25°	80585	104218	82338
30°	16533	34890	16667
35°	6575	11341	6434
40°	3364	4945	3199
45°	2247	2603	1904
50°	1326	1326	949
55°	642	861	422
60°	484	484	233
65°	275	275	275
70°	340	340	340
75°	0	0	0
80°	0	0	0
85°	0	0	0



TEST NUMBER: P1212315

CATALOG NUMBER: LDSQA4A30935D010TE LAR15SP 4LSQA1H-LSF-20

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	906.1	36.4
10°-20°	1077.7	43.3
20°-30°	429.7	17.3
30°-40°	54.2	2.2
40°-50°	13.4	0.5
50°-60°	3.9	0.2
60°-70°	1.3	0.1
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°	2413.5	97.1
0°-40°	2467.7	99.2
0°-60°	2484.9	99.9
0°-90°	2486.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2486.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	13113	13113	13113	13113	13113	
5°	10907	11007	10907	10917	10959	904
15°	3781	3804	3802	3802	3809	1075
25°	754	926	975	888	770	388
35°	56	67	96	64	54	40
45°	16	16	19	15	14	13
55°	4	4	5	4	2	4
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: P1212315

CATALOG NUMBER: LDSQA4A30935D010TE LAR15SP 4LSQA1H-LSF-20

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	13113.3	13113.3	13113.3	13113.3	13113.3
2.5°	12469.2	12536.2	12407.4	12420.1	12436.4
5°	10907.1	11006.9	10907.1	10917.3	10958.9
7.5°	8776.7	8863.8	8807.0	8832.3	8786.8
10°	6754.9	6786.4	6739.8	6762.5	6807.9
12.5°	5079.1	5114.5	5080.4	5081.6	5101.8
15°	3781.0	3803.7	3802.4	3802.4	3808.7
17.5°	2823.8	2854.0	2821.2	2823.8	2831.3
20°	2082.4	2102.6	2076.1	2072.3	2067.2
22.5°	1420.6	1463.6	1480.1	1458.6	1390.4
25°	753.9	925.7	975.0	887.7	770.3
27.5°	303.1	460.9	569.5	450.9	329.6
30°	147.8	200.8	311.9	205.9	149.0
32.5°	87.1	108.6	170.5	107.4	85.9
35°	55.6	66.9	95.9	64.4	54.4
37.5°	36.6	44.2	59.3	42.9	35.4
40°	26.6	30.3	39.1	29.0	25.3
42.5°	20.2	21.5	26.6	21.5	19.0
45°	16.4	16.4	19.0	15.1	13.9
47.5°	12.7	12.7	12.7	11.4	8.8
50°	8.8	8.8	8.8	7.6	6.3
52.5°	6.3	6.3	6.3	5.1	3.8
55°	3.8	3.8	5.1	3.8	2.5
57.5°	3.8	2.5	3.8	2.5	2.5
60°	2.5	2.5	2.5	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°	1.2	1.2	1.2	1.2	1.2
72.5°	1.2	1.2	1.2	1.2	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)