

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: P1212209

Luminaire Tested: **LDSQA4A20935D010TE LAR25NF 4LSQA1H**

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: P1212209
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26785)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA4A20935D010TE LAR25NF 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 25° NARROW FLOOD
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

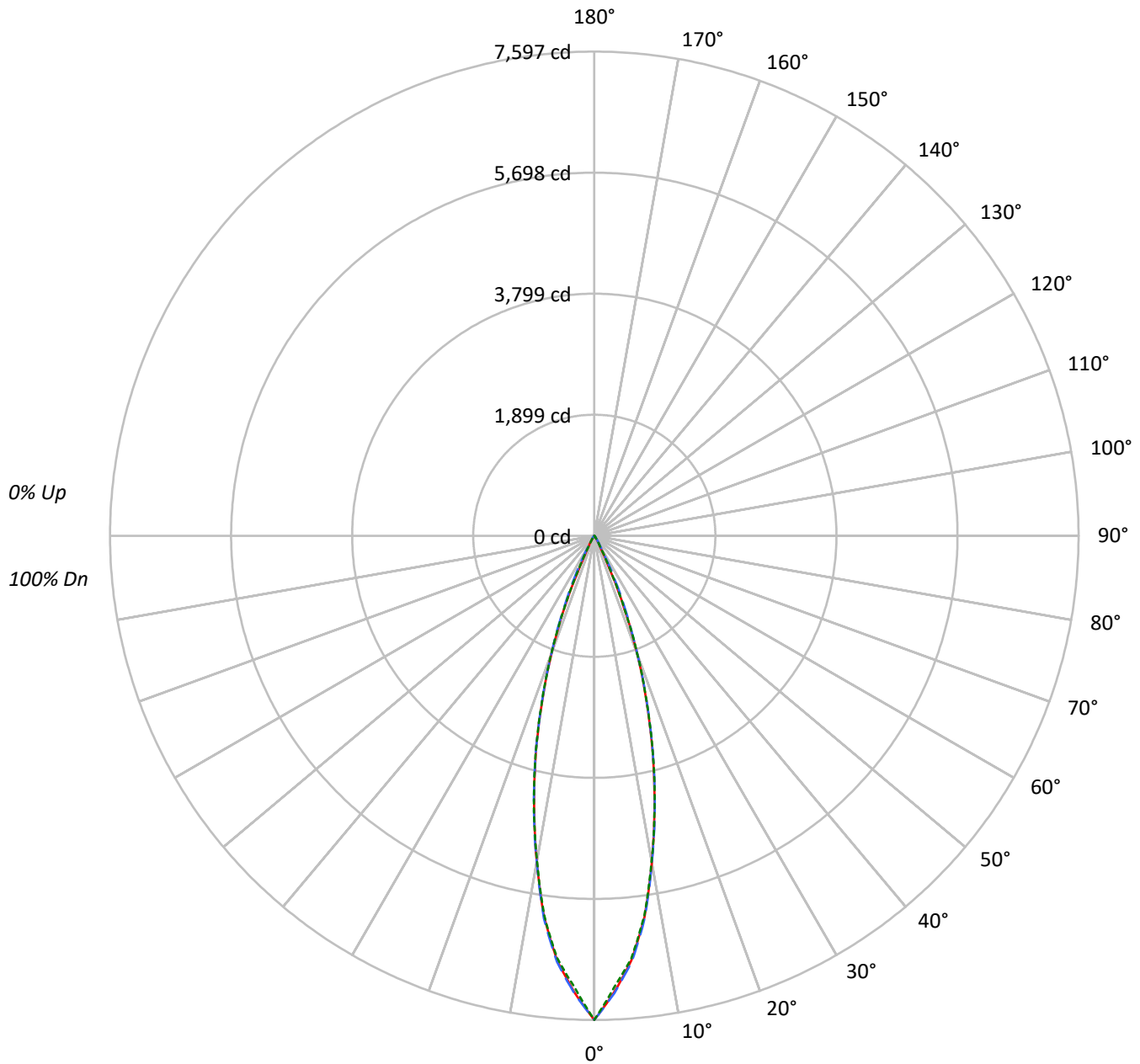
Lumens per Lamp: N/A
Luminaire Lumens: 1969.7 lumens
Efficiency: N/A
Efficacy: 68.4 lumens/watt
Spacing Criteria (0/90/45): 0.47 / 0.47 / 0.49
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 28.8
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: P1212209

CATALOG NUMBER: LDSQA4A20935D010TE LAR25NF 4LSQA1H

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P1212209

CATALOG NUMBER: LDSQA4A20935D010TE LAR25NF 4LSQA1H

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	109	113	111	109	107		107	105	104			103	102	101			100
2	111	108	105	102	109	106	103	101		103	101	99			100	98	97			97
3	108	103	99	96	106	102	98	96		99	96	94			97	95	93			95
4	104	99	95	92	103	98	94	91		96	93	90			94	91	89			92
5	101	95	91	88	100	94	90	88		93	89	87			91	88	86			90
6	98	92	88	84	97	91	87	84		90	86	84			88	85	83			87
7	95	89	84	81	94	88	84	81		87	83	81			86	83	80			85
8	92	86	82	79	91	85	81	79		84	81	78			84	80	78			83
9	90	83	79	76	89	83	79	76		82	78	76			81	78	76			80
10	87	81	77	74	87	80	76	74		80	76	74			79	76	73			78

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	735924	735924	735924
5°	650524	652751	647227
10°	511287	511868	509704
15°	355919	356942	357203
20°	201917	203237	203928
25°	54428	82370	61227
30°	13491	18413	13849
35°	4009	8420	4317
40°	1606	2795	1606
45°	808	1178	699
50°	512	512	256
55°	422	287	135
60°	329	155	155
65°	183	183	183
70°	227	227	0
75°	0	0	0
80°	0	0	0
85°	0	0	0

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P1212209

CATALOG NUMBER: LDSQA4A20935D010TE LAR25NF 4LSQA1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	596.0	30.3
10°-20°	969.2	49.2
20°-30°	360.2	18.3
30°-40°	35.7	1.8
40°-50°	6.0	0.3
50°-60°	1.6	0.1
60°-70°	0.8	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°	1925.4	97.7
0°-40°	1961.1	99.6
0°-60°	1968.7	100.0
0°-90°	1969.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1969.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7597	7597	7597	7597	7597	
5°	6690	6757	6712	6791	6656	592
15°	3549	3589	3559	3618	3562	960
25°	509	748	771	720	573	318
35°	34	42	71	44	36	27
45°	6	7	9	7	5	5
55°	2	2	2	2	1	2
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	

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P1212209

CATALOG NUMBER: LDSQA4A20935D010TE LAR25NF 4LSQA1H

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7596.6	7596.6	7596.6	7596.6	7596.6
2.5°	7169.0	7207.1	7183.4	7247.0	7093.4
5°	6689.5	6756.6	6712.4	6791.3	6655.6
7.5°	6031.0	6100.6	6055.6	6131.9	6010.6
10°	5197.6	5249.4	5203.5	5277.4	5181.5
12.5°	4364.3	4416.1	4382.2	4450.1	4373.6
15°	3548.8	3588.7	3559.0	3617.5	3561.6
17.5°	2720.6	2758.8	2731.7	2779.2	2736.8
20°	1958.6	1991.7	1971.4	2011.1	1978.1
22.5°	1216.1	1304.2	1318.7	1322.2	1226.2
25°	509.2	747.7	770.6	719.6	572.8
27.5°	209.6	275.0	366.6	289.4	220.6
30°	120.6	140.0	164.6	144.2	123.8
32.5°	60.2	78.1	107.8	82.2	63.7
35°	33.9	42.4	71.2	44.1	36.5
37.5°	20.4	24.6	35.7	25.4	21.2
40°	12.7	15.3	22.1	16.2	12.7
42.5°	8.6	10.2	13.6	10.2	8.6
45°	5.9	6.8	8.6	6.8	5.1
47.5°	4.2	4.2	5.1	4.2	3.4
50°	3.4	3.4	3.4	2.5	1.7
52.5°	2.5	2.5	2.5	1.7	1.7
55°	2.5	1.7	1.7	1.7	0.8
57.5°	1.7	1.7	1.7	0.8	0.8
60°	1.7	1.7	0.8	0.8	0.8
62.5°	0.8	0.8	0.8	0.8	0.8
65°	0.8	0.8	0.8	0.8	0.8
67.5°	0.8	0.8	0.8	0.8	0.8
70°	0.8	0.8	0.8	0.8	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.8	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)