

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: P1212191

Luminaire Tested: **LDSQA4A20930D010TE LAR15SP 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: P1212191
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26794)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA4A20930D010TE LAR15SP 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

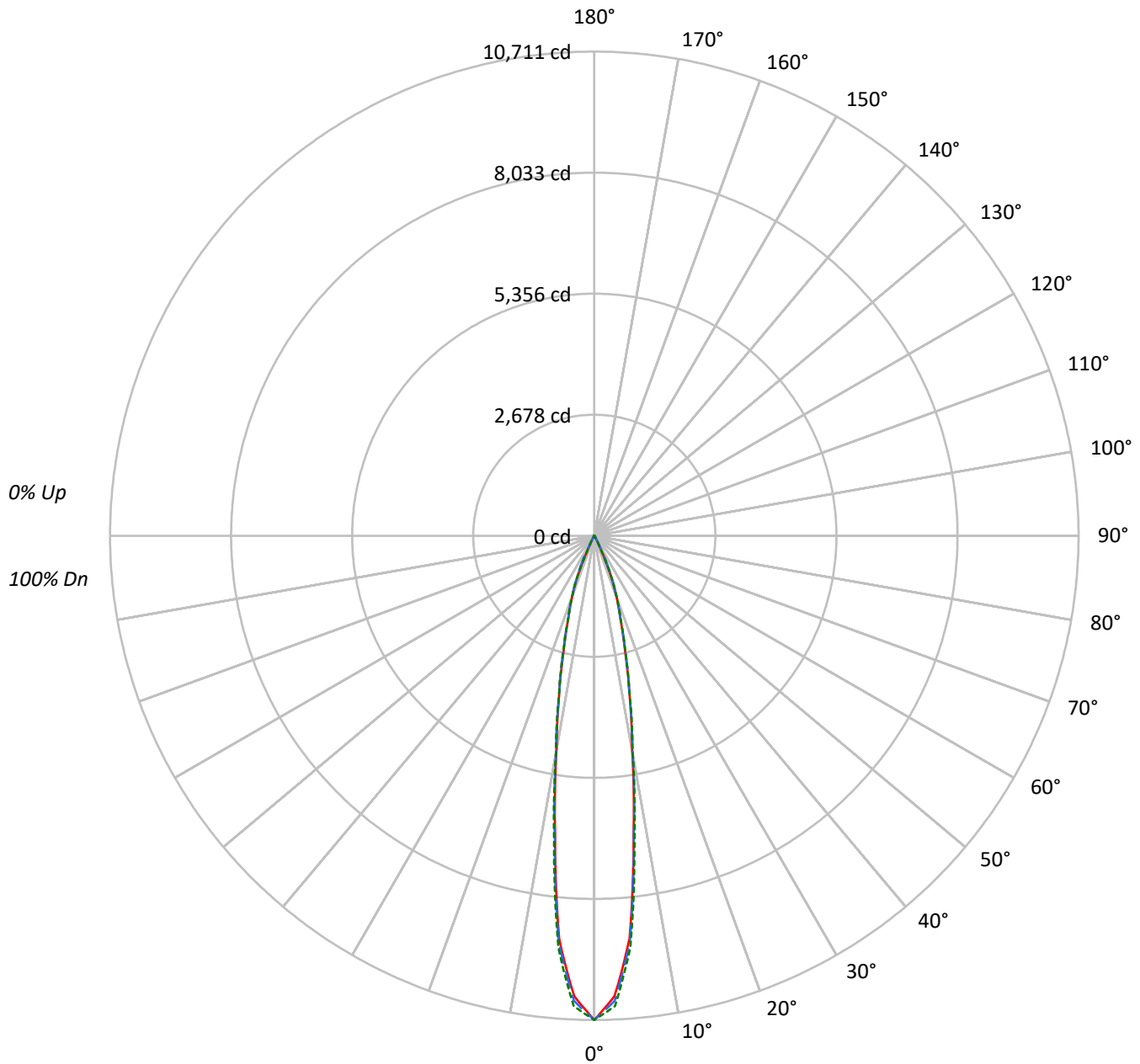
Lumens per Lamp: N/A
Luminaire Lumens: 1758.5 lumens
Efficiency: N/A
Efficacy: 61.1 lumens/watt
Spacing Criteria (0/90/45): 0.32 / 0.32 / 0.36
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

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: P1212191

CATALOG NUMBER: LDSQA4A20930D010TE LAR15SP 4LSQA1H

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P1212191

CATALOG NUMBER: LDSQA4A20930D010TE LAR15SP 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	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	110	108	107	106	105	104	103	102	100	99	99	97		
2	112	108	105	103	110	107	104	102	104	102	100	101	99	98	98	97	96	94		
3	108	104	101	98	107	103	100	97	100	98	96	98	96	94	96	94	93	92		
4	105	100	97	94	104	99	96	93	97	95	92	96	93	91	94	92	90	89		
5	103	97	93	90	101	96	93	90	95	92	89	93	91	89	92	90	88	87		
6	100	94	90	87	99	93	90	87	92	89	87	91	88	86	90	87	86	85		
7	97	91	88	85	96	91	87	85	90	87	84	89	86	84	88	85	83	82		
8	95	89	85	82	94	88	85	82	88	84	82	87	84	82	86	83	81	80		
9	93	87	83	80	92	86	83	80	85	82	80	85	82	80	84	81	79	79		
10	91	84	81	78	90	84	81	78	83	80	78	83	80	78	82	80	78	77		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1037662	1037662	1037662
5°	869734	877096	889854
10°	473179	480212	482022
15°	261664	265876	266879
20°	148175	148598	149464
25°	40426	63343	39710
30°	6488	9877	6287
35°	2188	3678	2093
40°	961	1492	961
45°	575	685	466
50°	377	377	256
55°	287	287	135
60°	155	155	155
65°	183	183	183
70°	227	227	227
75°	0	0	0
80°	0	0	0
85°	0	0	0



TEST NUMBER: P1212191

CATALOG NUMBER: LDSQA4A20930D010TE LAR15SP 4LSQA1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	714.0	40.6
10°-20°	755.0	42.9
20°-30°	265.6	15.1
30°-40°	17.9	1.0
40°-50°	3.7	0.2
50°-60°	1.2	0.1
60°-70°	0.8	0.0
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°	1734.6	98.6
0°-40°	1752.5	99.7
0°-60°	1757.4	99.9
0°-90°	1758.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1758.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10711	10711	10711	10711	10711	
5°	8944	9078	9019	9036	9151	706
15°	2609	2653	2651	2645	2661	748
25°	378	574	593	565	372	234
35°	18	23	31	23	18	14
45°	4	4	5	4	3	4
55°	2	2	2	1	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: P1212191

CATALOG NUMBER: LDSQA4A20930D010TE LAR15SP 4LSQA1H

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10711.3	10711.3	10711.3	10711.3	10711.3
2.5°	10196.9	10330.6	10297.0	10275.1	10415.5
5°	8943.7	9078.2	9019.4	9036.2	9150.6
7.5°	6649.1	6762.6	6702.2	6727.4	6814.7
10°	4810.2	4922.9	4881.7	4895.0	4900.1
12.5°	3586.4	3635.9	3603.2	3612.5	3629.3
15°	2609.0	2652.6	2651.0	2645.0	2661.0
17.5°	1914.6	1935.7	1914.6	1913.8	1924.7
20°	1437.3	1466.7	1441.4	1444.8	1449.8
22.5°	965.8	1024.6	1014.6	1001.8	988.4
25°	378.2	574.1	592.6	564.8	371.5
27.5°	108.5	179.0	254.7	175.7	105.0
30°	58.0	69.0	88.3	67.3	56.2
32.5°	31.1	39.5	50.4	38.7	30.2
35°	18.5	22.6	31.1	22.6	17.7
37.5°	11.8	14.2	19.4	14.2	11.8
40°	7.6	9.3	11.8	9.3	7.6
42.5°	5.9	6.8	7.6	5.9	5.0
45°	4.2	4.2	5.0	4.2	3.4
47.5°	3.4	3.4	3.4	2.5	2.5
50°	2.5	2.5	2.5	1.7	1.7
52.5°	1.7	1.7	1.7	1.7	1.7
55°	1.7	1.7	1.7	0.8	0.8
57.5°	1.7	0.8	0.8	0.8	0.8
60°	0.8	0.8	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	0.0
70°	0.8	0.8	0.8	0.8	0.8
72.5°	0.8	0.8	0.8	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
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



— 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)