

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: P1212207

Luminaire Tested: **LDSQA4A20935D010TE LAR15SP 4LSQAL1H**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: P1212207
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: LDSQA4A20935D010TE 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

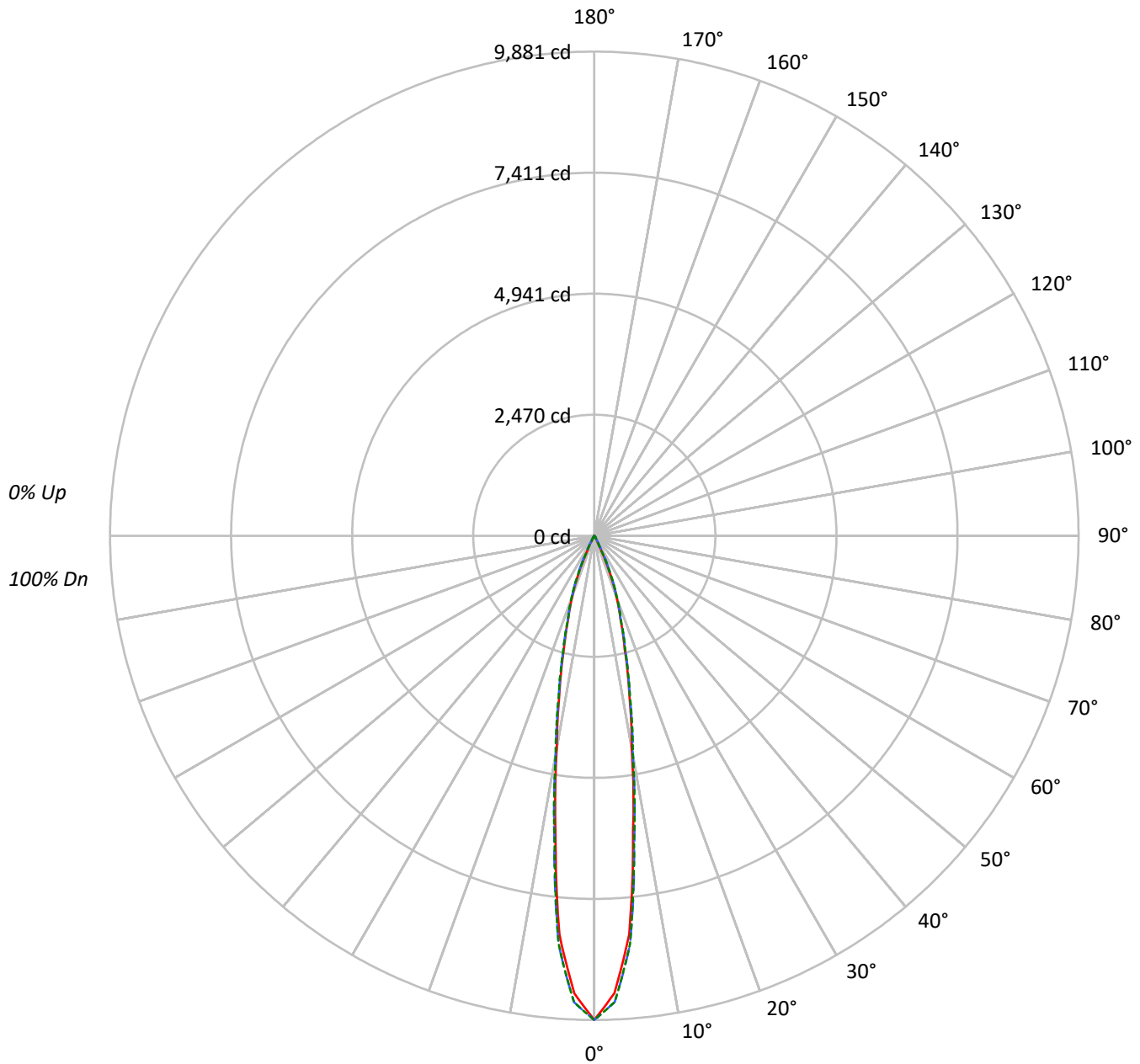
Lumens per Lamp: N/A
Luminaire Lumens: 1648.9 lumens
Efficiency: N/A
Efficacy: 57.3 lumens/watt
Spacing Criteria (0/90/45): 0.31 / 0.32 / 0.36
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P1212207

CATALOG NUMBER: LDSQA4A20935D010TE LAR15SP 4LSQAL1H

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P1212207

CATALOG NUMBER: LDSQA4A20935D010TE 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°	957236	957236	957236
5°	794009	814548	813400
10°	432650	445429	447681
15°	240562	247452	248736
20°	135629	139484	141227
25°	40821	60147	40640
30°	7685	11018	7685
35°	3311	5121	3406
40°	1606	2681	1606
45°	1041	1397	808
50°	633	769	377
55°	422	422	287
60°	329	155	155
65°	183	183	183
70°	0	227	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



TEST NUMBER: P1212207

CATALOG NUMBER: LDSQA4A20935D010TE LAR15SP 4LSQAL1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	657.9	39.9
10°-20°	701.2	42.5
20°-30°	255.8	15.5
30°-40°	24.4	1.5
40°-50°	6.7	0.4
50°-60°	2.0	0.1
60°-70°	0.8	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°	1614.9	97.9
0°-40°	1639.3	99.4
0°-60°	1648.0	99.9
0°-90°	1648.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1648.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9881	9881	9881	9881	9881	
5°	8165	8371	8376	8289	8364	645
15°	2399	2455	2467	2462	2480	686
25°	382	553	563	558	380	220
35°	28	34	43	34	29	20
45°	8	8	10	8	6	6
55°	2	2	2	2	2	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: P1212207

CATALOG NUMBER: LDSQA4A20935D010TE LAR15SP 4LSQAL1H

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9881.1	9881.1	9881.1	9881.1	9881.1
2.5°	9342.2	9539.1	9524.6	9480.6	9524.6
5°	8165.0	8371.2	8376.2	8288.9	8364.4
7.5°	6069.4	6229.0	6257.0	6171.3	6228.2
10°	4398.2	4540.9	4528.1	4511.1	4551.0
12.5°	3285.4	3357.6	3350.1	3368.6	3371.3
15°	2398.6	2455.4	2467.3	2462.2	2480.1
17.5°	1766.2	1796.8	1790.9	1800.2	1807.0
20°	1315.6	1364.0	1353.0	1361.4	1369.9
22.5°	872.6	961.6	950.6	964.2	956.6
25°	381.9	552.6	562.7	557.7	380.2
27.5°	117.1	197.8	253.8	193.5	117.1
30°	68.7	82.4	98.5	80.6	68.7
32.5°	43.3	51.8	62.0	51.0	42.4
35°	28.0	33.9	43.3	33.9	28.8
37.5°	18.7	22.9	30.6	22.9	19.5
40°	12.7	15.3	21.2	16.2	12.7
42.5°	9.4	11.0	14.5	11.0	8.6
45°	7.6	7.6	10.2	7.6	5.9
47.5°	5.9	5.9	6.8	5.1	4.2
50°	4.2	4.2	5.1	3.4	2.5
52.5°	2.5	3.4	3.4	2.5	1.7
55°	2.5	2.5	2.5	1.7	1.7
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°	0.0	0.8	0.8	0.0	0.0
72.5°	0.0	0.8	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)