

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: P1212371

Luminaire Tested: **LDSQA4A35935D010TE 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: P1212371
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: LDSQA4A35935D010TE 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

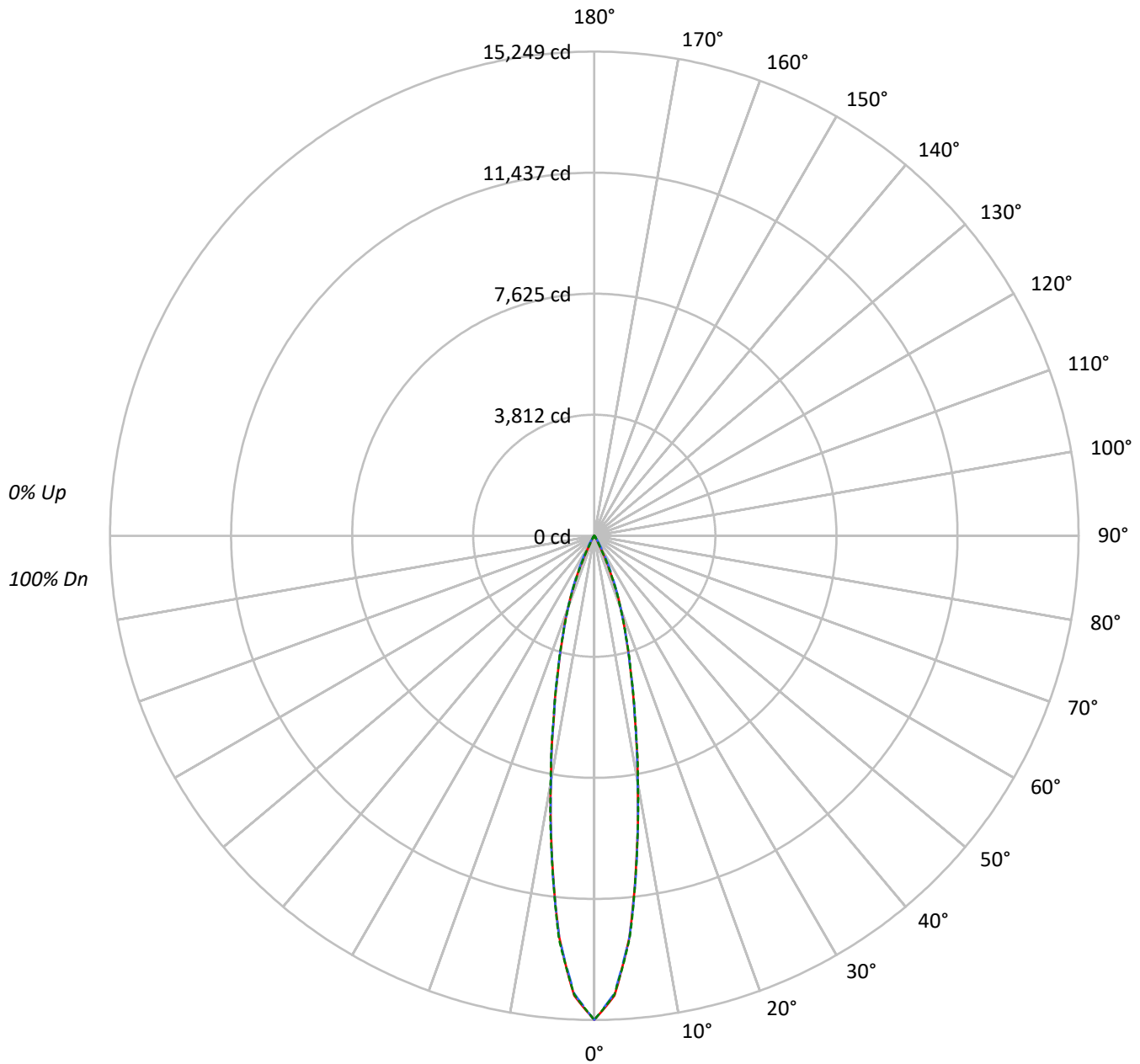
Lumens per Lamp: N/A
Luminaire Lumens: 2891.8 lumens
Efficiency: N/A
Efficacy: 60.6 lumens/watt
Spacing Criteria (0/90/45): 0.35 / 0.35 / 0.39
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 47.7
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

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Luminous Intensity Polar Plot



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1477215	1477215	1477215
5°	1233374	1233374	1239228
10°	772676	770944	778745
15°	440947	443455	444177
20°	249629	248886	247814
25°	93711	121181	95752
30°	19218	40572	19386
35°	7652	13186	7474
40°	3908	5754	3718
45°	2617	3014	2206
50°	1537	1537	1115
55°	760	996	490
60°	562	562	291
65°	344	344	344
70°	425	425	425
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1053.7	36.4
10°-20°	1253.2	43.3
20°-30°	499.6	17.3
30°-40°	63.0	2.2
40°-50°	15.5	0.5
50°-60°	4.6	0.2
60°-70°	1.6	0.1
70°-80°	0.6	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°	2806.4	97.0
0°-40°	2869.5	99.2
0°-60°	2889.6	99.9
0°-90°	2891.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2891.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	15249	15249	15249	15249	15249	
5°	12683	12799	12683	12695	12743	1051
15°	4397	4423	4422	4422	4429	1250
25°	877	1076	1134	1032	896	451
35°	65	78	112	75	63	47
45°	19	19	22	18	16	15
55°	4	4	6	4	3	5
65°	2	2	2	2	2	2
75°	0	2	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	15248.6	15248.6	15248.6	15248.6	15248.6
2.5°	14499.6	14577.5	14427.7	14442.5	14461.5
5°	12683.1	12799.2	12683.1	12694.9	12743.3
7.5°	10205.8	10307.2	10241.0	10270.5	10217.5
10°	7854.8	7891.5	7837.2	7863.6	7916.5
12.5°	5906.1	5947.3	5907.6	5909.1	5932.6
15°	4396.6	4423.1	4421.6	4421.6	4428.8
17.5°	3283.5	3318.8	3280.5	3283.5	3292.4
20°	2421.4	2445.0	2414.2	2409.7	2403.8
22.5°	1652.0	1701.9	1721.0	1696.1	1616.7
25°	876.7	1076.5	1133.7	1032.3	895.8
27.5°	352.4	536.0	662.3	524.3	383.3
30°	171.8	233.5	362.7	239.4	173.3
32.5°	101.3	126.3	198.3	124.8	99.9
35°	64.7	77.8	111.5	74.9	63.2
37.5°	42.6	51.4	69.0	49.9	41.1
40°	30.9	35.2	45.5	33.8	29.4
42.5°	23.5	25.0	30.9	25.0	22.0
45°	19.1	19.1	22.0	17.6	16.1
47.5°	14.7	14.7	14.7	13.3	10.2
50°	10.2	10.2	10.2	8.8	7.4
52.5°	7.4	7.4	7.4	5.9	4.5
55°	4.5	4.5	5.9	4.5	2.9
57.5°	4.5	2.9	4.5	2.9	2.9
60°	2.9	2.9	2.9	1.5	1.5
62.5°	1.5	1.5	1.5	1.5	1.5
65°	1.5	1.5	1.5	1.5	1.5
67.5°	1.5	1.5	1.5	1.5	1.5
70°	1.5	1.5	1.5	1.5	1.5
72.5°	1.5	1.5	1.5	1.5	0.0
75°	0.0	1.5	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

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— 0°-180° - - 45°-225° - - - 90°-270°

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