

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: P1212189

Luminaire Tested: **LDSQA4A20930D010TE 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: P1212189
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: LDSQA4A20930D010TE 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 / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

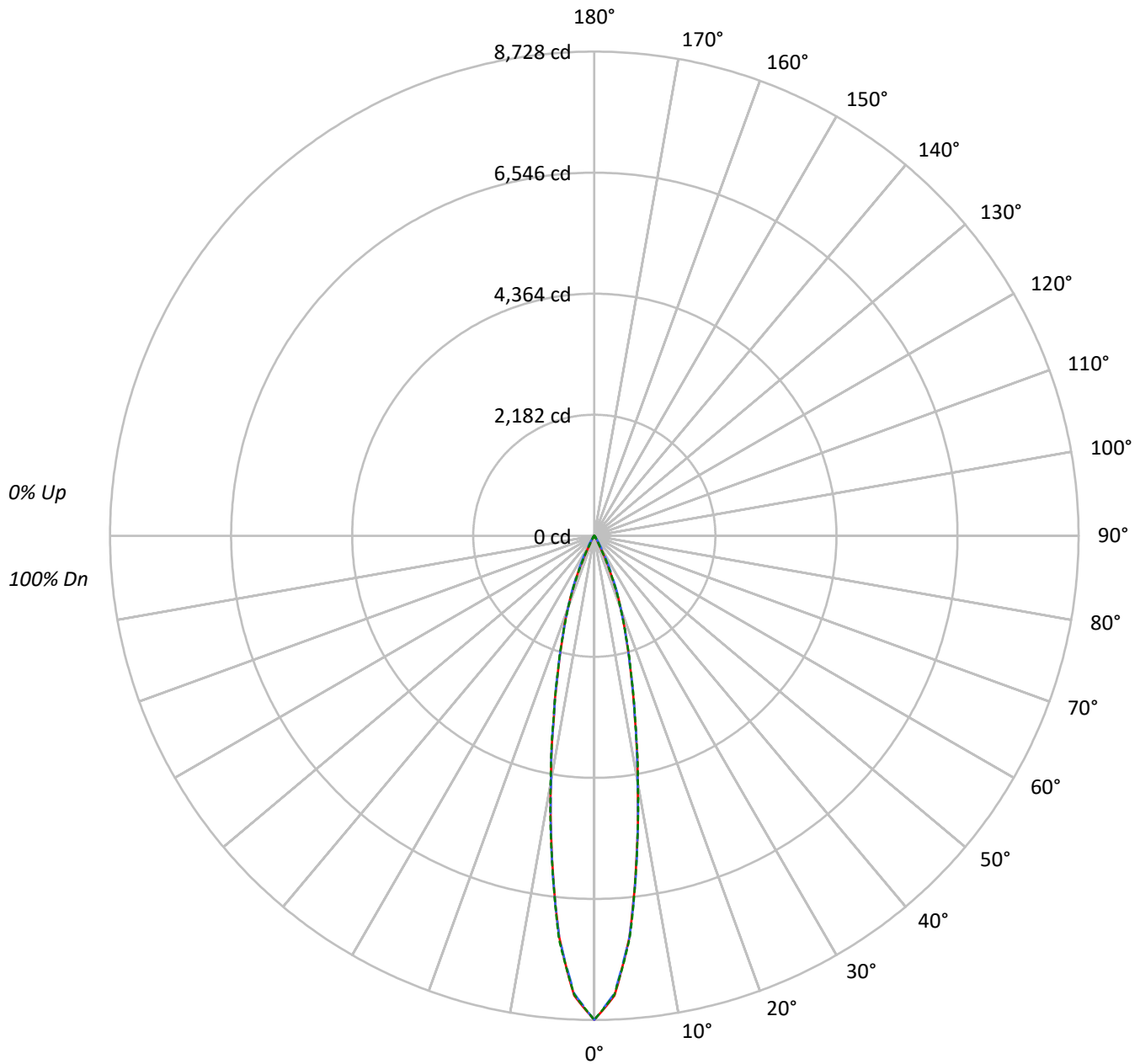
Lumens per Lamp: N/A
Luminaire Lumens: 1655.1 lumens
Efficiency: N/A
Efficacy: 57.5 lumens/watt
Spacing Criteria (0/90/45): 0.35 / 0.35 / 0.39
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 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

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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					0
RW	70	50	30	10	70	50	30	10		50	30	10			50	30	10			0
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			100
1	115	113	111	109	113	111	109	108		107	106	104			103	102	101			97
2	111	108	105	102	109	106	104	101		103	101	99			100	99	97			94
3	108	103	100	97	106	102	99	96		100	97	95			97	95	93			91
4	105	99	96	93	103	98	95	92		96	93	91			95	92	90			88
5	102	96	92	89	100	95	91	89		93	90	88			92	89	87			85
6	99	93	89	86	98	92	88	85		91	87	85			89	87	84			83
7	96	90	86	83	95	89	85	83		88	85	82			87	84	82			80
8	94	87	83	80	93	87	83	80		86	82	80			85	82	80			78
9	91	85	81	78	90	84	80	78		83	80	78			83	80	77			76
10	89	82	78	76	88	82	78	76		81	78	76			81	78	75			74

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	845509	845509	845509
5°	705944	705944	709299
10°	442251	441268	445734
15°	252387	253811	254242
20°	142886	142453	141845
25°	53638	69361	54803
30°	11007	23223	11097
35°	4376	7545	4281
40°	2238	3301	2137
45°	1493	1726	1274
50°	889	889	633
55°	422	574	287
60°	329	329	155
65°	183	183	183
70°	227	227	227
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	603.1	36.4
10°-20°	717.3	43.3
20°-30°	286.0	17.3
30°-40°	36.1	2.2
40°-50°	8.9	0.5
50°-60°	2.6	0.2
60°-70°	0.9	0.1
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°	1606.3	97.1
0°-40°	1642.4	99.2
0°-60°	1653.9	99.9
0°-90°	1655.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1655.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8728	8728	8728	8728	8728	
5°	7259	7326	7259	7266	7294	601
15°	2516	2532	2531	2531	2535	715
25°	502	616	649	591	513	258
35°	37	44	64	43	36	27
45°	11	11	13	10	9	8
55°	2	2	3	2	2	3
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

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8727.8	8727.8	8727.8	8727.8	8727.8
2.5°	8299.1	8343.7	8257.9	8266.3	8277.3
5°	7259.4	7325.8	7259.4	7266.2	7293.9
7.5°	5841.4	5899.5	5861.7	5878.5	5848.2
10°	4495.8	4516.8	4485.8	4500.9	4531.2
12.5°	3380.6	3404.0	3381.4	3382.2	3395.6
15°	2516.5	2531.6	2530.7	2530.7	2535.0
17.5°	1879.4	1899.6	1877.8	1879.4	1884.4
20°	1386.0	1399.4	1381.8	1379.3	1375.9
22.5°	945.6	974.2	985.1	970.7	925.4
25°	501.8	616.1	648.9	590.8	512.7
27.5°	201.8	306.8	379.0	300.0	219.4
30°	98.4	133.6	207.6	137.0	99.2
32.5°	58.0	72.3	113.4	71.4	57.2
35°	37.0	44.5	63.8	42.9	36.2
37.5°	24.3	29.4	39.5	28.6	23.5
40°	17.7	20.2	26.1	19.4	16.9
42.5°	13.4	14.2	17.7	14.2	12.6
45°	10.9	10.9	12.6	10.1	9.3
47.5°	8.4	8.4	8.4	7.6	5.9
50°	5.9	5.9	5.9	5.0	4.2
52.5°	4.2	4.2	4.2	3.4	2.5
55°	2.5	2.5	3.4	2.5	1.7
57.5°	2.5	1.7	2.5	1.7	1.7
60°	1.7	1.7	1.7	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	0.8
72.5°	0.8	0.8	0.8	0.8	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

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— 0°-180° - - 45°-225° - - - 90°-270°

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