

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: P182535

Luminaire Tested: **LDSQA4A28830D010TE LAR15SP 4LSQAL1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182535
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: LDSQA4A28830D010TE LAR15SP 4LSQAL1H
Description: PORTFOLIO 4" SQUARE LENSED ADJUSTABLE, SELF-FLANGED, 15° SPOT
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2614.2 lumens
Efficiency: N/A
Efficacy: 58.8 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

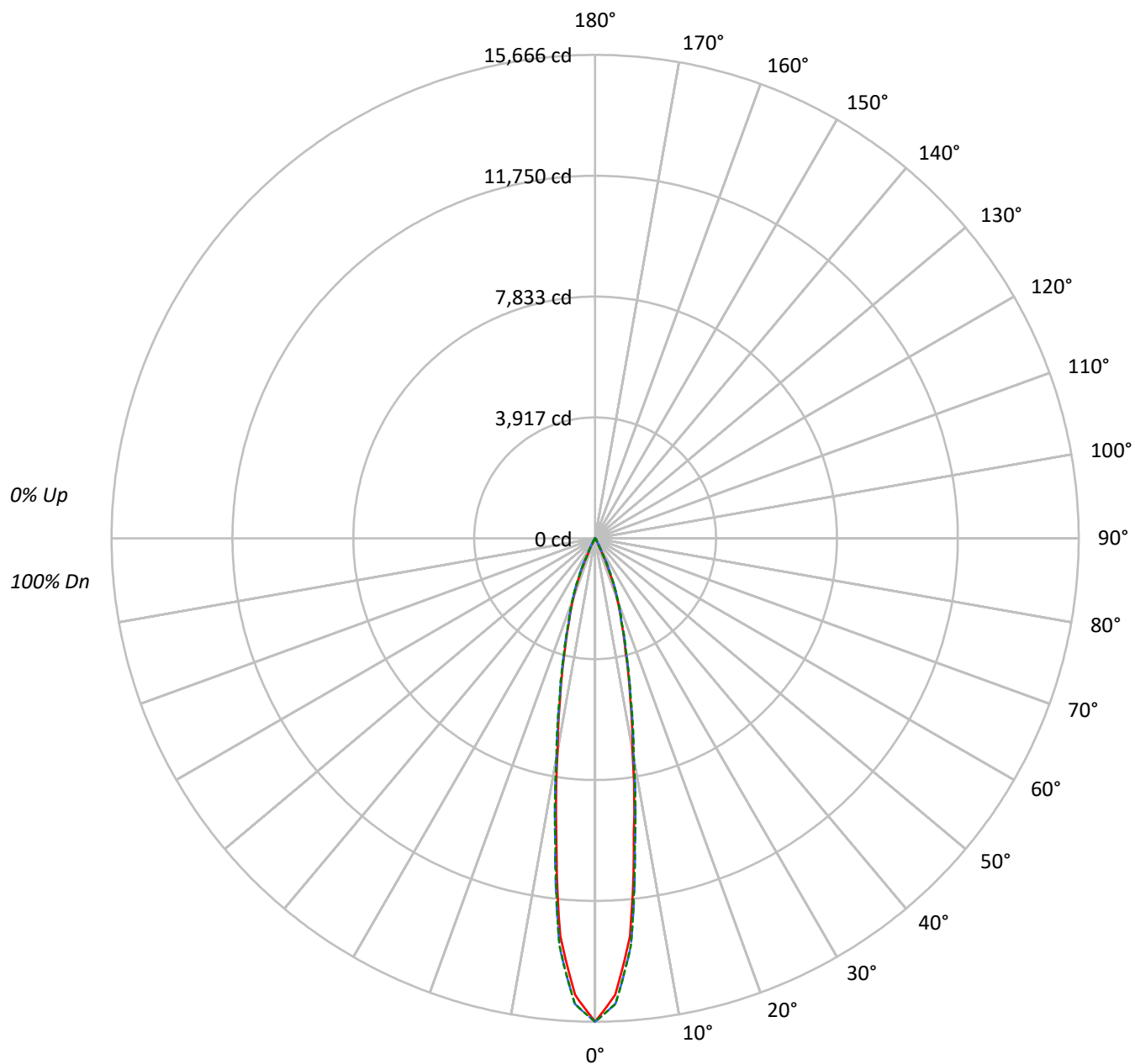
Input Watts (W): 44.49
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	113	111	109	108		107	106	105			103	102	102			97
2	112	108	105	103	110	107	104	102		103	101	100			101	99	98			94
3	108	104	100	98	107	103	99	97		100	98	95			98	96	94			91
4	105	100	96	94	104	99	96	93		97	94	92			95	93	91			89
5	102	97	93	90	101	96	92	90		94	91	89			93	90	88			86
6	100	94	90	87	98	93	89	87		92	89	86			91	88	86			84
7	97	91	87	84	96	90	87	84		89	86	84			88	85	83			82
8	95	88	85	82	94	88	84	82		87	84	81			86	83	81			80
9	92	86	82	80	92	86	82	80		85	82	79			84	81	79			78
10	90	84	80	78	89	84	80	78		83	80	77			82	79	77			76

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1517602	1517602	1517602
5°	1258814	1291391	1289563
10°	685923	706178	709749
15°	381384	392315	394331
20°	215020	221123	223897
25°	64722	95357	64433
30°	12193	17462	12193
35°	5251	8113	5416
40°	2555	4249	2555
45°	1658	2206	1288
50°	1010	1221	603
55°	676	676	456
60°	523	252	252
65°	298	298	298
70°	0	368	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1043.0	39.9
10°-20°	1111.7	42.5
20°-30°	405.5	15.5
30°-40°	38.6	1.5
40°-50°	10.6	0.4
50°-60°	3.2	0.1
60°-70°	1.3	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°	2560.2	97.9
0°-40°	2598.8	99.4
0°-60°	2612.7	99.9
0°-90°	2614.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2614.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	15666	15666	15666	15666	15666	
5°	12945	13272	13280	13141	13261	1023
15°	3803	3893	3912	3904	3932	1088
25°	606	876	892	884	603	350
35°	44	54	69	54	46	32
45°	12	12	16	12	9	10
55°	4	4	4	3	3	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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	15665.5	15665.5	15665.5	15665.5	15665.5
2.5°	14811.0	15123.2	15100.3	15030.4	15100.3
5°	12944.7	13271.7	13279.7	13141.1	13260.9
7.5°	9622.4	9875.4	9919.8	9783.9	9874.0
10°	6972.9	7199.0	7178.8	7151.9	7215.1
12.5°	5208.8	5323.2	5311.1	5340.7	5344.7
15°	3802.7	3892.8	3911.7	3903.6	3931.8
17.5°	2800.2	2848.6	2839.2	2854.0	2864.8
20°	2085.7	2162.4	2144.9	2158.3	2171.8
22.5°	1383.3	1524.6	1507.1	1528.6	1516.5
25°	605.5	876.0	892.1	884.1	602.8
27.5°	185.7	313.5	402.3	306.8	185.7
30°	109.0	130.5	156.1	127.8	109.0
32.5°	68.6	82.1	98.2	80.7	67.3
35°	44.4	53.8	68.6	53.8	45.8
37.5°	29.6	36.3	48.4	36.3	30.9
40°	20.2	24.2	33.6	25.6	20.2
42.5°	14.8	17.5	22.9	17.5	13.5
45°	12.1	12.1	16.1	12.1	9.4
47.5°	9.4	9.4	10.8	8.1	6.7
50°	6.7	6.7	8.1	5.4	4.0
52.5°	4.0	5.4	5.4	4.0	2.7
55°	4.0	4.0	4.0	2.7	2.7
57.5°	2.7	2.7	2.7	1.3	1.3
60°	2.7	2.7	1.3	1.3	1.3
62.5°	1.3	1.3	1.3	1.3	1.3
65°	1.3	1.3	1.3	1.3	1.3
67.5°	1.3	1.3	1.3	1.3	1.3
70°	0.0	1.3	1.3	0.0	0.0
72.5°	0.0	1.3	0.0	0.0	0.0
75°	0.0	1.3	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



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— 0°-180° - - 45°-225° - - - 90°-270°







(END OF REPORT)