

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: P182606

Luminaire Tested: **LDSQA4A18827D010TE LAR15SP 4LSQA1H-LSF-20**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182606
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: LDSQA4A18827D010TE 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 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1895.2 lumens
Efficiency: N/A
Efficacy: 65.1 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

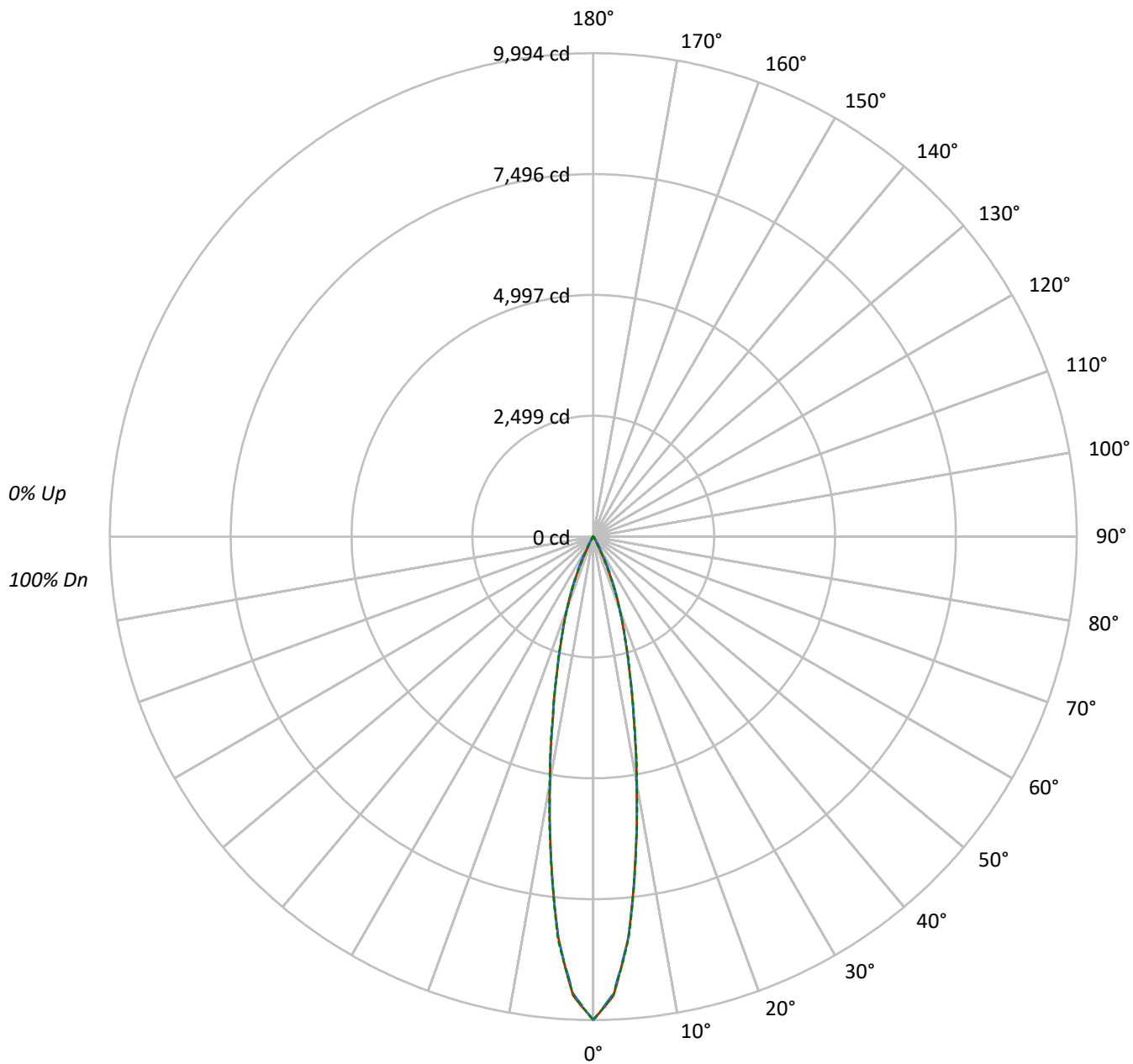
Input Watts (W): 29.12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	75			81	78	75			74

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	968134	968134	968134
5°	808334	808334	812165
10°	506398	505257	510372
15°	288984	290629	291110
20°	163608	163113	162423
25°	61419	79419	62755
30°	12596	26590	12708
35°	5003	8645	4896
40°	2555	3769	2428
45°	1713	1973	1452
50°	1010	1010	723
55°	490	642	321
60°	368	368	194
65°	229	229	229
70°	283	283	283
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	690.5	36.4
10°-20°	821.3	43.3
20°-30°	327.4	17.3
30°-40°	41.3	2.2
40°-50°	10.2	0.5
50°-60°	3.0	0.2
60°-70°	1.1	0.1
70°-80°	0.4	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°	1839.3	97.0
0°-40°	1880.6	99.2
0°-60°	1893.7	99.9
0°-90°	1895.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1895.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9994	9994	9994	9994	9994	
5°	8312	8388	8312	8320	8352	689
15°	2881	2899	2898	2898	2903	819
25°	575	705	743	677	587	296
35°	42	51	73	49	41	31
45°	12	12	14	12	11	10
55°	3	3	4	3	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°	9993.6	9993.6	9993.6	9993.6	9993.6
2.5°	9502.8	9553.8	9455.6	9465.2	9477.7
5°	8312.3	8388.3	8312.3	8320.0	8351.7
7.5°	6688.7	6755.1	6711.8	6731.0	6696.4
10°	5147.9	5172.0	5136.3	5153.7	5188.3
12.5°	3870.8	3897.7	3871.7	3872.7	3888.1
15°	2881.4	2898.8	2897.8	2897.8	2902.6
17.5°	2151.9	2175.0	2150.0	2151.9	2157.7
20°	1587.0	1602.4	1582.2	1579.3	1575.5
22.5°	1082.7	1115.4	1127.9	1111.6	1059.6
25°	574.6	705.4	743.0	676.6	587.1
27.5°	231.0	351.3	434.0	343.6	251.2
30°	112.6	153.0	237.7	156.9	113.6
32.5°	66.4	82.8	129.9	81.8	65.4
35°	42.3	51.0	73.1	49.1	41.4
37.5°	27.9	33.7	45.2	32.7	26.9
40°	20.2	23.1	29.8	22.1	19.2
42.5°	15.4	16.4	20.2	16.4	14.4
45°	12.5	12.5	14.4	11.5	10.6
47.5°	9.6	9.6	9.6	8.7	6.7
50°	6.7	6.7	6.7	5.8	4.8
52.5°	4.8	4.8	4.8	3.8	2.9
55°	2.9	2.9	3.8	2.9	1.9
57.5°	2.9	1.9	2.9	1.9	1.9
60°	1.9	1.9	1.9	1.0	1.0
62.5°	1.0	1.0	1.0	1.0	1.0
65°	1.0	1.0	1.0	1.0	1.0
67.5°	1.0	1.0	1.0	1.0	1.0
70°	1.0	1.0	1.0	1.0	1.0
72.5°	1.0	1.0	1.0	1.0	0.0
75°	0.0	1.0	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)