

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: P182610

Luminaire Tested: **LDSQA4A18927D010TE LAR15SP 4LSQA1H-LSF-20**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182610
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: LDSQA4A18927D010TE 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 / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1521.1 lumens
Efficiency: N/A
Efficacy: 52.2 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

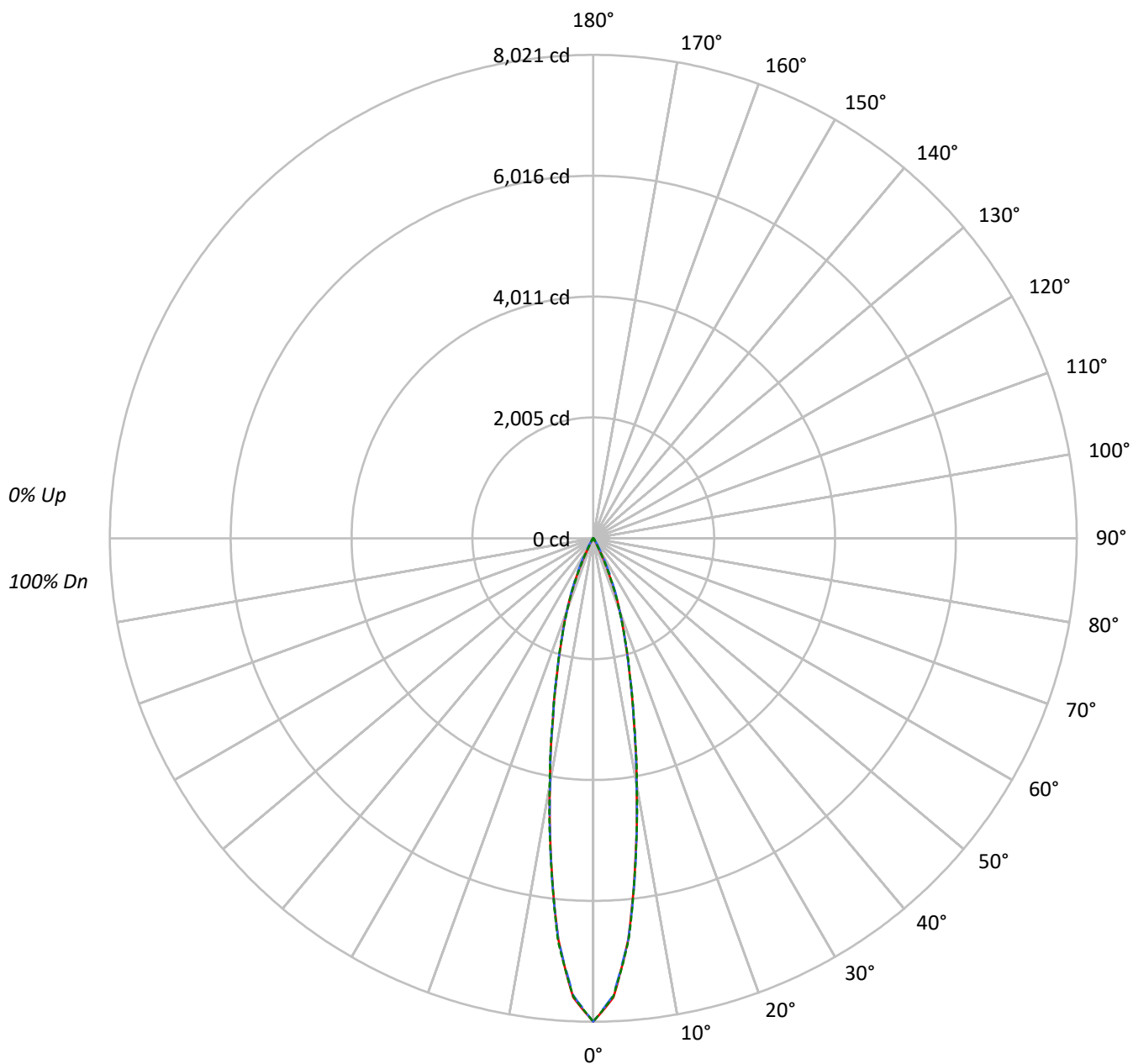
Input Watts (W): 29.12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	777018	777018	777018
5°	648763	648763	651846
10°	406435	405520	409622
15°	231937	233261	233642
20°	131309	130917	130361
25°	49287	63739	50367
30°	10112	21343	10191
35°	4021	6942	3926
40°	2049	3022	1948
45°	1370	1589	1165
50°	814	814	588
55°	388	524	253
60°	291	291	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°	554.2	36.4
10°-20°	659.2	43.3
20°-30°	262.8	17.3
30°-40°	33.1	2.2
40°-50°	8.2	0.5
50°-60°	2.4	0.2
60°-70°	0.8	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°	1476.2	97.0
0°-40°	1509.3	99.2
0°-60°	1519.9	99.9
0°-90°	1521.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1521.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8021	8021	8021	8021	8021	
5°	6671	6732	6671	6678	6703	553
15°	2313	2326	2326	2326	2330	657
25°	461	566	596	543	471	237
35°	34	41	59	39	33	25
45°	10	10	12	9	8	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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8020.8	8020.8	8020.8	8020.8	8020.8
2.5°	7626.9	7667.8	7589.0	7596.8	7606.8
5°	6671.4	6732.4	6671.4	6677.6	6703.1
7.5°	5368.3	5421.6	5386.9	5402.3	5374.5
10°	4131.7	4151.0	4122.4	4136.3	4164.1
12.5°	3106.7	3128.3	3107.4	3108.2	3120.6
15°	2312.6	2326.5	2325.8	2325.8	2329.6
17.5°	1727.1	1745.7	1725.6	1727.1	1731.8
20°	1273.7	1286.1	1269.9	1267.5	1264.5
22.5°	869.0	895.2	905.3	892.1	850.4
25°	461.1	566.2	596.3	543.0	471.2
27.5°	185.4	281.9	348.4	275.8	201.6
30°	90.4	122.8	190.8	125.9	91.1
32.5°	53.3	66.4	104.3	65.7	52.5
35°	34.0	40.9	58.7	39.4	33.2
37.5°	22.4	27.0	36.3	26.3	21.6
40°	16.2	18.5	23.9	17.8	15.4
42.5°	12.4	13.1	16.2	13.1	11.6
45°	10.0	10.0	11.6	9.3	8.5
47.5°	7.7	7.7	7.7	7.0	5.4
50°	5.4	5.4	5.4	4.6	3.9
52.5°	3.9	3.9	3.9	3.1	2.3
55°	2.3	2.3	3.1	2.3	1.5
57.5°	2.3	1.5	2.3	1.5	1.5
60°	1.5	1.5	1.5	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



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— 0°-180° - - 45°-225° - - - 90°-270°







(END OF REPORT)