

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: P182634

Luminaire Tested: **LDSQA4A28927D010TE LAR15SP 4LSQA1H-LSF-20**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182634
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: LDSQA4A28927D010TE 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: 2083.4 lumens
Efficiency: N/A
Efficacy: 46.8 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

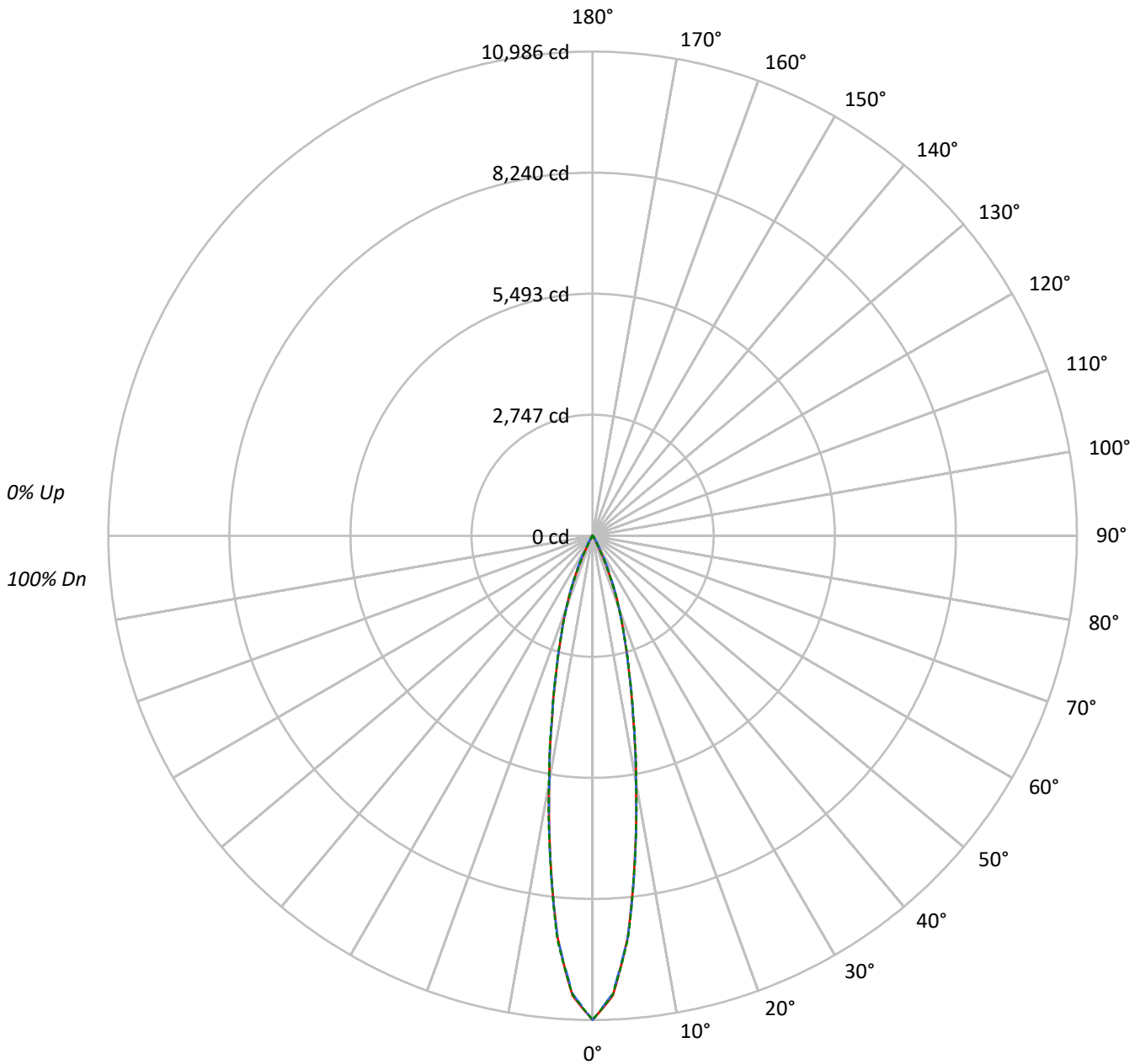
Input Watts (W): 44.49
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	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	102	102	102	100				100															
1	115	113	111	109	113	111	109	108	107	106	104	103	102	101	100	99	98	97	97	98	98	97															
2	111	108	105	102	109	106	104	101	103	101	99	100	99	97	98	96	95	94	94	98	96	95															
3	108	103	100	97	106	102	99	96	100	97	95	97	95	93	95	93	92	91	91	98	93	92															
4	105	99	96	93	103	98	95	92	96	93	91	95	92	90	93	91	89	88	88	93	91	89															
5	102	96	92	89	100	95	91	89	93	90	88	92	89	87	91	88	86	85	85	91	88	86															
6	99	93	89	86	98	92	88	85	91	87	85	89	87	84	88	86	84	83	83	88	86	84															
7	96	90	86	83	95	89	85	83	88	85	82	87	84	82	86	83	81	80	80	86	83	81															
8	94	87	83	80	93	87	83	80	86	82	80	85	82	80	84	81	79	78	78	84	81	79															
9	91	85	81	78	90	84	80	78	83	80	78	83	80	77	82	79	77	76	76	82	79	77															
10	89	82	78	76	88	82	78	76	81	78	75	81	78	75	80	77	75	74	74	80	77	75															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1064264	1064264	1064264
5°	888590	888590	892811
10°	556675	555426	561053
15°	317678	319483	320014
20°	179855	179309	178546
25°	67512	87297	68987
30°	13849	29230	13960
35°	5511	9508	5381
40°	2807	4148	2681
45°	1891	2178	1589
50°	1115	1115	799
55°	540	709	355
60°	407	407	213
65°	252	252	252
70°	312	312	312
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	759.1	36.4
10°-20°	902.8	43.3
20°-30°	359.9	17.3
30°-40°	45.4	2.2
40°-50°	11.2	0.5
50°-60°	3.3	0.2
60°-70°	1.2	0.1
70°-80°	0.5	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°	2021.9	97.0
0°-40°	2067.3	99.2
0°-60°	2081.8	99.9
0°-90°	2083.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2083.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10986	10986	10986	10986	10986	
5°	9138	9221	9138	9146	9181	757
15°	3168	3187	3186	3186	3191	900
25°	632	776	817	744	645	325
35°	47	56	80	54	46	34
45°	14	14	16	13	12	11
55°	3	3	4	3	2	4
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°	10985.9	10985.9	10985.9	10985.9	10985.9
2.5°	10446.3	10502.4	10394.5	10405.0	10418.8
5°	9137.6	9221.2	9137.6	9146.1	9181.0
7.5°	7352.8	7425.8	7378.2	7399.4	7361.3
10°	5659.0	5685.5	5646.3	5665.4	5703.5
12.5°	4255.1	4284.7	4256.2	4257.2	4274.2
15°	3167.5	3186.6	3185.5	3185.5	3190.8
17.5°	2365.6	2391.0	2363.5	2365.6	2371.9
20°	1744.6	1761.5	1739.3	1736.1	1731.9
22.5°	1190.2	1226.2	1239.9	1221.9	1164.8
25°	631.6	775.5	816.7	743.7	645.4
27.5°	253.9	386.2	477.1	377.7	276.1
30°	123.8	168.2	261.3	172.4	124.8
32.5°	73.0	91.0	142.8	89.9	71.9
35°	46.6	56.1	80.4	54.0	45.5
37.5°	30.7	37.0	49.7	36.0	29.6
40°	22.2	25.4	32.8	24.3	21.2
42.5°	16.9	18.0	22.2	18.0	15.9
45°	13.8	13.8	15.9	12.7	11.6
47.5°	10.6	10.6	10.6	9.5	7.4
50°	7.4	7.4	7.4	6.3	5.3
52.5°	5.3	5.3	5.3	4.2	3.2
55°	3.2	3.2	4.2	3.2	2.1
57.5°	3.2	2.1	3.2	2.1	2.1
60°	2.1	2.1	2.1	1.1	1.1
62.5°	1.1	1.1	1.1	1.1	1.1
65°	1.1	1.1	1.1	1.1	1.1
67.5°	1.1	1.1	1.1	1.1	1.1
70°	1.1	1.1	1.1	1.1	1.1
72.5°	1.1	1.1	1.1	1.1	0.0
75°	0.0	1.1	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)