

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: P1212063

Luminaire Tested: **LDSQA4A10927D010TE LAR15SP 4LSQA1H-LSF-20**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: P1212063
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: LDSQA4A10927D010TE 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

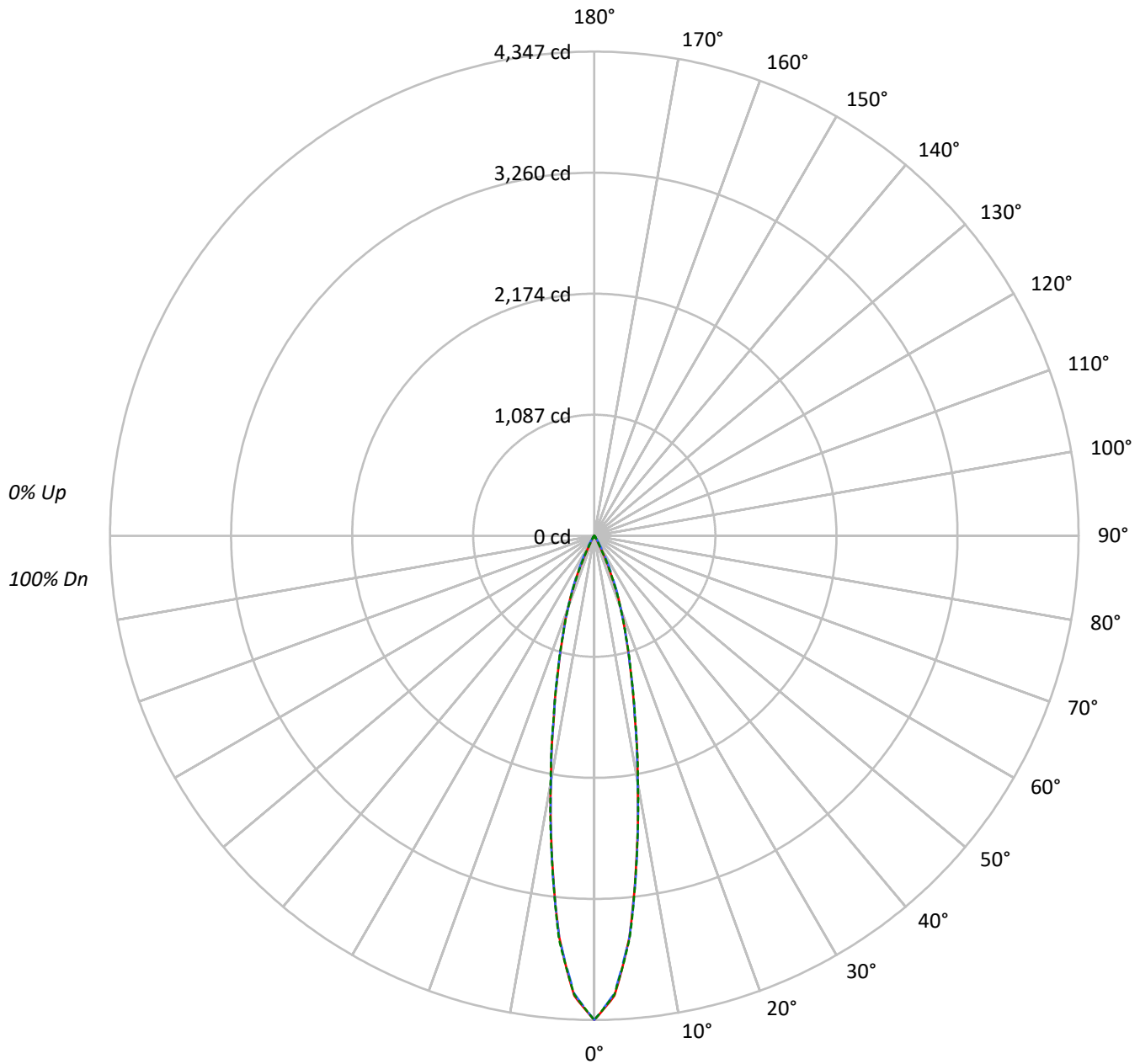
Lumens per Lamp: N/A
Luminaire Lumens: 824.4 lumens
Efficiency: N/A
Efficacy: 66.5 lumens/watt
Spacing Criteria (0/90/45): 0.35 / 0.35 / 0.39
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 12.4
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



Cooper Lighting Solutions Photometric Lab

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10		50	30	10			50	30	10			50
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	115	113	111	109	113	111	109	108		107	106	104			103	102	101			100
2	111	108	105	102	109	106	104	101		103	101	99			100	99	97			98
3	108	103	100	97	106	102	99	96		100	97	95			97	95	93			95
4	105	99	96	93	103	98	95	92		96	93	91			95	92	90			93
5	102	96	92	89	100	95	91	89		93	90	88			92	89	87			91
6	99	93	89	86	98	92	88	85		91	87	85			89	87	84			88
7	96	90	86	83	95	89	85	83		88	85	82			87	84	82			86
8	94	87	83	80	93	87	83	80		86	82	80			85	82	80			84
9	91	85	81	78	90	84	80	78		83	80	78			83	80	77			82
10	89	82	78	76	88	82	78	76		81	78	76			81	78	75			80

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	421147	421147	421147
5°	351630	351630	353303
10°	220290	219798	222021
15°	125717	126429	126640
20°	71175	70959	70649
25°	26712	34547	27300
30°	5481	11567	5526
35°	2176	3761	2129
40°	1113	1644	1062
45°	740	863	630
50°	437	437	316
55°	220	287	135
60°	155	155	78
65°	92	92	92
70°	113	113	113
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	300.4	36.4
10°-20°	357.3	43.3
20°-30°	142.4	17.3
30°-40°	18.0	2.2
40°-50°	4.4	0.5
50°-60°	1.3	0.2
60°-70°	0.4	0.1
70°-80°	0.2	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°	800.1	97.1
0°-40°	818.1	99.2
0°-60°	823.8	99.9
0°-90°	824.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	824.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4347	4347	4347	4347	4347	
5°	3616	3649	3616	3619	3633	300
15°	1254	1261	1261	1261	1263	356
25°	250	307	323	294	255	129
35°	18	22	32	21	18	13
45°	5	5	6	5	5	4
55°	1	1	2	1	1	1
65°	0	0	0	0	0	0
75°	0	0	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°	4347.3	4347.3	4347.3	4347.3	4347.3
2.5°	4133.8	4156.0	4113.3	4117.5	4122.9
5°	3615.9	3649.0	3615.9	3619.3	3633.1
7.5°	2909.7	2938.6	2919.7	2928.1	2913.0
10°	2239.4	2249.9	2234.4	2241.9	2257.0
12.5°	1683.8	1695.6	1684.3	1684.7	1691.4
15°	1253.5	1261.0	1260.6	1260.6	1262.7
17.5°	936.1	946.2	935.3	936.1	938.6
20°	690.4	697.1	688.3	687.0	685.3
22.5°	471.0	485.2	490.7	483.5	460.9
25°	249.9	306.9	323.2	294.3	255.4
27.5°	100.5	152.8	188.8	149.5	109.3
30°	49.0	66.6	103.4	68.2	49.4
32.5°	28.9	36.0	56.5	35.6	28.5
35°	18.4	22.2	31.8	21.4	18.0
37.5°	12.1	14.7	19.7	14.2	11.7
40°	8.8	10.0	13.0	9.6	8.4
42.5°	6.7	7.1	8.8	7.1	6.3
45°	5.4	5.4	6.3	5.0	4.6
47.5°	4.2	4.2	4.2	3.8	2.9
50°	2.9	2.9	2.9	2.5	2.1
52.5°	2.1	2.1	2.1	1.7	1.3
55°	1.3	1.3	1.7	1.3	0.8
57.5°	1.3	0.8	1.3	0.8	0.8
60°	0.8	0.8	0.8	0.4	0.4
62.5°	0.4	0.4	0.4	0.4	0.4
65°	0.4	0.4	0.4	0.4	0.4
67.5°	0.4	0.4	0.4	0.4	0.4
70°	0.4	0.4	0.4	0.4	0.4
72.5°	0.4	0.4	0.4	0.4	0.0
75°	0.0	0.4	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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