

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: P1212329

Luminaire Tested: **LDSQA4A30940D010TE LAR15SP 4LSQA1H-LSF-20**

Issue Date: 3/3/2020

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

**Test Information**

Test Method: LM-41-14
Report Number: P1212329
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: LDSQA4A30940D010TE 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 / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

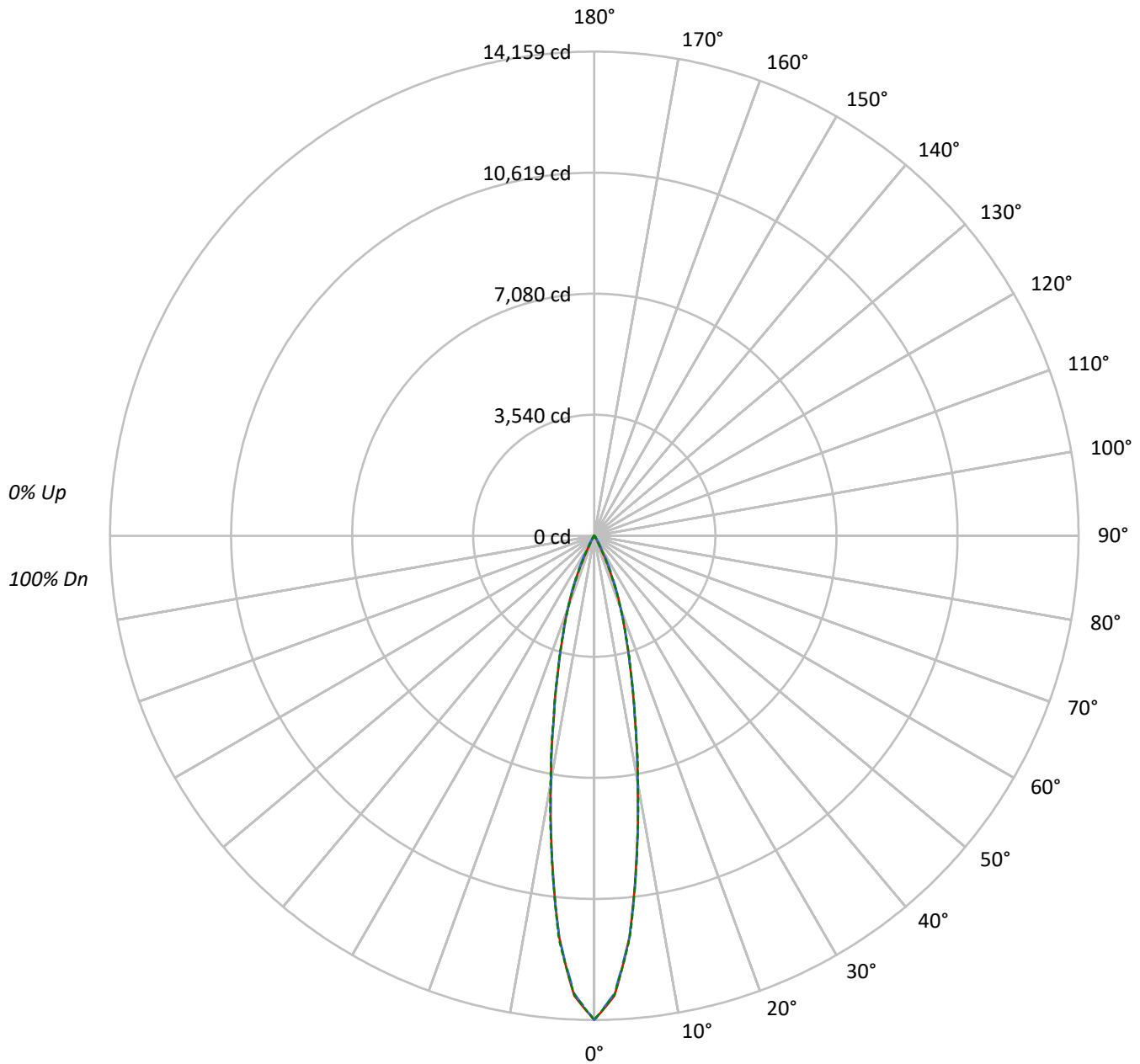
Lumens per Lamp: N/A
Luminaire Lumens: 2685.1 lumens
Efficiency: N/A
Efficacy: 67.5 lumens/watt
Spacing Criteria (0/90/45): 0.35 / 0.35 / 0.39
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 39.8
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		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	115	113	111	109	113	111	109	108		107	106	104		103	102	101		100	99	98
2	111	108	105	102	109	106	104	101		103	101	99		100	99	97		98	96	95
3	108	103	100	97	106	102	99	96		100	97	95		97	95	93		95	93	92
4	105	99	96	93	103	98	95	92		96	93	91		95	92	90		93	91	89
5	102	96	92	89	100	95	91	89		93	90	88		92	89	87		91	88	86
6	99	93	89	86	98	92	88	85		91	87	85		89	87	84		88	86	84
7	96	90	86	83	95	89	85	83		88	85	82		87	84	82		86	83	81
8	94	87	83	80	93	87	83	80		86	82	80		85	82	80		84	81	79
9	91	85	81	78	90	84	80	78		83	80	78		83	80	77		82	79	77
10	89	82	78	76	88	82	78	76		81	78	75		81	78	75		80	77	75

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1371640	1371640	1371640
5°	1145231	1145231	1150667
10°	717461	715848	723097
15°	409435	411752	412444
20°	231804	231093	230113
25°	87019	112513	88911
30°	17853	37664	17999
35°	7096	12252	6930
40°	3617	5349	3440
45°	2425	2809	2055
50°	1432	1432	1025
55°	692	912	456
60°	523	523	271
65°	321	321	321
70°	397	397	397
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	978.4	36.4
10°-20°	1163.6	43.3
20°-30°	463.9	17.3
30°-40°	58.5	2.2
40°-50°	14.4	0.5
50°-60°	4.2	0.2
60°-70°	1.5	0.1
70°-80°	0.6	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°	2605.9	97.0
0°-40°	2664.4	99.2
0°-60°	2683.0	99.9
0°-90°	2685.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2685.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	14159	14159	14159	14159	14159	
5°	11777	11884	11777	11788	11833	976
15°	4082	4107	4106	4106	4112	1160
25°	814	1000	1053	959	832	419
35°	60	72	104	70	59	44
45°	18	18	20	16	15	14
55°	4	4	5	4	3	5
65°	1	1	1	1	1	2
75°	0	1	0	0	0	1
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°	14158.8	14158.8	14158.8	14158.8	14158.8
2.5°	13463.4	13535.6	13396.6	13410.2	13427.9
5°	11776.7	11884.4	11776.7	11787.6	11832.6
7.5°	9476.4	9570.5	9509.2	9536.4	9487.4
10°	7293.5	7327.6	7277.1	7301.6	7350.8
12.5°	5484.1	5522.2	5485.5	5486.8	5508.6
15°	4082.4	4106.9	4105.5	4105.5	4112.4
17.5°	3048.9	3081.5	3046.1	3048.9	3057.0
20°	2248.5	2270.3	2241.6	2237.5	2232.1
22.5°	1534.0	1580.3	1598.0	1574.9	1501.2
25°	814.1	999.5	1052.6	958.6	831.8
27.5°	327.2	497.7	614.9	486.8	355.8
30°	159.6	216.8	336.7	222.3	160.9
32.5°	94.1	117.3	184.1	115.9	92.8
35°	60.0	72.3	103.6	69.5	58.6
37.5°	39.6	47.7	64.1	46.3	38.2
40°	28.6	32.8	42.3	31.4	27.2
42.5°	21.8	23.2	28.6	23.2	20.5
45°	17.7	17.7	20.5	16.4	15.0
47.5°	13.7	13.7	13.7	12.3	9.5
50°	9.5	9.5	9.5	8.1	6.8
52.5°	6.8	6.8	6.8	5.4	4.1
55°	4.1	4.1	5.4	4.1	2.7
57.5°	4.1	2.7	4.1	2.7	2.7
60°	2.7	2.7	2.7	1.4	1.4
62.5°	1.4	1.4	1.4	1.4	1.4
65°	1.4	1.4	1.4	1.4	1.4
67.5°	1.4	1.4	1.4	1.4	1.4
70°	1.4	1.4	1.4	1.4	1.4
72.5°	1.4	1.4	1.4	1.4	0.0
75°	0.0	1.4	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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