

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: P1212175

Luminaire Tested: **LDSQA4A20927D010TE 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: P1212175
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: LDSQA4A20927D010TE 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

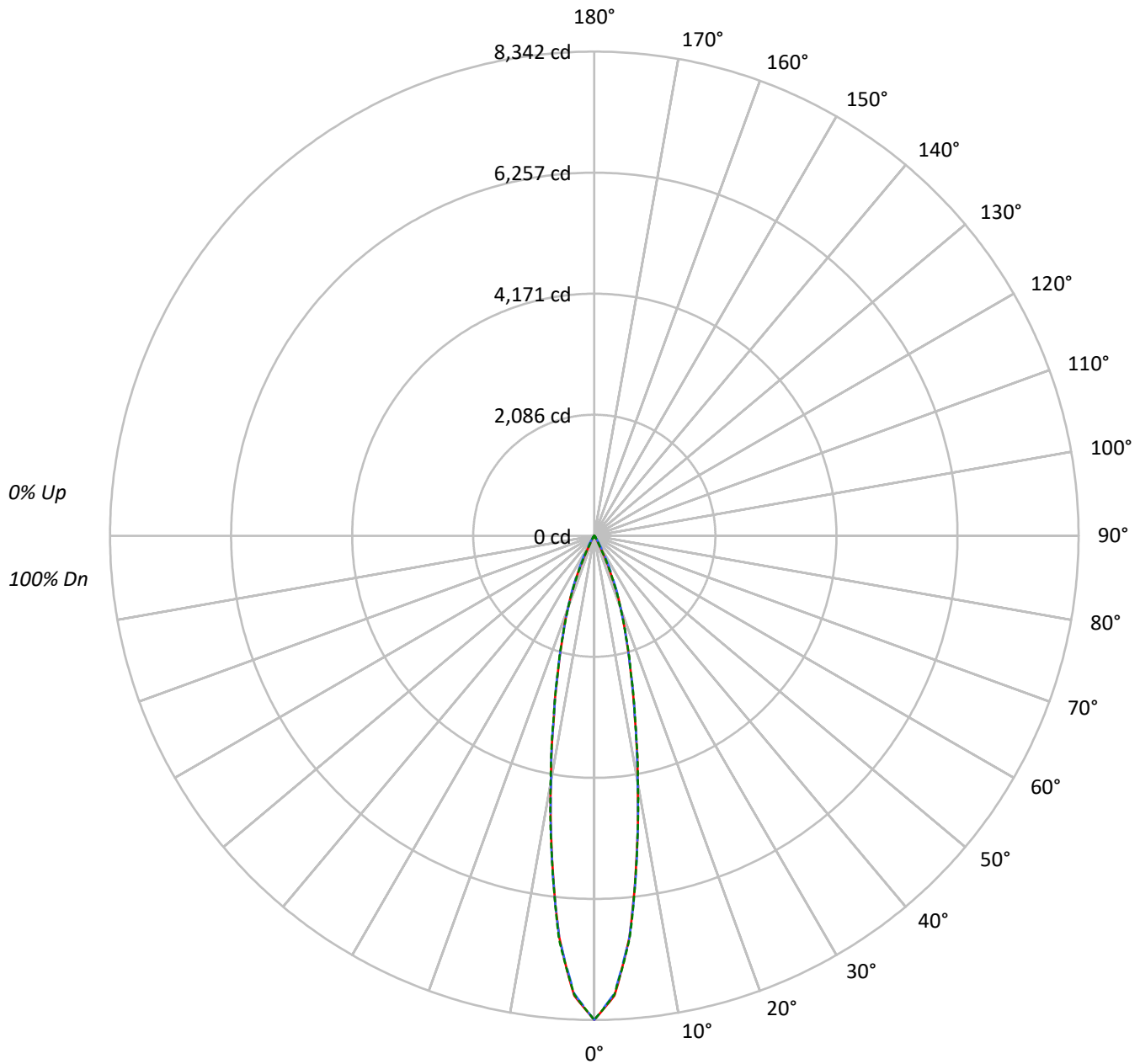
Lumens per Lamp: N/A
Luminaire Lumens: 1581.9 lumens
Efficiency: N/A
Efficacy: 54.9 lumens/watt
Spacing Criteria (0/90/45): 0.35 / 0.35 / 0.39
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 28.8
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	76		81	78	75		80	77	75

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	808096	808096	808096
5°	674709	674709	677918
10°	422695	421741	426001
15°	241214	242588	242989
20°	136557	136155	135567
25°	51254	66293	52387
30°	10515	22193	10593
35°	4187	7214	4092
40°	2137	3149	2023
45°	1425	1658	1206
50°	844	844	618
55°	405	540	270
60°	310	310	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°	576.4	36.4
10°-20°	685.5	43.3
20°-30°	273.3	17.3
30°-40°	34.5	2.2
40°-50°	8.5	0.5
50°-60°	2.5	0.2
60°-70°	0.9	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°	1535.2	97.1
0°-40°	1569.7	99.2
0°-60°	1580.7	99.9
0°-90°	1581.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1581.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8342	8342	8342	8342	8342	
5°	6938	7002	6938	6945	6971	575
15°	2405	2420	2419	2419	2423	684
25°	480	589	620	565	490	247
35°	35	43	61	41	35	26
45°	10	10	12	10	9	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°	8341.6	8341.6	8341.6	8341.6	8341.6
2.5°	7932.0	7974.5	7892.6	7900.6	7911.0
5°	6938.2	7001.7	6938.2	6944.7	6971.2
7.5°	5583.0	5638.5	5602.4	5618.4	5589.4
10°	4297.0	4317.0	4287.3	4301.8	4330.6
12.5°	3231.0	3253.4	3231.7	3232.6	3245.4
15°	2405.1	2419.6	2418.8	2418.8	2422.8
17.5°	1796.2	1815.5	1794.6	1796.2	1801.0
20°	1324.6	1337.5	1320.7	1318.2	1315.0
22.5°	903.8	931.0	941.5	927.8	884.4
25°	479.5	588.9	620.2	564.7	490.1
27.5°	192.8	293.2	362.3	286.8	209.7
30°	94.0	127.7	198.4	131.0	94.7
32.5°	55.4	69.0	108.5	68.3	54.6
35°	35.4	42.6	61.0	41.0	34.6
37.5°	23.3	28.1	37.8	27.4	22.5
40°	16.9	19.2	24.9	18.5	16.0
42.5°	12.9	13.6	16.9	13.6	12.1
45°	10.4	10.4	12.1	9.7	8.8
47.5°	8.0	8.0	8.0	7.3	5.6
50°	5.6	5.6	5.6	4.8	4.1
52.5°	4.1	4.1	4.1	3.2	2.4
55°	2.4	2.4	3.2	2.4	1.6
57.5°	2.4	1.6	2.4	1.6	1.6
60°	1.6	1.6	1.6	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

Classified

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— 0°-180° - - 45°-225° - - - 90°-270°

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