

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: P1212219

Luminaire Tested: **LDSQA4A20940D010TE LAR15SP 4LSQA1H**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: P1212219
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26794)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA4A20940D010TE LAR15SP 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

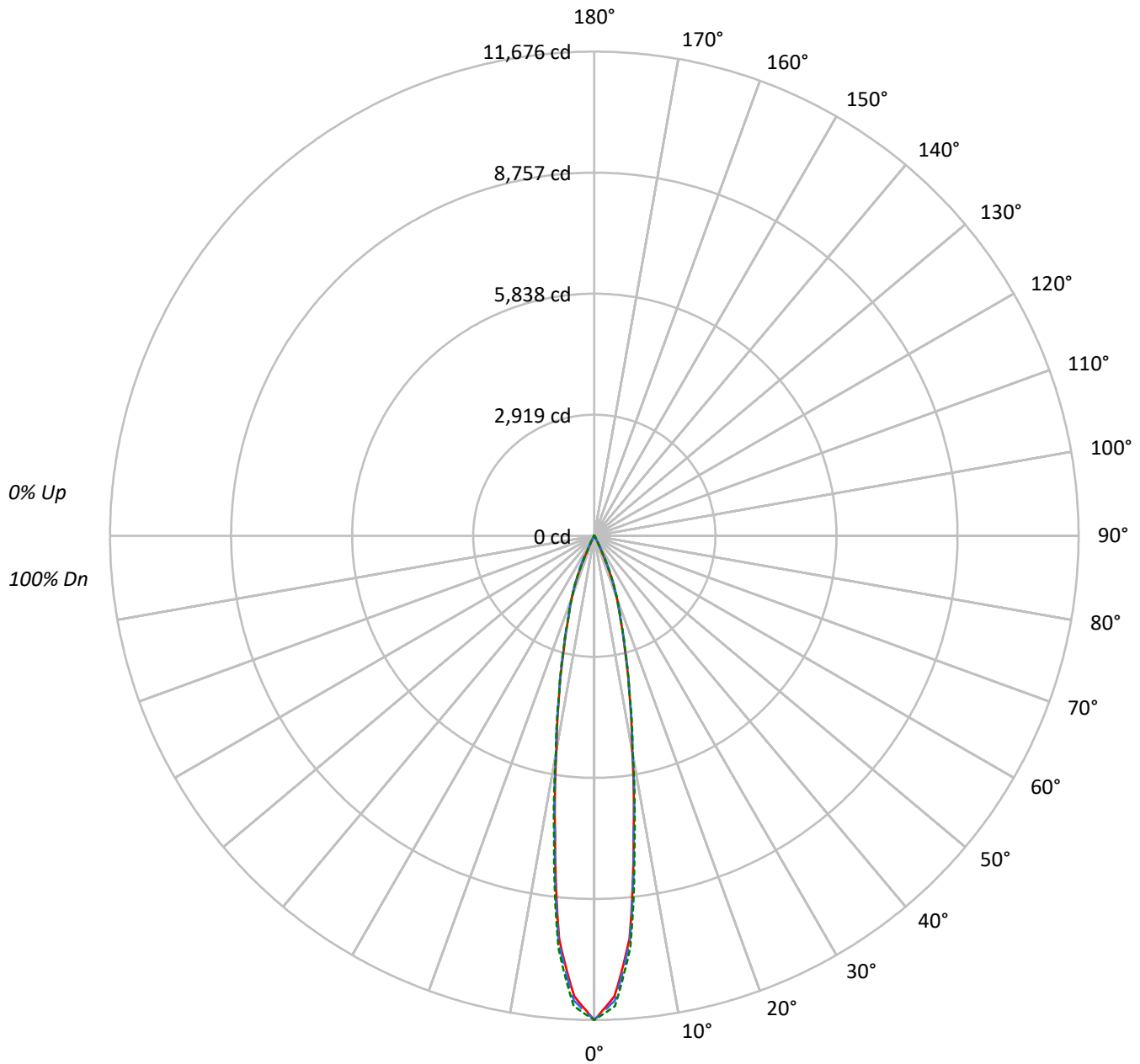
Lumens per Lamp: N/A
Luminaire Lumens: 1917.1 lumens
Efficiency: N/A
Efficacy: 66.6 lumens/watt
Spacing Criteria (0/90/45): 0.32 / 0.32 / 0.36
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

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



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					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	110	113	111	110	108		107	106	105		104	103	102		100	99	99
2	112	108	105	103	110	107	104	102		104	102	100		101	99	98		98	97	96
3	108	104	101	98	107	103	100	97		100	98	96		98	96	94		96	94	93
4	105	100	97	94	104	99	96	93		97	95	92		96	93	91		94	92	90
5	103	97	93	90	101	96	93	90		95	92	89		93	91	89		92	90	88
6	100	94	90	87	99	93	90	87		92	89	87		91	88	86		90	87	86
7	97	91	88	85	96	91	87	85		90	87	84		89	86	84		88	85	83
8	95	89	85	82	94	88	85	82		88	84	82		87	84	82		86	83	81
9	93	87	83	80	92	86	83	80		85	82	80		85	82	80		84	81	79
10	91	84	81	78	90	84	81	78		83	80	78		83	80	78		82	80	78

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1131137	1131137	1131137
5°	948085	956098	970014
10°	515793	523466	525443
15°	285213	289826	290929
20°	161515	162000	162938
25°	44060	69040	43291
30°	7070	10761	6868
35°	2389	4009	2271
40°	1037	1619	1037
45°	630	754	507
50°	407	407	271
55°	304	304	169
60°	194	194	194
65°	229	229	229
70°	283	283	283
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	778.3	40.6
10°-20°	823.0	42.9
20°-30°	289.6	15.1
30°-40°	19.5	1.0
40°-50°	4.1	0.2
50°-60°	1.4	0.1
60°-70°	1.0	0.1
70°-80°	0.4	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°	1890.9	98.6
0°-40°	1910.3	99.6
0°-60°	1915.8	99.9
0°-90°	1917.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1917.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	11676	11676	11676	11676	11676	
5°	9749	9896	9832	9850	9975	769
15°	2844	2892	2890	2883	2901	815
25°	412	626	646	616	405	255
35°	20	25	34	25	19	16
45°	5	5	6	5	4	4
55°	2	2	2	1	1	2
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°	11676.2	11676.2	11676.2	11676.2	11676.2
2.5°	11115.5	11261.2	11224.5	11200.7	11353.7
5°	9749.4	9896.0	9831.8	9850.2	9974.9
7.5°	7248.2	7371.8	7305.9	7333.4	7428.6
10°	5243.4	5366.3	5321.4	5336.0	5341.5
12.5°	3909.4	3963.5	3927.8	3937.8	3956.2
15°	2843.8	2891.6	2889.8	2883.3	2900.8
17.5°	2087.2	2110.1	2087.2	2086.2	2098.1
20°	1566.7	1598.8	1571.4	1575.0	1580.5
22.5°	1052.7	1116.9	1105.8	1092.1	1077.4
25°	412.2	625.8	645.9	615.7	405.0
27.5°	118.2	195.1	277.6	191.4	114.5
30°	63.2	75.1	96.2	73.3	61.4
32.5°	33.9	43.0	55.0	42.1	33.0
35°	20.2	24.7	33.9	24.7	19.2
37.5°	12.8	15.6	21.1	15.6	12.8
40°	8.2	10.1	12.8	10.1	8.2
42.5°	6.5	7.3	8.2	6.5	5.5
45°	4.6	4.6	5.5	4.6	3.7
47.5°	3.7	3.7	3.7	2.7	2.7
50°	2.7	2.7	2.7	1.8	1.8
52.5°	1.8	1.8	1.8	1.8	1.8
55°	1.8	1.8	1.8	1.0	1.0
57.5°	1.8	1.0	1.0	1.0	1.0
60°	1.0	1.0	1.0	1.0	1.0
62.5°	1.0	1.0	1.0	1.0	1.0
65°	1.0	1.0	1.0	1.0	1.0
67.5°	1.0	1.0	1.0	1.0	0.0
70°	1.0	1.0	1.0	1.0	1.0
72.5°	1.0	1.0	1.0	0.0	0.0
75°	0.0	1.0	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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