

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: P1212217

Luminaire Tested: **LDSQA4A20940D010TE 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: P1212217
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: LDSQA4A20940D010TE 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

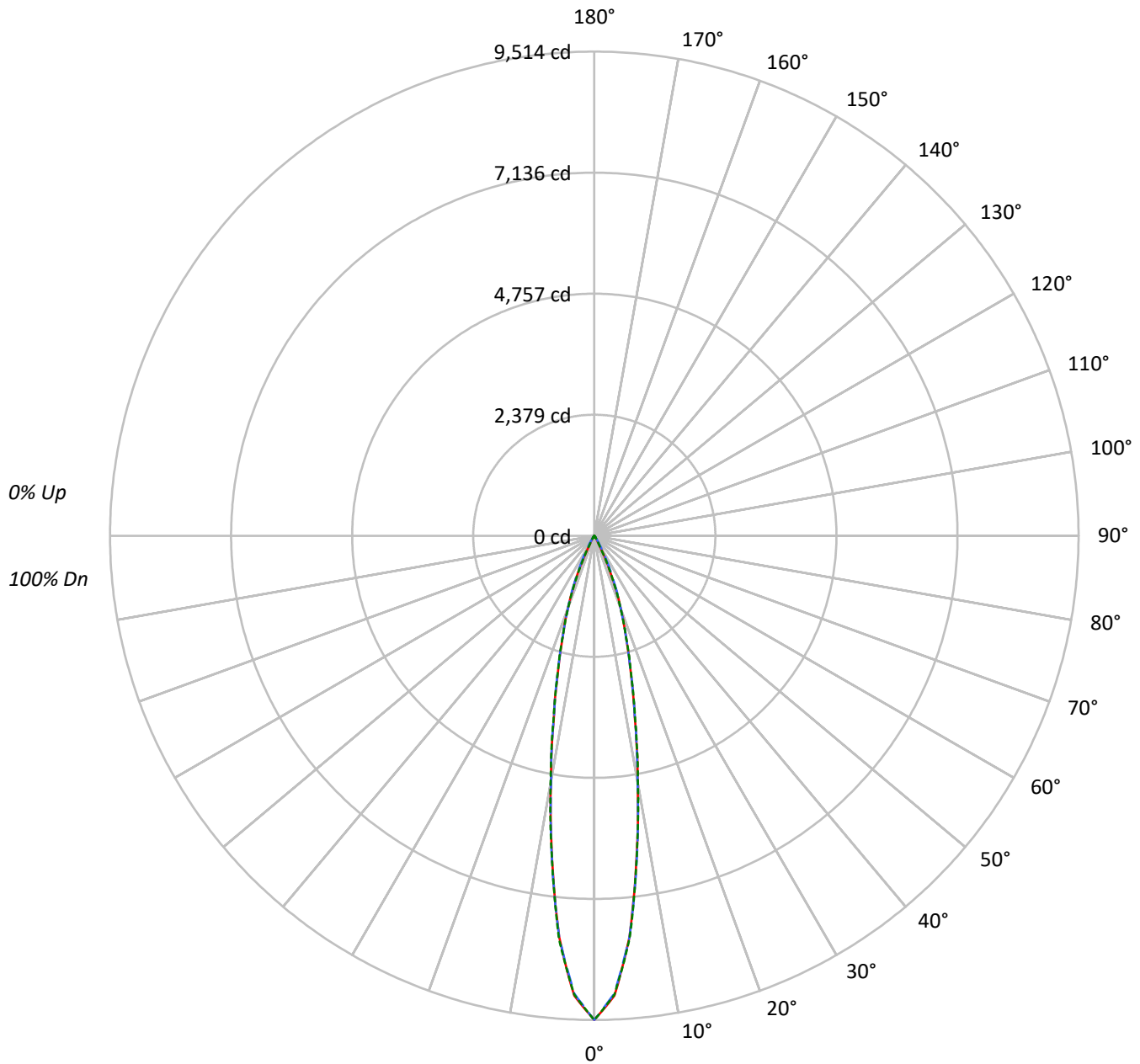
Lumens per Lamp: N/A
Luminaire Lumens: 1804.4 lumens
Efficiency: N/A
Efficacy: 62.7 lumens/watt
Spacing Criteria (0/90/45): 0.35 / 0.35 / 0.39
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

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			0
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			100
1	115	113	111	109	113	111	109	108		107	106	104			103	102	101			97
2	111	108	105	102	109	106	104	101		103	101	99			100	99	97			94
3	108	103	100	97	106	102	99	96		100	97	95			97	95	93			91
4	105	99	96	93	103	98	95	92		96	93	91			95	92	90			88
5	102	96	92	89	100	95	91	88		93	90	88			92	89	87			85
6	99	93	89	86	98	92	88	85		91	87	85			89	87	84			83
7	96	90	86	83	95	89	85	83		88	85	82			87	84	82			80
8	94	87	83	80	93	87	83	80		86	82	80			85	82	80			78
9	91	85	81	78	90	84	80	78		83	80	78			83	80	77			76
10	89	82	78	76	88	82	78	76		81	78	75			81	78	75			74

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	921673	921673	921673
5°	769542	769542	773199
10°	482101	481009	485888
15°	275123	276678	277139
20°	155752	155278	154629
25°	58469	75603	59741
30°	11992	25314	12103
35°	4766	8243	4660
40°	2428	3592	2314
45°	1644	1891	1384
50°	980	980	693
55°	456	625	304
60°	349	349	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°	657.4	36.4
10°-20°	781.9	43.3
20°-30°	311.7	17.3
30°-40°	39.3	2.2
40°-50°	9.7	0.5
50°-60°	2.8	0.2
60°-70°	1.1	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°	1751.0	97.0
0°-40°	1790.3	99.2
0°-60°	1802.9	99.9
0°-90°	1804.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1804.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9514	9514	9514	9514	9514	
5°	7913	7986	7913	7921	7951	656
15°	2743	2760	2759	2759	2763	780
25°	547	672	707	644	559	281
35°	40	49	70	47	39	29
45°	12	12	14	11	10	9
55°	3	3	4	3	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	0

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9514.0	9514.0	9514.0	9514.0	9514.0
2.5°	9046.7	9095.4	9001.8	9011.0	9023.0
5°	7913.4	7985.8	7913.4	7920.7	7951.0
7.5°	6367.7	6431.0	6389.8	6408.1	6375.1
10°	4900.9	4923.8	4889.8	4906.4	4939.4
12.5°	3685.0	3710.7	3686.0	3686.9	3701.6
15°	2743.2	2759.7	2758.7	2758.7	2763.3
17.5°	2048.7	2070.6	2046.8	2048.7	2054.2
20°	1510.8	1525.4	1506.2	1503.5	1499.9
22.5°	1030.7	1061.9	1073.8	1058.2	1008.8
25°	547.0	671.6	707.3	644.1	558.9
27.5°	219.8	334.5	413.2	327.0	239.1
30°	107.2	145.7	226.3	149.4	108.2
32.5°	63.2	78.8	123.7	77.9	62.3
35°	40.3	48.6	69.7	46.7	39.4
37.5°	26.6	32.0	43.0	31.2	25.7
40°	19.2	21.9	28.4	21.1	18.3
42.5°	14.6	15.6	19.2	15.6	13.8
45°	12.0	12.0	13.8	11.0	10.1
47.5°	9.1	9.1	9.1	8.2	6.5
50°	6.5	6.5	6.5	5.5	4.6
52.5°	4.6	4.6	4.6	3.7	2.7
55°	2.7	2.7	3.7	2.7	1.8
57.5°	2.7	1.8	2.7	1.8	1.8
60°	1.8	1.8	1.8	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	1.0
70°	1.0	1.0	1.0	1.0	1.0
72.5°	1.0	1.0	1.0	1.0	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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