

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: P182527

Luminaire Tested: **LDSQA4A13830D010TE LAR15SP 4LSQAL1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182527
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26796)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA4A13830D010TE LAR15SP 4LSQAL1H
Description: PORTFOLIO 4" SQUARE LENSED ADJUSTABLE, SELF-FLANGED, 15° SPOT
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1532.1 lumens
Efficiency: N/A
Efficacy: 68.8 lumens/watt
Spacing Criteria (0/90/45): 0.31 / 0.32 / 0.36
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

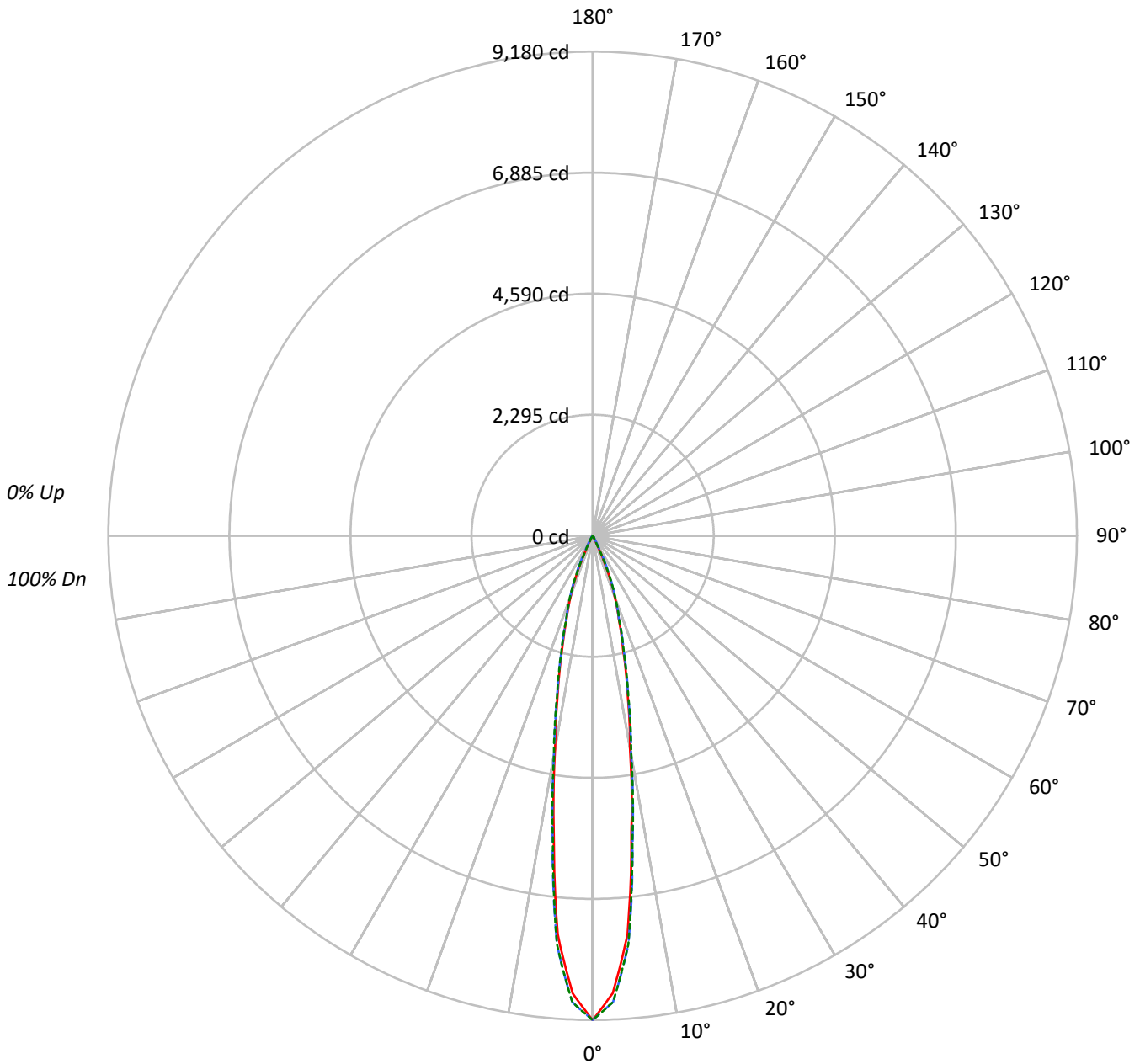
Input Watts (W): 22.27
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	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	102	102	102	100	100	100	100	100	100	100		
1	115	113	111	110	113	111	109	108	107	106	105	103	102	102	100	99	99	97	97	97	97	97	97	97		
2	112	108	105	103	110	107	104	102	103	101	100	101	99	98	98	97	96	94	94	94	94	94	94	94		
3	108	104	100	98	107	103	99	97	100	98	95	98	96	94	96	94	93	91	91	91	91	91	91	91		
4	105	100	96	94	104	99	96	93	97	94	92	95	93	91	94	92	90	89	89	89	89	89	89	89		
5	102	97	93	90	101	96	92	90	94	91	89	93	90	88	92	89	87	86	86	86	86	86	86	86		
6	100	94	90	87	98	93	89	87	92	89	86	91	88	86	89	87	85	84	84	84	84	84	84	84		
7	97	91	87	84	96	90	87	84	89	86	84	88	85	83	87	85	83	82	82	82	82	82	82	82		
8	95	88	85	82	94	88	84	82	87	84	81	86	83	81	85	83	81	80	80	80	80	80	80	80		
9	92	86	82	80	92	86	82	80	85	82	79	84	81	79	84	81	79	78	78	78	78	78	78	78		
10	90	84	80	78	89	84	80	78	83	80	77	82	79	77	82	79	77	76	76	76	76	76	76	76		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	889365	889365	889365
5°	737704	756803	755724
10°	401979	413842	415937
15°	223503	229911	231095
20°	126010	129587	131206
25°	37935	55882	37764
30°	7148	10235	7148
35°	3075	4754	3169
40°	1492	2491	1492
45°	973	1302	754
50°	588	708	362
55°	405	405	270
60°	310	155	155
65°	183	183	183
70°	0	227	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	611.2	39.9
10°-20°	651.5	42.5
20°-30°	237.6	15.5
30°-40°	22.6	1.5
40°-50°	6.2	0.4
50°-60°	1.9	0.1
60°-70°	0.8	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°	1500.4	97.9
0°-40°	1523.0	99.4
0°-60°	1531.1	99.9
0°-90°	1532.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1532.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9180	9180	9180	9180	9180	
5°	7586	7778	7782	7701	7771	599
15°	2228	2281	2292	2288	2304	638
25°	355	513	523	518	353	205
35°	26	32	40	32	27	18
45°	7	7	10	7	6	6
55°	2	2	2	2	2	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	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9180.5	9180.5	9180.5	9180.5	9180.5
2.5°	8679.8	8862.7	8849.3	8808.3	8849.3
5°	7586.0	7777.6	7782.4	7701.1	7771.3
7.5°	5639.0	5787.3	5813.3	5733.7	5786.5
10°	4086.4	4218.8	4207.0	4191.2	4228.3
12.5°	3052.5	3119.6	3112.5	3129.8	3132.2
15°	2228.5	2281.3	2292.4	2287.6	2304.2
17.5°	1641.0	1669.4	1663.9	1672.6	1678.9
20°	1222.3	1267.2	1257.0	1264.9	1272.7
22.5°	810.6	893.4	883.2	895.8	888.7
25°	354.9	513.4	522.8	518.1	353.3
27.5°	108.8	183.7	235.8	179.8	108.8
30°	63.9	76.5	91.5	74.9	63.9
32.5°	40.2	48.1	57.6	47.3	39.4
35°	26.0	31.5	40.2	31.5	26.8
37.5°	17.3	21.3	28.4	21.3	18.1
40°	11.8	14.2	19.7	15.0	11.8
42.5°	8.7	10.3	13.4	10.3	7.9
45°	7.1	7.1	9.5	7.1	5.5
47.5°	5.5	5.5	6.3	4.7	3.9
50°	3.9	3.9	4.7	3.2	2.4
52.5°	2.4	3.2	3.2	2.4	1.6
55°	2.4	2.4	2.4	1.6	1.6
57.5°	1.6	1.6	1.6	0.8	0.8
60°	1.6	1.6	0.8	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°	0.0	0.8	0.8	0.0	0.0
72.5°	0.0	0.8	0.0	0.0	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



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— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)