

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: P182443

Luminaire Tested: **LDSQA4A28930D010TE LAR15SP 4LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P182443
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: LDSQA4A28930D010TE LAR15SP 4LSQA1H
Description: PORTFOLIO 4" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 15° SPOT
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2316.0 lumens
Efficiency: N/A
Efficacy: 52.1 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

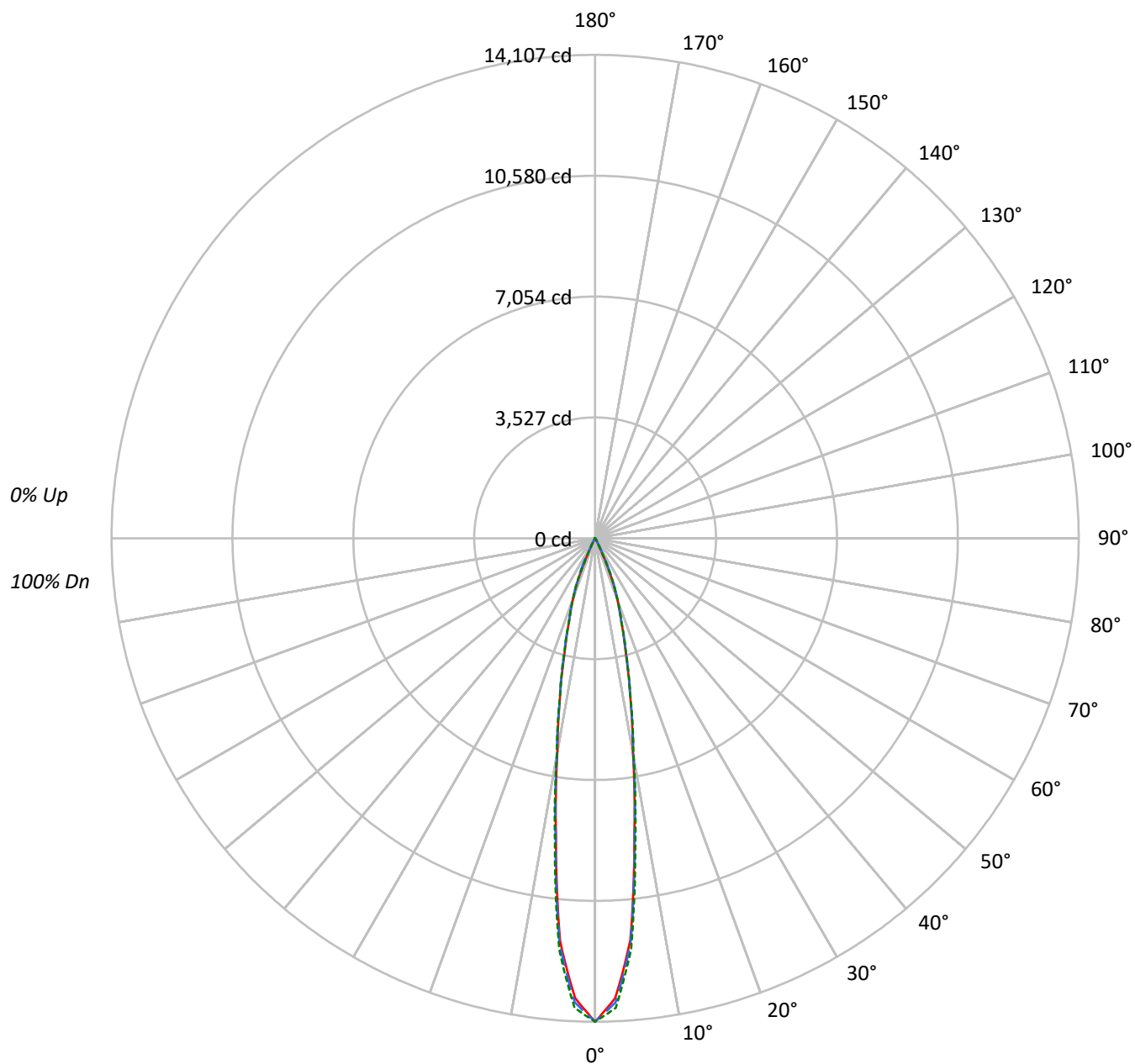
Input Watts (W): 44.49
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1366593	1366593	1366593
5°	1145435	1155121	1171915
10°	623163	632420	634820
15°	344596	350142	351476
20°	195134	195711	196845
25°	53242	83417	52301
30°	8546	12998	8300
35°	2886	4849	2744
40°	1265	1960	1265
45°	754	904	603
50°	497	497	332
55°	372	372	186
60°	213	213	213
65°	252	252	252
70°	312	312	312
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	940.3	40.6
10°-20°	994.3	42.9
20°-30°	349.8	15.1
30°-40°	23.6	1.0
40°-50°	4.9	0.2
50°-60°	1.6	0.1
60°-70°	1.1	0.0
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°	2284.5	98.6
0°-40°	2308.0	99.7
0°-60°	2314.5	99.9
0°-90°	2316.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2316.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	14107	14107	14107	14107	14107	
5°	11779	11956	11878	11901	12051	929
15°	3436	3494	3491	3484	3504	985
25°	498	756	780	744	489	308
35°	24	30	41	30	23	19
45°	6	6	7	6	4	5
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	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	14106.7	14106.7	14106.7	14106.7	14106.7
2.5°	13429.2	13605.2	13560.9	13532.2	13717.0
5°	11778.8	11955.9	11878.4	11900.6	12051.1
7.5°	8756.9	8906.3	8826.6	8859.8	8975.0
10°	6334.9	6483.3	6429.0	6446.7	6453.4
12.5°	4723.3	4788.6	4745.4	4757.6	4779.7
15°	3435.9	3493.5	3491.2	3483.5	3504.5
17.5°	2521.6	2549.3	2521.6	2520.5	2534.9
20°	1892.8	1931.6	1898.4	1902.8	1909.4
22.5°	1271.9	1349.3	1336.1	1319.5	1301.7
25°	498.1	756.0	780.4	743.9	489.3
27.5°	142.8	235.8	335.4	231.3	138.4
30°	76.4	90.8	116.2	88.6	74.2
32.5°	41.0	52.0	66.4	50.9	39.8
35°	24.4	29.9	41.0	29.9	23.2
37.5°	15.5	18.8	25.5	18.8	15.5
40°	10.0	12.2	15.5	12.2	10.0
42.5°	7.7	8.9	10.0	7.7	6.6
45°	5.5	5.5	6.6	5.5	4.4
47.5°	4.4	4.4	4.4	3.3	3.3
50°	3.3	3.3	3.3	2.2	2.2
52.5°	2.2	2.2	2.2	2.2	2.2
55°	2.2	2.2	2.2	1.1	1.1
57.5°	2.2	1.1	1.1	1.1	1.1
60°	1.1	1.1	1.1	1.1	1.1
62.5°	1.1	1.1	1.1	1.1	1.1
65°	1.1	1.1	1.1	1.1	1.1
67.5°	1.1	1.1	1.1	1.1	0.0
70°	1.1	1.1	1.1	1.1	1.1
72.5°	1.1	1.1	1.1	0.0	0.0
75°	0.0	1.1	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)