

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: P281711

Luminaire Tested: **LDA2B159024D010 EU2B15SP159024 2LBAPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P281711
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-10)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDA2B159024D010 EU2B15SP159024 2LBAPINSQ1MMS
Description: PORTFOLIO 2IN ADJ 1500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ PinHole, MMS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1033.0 lumens
Efficiency: N/A
Efficacy: 73.3 lumens/watt
Spacing Criteria (0/90/45): 0.3 / 0.3 / 0.29
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

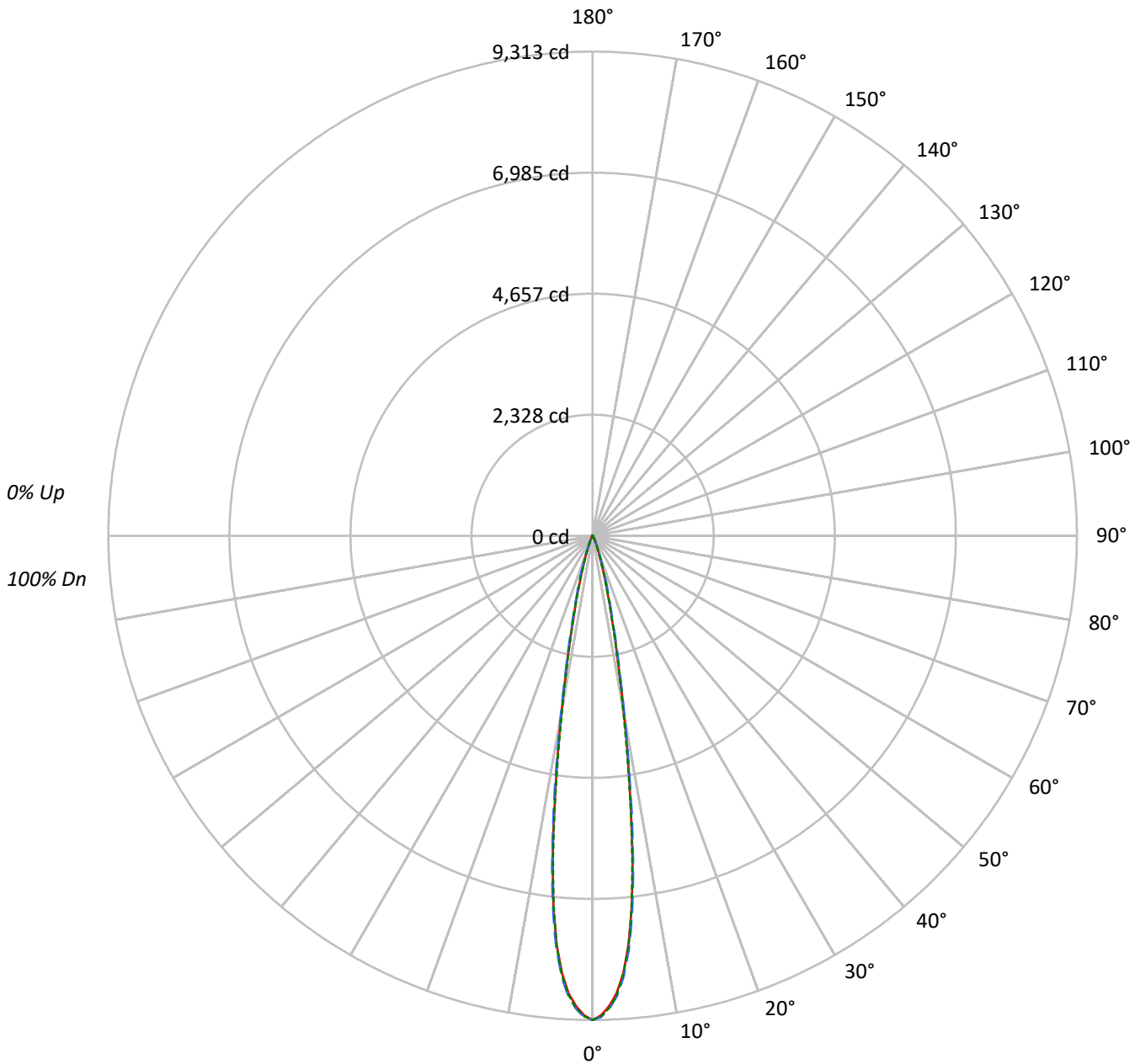
Input Watts (W): 14.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	116	114	112	111	113	112	110	109	108	107	106	104	103	103	101	100	100	98																			
2	113	110	107	105	111	108	106	104	105	103	102	102	101	99	99	98	97	96																			
3	110	106	103	101	108	105	102	100	102	100	98	100	98	97	98	97	95	94																			
4	107	103	100	97	106	102	99	97	100	98	96	98	96	95	97	95	94	93																			
5	105	100	97	95	104	100	96	94	98	95	93	97	94	93	95	93	92	91																			
6	103	98	95	92	102	97	94	92	96	93	91	95	93	91	94	92	90	89																			
7	101	96	93	90	100	95	92	90	94	92	90	93	91	89	93	90	89	88																			
8	99	94	91	89	98	94	91	88	93	90	88	92	90	88	91	89	87	87																			
9	98	92	89	87	97	92	89	87	91	89	87	91	88	86	90	88	86	85																			
10	96	91	88	86	95	90	88	86	90	87	85	89	87	85	89	87	85	84																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4594876	4594876	4594876
5°	3912694	3953453	3920073
10°	1727404	1766881	1687026
15°	524148	601171	532371
20°	156825	209117	175253
25°	61078	60152	64235
30°	27231	24610	25921
35°	5541	4878	4878
40°	0	386	1481
45°	4814	4047	7256
50°	0	1305	4452
55°	0	0	1978
60°	0	592	2269
65°	0	0	1401
70°	0	3318	6635
75°	0	0	0
80°	0	0	0
85°	0	3396	13020



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	603.7	58.4
10°-20°	344.8	33.4
20°-30°	65.5	6.3
30°-40°	11.9	1.2
40°-50°	3.1	0.3
50°-60°	2.3	0.2
60°-70°	0.4	0.0
70°-80°	0.5	0.1
80°-90°	0.7	0.1
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°	1014.0	98.2
0°-40°	1025.9	99.3
0°-60°	1031.4	99.8
0°-90°	1033.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1033.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9313	9313	9313	9313	9313	
5°	7900	7952	7983	7969	7915	600
15°	1026	1116	1177	1106	1042	326
25°	112	121	110	126	118	59
35°	9	12	8	10	8	13
45°	7	11	6	6	10	3
55°	0	1	0	1	2	1
65°	0	0	0	0	1	0
75°	0	0	0	0	0	0
85°	0	1	1	1	2	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9313.4	9313.4	9313.4	9313.4	9313.4
1°	9225.4	9235.1	9255.9	9277.2	9243.8
2°	9052.7	9076.3	9105.6	9125.2	9089.0
3°	8811.0	8843.8	8874.9	8878.9	8844.9
4°	8437.4	8477.7	8510.5	8506.5	8463.9
5°	7900.5	7952.3	7982.8	7968.9	7915.4
6°	7190.8	7240.9	7280.0	7240.3	7168.4
7°	6306.8	6364.3	6405.8	6337.9	6249.8
8°	5282.3	5362.9	5404.3	5309.4	5219.0
9°	4312.0	4367.8	4409.8	4306.2	4214.1
10°	3448.1	3550.5	3526.9	3446.9	3367.5
11°	2712.0	2804.6	2808.6	2754.5	2676.8
12°	2123.2	2221.0	2245.8	2204.3	2135.3
13°	1677.7	1750.8	1791.7	1749.1	1683.5
14°	1335.3	1400.3	1452.7	1397.4	1331.8
15°	1026.2	1116.0	1177.0	1105.6	1042.3
16°	816.1	890.4	962.9	881.7	831.1
17°	626.8	693.0	767.8	694.1	652.7
18°	496.1	548.5	630.8	554.8	518.6
19°	388.5	428.2	504.8	438.0	408.6
20°	298.7	342.4	398.3	352.8	333.8
22.5°	180.7	204.9	221.0	207.2	197.4
25°	112.2	120.9	110.5	126.0	118.0
26°	97.8	104.2	101.9	112.2	102.4
27°	78.3	86.3	80.0	88.1	85.2
28°	71.4	81.2	68.5	78.3	73.7
29°	50.1	54.1	48.9	52.4	52.4
30°	47.8	48.9	43.2	47.2	45.5
32.5°	37.4	35.1	28.8	30.5	29.4
35°	9.2	11.5	8.1	9.8	8.1
37.5°	13.8	12.7	15.0	14.4	13.8
40°	0.0	0.6	0.6	0.6	2.3
42.5°	10.4	6.3	5.8	4.0	6.9
45°	6.9	10.9	5.8	6.3	10.4
47.5°	0.0	0.6	0.0	1.2	1.2
50°	0.0	1.2	1.7	2.3	5.8
52.5°	1.2	6.9	3.5	6.3	9.2
55°	0.0	0.6	0.0	0.6	2.3
57.5°	2.3	1.2	2.3	2.3	10.4
60°	0.0	1.2	0.6	0.6	2.3
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	1.2
67.5°	0.0	0.6	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.6	0.0	0.0
80°	0.0	0.6	0.0	0.0	0.0
82.5°	0.0	0.6	1.2	1.7	1.2
85°	0.0	0.6	0.6	0.6	2.3
87.5°	0.0	1.2	1.7	0.0	1.2
90°	0.0	0.0	0.0	0.0	0.0



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







70°	0.0	1.7	2.3	0.0	4.6
72.5°	0.0	2.9	0.6	0.6	0.0



(END OF REPORT)