

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: P314852

Luminaire Tested: **LDA2B20SP9030D010 PIN1MB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P314852
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-8)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDA2B20SP9030D010 PIN1MB
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in
Adj PinHole, Black oculus black finish
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1615.5 lumens
Efficiency: N/A
Efficacy: 78.4 lumens/watt
Spacing Criteria (0/90/45): 0.32 / 0.3 / 0.32
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

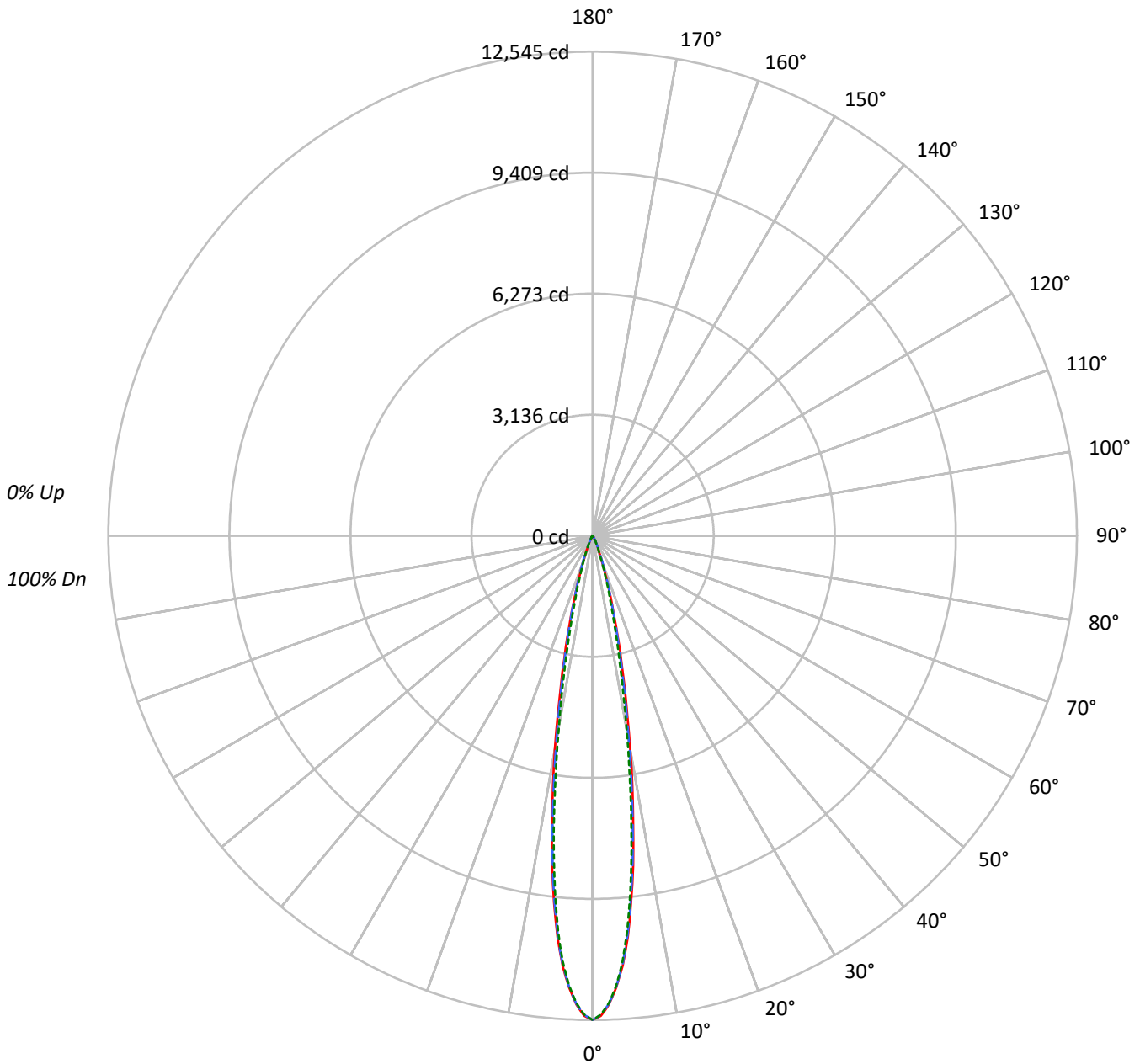
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6189273	6189273	6189273
5°	5170867	5146105	5085239
10°	2817270	2707507	2534220
15°	1116942	1088493	934395
20°	375288	401014	331396
25°	130212	140718	124986
30°	47626	52012	50930
35°	30656	35896	27223
40°	16101	19192	19772
45°	14722	11373	10745
50°	8827	5910	4452
55°	0	0	0
60°	5723	5723	1875
65°	4436	1167	0
70°	0	4183	5481
75°	0	9150	0
80°	0	0	0
85°	0	5661	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	820.2	50.8
10°-20°	610.5	37.8
20°-30°	135.0	8.4
30°-40°	30.0	1.9
40°-50°	12.3	0.8
50°-60°	2.0	0.1
60°-70°	2.1	0.1
70°-80°	1.7	0.1
80°-90°	1.6	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°	1565.8	96.9
0°-40°	1595.8	98.8
0°-60°	1610.1	99.7
0°-90°	1615.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1615.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	12545	12545	12545	12545	12545	
5°	10441	10398	10391	10352	10268	832
15°	2187	2180	2131	1932	1829	643
25°	239	267	258	239	230	130
35°	51	51	60	48	45	29
45°	21	17	16	16	15	13
55°	0	0	0	0	0	3
65°	4	2	1	0	0	4
75°	0	0	5	0	0	1
85°	0	1	1	3	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	12545.1	12545.1	12545.1	12545.1	12545.1
1°	12442.3	12391.4	12416.4	12430.8	12409.7
2°	12152.2	12090.7	12130.1	12133.9	12112.8
3°	11719.8	11692.0	11704.4	11709.2	11667.0
4°	11166.4	11126.0	11134.7	11124.1	11072.2
5°	10441.0	10397.8	10391.0	10351.6	10268.1
6°	9554.2	9529.2	9484.0	9416.8	9305.3
7°	8603.9	8583.8	8505.9	8384.9	8256.1
8°	7562.4	7562.4	7450.0	7282.9	7135.8
9°	6576.7	6540.2	6397.0	6195.2	6053.0
10°	5623.6	5574.6	5404.5	5199.8	5058.6
11°	4721.4	4669.5	4506.1	4296.7	4166.0
12°	3942.2	3914.3	3787.5	3556.9	3426.2
13°	3284.0	3247.5	3136.0	2917.9	2806.5
14°	2710.4	2664.3	2574.9	2375.1	2266.5
15°	2186.8	2180.1	2131.1	1932.2	1829.4
16°	1787.1	1783.2	1737.1	1543.0	1500.8
17°	1434.5	1454.6	1441.2	1262.5	1214.4
18°	1116.4	1156.8	1166.4	1005.0	957.0
19°	898.3	936.8	953.1	811.9	771.5
20°	714.8	751.3	763.8	658.1	631.2
22.5°	405.5	454.5	456.4	401.6	373.8
25°	239.2	267.1	258.5	239.2	229.6
26°	200.8	227.7	214.3	208.5	200.8
27°	169.1	187.4	176.8	167.2	173.9
28°	140.3	152.8	142.2	145.1	134.5
29°	111.5	132.6	117.2	120.1	111.5
30°	83.6	102.8	91.3	96.1	89.4
32.5°	62.5	68.2	60.5	68.2	68.2
35°	50.9	50.9	59.6	48.0	45.2
37.5°	23.1	18.3	20.2	16.3	19.2
40°	25.0	27.9	29.8	25.0	30.7
42.5°	17.3	23.1	23.1	15.4	26.9
45°	21.1	17.3	16.3	16.3	15.4
47.5°	9.6	6.7	7.7	8.6	13.5
50°	11.5	4.8	7.7	11.5	5.8
52.5°	3.8	0.0	4.8	0.0	1.9
55°	0.0	0.0	0.0	0.0	0.0
57.5°	0.0	0.0	1.0	1.9	0.0
60°	5.8	6.7	5.8	3.8	1.9
62.5°	9.6	1.9	2.9	3.8	0.0
65°	3.8	1.9	1.0	0.0	0.0
67.5°	0.0	0.0	2.9	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	4.8	0.0	0.0
77.5°	1.9	0.0	3.8	0.0	0.0
80°	0.0	1.9	0.0	0.0	0.0
82.5°	0.0	0.0	4.8	3.8	0.0
85°	0.0	1.0	1.0	2.9	0.0
87.5°	0.0	2.9	3.8	1.0	1.9
90°	0.0	0.0	0.0	0.0	0.0



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







70°	0.0	0.0	2.9	1.9	3.8
72.5°	0.0	1.0	3.8	5.8	1.9



(END OF REPORT)