

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: P282763

Luminaire Tested: **LDA2B209024D010 EU2B20NFL259024 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282763
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1809-951-26)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDA2B209024D010 EU2B20NFL259024 2LBALPINSQ1MMS
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MMS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1218.3 lumens
Efficiency: N/A
Efficacy: 59.1 lumens/watt
Spacing Criteria (0/90/45): 0.33 / 0.3 / 0.32
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

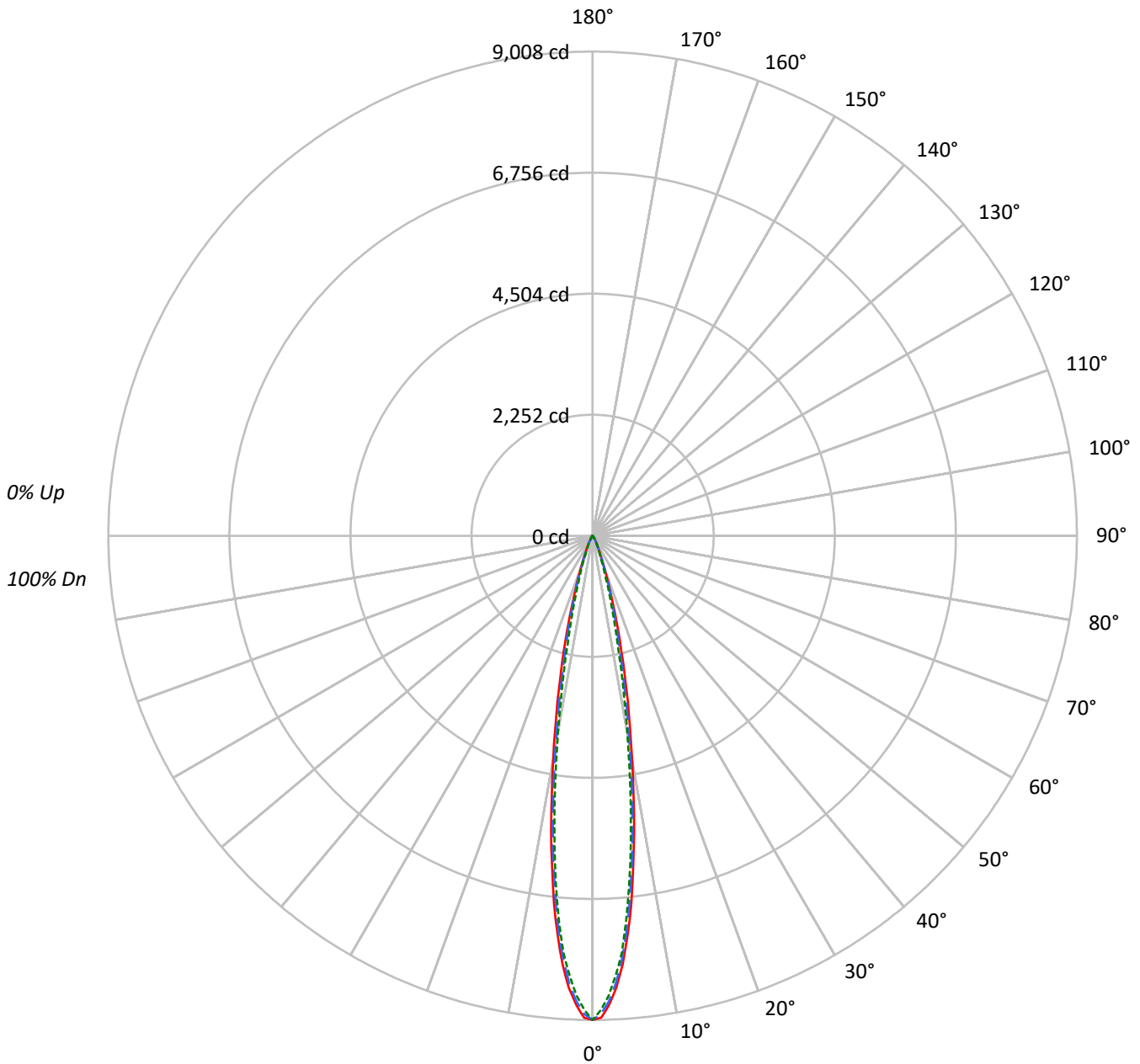
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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	115	113	112	110	113	111	110	108	107	106	105	104	103	102	100	100	99	97																			
2	112	109	106	104	110	107	105	103	104	102	100	101	100	98	99	97	96	95																			
3	109	105	101	99	107	103	100	98	101	99	97	99	97	95	97	95	94	92																			
4	106	101	98	95	105	100	97	94	98	96	93	96	94	92	95	93	91	90																			
5	103	98	94	92	102	97	94	91	96	93	91	94	92	90	93	91	89	88																			
6	101	95	92	89	100	95	91	89	93	90	88	92	90	88	91	89	87	86																			
7	99	93	89	87	98	92	89	86	91	88	86	90	88	86	89	87	85	84																			
8	96	91	87	85	96	90	87	84	89	86	84	88	86	84	88	85	83	83																			
9	94	89	85	83	94	88	85	82	87	84	82	87	84	82	86	84	82	81																			
10	93	87	83	81	92	86	83	81	86	83	81	85	82	80	85	82	80	79																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4444252	4444252	4444252
5°	3698104	3630304	3557008
10°	2118213	1987709	1855102
15°	942158	836736	701179
20°	341791	321368	254584
25°	131246	122536	105498
30°	56570	52639	46714
35°	26802	26802	22164
40°	13396	13847	11206
45°	7745	7256	6768
50°	5296	4835	4835
55°	4215	3011	3613
60°	3454	2072	2763
65°	2452	1634	2452
70°	2019	1010	2019
75°	1334	1334	1334
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	585.9	48.1
10°-20°	474.1	38.9
20°-30°	114.3	9.4
30°-40°	29.1	2.4
40°-50°	8.7	0.7
50°-60°	3.7	0.3
60°-70°	1.8	0.1
70°-80°	0.6	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°	1174.3	96.4
0°-40°	1203.5	98.8
0°-60°	1215.9	99.8
0°-90°	1218.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1218.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9008	9008	9008	9008	9008	
5°	7467	7398	7330	7266	7182	604
15°	1845	1801	1638	1476	1373	526
25°	241	242	225	204	194	125
35°	44	45	44	40	37	31
45°	11	11	10	10	10	9
55°	5	4	4	4	4	4
65°	2	2	1	1	2	2
75°	1	1	1	1	1	1
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°	9008.1	9008.1	9008.1	9008.1	9008.1
1°	8967.8	8905.3	8897.6	8936.6	8821.9
2°	8738.6	8694.1	8668.4	8691.3	8561.4
3°	8423.8	8380.8	8334.2	8334.9	8189.7
4°	7995.2	7961.1	7882.6	7859.0	7774.9
5°	7467.2	7398.4	7330.3	7266.4	7182.3
6°	6883.6	6794.6	6697.4	6602.2	6516.0
7°	6197.2	6138.1	6009.6	5879.7	5806.7
8°	5551.7	5456.6	5306.5	5143.9	5082.1
9°	4857.7	4789.6	4617.3	4428.3	4366.5
10°	4228.2	4157.4	3967.7	3757.2	3703.0
11°	3637.7	3571.0	3373.7	3152.8	3095.1
12°	3138.2	3043.7	2817.2	2625.5	2569.2
13°	2640.7	2576.1	2361.5	2171.8	2062.7
14°	2217.6	2164.1	1969.6	1802.9	1687.5
15°	1844.6	1800.8	1638.2	1475.6	1372.8
16°	1513.2	1486.1	1357.5	1200.5	1116.5
17°	1227.6	1202.6	1120.6	976.1	905.3
18°	991.4	987.9	919.8	794.8	731.6
19°	815.6	814.2	751.7	646.8	594.7
20°	651.0	660.0	612.1	520.4	484.9
21°	530.8	535.7	497.4	428.0	396.0
22°	432.1	435.6	410.6	353.6	336.3
23°	354.3	356.4	335.6	293.2	277.9
24°	291.8	293.2	274.4	244.6	231.4
25°	241.1	242.5	225.1	204.3	193.8
26°	200.1	201.5	186.2	171.6	161.2
27°	166.0	168.8	153.5	144.5	133.4
28°	141.7	142.4	128.5	123.0	112.5
29°	116.0	120.2	108.4	103.5	95.9
30°	99.3	101.4	92.4	88.9	82.0
32.5°	66.0	67.4	63.2	60.4	54.9
35°	44.5	45.2	44.5	40.3	36.8
37.5°	30.6	30.6	31.3	26.4	25.0
40°	20.8	20.8	21.5	18.1	17.4
42.5°	15.3	15.3	14.6	12.5	12.5
45°	11.1	11.1	10.4	9.7	9.7
47.5°	9.0	8.3	7.6	7.6	7.6
50°	6.9	6.9	6.3	5.6	6.3
52.5°	5.6	5.6	4.9	4.9	4.9
55°	4.9	4.2	3.5	3.5	4.2
57.5°	3.5	3.5	2.8	2.8	3.5
60°	3.5	2.8	2.1	2.8	2.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	2.1	1.4	1.4	1.4	1.4
70°	1.4	1.4	0.7	0.7	1.4
72.5°	0.7	0.7	0.7	0.7	0.7
75°	0.7	0.7	0.7	0.7	0.7
77.5°	0.7	0.7	0.0	0.0	0.7
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°







62.5°	2.8	2.1	2.1	2.1	2.1
65°	2.1	2.1	1.4	1.4	2.1



(END OF REPORT)