

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: P283768

Luminaire Tested: **LDA2B209040D010 EU2B20FL409040 2LBAPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P283768
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1809-951-15)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDA2B209040D010 EU2B20FL409040 2LBAPINSQ1MMS
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in Adj SQ PinHole, MMS

Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1490.3 lumens
Efficiency: N/A
Efficacy: 72.3 lumens/watt
Spacing Criteria (0/90/45): 0.55 / 0.55 / 0.55
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

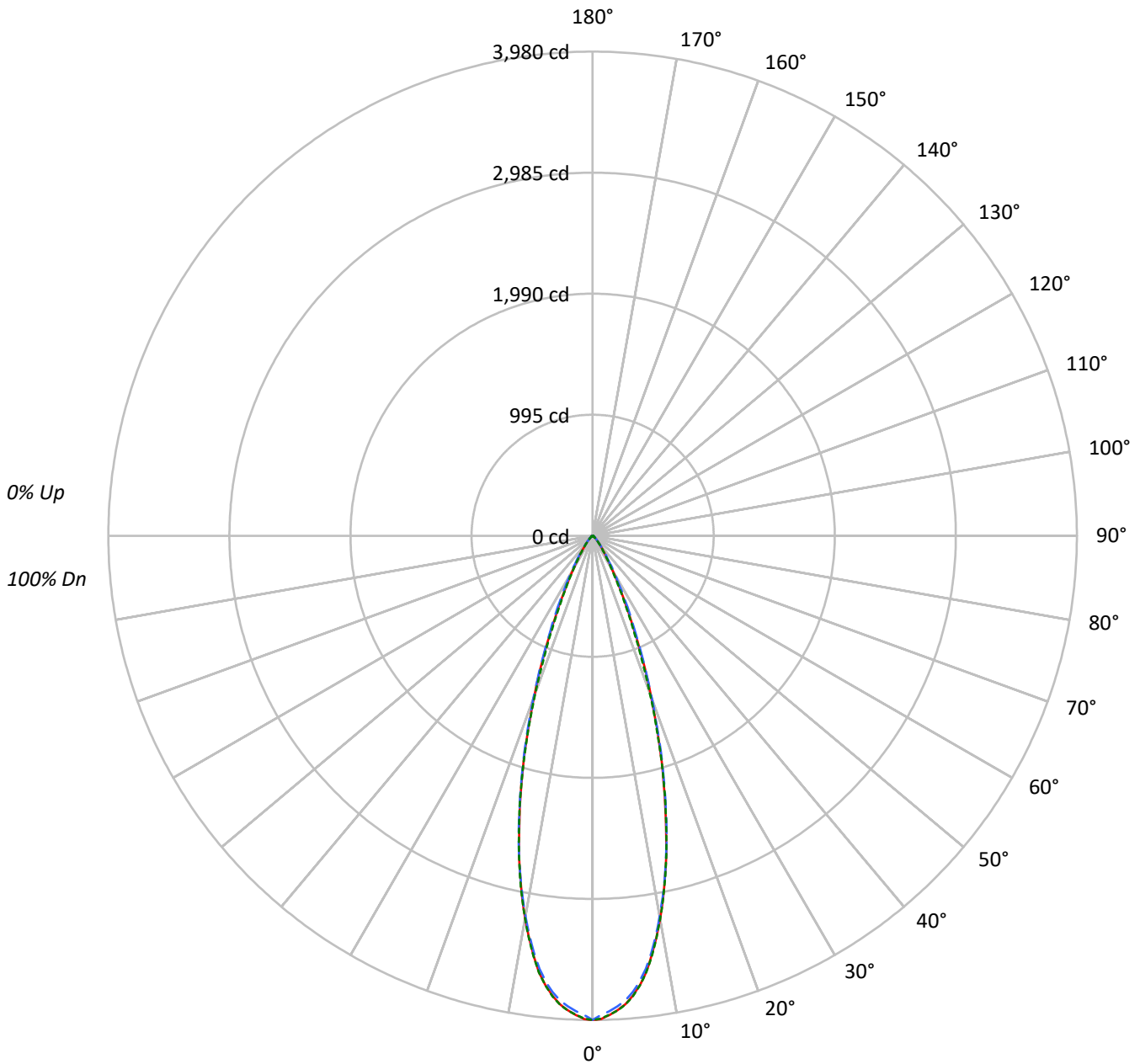
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95																			
2	110	106	102	99	108	104	101	98	101	98	96	98	96	94	95	93	92	90																			
3	105	100	96	92	104	99	95	92	96	93	90	94	91	89	92	89	88	86																			
4	101	95	90	87	100	94	90	86	92	88	85	90	87	84	88	86	83	82																			
5	98	91	86	82	96	90	85	82	88	84	81	86	83	80	85	82	80	79																			
6	94	87	82	78	93	86	81	78	84	80	77	83	80	77	82	79	76	75																			
7	91	83	78	75	89	82	78	74	81	77	74	80	76	74	79	76	73	72																			
8	87	80	75	71	86	79	74	71	78	74	71	77	73	71	76	73	70	69																			
9	84	77	72	69	83	76	72	68	75	71	68	74	71	68	74	70	68	67																			
10	82	74	69	66	81	73	69	66	73	69	66	72	68	65	71	68	65	64																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1963580	1963580	1963580
5°	1879163	1865048	1882035
10°	1600958	1590889	1602612
15°	1179971	1187683	1183853
20°	736610	750208	720386
25°	380511	408273	361404
30°	182413	209131	173868
35°	94197	104255	88114
40°	52747	55452	50106
45°	32095	32095	30909
50°	16656	20570	16656
55°	8602	13676	9376
60°	9867	9867	9867
65°	10740	10740	10740
70°	13271	12117	13271
75°	12772	12772	12772
80°	11933	11933	11933
85°	9623	9623	9623



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	342.3	23.0
10°-20°	628.8	42.2
20°-30°	340.9	22.9
30°-40°	109.4	7.3
40°-50°	37.3	2.5
50°-60°	13.1	0.9
60°-70°	9.5	0.6
70°-80°	7.0	0.5
80°-90°	2.0	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°	1312.1	88.0
0°-40°	1421.5	95.4
0°-60°	1471.9	98.8
0°-90°	1490.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1490.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3980	3980	3980	3980	3980	
5°	3794	3771	3766	3804	3800	343
15°	2310	2330	2325	2336	2318	626
25°	699	731	750	698	664	335
35°	156	163	173	157	146	105
45°	46	47	46	46	44	37
55°	10	12	16	12	11	11
65°	9	10	9	10	9	9
75°	7	7	7	7	7	7
85°	2	2	2	2	2	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3980.0	3980.0	3980.0	3980.0	3980.0
1°	3973.3	3944.9	3940.7	3977.5	3969.1
2°	3941.5	3914.8	3910.6	3947.4	3939.8
3°	3906.4	3882.1	3873.8	3912.2	3907.2
4°	3859.6	3837.0	3829.5	3867.9	3863.8
5°	3794.4	3770.9	3765.9	3803.6	3800.2
6°	3714.1	3694.9	3685.7	3723.3	3716.6
7°	3613.8	3596.2	3586.2	3613.8	3617.1
8°	3483.3	3475.0	3463.2	3490.8	3490.8
9°	3344.5	3337.0	3324.5	3349.5	3349.5
10°	3195.7	3190.7	3175.6	3199.0	3199.0
11°	3032.6	3030.1	3019.3	3038.5	3038.5
12°	2861.2	2867.1	2857.1	2873.8	2867.9
13°	2689.8	2687.3	2688.2	2700.7	2691.5
14°	2495.8	2510.9	2513.4	2520.9	2506.7
15°	2310.2	2329.5	2325.3	2336.1	2317.8
16°	2120.4	2142.2	2141.3	2143.8	2126.3
17°	1943.2	1955.7	1956.5	1954.0	1932.3
18°	1754.2	1771.8	1771.8	1767.6	1741.7
19°	1569.4	1582.8	1592.0	1582.8	1552.7
20°	1403.0	1412.2	1428.9	1405.5	1372.1
21°	1243.3	1251.7	1265.9	1238.3	1201.5
22°	1090.3	1101.2	1114.6	1082.8	1044.3
23°	947.3	972.4	977.4	934.0	901.3
24°	816.1	844.5	852.9	808.5	774.3
25°	699.0	730.8	750.0	698.2	663.9
26°	597.8	628.8	652.2	600.3	567.7
27°	509.2	541.8	566.1	517.6	486.6
28°	433.1	464.9	490.0	444.8	415.6
29°	376.3	394.7	419.7	382.1	355.4
30°	320.2	340.3	367.1	328.6	305.2
32.5°	219.9	230.8	251.7	228.3	209.9
35°	156.4	163.0	173.1	157.2	146.3
37.5°	111.2	114.5	120.4	111.2	105.4
40°	81.9	83.6	86.1	81.1	77.8
42.5°	61.0	61.9	61.9	60.2	58.5
45°	46.0	46.8	46.0	46.0	44.3
47.5°	33.4	36.0	35.1	35.1	32.6
50°	21.7	26.8	26.8	25.9	21.7
52.5°	13.4	18.4	20.9	18.4	14.2
55°	10.0	12.5	15.9	12.5	10.9
57.5°	10.0	10.0	11.7	10.0	10.0
60°	10.0	10.0	10.0	10.0	10.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	9.2	9.2	9.2	9.2	9.2
70°	9.2	9.2	8.4	9.2	9.2
72.5°	8.4	8.4	7.5	8.4	7.5
75°	6.7	6.7	6.7	6.7	6.7
77.5°	5.0	5.0	5.0	5.0	5.0
80°	4.2	4.2	4.2	4.2	4.2
82.5°	2.5	2.5	2.5	3.3	2.5
85°	1.7	1.7	1.7	1.7	1.7
87.5°	0.8	0.8	0.8	0.8	0.8
90°	0.0	0.0	0.0	0.0	0.0



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







62.5°	10.0	10.0	10.0	10.0	10.0
65°	9.2	10.0	9.2	10.0	9.2



(END OF REPORT)