

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: P283756

Luminaire Tested: **LDA2B209030D010 EU2B20FL409030 2LBAPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P283756
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: LDA2B209030D010 EU2B20FL409030 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: 1405.7 lumens
Efficiency: N/A
Efficacy: 68.2 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

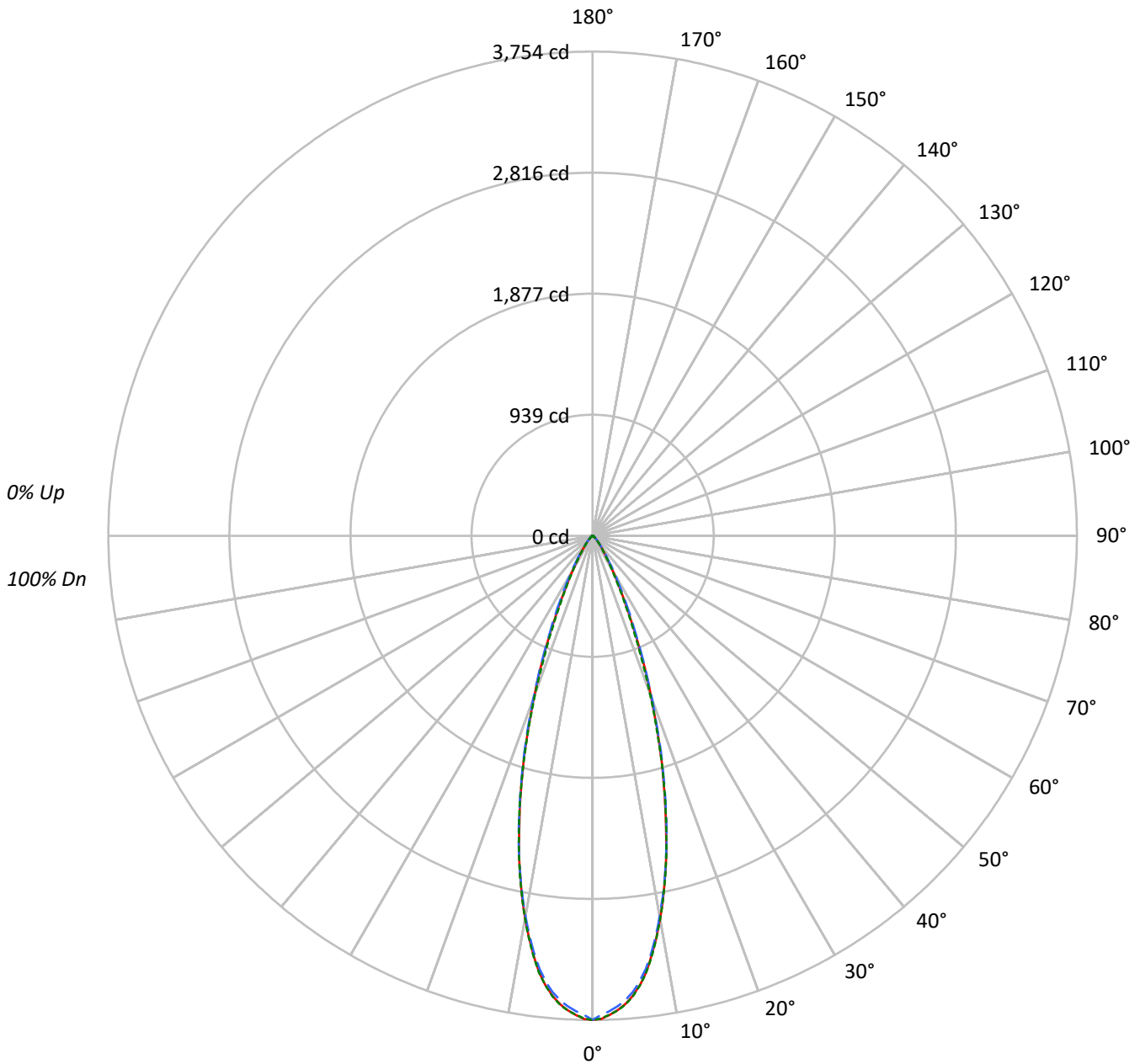
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1852031	1852031	1852031
5°	1772388	1759115	1775111
10°	1509982	1500513	1511585
15°	1112958	1120211	1116585
20°	694765	707628	679434
25°	358900	385083	340881
30°	172045	197225	163955
35°	88837	98293	83115
40°	49784	52296	47208
45°	30281	30281	29165
50°	15734	19342	15734
55°	8171	12902	8860
60°	9374	9374	9374
65°	10156	10156	10156
70°	12550	11396	12550
75°	12009	12009	12009
80°	11081	11081	11081
85°	9057	9057	9057



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	322.9	23.0
10°-20°	593.1	42.2
20°-30°	321.5	22.9
30°-40°	103.2	7.3
40°-50°	35.2	2.5
50°-60°	12.3	0.9
60°-70°	9.0	0.6
70°-80°	6.5	0.5
80°-90°	1.9	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°	1237.5	88.0
0°-40°	1340.7	95.4
0°-60°	1388.3	98.8
0°-90°	1405.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1405.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3754	3754	3754	3754	3754	
5°	3579	3557	3552	3588	3584	324
15°	2179	2197	2193	2203	2186	591
25°	659	689	707	658	626	316
35°	148	154	163	148	138	99
45°	43	44	43	43	42	35
55°	10	12	15	12	10	10
65°	9	10	9	10	9	9
75°	6	6	6	6	6	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°	3753.9	3753.9	3753.9	3753.9	3753.9
1°	3747.5	3720.7	3716.8	3751.5	3743.6
2°	3717.6	3692.3	3688.4	3723.1	3716.0
3°	3684.5	3661.6	3653.7	3690.0	3685.2
4°	3640.3	3619.0	3611.9	3648.2	3644.2
5°	3578.8	3556.7	3552.0	3587.5	3584.3
6°	3503.1	3484.9	3476.3	3511.7	3505.4
7°	3408.4	3391.9	3382.4	3408.4	3411.6
8°	3285.4	3277.5	3266.5	3292.5	3292.5
9°	3154.5	3147.4	3135.6	3159.2	3159.2
10°	3014.1	3009.4	2995.2	3017.3	3017.3
11°	2860.3	2858.0	2847.7	2865.9	2865.9
12°	2698.7	2704.2	2694.7	2710.5	2705.0
13°	2537.0	2534.6	2535.4	2547.3	2538.6
14°	2354.0	2368.2	2370.6	2377.7	2364.3
15°	2179.0	2197.1	2193.2	2203.4	2186.1
16°	2000.0	2020.5	2019.7	2022.0	2005.5
17°	1832.8	1844.6	1845.4	1843.0	1822.5
18°	1654.5	1671.1	1671.1	1667.2	1642.7
19°	1480.2	1492.9	1501.5	1492.9	1464.5
20°	1323.3	1332.0	1347.8	1325.7	1294.1
21°	1172.7	1180.6	1194.0	1168.0	1133.3
22°	1028.4	1038.6	1051.2	1021.3	985.0
23°	893.5	917.2	921.9	880.9	850.1
24°	769.7	796.5	804.4	762.6	730.3
25°	659.3	689.3	707.4	658.5	626.2
26°	563.9	593.0	615.1	566.2	535.5
27°	480.3	511.0	533.9	488.2	459.0
28°	408.5	438.5	462.1	419.5	391.9
29°	354.9	372.2	395.9	360.4	335.2
30°	302.0	321.0	346.2	309.9	287.8
32.5°	207.4	217.7	237.4	215.3	197.9
35°	147.5	153.8	163.2	148.3	138.0
37.5°	104.9	108.0	113.6	104.9	99.4
40°	77.3	78.9	81.2	76.5	73.3
42.5°	57.6	58.4	58.4	56.8	55.2
45°	43.4	44.2	43.4	43.4	41.8
47.5°	31.5	33.9	33.1	33.1	30.8
50°	20.5	25.2	25.2	24.4	20.5
52.5°	12.6	17.3	19.7	17.3	13.4
55°	9.5	11.8	15.0	11.8	10.3
57.5°	9.5	9.5	11.0	9.5	9.5
60°	9.5	9.5	9.5	9.5	9.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	8.7	8.7	8.7	8.7	8.7
70°	8.7	8.7	7.9	8.7	8.7
72.5°	7.9	7.9	7.1	7.9	7.1
75°	6.3	6.3	6.3	6.3	6.3
77.5°	4.7	4.7	4.7	4.7	4.7
80°	3.9	3.9	3.9	3.9	3.9
82.5°	2.4	2.4	2.4	3.2	2.4
85°	1.6	1.6	1.6	1.6	1.6
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°	9.5	9.5	9.5	9.5	9.5
65°	8.7	9.5	8.7	9.5	8.7



(END OF REPORT)