

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: P283769

Luminaire Tested: **LDA2B209040D010 EU2B20FL409040 2LBALPINSQ1MW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P283769
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 2LBALPINSQ1MW
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MW

Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1422.7 lumens
Efficiency: N/A
Efficacy: 69.1 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

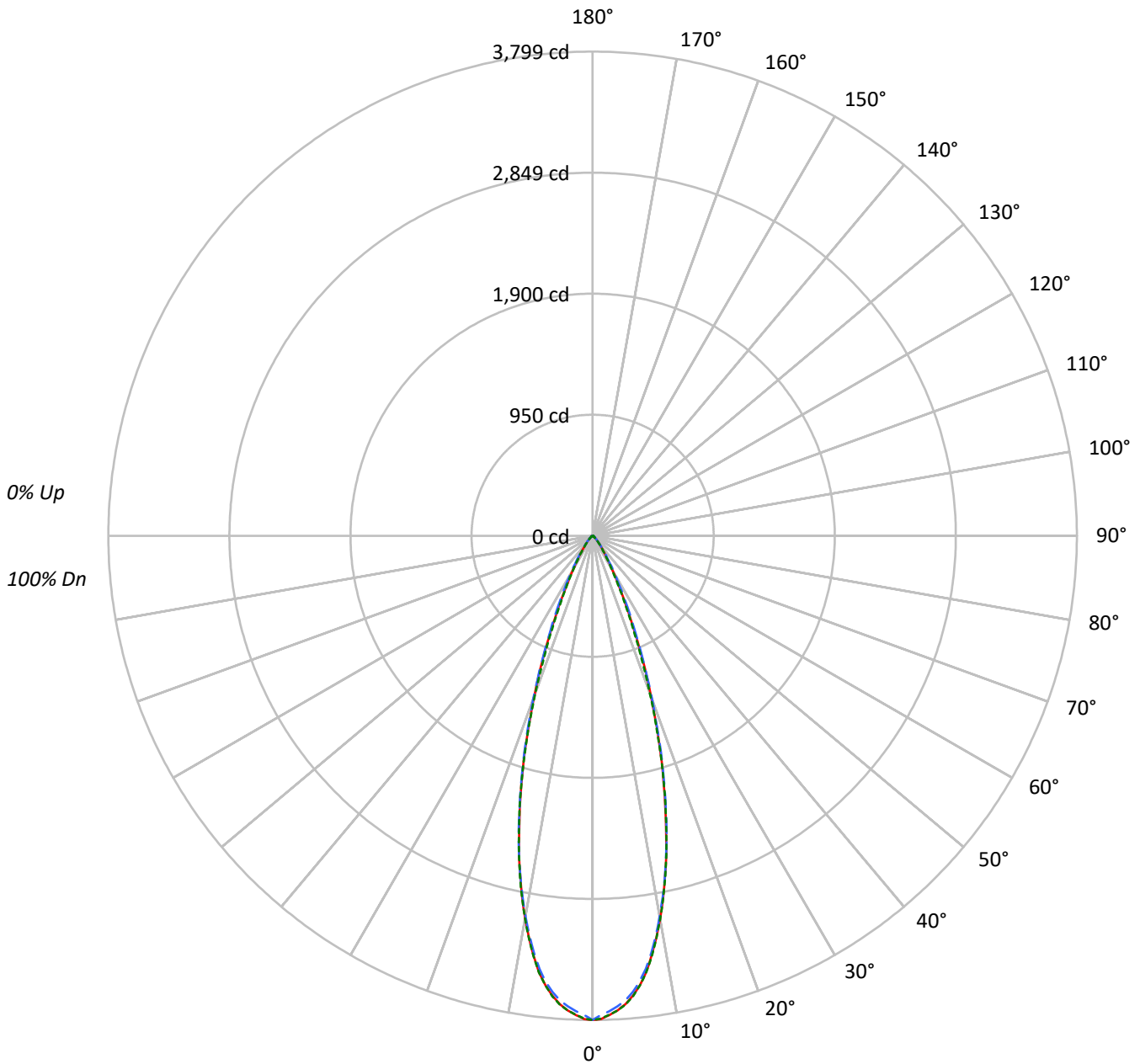
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1874429	1874429	1874429
5°	1793832	1780361	1796605
10°	1528267	1518649	1529870
15°	1126392	1133747	1130069
20°	703166	716186	687677
25°	363254	389765	344964
30°	174153	199618	165949
35°	89921	99497	84139
40°	50364	52940	47788
45°	30630	30630	29514
50°	15965	19572	15965
55°	8257	13074	8946
60°	9473	9473	9473
65°	10273	10273	10273
70°	12694	11540	12694
75°	12200	12200	12200
80°	11365	11365	11365
85°	9057	9057	9057



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	326.8	23.0
10°-20°	600.3	42.2
20°-30°	325.4	22.9
30°-40°	104.5	7.3
40°-50°	35.6	2.5
50°-60°	12.5	0.9
60°-70°	9.1	0.6
70°-80°	6.6	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°	1252.5	88.0
0°-40°	1357.0	95.4
0°-60°	1405.1	98.8
0°-90°	1422.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1422.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3799	3799	3799	3799	3799	
5°	3622	3600	3595	3631	3628	328
15°	2205	2224	2220	2230	2212	598
25°	667	698	716	666	634	320
35°	149	156	165	150	140	101
45°	44	45	44	44	42	35
55°	10	12	15	12	10	11
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°	3799.3	3799.3	3799.3	3799.3	3799.3
1°	3792.9	3765.7	3761.8	3796.9	3788.9
2°	3762.6	3737.0	3733.0	3768.1	3761.0
3°	3729.0	3705.9	3697.9	3734.6	3729.8
4°	3684.3	3662.8	3655.6	3692.3	3688.3
5°	3622.1	3599.7	3594.9	3630.9	3627.7
6°	3545.5	3527.1	3518.3	3554.2	3547.8
7°	3449.7	3432.9	3423.3	3449.7	3452.9
8°	3325.2	3317.2	3306.0	3332.3	3332.3
9°	3192.7	3185.5	3173.5	3197.5	3197.5
10°	3050.6	3045.8	3031.4	3053.8	3053.8
11°	2894.9	2892.6	2882.2	2900.5	2900.5
12°	2731.3	2736.9	2727.3	2743.3	2737.7
13°	2567.7	2565.3	2566.1	2578.1	2569.3
14°	2382.5	2396.9	2399.3	2406.5	2392.9
15°	2205.3	2223.7	2219.7	2230.1	2212.5
16°	2024.2	2044.9	2044.1	2046.5	2029.7
17°	1854.9	1866.9	1867.7	1865.3	1844.6
18°	1674.6	1691.3	1691.3	1687.3	1662.6
19°	1498.2	1510.9	1519.7	1510.9	1482.2
20°	1339.3	1348.1	1364.1	1341.7	1309.8
21°	1186.9	1194.9	1208.4	1182.1	1147.0
22°	1040.8	1051.2	1064.0	1033.6	996.9
23°	904.3	928.3	933.1	891.6	860.4
24°	779.0	806.1	814.1	771.8	739.1
25°	667.3	697.6	716.0	666.5	633.7
26°	570.7	600.2	622.6	573.1	542.0
27°	486.1	517.2	540.4	494.1	464.5
28°	413.5	443.8	467.7	424.6	396.7
29°	359.2	376.7	400.7	364.8	339.2
30°	305.7	324.9	350.4	313.7	291.3
32.5°	209.9	220.3	240.2	217.9	200.3
35°	149.3	155.6	165.2	150.1	139.7
37.5°	106.2	109.3	114.9	106.2	100.6
40°	78.2	79.8	82.2	77.4	74.2
42.5°	58.3	59.1	59.1	57.5	55.9
45°	43.9	44.7	43.9	43.9	42.3
47.5°	31.9	34.3	33.5	33.5	31.1
50°	20.8	25.5	25.5	24.7	20.8
52.5°	12.8	17.6	20.0	17.6	13.6
55°	9.6	12.0	15.2	12.0	10.4
57.5°	9.6	9.6	11.2	9.6	9.6
60°	9.6	9.6	9.6	9.6	9.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	8.8	8.8	8.8	8.8	8.8
70°	8.8	8.8	8.0	8.8	8.8
72.5°	8.0	8.0	7.2	8.0	7.2
75°	6.4	6.4	6.4	6.4	6.4
77.5°	4.8	4.8	4.8	4.8	4.8
80°	4.0	4.0	4.0	4.0	4.0
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°	9.6	9.6	9.6	9.6	9.6
65°	8.8	9.6	8.8	9.6	8.8



(END OF REPORT)