

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: P283729

Luminaire Tested: **LDA2B208035D010 EU2B20FL408035 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283729  
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: LDA2B208035D010 EU2B20FL408035 2LBALPINSQ1MMS  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MMS

Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1645.0 lumens  
Efficiency: N/A  
Efficacy: 79.9 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

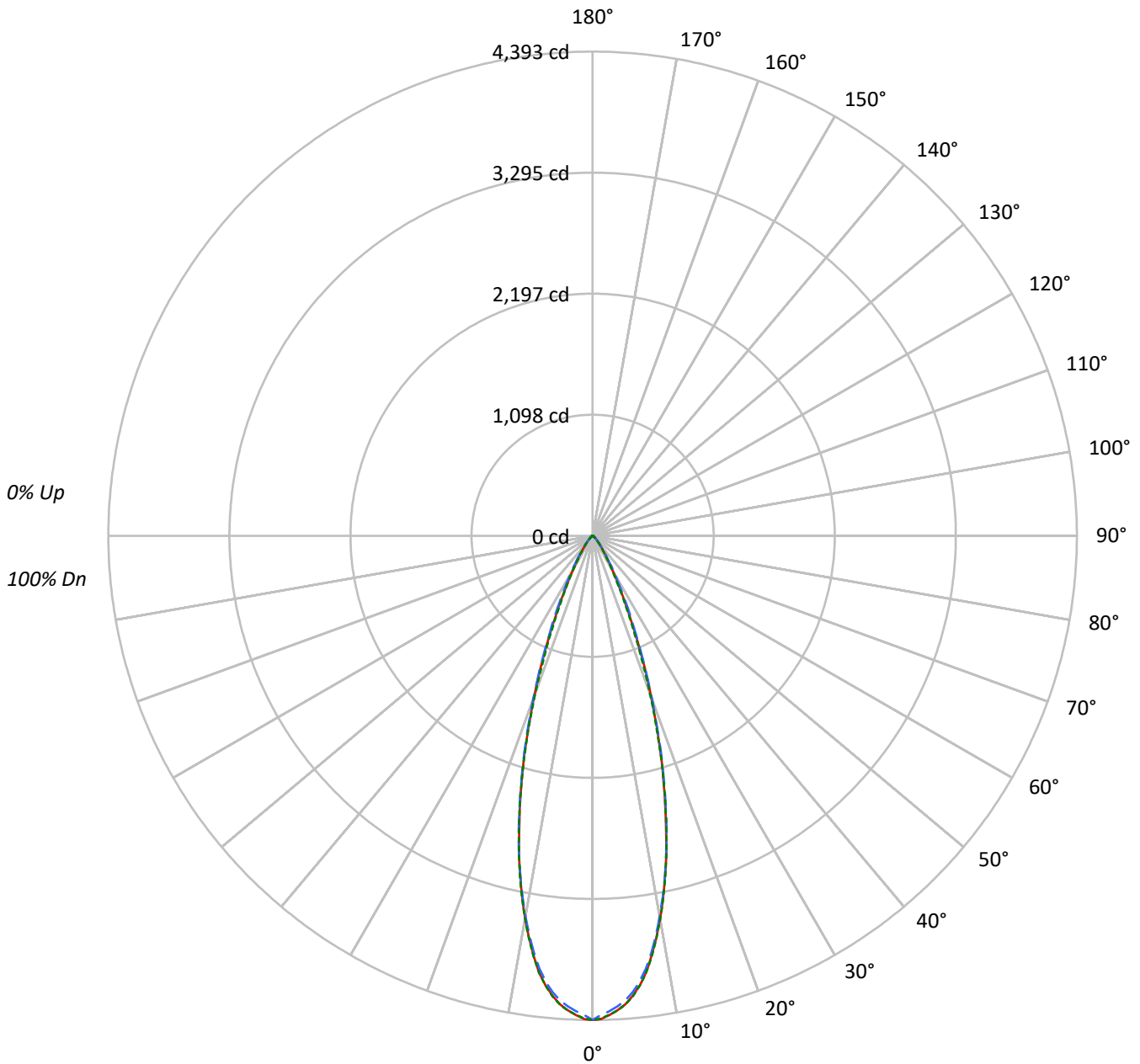
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20					
RC	80					70					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	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	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95					95			
2	110	106	102	99	108	104	101	98	101	98	96	98	96	94	95	93	92	90					90			
3	105	100	96	92	104	99	95	92	96	93	90	94	91	89	92	89	88	86					86			
4	101	95	90	87	100	94	90	86	92	88	85	90	87	84	88	86	83	82					82			
5	98	91	86	82	96	90	85	82	88	84	81	86	83	80	85	82	80	79					79			
6	94	87	82	78	93	86	81	78	84	80	77	83	80	77	82	79	76	75					75			
7	91	83	78	75	89	82	78	74	81	77	74	80	76	74	79	76	73	72					72			
8	87	80	75	71	86	79	74	71	78	74	71	77	73	71	76	73	70	69					69			
9	84	77	72	69	83	76	72	68	75	71	68	74	71	68	74	70	68	67					67			
10	82	74	69	66	81	73	69	66	73	69	66	72	68	65	71	68	65	64					64			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2167388	2167388	2167388
5°	2074191	2058640	2077360
10°	1767131	1756009	1768985
15°	1302453	1310931	1306692
20°	813053	828121	795150
25°	420032	450679	398910
30°	201384	230836	191927
35°	103954	115036	97269
40°	58221	61248	55258
45°	35444	35444	34118
50°	18421	22642	18421
55°	9548	15053	10322
60°	10953	10953	10953
65°	11907	11907	11907
70°	14713	13271	14713
75°	14106	14106	14106
80°	13069	13069	13069
85°	10189	10189	10189



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	377.9	23.0
10°-20°	694.1	42.2
20°-30°	376.3	22.9
30°-40°	120.8	7.3
40°-50°	41.2	2.5
50°-60°	14.4	0.9
60°-70°	10.5	0.6
70°-80°	7.7	0.5
80°-90°	2.2	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°	1448.2	88.0
0°-40°	1569.0	95.4
0°-60°	1624.6	98.8
0°-90°	1645.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1645.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4393	4393	4393	4393	4393	
5°	4188	4162	4157	4198	4195	379
15°	2550	2571	2567	2579	2558	691
25°	772	807	828	771	733	370
35°	173	180	191	174	162	116
45°	51	52	51	51	49	40
55°	11	14	18	14	12	12
65°	10	11	10	11	10	10
75°	7	7	7	7	7	8
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°	4393.1	4393.1	4393.1	4393.1	4393.1
1°	4385.7	4354.3	4349.7	4390.3	4381.1
2°	4350.6	4321.1	4316.5	4357.1	4348.8
3°	4311.8	4285.1	4275.9	4318.3	4312.8
4°	4260.2	4235.2	4226.9	4269.4	4264.8
5°	4188.2	4162.3	4156.8	4198.3	4194.6
6°	4099.6	4078.3	4068.2	4109.7	4102.3
7°	3988.8	3969.4	3958.4	3988.8	3992.5
8°	3844.9	3835.6	3822.7	3853.2	3853.2
9°	3691.6	3683.3	3669.5	3697.2	3697.2
10°	3527.4	3521.8	3505.2	3531.1	3531.1
11°	3347.4	3344.6	3332.6	3353.9	3353.9
12°	3158.2	3164.7	3153.6	3172.0	3165.6
13°	2969.0	2966.2	2967.2	2981.0	2970.9
14°	2754.9	2771.5	2774.3	2782.6	2766.9
15°	2550.0	2571.2	2566.6	2578.6	2558.3
16°	2340.5	2364.5	2363.6	2366.3	2347.0
17°	2144.8	2158.7	2159.6	2156.8	2132.9
18°	1936.3	1955.7	1955.7	1951.0	1922.4
19°	1732.3	1747.1	1757.2	1747.1	1713.8
20°	1548.6	1558.8	1577.3	1551.4	1514.5
21°	1372.4	1381.6	1397.3	1366.8	1326.2
22°	1203.5	1215.5	1230.2	1195.2	1152.7
23°	1045.7	1073.3	1078.9	1030.9	994.9
24°	900.8	932.1	941.4	892.5	854.6
25°	771.6	806.6	827.9	770.6	732.8
26°	659.9	694.0	719.9	662.7	626.7
27°	562.1	598.0	624.8	571.3	537.1
28°	478.1	513.1	540.8	491.0	458.7
29°	415.3	435.6	463.3	421.8	392.2
30°	353.5	375.6	405.2	362.7	336.9
32.5°	242.7	254.7	277.8	252.0	231.7
35°	172.6	180.0	191.0	173.5	161.5
37.5°	122.7	126.4	132.9	122.7	116.3
40°	90.4	92.3	95.1	89.5	85.8
42.5°	67.4	68.3	68.3	66.4	64.6
45°	50.8	51.7	50.8	50.8	48.9
47.5°	36.9	39.7	38.8	38.8	36.0
50°	24.0	29.5	29.5	28.6	24.0
52.5°	14.8	20.3	23.1	20.3	15.7
55°	11.1	13.8	17.5	13.8	12.0
57.5°	11.1	11.1	12.9	11.1	11.1
60°	11.1	11.1	11.1	11.1	11.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	10.2	10.2	10.2	10.2	10.2
70°	10.2	10.2	9.2	10.2	10.2
72.5°	9.2	9.2	8.3	9.2	8.3
75°	7.4	7.4	7.4	7.4	7.4
77.5°	5.5	5.5	5.5	5.5	5.5
80°	4.6	4.6	4.6	4.6	4.6
82.5°	2.8	2.8	2.8	3.7	2.8
85°	1.8	1.8	1.8	1.8	1.8
87.5°	0.9	0.9	0.9	0.9	0.9
90°	0.0	0.0	0.0	0.0	0.0



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







62.5°	11.1	11.1	11.1	11.1	11.1
65°	10.2	11.1	10.2	11.1	10.2



(END OF REPORT)