

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: P225204

Luminaire Tested: **LD2B20D010 EU2B20FL409727 2LBDSQC\*MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P225204  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P14838)  
Test Lab: INNOVATION CENTER (G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD2B20D010 EU2B20FL409727 2LBDSQC\*MB  
Description: 2000 Lumen, 2inch Portfolio LED Downlight  
FLOOD OPTIC  
SQUARE CAST TRIM WITH MATTE BLACK FINISH  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1225.8 lumens  
Efficiency: N/A  
Efficacy: 58.7 lumens/watt  
Spacing Criteria (0/90/45): 0.6 / 0.61 / 0.59  
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')  
CIE Type: Direct

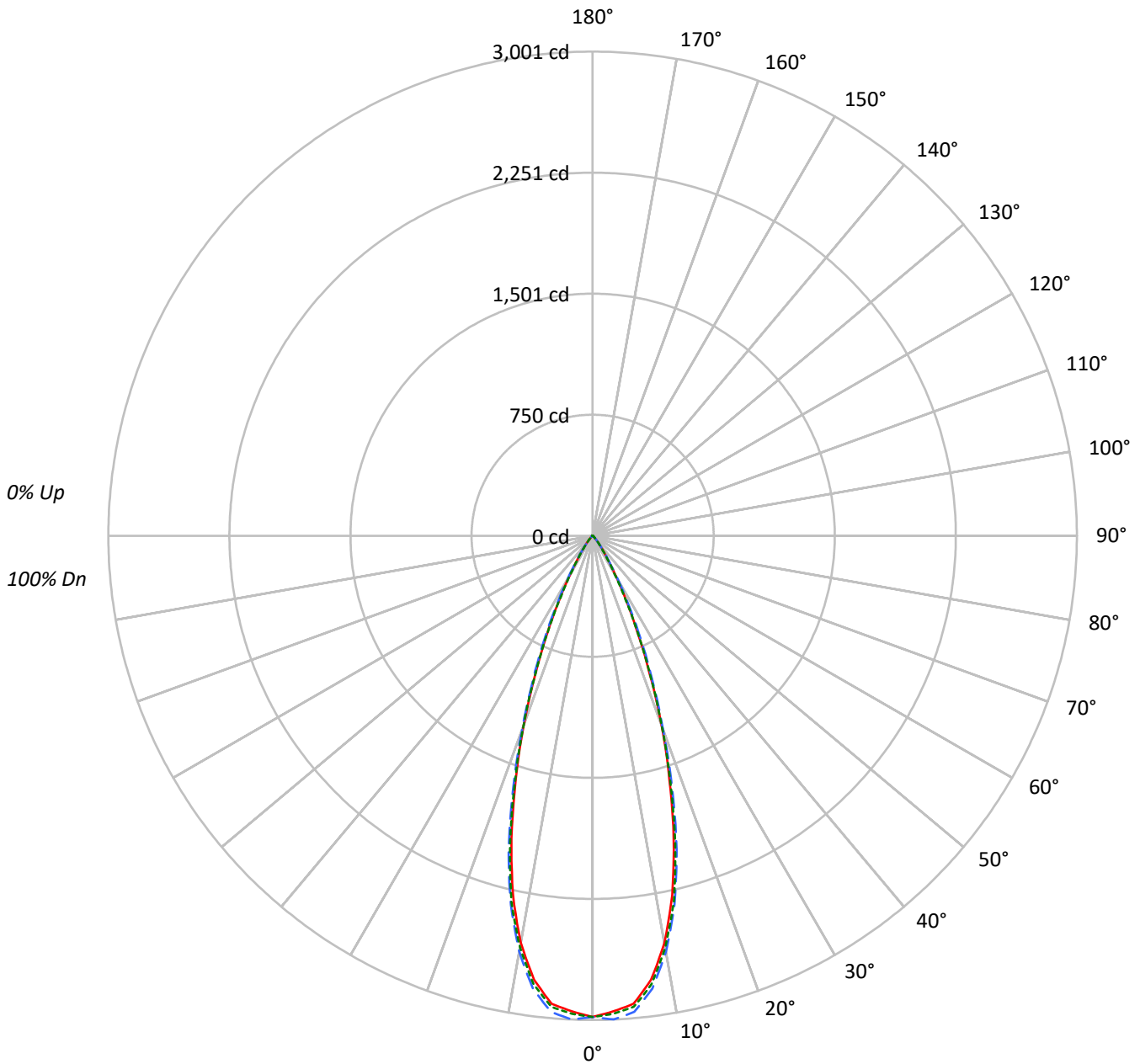
Input Watts (W): 20.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	112	110	108	112	110	108	107	106	105	103	102	101	100	99	98	97	96																			
2	110	106	103	100	108	105	102	99	101	99	97	98	97	95	96	94	93	91																			
3	106	101	97	94	104	99	96	93	97	94	91	95	92	90	92	90	89	87																			
4	102	96	92	88	100	95	91	88	93	89	87	91	88	86	89	87	85	83																			
5	98	92	87	84	97	91	86	83	89	85	82	88	84	82	86	83	81	80																			
6	95	88	83	79	93	87	82	79	86	82	79	84	81	78	83	80	78	77																			
7	91	84	79	76	90	83	79	76	82	78	75	81	78	75	80	77	75	73																			
8	88	81	76	73	87	80	76	73	79	75	72	78	75	72	77	74	72	71																			
9	85	78	73	70	84	77	73	70	76	72	69	76	72	69	75	71	69	68																			
10	82	75	70	67	82	74	70	67	74	70	67	73	69	67	72	69	66	65																			

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

	0°	45°	90°
0°	1155143	1155143	1155143
5°	1132338	1151779	1139453
10°	1007650	1029322	1018820
15°	778561	806632	792596
20°	513566	524572	516328
25°	280153	299386	281564
30°	126085	139503	120852
35°	54426	55987	49698
40°	22754	23614	21085
45°	9148	10025	10025
50°	4037	5002	5002
55°	2229	2229	3377
60°	1317	1317	1317
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	269.6	22.0
10°-20°	536.6	43.8
20°-30°	317.0	25.9
30°-40°	82.5	6.7
40°-50°	16.3	1.3
50°-60°	3.6	0.3
60°-70°	0.3	0.0
70°-80°	0.0	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°	1123.1	91.6
0°-40°	1205.6	98.4
0°-60°	1225.5	100.0
0°-90°	1225.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1225.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2982	2982	2982	2982	2982	
5°	2912	2936	2962	2942	2930	266
15°	1942	1985	2012	1982	1976	527
25°	656	677	700	674	659	309
35°	115	120	118	117	105	81
45°	17	20	18	18	18	15
55°	3	3	3	3	5	4
65°	0	0	0	0	0	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2982.2	2982.2	2982.2	2982.2	2982.2
2.5°	2950.6	2980.6	3000.6	2983.9	2965.6
5°	2912.2	2935.5	2962.2	2942.2	2930.5
7.5°	2775.4	2810.5	2830.5	2820.5	2802.1
10°	2561.9	2588.6	2617.0	2607.0	2590.3
12.5°	2280.1	2316.7	2343.4	2320.1	2323.4
15°	1941.5	1984.8	2011.5	1981.5	1976.5
17.5°	1582.9	1616.2	1634.6	1616.2	1602.9
20°	1245.9	1266.0	1272.6	1264.3	1252.6
22.5°	920.7	942.4	962.4	942.4	927.4
25°	655.5	677.2	700.5	673.8	658.8
27.5°	442.0	455.3	475.4	450.3	428.7
30°	281.9	296.9	311.9	293.6	270.2
32.5°	178.5	188.5	190.1	186.8	166.8
35°	115.1	120.1	118.4	116.8	105.1
37.5°	73.4	73.4	75.1	73.4	66.7
40°	45.0	48.4	46.7	45.0	41.7
42.5°	26.7	30.0	28.4	28.4	26.7
45°	16.7	20.0	18.3	18.3	18.3
47.5°	11.7	13.3	11.7	11.7	13.3
50°	6.7	8.3	8.3	8.3	8.3
52.5°	5.0	5.0	5.0	5.0	6.7
55°	3.3	3.3	3.3	3.3	5.0
57.5°	3.3	3.3	1.7	1.7	3.3
60°	1.7	1.7	1.7	1.7	1.7
62.5°	1.7	0.0	0.0	0.0	1.7
65°	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
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°







(END OF REPORT)