

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: P225200

Luminaire Tested: **LD2B20D010 EU2B20FL409030 2LBDSQC\*MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P225200  
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 EU2B20FL409030 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: 1419.7 lumens  
Efficiency: N/A  
Efficacy: 67.9 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

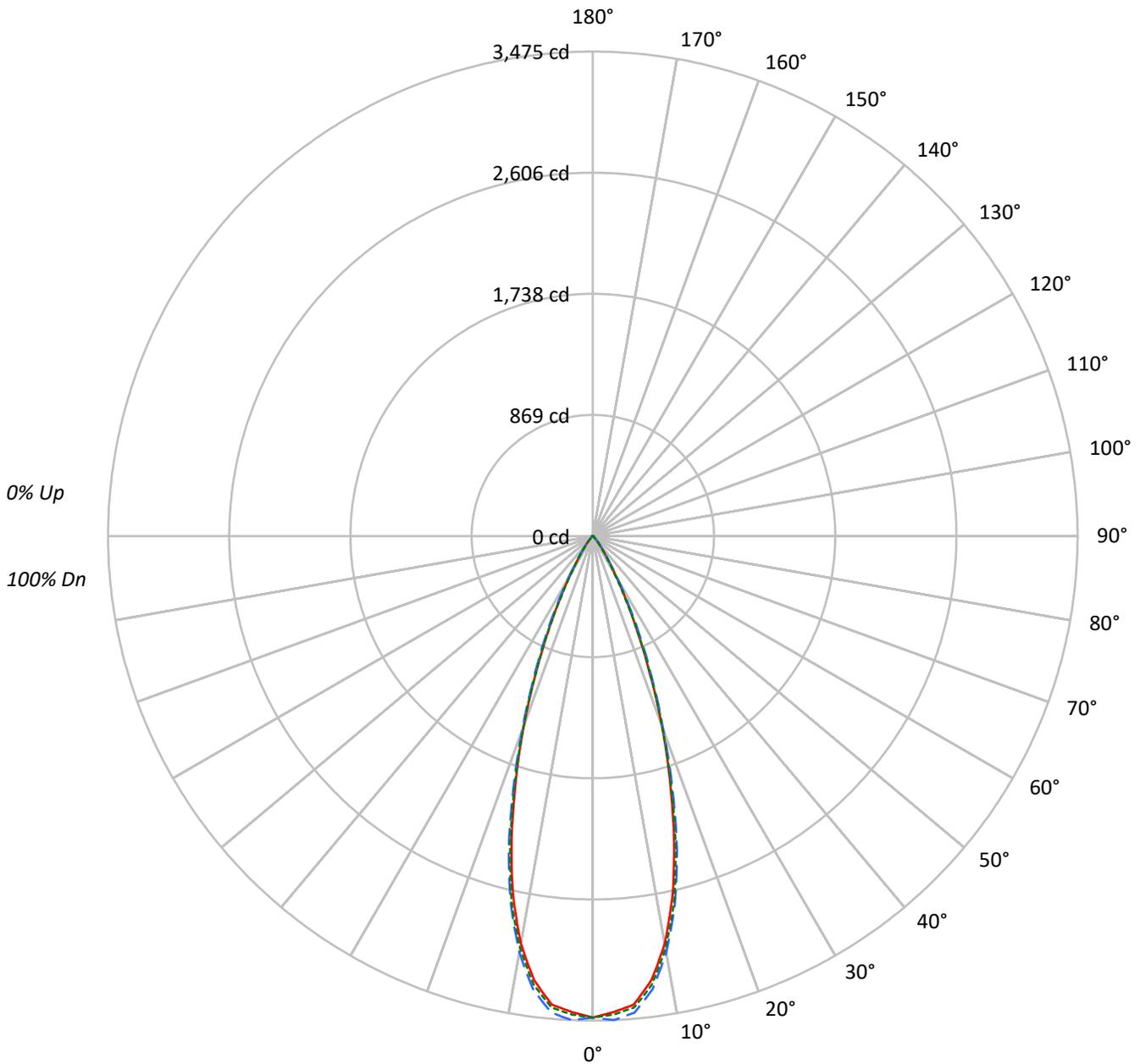
Input Watts (W): 20.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20					20					20					20					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	0					
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100				
1	115	112	110	108	112	110	108	107	106	105	103	102	101	100	99	98	97	96				96				
2	110	106	103	100	108	105	102	99	101	99	97	98	97	95	96	94	93	91				91				
3	106	101	97	94	104	99	96	93	97	94	91	95	92	90	92	90	89	87				87				
4	102	96	92	88	100	95	91	88	93	89	87	91	88	86	89	87	85	83				83				
5	98	92	87	84	97	91	86	83	89	85	82	88	84	82	86	83	81	80				80				
6	95	88	83	79	93	87	82	79	86	82	79	84	81	78	83	80	78	77				77				
7	91	84	79	76	90	83	79	76	82	78	75	81	78	75	80	77	75	73				73				
8	88	81	76	73	87	80	76	73	79	75	72	78	75	72	77	74	72	71				71				
9	85	78	73	70	84	77	73	70	76	72	69	76	72	69	75	71	69	68				68				
10	82	75	70	67	82	74	70	67	74	70	67	73	69	67	72	69	66	65				65				

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

	0°	45°	90°
0°	1337893	1337893	1337893
5°	1311470	1333983	1319713
10°	1167063	1192118	1179964
15°	901711	934233	917952
20°	594812	607549	598027
25°	324474	346741	326098
30°	146033	161553	139950
35°	63033	64877	57547
40°	26395	27355	24423
45°	10572	11613	11613
50°	4640	5845	5845
55°	2634	2634	3917
60°	1472	1472	1472
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°	312.2	22.0
10°-20°	621.5	43.8
20°-30°	367.1	25.9
30°-40°	95.6	6.7
40°-50°	18.9	1.3
50°-60°	4.1	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°	1300.7	91.6
0°-40°	1396.3	98.4
0°-60°	1419.4	100.0
0°-90°	1419.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1419.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3454	3454	3454	3454	3454	
5°	3373	3400	3431	3408	3394	309
15°	2249	2299	2330	2295	2289	610
25°	759	784	811	780	763	358
35°	133	139	137	135	122	93
45°	19	23	21	21	21	18
55°	4	4	4	4	6	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°	3454.0	3454.0	3454.0	3454.0	3454.0
2.5°	3417.3	3452.1	3475.2	3455.9	3434.7
5°	3372.9	3399.9	3430.8	3407.6	3394.1
7.5°	3214.4	3255.0	3278.2	3266.6	3245.4
10°	2967.2	2998.1	3030.9	3019.3	3000.0
12.5°	2640.7	2683.2	2714.1	2687.1	2690.9
15°	2248.6	2298.8	2329.7	2294.9	2289.1
17.5°	1833.2	1871.9	1893.1	1871.9	1856.4
20°	1443.0	1466.2	1473.9	1464.3	1450.8
22.5°	1066.3	1091.4	1114.6	1091.4	1074.1
25°	759.2	784.3	811.3	780.4	763.0
27.5°	511.9	527.4	550.6	521.6	496.5
30°	326.5	343.9	361.2	340.0	312.9
32.5°	206.7	218.3	220.2	216.4	193.2
35°	133.3	139.1	137.2	135.2	121.7
37.5°	85.0	85.0	86.9	85.0	77.3
40°	52.2	56.0	54.1	52.2	48.3
42.5°	30.9	34.8	32.8	32.8	30.9
45°	19.3	23.2	21.2	21.2	21.2
47.5°	13.5	15.5	13.5	13.5	15.5
50°	7.7	9.7	9.7	9.7	9.7
52.5°	5.8	5.8	5.8	5.8	7.7
55°	3.9	3.9	3.9	3.9	5.8
57.5°	3.9	3.9	1.9	1.9	3.9
60°	1.9	1.9	1.9	1.9	1.9
62.5°	1.9	0.0	0.0	0.0	1.9
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)