

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: P281504

Luminaire Tested: **LDA2B109027D010 EU2B10SP159027 2LBASQC1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281504  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-6)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B109027D010 EU2B10SP159027 2LBASQC1MMS  
Description: PORTFOLIO 2IN ADJ 1000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Cast Trim, MMS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 836.4 lumens  
Efficiency: N/A  
Efficacy: 83.6 lumens/watt  
Spacing Criteria (0/90/45): 0.31 / 0.31 / 0.29  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

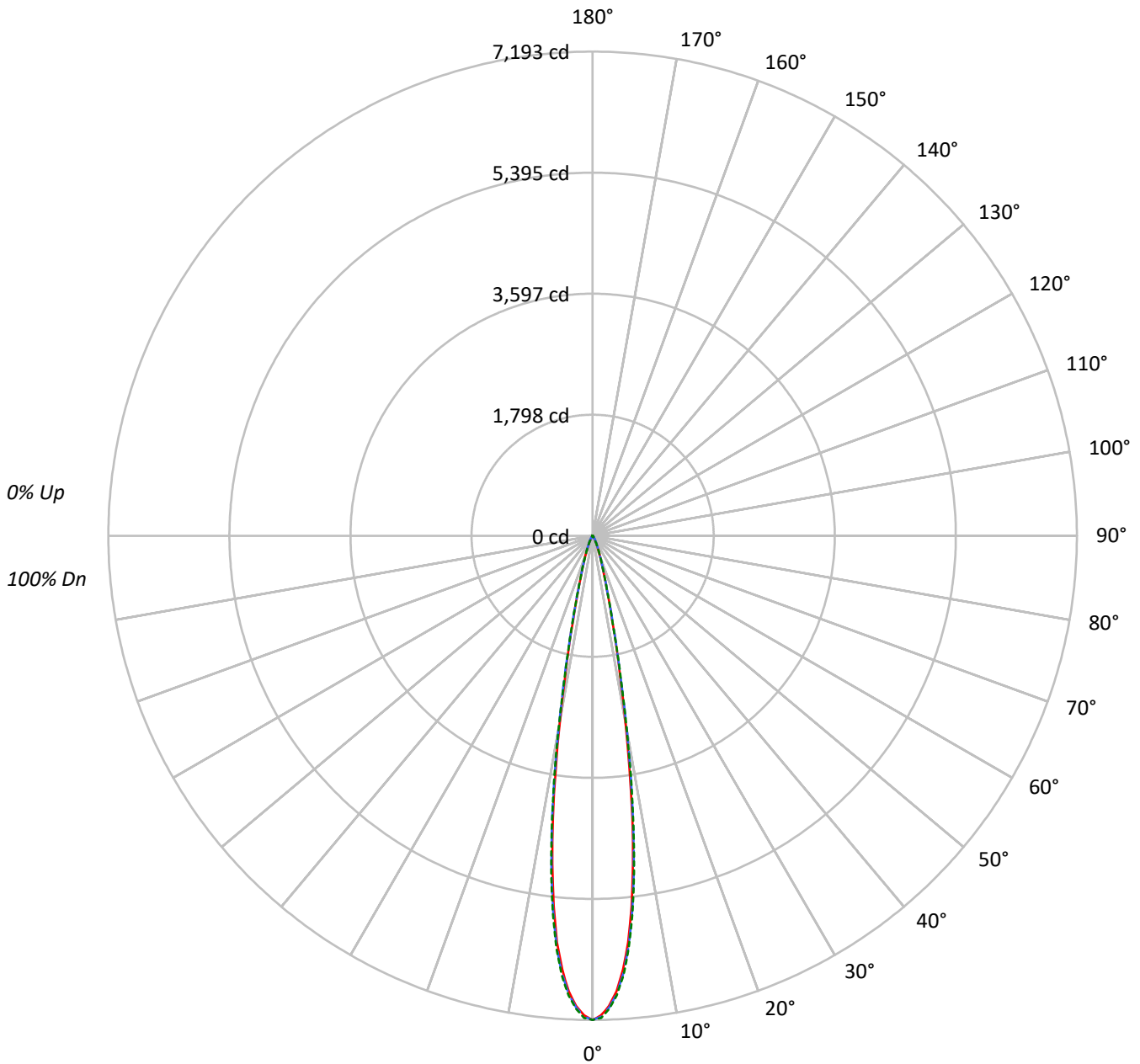
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	116	114	112	111	113	112	110	109	108	107	106	104	103	102	101	100	99	98	97	96					98	
2	113	109	107	105	111	108	105	103	105	103	101	102	100	99	99	98	97	96	95	94					96	
3	110	106	103	100	108	104	102	99	102	100	98	100	98	96	98	96	95	94	93	92					94	
4	107	103	99	97	106	102	99	96	100	97	95	98	96	94	96	95	93	92	91	90					92	
5	105	100	96	94	103	99	96	93	98	95	93	96	94	92	95	93	91	90	89	88					90	
6	103	97	94	91	101	97	94	91	96	93	91	94	92	90	93	91	90	89	88	87					89	
7	100	95	92	89	100	95	91	89	94	91	89	93	90	88	92	90	88	87	86	85					87	
8	99	93	90	88	98	93	90	87	92	89	87	91	89	87	90	88	87	86	85	84					86	
9	97	91	88	86	96	91	88	86	90	88	86	90	87	85	89	87	85	84	83	82					84	
10	95	90	87	84	94	89	86	84	89	86	84	88	86	84	88	85	84	83	82	81					83	

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

	0°	45°	90°
0°	3548801	3548801	3548801
5°	3003620	3035018	3048241
10°	1404527	1457780	1460586
15°	411371	417347	417142
20°	165225	165435	165645
25°	73653	81110	75394
30°	31276	43011	28541
35°	14334	19936	13371
40°	4701	7793	4186
45°	0	2791	0
50°	0	0	0
55°	1376	688	0
60°	0	0	0
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	2273	0	0
85°	4529	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	475.4	56.8
10°-20°	269.4	32.2
20°-30°	70.4	8.4
30°-40°	18.1	2.2
40°-50°	1.8	0.2
50°-60°	0.6	0.1
60°-70°	0.1	0.0
70°-80°	0.6	0.1
80°-90°	0.1	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°	815.2	97.5
0°-40°	833.3	99.6
0°-60°	835.7	99.9
0°-90°	836.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	836.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7193	7193	7193	7193	7193	
5°	6065	6119	6128	6090	6155	469
15°	805	816	817	808	817	264
25°	135	147	149	142	138	67
35°	24	25	33	23	22	16
45°	0	2	4	0	0	1
55°	2	2	1	0	0	1
65°	0	0	0	0	0	0
75°	0	0	0	0	0	2
85°	1	0	0	0	0	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7193.1	7193.1	7193.1	7193.1	7193.1
1°	7125.6	7153.9	7145.4	7135.3	7163.6
2°	6988.3	7015.8	7013.3	7000.0	7033.1
3°	6776.6	6815.0	6815.0	6795.2	6836.4
4°	6461.2	6519.7	6525.4	6497.5	6548.8
5°	6064.9	6119.0	6128.3	6089.6	6155.0
6°	5528.1	5602.0	5623.0	5578.2	5645.2
7°	4911.3	4988.9	5020.8	4970.7	5045.8
8°	4246.1	4301.8	4340.2	4282.8	4359.2
9°	3501.6	3582.0	3617.1	3561.4	3635.7
10°	2803.6	2877.6	2909.9	2896.5	2915.5
11°	2177.6	2243.0	2264.8	2246.6	2255.5
12°	1705.0	1731.2	1745.4	1733.2	1739.3
13°	1294.6	1329.7	1336.2	1330.9	1333.8
14°	1011.0	1028.0	1035.3	1032.8	1034.0
15°	805.4	816.3	817.1	807.8	816.7
16°	648.7	657.2	660.8	651.1	662.8
17°	531.6	538.4	542.5	532.8	537.6
18°	437.5	442.7	448.4	439.9	447.1
19°	367.2	370.4	370.8	368.4	370.4
20°	314.7	313.0	315.1	310.6	315.5
22.5°	207.2	211.3	216.1	210.8	212.9
25°	135.3	146.6	149.0	142.2	138.5
26°	111.5	126.0	132.5	121.6	109.9
27°	92.5	103.0	111.5	96.9	87.7
28°	81.2	90.1	98.6	84.8	73.9
29°	67.9	76.7	91.3	75.5	68.7
30°	54.9	61.4	75.5	57.4	50.1
32.5°	31.1	36.4	48.9	33.9	27.9
35°	23.8	25.4	33.1	22.6	22.2
37.5°	20.6	18.6	25.9	18.6	14.9
40°	7.3	10.9	12.1	8.1	6.5
42.5°	3.2	3.2	5.3	1.6	1.6
45°	0.0	1.6	4.0	0.4	0.0
47.5°	0.0	0.0	0.8	0.0	0.0
50°	0.0	0.8	0.0	0.0	0.0
52.5°	0.8	0.0	0.0	0.0	0.0
55°	1.6	2.0	0.8	0.4	0.0
57.5°	2.4	2.0	0.8	0.8	0.8
60°	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0
67.5°	0.8	0.4	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.4	0.0	0.0	0.0
77.5°	4.0	0.8	1.2	0.8	1.6
80°	0.8	0.0	0.0	0.0	0.0
82.5°	1.6	0.0	0.0	0.0	0.0
85°	0.8	0.0	0.0	0.0	0.0
87.5°	0.0	0.4	0.0	0.4	0.0
90°	0.0	0.0	0.0	0.0	0.0



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







70°	0.0	0.0	0.0	0.0	0.0
72.5°	1.6	1.2	0.0	0.0	1.6



(END OF REPORT)