

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: P281507

Luminaire Tested: **LDA2B109030D010 EU2B10SP159030 2LBASQC1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281507  
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: LDA2B109030D010 EU2B10SP159030 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: 872.7 lumens  
Efficiency: N/A  
Efficacy: 87.3 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

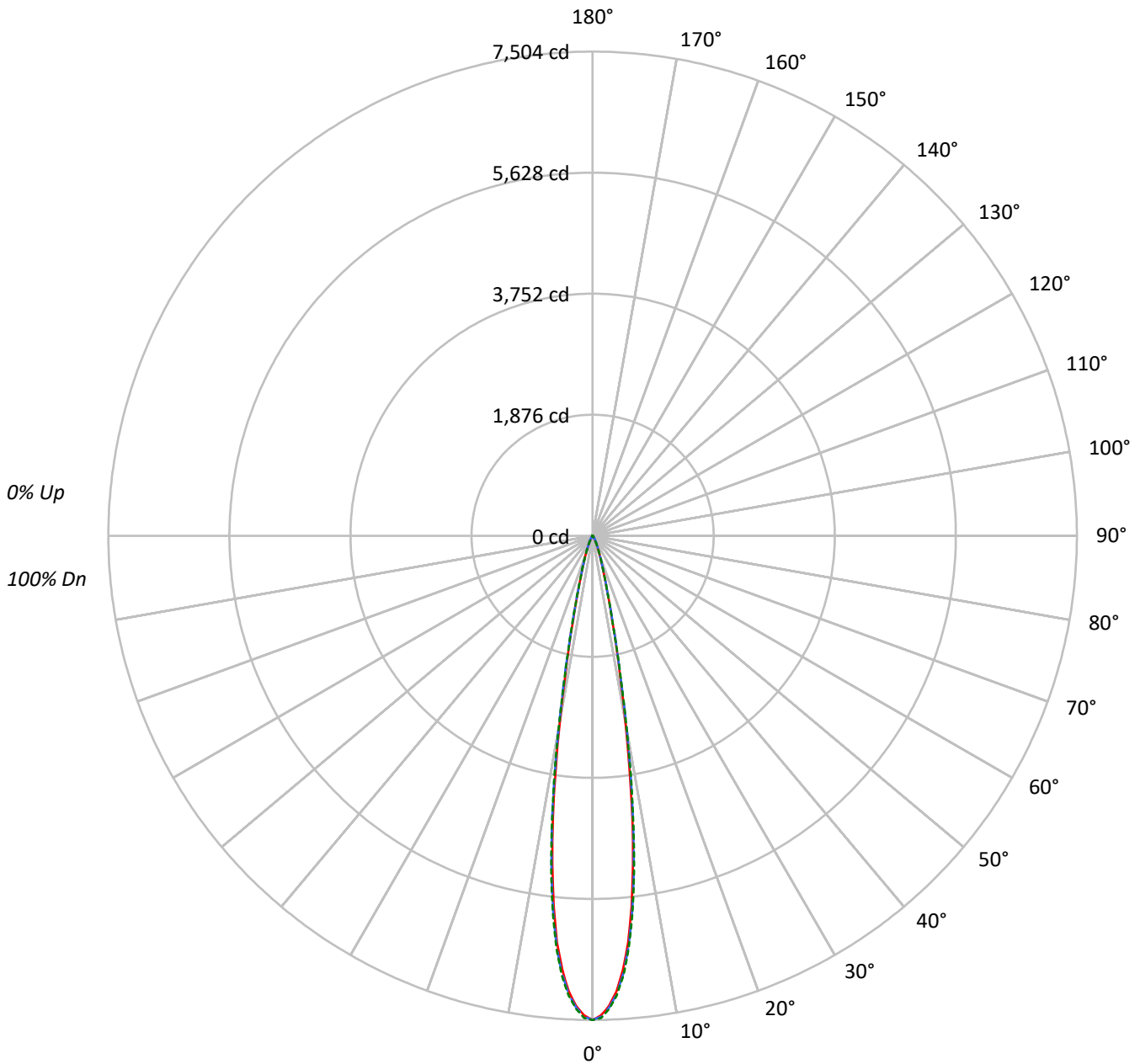
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3702434	3702434	3702434
5°	3133671	3166457	3180224
10°	1465345	1520903	1523859
15°	429196	435428	435223
20°	172366	172576	172786
25°	76864	84649	78661
30°	32643	44891	29795
35°	14997	20839	13973
40°	4895	8115	4315
45°	0	2930	0
50°	0	0	0
55°	1462	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°	496.0	56.8
10°-20°	281.1	32.2
20°-30°	73.4	8.4
30°-40°	18.9	2.2
40°-50°	1.9	0.2
50°-60°	0.6	0.1
60°-70°	0.1	0.0
70°-80°	0.6	0.1
80°-90°	0.2	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°	850.4	97.5
0°-40°	869.4	99.6
0°-60°	871.8	99.9
0°-90°	872.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	872.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7504	7504	7504	7504	7504	
5°	6328	6384	6394	6353	6422	490
15°	840	852	852	843	852	276
25°	141	153	156	148	144	70
35°	25	26	35	24	23	17
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°	7504.5	7504.5	7504.5	7504.5	7504.5
1°	7434.1	7463.6	7454.8	7444.3	7473.8
2°	7290.9	7319.5	7317.0	7303.1	7337.6
3°	7070.0	7110.1	7110.1	7089.4	7132.4
4°	6740.9	6802.0	6807.9	6778.8	6832.4
5°	6327.5	6384.0	6393.7	6353.2	6421.5
6°	5767.5	5844.6	5866.5	5819.7	5889.7
7°	5124.0	5204.9	5238.2	5185.9	5264.3
8°	4429.9	4488.0	4528.1	4468.2	4547.9
9°	3653.2	3737.1	3773.7	3715.6	3793.1
10°	2925.0	3002.1	3035.9	3021.9	3041.8
11°	2271.8	2340.1	2362.9	2343.9	2353.2
12°	1778.8	1806.2	1820.9	1808.3	1814.6
13°	1350.6	1387.3	1394.0	1388.6	1391.5
14°	1054.8	1072.5	1080.1	1077.6	1078.8
15°	840.3	851.7	852.5	842.8	852.1
16°	676.8	685.6	689.4	679.3	691.5
17°	554.6	561.7	566.0	555.8	560.9
18°	456.4	461.9	467.8	458.9	466.5
19°	383.1	386.4	386.9	384.3	386.4
20°	328.3	326.6	328.7	324.1	329.1
22.5°	216.2	220.4	225.5	220.0	222.1
25°	141.2	153.0	155.5	148.3	144.5
26°	116.3	131.5	138.2	126.8	114.6
27°	96.5	107.5	116.3	101.1	91.4
28°	84.7	94.0	102.8	88.5	77.1
29°	70.8	80.1	95.2	78.8	71.6
30°	57.3	64.1	78.8	59.8	52.3
32.5°	32.4	37.9	51.0	35.4	29.1
35°	24.9	26.5	34.6	23.6	23.2
37.5°	21.5	19.4	27.0	19.4	15.6
40°	7.6	11.4	12.6	8.4	6.7
42.5°	3.4	3.4	5.5	1.7	1.7
45°	0.0	1.7	4.2	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°	1.7	2.1	0.8	0.4	0.0
57.5°	2.5	2.1	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°	4.2	0.8	1.3	0.8	1.7
80°	0.8	0.0	0.0	0.0	0.0
82.5°	1.7	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°	1.7	1.3	0.0	0.0	1.7



(END OF REPORT)