

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: P281584

Luminaire Tested: **LDA2B209024D010 EU2B20SP159024 2LBASQC1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281584  
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: LDA2B209024D010 EU2B20SP159024 2LBASQC1MB  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Cast Trim, MB  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1437.1 lumens  
Efficiency: N/A  
Efficacy: 69.8 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

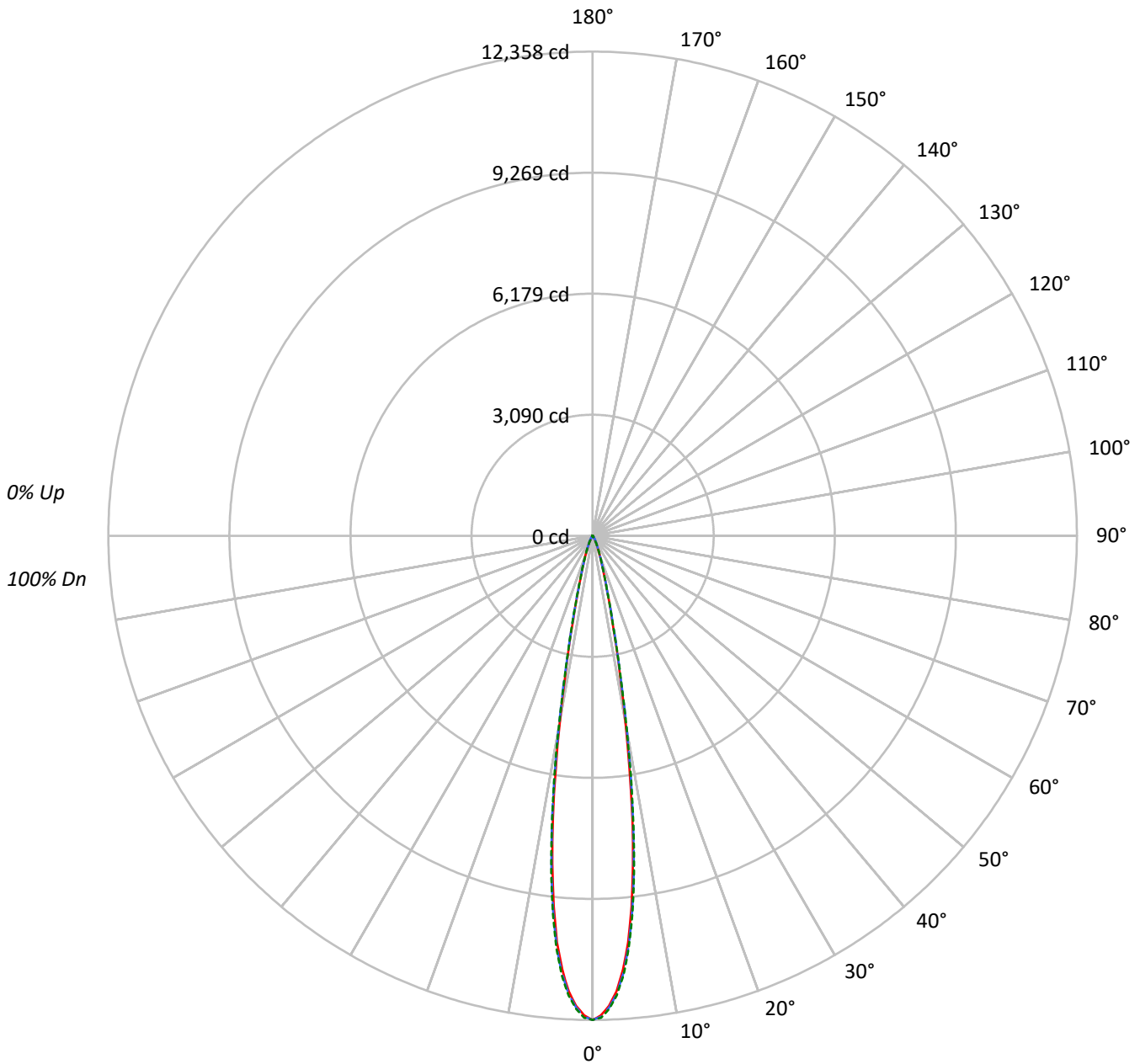
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	97	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	86	85	84	83					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°	6096866	6096866	6096866
5°	5160269	5214201	5236883
10°	2413035	2504463	2509322
15°	706747	717064	716706
20°	283828	284196	284563
25°	126565	139412	129559
30°	53778	73945	48993
35°	24633	34270	23007
40°	8050	13396	7149
45°	0	4814	0
50°	0	0	0
55°	2408	1204	0
60°	0	0	0
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	3978	0	0
85°	7925	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	816.7	56.8
10°-20°	462.9	32.2
20°-30°	120.9	8.4
30°-40°	31.2	2.2
40°-50°	3.1	0.2
50°-60°	1.0	0.1
60°-70°	0.2	0.0
70°-80°	1.0	0.1
80°-90°	0.3	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°	1400.4	97.5
0°-40°	1431.6	99.6
0°-60°	1435.7	99.9
0°-90°	1437.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1437.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	12358	12358	12358	12358	12358	
5°	10420	10513	10528	10462	10574	806
15°	1384	1402	1404	1388	1403	454
25°	232	252	256	244	238	116
35°	41	44	57	39	38	28
45°	0	3	7	1	0	2
55°	3	4	1	1	0	2
65°	0	0	0	0	0	1
75°	0	1	0	0	0	3
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°	12357.8	12357.8	12357.8	12357.8	12357.8
1°	12241.9	12290.5	12275.9	12258.5	12307.1
2°	12005.9	12053.1	12049.0	12026.1	12083.0
3°	11642.3	11708.2	11708.2	11674.2	11745.0
4°	11100.3	11201.0	11210.7	11162.8	11250.9
5°	10419.6	10512.6	10528.5	10461.9	10574.3
6°	9497.3	9624.3	9660.4	9583.4	9698.6
7°	8437.7	8570.9	8625.7	8539.7	8668.8
8°	7294.8	7390.5	7456.4	7357.9	7489.1
9°	6015.8	6153.9	6214.3	6118.5	6246.2
10°	4816.7	4943.7	4999.2	4976.3	5008.9
11°	3741.1	3853.5	3891.0	3859.7	3875.0
12°	2929.1	2974.2	2998.5	2977.7	2988.1
13°	2224.1	2284.5	2295.6	2286.5	2291.4
14°	1736.9	1766.1	1778.6	1774.4	1776.5
15°	1383.7	1402.5	1403.9	1387.9	1403.2
16°	1114.5	1129.0	1135.3	1118.6	1138.8
17°	913.2	925.0	932.0	915.3	923.6
18°	751.5	760.6	770.3	755.7	768.2
19°	630.8	636.3	637.0	632.9	636.3
20°	540.6	537.8	541.3	533.6	542.0
22.5°	356.0	362.9	371.3	362.2	365.7
25°	232.5	251.9	256.1	244.3	238.0
26°	191.5	216.5	227.6	208.9	188.8
27°	158.9	177.0	191.5	166.5	150.6
28°	139.5	154.7	169.3	145.7	127.0
29°	116.6	131.8	156.8	129.8	118.0
30°	94.4	105.5	129.8	98.5	86.0
32.5°	53.4	62.5	84.0	58.3	47.9
35°	40.9	43.7	56.9	38.9	38.2
37.5°	35.4	31.9	44.4	31.9	25.7
40°	12.5	18.7	20.8	13.9	11.1
42.5°	5.6	5.6	9.0	2.8	2.8
45°	0.0	2.8	6.9	0.7	0.0
47.5°	0.0	0.0	1.4	0.0	0.0
50°	0.0	1.4	0.0	0.0	0.0
52.5°	1.4	0.0	0.0	0.0	0.0
55°	2.8	3.5	1.4	0.7	0.0
57.5°	4.2	3.5	1.4	1.4	1.4
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°	1.4	0.7	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.7	0.0	0.0	0.0
77.5°	6.9	1.4	2.1	1.4	2.8
80°	1.4	0.0	0.0	0.0	0.0
82.5°	2.8	0.0	0.0	0.0	0.0
85°	1.4	0.0	0.0	0.0	0.0
87.5°	0.0	0.7	0.0	0.7	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°	2.8	2.1	0.0	0.0	2.8



(END OF REPORT)