

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: P281606

Luminaire Tested: **LDA2B209730D010 EU2B20SP159730 2LBASQC1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281606  
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: LDA2B209730D010 EU2B20SP159730 2LBASQC1MMS  
Description: PORTFOLIO 2IN ADJ 2000 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: 1482.8 lumens  
Efficiency: N/A  
Efficacy: 72.0 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

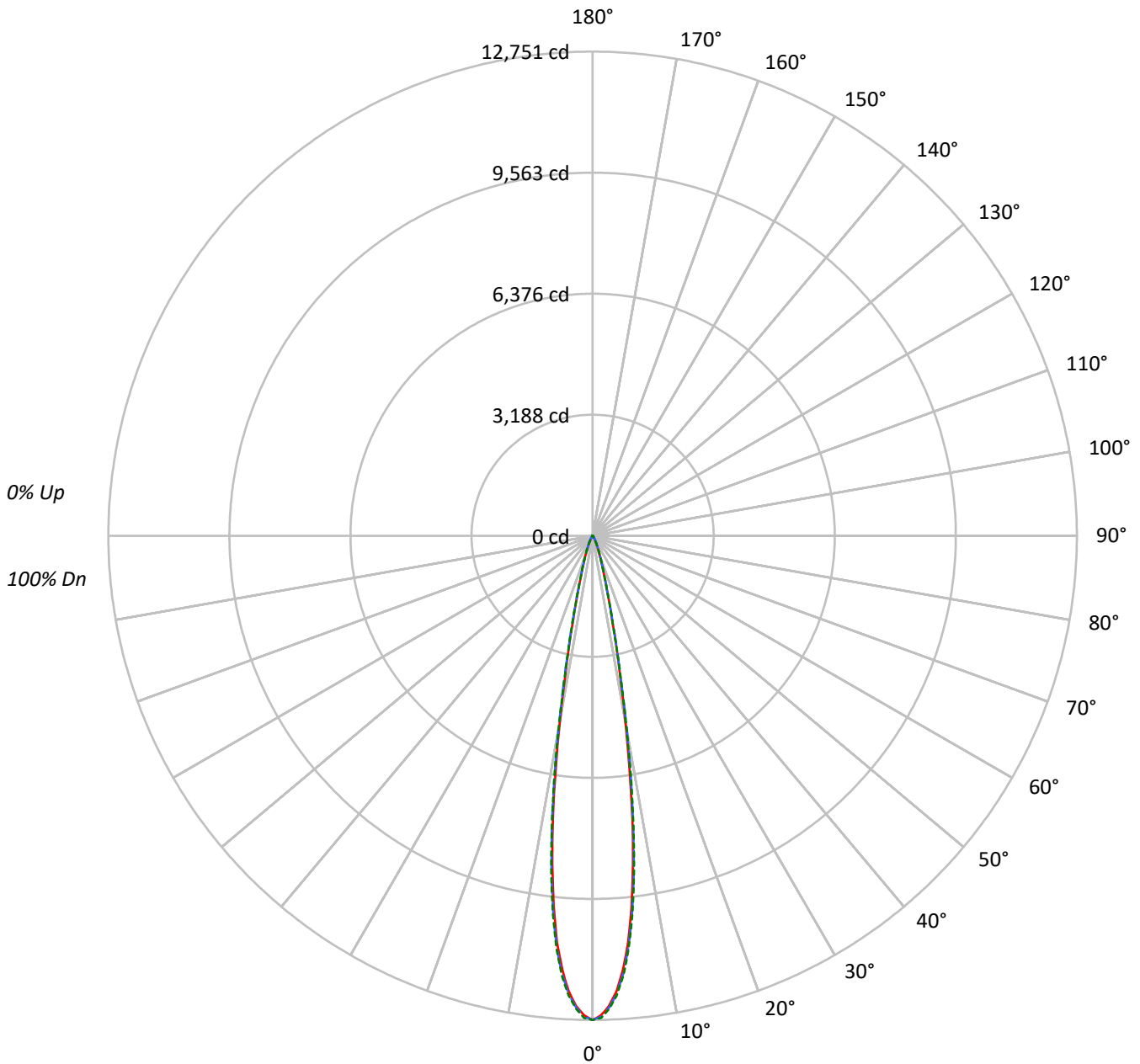
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20									20									20									20									
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	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	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°	6290955	6290955	6290955
5°	5324542	5380208	5403583
10°	2489834	2584167	2589177
15°	729271	739844	739487
20°	292859	293226	293594
25°	130593	143821	133696
30°	55487	76281	50588
35°	25416	35354	23730
40°	8308	13847	7406
45°	0	5024	0
50°	0	0	0
55°	2494	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°	842.7	56.8
10°-20°	477.6	32.2
20°-30°	124.7	8.4
30°-40°	32.1	2.2
40°-50°	3.2	0.2
50°-60°	1.0	0.1
60°-70°	0.2	0.0
70°-80°	1.1	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°	1445.0	97.5
0°-40°	1477.2	99.6
0°-60°	1481.4	99.9
0°-90°	1482.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1482.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	12751	12751	12751	12751	12751	
5°	10751	10847	10864	10795	10911	832
15°	1428	1447	1448	1432	1448	469
25°	240	260	264	252	246	119
35°	42	45	59	40	39	29
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°	12751.2	12751.2	12751.2	12751.2	12751.2
1°	12631.6	12681.7	12666.7	12648.8	12698.9
2°	12388.1	12436.8	12432.5	12408.9	12467.6
3°	12012.9	12081.0	12081.0	12045.9	12118.9
4°	11453.7	11557.5	11567.6	11518.1	11609.1
5°	10751.3	10847.2	10863.7	10795.0	10910.9
6°	9799.7	9930.7	9967.9	9888.5	10007.3
7°	8706.3	8843.8	8900.3	8811.5	8944.7
8°	7527.0	7625.8	7693.8	7592.1	7727.5
9°	6207.3	6349.8	6412.1	6313.3	6445.0
10°	4970.0	5101.0	5158.3	5134.7	5168.3
11°	3860.1	3976.1	4014.8	3982.6	3998.3
12°	3022.4	3068.9	3094.0	3072.5	3083.2
13°	2294.9	2357.2	2368.6	2359.3	2364.3
14°	1792.2	1822.3	1835.2	1830.9	1833.1
15°	1427.8	1447.1	1448.5	1432.1	1447.8
16°	1150.0	1165.0	1171.4	1154.2	1175.0
17°	942.3	954.5	961.6	944.5	953.0
18°	775.5	784.8	794.8	779.8	792.7
19°	650.9	656.6	657.3	653.0	656.6
20°	557.8	554.9	558.5	550.6	559.2
22.5°	367.3	374.5	383.1	373.8	377.4
25°	239.9	259.9	264.2	252.0	245.6
26°	197.6	223.4	234.9	215.5	194.8
27°	164.0	182.6	197.6	171.8	155.4
28°	143.9	159.7	174.7	150.4	131.0
29°	120.3	136.0	161.8	133.9	121.7
30°	97.4	108.8	133.9	101.7	88.8
32.5°	55.1	64.4	86.6	60.1	49.4
35°	42.2	45.1	58.7	40.1	39.4
37.5°	36.5	32.9	45.8	32.9	26.5
40°	12.9	19.3	21.5	14.3	11.5
42.5°	5.7	5.7	9.3	2.9	2.9
45°	0.0	2.9	7.2	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°	2.9	3.6	1.4	0.7	0.0
57.5°	4.3	3.6	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°	7.2	1.4	2.1	1.4	2.9
80°	1.4	0.0	0.0	0.0	0.0
82.5°	2.9	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°	2.9	2.1	0.0	0.0	2.9



(END OF REPORT)