

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: P284102

Luminaire Tested: **LDA2B209040D010 EU2B20WFL559040 2LBAPINSQ1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P284102  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1809-951-61)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B209040D010 EU2B20WFL559040 2LBAPINSQ1MW  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH WIDE FLOOD OPTIC AND  
2in Adj SQ PinHole, MW  
  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1577.4 lumens  
Efficiency: N/A  
Efficacy: 76.6 lumens/watt  
Spacing Criteria (0/90/45): 0.68 / 0.68 / 0.68  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

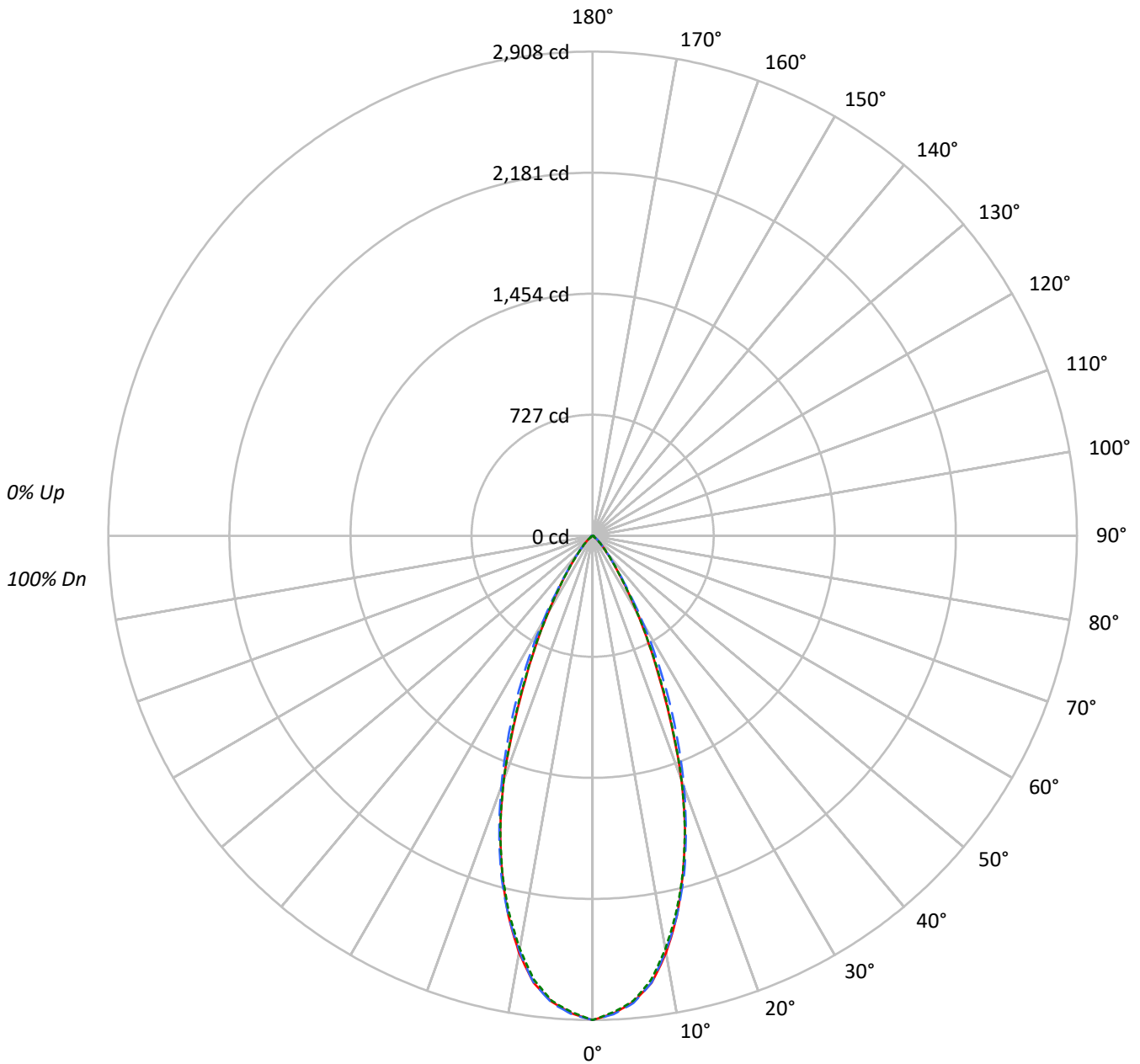
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	100	100	100		
	1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94	94	94	94	94	94		
	2	109	104	101	98	107	103	99	96	100	97	94	97	94	92	94	92	90	89	94	92	90	89	89		
	3	104	98	94	90	102	97	93	89	94	91	88	92	89	87	90	87	85	84	90	87	85	84	84		
	4	100	93	88	84	98	92	87	83	90	86	82	88	84	81	86	83	81	79	86	83	81	79	79		
	5	95	88	82	79	94	87	82	78	85	81	78	84	80	77	82	79	76	75	82	79	76	75	75		
	6	91	83	78	74	90	82	77	74	81	77	73	80	76	73	78	75	72	71	78	75	72	71	71		
	7	87	79	74	70	86	78	73	70	77	73	69	76	72	69	75	71	69	67	76	72	69	67	67		
	8	84	75	70	66	83	75	70	66	74	69	66	73	69	66	72	68	65	64	72	68	65	64	64		
	9	81	72	67	63	80	71	66	63	71	66	63	70	66	63	69	65	62	61	69	65	62	61	61		
	10	77	69	64	60	76	68	63	60	68	63	60	67	63	60	66	62	60	58	66	62	60	58	58		

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

	0°	45°	90°
0°	1434844	1434844	1434844
5°	1391741	1395059	1388770
10°	1273923	1268814	1261199
15°	1071535	1081495	1069799
20°	819406	841194	818093
25°	520358	586662	530483
30°	302617	341697	307915
35°	159967	170145	160509
40°	84433	88233	84433
45°	47236	48980	47794
50°	22105	27938	22105
55°	7999	15311	8774
60°	9177	9177	9177
65°	9923	10857	9923
70°	12261	10963	12261
75°	11247	11247	11247
80°	11933	9660	11933
85°	9623	9623	9623



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	259.6	16.5
10°-20°	578.0	36.6
20°-30°	466.8	29.6
30°-40°	184.5	11.7
40°-50°	56.6	3.6
50°-60°	14.6	0.9
60°-70°	8.8	0.6
70°-80°	6.5	0.4
80°-90°	1.9	0.1
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°	1304.5	82.7
0°-40°	1488.9	94.4
0°-60°	1560.2	98.9
0°-90°	1577.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1577.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2908	2908	2908	2908	2908	
5°	2810	2815	2817	2811	2804	260
15°	2098	2104	2117	2109	2094	576
25°	956	1002	1078	1020	974	445
35°	266	273	282	274	266	178
45°	68	68	70	69	68	55
55°	9	13	18	13	10	12
65°	8	9	9	9	8	9
75°	6	6	6	6	6	7
85°	2	2	2	2	2	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2908.3	2908.3	2908.3	2908.3	2908.3
2.5°	2871.9	2873.6	2876.1	2872.8	2864.3
5°	2810.2	2815.2	2816.9	2811.0	2804.2
7.5°	2708.7	2702.7	2707.8	2697.7	2689.2
10°	2542.9	2535.2	2532.7	2517.5	2517.5
12.5°	2338.1	2335.6	2337.3	2329.7	2317.8
15°	2097.9	2103.8	2117.4	2108.9	2094.5
17.5°	1843.3	1851.7	1863.6	1861.0	1841.6
20°	1560.7	1585.3	1602.2	1586.1	1558.2
22.5°	1239.3	1291.7	1334.9	1301.0	1255.4
25°	955.9	1001.6	1077.7	1020.2	974.5
27.5°	725.0	757.9	827.3	770.6	739.3
30°	531.2	551.5	599.8	562.5	540.5
32.5°	379.8	394.2	414.5	392.5	381.5
35°	265.6	273.2	282.5	274.1	266.5
37.5°	186.9	189.5	196.3	189.5	186.1
40°	131.1	132.0	137.0	132.8	131.1
42.5°	94.7	94.7	97.3	95.6	94.7
45°	67.7	68.5	70.2	69.4	68.5
47.5°	48.2	49.9	49.9	50.8	47.4
50°	28.8	35.5	36.4	35.5	28.8
52.5°	15.2	21.1	26.2	21.1	15.2
55°	9.3	12.7	17.8	12.7	10.2
57.5°	9.3	9.3	11.8	10.2	9.3
60°	9.3	9.3	9.3	9.3	9.3
62.5°	9.3	9.3	9.3	9.3	9.3
65°	8.5	9.3	9.3	9.3	8.5
67.5°	8.5	8.5	8.5	8.5	8.5
70°	8.5	8.5	7.6	8.5	8.5
72.5°	7.6	7.6	6.8	7.6	7.6
75°	5.9	5.9	5.9	5.9	5.9
77.5°	5.1	5.1	5.1	5.1	5.1
80°	4.2	4.2	3.4	4.2	4.2
82.5°	2.5	2.5	2.5	2.5	2.5
85°	1.7	1.7	1.7	1.7	1.7
87.5°	0.8	0.8	0.8	0.8	0.8
90°	0.0	0.0	0.0	0.0	0.0



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







(END OF REPORT)