

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: P283760

Luminaire Tested: **LDA2B209035D010 EU2B20FL409035 2LBAPINSQ1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283760  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1809-951-15)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B209035D010 EU2B20FL409035 2LBAPINSQ1MW  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in Adj SQ PinHole, MW  
  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1475.8 lumens  
Efficiency: N/A  
Efficacy: 71.6 lumens/watt  
Spacing Criteria (0/90/45): 0.55 / 0.55 / 0.55  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

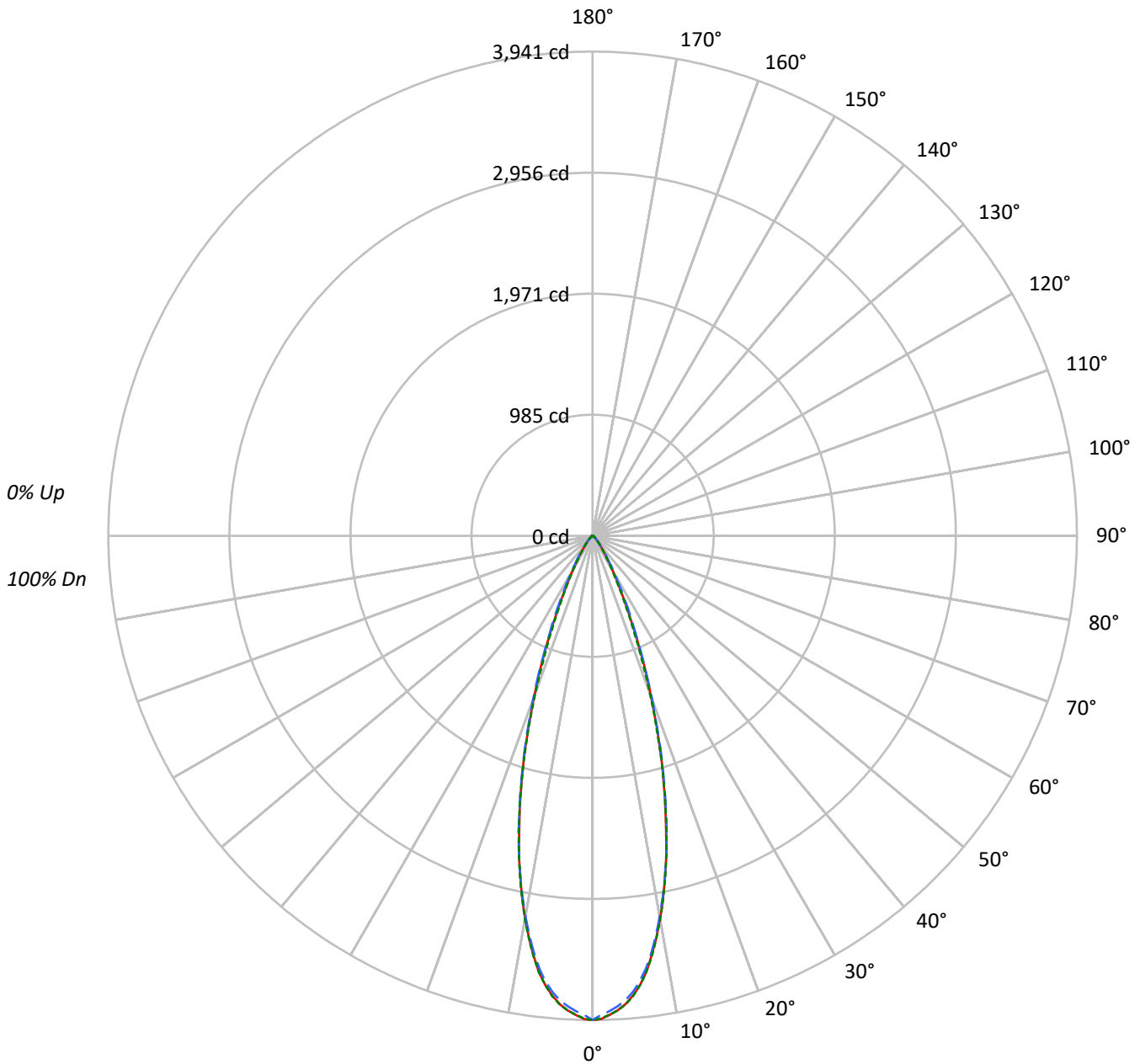
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95																			
2	110	106	102	99	108	104	101	98	101	98	96	98	96	94	95	93	92	90																			
3	105	100	96	92	104	99	95	92	96	93	90	94	91	89	92	89	88	86																			
4	101	95	90	87	100	94	90	86	92	88	85	90	87	84	88	86	83	82																			
5	98	91	86	82	96	90	85	82	88	84	81	86	83	80	85	82	80	79																			
6	94	87	82	78	93	86	81	78	84	80	77	83	80	77	82	79	76	75																			
7	91	83	78	75	89	82	78	74	81	77	74	80	76	74	79	76	73	72																			
8	87	80	75	71	86	79	74	71	78	74	71	77	73	71	76	73	70	69																			
9	84	77	72	69	83	76	72	68	75	71	68	74	71	68	74	70	68	67																			
10	82	74	69	66	81	73	69	66	73	69	66	72	68	65	71	68	65	64																			

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

	0°	45°	90°
0°	1944536	1944536	1944536
5°	1860888	1846972	1863761
10°	1585428	1575459	1587081
15°	1168530	1176140	1172361
20°	729469	742962	713403
25°	376809	404300	357865
30°	180647	207081	172159
35°	93233	103231	87271
40°	52231	54936	49591
45°	31746	31746	30630
50°	16502	20340	16502
55°	8515	13504	9290
60°	9769	9769	9769
65°	10623	10623	10623
70°	13127	11973	13127
75°	12581	12581	12581
80°	11649	11649	11649
85°	9623	9623	9623



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	339.0	23.0
10°-20°	622.7	42.2
20°-30°	337.6	22.9
30°-40°	108.4	7.3
40°-50°	36.9	2.5
50°-60°	12.9	0.9
60°-70°	9.4	0.6
70°-80°	6.9	0.5
80°-90°	2.0	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°	1299.3	88.0
0°-40°	1407.7	95.4
0°-60°	1457.6	98.8
0°-90°	1475.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1475.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3941	3941	3941	3941	3941	
5°	3758	3734	3729	3767	3763	340
15°	2288	2307	2303	2314	2295	620
25°	692	724	743	691	657	332
35°	155	162	171	156	145	104
45°	46	46	46	46	44	36
55°	10	12	16	12	11	11
65°	9	10	9	10	9	9
75°	7	7	7	7	7	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°	3941.4	3941.4	3941.4	3941.4	3941.4
1°	3934.7	3906.6	3902.4	3938.9	3930.6
2°	3903.3	3876.8	3872.6	3909.1	3901.6
3°	3868.5	3844.5	3836.2	3874.3	3869.3
4°	3822.1	3799.8	3792.3	3830.4	3826.3
5°	3757.5	3734.4	3729.4	3766.6	3763.3
6°	3678.0	3659.0	3649.9	3687.2	3680.5
7°	3578.7	3561.3	3551.4	3578.7	3582.0
8°	3449.5	3441.2	3429.6	3457.0	3457.0
9°	3312.1	3304.6	3292.2	3317.0	3317.0
10°	3164.7	3159.7	3144.8	3168.0	3168.0
11°	3003.2	3000.7	2990.0	3009.0	3009.0
12°	2833.5	2839.3	2829.3	2845.9	2840.1
13°	2663.7	2661.2	2662.1	2674.5	2665.4
14°	2471.6	2486.5	2489.0	2496.5	2482.4
15°	2287.8	2306.9	2302.7	2313.5	2295.3
16°	2099.8	2121.4	2120.5	2123.0	2105.6
17°	1924.3	1936.7	1937.6	1935.1	1913.5
18°	1737.2	1754.6	1754.6	1750.4	1724.8
19°	1554.2	1567.4	1576.5	1567.4	1537.6
20°	1389.4	1398.5	1415.1	1391.9	1358.8
21°	1231.3	1239.5	1253.6	1226.3	1189.9
22°	1079.7	1090.5	1103.7	1072.3	1034.2
23°	938.1	963.0	968.0	924.9	892.6
24°	808.1	836.3	844.6	800.7	766.7
25°	692.2	723.7	742.7	691.4	657.4
26°	592.0	622.7	645.9	594.5	562.2
27°	504.3	536.6	560.6	512.5	481.9
28°	428.9	460.4	485.2	440.5	411.5
29°	372.6	390.8	415.7	378.4	351.9
30°	317.1	337.0	363.5	325.4	302.2
32.5°	217.8	228.5	249.2	226.0	207.8
35°	154.8	161.5	171.4	155.7	144.9
37.5°	110.1	113.4	119.2	110.1	104.3
40°	81.1	82.8	85.3	80.3	77.0
42.5°	60.4	61.3	61.3	59.6	58.0
45°	45.5	46.4	45.5	45.5	43.9
47.5°	33.1	35.6	34.8	34.8	32.3
50°	21.5	26.5	26.5	25.7	21.5
52.5°	13.2	18.2	20.7	18.2	14.1
55°	9.9	12.4	15.7	12.4	10.8
57.5°	9.9	9.9	11.6	9.9	9.9
60°	9.9	9.9	9.9	9.9	9.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	9.1	9.1	9.1	9.1	9.1
70°	9.1	9.1	8.3	9.1	9.1
72.5°	8.3	8.3	7.5	8.3	7.5
75°	6.6	6.6	6.6	6.6	6.6
77.5°	5.0	5.0	5.0	5.0	5.0
80°	4.1	4.1	4.1	4.1	4.1
82.5°	2.5	2.5	2.5	3.3	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°







62.5°	9.9	9.9	9.9	9.9	9.9
65°	9.1	9.9	9.1	9.9	9.1



(END OF REPORT)