

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: P316006

Luminaire Tested: **LDA2B20SP8027D010 PINW1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P316006  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-7)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B20SP8027D010 PINW1MMS  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in  
Adj PinHole, White oculus, matte metallic silver finish  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1964.9 lumens  
Efficiency: N/A  
Efficacy: 95.4 lumens/watt  
Spacing Criteria (0/90/45): 0.32 / 0.3 / 0.32  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

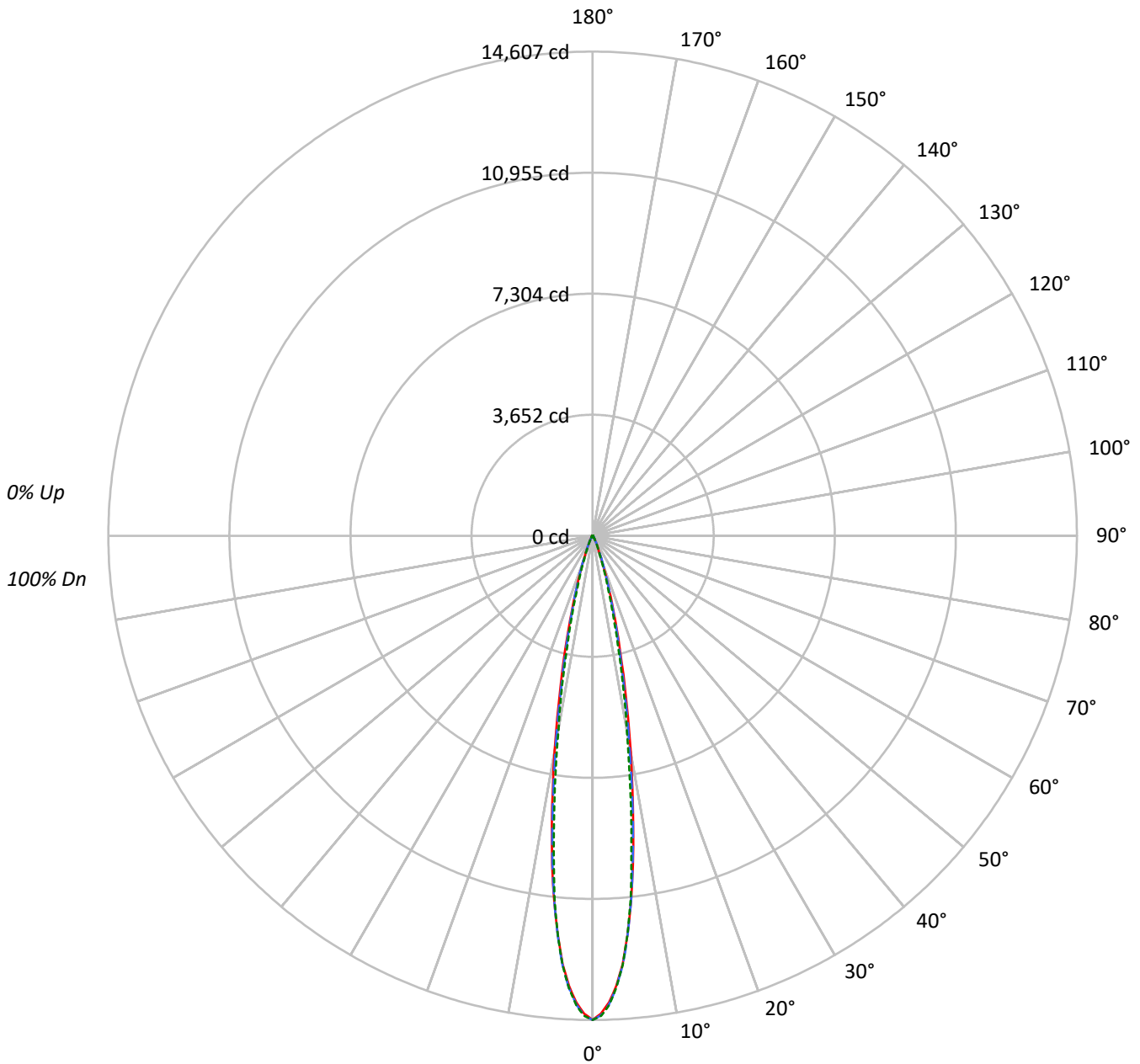
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P316006

CATALOG NUMBER: LDA2B20SP8027D010 PINW1MMS

### Luminous Intensity Polar Plot





TEST NUMBER: P316006

CATALOG NUMBER: LDA2B2OSP8027D010 PINW1MMS

**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				100															
1	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96	98	99	98	96															
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	98	96	95	94	98	96	95	94															
3	108	104	100	97	106	102	99	97	100	97	95	98	95	94	96	94	92	91	96	94	92	91															
4	105	100	96	93	104	99	96	93	97	94	92	95	93	91	94	92	90	89	94	92	90	89															
5	102	97	93	90	101	96	93	90	95	91	89	93	90	88	92	89	88	87	92	89	88	87															
6	100	94	90	88	99	94	90	87	92	89	87	91	88	86	90	88	86	85	90	88	86	85															
7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	86	84	83	88	86	84	83															
8	96	90	86	83	95	89	86	83	88	85	83	87	85	82	87	84	82	81	87	84	82	81															
9	94	88	84	81	93	87	84	81	86	83	81	86	83	81	85	82	81	80	85	82	81	80															
10	92	86	82	80	91	85	82	80	85	82	79	84	81	79	84	81	79	78	84	81	79	78															

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

	0°	45°	90°
0°	7206486	7206486	7206486
5°	5978515	5997929	5975197
10°	3308925	3189393	2971069
15°	1339483	1281103	1137526
20°	448791	475830	385263
25°	170767	171366	162221
30°	76566	75312	72749
35°	37101	33065	26320
40°	24538	31043	21640
45°	6279	10187	9349
50°	1689	2610	3454
55°	15397	13504	21160
60°	22103	17662	28714
65°	10507	27434	26150
70°	9665	8078	9665
75°	4194	10675	29927
80°	50857	69892	63642
85°	0	31700	37927



TEST NUMBER: P316006

CATALOG NUMBER: LDA2B2OSP8027D010 PINW1MMS

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	956.7	48.7
10°-20°	724.7	36.9
20°-30°	164.7	8.4
30°-40°	48.7	2.5
40°-50°	16.2	0.8
50°-60°	14.3	0.7
60°-70°	17.2	0.9
70°-80°	11.0	0.6
80°-90°	11.5	0.6
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°	1846.1	94.0
0°-40°	1894.8	96.4
0°-60°	1925.3	98.0
0°-90°	1964.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1964.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	14607	14607	14607	14607	14607	
5°	12072	12167	12111	11953	12065	968
15°	2622	2658	2508	2273	2227	762
25°	314	337	315	311	298	164
35°	62	68	55	64	44	49
45°	9	26	15	26	13	13
55°	18	26	16	24	25	7
65°	9	19	24	22	22	9
75°	2	8	6	10	16	5
85°	0	0	6	6	7	7
90°	0	0	0	0	0	



TEST NUMBER: P316006

CATALOG NUMBER: LDA2B2OSP8027D010 PINW1MMS

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	14606.9	14606.9	14606.9	14606.9	14606.9
1°	14418.7	14477.0	14471.4	14447.9	14489.3
2°	14087.1	14157.7	14151.0	14099.5	14173.4
3°	13600.9	13663.7	13653.6	13579.7	13660.3
4°	12951.2	13022.9	12994.9	12884.0	12987.1
5°	12071.8	12167.0	12111.0	11953.1	12065.1
6°	11097.2	11177.8	11089.3	10879.9	10989.6
7°	10006.1	10056.5	9940.0	9671.1	9597.2
8°	8815.2	8881.3	8718.9	8405.2	8324.6
9°	7677.1	7699.5	7502.3	7168.5	7066.5
10°	6605.0	6588.2	6366.4	6028.1	5930.6
11°	5588.9	5566.5	5332.4	5019.8	5051.2
12°	4664.7	4708.4	4436.2	4152.8	4158.4
13°	3905.2	3909.7	3675.5	3405.6	3389.9
14°	3197.2	3238.6	3038.1	2796.1	2751.3
15°	2622.5	2658.4	2508.2	2273.0	2227.1
16°	2099.3	2144.2	2036.6	1823.8	1763.3
17°	1690.5	1747.6	1677.0	1498.9	1429.4
18°	1352.1	1395.8	1379.0	1195.3	1138.2
19°	1067.6	1128.1	1132.6	979.1	910.8
20°	854.8	909.6	906.3	787.5	733.8
22.5°	490.7	519.8	520.9	464.9	433.5
25°	313.7	337.2	314.8	311.4	298.0
26°	272.2	291.3	266.6	266.6	254.3
27°	220.7	237.5	214.0	224.0	207.2
28°	186.0	203.9	183.7	181.5	179.2
29°	154.6	171.4	145.6	156.8	150.1
30°	134.4	146.8	132.2	149.0	127.7
32.5°	104.2	114.3	88.5	112.0	84.0
35°	61.6	68.3	54.9	63.9	43.7
37.5°	63.9	66.1	59.4	66.1	61.6
40°	38.1	39.2	48.2	48.2	33.6
42.5°	35.8	34.7	21.3	33.6	26.9
45°	9.0	25.8	14.6	25.8	13.4
47.5°	6.7	9.0	9.0	17.9	17.9
50°	2.2	9.0	3.4	6.7	4.5
52.5°	0.0	21.3	4.5	15.7	13.4
55°	17.9	25.8	15.7	23.5	24.6
57.5°	2.2	17.9	9.0	19.0	13.4
60°	22.4	30.2	17.9	32.5	29.1
62.5°	2.2	20.2	23.5	17.9	15.7
65°	9.0	19.0	23.5	22.4	22.4
67.5°	11.2	19.0	14.6	14.6	20.2



TEST NUMBER: P316006

CATALOG NUMBER: LDA2B20SP8027D010 PINW1MMS

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	2.2	7.8	5.6	10.1	15.7
77.5°	2.2	9.0	7.8	17.9	13.4
80°	17.9	20.2	24.6	32.5	22.4
82.5°	15.7	15.7	24.6	17.9	13.4
85°	0.0	0.0	5.6	5.6	6.7
87.5°	0.0	4.5	11.2	9.0	15.7
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093







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







70°	6.7	2.2	5.6	5.6	6.7
72.5°	2.2	10.1	9.0	5.6	11.2



(END OF REPORT)