

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: P282619

Luminaire Tested: **LDA2B20D2WD010 EU2B20SP15D2W 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282619
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: LDA2B20D2WD010 EU2B20SP15D2W 2LBALPINSQ1MMS
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Pinhole w-lens, MMS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1498.4 lumens
Efficiency: N/A
Efficacy: 72.7 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

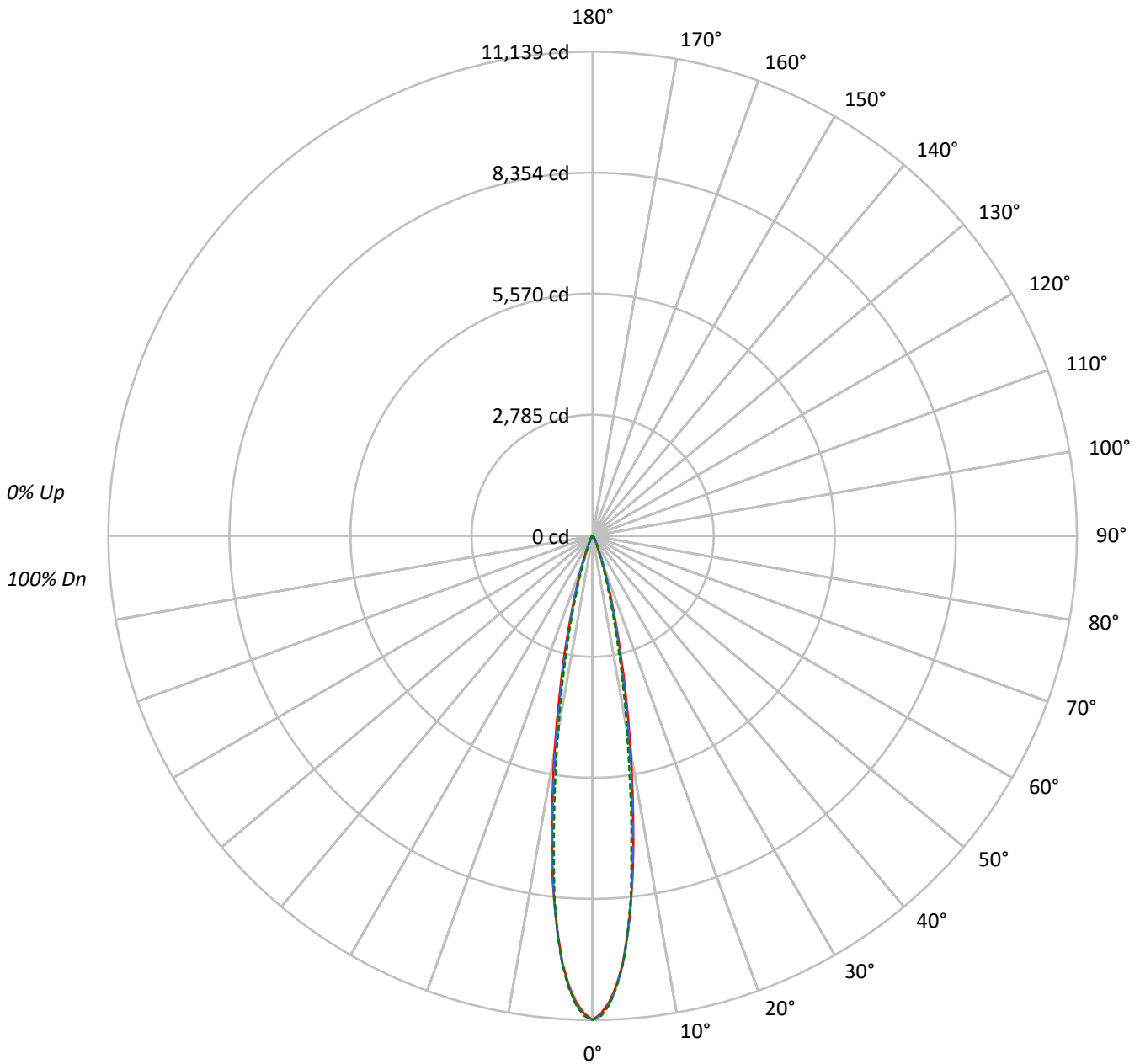
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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°	5495409	5495409	5495409
5°	4558990	4573798	4556465
10°	2523249	2432122	2265649
15°	1021429	976942	867433
20°	342211	362845	293751
25°	130212	130647	123680
30°	58393	57424	55487
35°	28307	25236	20056
40°	18677	23636	16487
45°	4744	7745	7187
50°	1305	1996	2610
55°	11784	10322	16171
60°	16873	13518	21905
65°	7938	20896	19962
70°	7357	6203	7357
75°	3241	8197	22874
80°	38924	53414	48584
85°	0	24341	28870



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	729.5	48.7
10°-20°	552.6	36.9
20°-30°	125.6	8.4
30°-40°	37.1	2.5
40°-50°	12.4	0.8
50°-60°	10.9	0.7
60°-70°	13.1	0.9
70°-80°	8.4	0.6
80°-90°	8.8	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°	1407.7	94.0
0°-40°	1444.9	96.4
0°-60°	1468.1	98.0
0°-90°	1498.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1498.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	11139	11139	11139	11139	11139	
5°	9206	9278	9235	9115	9200	738
15°	2000	2027	1913	1733	1698	581
25°	239	257	240	238	227	125
35°	47	52	42	49	33	37
45°	7	20	11	20	10	10
55°	14	20	12	18	19	6
65°	7	14	18	17	17	7
75°	2	6	4	8	12	4
85°	0	0	4	4	5	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	11138.7	11138.7	11138.7	11138.7	11138.7
1°	10995.2	11039.6	11035.3	11017.4	11049.0
2°	10742.3	10796.1	10791.0	10751.7	10808.1
3°	10371.6	10419.4	10411.7	10355.3	10416.8
4°	9876.1	9930.8	9909.4	9824.8	9903.4
5°	9205.5	9278.1	9235.4	9115.0	9200.4
6°	8462.3	8523.8	8456.3	8296.6	8380.3
7°	7630.2	7668.7	7579.8	7374.8	7318.4
8°	6722.2	6772.6	6648.7	6409.5	6348.0
9°	5854.2	5871.3	5721.0	5466.4	5388.7
10°	5036.7	5023.9	4854.8	4596.8	4522.5
11°	4261.9	4244.8	4066.3	3827.9	3851.9
12°	3557.1	3590.5	3382.9	3166.7	3171.0
13°	2977.9	2981.4	2802.8	2596.9	2585.0
14°	2438.1	2469.7	2316.8	2132.2	2098.1
15°	1999.8	2027.2	1912.7	1733.3	1698.3
16°	1600.9	1635.1	1553.0	1390.7	1344.6
17°	1289.1	1332.6	1278.8	1143.0	1090.0
18°	1031.1	1064.4	1051.6	911.5	867.9
19°	814.1	860.2	863.7	746.6	694.5
20°	651.8	693.7	691.1	600.5	559.5
22.5°	374.2	396.4	397.2	354.5	330.6
25°	239.2	257.1	240.0	237.5	227.2
26°	207.6	222.1	203.3	203.3	193.9
27°	168.3	181.1	163.2	170.9	158.0
28°	141.8	155.5	140.1	138.4	136.7
29°	117.9	130.7	111.1	119.6	114.5
30°	102.5	111.9	100.8	113.6	97.4
32.5°	79.4	87.1	67.5	85.4	64.1
35°	47.0	52.1	41.9	48.7	33.3
37.5°	48.7	50.4	45.3	50.4	47.0
40°	29.0	29.9	36.7	36.7	25.6
42.5°	27.3	26.5	16.2	25.6	20.5
45°	6.8	19.6	11.1	19.6	10.3
47.5°	5.1	6.8	6.8	13.7	13.7
50°	1.7	6.8	2.6	5.1	3.4
52.5°	0.0	16.2	3.4	12.0	10.3
55°	13.7	19.6	12.0	17.9	18.8
57.5°	1.7	13.7	6.8	14.5	10.3
60°	17.1	23.1	13.7	24.8	22.2
62.5°	1.7	15.4	17.9	13.7	12.0
65°	6.8	14.5	17.9	17.1	17.1
67.5°	8.5	14.5	11.1	11.1	15.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
75°	1.7	6.0	4.3	7.7	12.0
77.5°	1.7	6.8	6.0	13.7	10.3
80°	13.7	15.4	18.8	24.8	17.1
82.5°	12.0	12.0	18.8	13.7	10.3
85°	0.0	0.0	4.3	4.3	5.1
87.5°	0.0	3.4	8.5	6.8	12.0
90°	0.0	0.0	0.0	0.0	0.0



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







70°	5.1	1.7	4.3	4.3	5.1
72.5°	1.7	7.7	6.8	4.3	8.5



(END OF REPORT)