

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: P281747

Luminaire Tested: **LDA2B208040D010 EU2B20SP158040 2LBAPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P281747
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-10)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDA2B208040D010 EU2B20SP158040 2LBAPINSQ1MMS
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ PinHole, MMS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2107.8 lumens
Efficiency: N/A
Efficacy: 102.3 lumens/watt
Spacing Criteria (0/90/45): 0.3 / 0.3 / 0.29
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

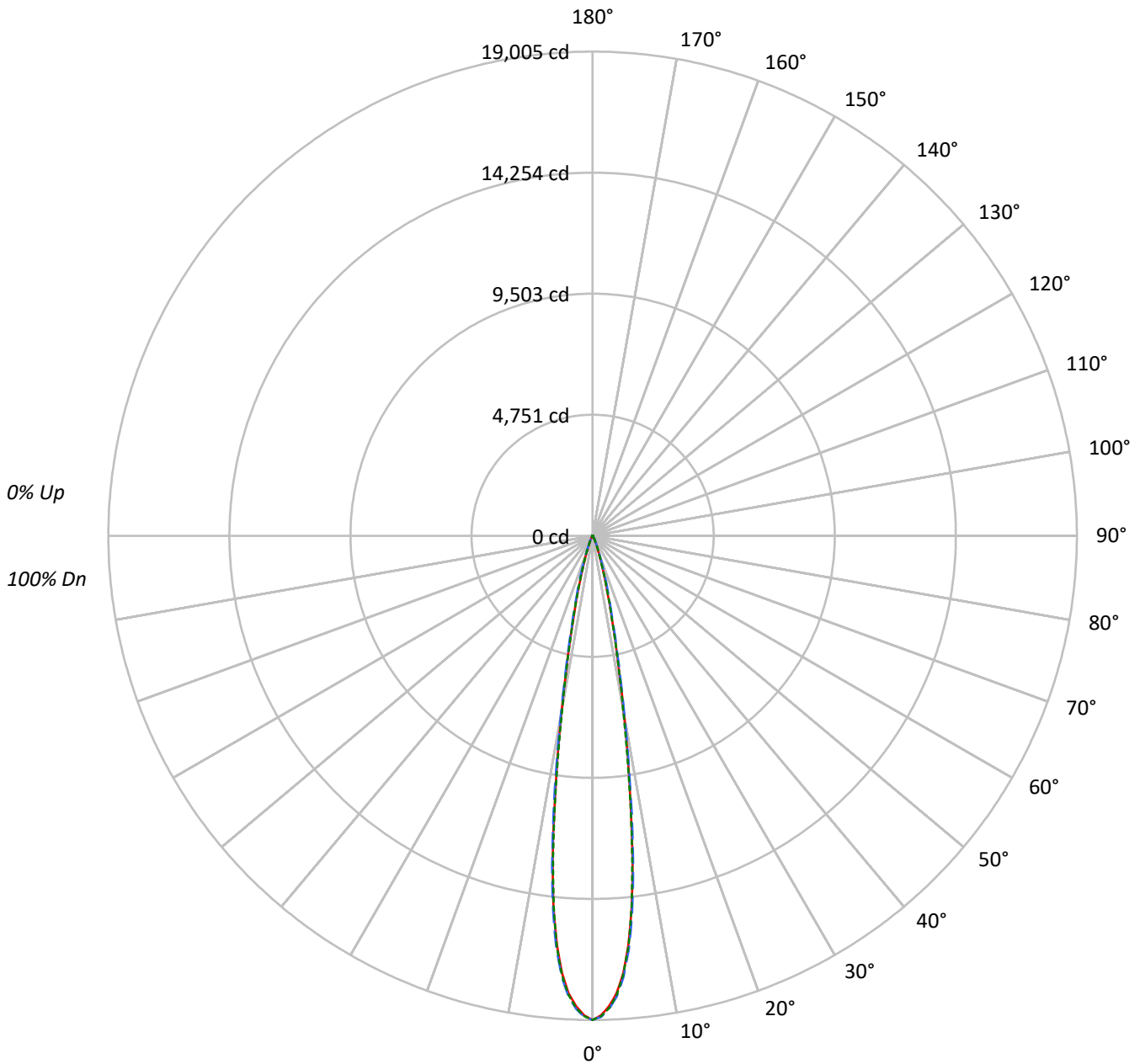
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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	116	114	112	111	113	112	110	109	108	107	106	104	103	103	101	100	100	98																			
2	113	110	107	105	111	108	106	104	105	103	102	102	101	99	99	98	97	96																			
3	110	106	103	101	108	105	102	100	102	100	98	100	98	97	98	97	95	94																			
4	107	103	100	97	106	102	99	97	100	98	96	98	96	95	97	95	94	93																			
5	105	100	97	95	104	100	96	94	98	95	93	97	94	93	95	93	92	91																			
6	103	98	95	92	102	97	94	92	96	93	91	95	93	91	94	92	90	89																			
7	101	96	93	90	100	95	92	90	94	92	90	93	91	89	93	90	89	88																			
8	99	94	91	89	98	94	91	88	93	90	88	92	90	88	91	89	88	87																			
9	98	92	89	87	97	92	89	87	91	89	87	91	88	86	90	88	86	85																			
10	96	91	88	86	95	90	88	86	90	87	85	89	87	85	89	87	85	84																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9376242	9376242	9376242
5°	7984164	8067315	7999269
10°	3524894	3605500	3442534
15°	1069543	1226706	1086348
20°	320003	426688	357647
25°	124659	122754	131083
30°	55544	50189	52867
35°	11323	9877	9877
40°	0	773	3027
45°	9838	8163	14722
50°	0	2686	8980
55°	0	0	4043
60°	0	1184	4638
65°	0	0	2685
70°	0	6780	13559
75°	0	0	0
80°	0	0	0
85°	0	6793	26605



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1232.0	58.4
10°-20°	703.7	33.4
20°-30°	133.6	6.3
30°-40°	24.3	1.2
40°-50°	6.2	0.3
50°-60°	4.8	0.2
60°-70°	0.8	0.0
70°-80°	1.1	0.1
80°-90°	1.5	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°	2069.2	98.2
0°-40°	2093.5	99.3
0°-60°	2104.5	99.8
0°-90°	2107.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2107.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	19005	19005	19005	19005	19005	
5°	16122	16227	16290	16261	16152	1224
15°	2094	2277	2402	2256	2127	666
25°	229	247	226	257	241	120
35°	19	24	16	20	16	26
45°	14	22	12	13	21	7
55°	0	1	0	1	5	2
65°	0	0	0	0	2	0
75°	0	0	0	0	0	0
85°	0	1	1	1	5	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	19004.8	19004.8	19004.8	19004.8	19004.8
1°	18825.2	18845.1	18887.4	18930.9	18862.7
2°	18472.8	18521.0	18580.9	18620.8	18546.8
3°	17979.6	18046.5	18109.9	18118.1	18048.8
4°	17217.3	17299.6	17366.5	17358.3	17271.4
5°	16121.6	16227.3	16289.5	16261.3	16152.1
6°	14673.5	14775.7	14855.5	14774.5	14627.7
7°	12869.6	12987.0	13071.6	12933.0	12753.3
8°	10779.0	10943.5	11028.0	10834.2	10649.9
9°	8798.9	8912.9	8998.6	8787.2	8599.3
10°	7036.1	7245.1	7197.0	7033.7	6871.7
11°	5534.0	5723.1	5731.3	5620.9	5462.3
12°	4332.5	4532.2	4582.7	4498.1	4357.2
13°	3423.5	3572.7	3656.0	3569.1	3435.2
14°	2724.7	2857.4	2964.3	2851.5	2717.7
15°	2094.0	2277.2	2401.7	2256.1	2126.9
16°	1665.4	1816.9	1964.8	1799.2	1695.9
17°	1279.0	1414.0	1566.7	1416.4	1331.8
18°	1012.4	1119.2	1287.2	1132.2	1058.2
19°	792.7	873.8	1030.0	893.8	833.9
20°	609.5	698.8	812.7	719.9	681.2
22.5°	368.8	418.1	451.0	422.8	402.8
25°	229.0	246.6	225.5	257.2	240.8
26°	199.7	212.6	207.9	229.0	209.1
27°	159.7	176.2	163.2	179.7	173.8
28°	145.6	165.6	139.8	159.7	150.3
29°	102.2	110.4	99.8	106.9	106.9
30°	97.5	99.8	88.1	96.3	92.8
32.5°	76.3	71.6	58.7	62.2	59.9
35°	18.8	23.5	16.4	20.0	16.4
37.5°	28.2	25.8	30.5	29.4	28.2
40°	0.0	1.2	1.2	1.2	4.7
42.5°	21.1	12.9	11.7	8.2	14.1
45°	14.1	22.3	11.7	12.9	21.1
47.5°	0.0	1.2	0.0	2.3	2.3
50°	0.0	2.3	3.5	4.7	11.7
52.5°	2.3	14.1	7.0	12.9	18.8
55°	0.0	1.2	0.0	1.2	4.7
57.5°	4.7	2.3	4.7	4.7	21.1
60°	0.0	2.3	1.2	1.2	4.7
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	2.3
67.5°	0.0	1.2	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	1.2	0.0	0.0
80°	0.0	1.2	0.0	0.0	0.0
82.5°	0.0	1.2	2.3	3.5	2.3
85°	0.0	1.2	1.2	1.2	4.7
87.5°	0.0	2.3	3.5	0.0	2.3
90°	0.0	0.0	0.0	0.0	0.0



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







70°	0.0	3.5	4.7	0.0	9.4
72.5°	0.0	5.9	1.2	1.2	0.0



(END OF REPORT)