

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: P282381

Luminaire Tested: **LDA2B208035D010 EU2B20NFL258035 2LBAPINSQ1MB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282381
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1809-951-26)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDA2B208035D010 EU2B20NFL258035 2LBAPINSQ1MB
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC AND 2in Adj SQ PinHole, MB
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1837.1 lumens
Efficiency: N/A
Efficacy: 89.2 lumens/watt
Spacing Criteria (0/90/45): 0.33 / 0.3 / 0.32
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

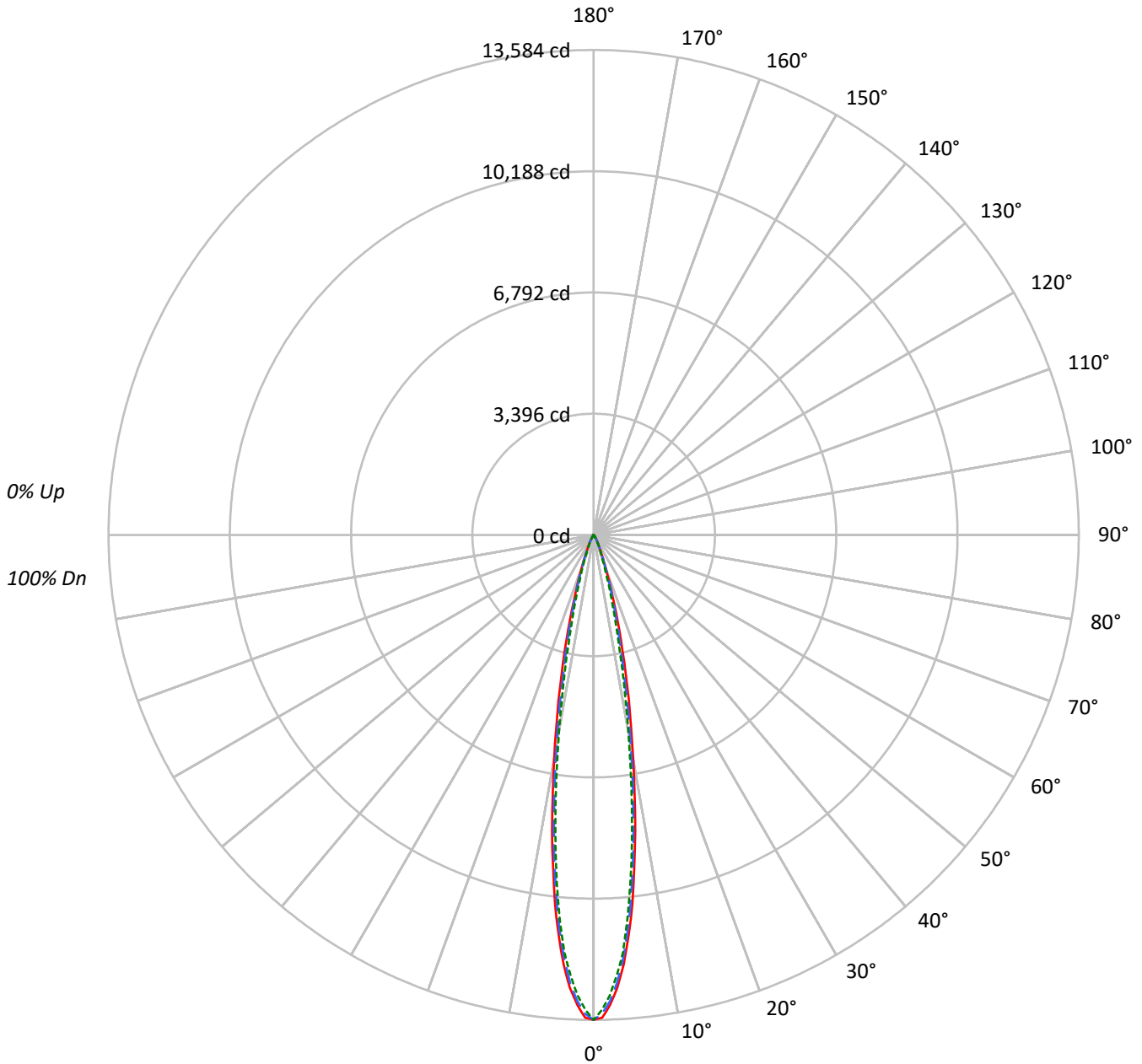
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				100															
1	115	113	112	110	113	111	110	108	107	106	105	104	103	102	100	100	99	97				97															
2	112	109	106	104	110	107	105	103	104	102	100	101	100	98	99	97	96	95				95															
3	109	105	101	99	107	103	100	98	101	99	97	99	97	95	97	95	94	92				92															
4	106	101	98	95	105	100	97	94	98	96	93	96	94	92	95	93	91	90				90															
5	103	98	94	92	102	97	94	91	96	93	91	94	92	90	93	91	89	88				88															
6	101	95	92	89	100	95	91	89	93	90	88	92	90	88	91	89	87	86				86															
7	99	93	89	87	98	92	89	86	91	88	86	90	88	86	89	87	85	84				84															
8	96	91	87	85	96	90	87	84	89	86	84	88	86	84	88	85	83	83				83															
9	94	89	85	83	94	88	85	82	87	84	82	87	84	82	86	84	82	81				81															
10	93	87	83	81	92	86	83	81	86	83	81	85	82	80	85	82	80	79				79															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6701975	6701975	6701975
5°	5576722	5474503	5364013
10°	3194302	2997470	2797532
15°	1420746	1261796	1057387
20°	515417	484598	383951
25°	197876	184757	159118
30°	85339	79357	70413
35°	40413	40413	33427
40°	20223	20931	16874
45°	11722	10954	10256
50°	8059	7215	7215
55°	6279	4473	5419
60°	5131	3059	4144
65°	3619	2452	3619
70°	3029	1442	3029
75°	1906	1906	1906
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	883.5	48.1
10°-20°	715.0	38.9
20°-30°	172.4	9.4
30°-40°	43.9	2.4
40°-50°	13.1	0.7
50°-60°	5.6	0.3
60°-70°	2.7	0.1
70°-80°	0.9	0.0
80°-90°	0.0	0.0
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°	1770.9	96.4
0°-40°	1814.9	98.8
0°-60°	1833.5	99.8
0°-90°	1837.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1837.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	13584	13584	13584	13584	13584	
5°	11260	11157	11054	10958	10831	911
15°	2782	2716	2470	2225	2070	793
25°	364	366	339	308	292	188
35°	67	68	67	61	56	46
45°	17	17	16	15	15	14
55°	7	6	5	5	6	6
65°	3	3	2	2	3	3
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	13584.3	13584.3	13584.3	13584.3	13584.3
1°	13523.5	13429.2	13417.7	13476.4	13303.5
2°	13177.8	13110.7	13071.9	13106.5	12910.6
3°	12703.2	12638.2	12568.0	12569.1	12350.1
4°	12056.7	12005.4	11887.0	11851.4	11724.6
5°	11260.5	11156.8	11054.1	10957.7	10831.0
6°	10380.4	10246.3	10099.7	9956.1	9826.2
7°	9345.3	9256.3	9062.5	8866.5	8756.5
8°	8372.0	8228.5	8002.2	7757.0	7663.8
9°	7325.4	7222.7	6962.9	6677.9	6584.7
10°	6376.2	6269.3	5983.3	5665.9	5584.2
11°	5485.7	5385.1	5087.6	4754.4	4667.4
12°	4732.4	4589.9	4248.4	3959.2	3874.3
13°	3982.2	3884.8	3561.1	3275.1	3110.6
14°	3344.2	3263.5	2970.2	2718.7	2544.8
15°	2781.6	2715.6	2470.4	2225.3	2070.2
16°	2281.9	2241.0	2047.2	1810.4	1683.6
17°	1851.3	1813.5	1689.9	1472.0	1365.1
18°	1495.0	1489.8	1387.1	1198.6	1103.2
19°	1230.0	1227.9	1133.6	975.4	896.8
20°	981.7	995.3	923.0	784.7	731.3
21°	800.4	807.8	750.1	645.4	597.2
22°	651.7	656.9	619.2	533.3	507.1
23°	534.3	537.5	506.0	442.1	419.1
24°	440.0	442.1	413.8	368.8	348.9
25°	363.5	365.6	339.4	308.0	292.3
26°	301.7	303.8	280.8	258.8	243.1
27°	250.4	254.6	231.5	217.9	201.2
28°	213.7	214.8	193.8	185.4	169.7
29°	175.0	181.2	163.4	156.1	144.6
30°	149.8	153.0	139.3	134.1	123.6
32.5°	99.5	101.6	95.3	91.1	82.8
35°	67.1	68.1	67.1	60.8	55.5
37.5°	46.1	46.1	47.1	39.8	37.7
40°	31.4	31.4	32.5	27.2	26.2
42.5°	23.0	23.0	22.0	18.9	18.9
45°	16.8	16.8	15.7	14.7	14.7
47.5°	13.6	12.6	11.5	11.5	11.5
50°	10.5	10.5	9.4	8.4	9.4
52.5°	8.4	8.4	7.3	7.3	7.3
55°	7.3	6.3	5.2	5.2	6.3
57.5°	5.2	5.2	4.2	4.2	5.2
60°	5.2	4.2	3.1	4.2	4.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	3.1	2.1	2.1	2.1	2.1
70°	2.1	2.1	1.0	1.0	2.1
72.5°	1.0	1.0	1.0	1.0	1.0
75°	1.0	1.0	1.0	1.0	1.0
77.5°	1.0	1.0	0.0	0.0	1.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0



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







62.5°	4.2	3.1	3.1	3.1	3.1
65°	3.1	3.1	2.1	2.1	3.1



(END OF REPORT)