

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: P282430

Luminaire Tested: **LDA2B209050D010 EU2B20NFL259050 2LBAPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282430
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: LDA2B209050D010 EU2B20NFL259050 2LBAPINSQ1MMS
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC AND 2in Adj SQ PinHole, MMS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1597.3 lumens
Efficiency: N/A
Efficacy: 77.5 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

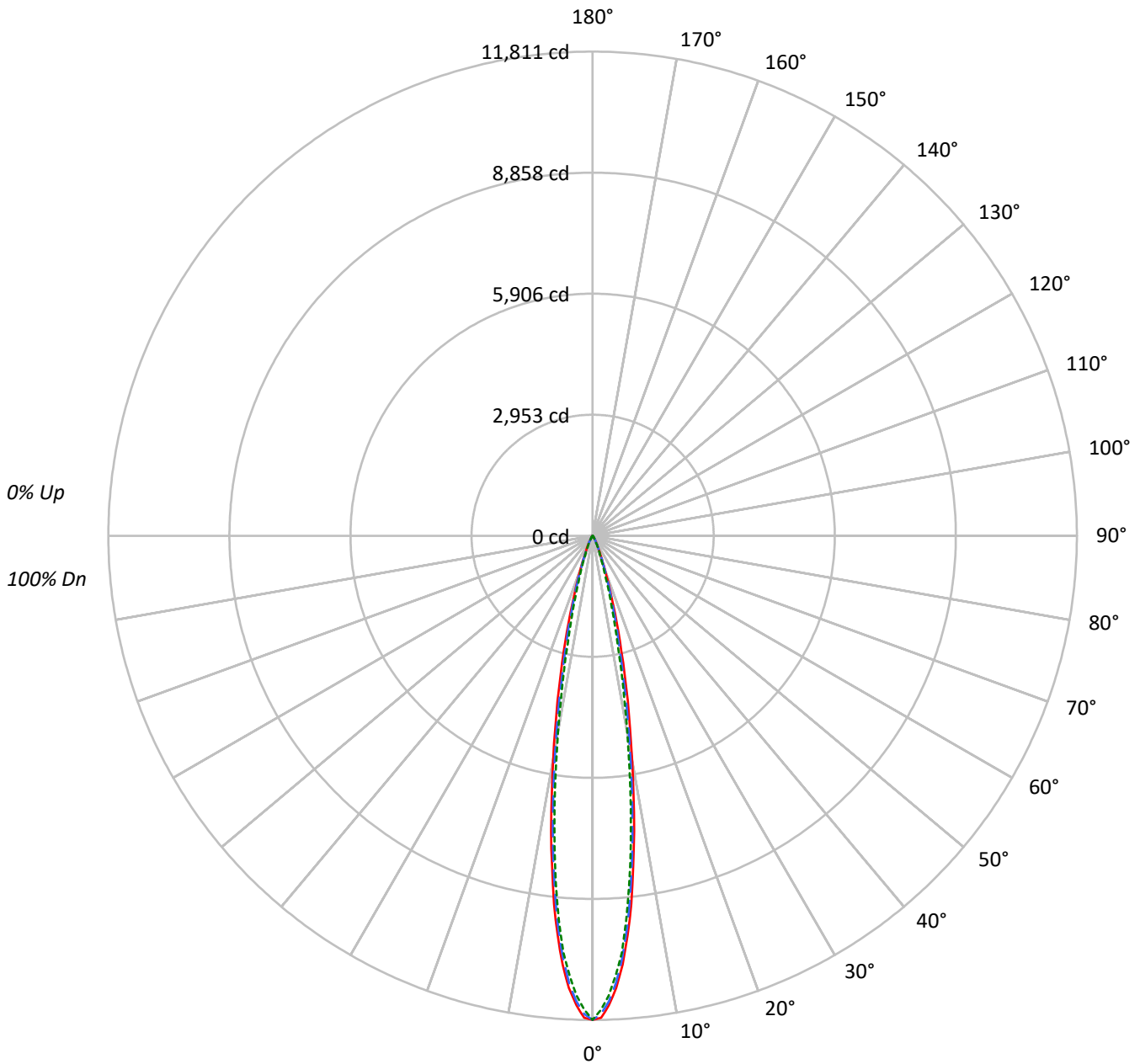
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5826997	5826997	5826997
5°	4848660	4759813	4663685
10°	2777292	2606160	2432273
15°	1235287	1097074	919327
20°	448109	421332	333811
25°	172074	160642	138323
30°	74230	69046	61241
35°	35113	35113	29090
40°	17582	18162	14684
45°	10187	9559	8931
50°	6985	6294	6294
55°	5505	3957	4731
60°	4539	2664	3552
65°	3152	2101	3152
70°	2596	1298	2596
75°	1716	1716	1716
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	768.2	48.1
10°-20°	621.6	38.9
20°-30°	149.9	9.4
30°-40°	38.2	2.4
40°-50°	11.4	0.7
50°-60°	4.9	0.3
60°-70°	2.3	0.1
70°-80°	0.8	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°	1539.7	96.4
0°-40°	1577.9	98.8
0°-60°	1594.2	99.8
0°-90°	1597.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1597.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	11811	11811	11811	11811	11811	
5°	9790	9700	9611	9527	9417	792
15°	2418	2361	2148	1935	1800	690
25°	316	318	295	268	254	163
35°	58	59	58	53	48	40
45°	15	15	14	13	13	12
55°	6	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°	11810.8	11810.8	11810.8	11810.8	11810.8
1°	11758.0	11676.0	11666.0	11717.0	11566.7
2°	11457.4	11399.1	11365.4	11395.4	11225.1
3°	11044.7	10988.2	10927.2	10928.1	10737.7
4°	10482.7	10438.1	10335.1	10304.2	10193.9
5°	9790.4	9700.2	9611.0	9527.2	9416.9
6°	9025.2	8908.7	8781.1	8656.3	8543.4
7°	8125.3	8047.8	7879.3	7709.0	7613.3
8°	7279.0	7154.2	6957.5	6744.3	6663.3
9°	6369.0	6279.8	6053.9	5806.1	5725.0
10°	5543.8	5450.9	5202.2	4926.2	4855.1
11°	4769.5	4682.1	4423.4	4133.7	4058.1
12°	4114.6	3990.7	3693.7	3442.3	3368.5
13°	3462.3	3377.6	3096.2	2847.5	2704.5
14°	2907.6	2837.5	2582.4	2363.8	2212.6
15°	2418.5	2361.1	2147.9	1934.8	1799.9
16°	1984.0	1948.4	1779.9	1574.0	1463.8
17°	1609.6	1576.8	1469.3	1279.8	1186.9
18°	1299.9	1295.3	1206.0	1042.1	959.2
19°	1069.4	1067.6	985.6	848.1	779.7
20°	853.5	865.4	802.5	682.3	635.8
21°	695.9	702.3	652.2	561.1	519.2
22°	566.6	571.1	538.3	463.7	440.9
23°	464.6	467.3	440.0	384.4	364.4
24°	382.6	384.4	359.8	320.6	303.3
25°	316.1	317.9	295.1	267.8	254.1
26°	262.3	264.2	244.1	225.0	211.3
27°	217.7	221.3	201.3	189.5	174.9
28°	185.8	186.7	168.5	161.2	147.6
29°	152.1	157.6	142.1	135.7	125.7
30°	130.3	133.0	121.2	116.6	107.5
32.5°	86.5	88.4	82.9	79.2	72.0
35°	58.3	59.2	58.3	52.8	48.3
37.5°	40.1	40.1	41.0	34.6	32.8
40°	27.3	27.3	28.2	23.7	22.8
42.5°	20.0	20.0	19.1	16.4	16.4
45°	14.6	14.6	13.7	12.8	12.8
47.5°	11.8	10.9	10.0	10.0	10.0
50°	9.1	9.1	8.2	7.3	8.2
52.5°	7.3	7.3	6.4	6.4	6.4
55°	6.4	5.5	4.6	4.6	5.5
57.5°	4.6	4.6	3.6	3.6	4.6
60°	4.6	3.6	2.7	3.6	3.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	2.7	1.8	1.8	1.8	1.8
70°	1.8	1.8	0.9	0.9	1.8
72.5°	0.9	0.9	0.9	0.9	0.9
75°	0.9	0.9	0.9	0.9	0.9
77.5°	0.9	0.9	0.0	0.0	0.9
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°	3.6	2.7	2.7	2.7	2.7
65°	2.7	2.7	1.8	1.8	2.7



(END OF REPORT)