

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: P282418

Luminaire Tested: **LDA2B209035D010 EU2B20NFL259035 2LBAPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282418
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: LDA2B209035D010 EU2B20NFL259035 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: 1522.4 lumens
Efficiency: N/A
Efficacy: 73.9 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

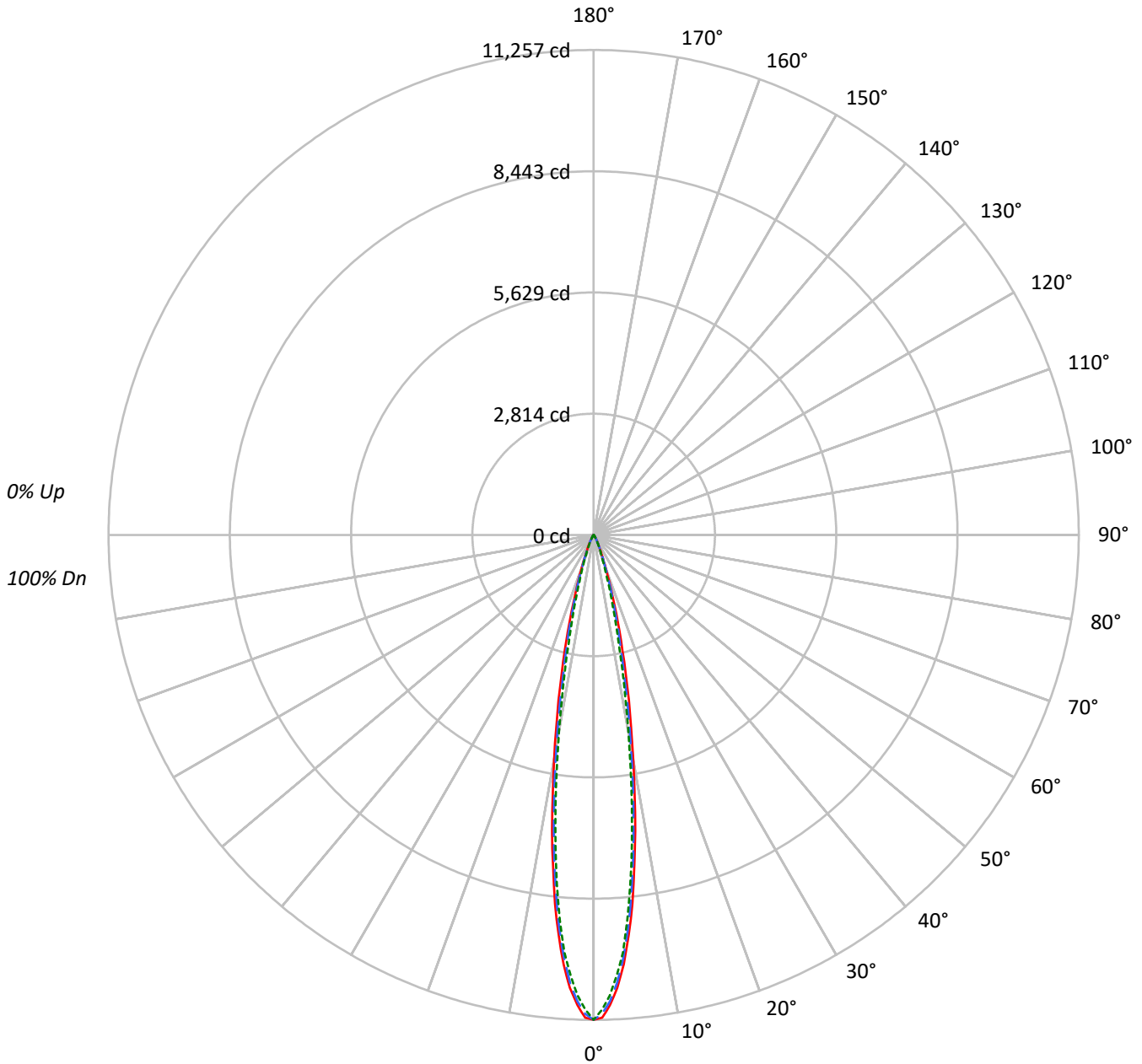
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					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	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°	5553724	5553724	5553724
5°	4621292	4536605	4444985
10°	2647039	2483923	2318201
15°	1177315	1045640	876219
20°	427108	401591	318165
25°	164017	153130	131845
30°	70755	65799	58336
35°	33487	33487	27705
40°	16745	17325	13976
45°	9698	9070	8512
50°	6678	5987	5987
55°	5247	3699	4473
60°	4243	2565	3454
65°	3035	1985	3035
70°	2452	1298	2452
75°	1716	1716	1716
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	732.1	48.1
10°-20°	592.5	38.9
20°-30°	142.9	9.4
30°-40°	36.4	2.4
40°-50°	10.9	0.7
50°-60°	4.6	0.3
60°-70°	2.2	0.1
70°-80°	0.8	0.1
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°	1467.5	96.4
0°-40°	1503.9	98.8
0°-60°	1519.4	99.8
0°-90°	1522.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1522.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	11257	11257	11257	11257	11257	
5°	9331	9245	9160	9080	8975	755
15°	2305	2250	2047	1844	1716	657
25°	301	303	281	255	242	156
35°	56	56	56	50	46	38
45°	14	14	13	12	12	12
55°	6	5	4	4	5	5
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°	11256.9	11256.9	11256.9	11256.9	11256.9
1°	11206.6	11128.5	11118.9	11167.5	11024.3
2°	10920.1	10864.5	10832.4	10861.0	10698.7
3°	10526.8	10473.0	10414.8	10415.7	10234.2
4°	9991.1	9948.6	9850.5	9821.0	9715.9
5°	9331.3	9245.3	9160.3	9080.4	8975.3
6°	8602.0	8490.9	8369.3	8250.4	8142.7
7°	7744.2	7670.5	7509.8	7347.5	7256.3
8°	6937.7	6818.8	6631.2	6428.1	6350.8
9°	6070.4	5985.3	5770.0	5533.8	5456.6
10°	5283.8	5195.2	4958.2	4695.2	4627.4
11°	4545.8	4462.5	4215.9	3939.8	3867.8
12°	3921.6	3803.5	3520.5	3280.9	3210.6
13°	3300.0	3219.2	2951.0	2714.0	2577.7
14°	2771.3	2704.4	2461.3	2253.0	2108.8
15°	2305.0	2250.3	2047.2	1844.0	1715.5
16°	1890.9	1857.1	1696.4	1500.2	1395.2
17°	1534.1	1502.8	1400.4	1219.8	1131.3
18°	1238.9	1234.6	1149.5	993.2	914.2
19°	1019.3	1017.5	939.4	808.3	743.2
20°	813.5	824.8	764.9	650.3	606.0
21°	663.3	669.4	621.6	534.8	494.9
22°	540.0	544.4	513.1	441.9	420.2
23°	442.8	445.4	419.3	366.4	347.3
24°	364.6	366.4	342.9	305.6	289.1
25°	301.3	303.0	281.3	255.2	242.2
26°	250.0	251.8	232.7	214.4	201.4
27°	207.5	211.0	191.9	180.6	166.7
28°	177.1	178.0	160.6	153.7	140.6
29°	145.0	150.2	135.4	129.4	119.8
30°	124.2	126.8	115.5	111.1	102.4
32.5°	82.5	84.2	79.0	75.5	68.6
35°	55.6	56.4	55.6	50.4	46.0
37.5°	38.2	38.2	39.1	33.0	31.3
40°	26.0	26.0	26.9	22.6	21.7
42.5°	19.1	19.1	18.2	15.6	15.6
45°	13.9	13.9	13.0	12.2	12.2
47.5°	11.3	10.4	9.6	9.6	9.6
50°	8.7	8.7	7.8	6.9	7.8
52.5°	6.9	6.9	6.1	6.1	6.1
55°	6.1	5.2	4.3	4.3	5.2
57.5°	4.3	4.3	3.5	3.5	4.3
60°	4.3	3.5	2.6	3.5	3.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	2.6	1.7	1.7	1.7	1.7
70°	1.7	1.7	0.9	0.9	1.7
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°	3.5	2.6	2.6	2.6	2.6
65°	2.6	2.6	1.7	1.7	2.6



(END OF REPORT)