

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: P282596

Luminaire Tested: **LDA2B209027D010 EU2B20SP159027 2LBALPINSQ1MW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282596
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: LDA2B209027D010 EU2B20SP159027 2LBALPINSQ1MW
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Pinhole w-lens, MW
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1548.4 lumens
Efficiency: N/A
Efficacy: 75.2 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

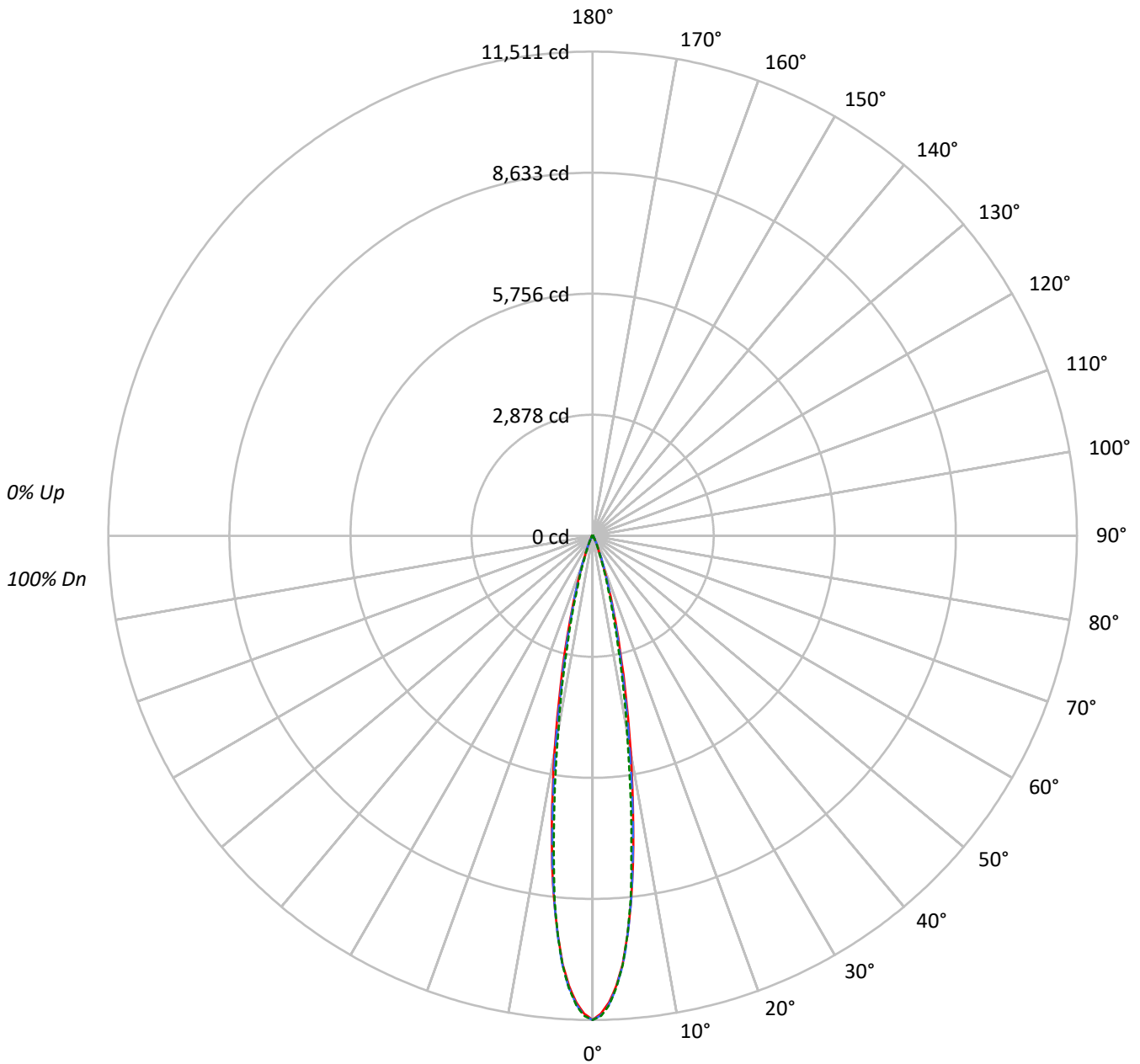
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					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	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	95	94	93	92	91	90	89	88	87	86	85	84	83	82	81	80								
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	98	96	95	94	93	92	91	90	89	88	87	86	85	84	83	82	81	80										
3	108	104	100	97	106	102	99	97	100	97	95	98	95	94	96	94	92	91	90	89	88	87	86	85	84	83	82	81	80													
4	105	100	96	93	104	99	96	93	97	94	92	95	93	91	94	92	90	89	88	87	86	85	84	83	82	81	80															
5	102	97	93	90	101	96	93	90	95	91	89	93	90	88	92	89	88	87	86	85	84	83	82	81	80																	
6	100	94	90	88	99	94	90	87	92	89	87	91	88	86	90	88	86	85	84	83	82	81	80																			
7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	86	84	83	82	81	80																					
8	96	90	86	83	95	89	86	83	88	85	83	87	85	82	87	84	82	81	80																							
9	94	88	84	81	93	87	84	81	86	83	81	86	83	81	85	82	81	80																								
10	92	86	82	80	91	85	82	80	85	82	79	84	81	79	84	81	79	78																								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5679038	5679038	5679038
5°	4711328	4726631	4708703
10°	2607563	2513380	2341346
15°	1055548	1009579	896394
20°	353657	374973	303569
25°	134567	135057	127817
30°	60330	59361	57310
35°	29271	26079	20719
40°	19321	24473	17067
45°	4954	8024	7396
50°	1382	1996	2686
55°	12128	10666	16687
60°	17465	13913	22695
65°	8288	21597	20663
70°	7645	6347	7645
75°	3431	8387	23637
80°	40060	55118	50288
85°	0	24907	30002



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	753.9	48.7
10°-20°	571.1	36.9
20°-30°	129.8	8.4
30°-40°	38.4	2.5
40°-50°	12.8	0.8
50°-60°	11.3	0.7
60°-70°	13.5	0.9
70°-80°	8.7	0.6
80°-90°	9.0	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°	1454.8	94.0
0°-40°	1493.2	96.4
0°-60°	1517.2	98.0
0°-90°	1548.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1548.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	11511	11511	11511	11511	11511	
5°	9513	9588	9544	9420	9508	763
15°	2067	2095	1977	1791	1755	601
25°	247	266	248	245	235	129
35°	49	54	43	50	34	38
45°	7	20	12	20	11	11
55°	14	20	12	18	19	6
65°	7	15	18	18	18	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°	11510.9	11510.9	11510.9	11510.9	11510.9
1°	11362.6	11408.5	11404.0	11385.5	11418.2
2°	11101.2	11156.9	11151.6	11111.0	11169.2
3°	10718.1	10767.5	10759.6	10701.3	10764.9
4°	10206.1	10262.6	10240.5	10153.1	10234.3
5°	9513.1	9588.1	9544.0	9419.5	9507.8
6°	8745.0	8808.6	8738.9	8573.8	8660.3
7°	7885.2	7924.9	7833.1	7621.2	7563.0
8°	6946.8	6998.9	6870.9	6623.7	6560.1
9°	6049.8	6067.5	5912.1	5649.1	5568.7
10°	5205.0	5191.8	5017.0	4750.4	4673.6
11°	4404.3	4386.6	4202.1	3955.8	3980.6
12°	3676.0	3710.4	3495.9	3272.5	3277.0
13°	3077.4	3081.0	2896.5	2683.7	2671.4
14°	2519.5	2552.2	2394.2	2203.5	2168.2
15°	2066.6	2094.9	1976.6	1791.2	1755.0
16°	1654.4	1689.7	1604.9	1437.2	1389.5
17°	1332.1	1377.2	1321.6	1181.2	1126.5
18°	1065.5	1100.0	1086.7	942.0	896.9
19°	841.3	889.0	892.5	771.6	717.7
20°	673.6	716.8	714.2	620.6	578.2
22.5°	386.7	409.6	410.5	366.4	341.6
25°	247.2	265.7	248.1	245.4	234.8
26°	214.5	229.5	210.1	210.1	200.4
27°	173.9	187.2	168.6	176.6	163.3
28°	146.5	160.7	144.8	143.0	141.2
29°	121.8	135.1	114.8	123.6	118.3
30°	105.9	115.6	104.2	117.4	100.6
32.5°	82.1	90.0	69.7	88.3	66.2
35°	48.6	53.9	43.3	50.3	34.4
37.5°	50.3	52.1	46.8	52.1	48.6
40°	30.0	30.9	38.0	38.0	26.5
42.5°	28.2	27.4	16.8	26.5	21.2
45°	7.1	20.3	11.5	20.3	10.6
47.5°	5.3	7.1	7.1	14.1	14.1
50°	1.8	7.1	2.6	5.3	3.5
52.5°	0.0	16.8	3.5	12.4	10.6
55°	14.1	20.3	12.4	18.5	19.4
57.5°	1.8	14.1	7.1	15.0	10.6
60°	17.7	23.8	14.1	25.6	23.0
62.5°	1.8	15.9	18.5	14.1	12.4
65°	7.1	15.0	18.5	17.7	17.7
67.5°	8.8	15.0	11.5	11.5	15.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
75°	1.8	6.2	4.4	7.9	12.4
77.5°	1.8	7.1	6.2	14.1	10.6
80°	14.1	15.9	19.4	25.6	17.7
82.5°	12.4	12.4	19.4	14.1	10.6
85°	0.0	0.0	4.4	4.4	5.3
87.5°	0.0	3.5	8.8	7.1	12.4
90°	0.0	0.0	0.0	0.0	0.0



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







70°	5.3	1.8	4.4	4.4	5.3
72.5°	1.8	7.9	7.1	4.4	8.8



(END OF REPORT)