

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: P283745

Luminaire Tested: **LDA2B209024D010 EU2B20FL409024 2LBALPINSQ1MW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P283745
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1809-951-15)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDA2B209024D010 EU2B20FL409024 2LBALPINSQ1MW
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MW

Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1193.6 lumens
Efficiency: N/A
Efficacy: 57.9 lumens/watt
Spacing Criteria (0/90/45): 0.55 / 0.55 / 0.55
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

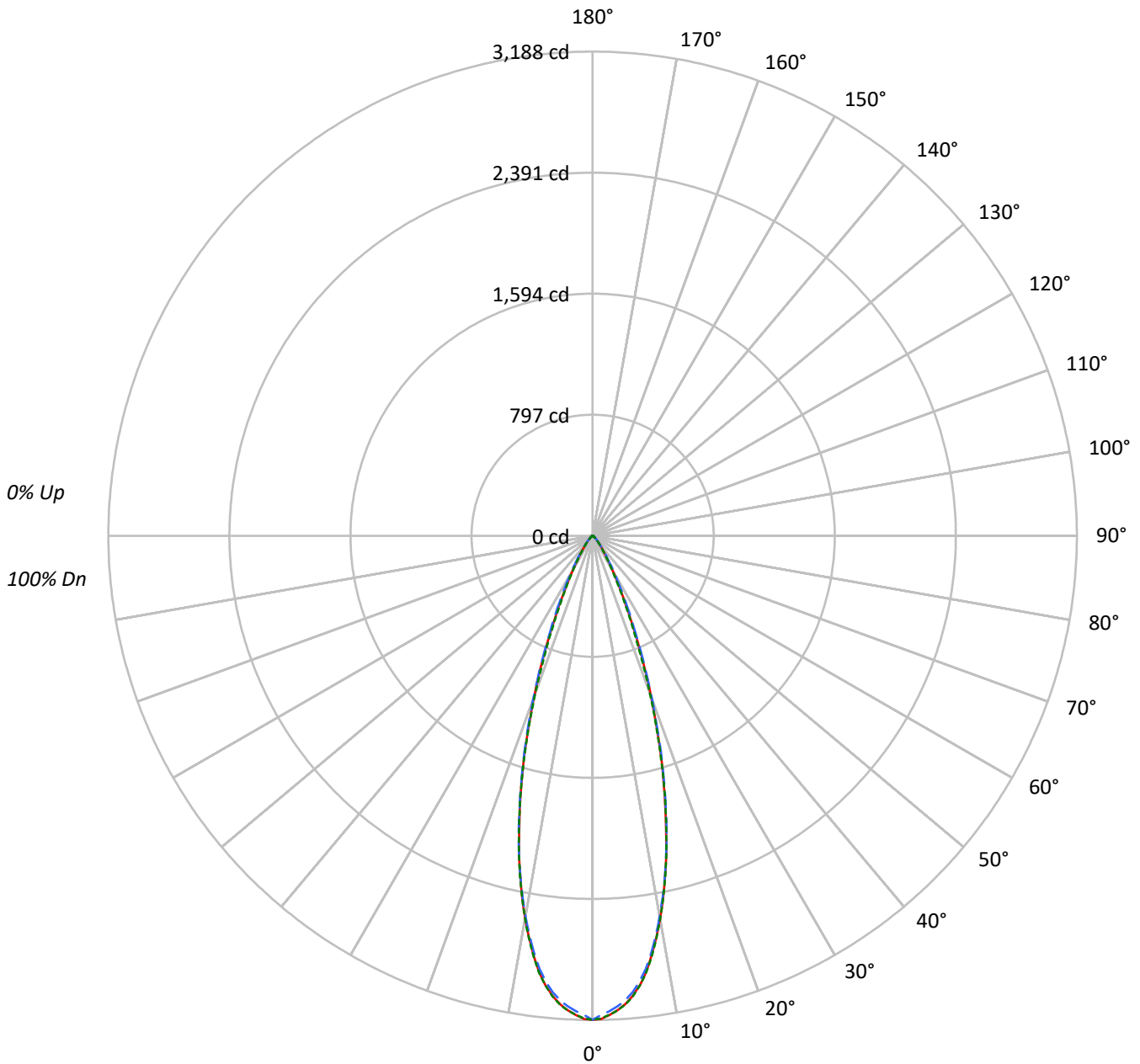
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95																			
2	110	106	102	99	108	104	101	98	101	98	96	98	96	94	95	93	92	90																			
3	105	100	96	92	104	99	95	92	96	93	90	94	91	89	92	89	88	86																			
4	101	95	90	87	100	94	90	86	92	88	85	90	87	84	88	86	83	82																			
5	98	91	86	82	96	90	85	82	88	84	81	86	83	80	85	82	80	79																			
6	94	87	82	78	93	86	81	78	84	80	77	83	80	77	82	79	76	75																			
7	91	83	78	75	89	82	78	74	81	77	74	80	76	74	79	76	73	72																			
8	87	80	75	71	86	79	74	71	78	74	71	77	73	71	76	73	70	69																			
9	84	77	72	69	83	76	72	68	75	71	68	74	71	68	74	70	68	67																			
10	82	74	69	66	81	73	69	66	73	69	66	72	68	65	71	68	65	64																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1572689	1572689	1572689
5°	1505054	1493762	1507381
10°	1282240	1274224	1283592
15°	945070	951250	948185
20°	589970	600891	576950
25°	304790	327000	289439
30°	146124	167487	139231
35°	75406	83476	70588
40°	42249	44439	40124
45°	25676	25676	24769
50°	13355	16425	13355
55°	6881	10924	7483
60°	7894	7894	7894
65°	8639	8639	8639
70°	10674	9665	10674
75°	10293	10293	10293
80°	9376	9376	9376
85°	7359	7359	7359



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	274.2	23.0
10°-20°	503.6	42.2
20°-30°	273.0	22.9
30°-40°	87.6	7.3
40°-50°	29.9	2.5
50°-60°	10.4	0.9
60°-70°	7.6	0.6
70°-80°	5.6	0.5
80°-90°	1.6	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°	1050.9	88.0
0°-40°	1138.5	95.4
0°-60°	1178.8	98.8
0°-90°	1193.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1193.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3188	3188	3188	3188	3188	
5°	3039	3020	3016	3046	3044	275
15°	1850	1866	1862	1871	1856	502
25°	560	585	601	559	532	268
35°	125	131	139	126	117	84
45°	37	38	37	37	36	29
55°	8	10	13	10	9	9
65°	7	8	7	8	7	8
75°	5	5	5	5	5	6
85°	1	1	1	1	1	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3187.7	3187.7	3187.7	3187.7	3187.7
1°	3182.3	3159.6	3156.2	3185.7	3179.0
2°	3156.9	3135.5	3132.1	3161.6	3155.5
3°	3128.8	3109.3	3102.6	3133.4	3129.4
4°	3091.3	3073.2	3067.1	3098.0	3094.6
5°	3039.0	3020.3	3016.2	3046.4	3043.7
6°	2974.7	2959.3	2952.0	2982.1	2976.7
7°	2894.4	2880.3	2872.3	2894.4	2897.0
8°	2789.9	2783.2	2773.8	2795.9	2795.9
9°	2678.7	2672.7	2662.7	2682.7	2682.7
10°	2559.5	2555.5	2543.5	2562.2	2562.2
11°	2428.9	2426.9	2418.2	2433.6	2433.6
12°	2291.7	2296.3	2288.3	2301.7	2297.0
13°	2154.4	2152.4	2153.0	2163.1	2155.7
14°	1999.0	2011.1	2013.1	2019.1	2007.7
15°	1850.3	1865.7	1862.4	1871.1	1856.4
16°	1698.3	1715.7	1715.1	1717.1	1703.0
17°	1556.3	1566.4	1567.1	1565.0	1547.6
18°	1405.0	1419.1	1419.1	1415.7	1394.9
19°	1257.0	1267.7	1275.1	1267.7	1243.6
20°	1123.7	1131.1	1144.5	1125.7	1098.9
21°	995.8	1002.5	1013.9	991.8	962.3
22°	873.3	882.0	892.7	867.2	836.4
23°	758.8	778.8	782.9	748.0	721.9
24°	653.6	676.4	683.1	647.6	620.1
25°	559.9	585.3	600.7	559.2	531.7
26°	478.8	503.6	522.4	480.8	454.7
27°	407.8	434.0	453.4	414.5	389.8
28°	346.9	372.3	392.4	356.3	332.8
29°	301.4	316.1	336.2	306.0	284.6
30°	256.5	272.6	294.0	263.2	244.4
32.5°	176.1	184.8	201.6	182.8	168.1
35°	125.2	130.6	138.6	125.9	117.2
37.5°	89.1	91.7	96.4	89.1	84.4
40°	65.6	67.0	69.0	65.0	62.3
42.5°	48.9	49.6	49.6	48.2	46.9
45°	36.8	37.5	36.8	36.8	35.5
47.5°	26.8	28.8	28.1	28.1	26.1
50°	17.4	21.4	21.4	20.8	17.4
52.5°	10.7	14.7	16.7	14.7	11.4
55°	8.0	10.0	12.7	10.0	8.7
57.5°	8.0	8.0	9.4	8.0	8.0
60°	8.0	8.0	8.0	8.0	8.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	7.4	7.4	7.4	7.4	7.4
70°	7.4	7.4	6.7	7.4	7.4
72.5°	6.7	6.7	6.0	6.7	6.0
75°	5.4	5.4	5.4	5.4	5.4
77.5°	4.0	4.0	4.0	4.0	4.0
80°	3.3	3.3	3.3	3.3	3.3
82.5°	2.0	2.0	2.0	2.7	2.0
85°	1.3	1.3	1.3	1.3	1.3
87.5°	0.7	0.7	0.7	0.7	0.7
90°	0.0	0.0	0.0	0.0	0.0



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







62.5°	8.0	8.0	8.0	8.0	8.0
65°	7.4	8.0	7.4	8.0	7.4



(END OF REPORT)