

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: P283747

Luminaire Tested: **LDA2B209024D010 EU2B20FL409024 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P283747
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 2LBALPINSQ1MMS
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MMS

Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1167.4 lumens
Efficiency: N/A
Efficacy: 56.7 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

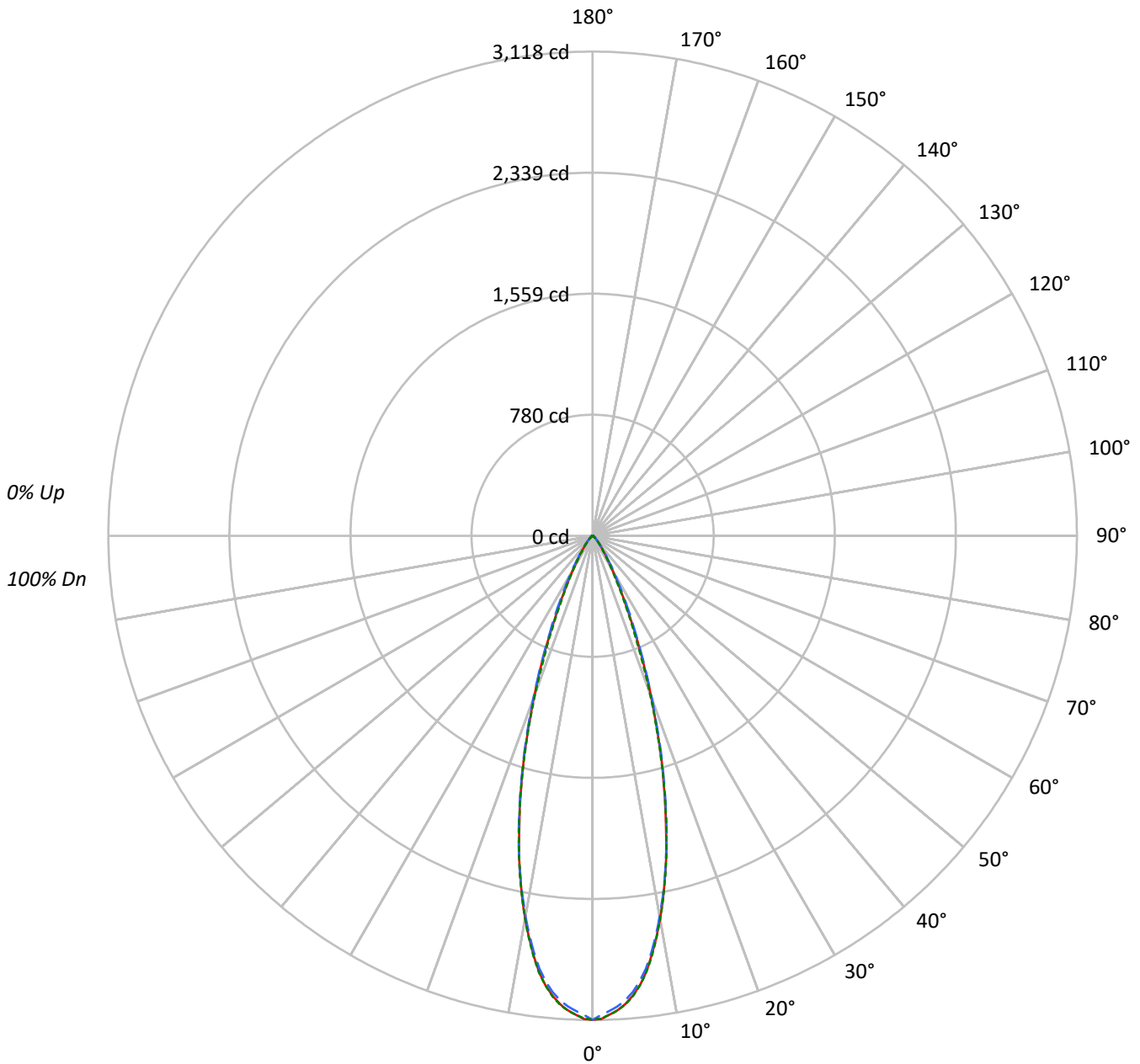
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1538105	1538105	1538105
5°	1471971	1460927	1474249
10°	1254035	1246170	1255337
15°	924282	930309	927295
20°	577002	587660	564296
25°	298040	319814	283070
30°	142877	163784	136212
35°	73780	81670	69022
40°	41347	43473	39222
45°	25118	25118	24211
50°	13048	16118	13048
55°	6795	10666	7311
60°	7795	7795	7795
65°	8405	8405	8405
70°	10386	9376	10386
75°	9912	9912	9912
80°	9376	9376	9376
85°	7359	7359	7359



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	268.2	23.0
10°-20°	492.6	42.2
20°-30°	267.0	22.9
30°-40°	85.7	7.3
40°-50°	29.2	2.5
50°-60°	10.2	0.9
60°-70°	7.5	0.6
70°-80°	5.4	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°	1027.8	88.0
0°-40°	1113.5	95.4
0°-60°	1152.9	98.8
0°-90°	1167.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1167.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3118	3118	3118	3118	3118	
5°	2972	2954	2950	2979	2977	269
15°	1810	1825	1821	1830	1816	491
25°	548	572	588	547	520	262
35°	122	128	136	123	115	83
45°	36	37	36	36	35	29
55°	8	10	12	10	8	9
65°	7	8	7	8	7	7
75°	5	5	5	5	5	5
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°	3117.6	3117.6	3117.6	3117.6	3117.6
1°	3112.3	3090.1	3086.8	3115.6	3109.1
2°	3087.4	3066.5	3063.2	3092.0	3086.1
3°	3059.9	3040.9	3034.4	3064.5	3060.6
4°	3023.3	3005.6	2999.7	3029.8	3026.5
5°	2972.2	2953.8	2949.9	2979.4	2976.8
6°	2909.3	2894.2	2887.0	2916.5	2911.3
7°	2830.7	2816.9	2809.1	2830.7	2833.3
8°	2728.5	2722.0	2712.8	2734.4	2734.4
9°	2619.8	2613.9	2604.1	2623.7	2623.7
10°	2503.2	2499.3	2487.5	2505.8	2505.8
11°	2375.5	2373.5	2365.0	2380.1	2380.1
12°	2241.2	2245.8	2238.0	2251.1	2246.5
13°	2107.0	2105.0	2105.7	2115.5	2108.3
14°	1955.0	1966.8	1968.8	1974.7	1963.5
15°	1809.6	1824.7	1821.4	1829.9	1815.5
16°	1661.0	1678.0	1677.3	1679.3	1665.5
17°	1522.1	1531.9	1532.6	1530.6	1513.6
18°	1374.1	1387.8	1387.8	1384.6	1364.3
19°	1229.3	1239.8	1247.0	1239.8	1216.2
20°	1099.0	1106.2	1119.3	1101.0	1074.8
21°	973.9	980.5	991.6	970.0	941.2
22°	854.1	862.6	873.0	848.2	818.0
23°	742.1	761.7	765.6	731.6	706.0
24°	639.2	661.5	668.0	633.3	606.5
25°	547.5	572.4	587.5	546.9	520.0
26°	468.3	492.5	510.9	470.3	444.7
27°	398.9	424.4	443.4	405.4	381.2
28°	339.3	364.2	383.8	348.4	325.5
29°	294.7	309.1	328.8	299.3	278.4
30°	250.8	266.6	287.5	257.4	239.1
32.5°	172.3	180.8	197.1	178.8	164.4
35°	122.5	127.7	135.6	123.1	114.6
37.5°	87.1	89.7	94.3	87.1	82.5
40°	64.2	65.5	67.5	63.5	60.9
42.5°	47.8	48.5	48.5	47.2	45.8
45°	36.0	36.7	36.0	36.0	34.7
47.5°	26.2	28.2	27.5	27.5	25.5
50°	17.0	21.0	21.0	20.3	17.0
52.5°	10.5	14.4	16.4	14.4	11.1
55°	7.9	9.8	12.4	9.8	8.5
57.5°	7.9	7.9	9.2	7.9	7.9
60°	7.9	7.9	7.9	7.9	7.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	7.2	7.2	7.2	7.2	7.2
70°	7.2	7.2	6.5	7.2	7.2
72.5°	6.5	6.5	5.9	6.5	5.9
75°	5.2	5.2	5.2	5.2	5.2
77.5°	3.9	3.9	3.9	3.9	3.9
80°	3.3	3.3	3.3	3.3	3.3
82.5°	2.0	2.0	2.0	2.6	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°	7.9	7.9	7.9	7.9	7.9
65°	7.2	7.9	7.2	7.9	7.2



(END OF REPORT)