

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: P283717

Luminaire Tested: **LDA2B208027D010 EU2B20FL408027 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P283717
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: LDA2B208027D010 EU2B20FL408027 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: 1596.2 lumens
Efficiency: N/A
Efficacy: 77.5 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

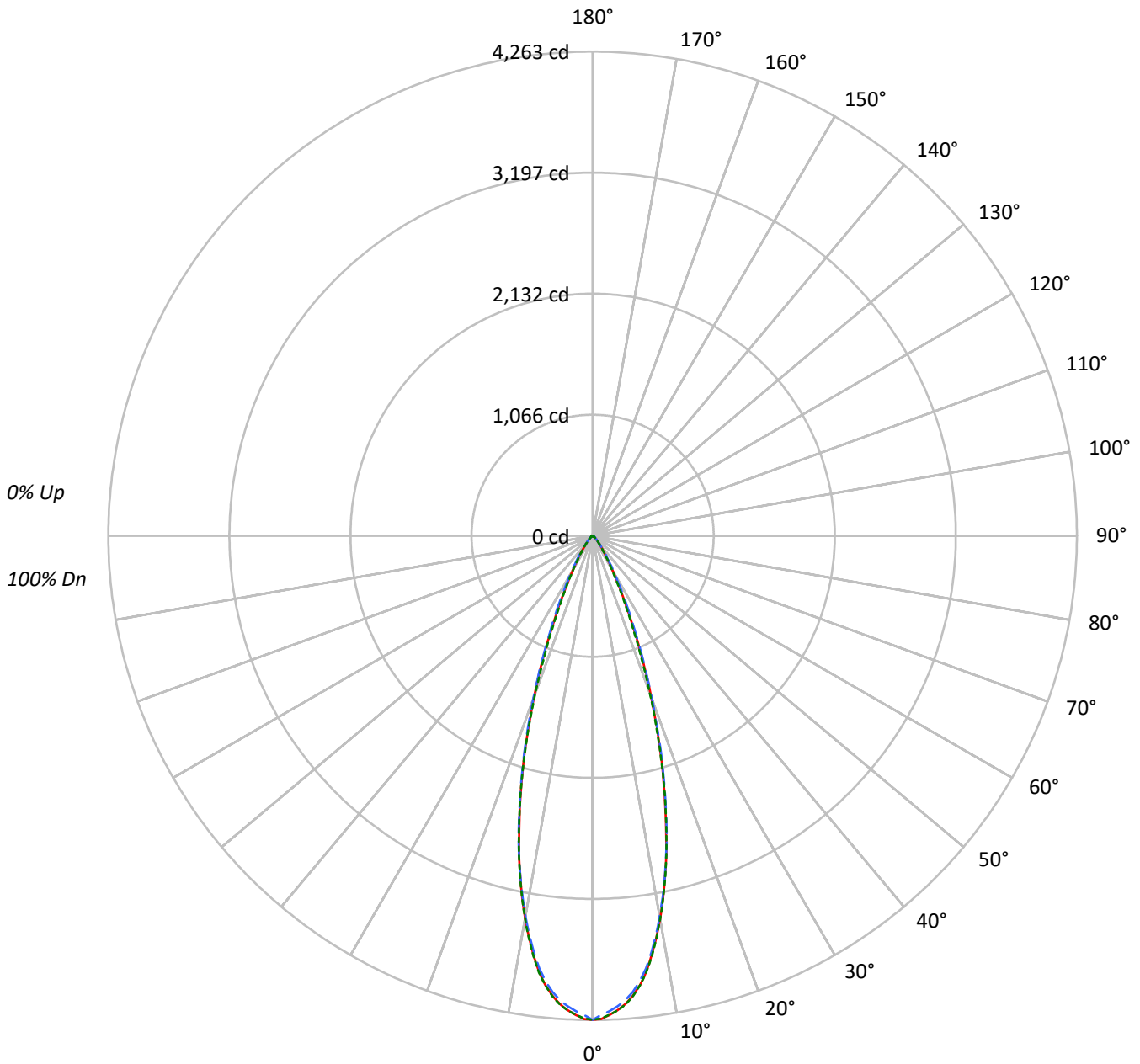
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2103053	2103053	2103053
5°	2012632	1997527	2015702
10°	1714679	1703908	1716483
15°	1263788	1272011	1267925
20°	788955	803498	771524
25°	407566	437288	387043
30°	195402	223943	186230
35°	100882	111663	94378
40°	56547	59380	53648
45°	34398	34398	33142
50°	17884	22028	17884
55°	9204	14623	9978
60°	10558	10558	10558
65°	11557	11557	11557
70°	14281	12982	14281
75°	13725	13725	13725
80°	12785	12785	12785
85°	10189	10189	10189



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	366.7	23.0
10°-20°	673.5	42.2
20°-30°	365.1	22.9
30°-40°	117.2	7.3
40°-50°	40.0	2.5
50°-60°	14.0	0.9
60°-70°	10.2	0.6
70°-80°	7.5	0.5
80°-90°	2.1	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°	1405.3	88.0
0°-40°	1522.5	95.4
0°-60°	1576.4	98.8
0°-90°	1596.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1596.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4263	4263	4263	4263	4263	
5°	4064	4039	4033	4074	4070	367
15°	2474	2495	2490	2502	2482	671
25°	749	783	803	748	711	359
35°	168	175	185	168	157	113
45°	49	50	49	49	48	39
55°	11	13	17	13	12	12
65°	10	11	10	11	10	10
75°	7	7	7	7	7	8
85°	2	2	2	2	2	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4262.7	4262.7	4262.7	4262.7	4262.7
1°	4255.5	4225.1	4220.6	4260.0	4251.0
2°	4221.5	4192.8	4188.3	4227.7	4219.7
3°	4183.9	4157.9	4148.9	4190.1	4184.8
4°	4133.7	4109.5	4101.5	4142.7	4138.2
5°	4063.9	4038.8	4033.4	4073.7	4070.1
6°	3977.9	3957.3	3947.4	3987.7	3980.6
7°	3870.4	3851.6	3840.9	3870.4	3874.0
8°	3730.7	3721.8	3709.2	3738.8	3738.8
9°	3582.1	3574.0	3560.6	3587.4	3587.4
10°	3422.7	3417.3	3401.2	3426.3	3426.3
11°	3248.0	3245.4	3233.7	3254.3	3254.3
12°	3064.5	3070.7	3060.0	3077.9	3071.6
13°	2880.9	2878.2	2879.1	2892.5	2882.7
14°	2673.1	2689.2	2691.9	2700.0	2684.8
15°	2474.3	2494.9	2490.4	2502.1	2482.4
16°	2271.0	2294.3	2293.4	2296.1	2277.3
17°	2081.2	2094.6	2095.5	2092.8	2069.5
18°	1878.8	1897.6	1897.6	1893.1	1865.4
19°	1680.9	1695.2	1705.1	1695.2	1663.0
20°	1502.7	1512.5	1530.4	1505.4	1469.5
21°	1331.6	1340.6	1355.8	1326.3	1286.9
22°	1167.8	1179.4	1193.7	1159.7	1118.5
23°	1014.6	1041.5	1046.9	1000.3	965.4
24°	874.0	904.5	913.4	866.0	829.2
25°	748.7	782.7	803.3	747.8	711.0
26°	640.3	673.4	698.5	643.0	608.1
27°	545.4	580.3	606.3	554.3	521.2
28°	463.9	497.9	524.8	476.4	445.1
29°	403.0	422.7	449.5	409.3	380.6
30°	343.0	364.5	393.1	351.9	326.9
32.5°	235.5	247.2	269.6	244.5	224.8
35°	167.5	174.6	185.4	168.4	156.7
37.5°	119.1	122.7	129.0	119.1	112.8
40°	87.8	89.6	92.2	86.9	83.3
42.5°	65.4	66.3	66.3	64.5	62.7
45°	49.3	50.1	49.3	49.3	47.5
47.5°	35.8	38.5	37.6	37.6	34.9
50°	23.3	28.7	28.7	27.8	23.3
52.5°	14.3	19.7	22.4	19.7	15.2
55°	10.7	13.4	17.0	13.4	11.6
57.5°	10.7	10.7	12.5	10.7	10.7
60°	10.7	10.7	10.7	10.7	10.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	9.9	9.9	9.9	9.9	9.9
70°	9.9	9.9	9.0	9.9	9.9
72.5°	9.0	9.0	8.1	9.0	8.1
75°	7.2	7.2	7.2	7.2	7.2
77.5°	5.4	5.4	5.4	5.4	5.4
80°	4.5	4.5	4.5	4.5	4.5
82.5°	2.7	2.7	2.7	3.6	2.7
85°	1.8	1.8	1.8	1.8	1.8
87.5°	0.9	0.9	0.9	0.9	0.9
90°	0.0	0.0	0.0	0.0	0.0



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







62.5°	10.7	10.7	10.7	10.7	10.7
65°	9.9	10.7	9.9	10.7	9.9



(END OF REPORT)