

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: P281756

Luminaire Tested: **LDA2B209027D010 EU2B20SP159027 2LBAPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P281756
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-10)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDA2B209027D010 EU2B20SP159027 2LBAPINSQ1MMS
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ PinHole, MMS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1548.5 lumens
Efficiency: N/A
Efficacy: 75.2 lumens/watt
Spacing Criteria (0/90/45): 0.3 / 0.3 / 0.29
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

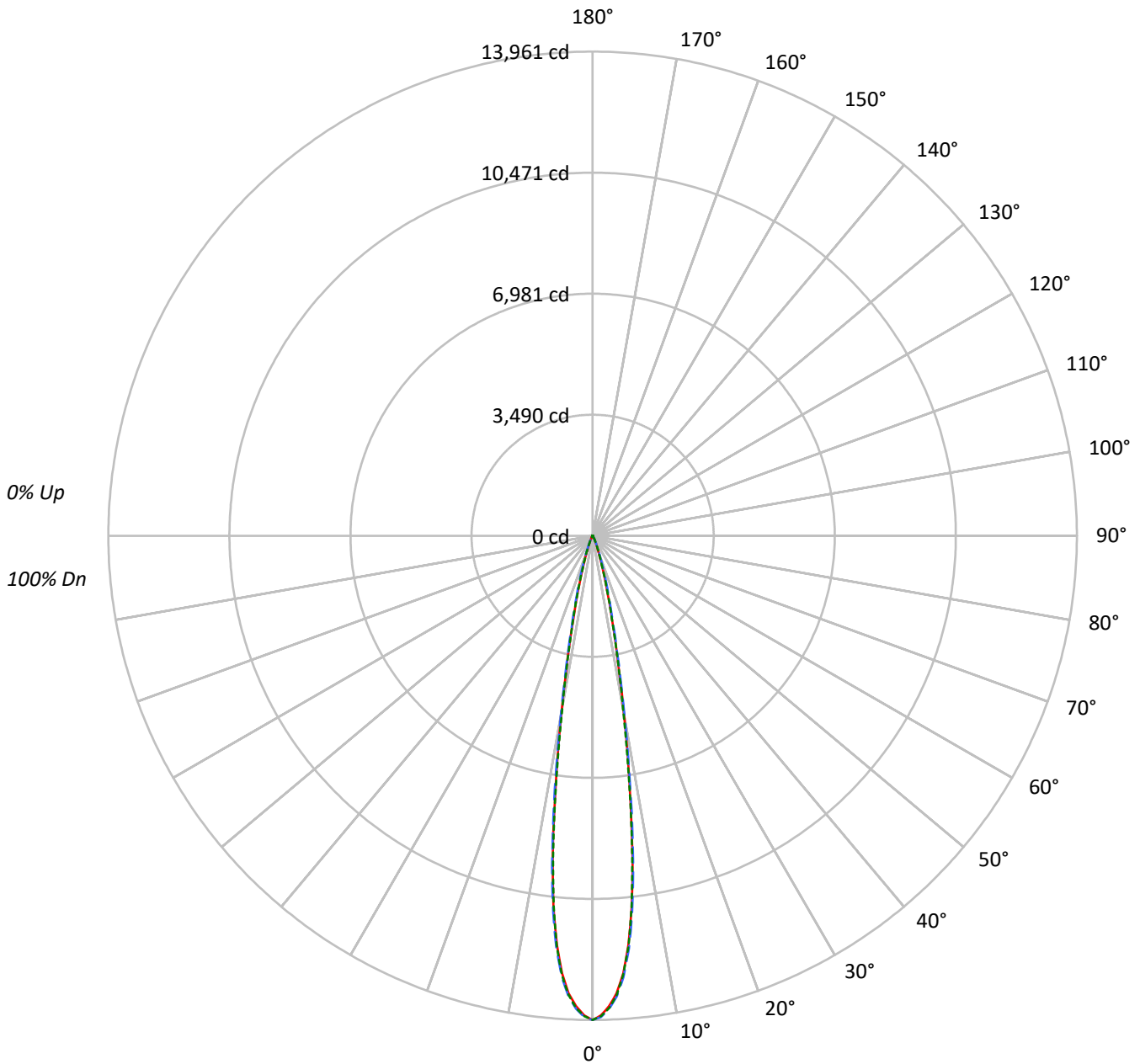
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	116	114	112	111	113	112	110	109	108	107	106	104	103	103	101	100	100	98																			
2	113	110	107	105	111	108	106	104	105	103	102	102	101	99	99	98	97	96																			
3	110	106	103	101	108	105	102	100	102	100	98	100	98	97	98	97	95	94																			
4	107	103	100	97	106	102	99	97	100	98	96	98	96	95	97	95	94	93																			
5	105	100	97	95	104	100	96	94	98	95	93	97	94	93	95	93	92	91																			
6	103	98	95	92	102	97	94	92	96	93	91	95	93	91	94	92	90	89																			
7	101	96	93	90	100	95	92	90	94	92	90	93	91	89	93	90	89	88																			
8	99	94	91	89	98	94	91	88	93	90	88	92	90	88	91	89	88	87																			
9	98	92	89	87	97	92	89	87	91	89	87	91	88	86	90	88	86	85																			
10	96	91	88	86	95	90	88	86	90	87	85	89	87	85	89	87	85	84																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6887824	6887824	6887824
5°	5865203	5926316	5876296
10°	2589378	2648593	2528910
15°	785711	901144	798020
20°	235106	313440	262722
25°	91562	90147	96298
30°	40789	36859	38853
35°	8312	7288	7288
40°	0	580	2254
45°	7256	6000	10815
50°	0	1996	6601
55°	0	0	3011
60°	0	888	3454
65°	0	0	1985
70°	0	5049	9953
75°	0	0	0
80°	0	0	0
85°	0	5095	19812



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	905.0	58.4
10°-20°	516.9	33.4
20°-30°	98.1	6.3
30°-40°	17.8	1.2
40°-50°	4.6	0.3
50°-60°	3.5	0.2
60°-70°	0.6	0.0
70°-80°	0.8	0.1
80°-90°	1.1	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°	1520.0	98.2
0°-40°	1537.9	99.3
0°-60°	1546.0	99.8
0°-90°	1548.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1548.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	13961	13961	13961	13961	13961	
5°	11843	11921	11966	11946	11865	899
15°	1538	1673	1764	1657	1562	489
25°	168	181	166	189	177	88
35°	14	17	12	15	12	19
45°	10	16	9	10	16	5
55°	0	1	0	1	4	1
65°	0	0	0	0	2	0
75°	0	0	0	0	0	0
85°	0	1	1	1	4	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	13961.0	13961.0	13961.0	13961.0	13961.0
1°	13829.0	13843.7	13874.8	13906.7	13856.6
2°	13570.2	13605.6	13649.6	13678.9	13624.6
3°	13207.9	13257.0	13303.6	13309.7	13258.8
4°	12647.9	12708.3	12757.5	12751.5	12687.6
5°	11843.0	11920.6	11966.4	11945.6	11865.4
6°	10779.2	10854.3	10912.9	10853.4	10745.6
7°	9454.0	9540.3	9602.4	9500.6	9368.6
8°	7918.3	8039.1	8101.2	7958.9	7823.4
9°	6463.7	6547.4	6610.4	6455.1	6317.1
10°	5168.7	5322.3	5286.9	5167.0	5048.0
11°	4065.3	4204.2	4210.2	4129.1	4012.7
12°	3182.7	3329.4	3366.5	3304.3	3200.8
13°	2514.9	2624.5	2685.7	2621.9	2523.5
14°	2001.6	2099.1	2177.6	2094.8	1996.4
15°	1538.3	1672.9	1764.3	1657.3	1562.4
16°	1223.4	1334.7	1443.4	1321.7	1245.8
17°	939.5	1038.8	1150.9	1040.5	978.4
18°	743.7	822.2	945.6	831.7	777.3
19°	582.4	641.9	756.6	656.6	612.6
20°	447.8	513.3	597.0	528.9	500.4
22.5°	270.9	307.1	331.3	310.6	295.9
25°	168.2	181.2	165.6	188.9	176.9
26°	146.7	156.2	152.7	168.2	153.6
27°	117.3	129.4	119.9	132.0	127.7
28°	107.0	121.6	102.7	117.3	110.4
29°	75.1	81.1	73.3	78.5	78.5
30°	71.6	73.3	64.7	70.7	68.2
32.5°	56.1	52.6	43.1	45.7	44.0
35°	13.8	17.3	12.1	14.7	12.1
37.5°	20.7	19.0	22.4	21.6	20.7
40°	0.0	0.9	0.9	0.9	3.5
42.5°	15.5	9.5	8.6	6.0	10.4
45°	10.4	16.4	8.6	9.5	15.5
47.5°	0.0	0.9	0.0	1.7	1.7
50°	0.0	1.7	2.6	3.5	8.6
52.5°	1.7	10.4	5.2	9.5	13.8
55°	0.0	0.9	0.0	0.9	3.5
57.5°	3.5	1.7	3.5	3.5	15.5
60°	0.0	1.7	0.9	0.9	3.5
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	1.7
67.5°	0.0	0.9	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.9	0.0	0.0
80°	0.0	0.9	0.0	0.0	0.0
82.5°	0.0	0.9	1.7	2.6	1.7
85°	0.0	0.9	0.9	0.9	3.5
87.5°	0.0	1.7	2.6	0.0	1.7
90°	0.0	0.0	0.0	0.0	0.0



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







70°	0.0	2.6	3.5	0.0	6.9
72.5°	0.0	4.3	0.9	0.9	0.0



(END OF REPORT)