

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: P282466

Luminaire Tested: **LDA2B058050D010 EU2B05SP158050 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282466
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: LDA2B058050D010 EU2B05SP158050 2LBALPINSQ1MMS
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Pinhole w-lens, MMS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 832.6 lumens
Efficiency: N/A
Efficacy: 118.9 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

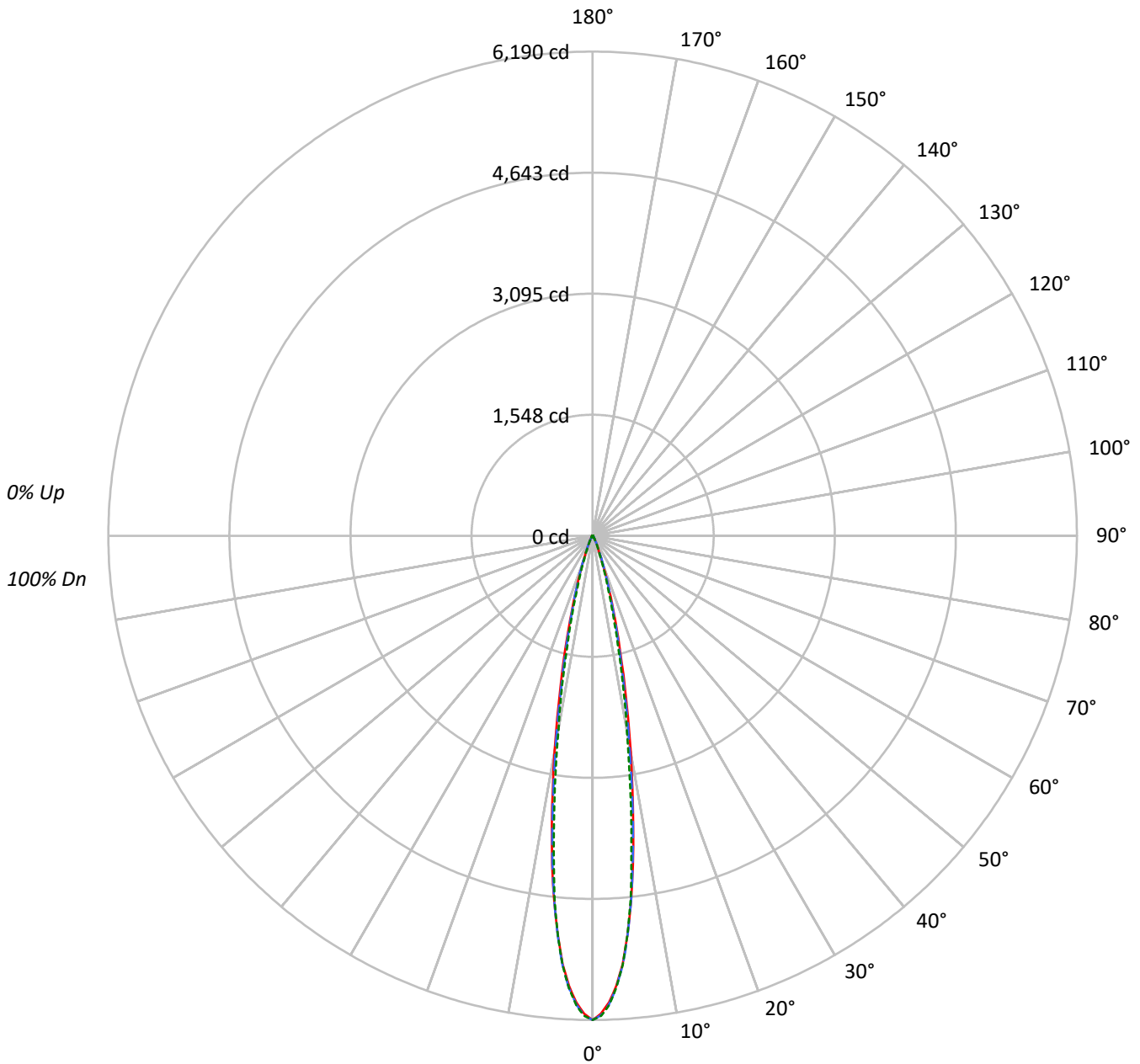
Input Watts (W): 7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P282466

CATALOG NUMBER: LDA2B058050D010 EU2B05SP158050 2LBALPINSQ1MMS

Luminous Intensity Polar Plot





TEST NUMBER: P282466

CATALOG NUMBER: LDA2B058050D010 EU2B05SP158050 2LBALPINSQ1MMS

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	0			
RCR																														
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100	100	100	100	100	100	100			
1	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96	96	96	96	96	96	96	96	96	96			
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	98	96	95	94	94	94	94	94	94	94	94	94	94			
3	108	104	100	97	106	102	99	97	100	97	95	98	95	94	96	94	92	91	91	91	91	91	91	91	91	91	91			
4	105	100	96	93	104	99	96	93	97	94	92	95	93	91	94	92	90	89	89	89	89	89	89	89	89	89	89			
5	102	97	93	90	101	96	93	90	95	91	89	93	90	88	92	89	88	87	87	87	87	87	87	87	87	87	87			
6	100	94	90	88	99	94	90	87	92	89	87	91	88	86	90	88	86	85	85	85	85	85	85	85	85	85	85			
7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	86	84	83	83	83	83	83	83	83	83	83	83			
8	96	90	86	83	95	89	86	83	88	85	83	87	85	82	87	84	82	81	81	81	81	81	81	81	81	81	81			
9	94	88	84	81	93	87	84	81	86	83	81	86	83	81	85	82	81	80	80	80	80	80	80	80	80	80	80			
10	92	86	82	80	91	85	82	80	85	82	79	84	81	79	84	81	79	78	78	78	78	78	78	78	78	78	78			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3053959	3053959	3053959
5°	2533532	2541802	2532145
10°	1402223	1351574	1259045
15°	567665	542893	482061
20°	190164	201662	163283
25°	72346	72618	68753
30°	32472	31902	30820
35°	15720	14033	11142
40°	10369	13138	9145
45°	2651	4326	3977
50°	691	1075	1458
55°	6537	5677	8946
60°	9374	7499	12137
65°	4436	11674	11090
70°	4039	3462	4039
75°	1716	4575	12581
80°	21593	29548	26991
85°	0	13586	15850



TEST NUMBER: P282466

CATALOG NUMBER: LDA2B058050D010 EU2B05SP158050 2LBALPINSQ1MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	405.4	48.7
10°-20°	307.1	36.9
20°-30°	69.8	8.4
30°-40°	20.6	2.5
40°-50°	6.9	0.8
50°-60°	6.0	0.7
60°-70°	7.3	0.9
70°-80°	4.6	0.6
80°-90°	4.8	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°	782.3	94.0
0°-40°	803.0	96.4
0°-60°	815.9	98.0
0°-90°	832.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	832.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6190	6190	6190	6190	6190	
5°	5116	5156	5132	5065	5113	410
15°	1111	1126	1063	963	944	323
25°	133	143	133	132	126	70
35°	26	29	23	27	18	21
45°	4	11	6	11	6	6
55°	8	11	7	10	10	3
65°	4	8	10	10	10	4
75°	1	3	2	4	7	2
85°	0	0	2	2	3	3
90°	0	0	0	0	0	



TEST NUMBER: P282466

CATALOG NUMBER: LDA2B058050D010 EU2B05SP158050 2LBALPINSQ1MMS

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6190.1	6190.1	6190.1	6190.1	6190.1
1°	6110.3	6135.0	6132.6	6122.7	6140.2
2°	5969.8	5999.7	5996.8	5975.0	6006.3
3°	5763.8	5790.3	5786.1	5754.7	5788.9
4°	5488.4	5518.8	5506.9	5459.9	5503.6
5°	5115.7	5156.1	5132.4	5065.4	5112.9
6°	4702.7	4736.9	4699.4	4610.6	4657.1
7°	4240.3	4261.7	4212.3	4098.4	4067.1
8°	3735.7	3763.7	3694.9	3561.9	3527.8
9°	3253.4	3262.9	3179.3	3037.8	2994.6
10°	2799.0	2791.9	2697.9	2554.5	2513.2
11°	2368.5	2359.0	2259.7	2127.3	2140.6
12°	1976.8	1995.3	1879.9	1759.8	1762.2
13°	1654.9	1656.8	1557.6	1443.2	1436.5
14°	1354.9	1372.5	1287.5	1184.9	1165.9
15°	1111.4	1126.5	1062.9	963.2	943.8
16°	889.7	908.6	863.1	772.9	747.2
17°	716.4	740.6	710.7	635.2	605.8
18°	573.0	591.5	584.4	506.5	482.3
19°	452.4	478.1	480.0	414.9	386.0
20°	362.2	385.5	384.1	333.7	311.0
22.5°	207.9	220.3	220.8	197.0	183.7
25°	132.9	142.9	133.4	132.0	126.3
26°	115.4	123.4	113.0	113.0	107.8
27°	93.5	100.6	90.7	94.9	87.8
28°	78.8	86.4	77.9	76.9	76.0
29°	65.5	72.6	61.7	66.5	63.6
30°	57.0	62.2	56.0	63.1	54.1
32.5°	44.2	48.4	37.5	47.5	35.6
35°	26.1	29.0	23.3	27.1	18.5
37.5°	27.1	28.0	25.2	28.0	26.1
40°	16.1	16.6	20.4	20.4	14.2
42.5°	15.2	14.7	9.0	14.2	11.4
45°	3.8	10.9	6.2	10.9	5.7
47.5°	2.8	3.8	3.8	7.6	7.6
50°	0.9	3.8	1.4	2.8	1.9
52.5°	0.0	9.0	1.9	6.6	5.7
55°	7.6	10.9	6.6	10.0	10.4
57.5°	0.9	7.6	3.8	8.1	5.7
60°	9.5	12.8	7.6	13.8	12.3
62.5°	0.9	8.5	10.0	7.6	6.6
65°	3.8	8.1	10.0	9.5	9.5
67.5°	4.7	8.1	6.2	6.2	8.5



TEST NUMBER: P282466

CATALOG NUMBER: LDA2B058050D010 EU2B05SP158050 2LBALPINSQ1MMS

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
75°	0.9	3.3	2.4	4.3	6.6
77.5°	0.9	3.8	3.3	7.6	5.7
80°	7.6	8.5	10.4	13.8	9.5
82.5°	6.6	6.6	10.4	7.6	5.7
85°	0.0	0.0	2.4	2.4	2.8
87.5°	0.0	1.9	4.7	3.8	6.6
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093





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







70°	2.8	0.9	2.4	2.4	2.8
72.5°	0.9	4.3	3.8	2.4	4.7



(END OF REPORT)