

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: P282754

Luminaire Tested: **LDA2B208035D010 EU2B20NFL258035 2LBALPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282754
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1809-951-26)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDA2B208035D010 EU2B20NFL258035 2LBALPINSQ1MMS
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC AND 2in Adj SQ Pinhole w-lens, MMS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1716.7 lumens
Efficiency: N/A
Efficacy: 83.3 lumens/watt
Spacing Criteria (0/90/45): 0.33 / 0.3 / 0.32
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

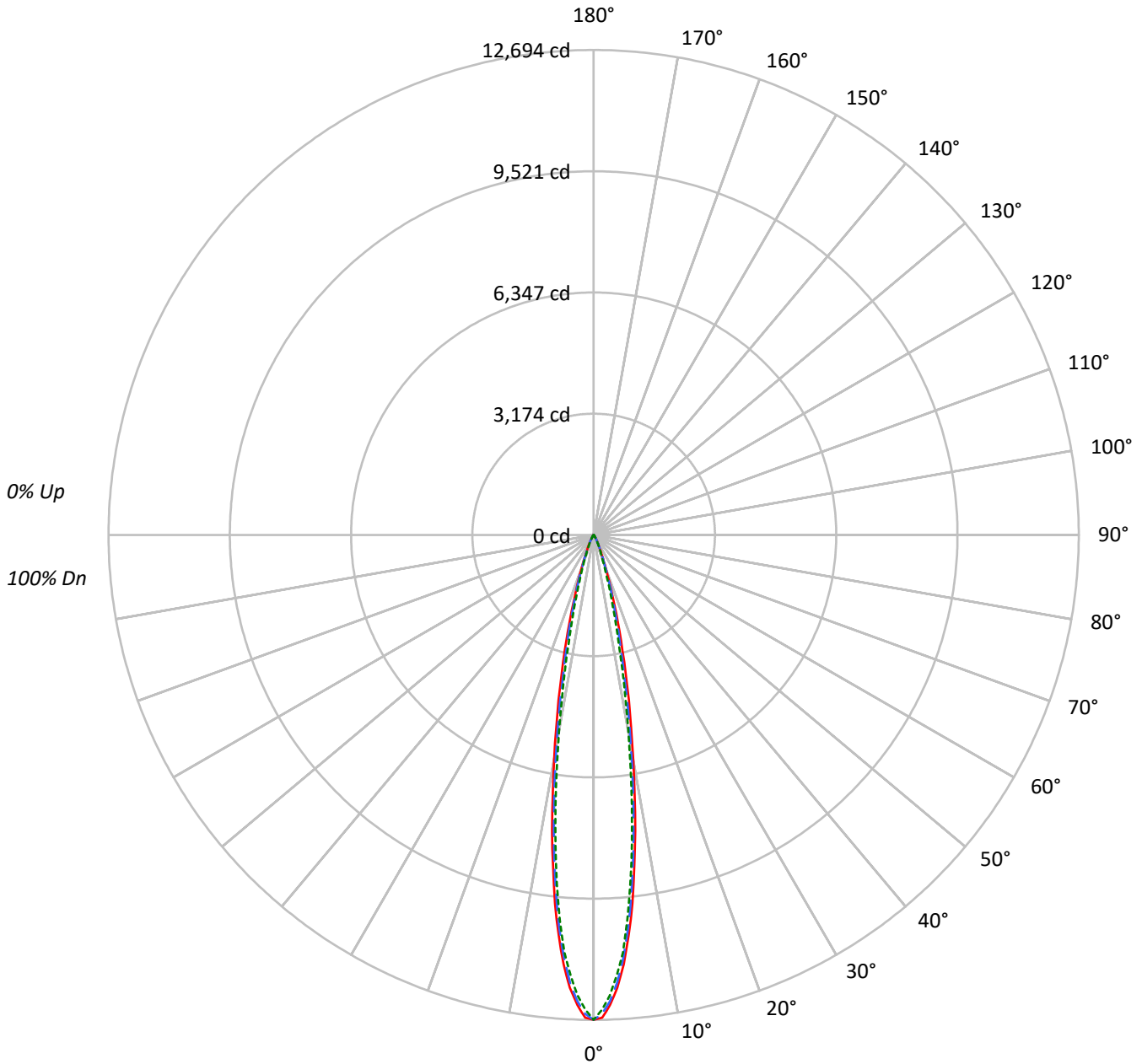
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P282754

CATALOG NUMBER: LDA2B208035D010 EU2B20NFL258035 2LBALPINSQ1MMS

Luminous Intensity Polar Plot





TEST NUMBER: P282754

CATALOG NUMBER: LDA2B208035D010 EU2B20NFL258035 2LBALPINSQ1MMS

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				100															
1	115	113	112	110	113	111	110	108	107	106	105	104	103	102	100	100	99	97				97															
2	112	109	106	104	110	107	105	103	104	102	100	101	100	98	99	97	96	95				95															
3	109	105	101	99	107	103	100	98	101	99	97	99	97	95	97	95	94	92				92															
4	106	101	98	95	105	100	97	94	98	96	93	96	94	92	95	93	91	90				90															
5	103	98	94	92	102	97	94	91	96	93	91	94	92	90	93	91	89	88				88															
6	101	95	92	89	100	95	91	89	93	90	88	92	90	88	91	89	87	86				86															
7	99	93	89	87	98	92	89	86	91	88	86	90	88	86	89	87	85	84				84															
8	96	91	87	85	96	90	87	84	89	86	84	88	86	84	88	85	83	83				83															
9	94	89	85	83	94	88	85	82	87	84	82	87	84	82	86	84	82	81				81															
10	93	87	83	81	92	86	83	81	86	83	81	85	82	80	85	82	80	79				79															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6262537	6262537	6262537
5°	5211081	5115598	5012289
10°	2984895	2800938	2614075
15°	1327582	1179103	988076
20°	481605	452834	358749
25°	184921	172672	148666
30°	79756	74173	65799
35°	37763	37763	31259
40°	18935	19514	15779
45°	10954	10256	9559
50°	7522	6754	6754
55°	5935	4215	5075
60°	4835	2861	3848
65°	3385	2335	3385
70°	2885	1442	2885
75°	1906	1906	1906
80°	0	0	0
85°	0	0	0



TEST NUMBER: P282754

CATALOG NUMBER: LDA2B208035D010 EU2B20NFL258035 2LBALPINSQ1MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	825.6	48.1
10°-20°	668.1	38.9
20°-30°	161.1	9.4
30°-40°	41.1	2.4
40°-50°	12.2	0.7
50°-60°	5.2	0.3
60°-70°	2.5	0.1
70°-80°	0.9	0.0
80°-90°	0.0	0.0
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°	1654.8	96.4
0°-40°	1695.9	98.8
0°-60°	1713.4	99.8
0°-90°	1716.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1716.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	12694	12694	12694	12694	12694	
5°	10522	10425	10329	10239	10121	851
15°	2599	2538	2308	2079	1934	741
25°	340	342	317	288	273	175
35°	63	64	63	57	52	43
45°	16	16	15	14	14	13
55°	7	6	5	5	6	6
65°	3	3	2	2	3	3
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P282754

CATALOG NUMBER: LDA2B208035D010 EU2B20NFL258035 2LBALPINSQ1MMS

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	12693.6	12693.6	12693.6	12693.6	12693.6
1°	12636.8	12548.7	12538.0	12592.8	12431.3
2°	12313.8	12251.1	12214.9	12247.2	12064.1
3°	11870.3	11809.6	11744.0	11745.0	11540.4
4°	11266.3	11218.3	11107.7	11074.4	10955.9
5°	10522.2	10425.3	10329.4	10239.3	10120.8
6°	9699.9	9574.6	9437.5	9303.4	9182.0
7°	8732.6	8649.4	8468.3	8285.2	8182.4
8°	7823.1	7689.0	7477.5	7248.5	7161.3
9°	6845.1	6749.2	6506.4	6240.1	6153.0
10°	5958.2	5858.3	5591.0	5294.4	5218.0
11°	5126.0	5032.0	4754.0	4442.7	4361.4
12°	4422.1	4289.0	3969.8	3699.6	3620.3
13°	3721.2	3630.1	3327.6	3060.3	2906.6
14°	3124.9	3049.6	2775.4	2540.5	2378.0
15°	2599.2	2537.5	2308.5	2079.4	1934.5
16°	2132.2	2094.1	1913.0	1691.7	1573.2
17°	1729.9	1694.6	1579.1	1375.5	1275.6
18°	1397.0	1392.1	1296.2	1120.0	1030.9
19°	1149.3	1147.4	1059.3	911.4	838.0
20°	917.3	930.0	862.5	733.3	683.3
21°	748.0	754.8	701.0	603.1	558.0
22°	608.9	613.8	578.6	498.3	473.8
23°	499.3	502.2	472.9	413.1	391.6
24°	411.2	413.1	386.7	344.6	326.0
25°	339.7	341.7	317.2	287.8	273.1
26°	281.9	283.9	262.4	241.8	227.1
27°	234.0	237.9	216.4	203.6	188.0
28°	199.7	200.7	181.1	173.3	158.6
29°	163.5	169.4	152.7	145.9	135.1
30°	140.0	142.9	130.2	125.3	115.5
32.5°	93.0	95.0	89.1	85.2	77.3
35°	62.7	63.6	62.7	56.8	51.9
37.5°	43.1	43.1	44.1	37.2	35.2
40°	29.4	29.4	30.3	25.5	24.5
42.5°	21.5	21.5	20.6	17.6	17.6
45°	15.7	15.7	14.7	13.7	13.7
47.5°	12.7	11.7	10.8	10.8	10.8
50°	9.8	9.8	8.8	7.8	8.8
52.5°	7.8	7.8	6.9	6.9	6.9
55°	6.9	5.9	4.9	4.9	5.9
57.5°	4.9	4.9	3.9	3.9	4.9
60°	4.9	3.9	2.9	3.9	3.9



TEST NUMBER: P282754

CATALOG NUMBER: LDA2B208035D010 EU2B20NFL258035 2LBALPINSQ1MMS

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	2.9	2.0	2.0	2.0	2.0
70°	2.0	2.0	1.0	1.0	2.0
72.5°	1.0	1.0	1.0	1.0	1.0
75°	1.0	1.0	1.0	1.0	1.0
77.5°	1.0	1.0	0.0	0.0	1.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093





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







62.5°	3.9	2.9	2.9	2.9	2.9
65°	2.9	2.9	2.0	2.0	2.9



(END OF REPORT)