

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: P281736

Luminaire Tested: **LDA2B208027D010 EU2B20SP158027 2LBAPINSQ1MW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P281736
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: LDA2B208027D010 EU2B20SP158027 2LBAPINSQ1MW
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ PinHole, MW
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1964.9 lumens
Efficiency: N/A
Efficacy: 95.4 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

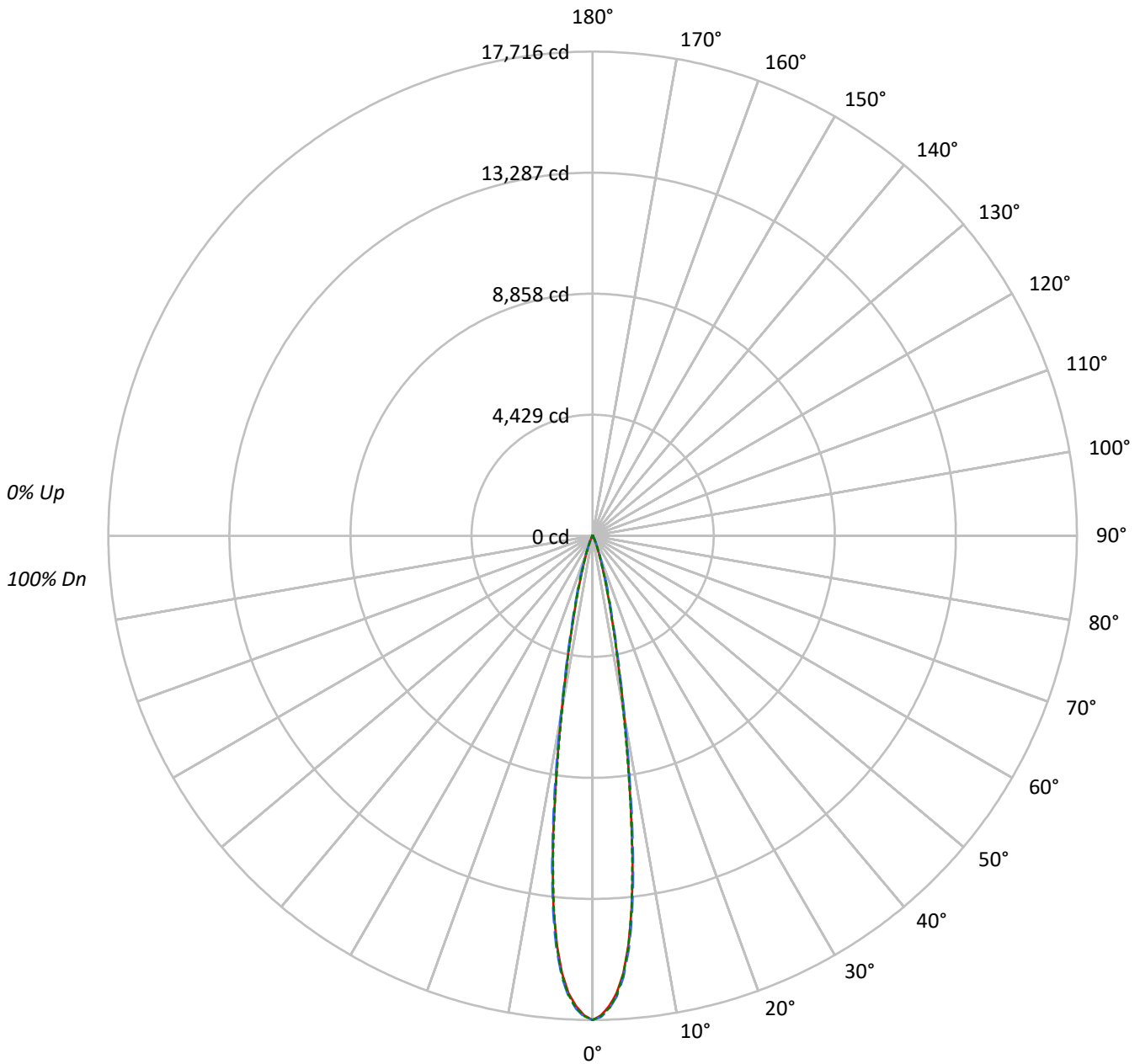
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8740447	8740447	8740447
5°	7442760	7520266	7456825
10°	3285880	3361026	3209081
15°	997015	1143553	1012695
20°	298319	397759	333391
25°	116222	114425	122155
30°	51784	46771	49278
35°	10540	9215	9215
40°	0	708	2834
45°	9140	7605	13745
50°	0	2533	8366
55°	0	0	3785
60°	0	1085	4342
65°	0	0	2568
70°	0	6347	12694
75°	0	0	0
80°	0	0	0
85°	0	6227	24907



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1148.4	58.4
10°-20°	655.9	33.4
20°-30°	124.5	6.3
30°-40°	22.6	1.2
40°-50°	5.8	0.3
50°-60°	4.4	0.2
60°-70°	0.7	0.0
70°-80°	1.0	0.1
80°-90°	1.4	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°	1928.9	98.2
0°-40°	1951.5	99.3
0°-60°	1961.8	99.8
0°-90°	1964.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1964.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	17716	17716	17716	17716	17716	
5°	15028	15127	15185	15159	15057	1141
15°	1952	2123	2239	2103	1983	621
25°	214	230	210	240	224	112
35°	18	22	15	19	15	24
45°	13	21	11	12	20	6
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°	17716.1	17716.1	17716.1	17716.1	17716.1
1°	17548.6	17567.2	17606.6	17647.2	17583.7
2°	17220.2	17265.1	17320.9	17358.1	17289.2
3°	16760.4	16822.8	16881.9	16889.5	16825.0
4°	16049.8	16126.5	16188.9	16181.2	16100.2
5°	15028.4	15126.9	15184.9	15158.7	15056.8
6°	13678.5	13773.7	13848.2	13772.6	13635.8
7°	11996.9	12106.3	12185.2	12056.0	11888.5
8°	10048.1	10201.4	10280.2	10099.6	9927.7
9°	8202.3	8308.5	8388.4	8191.3	8016.2
10°	6559.0	6753.8	6709.0	6556.8	6405.7
11°	5158.7	5335.0	5342.6	5239.7	5091.9
12°	4038.7	4224.9	4271.9	4193.1	4061.7
13°	3191.4	3330.4	3408.1	3327.1	3202.3
14°	2539.9	2663.7	2763.3	2658.2	2533.4
15°	1952.0	2122.8	2238.9	2103.1	1982.7
16°	1552.4	1693.7	1831.6	1677.2	1580.9
17°	1192.2	1318.1	1460.5	1320.3	1241.5
18°	943.7	1043.3	1199.9	1055.4	986.4
19°	739.0	814.5	960.1	833.1	777.3
20°	568.2	651.4	757.6	671.1	635.0
22.5°	343.8	389.8	420.4	394.1	375.5
25°	213.5	229.9	210.2	239.8	224.4
26°	186.1	198.2	193.8	213.5	194.9
27°	148.9	164.2	152.2	167.5	162.0
28°	135.8	154.4	130.3	148.9	140.1
29°	95.2	102.9	93.1	99.6	99.6
30°	90.9	93.1	82.1	89.8	86.5
32.5°	71.2	66.8	54.7	58.0	55.8
35°	17.5	21.9	15.3	18.6	15.3
37.5°	26.3	24.1	28.5	27.4	26.3
40°	0.0	1.1	1.1	1.1	4.4
42.5°	19.7	12.0	10.9	7.7	13.1
45°	13.1	20.8	10.9	12.0	19.7
47.5°	0.0	1.1	0.0	2.2	2.2
50°	0.0	2.2	3.3	4.4	10.9
52.5°	2.2	13.1	6.6	12.0	17.5
55°	0.0	1.1	0.0	1.1	4.4
57.5°	4.4	2.2	4.4	4.4	19.7
60°	0.0	2.2	1.1	1.1	4.4
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	2.2
67.5°	0.0	1.1	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	1.1	0.0	0.0
80°	0.0	1.1	0.0	0.0	0.0
82.5°	0.0	1.1	2.2	3.3	2.2
85°	0.0	1.1	1.1	1.1	4.4
87.5°	0.0	2.2	3.3	0.0	2.2
90°	0.0	0.0	0.0	0.0	0.0



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







70°	0.0	3.3	4.4	0.0	8.8
72.5°	0.0	5.5	1.1	1.1	0.0



(END OF REPORT)