

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: P281753

Luminaire Tested: **LDA2B209024D010 EU2B20SP159024 2LBAPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P281753
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: LDA2B209024D010 EU2B20SP159024 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: 1437.0 lumens
Efficiency: N/A
Efficacy: 69.8 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

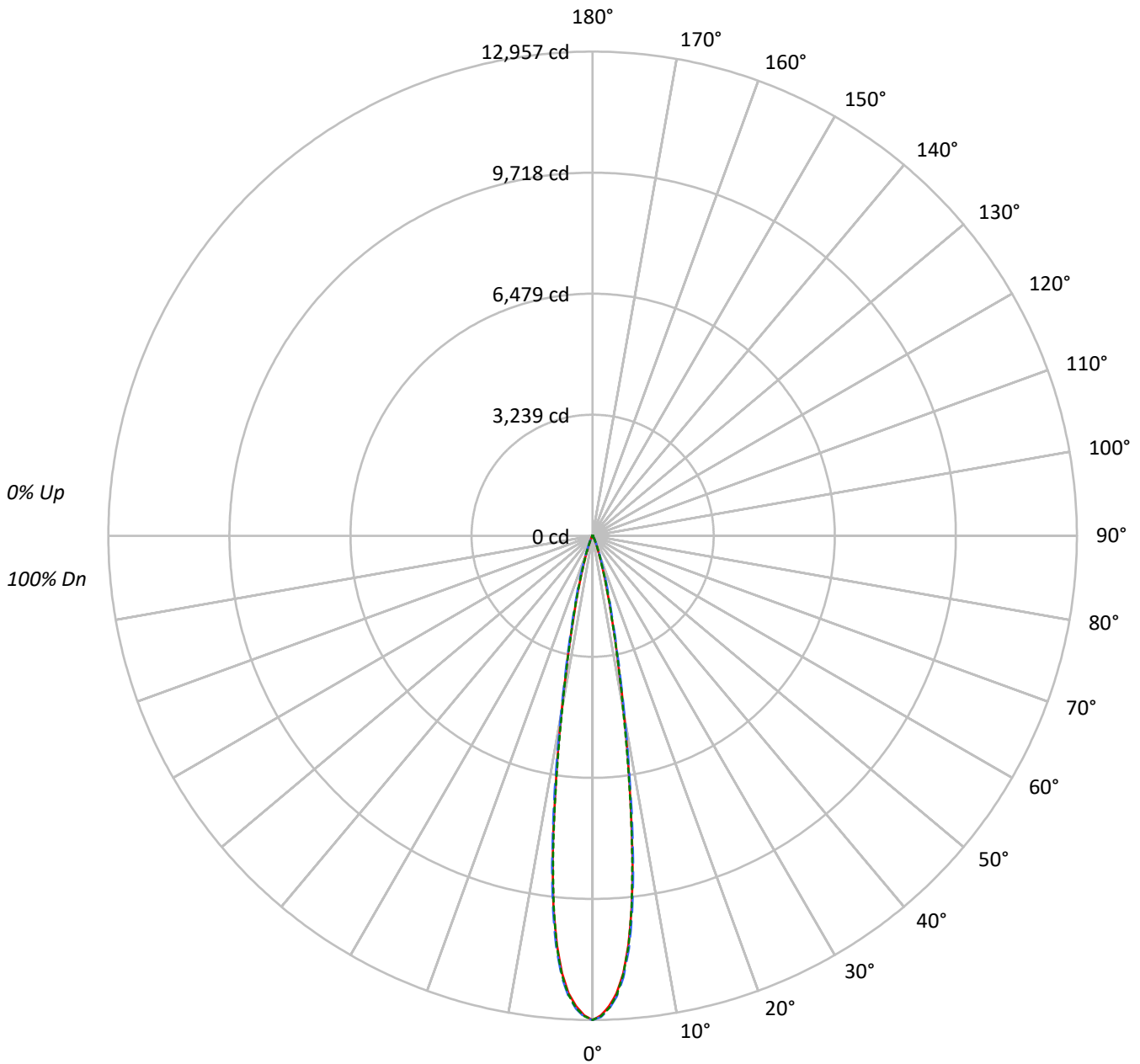
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6392489	6392489	6392489
5°	5443352	5500057	5453702
10°	2403166	2458123	2347007
15°	729220	836328	740661
20°	218200	290916	243821
25°	84975	83669	89330
30°	37884	34238	36061
35°	7709	6746	6746
40°	0	515	2061
45°	6698	5582	10047
50°	0	1842	6140
55°	0	0	2752
60°	0	789	3158
65°	0	0	1868
70°	0	4616	9232
75°	0	0	0
80°	0	0	0
85°	0	4529	18114



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	839.9	58.4
10°-20°	479.7	33.4
20°-30°	91.1	6.3
30°-40°	16.5	1.2
40°-50°	4.3	0.3
50°-60°	3.2	0.2
60°-70°	0.5	0.0
70°-80°	0.7	0.1
80°-90°	1.0	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°	1410.7	98.2
0°-40°	1427.3	99.3
0°-60°	1434.8	99.8
0°-90°	1437.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1437.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	12957	12957	12957	12957	12957	
5°	10991	11063	11106	11086	11012	835
15°	1428	1553	1637	1538	1450	454
25°	156	168	154	175	164	82
35°	13	16	11	14	11	18
45°	10	15	8	9	14	5
55°	0	1	0	1	3	1
65°	0	0	0	0	2	0
75°	0	0	0	0	0	0
85°	0	1	1	1	3	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	12957.0	12957.0	12957.0	12957.0	12957.0
1°	12834.5	12848.1	12876.9	12906.5	12860.1
2°	12594.2	12627.1	12667.9	12695.1	12644.7
3°	12257.9	12303.6	12346.8	12352.4	12305.2
4°	11738.3	11794.3	11840.0	11834.4	11775.1
5°	10991.2	11063.3	11105.7	11086.5	11012.1
6°	10004.0	10073.6	10128.1	10072.8	9972.7
7°	8774.1	8854.2	8911.8	8817.3	8694.8
8°	7348.8	7460.9	7518.6	7386.5	7260.8
9°	5998.9	6076.5	6135.0	5990.9	5862.7
10°	4797.0	4939.5	4906.7	4795.4	4684.9
11°	3772.9	3901.8	3907.4	3832.2	3724.1
12°	2953.8	3089.9	3124.3	3066.7	2970.6
13°	2334.0	2435.7	2492.6	2433.3	2342.1
14°	1857.6	1948.1	2021.0	1944.1	1852.8
15°	1427.7	1552.6	1637.4	1538.1	1450.1
16°	1135.4	1238.7	1339.6	1226.7	1156.2
17°	872.0	964.0	1068.1	965.6	908.0
18°	690.2	763.1	877.6	771.9	721.4
19°	540.5	595.7	702.2	609.3	568.5
20°	415.6	476.4	554.1	490.8	464.4
22.5°	251.4	285.0	307.5	288.3	274.6
25°	156.1	168.1	153.7	175.4	164.1
26°	136.1	144.9	141.7	156.1	142.5
27°	108.9	120.1	111.3	122.5	118.5
28°	99.3	112.9	95.3	108.9	102.5
29°	69.7	75.3	68.1	72.9	72.9
30°	66.5	68.1	60.1	65.7	63.3
32.5°	52.0	48.8	40.0	42.4	40.8
35°	12.8	16.0	11.2	13.6	11.2
37.5°	19.2	17.6	20.8	20.0	19.2
40°	0.0	0.8	0.8	0.8	3.2
42.5°	14.4	8.8	8.0	5.6	9.6
45°	9.6	15.2	8.0	8.8	14.4
47.5°	0.0	0.8	0.0	1.6	1.6
50°	0.0	1.6	2.4	3.2	8.0
52.5°	1.6	9.6	4.8	8.8	12.8
55°	0.0	0.8	0.0	0.8	3.2
57.5°	3.2	1.6	3.2	3.2	14.4
60°	0.0	1.6	0.8	0.8	3.2
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	1.6
67.5°	0.0	0.8	0.0	0.0	0.0



TEST NUMBER: P281753

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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	0.8	0.0	0.0
80°	0.0	0.8	0.0	0.0	0.0
82.5°	0.0	0.8	1.6	2.4	1.6
85°	0.0	0.8	0.8	0.8	3.2
87.5°	0.0	1.6	2.4	0.0	1.6
90°	0.0	0.0	0.0	0.0	0.0



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







70°	0.0	2.4	3.2	0.0	6.4
72.5°	0.0	4.0	0.8	0.8	0.0



(END OF REPORT)