

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: P281609

Luminaire Tested: **LDA2B20D2WD010 EU2B20SP15D2W 2LBASQC1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281609  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-6)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B20D2WD010 EU2B20SP15D2W 2LBASQC1MMS  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH SPOT OPTIC AND 2in Adj SQ Cast Trim, MMS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1498.3 lumens  
Efficiency: N/A  
Efficacy: 72.7 lumens/watt  
Spacing Criteria (0/90/45): 0.31 / 0.31 / 0.29  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

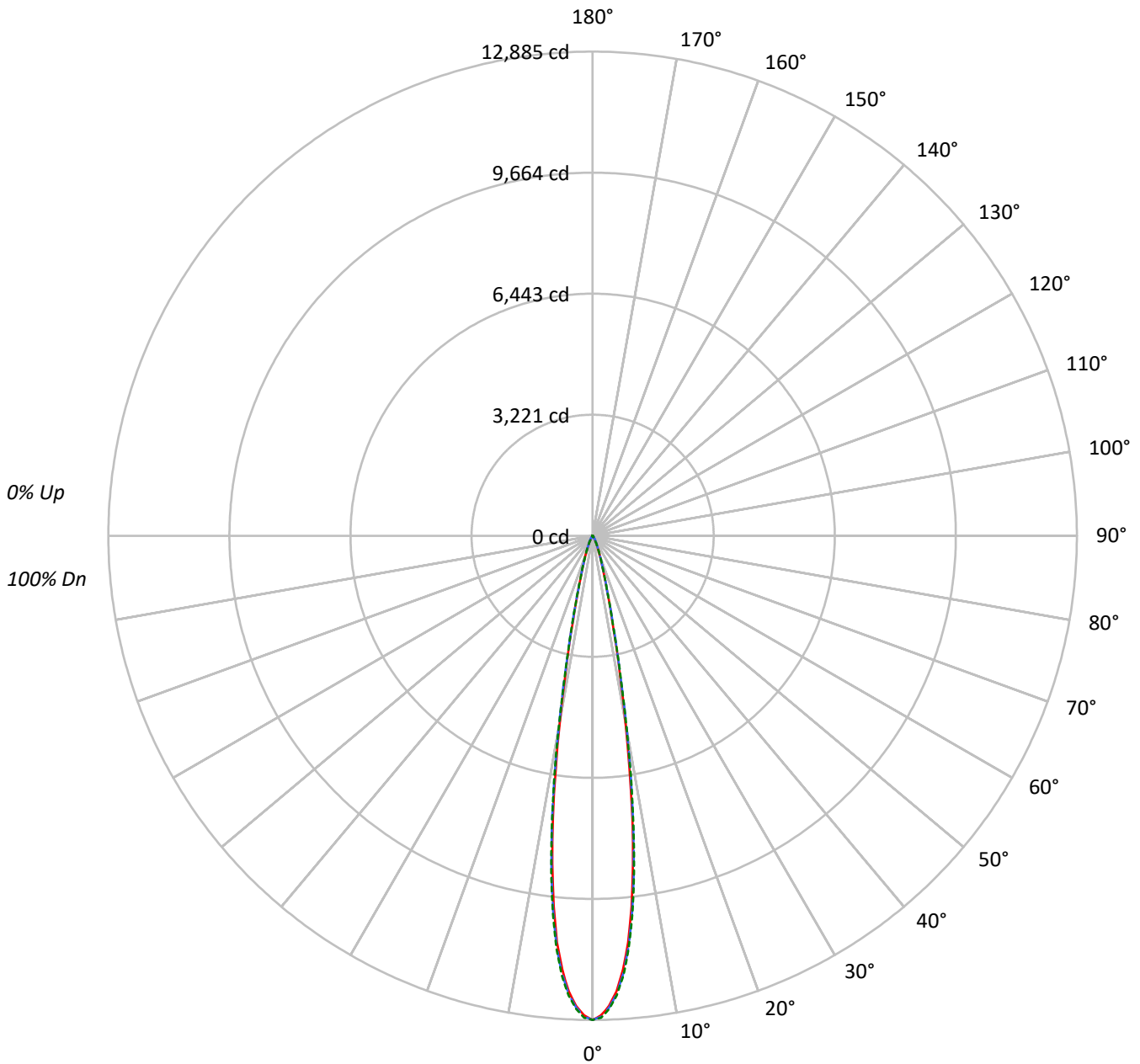
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	6356917	6356917	6356917
5°	5380356	5436616	5460289
10°	2515935	2611270	2616380
15°	736933	747608	747250
20°	295904	296324	296691
25°	131954	145345	135111
30°	56057	77078	51101
35°	25718	35715	23971
40°	8372	13976	7471
45°	0	5024	0
50°	0	0	0
55°	2494	1204	0
60°	0	0	0
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	3978	0	0
85°	7925	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	851.5	56.8
10°-20°	482.6	32.2
20°-30°	126.0	8.4
30°-40°	32.5	2.2
40°-50°	3.2	0.2
50°-60°	1.0	0.1
60°-70°	0.2	0.0
70°-80°	1.1	0.1
80°-90°	0.3	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°	1460.2	97.5
0°-40°	1492.7	99.6
0°-60°	1496.9	99.9
0°-90°	1498.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1498.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	12885	12885	12885	12885	12885	
5°	10864	10961	10978	10908	11025	841
15°	1443	1462	1464	1447	1463	474
25°	242	263	267	255	248	120
35°	43	46	59	40	40	29
45°	0	3	7	1	0	2
55°	3	4	1	1	0	2
65°	0	0	0	0	0	1
75°	0	1	0	0	0	3
85°	1	0	0	0	0	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	12884.9	12884.9	12884.9	12884.9	12884.9
1°	12764.1	12814.7	12799.5	12781.4	12832.1
2°	12518.1	12567.3	12562.9	12539.0	12598.4
3°	12138.9	12207.7	12207.7	12172.2	12246.0
4°	11573.8	11678.8	11688.9	11639.0	11730.8
5°	10864.0	10961.0	10977.6	10908.2	11025.4
6°	9902.4	10034.9	10072.5	9992.2	10112.3
7°	8797.6	8936.5	8993.7	8904.0	9038.5
8°	7605.9	7705.8	7774.5	7671.8	7808.5
9°	6272.4	6416.4	6479.4	6379.5	6512.6
10°	5022.1	5154.5	5212.4	5188.5	5222.6
11°	3900.6	4017.8	4056.9	4024.4	4040.3
12°	3054.1	3101.1	3126.4	3104.7	3115.6
13°	2319.0	2381.9	2393.5	2384.1	2389.1
14°	1811.0	1841.4	1854.4	1850.1	1852.3
15°	1442.8	1462.3	1463.7	1447.1	1463.0
16°	1162.0	1177.2	1183.7	1166.4	1187.3
17°	952.2	964.5	971.7	954.4	963.0
18°	783.6	793.0	803.1	787.9	801.0
19°	657.7	663.5	664.2	659.9	663.5
20°	563.6	560.7	564.4	556.4	565.1
22.5°	371.2	378.4	387.1	377.7	381.3
25°	242.4	262.6	267.0	254.7	248.2
26°	199.7	225.7	237.3	217.8	196.8
27°	165.7	184.5	199.7	173.7	157.0
28°	145.4	161.4	176.5	151.9	132.4
29°	121.6	137.5	163.5	135.3	123.0
30°	98.4	110.0	135.3	102.7	89.7
32.5°	55.7	65.1	87.5	60.8	49.9
35°	42.7	45.6	59.3	40.5	39.8
37.5°	36.9	33.3	46.3	33.3	26.8
40°	13.0	19.5	21.7	14.5	11.6
42.5°	5.8	5.8	9.4	2.9	2.9
45°	0.0	2.9	7.2	0.7	0.0
47.5°	0.0	0.0	1.4	0.0	0.0
50°	0.0	1.4	0.0	0.0	0.0
52.5°	1.4	0.0	0.0	0.0	0.0
55°	2.9	3.6	1.4	0.7	0.0
57.5°	4.3	3.6	1.4	1.4	1.4
60°	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0
67.5°	1.4	0.7	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
75°	0.0	0.7	0.0	0.0	0.0
77.5°	7.2	1.4	2.2	1.4	2.9
80°	1.4	0.0	0.0	0.0	0.0
82.5°	2.9	0.0	0.0	0.0	0.0
85°	1.4	0.0	0.0	0.0	0.0
87.5°	0.0	0.7	0.0	0.7	0.0
90°	0.0	0.0	0.0	0.0	0.0



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







70°	0.0	0.0	0.0	0.0	0.0
72.5°	2.9	2.2	0.0	0.0	2.9



(END OF REPORT)