

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: P281588

Luminaire Tested: **LDA2B209027D010 EU2B20SP159027 2LBASQC1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P281588  
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: LDA2B209027D010 EU2B20SP159027 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: 1548.4 lumens  
Efficiency: N/A  
Efficacy: 75.2 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

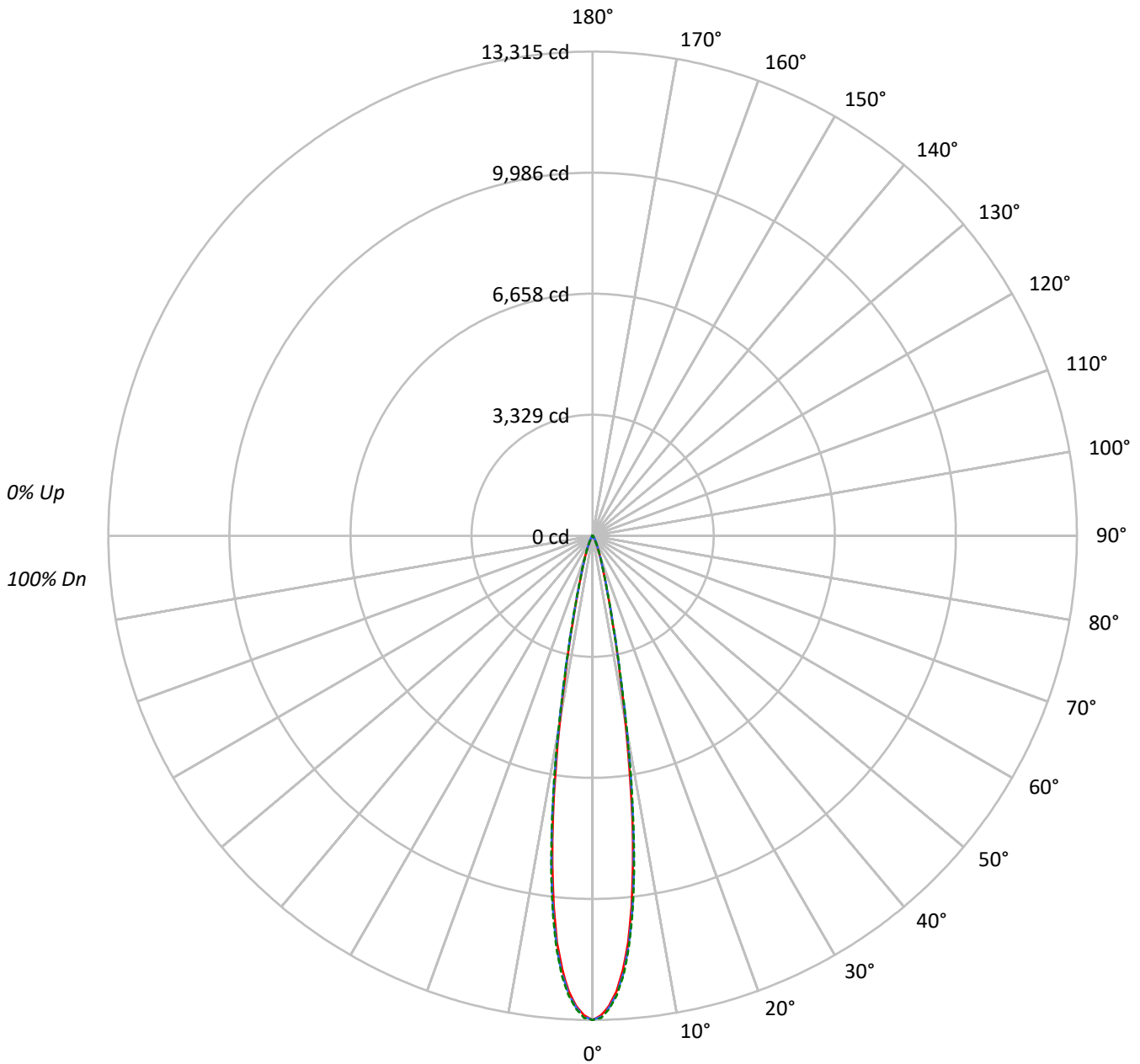
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					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	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	102	101	100	99	98	97	96					98	
2	113	109	107	105	111	108	105	103	105	103	101	102	100	99	99	98	97	96	95	94					96	
3	110	106	103	100	108	104	102	99	102	100	98	100	98	96	98	96	95	94	93	92					94	
4	107	103	99	97	106	102	99	96	100	97	95	98	96	94	96	95	93	92	91	90					92	
5	105	100	96	94	103	99	96	93	98	95	93	96	94	92	95	93	91	90	89	88					90	
6	103	97	94	91	101	97	94	91	96	93	91	94	92	90	93	91	90	89	88	87					89	
7	100	95	92	89	100	95	91	89	94	91	89	93	90	88	92	90	88	87	86	85					87	
8	99	93	90	88	98	93	90	87	92	89	87	91	89	87	90	88	86	85	84	83					86	
9	97	91	88	86	96	91	88	86	90	88	86	90	87	85	89	87	85	84	83	82					84	
10	95	90	87	84	94	89	86	84	89	86	84	88	86	84	88	85	84	83	82	81					83	

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

	0°	45°	90°
0°	6569310	6569310	6569310
5°	5560131	5618273	5642738
10°	2599998	2698539	2703800
15°	761552	772584	772227
20°	305827	306194	306614
25°	136363	150190	139629
30°	57937	79642	52810
35°	26561	36920	24754
40°	8695	14426	7728
45°	0	5233	0
50°	0	0	0
55°	2580	1290	0
60°	0	0	0
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	4262	0	0
85°	8491	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	880.0	56.8
10°-20°	498.7	32.2
20°-30°	130.2	8.4
30°-40°	33.6	2.2
40°-50°	3.3	0.2
50°-60°	1.1	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°	1509.0	97.5
0°-40°	1542.6	99.6
0°-60°	1546.9	99.9
0°-90°	1548.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1548.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	13315	13315	13315	13315	13315	
5°	11227	11327	11344	11273	11394	869
15°	1491	1511	1513	1495	1512	489
25°	250	271	276	263	256	125
35°	44	47	61	42	41	30
45°	0	3	8	1	0	2
55°	3	4	2	1	0	2
65°	0	0	0	0	0	1
75°	0	1	0	0	0	3
85°	2	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°	13315.4	13315.4	13315.4	13315.4	13315.4
1°	13190.5	13242.9	13227.2	13208.5	13260.8
2°	12936.3	12987.2	12982.7	12958.0	13019.3
3°	12544.5	12615.6	12615.6	12578.9	12655.2
4°	11960.5	12069.0	12079.4	12027.8	12122.8
5°	11227.0	11327.2	11344.4	11272.6	11393.8
6°	10233.3	10370.1	10409.0	10326.0	10450.2
7°	9091.5	9235.1	9294.2	9201.5	9340.5
8°	7860.0	7963.2	8034.3	7928.1	8069.4
9°	6482.0	6630.8	6695.8	6592.7	6730.2
10°	5189.9	5326.8	5386.6	5361.9	5397.1
11°	4031.0	4152.1	4192.5	4158.8	4175.3
12°	3156.1	3204.7	3230.9	3208.5	3219.7
13°	2396.4	2461.5	2473.5	2463.7	2469.0
14°	1871.5	1903.0	1916.4	1911.9	1914.2
15°	1491.0	1511.1	1512.6	1495.4	1511.9
16°	1200.8	1216.5	1223.3	1205.3	1227.0
17°	984.0	996.7	1004.2	986.2	995.2
18°	809.8	819.5	830.0	814.3	827.7
19°	679.7	685.7	686.4	681.9	685.7
20°	582.5	579.5	583.2	575.0	584.0
22.5°	383.6	391.1	400.0	390.3	394.0
25°	250.5	271.4	275.9	263.2	256.5
26°	206.4	233.3	245.3	225.1	203.4
27°	171.2	190.7	206.4	179.5	162.3
28°	150.3	166.7	182.4	157.0	136.8
29°	125.6	142.1	169.0	139.8	127.1
30°	101.7	113.7	139.8	106.2	92.7
32.5°	57.6	67.3	90.5	62.8	51.6
35°	44.1	47.1	61.3	41.9	41.1
37.5°	38.1	34.4	47.9	34.4	27.7
40°	13.5	20.2	22.4	15.0	12.0
42.5°	6.0	6.0	9.7	3.0	3.0
45°	0.0	3.0	7.5	0.7	0.0
47.5°	0.0	0.0	1.5	0.0	0.0
50°	0.0	1.5	0.0	0.0	0.0
52.5°	1.5	0.0	0.0	0.0	0.0
55°	3.0	3.7	1.5	0.7	0.0
57.5°	4.5	3.7	1.5	1.5	1.5
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°	1.5	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°	7.5	1.5	2.2	1.5	3.0
80°	1.5	0.0	0.0	0.0	0.0
82.5°	3.0	0.0	0.0	0.0	0.0
85°	1.5	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°	3.0	2.2	0.0	0.0	3.0



(END OF REPORT)