

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: P211574

Luminaire Tested: **LSR4B20D010BZ EC4B10208030 4LBSH1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211574  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35319)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LSR4B20D010BZ EC4B10208030 4LBSH1  
Description: PORTFOLIO 4 INCH CYLINDER  
SHALLOW DISTRIBUTION WITH SEMI-SPECULAR CLEAR TRIM  
WATTAGE D010TR-21.86W DE010-20.46W D5LT-21.24W DMX-20.89W DL2-22.5W  
DL3-21.8 6W DLE-22.46W  
Light Source: HIGH LUMEN LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1988.9 lumens  
Efficiency: N/A  
Efficacy: 95.6 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 1.06 / 1.17  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

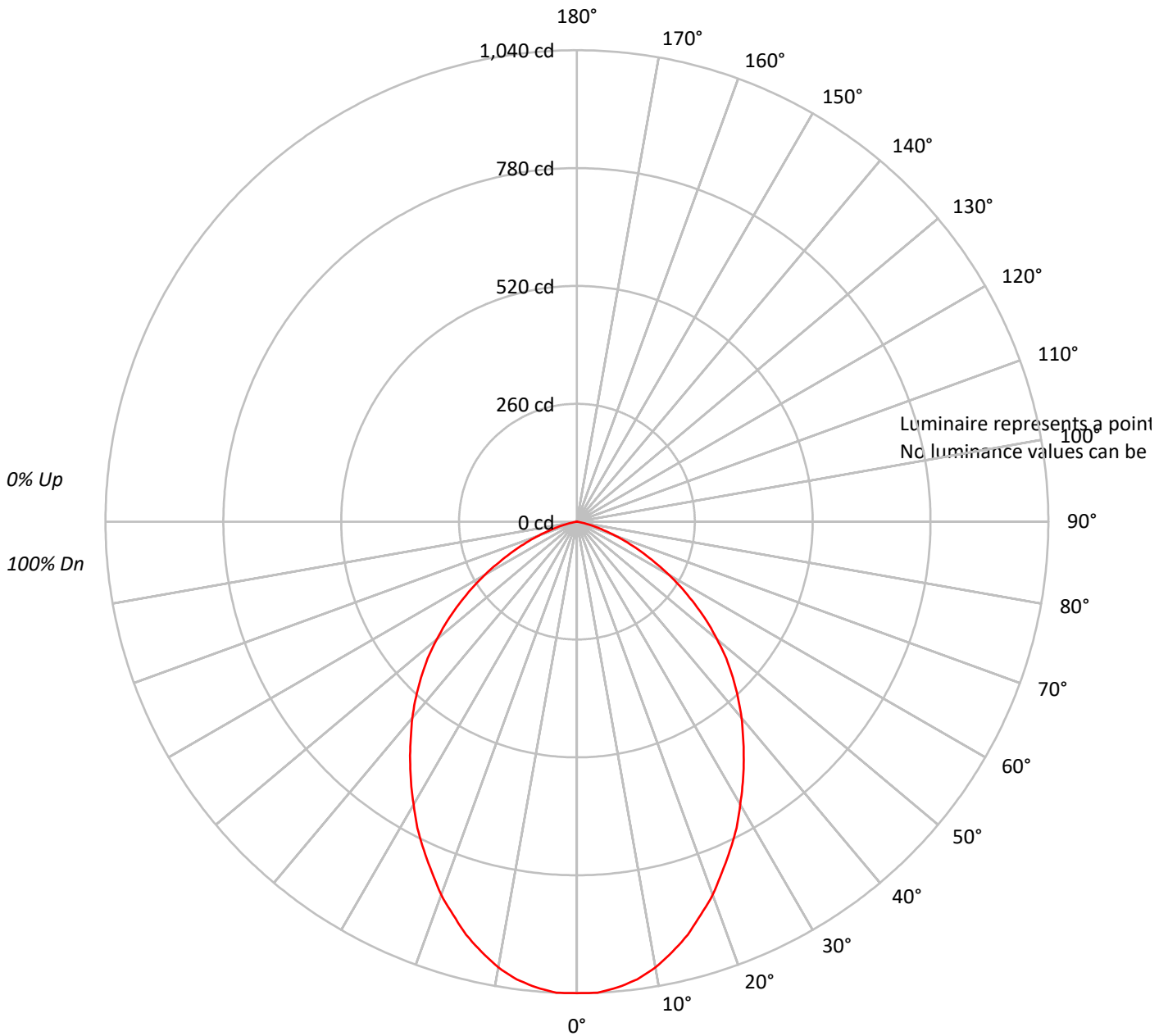
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88			
2	102	96	90	85	100	94	88	84	90	86	82	87	83	80	84	81	79	77			
3	95	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	69	67			
4	87	77	69	63	85	75	68	63	73	67	62	71	65	61	69	64	60	58			
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	53	51			
6	75	63	55	49	73	62	54	49	60	54	49	59	53	48	57	52	48	46			
7	70	58	50	44	68	57	49	44	55	49	44	54	48	43	53	47	43	41			
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37			
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	40	35	34			
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31			

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.4	4.9
10°-20°	264.8	13.3
20°-30°	367.8	18.5
30°-40°	401.3	20.2
40°-50°	374.4	18.8
50°-60°	284.1	14.3
60°-70°	155.6	7.8
70°-80°	42.8	2.2
80°-90°	0.6	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°	730.0	36.7
0°-40°	1131.4	56.9
0°-60°	1789.9	90.0
0°-90°	1988.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1988.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1040	
5°	1031	97
15°	944	265
25°	799	368
35°	642	401
45°	486	374
55°	318	284
65°	156	156
75°	37	43
85°	0	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1040.2
2.5°	1040.2
5°	1031.4
7.5°	1018.3
10°	998.6
12.5°	972.3
15°	943.8
17.5°	908.8
20°	876.0
22.5°	836.5
25°	799.3
27.5°	762.1
30°	720.5
32.5°	681.1
35°	641.6
37.5°	602.2
40°	565.0
42.5°	525.6
45°	486.2
47.5°	446.7
50°	402.9
52.5°	361.3
55°	317.5
57.5°	275.9
60°	234.3
62.5°	192.7
65°	155.5
67.5°	120.4
70°	89.8
72.5°	61.3
75°	37.2
77.5°	17.5
80°	4.4
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)