

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: P211503

Luminaire Tested: **LSR4B20D010BZ EC4B10209027 4LBMH1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211503  
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 EC4B10209027 4LBMH1  
Description: PORTFOLIO 4 INCH CYLINDER  
MEDIUM 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: 1250.6 lumens  
Efficiency: N/A  
Efficacy: 60.1 lumens/watt  
Spacing Criteria (0/90/45): 0.95 / 0.95 / 0.93  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

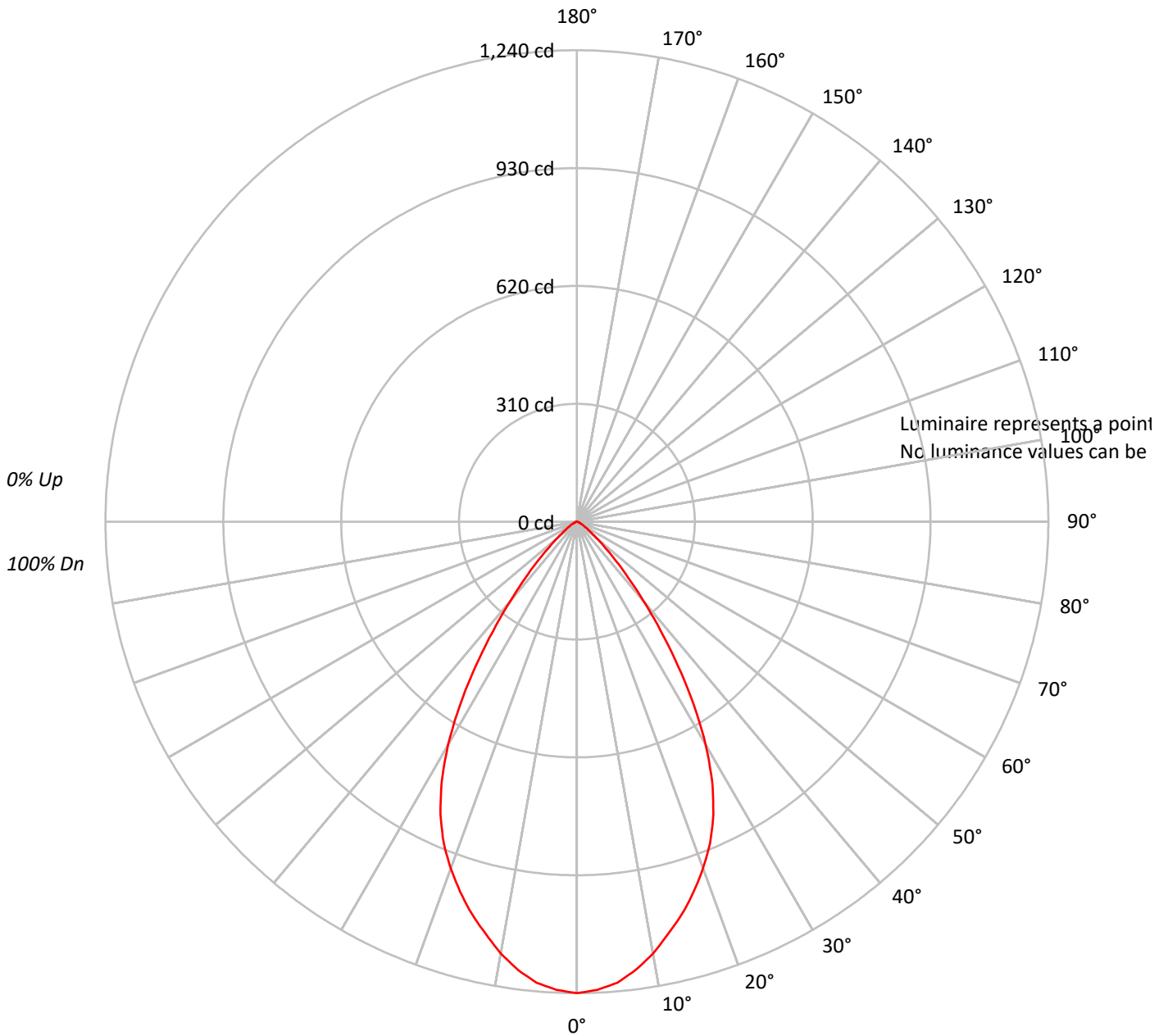
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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			100
1	113	110	108	105	111	108	106	104	104	102	100	100	99	97	97	96	95	93			93
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	85			85
3	101	94	89	85	99	93	88	84	90	86	83	88	84	82	86	83	80	79			79
4	96	88	82	77	94	86	81	77	84	80	76	82	78	75	80	77	74	73			73
5	90	82	75	71	89	81	75	70	79	74	70	77	73	69	75	72	69	67			67
6	86	76	70	65	84	75	69	65	74	68	64	72	68	64	71	67	64	62			62
7	81	71	65	60	80	70	64	60	69	64	60	68	63	59	67	62	59	58			58
8	77	67	60	56	75	66	60	56	65	59	56	64	59	55	63	58	55	54			54
9	73	63	56	52	72	62	56	52	61	56	52	60	55	52	59	55	52	50			50
10	69	59	53	49	68	59	53	49	58	52	49	57	52	48	56	52	48	47			47

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	114.1	9.1
10°-20°	299.3	23.9
20°-30°	384.7	30.8
30°-40°	289.4	23.1
40°-50°	116.2	9.3
50°-60°	33.0	2.6
60°-70°	10.4	0.8
70°-80°	3.0	0.2
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°	798.1	63.8
0°-40°	1087.6	87.0
0°-60°	1236.9	98.9
0°-90°	1250.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1250.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1240	
5°	1217	114
15°	1068	299
25°	849	385
35°	464	289
45°	143	116
55°	34	33
65°	9	10
75°	2	3
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1240.0
2.5°	1232.5
5°	1217.4
7.5°	1189.0
10°	1153.2
12.5°	1109.8
15°	1068.3
17.5°	1021.1
20°	970.1
22.5°	915.4
25°	849.3
27.5°	770.1
30°	677.6
32.5°	573.8
35°	464.3
37.5°	362.4
40°	271.8
42.5°	200.1
45°	143.4
47.5°	98.1
50°	67.9
52.5°	47.2
55°	34.0
57.5°	24.5
60°	18.9
62.5°	13.2
65°	9.4
67.5°	7.5
70°	5.7
72.5°	3.8
75°	1.9
77.5°	1.9
80°	1.9
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)