

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: P211640

Luminaire Tested: **LSR4B20D010BZ EC4B10209730 4LBWLI1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211640  
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 EC4B10209730 4LBWLI1  
Description: PORTFOLIO 4 INCH CYLINDER  
WIDE DISTRIBUTION WITH 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: 1496.8 lumens  
Efficiency: N/A  
Efficacy: 72.0 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.18  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

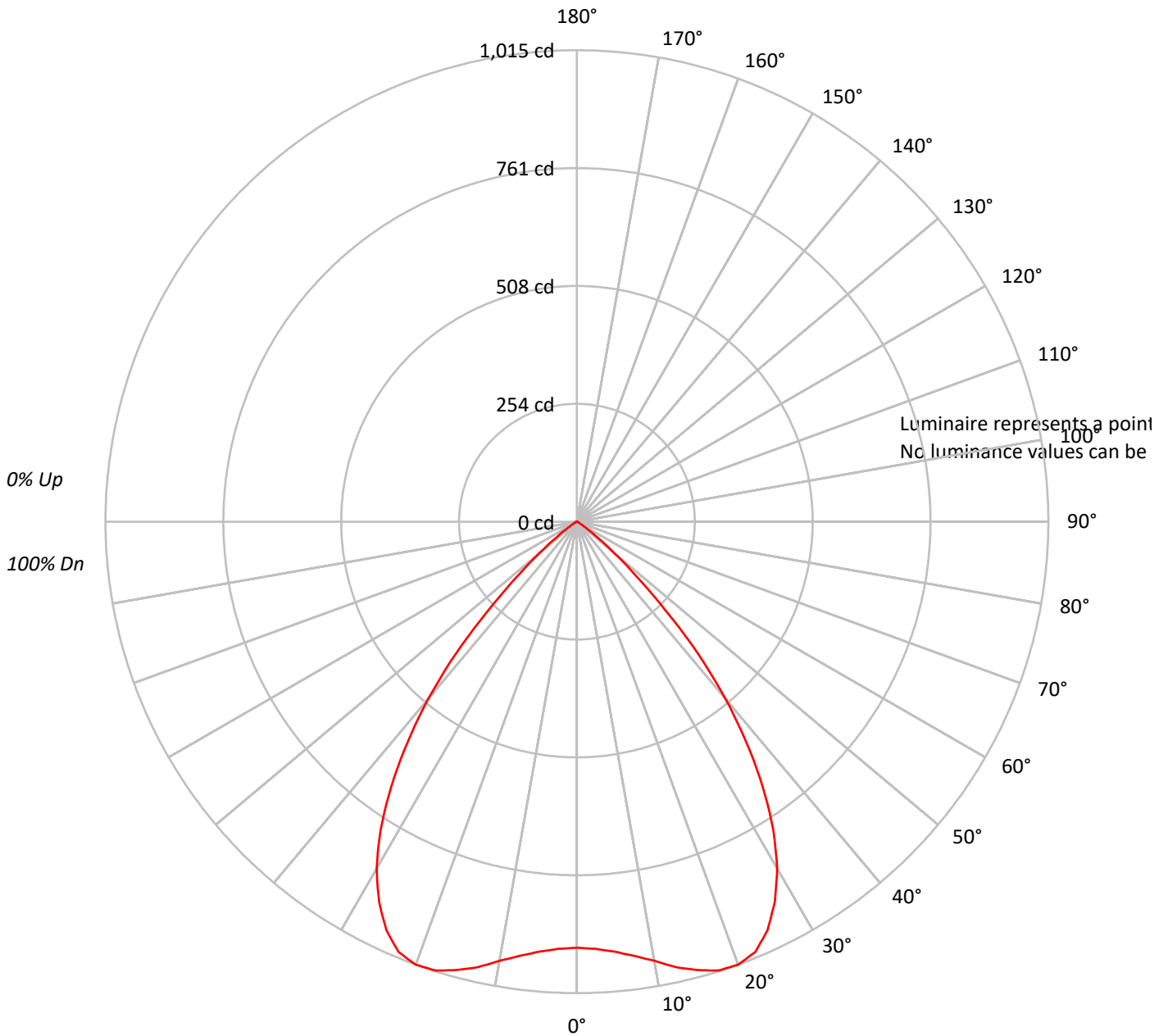
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





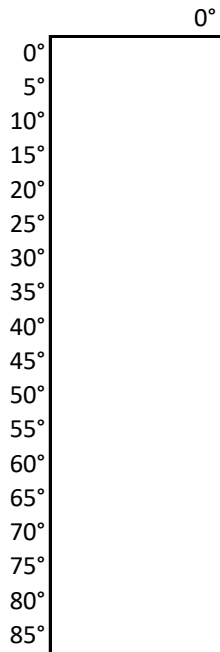
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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

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	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	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92																			92																	
2	106	101	97	93	104	99	95	92	96	93	90	93	90	88	90	88	86	84																			84																	
3	100	93	87	83	98	92	86	82	89	85	81	86	83	80	84	81	78	77																			77																	
4	94	86	79	75	92	84	79	74	82	77	73	80	76	72	78	75	72	70																			70																	
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64																			64																	
6	83	73	66	62	82	72	66	61	71	65	61	69	64	60	68	63	60	58																			58																	
7	78	68	61	56	77	67	61	56	66	60	56	64	59	55	63	59	55	54																			54																	
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49																			49																	
9	69	59	52	48	68	58	52	47	57	51	47	56	51	47	55	50	47	45																			45																	
10	66	55	48	44	65	54	48	44	53	48	44	53	47	44	52	47	43	42																			42																	

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.7	6.0
10°-20°	283.0	18.9
20°-30°	441.6	29.5
30°-40°	429.6	28.7
40°-50°	214.6	14.3
50°-60°	33.2	2.2
60°-70°	4.0	0.3
70°-80°	1.1	0.1
80°-90°	0.0	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°	814.3	54.4
0°-40°	1243.9	83.1
0°-60°	1491.7	99.7
0°-90°	1496.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1496.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	917	
5°	929	90
15°	999	283
25°	970	442
35°	698	430
45°	269	215
55°	27	33
65°	3	4
75°	2	1
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	917.2
2.5°	920.6
5°	929.2
7.5°	942.9
10°	960.0
12.5°	982.3
15°	999.4
17.5°	1013.2
20°	1014.9
22.5°	1002.9
25°	970.3
27.5°	922.3
30°	862.3
32.5°	786.9
35°	697.7
37.5°	600.0
40°	497.2
42.5°	387.4
45°	269.1
47.5°	173.1
50°	104.6
52.5°	56.6
55°	27.4
57.5°	12.0
60°	6.9
62.5°	5.1
65°	3.4
67.5°	3.4
70°	1.7
72.5°	1.7
75°	1.7
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)