

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: P211495

Luminaire Tested: **LE\_4B20D010 EC4B10208027 4LBW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211495  
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: LE\_4B20D010 EC4B10208027 4LBW1LI  
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: 2225.6 lumens  
Efficiency: N/A  
Efficacy: 107.0 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

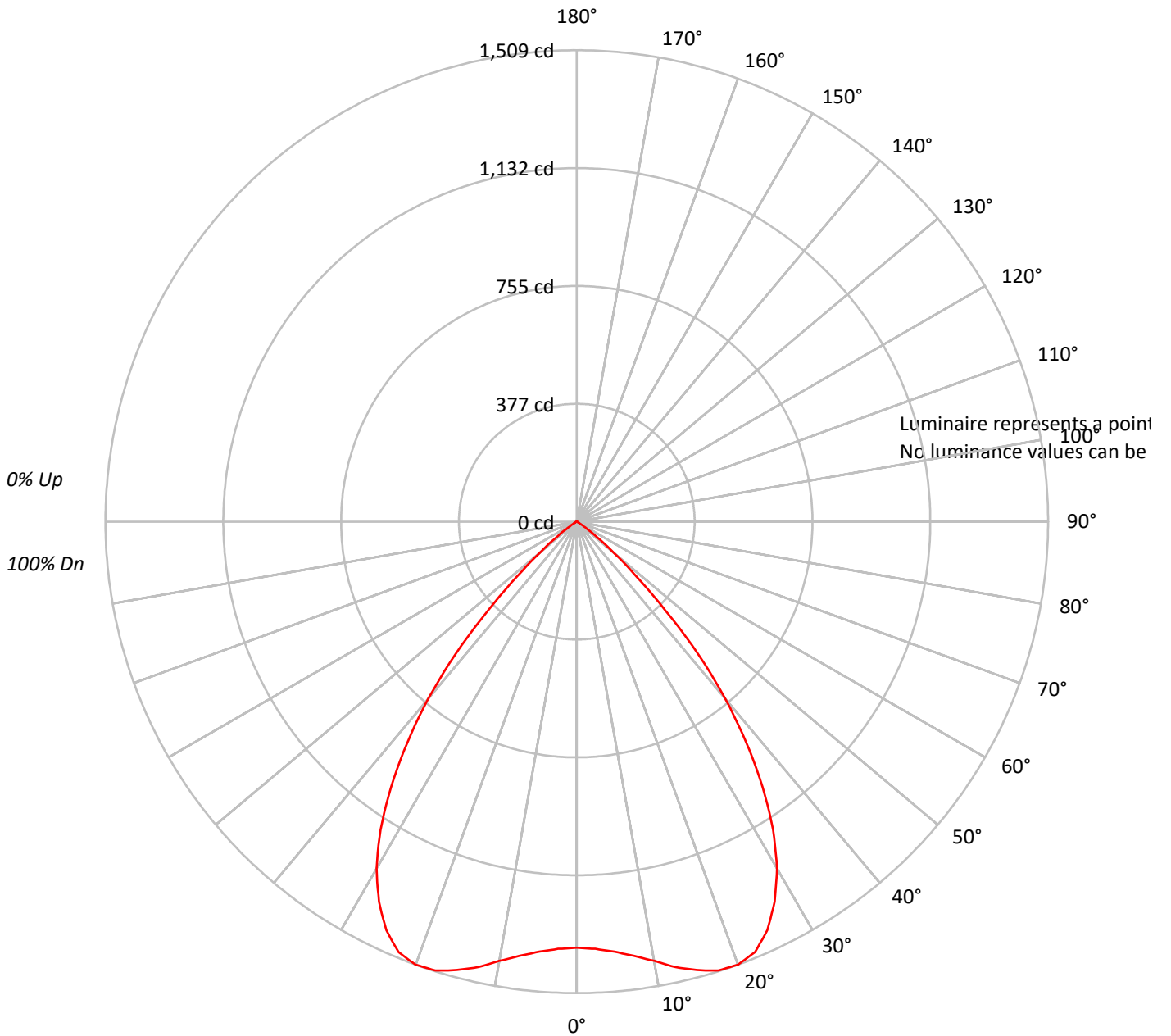
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20				20				20				20				20				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	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°	133.3	6.0
10°-20°	420.8	18.9
20°-30°	656.5	29.5
30°-40°	638.8	28.7
40°-50°	319.1	14.3
50°-60°	49.4	2.2
60°-70°	6.0	0.3
70°-80°	1.7	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°	1210.7	54.4
0°-40°	1849.5	83.1
0°-60°	2217.9	99.7
0°-90°	2225.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2225.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1364	
5°	1381	133
15°	1486	421
25°	1443	656
35°	1037	639
45°	400	319
55°	41	49
65°	5	6
75°	3	2
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1363.6
2.5°	1368.7
5°	1381.4
7.5°	1401.9
10°	1427.4
12.5°	1460.4
15°	1486.0
17.5°	1506.4
20°	1508.9
22.5°	1491.1
25°	1442.7
27.5°	1371.2
30°	1282.0
32.5°	1170.0
35°	1037.4
37.5°	892.0
40°	739.2
42.5°	576.1
45°	400.2
47.5°	257.4
50°	155.4
52.5°	84.1
55°	40.8
57.5°	17.9
60°	10.2
62.5°	7.7
65°	5.1
67.5°	5.1
70°	2.6
72.5°	2.6
75°	2.6
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)