

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: P211469

Luminaire Tested: **LE\_4B20D010 EC4B10208027 4LBCSM1B**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211469  
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 4LBCSM1B  
Description: PORTFOLIO 4 INCH CYLINDER  
SHALLOW DISTRIBUTION WITH CAST MATTE METALLIC SILVER 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: 2196.1 lumens  
Efficiency: N/A  
Efficacy: 105.6 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.23 / 1.33  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

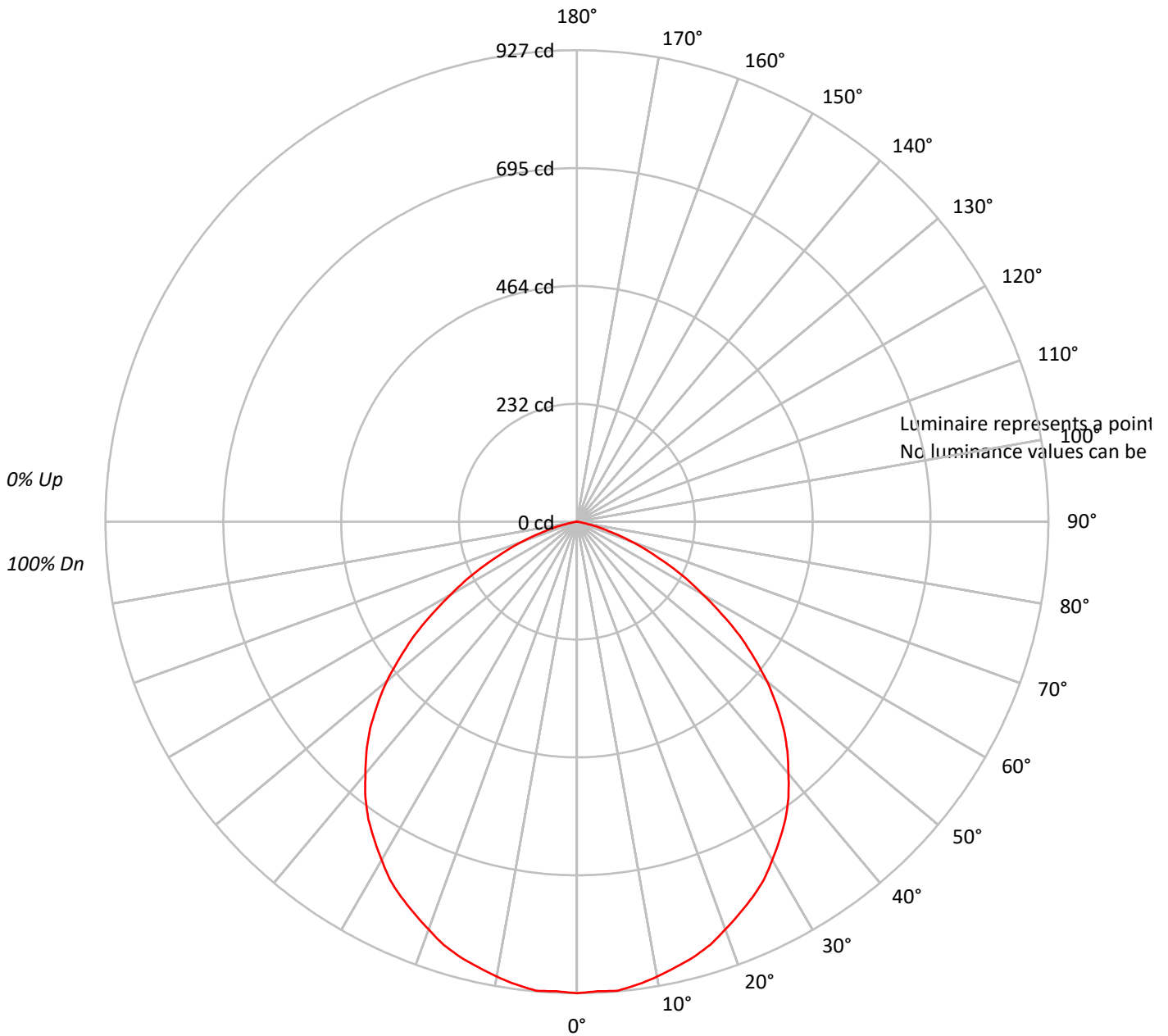
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90	88				88
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75				75
3	93	84	77	71	91	83	76	70	80	74	69	77	72	68	74	70	67	65				65
4	86	75	67	61	84	74	66	61	71	65	60	69	63	59	67	62	58	56				56
5	79	67	59	53	77	66	59	53	64	57	52	62	56	52	61	55	51	49				49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43				43
7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40	39				39
8	64	51	43	37	62	50	42	37	49	42	37	48	41	37	46	41	36	35				35
9	60	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31				31
10	56	43	35	30	55	43	35	30	42	35	30	41	34	30	40	34	30	28				28

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.7	4.0
10°-20°	249.9	11.4
20°-30°	375.6	17.1
30°-40°	445.7	20.3
40°-50°	441.1	20.1
50°-60°	346.5	15.8
60°-70°	194.2	8.8
70°-80°	54.5	2.5
80°-90°	0.9	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°	713.2	32.5
0°-40°	1158.9	52.8
0°-60°	1946.4	88.6
0°-90°	2196.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2196.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	927	
5°	926	88
15°	886	250
25°	816	376
35°	715	446
45°	575	441
55°	390	346
65°	194	194
75°	47	55
85°	0	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	927.3
2.5°	924.2
5°	925.8
7.5°	917.9
10°	908.4
12.5°	897.4
15°	886.4
17.5°	872.2
20°	853.3
22.5°	834.4
25°	815.6
27.5°	795.1
30°	768.3
32.5°	741.6
35°	714.8
37.5°	683.2
40°	647.0
42.5°	612.5
45°	574.7
47.5°	532.1
50°	488.0
52.5°	437.7
55°	390.5
57.5°	336.9
60°	286.5
62.5°	240.9
65°	193.6
67.5°	152.8
70°	113.3
72.5°	77.1
75°	47.2
77.5°	23.7
80°	6.3
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)