

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: P211507

Luminaire Tested: **LSR4B20D010BZ EC4B10209027 4LBNB1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211507
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 4LBNB1
Description: PORTFOLIO 4 INCH CYLINDER
NARROW DISTRIBUTION WITH SPECULAR BLACK 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: 645.1 lumens
Efficiency: N/A
Efficacy: 31.0 lumens/watt
Spacing Criteria (0/90/45): 0.62 / 0.62 / 0.79
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

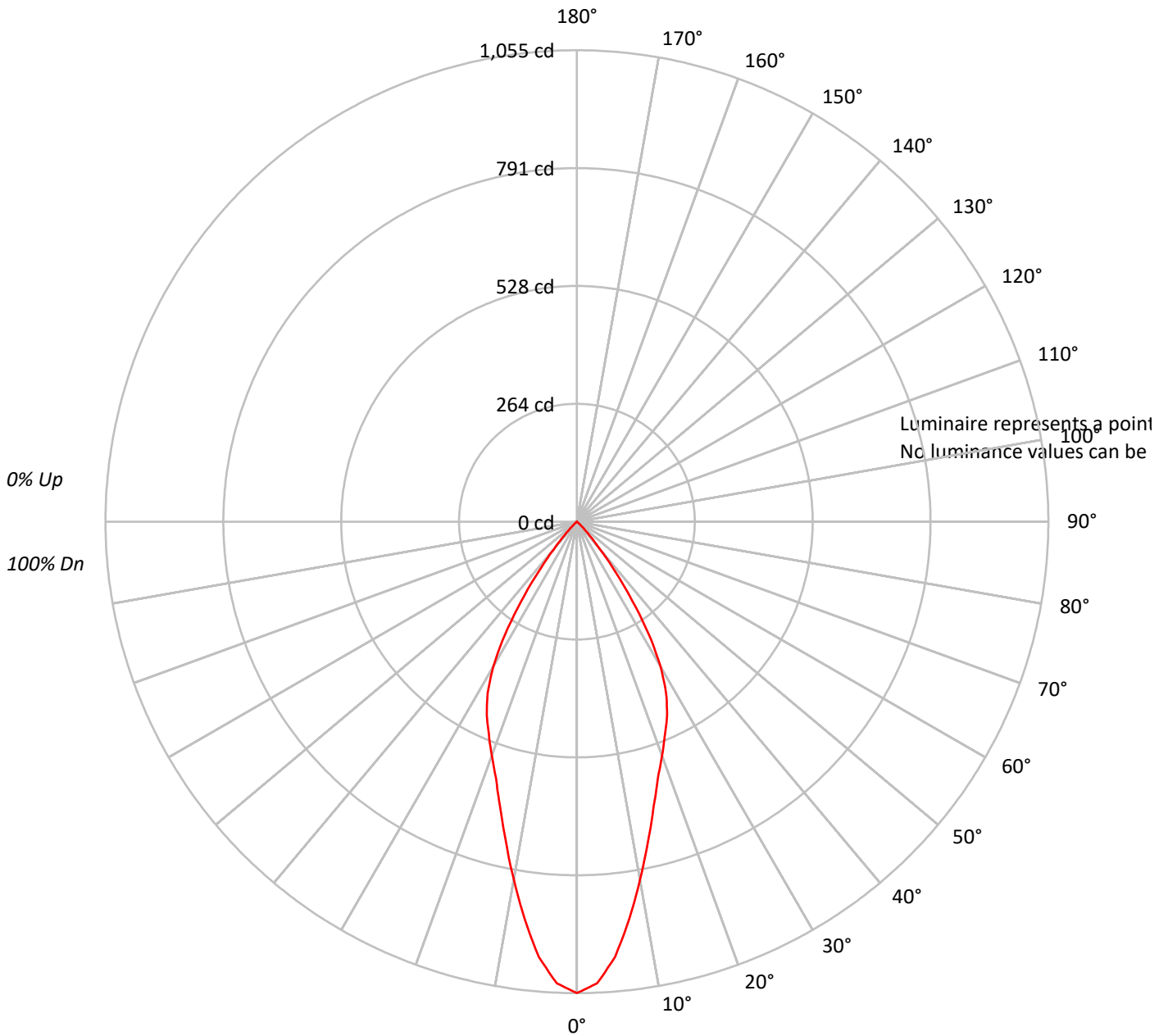
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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																						
RCR	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100	100	100	100	100	100	100	100	100	100																							
	1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94	94	94	94	94	94	94	94	94	94	94	94	94																							
	2	109	104	100	97	106	102	99	96	99	96	94	96	94	92	93	92	90	88	88	88	88	88	88	88	88	88	88	88	88	88																							
	3	104	98	93	89	102	96	92	88	94	90	87	91	88	86	89	86	84	83	83	83	83	83	83	83	83	83	83	83	83	83																							
	4	99	92	86	82	97	90	86	82	88	84	81	86	83	80	85	82	79	78	78	78	78	78	78	78	78	78	78	78	78	78																							
	5	94	86	81	77	92	85	80	76	84	79	76	82	78	75	80	77	74	73	73	73	73	73	73	73	73	73	73	73	73	73																							
	6	90	81	76	72	88	81	75	71	79	74	71	78	74	70	76	73	70	69	69	69	69	69	69	69	69	69	69	69	69	69																							
	7	86	77	71	67	84	76	71	67	75	70	67	74	69	66	73	69	66	65	65	65	65	65	65	65	65	65	65	65	65	65																							
	8	82	73	67	63	80	72	67	63	71	66	63	70	66	62	69	65	62	61	61	61	61	61	61	61	61	61	61	61	61	61																							
	9	78	69	63	60	77	68	63	59	67	63	59	67	62	59	66	62	59	58	58	58	58	58	58	58	58	58	58	58	58	58																							
	10	75	65	60	56	74	65	60	56	64	59	56	63	59	56	63	59	56	55	55	55	55	55	55	55	55	55	55	55	55	55																							

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.9	13.6
10°-20°	186.4	28.9
20°-30°	216.3	33.5
30°-40°	135.4	21.0
40°-50°	19.1	3.0
50°-60°	0.0	0.0
60°-70°	0.0	0.0
70°-80°	0.0	0.0
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°	490.6	76.0
0°-40°	626.0	97.0
0°-60°	645.1	100.0
0°-90°	645.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	645.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1055	
5°	977	88
15°	662	186
25°	477	216
35°	217	135
45°	17	19
55°	0	0
65°	0	0
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	1054.8
2.5°	1034.0
5°	977.4
7.5°	896.3
10°	813.3
12.5°	734.0
15°	662.3
17.5°	601.9
20°	556.6
22.5°	515.1
25°	477.4
27.5°	432.1
30°	373.6
32.5°	300.0
35°	217.0
37.5°	141.5
40°	81.1
42.5°	41.5
45°	17.0
47.5°	3.8
50°	0.0
52.5°	0.0
55°	0.0
57.5°	0.0
60°	0.0
62.5°	0.0
65°	0.0
67.5°	0.0
70°	0.0
72.5°	0.0
75°	0.0
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)