

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: P208280

Luminaire Tested: **LD4B20D010 EU4B10208030 4LBNI1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208280
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: LD4B20D010 EU4B10208030 4LBNLI1
Description: PORTFOLIO 4 INCH 50 DEGREE CUTOFF RECESSED DOWNLIGHT
NARROW 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: 1490.8 lumens
Efficiency: N/A
Efficacy: 71.7 lumens/watt
Spacing Criteria (0/90/45): 0.48 / 0.48 / 0.54
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

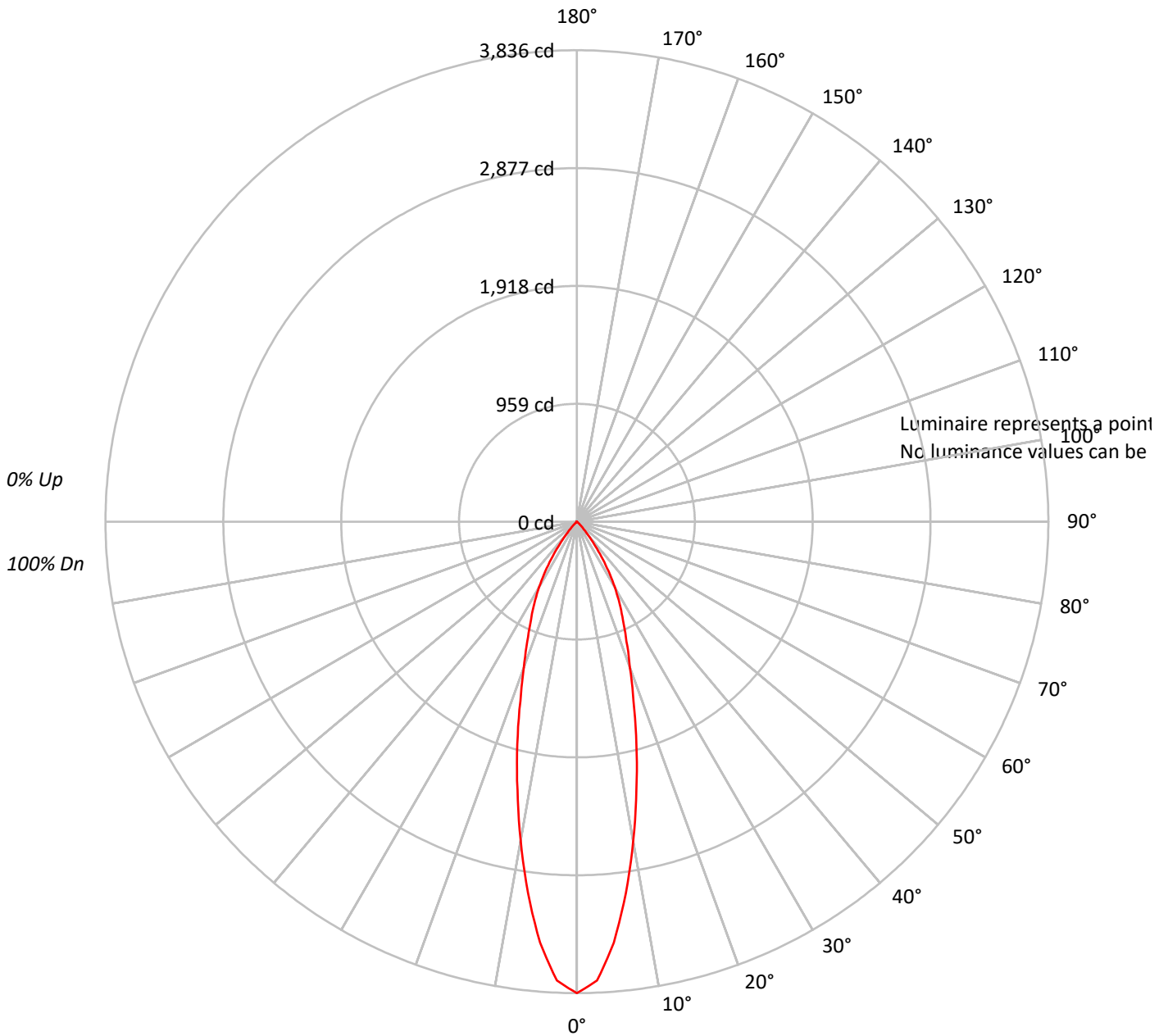
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95	95	95	95
2	109	105	102	99	107	103	100	98	100	98	95	97	95	93	95	93	92	90	90	90	90
3	105	99	95	92	103	98	94	91	95	92	89	93	90	88	91	89	87	85	85	85	85
4	101	94	89	86	99	93	88	85	91	87	84	89	86	83	87	84	82	81	81	81	81
5	96	89	84	80	95	88	84	80	87	82	79	85	81	79	83	80	78	77	77	77	77
6	92	85	80	76	91	84	79	76	83	78	75	81	78	75	80	77	74	73	73	73	73
7	89	81	76	72	88	80	75	72	79	75	71	78	74	71	77	73	71	69	69	69	69
8	85	77	72	68	84	77	72	68	76	71	68	75	71	68	74	70	67	66	66	66	66
9	82	74	69	65	81	73	68	65	72	68	65	72	68	65	71	67	64	63	63	63	63
10	79	71	66	62	78	70	65	62	69	65	62	69	65	62	68	64	62	61	61	61	61

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	302.3	20.3
10°-20°	517.6	34.7
20°-30°	411.4	27.6
30°-40°	217.8	14.6
40°-50°	37.5	2.5
50°-60°	2.8	0.2
60°-70°	1.4	0.1
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°	1231.3	82.6
0°-40°	1449.0	97.2
0°-60°	1489.4	99.9
0°-90°	1490.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1490.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3836	
5°	3439	302
15°	1871	518
25°	886	411
35°	344	218
45°	39	38
55°	2	3
65°	2	1
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	3836.4
2.5°	3737.7
5°	3439.2
7.5°	3048.9
10°	2635.6
12.5°	2236.2
15°	1871.1
17.5°	1531.3
20°	1260.4
22.5°	1053.8
25°	886.2
27.5°	750.7
30°	615.3
32.5°	477.5
35°	344.4
37.5°	227.3
40°	135.5
42.5°	78.1
45°	39.0
47.5°	13.8
50°	4.6
52.5°	4.6
55°	2.3
57.5°	2.3
60°	2.3
62.5°	2.3
65°	2.3
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)