

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: P211602

Luminaire Tested: **LE_4B20D010 EC4B10209030 4LBS1GPH**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211602
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 EC4B10209030 4LBS1GPH
Description: PORTFOLIO 4 INCH CYLINDER
SHALLOW DISTRIBUTION WITH GRAPHITE HAZE 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: 1808.1 lumens
Efficiency: N/A
Efficacy: 86.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.16 / 1.26
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

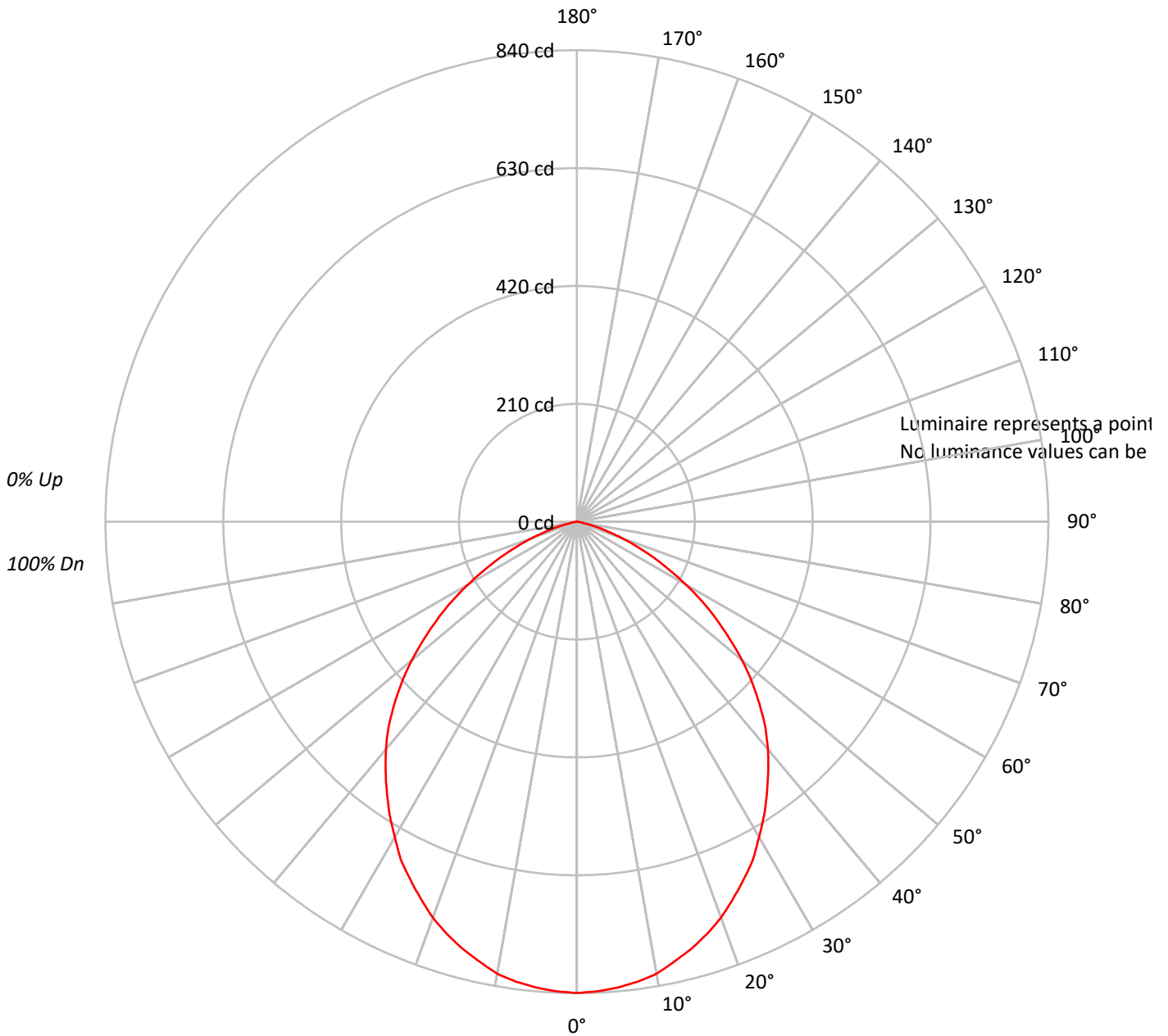
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	91	90	88		
2	102	95	89	84	100	93	88	83	90	85	82	87	83	80	84	81	78	76		
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66		
4	87	76	68	62	85	75	67	62	72	66	61	70	65	60	68	63	59	57		
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	50		
6	74	62	54	48	73	61	53	48	59	52	47	58	52	47	56	51	47	45		
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40		
8	65	52	44	38	63	51	44	38	50	43	38	49	42	38	48	42	38	36		
9	60	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34	32		
10	57	44	37	32	56	44	36	32	43	36	31	42	36	31	41	35	31	30		

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.1	4.4
10°-20°	221.9	12.3
20°-30°	323.7	17.9
30°-40°	369.1	20.4
40°-50°	354.1	19.6
50°-60°	271.2	15.0
60°-70°	148.8	8.2
70°-80°	39.6	2.2
80°-90°	0.6	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°	624.7	34.6
0°-40°	993.8	55.0
0°-60°	1619.1	89.5
0°-90°	1808.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1808.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	840	
5°	833	79
15°	788	222
25°	703	324
35°	590	369
45°	460	354
55°	304	271
65°	150	149
75°	35	40
85°	0	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	839.7
2.5°	837.6
5°	833.2
7.5°	826.7
10°	818.0
12.5°	802.8
15°	787.6
17.5°	770.4
20°	750.8
22.5°	727.0
25°	703.1
27.5°	679.2
30°	648.8
32.5°	620.6
35°	590.2
37.5°	559.8
40°	529.4
42.5°	496.9
45°	460.1
47.5°	423.2
50°	384.1
52.5°	342.9
55°	303.8
57.5°	264.7
60°	223.5
62.5°	184.4
65°	149.8
67.5°	115.0
70°	84.7
72.5°	56.4
75°	34.7
77.5°	15.2
80°	4.3
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)