

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: P211543

Luminaire Tested: **LSR4B20D010BZ EC4B10209727 4LBSB1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211543
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 EC4B10209727 4LBSB1
Description: PORTFOLIO 4 INCH CYLINDER
SHALLOW 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: 1248.6 lumens
Efficiency: N/A
Efficacy: 60.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.3
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

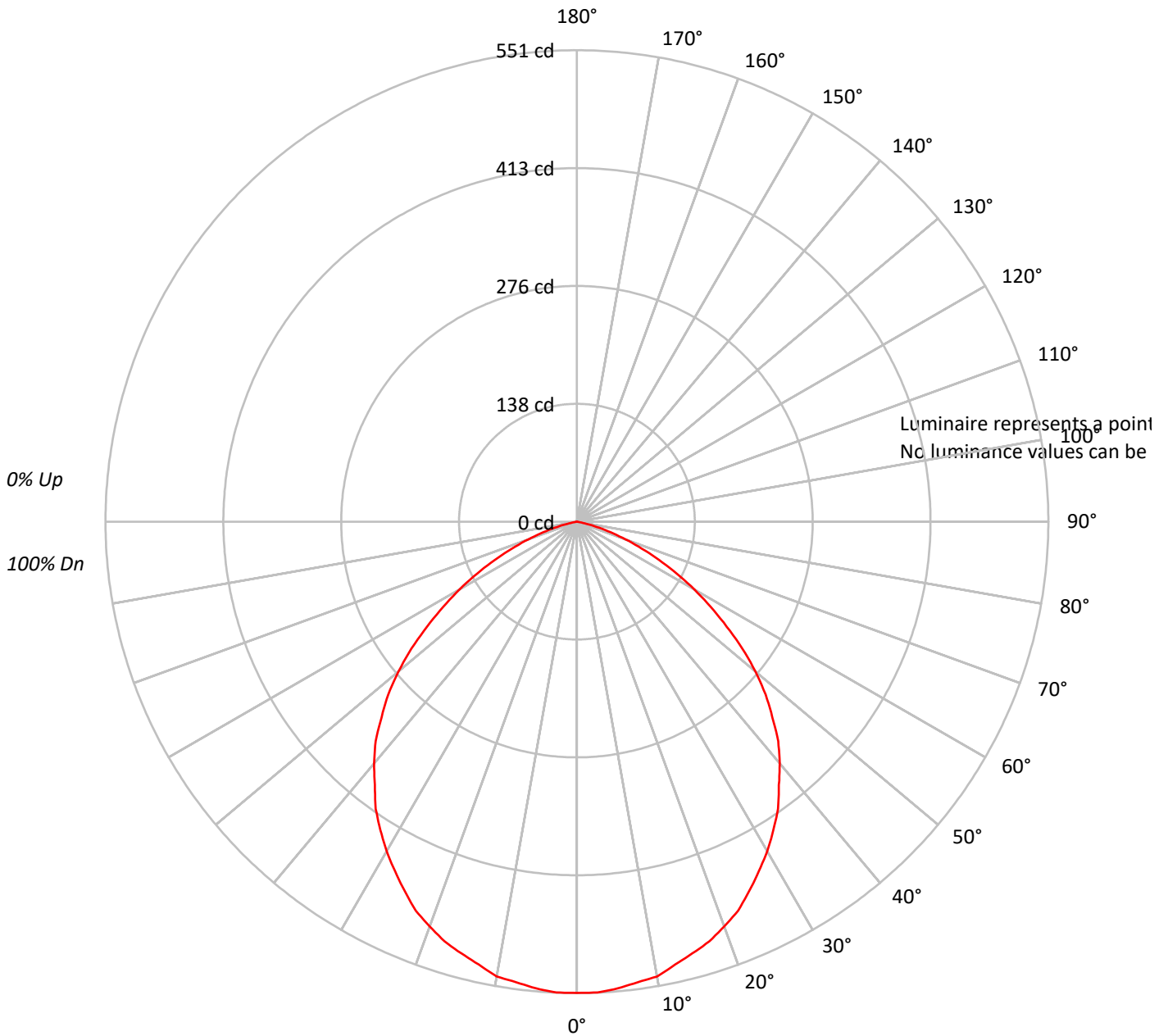
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
1	111	107	103	100	108	105	101	98	100	98	95	97	94	93	93	91	90	88			88
2	102	95	89	84	100	93	88	83	90	85	81	86	83	79	84	80	78	76			76
3	94	84	77	72	91	83	76	71	80	74	70	77	73	68	75	71	67	65			65
4	86	76	68	62	84	74	67	61	72	65	60	70	64	60	68	63	59	57			57
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50			50
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44			44
7	69	56	48	42	67	55	48	42	54	47	42	52	46	41	51	45	41	39			39
8	64	51	43	38	63	51	43	38	49	42	37	48	42	37	47	41	37	35			35
9	60	47	39	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32			32
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	40	35	31	29			29

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.0	4.2
10°-20°	147.5	11.8
20°-30°	219.4	17.6
30°-40°	255.3	20.5
40°-50°	248.9	19.9
50°-60°	191.4	15.3
60°-70°	105.8	8.5
70°-80°	28.0	2.2
80°-90°	0.2	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°	418.9	33.5
0°-40°	674.3	54.0
0°-60°	1114.6	89.3
0°-90°	1248.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1248.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	551	
5°	548	52
15°	522	148
25°	476	219
35°	410	255
45°	323	249
55°	214	191
65°	106	106
75°	24	28
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	550.8
2.5°	550.8
5°	547.6
7.5°	542.9
10°	539.7
12.5°	530.2
15°	522.3
17.5°	514.4
20°	503.3
22.5°	492.2
25°	476.4
27.5°	460.6
30°	444.8
32.5°	427.4
35°	409.9
37.5°	387.8
40°	368.8
42.5°	348.2
45°	322.9
47.5°	299.1
50°	272.2
52.5°	243.8
55°	213.7
57.5°	185.2
60°	158.3
62.5°	131.4
65°	106.0
67.5°	82.3
70°	60.1
72.5°	41.2
75°	23.7
77.5°	11.1
80°	1.6
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)