

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: P211603

Luminaire Tested: **LSR4B20D010BZ EC4B10209030 4LBSH1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211603
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 EC4B10209030 4LBSH1
Description: PORTFOLIO 4 INCH CYLINDER
SHALLOW DISTRIBUTION WITH SEMI-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: 1698.8 lumens
Efficiency: N/A
Efficacy: 81.7 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 1.06 / 1.17
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

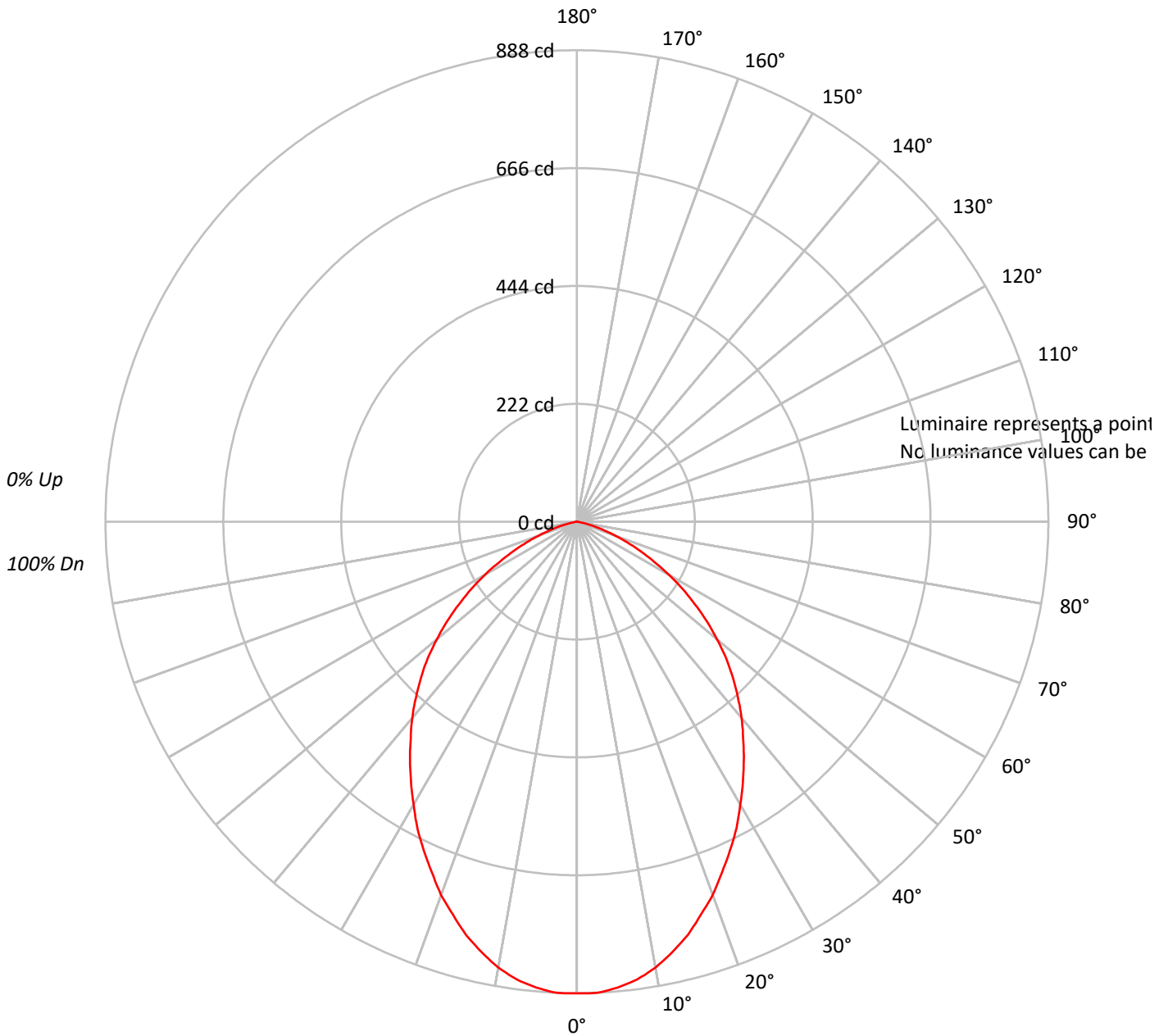
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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																			
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88																			
2	102	96	90	85	100	94	88	84	90	86	82	87	83	80	84	81	79	77																			
3	95	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	69	67																			
4	87	77	69	63	85	75	68	63	73	67	62	71	65	61	69	64	60	58																			
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	53	51																			
6	75	63	55	49	73	62	54	49	60	54	49	59	53	48	57	52	48	46																			
7	70	58	50	44	68	57	49	44	55	49	44	54	48	43	53	47	43	41																			
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37																			
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	40	35	34																			
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31																			

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.2	4.9
10°-20°	226.2	13.3
20°-30°	314.1	18.5
30°-40°	342.8	20.2
40°-50°	319.8	18.8
50°-60°	242.7	14.3
60°-70°	132.9	7.8
70°-80°	36.6	2.2
80°-90°	0.5	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°	623.6	36.7
0°-40°	966.4	56.9
0°-60°	1528.9	90.0
0°-90°	1698.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1698.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	888	
5°	881	83
15°	806	226
25°	683	314
35°	548	343
45°	415	320
55°	271	243
65°	133	133
75°	32	37
85°	0	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	888.5
2.5°	888.5
5°	881.0
7.5°	869.8
10°	853.0
12.5°	830.5
15°	806.2
17.5°	776.3
20°	748.2
22.5°	714.5
25°	682.7
27.5°	650.9
30°	615.4
32.5°	581.7
35°	548.1
37.5°	514.4
40°	482.6
42.5°	448.9
45°	415.3
47.5°	381.6
50°	344.2
52.5°	308.6
55°	271.2
57.5°	235.7
60°	200.1
62.5°	164.6
65°	132.8
67.5°	102.9
70°	76.7
72.5°	52.4
75°	31.8
77.5°	15.0
80°	3.7
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)