

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: P212443

Luminaire Tested: **LSR4B40D010BZ EC4B30509035 4LBSGPH1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P212443  
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: LSR4B40D010BZ EC4B30509035 4LBSGPH1  
Description: PORTFOLIO 4 INCH CYLINDER  
SHALLOW DISTRIBUTION WITH GRAPHITE HAZE TRIM  
WATTAGE D010TR-43.02W DE010-42.54W D5LT-42.539W DMX-41.87W DL2-41.57W  
DL3-44.71W DLE-39.33W  
Light Source: HIGH LUMEN LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3190.5 lumens  
Efficiency: N/A  
Efficacy: 76.3 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

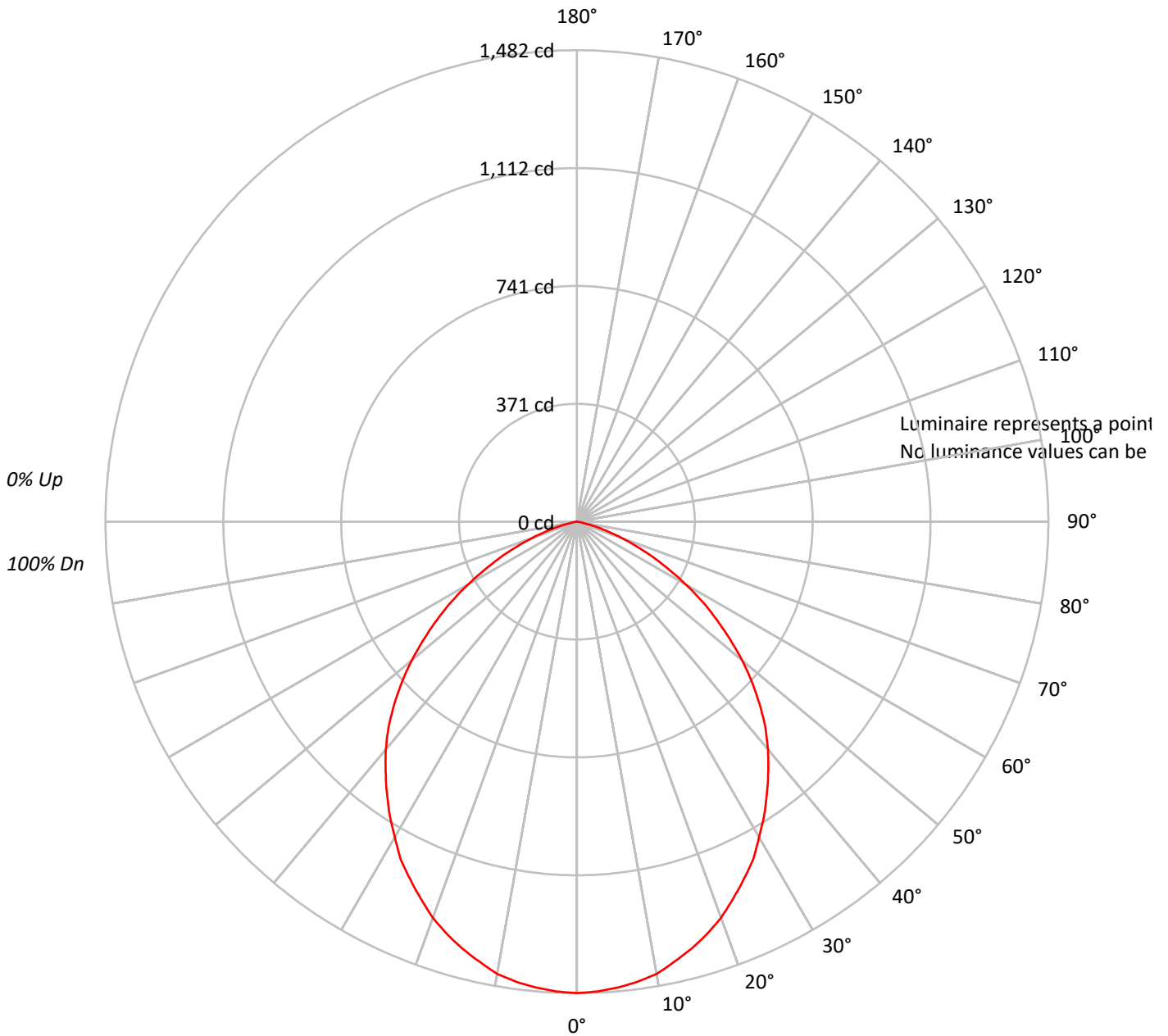
Input Watts (W): 41.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	139.5	4.4
10°-20°	391.6	12.3
20°-30°	571.2	17.9
30°-40°	651.4	20.4
40°-50°	624.8	19.6
50°-60°	478.5	15.0
60°-70°	262.6	8.2
70°-80°	69.8	2.2
80°-90°	1.0	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°	1102.3	34.5
0°-40°	1753.7	55.0
0°-60°	2857.1	89.5
0°-90°	3190.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3190.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1482	
5°	1470	140
15°	1390	392
25°	1241	571
35°	1042	651
45°	812	625
55°	536	479
65°	264	263
75°	61	70
85°	0	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1481.8
2.5°	1478.0
5°	1470.3
7.5°	1458.9
10°	1443.5
12.5°	1416.7
15°	1389.9
17.5°	1359.3
20°	1324.8
22.5°	1282.7
25°	1240.6
27.5°	1198.5
30°	1144.9
32.5°	1095.1
35°	1041.5
37.5°	987.9
40°	934.3
42.5°	876.8
45°	811.8
47.5°	746.7
50°	677.7
52.5°	605.0
55°	536.1
57.5°	467.1
60°	394.4
62.5°	325.5
65°	264.2
67.5°	202.9
70°	149.3
72.5°	99.6
75°	61.3
77.5°	26.8
80°	7.7
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)