

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: P212506

Luminaire Tested: **LSR4B40D010BZ EC4B30509040 4LBSWMH1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P212506  
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 EC4B30509040 4LBSWMH1  
Description: PORTFOLIO 4 INCH CYLINDER  
SHALLOW DISTRIBUTION WITH WARM 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: 3531.5 lumens  
Efficiency: N/A  
Efficacy: 84.5 lumens/watt  
Spacing Criteria (0/90/45): 0.99 / 0.99 / 1.08  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

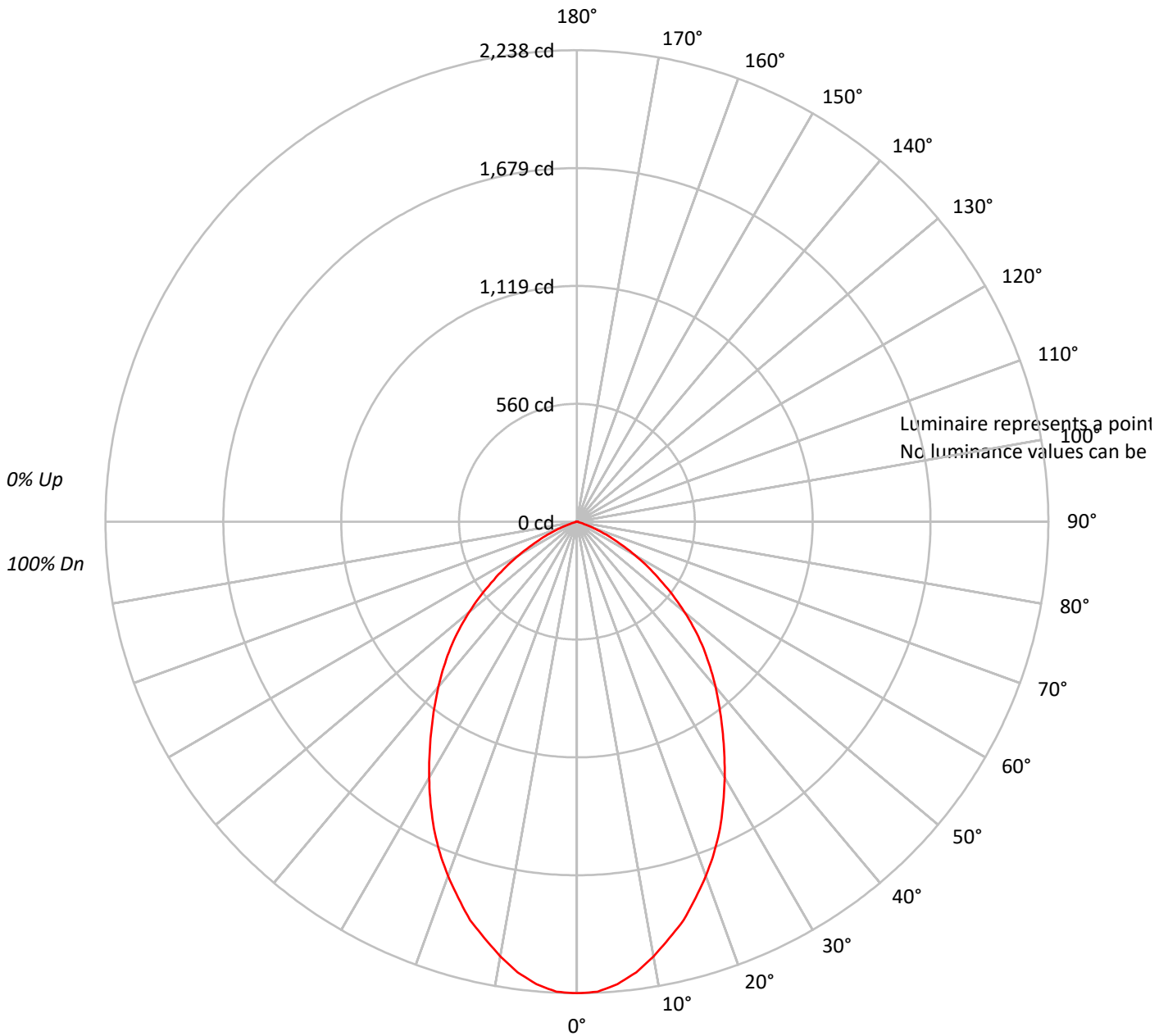
Input Watts (W): 41.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P212506

CATALOG NUMBER: LSR4B40D010BZ EC4B30509040 4LBSWMH1

### Luminous Intensity Polar Plot





TEST NUMBER: P212506

CATALOG NUMBER: LSR4B40D010BZ EC4B30509040 4LBSWMH1

**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	112	108	105	102	109	106	103	101	102	100	97	98	96	94	95	93	92	90		
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79		
3	96	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70		
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62		
5	83	73	65	59	82	72	64	59	70	63	59	68	62	58	66	61	57	56		
6	78	66	59	53	76	65	58	53	64	57	53	62	57	52	61	56	52	50		
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45		
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41		
9	64	52	45	40	63	52	45	40	50	44	40	49	44	39	49	43	39	38		
10	60	48	41	37	59	48	41	37	47	41	36	46	40	36	45	40	36	35		

**AVERAGE LUMINANCE (cd/sqm):**





TEST NUMBER: P212506

CATALOG NUMBER: LSR4B40D010BZ EC4B30509040 4LBSWMH1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	206.9	5.9
10°-20°	548.2	15.5
20°-30°	736.3	20.8
30°-40°	753.6	21.3
40°-50°	652.3	18.5
50°-60°	433.9	12.3
60°-70°	178.2	5.0
70°-80°	21.2	0.6
80°-90°	0.9	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°	1491.4	42.2
0°-40°	2245.0	63.6
0°-60°	3331.2	94.3
0°-90°	3531.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3531.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2238	
5°	2204	207
15°	1958	548
25°	1606	736
35°	1204	754
45°	850	652
55°	482	434
65°	176	178
75°	9	21
85°	0	1
90°	0	



TEST NUMBER: P212506

CATALOG NUMBER: LSR4B40D010BZ EC4B30509040 4LBSWMH1

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2238.3
2.5°	2233.7
5°	2203.6
7.5°	2157.3
10°	2094.8
12.5°	2025.3
15°	1958.2
17.5°	1872.6
20°	1789.2
22.5°	1701.3
25°	1606.4
27.5°	1504.5
30°	1402.7
32.5°	1300.8
35°	1203.6
37.5°	1111.0
40°	1023.1
42.5°	935.1
45°	849.5
47.5°	759.2
50°	666.6
52.5°	574.0
55°	481.5
57.5°	400.4
60°	317.1
62.5°	240.7
65°	175.9
67.5°	115.7
70°	67.1
72.5°	32.4
75°	9.3
77.5°	4.6
80°	2.3
82.5°	2.3
85°	0.0
87.5°	0.0
90°	0.0



Report Generated By E9808895 / USPTCWHP6082093







— 0°-180°







(END OF REPORT)