

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: P211639

Luminaire Tested: **LSR4B20D010BZ EC4B10209730 4LBWH1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211639
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 EC4B10209730 4LBWH1
Description: PORTFOLIO 4 INCH CYLINDER
WIDE 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: 1263.7 lumens
Efficiency: N/A
Efficacy: 60.8 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.13
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

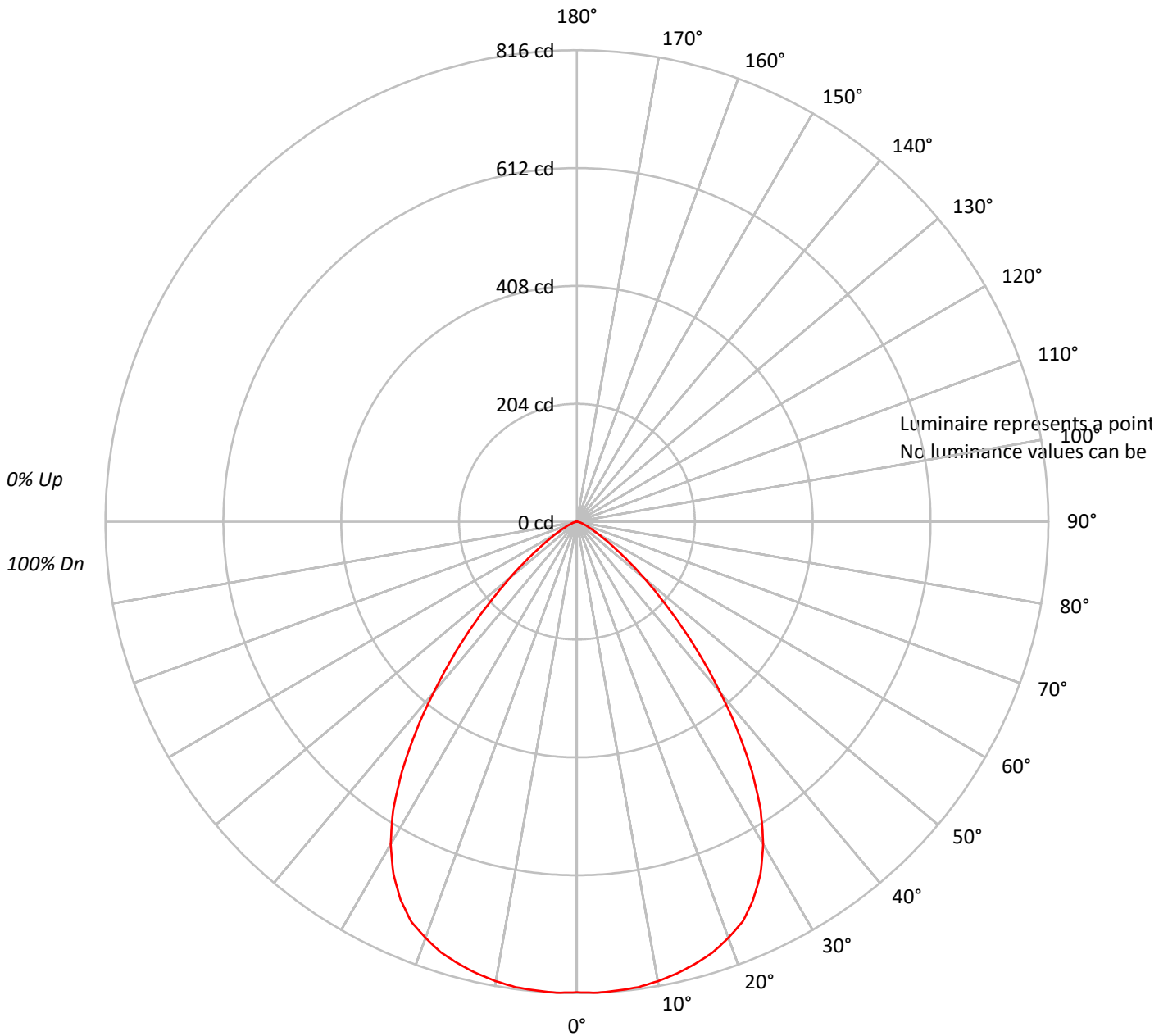
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P211639

CATALOG NUMBER: LSR4B20D010BZ EC4B10209730 4LBWH1

Luminous Intensity Polar Plot





TEST NUMBER: P211639

CATALOG NUMBER: LSR4B20D010BZ EC4B10209730 4LBWH1

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	112	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91																			
2	105	100	95	91	103	98	93	90	95	91	88	91	88	86	89	86	84	82																			
3	99	91	85	80	97	90	84	80	87	82	78	84	80	77	82	79	76	74																			
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67																			
5	87	77	70	65	85	76	69	64	74	68	64	72	67	63	70	66	62	61																			
6	81	71	64	58	80	70	63	58	68	62	58	67	61	57	65	61	57	55																			
7	76	65	58	53	75	65	58	53	63	57	53	62	56	52	61	56	52	50																			
8	72	60	53	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46																			
9	68	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	43																			
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39																			

AVERAGE LUMINANCE (cd/sqm):





TEST NUMBER: P211639

CATALOG NUMBER: LSR4B20D010BZ EC4B10209730 4LBWH1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.6	6.1
10°-20°	223.5	17.7
20°-30°	329.8	26.1
30°-40°	325.5	25.8
40°-50°	199.2	15.8
50°-60°	76.4	6.0
60°-70°	23.9	1.9
70°-80°	7.0	0.6
80°-90°	0.9	0.1
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°	630.9	49.9
0°-40°	956.3	75.7
0°-60°	1231.9	97.5
0°-90°	1263.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1263.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	814	
5°	814	78
15°	792	224
25°	722	330
35°	528	325
45°	256	199
55°	81	76
65°	22	24
75°	7	7
85°	0	1
90°	0	



TEST NUMBER: P211639

CATALOG NUMBER: LSR4B20D010BZ EC4B10209730 4LBWH1

CANDELA DISTRIBUTION (FULL):

	0°
0°	814.5
2.5°	816.2
5°	814.5
7.5°	812.8
10°	807.6
12.5°	800.8
15°	792.2
17.5°	781.9
20°	766.5
22.5°	749.3
25°	721.9
27.5°	687.6
30°	644.7
32.5°	591.6
35°	528.1
37.5°	457.8
40°	385.8
42.5°	318.9
45°	255.5
47.5°	198.9
50°	150.9
52.5°	111.5
55°	80.6
57.5°	56.6
60°	41.2
62.5°	30.9
65°	22.3
67.5°	17.1
70°	12.0
72.5°	8.6
75°	6.9
77.5°	3.4
80°	3.4
82.5°	1.7
85°	0.0
87.5°	0.0
90°	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180°







(END OF REPORT)