

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: P211659

Luminaire Tested: **LSR4B20D010BZ EC4B10208035 4LBSB1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211659
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 EC4B10208035 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: 1791.5 lumens
Efficiency: N/A
Efficacy: 86.1 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

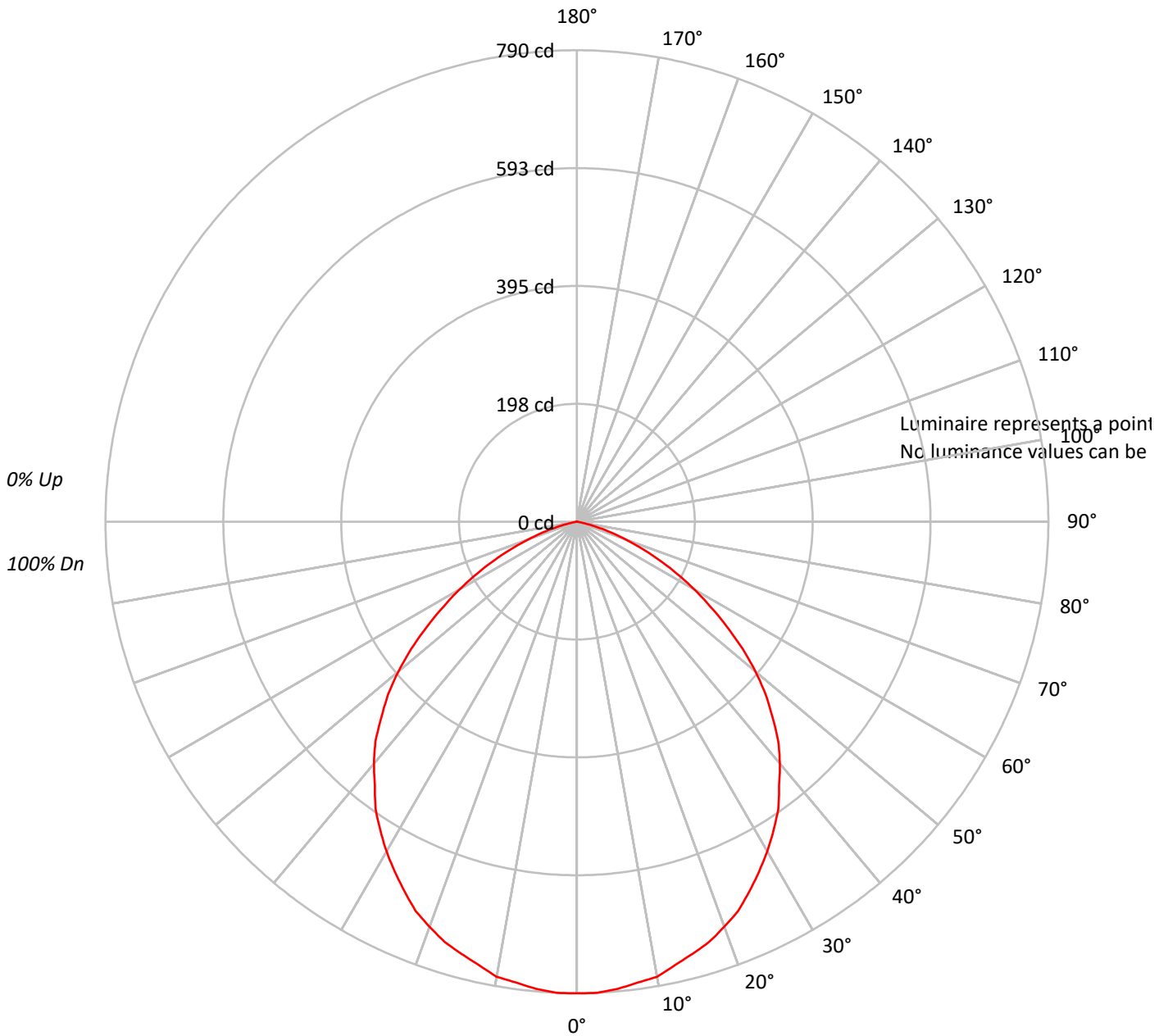
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P211659

CATALOG NUMBER: LSR4B20D010BZ EC4B10208035 4LBSB1

Luminous Intensity Polar Plot





TEST NUMBER: P211659

CATALOG NUMBER: LSR4B20D010BZ EC4B10208035 4LBSB1

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

AVERAGE LUMINANCE (cd/sqm):





TEST NUMBER: P211659

CATALOG NUMBER: LSR4B20D010BZ EC4B10208035 4LBSB1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.6	4.2
10°-20°	211.6	11.8
20°-30°	314.8	17.6
30°-40°	366.4	20.4
40°-50°	357.1	19.9
50°-60°	274.7	15.3
60°-70°	151.8	8.5
70°-80°	40.2	2.2
80°-90°	0.3	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°	601.1	33.6
0°-40°	967.4	54.0
0°-60°	1599.2	89.3
0°-90°	1791.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1791.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	790	
5°	786	75
15°	749	212
25°	684	315
35°	588	366
45°	463	357
55°	307	275
65°	152	152
75°	34	40
85°	0	0
90°	0	



TEST NUMBER: P211659

CATALOG NUMBER: LSR4B20D010BZ EC4B10208035 4LBSB1

CANDELA DISTRIBUTION (FULL):

	0°
0°	790.3
2.5°	790.3
5°	785.8
7.5°	778.9
10°	774.4
12.5°	760.8
15°	749.4
17.5°	738.1
20°	722.2
22.5°	706.3
25°	683.6
27.5°	660.9
30°	638.1
32.5°	613.2
35°	588.2
37.5°	556.4
40°	529.1
42.5°	499.6
45°	463.3
47.5°	429.2
50°	390.6
52.5°	349.7
55°	306.6
57.5°	265.7
60°	227.1
62.5°	188.5
65°	152.2
67.5°	118.1
70°	86.3
72.5°	59.0
75°	34.1
77.5°	15.9
80°	2.3
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180°







(END OF REPORT)