

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: P211569

Luminaire Tested: **LSR4B20D010BZ EC4B10208030 4LBNMW1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211569
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 EC4B10208030 4LBNMW1
Description: PORTFOLIO 4 INCH CYLINDER
NARROW DISTRIBUTION WITH MATTE WHITE 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: 1444.8 lumens
Efficiency: N/A
Efficacy: 69.5 lumens/watt
Spacing Criteria (0/90/45): 0.96 / 0.96 / 0.95
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

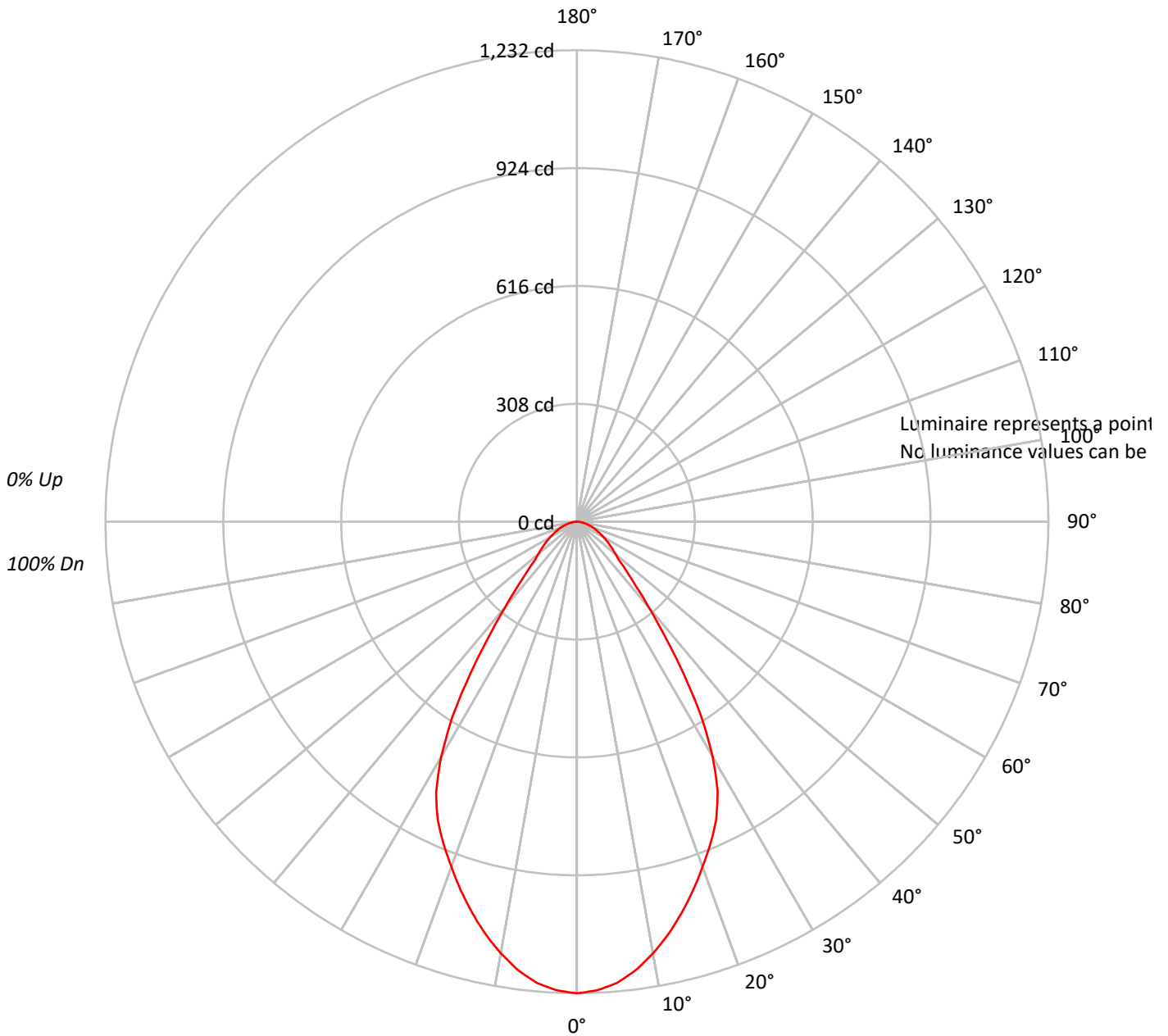
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P211569

CATALOG NUMBER: LSR4B20D010BZ EC4B10208030 4LBNMW1

Luminous Intensity Polar Plot





TEST NUMBER: P211569

CATALOG NUMBER: LSR4B20D010BZ EC4B10208030 4LBNMW1

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	105	103	109	106	104	101	102	100	98	98	97	95	95	94	92	90																			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	85	83	81																			
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73																			
4	92	83	76	71	90	82	76	71	80	74	70	78	73	69	76	72	68	67																			
5	87	77	70	65	85	76	69	64	74	68	64	72	67	63	70	66	63	61																			
6	82	71	64	59	80	70	64	59	69	63	58	67	62	58	66	61	58	56																			
7	77	66	59	54	75	65	59	54	64	58	54	63	57	53	62	57	53	52																			
8	73	62	55	50	71	61	55	50	60	54	50	59	53	49	58	53	49	48																			
9	69	58	51	46	68	57	51	46	56	50	46	55	50	46	54	49	46	44																			
10	65	54	48	43	64	54	47	43	53	47	43	52	47	43	51	46	43	41																			

AVERAGE LUMINANCE (cd/sqm):





TEST NUMBER: P211569

CATALOG NUMBER: LSR4B20D010BZ EC4B10208030 4LBNMW1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.4	7.8
10°-20°	296.7	20.5
20°-30°	390.5	27.0
30°-40°	304.0	21.0
40°-50°	147.6	10.2
50°-60°	93.3	6.5
60°-70°	60.2	4.2
70°-80°	31.5	2.2
80°-90°	7.8	0.5
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°	800.5	55.4
0°-40°	1104.5	76.4
0°-60°	1345.4	93.1
0°-90°	1444.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1444.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1232	
5°	1210	113
15°	1058	297
25°	861	390
35°	487	304
45°	184	148
55°	103	93
65°	60	60
75°	30	31
85°	7	8
90°	0	



TEST NUMBER: P211569

CATALOG NUMBER: LSR4B20D010BZ EC4B10208030 4LBNMW1

CANDELA DISTRIBUTION (FULL):

	0°
0°	1232.5
2.5°	1225.7
5°	1209.6
7.5°	1182.0
10°	1145.3
12.5°	1104.0
15°	1058.1
17.5°	1009.9
20°	959.4
22.5°	911.2
25°	860.7
27.5°	796.4
30°	709.2
32.5°	605.9
35°	486.6
37.5°	376.4
40°	291.5
42.5°	227.2
45°	183.6
47.5°	149.2
50°	130.8
52.5°	117.1
55°	103.3
57.5°	91.8
60°	80.3
62.5°	68.9
65°	59.7
67.5°	52.8
70°	43.6
72.5°	36.7
75°	29.8
77.5°	23.0
80°	16.1
82.5°	11.5
85°	6.9
87.5°	2.3
90°	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180°







(END OF REPORT)