

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: P211705

Luminaire Tested: **LSR4B20D010BZ EC4B10208040 4LBMGPH1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211705
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 EC4B10208040 4LBMGPH1
Description: PORTFOLIO 4 INCH CYLINDER
MEDIUM DISTRIBUTION WITH GRAPHITE HAZE 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: 1132.5 lumens
Efficiency: N/A
Efficacy: 54.4 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 0.92
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

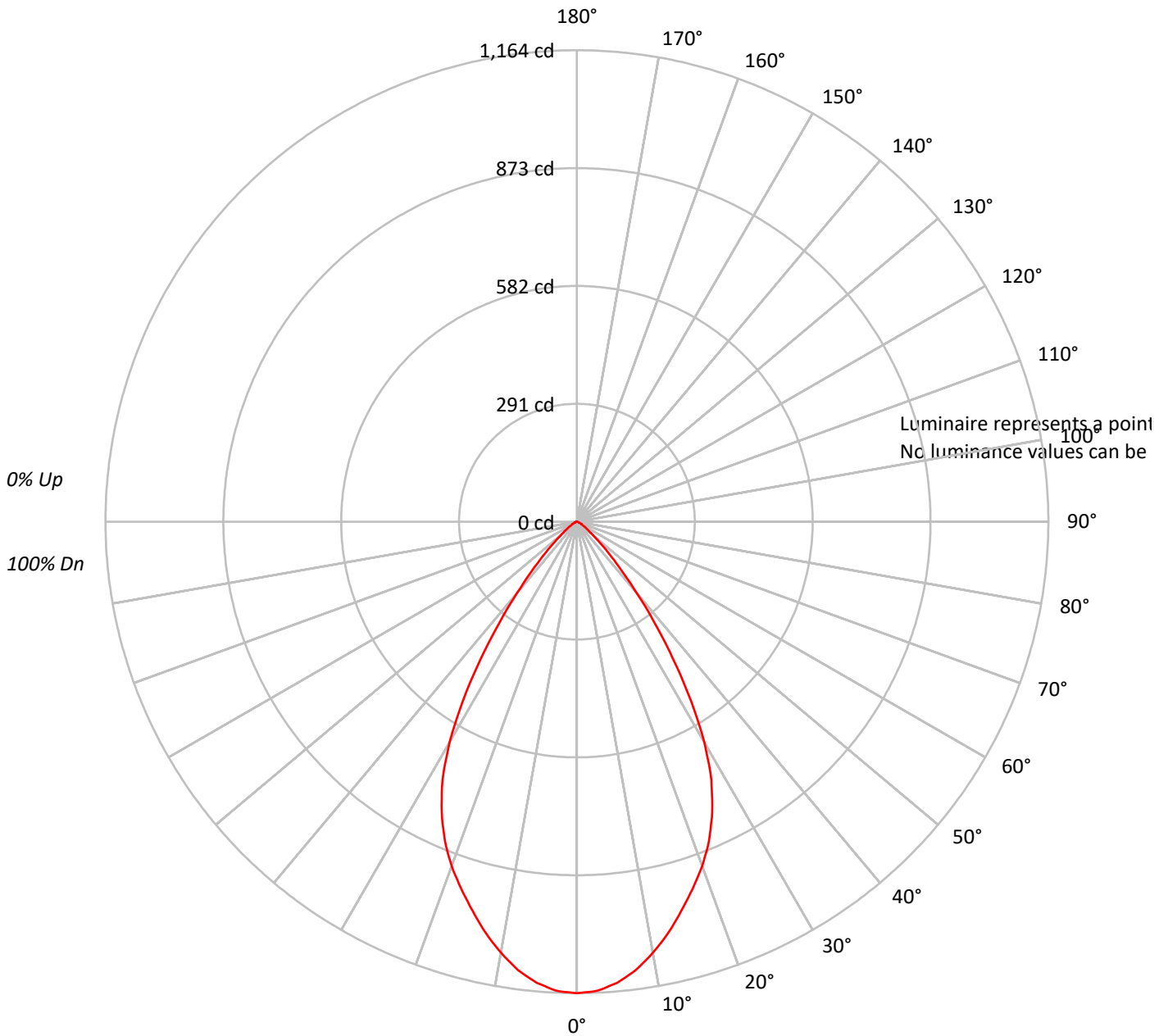
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P211705

CATALOG NUMBER: LSR4B20D010BZ EC4B10208040 4LBMGPH1

Luminous Intensity Polar Plot





TEST NUMBER: P211705

CATALOG NUMBER: LSR4B20D010BZ EC4B10208040 4LBMGPH1

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	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93																			
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	88	86																			
3	102	95	90	85	100	93	89	85	91	87	83	88	85	82	86	83	81	79																			
4	96	88	82	78	94	87	82	78	85	80	77	83	79	76	81	78	75	73																			
5	91	82	76	72	89	81	76	71	79	74	71	78	73	70	76	72	69	68																			
6	86	77	71	66	85	76	70	66	74	69	65	73	68	65	72	68	64	63																			
7	82	72	66	61	80	71	65	61	70	65	61	69	64	60	68	63	60	59																			
8	77	67	61	57	76	67	61	57	66	60	57	65	60	56	64	59	56	55																			
9	73	63	57	53	72	63	57	53	62	57	53	61	56	53	60	56	52	51																			
10	70	60	54	50	69	59	54	50	59	53	50	58	53	49	57	52	49	48																			

AVERAGE LUMINANCE (cd/sqm):





TEST NUMBER: P211705

CATALOG NUMBER: LSR4B20D010BZ EC4B10208040 4LBMGPH1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.1	9.5
10°-20°	279.4	24.7
20°-30°	358.3	31.6
30°-40°	259.0	22.9
40°-50°	92.9	8.2
50°-60°	25.1	2.2
60°-70°	8.2	0.7
70°-80°	2.5	0.2
80°-90°	0.0	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°	744.8	65.8
0°-40°	1003.9	88.6
0°-60°	1121.8	99.1
0°-90°	1132.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1132.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1164	
5°	1143	107
15°	995	279
25°	790	358
35°	414	259
45°	112	93
55°	26	25
65°	7	8
75°	2	3
85°	0	0
90°	0	



TEST NUMBER: P211705

CATALOG NUMBER: LSR4B20D010BZ EC4B10208040 4LBMGPH1

CANDELA DISTRIBUTION (FULL):

	0°
0°	1164.3
2.5°	1159.5
5°	1142.8
7.5°	1116.7
10°	1080.9
12.5°	1040.5
15°	995.2
17.5°	950.0
20°	904.8
22.5°	852.4
25°	790.5
27.5°	719.0
30°	628.6
32.5°	523.8
35°	414.3
37.5°	314.3
40°	228.6
42.5°	161.9
45°	111.9
47.5°	76.2
50°	50.0
52.5°	35.7
55°	26.2
57.5°	19.0
60°	14.3
62.5°	11.9
65°	7.1
67.5°	4.8
70°	4.8
72.5°	2.4
75°	2.4
77.5°	2.4
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180°







(END OF REPORT)