

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: P211499

Luminaire Tested: **LE_4B20D010 EC4B10209027 4LBCS1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211499
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: LE_4B20D010 EC4B10209027 4LBCS1MMS
Description: PORTFOLIO 4 INCH CYLINDER
SHALLOW DISTRIBUTION WITH CAST MATTE 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: 1700.7 lumens
Efficiency: N/A
Efficacy: 81.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.16 / 1.27
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

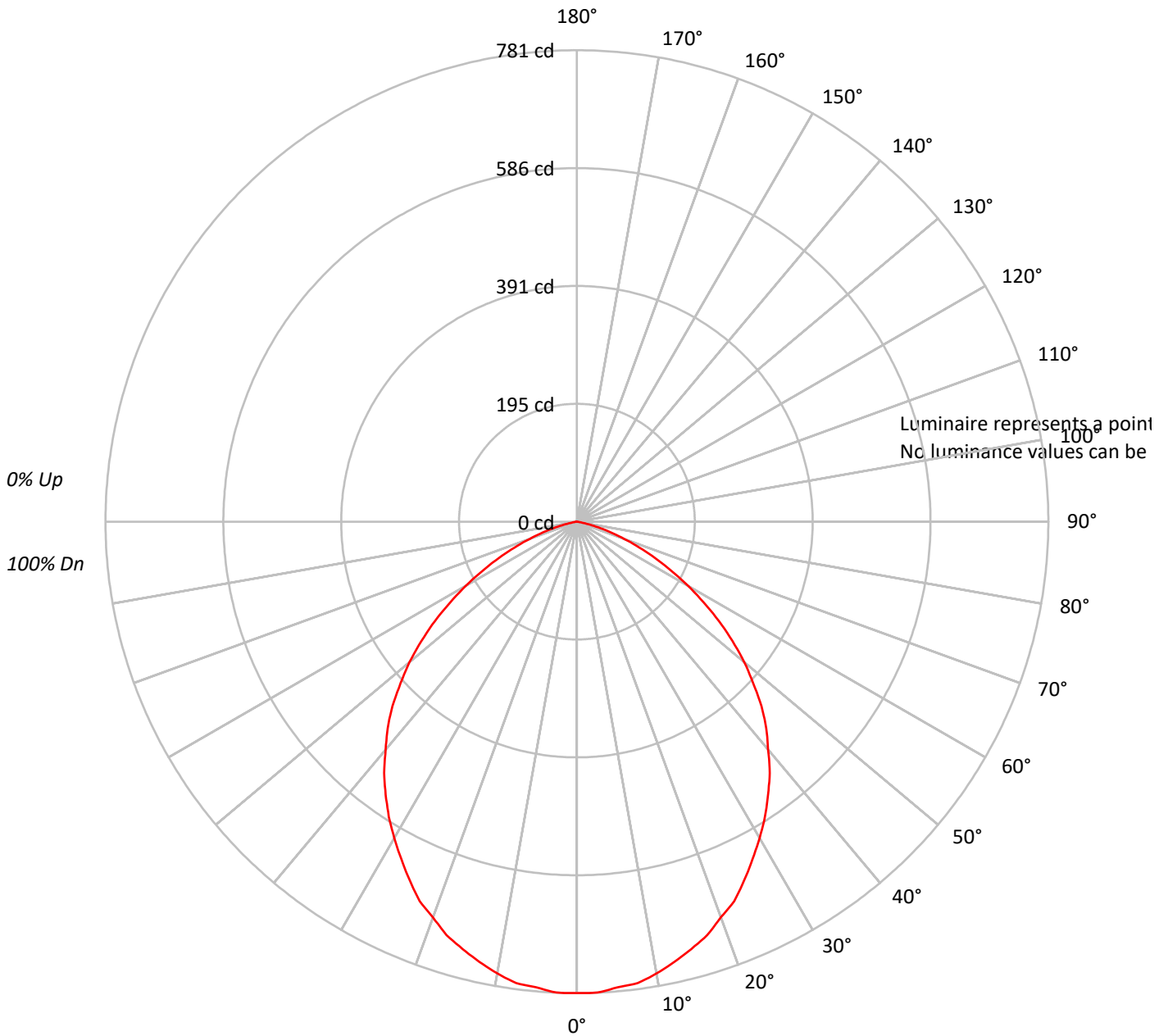
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P211499

CATALOG NUMBER: LE_4B20D010 EC4B10209027 4LBCS1MMS

Luminous Intensity Polar Plot





TEST NUMBER: P211499

CATALOG NUMBER: LE_4B20D010 EC4B10209027 4LBCS1MMS

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			100																
1	111	107	103	100	108	105	101	98	100	98	95	97	94	92	93	91	90	88			88																
2	102	95	89	84	100	93	88	83	90	85	81	86	83	79	83	80	78	76			76																
3	94	85	77	72	92	83	76	71	80	74	70	77	73	69	75	71	67	65			65																
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57			57																
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50			50																
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44			44																
7	69	56	48	42	67	56	48	42	54	47	42	53	46	42	51	46	41	40			40																
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36			36																
9	60	48	40	35	59	47	40	34	46	39	34	45	39	34	44	38	34	32			32																
10	57	44	36	31	55	43	36	31	43	36	31	42	35	31	41	35	31	29			29																

AVERAGE LUMINANCE (cd/sqm):





TEST NUMBER: P211499

CATALOG NUMBER: LE_4B20D010 EC4B10209027 4LBCS1MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.6	4.3
10°-20°	206.5	12.1
20°-30°	301.7	17.7
30°-40°	345.0	20.3
40°-50°	331.6	19.5
50°-60°	256.0	15.1
60°-70°	142.9	8.4
70°-80°	41.6	2.4
80°-90°	1.8	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°	581.8	34.2
0°-40°	926.8	54.5
0°-60°	1514.4	89.0
0°-90°	1700.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1700.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	781	
5°	774	74
15°	733	207
25°	656	302
35°	552	345
45°	432	332
55°	287	256
65°	143	143
75°	36	42
85°	1	2
90°	0	



TEST NUMBER: P211499

CATALOG NUMBER: LE_4B20D010 EC4B10209027 4LBCS1MMS

CANDELA DISTRIBUTION (FULL):

	0°
0°	781.0
2.5°	781.0
5°	774.4
7.5°	771.2
10°	760.1
12.5°	746.9
15°	732.7
17.5°	718.3
20°	697.4
22.5°	680.9
25°	655.6
27.5°	630.3
30°	605.1
32.5°	579.8
35°	552.2
37.5°	524.7
40°	492.8
42.5°	464.2
45°	432.3
47.5°	396.0
50°	361.9
52.5°	324.5
55°	287.1
57.5°	248.6
60°	212.3
62.5°	176.0
65°	143.0
67.5°	112.2
70°	83.6
72.5°	58.3
75°	36.3
77.5°	18.7
80°	6.6
82.5°	2.2
85°	1.0
87.5°	0.0
90°	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180°







(END OF REPORT)