

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: P211543

Luminaire Tested: **LE_4B20D010 EC4B10209727 4LBS1B**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211543
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 EC4B10209727 4LBS1B
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

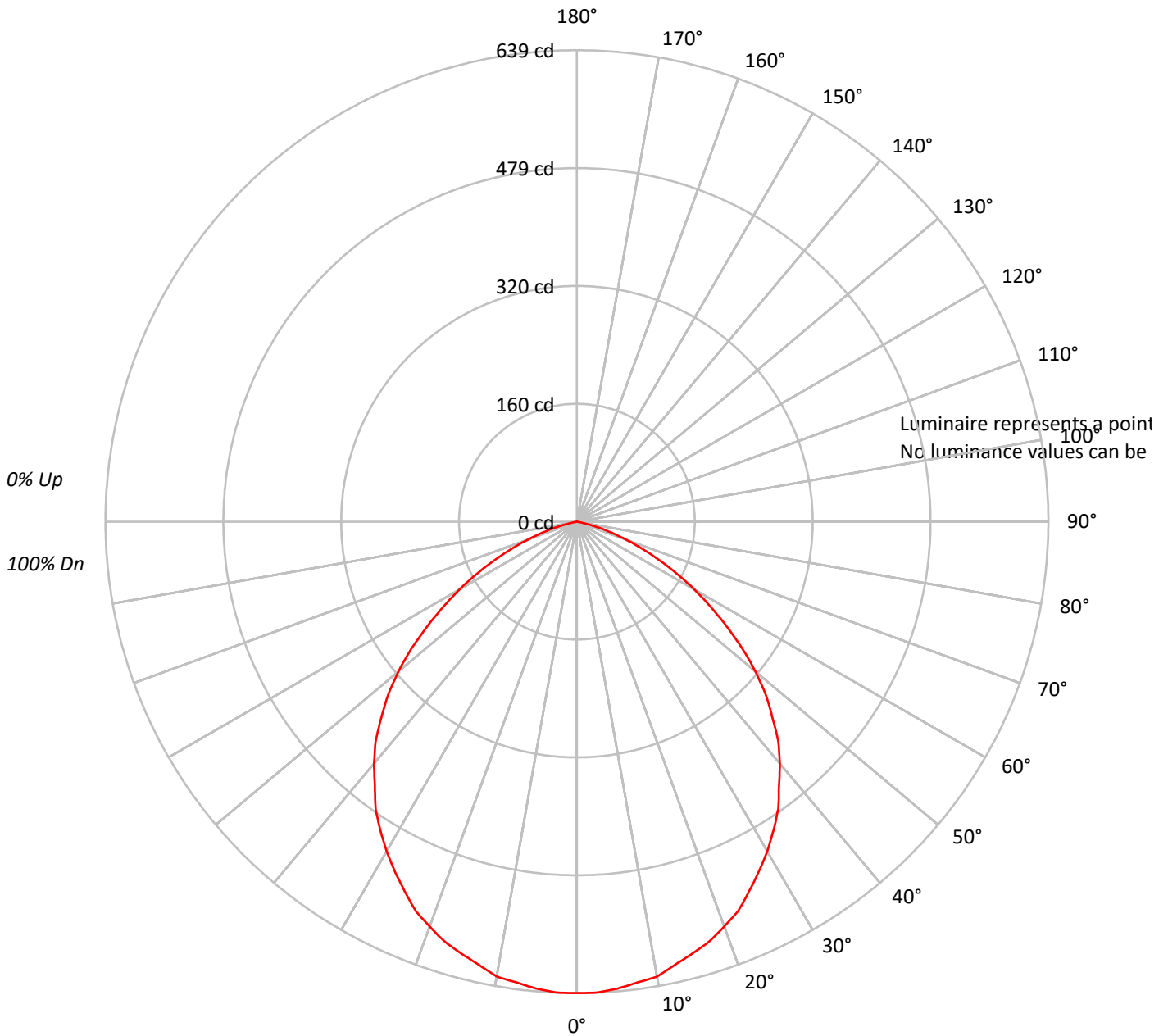
Lumens per Lamp: N/A
Luminaire Lumens: 1448.4 lumens
Efficiency: N/A
Efficacy: 69.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.3
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

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: P211543
CATALOG NUMBER: LE_4B20D010 EC4B10209727 4LBS1B

Luminous Intensity Polar Plot





TEST NUMBER: P211543

CATALOG NUMBER: LE_4B20D010 EC4B10209727 4LBS1B

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				
RC	80				70				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: P211543

CATALOG NUMBER: LE_4B20D010 EC4B10209727 4LBS1B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.3	4.2
10°-20°	171.1	11.8
20°-30°	254.5	17.6
30°-40°	296.2	20.4
40°-50°	288.7	19.9
50°-60°	222.1	15.3
60°-70°	122.7	8.5
70°-80°	32.5	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°	485.9	33.5
0°-40°	782.1	54.0
0°-60°	1292.9	89.3
0°-90°	1448.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1448.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	639	
5°	635	60
15°	606	171
25°	553	255
35°	476	296
45°	375	289
55°	248	222
65°	123	123
75°	28	33
85°	0	0
90°	0	



TEST NUMBER: P211543

CATALOG NUMBER: LE_4B20D010 EC4B10209727 4LBS1B

CANDELA DISTRIBUTION (FULL):

	0°
0°	638.9
2.5°	638.9
5°	635.2
7.5°	629.8
10°	626.1
12.5°	615.0
15°	605.9
17.5°	596.7
20°	583.8
22.5°	571.0
25°	552.6
27.5°	534.3
30°	516.0
32.5°	495.8
35°	475.5
37.5°	449.8
40°	427.8
42.5°	403.9
45°	374.6
47.5°	347.0
50°	315.8
52.5°	282.8
55°	247.9
57.5°	214.8
60°	183.6
62.5°	152.4
65°	123.0
67.5°	95.5
70°	69.7
72.5°	47.8
75°	27.5
77.5°	12.9
80°	1.9
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180°







(END OF REPORT)