

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: P251835

Luminaire Tested: **LD4B15D010 EU4B10209027 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251835
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-14)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD4B15D010 EU4B10209027 4LBDW1LI
Description: PORTFOLIO 4 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1109.0 lumens
Efficiency: N/A
Efficacy: 77.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.32 / 1.18
Luminous Opening: Circular (Dia: 7.42' x H: 0')
CIE Type: Direct

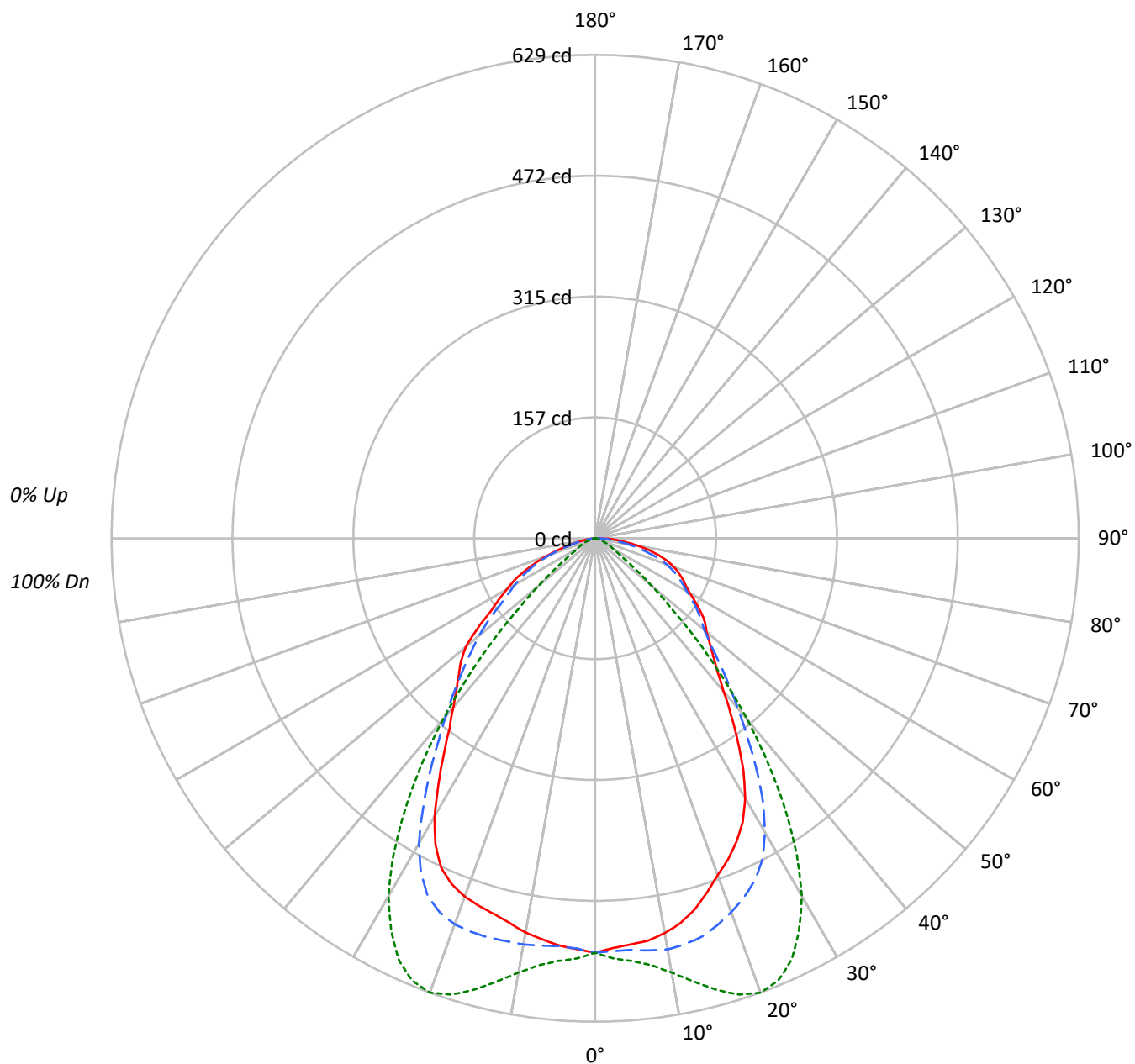
Input Watts (W): 14.39
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	110	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87		
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76		
3	94	85	78	72	92	84	77	72	81	75	71	78	73	69	76	72	68	66		
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58		
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52		
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47		
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	54	48	44	42		
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38		
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35		
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	134	134	134
5°	133	138	133
10°	132	145	132
15°	129	157	131
20°	124	167	132
25°	120	166	130
30°	112	155	120
35°	98	131	104
40°	84	100	93
45°	76	66	88
50°	73	37	85
55°	73	20	72
60°	71	13	66
65°	74	11	60
70°	79	8	49
75°	83	5	34
80°	82	3	22
85°	85	2	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.6	4.7
10°-20°	154.5	13.9
20°-30°	235.7	21.3
30°-40°	235.3	21.2
40°-50°	173.5	15.6
50°-60°	118.5	10.7
60°-70°	83.7	7.5
70°-80°	44.7	4.0
80°-90°	11.5	1.0
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°	441.9	39.8
0°-40°	677.1	61.1
0°-60°	969.2	87.4
0°-90°	1109.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1109.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	539	539	539	539	539	
5°	530	538	552	533	532	50
15°	500	537	608	538	506	140
25°	435	491	605	514	474	199
35°	324	365	431	376	343	202
45°	217	228	187	244	251	169
55°	168	162	46	151	166	150
65°	126	119	18	92	102	124
75°	86	70	6	32	35	90
85°	30	19	1	4	0	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	539.2	539.2	539.2	539.2	539.2	539.2	539.2	539.2	539.2
2.5°	533.6	536.8	537.6	543.2	547.3	542.4	534.4	534.4	535.2
5°	530.4	534.4	537.6	547.3	552.1	544.0	532.8	531.2	532.0
7.5°	528.0	533.6	540.8	555.3	560.1	549.7	534.4	528.0	526.4
10°	521.6	529.6	543.2	564.1	573.7	560.9	536.8	524.8	520.8
12.5°	512.8	522.4	540.8	573.7	590.5	571.3	536.8	519.2	512.8
15°	500.0	510.4	536.8	581.7	608.1	582.5	537.6	513.6	506.4
17.5°	483.2	496.0	528.0	585.7	622.6	592.9	536.8	509.6	501.6
20°	466.3	481.6	517.6	585.7	629.0	596.9	534.4	505.6	496.0
22.5°	451.9	467.1	505.6	578.5	622.6	592.1	527.2	498.4	487.2
25°	435.1	451.1	491.2	563.3	604.9	577.7	514.4	484.0	473.5
27.5°	415.8	433.5	471.1	539.2	574.5	551.3	490.4	460.7	449.5
30°	390.2	406.2	441.5	504.8	537.6	515.2	458.3	427.9	417.5
32.5°	359.0	373.4	406.2	463.1	488.0	469.5	416.6	391.0	379.0
35°	323.7	336.5	365.4	410.2	431.1	419.9	375.8	351.7	342.9
37.5°	290.9	300.5	324.5	357.4	370.2	363.0	335.7	318.1	310.9
40°	259.6	269.2	288.4	304.5	307.7	310.1	302.1	290.9	286.8
42.5°	235.6	244.4	256.4	254.8	245.2	258.8	271.6	270.0	266.8
45°	217.1	223.5	227.6	203.5	186.7	209.1	243.6	252.4	250.8
47.5°	201.9	205.1	202.7	162.7	132.2	162.7	218.7	236.4	236.4
50°	189.1	191.5	185.1	135.4	95.3	130.6	197.1	216.3	219.5
52.5°	180.3	181.1	173.1	114.6	65.7	103.4	173.9	190.7	193.1
55°	168.3	169.1	161.9	99.4	45.7	81.7	150.6	165.9	165.9
57.5°	154.6	156.2	149.0	86.5	32.0	68.1	133.0	147.4	148.2
60°	141.8	142.6	137.8	76.9	26.4	58.5	120.2	132.2	132.2
62.5°	133.0	133.8	128.2	71.3	22.4	51.3	106.6	117.8	118.6
65°	125.8	125.8	119.4	65.7	18.4	43.3	92.1	101.8	101.8
67.5°	117.8	116.2	109.8	58.5	14.4	35.3	77.7	84.9	84.1
70°	109.0	106.6	98.6	50.5	10.4	28.0	60.9	66.5	67.3
72.5°	98.6	95.3	84.9	41.7	8.0	20.8	44.9	49.7	49.7
75°	86.5	82.5	70.5	32.9	5.6	14.4	32.0	35.3	35.3
77.5°	72.1	68.1	56.1	24.0	4.0	9.6	21.6	24.0	24.0
80°	56.9	52.9	41.7	16.8	2.4	5.6	13.6	16.0	15.2
82.5°	42.5	38.5	28.0	10.4	1.6	3.2	8.8	8.8	8.0
85°	29.6	27.2	19.2	6.4	0.8	1.6	4.0	1.6	0.0
87.5°	20.0	17.6	12.0	3.2	0.0	0.8	0.8	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - 90°-270°







(END OF REPORT)