

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: P251836

Luminaire Tested: **LD4B15D010 EU4B10209030 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251836
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 EU4B10209030 4LBDW1LI
Description: PORTFOLIO 4 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1153.0 lumens
Efficiency: N/A
Efficacy: 80.1 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

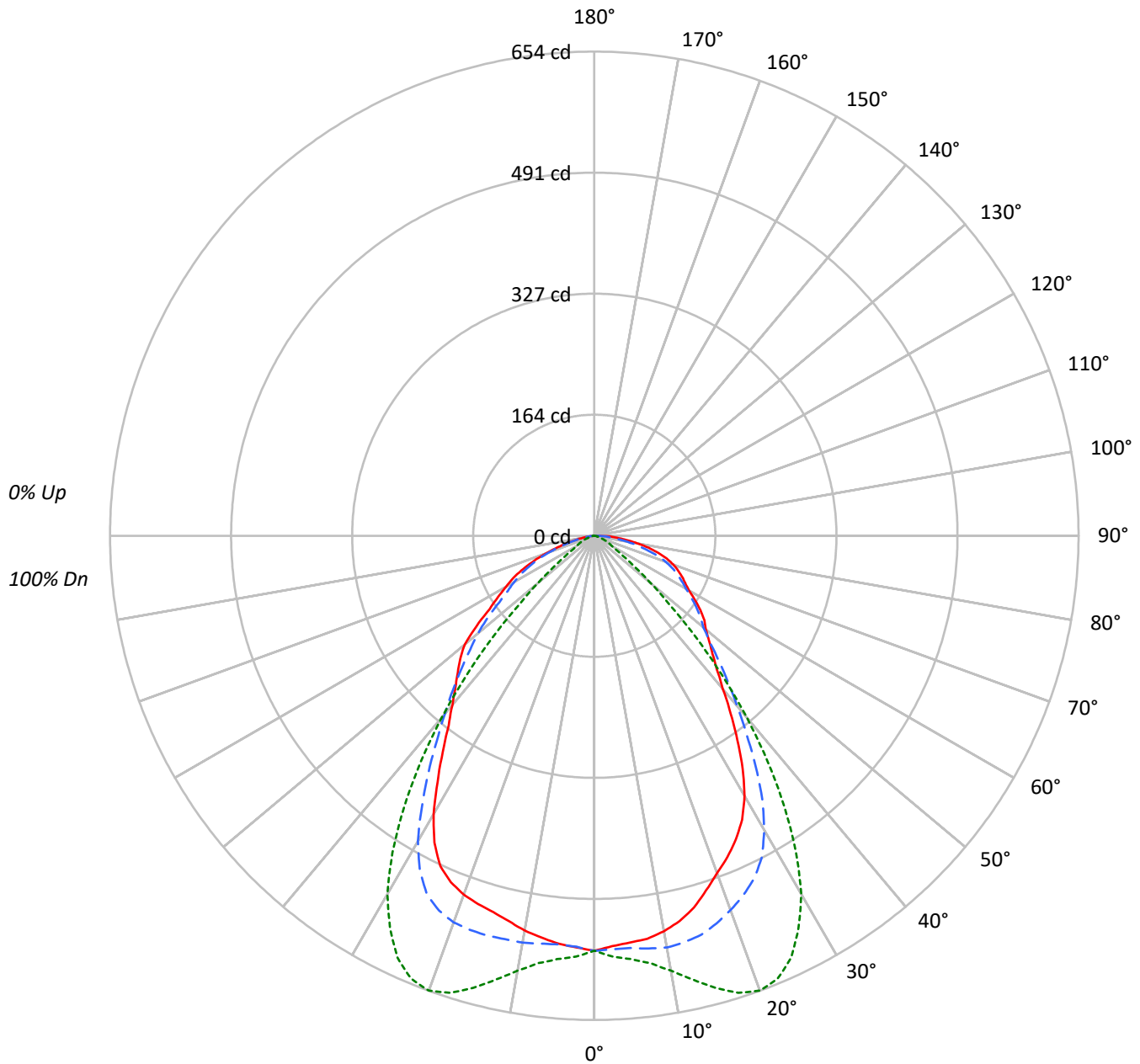
Input Watts (W): 14.39
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	140	140	140
5°	138	144	138
10°	137	151	137
15°	134	163	136
20°	129	173	137
25°	124	173	135
30°	117	161	125
35°	102	136	108
40°	88	104	97
45°	80	68	92
50°	76	38	88
55°	76	21	75
60°	73	14	69
65°	77	11	62
70°	83	8	51
75°	87	6	35
80°	85	4	23
85°	88	2	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.7	4.7
10°-20°	160.7	13.9
20°-30°	245.1	21.3
30°-40°	244.6	21.2
40°-50°	180.4	15.6
50°-60°	123.2	10.7
60°-70°	87.0	7.5
70°-80°	46.5	4.0
80°-90°	11.9	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°	459.4	39.8
0°-40°	704.0	61.1
0°-60°	1007.6	87.4
0°-90°	1153.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1153.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	561	561	561	561	561	
5°	552	559	574	554	553	52
15°	520	558	632	559	526	146
25°	452	511	629	535	492	207
35°	336	380	448	391	356	210
45°	226	237	194	253	261	176
55°	175	168	48	157	172	155
65°	131	124	19	96	106	129
75°	90	73	6	33	37	93
85°	31	20	1	4	0	34
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°	560.6	560.6	560.6	560.6	560.6	560.6	560.6	560.6	560.6
2.5°	554.8	558.1	559.0	564.8	569.0	564.0	555.6	555.6	556.5
5°	551.5	555.6	559.0	569.0	574.0	565.6	554.0	552.3	553.1
7.5°	549.0	554.8	562.3	577.3	582.3	571.5	555.6	549.0	547.3
10°	542.3	550.6	564.8	586.5	596.5	583.1	558.1	545.6	541.5
12.5°	533.1	543.1	562.3	596.5	613.9	594.0	558.1	539.8	533.1
15°	519.8	530.6	558.1	604.8	632.3	605.6	559.0	534.0	526.5
17.5°	502.3	515.7	549.0	609.0	647.3	616.4	558.1	529.8	521.5
20°	484.8	500.7	538.1	609.0	653.9	620.6	555.6	525.6	515.7
22.5°	469.8	485.7	525.6	601.5	647.3	615.6	548.1	518.1	506.5
25°	452.3	469.0	510.7	585.6	628.9	600.6	534.8	503.2	492.3
27.5°	432.3	450.7	489.8	560.6	597.3	573.1	509.8	479.0	467.3
30°	405.7	422.4	459.0	524.8	559.0	535.6	476.5	444.8	434.0
32.5°	373.2	388.2	422.4	481.5	507.3	488.2	433.2	406.5	394.0
35°	336.5	349.9	379.9	426.5	448.2	436.5	390.7	365.7	356.5
37.5°	302.4	312.4	337.4	371.5	384.9	377.4	349.0	330.7	323.2
40°	269.9	279.9	299.9	316.6	319.9	322.4	314.1	302.4	298.2
42.5°	244.9	254.1	266.6	264.9	254.9	269.1	282.4	280.7	277.4
45°	225.8	232.4	236.6	211.6	194.1	217.4	253.2	262.4	260.7
47.5°	209.9	213.3	210.8	169.1	137.5	169.1	227.4	245.7	245.7
50°	196.6	199.1	192.4	140.8	99.1	135.8	204.9	224.9	228.3
52.5°	187.4	188.3	179.9	119.1	68.3	107.5	180.8	198.3	200.8
55°	174.9	175.8	168.3	103.3	47.5	85.0	156.6	172.4	172.4
57.5°	160.8	162.4	154.9	90.0	33.3	70.8	138.3	153.3	154.1
60°	147.4	148.3	143.3	80.0	27.5	60.8	125.0	137.5	137.5
62.5°	138.3	139.1	133.3	74.1	23.3	53.3	110.8	122.5	123.3
65°	130.8	130.8	124.1	68.3	19.2	45.0	95.8	105.8	105.8
67.5°	122.5	120.8	114.1	60.8	15.0	36.7	80.8	88.3	87.5
70°	113.3	110.8	102.5	52.5	10.8	29.2	63.3	69.1	70.0
72.5°	102.5	99.1	88.3	43.3	8.3	21.7	46.7	51.6	51.6
75°	90.0	85.8	73.3	34.2	5.8	15.0	33.3	36.7	36.7
77.5°	75.0	70.8	58.3	25.0	4.2	10.0	22.5	25.0	25.0
80°	59.1	55.0	43.3	17.5	2.5	5.8	14.2	16.7	15.8
82.5°	44.2	40.0	29.2	10.8	1.7	3.3	9.2	9.2	8.3
85°	30.8	28.3	20.0	6.7	0.8	1.7	4.2	1.7	0.0
87.5°	20.8	18.3	12.5	3.3	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)