

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: P251848

Luminaire Tested: **LD4B20D010 EU4B10209027 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251848
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: LD4B20D010 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: 1502.0 lumens
Efficiency: N/A
Efficacy: 72.2 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

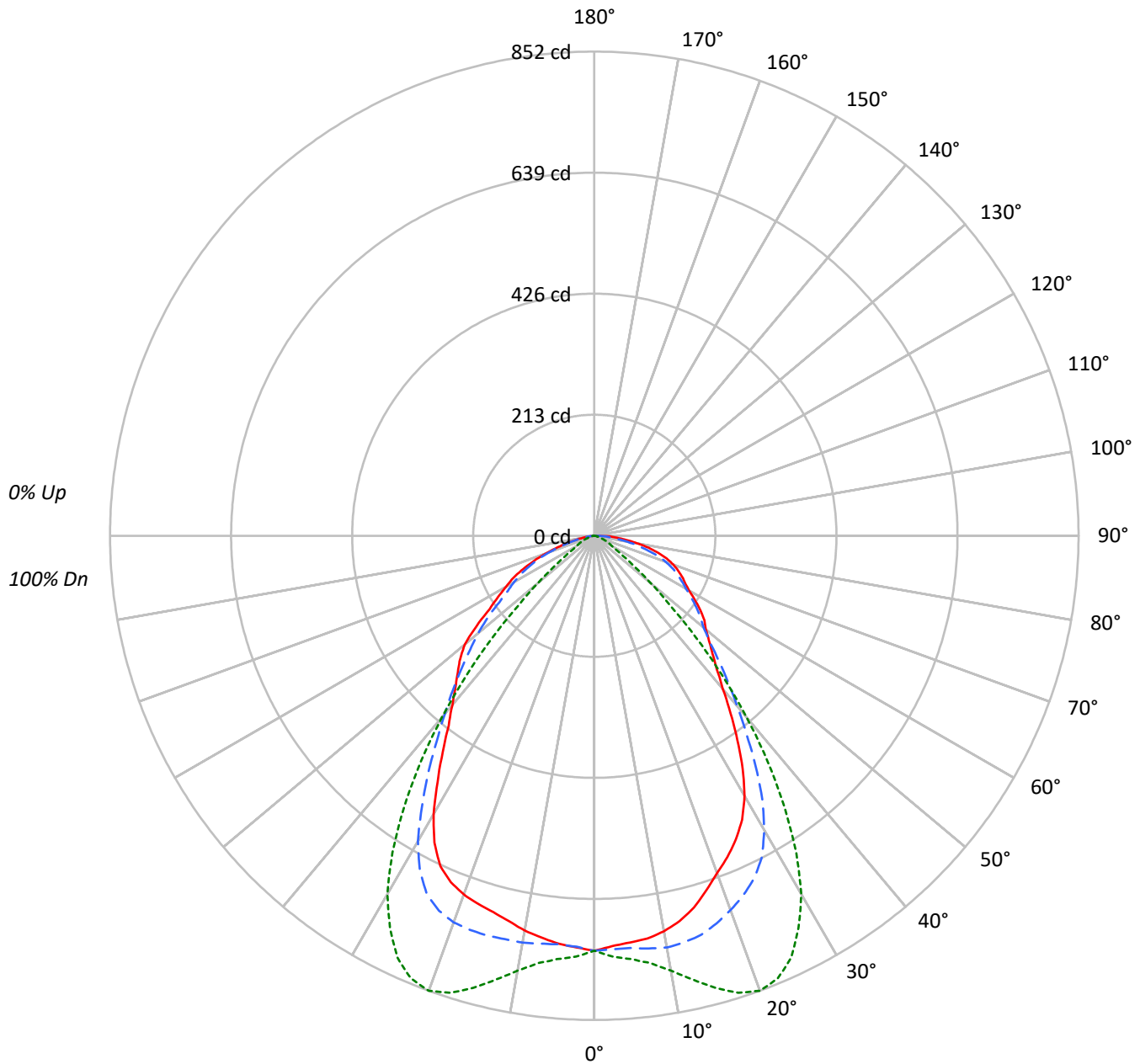
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	182	182	182
5°	180	187	180
10°	179	197	178
15°	175	212	177
20°	167	226	178
25°	162	225	176
30°	152	209	163
35°	133	178	141
40°	114	136	126
45°	104	89	120
50°	99	50	115
55°	99	27	98
60°	96	18	89
65°	100	15	81
70°	108	10	66
75°	113	7	46
80°	110	5	30
85°	115	3	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.9	4.7
10°-20°	209.3	13.9
20°-30°	319.2	21.3
30°-40°	318.6	21.2
40°-50°	235.0	15.6
50°-60°	160.5	10.7
60°-70°	113.3	7.5
70°-80°	60.5	4.0
80°-90°	15.5	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°	598.5	39.8
0°-40°	917.1	61.1
0°-60°	1312.6	87.4
0°-90°	1502.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1502.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	730	730	730	730	730	
5°	718	728	748	722	721	68
15°	677	727	824	728	686	190
25°	589	665	819	697	641	270
35°	438	495	584	509	464	274
45°	294	308	253	330	340	229
55°	228	219	62	204	225	203
65°	170	162	25	125	138	168
75°	117	96	8	43	48	122
85°	40	26	1	5	0	44
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°	730.3	730.3	730.3	730.3	730.3	730.3	730.3	730.3	730.3
2.5°	722.7	727.1	728.2	735.8	741.2	734.7	723.8	723.8	724.9
5°	718.4	723.8	728.2	741.2	747.7	736.8	721.7	719.5	720.6
7.5°	715.1	722.7	732.5	752.0	758.5	744.4	723.8	715.1	713.0
10°	706.5	717.3	735.8	764.0	777.0	759.6	727.1	710.8	705.4
12.5°	694.5	707.5	732.5	777.0	799.8	773.7	727.1	703.2	694.5
15°	677.2	691.3	727.1	787.8	823.7	788.9	728.2	695.6	685.8
17.5°	654.4	671.7	715.1	793.3	843.2	803.0	727.1	690.2	679.3
20°	631.6	652.2	701.0	793.3	851.9	808.5	723.8	684.8	671.7
22.5°	612.0	632.7	684.8	783.5	843.2	802.0	714.1	675.0	659.8
25°	589.3	611.0	665.2	762.9	819.3	782.4	696.7	655.5	641.3
27.5°	563.2	587.1	638.1	730.3	778.1	746.6	664.1	624.0	608.8
30°	528.5	550.2	597.9	683.7	728.2	697.8	620.7	579.5	565.4
32.5°	486.2	505.7	550.2	627.2	660.9	635.9	564.3	529.6	513.3
35°	438.4	455.8	494.8	555.6	583.8	568.6	509.0	476.4	464.5
37.5°	393.9	406.9	439.5	484.0	501.4	491.6	454.7	430.8	421.1
40°	351.6	364.6	390.7	412.4	416.7	420.0	409.1	393.9	388.5
42.5°	319.0	331.0	347.3	345.1	332.1	350.5	367.9	365.7	361.4
45°	294.1	302.8	308.2	275.6	252.8	283.2	329.9	341.8	339.7
47.5°	273.5	277.8	274.6	220.3	179.1	220.3	296.3	320.1	320.1
50°	256.1	259.4	250.7	183.4	129.1	176.9	267.0	293.0	297.3
52.5°	244.2	245.3	234.4	155.2	89.0	140.0	235.5	258.3	261.5
55°	227.9	229.0	219.2	134.6	61.9	110.7	204.0	224.6	224.6
57.5°	209.4	211.6	201.8	117.2	43.4	92.2	180.1	199.7	200.8
60°	192.1	193.2	186.7	104.2	35.8	79.2	162.8	179.1	179.1
62.5°	180.1	181.2	173.6	96.6	30.4	69.5	144.3	159.5	160.6
65°	170.4	170.4	161.7	89.0	25.0	58.6	124.8	137.8	137.8
67.5°	159.5	157.4	148.7	79.2	19.5	47.7	105.3	115.0	113.9
70°	147.6	144.3	133.5	68.4	14.1	38.0	82.5	90.1	91.2
72.5°	133.5	129.1	115.0	56.4	10.9	28.2	60.8	67.3	67.3
75°	117.2	111.8	95.5	44.5	7.6	19.5	43.4	47.7	47.7
77.5°	97.7	92.2	76.0	32.6	5.4	13.0	29.3	32.6	32.6
80°	77.0	71.6	56.4	22.8	3.3	7.6	18.4	21.7	20.6
82.5°	57.5	52.1	38.0	14.1	2.2	4.3	11.9	11.9	10.9
85°	40.2	36.9	26.0	8.7	1.1	2.2	5.4	2.2	0.0
87.5°	27.1	23.9	16.3	4.3	0.0	1.1	1.1	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)