

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: P251860

Luminaire Tested: **LD4B30D010 EU4B30509024 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251860
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: LD4B30D010 EU4B30509024 4LBDW1LI
Description: PORTFOLIO 4 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1904.0 lumens
Efficiency: N/A
Efficacy: 68.0 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

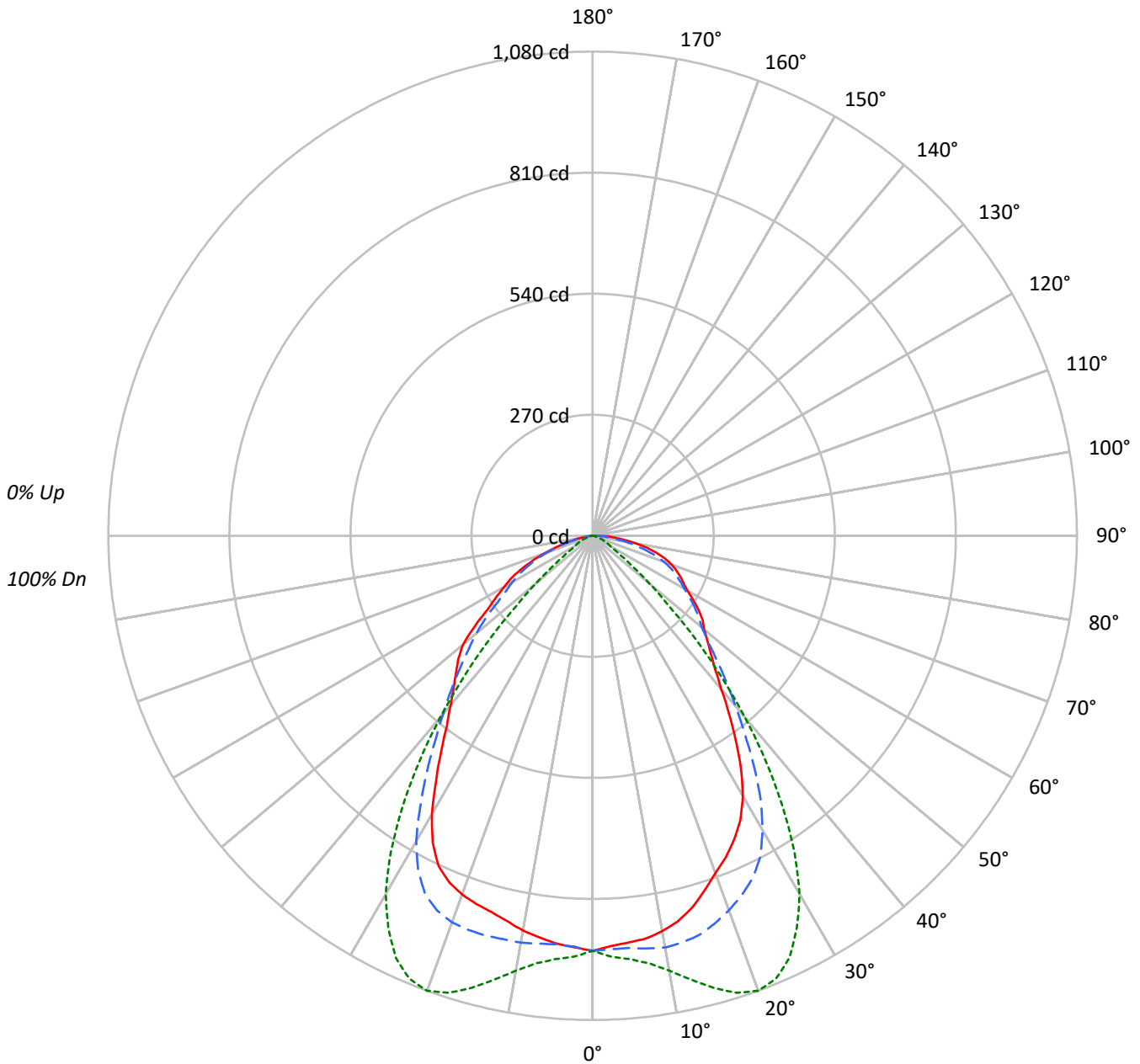
Input Watts (W): 28
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	231	231	231
5°	228	237	228
10°	227	249	226
15°	221	269	224
20°	212	286	226
25°	205	286	224
30°	193	266	206
35°	169	225	179
40°	145	172	160
45°	131	113	152
50°	126	63	146
55°	125	34	124
60°	121	23	113
65°	127	19	103
70°	136	13	84
75°	143	9	58
80°	140	6	37
85°	146	4	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.6	4.7
10°-20°	265.3	13.9
20°-30°	404.7	21.3
30°-40°	403.9	21.2
40°-50°	297.8	15.6
50°-60°	203.5	10.7
60°-70°	143.7	7.5
70°-80°	76.7	4.0
80°-90°	19.7	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°	758.6	39.8
0°-40°	1162.6	61.1
0°-60°	1663.9	87.4
0°-90°	1904.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1904.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	926	926	926	926	926	
5°	911	923	948	915	913	87
15°	858	922	1044	923	869	241
25°	747	843	1039	883	813	342
35°	556	627	740	645	589	347
45°	373	391	320	418	431	291
55°	289	278	78	259	285	257
65°	216	205	32	158	175	214
75°	149	121	10	55	60	154
85°	51	33	1	7	0	56
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°	925.8	925.8	925.8	925.8	925.8	925.8	925.8	925.8	925.8
2.5°	916.2	921.7	923.0	932.7	939.6	931.3	917.5	917.5	918.9
5°	910.7	917.5	923.0	939.6	947.8	934.1	914.8	912.0	913.4
7.5°	906.5	916.2	928.6	953.3	961.6	943.7	917.5	906.5	903.8
10°	895.5	909.3	932.7	968.4	985.0	962.9	921.7	901.0	894.2
12.5°	880.4	896.9	928.6	985.0	1013.8	980.8	921.7	891.4	880.4
15°	858.4	876.3	921.7	998.7	1044.1	1000.1	923.0	881.8	869.4
17.5°	829.5	851.5	906.5	1005.6	1068.9	1018.0	921.7	874.9	861.1
20°	800.6	826.8	888.7	1005.6	1079.9	1024.8	917.5	868.0	851.5
22.5°	775.9	802.0	868.0	993.2	1068.9	1016.6	905.2	855.6	836.4
25°	747.0	774.5	843.3	967.1	1038.6	991.8	883.2	830.9	813.0
27.5°	714.0	744.2	808.9	925.8	986.3	946.4	841.9	791.0	771.7
30°	669.9	697.4	758.0	866.6	923.0	884.5	786.9	734.6	716.7
32.5°	616.3	641.0	697.4	795.1	837.8	806.1	715.3	671.3	650.7
35°	555.8	577.8	627.3	704.3	740.1	720.8	645.2	603.9	588.8
37.5°	499.4	515.9	557.1	613.5	635.5	623.2	576.4	546.1	533.7
40°	445.7	462.2	495.2	522.7	528.2	532.4	518.6	499.4	492.5
42.5°	404.4	419.6	440.2	437.5	420.9	444.3	466.3	463.6	458.1
45°	372.8	383.8	390.7	349.4	320.5	359.0	418.2	433.3	430.6
47.5°	346.7	352.2	348.0	279.3	227.0	279.3	375.5	405.8	405.8
50°	324.6	328.8	317.8	232.5	163.7	224.2	338.4	371.4	376.9
52.5°	309.5	310.9	297.1	196.7	112.8	177.5	298.5	327.4	331.5
55°	288.9	290.3	277.9	170.6	78.4	140.3	258.6	284.8	284.8
57.5°	265.5	268.2	255.9	148.6	55.0	116.9	228.4	253.1	254.5
60°	243.5	244.9	236.6	132.1	45.4	100.4	206.3	227.0	227.0
62.5°	228.4	229.7	220.1	122.4	38.5	88.0	183.0	202.2	203.6
65°	216.0	216.0	205.0	112.8	31.6	74.3	158.2	174.7	174.7
67.5°	202.2	199.5	188.5	100.4	24.8	60.5	133.4	145.8	144.4
70°	187.1	183.0	169.2	86.7	17.9	48.1	104.5	114.2	115.6
72.5°	169.2	163.7	145.8	71.5	13.8	35.8	77.0	85.3	85.3
75°	148.6	141.7	121.1	56.4	9.6	24.8	55.0	60.5	60.5
77.5°	123.8	116.9	96.3	41.3	6.9	16.5	37.1	41.3	41.3
80°	97.7	90.8	71.5	28.9	4.1	9.6	23.4	27.5	26.1
82.5°	72.9	66.0	48.1	17.9	2.8	5.5	15.1	15.1	13.8
85°	50.9	46.8	33.0	11.0	1.4	2.8	6.9	2.8	0.0
87.5°	34.4	30.3	20.6	5.5	0.0	1.4	1.4	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)