

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: P251861

Luminaire Tested: **LD4B30D010 EU4B30509027 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251861
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 EU4B30509027 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: 2165.0 lumens
Efficiency: N/A
Efficacy: 77.3 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

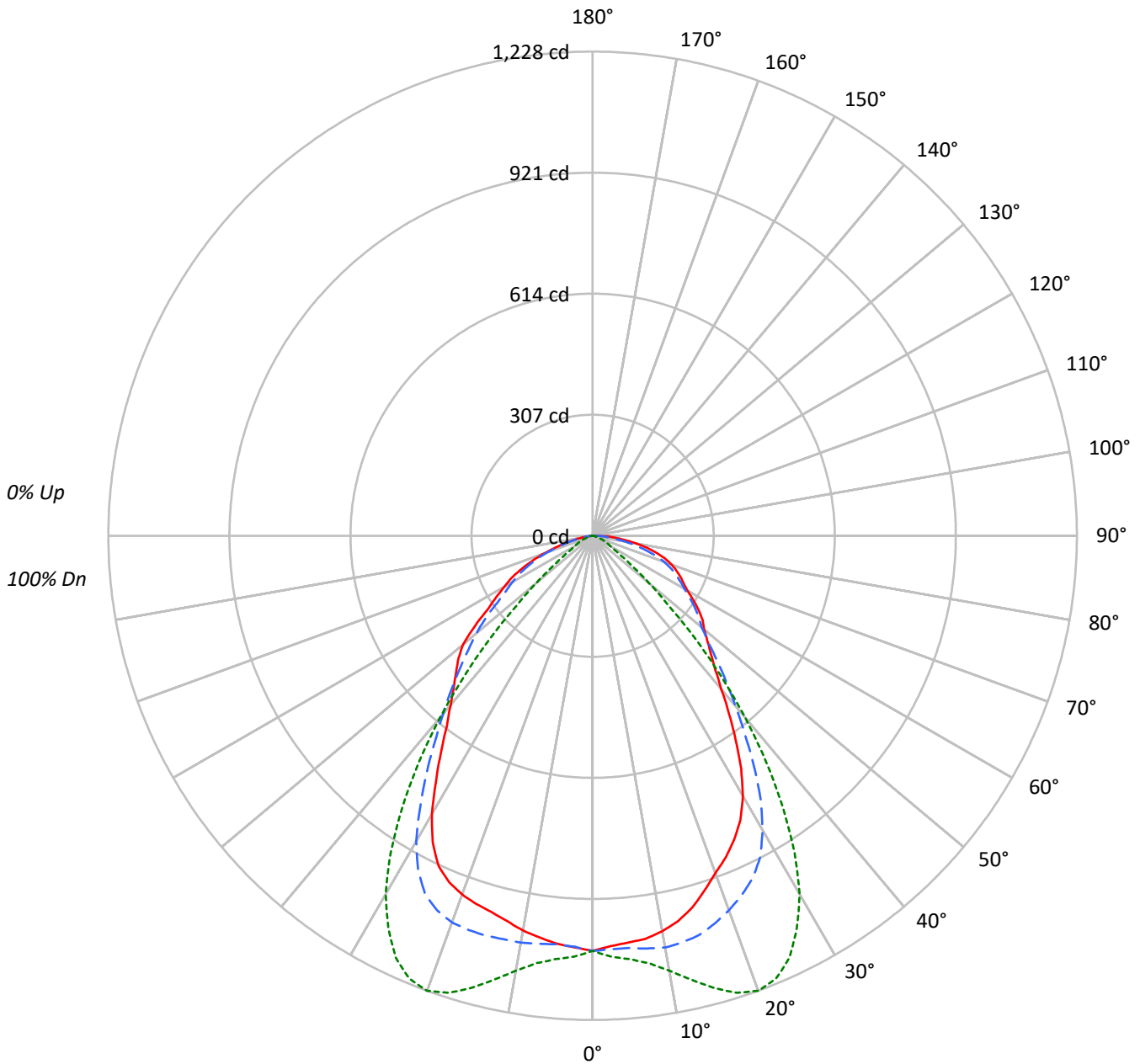
Input Watts (W): 28
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	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°	262	262	262
5°	259	270	260
10°	258	283	257
15°	252	306	255
20°	241	326	257
25°	234	325	254
30°	219	302	234
35°	192	256	204
40°	165	195	182
45°	149	128	173
50°	143	72	166
55°	143	39	141
60°	138	26	129
65°	145	21	117
70°	155	15	96
75°	163	10	66
80°	159	7	43
85°	166	5	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.8	4.7
10°-20°	301.7	13.9
20°-30°	460.1	21.3
30°-40°	459.3	21.2
40°-50°	338.7	15.6
50°-60°	231.4	10.7
60°-70°	163.4	7.5
70°-80°	87.2	4.0
80°-90°	22.4	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°	862.6	39.8
0°-40°	1321.9	61.1
0°-60°	1892.0	87.4
0°-90°	2165.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2165.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1053	1053	1053	1053	1053	
5°	1036	1050	1078	1040	1039	98
15°	976	1048	1187	1050	989	274
25°	849	959	1181	1004	924	389
35°	632	713	842	734	670	395
45°	424	444	364	476	490	331
55°	328	316	89	294	324	292
65°	246	233	36	180	199	243
75°	169	138	11	63	69	175
85°	58	38	2	8	0	64
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°	1052.7	1052.7	1052.7	1052.7	1052.7	1052.7	1052.7	1052.7	1052.7
2.5°	1041.8	1048.0	1049.6	1060.5	1068.4	1059.0	1043.3	1043.3	1044.9
5°	1035.5	1043.3	1049.6	1068.4	1077.7	1062.1	1040.2	1037.1	1038.6
7.5°	1030.8	1041.8	1055.8	1084.0	1093.4	1073.0	1043.3	1030.8	1027.7
10°	1018.3	1033.9	1060.5	1101.2	1120.0	1094.9	1048.0	1024.6	1016.7
12.5°	1001.1	1019.9	1055.8	1120.0	1152.8	1115.3	1048.0	1013.6	1001.1
15°	976.1	996.4	1048.0	1135.6	1187.2	1137.2	1049.6	1002.7	988.6
17.5°	943.2	968.2	1030.8	1143.4	1215.4	1157.5	1048.0	994.8	979.2
20°	910.4	940.1	1010.5	1143.4	1227.9	1165.3	1043.3	987.0	968.2
22.5°	882.2	911.9	987.0	1129.4	1215.4	1155.9	1029.2	972.9	951.0
25°	849.4	880.6	958.9	1099.6	1181.0	1127.8	1004.2	944.8	924.4
27.5°	811.8	846.2	919.8	1052.7	1121.5	1076.2	957.3	899.4	877.5
30°	761.8	793.1	861.9	985.4	1049.6	1005.8	894.7	835.3	815.0
32.5°	700.8	728.9	793.1	904.1	952.6	916.6	813.4	763.3	739.9
35°	631.9	657.0	713.3	800.9	841.5	819.6	733.6	686.7	669.5
37.5°	567.8	586.6	633.5	697.6	722.7	708.6	655.4	621.0	606.9
40°	506.8	525.6	563.1	594.4	600.7	605.3	589.7	567.8	560.0
42.5°	459.9	477.1	500.5	497.4	478.6	505.2	530.3	527.1	520.9
45°	423.9	436.4	444.2	397.3	364.5	408.3	475.5	492.7	489.6
47.5°	394.2	400.4	395.7	317.5	258.1	317.5	427.0	461.4	461.4
50°	369.2	373.8	361.3	264.4	186.1	255.0	384.8	422.3	428.6
52.5°	351.9	353.5	337.9	223.7	128.3	201.8	339.4	372.3	377.0
55°	328.5	330.0	316.0	194.0	89.2	159.5	294.1	323.8	323.8
57.5°	301.9	305.0	290.9	168.9	62.6	133.0	259.7	287.8	289.4
60°	276.9	278.4	269.0	150.2	51.6	114.2	234.6	258.1	258.1
62.5°	259.7	261.2	250.3	139.2	43.8	100.1	208.0	229.9	231.5
65°	245.6	245.6	233.1	128.3	36.0	84.5	179.9	198.7	198.7
67.5°	229.9	226.8	214.3	114.2	28.2	68.8	151.7	165.8	164.2
70°	212.7	208.0	192.4	98.5	20.3	54.7	118.9	129.8	131.4
72.5°	192.4	186.1	165.8	81.3	15.6	40.7	87.6	97.0	97.0
75°	168.9	161.1	137.7	64.1	10.9	28.2	62.6	68.8	68.8
77.5°	140.8	133.0	109.5	46.9	7.8	18.8	42.2	46.9	46.9
80°	111.1	103.2	81.3	32.8	4.7	10.9	26.6	31.3	29.7
82.5°	82.9	75.1	54.7	20.3	3.1	6.3	17.2	17.2	15.6
85°	57.9	53.2	37.5	12.5	1.6	3.1	7.8	3.1	0.0
87.5°	39.1	34.4	23.5	6.3	0.0	1.6	1.6	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)