

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: P251863

Luminaire Tested: **LD4B30D010 EU4B30509035 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251863
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 EU4B30509035 4LBDW1LI
Description: PORTFOLIO 4 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2283.0 lumens
Efficiency: N/A
Efficacy: 81.5 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

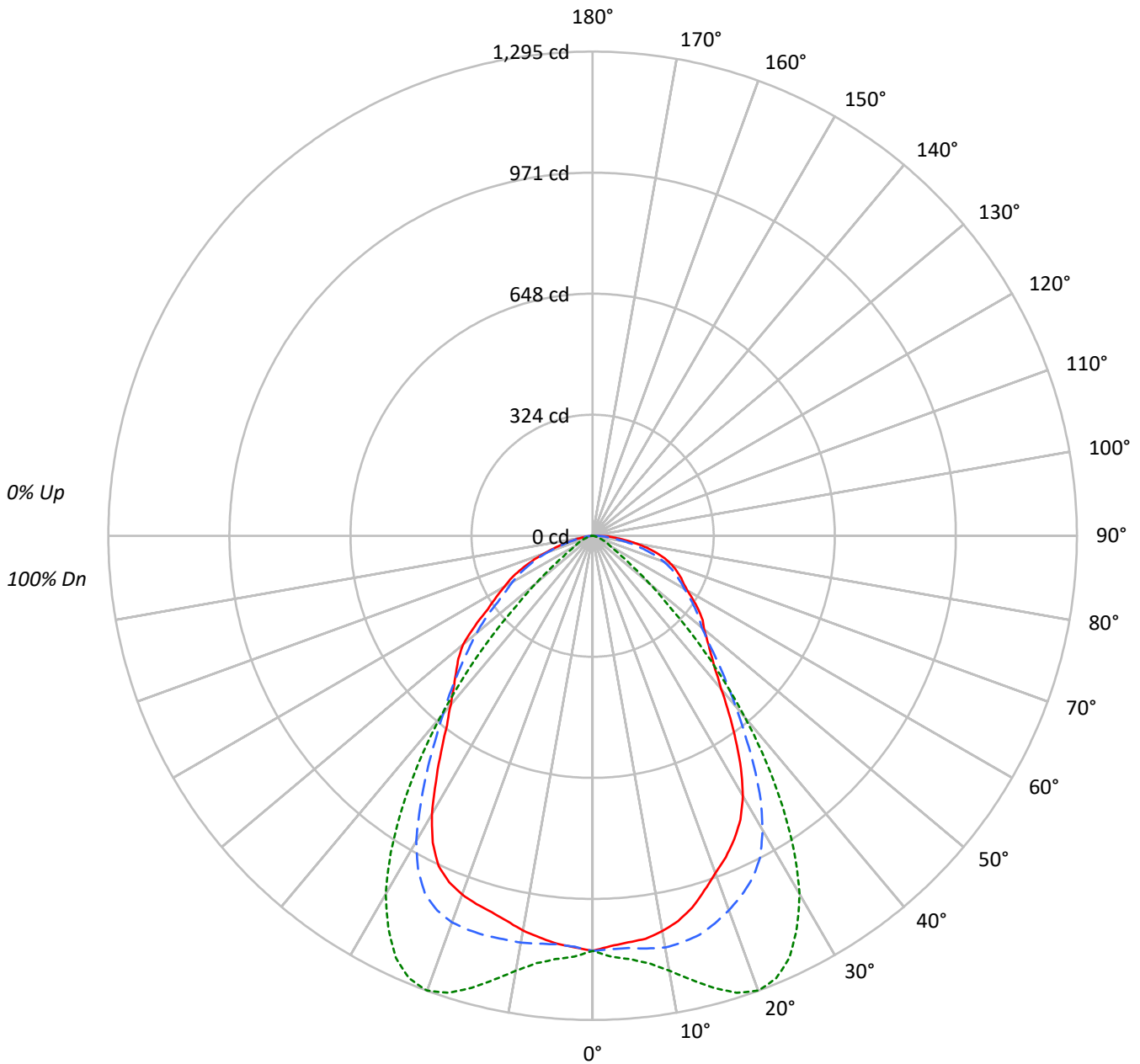
Input Watts (W): 28
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	277	277	277
5°	273	284	274
10°	272	299	271
15°	265	323	269
20°	255	343	271
25°	246	342	268
30°	231	318	247
35°	203	270	215
40°	174	206	192
45°	158	135	182
50°	151	76	175
55°	150	41	148
60°	146	27	136
65°	153	22	124
70°	163	16	101
75°	171	11	70
80°	168	7	45
85°	174	5	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.3	4.7
10°-20°	318.1	13.9
20°-30°	485.2	21.3
30°-40°	484.3	21.2
40°-50°	357.1	15.6
50°-60°	244.0	10.7
60°-70°	172.3	7.5
70°-80°	92.0	4.0
80°-90°	23.6	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°	909.7	39.8
0°-40°	1394.0	61.1
0°-60°	1995.1	87.4
0°-90°	2283.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2283.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1110	1110	1110	1110	1110	
5°	1092	1107	1136	1097	1095	104
15°	1029	1105	1252	1107	1042	289
25°	896	1011	1245	1059	975	410
35°	666	752	887	774	706	416
45°	447	468	384	501	516	349
55°	346	333	94	310	341	308
65°	259	246	38	190	210	256
75°	178	145	12	66	73	185
85°	61	40	2	8	0	68
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°	1110.1	1110.1	1110.1	1110.1	1110.1	1110.1	1110.1	1110.1	1110.1
2.5°	1098.5	1105.1	1106.8	1118.3	1126.6	1116.7	1100.2	1100.2	1101.8
5°	1091.9	1100.2	1106.8	1126.6	1136.5	1120.0	1096.9	1093.6	1095.2
7.5°	1087.0	1098.5	1113.4	1143.1	1153.0	1131.5	1100.2	1087.0	1083.7
10°	1073.8	1090.3	1118.3	1161.2	1181.0	1154.6	1105.1	1080.4	1072.1
12.5°	1055.7	1075.4	1113.4	1181.0	1215.7	1176.1	1105.1	1068.8	1055.7
15°	1029.3	1050.7	1105.1	1197.5	1251.9	1199.2	1106.8	1057.3	1042.5
17.5°	994.6	1021.0	1087.0	1205.8	1281.6	1220.6	1105.1	1049.1	1032.6
20°	960.0	991.3	1065.6	1205.8	1294.8	1228.8	1100.2	1040.8	1021.0
22.5°	930.3	961.6	1040.8	1190.9	1281.6	1219.0	1085.3	1026.0	1002.9
25°	895.7	928.6	1011.1	1159.6	1245.3	1189.3	1059.0	996.3	974.8
27.5°	856.1	892.4	969.9	1110.1	1182.7	1134.8	1009.5	948.4	925.3
30°	803.3	836.3	908.9	1039.2	1106.8	1060.6	943.5	880.8	859.4
32.5°	739.0	768.6	836.3	953.4	1004.5	966.6	857.7	804.9	780.2
35°	666.4	692.8	752.2	844.5	887.4	864.3	773.6	724.1	706.0
37.5°	598.8	618.5	668.0	735.7	762.1	747.2	691.1	654.8	640.0
40°	534.4	554.2	593.8	626.8	633.4	638.3	621.8	598.8	590.5
42.5°	484.9	503.1	527.8	524.5	504.7	532.8	559.2	555.9	549.3
45°	447.0	460.2	468.4	419.0	384.3	430.5	501.4	519.6	516.3
47.5°	415.7	422.3	417.3	334.8	272.2	334.8	450.3	486.6	486.6
50°	389.3	394.2	381.0	278.8	196.3	268.9	405.8	445.4	452.0
52.5°	371.1	372.8	356.3	235.9	135.3	212.8	357.9	392.6	397.5
55°	346.4	348.0	333.2	204.5	94.0	168.2	310.1	341.4	341.4
57.5°	318.3	321.6	306.8	178.1	66.0	140.2	273.8	303.5	305.1
60°	292.0	293.6	283.7	158.3	54.4	120.4	247.4	272.2	272.2
62.5°	273.8	275.5	263.9	146.8	46.2	105.6	219.4	242.5	244.1
65°	259.0	259.0	245.8	135.3	37.9	89.1	189.7	209.5	209.5
67.5°	242.5	239.2	226.0	120.4	29.7	72.6	160.0	174.8	173.2
70°	224.3	219.4	202.9	103.9	21.4	57.7	125.4	136.9	138.6
72.5°	202.9	196.3	174.8	85.8	16.5	42.9	92.4	102.3	102.3
75°	178.1	169.9	145.2	67.6	11.5	29.7	66.0	72.6	72.6
77.5°	148.5	140.2	115.5	49.5	8.2	19.8	44.5	49.5	49.5
80°	117.1	108.9	85.8	34.6	4.9	11.5	28.0	33.0	31.3
82.5°	87.4	79.2	57.7	21.4	3.3	6.6	18.1	18.1	16.5
85°	61.0	56.1	39.6	13.2	1.6	3.3	8.2	3.3	0.0
87.5°	41.2	36.3	24.7	6.6	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)