

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: P251864

Luminaire Tested: **LD4B30D010 EU4B30509040 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251864
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 EU4B30509040 4LBDW1LI
Description: PORTFOLIO 4 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2287.0 lumens
Efficiency: N/A
Efficacy: 81.7 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

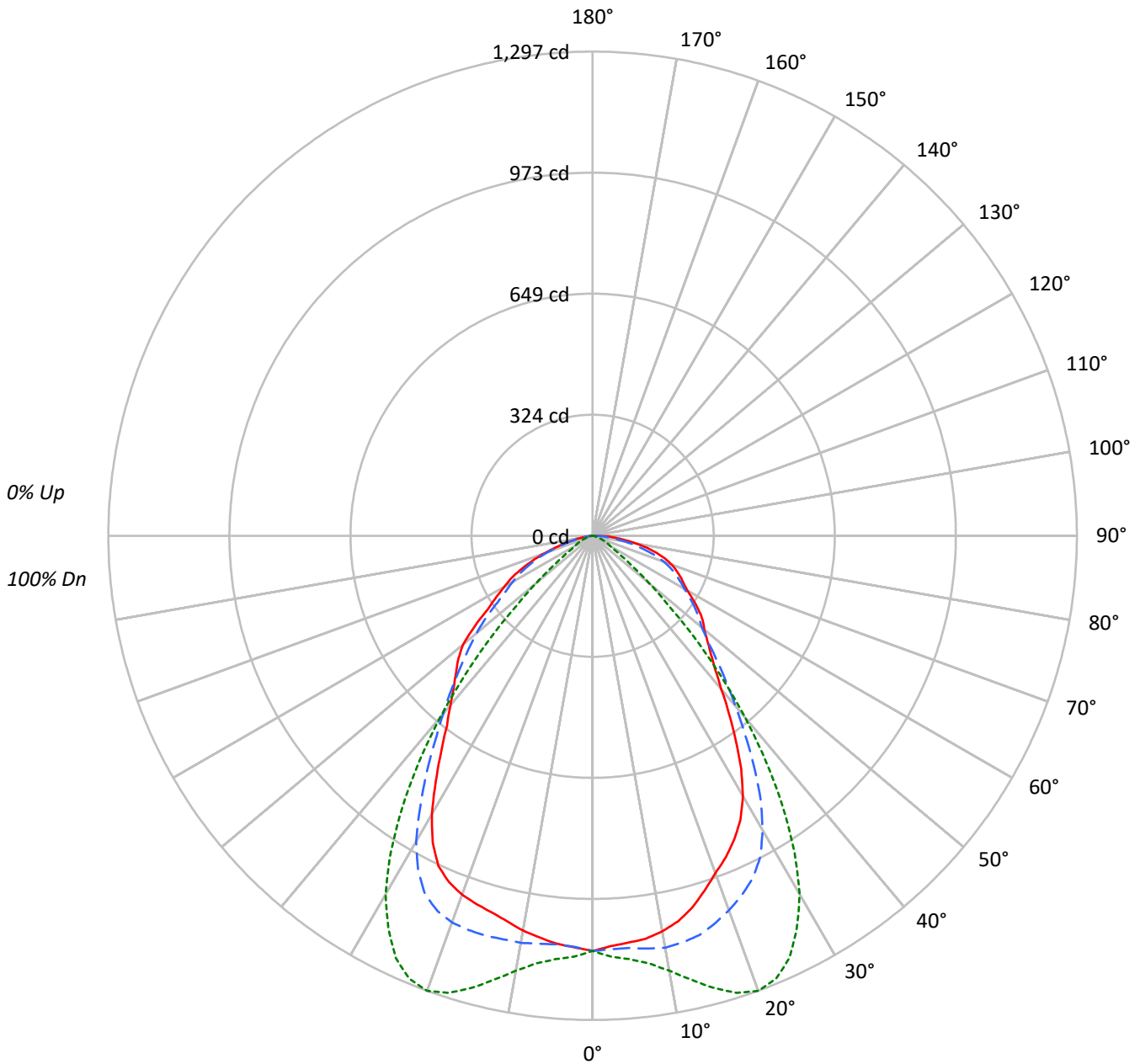
Input Watts (W): 28
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	274	285	274
10°	272	299	272
15°	266	323	269
20°	255	344	271
25°	247	343	268
30°	232	319	248
35°	203	270	215
40°	174	206	192
45°	158	136	182
50°	151	76	175
55°	151	41	149
60°	146	27	136
65°	153	22	124
70°	164	16	101
75°	172	11	70
80°	168	7	45
85°	175	5	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.5	4.7
10°-20°	318.7	13.9
20°-30°	486.1	21.3
30°-40°	485.2	21.2
40°-50°	357.8	15.6
50°-60°	244.4	10.7
60°-70°	172.6	7.5
70°-80°	92.2	4.0
80°-90°	23.7	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°	911.2	39.8
0°-40°	1396.4	61.1
0°-60°	1998.6	87.4
0°-90°	2287.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2287.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1112	1112	1112	1112	1112	
5°	1094	1109	1138	1099	1097	104
15°	1031	1107	1254	1109	1044	289
25°	897	1013	1248	1061	976	411
35°	668	754	889	775	707	417
45°	448	469	385	502	517	349
55°	347	334	94	311	342	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°	1112.0	1112.0	1112.0	1112.0	1112.0	1112.0	1112.0	1112.0	1112.0
2.5°	1100.5	1107.1	1108.7	1120.3	1128.6	1118.6	1102.1	1102.1	1103.8
5°	1093.9	1102.1	1108.7	1128.6	1138.5	1121.9	1098.8	1095.5	1097.2
7.5°	1088.9	1100.5	1115.3	1145.1	1155.0	1133.5	1102.1	1088.9	1085.6
10°	1075.7	1092.2	1120.3	1163.3	1183.1	1156.6	1107.1	1082.3	1074.0
12.5°	1057.5	1077.3	1115.3	1183.1	1217.8	1178.1	1107.1	1070.7	1057.5
15°	1031.1	1052.5	1107.1	1199.6	1254.1	1201.3	1108.7	1059.2	1044.3
17.5°	996.4	1022.8	1088.9	1207.9	1283.9	1222.7	1107.1	1050.9	1034.4
20°	961.7	993.1	1067.4	1207.9	1297.1	1231.0	1102.1	1042.6	1022.8
22.5°	931.9	963.3	1042.6	1193.0	1283.9	1221.1	1087.2	1027.8	1004.6
25°	897.2	930.3	1012.9	1161.6	1247.5	1191.3	1060.8	998.0	976.5
27.5°	857.6	893.9	971.6	1112.0	1184.7	1136.8	1011.2	950.1	927.0
30°	804.7	837.7	910.4	1041.0	1108.7	1062.5	945.1	882.4	860.9
32.5°	740.3	770.0	837.7	955.1	1006.3	968.3	859.2	806.3	781.6
35°	667.5	694.0	753.5	846.0	889.0	865.8	775.0	725.4	707.2
37.5°	599.8	619.6	669.2	736.9	763.4	748.5	692.3	656.0	641.1
40°	535.4	555.2	594.8	627.9	634.5	639.5	622.9	599.8	591.5
42.5°	485.8	504.0	528.8	525.4	505.6	533.7	560.1	556.8	550.2
45°	447.8	461.0	469.3	419.7	385.0	431.3	502.3	520.5	517.2
47.5°	416.4	423.0	418.0	335.4	272.6	335.4	451.1	487.4	487.4
50°	390.0	394.9	381.7	279.2	196.6	269.3	406.5	446.1	452.7
52.5°	371.8	373.4	356.9	236.3	135.5	213.2	358.6	393.3	398.2
55°	347.0	348.6	333.8	204.9	94.2	168.5	310.6	342.0	342.0
57.5°	318.9	322.2	307.3	178.5	66.1	140.4	274.3	304.0	305.7
60°	292.5	294.1	284.2	158.6	54.5	120.6	247.9	272.6	272.6
62.5°	274.3	275.9	264.4	147.1	46.3	105.8	219.8	242.9	244.5
65°	259.4	259.4	246.2	135.5	38.0	89.2	190.0	209.8	209.8
67.5°	242.9	239.6	226.4	120.6	29.7	72.7	160.3	175.1	173.5
70°	224.7	219.8	203.2	104.1	21.5	57.8	125.6	137.1	138.8
72.5°	203.2	196.6	175.1	85.9	16.5	43.0	92.5	102.4	102.4
75°	178.5	170.2	145.4	67.7	11.6	29.7	66.1	72.7	72.7
77.5°	148.7	140.4	115.7	49.6	8.3	19.8	44.6	49.6	49.6
80°	117.3	109.1	85.9	34.7	5.0	11.6	28.1	33.0	31.4
82.5°	87.6	79.3	57.8	21.5	3.3	6.6	18.2	18.2	16.5
85°	61.1	56.2	39.7	13.2	1.7	3.3	8.3	3.3	0.0
87.5°	41.3	36.4	24.8	6.6	0.0	1.7	1.7	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)