

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: P251862

Luminaire Tested: **LD4B30D010 EU4B30509030 4LBDW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P251862  
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 EU4B30509030 4LBDW1LI  
Description: PORTFOLIO 4 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2251.0 lumens  
Efficiency: N/A  
Efficacy: 80.4 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

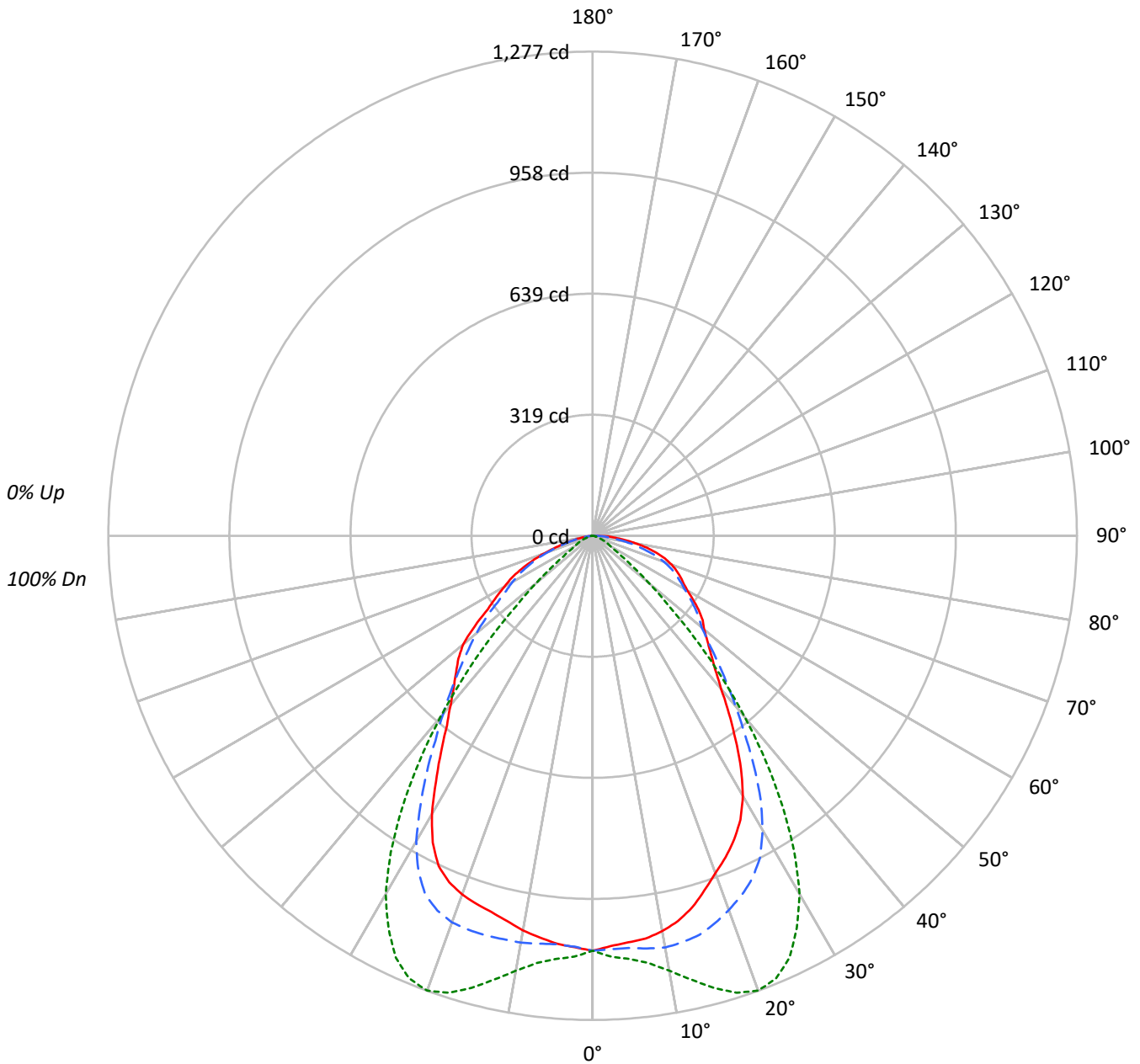
Input Watts (W): 28  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	273	273	273
5°	269	280	270
10°	268	295	267
15°	262	318	265
20°	251	339	267
25°	243	338	264
30°	228	314	244
35°	200	266	212
40°	171	203	189
45°	155	134	179
50°	149	75	173
55°	148	40	146
60°	143	27	134
65°	151	22	122
70°	161	15	100
75°	169	11	69
80°	166	7	44
85°	172	5	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.8	4.7
10°-20°	313.7	13.9
20°-30°	478.4	21.3
30°-40°	477.5	21.2
40°-50°	352.1	15.6
50°-60°	240.6	10.7
60°-70°	169.8	7.5
70°-80°	90.7	4.0
80°-90°	23.3	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°	896.9	39.8
0°-40°	1374.5	61.1
0°-60°	1967.2	87.4
0°-90°	2251.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2251.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1094	1094	1094	1094	1094	
5°	1077	1091	1120	1082	1080	102
15°	1015	1090	1234	1091	1028	285
25°	883	997	1228	1044	961	405
35°	657	742	875	763	696	411
45°	441	462	379	494	509	344
55°	342	328	93	306	337	304
65°	255	242	37	187	206	252
75°	176	143	11	65	72	182
85°	60	39	2	8	0	67
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°	1094.5	1094.5	1094.5	1094.5	1094.5	1094.5	1094.5	1094.5	1094.5
2.5°	1083.1	1089.6	1091.3	1102.7	1110.8	1101.0	1084.8	1084.8	1086.4
5°	1076.6	1084.8	1091.3	1110.8	1120.5	1104.3	1081.5	1078.3	1079.9
7.5°	1071.8	1083.1	1097.8	1127.1	1136.8	1115.7	1084.8	1071.8	1068.5
10°	1058.7	1075.0	1102.7	1144.9	1164.5	1138.4	1089.6	1065.3	1057.1
12.5°	1040.9	1060.4	1097.8	1164.5	1198.6	1159.6	1089.6	1053.9	1040.9
15°	1014.8	1036.0	1089.6	1180.7	1234.4	1182.3	1091.3	1042.5	1027.8
17.5°	980.7	1006.7	1071.8	1188.9	1263.7	1203.5	1089.6	1034.4	1018.1
20°	946.5	977.4	1050.6	1188.9	1276.7	1211.6	1084.8	1026.2	1006.7
22.5°	917.3	948.2	1026.2	1174.2	1263.7	1201.9	1070.1	1011.6	988.8
25°	883.1	915.6	996.9	1143.3	1227.9	1172.6	1044.1	982.3	961.2
27.5°	844.1	879.8	956.3	1094.5	1166.1	1118.9	995.3	935.1	912.4
30°	792.0	824.6	896.1	1024.6	1091.3	1045.7	930.3	868.5	847.3
32.5°	728.6	757.9	824.6	940.0	990.4	953.0	845.7	793.7	769.3
35°	657.0	683.1	741.6	832.7	875.0	852.2	762.8	714.0	696.1
37.5°	590.4	609.9	658.7	725.3	751.4	736.7	681.4	645.7	631.0
40°	526.9	546.5	585.5	618.0	624.5	629.4	613.1	590.4	582.2
42.5°	478.1	496.0	520.4	517.2	497.7	525.3	551.3	548.1	541.6
45°	440.7	453.7	461.9	413.1	378.9	424.5	494.4	512.3	509.0
47.5°	409.8	416.3	411.5	330.1	268.3	330.1	444.0	479.8	479.8
50°	383.8	388.7	375.7	274.9	193.5	265.1	400.1	439.1	445.6
52.5°	365.9	367.6	351.3	232.6	133.4	209.8	352.9	387.1	391.9
55°	341.5	343.2	328.5	201.7	92.7	165.9	305.8	336.7	336.7
57.5°	313.9	317.1	302.5	175.6	65.1	138.2	270.0	299.2	300.9
60°	287.9	289.5	279.7	156.1	53.7	118.7	244.0	268.3	268.3
62.5°	270.0	271.6	260.2	144.7	45.5	104.1	216.3	239.1	240.7
65°	255.3	255.3	242.3	133.4	37.4	87.8	187.0	206.5	206.5
67.5°	239.1	235.8	222.8	118.7	29.3	71.6	157.8	172.4	170.8
70°	221.2	216.3	200.0	102.5	21.1	56.9	123.6	135.0	136.6
72.5°	200.0	193.5	172.4	84.6	16.3	42.3	91.1	100.8	100.8
75°	175.6	167.5	143.1	66.7	11.4	29.3	65.1	71.6	71.6
77.5°	146.4	138.2	113.8	48.8	8.1	19.5	43.9	48.8	48.8
80°	115.5	107.3	84.6	34.2	4.9	11.4	27.6	32.5	30.9
82.5°	86.2	78.1	56.9	21.1	3.3	6.5	17.9	17.9	16.3
85°	60.2	55.3	39.0	13.0	1.6	3.3	8.1	3.3	0.0
87.5°	40.7	35.8	24.4	6.5	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)