

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: P251884

Luminaire Tested: **LD4B50D010TE EU4B30508040 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251884
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: LD4B50D010TE EU4B30508040 4LBDW1LI
Description: PORTFOLIO 4 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4863.0 lumens
Efficiency: N/A
Efficacy: 82.7 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

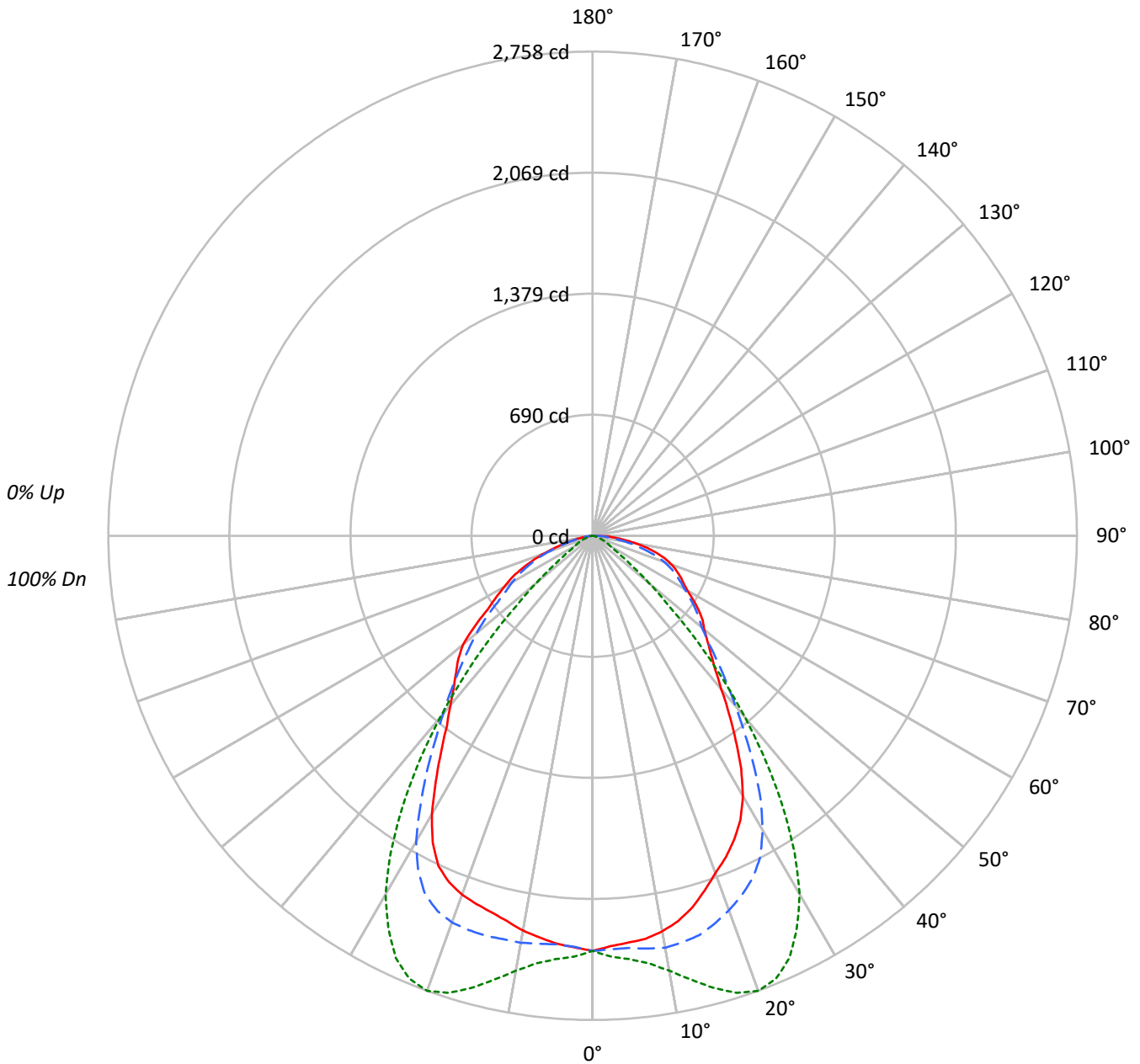
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P251884

CATALOG NUMBER: LD4B50D010TE EU4B30508040 4LBDW1LI

Luminous Intensity Polar Plot





TEST NUMBER: P251884

CATALOG NUMBER: LD4B50D010TE EU4B30508040 4LBDW1LI

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°	589	589	589
5°	582	605	583
10°	579	636	578
15°	566	688	573
20°	542	731	577
25°	524	729	571
30°	492	678	527
35°	432	575	457
40°	370	439	409
45°	336	288	387
50°	321	162	373
55°	320	87	316
60°	310	58	289
65°	325	48	263
70°	348	33	215
75°	365	24	149
80°	358	15	96
85°	372	10	0



TEST NUMBER: P251884

CATALOG NUMBER: LD4B50D010TE EU4B30508040 4LBDW1LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	226.4	4.7
10°-20°	677.7	13.9
20°-30°	1033.6	21.3
30°-40°	1031.7	21.2
40°-50°	760.7	15.6
50°-60°	519.7	10.7
60°-70°	366.9	7.5
70°-80°	196.0	4.0
80°-90°	50.3	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°	1937.6	39.8
0°-40°	2969.3	61.1
0°-60°	4249.8	87.4
0°-90°	4863.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4863.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2365	2365	2365	2365	2365	
5°	2326	2358	2421	2336	2333	221
15°	2192	2354	2667	2358	2220	615
25°	1908	2154	2653	2256	2076	874
35°	1420	1602	1890	1648	1504	887
45°	952	998	819	1068	1100	743
55°	738	710	200	660	727	656
65°	552	524	81	404	446	545
75°	380	309	25	140	155	394
85°	130	84	4	18	0	144
90°	0	0	0	0	0	



TEST NUMBER: P251884

CATALOG NUMBER: LD4B50D010TE EU4B30508040 4LBDW1LI

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	2364.6	2364.6	2364.6	2364.6	2364.6	2364.6	2364.6	2364.6	2364.6
2.5°	2340.0	2354.0	2357.6	2382.2	2399.7	2378.6	2343.5	2343.5	2347.0
5°	2325.9	2343.5	2357.6	2399.7	2420.8	2385.7	2336.5	2329.5	2333.0
7.5°	2315.4	2340.0	2371.6	2434.9	2455.9	2410.3	2343.5	2315.4	2308.4
10°	2287.3	2322.4	2382.2	2473.5	2515.7	2459.4	2354.0	2301.3	2283.8
12.5°	2248.6	2290.8	2371.6	2515.7	2589.4	2505.1	2354.0	2276.7	2248.6
15°	2192.4	2238.1	2354.0	2550.8	2666.7	2554.3	2357.6	2252.2	2220.5
17.5°	2118.6	2174.9	2315.4	2568.4	2730.0	2600.0	2354.0	2234.6	2199.5
20°	2044.9	2111.6	2269.7	2568.4	2758.1	2617.6	2343.5	2217.0	2174.9
22.5°	1981.6	2048.4	2217.0	2536.7	2730.0	2596.5	2311.9	2185.4	2136.2
25°	1907.8	1978.1	2153.8	2470.0	2652.7	2533.2	2255.7	2122.2	2076.5
27.5°	1823.5	1900.8	2065.9	2364.6	2519.2	2417.3	2150.3	2020.3	1971.1
30°	1711.1	1781.3	1935.9	2213.5	2357.6	2259.2	2009.7	1876.2	1830.5
32.5°	1574.0	1637.3	1781.3	2030.8	2139.7	2058.9	1827.0	1714.6	1661.9
35°	1419.5	1475.7	1602.2	1798.9	1890.3	1841.1	1647.8	1542.4	1503.8
37.5°	1275.4	1317.6	1423.0	1567.0	1623.2	1591.6	1472.2	1394.9	1363.2
40°	1138.4	1180.5	1264.9	1335.1	1349.2	1359.7	1324.6	1275.4	1257.8
42.5°	1033.0	1071.6	1124.3	1117.3	1075.1	1134.9	1191.1	1184.0	1170.0
45°	952.2	980.3	997.8	892.4	818.6	917.0	1068.1	1106.8	1099.7
47.5°	885.4	899.5	888.9	713.2	579.7	713.2	959.2	1036.5	1036.5
50°	829.2	839.7	811.6	593.8	418.1	572.7	864.3	948.6	962.7
52.5°	790.5	794.1	758.9	502.4	288.1	453.2	762.4	836.2	846.8
55°	737.8	741.3	709.7	435.7	200.3	358.4	660.5	727.3	727.3
57.5°	678.1	685.1	653.5	379.5	140.5	298.6	583.2	646.5	650.0
60°	621.9	625.4	604.3	337.3	115.9	256.5	527.0	579.7	579.7
62.5°	583.2	586.8	562.2	312.7	98.4	224.9	467.3	516.5	520.0
65°	551.6	551.6	523.5	288.1	80.8	189.7	404.1	446.2	446.2
67.5°	516.5	509.5	481.3	256.5	63.2	154.6	340.8	372.4	368.9
70°	477.8	467.3	432.2	221.4	45.7	123.0	267.0	291.6	295.1
72.5°	432.2	418.1	372.4	182.7	35.1	91.4	196.8	217.8	217.8
75°	379.5	361.9	309.2	144.1	24.6	63.2	140.5	154.6	154.6
77.5°	316.2	298.6	245.9	105.4	17.6	42.2	94.9	105.4	105.4
80°	249.5	231.9	182.7	73.8	10.5	24.6	59.7	70.3	66.8
82.5°	186.2	168.6	123.0	45.7	7.0	14.1	38.6	38.6	35.1
85°	130.0	119.5	84.3	28.1	3.5	7.0	17.6	7.0	0.0
87.5°	87.8	77.3	52.7	14.1	0.0	3.5	3.5	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)