

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: P251883

Luminaire Tested: **LD4B50D010TE EU4B30508035 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251883
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 EU4B30508035 4LBDW1LI
Description: PORTFOLIO 4 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4816.0 lumens
Efficiency: N/A
Efficacy: 81.9 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

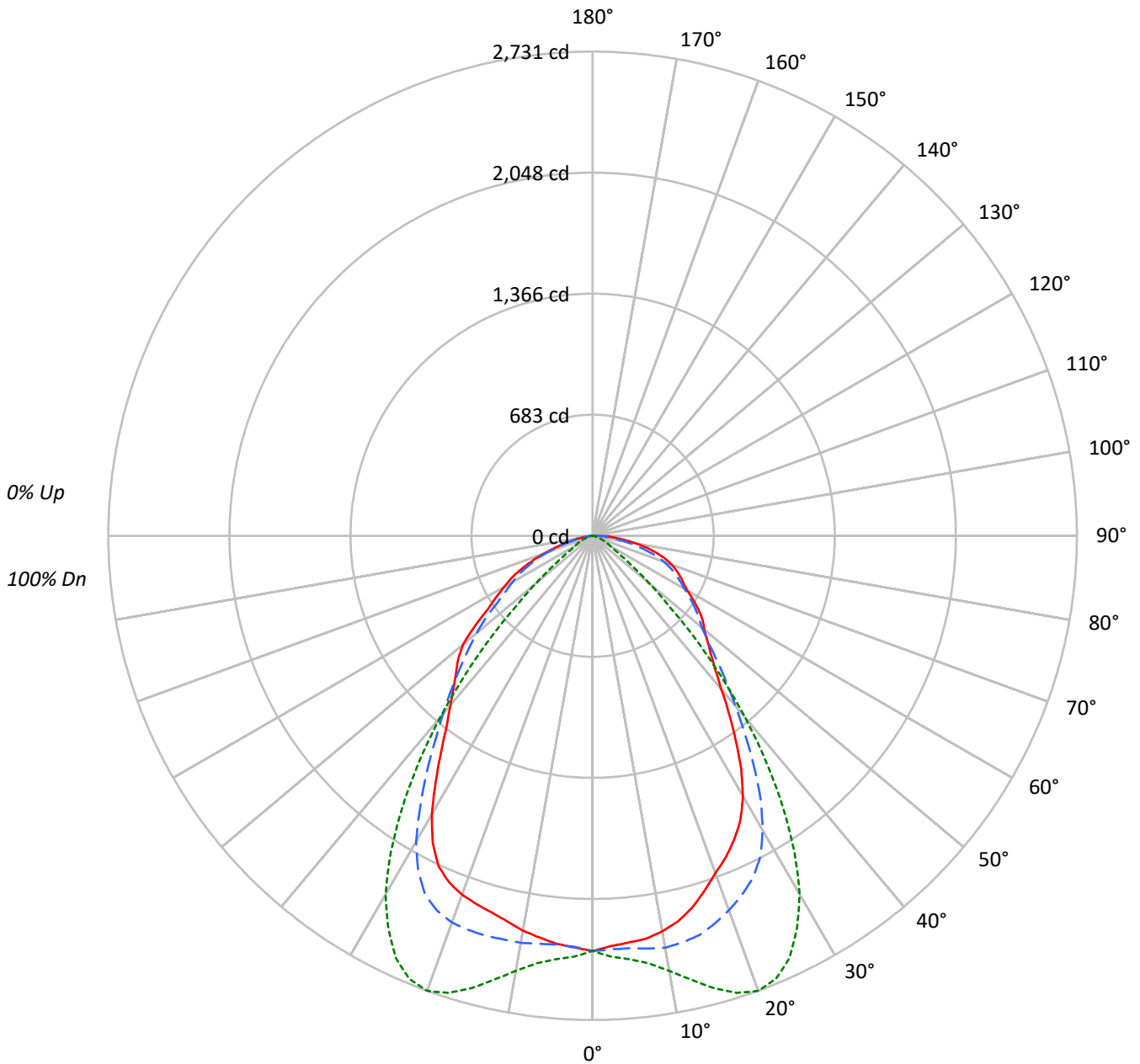
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	583	583	583
5°	576	600	578
10°	573	630	572
15°	560	681	567
20°	537	724	571
25°	519	722	565
30°	487	672	522
35°	428	569	453
40°	367	435	405
45°	332	286	384
50°	318	161	370
55°	317	86	313
60°	307	57	286
65°	322	47	261
70°	345	33	213
75°	362	23	147
80°	354	15	95
85°	368	10	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	224.2	4.7
10°-20°	671.1	13.9
20°-30°	1023.6	21.3
30°-40°	1021.7	21.2
40°-50°	753.4	15.6
50°-60°	514.7	10.7
60°-70°	363.4	7.5
70°-80°	194.1	4.0
80°-90°	49.8	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°	1918.9	39.8
0°-40°	2940.6	61.1
0°-60°	4208.7	87.4
0°-90°	4816.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4816.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2342	2342	2342	2342	2342	
5°	2304	2335	2397	2314	2310	219
15°	2171	2331	2641	2335	2199	609
25°	1889	2133	2627	2234	2056	866
35°	1406	1587	1872	1632	1489	878
45°	943	988	811	1058	1089	736
55°	731	703	198	654	720	649
65°	546	518	80	400	442	540
75°	376	306	24	139	153	390
85°	129	84	4	17	0	143
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°	2341.7	2341.7	2341.7	2341.7	2341.7	2341.7	2341.7	2341.7	2341.7
2.5°	2317.4	2331.3	2334.8	2359.1	2376.5	2355.7	2320.9	2320.9	2324.3
5°	2303.5	2320.9	2334.8	2376.5	2397.4	2362.6	2313.9	2306.9	2310.4
7.5°	2293.0	2317.4	2348.7	2411.3	2432.2	2387.0	2320.9	2293.0	2286.1
10°	2265.2	2300.0	2359.1	2449.6	2491.4	2435.7	2331.3	2279.1	2261.7
12.5°	2226.9	2268.7	2348.7	2491.4	2564.4	2480.9	2331.3	2254.7	2226.9
15°	2171.2	2216.5	2331.3	2526.1	2641.0	2529.6	2334.8	2230.4	2199.1
17.5°	2098.2	2153.8	2293.0	2543.5	2703.6	2574.9	2331.3	2213.0	2178.2
20°	2025.1	2091.2	2247.8	2543.5	2731.4	2592.3	2320.9	2195.6	2153.8
22.5°	1962.5	2028.6	2195.6	2512.2	2703.6	2571.4	2289.5	2164.3	2115.6
25°	1889.4	1959.0	2133.0	2446.1	2627.1	2508.8	2233.9	2101.6	2056.4
27.5°	1805.9	1882.4	2046.0	2341.7	2494.8	2393.9	2129.5	2000.7	1952.0
30°	1694.5	1764.1	1917.2	2192.1	2334.8	2237.3	1990.3	1858.1	1812.8
32.5°	1558.8	1621.5	1764.1	2011.2	2119.0	2039.0	1809.4	1698.0	1645.8
35°	1405.7	1461.4	1586.7	1781.5	1872.0	1823.3	1631.9	1527.5	1489.2
37.5°	1263.1	1304.8	1409.2	1551.9	1607.5	1576.2	1457.9	1381.4	1350.1
40°	1127.4	1169.1	1252.6	1322.2	1336.1	1346.6	1311.8	1263.1	1245.7
42.5°	1023.0	1061.3	1113.5	1106.5	1064.7	1123.9	1179.6	1172.6	1158.7
45°	943.0	970.8	988.2	883.8	810.7	908.2	1057.8	1096.1	1089.1
47.5°	876.8	890.8	880.3	706.3	574.1	706.3	949.9	1026.5	1026.5
50°	821.2	831.6	803.8	588.0	414.1	567.2	856.0	939.5	953.4
52.5°	782.9	786.4	751.6	497.6	285.3	448.9	755.1	828.1	838.6
55°	730.7	734.2	702.9	431.5	198.3	354.9	654.2	720.3	720.3
57.5°	671.6	678.5	647.2	375.8	139.2	295.8	577.6	640.2	643.7
60°	615.9	619.4	598.5	334.0	114.8	254.0	521.9	574.1	574.1
62.5°	577.6	581.1	556.7	309.7	97.4	222.7	462.8	511.5	515.0
65°	546.3	546.3	518.5	285.3	80.0	187.9	400.1	441.9	441.9
67.5°	511.5	504.5	476.7	254.0	62.6	153.1	337.5	368.8	365.4
70°	473.2	462.8	428.0	219.2	45.2	121.8	264.4	288.8	292.3
72.5°	428.0	414.1	368.8	180.9	34.8	90.5	194.9	215.7	215.7
75°	375.8	358.4	306.2	142.7	24.4	62.6	139.2	153.1	153.1
77.5°	313.2	295.8	243.6	104.4	17.4	41.8	93.9	104.4	104.4
80°	247.0	229.6	180.9	73.1	10.4	24.4	59.2	69.6	66.1
82.5°	184.4	167.0	121.8	45.2	7.0	13.9	38.3	38.3	34.8
85°	128.7	118.3	83.5	27.8	3.5	7.0	17.4	7.0	0.0
87.5°	87.0	76.5	52.2	13.9	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



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







(END OF REPORT)