

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: P251881

Luminaire Tested: **LD4B50D010TE EU4B30508027 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251881
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 EU4B30508027 4LBDW1LI
Description: PORTFOLIO 4 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4491.0 lumens
Efficiency: N/A
Efficacy: 76.4 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

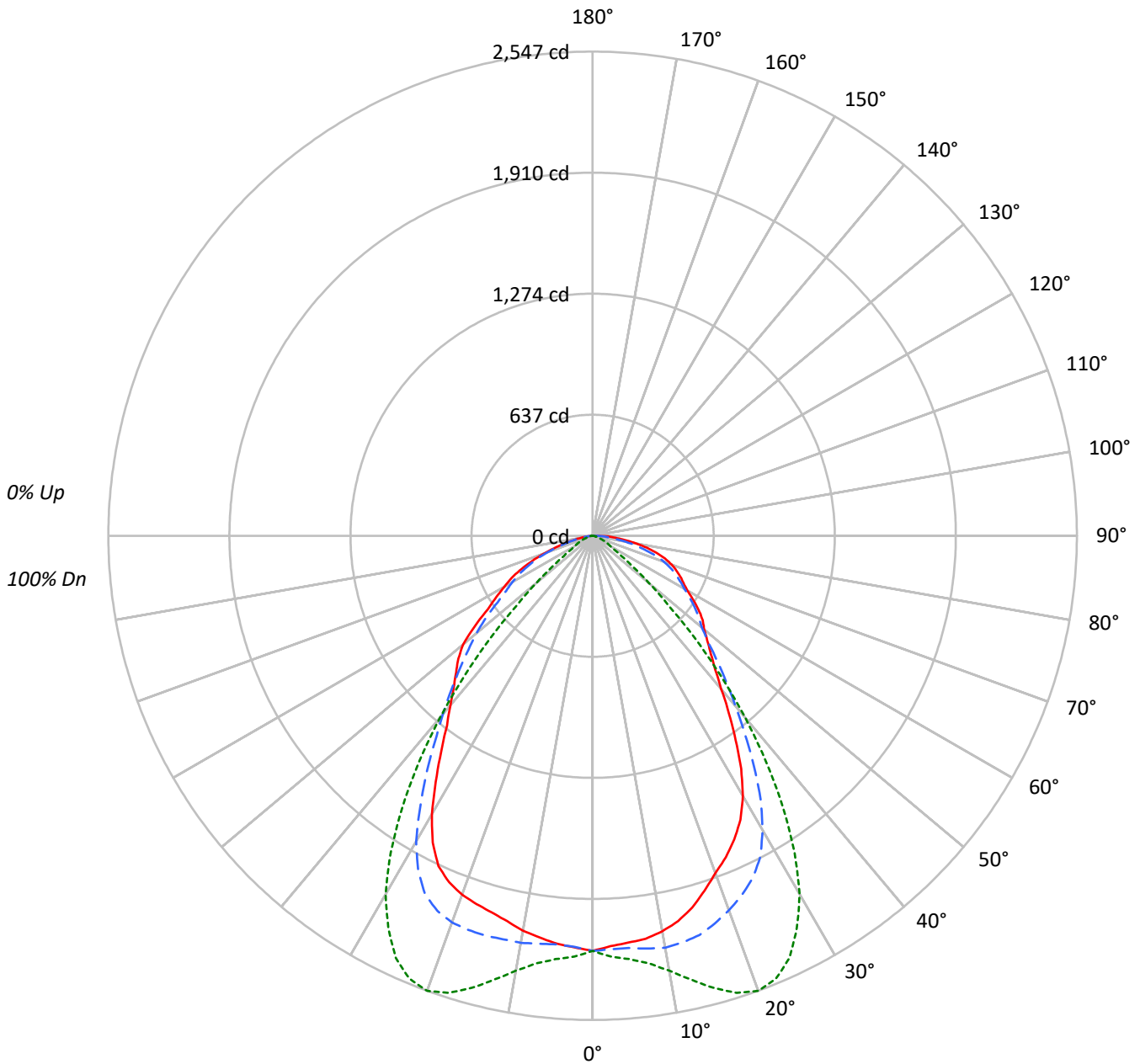
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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			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°	544	544	544
5°	537	559	539
10°	534	588	534
15°	522	635	529
20°	501	675	533
25°	484	673	527
30°	455	626	486
35°	399	531	422
40°	342	405	378
45°	310	266	358
50°	297	150	345
55°	296	80	292
60°	286	53	267
65°	300	44	243
70°	321	31	199
75°	337	22	137
80°	331	14	88
85°	343	9	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.1	4.7
10°-20°	625.8	13.9
20°-30°	954.5	21.3
30°-40°	952.8	21.2
40°-50°	702.5	15.6
50°-60°	480.0	10.7
60°-70°	338.9	7.5
70°-80°	181.0	4.0
80°-90°	46.5	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°	1789.4	39.8
0°-40°	2742.2	61.1
0°-60°	3924.7	87.4
0°-90°	4491.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4491.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2184	2184	2184	2184	2184	
5°	2148	2177	2236	2158	2154	204
15°	2025	2174	2463	2177	2051	568
25°	1762	1989	2450	2083	1918	807
35°	1311	1480	1746	1522	1389	819
45°	879	922	756	986	1016	686
55°	681	655	185	610	672	606
65°	509	484	75	373	412	504
75°	350	286	23	130	143	363
85°	120	78	3	16	0	133
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°	2183.7	2183.7	2183.7	2183.7	2183.7	2183.7	2183.7	2183.7	2183.7
2.5°	2161.0	2174.0	2177.2	2199.9	2216.2	2196.7	2164.2	2164.2	2167.5
5°	2148.0	2164.2	2177.2	2216.2	2235.6	2203.2	2157.7	2151.3	2154.5
7.5°	2138.3	2161.0	2190.2	2248.6	2268.1	2225.9	2164.2	2138.3	2131.8
10°	2112.3	2144.8	2199.9	2284.3	2323.2	2271.3	2174.0	2125.3	2109.1
12.5°	2076.6	2115.6	2190.2	2323.2	2391.4	2313.5	2174.0	2102.6	2076.6
15°	2024.7	2066.9	2174.0	2355.7	2462.8	2358.9	2177.2	2079.9	2050.7
17.5°	1956.6	2008.5	2138.3	2371.9	2521.2	2401.1	2174.0	2063.6	2031.2
20°	1888.4	1950.1	2096.1	2371.9	2547.1	2417.3	2164.2	2047.4	2008.5
22.5°	1830.0	1891.7	2047.4	2342.7	2521.2	2397.9	2135.0	2018.2	1972.8
25°	1761.9	1826.8	1989.0	2281.0	2449.8	2339.5	2083.1	1959.8	1917.6
27.5°	1684.0	1755.4	1907.9	2183.7	2326.5	2232.4	1985.8	1865.7	1820.3
30°	1580.2	1645.1	1787.8	2044.2	2177.2	2086.4	1856.0	1732.7	1690.5
32.5°	1453.6	1512.0	1645.1	1875.5	1976.0	1901.4	1687.3	1583.4	1534.8
35°	1310.9	1362.8	1479.6	1661.3	1745.7	1700.2	1521.8	1424.4	1388.7
37.5°	1177.8	1216.8	1314.1	1447.2	1499.1	1469.9	1359.5	1288.2	1259.0
40°	1051.3	1090.2	1168.1	1233.0	1246.0	1255.7	1223.3	1177.8	1161.6
42.5°	954.0	989.6	1038.3	1031.8	992.9	1048.0	1100.0	1093.5	1080.5
45°	879.3	905.3	921.5	824.2	756.0	846.9	986.4	1022.1	1015.6
47.5°	817.7	830.7	820.9	658.7	535.4	658.7	885.8	957.2	957.2
50°	765.8	775.5	749.5	548.4	386.1	528.9	798.2	876.1	889.1
52.5°	730.1	733.3	700.9	464.0	266.1	418.6	704.1	772.2	782.0
55°	681.4	684.6	655.4	402.3	184.9	331.0	610.0	671.7	671.7
57.5°	626.2	632.7	603.5	350.4	129.8	275.8	538.6	597.0	600.3
60°	574.3	577.6	558.1	311.5	107.1	236.9	486.7	535.4	535.4
62.5°	538.6	541.9	519.2	288.8	90.9	207.7	431.5	477.0	480.2
65°	509.4	509.4	483.5	266.1	74.6	175.2	373.1	412.1	412.1
67.5°	477.0	470.5	444.5	236.9	58.4	142.8	314.7	343.9	340.7
70°	441.3	431.5	399.1	204.4	42.2	113.6	246.6	269.3	272.6
72.5°	399.1	386.1	343.9	168.7	32.4	84.4	181.7	201.2	201.2
75°	350.4	334.2	285.5	133.0	22.7	58.4	129.8	142.8	142.8
77.5°	292.0	275.8	227.1	97.3	16.2	38.9	87.6	97.3	97.3
80°	230.4	214.2	168.7	68.1	9.7	22.7	55.2	64.9	61.6
82.5°	172.0	155.7	113.6	42.2	6.5	13.0	35.7	35.7	32.4
85°	120.1	110.3	77.9	26.0	3.2	6.5	16.2	6.5	0.0
87.5°	81.1	71.4	48.7	13.0	0.0	3.2	3.2	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)