

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: P251888

Luminaire Tested: **LD4B50D010TE EU4B30509030 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251888
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 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: 4010.0 lumens
Efficiency: N/A
Efficacy: 68.2 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

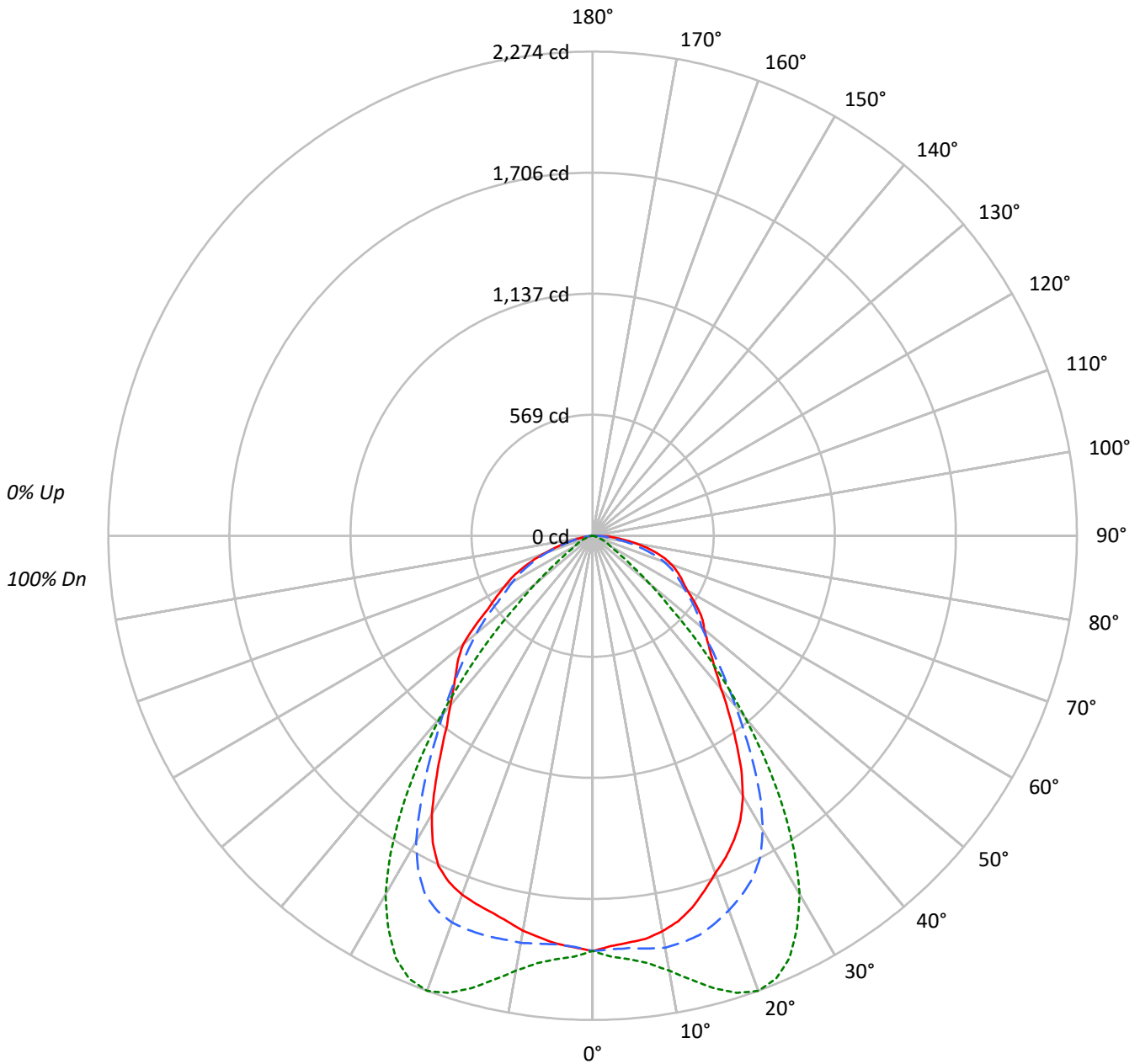
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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°	486	486	486
5°	480	499	481
10°	477	525	476
15°	466	567	472
20°	447	603	476
25°	432	601	471
30°	406	559	434
35°	356	474	377
40°	305	362	337
45°	277	238	320
50°	265	134	308
55°	264	72	260
60°	256	48	238
65°	268	39	217
70°	287	27	177
75°	301	20	123
80°	295	12	79
85°	306	8	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.7	4.7
10°-20°	558.8	13.9
20°-30°	852.3	21.3
30°-40°	850.7	21.2
40°-50°	627.3	15.6
50°-60°	428.6	10.7
60°-70°	302.6	7.5
70°-80°	161.6	4.0
80°-90°	41.5	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°	1597.8	39.8
0°-40°	2448.5	61.1
0°-60°	3504.3	87.4
0°-90°	4010.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4010.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1950	1950	1950	1950	1950	
5°	1918	1944	1996	1927	1924	182
15°	1808	1941	2199	1944	1831	507
25°	1573	1776	2187	1860	1712	721
35°	1170	1321	1559	1359	1240	731
45°	785	823	675	881	907	613
55°	608	585	165	545	600	541
65°	455	432	67	333	368	450
75°	313	255	20	116	128	325
85°	107	70	3	14	0	119
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°	1949.8	1949.8	1949.8	1949.8	1949.8	1949.8	1949.8	1949.8	1949.8
2.5°	1929.5	1941.1	1944.0	1964.3	1978.8	1961.4	1932.4	1932.4	1935.3
5°	1918.0	1932.4	1944.0	1978.8	1996.2	1967.2	1926.6	1920.9	1923.7
7.5°	1909.3	1929.5	1955.6	2007.8	2025.2	1987.5	1932.4	1909.3	1903.5
10°	1886.1	1915.1	1964.3	2039.6	2074.4	2028.0	1941.1	1897.7	1883.2
12.5°	1854.2	1889.0	1955.6	2074.4	2135.2	2065.7	1941.1	1877.4	1854.2
15°	1807.9	1845.5	1941.1	2103.4	2199.0	2106.3	1944.0	1857.1	1831.0
17.5°	1747.0	1793.4	1909.3	2117.9	2251.1	2143.9	1941.1	1842.6	1813.7
20°	1686.2	1741.2	1871.6	2117.9	2274.3	2158.4	1932.4	1828.1	1793.4
22.5°	1634.0	1689.1	1828.1	2091.8	2251.1	2141.0	1906.4	1802.1	1761.5
25°	1573.2	1631.1	1776.0	2036.7	2187.4	2088.9	1860.0	1749.9	1712.3
27.5°	1503.7	1567.4	1703.6	1949.8	2077.3	1993.3	1773.1	1665.9	1625.3
30°	1410.9	1468.9	1596.4	1825.2	1944.0	1862.9	1657.2	1547.1	1509.4
32.5°	1298.0	1350.1	1468.9	1674.6	1764.4	1697.8	1506.5	1413.8	1370.4
35°	1170.5	1216.8	1321.1	1483.4	1558.7	1518.1	1358.8	1271.9	1240.0
37.5°	1051.7	1086.5	1173.4	1292.2	1338.5	1312.4	1213.9	1150.2	1124.1
40°	938.7	973.5	1043.0	1100.9	1112.5	1121.2	1092.2	1051.7	1037.2
42.5°	851.8	883.6	927.1	921.3	886.5	935.8	982.2	976.4	964.8
45°	785.1	808.3	822.8	735.9	675.1	756.2	880.8	912.6	906.8
47.5°	730.1	741.7	733.0	588.1	478.0	588.1	790.9	854.7	854.7
50°	683.7	692.4	669.3	489.6	344.8	472.2	712.7	782.2	793.8
52.5°	651.9	654.8	625.8	414.3	237.6	373.7	628.7	689.5	698.2
55°	608.4	611.3	585.2	359.3	165.1	295.5	544.7	599.7	599.7
57.5°	559.2	565.0	538.9	312.9	115.9	246.3	480.9	533.1	536.0
60°	512.8	515.7	498.3	278.1	95.6	211.5	434.6	478.0	478.0
62.5°	480.9	483.8	463.6	257.9	81.1	185.4	385.3	425.9	428.8
65°	454.9	454.9	431.7	237.6	66.6	156.4	333.2	367.9	367.9
67.5°	425.9	420.1	396.9	211.5	52.1	127.5	281.0	307.1	304.2
70°	394.0	385.3	356.4	182.5	37.7	101.4	220.2	240.5	243.4
72.5°	356.4	344.8	307.1	150.7	29.0	75.3	162.2	179.6	179.6
75°	312.9	298.4	255.0	118.8	20.3	52.1	115.9	127.5	127.5
77.5°	260.7	246.3	202.8	86.9	14.5	34.8	78.2	86.9	86.9
80°	205.7	191.2	150.7	60.8	8.7	20.3	49.3	57.9	55.0
82.5°	153.6	139.1	101.4	37.7	5.8	11.6	31.9	31.9	29.0
85°	107.2	98.5	69.5	23.2	2.9	5.8	14.5	5.8	0.0
87.5°	72.4	63.7	43.5	11.6	0.0	2.9	2.9	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)