

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: P251875

Luminaire Tested: **LD4B40D010 EU4B30509030 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251875
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: LD4B40D010 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: 3152.0 lumens
Efficiency: N/A
Efficacy: 73.3 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

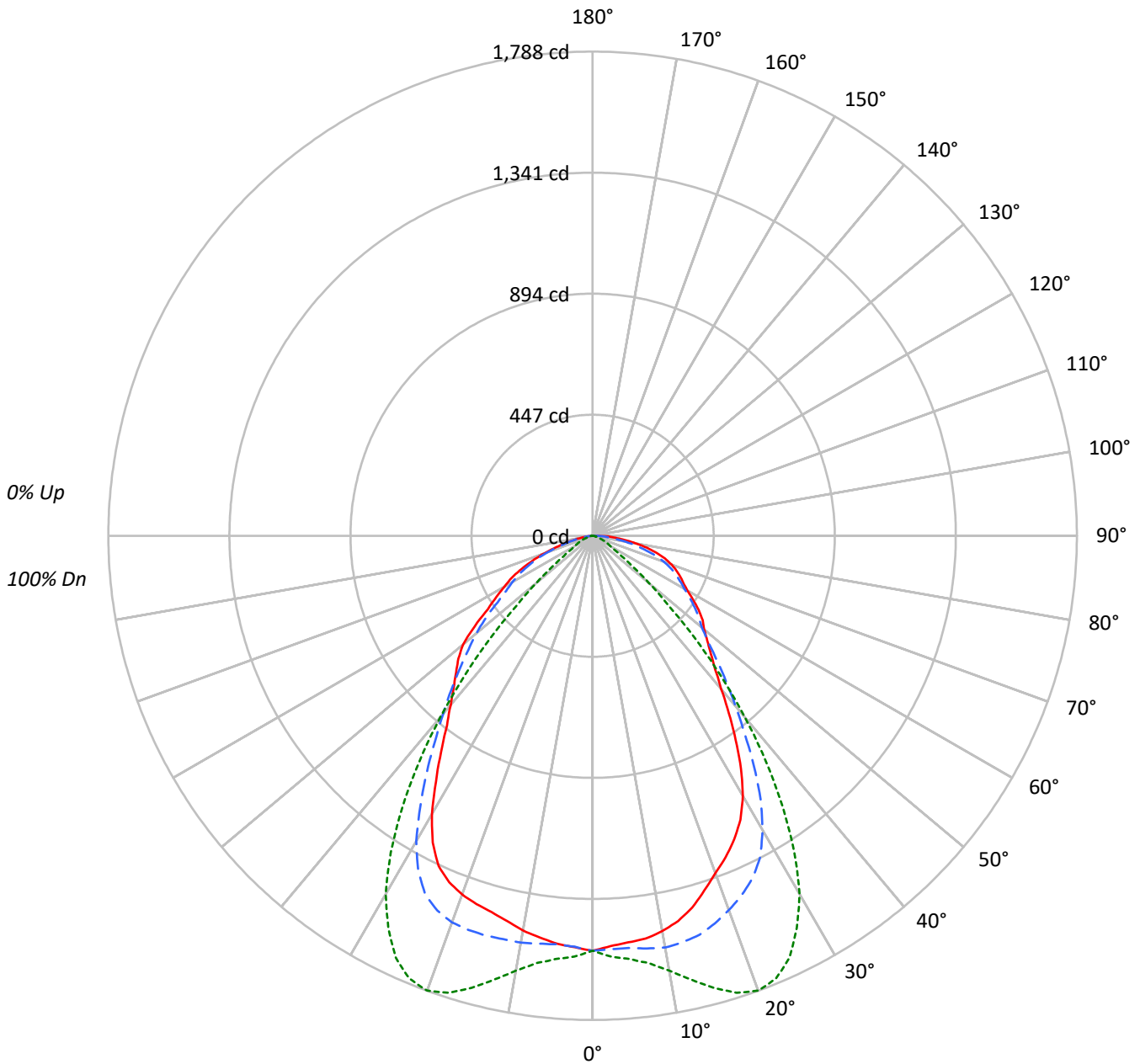
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	382	382	382
5°	377	392	378
10°	375	413	375
15°	367	446	371
20°	351	474	374
25°	340	473	370
30°	319	440	341
35°	280	373	296
40°	240	284	265
45°	217	187	251
50°	208	105	242
55°	208	56	205
60°	201	37	187
65°	211	31	170
70°	226	22	139
75°	237	15	96
80°	232	10	62
85°	241	7	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.8	4.7
10°-20°	439.2	13.9
20°-30°	669.9	21.3
30°-40°	668.7	21.2
40°-50°	493.1	15.6
50°-60°	336.9	10.7
60°-70°	237.8	7.5
70°-80°	127.0	4.0
80°-90°	32.6	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°	1255.9	39.8
0°-40°	1924.6	61.1
0°-60°	2754.6	87.4
0°-90°	3152.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3152.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1533	1533	1533	1533	1533	
5°	1508	1528	1569	1514	1512	143
15°	1421	1526	1728	1528	1439	398
25°	1237	1396	1719	1462	1346	566
35°	920	1038	1225	1068	975	575
45°	617	647	531	692	713	482
55°	478	460	130	428	471	425
65°	358	339	52	262	289	353
75°	246	200	16	91	100	255
85°	84	55	2	11	0	93
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°	1532.6	1532.6	1532.6	1532.6	1532.6	1532.6	1532.6	1532.6	1532.6
2.5°	1516.7	1525.8	1528.1	1544.0	1555.4	1541.7	1519.0	1519.0	1521.2
5°	1507.6	1519.0	1528.1	1555.4	1569.1	1546.3	1514.4	1509.9	1512.1
7.5°	1500.7	1516.7	1537.2	1578.2	1591.8	1562.2	1519.0	1500.7	1496.2
10°	1482.5	1505.3	1544.0	1603.2	1630.6	1594.1	1525.8	1491.6	1480.3
12.5°	1457.5	1484.8	1537.2	1630.6	1678.4	1623.7	1525.8	1475.7	1457.5
15°	1421.0	1450.6	1525.8	1653.3	1728.5	1655.6	1528.1	1459.8	1439.3
17.5°	1373.2	1409.7	1500.7	1664.7	1769.5	1685.2	1525.8	1448.4	1425.6
20°	1325.4	1368.7	1471.1	1664.7	1787.7	1696.6	1519.0	1437.0	1409.7
22.5°	1284.4	1327.7	1437.0	1644.2	1769.5	1682.9	1498.5	1416.5	1384.6
25°	1236.6	1282.1	1396.0	1600.9	1719.4	1641.9	1462.0	1375.5	1345.9
27.5°	1181.9	1232.0	1339.1	1532.6	1632.8	1566.8	1393.7	1309.5	1277.6
30°	1109.0	1154.6	1254.8	1434.7	1528.1	1464.3	1302.6	1216.1	1186.5
32.5°	1020.2	1061.2	1154.6	1316.3	1386.9	1334.5	1184.2	1111.3	1077.2
35°	920.0	956.5	1038.5	1166.0	1225.2	1193.3	1068.1	999.7	974.7
37.5°	826.7	854.0	922.3	1015.7	1052.1	1031.6	954.2	904.1	883.6
40°	737.8	765.2	819.8	865.4	874.5	881.3	858.5	826.7	815.3
42.5°	669.5	694.6	728.7	724.2	696.9	735.6	772.0	767.5	758.3
45°	617.2	635.4	646.8	578.4	530.6	594.4	692.3	717.4	712.8
47.5°	573.9	583.0	576.2	462.3	375.8	462.3	621.7	671.8	671.8
50°	537.4	544.3	526.1	384.9	271.0	371.2	560.2	614.9	624.0
52.5°	512.4	514.7	491.9	325.7	186.7	293.8	494.2	542.0	548.8
55°	478.2	480.5	460.0	282.4	129.8	232.3	428.1	471.4	471.4
57.5°	439.5	444.1	423.6	245.9	91.1	193.6	378.0	419.0	421.3
60°	403.1	405.4	391.7	218.6	75.2	166.2	341.6	375.8	375.8
62.5°	378.0	380.3	364.4	202.7	63.8	145.7	302.9	334.8	337.0
65°	357.5	357.5	339.3	186.7	52.4	123.0	261.9	289.2	289.2
67.5°	334.8	330.2	312.0	166.2	41.0	100.2	220.9	241.4	239.1
70°	309.7	302.9	280.1	143.5	29.6	79.7	173.1	189.0	191.3
72.5°	280.1	271.0	241.4	118.4	22.8	59.2	127.5	141.2	141.2
75°	245.9	234.6	200.4	93.4	15.9	41.0	91.1	100.2	100.2
77.5°	205.0	193.6	159.4	68.3	11.4	27.3	61.5	68.3	68.3
80°	161.7	150.3	118.4	47.8	6.8	15.9	38.7	45.5	43.3
82.5°	120.7	109.3	79.7	29.6	4.6	9.1	25.1	25.1	22.8
85°	84.3	77.4	54.7	18.2	2.3	4.6	11.4	4.6	0.0
87.5°	56.9	50.1	34.2	9.1	0.0	2.3	2.3	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)