

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: P251856

Luminaire Tested: **LD4B30D010 EU4B30508030 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251856
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: LD4B30D010 EU4B30508030 4LBDW1LI
Description: PORTFOLIO 4 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2635.0 lumens
Efficiency: N/A
Efficacy: 94.1 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

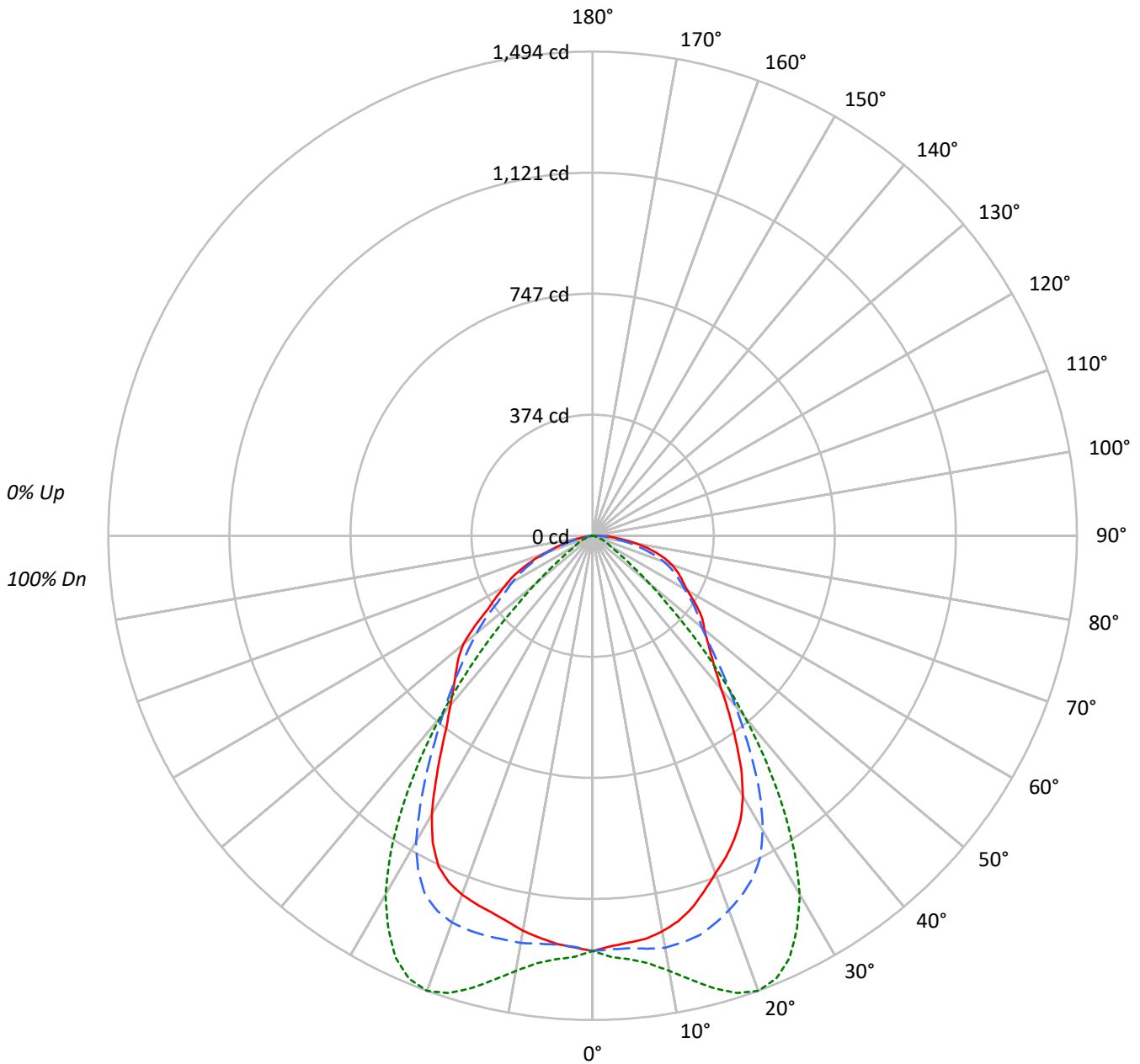
Input Watts (W): 28
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	319	319	319
5°	315	328	316
10°	314	345	313
15°	306	373	310
20°	294	396	312
25°	284	395	309
30°	267	368	285
35°	234	312	248
40°	201	238	222
45°	182	156	210
50°	174	88	202
55°	174	47	171
60°	168	31	157
65°	176	26	143
70°	189	18	116
75°	198	13	81
80°	194	8	52
85°	201	5	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.7	4.7
10°-20°	367.2	13.9
20°-30°	560.0	21.3
30°-40°	559.0	21.2
40°-50°	412.2	15.6
50°-60°	281.6	10.7
60°-70°	198.8	7.5
70°-80°	106.2	4.0
80°-90°	27.3	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°	1049.9	39.8
0°-40°	1608.9	61.1
0°-60°	2302.7	87.4
0°-90°	2635.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2635.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1281	1281	1281	1281	1281	
5°	1260	1277	1312	1266	1264	120
15°	1188	1276	1445	1277	1203	333
25°	1034	1167	1437	1222	1125	474
35°	769	868	1024	893	815	481
45°	516	541	444	579	596	403
55°	400	385	108	358	394	355
65°	299	284	44	219	242	296
75°	206	168	13	76	84	213
85°	70	46	2	10	0	78
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°	1281.2	1281.2	1281.2	1281.2	1281.2	1281.2	1281.2	1281.2	1281.2
2.5°	1267.9	1275.5	1277.4	1290.8	1300.3	1288.9	1269.8	1269.8	1271.7
5°	1260.3	1269.8	1277.4	1300.3	1311.7	1292.7	1266.0	1262.2	1264.1
7.5°	1254.6	1267.9	1285.1	1319.3	1330.7	1306.0	1269.8	1254.6	1250.8
10°	1239.4	1258.4	1290.8	1340.3	1363.1	1332.6	1275.5	1247.0	1237.5
12.5°	1218.4	1241.3	1285.1	1363.1	1403.1	1357.4	1275.5	1233.6	1218.4
15°	1188.0	1212.7	1275.5	1382.1	1445.0	1384.0	1277.4	1220.3	1203.2
17.5°	1148.0	1178.4	1254.6	1391.7	1479.2	1408.8	1275.5	1210.8	1191.8
20°	1108.0	1144.2	1229.8	1391.7	1494.5	1418.3	1269.8	1201.3	1178.4
22.5°	1073.7	1109.9	1201.3	1374.5	1479.2	1406.9	1252.7	1184.1	1157.5
25°	1033.8	1071.8	1167.0	1338.4	1437.4	1372.6	1222.2	1149.9	1125.1
27.5°	988.1	1029.9	1119.4	1281.2	1365.0	1309.8	1165.1	1094.7	1068.0
30°	927.1	965.2	1049.0	1199.4	1277.4	1224.1	1089.0	1016.6	991.9
32.5°	852.9	887.2	965.2	1100.4	1159.4	1115.6	990.0	929.0	900.5
35°	769.1	799.6	868.1	974.7	1024.2	997.6	892.9	835.8	814.8
37.5°	691.1	713.9	771.0	849.1	879.5	862.4	797.7	755.8	738.7
40°	616.8	639.7	685.4	723.4	731.1	736.8	717.7	691.1	681.6
42.5°	559.7	580.7	609.2	605.4	582.6	614.9	645.4	641.6	634.0
45°	515.9	531.2	540.7	483.6	443.6	496.9	578.7	599.7	595.9
47.5°	479.8	487.4	481.7	386.5	314.1	386.5	519.7	561.6	561.6
50°	449.3	455.0	439.8	321.7	226.5	310.3	468.3	514.0	521.6
52.5°	428.4	430.3	411.2	272.2	156.1	245.6	413.1	453.1	458.8
55°	399.8	401.7	384.6	236.1	108.5	194.2	357.9	394.1	394.1
57.5°	367.4	371.2	354.1	205.6	76.2	161.8	316.0	350.3	352.2
60°	337.0	338.9	327.4	182.8	62.8	139.0	285.6	314.1	314.1
62.5°	316.0	317.9	304.6	169.4	53.3	121.8	253.2	279.9	281.8
65°	298.9	298.9	283.7	156.1	43.8	102.8	218.9	241.8	241.8
67.5°	279.9	276.0	260.8	139.0	34.3	83.8	184.7	201.8	199.9
70°	258.9	253.2	234.2	119.9	24.7	66.6	144.7	158.0	159.9
72.5°	234.2	226.5	201.8	99.0	19.0	49.5	106.6	118.0	118.0
75°	205.6	196.1	167.5	78.1	13.3	34.3	76.2	83.8	83.8
77.5°	171.3	161.8	133.3	57.1	9.5	22.8	51.4	57.1	57.1
80°	135.2	125.6	99.0	40.0	5.7	13.3	32.4	38.1	36.2
82.5°	100.9	91.4	66.6	24.7	3.8	7.6	20.9	20.9	19.0
85°	70.4	64.7	45.7	15.2	1.9	3.8	9.5	3.8	0.0
87.5°	47.6	41.9	28.6	7.6	0.0	1.9	1.9	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)