

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: P251857

Luminaire Tested: **LD4B30D010 EU4B30508035 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251857
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 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: 2701.0 lumens
Efficiency: N/A
Efficacy: 96.5 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

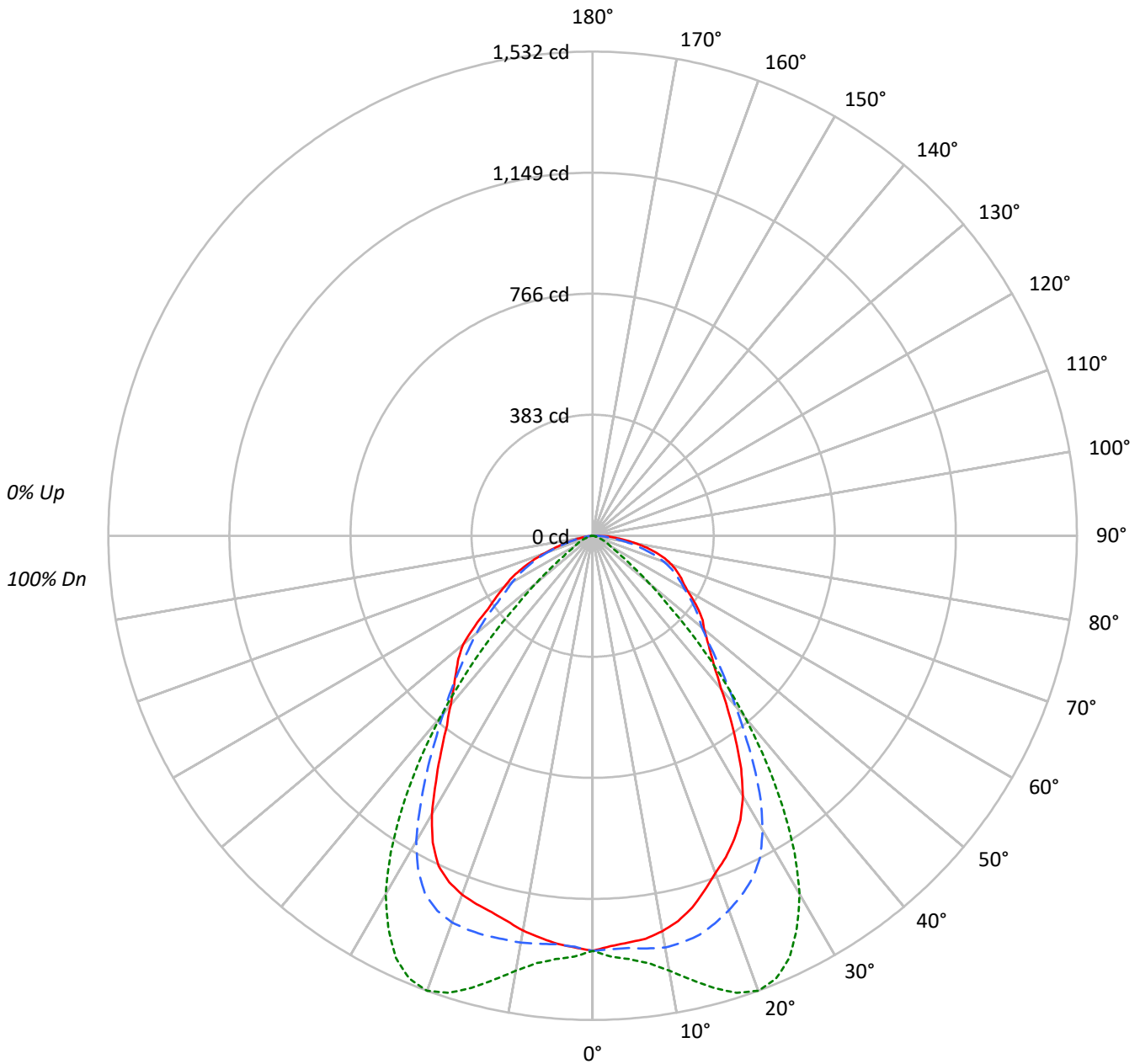
Input Watts (W): 28
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P251857

CATALOG NUMBER: LD4B30D010 EU4B30508035 4LBDW1LI

Luminous Intensity Polar Plot





TEST NUMBER: P251857

CATALOG NUMBER: LD4B30D010 EU4B30508035 4LBDW1LI

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°	327	327	327
5°	323	336	324
10°	321	353	321
15°	314	382	318
20°	301	406	320
25°	291	405	317
30°	273	377	292
35°	240	319	254
40°	206	244	227
45°	186	160	215
50°	178	90	207
55°	178	48	175
60°	172	32	160
65°	181	26	146
70°	193	19	119
75°	203	13	83
80°	199	8	53
85°	206	6	0



TEST NUMBER: P251857

CATALOG NUMBER: LD4B30D010 EU4B30508035 4LBDW1LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.8	4.7
10°-20°	376.4	13.9
20°-30°	574.1	21.3
30°-40°	573.0	21.2
40°-50°	422.5	15.6
50°-60°	288.7	10.7
60°-70°	203.8	7.5
70°-80°	108.8	4.0
80°-90°	27.9	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°	1076.2	39.8
0°-40°	1649.2	61.1
0°-60°	2360.4	87.4
0°-90°	2701.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2701.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1313	1313	1313	1313	1313	
5°	1292	1309	1345	1298	1296	123
15°	1218	1308	1481	1309	1233	341
25°	1060	1196	1473	1253	1153	485
35°	788	890	1050	915	835	493
45°	529	554	455	593	611	413
55°	410	394	111	367	404	364
65°	306	291	45	224	248	303
75°	211	172	14	78	86	219
85°	72	47	2	10	0	80
90°	0	0	0	0	0	



TEST NUMBER: P251857

CATALOG NUMBER: LD4B30D010 EU4B30508035 4LBDW1LI

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1313.3	1313.3	1313.3	1313.3	1313.3	1313.3	1313.3	1313.3	1313.3
2.5°	1299.7	1307.5	1309.4	1323.1	1332.8	1321.1	1301.6	1301.6	1303.6
5°	1291.9	1301.6	1309.4	1332.8	1344.6	1325.0	1297.7	1293.8	1295.8
7.5°	1286.0	1299.7	1317.2	1352.4	1364.1	1338.7	1301.6	1286.0	1282.1
10°	1270.4	1289.9	1323.1	1373.8	1397.2	1366.0	1307.5	1278.2	1268.5
12.5°	1248.9	1272.4	1317.2	1397.2	1438.2	1391.4	1307.5	1264.5	1248.9
15°	1217.7	1243.1	1307.5	1416.8	1481.2	1418.7	1309.4	1250.9	1233.3
17.5°	1176.7	1208.0	1286.0	1426.5	1516.3	1444.1	1307.5	1241.1	1221.6
20°	1135.8	1172.8	1260.6	1426.5	1531.9	1453.8	1301.6	1231.4	1208.0
22.5°	1100.6	1137.7	1231.4	1409.0	1516.3	1442.1	1284.1	1213.8	1186.5
25°	1059.6	1098.7	1196.2	1371.9	1473.4	1407.0	1252.8	1178.7	1153.3
27.5°	1012.8	1055.7	1147.5	1313.3	1399.2	1342.6	1194.3	1122.1	1094.8
30°	950.4	989.4	1075.3	1229.4	1309.4	1254.8	1116.2	1042.1	1016.7
32.5°	874.3	909.4	989.4	1127.9	1188.4	1143.6	1014.8	952.3	923.0
35°	788.4	819.6	889.9	999.1	1049.9	1022.6	915.2	856.7	835.2
37.5°	708.4	731.8	790.3	870.4	901.6	884.0	817.7	774.7	757.2
40°	632.3	655.7	702.5	741.6	749.4	755.2	735.7	708.4	698.6
42.5°	573.7	595.2	624.5	620.6	597.1	630.3	661.5	657.6	649.8
45°	528.8	544.5	554.2	495.7	454.7	509.3	593.2	614.7	610.8
47.5°	491.8	499.6	493.7	396.1	322.0	396.1	532.7	575.7	575.7
50°	460.5	466.4	450.8	329.8	232.2	318.1	480.1	526.9	534.7
52.5°	439.1	441.0	421.5	279.1	160.0	251.7	423.5	464.4	470.3
55°	409.8	411.8	394.2	242.0	111.2	199.0	366.9	404.0	404.0
57.5°	376.6	380.5	363.0	210.8	78.1	165.9	323.9	359.1	361.0
60°	345.4	347.4	335.7	187.3	64.4	142.5	292.7	322.0	322.0
62.5°	323.9	325.9	312.2	173.7	54.6	124.9	259.5	286.9	288.8
65°	306.4	306.4	290.8	160.0	44.9	105.4	224.4	247.8	247.8
67.5°	286.9	283.0	267.4	142.5	35.1	85.9	189.3	206.9	204.9
70°	265.4	259.5	240.0	122.9	25.4	68.3	148.3	162.0	163.9
72.5°	240.0	232.2	206.9	101.5	19.5	50.7	109.3	121.0	121.0
75°	210.8	201.0	171.7	80.0	13.7	35.1	78.1	85.9	85.9
77.5°	175.6	165.9	136.6	58.5	9.8	23.4	52.7	58.5	58.5
80°	138.6	128.8	101.5	41.0	5.9	13.7	33.2	39.0	37.1
82.5°	103.4	93.7	68.3	25.4	3.9	7.8	21.5	21.5	19.5
85°	72.2	66.3	46.8	15.6	2.0	3.9	9.8	3.9	0.0
87.5°	48.8	42.9	29.3	7.8	0.0	2.0	2.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093





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







(END OF REPORT)