

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: P251858

Luminaire Tested: **LD4B30D010 EU4B30508040 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251858
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 EU4B30508040 4LBDW1LI
Description: PORTFOLIO 4 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2730.0 lumens
Efficiency: N/A
Efficacy: 97.5 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

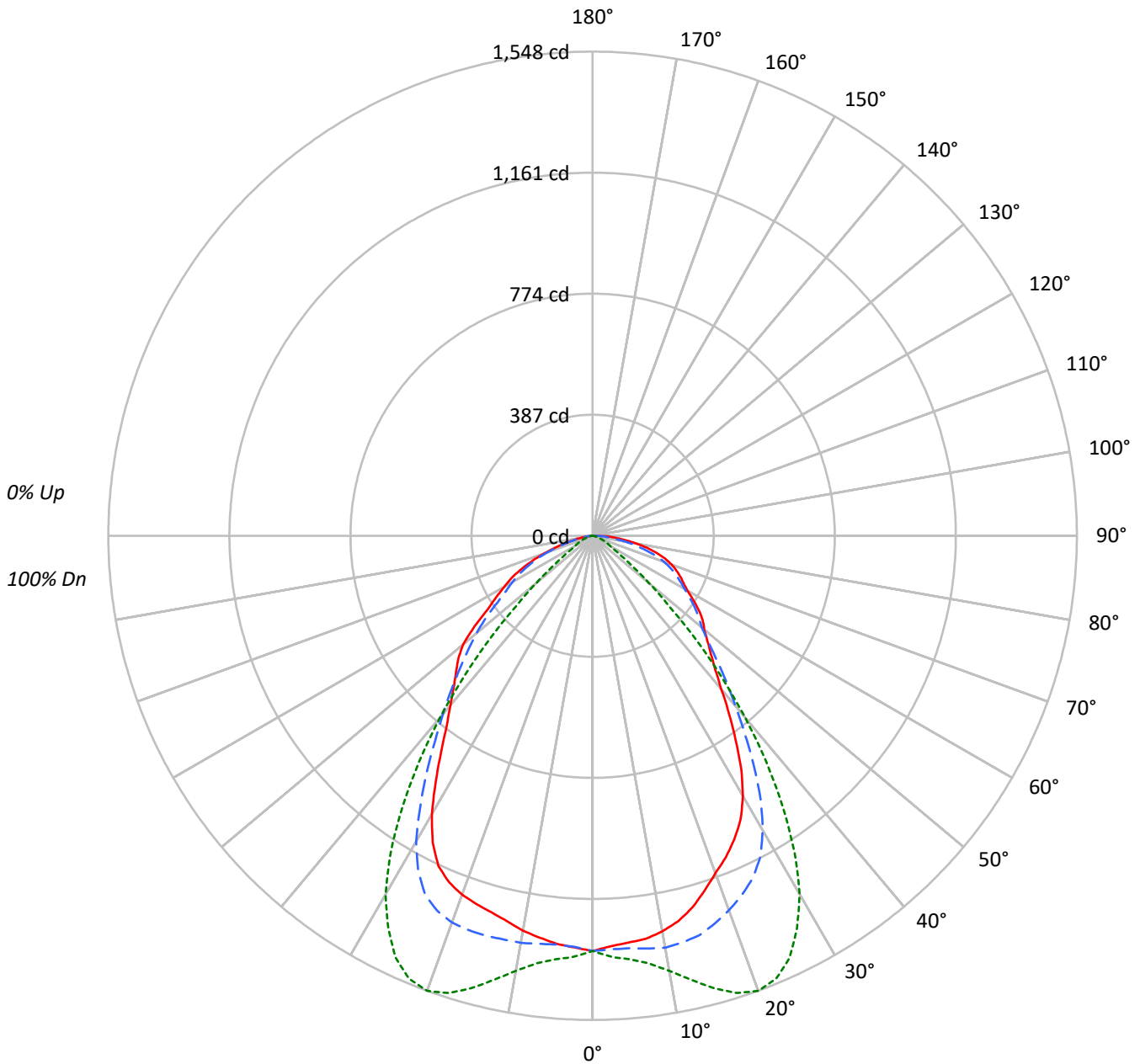
Input Watts (W): 28
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	331	331	331
5°	327	340	328
10°	325	357	324
15°	317	386	322
20°	304	411	324
25°	294	409	320
30°	276	381	296
35°	242	323	257
40°	208	246	230
45°	188	162	218
50°	180	91	209
55°	180	49	177
60°	174	32	162
65°	183	27	148
70°	195	19	121
75°	205	13	84
80°	201	8	54
85°	209	6	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.1	4.7
10°-20°	380.4	13.9
20°-30°	580.2	21.3
30°-40°	579.2	21.2
40°-50°	427.1	15.6
50°-60°	291.8	10.7
60°-70°	206.0	7.5
70°-80°	110.0	4.0
80°-90°	28.2	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°	1087.8	39.8
0°-40°	1666.9	61.1
0°-60°	2385.8	87.4
0°-90°	2730.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2730.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1327	1327	1327	1327	1327	
5°	1306	1324	1359	1312	1310	124
15°	1231	1322	1497	1324	1247	345
25°	1071	1209	1489	1266	1166	491
35°	797	899	1061	925	844	498
45°	534	560	460	600	617	417
55°	414	398	112	371	408	368
65°	310	294	45	227	250	306
75°	213	174	14	79	87	221
85°	73	47	2	10	0	81
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°	1327.4	1327.4	1327.4	1327.4	1327.4	1327.4	1327.4	1327.4	1327.4
2.5°	1313.6	1321.5	1323.5	1337.3	1347.2	1335.3	1315.6	1315.6	1317.6
5°	1305.7	1315.6	1323.5	1347.2	1359.0	1339.3	1311.7	1307.7	1309.7
7.5°	1299.8	1313.6	1331.4	1366.9	1378.7	1353.1	1315.6	1299.8	1295.9
10°	1284.0	1303.8	1337.3	1388.6	1412.2	1380.7	1321.5	1291.9	1282.1
12.5°	1262.3	1286.0	1331.4	1412.2	1453.7	1406.3	1321.5	1278.1	1262.3
15°	1230.8	1256.4	1321.5	1432.0	1497.1	1433.9	1323.5	1264.3	1246.6
17.5°	1189.4	1220.9	1299.8	1441.8	1532.6	1459.6	1321.5	1254.5	1234.7
20°	1147.9	1185.4	1274.2	1441.8	1548.3	1469.4	1315.6	1244.6	1220.9
22.5°	1112.4	1149.9	1244.6	1424.1	1532.6	1457.6	1297.8	1226.8	1199.2
25°	1071.0	1110.5	1209.1	1386.6	1489.2	1422.1	1266.3	1191.3	1165.7
27.5°	1023.7	1067.1	1159.8	1327.4	1414.2	1357.0	1207.1	1134.1	1106.5
30°	960.6	1000.0	1086.8	1242.6	1323.5	1268.3	1128.2	1053.3	1027.6
32.5°	883.6	919.1	1000.0	1140.1	1201.2	1155.8	1025.7	962.5	933.0
35°	796.9	828.4	899.4	1009.9	1061.2	1033.5	925.1	865.9	844.2
37.5°	716.0	739.7	798.8	879.7	911.3	893.5	826.4	783.0	765.3
40°	639.1	662.7	710.1	749.5	757.4	763.3	743.6	716.0	706.1
42.5°	579.9	601.6	631.2	627.2	603.6	637.1	668.6	664.7	656.8
45°	534.5	550.3	560.2	501.0	459.6	514.8	599.6	621.3	617.4
47.5°	497.0	504.9	499.0	400.4	325.4	400.4	538.5	581.9	581.9
50°	465.5	471.4	455.6	333.3	234.7	321.5	485.2	532.6	540.4
52.5°	443.8	445.8	426.0	282.1	161.7	254.4	428.0	469.4	475.4
55°	414.2	416.2	398.4	244.6	112.4	201.2	370.8	408.3	408.3
57.5°	380.7	384.6	366.9	213.0	78.9	167.7	327.4	362.9	364.9
60°	349.1	351.1	339.3	189.4	65.1	144.0	295.9	325.4	325.4
62.5°	327.4	329.4	315.6	175.5	55.2	126.2	262.3	289.9	291.9
65°	309.7	309.7	293.9	161.7	45.4	106.5	226.8	250.5	250.5
67.5°	289.9	286.0	270.2	144.0	35.5	86.8	191.3	209.1	207.1
70°	268.2	262.3	242.6	124.3	25.6	69.0	149.9	163.7	165.7
72.5°	242.6	234.7	209.1	102.6	19.7	51.3	110.5	122.3	122.3
75°	213.0	203.2	173.6	80.9	13.8	35.5	78.9	86.8	86.8
77.5°	177.5	167.7	138.1	59.2	9.9	23.7	53.3	59.2	59.2
80°	140.0	130.2	102.6	41.4	5.9	13.8	33.5	39.4	37.5
82.5°	104.5	94.7	69.0	25.6	3.9	7.9	21.7	21.7	19.7
85°	73.0	67.1	47.3	15.8	2.0	3.9	9.9	3.9	0.0
87.5°	49.3	43.4	29.6	7.9	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



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







(END OF REPORT)