

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: P251849

Luminaire Tested: **LD4B20D010 EU4B10209030 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251849
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: LD4B20D010 EU4B10209030 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: 1562.0 lumens
Efficiency: N/A
Efficacy: 75.1 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

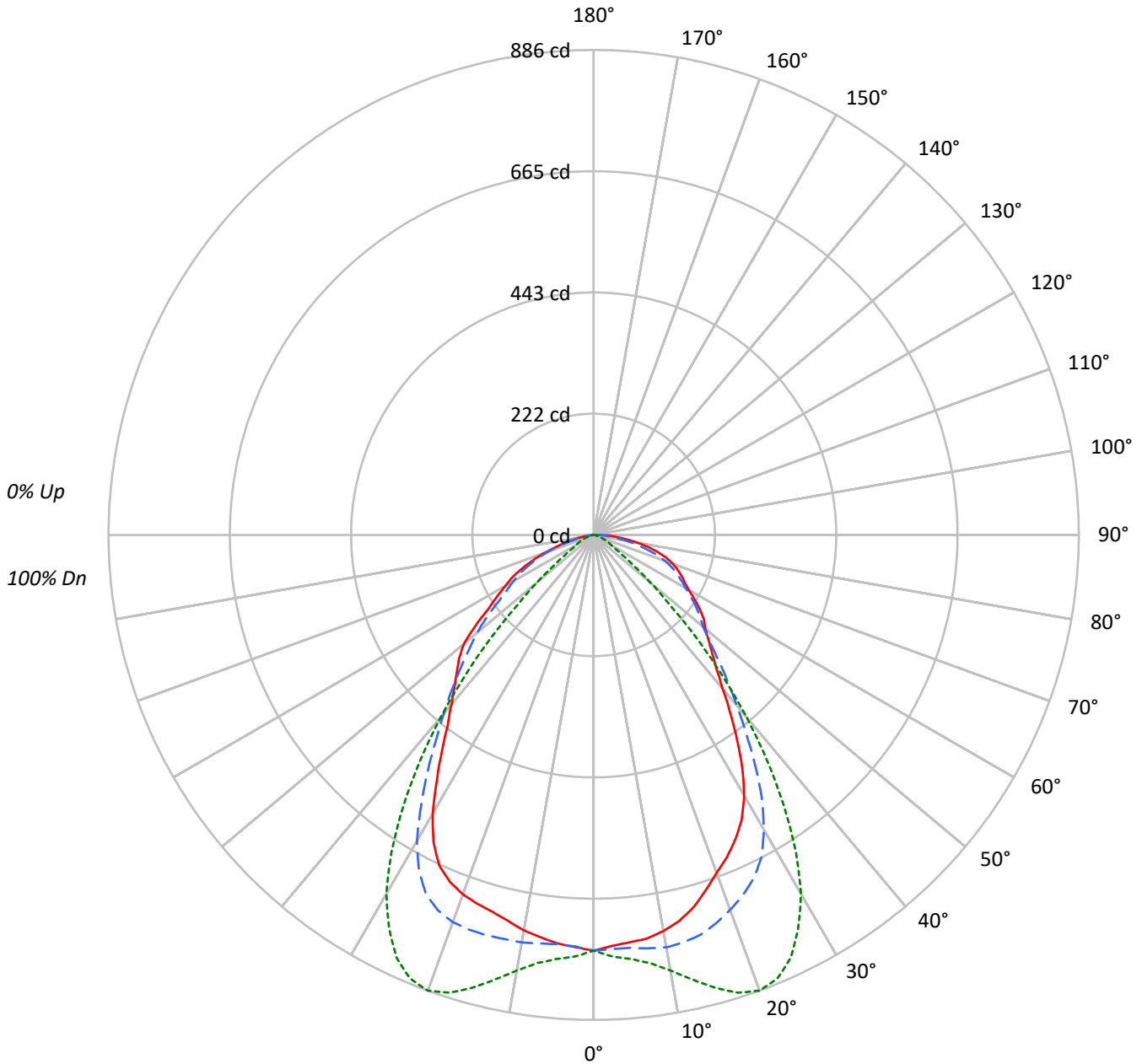
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	189	189	189
5°	187	194	187
10°	186	204	186
15°	182	221	184
20°	174	235	185
25°	168	234	183
30°	158	218	169
35°	139	185	147
40°	119	141	131
45°	108	93	124
50°	103	52	120
55°	103	28	101
60°	100	19	93
65°	104	15	84
70°	112	11	69
75°	117	8	48
80°	115	5	31
85°	119	3	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.7	4.7
10°-20°	217.7	13.9
20°-30°	332.0	21.3
30°-40°	331.4	21.2
40°-50°	244.3	15.6
50°-60°	166.9	10.7
60°-70°	117.9	7.5
70°-80°	62.9	4.0
80°-90°	16.2	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°	622.4	39.8
0°-40°	953.7	61.1
0°-60°	1365.0	87.4
0°-90°	1562.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1562.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	760	760	760	760	760	
5°	747	757	778	750	749	71
15°	704	756	857	757	713	197
25°	613	692	852	724	667	281
35°	456	515	607	529	483	285
45°	306	320	263	343	353	239
55°	237	228	64	212	234	211
65°	177	168	26	130	143	175
75°	122	99	8	45	50	126
85°	42	27	1	6	0	46
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°	759.5	759.5	759.5	759.5	759.5	759.5	759.5	759.5	759.5
2.5°	751.6	756.1	757.2	765.1	770.8	764.0	752.7	752.7	753.9
5°	747.1	752.7	757.2	770.8	777.6	766.3	750.5	748.2	749.4
7.5°	743.7	751.6	761.8	782.1	788.8	774.2	752.7	743.7	741.5
10°	734.7	746.0	765.1	794.5	808.0	790.0	756.1	739.2	733.6
12.5°	722.3	735.8	761.8	808.0	831.7	804.6	756.1	731.3	722.3
15°	704.2	718.9	756.1	819.3	856.6	820.4	757.2	723.4	713.2
17.5°	680.5	698.6	743.7	825.0	876.9	835.1	756.1	717.8	706.5
20°	656.8	678.3	729.0	825.0	885.9	840.8	752.7	712.1	698.6
22.5°	636.5	657.9	712.1	814.8	876.9	834.0	742.6	702.0	686.2
25°	612.8	635.4	691.8	793.4	852.0	813.7	724.5	681.6	667.0
27.5°	585.7	610.5	663.6	759.5	809.2	776.4	690.7	648.9	633.1
30°	549.6	572.2	621.8	711.0	757.2	725.7	645.5	602.6	588.0
32.5°	505.6	525.9	572.2	652.3	687.3	661.3	586.8	550.7	533.8
35°	455.9	474.0	514.6	577.8	607.2	591.4	529.3	495.4	483.0
37.5°	409.7	423.2	457.1	503.3	521.4	511.2	472.9	448.0	437.9
40°	365.6	379.2	406.3	428.8	433.4	436.7	425.5	409.7	404.0
42.5°	331.8	344.2	361.1	358.9	345.3	364.5	382.6	380.3	375.8
45°	305.8	314.9	320.5	286.6	262.9	294.5	343.1	355.5	353.2
47.5°	284.4	288.9	285.5	229.1	186.2	229.1	308.1	332.9	332.9
50°	266.3	269.7	260.7	190.7	134.3	184.0	277.6	304.7	309.2
52.5°	253.9	255.0	243.8	161.4	92.5	145.6	244.9	268.6	272.0
55°	237.0	238.1	228.0	139.9	64.3	115.1	212.2	233.6	233.6
57.5°	217.8	220.1	209.9	121.9	45.1	95.9	187.3	207.7	208.8
60°	199.8	200.9	194.1	108.3	37.2	82.4	169.3	186.2	186.2
62.5°	187.3	188.5	180.6	100.4	31.6	72.2	150.1	165.9	167.0
65°	177.2	177.2	168.2	92.5	26.0	60.9	129.8	143.3	143.3
67.5°	165.9	163.6	154.6	82.4	20.3	49.7	109.5	119.6	118.5
70°	153.5	150.1	138.8	71.1	14.7	39.5	85.8	93.7	94.8
72.5°	138.8	134.3	119.6	58.7	11.3	29.3	63.2	70.0	70.0
75°	121.9	116.2	99.3	46.3	7.9	20.3	45.1	49.7	49.7
77.5°	101.6	95.9	79.0	33.9	5.6	13.5	30.5	33.9	33.9
80°	80.1	74.5	58.7	23.7	3.4	7.9	19.2	22.6	21.4
82.5°	59.8	54.2	39.5	14.7	2.3	4.5	12.4	12.4	11.3
85°	41.8	38.4	27.1	9.0	1.1	2.3	5.6	2.3	0.0
87.5°	28.2	24.8	16.9	4.5	0.0	1.1	1.1	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)