

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: P251843

Luminaire Tested: **LD4B20D010 EU4B10208030 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251843
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 EU4B10208030 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: 1829.0 lumens
Efficiency: N/A
Efficacy: 87.9 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

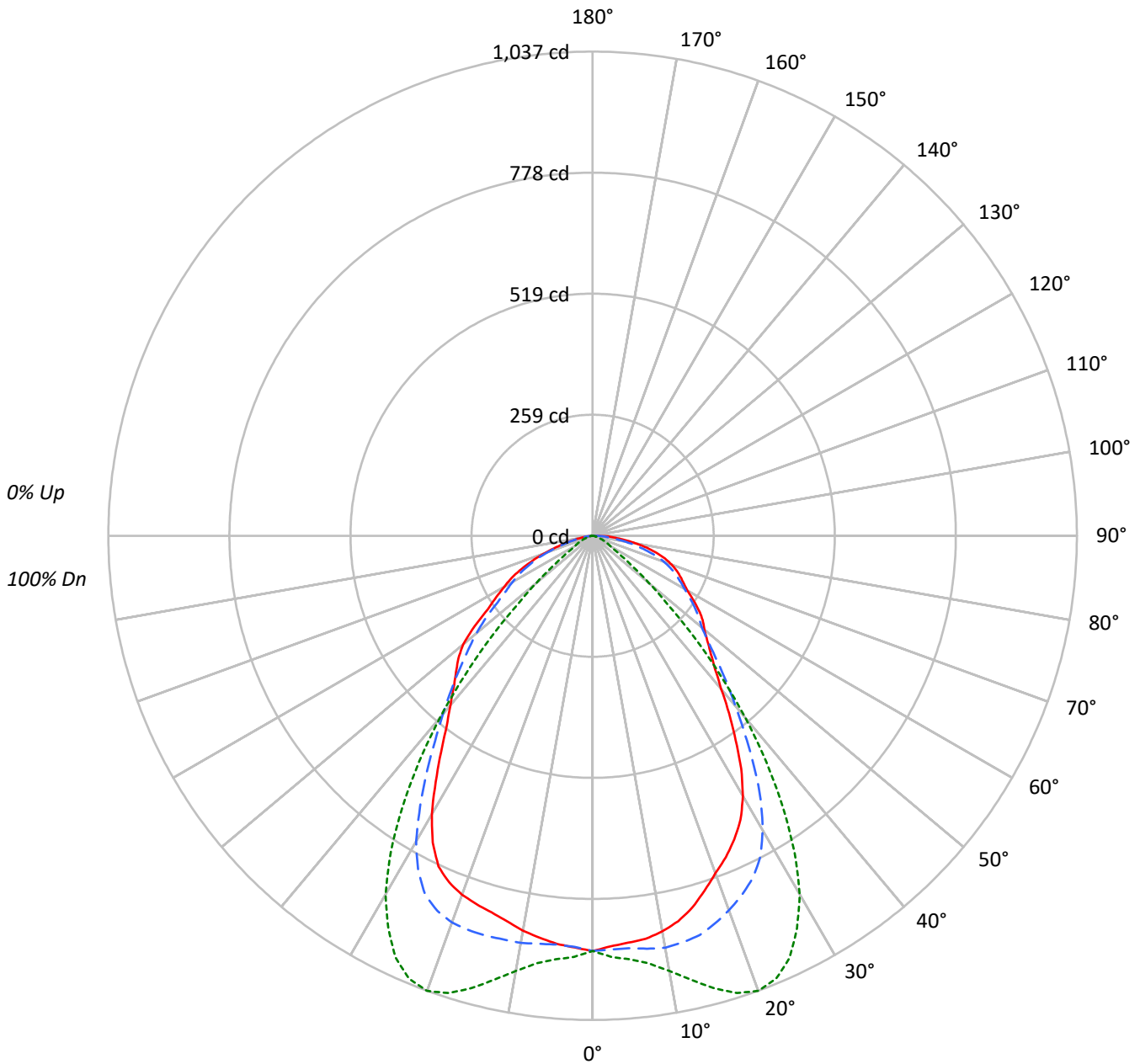
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	222	222	222
5°	219	228	219
10°	218	239	217
15°	213	259	215
20°	204	275	217
25°	197	274	215
30°	185	255	198
35°	162	216	172
40°	139	165	154
45°	126	108	146
50°	121	61	140
55°	121	33	119
60°	117	22	109
65°	122	18	99
70°	131	13	81
75°	137	9	56
80°	135	6	36
85°	140	4	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.2	4.7
10°-20°	254.9	13.9
20°-30°	388.7	21.3
30°-40°	388.0	21.2
40°-50°	286.1	15.6
50°-60°	195.5	10.7
60°-70°	138.0	7.5
70°-80°	73.7	4.0
80°-90°	18.9	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°	728.8	39.8
0°-40°	1116.8	61.1
0°-60°	1598.4	87.4
0°-90°	1829.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1829.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	889	889	889	889	889	
5°	875	887	910	879	877	83
15°	825	885	1003	887	835	231
25°	718	810	998	848	781	329
35°	534	603	711	620	566	334
45°	358	375	308	402	414	279
55°	278	267	75	248	274	247
65°	208	197	30	152	168	205
75°	143	116	9	53	58	148
85°	49	32	1	7	0	54
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°	889.3	889.3	889.3	889.3	889.3	889.3	889.3	889.3	889.3
2.5°	880.1	885.4	886.7	895.9	902.5	894.6	881.4	881.4	882.7
5°	874.8	881.4	886.7	902.5	910.5	897.3	878.8	876.1	877.4
7.5°	870.8	880.1	892.0	915.8	923.7	906.5	881.4	870.8	868.2
10°	860.3	873.5	895.9	930.3	946.2	925.0	885.4	865.5	858.9
12.5°	845.7	861.6	892.0	946.2	973.9	942.2	885.4	856.3	845.7
15°	824.6	841.8	885.4	959.4	1003.0	960.7	886.7	847.0	835.2
17.5°	796.8	818.0	870.8	966.0	1026.8	977.9	885.4	840.4	827.2
20°	769.1	794.2	853.7	966.0	1037.3	984.5	881.4	833.8	818.0
22.5°	745.3	770.4	833.8	954.1	1026.8	976.5	869.5	821.9	803.4
25°	717.5	744.0	810.0	929.0	997.7	952.8	848.4	798.2	781.0
27.5°	685.8	714.9	777.0	889.3	947.5	909.2	808.7	759.8	741.3
30°	643.5	670.0	728.1	832.5	886.7	849.7	755.9	705.7	688.5
32.5°	592.0	615.8	670.0	763.8	804.8	774.4	687.2	644.9	625.0
35°	533.9	555.0	602.6	676.6	710.9	692.4	619.8	580.1	565.6
37.5°	479.7	495.5	535.2	589.4	610.5	598.6	553.7	524.6	512.7
40°	428.1	444.0	475.7	502.1	507.4	511.4	498.2	479.7	473.1
42.5°	388.5	403.0	422.9	420.2	404.4	426.8	448.0	445.3	440.0
45°	358.1	368.7	375.3	335.6	307.9	344.9	401.7	416.3	413.6
47.5°	333.0	338.3	334.3	268.3	218.0	268.3	360.8	389.8	389.8
50°	311.9	315.8	305.3	223.3	157.3	215.4	325.1	356.8	362.1
52.5°	297.3	298.6	285.4	189.0	108.4	170.5	286.8	314.5	318.5
55°	277.5	278.8	266.9	163.9	75.3	134.8	248.4	273.5	273.5
57.5°	255.0	257.7	245.8	142.7	52.9	112.3	219.4	243.1	244.5
60°	233.9	235.2	227.3	126.9	43.6	96.5	198.2	218.0	218.0
62.5°	219.4	220.7	211.4	117.6	37.0	84.6	175.8	194.3	195.6
65°	207.5	207.5	196.9	108.4	30.4	71.4	152.0	167.8	167.8
67.5°	194.3	191.6	181.0	96.5	23.8	58.1	128.2	140.1	138.8
70°	179.7	175.8	162.5	83.3	17.2	46.3	100.4	109.7	111.0
72.5°	162.5	157.3	140.1	68.7	13.2	34.4	74.0	81.9	81.9
75°	142.7	136.1	116.3	54.2	9.3	23.8	52.9	58.1	58.1
77.5°	118.9	112.3	92.5	39.6	6.6	15.9	35.7	39.6	39.6
80°	93.8	87.2	68.7	27.8	4.0	9.3	22.5	26.4	25.1
82.5°	70.0	63.4	46.3	17.2	2.6	5.3	14.5	14.5	13.2
85°	48.9	44.9	31.7	10.6	1.3	2.6	6.6	2.6	0.0
87.5°	33.0	29.1	19.8	5.3	0.0	1.3	1.3	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)