

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: P251853

Luminaire Tested: **LD4B20D010 EU4B10209727 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251853
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 EU4B10209727 4LBDW1LI
Description: PORTFOLIO 4 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 97CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1306.0 lumens
Efficiency: N/A
Efficacy: 62.8 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

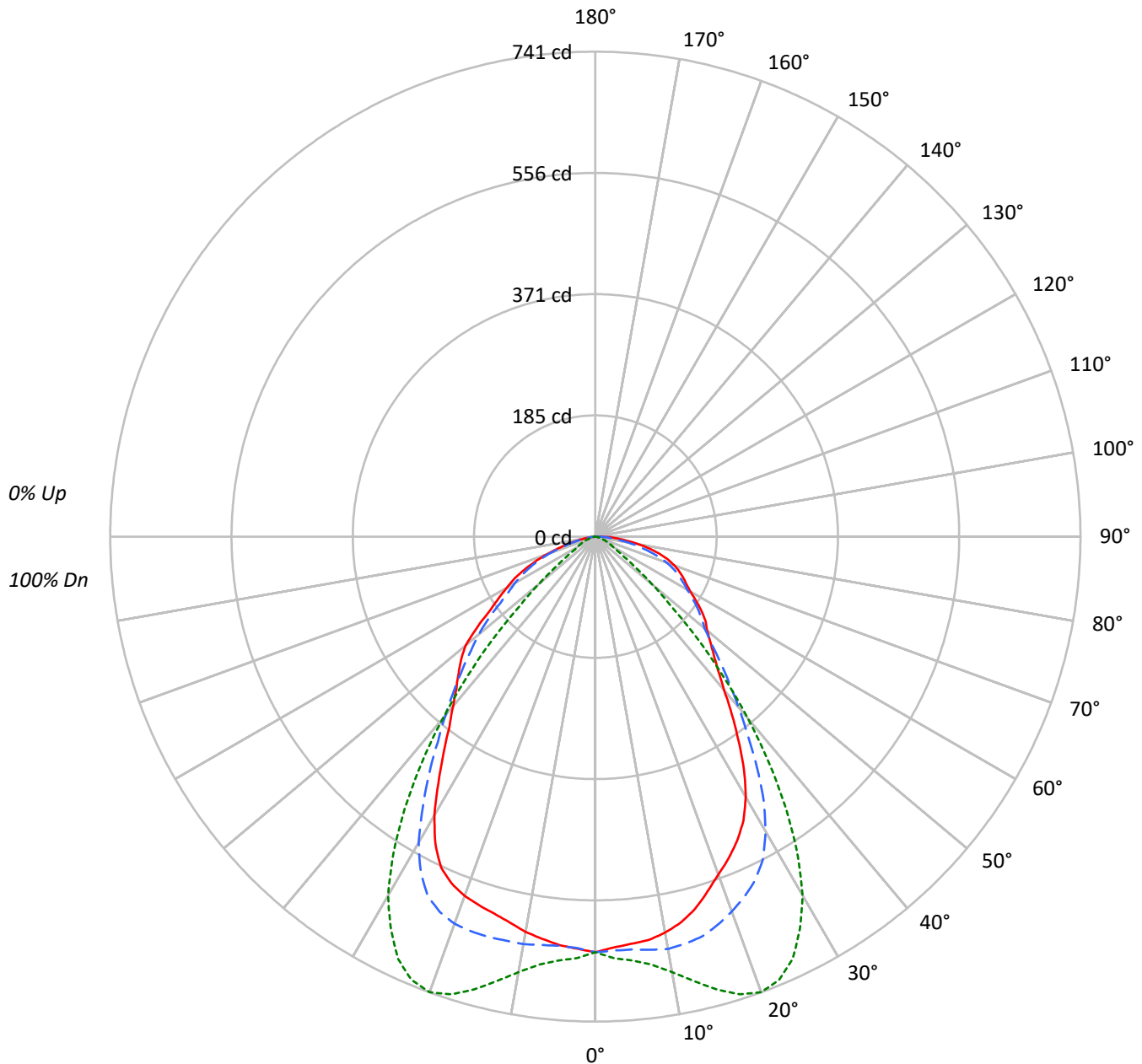
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10		50	30	10			50	30	10			50
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	110	106	103	100	108	104	101	98		100	97	95			96	94	92			93
2	102	95	89	84	100	93	88	83		90	85	81			87	83	80			84
3	94	85	78	72	92	84	77	72		81	75	71			78	73	69			76
4	87	77	69	63	85	76	68	63		73	67	62			71	66	61			69
5	81	70	62	56	79	69	61	56		67	60	55			65	59	54			63
6	76	64	56	50	74	63	55	50		61	54	49			59	53	49			58
7	71	58	50	45	69	58	50	45		56	49	44			55	49	44			54
8	66	54	46	41	65	53	46	41		52	45	40			51	45	40			50
9	62	50	42	37	61	49	42	37		48	42	37			47	41	37			46
10	58	46	39	34	57	46	39	34		45	38	34			44	38	34			43

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	158	158	158
5°	156	163	157
10°	155	171	155
15°	152	185	154
20°	146	196	155
25°	141	196	153
30°	132	182	141
35°	116	154	123
40°	99	118	110
45°	90	77	104
50°	86	44	100
55°	86	23	85
60°	83	15	78
65°	87	13	71
70°	93	9	58
75°	98	6	40
80°	96	4	26
85°	100	3	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.8	4.7
10°-20°	182.0	13.9
20°-30°	277.6	21.3
30°-40°	277.1	21.2
40°-50°	204.3	15.6
50°-60°	139.6	10.7
60°-70°	98.5	7.5
70°-80°	52.6	4.0
80°-90°	13.5	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°	520.4	39.8
0°-40°	797.4	61.1
0°-60°	1141.3	87.4
0°-90°	1306.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1306.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	635	635	635	635	635	
5°	625	633	650	628	626	59
15°	589	632	716	633	596	165
25°	512	578	712	606	558	235
35°	381	430	508	442	404	238
45°	256	268	220	287	295	200
55°	198	191	54	177	195	176
65°	148	141	22	108	120	146
75°	102	83	7	38	42	106
85°	35	23	1	5	0	39
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°	635.0	635.0	635.0	635.0	635.0	635.0	635.0	635.0	635.0
2.5°	628.4	632.2	633.1	639.7	644.5	638.8	629.4	629.4	630.3
5°	624.7	629.4	633.1	644.5	650.1	640.7	627.5	625.6	626.5
7.5°	621.8	628.4	636.9	653.9	659.6	647.3	629.4	621.8	619.9
10°	614.3	623.7	639.7	664.3	675.6	660.5	632.2	618.0	613.3
12.5°	603.9	615.2	636.9	675.6	695.4	672.8	632.2	611.4	603.9
15°	588.8	601.1	632.2	685.0	716.2	686.0	633.1	604.8	596.3
17.5°	569.0	584.1	621.8	689.8	733.2	698.2	632.2	600.1	590.7
20°	549.2	567.1	609.6	689.8	740.7	703.0	629.4	595.4	584.1
22.5°	532.2	550.1	595.4	681.3	733.2	697.3	620.9	586.9	573.7
25°	512.4	531.2	578.4	663.3	712.4	680.3	605.8	569.9	557.7
27.5°	489.7	510.5	554.8	635.0	676.5	649.2	577.5	542.6	529.3
30°	459.5	478.4	519.9	594.5	633.1	606.7	539.7	503.9	491.6
32.5°	422.7	439.7	478.4	545.4	574.6	552.9	490.7	460.5	446.3
35°	381.2	396.3	430.3	483.1	507.6	494.4	442.5	414.2	403.9
37.5°	342.5	353.8	382.1	420.8	435.9	427.4	395.4	374.6	366.1
40°	305.7	317.0	339.7	358.6	362.3	365.2	355.7	342.5	337.8
42.5°	277.4	287.8	301.9	300.1	288.7	304.8	319.9	318.0	314.2
45°	255.7	263.3	268.0	239.7	219.9	246.3	286.8	297.2	295.3
47.5°	237.8	241.6	238.7	191.5	155.7	191.5	257.6	278.4	278.4
50°	222.7	225.5	218.0	159.5	112.3	153.8	232.1	254.8	258.5
52.5°	212.3	213.2	203.8	134.9	77.4	121.7	204.8	224.6	227.4
55°	198.2	199.1	190.6	117.0	53.8	96.2	177.4	195.3	195.3
57.5°	182.1	184.0	175.5	101.9	37.7	80.2	156.6	173.6	174.6
60°	167.0	168.0	162.3	90.6	31.1	68.9	141.5	155.7	155.7
62.5°	156.6	157.6	151.0	84.0	26.4	60.4	125.5	138.7	139.6
65°	148.1	148.1	140.6	77.4	21.7	51.0	108.5	119.8	119.8
67.5°	138.7	136.8	129.3	68.9	17.0	41.5	91.5	100.0	99.1
70°	128.3	125.5	116.1	59.4	12.3	33.0	71.7	78.3	79.3
72.5°	116.1	112.3	100.0	49.1	9.4	24.5	52.8	58.5	58.5
75°	101.9	97.2	83.0	38.7	6.6	17.0	37.7	41.5	41.5
77.5°	84.9	80.2	66.1	28.3	4.7	11.3	25.5	28.3	28.3
80°	67.0	62.3	49.1	19.8	2.8	6.6	16.0	18.9	17.9
82.5°	50.0	45.3	33.0	12.3	1.9	3.8	10.4	10.4	9.4
85°	34.9	32.1	22.6	7.5	0.9	1.9	4.7	1.9	0.0
87.5°	23.6	20.8	14.2	3.8	0.0	0.9	0.9	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)