

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: P251844

Luminaire Tested: **LD4B20D010 EU4B10208035 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251844
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 EU4B10208035 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: 1874.0 lumens
Efficiency: N/A
Efficacy: 90.1 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

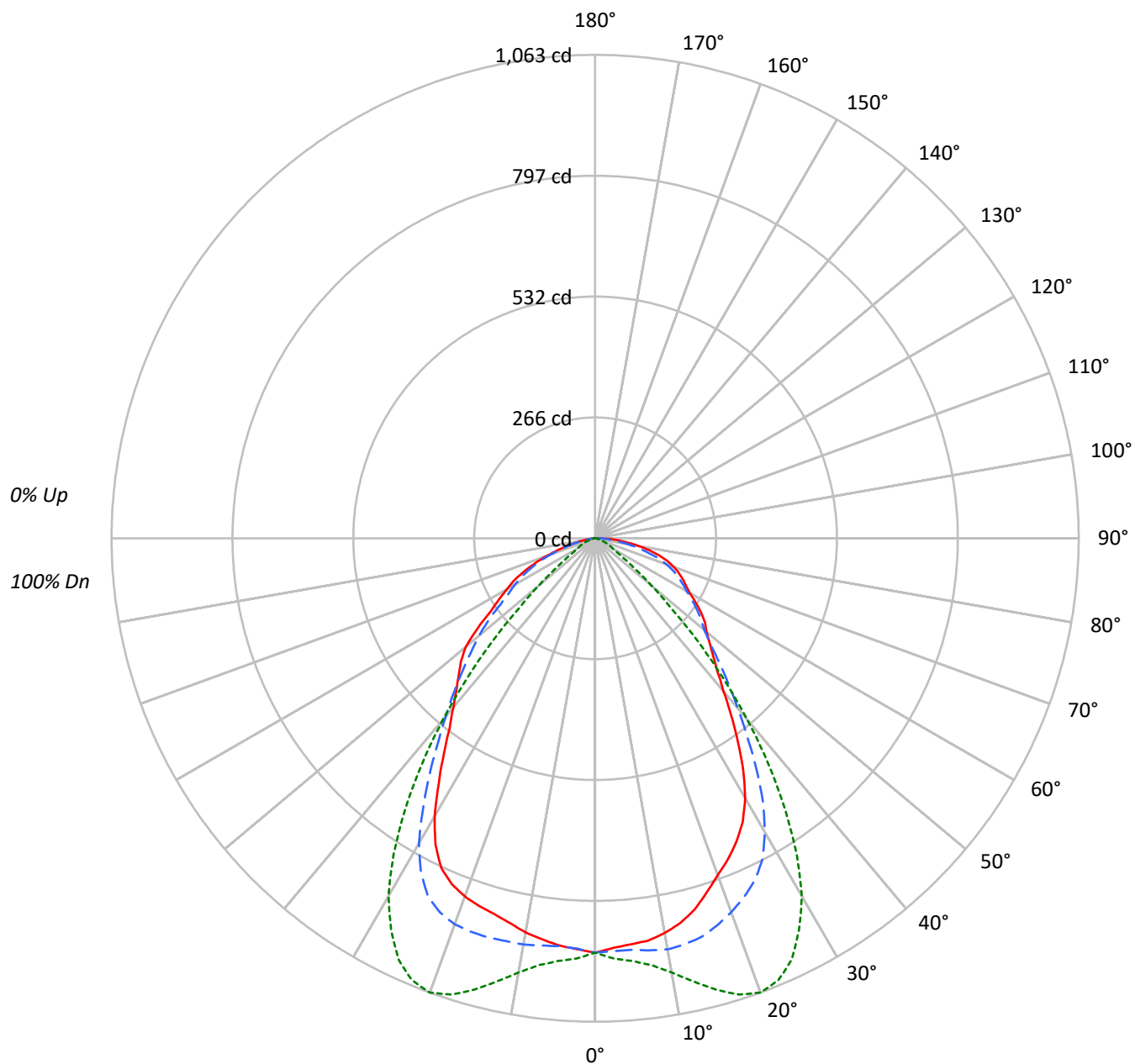
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	227	227	227
5°	224	233	225
10°	223	245	223
15°	218	265	221
20°	209	282	222
25°	202	281	220
30°	190	261	203
35°	166	222	176
40°	143	169	158
45°	129	111	149
50°	124	62	144
55°	123	34	122
60°	119	22	111
65°	125	18	101
70°	134	13	83
75°	141	9	57
80°	138	6	37
85°	143	4	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.2	4.7
10°-20°	261.1	13.9
20°-30°	398.3	21.3
30°-40°	397.6	21.2
40°-50°	293.2	15.6
50°-60°	200.3	10.7
60°-70°	141.4	7.5
70°-80°	75.5	4.0
80°-90°	19.4	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°	746.7	39.8
0°-40°	1144.3	61.1
0°-60°	1637.7	87.4
0°-90°	1874.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1874.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	911	911	911	911	911	
5°	896	908	933	900	899	85
15°	845	907	1028	908	856	237
25°	735	830	1022	869	800	337
35°	547	617	728	635	580	342
45°	367	384	316	412	424	286
55°	284	274	77	254	280	253
65°	213	202	31	156	172	210
75°	146	119	10	54	60	152
85°	50	32	1	7	0	55
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°	911.2	911.2	911.2	911.2	911.2	911.2	911.2	911.2	911.2
2.5°	901.7	907.2	908.5	918.0	924.8	916.6	903.1	903.1	904.4
5°	896.3	903.1	908.5	924.8	932.9	919.3	900.4	897.7	899.0
7.5°	892.3	901.7	913.9	938.3	946.4	928.8	903.1	892.3	889.6
10°	881.4	895.0	918.0	953.2	969.4	947.8	907.2	886.8	880.1
12.5°	866.5	882.8	913.9	969.4	997.9	965.4	907.2	877.4	866.5
15°	844.9	862.5	907.2	983.0	1027.7	984.3	908.5	867.9	855.7
17.5°	816.4	838.1	892.3	989.7	1052.0	1001.9	907.2	861.1	847.6
20°	788.0	813.7	874.7	989.7	1062.9	1008.7	903.1	854.3	838.1
22.5°	763.6	789.4	854.3	977.6	1052.0	1000.6	890.9	842.2	823.2
25°	735.2	762.3	830.0	951.8	1022.2	976.2	869.2	817.8	800.2
27.5°	702.7	732.5	796.1	911.2	970.8	931.5	828.6	778.5	759.6
30°	659.4	686.5	746.0	853.0	908.5	870.6	774.5	723.0	705.4
32.5°	606.6	630.9	686.5	782.6	824.6	793.4	704.1	660.7	640.4
35°	547.0	568.7	617.4	693.2	728.4	709.5	635.0	594.4	579.5
37.5°	491.5	507.7	548.4	603.9	625.5	613.3	567.3	537.5	525.3
40°	438.7	454.9	487.4	514.5	519.9	524.0	510.4	491.5	484.7
42.5°	398.1	413.0	433.3	430.6	414.3	437.3	459.0	456.3	450.9
45°	366.9	377.8	384.5	343.9	315.5	353.4	411.6	426.5	423.8
47.5°	341.2	346.6	342.6	274.9	223.4	274.9	369.6	399.4	399.4
50°	319.5	323.6	312.8	228.8	161.1	220.7	333.1	365.6	371.0
52.5°	304.6	306.0	292.5	193.6	111.0	174.7	293.8	322.2	326.3
55°	284.3	285.7	273.5	167.9	77.2	138.1	254.5	280.3	280.3
57.5°	261.3	264.0	251.8	146.2	54.2	115.1	224.8	249.1	250.5
60°	239.7	241.0	232.9	130.0	44.7	98.8	203.1	223.4	223.4
62.5°	224.8	226.1	216.6	120.5	37.9	86.7	180.1	199.0	200.4
65°	212.6	212.6	201.7	111.0	31.1	73.1	155.7	172.0	172.0
67.5°	199.0	196.3	185.5	98.8	24.4	59.6	131.3	143.5	142.2
70°	184.1	180.1	166.5	85.3	17.6	47.4	102.9	112.4	113.7
72.5°	166.5	161.1	143.5	70.4	13.5	35.2	75.8	83.9	83.9
75°	146.2	139.5	119.1	55.5	9.5	24.4	54.2	59.6	59.6
77.5°	121.9	115.1	94.8	40.6	6.8	16.2	36.6	40.6	40.6
80°	96.1	89.4	70.4	28.4	4.1	9.5	23.0	27.1	25.7
82.5°	71.8	65.0	47.4	17.6	2.7	5.4	14.9	14.9	13.5
85°	50.1	46.0	32.5	10.8	1.4	2.7	6.8	2.7	0.0
87.5°	33.8	29.8	20.3	5.4	0.0	1.4	1.4	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)