

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: P274467

Luminaire Tested: **LD6B10DE010W2N2050 EU6B1020W2N902050 6LBSQ0LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P274467
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35088)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B10DE010W2N2050 EU6B1020W2N902050 6LBSQ0LI
Description: PORTFOLIO 6" W2N SQ DOWNLIGHT WITH SPECULAR FINISH
Light Source: W2N 2000K-5000K CCT TUNING RANGE
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 937.1 lumens
Efficiency: N/A
Efficacy: 66.9 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.9 / 0.94
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

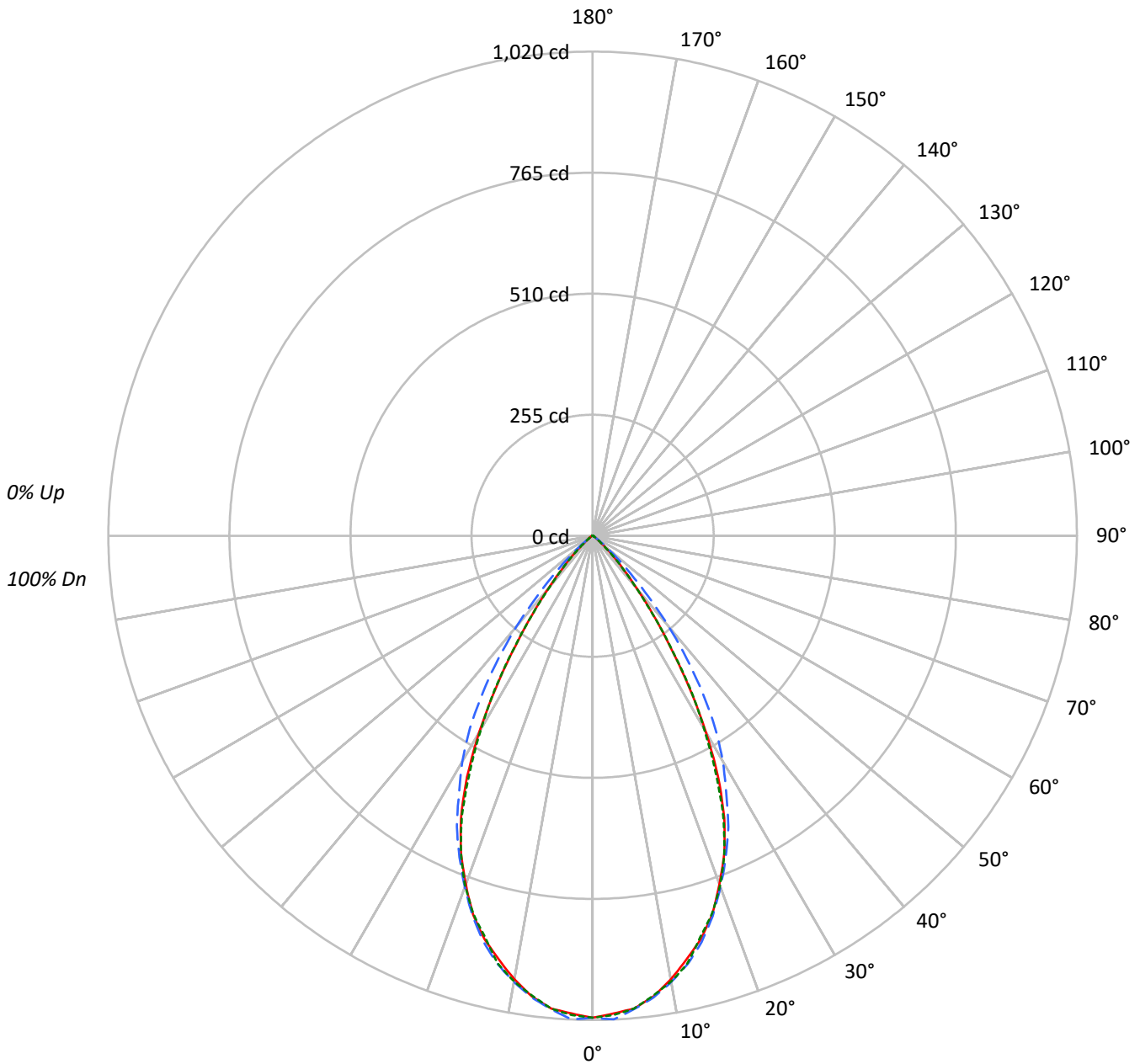
Input Watts (W): 14
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10	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	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93					93			
2	108	103	99	95	105	101	97	94	98	95	92	95	92	90	92	90	88	87					87			
3	102	96	91	87	100	94	90	86	92	88	84	89	86	83	87	84	82	80					80			
4	97	89	84	79	95	88	83	79	86	81	78	84	80	77	82	79	76	75					75			
5	92	83	77	73	90	82	77	73	81	76	72	79	75	71	77	74	71	69					69			
6	87	78	72	68	86	77	72	67	76	71	67	74	70	66	73	69	66	65					65			
7	83	73	67	63	81	73	67	63	71	66	62	70	65	62	69	65	62	60					60			
8	79	69	63	59	77	68	62	58	67	62	58	66	61	58	65	61	58	56					56			
9	75	65	59	55	74	64	59	55	63	58	55	63	58	54	62	57	54	53					53			
10	71	61	55	51	70	61	55	51	60	55	51	59	54	51	58	54	51	50					50			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	43710	43710	43710
5°	43207	43263	43207
10°	41477	41731	41678
15°	39212	39502	39012
20°	35785	36055	35963
25°	31160	32143	30946
30°	23695	27255	23342
35°	14917	21187	15054
40°	8049	13995	7902
45°	3812	6911	3769
50°	1427	2592	1427
55°	676	826	631
60°	448	388	448
65°	265	265	265
70°	164	239	164
75°	100	100	100
80°	149	149	149
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.1	10.0
10°-20°	246.7	26.3
20°-30°	301.3	32.2
30°-40°	210.8	22.5
40°-50°	69.1	7.4
50°-60°	11.0	1.2
60°-70°	3.0	0.3
70°-80°	1.0	0.1
80°-90°	0.3	0.0
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°	642.1	68.5
0°-40°	852.9	91.0
0°-60°	932.9	99.6
0°-90°	937.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	937.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1015	1015	1015	1015	1015	
5°	1000	1000	1001	995	1000	94
15°	880	883	886	880	875	245
25°	656	666	677	664	651	295
35°	284	335	403	330	286	181
45°	63	77	114	76	62	52
55°	9	10	11	10	8	9
65°	3	3	3	3	3	3
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1015.2	1015.2	1015.2	1015.2	1015.2	1015.2	1015.2	1015.2	1015.2	1015.2	1015.2
2.5°	1007.4	1014.5	1012.6	1017.1	1017.1	1011.9	1013.2	1015.2	1017.7	1019.7	1004.2
5°	999.7	1006.1	1000.3	1006.8	1002.9	997.1	1006.8	1001.6	1004.8	1001.0	1003.6
7.5°	979.1	989.4	977.8	985.5	982.9	979.7	983.6	982.3	984.2	981.0	973.9
10°	948.7	957.1	949.4	960.3	955.2	952.0	955.2	958.4	957.8	954.5	958.4
12.5°	913.9	923.6	919.7	926.2	920.4	920.4	928.1	926.2	926.8	924.2	928.7
15°	879.7	886.8	881.0	889.4	886.8	879.7	883.0	883.0	888.1	886.2	881.0
17.5°	837.2	843.0	836.5	838.4	835.9	834.6	848.1	839.1	844.3	840.4	841.0
20°	781.0	783.6	781.7	786.9	783.6	787.5	786.2	784.9	784.9	786.9	782.3
22.5°	724.3	724.3	726.2	727.5	730.1	726.2	734.0	727.5	728.2	732.7	731.4
25°	655.9	654.0	658.5	665.0	667.5	664.3	674.6	669.5	673.3	676.6	669.5
27.5°	572.7	572.7	577.2	588.2	590.1	594.0	608.2	608.2	613.4	608.8	614.0
30°	476.6	483.7	489.5	503.7	508.2	516.6	531.4	538.5	550.2	548.2	545.6
32.5°	377.9	387.6	388.3	403.1	415.4	429.5	449.5	466.3	474.7	480.5	474.0
35°	283.8	289.6	294.7	305.1	325.7	344.4	362.5	384.4	399.2	403.1	397.3
37.5°	207.7	209.0	214.1	223.8	239.3	257.3	279.3	303.1	318.6	324.4	318.0
40°	143.2	144.5	147.1	155.4	168.3	181.2	198.6	223.2	237.3	249.0	240.6
42.5°	96.1	97.4	100.0	106.4	113.5	125.8	139.3	154.8	168.3	173.5	169.0
45°	62.6	62.6	63.9	68.4	72.2	81.9	91.6	101.3	110.3	113.5	110.3
47.5°	36.8	37.4	38.7	41.9	46.4	50.3	57.4	63.9	66.4	69.0	67.7
50°	21.3	21.3	23.2	25.2	28.4	31.0	33.5	36.1	37.4	38.7	37.4
52.5°	11.6	12.3	12.9	13.5	14.8	17.4	19.3	19.3	20.0	20.6	20.0
55°	9.0	9.0	9.0	9.0	9.7	9.7	9.7	10.3	10.3	11.0	10.3
57.5°	6.4	6.4	6.4	7.1	7.1	7.1	6.4	6.4	6.4	6.4	6.4
60°	5.2	5.2	5.2	5.2	5.2	5.2	5.2	4.5	4.5	4.5	4.5
62.5°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
65°	2.6	2.6	3.2	3.2	3.2	3.2	3.2	2.6	2.6	2.6	2.6
67.5°	1.9	1.9	1.9	1.9	2.6	2.6	1.9	1.9	1.9	1.9	1.9
70°	1.3	1.3	1.3	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
72.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
75°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
77.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
80°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P274467

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1015.2	1015.2	1015.2	1015.2	1015.2	1015.2	1015.2	1015.2
2.5°	1015.2	1004.2	1005.5	1011.3	1008.1	1011.3	1010.7	1010.7
5°	1004.2	1001.0	995.8	993.9	997.8	1006.1	1004.8	999.7
7.5°	983.6	975.2	981.0	983.6	980.3	985.5	988.1	977.1
10°	959.1	955.8	954.5	955.8	954.5	959.7	953.3	953.3
12.5°	924.2	919.1	919.1	926.8	922.3	918.4	923.6	922.9
15°	889.4	879.1	879.1	881.7	883.6	881.0	881.7	875.2
17.5°	837.8	834.6	830.1	837.2	839.1	836.5	838.4	835.2
20°	789.4	789.4	781.0	784.3	786.9	788.8	790.1	784.9
22.5°	727.5	728.8	723.0	729.5	731.4	724.9	726.2	724.9
25°	670.8	670.1	665.6	663.0	664.3	661.7	661.1	651.4
27.5°	608.2	601.7	592.1	594.7	583.7	574.7	574.7	559.8
30°	540.5	529.5	516.6	503.7	494.0	483.7	477.9	469.5
32.5°	461.1	446.3	430.2	412.8	401.8	386.3	377.9	382.5
35°	382.5	360.5	338.6	321.2	304.4	295.4	285.1	286.4
37.5°	306.4	275.4	256.0	237.3	223.2	211.5	207.0	205.7
40°	223.8	199.3	179.9	166.4	156.7	147.7	142.5	140.6
42.5°	154.8	137.4	121.9	110.9	104.5	98.7	96.1	95.5
45°	100.6	90.3	80.0	72.2	67.1	63.2	62.6	61.9
47.5°	63.2	58.0	51.6	45.8	41.3	38.7	36.8	36.8
50°	36.1	34.2	31.0	27.7	25.2	23.9	21.9	21.3
52.5°	19.3	19.3	18.1	15.5	13.5	12.3	12.3	11.6
55°	10.3	10.3	9.7	9.7	9.0	9.0	9.0	8.4
57.5°	6.4	6.4	7.1	7.1	6.4	6.4	6.4	6.4
60°	4.5	5.2	5.2	5.2	5.2	5.2	5.2	5.2
62.5°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
65°	2.6	3.2	3.2	3.2	3.2	2.6	2.6	2.6
67.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
70°	1.9	1.9	1.9	1.9	1.9	1.3	1.3	1.3
72.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
75°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
77.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
80°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
90°	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)