

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: PORTFOLIO

Report Number: P496583

Luminaire Tested: **LDA2B109050R30D010 2LBD1MW-30DEG TILT**

Issue Date: 3/8/2021

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



**Test Information**

Test Method: LM-79-08  
Report Number: P496583  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-037-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/8/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LDA2B109050R30D010 2LBD1MW-30DEG TILT  
Description: 1000 LUMEN 2IN ADJUSTABLE LED LUMINAIRE WITH 90 CRI LEDS AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

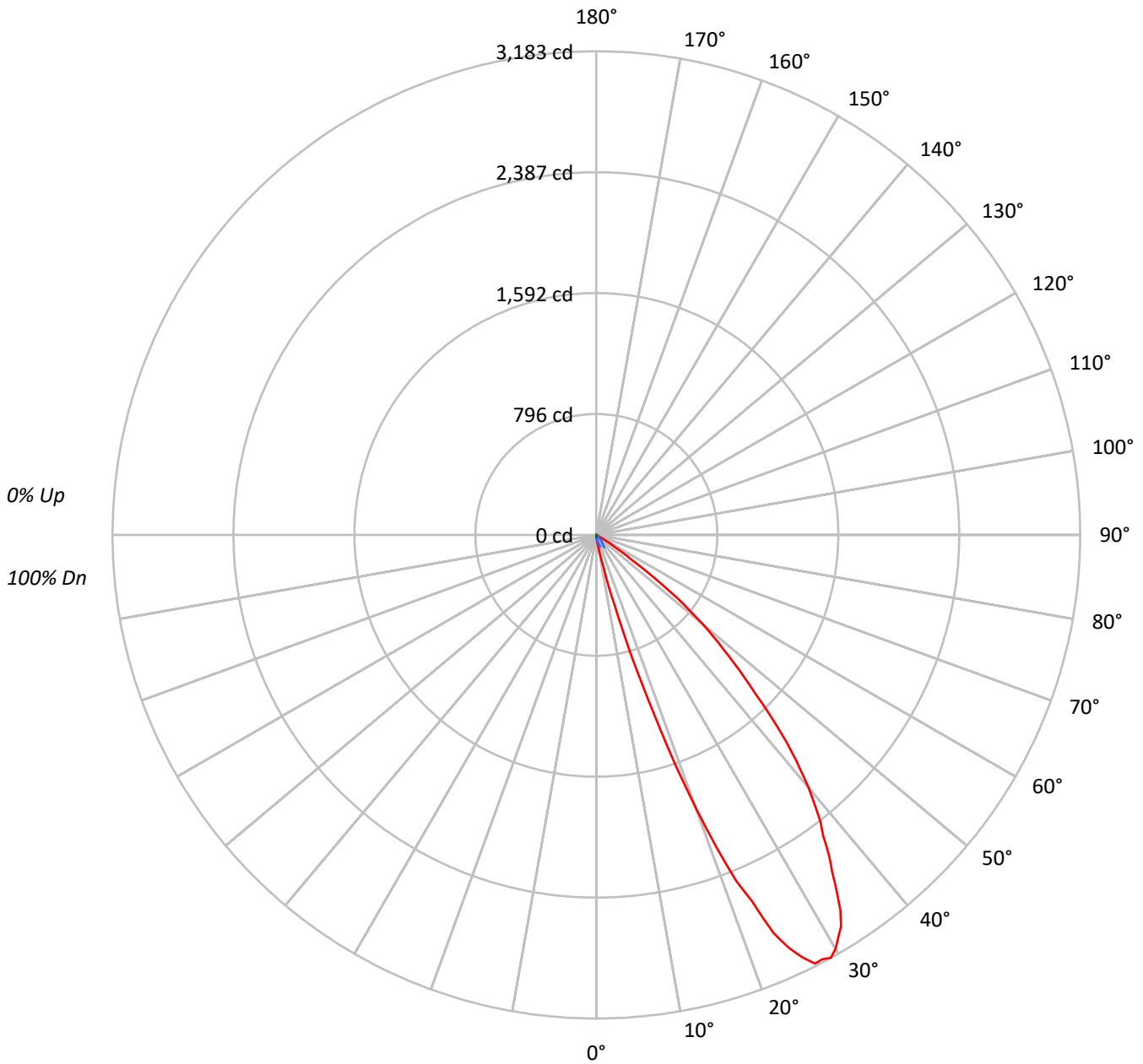
Lumens per Lamp: N/A  
Luminaire Lumens: 640.2 lumens  
Efficiency: N/A  
Efficacy: 64.0 lumens/watt  
Spacing Criteria (0/90/45): 3.2 / 0.53 / 1.4  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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

TEST NUMBER: P496583

CATALOG NUMBER: LDA2B109050R30D010 2LBD1MW-30DEG TILT

### Luminous Intensity Polar Plot



— 0°-180°    - - 45°-225°    - - - 90°-270°



TEST NUMBER: P496583

CATALOG NUMBER: LDA2B109050R30D010 2LBD1MW-30DEG TILT

**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	112	109	106	103	109	106	104	101	102	100	98	98	97	95	95	94	92	90					90			
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80					80			
3	97	89	83	77	95	87	82	77	85	80	76	82	78	74	80	76	73	71					71			
4	90	80	73	68	88	79	72	67	77	71	66	75	70	66	73	68	65	63					63			
5	83	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	57	56					56			
6	77	66	58	52	76	65	58	52	63	57	52	62	56	51	60	55	51	49					49			
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44					44			
8	66	54	46	41	65	54	46	41	52	46	41	51	45	41	50	44	40	39					39			
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34					34			
10	57	45	38	33	56	45	37	33	44	37	32	43	37	32	42	36	32	31					31			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	7104	7104	7104
5°	15402	6438	4606
10°	46290	5561	3006
15°	280666	4035	2350
20°	1004950	2205	998
25°	1633202	762	0
30°	1792457	285	0
35°	1628936	0	0
40°	1398078	0	0
45°	1036322	0	0
50°	700759	0	0
55°	236713	430	0
60°	33845	888	0
65°	2685	1051	0
70°	0	1298	0
75°	0	2669	0
80°	0	2557	0
85°	0	5095	0



TEST NUMBER: P496583

CATALOG NUMBER: LDA2B109050R30D010 2LBD1MW-30DEG TILT

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1.9	0.3
10°-20°	33.0	5.2
20°-30°	187.2	29.2
30°-40°	243.9	38.1
40°-50°	142.9	22.3
50°-60°	28.9	4.5
60°-70°	1.1	0.2
70°-80°	0.8	0.1
80°-90°	0.6	0.1
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°	222.1	34.7
0°-40°	466.0	72.8
0°-60°	637.8	99.6
0°-90°	640.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	640.2	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	14	14	14	14	14	
5°	31	22	13	10	9	5
15°	550	63	8	5	5	233
25°	3000	105	1	1	0	1327
35°	2705	77	0	0	0	1684
45°	1485	19	0	0	0	1160
55°	275	2	0	0	0	321
65°	2	0	1	1	0	7
75°	0	1	1	1	0	0
85°	0	1	1	1	0	0
90°	0	0	0	0	0	



TEST NUMBER: P496583

CATALOG NUMBER: LDA2B109050R30D010 2LBD1MW-30DEG TILT

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4
2.5°	19.5	18.1	17.2	14.9	13.5	12.5	12.1	11.6	11.1
5°	31.1	28.8	22.3	16.2	13.0	11.1	10.2	9.3	9.3
7.5°	53.4	43.2	29.2	17.2	12.1	9.7	8.8	7.4	7.0
10°	92.4	71.9	39.9	18.1	11.1	8.8	7.0	6.5	6.0
12.5°	216.8	131.4	50.6	18.1	9.7	7.4	6.0	5.6	5.1
15°	549.5	267.8	62.7	17.2	7.9	5.6	5.1	4.6	4.6
17.5°	1139.9	550.0	76.1	15.8	6.5	4.2	3.7	3.2	3.2
20°	1914.1	985.8	89.1	13.5	4.2	2.8	2.3	1.9	1.9
21°	2199.1	1144.1	95.6	12.5	3.7	2.3	1.9	1.9	1.4
22°	2455.3	1289.4	99.3	12.1	2.8	1.9	1.9	1.4	1.4
23°	2620.6	1473.7	102.6	10.7	2.3	1.4	1.4	0.9	0.5
24°	2869.8	1618.0	104.0	9.7	1.9	1.4	0.9	0.5	0.5
25°	3000.2	1748.9	105.4	8.8	1.4	1.4	0.9	0.5	0.0
26°	3094.0	1852.4	110.5	8.4	1.4	0.9	0.9	0.5	0.0
27°	3167.3	1918.3	113.3	7.4	0.9	0.9	0.9	0.0	0.0
28°	3163.2	1966.1	110.9	6.5	0.9	0.9	0.5	0.0	0.0
29°	3183.1	1998.6	109.5	5.6	0.5	0.5	0.5	0.0	0.0
30°	3146.4	2001.4	104.4	5.1	0.5	0.5	0.5	0.0	0.0
31°	3090.8	1967.5	102.6	4.6	0.0	0.5	0.5	0.0	0.0
32°	3038.3	1952.2	96.5	3.7	0.0	0.5	0.5	0.0	0.0
33°	2948.3	1883.5	90.5	3.2	0.0	0.5	0.0	0.0	0.0
34°	2827.6	1816.2	84.9	2.8	0.0	0.5	0.0	0.0	0.0
35°	2704.6	1760.5	77.0	2.8	0.0	0.5	0.0	0.0	0.0
36°	2602.5	1659.3	71.5	2.3	0.0	0.5	0.0	0.0	0.0
37°	2478.5	1572.5	64.1	1.9	0.0	0.0	0.0	0.0	0.0
38°	2394.1	1450.5	58.5	1.9	0.0	0.0	0.0	0.0	0.0
39°	2280.4	1347.4	51.5	1.4	0.0	0.0	0.0	0.0	0.0
40°	2170.8	1240.7	44.6	0.9	0.0	0.0	0.0	0.0	0.0
42.5°	1856.6	957.1	30.6	0.5	0.0	0.0	0.0	0.0	0.0
45°	1485.3	701.8	19.0	0.0	0.0	0.0	0.0	0.0	0.0
47.5°	1179.4	473.9	12.1	0.0	0.0	0.0	0.0	0.0	0.0
50°	913.0	244.1	7.0	0.0	0.0	0.0	0.0	0.0	0.0
52.5°	607.1	103.5	4.2	0.0	0.0	0.5	0.0	0.0	0.0
55°	275.2	53.8	1.9	0.0	0.5	0.5	0.5	0.0	0.0
57.5°	110.9	23.2	0.9	0.5	0.5	0.5	0.5	0.0	0.0
60°	34.3	6.5	0.5	0.5	0.9	0.9	0.5	0.0	0.0
62.5°	7.0	1.4	0.5	0.9	0.9	0.9	0.5	0.0	0.0
65°	2.3	0.5	0.5	0.9	0.9	0.9	0.9	0.0	0.0
67.5°	0.5	0.5	0.5	0.9	0.9	0.9	0.9	0.5	0.0
70°	0.0	0.5	0.9	0.9	0.9	1.4	0.9	0.5	0.0
72.5°	0.0	0.5	0.9	0.9	0.9	0.9	0.9	0.5	0.0
75°	0.0	0.5	0.9	0.9	1.4	1.4	0.9	0.5	0.0
77.5°	0.0	0.5	0.9	0.9	0.9	0.9	0.9	0.5	0.0
80°	0.0	0.5	0.9	0.9	0.9	0.9	0.9	0.5	0.0



TEST NUMBER: P496583

CATALOG NUMBER: LDA2B109050R30D010 2LBD1MW-30DEG TILT

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
82.5°	0.0	0.5	0.9	0.9	0.9	0.9	0.9	0.5	0.0
85°	0.0	0.5	0.9	0.9	0.9	0.9	0.9	0.0	0.0
87.5°	0.0	0.5	0.9	0.9	0.9	0.9	0.5	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)