

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: P495488

Luminaire Tested: **LDA2B109024R20D010 2LBDLC1MMS-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: P495488  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-037-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/8/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LDA2B109024R20D010 2LBDLC1MMS-30DEG TILT  
Description: 1000 LUMEN 2IN ADJUSTABLE LED LUMINAIRE WITH 90 CRI LEDS AND 2400K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

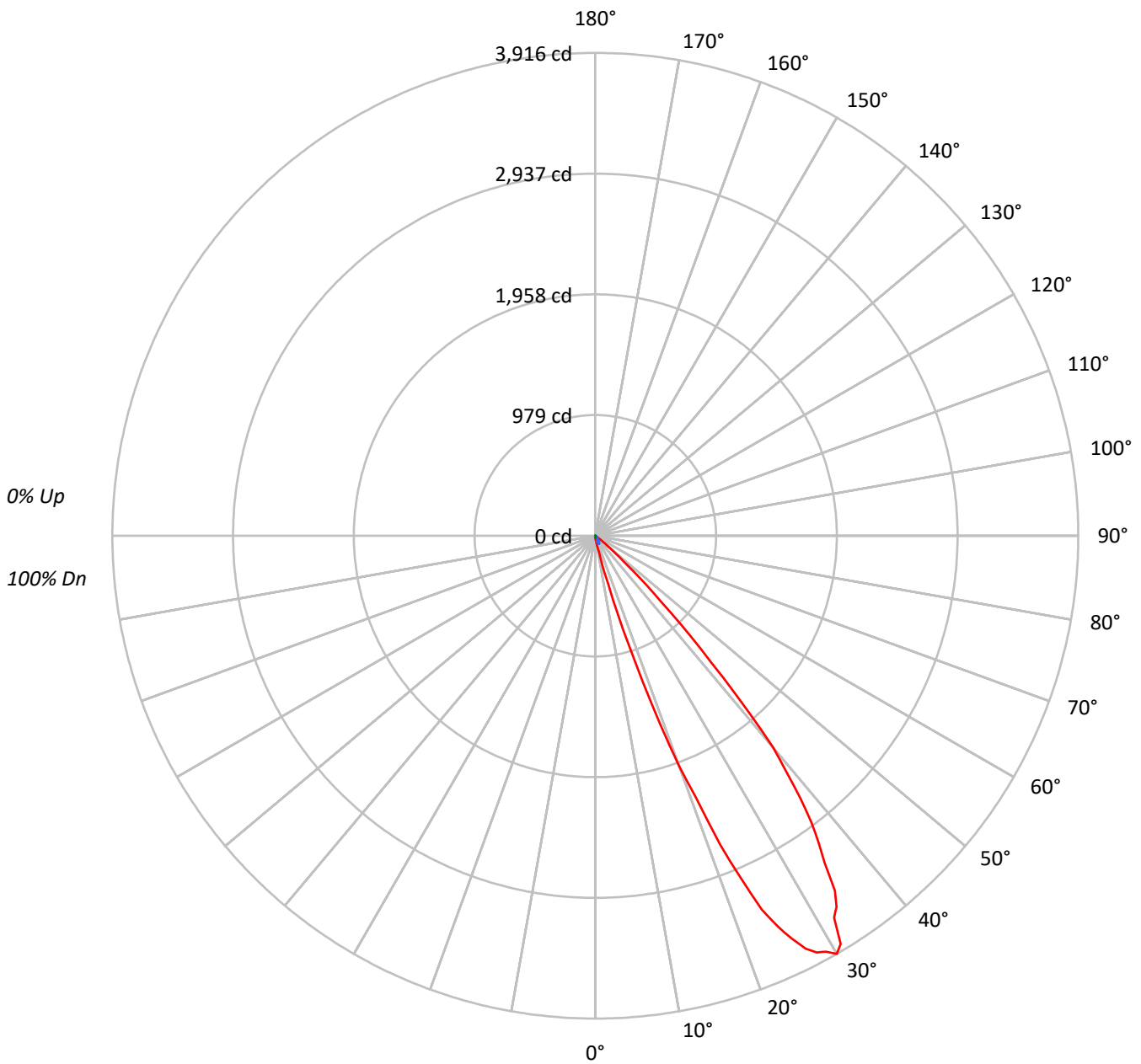
Lumens per Lamp: N/A  
Luminaire Lumens: 494.5 lumens  
Efficiency: N/A  
Efficacy: 49.5 lumens/watt  
Spacing Criteria (0/90/45): 2.56 / 0.56 / 1.2  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

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: P495488

CATALOG NUMBER: LDA2B109024R20D010 2LBDLC1MMS-30DEG TILT

### Luminous Intensity Polar Plot



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



TEST NUMBER: P495488

CATALOG NUMBER: LDA2B109024R20D010 2LBDLC1MMS-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	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91					91			
2	105	100	95	91	103	98	93	90	95	91	88	91	88	86	89	86	84	82					82			
3	99	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	76	74					74			
4	92	83	76	71	90	82	75	70	79	74	70	77	73	69	75	71	68	66					66			
5	86	75	68	63	84	74	68	63	73	67	62	71	66	62	69	65	61	59					59			
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53					53			
7	74	63	55	50	73	62	55	50	61	54	50	59	54	50	58	53	49	48					48			
8	69	57	50	45	68	57	50	45	56	49	45	54	49	44	53	48	44	43					43			
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38					38			
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34					34			

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

	0°	90°	180°
0°	7844	7844	7844
5°	15006	6933	5052
10°	35870	6062	3407
15°	209107	4852	1379
20°	1043066	2993	420
25°	1901901	1034	0
30°	2230716	0	0
35°	1952423	0	0
40°	1441808	0	0
45°	519731	0	0
50°	108222	0	0
55°	24772	344	0
60°	7894	395	0
65°	1751	934	0
70°	0	1154	577
75°	0	1525	0
80°	0	2273	0
85°	0	4529	0



TEST NUMBER: P495488

CATALOG NUMBER: LDA2B109024R20D010 2LBDLC1MMS-30DEG TILT

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1.8	0.4
10°-20°	27.2	5.5
20°-30°	183.1	37.0
30°-40°	213.9	43.3
40°-50°	62.4	12.6
50°-60°	4.2	0.8
60°-70°	0.8	0.2
70°-80°	0.7	0.1
80°-90°	0.5	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°	212.1	42.9
0°-40°	426.0	86.1
0°-60°	492.5	99.6
0°-90°	494.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	494.5	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	16	16	16	16	16	
5°	30	22	14	12	10	4
15°	409	46	10	5	3	214
25°	3494	72	2	0	0	1547
35°	3242	39	0	0	0	1992
45°	745	8	0	0	0	686
55°	29	2	0	0	0	37
65°	2	1	1	1	0	2
75°	0	1	1	1	0	0
85°	0	1	1	1	0	0
90°	0	0	0	0	0	



TEST NUMBER: P495488

CATALOG NUMBER: LDA2B109024R20D010 2LBDLC1MMS-30DEG TILT

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9
2.5°	20.5	20.5	18.2	16.3	14.8	14.0	13.6	12.9	12.5
5°	30.3	26.5	22.0	17.1	14.0	12.9	11.8	10.6	10.2
7.5°	44.4	38.7	26.5	17.4	13.3	11.4	10.2	9.1	8.3
10°	71.6	55.7	32.6	17.4	12.1	9.9	8.3	7.2	6.8
12.5°	132.3	85.3	39.0	17.1	11.0	8.3	6.4	5.7	4.5
15°	409.4	176.6	46.2	16.3	9.5	6.4	4.9	3.0	2.7
17.5°	1058.7	412.4	51.6	14.4	7.6	4.5	2.3	1.9	1.9
20°	1986.7	747.9	59.1	12.5	5.7	3.0	1.5	1.1	0.8
21°	2266.4	915.1	62.9	11.8	4.9	1.9	1.1	0.4	0.4
22°	2701.2	1097.4	66.0	11.0	4.2	1.1	0.8	0.4	0.0
23°	3010.9	1213.8	69.0	9.9	3.0	1.1	0.4	0.0	0.0
24°	3320.6	1362.0	70.9	9.1	2.7	0.8	0.4	0.0	0.0
25°	3493.8	1485.5	71.6	8.3	1.9	0.4	0.0	0.0	0.0
26°	3636.3	1568.2	72.0	7.6	1.1	0.0	0.0	0.0	0.0
27°	3758.4	1664.1	71.3	6.8	1.1	0.0	0.0	0.0	0.0
28°	3827.7	1680.0	70.1	6.1	0.4	0.0	0.0	0.0	0.0
29°	3857.7	1660.7	66.7	5.3	0.4	0.0	0.0	0.0	0.0
30°	3915.7	1642.5	63.3	4.9	0.0	0.0	0.0	0.0	0.0
31°	3862.2	1582.2	59.1	4.2	0.0	0.0	0.0	0.0	0.0
32°	3653.0	1531.4	54.2	3.4	0.0	0.0	0.0	0.0	0.0
33°	3590.5	1427.2	48.9	3.0	0.0	0.0	0.0	0.0	0.0
34°	3472.6	1272.1	44.4	2.7	0.0	0.0	0.0	0.0	0.0
35°	3241.7	1144.0	38.7	2.3	0.0	0.0	0.0	0.0	0.0
36°	3080.6	997.7	33.7	1.9	0.0	0.0	0.0	0.0	0.0
37°	2911.9	869.9	29.9	1.5	0.0	0.0	0.0	0.0	0.0
38°	2702.3	735.8	25.4	1.1	0.0	0.0	0.0	0.0	0.0
39°	2458.2	608.0	21.6	1.1	0.0	0.0	0.0	0.0	0.0
40°	2238.7	490.1	18.6	0.8	0.0	0.0	0.0	0.0	0.0
42.5°	1381.7	279.7	11.0	0.8	0.0	0.0	0.0	0.0	0.0
45°	744.9	169.8	8.0	0.4	0.0	0.0	0.0	0.0	0.0
47.5°	343.0	79.2	5.7	0.4	0.0	0.0	0.0	0.0	0.0
50°	141.0	35.3	4.2	0.0	0.0	0.0	0.0	0.0	0.0
52.5°	50.8	19.7	2.7	0.0	0.0	0.4	0.0	0.0	0.0
55°	28.8	11.4	1.5	0.4	0.4	0.4	0.4	0.0	0.0
57.5°	13.6	6.4	0.4	0.4	0.4	0.4	0.4	0.0	0.0
60°	8.0	3.4	0.4	0.4	0.4	0.8	0.4	0.0	0.0
62.5°	3.8	1.1	0.4	0.8	0.8	0.8	0.8	0.4	0.0
65°	1.5	0.4	0.8	0.8	0.8	1.1	0.8	0.4	0.0
67.5°	0.4	0.4	0.8	0.8	0.8	1.1	0.8	0.4	0.4
70°	0.0	0.4	0.8	0.8	0.8	1.1	0.8	0.4	0.4
72.5°	0.0	0.4	0.8	0.8	0.8	1.1	0.8	0.4	0.4
75°	0.0	0.4	0.8	0.8	0.8	0.8	0.8	0.4	0.0
77.5°	0.0	0.4	0.8	0.8	0.8	0.8	0.8	0.4	0.0
80°	0.0	0.4	0.8	0.8	0.8	0.8	0.8	0.4	0.0



TEST NUMBER: P495488

CATALOG NUMBER: LDA2B109024R20D010 2LBDLC1MMS-30DEG TILT

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
82.5°	0.0	0.4	0.8	0.8	0.8	0.8	0.8	0.4	0.0
85°	0.0	0.4	0.8	0.8	0.8	0.8	0.8	0.4	0.0
87.5°	0.0	0.4	0.8	0.8	0.8	0.8	0.4	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)