

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: P499605

Luminaire Tested: **LDA2B159727R30D010 2LBD1MMS-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: P499605  
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: LDA2B159727R30D010 2LBD1MMS-30DEG TILT  
Description: 1500 LUMEN 2IN ADJUSTABLE LED LUMINAIRE WITH 97 CRI LEDS AND 2700K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

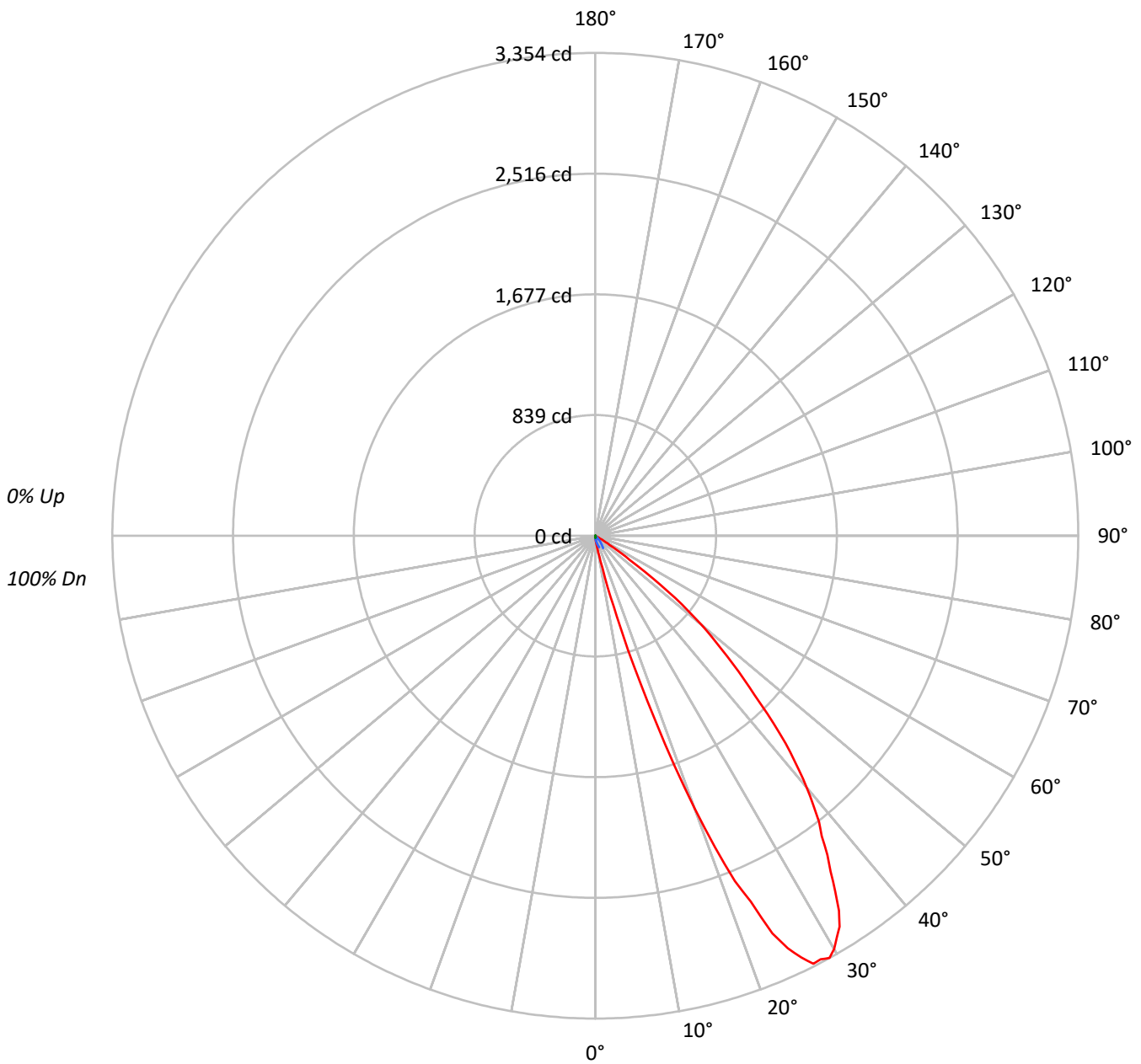
Lumens per Lamp: N/A  
Luminaire Lumens: 674.6 lumens  
Efficiency: N/A  
Efficacy: 47.8 lumens/watt  
Spacing Criteria (0/90/45): 3.2 / 0.53 / 1.4  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

Input Watts (W): 14.1  
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

TEST NUMBER: P499605

CATALOG NUMBER: LDA2B159727R30D010 2LBD1MMS-30DEG TILT

### Luminous Intensity Polar Plot



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



TEST NUMBER: P499605

CATALOG NUMBER: LDA2B159727R30D010 2LBD1MMS-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°	7499	7499	7499
5°	16244	6785	4853
10°	48745	5861	3206
15°	295733	4239	2503
20°	1058765	2310	1050
25°	1720627	817	0
30°	1888449	285	0
35°	1716147	0	0
40°	1472915	0	0
45°	1091791	0	0
50°	738215	0	0
55°	249444	430	0
60°	35719	987	0
65°	2802	1167	0
70°	0	1442	0
75°	0	2859	0
80°	0	2841	0
85°	0	5661	0



TEST NUMBER: P499605

CATALOG NUMBER: LDA2B159727R30D010 2LBD1MMS-30DEG TILT

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2.0	0.3
10°-20°	34.8	5.2
20°-30°	197.2	29.2
30°-40°	257.0	38.1
40°-50°	150.5	22.3
50°-60°	30.4	4.5
60°-70°	1.2	0.2
70°-80°	0.8	0.1
80°-90°	0.7	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°	234.0	34.7
0°-40°	491.0	72.8
0°-60°	671.9	99.6
0°-90°	674.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	674.6	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	15	15	15	15	15	
5°	33	24	14	11	10	5
15°	579	66	8	5	5	245
25°	3161	111	2	1	0	1398
35°	2849	81	0	0	0	1774
45°	1565	20	0	0	0	1222
55°	290	2	0	0	0	338
65°	2	0	1	1	0	7
75°	0	1	2	1	0	0
85°	0	1	1	1	0	0
90°	0	0	0	0	0	



TEST NUMBER: P499605

CATALOG NUMBER: LDA2B159727R30D010 2LBD1MMS-30DEG TILT

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2
2.5°	20.5	19.1	18.1	15.6	14.2	13.2	12.7	12.2	11.7
5°	32.8	30.3	23.5	17.1	13.7	11.7	10.8	9.8	9.8
7.5°	56.2	45.5	30.8	18.1	12.7	10.3	9.3	7.8	7.3
10°	97.3	75.8	42.1	19.1	11.7	9.3	7.3	6.8	6.4
12.5°	228.4	138.4	53.3	19.1	10.3	7.8	6.4	5.9	5.4
15°	579.0	282.1	66.0	18.1	8.3	5.9	5.4	4.9	4.9
17.5°	1201.0	579.5	80.2	16.6	6.8	4.4	3.9	3.4	3.4
20°	2016.6	1038.6	93.9	14.2	4.4	2.9	2.4	2.0	2.0
21°	2316.8	1205.4	100.7	13.2	3.9	2.4	2.0	2.0	1.5
22°	2586.8	1358.4	104.6	12.7	2.9	2.0	2.0	1.5	1.5
23°	2760.9	1552.6	108.1	11.2	2.4	1.5	1.5	1.0	0.5
24°	3023.4	1704.6	109.5	10.3	2.0	1.5	1.0	0.5	0.5
25°	3160.8	1842.5	111.0	9.3	1.5	1.5	1.0	0.5	0.0
26°	3259.6	1951.6	116.4	8.8	1.5	1.0	1.0	0.5	0.0
27°	3336.9	2021.0	119.3	7.8	1.0	1.0	1.0	0.0	0.0
28°	3332.5	2071.4	116.9	6.8	1.0	1.0	0.5	0.0	0.0
29°	3353.5	2105.6	115.4	5.9	0.5	0.5	0.5	0.0	0.0
30°	3314.9	2108.5	110.0	5.4	0.5	0.5	0.5	0.0	0.0
31°	3256.2	2072.8	108.1	4.9	0.0	0.5	0.5	0.0	0.0
32°	3200.9	2056.7	101.7	3.9	0.0	0.5	0.5	0.0	0.0
33°	3106.1	1984.3	95.4	3.4	0.0	0.5	0.0	0.0	0.0
34°	2978.9	1913.4	89.5	2.9	0.0	0.5	0.0	0.0	0.0
35°	2849.4	1854.7	81.2	2.9	0.0	0.5	0.0	0.0	0.0
36°	2741.8	1748.1	75.3	2.4	0.0	0.5	0.0	0.0	0.0
37°	2611.2	1656.7	67.5	2.0	0.0	0.0	0.0	0.0	0.0
38°	2522.2	1528.1	61.6	2.0	0.0	0.0	0.0	0.0	0.0
39°	2402.4	1419.5	54.3	1.5	0.0	0.0	0.0	0.0	0.0
40°	2287.0	1307.1	46.9	1.0	0.0	0.0	0.0	0.0	0.0
42.5°	1956.0	1008.3	32.3	0.5	0.0	0.0	0.0	0.0	0.0
45°	1564.8	739.4	20.0	0.0	0.0	0.0	0.0	0.0	0.0
47.5°	1242.5	499.3	12.7	0.0	0.0	0.0	0.0	0.0	0.0
50°	961.8	257.2	7.3	0.0	0.0	0.0	0.0	0.0	0.0
52.5°	639.6	109.0	4.4	0.0	0.0	0.5	0.0	0.0	0.0
55°	290.0	56.7	2.0	0.0	0.5	0.5	0.5	0.0	0.0
57.5°	116.9	24.4	1.0	0.5	0.5	0.5	0.5	0.0	0.0
60°	36.2	6.8	0.5	0.5	1.0	1.0	0.5	0.0	0.0
62.5°	7.3	1.5	0.5	1.0	1.0	1.0	0.5	0.0	0.0
65°	2.4	0.5	0.5	1.0	1.0	1.0	1.0	0.0	0.0
67.5°	0.5	0.5	0.5	1.0	1.0	1.0	1.0	0.5	0.0
70°	0.0	0.5	1.0	1.0	1.0	1.5	1.0	0.5	0.0
72.5°	0.0	0.5	1.0	1.0	1.0	1.0	1.0	0.5	0.0
75°	0.0	0.5	1.0	1.0	1.5	1.5	1.0	0.5	0.0
77.5°	0.0	0.5	1.0	1.0	1.0	1.0	1.0	0.5	0.0
80°	0.0	0.5	1.0	1.0	1.0	1.0	1.0	0.5	0.0



TEST NUMBER: P499605

CATALOG NUMBER: LDA2B159727R30D010 2LBD1MMS-30DEG TILT

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
82.5°	0.0	0.5	1.0	1.0	1.0	1.0	1.0	0.5	0.0
85°	0.0	0.5	1.0	1.0	1.0	1.0	1.0	0.0	0.0
87.5°	0.0	0.5	1.0	1.0	1.0	1.0	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)