

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: P498504

Luminaire Tested: **LDA2B159027R20D010 2LBDL1MMS-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: P498504  
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: LDA2B159027R20D010 2LBDL1MMS-30DEG TILT  
Description: 1500 LUMEN 2IN ADJUSTABLE LED LUMINAIRE WITH 90 CRI LEDS AND 2700K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

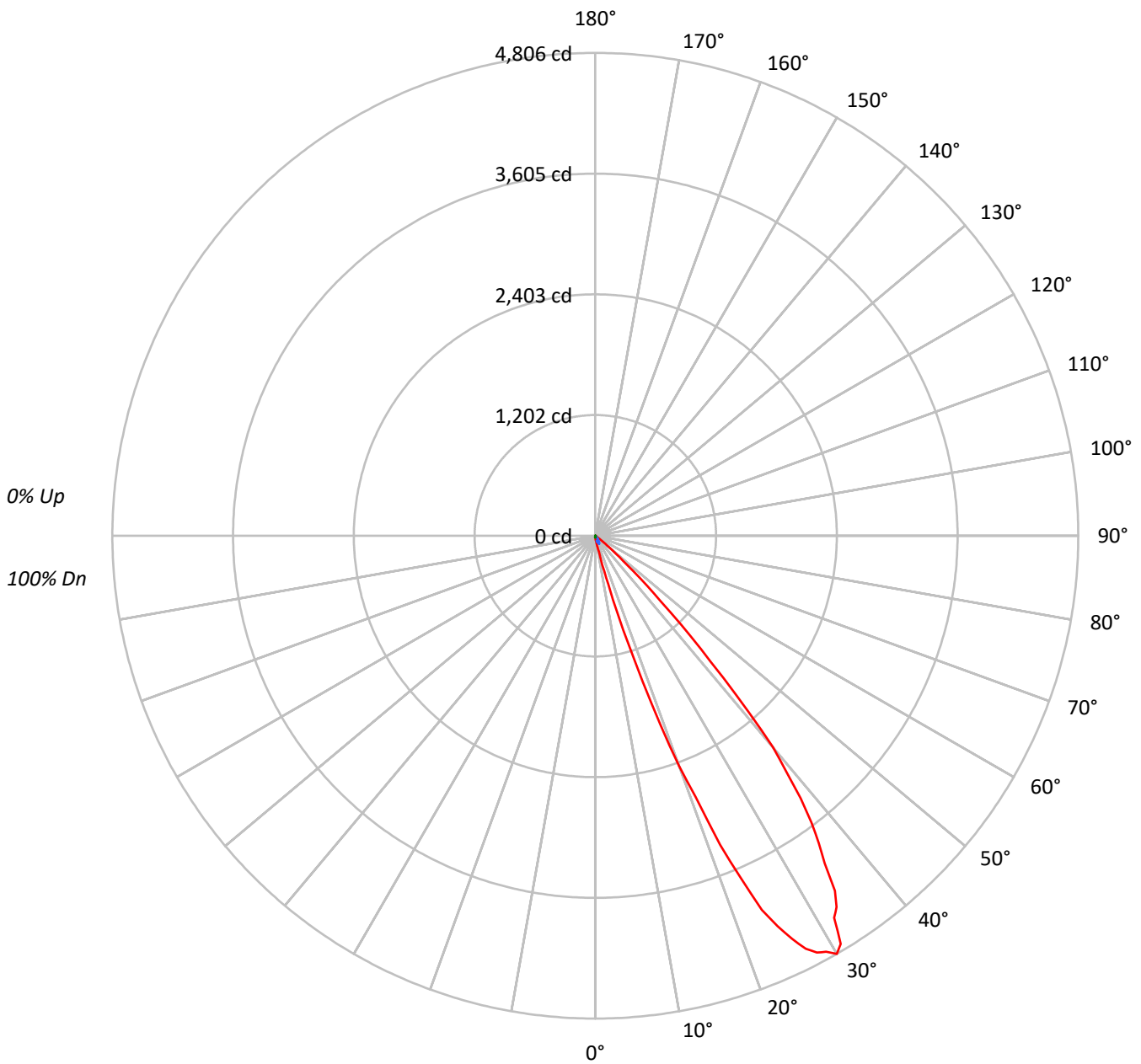
Lumens per Lamp: N/A  
Luminaire Lumens: 606.9 lumens  
Efficiency: N/A  
Efficacy: 43.0 lumens/watt  
Spacing Criteria (0/90/45): 2.56 / 0.56 / 1.2  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

Input Watts (W): 14.1  
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

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### Luminous Intensity Polar Plot



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



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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	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°	9621	9621	9621
5°	18423	8518	6240
10°	44035	7464	4208
15°	256660	5925	1686
20°	1280273	3675	473
25°	2334507	1252	0
30°	2738078	0	0
35°	2396546	0	0
40°	1769752	0	0
45°	637924	0	0
50°	132860	0	0
55°	30449	430	0
60°	9670	493	0
65°	2218	1051	0
70°	0	1298	721
75°	0	1716	0
80°	0	2557	0
85°	0	5095	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2.2	0.4
10°-20°	33.3	5.5
20°-30°	224.7	37.0
30°-40°	262.6	43.3
40°-50°	76.6	12.6
50°-60°	5.1	0.8
60°-70°	1.0	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°	260.3	42.9
0°-40°	522.8	86.2
0°-60°	604.5	99.6
0°-90°	606.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	606.9	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	20	20	20	20	20	
5°	37	27	17	14	13	5
15°	502	57	12	6	3	262
25°	4288	88	2	0	0	1899
35°	3979	48	0	0	0	2444
45°	914	10	0	0	0	842
55°	35	2	0	0	0	45
65°	2	1	1	1	0	3
75°	0	1	1	1	0	0
85°	0	1	1	1	0	0
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°	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5
2.5°	25.1	25.1	22.3	20.0	18.1	17.2	16.8	15.8	15.4
5°	37.2	32.6	27.0	20.9	17.2	15.8	14.4	13.0	12.6
7.5°	54.4	47.5	32.6	21.4	16.3	14.0	12.6	11.2	10.2
10°	87.9	68.4	40.0	21.4	14.9	12.1	10.2	8.8	8.4
12.5°	162.4	104.7	47.9	20.9	13.5	10.2	7.9	7.0	5.6
15°	502.5	216.8	56.8	20.0	11.6	7.9	6.0	3.7	3.3
17.5°	1299.5	506.2	63.3	17.7	9.3	5.6	2.8	2.3	2.3
20°	2438.5	918.0	72.6	15.4	7.0	3.7	1.9	1.4	0.9
21°	2781.9	1123.2	77.2	14.4	6.0	2.3	1.4	0.5	0.5
22°	3315.6	1347.0	81.0	13.5	5.1	1.4	0.9	0.5	0.0
23°	3695.7	1489.8	84.7	12.1	3.7	1.4	0.5	0.0	0.0
24°	4075.8	1671.7	87.0	11.2	3.3	0.9	0.5	0.0	0.0
25°	4288.5	1823.4	87.9	10.2	2.3	0.5	0.0	0.0	0.0
26°	4463.4	1924.9	88.4	9.3	1.4	0.0	0.0	0.0	0.0
27°	4613.2	2042.6	87.5	8.4	1.4	0.0	0.0	0.0	0.0
28°	4698.4	2062.1	86.1	7.4	0.5	0.0	0.0	0.0	0.0
29°	4735.1	2038.4	81.9	6.5	0.5	0.0	0.0	0.0	0.0
30°	4806.3	2016.1	77.7	6.0	0.0	0.0	0.0	0.0	0.0
31°	4740.7	1942.1	72.6	5.1	0.0	0.0	0.0	0.0	0.0
32°	4483.9	1879.7	66.5	4.2	0.0	0.0	0.0	0.0	0.0
33°	4407.1	1751.8	60.0	3.7	0.0	0.0	0.0	0.0	0.0
34°	4262.4	1561.5	54.4	3.3	0.0	0.0	0.0	0.0	0.0
35°	3979.1	1404.2	47.5	2.8	0.0	0.0	0.0	0.0	0.0
36°	3781.3	1224.6	41.4	2.3	0.0	0.0	0.0	0.0	0.0
37°	3574.3	1067.8	36.8	1.9	0.0	0.0	0.0	0.0	0.0
38°	3317.0	903.1	31.2	1.4	0.0	0.0	0.0	0.0	0.0
39°	3017.3	746.3	26.5	1.4	0.0	0.0	0.0	0.0	0.0
40°	2747.9	601.6	22.8	0.9	0.0	0.0	0.0	0.0	0.0
42.5°	1695.9	343.4	13.5	0.9	0.0	0.0	0.0	0.0	0.0
45°	914.3	208.4	9.8	0.5	0.0	0.0	0.0	0.0	0.0
47.5°	421.1	97.2	7.0	0.5	0.0	0.0	0.0	0.0	0.0
50°	173.1	43.3	5.1	0.0	0.0	0.0	0.0	0.0	0.0
52.5°	62.3	24.2	3.3	0.0	0.0	0.5	0.0	0.0	0.0
55°	35.4	14.0	1.9	0.5	0.5	0.5	0.5	0.0	0.0
57.5°	16.8	7.9	0.5	0.5	0.5	0.5	0.5	0.0	0.0
60°	9.8	4.2	0.5	0.5	0.5	0.9	0.5	0.0	0.0
62.5°	4.7	1.4	0.5	0.9	0.9	0.9	0.9	0.5	0.0
65°	1.9	0.5	0.9	0.9	0.9	1.4	0.9	0.5	0.0
67.5°	0.5	0.5	0.9	0.9	0.9	1.4	0.9	0.5	0.5
70°	0.0	0.5	0.9	0.9	0.9	1.4	0.9	0.5	0.5
72.5°	0.0	0.5	0.9	0.9	0.9	1.4	0.9	0.5	0.5
75°	0.0	0.5	0.9	0.9	0.9	0.9	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



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**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	0.5	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)