

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: P499368

Luminaire Tested: **LDA2B159050R20D010 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: P499368  
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: LDA2B159050R20D010 2LBDL1MMS-30DEG TILT  
Description: 1500 LUMEN 2IN ADJUSTABLE LED LUMINAIRE WITH 90 CRI LEDS AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

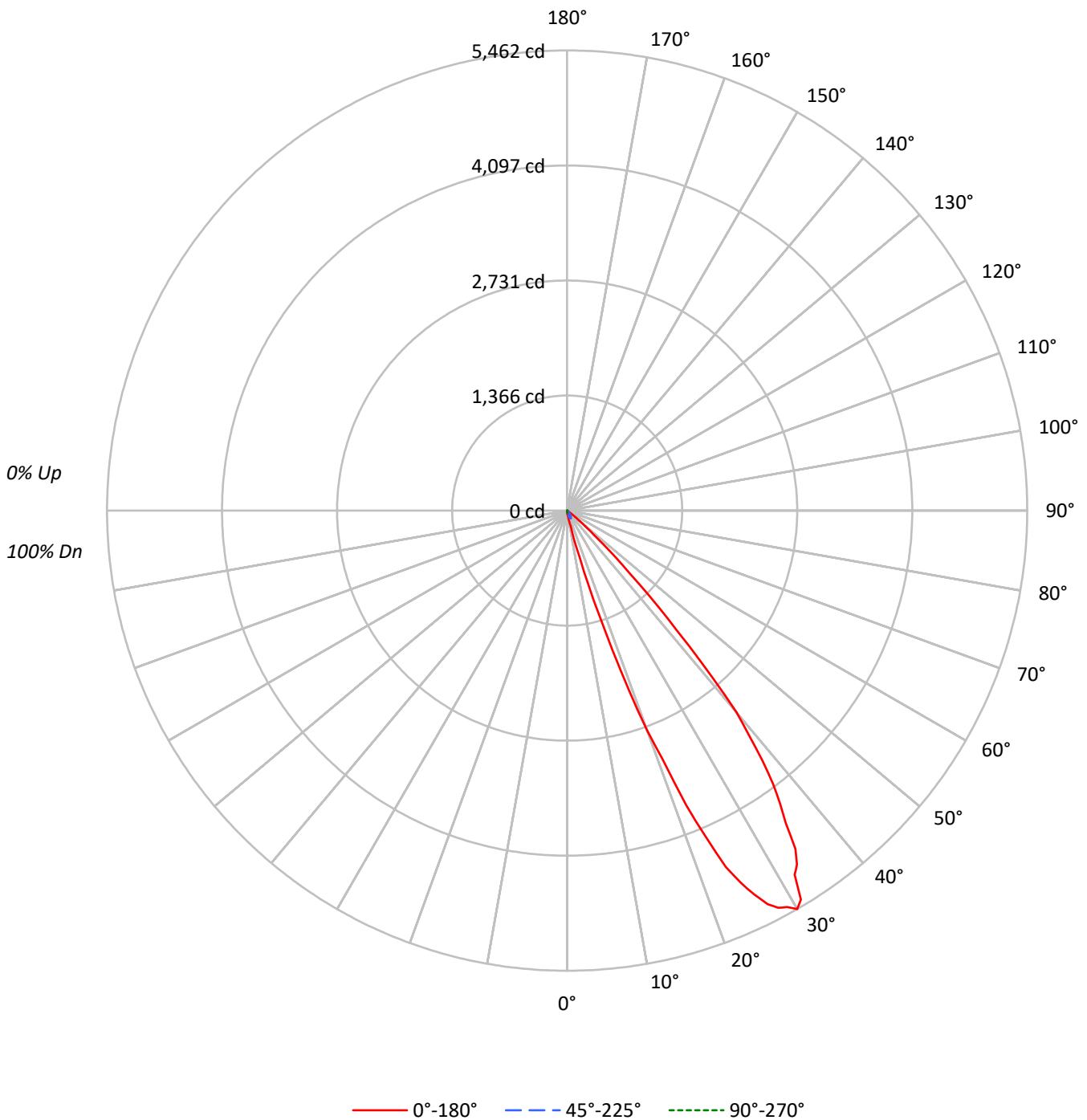
Lumens per Lamp: N/A  
Luminaire Lumens: 689.7 lumens  
Efficiency: N/A  
Efficacy: 48.9 lumens/watt  
Spacing Criteria (0/90/45): 2.56 / 0.56 / 1.2  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

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





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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°	10953	10953	10953
5°	20949	9707	7082
10°	50047	8466	4759
15°	291647	6742	1890
20°	1454948	4148	578
25°	2652906	1415	0
30°	3111563	0	0
35°	2723406	0	0
40°	2011202	0	0
45°	724930	0	0
50°	150974	0	0
55°	34578	430	0
60°	10953	493	0
65°	2452	1284	0
70°	0	1587	721
75°	0	2097	0
80°	0	3125	0
85°	0	6227	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2.5	0.4
10°-20°	37.9	5.5
20°-30°	255.4	37.0
30°-40°	298.4	43.3
40°-50°	87.0	12.6
50°-60°	5.8	0.8
60°-70°	1.1	0.2
70°-80°	0.9	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°	295.8	42.9
0°-40°	594.2	86.1
0°-60°	687.0	99.6
0°-90°	689.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	689.7	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	22	22	22	22	22	
5°	42	31	20	16	14	6
15°	571	64	13	7	4	298
25°	4873	100	3	0	0	2158
35°	4522	54	0	0	0	2778
45°	1039	11	0	0	0	957
55°	40	2	0	0	0	51
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°	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
2.5°	28.6	28.6	25.4	22.7	20.6	19.6	19.0	18.0	17.4
5°	42.3	37.0	30.7	23.8	19.6	18.0	16.4	14.8	14.3
7.5°	61.9	53.9	37.0	24.3	18.5	15.9	14.3	12.7	11.6
10°	99.9	77.7	45.5	24.3	16.9	13.7	11.6	10.0	9.5
12.5°	184.5	119.0	54.5	23.8	15.3	11.6	9.0	7.9	6.3
15°	571.0	246.4	64.5	22.7	13.2	9.0	6.9	4.2	3.7
17.5°	1476.8	575.3	71.9	20.1	10.6	6.3	3.2	2.6	2.6
20°	2771.2	1043.2	82.5	17.4	7.9	4.2	2.1	1.6	1.1
21°	3161.4	1276.4	87.8	16.4	6.9	2.6	1.6	0.5	0.5
22°	3767.8	1530.7	92.0	15.3	5.8	1.6	1.1	0.5	0.0
23°	4199.8	1693.0	96.2	13.7	4.2	1.6	0.5	0.0	0.0
24°	4631.8	1899.8	98.9	12.7	3.7	1.1	0.5	0.0	0.0
25°	4873.4	2072.2	99.9	11.6	2.6	0.5	0.0	0.0	0.0
26°	5072.3	2187.4	100.5	10.6	1.6	0.0	0.0	0.0	0.0
27°	5242.5	2321.2	99.4	9.5	1.6	0.0	0.0	0.0	0.0
28°	5339.3	2343.4	97.8	8.5	0.5	0.0	0.0	0.0	0.0
29°	5381.0	2316.4	93.1	7.4	0.5	0.0	0.0	0.0	0.0
30°	5461.9	2291.1	88.3	6.9	0.0	0.0	0.0	0.0	0.0
31°	5387.4	2207.0	82.5	5.8	0.0	0.0	0.0	0.0	0.0
32°	5095.5	2136.1	75.6	4.8	0.0	0.0	0.0	0.0	0.0
33°	5008.3	1990.7	68.2	4.2	0.0	0.0	0.0	0.0	0.0
34°	4843.8	1774.5	61.9	3.7	0.0	0.0	0.0	0.0	0.0
35°	4521.8	1595.8	53.9	3.2	0.0	0.0	0.0	0.0	0.0
36°	4297.1	1391.7	47.1	2.6	0.0	0.0	0.0	0.0	0.0
37°	4061.8	1213.5	41.8	2.1	0.0	0.0	0.0	0.0	0.0
38°	3769.4	1026.3	35.4	1.6	0.0	0.0	0.0	0.0	0.0
39°	3428.9	848.1	30.1	1.6	0.0	0.0	0.0	0.0	0.0
40°	3122.8	683.7	25.9	1.1	0.0	0.0	0.0	0.0	0.0
42.5°	1927.3	390.2	15.3	1.1	0.0	0.0	0.0	0.0	0.0
45°	1039.0	236.9	11.1	0.5	0.0	0.0	0.0	0.0	0.0
47.5°	478.5	110.5	7.9	0.5	0.0	0.0	0.0	0.0	0.0
50°	196.7	49.2	5.8	0.0	0.0	0.0	0.0	0.0	0.0
52.5°	70.9	27.5	3.7	0.0	0.0	0.5	0.0	0.0	0.0
55°	40.2	15.9	2.1	0.5	0.5	0.5	0.5	0.0	0.0
57.5°	19.0	9.0	0.5	0.5	0.5	0.5	0.5	0.0	0.0
60°	11.1	4.8	0.5	0.5	0.5	1.1	0.5	0.0	0.0
62.5°	5.3	1.6	0.5	1.1	1.1	1.1	1.1	0.5	0.0
65°	2.1	0.5	1.1	1.1	1.1	1.6	1.1	0.5	0.0
67.5°	0.5	0.5	1.1	1.1	1.1	1.6	1.1	0.5	0.5
70°	0.0	0.5	1.1	1.1	1.1	1.6	1.1	0.5	0.5
72.5°	0.0	0.5	1.1	1.1	1.1	1.6	1.1	0.5	0.5
75°	0.0	0.5	1.1	1.1	1.1	1.1	1.1	0.5	0.0
77.5°	0.0	0.5	1.1	1.1	1.1	1.1	1.1	0.5	0.0
80°	0.0	0.5	1.1	1.1	1.1	1.1	1.1	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	1.1	1.1	1.1	1.1	1.1	0.5	0.0
85°	0.0	0.5	1.1	1.1	1.1	1.1	1.1	0.5	0.0
87.5°	0.0	0.5	1.1	1.1	1.1	1.1	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)