

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: P499173

Luminaire Tested: **LDA2B159040R30D010 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: P499173  
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: LDA2B159040R30D010 2LBD1MMS-30DEG TILT  
Description: 1500 LUMEN 2IN ADJUSTABLE LED LUMINAIRE WITH 90 CRI LEDS AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

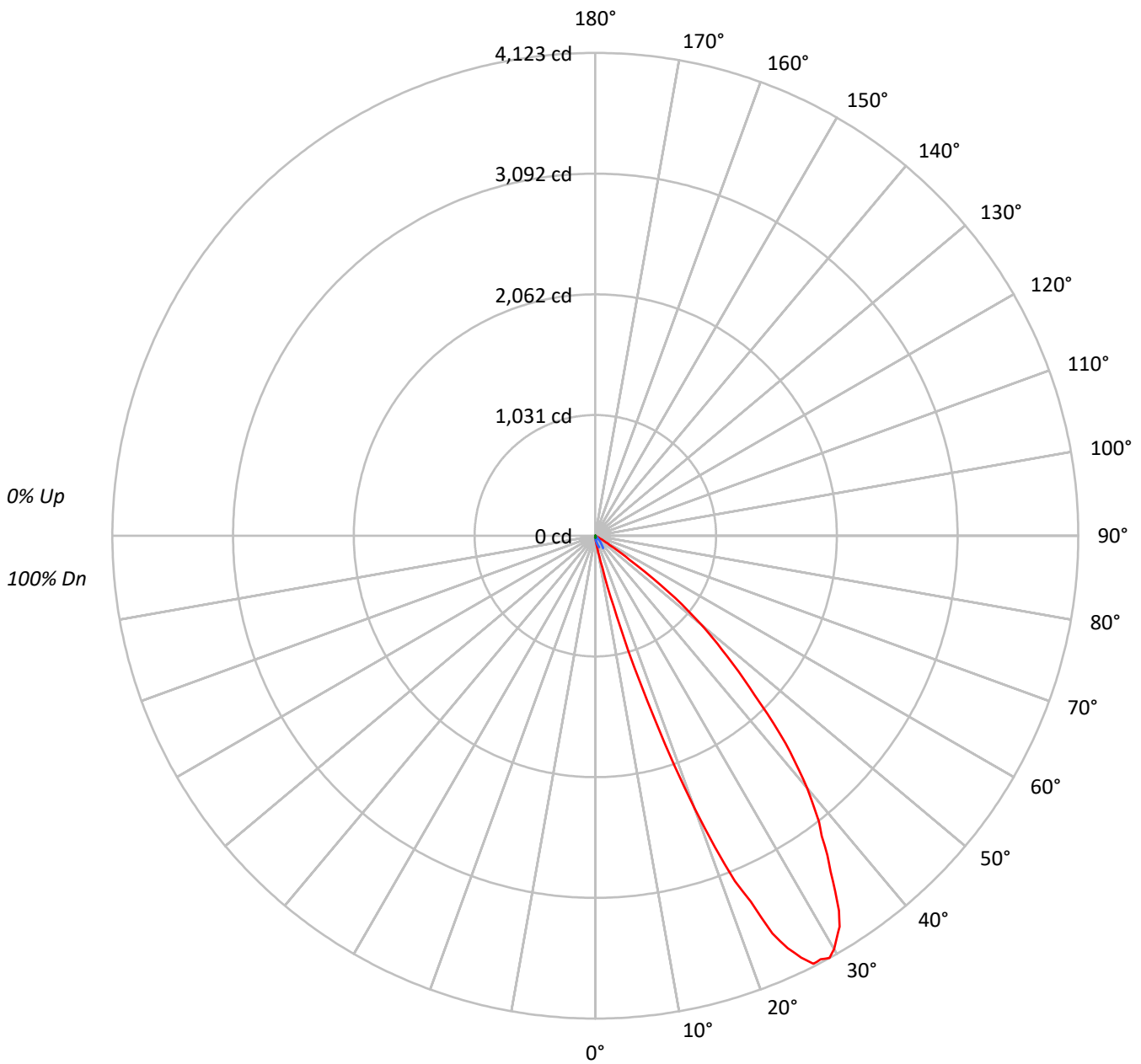
Lumens per Lamp: N/A  
Luminaire Lumens: 829.2 lumens  
Efficiency: N/A  
Efficacy: 58.8 lumens/watt  
Spacing Criteria (0/90/45): 3.2 / 0.53 / 1.4  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

Input Watts (W): 14.1  
Input Voltage (V): NR  
Input Current (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	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°	9177	9177	9177
5°	19958	8320	5943
10°	59916	7214	3908
15°	363563	5210	3065
20°	1301589	2835	1260
25°	2115292	980	0
30°	2321581	342	0
35°	2109739	0	0
40°	1810713	0	0
45°	1342202	0	0
50°	907533	0	0
55°	306643	516	0
60°	43909	1184	0
65°	3502	1401	0
70°	0	1731	0
75°	0	3431	0
80°	0	3409	0
85°	0	6793	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2.4	0.3
10°-20°	42.7	5.2
20°-30°	242.5	29.2
30°-40°	315.9	38.1
40°-50°	185.1	22.3
50°-60°	37.4	4.5
60°-70°	1.4	0.2
70°-80°	1.0	0.1
80°-90°	0.8	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°	287.6	34.7
0°-40°	603.5	72.8
0°-60°	826.0	99.6
0°-90°	829.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	829.2	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	19	19	19	19	19	
5°	40	29	17	13	12	6
15°	712	81	10	7	6	301
25°	3886	136	2	1	0	1718
35°	3503	100	0	0	0	2181
45°	1924	25	0	0	0	1503
55°	356	2	1	1	0	416
65°	3	1	1	1	0	8
75°	0	1	2	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°	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6
2.5°	25.2	23.4	22.2	19.2	17.4	16.2	15.6	15.0	14.4
5°	40.3	37.3	28.9	21.0	16.8	14.4	13.2	12.0	12.0
7.5°	69.1	55.9	37.9	22.2	15.6	12.6	11.4	9.6	9.0
10°	119.6	93.2	51.7	23.4	14.4	11.4	9.0	8.4	7.8
12.5°	280.7	170.1	65.5	23.4	12.6	9.6	7.8	7.2	6.6
15°	711.8	346.9	81.2	22.2	10.2	7.2	6.6	6.0	6.0
17.5°	1476.4	712.4	98.6	20.4	8.4	5.4	4.8	4.2	4.2
20°	2479.1	1276.8	115.4	17.4	5.4	3.6	3.0	2.4	2.4
21°	2848.2	1481.8	123.8	16.2	4.8	3.0	2.4	2.4	1.8
22°	3180.0	1670.0	128.6	15.6	3.6	2.4	2.4	1.8	1.8
23°	3394.1	1908.6	132.9	13.8	3.0	1.8	1.8	1.2	0.6
24°	3716.9	2095.6	134.7	12.6	2.4	1.8	1.2	0.6	0.6
25°	3885.8	2265.1	136.5	11.4	1.8	1.8	1.2	0.6	0.0
26°	4007.2	2399.2	143.1	10.8	1.8	1.2	1.2	0.6	0.0
27°	4102.2	2484.5	146.7	9.6	1.2	1.2	1.2	0.0	0.0
28°	4096.8	2546.4	143.7	8.4	1.2	1.2	0.6	0.0	0.0
29°	4122.6	2588.5	141.9	7.2	0.6	0.6	0.6	0.0	0.0
30°	4075.2	2592.1	135.3	6.6	0.6	0.6	0.6	0.0	0.0
31°	4003.0	2548.2	132.9	6.0	0.0	0.6	0.6	0.0	0.0
32°	3935.1	2528.4	125.0	4.8	0.0	0.6	0.6	0.0	0.0
33°	3818.5	2439.4	117.2	4.2	0.0	0.6	0.0	0.0	0.0
34°	3662.2	2352.3	110.0	3.6	0.0	0.6	0.0	0.0	0.0
35°	3502.9	2280.1	99.8	3.6	0.0	0.6	0.0	0.0	0.0
36°	3370.6	2149.1	92.6	3.0	0.0	0.6	0.0	0.0	0.0
37°	3210.1	2036.7	83.0	2.4	0.0	0.0	0.0	0.0	0.0
38°	3100.7	1878.6	75.7	2.4	0.0	0.0	0.0	0.0	0.0
39°	2953.4	1745.1	66.7	1.8	0.0	0.0	0.0	0.0	0.0
40°	2811.5	1606.9	57.7	1.2	0.0	0.0	0.0	0.0	0.0
42.5°	2404.6	1239.6	39.7	0.6	0.0	0.0	0.0	0.0	0.0
45°	1923.7	908.9	24.6	0.0	0.0	0.0	0.0	0.0	0.0
47.5°	1527.5	613.8	15.6	0.0	0.0	0.0	0.0	0.0	0.0
50°	1182.4	316.2	9.0	0.0	0.0	0.0	0.0	0.0	0.0
52.5°	786.3	134.1	5.4	0.0	0.0	0.6	0.0	0.0	0.0
55°	356.5	69.7	2.4	0.0	0.6	0.6	0.6	0.0	0.0
57.5°	143.7	30.1	1.2	0.6	0.6	0.6	0.6	0.0	0.0
60°	44.5	8.4	0.6	0.6	1.2	1.2	0.6	0.0	0.0
62.5°	9.0	1.8	0.6	1.2	1.2	1.2	0.6	0.0	0.0
65°	3.0	0.6	0.6	1.2	1.2	1.2	1.2	0.0	0.0
67.5°	0.6	0.6	0.6	1.2	1.2	1.2	1.2	0.6	0.0
70°	0.0	0.6	1.2	1.2	1.2	1.8	1.2	0.6	0.0
72.5°	0.0	0.6	1.2	1.2	1.2	1.2	1.2	0.6	0.0
75°	0.0	0.6	1.2	1.2	1.8	1.8	1.2	0.6	0.0
77.5°	0.0	0.6	1.2	1.2	1.2	1.2	1.2	0.6	0.0
80°	0.0	0.6	1.2	1.2	1.2	1.2	1.2	0.6	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	0.6	1.2	1.2	1.2	1.2	1.2	0.6	0.0
85°	0.0	0.6	1.2	1.2	1.2	1.2	1.2	0.0	0.0
87.5°	0.0	0.6	1.2	1.2	1.2	1.2	0.6	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)