

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: P499429

Luminaire Tested: **LDA2B159050R35D010 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: P499429  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-037-28)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/8/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LDA2B159050R35D010 2LBD1MMS-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**

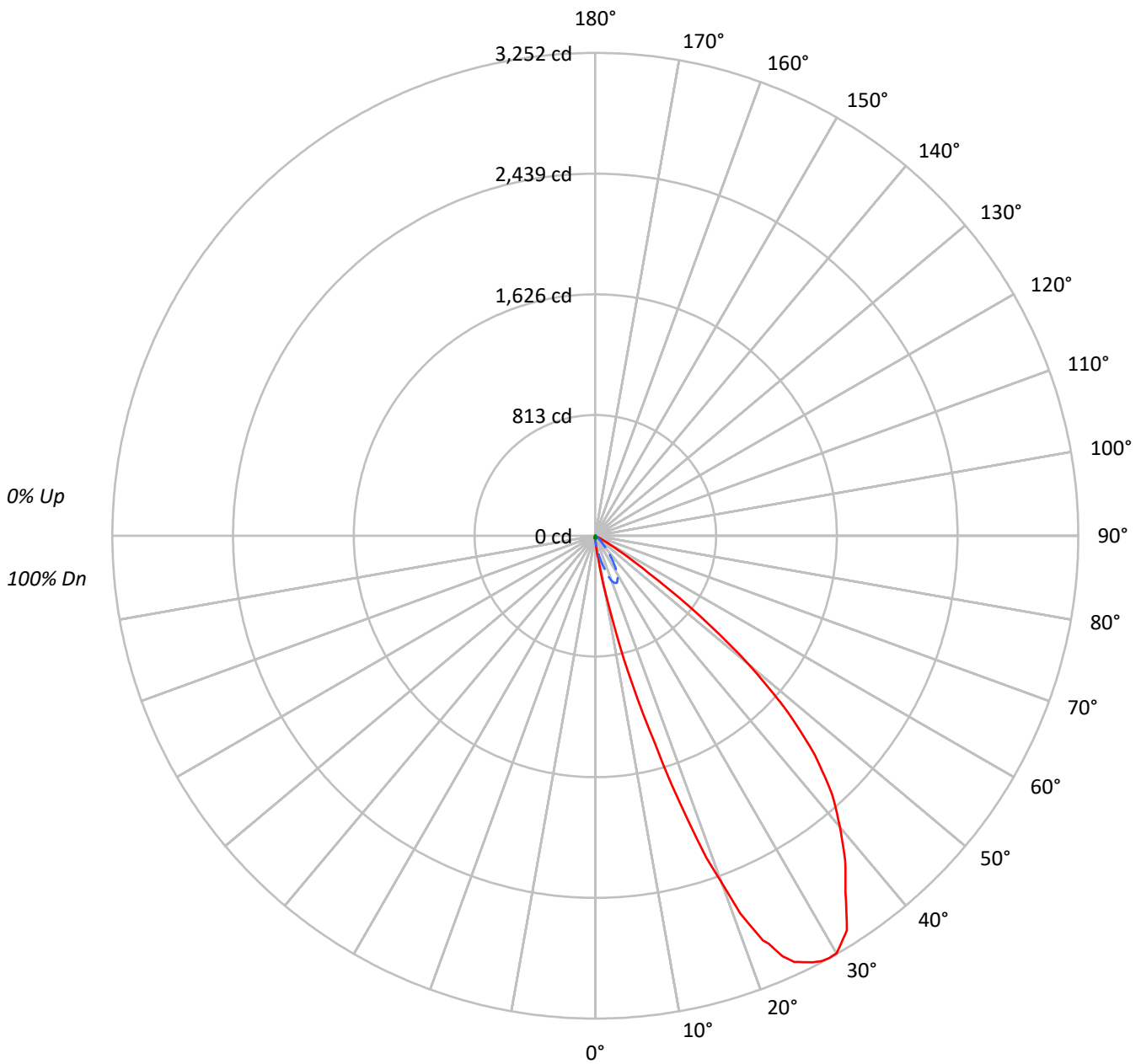
Lumens per Lamp: N/A  
Luminaire Lumens: 877.4 lumens  
Efficiency: N/A  
Efficacy: 62.2 lumens/watt  
Spacing Criteria (0/90/45): 3.16 / 0.51 / 1.46  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

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

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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				
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82					80				
3	97	89	83	77	95	87	82	77	85	80	76	82	78	74	80	76	73					71				
4	90	80	73	68	88	79	72	67	77	71	66	75	70	66	73	68	65					63				
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58					56				
6	77	66	58	53	76	65	58	52	63	57	52	62	56	52	60	55	51					49				
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46					44				
8	67	54	47	42	65	54	47	41	53	46	41	51	45	41	50	45	41					39				
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	36					35				
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33					31				

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

	0°	90°	180°
0°	14604	14604	14604
5°	45860	12827	7973
10°	195830	10821	5861
15°	632788	7866	4750
20°	1304109	4883	3255
25°	1724329	2341	2014
30°	1849597	1082	1082
35°	1767582	723	361
40°	1650283	386	0
45°	1458581	0	0
50°	1035711	461	0
55°	371327	516	0
60°	57329	1184	0
65°	2918	1401	0
70°	0	1731	0
75°	0	2287	1144
80°	0	3409	0
85°	0	6793	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	5.2	0.6
10°-20°	71.0	8.1
20°-30°	237.7	27.1
30°-40°	299.4	34.1
40°-50°	211.8	24.1
50°-60°	48.8	5.6
60°-70°	1.6	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°	314.0	35.8
0°-40°	613.4	69.9
0°-60°	874.0	99.6
0°-90°	877.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	877.4	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	30	30	30	30	30	
5°	93	60	26	18	16	17
15°	1239	219	15	10	9	408
25°	3168	346	4	4	4	1428
35°	2935	203	1	1	1	1837
45°	2090	50	0	0	0	1568
55°	432	2	1	1	0	488
65°	2	1	1	1	0	10
75°	0	1	1	1	1	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°	29.6	29.6	29.6	29.6	29.6	29.6	29.6	29.6	29.6
1°	37.1	35.8	34.0	30.9	27.8	26.6	26.6	24.7	24.7
2°	44.5	42.6	38.9	32.7	27.8	24.7	23.5	22.2	21.6
3°	57.4	52.5	44.5	35.2	27.2	23.5	22.9	19.8	19.8
4°	71.6	66.7	51.3	37.1	26.6	22.2	19.8	18.5	17.9
5°	92.6	81.5	60.5	38.9	25.9	21.0	18.5	16.7	16.1
6°	119.8	104.4	69.2	40.8	25.3	19.8	17.3	15.4	14.8
7°	150.7	129.7	79.7	42.6	24.1	18.5	16.1	14.8	14.2
8°	216.2	166.7	92.0	43.8	23.5	17.3	15.4	13.6	13.0
9°	289.0	215.5	105.6	45.7	22.2	16.7	14.2	13.0	12.4
10°	390.9	282.2	121.0	46.9	21.6	15.4	13.0	12.4	11.7
11°	492.2	365.0	140.2	47.6	20.4	13.6	13.0	12.4	11.7
12°	659.0	444.0	156.9	47.6	19.1	13.0	11.7	11.1	10.5
13°	856.6	579.9	181.0	48.2	17.3	12.4	11.1	10.5	10.5
14°	1030.8	701.6	197.0	48.2	16.7	11.1	10.5	10.5	9.9
15°	1238.9	820.2	218.6	47.6	15.4	10.5	10.5	9.9	9.3
16°	1456.9	998.0	247.7	46.3	14.2	9.3	9.9	8.6	8.0
17°	1745.9	1145.0	269.9	45.1	13.0	8.6	8.6	8.6	8.0
18°	2010.3	1323.5	287.8	43.8	11.7	8.6	8.0	8.0	7.4
19°	2293.7	1466.8	305.7	42.0	10.5	7.4	7.4	7.4	6.8
20°	2483.9	1642.8	325.5	40.1	9.3	6.8	7.4	6.8	6.2
21°	2724.8	1800.3	332.9	38.3	8.0	6.2	6.2	6.2	5.6
22.5°	2950.2	2009.6	344.6	34.6	6.8	4.9	5.6	4.9	4.9
23°	2984.8	2054.1	344.6	33.3	6.2	4.9	5.6	4.9	4.9
24°	3099.7	2175.8	348.9	30.9	4.9	4.3	4.9	4.3	4.3
25°	3167.6	2272.1	345.8	28.4	4.3	4.3	4.3	4.3	3.7
26°	3195.4	2298.7	338.4	26.6	3.7	3.7	4.3	3.7	3.1
27°	3224.4	2359.2	329.2	24.1	3.1	3.7	3.7	3.7	3.1
28°	3244.8	2366.6	319.9	22.2	2.5	3.1	3.7	3.1	3.1
29°	3251.6	2376.5	308.8	19.8	1.9	2.5	3.1	2.5	2.5
30°	3246.7	2374.6	292.7	17.9	1.9	2.5	2.5	2.5	1.9
32.5°	3152.2	2321.5	248.3	13.0	1.2	1.9	1.9	1.9	1.2
35°	2934.8	2199.2	202.6	8.6	1.2	1.2	1.2	1.2	0.6
37.5°	2763.1	2016.4	155.0	4.9	0.6	1.2	1.2	0.6	0.0
40°	2562.4	1751.5	111.8	3.1	0.6	0.6	0.6	0.0	0.0
42.5°	2358.6	1481.6	76.0	1.2	0.0	0.6	0.6	0.0	0.0
45°	2090.5	1134.5	50.0	0.6	0.0	0.6	0.0	0.0	0.0
47.5°	1758.3	823.9	34.0	0.0	0.0	0.6	0.0	0.0	0.0
50°	1349.4	461.3	19.1	0.0	0.6	0.6	0.6	0.0	0.0
52.5°	889.3	230.4	7.4	0.0	0.6	0.6	0.6	0.0	0.0
55°	431.7	123.5	2.5	0.6	0.6	1.2	0.6	0.0	0.0
57.5°	203.8	48.2	0.6	0.6	1.2	1.2	0.6	0.0	0.0
60°	58.1	9.9	0.6	0.6	1.2	1.2	0.6	0.6	0.0
62.5°	8.0	1.2	0.6	1.2	1.2	1.2	1.2	0.6	0.0
65°	2.5	0.6	0.6	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°
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	0.6	1.2	1.2	1.2	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	1.2	1.2	1.2	0.6	0.6
77.5°	0.0	0.6	1.2	1.2	1.9	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
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	0.6	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)