

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: P499656

Luminaire Tested: **LDA2B159727R35D010 2LBDC1MMS-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: P499656  
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: LDA2B159727R35D010 2LBDC1MMS-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**

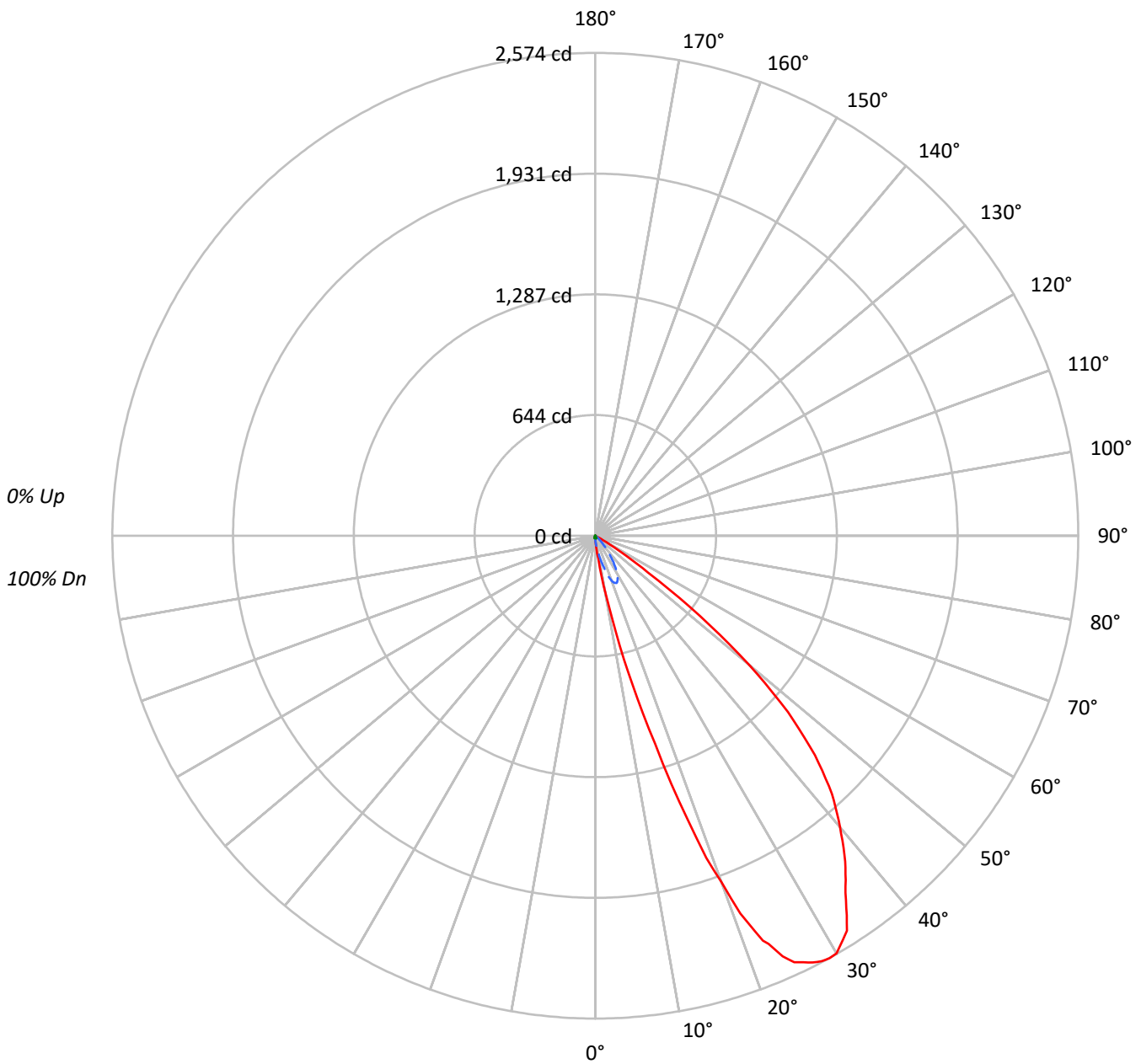
Lumens per Lamp: N/A  
Luminaire Lumens: 694.8 lumens  
Efficiency: N/A  
Efficacy: 49.3 lumens/watt  
Spacing Criteria (0/90/45): 3.16 / 0.51 / 1.46  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

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% Up  
100% Dn

— 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	83	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	46	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°	11594	11594	11594
5°	36302	10153	6290
10°	155051	8567	4659
15°	501010	6231	3729
20°	1032566	3833	2573
25°	1365266	1851	1579
30°	1464433	855	855
35°	1399526	602	301
40°	1306624	322	0
45°	1154864	0	0
50°	820034	384	0
55°	293999	430	0
60°	45389	987	0
65°	2335	1167	0
70°	0	1442	0
75°	0	1906	953
80°	0	2841	0
85°	0	5661	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	4.1	0.6
10°-20°	56.2	8.1
20°-30°	188.2	27.1
30°-40°	237.1	34.1
40°-50°	167.7	24.1
50°-60°	38.7	5.6
60°-70°	1.3	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°	248.6	35.8
0°-40°	485.7	69.9
0°-60°	692.1	99.6
0°-90°	694.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	694.8	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	24	24	24	24	24	
5°	73	48	20	15	13	14
15°	981	173	12	8	7	323
25°	2508	274	3	3	3	1131
35°	2324	160	1	1	0	1455
45°	1655	40	0	0	0	1241
55°	342	2	0	0	0	387
65°	2	0	1	1	0	8
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°	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
1°	29.3	28.4	26.9	24.4	22.0	21.0	21.0	19.6	19.6
2°	35.2	33.7	30.8	25.9	22.0	19.6	18.6	17.6	17.1
3°	45.5	41.6	35.2	27.9	21.5	18.6	18.1	15.6	15.6
4°	56.7	52.8	40.6	29.3	21.0	17.6	15.6	14.7	14.2
5°	73.3	64.5	47.9	30.8	20.5	16.6	14.7	13.2	12.7
6°	94.9	82.6	54.8	32.3	20.0	15.6	13.7	12.2	11.7
7°	119.3	102.7	63.1	33.7	19.1	14.7	12.7	11.7	11.2
8°	171.1	132.0	72.9	34.7	18.6	13.7	12.2	10.8	10.3
9°	228.8	170.7	83.6	36.2	17.6	13.2	11.2	10.3	9.8
10°	309.5	223.5	95.8	37.2	17.1	12.2	10.3	9.8	9.3
11°	389.7	289.0	111.0	37.7	16.1	10.8	10.3	9.8	9.3
12°	521.8	351.6	124.2	37.7	15.2	10.3	9.3	8.8	8.3
13°	678.2	459.2	143.3	38.1	13.7	9.8	8.8	8.3	8.3
14°	816.1	555.5	156.0	38.1	13.2	8.8	8.3	8.3	7.8
15°	980.9	649.4	173.1	37.7	12.2	8.3	8.3	7.8	7.3
16°	1153.5	790.2	196.1	36.7	11.2	7.3	7.8	6.8	6.4
17°	1382.4	906.6	213.7	35.7	10.3	6.8	6.8	6.8	6.4
18°	1591.7	1047.9	227.9	34.7	9.3	6.8	6.4	6.4	5.9
19°	1816.1	1161.4	242.1	33.3	8.3	5.9	5.9	5.9	5.4
20°	1966.7	1300.7	257.7	31.8	7.3	5.4	5.9	5.4	4.9
21°	2157.4	1425.4	263.6	30.3	6.4	4.9	4.9	4.9	4.4
22.5°	2335.9	1591.2	272.9	27.4	5.4	3.9	4.4	3.9	3.9
23°	2363.3	1626.4	272.9	26.4	4.9	3.9	4.4	3.9	3.9
24°	2454.2	1722.7	276.3	24.4	3.9	3.4	3.9	3.4	3.4
25°	2508.0	1799.0	273.8	22.5	3.4	3.4	3.4	3.4	2.9
26°	2530.0	1820.0	268.0	21.0	2.9	2.9	3.4	2.9	2.4
27°	2553.0	1867.9	260.6	19.1	2.4	2.9	2.9	2.9	2.4
28°	2569.2	1873.8	253.3	17.6	2.0	2.4	2.9	2.4	2.4
29°	2574.5	1881.6	244.5	15.6	1.5	2.0	2.4	2.0	2.0
30°	2570.6	1880.2	231.8	14.2	1.5	2.0	2.0	2.0	1.5
32.5°	2495.8	1838.1	196.6	10.3	1.0	1.5	1.5	1.5	1.0
35°	2323.7	1741.3	160.4	6.8	1.0	1.0	1.0	1.0	0.5
37.5°	2187.7	1596.6	122.7	3.9	0.5	1.0	1.0	0.5	0.0
40°	2028.8	1386.8	88.5	2.4	0.5	0.5	0.5	0.0	0.0
42.5°	1867.5	1173.1	60.1	1.0	0.0	0.5	0.5	0.0	0.0
45°	1655.2	898.3	39.6	0.5	0.0	0.5	0.0	0.0	0.0
47.5°	1392.2	652.3	26.9	0.0	0.0	0.5	0.0	0.0	0.0
50°	1068.4	365.3	15.2	0.0	0.5	0.5	0.5	0.0	0.0
52.5°	704.1	182.4	5.9	0.0	0.5	0.5	0.5	0.0	0.0
55°	341.8	97.8	2.0	0.5	0.5	1.0	0.5	0.0	0.0
57.5°	161.4	38.1	0.5	0.5	1.0	1.0	0.5	0.0	0.0
60°	46.0	7.8	0.5	0.5	1.0	1.0	0.5	0.5	0.0
62.5°	6.4	1.0	0.5	1.0	1.0	1.0	1.0	0.5	0.0
65°	2.0	0.5	0.5	1.0	1.0	1.0	1.0	0.5	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.5	0.5	0.5	1.0	1.0	1.0	1.0	0.5	0.0
70°	0.0	0.5	0.5	1.0	1.0	1.0	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	1.0	1.0	1.0	0.5	0.5
77.5°	0.0	0.5	1.0	1.0	1.5	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
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	0.5	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)