

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: P493165

Luminaire Tested: **LDA2B059030R35D010 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: P493165  
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: LDA2B059030R35D010 2LBD1MMS-30DEG TILT  
Description: 500 LUMEN 2IN ADJUSTABLE LED LUMINAIRE WITH 90 CRI LEDS AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

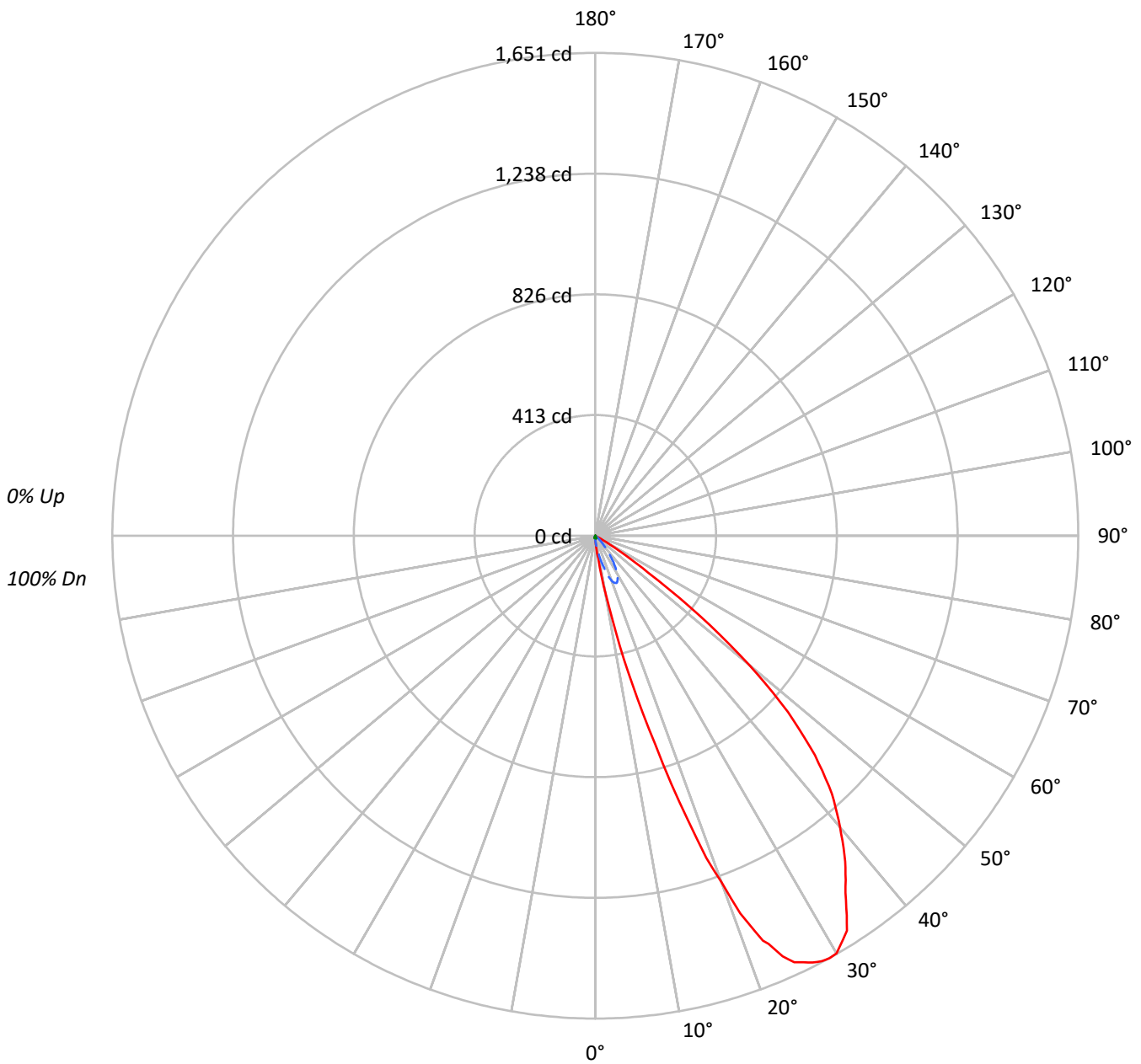
Lumens per Lamp: N/A  
Luminaire Lumens: 445.6 lumens  
Efficiency: N/A  
Efficacy: 63.7 lumens/watt  
Spacing Criteria (0/90/45): 3.16 / 0.51 / 1.46  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

Input Watts (W): 7  
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% 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					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	67	75	70	66	73	68	65	63					63			
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56					56			
6	77	66	58	53	76	65	58	52	63	57	52	62	56	52	60	55	51	49					49			
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46	44					44			
8	67	54	47	42	65	54	47	41	53	46	41	51	45	41	50	45	41	39					39			
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	36	35					35			
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31					31			

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

	0°	90°	180°
0°	7450	7450	7450
5°	23277	6537	4061
10°	99443	5511	3006
15°	321374	3984	2401
20°	662319	2468	1628
25°	875719	1198	1034
30°	939354	513	513
35°	897704	361	181
40°	838087	193	0
45°	740768	0	0
50°	525992	230	0
55°	188545	258	0
60°	29108	592	0
65°	1518	700	0
70°	0	865	0
75°	0	1144	572
80°	0	1705	0
85°	0	3396	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2.6	0.6
10°-20°	36.1	8.1
20°-30°	120.7	27.1
30°-40°	152.1	34.1
40°-50°	107.6	24.1
50°-60°	24.8	5.6
60°-70°	0.8	0.2
70°-80°	0.5	0.1
80°-90°	0.4	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°	159.5	35.8
0°-40°	311.5	69.9
0°-60°	443.9	99.6
0°-90°	445.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	445.6	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	15	15	15	15	15	
5°	47	31	13	9	8	9
15°	629	111	8	5	5	207
25°	1609	176	2	2	2	725
35°	1490	103	1	1	0	933
45°	1062	25	0	0	0	796
55°	219	1	0	0	0	248
65°	1	0	1	1	0	5
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°	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1
1°	18.8	18.2	17.3	15.7	14.1	13.5	13.5	12.5	12.5
2°	22.6	21.6	19.8	16.6	14.1	12.5	11.9	11.3	11.0
3°	29.2	26.7	22.6	17.9	13.8	11.9	11.6	10.0	10.0
4°	36.4	33.9	26.0	18.8	13.5	11.3	10.0	9.4	9.1
5°	47.0	41.4	30.7	19.8	13.2	10.7	9.4	8.5	8.2
6°	60.8	53.0	35.1	20.7	12.9	10.0	8.8	7.8	7.5
7°	76.5	65.9	40.5	21.6	12.2	9.4	8.2	7.5	7.2
8°	109.8	84.7	46.7	22.3	11.9	8.8	7.8	6.9	6.6
9°	146.8	109.5	53.6	23.2	11.3	8.5	7.2	6.6	6.3
10°	198.5	143.3	61.5	23.8	11.0	7.8	6.6	6.3	6.0
11°	250.0	185.4	71.2	24.2	10.4	6.9	6.6	6.3	6.0
12°	334.7	225.5	79.7	24.2	9.7	6.6	6.0	5.6	5.3
13°	435.0	294.5	91.9	24.5	8.8	6.3	5.6	5.3	5.3
14°	523.5	356.3	100.1	24.5	8.5	5.6	5.3	5.3	5.0
15°	629.2	416.5	111.0	24.2	7.8	5.3	5.3	5.0	4.7
16°	739.9	506.9	125.8	23.5	7.2	4.7	5.0	4.4	4.1
17°	886.7	581.5	137.1	22.9	6.6	4.4	4.4	4.4	4.1
18°	1020.9	672.2	146.2	22.3	6.0	4.4	4.1	4.1	3.8
19°	1164.9	744.9	155.3	21.3	5.3	3.8	3.8	3.8	3.5
20°	1261.5	834.3	165.3	20.4	4.7	3.5	3.8	3.5	3.1
21°	1383.8	914.3	169.1	19.4	4.1	3.1	3.1	3.1	2.8
22.5°	1498.3	1020.6	175.0	17.6	3.5	2.5	2.8	2.5	2.5
23°	1515.9	1043.2	175.0	16.9	3.1	2.5	2.8	2.5	2.5
24°	1574.2	1105.0	177.2	15.7	2.5	2.2	2.5	2.2	2.2
25°	1608.7	1153.9	175.6	14.4	2.2	2.2	2.2	2.2	1.9
26°	1622.8	1167.4	171.9	13.5	1.9	1.9	2.2	1.9	1.6
27°	1637.6	1198.2	167.2	12.2	1.6	1.9	1.9	1.9	1.6
28°	1647.9	1201.9	162.5	11.3	1.3	1.6	1.9	1.6	1.6
29°	1651.4	1206.9	156.8	10.0	0.9	1.3	1.6	1.3	1.3
30°	1648.9	1206.0	148.7	9.1	0.9	1.3	1.3	1.3	0.9
32.5°	1600.9	1179.0	126.1	6.6	0.6	0.9	0.9	0.9	0.6
35°	1490.5	1116.9	102.9	4.4	0.6	0.6	0.6	0.6	0.3
37.5°	1403.3	1024.1	78.7	2.5	0.3	0.6	0.6	0.3	0.0
40°	1301.3	889.5	56.8	1.6	0.3	0.3	0.3	0.0	0.0
42.5°	1197.8	752.5	38.6	0.6	0.0	0.3	0.3	0.0	0.0
45°	1061.7	576.2	25.4	0.3	0.0	0.3	0.0	0.0	0.0
47.5°	893.0	418.4	17.3	0.0	0.0	0.3	0.0	0.0	0.0
50°	685.3	234.3	9.7	0.0	0.3	0.3	0.3	0.0	0.0
52.5°	451.7	117.0	3.8	0.0	0.3	0.3	0.3	0.0	0.0
55°	219.2	62.7	1.3	0.3	0.3	0.6	0.3	0.0	0.0
57.5°	103.5	24.5	0.3	0.3	0.6	0.6	0.3	0.0	0.0
60°	29.5	5.0	0.3	0.3	0.6	0.6	0.3	0.3	0.0
62.5°	4.1	0.6	0.3	0.6	0.6	0.6	0.6	0.3	0.0
65°	1.3	0.3	0.3	0.6	0.6	0.6	0.6	0.3	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.3	0.3	0.3	0.6	0.6	0.6	0.6	0.3	0.0
70°	0.0	0.3	0.3	0.6	0.6	0.6	0.6	0.3	0.0
72.5°	0.0	0.3	0.6	0.6	0.6	0.6	0.6	0.3	0.0
75°	0.0	0.3	0.6	0.6	0.6	0.6	0.6	0.3	0.3
77.5°	0.0	0.3	0.6	0.6	0.9	0.6	0.6	0.3	0.0
80°	0.0	0.3	0.6	0.6	0.6	0.6	0.6	0.3	0.0
82.5°	0.0	0.3	0.6	0.6	0.6	0.6	0.6	0.3	0.0
85°	0.0	0.3	0.6	0.6	0.6	0.6	0.6	0.3	0.0
87.5°	0.0	0.3	0.6	0.6	0.6	0.6	0.3	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)