

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: P493739

Luminaire Tested: **LDA2B059050R20D010 2LBD1WMH-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: P493739  
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: LDA2B059050R20D010 2LBD1WMH-30DEG TILT  
Description: 500 LUMEN 2IN ADJUSTABLE LED LUMINAIRE WITH 90 CRI LEDS AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

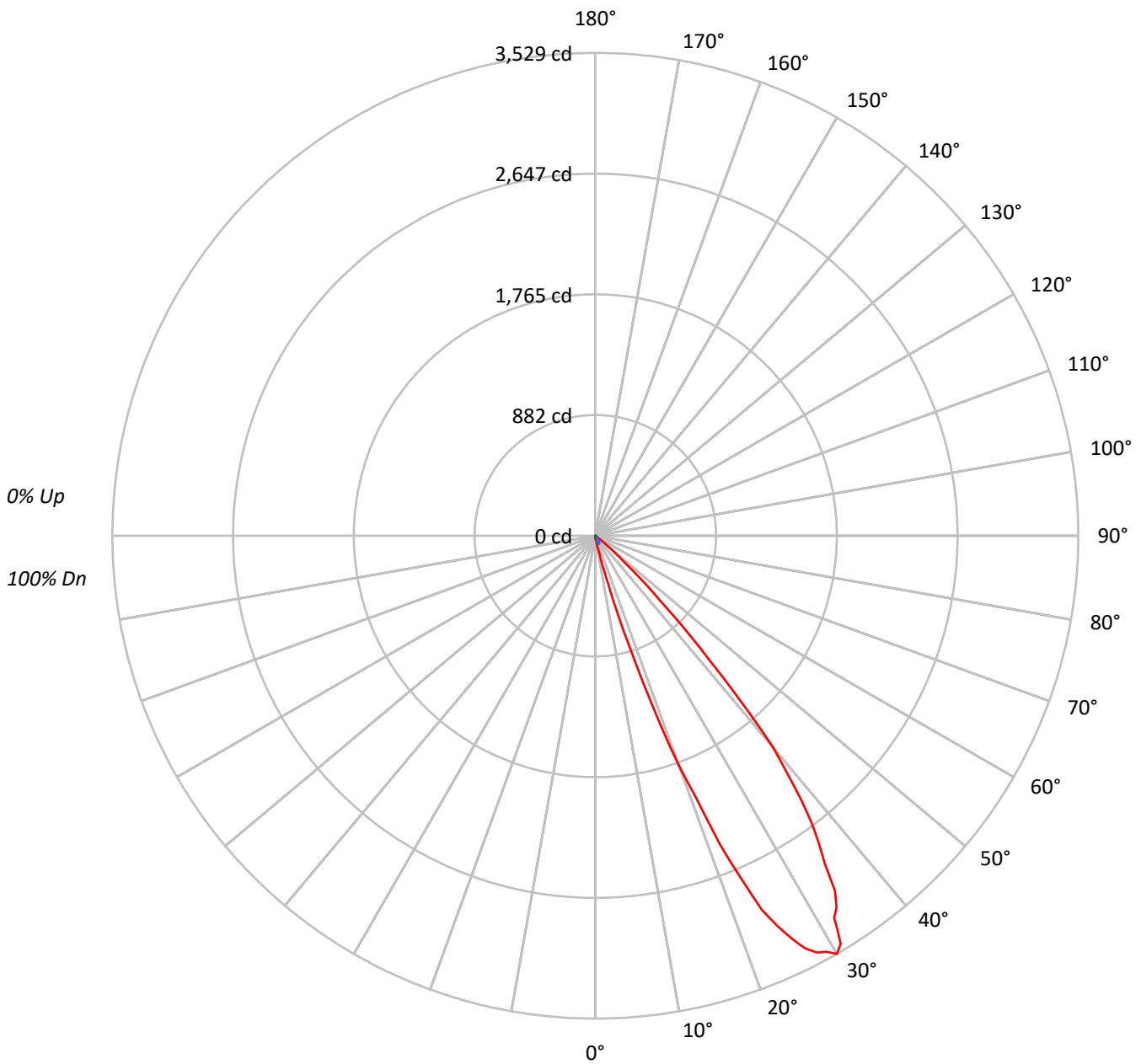
Lumens per Lamp: N/A  
Luminaire Lumens: 445.6 lumens  
Efficiency: N/A  
Efficacy: 63.7 lumens/watt  
Spacing Criteria (0/90/45): 2.56 / 0.56 / 1.2  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

Input Watts (W): 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°-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	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°	7055	7055	7055
5°	13520	6240	4556
10°	32363	5461	3056
15°	188473	4342	1226
20°	940109	2678	368
25°	1714149	925	0
30°	2010533	0	0
35°	1759752	0	0
40°	1299540	0	0
45°	468379	0	0
50°	97554	0	0
55°	22364	258	0
60°	7104	296	0
65°	1634	817	0
70°	0	1010	433
75°	0	1334	0
80°	0	1989	0
85°	0	3962	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1.6	0.4
10°-20°	24.5	5.5
20°-30°	165.0	37.0
30°-40°	192.8	43.3
40°-50°	56.2	12.6
50°-60°	3.7	0.8
60°-70°	0.7	0.2
70°-80°	0.6	0.1
80°-90°	0.5	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°	191.1	42.9
0°-40°	383.9	86.2
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°	14	14	14	14	14	
5°	27	20	13	11	9	4
15°	369	42	8	4	2	193
25°	3149	65	2	0	0	1394
35°	2922	35	0	0	0	1795
45°	671	7	0	0	0	619
55°	26	1	0	0	0	33
65°	1	1	1	1	0	2
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°	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3	14.3
2.5°	18.4	18.4	16.4	14.7	13.3	12.6	12.3	11.6	11.3
5°	27.3	23.9	19.8	15.4	12.6	11.6	10.6	9.6	9.2
7.5°	40.0	34.8	23.9	15.7	12.0	10.2	9.2	8.2	7.5
10°	64.6	50.2	29.4	15.7	10.9	8.9	7.5	6.5	6.1
12.5°	119.2	76.9	35.2	15.4	9.9	7.5	5.8	5.1	4.1
15°	369.0	159.2	41.7	14.7	8.5	5.8	4.4	2.7	2.4
17.5°	954.2	371.7	46.5	13.0	6.8	4.1	2.0	1.7	1.7
20°	1790.6	674.1	53.3	11.3	5.1	2.7	1.4	1.0	0.7
21°	2042.7	824.7	56.7	10.6	4.4	1.7	1.0	0.3	0.3
22°	2434.6	989.1	59.4	9.9	3.8	1.0	0.7	0.3	0.0
23°	2713.7	1093.9	62.2	8.9	2.7	1.0	0.3	0.0	0.0
24°	2992.8	1227.5	63.9	8.2	2.4	0.7	0.3	0.0	0.0
25°	3148.9	1338.9	64.6	7.5	1.7	0.3	0.0	0.0	0.0
26°	3277.4	1413.4	64.9	6.8	1.0	0.0	0.0	0.0	0.0
27°	3387.4	1499.8	64.2	6.1	1.0	0.0	0.0	0.0	0.0
28°	3449.9	1514.2	63.2	5.5	0.3	0.0	0.0	0.0	0.0
29°	3476.9	1496.7	60.1	4.8	0.3	0.0	0.0	0.0	0.0
30°	3529.2	1480.4	57.1	4.4	0.0	0.0	0.0	0.0	0.0
31°	3481.0	1426.0	53.3	3.8	0.0	0.0	0.0	0.0	0.0
32°	3292.4	1380.2	48.9	3.1	0.0	0.0	0.0	0.0	0.0
33°	3236.1	1286.3	44.1	2.7	0.0	0.0	0.0	0.0	0.0
34°	3129.8	1146.6	40.0	2.4	0.0	0.0	0.0	0.0	0.0
35°	2921.8	1031.1	34.8	2.0	0.0	0.0	0.0	0.0	0.0
36°	2776.6	899.2	30.4	1.7	0.0	0.0	0.0	0.0	0.0
37°	2624.5	784.1	27.0	1.4	0.0	0.0	0.0	0.0	0.0
38°	2435.6	663.1	22.9	1.0	0.0	0.0	0.0	0.0	0.0
39°	2215.6	548.0	19.5	1.0	0.0	0.0	0.0	0.0	0.0
40°	2017.8	441.7	16.7	0.7	0.0	0.0	0.0	0.0	0.0
42.5°	1245.3	252.1	9.9	0.7	0.0	0.0	0.0	0.0	0.0
45°	671.3	153.1	7.2	0.3	0.0	0.0	0.0	0.0	0.0
47.5°	309.2	71.4	5.1	0.3	0.0	0.0	0.0	0.0	0.0
50°	127.1	31.8	3.8	0.0	0.0	0.0	0.0	0.0	0.0
52.5°	45.8	17.8	2.4	0.0	0.0	0.3	0.0	0.0	0.0
55°	26.0	10.2	1.4	0.3	0.3	0.3	0.3	0.0	0.0
57.5°	12.3	5.8	0.3	0.3	0.3	0.3	0.3	0.0	0.0
60°	7.2	3.1	0.3	0.3	0.3	0.7	0.3	0.0	0.0
62.5°	3.4	1.0	0.3	0.7	0.7	0.7	0.7	0.3	0.0
65°	1.4	0.3	0.7	0.7	0.7	1.0	0.7	0.3	0.0
67.5°	0.3	0.3	0.7	0.7	0.7	1.0	0.7	0.3	0.3
70°	0.0	0.3	0.7	0.7	0.7	1.0	0.7	0.3	0.3
72.5°	0.0	0.3	0.7	0.7	0.7	1.0	0.7	0.3	0.3
75°	0.0	0.3	0.7	0.7	0.7	0.7	0.7	0.3	0.0
77.5°	0.0	0.3	0.7	0.7	0.7	0.7	0.7	0.3	0.0
80°	0.0	0.3	0.7	0.7	0.7	0.7	0.7	0.3	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	0.3	0.7	0.7	0.7	0.7	0.7	0.3	0.0
85°	0.0	0.3	0.7	0.7	0.7	0.7	0.7	0.3	0.0
87.5°	0.0	0.3	0.7	0.7	0.7	0.7	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)