

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: P496128

Luminaire Tested: **LDA2B109035R20D010 2LBDL1MMS-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: P496128
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: LDA2B109035R20D010 2LBDL1MMS-30DEG TILT
Description: 1000 LUMEN 2IN ADJUSTABLE LED LUMINAIRE WITH 90 CRI LEDS AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

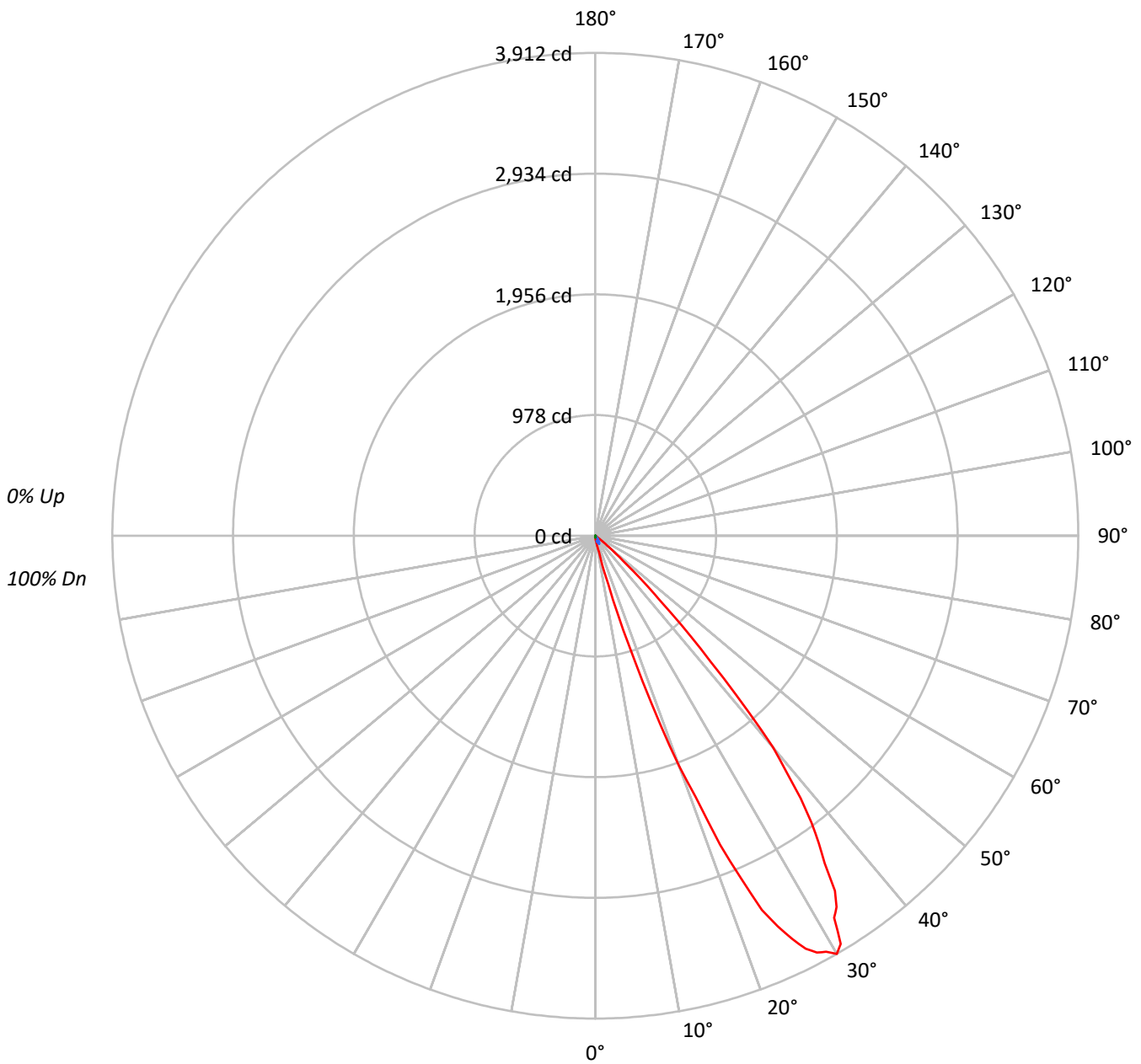
Lumens per Lamp: N/A
Luminaire Lumens: 494.1 lumens
Efficiency: N/A
Efficacy: 49.4 lumens/watt
Spacing Criteria (0/90/45): 2.56 / 0.56 / 1.2
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

Input Watts (W): 10
Input Voltage (V): NR
Input Current (A_{in}): 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°	7844	7844	7844
5°	15006	6933	5052
10°	35870	6062	3407
15°	208903	4852	1379
20°	1042174	2993	420
25°	1900322	1034	0
30°	2228836	0	0
35°	1950796	0	0
40°	1440584	0	0
45°	519242	0	0
50°	108146	0	0
55°	24772	344	0
60°	7894	395	0
65°	1751	934	0
70°	0	1154	577
75°	0	1525	0
80°	0	2273	0
85°	0	4529	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.8	0.4
10°-20°	27.1	5.5
20°-30°	182.9	37.0
30°-40°	213.7	43.3
40°-50°	62.3	12.6
50°-60°	4.2	0.8
60°-70°	0.8	0.2
70°-80°	0.7	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°	211.9	42.9
0°-40°	425.6	86.1
0°-60°	492.1	99.6
0°-90°	494.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	494.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	16	16	16	16	16	
5°	30	22	14	12	10	4
15°	409	46	10	5	3	213
25°	3491	72	2	0	0	1546
35°	3239	39	0	0	0	1990
45°	744	8	0	0	0	686
55°	29	2	0	0	0	37
65°	2	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°	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9
2.5°	20.5	20.5	18.2	16.3	14.8	14.0	13.6	12.9	12.5
5°	30.3	26.5	22.0	17.0	14.0	12.9	11.7	10.6	10.2
7.5°	44.3	38.6	26.5	17.4	13.3	11.4	10.2	9.1	8.3
10°	71.6	55.7	32.6	17.4	12.1	9.8	8.3	7.2	6.8
12.5°	132.2	85.2	39.0	17.0	11.0	8.3	6.4	5.7	4.5
15°	409.0	176.5	46.2	16.3	9.5	6.4	4.9	3.0	2.7
17.5°	1057.8	412.1	51.5	14.4	7.6	4.5	2.3	1.9	1.9
20°	1985.0	747.3	59.1	12.5	5.7	3.0	1.5	1.1	0.8
21°	2264.5	914.3	62.9	11.7	4.9	1.9	1.1	0.4	0.4
22°	2698.9	1096.5	65.9	11.0	4.2	1.1	0.8	0.4	0.0
23°	3008.3	1212.7	68.9	9.8	3.0	1.1	0.4	0.0	0.0
24°	3317.8	1360.8	70.8	9.1	2.7	0.8	0.4	0.0	0.0
25°	3490.9	1484.3	71.6	8.3	1.9	0.4	0.0	0.0	0.0
26°	3633.3	1566.9	72.0	7.6	1.1	0.0	0.0	0.0	0.0
27°	3755.2	1662.7	71.2	6.8	1.1	0.0	0.0	0.0	0.0
28°	3824.5	1678.6	70.1	6.1	0.4	0.0	0.0	0.0	0.0
29°	3854.4	1659.3	66.7	5.3	0.4	0.0	0.0	0.0	0.0
30°	3912.4	1641.1	63.2	4.9	0.0	0.0	0.0	0.0	0.0
31°	3859.0	1580.9	59.1	4.2	0.0	0.0	0.0	0.0	0.0
32°	3649.9	1530.1	54.2	3.4	0.0	0.0	0.0	0.0	0.0
33°	3587.4	1426.0	48.9	3.0	0.0	0.0	0.0	0.0	0.0
34°	3469.6	1271.1	44.3	2.7	0.0	0.0	0.0	0.0	0.0
35°	3239.0	1143.0	38.6	2.3	0.0	0.0	0.0	0.0	0.0
36°	3078.0	996.8	33.7	1.9	0.0	0.0	0.0	0.0	0.0
37°	2909.5	869.2	29.9	1.5	0.0	0.0	0.0	0.0	0.0
38°	2700.0	735.1	25.4	1.1	0.0	0.0	0.0	0.0	0.0
39°	2456.1	607.5	21.6	1.1	0.0	0.0	0.0	0.0	0.0
40°	2236.8	489.7	18.6	0.8	0.0	0.0	0.0	0.0	0.0
42.5°	1380.5	279.5	11.0	0.8	0.0	0.0	0.0	0.0	0.0
45°	744.2	169.7	8.0	0.4	0.0	0.0	0.0	0.0	0.0
47.5°	342.8	79.2	5.7	0.4	0.0	0.0	0.0	0.0	0.0
50°	140.9	35.2	4.2	0.0	0.0	0.0	0.0	0.0	0.0
52.5°	50.8	19.7	2.7	0.0	0.0	0.4	0.0	0.0	0.0
55°	28.8	11.4	1.5	0.4	0.4	0.4	0.4	0.0	0.0
57.5°	13.6	6.4	0.4	0.4	0.4	0.4	0.4	0.0	0.0
60°	8.0	3.4	0.4	0.4	0.4	0.8	0.4	0.0	0.0
62.5°	3.8	1.1	0.4	0.8	0.8	0.8	0.8	0.4	0.0
65°	1.5	0.4	0.8	0.8	0.8	1.1	0.8	0.4	0.0
67.5°	0.4	0.4	0.8	0.8	0.8	1.1	0.8	0.4	0.4
70°	0.0	0.4	0.8	0.8	0.8	1.1	0.8	0.4	0.4
72.5°	0.0	0.4	0.8	0.8	0.8	1.1	0.8	0.4	0.4
75°	0.0	0.4	0.8	0.8	0.8	0.8	0.8	0.4	0.0
77.5°	0.0	0.4	0.8	0.8	0.8	0.8	0.8	0.4	0.0
80°	0.0	0.4	0.8	0.8	0.8	0.8	0.8	0.4	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	0.4	0.8	0.8	0.8	0.8	0.8	0.4	0.0
85°	0.0	0.4	0.8	0.8	0.8	0.8	0.8	0.4	0.0
87.5°	0.0	0.4	0.8	0.8	0.8	0.8	0.4	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)