

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: P496109

Luminaire Tested: **LDA2B109035R20D010 2LBD1MW-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: P496109
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 2LBD1MW-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

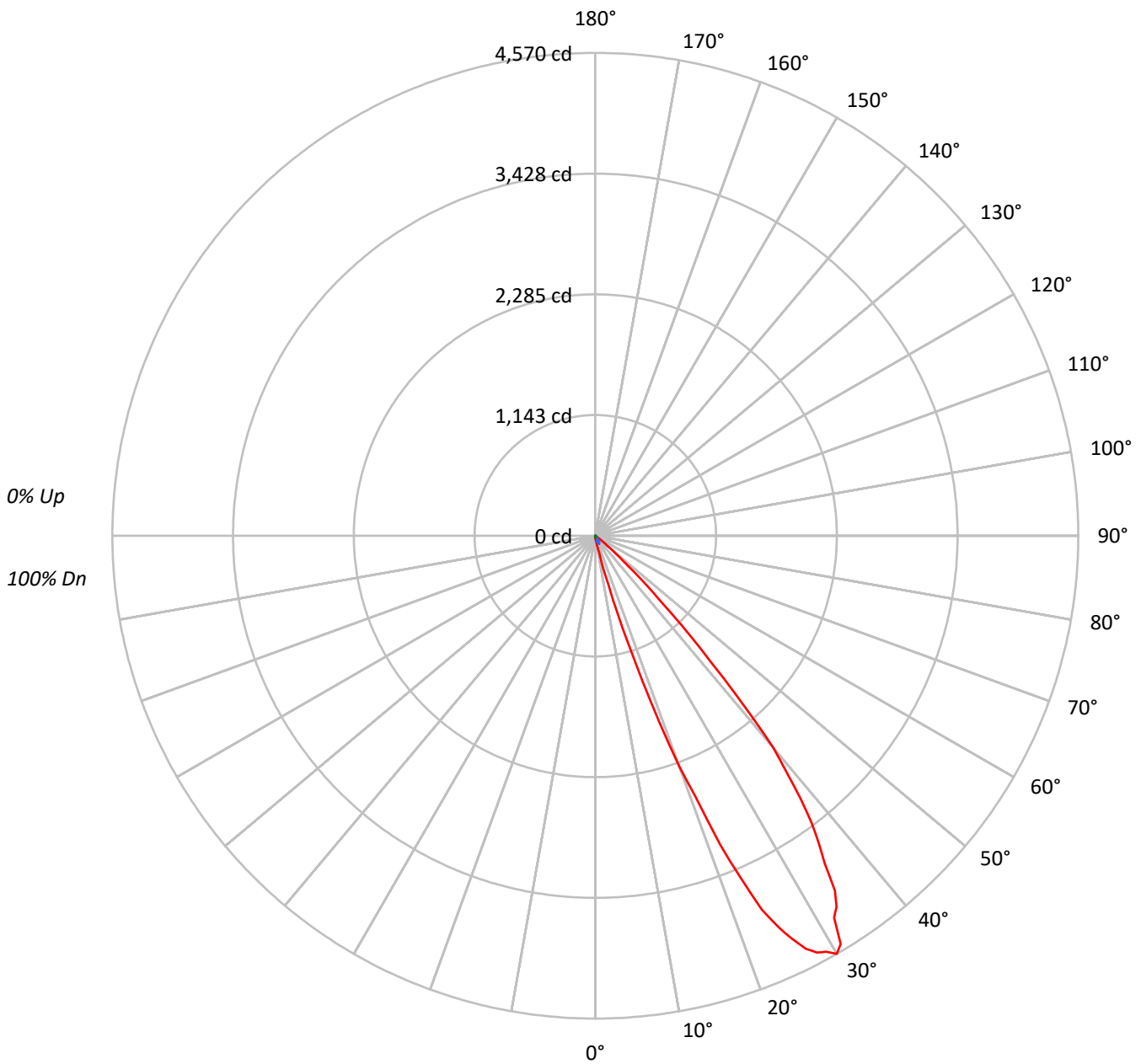
Lumens per Lamp: N/A
Luminaire Lumens: 577.0 lumens
Efficiency: N/A
Efficacy: 57.7 lumens/watt
Spacing Criteria (0/90/45): 2.56 / 0.56 / 1.2
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

Input Watts (W): 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

TEST NUMBER: P496109

CATALOG NUMBER: LDA2B109035R20D010 2LBD1MW-30DEG TILT

Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - - - 90°-270°



TEST NUMBER: P496109

CATALOG NUMBER: LDA2B109035R20D010 2LBD1MW-30DEG TILT

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°	9177	9177	9177
5°	17532	8122	5893
10°	41881	7114	4008
15°	244044	5669	1583
20°	1217270	3465	473
25°	2219592	1198	0
30°	2603347	0	0
35°	2278559	0	0
40°	1682678	0	0
45°	606527	0	0
50°	126336	0	0
55°	28901	344	0
60°	9177	395	0
65°	2101	1051	0
70°	0	1298	577
75°	0	1716	0
80°	0	2557	0
85°	0	5095	0



TEST NUMBER: P496109

CATALOG NUMBER: LDA2B109035R20D010 2LBD1MW-30DEG TILT

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.1	0.4
10°-20°	31.7	5.5
20°-30°	213.7	37.0
30°-40°	249.6	43.3
40°-50°	72.8	12.6
50°-60°	4.8	0.8
60°-70°	0.9	0.2
70°-80°	0.7	0.1
80°-90°	0.6	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°	247.5	42.9
0°-40°	497.1	86.2
0°-60°	574.8	99.6
0°-90°	577.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	577.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	19	19	19	19	19	
5°	35	26	16	14	12	5
15°	478	54	11	6	3	249
25°	4077	84	2	0	0	1805
35°	3783	45	0	0	0	2324
45°	869	9	0	0	0	801
55°	34	2	0	0	0	43
65°	2	1	1	1	0	3
75°	0	1	1	1	0	0
85°	0	1	1	1	0	0
90°	0	0	0	0	0	



TEST NUMBER: P496109

CATALOG NUMBER: LDA2B109035R20D010 2LBD1MW-30DEG TILT

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6
2.5°	23.9	23.9	21.2	19.0	17.3	16.4	15.9	15.0	14.6
5°	35.4	31.0	25.7	19.9	16.4	15.0	13.7	12.4	11.9
7.5°	51.8	45.1	31.0	20.3	15.5	13.3	11.9	10.6	9.7
10°	83.6	65.0	38.0	20.3	14.2	11.5	9.7	8.4	8.0
12.5°	154.4	99.5	45.6	19.9	12.8	9.7	7.5	6.6	5.3
15°	477.8	206.1	54.0	19.0	11.1	7.5	5.8	3.5	3.1
17.5°	1235.6	481.3	60.2	16.8	8.8	5.3	2.7	2.2	2.2
20°	2318.5	872.8	69.0	14.6	6.6	3.5	1.8	1.3	0.9
21°	2645.0	1067.9	73.4	13.7	5.8	2.2	1.3	0.4	0.4
22°	3152.4	1280.7	77.0	12.8	4.9	1.3	0.9	0.4	0.0
23°	3513.8	1416.5	80.5	11.5	3.5	1.3	0.4	0.0	0.0
24°	3875.3	1589.5	82.7	10.6	3.1	0.9	0.4	0.0	0.0
25°	4077.4	1733.7	83.6	9.7	2.2	0.4	0.0	0.0	0.0
26°	4243.8	1830.1	84.1	8.8	1.3	0.0	0.0	0.0	0.0
27°	4386.2	1942.1	83.2	8.0	1.3	0.0	0.0	0.0	0.0
28°	4467.2	1960.6	81.8	7.1	0.4	0.0	0.0	0.0	0.0
29°	4502.1	1938.1	77.9	6.2	0.4	0.0	0.0	0.0	0.0
30°	4569.8	1916.8	73.9	5.8	0.0	0.0	0.0	0.0	0.0
31°	4507.4	1846.5	69.0	4.9	0.0	0.0	0.0	0.0	0.0
32°	4263.2	1787.2	63.3	4.0	0.0	0.0	0.0	0.0	0.0
33°	4190.2	1665.6	57.1	3.5	0.0	0.0	0.0	0.0	0.0
34°	4052.7	1484.6	51.8	3.1	0.0	0.0	0.0	0.0	0.0
35°	3783.2	1335.1	45.1	2.7	0.0	0.0	0.0	0.0	0.0
36°	3595.2	1164.3	39.4	2.2	0.0	0.0	0.0	0.0	0.0
37°	3398.4	1015.3	34.9	1.8	0.0	0.0	0.0	0.0	0.0
38°	3153.7	858.7	29.6	1.3	0.0	0.0	0.0	0.0	0.0
39°	2868.8	709.6	25.2	1.3	0.0	0.0	0.0	0.0	0.0
40°	2612.7	572.0	21.7	0.9	0.0	0.0	0.0	0.0	0.0
42.5°	1612.5	326.5	12.8	0.9	0.0	0.0	0.0	0.0	0.0
45°	869.3	198.2	9.3	0.4	0.0	0.0	0.0	0.0	0.0
47.5°	400.4	92.5	6.6	0.4	0.0	0.0	0.0	0.0	0.0
50°	164.6	41.1	4.9	0.0	0.0	0.0	0.0	0.0	0.0
52.5°	59.3	23.0	3.1	0.0	0.0	0.4	0.0	0.0	0.0
55°	33.6	13.3	1.8	0.4	0.4	0.4	0.4	0.0	0.0
57.5°	15.9	7.5	0.4	0.4	0.4	0.4	0.4	0.0	0.0
60°	9.3	4.0	0.4	0.4	0.4	0.9	0.4	0.0	0.0
62.5°	4.4	1.3	0.4	0.9	0.9	0.9	0.9	0.4	0.0
65°	1.8	0.4	0.9	0.9	0.9	1.3	0.9	0.4	0.0
67.5°	0.4	0.4	0.9	0.9	0.9	1.3	0.9	0.4	0.4
70°	0.0	0.4	0.9	0.9	0.9	1.3	0.9	0.4	0.4
72.5°	0.0	0.4	0.9	0.9	0.9	1.3	0.9	0.4	0.4
75°	0.0	0.4	0.9	0.9	0.9	0.9	0.9	0.4	0.0
77.5°	0.0	0.4	0.9	0.9	0.9	0.9	0.9	0.4	0.0
80°	0.0	0.4	0.9	0.9	0.9	0.9	0.9	0.4	0.0



TEST NUMBER: P496109

CATALOG NUMBER: LDA2B109035R20D010 2LBD1MW-30DEG TILT

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
82.5°	0.0	0.4	0.9	0.9	0.9	0.9	0.9	0.4	0.0
85°	0.0	0.4	0.9	0.9	0.9	0.9	0.9	0.4	0.0
87.5°	0.0	0.4	0.9	0.9	0.9	0.9	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)