

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: P499213

Luminaire Tested: **LDA2B159040R35D010 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: P499213
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: LDA2B159040R35D010 2LBD1MMS-30DEG TILT
Description: 1500 LUMEN 2IN ADJUSTABLE LED LUMINAIRE WITH 90 CRI LEDS AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

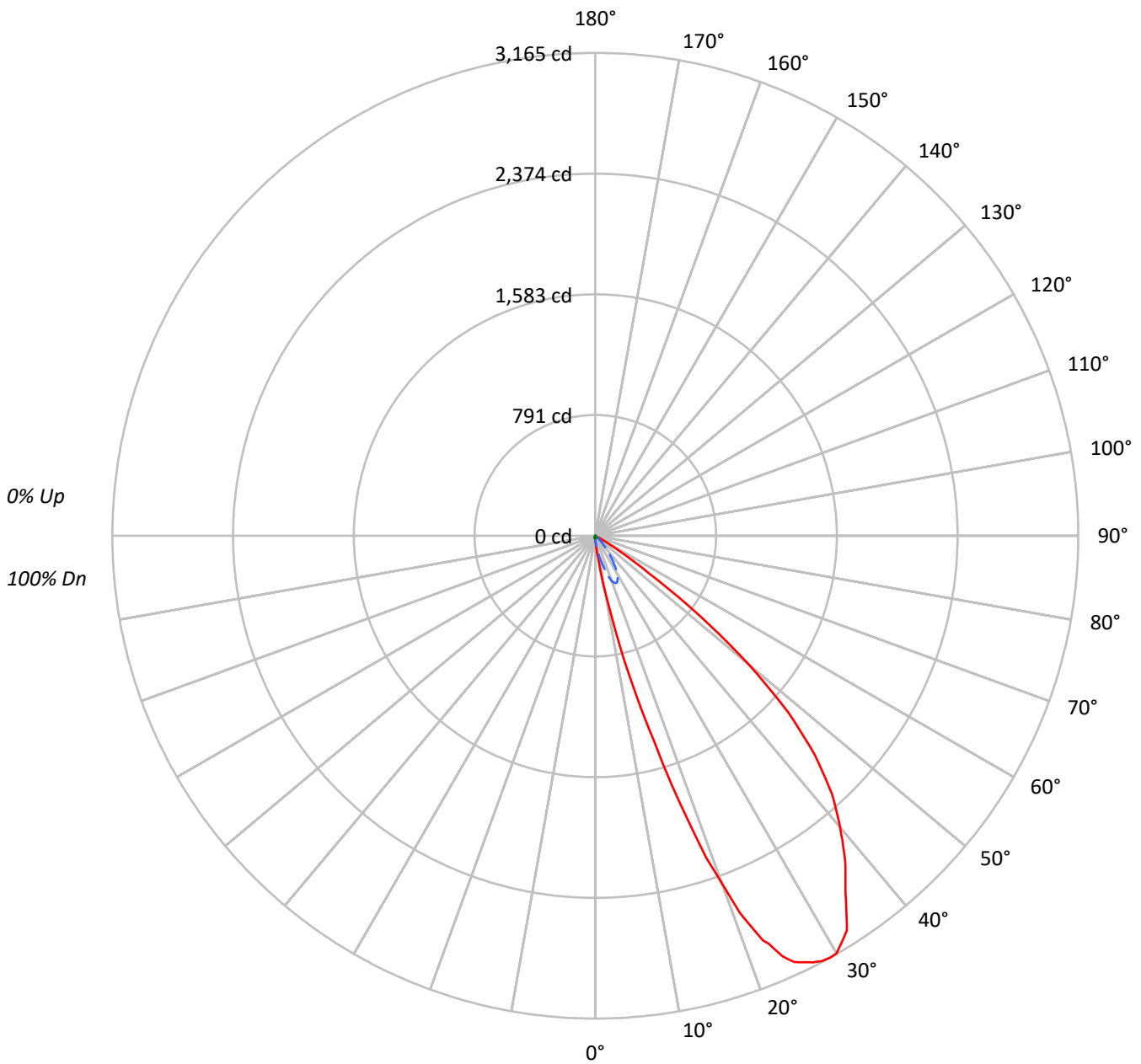
Lumens per Lamp: N/A
Luminaire Lumens: 854.1 lumens
Efficiency: N/A
Efficacy: 60.6 lumens/watt
Spacing Criteria (0/90/45): 3.16 / 0.51 / 1.46
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

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°-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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	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	84	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°	14258	14258	14258
5°	44671	12480	7726
10°	190620	10520	5711
15°	615932	7661	4597
20°	1269405	4725	3150
25°	1678439	2286	1960
30°	1800319	1025	1025
35°	1720483	723	361
40°	1606295	386	0
45°	1419788	0	0
50°	1008157	461	0
55°	361435	516	0
60°	55750	1184	0
65°	2802	1401	0
70°	0	1731	0
75°	0	2287	1144
80°	0	3409	0
85°	0	6793	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.1	0.6
10°-20°	69.1	8.1
20°-30°	231.4	27.1
30°-40°	291.5	34.1
40°-50°	206.2	24.1
50°-60°	47.5	5.6
60°-70°	1.5	0.2
70°-80°	1.0	0.1
80°-90°	0.8	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°	305.6	35.8
0°-40°	597.0	69.9
0°-60°	850.8	99.6
0°-90°	854.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	854.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	29	29	29	29	29	
5°	90	59	25	18	16	17
15°	1206	213	15	10	9	397
25°	3083	337	4	4	4	1390
35°	2857	197	1	1	1	1788
45°	2035	49	0	0	0	1526
55°	420	2	1	1	0	475
65°	2	1	1	1	0	9
75°	0	1	1	1	1	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°	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9
1°	36.1	34.9	33.1	30.1	27.1	25.8	25.8	24.0	24.0
2°	43.3	41.5	37.9	31.9	27.1	24.0	22.8	21.6	21.0
3°	55.9	51.1	43.3	34.3	26.5	22.8	22.2	19.2	19.2
4°	69.7	64.9	49.9	36.1	25.8	21.6	19.2	18.0	17.4
5°	90.2	79.4	58.9	37.9	25.2	20.4	18.0	16.2	15.6
6°	116.6	101.6	67.3	39.7	24.6	19.2	16.8	15.0	14.4
7°	146.7	126.2	77.5	41.5	23.4	18.0	15.6	14.4	13.8
8°	210.4	162.3	89.6	42.7	22.8	16.8	15.0	13.2	12.6
9°	281.3	209.8	102.8	44.5	21.6	16.2	13.8	12.6	12.0
10°	380.5	274.7	117.8	45.7	21.0	15.0	12.6	12.0	11.4
11°	479.1	355.3	136.5	46.3	19.8	13.2	12.6	12.0	11.4
12°	641.4	432.2	152.7	46.3	18.6	12.6	11.4	10.8	10.2
13°	833.8	564.5	176.1	46.9	16.8	12.0	10.8	10.2	10.2
14°	1003.3	682.9	191.8	46.9	16.2	10.8	10.2	10.2	9.6
15°	1205.9	798.3	212.8	46.3	15.0	10.2	10.2	9.6	9.0
16°	1418.1	971.4	241.1	45.1	13.8	9.0	9.6	8.4	7.8
17°	1699.4	1114.5	262.7	43.9	12.6	8.4	8.4	8.4	7.8
18°	1956.7	1288.2	280.1	42.7	11.4	8.4	7.8	7.8	7.2
19°	2232.6	1427.7	297.6	40.9	10.2	7.2	7.2	7.2	6.6
20°	2417.8	1599.0	316.8	39.1	9.0	6.6	7.2	6.6	6.0
21°	2652.2	1752.3	324.0	37.3	7.8	6.0	6.0	6.0	5.4
22.5°	2871.7	1956.1	335.4	33.7	6.6	4.8	5.4	4.8	4.8
23°	2905.3	1999.4	335.4	32.5	6.0	4.8	5.4	4.8	4.8
24°	3017.1	2117.8	339.6	30.1	4.8	4.2	4.8	4.2	4.2
25°	3083.3	2211.6	336.6	27.7	4.2	4.2	4.2	4.2	3.6
26°	3110.3	2237.5	329.4	25.8	3.6	3.6	4.2	3.6	3.0
27°	3138.6	2296.4	320.4	23.4	3.0	3.6	3.6	3.6	3.0
28°	3158.4	2303.6	311.4	21.6	2.4	3.0	3.6	3.0	3.0
29°	3165.0	2313.2	300.6	19.2	1.8	2.4	3.0	2.4	2.4
30°	3160.2	2311.4	284.9	17.4	1.8	2.4	2.4	2.4	1.8
32.5°	3068.2	2259.7	241.7	12.6	1.2	1.8	1.8	1.8	1.2
35°	2856.6	2140.7	197.2	8.4	1.2	1.2	1.2	1.2	0.6
37.5°	2689.5	1962.7	150.9	4.8	0.6	1.2	1.2	0.6	0.0
40°	2494.1	1704.8	108.8	3.0	0.6	0.6	0.6	0.0	0.0
42.5°	2295.8	1442.1	73.9	1.2	0.0	0.6	0.6	0.0	0.0
45°	2034.9	1104.3	48.7	0.6	0.0	0.6	0.0	0.0	0.0
47.5°	1711.5	801.9	33.1	0.0	0.0	0.6	0.0	0.0	0.0
50°	1313.5	449.1	18.6	0.0	0.6	0.6	0.6	0.0	0.0
52.5°	865.6	224.2	7.2	0.0	0.6	0.6	0.6	0.0	0.0
55°	420.2	120.2	2.4	0.6	0.6	1.2	0.6	0.0	0.0
57.5°	198.4	46.9	0.6	0.6	1.2	1.2	0.6	0.0	0.0
60°	56.5	9.6	0.6	0.6	1.2	1.2	0.6	0.6	0.0
62.5°	7.8	1.2	0.6	1.2	1.2	1.2	1.2	0.6	0.0
65°	2.4	0.6	0.6	1.2	1.2	1.2	1.2	0.6	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.6	0.6	0.6	1.2	1.2	1.2	1.2	0.6	0.0
70°	0.0	0.6	0.6	1.2	1.2	1.2	1.2	0.6	0.0
72.5°	0.0	0.6	1.2	1.2	1.2	1.2	1.2	0.6	0.0
75°	0.0	0.6	1.2	1.2	1.2	1.2	1.2	0.6	0.6
77.5°	0.0	0.6	1.2	1.2	1.8	1.2	1.2	0.6	0.0
80°	0.0	0.6	1.2	1.2	1.2	1.2	1.2	0.6	0.0
82.5°	0.0	0.6	1.2	1.2	1.2	1.2	1.2	0.6	0.0
85°	0.0	0.6	1.2	1.2	1.2	1.2	1.2	0.6	0.0
87.5°	0.0	0.6	1.2	1.2	1.2	1.2	0.6	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)