

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: P499152

Luminaire Tested: **LDA2B159040R20D010 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: P499152
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: LDA2B159040R20D010 2LBDL1MMS-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

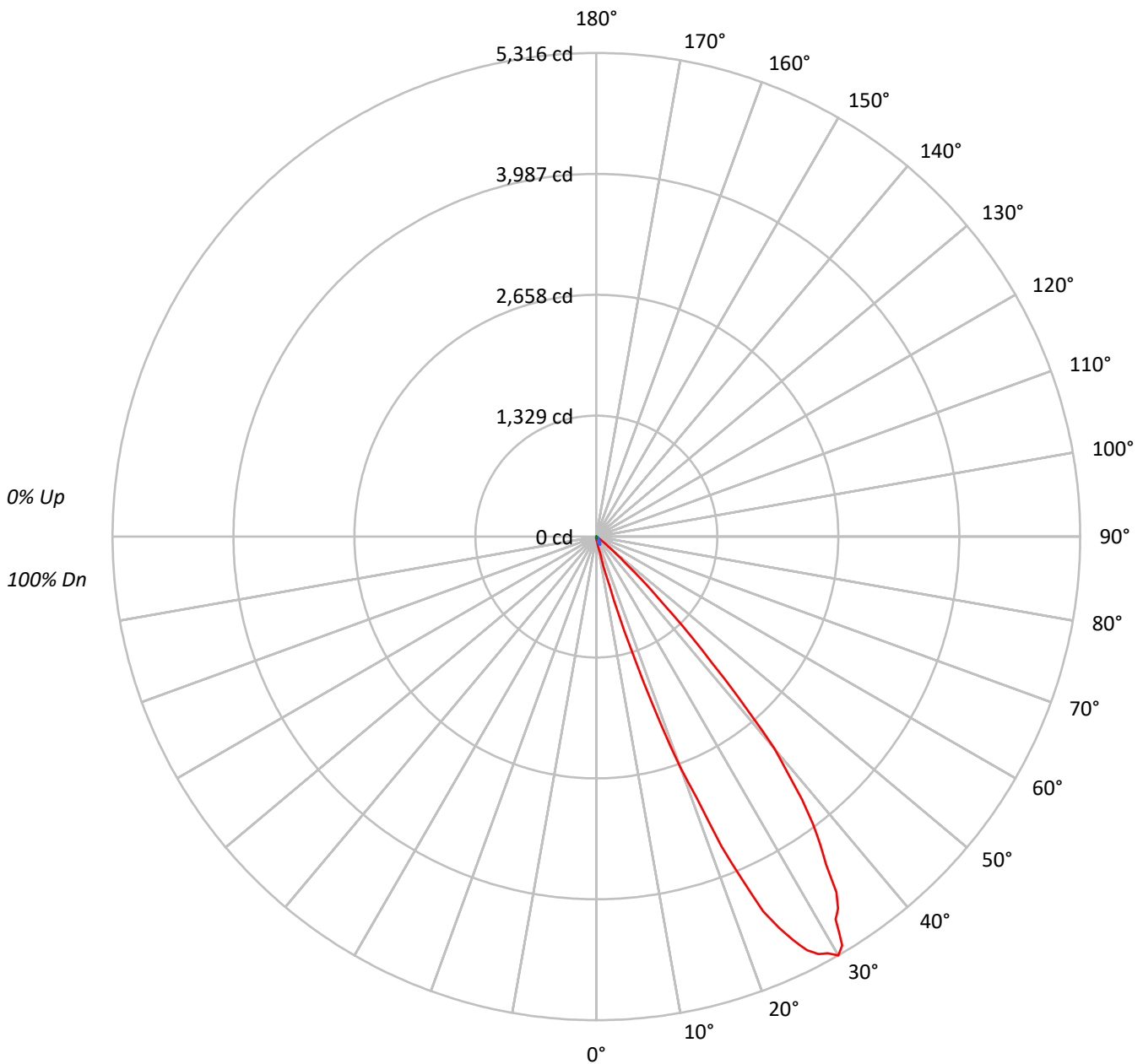
Lumens per Lamp: N/A
Luminaire Lumens: 671.2 lumens
Efficiency: N/A
Efficacy: 47.6 lumens/watt
Spacing Criteria (0/90/45): 2.56 / 0.56 / 1.2
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	10657	10657	10657
5°	20404	9410	6884
10°	48745	8266	4659
15°	283884	6589	1839
20°	1416201	4043	525
25°	2582302	1415	0
30°	3028731	0	0
35°	2650891	0	0
40°	1957618	0	0
45°	705603	0	0
50°	146983	0	0
55°	33632	430	0
60°	10657	493	0
65°	2452	1167	0
70°	0	1442	721
75°	0	1906	0
80°	0	2841	0
85°	0	5661	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.4	0.4
10°-20°	36.9	5.5
20°-30°	248.6	37.0
30°-40°	290.4	43.3
40°-50°	84.7	12.6
50°-60°	5.7	0.8
60°-70°	1.0	0.2
70°-80°	0.8	0.1
80°-90°	0.7	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°	287.9	42.9
0°-40°	578.3	86.2
0°-60°	668.7	99.6
0°-90°	671.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	671.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	22	22	22	22	22	
5°	41	30	19	16	14	6
15°	556	63	13	7	4	290
25°	4744	97	3	0	0	2100
35°	4401	52	0	0	0	2704
45°	1011	11	0	0	0	932
55°	39	2	0	0	0	50
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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	21.6	21.6	21.6	21.6	21.6	21.6	21.6	21.6	21.6
2.5°	27.8	27.8	24.7	22.1	20.1	19.0	18.5	17.5	17.0
5°	41.2	36.0	29.9	23.2	19.0	17.5	16.0	14.4	13.9
7.5°	60.2	52.5	36.0	23.7	18.0	15.4	13.9	12.4	11.3
10°	97.3	75.7	44.3	23.7	16.5	13.4	11.3	9.8	9.3
12.5°	179.6	115.8	53.0	23.2	14.9	11.3	8.7	7.7	6.2
15°	555.8	239.8	62.8	22.1	12.9	8.7	6.7	4.1	3.6
17.5°	1437.5	560.0	70.0	19.6	10.3	6.2	3.1	2.6	2.6
20°	2697.4	1015.4	80.3	17.0	7.7	4.1	2.1	1.5	1.0
21°	3077.2	1242.4	85.4	16.0	6.7	2.6	1.5	0.5	0.5
22°	3667.5	1490.0	89.6	14.9	5.7	1.5	1.0	0.5	0.0
23°	4088.0	1648.0	93.7	13.4	4.1	1.5	0.5	0.0	0.0
24°	4508.5	1849.2	96.2	12.4	3.6	1.0	0.5	0.0	0.0
25°	4743.7	2017.0	97.3	11.3	2.6	0.5	0.0	0.0	0.0
26°	4937.2	2129.2	97.8	10.3	1.5	0.0	0.0	0.0	0.0
27°	5102.9	2259.4	96.8	9.3	1.5	0.0	0.0	0.0	0.0
28°	5197.1	2281.0	95.2	8.2	0.5	0.0	0.0	0.0	0.0
29°	5237.7	2254.7	90.6	7.2	0.5	0.0	0.0	0.0	0.0
30°	5316.5	2230.0	85.9	6.7	0.0	0.0	0.0	0.0	0.0
31°	5243.9	2148.2	80.3	5.7	0.0	0.0	0.0	0.0	0.0
32°	4959.8	2079.2	73.6	4.6	0.0	0.0	0.0	0.0	0.0
33°	4874.9	1937.7	66.4	4.1	0.0	0.0	0.0	0.0	0.0
34°	4714.8	1727.2	60.2	3.6	0.0	0.0	0.0	0.0	0.0
35°	4401.4	1553.3	52.5	3.1	0.0	0.0	0.0	0.0	0.0
36°	4182.7	1354.6	45.8	2.6	0.0	0.0	0.0	0.0	0.0
37°	3953.7	1181.2	40.7	2.1	0.0	0.0	0.0	0.0	0.0
38°	3669.0	999.0	34.5	1.5	0.0	0.0	0.0	0.0	0.0
39°	3337.6	825.5	29.3	1.5	0.0	0.0	0.0	0.0	0.0
40°	3039.6	665.5	25.2	1.0	0.0	0.0	0.0	0.0	0.0
42.5°	1876.0	379.8	14.9	1.0	0.0	0.0	0.0	0.0	0.0
45°	1011.3	230.6	10.8	0.5	0.0	0.0	0.0	0.0	0.0
47.5°	465.8	107.6	7.7	0.5	0.0	0.0	0.0	0.0	0.0
50°	191.5	47.9	5.7	0.0	0.0	0.0	0.0	0.0	0.0
52.5°	69.0	26.8	3.6	0.0	0.0	0.5	0.0	0.0	0.0
55°	39.1	15.4	2.1	0.5	0.5	0.5	0.5	0.0	0.0
57.5°	18.5	8.7	0.5	0.5	0.5	0.5	0.5	0.0	0.0
60°	10.8	4.6	0.5	0.5	0.5	1.0	0.5	0.0	0.0
62.5°	5.1	1.5	0.5	1.0	1.0	1.0	1.0	0.5	0.0
65°	2.1	0.5	1.0	1.0	1.0	1.5	1.0	0.5	0.0
67.5°	0.5	0.5	1.0	1.0	1.0	1.5	1.0	0.5	0.5
70°	0.0	0.5	1.0	1.0	1.0	1.5	1.0	0.5	0.5
72.5°	0.0	0.5	1.0	1.0	1.0	1.5	1.0	0.5	0.5
75°	0.0	0.5	1.0	1.0	1.0	1.0	1.0	0.5	0.0
77.5°	0.0	0.5	1.0	1.0	1.0	1.0	1.0	0.5	0.0
80°	0.0	0.5	1.0	1.0	1.0	1.0	1.0	0.5	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	0.5	1.0	1.0	1.0	1.0	1.0	0.5	0.0
85°	0.0	0.5	1.0	1.0	1.0	1.0	1.0	0.5	0.0
87.5°	0.0	0.5	1.0	1.0	1.0	1.0	0.5	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)