

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: P497199

Luminaire Tested: **LDA2B158027R20D010 2LBDC1MMS-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: P497199  
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: LDA2B158027R20D010 2LBDC1MMS-30DEG TILT  
Description: 1500 LUMEN 2IN ADJUSTABLE LED LUMINAIRE WITH 80 CRI LEDS AND 2700K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

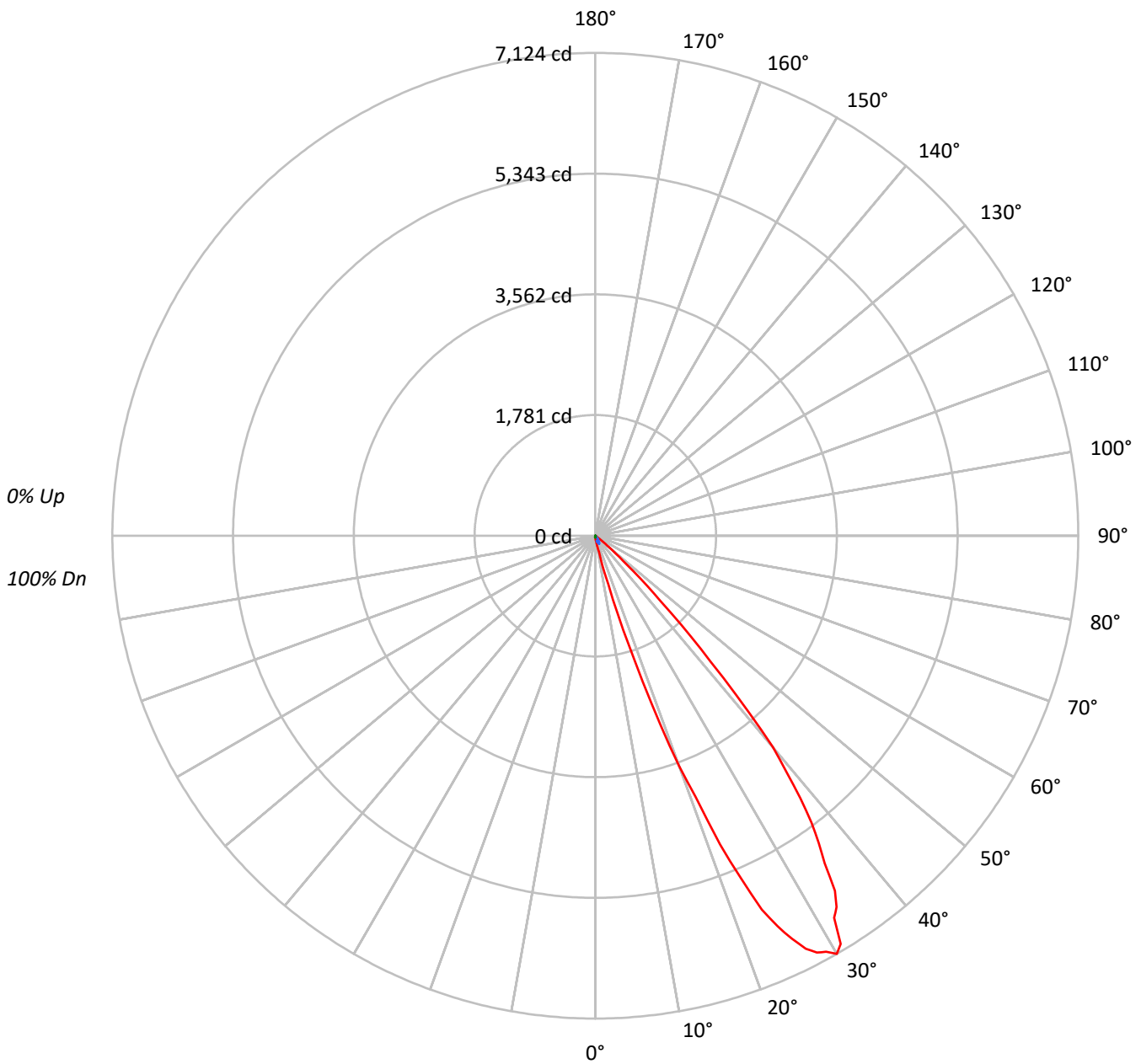
Lumens per Lamp: N/A  
Luminaire Lumens: 899.6 lumens  
Efficiency: N/A  
Efficacy: 63.8 lumens/watt  
Spacing Criteria (0/90/45): 2.56 / 0.56 / 1.2  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

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

TEST NUMBER: P497199

CATALOG NUMBER: LDA2B158027R20D010 2LBDC1MMS-30DEG TILT

### Luminous Intensity Polar Plot



— 0°-180°    - - 45°-225°    - - - 90°-270°



TEST NUMBER: P497199

CATALOG NUMBER: LDA2B158027R20D010 2LBDC1MMS-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°	14307	14307	14307
5°	27338	12629	9212
10°	65277	11071	6212
15°	380418	8785	2452
20°	1897649	5408	735
25°	3460199	1851	0
30°	4058380	0	0
35°	3552148	0	0
40°	2623167	0	0
45°	945479	0	0
50°	196873	0	0
55°	45072	602	0
60°	14307	691	0
65°	3269	1634	0
70°	0	2019	1010
75°	0	2669	0
80°	0	3978	0
85°	0	7925	0



TEST NUMBER: P497199

CATALOG NUMBER: LDA2B158027R20D010 2LBDC1MMS-30DEG TILT

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	3.3	0.4
10°-20°	49.4	5.5
20°-30°	333.1	37.0
30°-40°	389.2	43.3
40°-50°	113.5	12.6
50°-60°	7.6	0.8
60°-70°	1.4	0.2
70°-80°	1.2	0.1
80°-90°	1.0	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°	385.8	42.9
0°-40°	775.0	86.1
0°-60°	896.0	99.6
0°-90°	899.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	899.6	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	29	29	29	29	29	
5°	55	40	26	21	19	7
15°	745	84	17	9	5	389
25°	6356	130	3	0	0	2814
35°	5898	70	0	0	0	3623
45°	1355	14	0	0	0	1249
55°	52	3	1	1	0	67
65°	3	1	1	1	0	4
75°	0	1	1	1	0	0
85°	0	1	1	1	0	0
90°	0	0	0	0	0	



TEST NUMBER: P497199

CATALOG NUMBER: LDA2B158027R20D010 2LBDC1MMS-30DEG TILT

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0
2.5°	37.2	37.2	33.1	29.7	26.9	25.5	24.8	23.4	22.8
5°	55.2	48.3	40.0	31.0	25.5	23.4	21.4	19.3	18.6
7.5°	80.7	70.3	48.3	31.7	24.1	20.7	18.6	16.6	15.2
10°	130.3	101.4	59.3	31.7	22.1	17.9	15.2	13.1	12.4
12.5°	240.7	155.2	71.0	31.0	20.0	15.2	11.7	10.3	8.3
15°	744.8	321.4	84.1	29.7	17.2	11.7	9.0	5.5	4.8
17.5°	1926.1	750.3	93.8	26.2	13.8	8.3	4.1	3.4	3.4
20°	3614.4	1360.6	107.6	22.8	10.3	5.5	2.8	2.1	1.4
21°	4123.3	1664.8	114.5	21.4	9.0	3.4	2.1	0.7	0.7
22°	4914.3	1996.5	120.0	20.0	7.6	2.1	1.4	0.7	0.0
23°	5477.8	2208.2	125.5	17.9	5.5	2.1	0.7	0.0	0.0
24°	6041.2	2477.9	129.0	16.6	4.8	1.4	0.7	0.0	0.0
25°	6356.4	2702.7	130.3	15.2	3.4	0.7	0.0	0.0	0.0
26°	6615.7	2853.0	131.0	13.8	2.1	0.0	0.0	0.0	0.0
27°	6837.7	3027.5	129.7	12.4	2.1	0.0	0.0	0.0	0.0
28°	6963.9	3056.5	127.6	11.0	0.7	0.0	0.0	0.0	0.0
29°	7018.4	3021.3	121.4	9.7	0.7	0.0	0.0	0.0	0.0
30°	7123.9	2988.2	115.2	9.0	0.0	0.0	0.0	0.0	0.0
31°	7026.7	2878.5	107.6	7.6	0.0	0.0	0.0	0.0	0.0
32°	6646.0	2786.1	98.6	6.2	0.0	0.0	0.0	0.0	0.0
33°	6532.2	2596.5	89.0	5.5	0.0	0.0	0.0	0.0	0.0
34°	6317.7	2314.4	80.7	4.8	0.0	0.0	0.0	0.0	0.0
35°	5897.8	2081.3	70.3	4.1	0.0	0.0	0.0	0.0	0.0
36°	5604.7	1815.1	61.4	3.4	0.0	0.0	0.0	0.0	0.0
37°	5297.8	1582.7	54.5	2.8	0.0	0.0	0.0	0.0	0.0
38°	4916.4	1338.6	46.2	2.1	0.0	0.0	0.0	0.0	0.0
39°	4472.3	1106.2	39.3	2.1	0.0	0.0	0.0	0.0	0.0
40°	4073.0	891.7	33.8	1.4	0.0	0.0	0.0	0.0	0.0
42.5°	2513.7	509.0	20.0	1.4	0.0	0.0	0.0	0.0	0.0
45°	1355.1	309.0	14.5	0.7	0.0	0.0	0.0	0.0	0.0
47.5°	624.1	144.1	10.3	0.7	0.0	0.0	0.0	0.0	0.0
50°	256.5	64.1	7.6	0.0	0.0	0.0	0.0	0.0	0.0
52.5°	92.4	35.9	4.8	0.0	0.0	0.7	0.0	0.0	0.0
55°	52.4	20.7	2.8	0.7	0.7	0.7	0.7	0.0	0.0
57.5°	24.8	11.7	0.7	0.7	0.7	0.7	0.7	0.0	0.0
60°	14.5	6.2	0.7	0.7	0.7	1.4	0.7	0.0	0.0
62.5°	6.9	2.1	0.7	1.4	1.4	1.4	1.4	0.7	0.0
65°	2.8	0.7	1.4	1.4	1.4	2.1	1.4	0.7	0.0
67.5°	0.7	0.7	1.4	1.4	1.4	2.1	1.4	0.7	0.7
70°	0.0	0.7	1.4	1.4	1.4	2.1	1.4	0.7	0.7
72.5°	0.0	0.7	1.4	1.4	1.4	2.1	1.4	0.7	0.7
75°	0.0	0.7	1.4	1.4	1.4	1.4	1.4	0.7	0.0
77.5°	0.0	0.7	1.4	1.4	1.4	1.4	1.4	0.7	0.0
80°	0.0	0.7	1.4	1.4	1.4	1.4	1.4	0.7	0.0



TEST NUMBER: P497199

CATALOG NUMBER: LDA2B158027R20D010 2LBDC1MMS-30DEG TILT

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
82.5°	0.0	0.7	1.4	1.4	1.4	1.4	1.4	0.7	0.0
85°	0.0	0.7	1.4	1.4	1.4	1.4	1.4	0.7	0.0
87.5°	0.0	0.7	1.4	1.4	1.4	1.4	0.7	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)