

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: P499129

Luminaire Tested: **LDA2B159040R20D010 2LBD1MB-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: P499129  
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 2LBD1MB-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**

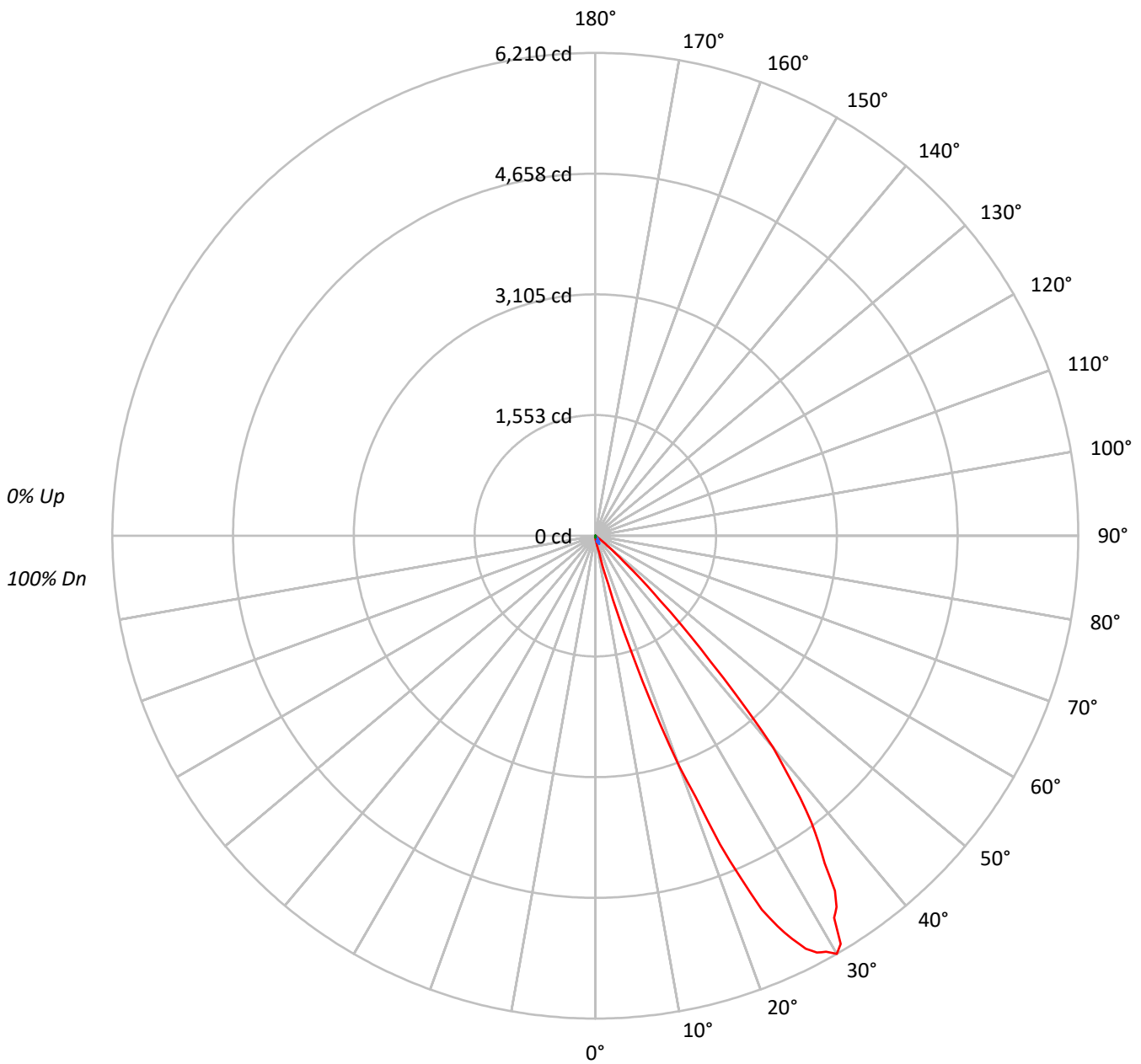
Lumens per Lamp: N/A  
Luminaire Lumens: 784.1 lumens  
Efficiency: N/A  
Efficacy: 55.6 lumens/watt  
Spacing Criteria (0/90/45): 2.56 / 0.56 / 1.2  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

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

TEST NUMBER: P499129

CATALOG NUMBER: LDA2B159040R20D010 2LBD1MB-30DEG TILT

### Luminous Intensity Polar Plot



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



TEST NUMBER: P499129

CATALOG NUMBER: LDA2B159040R20D010 2LBD1MB-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°	12433	12433	12433
5°	23821	10994	8023
10°	56910	9619	5411
15°	331589	7661	2145
20°	1654143	4725	630
25°	3016160	1633	0
30°	3537631	0	0
35°	3096340	0	0
40°	2286593	0	0
45°	824146	0	0
50°	171621	0	0
55°	39309	516	0
60°	12433	592	0
65°	2802	1401	0
70°	0	1731	865
75°	0	2287	0
80°	0	3409	0
85°	0	6793	0



TEST NUMBER: P499129

CATALOG NUMBER: LDA2B159040R20D010 2LBD1MB-30DEG TILT

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2.9	0.4
10°-20°	43.1	5.5
20°-30°	290.4	37.0
30°-40°	339.2	43.3
40°-50°	98.9	12.6
50°-60°	6.6	0.8
60°-70°	1.2	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°	336.3	42.9
0°-40°	675.5	86.2
0°-60°	781.0	99.6
0°-90°	784.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	784.1	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	25	25	25	25	25	
5°	48	35	22	19	16	6
15°	649	73	15	8	4	339
25°	5541	114	3	0	0	2453
35°	5141	61	0	0	0	3158
45°	1181	13	0	0	0	1088
55°	46	2	1	1	0	58
65°	2	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: P499129

CATALOG NUMBER: LDA2B159040R20D010 2LBD1MB-30DEG TILT

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2
2.5°	32.5	32.5	28.9	25.8	23.4	22.2	21.6	20.4	19.8
5°	48.1	42.1	34.9	27.1	22.2	20.4	18.6	16.8	16.2
7.5°	70.3	61.3	42.1	27.7	21.0	18.0	16.2	14.4	13.2
10°	113.6	88.4	51.7	27.7	19.2	15.6	13.2	11.4	10.8
12.5°	209.8	135.3	61.9	27.1	17.4	13.2	10.2	9.0	7.2
15°	649.2	280.1	73.3	25.8	15.0	10.2	7.8	4.8	4.2
17.5°	1679.0	654.0	81.8	22.8	12.0	7.2	3.6	3.0	3.0
20°	3150.6	1186.1	93.8	19.8	9.0	4.8	2.4	1.8	1.2
21°	3594.2	1451.2	99.8	18.6	7.8	3.0	1.8	0.6	0.6
22°	4283.7	1740.3	104.6	17.4	6.6	1.8	1.2	0.6	0.0
23°	4774.9	1924.9	109.4	15.6	4.8	1.8	0.6	0.0	0.0
24°	5266.0	2159.9	112.4	14.4	4.2	1.2	0.6	0.0	0.0
25°	5540.7	2355.9	113.6	13.2	3.0	0.6	0.0	0.0	0.0
26°	5766.8	2486.9	114.2	12.0	1.8	0.0	0.0	0.0	0.0
27°	5960.3	2639.0	113.0	10.8	1.8	0.0	0.0	0.0	0.0
28°	6070.3	2664.3	111.2	9.6	0.6	0.0	0.0	0.0	0.0
29°	6117.8	2633.6	105.8	8.4	0.6	0.0	0.0	0.0	0.0
30°	6209.8	2604.8	100.4	7.8	0.0	0.0	0.0	0.0	0.0
31°	6125.1	2509.2	93.8	6.6	0.0	0.0	0.0	0.0	0.0
32°	5793.2	2428.6	86.0	5.4	0.0	0.0	0.0	0.0	0.0
33°	5694.0	2263.3	77.5	4.8	0.0	0.0	0.0	0.0	0.0
34°	5507.1	2017.4	70.3	4.2	0.0	0.0	0.0	0.0	0.0
35°	5141.0	1814.3	61.3	3.6	0.0	0.0	0.0	0.0	0.0
36°	4885.5	1582.2	53.5	3.0	0.0	0.0	0.0	0.0	0.0
37°	4618.0	1379.6	47.5	2.4	0.0	0.0	0.0	0.0	0.0
38°	4285.6	1166.8	40.3	1.8	0.0	0.0	0.0	0.0	0.0
39°	3898.4	964.2	34.3	1.8	0.0	0.0	0.0	0.0	0.0
40°	3550.4	777.3	29.5	1.2	0.0	0.0	0.0	0.0	0.0
42.5°	2191.2	443.6	17.4	1.2	0.0	0.0	0.0	0.0	0.0
45°	1181.2	269.3	12.6	0.6	0.0	0.0	0.0	0.0	0.0
47.5°	544.0	125.6	9.0	0.6	0.0	0.0	0.0	0.0	0.0
50°	223.6	55.9	6.6	0.0	0.0	0.0	0.0	0.0	0.0
52.5°	80.6	31.3	4.2	0.0	0.0	0.6	0.0	0.0	0.0
55°	45.7	18.0	2.4	0.6	0.6	0.6	0.6	0.0	0.0
57.5°	21.6	10.2	0.6	0.6	0.6	0.6	0.6	0.0	0.0
60°	12.6	5.4	0.6	0.6	0.6	1.2	0.6	0.0	0.0
62.5°	6.0	1.8	0.6	1.2	1.2	1.2	1.2	0.6	0.0
65°	2.4	0.6	1.2	1.2	1.2	1.8	1.2	0.6	0.0
67.5°	0.6	0.6	1.2	1.2	1.2	1.8	1.2	0.6	0.6
70°	0.0	0.6	1.2	1.2	1.2	1.8	1.2	0.6	0.6
72.5°	0.0	0.6	1.2	1.2	1.2	1.8	1.2	0.6	0.6
75°	0.0	0.6	1.2	1.2	1.2	1.2	1.2	0.6	0.0
77.5°	0.0	0.6	1.2	1.2	1.2	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



TEST NUMBER: P499129

CATALOG NUMBER: LDA2B159040R20D010 2LBD1MB-30DEG TILT

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
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)