

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: P496992

Luminaire Tested: **LDA2B109730R20D010 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: P496992
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: LDA2B109730R20D010 2LBDL1MMS-30DEG TILT
Description: 1000 LUMEN 2IN ADJUSTABLE LED LUMINAIRE WITH 97 CRI LEDS AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

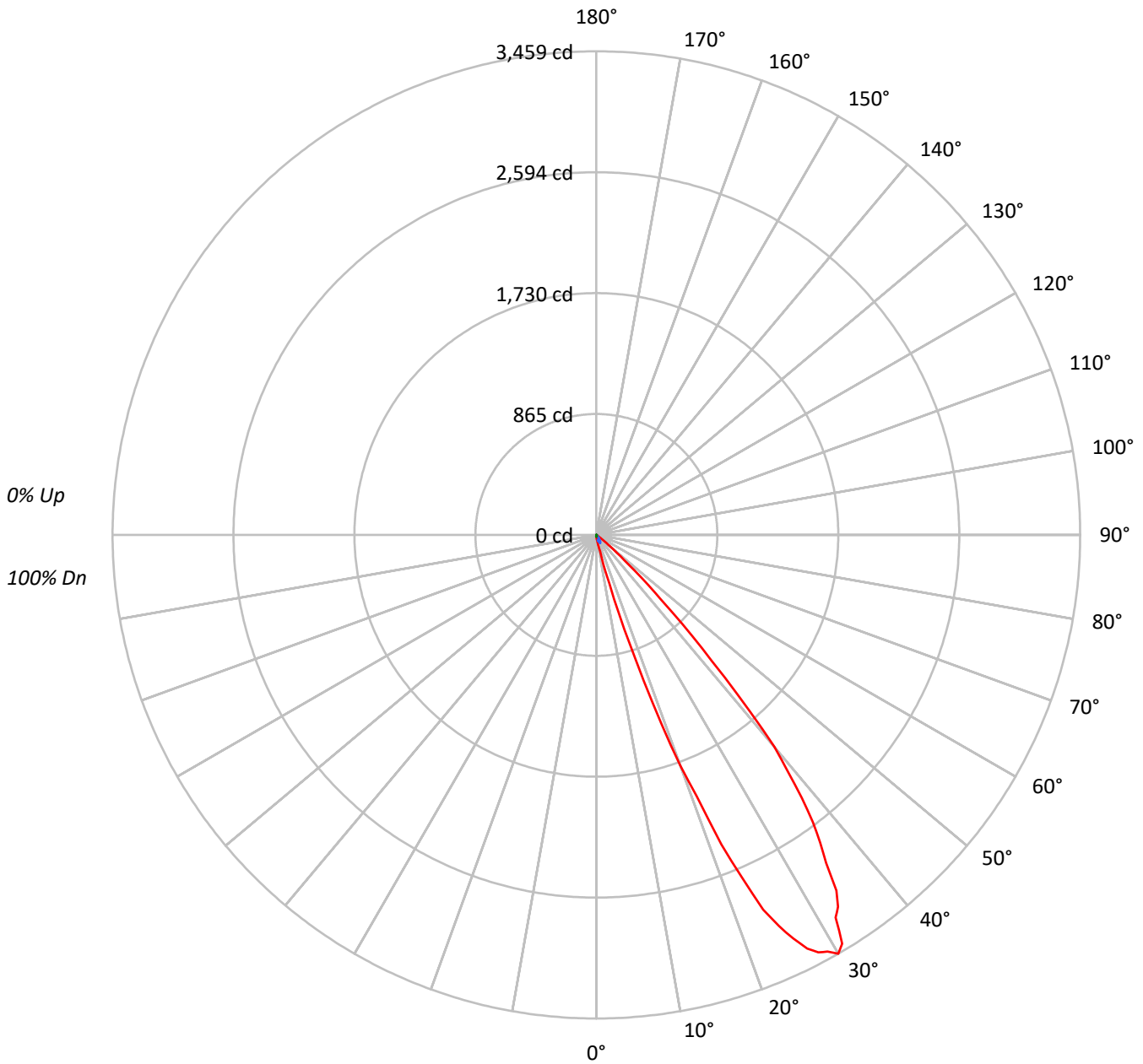
Lumens per Lamp: N/A
Luminaire Lumens: 436.8 lumens
Efficiency: N/A
Efficacy: 43.7 lumens/watt
Spacing Criteria (0/90/45): 2.56 / 0.56 / 1.2
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

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: P496992

CATALOG NUMBER: LDA2B109730R20D010 2LBDL1MMS-30DEG TILT

Luminous Intensity Polar Plot



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



TEST NUMBER: P496992

CATALOG NUMBER: LDA2B109730R20D010 2LBDL1MMS-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°	6956	6956	6956
5°	13273	6141	4457
10°	31712	5360	3006
15°	184693	4290	1175
20°	921418	2625	368
25°	1680127	925	0
30°	1970598	0	0
35°	1724759	0	0
40°	1273714	0	0
45°	459099	0	0
50°	95635	0	0
55°	21848	258	0
60°	6907	296	0
65°	1518	817	0
70°	0	1010	433
75°	0	1334	0
80°	0	1989	0
85°	0	3962	0



TEST NUMBER: P496992

CATALOG NUMBER: LDA2B109730R20D010 2LBDL1MMS-30DEG TILT

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.6	0.4
10°-20°	24.0	5.5
20°-30°	161.7	37.0
30°-40°	189.0	43.3
40°-50°	55.1	12.6
50°-60°	3.7	0.8
60°-70°	0.7	0.2
70°-80°	0.6	0.1
80°-90°	0.5	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°	187.3	42.9
0°-40°	376.3	86.2
0°-60°	435.1	99.6
0°-90°	436.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	436.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	14	14	14	14	14	
5°	27	19	12	10	9	4
15°	362	41	8	4	2	189
25°	3086	63	2	0	0	1367
35°	2864	34	0	0	0	1759
45°	658	7	0	0	0	606
55°	25	1	0	0	0	32
65°	1	1	1	1	0	2
75°	0	1	1	1	0	0
85°	0	1	1	1	0	0
90°	0	0	0	0	0	



TEST NUMBER: P496992

CATALOG NUMBER: LDA2B109730R20D010 2LBDL1MMS-30DEG TILT

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1
2.5°	18.1	18.1	16.1	14.4	13.1	12.4	12.1	11.4	11.1
5°	26.8	23.4	19.4	15.1	12.4	11.4	10.4	9.4	9.0
7.5°	39.2	34.2	23.4	15.4	11.7	10.0	9.0	8.0	7.4
10°	63.3	49.2	28.8	15.4	10.7	8.7	7.4	6.4	6.0
12.5°	116.9	75.3	34.5	15.1	9.7	7.4	5.7	5.0	4.0
15°	361.6	156.0	40.9	14.4	8.4	5.7	4.4	2.7	2.3
17.5°	935.3	364.3	45.5	12.7	6.7	4.0	2.0	1.7	1.7
20°	1755.0	660.7	52.2	11.1	5.0	2.7	1.3	1.0	0.7
21°	2002.1	808.4	55.6	10.4	4.4	1.7	1.0	0.3	0.3
22°	2386.2	969.4	58.3	9.7	3.7	1.0	0.7	0.3	0.0
23°	2659.8	1072.2	60.9	8.7	2.7	1.0	0.3	0.0	0.0
24°	2933.4	1203.2	62.6	8.0	2.3	0.7	0.3	0.0	0.0
25°	3086.4	1312.3	63.3	7.4	1.7	0.3	0.0	0.0	0.0
26°	3212.3	1385.3	63.6	6.7	1.0	0.0	0.0	0.0	0.0
27°	3320.1	1470.0	63.0	6.0	1.0	0.0	0.0	0.0	0.0
28°	3381.4	1484.1	61.9	5.4	0.3	0.0	0.0	0.0	0.0
29°	3407.9	1467.0	58.9	4.7	0.3	0.0	0.0	0.0	0.0
30°	3459.1	1450.9	55.9	4.4	0.0	0.0	0.0	0.0	0.0
31°	3411.9	1397.7	52.2	3.7	0.0	0.0	0.0	0.0	0.0
32°	3227.0	1352.8	47.9	3.0	0.0	0.0	0.0	0.0	0.0
33°	3171.8	1260.7	43.2	2.7	0.0	0.0	0.0	0.0	0.0
34°	3067.7	1123.8	39.2	2.3	0.0	0.0	0.0	0.0	0.0
35°	2863.7	1010.6	34.2	2.0	0.0	0.0	0.0	0.0	0.0
36°	2721.4	881.4	29.8	1.7	0.0	0.0	0.0	0.0	0.0
37°	2572.4	768.5	26.5	1.3	0.0	0.0	0.0	0.0	0.0
38°	2387.2	650.0	22.4	1.0	0.0	0.0	0.0	0.0	0.0
39°	2171.6	537.1	19.1	1.0	0.0	0.0	0.0	0.0	0.0
40°	1977.7	433.0	16.4	0.7	0.0	0.0	0.0	0.0	0.0
42.5°	1220.6	247.1	9.7	0.7	0.0	0.0	0.0	0.0	0.0
45°	658.0	150.0	7.0	0.3	0.0	0.0	0.0	0.0	0.0
47.5°	303.0	70.0	5.0	0.3	0.0	0.0	0.0	0.0	0.0
50°	124.6	31.1	3.7	0.0	0.0	0.0	0.0	0.0	0.0
52.5°	44.9	17.4	2.3	0.0	0.0	0.3	0.0	0.0	0.0
55°	25.4	10.0	1.3	0.3	0.3	0.3	0.3	0.0	0.0
57.5°	12.1	5.7	0.3	0.3	0.3	0.3	0.3	0.0	0.0
60°	7.0	3.0	0.3	0.3	0.3	0.7	0.3	0.0	0.0
62.5°	3.3	1.0	0.3	0.7	0.7	0.7	0.7	0.3	0.0
65°	1.3	0.3	0.7	0.7	0.7	1.0	0.7	0.3	0.0
67.5°	0.3	0.3	0.7	0.7	0.7	1.0	0.7	0.3	0.3
70°	0.0	0.3	0.7	0.7	0.7	1.0	0.7	0.3	0.3
72.5°	0.0	0.3	0.7	0.7	0.7	1.0	0.7	0.3	0.3
75°	0.0	0.3	0.7	0.7	0.7	0.7	0.7	0.3	0.0
77.5°	0.0	0.3	0.7	0.7	0.7	0.7	0.7	0.3	0.0
80°	0.0	0.3	0.7	0.7	0.7	0.7	0.7	0.3	0.0



TEST NUMBER: P496992

CATALOG NUMBER: LDA2B109730R20D010 2LBDL1MMS-30DEG TILT

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
82.5°	0.0	0.3	0.7	0.7	0.7	0.7	0.7	0.3	0.0
85°	0.0	0.3	0.7	0.7	0.7	0.7	0.7	0.3	0.0
87.5°	0.0	0.3	0.7	0.7	0.7	0.7	0.3	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)