

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: P496189

Luminaire Tested: **LDA2B109035R35D010 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: P496189
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: LDA2B109035R35D010 2LBD1MMS-30DEG TILT
Description: 1000 LUMEN 2IN ADJUSTABLE LED LUMINAIRE WITH 90 CRI LEDS AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

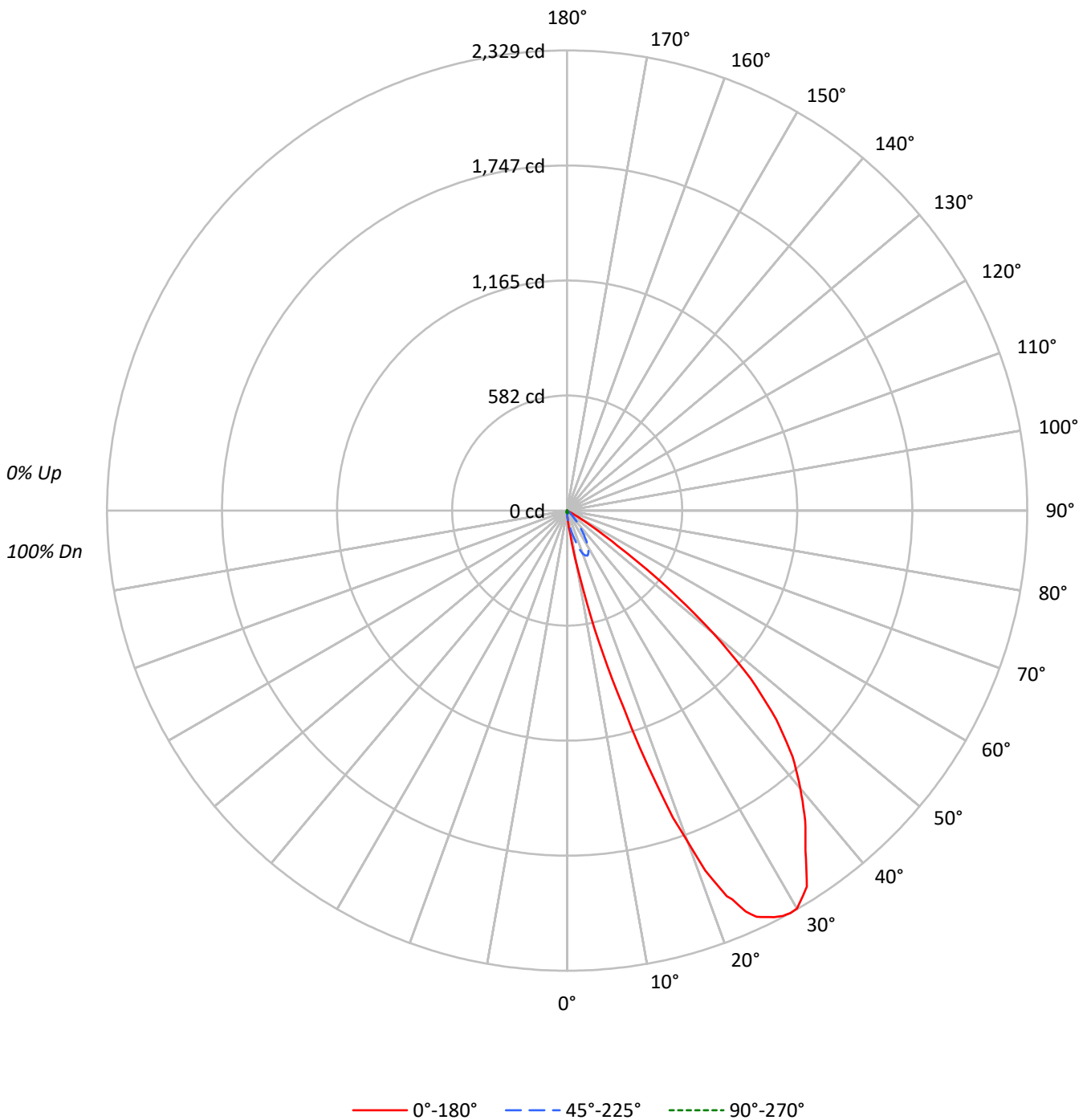
Lumens per Lamp: N/A
Luminaire Lumens: 628.5 lumens
Efficiency: N/A
Efficacy: 62.9 lumens/watt
Spacing Criteria (0/90/45): 3.16 / 0.51 / 1.46
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

Input Watts (W): 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

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Luminous Intensity Polar Plot





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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	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°	10459	10459	10459
5°	32884	9212	5695
10°	140272	7765	4208
15°	453253	5669	3371
20°	934176	3465	2310
25°	1235163	1688	1470
30°	1324860	741	741
35°	1266120	542	241
40°	1182067	258	0
45°	1044834	0	0
50°	741899	307	0
55°	265958	344	0
60°	41048	888	0
65°	2101	1051	0
70°	0	1298	0
75°	0	1716	762
80°	0	2557	0
85°	0	5095	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.7	0.6
10°-20°	50.9	8.1
20°-30°	170.3	27.1
30°-40°	214.5	34.1
40°-50°	151.7	24.1
50°-60°	35.0	5.6
60°-70°	1.1	0.2
70°-80°	0.7	0.1
80°-90°	0.6	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°	224.9	35.8
0°-40°	439.4	69.9
0°-60°	626.1	99.6
0°-90°	628.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	628.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	21	21	21	21	21	
5°	66	43	19	13	12	12
15°	887	157	11	8	7	292
25°	2269	248	3	3	3	1023
35°	2102	145	1	1	0	1316
45°	1498	36	0	0	0	1123
55°	309	2	0	0	0	350
65°	2	0	1	1	0	7
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°	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2
1°	26.5	25.7	24.3	22.1	19.9	19.0	19.0	17.7	17.7
2°	31.9	30.5	27.9	23.4	19.9	17.7	16.8	15.9	15.5
3°	41.1	37.6	31.9	25.2	19.5	16.8	16.4	14.2	14.2
4°	51.3	47.8	36.7	26.5	19.0	15.9	14.2	13.3	12.8
5°	66.4	58.4	43.4	27.9	18.6	15.0	13.3	11.9	11.5
6°	85.8	74.8	49.5	29.2	18.1	14.2	12.4	11.1	10.6
7°	107.9	92.9	57.1	30.5	17.3	13.3	11.5	10.6	10.2
8°	154.8	119.4	65.9	31.4	16.8	12.4	11.1	9.7	9.3
9°	207.0	154.4	75.6	32.7	15.9	11.9	10.2	9.3	8.8
10°	280.0	202.2	86.7	33.6	15.5	11.1	9.3	8.8	8.4
11°	352.6	261.4	100.4	34.1	14.6	9.7	9.3	8.8	8.4
12°	472.0	318.1	112.4	34.1	13.7	9.3	8.4	8.0	7.5
13°	613.6	415.4	129.6	34.5	12.4	8.8	8.0	7.5	7.5
14°	738.3	502.5	141.1	34.5	11.9	8.0	7.5	7.5	7.1
15°	887.4	587.5	156.6	34.1	11.1	7.5	7.5	7.1	6.6
16°	1043.6	714.9	177.4	33.2	10.2	6.6	7.1	6.2	5.8
17°	1250.6	820.2	193.3	32.3	9.3	6.2	6.2	6.2	5.8
18°	1439.9	948.0	206.1	31.4	8.4	6.2	5.8	5.8	5.3
19°	1643.0	1050.7	219.0	30.1	7.5	5.3	5.3	5.3	4.9
20°	1779.3	1176.7	233.1	28.8	6.6	4.9	5.3	4.9	4.4
21°	1951.8	1289.5	238.4	27.4	5.8	4.4	4.4	4.4	4.0
22.5°	2113.2	1439.5	246.8	24.8	4.9	3.5	4.0	3.5	3.5
23°	2138.0	1471.4	246.8	23.9	4.4	3.5	4.0	3.5	3.5
24°	2220.3	1558.5	249.9	22.1	3.5	3.1	3.5	3.1	3.1
25°	2269.0	1627.5	247.7	20.3	3.1	3.1	3.1	3.1	2.7
26°	2288.9	1646.5	242.4	19.0	2.7	2.7	3.1	2.7	2.2
27°	2309.7	1689.9	235.8	17.3	2.2	2.7	2.7	2.7	2.2
28°	2324.3	1695.2	229.2	15.9	1.8	2.2	2.7	2.2	2.2
29°	2329.1	1702.3	221.2	14.2	1.3	1.8	2.2	1.8	1.8
30°	2325.6	1701.0	209.7	12.8	1.3	1.8	1.8	1.8	1.3
32.5°	2257.9	1662.9	177.8	9.3	0.9	1.3	1.3	1.3	0.9
35°	2102.2	1575.3	145.1	6.2	0.9	0.9	0.9	0.9	0.4
37.5°	1979.2	1444.4	111.0	3.5	0.4	0.9	0.9	0.4	0.0
40°	1835.4	1254.6	80.1	2.2	0.4	0.4	0.4	0.0	0.0
42.5°	1689.4	1061.3	54.4	0.9	0.0	0.4	0.4	0.0	0.0
45°	1497.5	812.7	35.8	0.4	0.0	0.4	0.0	0.0	0.0
47.5°	1259.5	590.1	24.3	0.0	0.0	0.4	0.0	0.0	0.0
50°	966.6	330.5	13.7	0.0	0.4	0.4	0.4	0.0	0.0
52.5°	637.0	165.0	5.3	0.0	0.4	0.4	0.4	0.0	0.0
55°	309.2	88.5	1.8	0.4	0.4	0.9	0.4	0.0	0.0
57.5°	146.0	34.5	0.4	0.4	0.9	0.9	0.4	0.0	0.0
60°	41.6	7.1	0.4	0.4	0.9	0.9	0.4	0.4	0.0
62.5°	5.8	0.9	0.4	0.9	0.9	0.9	0.9	0.4	0.0
65°	1.8	0.4	0.4	0.9	0.9	0.9	0.9	0.4	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.4	0.4	0.4	0.9	0.9	0.9	0.9	0.4	0.0
70°	0.0	0.4	0.4	0.9	0.9	0.9	0.9	0.4	0.0
72.5°	0.0	0.4	0.9	0.9	0.9	0.9	0.9	0.4	0.0
75°	0.0	0.4	0.9	0.9	0.9	0.9	0.9	0.4	0.4
77.5°	0.0	0.4	0.9	0.9	1.3	0.9	0.9	0.4	0.0
80°	0.0	0.4	0.9	0.9	0.9	0.9	0.9	0.4	0.0
82.5°	0.0	0.4	0.9	0.9	0.9	0.9	0.9	0.4	0.0
85°	0.0	0.4	0.9	0.9	0.9	0.9	0.9	0.4	0.0
87.5°	0.0	0.4	0.9	0.9	0.9	0.9	0.4	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)