

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: P496621

Luminaire Tested: **LDA2B109050R35D010 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: P496621
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: LDA2B109050R35D010 2LBD1MMS-30DEG TILT
Description: 1000 LUMEN 2IN ADJUSTABLE LED LUMINAIRE WITH 90 CRI LEDS AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

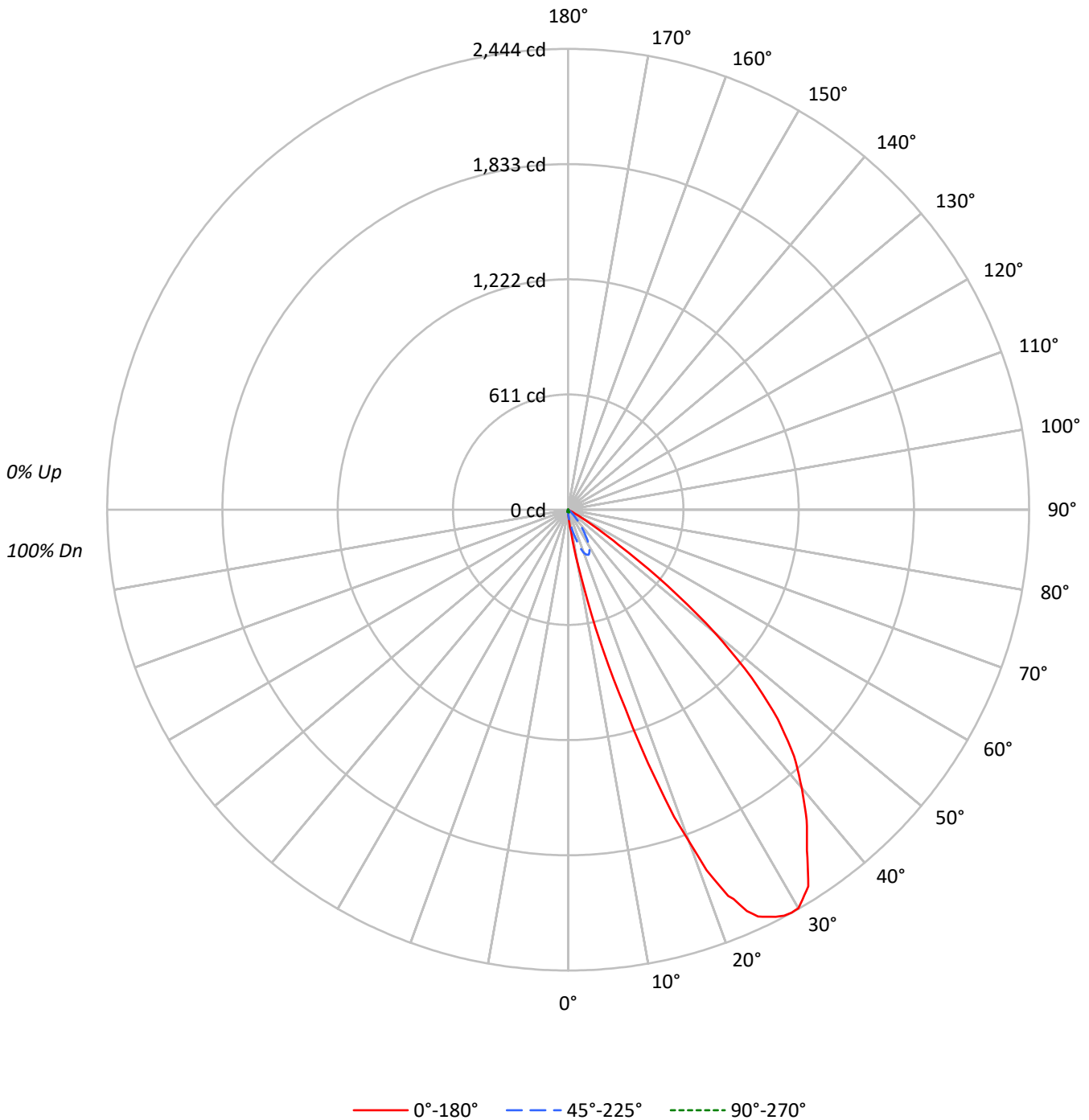
Lumens per Lamp: N/A
Luminaire Lumens: 659.5 lumens
Efficiency: N/A
Efficacy: 65.9 lumens/watt
Spacing Criteria (0/90/45): 3.16 / 0.51 / 1.46
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

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					90			
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80					80			
3	97	89	83	77	95	87	82	77	85	80	76	82	78	74	80	76	73	71					71			
4	90	80	73	68	88	79	72	67	77	71	66	75	70	66	73	68	65	63					63			
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56					56			
6	77	66	58	53	76	65	58	52	63	57	52	62	56	52	60	55	51	49					49			
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46	44					44			
8	67	54	47	42	65	54	46	41	53	46	41	51	45	41	50	45	41	39					39			
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	36	35					35			
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31					31			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	11002	11002	11002
5°	34469	9657	5992
10°	147186	8116	4409
15°	475574	5925	3575
20°	980116	3675	2415
25°	1295914	1742	1524
30°	1390032	798	798
35°	1328397	542	301
40°	1240224	322	0
45°	1096186	0	0
50°	778434	384	0
55°	279033	430	0
60°	43021	888	0
65°	2218	1051	0
70°	0	1298	0
75°	0	1716	953
80°	0	2557	0
85°	0	5095	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.9	0.6
10°-20°	53.4	8.1
20°-30°	178.7	27.1
30°-40°	225.0	34.1
40°-50°	159.2	24.1
50°-60°	36.7	5.6
60°-70°	1.2	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°	236.0	35.8
0°-40°	461.0	69.9
0°-60°	656.9	99.6
0°-90°	659.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	659.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	22	22	22	22	22	
5°	70	46	20	14	12	13
15°	931	164	12	8	7	307
25°	2381	260	3	3	3	1073
35°	2206	152	1	1	0	1381
45°	1571	38	0	0	0	1178
55°	324	2	0	0	0	367
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°	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3
1°	27.8	26.9	25.5	23.2	20.9	20.0	20.0	18.6	18.6
2°	33.4	32.0	29.2	24.6	20.9	18.6	17.6	16.7	16.2
3°	43.2	39.5	33.4	26.5	20.4	17.6	17.2	14.9	14.9
4°	53.8	50.1	38.5	27.8	20.0	16.7	14.9	13.9	13.5
5°	69.6	61.3	45.5	29.2	19.5	15.8	13.9	12.5	12.1
6°	90.0	78.4	52.0	30.6	19.0	14.9	13.0	11.6	11.1
7°	113.3	97.5	59.9	32.0	18.1	13.9	12.1	11.1	10.7
8°	162.5	125.3	69.2	33.0	17.6	13.0	11.6	10.2	9.7
9°	217.2	162.0	79.4	34.3	16.7	12.5	10.7	9.7	9.3
10°	293.8	212.1	91.0	35.3	16.2	11.6	9.7	9.3	8.8
11°	369.9	274.3	105.4	35.7	15.3	10.2	9.7	9.3	8.8
12°	495.2	333.7	117.9	35.7	14.4	9.7	8.8	8.4	7.9
13°	643.8	435.8	136.0	36.2	13.0	9.3	8.4	7.9	7.9
14°	774.7	527.3	148.1	36.2	12.5	8.4	7.9	7.9	7.4
15°	931.1	616.4	164.3	35.7	11.6	7.9	7.9	7.4	7.0
16°	1094.9	750.1	186.1	34.8	10.7	7.0	7.4	6.5	6.0
17°	1312.1	860.5	202.8	33.9	9.7	6.5	6.5	6.5	6.0
18°	1510.8	994.7	216.3	33.0	8.8	6.5	6.0	6.0	5.6
19°	1723.8	1102.3	229.8	31.6	7.9	5.6	5.6	5.6	5.1
20°	1866.8	1234.6	244.6	30.2	7.0	5.1	5.6	5.1	4.6
21°	2047.8	1353.0	250.2	28.8	6.0	4.6	4.6	4.6	4.2
22.5°	2217.2	1510.3	259.0	26.0	5.1	3.7	4.2	3.7	3.7
23°	2243.2	1543.7	259.0	25.1	4.6	3.7	4.2	3.7	3.7
24°	2329.5	1635.2	262.2	23.2	3.7	3.2	3.7	3.2	3.2
25°	2380.6	1707.6	259.9	21.4	3.2	3.2	3.2	3.2	2.8
26°	2401.5	1727.5	254.4	20.0	2.8	2.8	3.2	2.8	2.3
27°	2423.3	1773.0	247.4	18.1	2.3	2.8	2.8	2.8	2.3
28°	2438.6	1778.6	240.4	16.7	1.9	2.3	2.8	2.3	2.3
29°	2443.7	1786.0	232.1	14.9	1.4	1.9	2.3	1.9	1.9
30°	2440.0	1784.6	220.0	13.5	1.4	1.9	1.9	1.9	1.4
32.5°	2369.0	1744.7	186.6	9.7	0.9	1.4	1.4	1.4	0.9
35°	2205.6	1652.8	152.2	6.5	0.9	0.9	0.9	0.9	0.5
37.5°	2076.6	1515.4	116.5	3.7	0.5	0.9	0.9	0.5	0.0
40°	1925.7	1316.3	84.0	2.3	0.5	0.5	0.5	0.0	0.0
42.5°	1772.6	1113.5	57.1	0.9	0.0	0.5	0.5	0.0	0.0
45°	1571.1	852.6	37.6	0.5	0.0	0.5	0.0	0.0	0.0
47.5°	1321.4	619.2	25.5	0.0	0.0	0.5	0.0	0.0	0.0
50°	1014.2	346.7	14.4	0.0	0.5	0.5	0.5	0.0	0.0
52.5°	668.4	173.1	5.6	0.0	0.5	0.5	0.5	0.0	0.0
55°	324.4	92.8	1.9	0.5	0.5	0.9	0.5	0.0	0.0
57.5°	153.2	36.2	0.5	0.5	0.9	0.9	0.5	0.0	0.0
60°	43.6	7.4	0.5	0.5	0.9	0.9	0.5	0.5	0.0
62.5°	6.0	0.9	0.5	0.9	0.9	0.9	0.9	0.5	0.0
65°	1.9	0.5	0.5	0.9	0.9	0.9	0.9	0.5	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.5	0.5	0.5	0.9	0.9	0.9	0.9	0.5	0.0
70°	0.0	0.5	0.5	0.9	0.9	0.9	0.9	0.5	0.0
72.5°	0.0	0.5	0.9	0.9	0.9	0.9	0.9	0.5	0.0
75°	0.0	0.5	0.9	0.9	0.9	0.9	0.9	0.5	0.5
77.5°	0.0	0.5	0.9	0.9	1.4	0.9	0.9	0.5	0.0
80°	0.0	0.5	0.9	0.9	0.9	0.9	0.9	0.5	0.0
82.5°	0.0	0.5	0.9	0.9	0.9	0.9	0.9	0.5	0.0
85°	0.0	0.5	0.9	0.9	0.9	0.9	0.9	0.5	0.0
87.5°	0.0	0.5	0.9	0.9	0.9	0.9	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)