

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: P496405

Luminaire Tested: **LDA2B109040R35D010 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: P496405
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: LDA2B109040R35D010 2LBD1MMS-30DEG TILT
Description: 1000 LUMEN 2IN ADJUSTABLE LED LUMINAIRE WITH 90 CRI LEDS AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

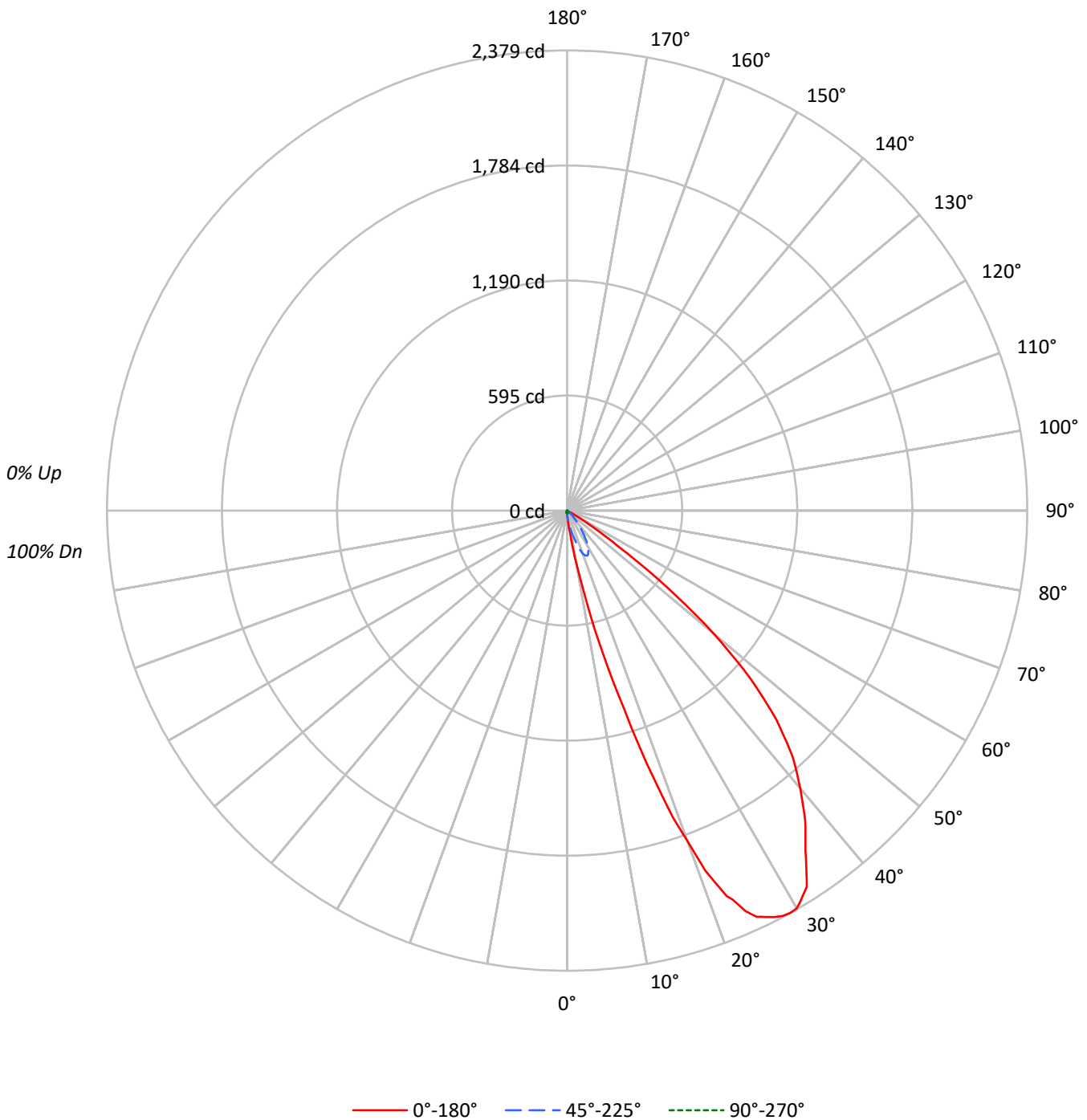
Lumens per Lamp: N/A
Luminaire Lumens: 642.0 lumens
Efficiency: N/A
Efficacy: 64.2 lumens/watt
Spacing Criteria (0/90/45): 3.16 / 0.51 / 1.46
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	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	83	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°	10706	10706	10706
5°	33578	9410	5794
10°	143278	7915	4308
15°	462907	5772	3473
20°	954022	3570	2363
25°	1261401	1742	1470
30°	1353002	798	798
35°	1293043	542	301
40°	1207249	322	0
45°	1067022	0	0
50°	757710	384	0
55°	271635	430	0
60°	41936	888	0
65°	2101	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°	3.8	0.6
10°-20°	51.9	8.1
20°-30°	173.9	27.1
30°-40°	219.1	34.1
40°-50°	155.0	24.1
50°-60°	35.7	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°	229.7	35.8
0°-40°	448.7	69.9
0°-60°	639.4	99.6
0°-90°	642.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	642.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	22	22	22	22	22	
5°	68	44	19	14	12	13
15°	906	160	11	8	7	299
25°	2317	253	3	3	3	1045
35°	2147	148	1	1	0	1344
45°	1529	37	0	0	0	1147
55°	316	2	0	0	0	357
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°	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7
1°	27.1	26.2	24.8	22.6	20.3	19.4	19.4	18.1	18.1
2°	32.5	31.2	28.5	23.9	20.3	18.1	17.2	16.3	15.8
3°	42.0	38.4	32.5	25.8	19.9	17.2	16.7	14.5	14.5
4°	52.4	48.8	37.5	27.1	19.4	16.3	14.5	13.6	13.1
5°	67.8	59.6	44.3	28.5	19.0	15.4	13.6	12.2	11.7
6°	87.6	76.4	50.6	29.8	18.5	14.5	12.6	11.3	10.8
7°	110.2	94.9	58.3	31.2	17.6	13.6	11.7	10.8	10.4
8°	158.1	122.0	67.3	32.1	17.2	12.6	11.3	9.9	9.5
9°	211.4	157.7	77.3	33.4	16.3	12.2	10.4	9.5	9.0
10°	286.0	206.5	88.5	34.3	15.8	11.3	9.5	9.0	8.6
11°	360.1	267.0	102.6	34.8	14.9	9.9	9.5	9.0	8.6
12°	482.1	324.8	114.8	34.8	14.0	9.5	8.6	8.1	7.7
13°	626.6	424.2	132.4	35.2	12.6	9.0	8.1	7.7	7.7
14°	754.0	513.2	144.1	35.2	12.2	8.1	7.7	7.7	7.2
15°	906.3	600.0	159.9	34.8	11.3	7.7	7.7	7.2	6.8
16°	1065.8	730.1	181.2	33.9	10.4	6.8	7.2	6.3	5.9
17°	1277.2	837.6	197.4	33.0	9.5	6.3	6.3	6.3	5.9
18°	1470.6	968.2	210.5	32.1	8.6	6.3	5.9	5.9	5.4
19°	1677.9	1073.0	223.6	30.7	7.7	5.4	5.4	5.4	5.0
20°	1817.1	1201.7	238.1	29.4	6.8	5.0	5.4	5.0	4.5
21°	1993.3	1317.0	243.5	28.0	5.9	4.5	4.5	4.5	4.1
22.5°	2158.2	1470.1	252.1	25.3	5.0	3.6	4.1	3.6	3.6
23°	2183.5	1502.6	252.1	24.4	4.5	3.6	4.1	3.6	3.6
24°	2267.5	1591.6	255.3	22.6	3.6	3.2	3.6	3.2	3.2
25°	2317.2	1662.1	253.0	20.8	3.2	3.2	3.2	3.2	2.7
26°	2337.5	1681.5	247.6	19.4	2.7	2.7	3.2	2.7	2.3
27°	2358.8	1725.8	240.8	17.6	2.3	2.7	2.7	2.7	2.3
28°	2373.7	1731.2	234.0	16.3	1.8	2.3	2.7	2.3	2.3
29°	2378.6	1738.5	225.9	14.5	1.4	1.8	2.3	1.8	1.8
30°	2375.0	1737.1	214.1	13.1	1.4	1.8	1.8	1.8	1.4
32.5°	2305.9	1698.3	181.6	9.5	0.9	1.4	1.4	1.4	0.9
35°	2146.9	1608.8	148.2	6.3	0.9	0.9	0.9	0.9	0.5
37.5°	2021.3	1475.1	113.4	3.6	0.5	0.9	0.9	0.5	0.0
40°	1874.5	1281.3	81.8	2.3	0.5	0.5	0.5	0.0	0.0
42.5°	1725.4	1083.8	55.6	0.9	0.0	0.5	0.5	0.0	0.0
45°	1529.3	829.9	36.6	0.5	0.0	0.5	0.0	0.0	0.0
47.5°	1286.2	602.7	24.8	0.0	0.0	0.5	0.0	0.0	0.0
50°	987.2	337.5	14.0	0.0	0.5	0.5	0.5	0.0	0.0
52.5°	650.6	168.5	5.4	0.0	0.5	0.5	0.5	0.0	0.0
55°	315.8	90.4	1.8	0.5	0.5	0.9	0.5	0.0	0.0
57.5°	149.1	35.2	0.5	0.5	0.9	0.9	0.5	0.0	0.0
60°	42.5	7.2	0.5	0.5	0.9	0.9	0.5	0.5	0.0
62.5°	5.9	0.9	0.5	0.9	0.9	0.9	0.9	0.5	0.0
65°	1.8	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)