

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P#

Luminaire Tested: 22D3X-LP-70-L927.ies

Issue Date: 12/20/2023

Test Information

Test Method: LM-79-2019
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2307-104-1)
Test Lab: INNOVATION CENTER
Issue Date: 12/20/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 22D3X-LP-70-L927.ies
Description: 2x2 D3X-LP AT 7000LM 2700K 90CRI
Light Source: -
Ballast/Driver: -

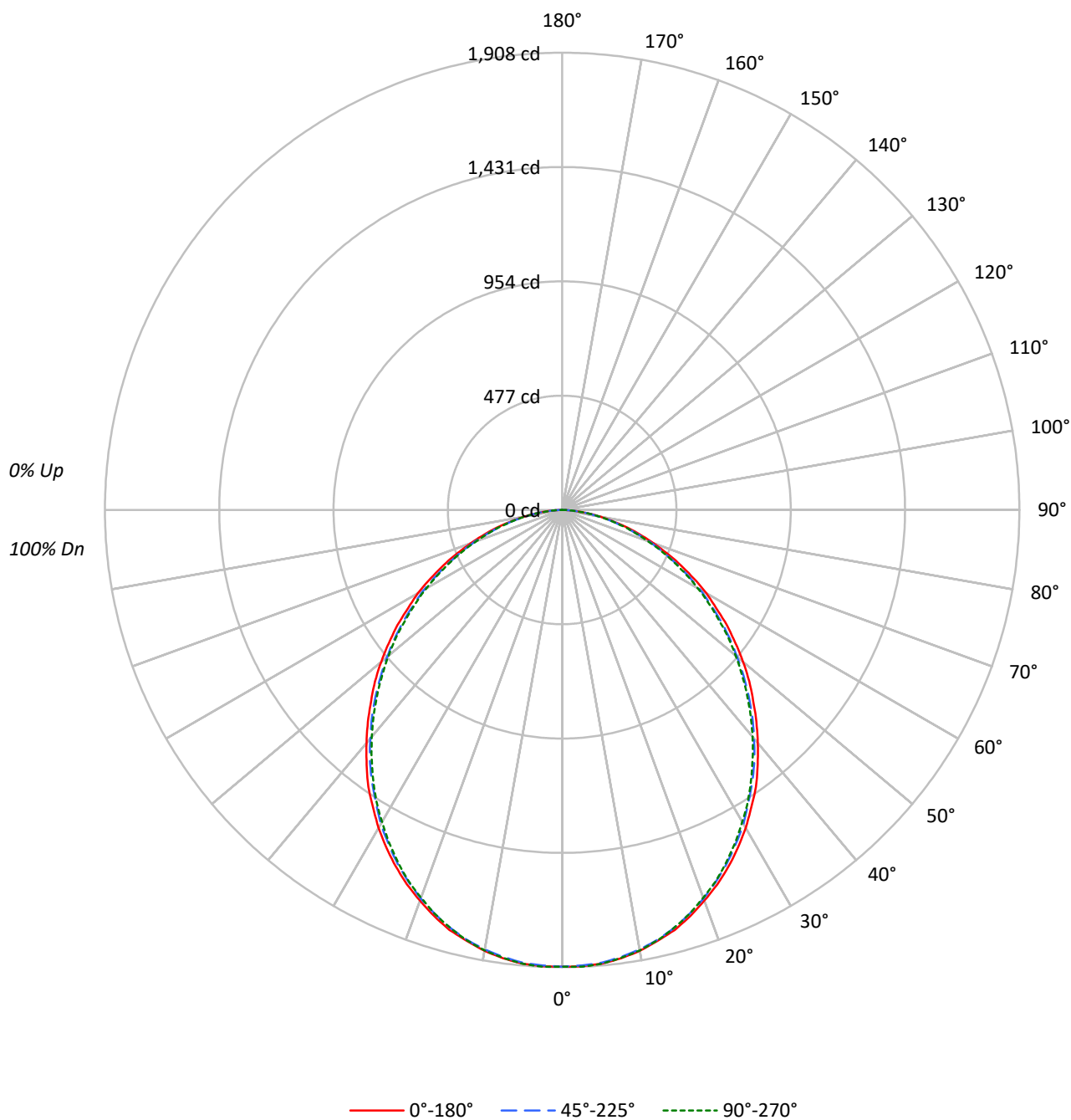
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4762.6 lumens
Efficiency: N/A
Efficacy: 74.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.29
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 63.9
Input Voltage (V): 120
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: 24 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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	105	101	97	107	102	99	95	98	95	92		94	92	89		91
2	100	92	85	80	97	90	84	79	86	81	77		83	79	75		80
3	91	81	73	67	89	79	72	66	76	70	65		74	68	64		71
4	84	72	64	57	81	71	63	57	68	61	56		66	60	55		64
5	77	65	56	49	75	64	55	49	61	54	49		59	53	48		58
6	71	58	50	43	69	57	49	43	56	48	43		54	47	42		52
7	66	53	44	38	65	52	44	38	51	43	38		49	43	38		48
8	62	49	40	34	60	48	40	34	47	39	34		45	39	34		44
9	58	45	37	31	56	44	36	31	43	36	31		42	35	31		41
10	54	41	33	28	53	41	33	28	40	33	28		39	32	28		38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5129	5129	5129
5°	5133	5123	5133
10°	5104	5088	5099
15°	5056	5029	5029
20°	4968	4941	4930
25°	4875	4830	4813
30°	4760	4701	4671
35°	4633	4546	4515
40°	4461	4375	4341
45°	4291	4190	4154
50°	4124	3989	3957
55°	3936	3794	3741
60°	3739	3576	3525
65°	3481	3312	3275
70°	3181	3061	2987
75°	2901	2724	2744
80°	2501	2354	2383
85°	1933	1874	1757

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4291 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.0	3.8
10°-20°	509.0	10.7
20°-30°	749.7	15.7
30°-40°	867.3	18.2
40°-50°	852.6	17.9
50°-60°	726.6	15.3
60°-70°	520.7	10.9
70°-80°	282.8	5.9
80°-90°	73.8	1.5
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°	1438.8	30.2
0°-40°	2306.1	48.4
0°-60°	3885.4	81.6
0°-90°	4762.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4762.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1906	1906	1906	1906	1906	
5°	1900	1896	1896	1896	1900	180
15°	1815	1807	1805	1803	1805	511
25°	1642	1634	1627	1623	1621	756
35°	1410	1399	1384	1376	1374	880
45°	1128	1120	1101	1092	1092	871
55°	839	824	809	799	797	749
65°	547	535	520	514	514	542
75°	279	270	262	258	264	295
85°	63	63	61	59	57	76
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1905.9	1905.9	1905.9	1905.9	1905.9
2.5°	1905.9	1904.0	1902.1	1904.0	1907.8
5°	1900.2	1896.4	1896.4	1896.4	1900.2
7.5°	1886.9	1883.1	1881.2	1883.1	1885.0
10°	1867.9	1864.1	1862.2	1864.1	1866.0
12.5°	1841.3	1839.4	1837.5	1837.5	1839.4
15°	1814.7	1807.1	1805.3	1803.4	1805.3
17.5°	1776.8	1774.9	1767.3	1767.3	1767.3
20°	1735.0	1731.2	1725.5	1721.7	1721.7
22.5°	1691.4	1687.6	1678.1	1674.3	1676.2
25°	1642.0	1634.4	1626.8	1623.0	1621.1
27.5°	1588.8	1581.3	1569.9	1564.2	1564.2
30°	1531.9	1526.2	1512.9	1505.3	1503.4
32.5°	1469.3	1465.5	1446.5	1442.7	1442.7
35°	1410.4	1399.0	1383.8	1376.2	1374.3
37.5°	1340.2	1332.6	1317.4	1307.9	1306.0
40°	1269.9	1260.4	1245.3	1237.7	1235.8
42.5°	1199.7	1190.2	1175.0	1165.5	1163.6
45°	1127.6	1120.0	1101.0	1091.5	1091.5
47.5°	1059.2	1044.0	1027.0	1019.4	1017.5
50°	985.2	971.9	952.9	945.3	945.3
52.5°	911.2	901.7	880.8	877.0	873.2
55°	839.0	823.8	808.7	799.2	797.3
57.5°	761.2	747.9	732.7	725.1	725.1
60°	694.8	677.7	664.4	654.9	654.9
62.5°	618.8	603.6	590.4	584.7	582.8
65°	546.7	535.3	520.1	514.4	514.4
67.5°	474.6	465.1	451.8	446.1	448.0
70°	404.3	398.6	389.1	381.6	379.7
72.5°	339.8	332.2	322.7	320.8	320.8
75°	279.0	269.6	262.0	258.2	263.9
77.5°	216.4	210.7	206.9	205.0	206.9
80°	161.4	153.8	151.9	153.8	153.8
82.5°	112.0	108.2	106.3	106.3	106.3
85°	62.6	62.6	60.7	58.8	56.9
87.5°	24.7	24.7	26.6	26.6	28.5
90°	0.0	0.0	0.0	0.0	0.0

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room Dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	16.7	18.3	17.0	18.6	18.9	16.4	18.0	16.8	18.3	18.6
	3H	18.3	19.7	18.7	20.1	20.4	18.0	19.5	18.4	19.8	20.2
	4H	18.9	20.3	19.3	20.6	21.0	18.6	20.0	19.0	20.3	20.7
	6H	19.3	20.6	19.7	20.9	21.3	19.0	20.3	19.4	20.7	21.0
	8H	19.5	20.7	19.9	21.0	21.4	19.2	20.4	19.6	20.7	21.1
	12H	19.5	20.7	20.0	21.1	21.5	19.2	20.4	19.7	20.8	21.2
4H	2H	17.2	18.5	17.6	18.9	19.3	17.0	18.4	17.4	18.7	19.1
	3H	19.1	20.2	19.5	20.6	21.0	18.8	20.0	19.2	20.4	20.8
	4H	19.8	20.8	20.2	21.2	21.7	19.5	20.6	20.0	21.0	21.4
	6H	20.3	21.2	20.8	21.7	22.1	20.1	21.0	20.5	21.4	21.9
	8H	20.5	21.3	21.0	21.8	22.2	20.2	21.1	20.7	21.5	22.0
	12H	20.6	21.4	21.1	21.8	22.3	20.4	21.1	20.8	21.6	22.0
8H	4H	20.0	20.9	20.5	21.3	21.8	19.8	20.6	20.3	21.1	21.5
	6H	20.7	21.4	21.2	21.9	22.3	20.5	21.1	21.0	21.6	22.1
	8H	20.9	21.5	21.4	22.0	22.5	20.7	21.3	21.2	21.8	22.3
	12H	21.1	21.6	21.6	22.1	22.7	20.9	21.4	21.4	21.9	22.5
12H	4H	20.1	20.8	20.5	21.3	21.7	19.8	20.6	20.3	21.1	21.5
	6H	20.7	21.3	21.2	21.8	22.3	20.5	21.1	21.0	21.6	22.1
	8H	21.0	21.6	21.5	22.0	22.6	20.8	21.3	21.3	21.8	22.4

(END OF REPORT)