

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-L950.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-L950.ies
Description: 2x2 D3X-LP AT 7000LM 5000K 90CRI
Light Source: -
Ballast/Driver: -

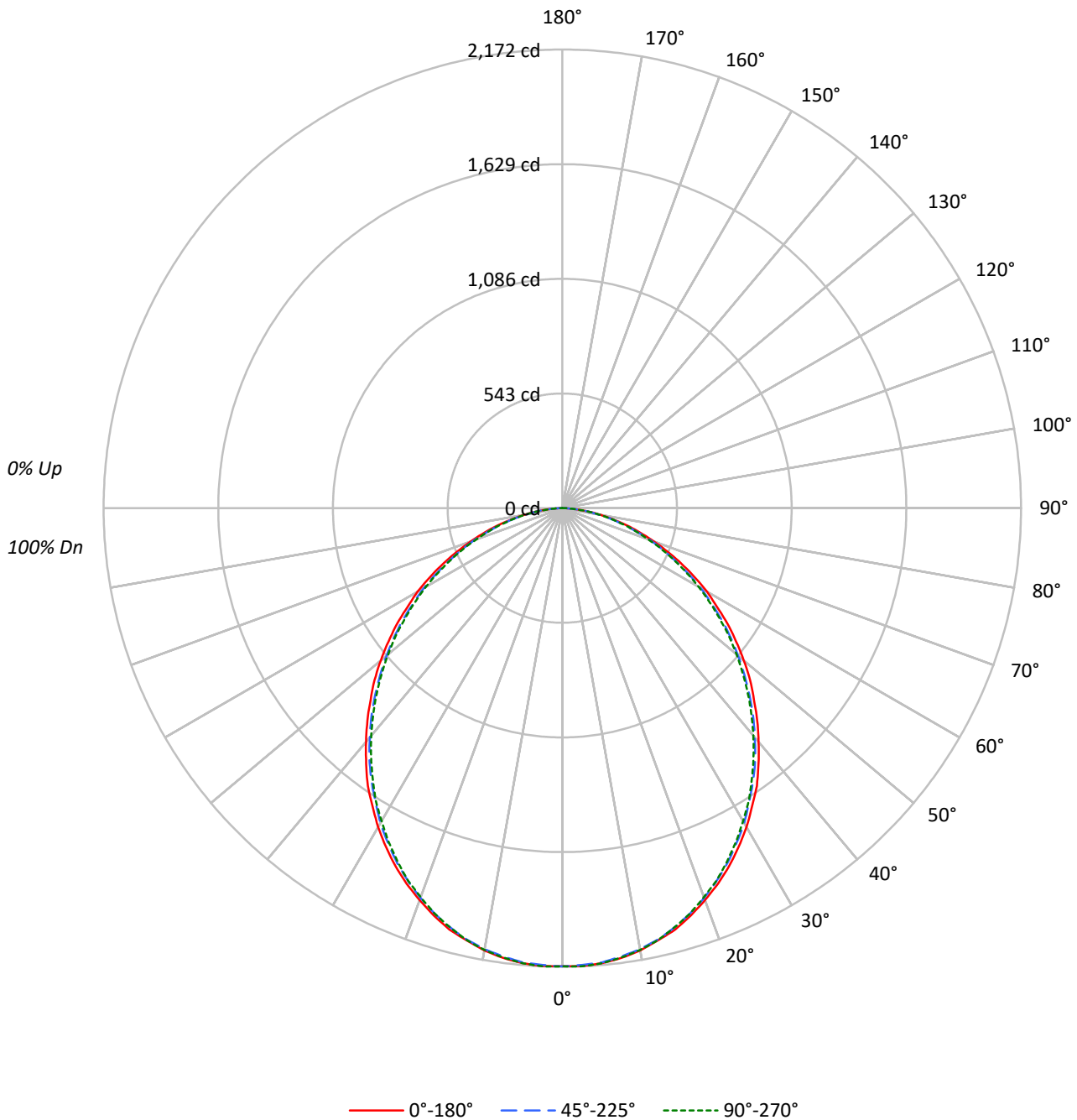
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5422.6 lumens
Efficiency: N/A
Efficacy: 84.9 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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	87	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73	73	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	63	63	61
4	84	72	64	57	81	71	63	57	68	61	56	66	60	55	64	59	54	54	54	52
5	77	65	56	49	75	64	55	49	61	54	49	59	53	48	58	52	48	48	48	45
6	71	58	50	43	69	57	49	43	56	48	43	54	47	42	52	47	42	42	42	40
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	37	37	37	36
8	62	49	40	34	60	48	40	34	47	39	34	45	39	34	44	38	34	34	34	32
9	58	45	37	31	56	44	36	31	43	36	31	42	35	31	41	35	31	31	31	29
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	28	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5839	5839	5839
5°	5844	5833	5844
10°	5811	5794	5805
15°	5756	5726	5726
20°	5657	5626	5614
25°	5551	5500	5480
30°	5420	5353	5319
35°	5276	5176	5140
40°	5079	4980	4943
45°	4886	4771	4730
50°	4696	4542	4506
55°	4482	4320	4259
60°	4257	4071	4013
65°	3964	3771	3729
70°	3622	3486	3401
75°	3303	3101	3123
80°	2847	2679	2713
85°	2201	2137	2001

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4886 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	205.0	3.8
10°-20°	579.6	10.7
20°-30°	853.6	15.7
30°-40°	987.5	18.2
40°-50°	970.8	17.9
50°-60°	827.3	15.3
60°-70°	592.8	10.9
70°-80°	322.0	5.9
80°-90°	84.0	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°	1638.2	30.2
0°-40°	2625.7	48.4
0°-60°	4423.8	81.6
0°-90°	5422.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5422.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2170	2170	2170	2170	2170	
5°	2164	2159	2159	2159	2164	205
15°	2066	2058	2055	2053	2055	582
25°	1870	1861	1852	1848	1846	861
35°	1606	1593	1576	1567	1565	1001
45°	1284	1275	1254	1243	1243	992
55°	955	938	921	910	908	853
65°	622	610	592	586	586	617
75°	318	307	298	294	300	336
85°	71	71	69	67	65	87
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2170.0	2170.0	2170.0	2170.0	2170.0
2.5°	2170.0	2167.8	2165.7	2167.8	2172.1
5°	2163.5	2159.2	2159.2	2159.2	2163.5
7.5°	2148.4	2144.0	2141.9	2144.0	2146.2
10°	2126.7	2122.4	2120.3	2122.4	2124.6
12.5°	2096.5	2094.3	2092.2	2092.2	2094.3
15°	2066.2	2057.6	2055.4	2053.3	2055.4
17.5°	2023.0	2020.8	2012.2	2012.2	2012.2
20°	1975.5	1971.1	1964.6	1960.3	1960.3
22.5°	1925.7	1921.4	1910.6	1906.3	1908.5
25°	1869.5	1860.9	1852.3	1847.9	1845.8
27.5°	1809.0	1800.4	1787.4	1780.9	1780.9
30°	1744.2	1737.7	1722.6	1713.9	1711.8
32.5°	1672.9	1668.5	1646.9	1642.6	1642.6
35°	1605.9	1592.9	1575.6	1567.0	1564.8
37.5°	1525.9	1517.3	1500.0	1489.2	1487.0
40°	1445.9	1435.1	1417.8	1409.2	1407.0
42.5°	1366.0	1355.2	1337.9	1327.1	1324.9
45°	1283.8	1275.2	1253.6	1242.8	1242.8
47.5°	1206.0	1188.7	1169.3	1160.6	1158.5
50°	1121.7	1106.6	1085.0	1076.3	1076.3
52.5°	1037.4	1026.6	1002.9	998.5	994.2
55°	955.3	938.0	920.7	909.9	907.8
57.5°	866.7	851.6	834.3	825.6	825.6
60°	791.0	771.6	756.5	745.7	745.7
62.5°	704.6	687.3	672.2	665.7	663.5
65°	622.5	609.5	592.2	585.7	585.7
67.5°	540.3	529.5	514.4	507.9	510.1
70°	460.4	453.9	443.1	434.4	432.3
72.5°	386.9	378.2	367.4	365.3	365.3
75°	317.7	306.9	298.3	293.9	300.4
77.5°	246.4	239.9	235.6	233.4	235.6
80°	183.7	175.1	172.9	175.1	175.1
82.5°	127.5	123.2	121.0	121.0	121.0
85°	71.3	71.3	69.2	67.0	64.8
87.5°	28.1	28.1	30.3	30.3	32.4
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	17.1	18.7	17.5	19.0	19.3	16.9	18.5	17.2	18.8	19.1
	3H	18.8	20.2	19.1	20.5	20.9	18.5	19.9	18.9	20.2	20.6
	4H	19.4	20.7	19.8	21.1	21.4	19.1	20.4	19.5	20.8	21.1
	6H	19.8	21.0	20.2	21.4	21.8	19.5	20.7	19.9	21.1	21.5
	8H	19.9	21.1	20.3	21.5	21.9	19.6	20.8	20.0	21.2	21.6
	12H	20.0	21.1	20.4	21.5	21.9	19.7	20.8	20.1	21.2	21.6
4H	2H	17.6	19.0	18.0	19.3	19.7	17.5	18.8	17.9	19.2	19.5
	3H	19.5	20.6	19.9	21.0	21.4	19.3	20.4	19.7	20.8	21.2
	4H	20.2	21.3	20.7	21.7	22.1	20.0	21.0	20.4	21.4	21.9
	6H	20.8	21.7	21.2	22.1	22.6	20.5	21.4	21.0	21.9	22.3
	8H	20.9	21.8	21.4	22.2	22.7	20.7	21.5	21.2	22.0	22.4
	12H	21.1	21.8	21.5	22.3	22.8	20.8	21.5	21.3	22.0	22.5
8H	4H	20.5	21.3	20.9	21.8	22.2	20.3	21.1	20.7	21.5	22.0
	6H	21.1	21.8	21.6	22.3	22.8	20.9	21.6	21.4	22.1	22.6
	8H	21.4	22.0	21.9	22.5	23.0	21.1	21.8	21.7	22.3	22.8
	12H	21.5	22.1	22.1	22.6	23.1	21.3	21.9	21.8	22.4	22.9
12H	4H	20.5	21.3	21.0	21.7	22.2	20.3	21.0	20.8	21.5	22.0
	6H	21.2	21.8	21.7	22.3	22.8	21.0	21.6	21.5	22.0	22.6
	8H	21.5	22.0	22.0	22.5	23.1	21.2	21.8	21.8	22.3	22.8

(END OF REPORT)