

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-80-L850.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-80-L850.ies
Description: 2x2 D3X-LP AT 8000LM 5000K 80CRI
Light Source: -
Ballast/Driver: -

Summary

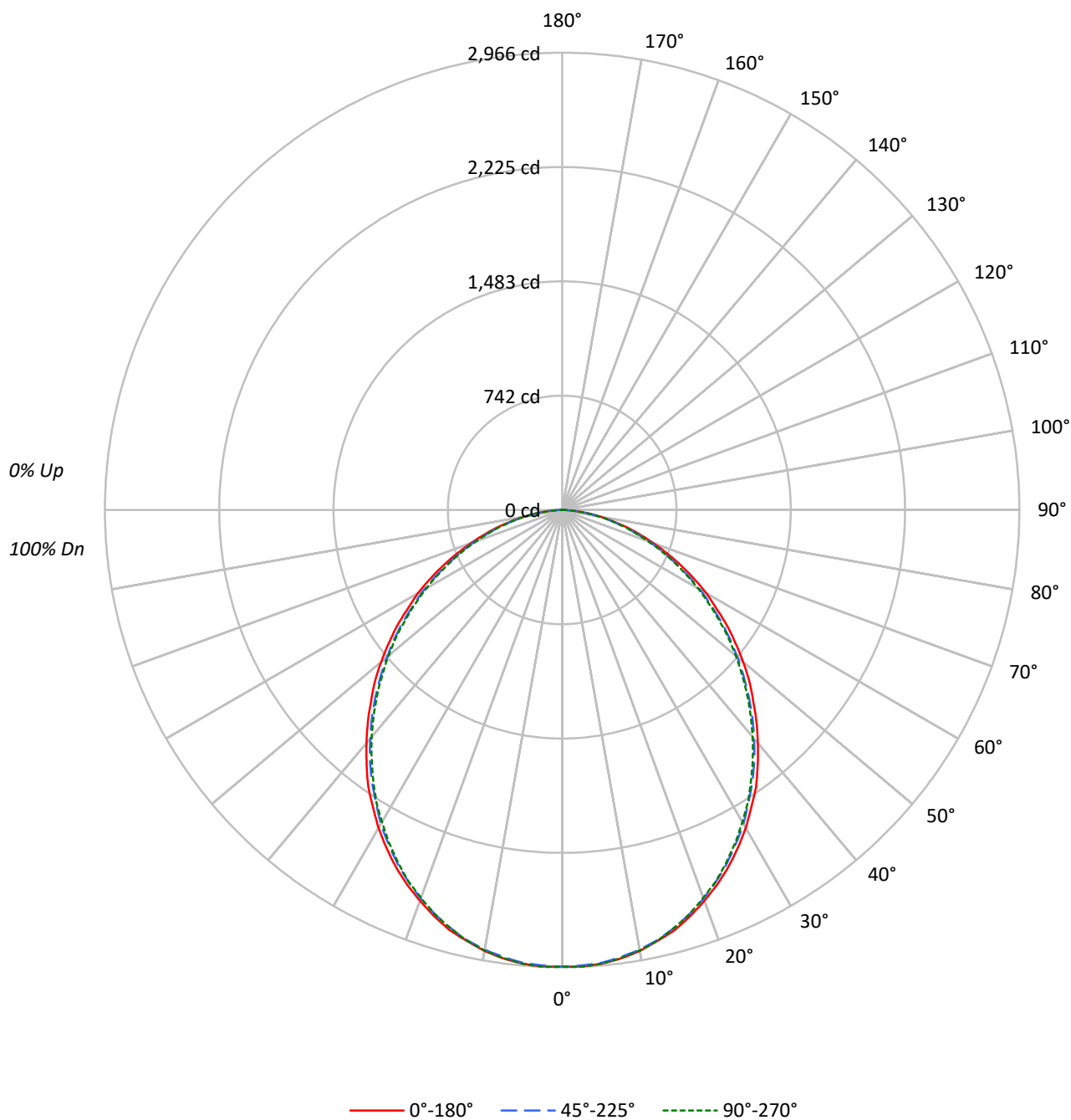
Lumens per Lamp: N/A
Luminaire Lumens: 7404.7 lumens
Efficiency: N/A
Efficacy: 100.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.29
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 73.4
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		0
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		100
1	109	105	101	97	107	102	99	95	98	95	92		94	92	89		85
2	100	92	85	80	97	90	84	79	86	81	77		83	79	75		71
3	91	81	73	67	89	79	72	66	76	70	65		74	68	64		61
4	84	72	64	57	81	71	63	57	68	61	56		66	60	55		52
5	77	65	56	49	75	64	55	49	61	54	49		59	53	48		45
6	71	58	50	43	69	57	49	43	56	48	43		54	47	42		40
7	66	53	44	38	65	52	44	38	51	43	38		49	43	38		36
8	62	49	40	34	60	48	40	34	47	39	34		45	39	34		32
9	58	45	37	31	56	44	36	31	43	36	31		42	35	31		29
10	54	41	33	28	53	41	33	28	40	33	28		39	32	28		26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7974	7974	7974
5°	7980	7964	7980
10°	7935	7911	7928
15°	7860	7819	7819
20°	7725	7683	7666
25°	7580	7510	7484
30°	7401	7309	7263
35°	7204	7068	7020
40°	6936	6801	6749
45°	6672	6514	6458
50°	6413	6203	6153
55°	6120	5899	5816
60°	5814	5560	5480
65°	5412	5149	5093
70°	4946	4760	4644
75°	4510	4235	4265
80°	3888	3659	3705
85°	3007	2915	2732

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6672 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	279.9	3.8
10°-20°	791.4	10.7
20°-30°	1165.6	15.7
30°-40°	1348.4	18.2
40°-50°	1325.7	17.9
50°-60°	1129.8	15.3
60°-70°	809.5	10.9
70°-80°	439.7	5.9
80°-90°	114.7	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°	2237.0	30.2
0°-40°	3585.4	48.4
0°-60°	6040.8	81.6
0°-90°	7404.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7404.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2963	2963	2963	2963	2963	
5°	2954	2948	2948	2948	2954	280
15°	2822	2810	2807	2804	2807	794
25°	2553	2541	2529	2523	2520	1175
35°	2193	2175	2152	2140	2137	1368
45°	1753	1741	1712	1697	1697	1354
55°	1304	1281	1257	1242	1240	1165
65°	850	832	809	800	800	842
75°	434	419	407	401	410	458
85°	97	97	94	92	88	118
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2963.2	2963.2	2963.2	2963.2	2963.2
2.5°	2963.2	2960.2	2957.3	2960.2	2966.1
5°	2954.3	2948.4	2948.4	2948.4	2954.3
7.5°	2933.7	2927.7	2924.8	2927.7	2930.7
10°	2904.1	2898.2	2895.3	2898.2	2901.2
12.5°	2862.8	2859.9	2856.9	2856.9	2859.9
15°	2821.5	2809.7	2806.7	2803.8	2806.7
17.5°	2762.5	2759.5	2747.7	2747.7	2747.7
20°	2697.5	2691.6	2682.8	2676.9	2676.9
22.5°	2629.7	2623.8	2609.0	2603.1	2606.1
25°	2552.9	2541.1	2529.3	2523.4	2520.5
27.5°	2470.3	2458.5	2440.8	2431.9	2431.9
30°	2381.7	2372.9	2352.2	2340.4	2337.5
32.5°	2284.4	2278.4	2248.9	2243.0	2243.0
35°	2192.9	2175.2	2151.5	2139.7	2136.8
37.5°	2083.7	2071.9	2048.2	2033.5	2030.5
40°	1974.5	1959.7	1936.1	1924.3	1921.3
42.5°	1865.3	1850.5	1826.9	1812.1	1809.2
45°	1753.1	1741.3	1711.8	1697.0	1697.0
47.5°	1646.9	1623.2	1596.7	1584.9	1581.9
50°	1531.8	1511.1	1481.6	1469.8	1469.8
52.5°	1416.7	1401.9	1369.4	1363.5	1357.6
55°	1304.5	1280.9	1257.3	1242.5	1239.6
57.5°	1183.5	1162.8	1139.2	1127.4	1127.4
60°	1080.2	1053.6	1033.0	1018.2	1018.2
62.5°	962.1	938.5	917.9	909.0	906.1
65°	850.0	832.3	808.7	799.8	799.8
67.5°	737.8	723.1	702.4	693.6	696.5
70°	628.6	619.8	605.0	593.2	590.3
72.5°	528.3	516.5	501.7	498.8	498.8
75°	433.8	419.1	407.3	401.4	410.2
77.5°	336.5	327.6	321.7	318.7	321.7
80°	250.9	239.1	236.1	239.1	239.1
82.5°	174.1	168.2	165.3	165.3	165.3
85°	97.4	97.4	94.4	91.5	88.5
87.5°	38.4	38.4	41.3	41.3	44.3
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	18.2	19.8	18.6	20.1	20.4	18.0	19.5	18.3	19.9	20.2
	3H	19.8	21.3	20.2	21.6	22.0	19.6	21.0	19.9	21.3	21.7
	4H	20.4	21.8	20.8	22.1	22.5	20.1	21.5	20.5	21.8	22.2
	6H	20.9	22.1	21.3	22.5	22.9	20.6	21.8	21.0	22.2	22.6
	8H	21.0	22.2	21.4	22.6	23.0	20.7	21.9	21.1	22.3	22.7
	12H	21.1	22.2	21.5	22.6	23.0	20.8	21.9	21.2	22.3	22.7
4H	2H	18.7	20.1	19.1	20.4	20.8	18.5	19.9	18.9	20.2	20.6
	3H	20.6	21.7	21.0	22.1	22.5	20.4	21.5	20.8	21.9	22.3
	4H	21.3	22.3	21.8	22.8	23.2	21.1	22.1	21.5	22.5	22.9
	6H	21.9	22.7	22.3	23.2	23.6	21.6	22.5	22.1	22.9	23.4
	8H	22.0	22.9	22.5	23.3	23.8	21.8	22.6	22.2	23.1	23.5
	12H	22.1	22.9	22.6	23.4	23.8	21.9	22.6	22.4	23.1	23.6
8H	4H	21.6	22.4	22.0	22.8	23.3	21.3	22.2	21.8	22.6	23.1
	6H	22.2	22.9	22.7	23.4	23.9	22.0	22.7	22.5	23.2	23.6
	8H	22.4	23.1	23.0	23.6	24.1	22.2	22.8	22.7	23.4	23.8
	12H	22.6	23.2	23.1	23.7	24.2	22.4	22.9	22.9	23.4	24.0
12H	4H	21.6	22.3	22.1	22.8	23.3	21.4	22.1	21.8	22.6	23.1
	6H	22.3	22.9	22.8	23.3	23.9	22.0	22.7	22.6	23.1	23.7
	8H	22.5	23.1	23.0	23.6	24.1	22.3	22.9	22.8	23.4	23.9



(END OF REPORT)