

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-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-70-L850.ies
Description: 2x2 D3X-LP AT 7000LM 5000K 80CRI
Light Source: -
Ballast/Driver: -

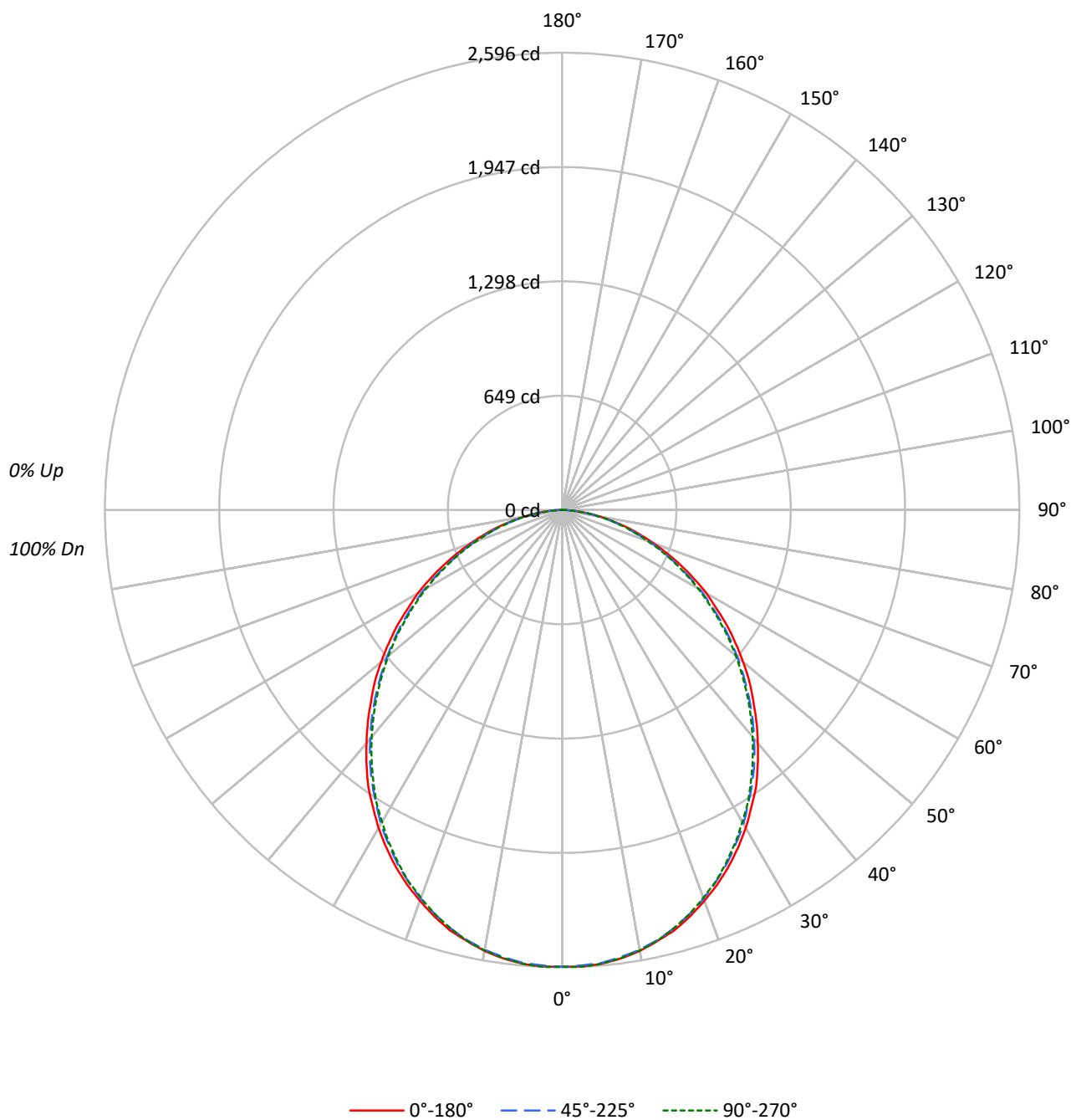
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6481.4 lumens
Efficiency: N/A
Efficacy: 101.4 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°	6980	6980	6980
5°	6985	6971	6985
10°	6946	6925	6939
15°	6880	6844	6844
20°	6762	6725	6710
25°	6635	6573	6551
30°	6478	6398	6357
35°	6305	6187	6144
40°	6071	5953	5908
45°	5840	5702	5653
50°	5613	5429	5386
55°	5357	5163	5090
60°	5089	4866	4797
65°	4737	4507	4458
70°	4330	4167	4065
75°	3949	3707	3734
80°	3403	3203	3243
85°	2634	2553	2393

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5840 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	245.0	3.8
10°-20°	692.8	10.7
20°-30°	1020.3	15.7
30°-40°	1180.3	18.2
40°-50°	1160.4	17.9
50°-60°	988.9	15.3
60°-70°	708.6	10.9
70°-80°	384.8	5.9
80°-90°	100.4	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°	1958.1	30.2
0°-40°	3138.4	48.4
0°-60°	5287.6	81.6
0°-90°	6481.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6481.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2594	2594	2594	2594	2594	
5°	2586	2581	2581	2581	2586	245
15°	2470	2459	2457	2454	2457	695
25°	2235	2224	2214	2209	2206	1029
35°	1919	1904	1883	1873	1870	1197
45°	1534	1524	1498	1485	1485	1185
55°	1142	1121	1100	1088	1085	1020
65°	744	728	708	700	700	737
75°	380	367	356	351	359	401
85°	85	85	83	80	78	104
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2593.7	2593.7	2593.7	2593.7	2593.7
2.5°	2593.7	2591.1	2588.5	2591.1	2596.3
5°	2585.9	2580.8	2580.8	2580.8	2585.9
7.5°	2567.9	2562.7	2560.1	2562.7	2565.3
10°	2542.0	2536.9	2534.3	2536.9	2539.4
12.5°	2505.9	2503.3	2500.7	2500.7	2503.3
15°	2469.7	2459.4	2456.8	2454.2	2456.8
17.5°	2418.0	2415.4	2405.1	2405.1	2405.1
20°	2361.2	2356.0	2348.3	2343.1	2343.1
22.5°	2301.8	2296.6	2283.7	2278.5	2281.1
25°	2234.6	2224.3	2213.9	2208.8	2206.2
27.5°	2162.3	2151.9	2136.4	2128.7	2128.7
30°	2084.8	2077.0	2058.9	2048.6	2046.0
32.5°	1999.5	1994.4	1968.5	1963.4	1963.4
35°	1919.4	1903.9	1883.3	1872.9	1870.4
37.5°	1823.9	1813.5	1792.9	1779.9	1777.4
40°	1728.3	1715.4	1694.7	1684.4	1681.8
42.5°	1632.7	1619.8	1599.1	1586.2	1583.6
45°	1534.5	1524.2	1498.3	1485.4	1485.4
47.5°	1441.5	1420.8	1397.6	1387.3	1384.7
50°	1340.8	1322.7	1296.8	1286.5	1286.5
52.5°	1240.0	1227.1	1198.7	1193.5	1188.3
55°	1141.8	1121.2	1100.5	1087.6	1085.0
57.5°	1035.9	1017.8	997.2	986.8	986.8
60°	945.5	922.3	904.2	891.3	891.3
62.5°	842.2	821.5	803.4	795.7	793.1
65°	744.0	728.5	707.8	700.1	700.1
67.5°	645.8	632.9	614.8	607.1	609.7
70°	550.3	542.5	529.6	519.3	516.7
72.5°	462.4	452.1	439.2	436.6	436.6
75°	379.8	366.8	356.5	351.3	359.1
77.5°	294.5	286.8	281.6	279.0	281.6
80°	219.6	209.3	206.7	209.3	209.3
82.5°	152.4	147.3	144.7	144.7	144.7
85°	85.3	85.3	82.7	80.1	77.5
87.5°	33.6	33.6	36.2	36.2	38.8
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	17.7	19.3	18.1	19.6	19.9	17.5	19.1	17.9	19.4	19.7
	3H	19.4	20.8	19.8	21.1	21.5	19.1	20.5	19.5	20.9	21.2
	4H	20.0	21.3	20.4	21.7	22.1	19.7	21.0	20.1	21.4	21.8
	6H	20.4	21.7	20.8	22.0	22.4	20.1	21.4	20.5	21.7	22.1
	8H	20.5	21.7	21.0	22.1	22.5	20.2	21.4	20.7	21.8	22.2
	12H	20.6	21.8	21.0	22.1	22.6	20.3	21.5	20.7	21.8	22.3
4H	2H	18.3	19.6	18.7	20.0	20.3	18.1	19.4	18.5	19.8	20.2
	3H	20.1	21.3	20.5	21.7	22.1	19.9	21.0	20.3	21.4	21.8
	4H	20.9	21.9	21.3	22.3	22.7	20.6	21.6	21.0	22.0	22.5
	6H	21.4	22.3	21.9	22.7	23.2	21.1	22.0	21.6	22.5	22.9
	8H	21.6	22.4	22.0	22.8	23.3	21.3	22.1	21.8	22.6	23.1
	12H	21.7	22.4	22.2	22.9	23.4	21.4	22.2	21.9	22.6	23.1
8H	4H	21.1	21.9	21.6	22.4	22.8	20.9	21.7	21.3	22.2	22.6
	6H	21.7	22.4	22.2	22.9	23.4	21.5	22.2	22.0	22.7	23.2
	8H	22.0	22.6	22.5	23.1	23.6	21.8	22.4	22.3	22.9	23.4
	12H	22.2	22.7	22.7	23.2	23.8	21.9	22.5	22.4	23.0	23.5
12H	4H	21.1	21.9	21.6	22.4	22.8	20.9	21.6	21.4	22.1	22.6
	6H	21.8	22.4	22.3	22.9	23.4	21.6	22.2	22.1	22.7	23.2
	8H	22.1	22.6	22.6	23.1	23.7	21.9	22.4	22.4	22.9	23.5

(END OF REPORT)