

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-50-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-50-L850.ies
Description: 2x2 D3X-LP AT 5000LM 5000K 80CRI
Light Source: -
Ballast/Driver: -

Summary

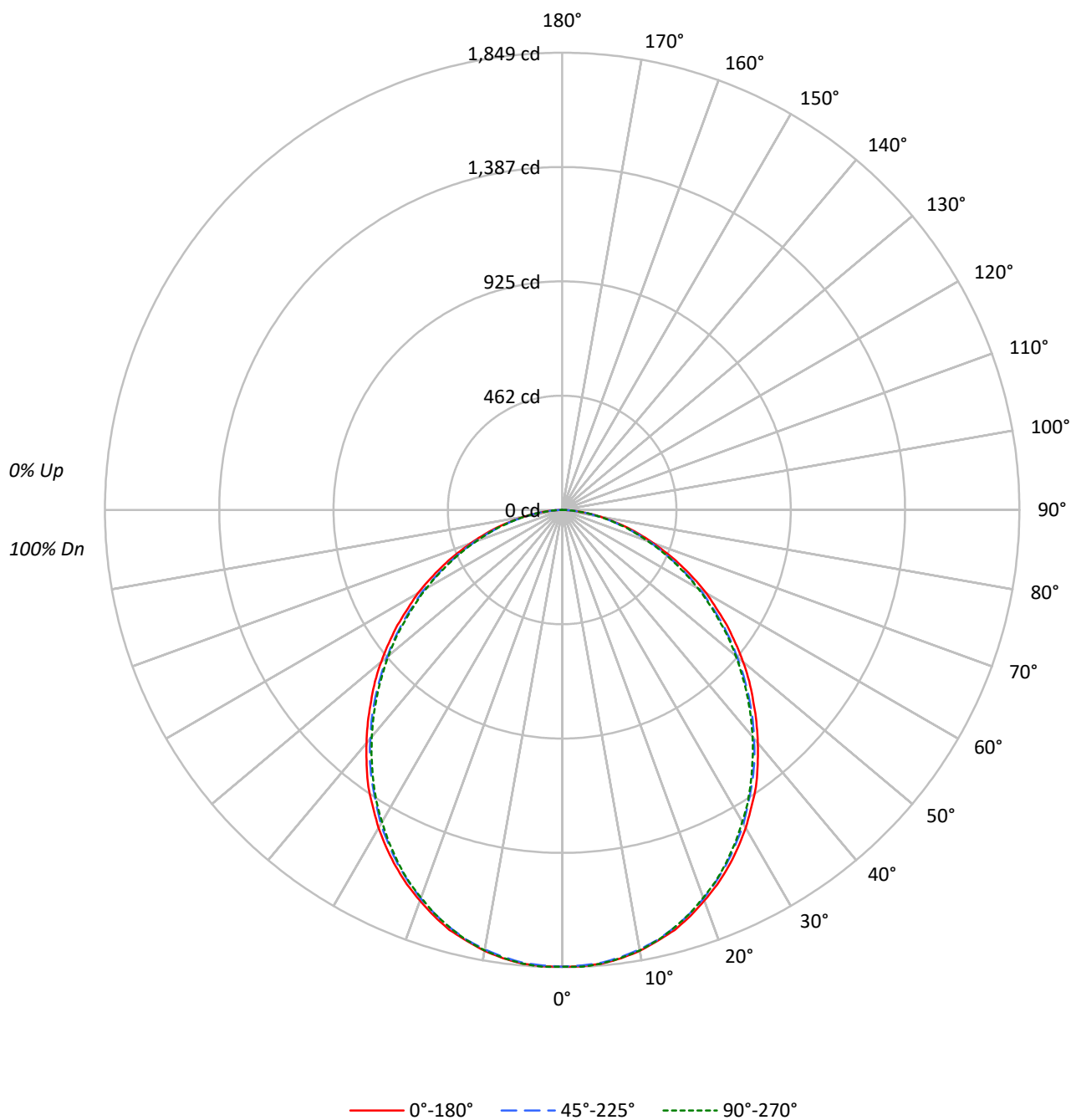
Lumens per Lamp: N/A
Luminaire Lumens: 4615.4 lumens
Efficiency: N/A
Efficacy: 110.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.29
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 41.9
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	30	10	50	30	10
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°	4970	4970	4970
5°	4974	4964	4974
10°	4946	4931	4941
15°	4899	4874	4874
20°	4815	4789	4778
25°	4725	4681	4665
30°	4613	4556	4527
35°	4490	4406	4375
40°	4323	4239	4207
45°	4158	4061	4026
50°	3997	3866	3835
55°	3815	3677	3625
60°	3624	3465	3416
65°	3373	3209	3174
70°	3083	2967	2895
75°	2811	2640	2659
80°	2424	2281	2309
85°	1874	1819	1704

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4158 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	174.5	3.8
10°-20°	493.3	10.7
20°-30°	726.5	15.7
30°-40°	840.5	18.2
40°-50°	826.3	17.9
50°-60°	704.2	15.3
60°-70°	504.6	10.9
70°-80°	274.0	5.9
80°-90°	71.5	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°	1394.3	30.2
0°-40°	2234.8	48.4
0°-60°	3765.3	81.6
0°-90°	4615.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4615.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1847	1847	1847	1847	1847	
5°	1841	1838	1838	1838	1841	175
15°	1759	1751	1749	1748	1749	495
25°	1591	1584	1576	1573	1571	732
35°	1367	1356	1341	1334	1332	852
45°	1093	1085	1067	1058	1058	844
55°	813	798	784	774	773	726
65°	530	519	504	498	498	525
75°	270	261	254	250	256	286
85°	61	61	59	57	55	74
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1846.9	1846.9	1846.9	1846.9	1846.9
2.5°	1846.9	1845.1	1843.3	1845.1	1848.8
5°	1841.4	1837.7	1837.7	1837.7	1841.4
7.5°	1828.5	1824.9	1823.0	1824.9	1826.7
10°	1810.2	1806.5	1804.6	1806.5	1808.3
12.5°	1784.4	1782.6	1780.7	1780.7	1782.6
15°	1758.6	1751.3	1749.4	1747.6	1749.4
17.5°	1721.9	1720.0	1712.7	1712.7	1712.7
20°	1681.4	1677.7	1672.2	1668.5	1668.5
22.5°	1639.1	1635.4	1626.2	1622.5	1624.4
25°	1591.2	1583.9	1576.5	1572.8	1571.0
27.5°	1539.7	1532.4	1521.3	1515.8	1515.8
30°	1484.5	1479.0	1466.1	1458.8	1457.0
32.5°	1423.8	1420.2	1401.8	1398.1	1398.1
35°	1366.8	1355.8	1341.1	1333.7	1331.9
37.5°	1298.7	1291.4	1276.7	1267.5	1265.6
40°	1230.7	1221.5	1206.8	1199.4	1197.6
42.5°	1162.6	1153.4	1138.7	1129.5	1127.7
45°	1092.7	1085.4	1067.0	1057.8	1057.8
47.5°	1026.5	1011.8	995.2	987.9	986.0
50°	954.7	941.9	923.5	916.1	916.1
52.5°	883.0	873.8	853.6	849.9	846.2
55°	813.1	798.4	783.7	774.5	772.6
57.5°	737.7	724.8	710.1	702.7	702.7
60°	673.3	656.7	643.9	634.7	634.7
62.5°	599.7	585.0	572.1	566.6	564.8
65°	529.8	518.8	504.0	498.5	498.5
67.5°	459.9	450.7	437.8	432.3	434.1
70°	391.8	386.3	377.1	369.8	367.9
72.5°	329.3	321.9	312.7	310.9	310.9
75°	270.4	261.2	253.9	250.2	255.7
77.5°	209.7	204.2	200.5	198.7	200.5
80°	156.4	149.0	147.2	149.0	149.0
82.5°	108.5	104.9	103.0	103.0	103.0
85°	60.7	60.7	58.9	57.0	55.2
87.5°	23.9	23.9	25.8	25.8	27.6
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	16.5	18.1	16.9	18.5	18.8	16.3	17.9	16.7	18.2	18.5
	3H	18.2	19.6	18.6	20.0	20.3	17.9	19.4	18.3	19.7	20.0
	4H	18.8	20.2	19.2	20.5	20.9	18.5	19.9	18.9	20.2	20.6
	6H	19.2	20.5	19.6	20.8	21.2	18.9	20.2	19.3	20.5	20.9
	8H	19.4	20.5	19.8	20.9	21.3	19.1	20.3	19.5	20.6	21.0
	12H	19.4	20.6	19.9	21.0	21.4	19.1	20.3	19.6	20.7	21.1
4H	2H	17.1	18.4	17.5	18.8	19.2	16.9	18.2	17.3	18.6	19.0
	3H	19.0	20.1	19.4	20.5	20.9	18.7	19.8	19.1	20.2	20.6
	4H	19.7	20.7	20.1	21.1	21.5	19.4	20.4	19.9	20.9	21.3
	6H	20.2	21.1	20.7	21.5	22.0	20.0	20.9	20.4	21.3	21.8
	8H	20.4	21.2	20.9	21.7	22.1	20.1	21.0	20.6	21.4	21.9
	12H	20.5	21.2	21.0	21.7	22.2	20.2	21.0	20.7	21.5	21.9
8H	4H	19.9	20.8	20.4	21.2	21.7	19.7	20.5	20.2	21.0	21.4
	6H	20.6	21.3	21.1	21.7	22.2	20.4	21.0	20.8	21.5	22.0
	8H	20.8	21.4	21.3	21.9	22.4	20.6	21.2	21.1	21.7	22.2
	12H	21.0	21.5	21.5	22.0	22.6	20.8	21.3	21.3	21.8	22.4
12H	4H	19.9	20.7	20.4	21.2	21.6	19.7	20.5	20.2	20.9	21.4
	6H	20.6	21.2	21.1	21.7	22.2	20.4	21.0	20.9	21.5	22.0
	8H	20.9	21.4	21.4	21.9	22.5	20.7	21.2	21.2	21.7	22.3

(END OF REPORT)