

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-40-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-40-L850.ies
Description: 2x2 D3X-LP AT 4000LM 5000K 80CRI
Light Source: -
Ballast/Driver: -

Summary

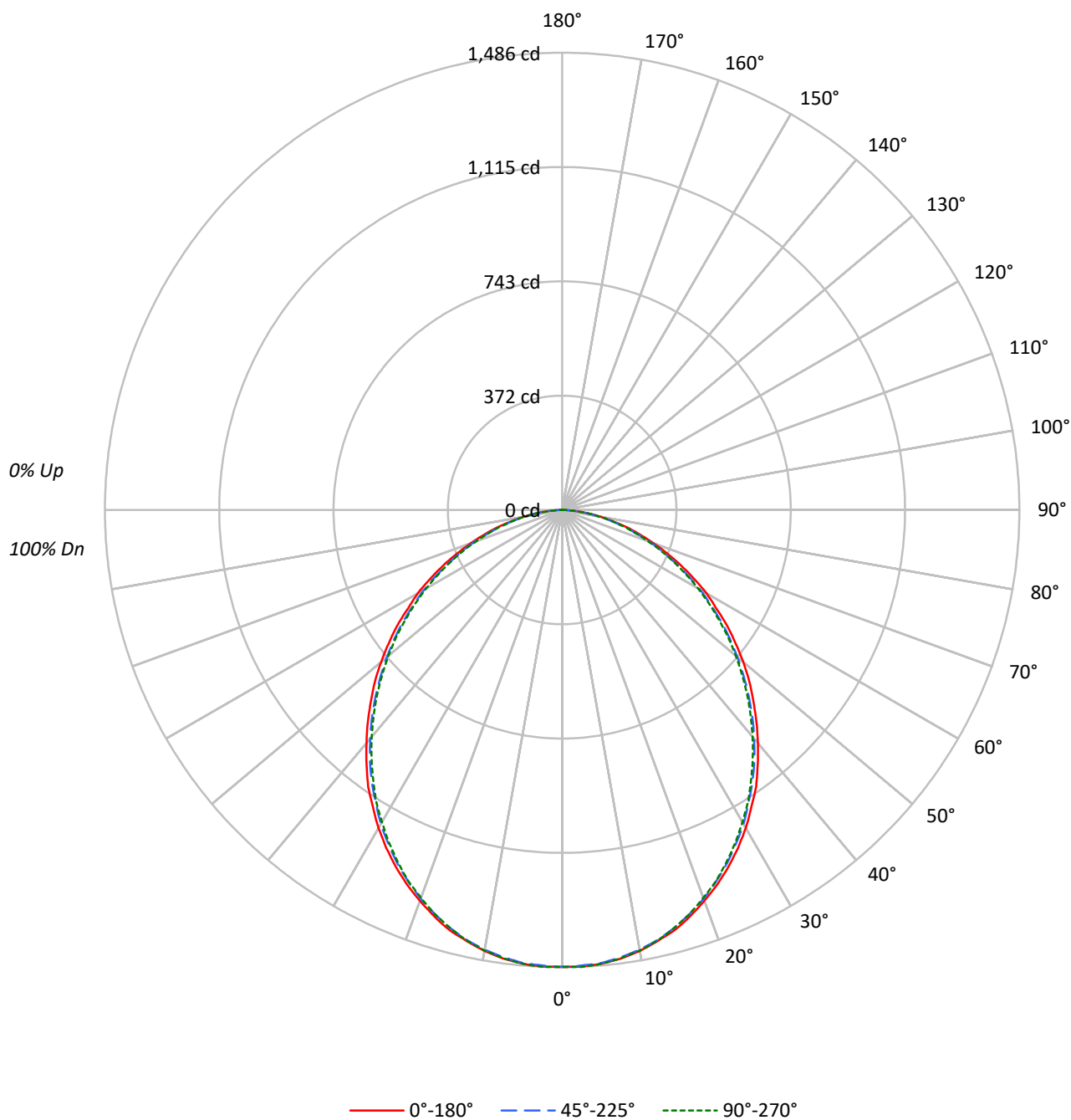
Lumens per Lamp: N/A
Luminaire Lumens: 3710.5 lumens
Efficiency: N/A
Efficacy: 113.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.29
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 32.6
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°	3996	3996	3996
5°	3999	3991	3999
10°	3977	3965	3972
15°	3939	3918	3918
20°	3871	3850	3841
25°	3798	3763	3750
30°	3709	3663	3640
35°	3610	3542	3518
40°	3476	3408	3382
45°	3343	3264	3236
50°	3213	3108	3083
55°	3067	2956	2914
60°	2913	2786	2746
65°	2712	2580	2552
70°	2478	2386	2327
75°	2260	2122	2138
80°	1948	1833	1857
85°	1507	1460	1371

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3343 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.3	3.8
10°-20°	396.6	10.7
20°-30°	584.1	15.7
30°-40°	675.7	18.2
40°-50°	664.3	17.9
50°-60°	566.1	15.3
60°-70°	405.6	10.9
70°-80°	220.3	5.9
80°-90°	57.5	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°	1121.0	30.2
0°-40°	1796.7	48.4
0°-60°	3027.1	81.6
0°-90°	3710.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3710.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1485	1485	1485	1485	1485	
5°	1480	1478	1478	1478	1480	140
15°	1414	1408	1406	1405	1406	398
25°	1279	1273	1268	1264	1263	589
35°	1099	1090	1078	1072	1071	685
45°	878	873	858	850	850	679
55°	654	642	630	623	621	584
65°	426	417	405	401	401	422
75°	217	210	204	201	206	230
85°	49	49	47	46	44	59
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1484.9	1484.9	1484.9	1484.9	1484.9
2.5°	1484.9	1483.4	1481.9	1483.4	1486.3
5°	1480.4	1477.5	1477.5	1477.5	1480.4
7.5°	1470.1	1467.1	1465.6	1467.1	1468.6
10°	1455.3	1452.3	1450.9	1452.3	1453.8
12.5°	1434.6	1433.1	1431.6	1431.6	1433.1
15°	1413.9	1408.0	1406.5	1405.0	1406.5
17.5°	1384.3	1382.8	1376.9	1376.9	1376.9
20°	1351.8	1348.8	1344.4	1341.4	1341.4
22.5°	1317.7	1314.8	1307.4	1304.4	1305.9
25°	1279.3	1273.4	1267.5	1264.5	1263.0
27.5°	1237.9	1232.0	1223.1	1218.7	1218.7
30°	1193.5	1189.1	1178.7	1172.8	1171.3
32.5°	1144.7	1141.8	1127.0	1124.0	1124.0
35°	1098.9	1090.0	1078.2	1072.2	1070.8
37.5°	1044.1	1038.2	1026.4	1019.0	1017.5
40°	989.4	982.0	970.2	964.3	962.8
42.5°	934.7	927.3	915.5	908.1	906.6
45°	878.5	872.6	857.8	850.4	850.4
47.5°	825.3	813.4	800.1	794.2	792.7
50°	767.6	757.2	742.4	736.5	736.5
52.5°	709.9	702.5	686.2	683.3	680.3
55°	653.7	641.9	630.0	622.6	621.2
57.5°	593.1	582.7	570.9	565.0	565.0
60°	541.3	528.0	517.6	510.2	510.2
62.5°	482.1	470.3	460.0	455.5	454.0
65°	425.9	417.1	405.2	400.8	400.8
67.5°	369.7	362.3	352.0	347.6	349.0
70°	315.0	310.6	303.2	297.3	295.8
72.5°	264.7	258.8	251.4	249.9	249.9
75°	217.4	210.0	204.1	201.1	205.6
77.5°	168.6	164.2	161.2	159.7	161.2
80°	125.7	119.8	118.3	119.8	119.8
82.5°	87.3	84.3	82.8	82.8	82.8
85°	48.8	48.8	47.3	45.8	44.4
87.5°	19.2	19.2	20.7	20.7	22.2
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	15.8	17.4	16.2	17.7	18.0	15.6	17.1	15.9	17.5	17.8
	3H	17.4	18.9	17.8	19.2	19.6	17.2	18.6	17.5	18.9	19.3
	4H	18.0	19.4	18.4	19.7	20.1	17.7	19.1	18.1	19.4	19.8
	6H	18.5	19.7	18.9	20.1	20.5	18.2	19.4	18.6	19.8	20.2
	8H	18.6	19.8	19.0	20.2	20.6	18.3	19.5	18.7	19.9	20.3
	12H	18.7	19.8	19.1	20.2	20.6	18.4	19.5	18.8	19.9	20.3
4H	2H	16.3	17.7	16.7	18.0	18.4	16.1	17.5	16.5	17.8	18.2
	3H	18.2	19.3	18.6	19.7	20.1	18.0	19.1	18.4	19.5	19.9
	4H	18.9	19.9	19.4	20.4	20.8	18.7	19.7	19.1	20.1	20.5
	6H	19.5	20.3	19.9	20.8	21.2	19.2	20.1	19.7	20.5	21.0
	8H	19.6	20.5	20.1	20.9	21.4	19.4	20.2	19.8	20.7	21.1
	12H	19.7	20.5	20.2	21.0	21.4	19.5	20.2	20.0	20.7	21.2
8H	4H	19.2	20.0	19.6	20.4	20.9	18.9	19.8	19.4	20.2	20.7
	6H	19.8	20.5	20.3	21.0	21.5	19.6	20.3	20.1	20.8	21.2
	8H	20.0	20.7	20.6	21.2	21.7	19.8	20.4	20.3	21.0	21.4
	12H	20.2	20.8	20.7	21.3	21.8	20.0	20.5	20.5	21.0	21.6
12H	4H	19.2	19.9	19.7	20.4	20.9	19.0	19.7	19.4	20.2	20.7
	6H	19.9	20.5	20.4	20.9	21.5	19.6	20.3	20.2	20.7	21.3
	8H	20.1	20.7	20.6	21.2	21.7	19.9	20.5	20.4	21.0	21.5

(END OF REPORT)