

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-45-L927.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-45-L927.ies
Description: 2x2 D3X-LP AT 4500LM 2700K 90CRI
Light Source: -
Ballast/Driver: -

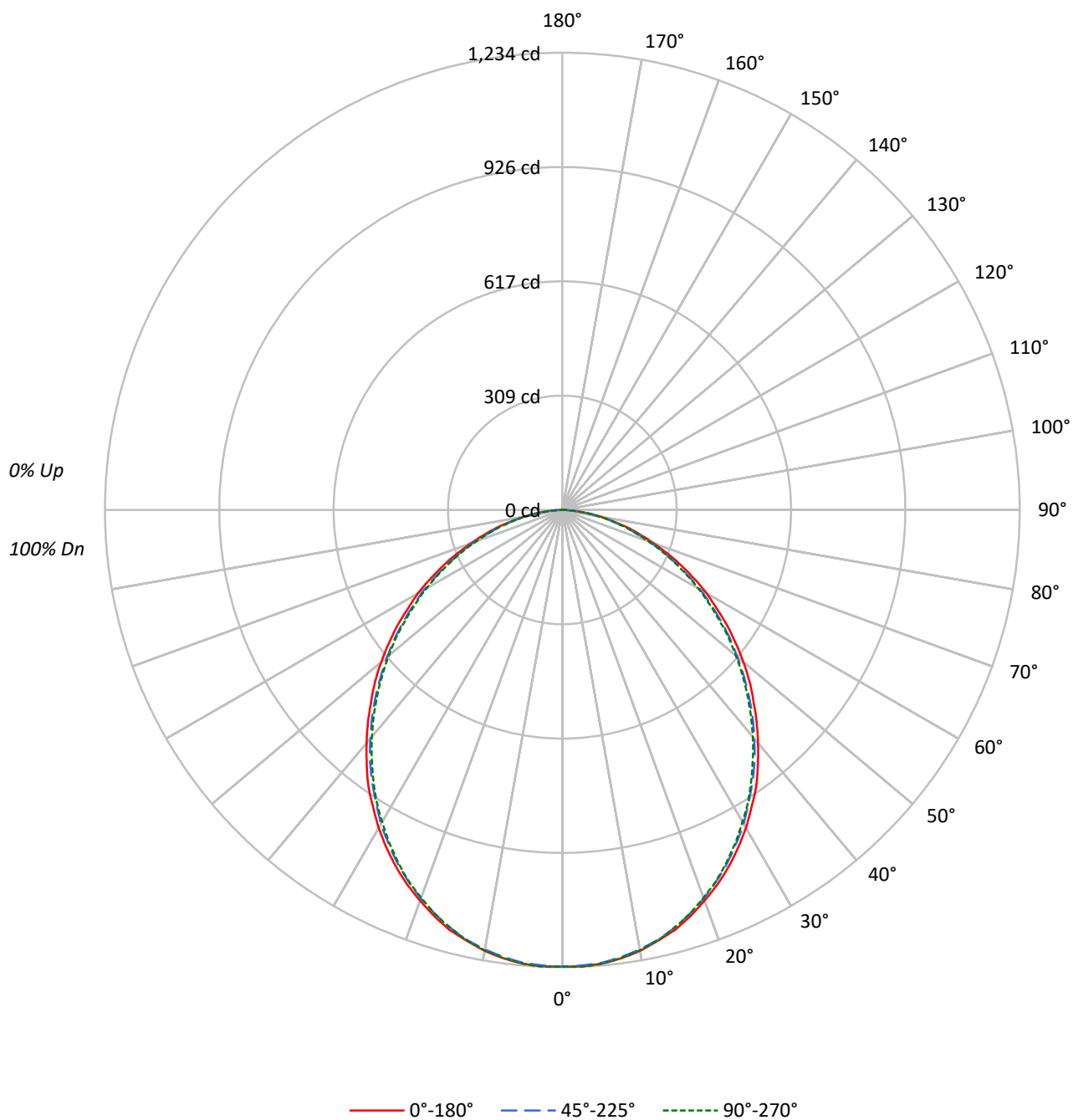
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3080.3 lumens
Efficiency: N/A
Efficacy: 81.5 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): 37.8
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			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°	3317	3317	3317
5°	3320	3313	3320
10°	3301	3291	3298
15°	3270	3253	3253
20°	3214	3196	3189
25°	3153	3124	3113
30°	3079	3040	3022
35°	2997	2940	2920
40°	2885	2829	2808
45°	2775	2710	2687
50°	2668	2580	2560
55°	2546	2454	2419
60°	2419	2313	2280
65°	2252	2142	2118
70°	2057	1980	1932
75°	1877	1761	1775
80°	1618	1522	1540
85°	1250	1213	1136

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2775 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.4	3.8
10°-20°	329.2	10.7
20°-30°	484.9	15.7
30°-40°	560.9	18.2
40°-50°	551.5	17.9
50°-60°	470.0	15.3
60°-70°	336.7	10.9
70°-80°	182.9	5.9
80°-90°	47.7	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°	930.6	30.2
0°-40°	1491.5	48.4
0°-60°	2513.0	81.6
0°-90°	3080.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3080.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1233	1233	1233	1233	1233	
5°	1229	1226	1226	1226	1229	117
15°	1174	1169	1168	1166	1168	330
25°	1062	1057	1052	1050	1048	489
35°	912	905	895	890	889	569
45°	729	724	712	706	706	563
55°	543	533	523	517	516	485
65°	354	346	336	333	333	350
75°	180	174	169	167	171	191
85°	40	40	39	38	37	49
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1232.7	1232.7	1232.7	1232.7	1232.7
2.5°	1232.7	1231.4	1230.2	1231.4	1233.9
5°	1229.0	1226.5	1226.5	1226.5	1229.0
7.5°	1220.4	1217.9	1216.7	1217.9	1219.2
10°	1208.1	1205.7	1204.4	1205.7	1206.9
12.5°	1190.9	1189.7	1188.5	1188.5	1189.7
15°	1173.7	1168.8	1167.6	1166.4	1167.6
17.5°	1149.2	1148.0	1143.0	1143.0	1143.0
20°	1122.2	1119.7	1116.0	1113.6	1113.6
22.5°	1093.9	1091.5	1085.3	1082.9	1084.1
25°	1062.0	1057.1	1052.2	1049.7	1048.5
27.5°	1027.6	1022.7	1015.4	1011.7	1011.7
30°	990.8	987.1	978.5	973.6	972.4
32.5°	950.3	947.8	935.6	933.1	933.1
35°	912.2	904.9	895.0	890.1	888.9
37.5°	866.8	861.9	852.1	845.9	844.7
40°	821.4	815.2	805.4	800.5	799.3
42.5°	775.9	769.8	760.0	753.8	752.6
45°	729.3	724.4	712.1	706.0	706.0
47.5°	685.1	675.3	664.2	659.3	658.1
50°	637.2	628.6	616.3	611.4	611.4
52.5°	589.3	583.2	569.7	567.2	564.8
55°	542.7	532.8	523.0	516.9	515.7
57.5°	492.3	483.7	473.9	469.0	469.0
60°	449.4	438.3	429.7	423.6	423.6
62.5°	400.2	390.4	381.8	378.2	376.9
65°	353.6	346.2	336.4	332.7	332.7
67.5°	306.9	300.8	292.2	288.5	289.8
70°	261.5	257.8	251.7	246.8	245.6
72.5°	219.8	214.9	208.7	207.5	207.5
75°	180.5	174.3	169.4	167.0	170.7
77.5°	140.0	136.3	133.8	132.6	133.8
80°	104.4	99.4	98.2	99.4	99.4
82.5°	72.4	70.0	68.8	68.8	68.8
85°	40.5	40.5	39.3	38.1	36.8
87.5°	16.0	16.0	17.2	17.2	18.4
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	15.1	16.7	15.5	17.1	17.4	14.9	16.5	15.3	16.8	17.1
	3H	16.8	18.2	17.2	18.6	18.9	16.5	17.9	16.9	18.3	18.6
	4H	17.4	18.7	17.8	19.1	19.5	17.1	18.5	17.5	18.8	19.2
	6H	17.8	19.1	18.2	19.4	19.8	17.5	18.8	17.9	19.1	19.5
	8H	17.9	19.1	18.4	19.5	19.9	17.7	18.8	18.1	19.2	19.6
	12H	18.0	19.2	18.5	19.5	20.0	17.7	18.9	18.2	19.2	19.7
4H	2H	15.7	17.0	16.1	17.4	17.8	15.5	16.8	15.9	17.2	17.6
	3H	17.6	18.7	18.0	19.1	19.5	17.3	18.4	17.7	18.8	19.2
	4H	18.3	19.3	18.7	19.7	20.1	18.0	19.0	18.5	19.5	19.9
	6H	18.8	19.7	19.3	20.1	20.6	18.6	19.4	19.0	19.9	20.3
	8H	19.0	19.8	19.4	20.3	20.7	18.7	19.6	19.2	20.0	20.5
	12H	19.1	19.8	19.6	20.3	20.8	18.8	19.6	19.3	20.1	20.5
8H	4H	18.5	19.4	19.0	19.8	20.3	18.3	19.1	18.8	19.6	20.0
	6H	19.2	19.9	19.7	20.3	20.8	18.9	19.6	19.4	20.1	20.6
	8H	19.4	20.0	19.9	20.5	21.0	19.2	19.8	19.7	20.3	20.8
	12H	19.6	20.1	20.1	20.6	21.2	19.3	19.9	19.9	20.4	20.9
12H	4H	18.5	19.3	19.0	19.8	20.2	18.3	19.1	18.8	19.5	20.0
	6H	19.2	19.8	19.7	20.3	20.8	19.0	19.6	19.5	20.1	20.6
	8H	19.5	20.0	20.0	20.5	21.1	19.3	19.8	19.8	20.3	20.9

(END OF REPORT)