

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-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-40-L927.ies
Description: 2x2 D3X-LP AT 4000LM 2700K 90CRI
Light Source: -
Ballast/Driver: -

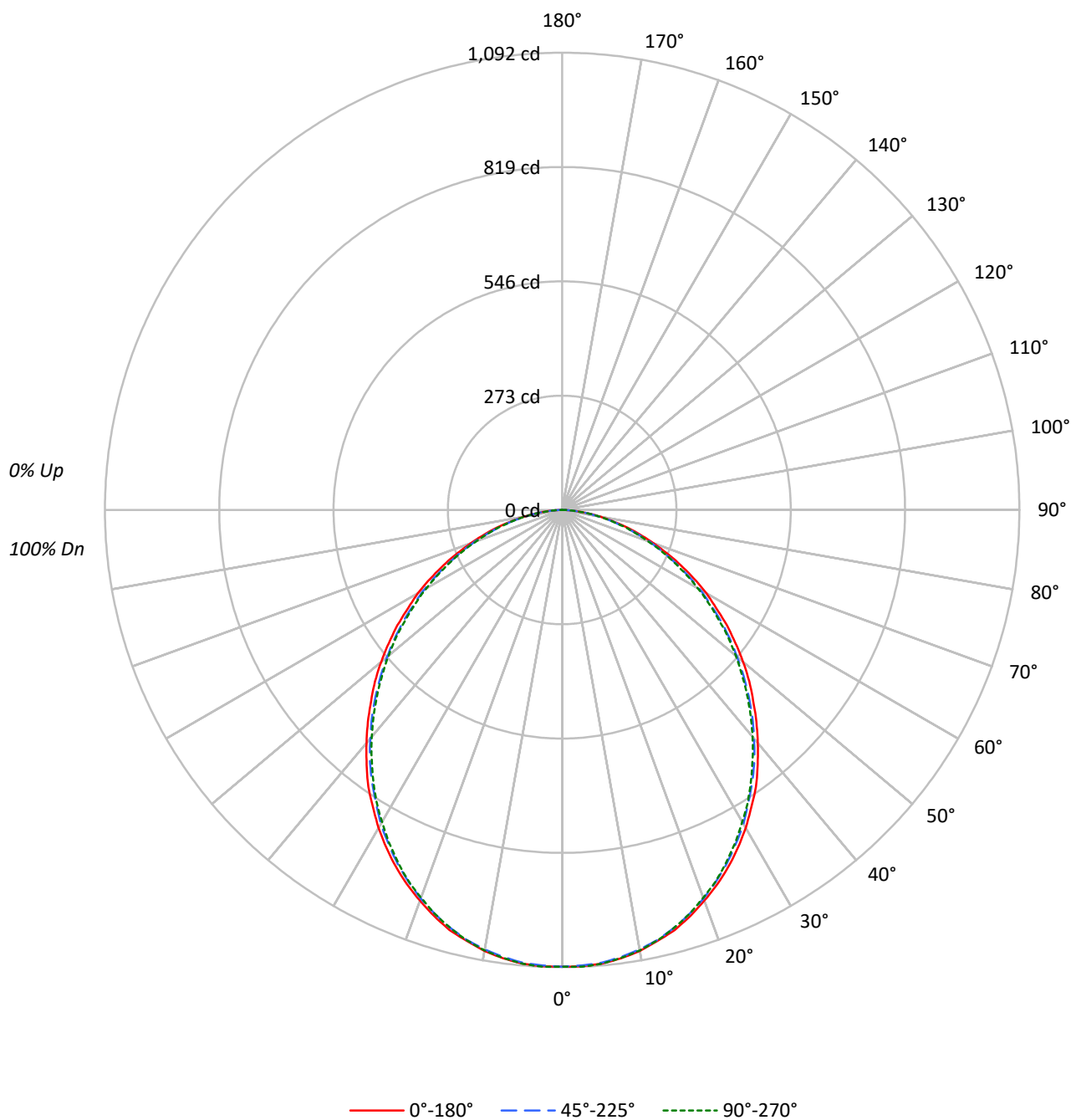
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2725.8 lumens
Efficiency: N/A
Efficacy: 83.6 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

TEST NUMBER: P#
CATALOG NUMBER: 22D3X-LP-40-L927.ies

Luminous Intensity Polar Plot



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CATALOG NUMBER: 22D3X-LP-40-L927.ies

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°	2935	2935	2935
5°	2938	2932	2938
10°	2921	2912	2918
15°	2894	2878	2878
20°	2844	2828	2822
25°	2790	2765	2755
30°	2724	2691	2674
35°	2652	2602	2584
40°	2553	2504	2485
45°	2456	2398	2377
50°	2361	2283	2265
55°	2253	2171	2141
60°	2140	2047	2017
65°	1992	1896	1875
70°	1821	1752	1710
75°	1660	1559	1570
80°	1430	1347	1364
85°	1108	1074	1007

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2456 cd/sqm

TEST NUMBER: P#

CATALOG NUMBER: 22D3X-LP-40-L927.ies

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.0	3.8
10°-20°	291.3	10.7
20°-30°	429.1	15.7
30°-40°	496.4	18.2
40°-50°	488.0	17.9
50°-60°	415.9	15.3
60°-70°	298.0	10.9
70°-80°	161.8	5.9
80°-90°	42.2	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°	823.5	30.2
0°-40°	1319.9	48.4
0°-60°	2223.8	81.6
0°-90°	2725.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2725.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1091	1091	1091	1091	1091	
5°	1088	1085	1085	1085	1088	103
15°	1039	1034	1033	1032	1033	292
25°	940	935	931	929	928	433
35°	807	801	792	788	787	503
45°	645	641	630	625	625	498
55°	480	472	463	457	456	429
65°	313	306	298	294	294	310
75°	160	154	150	148	151	169
85°	36	36	35	34	33	44
90°	0	0	0	0	0	

TEST NUMBER: P#

CATALOG NUMBER: 22D3X-LP-40-L927.ies

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1090.8	1090.8	1090.8	1090.8	1090.8
2.5°	1090.8	1089.7	1088.6	1089.7	1091.9
5°	1087.6	1085.4	1085.4	1085.4	1087.6
7.5°	1080.0	1077.8	1076.7	1077.8	1078.9
10°	1069.1	1066.9	1065.8	1066.9	1068.0
12.5°	1053.9	1052.8	1051.7	1051.7	1052.8
15°	1038.7	1034.3	1033.2	1032.1	1033.2
17.5°	1016.9	1015.8	1011.5	1011.5	1011.5
20°	993.0	990.9	987.6	985.4	985.4
22.5°	968.0	965.9	960.4	958.3	959.4
25°	939.8	935.4	931.1	928.9	927.8
27.5°	909.4	905.0	898.5	895.3	895.3
30°	876.8	873.5	865.9	861.6	860.5
32.5°	840.9	838.8	827.9	825.7	825.7
35°	807.2	800.7	792.0	787.7	786.6
37.5°	767.0	762.7	754.0	748.6	747.5
40°	726.8	721.4	712.7	708.4	707.3
42.5°	686.6	681.2	672.5	667.1	666.0
45°	645.4	641.0	630.2	624.7	624.7
47.5°	606.2	597.6	587.8	583.4	582.3
50°	563.9	556.3	545.4	541.1	541.1
52.5°	521.5	516.1	504.1	501.9	499.8
55°	480.2	471.5	462.8	457.4	456.3
57.5°	435.7	428.1	419.4	415.0	415.0
60°	397.6	387.9	380.3	374.8	374.8
62.5°	354.2	345.5	337.9	334.6	333.5
65°	312.9	306.4	297.7	294.4	294.4
67.5°	271.6	266.2	258.6	255.3	256.4
70°	231.4	228.2	222.7	218.4	217.3
72.5°	194.5	190.1	184.7	183.6	183.6
75°	159.7	154.3	149.9	147.8	151.0
77.5°	123.9	120.6	118.4	117.3	118.4
80°	92.3	88.0	86.9	88.0	88.0
82.5°	64.1	61.9	60.8	60.8	60.8
85°	35.9	35.9	34.8	33.7	32.6
87.5°	14.1	14.1	15.2	15.2	16.3
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P#

CATALOG NUMBER: 22D3X-LP-40-L927.ies

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	14.7	16.3	15.1	16.6	16.9	14.5	16.1	14.8	16.4	16.7
	3H	16.4	17.8	16.8	18.1	18.5	16.1	17.5	16.5	17.9	18.2
	4H	17.0	18.3	17.4	18.7	19.1	16.7	18.0	17.1	18.4	18.8
	6H	17.4	18.6	17.8	19.0	19.4	17.1	18.3	17.5	18.7	19.1
	8H	17.5	18.7	17.9	19.1	19.5	17.2	18.4	17.7	18.8	19.2
	12H	17.6	18.7	18.0	19.1	19.6	17.3	18.4	17.7	18.8	19.3
4H	2H	15.3	16.6	15.7	17.0	17.3	15.1	16.4	15.5	16.8	17.1
	3H	17.1	18.3	17.5	18.7	19.1	16.9	18.0	17.3	18.4	18.8
	4H	17.9	18.9	18.3	19.3	19.7	17.6	18.6	18.0	19.0	19.5
	6H	18.4	19.3	18.8	19.7	20.2	18.1	19.0	18.6	19.5	19.9
	8H	18.6	19.4	19.0	19.8	20.3	18.3	19.1	18.8	19.6	20.0
	12H	18.7	19.4	19.2	19.9	20.4	18.4	19.2	18.9	19.6	20.1
8H	4H	18.1	18.9	18.6	19.4	19.8	17.9	18.7	18.3	19.1	19.6
	6H	18.7	19.4	19.2	19.9	20.4	18.5	19.2	19.0	19.7	20.2
	8H	19.0	19.6	19.5	20.1	20.6	18.8	19.4	19.3	19.9	20.4
	12H	19.2	19.7	19.7	20.2	20.8	18.9	19.5	19.4	20.0	20.5
12H	4H	18.1	18.9	18.6	19.3	19.8	17.9	18.6	18.4	19.1	19.6
	6H	18.8	19.4	19.3	19.9	20.4	18.6	19.2	19.1	19.7	20.2
	8H	19.1	19.6	19.6	20.1	20.7	18.9	19.4	19.4	19.9	20.5

(END OF REPORT)