

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-20-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-20-L850.ies
Description: 2x2 D3X-LP AT 2000LM 5000K 80CRI
Light Source: -
Ballast/Driver: -

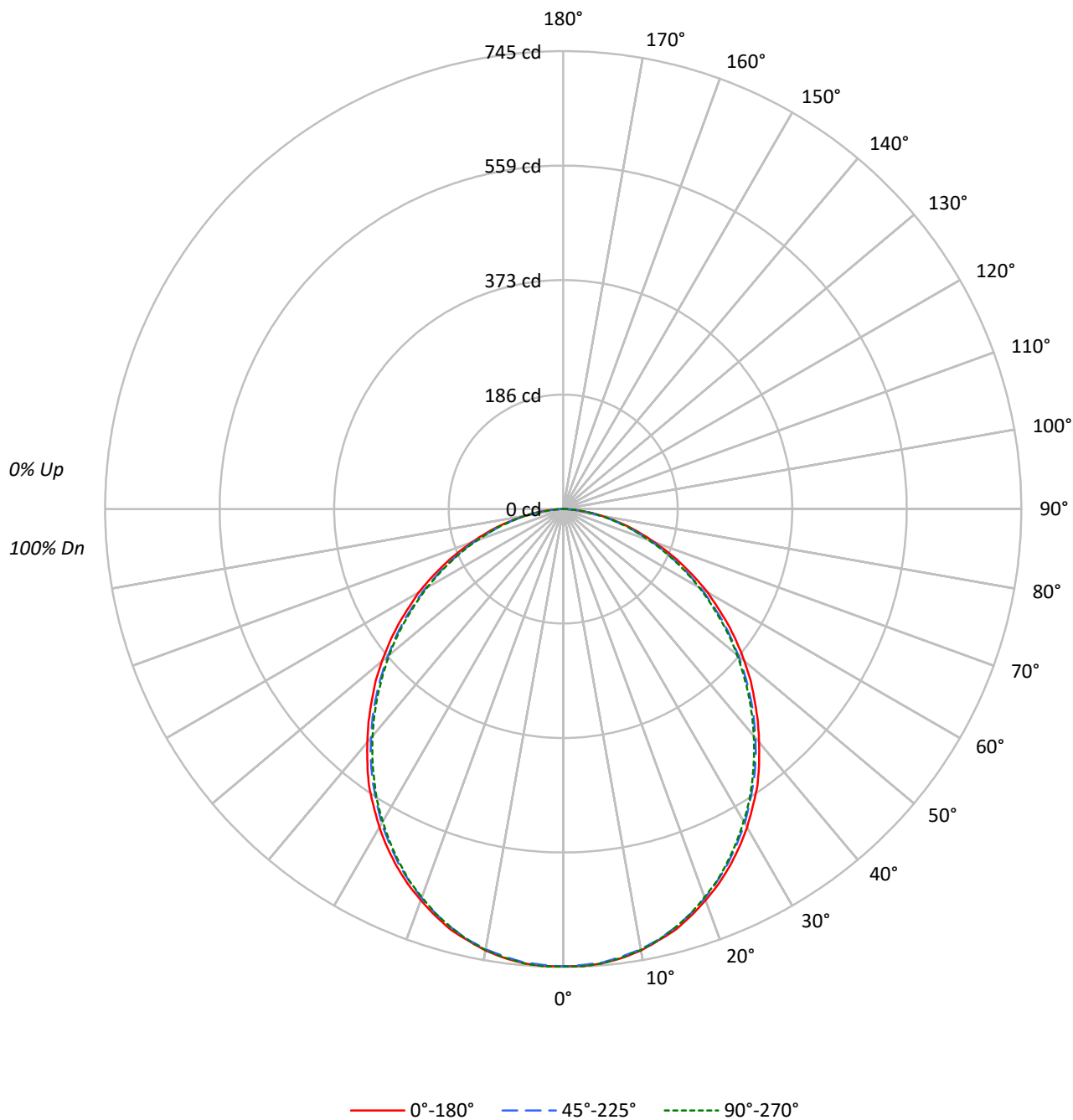
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1858.9 lumens
Efficiency: N/A
Efficacy: 115.5 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): 16.1
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-20-L850.ies

Luminous Intensity Polar Plot



TEST NUMBER: P#

CATALOG NUMBER: 22D3X-LP-20-L850.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		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	109	105	101	97	107	102	99	95		98	95	92		94	92	89		91	89	87
2	100	92	85	80	97	90	84	79		86	81	77		83	79	75		80	77	73
3	91	81	73	67	89	79	72	66		76	70	65		74	68	64		71	67	63
4	84	72	64	57	81	71	63	57		68	61	56		66	60	55		64	59	54
5	77	65	56	49	75	64	55	49		61	54	49		59	53	48		58	52	48
6	71	58	50	43	69	57	49	43		56	48	43		54	47	42		52	47	42
7	66	53	44	38	65	52	44	38		51	43	38		49	43	38		48	42	37
8	62	49	40	34	60	48	40	34		47	39	34		45	39	34		44	38	34
9	58	45	37	31	56	44	36	31		43	36	31		42	35	31		41	35	31
10	54	41	33	28	53	41	33	28		40	33	28		39	32	28		38	32	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2002	2002	2002
5°	2004	1999	2004
10°	1992	1986	1990
15°	1973	1963	1963
20°	1939	1929	1924
25°	1903	1885	1879
30°	1858	1835	1823
35°	1808	1774	1762
40°	1741	1707	1694
45°	1675	1635	1621
50°	1610	1557	1545
55°	1536	1481	1460
60°	1460	1396	1376
65°	1359	1293	1279
70°	1242	1195	1166
75°	1132	1063	1071
80°	976	919	930
85°	756	732	685

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1675 cd/sqm

TEST NUMBER: P#

CATALOG NUMBER: 22D3X-LP-20-L850.ies

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.3	3.8
10°-20°	198.7	10.7
20°-30°	292.6	15.7
30°-40°	338.5	18.2
40°-50°	332.8	17.9
50°-60°	283.6	15.3
60°-70°	203.2	10.9
70°-80°	110.4	5.9
80°-90°	28.8	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°	561.6	30.2
0°-40°	900.1	48.4
0°-60°	1516.5	81.6
0°-90°	1858.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1858.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	744	744	744	744	744	
5°	742	740	740	740	742	70
15°	708	705	705	704	705	199
25°	641	638	635	634	633	295
35°	550	546	540	537	536	343
45°	440	437	430	426	426	340
55°	328	322	316	312	311	292
65°	213	209	203	201	201	211
75°	109	105	102	101	103	115
85°	24	24	24	23	22	30
90°	0	0	0	0	0	

TEST NUMBER: P#

CATALOG NUMBER: 22D3X-LP-20-L850.ies

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	743.9	743.9	743.9	743.9	743.9
2.5°	743.9	743.1	742.4	743.1	744.6
5°	741.7	740.2	740.2	740.2	741.7
7.5°	736.5	735.0	734.2	735.0	735.7
10°	729.1	727.6	726.8	727.6	728.3
12.5°	718.7	717.9	717.2	717.2	717.9
15°	708.3	705.3	704.6	703.9	704.6
17.5°	693.5	692.8	689.8	689.8	689.8
20°	677.2	675.7	673.5	672.0	672.0
22.5°	660.2	658.7	655.0	653.5	654.2
25°	640.9	637.9	635.0	633.5	632.7
27.5°	620.1	617.2	612.7	610.5	610.5
30°	597.9	595.7	590.5	587.5	586.8
32.5°	573.5	572.0	564.6	563.1	563.1
35°	550.5	546.1	540.1	537.2	536.4
37.5°	523.1	520.1	514.2	510.5	509.7
40°	495.7	492.0	486.0	483.1	482.3
42.5°	468.3	464.6	458.6	454.9	454.2
45°	440.1	437.1	429.7	426.0	426.0
47.5°	413.4	407.5	400.8	397.9	397.1
50°	384.5	379.3	371.9	369.0	369.0
52.5°	355.6	351.9	343.8	342.3	340.8
55°	327.5	321.6	315.6	311.9	311.2
57.5°	297.1	291.9	286.0	283.0	283.0
60°	271.2	264.5	259.3	255.6	255.6
62.5°	241.5	235.6	230.4	228.2	227.5
65°	213.4	208.9	203.0	200.8	200.8
67.5°	185.2	181.5	176.3	174.1	174.9
70°	157.8	155.6	151.9	148.9	148.2
72.5°	132.6	129.7	126.0	125.2	125.2
75°	108.9	105.2	102.2	100.8	103.0
77.5°	84.5	82.2	80.8	80.0	80.8
80°	63.0	60.0	59.3	60.0	60.0
82.5°	43.7	42.2	41.5	41.5	41.5
85°	24.5	24.5	23.7	23.0	22.2
87.5°	9.6	9.6	10.4	10.4	11.1
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P#

CATALOG NUMBER: 22D3X-LP-20-L850.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	13.4	15.0	13.8	15.3	15.6	13.1	14.7	13.5	15.1	15.4
	3H	15.0	16.5	15.4	16.8	17.2	14.8	16.2	15.1	16.5	16.9
	4H	15.6	17.0	16.0	17.3	17.7	15.3	16.7	15.7	17.0	17.4
	6H	16.1	17.3	16.5	17.7	18.1	15.8	17.0	16.2	17.4	17.8
	8H	16.2	17.4	16.6	17.8	18.2	15.9	17.1	16.3	17.5	17.9
	12H	16.3	17.4	16.7	17.8	18.2	16.0	17.1	16.4	17.5	17.9
4H	2H	13.9	15.3	14.3	15.6	16.0	13.7	15.1	14.1	15.4	15.8
	3H	15.8	16.9	16.2	17.3	17.7	15.6	16.7	16.0	17.1	17.5
	4H	16.5	17.5	17.0	18.0	18.4	16.3	17.3	16.7	17.7	18.1
	6H	17.1	17.9	17.5	18.4	18.8	16.8	17.7	17.3	18.1	18.6
	8H	17.2	18.1	17.7	18.5	19.0	17.0	17.8	17.4	18.3	18.7
	12H	17.3	18.1	17.8	18.6	19.0	17.1	17.8	17.6	18.3	18.8
8H	4H	16.8	17.6	17.2	18.0	18.5	16.5	17.4	17.0	17.8	18.3
	6H	17.4	18.1	17.9	18.6	19.1	17.2	17.9	17.7	18.4	18.8
	8H	17.6	18.3	18.2	18.8	19.3	17.4	18.0	17.9	18.6	19.0
	12H	17.8	18.4	18.3	18.9	19.4	17.6	18.1	18.1	18.6	19.2
12H	4H	16.8	17.5	17.3	18.0	18.5	16.6	17.3	17.0	17.8	18.3
	6H	17.5	18.1	18.0	18.5	19.1	17.2	17.9	17.8	18.3	18.9
	8H	17.7	18.3	18.2	18.8	19.3	17.5	18.1	18.0	18.6	19.1

(END OF REPORT)