

Thermal Product Catalog

Thermal Products

This catalog includes standard heatsink products for testing purposes which are suitable for each of the standard UV LED product lines, as well as information on thermal services for custom cooling solutions.

Thermal Product Catalog

Standard Heatsink Products

Violumas standard heatsink products are not optimized for unique systems and are primarily meant to be utilized for testing purposes.

- Each product has been tested under the condition of $T_a=25^{\circ}\text{C}$ and maintains the junction temperature of the LED below 75°C .
- Each standard heatsink is provided with mounting screws for the associated COB product.
- Thermal pads can be provided as suitable TIM (thermal interface material). For higher power COB products, samples of thermal grease may be available upon request.
- For instructions on properly mounting the LED on a heatsink, please refer to the Application Note: Mounting LEDs on Heatsinks.

Precaution: Please do not operate Violumas LEDs without a proper cooling solution. Operating the LED without a heatsink may result in immediate failure and Violumas will not be responsible for replacement.

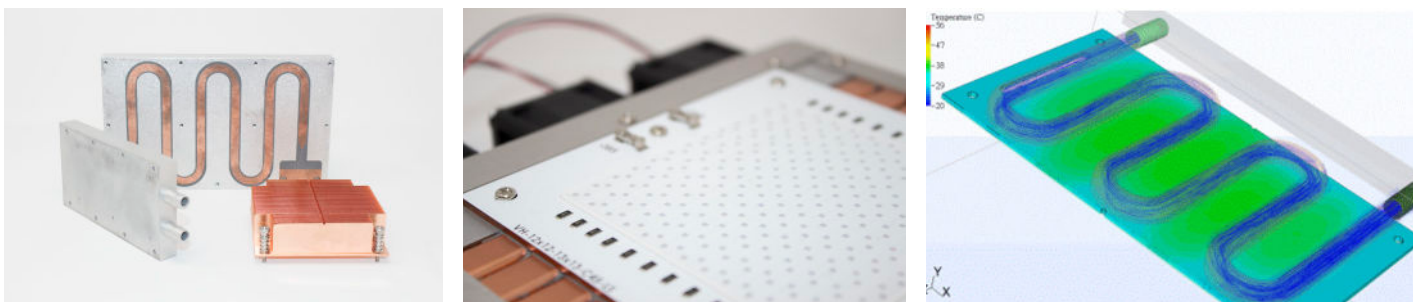
Heatsink Part Number	Description	Catalog Page No.
30.1.006770	Heatsink for VC1X1 COB Series	2
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Thermal Services: Simulation & Design

For the integration of LEDs or LED arrays into specified systems, many off-the-shelf heatsink solutions may not suffice as proper cooling solutions. Designing a proper cooling solution may take the following parameters into consideration:

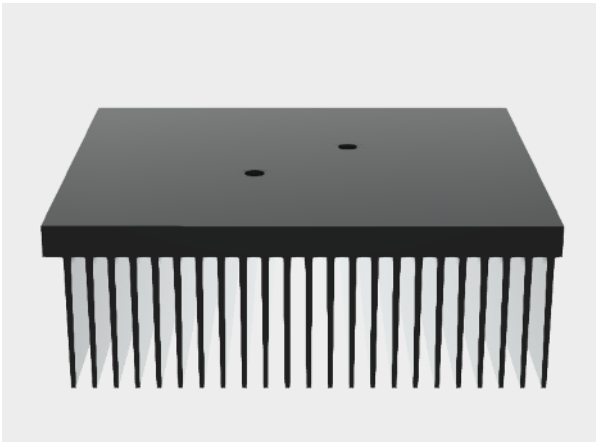
- Lifetime requirements of the system
- Mechanical requirements of the system
- Thermal budget

Violumas offers thermal modeling and design services to provide customized passive, active, and liquid cooling solutions to optimize reliability while keeping your specific system requirements in mind.

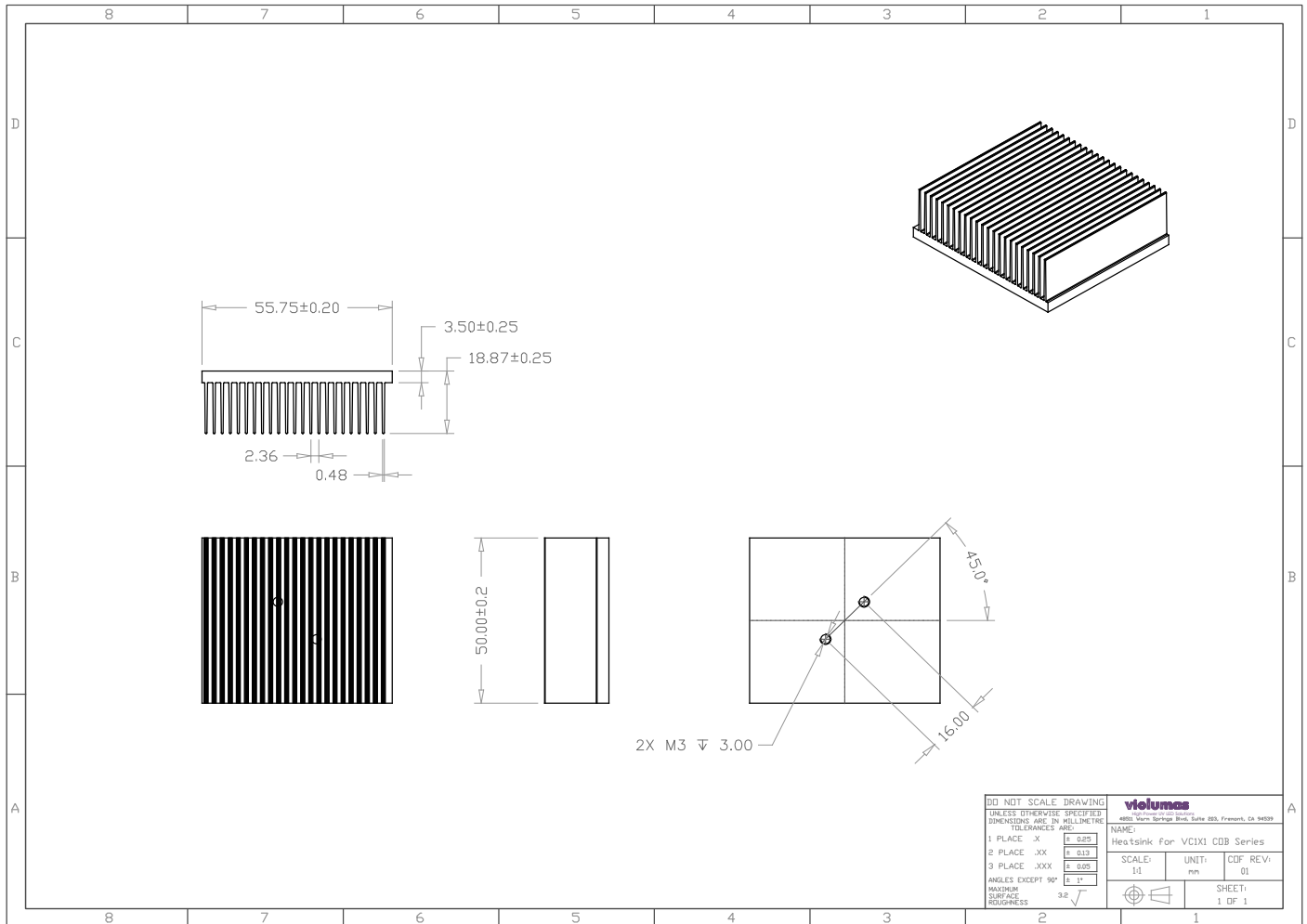


Contact the Violumas team to learn more about thermal services.

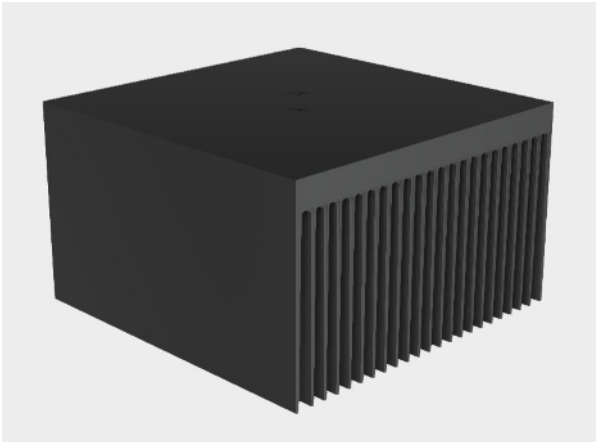
30.1.006770 (Heatsink for VC1X1 COB Series)



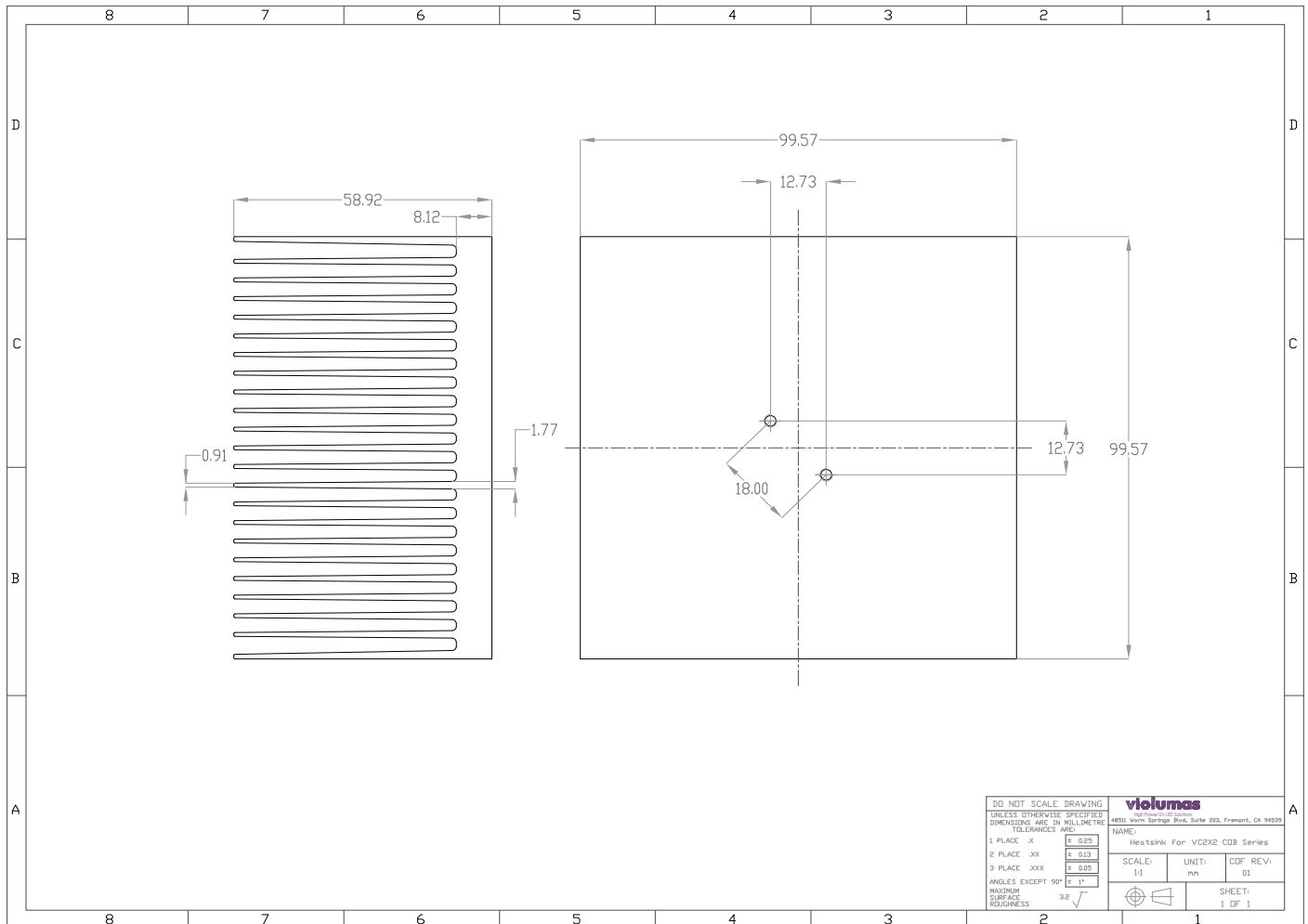
- Suitable LED Models: VC1X1 COB Series (pre-drilled mounting holes)
- Thermal Capacity: 6 W
- Dimensions: 50 x 55.75 x 18.87 mm
- Weight: 57 g
- Material: Aluminum
- Product Includes: Heatsink (1), M3 Screws (2)
- Available Upon Request: Thermal Pad



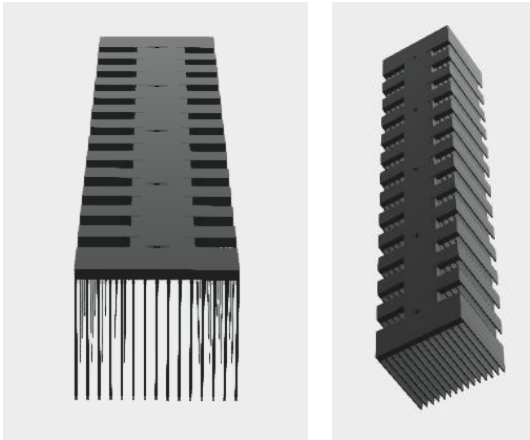
30.1.006846 (Heatsink for VC2X2 COB Series)



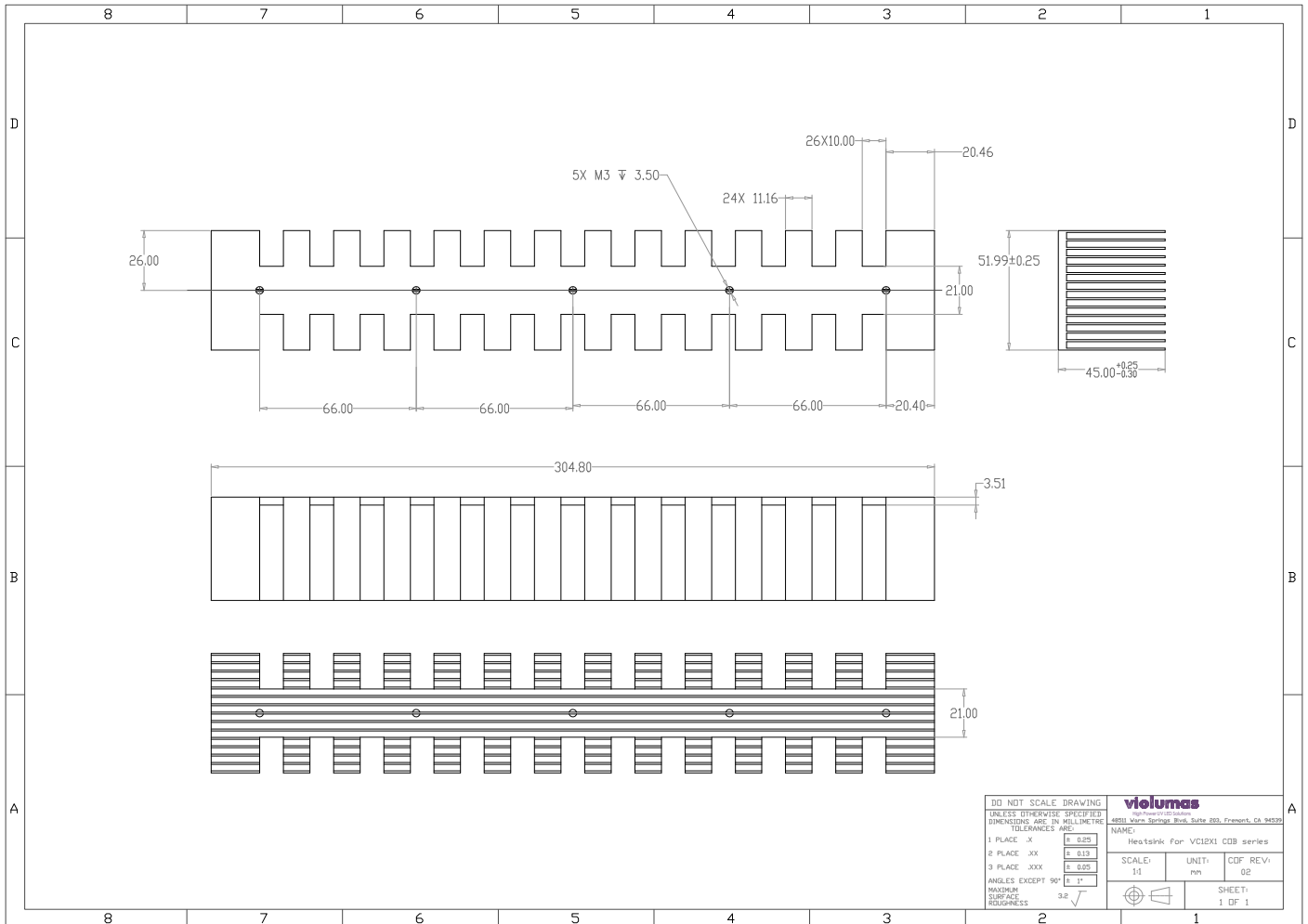
- Suitable LED Models: VC2X2 COB Series (pre-drilled mounting holes)
- Thermal Capacity: 20 W
- Dimensions: 99.57 x 99.57 x 58.92 mm
- Weight: 644 g
- Material: Aluminum (Black Anodized)
- Product Includes: Heatsink (1), M3 Screws (2)
- Available Upon Request: Thermal Pad



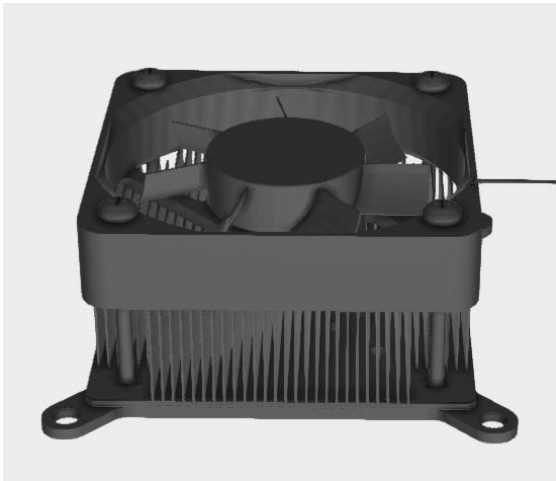
30.3.006733 (Heatsink for VC12X1 COB Series)



- Suitable LED Models: VC12X1 COB Series (pre-drilled mounting holes)
- Thermal Capacity: 60 W
- Dimensions: 304.8 x 52 x 45 mm
- Weight: 385 g
- Material: Aluminum (Black Anodized)
- Product Includes: Heatsink (1), M3 Screws (2)



30.4988.10 (Heatsink with Fan for VC4X2 COB Series)



- Suitable LED Models: VC4X2 COB Series, VC2X2 COB Series (pre-drilled mounting holes)
- Thermal Capacity: 50 W
- Dimensions: 60.35 x 60.35 x 26.5 mm
- Weight: 64 g
- Material: Aluminum (Black Anodized)
- Product Includes: Heatsink with Fan (1), M3 Screws (2)
- Available Upon Request: Thermal Pad, Fan Driver Kit

NOTE:
F-5010H2B11 AND F-5010H2B1V ARE THE SAME FAN, 2 BALL BEARING, 5000 RPM, 3 WIRE, SAME BLADE AND FRAME, THE ONLY DIFFERENCE IS THE PART # ON THE LABEL.

FAN BOM

①	1X FAN, CDFAN MODEL F-5010H2B11 OR F-5010H2B1V, 2 BALL BEARING, 5000 RPM	
②	1X MOLEX HOUSING 22-01-3037 OR EQUIV. 2X MOLEX TERMINAL 08-50-0114 OR EQUIV.	

Value	Temp	25	30	40	50	60	70
AF		45.25	32	16	8	4	2
ESTIMATED MTF		1801739	1274002	637011	318506	159253	79626
ESTIMATED L10		257391	182003	91002	45501	22750	11375

MODEL NO	RATED VOLTAGE V	OPERATING VOLTAGE V	RATED CURRENT A	ACTUAL CURRENT A	RATED POWER W	RATED SPEED RPM	MAX AIR FLOW @ 5000 RPM		MAX PRESSURE @ 5000 RPM		NOISE LEVEL dBA
							CMM	CFM	mmH ₂ O	InH ₂ O	
F-5010H2B11 F-5010H2B1V	12	5-13.8	0.14	0.11	1.32	6100	.453	16.08	5.15	0.202	36.0

③	SCREW	SCREW, M3 X 26.0, STEEL, BLACK ZINC	4
②	FAN, 12VDC	DC FAN, 12V, 2 BALL BEARING	1
①	HEAT SINK	AL 6063-T5 / BLACK ANODIZED / RDHS	1

Material/Plating/RoHS

DO NOT SCALE DRAWING
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN MILLIMETERS
TOLERANCES ARE:

1 PLACE .X	± 0.40
2 PLACE .XX	± 0.25
3 PLACE .XXX	± 0.13

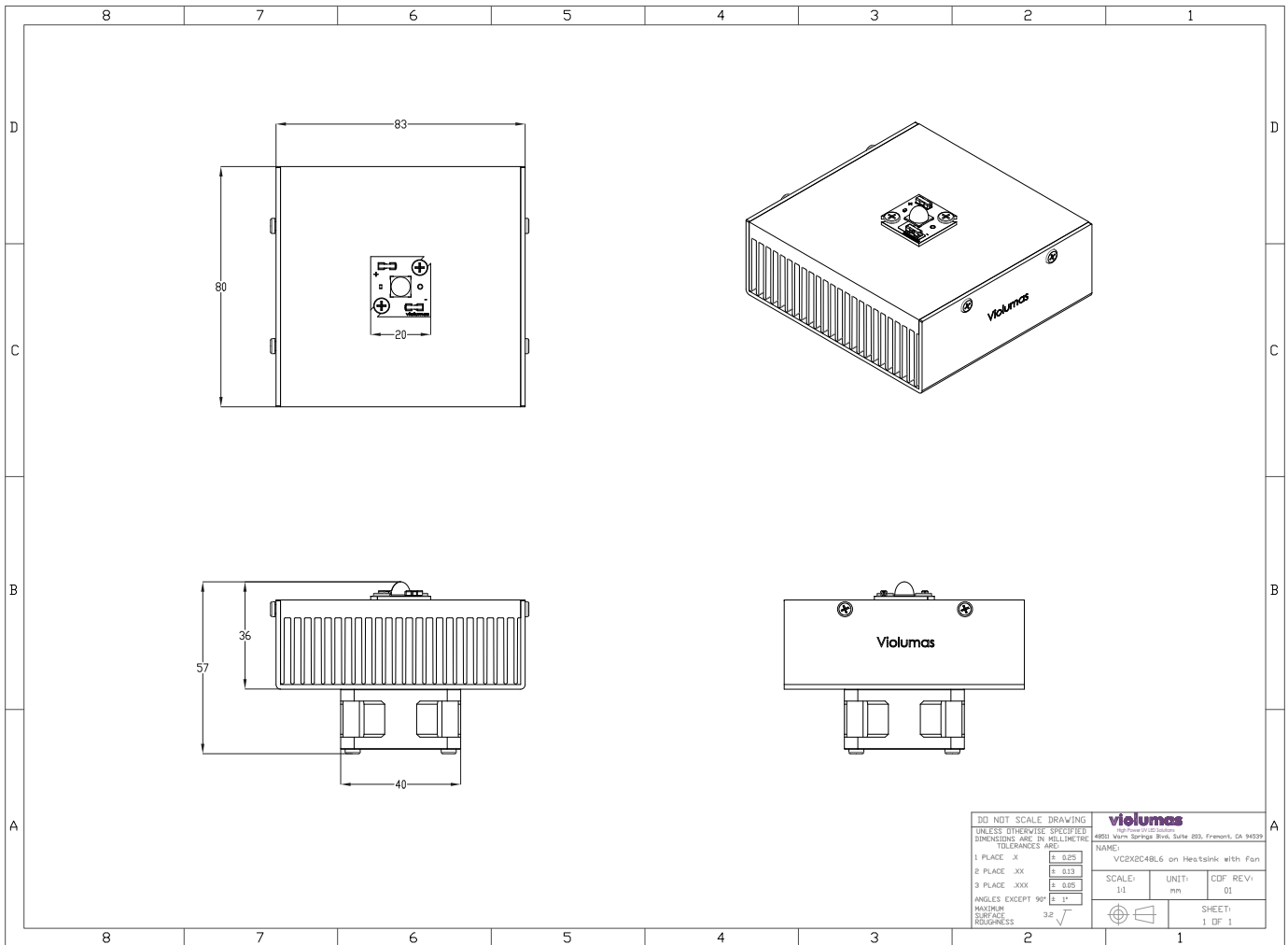
ANGLES EXCEPT 90°
MAXIMUM SURFACE ROUGHNESS 3.2

SCALE: 1/1
UNIT: mm
CDF REV: 04
SHEET: 1 OF 1

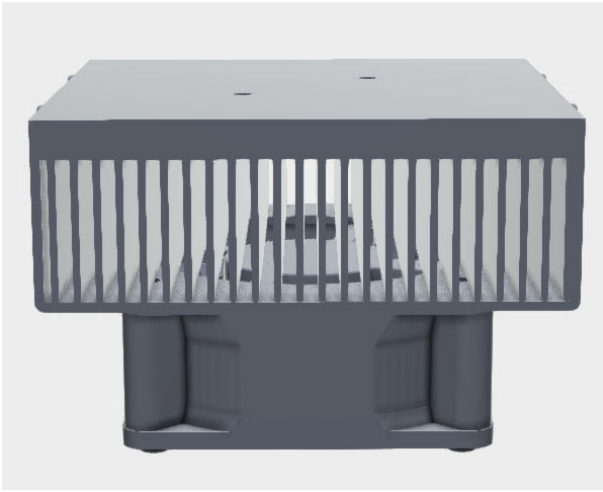
30.4988.20 (Fan-Cooled Heatsink for VC2X2 COB Series)



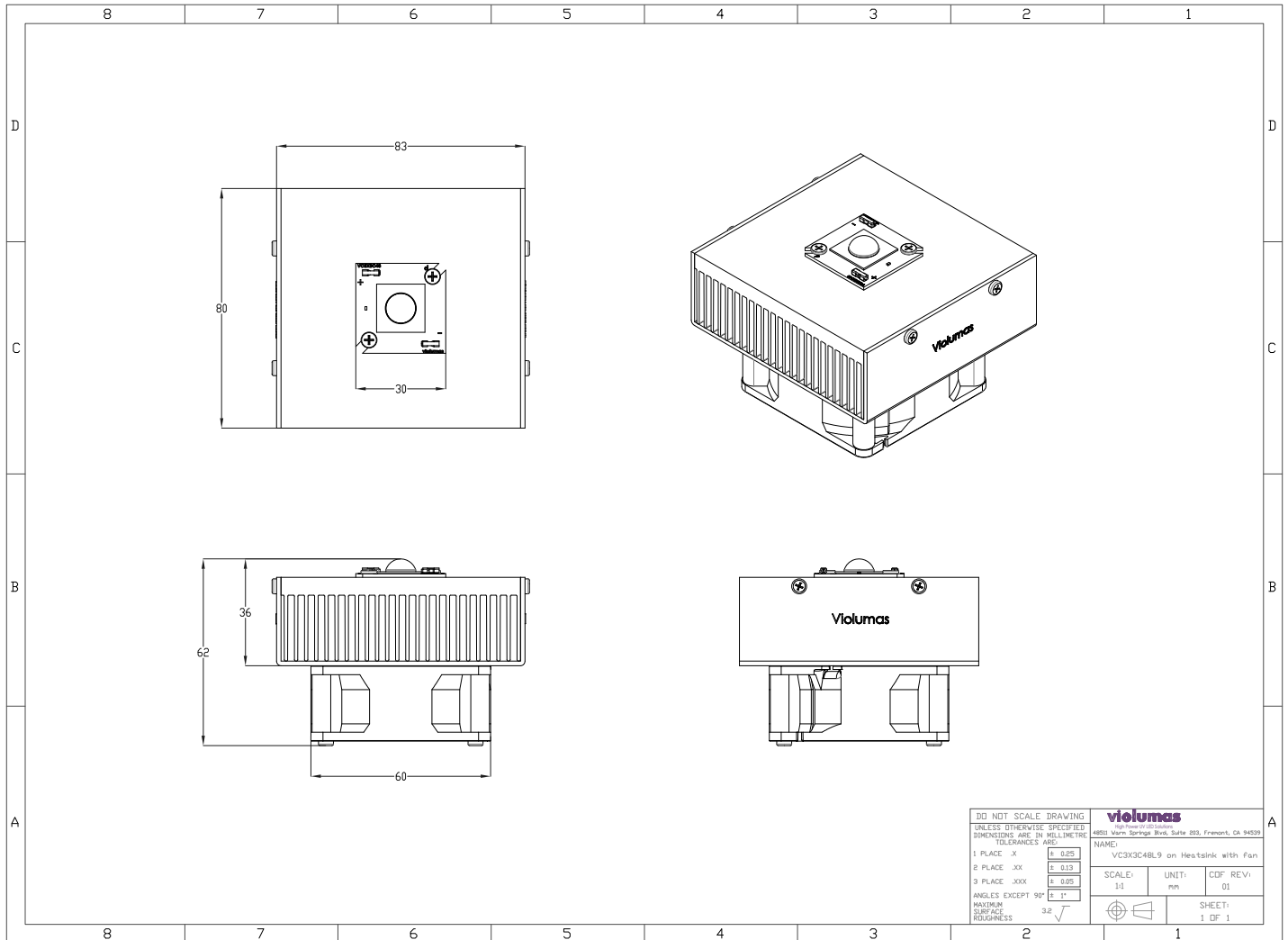
- Suitable LED Models: VC2X2 COB Series (pre-drilled mounting holes)
- Thermal Capacity: 50 W
- Dimensions: 83 x 80 x 57 mm
- Weight: 300 g
- Material: Aluminum (Black Anodized)
- Product Includes: Heatsink with Fan (1), M3 Screws (2)
- Available Upon Request: Thermal Pad, Fan Driver Kit



30.4988.30 (Fan-Cooled Heatsink for VC3X3 COB Series)



- Suitable LED Models: VC3X3 COB Series (pre-drilled mounting holes)
- Thermal Capacity: 60 W
- Dimensions: 83 x 80 x 62 mm
- Weight: 350 g
- Material: Aluminum (Black Anodized)
- Product Includes: Heatsink with Fan (1), M3 Screws (2)
- Available Upon Request: Fan Driver Kit



30.4988.40 (Fan-Cooled Heatsink for VC4X4 COB Series)



- Suitable LED Models: VC4X4 COB Series (pre-drilled mounting holes)
- Thermal Capacity: 100 W
- Dimensions: 83 x 80 x 74 mm
- Weight: 440 g
- Material: Aluminum (Black Anodized)
- Product Includes: Heatsink with Fan (1), M3 Screws (2)
- Available Upon Request: Fan Driver Kit

