

System Report



Date 8/18/2025

Customer	Dr. Juan Manuel Uruena/BioPACIFICMIP Room No. 3448, CaliforniaNanoSystems Ins. Elings Hall room 3448 University of California, SantaBarbara Santa Barbara, CA 93106-6105 United States Tel: 727-687-6389	
System	MONO3-MZ2 (dual projector DLP, 1920 x 1080, 30.0 um, 365, 405, RGB)	
Order date	Feb 25, 2025	
Delivery date	Aug 25, 2025	
Serial number	M3MZ4-N32	
Included projector	Projector-0 EKB E4750LC-UV, 365 nm Projector-1 EKB E4750LC-UV, 405 nm Projector-2 EKB E4750LC-RGB (3-channel LED)	
Dichroic mirrors	Filter for 365 nm : Chroma T387lp-UF1, 35 x 50 x 1mm Filter for 405 nm : Chroma T425lpxr-UF1, 35 x 50 x 1mm	
Pixel size	30.0 um * Adjusted pixel size, native pixel size: 38-40 um	
Motor current	NEMA17, LV8729, Z-axis: 1.7A Motor direction inversion: F/F/F	
Firmware version	2.3Z / 1.8S / 1.8S / 1.8S	
Customization	- Three projector provided and two of them can be installed in the printer	

LED intensity @ build surface Intensity meter: Thorlabs S120VC / PM100USB unit: mW/cm²

Regulation mode: combined (optical)

DAC	365 nm	405 nm	B (456 nm)	G (520-550)	R (620 nm)
0	7.9	20.1	7.1	7.9	4.3
10	7.9	20.0	7.1	8.7	4.3
20	7.9	24.7	12.8	16.7	5.7
30	7.9	35.9	17.6	23.7	8.5
40	7.9	46.2	21.5	29.7	11.1
50	7.9	55.6	24.9	34.8	13.4
60	9.1	64.1	27.9	39.2	15.3
70	10.4	71.7	30.4	43.2	17.0
80	11.8	78.0	32.5	46.7	18.4
90	13.1	83.2	34.3	49.7	19.4
100	14.5	87.3	35.7	52.5	20.2

T387lp reflection T387lp pass-thru T425lp pass-thru T425lp pass-thru T425lp pass-thru

* Do not use the intensities colored in orange for a long exposure time (> 60sec)

Test print

Resin: B9C HD slate

Condition: Exposure condition: 405 nm DAC **0 (global dimming: 0.5)** for ~4 mW/cm²
20 sec x 2 / 2.0 sec / 50 um layer thickness**Sequential printing**

Resin: B9C HD Slate

405 DAC: 0

Global dimming: 0.5

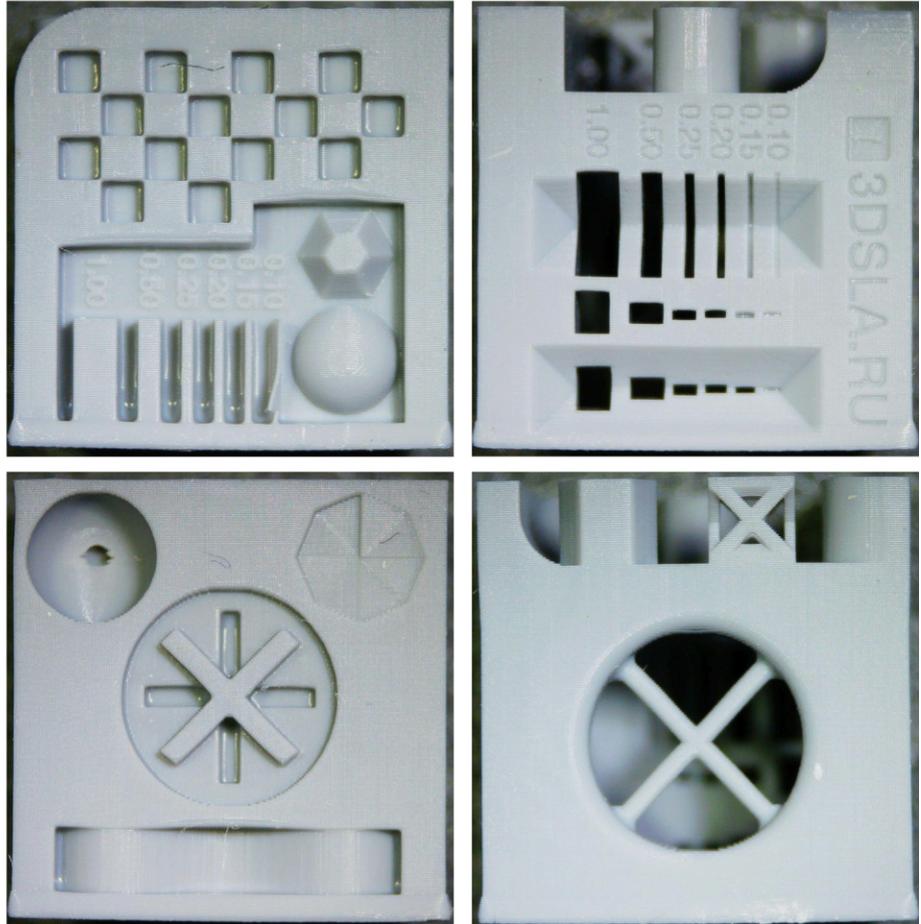
Intensity: 4 mW/cm²

Base exp: 20 sec

Norm exp: 2 sec

Layer thick: 50 um

Layer count: 200



Note:

1. If you experience a sticky print on the film, try other films (PFA or ACF) and longer lift with a slower speed.
2. Limit the LED intensity less than 75% of its maximum if possible, especially for a long exposure (>60sec)

End of report