

# HOW TO SHIMMER SCAN

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## **9-shot recipe**

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# Learning how to Shimmer Scan

3D design can create stunning photorealistic visuals of apparel, furnishings and interiors. But these digital scenes are only as good as the digital materials that go into them. More than an ordinary photo, a digital material always looks correct under any lighting and folded into any shape.

With Bandicoot Shimmer Scan, you can create high quality digital materials with a standard camera. You take a set of photos from different angles of your real material, and our software analyses how the appearance changes with angle and lighting to produce a 3D ready digital material with infinite yardage.





# Fabric digitisation skills

**In this guide, we will first teach you how to do a 9 shot scan:**

1. Set up your equipment for scanning
2. Perform the scan
3. Upload the photos for processing
4. Download the digital material

This **9 shot recipe** will allow you to create digital materials for plain matte fabrics.

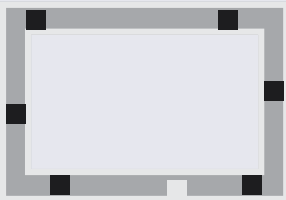
You can then move on to the more advanced **25 shot scan**. After that you will be ready to create digital materials from a wide range of real materials including glossy satins and metallic finishes.

FABRIC TYPES	TECHNIQUE	SKILL LEVEL
<ul style="list-style-type: none"><li>• Plain matte fabric (e.g. woven cotton, poly, linen or denim)</li></ul>	<b>9 shot scan</b>	Beginner
<ul style="list-style-type: none"><li>• All</li></ul>	Fabric preparation	Intermediate
<ul style="list-style-type: none"><li>• Textured (e.g. Jacquard)</li><li>• Glossy (e.g. satin)</li><li>• Metallic and foil</li><li>• Velvet</li><li>• Leather</li></ul>	<b>25 shot scan</b>	Intermediate
<ul style="list-style-type: none"><li>• Patterned repeats up to 40 cm</li></ul>	Tiling	Intermediate
<ul style="list-style-type: none"><li>• Lace and sheers</li></ul>	Alpha scan	Advanced
<ul style="list-style-type: none"><li>• Patterned repeats between 40 cm and 1 m</li></ul>	Large scans	Advanced
<ul style="list-style-type: none"><li>• Patterned repeats above 1 m</li></ul>	Stitching multiple scans	Advanced

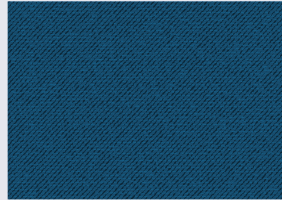
For more guides, visit our Help Centre at [shimmerscan.com](https://shimmerscan.com)

# Gather your gear

## INCLUDED IN OUR SCANNING PACK:



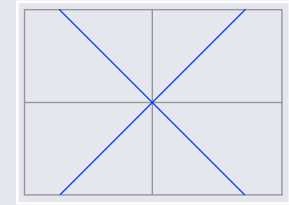
**Bandicoot PRO Frame**  
frames the fabric  
for scanning



**Sample fabric**  
a matte fabric for learning  
how to scan



**Backing sheet**  
provides a clean background  
in case the fabric is slightly sheer

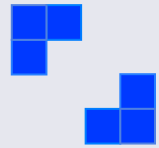


**Bandicoot Scan Mat**  
used to set up the camera  
positions

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## YOU WILL NEED TO SUPPLY:

- **Mirrorless or DSLR camera:** at least 24 megapixels
- **Lens:** 50 mm or 85 mm prime lenses are best
- **Flash:** on-camera Speedlite or similar
- **Broadband internet:** at least 50 Mbps
- **A free Bandicoot account:** hit "sign up" at the bottom of the login screen
- **Fabric to scan:** we can scan most fabrics except sequins or fur (start with supplied matte fabric to make your first scan easy)
- **Room to scan:** about 2 x 2 metres so you can walk around the Frame
- **The right light:** normal room lighting is OK, but avoid direct sunlight
- **Small table or box:** to place Frame onto for scanning (if you're tall, otherwise use the floor)
- **Painter's tape and measuring tape:** to mark out where to stand when scanning



# Scanning positions

The camera positions for scanning depend on your lens, camera and Frame.

Here are some examples:

LENS FOCAL LENGTH (f)	FRAME SIZE	CAMERA SENSOR SIZE	TAPE MARK DIAMETER (D)	CAMERA HEIGHT (H)
85 mm	M	Full frame	40 cm	95 cm
50 mm	M	Full frame	40 cm	55 cm
85 mm	L	Full frame	55 cm	135 cm
50 mm	L	Full frame	55 cm	80 cm

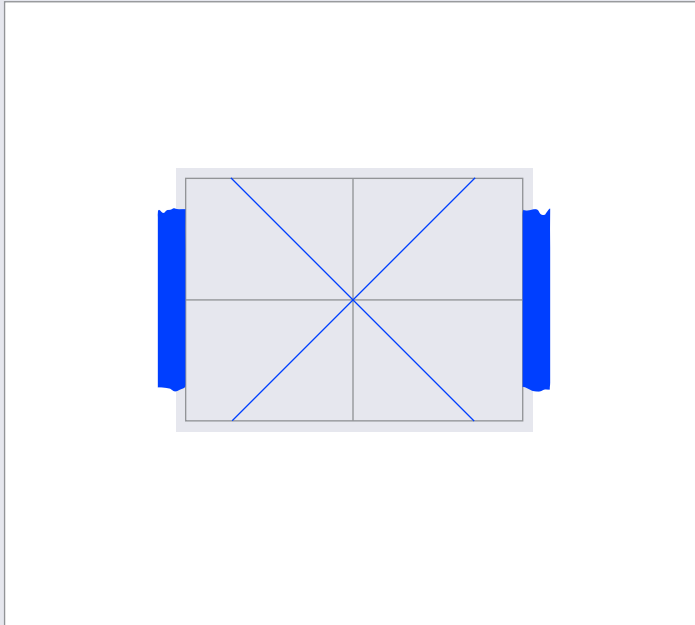
If you have a different combination, then please contact us for the measurements.

To make your first scan easier, you can ask a friend or colleague to hold the instructions and measure the camera height.

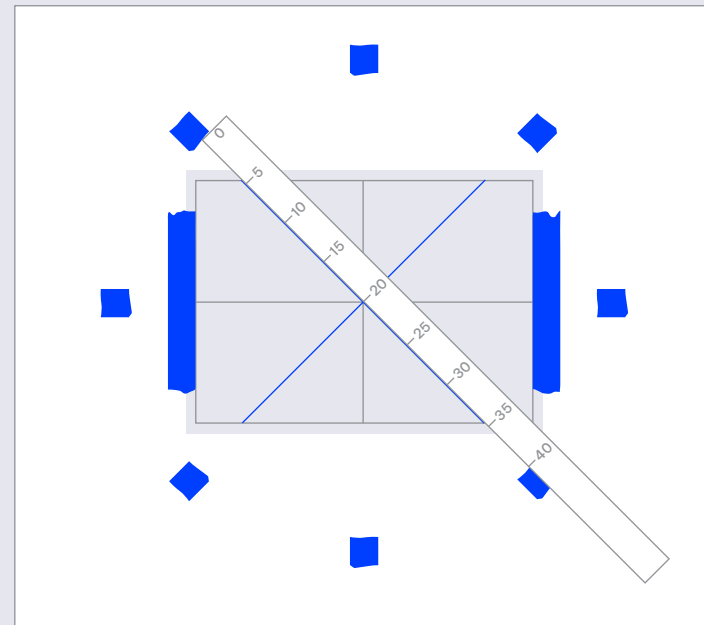
Measuring to the nearest 5 cm is OK for the diameters and heights. The height is from the floor to the camera back.

# On your marks

**The first time you scan, prepare a scanning pattern to help you find the right camera positions.**



1. Tape the Scan Mat to the floor



2. Place 8 tape marks in a D cm diameter circle around the Frame (look up your value for D in the table on the previous page)

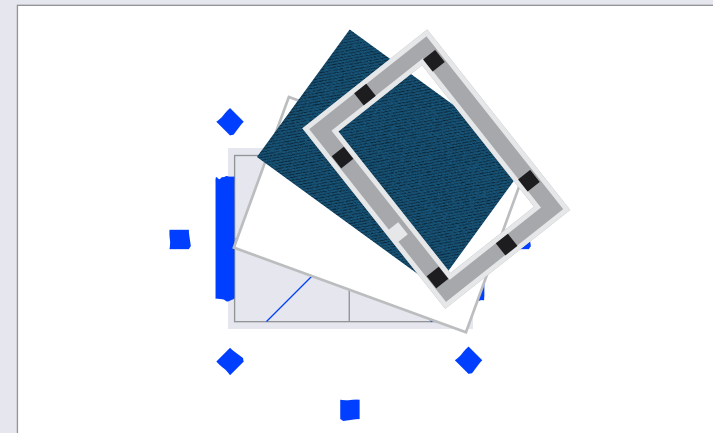
**Line up your measuring tape with the lines on the scanning mat,  
so that the marks are evenly spread in a circle**

# ✓ Get set

## Prepare your fabric for scanning.

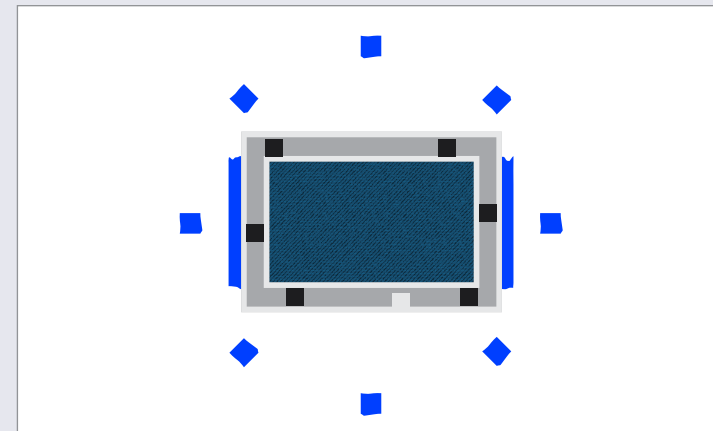
1. Lay the material flat on top of the backing sheet.

Use a sample the same size as your Frame for your first scan so you can see all position markers



2. Put the Frame on top of the material, with the area you want to scan showing in the middle of the Frame

3. Keep the Frame and material completely still while scanning



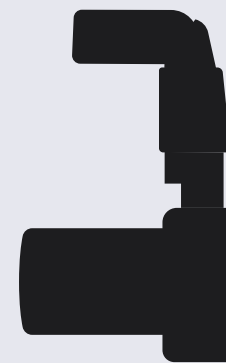
# ✓ Get set

## Prepare your camera.

1. Set up your camera and flash using the settings in the table

SETTING	SELECT
Mode	Manual (M)
Aperture	f/16
Shutter speed	1/200 s
ISO	100
Format	RAW
Focus	AF
White balance	Flash
Flash power	Manual 1/16

2. Click the head of the flash down to the lowest angle possible, so that it is pointing in the same direction as the lens



OK



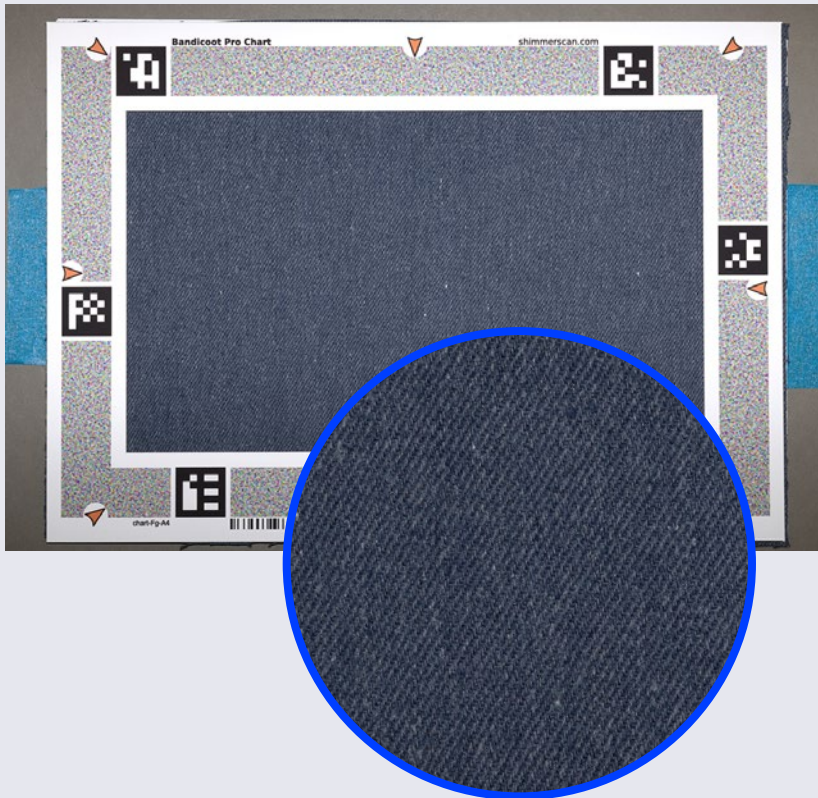
BEST



# ✓ Get set

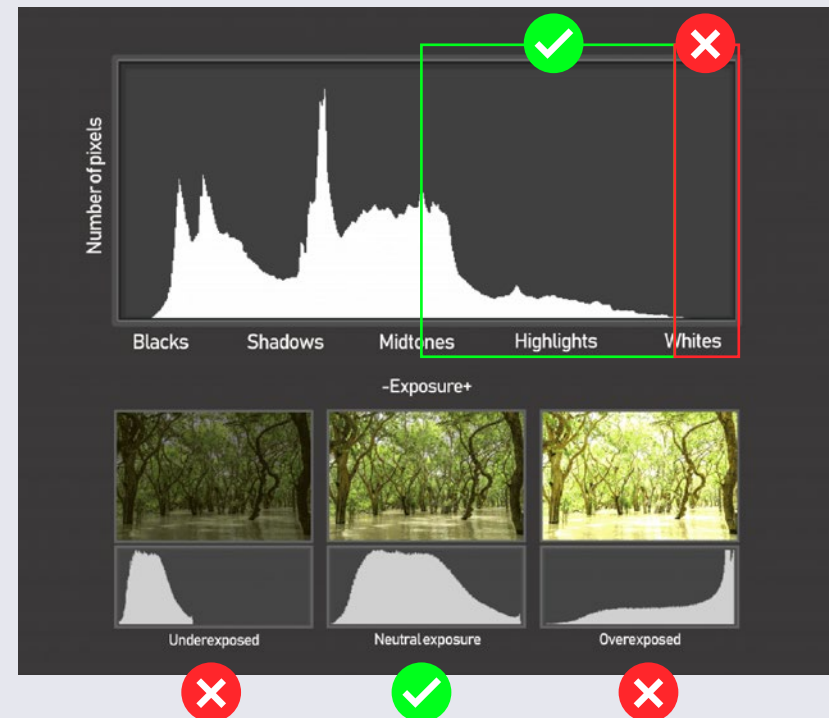
## Set your flash power.

1. Take a test photo from directly above the Frame with the Frame filling the camera display



2. Check the histogram is about 2/3 from the right hand side (avoid clipping)

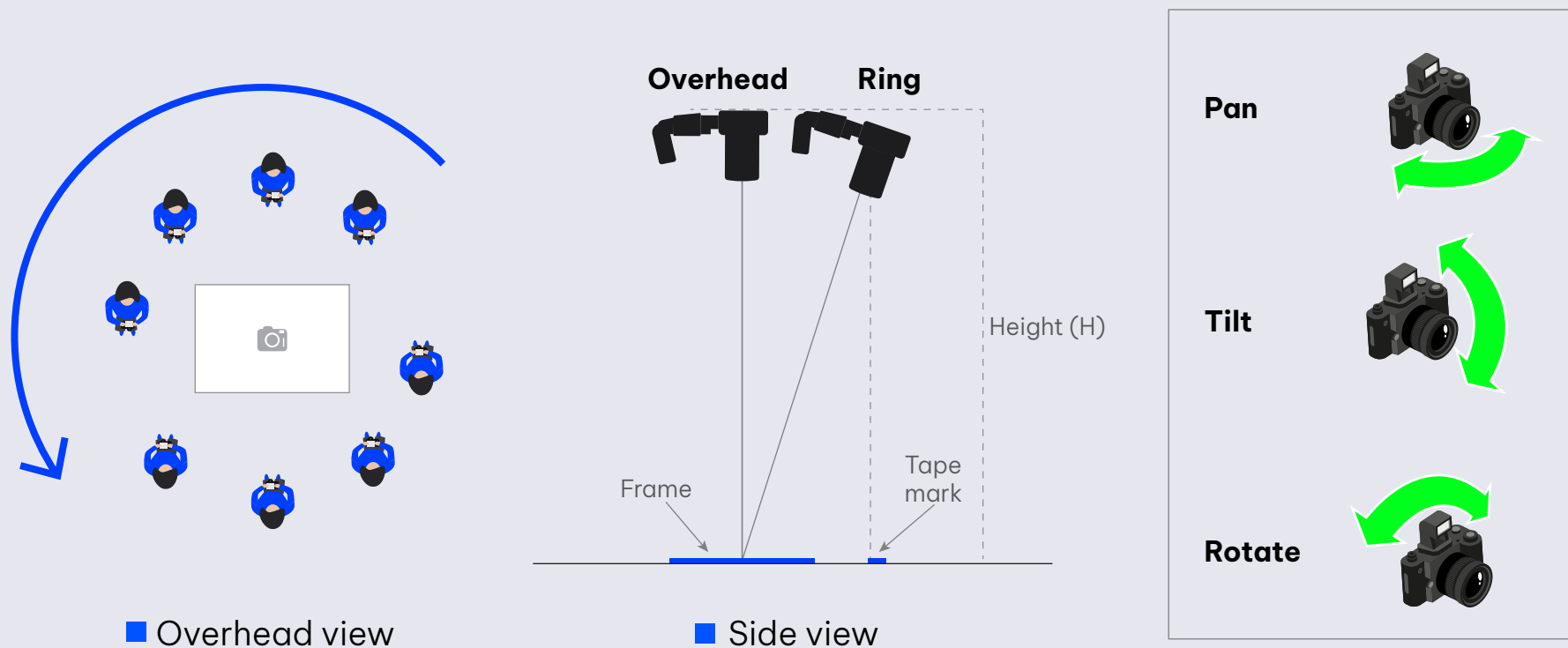
3. Adjust the flash power, take another photo and re-check the histogram until it looks good



# Scan!

**You're going to take 1 overhead photo of the Frame, then walk around the Frame and take 8 photos in a ring. These 9 photos will capture how the material looks from every direction.**

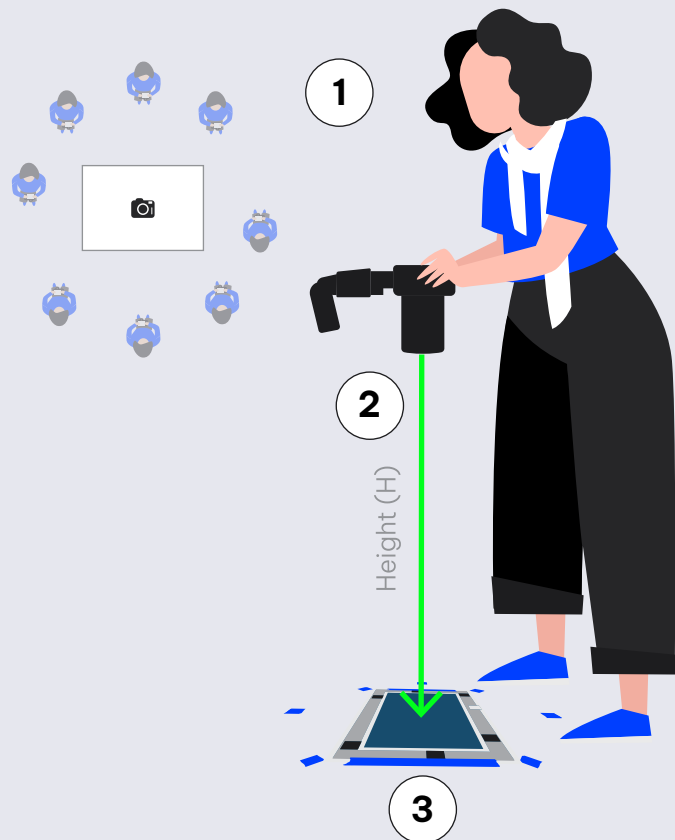
Although you are moving the camera to take photos at different angles, the size of the Frame needs to be about the same in every photo. Keeping the Frame tightly framed ensures that your scan captures all of the fine texture details.



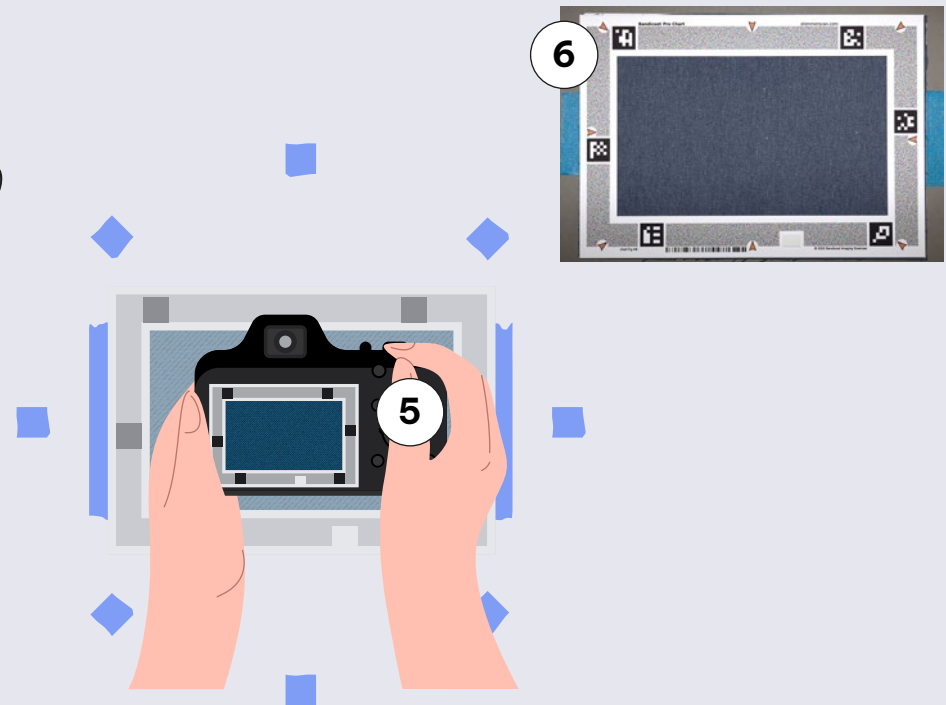


# Centre photo

1. Stand facing towards the Frame
2. Hold the camera at height H cm above the centre of the Frame
3. Point the camera at the centre of the Frame



4. Rotate the camera until the long side of the Frame lines up with the long side of the display
5. Move the camera directly up or down until the Frame fills the display
6. Take a photo of the fabric





# Bottom long side photo

Long Side

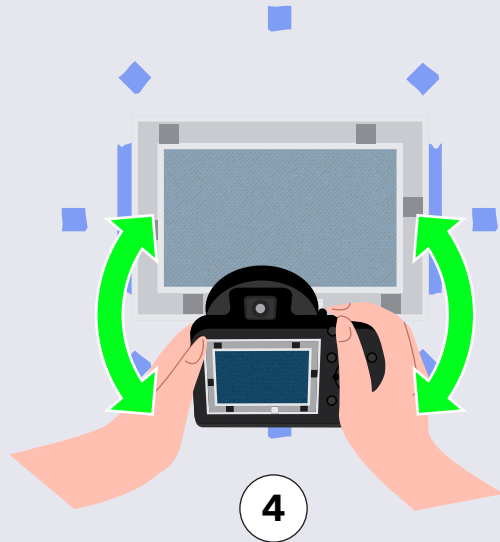
1. Hold the camera at height  $H$  cm above the bottom tape mark
2. Point the camera down at the tape mark

3. Tilt the camera up towards the Frame until the centre of the Frame is in the centre of the camera display

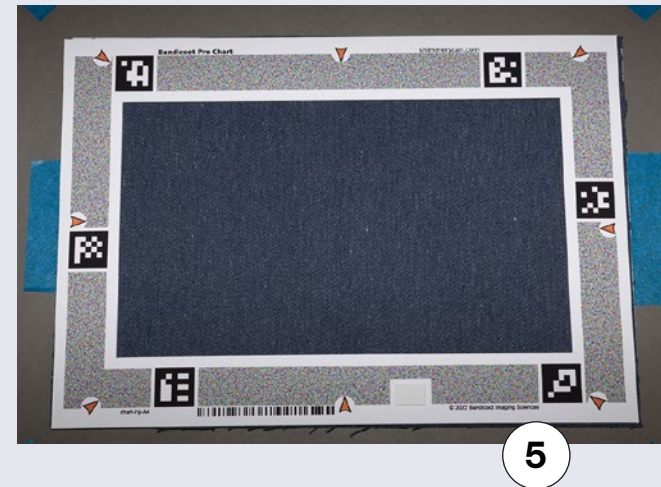


# Bottom long side photo Long Side

4. Rotate the camera until the long side of the Frame lines up with the long side of the display and the Frame fills the camera display



5. Take a photo of the fabric





# Lower right corner photo

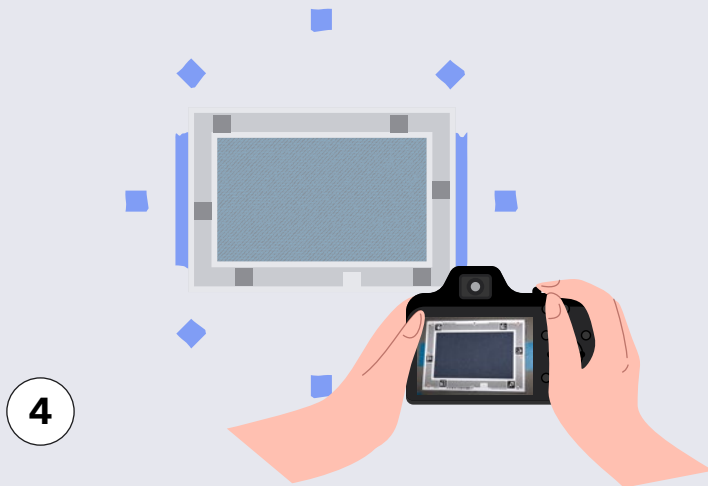
Corner

1. Hold the camera at height H cm above the lower right tape mark
2. Point the camera down at the tape mark
3. Pan and tilt the camera towards the Frame until the centre of the Frame is in the centre of the camera display

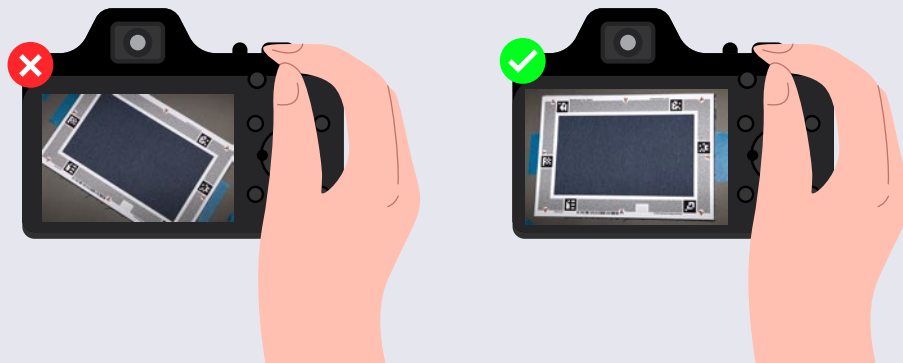
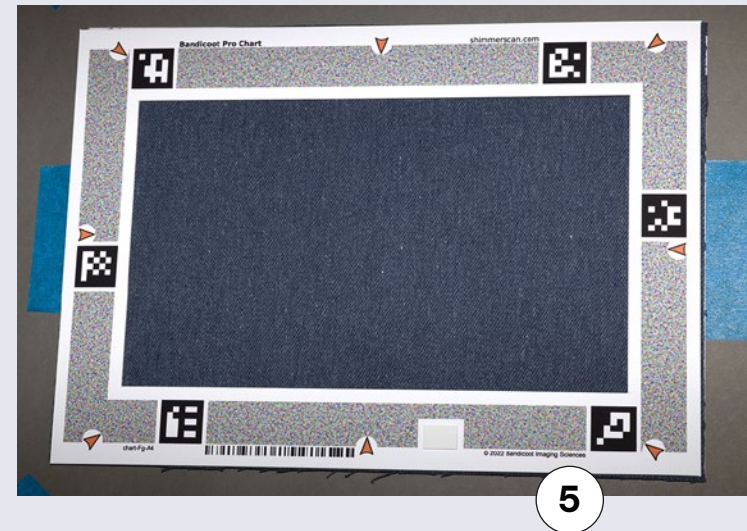


# Lower right corner photo Corner

4. Rotate the camera until the long side of the Frame lines up with the long side of the display and the Frame fills the camera display



5. Take a photo of the fabric



# ■ Right short side photo Short side

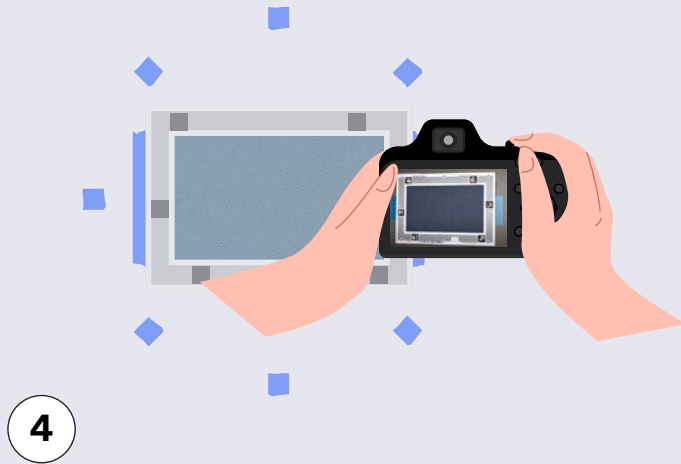
1. Hold the camera at height H cm above the right side tape mark
2. Point the camera down at the tape mark

3. Pan the camera left towards the Frame until the centre of the Frame is in the centre of the camera display

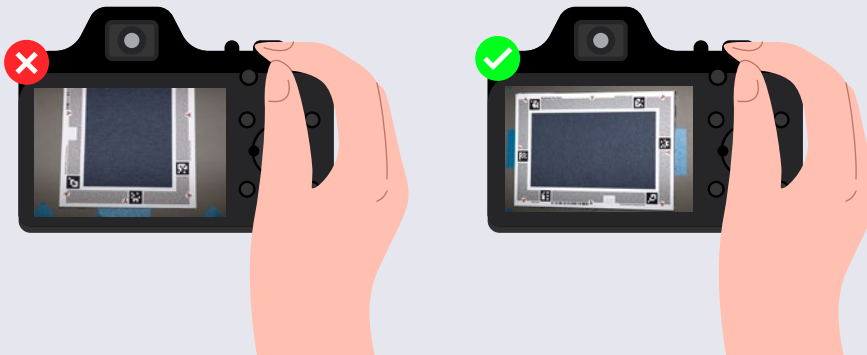
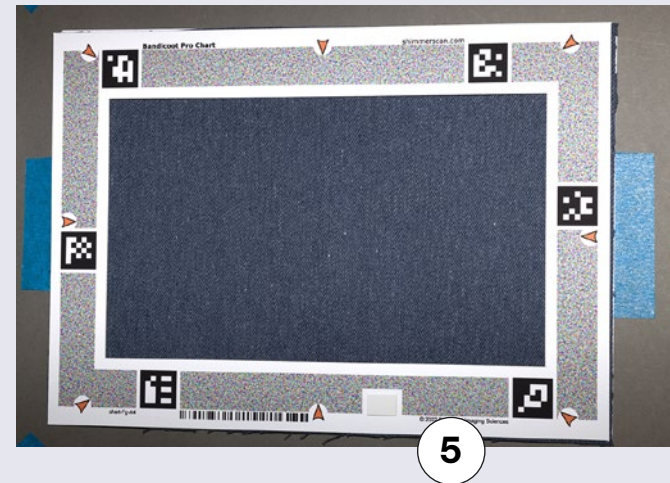


# ■ Right short side photo Short side

4. Rotate the camera until the long side of the Frame lines up with the long side of the display and the Frame fills the camera display

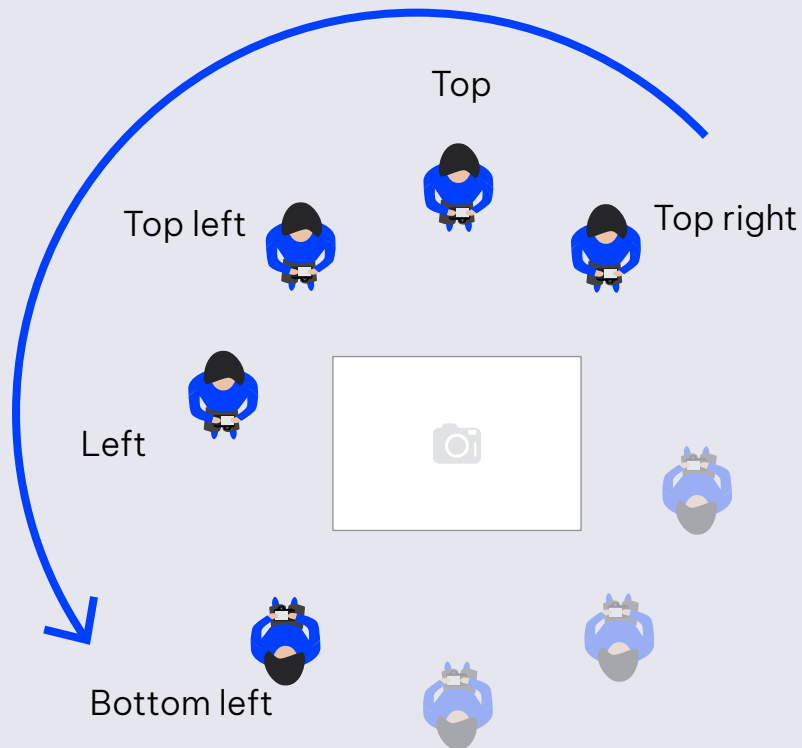


5. Take a photo of the fabric

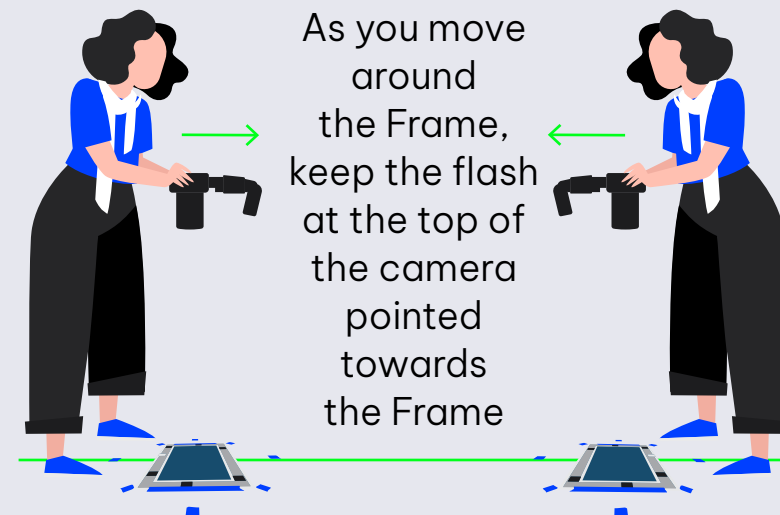


# ■ Complete your scan

Now you've taken your first 4 photos, keep moving around the Frame and repeat the recipe in the table for each corner and side to get the remaining 5 photos.



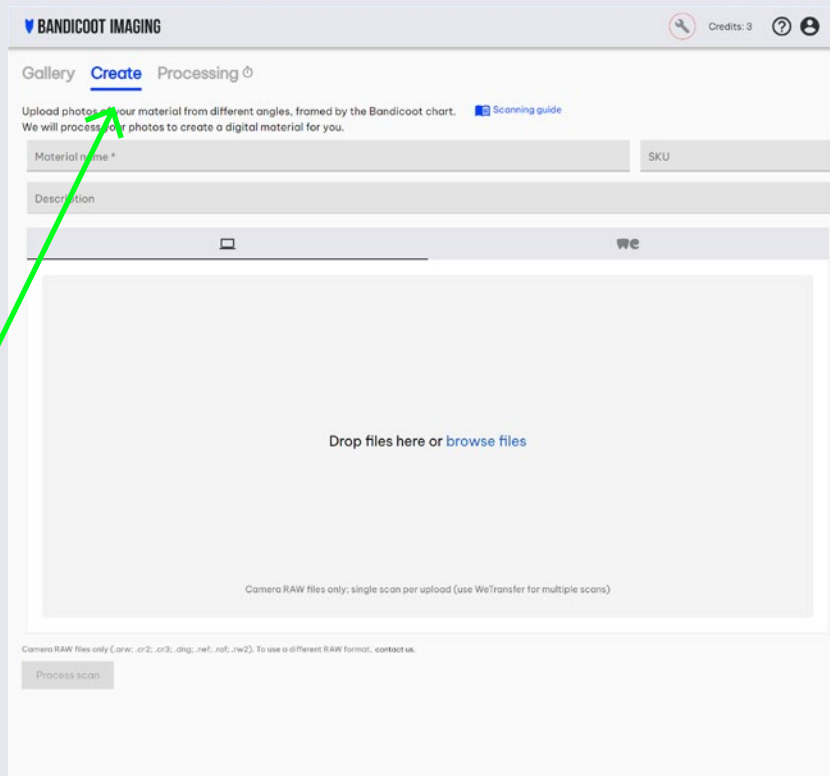
DIRECTION	RECIPE
Top right corner	Corner
Top side	Long side
Top left corner	Corner
Left side	Short side
Bottom left corner	Corner





# Upload and use

1. Copy your photos onto your PC.
2. Open the **Create screen** in the Bandicoot web app




**BANDICOOT IMAGING** Credits: 3

Gallery **Create** Processing

Upload photos of your material from different angles, framed by the Bandicoot chart. [Scanning guide](#)  
We will process your photos to create a digital material for you.

Material name \*  SKU

Description

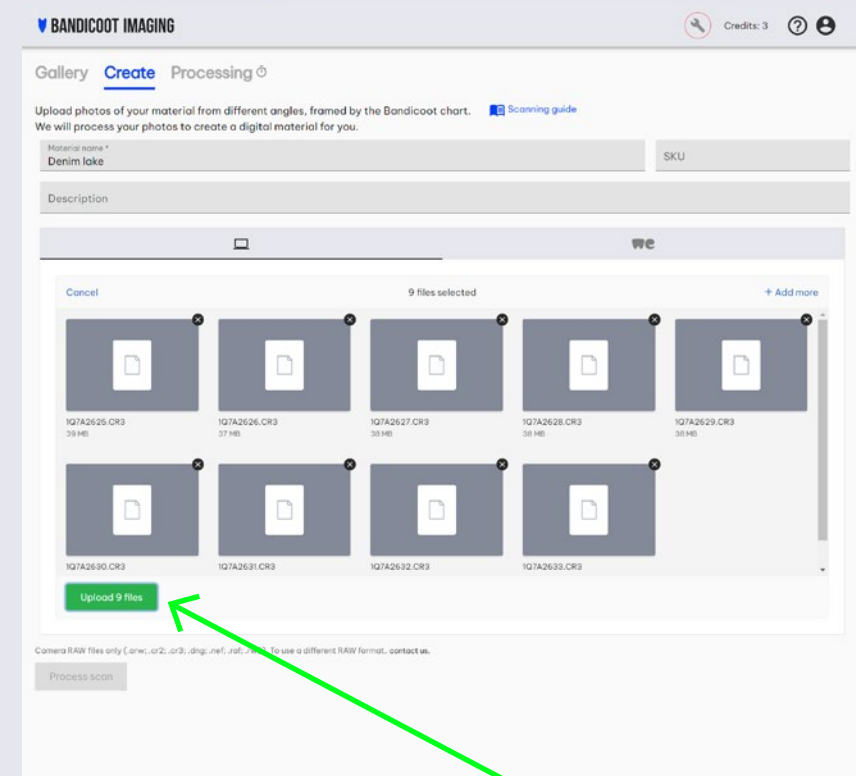
 **we**

Drop files here or [browse files](#)

Camera RAW files only; single scan per upload (use WeTransfer for multiple scans)

Camera RAW files only (.arw, .cr2, .cr3, .dng, .nef, .raf, .rw2). To use a different RAW format, contact us.

3. Drag your 9 photos into the form and press **Upload**




**BANDICOOT IMAGING** Credits: 3

Gallery **Create** Processing






Upload photos of your material from different angles, framed by the Bandicoot chart. [Scanning guide](#)  
We will process your photos to create a digital material for you.





Material name \*  Denim lake SKU

Description

 **we**

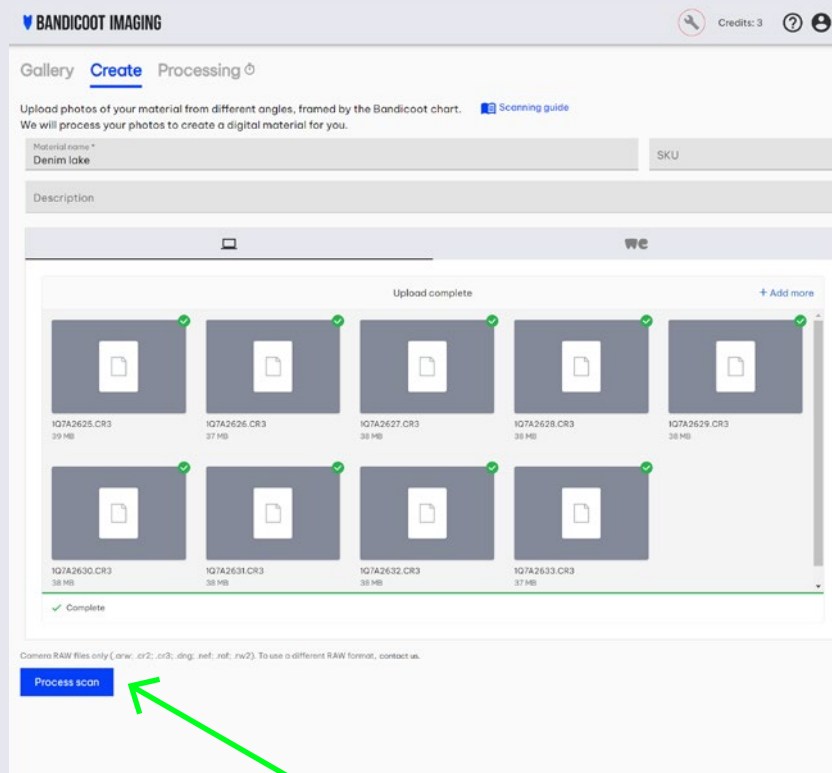
Cancel 9 files selected [+ Add more](#)

      
1Q7A2625.CR3 39 MB 1Q7A2626.CR3 37 MB 1Q7A2627.CR3 38 MB 1Q7A2628.CR3 38 MB 1Q7A2629.CR3 38 MB

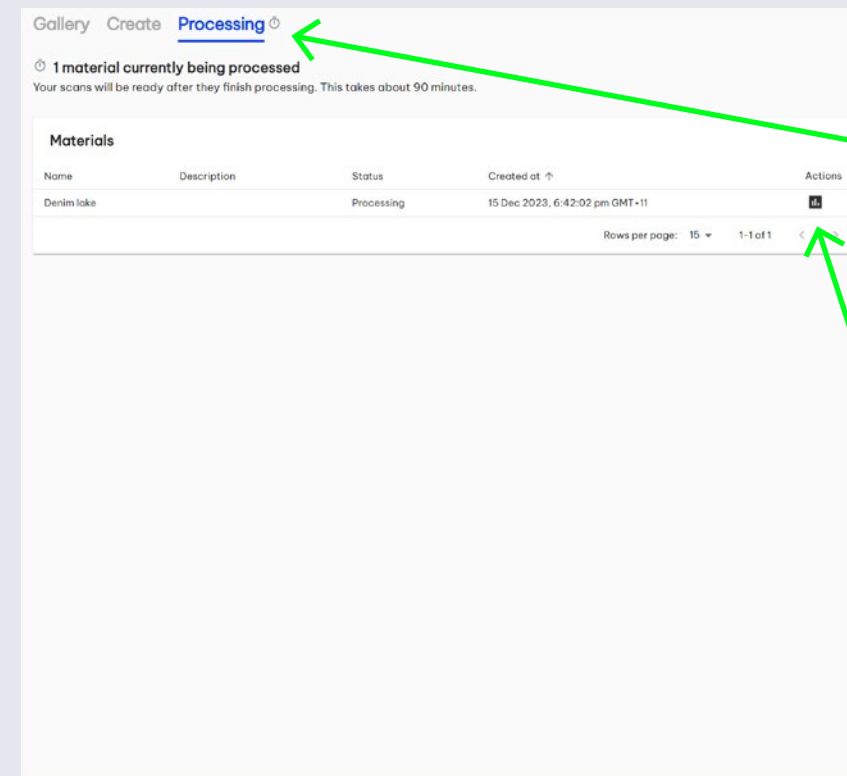
     
1Q7A2630.CR3 1Q7A2631.CR3 1Q7A2632.CR3 1Q7A2633.CR3

Camera RAW files only (.arw, .cr2, .cr3, .dng, .nef, .raf, .rw2). To use a different RAW format, contact us.

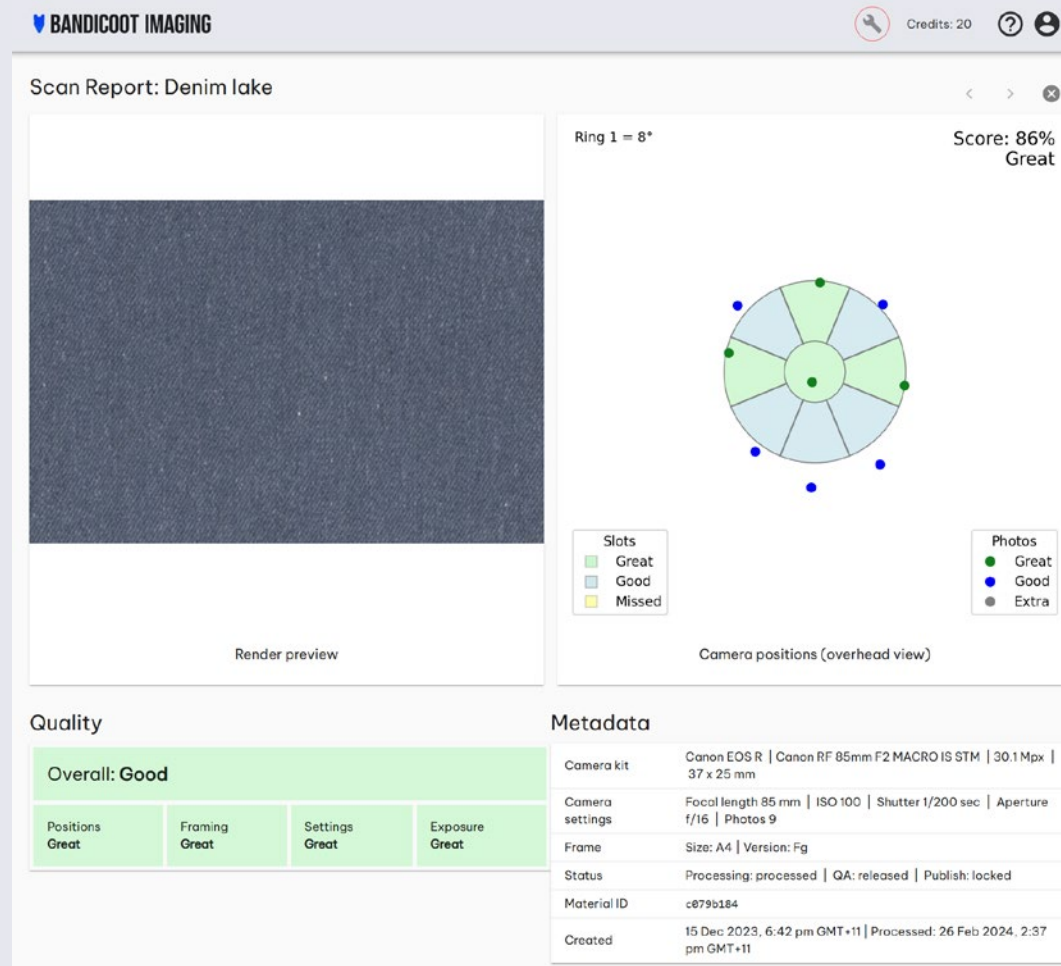
4. After the upload is complete press  
**Process scan**



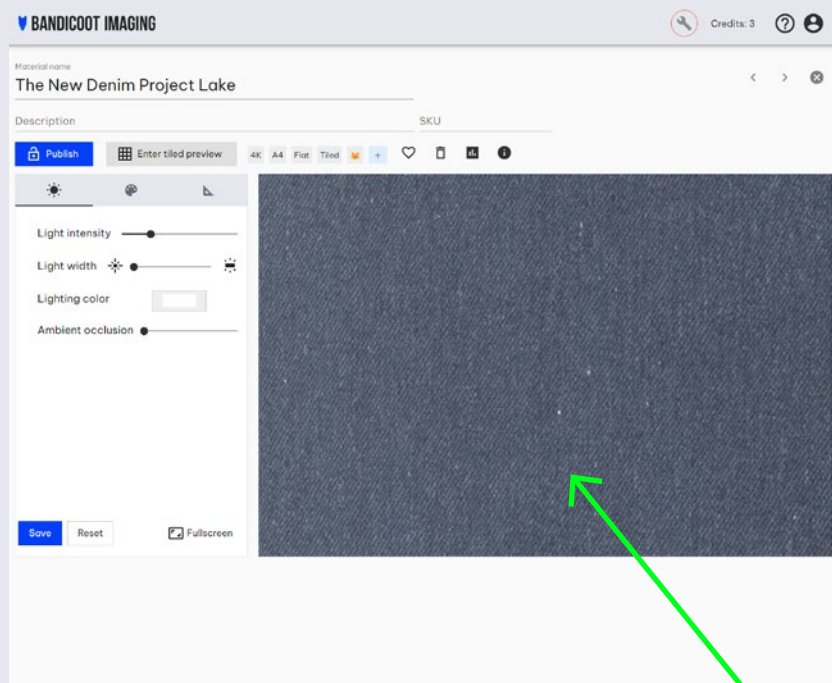
After a moment, a scan report will be created for you to view inside the web app. To open it, go to the Processing screen and click the report icon next to your scan.



The report includes the camera positions from your scan. You can see how well your own photos line up with the 9 ideal slots from the scan recipe (shown on the right). Framing, camera settings and exposure are also checked.

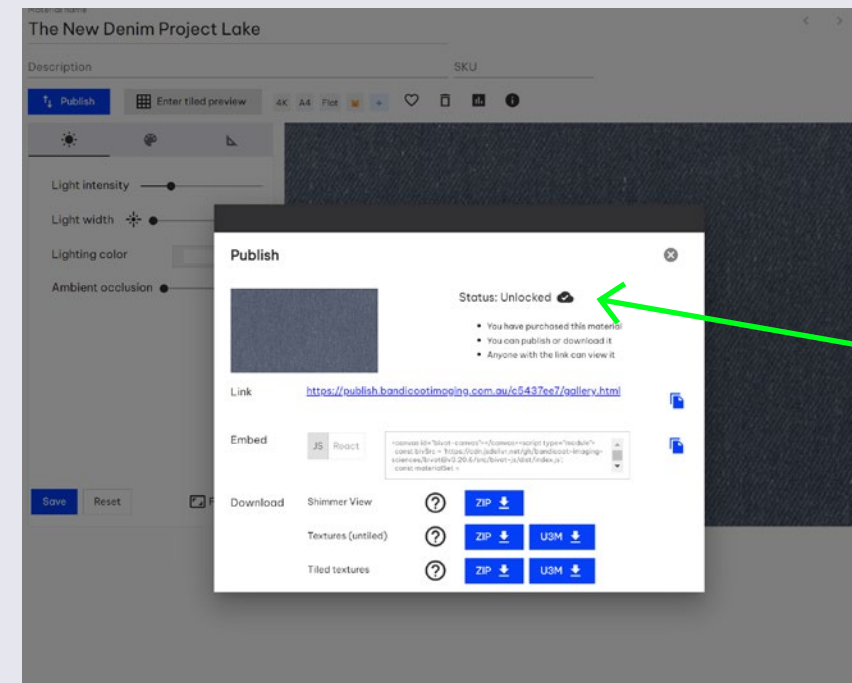


Your new digital fabrics will appear in about 2 hours, ready to use in your 3D design software. If you have bought a starter pack, then we will review your first scan and send you feedback.



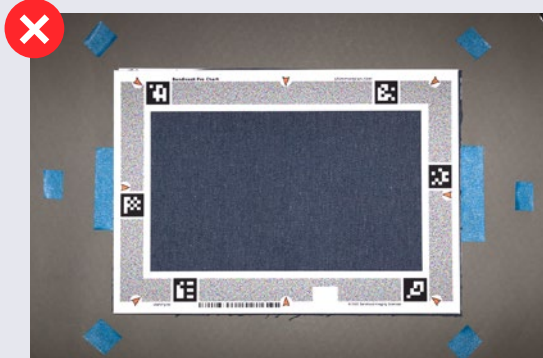
To use your digital fabric, click the **Publish** button and **Unlock** the scan (this costs 1 credit). Then download the Tiled textures using the format for your 3D software:

- ZIP for most tools including CLO and 3DS Max
- U3M for Browzwear

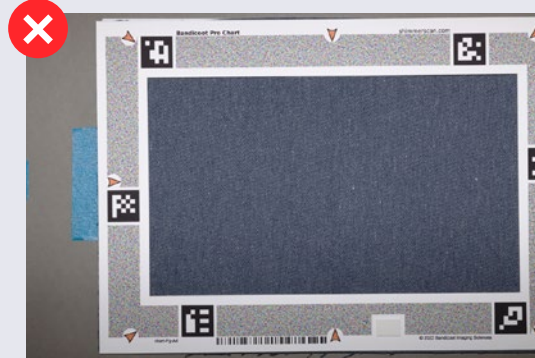


# ❏ Traps to avoid – photo framing

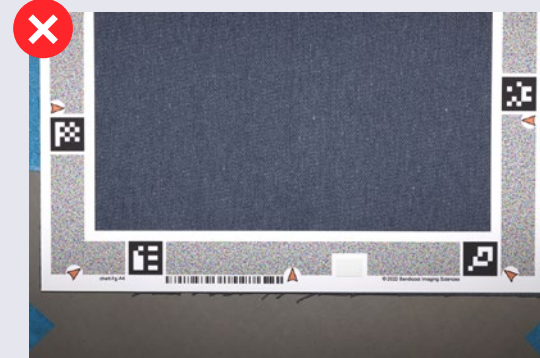
Frame too small



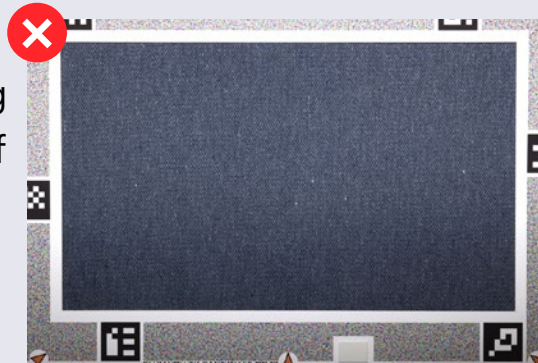
Frame cut off



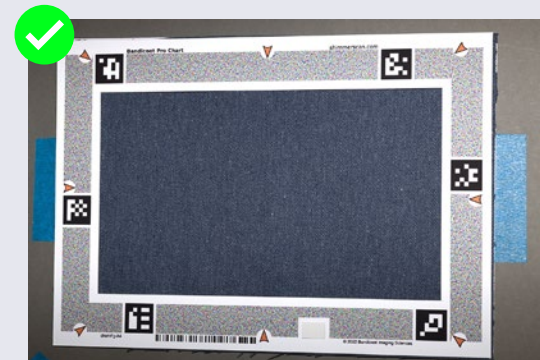
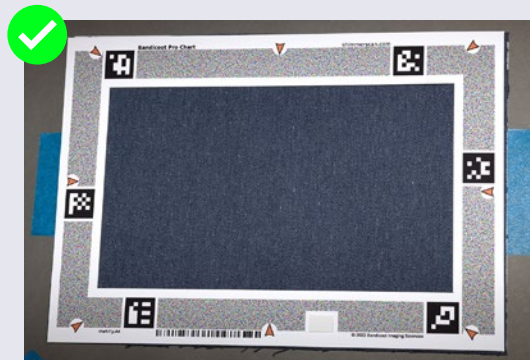
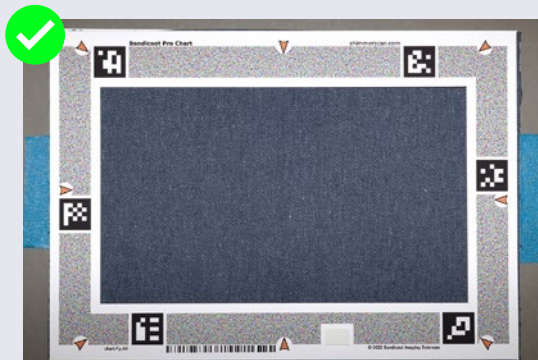
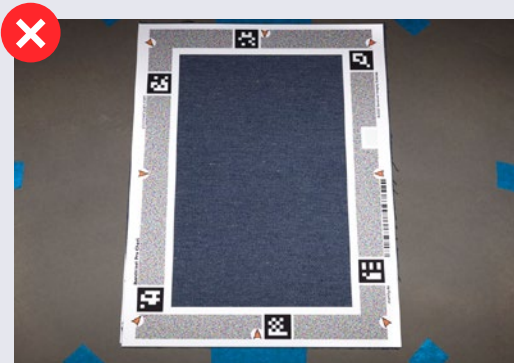
Frame cut off



Frame too big  
& cut off



Frame too small  
& wrong orientation





# ❏ Traps to avoid – photo framing



Leaning  
over Frame



Camera  
upside down



Frame not  
lined up  
with camera  
display



Walk around  
the Frame



Frame correctly  
lined up with  
camera display



## T Tip

- If you're tall, you can use a small stool, box or crate to make scanning more comfortable:
  - Keep the scanning mat and tape marks on the floor
  - Put the stool over the middle of the mat
  - Place the backing sheet, fabric and Frame on the stool
  - Measure the height of the stool
  - Your camera height for scanning should be:  
 $H \text{ cm} + \text{stool height}$

