



Creating Camera Profiles for Capture One Pro with Lumariver

For advice on the best viewing settings visit <https://mbp.ac/pdf>

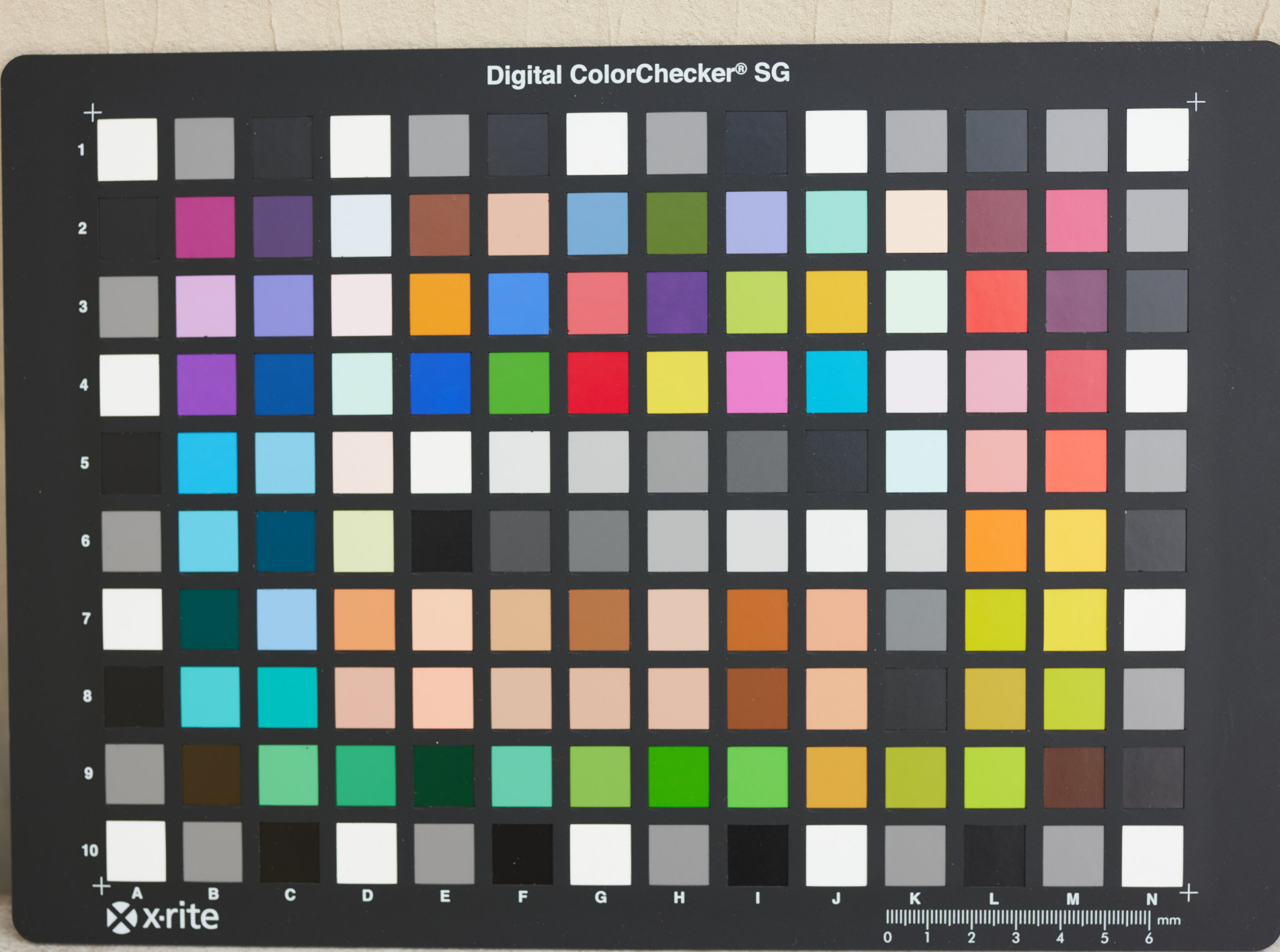
OK, so it's been a couple of years, and coincidentally exactly 100 episodes, since I reviewed and created a tutorial to help you to create camera profiles for use in Capture One Pro using the Lumariver Profile Designer software, and with my new EOS R5 sitting around without a custom profile, I figured I'd make one, and I was pleased to see that a few changes made to the Lumariver software have made the profiles easier to create than ever before!

There are a number of ways to create these profiles, and I haven't tried all of them, but the main thing to note here is that I followed Lumariver Manual instructions for Making Capture One ICC Profiles, and did NOT use the

simpler workflow for reproduction. I went through the full steps, and in step 14 I used Alternative A to get the Capture One curve for my profile. The instructions from Lumariver are clear enough, but in my humble opinion could be a little clearer and better illustrated, so here goes with my version.

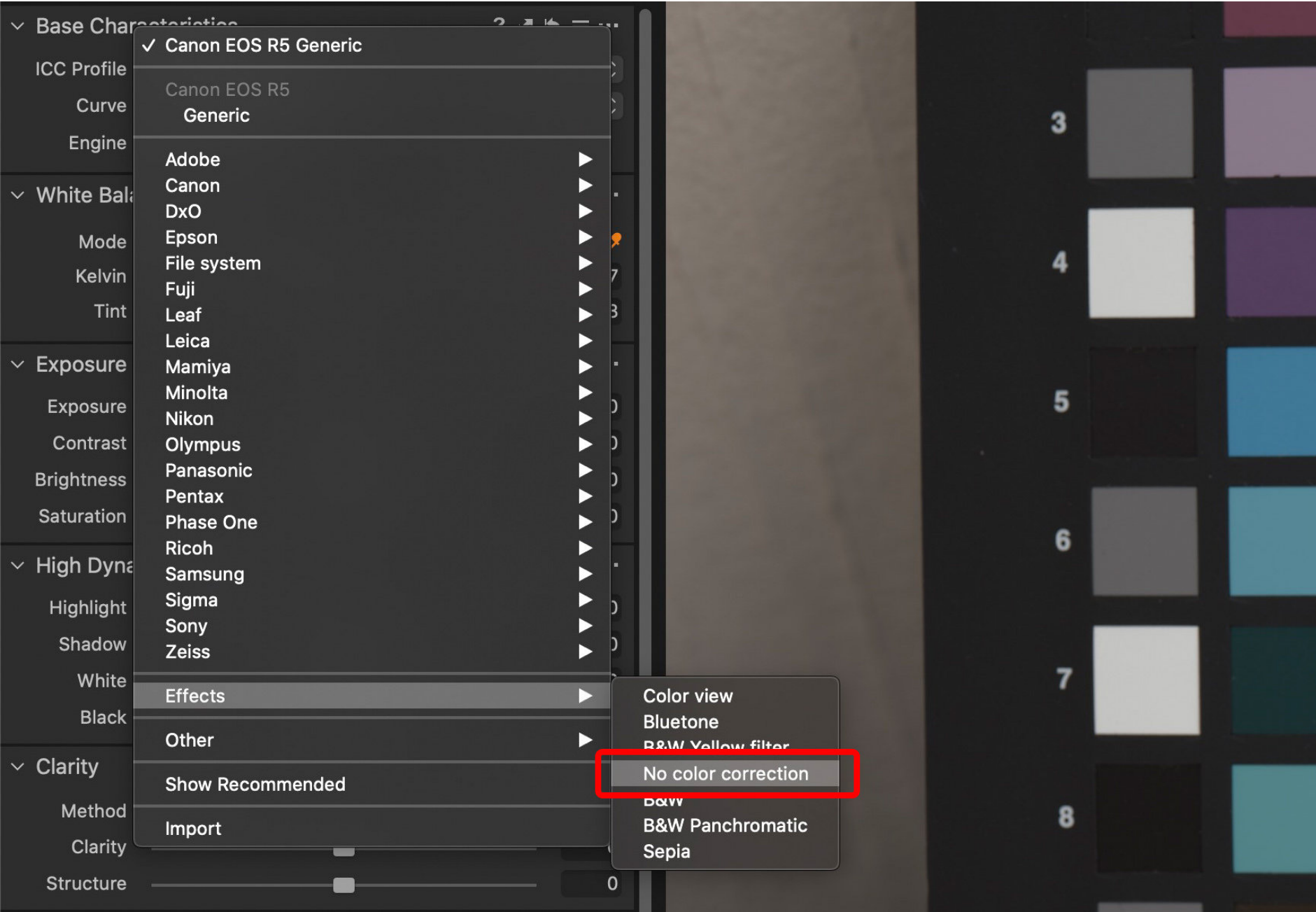
Preparing Your Photograph

First, you'll need an X-Rite ColorChecker target. There are other targets that you can use, but I recommend X-Rite's as they are what I use. You can use the ColorChecker Passport, but for my profile, I used the Digital ColorChecker SG that you can see in this photo, that I used to create my profile. Excuse the grubby outside air-conditioning unit



that I placed the target on. I didn't want to spend much time on this, so I didn't cover it up or anything. I exposed the chart in Manual mode and ensured that I pulled back slightly from the setting that started the white patches blinking with exposure alerts, so the base image is as bright as it can be without starting to overexpose, just as I shoot all of my images.

The next part of the process will make your image look crap for a while, but this is necessary, so let's work through it. As you can see in the screenshot, under the Base Characteristics panel in Capture One Pro, you need to select No Color Correction from the Effects section of the ICC Profile pulldown. If you don't see this option, click on the Show All option first. It's also important here to select



For the sake of this process, note that I used the White Balance picker tool in Capture One Pro and selected one of the neutral gray cells on the target, and that set the custom white balance of the image to 5757 Kelvin and a Tint of -2.8. You can use this profile for a wide range of white balances, but to create it, we need to set that custom white balance in this way, and remember the kelvin value for later.

the Linear Response option from the Curve pulldown, below the ICC Profile pulldown. This is the part that will make your image look flat and much less colorful, so if it still looks OK, go back and check these last few steps.

Export Variants

Then right-click the image that you just changed, and select Export, then Variants, from the shortcut menu that appears (right). You'll then see a dialog box to select the settings, which need to be the TIFF format, 16 bit, and under ICC Profile select Embed camera profile. For the filename, to make the following steps easier, either change the name to Linear or append the word Linear to the filename as I have (below).

After exporting your Linear copy of the image, go back to the Curve pulldown from the Base Characteristics panel, and this time select Auto, unless you usually select one of the other options, such as Film Standard. I just selected Auto, and then exported a second copy

Location

DestinationDesktop

Sub Folder

Sample Path/Users/Martin/Desktop

Space Left343.86 GB

Naming

FormatImage Name_Linear

Job NameExport

SampleMBP_Digital_Colorchecker_..._20200917_R512186_Linear

Recipe

Basic

File

Adjustments

Metadata

FormatTIFF

OptionsUncompressed

ICC ProfileEmbed camera profile

Resolution300 px/in

ScaleFixed

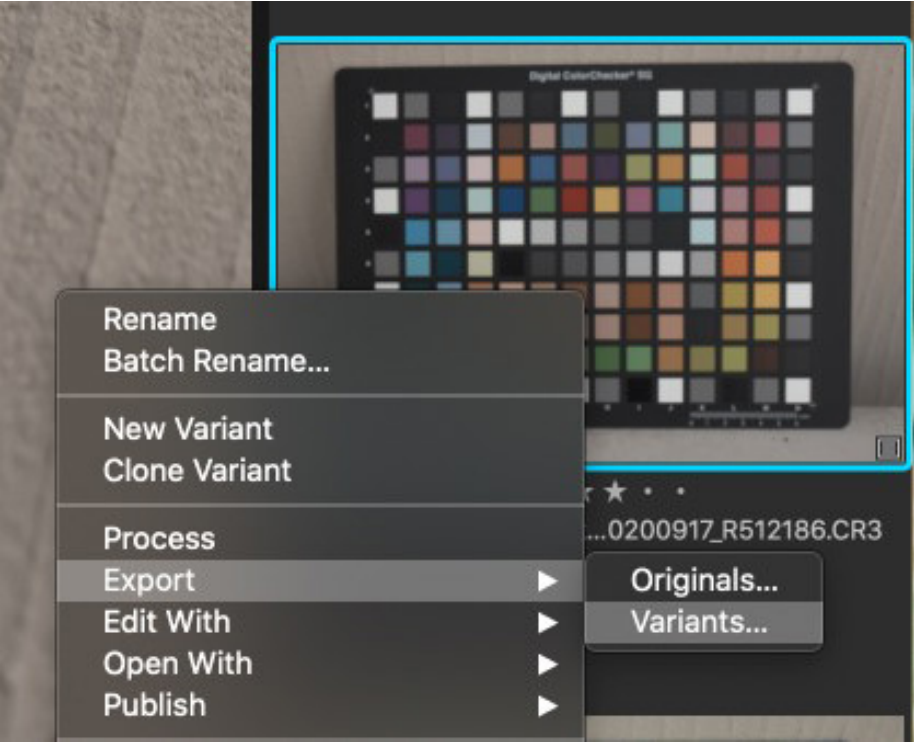
Open WithNone

Options

Notify When Completed

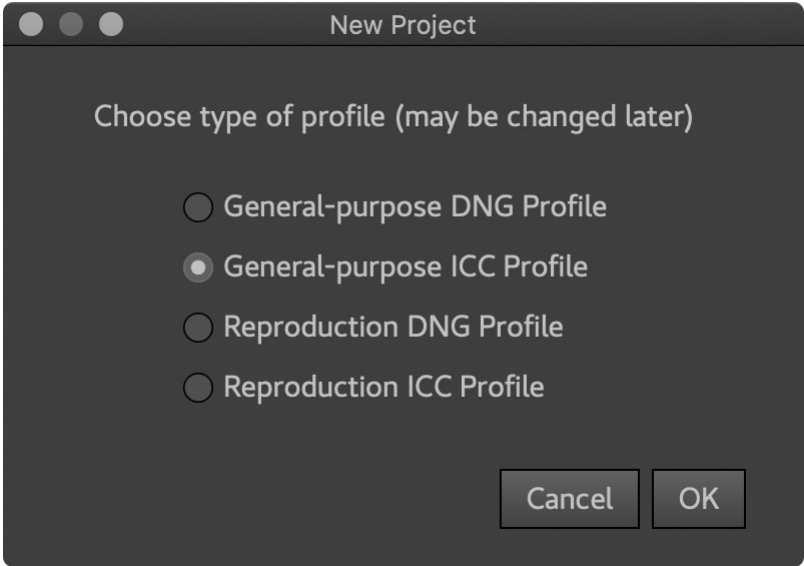
Cancel

Export 1 Variant

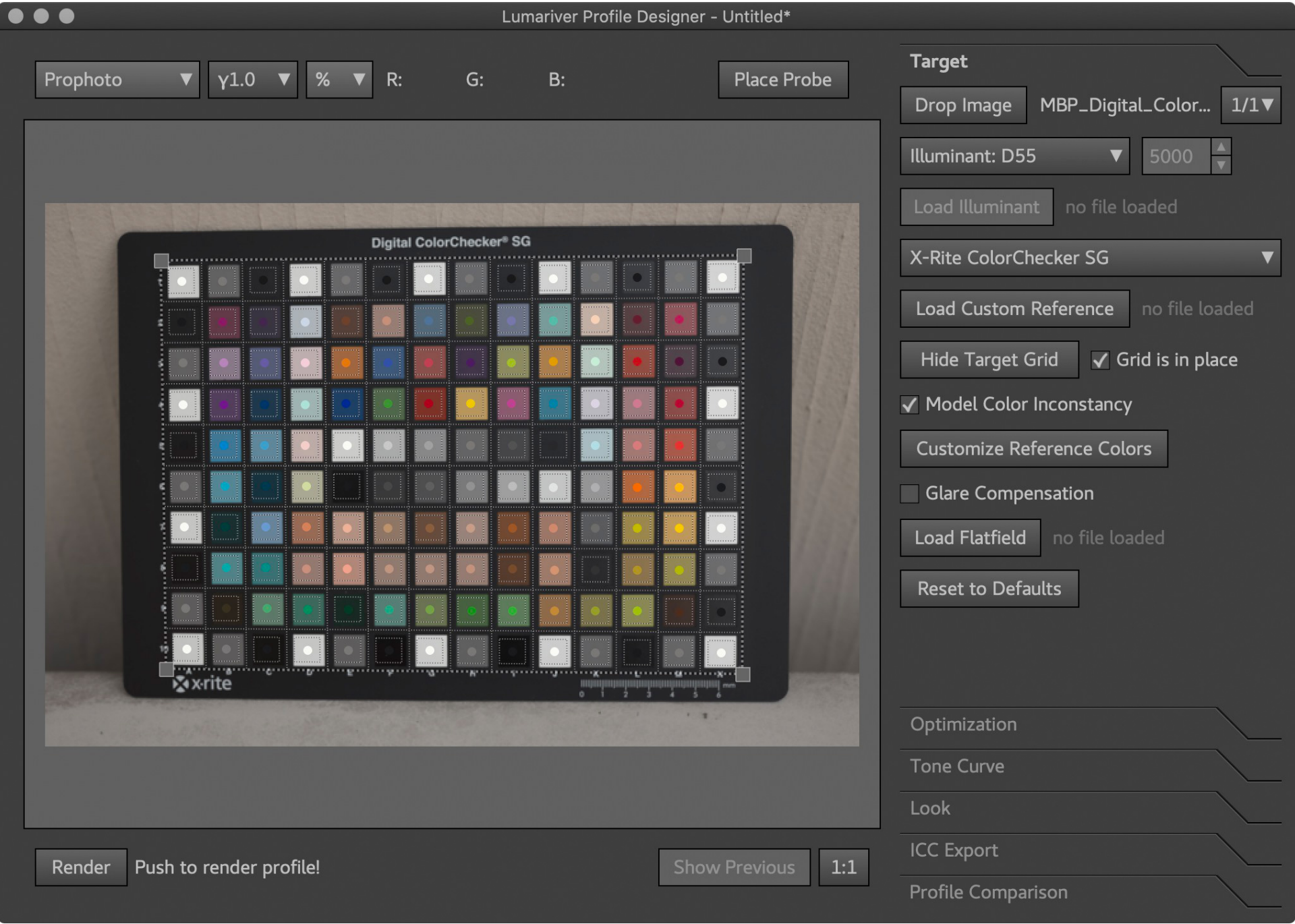


of the image repeating the previous step, but this time appended the words Auto_Curve to the filename so that I can easily identify it as we proceed.

Next, assuming you have already installed and licensed your copy of Lumariver Profile Designer, open it and select General-purpose ICC Profile, as you see in the below screenshot.



After that, click on the Load Image button under the Target dialog that should already be selected when you start Lumariver. In the screenshot at the top of the next page it says Drop Image because I have already loaded the image when I captured this. You will just need to hit the Load Image button and select the Linear TIFF that we exported first of the two.



Also, select the Illuminant which is closest to the White Balance that you made a mental note of earlier. My image was 5757 Kelvin, so I chose D55. Next, select your target from the pulldown that says X-Rite ColorChecker SG in my screenshot. Again, I've already selected this. After that, select Show Target Grid, and align the corners of the grid that will appear with the plus symbols in each corner of your ColorChecker, as you can see in my screenshot.

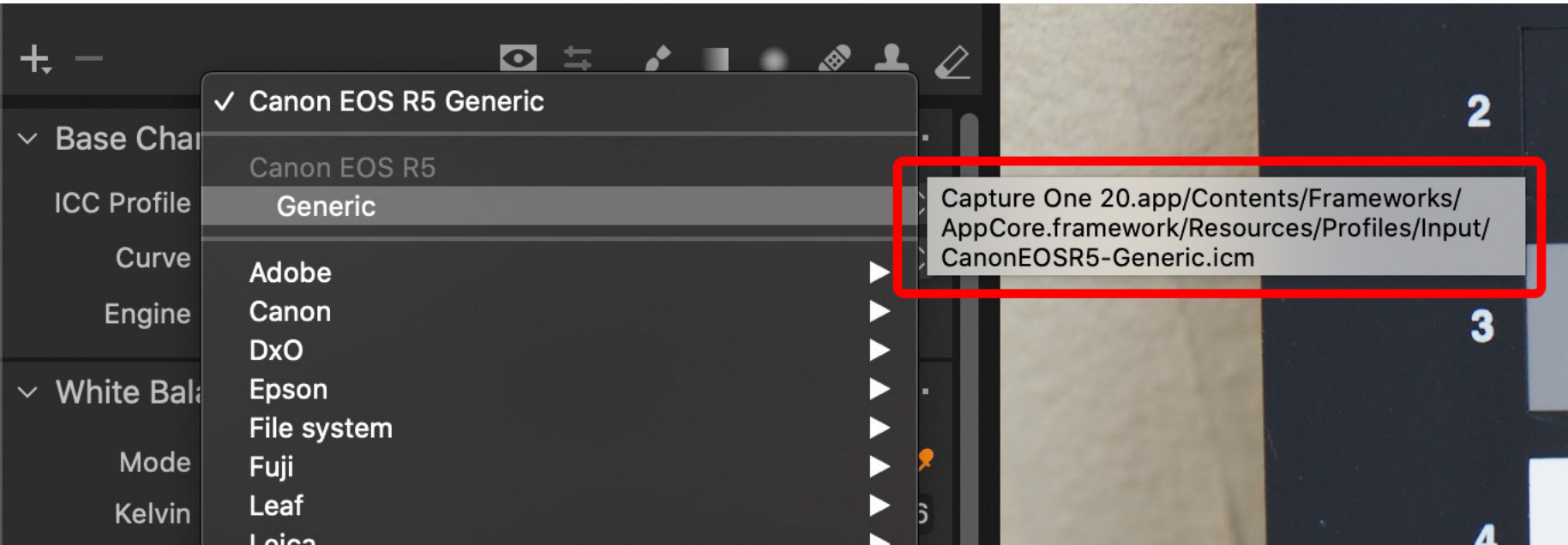
Now select the Tone Curve option in the bottom right of the Lumariver dialog, and select Load Base Curve, and load the second of the two images that you exported earlier, marked with Auto_Curve in my example. Then, under the Curve Mode pulldown, select Add to Base Curve, and then select Curve: Custom and press the Load Custom Curve button and a dialog will open.

Leave that dialog open and go back to Capture One Pro, and go back to the Base Characteristics panel, and locate an image that still has your default camera profile selected, not the one that you used for this export because we changed that.

Locate Generic Capture One Pro Camera Profile

In my case, the Canon EOS R5 Generic profile was selected. Mouse over the profile that is applied to your images, and you should see a popup with the path to the Generic Capture One Pro profile that your camera has been using (top of following page).

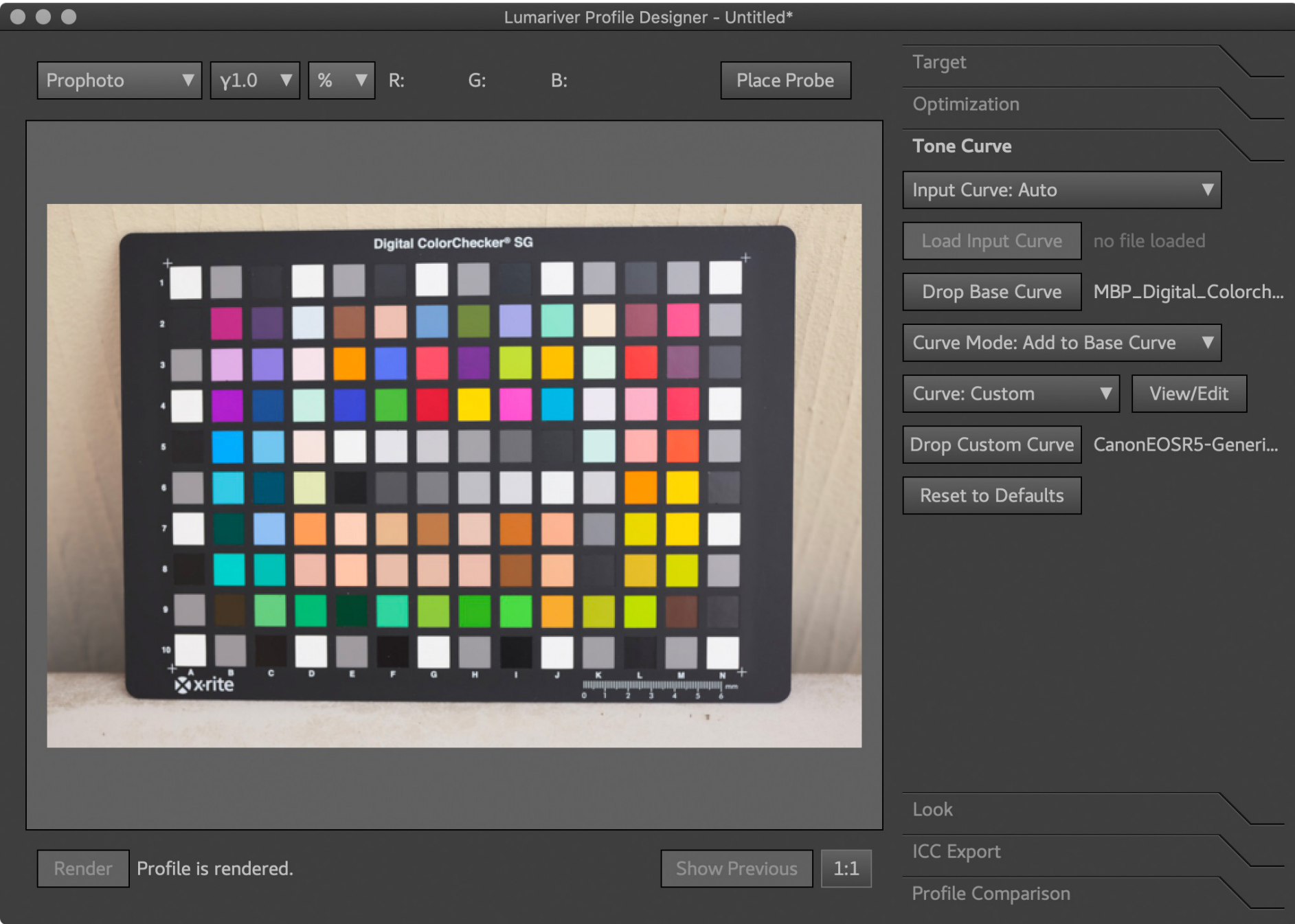
Go to that folder, and locate the profile, then drag the file to the dialog that we left open in Lumariver earlier. This will



move the dialog to your profiles folder and select the file that you just dragged, ready for you to import. Also, at this point, note the name of the profile file, or better still, select it and copy the filename to your computer's clipboard for use in a few moments.

The Rendered Profile

Once you have your Generic profile loaded, you are ready to hit the Render button. As you can see in the below screenshot, once Rendered, you should



see a beautiful full-colored version of your original photograph, and this indicates that the process was successful.

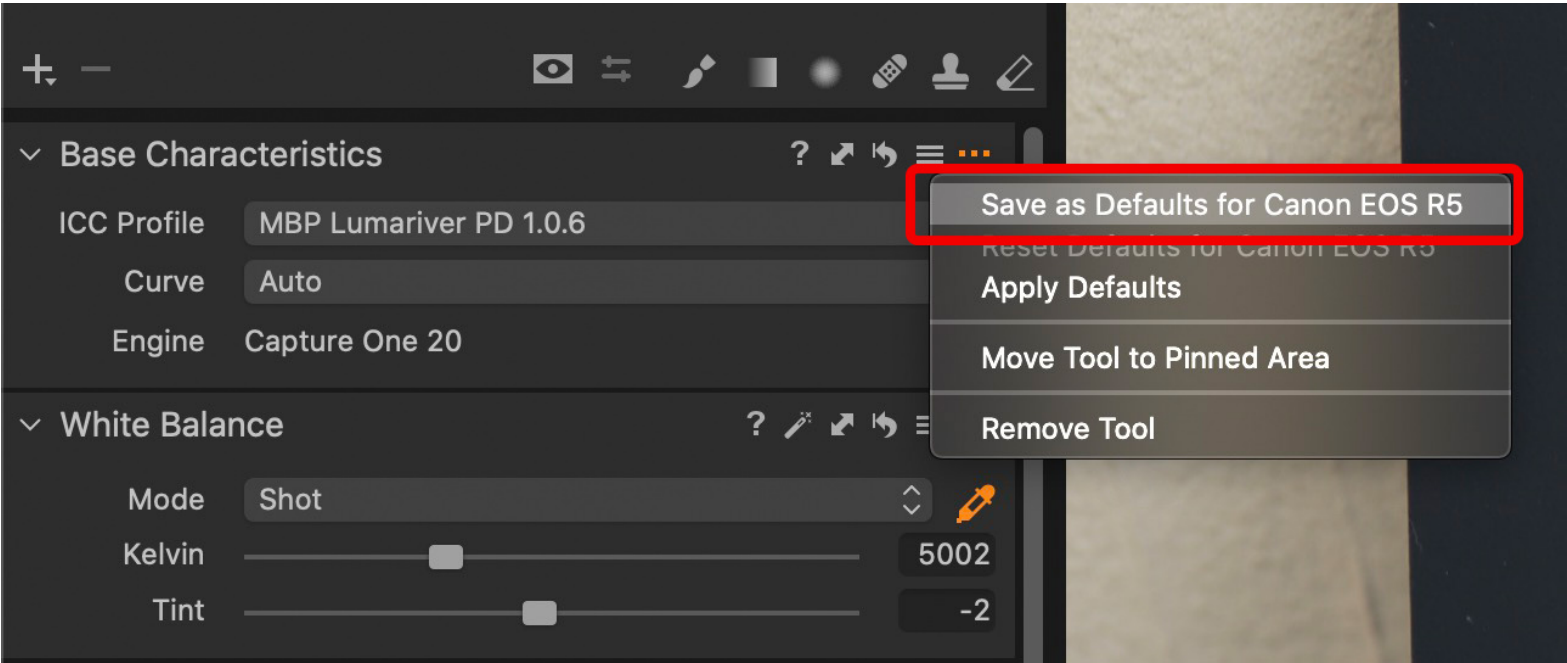
In previous versions, following the Manual as we just did never gave me a useable profile, and I had to select some other options to get that, but now it works right out of the box, which is great.

Go to the ICC Export tab, and type or paste the filename that I asked you to copy to your clipboard a few moments ago. You just need the first part of the filename, up to the hyphen, which is CanonEOSR5 in my example, and then you want to add something descriptive after that. If you don't use the same start of the filename as your camera's generic profile, the new profile will not be listed with your Generic profile under the Base Characteristics ICC Profile pulldown. Any other filename will cause your profile to be listed under the Other section, and that makes it more difficult to locate later.

Save as Defaults for Camera

If you do that, from now on, all images that you import into Capture One Pro from the same camera will get this new camera profile assigned. If you prefer to just assign the profile yourself, skip the last step, and just select the profile from the pulldown manually when you want to apply it. To apply the new profile to images that were imported before you created this new profile, you just need to select them, and then select the new profile. If you made the new profile the default, you can also just select Apply Defaults.

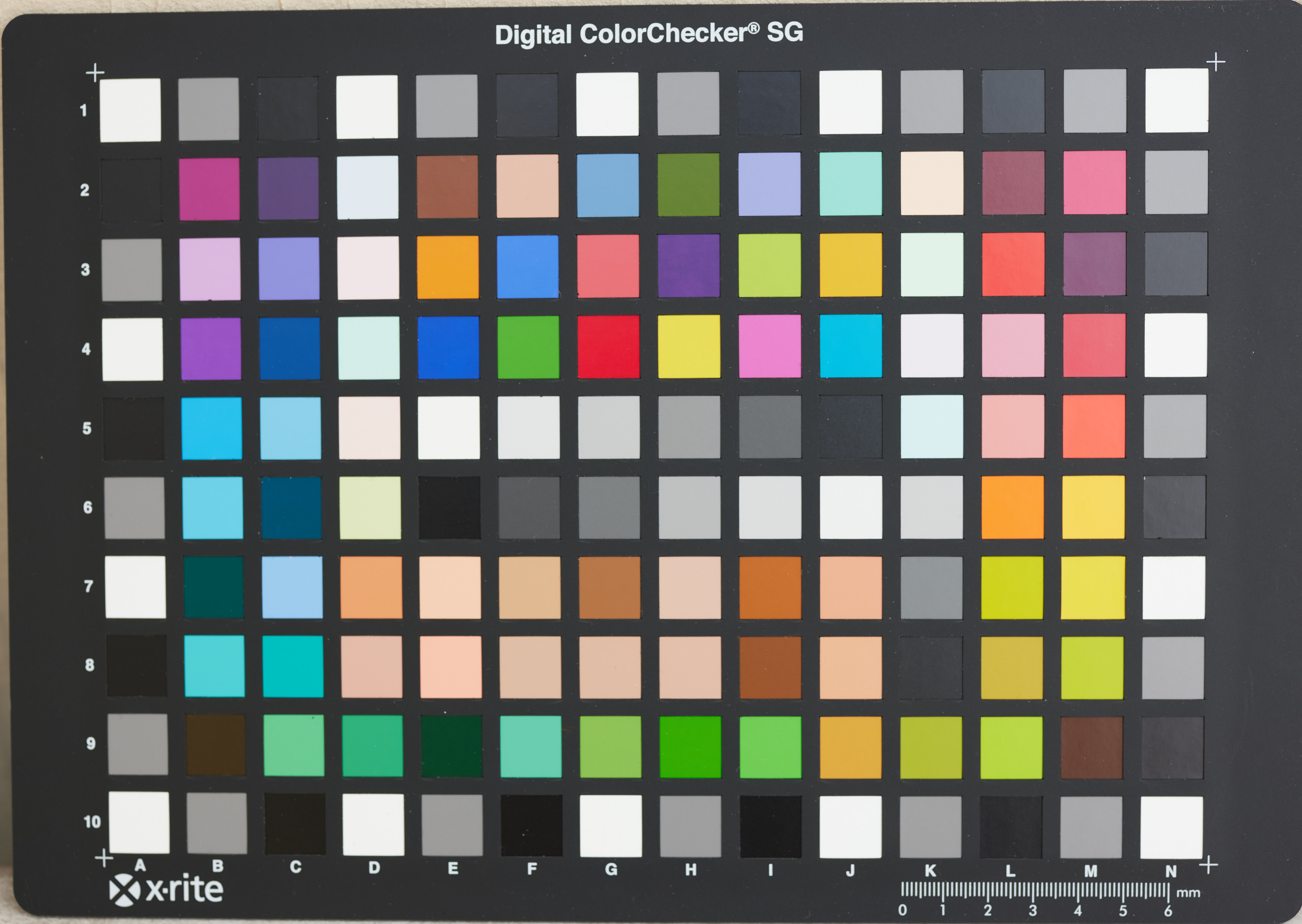
Note too that the first part of the profile filename, used to identify it and group the profile correctly, is not included in the pulldown, because it is displayed under the camera's profiles. This is why you still want to give it a meaningful name after the hyphen. Also, if you want to see your original target photo in full

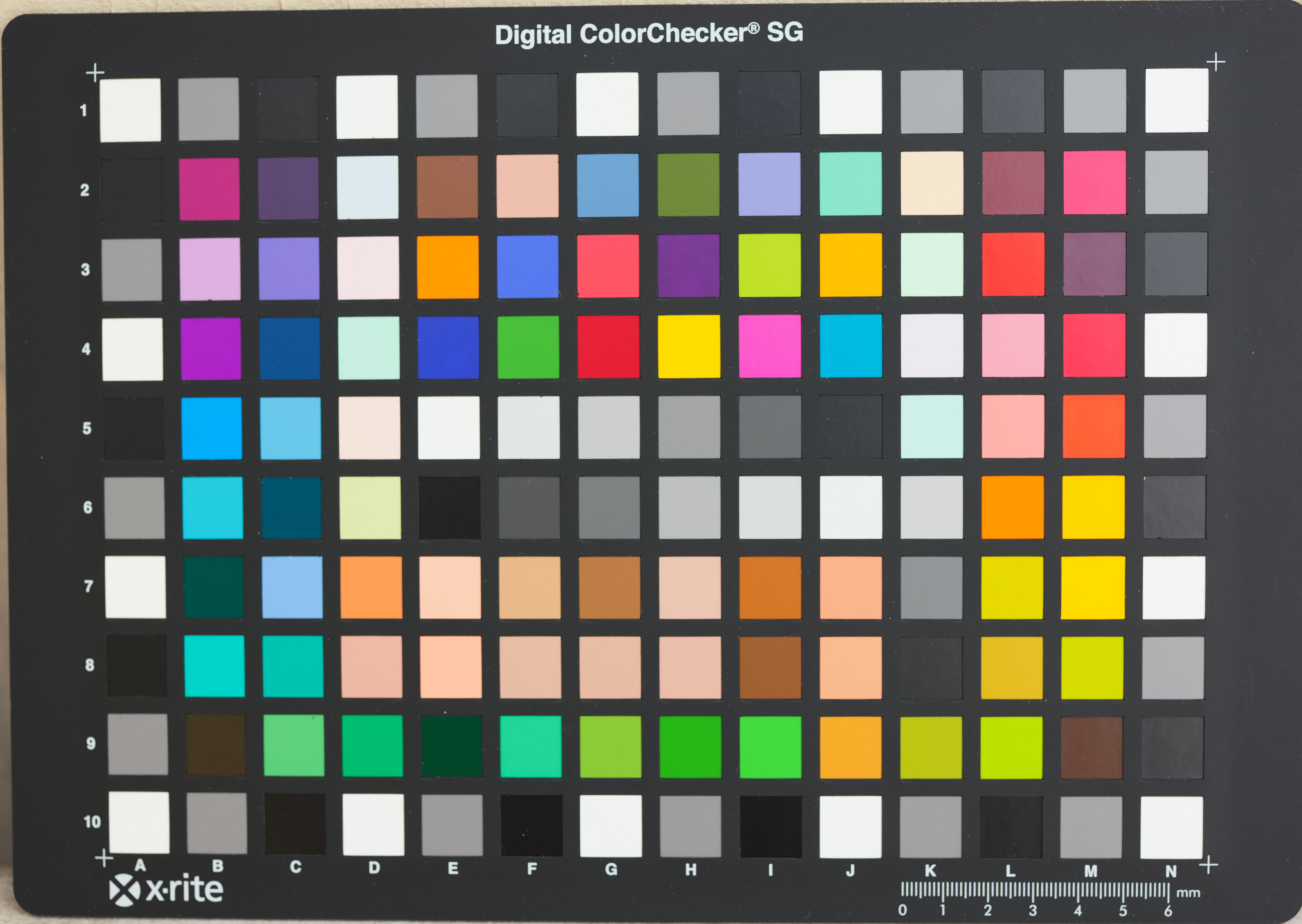


Check your profile, and see if it is at least marginally better than the Capture One Pro Generic camera profile. The one that I just created is, so I am going to use it by default for my EOS R5 from now on. To make that happen, right-click the ellipses in the top right corner of the Base Characteristics panel, and select Save as Defaults for Canon EOS R5 or whatever your camera is called.

splendor, you'll need to change the Linear Response curve back to Auto or whatever you use, as well as assigning the new camera profile.

So that you can see the difference, on the following two pages I'll add the Before / After images. If you can't tell in the eBook, [visit the post](#) and use the slider towards the bottom of the page.





If you are interested in grabbing a copy of Lumariver Profile Designer to create your own profiles, you'll find it at www.lumariver.com and note that to create profiles for Capture One Pro as we've done in this tutorial, you will need at least the Pro Edition, and the Repro Edition also works for this. The Basic Edition does not work. That will only create DNG based camera profiles, but that should mean that it will be enough if you use Adobe Camera Raw based camera profiles. Also, if you need a ColorChecker target, you can get both the ColorChecker Passport and the Digital ColorChecker SG from our friends at B&H Photo or Amazon and if you use our affiliate links it helps to keep the lights on the content coming, as well as being very much appreciated.

Affiliate Links

ColorChecker Passport on B&H Photo <https://mbp.ac/ccp>, and on Amazon.com <https://amzn.to/2RwrCOq>.

Digital ColorChecker SG on B&H Photo <https://mbp.ac/ccsg> and on Amazon.com <https://amzn.to/3c5ApjK>.

Bonus Photo

That's the end of this post, but we were left with a lot of space on this last page, so I've added a photo that I will be sharing next week, in a tribute to my EF 100-400mm lens that I just let go to put the money towards the RF 100-500mm lens. I'm a little sentimental, but I find it important to pay my respects to lenses that I let go, even though they go on to new homes and hopefully owners that enjoy working with them as much as I did. :)



This article was first published on Sept 17, 2020

See You Online!

Check out our Tours & Workshops, eBooks and fine art prints and other products and services, or listen to the audio of our articles on our website!

<https://martinbaileyphotography.com>

Notice of Rights

All rights reserved. No part of this book may be reproduced or transmitted in any form by any means without the prior written permission of the publisher.

Copyright © 2020 - All Rights Reserved