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Lighting

EL Zone Exposure System- how does it work and how do you use it

EL Zone False Color

MATTHEW ALLARD ACS 2 WEEKS AGO 26

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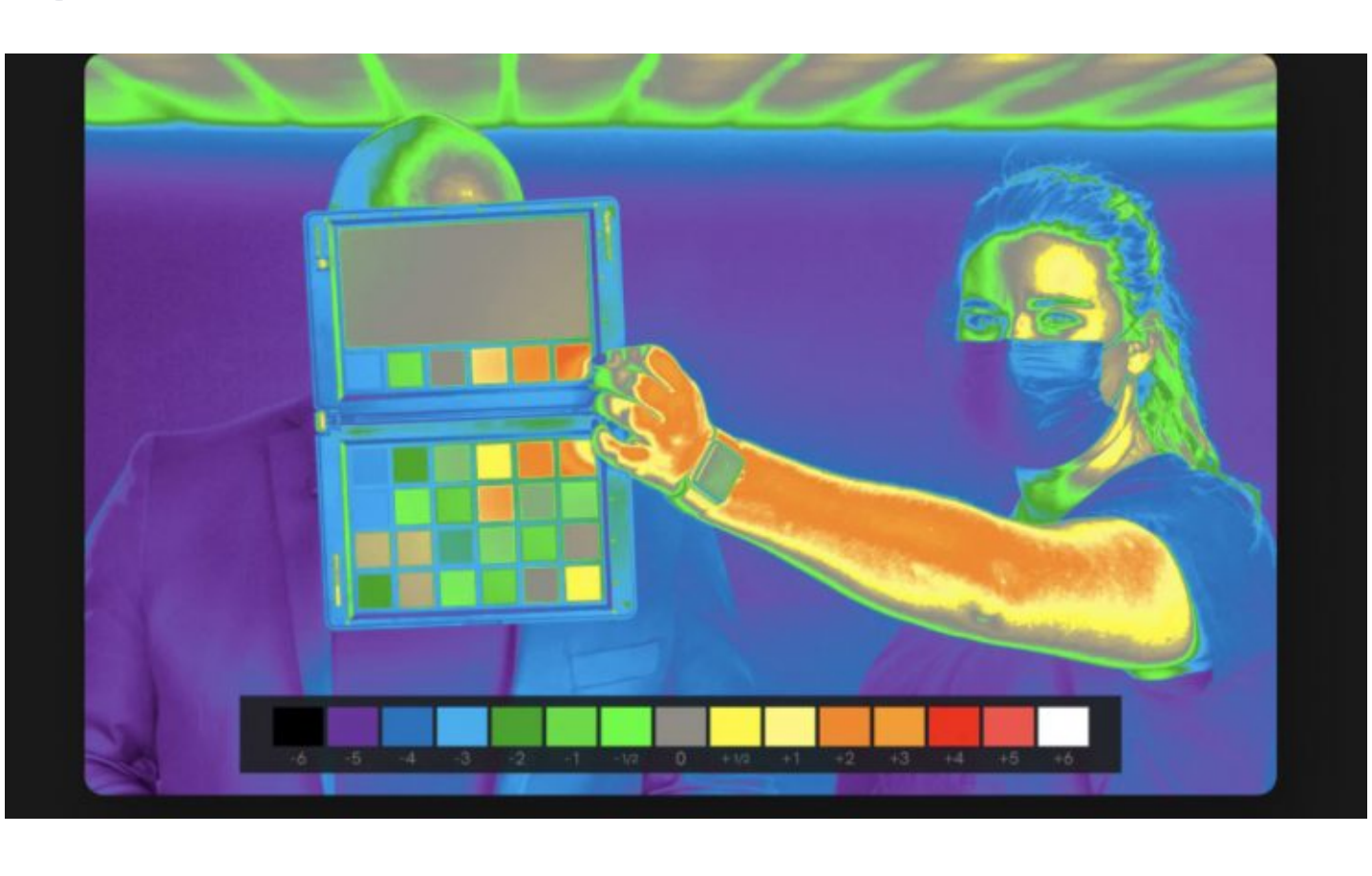
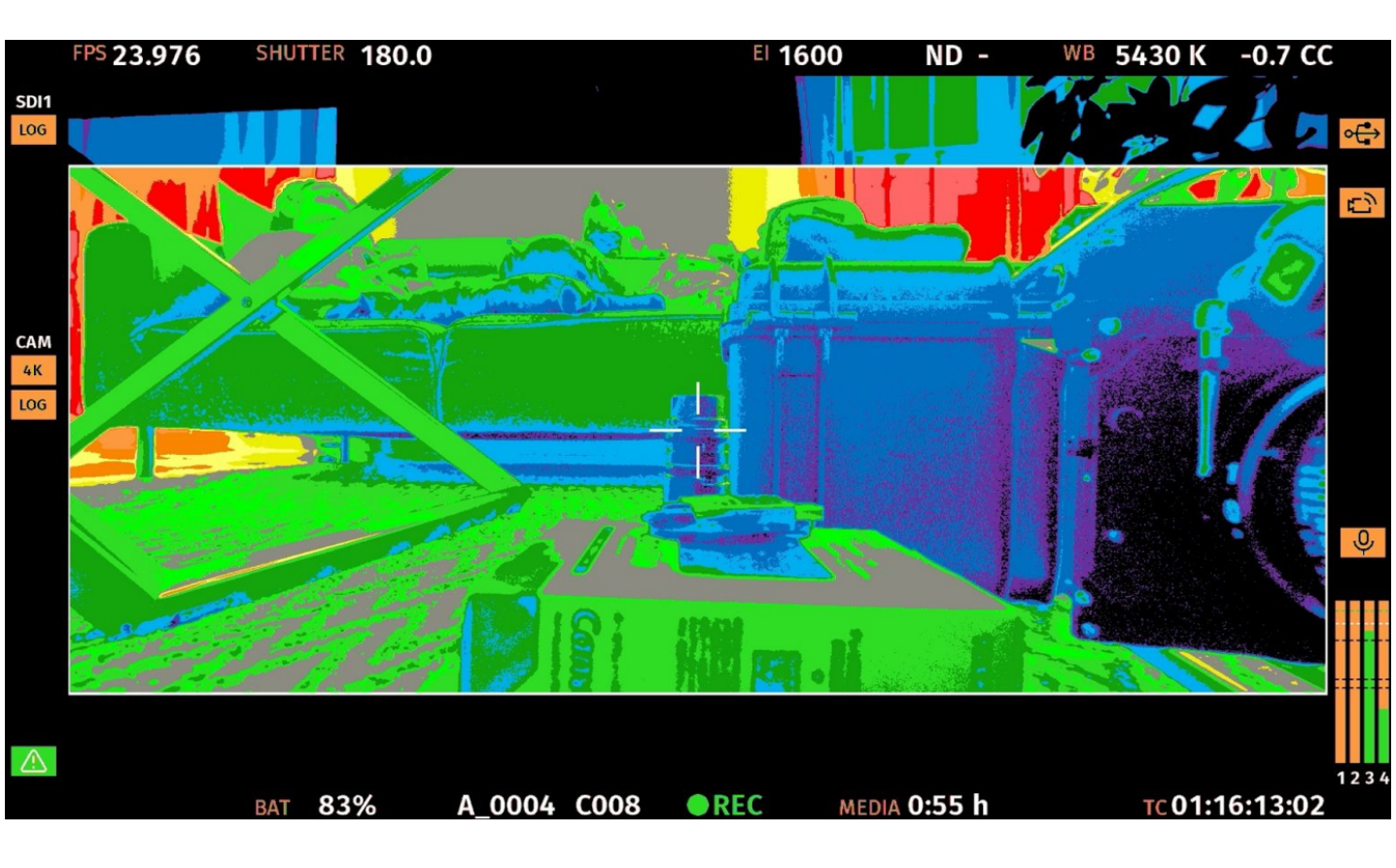


EL Zone is an exposure tool that is based on stop values that relate one-to-one with lenses and light meters. It has been around for quite a while now, but I thought that it was worth looking into in more detail.

What is the EL Zone exposure system?

The EL Zone exposure system which was designed by cinematographer Ed Lachman, ASC, is an innovative tool for displaying exposure values using stops. EL Zone is similar to false color, however, it allows for higher precision, greater consistency, and more intuitive on-set communication.



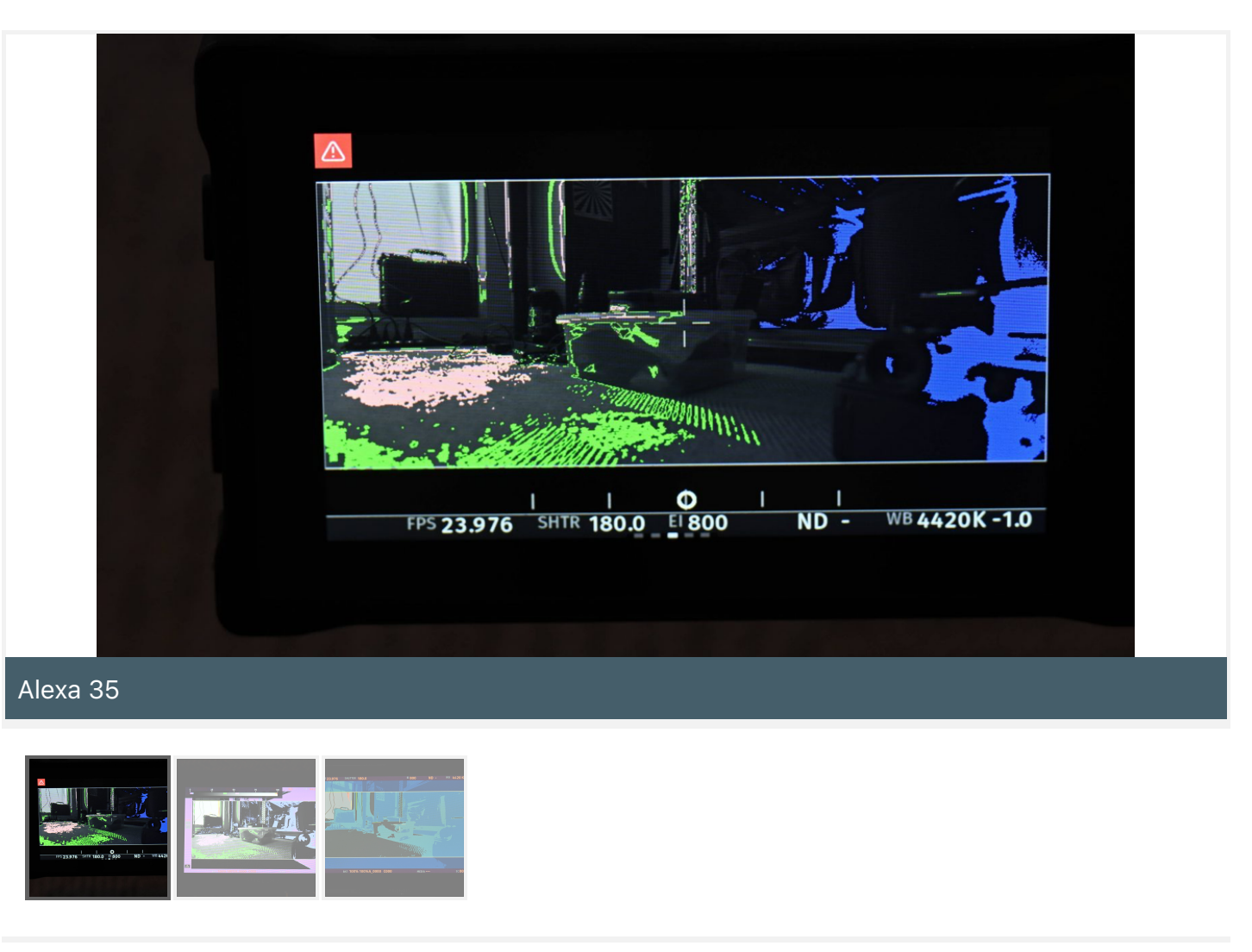
EL Zone can be found in SmallHD monitors that are running the latest PageOS 5 operating system. El Zone is only possible to use if you are feeding your SmallHD monitor a Log signal. It doesn't work if you are inputting a signal with a LUT or Look enabled.

How is it different from False Color?

False color and waveform assist tools are based on IRE values, which track percentages in voltage. False color works by comparing the relative luminance values by sampling data on a colored scale. This colored scale represents IRE values from 0 to 100%. The IRE scale (false color) was developed way back in the 1950s by The Institute of Radio Engineers.

The problem with false color on most monitors is that it isn't mapped to any particular camera and nothing is standardized. Different monitors and cameras show false color in different ways.

I have constantly complained about this for years. So many monitors that get released have false color as an assist tool, but they can be generic indicators at best and are not mapped specifically to individual cameras and everyone uses different colors and scales. Different cameras have different IRE values for various exposure points, especially middle grey. If false color isn't mapped to the camera you are using, then making exposure choices based on false color may not be accurate. For a camera like the Alexa 35 where the IRE value for middle grey is 28%, you are not going to get an accurate false color display on most monitors because it is just assuming that middle grey should be somewhere around 45-52 IRE.



Alexa 35

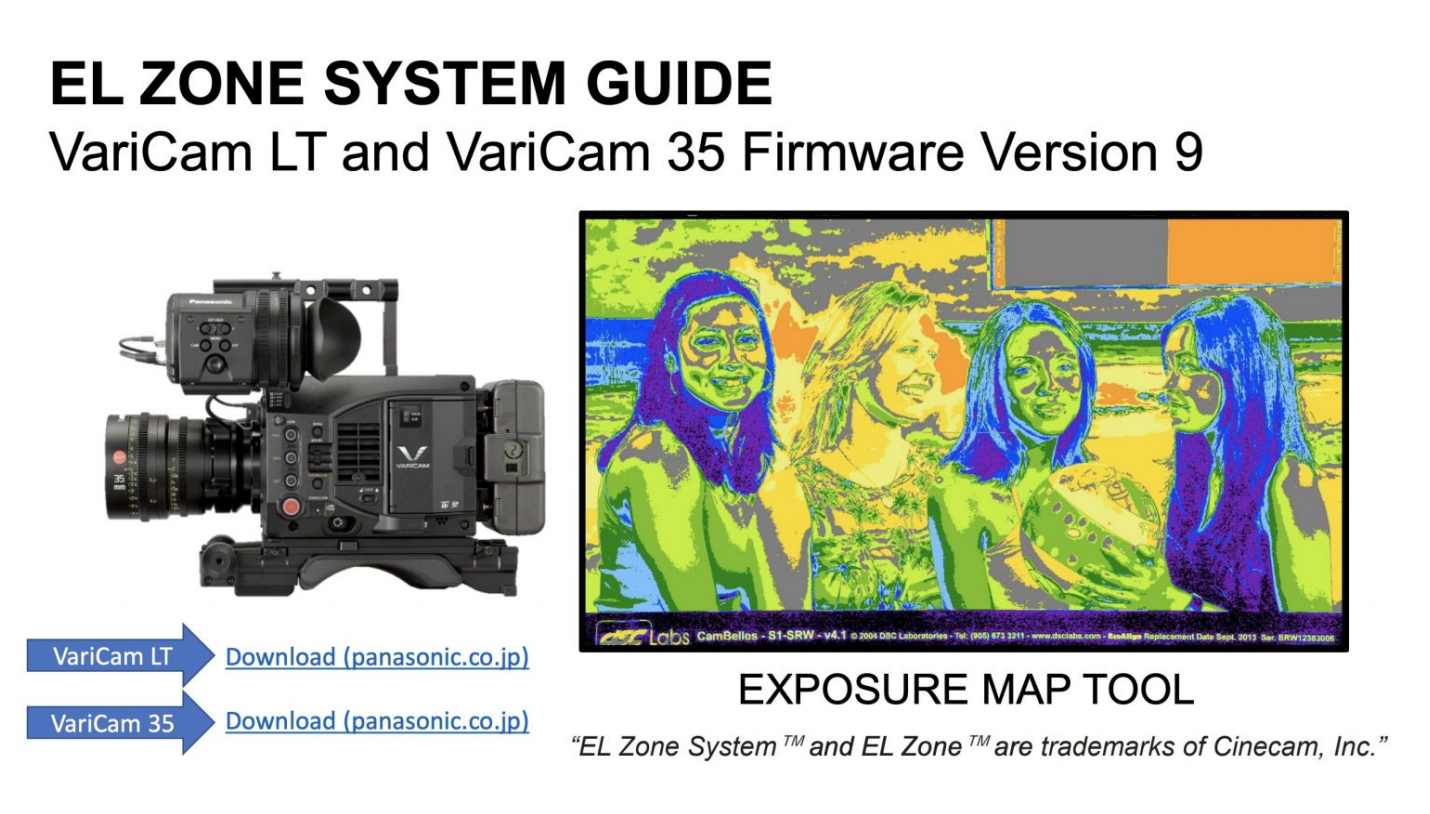
Above is a prime example of what I am talking about. Let's compare the false color on the Alexa 35's screen, a SmallHD Ultra 5, and an Atomos Ninja 5 when they are all being fed the exact same signal. As you can see, the SmallHD is very similar to the ARRI, but the Ninja V is showing me colors that are completely different. This is where consistency is key. Because false color is being displayed in so many different ways it becomes confusing for the end user. This is where you want the false color that you are seeing on your camera to match the false color you are seeing on your monitor.

To be fair, false color, regardless of how it is being displayed, is still going to get you in the ballpark, and for a lot of users, close enough is good enough. If you have a camera that has false color as one of its exposure tools, then you already have a leg up because it has been mapped to your camera.

At least on monitors from SmallHD, you can set up your own false color scale or you can use the pre-mapped ARRI one which is what I do. Using false color on any monitor that hasn't been mapped to a particular camera is not ideal. If you own or use an ARRI, then great, false color works well when combined with a SmallHD monitor, but if you are using a lot of the cheaper monitors, then it won't be as accurate as you think. In saying that it really does depend on the camera. Because a lot of cameras have IRE values for middle grey from around 45-52 IRE you will get a similar result regardless of what false color system is being used.

EL Zone is a system based on 18% gray, which is a universal standard for photography. This way your camera can be your lightmeter or you could also use an external lightmeter as they will be consistent with each other. One of the nice aspects of EL Zone is that you can take a frame grab of a scene to precisely match exposure and lighting later on if you need to do repeat lighting set-ups, maintain consistency, or even do re-shoots.

What cameras & equipment utilize EL Zone?


EL ZONE SYSTEM GUIDE
VariCam LT and VariCam 35 Firmware Version 9
VariCam LT
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VariCam 35
Download (panasonic.co.jp)
EXPOSURE MAP TOOL

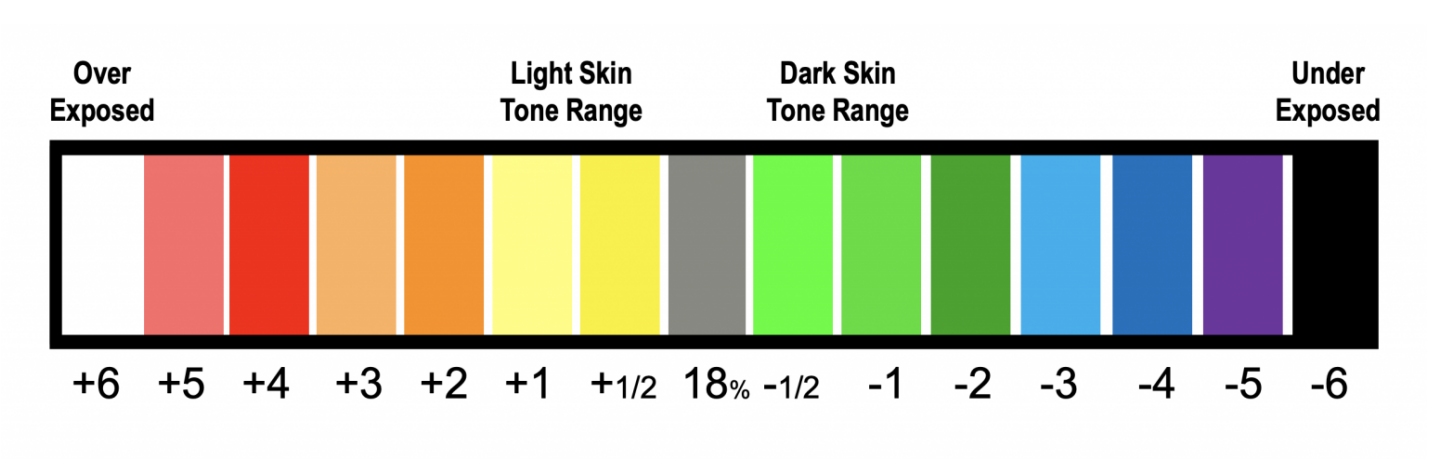
"EL Zone System ™ and EL Zone ™ are trademarks of Cinecam, Inc."

Maybe a lot of our readers won't know this, but EL Zone was incorporated into the Panasonic VariCam LT and 35 via a firmware update that was released back in April 2021. To my knowledge, these are the only cameras that currently utilize EL Zone, apart from the Sigma fp and fp L which received the feature just recently in a firmware update. SmallHD PageOS 5, as I already mentioned, and Colourlab Ai also utilize EL Zone. I think that adoption is going to continue and I think we may well find more cameras and software starting to use it in the future.

So how do you use EL Zone?

EL Zone has 15 delineated zones in 1 stop increments plus + – ½ increments above and below 18% gray for setting precise skin tones and other exposure values. Seeing values in stops makes a lot more sense than seeing IRE values.

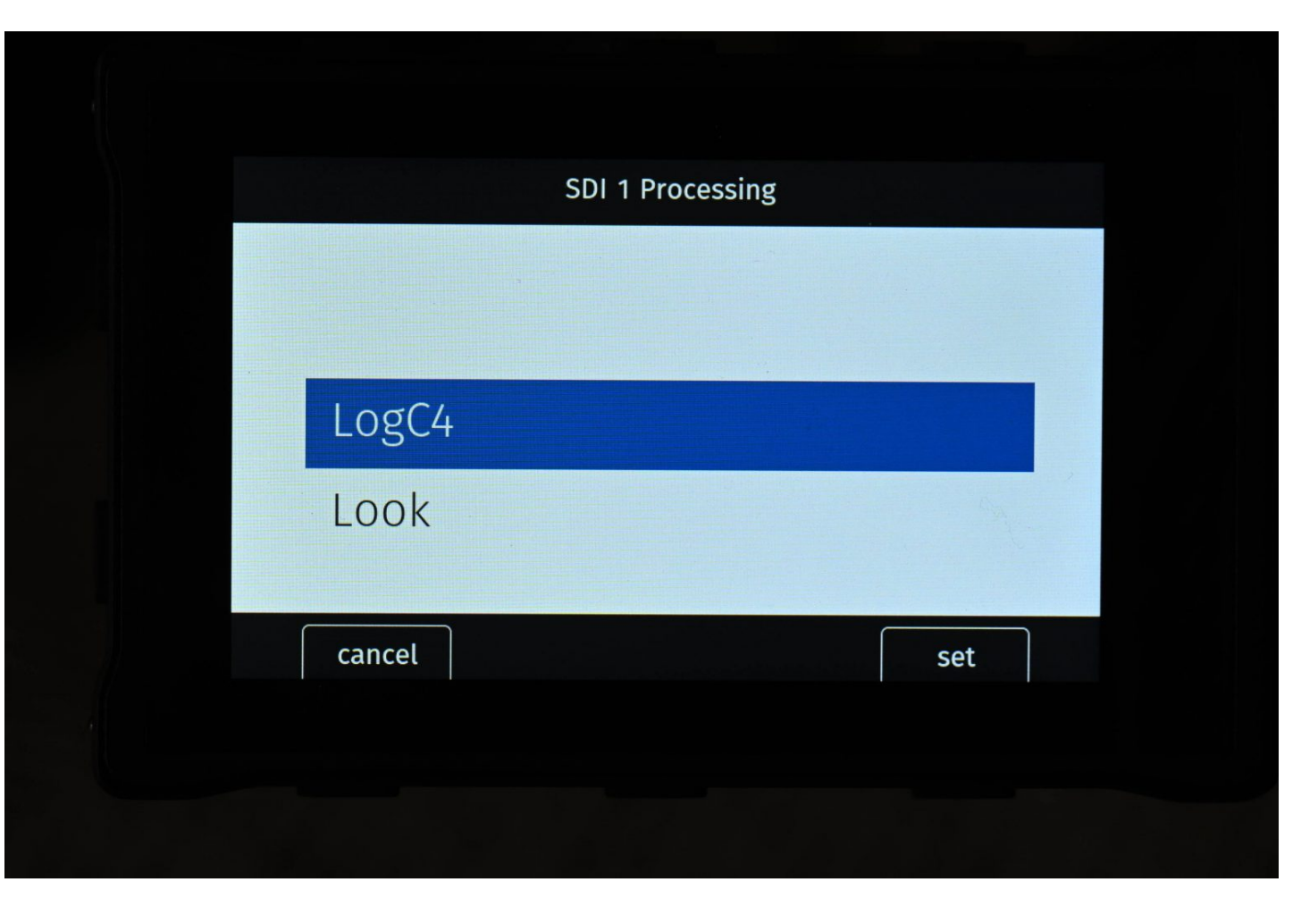
It is easy to use because 18% gray is gray, over-exposure is white, and under exposure is black. I like how this has been implemented because the values make sense. White for overexposure, black for under-exposure, and grey for 18% grey.



Each stop or zone is displayed as a solid color which makes it very easy to identify the exact stop value. This makes it more precise than false color because you are seeing accurate representations of stops above and below middle gray. While false color is a good tool for setting middle grey, skin tones, and displaying if anything is being clipped, it doesn't offer as much information as EL Zone does.

Because EL Zone shows exposure values for an entire scene, it makes light level adjustments a lot easier. If you are communicating with a gaffer, this gives you precise readings that you can see directly from a monitor. While you could certainly still walk around with a light meter to get readings, with EL Zone a lot of the information for your scene is displayed straight in front of you on one screen.

So now that we know how it works, how do we set it up and use it?



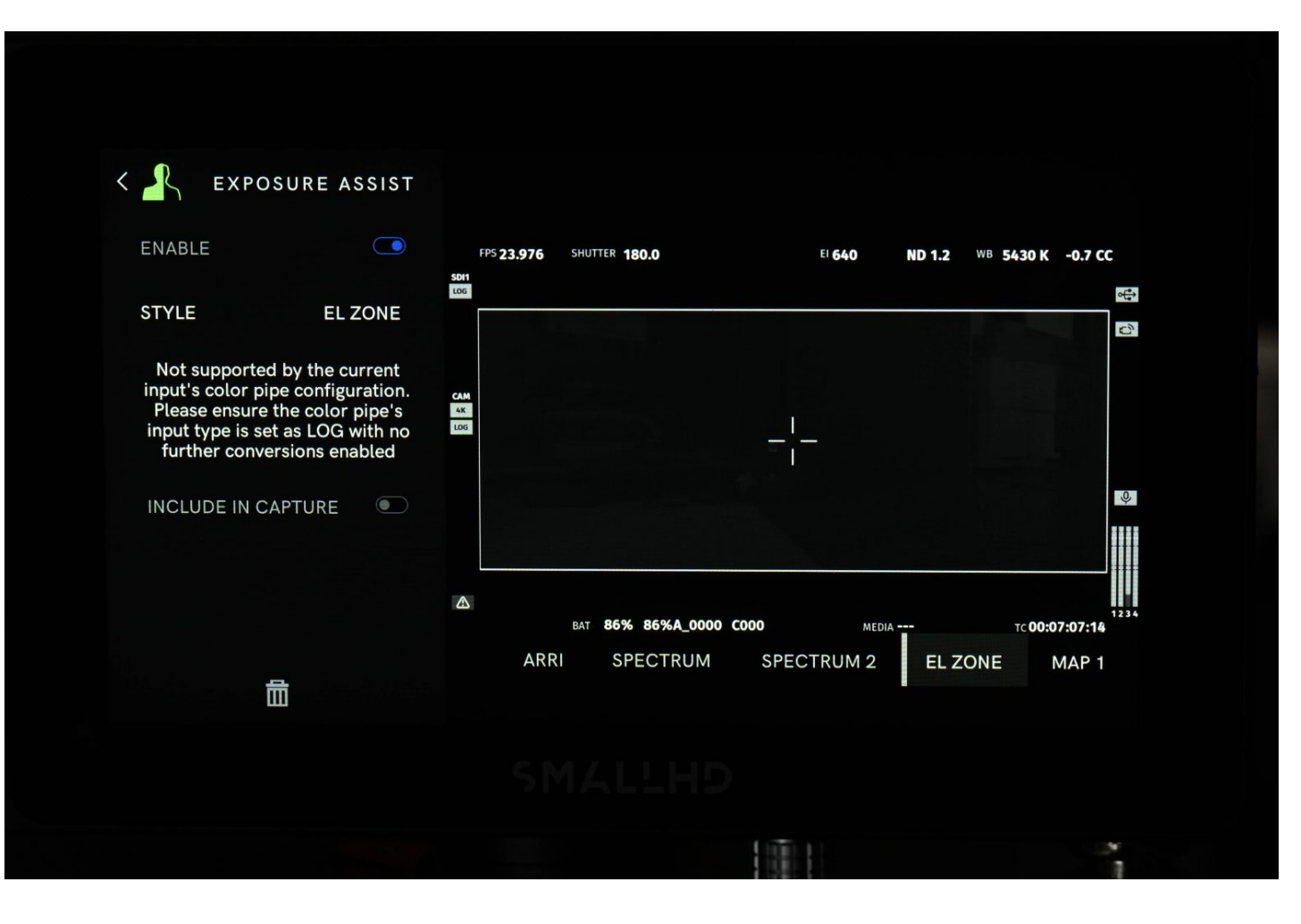
SDI 1 Processing

LogC4

Look

cancel set

As I mentioned earlier, on SmallHD monitors you have to send the monitor a Log image otherwise EL Zone will not work. This means that on your camera you need to make sure that the SDI or HDMI output is sending out a Log image.



EXPOSURE ASSIST

ENABLE

STYLE EL ZONE

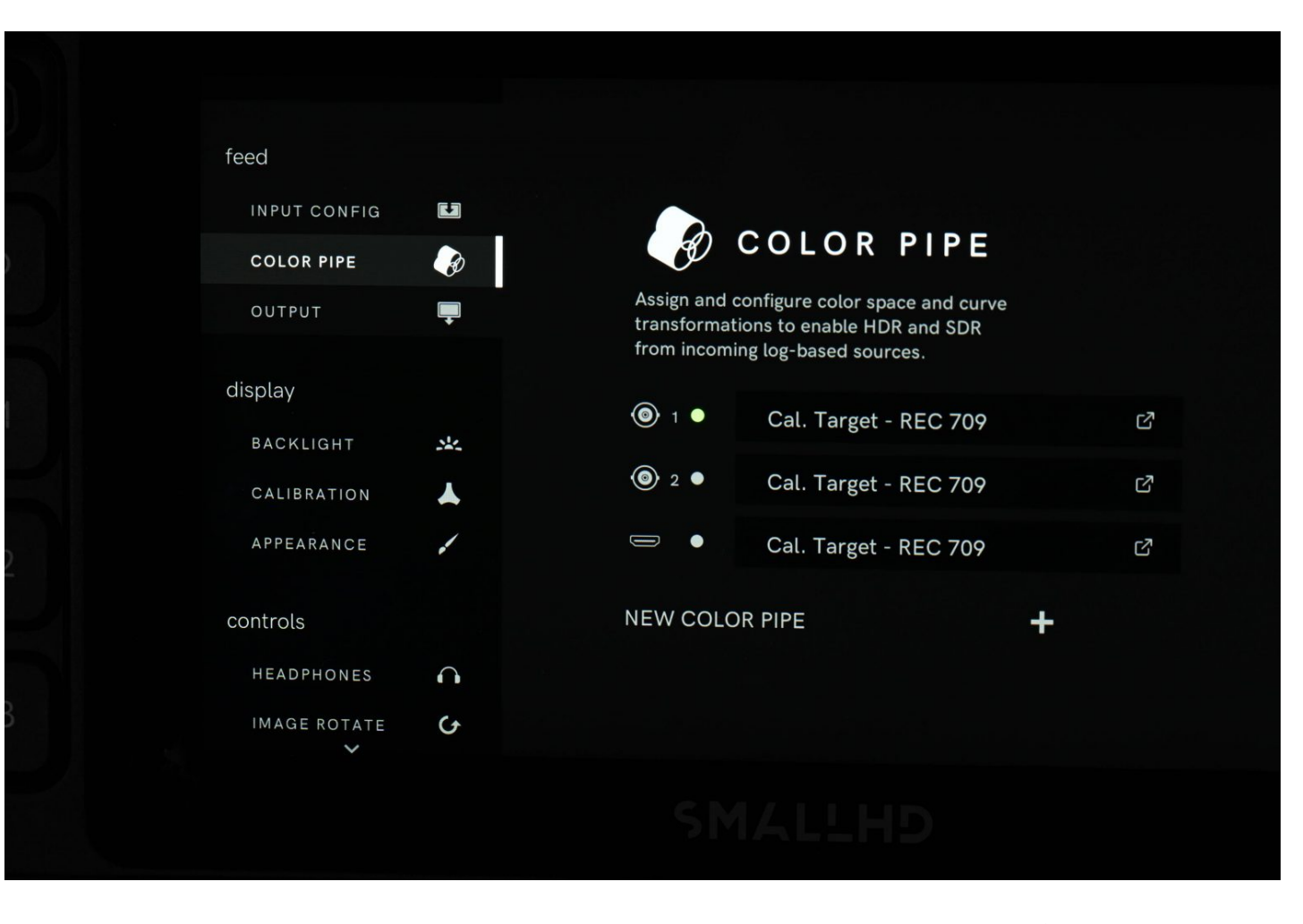
Not supported by the current input's color pipe configuration. Please ensure the color pipe's input type is set as LOG with no further conversions enabled

INCLUDE IN CAPTURE

The reason for this is that the EL Zone scale exceeds the steps (latitude) that Rec.709 LUTs or Looks can display. If you attempt to try and activate EL Zone on a SmallHD monitor and it hasn't been configured properly you will get a visual message.

To set up a SmallHD monitor correctly you need to go into your Color Pipe settings and either create a new Color Pipe setting or select one if you have already done so prior.

So what steps do you need to take to set it up correctly?



COLOR PIPE

Assign and configure color space and curve transformations to enable HDR and SDR from incoming log-based sources.

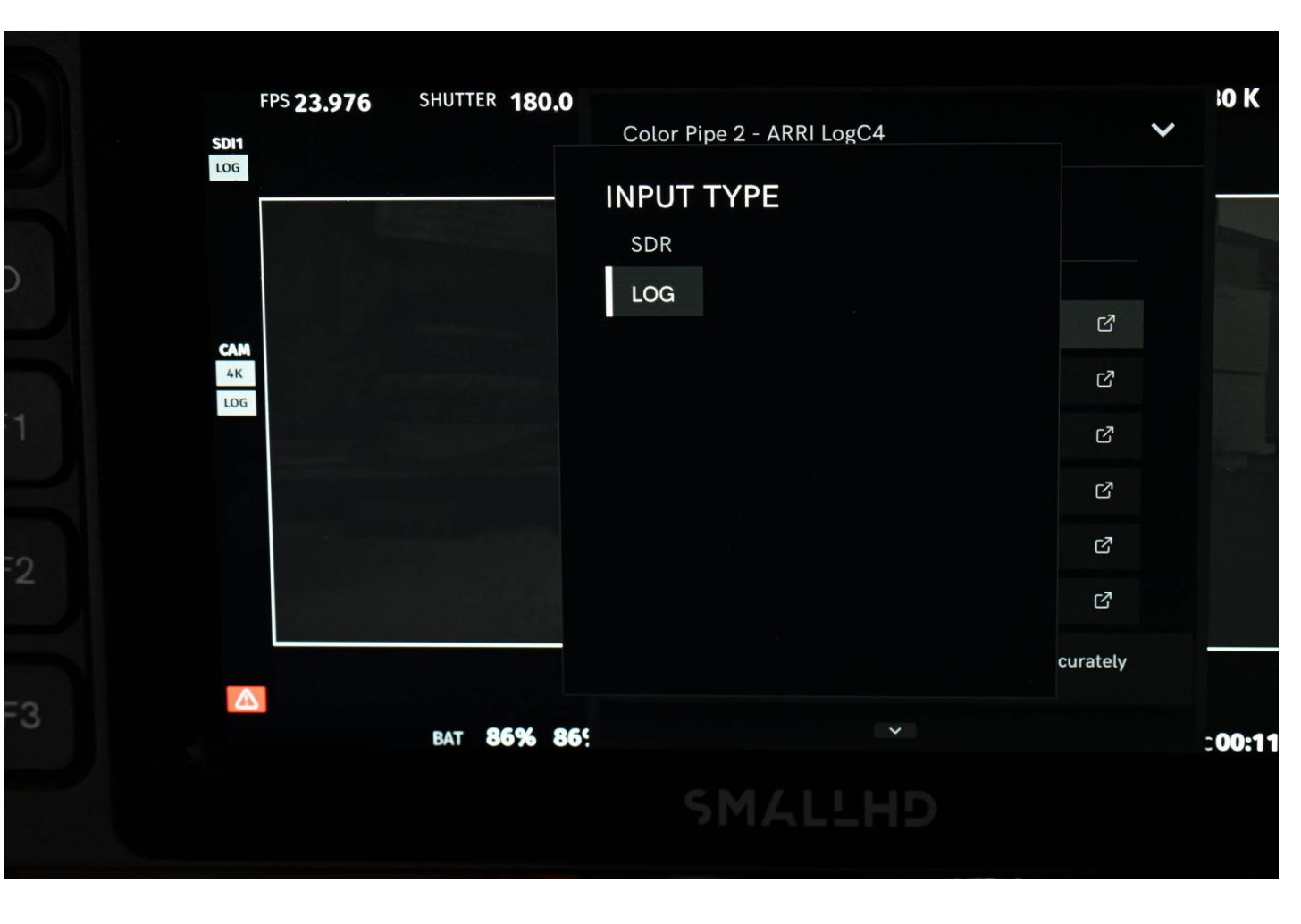
1 Cal. Target - REC 709

2 Cal. Target - REC 709

Cal. Target - REC 709

NEW COLOR PIPE +

First, you need to create a new Color Pipe by clicking on ***New Color Pipe***.



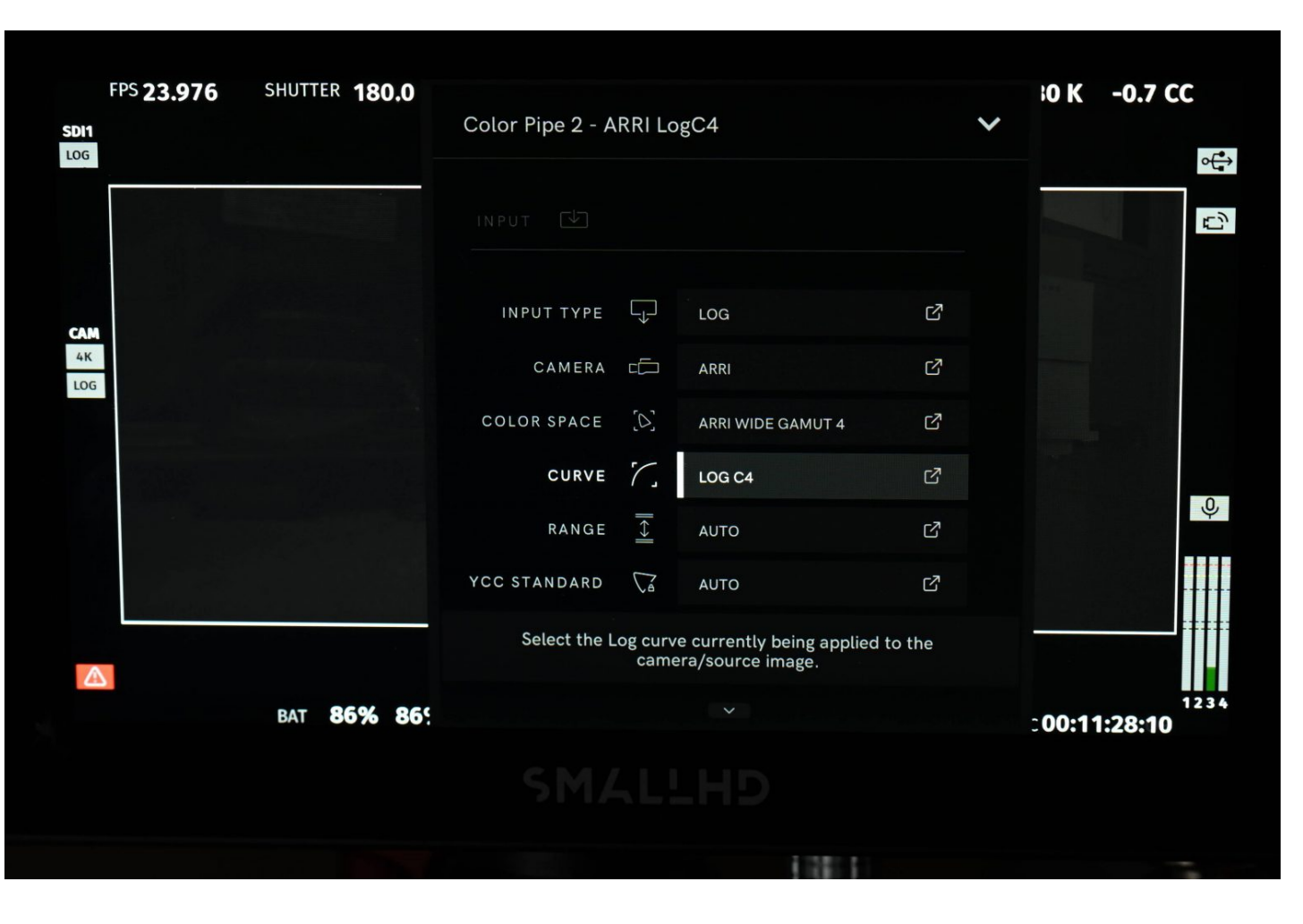
Color Pipe 2 - ARRI LogC4

INPUT TYPE

SDR

LOG

The next step is to set the ***Input Type*** to ***LOG***.



Color Pipe 2 - ARRI LogC4

INPUT

INPUT TYPE LOG

CAMERA ARRI

COLOR SPACE ARRI WIDE GAMUT 4

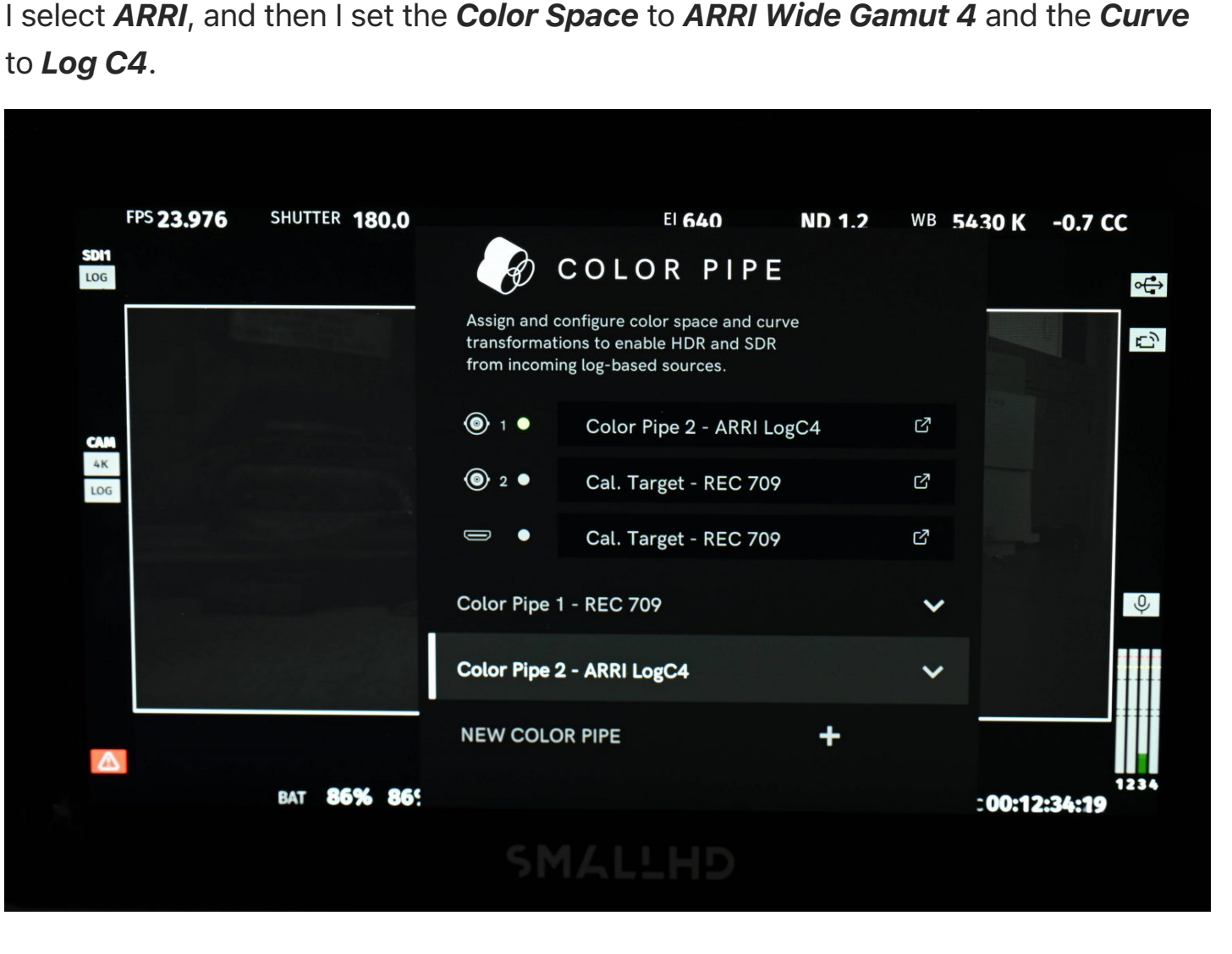
CURVE LOG C4

RANGE AUTO

YCC STANDARD AUTO

Select the Log curve currently being applied to the camera/source image.

You then select the camera type you are using, in this case, because it is the Alexa 35 I select ***ARRI***, and then I set the ***Color Space*** to ***ARRI Wide Gamut 4*** and the ***Curve*** to ***Log C4***.



COLOR PIPE

Assign and configure color space and curve transformations to enable HDR and SDR from incoming log-based sources.

1 Color Pipe 2 - ARRI LogC4

2 Cal. Target - REC 709

Cal. Target - REC 709

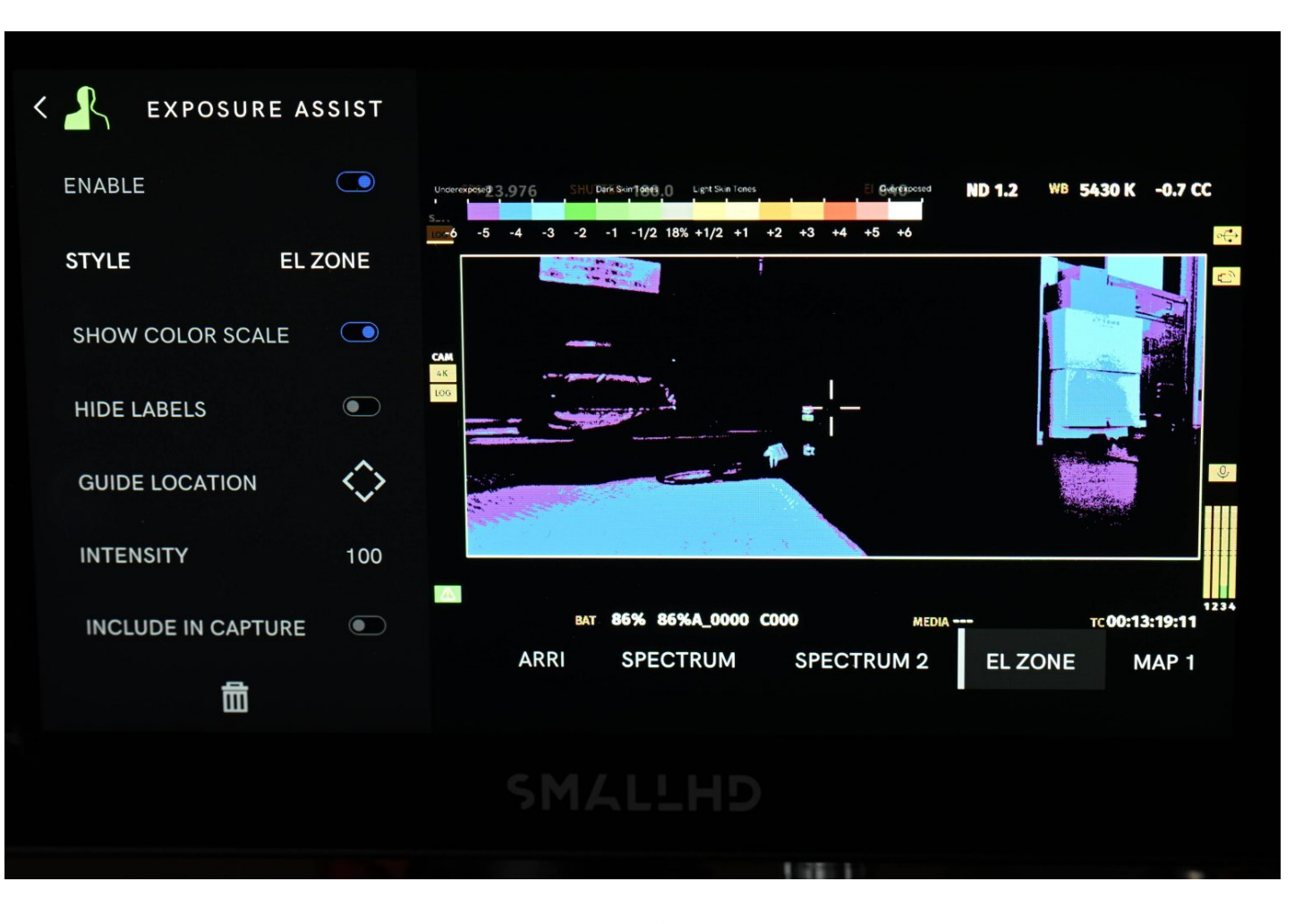
Color Pipe 1 - REC 709

Color Pipe 2 - ARRI LogC4

NEW COLOR PIPE +

I have now set up my Color Pipe correctly to use my camera with EL Zone on a SmallHD monitor. Once the Color Pipe has been created it will be automatically saved on the monitor. You can save multiple Color Pipe settings and recall them depending on what camera you happen to be using.

The only slight caveat with this process is that you can't just send a signal out from your camera that has a Look or LUT applied to it. For EL Zone to work, as I previously mentioned, it needs a Log image. What this essentially means is that you need to have the same LUT loaded up on the monitor that you are using in your camera when you are not using EL Zone.



EXPOSURE ASSIST

ENABLE

STYLE EL ZONE

SHOW COLOR SCALE

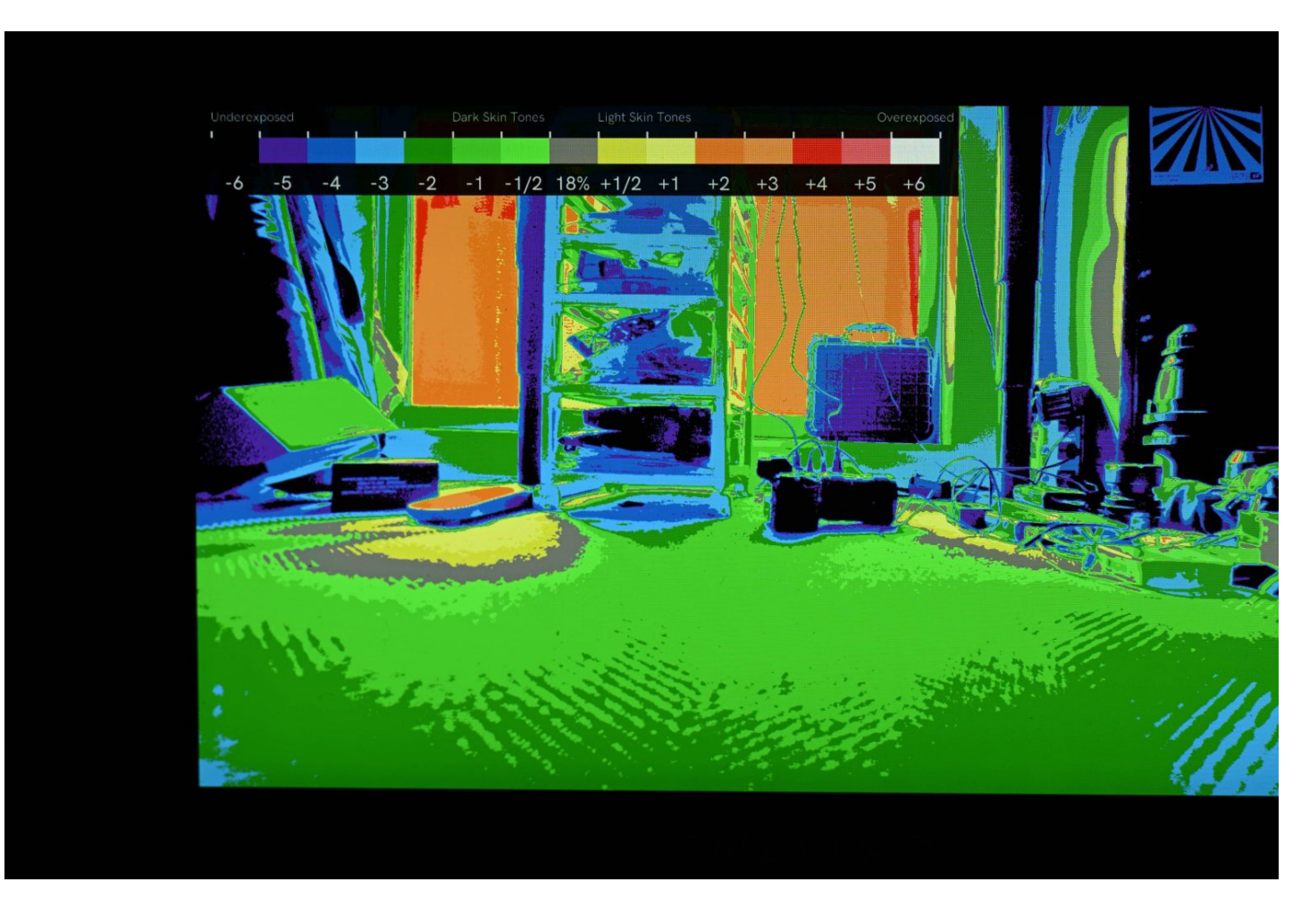
HIDE LABELS

GUIDE LOCATION

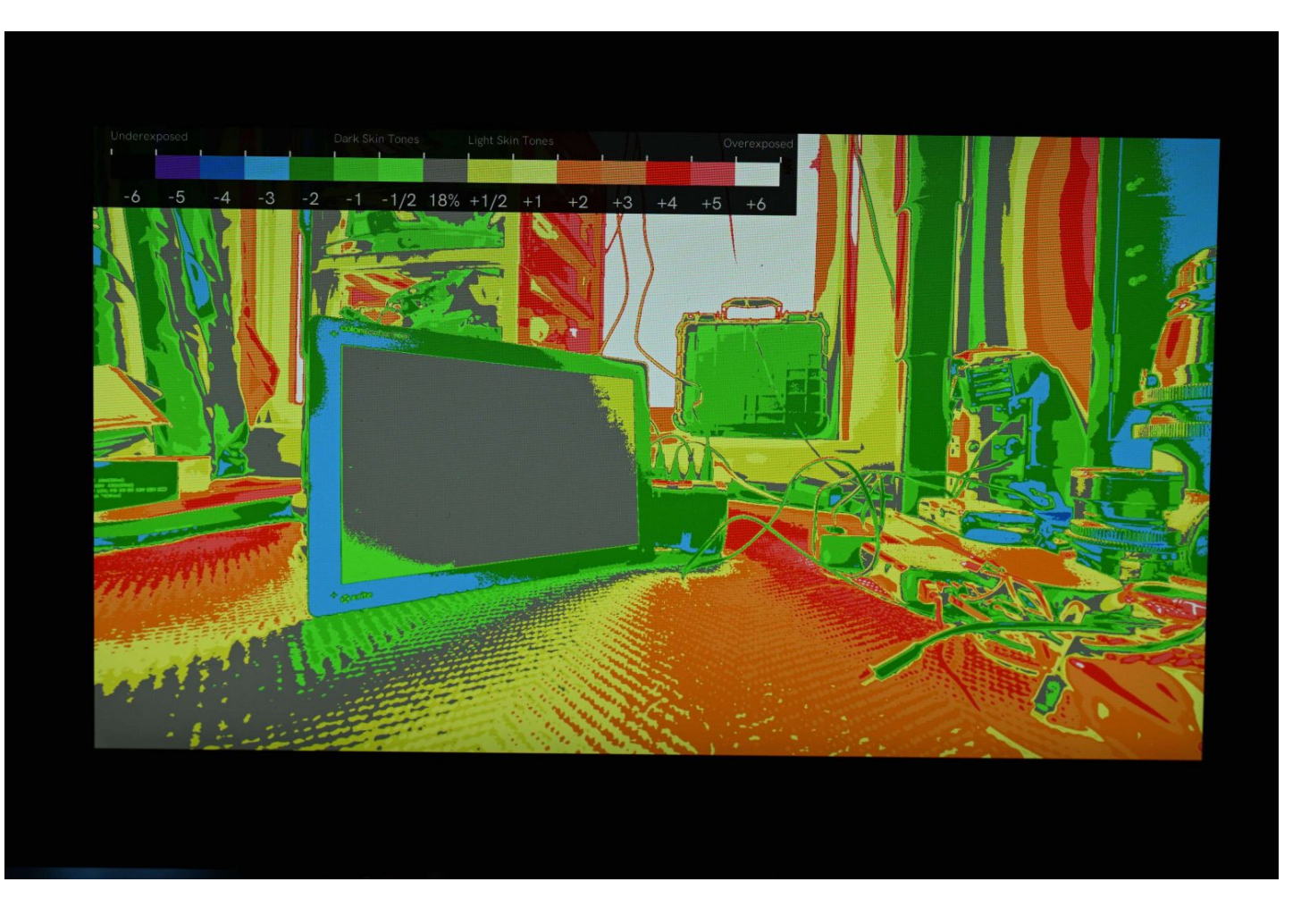
INTENSITY 100

INCLUDE IN CAPTURE

Now, when you activate your ***Exposure Assist*** on a SmallHD monitor and choose ***EL Zone*** you will see the screen that is above. On this screen, it is a good idea to select ***Show Color Scale*** so you get a clear reference for what you are seeing.

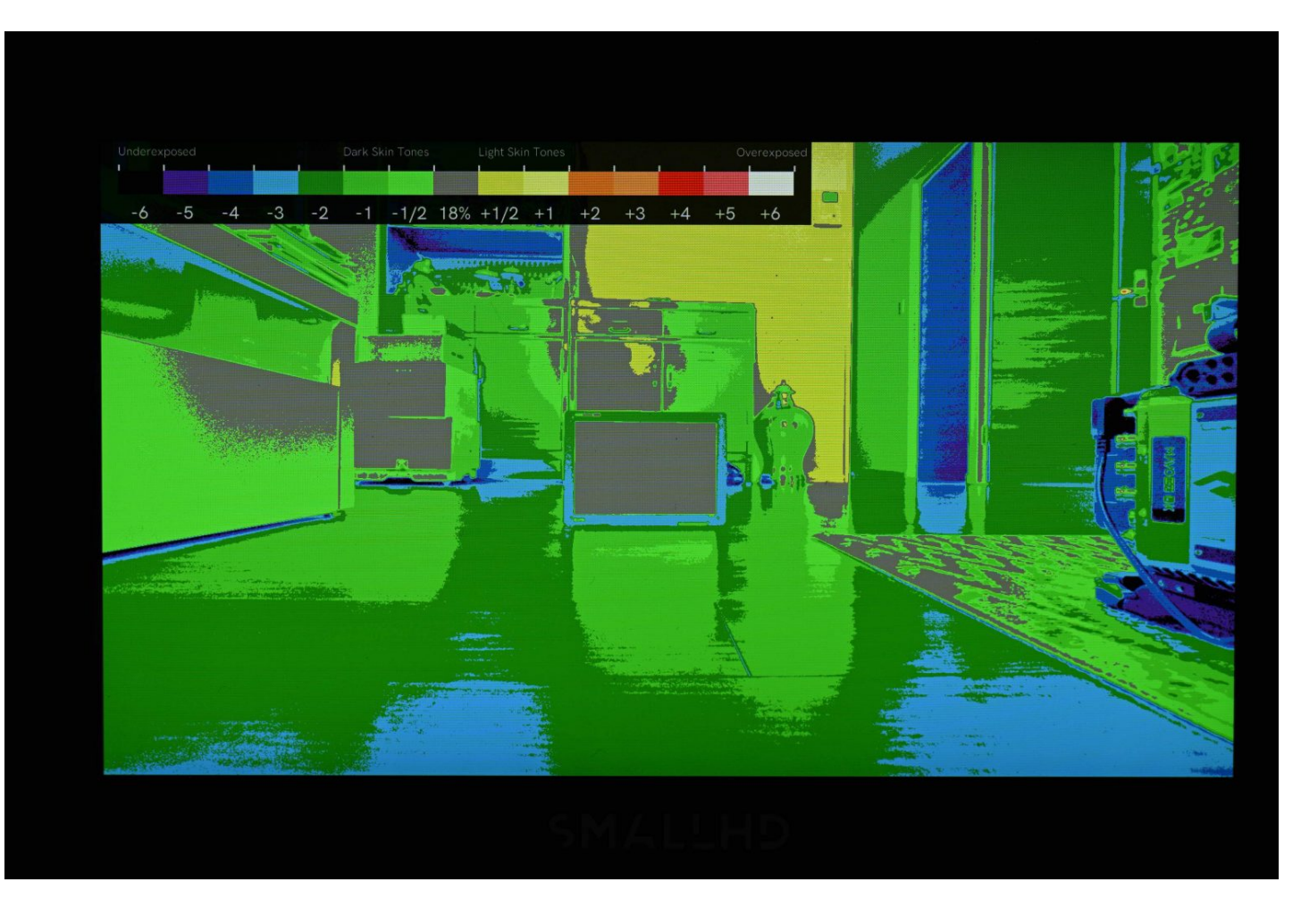


On your image, you will then be able to see the Color Scale and what the color values represent. In the example above you can see that in this shot there are about 10 stops of difference between the brightest and darkest parts of the image. Black being -6 stops below middle grey, and red being +4 stops above middle grey.

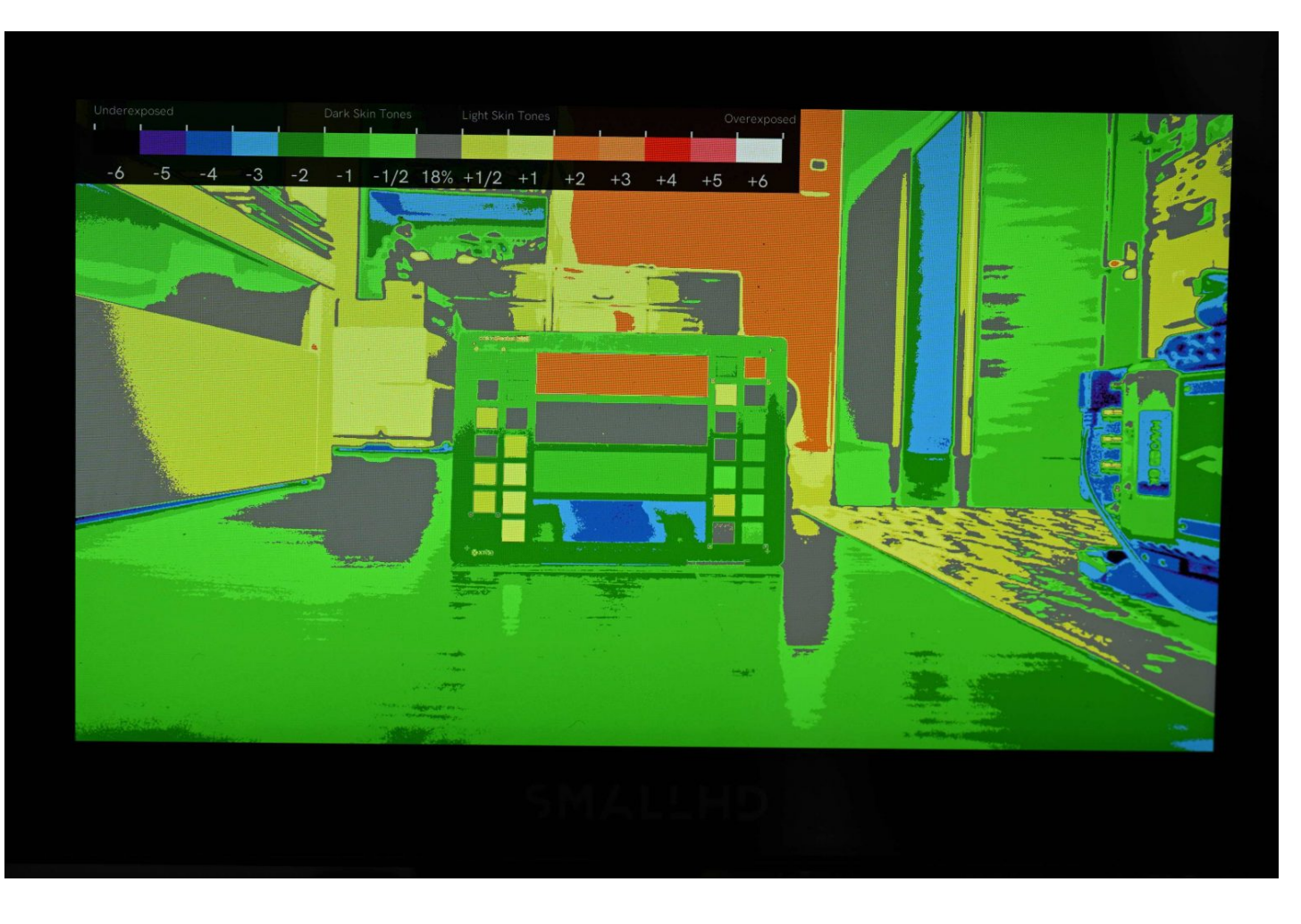


Above is a good example of how easy it is to see when something has clipped. I have placed a grey card and exposed for it, but as you can see, by exposing the grey card correctly I am going to overexpose the back window. It is completely white, indicating overexposure. Now, just a spoiler alert, this isn't showing accurate overexposure for the camera I am using, but for the purposes of explaining how EL Zone works, let's ignore that for now.

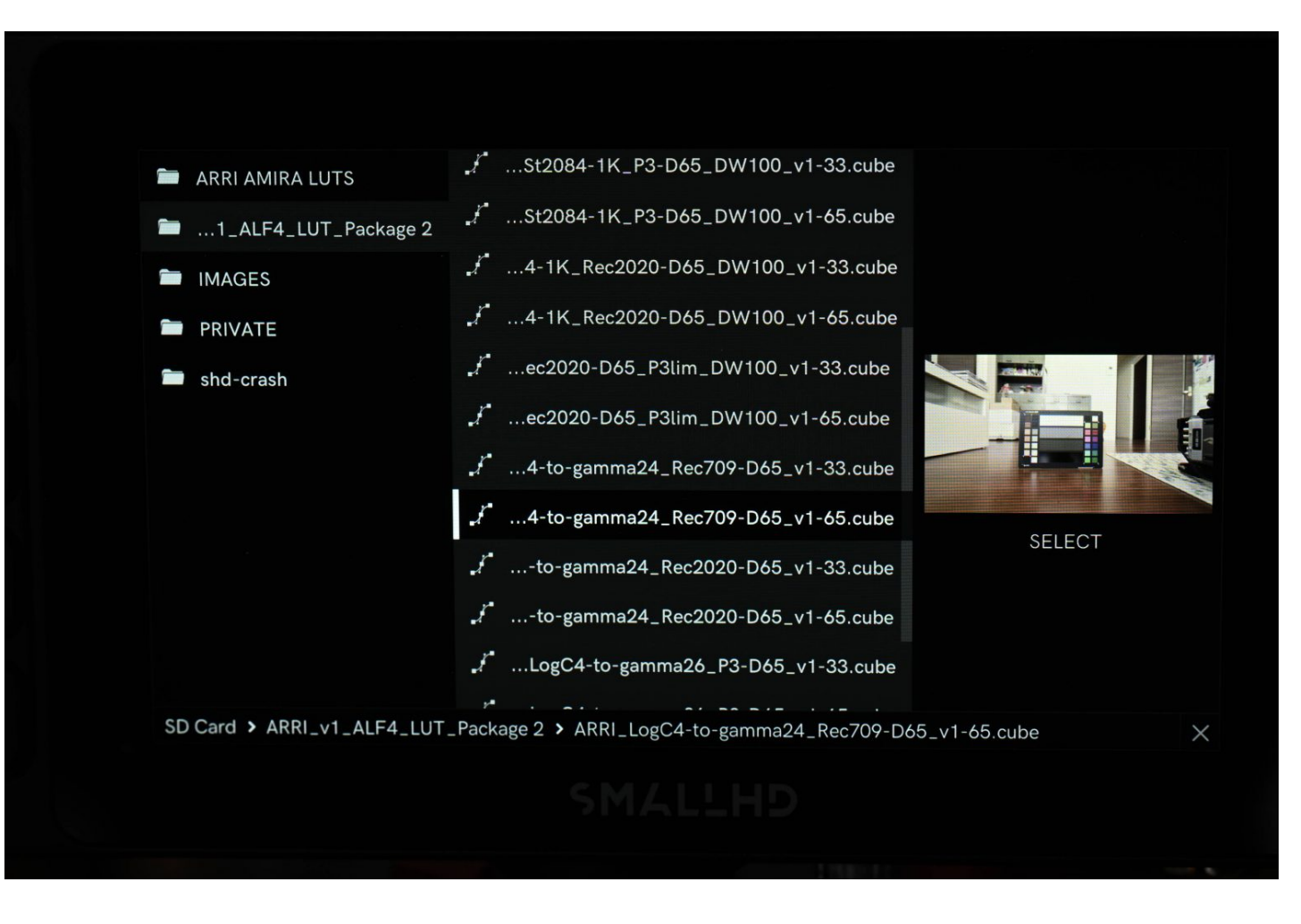
If I wanted to maintain exposure in the back window I could bring down my exposure until it was no longer clipping and then add the appropriate amount of light to expose the grey card correctly. For example, if I needed to bring my exposure down by 2 stops to prevent the window from clipping, I know that I would need to increase my light on the grey card by two stops to compensate. This is the beauty of EL Zone, everything has a direct reference and you can easily see where you need to make adjustments.



Above we can see another example of how useful EL Zone is. In this case, I have exposed for 18% grey, but you can see that this is a very low-contrast scene where there is only a difference of around 7-8 stops between the brightest and darkest parts of the scene. This is where EL Zone becomes very useful because it then allows me to look at what I need to do to my scene if I wanted to add more contrast.



Above you can see a shot where I exposed a color checker chart so that 18% grey was correct. Now I can see what the values are for everything else that is in my scene.



ARRI AMIRA LUTS

...1_ALF4_LUT_Package 2

IMAGES

PRIVATE

shd-crash

...St2084-1K_P3-D65_DW100_v1-33.cube

...St2084-1K_P3-D65_DW100_v1-65.cube

...4-1K_Rec2020-D65_DW100_v1-33.cube

...4-1K_Rec2020-D65_DW100_v1-65.cube

...ec2020-D65_P3lim_DW100_v1-33.cube

...ec2020-D65_P3lim_DW100_v1-65.cube

...4-to-gamma24_Rec709-D65_v1-33.cube

...4-to-gamma24_Rec709-D65_v1-65.cube

...-to-gamma24_Rec2020-D65_v1-33.cube

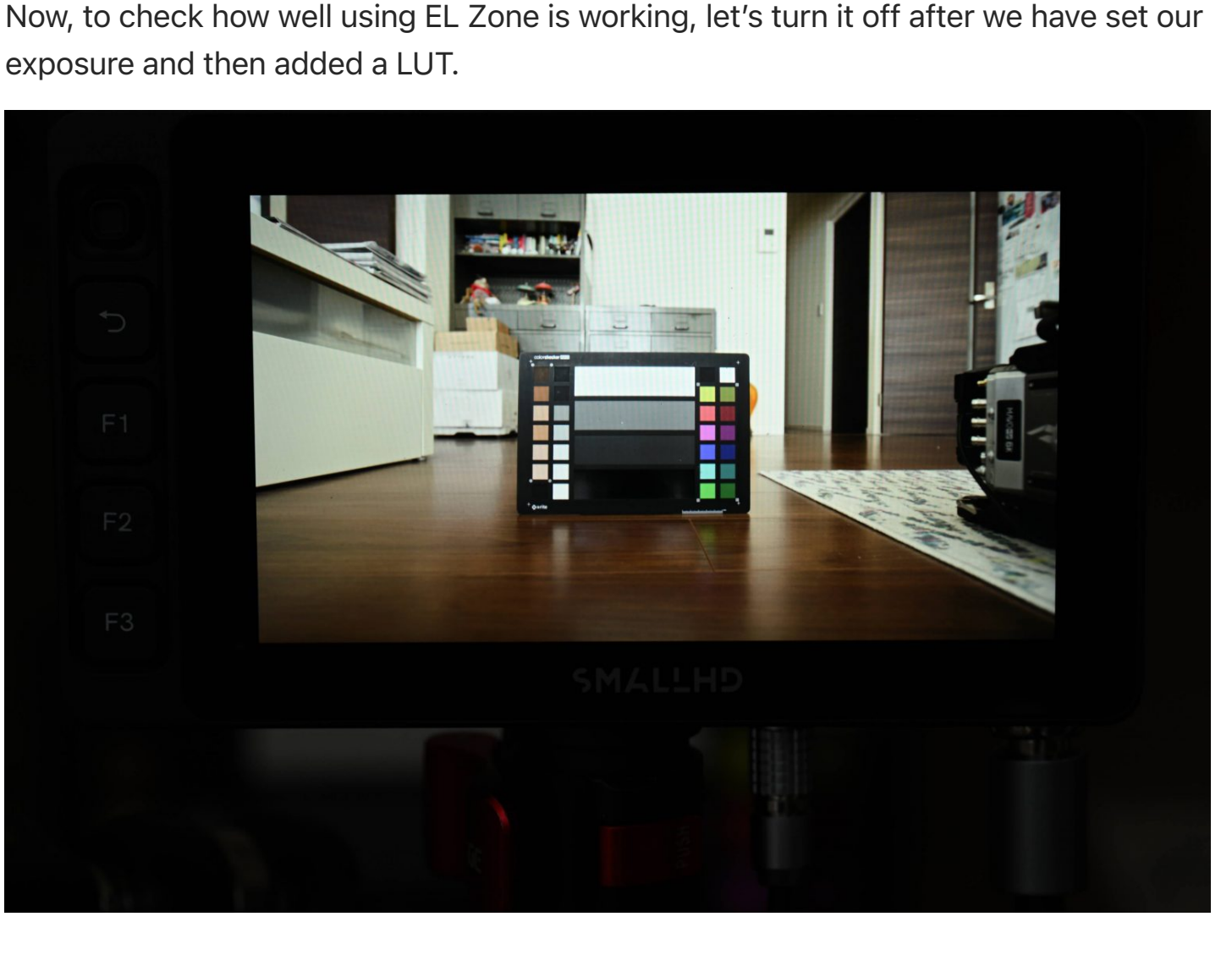
...-to-gamma24_Rec2020-D65_v1-65.cube

...LogC4-to-gamma26_P3-D65_v1-33.cube

SELECT

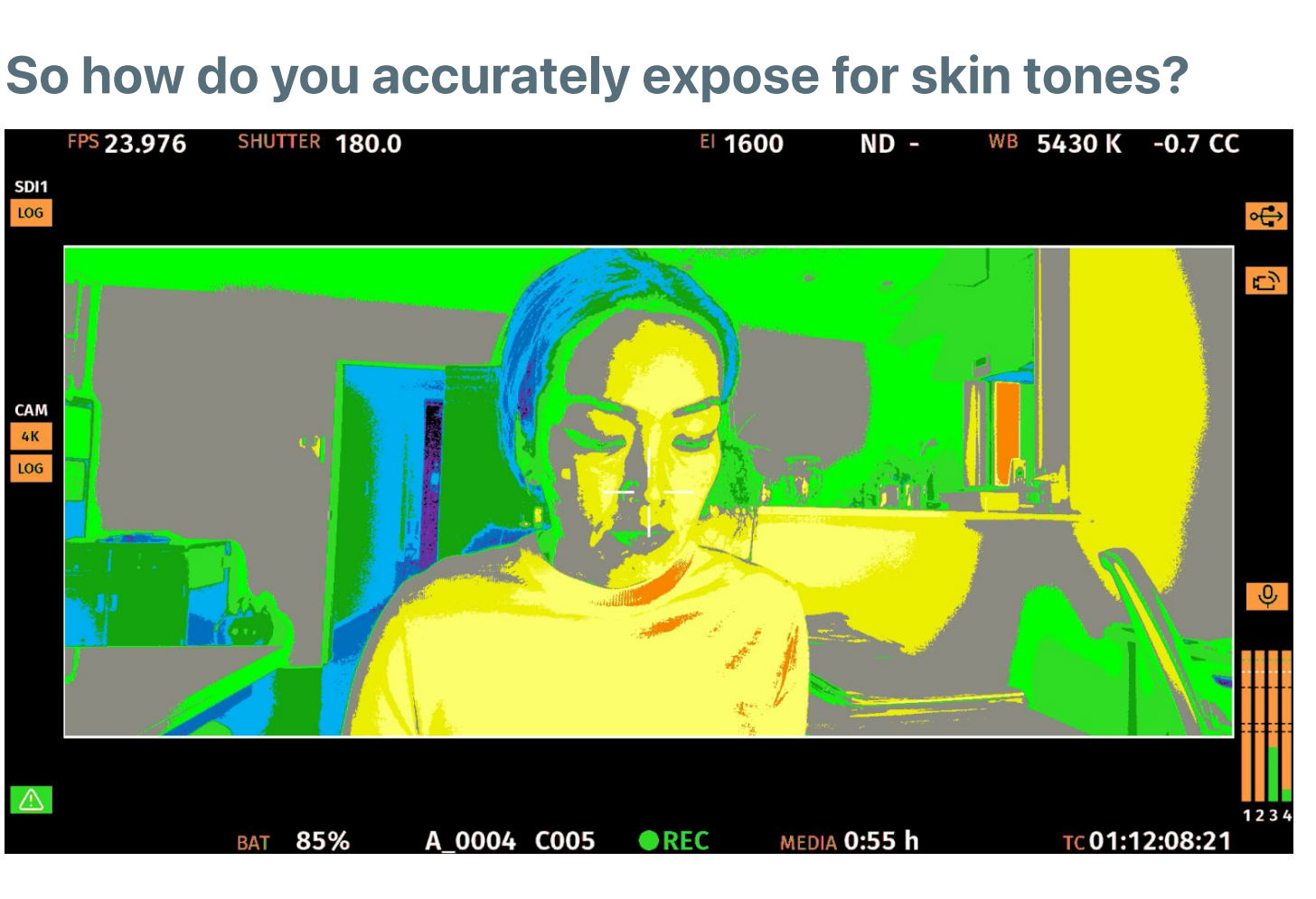
SD Card › ARRI_v1_ALF4_LUT_Package 2 › ARRI_LogC4-to-gamma24_Rec709-D65_v1-65.cube

Now, to check how well using EL Zone is working, let's turn it off after we have set our exposure and then added a LUT.



So what did we get? Well, as you can see, we got a well-exposed image.

So how do you accurately expose for skin tones?



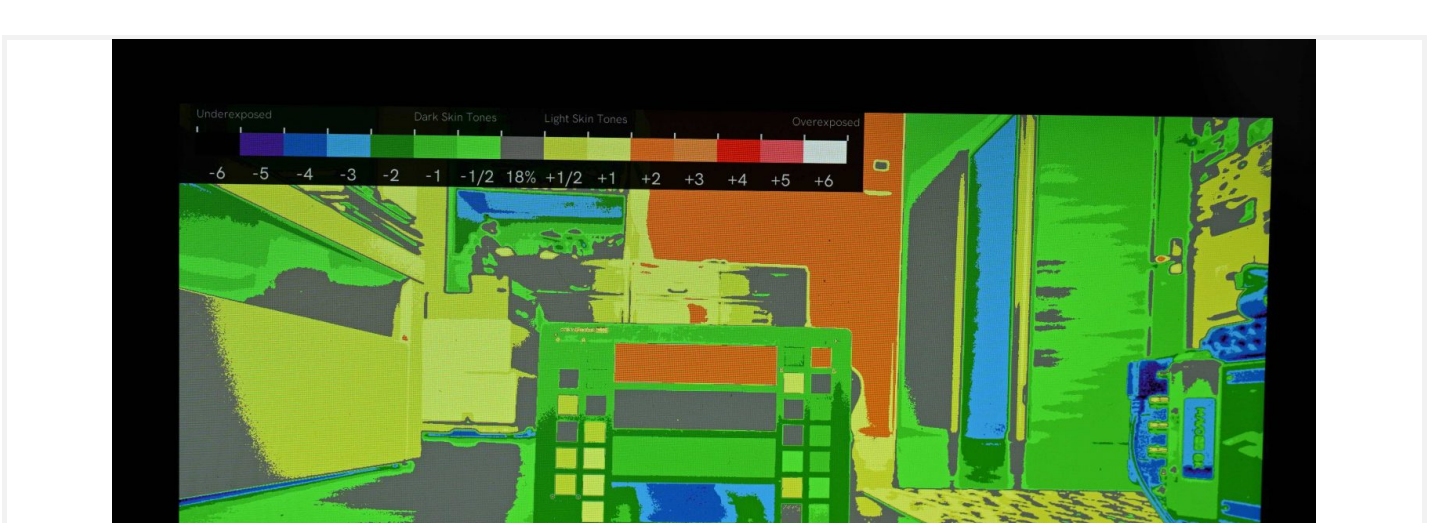
Caucasian skin is represented by either medium yellow (+1/2 stop over 18% grey), or bright yellow (+1 above 18% grey).

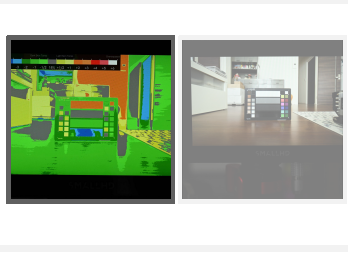
Dark skin is represented by light green (-1/2 stop below 18% grey), or medium green (-1 stop below 18% grey).

Now, the only problem with EL Zone is that it does take a while to get your head around it if you are used to using false colors. As your brain gets pre-mapped with what false color values are indicated as you need to re-train it to use EL Zone.

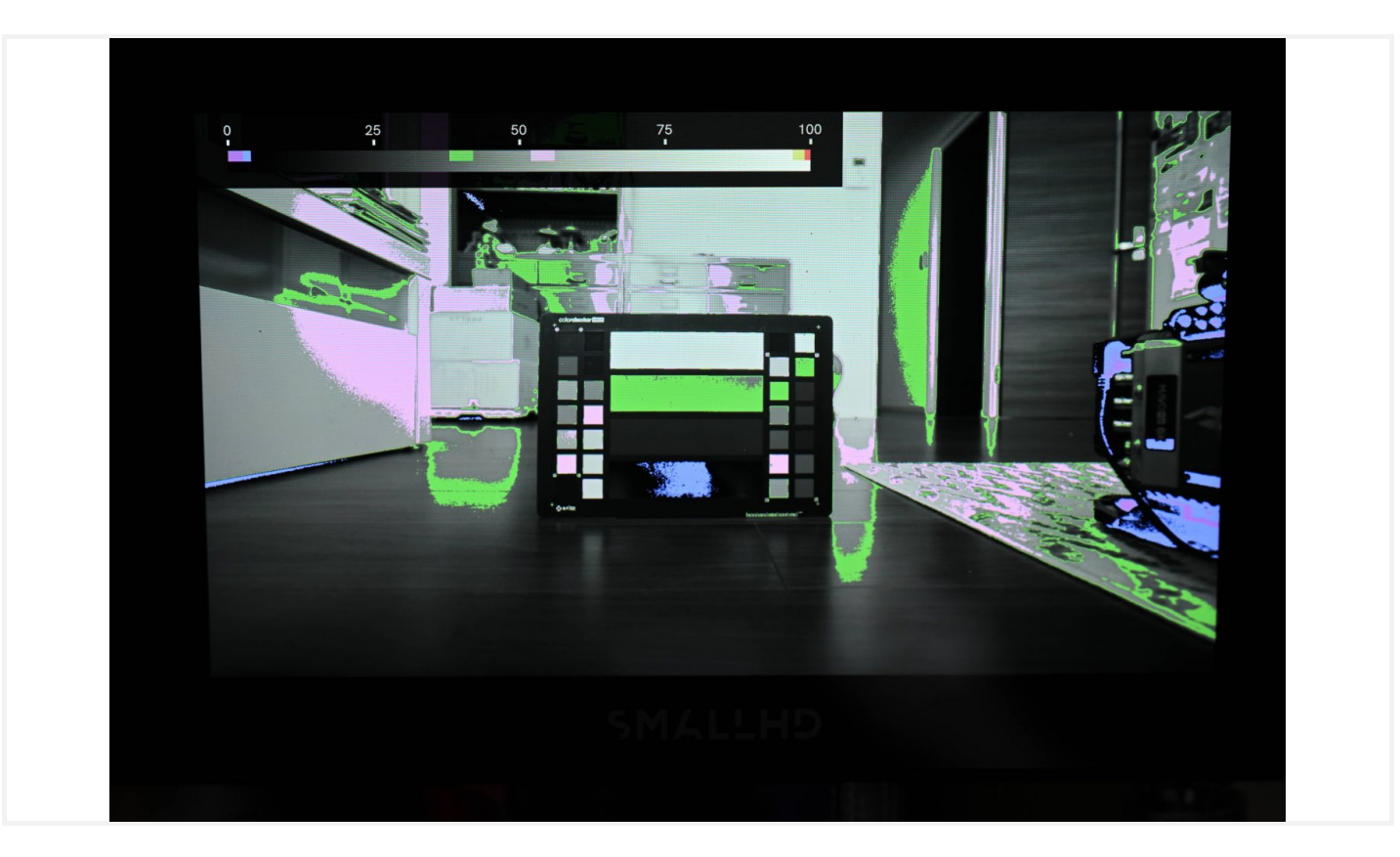
How does it compare to using False Color?

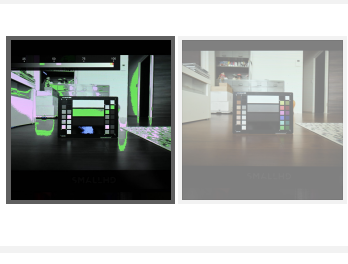
I wanted to do some testing to see if there were exposure differences between using EL Zone and false color and if there were any caveats to using it.



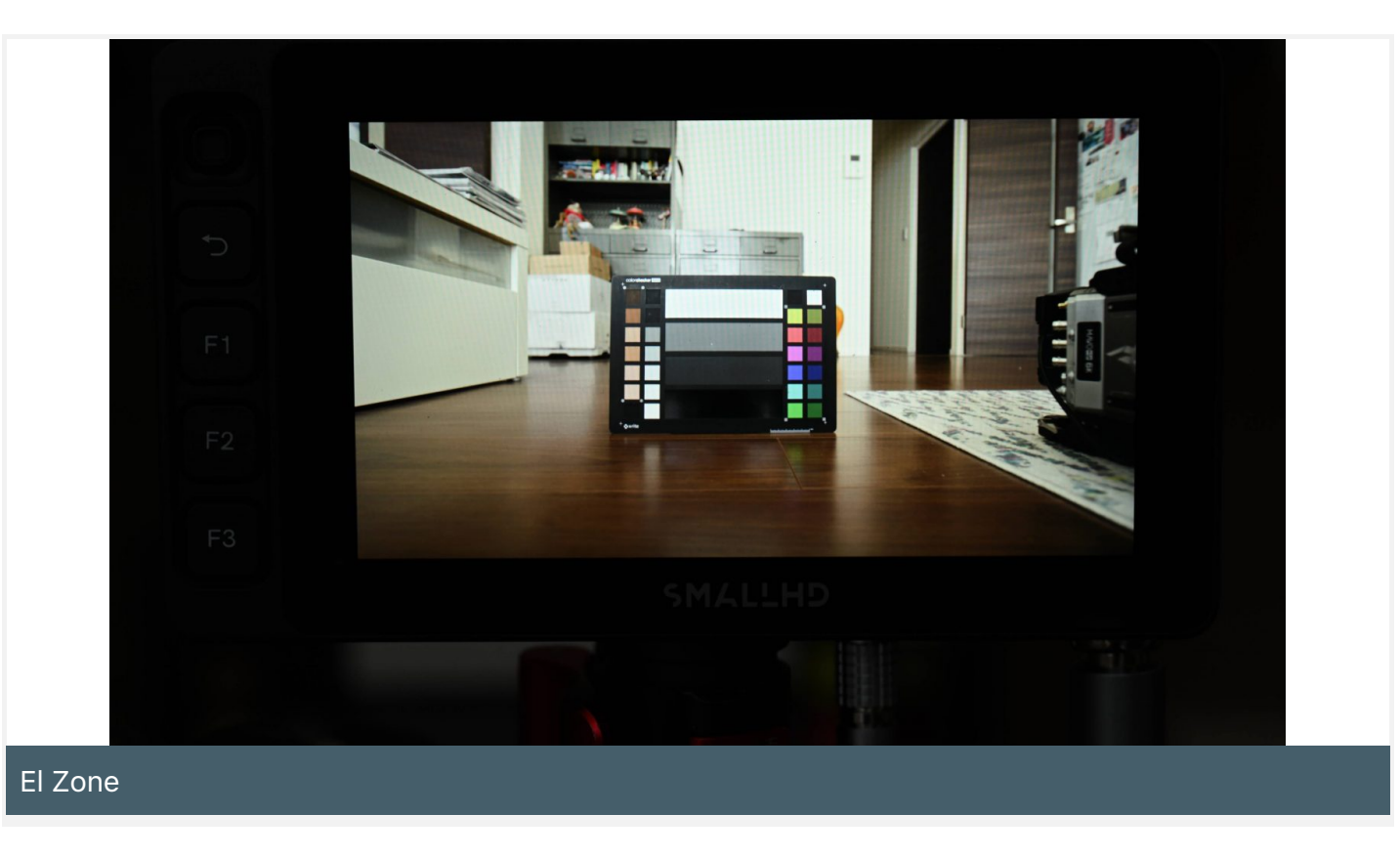


Above you can see the images for a scene with a color checker chart where exposure was set using EL Zone.

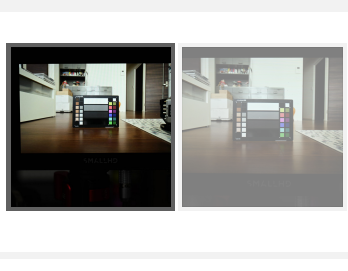




Now, let's expose the same exact same shot using false color.

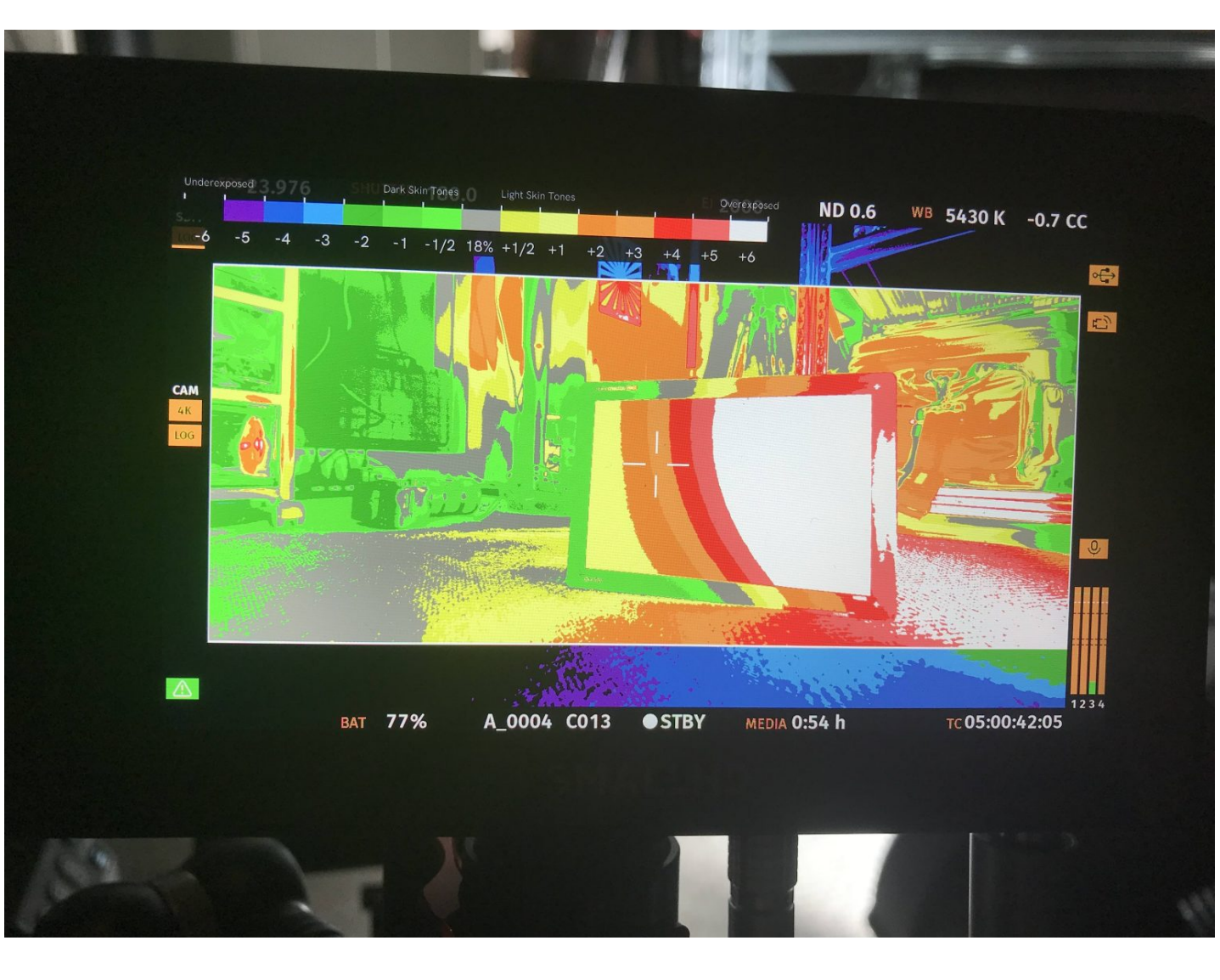


El Zone

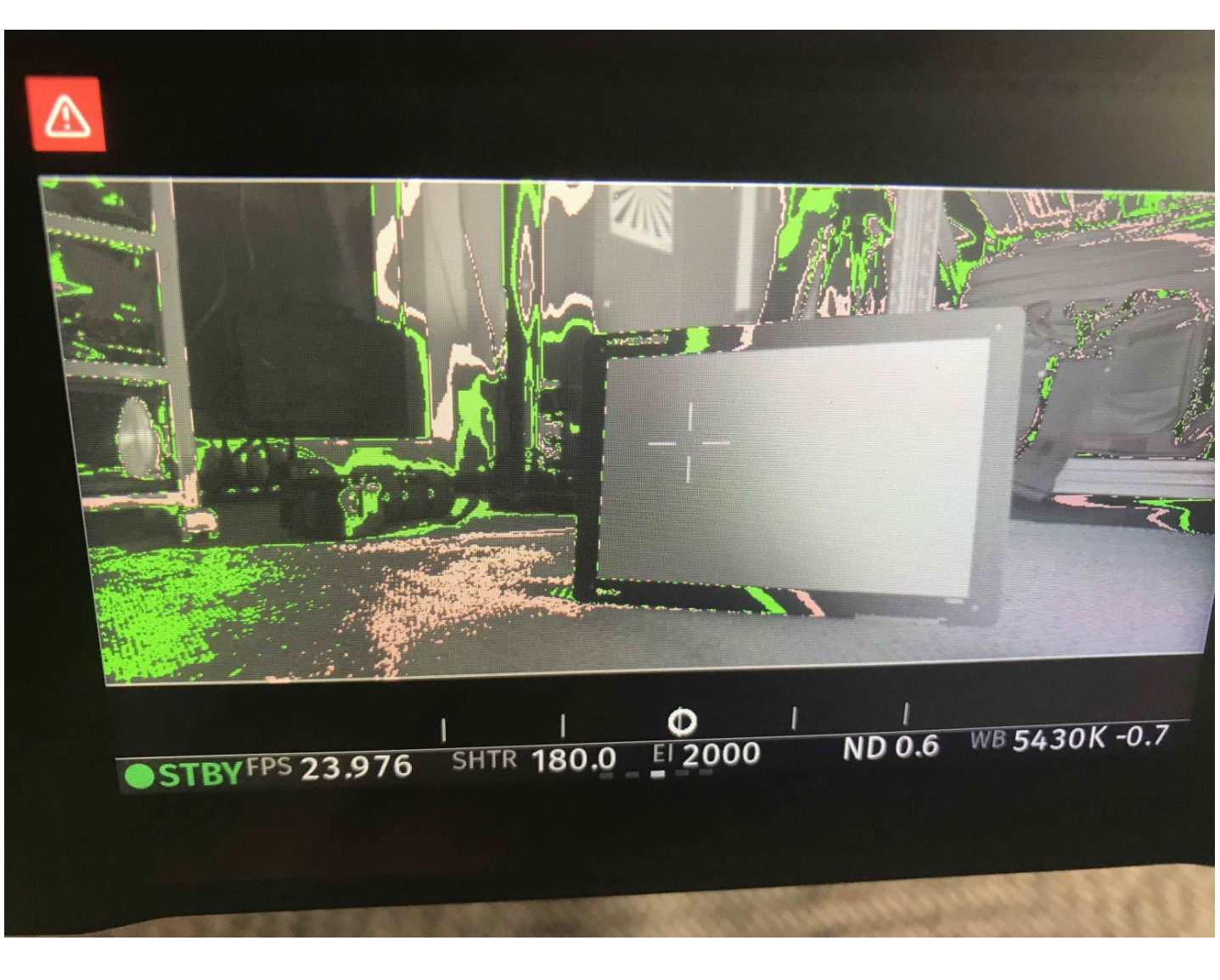


If we look at both images after exposure was set they are pretty close, although I think using the EL Zone method provided a slightly better result.

Now, the only problem with EL Zone is that it is limited to 12 stops, 6 above, and 6 below middle grey. With cameras that can capture large amounts of dynamic range, like the ARRI Alexa 35, you won't be able to see an accurate representation of all of your stops. With false color in the camera, I can have it applied to a Log image so that when I activate false color it bypasses the Look. This then enables me to see how much I can push my exposure before I get any clipping. This is something I can't do with EL Zone because it is going to show overexposure well before my image has actually clipped.

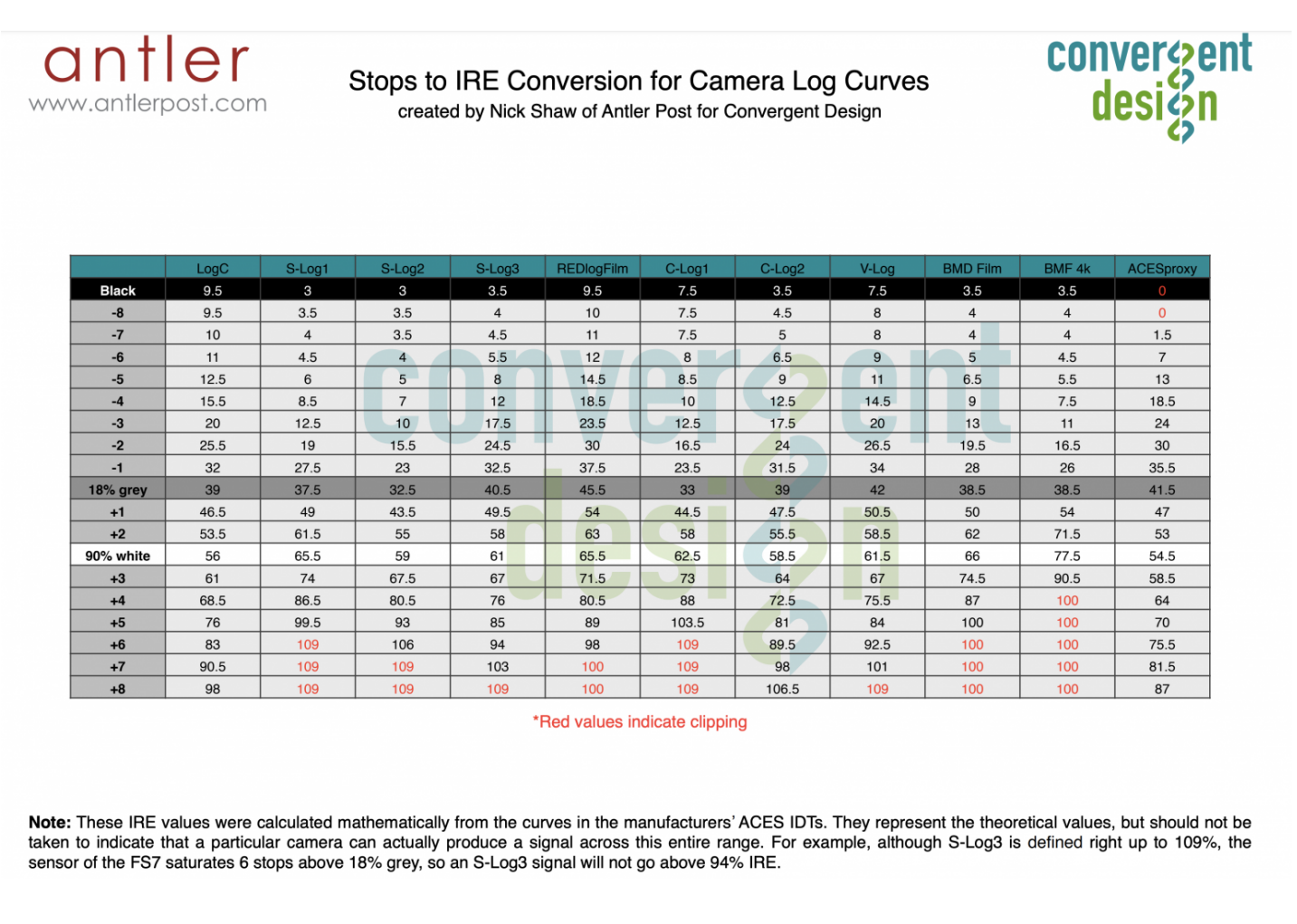


I will show you what I mean. Above is an image where EL Zone is showing overexposure in the scene.



However, if we use false color for the exact same image with the exact same exposure settings you can see a massive difference. There are no overexposed parts of the image, in fact, nothing comes even remotely close to clipping.

EL Zone has to be calibrated specifically to each specific camera sensor's gamma and latitude. In the Panasonic Varicam and Varicam LT, as well as the Sigma fp and fp L it is, but if you use it with other cameras then it isn't going to work as well.



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www.antlerpost.com

Stops to IRE Conversion for Camera Log Curves
created by Nick Shaw of Antler Post for Convergent Design

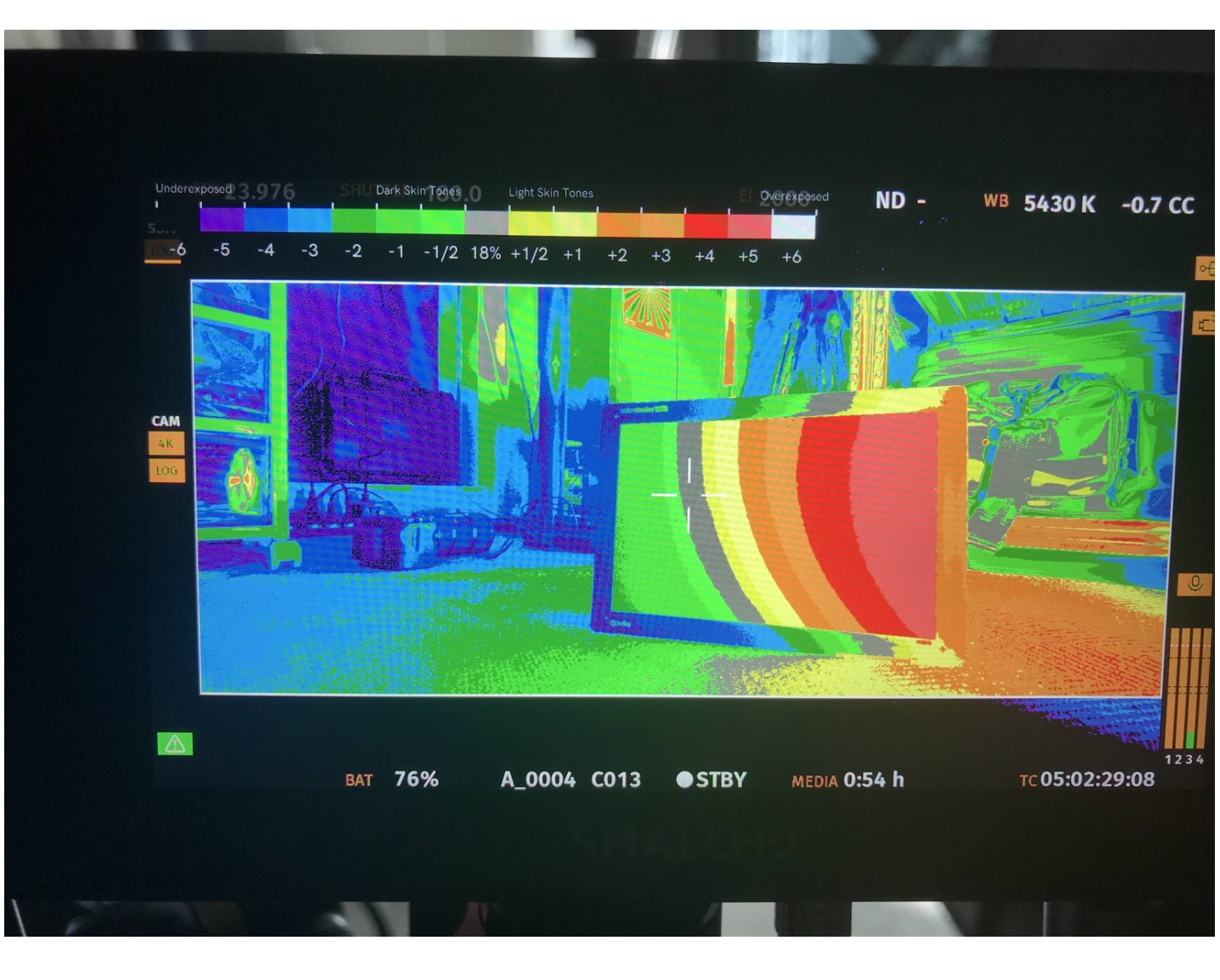
convergent design

	LogC	S-Log1	S-Log2	S-Log3	REDlogFilm	C-Log1	C-Log2	V-Log	BMD Film	BMF 4k	ACESproxy
Black	9.5	3	3	3.5	9.5	7.5	3.5	7.5	3.5	3.5	0
-8	9.5	3.5	3.5	4	10	7.5	4.5	8	4	4	0
-7	10	4	3.5	4.5	11	7.5	5	8	4	4	1.5
-6	11	4.5	4	5.5	12	8	6.5	9	5	4.5	7
-5	12.5	6	5	8	14.5	8.5	9	11	6.5	5.5	13
-4	15.5	8.5	7	12	18.5	10	12.5	14.5	9	7.5	18.5
-3	20	12.5	10	17.5	23.5	12.5	17.5	20	13	11	24
-2	25.5	19	15.5	24.5	30	16.5	24	26.5	19.5	16.5	30
-1	32	27.5	23	32.5	37.5	23.5	31.5	34	28	26	35.5
18% grey	39	37.5	32.5	40.5	45.5	33	39	42	38.5	38.5	41.5
+1	46.5	49	43.5	49.5	54	44.5	47.5	50.5	50	54	47
+2	53.5	61.5	55	58	63	58	55.5	58.5	62	71.5	53
90% white	56	65.5	59	61	65.5	62.5	58.5	61.5	66	77.5	54.5
+3	61	74	67.5	67	71.5	73	64	67	74.5	90.5	58.5
+4	68.5	86.5	80.5	76	80.5	88	72.5	75.5	87	100	64
+5	76	99.5	93	85	89	103.5	81	84	100	100	70
+6	83	109	106	94	98	109	89.5	92.5	100	100	75.5
+7	90.5	109	109	103	100	109	98	101	100	100	81.5
+8	98	109	109	109	100	109	106.5	109	100	100	87

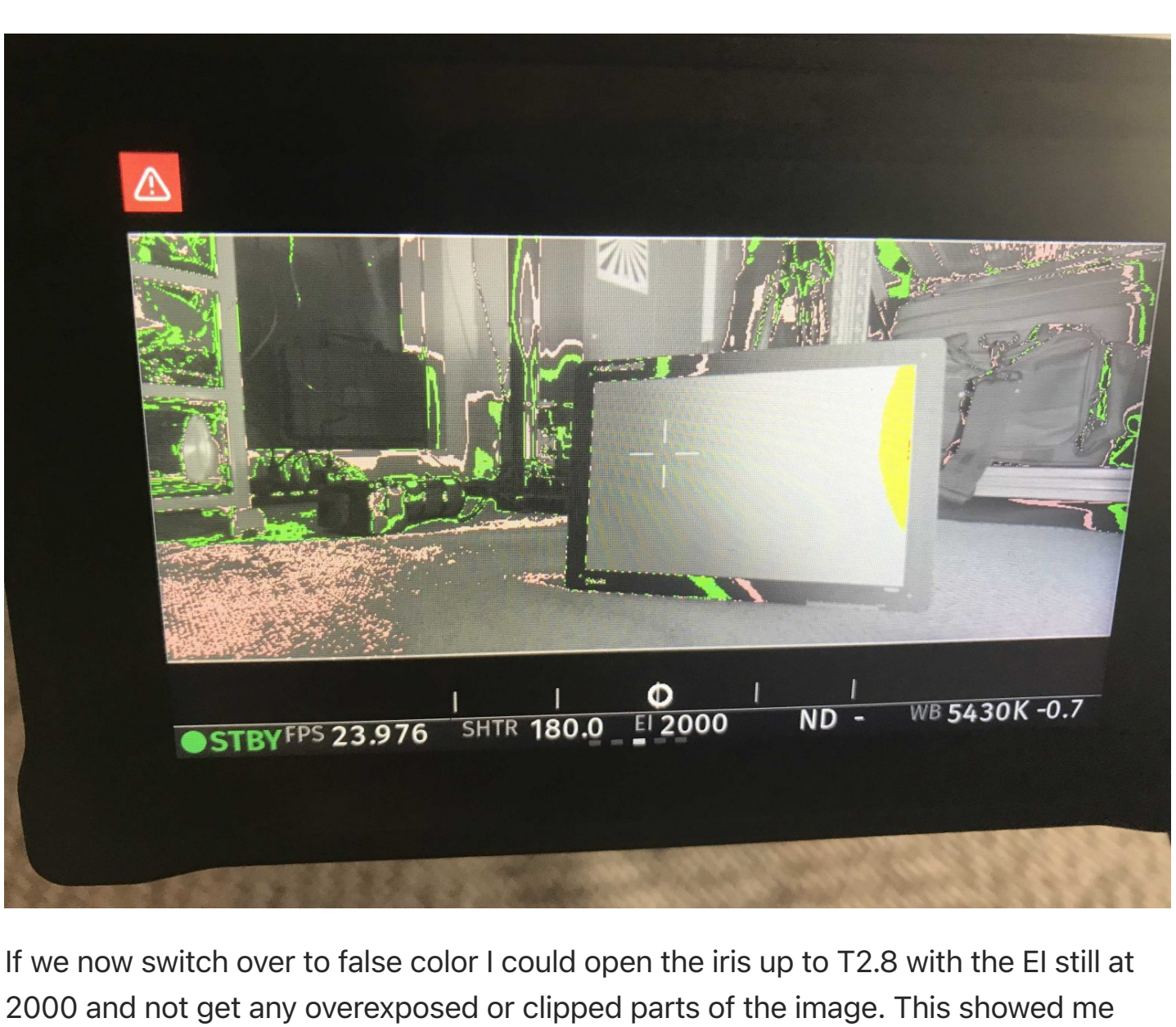
*Red values indicate clipping

Note: These IRE values were calculated mathematically from the curves in the manufacturers' ACES IDTs. They represent the theoretical values, but should not be taken to indicate that a particular camera can actually produce a signal across this entire range. For example, although S-Log3 is defined right up to 109%, the sensor of the FS7 saturates 6 stops above 18% grey, so an S-Log3 signal will not go above 94% IRE.

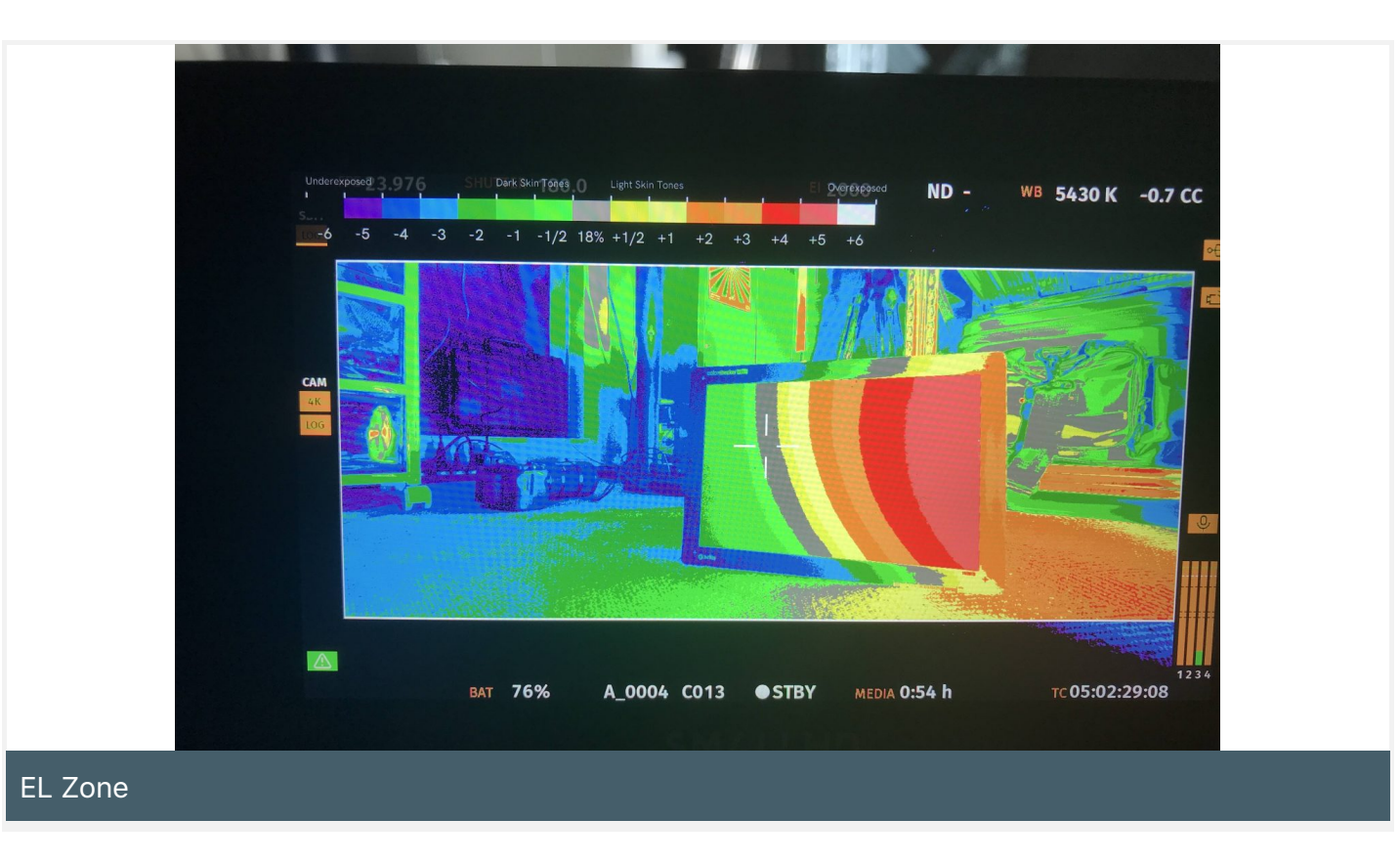
EL Zone could be mapped and implemented into cameras and monitors, but that would require some work. Above you can see mathematical calculations for various Log curves that were created by Nick Shaw of Antler Post for Convergent Design that show you the direct relationship between IRE levels and stops.



Ok, so back to the comparisons. If I expose based on EL Zone so that there is no overexposure in the scene, above is what I get. To do this I had to stop the lens down to T22 when the EI was set at 2000. This is not how I would normally expose this, but I am simply doing this to show you a clear comparison between EL Zone and false color.



If we now switch over to false color I could open the iris up to T2.8 with the EI still at 2000 and not get any overexposed or clipped parts of the image. This showed me that I had an additional 6 stops of latitude in the highlights available that weren't being shown if I selected EL Zone.

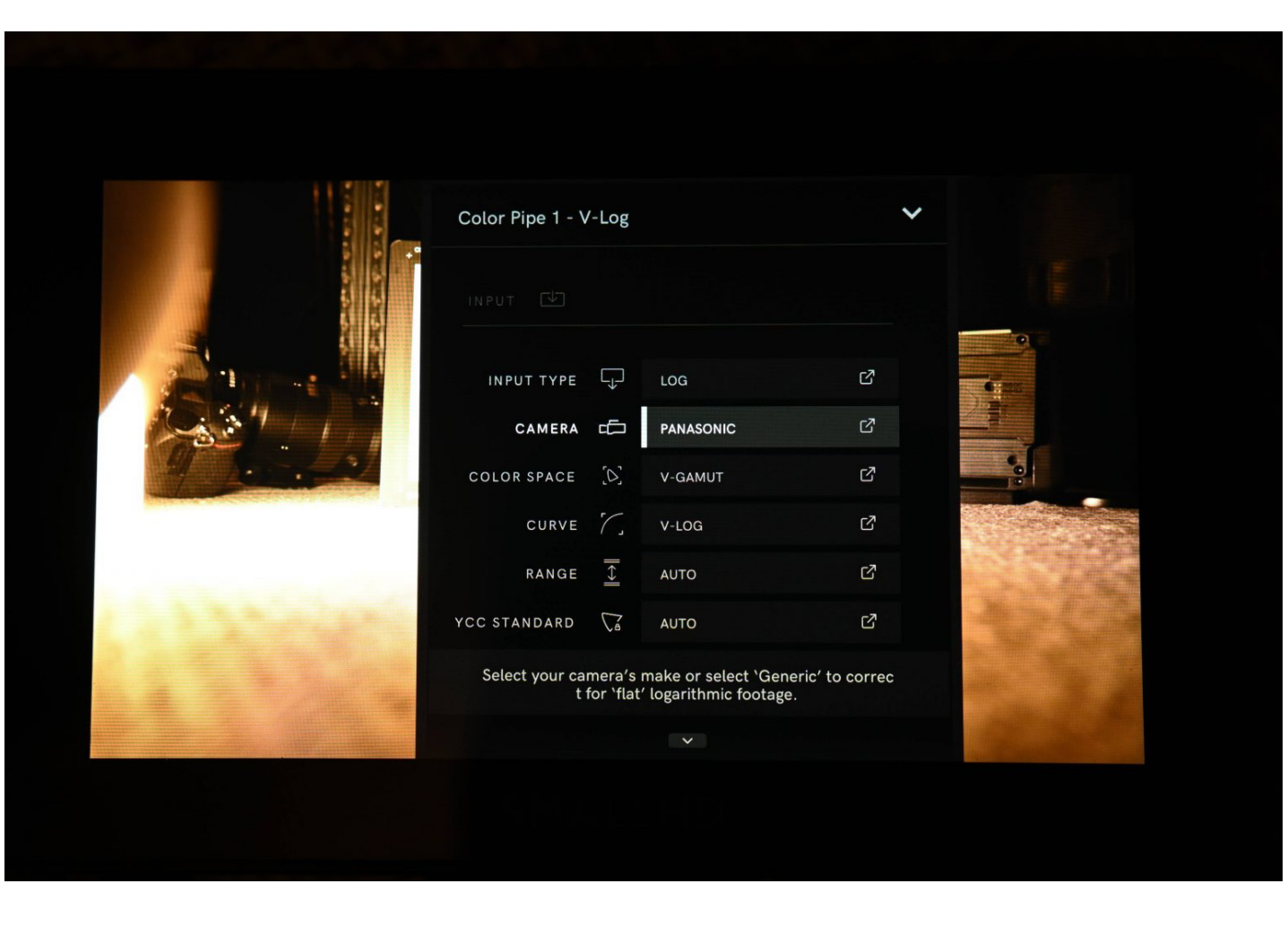


EL Zone

Conversely, if I swapped over to false color with the exact same EI and T stop being used you can also see the dramatic difference between EL Zone and false color. EL Zone was showing parts of the image were almost overexposed, while on false color it was showing values that were almost correct for middle grey.

Look, this isn't going to be the case with a lot of cameras because if their actual dynamic range is closer to 12 stops, then EL Zone is a good option to use. But with cameras that are capable of displaying a lot more than 12 stops, it will indicate overexposure well before it should.

Just to be completely fair to EL Zone, let's look at another camera with less dynamic range to see how it compares. For this example, I will use the Panasonic S1H.



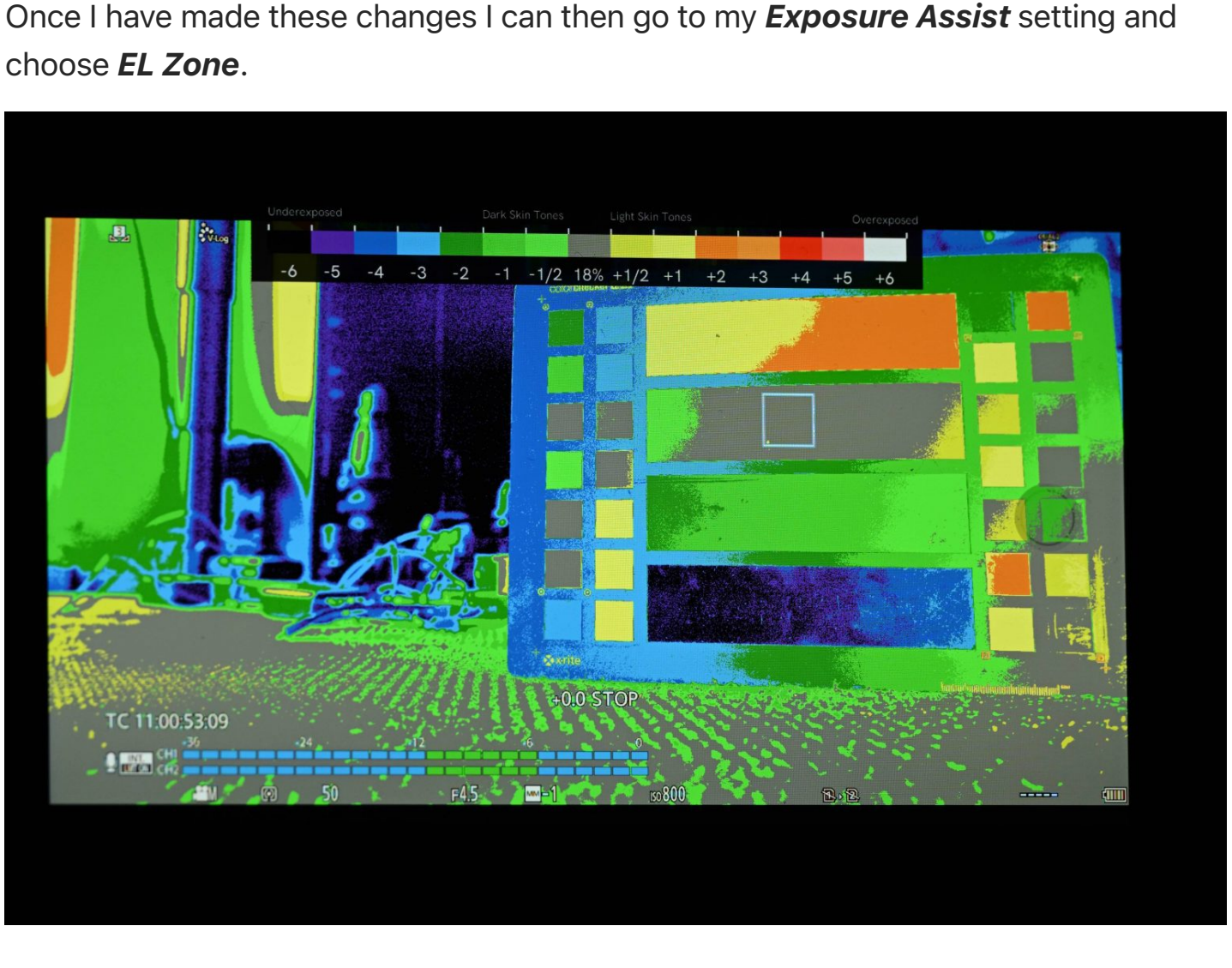
Color Pipe 1 - V-Log

INPUT TYPE: LOG
CAMERA: PANASONIC
COLOR SPACE: V-GAMUT
CURVE: V-LOG
RANGE: AUTO
YCC STANDARD: AUTO

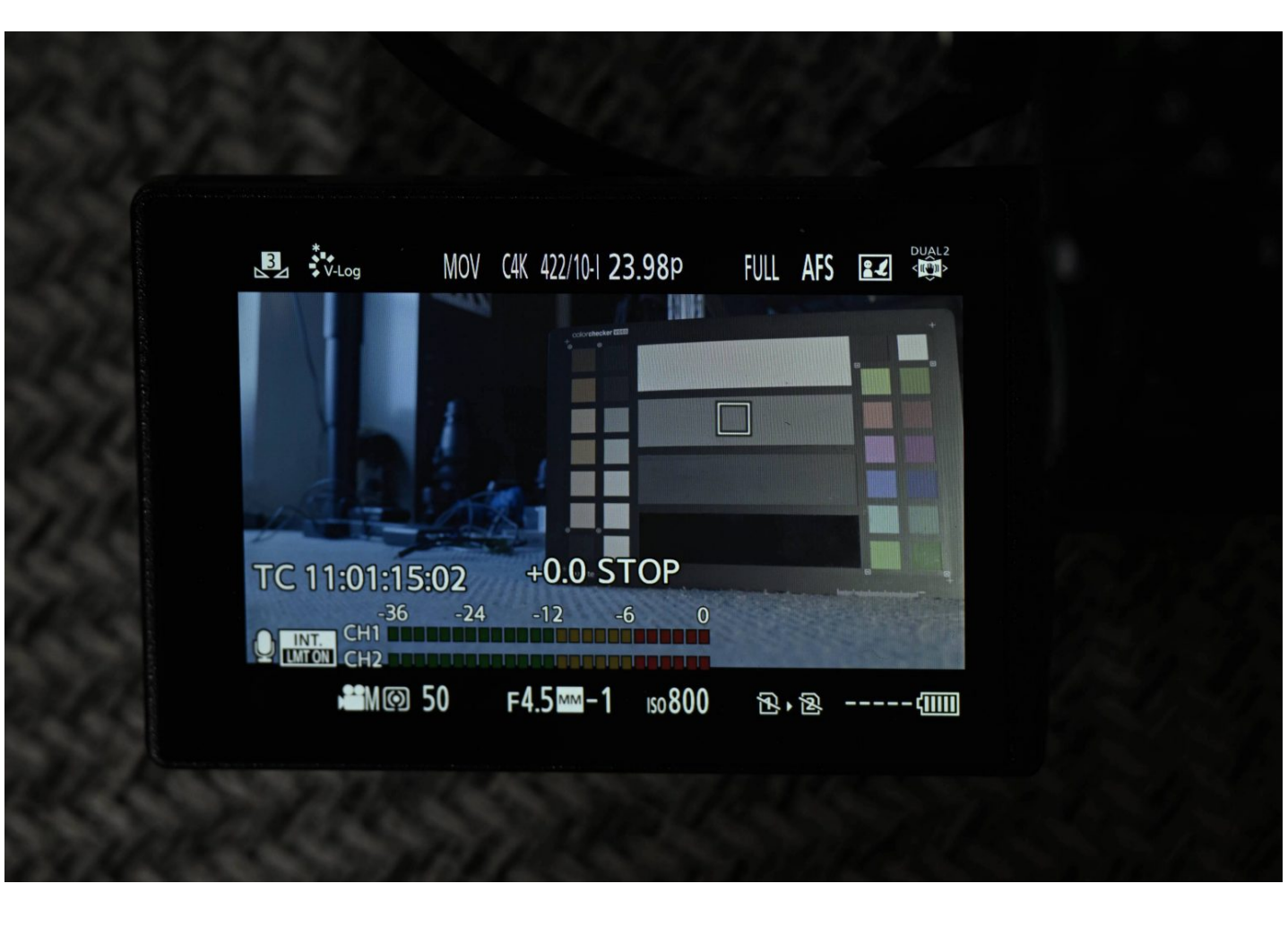
Select your camera's make or select 'Generic' to correct for 'flat' logarithmic footage.

Just like with the ARRI, I have to change the Color Pipe settings to be able to use EL Zone with the Panasonic. In this case, it is ***V Gamut*** for the ***Color Space*** and ***V- Log*** for the ***Curve***.

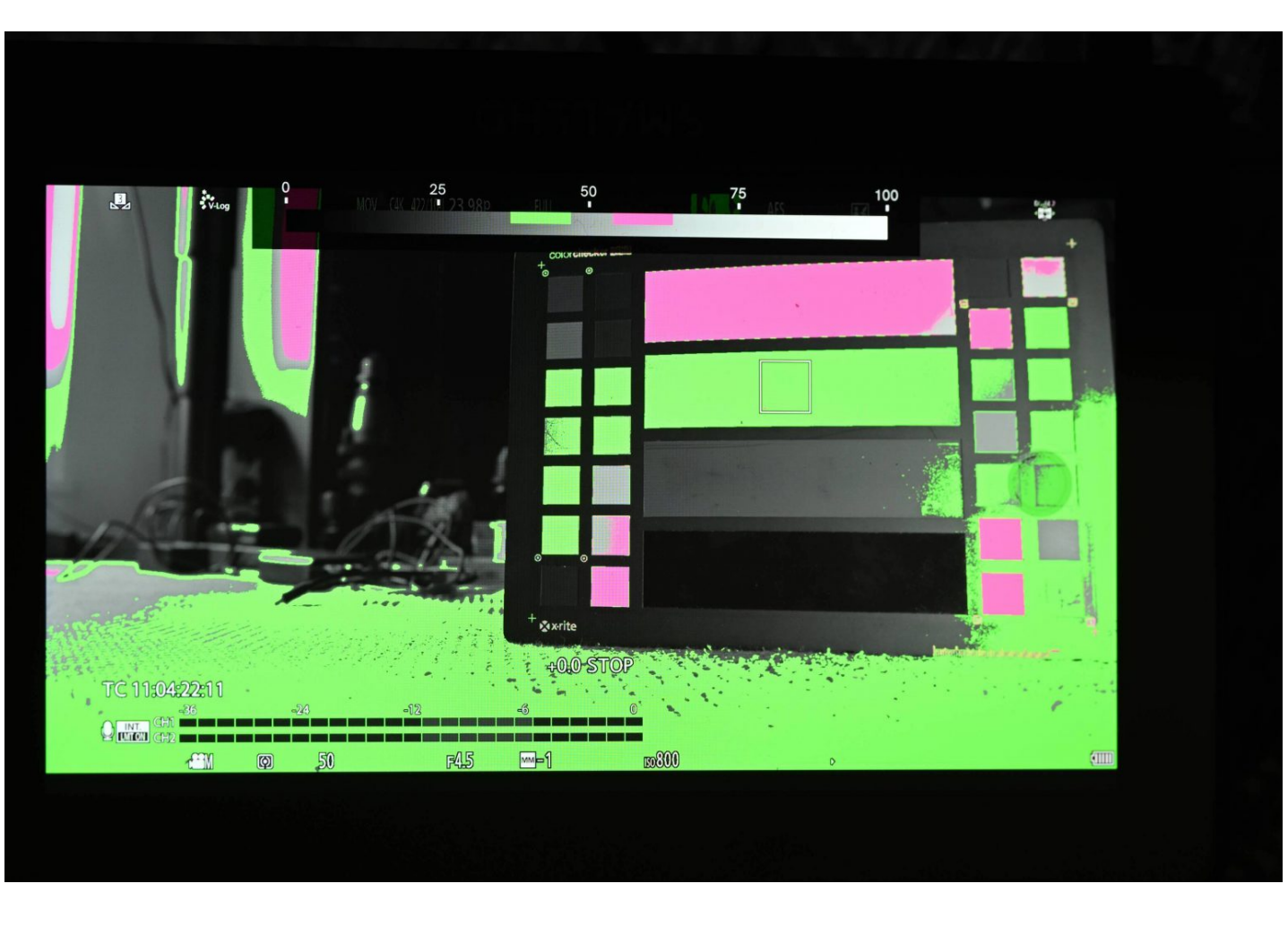
Once I have made these changes I can then go to my ***Exposure Assist*** setting and choose ***EL Zone***.



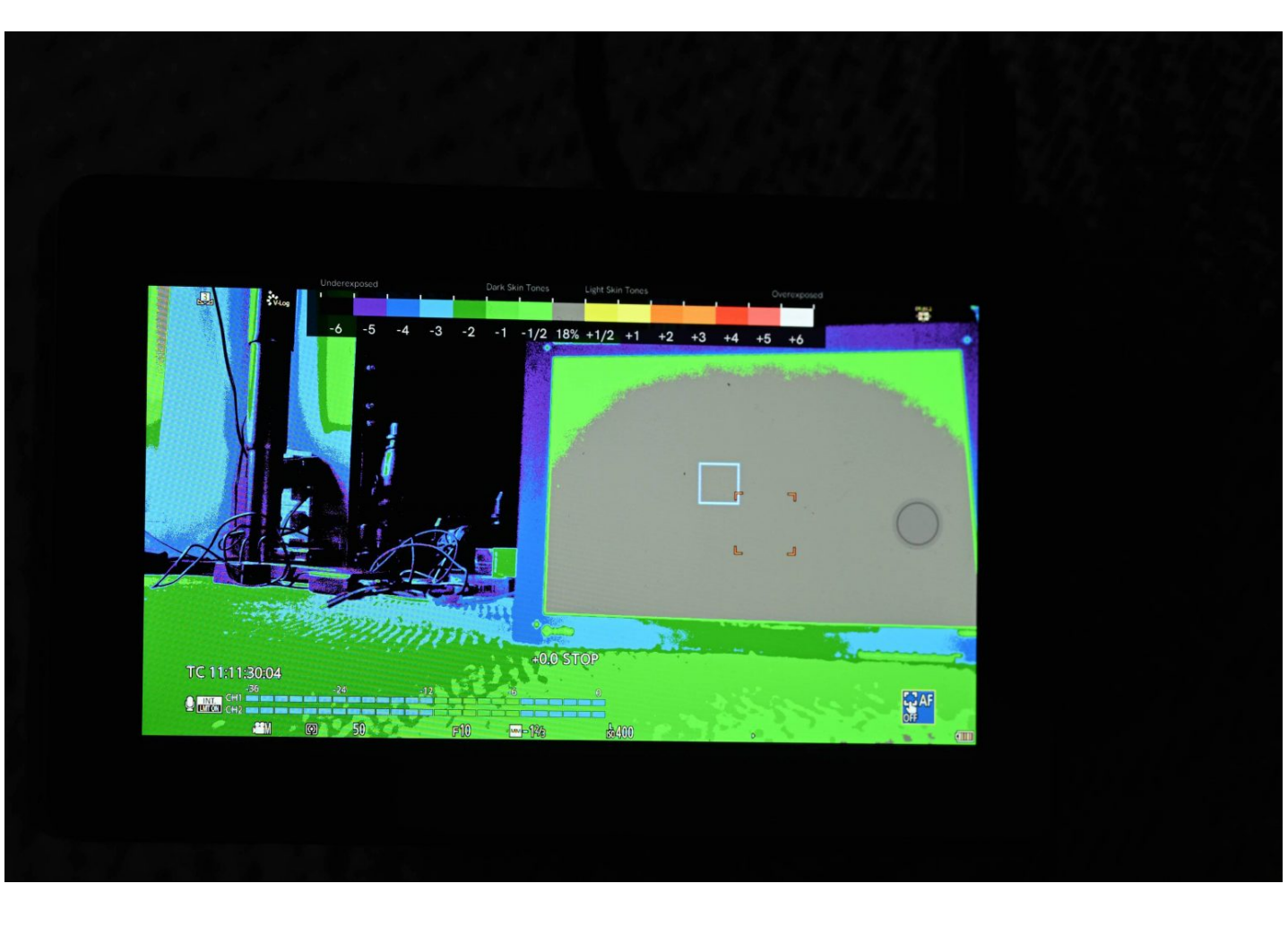
Above you can see what it looks like if I set the exposure so that middle grey is correct using EL Zone.



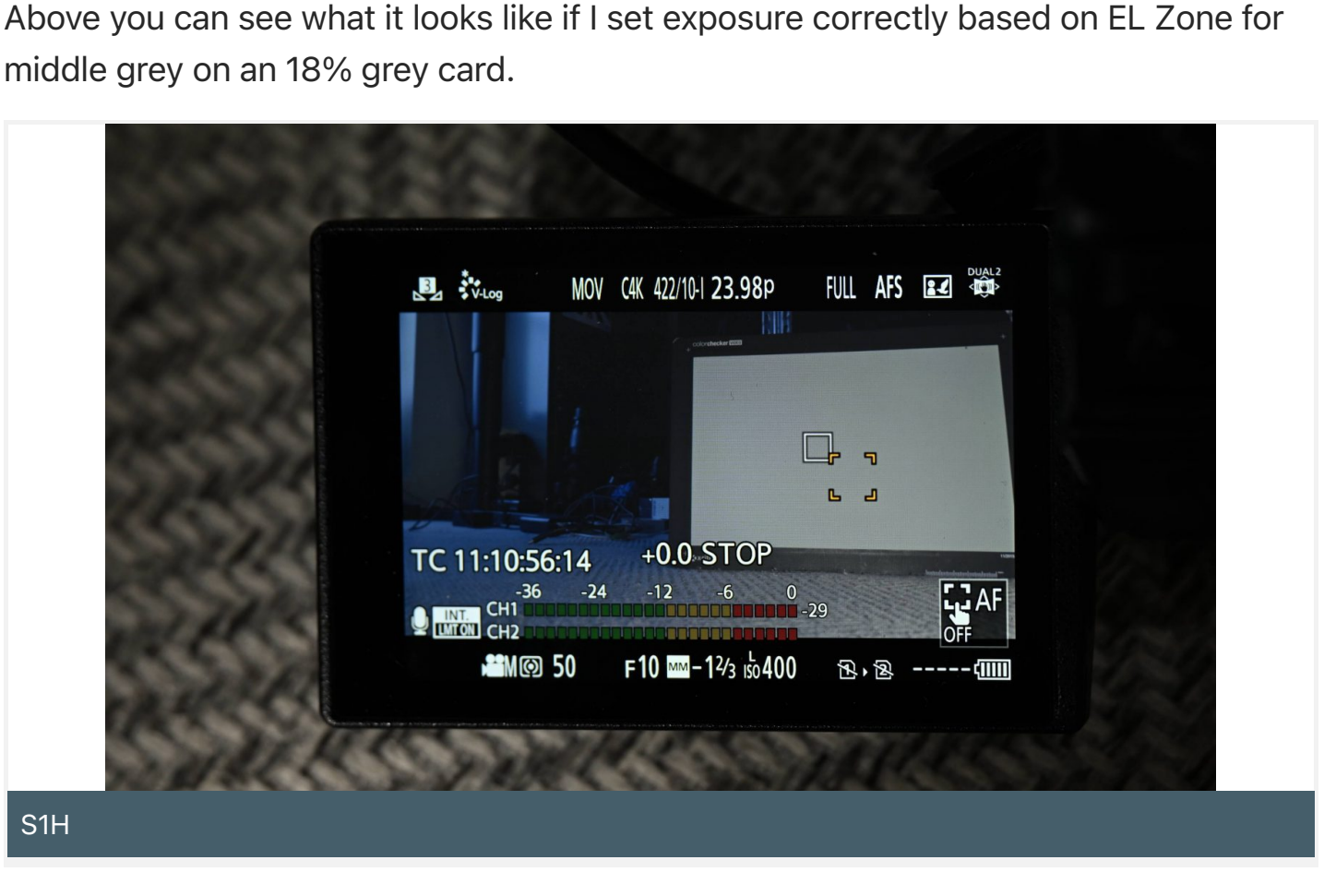
Ok, so now let's have a look at the screen on the S1H with the luminance spot meter exposure tool activated. As you can see it is showing middle grey as being spot on. This is indicated by the +0.0 STOPS.



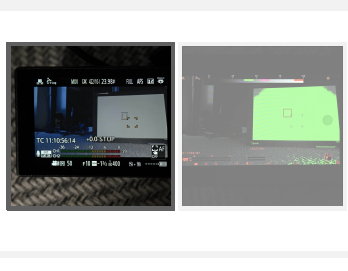
Above you can see the same image when false color is used instead of EL Zone. Now, please be aware that I have mapped false color on the SmallHD specifically for this camera so I would expect the results to be accurate. On most monitors, you can't map false color and that is when you can run into inconsistencies.



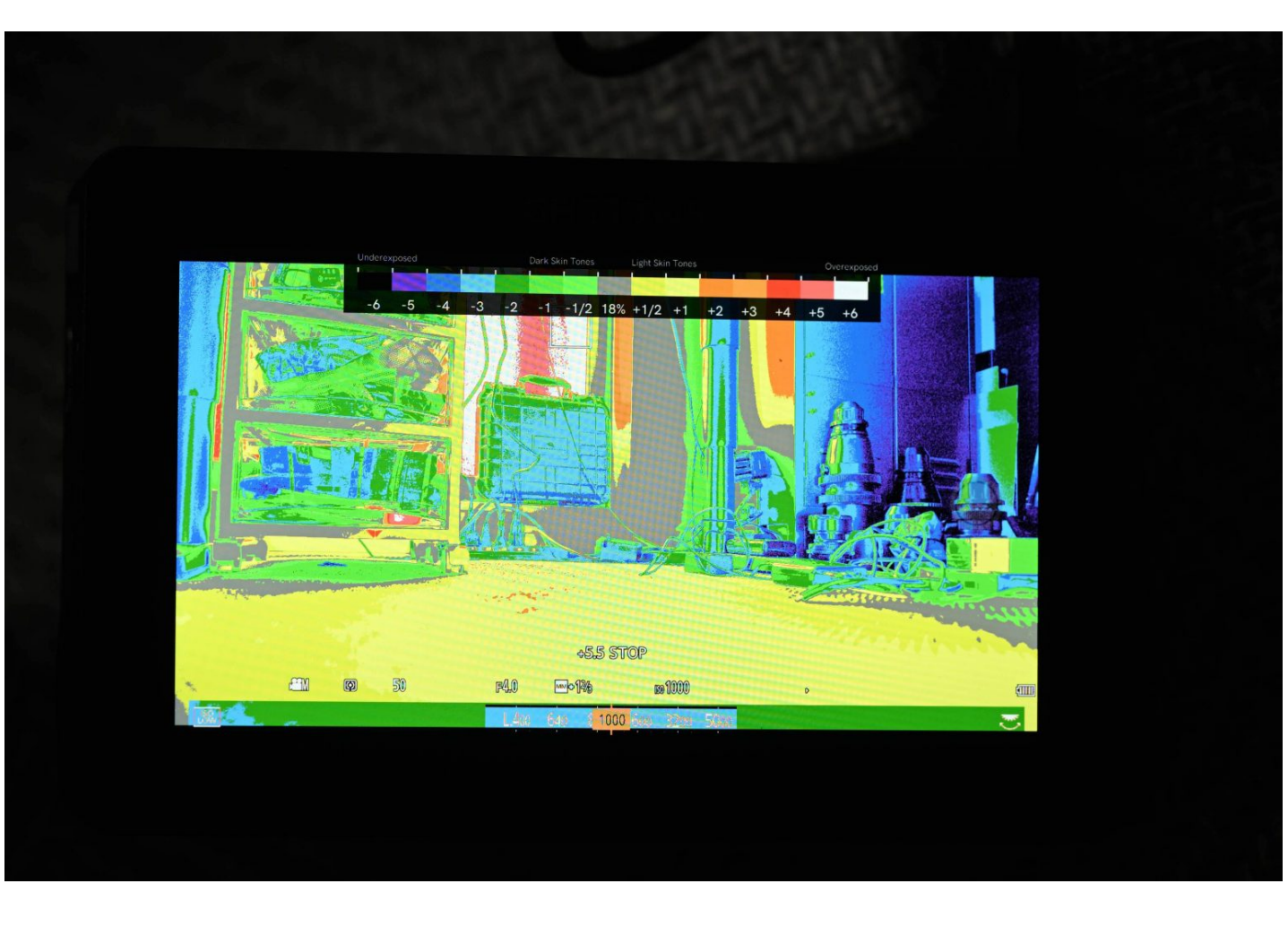
Above you can see what it looks like if I set exposure correctly based on EL Zone for middle grey on an 18% grey card.



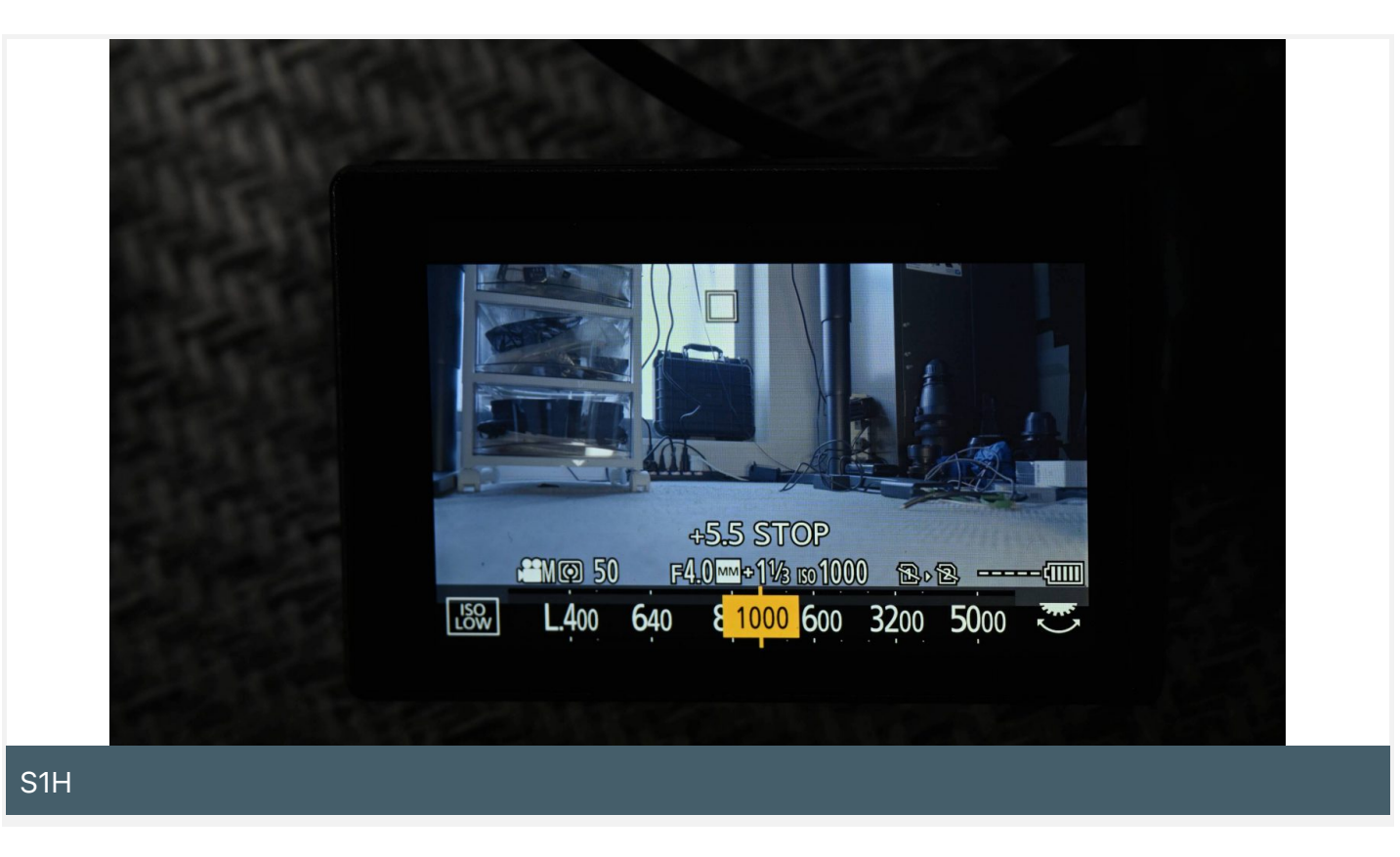
S1H



Let's now check to see how that compares to what I am seeing on the S1H's screen and if I switch the SmallHD Exposure Setting over to false color. As you can see, all three exposure methods are giving me almost the exact same result.



Ok, so now let's have a look if I raise the exposure so that we get some overexposure in the image. We can see that overexposure is indicated by the color white.



S1H

Again, let's see how this compares to what I am seeing on the screen of the S1H and when I switch to false color on the Small HD. As you can see if I place the luminance spot meter on the same part of the image that is showing overexposure when EL Zone is used it tells me that it is 5.5 stops above middle grey. Having worked with the S1H, I know that 5.5 stops above middle grey are going to result in highlight clipping. On false color, it is displayed as red which is also indicating overexposure.

From my testing, I found that EL Zone works well with cameras that have dynamic range that is within the limits of what EL Zone is capable of displaying.

When setting exposure it really depends on what you are trying to achieve. In some cases, setting exposure so it looks good for the LUT or Look you are using will be perfectly fine, but in other instances, especially high dynamic range scenes, you may want to expose to the right to raise the exposure of areas below middle grey, while still not clipping your highlights.

Thoughts on EL Zone

I like the concept of EL Zone and in a lot of instances, it works really well. The biggest caveat is that it is limited to showing 12 stops and depending on the camera you are using, this can be an issue, especially when displaying accurate overexposure.

On the positive side, it is really nice to be able to see a visual indicator of exactly what stop value an object is in your scene. You can use EL Zone as a sort of defacto light meter and it allows you to see all the values in your scene on a single display. No, it isn't going to give you T-stop or F-stop values based on a certain EI or ISO, but it will give you enough information that you can clearly converse with a gaffer so you can tell them to raise or lower the intensity of a light by a given number of stops. All you need to do is to look at your camera and call out a T-stop or F-stop. Because you have a reference on your screen, if you have your camera T-stop at say T5.6 and your EL Zone is showing you that the correct exposure is 2 stops under what it should be, you know that you will have to either open up the iris to T2.8 or add more light to compensate. For gaffers, they could also have a Small HD monitor with a wireless RX unit on it where they could be seeing the exact same image with the EL Zone applied as the DP was. This would also help with communication.

It is always great to see new ways of doing things. We have arguably become so used to older forms of technology when dealing with exposure, such as zebras, false color, and histograms. While all these tools certainly have their place, EL Zone adds another element that can be very useful when judging exposure. Hopefully, in the future, it gets implemented in more cameras and devices, but this will require it to be calibrated specifically to each specific camera sensor's gamma and latitude.

By Matthew Allard ACS

Matthew Allard is a multi-award-winning, ACS accredited freelance Director of Photography with 30 years' of experience working in more than 50 countries around the world.

He is the Editor of Newsshooter.com and has been writing on the site since 2010.

Matthew has won 45 ACS Awards, including four prestigious Golden Tripods. In 2016 he won the Award for Best Cinematography at the 21st Asian Television Awards.

Matthew is available to hire as a DP in Japan or for work anywhere else in the world.

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Best Newest Oldest

Tim de la Torre
6 days ago

I got this working on my old C100s, which is awesome, but I don't see Blackmagic as an option for setting up the color pipe and I have a few BM cameras. Does anyone know if SmallHD will be releasing a color pipe for Blackmagic?

0 0 Reply • Share ›

Matt Mead
13 days ago

Thanks for sharing this and big thanks to Ed Lachman for creating the system.

I've made an S-log 3 version here in 33 x 33 x 33. Tested loading it on FX6 and Atomos Shogun, but not against a reference chart to verify the values.

https://drive.google.com/fi...

Unfortunately it seems to have trouble displaying -5 and -6. You can see my working and links to the tools I used to generate it:
https://docs.google.com/spr...

In particular, this tool was helpful for making false colour LUTs but only accepts integers for IRE values:
https://colorizer.net/index...

Any tips to improve it welcome!

0 0 Reply • Share ›

Tinx Chan
14 days ago

The benefit of EL Zone is that it isn't just for simply getting "proper" exposure, but it also gives the cinematographer the ability to light for specific contrast ratios without a light meter…. You can easily see where you want your exposure for the face, whether yellow or middle gray… and adjust your fill/ shadow side accordingly… whether -2 stops -3, or -4, it simplifies everything and is a great tool for keeping your lighting consistent. Also with the addition of the extension range to show the highlights and shadows before it clips— that really is all we need on set… Personally, I never need to know exactly what's 7 or 8 stops over, I just need to know when it's gone, and more importantly my middle ranges over and under 18% gray.

1 0 Reply • Share ›

Diba Duhey
16 days ago

The 12 stop limit is a big caveat indeed.
Was so excited for a moment

2 0 Reply • Share ›

Ed Lachman → Diba Duhey
14 days ago

There is no problem in extending the exposure range in the EL Zone System in stops for ARRI Alexa 35 or for any other camera manufacturer through in-camera representation or using a Small HD. It won't add more colors, which would only make it less distinguishable and lose the simplicity of the mid-tones, where it is most important. The whole concept and design of the EL Zone System is for cinematographers in the field with its values of light in stops to distinguish contrast and exposure. In the areas of the over- and under-exposure, where more stops are needed, I will be instituting a system similar to zebras to represent the amount of stops that would hold detail in the over or under areas. Thanks for everybody's comments and your article. As camera sensors have become more sensitive, it has always been in my thoughts and I hear you. And of course, the EL Zone System has to recognize whatever the latitude of the sensor is that it is representing.

- Ed Lachman, ASC

5 0 Reply • Share ›

Simon Cai → Ed Lachman
13 days ago

This makes lots of sense to me in making decisions on exposures and lightings more than false color. Thank you Ed

0 0 Reply • Share ›

Matthew Allard ACS Newsshooter Team ➜ Ed Lachman
14 days ago

Hi Ed, thank you so much for your comments and for answering readers comments.

👍 0 👎 0 Reply • Share ›

Dev Barua ➜ Ed Lachman
14 days ago

From what I read, the EL Zone will be tailored to each sensor and the zebra system is a great way to represent the extended latitude beyond 12 stops. Although, in most scenarios 12 stops of exposure are more than enough for my purposes.

👍 0 👎 0 Reply • Share ›

Thatcher ➜ Diba Duhey
16 days ago

Fortunately it's not too hard to just make a false color LUT that extends what this tool does to any log curve, for any monitor that supports LUT uploads. I wrote a DCTL for Resolve to generate LUTs with this idea back in February 2022, though I guess I wasn't the first one to think of this.

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Peter ➜ Thatcher
16 days ago

I am not sure I fully understand what you are saying. But it seems it is a major hurdle that can be overcome. Could you explain a bit more clearly for us with limited knowledge, who are left a bit in the dark?

👍 0 👎 0 Reply • Share ›

Thatcher ➜ Peter
16 days ago edited

Here's the updated DCTL:

https://github.com/thatcher...

There are a bunch of instructions in the README in that repository on how to use and install it, but basically the trick is that you apply this downstream of a color space transform to Gamma=Linear, and then you have to find a way to convert this DCTL to a LUT. I provide a couple pointers on how to do that in the Readme as well.

👍 1 👎 0 Reply • Share ›

MG ➜ Thatcher
15 days ago

Mark, nice looking DCTLs! I'll take a look. I have indeed built an extended version of EL Zone in ACESproxy log using Nuke. I just need to get around to rebuilding it and exporting it. It requires a pre-transform from other log formats to ACESproxy, obviously. Cameras that already output ACESproxy like some Canon and Sony cams can directly use it, of course.

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Thatcher ➜ Peter
16 days ago

I guess it's bad mannered of me to allude to how to do it without actually saying how. One way you could do it today would be to use the False Color plugin that comes with Resolve. Shoot an exposure bracket of an 18% gray card and measure the IRE of the card when over/under exposed, and then assign the colors of your choice to those IRE values in that plugin, and bake the result as a LUT. I've got a tool I can use to do something similar, but uses Resolve's color space awareness to not require the exposure bracket step. I'll patch it to let you configure the clipping point and post a link.

👍 2 👎 0 Reply • Share ›

Diba Duhey ➜ Thatcher
16 days ago

Wow, amazing!

👍 0 👎 0 Reply • Share ›

Jonathon Sendall ➜ Diba Duhey
16 days ago edited

Is that limit in the camera software that it's installed on? I don't think that's such a huge problem as lighting to that stop range might be a good idea. It can always be expanded out for different cameras, no?

It does seem to make sense though because he is using more band colours spread out near the skin tone values.

👍 1 👎 0 Reply • Share ›

Matthew Allard ACS Newsshooter Team ➜ Jonathon Sendall
16 days ago

It could certainly be tailored to individual cameras.

👍 0 👎 0 Reply • Share ›

Jonathon Sendall ➜ Matthew Allard ACS
16 days ago

Agreed. I think the camera manufacturers would need to map their own sensors but it's an excellent application. I would like though to perhaps be able to change the colours as I prefer red as clip, not white.

👍 0 👎 0 Reply • Share ›

Nick Paton
16 days ago

Its a great tool and far more intuitive than false colour in my opinion. I shoot a lot of Canon (c500ii) and smallHD only has canon Clog as a log option...I have contacted customer service about it as clog is largely redundant with clog 2 and clog3 being the most used for quite some time now. Hoping someone out there from smallHD is listening!!

👍 1 👎 0 Reply • Share ›

Casey ➜ Nick Paton
16 days ago

The C500II has stop based false color built in. 18% grey, one stop over, clipping, and one stop before clipping. It isn't as colorful, but it does most of the job. Use it in combination with the exposure meter and it is easy to get well balanced scenes.

👍 0 👎 0 Reply • Share ›

Francisco ➜ Nick Paton
16 days ago

I tought i was nuts because i only got clog and nobody at smallhd replied on social media. Glad its a known issue. Please @smallhd, add clog 2

👍 0 👎 0 Reply • Share ›

Matthew Allard ACS Newsshooter Team ➜ Nick Paton
16 days ago

I wonder why that is. Perhaps there is some type of reason?

👍 0 👎 0 Reply • Share ›

Nick Paton ➜ Matthew Allard ACS
16 days ago

I have no idea but wish they had the setting. I find it as intuitive as my old spot meter and the way I'd expose back in the film days.

👍 0 👎 0 Reply • Share ›

Anonymous Scandinavian Coward
17 days ago

Thanks, Matt. I guess you just saved us $350.

https://www.newsshooter.com...

👍 0 👎 0 Reply • Share ›

Matthew Allard ACS Newsshooter Team
➜ Anonymous Scandinavian Coward 16 days ago

Oh, I don't know about that. He's the inventor, I am just an end user.

👍 1 👎 0 Reply • Share ›

Wind
17 days ago

Can do the same thing with customized false color with omniscope/scopebox.
The integration is quite useful tho so that DPs don't need to walk back to their DIT tent when operating.
As for the shoulder and toe of the captured information, pushing one or two stops is normally acceptable for Alexa/Venice cause both their sensor allows and their log curves are quite linear(perceptually linear not mathematically)
however if we are using less capable camera, extreme ETTR/pushing can definitely leads to desaturation and other potential issues such as shot matching. Yes, you can pull it back and the more light CMOS gets the cleaner it is...but anything in the 4+ over zone have a certain degree of information loss.

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Zak Ray
17 days ago

This is very cool! Thanks for highlighting it.

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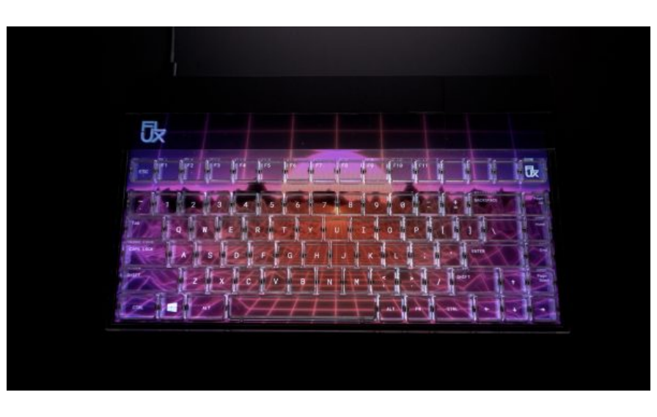

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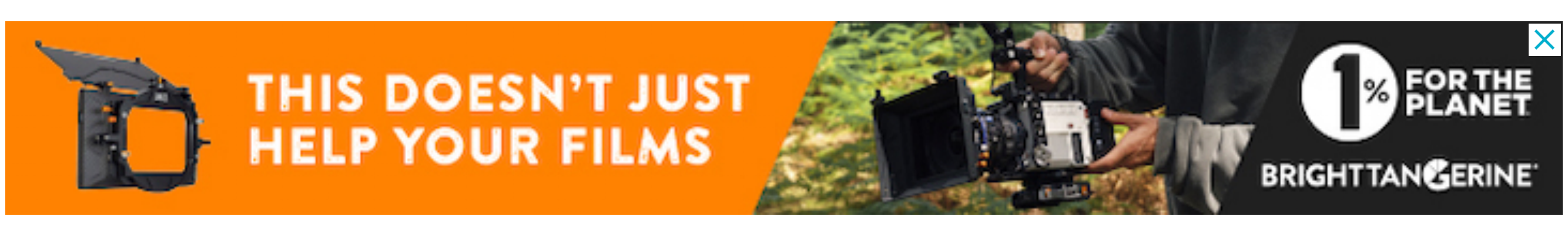MATTHEW ALLARD ACS 15 HOURS AGO 3