Test EIZO EV2495-BK: Ingenious monitor for (home) office environments

Frameless 24" monitor in 16:10 format offers exemplary ergonomics and energy-saving features as well as USB-C

12.11.2020, Manuel Findeis

Introduction

With the 27-inch FlexScan EV2795 and the 24.1-inch FlexScan EV2495, EIZO presents two new, almost frameless LCD monitors that are optimally suited for the (home) office thanks to USB-C docking. Both displays are anti-reflective, flicker-free and equipped with exemplary ergonomics and energy-saving features. They are both ideally suited for clean-desk use.

With the EIZO EV2495 we have the smaller model in the test. We will look at the larger version at a later date. The EV2495 distributes its 1920 x 1200 pixels on a 24.1-inch diagonal in 16:10 format. Compared to Full HD monitors, this creates a little more space vertically, which is particularly welcome for office applications.

In other respects, too, the device equipped with a viewing-angle-neutral IPS panel is particularly geared towards efficiency and productivity in the office and home office. Thanks to state-of-the-art connectivity with USB-C, a single connection is enough to daisy-chain up to four screens into a multi-screen solution.

At the same time, a 70-watt power supply for notebooks and small computers is available via USB-C. The special feature, however, is the integrated docking station, which provides a KVM switch and even a LAN connection.

The virtually frameless design with electrostatic controls causes minimal disruption to the composite screen area in multi-screen solutions and also provides comprehensive ergonomic features. Thanks to the hybrid technology developed by EIZO, the display is said to remain flicker-free and thus easy on the eyes. The sensor-controlled, automatic adjustment of the image brightness also contributes to this. Of course, this also saves electricity - up to 50 % according to EIZO.

A 10-bit LUT is supposed to ensure particularly precise colour control. Compared to an otherwise usual 8-bit LUT, this ensures considerably more precise colour information, especially for the finest colour gradations.

Precision work has its price, of course. The RRP is 637 euros. At the time of testing, however, the EIZO EV2495 was already available from 555 euros. As usual, the manufacturer also offers a generous five-year warranty for the current test model.

For detailed information on the features and specifications, please refer to the EIZO EV2495 data sheet.

Scope of delivery

EIZO's claim to environmentally and socially conscious production is already evident in the packaging. Unnecessary plastic bags were largely dispensed with. Quick-start instructions and conformity documents, for example, are enclosed in a conventional envelope, which serves its purpose perfectly.

It is also noteworthy in this context that EIZO explicitly points out on the product website that the EV2495 is produced in a socially responsible manner and without child or forced labour. For those who only ever look for the cheapest device when making a purchase decision, this might make you think.

Scope of delivery

The scope of delivery is otherwise manageable: a power cable, a high-quality USB-C cable and screws for alternative wall or swivel arm mounting according to VESA standard 100 x 100 mm - that's it. We would have liked to see cables for HDMI and DisplayPort in this price range.

As usual, we were able to effortlessly download a detailed manual, drivers and a standard colour profile directly from the EV2495 product page. The additional software "Screen InStyle" is also available here. This allows you to easily manage power consumption, colour, brightness and other settings for a single screen or a multi-monitor configuration.

We did not take a closer look at the additional software in the context of this test, but we can say from our experience elsewhere that EIZO has understood the importance of a well-rounded overall solution consisting of hardware and software. This is of course worth mentioning in comparison to competitors from Taiwan, South Korea and China. Rather regularly than rarely, one encounters software solutions that seem lovelessly plugged together and unfinished, and which it is better not to install in the first place. This is not the case with EIZO and is therefore a plus point worth considering.

Optics and mechanics

There is no need for assembly, as the unit is already completely pre-assembled in the box and only needs to be transported to the desk. Of course, the stand can be removed if desired. This is done with a push-button above the stand or below the recessed grip. Threads according to the VESA standard (100 × 100 mm) are visible underneath.

Opening for the support leg

Engaging the stand leg

When you arrive at the office in the morning, you usually see your monitor from behind. The EIZO EV2495 puts you in a good mood, because thanks to its slightly tuned design it really smiles at you.

In principle, the design corresponds to the design line that has been familiar for several generations. In detail, however, there is a renewed trend towards curved lines and gentle curves instead of sharp, but also hard edges. Another new feature is the clearly airier-looking turntable, where an opening has simply been left in the middle.

Front view in the highest position

Rear view in the highest position

We already know the two-stage construction of the stand leg itself from other models. It allows an unusually generous height adjustment of 18 cm. The display can be lowered completely to the turntable.

Front view in the lowest position

Rear view in the lowest position

In contrast to the sometimes criticised flex stand on the CS and CG monitors, the height adjustment on the EV2495 is also pleasantly smooth. In the photos below, we only show a 45-degree rotation in each case. In fact, the EV2495 can be rotated 172 degrees in both directions - a total of 344 degrees.

View Rotation to the left

View Rotation to the right

The mechanism for this is located in the underside of the turntable. The area visible from above rotates with it. The two-stage height adjustment is clearly visible in the side views. However, the steps are not used one after the other as with the flexstand of the CG series, but simultaneously. This makes the entire height adjustment possible in one smooth, flowing movement.

Lateral view

Lateral view with maximum angle of inclination to the rear

As usual with EIZO, the tilt is also very generously adjustable from -5 to +35 degrees. A 90-degree swivel into the pivot position is of course also possible. Even though the stand may look a little unusual when viewed from the side, you really can't complain about the scope of ergonomic functions and the mechanics involved.

View pivot sideways

Pivot view from the front

There are certainly flatter displays in terms of depth, but from the front, the most striking feature is the almost frameless design. The outer frame is only 1 mm thick at the top and sides. After switching on, as usual, a frame is added by the unused display area. But at 5 mm, it is also narrower than average.

Unfortunately, the frame is not the same width all around. At the bottom, the outer frame measures 5 mm, and the additional frame through the unused display area is somewhat larger at about 6 mm. This is particularly relevant if you want to stack two screens on top of each other using a swivel arm for multi-screen operation.

Despite the airy-looking design, the EIZO EV2495 is no lightweight in the 24-inch class at 7.6 kg (including the stand). On the other hand, the weight, which is caused to a not inconsiderable extent by the compact display itself, may also contribute to the device's valuable impression.

Overall, the workmanship and materials used in the EIZO EV2495 make a very high-quality, discreetly elegant impression. We also did not notice any irregularities in the gaps.

Support leg

The manufacturer has dispensed with the double cable management solution as with the EIZO EV2456 in the EIZO EV2495. A larger flat cable cover is already pre-mounted. The cover can be very easily pushed up and removed in order to place the cables accordingly.

Cable cover closed

Cable cover open

The power supply unit is integrated into the housing. By means of the dedicated power switch, the unit can be completely disconnected from the mains. The ventilation slots on the back of the display are hidden behind a friendly Asian smile. Nevertheless, we could not even detect a noteworthy warming in this area even after longer use. Incidentally, the recess above the stand suspension can be used very well as a transport handle.

Practical carrying handle and hidden ventilation slots

Technology

Operating noise

We did not notice any operating noise with the EIZO EV2495. Both in standby and in operation, the monitor works completely noiselessly - regardless of the brightness setting. However, the noise development in particular can be subject to a certain series dispersion, which is why this assessment does not necessarily apply equally to all devices in a series.

Power consumption

	Manufacturer (in watts)	Measured (in watts)
Operation max.	156	18,94
Operation typical	11	-
140 cd/m²	k. A.	11,39
Operation min.	k. A.	5,8
Energy saving mode (standby)	0,5	<0,4
Switched off (Soft-off)	0,5	<0,3
Switched off (mains switch)	0	0

**Measured values without additional consumers (loudspeaker and USB)*

EIZO states a maximum consumption of 156 watts in the data sheet. This value need not shock anyone, because it means operation at maximum brightness and using all signal and USB connections. This can probably only be achieved anyway if an external device is supplied with the maximum 70 watts.

According to our measurements, the power consumption at maximum brightness is only 18.94 watts. We measured slightly less than 0.4 watts in standby and a slightly lower value in soft-off. The power consumption can be completely cut off with the power switch.

At 140 cd/m² at the workstation, the measuring device displays 11.39 watts. The efficiency at this brightness is calculated at an excellent 2.1 cd/W, which is practically record-breaking for the EIZO EV2495 and can even be improved during operation. The "EcoView" function is responsible for this. If desired, the monitor brightness can be automatically adjusted to the ambient brightness via a sensor.

Connections

The EIZO EV2495 offers all modern digital inputs: 1 x DisplayPort (HDCP 1.3), 1 x HDMI (HDCP 1.4) and 1 x USB-C (compatible with DisplayPort Alternate Mode, HDCP 1.3). Furthermore, we also find the RJ-45 input on the back, which supports gigabit speed.

The USB-C input also serves as a USB upstream port. Devices connected to it can transmit a video signal and are simultaneously supplied with LAN, USB hub and power (70 watts max.) in the sense of a docking station.

On the far right you can see the second USB-C port, which is protected by a cover. This is primarily a signal output that is needed for connecting several monitors in series. At the same time, it can be used as a USB-C downstream port and supply connected devices with up to 15 watts of power.

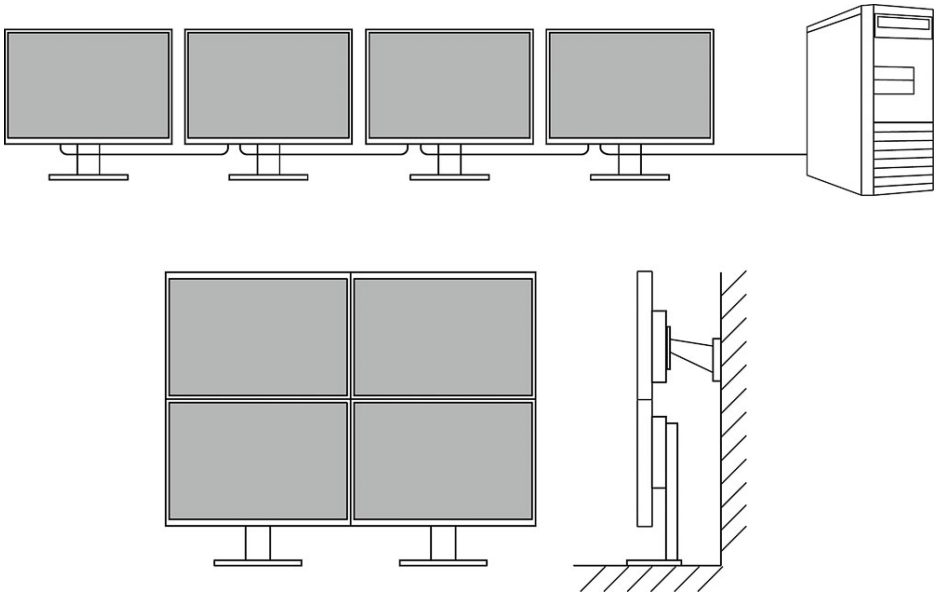
Connections

The usual USB 3.0 downstream ports of type A can be found together with the headphone jack on the left behind the frame in a small bay. One of them also has a battery charging function with 10.5 watts.

3 x USB 3.0 downstream ports and the headphone jack on the side in the bay window

You don't have to rely on USB-C to use the USB hub. There is also another USB upstream port of type B. However, both can be used by different PCs at the same time. For this purpose, the EIZO EV2495 has an integrated KVM switch that can be configured via the OSD. When the video input is changed, the USB ports and, if necessary, the mouse and keyboard are also taken over.

Thanks to the almost frameless design already described, the EIZO EV2495 is also very well suited for series connection and multi-screen systems. Up to four monitors can be connected simultaneously. Using swivel arms, the screens can also be easily stacked to form a large screen area. The use of the additional software "Screen InStyle" then makes particular sense, as it allows the settings for all monitors to be synchronised centrally.



Daisy-chaining up to four monitors with the USB-C output

Operation

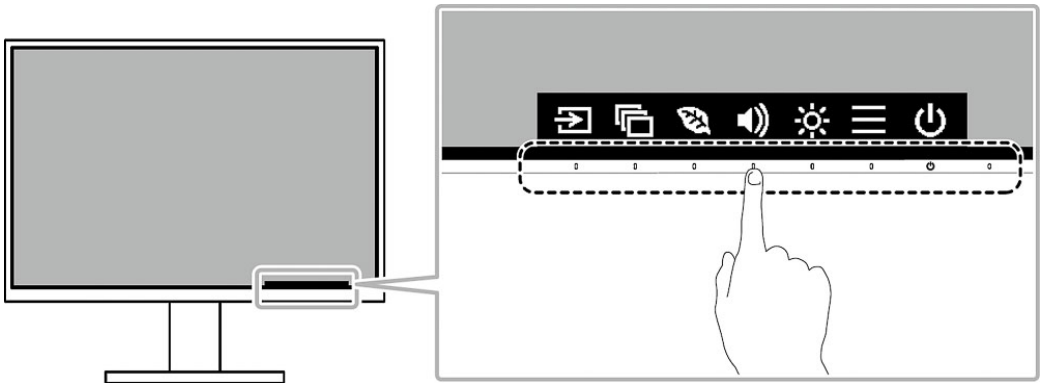
With a single monitor, conventional key operation is very convenient thanks to electrostatic controls. All controls, the brightness sensor and the loudspeakers are integrated completely flat into the narrow front panel.

Electrostatic controls

Unfortunately, the EIZO EV2495 does not have the acoustic feedback of the responsive touch keys as the Color Edge devices. You have to be a little careful when operating it, as the bezel is very narrow and otherwise you will leave fingerprints on the display.

OSD

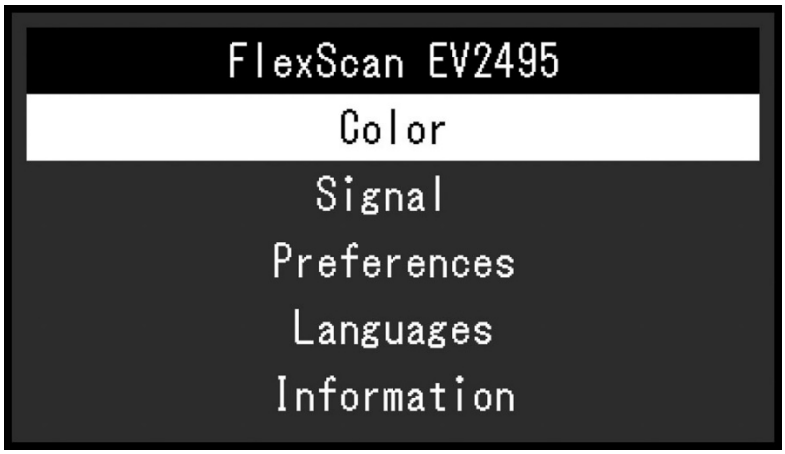
Pressing any key first calls up the quick selection, which makes the function of the individual keys visible with symbols. Signal source, user mode, EcoView, volume and brightness can thus be controlled directly without diversions via the menu. The "Menu" key takes you to the main menu with five main levels.



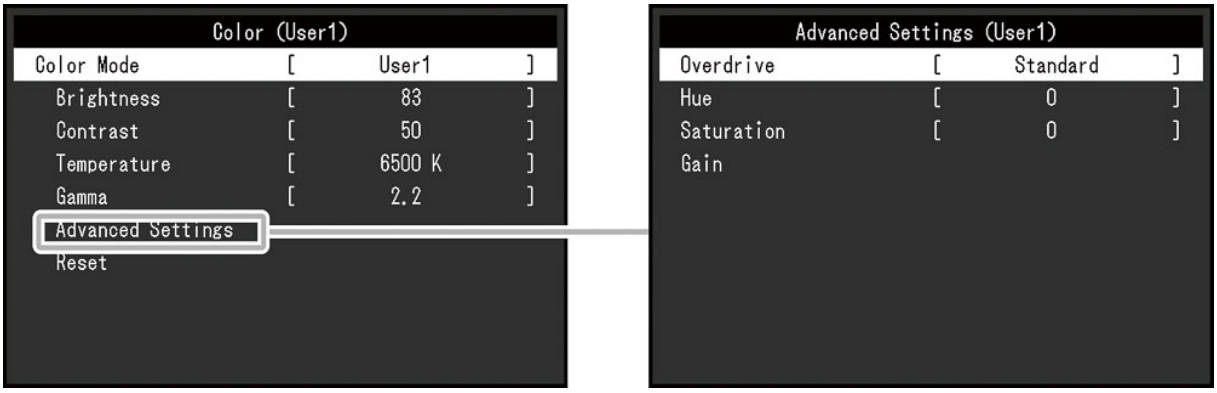
Menu entry and quick selection (Screenshot: EIZO manual)

The OSD is, as usual from EIZO, visually quite sober, but very professional in terms of the scope and terminology used. However, this does not mean that only professionals can handle it, because the exact opposite is the case.

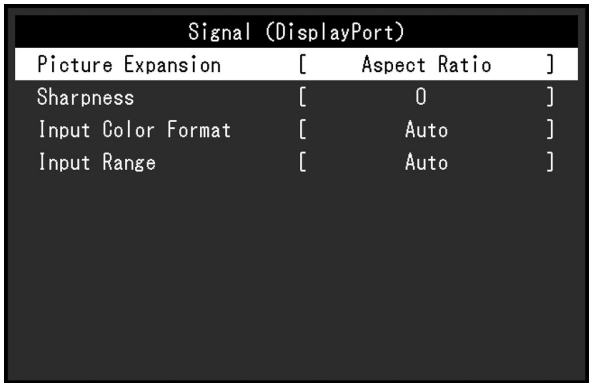
The OSDs of many other manufacturers are often colourful and wildly convoluted, although they are actually aimed at inexperienced consumers and should be simple. With EIZO, on the other hand, it is amazing how a professional range of functions can be structured so simply and clearly that beginners and professionals alike can immediately find their way around intuitively. In addition, everything is explained in the manual in above-average detail.



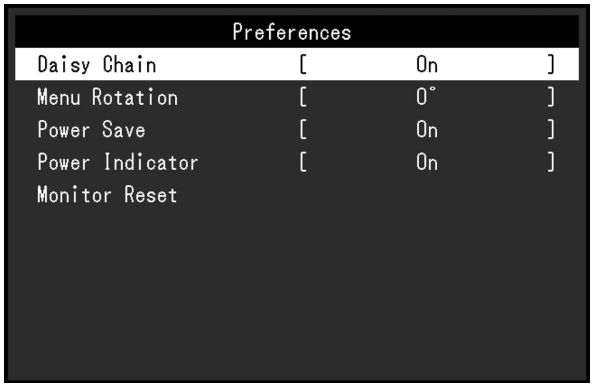
OSD: Main menu (Screenshot: EIZO manual)



OSD: Colour settings (Screenshot: EIZO manual)



OSD: Signal settings (Screenshot: EIZO manual)



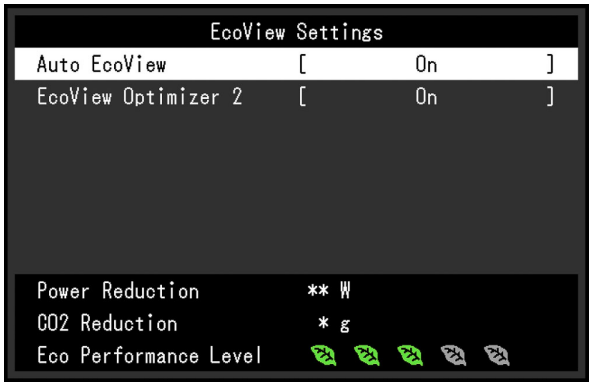
OSD: Preferences (Screenshot: EIZO manual)

In addition, not only the mechanics but also the electronics contribute to the ergonomics of the EIZO EV2495. The proband is equipped with an advanced fifth-generation Auto EcoView function.

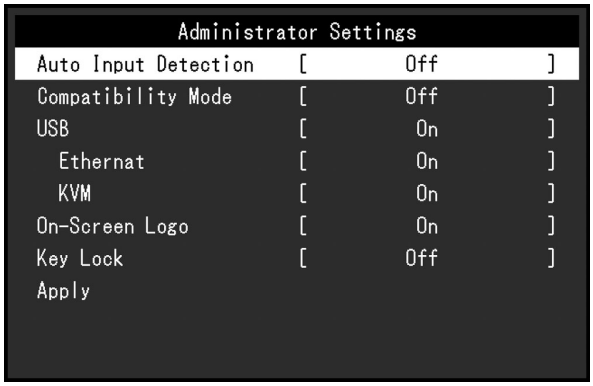
This continuously measures the change in ambient light and optimises the screen for optimal brightness values. Use has been greatly simplified and the settings of "Auto EcoView" now happen virtually unnoticed when the brightness control on the monitor is operated.

"Auto EcoView" works completely in the background and is free of cumbersome menus. The user only has to decide whether to switch on "Auto EcoView" or not. The monitor sensor technology independently detects whether the picture brightness was set in dark or bright ambient lighting and adjusts the brightness accordingly from this starting point, even if the environment changes.

The adjustments are so discreet that they are hardly noticeable. On the one hand, this is easy on the eyes, and on the other, it is good for the environment and your wallet. EIZO even discreetly adds colour to the OSD when displaying the energy savings achieved.



OSD: EcoView settings (Screenshot: EIZO manual)



OSD: Administrator settings (Screenshot: EIZO manual)

Picture quality

The panel frame and the surface of the panel are matt and effectively anti-reflective. Light falling from the side or even a viewer wearing light-coloured clothing creates only weak reflections on the screen.

At reset, the monitor sets the following values:

Factory settings	
Picture mode:	User1
Brightness:	91
Contrast:	50
Gamma:	2,2
Colour temperature:	6500K
RGB:	94/95/100
Colour Gamut:	k. A.
DUE Priority	k. A.
Sharpness:	0
Response time:	Standard

These values were used for the following assessment at factory setting.

Grayscale

The greyscales and the grey gradient already make an almost perfect impression ex works. They are very neutral and completely identical on both halves of the picture. There are also no colour temperature fluctuations in the different levels. The brightest levels can be distinguished completely and the darkest up to and including level 4.

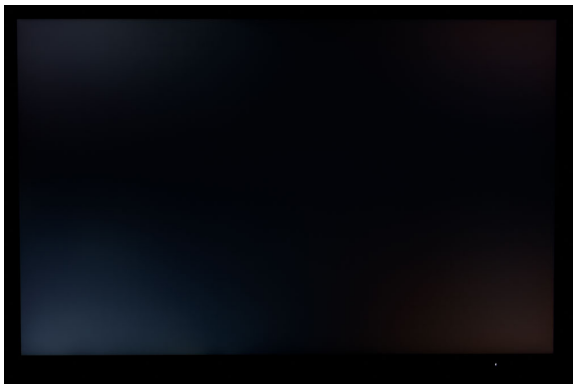
Even though it was possible to feed the driver with the usual 8 bits, the representation of fine grey and colour gradients is particularly positive. In some cases, the 256 gradations are barely discernible. Even vertically in the dark area at the edge, the representation is very even, but is somewhat diminished by brightening in the corners.

Grayscale

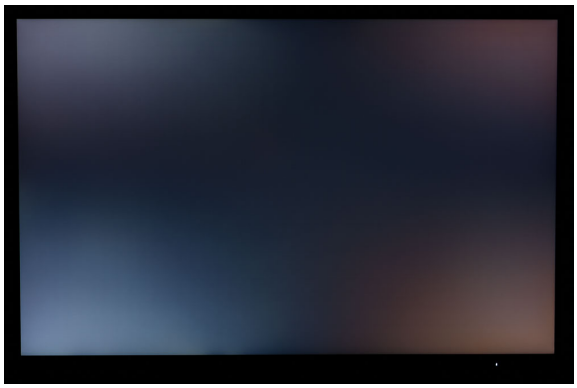
However, we noticed a certain weakness in the aspect of viewing angle stability. It is quite good, and the pattern remains almost completely intact even at the most extreme viewing angles, both in the darkest and the brightest levels. However, the colour temperature already changes noticeably from angles of about 30°. It becomes cooler, so the picture appears fresher, but remains completely coherent and neutral. We will come back to this in the chapter "Viewing Angles".

Illumination

The left photo shows a completely black image approximately as one sees it with the naked eye in a completely darkened room; here the noticeable weaknesses become visible. The right photo with a longer exposure time, on the other hand, highlights the problem areas and only serves to show them more clearly.



Illumination with normal exposure



Illumination with extended exposure

At first glance, the EIZO EV2495 immediately pleases with a very rich black. The measured black value is actually almost at the level of an EIZO CG2730.

The black image appears very even in wide areas starting from the centre of the picture. However, even when sitting in the centre of the screen, there is a clear and extensive lightening in the bottom left corner. They are not purely due to the viewing angle, so they do not disappear completely even when these areas are viewed vertically. The bottom left corner is predominantly colour-neutral. In the lower right corner, on the other hand, a slight reddish shimmer can be seen even with the naked eye.

In the lower left corner and partly also in other places, there is also some edge irradiation visible, but it is only very slight. Apart from the lower left corner, one has to make a great effort to recognise them at all.

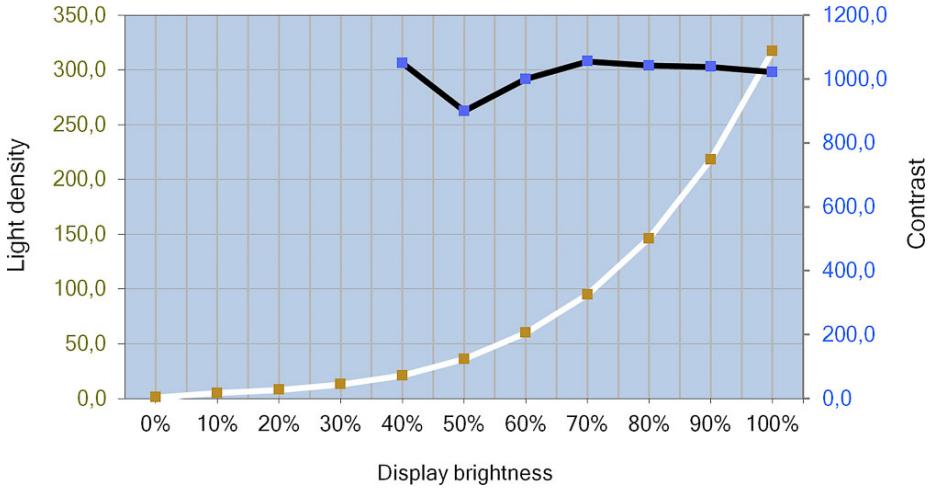
As soon as one deviates from the frontal seating position, the picture as a whole - as usual - brightens visibly. This is most noticeable from above. Here, too, a special feature is noticeable: if you look at the display from the top right, it appears neutral to slightly reddish. If you look at it from the top left, on the other hand, a clearly reddish tint is visible.

Overall, we would have expected more from an EIZO EV or in this price range in terms of illumination.

Brightness, black level and contrast

Measurements are taken after calibration to D65 as the white point. If possible, all dynamic controls are deactivated. Due to the necessary adjustments, the results are lower than when performing the test series with native white point.

The measuring window is not surrounded by a black border. The values can therefore be compared more with ANSI contrast and reflect real-world situations much better than measurements of flat white and black images.



Brightness and contrast curve of the EIZO EV2495

With native white point, we reach a maximum of around 313 cd/m². This is 11% below the manufacturer's specification of 350 cd/m². The brightness can be turned down to a minimum of 1 cd/m², which is not usable.

The brightness increase of the EIZO EV2495 is not linear as usual, but progressive. The maximum brightness is more than sufficient in any case, but normal working brightness is only achieved at settings above the 50 per cent mark.

The remaining range is nevertheless sufficient for fine adjustment of the brightness. The brightness as well as the RGB gain controls on the EIZO EV2495 make a very precise impression, so that the desired target brightness (or the desired white point) can be set very accurately. After calibration, the luminance increases slightly to a maximum of 317 cd/m².

The contrast ratio of the IPS panel is given by the manufacturer as 1000:1. With a brightness of only 1 cd/m², the black level can no longer be determined meaningfully by our measuring device. Since it is difficult to find the mouse pointer at all in the control range from 0 to 20 %, there is no point in displaying a contrast ratio of any kind. In order not to falsify the average calculations in the sensible working range, we have cut off the contrast curve below 40 % of the brightness slider.

According to our measurements, the contrast ratio in this range averages a very good 1015:1 after calibration.

Image homogeneity

-6.74%	-7.06%	-6.23%	-5.08%	-5.2%
-8.74%	-5.22%	0.0%	-2.42%	-4.05%
-4.97%	-2.4%	-1.22%	-1.69%	-0.4%

Brightness distribution of the white test pattern

3.63	3.09	2.69	2.26	1.84
1.14	1.5	0.0	0.48	0.78
1.05	0.61	0.34	0.41	0.71

Colour homogeneity in the white test pattern

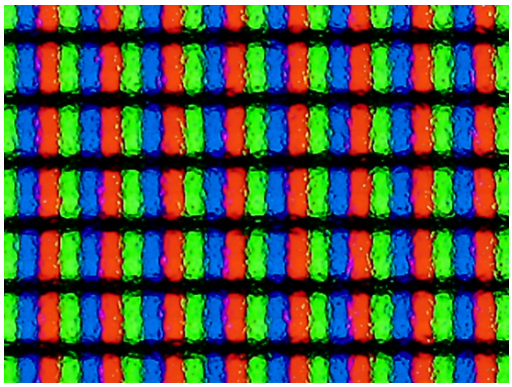
We examine the image homogeneity on the basis of four test images (white, neutral tones with 75 %, 50 %, 25 % brightness), which we measure at 15 points. This results in the averaged brightness deviation in % and the likewise averaged delta C (i.e. the chromaticity difference) in relation to the respective centrally measured value. The perception threshold for brightness differences is about 10 %.

The brightness distribution is good with an average value of 4.39 %. The maximum deviation of 8.74 % is even very good. In terms of colour homogeneity, the maximum deviation in the top left corner with a Delta C of 3.63 is only satisfactory. However, a look at the values above shows that the colour homogeneity in the most important image areas is also quite good. This also applies to the average value with a Delta C of 1.47.

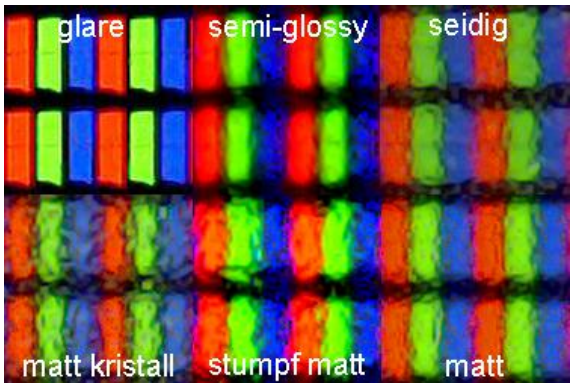
Since the subjective impression is also quite good - apart from a certain drop in brightness near the corners and edges - we still award a good overall rating.

Coating

The surface coating of the panel has a great influence on the visual assessment of image sharpness, contrast and sensitivity to ambient light. We examine the coating with the microscope and show the surface of the panel (foremost film) in extreme magnification.



Coating of the EIZO EV2495



Coating reference picture

Microscopic view of the subpixels, with focus on the screen surface: The EIZO EV2495 has a dull matte surface with microscopically visible pits for diffusion.

Viewpoint

The manufacturer's specification for the maximum viewing angle is 178 degrees horizontally and vertically. These are typical values for modern IPS and VA panels. The photo shows the EV2495 screen at horizontal viewing angles of ±60 degrees and vertical viewing angles of +45 and -30 degrees.

Horizontal and vertical viewing angles

The first thing we noticed about the viewing angle image when looking at it from the front is that, subjectively speaking, it seems to be perfectly colour-coordinated. The skin tones in particular seem very credible.

In terms of viewing angle neutrality itself, the result is no longer perfect - despite the IPS panel. As usual, colour saturation remains virtually unchanged even at more extreme viewing angles. Even the usual drop in brightness and contrast are comparatively low on the EIZO EV2495, at least at horizontal viewing angles.

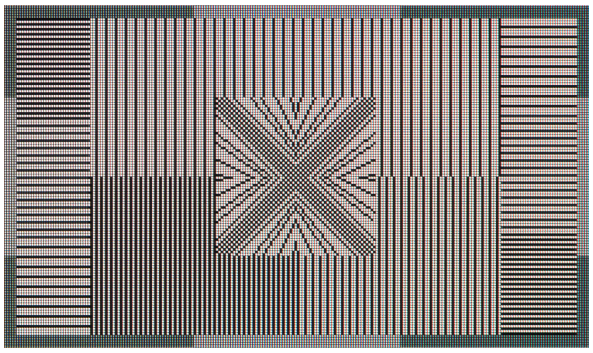
As already described with the greyscales, the colour temperature change is already clearly noticeable at quite small angles - at the latest from 30°. The cooling of the image seems to be even more pronounced at viewing angles from the left than from the right. This conspicuousness only affects horizontal viewing angles. We did not notice it vertically.

In the EIZO EV2495's defence, however, it has to be said that the colours always remain consistent with each other. Furthermore, you don't notice this at all in normal working positions in front of the screen. Here, the viewing angle neutrality can be rated as very good.

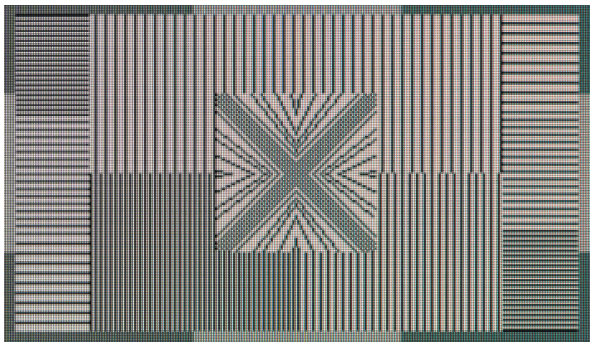
Interpolation

The EIZO EV2495 also has a sharpness control, but it is greyed out in the native resolution on the DisplayPort. According to the manual, it is only used to compensate for blurring caused by scaling at lower resolutions.

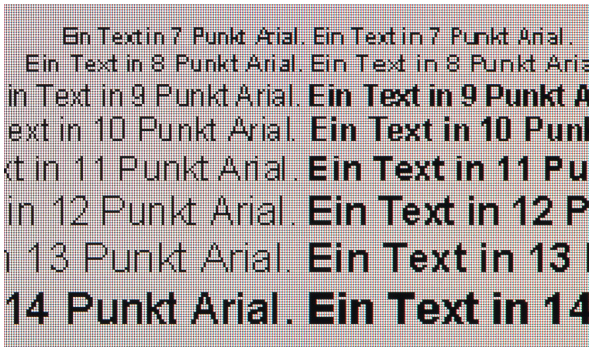
For input signals that deviate from the native resolution, the unit offers the options "full screen" (distorted if necessary) and "aspect ratio" (undistorted) as well as a pixel-precise 1:1 display. The scaling is set to "automatic" ex works. It works very well and in most cases achieves a distortion-free and maximum screen-filling display.



Test graphic native, full screen



Test graphic 1280 x 720, full screen



Text reproduction native, full screen

Text reproduction 1280 x 720, full screen

The interpolation capability of the EIZO EV2495 is - as usual from the manufacturer - excellent. This applies to both the scaling options and the implementation. The sharpness at native resolution is very good, as expected. At 1280 x 720 you can see that the necessary pixel enlargement is mainly caused by additionally inserted grey pixels. This leads to somewhat bolder contours with a slight impression of blurriness. Colour fringing does not occur.

In all interpolated resolutions, the readability of texts and the reproduction of the test graphics are good to very good - according to the degree of scaling. The unavoidable interpolation artefacts are low. Even texts with bold letters remain legible. It is also pleasing that a distortion-free, maximally area-filling display is possible in all tested resolutions without any problems.

Signal	**Distortion-free, maximum area-filling reproduction**	**Unscaled playback**
SD (480p)	Yain: maximum, but not quite distortion-free	Yes
SD (576p)	Yes	Yes
HD (720p)	Yes	Yes
HD (1080p)	Yes	Yes
Ultra HD, 4K	No	No
PC (4:3)	Yes	Yes
PC (16:10)	Yes	Yes
PC (16:9)	Yes	Yes

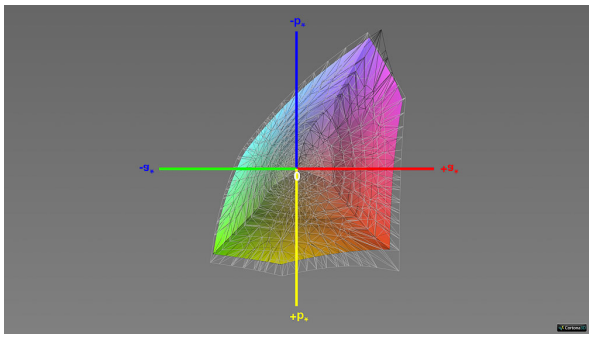
Colour rendering

For monitors for the consumer and office sector, we first test the colour reproduction in the factory setting after the reset and - if available - in an sRGB mode. Then the test person is calibrated with Quato iColor Display. We use our own software for the measurements, the X-Rite i1Display Pro colourimeter and the X-Rite i1Pro spectrophotometer are used as measuring devices.

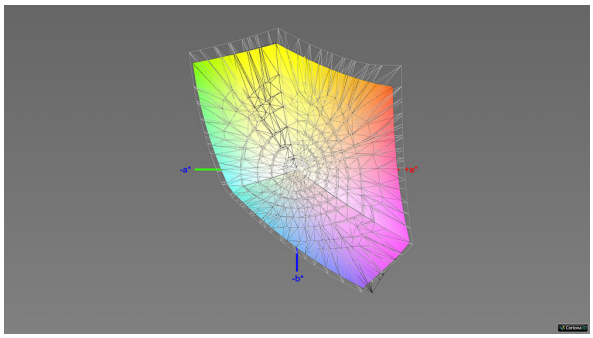
Colour space coverage

Subjectively, it is noticeable with the EIZO EV2495 on the desktop and in test images with the primary and secondary colours that the device displays the colours noticeably stronger than would be the case with a pure sRGB model.

The sRGB colour space is - as stated by the manufacturer - practically completely covered. The native colour space, however, goes noticeably beyond this, which is particularly noticeable in a strong red. For an office monitor, the somewhat larger colour space is rather a plus, as working with stronger colours is more fun.

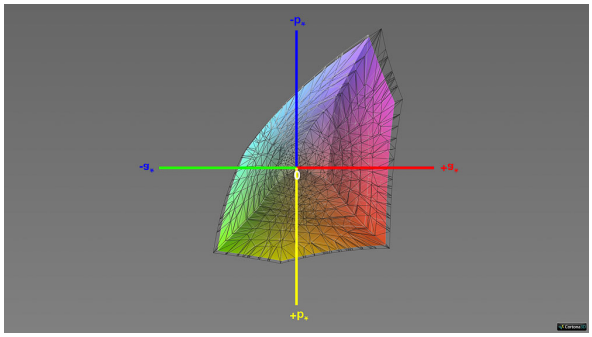


Coverage of the sRGB colour space in the native colour space (User1 mode), 3D slice 1

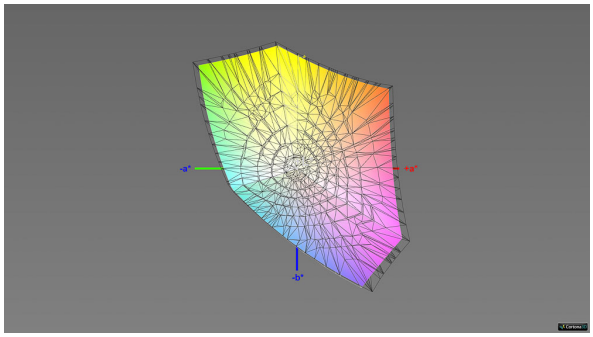


Coverage of the sRGB colour space in the native colour space (User1 mode), 3D cut 2

For image and especially video editing in an uncalibrated state, however, the EIZO EV2495 also offers a good sRGB mode. Here, overcoverage is avoided. However, the desired colour space coverage of 92% is somewhat meagre.



Coverage of the sRGB colour space in sRGB mode, 3D slice 1



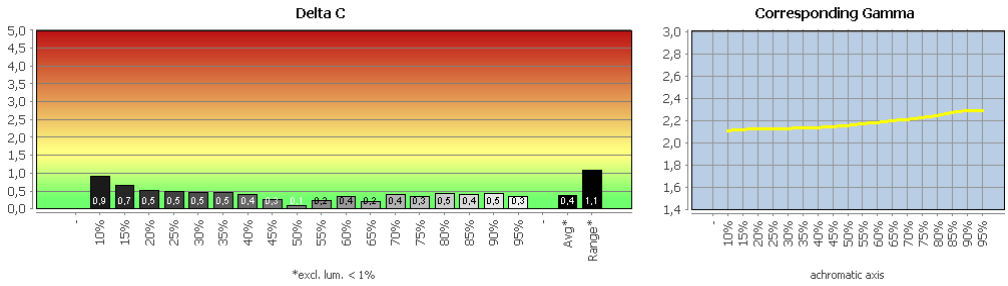
Coverage of the sRGB colour space in sRGB mode, 3D slice 2

The following table summarises the results for the factory preset and after software calibration with Quato iColor Display:

Colour space	Cover in factory preset	Coverage after calibration
sRGB	92 %	99 %
Adobe RGB	-	75 %
ECI-RGB v2	-	68 %
DCI-P3 RGB	-	77 %
ISO Coated v2 (FOGRA39L)	-	92 %

Colour mode: Custom (factory setting)

We have summarised the explanations for the following charts for you: Delta E deviation for colour values and white point, Delta C deviation for grey values, and gradation.

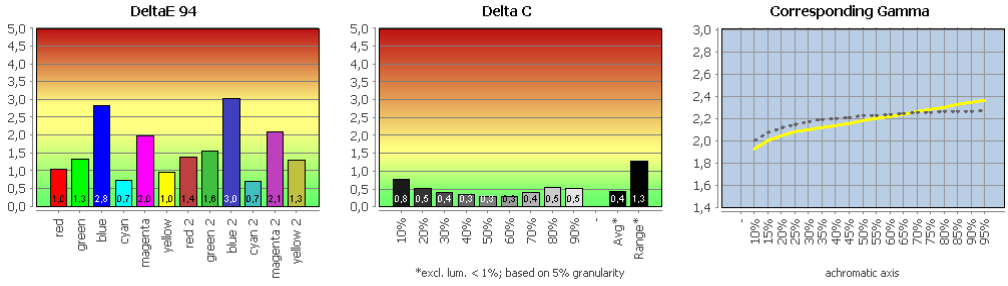


Grey balance in factory setting, picture mode "User1

The grey balance of the EIZO EV2495 is also excellent from the factory. The colour temperature of 6800 K is slightly cooler. The average gamma of 2.18 is almost spot on. The slightly rising gradient is otherwise predominantly linear.

The detailed test results can be downloaded as a PDF file.

Comparison sRGB mode with sRGB working colour space



Colour reproduction in the factory setting, picture mode "sRGB

As we already showed in the colour space comparison, the EIZO EV2495 has a true sRGB mode that significantly reduces the native colour space. This is especially important if

you want to have a colour-accurate display outside of colour management-enabled applications.

The grey balance is only good enough for a good result, which is exclusively due to the slightly increased range. As before, the colour temperature of 6800 K remains somewhat cooler than the set value or the 6500 K standard. The gamma curve has been adjusted somewhat, but can only hint at the standard curve. On average, however, the gamma is still close to the target at 2.18.

The colour deviations are somewhat higher here, but on average (Delta-E94-Average: 1.49) they are sufficient for a good rating. Only the colour space coverage of only 92% is not quite optimal.

The detailed test results can be downloaded as a PDF file.

Measurements after calibration and profiling

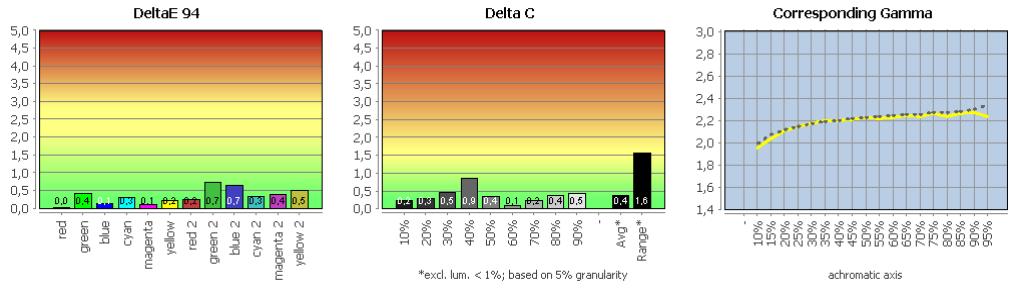
For the following measurements, the unit was calibrated and profiled from Quato iColor Display. The target brightness was 140 cd/m². D65 was chosen as the white point.

Neither represents a generally valid recommendation. This also applies to the choice of gradation, especially since the current characteristic is taken into account within the framework of colour management anyway.

The following values were set for the calibration in the OSD:

Calibration	
Picture mode:	User1
Brightness:	79
Contrast:	50
Gamma set:	2,2
Colour temperature:	6500K
RGB:	99/95/99
Colour Gamut:	k. A.
DUE Priority	k. A.
Sharpness:	0
Response time:	Standard

Profile validation

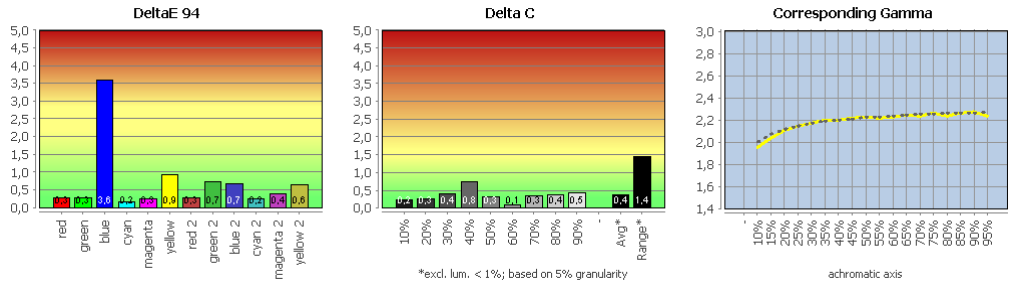


Profile validation

The EIZO EV2495 shows no noticeable drifts or unsightly non-linearities. The matrix profile describes its condition very accurately. A repetition of the profile validation after 24 hours showed no significantly increased deviations. All calibration targets were met. The grey balance is good, the colour values are very good.

The detailed test results can be downloaded as a PDF file.

Comparison with sRGB (colour transformed)



Comparison with sRGB (colour transformed)

Our CMM takes into account the working colour space and screen profile and performs the necessary colour space transformations with colourimetric rendering intent on this basis.

The grey balance is good to very good. The colour space coverage and the colour deviations (Delta-E94-Average: 0.67) are very good. Only the outlier in blue, which can also be seen in the graphic, goes quite a bit overboard.

The detailed test results can be downloaded as a PDF file.

Reaction behaviour

We tested the EIZO EV2495 in native resolution at 60 Hz on the DisplayPort. The monitor was reset to the factory settings for the measurement.

Image build-up time and acceleration behaviour

We determine the image build-up time for the black to white change and the best grey to grey change. In addition, we give the average value for our 15 measuring points.

The measurement value CtC (colour to colour) goes beyond the conventional measurements of pure brightness jumps - after all, one usually sees a coloured image on the screen. This measurement therefore measures the longest period of time that the monitor needs to change from one mixed colour to the other and stabilise its brightness. The mixed colours cyan, magenta and yellow are used - each with 50 % signal brightness. With the CtC colour change, therefore, not all three subpixels of a pixel switch in the same way, but different rise and fall times are combined.

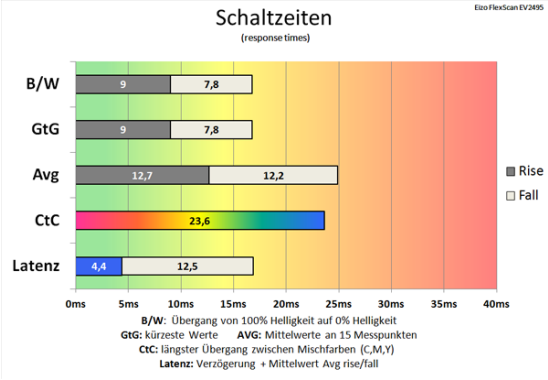
The data sheet states a response time of 5 ms for GtG. An acceleration option (overdrive) is available. Here there are the positions "Off", "Standard" and "Improved". The default value is "Standard".

60 Hz, Overdrive "Off

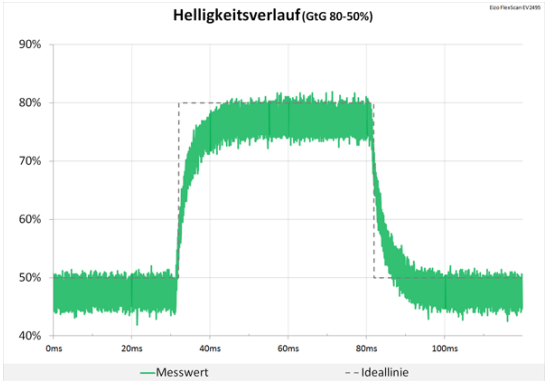
The overdrive can be switched off on the EIZO EV2495 if desired. We measured the black/white change and the fastest grey change at 16.8 ms each. The average value for our 15 measurement points is 24.9 ms, the CtC value is determined with 23.6 ms.

There are no overshoots to be observed, the tuning is very neutral.

The switching time diagram shows, among other things, how different brightness jumps add up, how fast the monitor reacts in the factory setting in the best case and what average reaction time can be assumed.



60 Hz (Overdrive "Off"): slow switching times

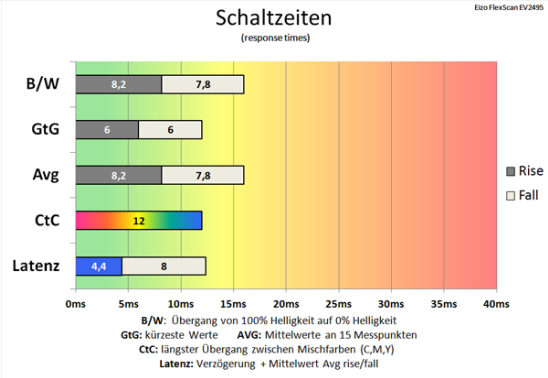


60 Hz (Overdrive "Off"): no overshoots

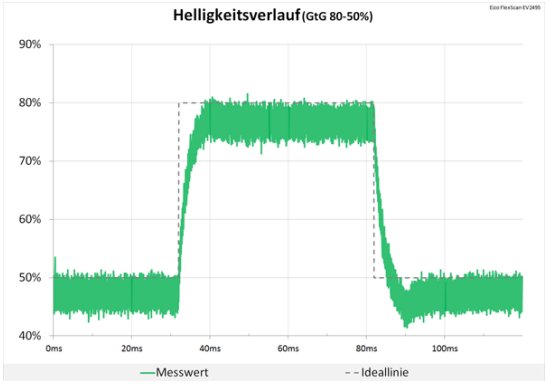
60 Hz, Overdrive "Standard

In the factory setting "Standard", the switching times are already shortened very effectively. We measure the black/white change with 16 ms and the fastest grey change with 12 ms. The average value for our 15 measuring points is a fast 16 ms. The CtC value is now also in a decent range at 12 ms.

In the overdrive setting "Standard", hardly any overshoots can be detected and the image build-up times are very fast. The value "Standard" activated by the manufacturer as standard is thus optimally selected. Losses in picture quality are not to be feared here.



60 Hz (Overdrive "Standard"): fast switching times

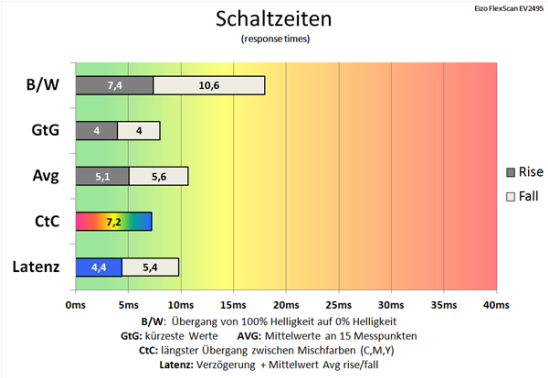


60 Hz (Overdrive "Standard"): minimum overshoot

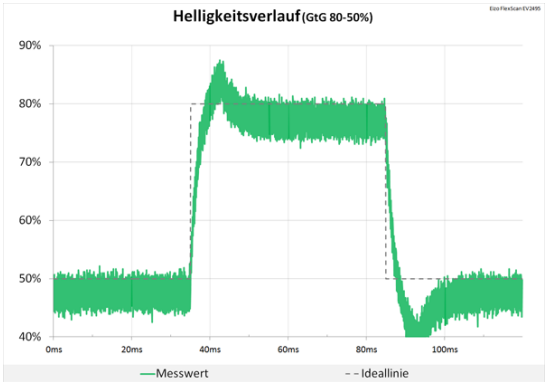
60 Hz, Overdrive "Improved

In the highest "Improved" setting at 60 Hz, we measure the black/white change at 18 ms and the fastest grey change at 8 ms. The average value for our 15 measurement points is 10.7 ms. A CtC value of 7.2 ms is short.

Even at the highest overdrive setting, the overshoots remain within an acceptable range.



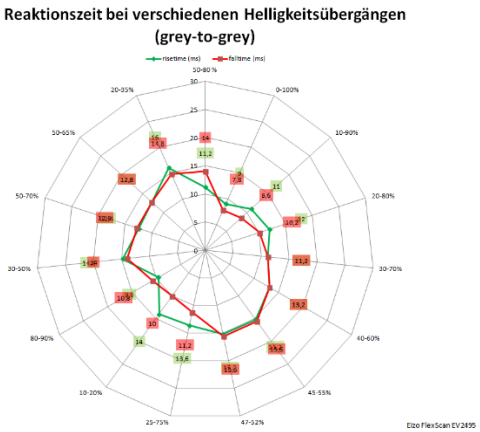
60 Hz (Overdrive "Improved"): fast switching times

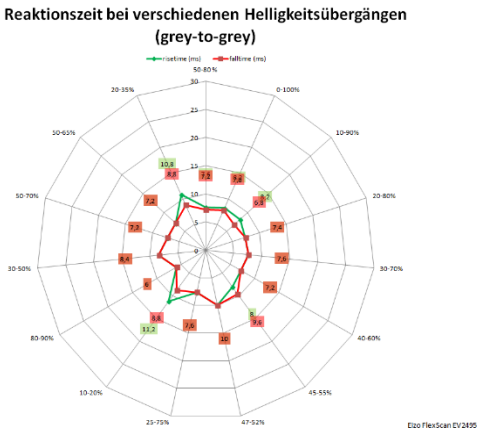


60 Hz (Overdrive "Improved"): somewhat stronger, but still acceptable overshoots

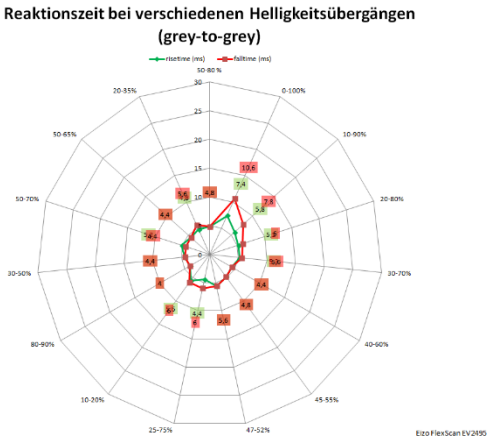
Network diagrams

In the following grid diagrams you can see an overview of all the measured values for the different brightness jumps of our measurements. Ideally, the green and red lines would be close to the centre. Each axis represents a brightness jump of the monitor defined in level and dynamics, measured via light sensor and oscilloscope.





60 Hz, Overdrive "Off" and 60 Hz, Overdrive "Standard



60 Hz, Overdrive "Improved

Latency and subjective evaluation

The latency is an important value for gamers; we determine it as the sum of the signal delay time and half the average picture change time. While other representatives from the EV series were able to achieve quite good response times in some cases, it was the pronounced signal delay in the end that called the gaming suitability into question again.

The FlexScan models from EIZO are basically all designed for use in office environments. However, some of them, such as the EIZO EV2495, are supposed to be quite suitable for gaming.

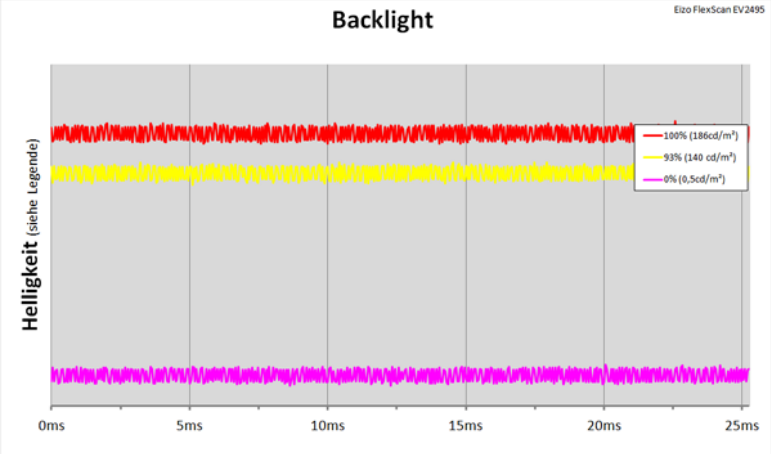
The manufacturer does not promise too much here, because with only 4.4 ms, the signal delay is very short - especially for a 60 Hz monitor. We calculate half the average picture change time at 5.4 ms. In total, the latency is 9.8 ms.

The EIZO EV2495 is therefore also suitable for occasional gaming. Nevertheless, it only has a refresh rate of 60 Hz and no other gaming features such as VRR or Adaptive Sync.

Backlight

The EIZO EV2495 is advertised by the manufacturer as flicker-free. To protect the eyes, a hybrid technology developed by EIZO is used to control the backlight. This is supposed to combine the advantages of the otherwise usual PWM control (pulse width modulation) and a DC control ("Direct Current"). The company promises absolute freedom from flicker without compromising picture quality or colour stability. The hybrid technology is also the reason why the brightness can be turned down so much on the test person.

Our measurement looks like a direct control. With the naked eye, no interruptions in the luminous flux (flickering) are visible either. Thus, the monitor is also well suited for longer work at reduced brightness.



Flicker-free LED backlight with hybrid technology from EIZO

Sound

More for the sake of completeness, the EIZO EV2495 has two stereo speakers. They can be recognised as narrow slots on the front and have an output power of 1 watt each. The unit processes sound signals at all inputs that also accept video signals. Output is possible via the integrated speakers or via the headphone output.

Front-facing speakers: Slots on the outer edges

As expected, the volume and sound of the integrated speakers are quite moderate and not intended for entertainment purposes. However, they are certainly sufficient for acoustic feedback through the system sounds.

DVD and video

HD feeds such as Blu-ray players, HDTV receivers and game consoles can be connected directly to the HDMI socket of the EIZO EV2495, and the sound is output to the internal speakers or forwarded to the headphone output.

The OSD also offers a presetting for films ("Movie" picture mode). However, it is not necessary to switch to a picture mode other than the calibrated User1 mode.

With this configuration and brightness setting 79, we watched an HD video on the PC. The reproduction appears rich in detail and can convince with good contrast and natural colours. In scenes with highly saturated colours, these (especially red) are displayed somewhat more vividly, otherwise the reproduction corresponds to the HDTV standard.

Compared to a monitor in 16:9 format, the EIZO EV2495 with its 16:10 format has no disadvantages either. The unused additional lines simply remain black. The weaknesses in the bottom corners, which were criticised at least in our test device in the chapter "Illumination", are only noticeable even with Cinemascope films if you look for them. Since the brightening is quite even, it did not bother us during film playback.

The playback appears smooth throughout, and there were no lagging effects in fast scenes. However, the EIZO EV2495 is not capable of 24p playback.

Scaling, frame rates and deinterlacing

At the HDMI port, the EIZO EV2495 scales the video resolutions 576p, 720p and 1080p as expected as a flawless full screen image. The EIZO EV2495 can even accept these three formats in the old "interlace" scanning format.

Overscan, colour models and signal level

We did not find an overscan option in the menu of the EIZO EV2495 (nor did we expect one).

The colour model available in the menu is YUV or RGB. By default, the unit itself makes the correct decision. If necessary, the signal level or the input range can also be adjusted.

Evaluation

Housing processing and mechanics:	5
Ergonomics:	5
Operation/OSD:	5
Energy consumption:	5
Noise generation:	5
Subjective image impression:	5
Viewing angle dependence:	4
Contrast:	5
Illumination (black image):	3
Image homogeneity (brightness distribution):	4
Image homogeneity (colour purity):	4
Colour space volume (sRGB):	5
Before calibration (greyscale factory mode):	5
Before calibration (sRGB):	4
After calibration (sRGB):	4,5
After calibration (profile validation):	4
Interpolated image:	5
Suitable for casual players:	4
Suitable for hardcore players:	3
Suitable for DVD/Video (PC):	4
Suitable for DVD/video (external feed):	4
Price-performance ratio:	4
Price [incl. VAT in Euro]:	approx. 576 €
Overall ranking:	4.4 (VERY GOOD)

Conclusion

With its smiling ventilation slot on the back, the EIZO EV2495 puts you in a good mood as soon as you enter the office in the morning. EIZO's design has once again become somewhat softer and more rounded. This makes the proband look even more

representative and elegant - especially if you order it in white. Nevertheless, the new model also fits seamlessly into the EIZO product lines.

The workmanship leaves a very high-quality impression overall, and the stand can boast industry-leading ergonomic features and very good mechanics, as usual. The 16:10 format offers a welcome extra space in height compared to Full HD devices. If the space and resolution of a 24-incher are not enough, you can also consider the bigger brother EV2795 with WQHD resolution.

The EIZO EV2495 is optimised as a professional device for (home) office environments. The focus is therefore on connectivity, efficiency, ergonomics and sustainability. In all these aspects, the model also shines with flying colours in our test.

Notebook and tablet users in particular benefit from the integrated docking station with LAN connection and KVM switch. Since there is a USB-C output for the USB-C input, the EIZO EV2495 can also be used very well to connect up to four monitors in series or to combine them into a multi-screen system. Since the bezel is also record-breakingly narrow, there are only minimal interruptions in the screen surface.

In terms of illumination and image homogeneity, the results are not quite optimal, but the EBV suitability is nevertheless given in conjunction with the good results in the image quality tests - especially since it should always be borne in mind that this is an office monitor.

So far, no big surprise. But if you look at the gaming performance of the EIZO EV2495, it almost turns out to be the optimal all-rounder. If it weren't for the price, which at 555 euros was certainly above average at the time of testing. However, one should not forget the five-year manufacturer's warranty (incl. on-site replacement service). This is not only important just in case. You can confidently assume that you will get a well-engineered device from the start that will never want to make use of this warranty.

We can unreservedly recommend the EIZO EV2495 for use in the office or home office and give it a buy recommendation.

Note: PRAD received the EV2495-BK on loan from EIZO for testing purposes. The manufacturer did not exert any influence on the test report, nor was there any obligation to publish it or any confidentiality agreement.

Link to the original test report: https://www.prad.de/testberichte/test-eizo-ev2495-bk-genialer-monitor-fuer-home-office-umgebungen/