Test EIZO EV2795: First-class picture quality and low latency

The 27-inch all-round monitor is ideal for the office and home office thanks to USB-C docking incl. LAN connection and KVM switch.

16.12.2020, Manuel Findeis

Introduction

EIZO is currently refreshing or expanding its EV series, also known as FlexScan, with models ending in "95". With the EIZO EV2495 and the EIZO EV3895 we recently had two of these models in our test. Now it's the turn of the EIZO EV2795 as a representative of the important 27-inch class.

All 95 models have an almost frameless design and are supposed to be ideal for the office and home office thanks to USB-C docking incl. LAN connection and KVM switch. This is EIZO's response to the fact that notebooks now often no longer have a LAN connection. With the 95 models, they are also LAN-capable again. Exemplary ergonomics and energy-saving functions are a matter of course for the manufacturer.

However, it is not easy at first to classify the 95 models in the overall range, which becomes particularly clear with the 27-inch models. The EIZO EV2795 does not follow in the footsteps of the EV2785 with 4K resolution, but rather makes the EV2780 obsolete. Like the EV2780, the EV2795 remains true to the WQHD resolution (2560 x 1440 pixels), but can do more in every respect and costs a good 150 euros less on the EIZO website.

USB-C was already available on the EV2780, but new features include the docking station, the ability to chain several monitors together using the USB-C daisy chain, and the external power supply with up to 70 watts instead of just 30 watts. Gamers should also get their money's worth with the EIZO EV2795.

With a bezel of only 1 mm, the EIZO EV2795 is virtually frameless. The minimalist design and completely flat surface ensure seamless image display in multi-screen systems. The case is available in black (EV2795-BK) or white (EV2795-WT) with matching cables in each colour. At the time of testing, the EIZO EV2795 was already available in stores for 720 euros.

For detailed information on the features and specifications, please refer to the EIZO EV2795 data sheet.

Scope of delivery

In view of the premium price, the scope of delivery is somewhat meagre. Apart from the obligatory power cable, only the USB-C cable is worth mentioning. Four matching screws are included for wall mounting. We also find a printed quick-start guide. As usual, we were able to easily download a detailed manual, drivers and a standard colour profile

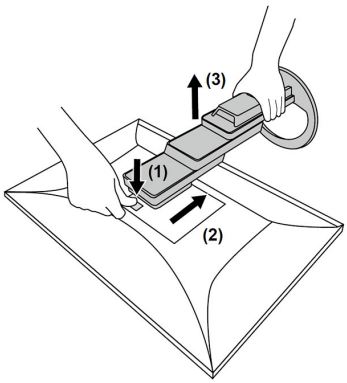
directly from the EV2795 product page. EIZO is one of the few manufacturers to include manuals that really deserve the name without reservation.

Scope of delivery

Optics and mechanics

There is no need for assembly, as the unit is delivered already fully assembled in the box. Of course, the stand can also be removed if desired. A push-button above the stand leg or below the recessed grip serves this purpose. Threads according to the VESA standard (100 × 100 mm) are visible underneath.

Stand leg suspension with push button



Mounting in schematic representation (Screenshot: EIZO manual)

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

From the front, the most striking feature is the almost frameless design. The outer frame is only 1 mm wide at the top and sides. In operation, however, there is, as usual, an additional frame through the unused display area (approx. 6 mm). The screen sits almost flush in the frame and is only slightly offset inwards.

Unfortunately, the frame is not the same width all round. It is slightly wider at the bottom, about 6 mm, to leave room for the electrostatic controls. Nevertheless, the EIZO EV2795 is above average for use in multi-screen systems. Even when the displays are positioned vertically one above the other, the image interruption caused by the frame is only slight.

Front view in the highest position

Rear view in the highest position

In principle, the design corresponds to the design line that has been familiar for several generations. In detail, however, the new 95 models show 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.

We already know the two-stage construction of the stand leg itself from other models. It allows an unusually generous height adjustment of 17.6 cm. The display can also be lowered completely to the turntable.

Front view in the lowest position

Rear view in the lowest position

Of course, the EIZO EV2795 remains true to its excellent ergonomic functions overall. When it comes to rotation, we only show a 45-degree turn in each of the photos below. In fact, the EV2795 can be rotated 172° in both directions - a total of 344°.

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 and the EIZO logo at the front rotate 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 flex stand 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.

View pivot sideways

Pivot view from the front

Even if the stand looks a little unusual from the side, one could even say not very delicate: one can truly not complain about the scope of the ergonomic functions and the mechanics. All mechanical adjustments are very precise and pleasantly smooth.

Support leg

Overall, the workmanship of the EIZO EV2795 is impeccable. The materials used underline the premium claim and at the same time make a robust and easy-to-clean impression. The gaps are minimal. The display surface, which is almost flush with the frame, is particularly impressive. Everything appears to be cast from a single mould. The monitor looks really classy, especially in white.

In contrast to its predecessor, the EV2780, the EIZO EV2795 now uses not only a simple cable clip for cable management, but a complete cover. It is already pre-mounted and 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 of the EV2795 is integrated into the housing as usual. 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 smile. Even in this area, we could not detect any significant heating, even after prolonged use. Incidentally, the recess above the stand suspension can be used very well as a transport handle.

Ventilation slots

Technology

Operating noise

We did not notice any operating noise during our test. 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 have to apply equally to all devices of a series.

Power consumption

	Manufacturer (in watts)	Measured (in watts)
Operation max.	164	25,62
Operation typical	16	-
140 cd/m²	k. A.	16,26
Operation min.	k. A.	9,477
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 164 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. It can probably only be reached when an external device is supplied with the maximum 70 watts.

According to our measurements, the power consumption at maximum brightness is only 25.62 watts. We measured about 0.4 watts in standby and a slightly lower value in soft-off. The power consumption can also be completely cut off with the power switch.

At 140 cd/m² at the workstation, the meter shows 16.26 watts, the efficiency at this brightness calculates to a very good 1.7 cd/W 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

Even at first glance, the EIZO EV2795 is significantly better equipped in terms of connectivity than its predecessor, the EV2780. The signal inputs include: 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). Not to be overlooked among the connections is the RJ-45 socket, which supports LAN connections at 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 a second USB-C port 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 also be used as a USB-C downstream port and supply connected devices with up to 15 watts of power.

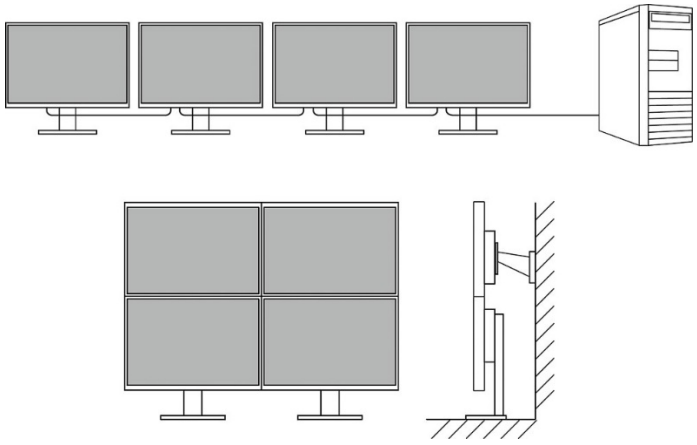
Connections

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. The EV2780 had to make do with two ports, the EV2795 now has three. 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

However, you do not have to rely on USB-C to use the USB hub. There is also another USB upstream port of type B. Both can be used by different PCs at the same time. The EIZO EV2795 also 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.

As already mentioned, the EIZO EV2795 in combination with its almost frameless design is also very well suited for series connection and multi-screen systems. Up to four monitors can be connected simultaneously. Using swivel arms, the displays can also be easily connected to form a large screen. The use of the additional software "Screen InStyle" then makes particular sense, as the settings for all monitors can be synchronised centrally.



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

Operation

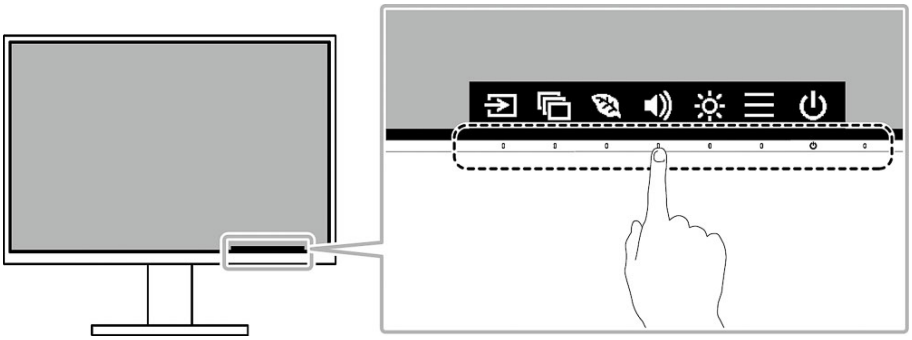
All controls, the brightness sensor and the speakers are integrated completely flat into the narrow front bezel. Instead of mechanical buttons, the EIZO EV2795 uses electrostatic controls.

Electrostatic controls

Unfortunately, the EIZO EV2795 does not have the acoustic feedback of the responsive touch keys as the ColorEdge devices. You have to be a little careful with the actually very comfortable operation, as the bezel is very narrow and otherwise you will quickly leave fingerprints on the display surface.

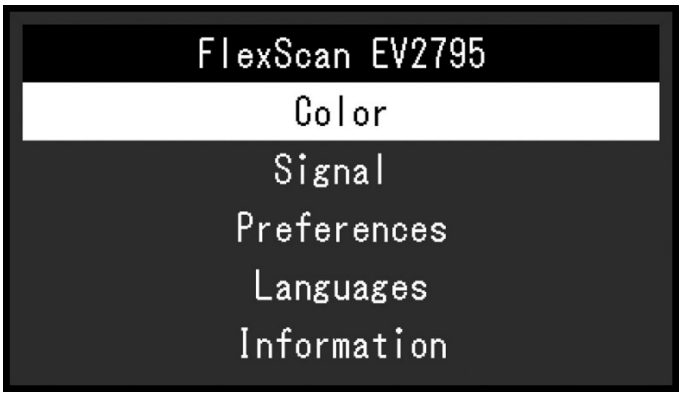
OSD

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.

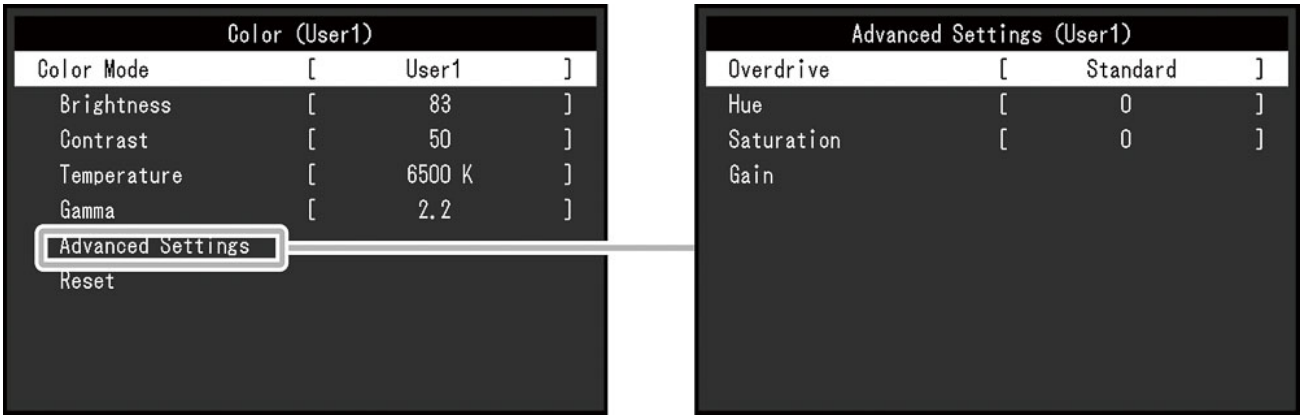


Menu entry and quick selection (Screenshot: EIZO manual)

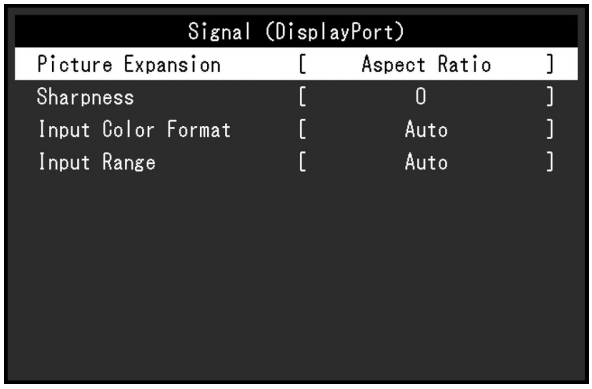
As usual with EIZO, the OSD is visually quite sober, but it is very professional in terms of its scope and the terminology used. EIZO succeeds amazingly well in keeping the menu simple at the same time, so that even beginners can immediately get to grips with it intuitively. Unnecessary bells and whistles and supposedly consumer-oriented terms have simply been dispensed with. If necessary, everything is also explained in the manual in an above-average way.



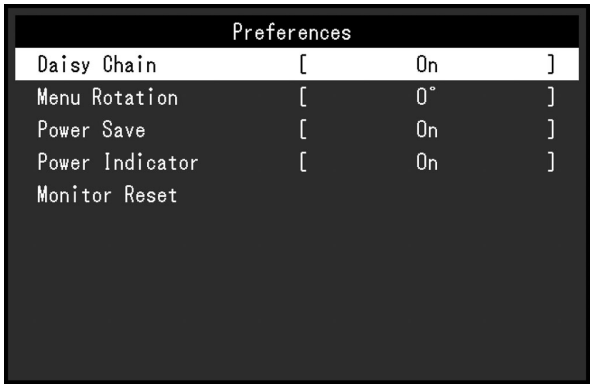
OSD: Main menu (Screenshot: EIZO manual)



OSD: Colour settings (Screenshot: EIZO manual)



OSD: Signal settings (Screenshot: EIZO manual)

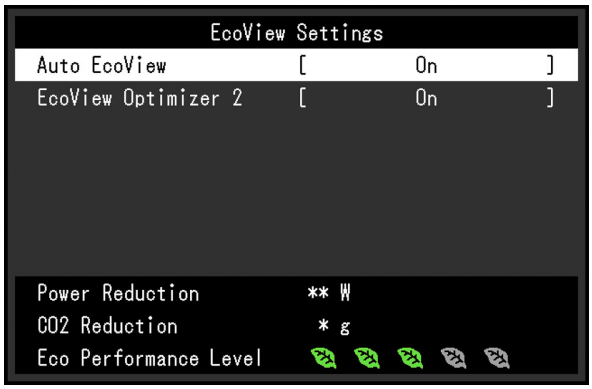


OSD: Preferences (Screenshot: EIZO manual)

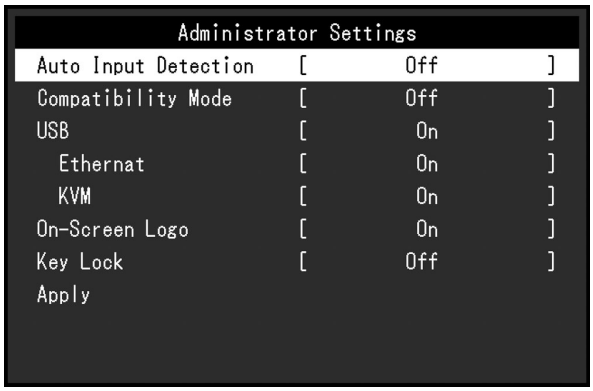
Moreover, not only the mechanics but also the electronics contribute to the ergonomics of the EIZO EV2795. The test person is equipped with a further developed EcoView function of the fifth generation.

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

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



OSD: EcoView settings (Screenshot: EIZO manual)



OSD: Administrator settings (Screenshot: EIZO manual)

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.

EcoView sensor

Picture quality

The EIZO EV2795 has an internal 14-bit LUT for precise colour control with the ability to display more than 1.06 billion colour tones or colour gradations. The allocation of colour information is thus considerably more precise than with the usual 8-bit LUTs, which only have 16.7 million colours.

However, the number of colours that can actually be displayed is limited by the signal input. Here, as with HDMI, only 8-bit transmission is possible at the DisplayPort. Especially when displaying colour gradients, the higher calculation accuracy in the translation to the display control is of considerable advantage.

At reset, the monitor sets the following values:

Factory settings	
Picture mode:	User1
Brightness:	91
Contrast:	50
Gamma:	2,2
Colour temperature:	6500 K
RGB:	90/90/100
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

At first glance, the greyscales on the EIZO EV2795 make an excellent impression. The general colour temperature, gradations and neutrality seem perfect. The brightest levels are fully visible, the darkest up to and including level 7.

On closer inspection, however, it is noticeable that the left and right halves of the picture are not identical. On the left, the greyscales are somewhat warmer, on the right somewhat cooler. The difference is not dramatic, but the subjective impression is confirmed both by the photograph and by our measurements of image homogeneity. While there is hardly any difference in homogeneous colour areas or completely white areas, this is the case for areas with medium or lighter shades of grey.

In the area of viewing angle stability, we noticed minor deficits. In terms of the differentiability of the individual levels, it is initially good. Even at extreme viewing angles, the brightest levels remain completely intact, but the darkest levels lose two to three levels. This is due to the brightening of the display and is within a normal range.

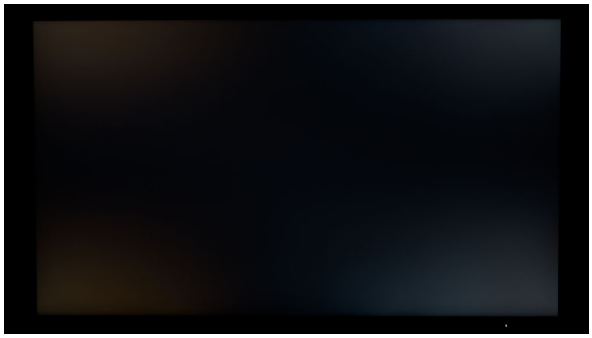
However, the greyscales appear somewhat cooler or slightly bluish from angles of 45° at the latest. However, the picture remains completely coherent. This is much less noticeable with mixed or coloured image content, such as our viewing angle image.

Grayscale

A positive feature is the very good representation of fine grey and colour gradients. No colour shimmering or banding effects can be observed ex works. The EIZO EV2795 works internally with a 14-bit LUT. This higher colour precision is noticeable.

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 EV2795 immediately pleases with a very rich black. The measured black value is actually almost at the level of an EIZO CG2730.

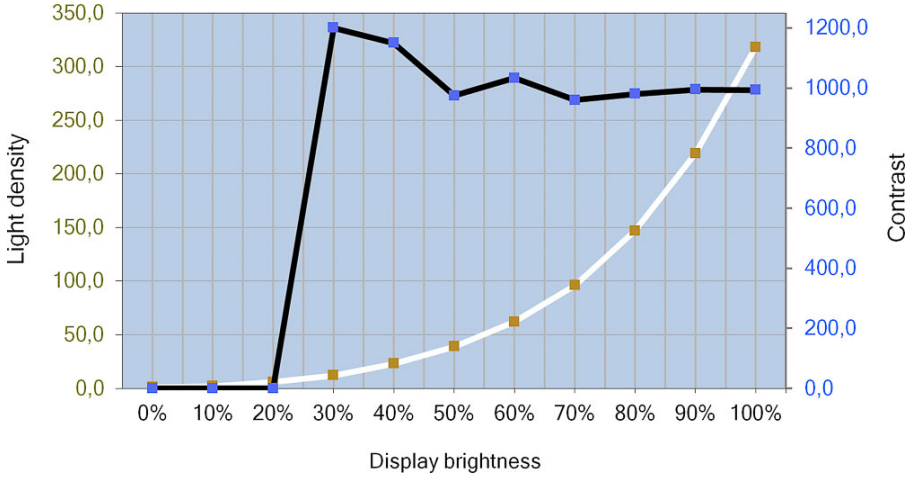
The black image also appears very even in wide areas starting from the centre of the picture. However, even when sitting in the centre of the picture, there is a clear, large-area brightening in the corners. In the left half of the picture, they also have an orange tinge. The brightening is primarily due to the viewing angle. When the corners are viewed perpendicularly, they practically disappear. We could not detect any clear edge irradiation anywhere on our test device.

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 left, it appears predominantly colour-neutral. If you look at it from the top right, on the other hand, a distinct yellowish tinge is visible.

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 measurement 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.



With native white point, we reach a maximum of around 316 cd/m². This is 10% below the manufacturer's specification of 350 cd/m². The brightness can be reduced to a minimum of 1 cd/m², which is no longer useful.

The brightness increase of the EIZO EV2795 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 EV2795 make a very precise impression, so that the desired target brightness (or the desired white point) can be set very accurately. Since we were able to leave the RGB settings in the factory settings for calibration, the values for maximum and minimum brightness do not change.

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 meaningfully determined by our measuring device.

Since it is difficult to find the mouse pointer at all in the control range from 0 to 20 %, the display of a contrast ratio of any kind makes no sense here. In order not to falsify the average calculations in the sensible working range, we have only used brightness settings of 30 % and higher for the contrast calculation.

According to our measurements, the contrast ratio in this range averages a very good 1036:1 after calibration.

Image homogeneity

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 %.

-4.92%	-2.49%	-7.4%	-4.91%	-11.15%
-9.94%	-4.07%	0.0%	-6.82%	-14.21%
-9.66%	-6.74%	-7.91%	-7.33%	-8.23%

Brightness distribution of the white test pattern

1.45	1.5	0.76	1.38	3.44
0.79	1.06	0.0	1.22	2.96
0.97	0.66	1.7	2.34	3.86

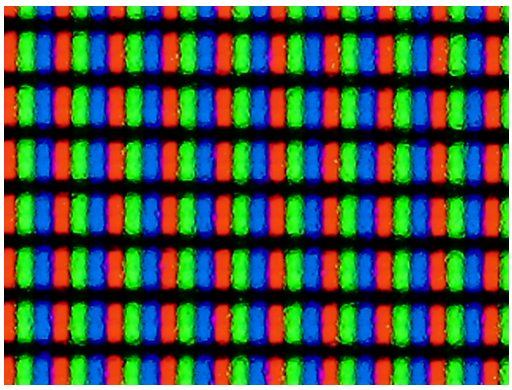
Colour homogeneity in the white test pattern

The brightness distribution is only satisfactory with an average value of 7.56%. At least the maximum value of 14.21% is already good. The colour homogeneity is also satisfactory (delta C average: 1.72; delta C maximum: 3.86). Here you can also see the reason for the partly visible differences between the left and right half of the picture.

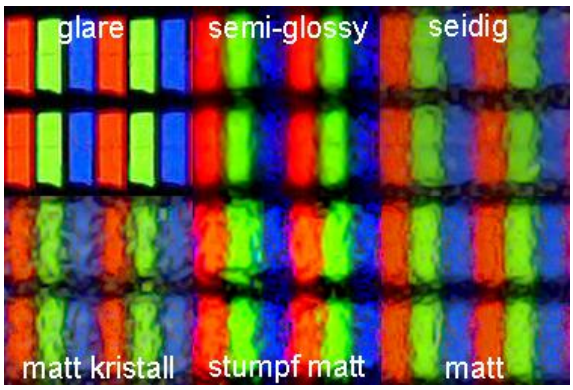
The image homogeneity is on the usual level of office monitors. With a premium product from EIZO, the expectations in the area of brightness distribution and colour purity are nevertheless somewhat greater and are not quite fulfilled in this case.

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 EV2795



Coating reference picture

Microscopic view of the subpixels, with focus on the screen surface: The EIZO EV2795 has a dull matte surface with microscopically visible pits for diffusion.

Also according to our subjective assessment, the panel frame and the surface of the panel are matt and effectively anti-reflective. Light falling in from the side or even a

viewer wearing light-coloured clothing produces only weak reflections on the screen. However, bright objects tend to reflect a little more strongly on the EIZO EV2795 than on comparable displays.

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 EV2795 screen at horizontal viewing angles of ±60 degrees and vertical viewing angles of +45 and -30 degrees.

Horizontal and vertical viewing angles

The viewing angle stability is very good, as is typical for IPS. Even at extreme viewing angles, the colours remain very stable thanks to the IPS panel. Even the loss of brightness and contrast, which cannot be completely avoided, is only very slight, especially at horizontal viewing angles.

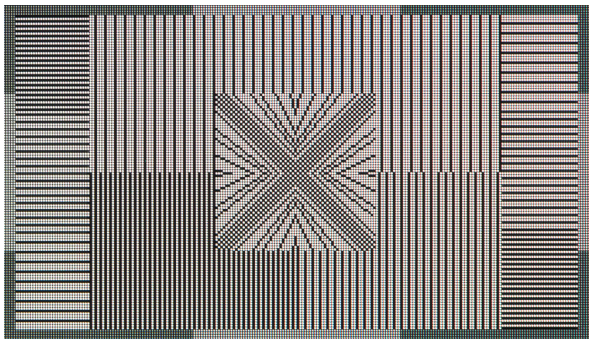
The effect already described for the greyscales is more difficult to recognise with mixed image content such as our viewing angle image, but it also comes into play here. At horizontal viewing angles, the picture becomes somewhat cooler. However, this is only noticeable at viewing angles from about 45° and is therefore rather uncritical even for EBV.

The brightness decrease is much more pronounced vertically, but the colour temperature seems to remain constant. The EIZO models EV2495 and EV2795 are similar in this respect, but the latter performs noticeably better.

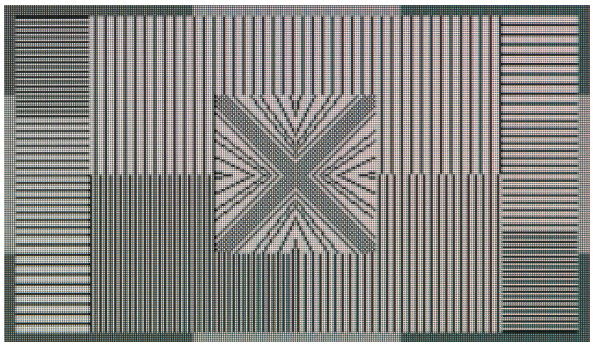
Interpolation

The EIZO EV2795 also has a sharpness control, which is not active 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.

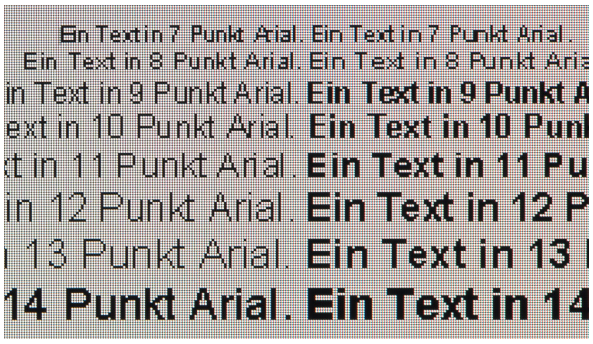
For input signals that deviate from the native resolution, the unit offers the options "full screen" (distorted if necessary), "aspect ratio" (undistorted) and also a pixel-precise 1:1 display. The scaling is set to "automatic" ex works. It works very well and in most cases achieves a distortion-free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



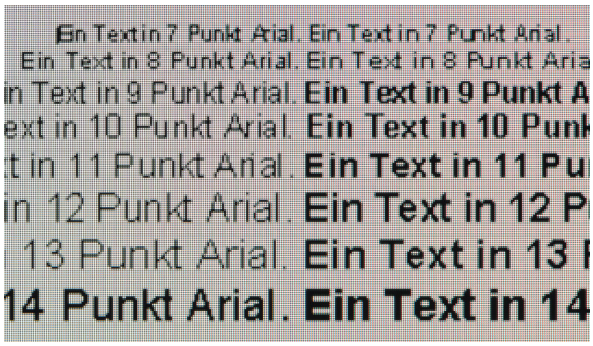
Test graphic native, full screen



Test graphic 1920 x 1080, full screen



Text reproduction native, full screen



Text reproduction 1920 x 1080, full screen

The interpolation capabilities of the EV2795 are - as usual from EIZO - excellent. This applies to both the scaling options and the implementation. In comparison, we show the 1080p resolution here instead of the otherwise most commonly used 720p resolution, because a WHQD monitor must then also work properly because no integer divider can be used.

At 1920 x 1080 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.

Signal	**Distortion-free, maximum area-filling reproduction**	**Unscaled playback**
SD (480p)	Yes	Yes

SD (576p)	Yes	Yes
HD (720p)	Yes	Yes
HD (1080p)	Yes	Yes
Ultra HD, 4K	No	No
PC (5:4)	Yes	Yes
PC (4:3)	Yes	Yes
PC (16:10)	Yes	Yes
PC (16:9)	Yes	Yes

Colour rendering

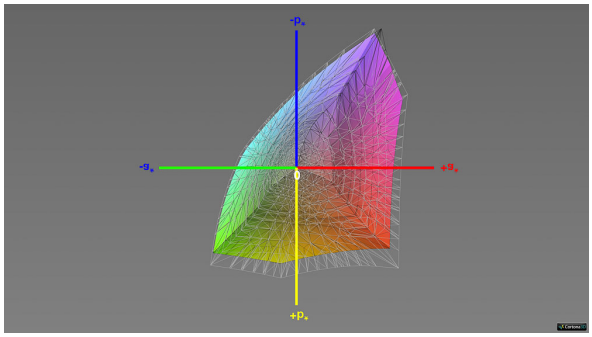
For monitors for the consumer and office sector, we first test the colour reproduction in the factory setting after the reset and - if available - in an sRGB mode. Then the test person is calibrated with Quato iColor Display. We use our own software for the measurements, the X-Rite i1Display Pro colourimeter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

Colour space comparison in CIELAB (D50)

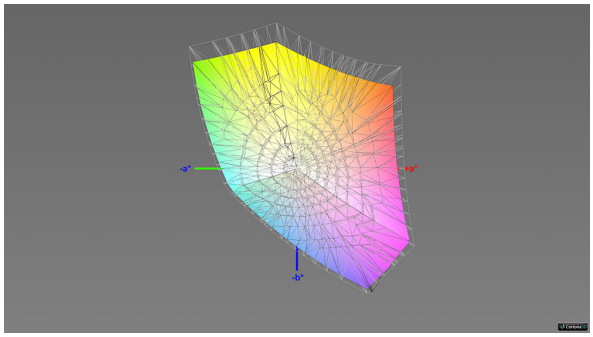
The following illustrations are based on the colourimetric data after a calibration to D65 as white point. The reference white for the preparation in CIELAB is D50 (adapted with Bradford).

White volume: Screen colour space
Black volume: Reference colour space
Coloured volume: Intersection
Comparison targets: sRGB

The following graphs show the colour space coverage after software calibration:



Coverage of the sRGB colour space, 3D slice 1

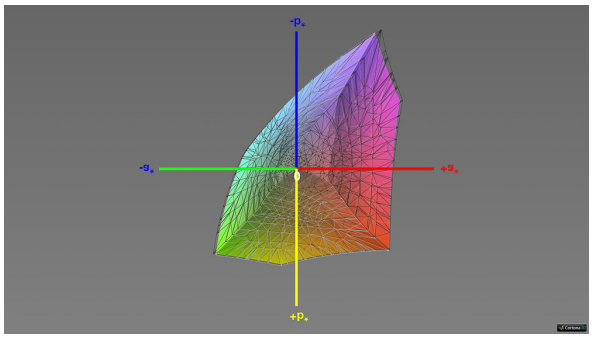


Coverage of the sRGB colour space, 3D slice 2

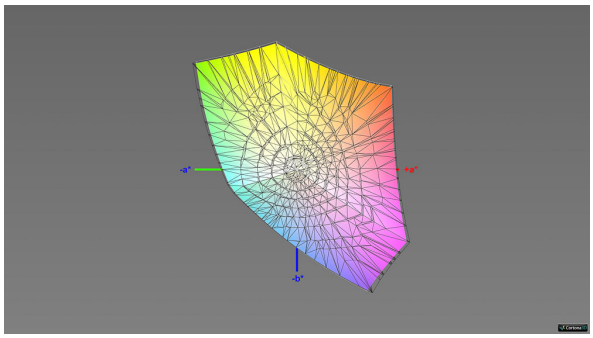
Subjectively, it is noticeable with the EIZO EV2795 on the desktop and in test images with the primary and secondary colours that the device displays the colours noticeably stronger than would be the case with a pure sRGB device.

The sRGB colour space is also - 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 slightly larger colour space is rather a plus, as working with stronger colours is more fun.

For image and video editing in an uncalibrated state, however, the EIZO EV2795 also offers an excellent sRGB mode. Here, overcoverage is avoided. The coverage of the target colour space decreases only slightly to 96%.



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



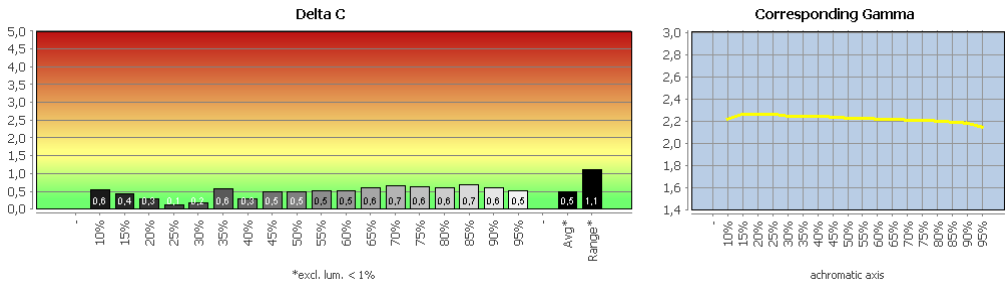
Coverage of the sRGB colour space in sRGB mode, 3D slice 2

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	96 %	99 %
Adobe RGB	-	74 %
ECI-RGB v2	-	68 %
DCI-P3 RGB	-	78 %
ISO Coated v2 (FOGRA39L)	-	91 %

<u>Colour mode: Custom (factory setting)</u>

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.

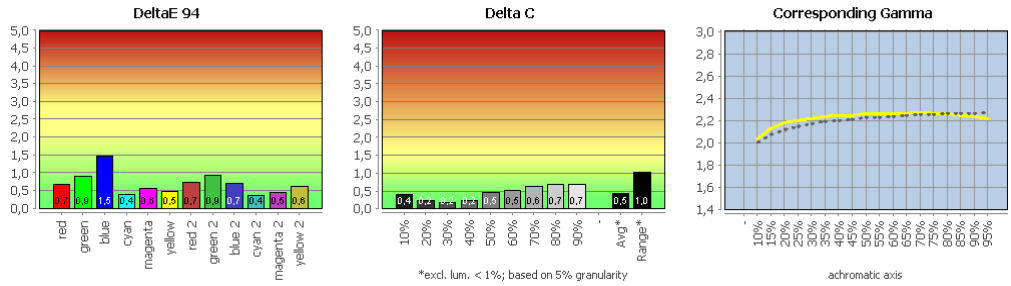


Grey balance in the factory setting, picture mode "User1

The grey balance of the EIZO EV2795 is also excellent from the factory. The colour temperature of 6600 K is within the specified range, and the average gamma of 2.22 is also almost spot on. The actually rising gamma curve is predominantly linear and even drops minimally towards the end.

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 EV2795 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 also very good here. As usual, the colour temperature of 6600 K is close to the norm. The average gamma is practically unchanged at 2.23. However, the gamma curve has been perfectly adjusted to the sRGB specification.

The colour space coverage is very good at 96 %. The same applies to the remaining colour deviations (Delta-E94-Average: 0.72, Delta-E94-Maximum: 1.92). The brightness of the EIZO EV2795 can also be adjusted in sRGB mode, making it fully suitable for practical use.

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.

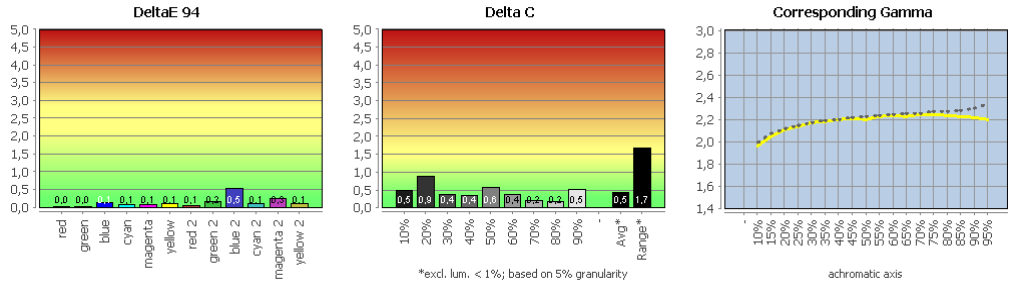
Neither represents a generally valid recommendation. This also applies to the choice of gradation, especially since the current characteristic is taken into account within the framework of colour management anyway.

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:	6500 K
RGB:	90/90/100
Colour Gamut:	k. A.
DUE Priority	k. A.
Sharpness:	0
Response time:	Standard

It is particularly remarkable that we only had to adjust the brightness of the EIZO EV2795 to the target brightness for calibration. The colour temperature, on the other hand, could be left at 6500 K. The values found under the advanced settings of the RGB slider are also unchanged. These values are presumably device-specific and can in no way be used as a basis for other copies of the EIZO EV2795.

Profile validation

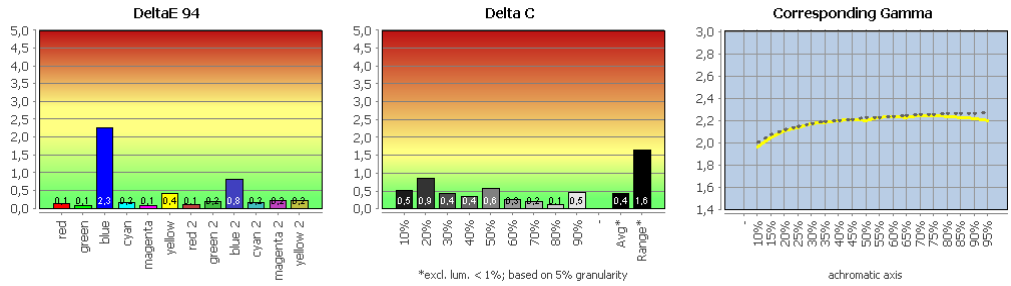


Profile validation

The EIZO EV2795 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 (apart from the slightly increased range) and 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 only noticeable thing is the somewhat higher deviation in blue (Delta-E94-Maximum: 2.44). This is mainly because the other values are so extremely good (Delta-E94-Average: 0.36). Overall, the result for the colour values as well as for the grey balance is good to very good.

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

Reaction behaviour

We tested the EIZO EV2795 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.

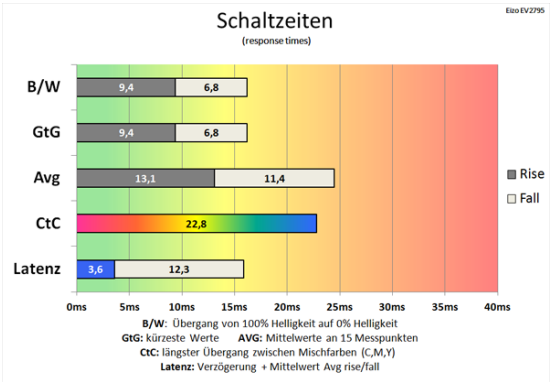
The data sheet states a response time of 5 ms for GtG. An acceleration option (overdrive) is available. Here there are the positions "Off", "Standard" and "Improved". The default value is "Standard".

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.

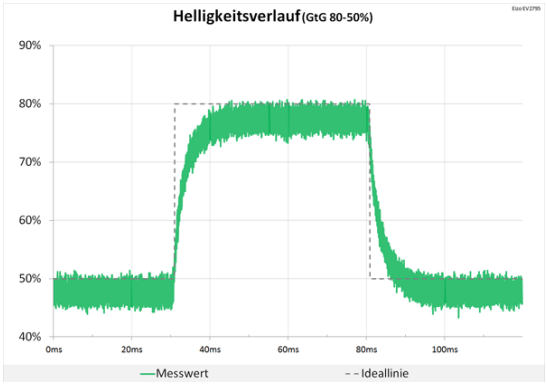
60 Hz, Overdrive "Off

The overdrive can also be switched off on the EIZO EV2795. We measure the black/white change and the fastest grey change at 16.2 ms each. The average value for our 15 measurement points is 24.5 ms, and the CtC value is determined with 22.8 ms.

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



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

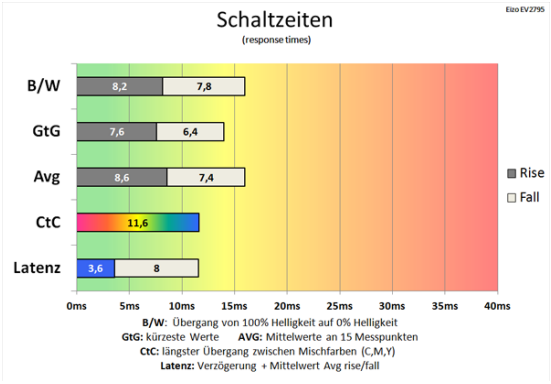


60 Hz (Overdrive "Off"): no overshoots

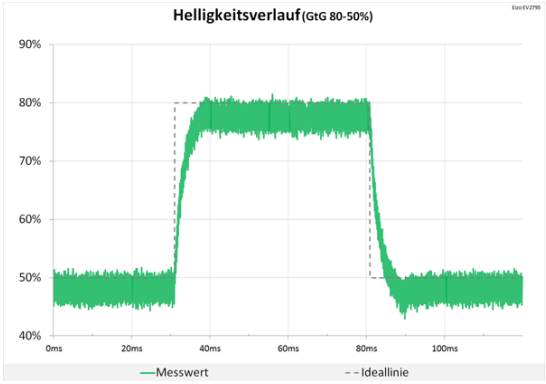
60 Hz, Overdrive "Standard

In the factory setting "Standard", the switching times are already effectively shortened. We measure the black/white change with 16 ms and the fastest grey change with 14 ms. The average value for our 15 measuring points is 16 ms. The CtC value is now also within a decent range at 11.6 ms.

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



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

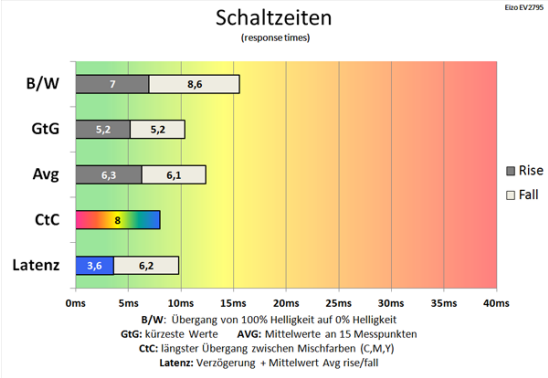


60 Hz (Overdrive "Standard"): minimum overshoot

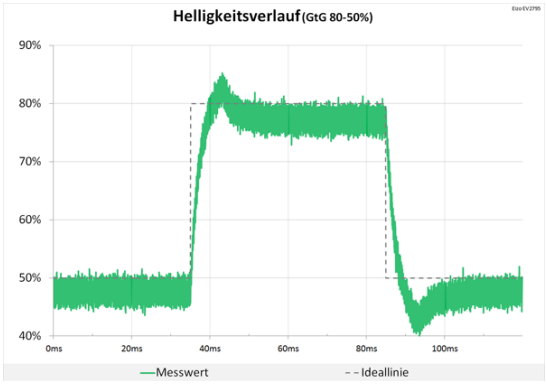
60 Hz, Overdrive "Improved

In the highest "Improved" setting at 60 Hz, we measure the black/white change at 15.6 ms and the fastest grey change at 10.4 ms. The average value for our 15 measurement points is 12.4 ms. A CtC value of 8 ms is also short.

Even in the highest overdrive setting, only slight overshoots are noticeable, which is why we can definitely recommend the strongest overdrive function of the EIZO EV2795, even under aspects of picture quality.



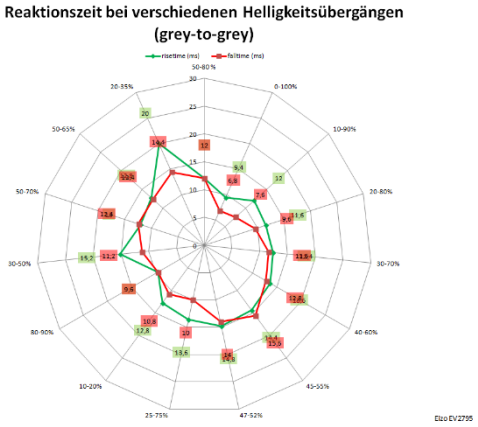
60 Hz (Overdrive "Improved"): fast switching times

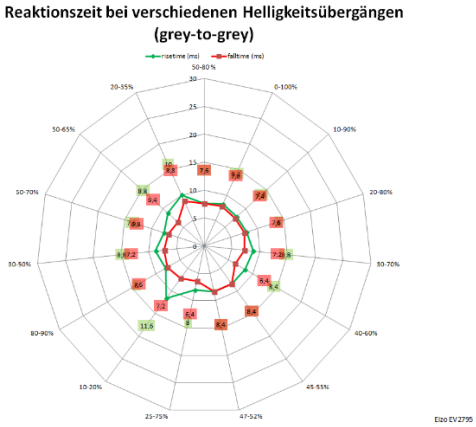


60 Hz (Overdrive "Improved"): Overshoots that still remain completely acceptable

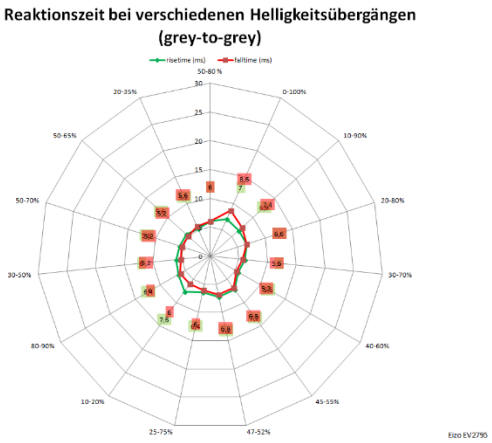
Network diagrams

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 assessment

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 primarily designed for use in office environments. However, some of them, such as the EIZO EV2795, are also designed to be suitable for a game in between.

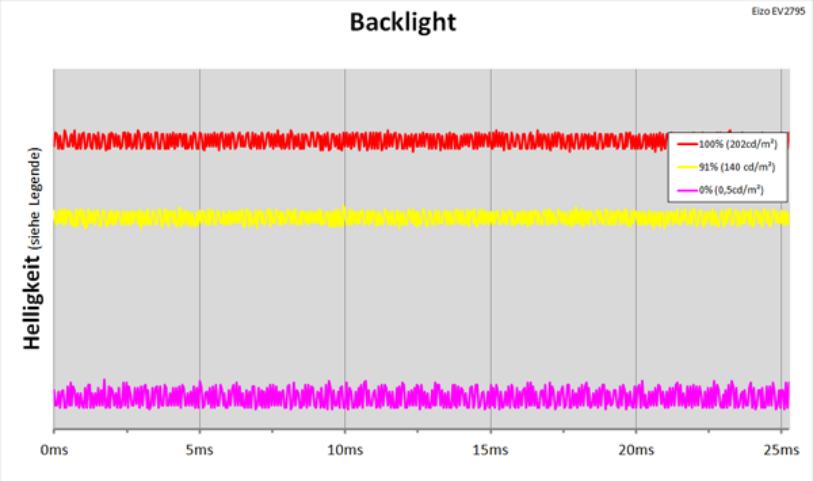
EIZO really doesn't promise too much here, because with only 3.6 ms, the signal delay is really excellent, not only for a 60 Hz monitor. The half average picture change time is 6.2 ms. All in all, the latency is a fast 9.8 ms.

The EIZO EV2795 is therefore also suitable for gaming, especially since the picture quality hardly suffers in the highest overdrive level. Of course, the monitor only has a refresh rate of 60 Hz, and Adaptive Sync or other gaming technologies are missing. But not everyone understands gaming to mean playing fast-paced shooters. Of course, it was neither designed nor really suitable for that.

Backlight

The EIZO EV2795 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 usual PWM control (pulse width modulation) and a DC control ("Direct Current"). EIZO promises absolute freedom from flicker without affecting the picture quality or colour stability. The hybrid technology is also the reason why the brightness of the EIZO EV2795 can be adjusted down so far.

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 EV2795 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 stereo speakers with 1 watt each

As expected, the volume and sound of the integrated speakers are quite mediocre. They are more of a stopgap for 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 EV2795, and the sound is output to the internal speakers or forwarded to the headphone output.

The WQHD resolution does not correspond to any common video resolution and is therefore not inherently optimally suited for video playback. However, at least the 16:9 format is perfect for modern videos. Thanks to the good illumination, the EIZO EV2795 does not show any annoying brightening in the black bars of Cinemascope films.

As we saw in the chapter "Interpolation", the EIZO EV2795 can also scale all important video resolutions (480p, 576p, 720p, 1080p) to the maximum picture height without problems and distortion. In our subjective view, a Full HD film still looks better than on a Full HD monitor despite scaling. However, the review sample cannot downscale to the current 4K resolution. Unfortunately, 24p playback is not possible in any of the supported resolutions.

To determine the input colour space, YUV 4:2:2, YUV 4:4:4, YUV or RGB are available in the menu. By default, the unit itself makes the correct decision. If necessary, the input range can also be adjusted. We did not find an overscan option in the menu of the EV2795, nor did we expect one.

Regardless of whether it is used with external players or on a PC, the EIZO EV2795 shines with its excellent picture quality when it comes to entertainment. For feature films, there is a special preset in the OSD ("Movie" picture mode), but you don't necessarily have to use it. The standard mode ex works is also very suitable for watching feature films.

For entertainment purposes, however, you can safely stay in the native colour space. Most users will find the somewhat stronger colours, for example in red, more of a bonus. Otherwise, the EIZO EV2795 offers an excellent sRGB mode for reproduction according to the HDTV standard. This also allows video editing with applications that do not support colour management.

Evaluation

Housing processing and mechanics:	5
Ergonomics:	5
Operation/OSD:	5
Energy consumption:	5
Noise generation:	5
Subjective image impression:	5
Viewing angle dependence:	4,5
Contrast:	5
Illumination (black image):	4
Image homogeneity (brightness distribution):	3
Image homogeneity (colour purity):	3
Colour space volume (sRGB):	5

Before calibration (greyscale factory mode):	5
Before calibration (sRGB):	5
After calibration (sRGB):	4,5
After calibration (profile validation):	4,5
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:	3
Price [incl. VAT in Euro]:	approx. 730 €
Overall ranking:	4.4 (VERY GOOD)

Conclusion

The EIZO EV2795 initially remains true to its virtues as an office specialist and convinces there with an even more elegant, representative design. The newcomer can clearly outdo its predecessor EV2780 in connectivity alone, but also in picture quality.

With USB-C docking incl. LAN connection and KVM switch, EIZO takes into account the fact that notebooks now often no longer have a LAN connection. But even with the power supply for external devices, you can now do much more with 70 instead of 30 watts.

Combined with an almost bezel-less, flush mount design all around and daisy chain support, the EIZO EV2795 is more suitable than ever for assembling multi-screen workstations.

The EIZO EV2795 is no longer just aimed at business users, but can also be used in the home office for a game after work. It is also easy on the wallet with first-class energy efficiency. In the entertainment sector, however, the EIZO EV2795 has strong competition in the form of the EV2785, as the latter is even better suited for video thanks to its 4K resolution and hardly costs more.

In terms of picture quality, the new EIZO EV2795 is definitely convincing all round. Only the image homogeneity did not quite meet our expectations. Nevertheless, the EIZO EV2795 has become an excellent all-rounder that should continue to appeal to photographers and image editors. In terms of price, however, the EIZO CS2731 with its extended colour space and hardware calibration is already within reach.

And that brings us back to the sticking point, namely the price. At the time of testing, the EIZO EV2795 was already available for 720 euros. Moreover, the premium character of the device is quite palpable. As an all-rounder, however, it naturally has to face the competition, and here it is already in the upper price segment.

But you should never forget the value of EIZO's five-year manufacturer's warranty with on-site replacement service. The possibility of also supplying ultrabooks and tablets with fast and stable Gigabit LAN could ultimately tip the scales in favour of the EIZO EV2795.

Note: PRAD received the EV2795-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-ev2795-erstklassige-bildqualitaet-und-geringe-latenz/