ElectriQ 32" 4K FreeSync IPS Monitor Review

ElectriQ

Investing in a big screen high-resolution monitor can be expensive, but it seems all that is about to change. While many 4K IPS monitors from, shall we say "more established brands" can cost many times this, the ElectriQ monitor will leave you with some change from £250. That's crazy cheap for a panel, and after finding out just how popular this monitor is, we wanted to see what all the fuss was about.

Ah, it's a cheap no brand monitor, so you get nothing right? Wrong. Equipped with a 4K 32″ IPS panel that runs at 60 Hz, that's a freaking huge amount of panel real-estate right off the bat. Add to that AMD FreeSync support, a slim bezel, built-in speakers, good connectivity, VESA support, and even an HDMI cable thrown in the box.

Features

- The 4K picture quality delivers incredible colour and detail
- It's perfect for designers – you can make really precise changes with brilliant accuracy
- AMD FreeSync eliminates any stuttering and tearing, ideal for fast-paced gaming
- Connects quickly to your PC or games console with automatic ratio adjustments
- Really slim bezel gives you a larger display and looks great
- Aluminium Bezel and Stand
- Screen size: 32
- Resolution: 4K (3840 x 2160)

Specification

- Screen size: 32"
- Resolution: 4K (3840 x 2160)
- Aspect ratio: 16:9
- Contrast ratio: 3000:1
- Refresh rate: 60Hz
- Response time: 12MS
- Power consumption: 60W
- Ports: DVI, HDMI, DisplayPort & Audio in
- VESA: 100 x 100mm

For in-depth specifications, please visit the official Laptops Direct product page.

What's in the Box

- 32″ Monitor
- 1 x Power adapter
- 1 x HDMI cable
- User manual and warranty

The stand is metal cast and comes in two parts. It looks a little small for a monitor of this size and weight but should be about enough to get the job done. Of course, you also get the required HDMI, and power cables included too.

What ElectriQ Had to Say

"Make the step up with this fantastic electriQ monitor and you'll notice the amazing difference instantly. Fantastic for designers and gamers alike, it's packed full of incredible features. With a 60Hz refresh rate and highly detailed 4K resolution everything is really smooth and packed full of detail and colour for a fantastic experience! For designers, accuracy is key. You need as much detail as possible with colours that are extremely precise so you know exactly how your project will turn out, especially with print. That's what you get with this monitor. Its 4K display ensures there's a huge level of detail with really vibrant colours." – ElectriQ

A Closer Look

The monitor looks pretty much as you would expect, a big black rectangle. What does surprise me is the pretty slim bezel, which looks nice and slick given the overall size of the monitor. Cheaper brands tend to feature thicker housing, but that's not the case here.

The control buttons are on the bottom right, and nicely enough they're clicky buttons.

Given the market trend for those flipping useless touch buttons, I'm happy to see this.

The brand logo is in the centre, and honestly, I think it's a bit big and distracting. I know all brands want to show their logo, but a black inlay would have been fine.

Slim Panel Design

As I said before, the panel is impressively thin, and the main chunk of it is nice and flat at the back. The housing for the I/O panel and ventilation is neat and tidy too. Furthermore, with the VEGA mount and low profile design, it should work well for wall mounting.

Along the bottom, you'll find all the usual connection ports. Nothing fancy, but everything you need really. There's some small screw holding the two sections of the plastic together, and the plastic panels do have a big of a gap that you can squeeze shut with your finger. It's not a big deal, but maybe if they add two extra screws along the length would fix that up nicely.

Looking Good!

The stand is pretty slim which is nice, but I feel like it should have a bit more width and depth to it to give the monitor more stability. On my desk, it's not an issue, but in a more open desk environment, I would want something more secure. Overall though, the monitor does look fantastic. I mean, it's a freaking 32-inch display, and just regarding raw screen size, it's bigger than what most people are rocking. The matte finish is beautiful too, helping cut down an impressive amount of glare.

The monitor panel is pretty darn impressive, and the colours are vibrant. What does surprise me is the backlight performance, which doesn't appear to have any noticeable bleeding in the corners; something which often effects cheaper panels.

Hardware

For the bulk of the visual testing, we will be using the Datacolor Spyder 5 Elite. A great piece of hardware that sits on the face of the monitor to analyse essential technical attributes of the panel.

Here you can see the testing setup deployed for each monitor review:

- Motherboard – Gigabyte AORUS Gaming 9
- CPU – Intel Core i9-7900X
- RAM – Crucial DDR4 2400MHz Quad-Channel 32GB
- CPU Cooler – Noctua D15S with dual fans
- Graphics Card – Nvidia GeForce GTX 1080 Ti
- Power Supply – BeQuiet Dark Power Pro 850 Watt
- Main Storage Drive – Toshiba OCZ VX500 500GB
- Chassis – Lian Li T80 Test Bench
- Operating System – Windows 10 Pro 64 Bit

Software

- Datacolor Spyder 5 Elite bundled software
- Colour Gamut
- Brightness levels
- Contrast Ratios
- Colour uniformity
- Brightness Uniformity
- Colour Accuracy

Testing monitors can be very subjective to personal tastes, so a written analysis is not the best way to convey the results. By using the Spyder 5 Elite, the bundled software allows us to use visual graphs to analyse the results. The tests will be taken at two key settings, calibrated and uncalibrated. Uncalibrated is the 'out-of-the-box' scenario, which is typically what most users tend to use as entering the screen settings can seem rather daunting. Calibrated tests will be taken after finding the optimal settings through tests with the Spyder 5 Elite. These are, in testing scenarios, the best possible settings for the monitor and for the user; however, you might find a different setting to be better for you.

Datacolor Spyder 5 Elite Testing

Using the Datacolor Spyder 5 Elite, we can accurately test critical components of a display including colour gamut, colour accuracy, colour uniformity, brightness uniformity and more. The data below provides a detailed indication of the overall performance in both non-calibrated and calibrated setup scenarios.
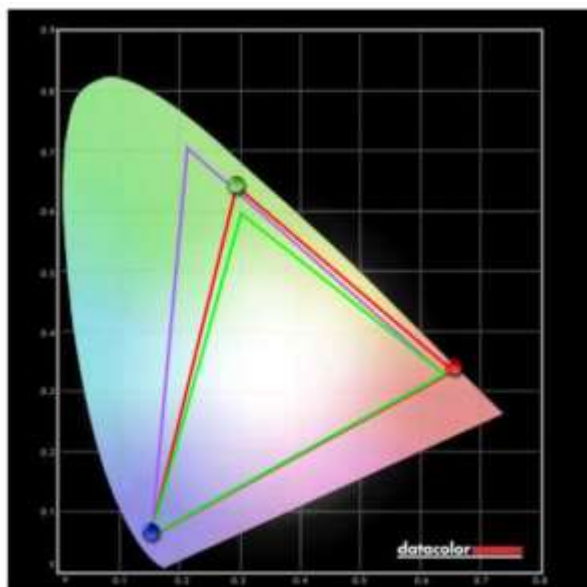
Colour

Uncalibrated

Color Gamut Of Display

Calibrated

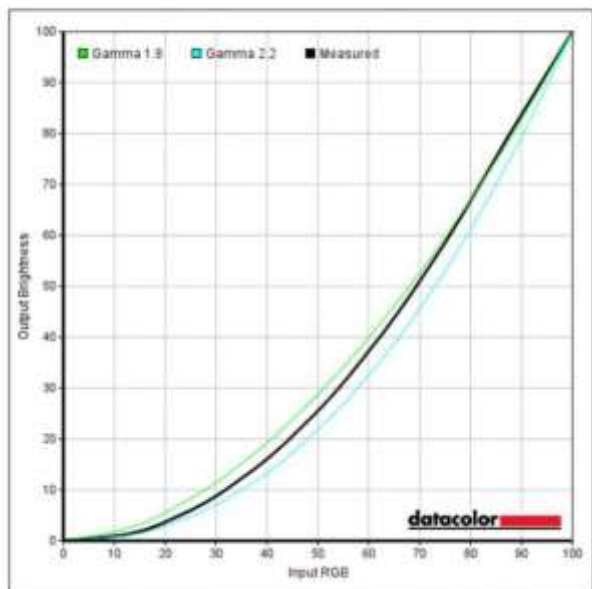Color Gamut Of Display
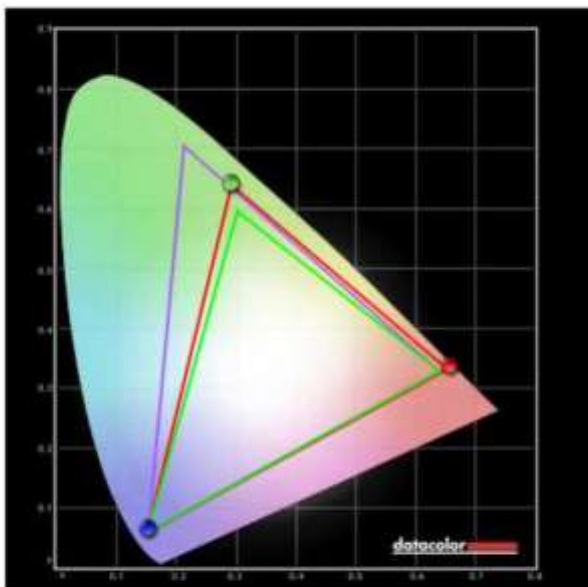
100% of sRGB   82% of AdobeRGB

100% of sRGB   81% of AdobeRGB

Tone Response

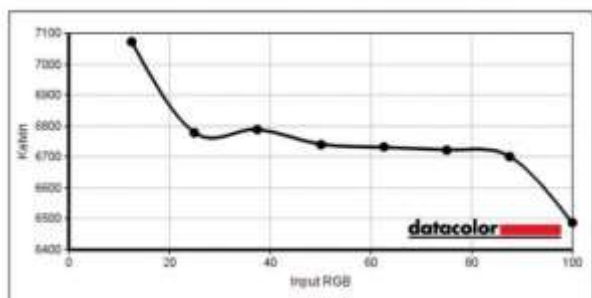**Uncalibrated**

Measured Display Gamma: 2.0 (0.01)

Tone Response

Calibrated

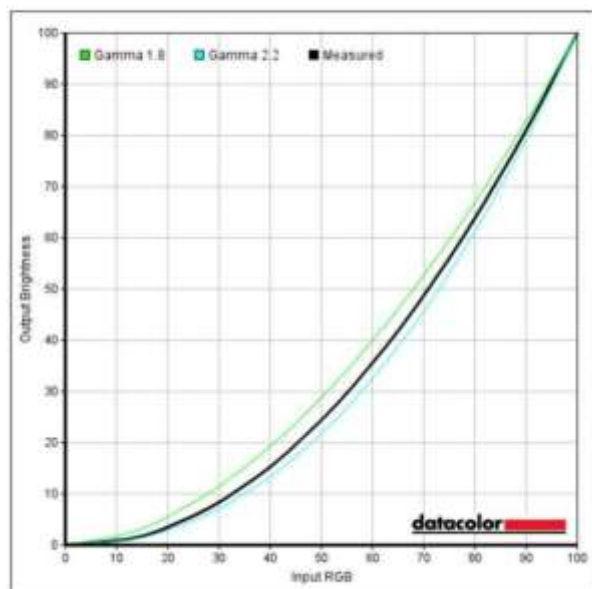Measured Display Gamma: 2.0 (0.00)

Tone Response

Gray Ramp

Gray Ramp
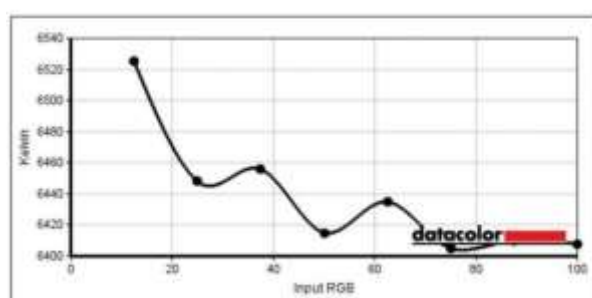
Color Accuracy

Uncalibrated

Color Accuracy

ID	Patch Lab			Result Lab			Delta-E	1	2	3	4	5	6	7
1E	96.04	2.16	2.60	96.76	2.85	-1.11	3.62							
2E	80.44	1.17	2.05	80.53	1.11	2.48	0.41							
3E	65.52	0.69	1.86	65.48	0.95	-0.34	2.17							
4E	49.62	0.58	1.56	51.16	0.96	0.52	1.93							
5E	33.55	0.35	1.40	35.74	-0.23	2.20	2.13							
6E	16.91	1.43	-0.81	16.64	2.18	-1.98	1.45							
1F	47.12	-32.52	-28.75	49.37	-25.18	-25.83	3.81							
2F	50.49	53.45	-13.55	51.50	51.75	-14.64	1.28							
3F	83.61	3.36	87.02	83.77	4.76	86.90	0.79							
4F	41.05	60.75	31.17	40.72	60.83	28.90	1.13							
5F	54.14	-40.76	34.75	54.33	-39.30	33.42	0.90							
6F	24.75	13.78	-49.48	25.69	13.00	-50.73	1.28							
				Min:			0.41							
				Max:			3.81							
				Average:			1.74							

Calibrated

Color Accuracy

ID	Patch Lab			Result Lab			Delta-E	1	2	3	4	5	6	7
1E	96.04	2.16	2.60	95.88	2.13	2.90	0.29							
2E	80.44	1.17	2.05	80.40	1.16	2.37	0.30							
3E	65.52	0.69	1.86	65.70	0.04	2.53	1.16							
4E	49.62	0.58	1.56	49.78	0.73	1.39	0.32							
5E	33.55	0.35	1.40	33.95	0.37	1.42	0.32							
6E	16.91	1.43	-0.81	17.77	1.42	-0.78	0.58							
1F	47.12	-32.52	-28.75	48.43	-25.72	-24.95	3.19							
2F	50.49	53.45	-13.55	50.38	53.16	-13.86	0.21							
3F	83.61	3.36	87.02	83.38	1.92	86.31	0.39							
4F	41.05	60.75	31.17	41.33	60.45	30.09	0.54							
5F	54.14	-40.76	34.75	54.10	-39.76	33.57	0.47							
6F	24.75	13.78	-49.48	24.98	12.65	-48.27	0.41							
				Min:			0.21							
				Max:			3.19							
				Average:			0.68							

Colour Uniformity

Uncalibrated

Color Uniformity for Brightness 100%

Quadrant	Color (Lab)			DeltaE To Closest
1 (Closest To D65)	134.13,	15.94,	7.21	0.0
2	36.01,	16.61,	8.82	1.6
3	35.08,	7.09,	0.23	3.2
4	138.64,	6.30,	0.37	3.0
5	138.69,	7.06,	0.75	3.4
6	136.45,	7.70,	0.44	3.5
7	134.66,	16.57,	0.92	3.7
8	138.79,	17.25,	9.34	2.3
9	35.80,	17.69,	9.76	2.9

Color Uniformity for Brightness 50%

Quadrant	Color (Lab)			DeltaE To Closest
1	79.32,	3.15,	1.47	1.6
2	1.04,	3.53,	.53	0.8
3	0.24,	.05,	.32	0.9
4 (Closest To D65)	0.65,	3.23,	.18	0.0
5	83.21,	3.83,	.26	0.5
6	81.74,	4.36,	.12	1.1
7	79.19,	3.67,	.99	0.9
8	2.10,	.80,	05	0.5
9	82.16,	4.51,	01	1.2
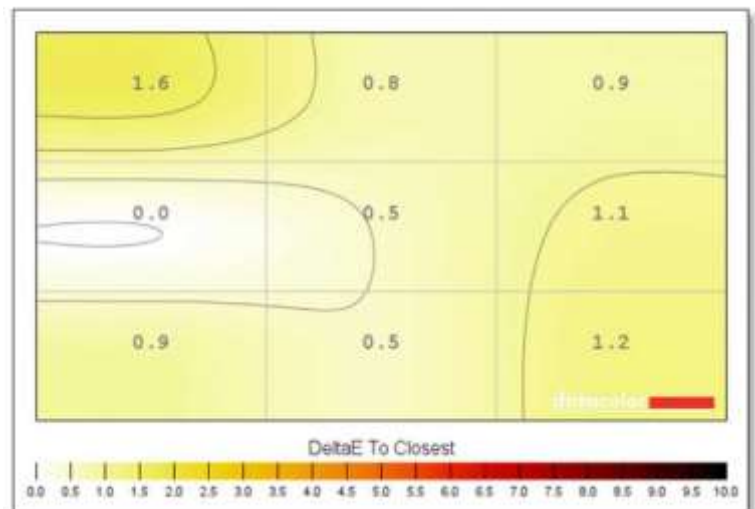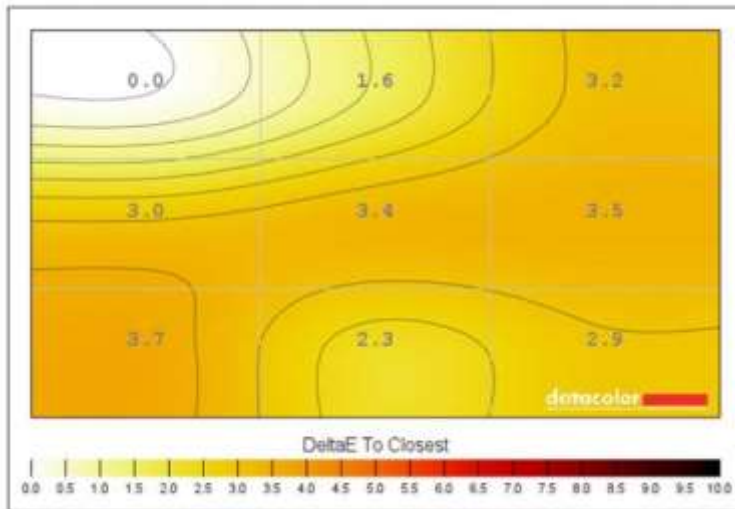
Calibrated

Color Uniformity for Brightness 100%

Quadrant	Color (Lab)			DeltaE To Closest
1 (Closest To D65)	129.34,	34.55,	14.77	0.0
2	129.95,	34.84,	14.93	0.2
3	129.49,	35.43,	16.84	2.3
4	131.78,	25.59,	17.45	2.5
5	133.57,	35.61,	17.77	2.6
6	131.26,	35.86,	17.43	2.7
7	29.40,	35.64,	18.31	3.7
8	131.48,	35.35,	16.75	1.8
9	30.59,	35.12,	15.68	0.9

Color Uniformity for Brightness 50%

Quadrant	Color (Lab)			DeltaE To Closest
1 (Closest To D65)	73.49,	15.27,	.60	0.0
2	74.53,	15.69,	9.72	0.2
3	4.02,	16.13,	1.05	1.6
4	74.97,	.00,	1.09	1.4
5	6.90,	16.45,	11.29	1.5
6	75.58,	16.66,	0.99	1.6
7	73.16,	.00,	11.66	2.2
8	75.84,	6.07,	1.02	1.2
9	75.95,	16.24,	9.94	0.6

DeltaE To Closest

0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 6.5 7.0 7.5 8.0 8.5 9.0 9.5 10.0

DeltaE To Closest

0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 6.5 7.0 7.5 8.0 8.5 9.0 9.5 10.0
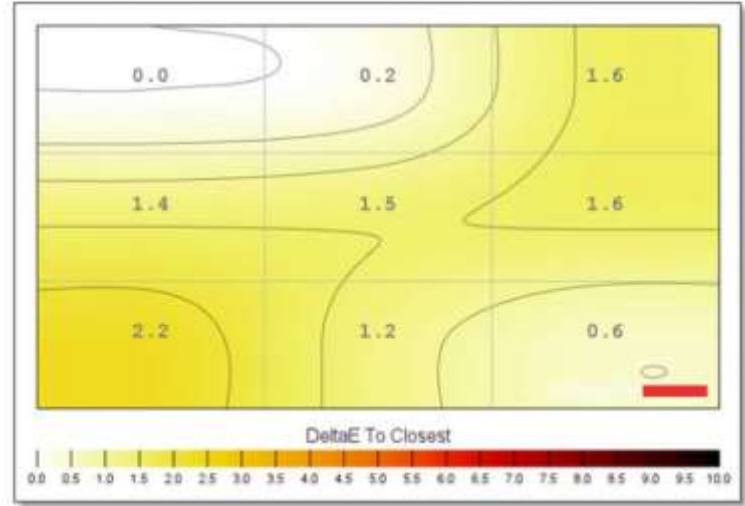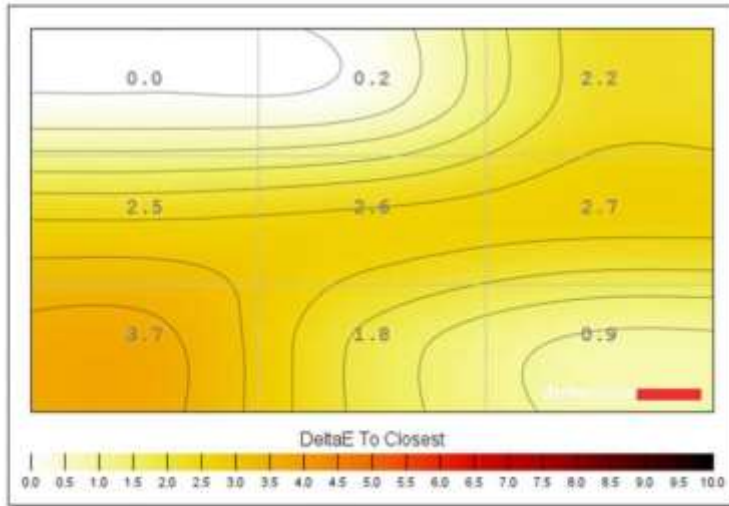
Brightness Levels

Uncalibrated

Brightness, Contrast and White Point At Different Brightness Settings

Setting	Brightness	Black	Contrast	White Point
0 %	53.7	0.02	3360 : 1	6500 (0.310,0.354)
25 %	120.9	0.16	740 : 1	6500 (0.310,0.354)
50 %	182.6	0.23	810 : 1	6500 (0.310,0.353)
75 %	236.6	0.30	800 : 1	6500 (0.310,0.353)
100 %	264.1	0.35	740 : 1	6500 (0.310,0.353)

Calibrated

Brightness, Contrast and White Point At Different Brightness Settings

Setting	Brightness	Black	Contrast	White Point
0 %	53.6	0.02	3350 : 1	6500 (0.310,0.354)
25 %	122.2	0.16	750 : 1	6500 (0.310,0.354)
50 %	184.7	0.25	750 : 1	6500 (0.310,0.354)
75 %	239.0	0.30	790 : 1	6500 (0.310,0.353)
100 %	264.5	0.33	790 : 1	6500 (0.310,0.353)

Monitor Rating

Uncalibrated

Monitor Rating

Category	Rating	1	2	3	4	5
Gamut	5.0	●	●	●	●	●
Tone Response	3.0	●	●	●		
White Point	2.5	●	●	◖		
Contrast	5.0	●	●	●	●	●
Luminance Uniformity	2.0	●	●			
Color Uniformity	4.5	●	●	●	●	◖
Color Accuracy	3.0	●	●	●		
Overall Rating	3.5	●	●	●	◖	

Calibrated

Monitor Rating

Category	Rating	1	2	3	4	5
Gamut	5.0	●	●	●	●	●
Tone Response	3.0	●	●	●		
White Point	1.5	●	◖			
Contrast	5.0	●	●	●	●	●
Luminance Uniformity	2.0	●	●			
Color Uniformity	4.5	●	●	●	●	◖
Color Accuracy	4.0	●	●	●	●	
Overall Rating	3.5	●	●	●	◖	

Final Thoughts

Pricing

Priced at around £250 from Laptops Direct, the ElectriQ 32-inch 4K FreeSync IPS HDMI Monitor is one of the cheapest monitors in its class. Not only is it about half the price of most 4K monitors, but it's also quite a bit larger than most affordable models. In short, this is a freaking tremendous amount of panel for a reasonably small investment. If you're really in a pinch, you can get a refurbished model for closer to £200. The monitor comes with a 1-year warranty too, not the best guarantee, but I think it's fair at this price range at least.

Overview

The phrase you get what you pay for is easily thrown around. However, while there are signs that this is a cheaper monitor, it still holds up far better than I expected. Furthermore, looking at the extensive user reviews that are available online, others are pretty darn happy with what they get, especially at this price. Is it perfect? Hell no, for the enthusiast editor and colour fanatic, it's not perfect. However, for someone who loves to game on an evening and spends the rest of the time staring at Google Docs and social media, it's perfect.

Panel Performance

The black levels are surprisingly good, although that's partly due to the IPS panel, which does give great viewing angles too. There are some compromises though, such as the 12ms response time, maybe not ideal for eSports, but for gamers like me who play RPG games and work… I couldn't care less about that response time; seriously I couldn't. Any ghosting issues are incredibly minimal and no better or worse than what I have on my own Iiyama ProLite, which has a 1ms response time. However, that's a TN panel, this is IPS, so sometimes numbers aren't everything.

Overclocking the panel also allowed it to hit 70 Hz at both 1440p and 2160p with no noticeable issues. Of course, every panel behaves differently, but it was a nice perk regardless.

Colours

Our monitor calibration may not show vast improvements, but real-world testing painted a very different picture. Out of the box, the monitor had a green and blue hue to everything; it was pretty awful if I'm honest. However, the monitor has a colour temperature adjustment, including RGB sliders, and two Gamma modes. Putting it on Warm and Gamma 2 while dropping the brightness to 80% and contrast to 46%; That will get you closer to good visual quality. Our standard calibration got the colour accuracy to 4/5, but the further tweaking of my own took that to 4.5/5, but not enough to change the overall rating of 3.5/5.

Build Quality

It was a bit rough around the edges, but not to the point where I would be returning it. I wasn't the first person to handle this monitor though. Looking at the user reviews, people do seem happy with the quality of their monitors. The online gripe I can agree with is that the stand feels a bit small and could be improved. Personally, I would buy an aftermarket VESA stand that offers more adjustments.

Should I Buy One?

Coming off of my TN panel Iiyama 28″ 4K monitor, I think the IPS panel on this monitor is as good or better than what I was using. They say to put your money where your mouth is, and I absolutely would buy one of these myself. Sure, it's not scoring the extreme colour accuracy and gtg times of models from the likes of AOC and LG, but at literally 1/4 of the price, it's hard to complain. You get a considerable panel size, plenty of features, and lots of pixels for a very reasonable price..

Pros

- Huge 32-inch panel
- Slim bezel
- 4K IPS
- 60 Hz
- Freesync
- Built-in speakers
- Built-in colour/gamma controls
- HDMI cable included
- VESA compatible
- Easy to use OSD controls
- Overclocked to 70 Hz
- Good colour reproduction
- Good backlight performance
- Great viewing angles

Cons

- Stand design could be improved
- The bottom edge of casing could be a bit tighter

Neutral

- Low response time, but I feel this is reflected in the price and doesn't have an impact on standard usage