

Now that your camera is all
clean inside and out:

Its time for AF Micro Adjustments

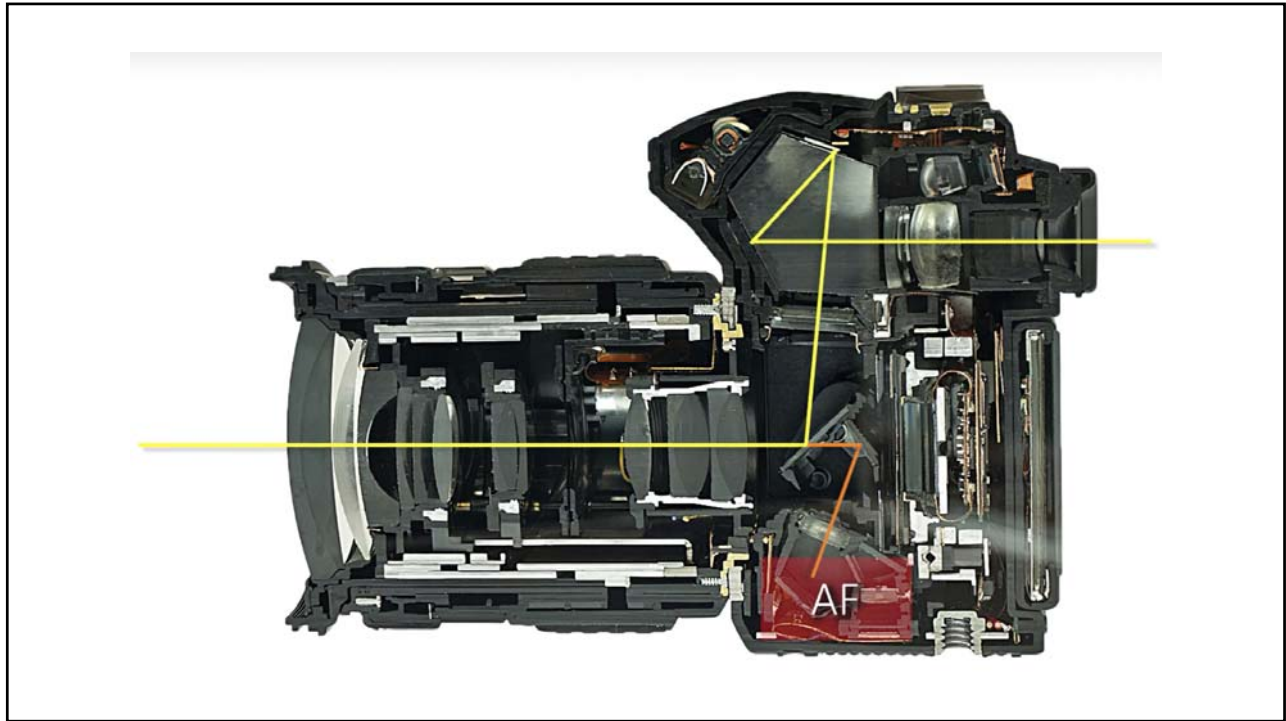
- ReikanFoCal- High tech \$\$\$
- Spyder LENSICAL- Low tech \$\$
- Dot Tune- Free

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Reikan
Technology



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FoCal

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Adjustment

Nikon

The following table shows the Nikon which can be *tethered*, i.e. connected to the computer and automatically controlled by FoCal.

Tethered Camera	Autofocus Calibration	Calibration Check	MultiTest	Stabilisation Test	Focus Consistency	Aperture Sharpness	Dust Analysis
D3	User Assisted	✓	✓		✓	✓	✓
D3s	User Assisted	✓	✓	✓	✓	✓	✓
D3x	User Assisted	✓	✓	✓	✓	✓	✓
D4	User Assisted	✓	✓	✓	✓	✓	✓
D4s	User Assisted	✓	✓	✓	✓	✓	✓
D5	User Assisted	✓	✓	✓	✓	✓	✓
D6	User Assisted Wide & Tele	✓	✓	✓	✓	✓	✓
D300	User Assisted	✓	✓		✓	✓	✓
D300s	User Assisted	✓	✓		✓	✓	✓
D500	User Assisted	✓	✓	✓	✓	✓	✓
D600	User Assisted	✓	✓	✓	✓	✓	✓
D610	User Assisted	✓	✓	✓	✓	✓	✓
D700	User Assisted	✓	✓		✓	✓	✓
D750	User Assisted	✓	✓	✓	✓	✓	✓

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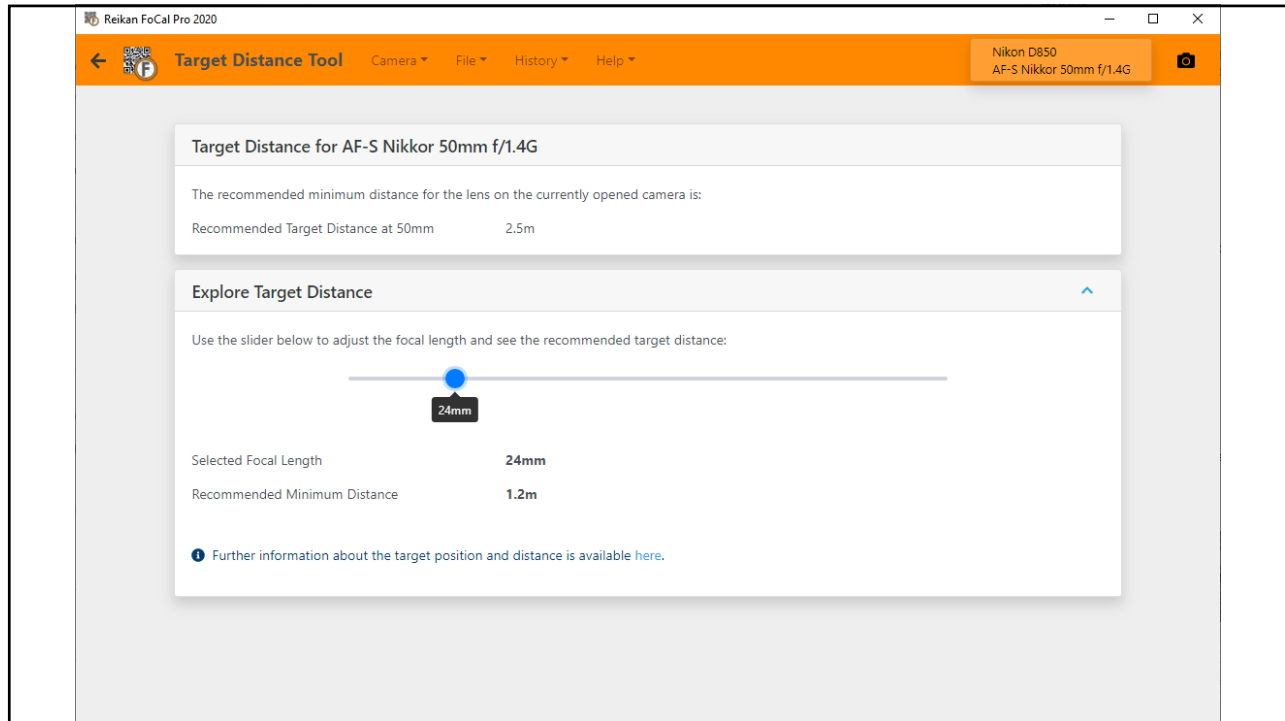
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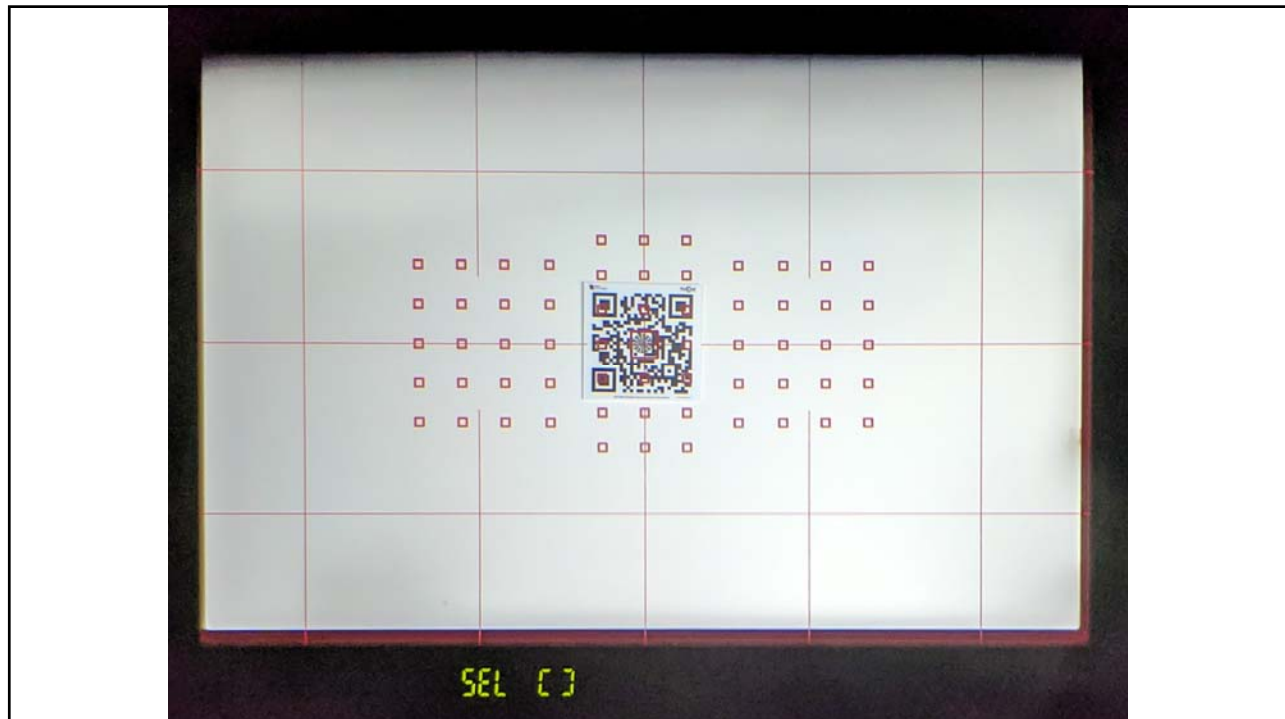
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FoCal Test Distance Chart

Focal Length	Recommended <i>minimum</i> test distance
<10mm	0.5m (50x or greater)
24mm	1.2m (50x)
50mm	2.5m (50x)
85mm	3.5m (40x)
100mm	4m (40x)
200mm	6m (30x)
300mm	7.5m (25x)
400mm	8m (20x)
500mm	10m (20x)
600mm	12m (20x)
800mm	16m (20x)
1000mm	20m (20x)
Macro lenses	Typical working distance – e.g. 0.3m for 1:1 shooting.

Note that Focal length is the actual focal length of the lens (and teleconverter combination if applicable) – the sensor “crop factor” can be ignored.

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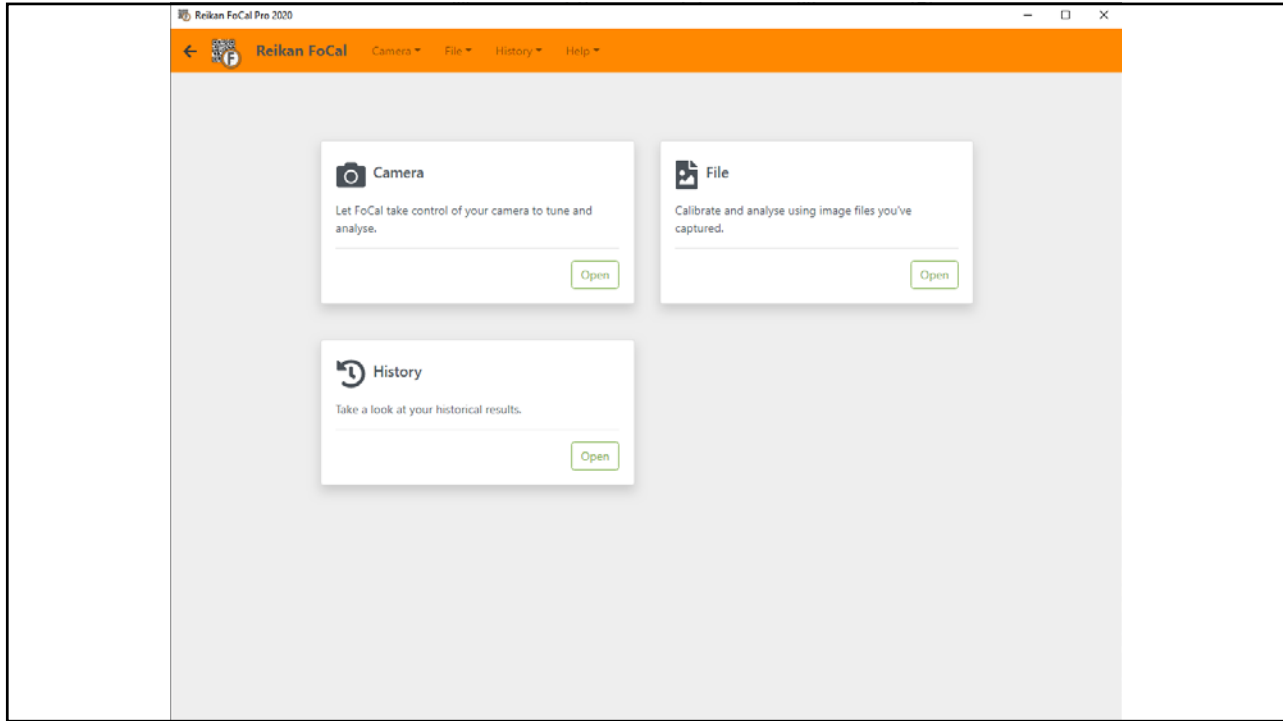
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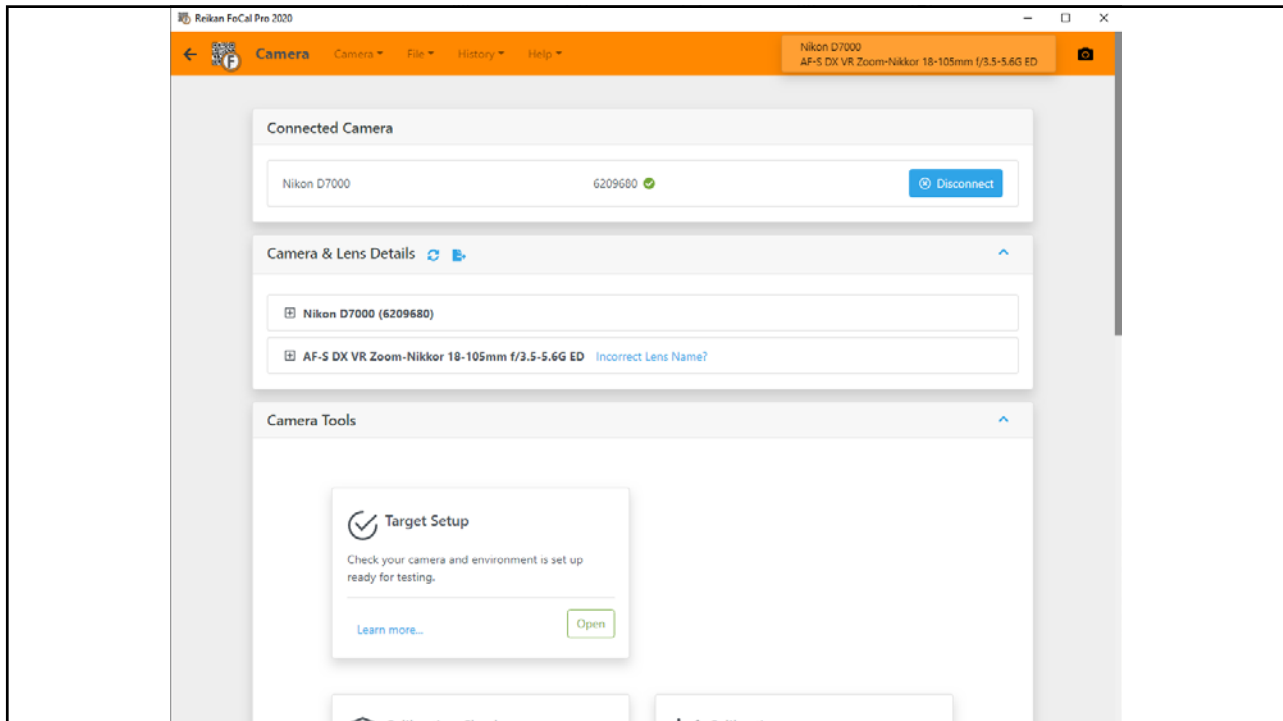
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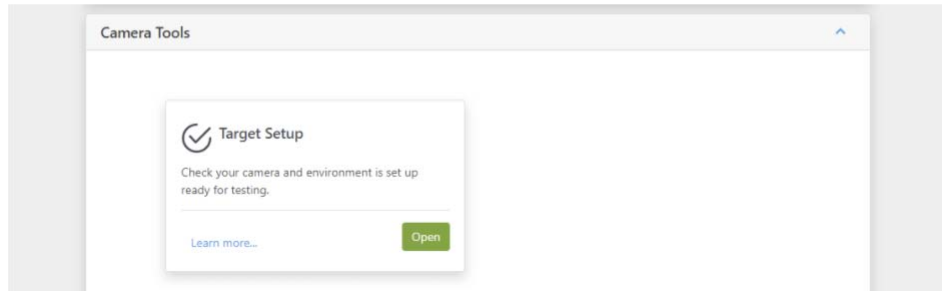
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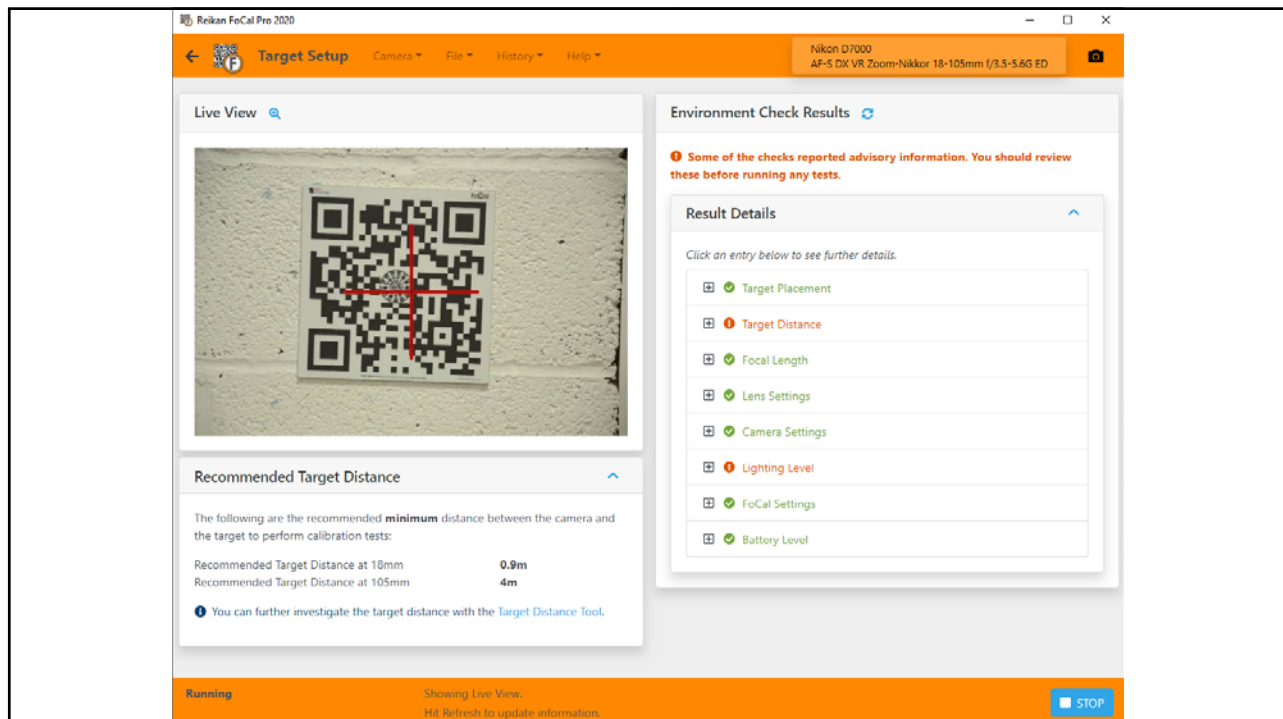
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Checking your Environment

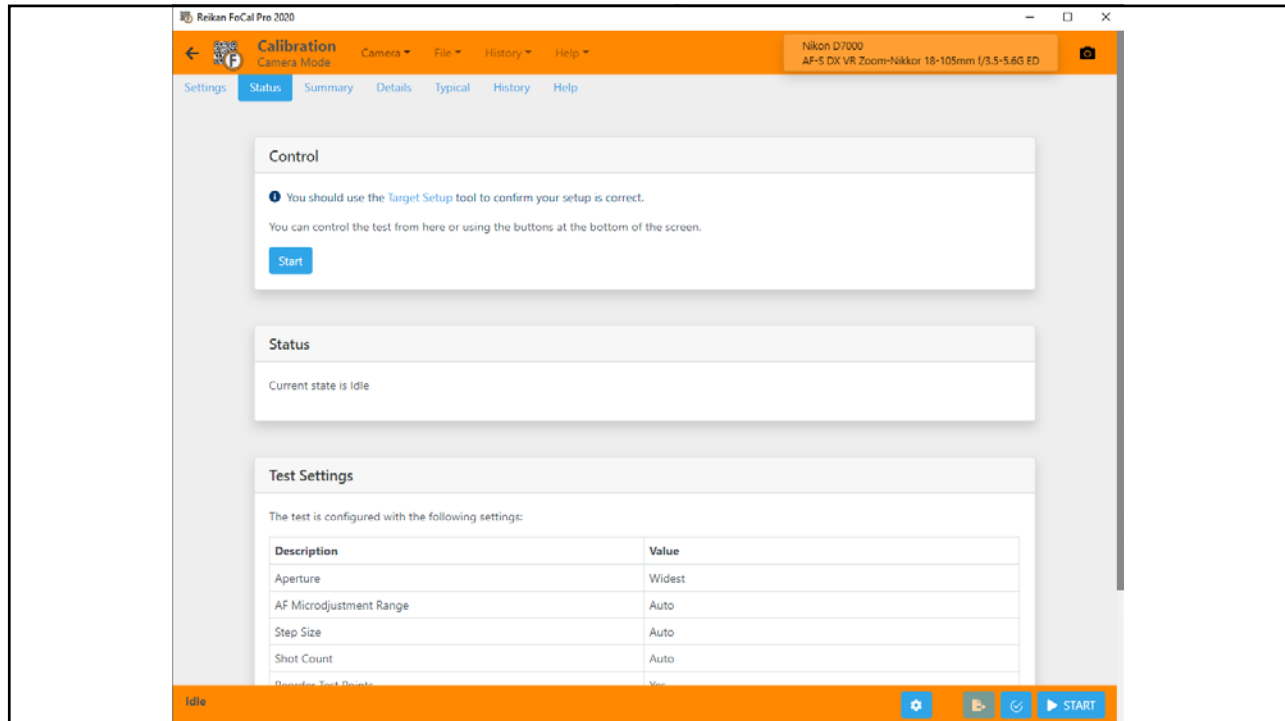
Once connected, the first step is to verify that FoCal is happy with the setup for the test. To do this, you'll use the *Target Setup* tool. In the *Camera Tools* panel, hit the *Open* button in the *Target Setup* card:



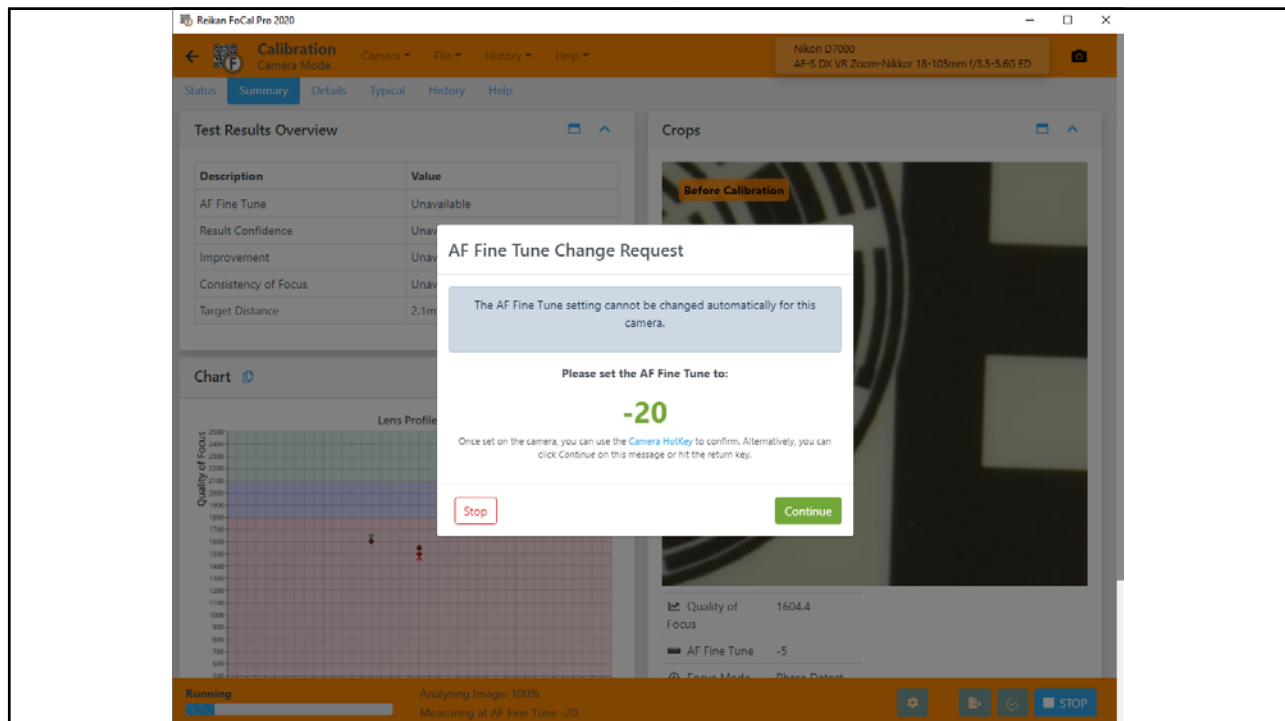
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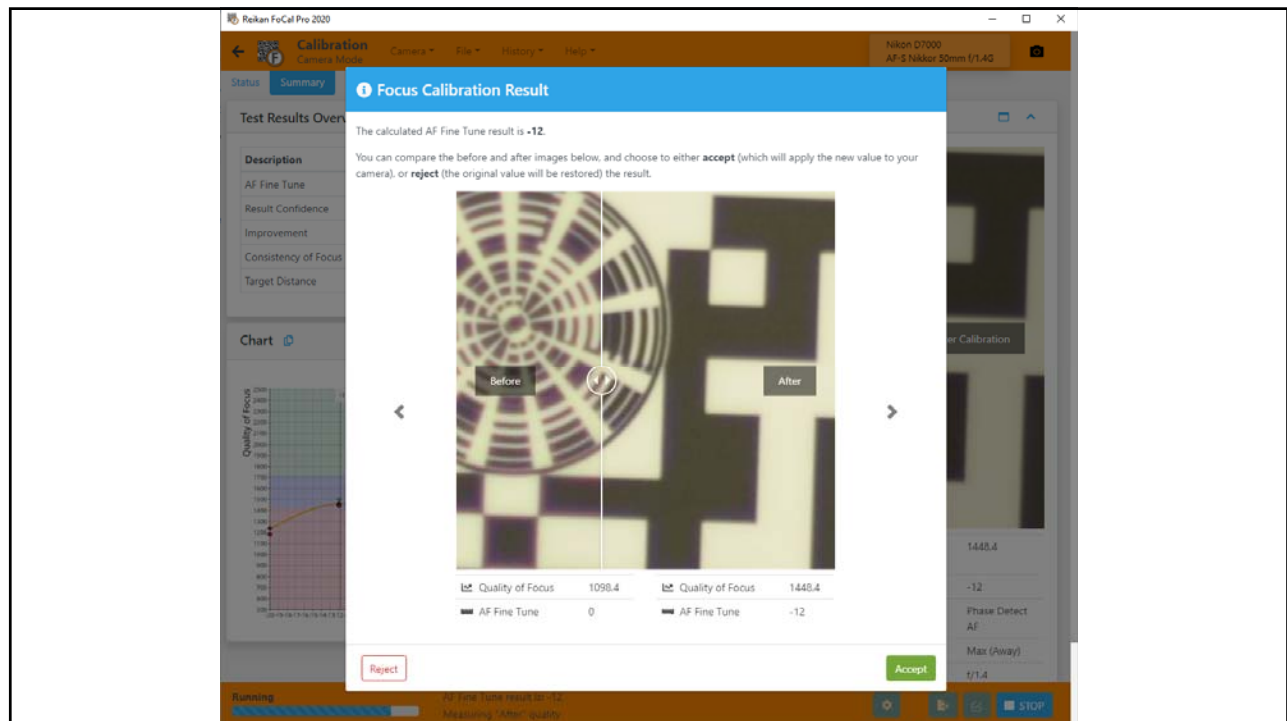
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MultiTest

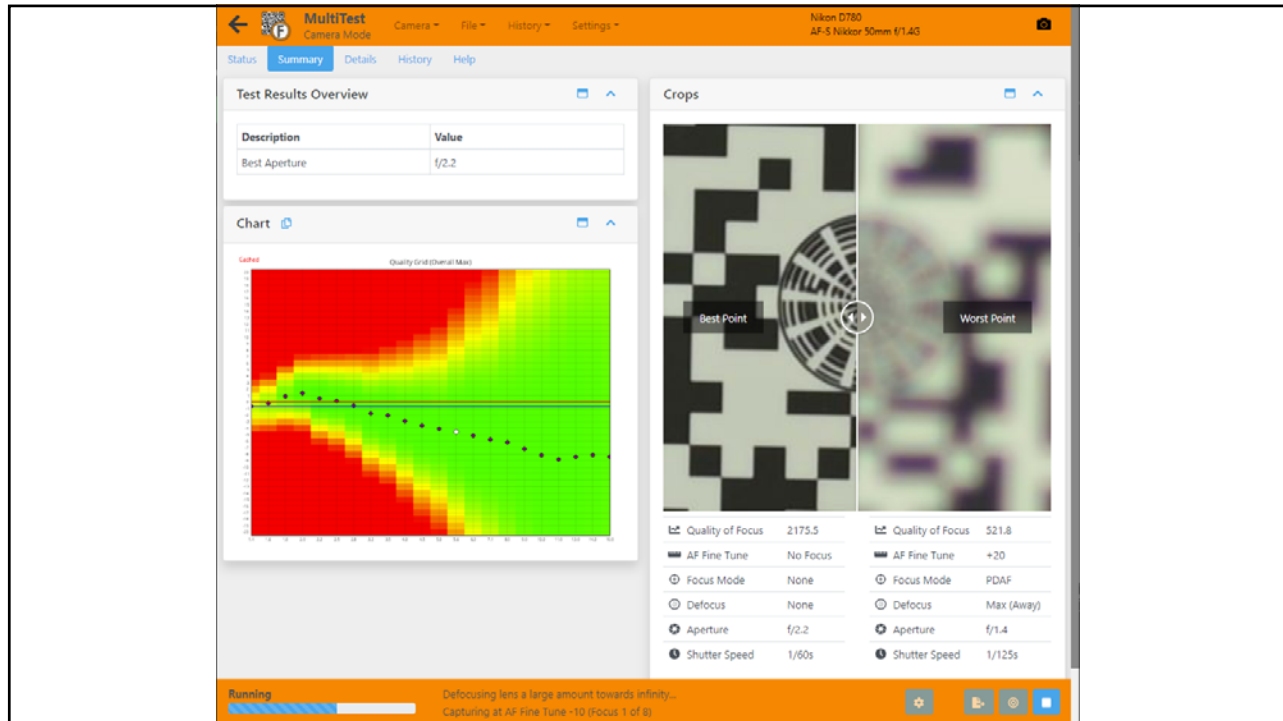
The FoCal *MultiTest* measures across the whole focus and aperture range to create a detailed view of the performance of your camera and lens.

In a single test, MultiTest can give you information about:

- Autofocus Calibration state
- Aperture Sharpness (under multiple conditions)
- Focus Consistency
- Focus Shift
- Autofocus error
- Spectral (colour) information
- Vignetting information

and more!

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Overview	
Test Information	
Property	Description
Data Creation FoCal Version	2.4.5.3284M
Data Analysis FoCal Version	2.4.5M
OS Version	OS X 10.11.6
Source Mode	Camera Mode
Image Capture Mode	JPEG
Analysis Method	Multi-ESH (RGB)
Camera Model	Canon EOS 6D
Firmware Version	1.1.7
Serial Number	23023003454
Camera Temperature	19C
Test Colour Temp	5200K
Lens	EF35mm f/1.4L USM
Focal Length	35mm
Termination Reason	Success
Test Aperture	f/1.4
Test ISO	100
Defocus Method	Large defocus away from the camera
Distance to Target	2m
Starting AF Microadjustment	+2
Tested AF Microadjustment Range	Full (-20 to 20)
AF Microadjustment Step Size	Auto
AF Consistency Constraint	6%
Total Shot Count	16
Calculated AF Microadjustment	-1
Result Confidence	Excellent
Consistency of Focus	98.1%

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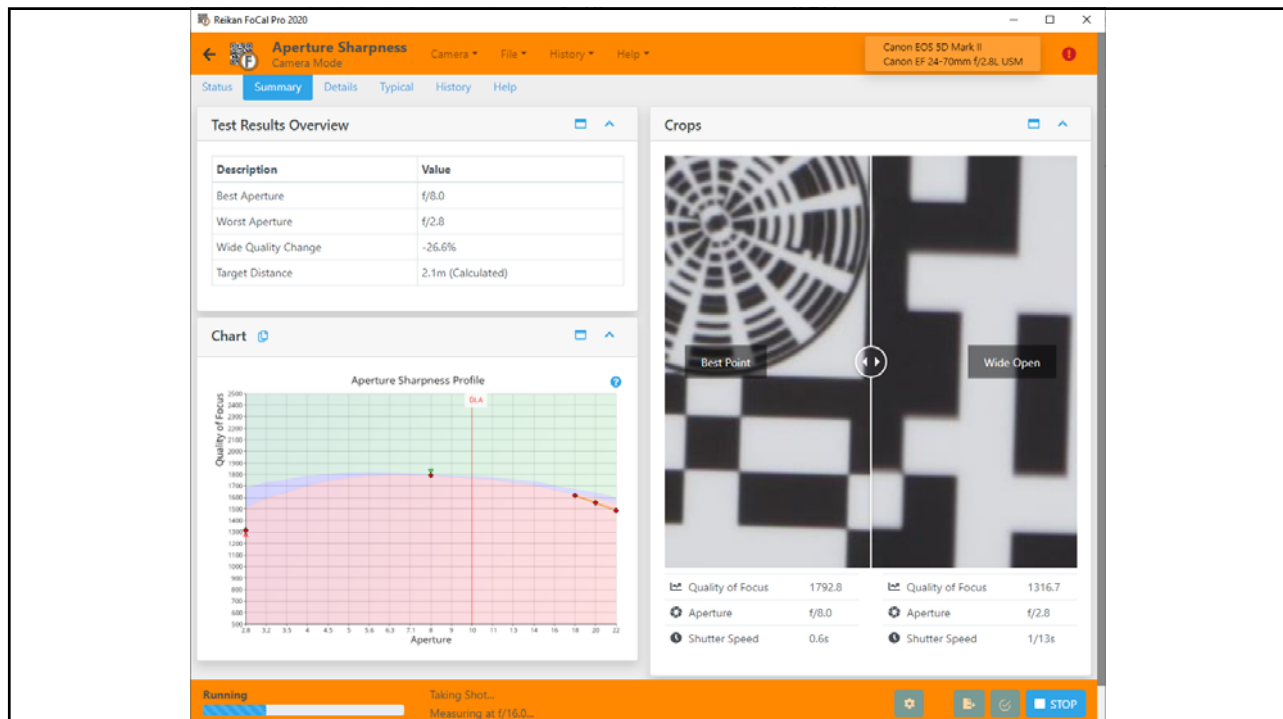
Aperture Sharpness

The Aperture Sharpness test shows you how your lens performs across the aperture range. You can see how the sharpness changes, how diffraction affects the lens, whether your lens elements are correctly aligned through the measurement of astigmatism and image motion and much more.

With FoCal Comparison Data, you can see how all these parameters compare to other FoCal users, helping you determine if your lens is behaving as expected.

For lots more details and information about the Aperture Sharpness test, see <http://www.reikanfocal.com/aperturesharpness>.

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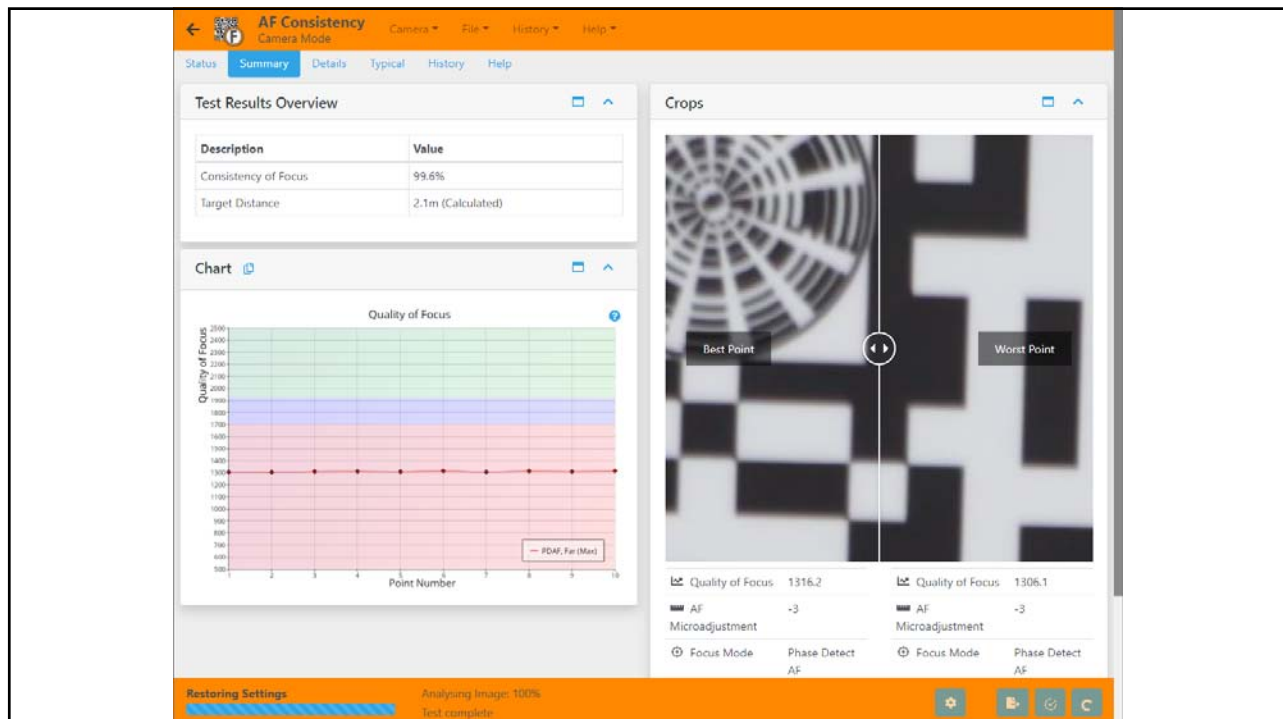
Focus Consistency

The Focus Consistency test automatically repeats autofocus operations a number of times, showing you how your camera and lens are behaving. You can look for anomalies in consistency, astigmatism, image motion and other measurements to check that everything is operating correctly.

As with other tests, FoCal Comparison Data can show you how all these parameters compare to other FoCal users, helping you determine if your lens is behaving as well or not so well.

For lots more details and information about the Focus Consistency test, see <http://www.reikanfocal.com/focusconsistency>.

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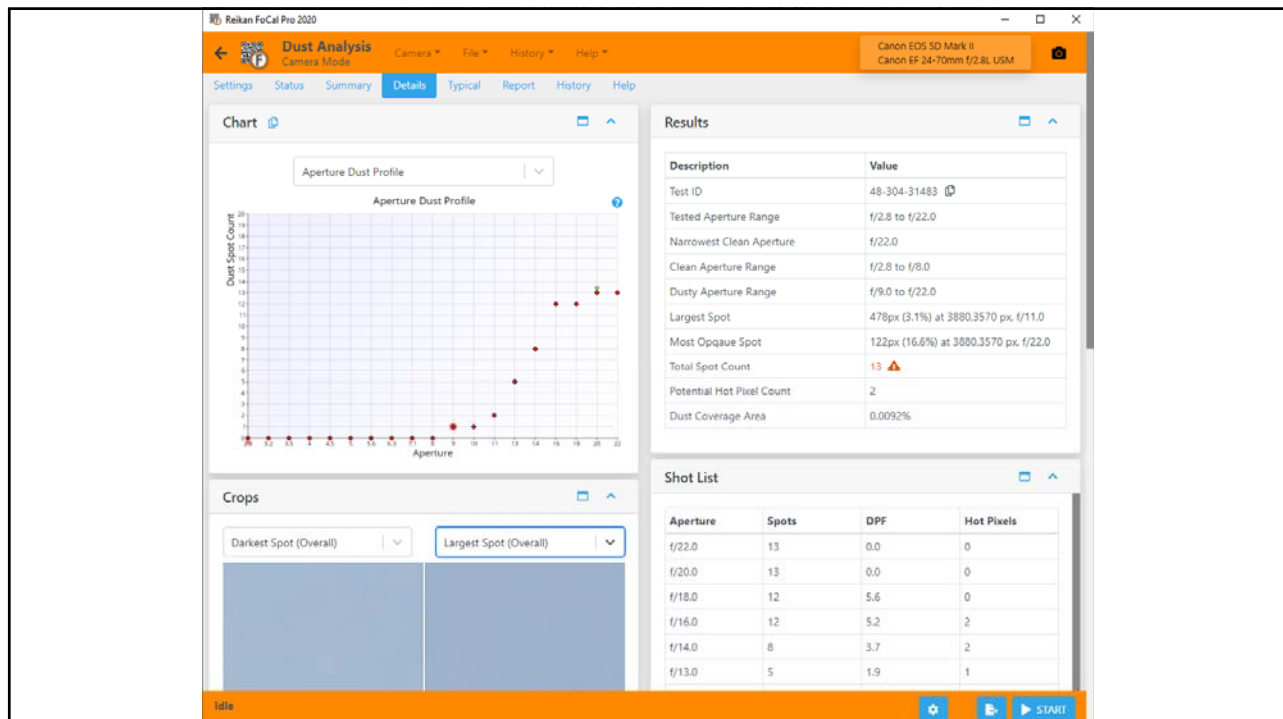
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Dust Analysis

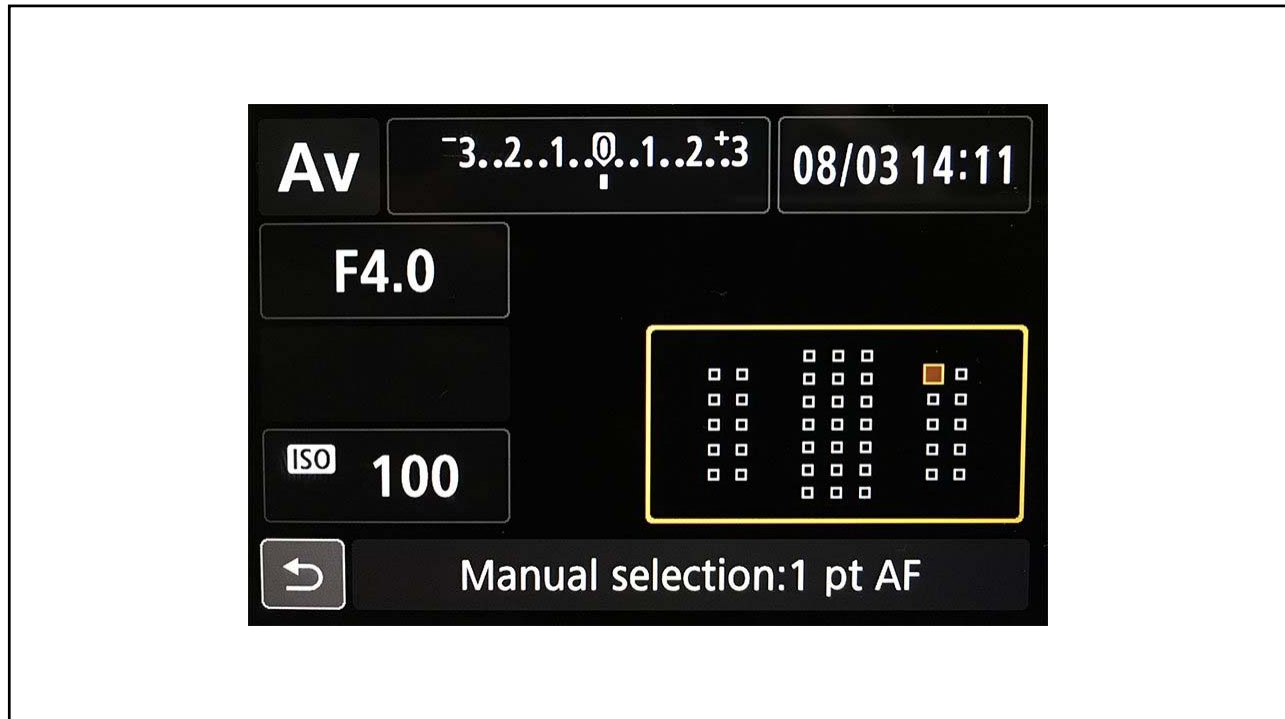
How dirty is your sensor, and does it matter? The FoCal Dust Analysis test automatically measures the impact of dust across the aperture range, using complex analysis to give you high confidence results and show you only spots that matter. A clear indication of affected apertures helps you decide whether you want to potentially risky step of cleaning your sensor, and Dust Perception Factor lets you see whether you're really likely to see any impact from them. Hot Pixel detection can show you whether there are any particularly concerning stuck pixels too.

For lots more details and information about the Dust Analysis test, see <http://www.reikanfocal.com/dustanalysis>.

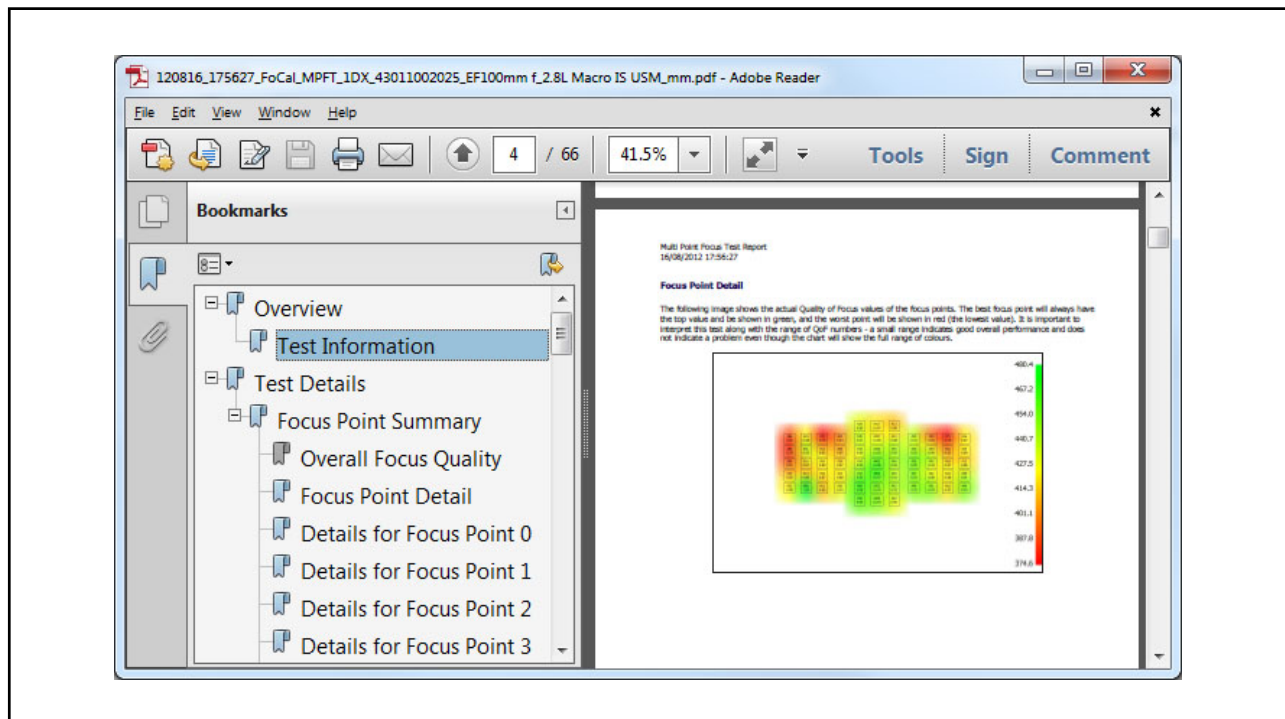
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Calibration History Camera File History Help

Comparison with Typical Performance

Further information about this lens is available at [FoCal IQ](#)

The following information shows how your data compares with the typical values of other FoCal users.

Interpretation of your test results

The following section shows a basic interpretation of your results as compared to typical results from other users.

Lens Astigmatism

Your lens is showing higher than average range of astigmatism, although the average value is acceptable.

Consistency of Focus

There is no comparison information.

Comparison Details

The following section shows more details about how your results compare to typical results from other users.

Astigmatism Factor

The following information shows how the sharpness in a horizontal and vertical axis compare. The *Astigmatism Factor* is the ratio of the horizontal to vertical sharpness expressed as a percentage, and is positive if the horizontal axis is sharpest or negative if the vertical axis is sharpest.

Measured	Typical
Astigmatism Factor 2.4%	1.1-7.3%
Astigmatism Range 8.7%	0.4-4.0%

Comparison Data Quality: Excellent, Excellent

Consistency of Focus

The following information shows how consistent the autofocus is during the test. This information is based on the repeatability of shots at the same AF Fine Tune and will give a slightly different result to the Autofocus Consistency test.

No Consistency of Focus Information

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Reikan FoCal Pro 2020 History Camera File History Help

History Selection

Nikon D780 (6004905) AF-S Nikkor 50mm f/1.4G

Matching Tests

Date	Test	Mode	Focal Length	Summary
22/07/2020 12:59:35	✓	📷	Unavailable	Point Count = 22
22/07/2020 12:56:44	🟢	📷	50mm	Consistency of Focus: 95.1%. Shot Count: 10
22/07/2020 12:50:07	🟢	📷	50mm	Best Aperture f/10.0
22/07/2020 10:14:34	+	📷	50mm	Best Aperture f/5.6
22/07/2020 08:37:46	+	📷	50mm	Best Aperture f/9.0
21/07/2020 16:52:42	+	📷	50mm	Best Aperture f/1.4
21/07/2020 16:45:54	🟢	📷	50mm	112.5%
21/07/2020 16:36:36	✂️	📷	50mm	+1 (Quality is Excellent)
21/07/2020 16:24:33	🟢	📷	50mm	71.2%
21/07/2020 16:09:42	🟢	📷	50mm	68.0%

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Entries shown in green have additional data e.g. crops available.

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The image displays six product listings arranged in two rows. Each listing includes a product icon or image, a name, and a price.

Product Name	Price
FoCal Plus	\$59.95
FoCal Pro	\$99.95
FoCal Pro (Twin Pack Bundle)	\$139.95
Printed Target - Normal	\$20.00
Printed Target - Large	\$30.00
Target Twin Pack (Normal + Large)	\$44.95

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