

Nikkor AF 85mm f/1.8 D - Review / Test Report

Lens Reviews - Nikon / Nikkor (APS-C)
Page 2 of 3

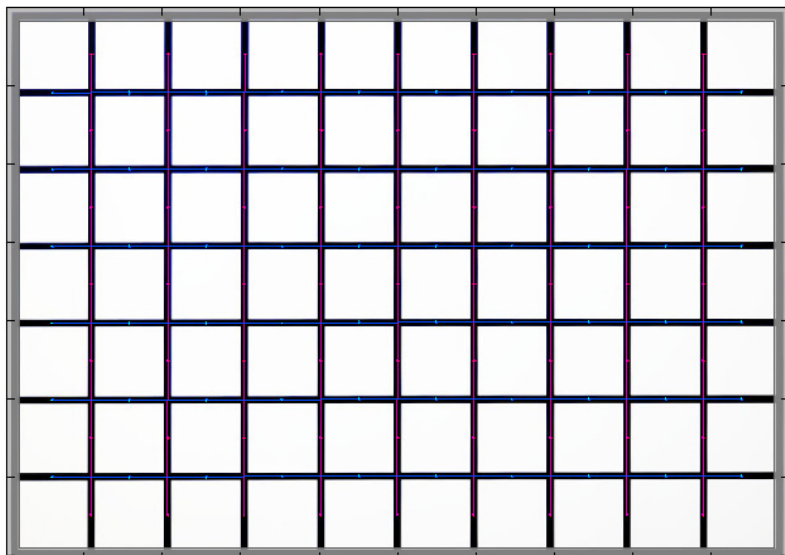
ARTICLE INDEX

- [Introduction](#)
- [Analysis](#)
- [Sample Images & Verdict](#)

Distortions

The AF 85mm f/1.8 D shows extremely low distortions (0.03%) which are absolutely negligible in field conditions.

**Distortion: 3rd order correction 11-Apr-2006 21:15:56
85mm**



SMIA TV Distortion = -0.0271%
 $k_1 = 0.000375$ ($r_u = r_d + k_1 r_d^2$)
 (r in center-corner units.)
 $h_1, h_2 = -0.0095, 0.0104$
 PW Pro Coeff. = 0.003375
 PW Pro Scale = 0.9999
 Line calc: 3rd order

Selected EXIF data

File: 2006:04:11 21:15:48
 Make: NIKON CORPORATION
 Model: NIKON D200
 Taken: 2006:04:11 20:07:49
 Res: 1000 x 705
 FL:
 Exp: 0.250 s (1/4)

Aper: f/1.8
 ISO: 200

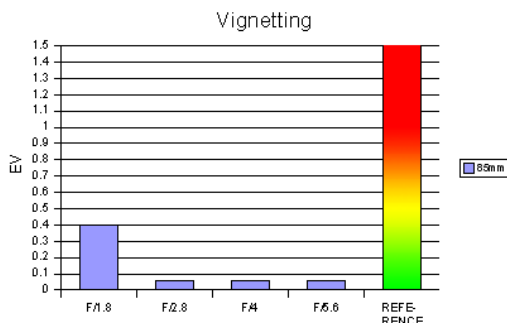


The chart above has a real-world size of about 120x80cm.

Vignetting

Thanks to the sweet spot behavior on the D200 vignetting is very well controlled. Surprisingly for such a large aperture lens this is also true for the max. aperture setting (f/1.8) with a relative light loss of a mere 0.4EV which is generally irrelevant. From f/2.8 and up the problem is only detectable under lab conditions.

Vignetting	F/1.8	F/2.8	F/4	F/5.6
85mm	0.4	0.06	0.06	0.06



MTF (resolution)

The AF 85mm f/1.8 D was able to show exceptional resolution figures in the lab. The center resolution is already *excellent* straight from the max. aperture setting with the borders following quite closely. The sweet spot is reached around f/5.6 where the lens scratches the resolution limits of the D200.

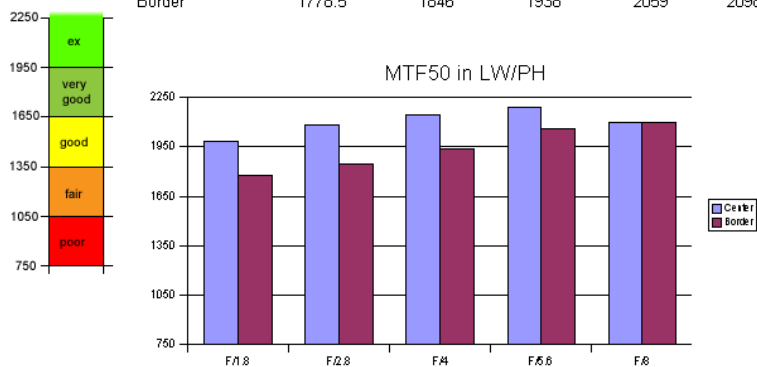
Below is a simplified summary of the formal findings. The chart shows in line widths per picture height (LW/PH) which can be taken as a quantity for sharpness. The chart is limited to the visually relevant LW/PH range of [750, 2250]. If you want to know more about the MTF50 figures you may check out the corresponding [Imatest Explanations](#).

Rating Scale:
Nikon (10mp)

Nikkor AF 85mm f/1.8 D

max:
~2320 LW/PH

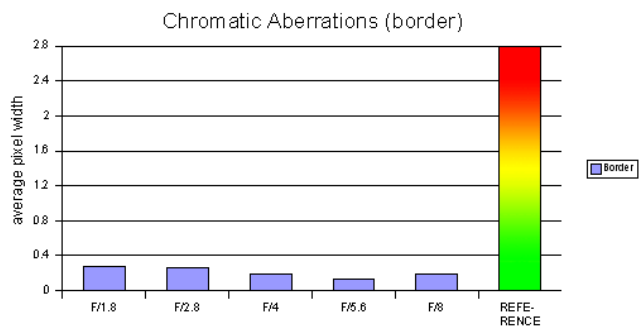
	F/1.8	F/2.8	F/4	F/5.6	F/8
Center	1981	2087	2144	2188.5	2102.5
Border	1778.5	1846	1938	2059	2098.5



Chromatic Aberrations (CAs)

Chromatic aberrations (color shadows at harsh contrast transitions) are extremely low even for a fix focal lens.

CAs	F/1.8	F/2.8	F/4	F/5.6	F/8
Border	0.28	0.25	0.19	0.13	0.19



<< Prev - Next >>