# Canon RF 28-70 f2 L USM

# **User impressions**

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## Introduction

This is a big and heavy lens for a standard zoom range of 28-70 when compared to the well-known 24-70mm f2.8. range of lenses offered by every manufacturer. Refer to the photo below where it is fitted to the excellent EOS R5. But with the very fast maximum aperture of f2 all through the zoom range, it is stands alone with no real competition in the lens world.



This f2 aperture is made possible due the inherent design of the RF lens mount placing the large rear element closer to the sensor (ie short register mount) which helps to control aberrations and vignetting to an extend not possible with the older EF lens mount.

A quick look at the basic specification of the lens:

#### **Specifications**

Zoom range: 28mm to 70mm

F-stop range: f2 to f22

Angle of view: 65° - 29°, 75° - 34° (horizontal, vertical)

Filter thread: 95mm

Lens construction: 19 elements in 13 groups including 2 UHD glass elements and 1 Super UD

element, 4 elements also has aspheric surfaces

Aperture Blades: 9, rounded, electronically controlled.

Minimum focussing distance: 0.39m (0.18x magnification)

IS: None

Focus motor: USM with full manual override

Focus method: Internal, front element does not rotate during focus

Zoom method: Rotary type with extending lens barrel

Weight: 1430g

Accessories: front and rear lens caps, soft pouch, scalloped lens hood.

Immediately apparent is the lack of image stabilisation. To me this is not a big deal – the lens is still easily hand holdable with a fast, maximum aperture. Also, one has to remember that the EOS R5 (and R6) offers stabilisation in the camera body (IBIS in-body image stabilisation) as a unique feature to those bodies. Makes the requirement of IS on the lens not all that important anymore, and also results in some weight saving and possibly a less bulky design as well.

#### In the hand

For a lens with this zoom range it feels quite formidable in the hand, and with the large, 95mm front element also looks quite intimidating. It is larger than the RF 70-200 f2.8 in both overall length in minimum zoom setting and in diameter on the lens barrel and front element. (95mm vs 77mm filter thread size)

This lens has a remarkably clean design, no distance scales and switch clusters. All you have is the all too familiar AF/MF switch located on the left-hand side of the lens and a zoom lock switch on the right-hand side to prevent zoom creep, for transport purposes.

Apart from the usual zoom ring and MF ring there is also a control ring which is found only on RF lenses. This ring can be set in the camera menu system to control a parameter of your choice; on the EOS R5 I was reviewing at the same time I selected the AF method, which meant I could quickly change the AF from centre point with surrounding AF to tracking AF or whatever I required. Very

handy indeed. On the switchgear photos below the zoom ring is at the bottom, the MF ring in the middle and the control ring at the top (with the red L signature ring).

The scalloped lens hood has a bayonet fit design with a lock latch which prevents accidental removal of the hood. It locks securely into place.



Left hand side: AF / MF switch Right hand side: Zoom lock switch

Zoom ring bottom, MF ring middle, Control ring top (with red band)

#### **Performance**

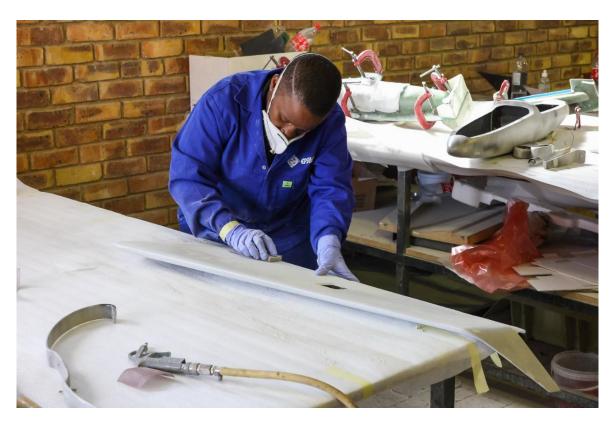
This is a very sharp lens, with no real noticeable fading in sharpness towards the corners. Even at f2 you have to pixel peep on the right subject to notice and loss in sharpness. This lens displays excellent sharpness all through the zoom range and aperture settings. This level of sharpness is usually seen in dedicated prime macro lenses; I was suitably impressed. There is some very slight light fall off in the corners which you'll notice when shooting at a clear blue sky, but under normal conditions not visible. Most affected is 28-40mm and with the lens wide open, is does get less visible when stopping down and by f4 all but gone. What also helps is that bodies such as the R5 can autocorrect for this so this is really not an issue anymore.

Auto focus in one-shot mode is quick, quiet and accurate, even in low light conditions.

Low light environment is one of the areas where this lens really shines. I was documenting a production process, indoors, for UAV's where changing light levels are experienced. To capture the process stages one would not want to use flash for the shadows it invariably creates, so natural light is the norm, and the fast f2 aperture along with the excellent high ISO capabilities of the EOS R5 made the documenting of the manufacturing process very easy. The real interesting sections of the manufacturing process is protected by IP rights and I cannot show that here, but some basic finishing processes do not sell any secrets. The image of the production line worker was captured in an area with natural light streaming in from an open roller-door, enabling the use of a smaller aperture.

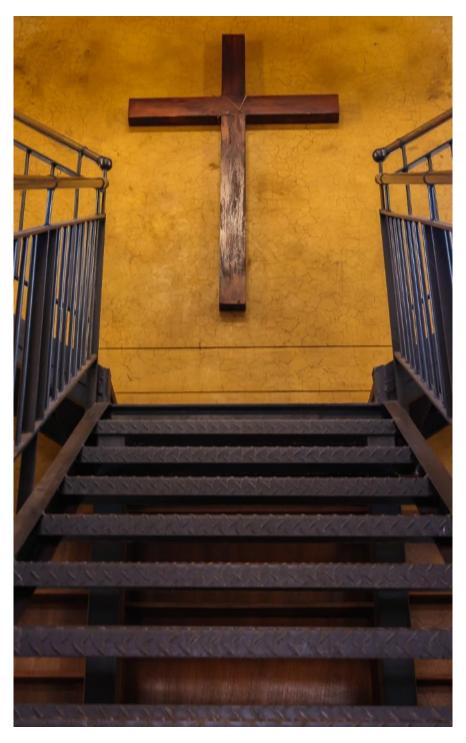


Sharpness across the frame is excellent with no visible light fall-off. Canon EOS R5 with RF 28-70 f2 L USM. 28mm 1/500, f2, ISO 1600



Documenting a UAV manufacturing process. Canon EOS R5 with RF 28-70 f2 L USM. 28mm 1/320, f9, ISO 6400, cropped.

High quality optics of the lens helps to capture detail even in more dimly lit interiors, such as this wedding venue below, especially when fitted to a high ISO capable body such as the R5. With no IS on the lens, the IBIS of the R5 helps to keep hand-held images pin sharp at slower shutter speeds.



Canon EOS R5 with RF 28-70 f2 L USM. 39mm 1/13, f7.1, ISO 6400

Whilst it is not a particularly close-focussing lens, it fares more than well enough for close-up photography. The quality optics linked to a quality sensor makes capturing flowers and such subjects easy, displaying very good colours and detail with some serious depth of field control should you want to place attention on a specific part your flower. Colour rendition is very accurate.



Canon EOS R5 with RF 28-70 f2 L USM. 70mm 1/6400, f2, ISO 1000



Canon EOS R5 with RF 28-70 f2 L USM. 28mm 1/6400, f7.1, ISO 1600

During our annual Porsche Day park-off usually held at Loftus Versveld, but this year due to the Covid-19 regulations held at another venue, I used the RF 28-70 to capture some of the stunning cars which attended the event, the image quality delivered by the lens showing the colours and details of these cars to the fullest.



Canon EOS R5 with RF 28-70 f2 L USM. 31mm 1/5000, f7.1, ISO 1600

The depth of field control is also one of the aspects of this lens which I believe the people photographers out there will really like. This really helps to make your subject stand out from the background, providing a pleasing perspective and placing the attention on your subject. Not to mention again its superb low light capabilities and sharpness across the zoom and aperture range which will make fashion photography and wedding photography in dimly lit interiors easier.

As a landscape lens it also delivers stellar performance making it very useful in this genre. I have no claim to fame as a landscape photographer, I merely dabble when I get the opportunity. The high-quality optics combined with the nice zoom range really makes this lens ideal as a landscape lens, usually the domain of the sharp wide-angle prime lenses. Now there is the versatility of a zoom with really good optical quality for the landscape shooters out there. At slow shutter speeds the IBIS of the Canon EOS R5 again helped to keep images sharp. Would have liked to have polarising filter available, but unfortunately none in my kit at 95mm. The possibilities are definitely there for the serious landscaper.

#### **Summary**

#### Pro's:

- Very versatile lens
- · Very sharp in centre and corners of frame

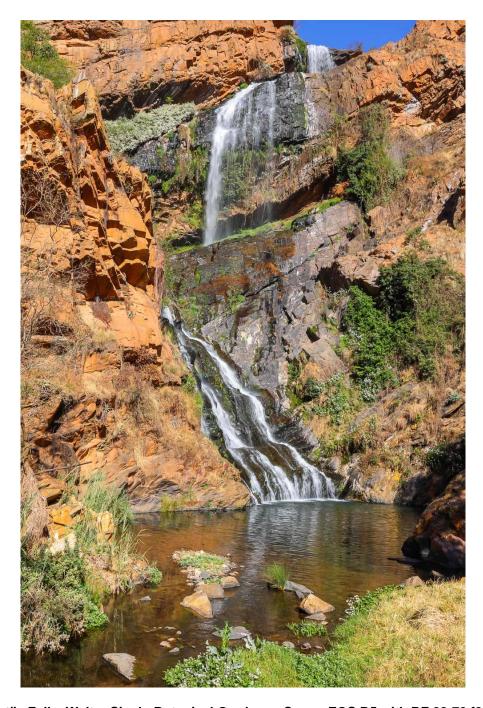
- Fast f2 aperture when required
- Fast and accurate AF
- Feels very solid in hand
- Zoom lock switch

### Con's:

- Heavy for the zoom range
- Expensive
- No IS (not a real issue though)



Outdoor portrait. Canon EOS R5 with RF 28-70 f2 L USM. 70mm 1/2500, f2.2, ISO 160



Witpoortjie Falls, Walter Sisulu Botanical Gardens. Canon EOS R5 with RF 28-70 f2 L USM. 32mm 1/20, f22, ISO 100, handheld

# Conclusion

An impressive general-purpose lens with exceptional performance, a good option to consider for the user wanting an all-in-one lens in the standard zoom range and demanding only the best in optical quality.

Many thanks to Canon SA for arranging and making available the test lens.