



KAHLES

THE KAHLES SKMR4 RETICLE

We at KAHLES share the passion and professionalism of ambitious shooters. We passionately support their aspiration to continually enhance performance. We do this with intuitive simple and smart products, based on profound user insight. This is why we offer reticles like SKMR4 in our products.

The SKMR4 reticle has been designed by Shannon Kay (Shannon Kay Milling Reticle), a PRS shooter from the US and owner of the K&M PRECISION RIFLE TRAINING SHOOTING COMPLEX and owner of the PRS Series. We have asked Shannon to explain the basic idea behind SKMR4.



Relevant links: <https://kmprecisionrifletraining.com/>
<https://www.precisionrifleseries.com/>

How to work with the KAHLES SKMR4 reticle – by Shannon Kay

"I'm proud to partner with Kahles Optics by designing their industry leading SKMR reticles. The SKMR line of reticles was designed to be uncomplicated, practical and visually expedient for both tactical operations and the most demanding long-range competitors.

Backed by Kahles Optics long history and superior glass quality, it is with little surprise that the Kahles K525i has rapidly dominated the marketplace becoming one of the most trusted scopes among top performing competitive shooters. The SKMR reticles field proven success has made it one of the most emulated reticles on the market today.

The recently released SKMR4 reticle is a culmination of refinements based on the extensive real-world experience of professional precision rifle shooters both in the field and on the competitive firing line. As shooters have advanced in their capabilities the SKMR4 reticle has been fine-tuned with enhanced features, making even faster and more precise shooting possible.

Two-tenths mil marks along the horizontal axis allow for more precise wind holds. The floating dot aiming point prevents the target from being obscured. Slight variations in hash marks make it easy to find your hold without having to count lines. The bold outer posts allow engagement of targets when you're dialed to low magnification and number indexes all while maintaining a simple, uncluttered field of view." "



2 MAIN TECHNIQUES

The following examples shall illustrate different strategies how to use the SKMR4 reticle. The graphs we use are based on the STRELOK PRO App, using the data from Shannon's weapon system.

<u>Data used for calculations:</u>	Caliber:	6mm GT
	Bullet:	Berger Hybrid Target
	Bullet weight:	105 grs
	Bullet speed:	2,990 fps
	Zero distance:	100 yards

TECHNIQUE 1

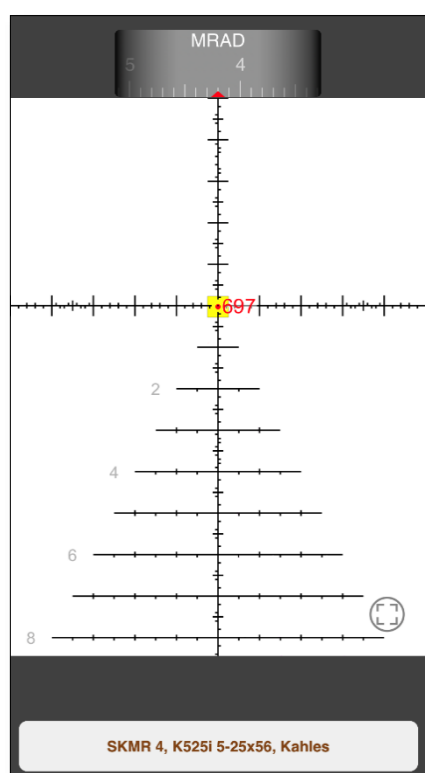
Shannon Kay typically will dial data on the most difficult distance/target and hold under or over on the less challenging distances or targets sizes.

Target 1:	700 meters 14-inch square
Target 2:	500 meters 12-inch square
Target 3:	300 meters 10-inch square

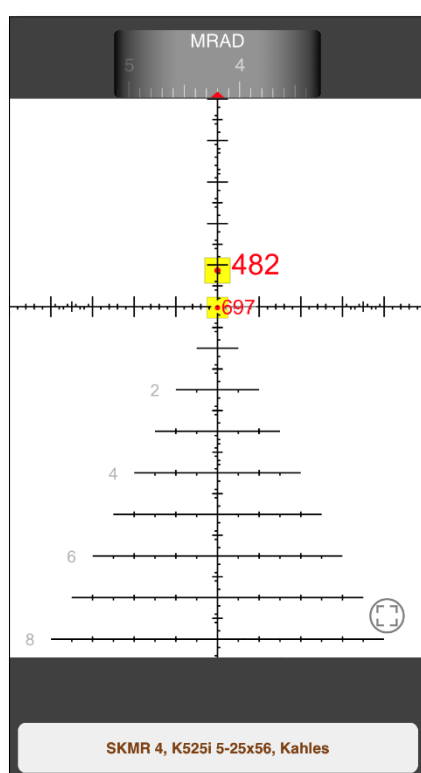
In this example Shannon would dial 700 meters, using 4.2 mils as shown in graph 1.1.

Keeping the 4.2 mils, Shannon would hold under 0.8 mils for the 2nd target at 500 meters as shown in graph 1.2.

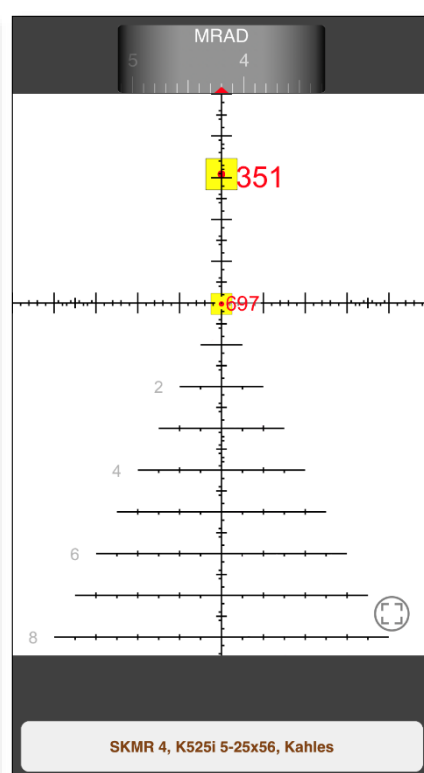
For the third target he would hold under 3.2 mils under from the 4.2 mils dialled on the scope to complete the holdover technique.



Graph 1.1.
Target distance 700 m / 42 clicks



Graph 1.2.
Target distance 500 m / 42 clicks
1.0 mils under are 482 m



Graph 1.3.
Target distance 300 m / 42 clicks
3.0 mils under are 351 m



TECHNIQUE 2

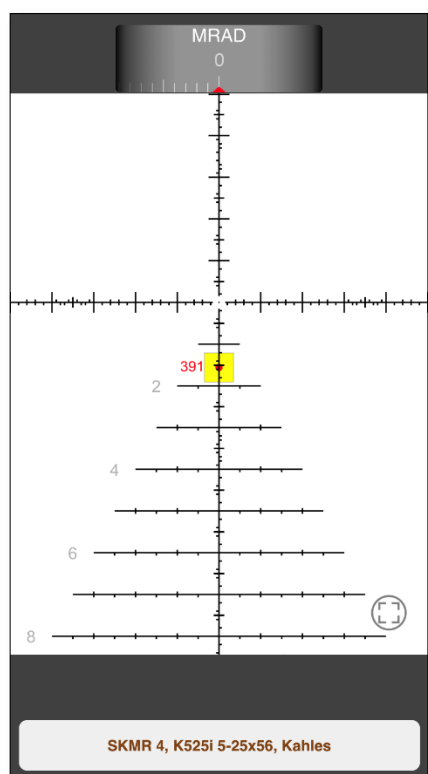
Holding over just using the reticle from a 100m zero.

Target 1: 400 meters

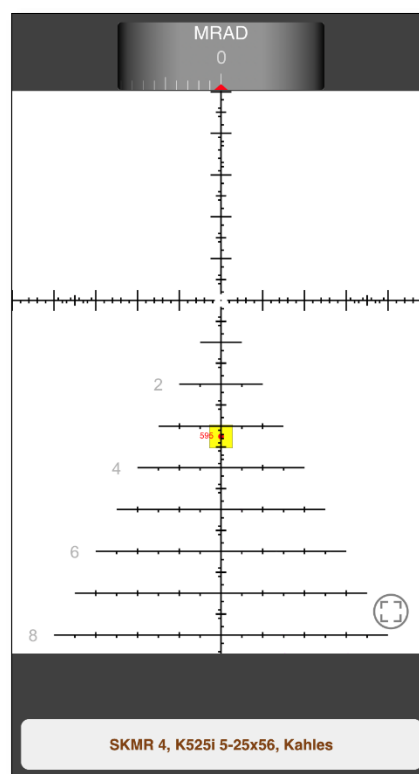
Target 2: 600 meters

In this example the 400m target would be use with 1.6 mils over center as shown in graph 2.1.

3.2 mils over the 100m zero would work for the second target at 600 m.

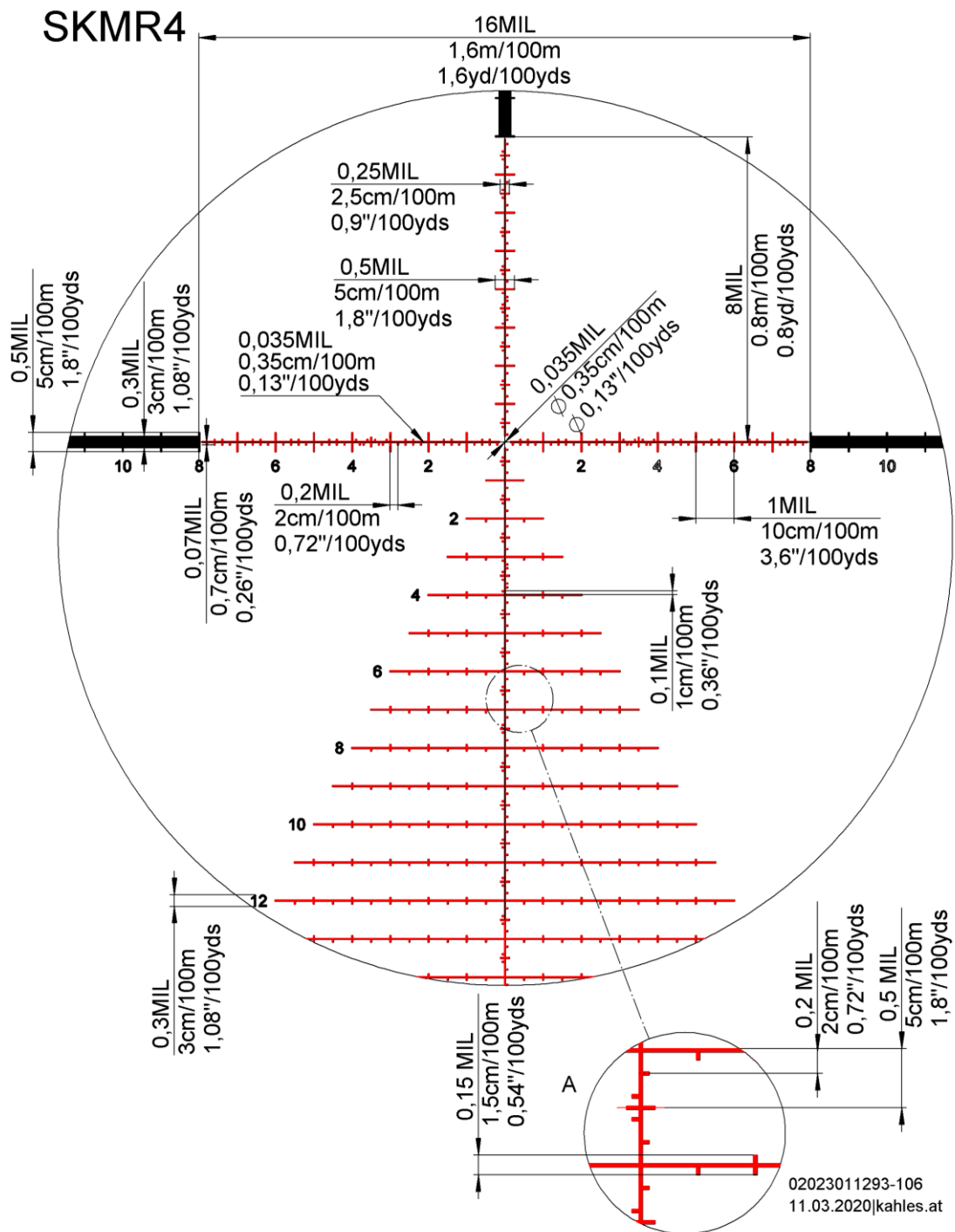


Graph 2.1.
Target distance 400 m / 0 clicks
1,5 mils over are 391 m



Graph 2.2.
Target distance 600 m / 0 clicks
3.2 mils over are 595 m

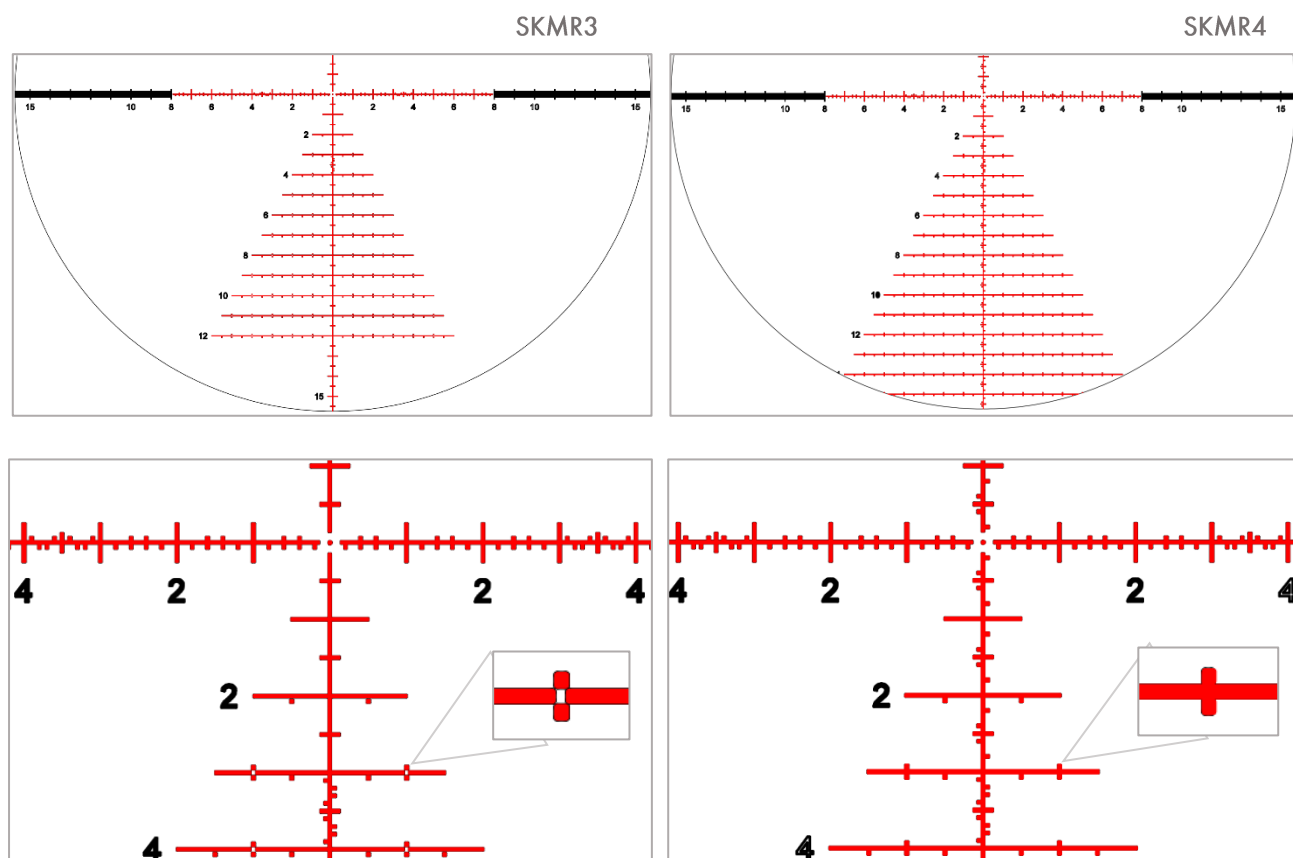
RETICLE DIMENSIONS





THE DIFFERENCE BETWEEN SKMR3 AND SKMR4 RETICLE

"The two-tenths mil marks in the SKMR4 along the horizontal axis allow for more precise wind holds. The floating dot aiming point prevents the target from being obscured. Slight variations in hash marks make it easy to find your hold without having to count lines. The bold outer posts allow engagement of targets when you're dialed to low magnification and number indexes all while maintaining a simple, uncluttered field of view."



RETICLE HIGHLIGHTS:

- The distinct 0.5 MIL spacing is kept, but with the addition of 0.2 MIL spacing for greater reticle hold precision. In the SKMR3, the vertical increments were in 0.5 MILS.
- The number of Marker Bars have increased from 12 MILS to 15 MILS for longer-range capability. The windage spacing on the marker bars is kept at 0.5 MIL increments. The 1 MIL windage hash marks on the marker bars are now solid rather than hollow for better visibility.
- The windage and elevation stays the same in both the SKMR3 and SKMR4 between the 3rd and 4th MIL. The increments are in 0.1 MIL.
- The dot in the middle stays the same size at 0.035 MILS.
- Thin crosshair thickness 0.25 MIL – Subtensions remain the same between SKMR3 and SKMR4.
- The horizontal crosshair stays the same with 0.2 MIL increments and 0.1 MIL increments between the 3rd and 4th MIL.

Shannon Kay