



# 2022 HELMET LABORATORY TESTING PERFORMANCE RESULTS

THE NFL, IN COLLABORATION WITH THE NFLPA, THROUGH THEIR RESPECTIVE APPOINTED BIOMECHANICAL EXPERTS, ANNUALLY COORDINATE EXTENSIVE LABORATORY RESEARCH TO EVALUATE WHICH HELMETS BEST REDUCE HEAD IMPACT SEVERITY. THE RESULTS OF THOSE TESTS, WHICH ARE GENERALLY SUPPORTED BY ON-FIELD PERFORMANCE, ARE SET FORTH ON THIS POSTER.

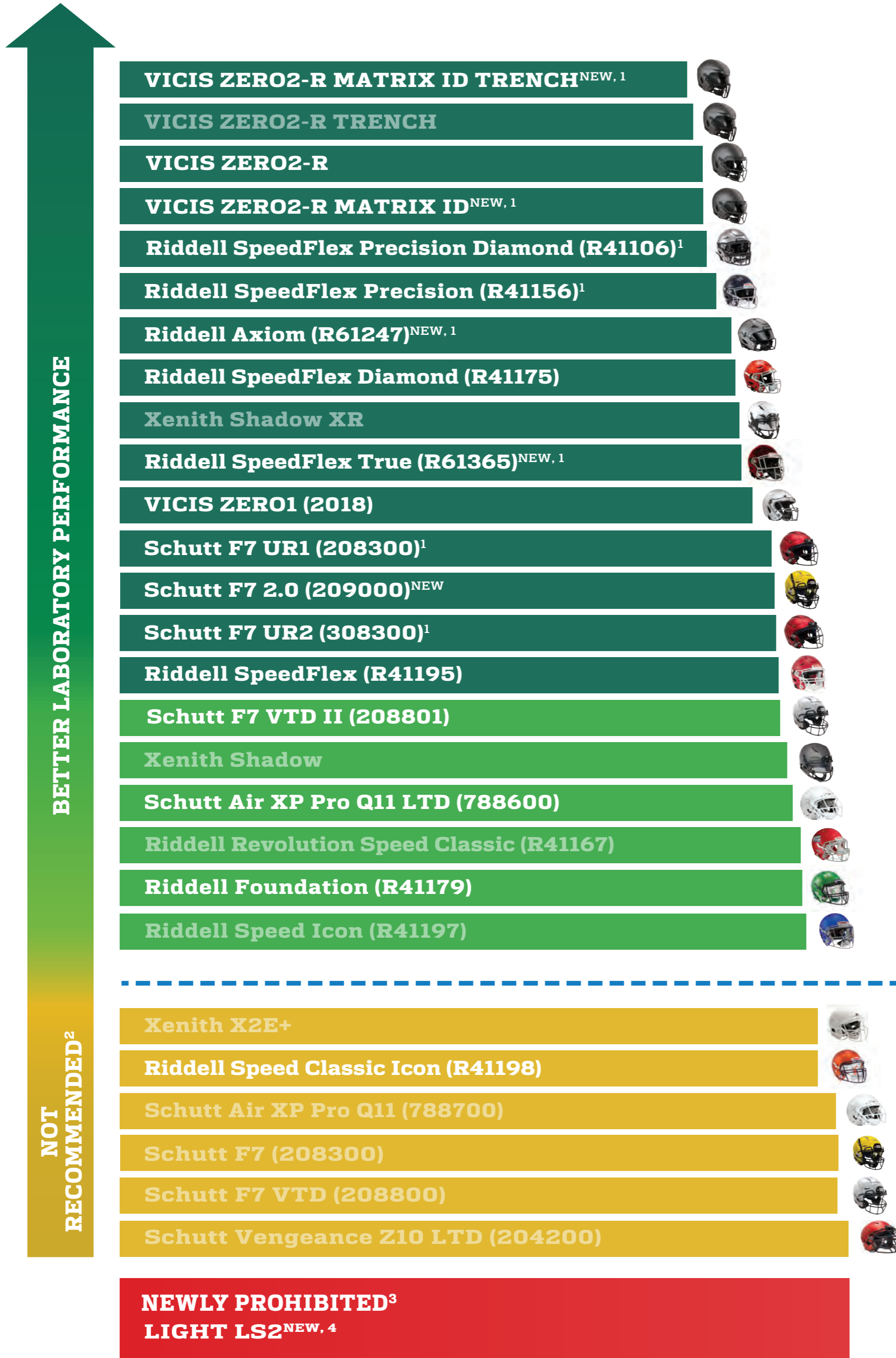
The helmet models are listed in order of their performance, with a shorter bar representing better performance. The rankings are based exclusively on the ability of the helmet to reduce head impact severity measures in laboratory testing. Performance variation related to helmet fit, retention, temperature-dependence, and long-term durability are not addressed in these rankings.

All helmets in green are recommended for use by NFL players. Based on a statistical grouping analysis, helmets in the Top-Performing group have been further distinguished into two green categories. The dark green group represents those that performed similar to the top-performing helmets from the 2022 poster, while the light green group performed better or similar to the lowest ranked dark green helmet from the 2021 poster. Helmets with poorer laboratory performance were placed in the yellow (not recommended) or red (prohibited) groups. Helmets in the yellow group may be worn only by players who wore them during the 2021 NFL season. Players may wear helmets that are: (1) certified based on the standards established by NOCSAE (National Operating Committee on Standards for Athletic Equipment); (2) less than 10 years old; and (3) not prohibited pursuant to the NFL and NFLPA's joint Helmet Laboratory Testing program. The information presented here is based solely upon the results of this research and the expert opinions of the scientists involved.

The laboratory conditions are intended to represent potentially concussive head impacts in the NFL. The results of this study should not be extrapolated to collegiate, high school, or youth football.



Use this QR code to view the full list of prohibited helmets and an additional list of approved legacy helmets.



<sup>1</sup>Results shown are for a helmet with interior padding customized for the testing headform. Actual performance and ranking may vary since these helmets are customized for each player's head shape.

<sup>2</sup>These helmets are not permitted for new players and players who did not wear them during the 2021 NFL season.

<sup>3</sup>Refer to the QR code on this poster to view the full list of prohibited helmets. These prohibited models performed poorly in laboratory testing or were produced by companies no longer manufacturing football helmets.

<sup>4</sup>This helmet was tested but not ranked because damage to the shell in the highest velocity impacts suggested that the helmet may not be able to withstand the rigors of NFL practices and games.

Note: Models worn by less than 1% of NFL players are grayed out.