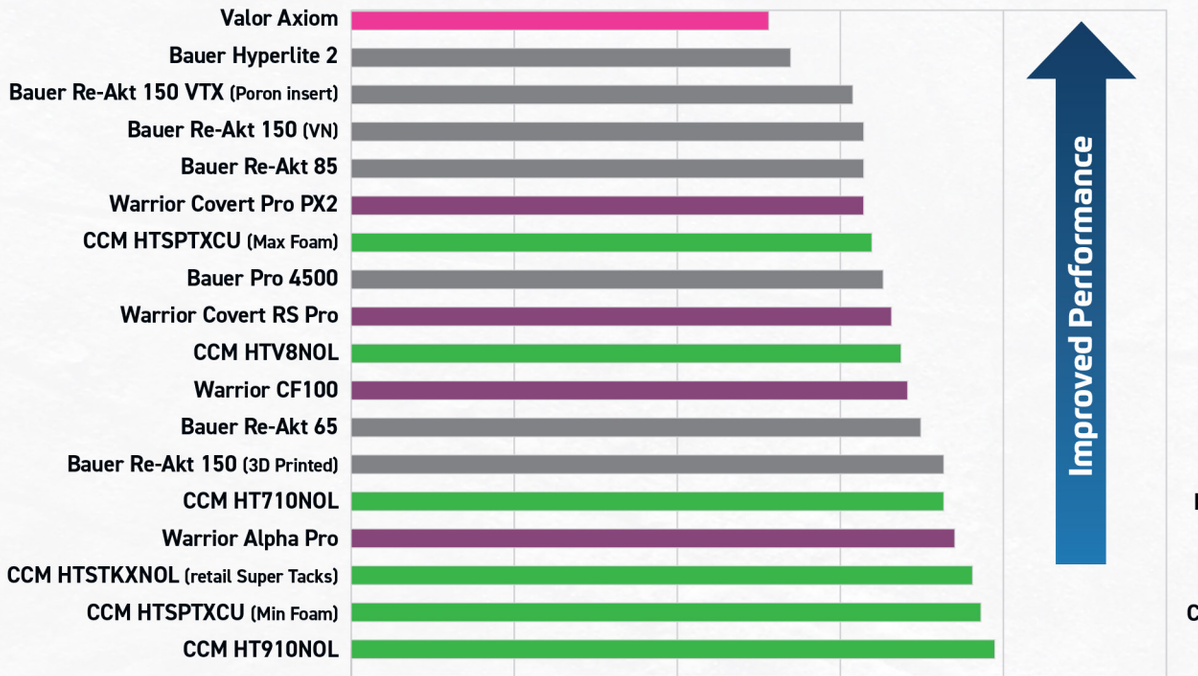
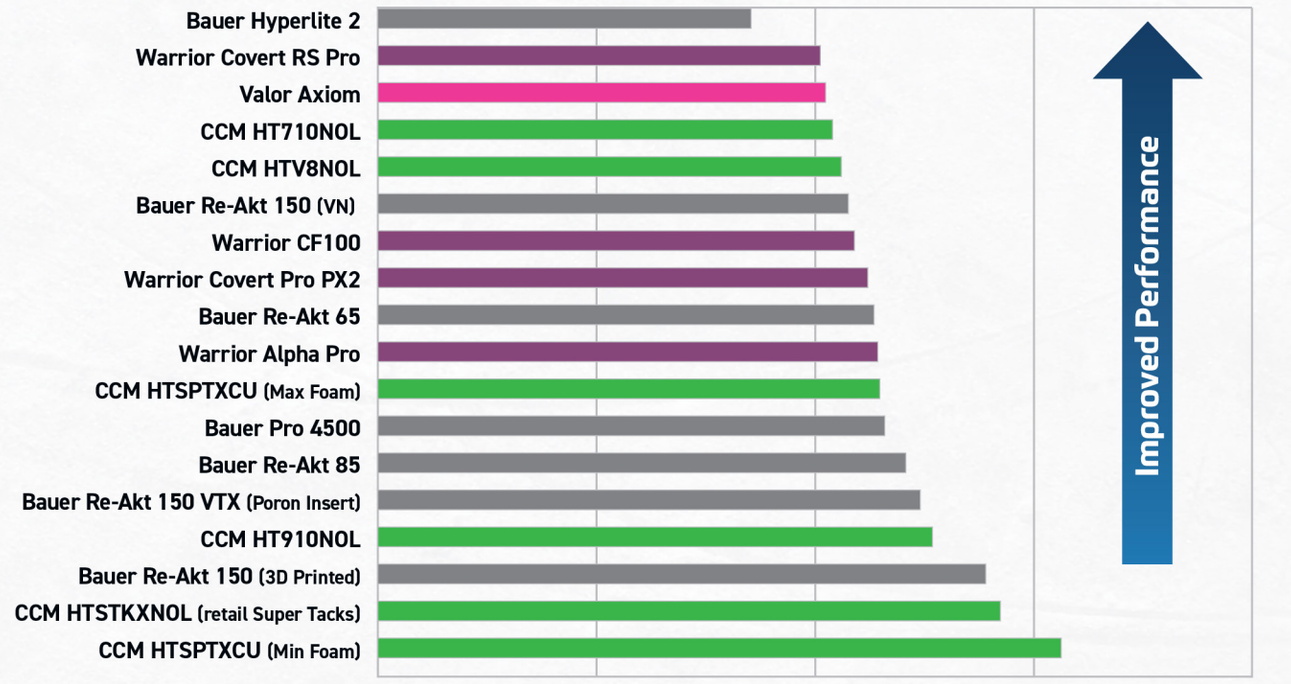
PLAYER HELMET IMPACT TESTING

LINEAR IMPACT METHOD

LINEAR ACCELERATION (g)

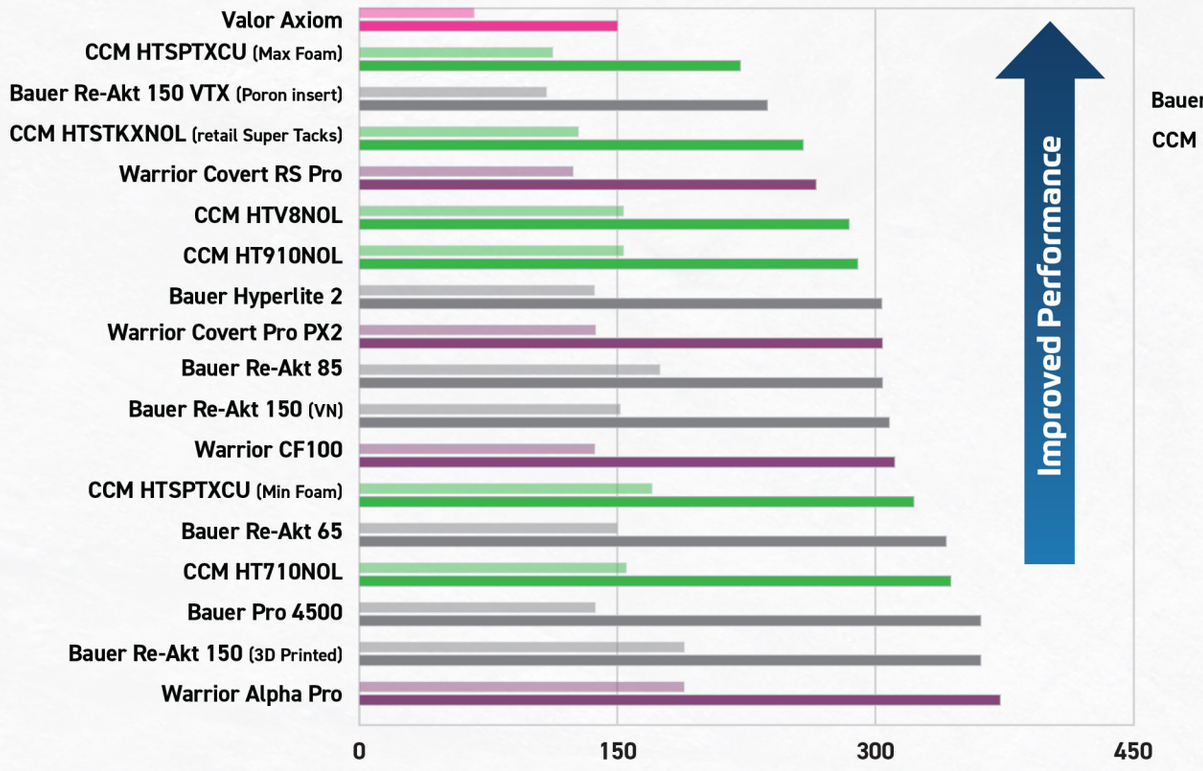


ROTATIONAL ACCELERATION (rad/sec^2)

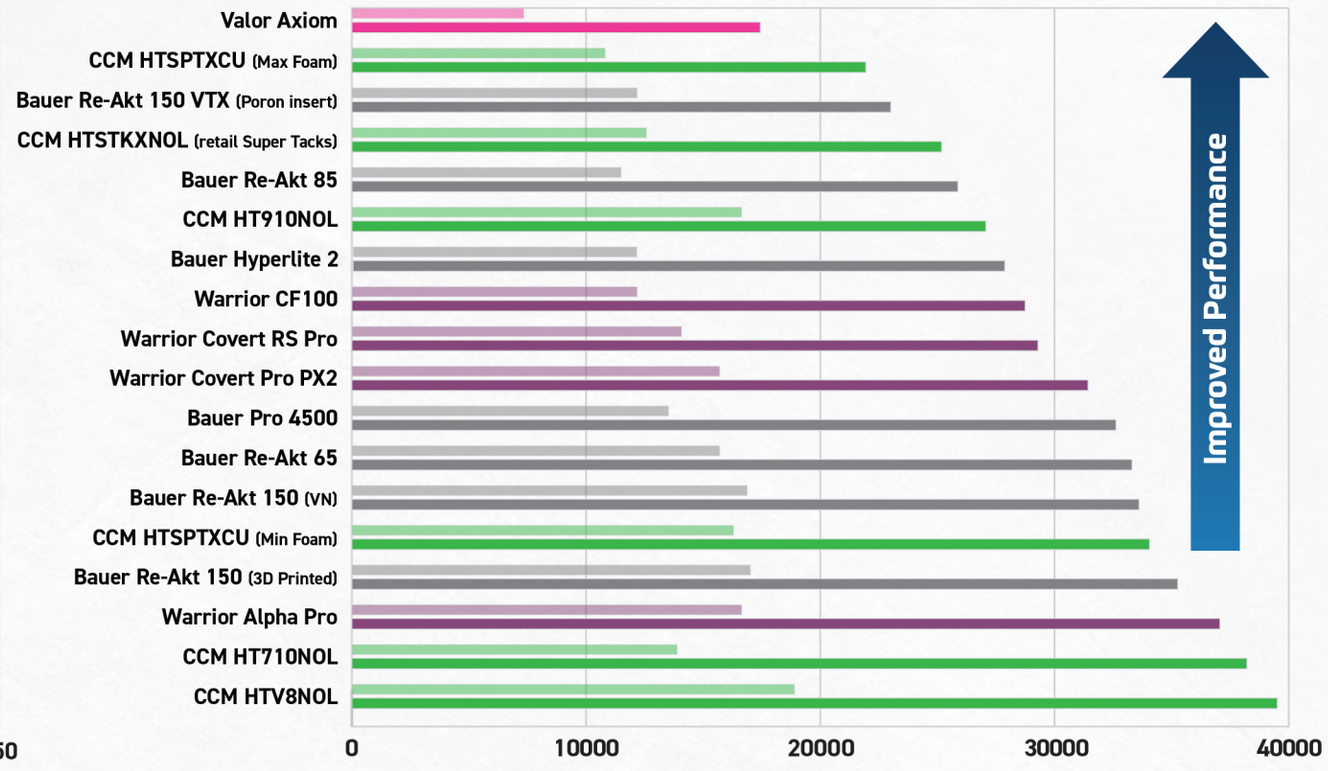


PUCK IMPACT METHOD

LINEAR ACCELERATION (g)



ROTATIONAL ACCELERATION (rad/sec^2)



ABOUT THE TESTING:

The NHL, in collaboration with the NHLPA, engaged biomechanical engineers to conduct laboratory testing to measure the forces resulting from impacts to player helmets under controlled laboratory conditions, and to evaluate the relative performance of the helmets pursuant to such testing. The engineers subjected the helmets to impact testing using two different testing methodologies – linear impactor and puck impacts. The helmets are listed in order of their relative performance under each testing methodology, with shorter bars representing better performance. All of the player helmets on this poster were certified by HECC and CSA and are on the NHL Cleared For Use List.

The linear impactor methodology used a pneumatically-fired piston to strike the helmets in five discrete impact locations (front, front boss, side, rear boss and back). This testing is representative of impacts resulting from player-to-player contact or player-to-environment contact. The puck impact testing was conducted at velocities of 60 mph and 80 mph in the same five impact locations. All player helmets were fitted to a Hybrid III head form and neck assembly that permitted both linear and rotational head kinematics during the impacts. The head form was equipped with sensors that measured the magnitude of the impact forces transmitted to the head. All testing results represent data averaged across the impact locations.

The NHL and the NHLPA relied on the engineers to develop the testing methodology and have not confirmed the data produced by the testing. These test results are presented for informational purposes only, to allow you to compare the relative performance of the helmets. The results do not measure or predict injury risk and do not necessarily reflect how the tested helmets will perform in use, as there may be other considerations associated with injury or on-ice performance that were not part of the testing protocol. In addition, other factors may be important in player selection of protective equipment, such as equipment fit and injury history. Players, in consultation with Club personnel, shall make independent decisions regarding equipment selection. Neither the NHL nor the NHLPA assume responsibility for Player equipment choices. The NHL and NHLPA do not endorse or recommend any one particular helmet over another.

If you are interested in wearing a helmet that does not appear on the poster, please check with your equipment manager. Players are not permitted to wear a helmet that is not on the Cleared For Use List. Please note that not all helmets on the Cleared For Use List are depicted on this poster.

(June, 2023)