$$
\begin{aligned}
p_{x2} &= p_{x1} \cos\psi_2 + p_{z1} \sin\psi_2 , \\
x_2 &= x_1 (\cos\psi_2 + \frac{p_{x2}}{p_{z2}} \sin\psi_2) , \\
y_2 &= y_1 + \frac{p_{y2}}{p_{z2}} x_1 \sin\psi_2 , \\
z_2 &= z_1 - x_1 \frac{p_2}{p_{z2}} \sin\psi_2 ,
\end{aligned}
$$

, where $\psi_2 \equiv \texttt{ANGLE} \times \texttt{E2}$.