

Parameters	Optimized value	Range	Pre-optimized value
$\phi_{\text{flat0}}$	56.5	56.0 : 84.0	70.0
$\beta_{\text{NH}}$	57.2	30.0 : 60.0	37.5
$\beta_{\text{SH}}$	-31.3	-60.0 : -30.0	-52.5
$\Psi_0$	10.14	7.4 : 12	8.0