

$$N = 230 = 2 \cdot 5 \cdot 23$$

By the Ibukiyama-Kitayama dimension formula,
 $\dim(S_4(K(230))) = 122$

By the Skoruppa-Zagier dimension formula and Jacobi restriction,
the lift dimension of $S_4(K(230))^+$ is 37
the nonlift dimension of $S_4(K(230))^+$ is heuristically 60
 $\dim(S_4(K(230))^+)$ thus is heuristically 97
 $\dim(S_4(K(230))^-)$ is heuristically 25

$\dim(J_{\{2,230\}}^{\{\text{cusp}\}}) = 2$ (Skoruppa-Zagier), so need to span to within 1 dimension

$q = 7$ for TraceDown

After TD($\text{Grit}(J_{\{4,1610\}}^{\{\text{cusp}\}})$) and $(\text{Grit}(J_{\{2,230\}}^{\{\text{cusp}\}}))^2$,
spanned rank in $S_4(K(230))^+$ is 96
spanned rank in $S_4(K(230))^-$ is 0

Hecke operators applied: $\{\{2, 2\}, \{2, 2\}, \{2, 1\}\}, \{\{2, 2\}, \{3, 1\}\}$
After Hecke spreading,
spanned rank in $S_4(K(230))^-$ is 7

After Borcherds products,
spanned rank in $S_4(K(230))^-$ is 25

Final spanned rank in $S_4(K(230))^+$ is 96

Final spanned rank in $S_4(K(230))^-$ is 25

$S_2(K(230))^+$ is determined by Jacobi restriction and the $H4Ndl(2,+)$ test
($\dim(H_4(230,2,1)^+) \leq 1$ and this is less than $\dim(J_{\{2,230\}}^{\{\text{cusp}\}})+1 = 3$)
 $S_2(K(230))^- = 0$ by Jacobi restriction and the $H4Ndl(4,-)$ test
($\dim(H_4(230,4,1)^-) \leq 1$ and this is less than $\dim(J_{\{2,230\}}^{\{\text{cusp}\}}) = 2$)

So $S_2(K(230)) = \text{Grit}(J_{\{2,230\}}^{\{\text{cusp}\}})$ (dimension 2)