```
By the Ibukiyama-Kitayama dimension formula, dim(S \ 4(K(95))) = 22
```

N = 95 = 5 \* 19

By the Skoruppa-Zagier dimension formula and Jacobi restriction, the lift dimension of  $S_4(K(95))^+$  is 14 the nonlift dimension of  $S_4(K(95))^+$  is heuristically 7  $\dim(S_4(K(95))^+)$  thus is heuristically 21  $\dim(S_4(K(95))^-)$  is heuristically 1

The heuristic dimensions are correct by the spanning results to follow  $\label{eq:dim} \mbox{dim}(J_{\{2,95\}}^{cusp\}}) \ = \ 0 \ \mbox{(Skoruppa-Zagier), so need to span completely}$ 

```
q=7 for TraceDown After TD(Grit(J_{4,665}^{cusp})) and (Grit(J_{2,95}^{cusp}))^2, spanned rank in S_4(K(95))^+ is 21 spanned rank in S_4(K(95))^- is 0
```

spanned rank in  $S_{\_}4\left(\text{K}\left(95\right)\right)\,\hat{\ }\text{-}$  is 1

After Borcherds products,

Final spanned rank in  $S_4(K(95))^+$  is 21 Final spanned rank in  $S_4(K(95))^-$  is 1

 $S_2\left(K\left(95\right)\right)$  is determined by Jacobi restriction and the  $\text{H4Ndd}\left(1,+\right)$  test  $\left(\text{H}_4\left(95,1,1\right)^+\ =\ 0\right)$ 

So  $S_2(K(95)) = Grit(J_{2,95}^{cusp}) (dimension 0)$