```
N = 247 = 13*19

By the Ibukiyama-Kitayama dimension formula,
 dim(S_4(K(247))) = 137

By the Skoruppa-Zagier dimension formula and Jacobi restriction,
 the lift dimension of S_4(K(247))^+ is 47
 the nonlift dimension of S_4(K(247))^+ is heuristically 77
 dim(S_4(K(247))^+) thus is heuristically 124
 dim(S_4(K(247))^-) is heuristically 13

dim(J_{2,247}^{cusp}) = 7 (Skoruppa-Zagier), so need to span to within 6 dimensions

q = 5 for TraceDown
After TD(Grit(J_{4,1235}^{cusp})) and (Grit(J_{2,247}^{cusp}))^2,
 spanned rank in S_4(K(247))^+ is 124
 spanned rank in S_4(K(247))^- is 0

After Borcherds products,
 spanned rank in S_4(K(247))^- is 7

Final spanned rank in S_4(K(247))^+ is 124
Final spanned rank in S_4(K(247))^- is 7

--------------------------------------------------------------------------------

S_2(K(247))^+ is determined by Jacobi restriction and the H4Nd1(3,+) test
 (dim(H_4(247,3,1)^+) <= 6 and this is less than dim(J_{2,247}^{cusp})+1 = 8)
S_2(K(247))^- = 0 by Jacobi restriction and the H4Nd1(1,-) test
 (dim(H_4(247,1,1)^-) <= 6 and this is less than dim(J_{2,247}^{cusp}) = 7)

So S_2(K(247)) = Grit(J_{2,247}^{cusp}) (dimension 7)
```