```
N = 258 = 2*3*43

By the Ibukiyama-Kitayama dimension formula,
 dim(S_4(K(258))) = 163

By the Skoruppa-Zagier dimension formula and Jacobi restriction,
 the lift dimension of S_4(K(258))^+ is 44
 the nonlift dimension of S_4(K(258))^+ is heuristically 84
 dim(S_4(K(258))^+) thus is heuristically 128
 dim(S_4(K(258))^-) is heuristically 35

dim(J_{2,258}^{cusp}) = 4 (Skoruppa-Zagier), so need to span to within 3 dimensions

q = 7 for TraceDown
After TD(Grit(J_{4,1806}^{cusp})) and (Grit(J_{2,258}^{cusp}))^2,
 spanned rank in S_4(K(258))^+ is 127
 spanned rank in S_4(K(258))^- is 0

Hecke operators applied: {{{2, 2}}, {{2, 2}, {2, 1}}, {{3, 2}}, {{2, 2}, {3, 1}}}
After Hecke spreading,
 spanned rank in S_4(K(258))^- is 24

After Borcherds products,
 spanned rank in S_4(K(258))^- is 34

Final spanned rank in S_4(K(258))^+ is 127
Final spanned rank in S_4(K(258))^- is 34

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

S_2(K(258))^+ is determined by Jacobi restriction and the H4Nd1(2,+) test
 (dim(H_4(258,2,1)^+) <= 3 and this is less than dim(J_{2,258}^{cusp})+1 = 5)
S_2(K(258))^- = 0 by Jacobi restriction and the H4Nd1(3,-) test
 (dim(H_4(258,3,1)^-) <= 3 and this is less than dim(J_{2,258}^{cusp}) = 4)

So S_2(K(258)) = Grit(J_{2,258}^{cusp}) (dimension 4)
```