```
N = 118 = 2*59

By the Ibukiyama-Kitayama dimension formula,
 dim(S_4(K(118))) = 41

By the Skoruppa-Zagier dimension formula and Jacobi restriction,
 the lift dimension of S_4(K(118))^+ is 20
 the nonlift dimension of S_4(K(118))^+ is heuristically 18
 dim(S_4(K(118))^+) thus is heuristically 38
 dim(S_4(K(118))^-) is heuristically 3

The heuristic dimensions are correct by the spanning results to follow

dim(J_{2,118}^{cusp}) = 1 (Skoruppa-Zagier), so need to span completely

q = 5 for TraceDown
After TD(Grit(J_{4,590}^{cusp})) and (Grit(J_{2,118}^{cusp}))^2,
 spanned rank in S_4(K(118))^+ is 38
 spanned rank in S_4(K(118))^- is 0

After Borcherds products,
 spanned rank in S_4(K(118))^- is 3

Final spanned rank in S_4(K(118))^+ is 38
Final spanned rank in S_4(K(118))^- is 3

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

S_2(K(118))^+ is determined by Jacobi restriction and the H4Nd1(1,+) test
 (dim(H_4(118,1,1)^+) <= 1 and this is less than dim(J_{2,118}^{cusp})+1 = 2)
S_2(K(118))^- = 0 by Jacobi restriction and the H4Nd1(1,-) test
 (dim(H_4(118,1,1)^-) <= 0 and this is less than dim(J_{2,118}^{cusp}) = 1)

So S_2(K(118)) = Grit(J_{2,118}^{cusp}) (dimension 1)
```