WHAT IS CLAIMED IS:

1. A method for video decoding in a video decoder, comprising:

decoding prediction information of one or more blocks from a coded video bitstream, the prediction information indicating that local illumination compensation (LIC) is applied to the one or more blocks and including LIC information of the one or more blocks, the one or more blocks including a current block to be reconstructed;

determining a final scaling factor α_{f1} of a first subblock in the current block and a final offset β_{f1} of the first subblock in the current block based on offset information of at least one of a first parameter μ_1 of the one or more blocks or a second parameter μ_2 of the one or more blocks indicated by the LIC information, the final scaling factor α_{f1} being based on an initial scaling factor α_{i1} and the first parameter μ_1, and the final offset β_{f1} being based on an initial offset β_{i1} and the second parameter μ_2;

determining an updated first predictor subblock in a predictor corresponding to the current block based on the final scaling factor α_{f1}, the final offset β_{f1}, and the first predictor subblock in the predictor, an updated value of a first sample in the first predictor subblock in the predictor being equal to $\alpha_{f1} \times p_{i1} + \beta_{f1}$, p_{i1} being a value of the first sample in the first predictor subblock in the predictor; and

reconstructing the first subblock in the current block based on the updated first predictor subblock in the predictor.

2. The method of claim 1, wherein

the initial scaling factor α_{i1} of the first subblock in the current block and the initial offset β_{i1} of the first subblock in the current block are determined based on a first portion of a current template of the current block and a first portion of a reference template of a reference block, the predictor being based on the reference block.

3. The method of claim 2, wherein

the offset information indicated by the LIC information of the one or more blocks indicates one of (i) the first parameter μ_1 and (ii) the second parameter μ_2, and

another one of (i) the first parameter μ_1 and (ii) the second parameter μ_2 is determined based on the one of (i) the first parameter μ_1 and (ii) the second parameter μ_2.

4. The method of claim 2, wherein

one of (i) the first parameter μ_1 and (ii) the second parameter μ_2 is equal to zero, and

the LIC information of the one or more blocks does not indicate the one of (i) the first parameter μ_1 and (ii) the second parameter μ_2.

5. The method of claim 2, wherein

the LIC information of the one or more blocks includes at least one index that indicates the at least one of the first parameter μ_1 or the second parameter μ_2.

6. The method of claim 2, wherein

the at least one of the first parameter μ_1 or the second parameter μ_2 is a floating-point value and is quantized with multiple bits, and

the LIC information of the one or more blocks includes the multiple bits.

7. The method of claim 2, wherein the determining the final scaling factor comprises:

determining the final scaling factor α_{f1} of the first subblock in the current block to be a summation of the first parameter μ_1 of the one or more blocks and the initial scaling factor α_{i1} of the first subblock in the current block.

8. The method of claim 2, wherein the determining the final offset comprises:

determining a parameter $T_{avg,1}$ of the first subblock in the current block based on at least one of the first portion of the current template or the first portion of the reference template, and

determining the final offset β_{f1} of the first subblock in the current block to be $(\beta_{i1} + \mu_2 \times T_{avg,1})$.

9. The method of claim 1, wherein

the LIC information of the one or more blocks is signaled at a coding unit (CU) level.

10. The method of claim 1, wherein

the LIC information of the one or more blocks is signaled at a level that is higher than a coding unit (CU) level.

11. The method of claim 2, wherein

the first subblock includes the current block,

the first predictor subblock includes the predictor,

the first portion of the current template includes the current template, and

the first portion of the reference template includes the reference template.

12. The method of claim 2, wherein

the current block includes the first subblock and a second subblock,

the at least one of the first parameter μ_1 or the second parameter μ_2 indicated in the LIC information of the one or more blocks applies to the first subblock and the second subblock, and

the second subblock is associated with another initial scaling factor α_{i2} that is different from the initial scaling factor α_{i1} of the first subblock and another initial offset β_{i2} that is different from the initial offset of the first subblock.

13. A method for video encoding in a video encoder, comprising:

determining a final scaling factor α_{f1} of a first subblock in a current block of one or more blocks to which local illumination compensation (LIC) is applied and a final offset β_{f1} of the first subblock in the current block, the final scaling factor α_{f1} being based on an initial scaling factor α_{i1} and a first parameter μ_1 of the one or more blocks, and the final offset β_{f1} being based on an initial offset β_{i1} and a second parameter μ_2 of the one or more blocks;

determining an updated first predictor subblock in a predictor corresponding to the current block based on the final scaling factor α_{f1}, the final offset β_{f1}, and the first predictor subblock in the predictor, an updated value of a first sample in the first predictor subblock in the predictor being equal to $\alpha_{f1} \times p_{i1} + \beta_{f1,}$ p_{i1} being a value of the first sample in the first predictor subblock in the predictor;

encoding, in a bitstream, LIC information that indicates offset information of at least one of the first parameter μ_1 and the second parameter μ_2; and

encoding, in the bitstream, the first subblock in the current block based on the updated first predictor subblock in the predictor.

14. The method of claim 13, wherein

the initial scaling factor α_{i1} of the first subblock in the current block and the initial offset β_{i1} of the first subblock in the current block are determined based on a first portion of a current

template of the current block and a first portion of a reference template of a reference block, the predictor being based on the reference block.

15. The method of claim 14, wherein

the offset information indicated by the LIC information of the one or more blocks indicates one of (i) the first parameter μ_1 and (ii) the second parameter μ_2, and

another one of (i) the first parameter μ_1, and (ii) the second parameter μ_2 is determined based on the one of (i) the first parameter μ_1, and (ii) the second parameter μ_2.

16. The method of claim 14, wherein

one of (i) the first parameter μ_1, and (ii) the second parameter μ_2 is equal to zero, and

the LIC information of the one or more blocks does not indicate the one of (i) the first parameter μ_1, and (ii) the second parameter μ_2.

17. The method of claim 14, wherein

the LIC information of the one or more blocks includes at least one index that indicates the at least one of the first parameter μ_1, or the second parameter μ_2.

18. The method of claim 14, wherein

the at least one of the first parameter μ_1, or the second parameter μ_2 is a floating-point value and is quantized with multiple bits, and

the LIC information of the one or more blocks includes the multiple bits.

19. The method of claim 14, wherein the determining the final scaling factor comprises:

determining the final scaling factor α_{f1} of the first subblock in the current block to be a summation of the first parameter μ_1, of the one or more blocks and the initial scaling factor α_{i1} of the first subblock in the current block.

20. A method of processing visual media data, the method comprising:

processing a bitstream that includes the visual media data according to a format rule, wherein

the bitstream includes prediction information of one or more blocks, the prediction information indicating that local illumination compensation (LIC) is applied to the one or more

blocks and including LIC information of the one or more blocks, the one or more blocks including a current block to be reconstructed; and

the format rule specifies that

a final scaling factor α_{f1} of a first subblock in the current block and a final offset β_{f1} of the first subblock in the current block is determined based on offset information of at least one of a first parameter μ_1 of the one or more blocks or a second parameter μ_2 of the one or more blocks indicated by the LIC information,

the final scaling factor α_{f1} is based on an initial scaling factor α_{i1} and the first parameter μ_1,

the final offset β_{f1} is based on an initial offset β_{i1} and the second parameter μ_2,

an updated first predictor subblock in a predictor corresponding to the current block is determined based on the final scaling factor α_{f1}, the final offset β_{f1}, and the first predictor subblock in the predictor, an updated value of a first sample in the first predictor subblock in the predictor being equal to $\alpha_{f1} \times p_{i1} + \beta_{f1,}$ p_{i1} being a value of the first sample in the first predictor subblock in the predictor, and

the first subblock in the current block is reconstructed based on the updated first predictor subblock in the predictor.