Supplemental Material for:

Complex-valued universal linear transformations and image encryption using spatially incoherent diffractive networks

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FIG. S4. Operation of a spatially incoherent D^2NN for an arbitrarily selected mosaicing and demosaicing scheme.

FIG. S5. Comparison between E=4 and E=3 mosaicing schemes for a spatially incoherent D^2NN.

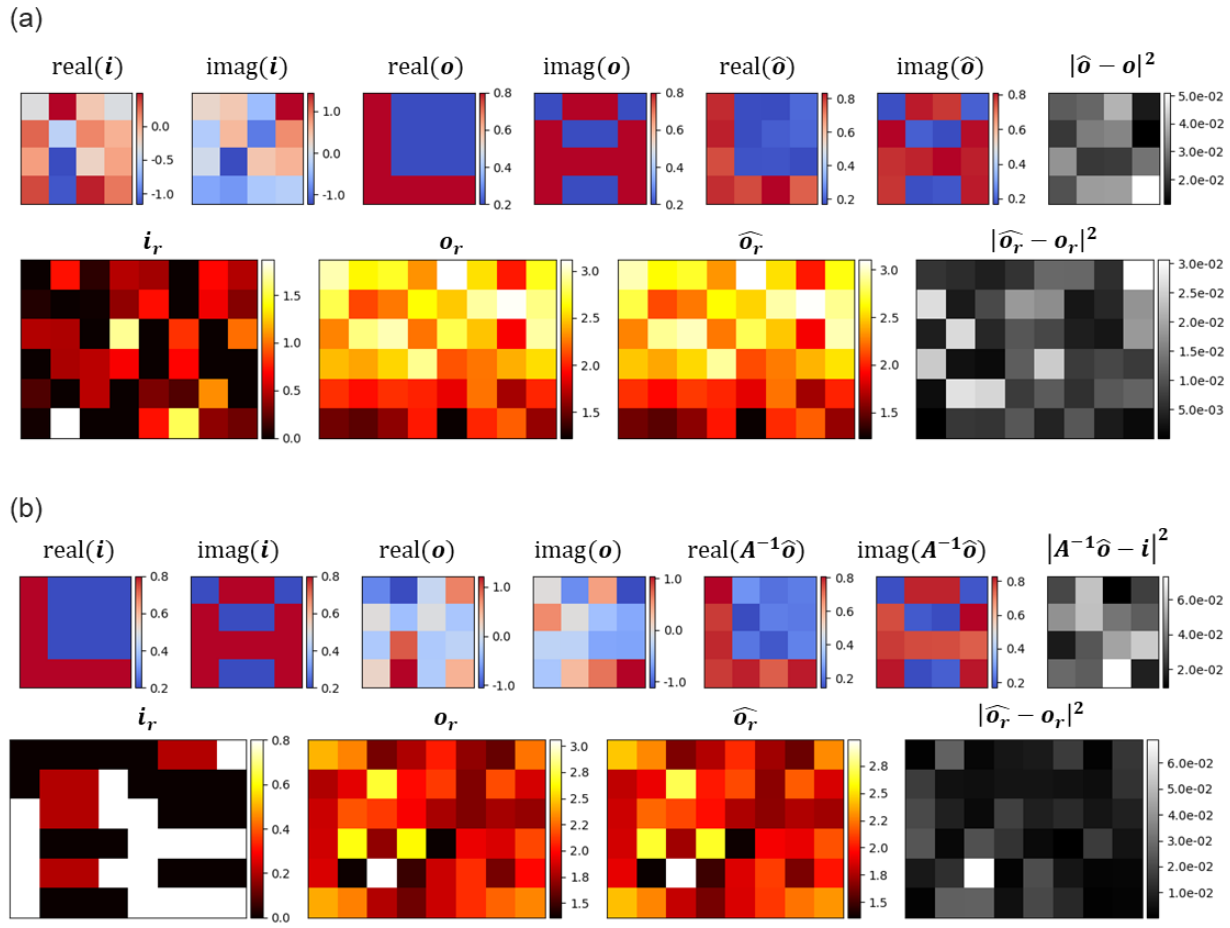

FIG. S1. The same as Figure 3 of the main text, except that the information 'L' and 'A' are encoded into the real and imaginary parts of the complex image, respectively.

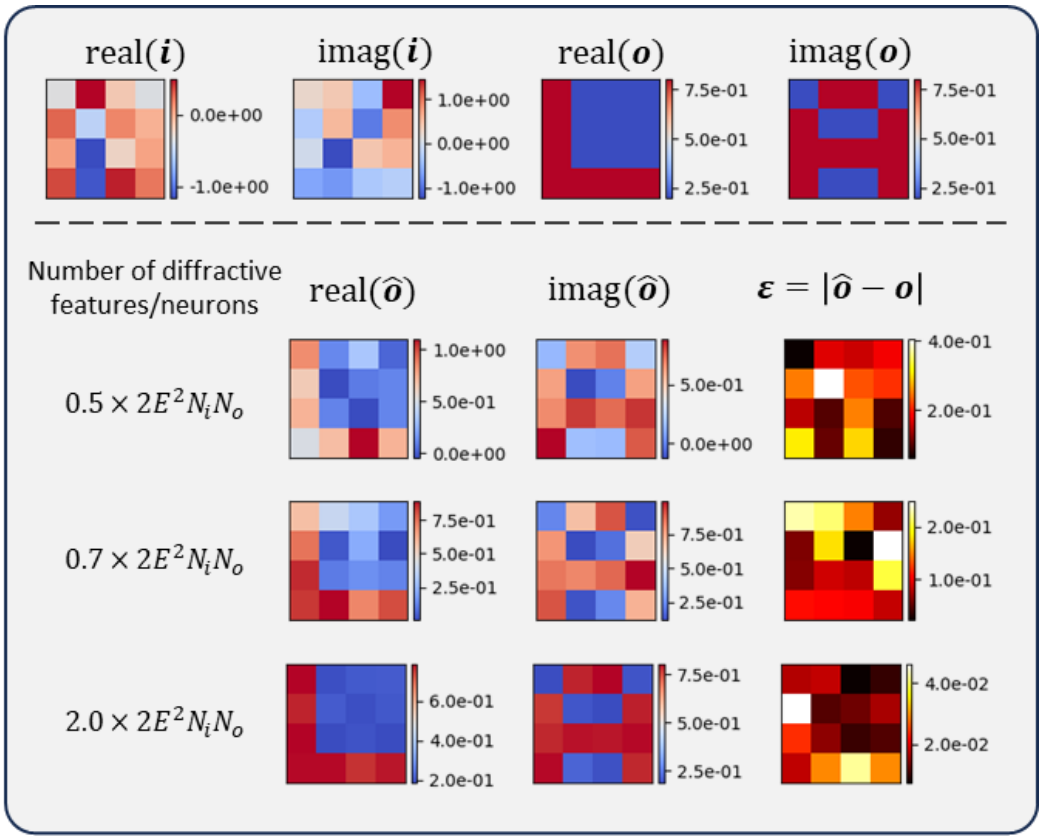

FIG. S2. Complex-valued image decryption performance of spatially incoherent D^2NNs as a function of the number of trainable diffractive features/neurons available.

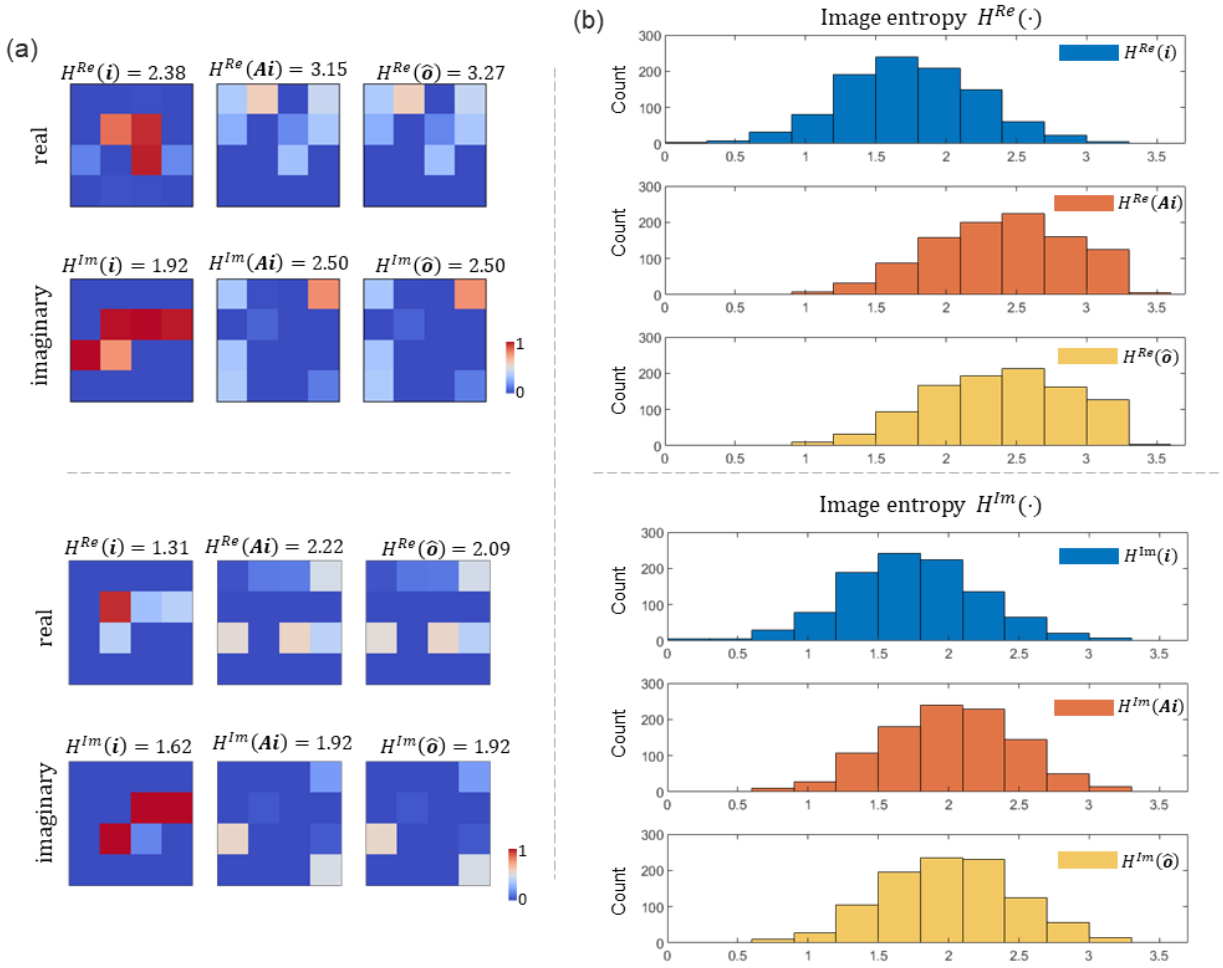

FIG. S3. Evaluation of the spatially incoherent D^{2}NN-based complex-valued image encryption method using entropy. Refer to the "Entropy Evaluation" section of the main text for details.

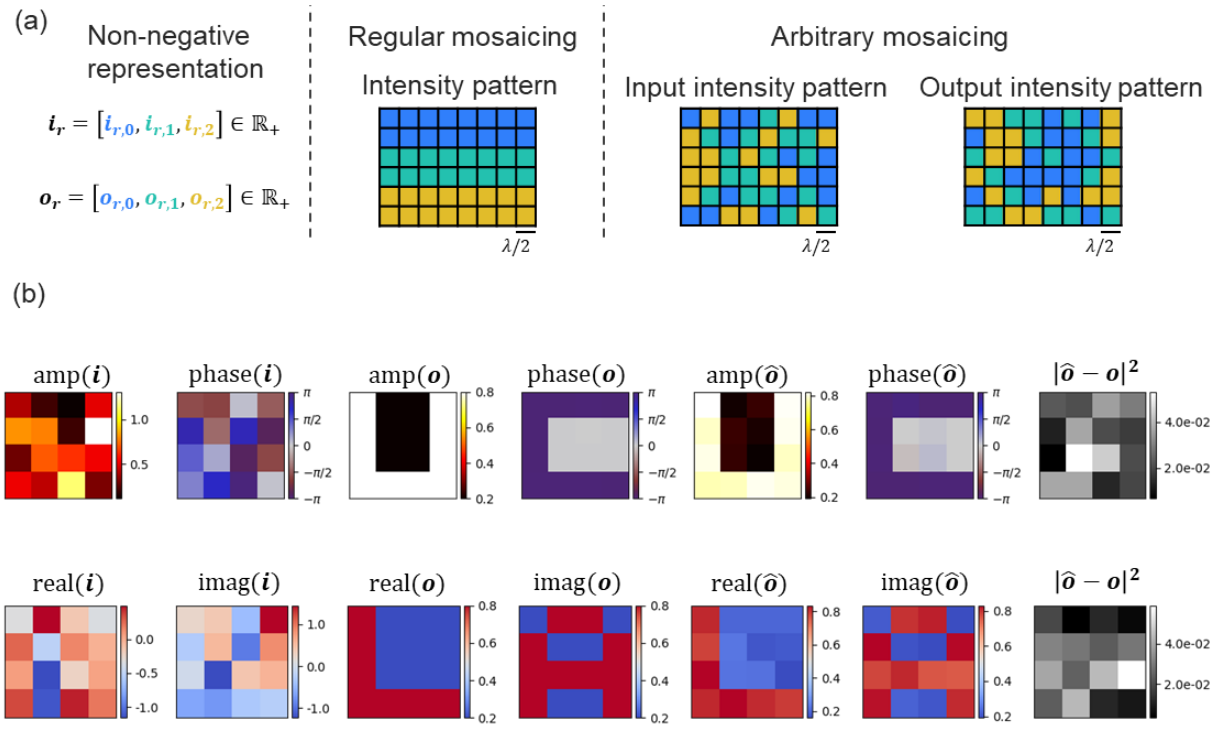

FIG. S4. Operation of a spatially incoherent D^{2}NN for an arbitrarily selected mosaicing and demosaicing scheme.

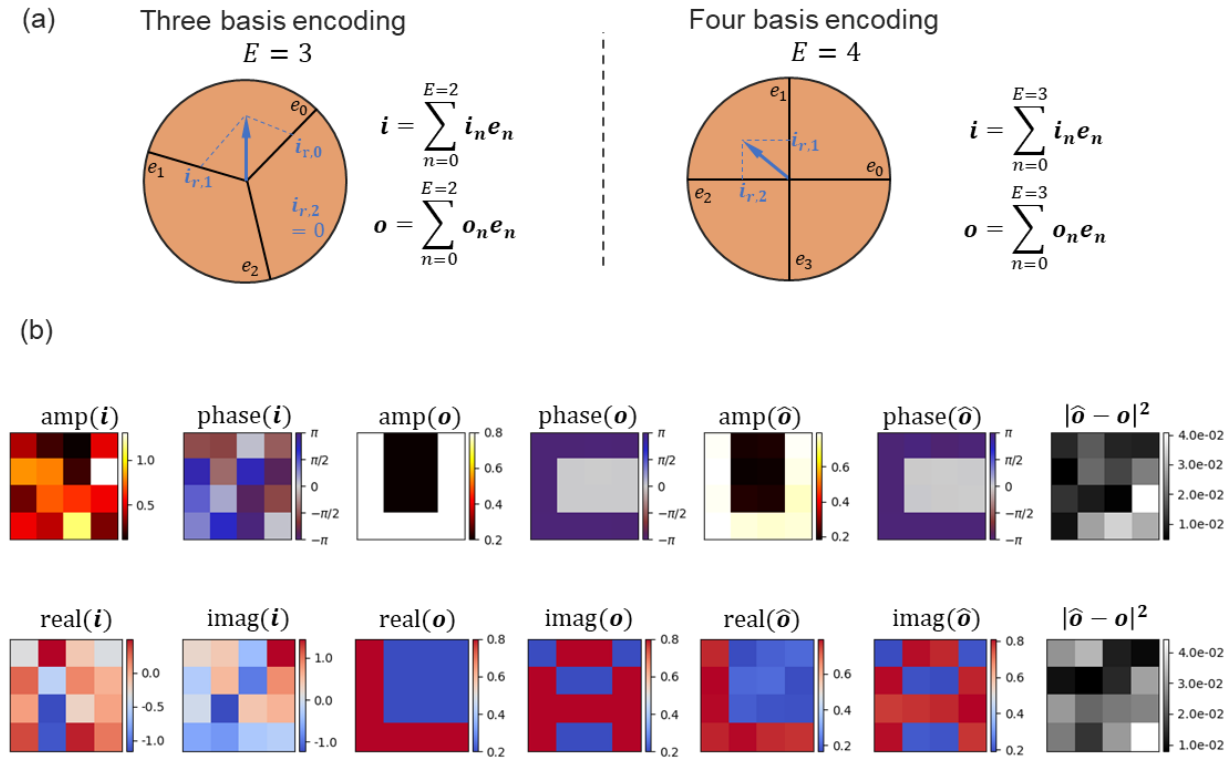

FIG. S5. Comparison between $E = 4$ and $E = 3$ mosaicing schemes for a spatially incoherent D^{2}NN.