# Experiments

Chart, diagram, bar chart

Description automatically generated

The threshold for all test cases is 140. Figure1 a was recorded in a dark and far setting. We got a ‘’Not a real letter” error. The decrypted plaintext was empty. Figure1 b was recorded in a light and far setting. The decrypted plaintext was “SAS ST S SR”. Figure1 c was recorded in a dark and close setting. The decrypted plaintext is “SWR SWR SW.” The Figure 1 d was recorded in a light and close setting. The decrypted plaintext is “SAS STS SS.”

# Evaluation

We design two evaluation metrics to compare different test cases. The first metric is the number of words guessed. We call it WORDS\_GUESSED. The second metric is the length of the longest common subsequence after removing space characters between guessed words, namely LONGEST\_SUBSTR\_NOSPACE.

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Figure 1: WORDS\_GUESSED when the threshold is 140. The plaintexts are from left to right: “*SOS SOS SOS*”, “”, “*SAS ST S SR*”, “*SWR SWR SW*”. “*SAS STS SS*”.

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Figure 2: LONGEST\_SUBSTR\_NOSPACE when the threshold is 140. The preprocessed plaintexts are left to right: “*SOSSOSSOS*”, “”, “*SASSTSSR*”, “*SWRSWRSW*”. “*SASSTSSS*”.