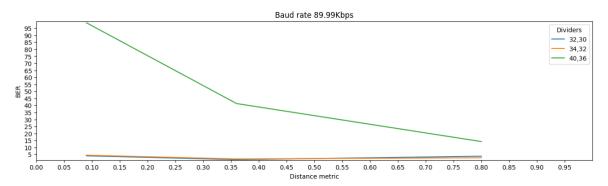
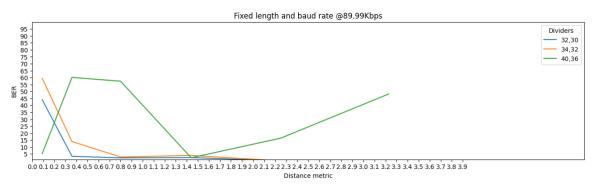
## **Experimental Optimization 2**

We decreased the baud rate to 89.99Kbps and evaluated the performance of the selected dividers. Our observations are recorded as shown below in the graph.



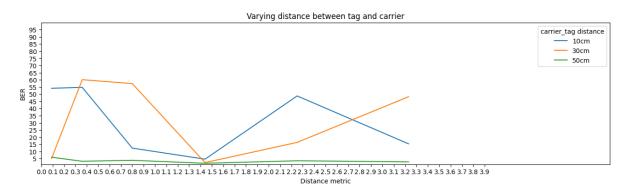
Out of the three dividers, (40,36) has a better performance.

In order to improve the transmission range, we modified the packet length by reducing the payload size to 6 and evaluated the performance. The results were observed as below:



The divider (40,36) is able to transmit data beyond 4m.

The transmission distance was measured while varying the carrier tag distance and the results were as shown below.



We also observed that when the receiving antenna is adjusted to a certain angle and certain height the reception rate changes.