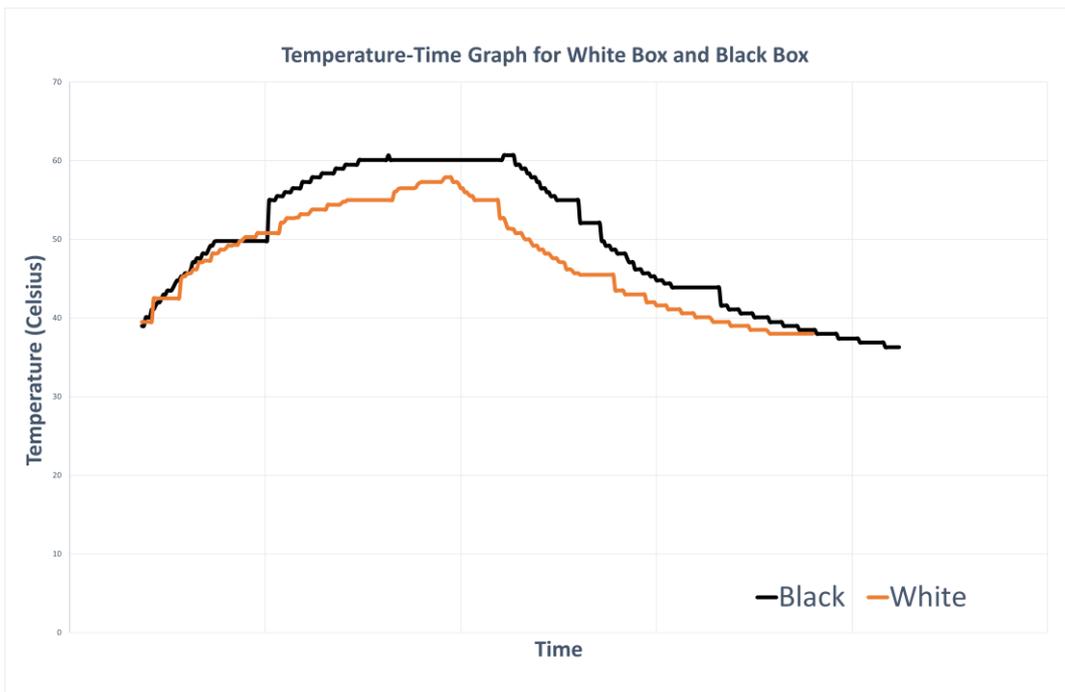
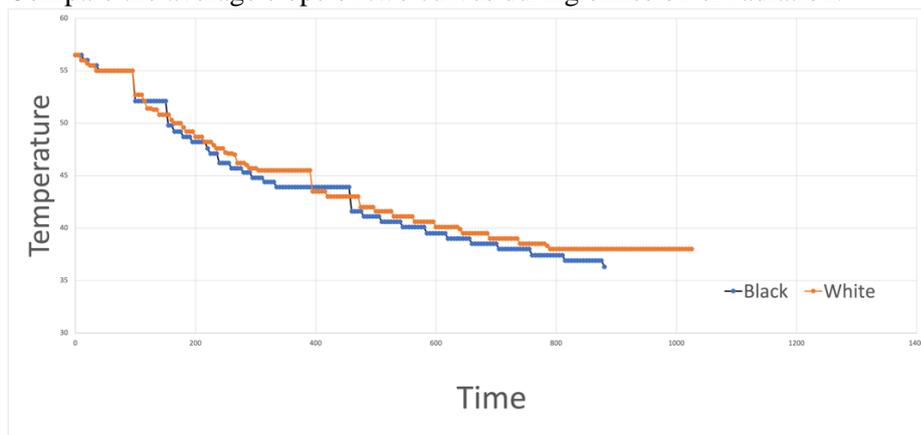


Task 1: How does colour affect the absorption and emission of radiation?



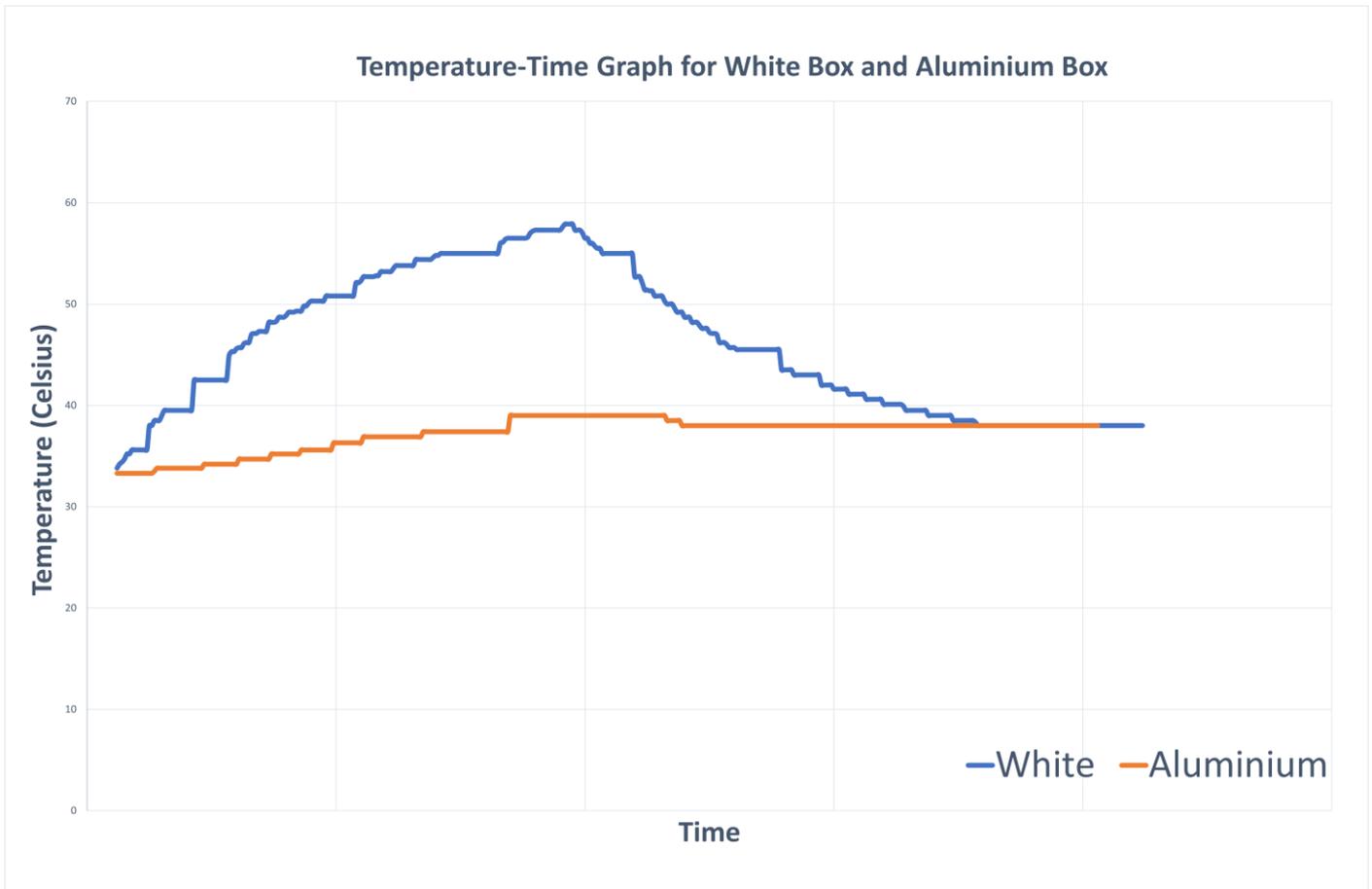
1. Compare the average slope of two curves during absorption of radiation.

2. Compare the average slope of two curves during emission of radiation.



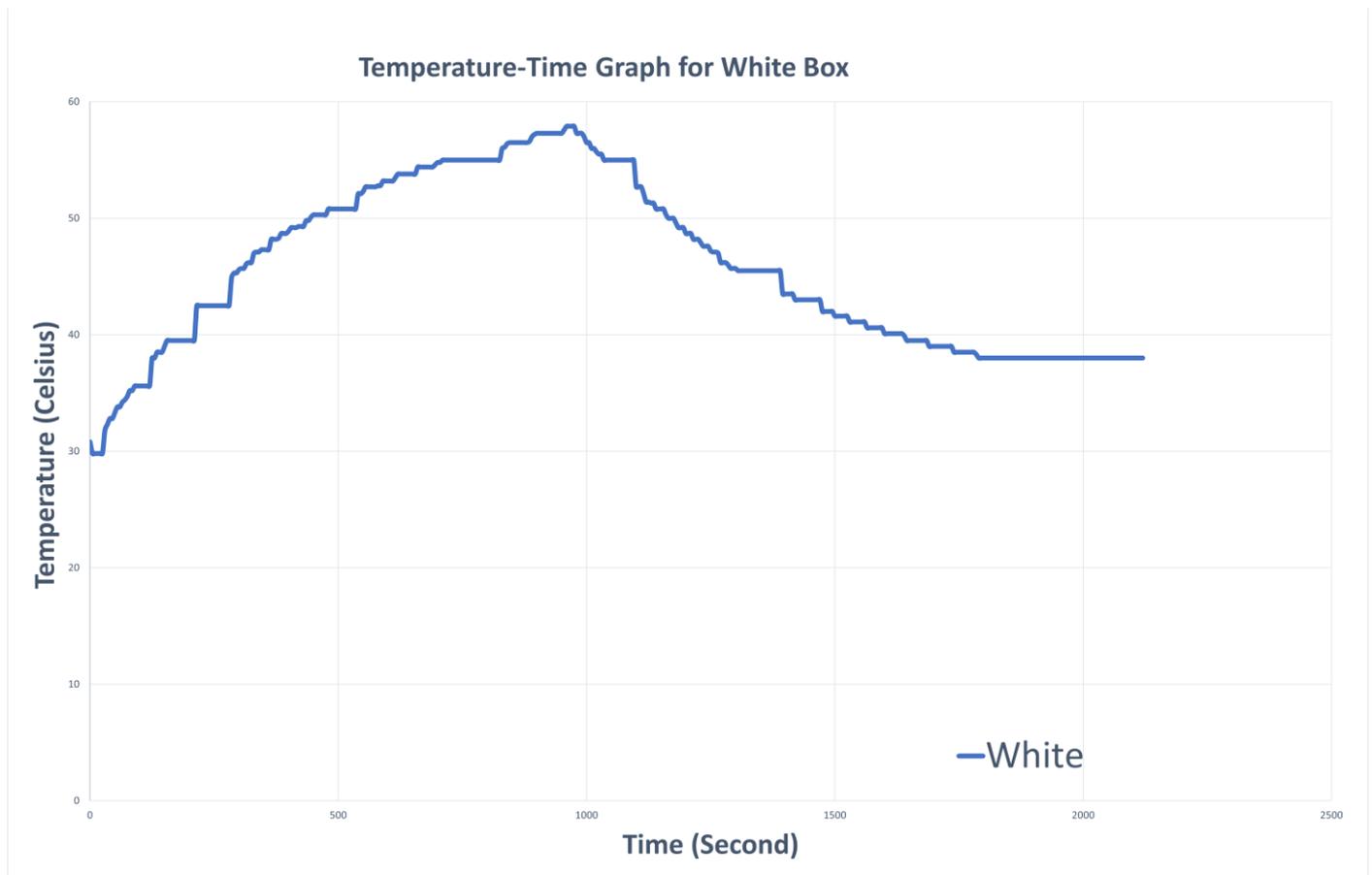
3. How does colour affect the absorption and emission of radiation?

Task 2: How does aluminium and white surface affect the absorption and emission of radiation?



1. Mark on the graphs, for the absorption and emission on radiation.
2. Compare the average slope of two curves during absorption of radiation.
3. How do the white and aluminium surface affect the absorption of radiation?

Task 3: How does temperature difference affect the absorption and emission of radiation?



Given:

the temperature of the lamp : $\sim 150^{\circ}\text{C}$

the temperature of the room temperature: $\sim 25^{\circ}\text{C}$

1. Mark on the graph, for the absorption and emission on radiation.
2. Divide the graph in equal time interval.
3. Mark the slopes on the curve.
4. During the absorption of the radiation, what is the relationship between the temperature difference between the box and the lamp and the rate of temperature change?
5. During the emission of the radiation, what is the relationship between the temperature difference between the box and the surrounding and the rate of temperature change?
6. How does temperature difference affect the absorption and emission of radiation?