# THE EFFECTS OF LAP-TOP SCREEN LOCATION AND SIGNAL COLOR TO HUMAN DETECTION PERFORMANCE

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## Abstract

This study analyzed the effects of lap-top screen locations and signal colors on white background to human detection performance. The screen was divided into 256 cells. The signals in six different colors appeared randomly on one cell at a time. Around the central 4×4 cells were another six loops of cells which constituted totally seven locations of the screen. According to the average simple reaction time, the uttermost location had the worst detection performance; the next outer location had next worst performance and etc. The results of statistical inference suggested three significantly different detection zones. In the uttermost detection zone, the black and blue signals were significantly better than others; in the innermost detection zone, the black, blue and green signals were significantly better than others. According to these results, this study proposed different detection performance zones and different color groups of each zone for the reference of various applications.

Keyword：Lap-top screen, Simple reaction, Signal detection, Human performance