

These are the results displayed on the website, which was designed by a member of our team. The values correspond respectively to: temperature (°C), air humidity (%), CO₂ concentration (ppm), light intensity (lux), and soil moisture (%).

Biểu đồ TEMPERATURE theo giờ

TEMPERATURE

Nhiệt độ (°C)

Thời gian

| Thời gian | Nhiệt độ (°C) |
|-----------|---------------|
| 11:29 | 37.0 |
| 11:35 | 38.0 |
| 11:41 | 38.0 |
| 11:47 | 38.0 |
| 11:54 | 38.0 |
| 12:00 | 38.0 |
| 12:06 | 37.0 |
| 12:12 | 37.0 |
| 12:19 | 37.0 |
| 12:25 | 39.0 |
| 12:31 | 38.0 |
| 12:37 | 38.0 |
| 12:43 | 40.0 |
| 12:50 | 39.0 |
| 12:56 | 39.0 |
| 13:02 | 39.0 |
| 13:09 | 36.0 |
| 13:14 | 35.0 |
| 13:20 | 35.0 |
| 13:26 | 35.0 |
| 13:32 | 35.0 |
| 13:39 | 35.0 |
| 13:45 | 35.0 |
| 13:52 | 35.0 |
| 13:59 | 35.0 |
| 14:05 | 36.0 |

1

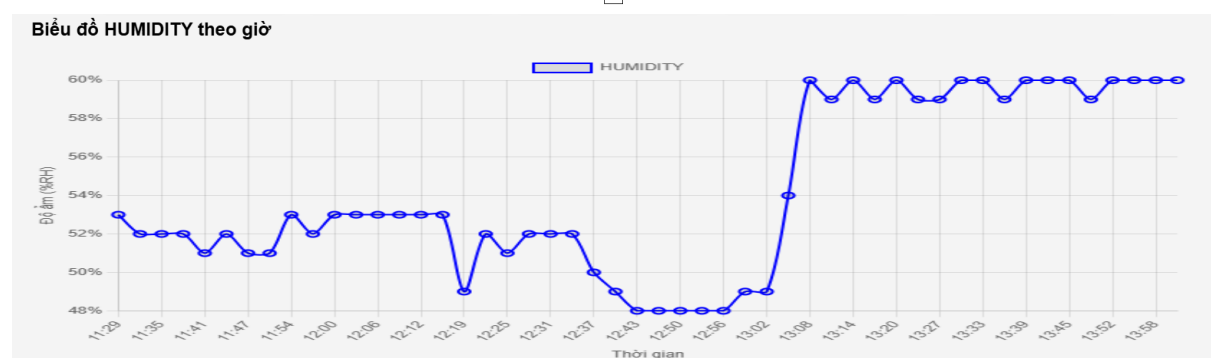


Figure 2: Air humidity displayed on the website

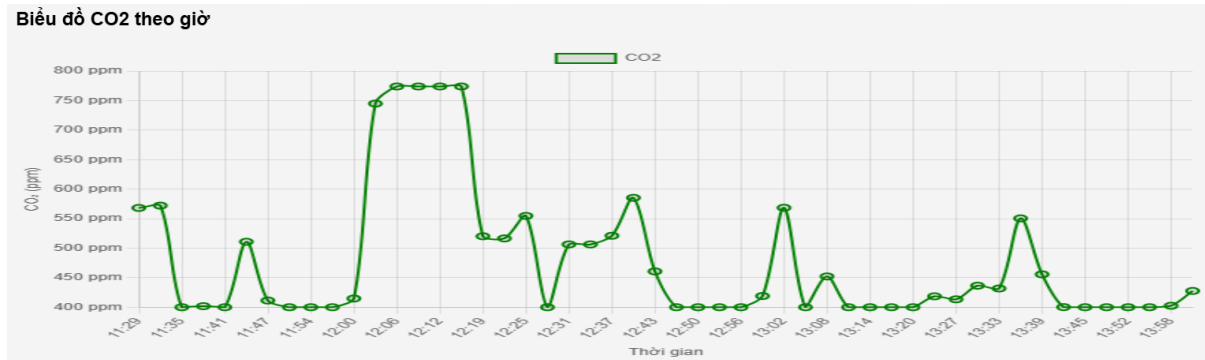


Figure 3: CO₂ concentration displayed on the website

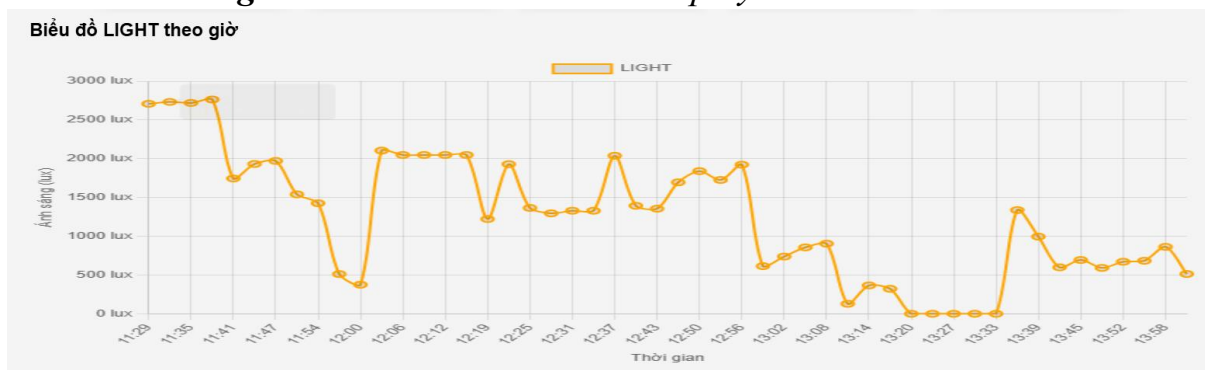


Figure 4: Light intensity displayed on the website

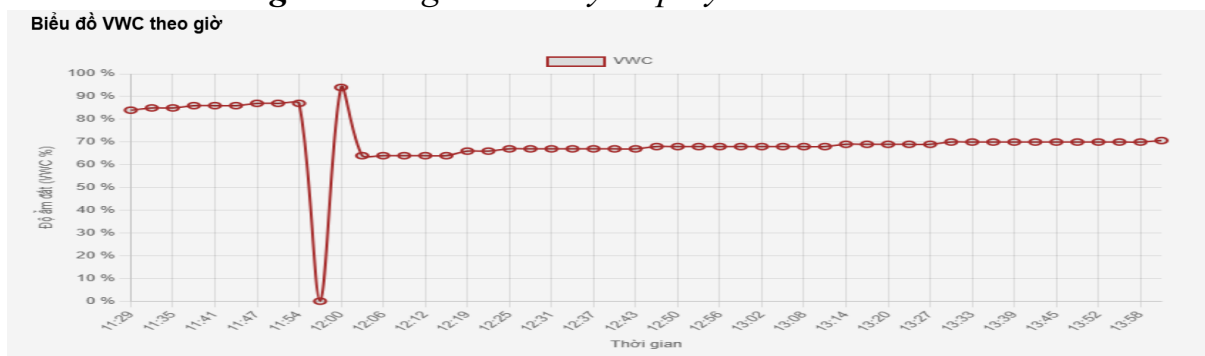


Figure 5: Soil moisture displayed on the website

Discussion:

The experiment was conducted over a period of 2 hours and 30 minutes, using a real potted plant as a simulation object for the intended environmental conditions. During the experiment, the team deliberately introduced several controlled environmental changes such as variations in light intensity, air humidity, soil moisture, and human presence to test the system's sensing and response capabilities.

The data collected from the sensors and displayed on the monitoring software clearly reflected changes corresponding to the modified environmental factors. Although no specialized equipment was available for exact calibration and

validation, the comparison with the actual conditions introduced during testing suggests that the sensors responded reasonably, followed correct trends, and can be considered relatively reliable.

Conclusion:

Based on the experimental results, it can be concluded that the system operated relatively stably and fulfilled the intended functional requirements within the testing scope. Despite the short testing duration and limited environmental conditions, the sensor outputs and actuator responses demonstrated encouraging operational performance.