# Vidal Solutions Sensor Data Report

## AM103-Sensor_4

1. CO2 emissions Trend Analysis:

The trend in CO2 emissions shows a slight increase throughout the day, with readings ranging from 604ppm to 893ppm. The highest reading of 893ppm was recorded at 12:48 PM and the lowest reading of 604ppm was recorded at 10:58 AM. However, all CO2 readings are within the amber range (600 to 800 ppm), indicating that there is a moderate level of CO2 emission in the living room.

2. Temperature Trend Analysis:

The temperature trend shows a slight increase throughout the day, with temperatures ranging from 22.5°C to 24.5°C. The highest temperature reading of 24.5°C was recorded at 7:08 PM and the lowest temperature reading of 22.5°C was recorded at 3:18 AM. All temperature readings are within the green range (below 25.5°C), indicating that the living room temperature is generally comfortable.

3. Humidity Trend Analysis:

The humidity trend shows a slight decrease throughout the day, with readings ranging from 76% to 81.5%. The highest humidity reading of 81.5% was recorded at 2:08 PM and the lowest humidity reading of 76% was recorded at 4:38 AM. All humidity readings are within the amber range (60 to 65 percentage), indicating that there is a moderate level of humidity in the living room.

4. Conclusion:

The CO2, temperature and humidity levels in the living room have been generally stable throughout the day with no significant deviations from the green, amber or red threshold ranges. However, it's worth noting that the CO2 emissions have been consistently within the amber range which could indicate a potential issue if these levels persist over an extended period of time.

5. Recommendation:

Given the trend in CO2 emissions and considering they are consistently within the amber range, it would be recommended to investigate the source of this emission and consider implementing measures to reduce it where possible. This could include improving ventilation or identifying any potential sources of high CO2 output such as cooking appliances or certain household plants. Additionally, regular monitoring of these levels can help identify any trends or patterns that may indicate a need for further action.

# Vidal Solutions Sensor Data Report

## AM103L-Sensor_5

1. CO2 emissions Trend Analysis:

The trend in the CO2 emissions shows that the levels are consistently above the green threshold of below 600ppm, with an average value of approximately 1195ppm and a peak value of 1402ppm. This indicates that there is a persistent issue with high CO2 emissions in the living room which needs attention.

2. Temperature Trend Analysis:

The temperature readings are mostly within the green threshold range, with an average temperature of approximately 23.5°C and no values exceeding the red threshold of above 27°C. However, there is a noticeable increase in temperature towards the end of the dataset, which could be worth investigating further to ensure that it does not lead to potential CO2 emission increases or other issues.

3. Humidity Trend Analysis:

The humidity levels are mostly within the green threshold range, with an average value of approximately 80% and no values exceeding the red threshold of above 65%. However, there is a noticeable dip in humidity towards the end of the dataset which could potentially impact indoor air quality. It would be recommended to monitor this trend closely and consider implementing measures to maintain appropriate humidity levels if necessary.

4. Conclusion:

The data indicates that CO2 emissions are consistently high, while temperature and humidity levels are mostly within acceptable ranges but with some fluctuations towards the end of the dataset. This suggests a need for further investigation into potential causes of high CO2 emissions and monitoring of temperature and humidity trends to ensure indoor air quality is maintained.

5. Recommendation:

Based on the data analysis, it would be recommended to conduct an investigation into the sources of high CO2 emissions in the living room. This could include checking ventilation systems, identifying potential leakages or other causes, and considering implementing measures such as increased plant life or air purifiers to help reduce CO2 levels. Additionally, monitoring temperature and humidity trends closely and addressing any fluctuations towards the end of the dataset would be important for maintaining indoor air quality.

# Vidal Solutions Sensor Data Report

## AM307-Sensor_2

1. CO2 emissions Trend Analysis:

The trend in CO2 emissions shows a gradual increase throughout the day, with readings ranging from 617ppm to 1060ppm. The highest reading of 1060ppm was recorded at 13:08:29 and is above the red threshold (above 800 ppm). This indicates a potential issue that needs attention as high CO2 levels can lead to health issues and discomfort.

2. Temperature Trend Analysis:

The temperature remains relatively stable throughout the day, with readings ranging from 23.1 °C to 24.6 °C. All readings are below the red threshold (above 27°C), indicating that the temperature is within an acceptable range.

3. Humidity Trend Analysis:

The humidity levels show a slight increase towards the end of the day, with readings ranging from 59% to 81.5%. The highest reading of 81.5% was recorded at 20:48:29 and is above the amber threshold (above 65%). This could potentially lead to discomfort or mold growth if not addressed promptly.

4. Conclusion:

The CO2 levels show a potential issue with one reading exceeding the red threshold, while temperature readings are within an acceptable range and humidity is slightly above the amber threshold.

5. Recommendation:

To address the high CO2 level, consider increasing ventilation by opening windows or using air purifiers. For the humidity issue, try to reduce moisture sources such as plants or cooking and ensure proper ventilation. Regular monitoring of these readings can help identify any potential issues early on.

# Vidal Solutions Sensor Data Report

## AM319-Sensor_1

1. CO2 emissions Trend Analysis:

The trend in the CO2 emissions shows that the levels are consistently above the green threshold of below 600ppm, with an average value of approximately 873ppm. This indicates a potential issue and suggests that the room may have poor ventilation or high sources of carbon emission. The highest recorded CO2 level was 957 ppm at 13:19 hours.

2. Temperature Trend Analysis:

The temperature trend shows that it remains consistently within the green threshold, with an average value of approximately 23.4°C and no readings above the amber or red thresholds. This is a good sign as maintaining optimal indoor temperatures is essential for comfort and energy efficiency.

3. Humidity Trend Analysis:

The humidity trend shows that it remains consistently within the green threshold, with an average value of approximately 78.5%. However, there was one instance where the humidity level reached 84% at 00:41 hours, which is above the amber threshold. This could potentially lead to discomfort and mold growth if not addressed promptly.

4. Conclusion:

The CO2 emissions are consistently high, indicating a potential issue with poor ventilation or high carbon sources in the room. The temperature remains within an acceptable range, but there was one instance of elevated humidity levels above the amber threshold.

5. Recommendation:

To address the high CO2 levels, consider improving the room's ventilation by opening windows or using air purifiers. For the elevated humidity level, try to reduce moisture sources and increase ventilation to maintain optimal indoor conditions for comfort and health. Regularly monitoring these trends can help identify potential issues early on and prevent any negative impacts on your living environment.

# Vidal Solutions Sensor Data Report

## AM319-Sensor_3

1. CO2 emissions Trend Analysis:

The trend in CO2 emissions shows a gradual increase throughout the day, with most readings falling above the amber threshold of 800ppm and some even exceeding the red threshold of 850ppm. The highest reading was recorded at 13:14:13 with a value of 918 ppm. This trend could indicate poor ventilation or high usage of appliances that emit CO2 in the living room.

2. Temperature Trend Analysis:

The temperature readings remain consistently above the amber threshold of 25.5 degree celsius, with most readings falling between 24 and 26 degrees celsius. The highest reading was recorded at 13:14:13 with a value of 27 degrees celsius. This trend could indicate that the living room is consistently warmer than ideal, which may contribute to discomfort or increased energy consumption for cooling.

3. Humidity Trend Analysis:

The humidity readings show a more varied trend, with some readings falling below the green threshold of 60 percentage and others exceeding the red threshold of 75 percentage. The lowest reading was recorded at 12:34:13 with a value of 59 ppm, while the highest reading was recorded at 13:14:13 with a value of 81 pcm. This trend could indicate inconsistent moisture levels in the living room, which may affect comfort and potentially contribute to mold growth if humidity remains high for extended periods.

4. Conclusion:

The data indicates that CO2 emissions are consistently above acceptable levels, temperature is consistently warmer than ideal, and humidity levels show significant variation throughout the day. These trends could indicate issues with ventilation, energy consumption, or inconsistent environmental conditions in the living room.

5. Recommendation:

To address these issues, consider implementing measures to improve ventilation such as opening windows regularly, using exhaust fans, or installing an air purifier. Additionally, ensure that appliances are energy efficient and properly maintained to reduce CO2 emissions. Regularly monitor temperature and humidity levels and adjust accordingly to maintain ideal conditions for comfort and health.