We can still rely on the results of our post-hoc analysis, but with specific considerations due to the violation of the normality assumption. Here's a breakdown of how to interpret our findings in light of the normality issue:

1. **Reliability of the Results**
   - **Non-parametric Context**: If we used a non-parametric test like Dunn's test, our results are generally more reliable despite the normality violation. Non-parametric tests are less affected by the distribution of data, making them suitable for our situation.
   - **Statistical Significance**: The extremely low p-values for the comparisons indicate strong evidence against the null hypothesis. This suggests that the differences in log-transformed sales between the categories are statistically significant.
2. **Interpretation of Findings**
   - **Furniture vs. Office Supplies**: The p-value of $1.534319 \times 10^{-138}$ shows an overwhelming significance, indicating that sales performance in these categories is notably different.
   - **Furniture vs. Technology**: A p-value of 5.207264×10^{-02} is just below the alpha level, supporting a significant difference in sales between these categories.
   - **Office Supplies vs. Technology**: The p-value of $2.001982 \times 10^{-154}$ reinforces that there is a significant difference in sales between these two categories.
3. **Implications for Decision-Making**
   - **Strategic Focus**: The significant differences among categories imply that we should tailor our strategies—such as sales tactics, inventory management, and marketing efforts—according to the distinct performance metrics of each category.
   - **Resource Allocation**: Understanding which categories perform better can inform our resource allocation and promotional strategies to enhance overall sales performance.
4. **Cautions and Considerations**
   - **Practical Significance**: While the statistical differences are clear, we should assess the effect sizes to understand the magnitude of these differences and their implications for business decisions.
   - **Acknowledging Normality Violations**: We must be transparent about the normality violation when reporting results. While the statistical methods used allow for meaningful interpretation, acknowledging the data's distribution characteristics will provide a more nuanced understanding of the results.

Conclusion
In summary, while the normality assumption violation does warrant caution, the significant results from our post-hoc analysis can still be considered reliable, especially if non-parametric methods were used. We should interpret the findings in the context of their practical implications and ensure to communicate the nuances of the analysis clearly when making business decisions.