# **Individual Sleep Analysis Report**

## Subject ID: 3 | Healthy Control Study

Analysis Date: August 16, 2025 | Nights Analyzed: 2 | Report Generated by: Sleep-EDF Analysis System

## **Subject Information**

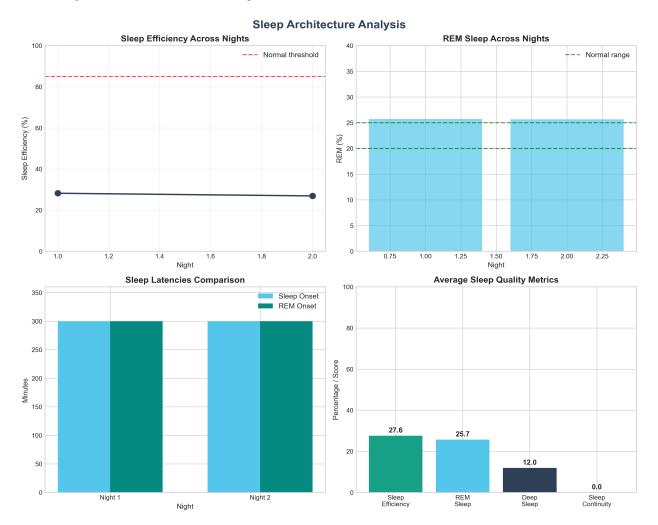
Subject ID	3
Age	26 years
Sex	F
Study Type	Healthy Controls
Number of Nights	2
Recording Dates	Multiple nights

## **Executive Summary**

This report presents a comprehensive analysis of 2 night polysomnographic recordings for Subject 3, a 26-year-old F participant from the Sleep Cassette (healthy controls) study under nan condition.

Metric	Value	Clinical Interpretation
Sleep Efficiency	27.6%	Below Normal (<85%)
Sleep Latency	448.0 min	Prolonged (>30min)
REM Latency	528.2 min	Atypical
REM Sleep	25.7%	Atypical
Wake After Sleep Onset	543.2 min	Elevated (>30min)

## **Sleep Architecture Analysis**

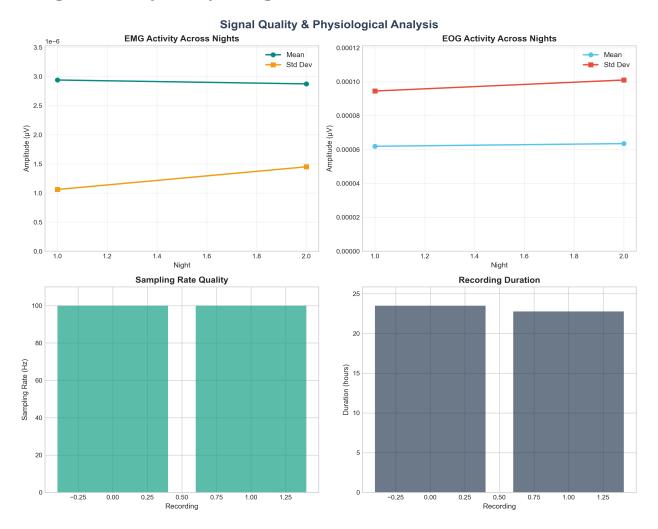


**Neurophysiological Analysis - EEG Power Spectrum** 

### **EEG Power Spectral Analysis**



## **Signal Quality & Physiological Assessment**



**Population Comparative Analysis** 

#### **Comparative Population Analysis** Sleep Efficiency (%) REM Sleep (%) ★ Subject Healthy Controls Sleep Difficulty Sleep Difficulty Healthy Controls WASO (min) Sleep Latency (min) Ö

Healthy Controls

Healthy Controls

Sleep Difficulty

### **Clinical Interpretation & Recommendations**

### **Overall Sleep Health Assessment**

Sleep Quality Level: POOR

Poor sleep quality with multiple metrics outside normal ranges. The subject's sleep architecture shows:

• Sleep Efficiency: 27.6% (Below normal)

REM Sleep: 25.7% (Atypical)Deep Sleep: 12.0% (Reduced)

• Sleep Continuity: Fragmented (WASO: 543.2 min)

### **Key Findings**

- **Reduced Sleep Efficiency**: At 27.6%, sleep efficiency is below the normal threshold of 85%, indicating potential sleep quality issues.
- **Elevated REM Sleep**: REM sleep comprises 25.7% of total sleep, which is above the typical range of 20-25%.
- **Reduced Deep Sleep**: Deep sleep stages (N3+N4) comprise 12.0% of sleep, which may indicate reduced sleep restoration.

#### Recommendations

- Consider sleep hygiene counseling and evaluation of factors affecting sleep quality
- Assess sleep environment and factors that may be disrupting deep sleep stages
- Investigation of factors causing sleep fragmentation may be beneficial

### Report Analysis and Generation:

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