

Individual Sleep Analysis Report

Subject ID: 5 | Healthy Control Study

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

Subject Information

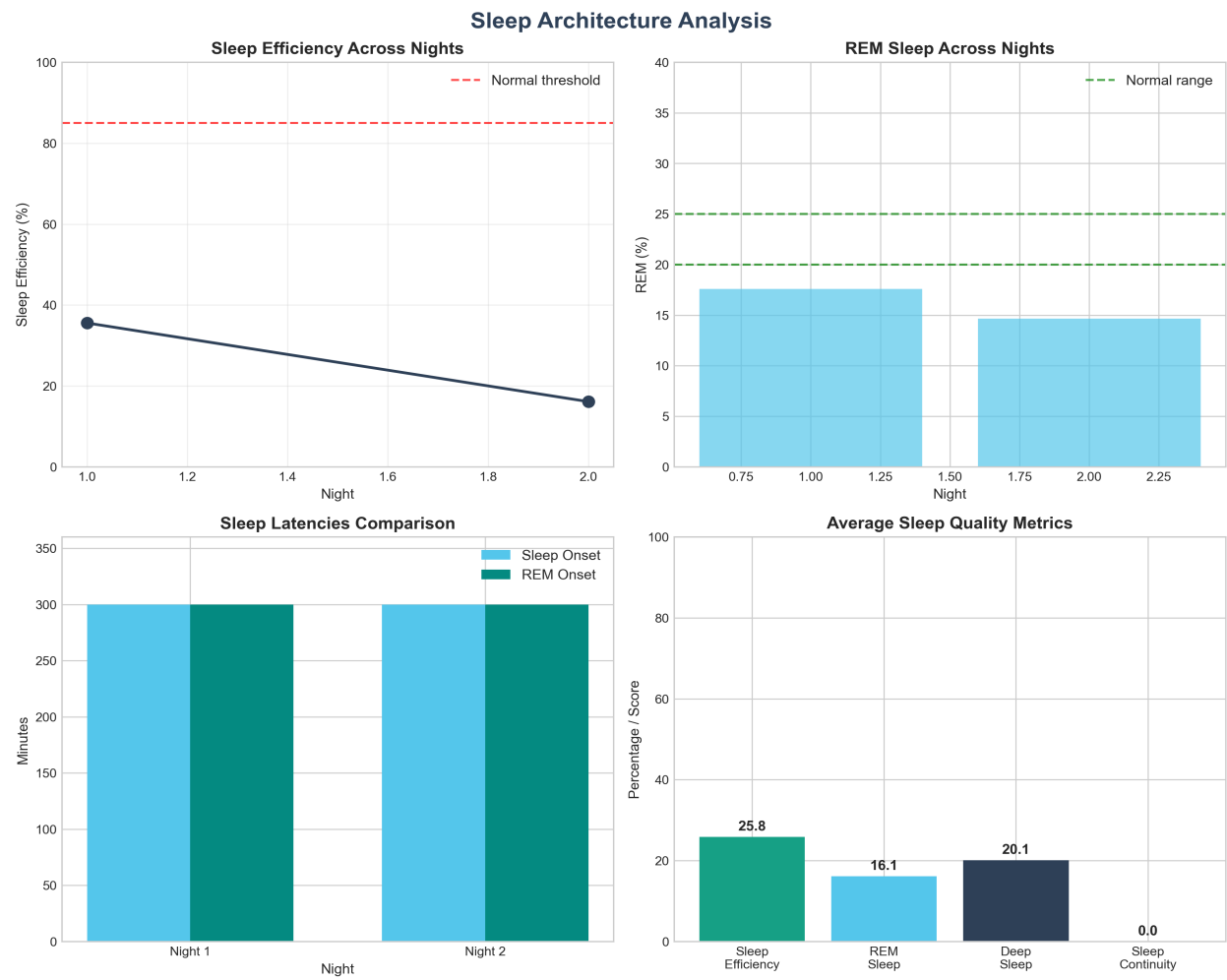
Subject ID	5
Age	28 years
Sex	F
Study Type	Healthy Controls
Number of Nights	2
Recording Dates	Multiple nights

Executive Summary

This report presents a comprehensive analysis of 2 night polysomnographic recordings for Subject 5, a 28-year-old F participant from the Sleep Cassette (healthy controls) study under nan condition.

Metric	Value	Clinical Interpretation
Sleep Efficiency	25.8%	Below Normal (<85%)
Sleep Latency	592.5 min	Prolonged (>30min)
REM Latency	663.5 min	Atypical
REM Sleep	16.1%	Atypical
Wake After Sleep Onset	417.0 min	Elevated (>30min)

Sleep Architecture Analysis

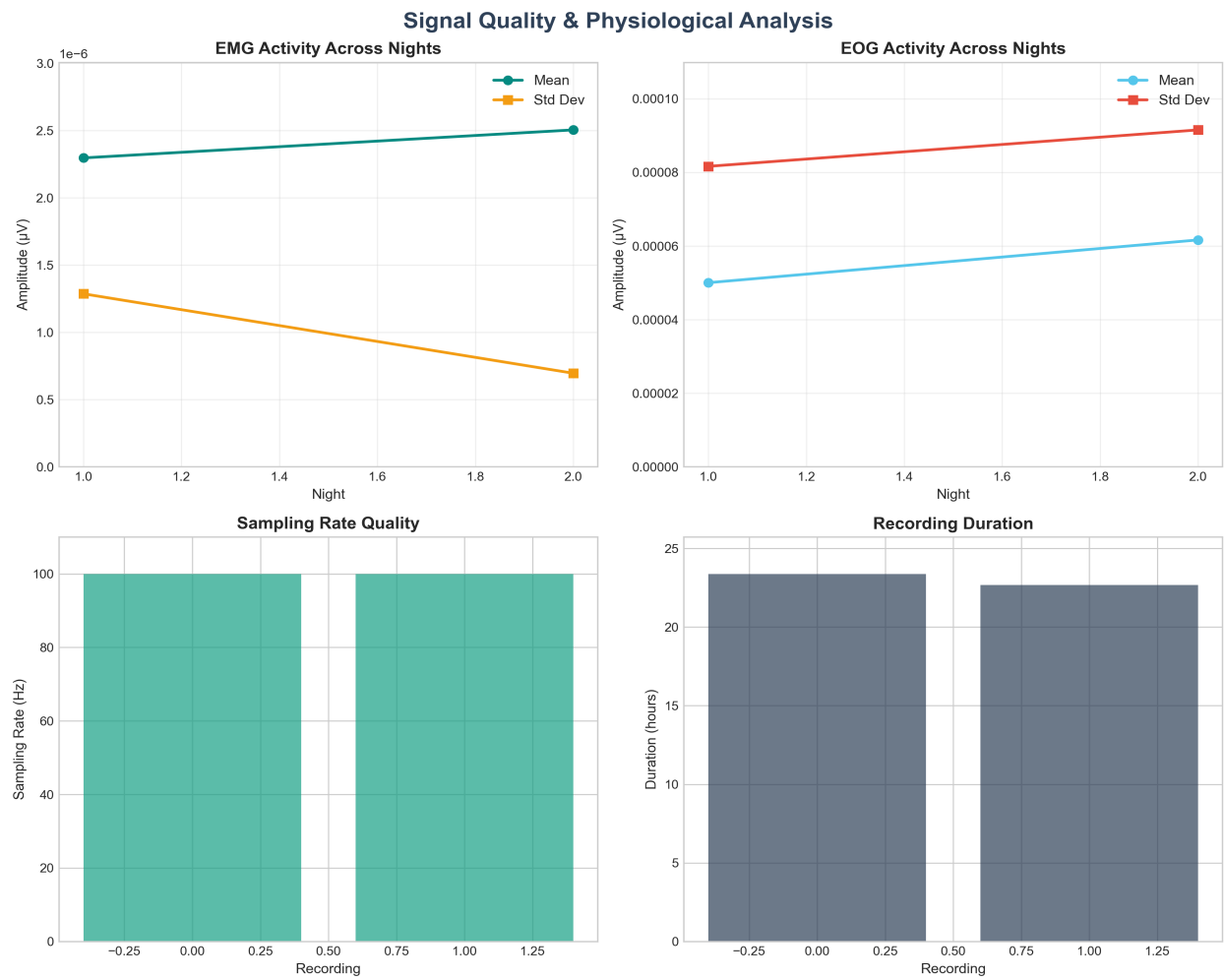


Neurophysiological Analysis - EEG Power Spectrum

EEG Power Spectral Analysis

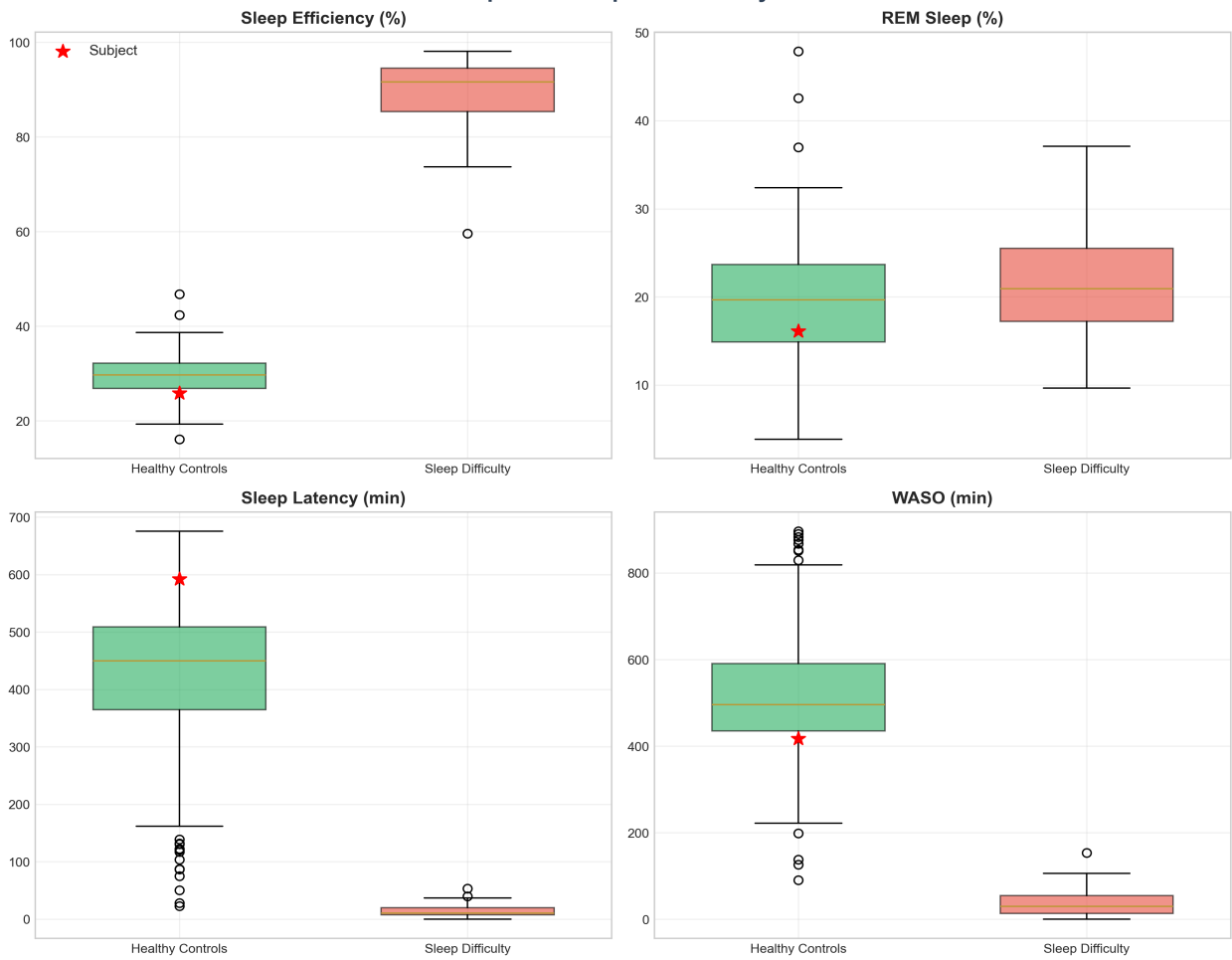


Signal Quality & Physiological Assessment



Population Comparative Analysis

Comparative Population Analysis



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: 25.8% (Below normal)
- REM Sleep: 16.1% (Atypical)
- Deep Sleep: 20.1% (Adequate)
- Sleep Continuity: Fragmented (WASO: 417.0 min)

Key Findings

- **Reduced Sleep Efficiency:** At 25.8%, sleep efficiency is below the normal threshold of 85%, indicating potential sleep quality issues.
- **Reduced REM Sleep:** REM sleep comprises 16.1% of total sleep, which is below the normal range of 20-25%.
- **Adequate Deep Sleep:** Deep sleep stages comprise 20.1% of sleep, indicating good restorative sleep.
- **High Night-to-Night Variability:** Sleep efficiency varies significantly across nights (SD: 13.7%), suggesting inconsistent sleep patterns.

Recommendations

- Consider sleep hygiene counseling and evaluation of factors affecting sleep quality
- Evaluate for potential REM sleep disorders or medications affecting REM sleep
- Investigation of factors causing sleep fragmentation may be beneficial
- Sleep diary and lifestyle factor assessment recommended due to high night-to-night variability

Report Analysis and Generation:

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