

# Communication Quality Analysis Report

## LTE & Starlink Network Performance

Report Generated: 2026-01-29 14:02

### Flight Summary

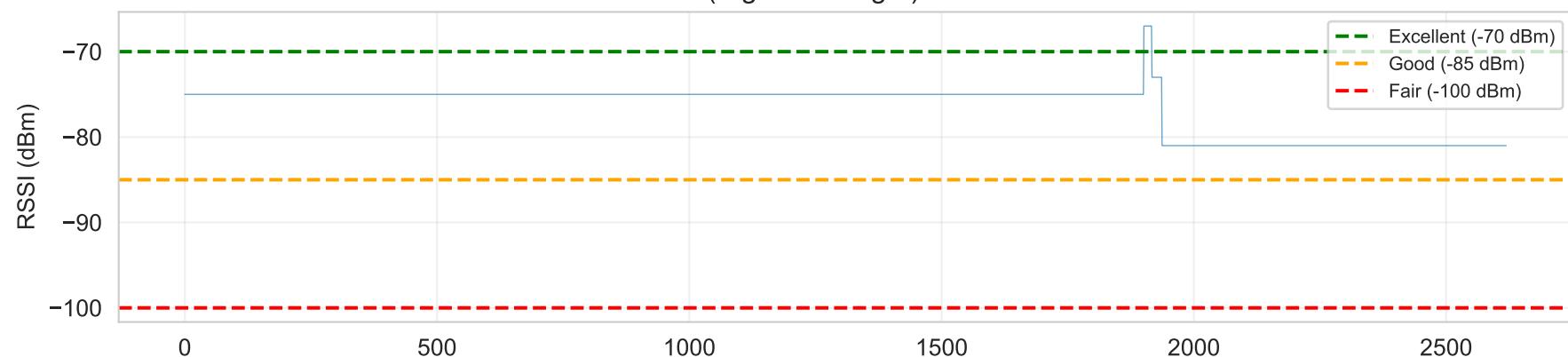
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Total Data Points: 2,620  
Flight Duration: 399 seconds

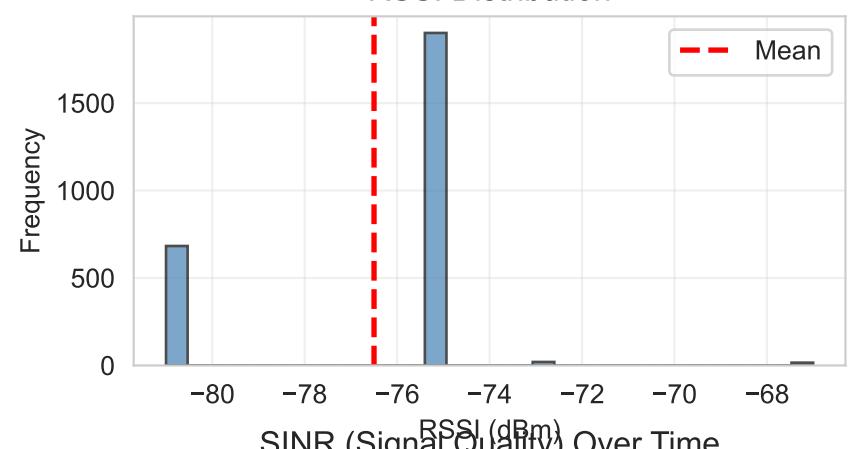
LTE Coverage: 100.0%  
Starlink Coverage: 53.9%

# LTE Communication Quality Analysis

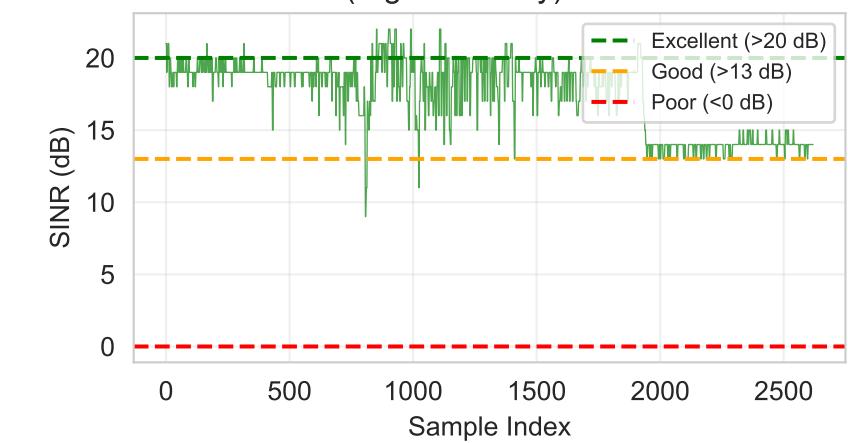
RSSI (Signal Strength) Over Time



RSSI Distribution

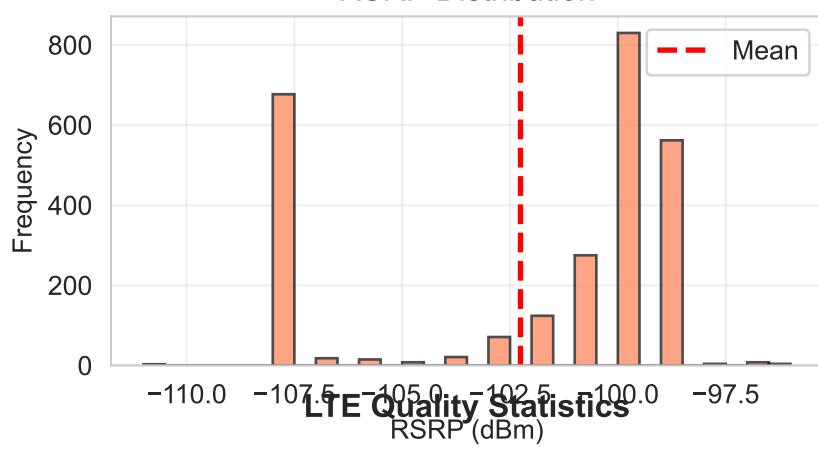


SINR (Signal Quality) Over Time



Sample Index

RSRP Distribution

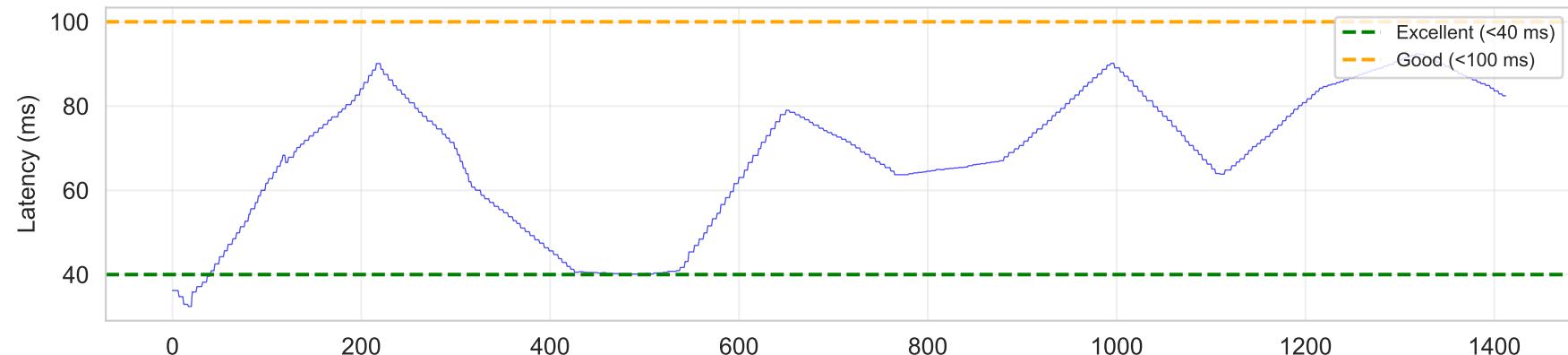


LTE Quality Statistics

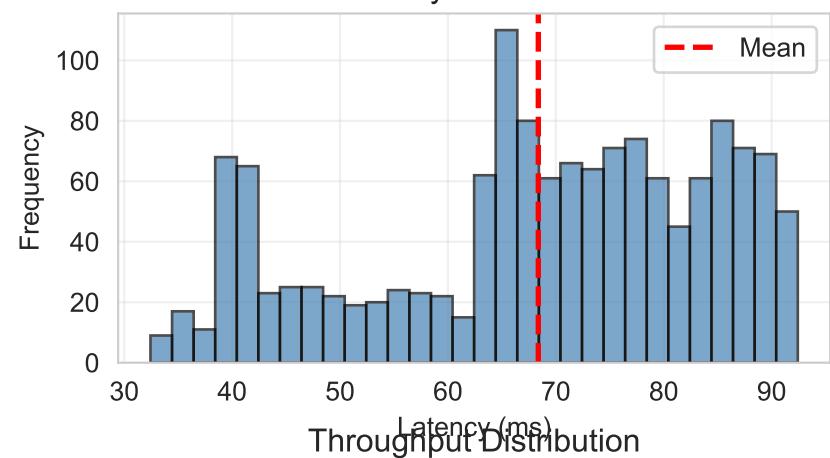
Metric	Mean	Min	Max	Std
RSSI (dBm)	-76.5	-81	-67	2.7
RSRP (dBm)	-102.3	-111	-96	3.6
SINR (dB)	17.4	9	22	2.5

# Starlink Communication Quality Analysis

## Latency Over Time

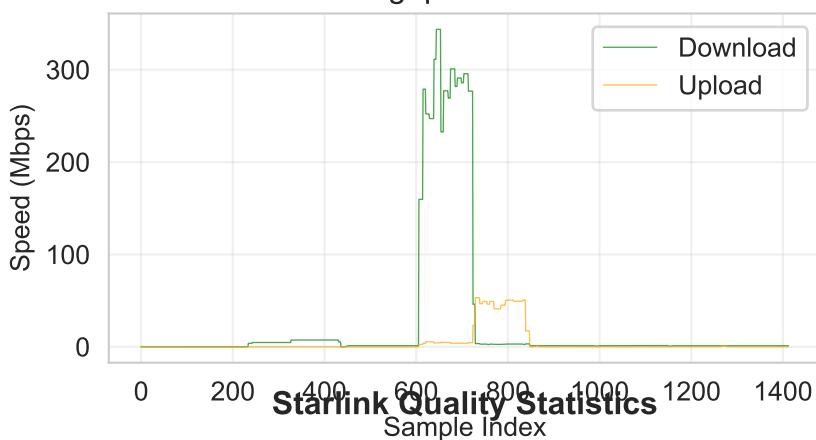


## Latency Distribution

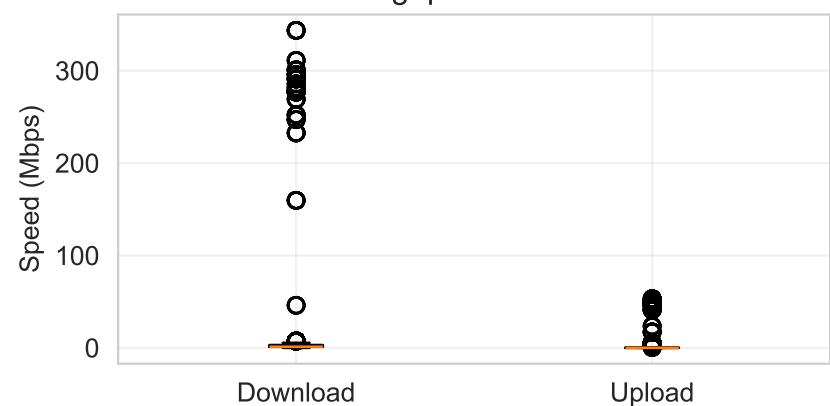


## Sample Index

## Throughput Over Time



## Throughput Distribution

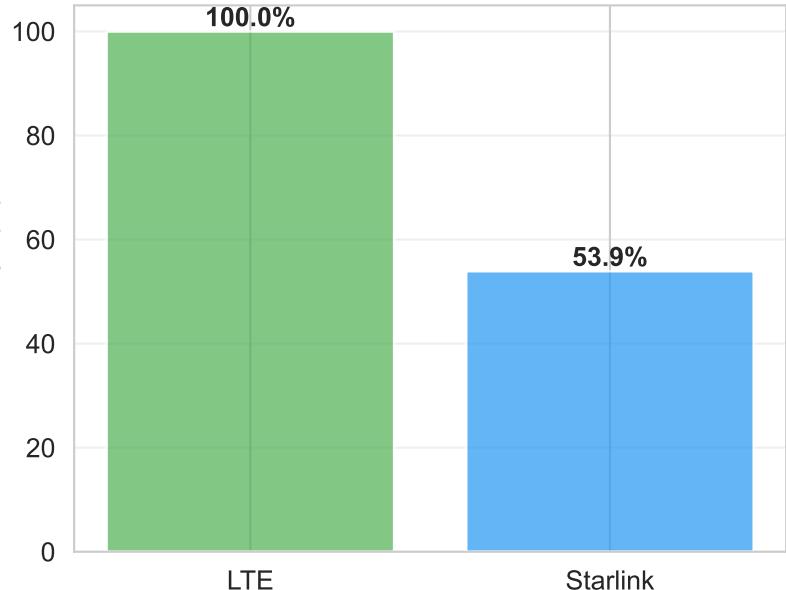


## Starlink Quality Statistics

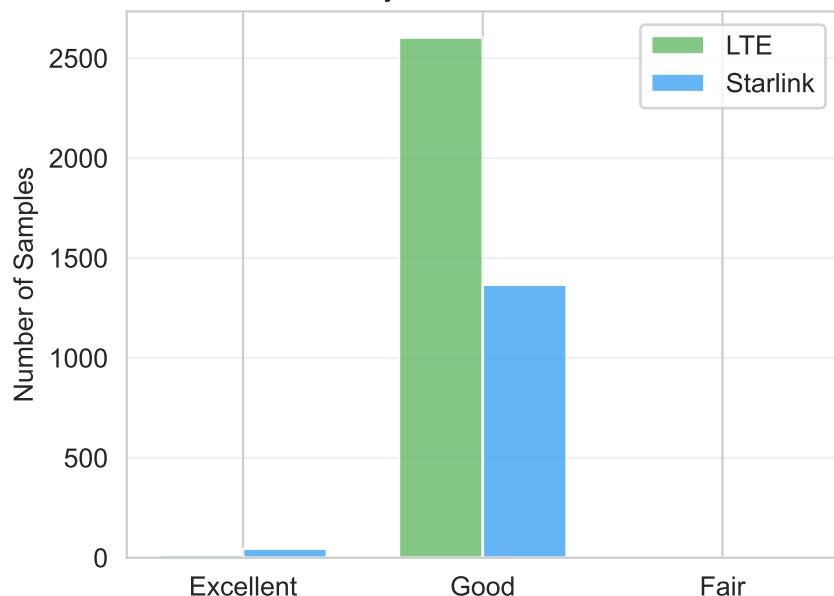
Metric	Mean	Min	Max	Std
Latency (ms)	68.4	32.4	92.4	15.9
Download (Mbps)	24.7	0.0	343.7	76.2
Upload (Mbps)	4.4	0.0	53.2	12.9

# LTE vs Starlink Comparison

Network Coverage



Quality Grade Distribution



## ANALYSIS SUMMARY & RECOMMENDATIONS

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### Network Performance:

- LTE Coverage: 100.0% | Overall Quality: Good
- Starlink Coverage: 53.9% | Overall Quality: Good

### Key Findings:

- LTE Average RSSI: -76.5 dBm
- LTE Average SINR: 17.4 dB
- Starlink Average Latency: 68.4 ms
- Starlink Average Download: 24.7 Mbps

### Recommendations:

1. LTE provides excellent coverage throughout the flight
2. Starlink shows reliable performance in this flight area
3. For mission-critical applications, dual network redundancy is available

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