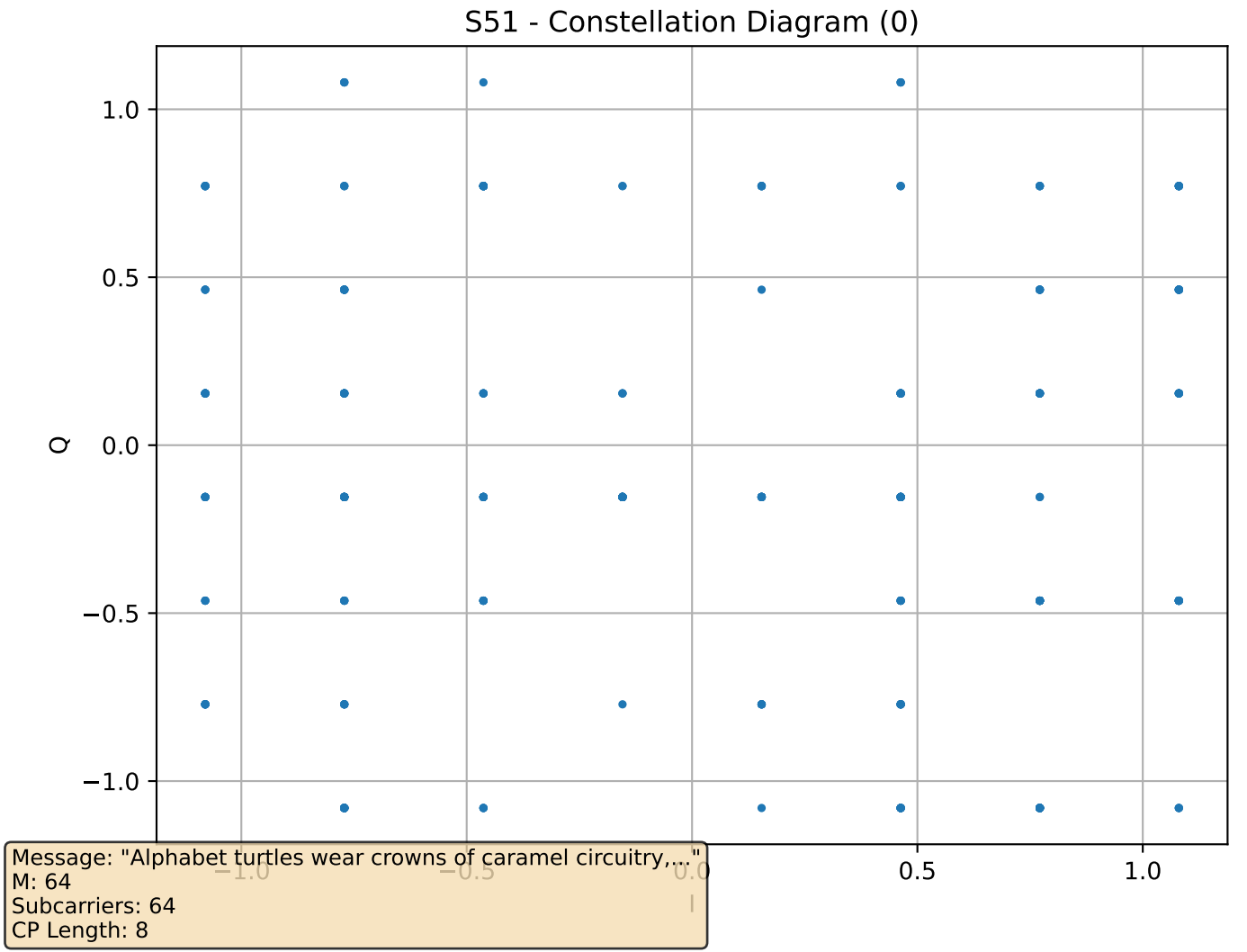
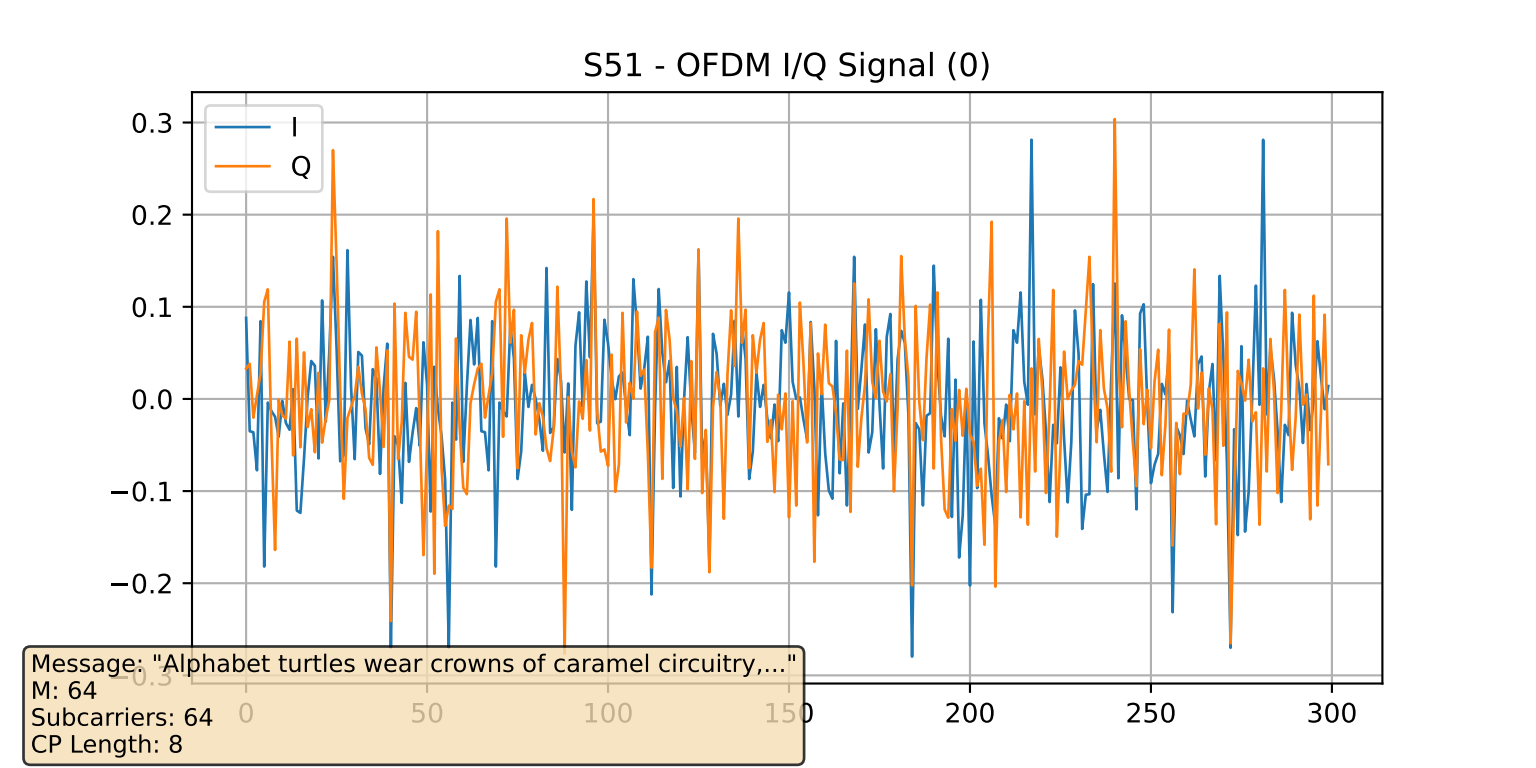
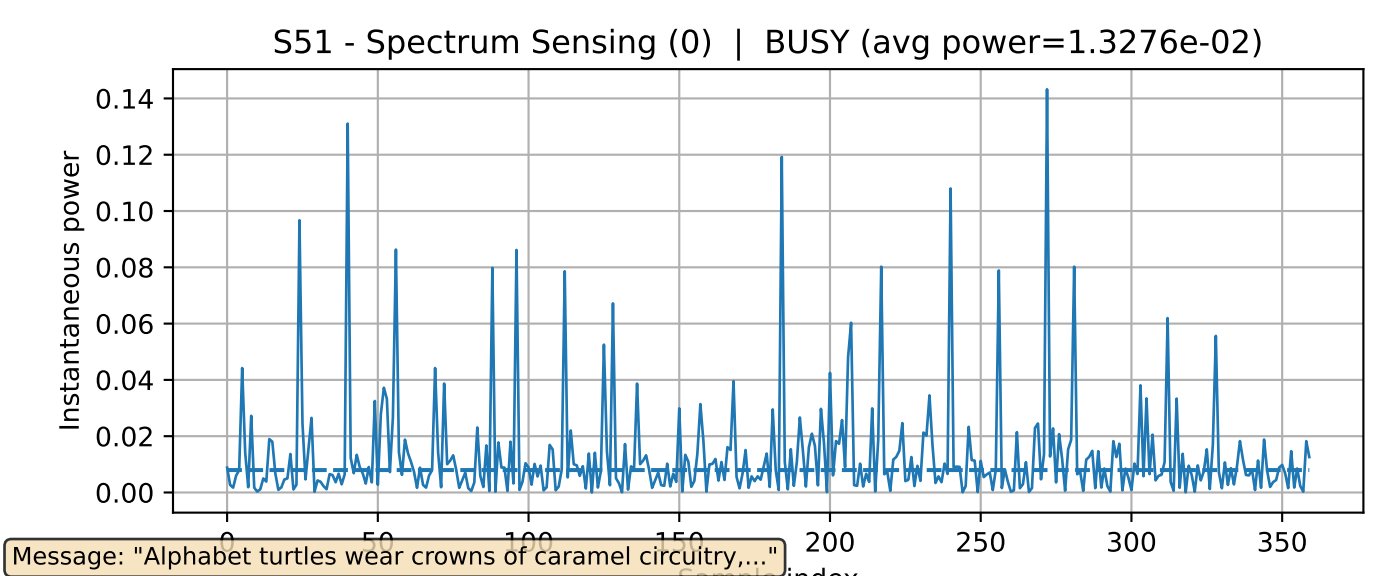
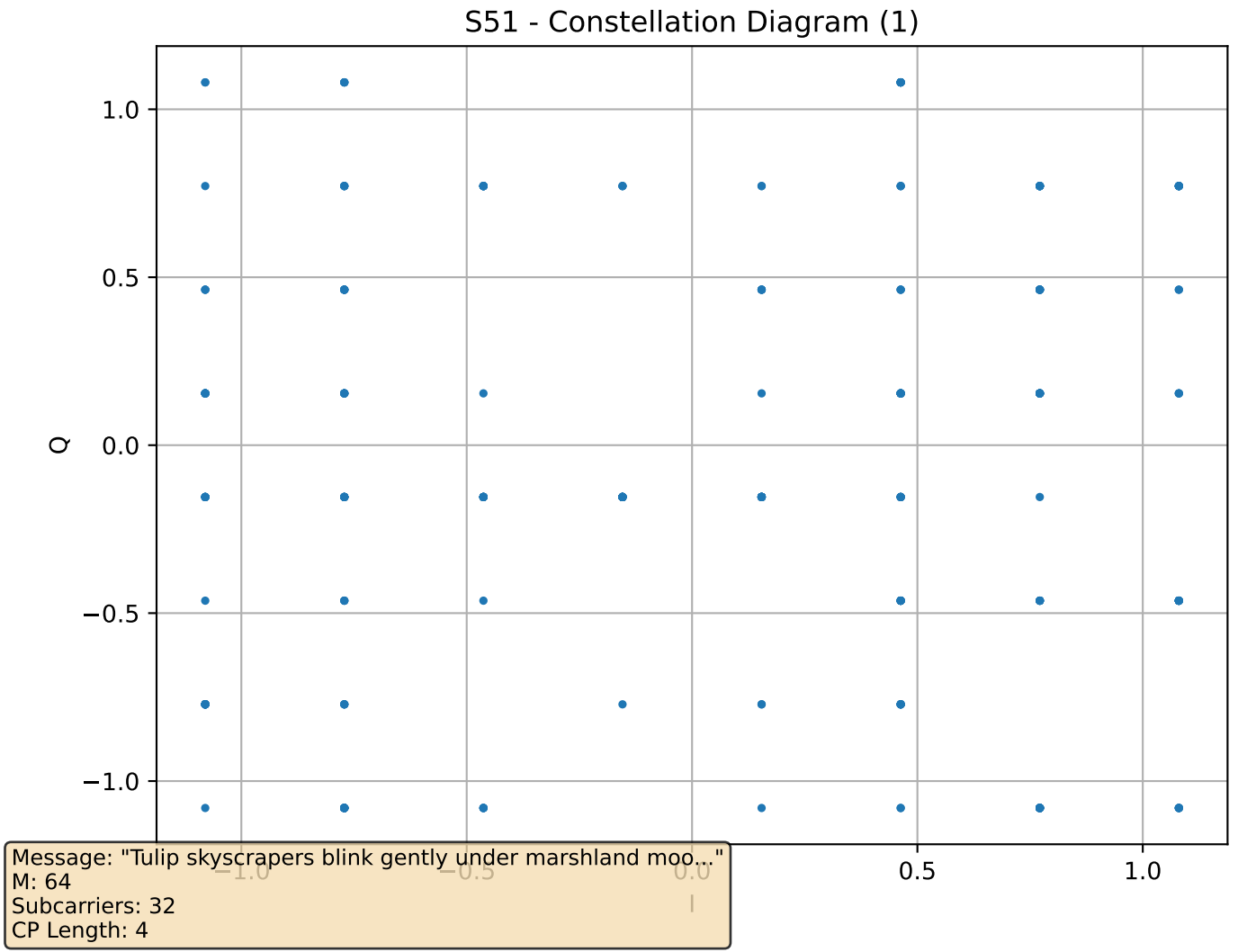
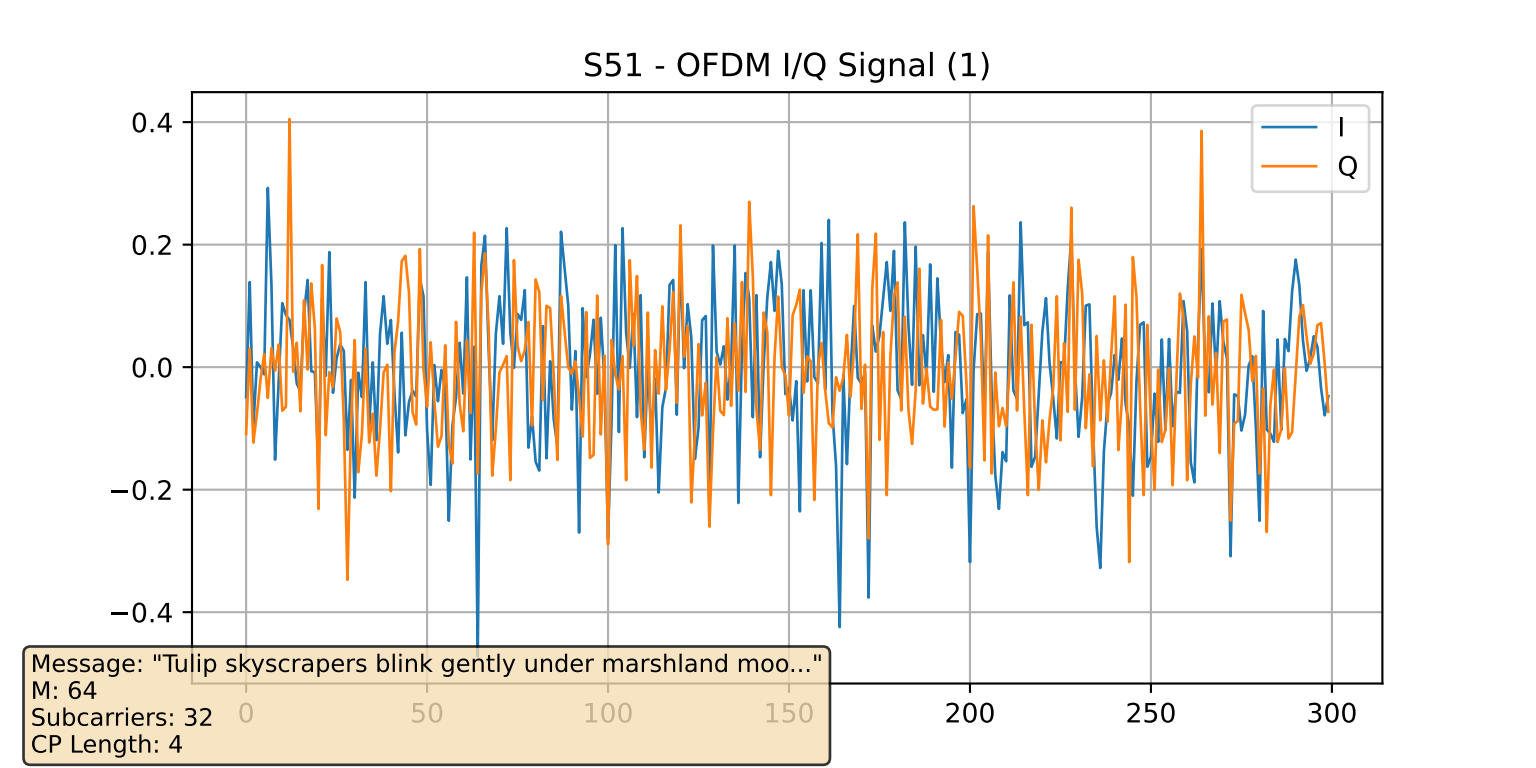
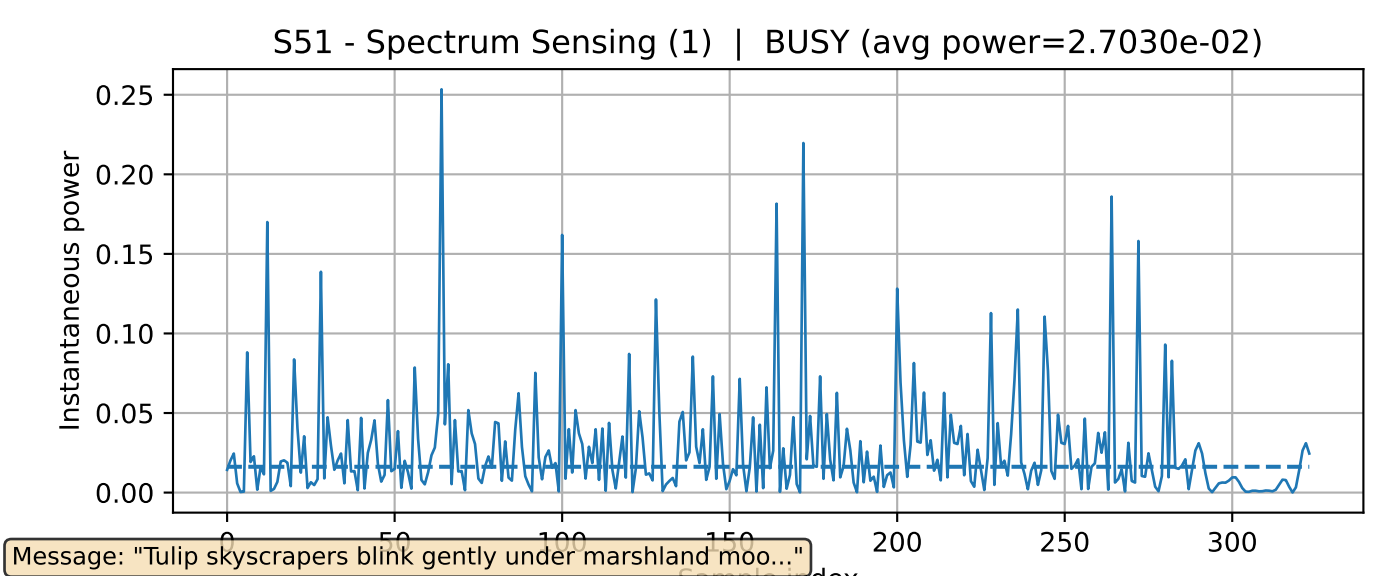

S51 - Constellation Diagram (0)
Q
1.0
0.5
0.0
−0.5
−1.0
−1.0
−0.5
0.0
0.5
1.0
Message: "Alphabet turtles wear crowns of caramel circuitry,..."
M: 64
Subcarriers: 64
CP Length: 8

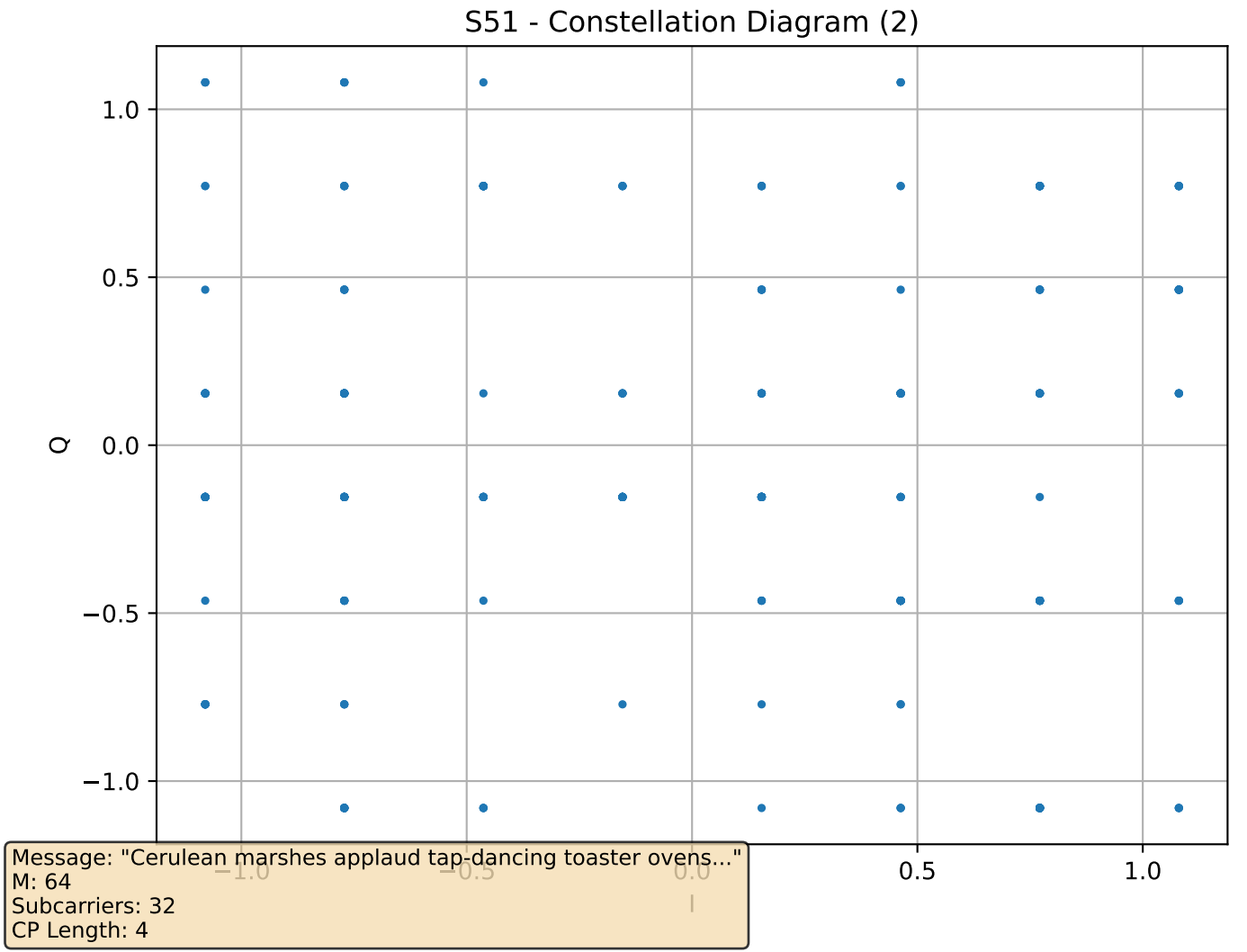

S51 - OFDM I/Q Signal (0)
I
Q
0.3
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
50
100
150
200
250
300
Message: "Alphabet turtles wear crowns of caramel circuitry,..."
M: 64
Subcarriers: 64
CP Length: 8

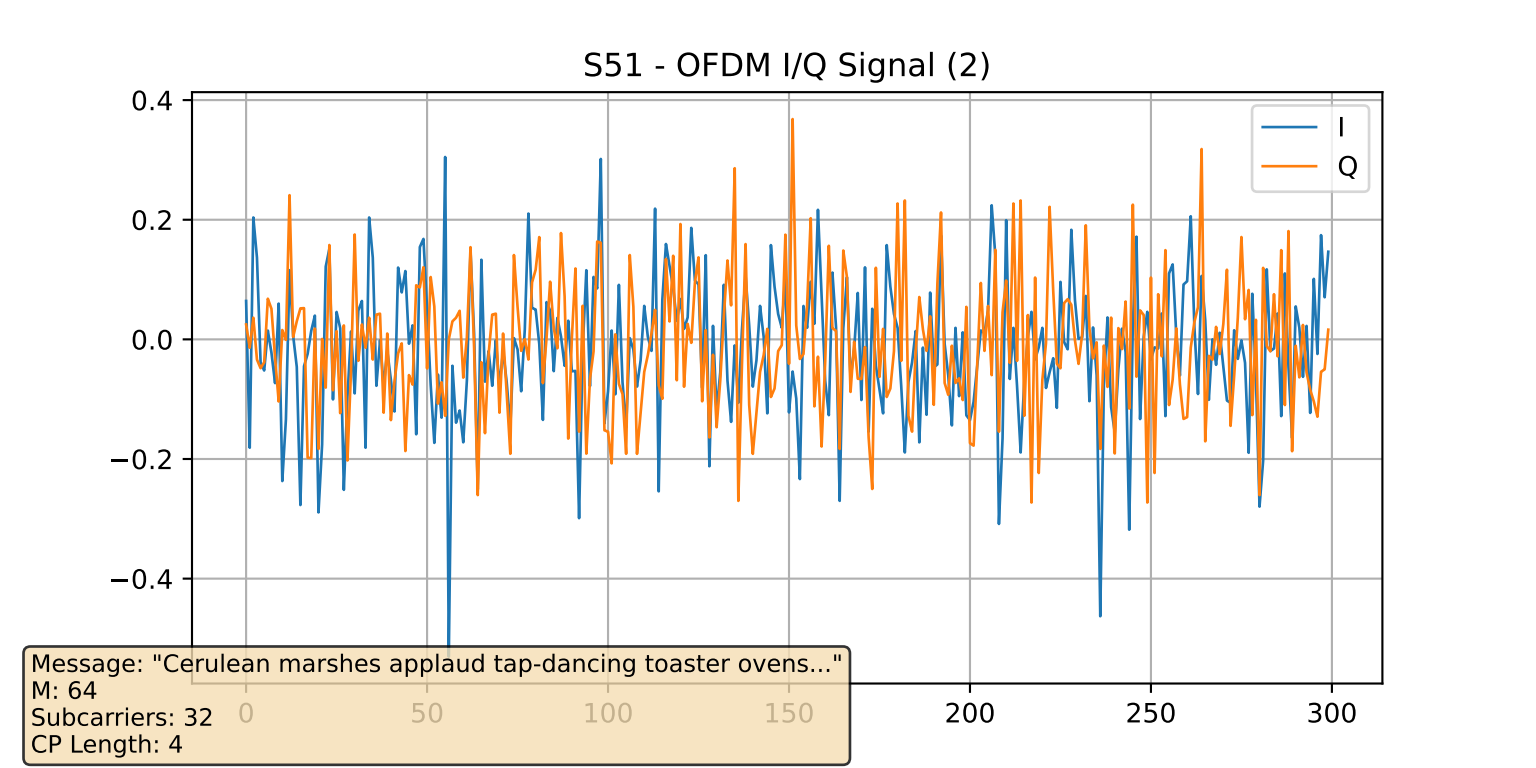

S51 - Spectrum Sensing (0) | BUSY (avg power=1.3276e-02)
Instantaneous power
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
0
50
100
150
200
250
300
350
Message: "Alphabet turtles wear crowns of caramel circuitry,..."

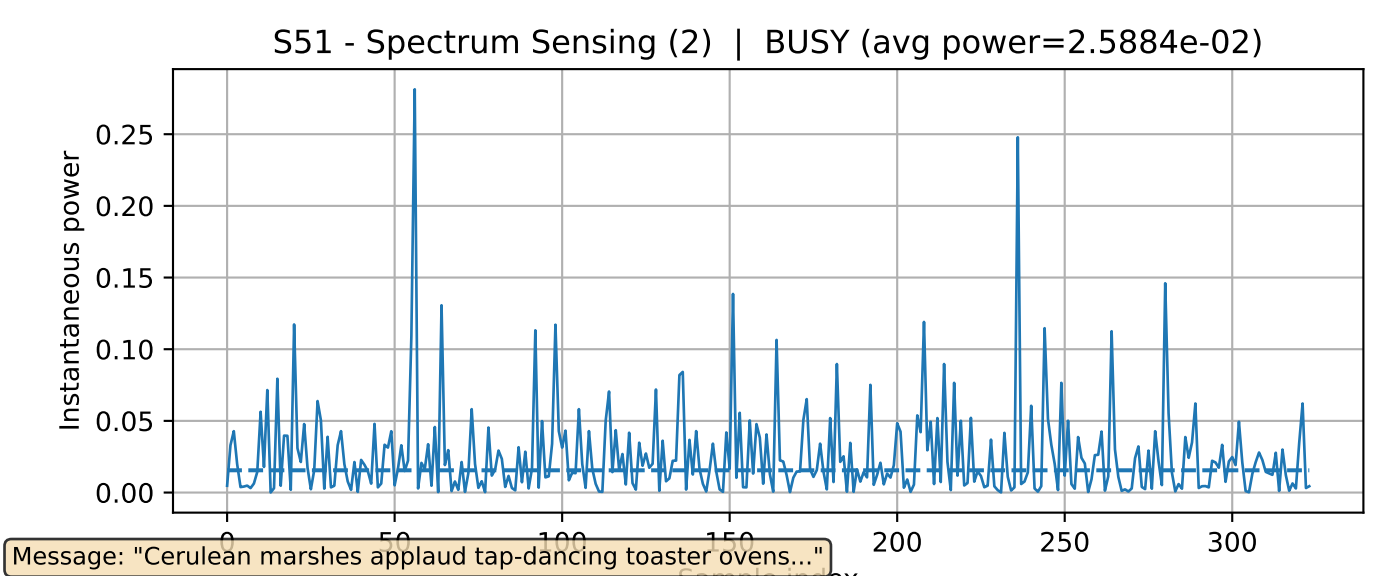

S51 - Constellation Diagram (1)
Q
1.0
0.5
0.0
−0.5
−1.0
−1.0
−0.5
0.0
0.5
1.0
Message: "Tulip skyscrapers blink gently under marshland moo..."
M: 64
Subcarriers: 32
CP Length: 4

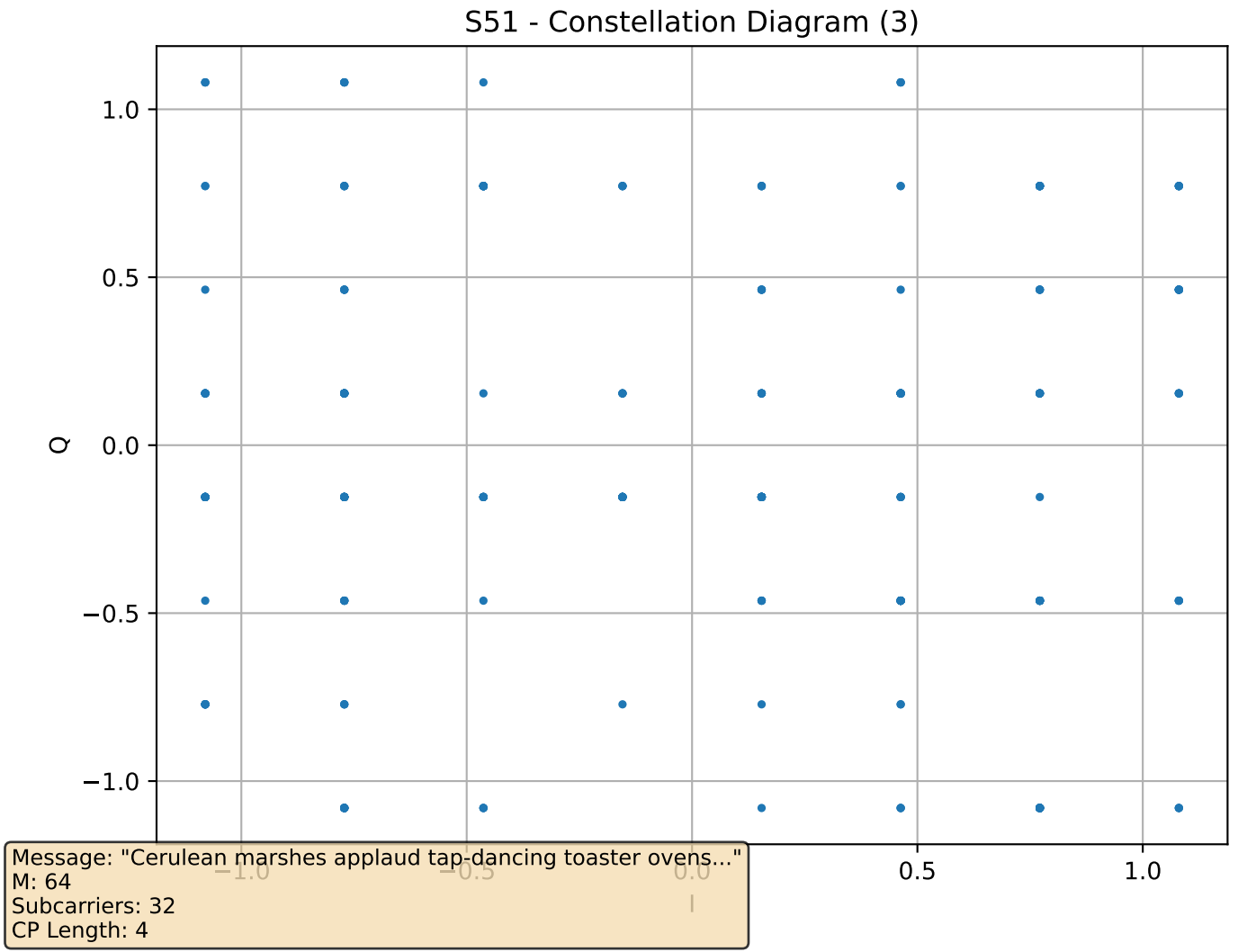

S51 - OFDM I/Q Signal (1)
I
Q
0.4
0.2
0.0
−0.2
−0.4
0
50
100
150
200
250
300
Message: "Tulip skyscrapers blink gently under marshland moo..."
M: 64
Subcarriers: 32
CP Length: 4

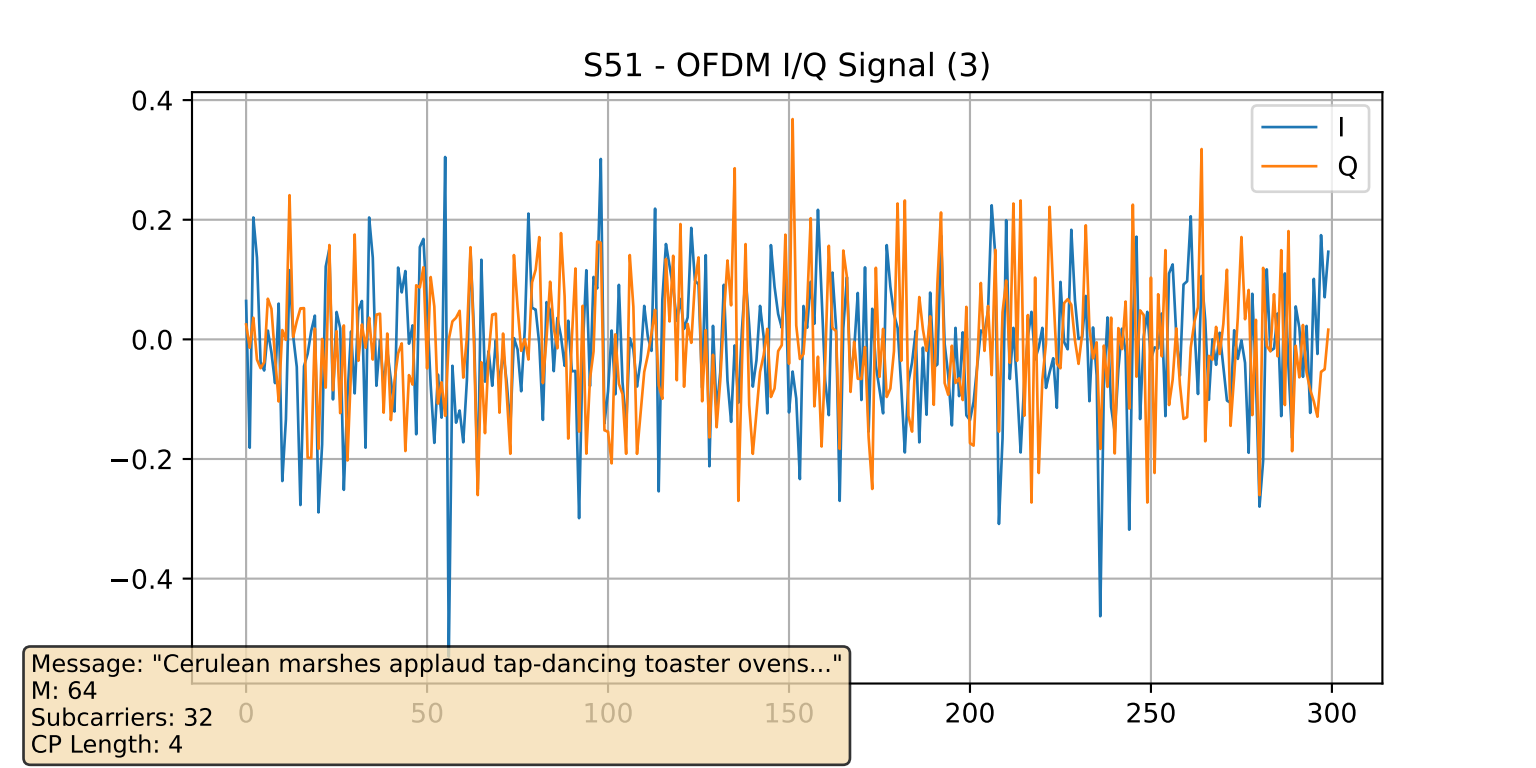

S51 - Spectrum Sensing (1) | BUSY (avg power=2.7030e-02)
Instantaneous power
0.25
0.20
0.15
0.10
0.05
0.00
0
50
100
150
200
250
300
Message: "Tulip skyscrapers blink gently under marshland moo..."

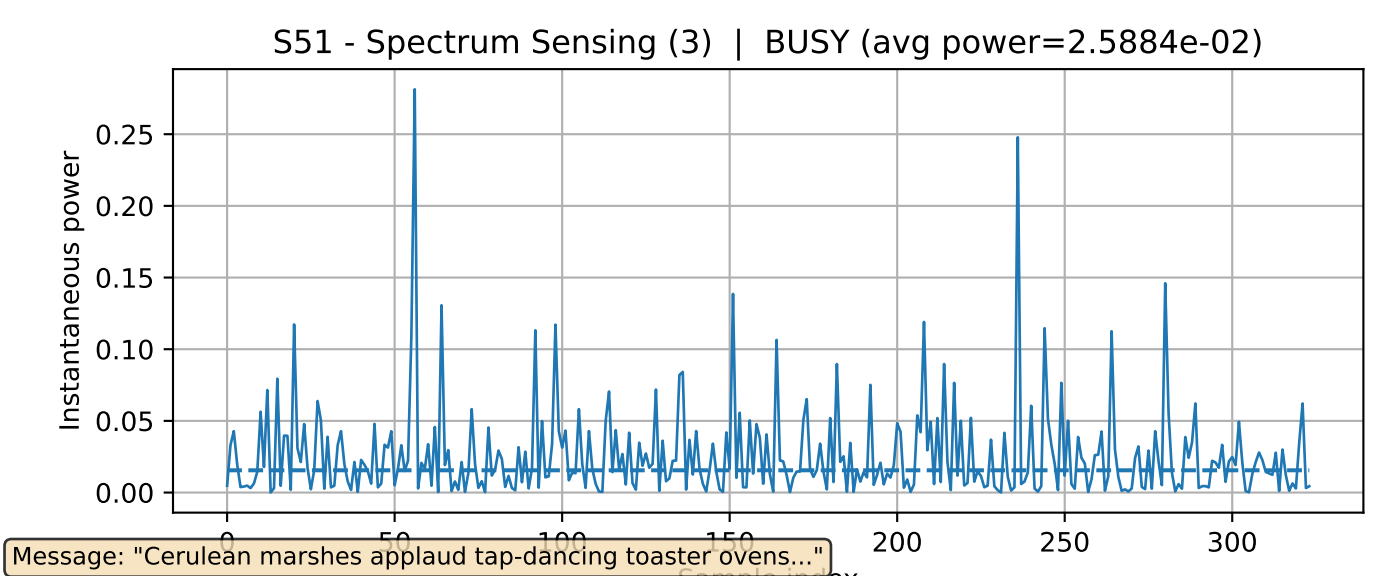

S51 - Constellation Diagram (2)
Q
1.0
0.5
0.0
−0.5
−1.0
−1.0
−0.5
0.0
0.5
1.0
Message: "Cerulean marshes applaud tap-dancing toaster ovens..."
M: 64
Subcarriers: 32
CP Length: 4

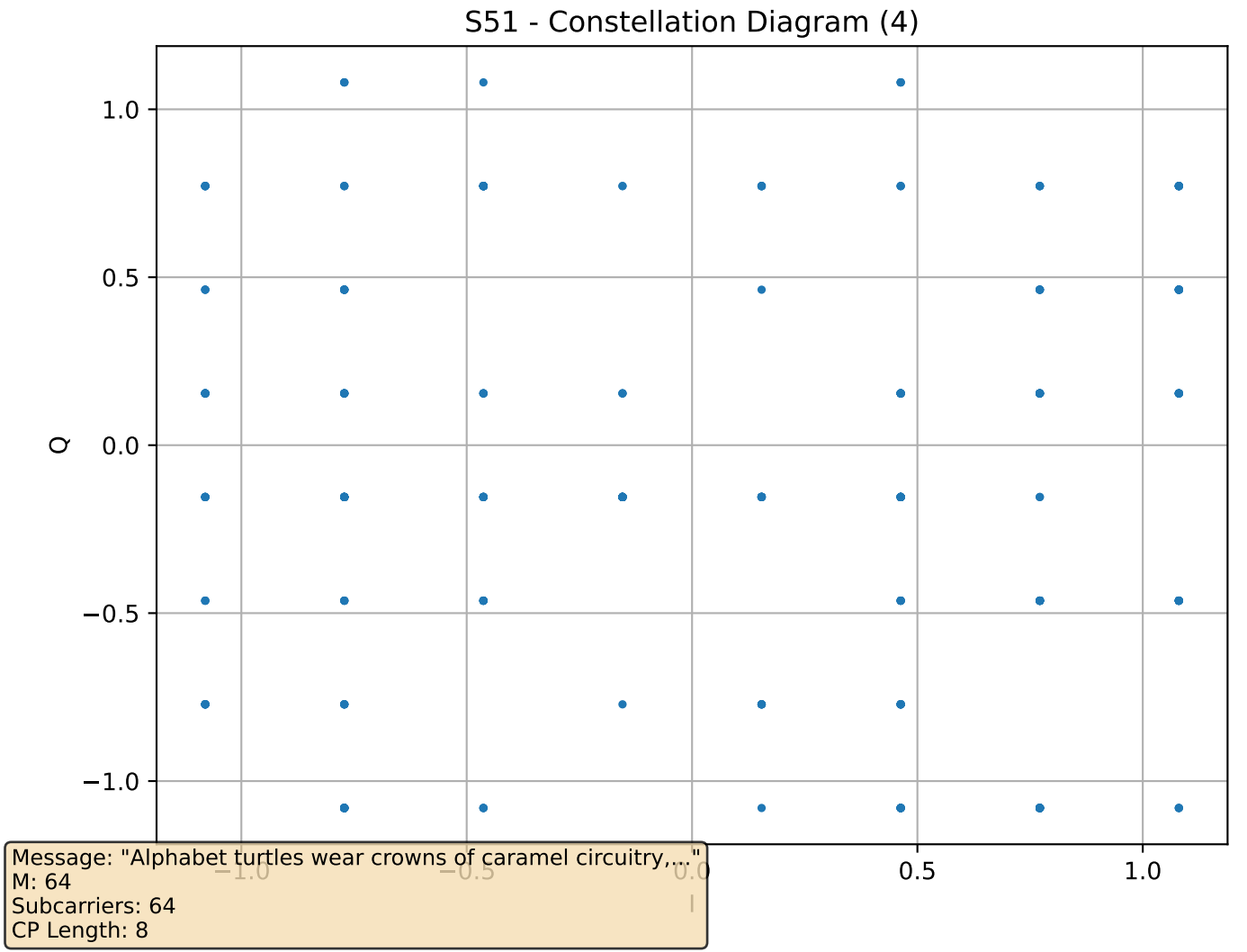

S51 - OFDM I/Q Signal (2)
I
Q
0.4
0.2
0.0
−0.2
−0.4
0
50
100
150
200
250
300
Message: "Cerulean marshes applaud tap-dancing toaster ovens..."
M: 64
Subcarriers: 32
CP Length: 4

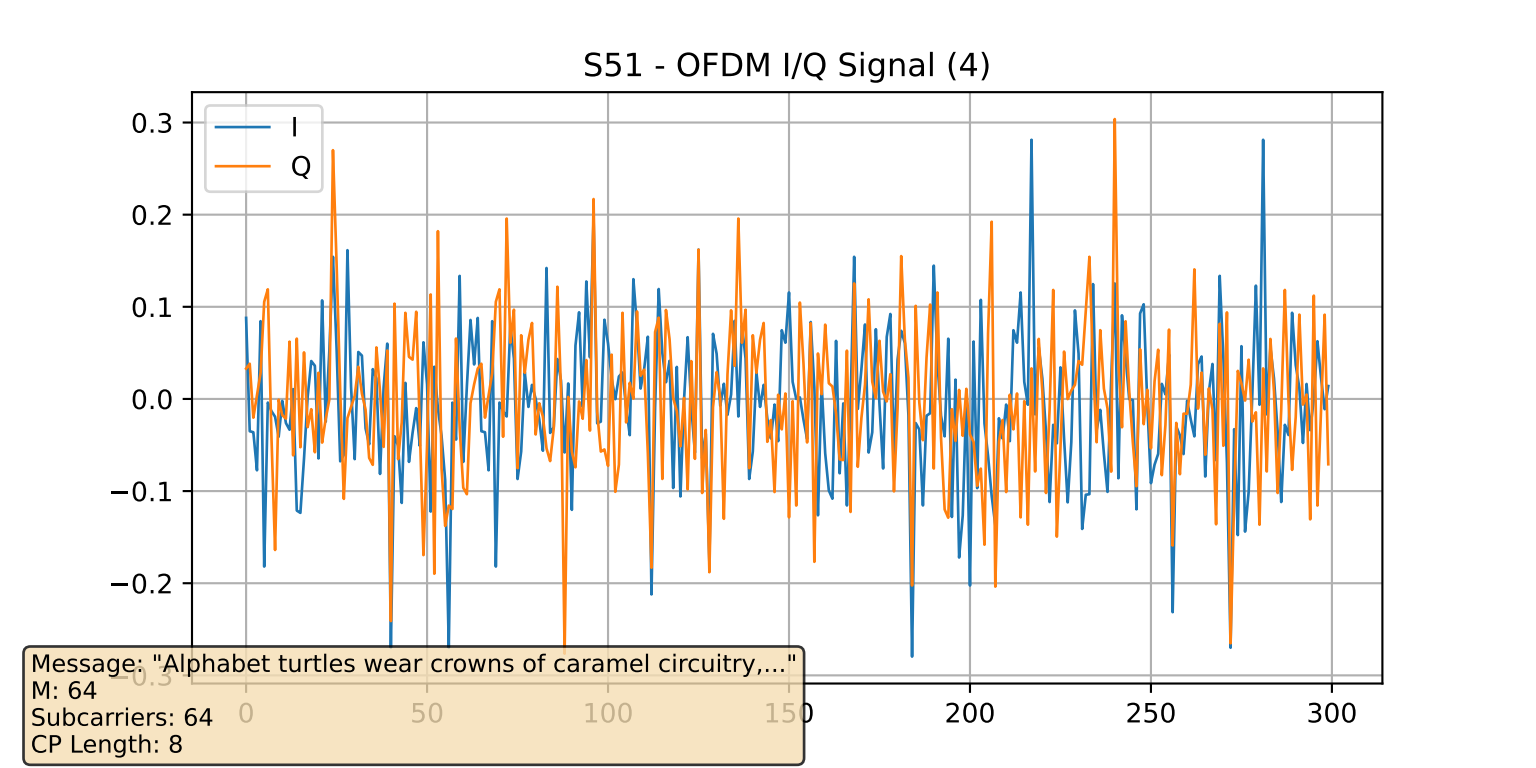

S51 - Spectrum Sensing (2) | BUSY (avg power=2.5884e-02)
Instantaneous power
0.25
0.20
0.15
0.10
0.05
0.00
0
50
100
150
200
250
300
Message: "Cerulean marshes applaud tap-dancing toaster ovens..."

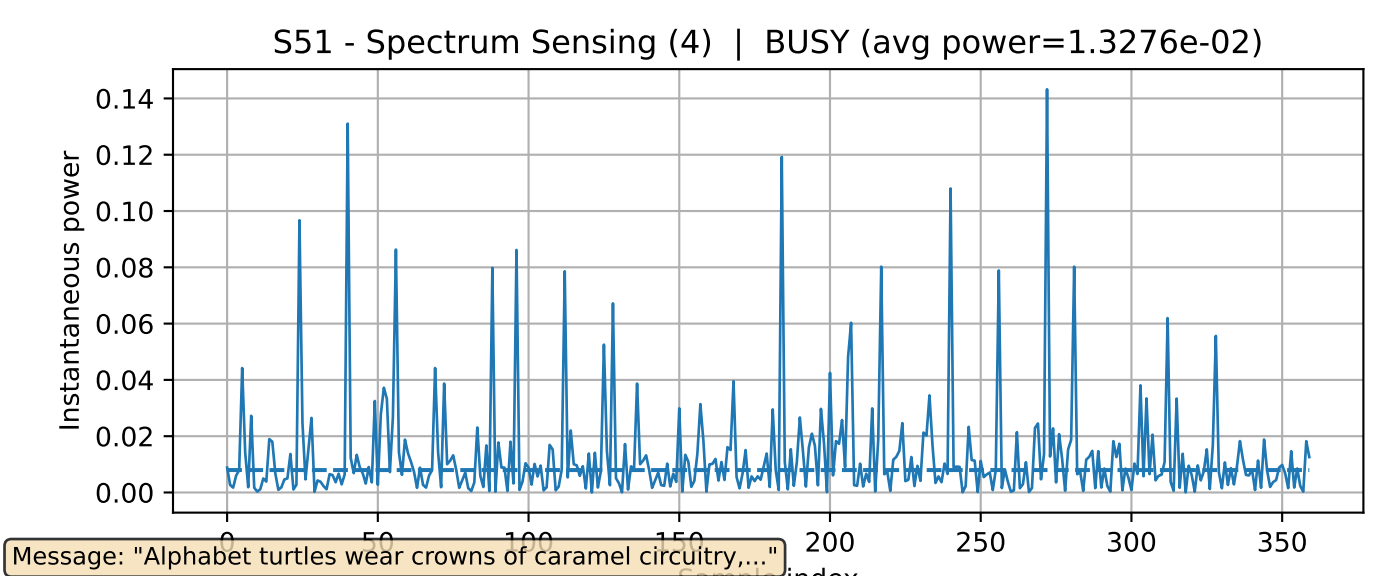

S51 - Constellation Diagram (3)
Q
1.0
0.5
0.0
−0.5
−1.0
−1.0
−0.5
0.0
0.5
1.0
Message: "Cerulean marshes applaud tap-dancing toaster ovens..."
M: 64
Subcarriers: 32
CP Length: 4

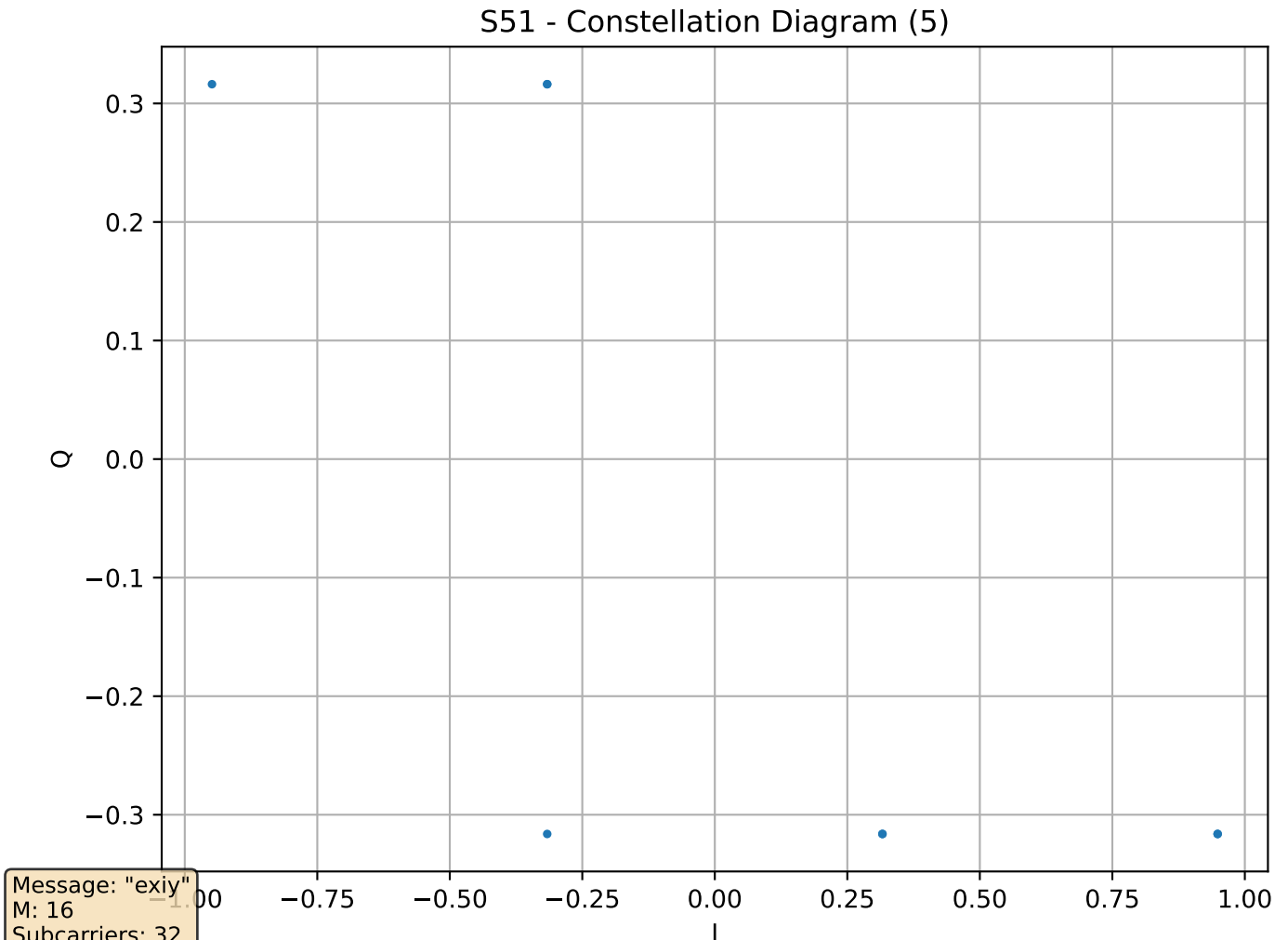

S51 - OFDM I/Q Signal (3)
I
Q
0.4
0.2
0.0
−0.2
−0.4
0
50
100
150
200
250
300
Message: "Cerulean marshes applaud tap-dancing toaster ovens..."
M: 64
Subcarriers: 32
CP Length: 4

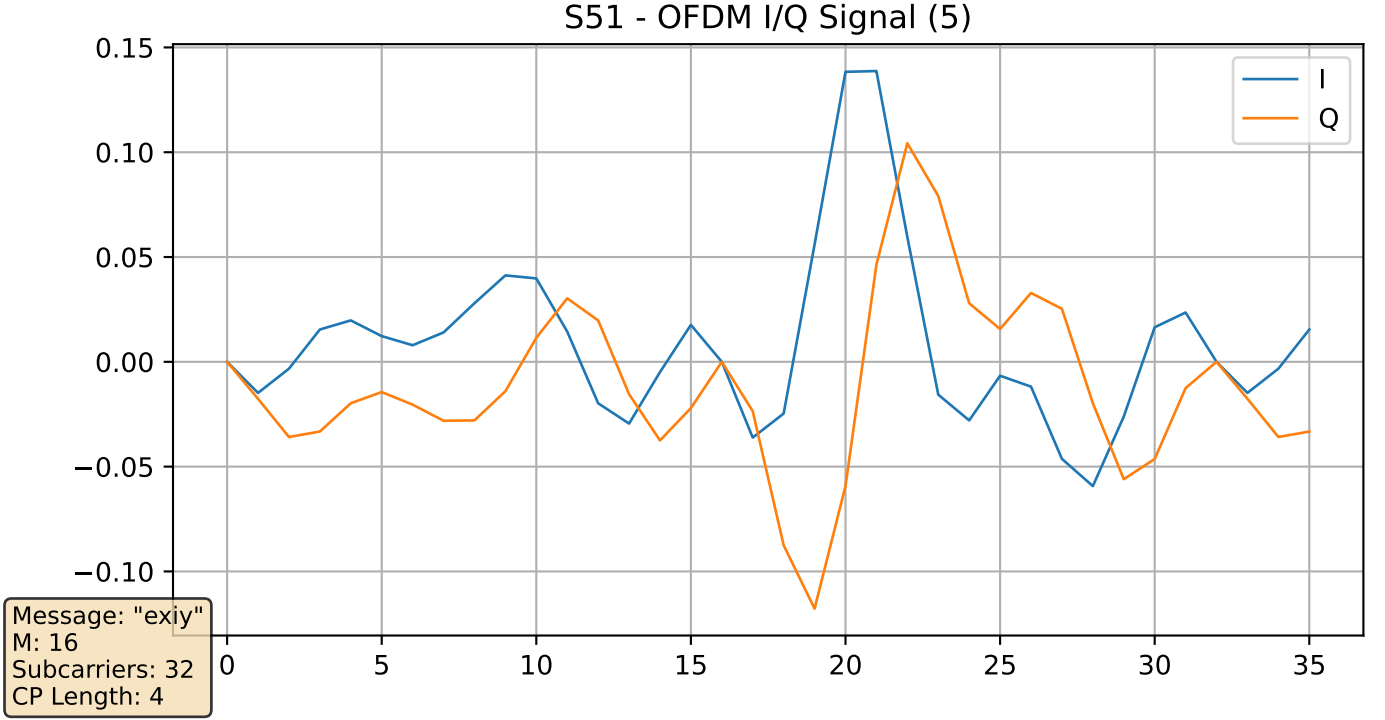

S51 - Spectrum Sensing (3) | BUSY (avg power=2.5884e-02)
Instantaneous power
0.25
0.20
0.15
0.10
0.05
0.00
0
50
100
150
200
250
300
Message: "Cerulean marshes applaud tap-dancing toaster ovens..."

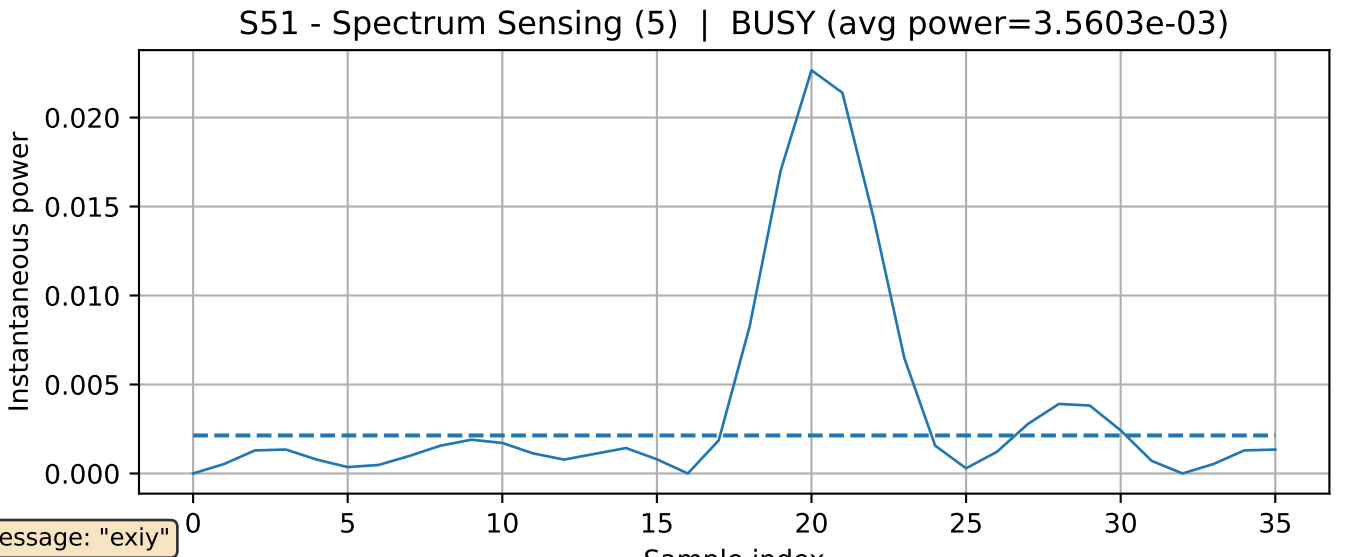

S51 - Constellation Diagram (4)
Q
1.0
0.5
0.0
−0.5
−1.0
−1.0
−0.5
0.0
0.5
1.0
Message: "Alphabet turtles wear crowns of caramel circuitry,..."
M: 64
Subcarriers: 64
CP Length: 8


S51 - OFDM I/Q Signal (4)
I
Q
0.3
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
50
100
150
200
250
300
Message: "Alphabet turtles wear crowns of caramel circuitry,..."
M: 64
Subcarriers: 64
CP Length: 8

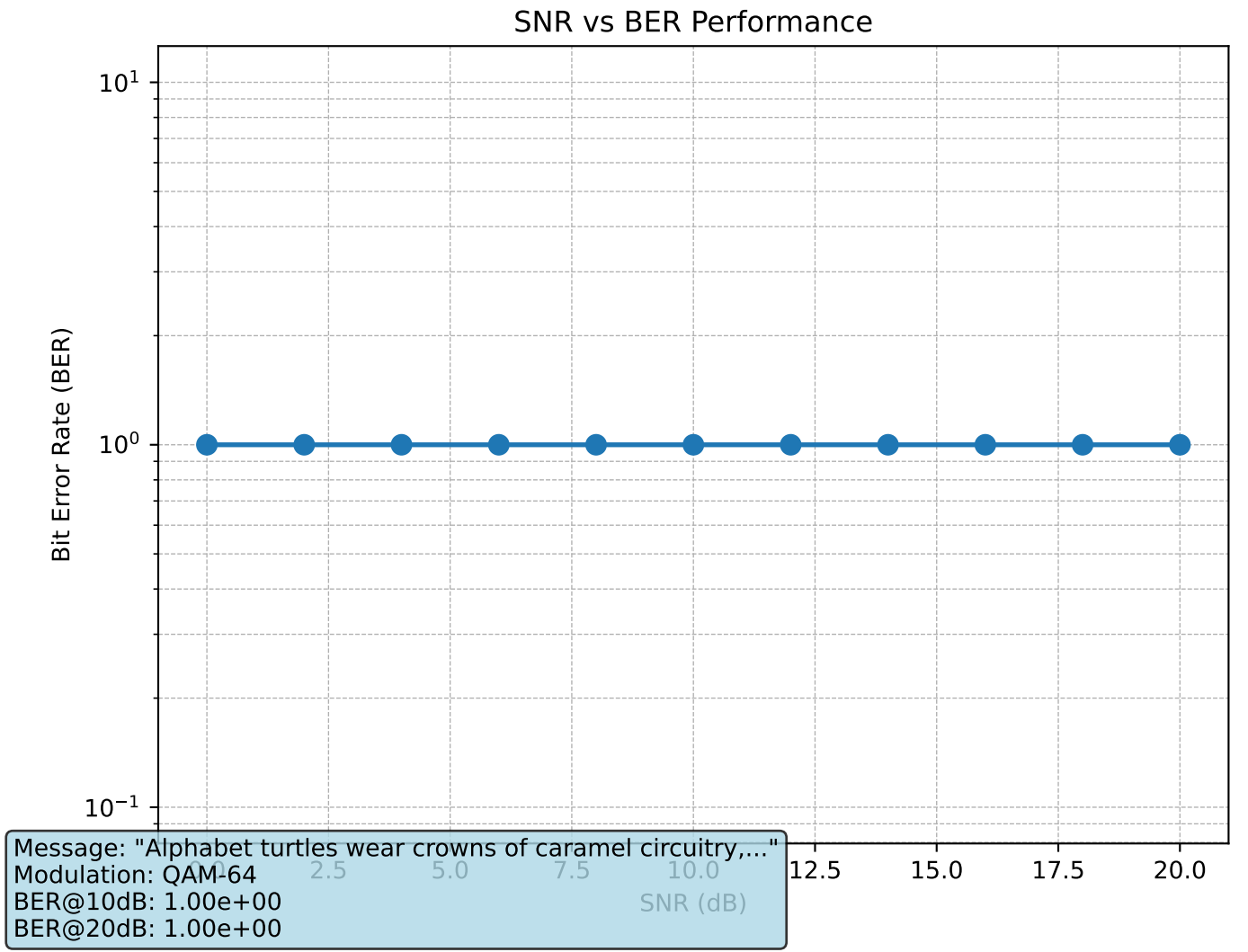

S51 - Spectrum Sensing (4) | BUSY (avg power=1.3276e-02)
Instantaneous power
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
0
50
100
150
200
250
300
350
Message: "Alphabet turtles wear crowns of caramel circuitry,..."


S51 - Constellation Diagram (5)
0.3
0.2
0.1
0.0
−0.1
−0.2
−0.3
Q
−0.75
−0.50
−0.25
0.00
0.25
0.50
0.75
1.00
I
Message: "exiy"
M: 16
Subcarriers: 32
CP Length: 4


S51 - OFDM I/Q Signal (5)
0.15
0.10
0.05
0.00
−0.05
−0.10
0
5
10
15
20
25
30
35
I
Q
Message: "exiy"
M: 16
Subcarriers: 32
CP Length: 4



Message: "exiy"


SNR vs BER Performance
Bit Error Rate (BER)
10^{1}
10^{0}
10^{-1}
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
SNR (dB)
Message: "Alphabet turtles wear crowns of caramel circuitry,..."
Modulation: QAM-64
BER@10dB: 1.00e+00
BER@20dB: 1.00e+00