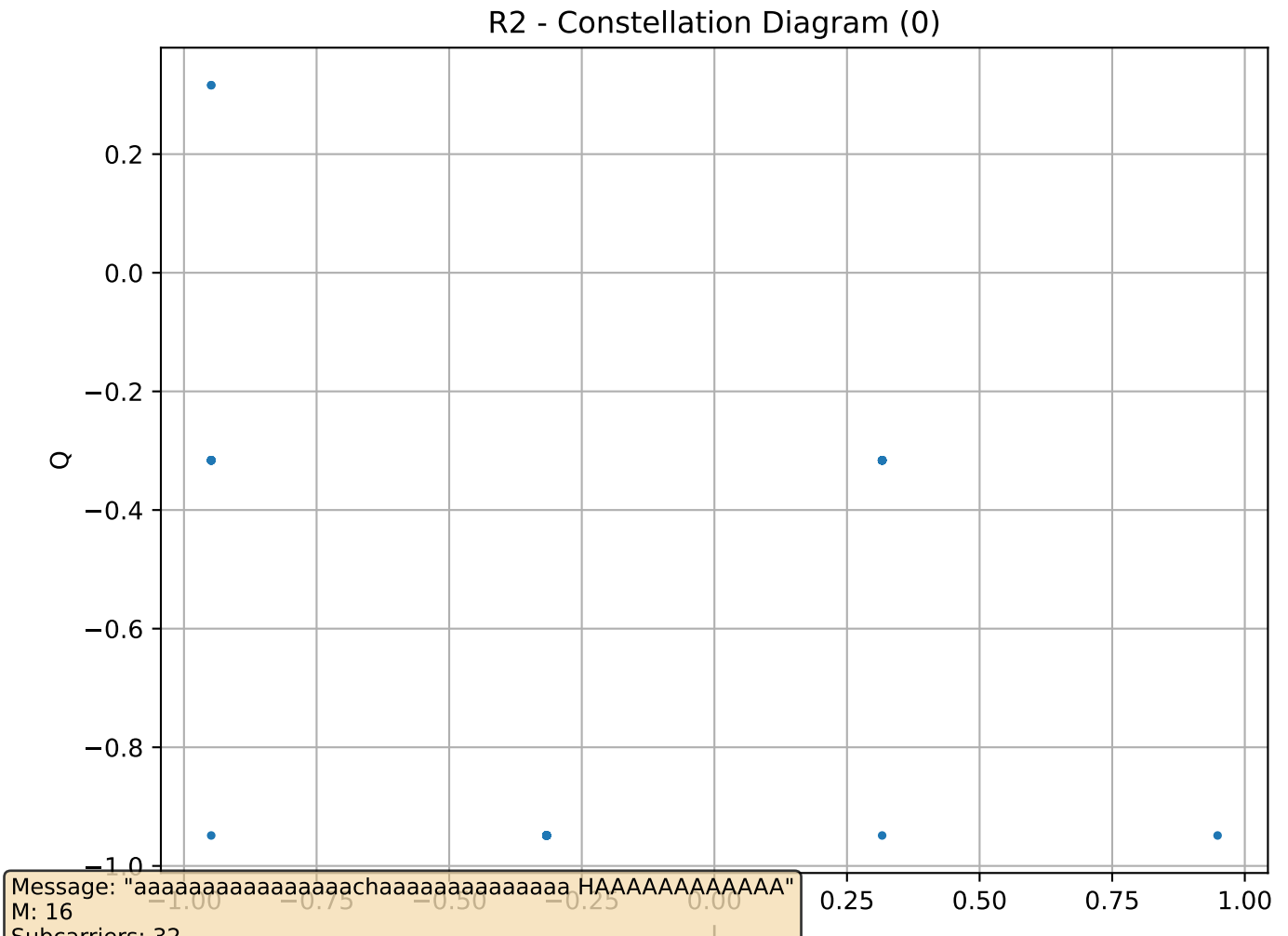
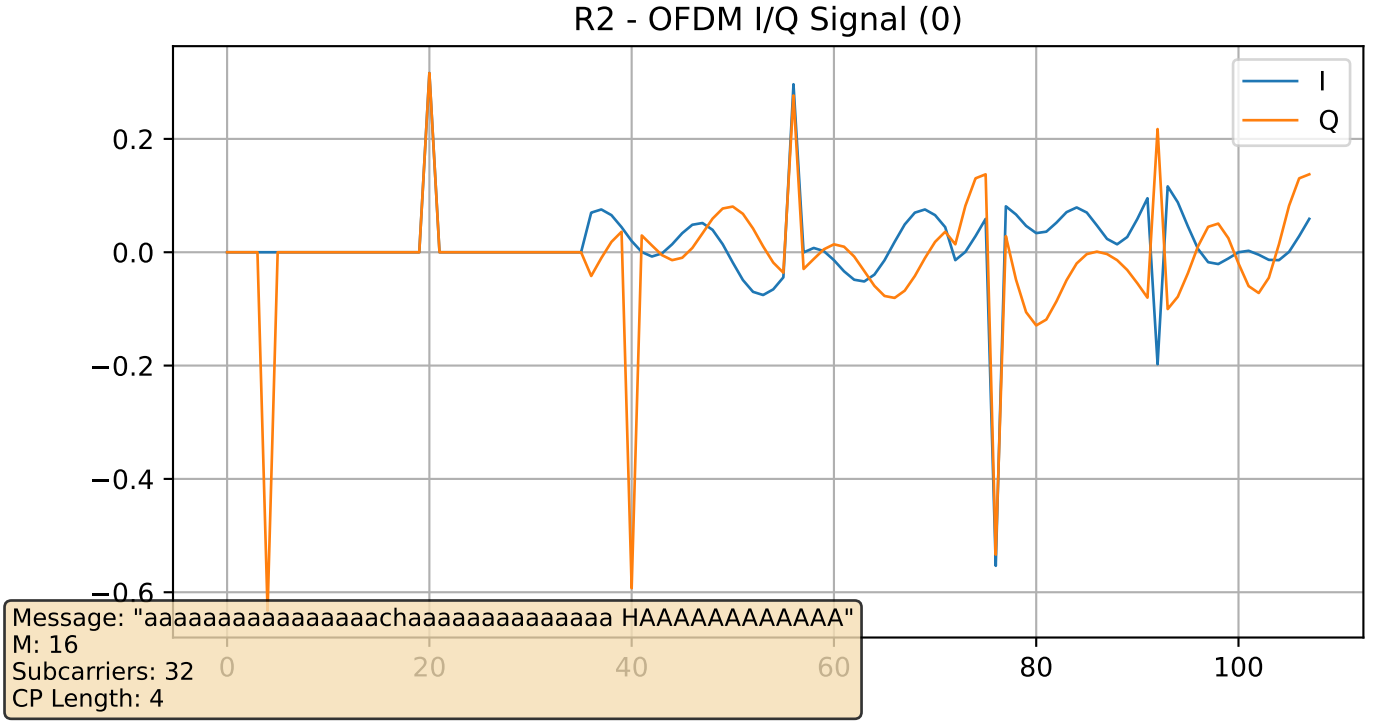
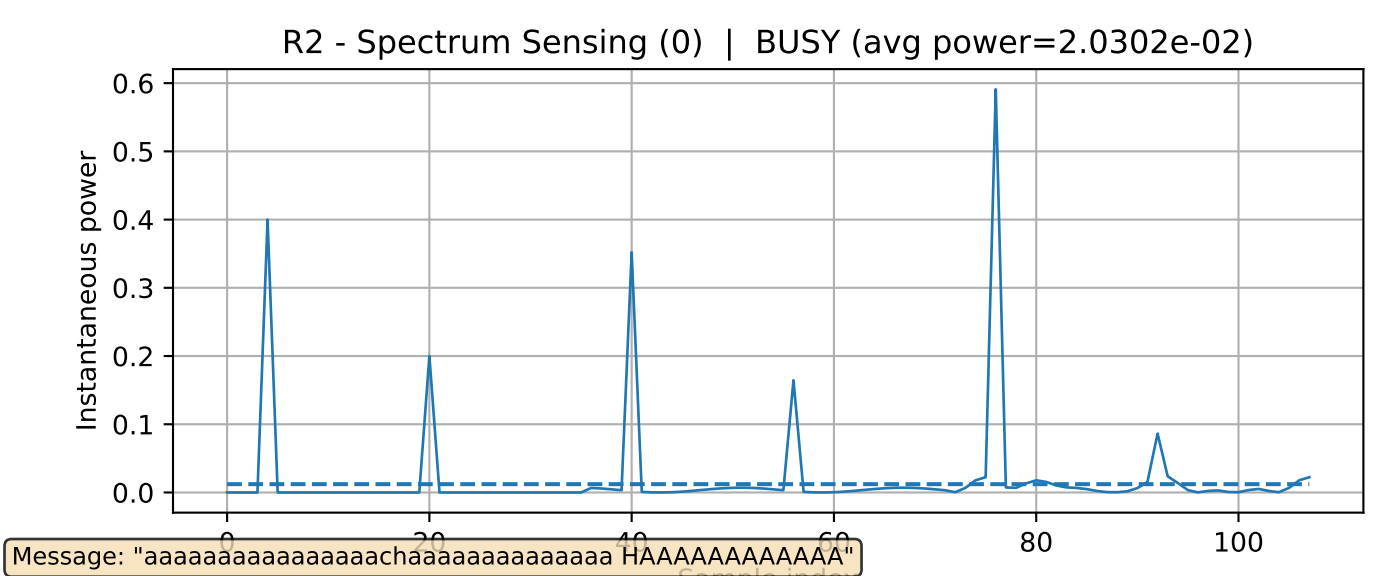
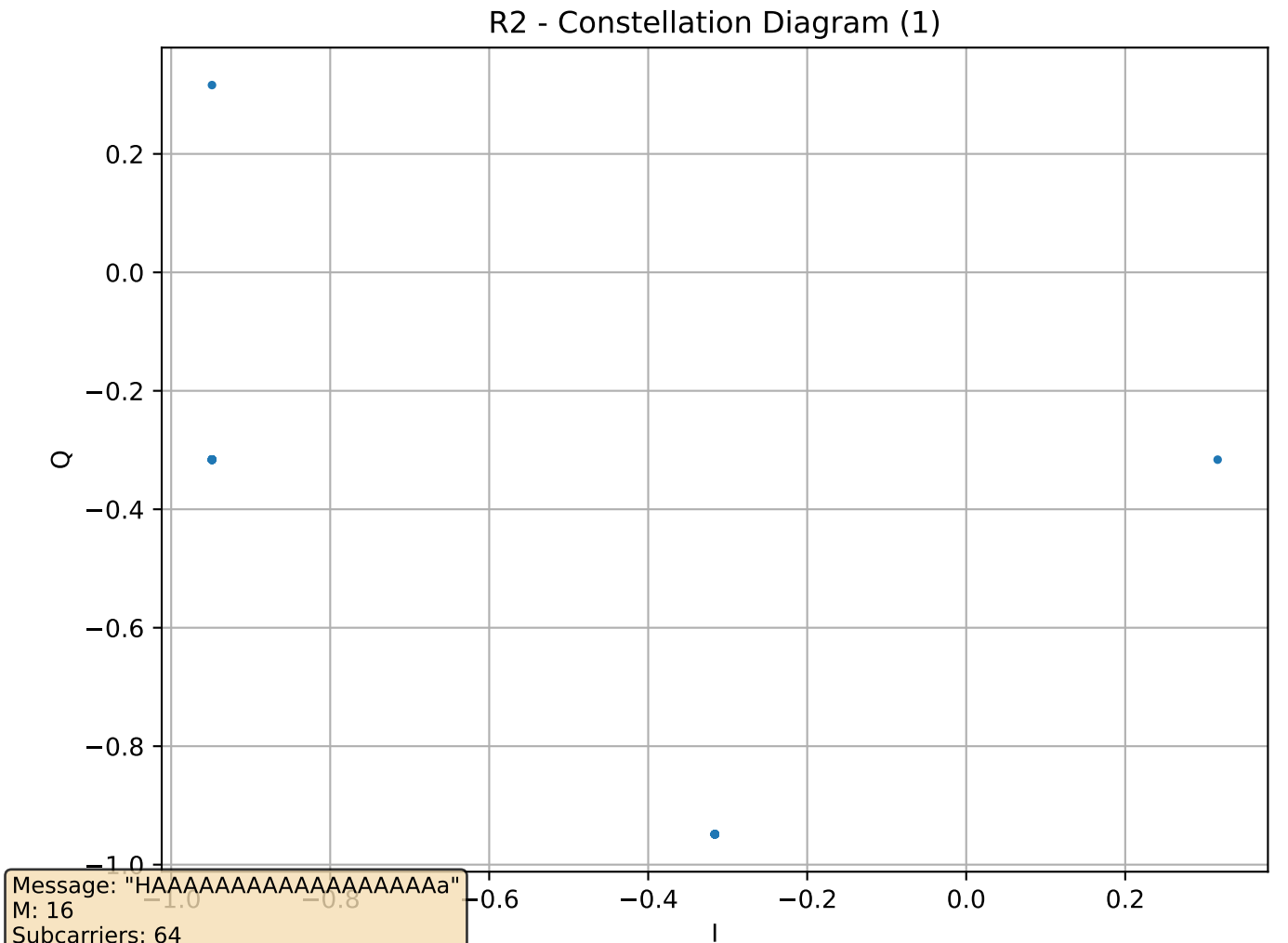
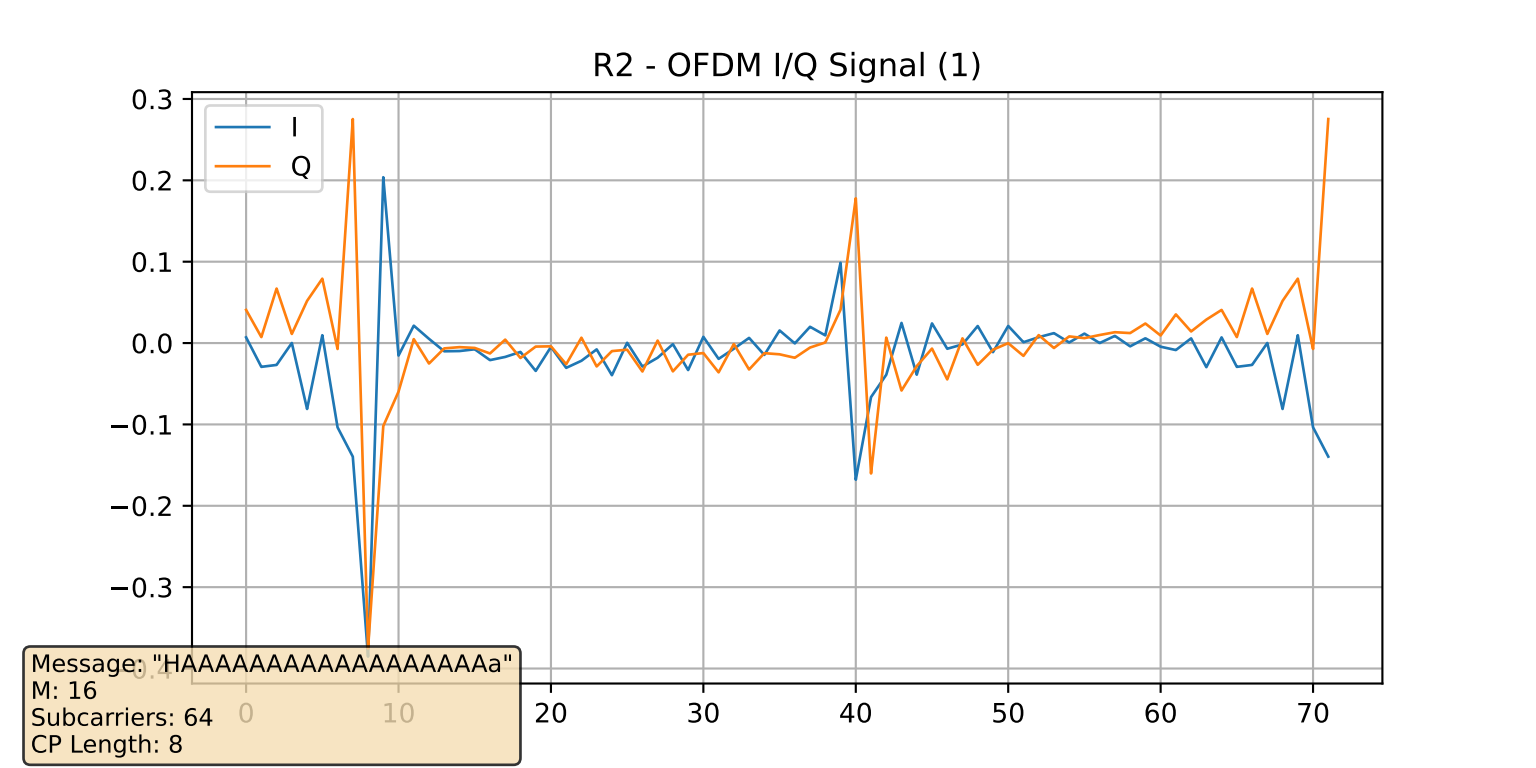
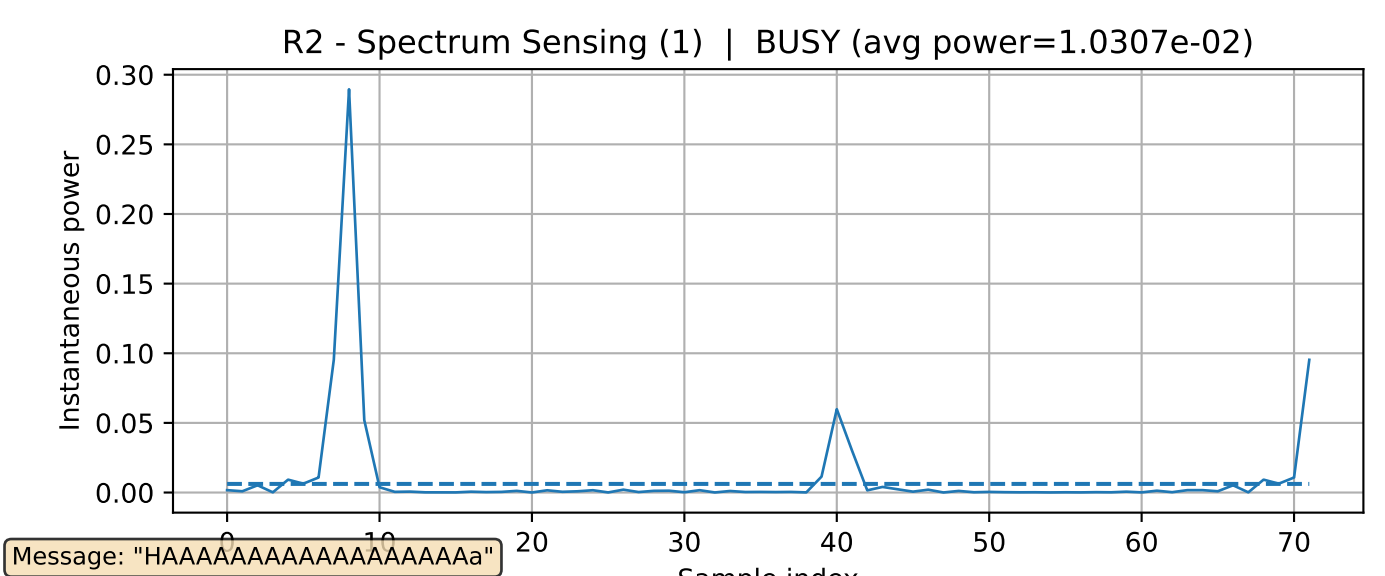

R2 - Constellation Diagram (0)
Q
0.2
0.0
−0.2
−0.4
−0.6
−0.8
−1.0
−1.00
−0.75
−0.50
−0.25
0.00
0.25
0.50
0.75
1.00
Message: "aaaaaaaaaaaaaaaachaaaaaaaaaaaaaa HAAAAAAAAAAA"
M: 16
Subcarriers: 32
CP Length: 4

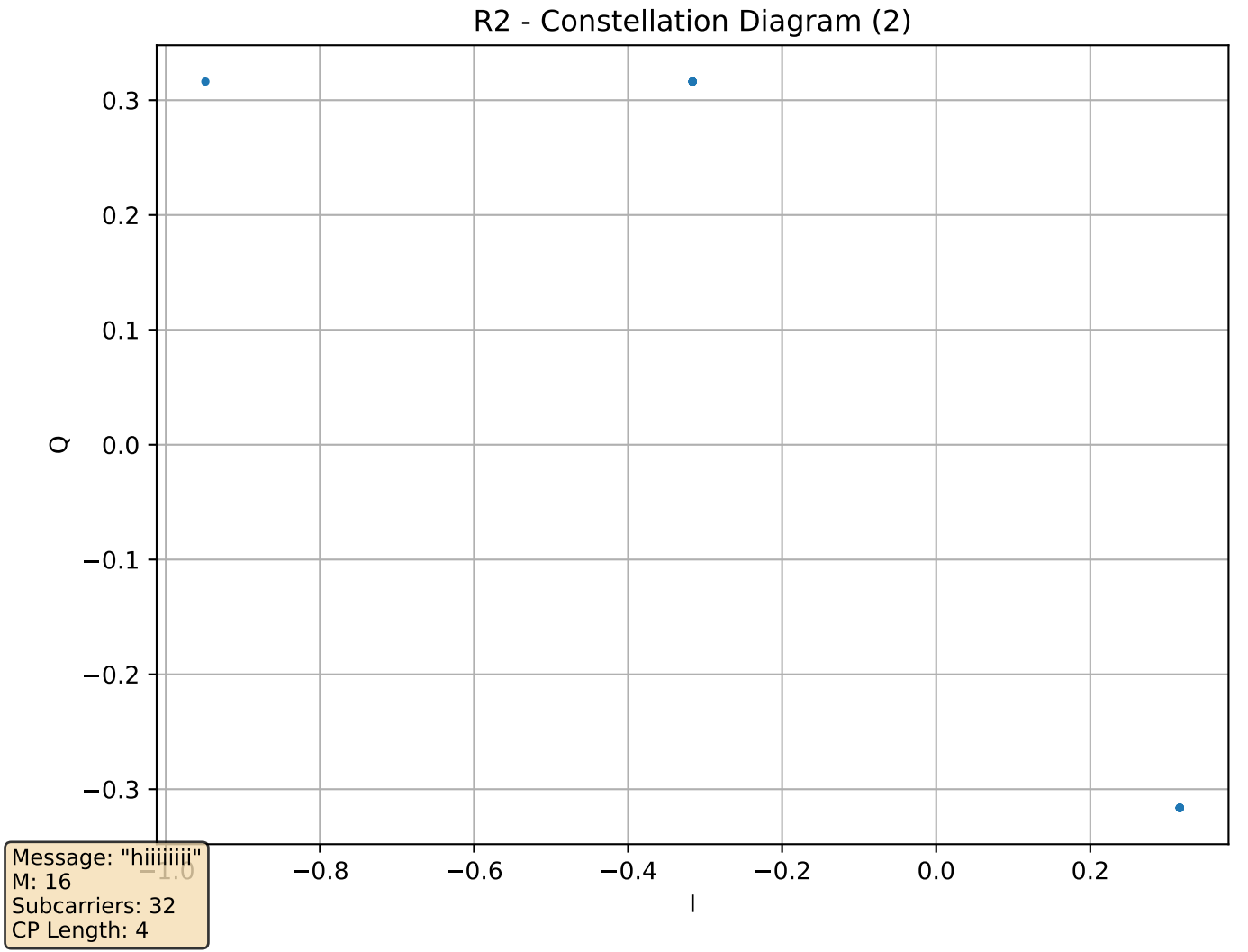

R2 - OFDM I/Q Signal (0)
I
Q
0.2
0.0
−0.2
−0.4
−0.6
0
20
40
60
80
100
Message: "aaaaaaaaaaaaaaaachaaaaaaaaaaaaaa HAAAAAAAAAAAA"
M: 16
Subcarriers: 32
CP Length: 4

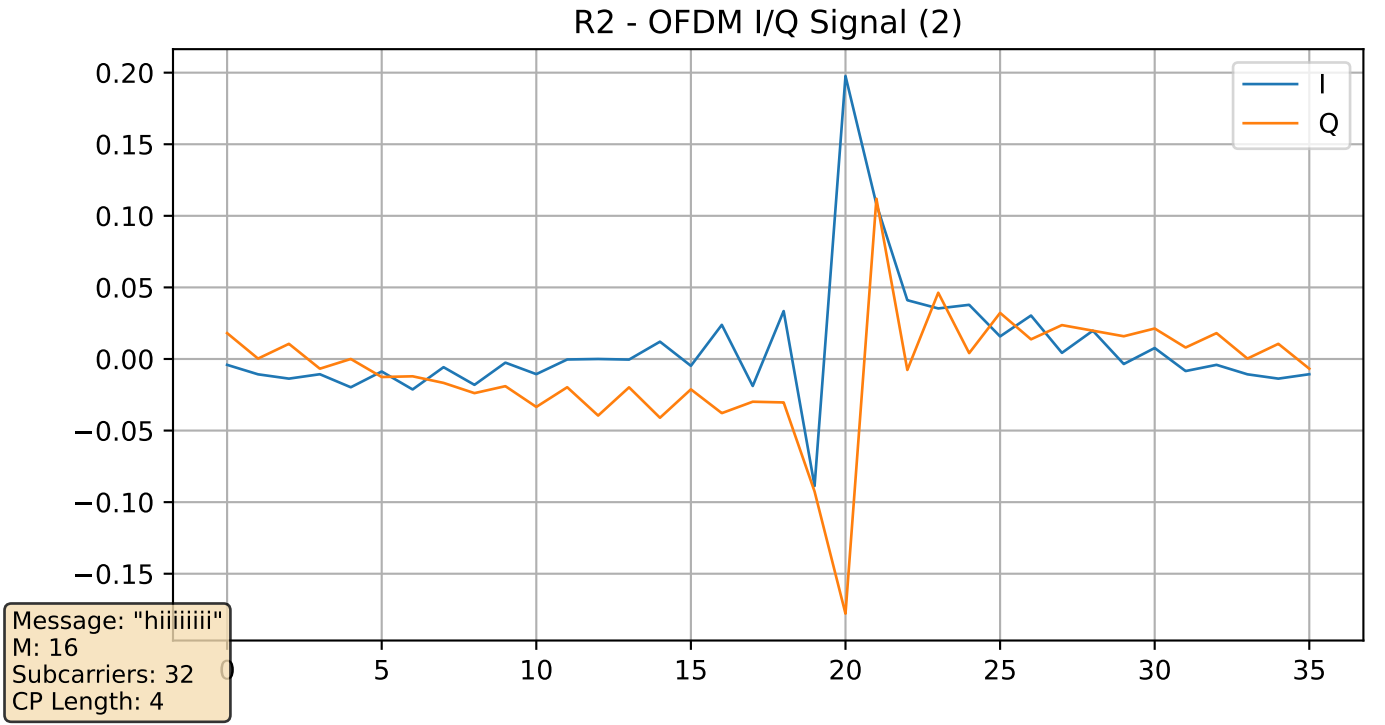

R2 - Spectrum Sensing (0) | BUSY (avg power=2.0302e-02)
Instantaneous power
0.6
0.5
0.4
0.3
0.2
0.1
0.0
0
20
40
60
80
100
Message: "aaaaaaaaaaaaaaaachaaaaaaaaaaaaaa HAAAAAAAAAAAA"

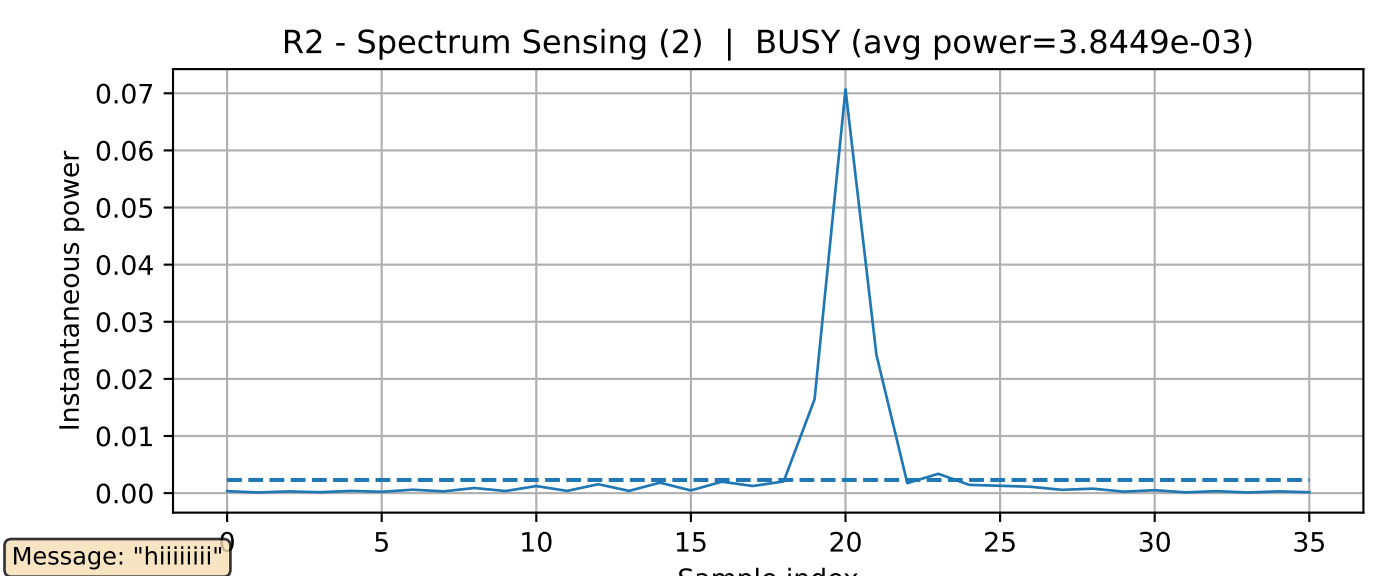

R2 - Constellation Diagram (1)
0.2
0.0
−0.2
−0.4
−0.6
−0.8
−1.0
Q
−1.0
−0.8
−0.6
−0.4
−0.2
0.0
0.2
I
Message: "HAAAAAAAAAAAAAAAAAa"
M: 16
Subcarriers: 64
CP Length: 8

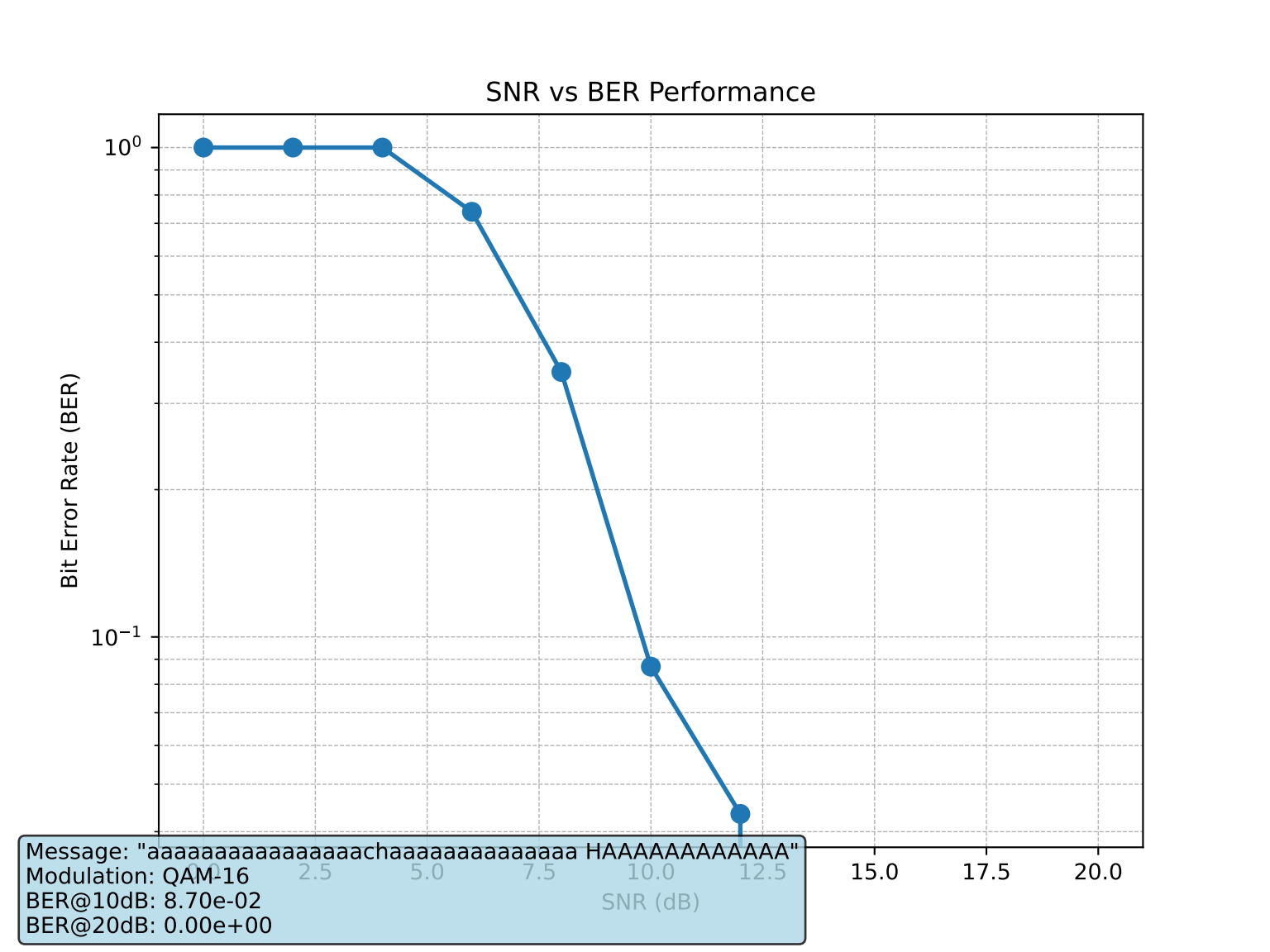

R2 - OFDM I/Q Signal (1)
I
Q
0.3
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
10
20
30
40
50
60
70
Message: "HAAAAAAAAAAAAAAAAAa"
M: 16
Subcarriers: 64
CP Length: 8


R2 - Spectrum Sensing (1) | BUSY (avg power=1.0307e-02)
Instantaneous power
0.30
0.25
0.20
0.15
0.10
0.05
0.00
0
10
20
30
40
50
60
70
Sample index
Message: "HAAAAAAAAAAAAAAAAAa"


R2 - Constellation Diagram (2)
0.3
0.2
0.1
0.0
−0.1
−0.2
−0.3
Q
−1.0
−0.8
−0.6
−0.4
−0.2
0.0
0.2
I
Message: "hiiiiiiii"
M: 16
Subcarriers: 32
CP Length: 4


R2 - OFDM I/Q Signal (2)
I
Q
0.20
0.15
0.10
0.05
0.00
−0.05
−0.10
−0.15
0
5
10
15
20
25
30
35
Message: "hiiiiiiii"
M: 16
Subcarriers: 32
CP Length: 4


R2 - Spectrum Sensing (2) | BUSY (avg power=3.8449e-03)
Instantaneous power
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
0
5
10
15
20
25
30
35
Message: "hiiiiiiii"


SNR vs BER Performance
Bit Error Rate (BER)
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: "aaaaaaaaaaaaaaaachaaaaaaaaaaaaaa HAAAAAAAAAAAA"
Modulation: QAM-16
BER@10dB: 8.70e-02
BER@20dB: 0.00e+00