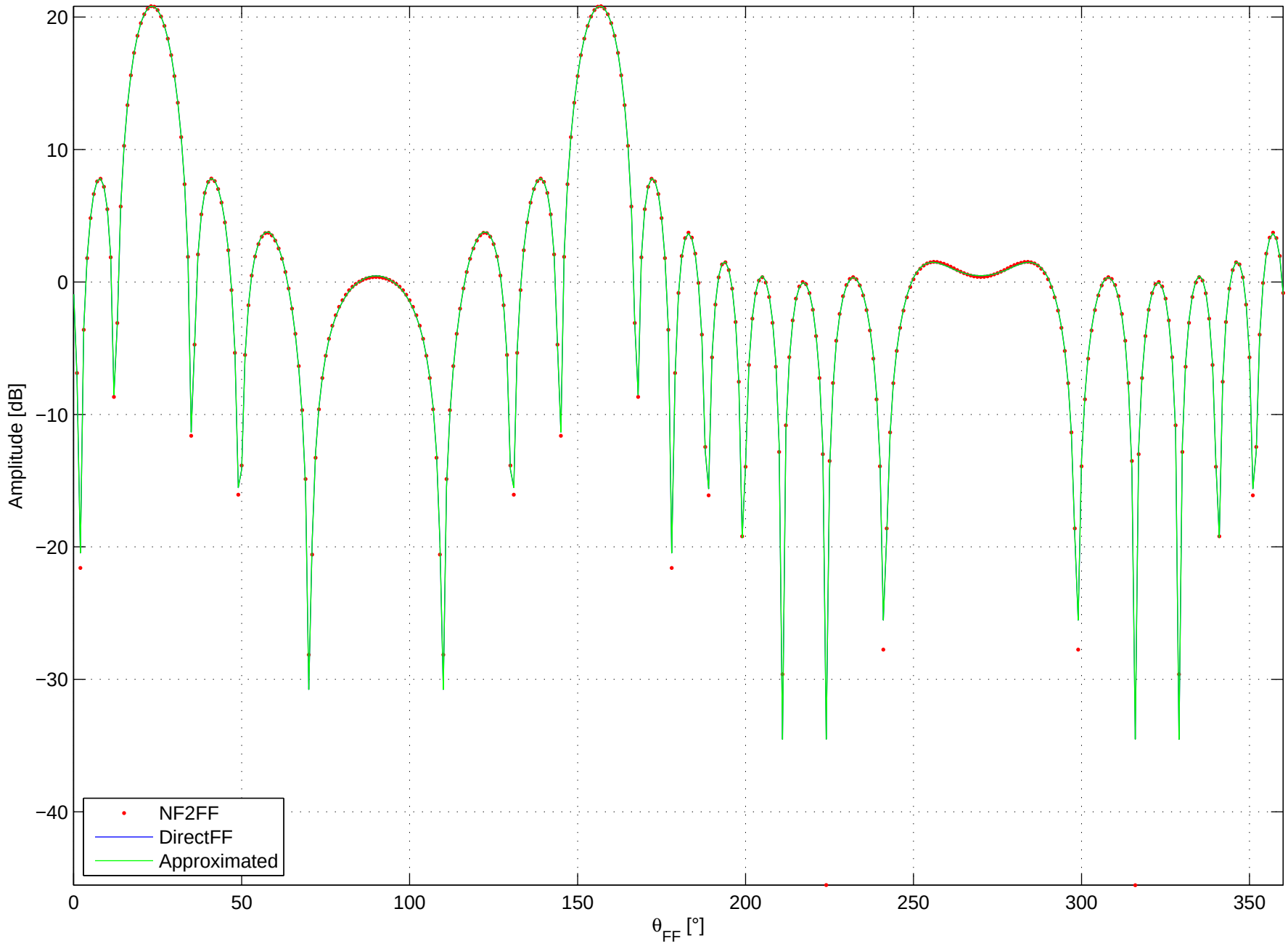
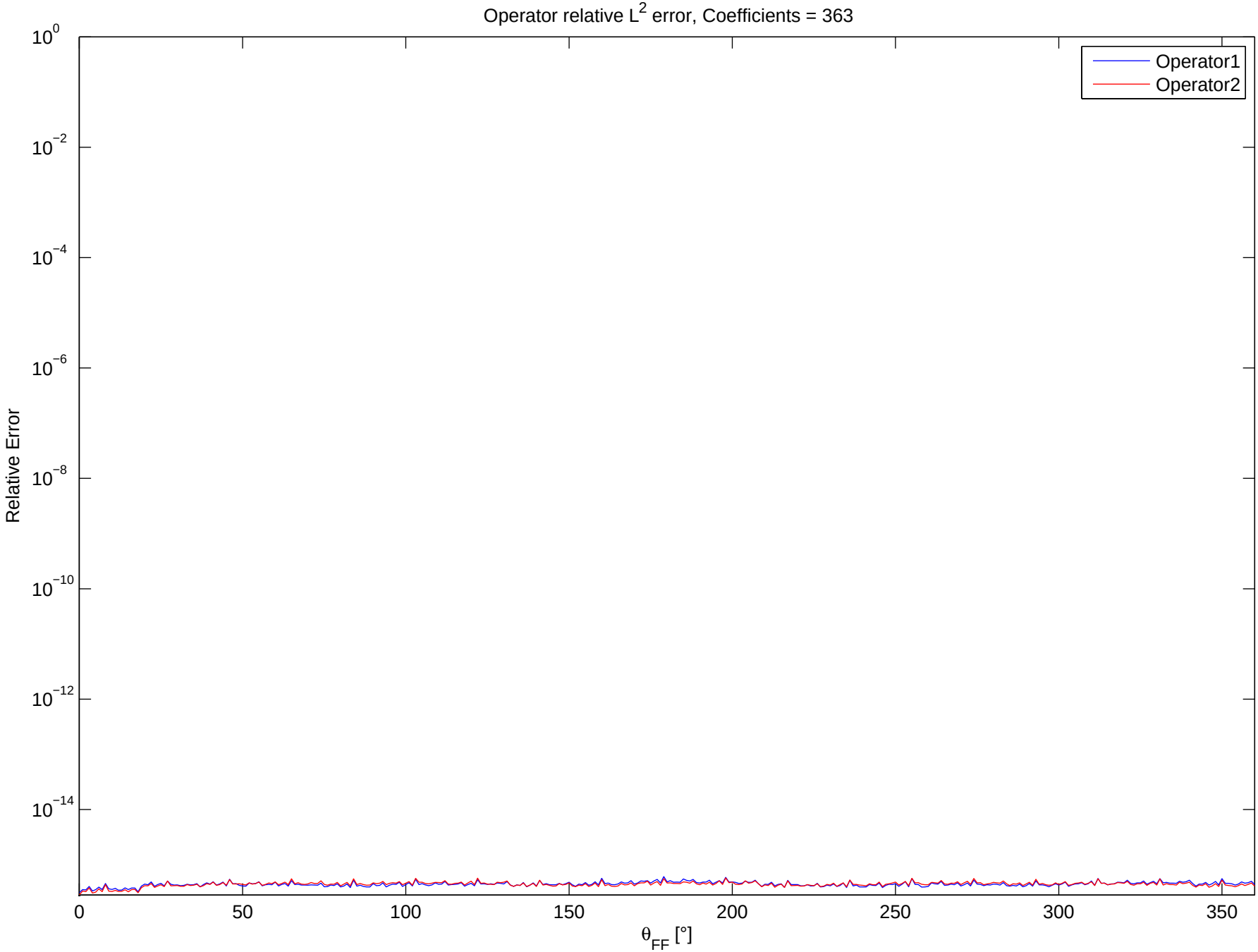
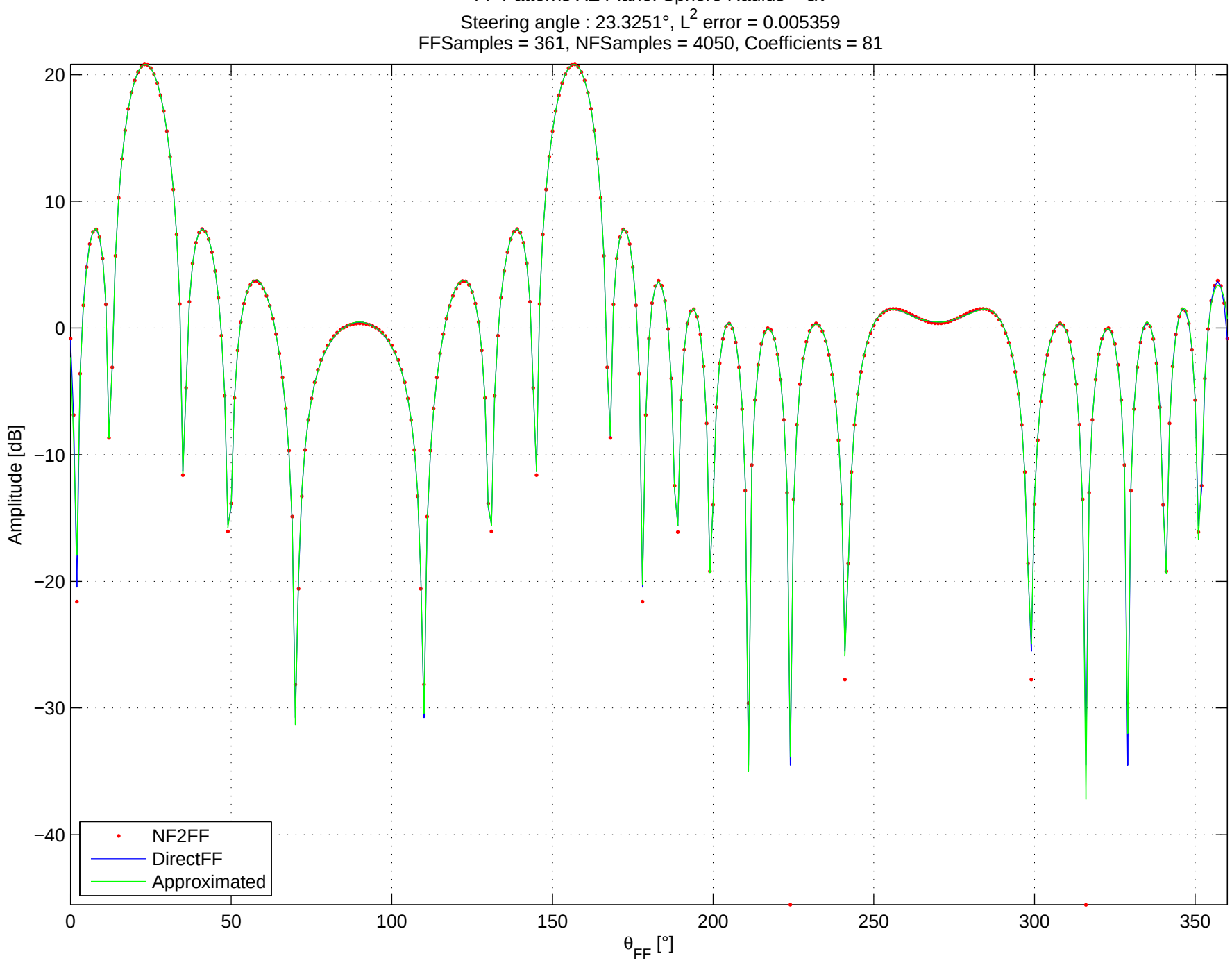
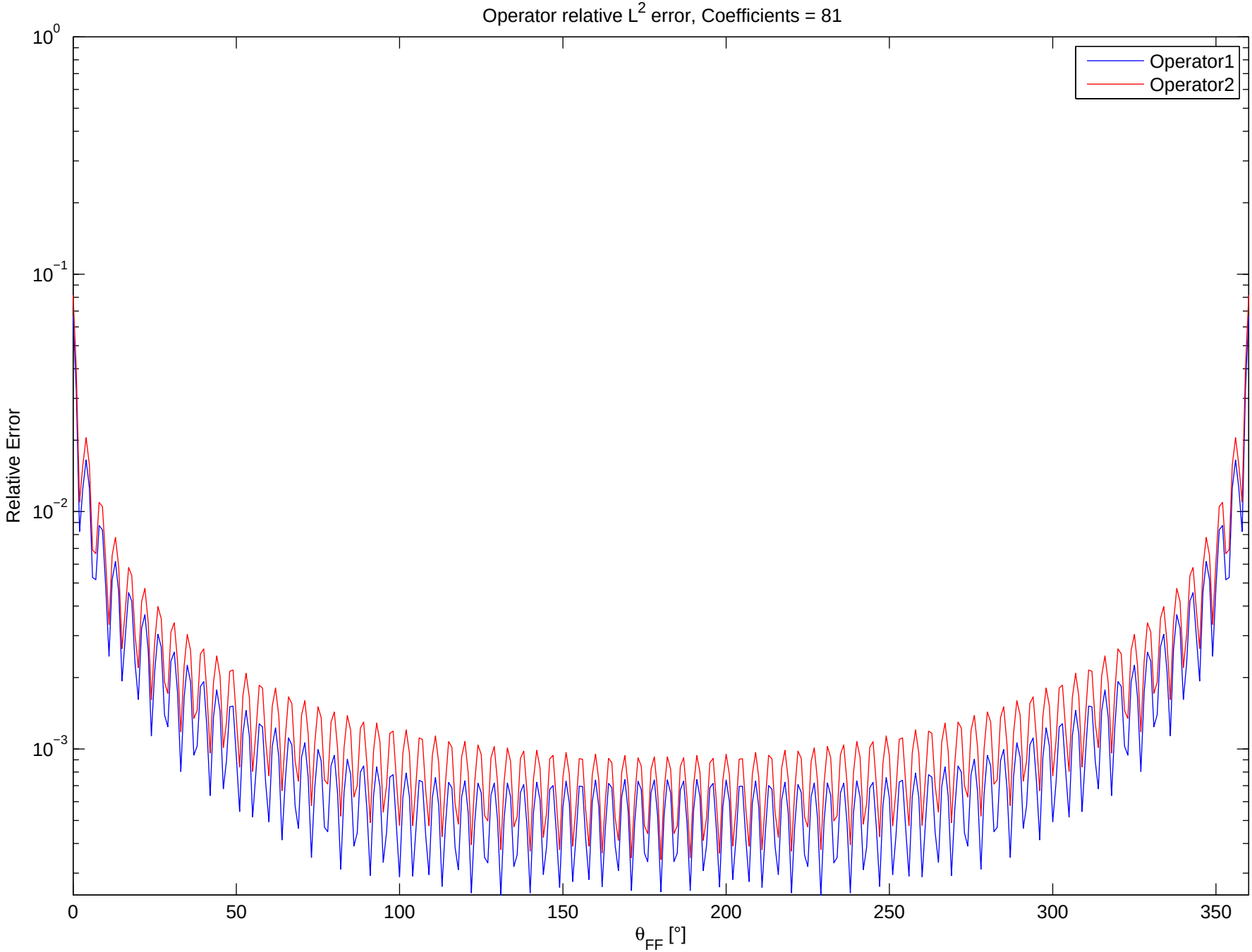
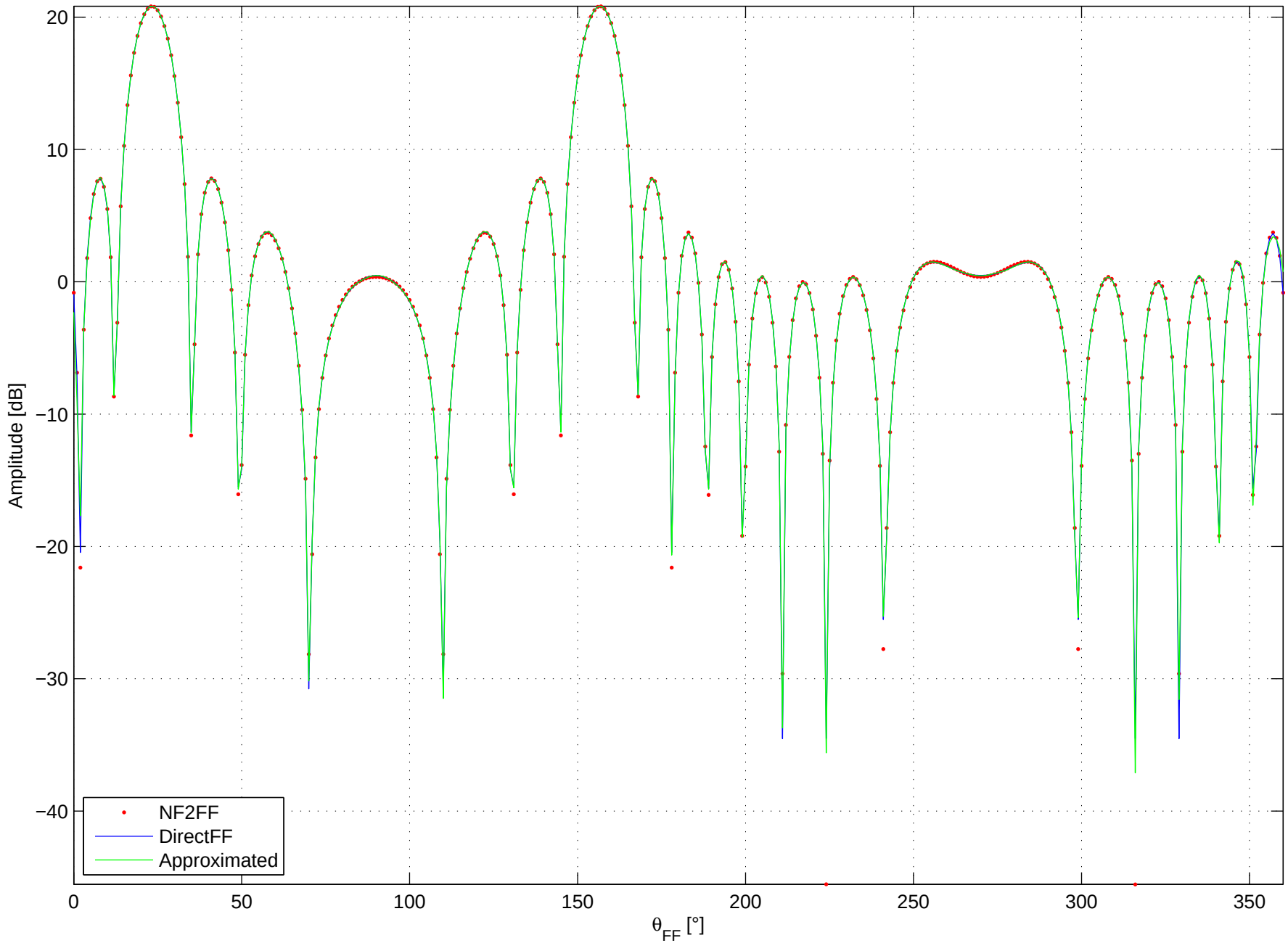
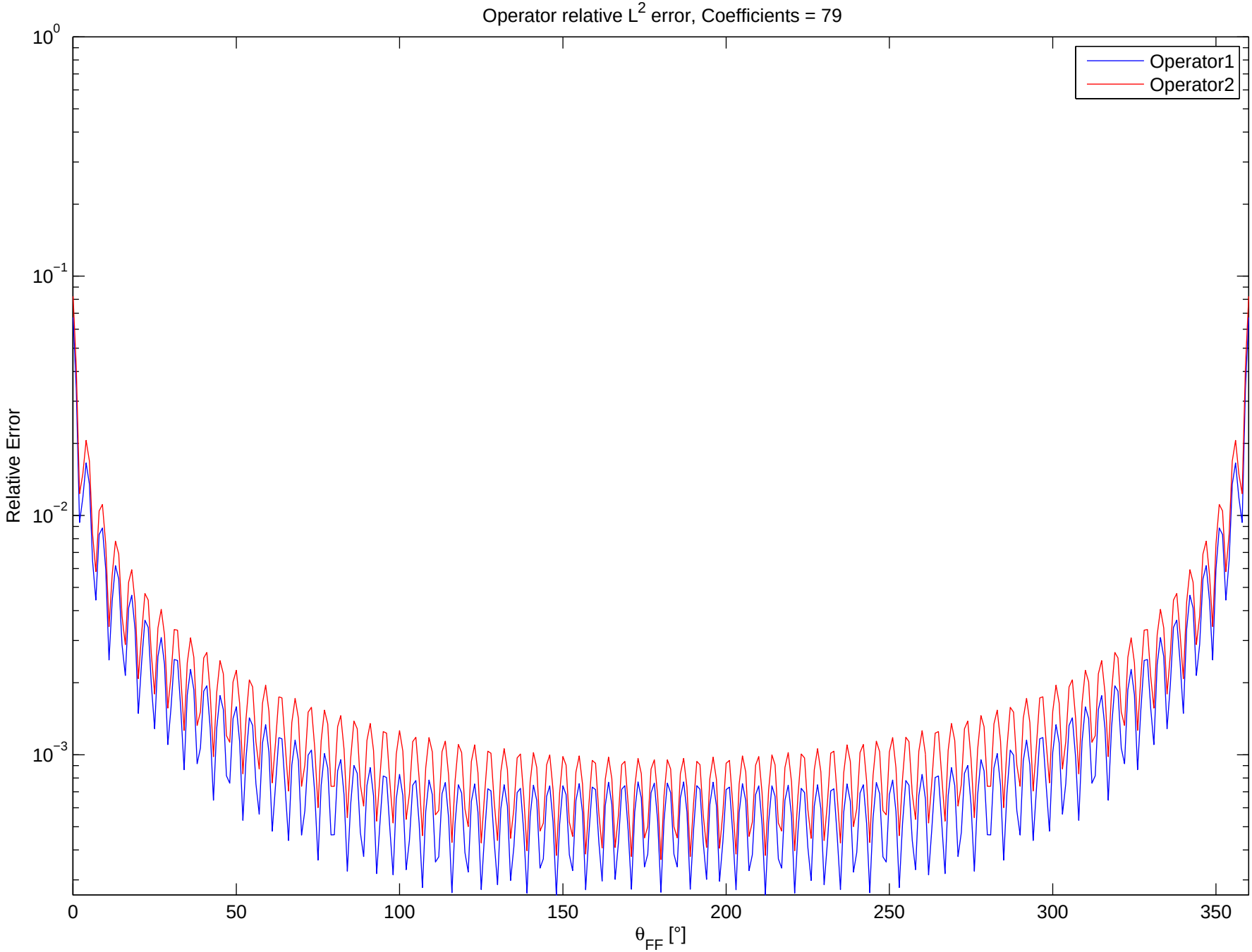

FF Patterns XZ Plane. Sphere Radius = 3λ
Steering angle : 23.3251°, L2 error = 1.1906e−015
FFSamples = 361, NFSamples = 4050, Coefficients = 363
Amplitude [dB]
θFF [°]
NF2FF
DirectFF
Approximated
20
10
0
−10
−20
−30
−40
0
50
100
150
200
250
300
350

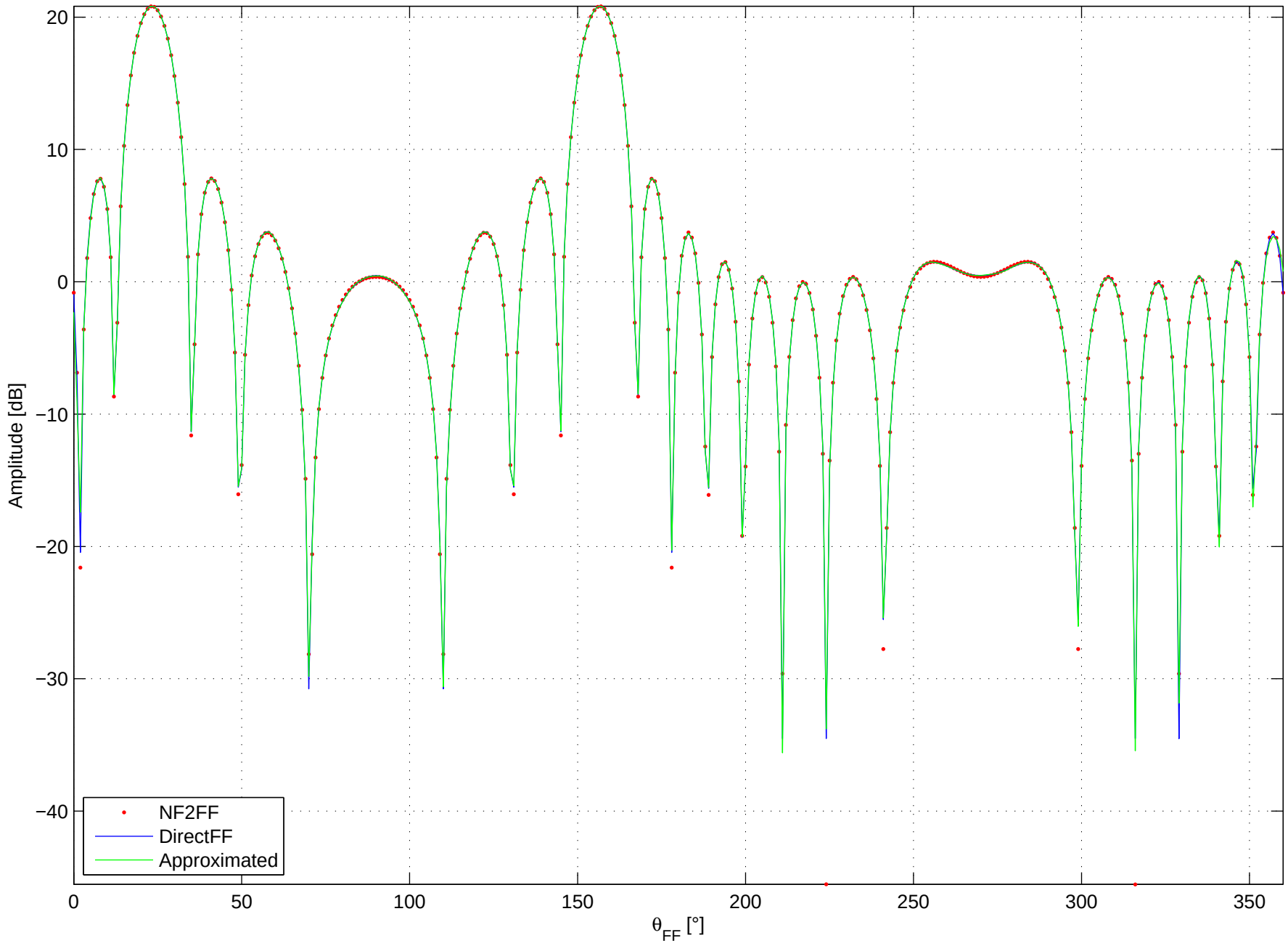

Operator relative L2 error, Coefficients = 363
Operator1
Operator2
Relative Error
10^0
10^−2
10^−4
10^−6
10^−8
10^−10
10^−12
10^−14
0
50
100
150
200
250
300
350
θFF [°]

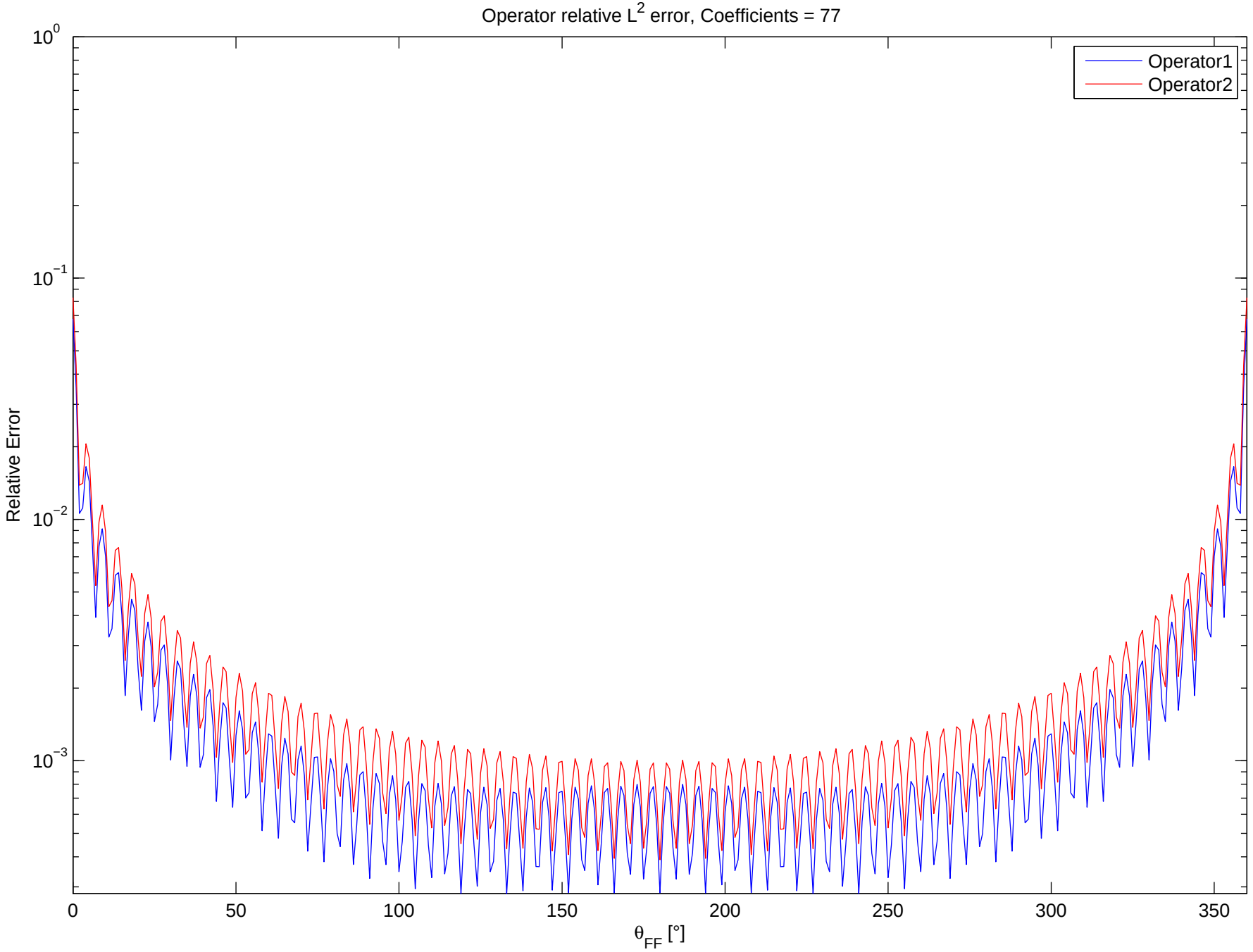

FF Patterns XZ Plane. Sphere Radius = 3λ
Steering angle : 23.3251°, L2 error = 0.005359
FFSamples = 361, NFSamples = 4050, Coefficients = 81
Amplitude [dB]
θFF [°]
NF2FF
DirectFF
Approximated
20
10
0
−10
−20
−30
−40
0
50
100
150
200
250
300
350

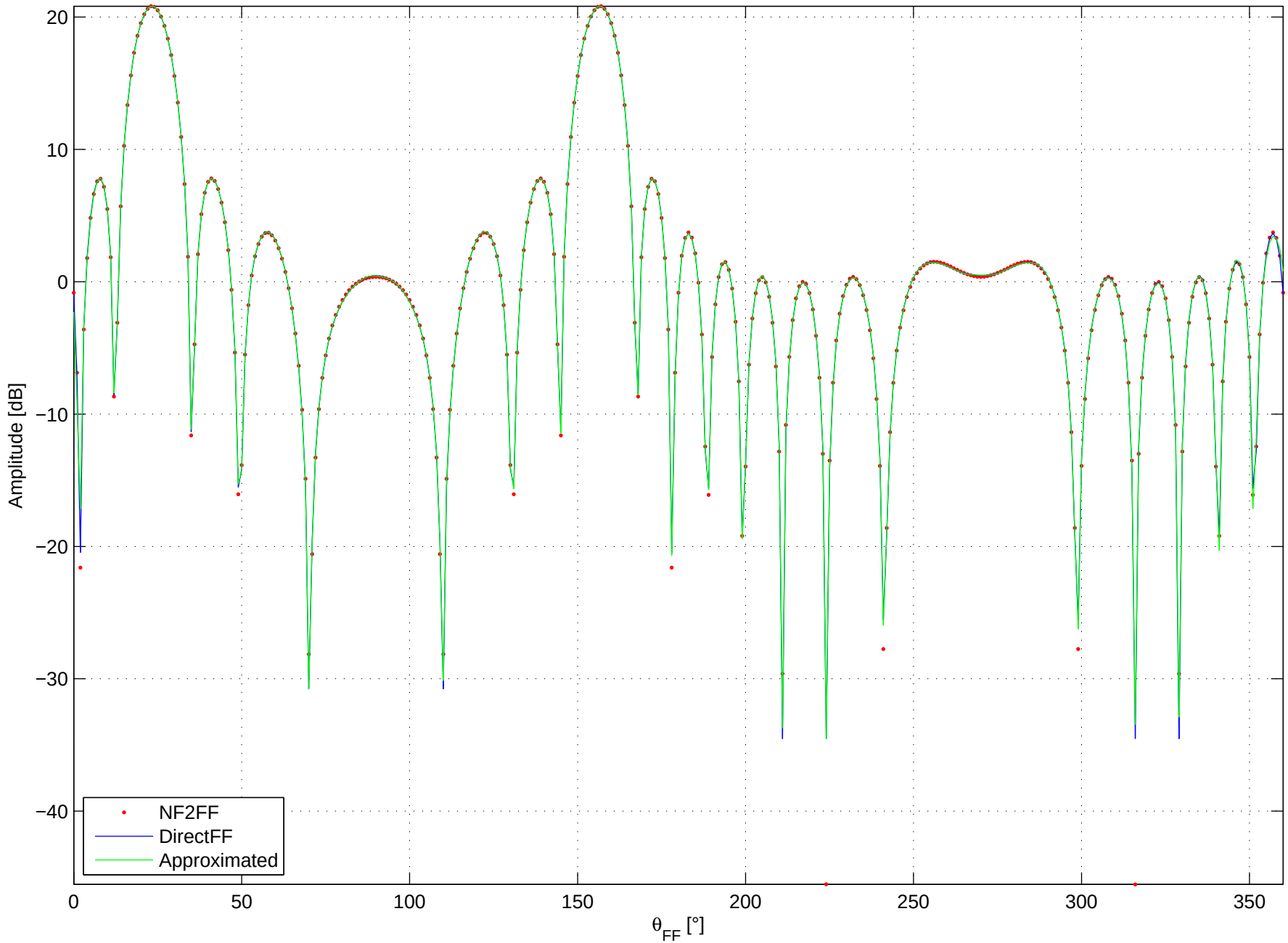

Operator relative L2 error, Coefficients = 81
Operator1
Operator2
Relative Error
θFF [°]
10^0
10^-1
10^-2
10^-3
0
50
100
150
200
250
300
350

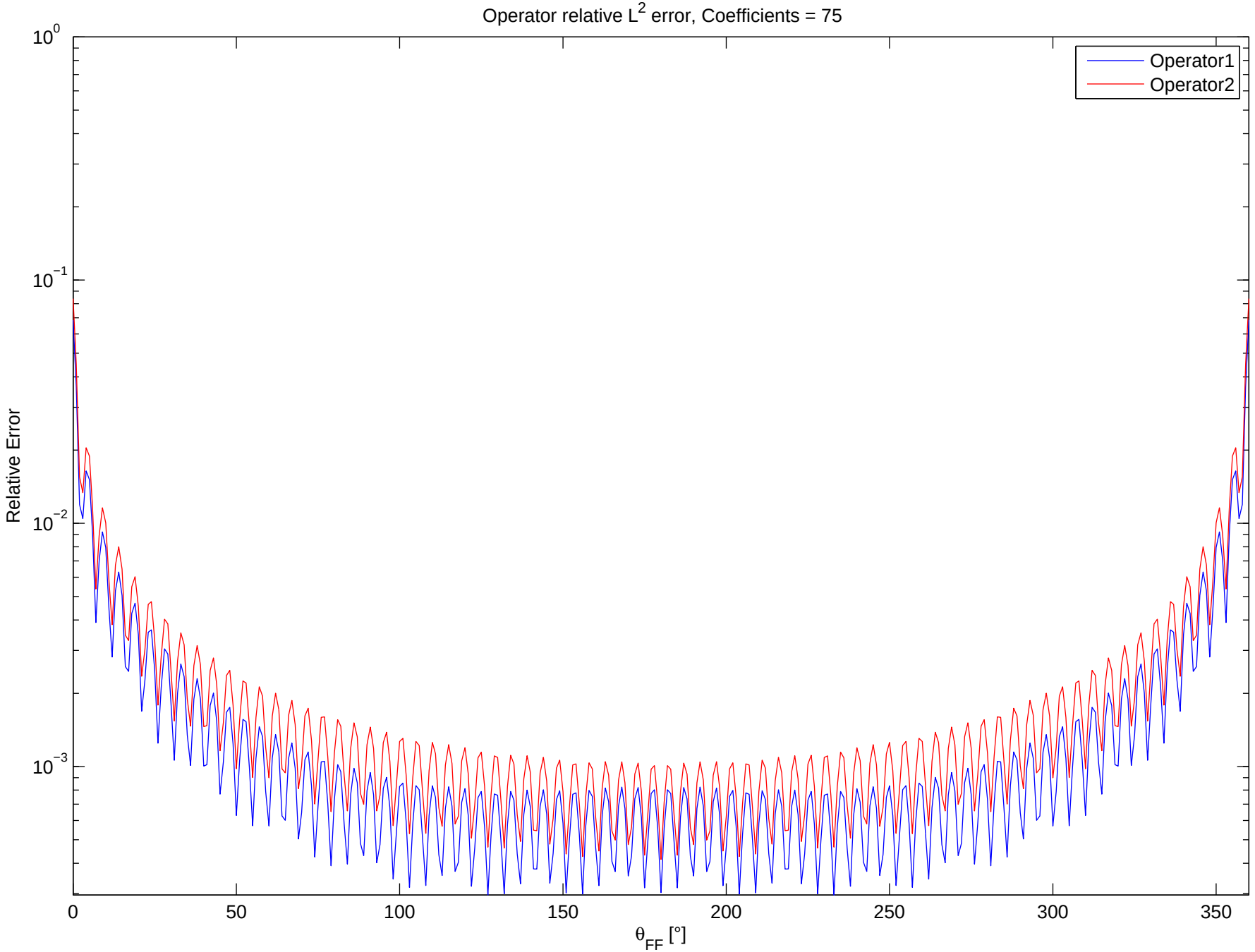

FF Patterns XZ Plane. Sphere Radius = 3λ
Steering angle : 23.3251°, L2 error = 0.0054556
FFSamples = 361, NFSamples = 4050, Coefficients = 79
Amplitude [dB]
θFF [°]
NF2FF
DirectFF
Approximated
20
10
0
−10
−20
−30
−40
0
50
100
150
200
250
300
350

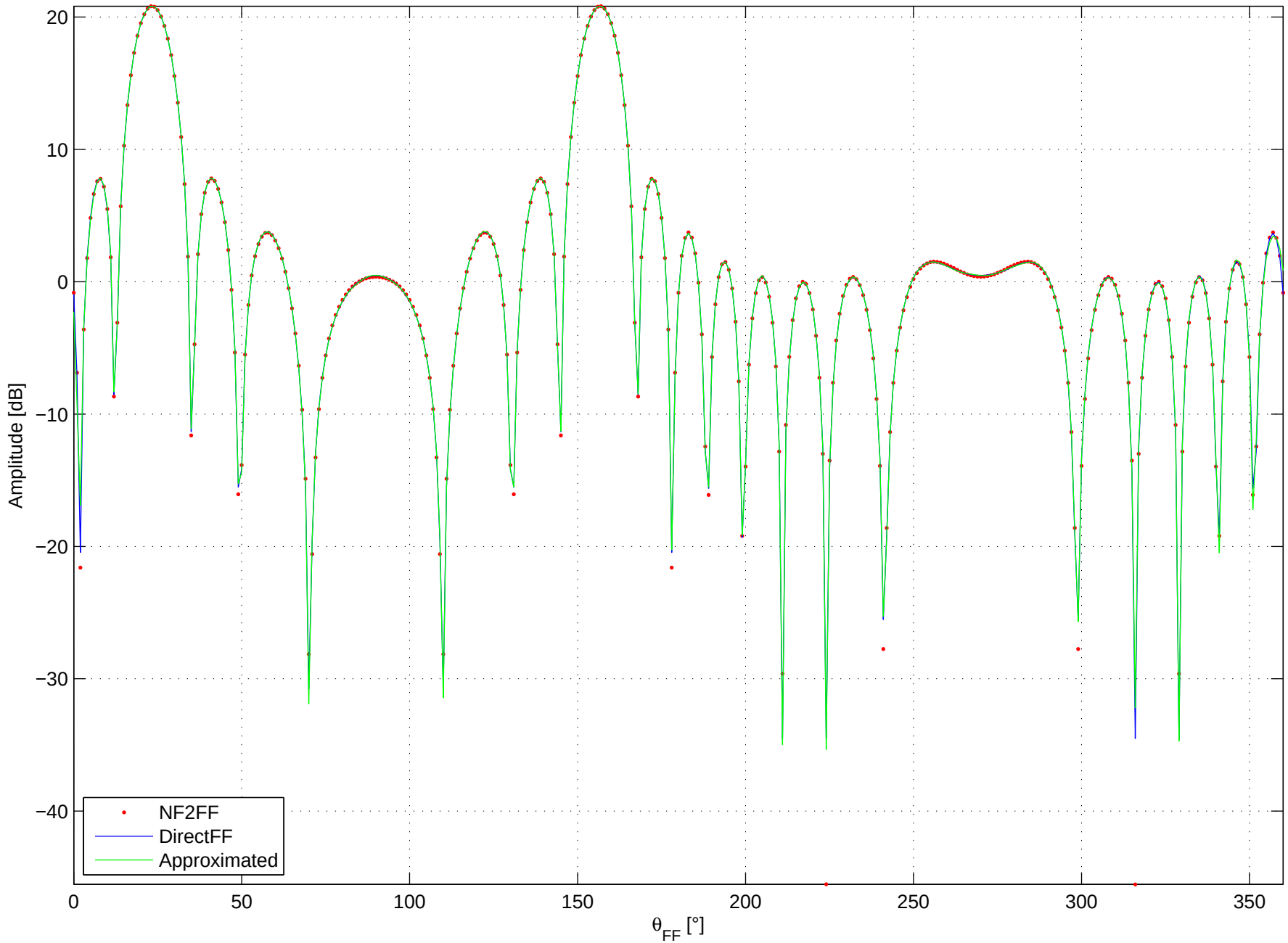

Operator relative L2 error, Coefficients = 79
Operator1
Operator2
Relative Error
θFF [°]
10^0
10^-1
10^-2
10^-3
0
50
100
150
200
250
300
350

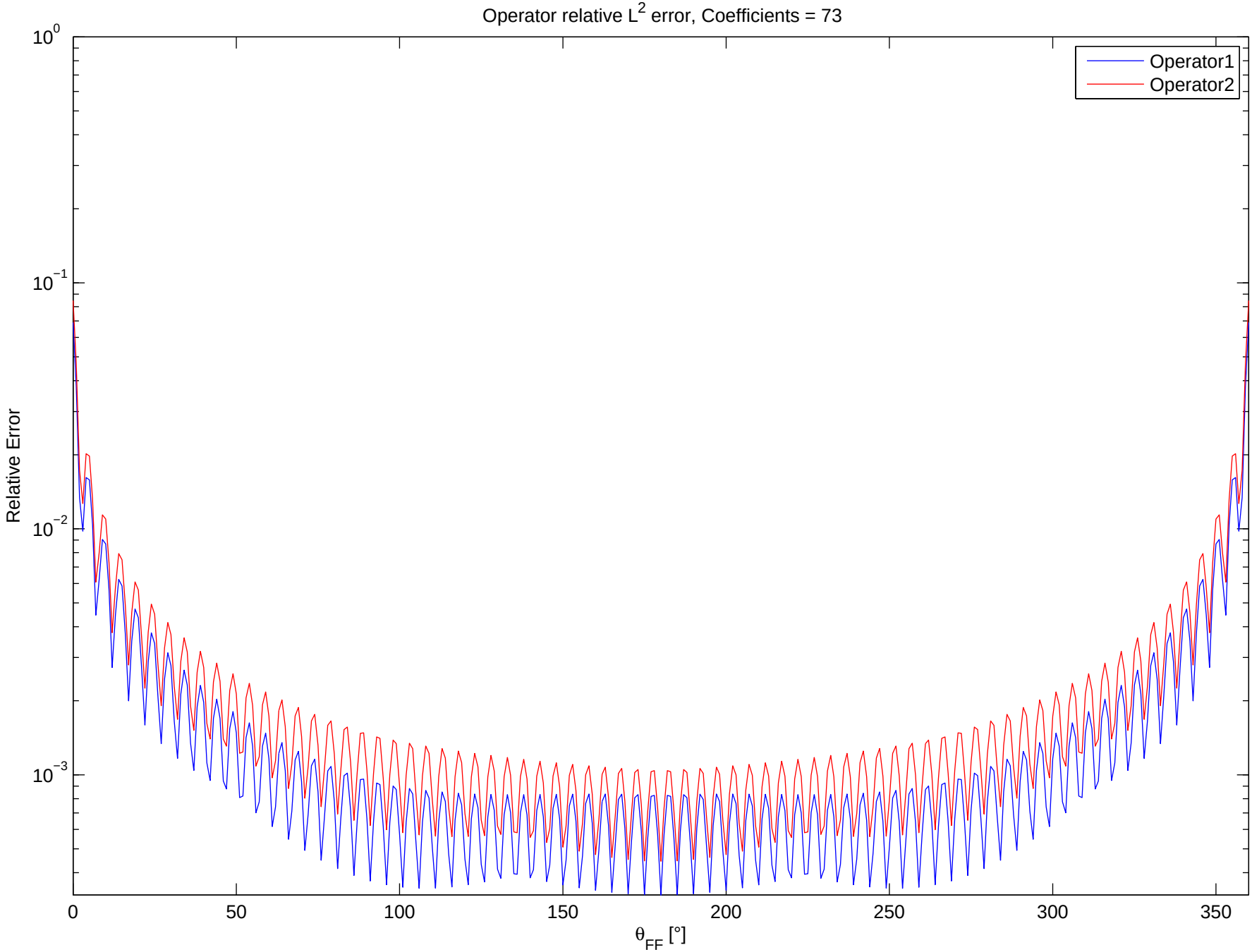

FF Patterns XZ Plane. Sphere Radius = 3λ
Steering angle : 23.3251°, L2 error = 0.0055578
FFSamples = 361, NFSamples = 4050, Coefficients = 77
Amplitude [dB]
θFF [°]
NF2FF
DirectFF
Approximated
20
10
0
−10
−20
−30
−40
0
50
100
150
200
250
300
350

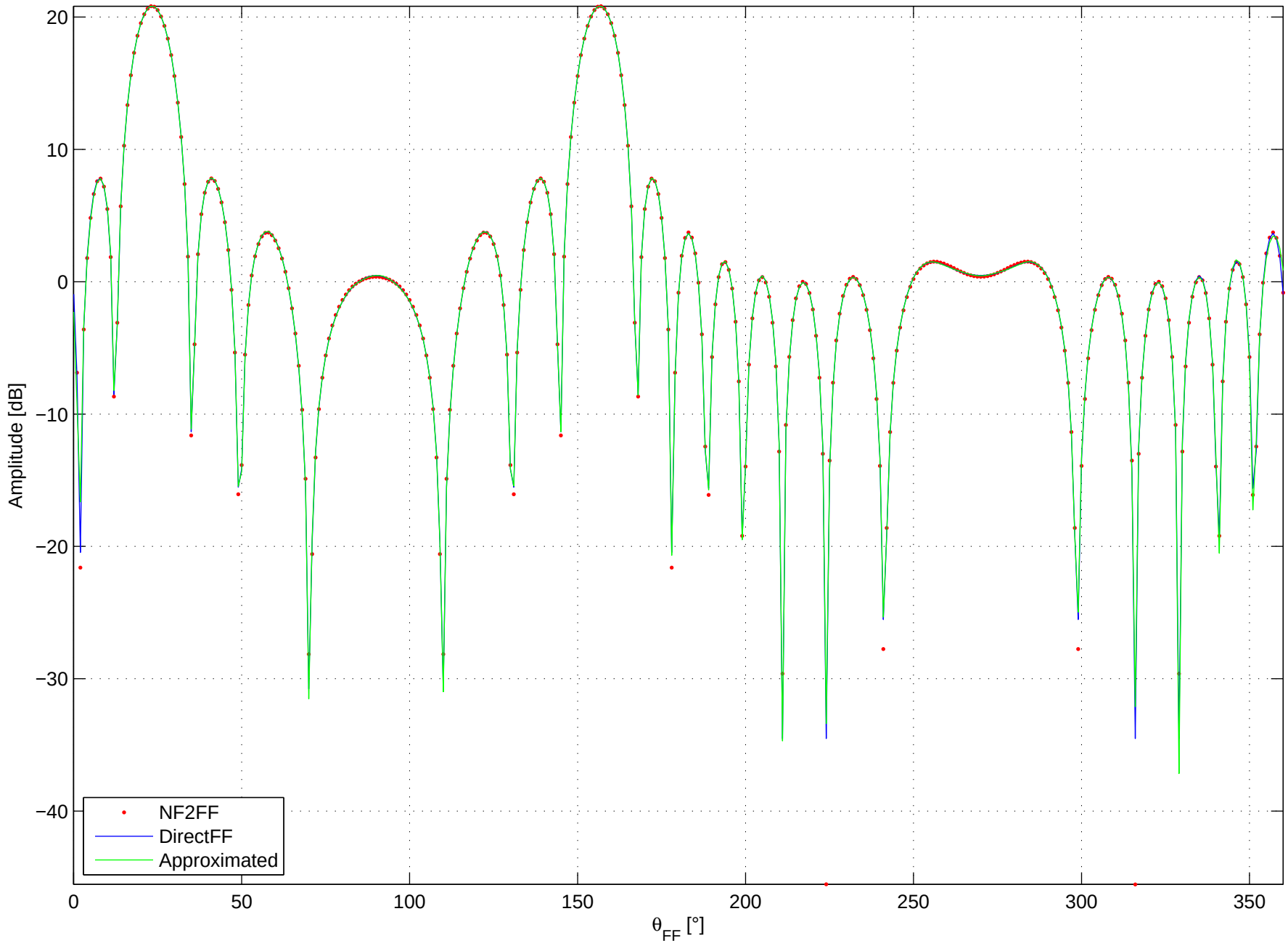

Operator relative L2 error, Coefficients = 77
Operator1
Operator2
Relative Error
θFF [°]
10^0
10^-1
10^-2
10^-3
0
50
100
150
200
250
300
350

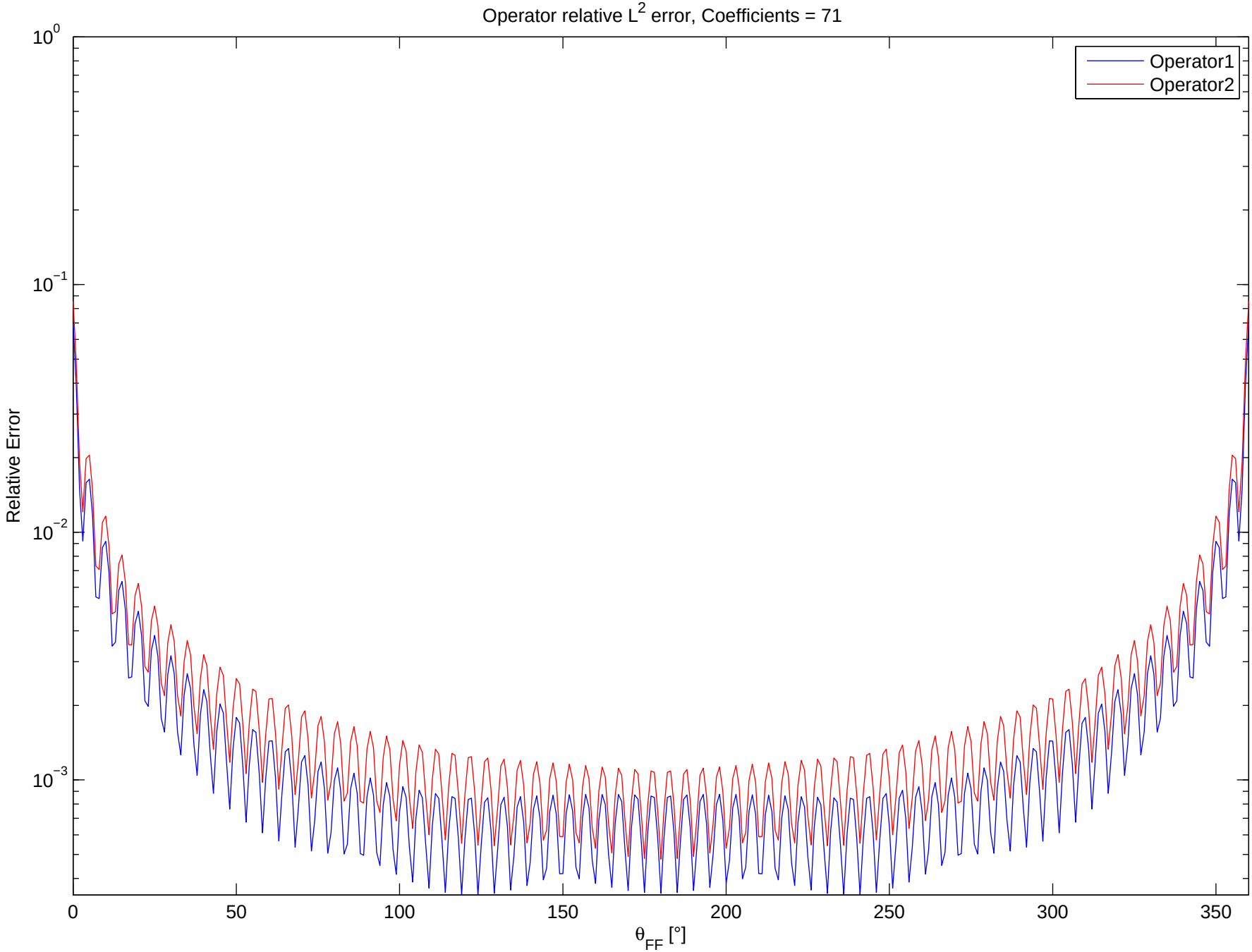

FF Patterns XZ Plane. Sphere Radius = 3λ
Steering angle : 23.3251°, L2 error = 0.0056661
FFSamples = 361, NFSamples = 4050, Coefficients = 75
Amplitude [dB]
θFF [°]
NF2FF
DirectFF
Approximated
20
10
0
−10
−20
−30
−40
0
50
100
150
200
250
300
350

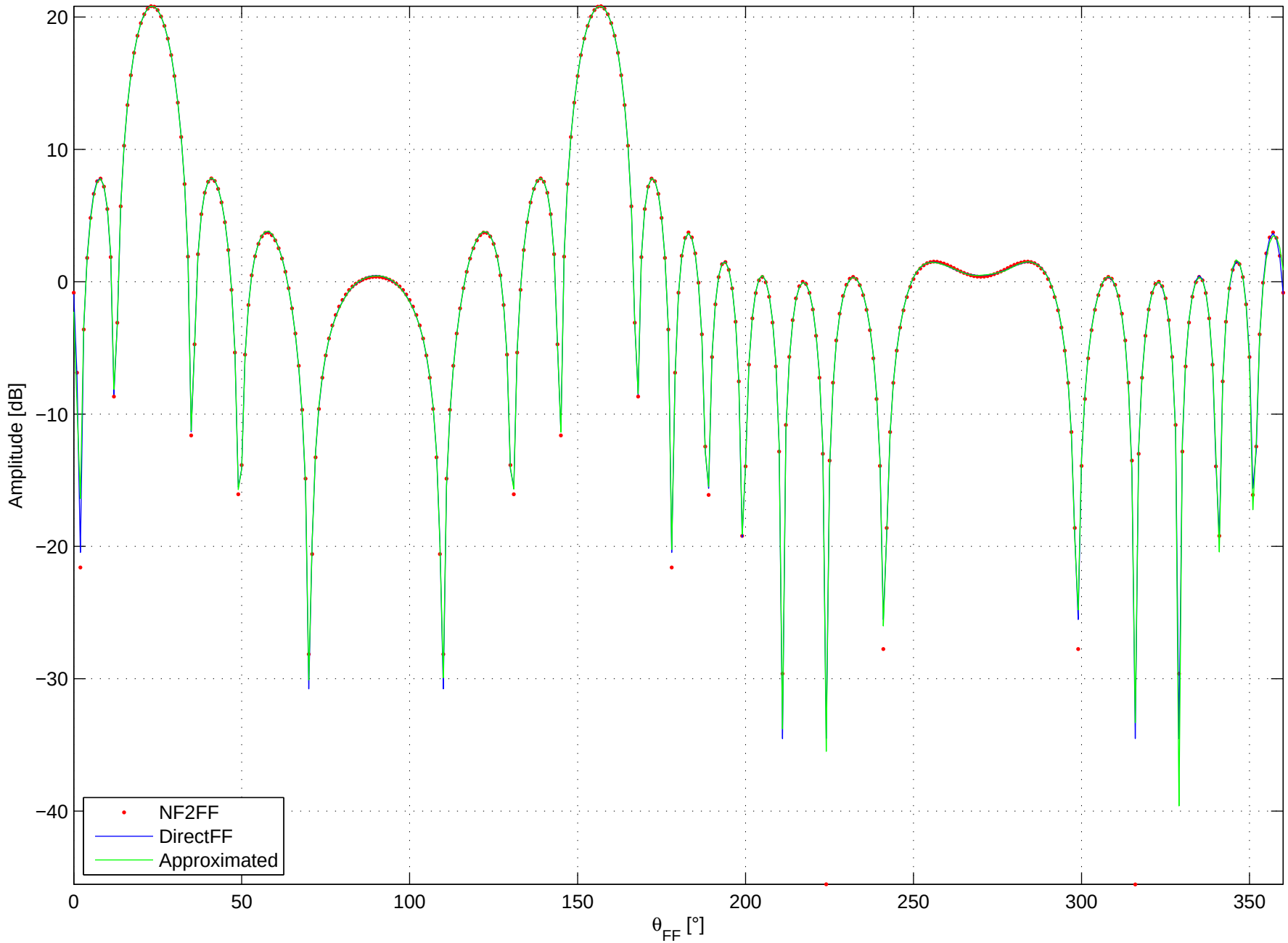

Operator relative L2 error, Coefficients = 75
Operator1
Operator2
Relative Error
10^0
10^-1
10^-2
10^-3
0
50
100
150
200
250
300
350
θFF [°]

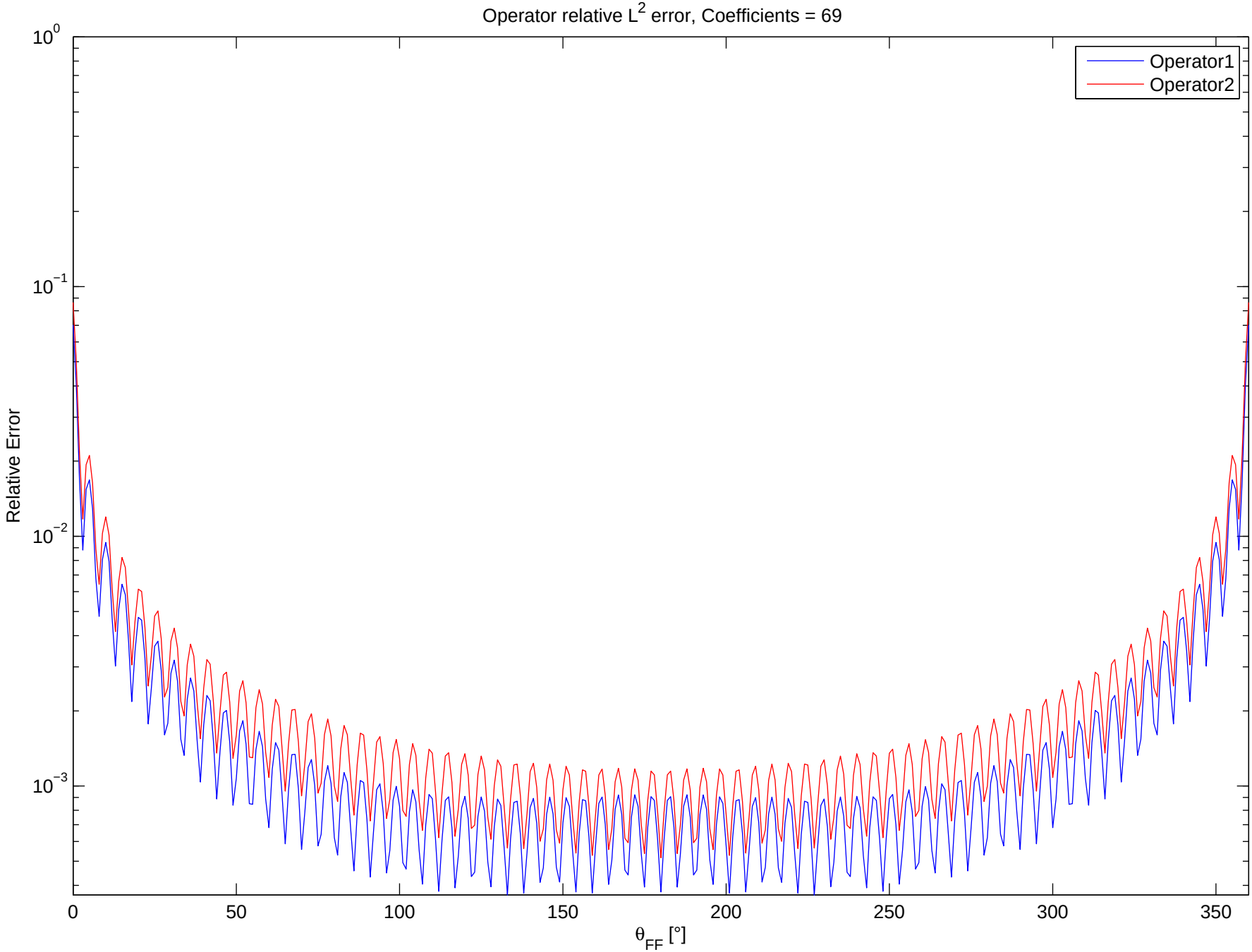

FF Patterns XZ Plane. Sphere Radius = 3λ
Steering angle : 23.3251°, L2 error = 0.0057813
FFSamples = 361, NFSamples = 4050, Coefficients = 73
Amplitude [dB]
θFF [°]
NF2FF
DirectFF
Approximated
20
10
0
−10
−20
−30
−40
0
50
100
150
200
250
300
350

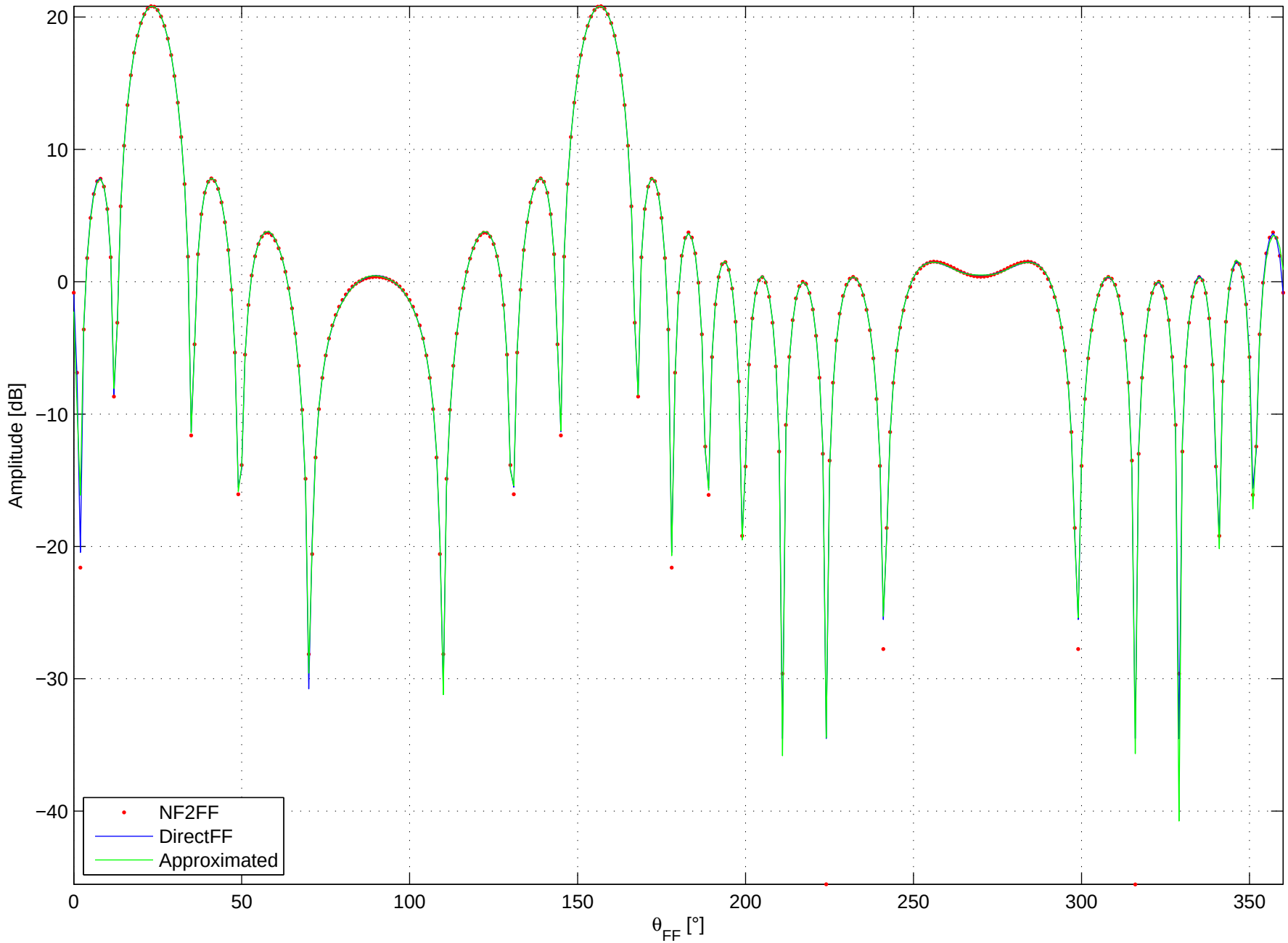

Operator relative L2 error, Coefficients = 73
Operator1
Operator2
Relative Error
10^0
10^-1
10^-2
10^-3
0
50
100
150
200
250
300
350
θFF [°]

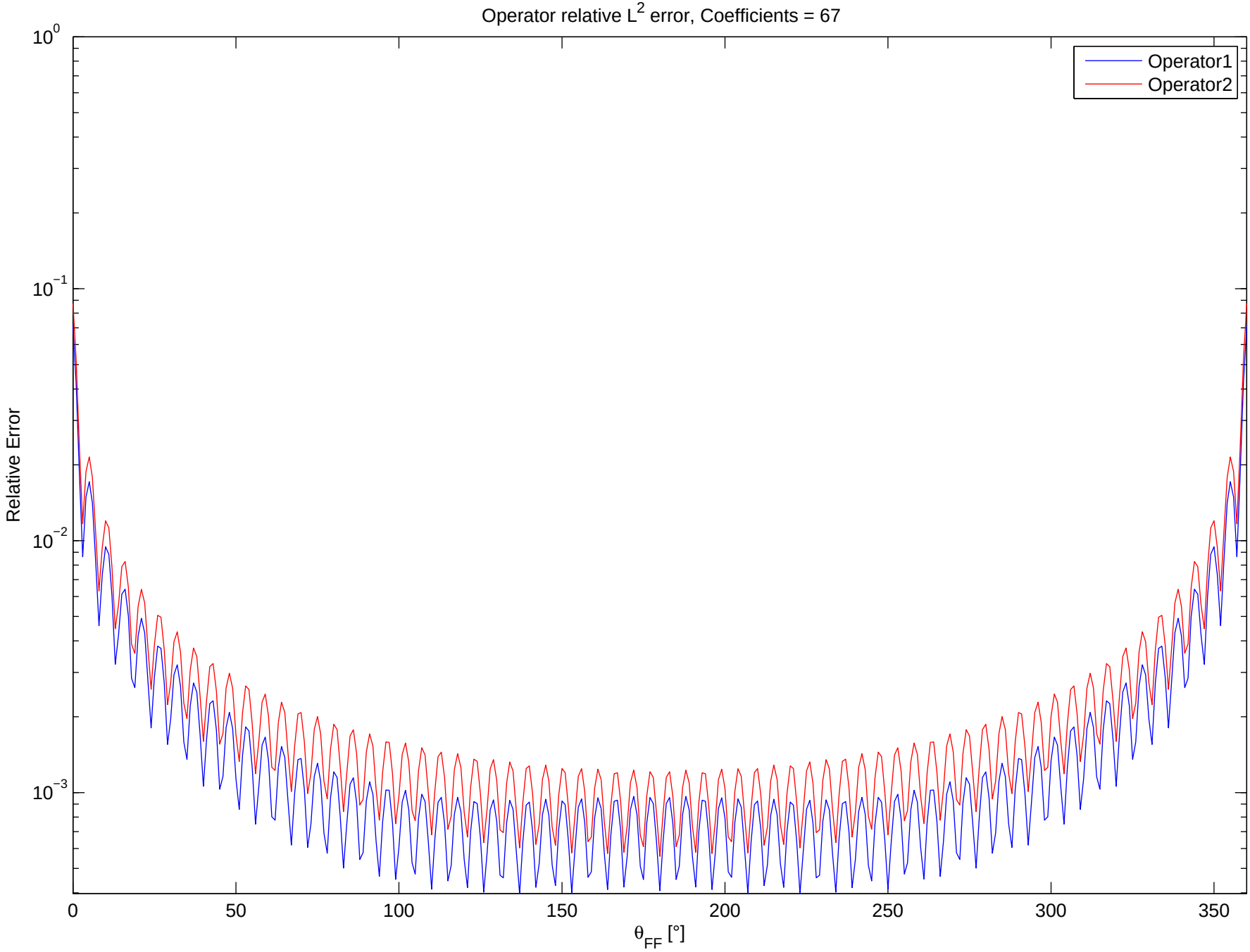

FF Patterns XZ Plane. Sphere Radius = 3λ
Steering angle : 23.3251°, L2 error = 0.0059043
FFSamples = 361, NFSamples = 4050, Coefficients = 71
Amplitude [dB]
θFF [°]
NF2FF
DirectFF
Approximated
20
10
0
−10
−20
−30
−40
0
50
100
150
200
250
300
350

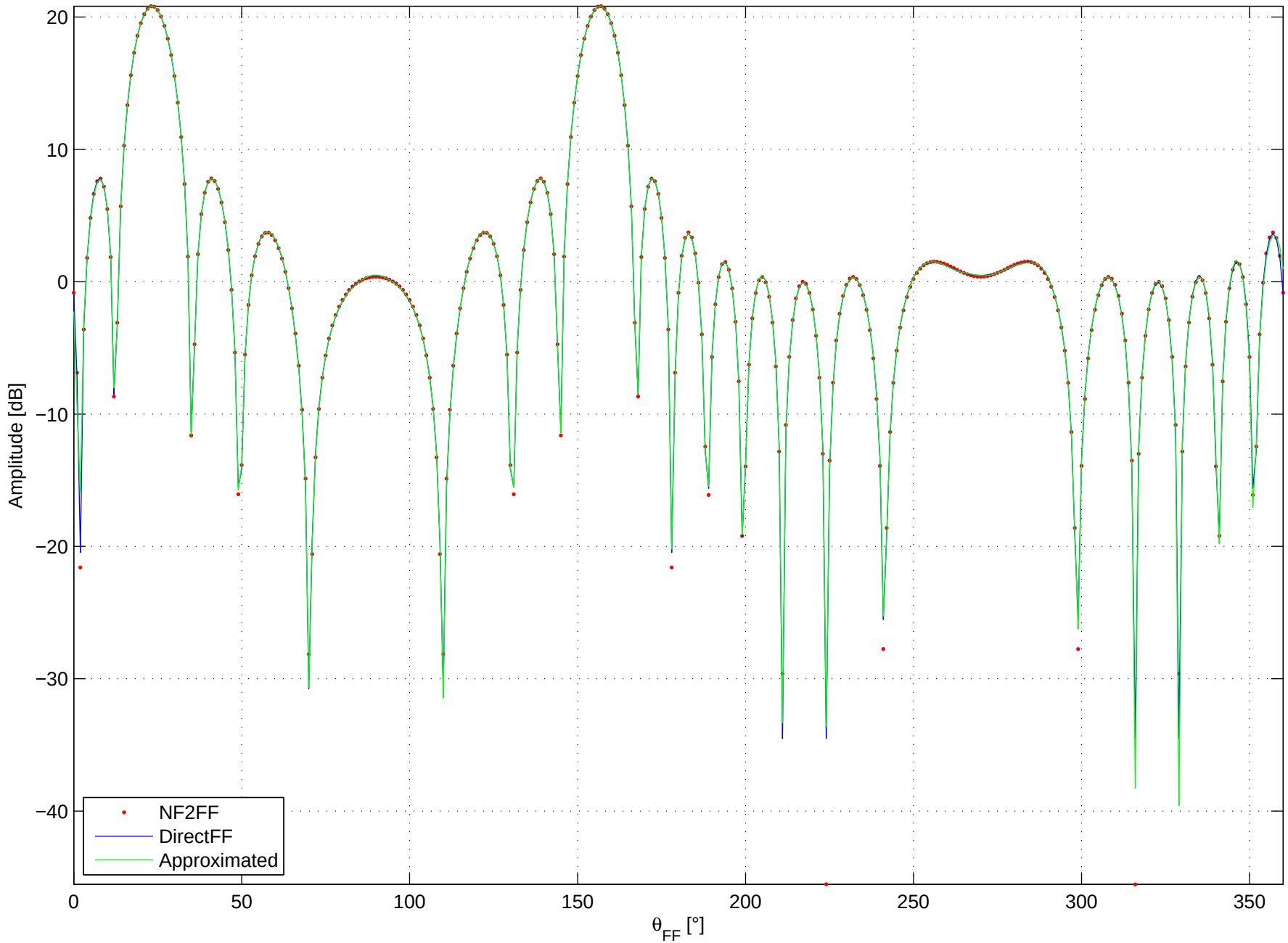

Operator relative L2 error, Coefficients = 71
Operator1
Operator2
Relative Error
10^0
10^-1
10^-2
10^-3
0
50
100
150
200
250
300
350
θFF [°]

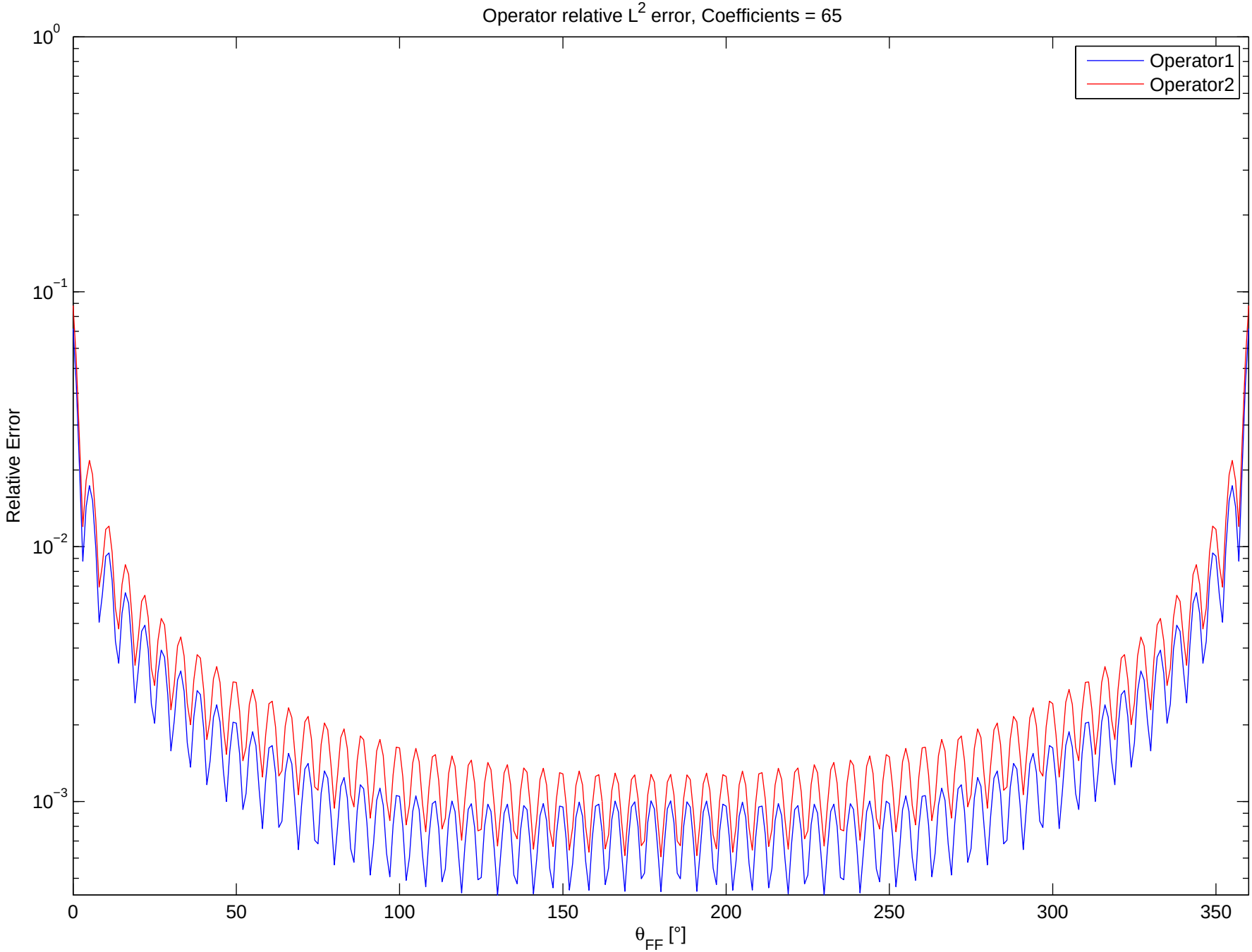

FF Patterns XZ Plane. Sphere Radius = 3λ
Steering angle : 23.3251°, L2 error = 0.0060361
FFSamples = 361, NFSamples = 4050, Coefficients = 69
Amplitude [dB]
θFF [°]
NF2FF
DirectFF
Approximated
20
10
0
−10
−20
−30
−40
0
50
100
150
200
250
300
350

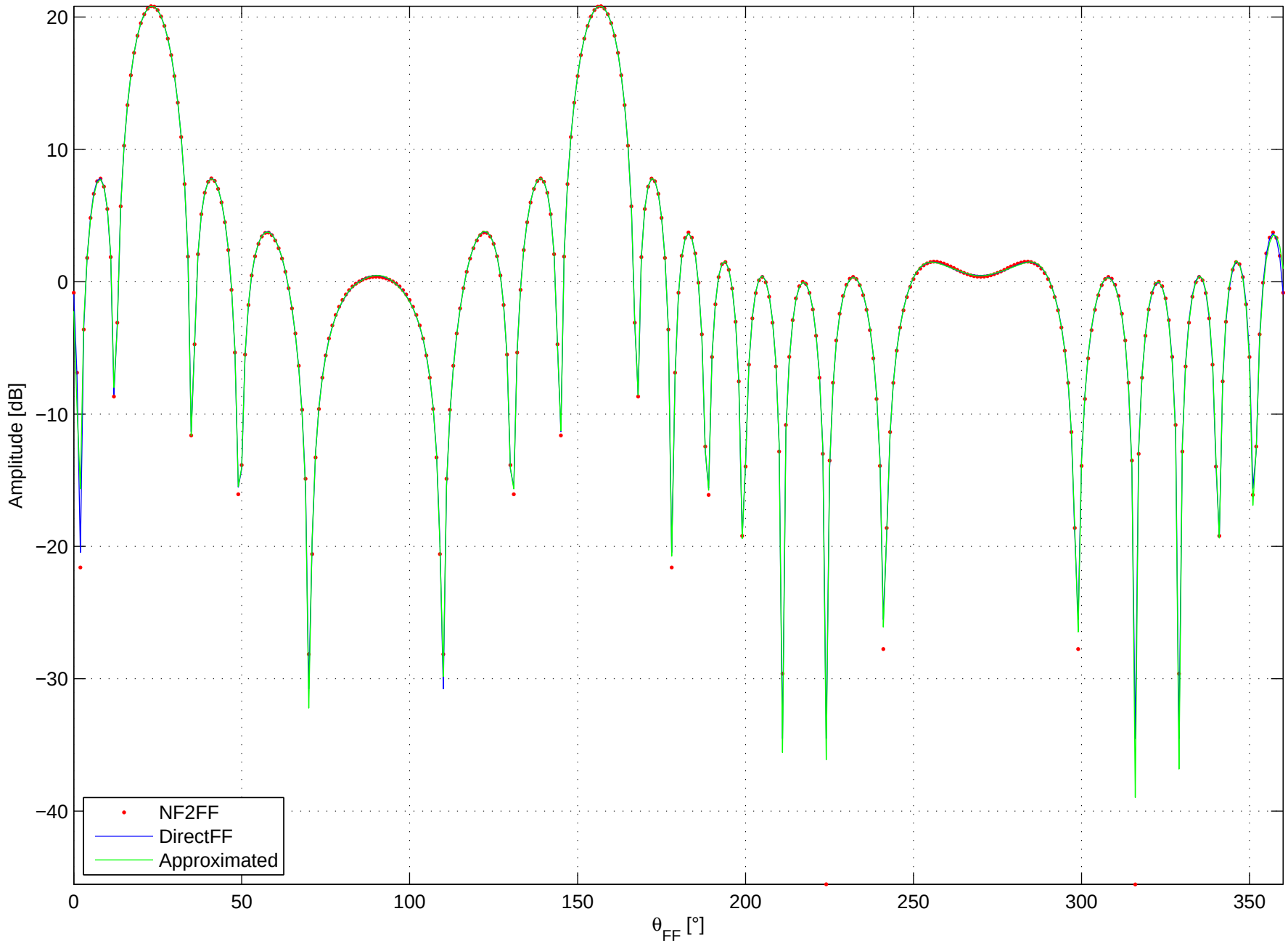

Operator relative L2 error, Coefficients = 69
Operator1
Operator2
Relative Error
10^0
10^-1
10^-2
10^-3
0
50
100
150
200
250
300
350
θFF [°]

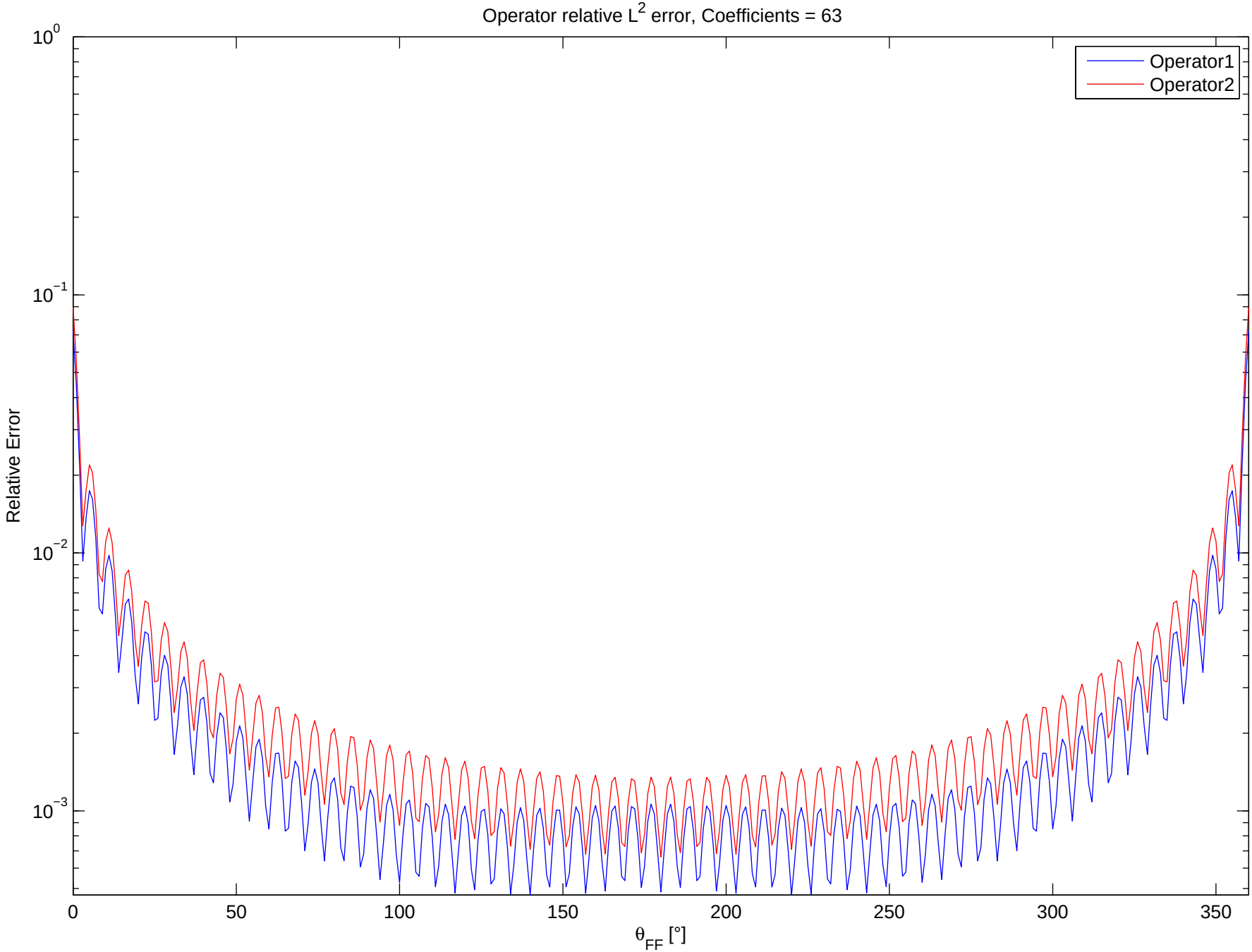

FF Patterns XZ Plane. Sphere Radius = 3λ
Steering angle : 23.3251°, L2 error = 0.0061779
FFSamples = 361, NFSamples = 4050, Coefficients = 67
Amplitude [dB]
θFF [°]
NF2FF
DirectFF
Approximated
20
10
0
−10
−20
−30
−40
0
50
100
150
200
250
300
350

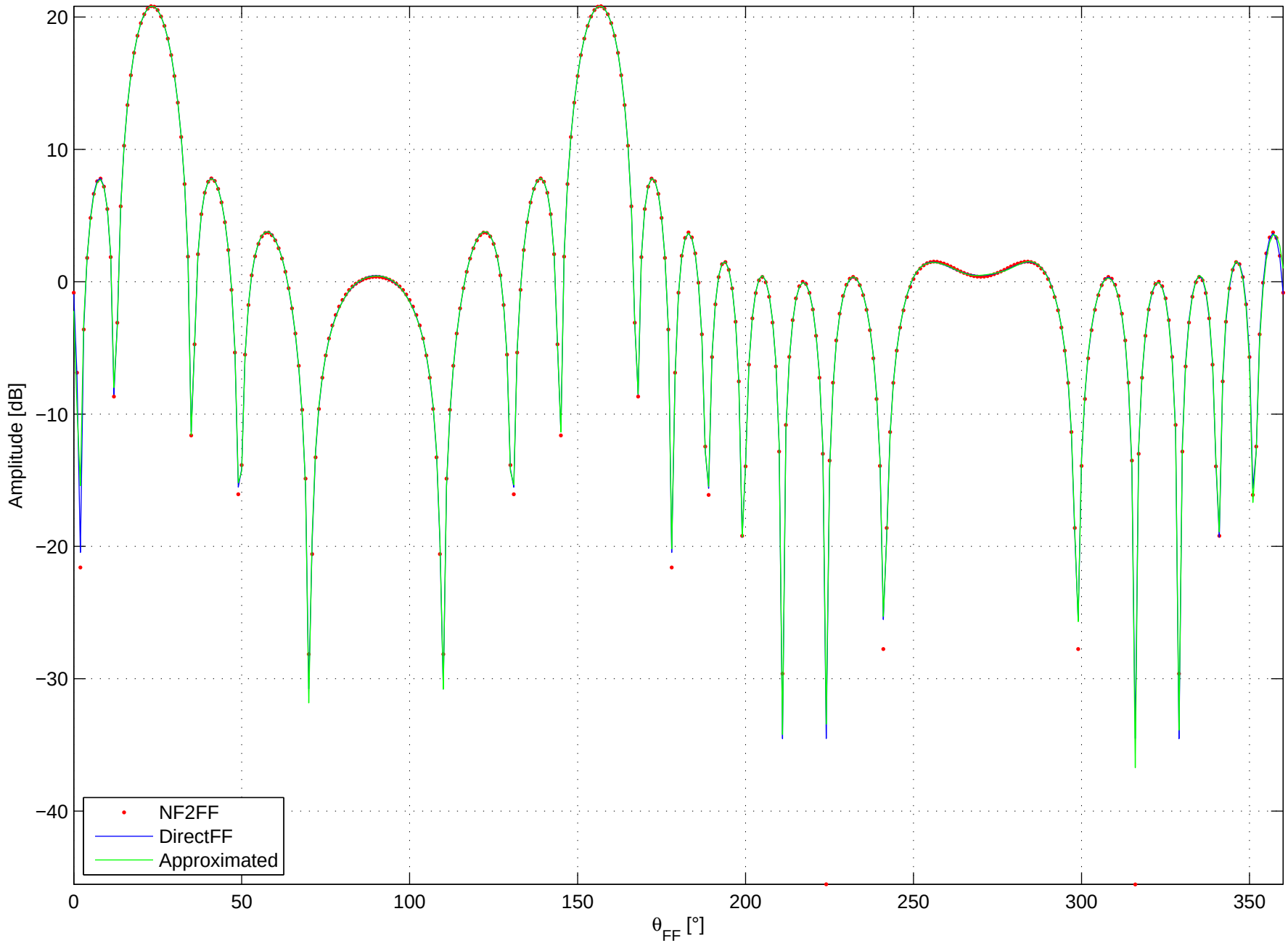

Operator relative L2 error, Coefficients = 67
Operator1
Operator2
Relative Error
θFF [°]
10^0
10^-1
10^-2
10^-3
0
50
100
150
200
250
300
350

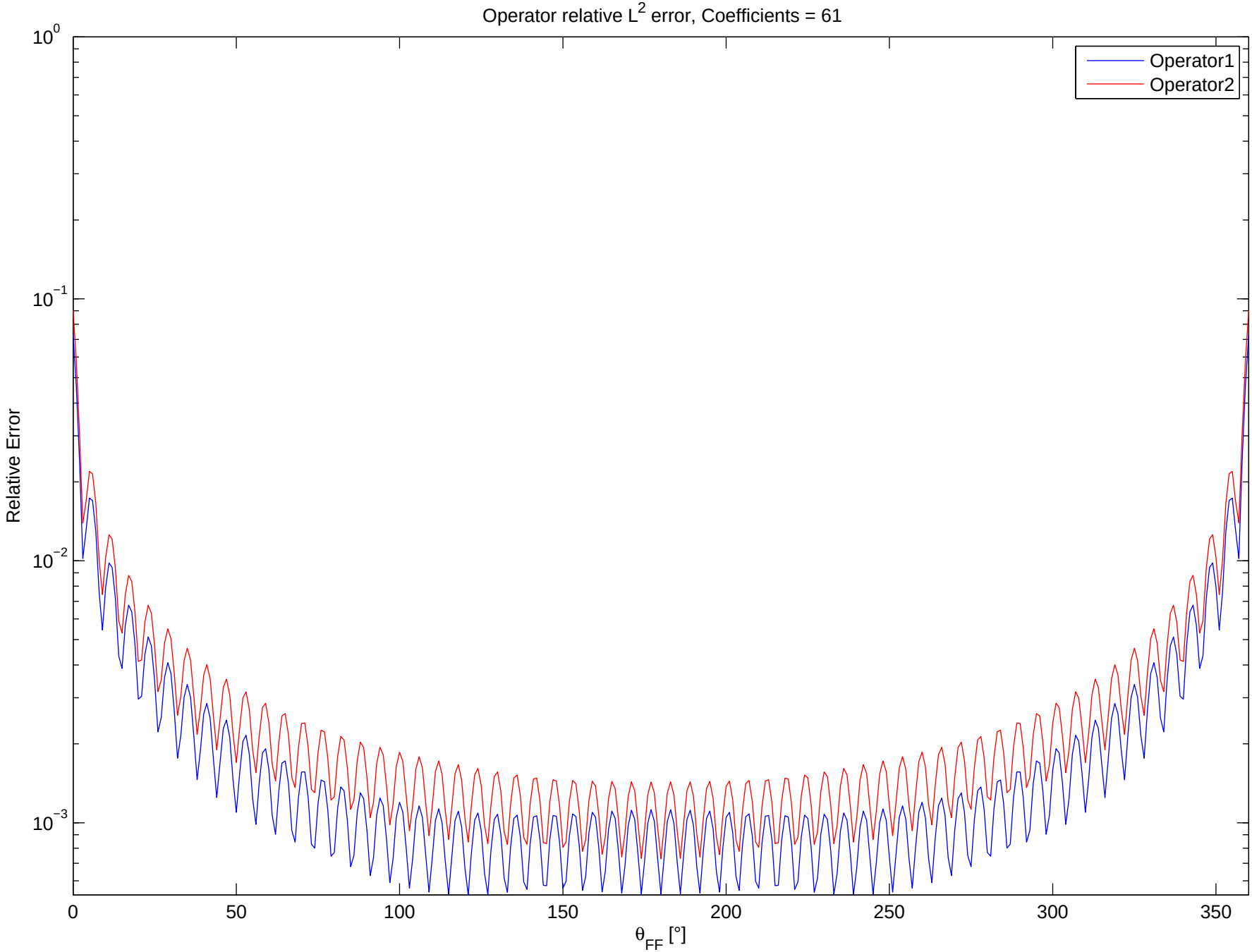

FF Patterns XZ Plane. Sphere Radius = 3λ
Steering angle : 23.3251°, L2 error = 0.0063313
FFSamples = 361, NFSamples = 4050, Coefficients = 65
Amplitude [dB]
θFF [°]
NF2FF
DirectFF
Approximated
20
10
0
−10
−20
−30
−40
0
50
100
150
200
250
300
350

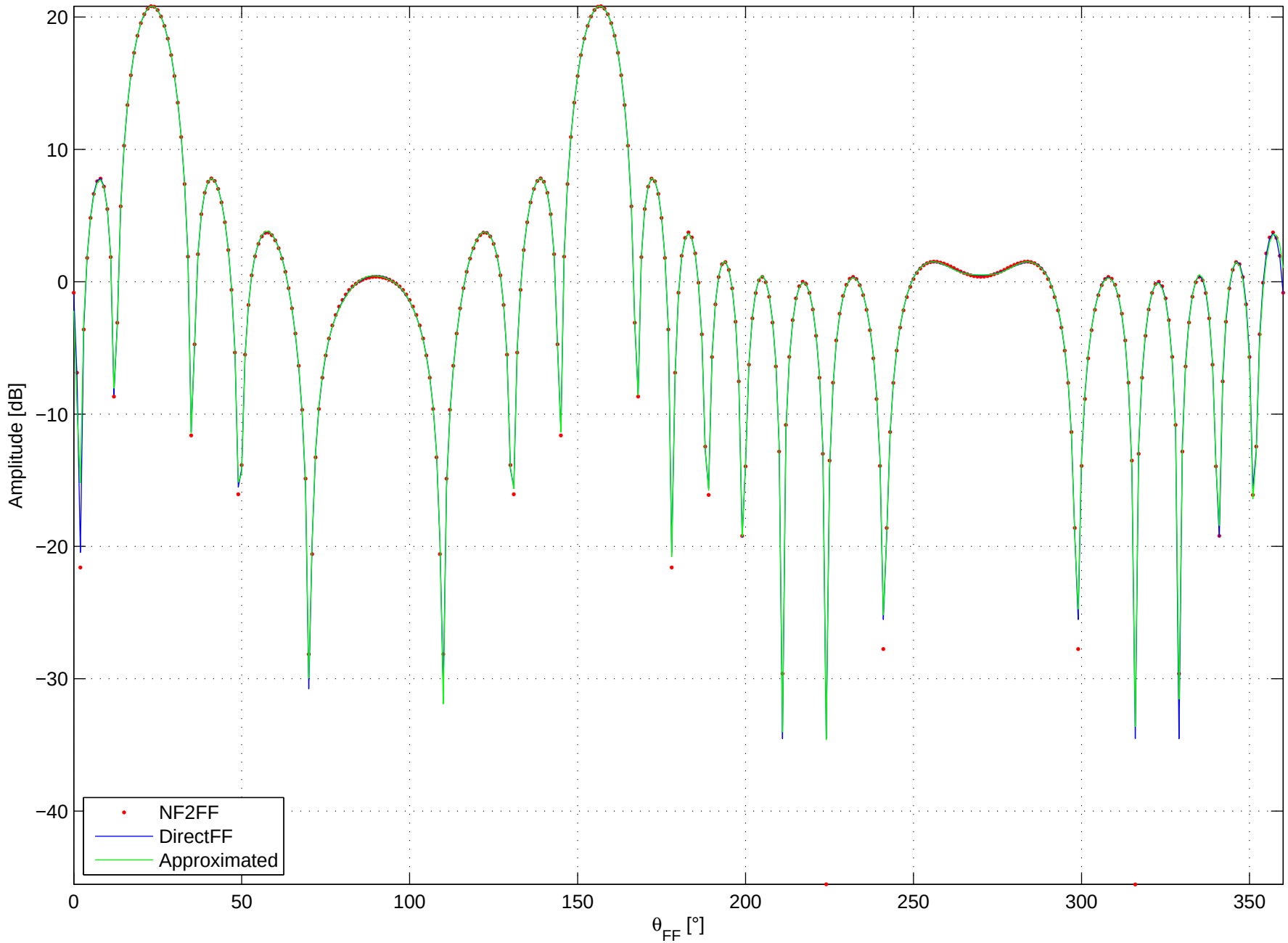

Operator relative L2 error, Coefficients = 65
Operator1
Operator2
Relative Error
10^0
10^-1
10^-2
10^-3
0
50
100
150
200
250
300
350
θFF [°]

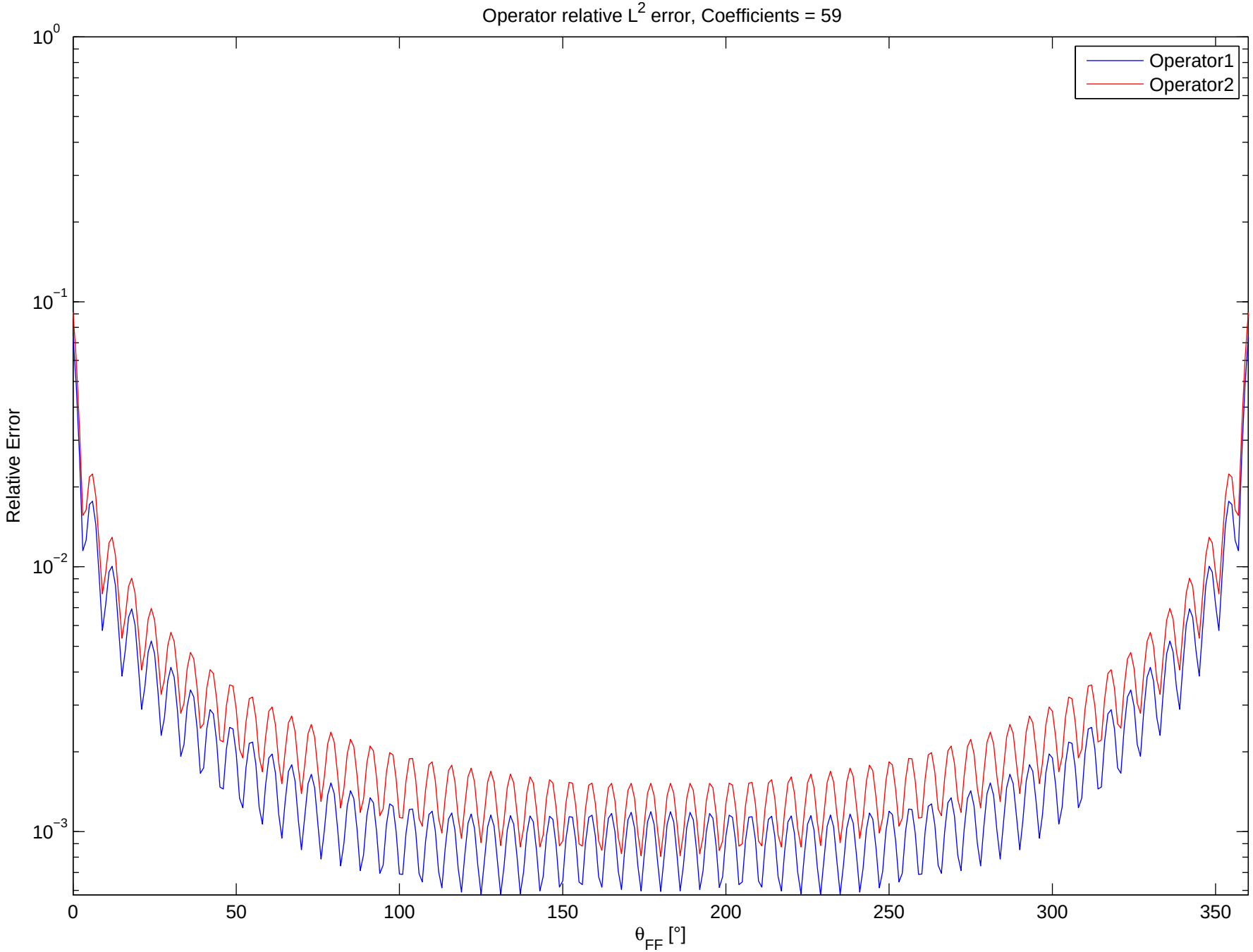

FF Patterns XZ Plane. Sphere Radius = 3λ
Steering angle : 23.3251°, L2 error = 0.0064981
FFSamples = 361, NFSamples = 4050, Coefficients = 63
Amplitude [dB]
θFF [°]
NF2FF
DirectFF
Approximated
20
10
0
−10
−20
−30
−40
0
50
100
150
200
250
300
350

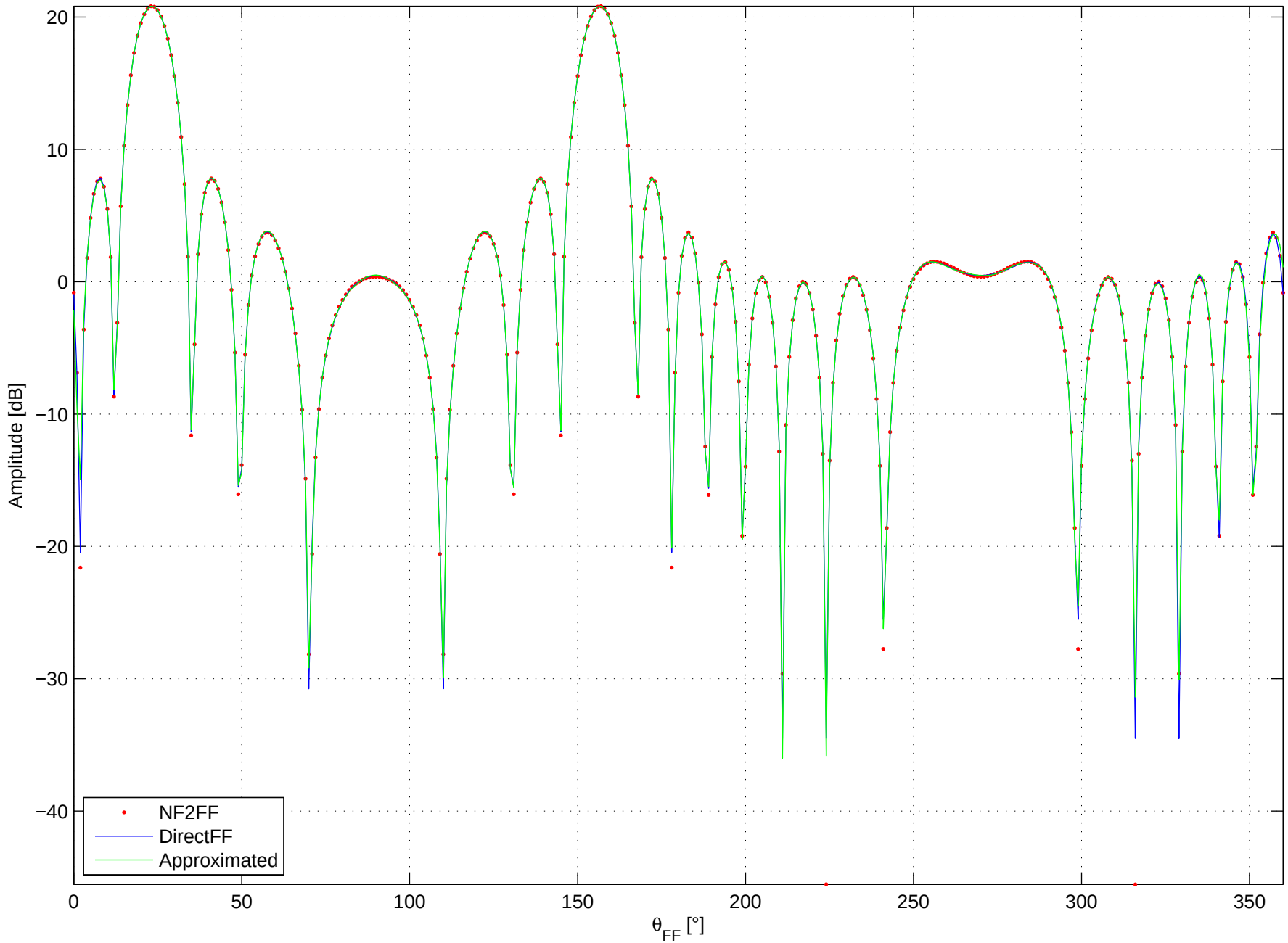

Operator relative L2 error, Coefficients = 63
Operator1
Operator2
Relative Error
10^0
10^-1
10^-2
10^-3
0
50
100
150
200
250
300
350
θFF [°]

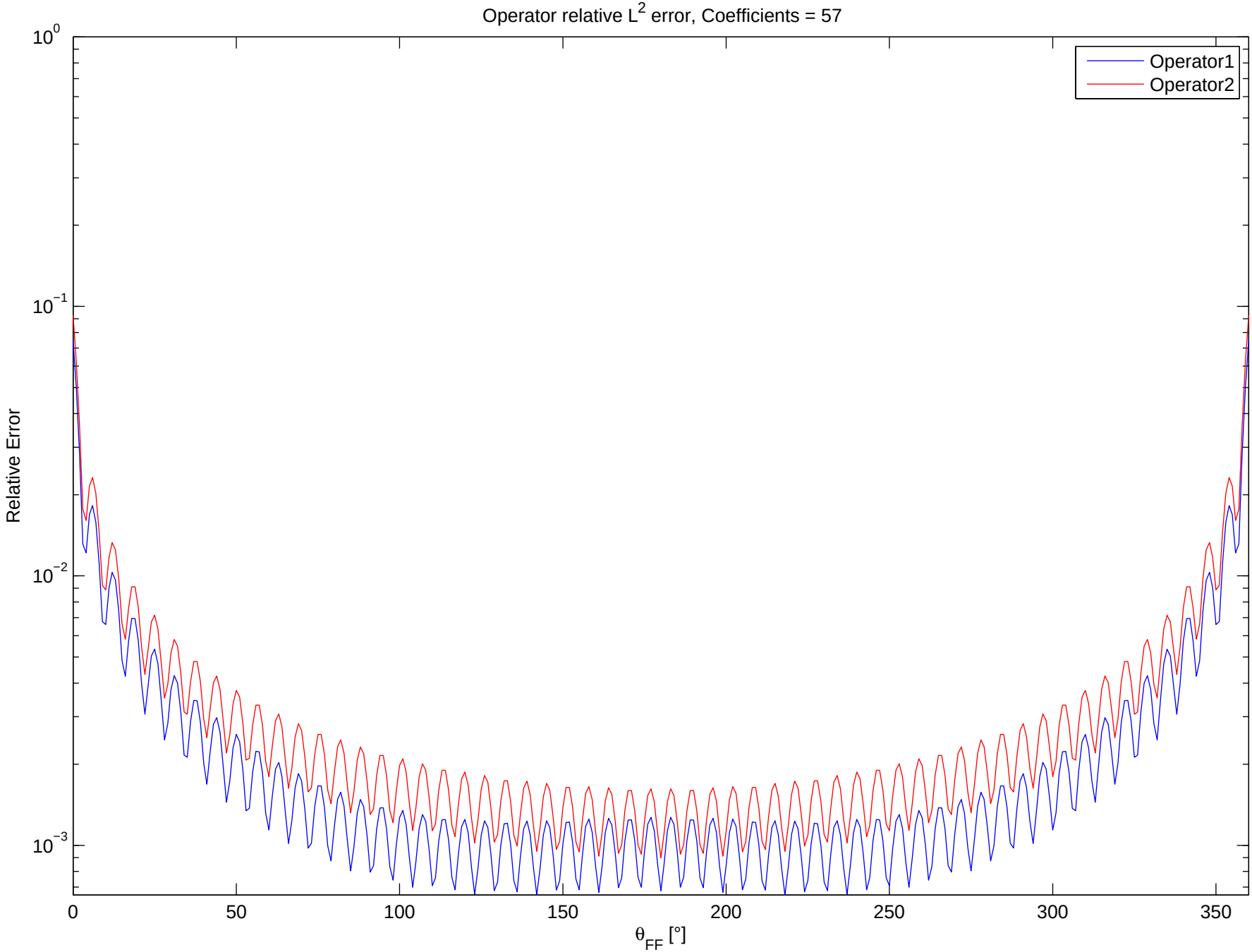

FF Patterns XZ Plane. Sphere Radius = 3λ
Steering angle : 23.3251°, L2 error = 0.0066807
FFSamples = 361, NFSamples = 4050, Coefficients = 61
Amplitude [dB]
θFF [°]
NF2FF
DirectFF
Approximated
20
10
0
−10
−20
−30
−40
0
50
100
150
200
250
300
350

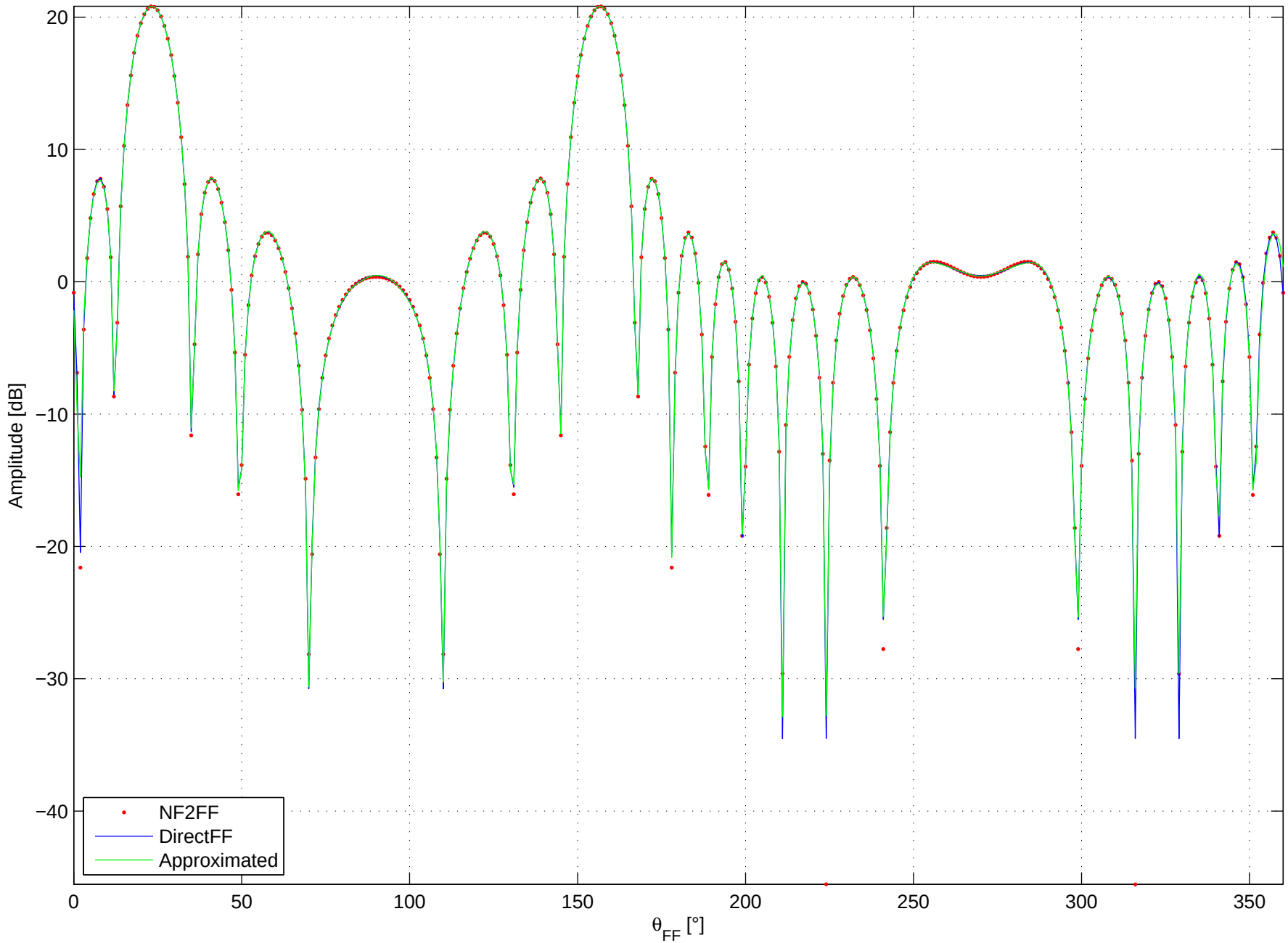

Operator relative L2 error, Coefficients = 61
Operator1
Operator2
Relative Error
θFF [°]
10^0
10^−1
10^−2
10^−3
0
50
100
150
200
250
300
350

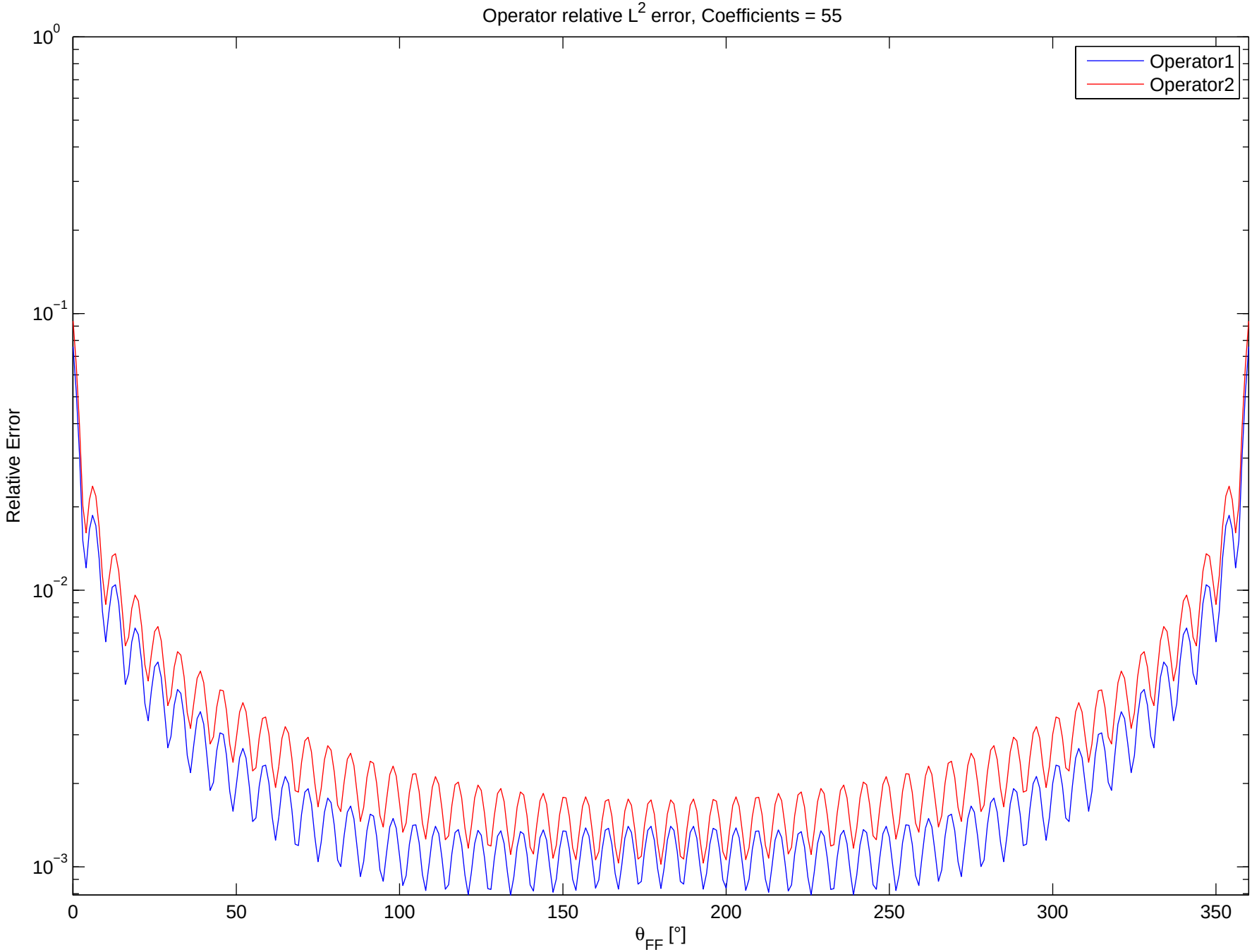

FF Patterns XZ Plane. Sphere Radius = 3λ
Steering angle : 23.3251°, L2 error = 0.0068819
FFSamples = 361, NFSamples = 4050, Coefficients = 59
Amplitude [dB]
θFF [°]
NF2FF
DirectFF
Approximated
20
10
0
−10
−20
−30
−40
0
50
100
150
200
250
300
350

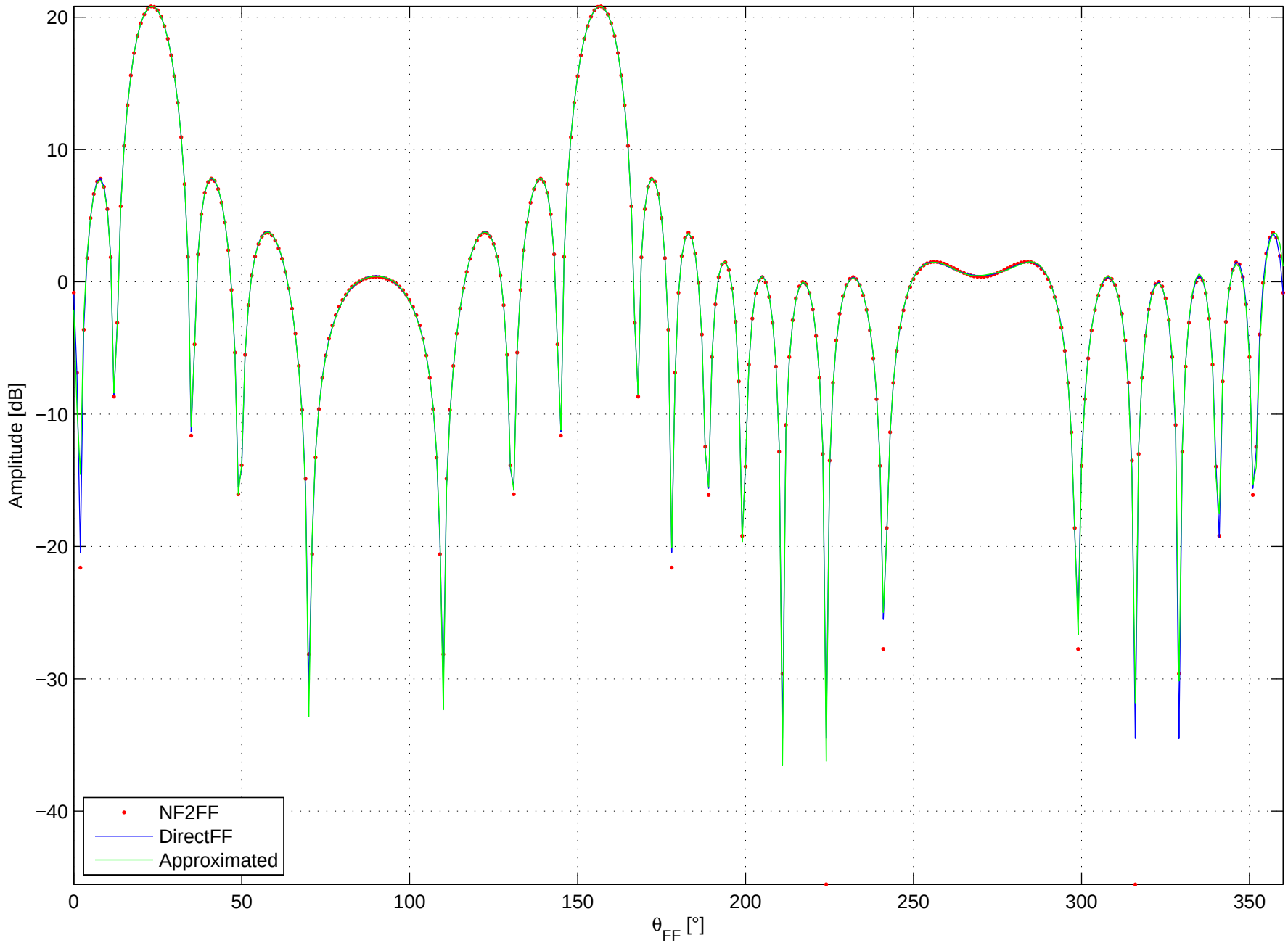

Operator relative L2 error, Coefficients = 59
Operator1
Operator2
Relative Error
θFF [°]
10^0
10^-1
10^-2
10^-3
0
50
100
150
200
250
300
350

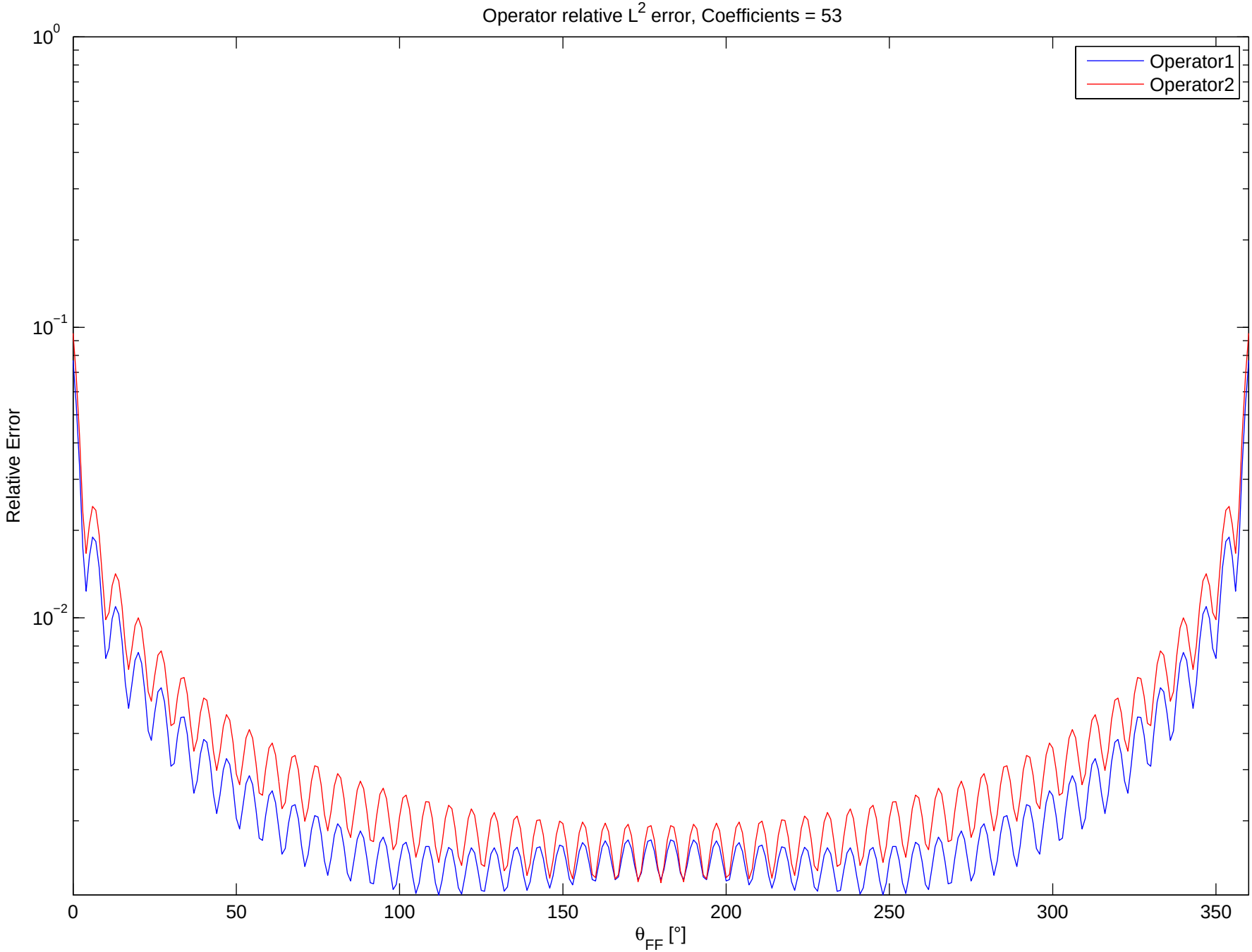

FF Patterns XZ Plane. Sphere Radius = 3λ
Steering angle : 23.3251°, L2 error = 0.0071056
FFSamples = 361, NFSamples = 4050, Coefficients = 57
Amplitude [dB]
θFF [°]
NF2FF
DirectFF
Approximated
20
10
0
−10
−20
−30
−40
0
50
100
150
200
250
300
350

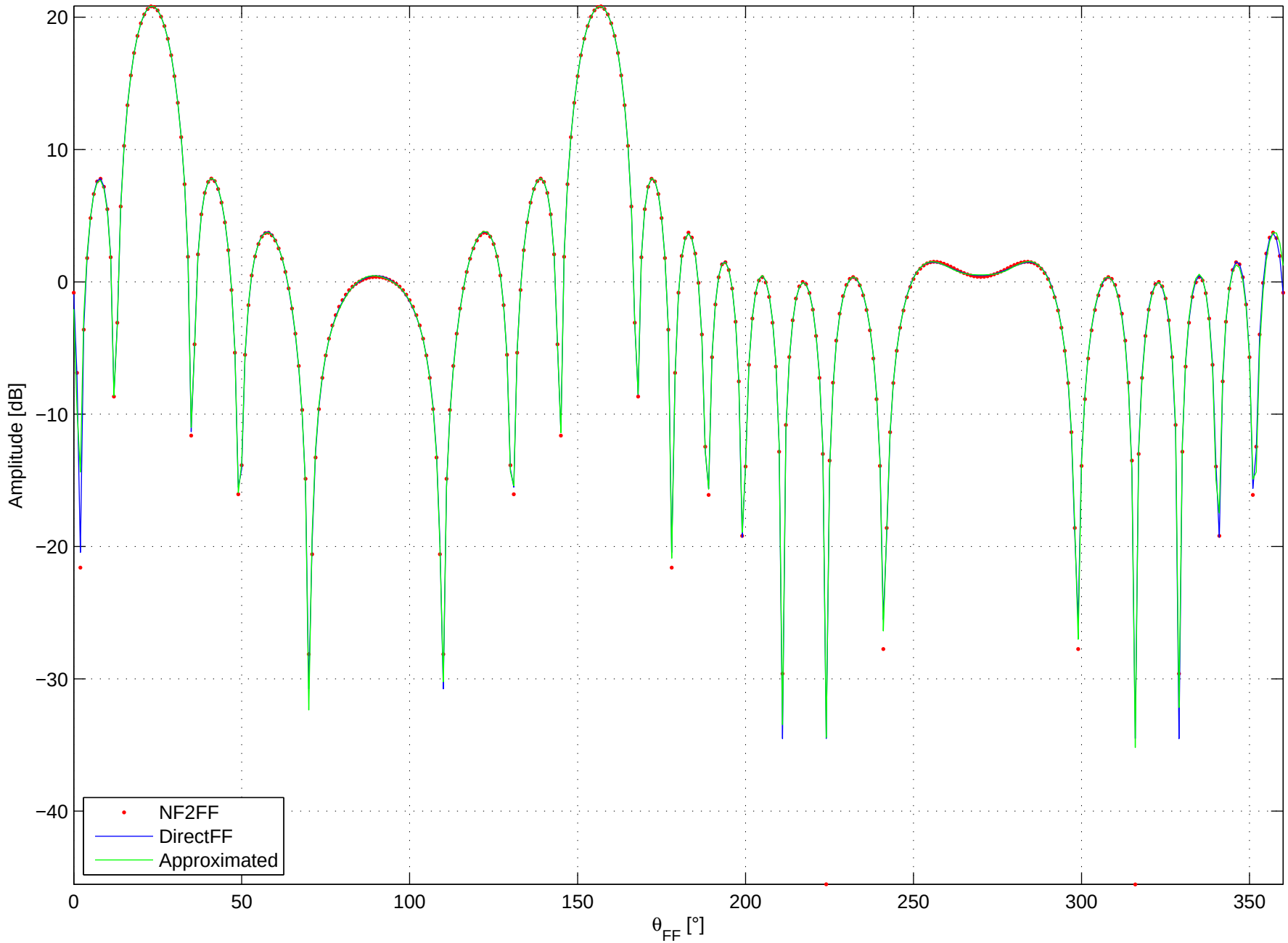

Operator relative L2 error, Coefficients = 57
Operator1
Operator2
Relative Error
10^0
10^-1
10^-2
10^-3
0
50
100
150
200
250
300
350
θFF [°]

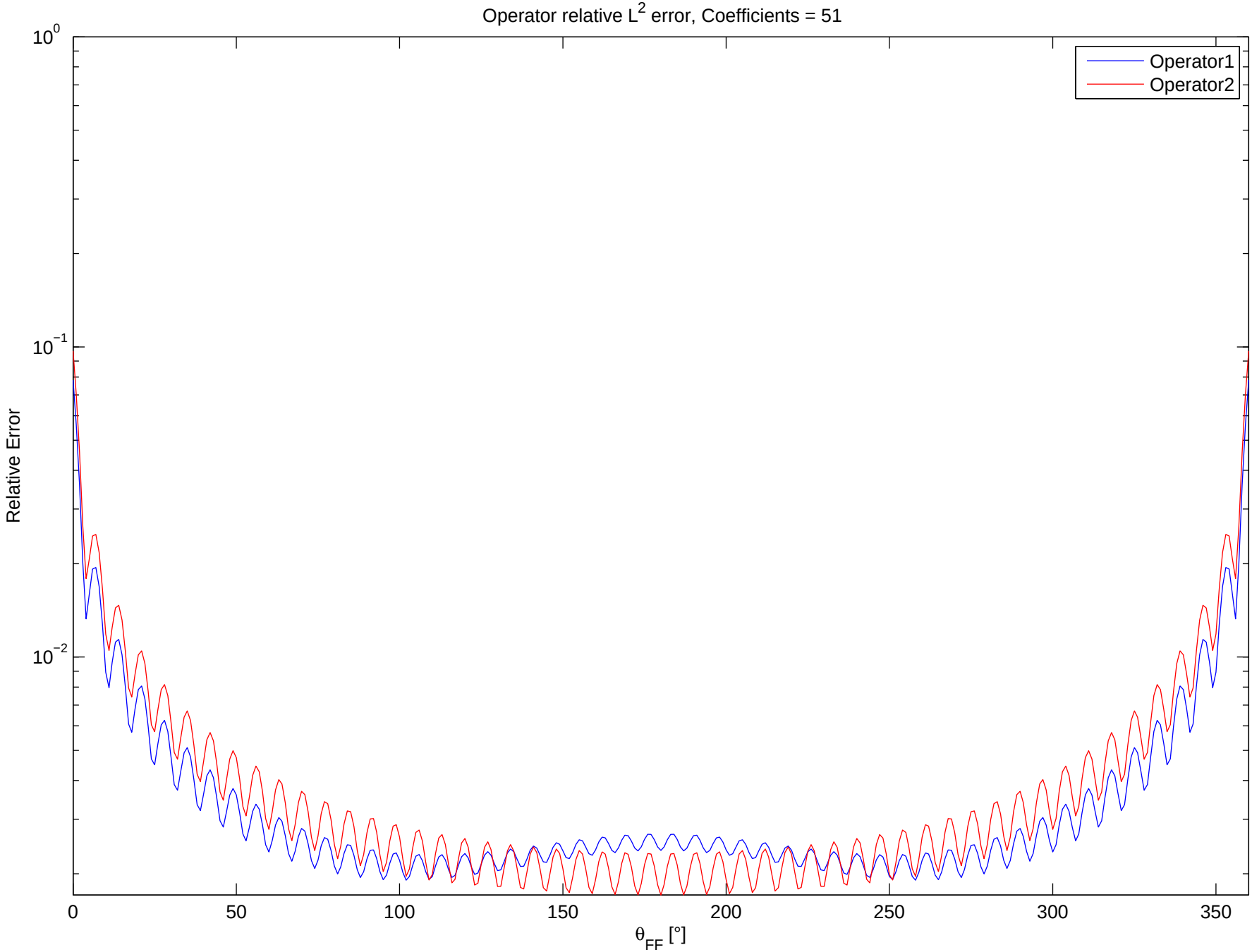

FF Patterns XZ Plane. Sphere Radius = 3λ
Steering angle : 23.3251°, L2 error = 0.0073564
FFSamples = 361, NFSamples = 4050, Coefficients = 55
Amplitude [dB]
θFF [°]
NF2FF
DirectFF
Approximated
20
10
0
−10
−20
−30
−40
0
50
100
150
200
250
300
350

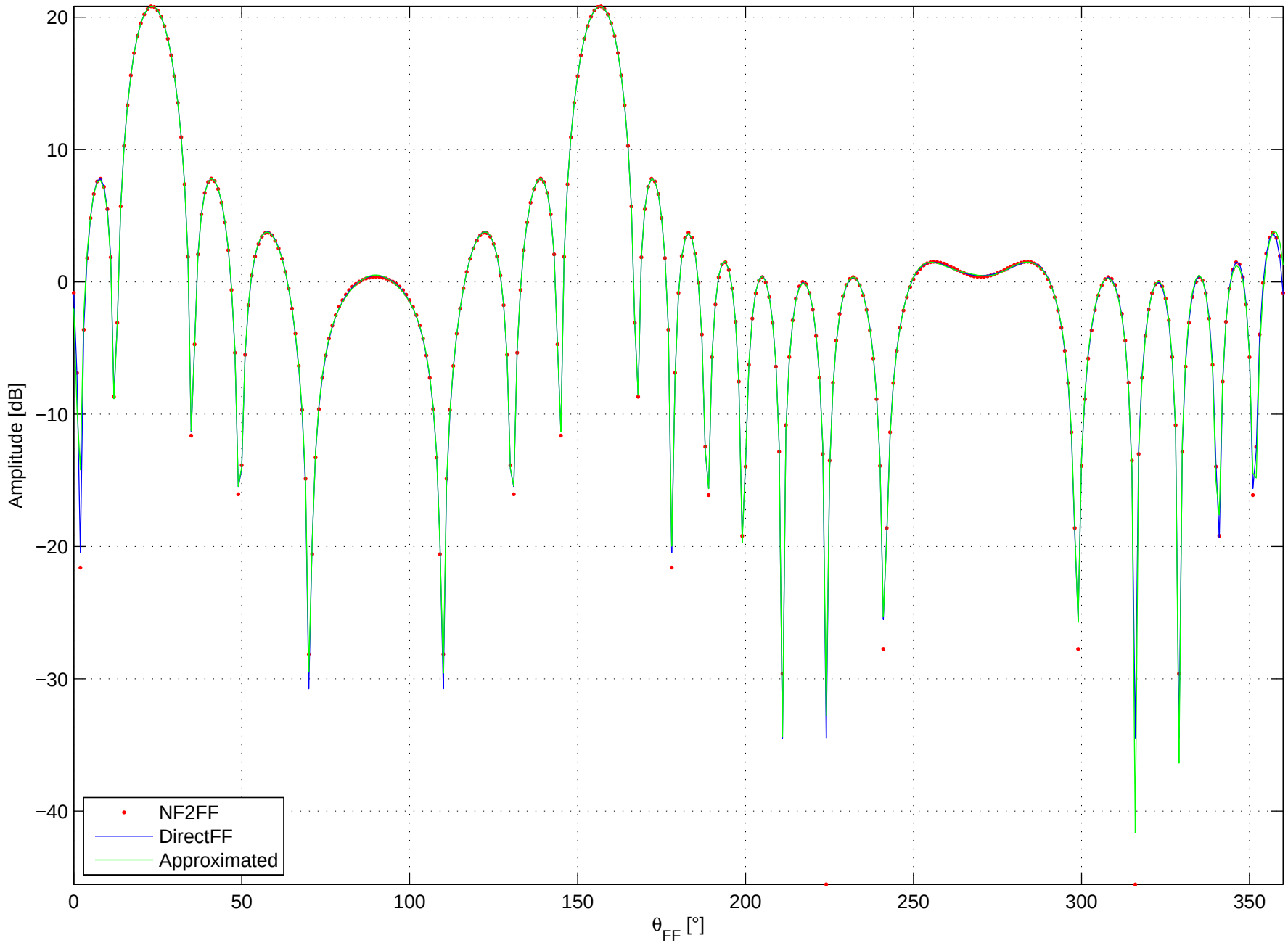

Operator relative L2 error, Coefficients = 55
Operator1
Operator2
Relative Error
θFF [°]
10^0
10^-1
10^-2
10^-3
0
50
100
150
200
250
300
350

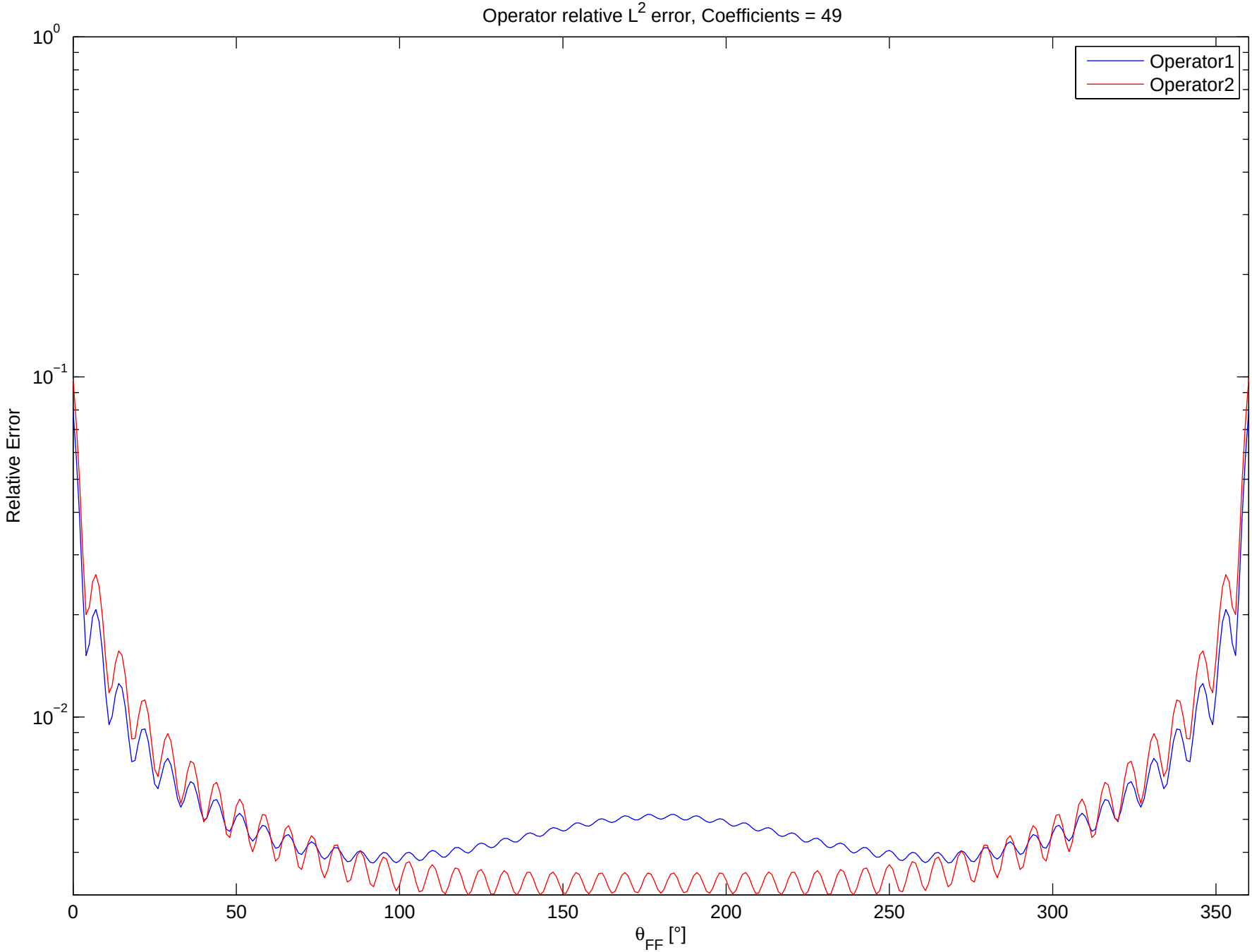

FF Patterns XZ Plane. Sphere Radius = 3λ
Steering angle : 23.3251°, L2 error = 0.0076423
FFSamples = 361, NFSamples = 4050, Coefficients = 53
Amplitude [dB]
θFF [°]
NF2FF
DirectFF
Approximated
20
10
0
−10
−20
−30
−40
0
50
100
150
200
250
300
350

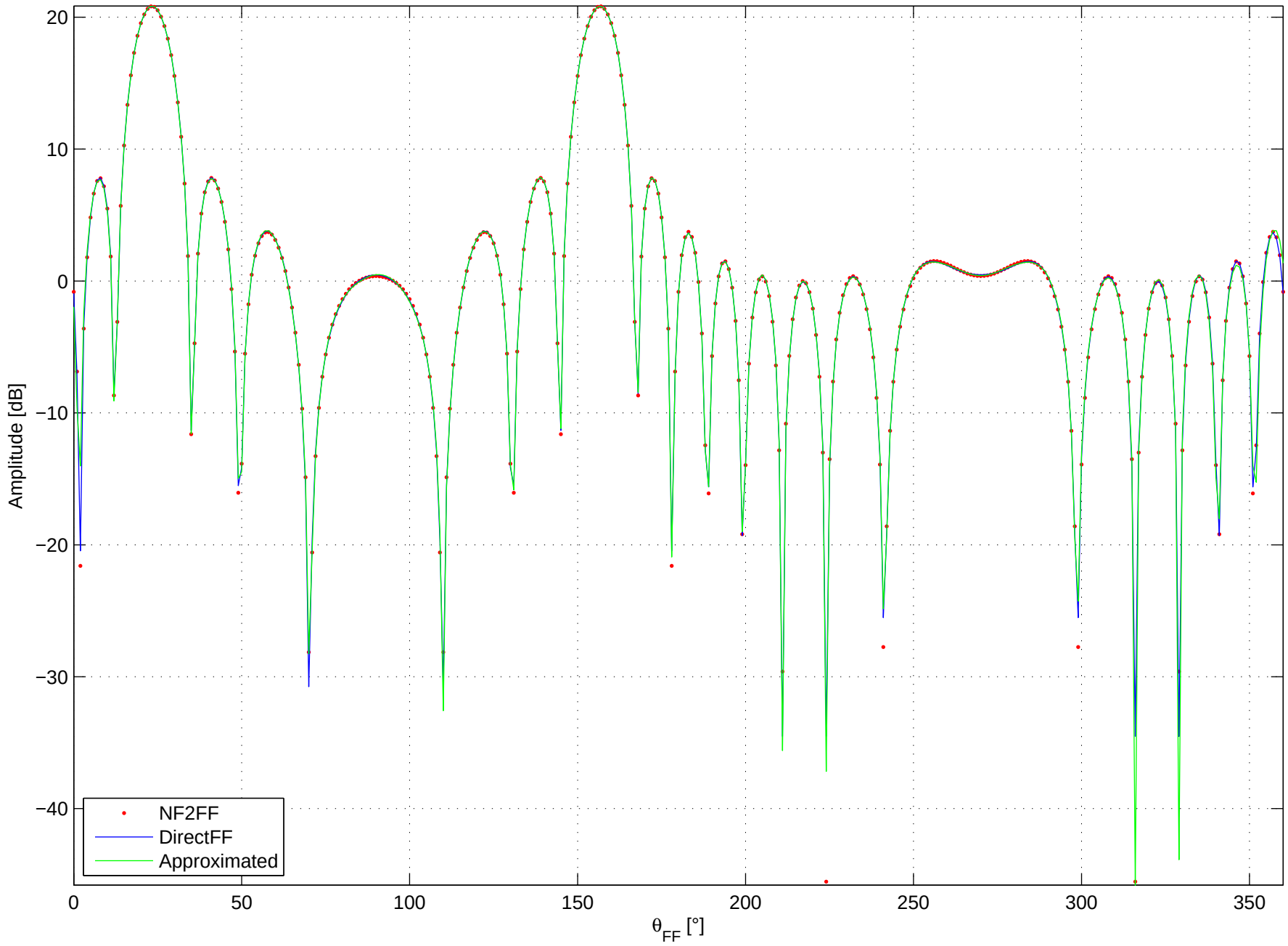

Operator relative L2 error, Coefficients = 53
Operator1
Operator2
Relative Error
θFF [°]
10^0
10^-1
10^-2
0
50
100
150
200
250
300
350

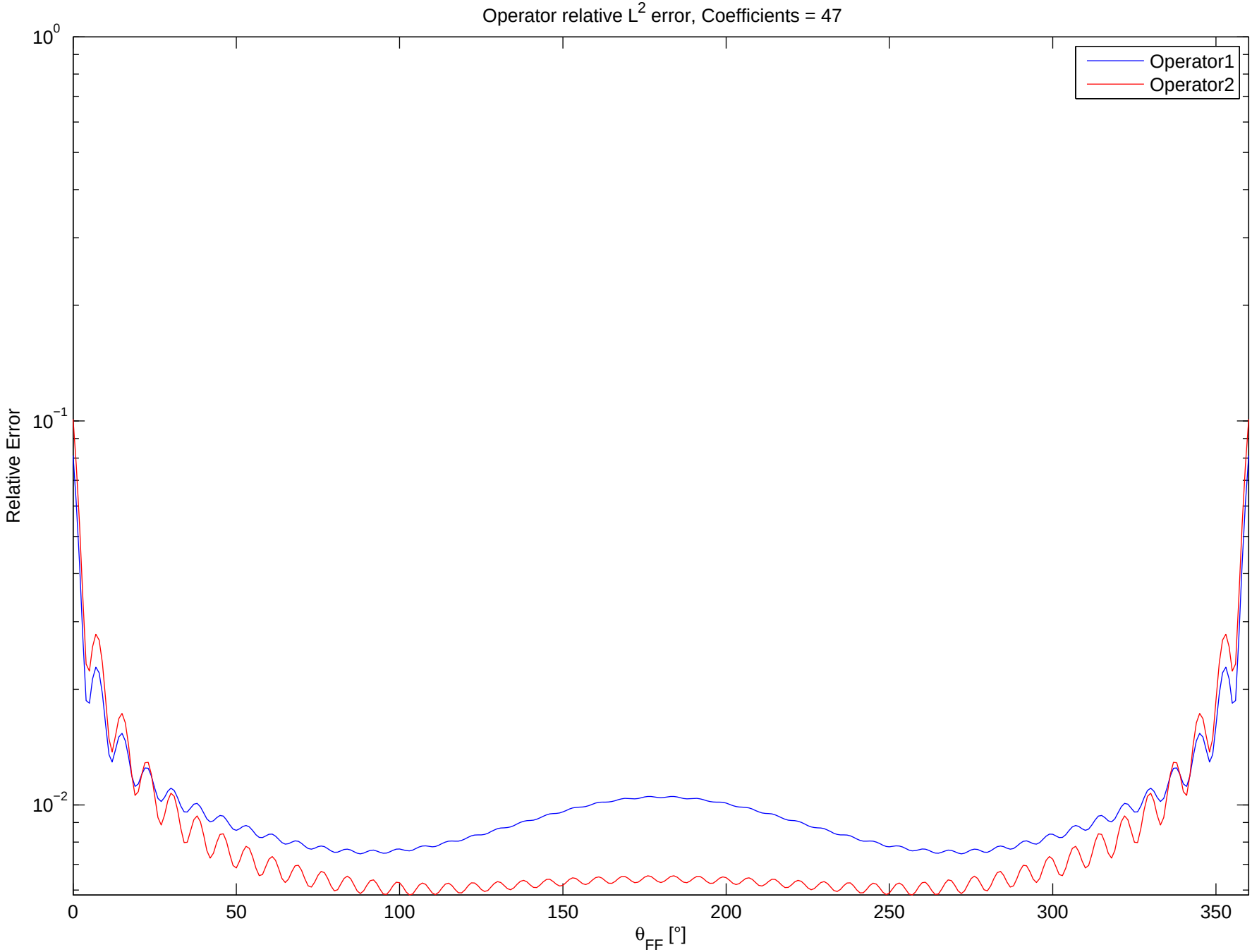

FF Patterns XZ Plane. Sphere Radius = 3λ
Steering angle : 23.3251°, L2 error = 0.0079649
FFSamples = 361, NFSamples = 4050, Coefficients = 51
Amplitude [dB]
θFF [°]
NF2FF
DirectFF
Approximated
20
10
0
−10
−20
−30
−40
0
50
100
150
200
250
300
350

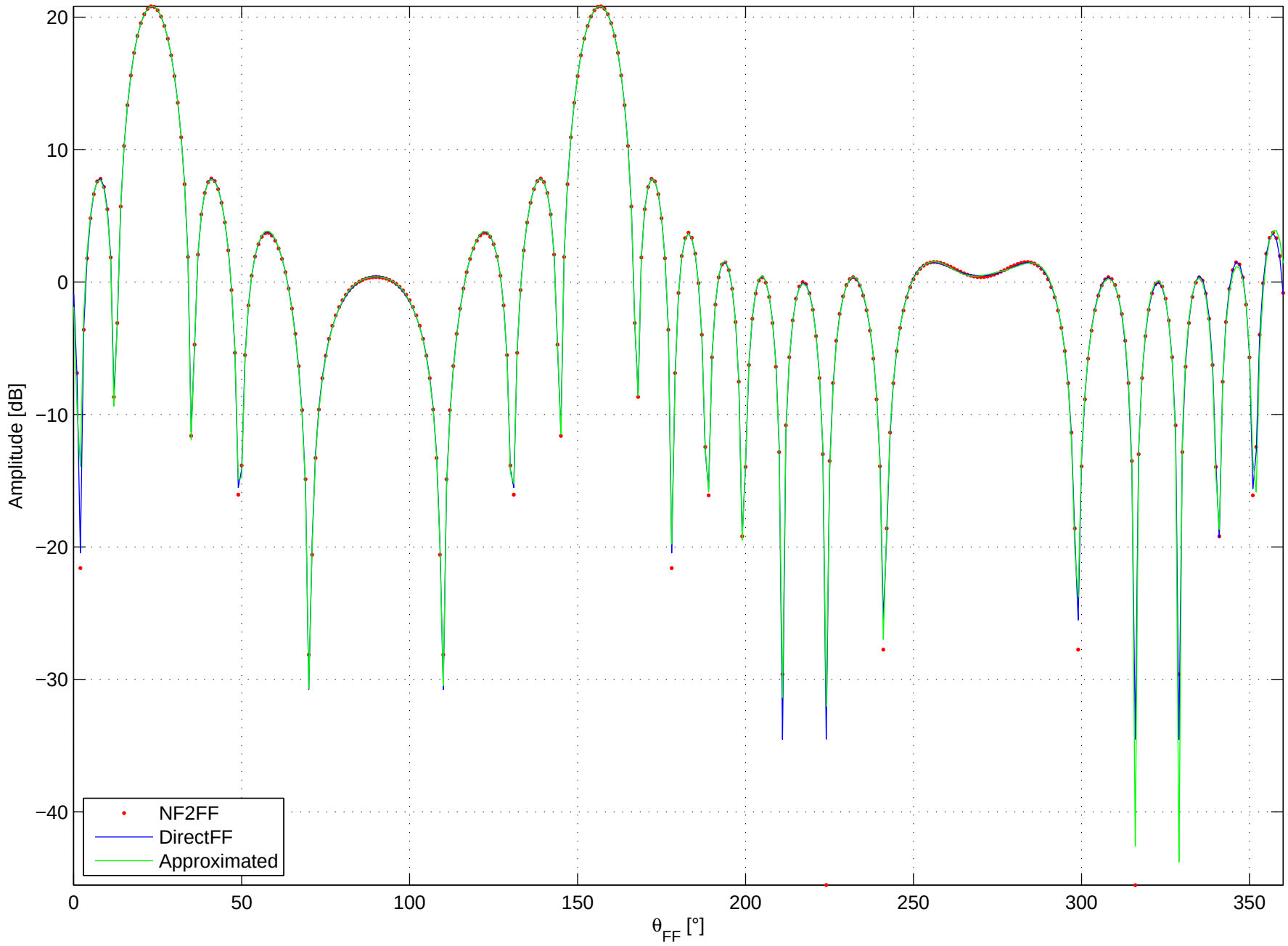

Operator relative L2 error, Coefficients = 51
Operator1
Operator2
Relative Error
10^0
10^-1
10^-2
0
50
100
150
200
250
300
350
θFF [°]

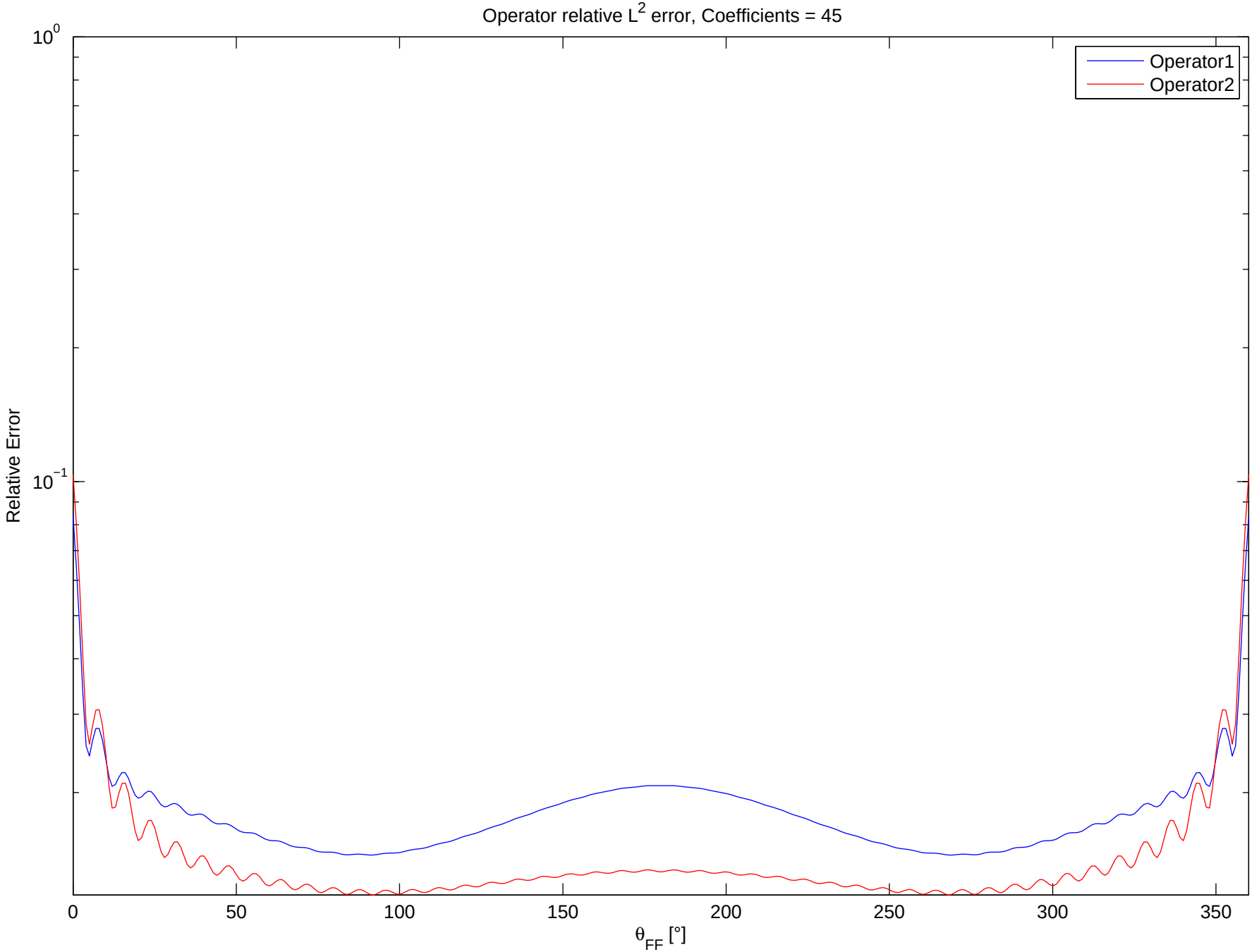

FF Patterns XZ Plane. Sphere Radius = 3λ
Steering angle : 23.3251°, L2 error = 0.0083535
FFSamples = 361, NFSamples = 4050, Coefficients = 49
Amplitude [dB]
θFF [°]
NF2FF
DirectFF
Approximated
20
10
0
−10
−20
−30
−40
0
50
100
150
200
250
300
350

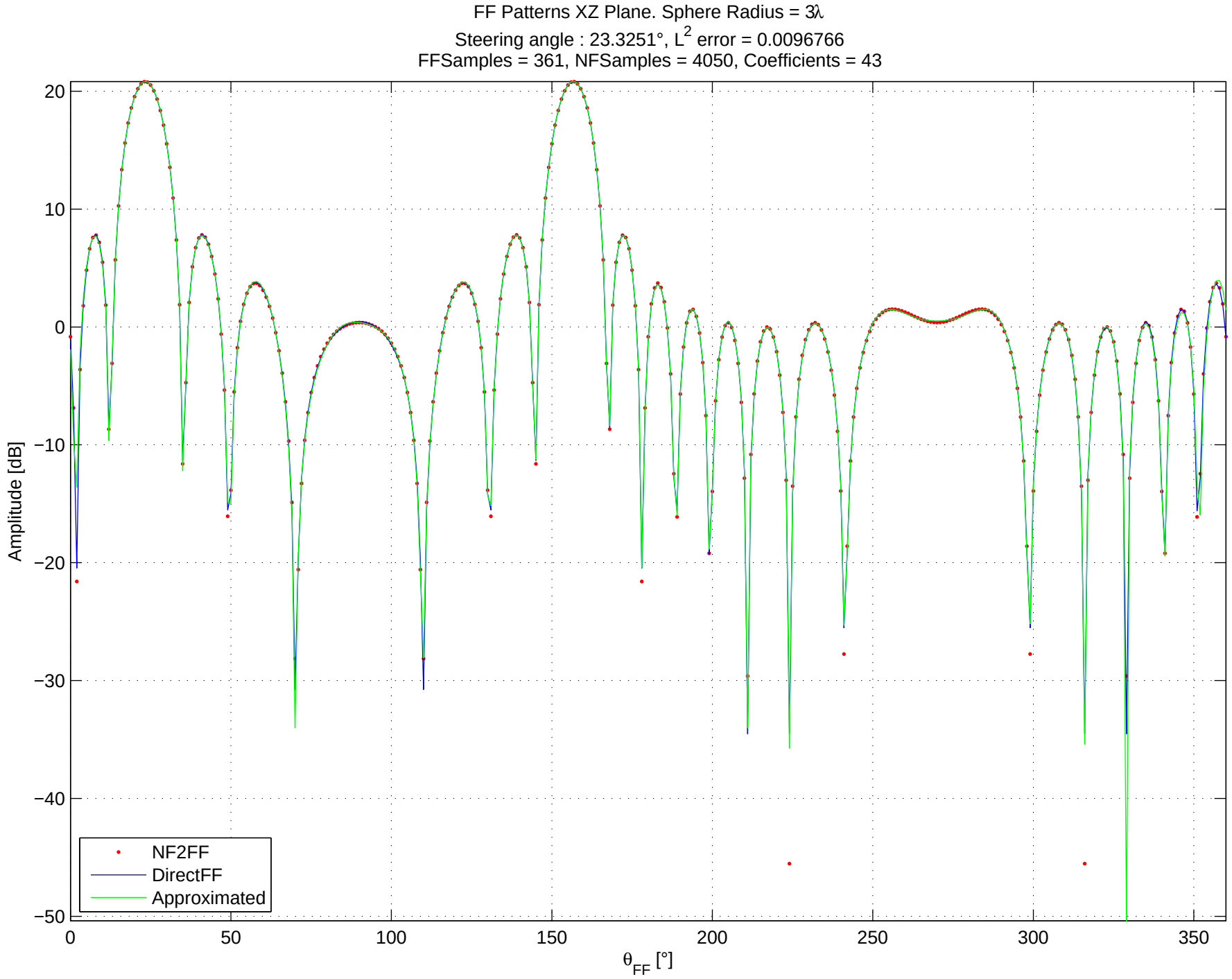

Operator relative L2 error, Coefficients = 49
Operator1
Operator2
Relative Error
10^0
10^-1
10^-2
0
50
100
150
200
250
300
350
θFF [°]

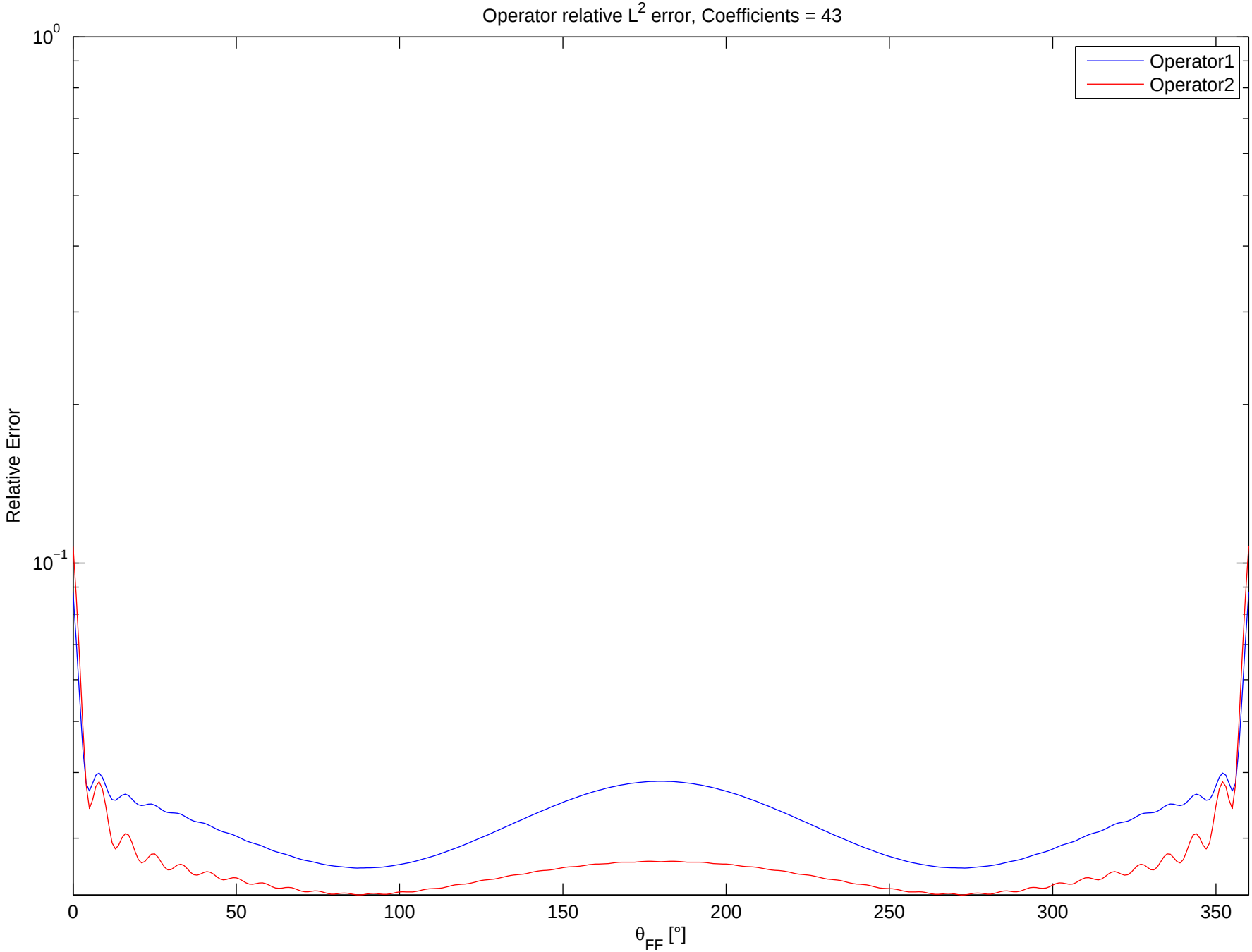

FF Patterns XZ Plane. Sphere Radius = 3λ
Steering angle : 23.3251°, L2 error = 0.0087524
FFSamples = 361, NFSamples = 4050, Coefficients = 47
Amplitude [dB]
θFF [°]
NF2FF
DirectFF
Approximated
20
10
0
−10
−20
−30
−40
0
50
100
150
200
250
300
350

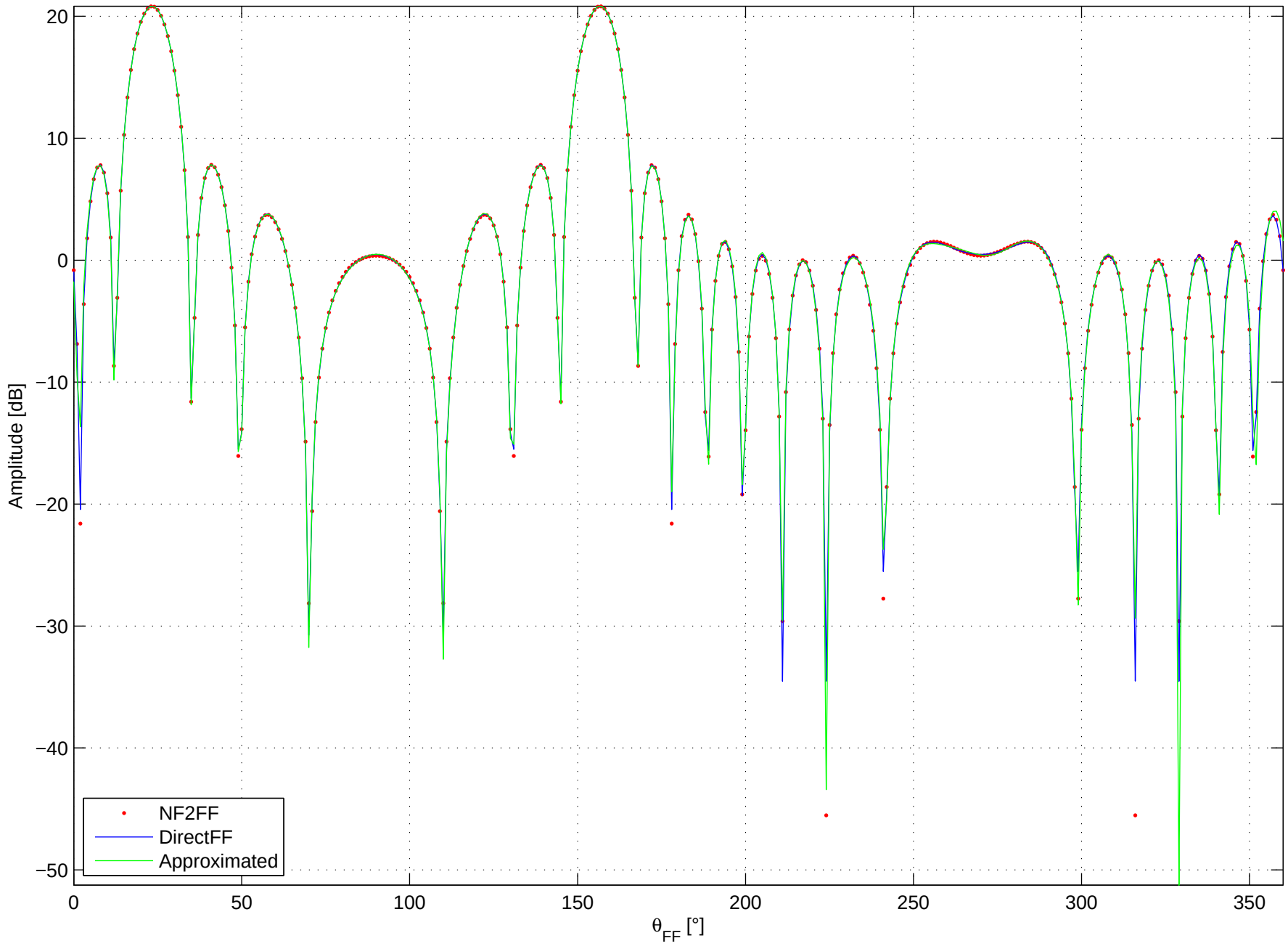

Operator relative L2 error, Coefficients = 47
Operator1
Operator2
Relative Error
10^0
10^-1
10^-2
0
50
100
150
200
250
300
350
θFF [°]

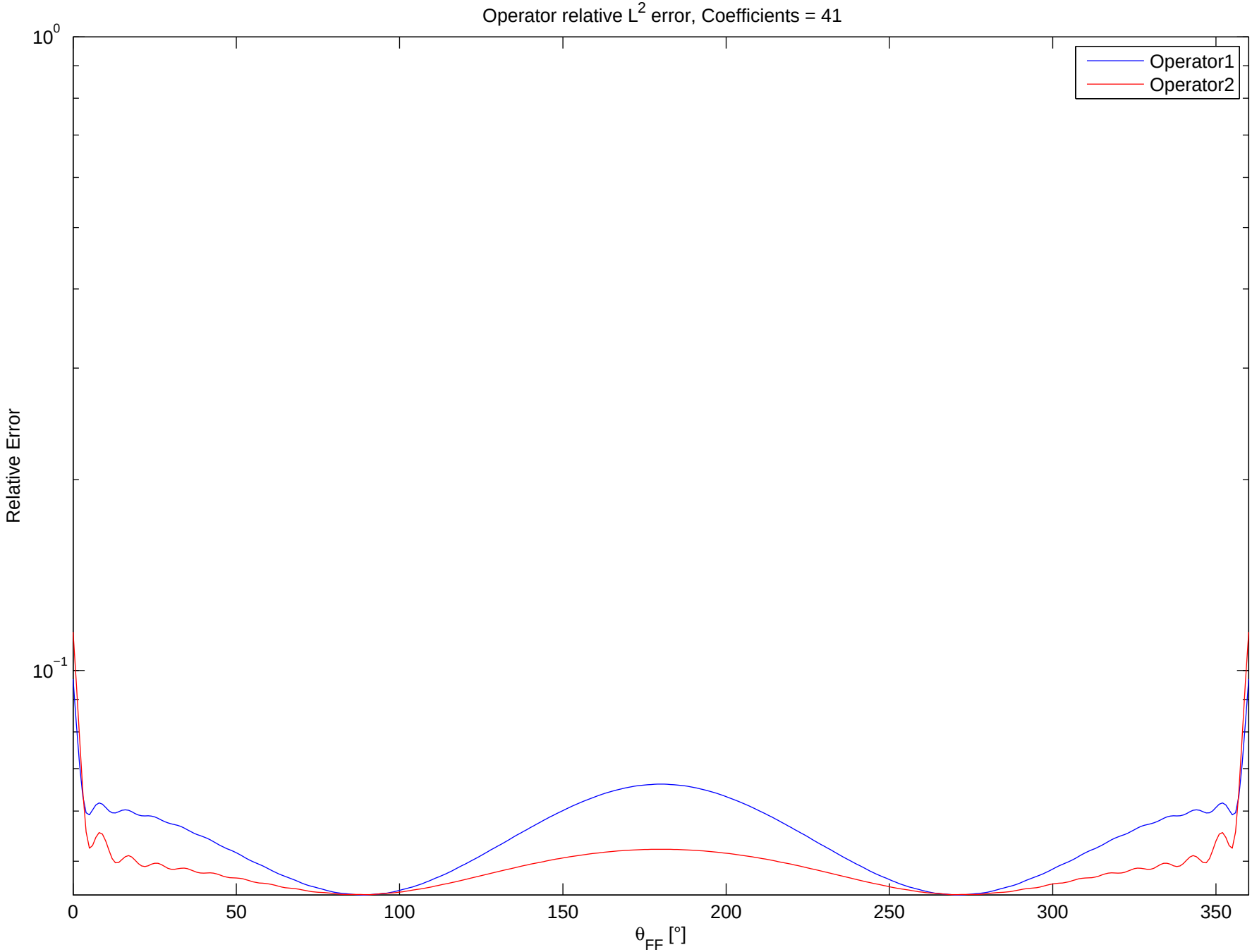

FF Patterns XZ Plane. Sphere Radius = 3λ
Steering angle : 23.3251°, L2 error = 0.0093284
FFSamples = 361, NFSamples = 4050, Coefficients = 45
Amplitude [dB]
θFF [°]
NF2FF
DirectFF
Approximated
20
10
0
−10
−20
−30
−40
0
50
100
150
200
250
300
350

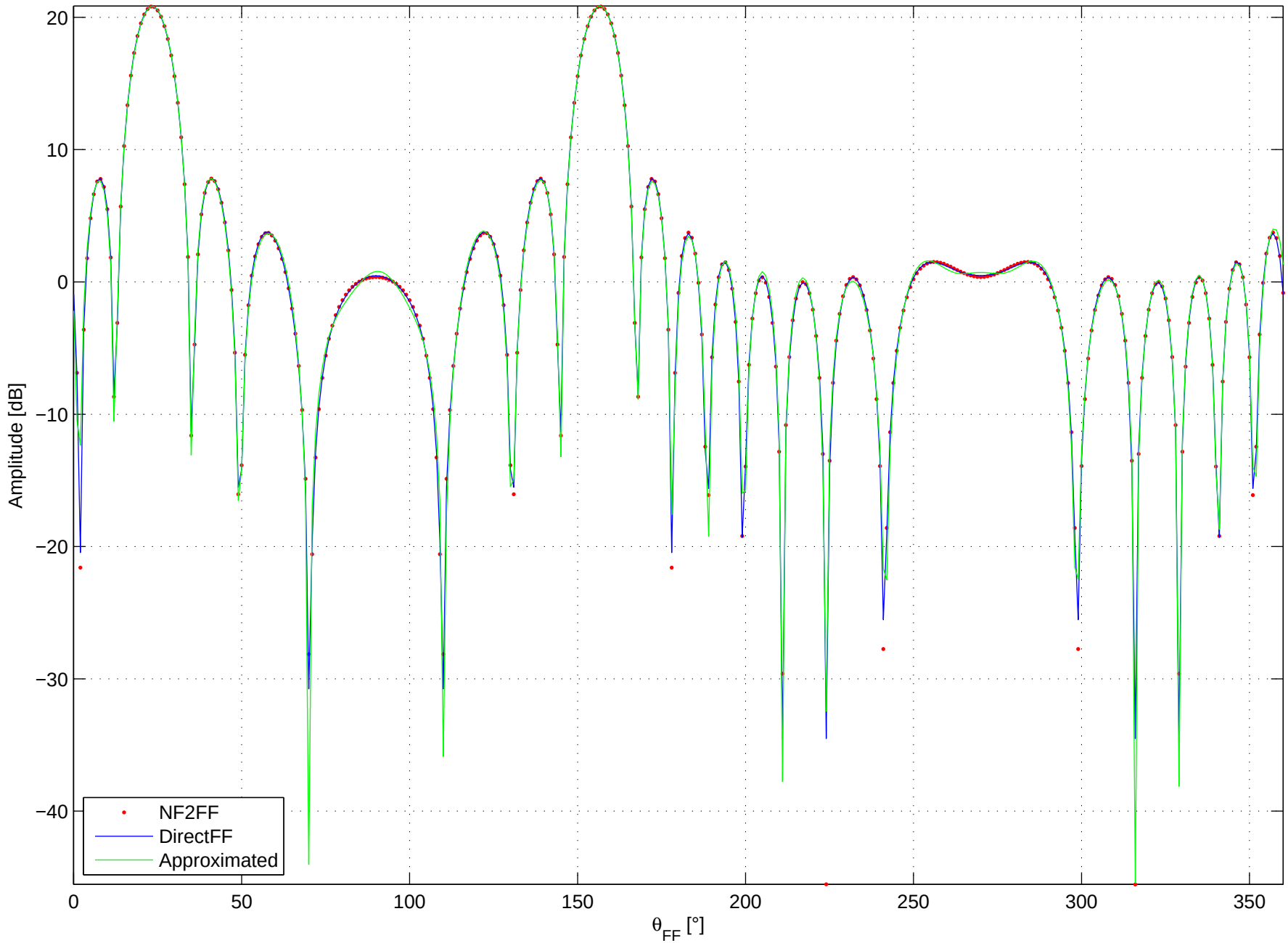

Operator relative L2 error, Coefficients = 45
Operator1
Operator2
Relative Error
10^0
10^-1
0
50
100
150
200
250
300
350
θFF [°]

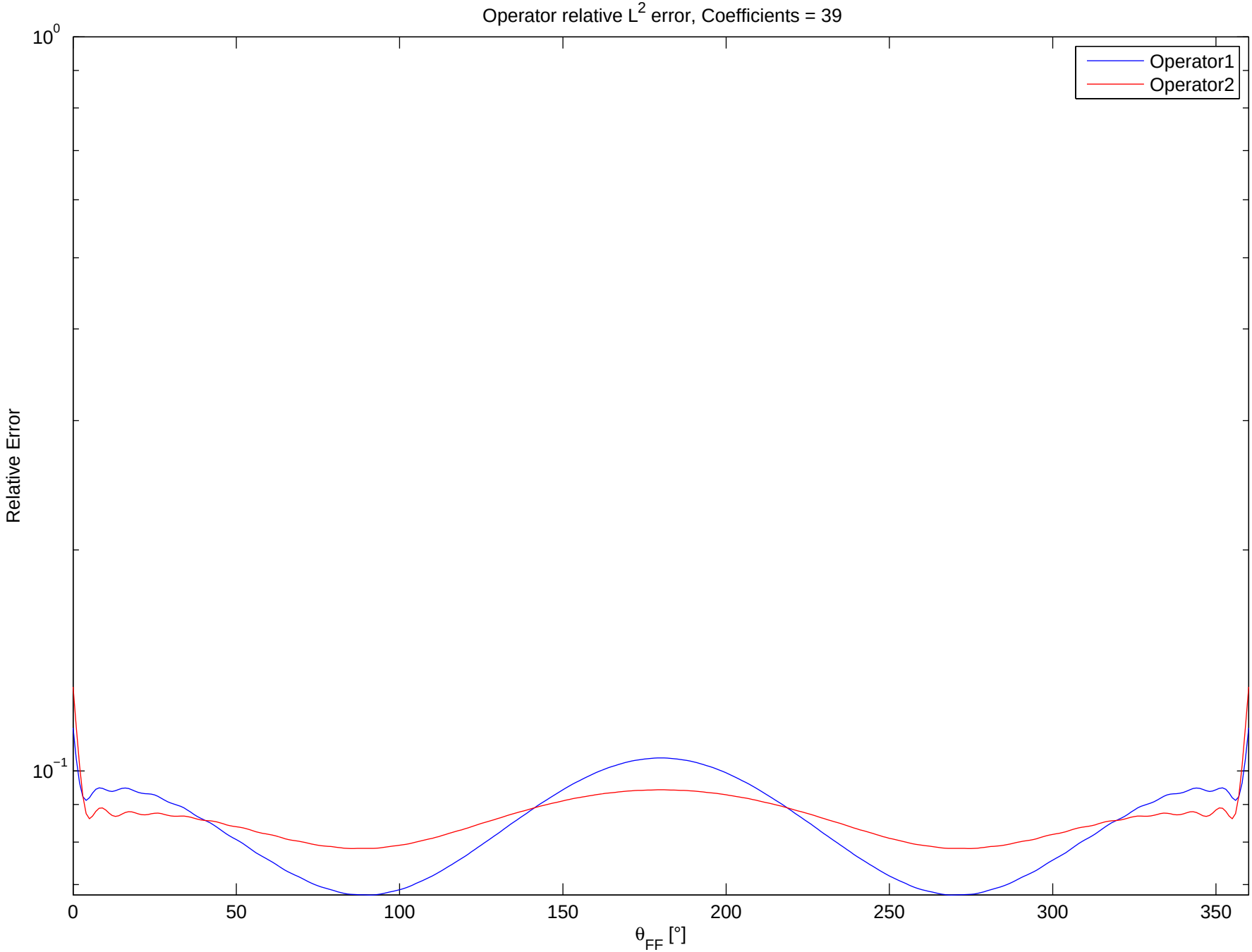

FF Patterns XZ Plane. Sphere Radius = 3λ
Steering angle : 23.3251°, L2 error = 0.0096766
FFSamples = 361, NFSamples = 4050, Coefficients = 43
Amplitude [dB]
θFF [°]
NF2FF
DirectFF
Approximated
20
10
0
−10
−20
−30
−40
−50
0
50
100
150
200
250
300
350

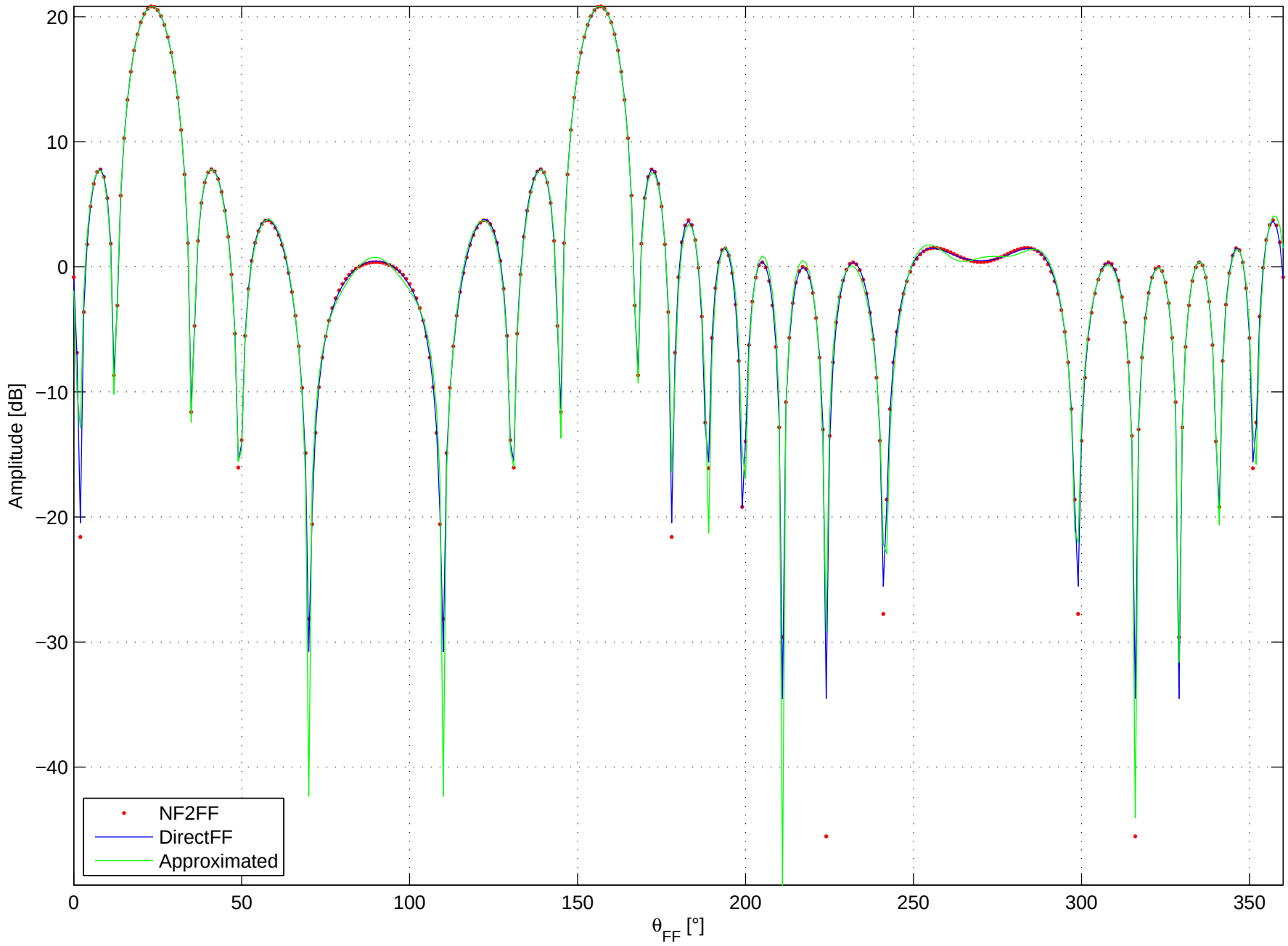

Operator relative L2 error, Coefficients = 43
Operator1
Operator2
Relative Error
10^0
10^-1
0
50
100
150
200
250
300
350
θFF [°]

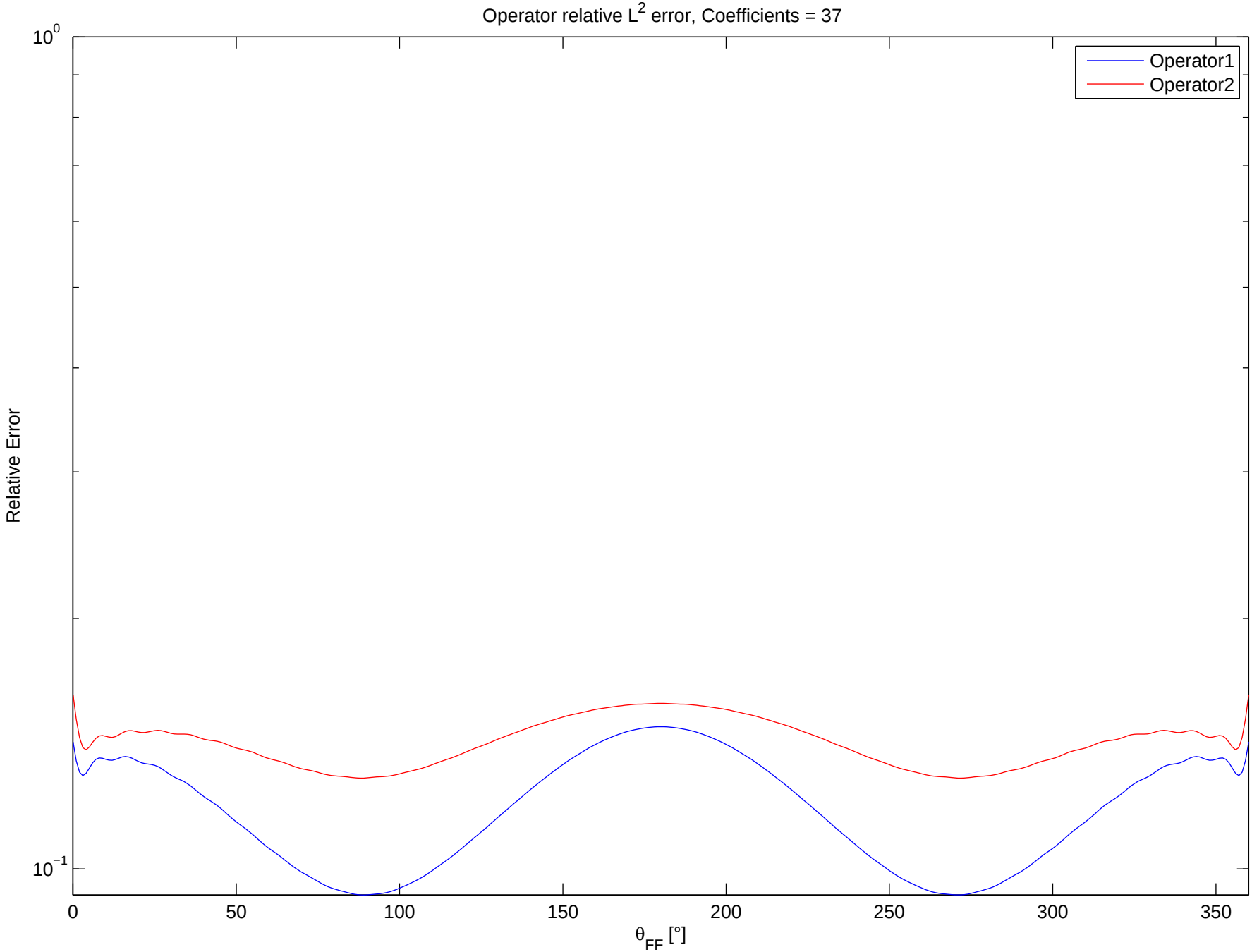

FF Patterns XZ Plane. Sphere Radius = 3λ
Steering angle : 23.3251°, L2 error = 0.010605
FFSamples = 361, NFSamples = 4050, Coefficients = 41
Amplitude [dB]
θFF [°]
NF2FF
DirectFF
Approximated
20
10
0
−10
−20
−30
−40
−50
0
50
100
150
200
250
300
350

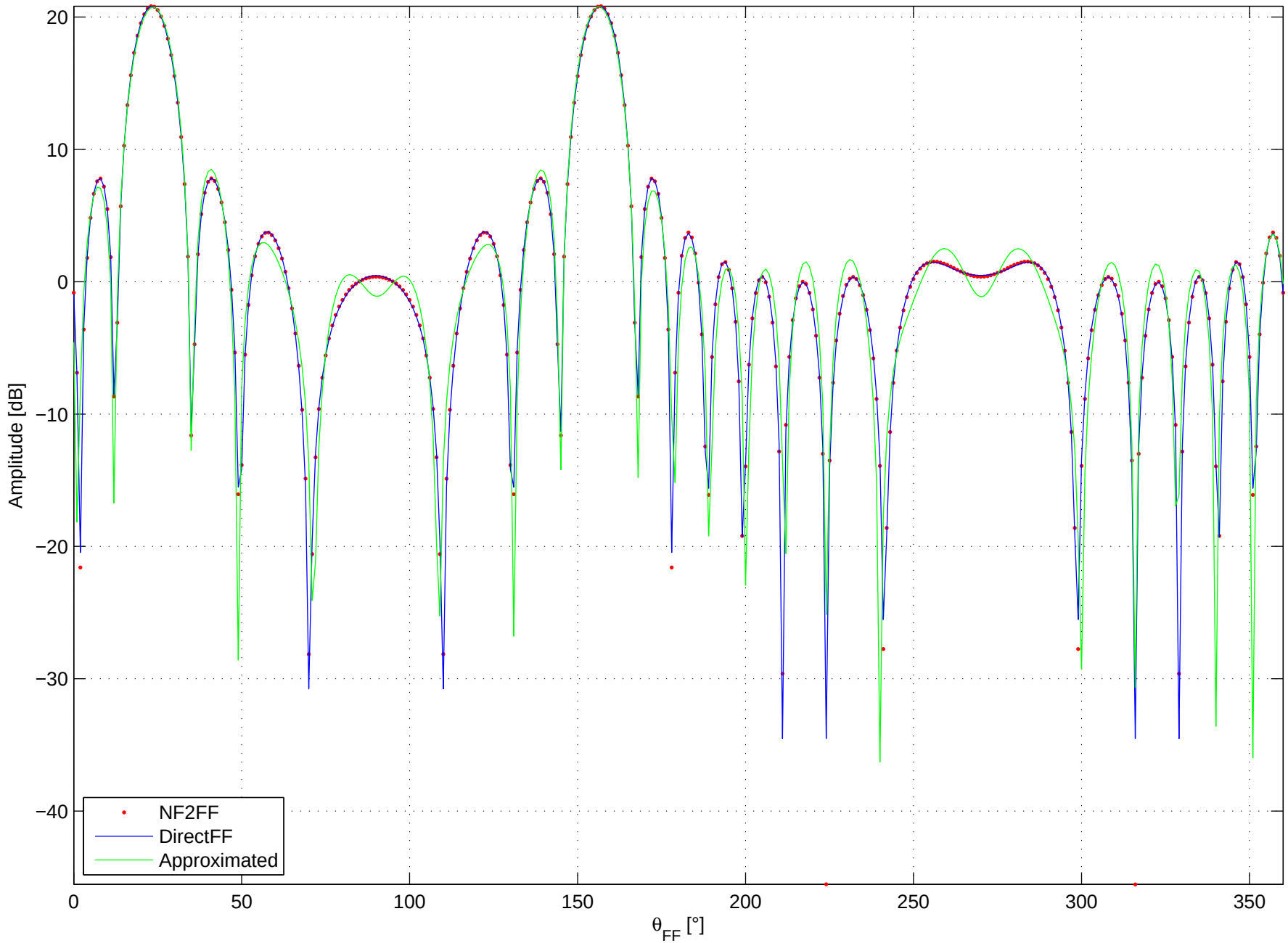

Operator relative L2 error, Coefficients = 41
Operator1
Operator2
Relative Error
10^0
10^-1
0
50
100
150
200
250
300
350
θFF [°]

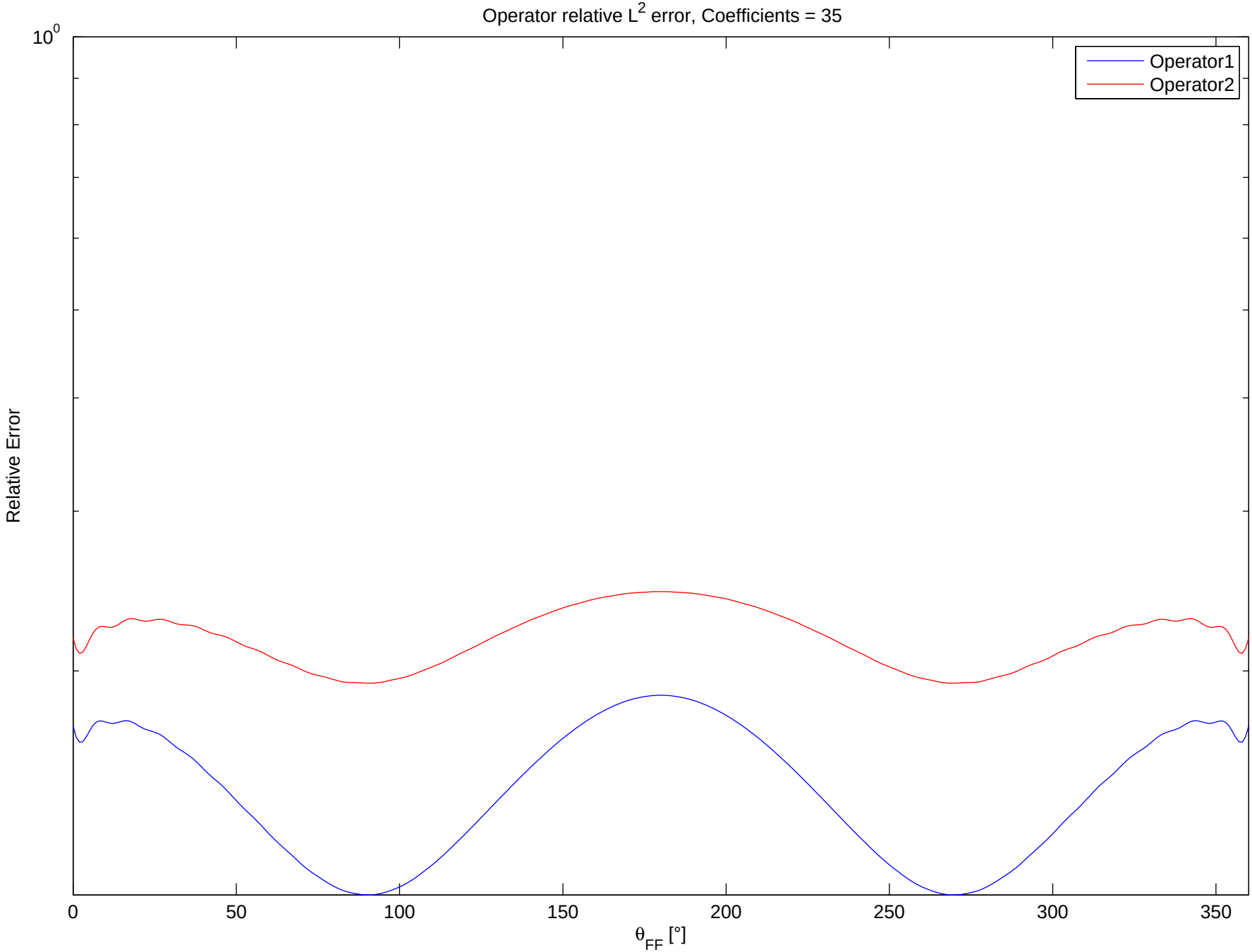

FF Patterns XZ Plane. Sphere Radius = 3λ
Steering angle : 23.3251°, L2 error = 0.01454
FFSamples = 361, NFSamples = 4050, Coefficients = 39
Amplitude [dB]
θFF [°]
NF2FF
DirectFF
Approximated
20
10
0
−10
−20
−30
−40
0
50
100
150
200
250
300
350

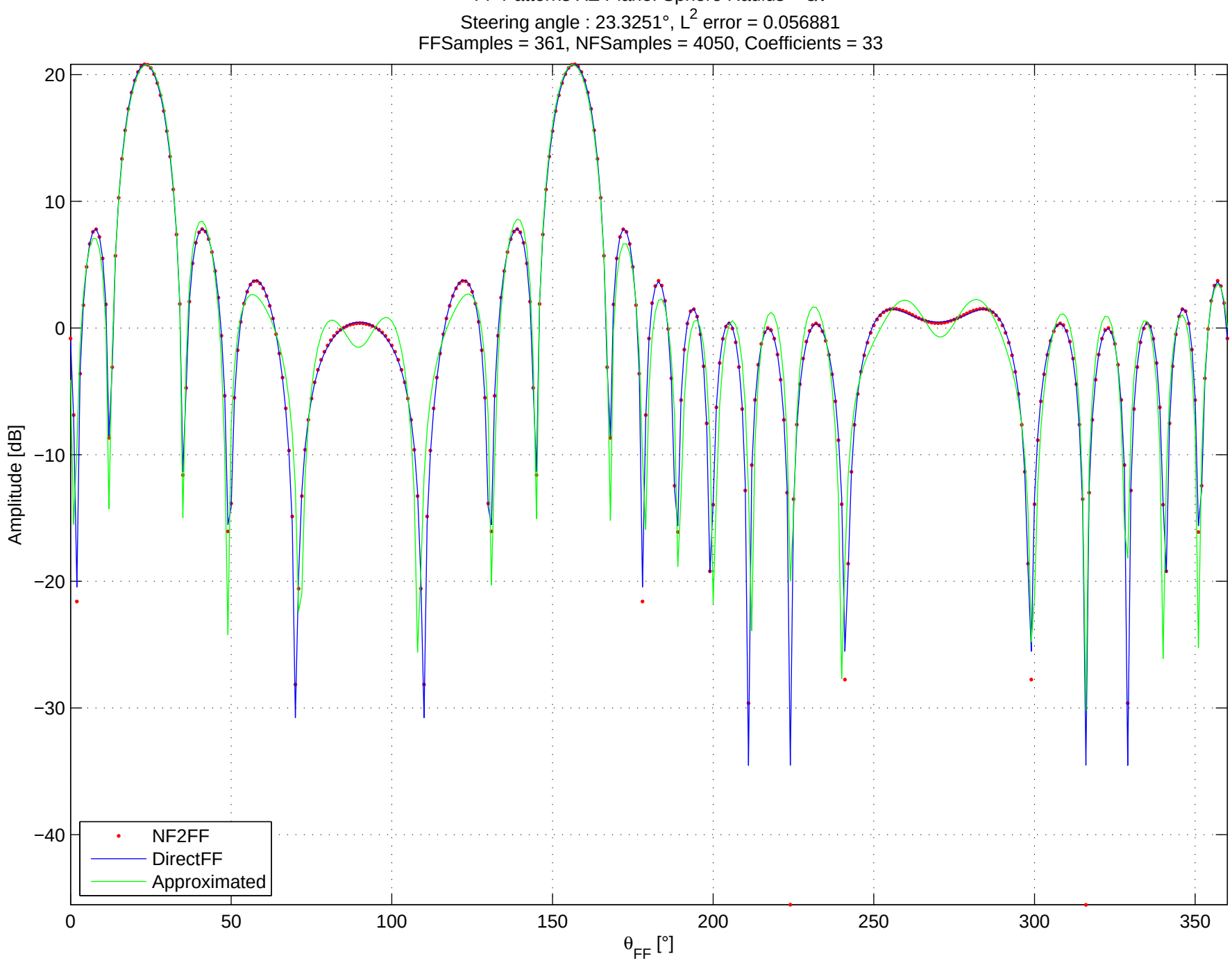

Operator relative L2 error, Coefficients = 39
Operator1
Operator2
Relative Error
10^0
10^-1
0
50
100
150
200
250
300
350
θFF [°]

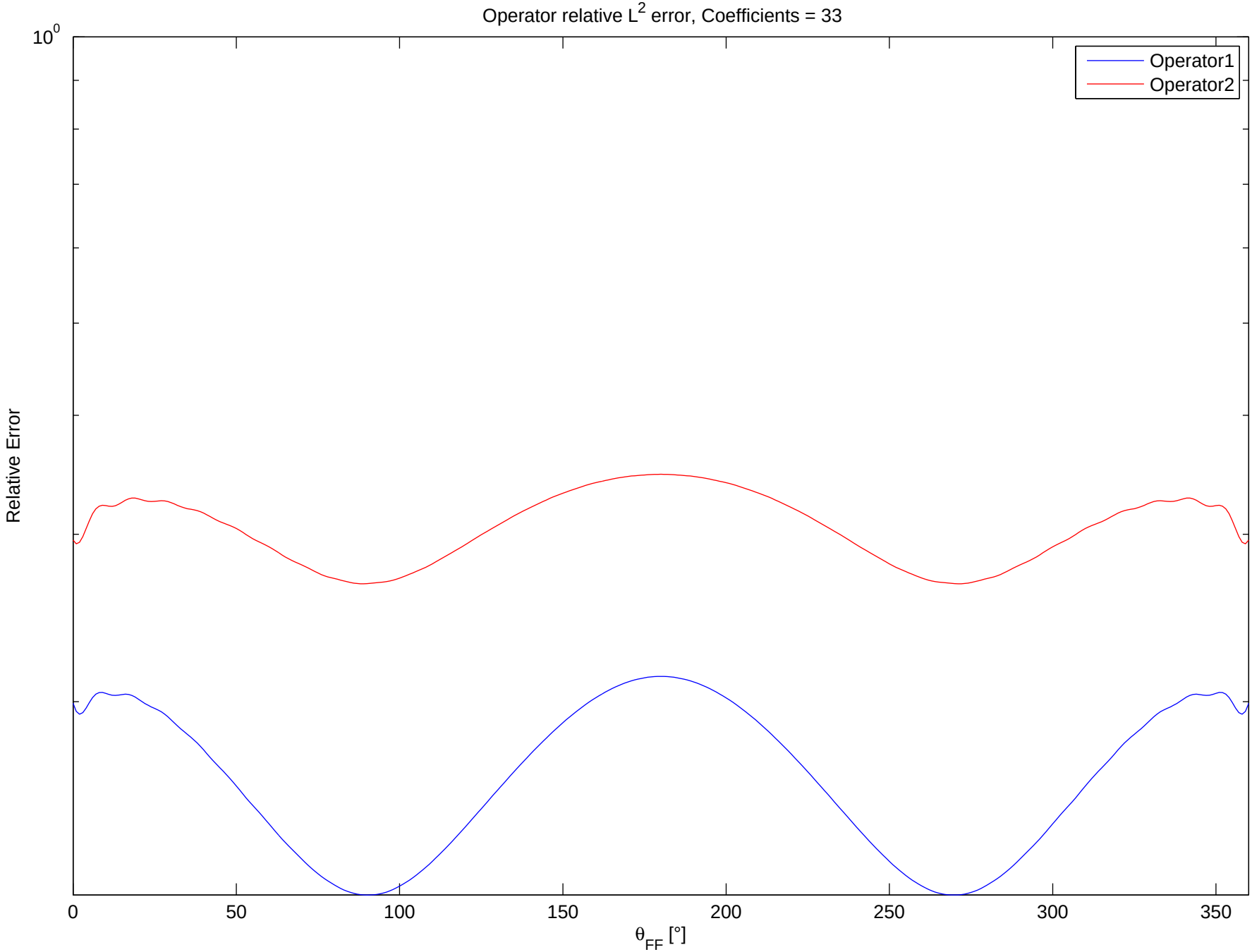

FF Patterns XZ Plane. Sphere Radius = 3λ
Steering angle : 23.3251°, L2 error = 0.015689
FFSamples = 361, NFSamples = 4050, Coefficients = 37
Amplitude [dB]
θFF [°]
NF2FF
DirectFF
Approximated
20
10
0
−10
−20
−30
−40
0
50
100
150
200
250
300
350

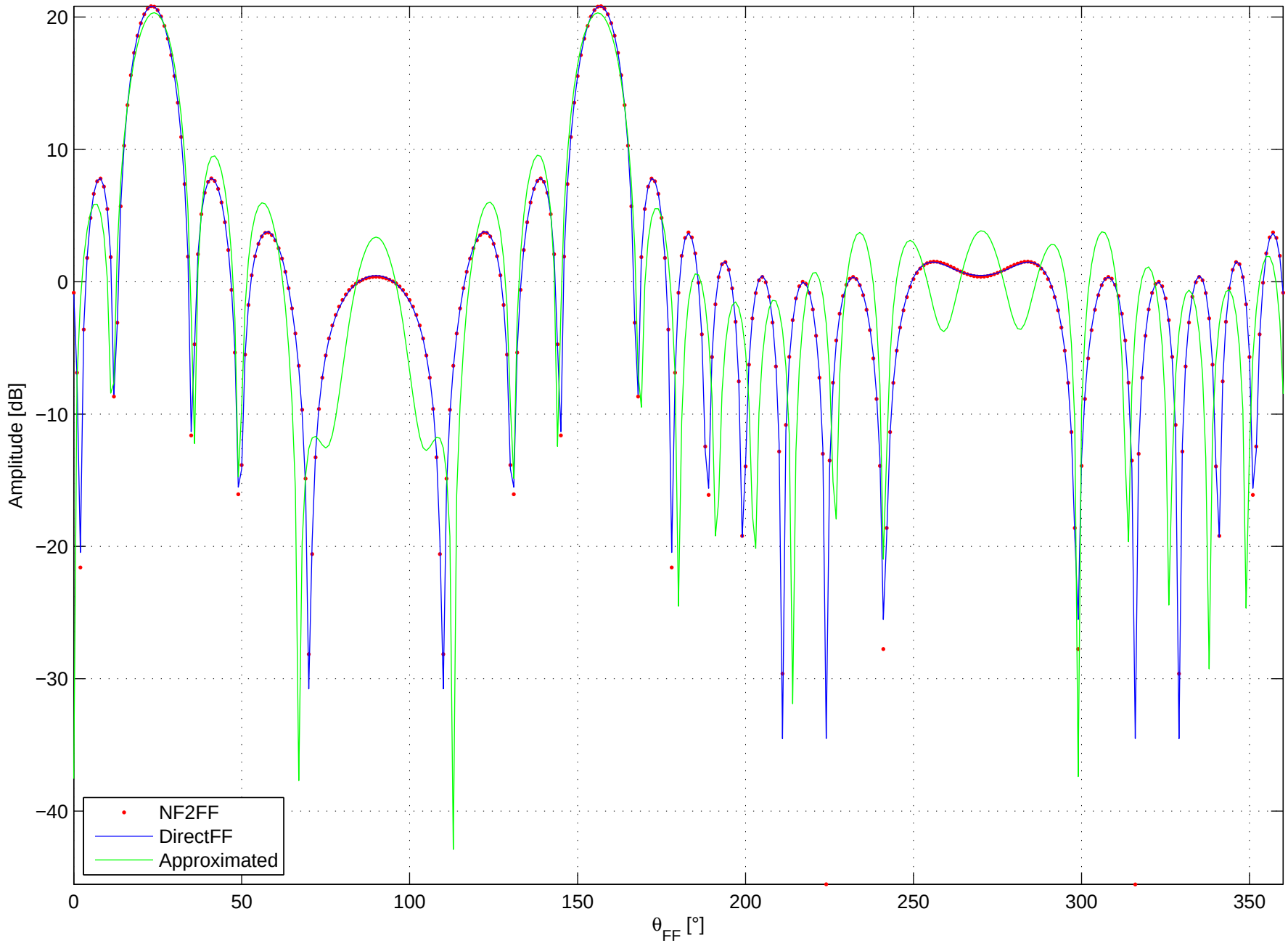

Operator relative L2 error, Coefficients = 37
Operator1
Operator2
Relative Error
10^0
10^-1
0
50
100
150
200
250
300
350
θFF [°]

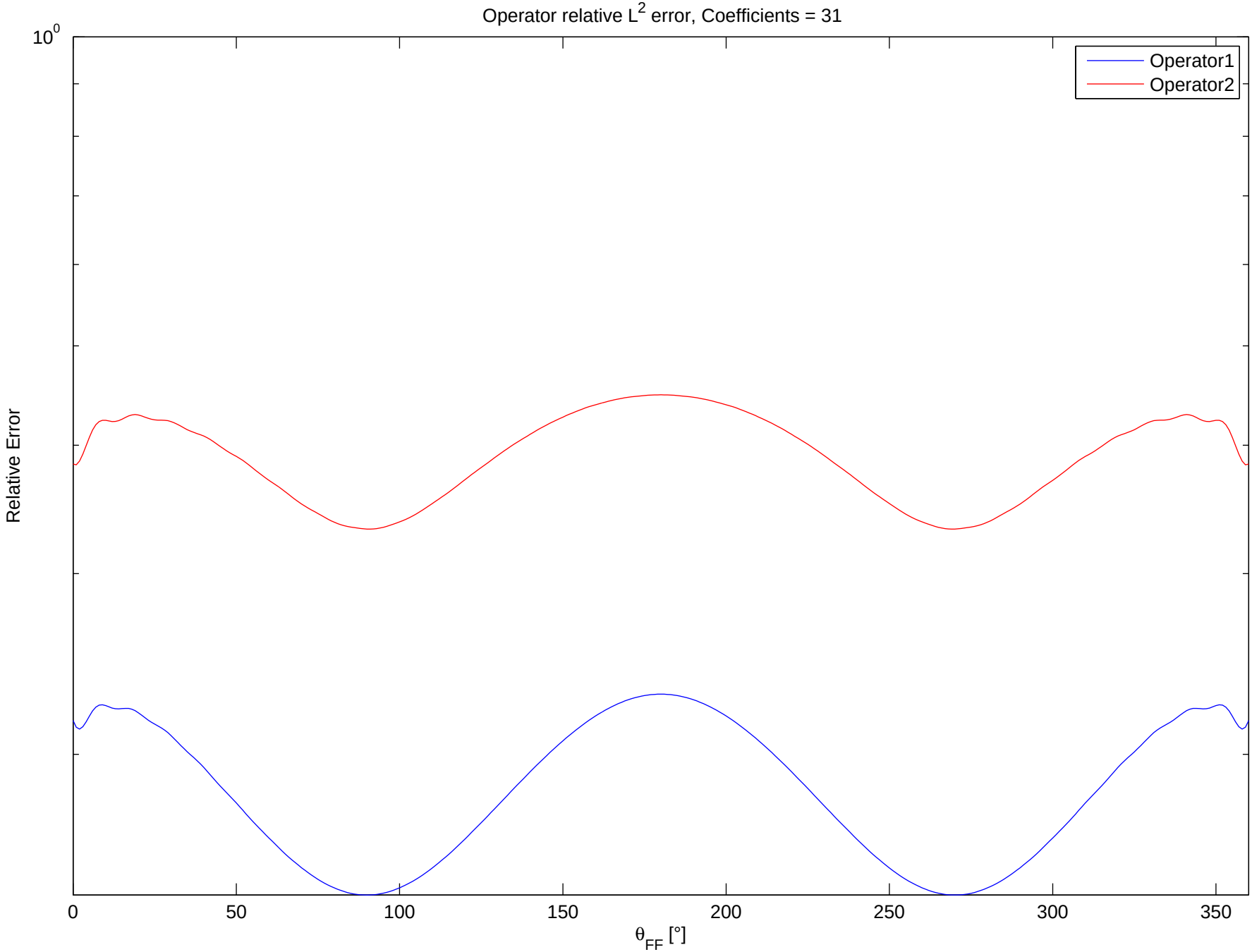

FF Patterns XZ Plane. Sphere Radius = 3λ
Steering angle : 23.3251°, L2 error = 0.055332
FFSamples = 361, NFSamples = 4050, Coefficients = 35
Amplitude [dB]
θFF [°]
NF2FF
DirectFF
Approximated
20
10
0
−10
−20
−30
−40
0
50
100
150
200
250
300
350

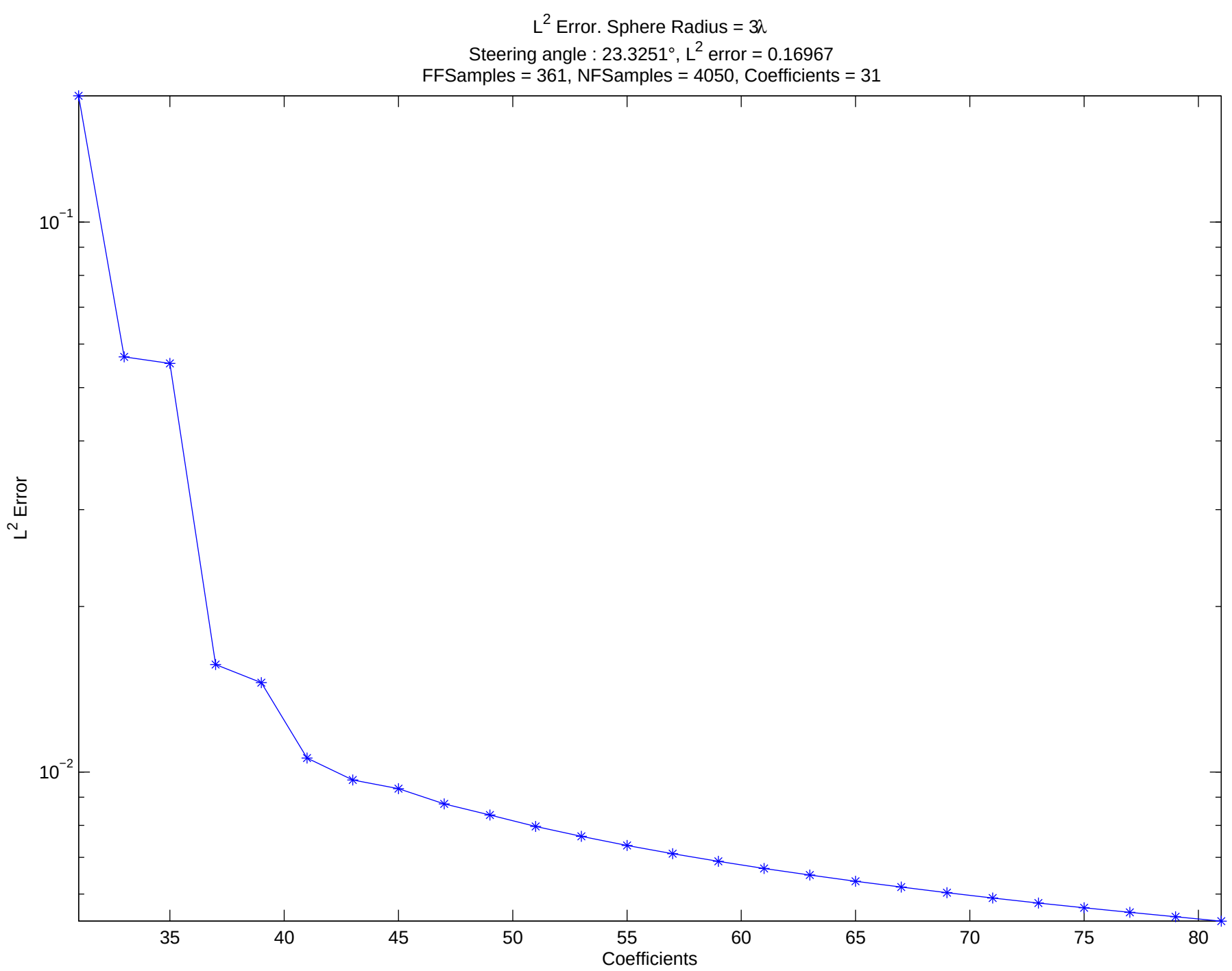

Operator relative L2 error, Coefficients = 35
10^0
Relative Error
Operator1
Operator2
0
50
100
150
200
250
300
350
θFF [°]


FF Patterns XZ Plane. Sphere Radius = 3λ
Steering angle : 23.3251°, L2 error = 0.056881
FFSamples = 361, NFSamples = 4050, Coefficients = 33
Amplitude [dB]
θFF [°]
NF2FF
DirectFF
Approximated
20
10
0
−10
−20
−30
−40
0
50
100
150
200
250
300
350


Operator relative L2 error, Coefficients = 33
10^0
Relative Error
Operator1
Operator2
0
50
100
150
200
250
300
350
θFF [°]


FF Patterns XZ Plane. Sphere Radius = 3λ
Steering angle : 23.3251°, L2 error = 0.16967
FFSamples = 361, NFSamples = 4050, Coefficients = 31
Amplitude [dB]
θFF [°]
NF2FF
DirectFF
Approximated
20
10
0
−10
−20
−30
−40
0
50
100
150
200
250
300
350


Operator relative L2 error, Coefficients = 31
10^0
Relative Error
Operator1
Operator2
0
50
100
150
200
250
300
350
θFF [°]


L2 Error. Sphere Radius = 3λ
Steering angle : 23.3251°, L2 error = 0.16967
FFSamples = 361, NFSamples = 4050, Coefficients = 31
10−1
10−2
L2 Error
35
40
45
50
55
60
65
70
75
80
Coefficients