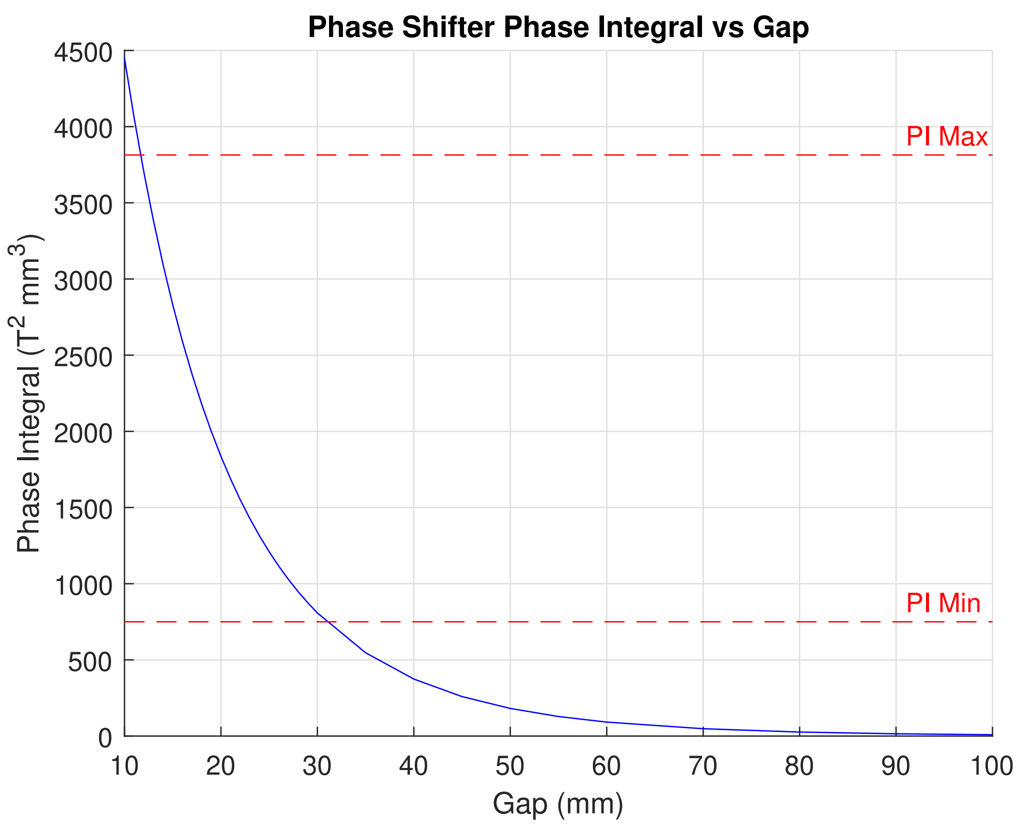
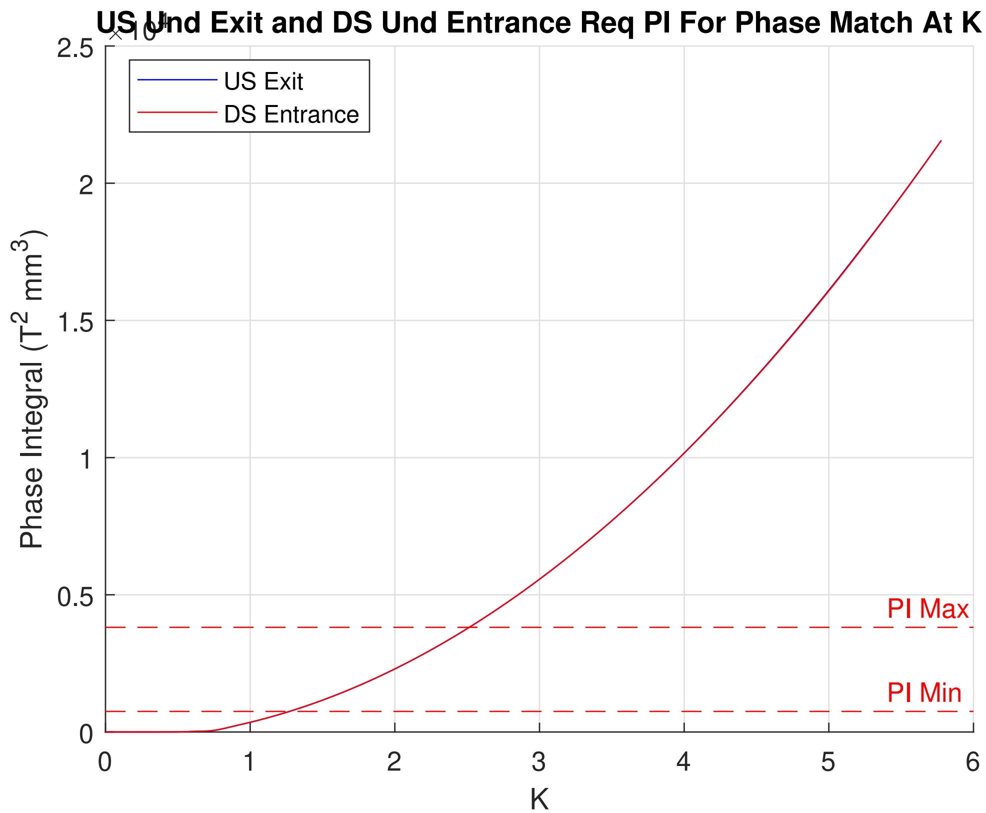
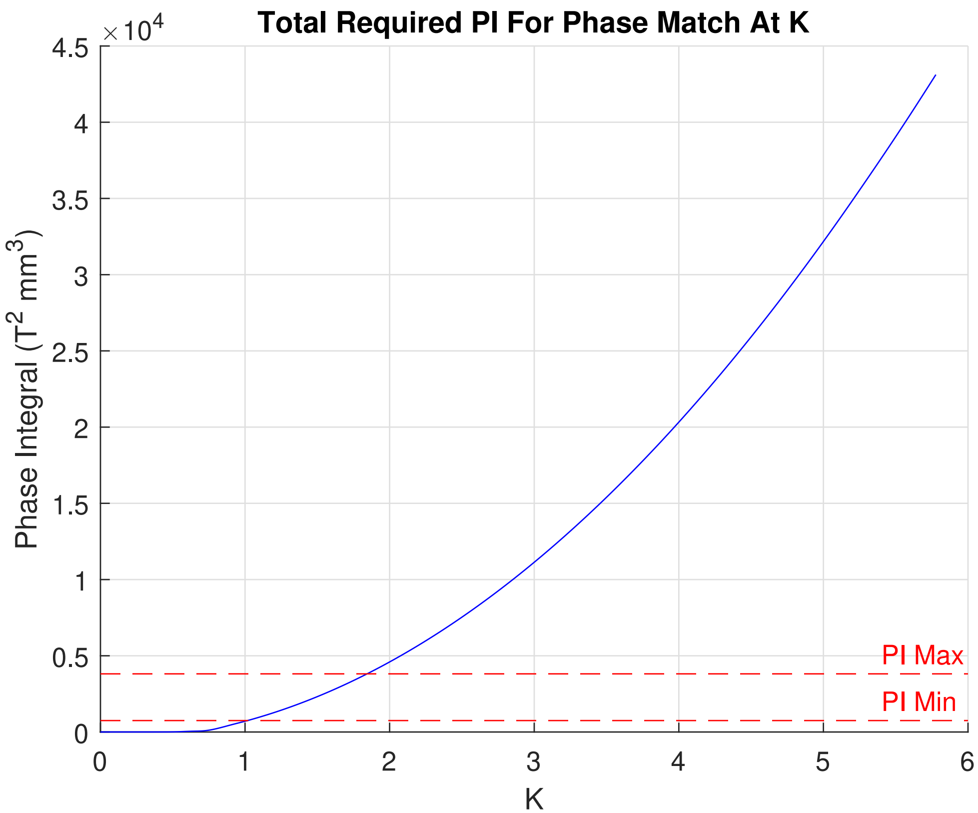
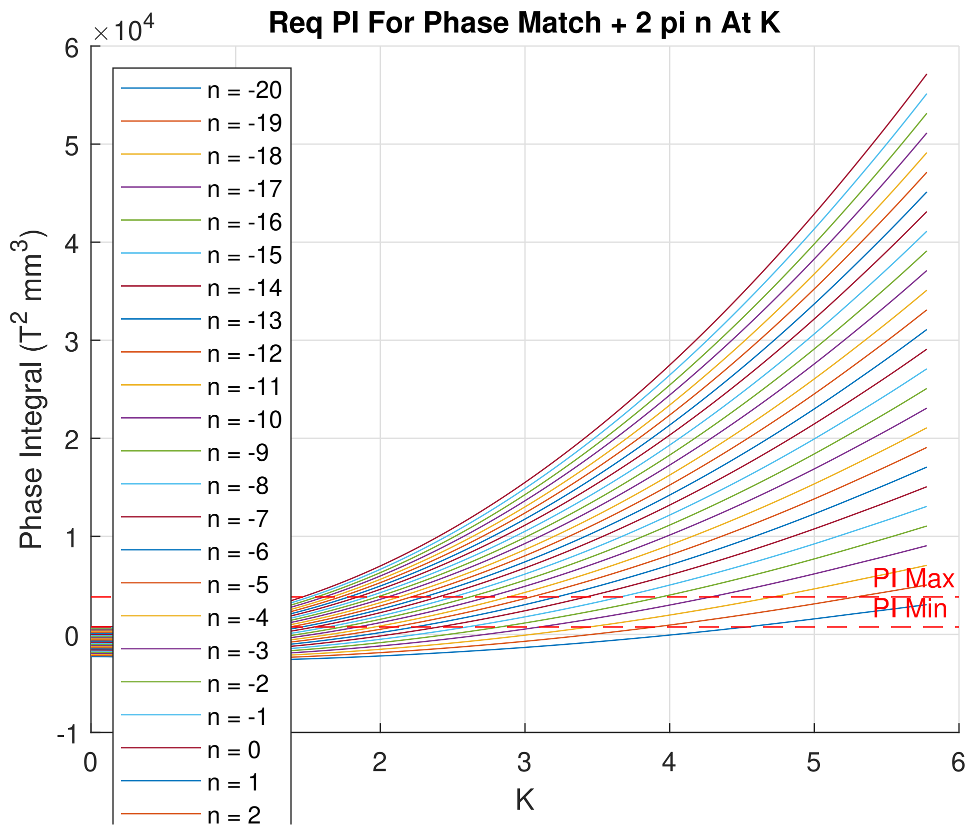
SLAC Magnetic Measurements#
Date: 06-20-2019#
Time: 15:46:09#



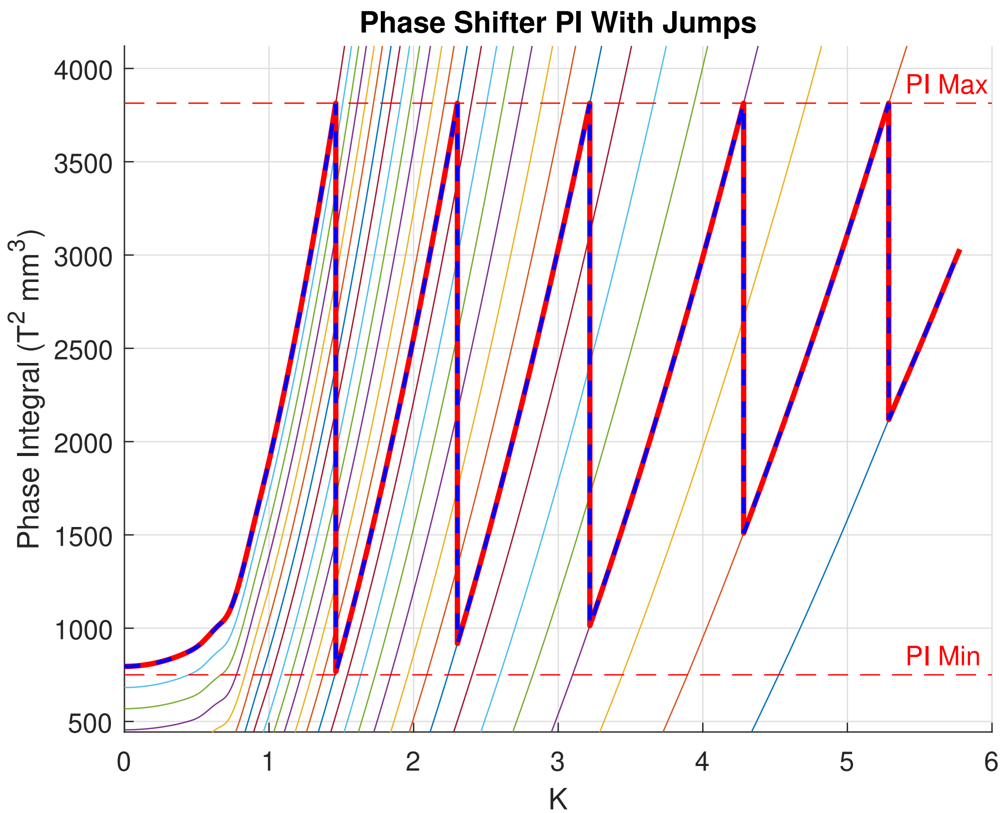
Phase Shifter Phase Integral vs Gap
PI Max
PI Min
Phase Integral (T^2 mm^3)
Gap (mm)
4500
4000
3500
3000
2500
2000
1500
1000
500
0
10
20
30
40
50
60
70
80
90
100

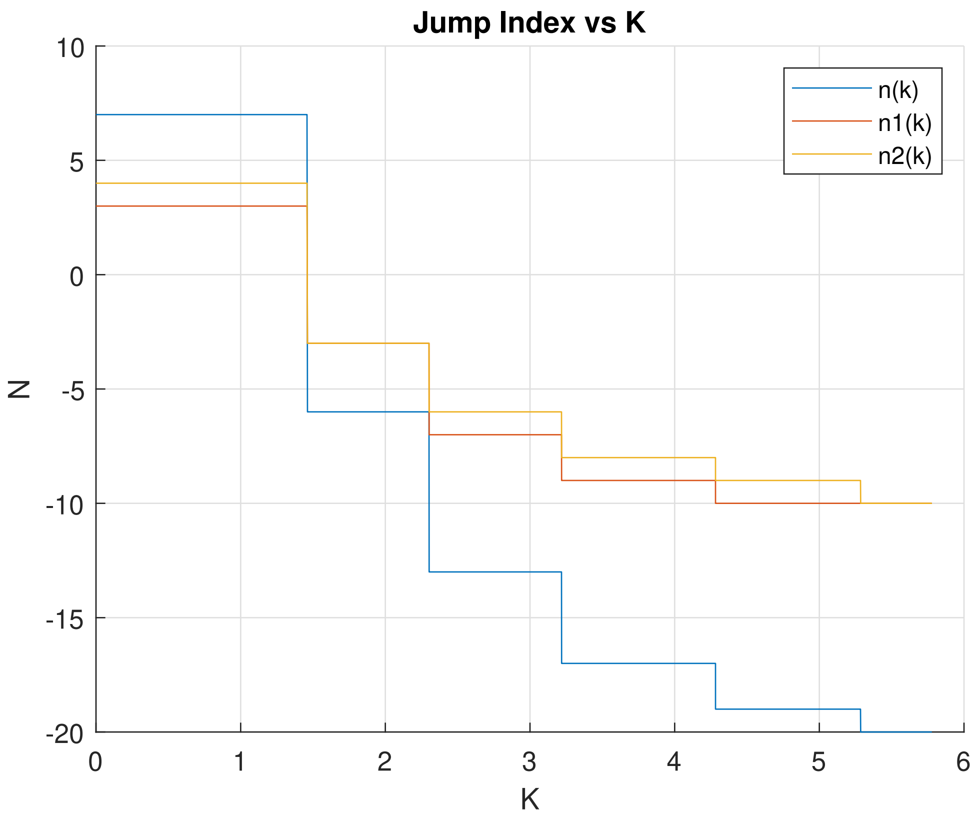

US Und Exit and DS Und Entrance Req PI For Phase Match At K
×10^4
2.5
2
1.5
1
0.5
0
US Exit
DS Entrance
PI Max
PI Min
Phase Integral (T^2 mm^3)
0
1
2
3
4
5
6
K


Total Required PI For Phase Match At K
×10^4
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
Phase Integral (T^2 mm^3)
PI Max
PI Min
0
1
2
3
4
5
6
K

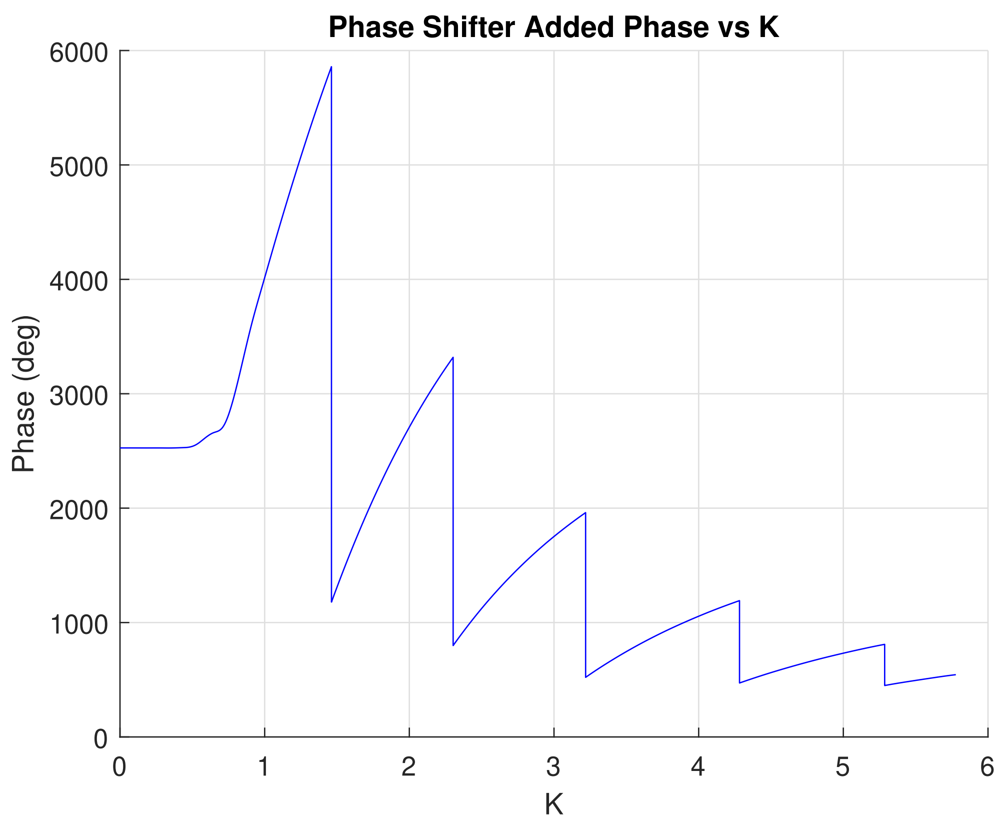


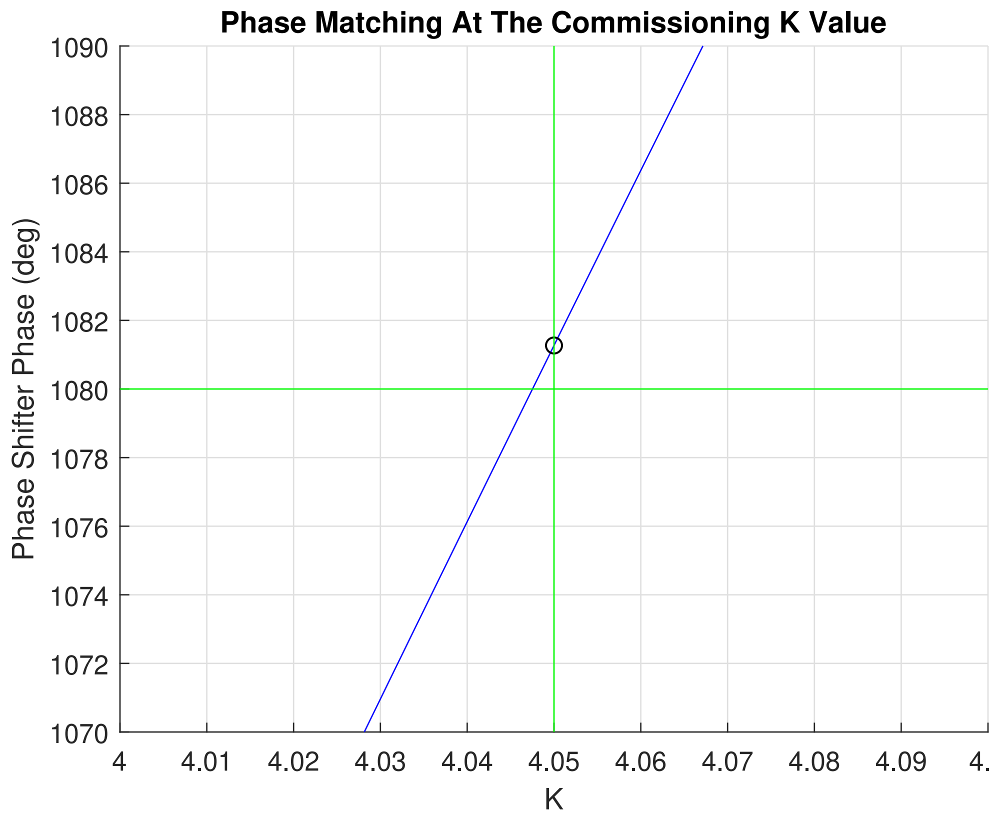
Req PI For Phase Match + 2 pi n At K
×10^4
Phase Integral (T^2 mm^3)
K
n = -20
n = -19
n = -18
n = -17
n = -16
n = -15
n = -14
n = -13
n = -12
n = -11
n = -10
n = -9
n = -8
n = -7
n = -6
n = -5
n = -4
n = -3
n = -2
n = -1
n = 0
n = 1
n = 2
PI Max
PI Min


Phase Shifter PI With Jumps
PI Max
PI Min
Phase Integral (T^2 mm^3)
K
4000
3500
3000
2500
2000
1500
1000
500
0
1
2
3
4
5
6



Jump Index vs K
n(k)
n1(k)
n2(k)
N
K
10
5
0
-5
-10
-15
-20
0
1
2
3
4
5
6


Phase Shifter Added Phase vs K
6000
5000
4000
3000
2000
1000
0
Phase (deg)
0
1
2
3
4
5
6
K



Phase Matching At The Commissioning K Value
Phase Shifter Phase (deg)
1090
1088
1086
1084
1082
1080
1078
1076
1074
1072
1070
4
4.01
4.02
4.03
4.04
4.05
4.06
4.07
4.08
4.09
4.1
K