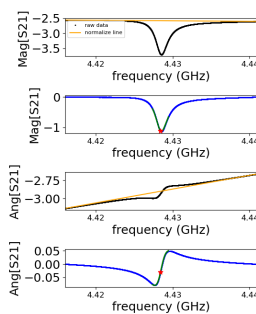
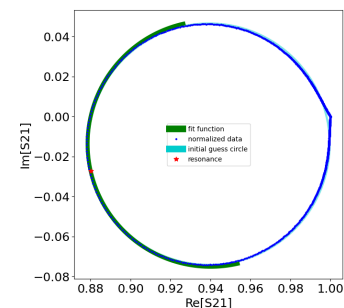


Pin Inserted into Cavity Volume

$z = +0.0606$ "

DCM fit for mines_cavity_bare_no_in_seal
_rt_zpin_0_0606in_210430.csv

No manually input parameters



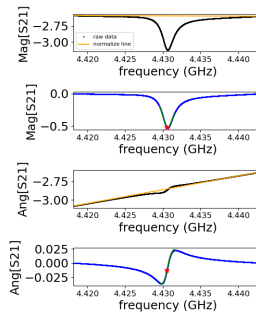
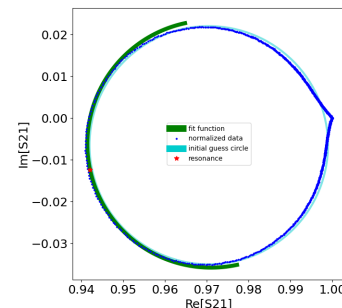
$Q = 2142.0 \pm 3.0$
 $Q_i = 2434.0 \pm 5.0$
 $Q_c = 17415.0 \pm 30.0$
 $1/\text{Re}[1/Q_c] = 17856.0 \pm 30.0$
 $\phi = 0.222 \pm 0.001$ radians
 $f_c = 4.428416 \pm 2e-06$ GHz

$Q_c = 17415$

$z = +0.0485$ "

DCM fit for mines_cavity_bare_no_in_seal
_rt_zpin_0_0485in_210430.csv

No manually input parameters



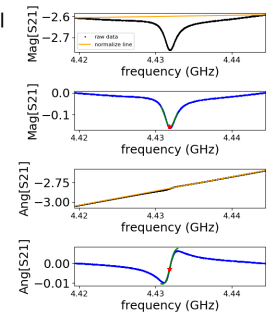
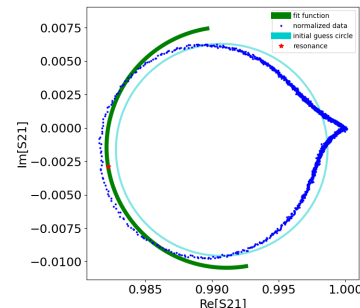
$Q = 2241.0 \pm 7.0$
 $Q_i = 2379.0 \pm 8.0$
 $Q_c = 37840.0 \pm 100.0$
 $1/\text{Re}[1/Q_c] = 38700.0 \pm 100.0$
 $\phi = 0.211 \pm 0.003$ radians
 $f_c = 4.430546 \pm 3e-06$ GHz

$Q_c = 37840$

$z = +0.02060$ "

DCM fit for mines_cavity_bare_no_in_seal
_rt_zpin_0_0260in_210430.csv

No manually input parameters



$Q = 2033.0 \pm 20.0$
 $Q_i = 2070.0 \pm 20.0$
 $Q_c = 112800.0 \pm 1000.0$
 $1/\text{Re}[1/Q_c] = 114300.0 \pm 1000.0$
 $\phi = 0.161 \pm 0.009$ radians
 $f_c = 4.43182 \pm 1e-05$ GHz

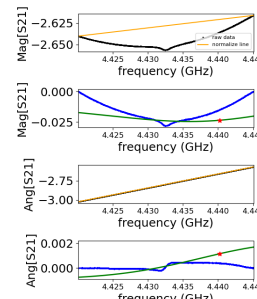
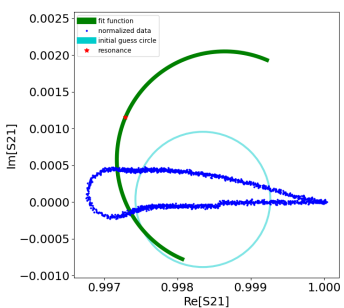
$Q_c = 112800$

Pin at Cavity Wall

$z = 0$ "

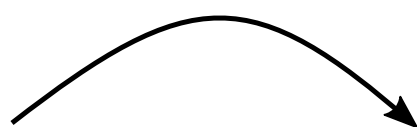
DCM fit for mines_cavity_bare_no_in_seal
_rt_zpin_0in_210430.csv

No manually input parameters



$Q = 105.0 \pm 6.0$
 $Q_i = 106.0 \pm 6.0$
 $Q_c = 35900.0 \pm 2000.0$
 $1/\text{Re}[1/Q_c] = 39000.0 \pm 2000.0$
 $\phi = 5.87 \pm 0.05$ radians
 $f_c = 4.44 \pm 0.001$ GHz

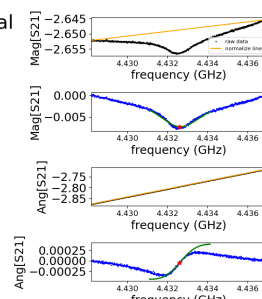
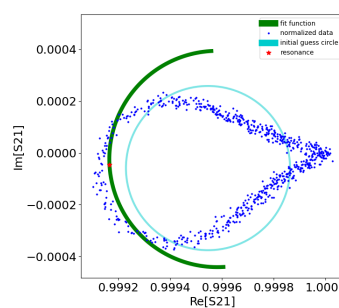
Trim data



$z = 0$ "

DCM fit for mines_cavity_bare_no_in_seal
_rt_zpin_0in_210430_trimmed.csv

No manually input parameters



$Q = 1468.0 \pm 40.0$
 $Q_i = 1469.0 \pm 50.0$
 $Q_c = 1757000.0 \pm 50000.0$
 $1/\text{Re}[1/Q_c] = 1760000.0 \pm 50000.0$
 $\phi = 0.05590362278 \pm \text{inf}$ radians
 $f_c = 4.43261 \pm 4e-05$ GHz

$Q_c = 1757000$

Summary of Q_c vs. z

