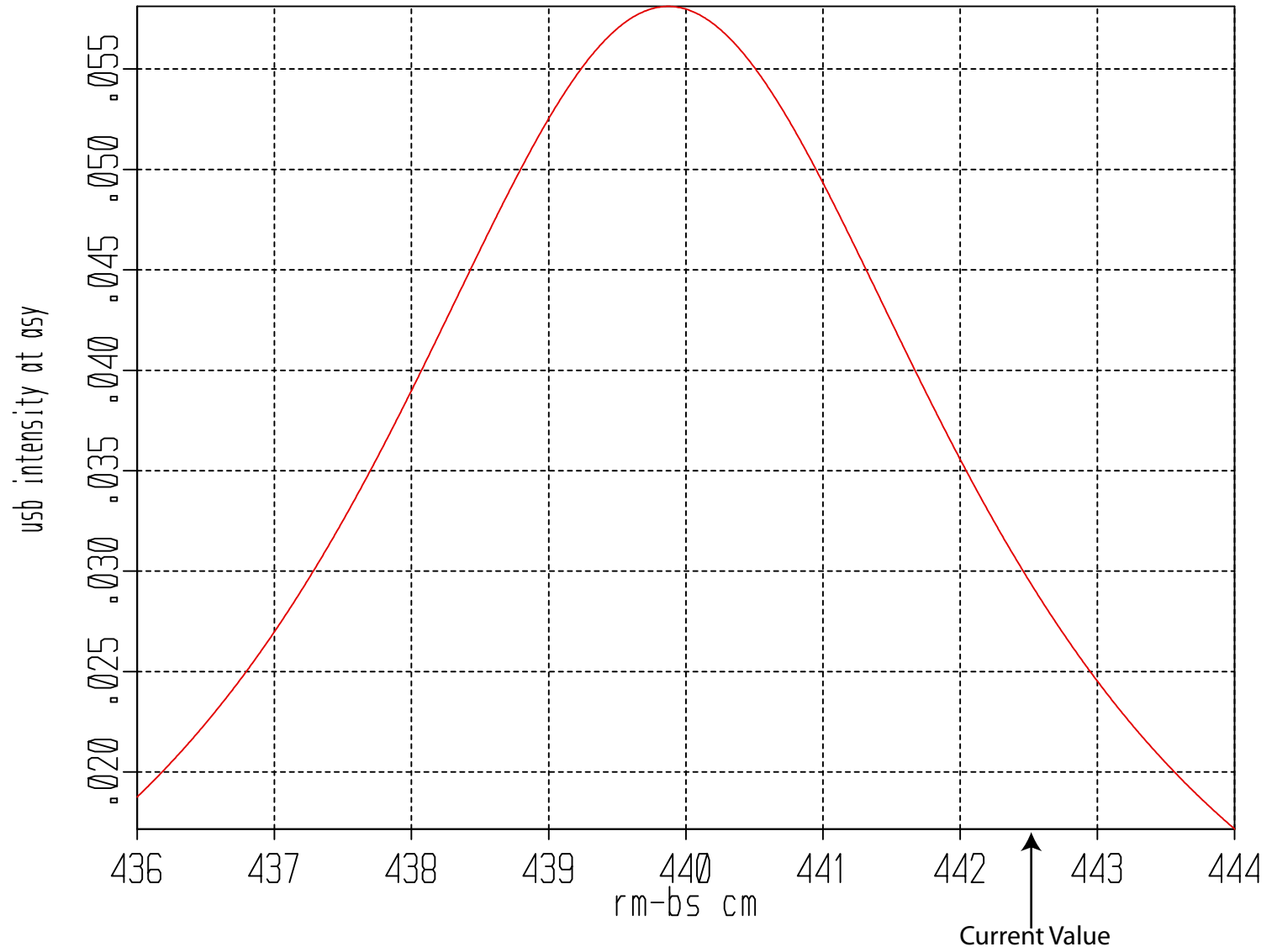


PARAMETERS FOR THE 4Km at Livingston

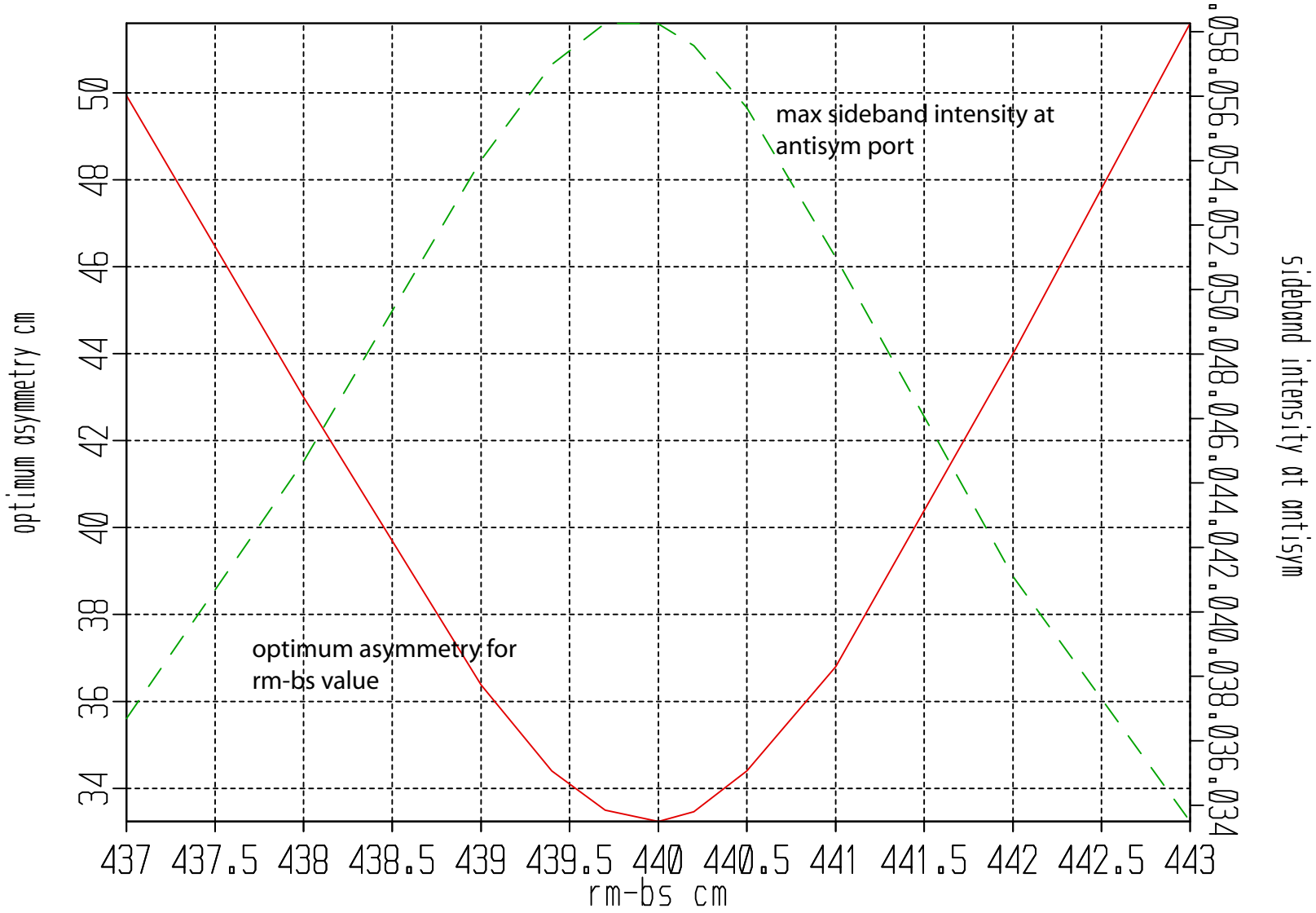
values consistent with Garilynn's tables 4/10/02
and the measured values at Livingston May 25, 2003

```
param(1) = ' 1  rm transmission  '  
value(1) = 2.7d-2  
param(2) = ' 2  rm loss  '  
value(2) = 1.0d-5  
param(3) = ' 3  bs unbalance R - T  '  
value(3) = -5.0d-3  
param(4) = ' 4  bs loss and bs+itm refl at AR  '  
value(4) = 9.2d-4  
param(5) = ' 5  itmx transmission  '  
value(5) = 2.88d-2  
param(6) = ' 6  itmx loss  '  
value(6) = 5.0d-5  
param(7) = ' 7  etmx transmission  '  
value(7) = 5.5d-6  
param(8) = ' 8  etmx loss  '  
value(8) = 5.0d-5  
param(9) = ' 9  itmy transmission  '  
value(9) = 2.88d-2  
param(10) = ' 10  itmy loss  '  
value(10) = 5.0d-5  
param(11) = ' 11  etmy transmission  '  
value(11) = 5.5d-6  
param(12) = ' 12  etmy loss  '  
value(12) = 5.0d-5  
param(13) = ' 13  modulation index  '  
value(13) = 5.0d-1  
param(14) = ' 14  modulation frequency Hz  '  
value(14) = 24.485446d+6  
param(15) = ' 15  rm-bs length cm  '  
value(15) = 442.526d+0  
param(16) = ' 16  <bs-itm> cm  '  
value(16) = 477.824d+0  
param(17) = ' 17  schnupp asymmetry (x-y) cm  '  
value(17) = 31.1d+0  
param(18) = ' 18  y cavity length cm  '  
value(18) = 3.995055d+5  
param(19) = ' 19  x cavity length cm  '  
value(19) == 3.995055d+5
```

Uppersideband intensity at antisym vs rm-bs cm for 31.1cm asym



maximum upper sideband intensity at asy and max asymmetry vs rm-bs cm

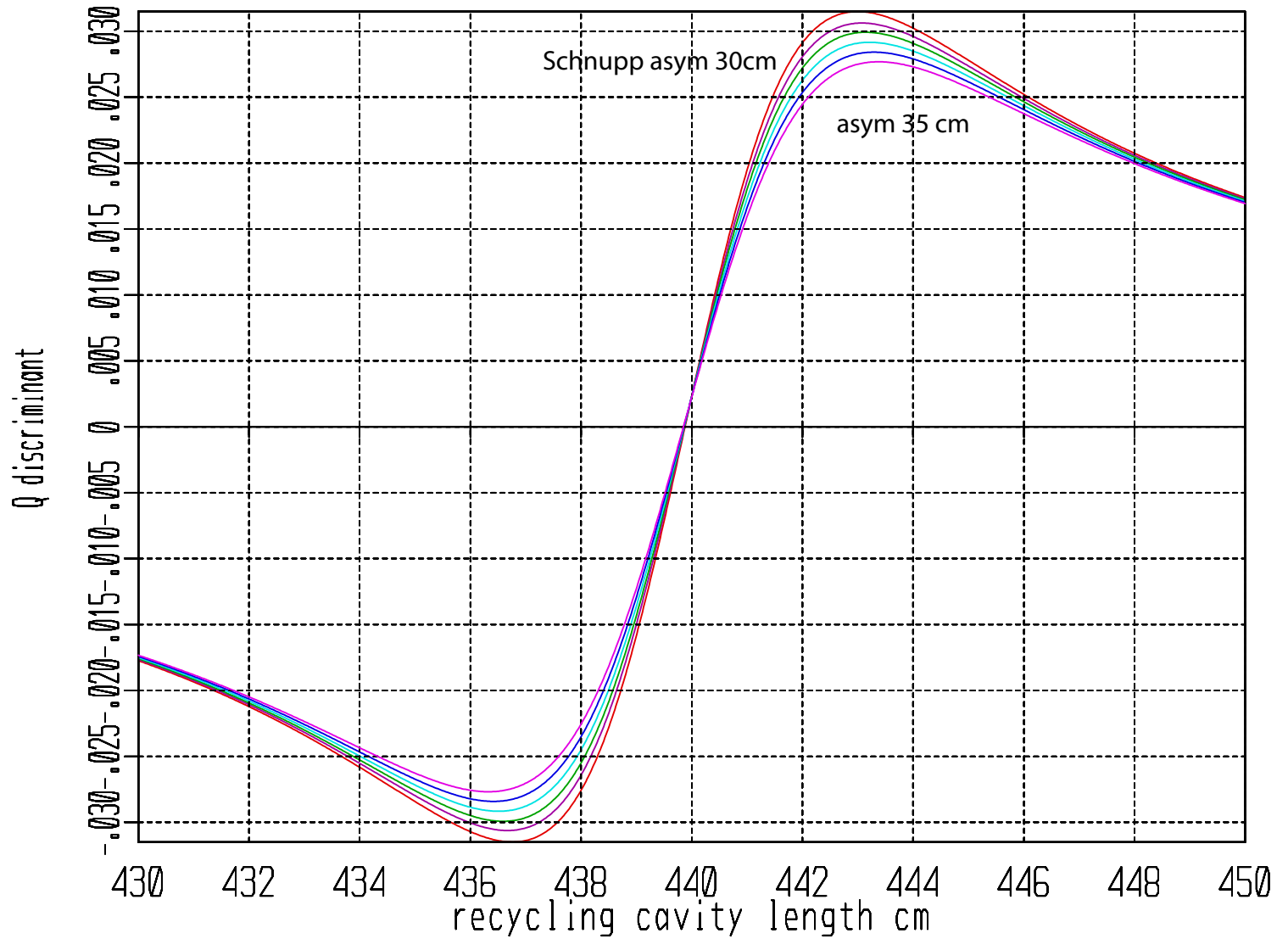


optimum asymmetry for
rm-bs value

max sideband intensity at
antisym port

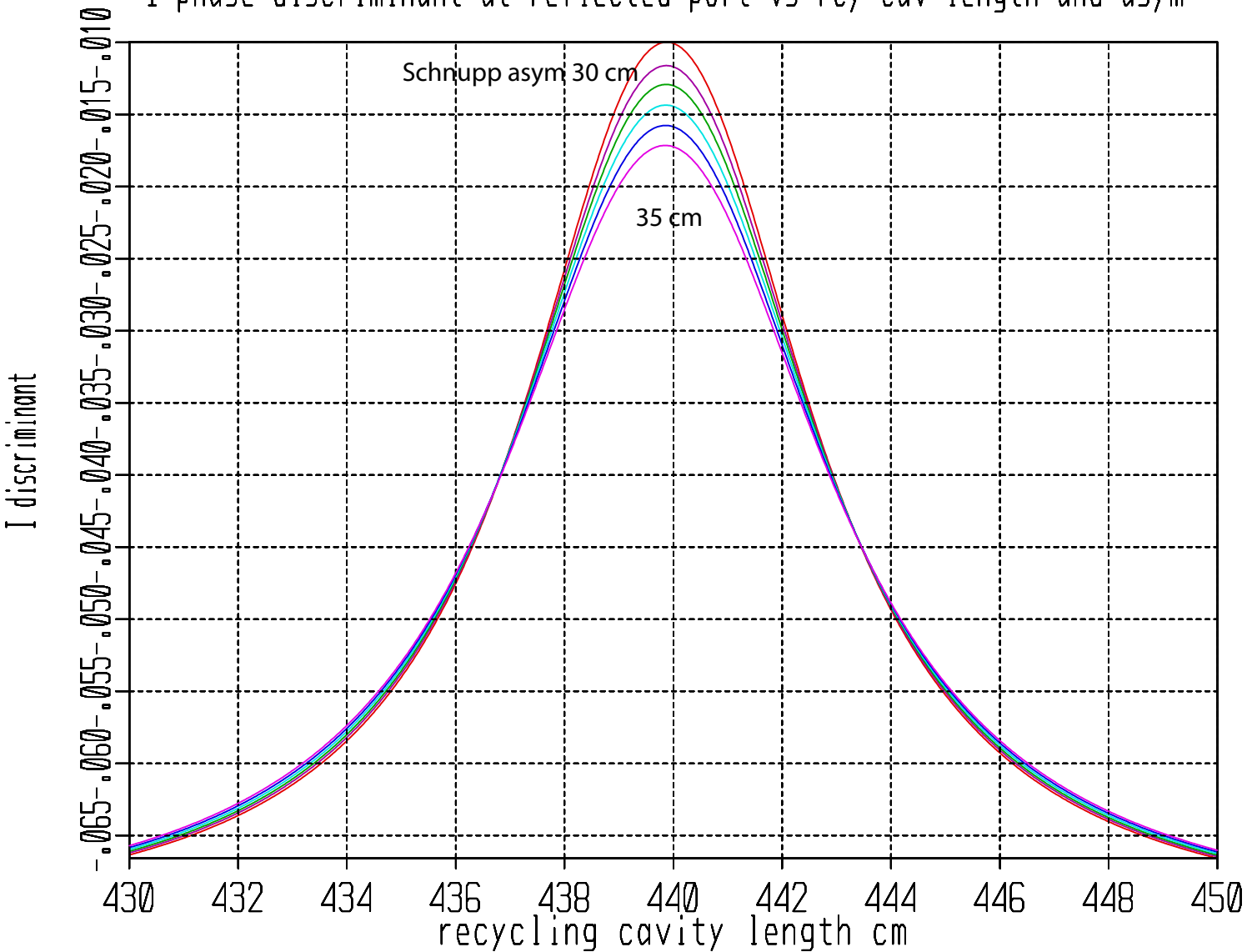
sideband intensity at antisym

Q phase discriminant at reflected port vs rcy cav length and asym



NOTE: DISCRIMINANT FOR LITTLE L+ MOTIONS (common mode recycling cavity motions)

I phase discriminant at reflected port vs rcy cav length and asym



NOTE: DISCRIMINANT FOR LITTLE L+ MOTIONS (common mode recycling cavity motions)