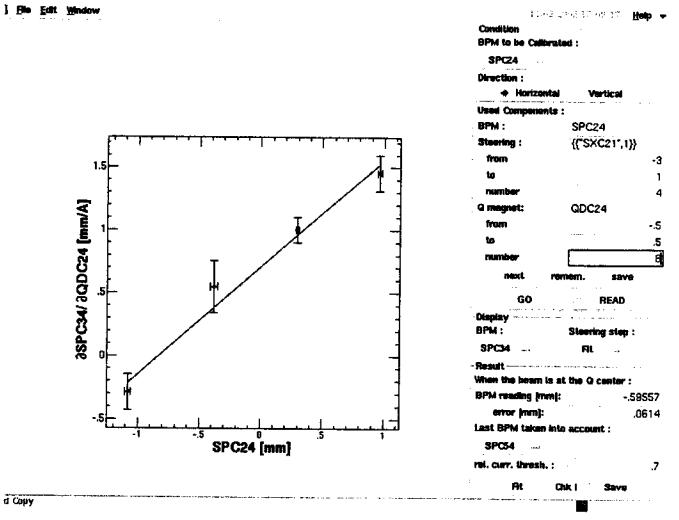
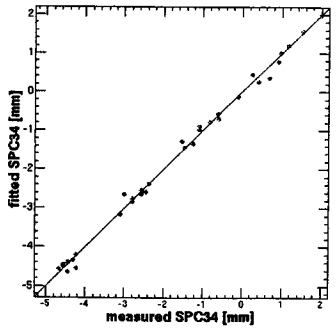


Condition
BPM to be Calibrated : SPC24
Direction : Horizontal Vertical
Used Components :
BPM : SPC24
Steering : {{"SXC21",1}}
from -3
to 1
number 4
Q magnet: QDC24
from -.5
to .5
number 6
next remem. save
GO READ
Display
BPM : Steering step :
SPC34 Fit
Result
When the beam is at the Q center :
BPM reading [mm]: -.58557
error [mm]: .0614
Last BPM taken into account : SPC34
rel. curr. thresh. : .7
Fit Chk I Save

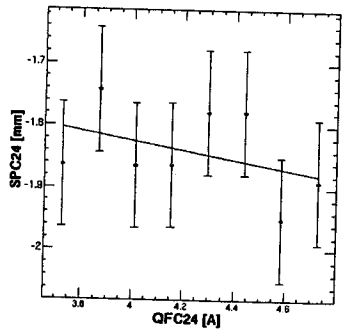
residual = .157 mm



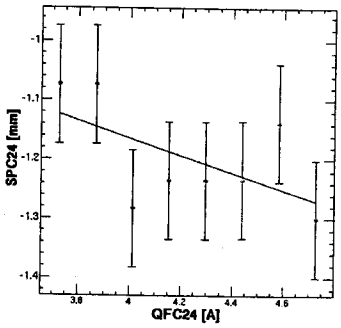
Condition
BPM to be Calibrated : SPC24
Direction : Horizontal Vertical
Used Components :
BPM : SPC24
Steering : {{"SXC21",1}}
from -3
to 1
number 4
Q magnet: QDC24
from -.5
to .5
number 6
next remem. save
GO READ
Display
BPM : Steering step :
SPC34 Fit
Result
When the beam is at the Q center :
BPM reading [mm]: -.59557
error [mm]: .0614
Last BPM taken into account : SPC34
rel. curr. thresh. : .7
Fit Chk I Save

offset from -0.60 ± 0.06 mm for QD C24

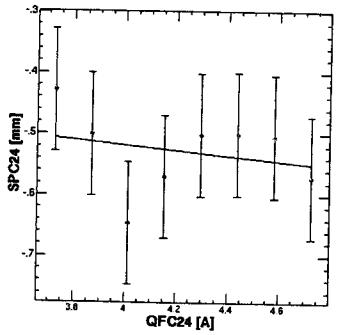
SPC24 vs, QFC24 Horizontal



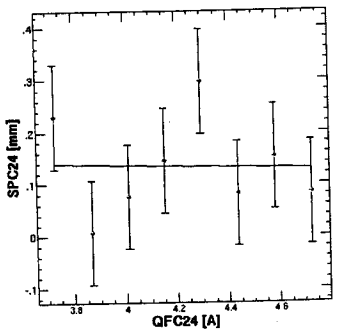
Condition
BPM to be Calibrated : SPC24
Direction : Horizontal Vertical
Used Components :
BPM : SPC24
Steering : {{"SXC21",1}}
from -4.5
to -.5
number 4
Q magnet: QFC24
from -.5
to .5
number 6
next remem. save
GO READ
Display
BPM : Steering step :
SPC24 1
Result
When the beam is at the Q center :
BPM reading [mm]: -1.27622
error [mm]: .181
Last BPM taken into account : SPC34
rel. curr. thresh. : .7
Fit Chk I Save



Condition
BPM to be Calibrated : SPC24
Direction : Horizontal Vertical
Used Components :
BPM : SPC24
Steering : {{"SXC21",1}}
from -4.5
to -.5
number 4
Q magnet: QFC24
from -.5
to .5
number 6
next remem. save
GO READ
Display
BPM : Steering step :
SPC24 2
Result
When the beam is at the Q center :
BPM reading [mm]: -1.27622
error [mm]: .181
Last BPM taken into account : SPC34
rel. curr. thresh. : .7
Fit Chk I Save

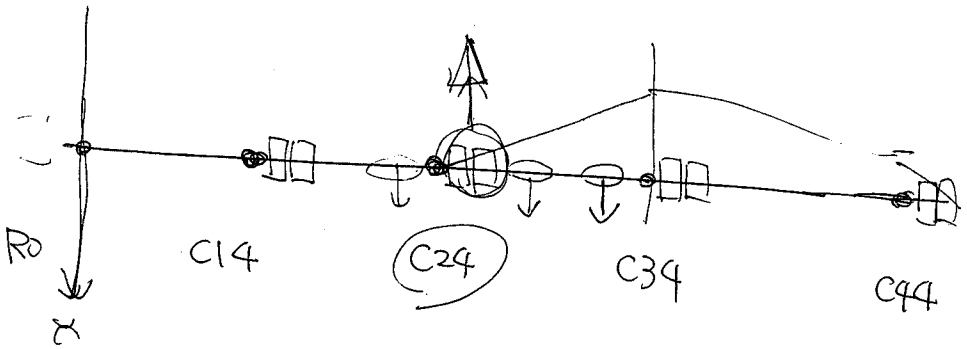


Condition
BPM to be Calibrated : SPC24
Direction : Horizontal Vertical
Used Components :
BPM : SPC24
Steering : {{"SXC21",1}}
from -4.5
to -.5
number 4
Q magnet: QFC24
from -.5
to .5
number 6
next remem. save
GO READ
Display
BPM : Steering step :
SPC24 3
Result
When the beam is at the Q center :
BPM reading [mm]: -1.27622
error [mm]: .181
Last BPM taken into account : SPC34
rel. curr. thresh. : .7
Fit Chk I Save



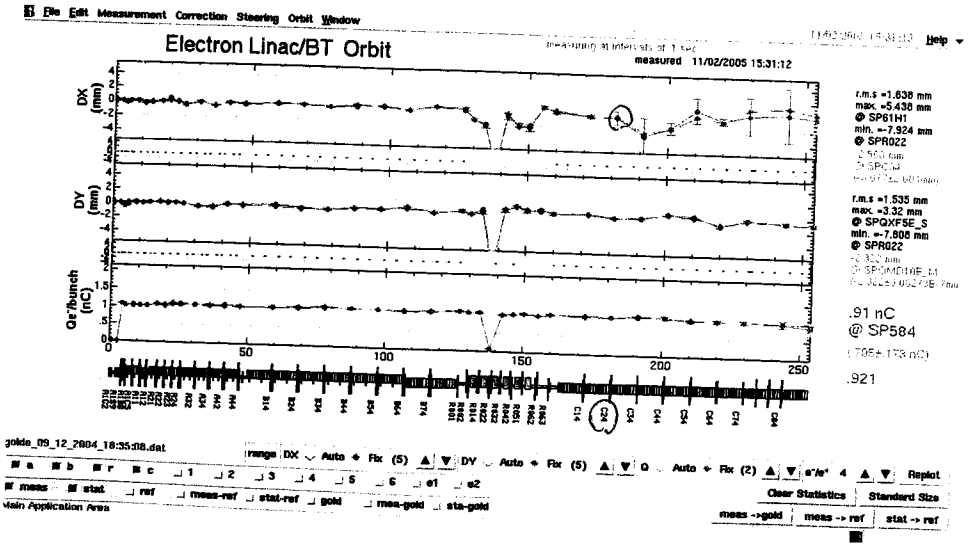
Condition
BPM to be Calibrated : SPC24
Direction : Horizontal Vertical
Used Components :
BPM : SPC24
Steering : {{"SXC21",1}}
from -4.5
to -.5
number 4
Q magnet: QFC24
from -.5
to .5
number 6
next remem. save
GO READ
Display
BPM : Steering step :
SPC24 4
Result
When the beam is at the Q center :
BPM reading [mm]: -1.27622
error [mm]: .181
Last BPM taken into account : SPC34
rel. curr. thresh. : .7
Fit Chk I Save

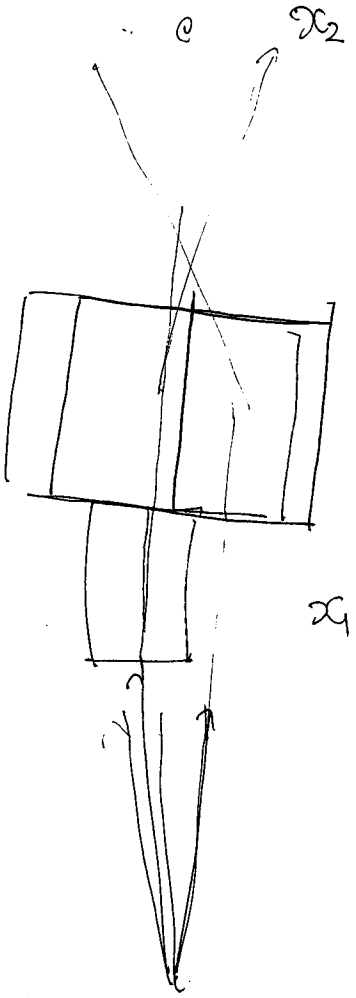
SX-C1_1	+3.77
SX_C2_3	+4.0
SX_C3_1	+4.6
SX_C3_3	+4.5
SX_C4_1	+3.0

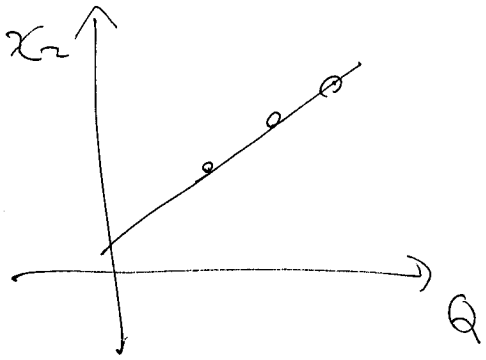


$\rho = \frac{p}{eB}$

$\frac{1}{\rho} = \frac{B}{B\rho}$

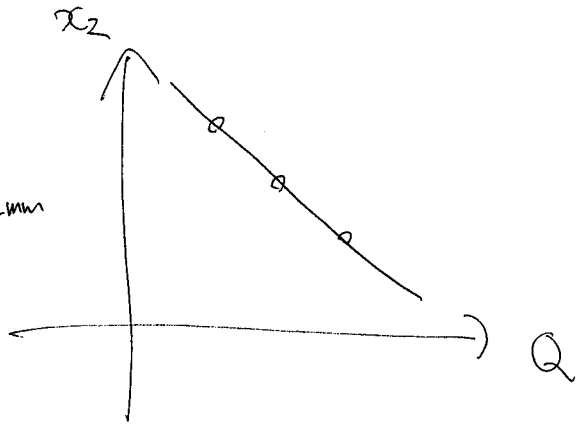


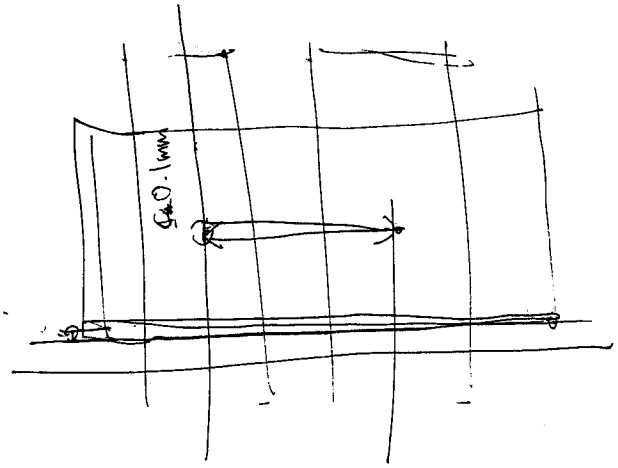


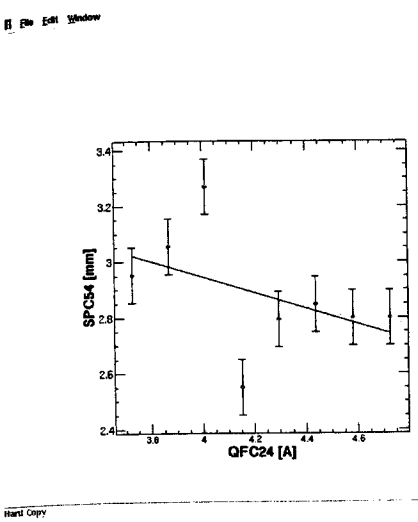


$x_1 = 0$

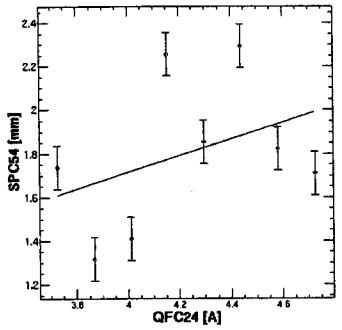
$x_1 = \pm 1\,mm$



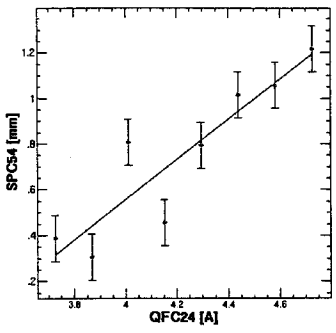




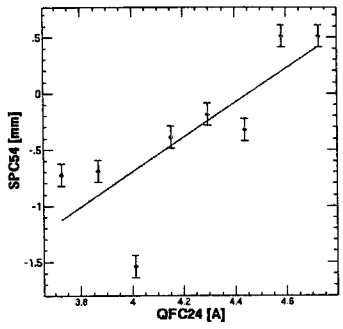
Condition
BPM to be Calibrated : SPC24
Direction : Horizontal Vertical
Used Components :
BPM : SPC24
Steering : {{"SXC21",1}}
from -4.5
to -.5
number 4
Q magnet: QFC24
from -.5
to .5
number 8
next remem. save
GO READ
Display
BPM : Steering step :
SPC54 1
Result
When the beam is at the Q center :
BPM reading [mm]: -1.27426
error [mm]: .18243
Last BPM taken into account : SPC54
rel. curr. thresh. : .7
Fit Chk I Save



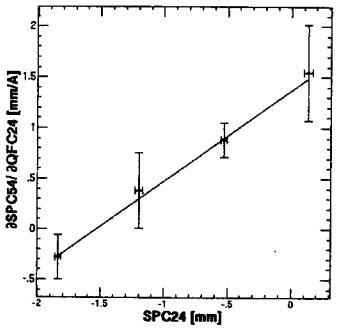
Condition
BPM to be Calibrated : SPC24
Direction : Horizontal Vertical
Used Components :
BPM : SPC24
Steering : {{"SXC21",1}}
from -4.5
to -.5
number 4
Q magnet: QFC24
from -.5
to .5
number 8
next remem. save
GO READ
Display
BPM : Steering step :
SPC54 2
Result
When the beam is at the Q center :
BPM reading [mm]: -1.27426
error [mm]: .18243
Last BPM taken into account : SPC54
rel. curr. thresh. : .7
Fit Chk I Save



Condition
BPM to be Calibrated : SPC24
Direction : Horizontal Vertical
Used Components :
BPM : SPC24
Steering : {{"SXC21",1}}
from -4.5
to -.5
number 4
Q magnet: QFC24
from -.5
to .5
number 8
next remem. save
GO READ
Display
BPM : Steering step :
SPC54 3
Result
When the beam is at the Q center :
BPM reading [mm]: -1.27426
error [mm]: .18243
Last BPM taken into account : SPC54
rel. curr. thresh. : .7
Fit Chk I Save

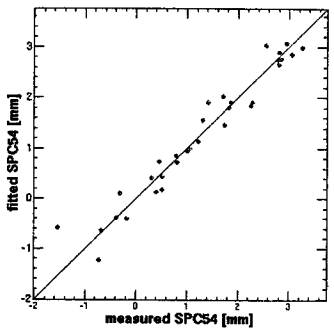


Condition
BPM to be Calibrated : SPC24
Direction : Horizontal Vertical
Used Components :
BPM : SPC24
Steering : {{"SXC21",1}}
from -4.5
to -.5
number 4
Q magnet: QFC24
from -.5
to .5
number 8
next remem. save
GO READ
Display
BPM : Steering step :
SPC54 4
Result
When the beam is at the Q center :
BPM reading [mm]: -1.27426
error [mm]: .18243
Last BPM taken into account : SPC54
rel. curr. thresh. : .7
Fit Chk I Save



Condition
BPM to be Calibrated : SPC24
Direction : Horizontal Vertical
Used Components :
BPM : SPC24
Steering : {{"SXC21",1}}
from -4.5
to -.5
number 4
Q magnet: QFC24
from -.5
to .5
number 8
next remem. save
GO READ
Display
BPM : Steering step :
SPC54 Fit
Result
When the beam is at the Q center :
BPM reading [mm]: -1.27426
error [mm]: .18243
Last BPM taken into account : SPC54
rel. curr. thresh. : .7
Fit Chk I Save

residual = .329 mm

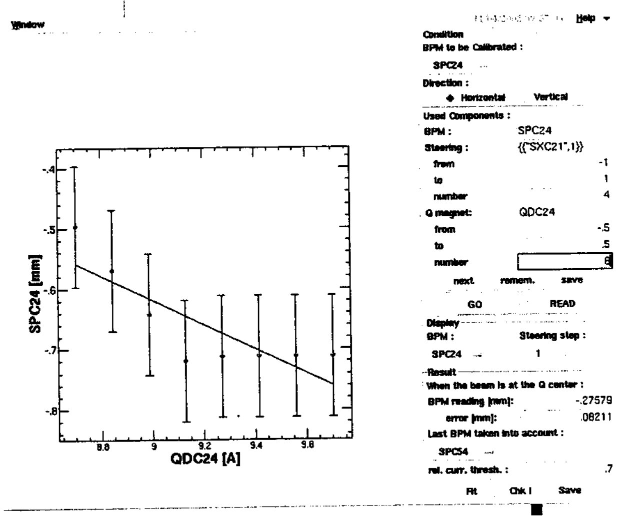


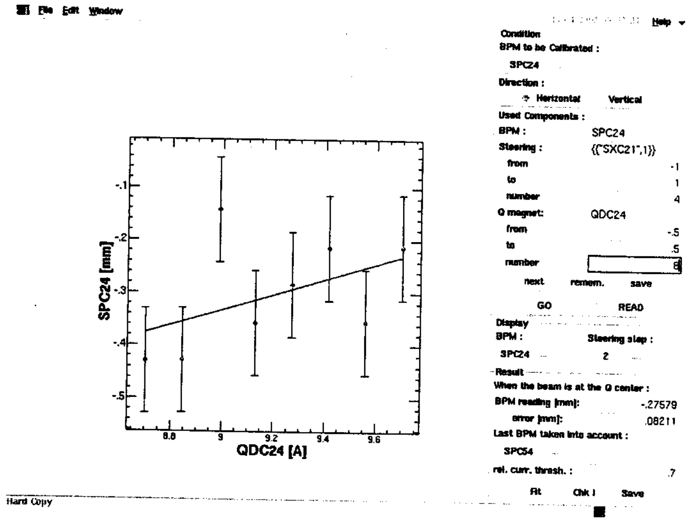
Condition
BPM to be Calibrated : SPC24
Direction : Horizontal Vertical
Used Components :
BPM : SPC24
Steering : {{"SXC21",1}}
from
to
number
Q magnet: QFC24
from
to
number
next remem. save
GO READ
Display
BPM : Steering step :
SPC54 Fit
Result
When the beam is at the Q center :
BPM reading [mm]: -1.274
error [mm]: .182
Last BPM taken into account : SPC54
rel. curr. thresh. :
Fit Chk I Save

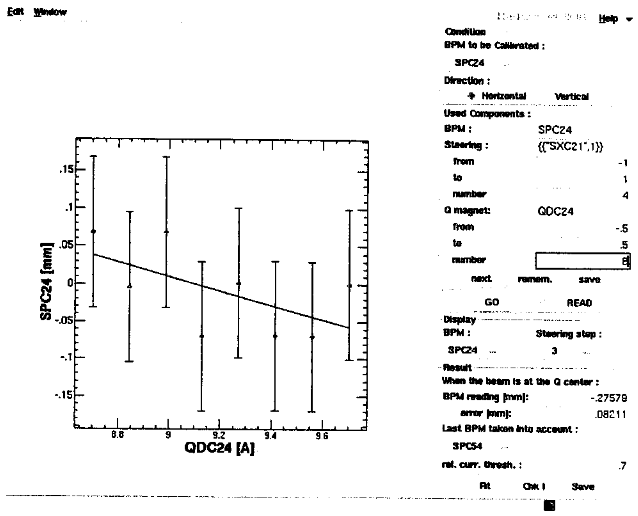
offset Hor −1.27 ± 0.18 mm for QFC24.

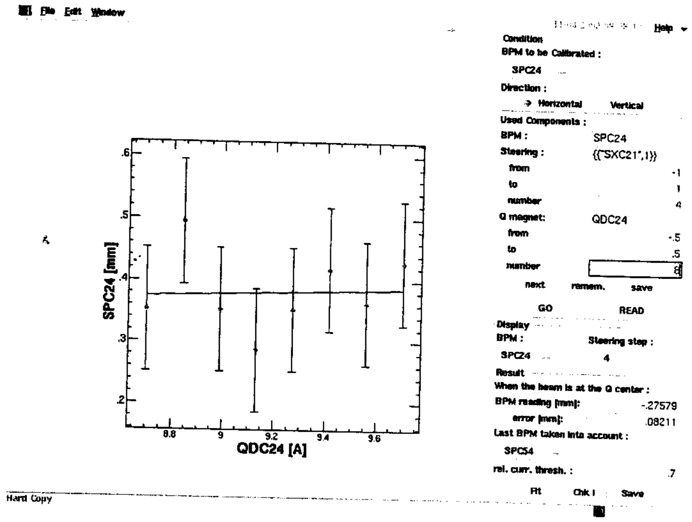
105 ('05/11/4(金)) (Quad BPM / M. Satoh.)

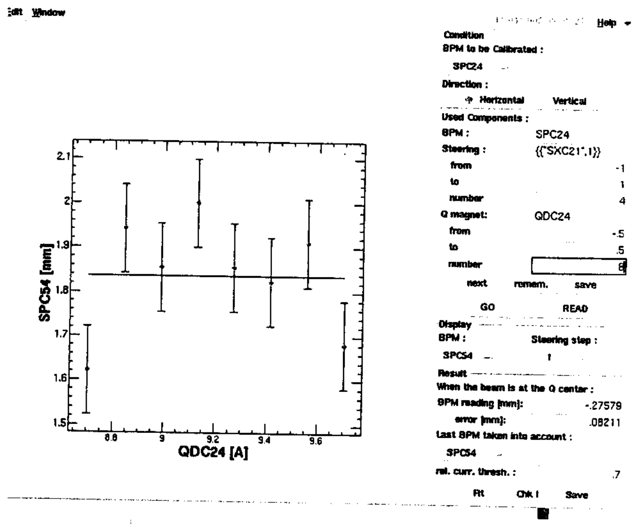
時間があれば {QD C34 / QF} の Quad BPMをやる。

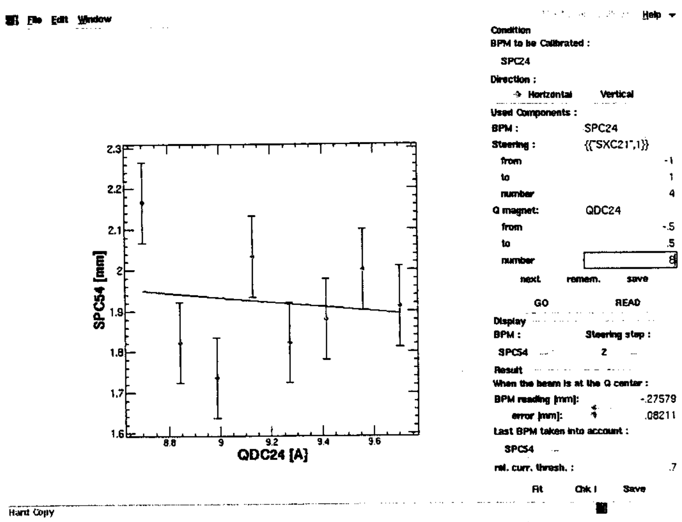




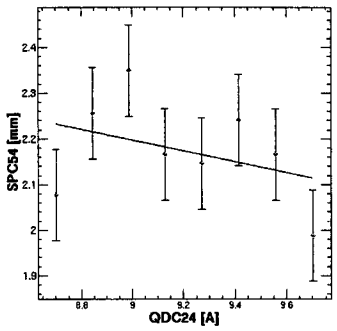








File Edit Window

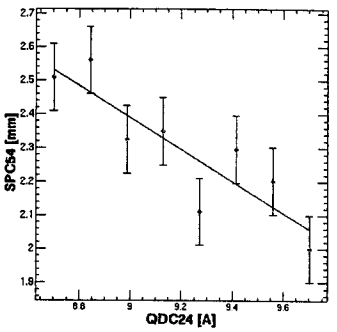


Help

Condition
BPM to be Calibrated :
SPC24
Direction :
Horizontal Vertical
Used Components :
BPM : SPC24
Steering : {{"SXC21",1}}
from -1
to 1
number 4
Q magnet: QDC24
from -.5
to .5
number 8
next remem. save
GO READ
Display
BPM : Steering step :
SPC54 3
Result
When the beam is at the Q center :
BPM reading [mm]: -.27579
error [mm]: .08211
Last BPM taken into account :
SPC54
rel. curr. thresh. : .7
Fit Chk f Save

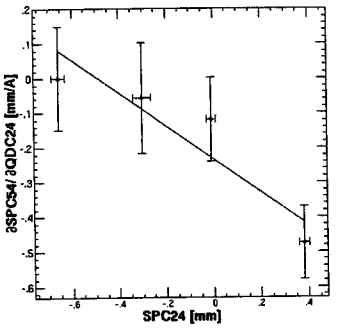
Hard Copy

File Edit Window



Hard Copy

File Edit Window



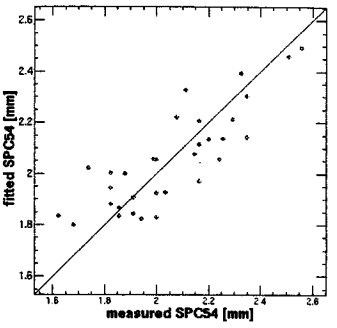
Help

Condition
BPM to be Calibrated :
SPC24
Direction :
Horizontal Vertical
Used Components :
BPM : SPC24
Steering : {{"SXC21",1}}
from -1
to 1
number 4
Q magnet: QDC24
from -.5
to .5
number 8
next remem. save
GO READ
Display
BPM : Steering step :
SPC54 Fit
Result
When the beam is at the Q center :
BPM reading [mm]: -.27579
error [mm]: .08211
Last BPM taken into account :
SPC54
rel. curr. thresh. : .7
Fit Chk f Save

Hard Copy

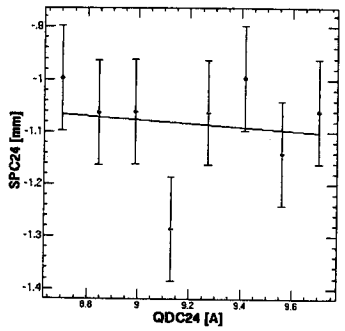
File Edit Window

hospital 137 mm



Hard Copy

File Edit Window

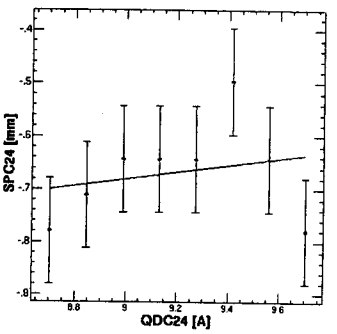


Help

Condition
BPM to be Calibrated :
SPC24
Direction :
Horizontal Vertical
Used Components :
BPM : SPC24
Steering : {{"SXC21",1}}
from -2
to 1
number 4
Q magnet: QDC24
from -5
to .5
number 8
next remem. save
GO READ
Display
BPM : Steering step :
SPC24 1
Result
When the beam is at the Q center :
BPM reading [mm]: -.27495
error [mm]: .06707
Last BPM taken into account :
SPC34
rel. curr. thresh. : .7
Fit Chk f Save

Hard Copy

File Edit Window



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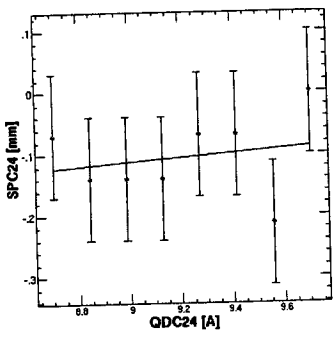
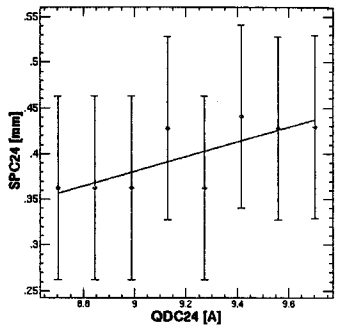


Condition
BPM to be Calibrated :
SPC24
Direction :
Horizontal Vertical
Used Components :
BPM : SPC24
Steering : {{"SXC21",1}}
from -2
to 1
number 4
Q magnet: QDC24
from -.5
to .5
number 8
next remem. save
GO READ
Display
BPM : Steering step :
SPC24 3
Result
When the beam is at the Q center :
BPM reading [mm]: -.27495
error [mm]: .06707
Last BPM taken into account :
SPC34
rel. curr. thresh. : .7
Fit Chk ! Save

Hard Copy

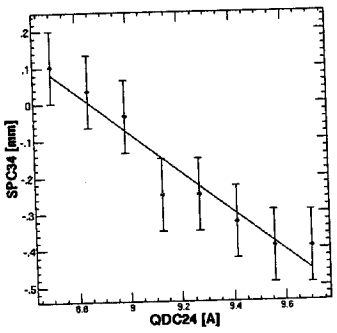
File Edit Window



Condition
BPM to be Calibrated :
SPC24
Direction :
Horizontal Vertical
Used Components :
BPM : SPC24
Steering : {{"SXC21",1}}
from -2
to 1
number 4
Q magnet: QDC24
from -.5
to .5
number 8
next remem. save
GO READ
Display
BPM : Steering step :
SPC24 4
Result
When the beam is at the Q center :
BPM reading [mm]: -.27495
error [mm]: .06707
Last BPM taken into account :
SPC34
rel. curr. thresh. : .7
Fit Chk ! Save

Hard Copy

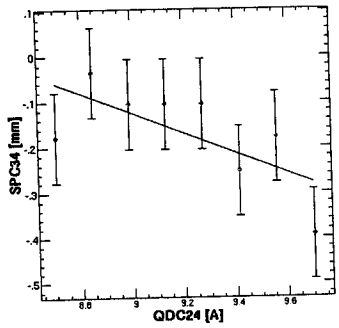
File Edit Window



Condition
BPM to be Calibrated :
SPC24
Direction :
Horizontal Vertical
Used Components :
BPM : SPC24
Steering : {{"SXC21",1}}
from
to
number
Q magnet: QDC24
from
to
number
next remem. save
GO READ
Display
BPM : Steering step :
SPC34 1
Result
When the beam is at the Q center :
BPM reading [mm]: -.2749
error [mm]: .0670
Last BPM taken into account :
SPC34
rel. curr. thresh. :
Fit Chk ! Save

Hard Copy

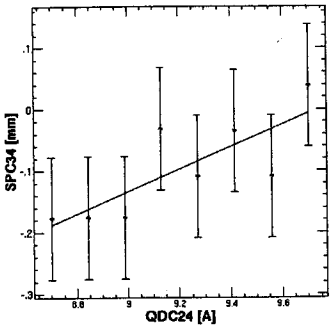
File Edit Window



Condition
BPM to be Calibrated :
SPC24
Direction :
Horizontal Vertical
Used Components :
BPM : SPC24
Steering : {{"SXC21",1}}
from -2
to 1
number 4
Q magnet: QDC24
from -.5
to .5
number 8
next remem. save
GO READ
Display
BPM : Steering step :
SPC34 2
Result
When the beam is at the Q center :
BPM reading [mm]: -.27495
error [mm]: .06707
Last BPM taken into account :
SPC34
rel. curr. thresh. : .7
Fit Chk ! Save

Hard Copy

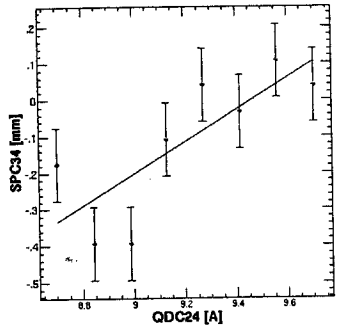
File Edit Window



Condition
BPM to be Calibrated :
SPC24
Direction :
Horizontal Vertical
Used Components :
BPM : SPC24
Steering : {{"SXC21",1}}
from -2
to 1
number 4
Q magnet: QDC24
from -.5
to .5
number 8
next remem. save
GO READ
Display
BPM : Steering step :
SPC34 3
Result
When the beam is at the Q center :
BPM reading [mm]: -.27495
error [mm]: .06707
Last BPM taken into account :
SPC34
rel. curr. thresh. : .7
Fit Chk ! Save

Copy

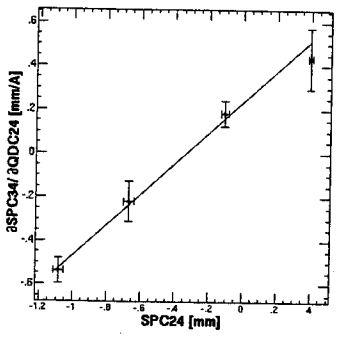
File Edit Window



Condition
BPM to be Calibrated :
SPC24
Direction :
Horizontal Vertical
Used Components :
BPM : SPC24
Steering : {{"SXC21",1}}
from -2
to 1
number 4
Q magnet: QDC24
from -.5
to .5
number 8
next remem. save
GO READ
Display
BPM : Steering step :
SPC34 4
Result
When the beam is at the Q center :
BPM reading [mm]: -.27495
error [mm]: .06707
Last BPM taken into account :
SPC34
rel. curr. thresh. : .7
Fit Chk ! Save

Hard Copy

File Edit Window



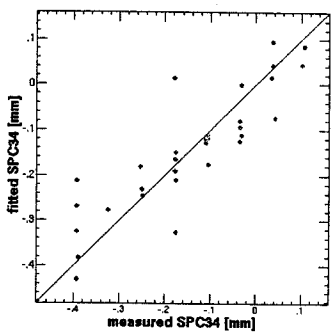
Hard Copy

Help

Condition
BPM to be Calibrated :
SPC24
Direction :
Horizontal Vertical
Used Components :
BPM : SPC24
Steering : {{"SXC21",1}}
from -2
to 1
number 4
Q magnet: QDC24
from -.5
to .5
number 8
next remem. save
GO READ
Display
BPM : Steering step :
SPC34 Fit
Result
When the beam is at the Q center :
BPM reading [mm]: -.27485
error [mm]: .06707
Last BPM taken into account :
SPC34
rel. curr. thresh. : .7
Fit Chk I Save

File Edit Window

residual = .080 mm

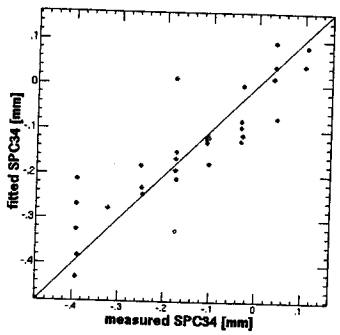


Hard Copy

Condition
BPM to be Calibrate
SPC24
Direction :
Horizontal
Used Components :
BPM :
Steering :
from
to
number
Q magnet:
from
to
number
next
GO
Display
BPM :
SPC34
Result
When the beam is at
BPM reading [mm]:
error [mm]:
Last BPM taken into
SPC34
rel. curr. thresh. :
Fit

File Edit Window

residual = .080 mm

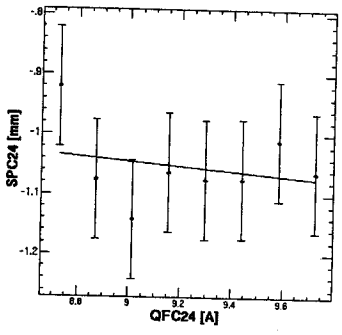


Hard Copy

Help

Condition
BPM to be Calibrated :
SPC24
Direction :
Horizontal Vertical
Used Components :
BPM : SPC24
Steering : {{"SXC21",1}}
from -2
to 1
number 4
Q magnet: QDC24
from -.5
to .5
number 8
next remem. save
GO READ
Display
BPM : Steering step :
SPC34 Fit
Result
When the beam is at the Q center :
BPM reading [mm]: -.27485
error [mm]: .06707
Last BPM taken into account :
SPC34
rel. curr. thresh. : .7
Fit Chk I Save

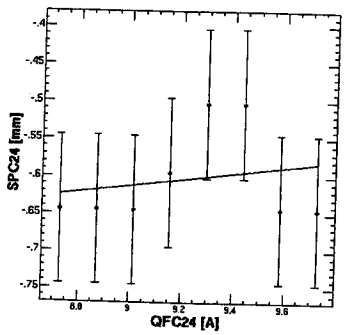
File Edit Window



Hard Copy

Condition
BPM to be Calibrated
SPC24
Direction :
Horizontal
Used Components :
BPM :
Steering :
from
to
number
Q magnet:
from
to
number
next
GO
Display
BPM :
SPC24
Result
When the beam is at th
BPM reading [mm]:
error [mm]:
Last BPM taken into ac
SPC54
rel. curr. thresh. :
Fit

File Edit Window

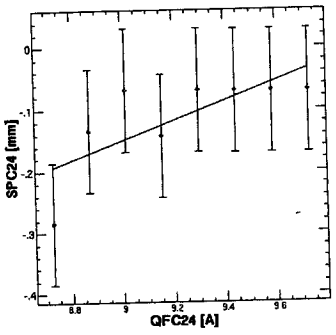


Hard Copy

Help

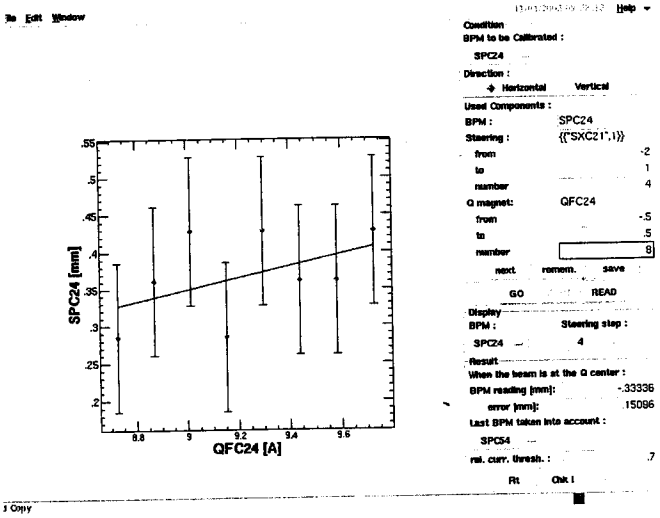
Condition
BPM to be Calibrated :
SPC24
Direction :
Horizontal Vertical
Used Components :
BPM : SPC24
Steering : {{"SXC21",1}}
from -2
to 1
number 4
Q magnet: QFC24
from -.5
to .5
number 8
next remem. save
GO READ
Display
BPM : Steering step :
SPC24 2
Result
When the beam is at the Q center :
BPM reading [mm]: -.33336
error [mm]: .15096
Last BPM taken into account :
SPC54
rel. curr. thresh. : .7
Fit Chk I

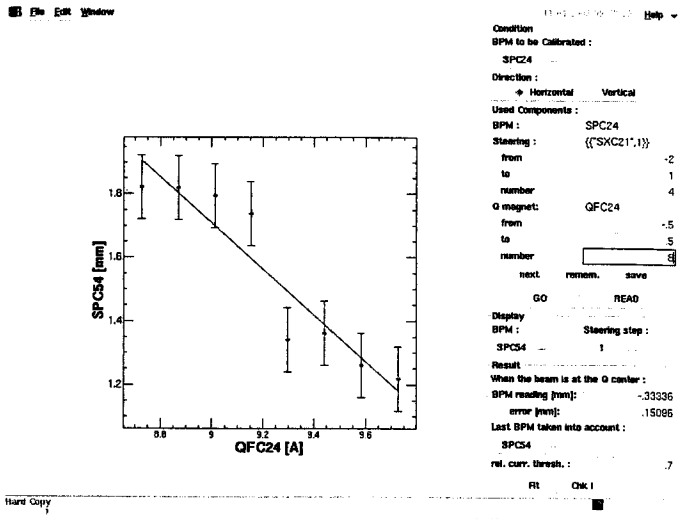
File Edit Window

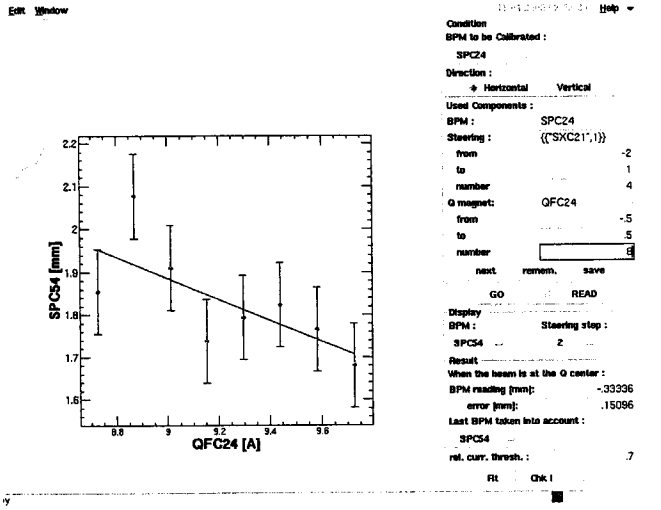


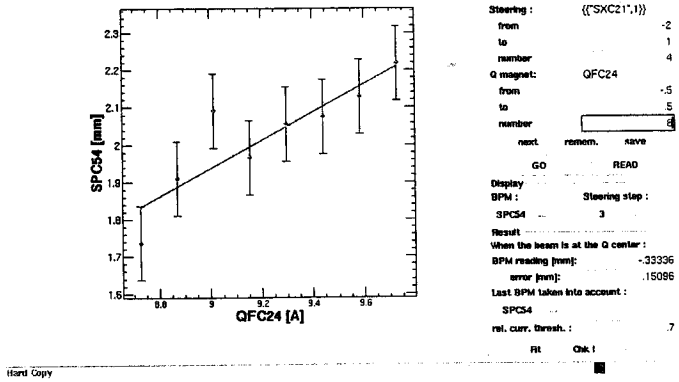
Hard Copy

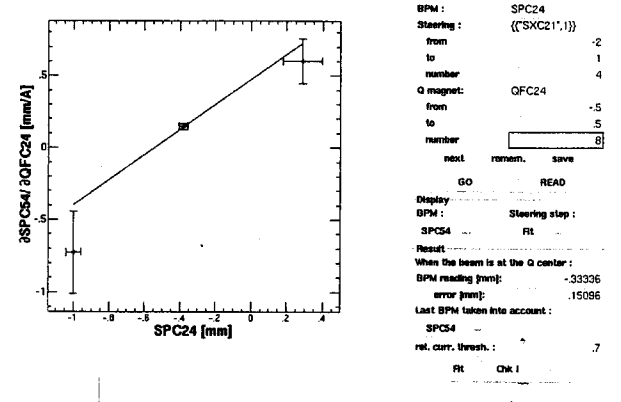
Condition
BPM to be Calibrated :
SPC24
Direction :
Horizontal
Used Components :
BPM :
Steering :
from
to
number
Q magnet:
from
to
number
next
GO
Display
BPM :
SPC24
Result
When the beam is at
BPM reading [mm]:
error [mm]:
Last BPM taken into
SPC54
rel. curr. thresh. :
Fit

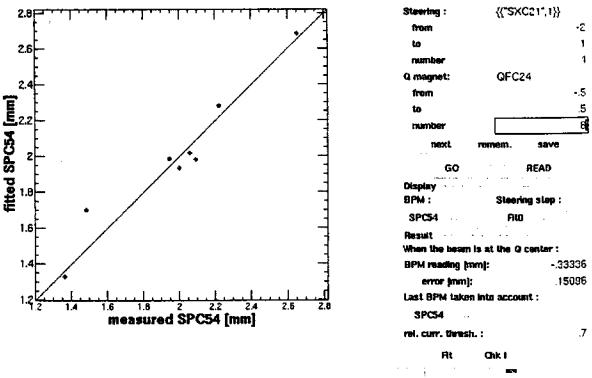












$QFC24|_{offset} - QRC24|_{offset} = -0.33 - (-0.27) = -0.06$

11/2(木) 9時 アライメント補正.

$-1.27 - (-0.60) = -0.67$

10/5/11/4(月) M.S.

SPC34 ← {QDC34 / QFC34} ← Quad BPM

File Edit Measurement Correction Steering Orbit Window

Help

Electron Linac/BT Orbit

measured 11/04/2005 13:45:29

DX (mm)

DY (mm)

Qe-/bunch (nC)

r.m.s =1.262 mm
max =3.013 mm
@ SPQX4E_S
min. =-7.929 mm
@ SPR022

r.m.s =1.1 mm
max =3.291 mm
@ SP61H1
min. =-7.803 mm
@ SPR022

.081 nC
@ SPQMF3E_I

.077

golde_09_12_2004_18:35:08.dat

range DX Auto Fix (5) DY Auto Fix (5) Q Auto Fix (2) e-/e+ 4 Replot

Clear Statistics Standard Size

meas ->gold meas -> ref stat -> ref

a b r c 1 2 3 4 5 6 e1 e2

meas stat ref meas-ref stat-ref gold meas-gold sta-gold

Hard Copy

File Edit Window

SPC54 [mm]

QDC34 [A]

Condition
BPM to be Calibrated :
SPC34
Direction :
Horizontal Vertical
Used Components :
BPM : SPC34
Steering : {"SXC31",1)}
from -3
to 3
number 4
Q magnet: QDC34
from 0
to 2
number 8
next remem. save
GO READ
Display
BPM : Steering step :
SPC54 1
Result
When the beam is at the Q center :
BPM reading [mm]: -.20122
error [mm]: .01714
Last BPM taken into account :
SPC54
rel. curr. thresh. : .7
Fit Chk f Save

File Edit Window

SPC54 [mm]

QDC34 [A]

Condition
BPM to be Calibrated :
SPC34
Direction :
Horizontal Verti
Used Components :
BPM : SPC34
Steering : {"SXC3
from
to
number
Q magnet: QDC34
from
to
number
next remem.
GO RE
Display
BPM : Steering s
SPC54 2
Result
When the beam is at the Q cen
BPM reading [mm]:
error [mm]:
Last BPM taken into account :
SPC54
rel. curr. thresh. :
Fit Chk f S

File Edit Window

SPC54 [mm]

QDC34 [A]

Condition
BPM to be Calibrated :
SPC34
Direction :
Horizontal Vertical
Used Components :
BPM : SPC34
Steering : {"SXC31",1)}
from -3
to 3
number 4
Q magnet: QDC34
from 0
to 2
number 6
next remem. save
GO READ
Display
BPM : Steering step :
SPC54 3
Result
When the beam is at the Q center :
BPM reading [mm]: -.20122
error [mm]: .01714
Last BPM taken into account :
SPC54
rel. curr. thresh. : .7
Fit Chk f Save

File Edit Window

SPC54 [mm]

QDC34 [A]

Condition
BPM to be Calibrated :
SPC34
Direction :
Horizontal
Used Components :
BPM : SP
Steering : {"
from
to
number
Q magnet: QD
from
to
number
next remem.
GO
Display
BPM : Step
SPC54 4
Result
When the beam is at the
BPM reading [mm]:
error [mm]:
Last BPM taken into acco
SPC54
rel. curr. thresh. :
Fit Chk f