

0 werkmep. 10cm.
bolgaas.

duunne ordner mcke

| | | | |
|-------------|--|---|------------|
| E L C O M A | KWALITEITSLAB. OSC. BZN. PHILIPS HEERLEN | | |
| | KHR-89/VL-167 | 1 | 1984.01.18 |

LINEARITEIT VAN 26D10

1. INLEIDING : n = 5 stuks.

Meetkonditie = $V_k/g^2 = 1.200 \text{ V}$

$V_s/k = 12 \text{ kV}$

Meetmal = 10 x 8 div. (1 div. = 6 mm)

= 60 x 48 mm

Nuttig schermoppervlak = 70 x 56 mm (1 div. = 7 mm)

2. MEETRESULTAAT : Bijlage 1 t/m 6.

3. KONKLUSIE : In X-richting zeer slechte lineariteit, let op gereduceerde meetmalafmeting.

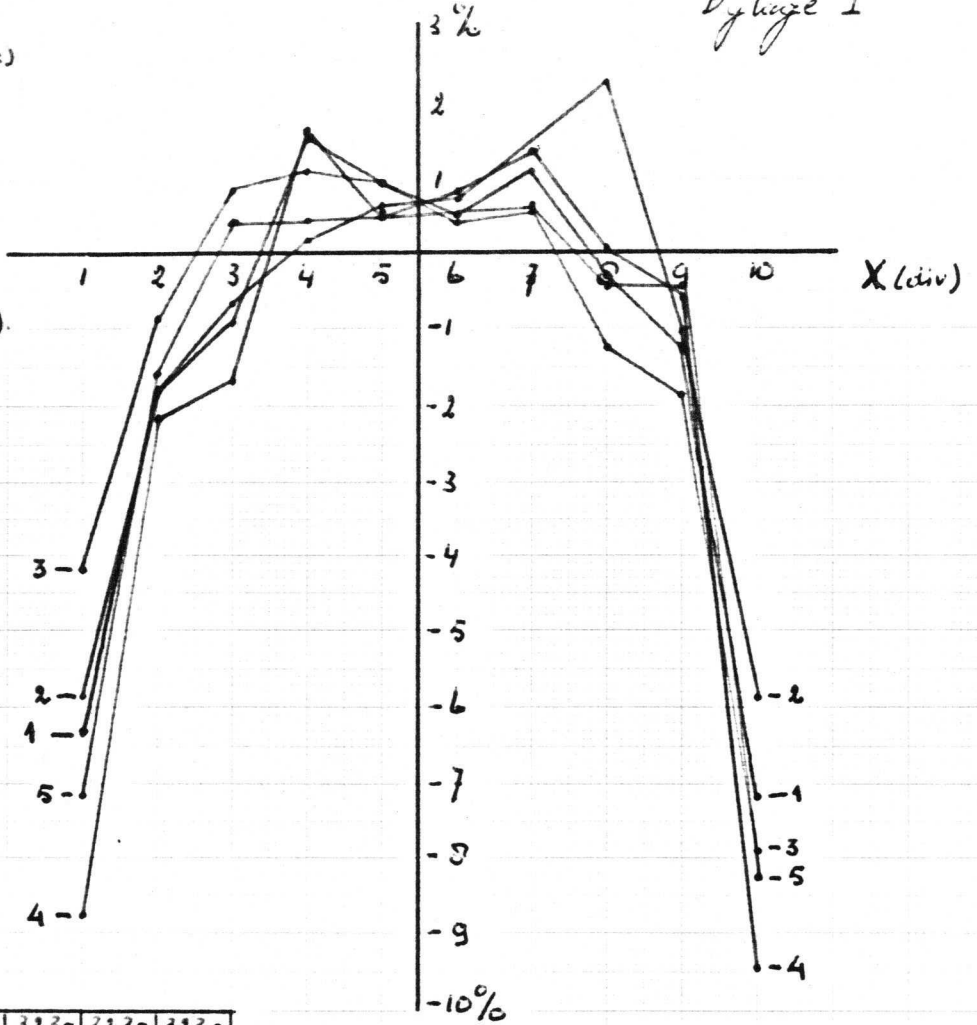
J. Vleeschouwers

Kopie: H.H. Koppelmans
Mordang
Warnier
Sieben
Schröder
Zeppenfeld
Schols

Typ: 10 DIC
(gem. inw. raster)

Bylage 1

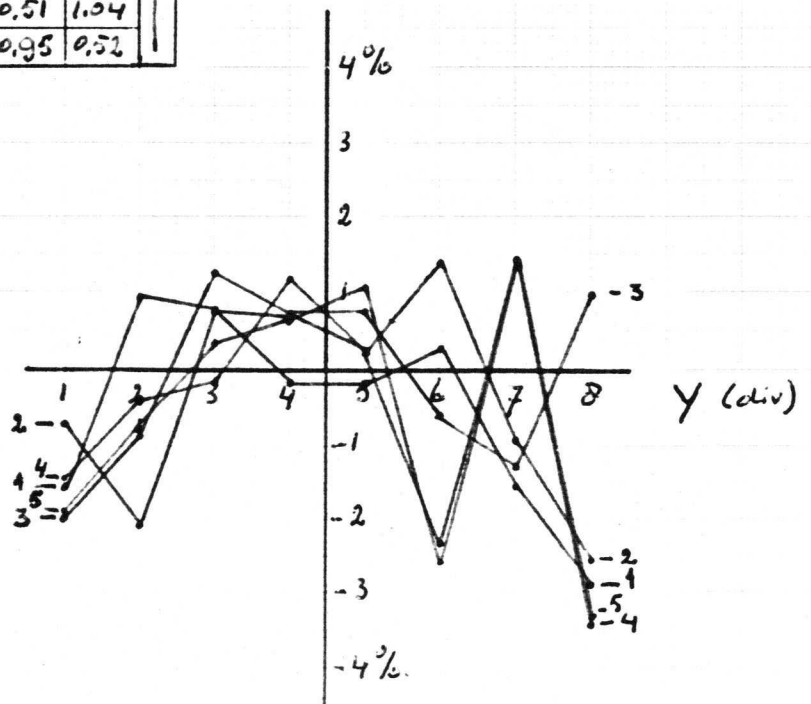
Lin. gem. 80% → f'(div)



| Buis nr: | 323-653 1 | 323-679 2 | 323-691 3 | 323-686 4 | 323-697 5 |
|----------------|--------------|--------------|--------------|--------------|--------------|
| Lin. max X | 9.4 | 8.65 | 9.77 | 13.2 | 9.7 |
| Lin max Y | 3.95 | 4.05 | 3.23 | 5.03 | 4.91 |
| Lin(25-75%) X1 | 1.02 | 0.86 | 0.38 | 1.03 | 0.46 |
| Lin(25-75%) X2 | 0.53 | 0.01 | 0.89 | 0.45 | 0.46 |
| Lin(25-75%) Y1 | 0.3 | 0 | 1.12 | 0.51 | 1.04 |
| Lin(25-75%) Y2 | -0.08 | 0.92 | 0.37 | 0.95 | 0.52 |

1 div = 6 mm !

Lin. gem. 75% → f'(div)



18-1-84
P. G. Schow.

Bylage 3

=====
Vk/a2=1200V Vs/k=12kV
26D10 323679
INPUT overzicht HORIZONTAAL
=====

Table with 5 columns: Div, 1ste, 2de, Meetfout, Gem. Rows X1-X10.

INPUT overzicht VERTIKAAL

Table with 5 columns: Div, 1ste, 2de, Meetfout, Gem. Rows Y1-Y8.

Rapport LINEARITEIT van:
Vk/a2=1200V Vs/k=12kV

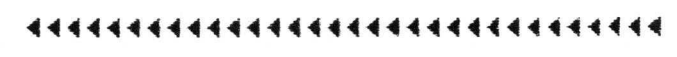
Type : 26D10
Buis : 323679
Meetdatum: 18-1-1984

HORIZONTAAL LIN LIN
Div Mx/div 100% 80%
X 1 4.28 -4.75 -5.86
...
In: [V/div] [%] [%]

Lin.max. = 8.65 %
Lin(25/75%)X1 = .86 %
Lin(25/75%)X2 = .01 %

Overzicht DEFLEKTIEFACTOREN X:
Gem.(100%) = 4.49 V/div
Gem.(80%) = 4.54 V/div
Mx (def.) = 4.56 V/div

Exc defl. factor = .01 V = .22 %



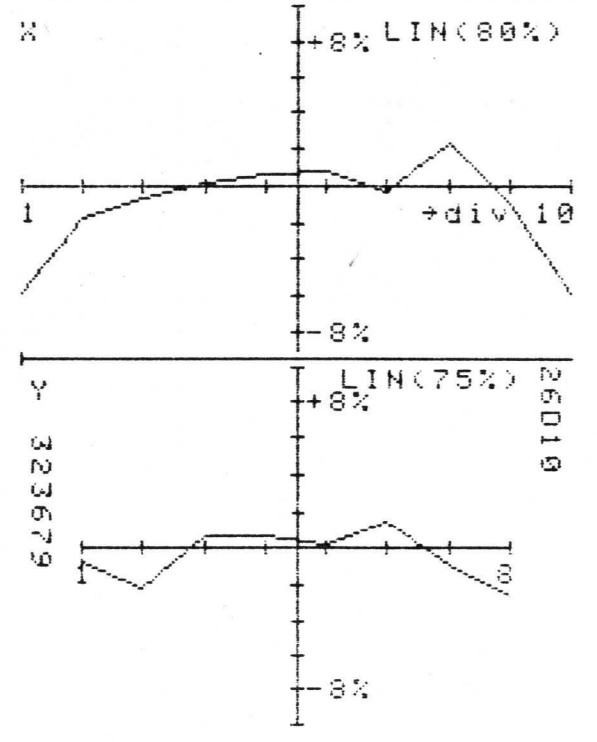
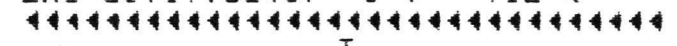
VERTIKAAL LIN LIN LIN
Div My/div 100% 80% 75%
Y 1 2.14 -.29 -.60 -.70
...
In: [V/div] [%] [%] [%]

Lin.max. = 4.05 %
Lin(25/75%)Y1 = 0 %
Lin(25/75%)Y2 = .92 %

Overzicht DEFLEKTIEFACTOREN: Y

Gem.(100%) = 2.15 V/div
Gem.(80%) = 2.15 V/div
Gem.(75%) = 2.16 V/div
My (def.) = 2.17 V/div

Exc defl. factor = 0 V = .12 %



Bylage 4

Vk/g2=1200V Vs/k=12kV
 26D10 323681
 INPUT overzicht HORIZONTALAAL

| Div | 1ste | 2de | Meetfout | Gem. |
|-----|------|------|----------|------|
| X 1 | 4.26 | 4.26 | 0.0% | 4.26 |
| X 2 | 4.41 | 4.41 | 0.0% | 4.41 |
| X 3 | 4.49 | 4.48 | .2% | 4.49 |
| X 4 | 4.49 | 4.50 | -.2% | 4.50 |
| X 5 | 4.49 | 4.49 | 0.0% | 4.49 |
| X 6 | 4.47 | 4.46 | .2% | 4.47 |
| X 7 | 4.47 | 4.47 | 0.0% | 4.47 |
| X 8 | 4.39 | 4.39 | 0.0% | 4.39 |
| X 9 | 4.36 | 4.37 | -.2% | 4.37 |
| X10 | 4.10 | 4.09 | .2% | 4.10 |

INPUT overzicht VERTIKAAL

| Div | 1ste | 2de | Meetfout | Gem. |
|-----|------|------|----------|------|
| Y 1 | 2.16 | 2.17 | -.5% | 2.17 |
| Y 2 | 2.19 | 2.19 | 0.0% | 2.19 |
| Y 3 | 2.24 | 2.23 | .4% | 2.24 |
| Y 4 | 2.22 | 2.23 | -.5% | 2.23 |
| Y 5 | 2.22 | 2.23 | -.5% | 2.23 |
| Y 6 | 2.20 | 2.19 | .5% | 2.20 |
| Y 7 | 2.18 | 2.18 | 0.0% | 2.18 |
| Y 8 | 2.23 | 2.23 | 0.0% | 2.23 |

 * Rapport LINEARITEIT van: *
 * Vk/g2=1200V Vs/k=12kV *

Type :26D10
 Buis :323681
 Meetdatum:18-1-1984

| HORIZONTALAAL | | LIN | LIN |
|---------------|--------|-------|-------|
| Div | Mx/div | 100% | 80% |
| X 1 | 4.26 | -3.02 | -4.19 |
| X 2 | 4.41 | .40 | -.82 |
| X 3 | 4.49 | 2.11 | .97 |
| X 4 | 4.50 | 2.33 | 1.10 |
| X 5 | 4.49 | 2.22 | .98 |
| X 6 | 4.47 | 1.65 | .42 |
| X 7 | 4.47 | 1.76 | .53 |
| X 8 | 4.39 | -.06 | -1.27 |
| X 9 | 4.37 | -.63 | -1.83 |
| X10 | 4.10 | -6.77 | -7.90 |
| In: [V/div] | | [%] | [%] |

Lin.max. = 9.77 %
 Lin(25/75%)X1 = .30 %
 Lin(25/75%)X2 = .89 %

Overzicht DEFLEKTIEFACTOREN X:

 Gem.(100%) = 4.39 V/div
 Gem.(80%) = 4.45 V/div
 Mx (def.) = 4.48 V/div

Exc defl. factor = .03 V = .56 %

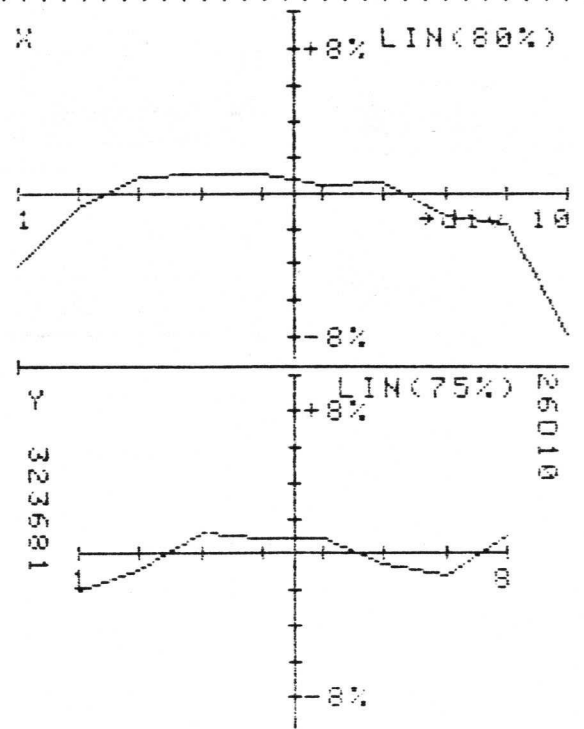
| VERTIKAAL | | LIN | LIN | LIN |
|-------------|--------|-------|-------|-------|
| Div | My/div | 100% | 80% | 75% |
| Y 1 | 2.17 | -1.84 | -1.93 | -1.96 |
| Y 2 | 2.19 | -.71 | -.80 | -.83 |
| Y 3 | 2.24 | 1.33 | 1.24 | 1.21 |
| Y 4 | 2.23 | .88 | .79 | .75 |
| Y 5 | 2.23 | .88 | .79 | .75 |
| Y 6 | 2.20 | -.48 | -.57 | -.60 |
| Y 7 | 2.18 | -1.16 | -1.25 | -1.28 |
| Y 8 | 2.23 | 1.11 | 1.01 | .98 |
| In: [V/div] | | [%] | [%] | [%] |

Lin.max. = 3.23 %
 Lin(25/75%)Y1 = 1.12 %
 Lin(25/75%)Y2 = .37 %

Overzicht DEFLEKTIEFACTOREN Y:

 Gem.(100%) = 2.21 V/div
 Gem.(80%) = 2.21 V/div
 Gem.(75%) = 2.21 V/div
 My (def.) = 2.22 V/div

Exc defl. factor = .02 V = .9 %



=====
 V_{k/a2}=1200V V_{s/k}=12kV
 26D10 323686
 INPUT overzicht HORIZONTAAL
 =====

| Div | 1ste | 2de | Meetfout | Gem. |
|-----|------|------|----------|------|
| X 1 | 4.18 | 4.16 | .5% | 4.17 |
| X 2 | 4.47 | 4.48 | -.2% | 4.48 |
| X 3 | 4.50 | 4.49 | .2% | 4.50 |
| X 4 | 4.64 | 4.65 | -.2% | 4.65 |
| X 5 | 4.60 | 4.59 | .2% | 4.60 |
| X 6 | 4.61 | 4.61 | 0.0% | 4.61 |
| X 7 | 4.63 | 4.64 | -.2% | 4.64 |
| X 8 | 4.58 | 4.57 | .2% | 4.58 |
| X 9 | 4.54 | 4.55 | -.2% | 4.55 |
| X10 | 4.14 | 4.14 | 0.0% | 4.14 |

INPUT overzicht VERTIKAAL

| Div | 1ste | 2de | Meetfout | Gem. |
|-----|------|------|----------|------|
| Y 1 | 2.23 | 2.23 | 0.0% | 2.23 |
| Y 2 | 2.26 | 2.25 | .4% | 2.26 |
| Y 3 | 2.26 | 2.26 | 0.0% | 2.26 |
| Y 4 | 2.29 | 2.29 | 0.0% | 2.29 |
| Y 5 | 2.27 | 2.27 | 0.0% | 2.27 |
| Y 6 | 2.21 | 2.21 | 0.0% | 2.21 |
| Y 7 | 2.29 | 2.30 | -.4% | 2.30 |
| Y 8 | 2.19 | 2.18 | .5% | 2.19 |

```

*****
* Rapport LINEARITEIT van: *
* Vk/a2=1200V Vs/k=12kV *
*****

```

Type :26D10
 Buis :323686
 Meetdatum:17-1-1984

| Div | Mx/div | LIN 100% | LIN 80% |
|-----|--------|----------|---------|
| X 1 | 4.17 | -7.10 | -8.79 |
| X 2 | 4.48 | -.30 | -2.12 |
| X 3 | 4.50 | .14 | -1.68 |
| X 4 | 4.65 | 3.49 | 1.60 |
| X 5 | 4.60 | 2.37 | .51 |
| X 6 | 4.61 | 2.71 | .83 |
| X 7 | 4.64 | 3.26 | 1.38 |
| X 8 | 4.58 | 1.93 | .07 |
| X 9 | 4.55 | 1.26 | -.59 |
| X10 | 4.14 | -7.76 | -9.45 |

Lin.max. = 12.2 %
 Lin(25/75%)X1 = 1.03 %
 Lin(25/75%)X2 = .45 %

Overzicht DEFLEKTIEFACTOREN X:

```

=====
Gem.(100%) = 4.49 V/div
Gem.(80%) = 4.57 V/div
Mx (def.) = 4.62 V/div

```

Exc defl. factor = 0 V = -.05 %

Bylage 5

| VERTIKAAL | LIN | LIN | LIN | |
|-------------------------|------|-------|-------|-------|
| Div M _y /div | 100% | 80% | 75% | |
| Y 1 | 2.23 | -.86 | -1.32 | -1.47 |
| Y 2 | 2.26 | .25 | -.21 | -.37 |
| Y 3 | 2.26 | .47 | .01 | -.15 |
| Y 4 | 2.29 | 1.81 | 1.33 | 1.18 |
| Y 5 | 2.27 | .92 | .45 | .29 |
| Y 6 | 2.21 | -1.75 | -2.21 | -2.36 |
| Y 7 | 2.30 | 2.03 | 1.56 | 1.40 |
| Y 8 | 2.19 | -2.86 | -3.31 | -3.46 |

Lin.max. = 5.03 %

Lin(25/75%)Y1 = .51 %
 Lin(25/75%)Y2 = .95 %

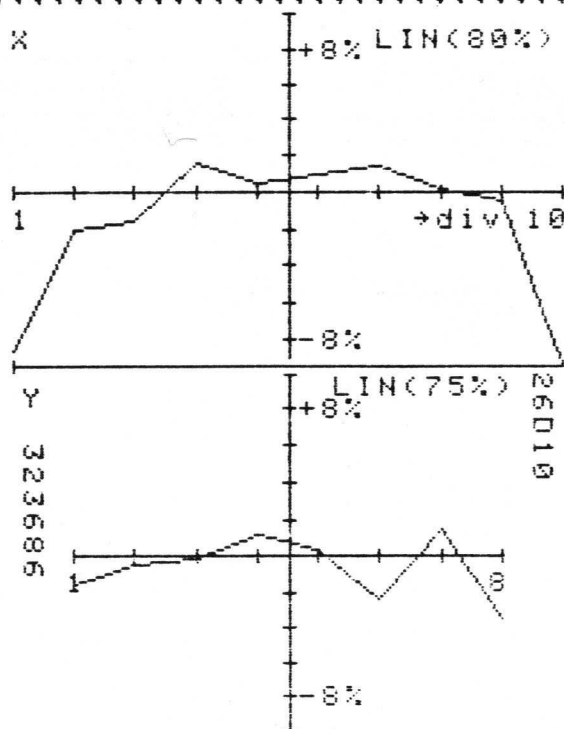
Overzicht DEFLEKTIEFACTOREN Y:

```

=====
Gem.(100%) = 2.25 V/div
Gem.(80%) = 2.26 V/div
Gem.(75%) = 2.26 V/div
My (def.) = 2.26 V/div

```

Exc defl. factor = .04 V = 1.56 %



=====
 V_{k/g2}=1200V V_{s/k}=12kV
 26D10 323687
 INPUT overzicht HORIZONTAAL
 =====

| Div | 1ste | 2de | Meetfout | Gem. |
|-----|------|------|----------|------|
| X 1 | 4.18 | 4.17 | .2% | 4.18 |
| X 2 | 4.43 | 4.42 | .2% | 4.43 |
| X 3 | 4.51 | 4.52 | -.2% | 4.52 |
| X 4 | 4.51 | 4.52 | -.2% | 4.52 |
| X 5 | 4.52 | 4.52 | 0.0% | 4.52 |
| X 6 | 4.51 | 4.53 | -.4% | 4.52 |
| X 7 | 4.53 | 4.52 | .2% | 4.53 |
| X 8 | 4.47 | 4.48 | -.2% | 4.48 |
| X 9 | 4.47 | 4.48 | -.2% | 4.48 |
| X10 | 4.12 | 4.13 | -.2% | 4.13 |

INPUT overzicht VERTIKAAL

| Div | 1ste | 2de | Meetfout | Gem. |
|-----|------|------|----------|------|
| Y 1 | 2.17 | 2.17 | 0.0% | 2.17 |
| Y 2 | 2.20 | 2.19 | .5% | 2.20 |
| Y 3 | 2.22 | 2.22 | 0.0% | 2.22 |
| Y 4 | 2.23 | 2.22 | .4% | 2.23 |
| Y 5 | 2.23 | 2.24 | -.4% | 2.24 |
| Y 6 | 2.15 | 2.16 | -.5% | 2.16 |
| Y 7 | 2.25 | 2.24 | .4% | 2.25 |
| Y 8 | 2.14 | 2.14 | 0.0% | 2.14 |

 * Rapport LINEARITEIT van: *
 * V_{k/g2}=1200V V_{s/k}=12kV *

Type : 26D10
 Buis : 323687
 Meetdatum: 17-1-1984

| HORIZONTAAL | LIN | LIN |
|-------------|------|-------|
| Div Mx/div | 100% | 80% |
| X 1 | 4.18 | -5.69 |
| X 2 | 4.43 | -.05 |
| X 3 | 4.52 | 1.99 |
| X 4 | 4.52 | 1.99 |
| X 5 | 4.52 | 2.10 |
| X 6 | 4.52 | 2.10 |
| X 7 | 4.53 | 2.21 |
| X 8 | 4.48 | 1.08 |
| X 9 | 4.48 | 1.08 |
| X10 | 4.13 | -6.82 |

Lin.max. = 9.7 %
 Lin(25/75%)X1 = .46 %
 Lin(25/75%)X2 = .46 %

Overzicht DEFLEKTIEFACTOREN X:
 =====
 Gem.(100%) = 4.43 V/div
 Gem.(80%) = 4.5 V/div
 Mx(def.) = 4.52 V/div

Exc defl.factor = 0 V = -.11 %

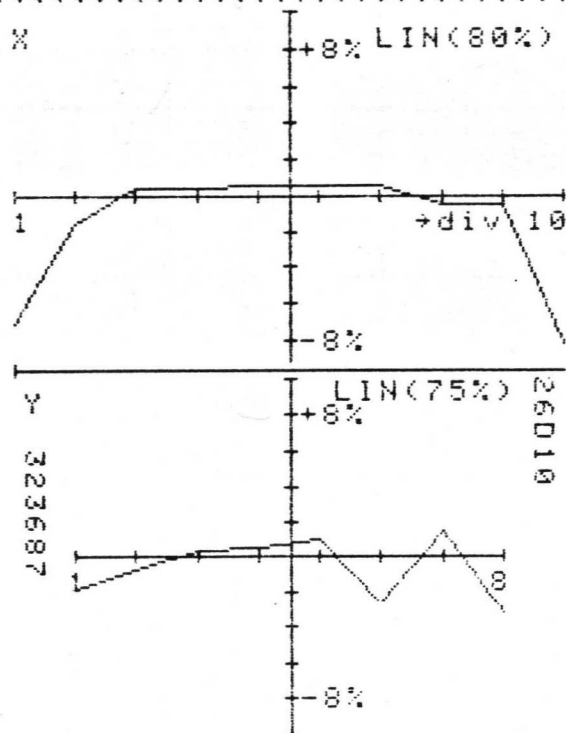
Bijlage 6

| VERTIKAAL | LIN | LIN | LIN |
|------------|------|-------|-------|
| Div My/div | 100% | 80% | 75% |
| Y 1 | 2.17 | -1.28 | -1.76 |
| Y 2 | 2.20 | -.14 | -.63 |
| Y 3 | 2.22 | 1.00 | .50 |
| Y 4 | 2.23 | 1.22 | .73 |
| Y 5 | 2.24 | 1.68 | 1.18 |
| Y 6 | 2.16 | -1.96 | -2.44 |
| Y 7 | 2.25 | 2.13 | 1.63 |
| Y 8 | 2.14 | -2.64 | -3.12 |

In: [V/div] [%] [%] [%]
 Lin.max. = 4.91 %
 Lin(25/75%)Y1 = 1.04 %
 Lin(25/75%)Y2 = .52 %

Overzicht DEFLEKTIEFACTOREN Y:
 =====
 Gem.(100%) = 2.2 V/div
 Gem.(80%) = 2.21 V/div
 Gem.(75%) = 2.21 V/div
 My(def.) = 2.21 V/div

Exc defl.factor = .03 V = 1.25 %



Meetinstelling +

Levensduur instelling. 26 D10.

0-
werkmap
10 cm
bolgas

- $V_k = 1.2 \text{ kV}$
- $V_{\text{scherm/kath}} = 12 \text{ kV}$.
- $I_{\text{nav}} = 5 \mu\text{A}$
- $R = 4 \times 4 \text{ cm}^2$.

(Meten m.b.t. Kanon: conform D14-370 →)

- $I_{b \times} (V_d = \overset{25}{30} \text{ V})$ $R = 40 \times 40 \text{ mm}^2$

- Lum. $R = 4 \times 4$, $I_{\text{nav}} = 5 \mu\text{A}$

- Fot. schrijfsnelheid: niet meten.

Bestaat er een targetspec?

Meeteis concept: opstellen: HHH Vleeschouwers/
Koppelmanns.

→ Indien niet accoord, dan z.s.m.
reactie.

[HH Koppelmanns
Schröder
Zeppenfeld

11/1-84

HH Schols
Winands
Vleeschouwers

Sieben ad

26D10

glas dilite 3.99 mm

14kV 50 uA

26D10

* X-RAY report on Project: *
* 26D10 *

Testresults of the: SCREEN

Details about the GLASS:

9270
Min. MU glass = 10.4
Real MU glass = 10.7
Exponent X = 2.76
Min. thickness = 3.7

Date of test: 83-05-10

Tubenumber = 10
Corr. fact VICTOREEN = 1.13
Glass thickness = 3.99 mm

| KV | mR/hr | uA | mR/hr (5uA) |
|----|-------|------|-------------|
| 16 | .04 | 25.0 | .009 |
| 17 | .18 | 25.0 | .041 |
| 18 | .80 | 25.0 | .181 |
| 19 | 2.78 | 25.0 | .628 |
| 20 | 7.70 | 25.0 | 1.740 |
| 21 | 7.55 | 10.0 | 4.266 |
| 22 | 7.75 | 5.0 | 8.758 |
| 23 | 7.55 | 2.5 | 17.063 |

* SCREEN SCREEN SCREEN SCREEN *

16 kV TUBE X XMAX
===== NR (mR/hr) at 5 uA

1 10 .009 .023
MEAN X = .009 mR/hr
MEAN XMAX = .023 mR/hr
SIGMA X = .999 mR/hr
SIGMA XMAX = .999 mR/hr
XMAX+3σXMAX = .300 mR/hr

17 kV TUBE X XMAX
===== NR (mR/hr) at 5 uA

1 10 .041 .091
MEAN X = .041 mR/hr
MEAN XMAX = .091 mR/hr
SIGMA X = .999 mR/hr
SIGMA XMAX = .999 mR/hr
XMAX+3σXMAX = .300 mR/hr

18 kV TUBE X XMAX
===== NR (mR/hr) at 5 uA

1 10 .181 .361
MEAN X = .181 mR/hr
MEAN XMAX = .361 mR/hr
SIGMA X = .999 mR/hr
SIGMA XMAX = .999 mR/hr
XMAX+3σXMAX = .300 mR/hr

19 kV TUBE X XMAX
===== NR (mR/hr) at 5 uA

1 10 .628 1.146
MEAN X = .628 mR/hr
MEAN XMAX = 1.146 mR/hr
SIGMA X = .999 mR/hr
SIGMA XMAX = .999 mR/hr
XMAX+3σXMAX = .300 mR/hr

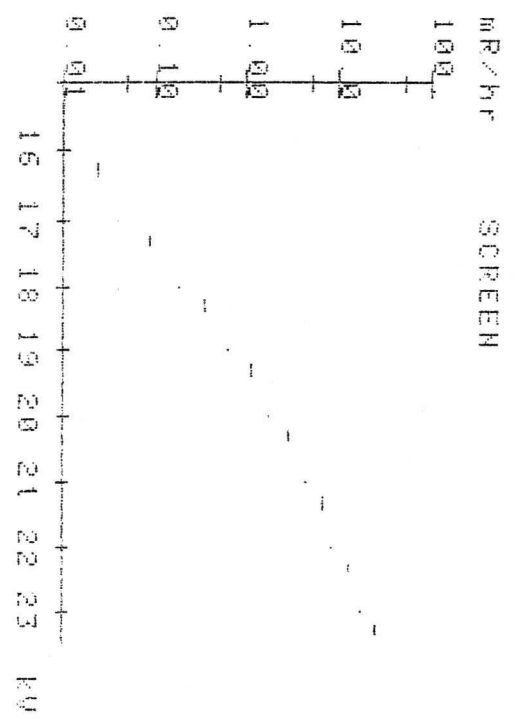
20 kV TUBE X XMAX
===== NR (mR/hr) at 5 uA

1 10 1.740 2.941
MEAN X = 1.740 mR/hr
MEAN XMAX = 2.941 mR/hr
SIGMA X = .999 mR/hr
SIGMA XMAX = .999 mR/hr
XMAX+3σXMAX = .300 mR/hr

| kV | TUBE NR | X (mR/hr) | XMAX at 5 μ A |
|-----------------------------------|---------|-----------|-------------------|
| 22 | 10 | 4.266 | 6.767 |
| MEAN X = 4.266 mR/hr | | | |
| MEAN XMAX = 6.767 mR/hr | | | |
| SIGMA X = .999 mR/hr | | | |
| SIGMA XMAX = .999 mR/hr | | | |
| XMAX+3 σ XMAX = .300 mR/hr | | | |

| 22 kV | TUBE NR | X (mR/hr) | XMAX at 5 μ A |
|-----------------------------------|---------|-----------|-------------------|
| 22 | 10 | 8.758 | 13.176 |
| MEAN X = 8.758 mR/hr | | | |
| MEAN XMAX = 13.176 mR/hr | | | |
| SIGMA X = .999 mR/hr | | | |
| SIGMA XMAX = .999 mR/hr | | | |
| XMAX+3 σ XMAX = .300 mR/hr | | | |

| 23 kV | TUBE NR | X (mR/hr) | XMAX at 5 μ A |
|-----------------------------------|---------|-----------|-------------------|
| 23 | 10 | 17.063 | 24.545 |
| MEAN X = 17.063 mR/hr | | | |
| MEAN XMAX = 24.545 mR/hr | | | |
| SIGMA X = .999 mR/hr | | | |
| SIGMA XMAX = .999 mR/hr | | | |
| XMAX+3 σ XMAX = .300 mR/hr | | | |



X-RAY report on Project:
26D10

Test results of the: SCREEN

Details about the GLASS:

B270
Min. MU glass = 10
Real MU glass = 10.7
Exponent X = 2.76
Min. thickness = 3.5

Date of test: 83-05-10

Tubenumbr = 10
Corr. fact. VICTOREEN = 1.13
Glassthickness = 3.99 mm

| KV | mR/hr | μ A | mR/hr(5 μ A) |
|----|-------|---------|------------------|
| 16 | .04 | 25.0 | .009 |
| 17 | .18 | 25.0 | .041 |
| 18 | .60 | 25.0 | .181 |
| 19 | 2.70 | 25.0 | .628 |
| 20 | 7.70 | 25.0 | 1.740 |
| 21 | 7.55 | 10.0 | 4.266 |
| 22 | 7.75 | 5.0 | 8.750 |
| 23 | 7.55 | 2.5 | 17.063 |

* SCREEN SCREEN SCREEN SCREEN *

| 16 kV | TUBE | X | XMAX |
|-------|------|---------|--------------|
| ==== | NR | (mR/hr) | at 5 μ A |
| 1 | 10 | .009 | .051 |

MEAN X = .009 mR/hr
MEAN XMAX = .051 mR/hr
SIGMA X = .999 mR/hr
SIGMA XMAX = .999 mR/hr
XMAX+3 σ XMAX = .300 mR/hr

| 17 kV | TUBE | X | XMAX |
|-------|------|---------|--------------|
| ==== | NR | (mR/hr) | at 5 μ A |
| 1 | 10 | .041 | .177 |

MEAN X = .041 mR/hr
MEAN XMAX = .177 mR/hr
SIGMA X = .999 mR/hr
SIGMA XMAX = .999 mR/hr
XMAX+3 σ XMAX = .300 mR/hr

| 18 kV | TUBE | X | XMAX |
|-------|------|---------|--------------|
| ==== | NR | (mR/hr) | at 5 μ A |
| 1 | 10 | .181 | .641 |

MEAN X = .181 mR/hr
MEAN XMAX = .641 mR/hr
SIGMA X = .999 mR/hr
SIGMA XMAX = .999 mR/hr
XMAX+3 σ XMAX = .300 mR/hr

| 19 kV | TUBE | X | XMAX |
|-------|------|---------|--------------|
| ==== | NR | (mR/hr) | at 5 μ A |
| 1 | 10 | .628 | 1.881 |

MEAN X = .628 mR/hr
MEAN XMAX = 1.881 mR/hr
SIGMA X = .999 mR/hr
SIGMA XMAX = .999 mR/hr
XMAX+3 σ XMAX = .300 mR/hr

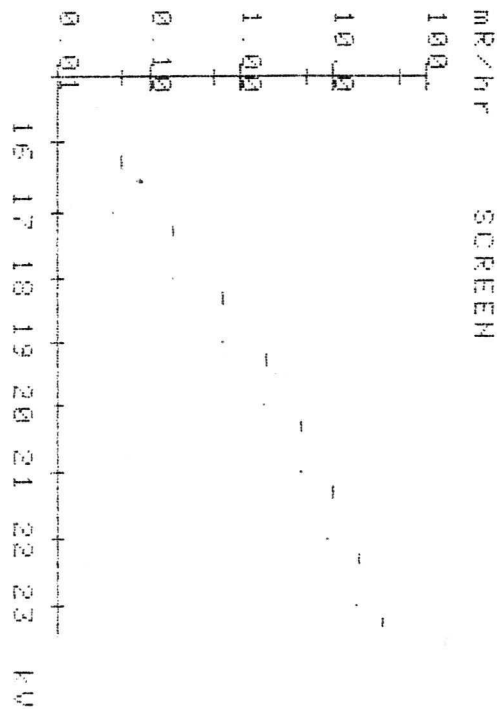
| 20 kV | TUBE | X | XMAX |
|-------|------|---------|--------------|
| ==== | NR | (mR/hr) | at 5 μ A |
| 1 | 10 | 1.740 | 4.536 |

MEAN X = 1.740 mR/hr
MEAN XMAX = 4.536 mR/hr
SIGMA X = .999 mR/hr
SIGMA XMAX = .999 mR/hr
XMAX+3 σ XMAX = .300 mR/hr

| kV | TUBE | X | XMAX |
|----------------------|------|---------|--------------|
| ==== | NR | (mR/hr) | at 5 μ A |
| 1 | 10 | 4.266 | 9.908 |
| MEAN X | = | 4.266 | mR/hr |
| MEAN XMAX | = | 9.908 | mR/hr |
| SIGMA X | = | .999 | mR/hr |
| SIGMA XMAX | = | .999 | mR/hr |
| XMAX+3 σ XMAX | = | .300 | mR/hr |

| 22 kV | TUBE | X | XMAX |
|----------------------|------|---------|--------------|
| ==== | NR | (mR/hr) | at 5 μ A |
| 1 | 10 | 8.758 | 18.464 |
| MEAN X | = | 8.758 | mR/hr |
| MEAN XMAX | = | 18.464 | mR/hr |
| SIGMA X | = | .999 | mR/hr |
| SIGMA XMAX | = | .999 | mR/hr |
| XMAX+3 σ XMAX | = | .300 | mR/hr |

| 23 kV | TUBE | X | XMAX |
|----------------------|------|---------|--------------|
| ==== | NR | (mR/hr) | at 5 μ A |
| 1 | 10 | 17.063 | 33.144 |
| MEAN X | = | 17.063 | mR/hr |
| MEAN XMAX | = | 33.144 | mR/hr |
| SIGMA X | = | .999 | mR/hr |
| SIGMA XMAX | = | .999 | mR/hr |
| XMAX+3 σ XMAX | = | .300 | mR/hr |

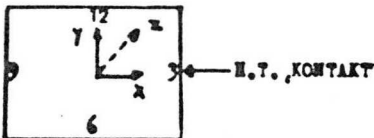


TEST: _____ DATE: 26 Dec 10-5-83 BY Schols/leijps TYPE: 26 Dec
 GUNNO.: _____
 TRIAL: _____

EQUIPMENT

H.V.: METER/DIV. : _____
 SUPPLY : _____
 CURRENT: METER : _____
 SEARCH INSTR. : _____
 VICTORION 440 RPC : SERIAL NR.: 2389
 CALIBR. : _____

TESTMETHOD : _____
 SCREEN-GLASS : _____
 CONE-GLASS : _____
 BECK-GLASS : _____



HOTSPOTLOCATION (IN CM)
 SCREEN: X/Y IN CM WITH RESPECT TO SCREEN-CENTRE
 CONE : CLOCK + VALUE OF Z (IN CM).

SCREENPARAMETERS

MIN. T (MM) : _____ MM ACC. TO DRAWING/DOC.: _____
 MIN. β (CM⁻¹) : _____ ACC. TO DRAWING/DOC.: _____
 ACTUAL T : 4.96 MM → ?? 3.99mm.
 ACTUAL β : _____ CM⁻¹ (AT 0.6 I)

HOTSPOTLOCATION: X/Y: _____

CONEPARAMETERS

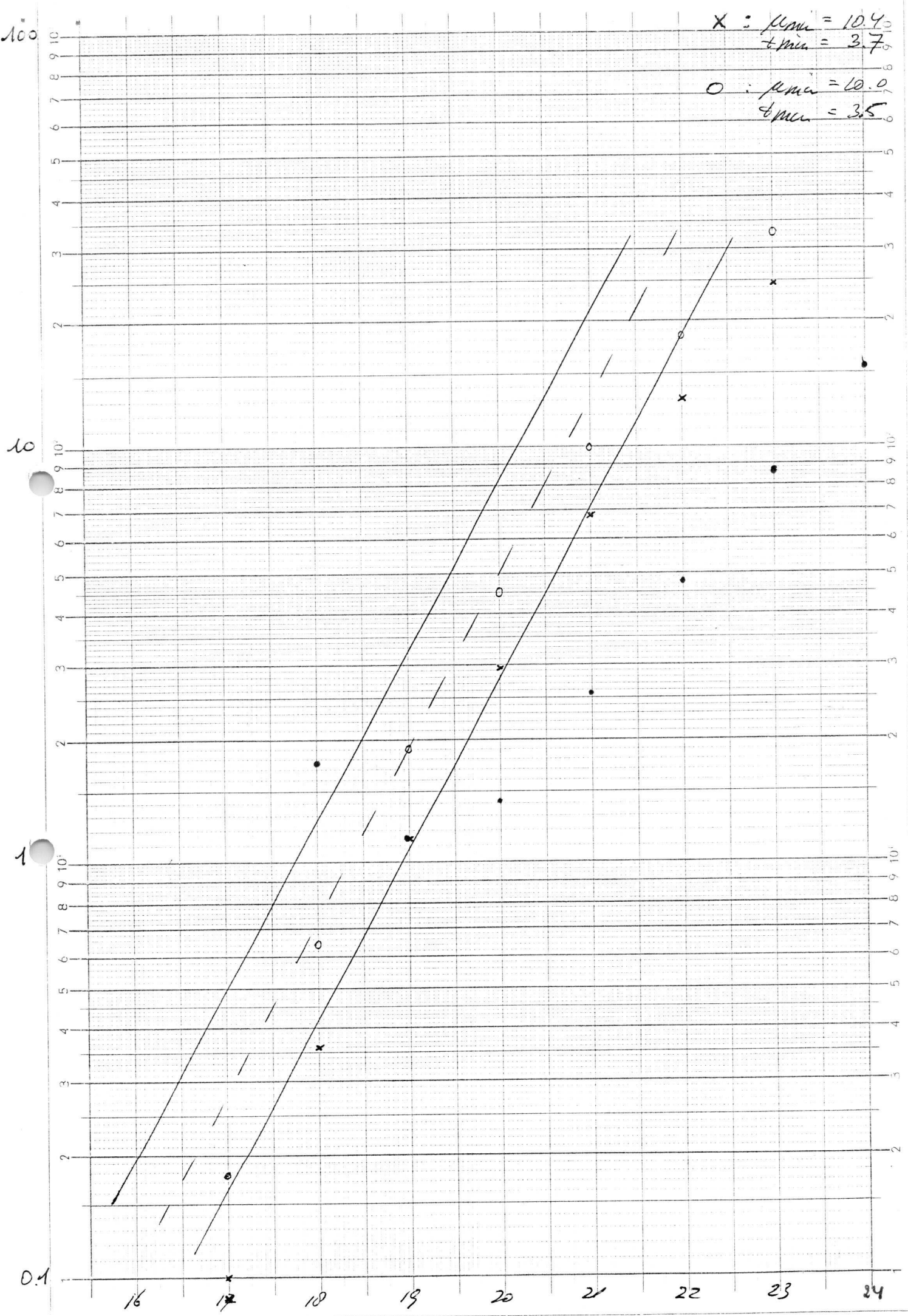
MIN. T (MM) : _____ MM ACC. TO DRAWING/DOC.: _____
 MIN. β (CM⁻¹) : _____ ACC. TO DRAWING/DOC.: _____
 ACTUAL T : _____ MM
 ACTUAL β : _____ CM⁻¹ (AT 0.6 I)

HOTSPOTLOCATION: _____ HRS.
 Z: _____ CM

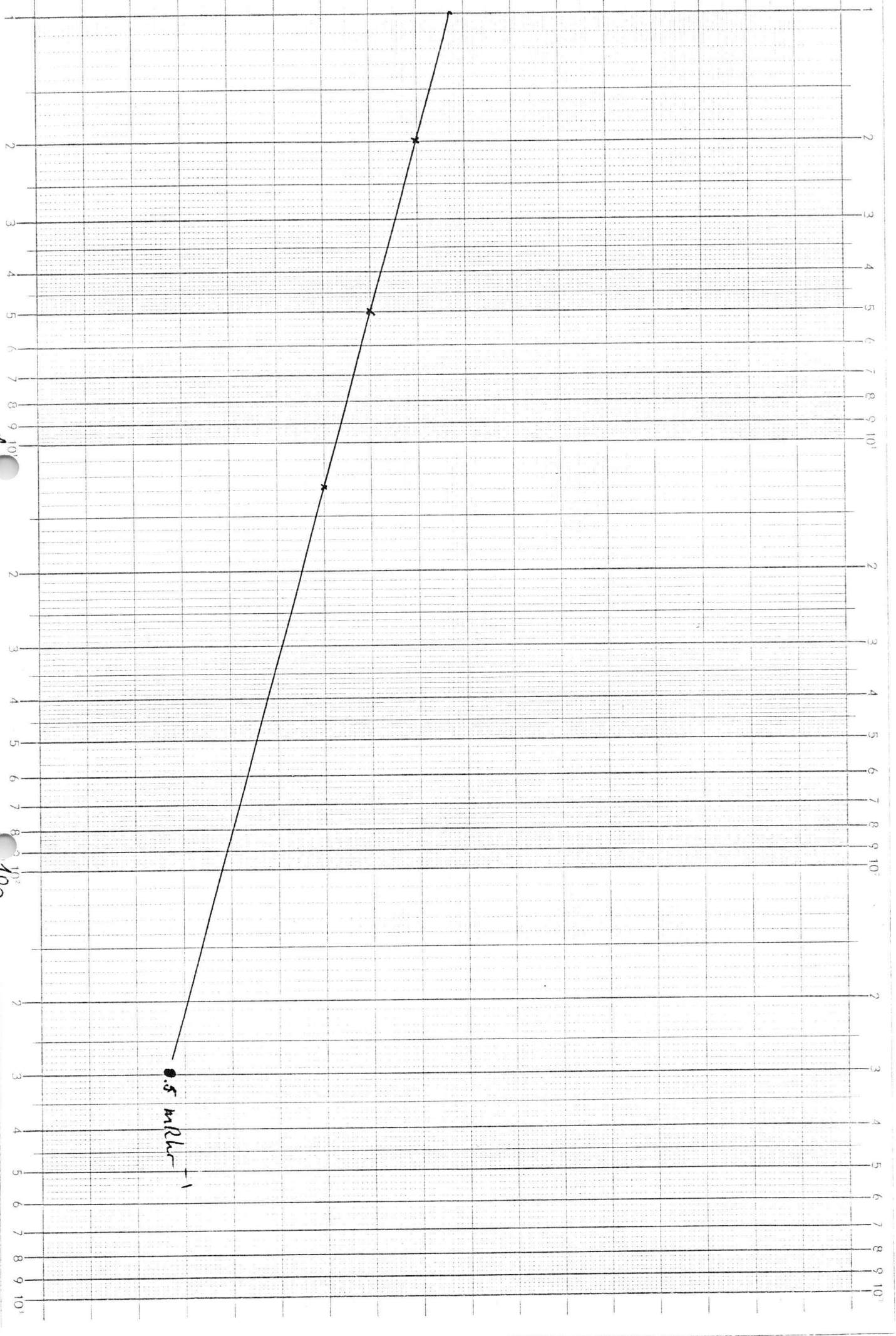
MEASUREMENTS

| VOLTAGE SCREEN - CATHODE | SCREEN | | | VOLTAGE SCREEN - CATHODE | CONE | | |
|--------------------------------|-------------------------------|--------|---------------------------|--------------------------------|-------------------------------|--------|---------------------------|
| | ϵ MR/HR - BG - MR/HR | IS(UA) | CALC. MR/HR AT IS...UA | | ϵ MR/HR - BG - MR/HR | IS(UA) | CALC. MR/HR AT IS...UA |
| 16 | 0.14-0.04 | 0.04 | 25 | | | | |
| 17 | 0.28-0.18 | 0.18 | 25 | | | | |
| 18 | 0.8-0.21 | 0.2 | 25 | | | | |
| 19 | 2.8-0.62 | 2.78 | 25 | | | | |
| 20 | 7.75-0.05 | 7.70 | 25 | | | | |
| 21 | 7.6-0.05 | 7.55 | 10 | | | | |
| 22 | 7.8-0.05 | 7.75 | 5 | | | | |
| 23 | 7.6-0.05 | 7.55 | 2.5 | | | | |
| | | | | | | | |
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23
22
21
20
19
18
17
16
15
14
13



10¹

10²
100

5 ml/hr

self

Glass-details: B270
 Dbase : 26D10
 Date of test : 10-05-1983

Min. Mu= 10.4 [cm⁻¹]
 Min. Thickness= 3.7 [mm]
 Exp. x = 2.76

| kV | Tubenr: | Mu [cm ⁻¹] | Thick. [mm] | Corr. VICT. | Measured [mR/h] | at i [muA] | mR/h at i=5 muA | mR/h at min.MU*T | |
|------|---------|------------------------|-------------|-------------|-----------------|---------------------------|-----------------|------------------|-------|
| 16.0 | 10 | 10.70 | 3.99 | 1.13 | .040 | 25.0 | .009 | .023 | |
| | | | | | | [At 16.0 kV and 5 muA is] | Mean= | .01 | .02 |
| | | | | | | [Xmax+3Smax=, mR/h] | Sdev= | . | . |
| 17.0 | 10 | 10.70 | 3.99 | 1.13 | .180 | 25.0 | .041 | .091 | |
| | | | | | | [At 17.0 kV and 5 muA is] | Mean= | .04 | .09 |
| | | | | | | [Xmax+3Smax=, mR/h] | Sdev= | . | . |
| 18.0 | 10 | 10.70 | 3.99 | 1.13 | .800 | 25.0 | .181 | .361 | |
| | | | | | | [At 18.0 kV and 5 muA is] | Mean= | .18 | .36 |
| | | | | | | [Xmax+3Smax=, mR/h] | Sdev= | . | . |
| 19.0 | 10 | 10.70 | 3.99 | 1.13 | 2.780 | 25.0 | .628 | 1.146 | |
| | | | | | | [At 19.0 kV and 5 muA is] | Mean= | .63 | 1.15 |
| | | | | | | [Xmax+3Smax=, mR/h] | Sdev= | . | . |
| 20.0 | 10 | 10.70 | 3.99 | 1.13 | 7.700 | 25.0 | 1.740 | 2.941 | |
| | | | | | | [At 20.0 kV and 5 muA is] | Mean= | 1.74 | 2.94 |
| | | | | | | [Xmax+3Smax=, mR/h] | Sdev= | . | . |
| 21.0 | 10 | 10.70 | 3.99 | 1.13 | 7.550 | 10.0 | 4.266 | 6.767 | |
| | | | | | | [At 21.0 kV and 5 muA is] | Mean= | 4.27 | 6.77 |
| | | | | | | [Xmax+3Smax=, mR/h] | Sdev= | . | . |
| 22.0 | 10 | 10.70 | 3.99 | 1.13 | 7.750 | 5.0 | 8.758 | 13.176 | |
| | | | | | | [At 22.0 kV and 5 muA is] | Mean= | 8.76 | 13.18 |
| | | | | | | [Xmax+3Smax=, mR/h] | Sdev= | . | . |
| 23.0 | 10 | 10.70 | 3.99 | 1.13 | 7.550 | 2.5 | 17.063 | 24.545 | |
| | | | | | | [At 23.0 kV and 5 muA is] | Mean= | 17.06 | 24.55 |
| | | | | | | [Xmax+3Smax=, mR/h] | Sdev= | . | . |

