

**Channel-Messung**

**Aufbau:**

|                     |   |         |                       |
|---------------------|---|---------|-----------------------|
| Patch-Kabel A-Ende: | <b>5 m UC600 SS27 4P (Steward High-Speed-Stecker)</b> | Datum:  | <b>36248</b>          |
| Komponente A-Ende:  | <b>Pouyet Cat.6 modular (P28203AA)</b>                | Prüfer: | <b>Dr. C. Pfeiler</b> |
| Tertiärkabel:       | <b>90 m UC400 SS23 4P</b>                             | Datei:  | <b>423pouste.xls</b>  |
| Komponente E-Ende:  | <b>Pouyet Cat.6 modular (P28203AA)</b>                |         |                       |
| Patch-Kabel E-Ende: | <b>5 m UC600 SS27 4P (Steward High-Speed-Stecker)</b> |         |                       |

Frequenz: 1-600 MHz (401 Meßpunkte)  
 Meßgeräte: HP8753, KRMZ 1200  
 Bewertung gegen Class: **E**  
 Paare 12/78 gegen Class: **F** (Für Zweipaarbetrieb entfallen PowerSum-Betrachtungen!)

**Resultat:** Der Channel entspricht Class E nach E-ISO 11801.  
 Auf den Paaren 12 und 78 ist Betrieb bis 600 MHz möglich. gepr.  
 Das ACR wird negativ bei 278 MHz.

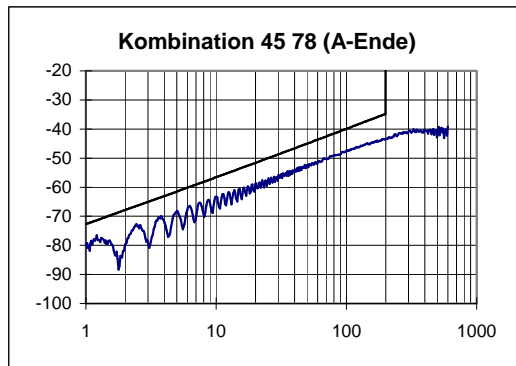
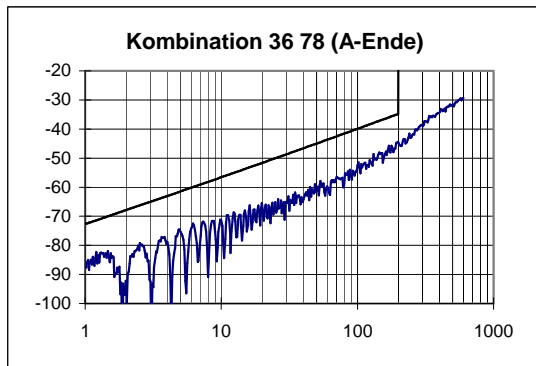
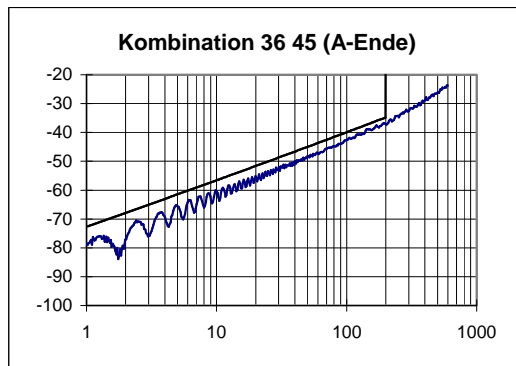
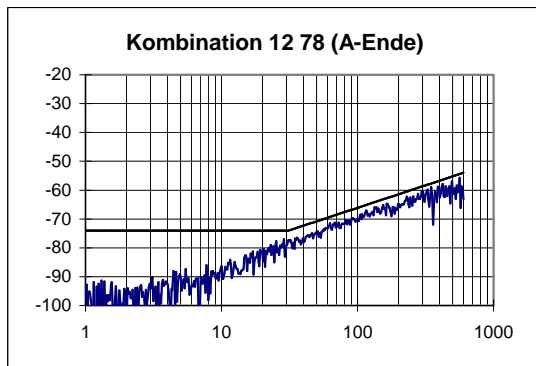
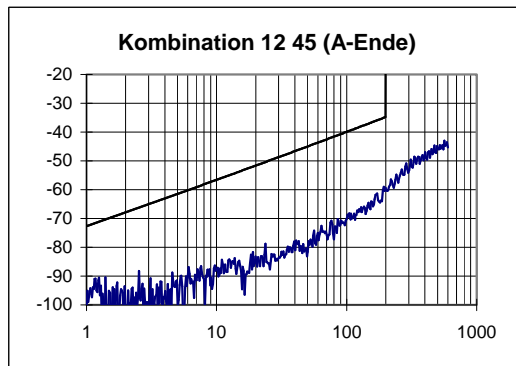
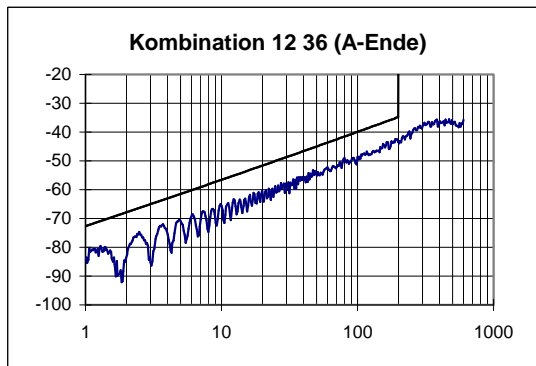


**Übersicht Ergebnis:**

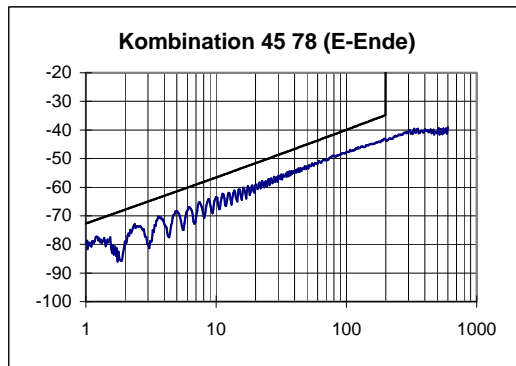
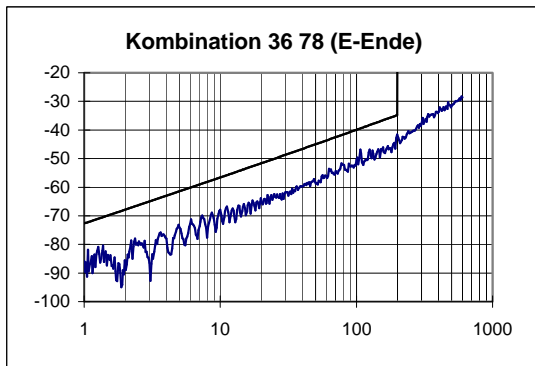
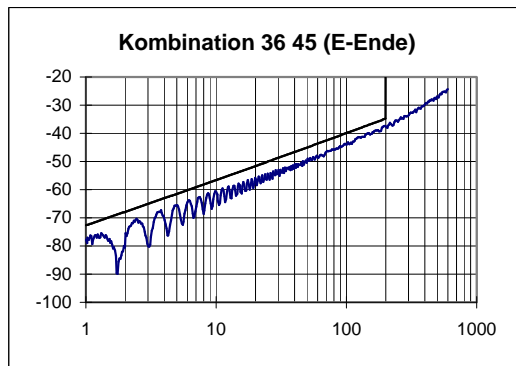
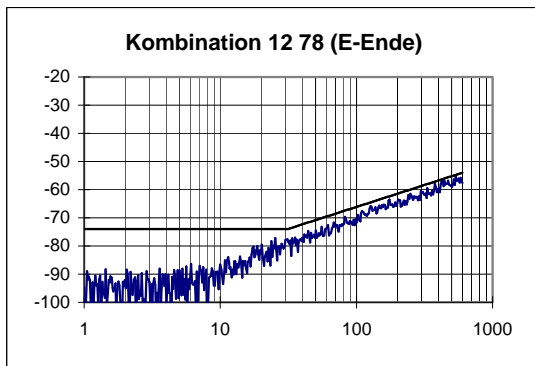
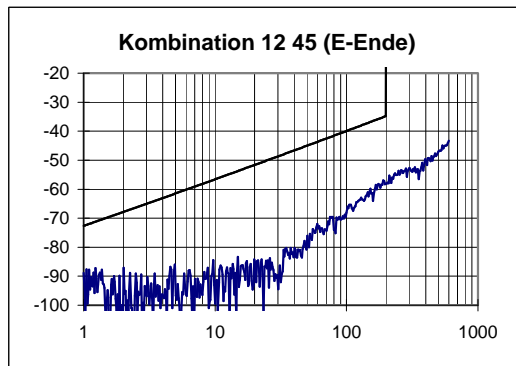
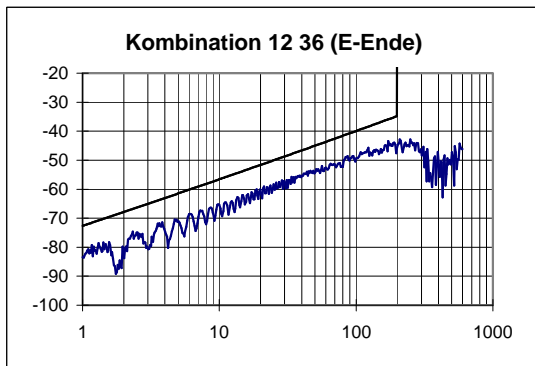
| Paar                          | 12    | 36     | 45     | 78     | Grenzwert | max. skew/ns | Grenzw. |
|-------------------------------|-------|--------|--------|--------|-----------|--------------|---------|
| <b>max. Laufzeit / ns</b>     | 448,0 | 457,0  | 443,0  | 448,0  | 544 500   | 16,0         | 50 20   |
| <b>Dämpfung @ 100MHz/dB</b>   | 19,50 | 19,20  | 19,20  | 18,70  | 21,7      |              |         |
| Dämpfung @ 200MHz/dB          | 28,40 | 28,40  | 28,00  | 27,10  | 31,7      |              |         |
| <b>min PSNEXT-Res. / dB</b>   | 9,60  | 3,08   | 3,52   | 6,54   |           |              |         |
| @ f / MHz                     | 1,31  | 193,00 | 142,00 | 1,21   |           |              |         |
| PSNEXT Gr. / dB               | 68,40 | 32,12  | 34,44  | 68,96  |           |              |         |
| PSNEXT @ 100 MHz              | 48,6  | 41,3   | 41,4   | 45,8   | 37,1      |              |         |
| PSNEXT @ 200 MHz              | 43,3  | 35,6   | 36,2   | 39,3   | 31,9      |              |         |
| <b>min PSELFEXT-Res. / dB</b> | 15,62 | 12,73  | 13,52  | 18,51  |           |              |         |
| @ f / MHz                     | 1,07  | 1,08   | 1,14   | 131,00 |           |              |         |
| PSELFEXT Gr. / dB             | 59,63 | 59,55  | 59,08  | 17,88  |           |              |         |
| PSELFEXT @ 100 MHz            | 39,0  | 36,1   | 39,4   | 45,8   | 20,2      |              |         |
| PSELFEXT @ 200 MHz            | 41,8  | 36,6   | 36,5   | 39,3   | 14,2      |              |         |
| <b>min PSACR-Reserve / dB</b> | 9,8   | 4,9    | 4,5    | 6,7    |           |              |         |
| @ f / MHz                     | 1,3   | 6,1    | 1,2    | 1,2    |           |              |         |
| PSACR Grenz. / dB             | 65,9  | 52,4   | 66,6   | 66,6   |           |              |         |
| PSACR @ 100 MHz               | 30,1  | 23,1   | 23,5   | 27,5   | 15,4      |              |         |
| PSACR @ 200 MHz               | 17,2  | 7,7    | 8,5    | 13,9   | 0,1       |              |         |
| <b>min RL-Reserve / dB</b>    | 5,5   | 4,7    | 4,7    | 3,5    |           |              |         |
| @ f / MHz                     | 4,0   | 10,0   | 4,0    | 4,0    |           |              |         |
| RL Grenzwert / dB             | 19,0  | 19,0   | 19,0   | 19,0   |           |              |         |

| Kombination                  | 12 36  | 12 45 | 12 78  | 36 45  | 36 78  | 45 78 | Grenzwert |
|------------------------------|--------|-------|--------|--------|--------|-------|-----------|
| <b>min NEXT-Reserve / dB</b> | 7,23   | 15,27 | 0,44   | 1,51   | 6,78   | 5,25  |           |
| @ f / MHz                    | 190,00 | 1,05  | 536,00 | 170,00 | 199,00 | 1,21  |           |
| NEXT @ 100 MHz               | 48,7   | 68,1  | 70,7   | 42,6   | 50,4   | 47,4  | 39,9 66,1 |
| NEXT @ 200 MHz               | 43,4   | 58,1  | 64,8   | 37,1   | 41,6   | 43,3  | 34,8 61,4 |
| <b>min ELFEXT-Reserve/dB</b> | 13,5   | 20,3  | 21,7   | 10,6   | 15,6   | 20,3  |           |
| @ f / MHz                    | 1,1    | 1,4   | 1,0    | 157,0  | 131,0  | 1,1   |           |
| ELFEXT @ 100 MHz             | 39,2   | 55,1  | 57,1   | 39,4   | 46,2   | 60,2  | 23,2 33,0 |
| ELFEXT @ 200 MHz             | 42,1   | 56,5  | 52,4   | 38,3   | 44,5   | 41,2  | 17,2 27,0 |
| <b>min ACR-Reserve / dB</b>  | 7,8    | 15,4  | 2,7    | 3,8    | 9,9    | 5,5   |           |
| @ f / MHz                    | 1,2    | 1,1   | 175,0  | 6,1    | 75,6   | 1,2   |           |
| ACR @ 100 MHz                | 29,5   | 48,9  | 52,0   | 23,4   | 31,7   | 28,7  | 18,2 45,7 |
| ACR @ 200 MHz                | 15,0   | 30,1  | 37,7   | 9,1    | 14,5   | 16,2  | 3,0 32,5  |

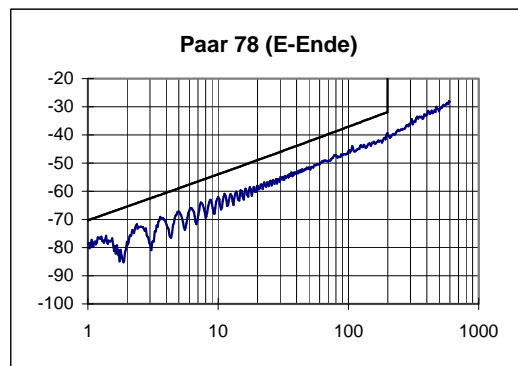
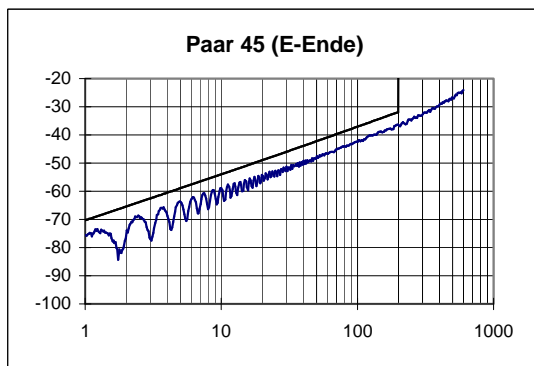
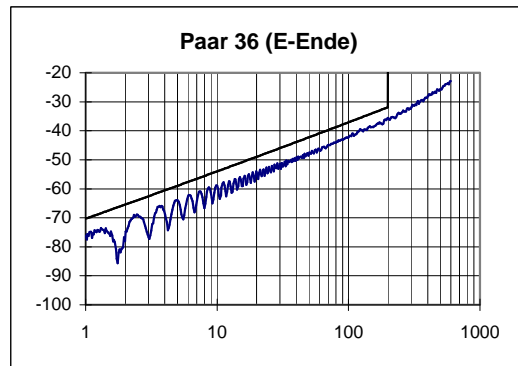
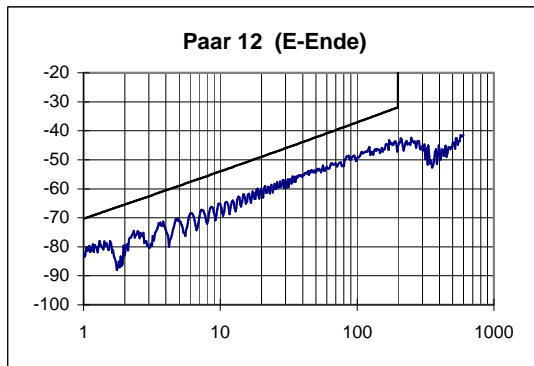
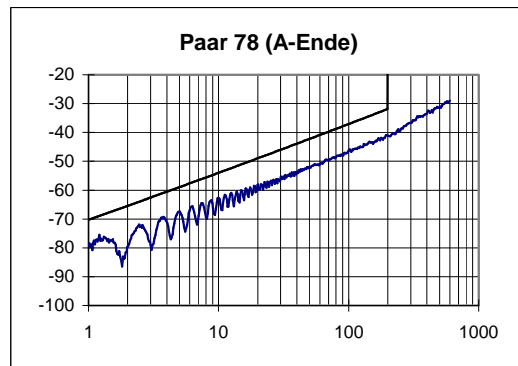
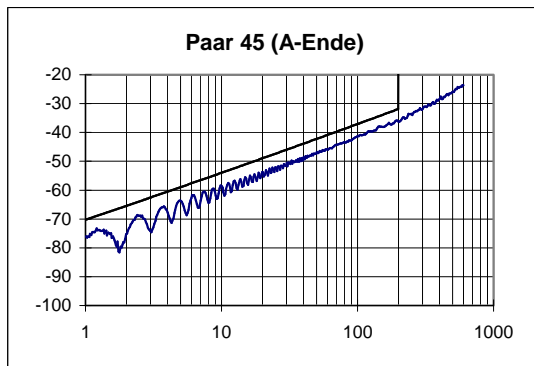
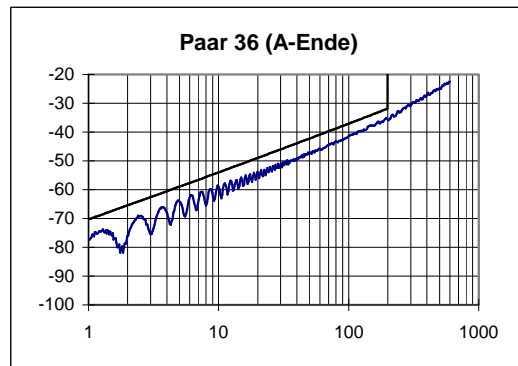
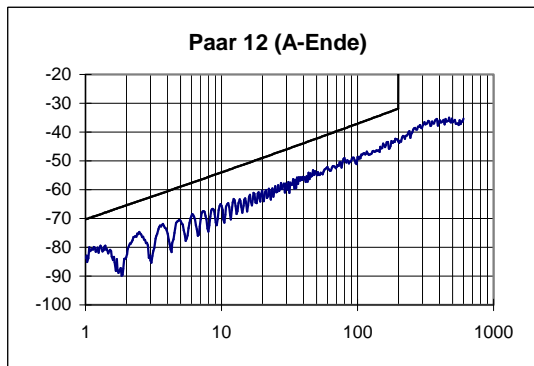
# NEXT / dB



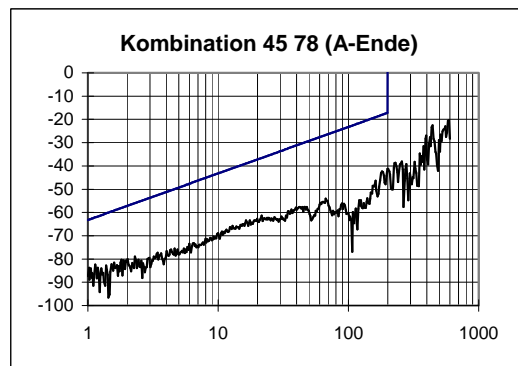
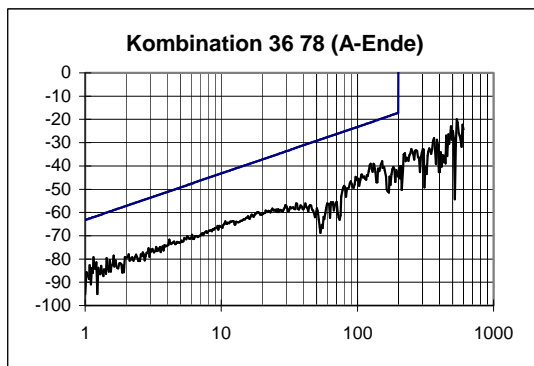
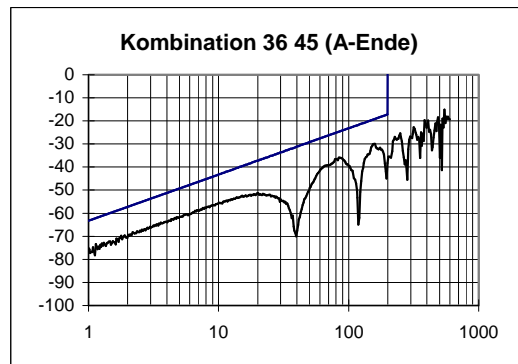
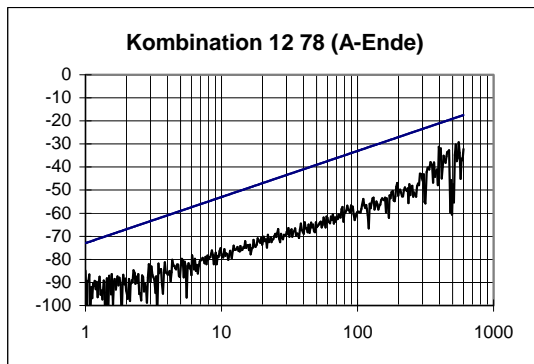
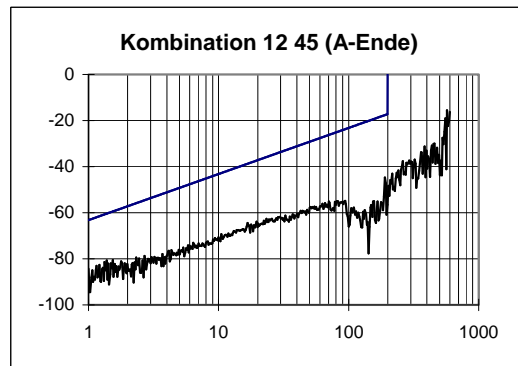
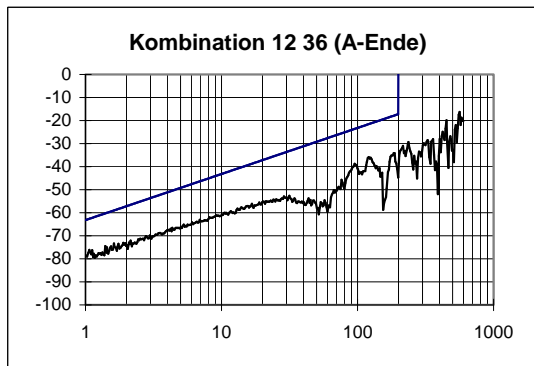
# NEXT / dB



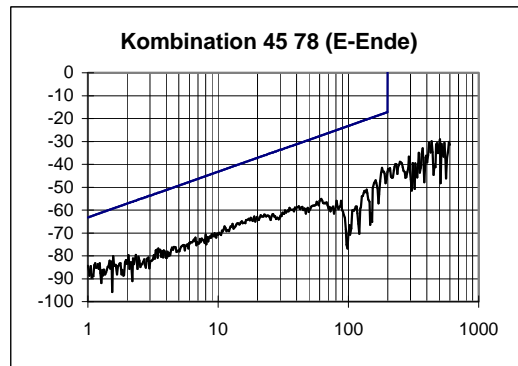
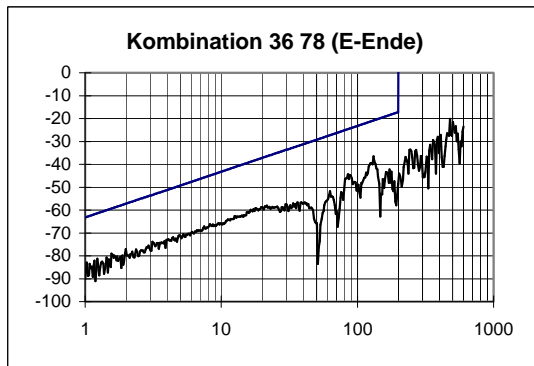
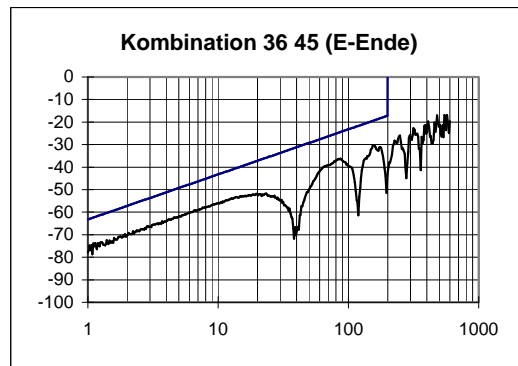
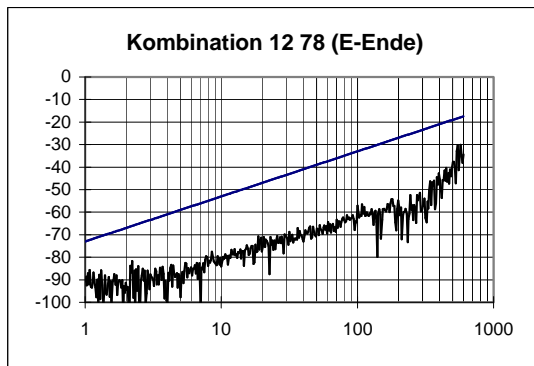
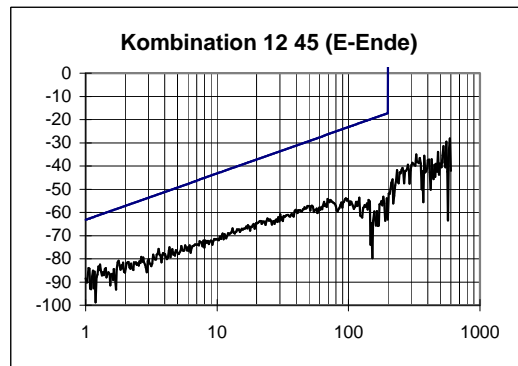
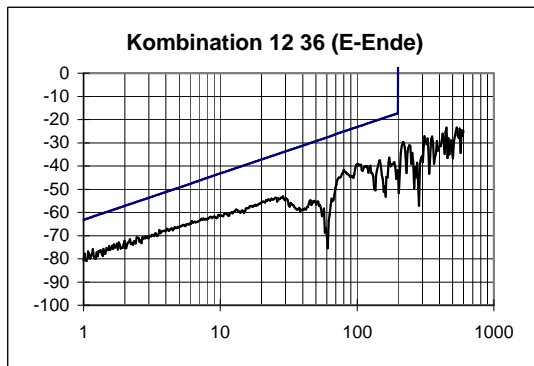
PSNEXT / dB



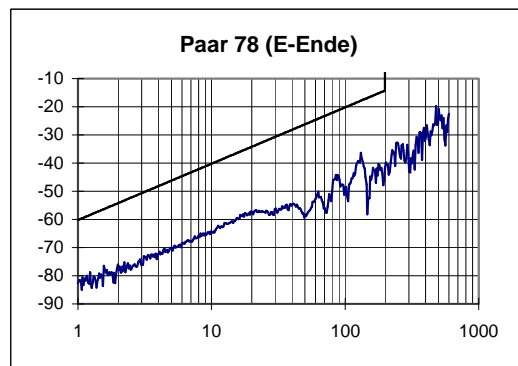
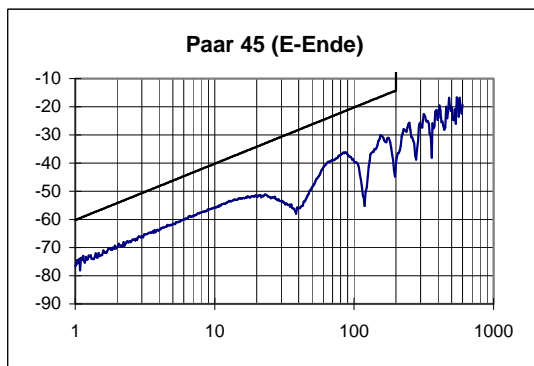
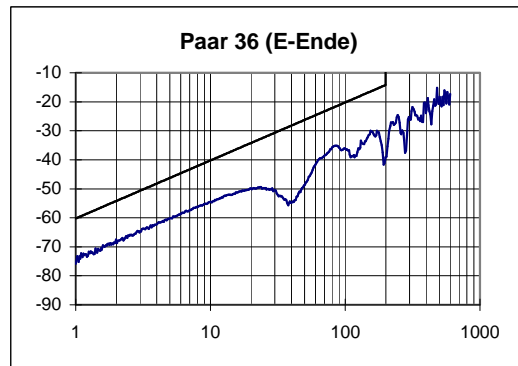
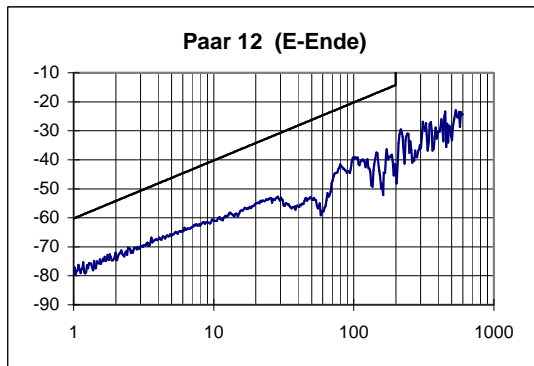
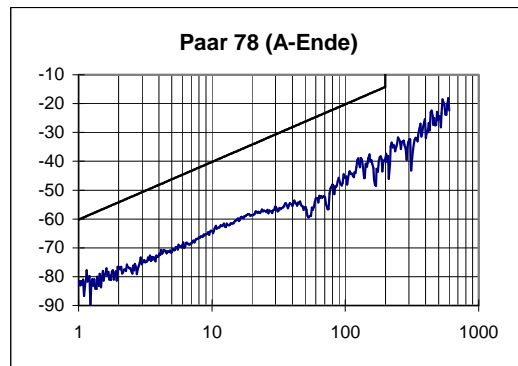
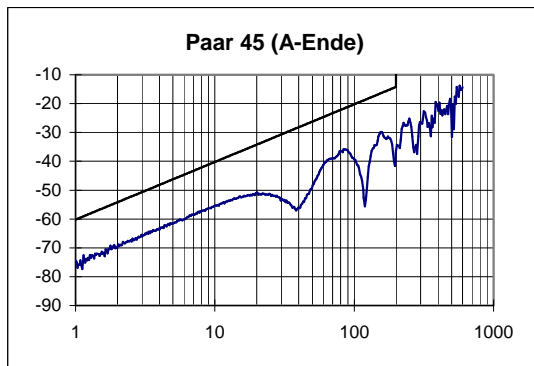
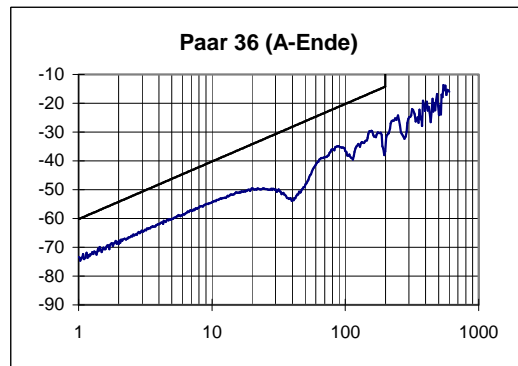
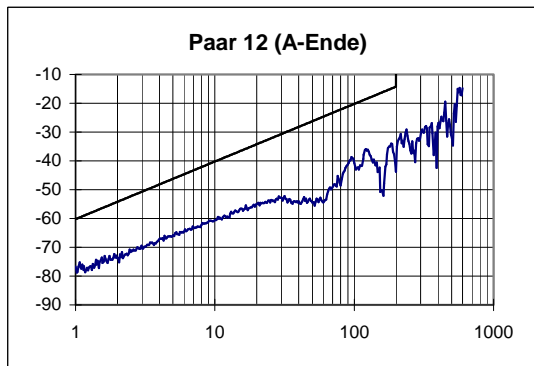
# ELFEXT / dB

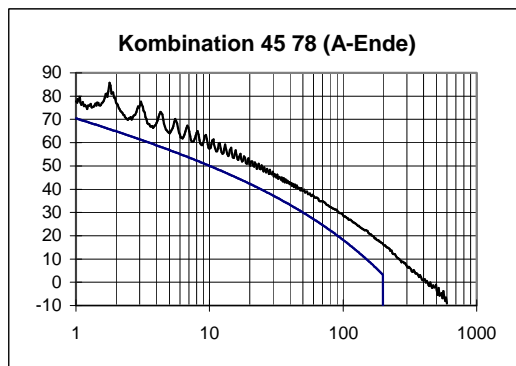
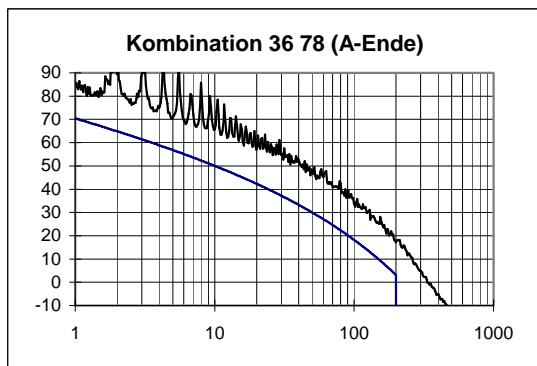
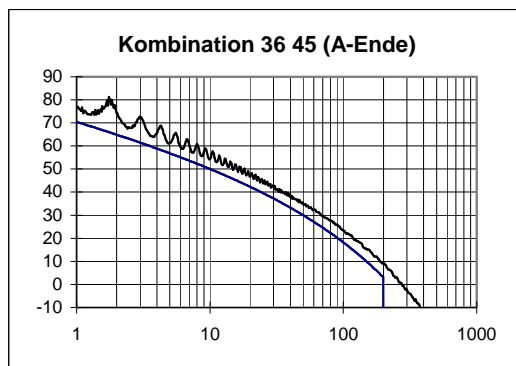
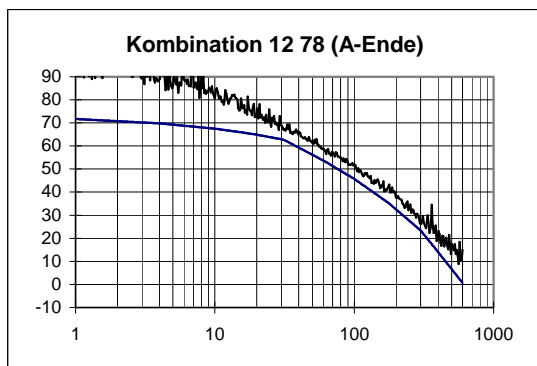
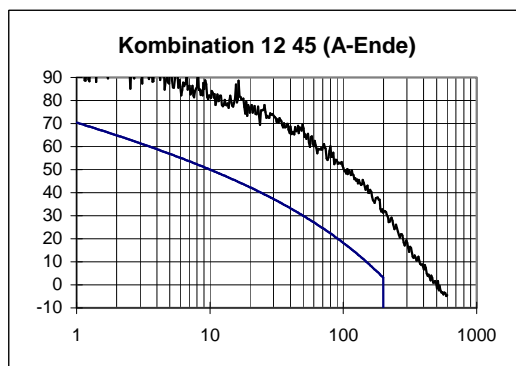
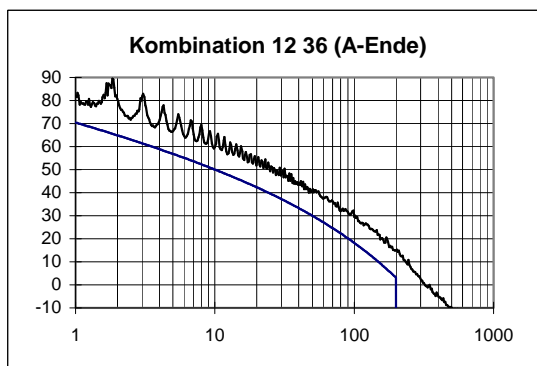


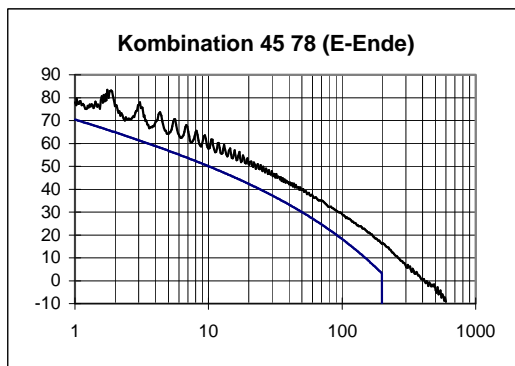
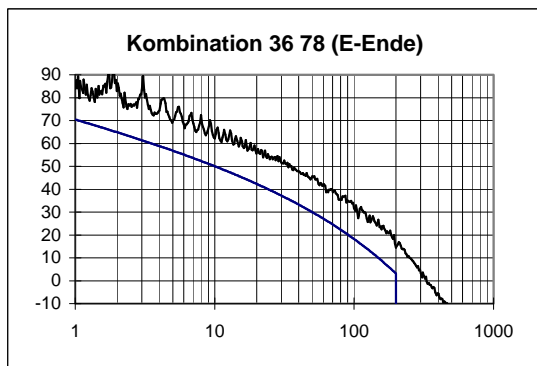
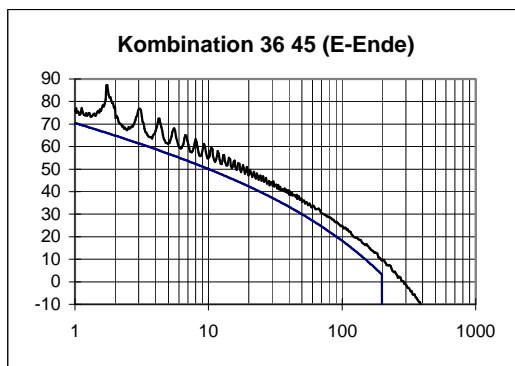
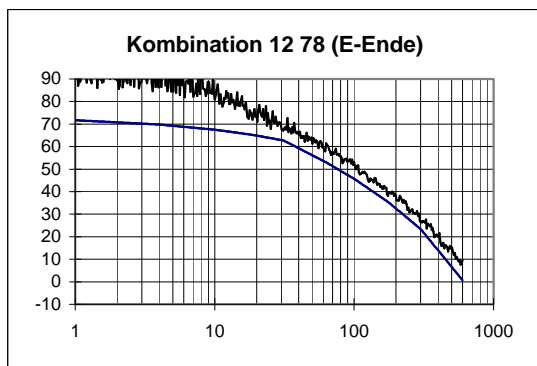
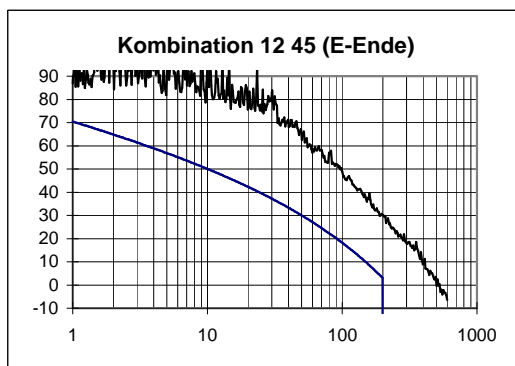
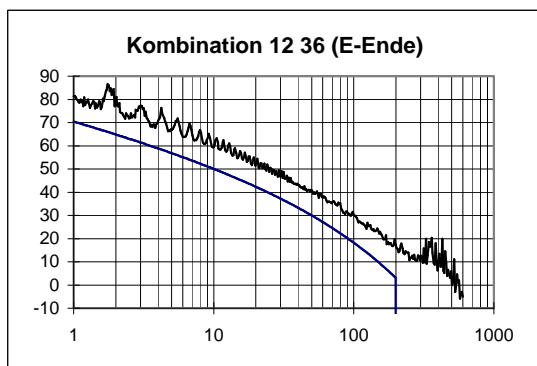
# ELFEXT / dB



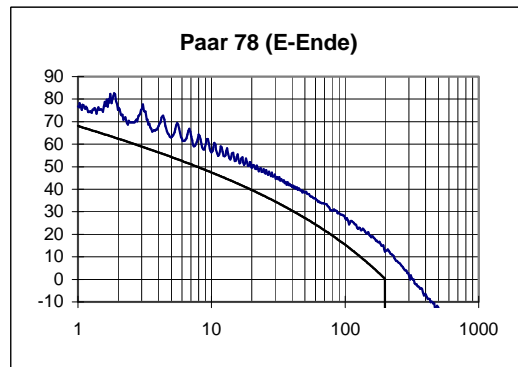
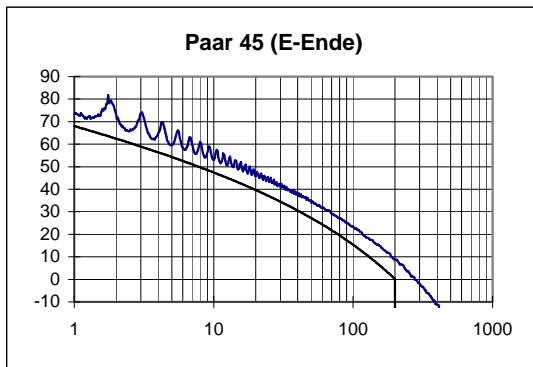
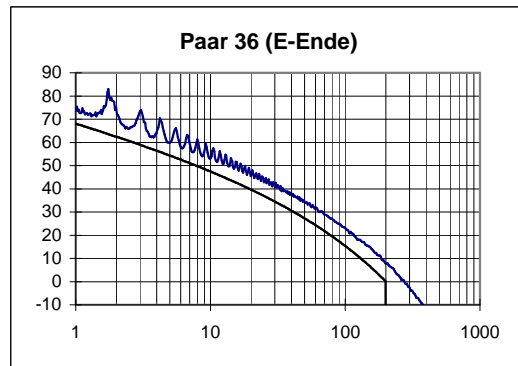
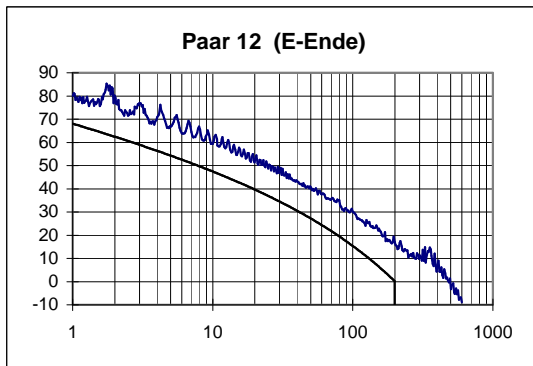
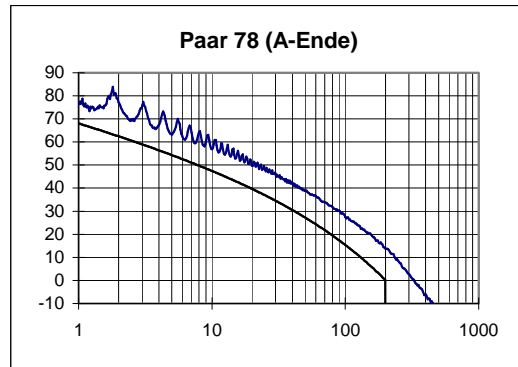
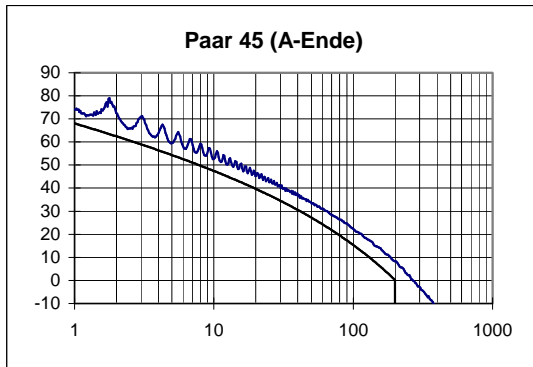
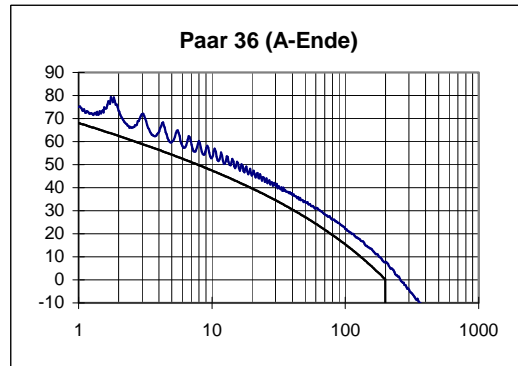
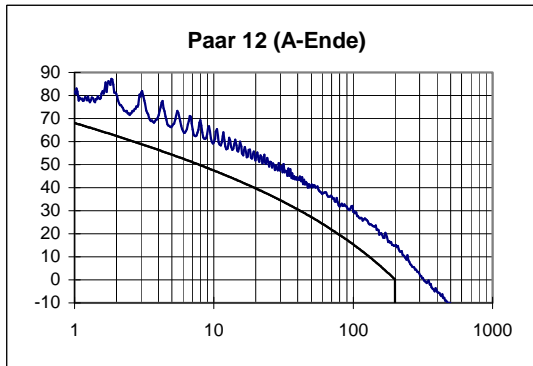
# PSELFEXT / dB



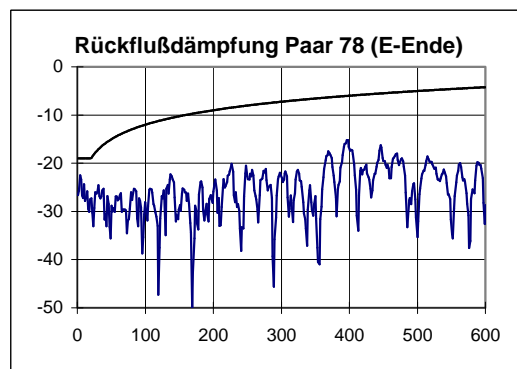
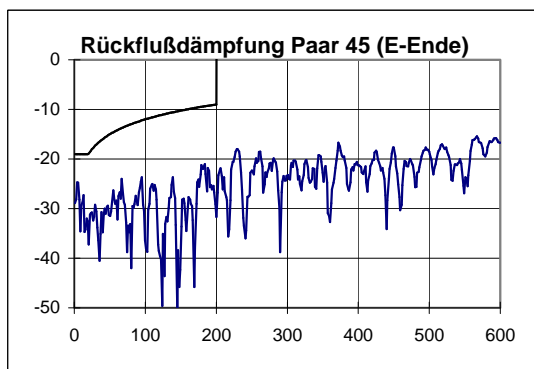
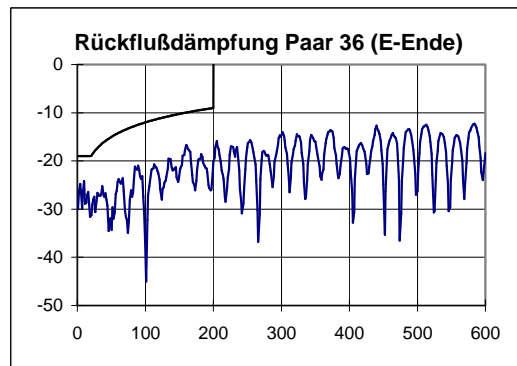
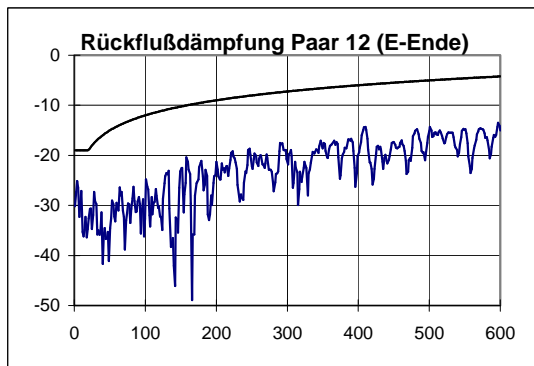
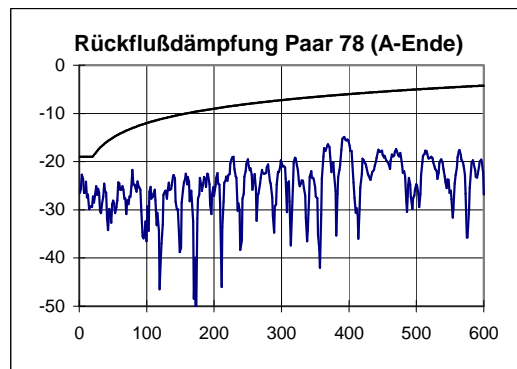
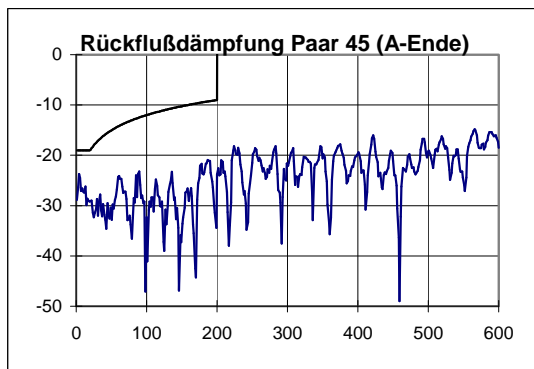
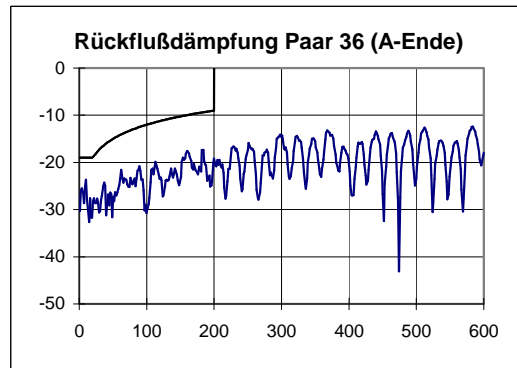
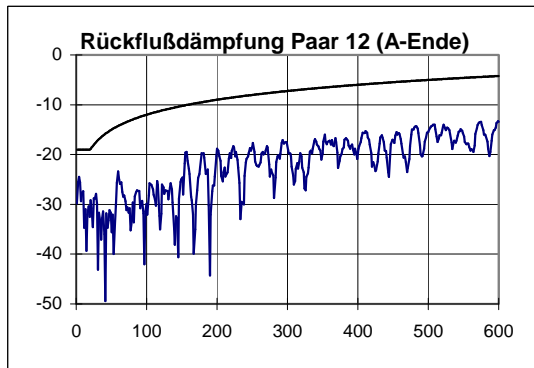




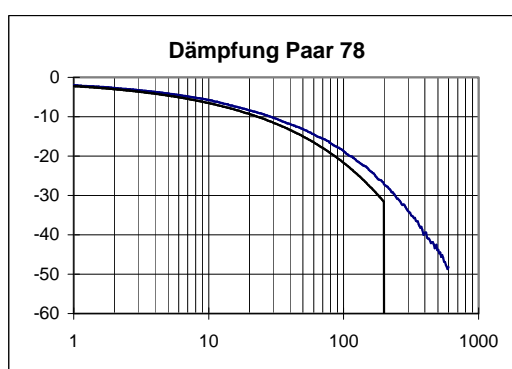
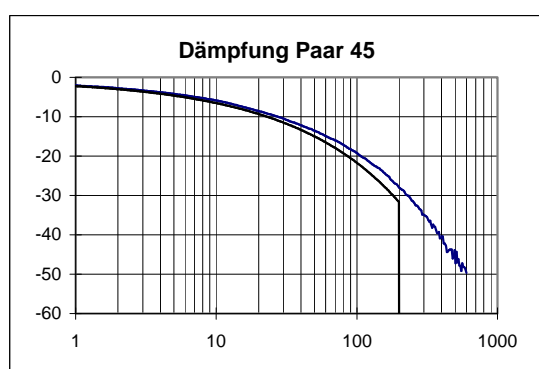
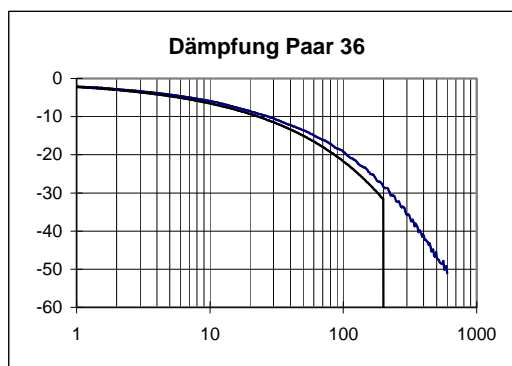
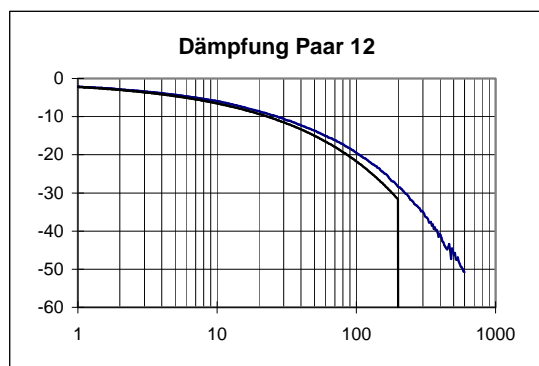
PSACR / dB



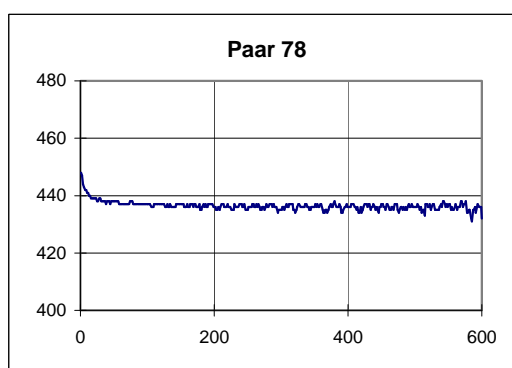
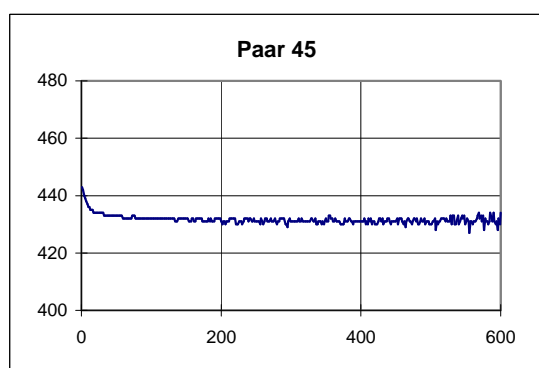
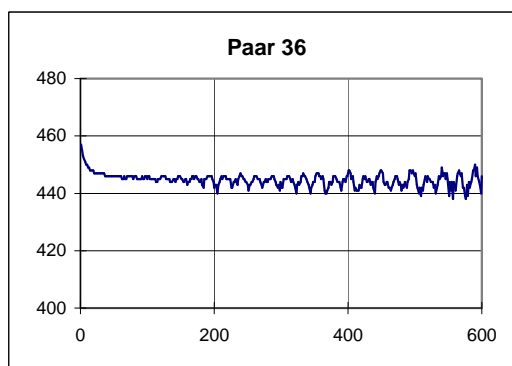
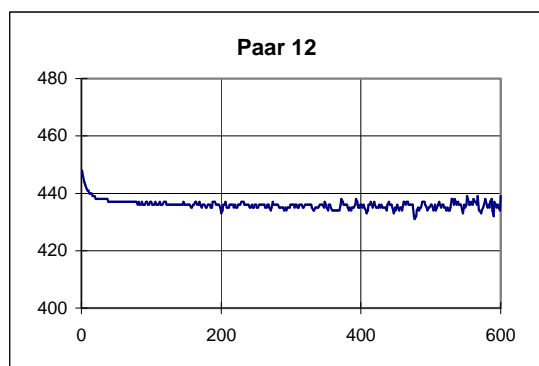
# Return Loss / dB



## Dämpfung / dB



## Laufzeit / ns



Messung aus Gruppengeschwindigkeit mit 801 Meßpunkten und Smooth mit 0.2% Span direkt im Analysator.  
 Nachträgliche Punktereduzierung auf 401.  
 423pouste.xls