

## Test Report No. EWA20026-39

### Transmission Performance Testing:

according to ISO/IEC JTC 1/SC 25 N 739 IT (2001-10-10)  
Channel Class E

### The Equipment Under Test (EUT)

Part 1:	Modular Patch Panel MPP /MPD Cat. 6
Part 2:	Outlet AMJ45 8/8 Cat. 6 / Class E
Part 3:	L00003A0049 (2x) TG Measuring Cable Cat. 6 - 5m (2x)
Part 4:	M06015A0079 (2x) Microtest Omniscanner 2 Channel Adapter Cat. 6
Installation Cable:	Silverline Premium S-STP 4x2/0,55 LSOH Cat. 7

### Result:

The EUT has been verified as being compliant with the transmission specifications according to the standard ISO/IEC JTC 1/SC 25 N 739 IT (2001).

The minimum NEXT reserve of the Channel Class E is:  
@100 MHz = -9,7 dB and @ 250 MHz = -7,4 dB.

### Test location:

Telegärtner Karl Gärtner GmbH  
Lerchenstrasse 35  
7144 Steinenbronn / Germany  
Telefon: +49 7157 / 125 - 118 Fax: +49 7157 / 125 - 120  
e-mail: frank.albert@telegaertner.com

### Tested by:



Frank Albert

Steinenbronn, August 06, 2002

**Products:**

Electrically compatible with the following part numbers:

Modular Patch Panel MPP / MPD Cat. 6:

- J02023F0019 Mod. Patch Panel Cat. 6 MPP24-HS screened, RAL 7035
- J02023B0019 Mod. Patch Panel Cat. 6 MPP24-HS screened, RAL 7035
- J02023C0019 Mod. Patch Panel Cat. 6 MPP24-HS screened, RAL 7035
- J02023D0019 Mod. Patch Panel Cat. 6 MPP24-HS screened, RAL 7035
- J02023E0019 Mod. Patch Panel Cat. 6 MPP24-HS screened, RAL 7035
- J02023H0019 Mod. Patch Panel Cat. 6 MPP24-HS screened, RAL 7035
- J02022F0024 Mod. Patch Panel Cat. 6 MPP16-HS screened, RAL 7035
- J02022B0024 Mod. Patch Panel Cat. 6 MPP16-HS screened, RAL 7035
- J02022D0024 Mod. Patch Panel Cat. 6 MPP16-HS screened, RAL 7035
- J02022A0038 10" Mod. Patch Panel Cat. 6 MPP12-HS screened, RAL 7035
- J02022A0028 Distributor Cat. 6 MPD12-HS screened
- J02021A0019 Distributor Cat. 6 MPD12-HS 3HU/ 10PU screened
- J02021A0015 Distributor Cat. 6 Typ II MPD6-HS screened
- J02021A0017 Distributor Cat. 6 Typ II MPD6-HS screened
- J02021A0024 Distributor Cat. 6 MPD6-HS 3HU/8PU screened without front panel

Outlet AMJ45 8/8 Cat. 6 / Class E

- J00020A0393 Outlet AMJ45 8/8 UP/50 EK screenend, Cat. 6 / Class E alpine white
- J00020A0394 Outlet AMJ45 8/8 UP/50 EK screenend, Cat. 6 / Class E pearl white RAL 1013
- J00020A0395 Outlet AMJ45 8/8 UP/50 EK screenend, Cat. 6 / Class E without cover plate
- J00020H0393 Outlet AMJ45 8/8 UP/50 EK screenend, Cat. 6 / Class E alpine white
- J00020H0394 Outlet AMJ45 8/8 UP/50 EK screenend, Cat. 6 / Class E pearl white RAL 1013
- J00020A0392 Outlet AMJ45 8/8 UP/50 EK screenend, Cat. 6 / Class E without cover plate

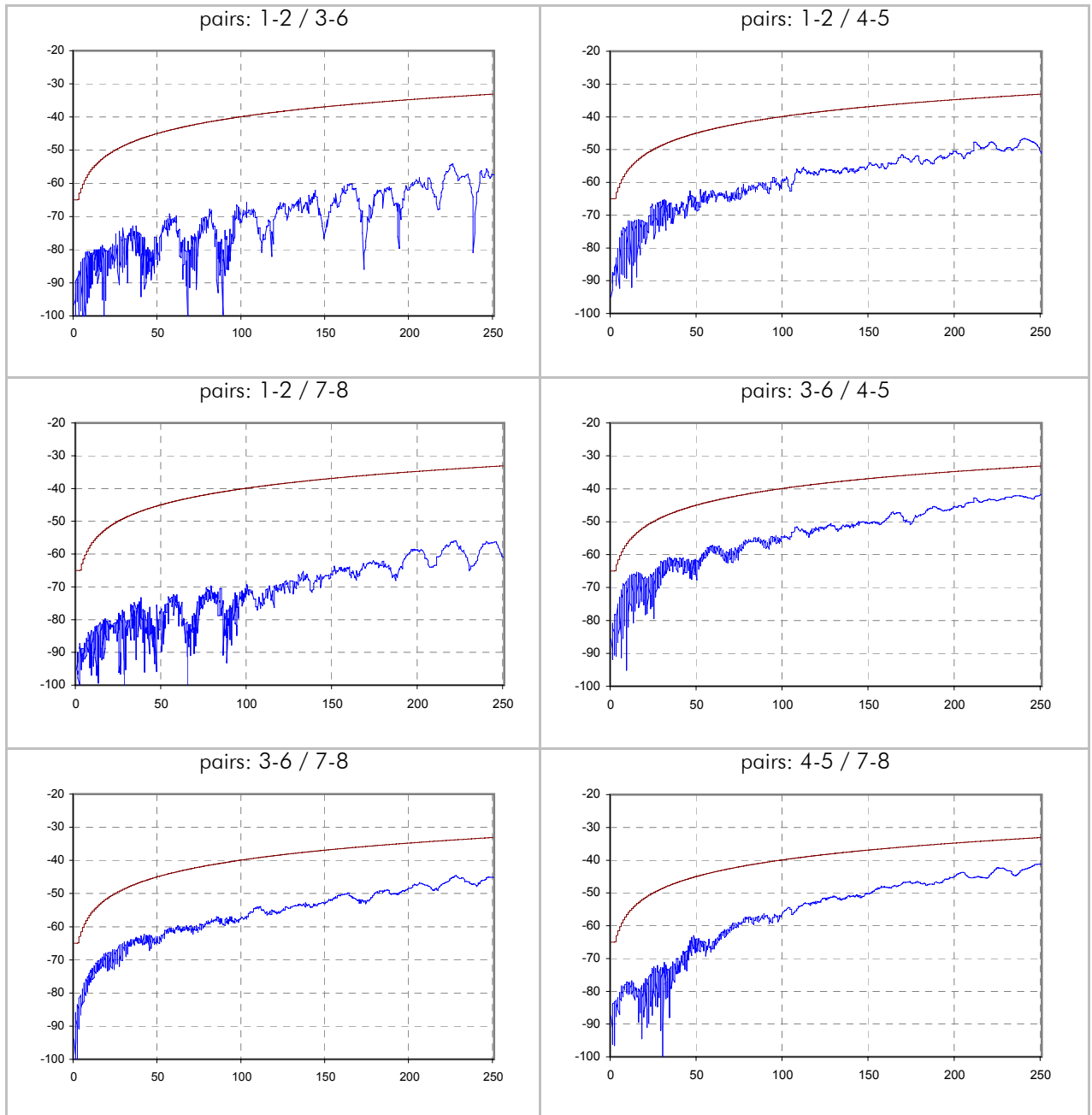
## Test Results

pairs	1-2	3-6	4-5	7-8	limit	skew / ns	limit
max Propagation delay / ns	451,0	465,0	456,0	462,0	546,3	14,0	50,0
Attenuation @ 100 MHz / dB	-19,6	-19,8	-19,6	-19,6	-21,7		
Attenuation @ 250 MHz / dB	-31,5	-32,1	-32,2	-32,4	-21,7		
min PSNEXT margin / dB	13,7	5,3	7,8	7,7			
@ f / MHZ	238,0	237,1	37,2	233,5			
PSNEXT limit / dB	-30,5	-30,6	-44,4	-30,7			
PSNEXT @ 100 MHz	-54,2	-48,2	-48,0	-51,0	-37,1		
PSNEXT @ 250 MHz	-47,2	-38,1	-38,3	-39,7	-30,2		
min PSELFEXT margin / dB	14,2	7,6	7,0	12,9			
@ f / MHZ	26,6	1,0	1,0	1,2			
PSELFEXT limit / dB	-31,8	-60,6	-60,6	-58,8			
PSELFEXT @ 100 MHz	-35,6	-30,6	-29,8	-43,8	-20,3		
PSELFEXT @ 250 MHz	-35,6	-22,0	-22,8	-26,4	-12,3		
min PSACR margin / dB	17,7	8,7	8,6	11,4			
@ f / MHZ	7,7	237,1	26,3	233,5			
PSACR limit / dB	50,1	-4,3	36,3	-3,9			
PSACR @ 100 MHz	39,5	32,9	32,2	34,6	15,4		
PSACR @ 250 MHz	17,6	8,1	9,7	7,4	-5,7		
min Return Loss margin / dB	3,9	4,3	3,7	4,3			
@ f / MHZ	2,5	2,3	2,3	2,3			
Return Loss limit / dB	-19,0	-19,0	-19,0	-19,0			

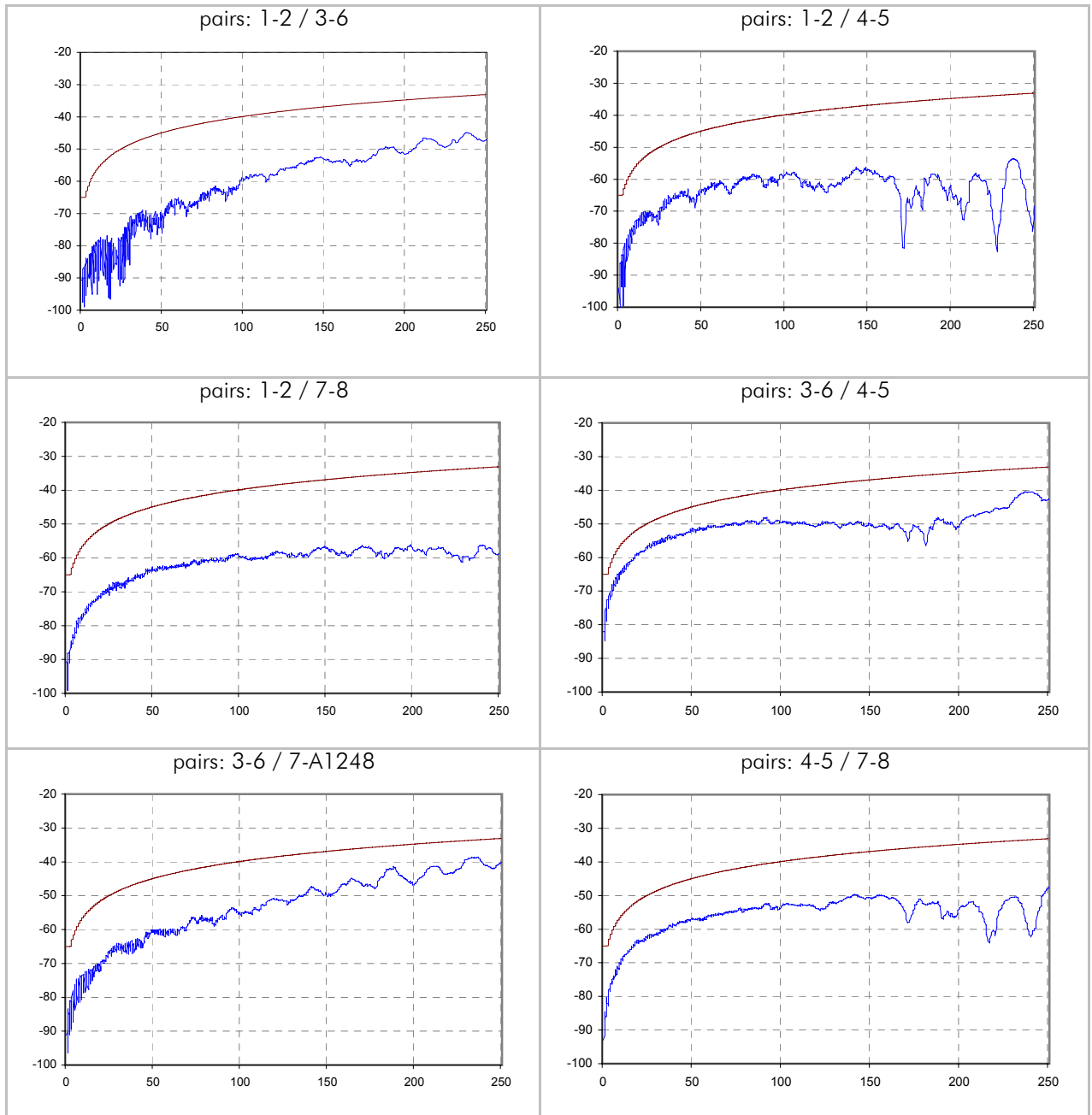
pairs	1-2 / 3-6	1-2 / 4-5	1-2 / 7-8	3-6 / 4-5	3-6 / 7-8	4-5 / 7-8	limit
min NEXT margin / dB	11,4	13,2	17,7	6,2	5,0	8,1	
@ f / MHZ	238,0	240,7	46,8	37,2	233,5	249,2	
Next limit / dB	-33,5	-33,4	-45,5	-47,2	-33,6	-33,1	
NEXT @ 100 MHz	-58,9	-59,1	-58,8	-49,6	-55,5	-54,1	-39,9
NEXT @ 250 MHz	-47,4	-50,1	-59,1	-42,0	-40,5	-41,2	-33,1
min ACR margin / dB	14,9	15,8	18,7	6,9	8,4	11,6	
@ f / MHZ	238,9	6,8	25,5	28,6	233,5	249,7	
ACR limit / dB	-1,6	53,9	39,3	37,8	-1,0	-2,8	
ACR @ 100 MHz	39,0	39,5	39,1	29,7	35,6	34,5	18,2
ACR @ 250 MHz	15,3	17,9	26,7	9,8	8,2	8,8	-2,8

pairs	3-6 / 1-2	4-5 / 1-2	7-8 / 1-2	4-5 / 3-6	7-8 / 3-6	7-8 / 4-5	limit
	1-2 / 3-6	1-2 / 4-5	1-2 / 7-8	3-6 / 4-5	3-6 / 7-8	4-5 / 7-8	
min ELFEXT margin / dB	18,8	11,2	25,0	5,3	11,6	10,8	
@ f / MHZ	1,0	31,1	250,1	1,0	247,9	179,5	
ELFEXT limit / dB	-63,6	-33,4	-15,3	-63,6	-15,4	-18,2	
min ELFEXT margin / dB	18,9	11,2	24,2	5,2	12,3	10,9	
@ f / MHZ	1,0	31,1	250,1	1,0	249,7	180,9	
ELFEXT limit / dB	-63,6	-33,4	-15,3	-63,6	-15,3	-18,1	
ELFEXT @ 100 MHz	-47,2	-35,9	-56,5	-30,8	-44,5	-52,3	-23,3
ELFEXT @ 250 MHz	-38,6	-39,8	-41,3	-23,3	-27,8	-33,2	-15,3
ELFEXT @ 100 MHz	-46,9	-35,9	-56,6	-31,0	-44,7	-52,4	-23,3
ELFEXT @ 250 MHz	-38,1	-39,2	-40,5	-23,3	-27,6	-33,0	-15,3

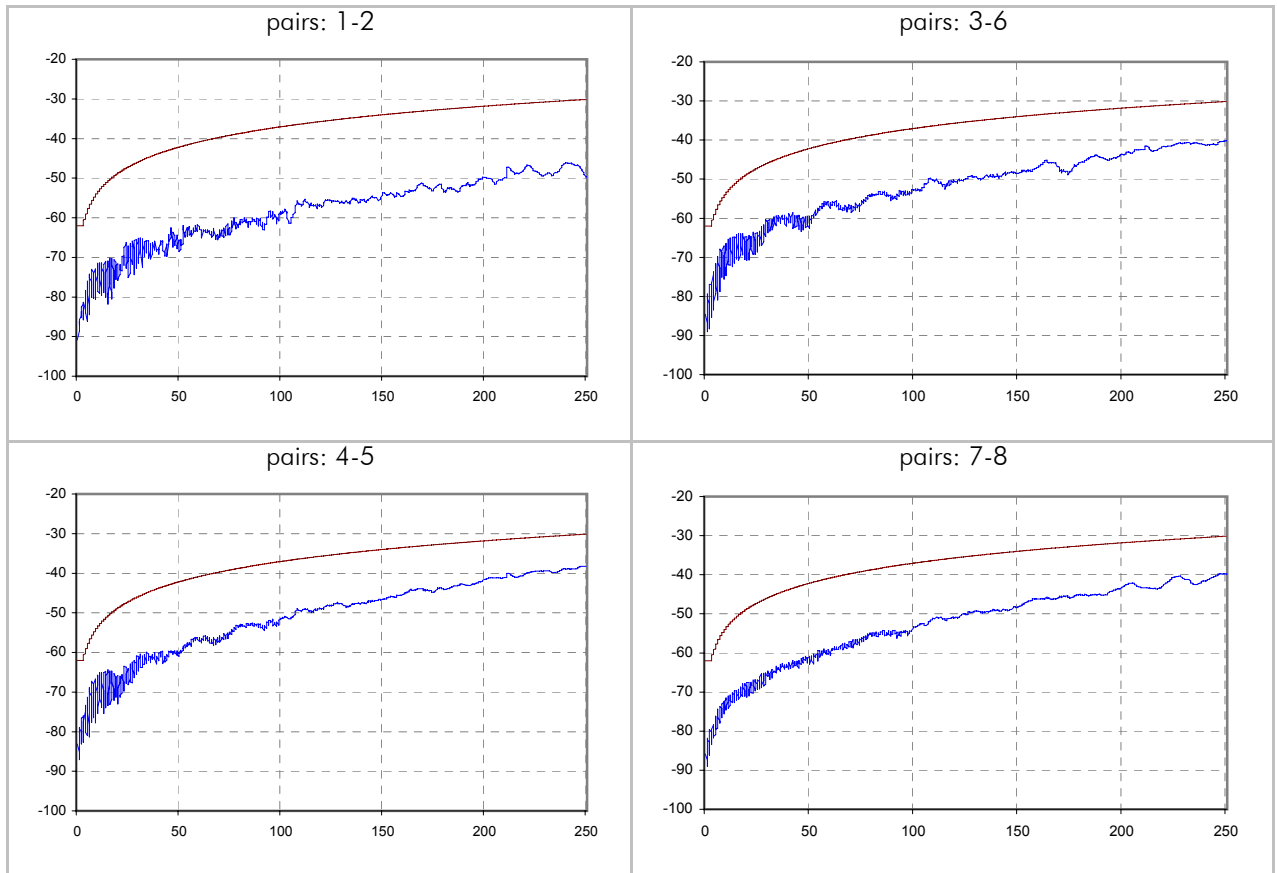
NEXT / dB (scanner side - type 1 side)



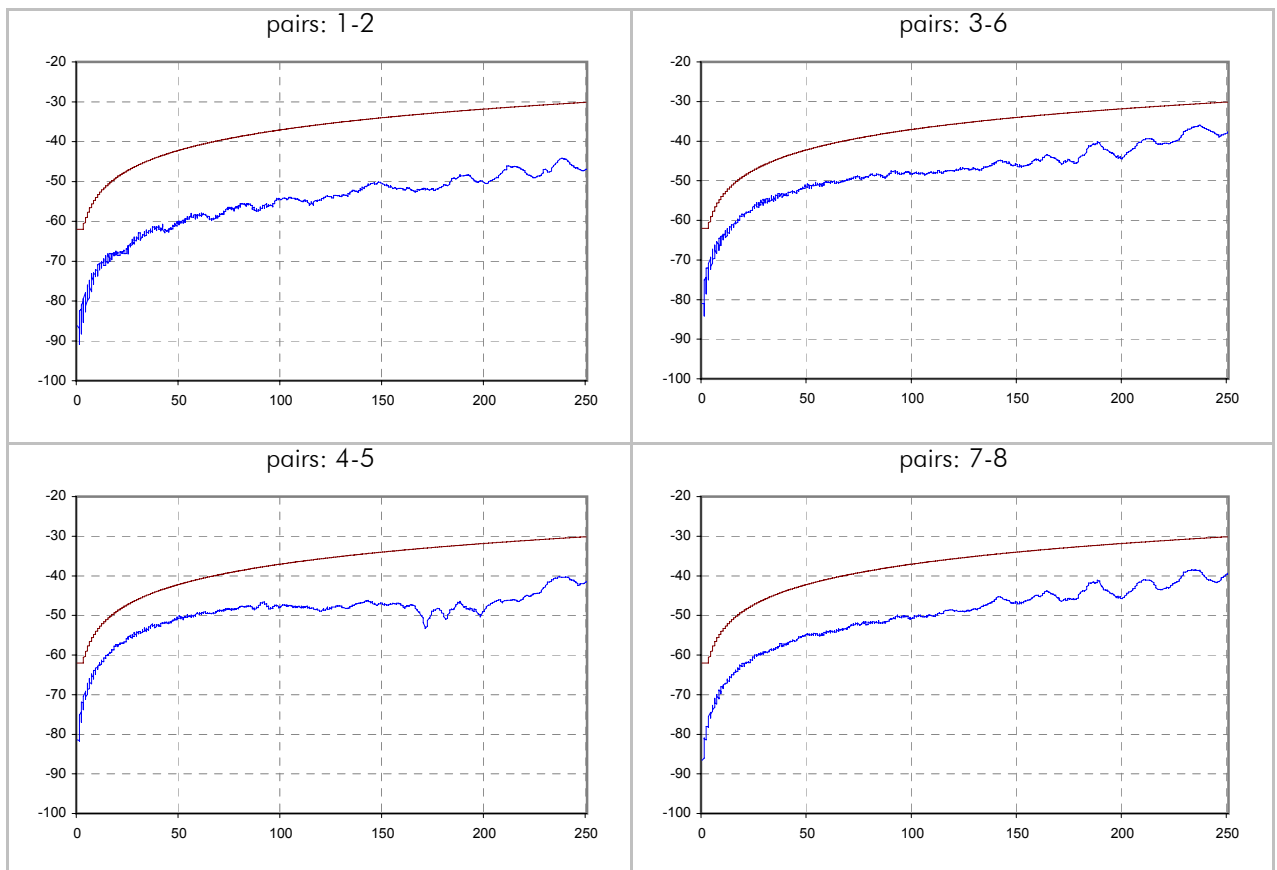
NEXT / dB (remote side - type 2 side)



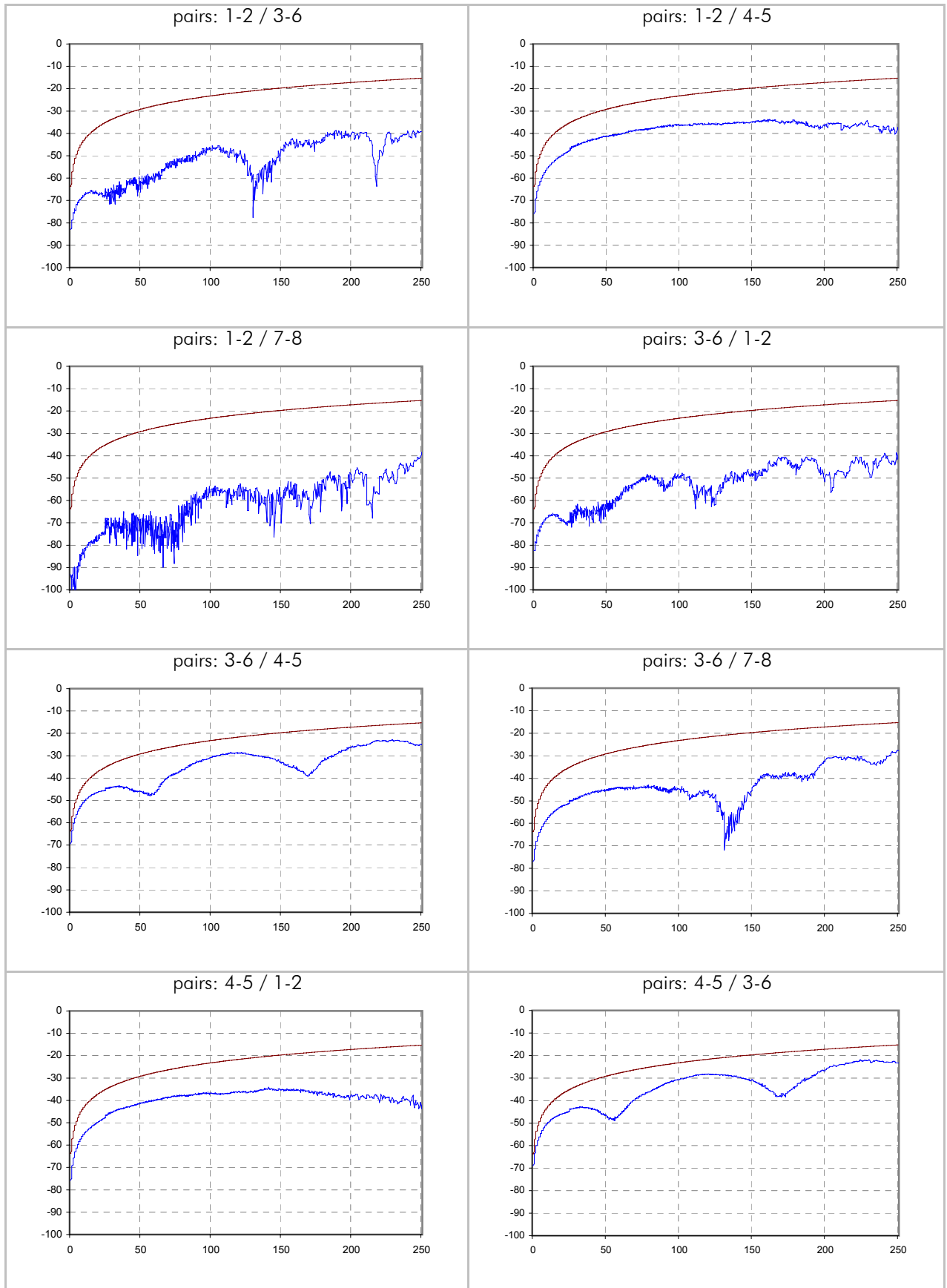
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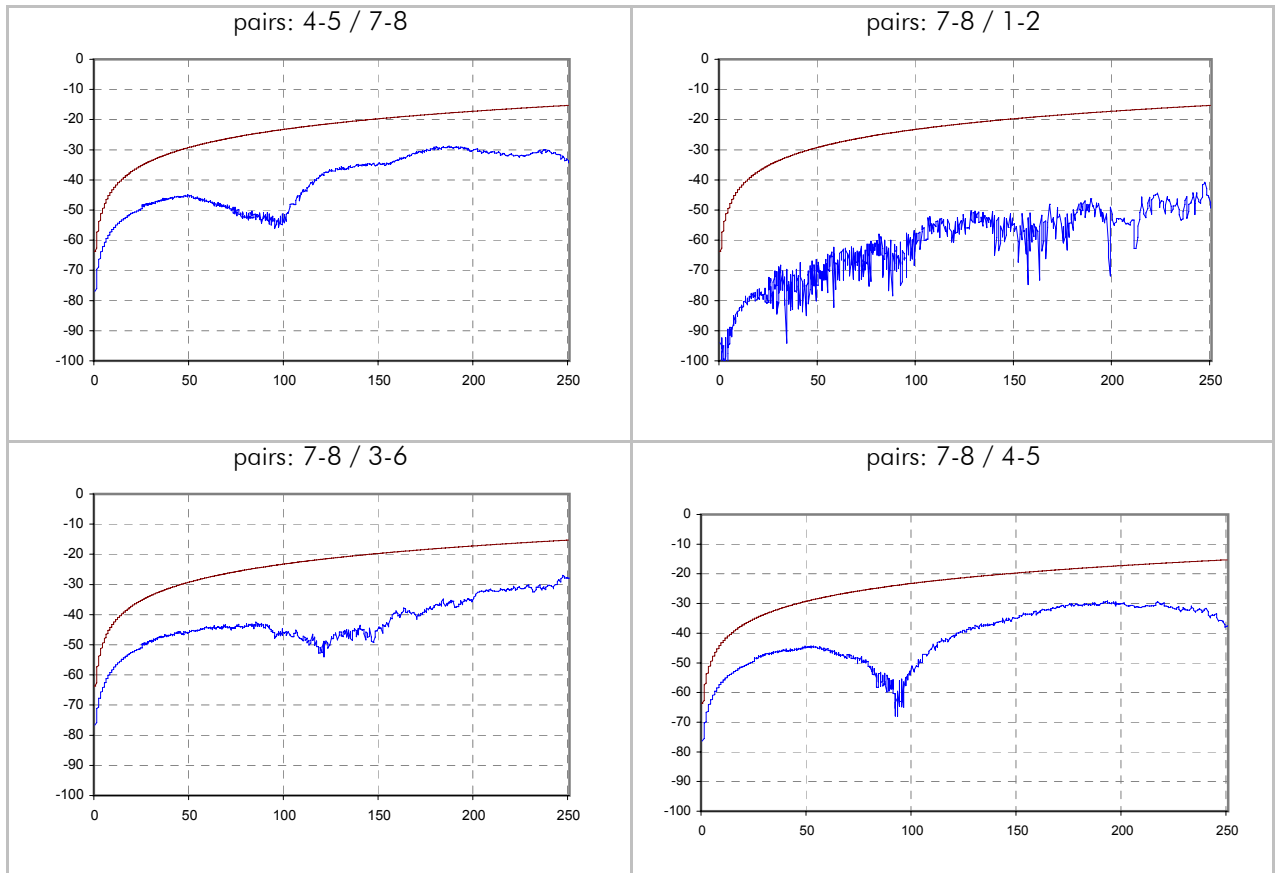
PSNEXT / dB (remote side - type 2 side)



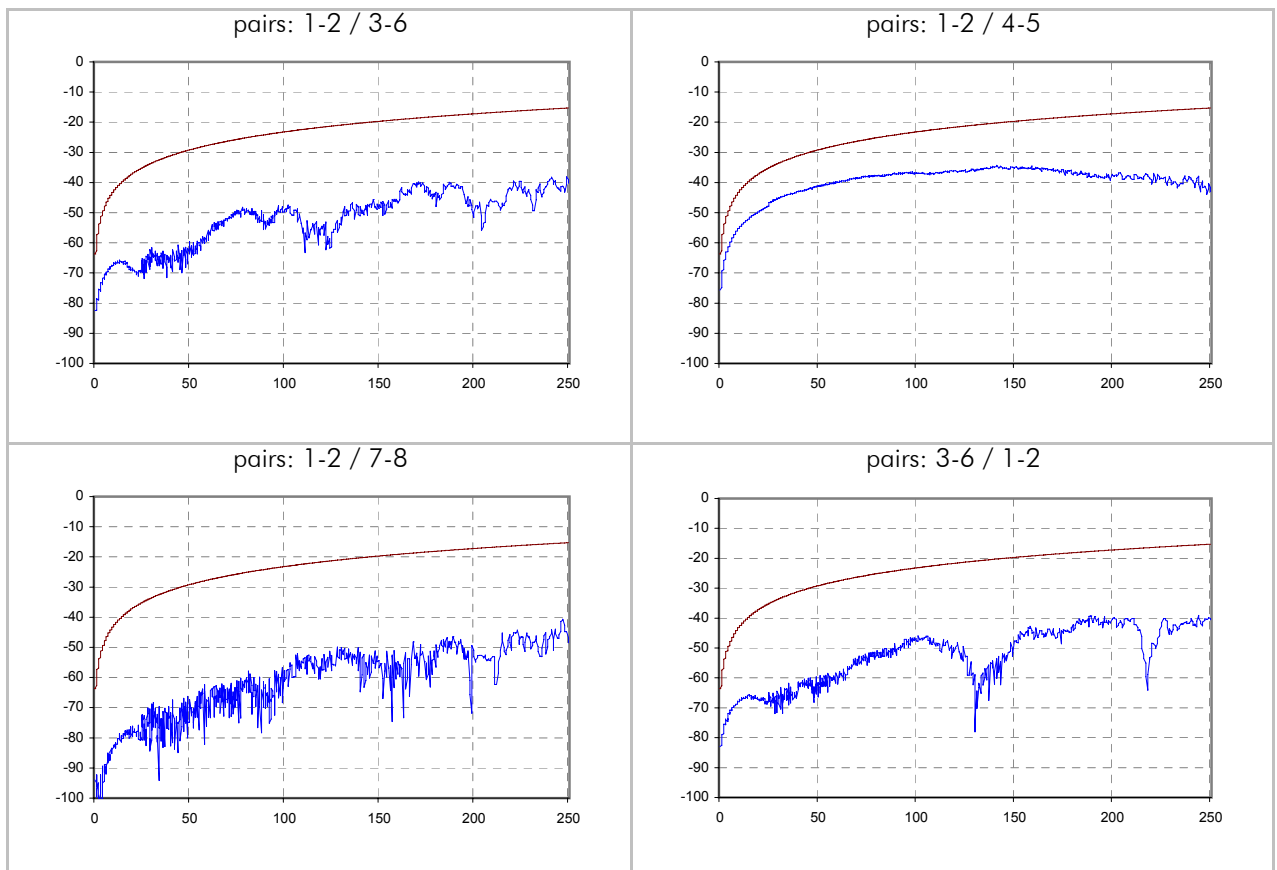
ELFEXT / dB (scanner side - type 1 side)



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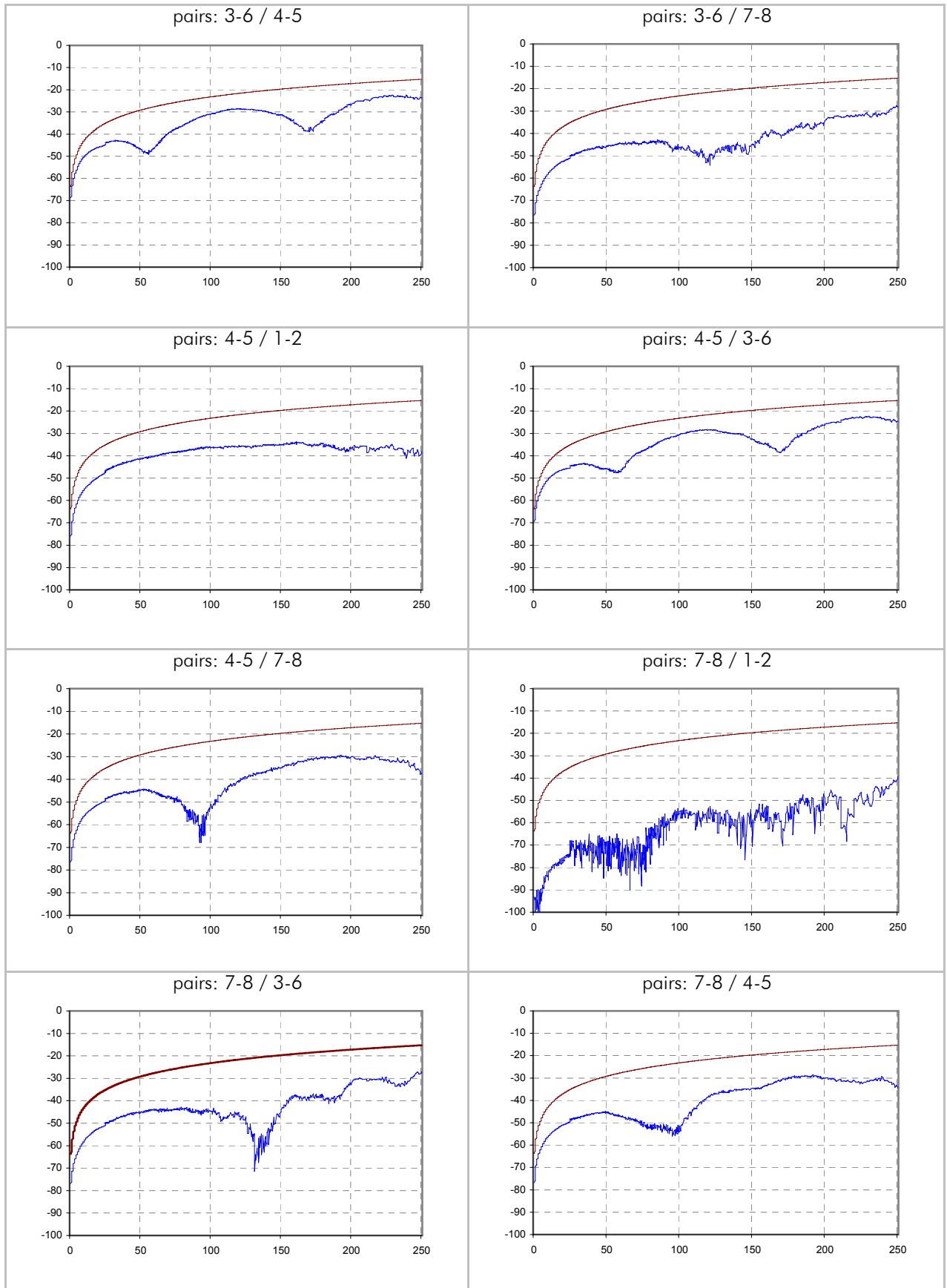


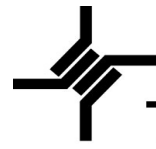
ELFEXT / dB (remote side - type 2 side)



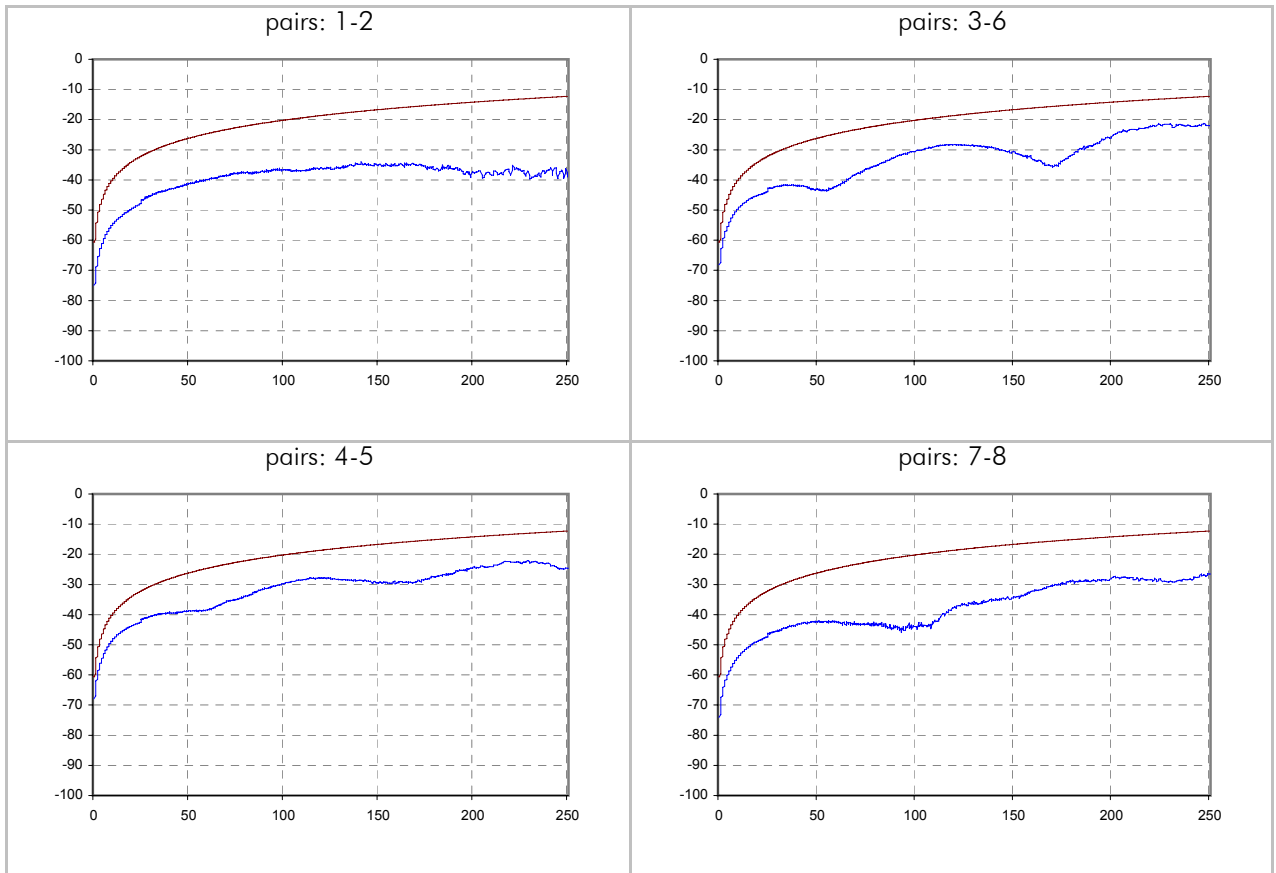


ELFEXT / dB (remote side - type 2 side)

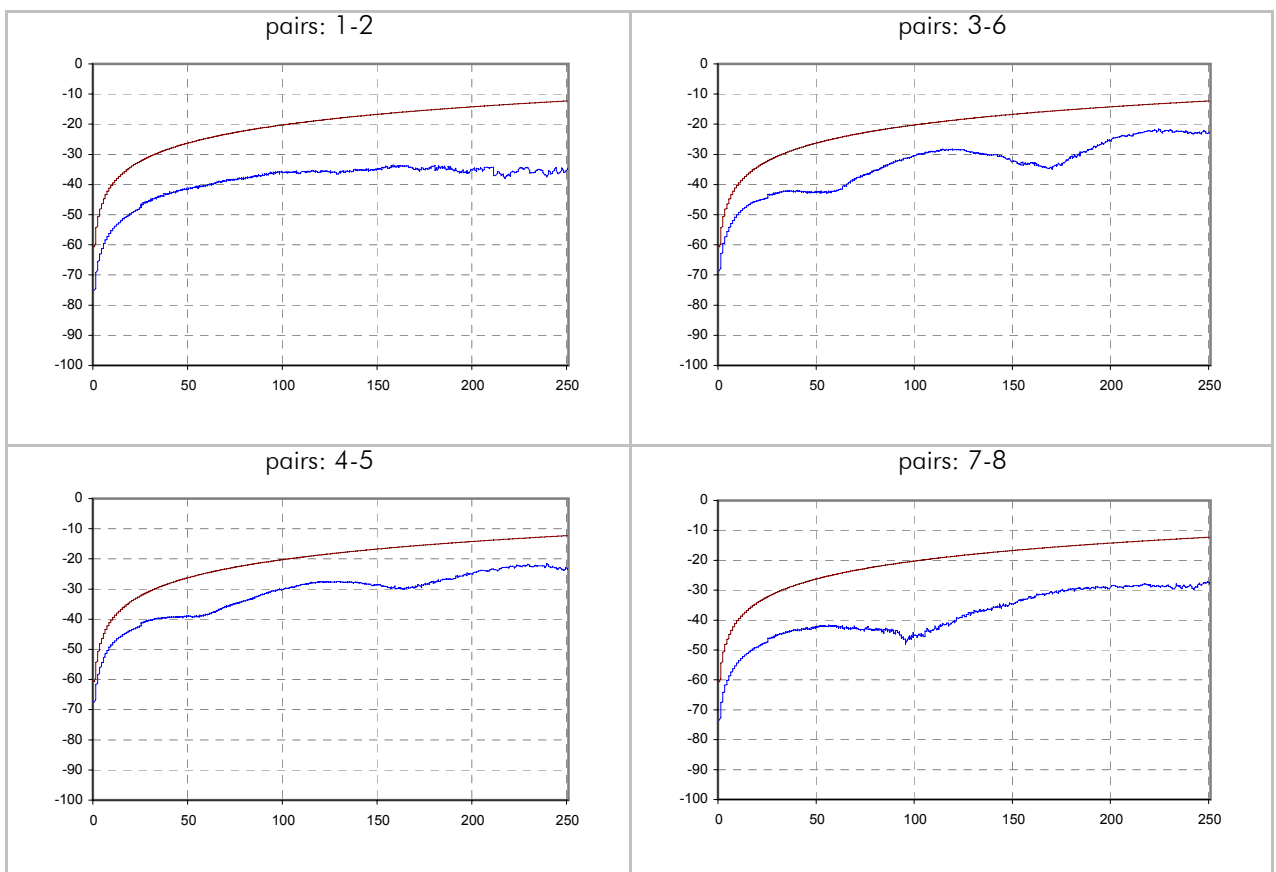




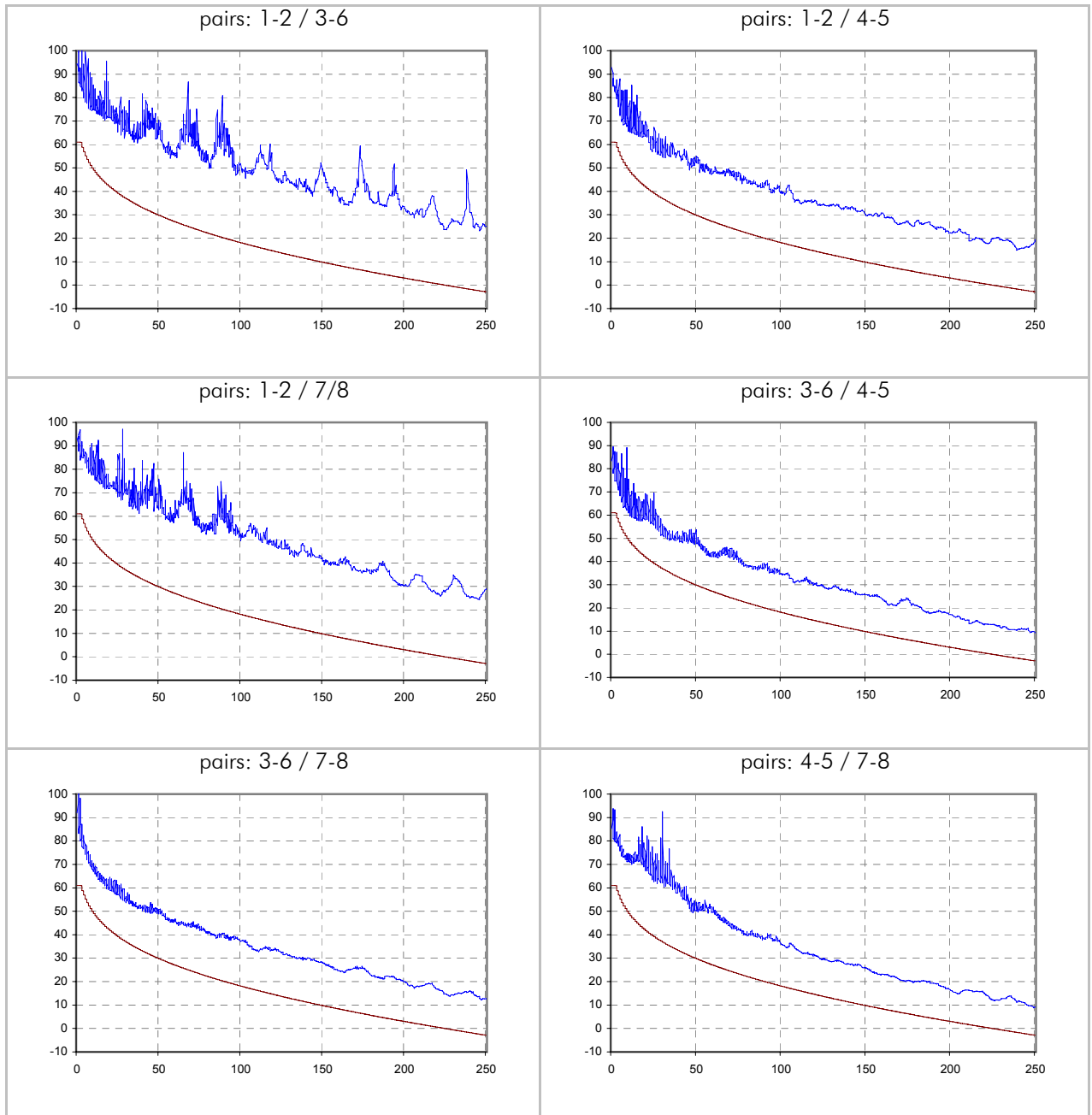
PSELFEXT / dB (scanner side - type 1 side)



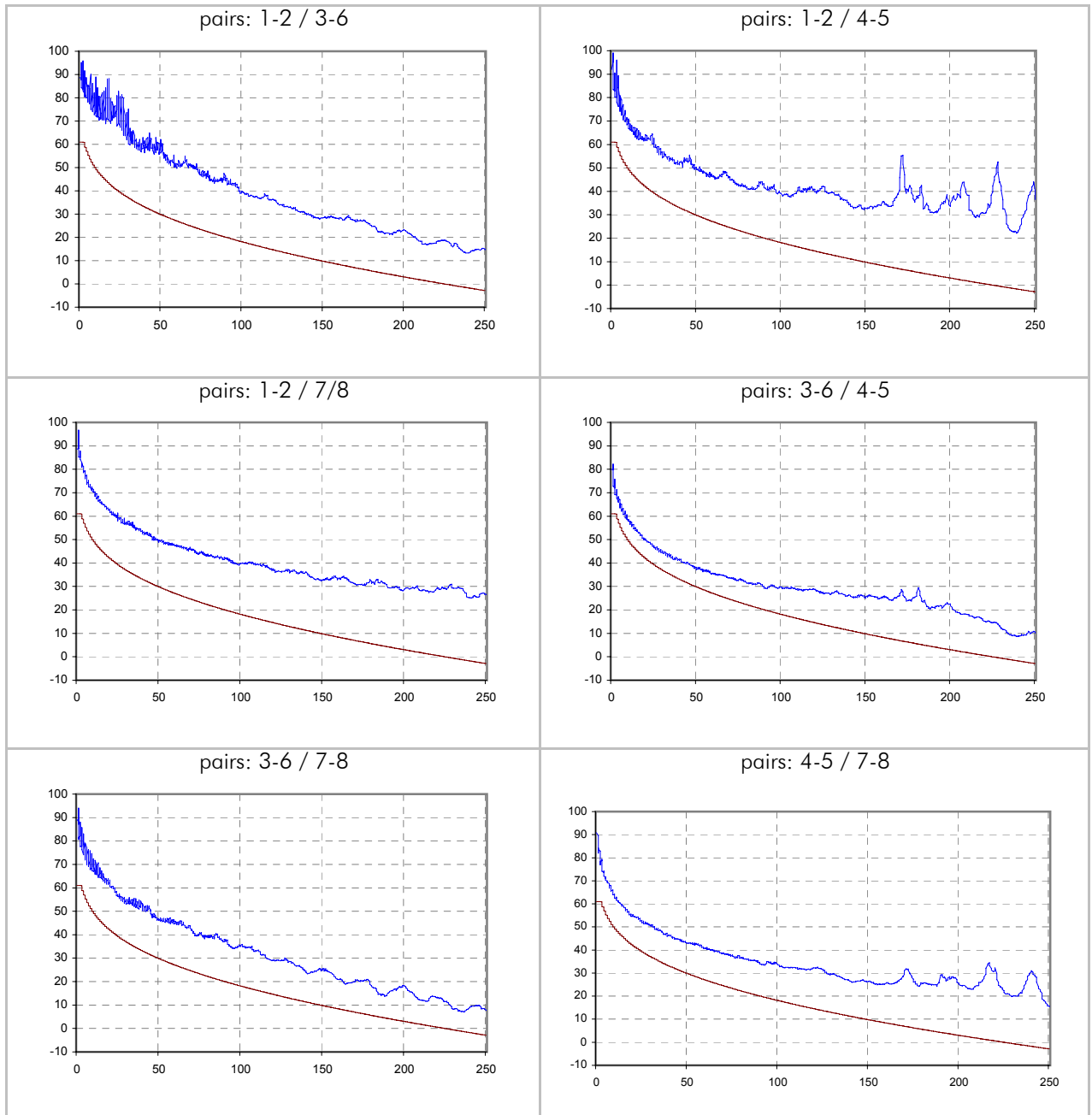
PSELFEXT / dB (remote side - type 2 side)



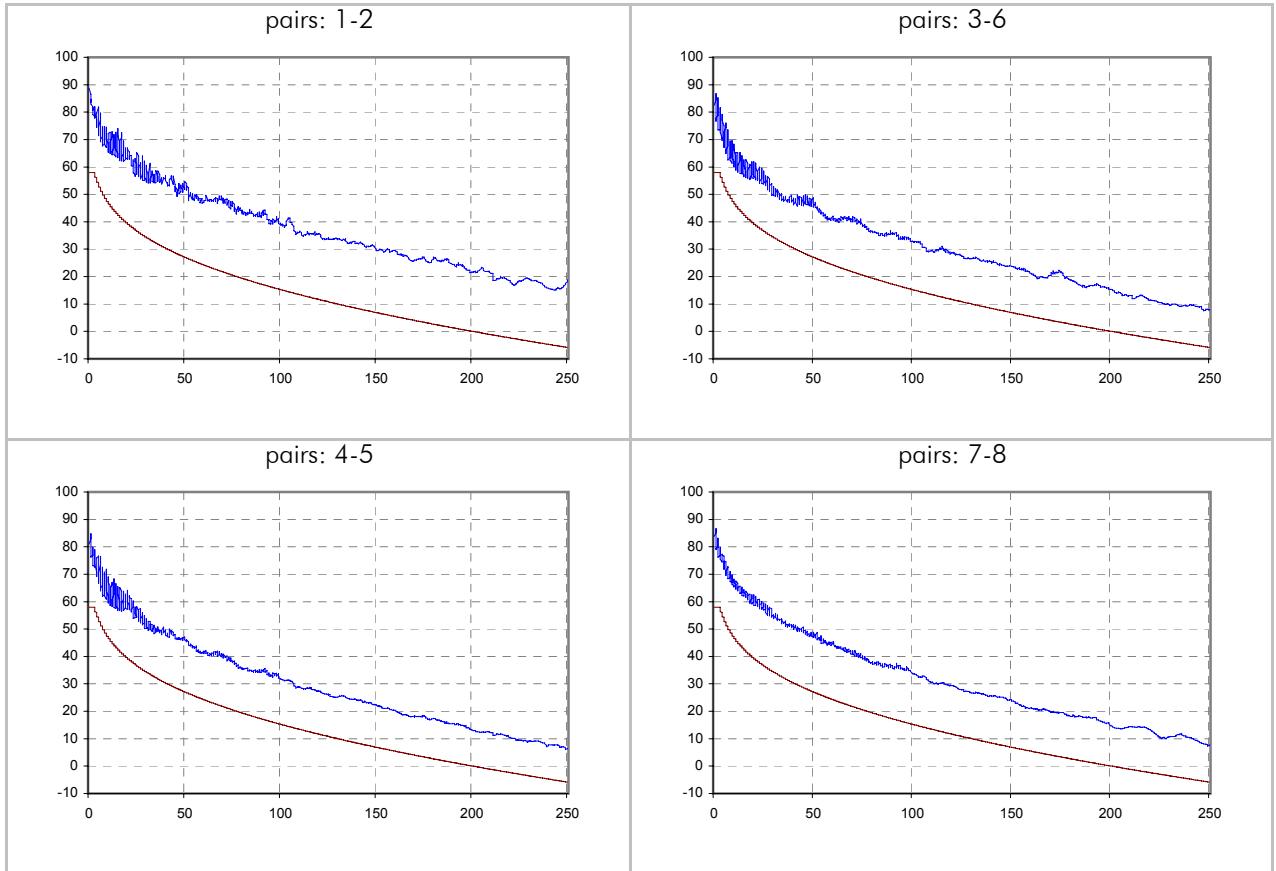
ACR / dB (scanner side - type 1 side)



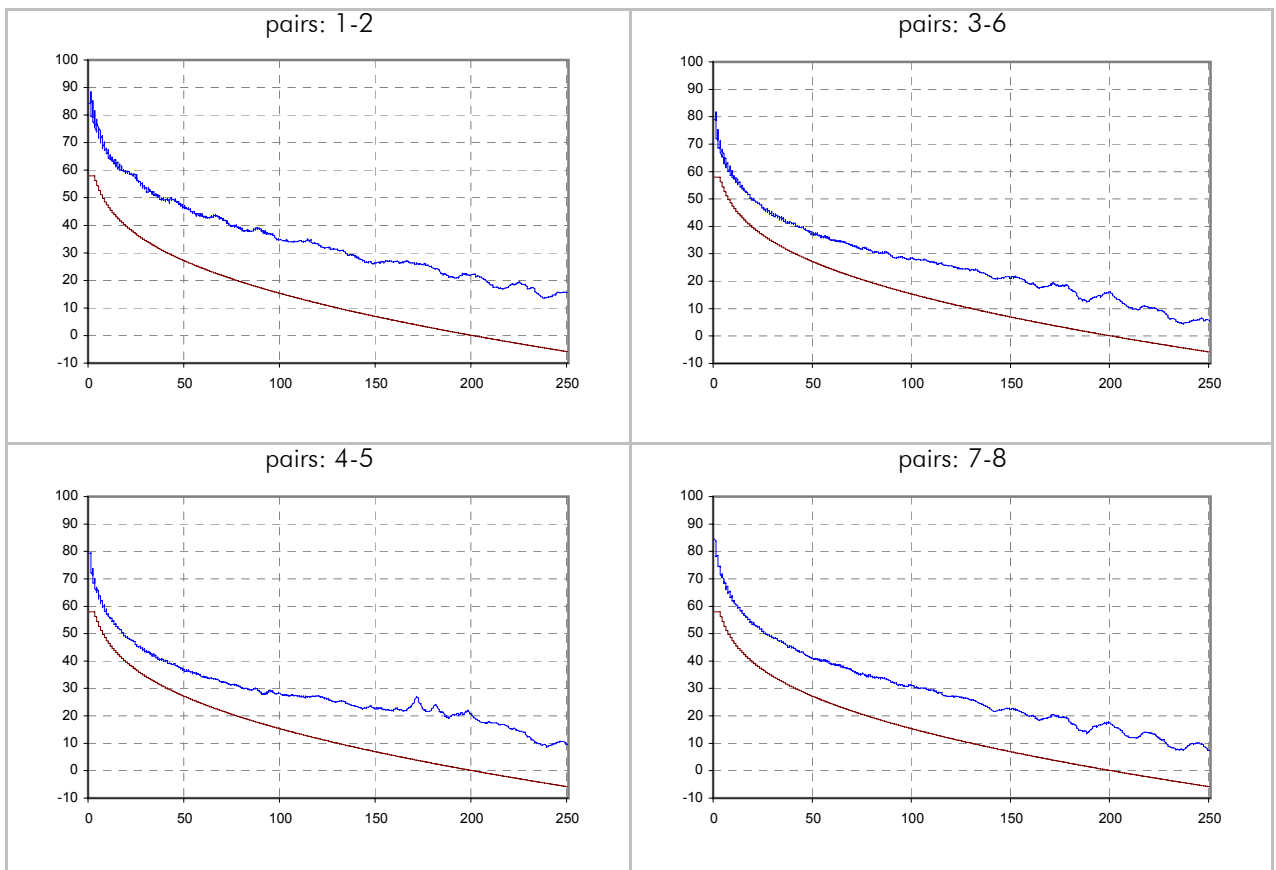
ACR / dB (remote side - type 2 side)



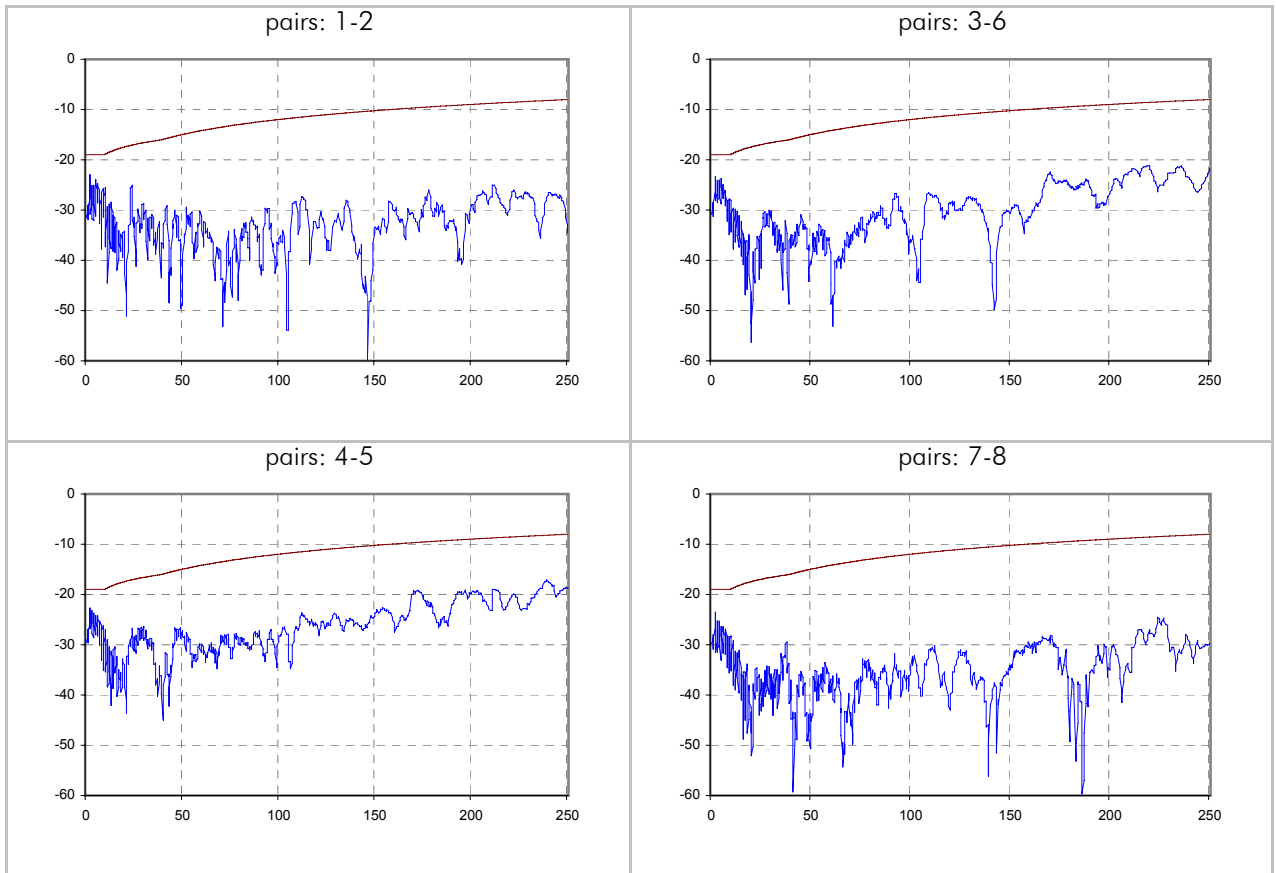
PSACR / dB (scanner side - type 1 side)



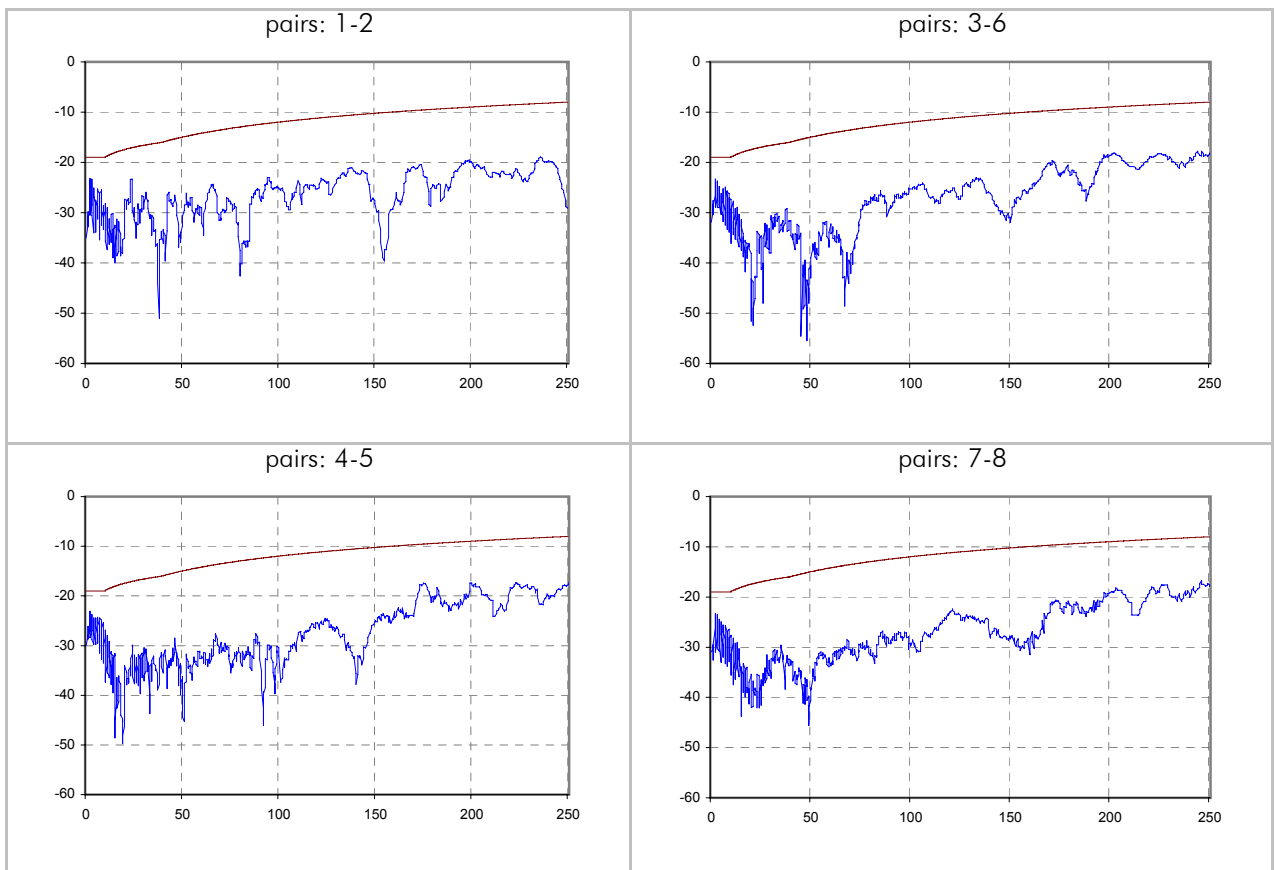
PSACR / dB (remote side - type 2 side)



Return Loss / dB (scanner side - type 1 side)



Return Loss / dB (remote side - type 2 side)



Attenuation / dB

