

Test Report No. EWA20026-42

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 /Class E
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 Giga S-STP 4x2/0,64 LSOH Cat. 8

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 = -7,5 dB and @ 250 MHz = -8,5 dB.

Test location:

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Tested by:



Frank Albert

Steinenbronn, August 06, 2002

Products:

Electrically compatible with the following part numbers:

Modular Patch Panel MPP / MPD Cat. 6 / Class E:

J02023A0021 Modular Patch Panel Cat. 6 / Class E MPP24-HS screened, RAL 7035

J02023H0021 Modular Patch Panel Cat. 6 / Class E MPP24-HS screened, RAL 7035

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

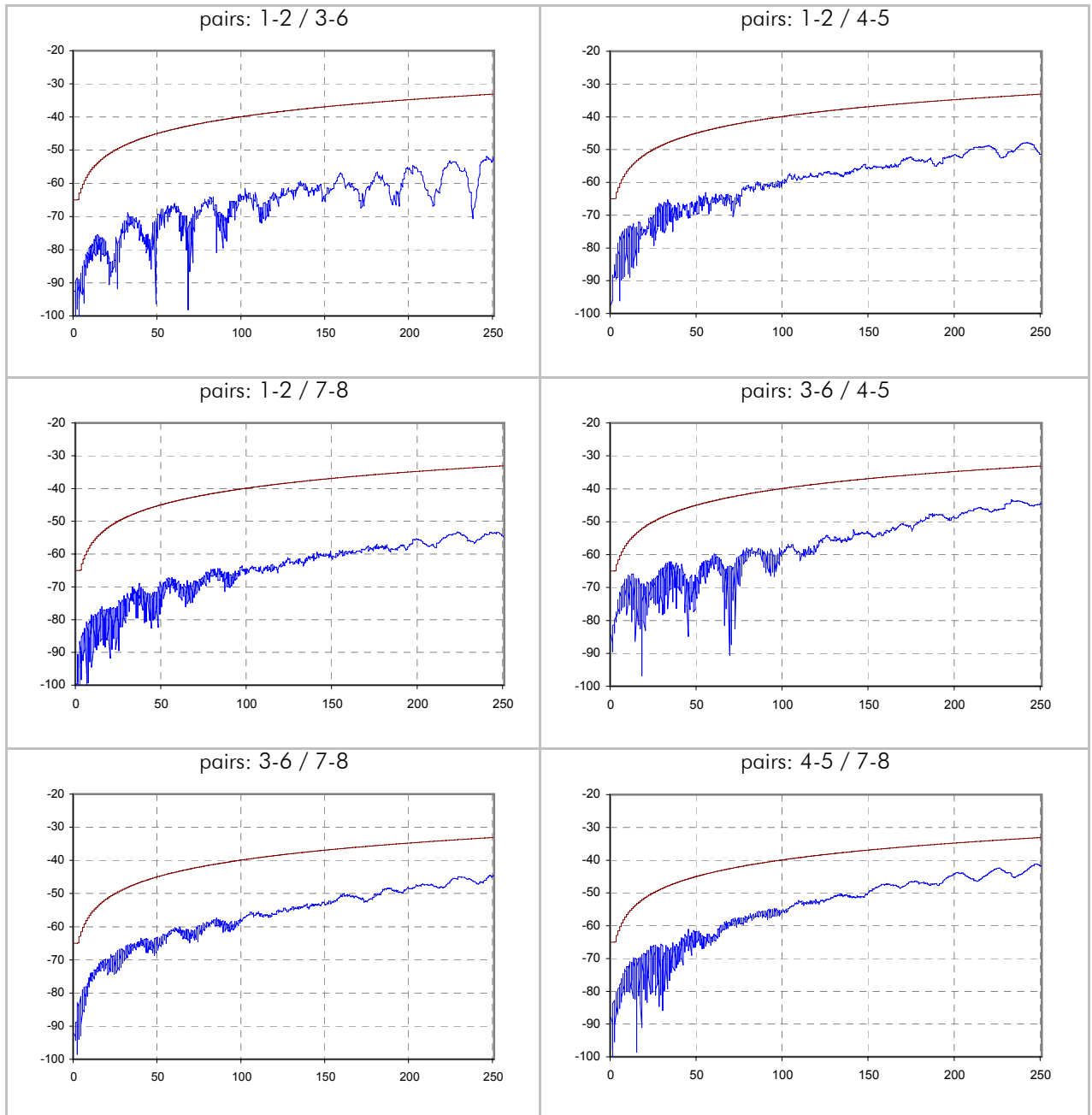
Test Results

pairs	1-2	3-6	4-5	7-8	limit	skew / ns	limit
max Propagation delay / ns	441,0	456,0	443,0	454,0	546,3	15,0	50,0
Attenuation @ 100 MHz / dB	-17,5	-18,3	-17,8	-18,3	-21,7		
Attenuation @ 250 MHz / dB	-27,8	-29,7	-28,6	-29,3	-21,7		
min PSNEXT margin / dB	13,5	6,8	6,6	8,4			
@ f / MHZ	237,1	235,3	19,2	233,5			
PSNEXT limit / dB	-30,6	-30,6	-49,3	-30,7			
PSNEXT @ 100 MHz	-55,4	-46,2	-46,2	-49,3	-37,1		
PSNEXT @ 250 MHz	-46,8	-39,6	-39,6	-39,9	-30,2		
min PSELFEXT margin / dB	13,9	7,4	6,5	12,8			
@ f / MHZ	1,0	1,0	1,0	1,4			
PSELFEXT limit / dB	-60,6	-60,6	-60,6	-57,3			
PSELFEXT @ 100 MHz	-41,4	-29,3	-28,8	-34,5	-20,3		
PSELFEXT @ 250 MHz	-29,0	-20,6	-20,9	-26,8	-12,3		
min PSACR margin / dB	17,4	8,3	7,8	13,1			
@ f / MHZ	6,8	17,8	19,2	26,4			
PSACR limit / dB	51,3	41,0	40,2	36,2			
PSACR @ 100 MHz	40,6	36,3	35,6	35,2	15,4		
PSACR @ 250 MHz	20,4	12,0	14,8	12,4	-5,7		
min Return Loss margin / dB	2,8	5,1	3,4	4,5			
@ f / MHZ	2,5	2,5	3,7	3,4			
Return Loss limit / dB	-19,0	-19,0	-19,0	-19,0			

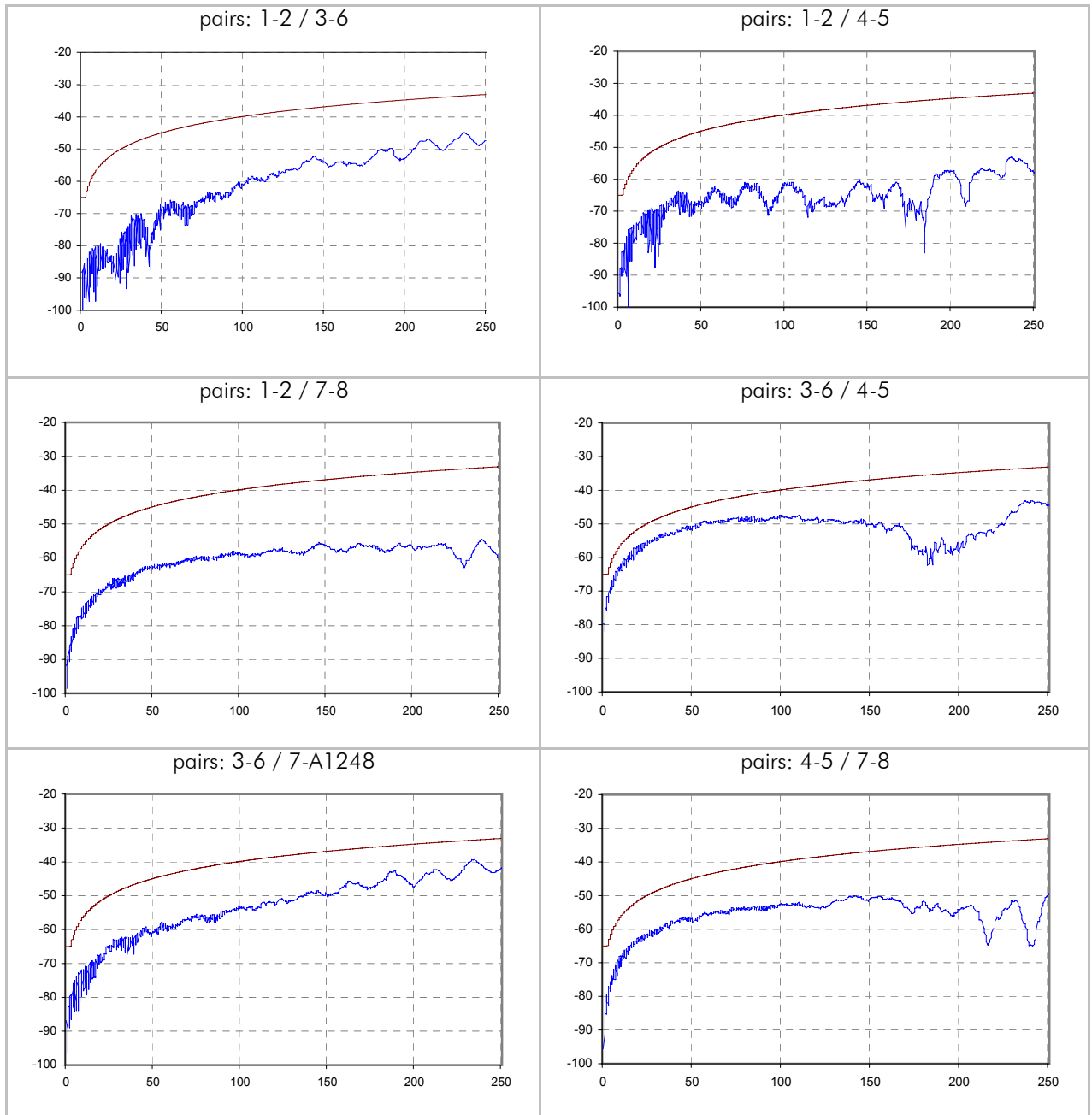
pairs	1-2 / 3-6	1-2 / 4-5	1-2 / 7-8	3-6 / 4-5	3-6 / 7-8	4-5 / 7-8	limit
min NEXT margin / dB	11,4	14,5	16,7	4,7	5,7	8,0	
@ f / MHZ	236,7	242,5	27,3	19,2	233,5	247,4	
Next limit / dB	-33,5	-33,3	-49,4	-51,9	-33,6	-33,2	
NEXT @ 100 MHz	-60,8	-61,3	-58,5	-47,4	-53,0	-52,7	-39,9
NEXT @ 250 MHz	-47,4	-51,4	-54,4	-44,6	-42,3	-41,6	-33,1
min ACR margin / dB	17,5	16,6	18,1	5,9	11,7	12,1	
@ f / MHZ	236,2	7,0	27,3	19,2	235,3	16,3	
ACR limit / dB	-1,3	53,6	38,5	42,8	-1,2	44,7	
ACR @ 100 MHz	42,6	43,5	40,2	29,1	34,7	34,4	18,2
ACR @ 250 MHz	17,7	22,7	25,1	14,9	12,6	12,2	-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	20,1	11,3	24,2	5,0	13,0	11,6	
@ f / MHZ	247,9	1,0	227,2	1,0	1,4	230,8	
ELFEXT limit / dB	-15,4	-63,6	-16,1	-63,6	-60,3	-16,0	
min ELFEXT margin / dB	18,2	11,2	23,2	5,0	13,0	10,9	
@ f / MHZ	247,9	1,0	227,2	1,0	1,4	230,8	
ELFEXT limit / dB	-15,4	-63,6	-16,1	-63,6	-60,3	-16,0	
ELFEXT @ 100 MHz	-54,5	-41,7	-53,0	-29,5	-41,4	-35,7	-23,3
ELFEXT @ 250 MHz	-36,9	-29,7	-43,7	-21,2	-30,7	-29,6	-15,3
ELFEXT @ 100 MHz	-53,7	-41,4	-52,2	-30,0	-41,4	-35,2	-23,3
ELFEXT @ 250 MHz	-35,0	-28,9	-42,2	-22,3	-31,0	-28,9	-15,3

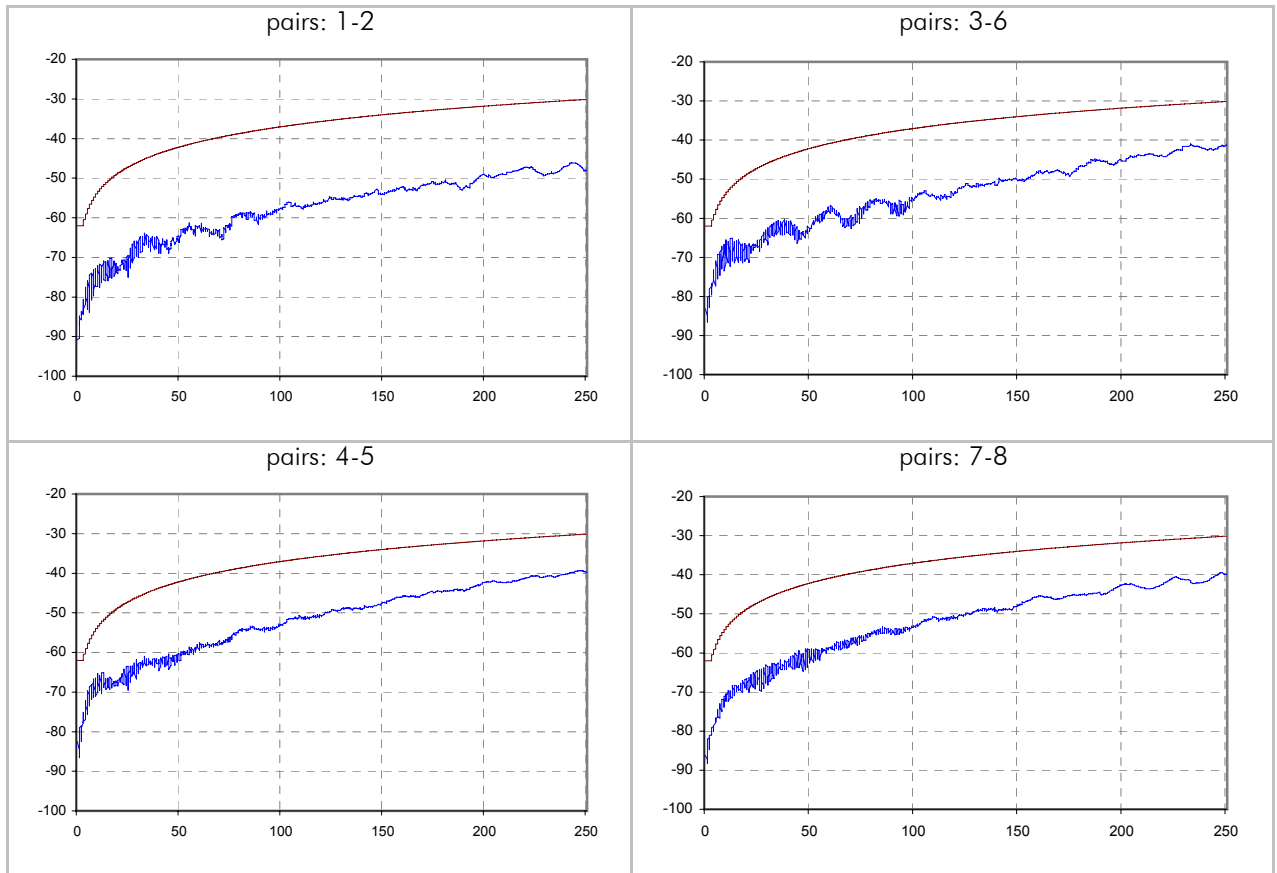
NEXT / dB (scanner side - type 1 side)



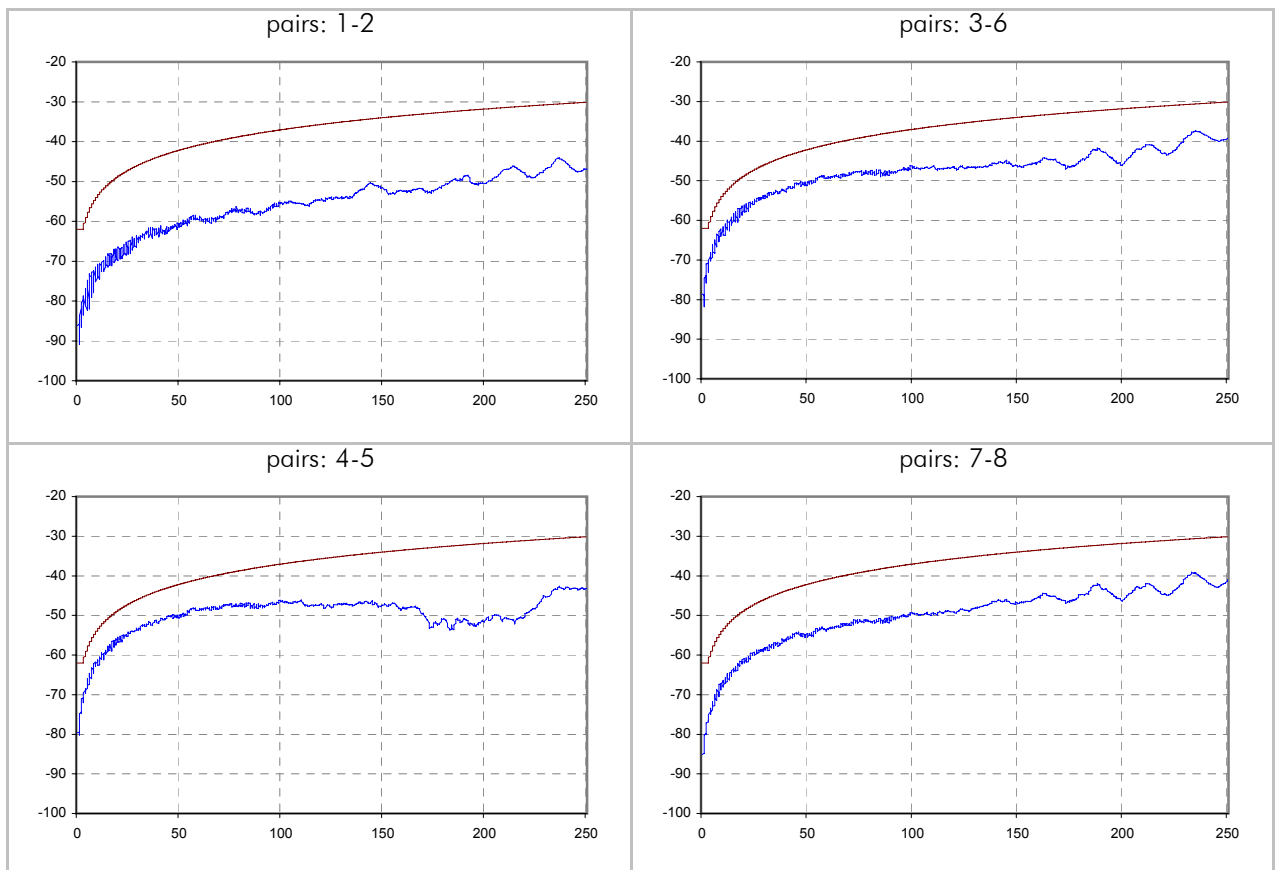
NEXT / dB (remote side - type 2 side)



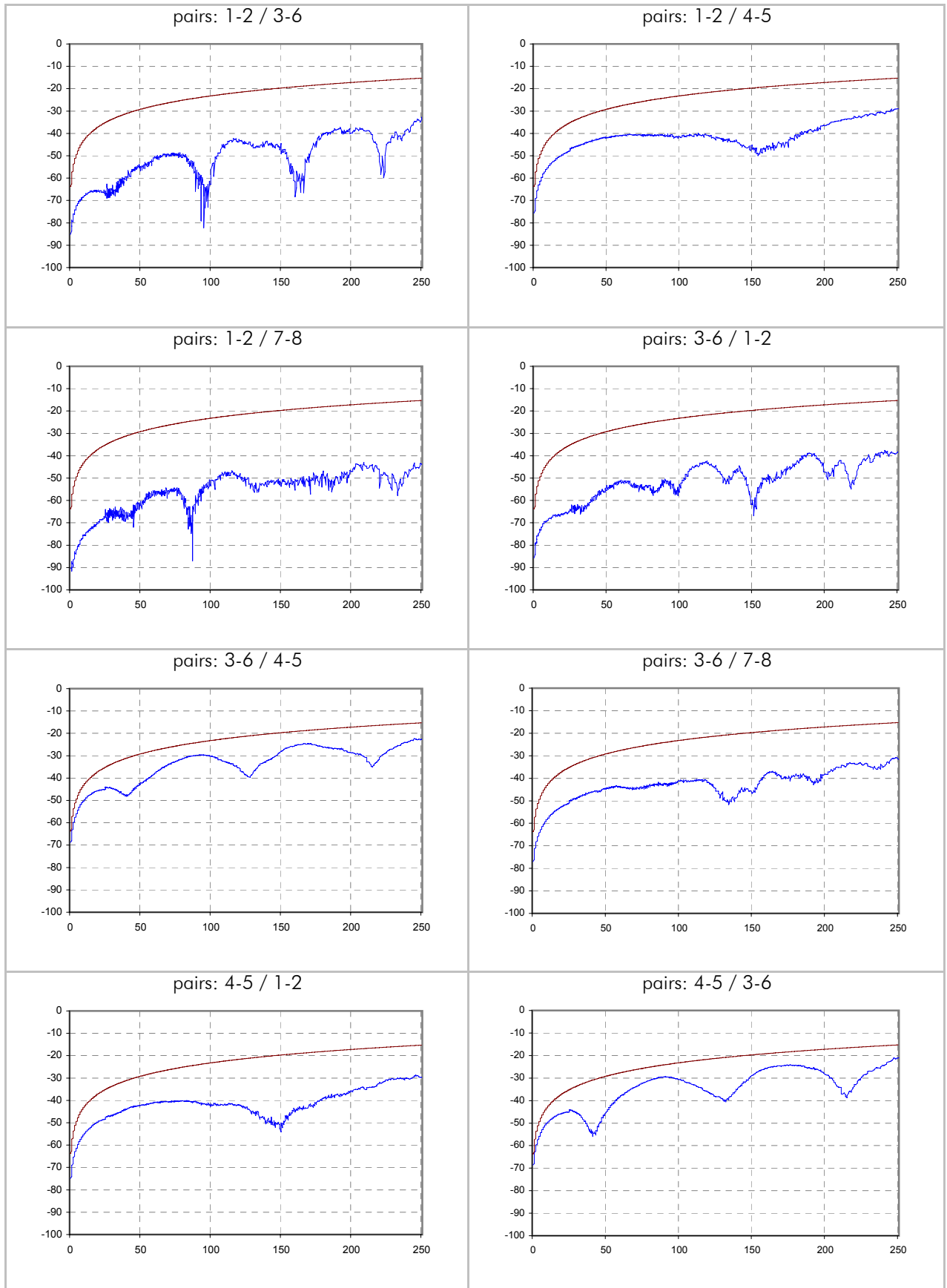
PSNEXT / dB (scanner side - type 1 side)

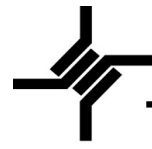


PSNEXT / dB (remote side - type 2 side)

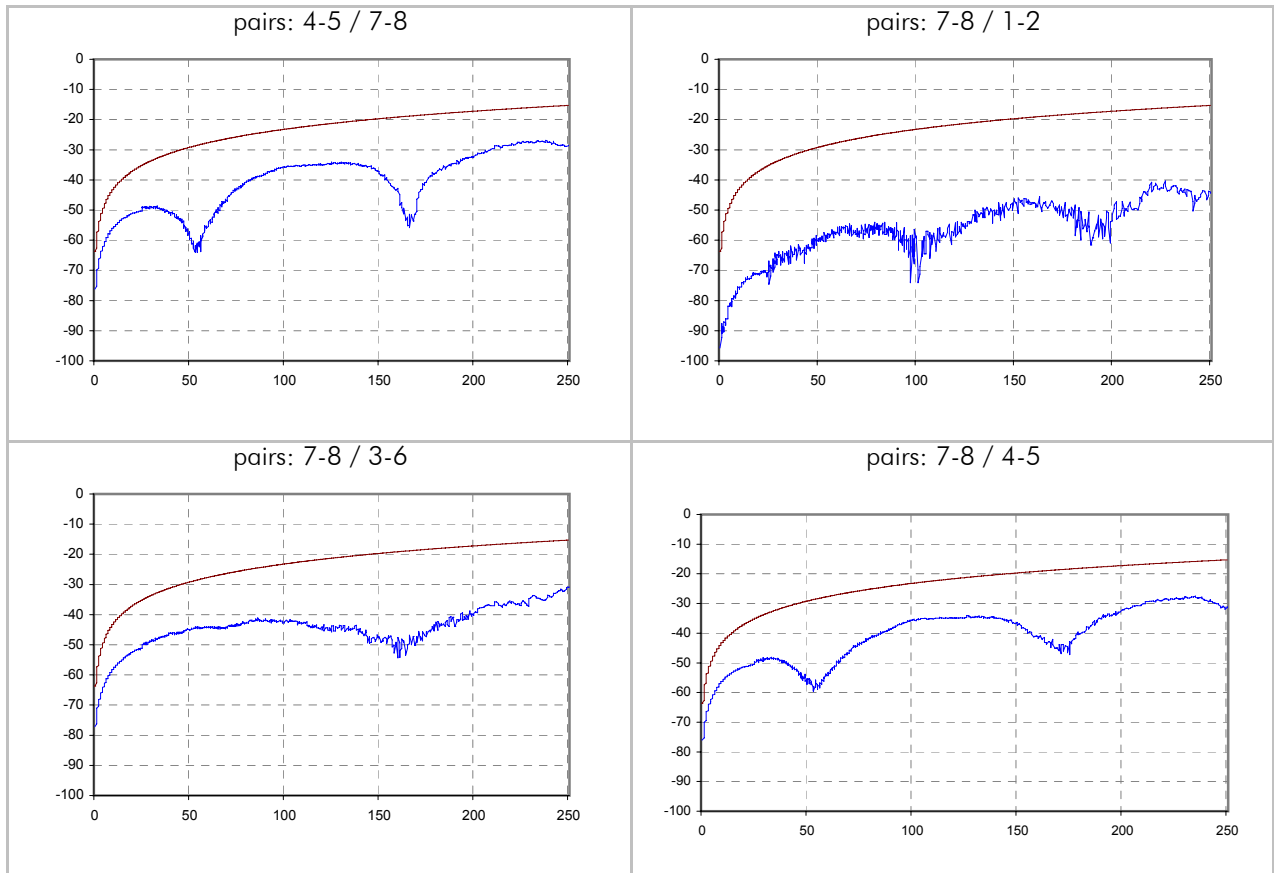


ELFEXT / dB (scanner side - type 1 side)

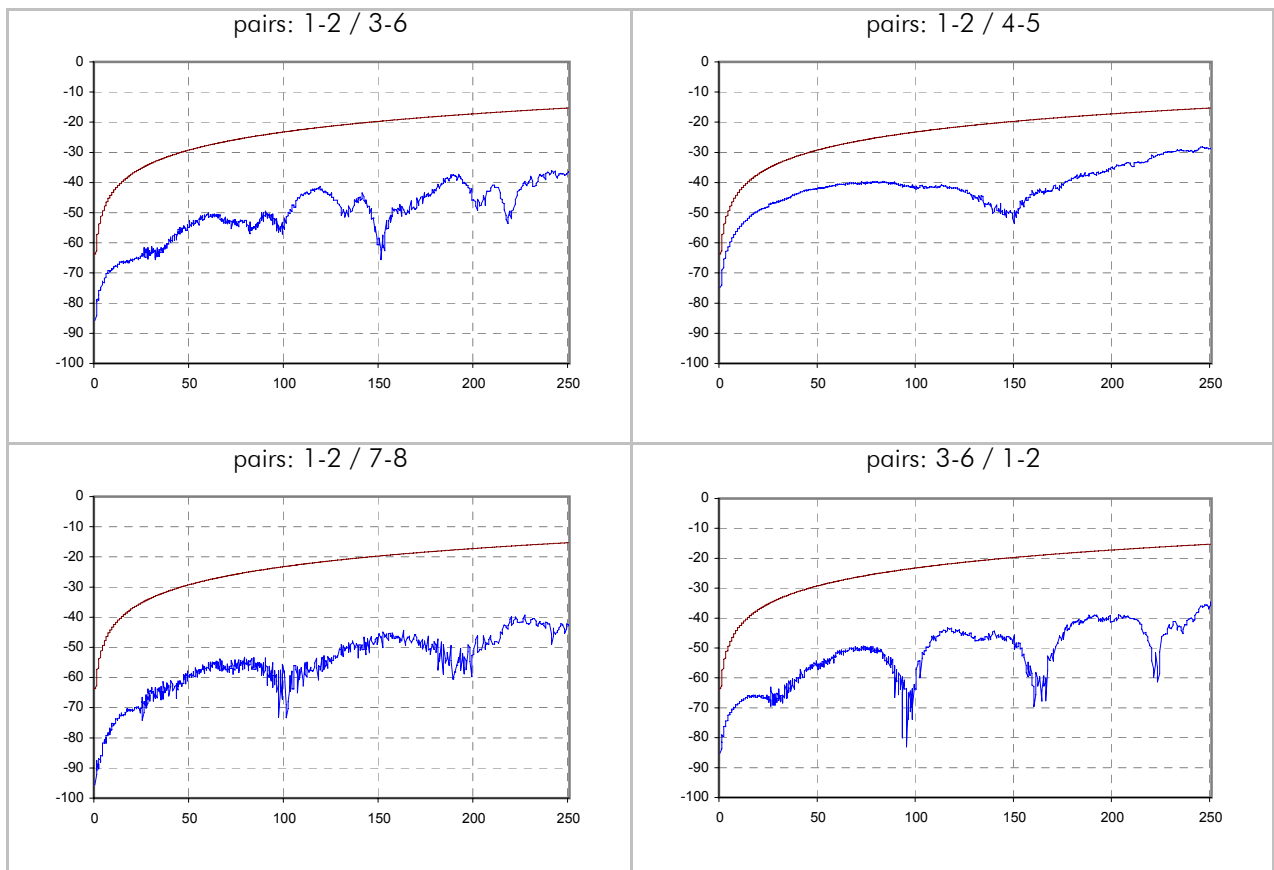


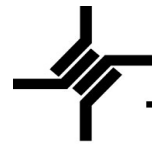


ELFEXT / dB (scanner side - type 1 side)

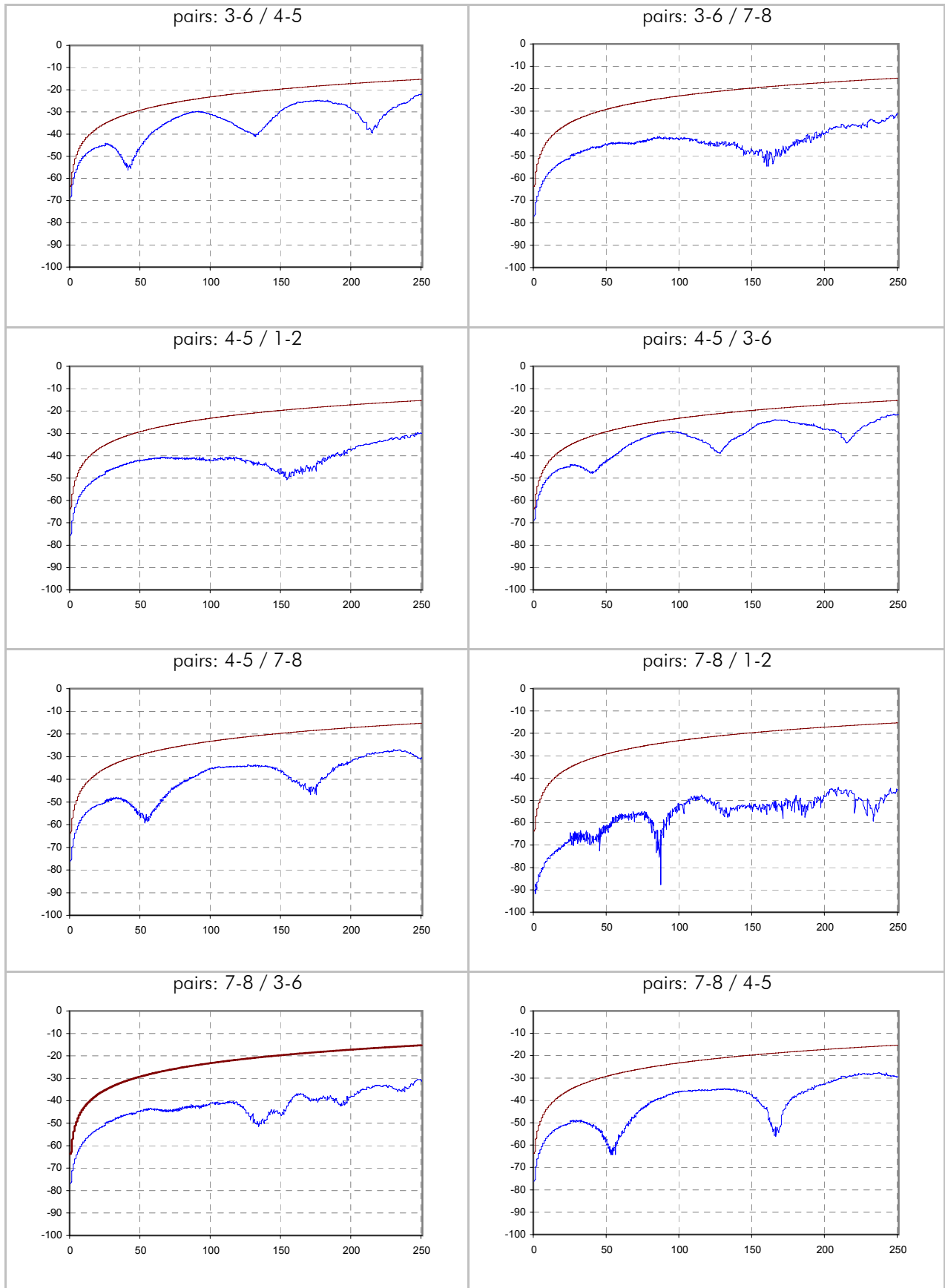


ELFEXT / dB (remote side - type 2 side)

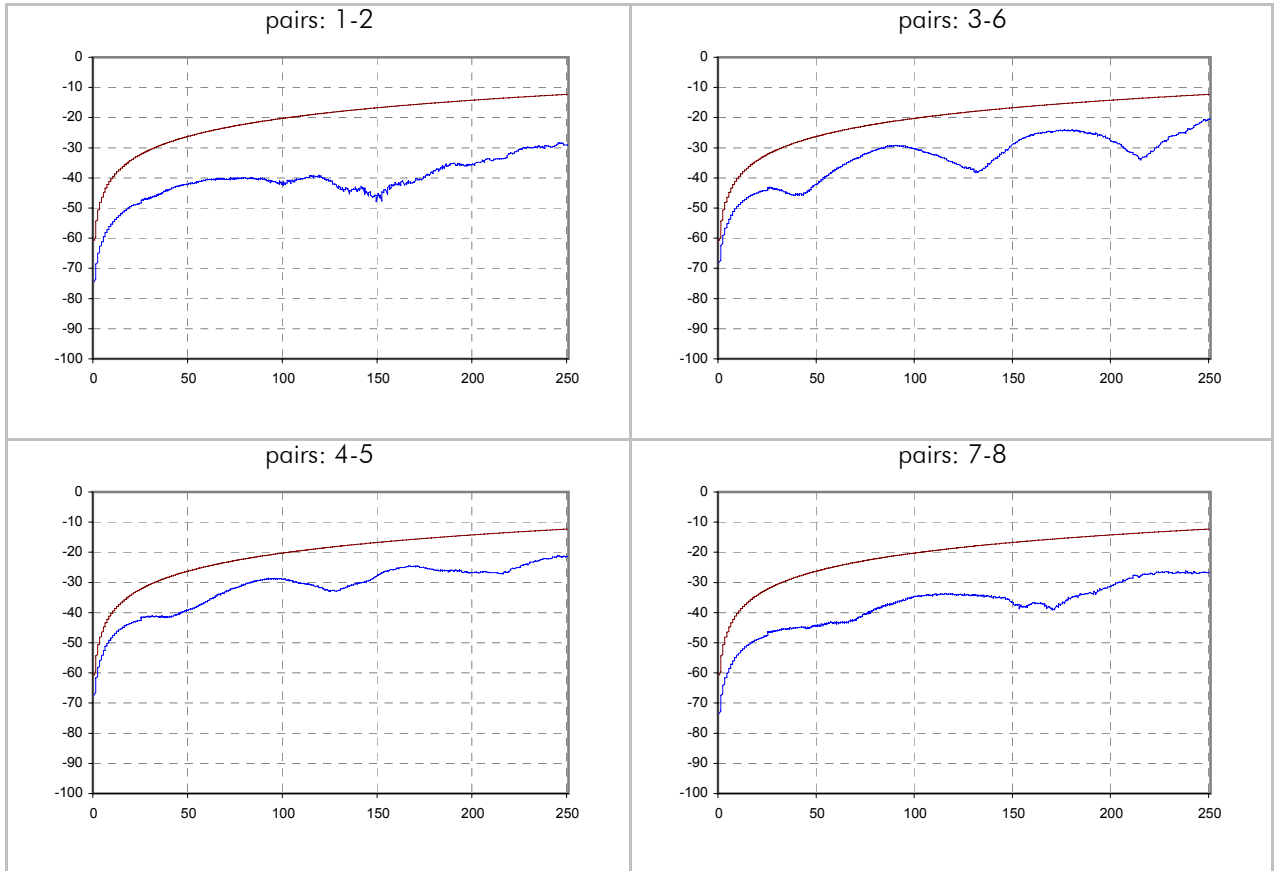




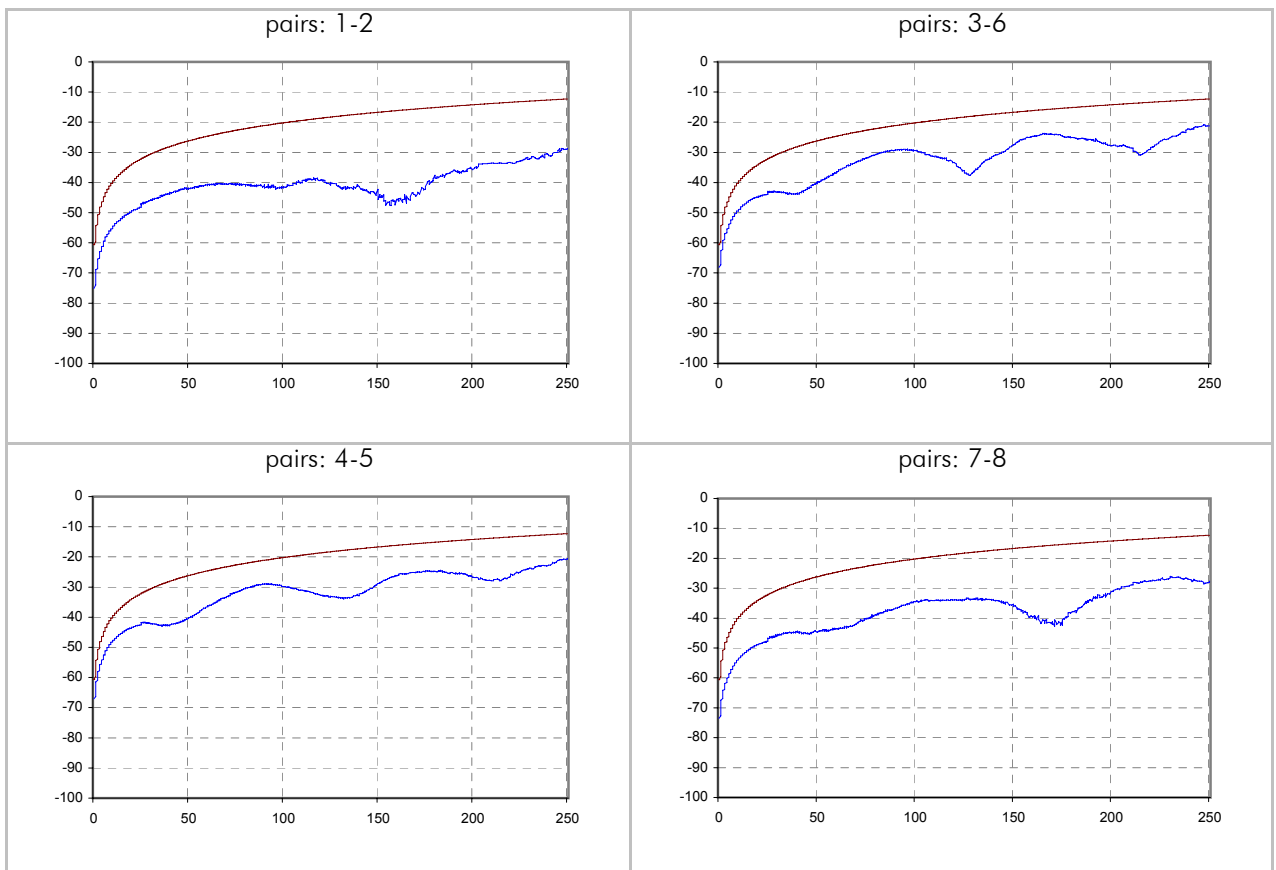
ELFEXT / dB (remote side - type 2 side)



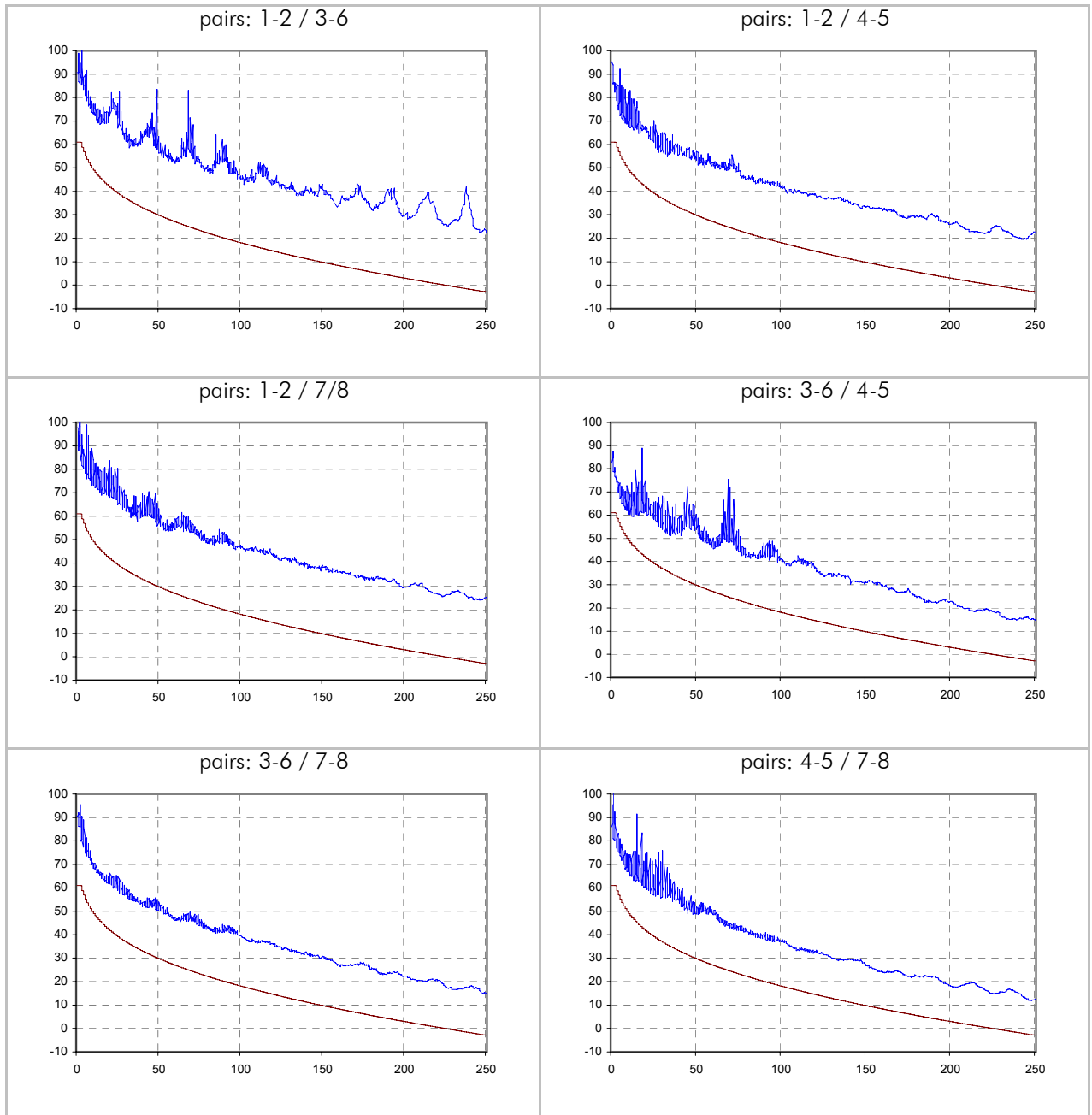
PSELFEXT / dB (scanner side - type 1 side)



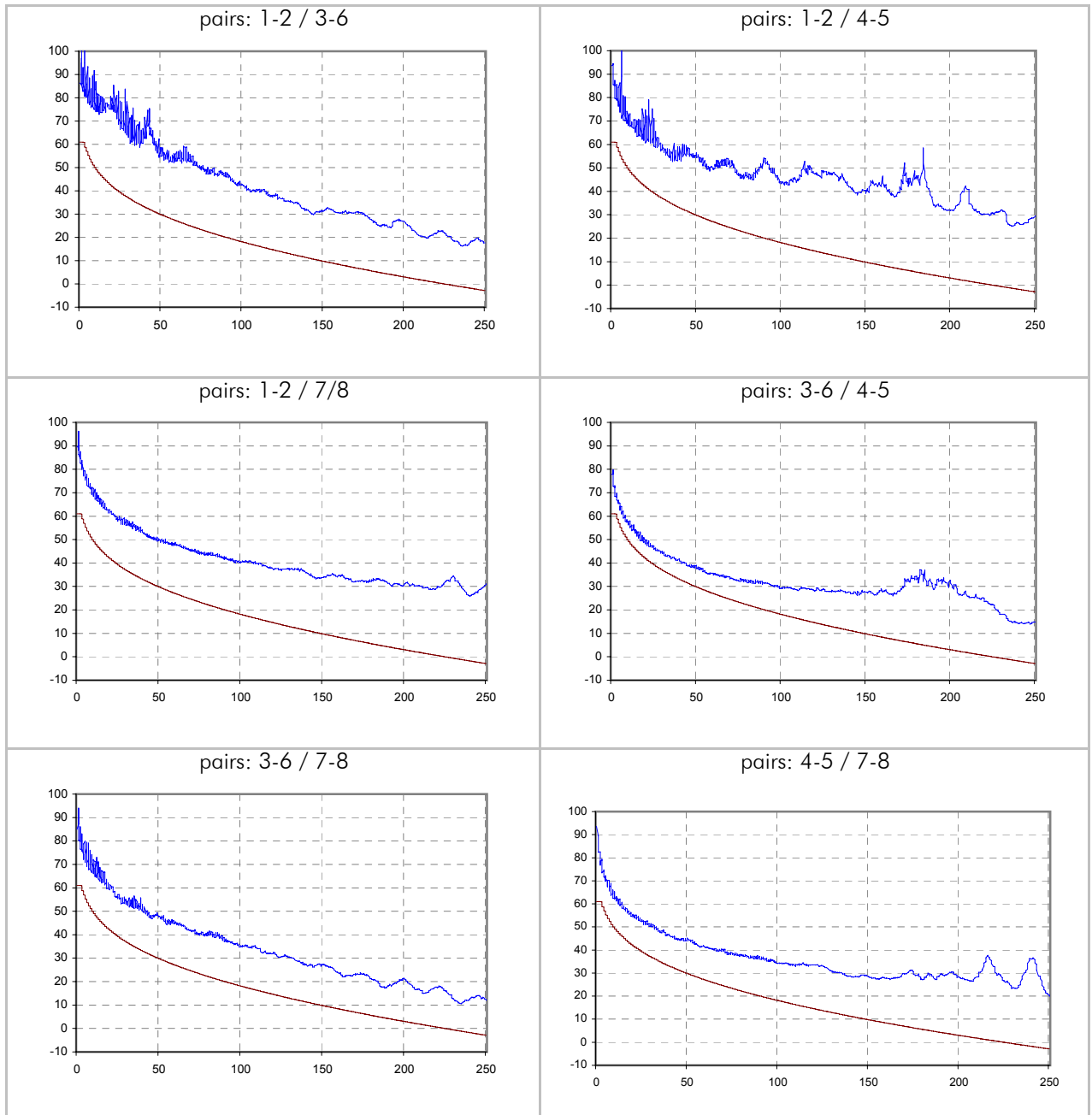
PSELFEXT / dB (remote side - type 2 side)



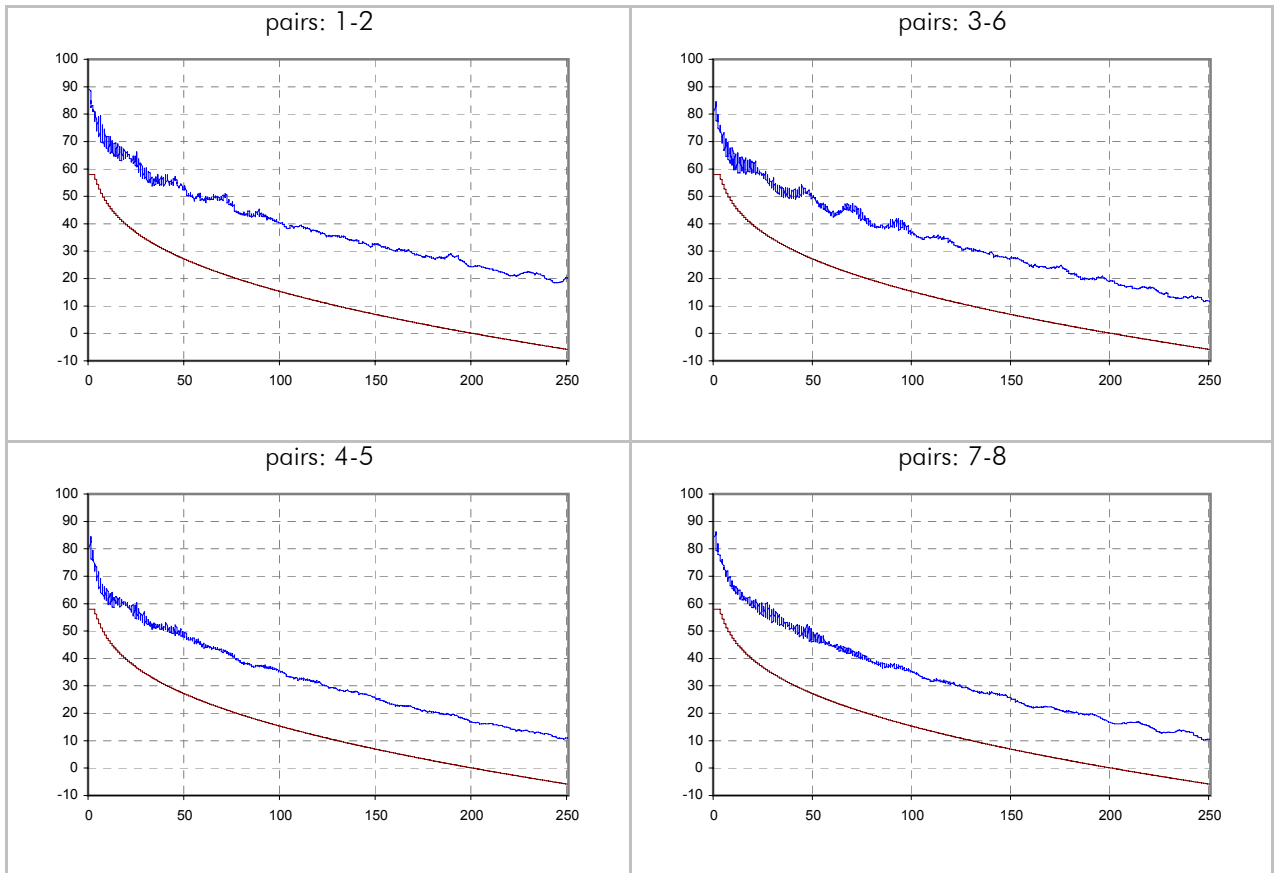
ACR / dB (scanner side - type 1 side)



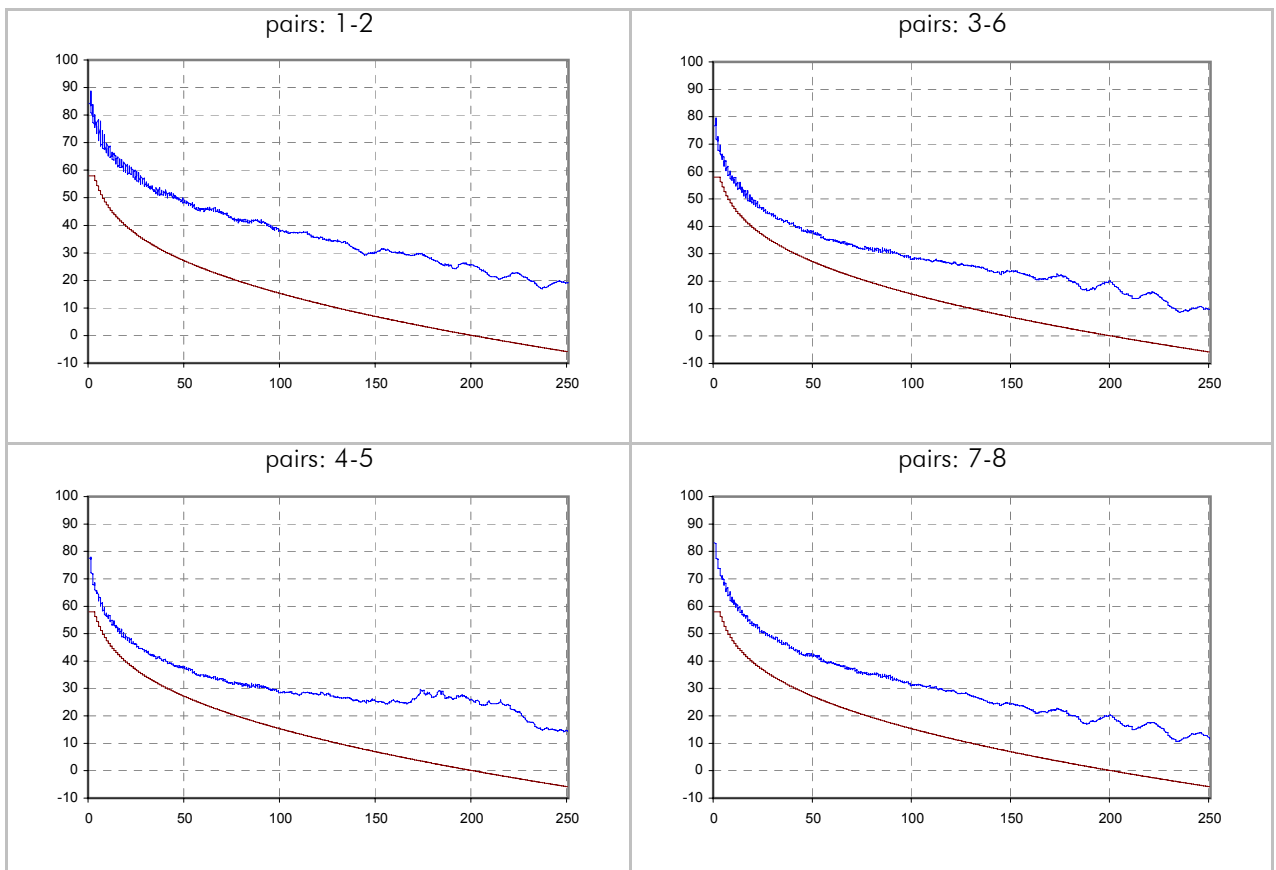
ACR / dB (remote side - type 2 side)



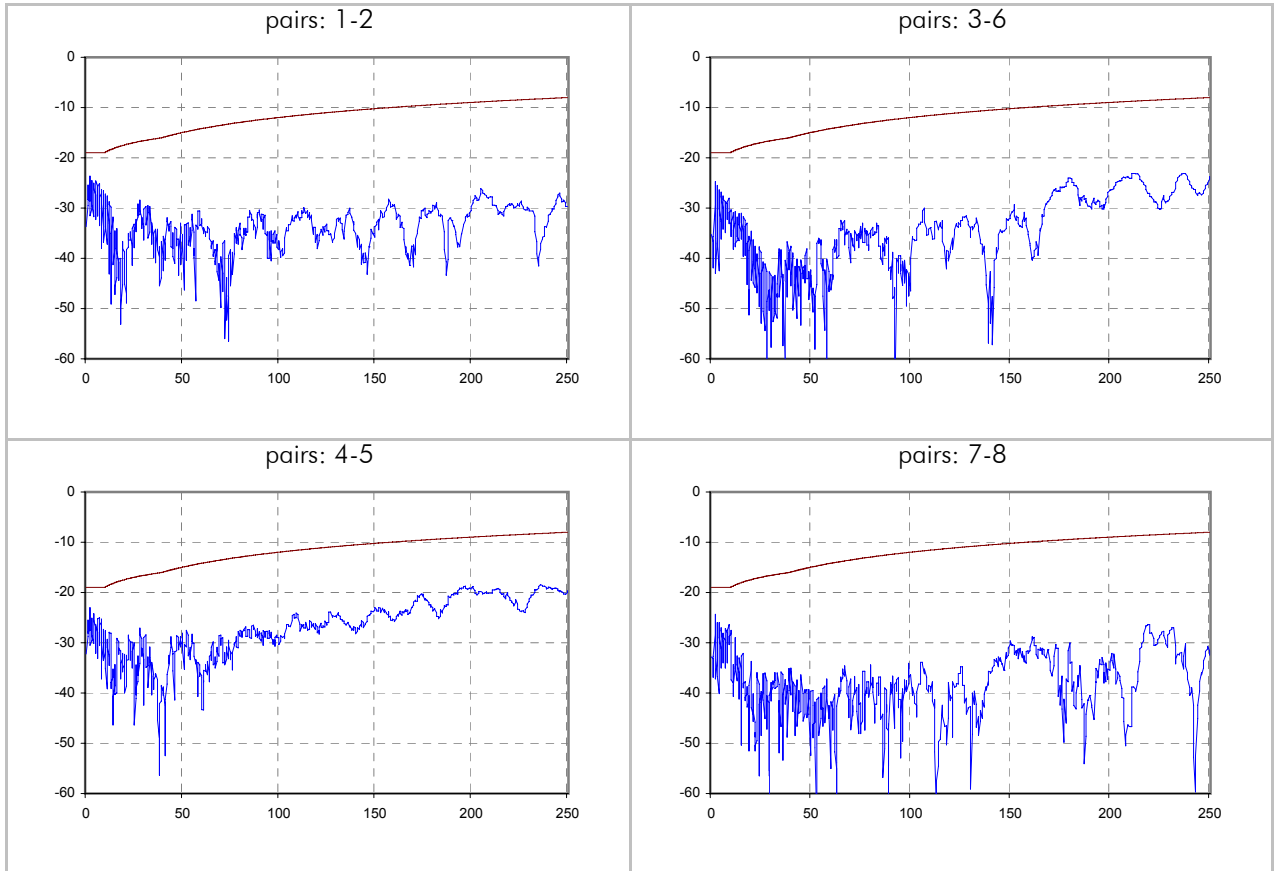
PSACR / dB (scanner side - type 1 side)



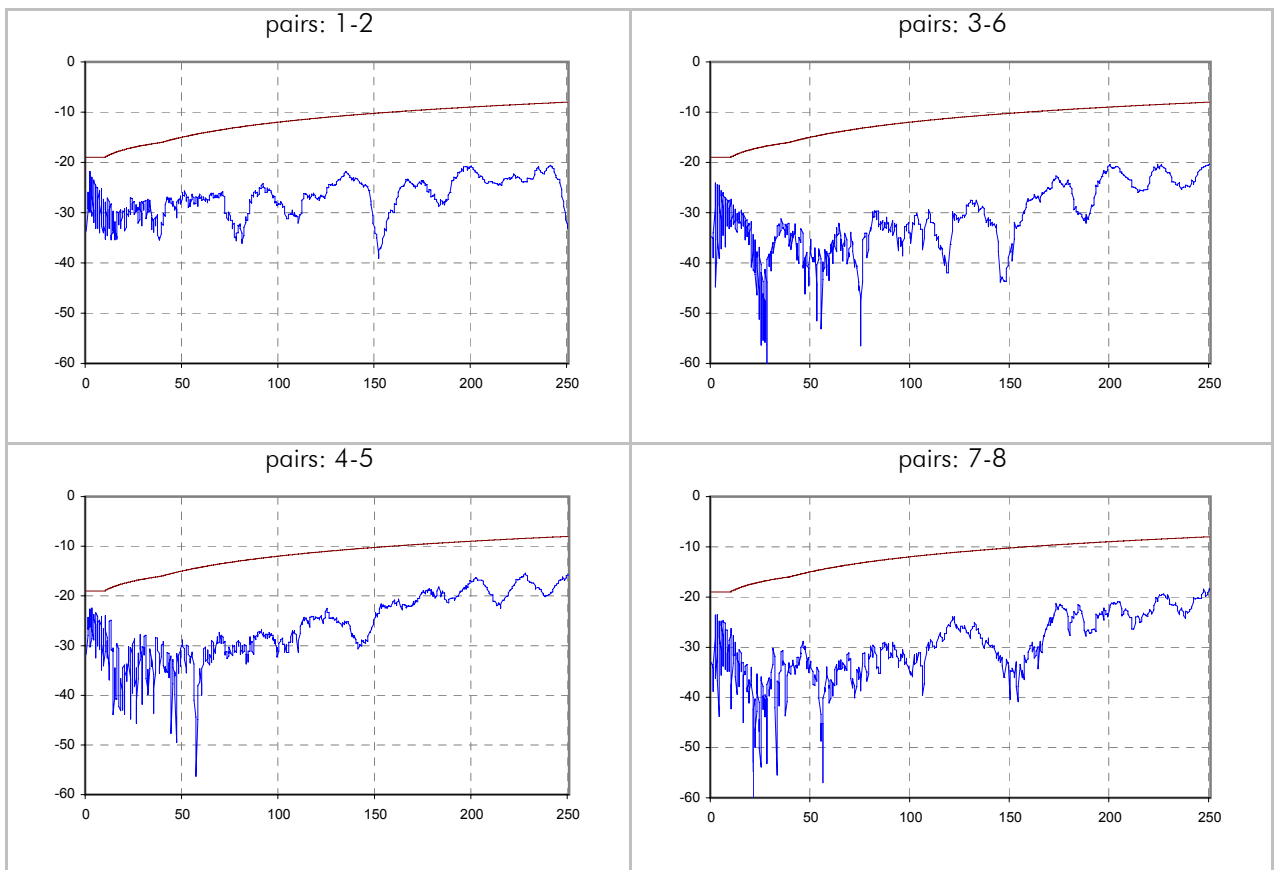
PSACR / dB (remote side - type 2 side)



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



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



Attenuation / dB

