

Test Report No. EWA20026-51

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 Category 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:	Belden 7860E

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 = -10,9 dB and @ 250 MHz = -8,7 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:

- 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

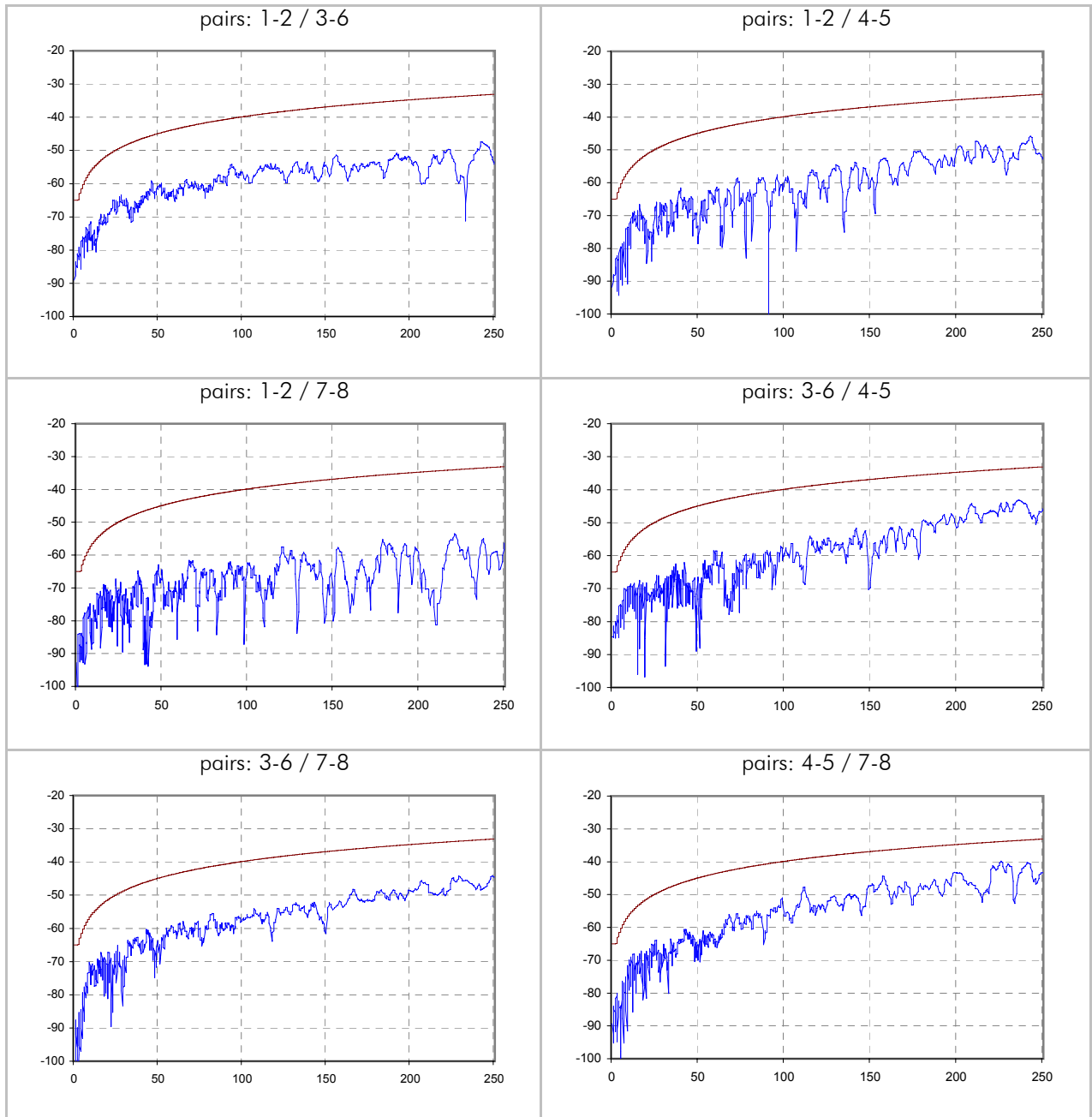
Test Results

pairs	1-2	3-6	4-5	7-8	limit	skew / ns	limit
max Propagation delay / ns	505,0	527,0	518,0	496,0	546,3	31,0	50,0
Attenuation @ 100 MHz / dB	-19,3	-20,0	-19,6	-19,4	-21,7		
Attenuation @ 250 MHz / dB	-30,8	-32,5	-31,5	-31,6	-21,7		
min PSNEXT margin / dB	12,1	6,6	6,1	7,7			
@ f / MHZ	16,7	237,1	26,2	226,3			
PSNEXT limit / dB	-50,3	-30,6	-47,0	-30,9			
PSNEXT @ 100 MHz	-53,0	-48,3	-49,0	-49,0	-37,1		
PSNEXT @ 250 MHz	-45,1	-39,4	-41,5	-40,4	-30,2		
min PSELFEXT margin / dB	14,2	7,1	7,0	12,6			
@ f / MHZ	1,4	231,7	1,4	216,0			
PSELFEXT limit / dB	-57,3	-13,0	-57,3	-13,6			
PSELFEXT @ 100 MHz	-34,9	-29,6	-28,6	-34,7	-20,3		
PSELFEXT @ 250 MHz	-32,9	-20,0	-20,9	-25,1	-12,3		
min PSACR margin / dB	12,9	7,3	6,8	10,7			
@ f / MHZ	16,7	10,0	9,7	10,9			
PSACR limit / dB	41,8	47,5	47,7	46,6			
PSACR @ 100 MHz	36,3	33,7	32,1	32,0	15,4		
PSACR @ 250 MHz	18,3	9,5	11,7	9,2	-5,7		
min Return Loss margin / dB	4,9	5,0	4,3	3,0			
@ f / MHZ	2,1	2,1	2,1	2,1			
Return Loss limit / dB	-19,0	-19,0	-19,0	-19,0			

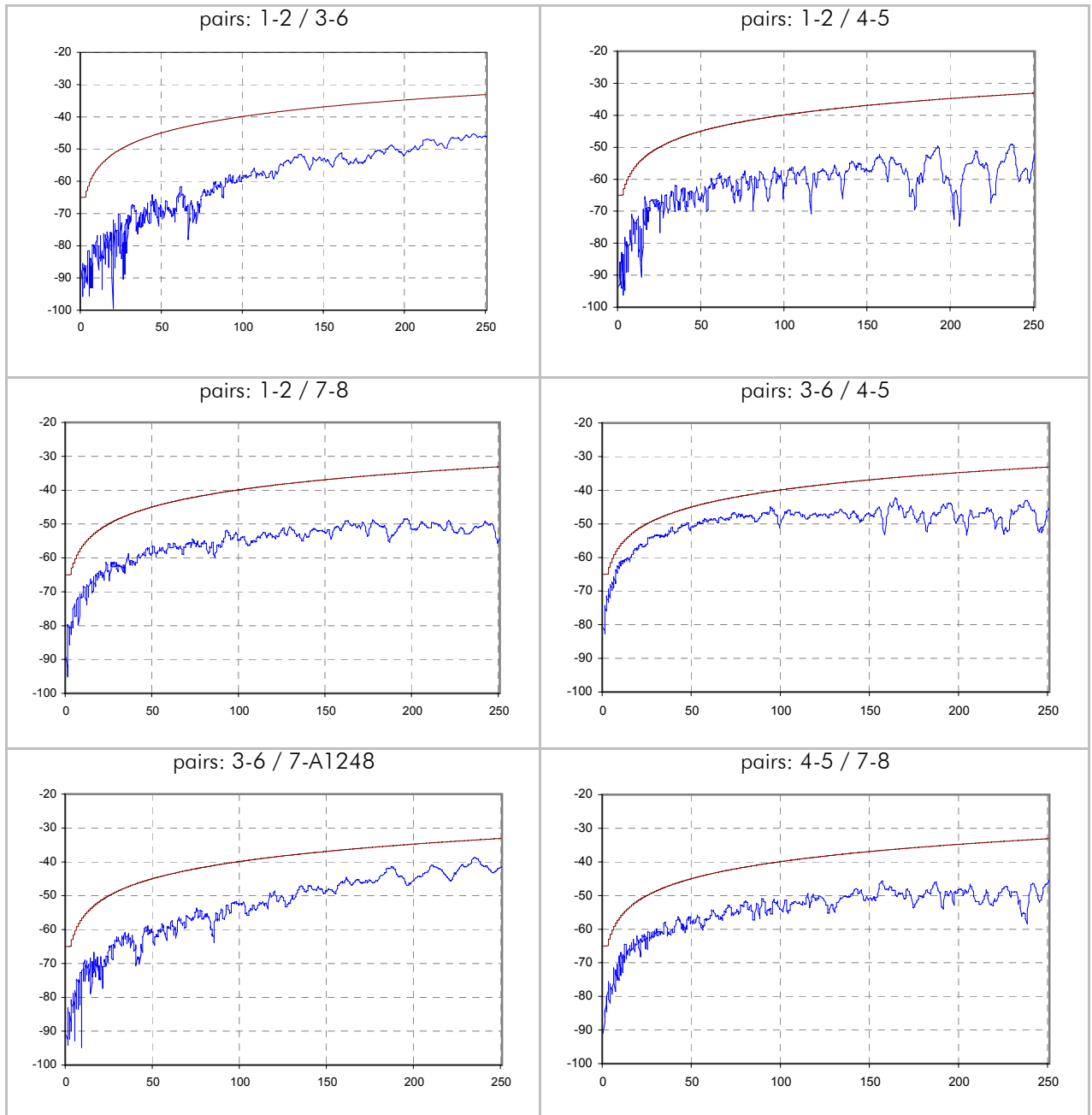
pairs	1-2 / 3-6	1-2 / 4-5	1-2 / 7-8	3-6 / 4-5	3-6 / 7-8	4-5 / 7-8	limit
min NEXT margin / dB	11,8	12,5	10,7	4,2	5,1	5,9	
@ f / MHZ	242,5	16,7	23,5	39,2	235,3	226,3	
Next limit / dB	-33,3	-52,9	-50,5	-46,8	-33,6	-33,9	
NEXT @ 100 MHz	-56,9	-62,5	-54,8	-50,8	-52,8	-52,6	-39,9
NEXT @ 250 MHz	-46,0	-51,9	-55,6	-46,3	-41,8	-43,4	-33,1
min ACR margin / dB	14,6	13,1	11,4	5,0	8,5	9,4	
@ f / MHZ	46,8	16,7	23,5	26,2	234,4	226,3	
ACR limit / dB	31,0	44,4	40,4	39,0	-1,1	-0,1	
ACR @ 100 MHz	36,9	42,9	35,4	30,8	32,8	33,0	18,2
ACR @ 250 MHz	13,5	20,3	24,0	13,9	9,3	11,8	-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	18,1	12,1	23,1	4,6	10,9	10,0	
@ f / MHZ	1,0	1,4	229,0	231,7	250,1	208,3	
ELFEXT limit / dB	-63,6	-60,3	-16,1	-16,0	-15,3	-16,9	
min ELFEXT margin / dB	16,7	11,7	22,6	5,2	12,0	10,9	
@ f / MHZ	246,1	198,9	246,1	1,2	250,1	210,1	
ELFEXT limit / dB	-15,4	-17,3	-15,4	-61,8	-15,3	-16,8	
ELFEXT @ 100 MHz	-44,4	-35,4	-54,6	-30,2	-38,8	-36,4	-23,3
ELFEXT @ 250 MHz	-38,1	-35,8	-39,9	-21,1	-26,6	-27,5	-15,3
ELFEXT @ 100 MHz	-43,7	-35,1	-54,5	-30,6	-39,4	-36,6	-23,3
ELFEXT @ 250 MHz	-36,4	-35,0	-39,0	-22,1	-27,4	-27,4	-15,3

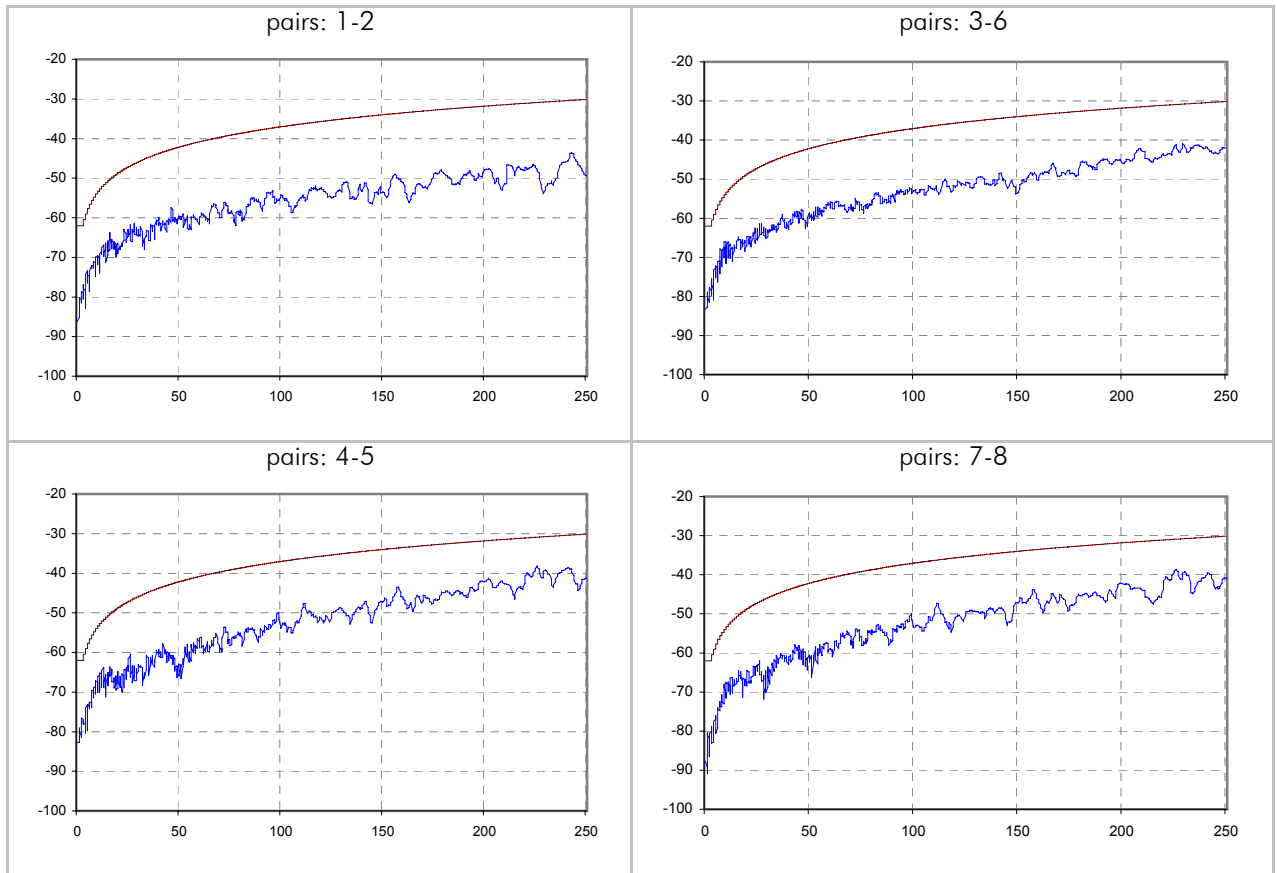
NEXT / dB (scanner side - type 1 side)



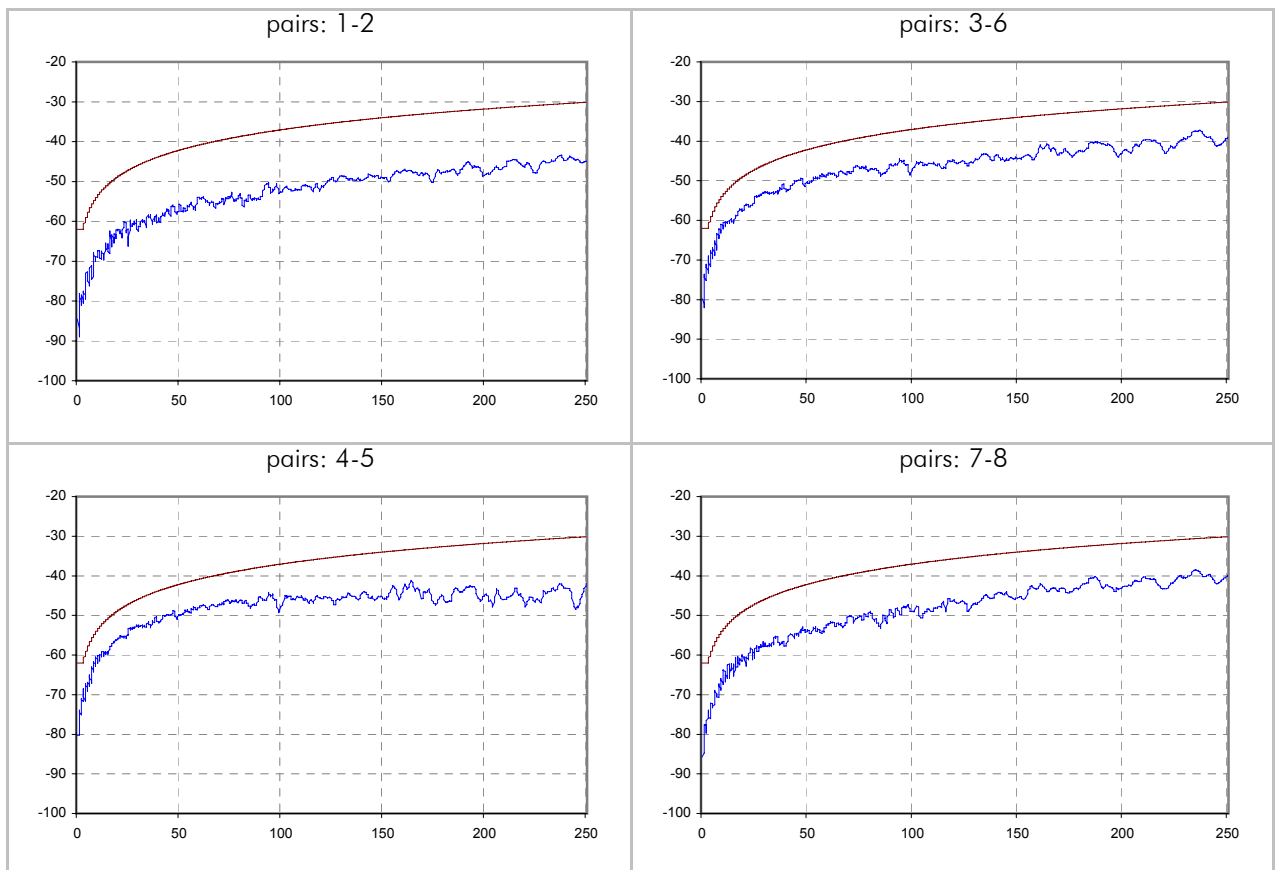
NEXT / dB (remote side - type 2 side)



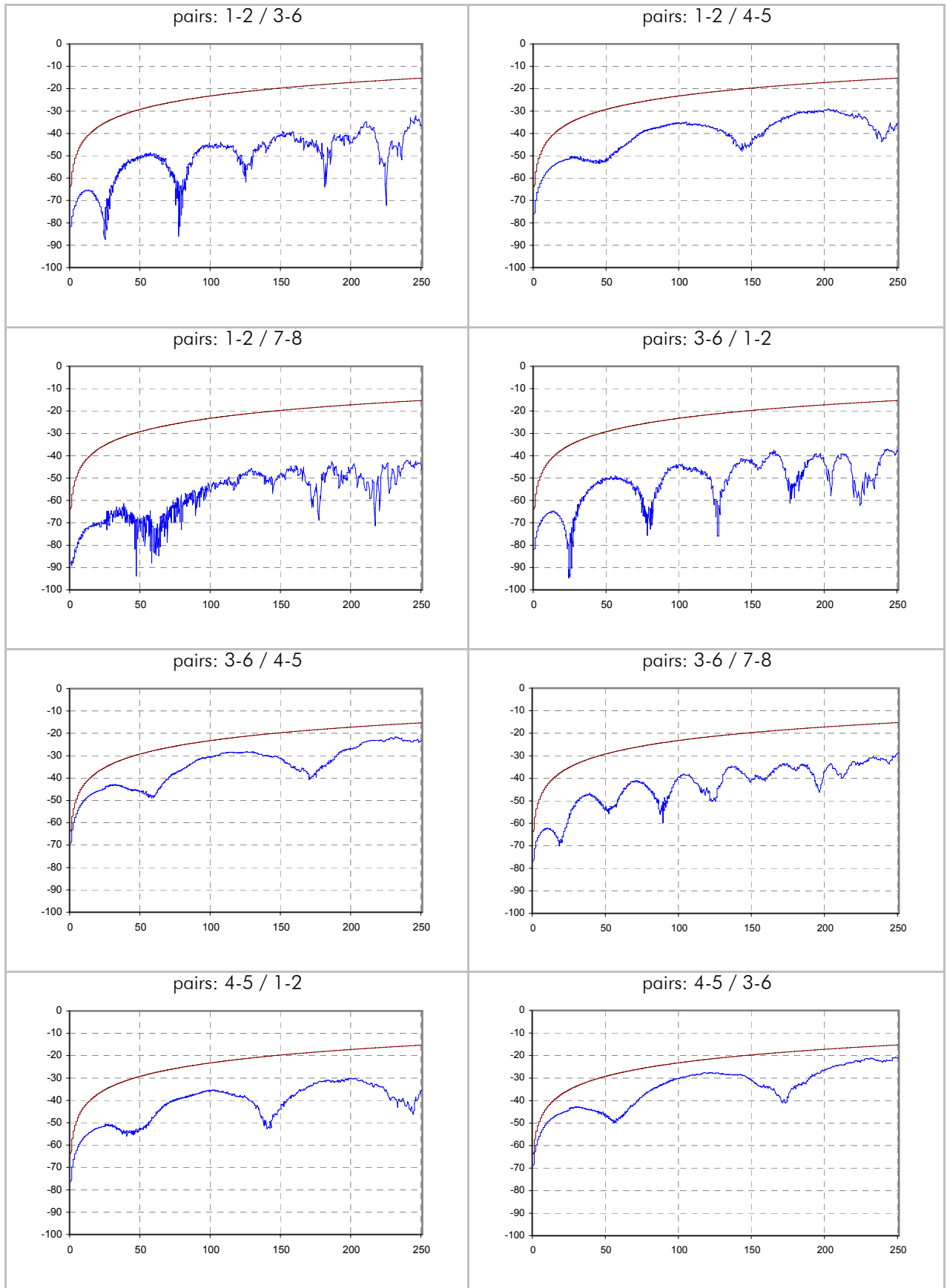
PSNEXT / dB (scanner side - type 1 side)



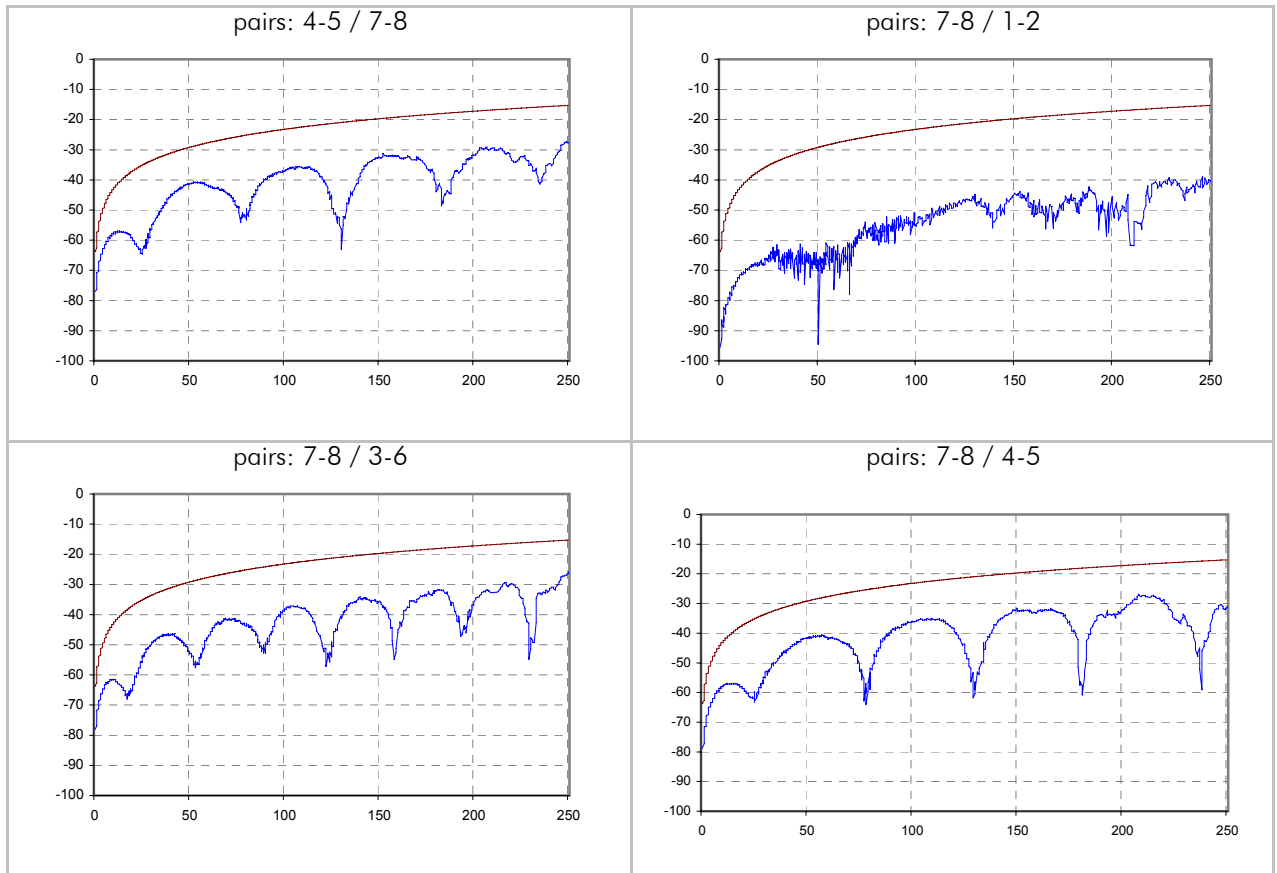
PSNEXT / dB (remote side - type 2 side)



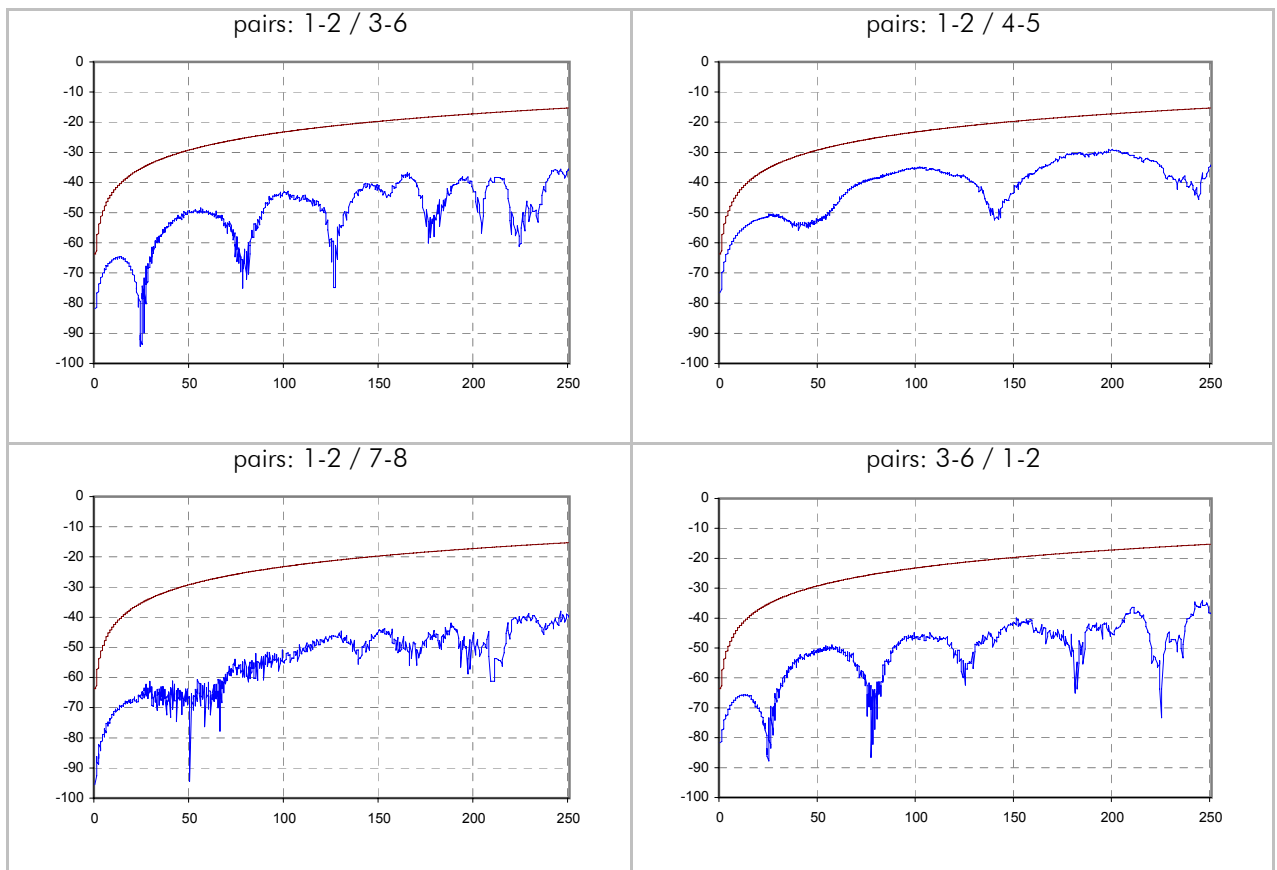
ELFEXT / dB (scanner side - type 1 side)



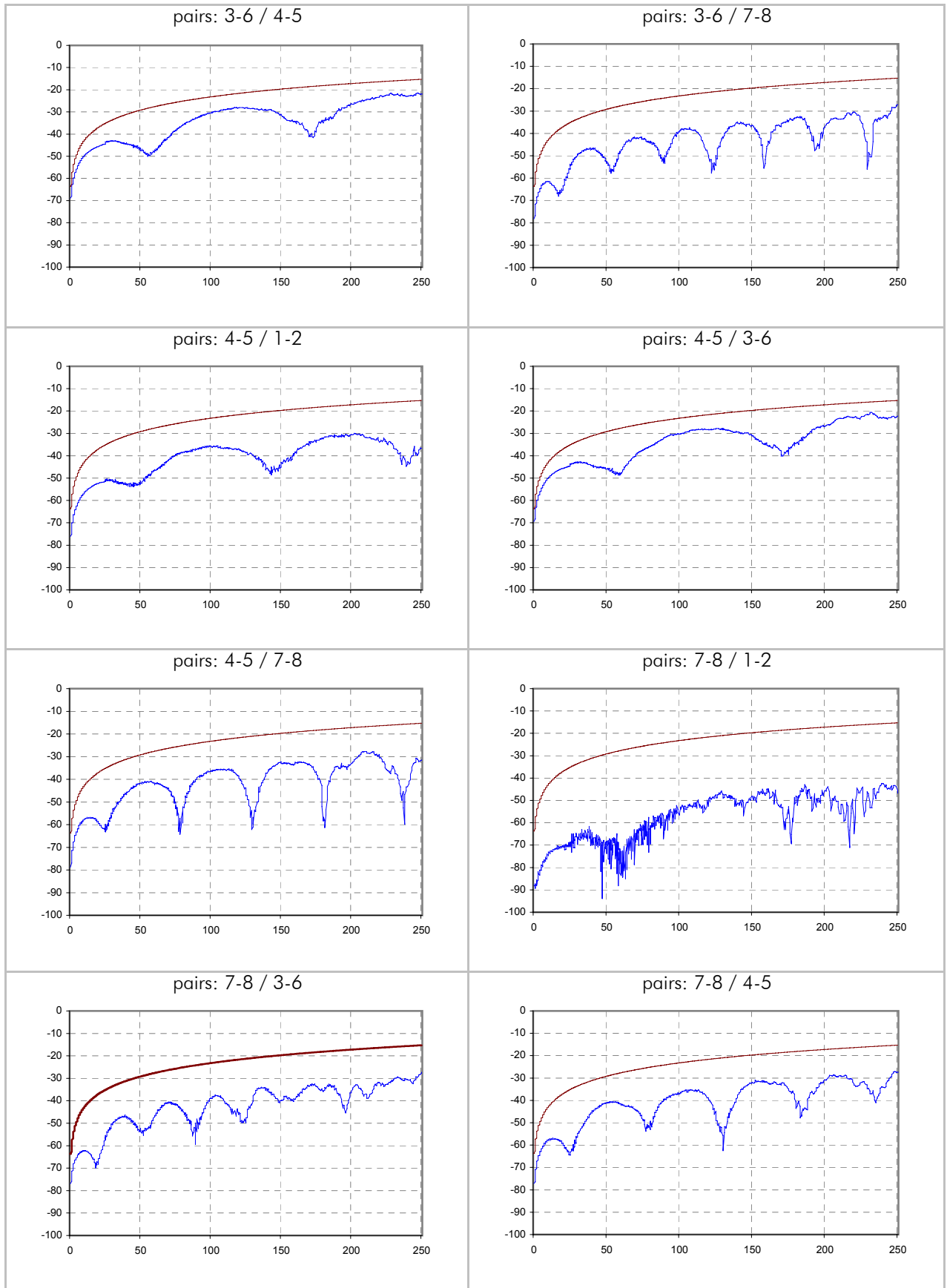
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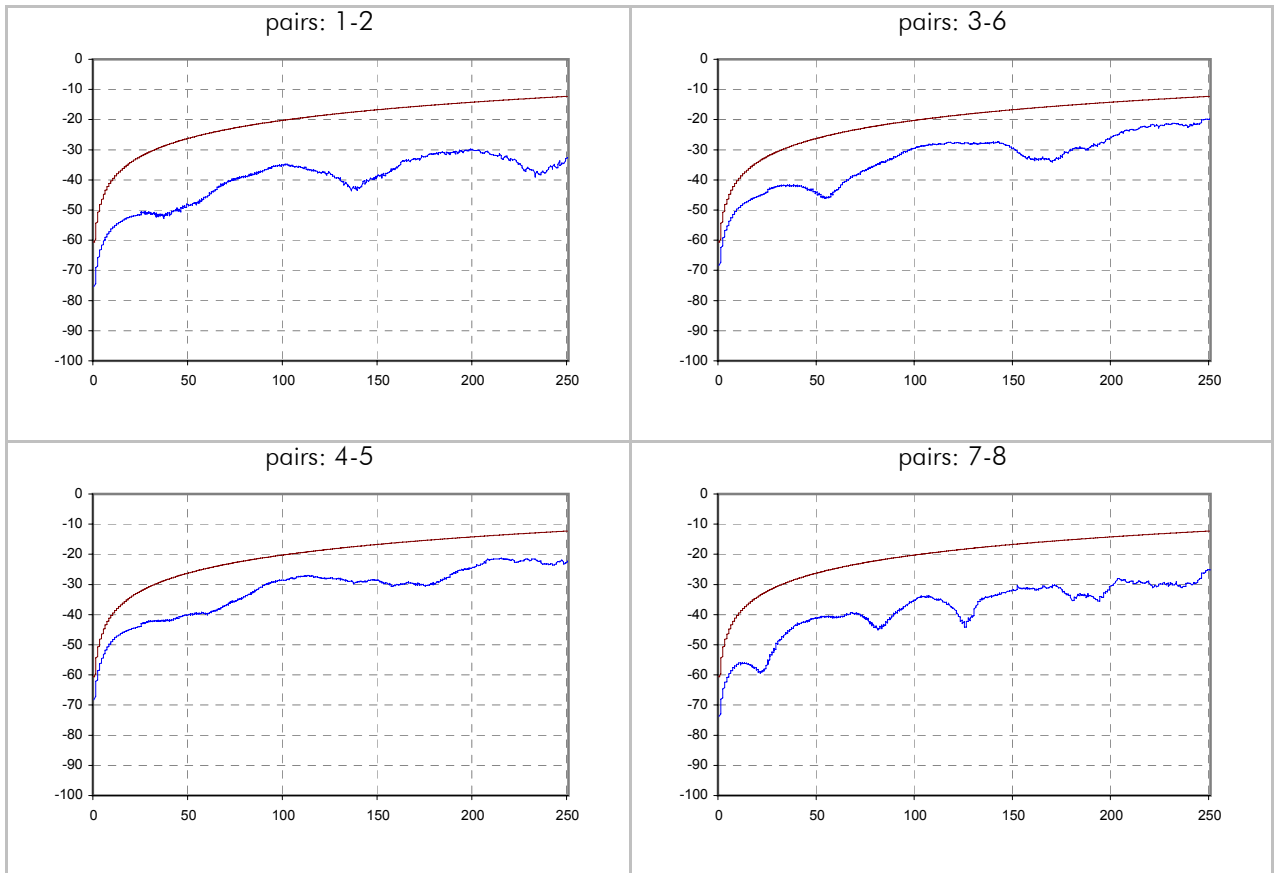
ELFEXT / dB (remote side - type 2 side)



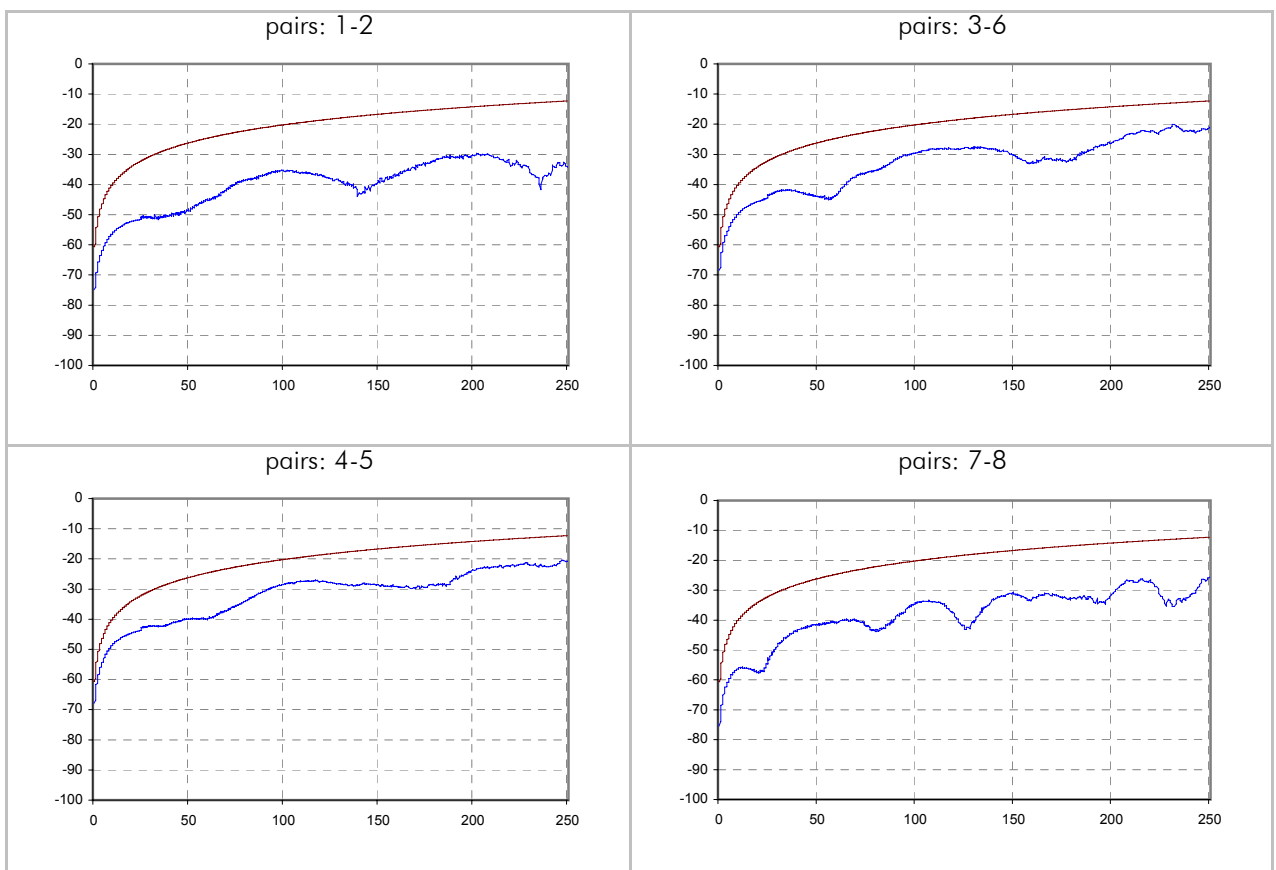
ELFEXT / dB (remote side - type 2 side)



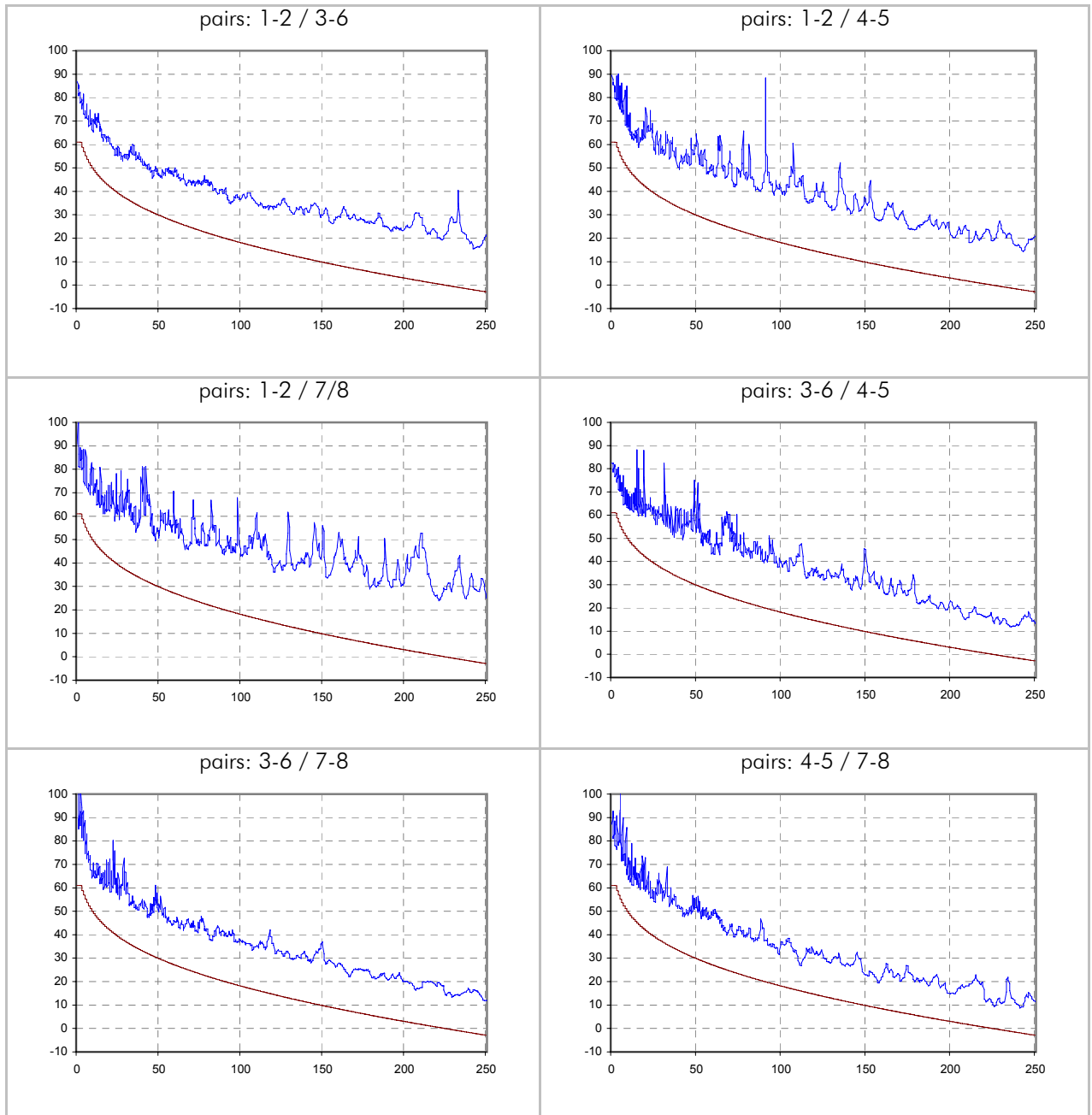
PSELFEXT / dB (scanner side - type 1 side)



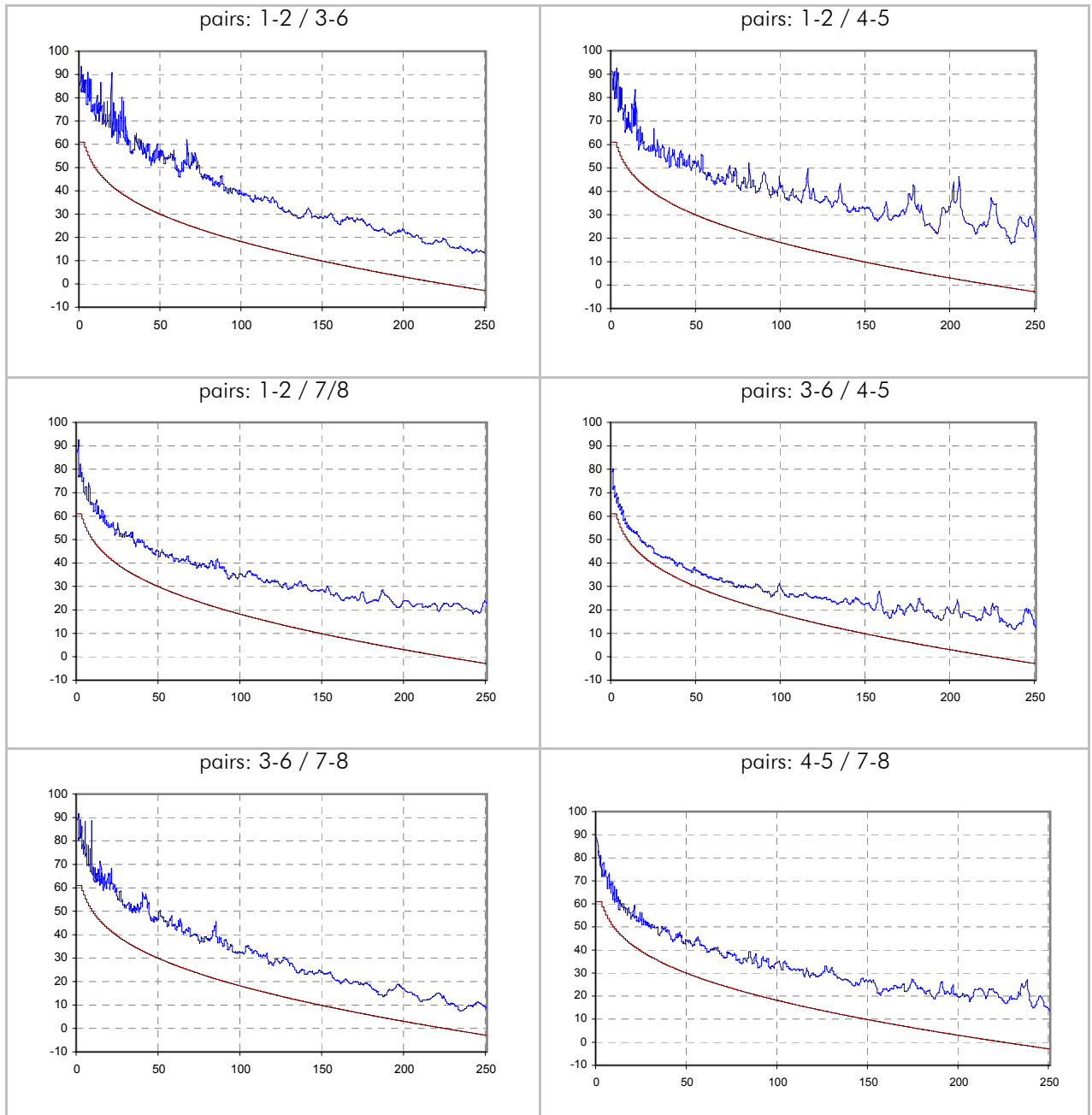
PSELFEXT / dB (remote side - type 2 side)



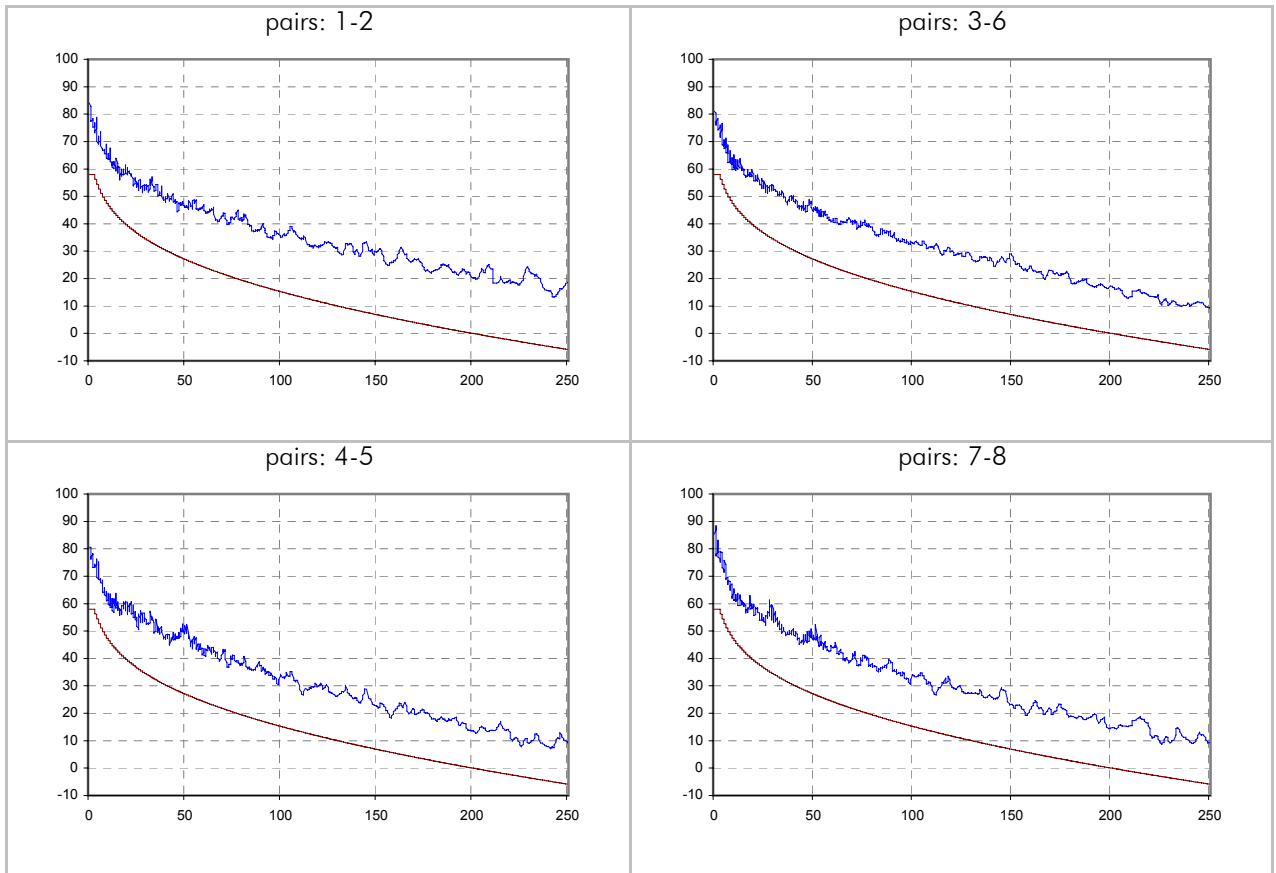
ACR / dB (scanner side - type 1 side)



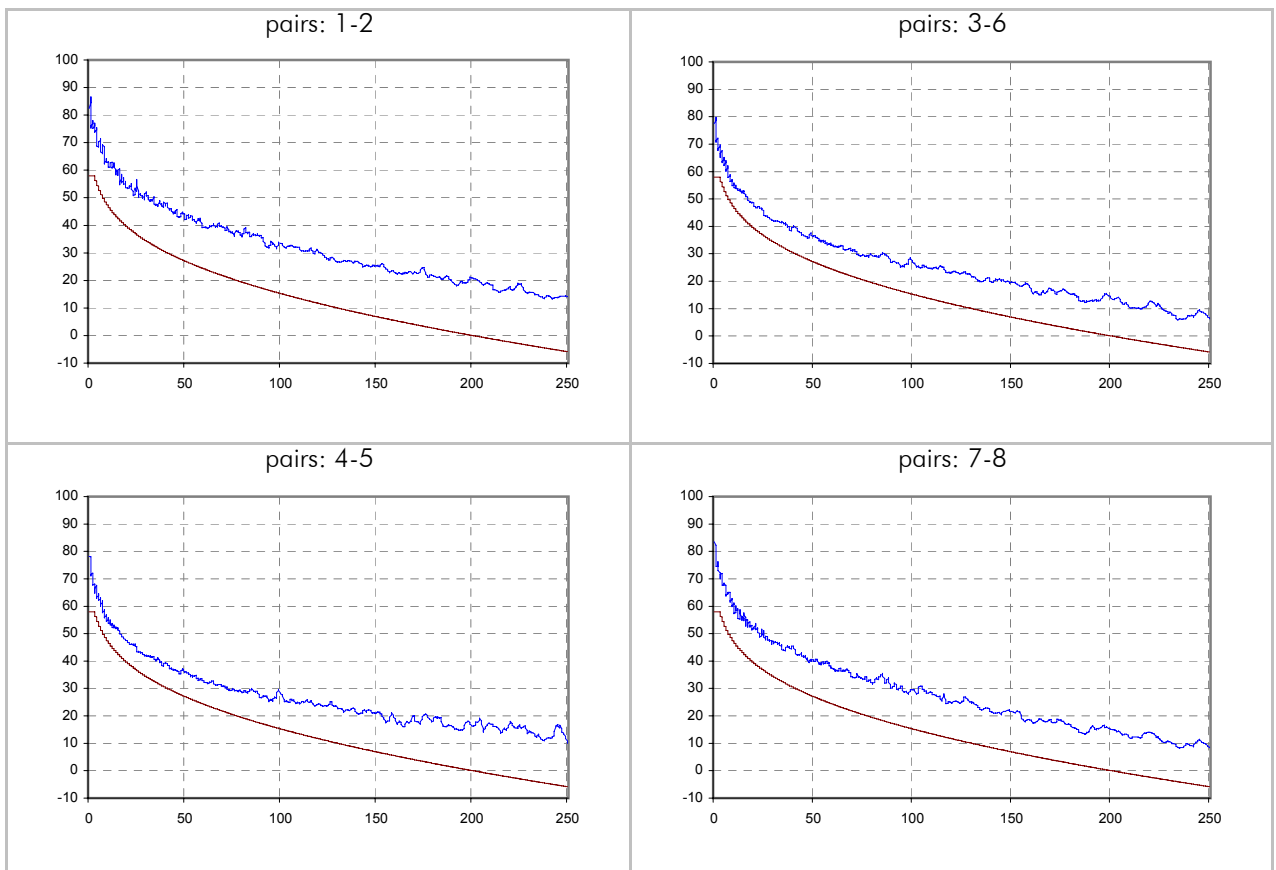
ACR / dB (remote side - type 2 side)



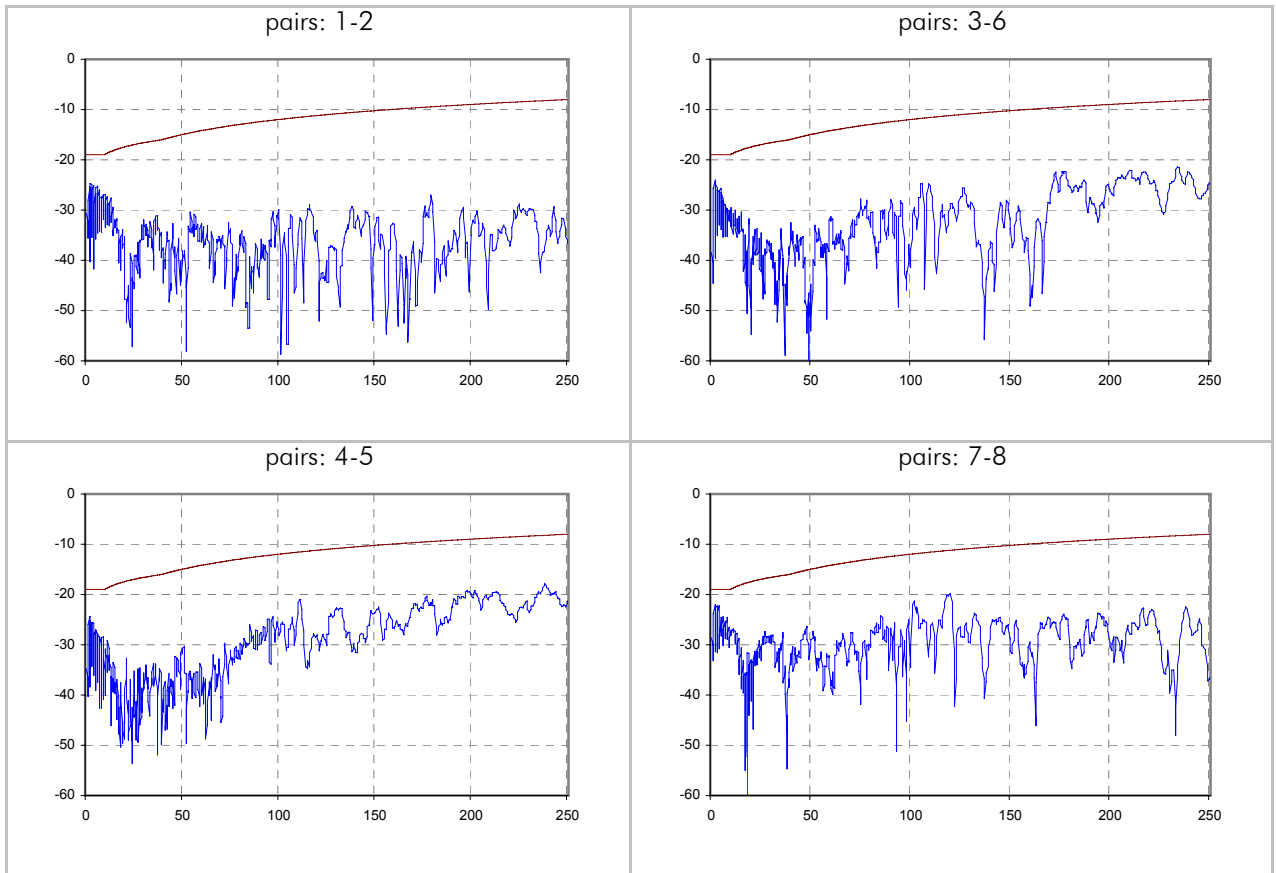
PSACR / dB (scanner side - type 1 side)



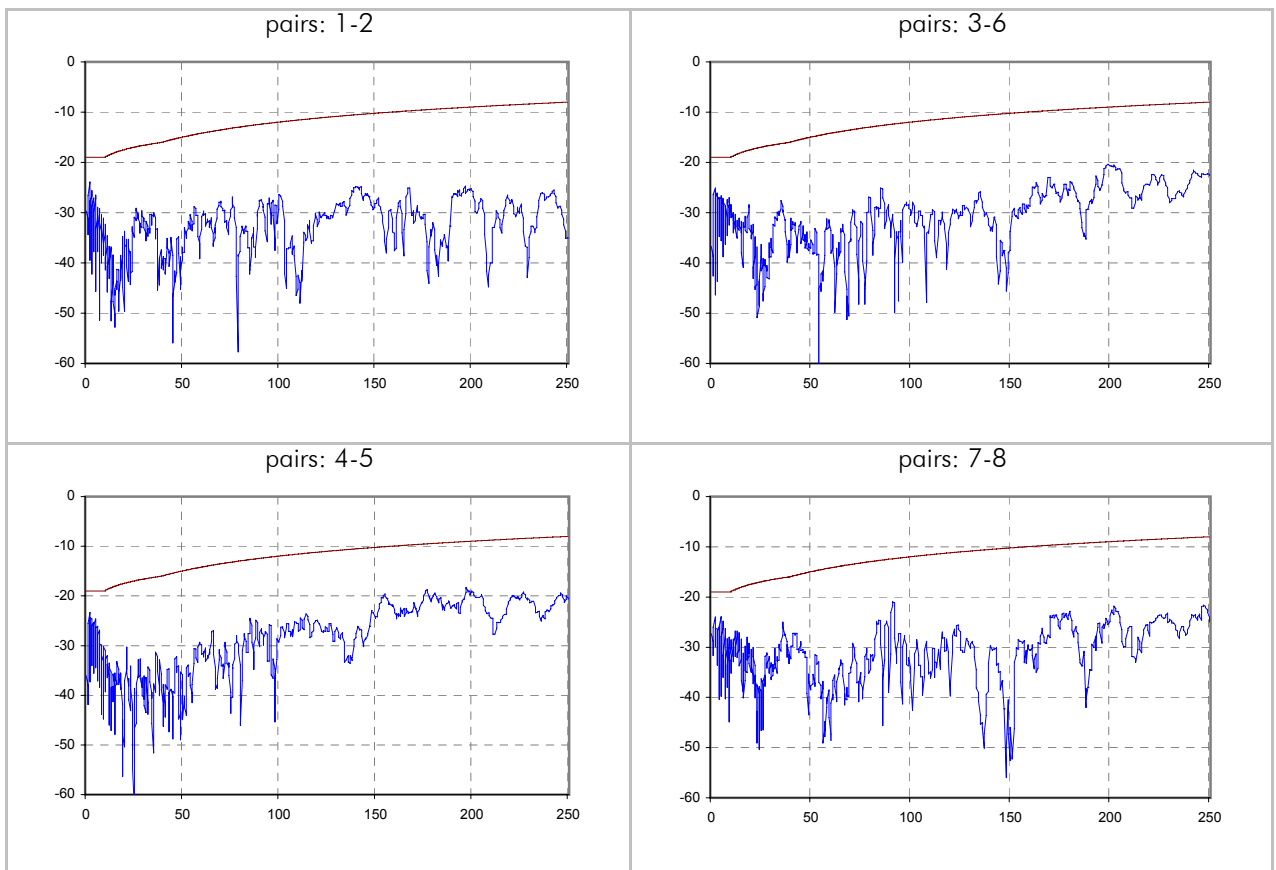
PSACR / dB (remote side - type 2 side)



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



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



Attenuation / dB

