

Test Report No. EWA20026-53

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:	Belden 1885 ENH

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 = -11,5 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

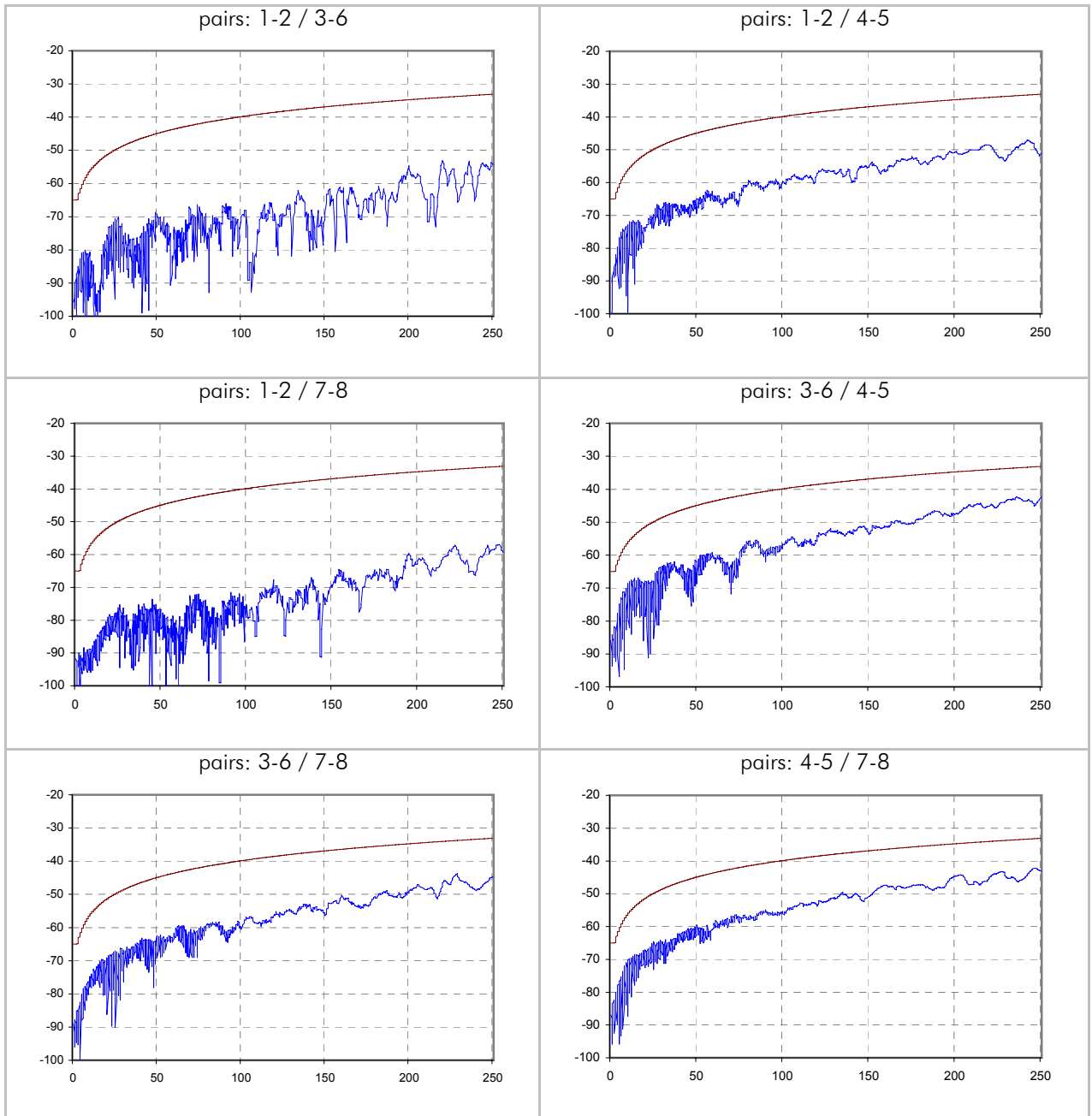
Test Results

pairs	1-2	3-6	4-5	7-8	limit	skew / ns	limit
max Propagation delay / ns	461,0	455,0	458,0	455,0	546,3	6,0	50,0
Attenuation @ 100 MHz / dB	-18,9	-18,9	-19,0	-18,7	-21,7		
Attenuation @ 250 MHz / dB	-30,5	-30,7	-30,4	-30,8	-21,7		
min PSNEXT margin / dB	13,8	5,3	8,8	8,2			
@ f / MHZ	234,4	233,5	238,9	233,5			
PSNEXT limit / dB	-30,6	-30,7	-30,5	-30,7			
PSNEXT @ 100 MHz	-56,2	-49,4	-49,3	-51,1	-37,1		
PSNEXT @ 250 MHz	-47,5	-39,0	-39,8	-40,8	-30,2		
min PSELFEXT margin / dB	13,7	7,7	7,1	12,8			
@ f / MHZ	1,0	1,0	1,0	1,0			
PSELFEXT limit / dB	-60,6	-60,6	-60,6	-60,6			
PSELFEXT @ 100 MHz	-40,0	-32,7	-32,6	-39,1	-20,3		
PSELFEXT @ 250 MHz	-28,8	-29,5	-24,0	-26,3	-12,3		
min PSACR margin / dB	17,4	10,1	10,1	13,6			
@ f / MHZ	4,3	4,3	30,4	23,5			
PSACR limit / dB	55,6	55,6	34,3	37,7			
PSACR @ 100 MHz	41,5	36,4	33,9	35,8	15,4		
PSACR @ 250 MHz	18,7	10,0	12,1	10,2	-5,7		
min Return Loss margin / dB	4,6	5,0	4,3	4,5			
@ f / MHZ	2,3	2,3	2,5	2,3			
Return Loss limit / dB	-19,0	-19,0	-19,0	-19,0			

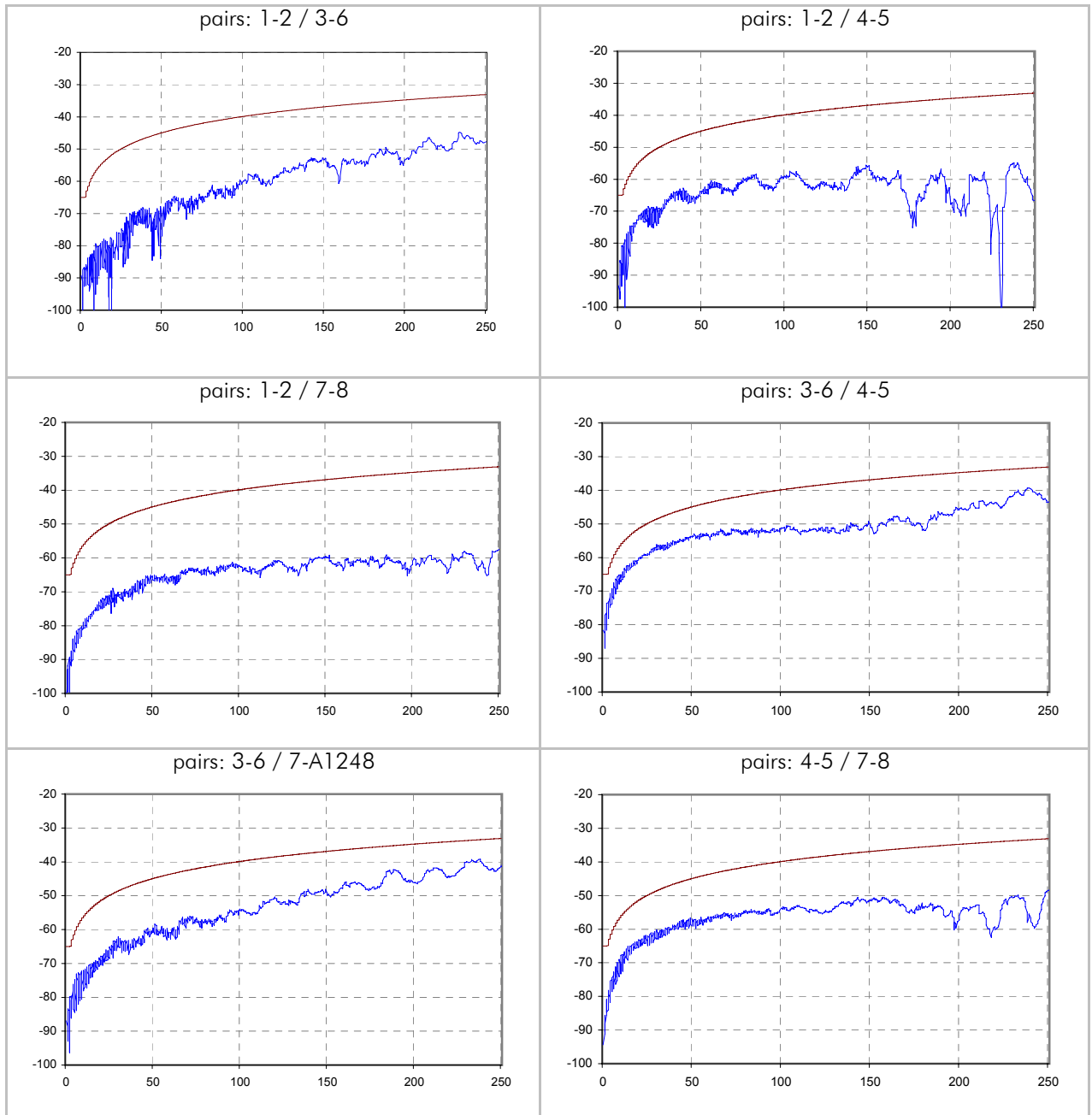
pairs	1-2 / 3-6	1-2 / 4-5	1-2 / 7-8	3-6 / 4-5	3-6 / 7-8	4-5 / 7-8	limit
min NEXT margin / dB	11,2	13,7	19,8	5,9	5,7	9,0	
@ f / MHZ	234,4	242,5	28,0	238,9	233,5	246,1	
Next limit / dB	-33,6	-33,3	-49,2	-33,5	-33,6	-33,2	
NEXT @ 100 MHz	-61,0	-59,7	-62,6	-51,4	-54,4	-54,5	-39,9
NEXT @ 250 MHz	-47,9	-51,9	-57,8	-43,1	-41,8	-43,0	-33,1
min ACR margin / dB	16,1	16,4	20,9	8,6	10,6	12,1	
@ f / MHZ	234,4	6,8	28,0	6,6	233,5	14,7	
ACR limit / dB	-1,1	53,9	38,2	54,2	-1,0	45,9	
ACR @ 100 MHz	42,1	40,8	43,7	32,4	35,5	35,5	18,2
ACR @ 250 MHz	17,2	21,4	27,0	12,3	11,0	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	18,0	11,4	24,0	5,6	12,3	10,7	
@ f / MHZ	191,7	1,0	1,0	1,0	1,0	242,5	
ELFEXT limit / dB	-17,6	-63,6	-63,6	-63,6	-63,6	-15,6	
min ELFEXT margin / dB	18,2	11,4	24,0	5,5	12,3	10,9	
@ f / MHZ	191,7	1,0	1,0	1,0	1,0	245,2	
ELFEXT limit / dB	-17,6	-63,6	-63,6	-63,6	-63,6	-15,5	
ELFEXT @ 100 MHz	-58,7	-40,0	-53,5	-33,7	-39,3	-49,3	-23,3
ELFEXT @ 250 MHz	-41,9	-29,0	-43,7	-30,4	-36,8	-26,6	-15,3
ELFEXT @ 100 MHz	-58,7	-39,9	-53,7	-33,6	-39,5	-49,6	-23,3
ELFEXT @ 250 MHz	-41,6	-29,0	-43,4	-30,7	-36,8	-26,3	-15,3

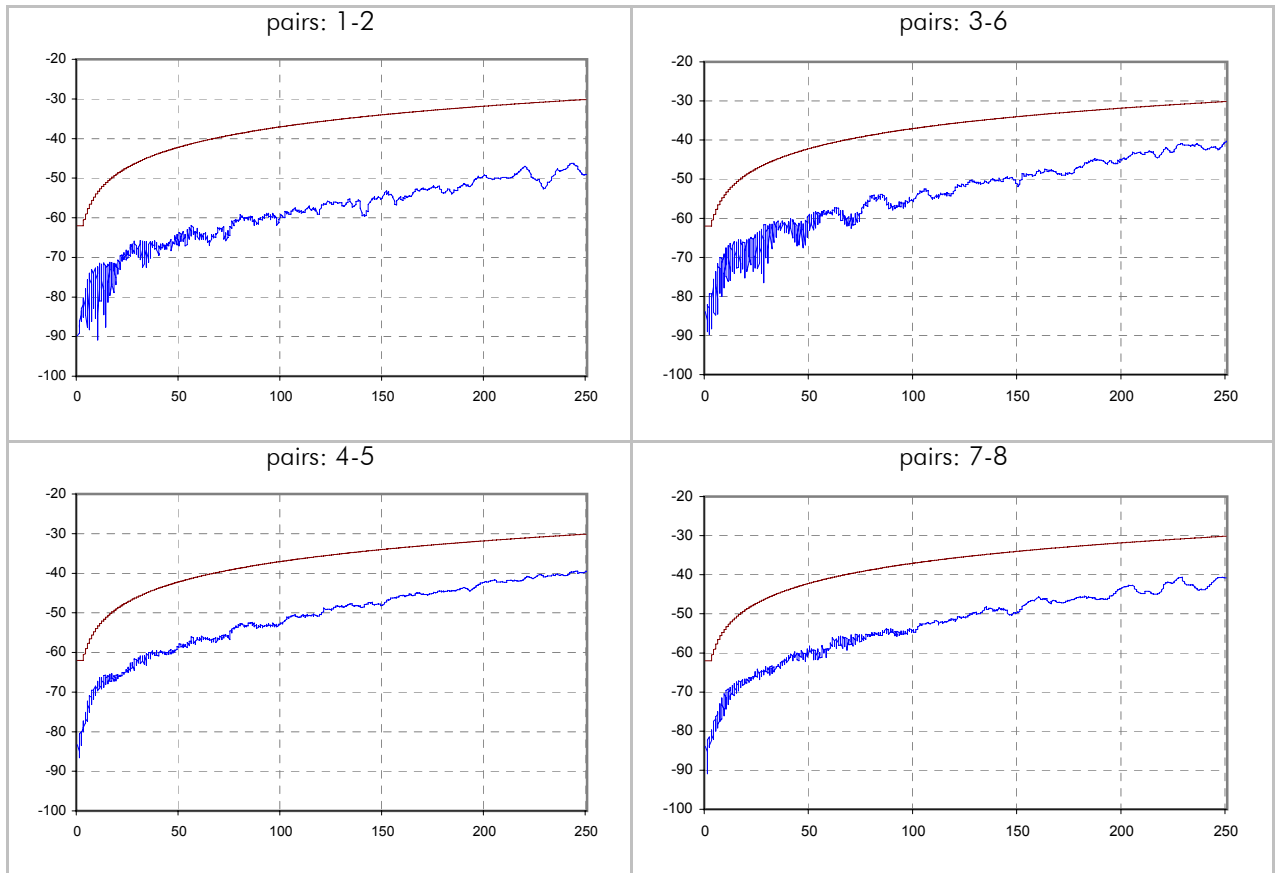
NEXT / dB (scanner side - type 1 side)



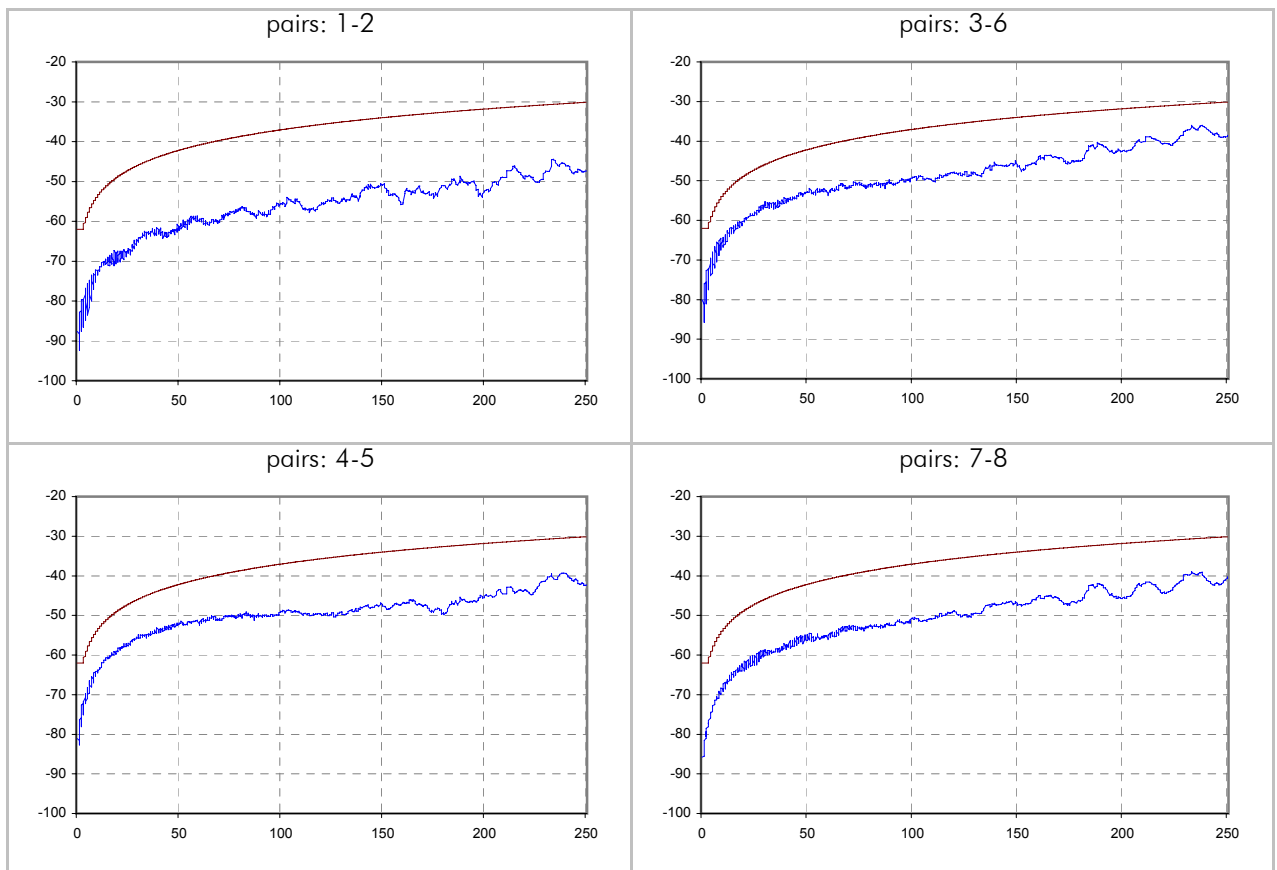
NEXT / dB (remote side - type 2 side)



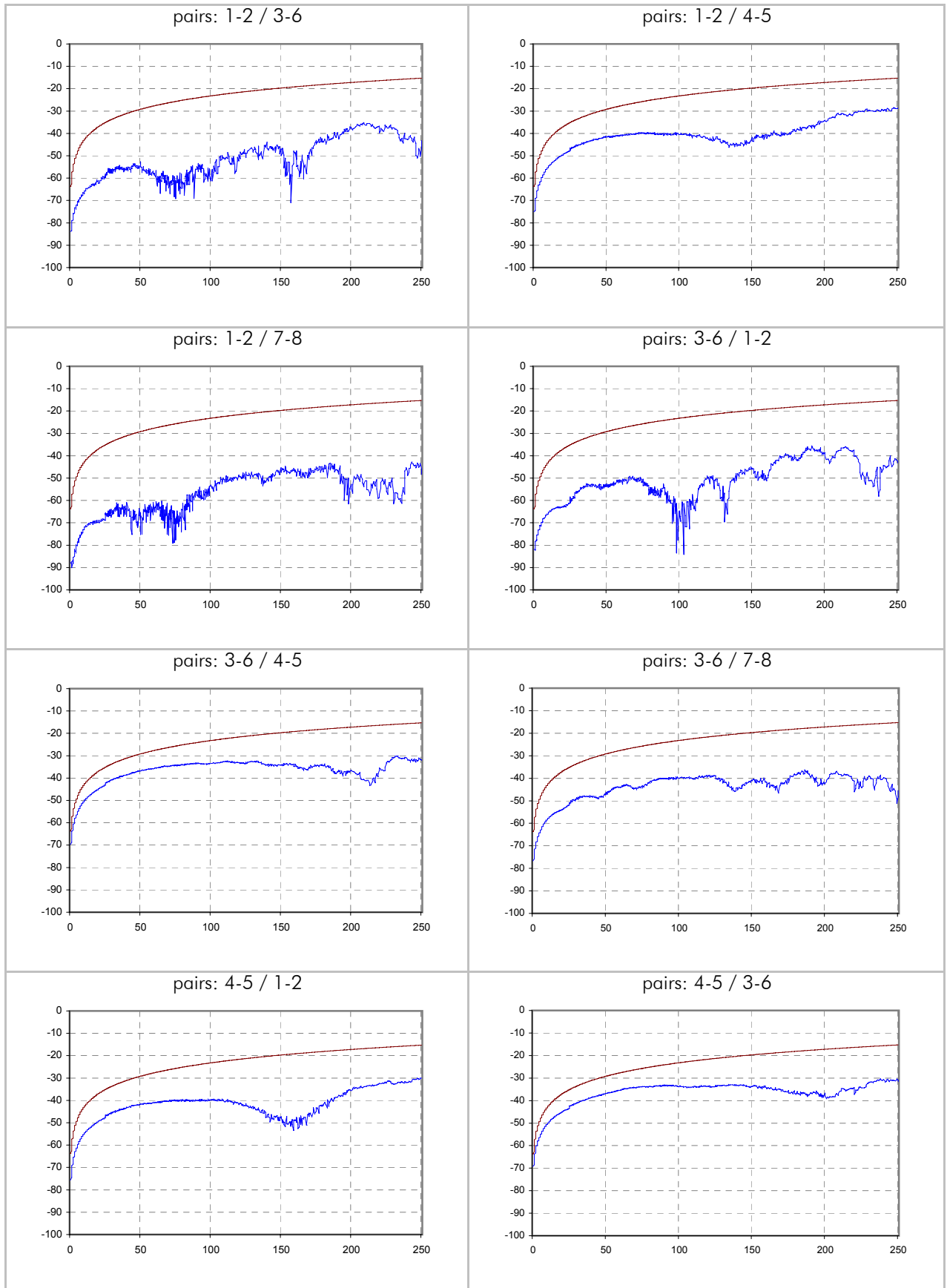
PSNEXT / dB (scanner side - type 1 side)



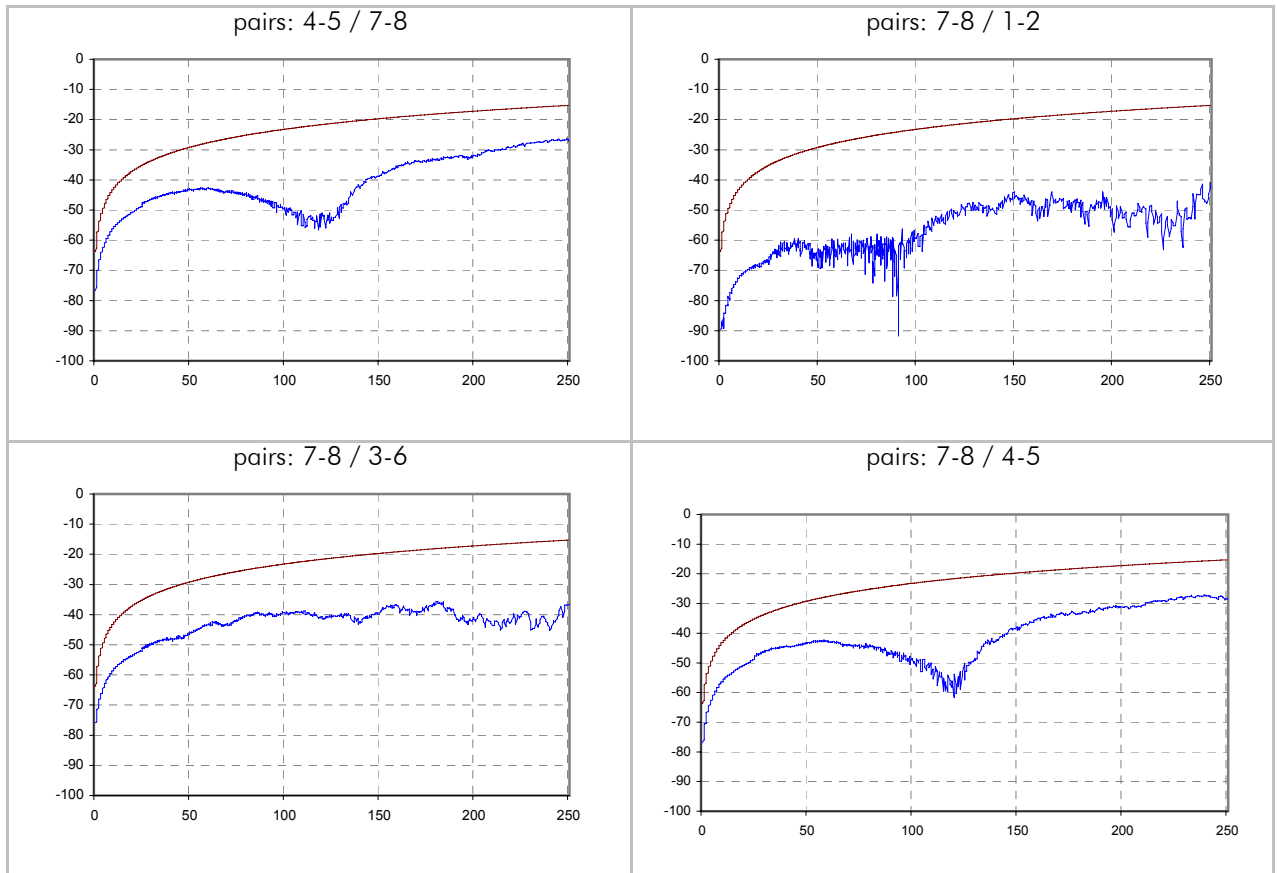
PSNEXT / dB (remote side - type 2 side)



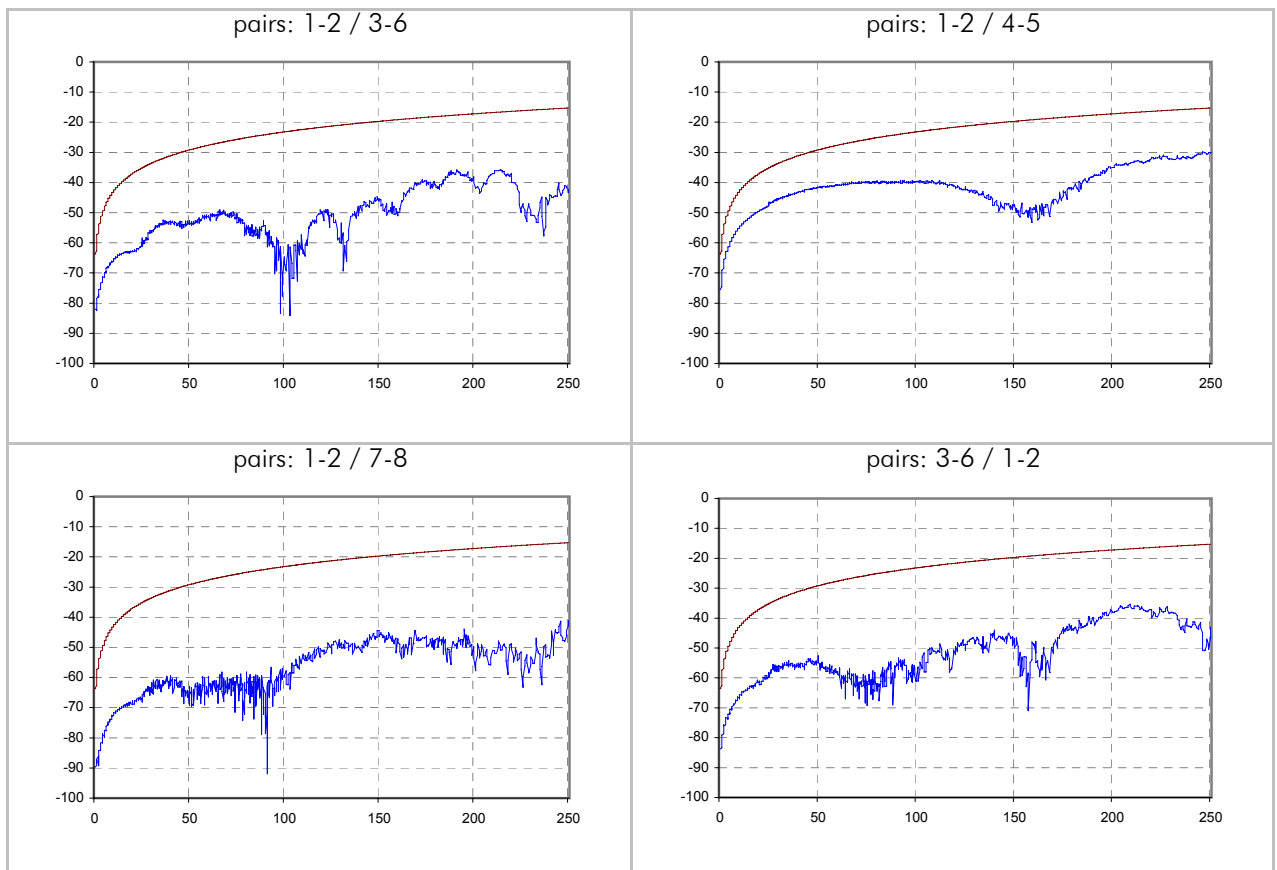
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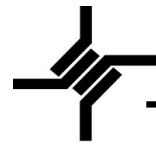


ELFEXT / dB (scanner side - type 1 side)

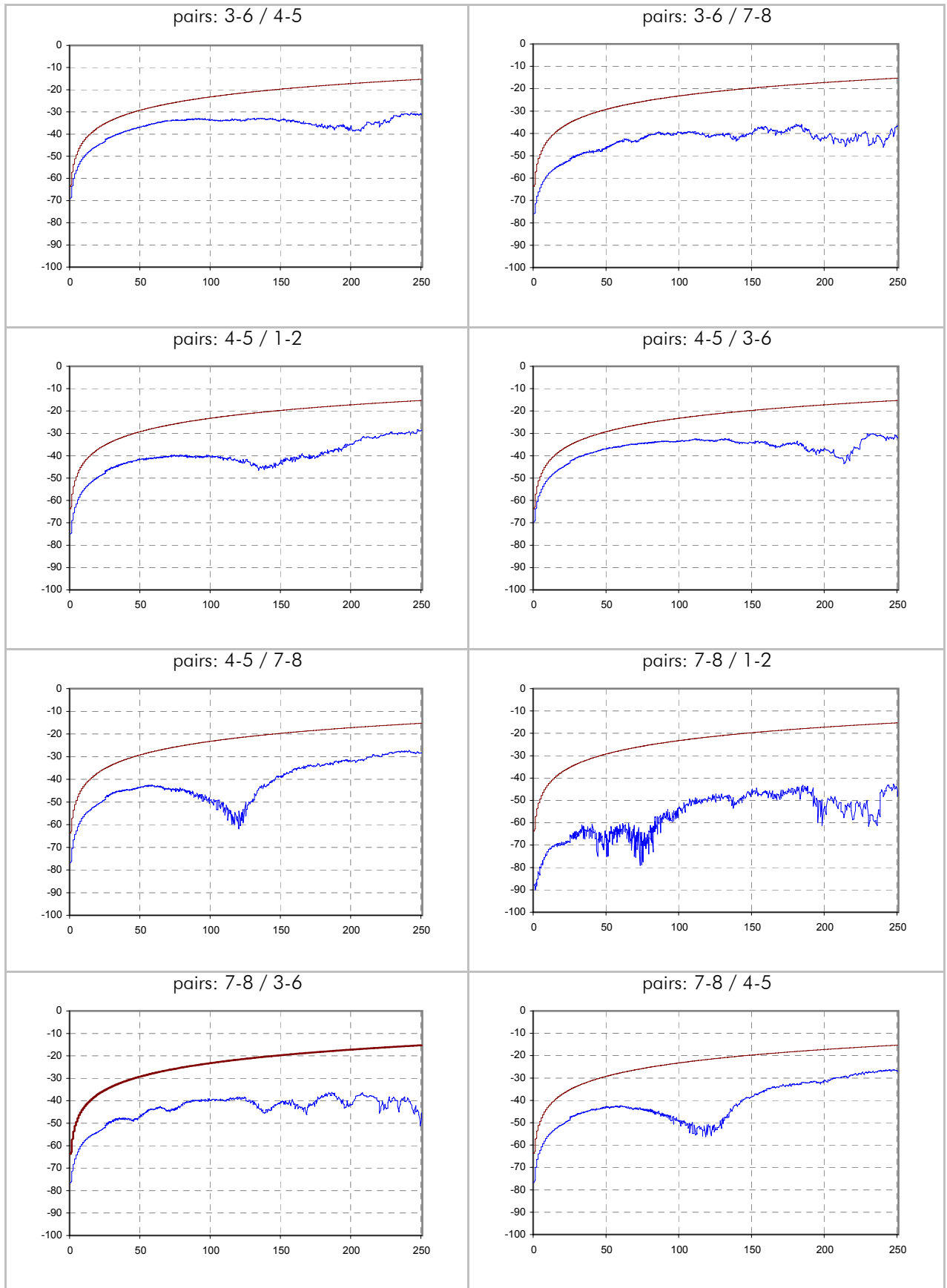


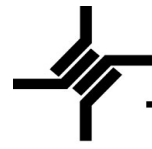
ELFEXT / dB (remote side - type 2 side)



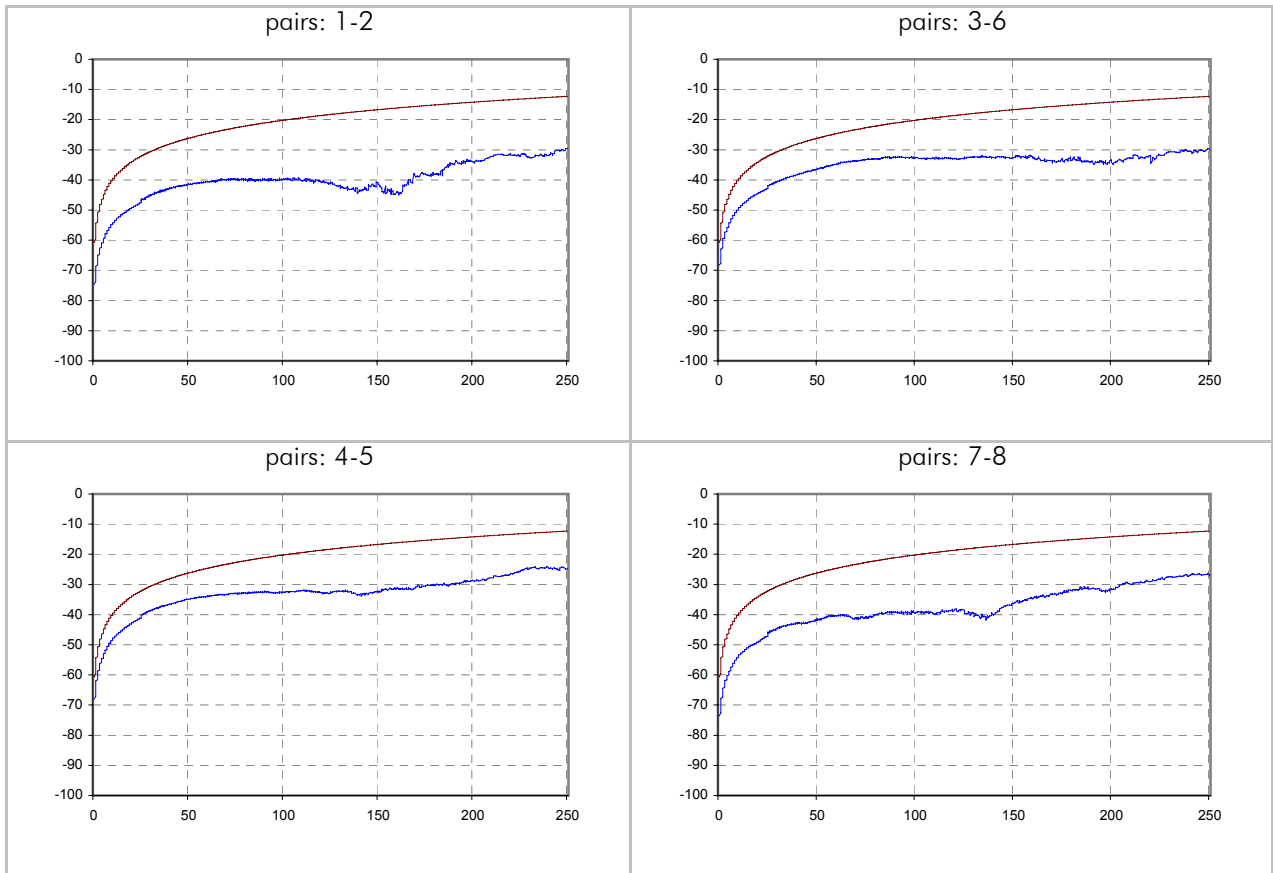


ELFEXT / dB (remote side - type 2 side)

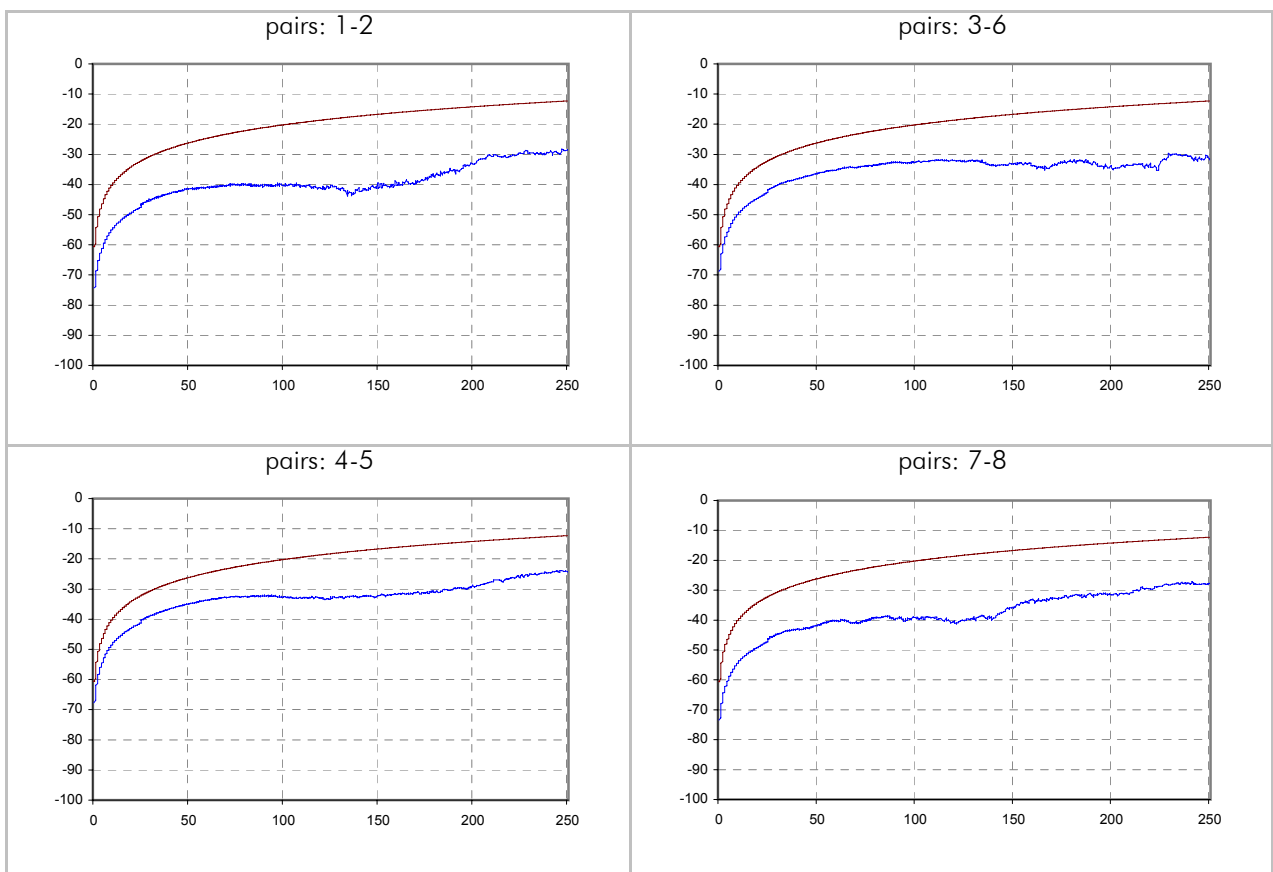




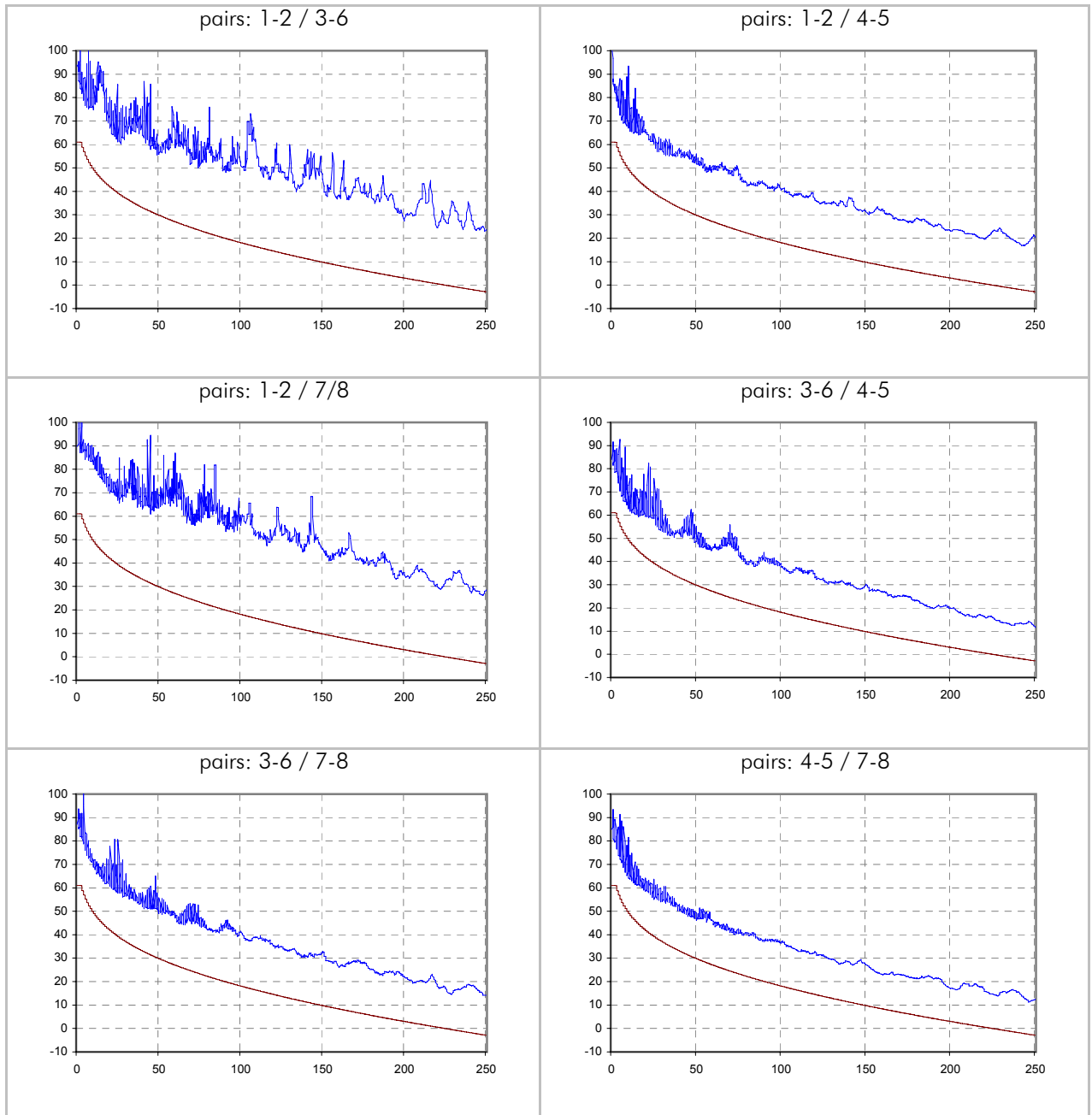
PSELFEXT / dB (scanner side - type 1 side)



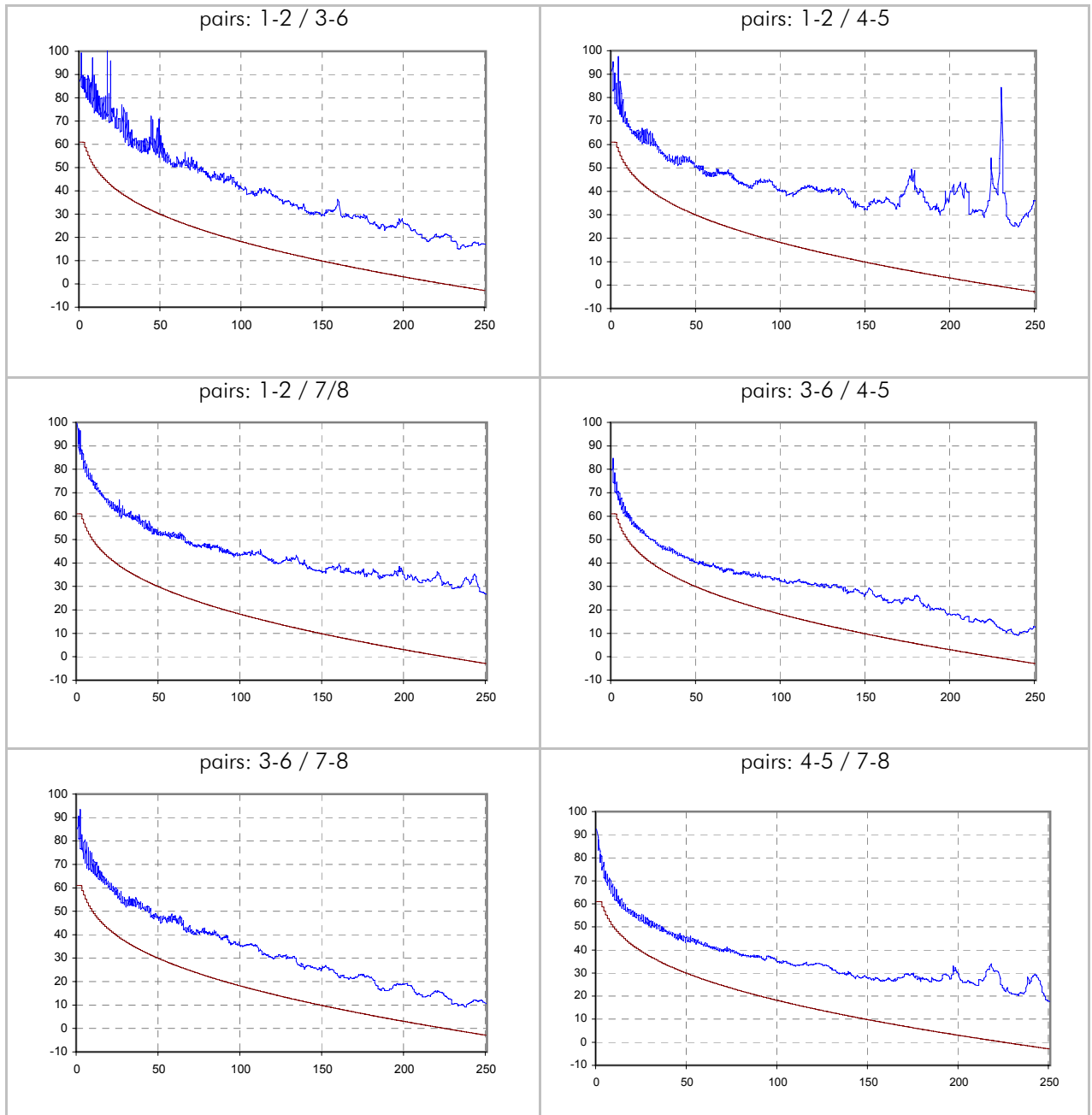
PSELFEXT / dB (remote side - type 2 side)



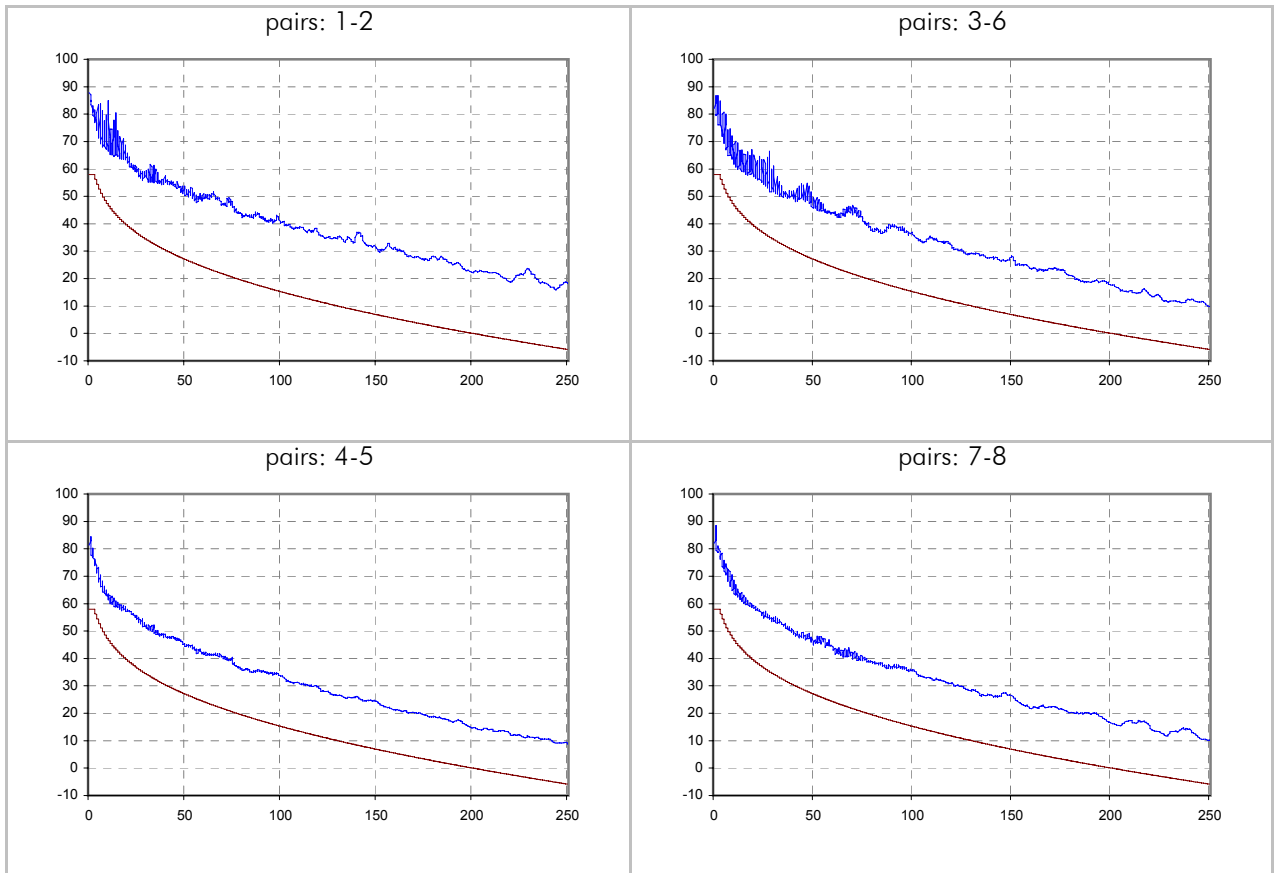
ACR / dB (scanner side - type 1 side)



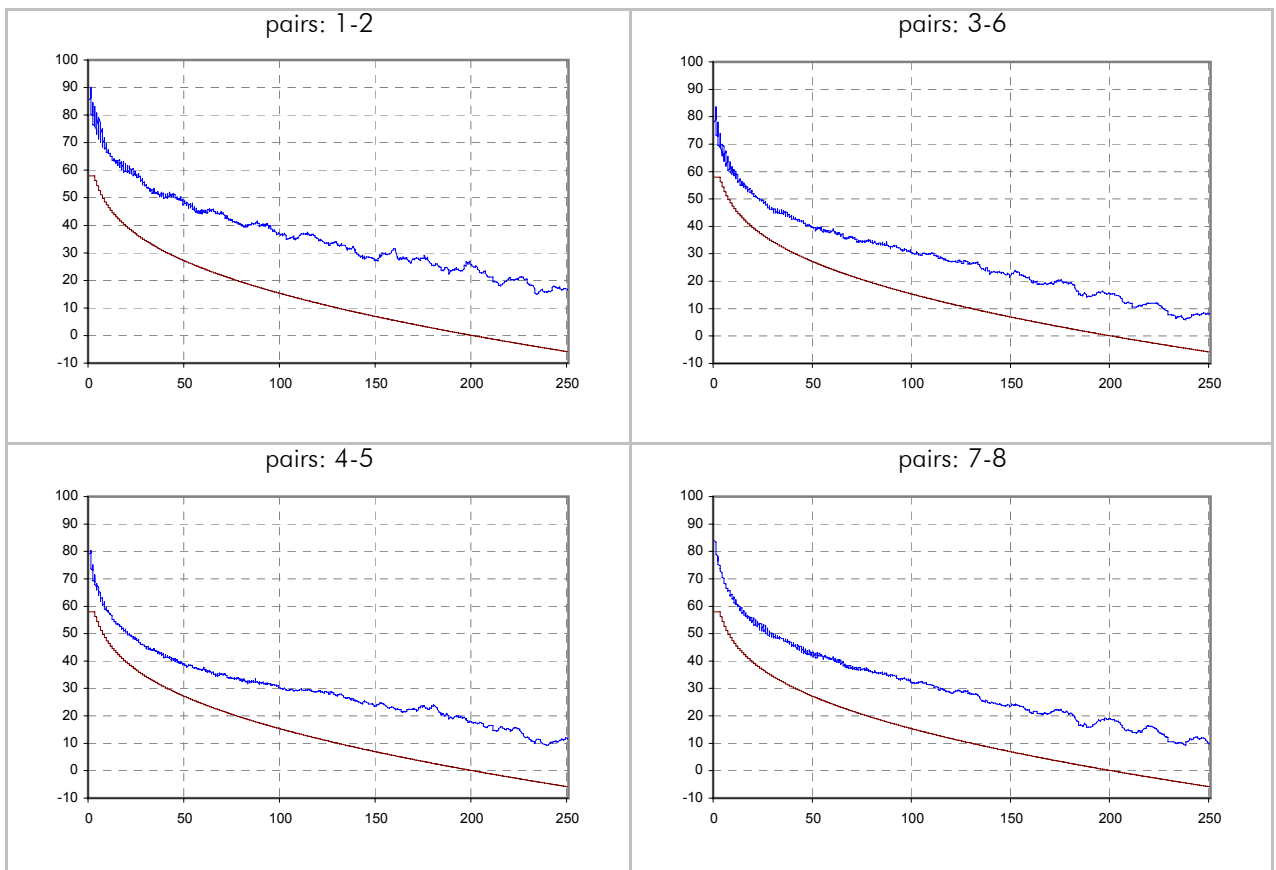
ACR / dB (remote side - type 2 side)



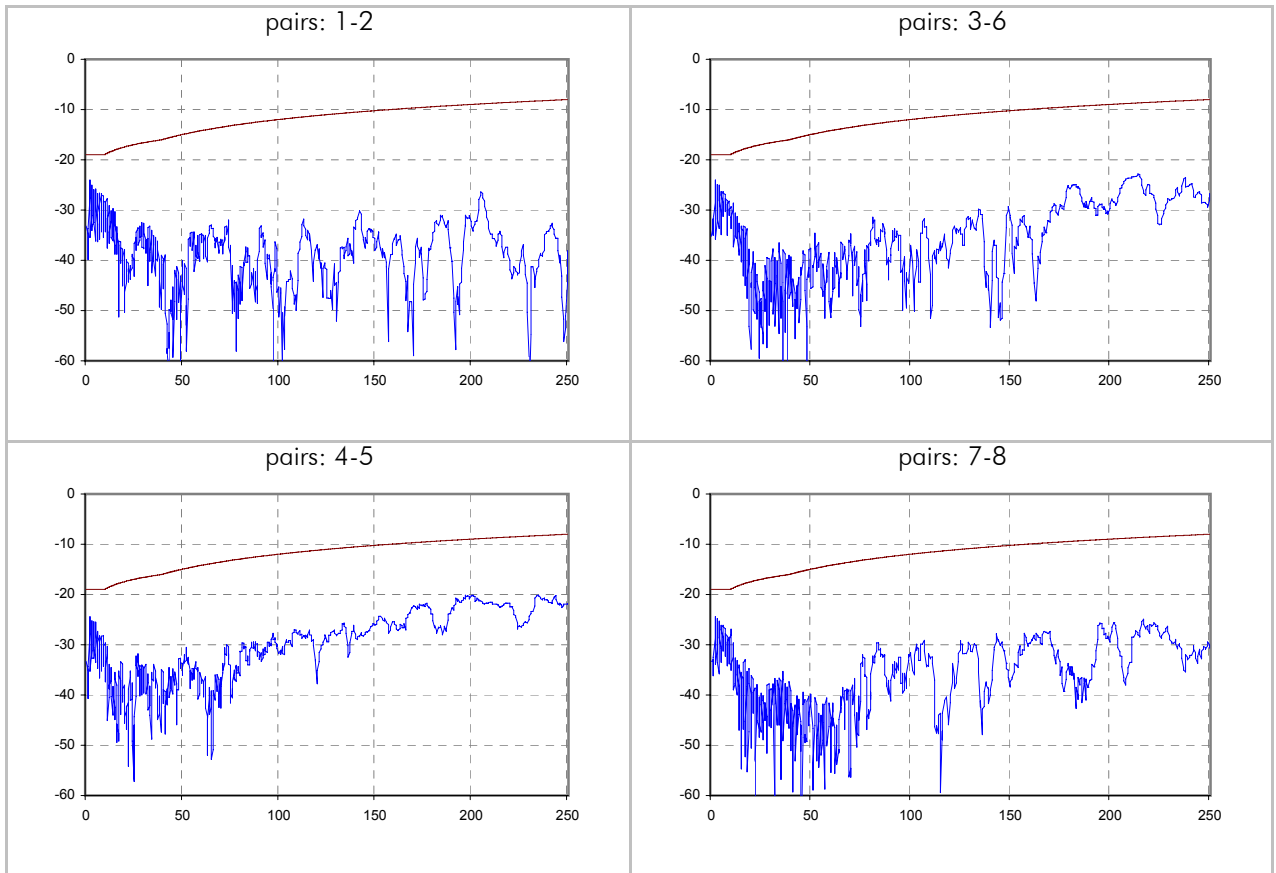
PSACR / dB (scanner side - type 1 side)



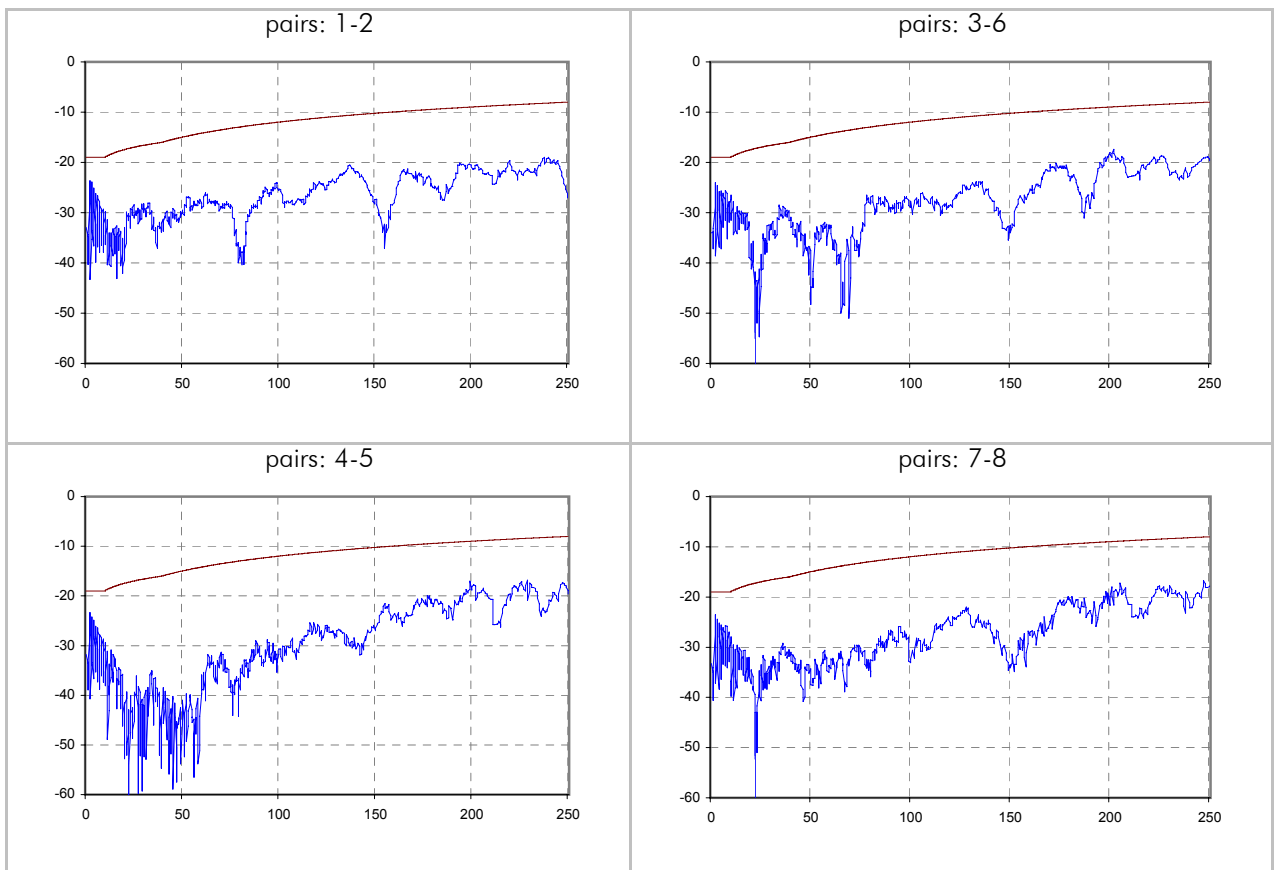
PSACR / dB (remote side - type 2 side)



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



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



Attenuation / dB

