

Test Report No. EWA20026-47

Transmission Performance Testing:

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

The Equipment Under Test (EUT)

Part 1:	Modular Patch Panel MPP /MPD Cat. 5e
Part 2:	Outlet AMJ45 8/8 Cat. 5e
Part 3:	L00003A0049 (2x) TG Measuring Cable Cat. 6 - 5m (2x)
Part 4:	M06015A0079 (2x) Microtest Omniscanner 2 Channel Adapter Cat. 6
Installation Cable:	Leoni Q-Line 4P051 SC 200 FRNC

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 D is:
@100 MHz = -13,7 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. 5e:

- J02023A0017 Mod. Patch Panel Cat.5e MPP24-HS screened, RAL 7035
- J02023C0017 Mod. Patch Panel Cat.5e MPP24-HS screened, RAL 7035
- J02023D0017 Mod. Patch Panel Cat.5e MPP24-HS screened, RAL 7035
- J02023H0017 Mod. Patch Panel Cat.5e MPP24-HS screened, RAL 7035
- J02022A0022 Mod. Patch Panel Cat.5e MPP16-HS screened, RAL 7035
- J02022B0022 Distributor Cat.6 Typ II MPD6-HS screened
- J02022D0022 Mod. Patch Panel Cat.5e 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 MPD6-HS 3HU/8PU screened
- J02021A0024 Distributor Cat.6 MPD6-HS 3HU/8PU screened without front panel

Outlet AMJ45 8/8 Cat. 5e:

- J00020A0389 Outlet AMJ45 8/8 UP/50 screened, Cat.5e alpine white
- J00020A0390 Outlet AMJ45 8/8 UP/50 screened, Cat.5e pearl white RAL 1013
- J00020A0388 Outlet AMJ45 8/8 UP/0 screened, Cat.5e without cover plate
- J00020H0389 Outlet AMJ45 8/8 UP/50 screened, Cat.5e alpine white
- J00020H0390 Outlet AMJ45 8/8 UP/50 screened, Cat.5e pearl white RAL 1013

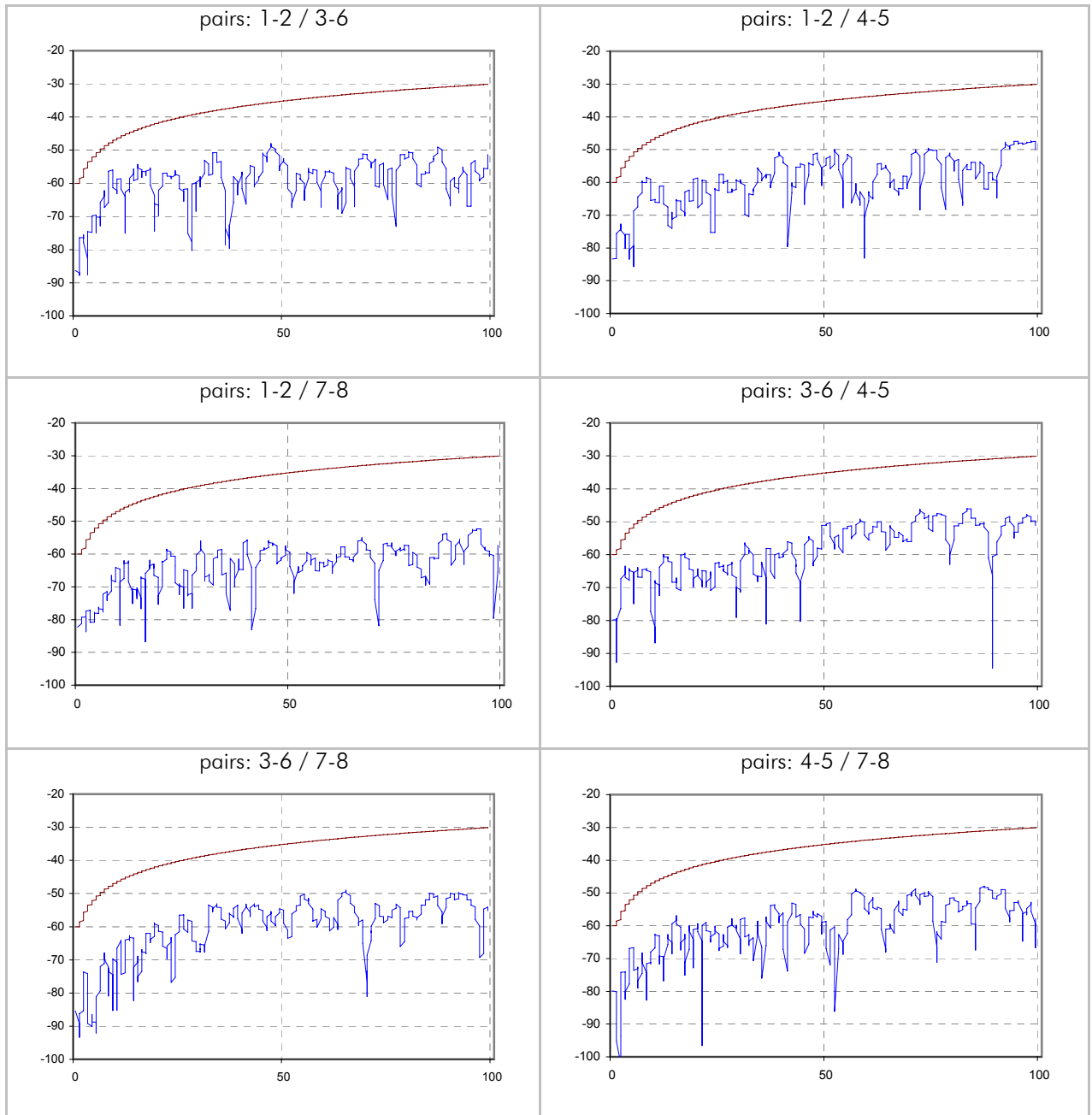
Test Results

pairs	1-2	3-6	4-5	7-8	limit	skew / ns	limit
max Propagation delay / ns	498,0	497,0	497,0	506,0	547,6	15,0	50,0
Attenuation @ 100 MHz / dB	-20,3	-20,4	-20,6	-21,3	-24,0		
min PSNEXT margin / dB	9,3	10,8	11,5	12,7			
@ f / MHz	8,8	9,1	3,4	10,6			
PSNEXT limit / dB	-44,9	-44,7	-51,6	-43,6			
PSNEXT @ 100 MHz	-41,3	-43,5	-42,7	-46,9	-27,1		
min PSELFEXT margin / dB	19,3	13,9	15,4	18,0			
@ f / MHz	98,3	1,0	1,2	1,2			
PSELFEXT limit / dB	-14,5	-54,8	-53,0	-53,0			
PSELFEXT @ 100 MHz	-34,1	-34,6	-36,2	-37,7	-14,4		
min PSACR margin / dB	9,8	11,4	11,7	13,2			
@ f / MHz	8,8	9,1	3,4	10,6			
PSACR limit / dB	38,2	37,9	47,4	36,2			
PSACR @ 100 MHz	26,5	27,3	26,2	31,8	3,1		
min Return Loss margin / dB	7,0	7,6	6,2	8,1			
@ f / MHz	2,3	13,3	2,3	2,1			
Return Loss limit / dB	-17,0	-17,0	-17,0	-17,0			

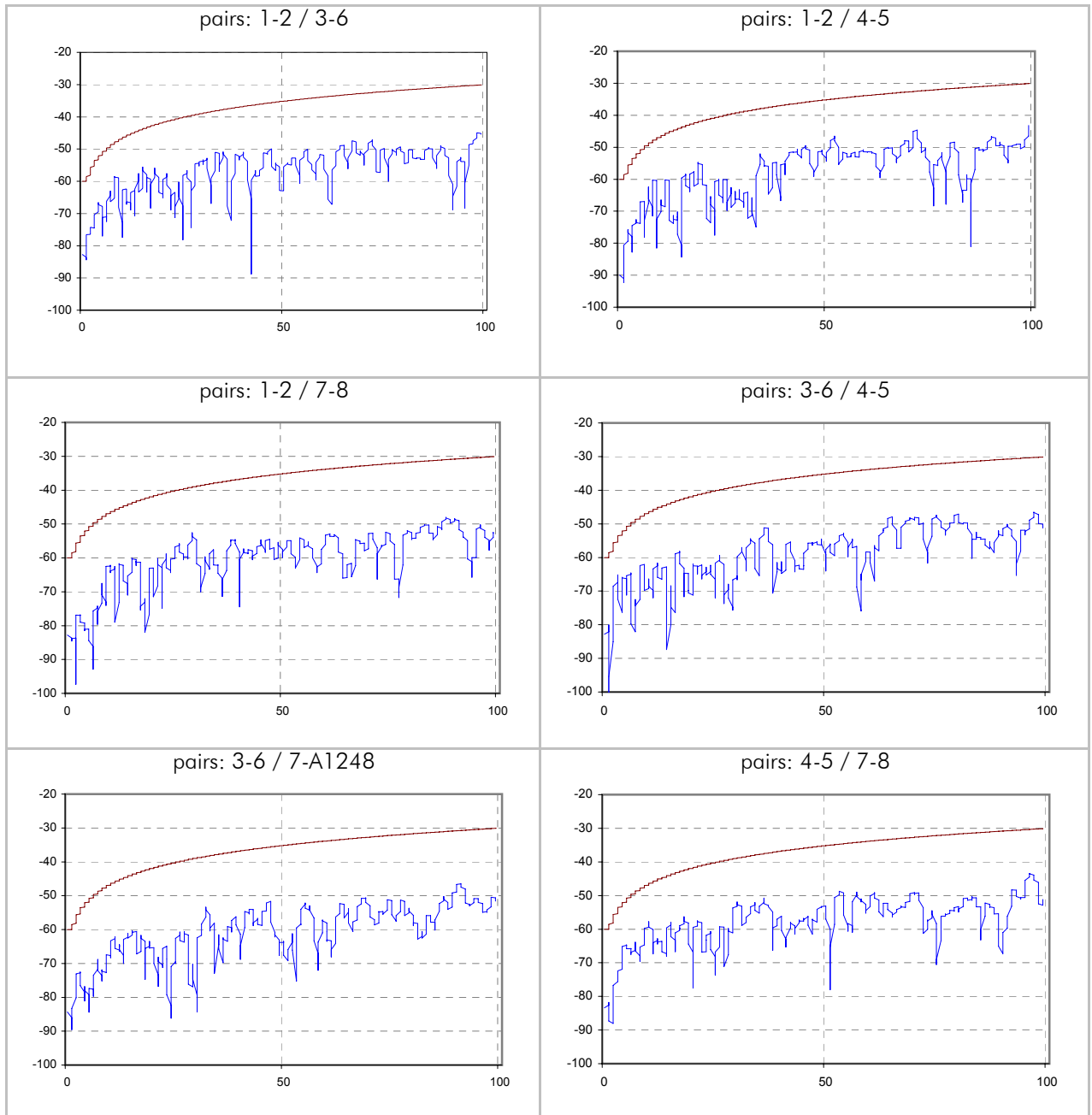
pairs	1-2 / 3-6	1-2 / 4-5	1-2 / 7-8	3-6 / 4-5	3-6 / 7-8	4-5 / 7-8	limit
min NEXT margin / dB	8,3	10,3	13,5	8,5	14,7	11,2	
@ f / MHz	9,2	8,8	29,5	3,4	32,7	10,6	
Next limit / dB	-47,7	-47,9	-39,1	-54,6	-38,4	-46,6	
NEXT @ 100 MHz	-45,2	43,8	-52,5	50,2	49,8	50,2	-30,1
min ACR margin / dB	8,8	11,0	14,7	9,0	16,3	11,8	
@ f / MHz	9,1	8,8	29,5	3,4	32,9	10,6	
ACR limit / dB	40,9	41,2	26,6	50,4	25,1	39,2	
ACR @ 100 MHz	24,7	23,5	31,2	30,3	29,8	30,1	6,1

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	17,3	20,3	26,1	13,1	16,4	20,6	
@ f / MHz	78,7	92,7	1,0	1,0	1,0	1,2	
ELFEXT limit / dB	-19,5	-18,1	-57,8	-57,8	-57,8	-56,0	
min ELFEXT margin / dB	17,3	20,5	26,2	13,1	16,4	20,1	
@ f / MHz	86,8	92,7	1,0	1,2	1,0	77,6	
ELFEXT limit / dB	-18,6	-18,1	-57,8	-56,0	-57,8	-19,6	
ELFEXT @ 100 MHz	-35,7	-39,7	-48,8	-42,1	-45,8	-39,8	-17,4
ELFEXT @ 100 MHz	-35,8	-39,8	-47,9	-42,2	-44,9	-38,8	-17,4

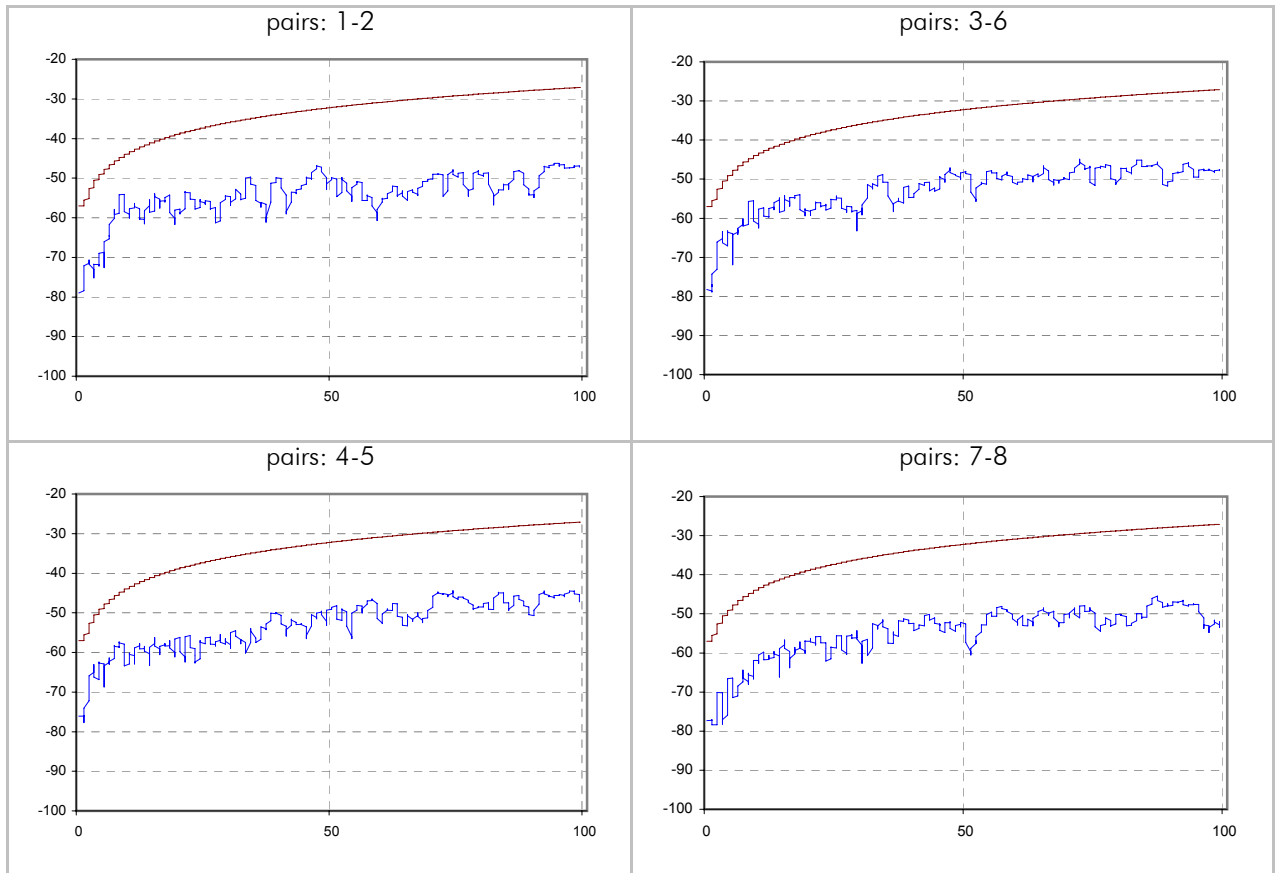
NEXT / dB (scanner side - type 1 side)



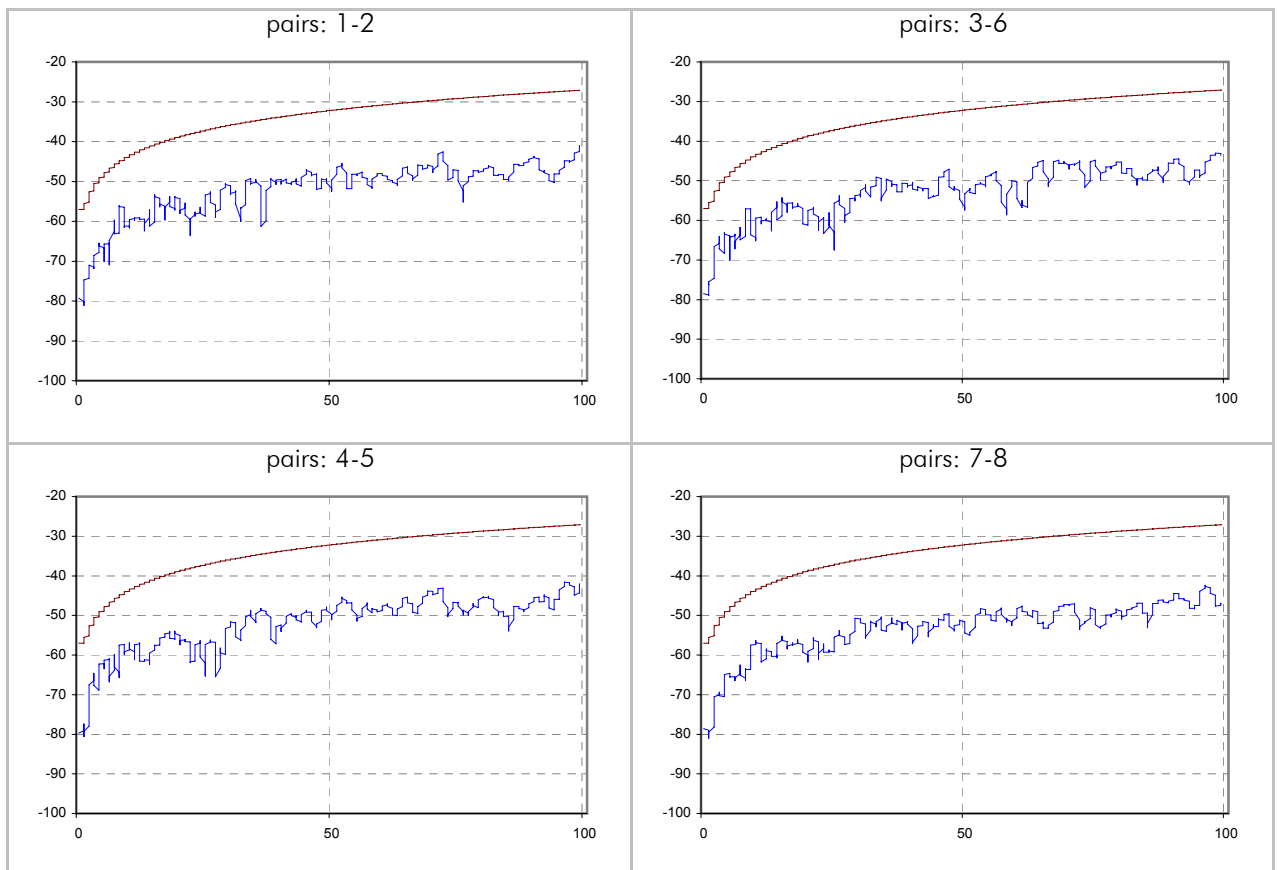
NEXT / dB (remote side - type 2 side)



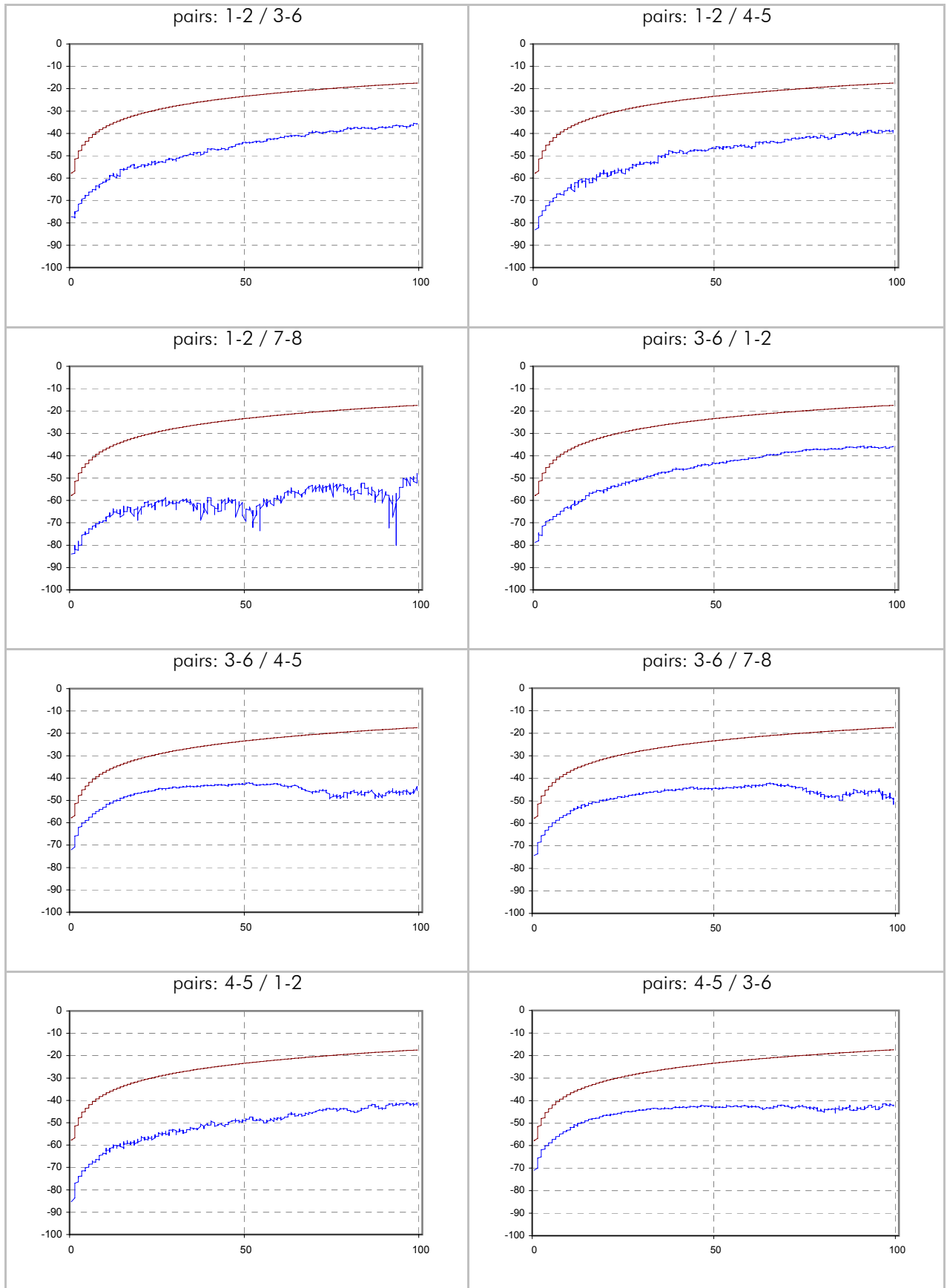
PSNEXT / dB (scanner side - type 1 side)



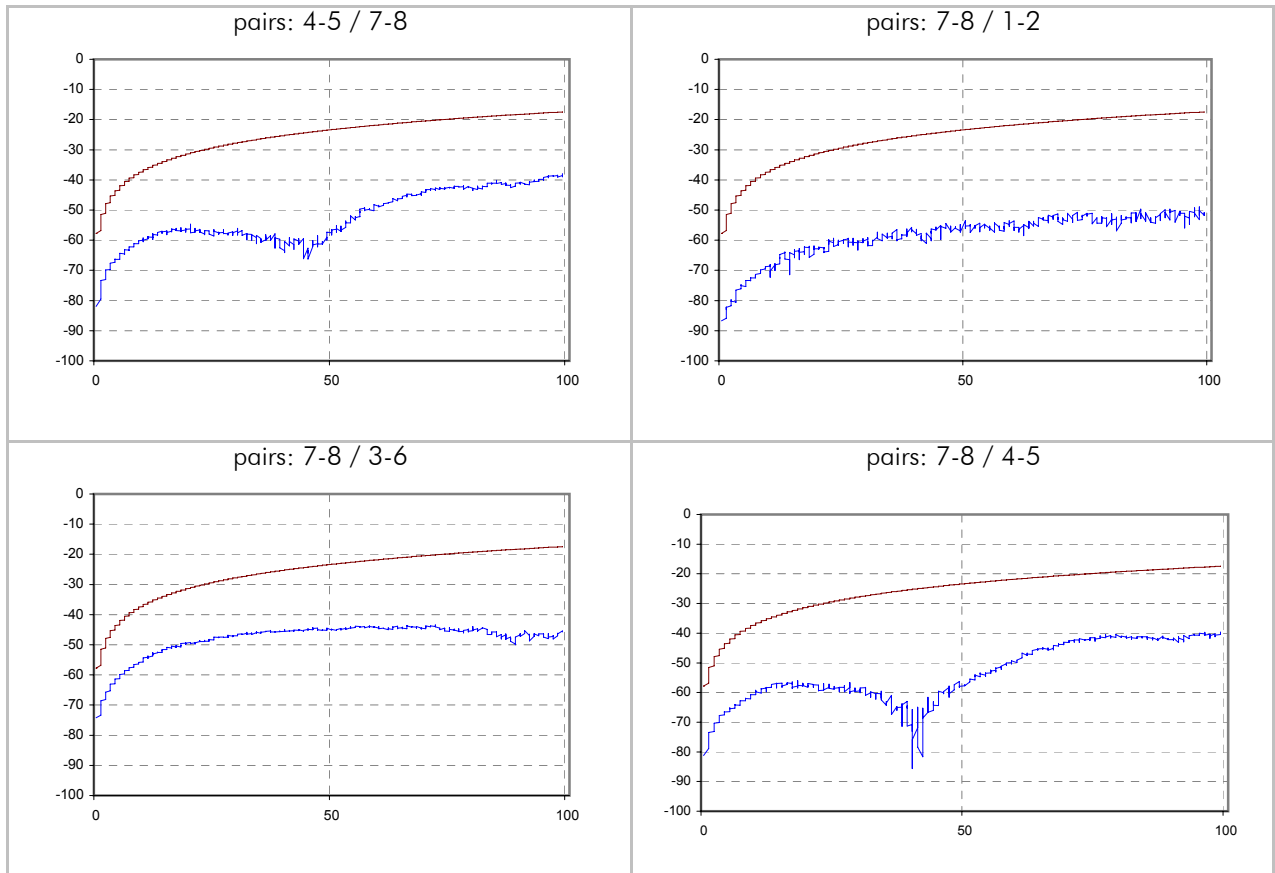
PSNEXT / dB (remote side - type 2 side)



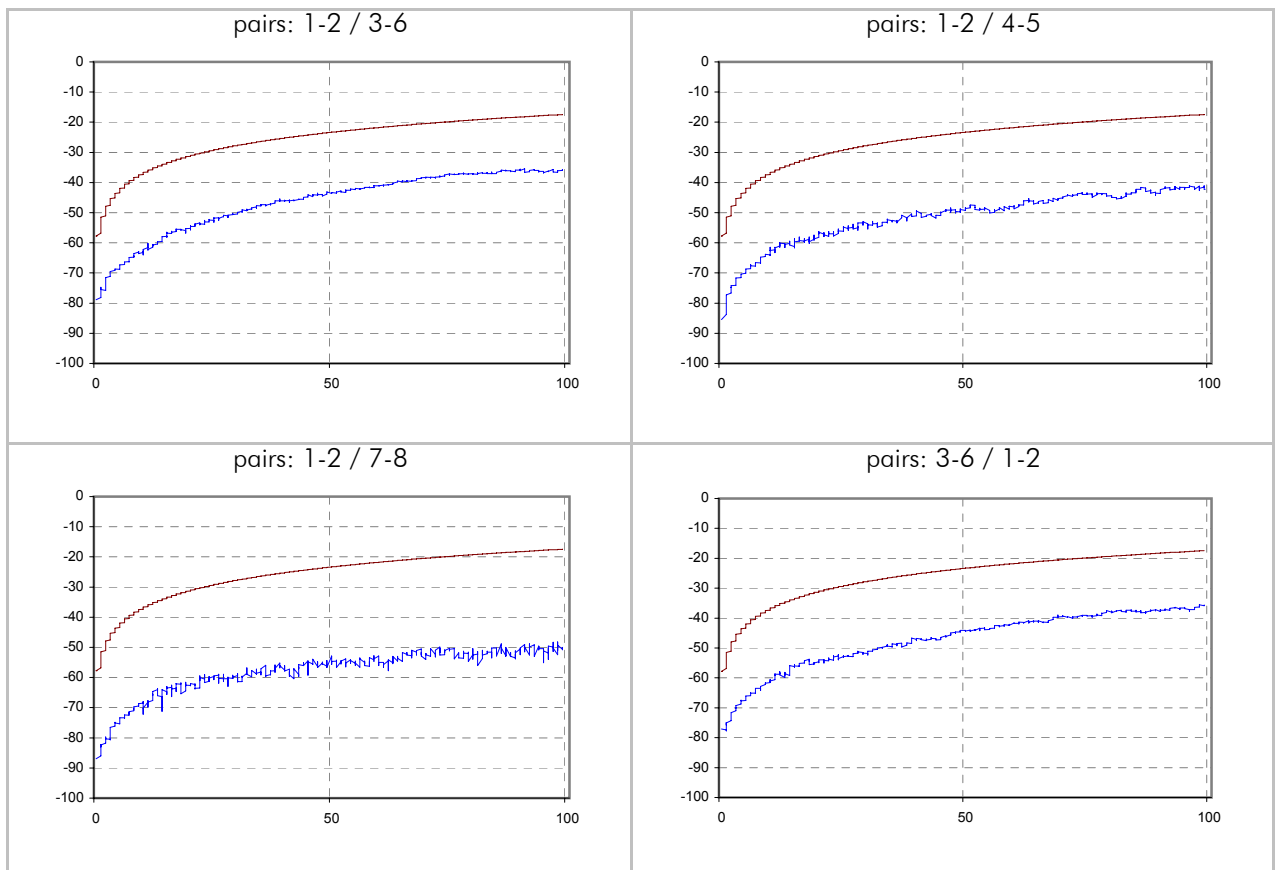
ELFEXT / dB (scanner side - type 1 side)



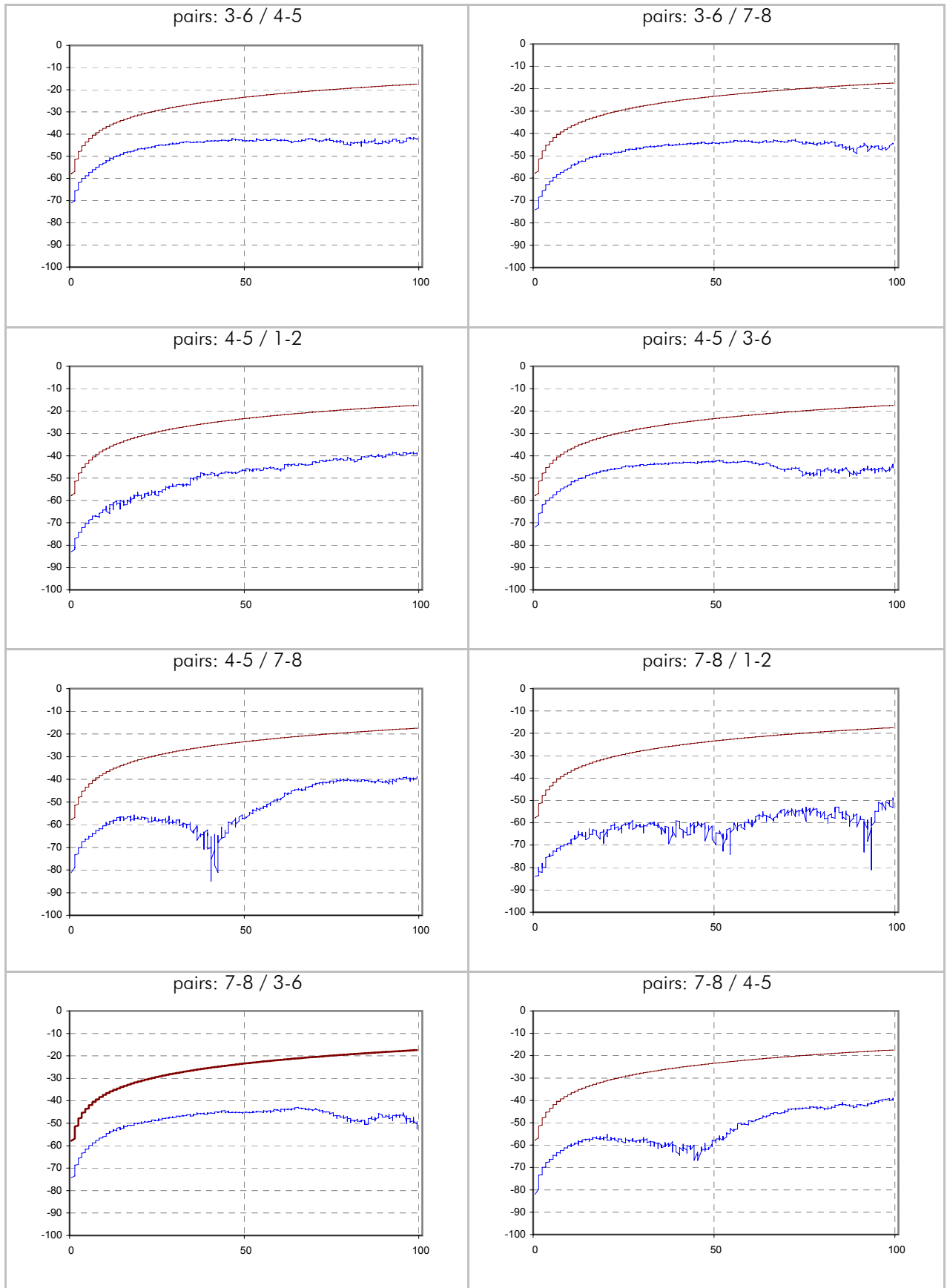
ELFEXT / dB (scanner side - type 1 side)



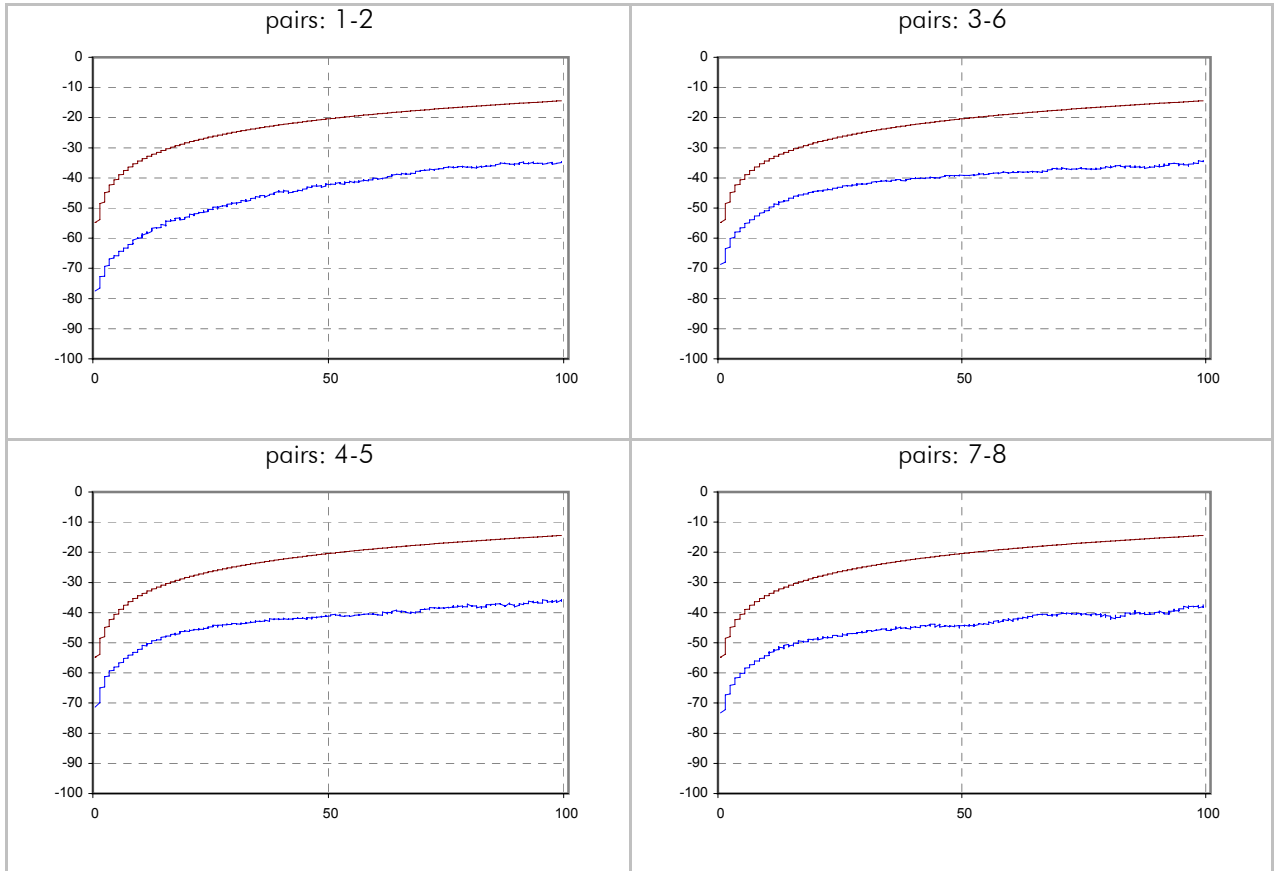
ELFEXT / dB (remote side - type 2 side)



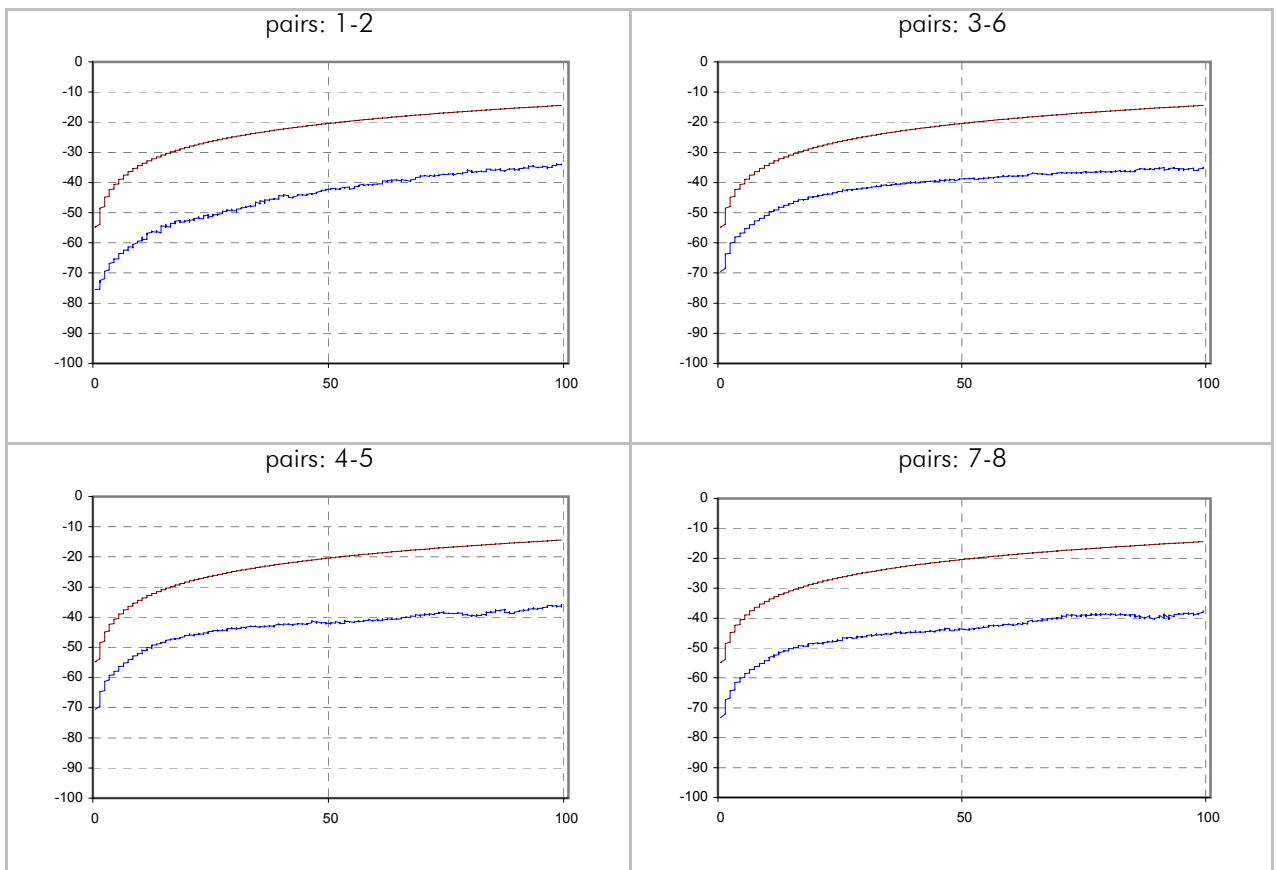
ELFEXT / dB (remote side - type 2 side)

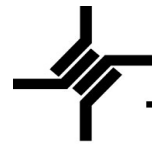


PSELFEXT / dB (scanner side - type 1 side)

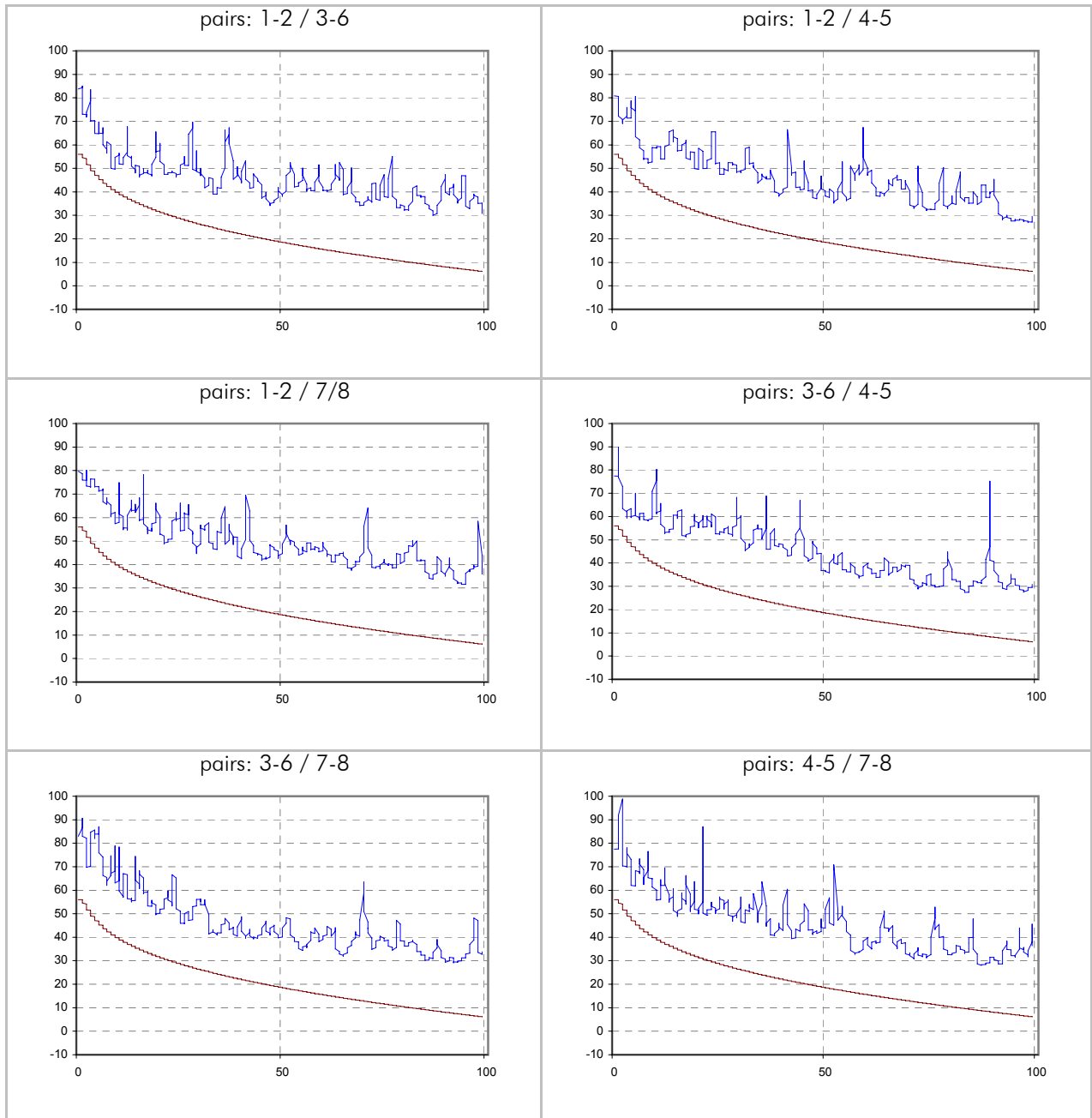


PSELFEXT / dB (remote side - type 2 side)

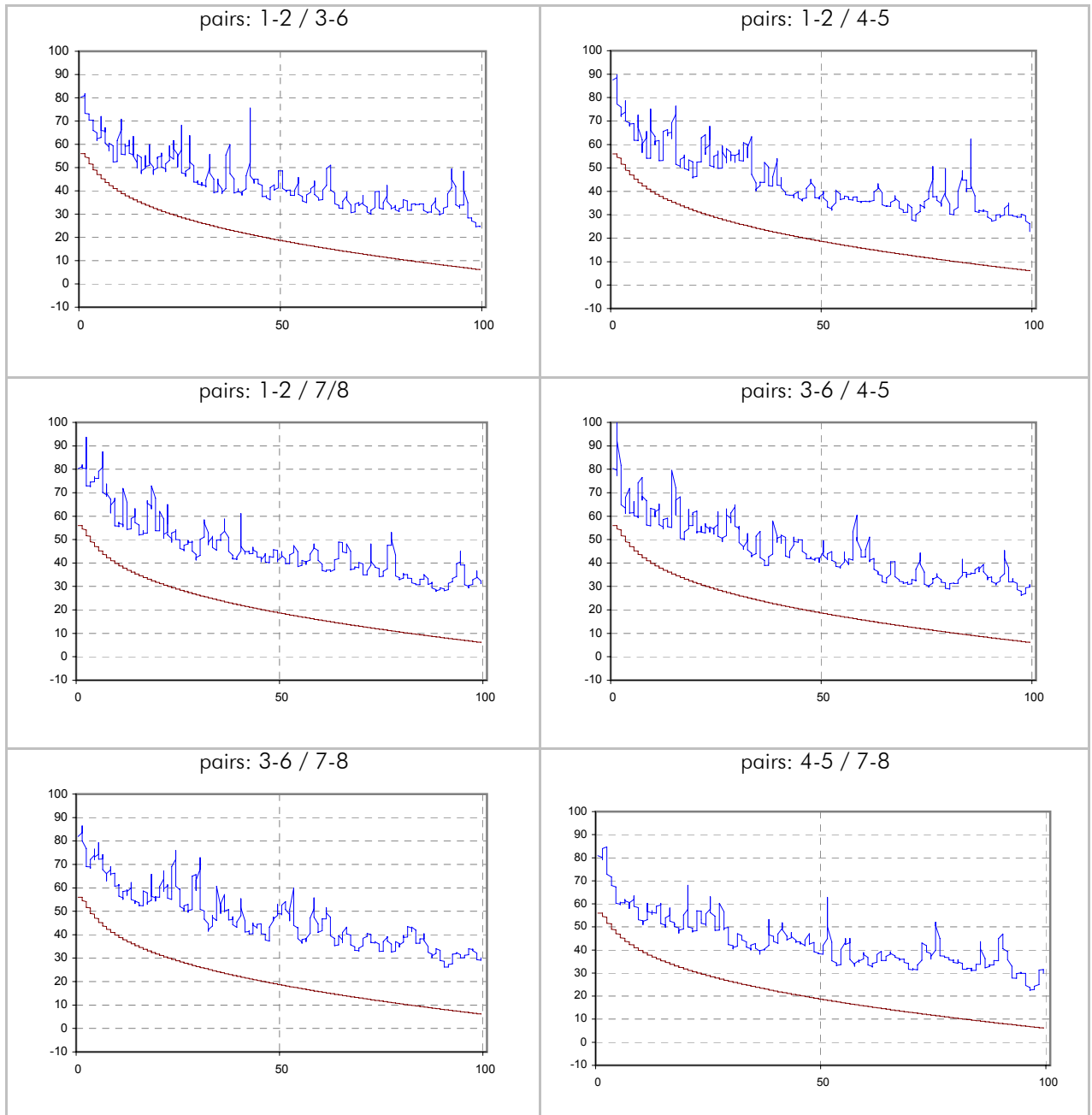




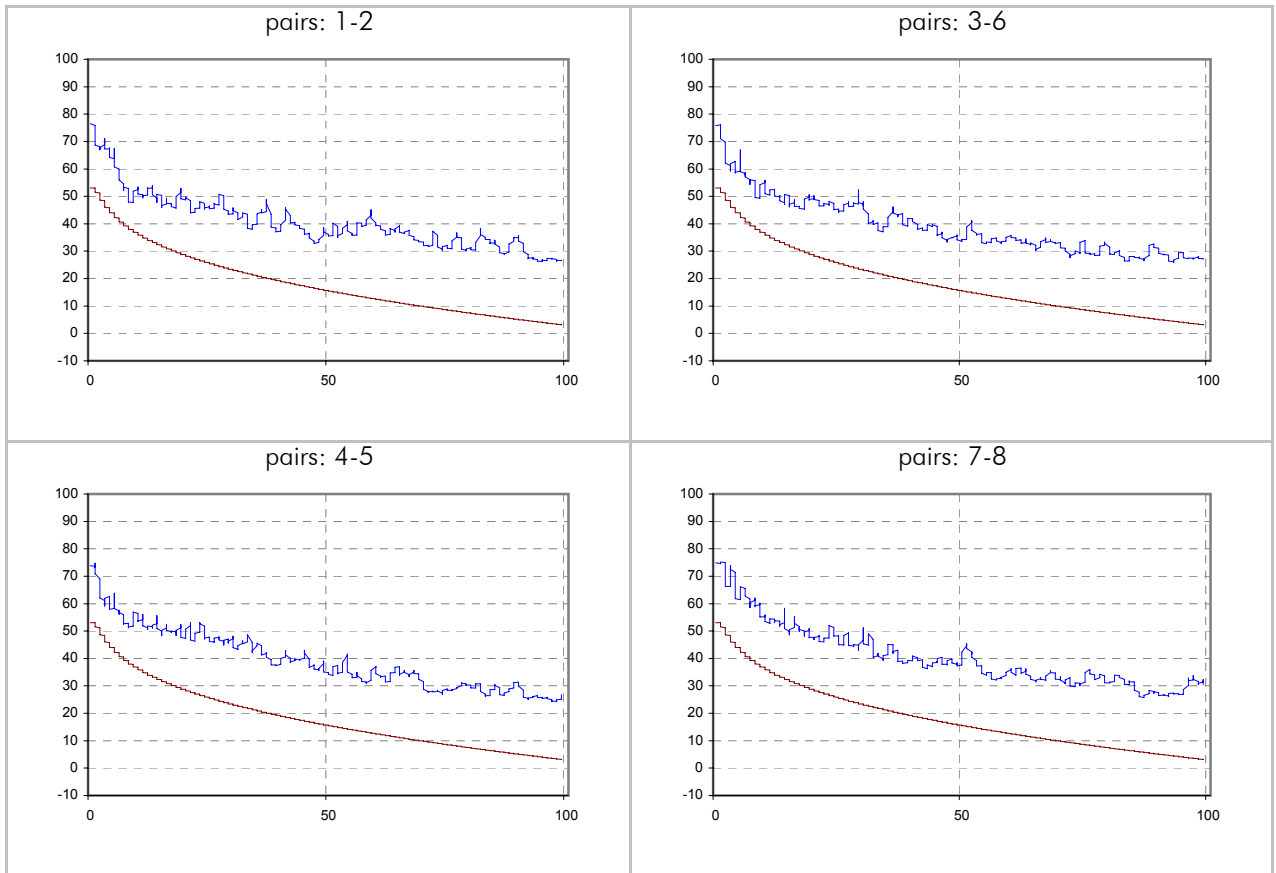
ACR / dB (scanner side - type 1 side)



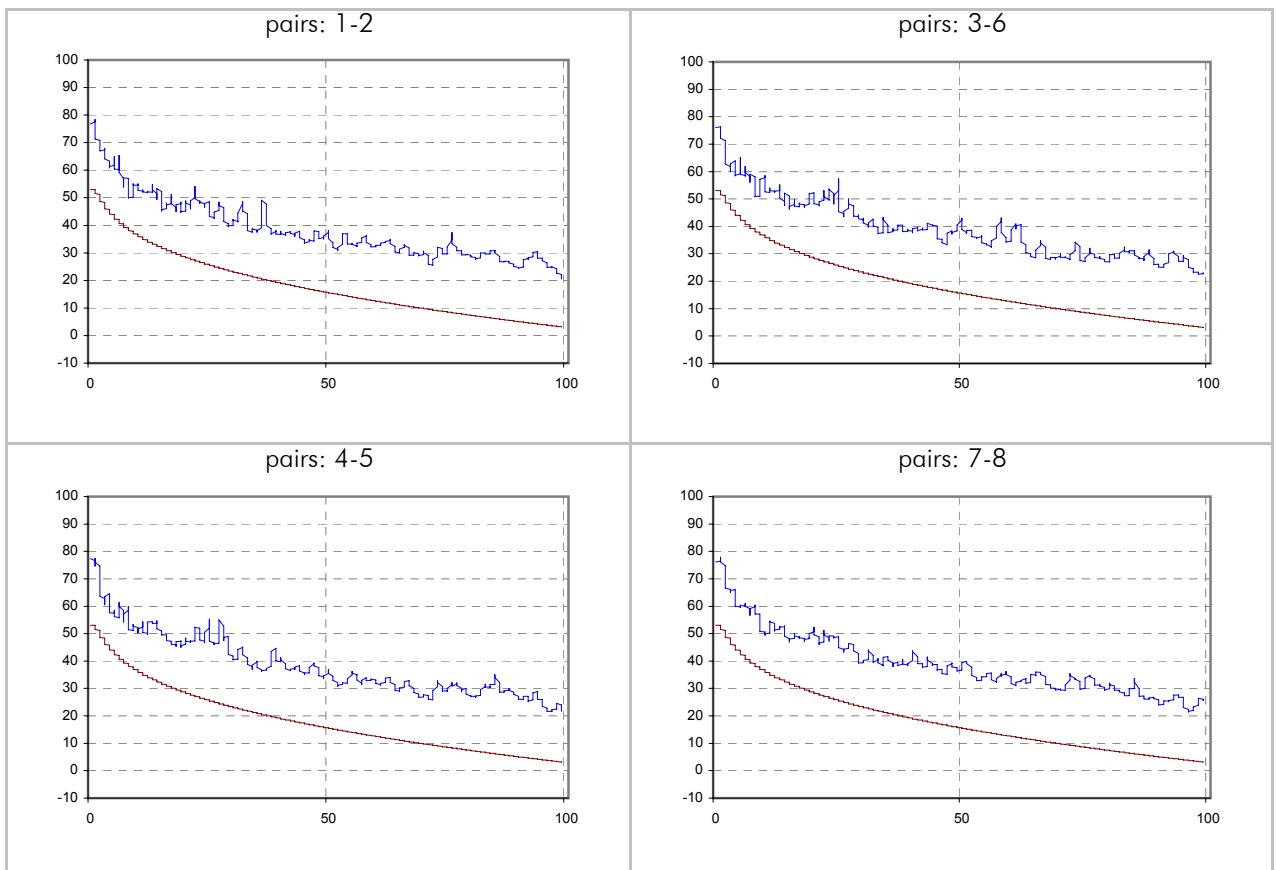
ACR / dB (remote side - type 2 side)



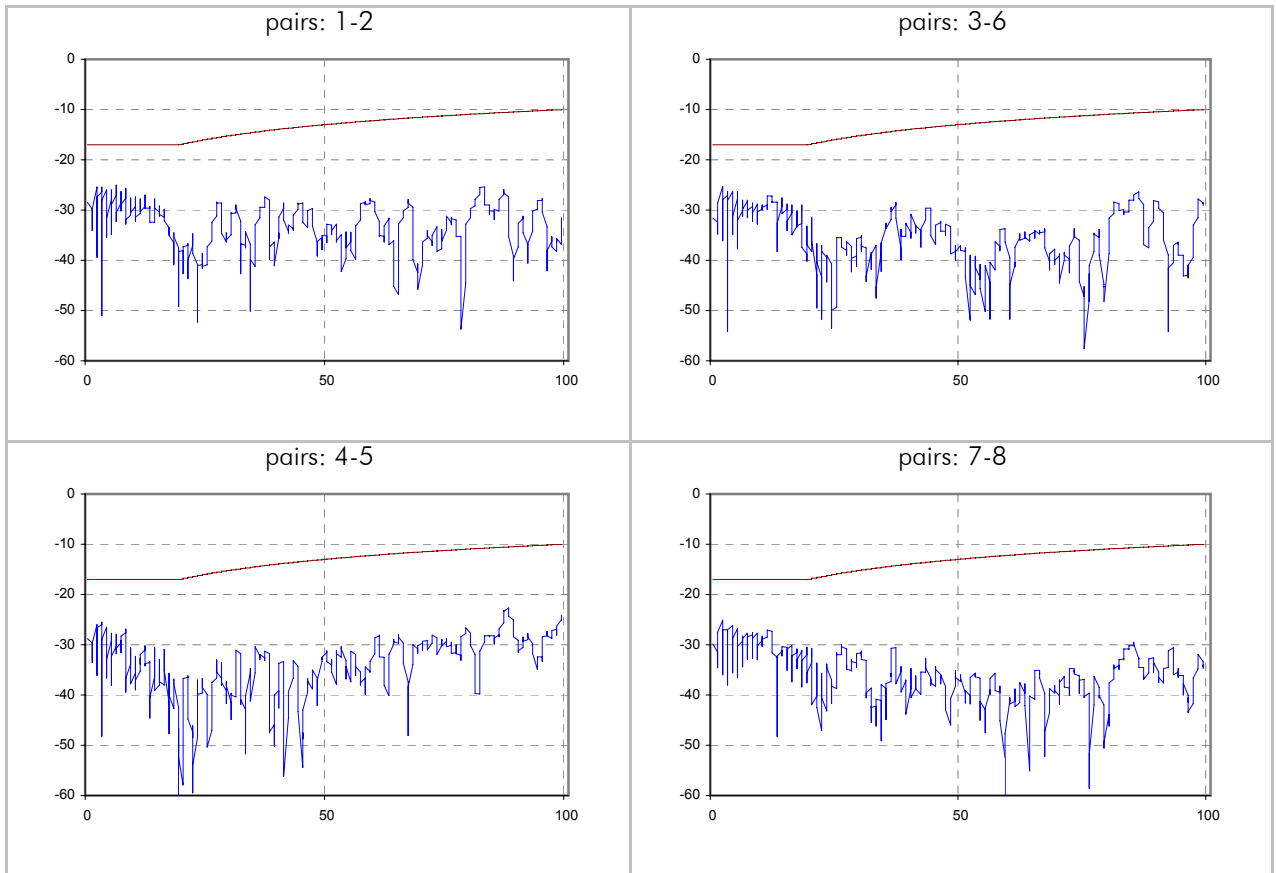
PSACR / dB (scanner side - type 1 side)



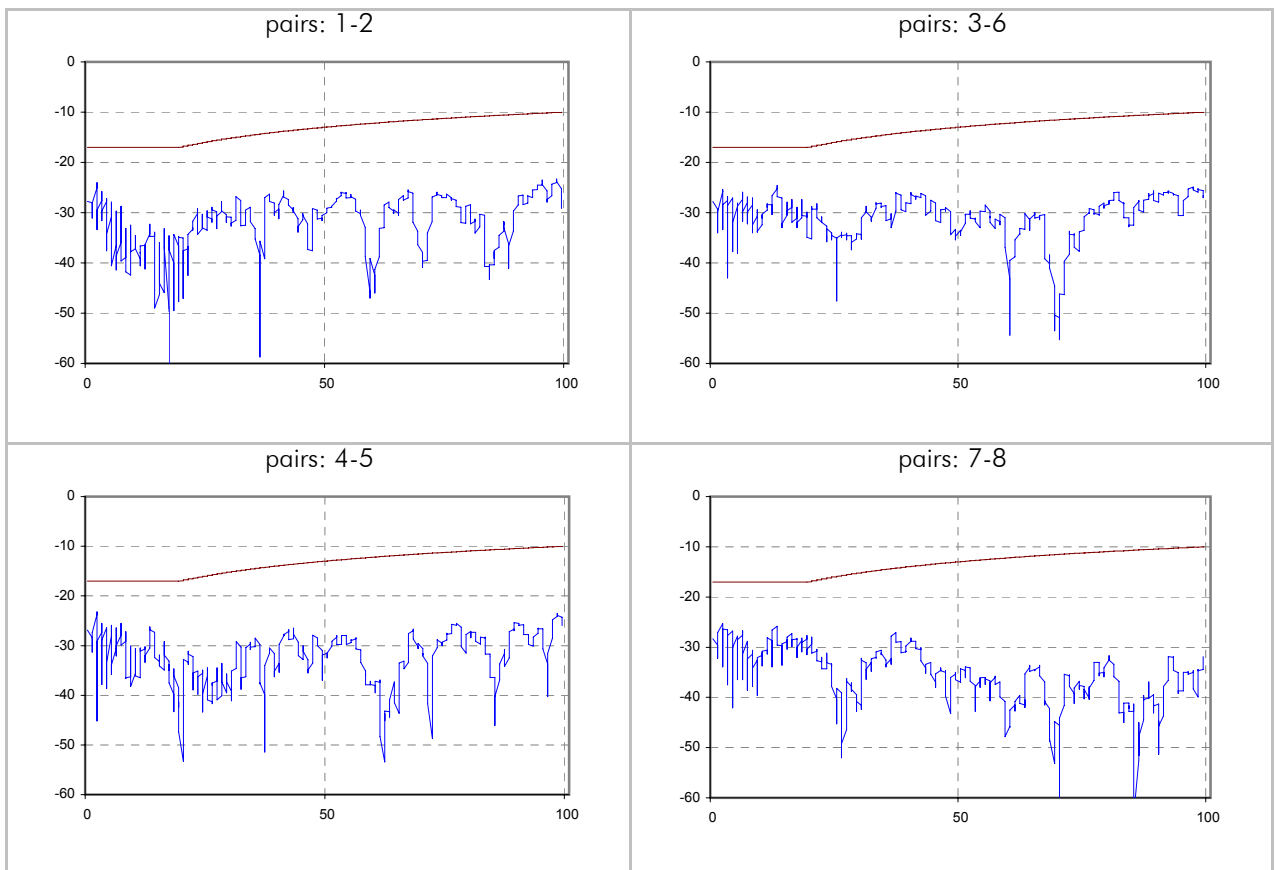
PSACR / dB (remote side - type 2 side)



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



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



Attenuation / dB

