

Test Report No. EWA20026-41

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 Gold S-STP 4x2/0,58 LSFROH 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 = -10,8 dB and @ 250 MHz = -8,6 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

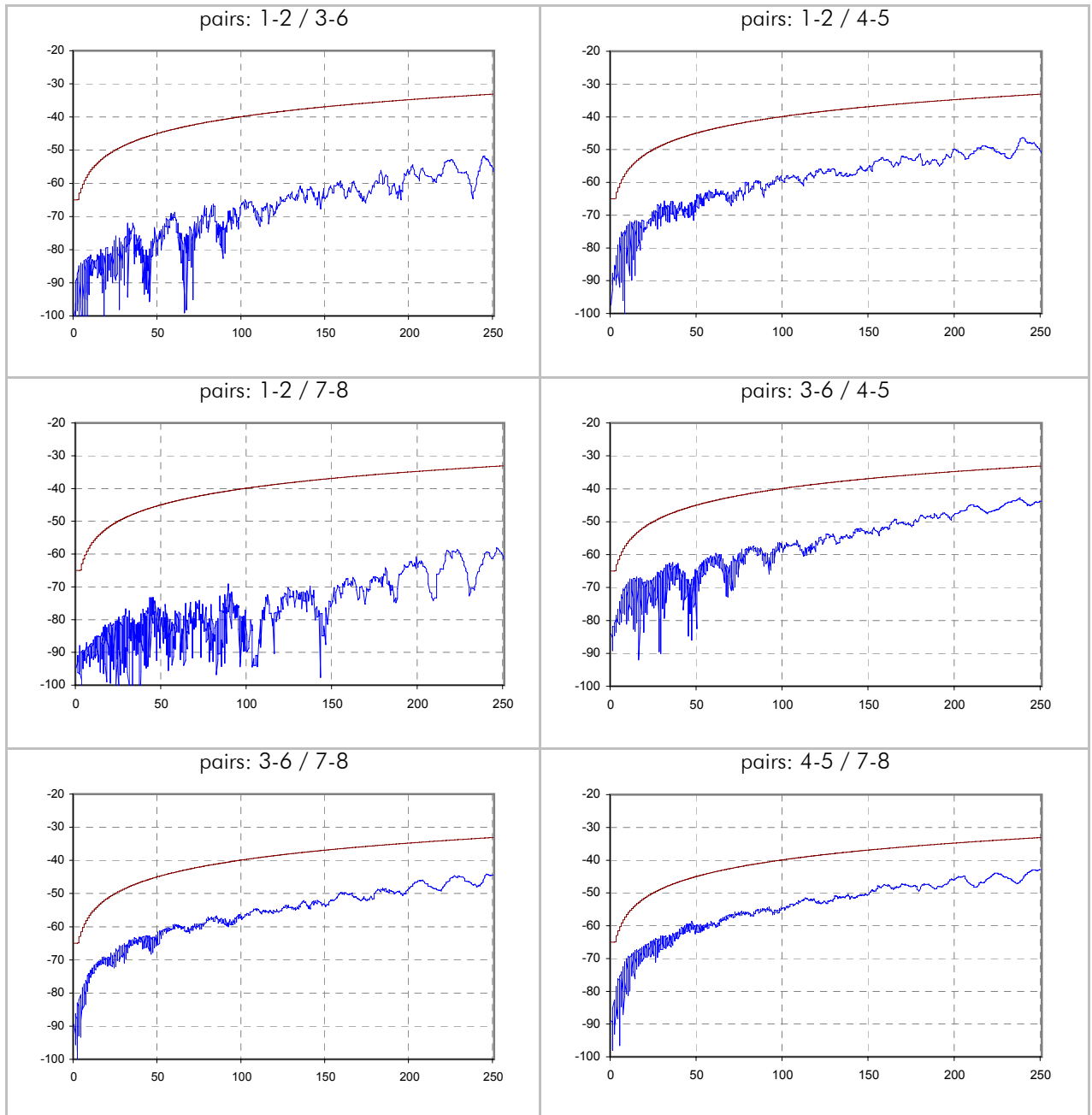
Test Results

pairs	1-2	3-6	4-5	7-8	limit	skew / ns	limit
max Propagation delay / ns	454,0	466,0	456,0	462,0	546,3	12,0	50,0
Attenuation @ 100 MHz / dB	-18,6	-19,2	-18,7	-19,0	-21,7		
Attenuation @ 250 MHz / dB	-29,5	-30,8	-30,3	-30,9	-21,7		
min PSNEXT margin / dB	13,4	5,1	7,8	8,0			
@ f / MHZ	237,1	237,1	24,6	237,1			
PSNEXT limit / dB	-30,6	-30,6	-47,5	-30,6			
PSNEXT @ 100 MHz	-58,8	-49,1	-49,3	-51,5	-37,1		
PSNEXT @ 250 MHz	-47,3	-38,5	-39,9	-40,6	-30,2		
min PSELFEXT margin / dB	13,9	7,5	6,7	12,6			
@ f / MHZ	1,0	1,0	1,0	1,2			
PSELFEXT limit / dB	-60,6	-60,6	-60,6	-58,8			
PSELFEXT @ 100 MHz	-38,6	-29,5	-29,3	-40,3	-20,3		
PSELFEXT @ 250 MHz	-30,2	-26,3	-26,6	-27,2	-12,3		
min PSACR margin / dB	18,5	9,3	9,0	13,0			
@ f / MHZ	6,8	237,1	24,6	235,3			
PSACR limit / dB	51,3	-4,3	37,1	-4,1			
PSACR @ 100 MHz	40,6	34,7	33,1	33,9	15,4		
PSACR @ 250 MHz	19,0	10,1	11,0	10,0	-5,7		
min Return Loss margin / dB	3,5	4,3	3,5	4,3			
@ f / MHZ	2,5	3,4	2,5	2,3			
Return Loss limit / dB	-19,0	-19,0	-19,0	-19,0			

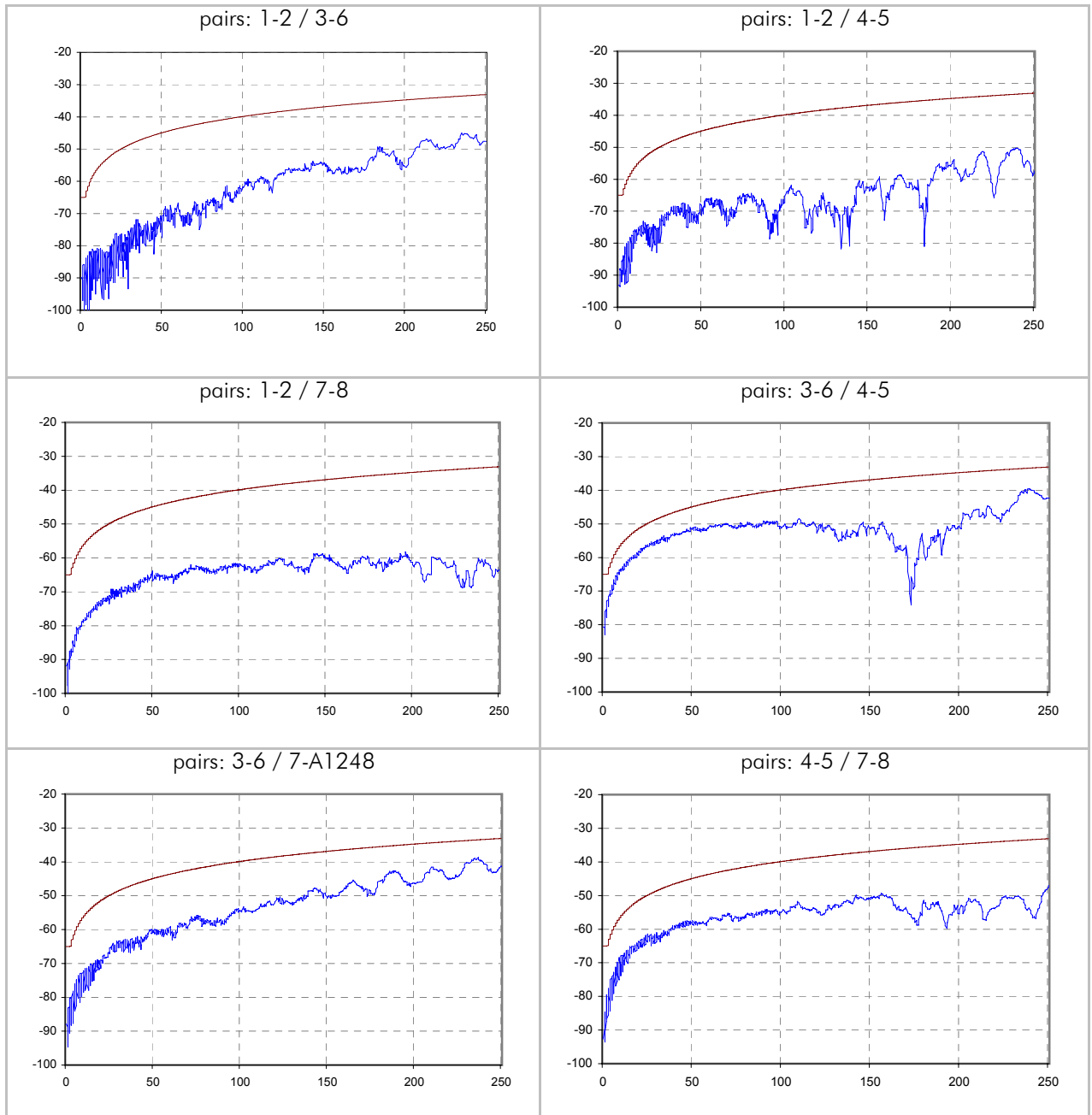
pairs	1-2 / 3-6	1-2 / 4-5	1-2 / 7-8	3-6 / 4-5	3-6 / 7-8	4-5 / 7-8	limit
min NEXT margin / dB	11,4	13,0	18,9	5,8	5,2	9,8	
@ f / MHZ	235,3	239,8	50,2	34,7	237,1	245,6	
Next limit / dB	-33,6	-33,4	-45,0	-47,7	-33,5	-33,2	
NEXT @ 100 MHz	-63,0	-59,4	-62,7	-50,7	-54,7	-54,7	-39,9
NEXT @ 250 MHz	-47,6	-50,1	-59,9	-42,3	-41,7	-42,9	-33,1
min ACR margin / dB	15,6	16,5	20,5	7,0	9,5	12,3	
@ f / MHZ	235,3	6,8	50,2	34,7	235,3	9,7	
ACR limit / dB	-1,2	53,9	29,9	35,3	-1,2	50,3	
ACR @ 100 MHz	43,8	40,7	43,8	31,5	35,5	35,7	18,2
ACR @ 250 MHz	16,8	19,8	29,0	11,5	10,8	12,0	-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	19,2	11,5	24,0	5,2	11,8	11,5	
@ f / MHZ	1,0	1,2	201,1	1,0	221,8	144,9	
ELFEXT limit / dB	-63,6	-61,8	-17,2	-63,6	-16,3	-20,0	
min ELFEXT margin / dB	19,2	11,4	23,2	5,1	12,2	10,9	
@ f / MHZ	1,0	2,5	201,1	1,0	248,8	144,9	
ELFEXT limit / dB	-63,6	-55,2	-17,2	-63,6	-15,3	-20,0	
ELFEXT @ 100 MHz	-52,0	-39,0	-53,0	-29,5	-47,5	-41,7	-23,3
ELFEXT @ 250 MHz	-45,2	-30,2	-40,8	-30,2	-27,9	-34,1	-15,3
ELFEXT @ 100 MHz	-51,4	-38,9	-52,6	-30,0	-47,7	-41,5	-23,3
ELFEXT @ 250 MHz	-43,9	-29,5	-39,4	-30,8	-27,8	-33,4	-15,3

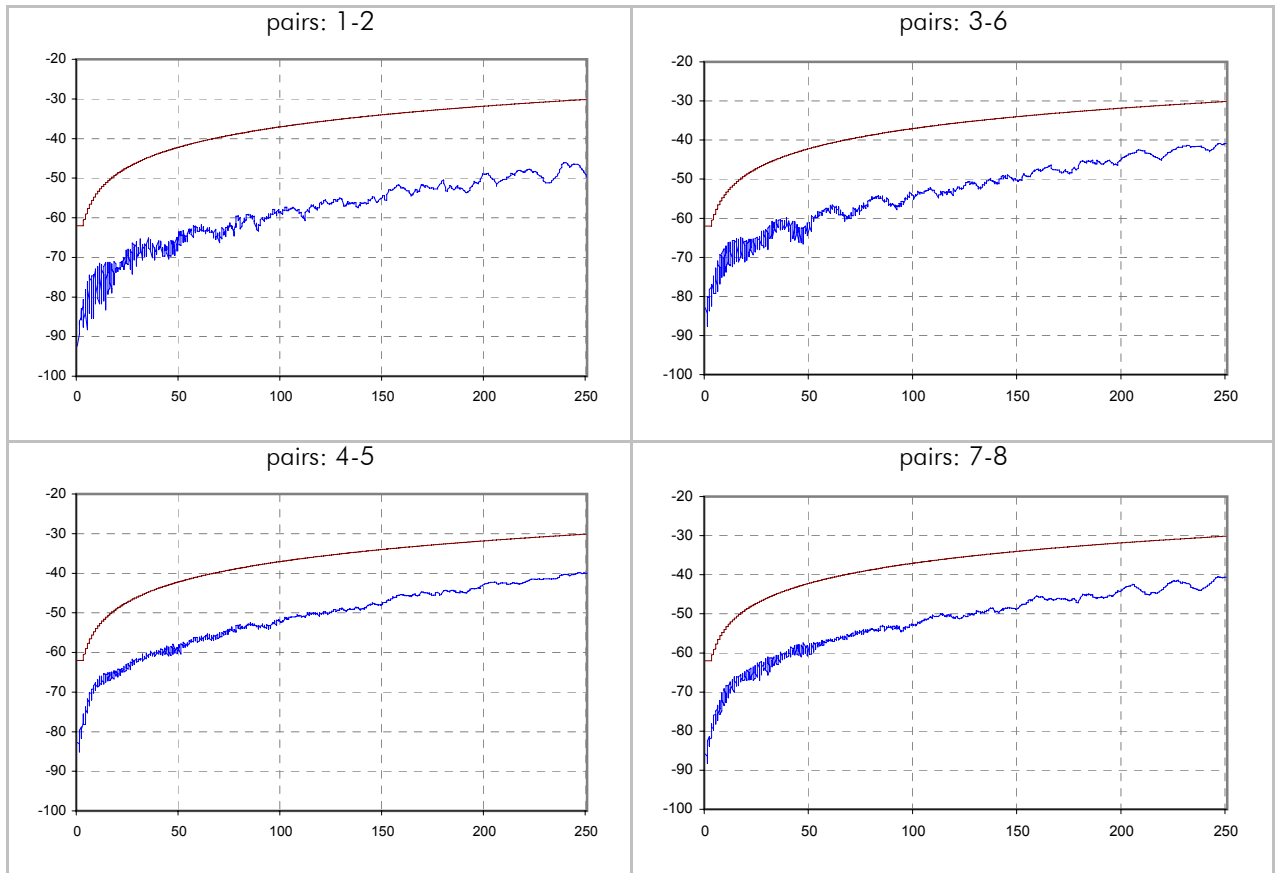
NEXT / dB (scanner side - type 1 side)



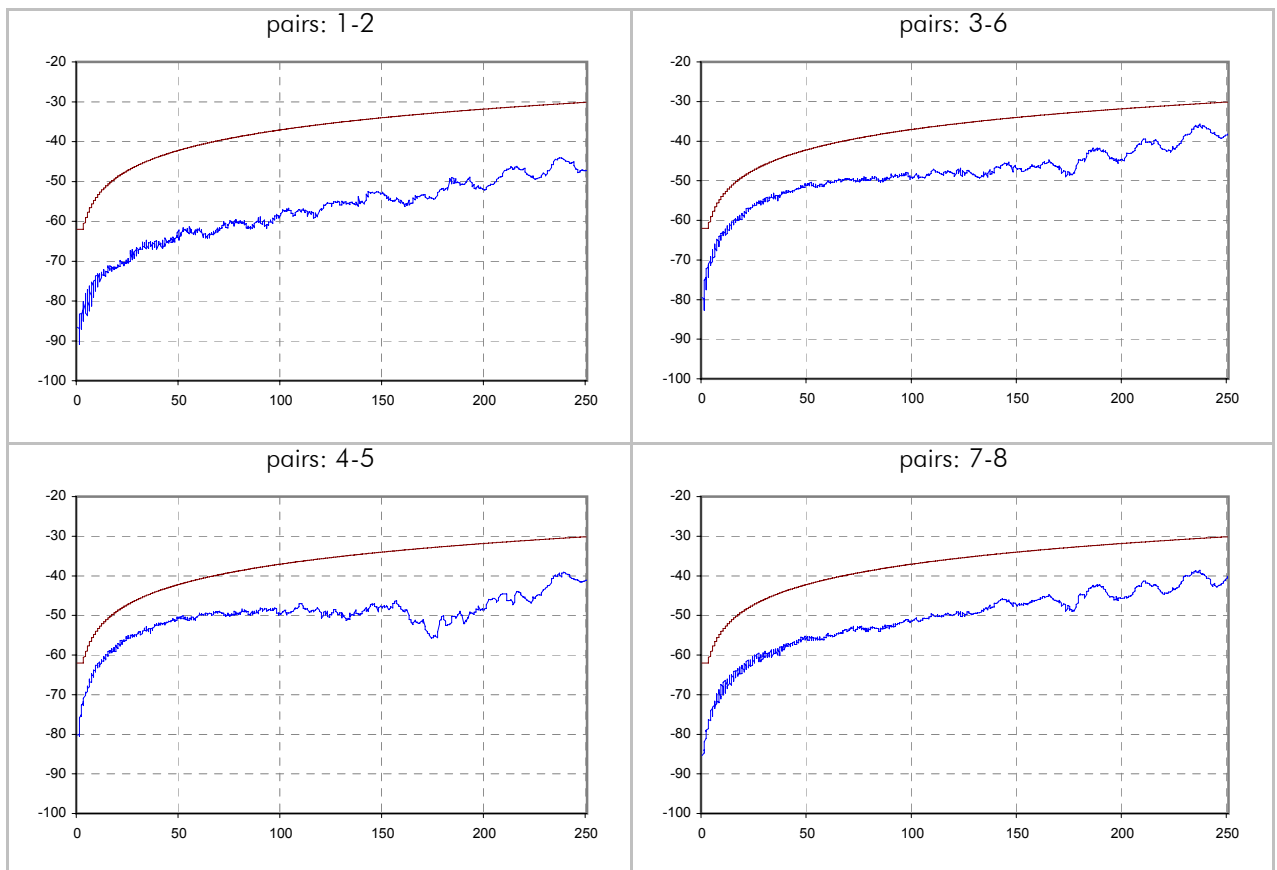
NEXT / dB (remote side - type 2 side)



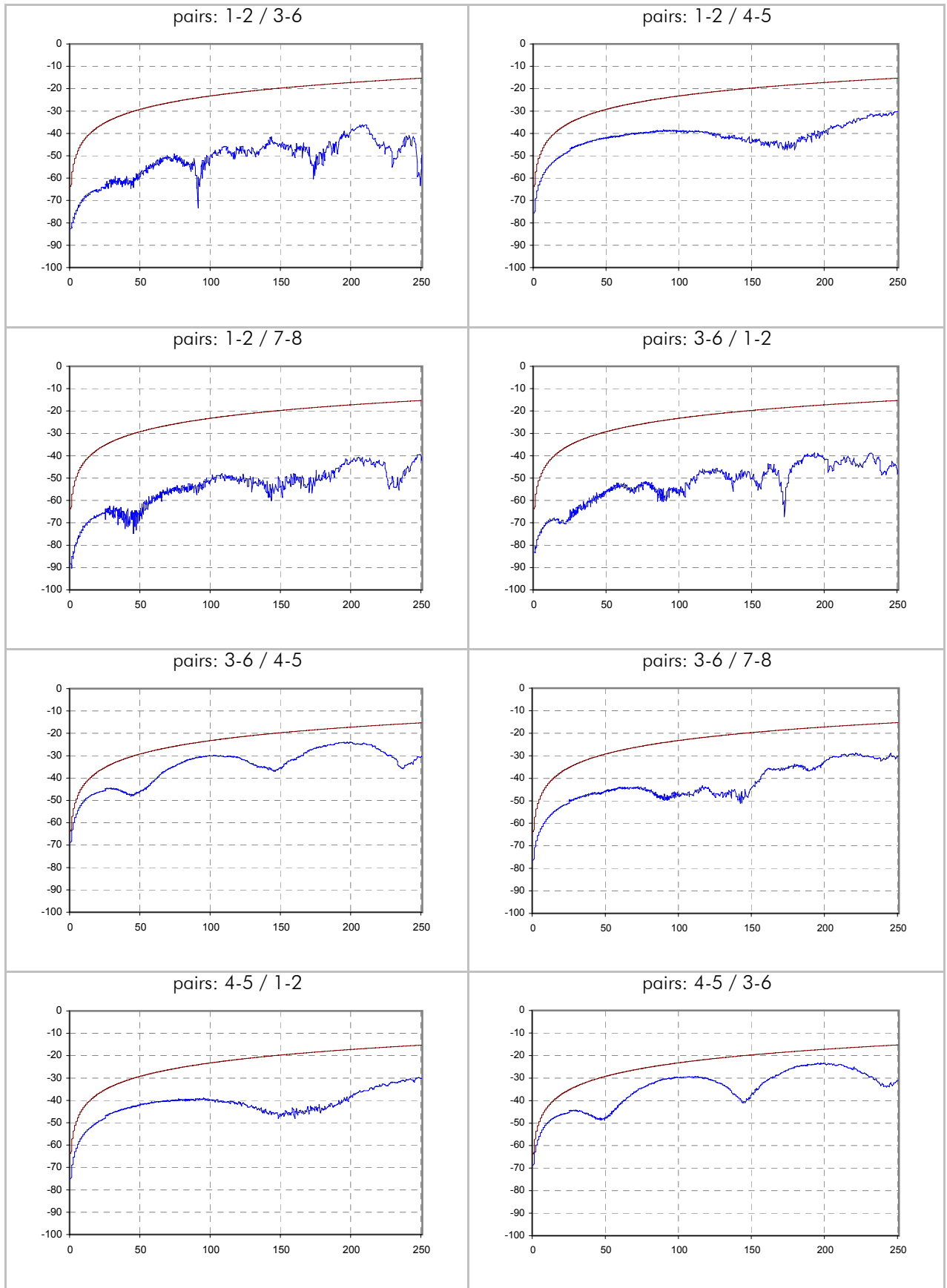
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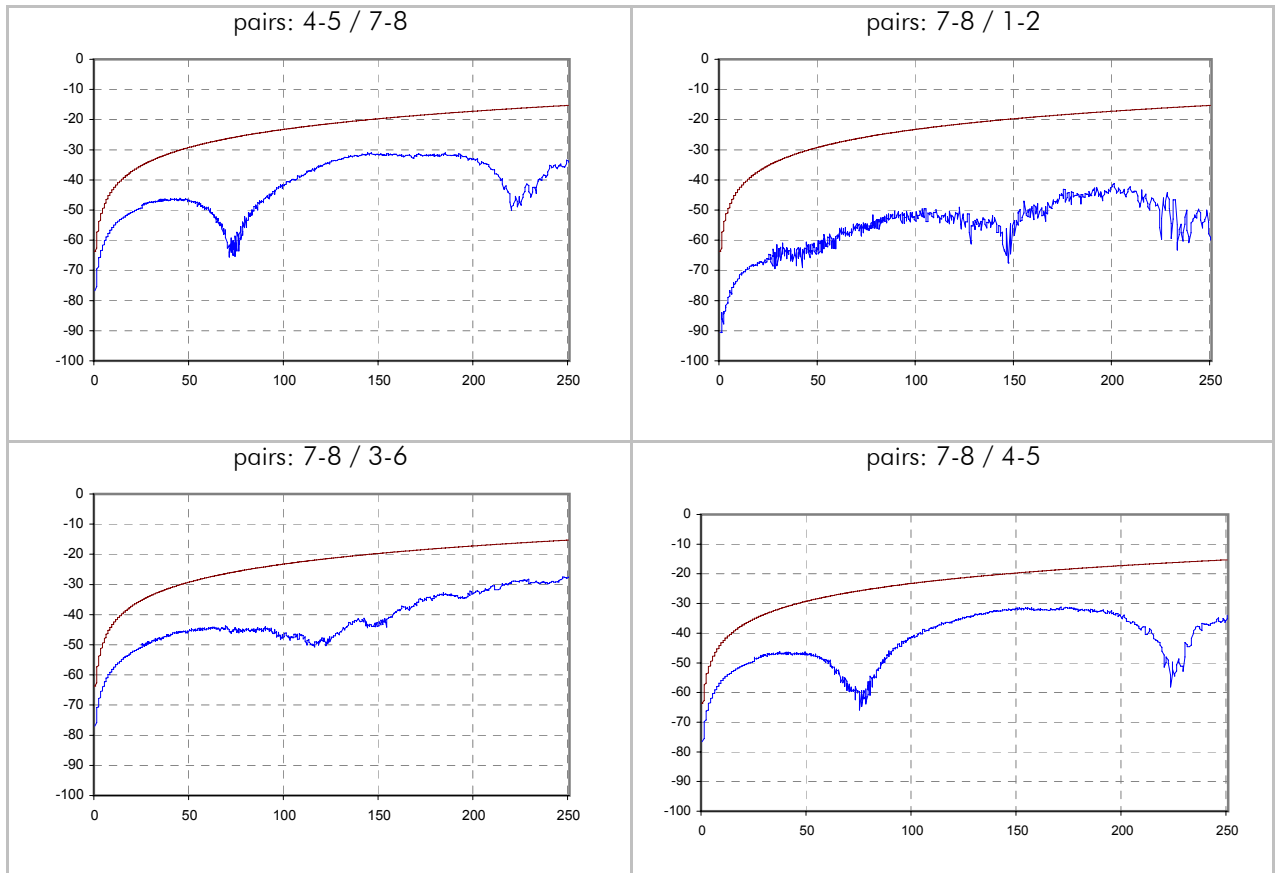
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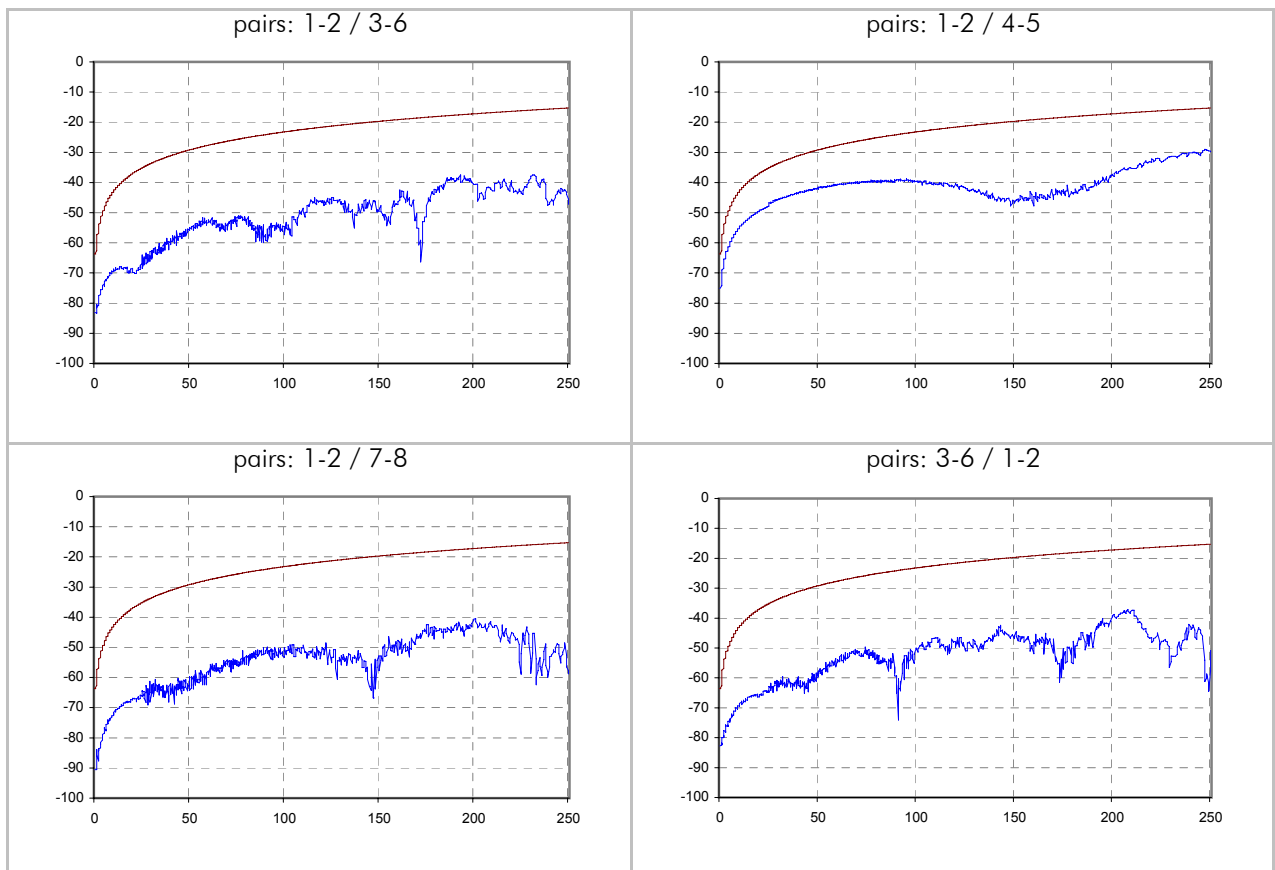
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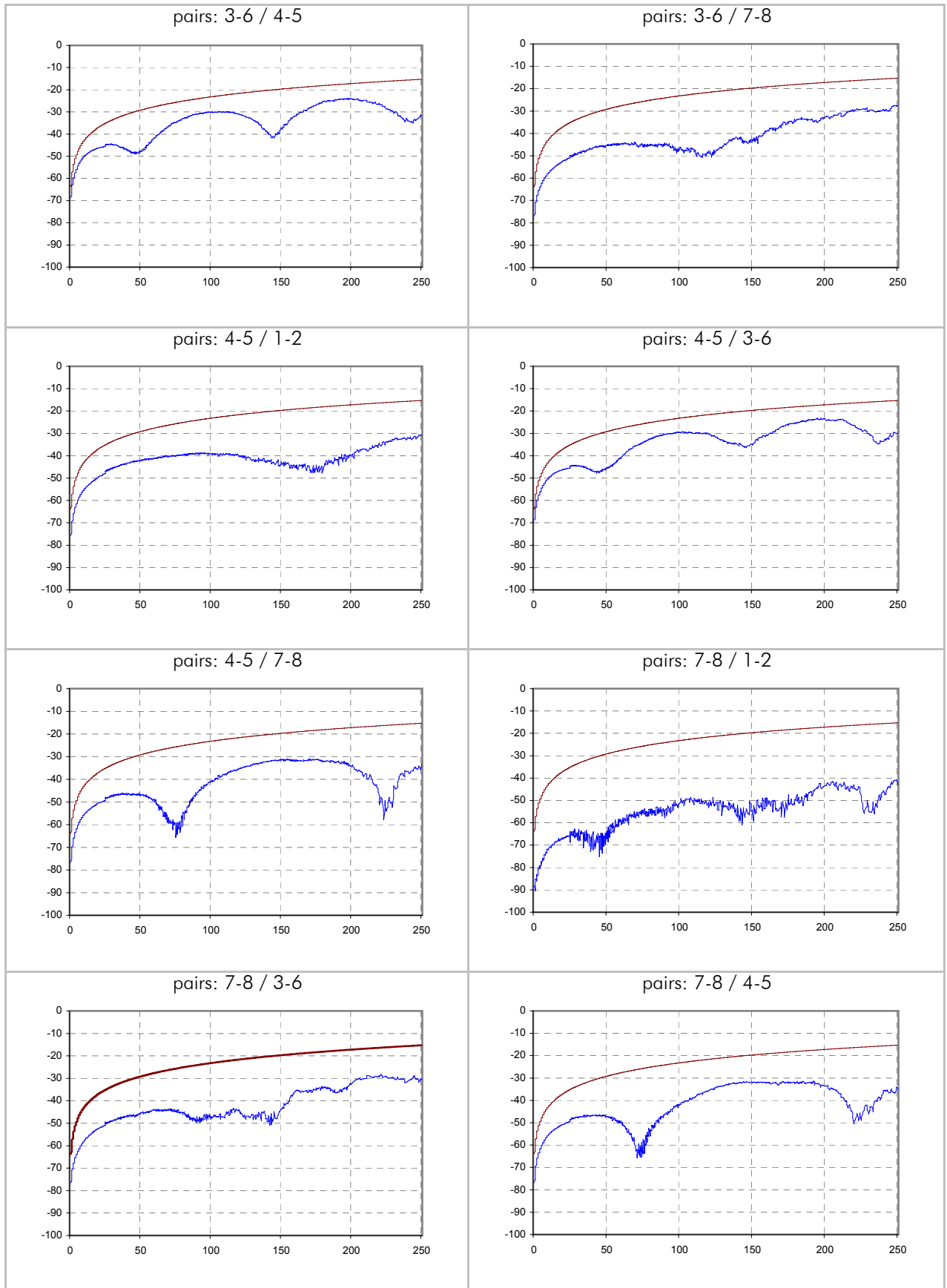
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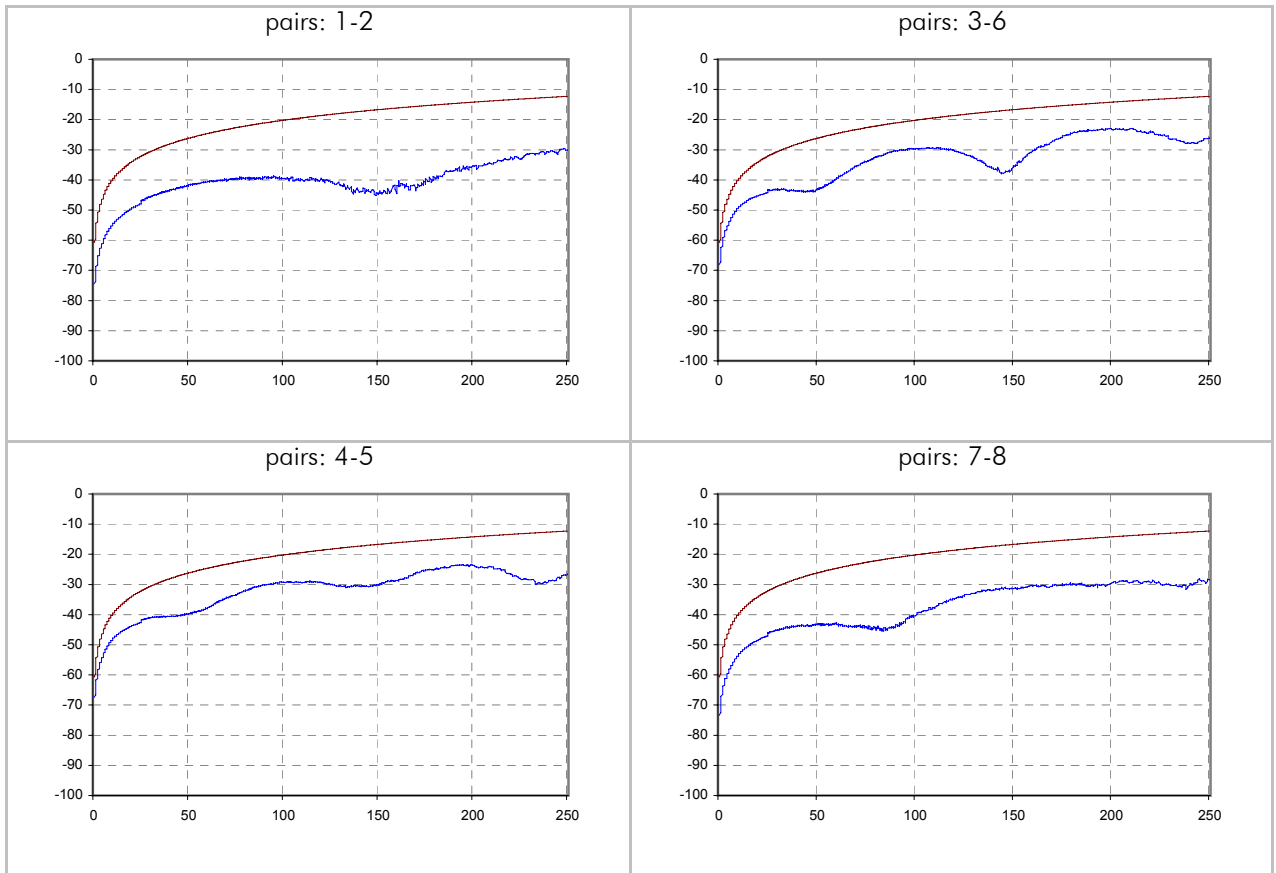
ELFEXT / dB (remote side - type 2 side)



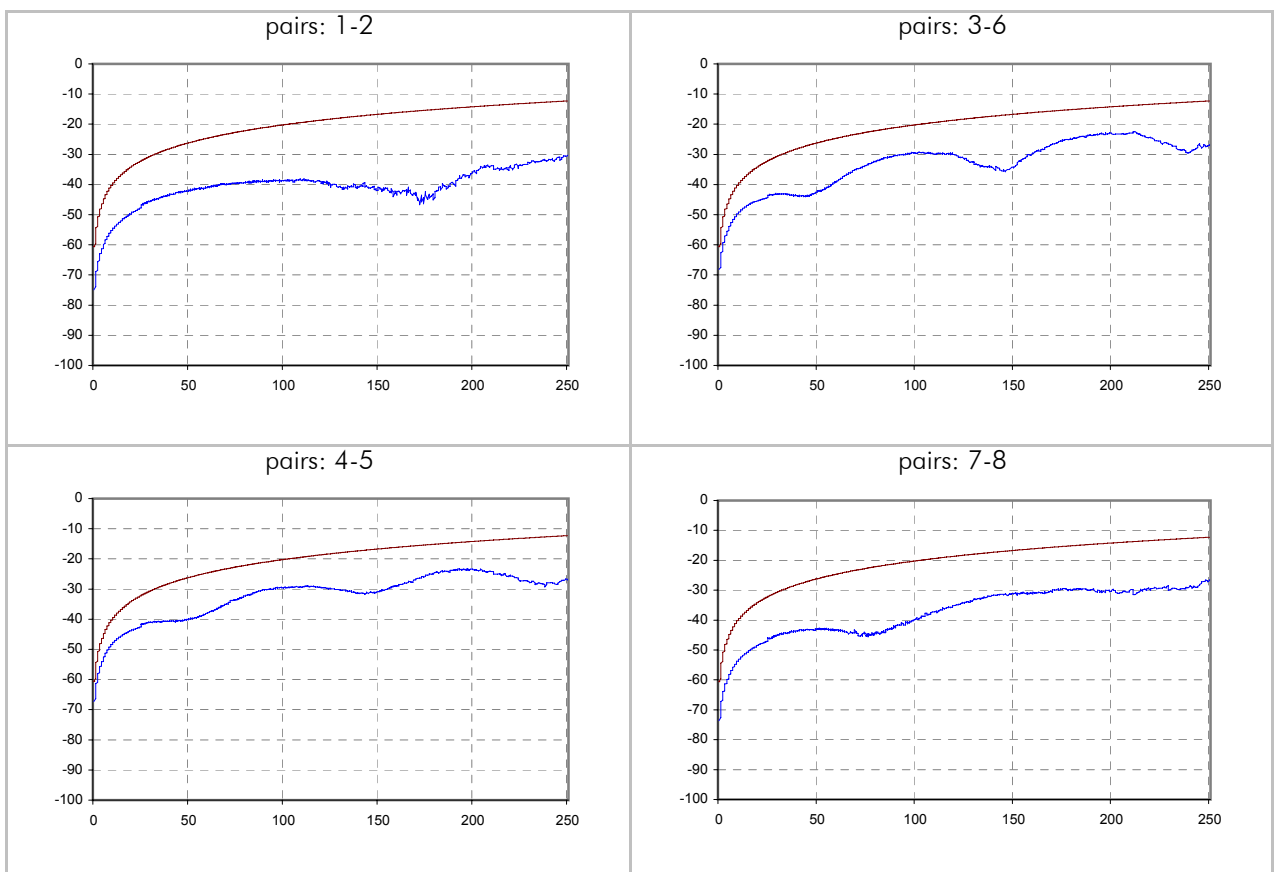
ELFEXT / dB (remote side - type 2 side)



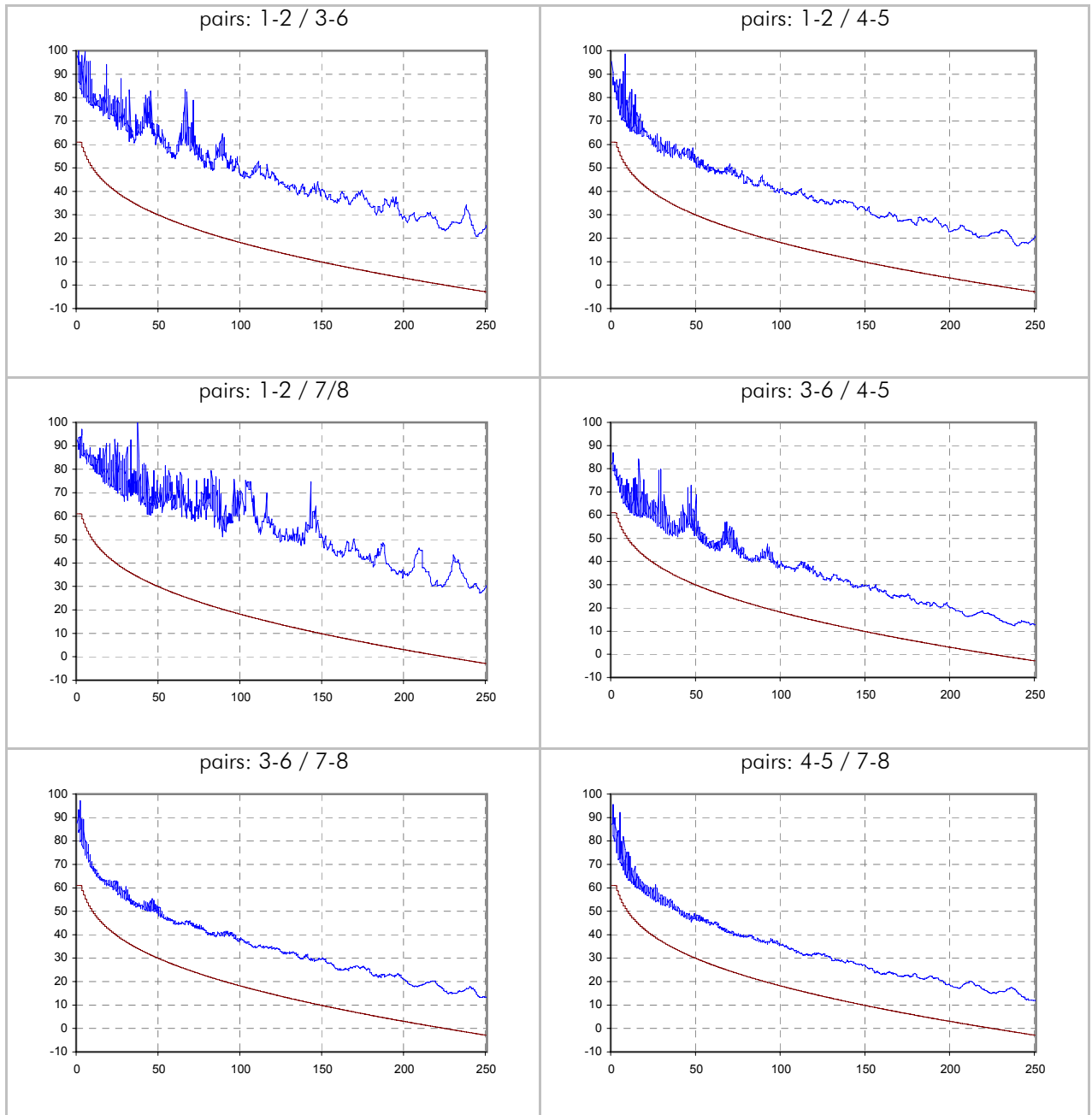
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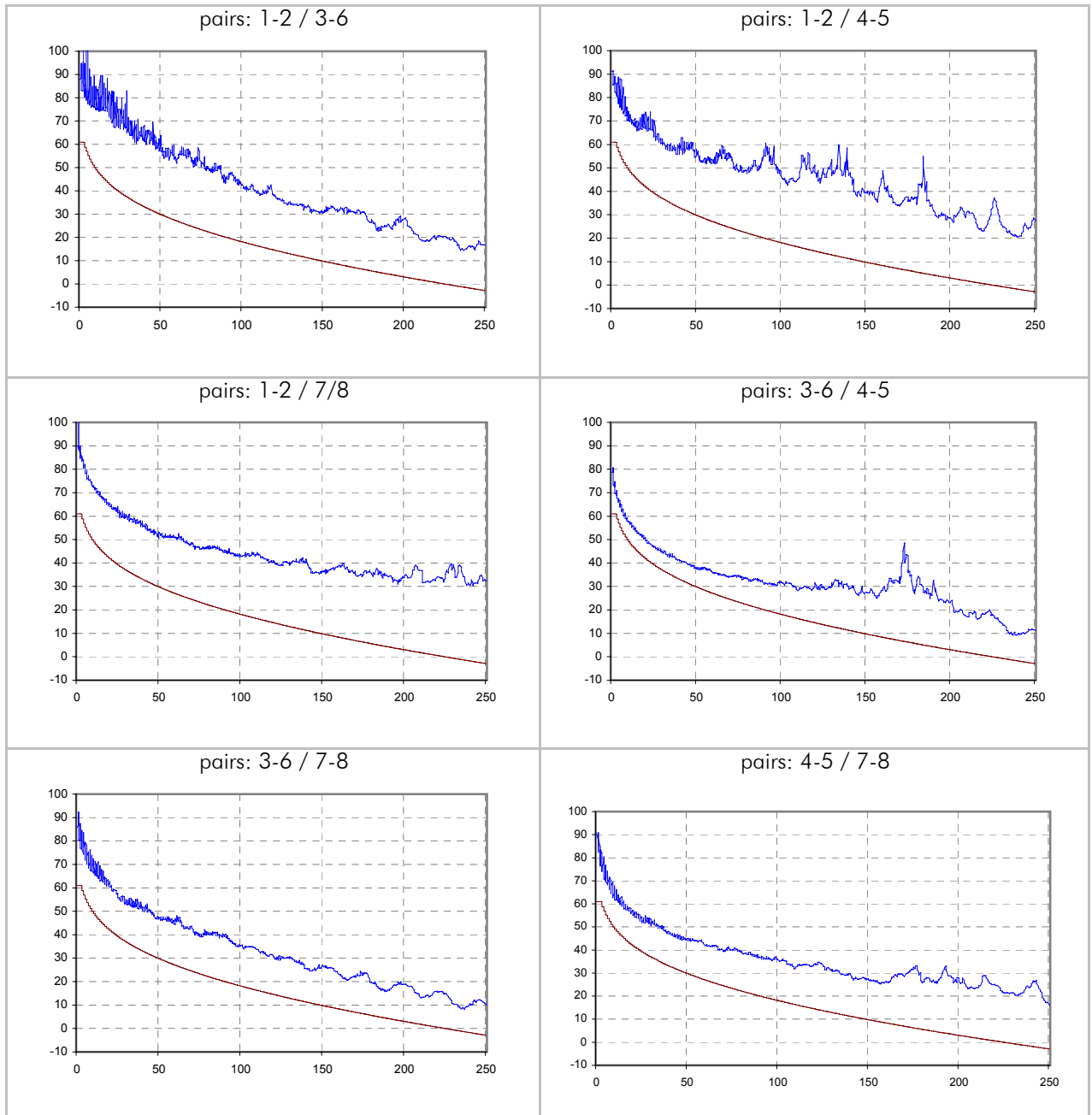
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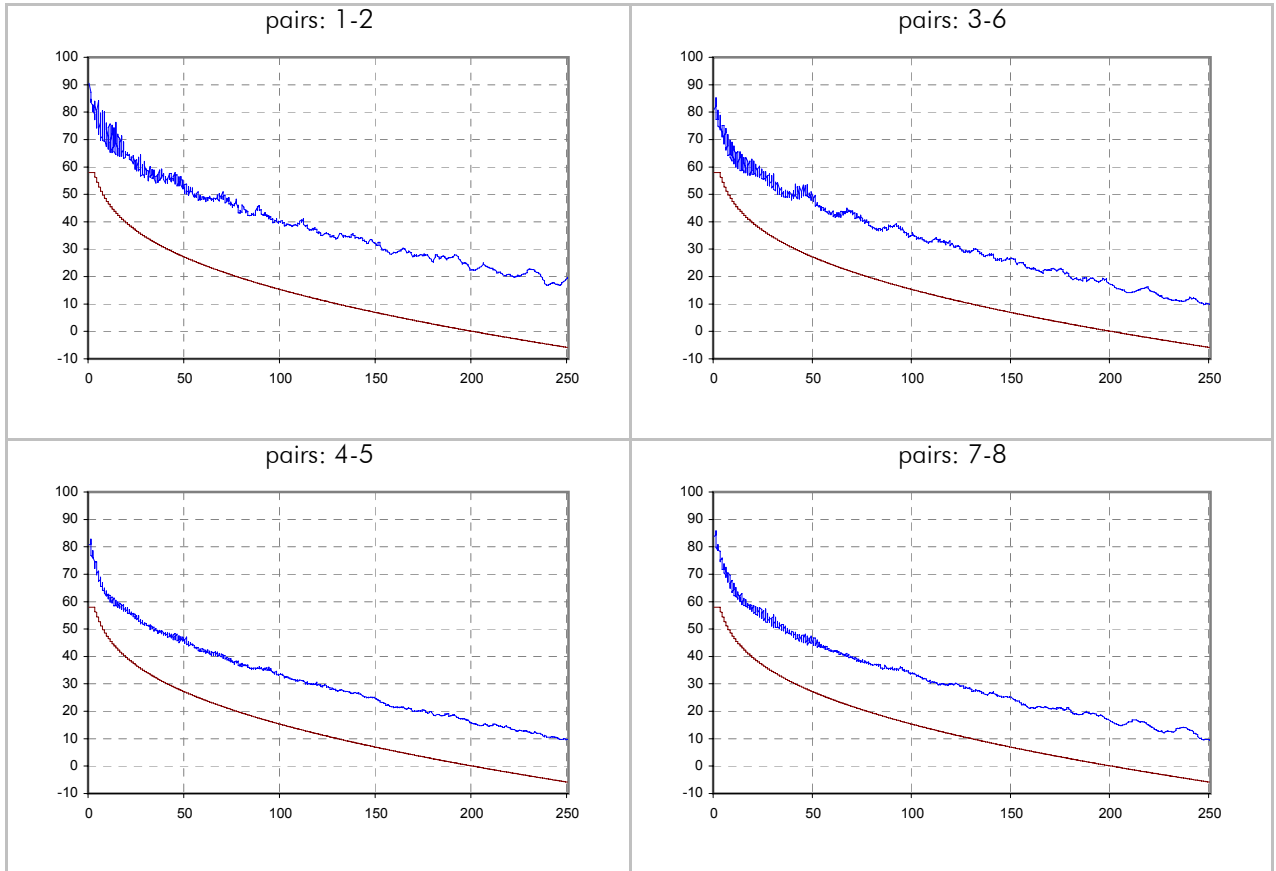
ACR / dB (scanner side - type 1 side)



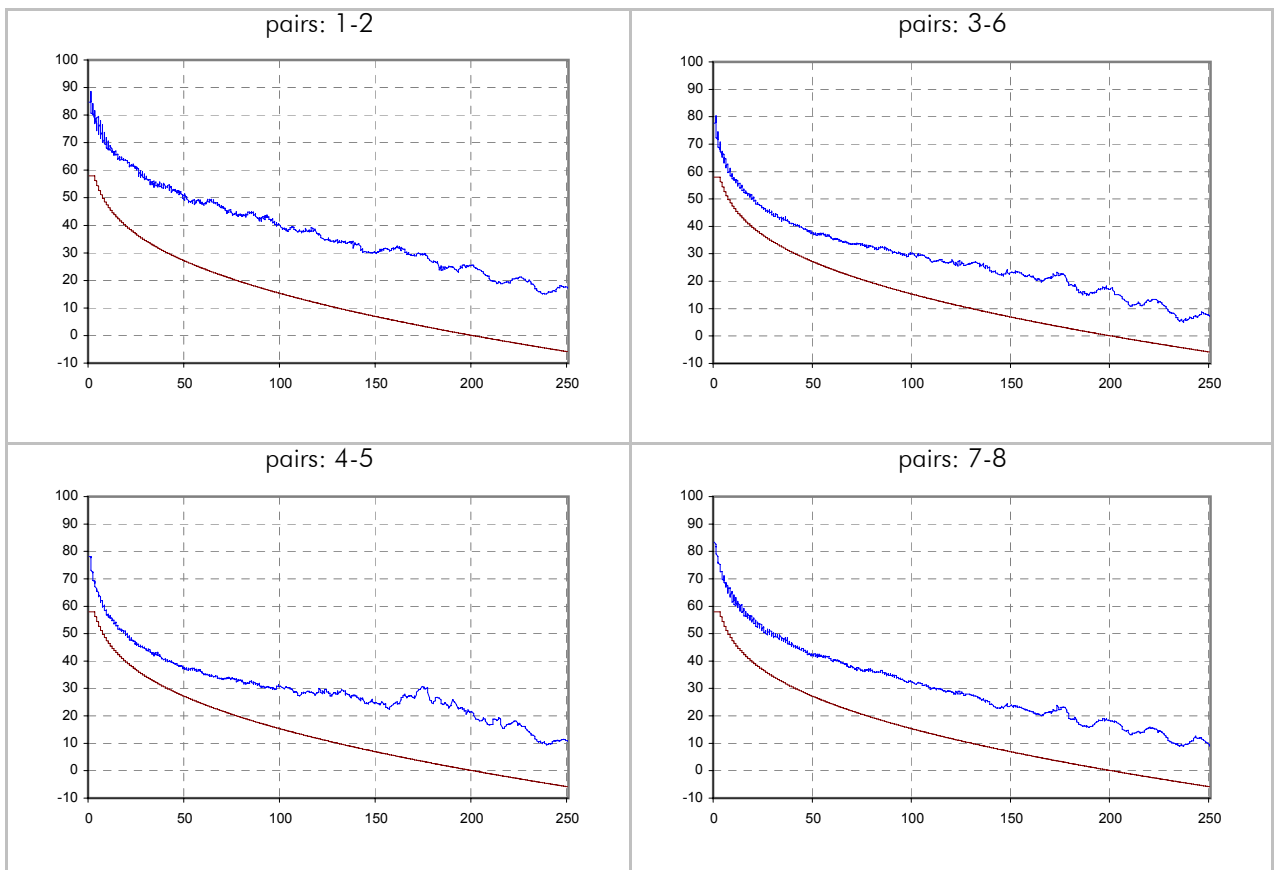
ACR / dB (remote side - type 2 side)



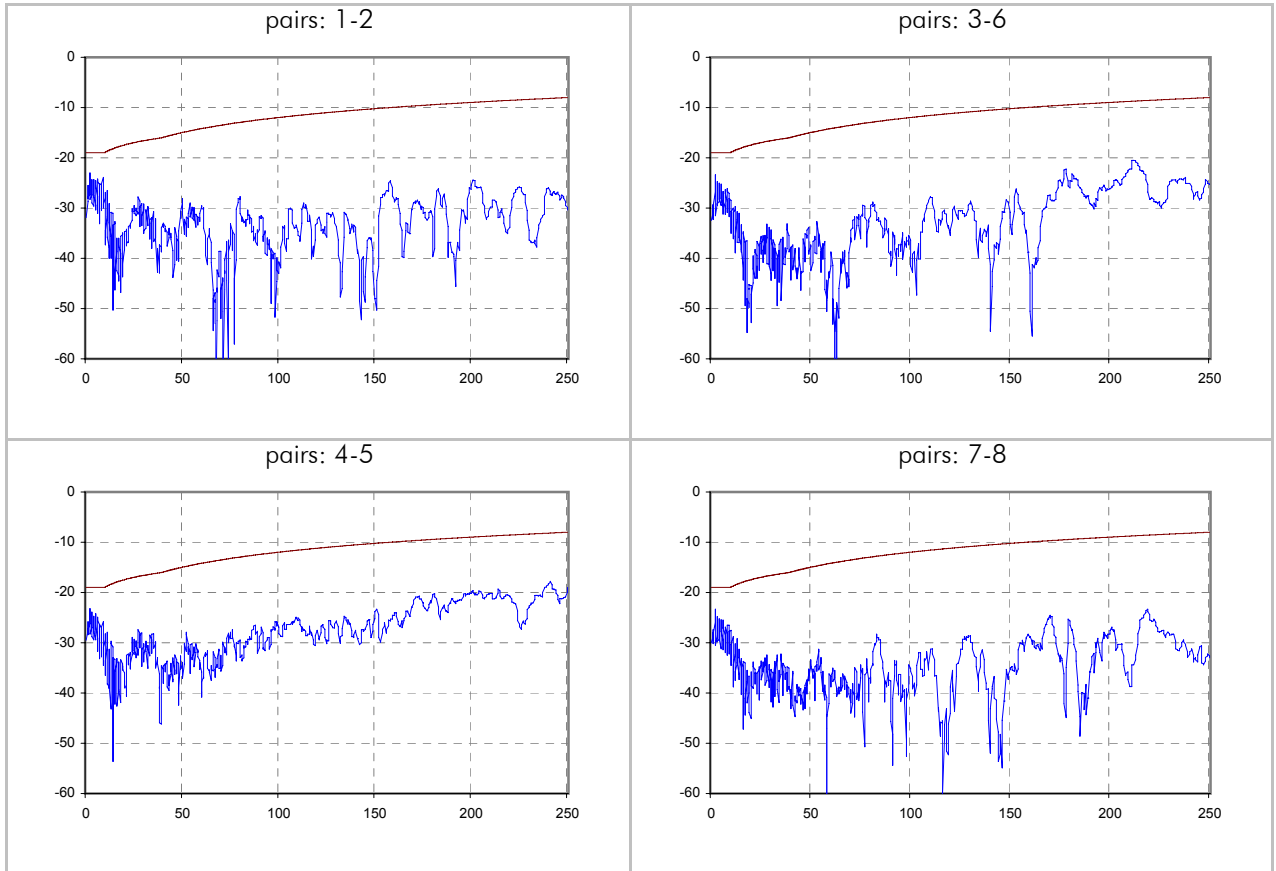
PSACR / dB (scanner side - type 1 side)



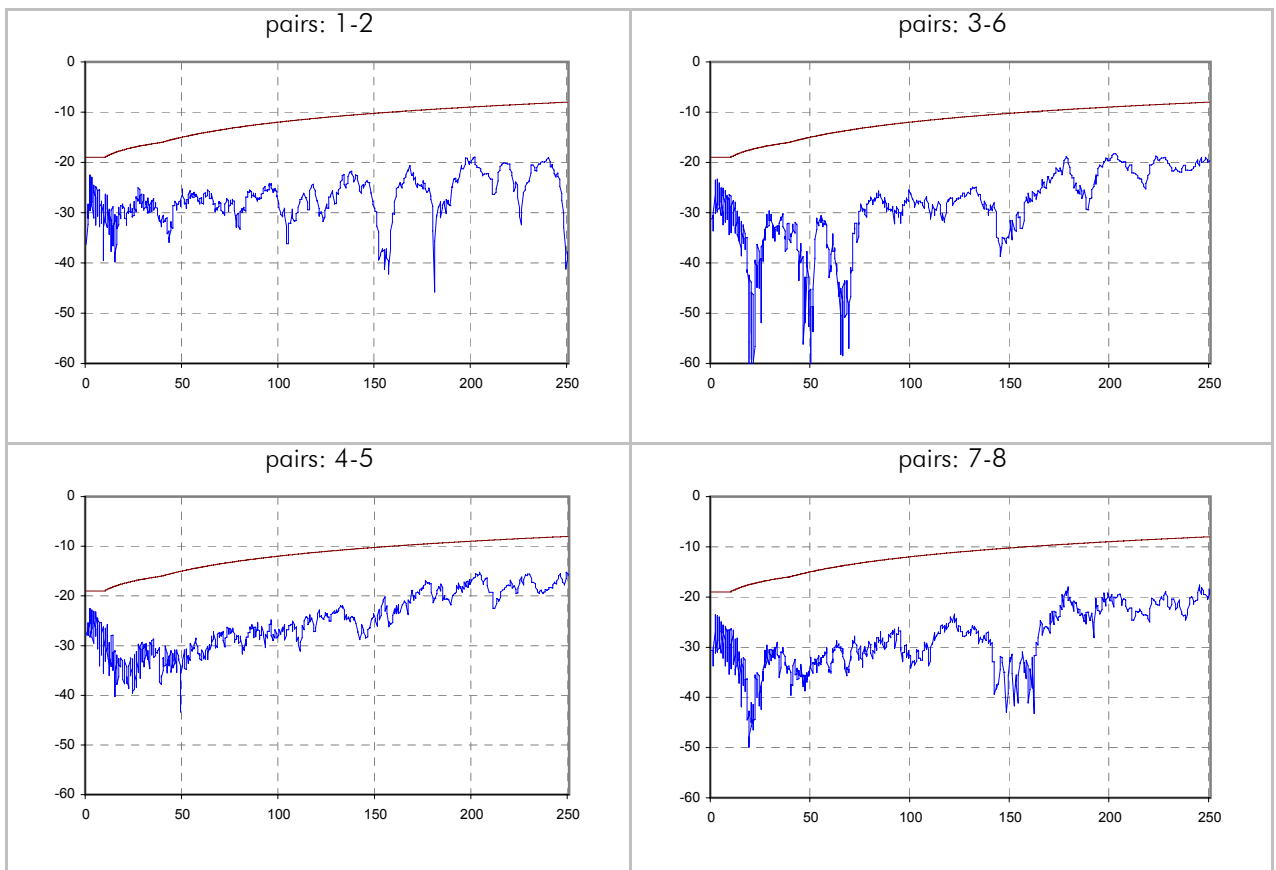
PSACR / dB (remote side - type 2 side)



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



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



Attenuation / dB

