

## Test Report No. EWA20026-37

### 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 Trend S-STP 4x2/0,55 LSOH Cat.6

### 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 = -10,5 dB and @ 250 MHz = -9,4 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

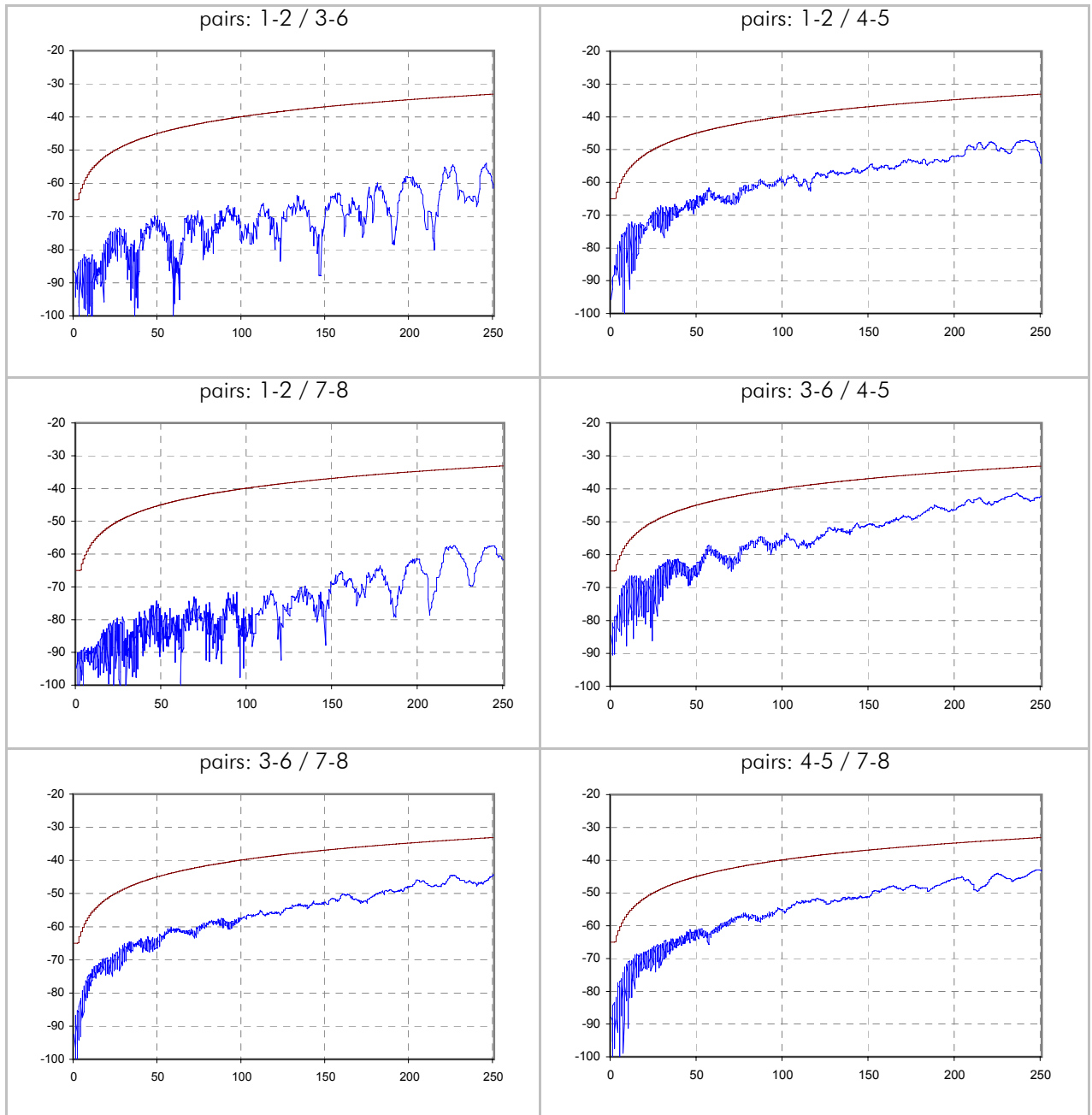
## Test Results

pairs	1-2	3-6	4-5	7-8	limit	skew / ns	limit
max Propagation delay / ns	451,0	465,0	456,0	462,0	546,3	14,0	50,0
Attenuation @ 100 MHz / dB	-19,5	-19,8	-19,5	-19,6	-21,7		
Attenuation @ 250 MHz / dB	-30,8	-32,4	-31,6	-31,6	-21,7		
min PSNEXT margin / dB	14,2	6,0	8,7	8,2			
@ f / MHZ	238,9	237,1	57,2	235,3			
PSNEXT limit / dB	-30,5	-30,6	-41,2	-30,6			
PSNEXT @ 100 MHz	-58,1	-48,6	-48,9	-50,9	-37,1		
PSNEXT @ 250 MHz	-47,8	-39,1	-39,6	-40,9	-30,2		
min PSELFEXT margin / dB	14,1	7,5	6,9	13,0			
@ f / MHZ	1,2	1,0	1,0	1,0			
PSELFEXT limit / dB	-58,8	-60,6	-60,6	-60,6			
PSELFEXT @ 100 MHz	-37,8	-30,3	-30,1	-42,2	-20,3		
PSELFEXT @ 250 MHz	-34,5	-22,1	-23,8	-28,9	-12,3		
min PSACR margin / dB	18,4	9,6	9,4	11,9			
@ f / MHZ	4,6	237,1	7,7	235,3			
PSACR limit / dB	55,2	-4,3	50,1	-4,1			
PSACR @ 100 MHz	40,3	34,4	32,7	33,5	15,4		
PSACR @ 250 MHz	19,8	8,2	10,4	10,1	-5,7		
min Return Loss margin / dB	3,4	4,1	3,1	4,3			
@ f / MHZ	2,5	2,3	2,5	2,3			
Return Loss limit / dB	-19,0	-19,0	-19,0	-19,0			

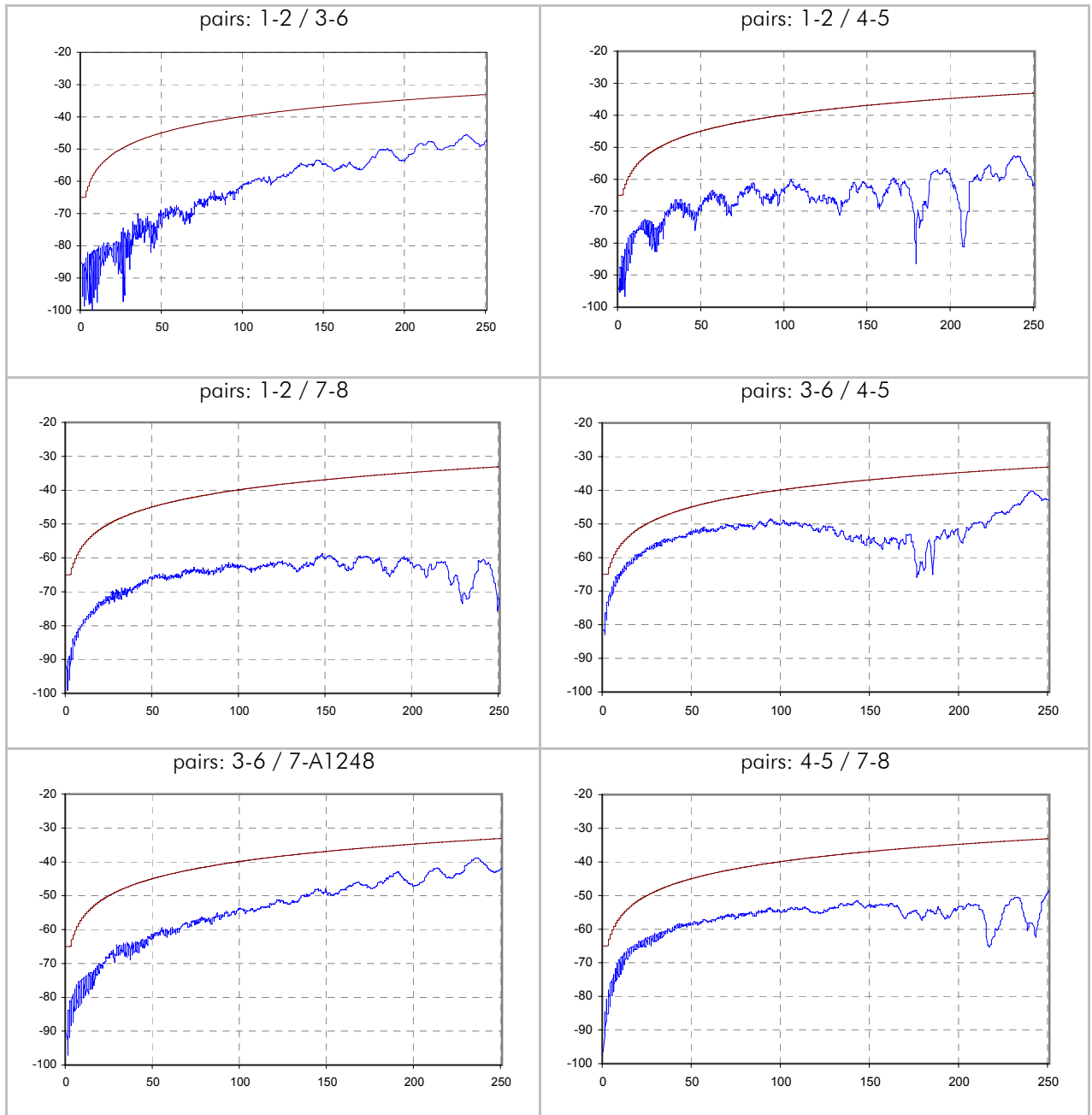
pairs	1-2 / 3-6	1-2 / 4-5	1-2 / 7-8	3-6 / 4-5	3-6 / 7-8	4-5 / 7-8	limit
min NEXT margin / dB	12,0	13,5	20,3	6,8	5,3	9,8	
@ f / MHZ	238,4	214,6	27,1	240,7	236,2	247,9	
Next limit / dB	-33,5	-34,3	-49,5	-33,4	-33,5	-33,2	
NEXT @ 100 MHz	-62,5	-59,9	-62,5	-50,4	-53,8	-54,6	-39,9
NEXT @ 250 MHz	-47,9	-51,6	-61,5	-42,7	-42,5	-43,0	-33,1
min ACR margin / dB	15,6	16,7	21,0	7,6	8,8	12,3	
@ f / MHZ	238,0	10,4	27,1	34,9	235,3	12,2	
ACR limit / dB	-1,5	49,6	38,6	35,2	-1,2	47,9	
ACR @ 100 MHz	42,6	40,4	42,9	30,6	34,0	35,0	18,2
ACR @ 250 MHz	15,6	20,0	29,8	10,3	10,1	11,4	-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	11,3	23,3	5,2	12,8	11,6	
@ f / MHZ	238,9	1,2	245,2	1,0	1,0	193,5	
ELFEXT limit / dB	-15,7	-61,8	-15,5	-63,6	-63,6	-17,5	
min ELFEXT margin / dB	18,2	11,2	23,0	5,1	12,8	11,8	
@ f / MHZ	239,8	1,2	245,2	1,0	1,0	193,5	
ELFEXT limit / dB	-15,7	-61,8	-15,5	-63,6	-63,6	-17,5	
ELFEXT @ 100 MHz	-50,2	-38,0	-55,5	-30,4	-43,3	-47,8	-23,3
ELFEXT @ 250 MHz	-37,7	-37,5	-41,5	-23,3	-28,8	-40,0	-15,3
ELFEXT @ 100 MHz	-49,8	-38,1	-55,4	-30,8	-43,6	-47,6	-23,3
ELFEXT @ 250 MHz	-36,1	-36,7	-40,6	-24,1	-29,5	-40,0	-15,3

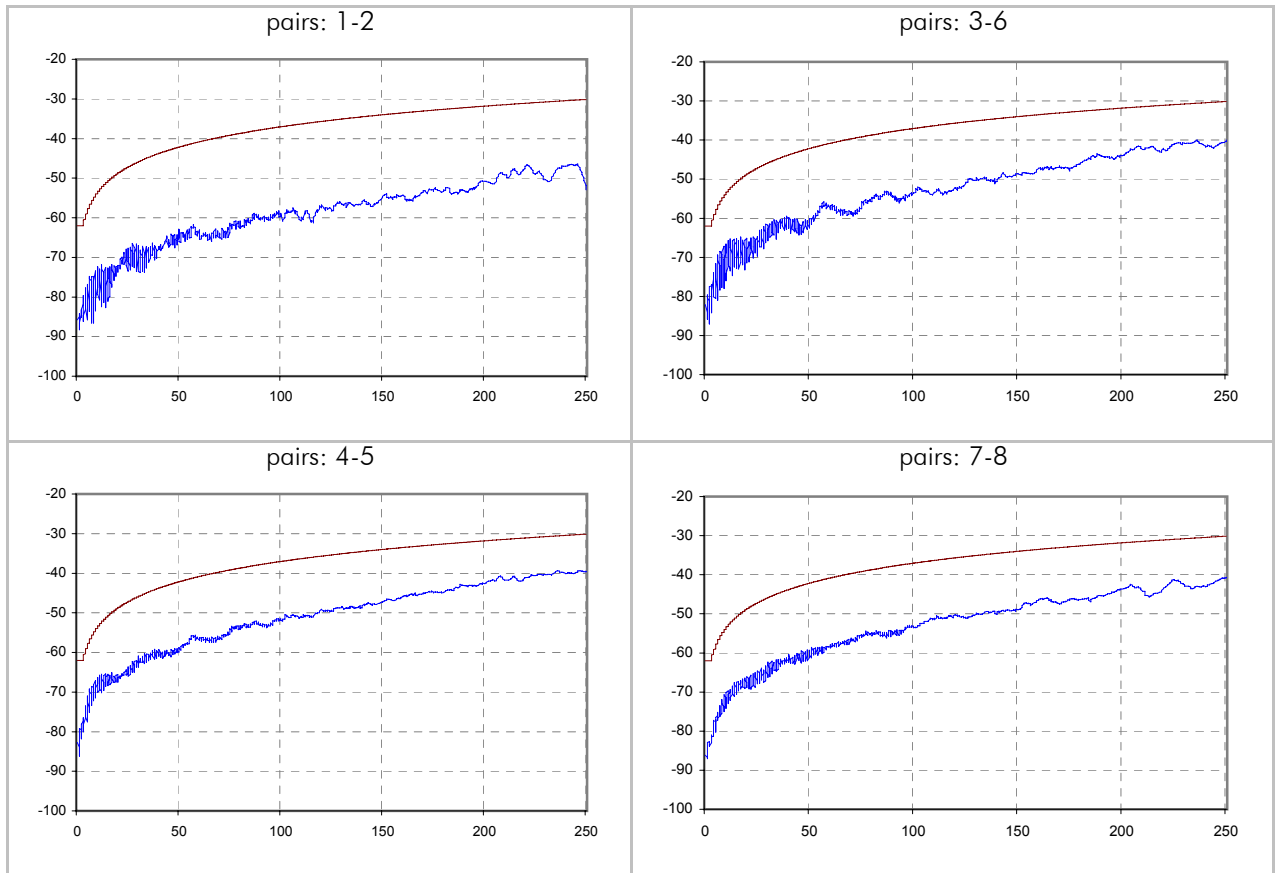
NEXT / dB (scanner side - type 1 side)



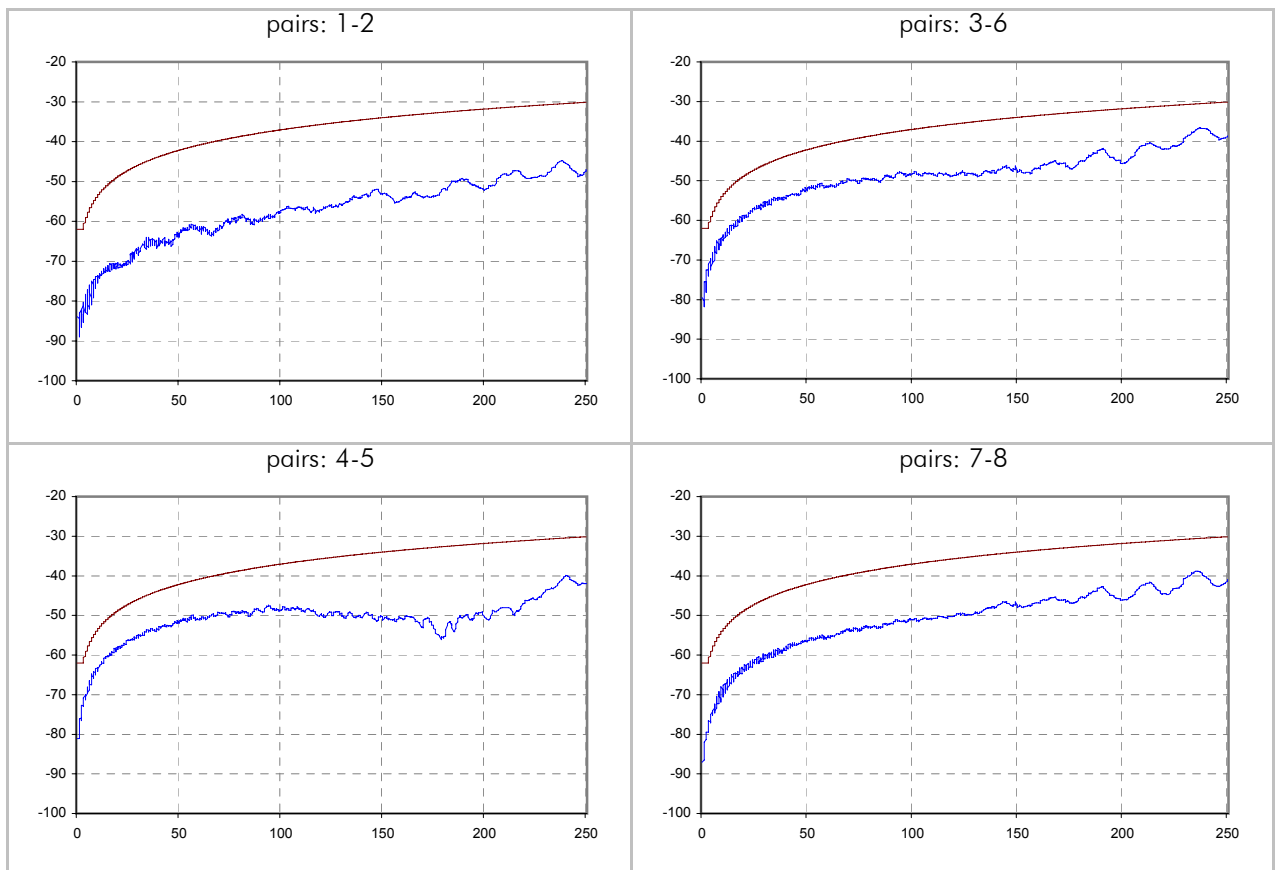
NEXT / dB (remote side - type 2 side)



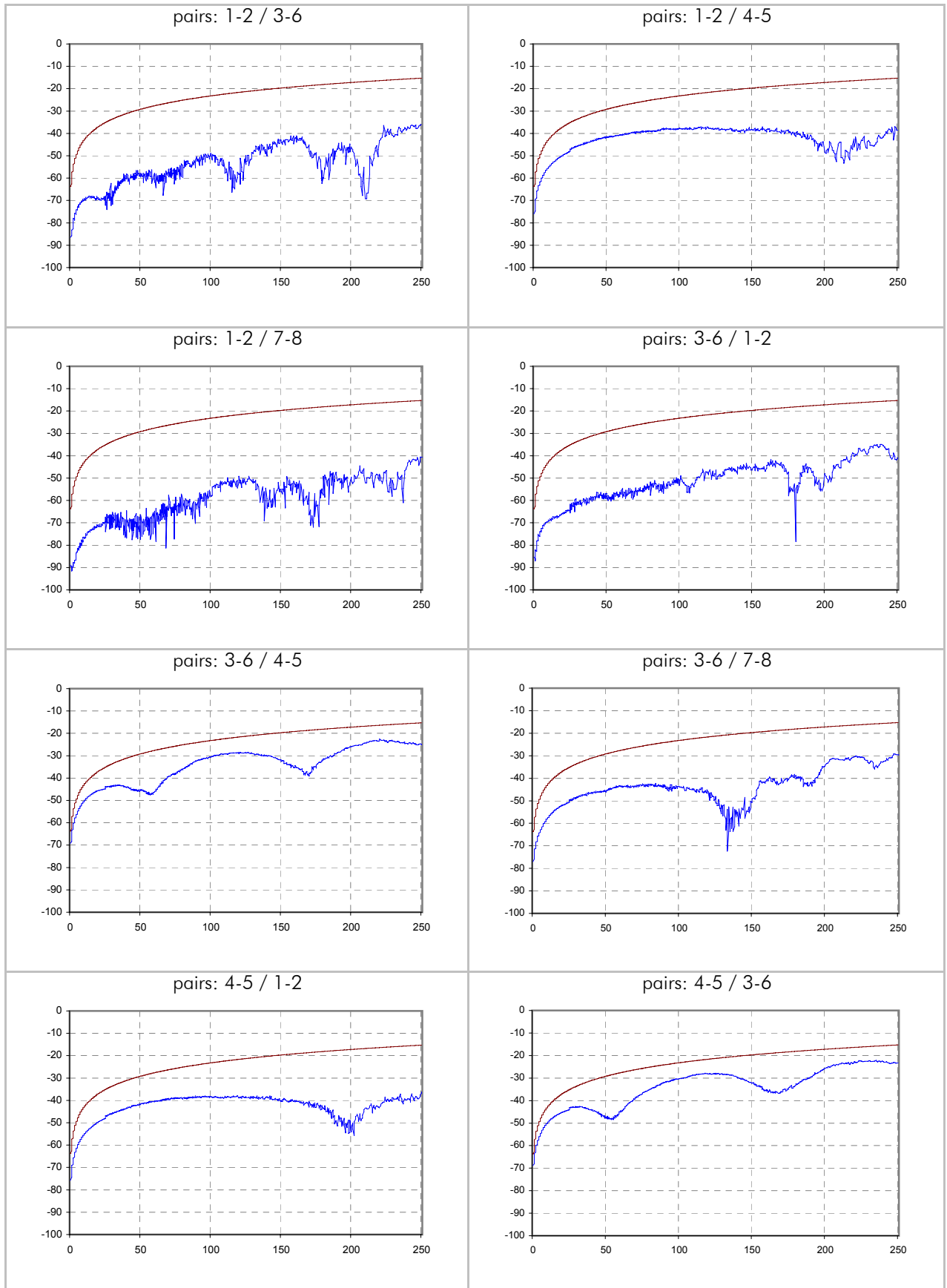
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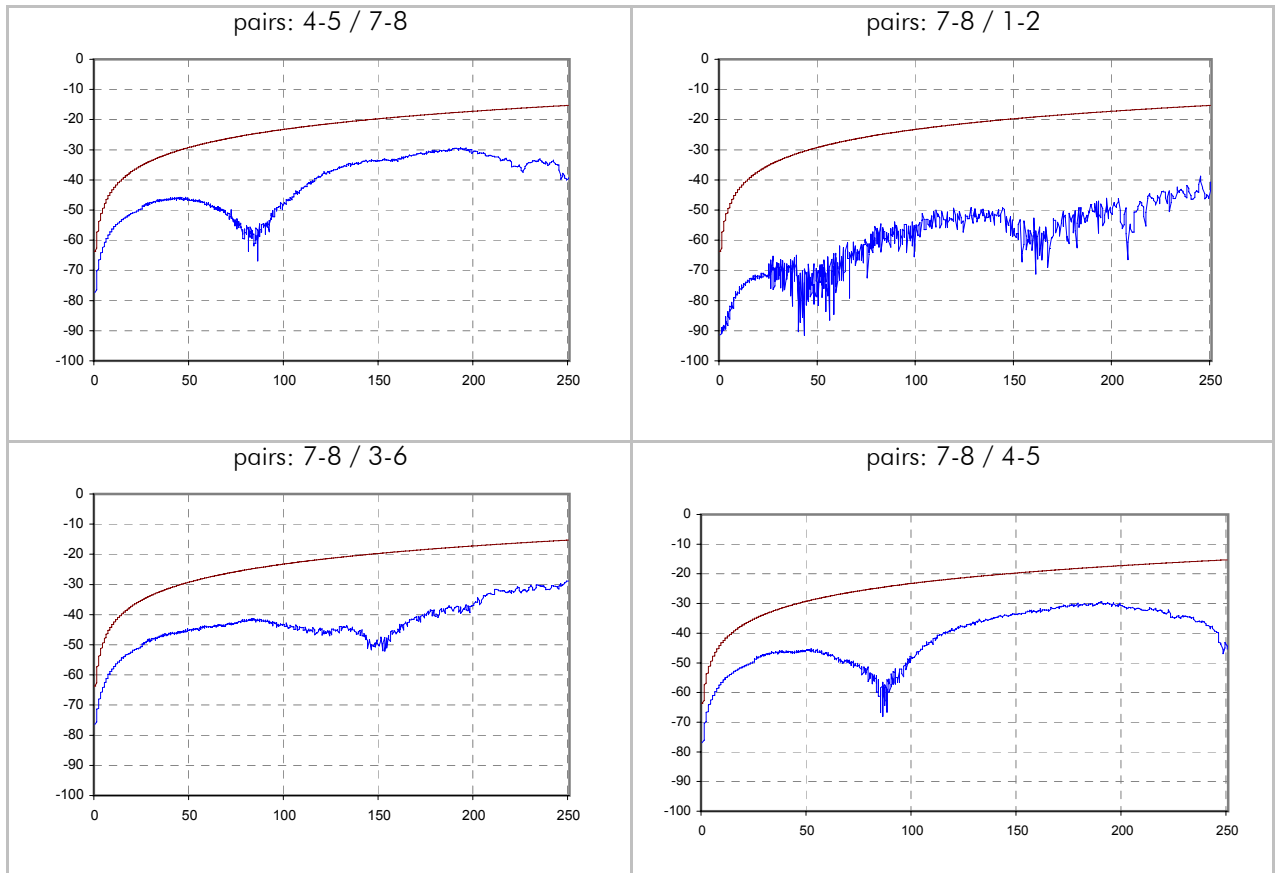
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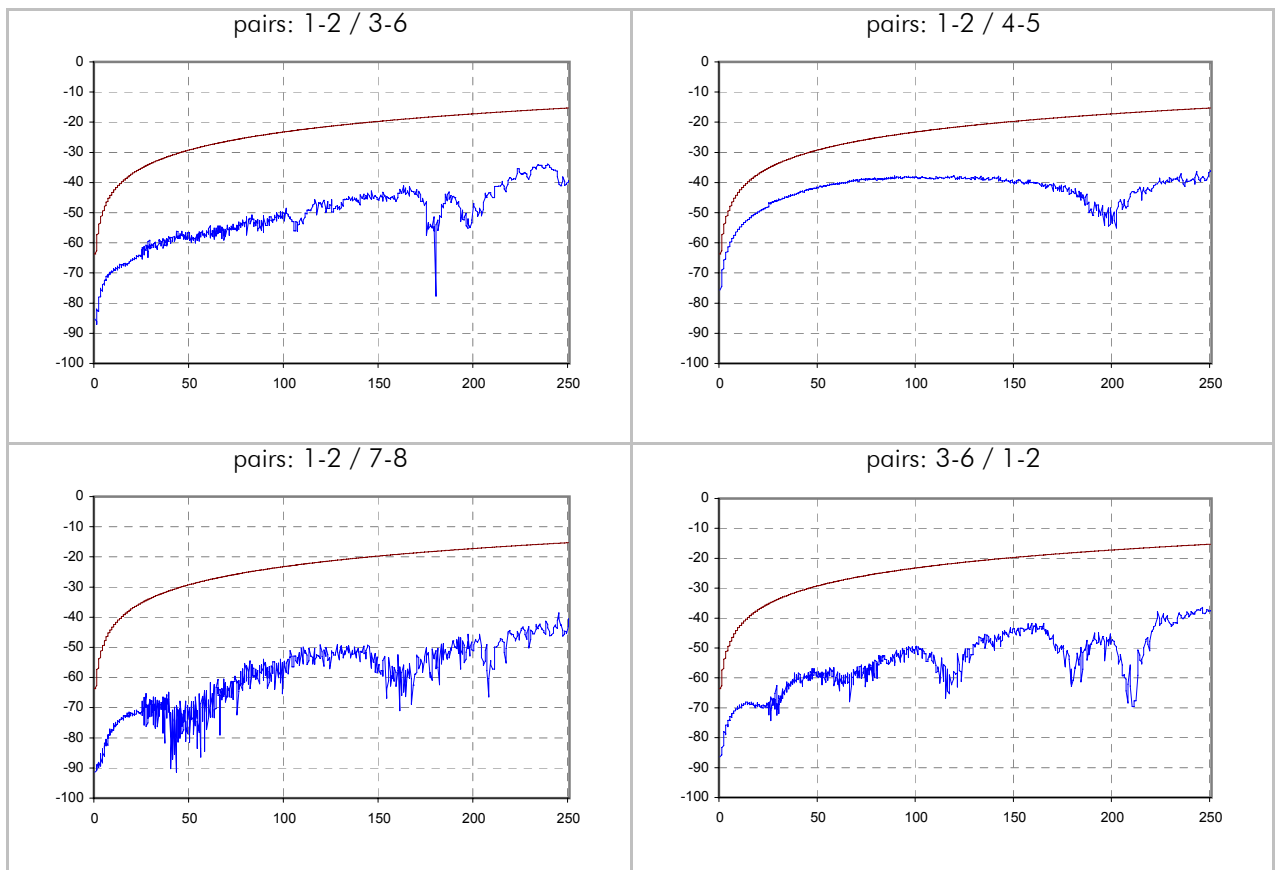
ELFEXT / dB (scanner side - type 1 side)



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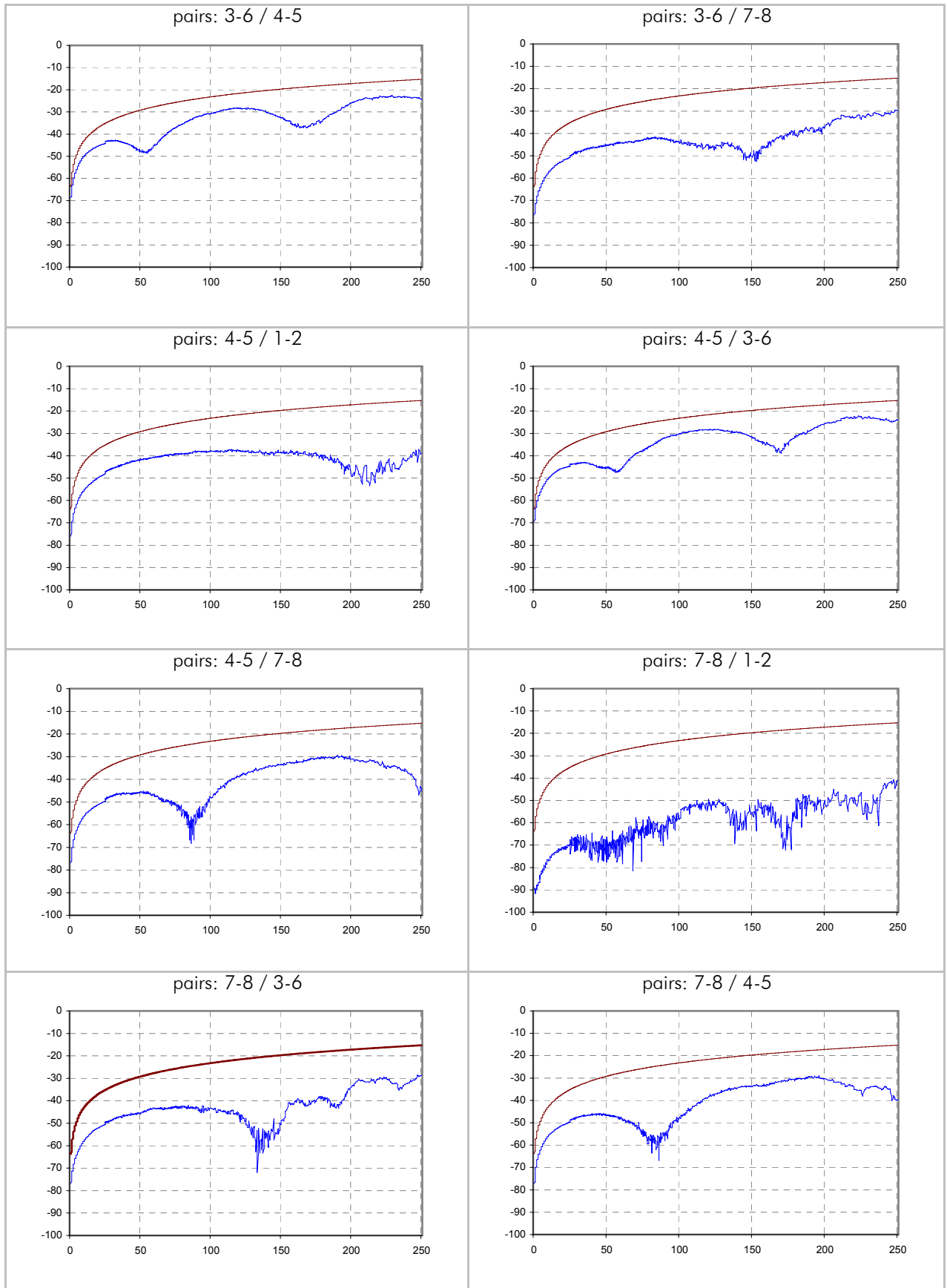


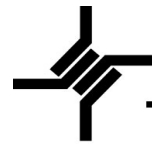
ELFEXT / dB (remote side - type 2 side)



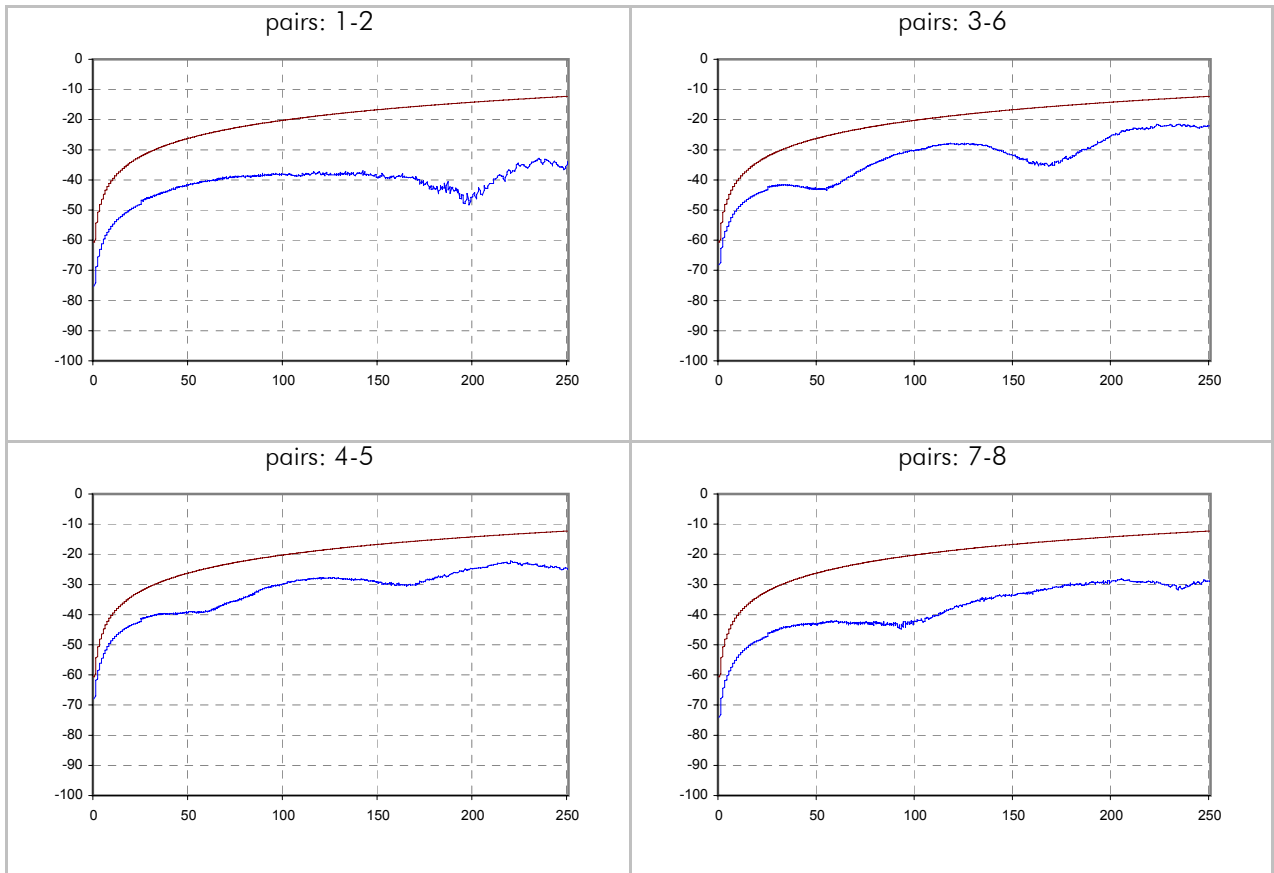


ELFEXT / dB (remote side - type 2 side)

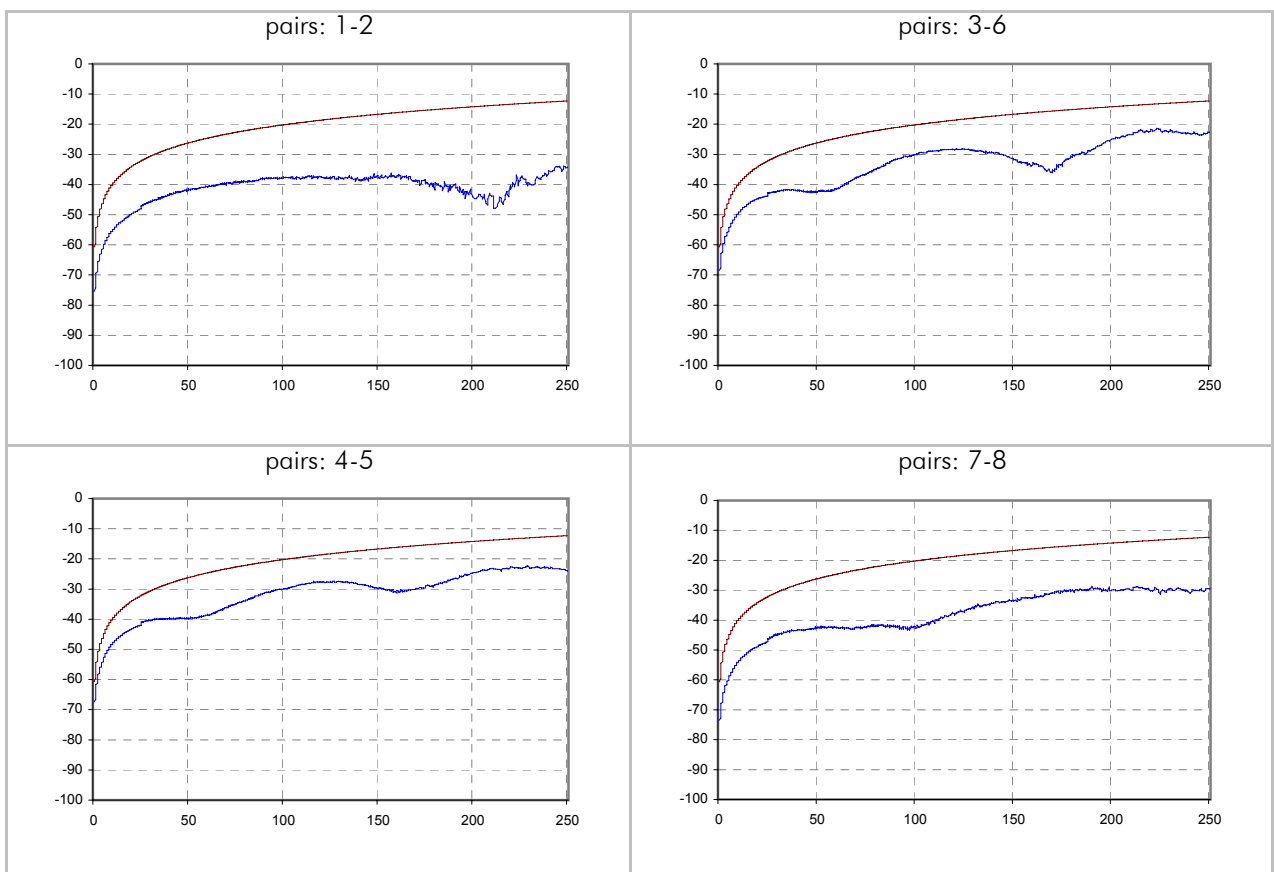




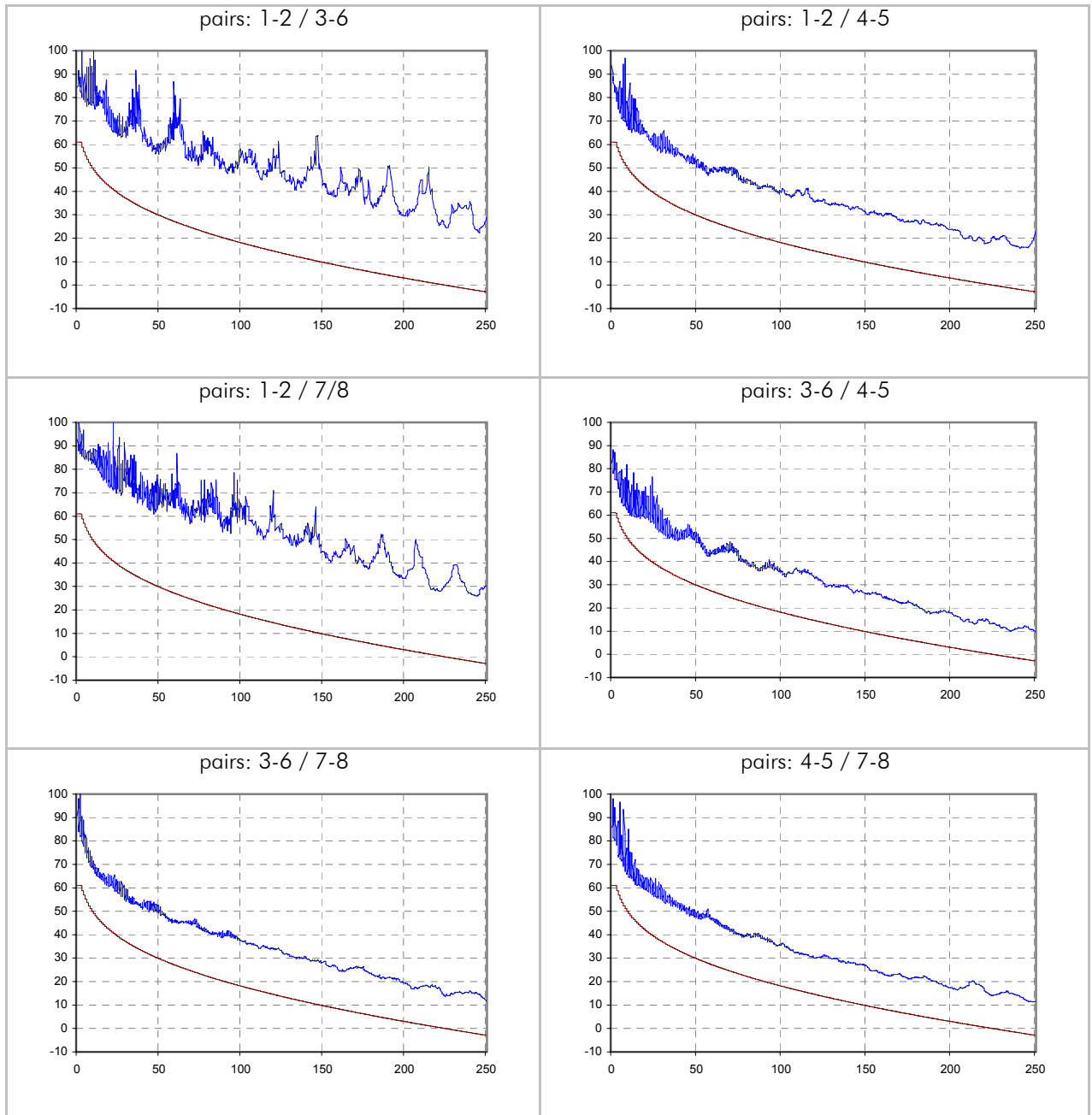
PSELFEXT / dB (scanner side - type 1 side)



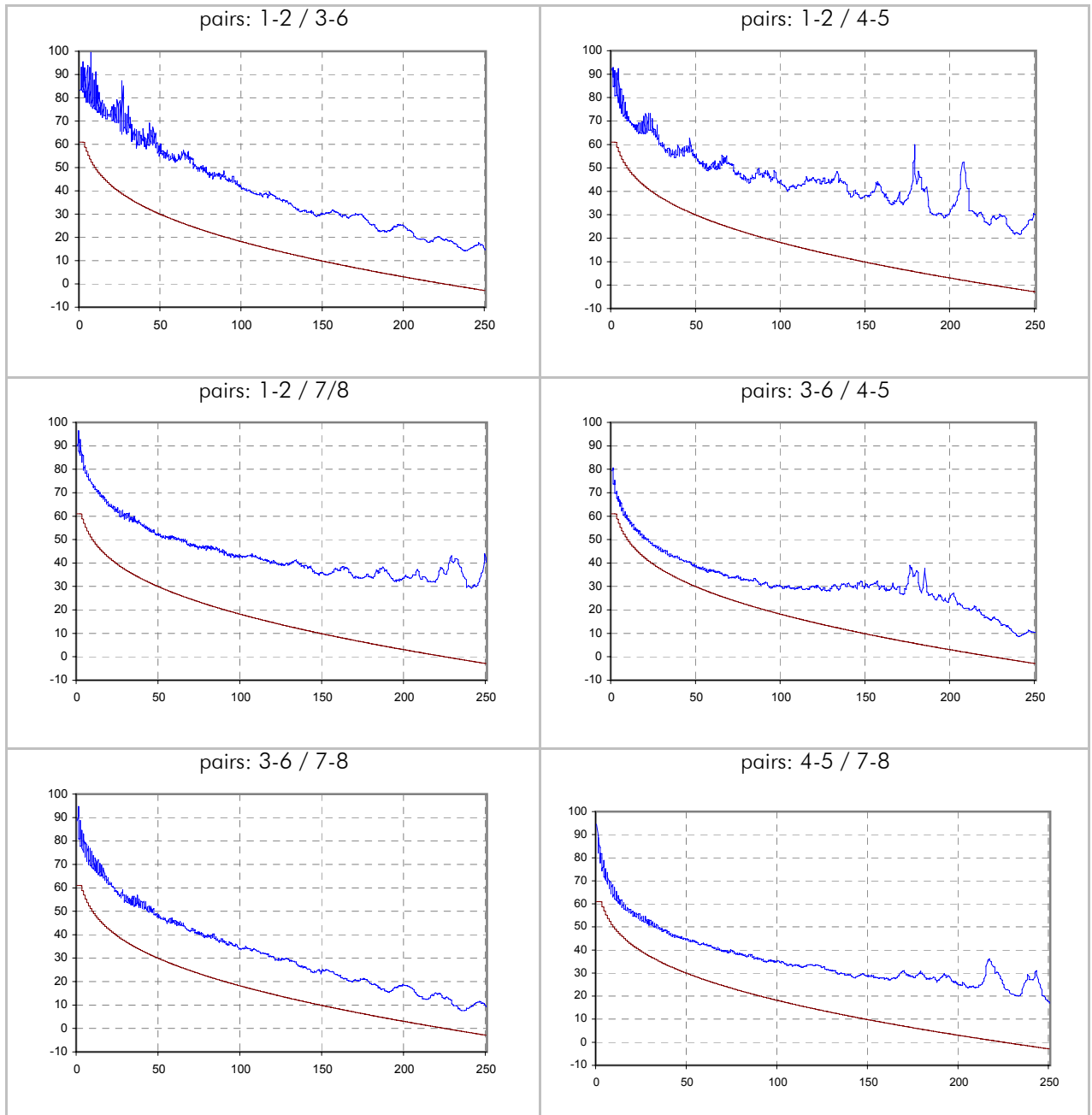
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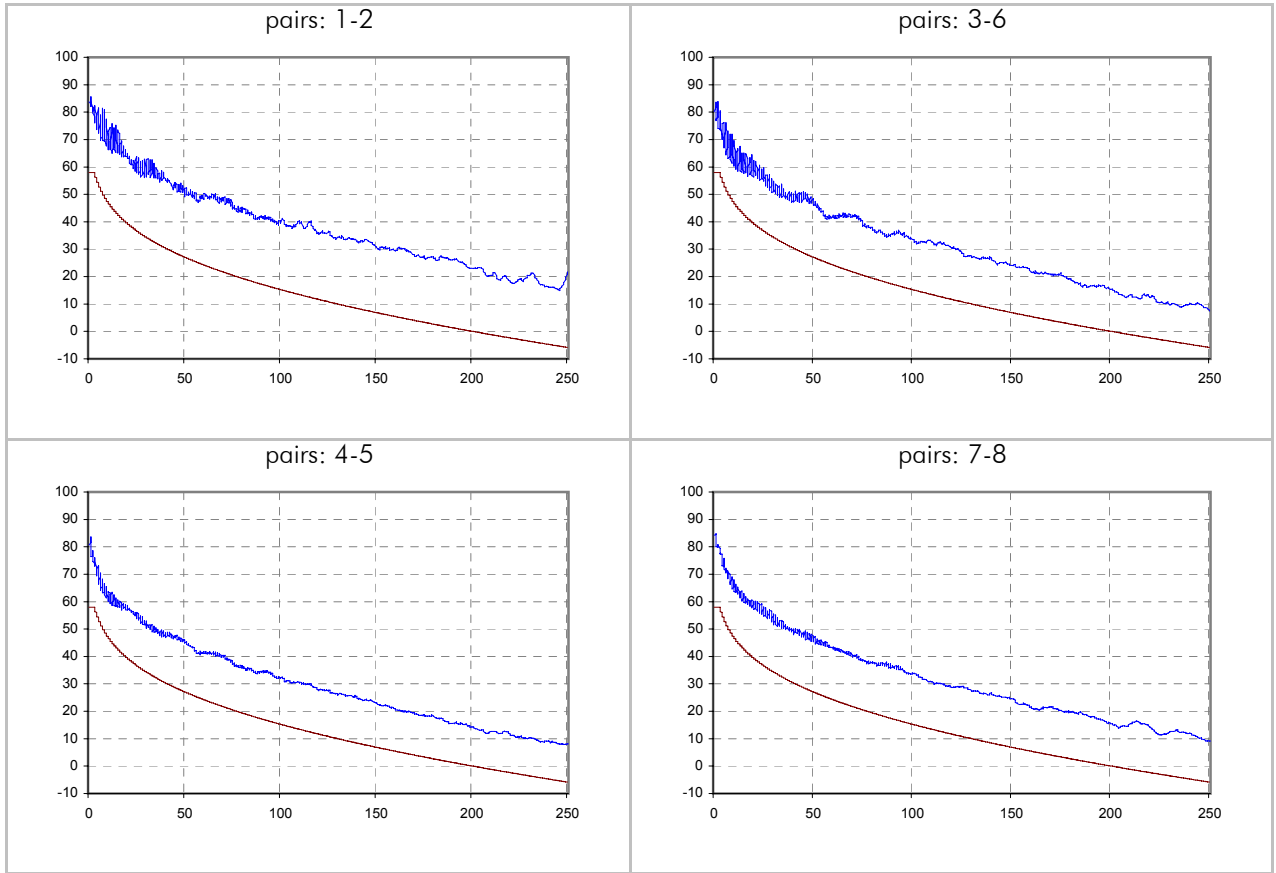
ACR / dB (scanner side - type 1 side)



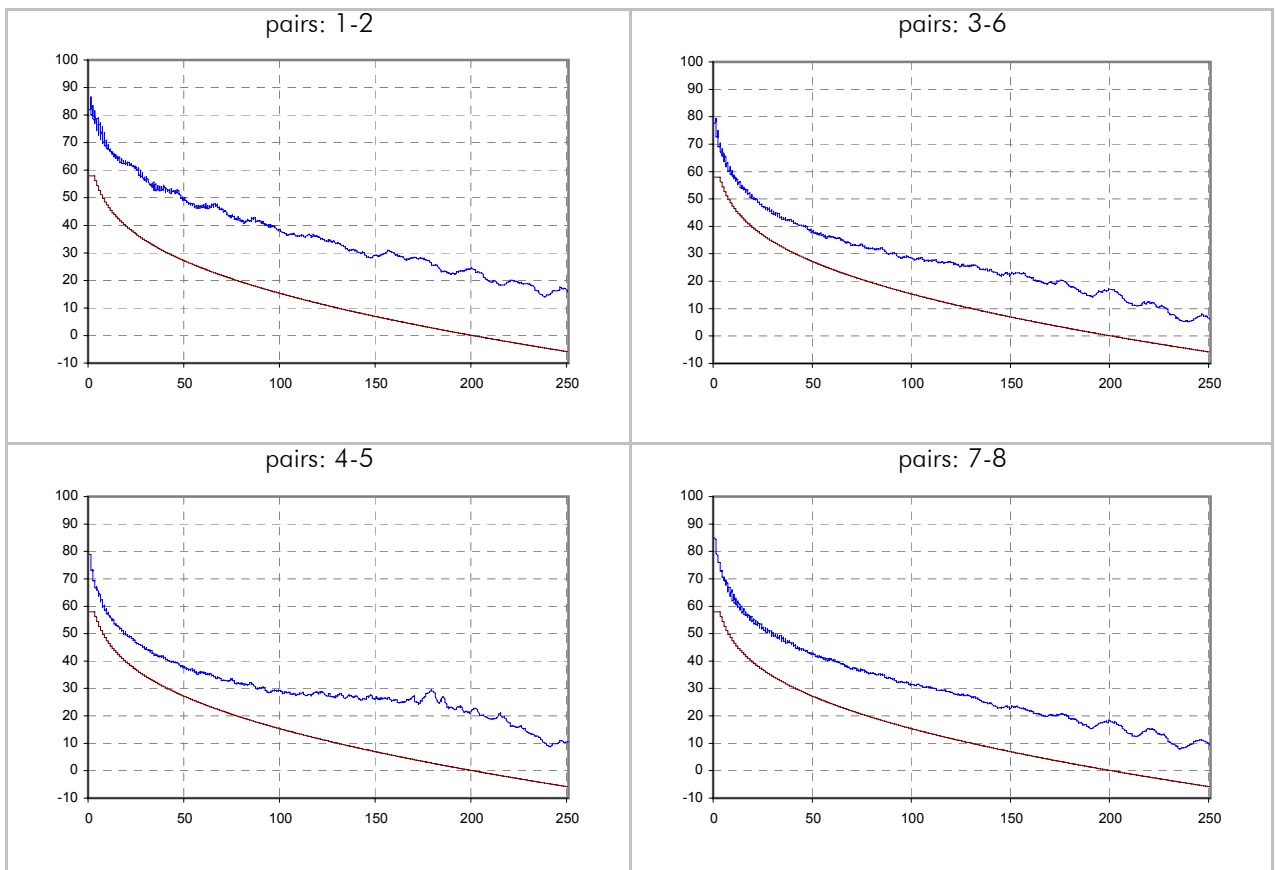
ACR / dB (remote side - type 2 side)



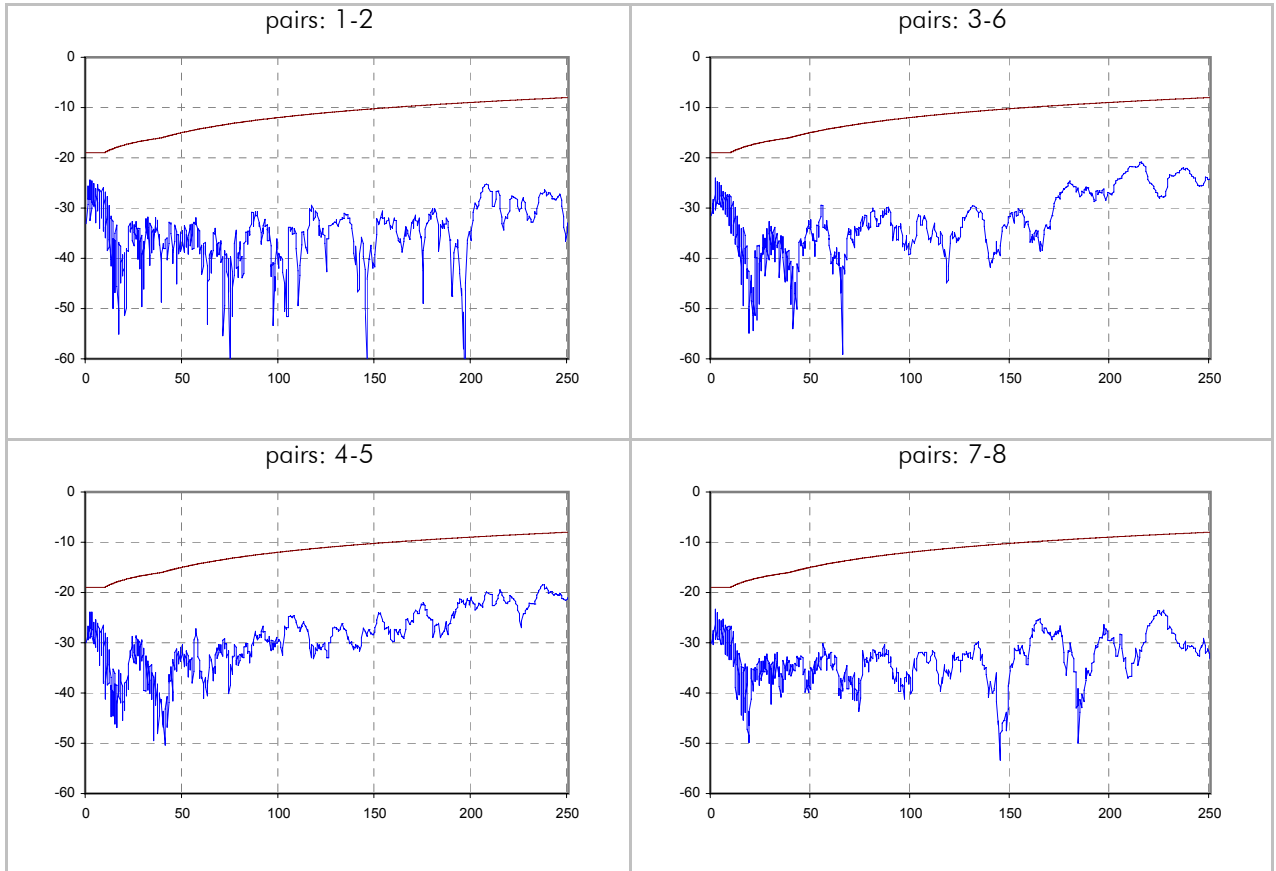
PSACR / dB (scanner side - type 1 side)



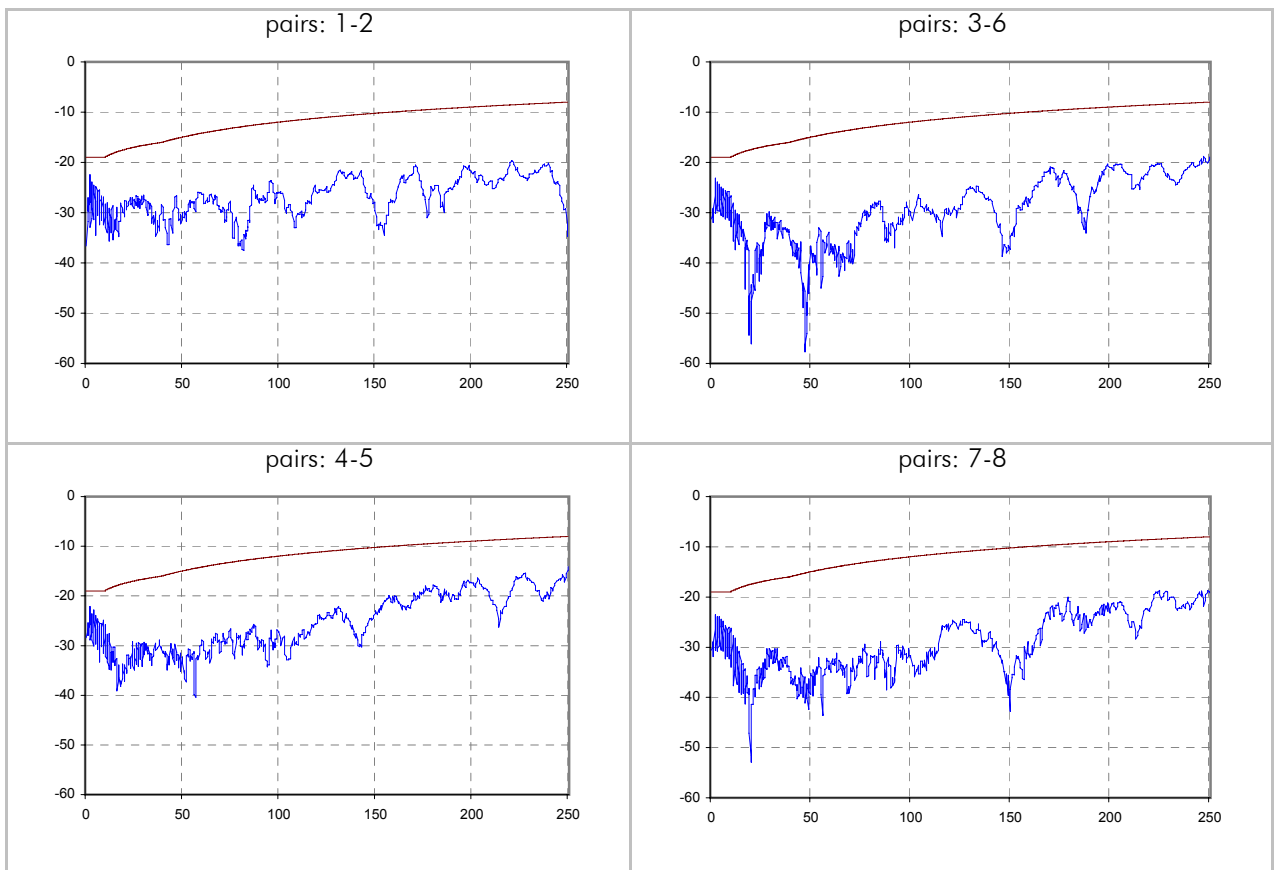
PSACR / dB (remote side - type 2 side)



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



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



Attenuation / dB

