

## Test Report No. EWA20026-32

### 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:	Draka MC UC400 HS24 4P 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 = -9,4 dB and @ 250 MHz = -7,2 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. 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

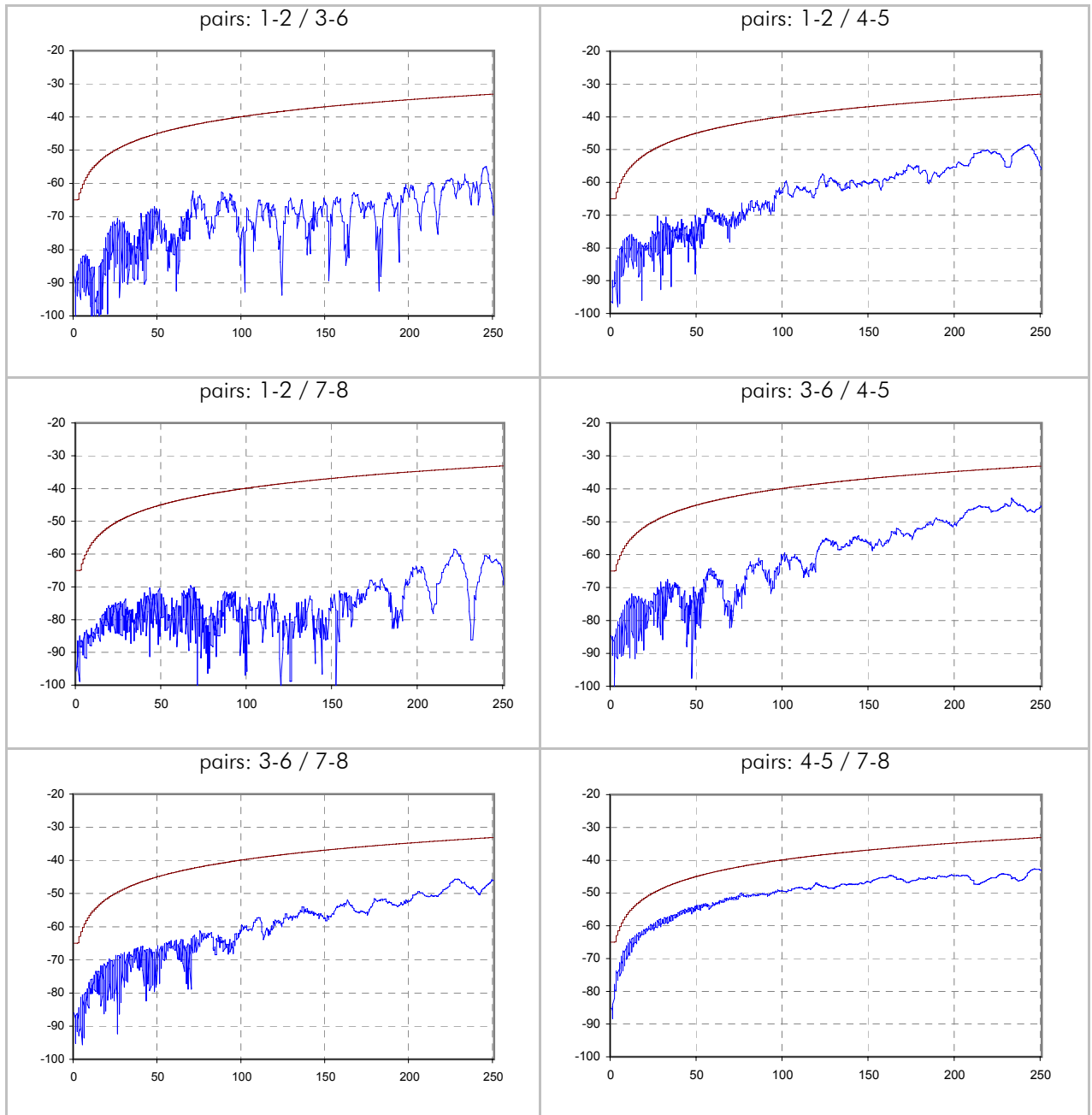
## Test Results

pairs	1-2	3-6	4-5	7-8	limit	skew / ns	limit
max Propagation delay / ns	425,0	434,0	424,0	427,0	546,3	10,0	50,0
Attenuation @ 100 MHz / dB	-20,2	-20,7	-20,3	-20,3	-21,7		
Attenuation @ 250 MHz / dB	-32,1	-33,7	-32,5	-33,1	-21,7		
min PSNEXT margin / dB	14,3	4,9	7,5	8,4			
@ f / MHZ	239,8	237,1	237,1	234,4			
PSNEXT limit / dB	-30,5	-30,6	-30,6	-30,6			
PSNEXT @ 100 MHz	-53,4	-49,7	-48,8	-49,1	-37,1		
PSNEXT @ 250 MHz	-49,6	-37,7	-39,4	-40,4	-30,2		
min PSELFEXT margin / dB	13,9	8,1	7,4	12,6			
@ f / MHZ	1,0	1,0	1,0	1,0			
PSELFEXT limit / dB	-60,6	-60,6	-60,6	-60,6			
PSELFEXT @ 100 MHz	-35,2	-30,6	-29,4	-37,7	-20,3		
PSELFEXT @ 250 MHz	-29,0	-22,2	-22,4	-31,2	-12,3		
min PSACR margin / dB	14,9	7,0	10,3	11,0			
@ f / MHZ	4,6	237,1	33,3	231,7			
PSACR limit / dB	55,2	-4,3	33,1	-3,7			
PSACR @ 100 MHz	42,9	37,1	28,8	28,9	15,4		
PSACR @ 250 MHz	21,8	9,1	8,5	8,0	-5,7		
min Return Loss margin / dB	5,6	5,4	5,8	5,5			
@ f / MHZ	2,5	2,5	2,5	2,5			
Return Loss limit / dB	-19,0	-19,0	-19,0	-19,0			

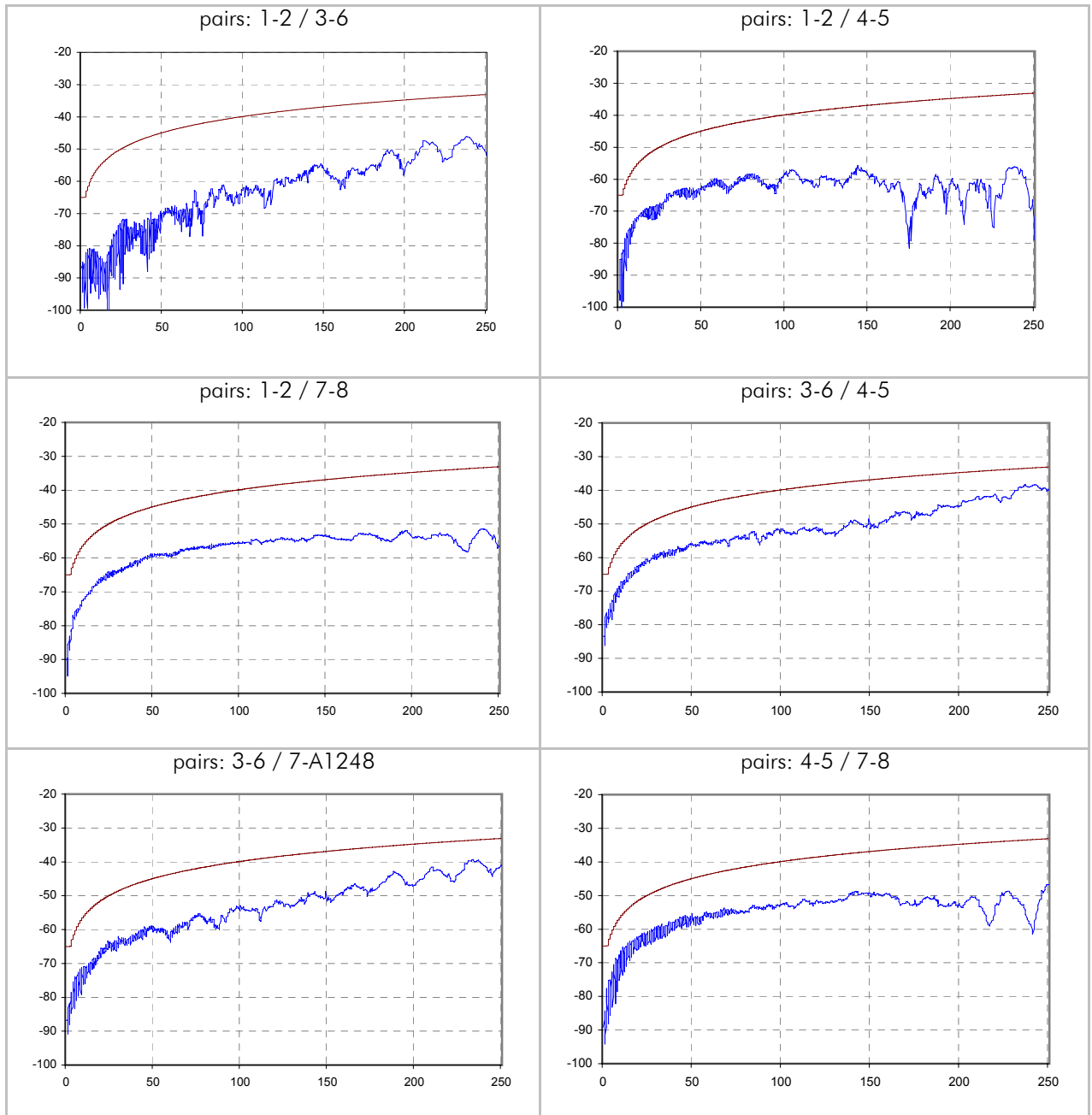
pairs	1-2 / 3-6	1-2 / 4-5	1-2 / 7-8	3-6 / 4-5	3-6 / 7-8	4-5 / 7-8	limit
min NEXT margin / dB	12,5	15,2	13,7	4,7	5,7	8,1	
@ f / MHZ	238,0	243,4	49,1	237,1	234,4	76,0	
Next limit / dB	-33,5	-33,3	-45,1	-33,5	-33,6	-41,9	
NEXT @ 100 MHz	-62,9	-59,1	-55,5	-52,2	-53,6	-49,3	-39,9
NEXT @ 250 MHz	-50,5	-54,7	-57,2	-40,3	-41,7	-42,9	-33,1
min ACR margin / dB	14,6	16,3	14,3	6,9	7,7	9,1	
@ f / MHZ	239,8	4,6	49,1	237,1	234,4	11,8	
ACR limit / dB	-1,7	57,7	30,3	-1,4	-1,1	48,3	
ACR @ 100 MHz	42,2	38,8	35,1	31,5	32,9	29,0	18,2
ACR @ 250 MHz	16,8	22,2	24,1	6,6	8,0	9,8	-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	18,4	11,2	22,8	5,9	12,3	10,6	
@ f / MHZ	249,7	28,2	245,2	239,8	1,0	30,9	
ELFEXT limit / dB	-15,3	-34,3	-15,5	-15,7	-63,6	-33,5	
min ELFEXT margin / dB	16,8	11,2	22,4	6,0	12,3	10,6	
@ f / MHZ	249,7	28,2	245,2	1,0	1,0	30,9	
ELFEXT limit / dB	-15,3	-34,3	-15,5	-63,6	-63,6	-33,5	
ELFEXT @ 100 MHz	-46,0	-35,5	-56,1	-30,9	-44,8	-38,5	-23,3
ELFEXT @ 250 MHz	-33,7	-29,9	-43,4	-22,7	-40,1	-32,2	-15,3
ELFEXT @ 100 MHz	-45,5	-35,4	-55,9	-31,3	-45,1	-38,5	-23,3
ELFEXT @ 250 MHz	-32,1	-29,5	-42,4	-23,9	-40,7	-31,6	-15,3

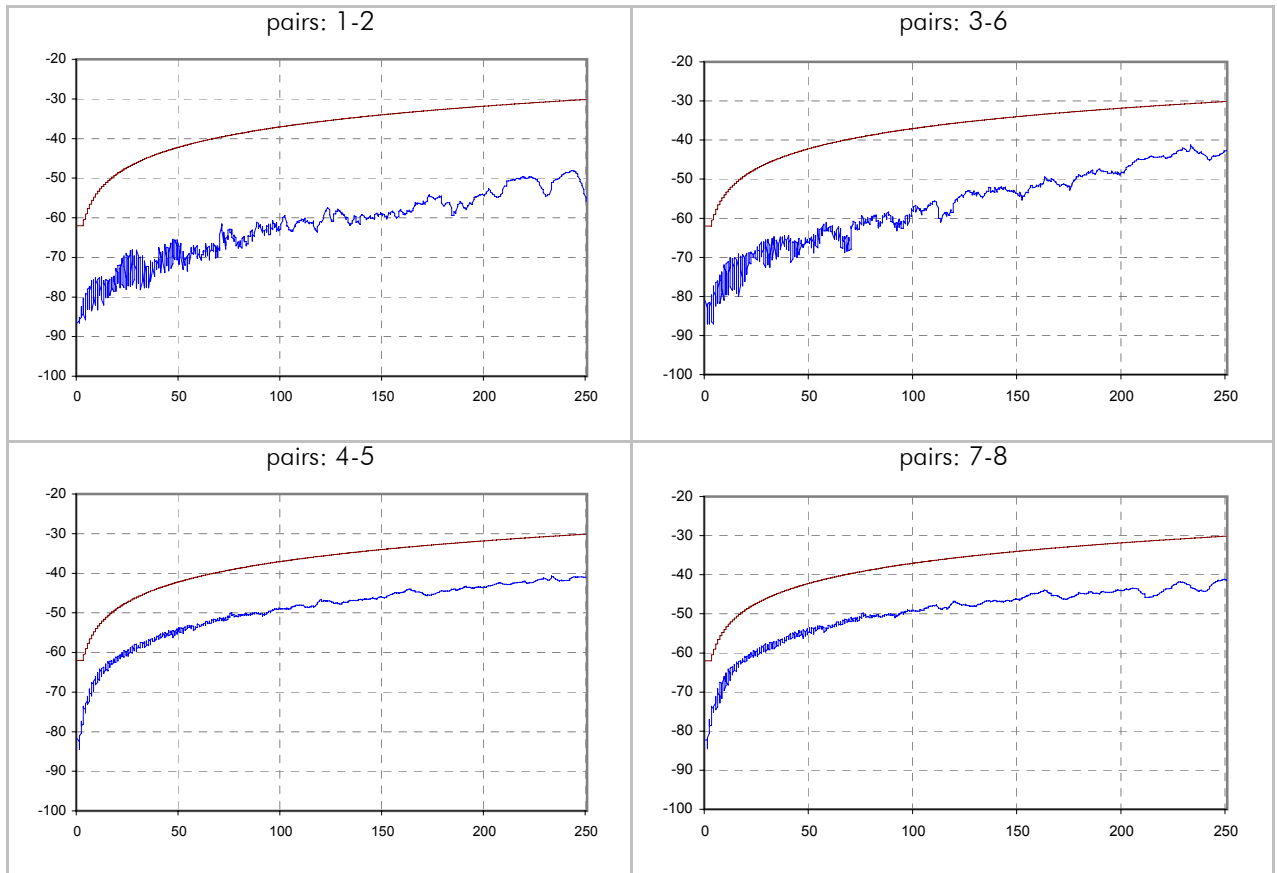
NEXT / dB (scanner side - type 1 side)



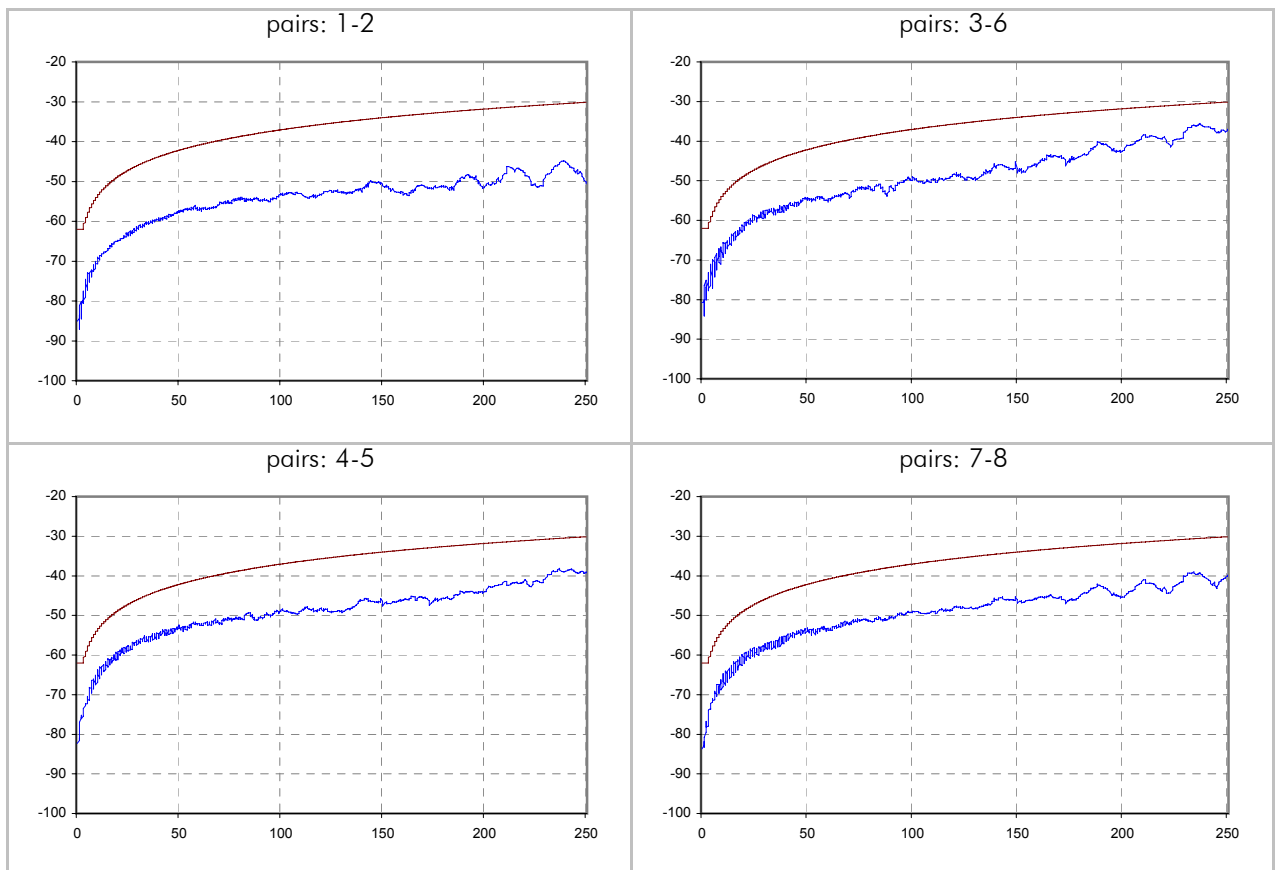
NEXT / dB (remote side - type 2 side)



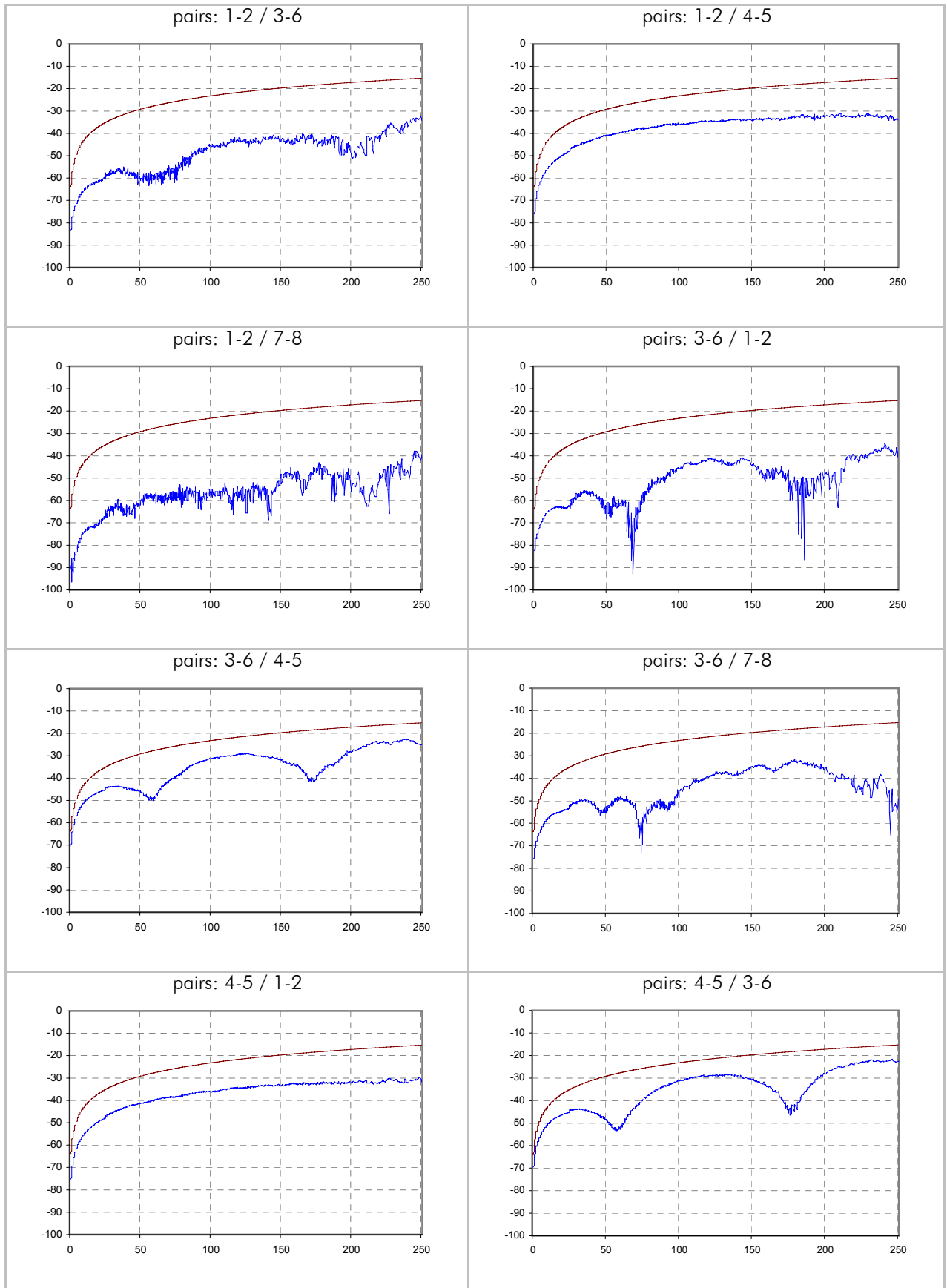
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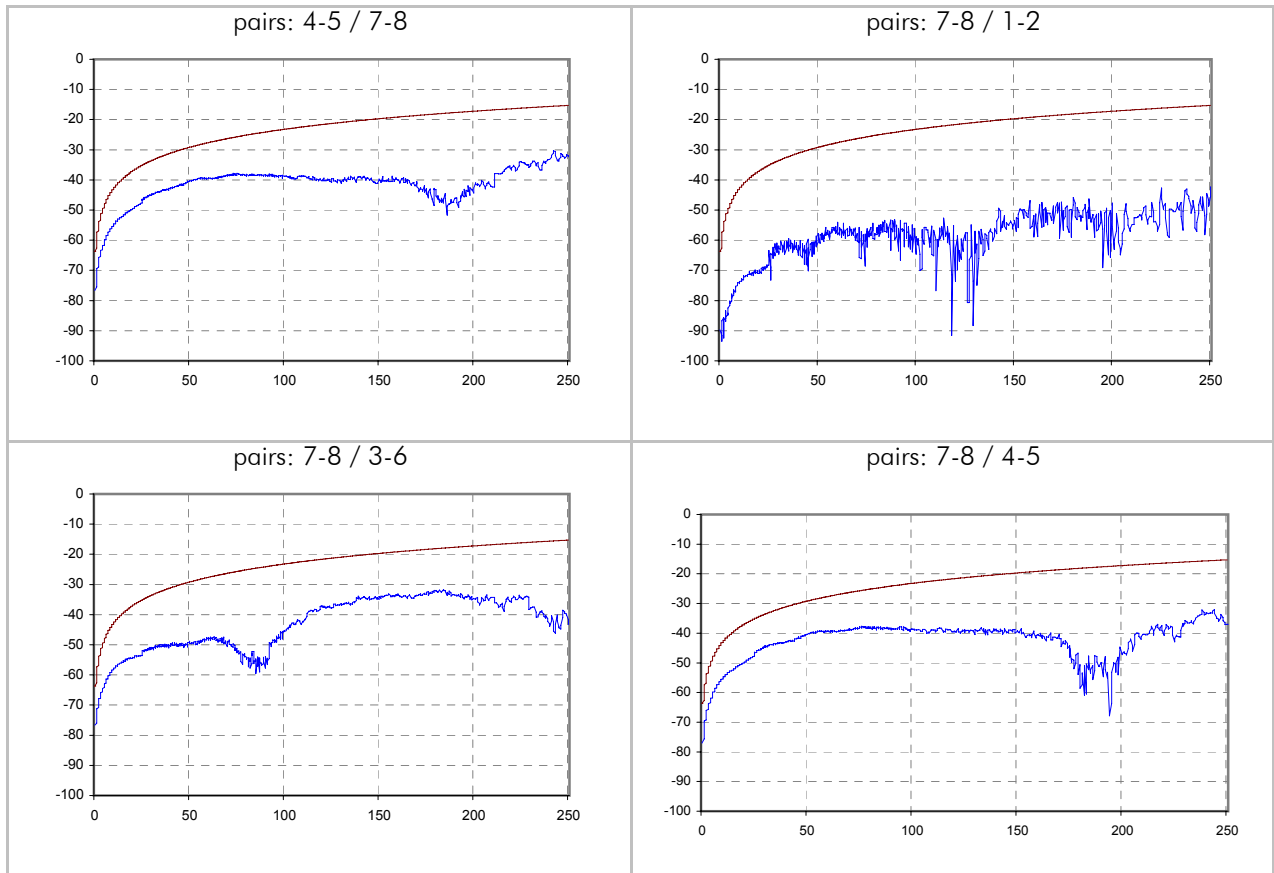
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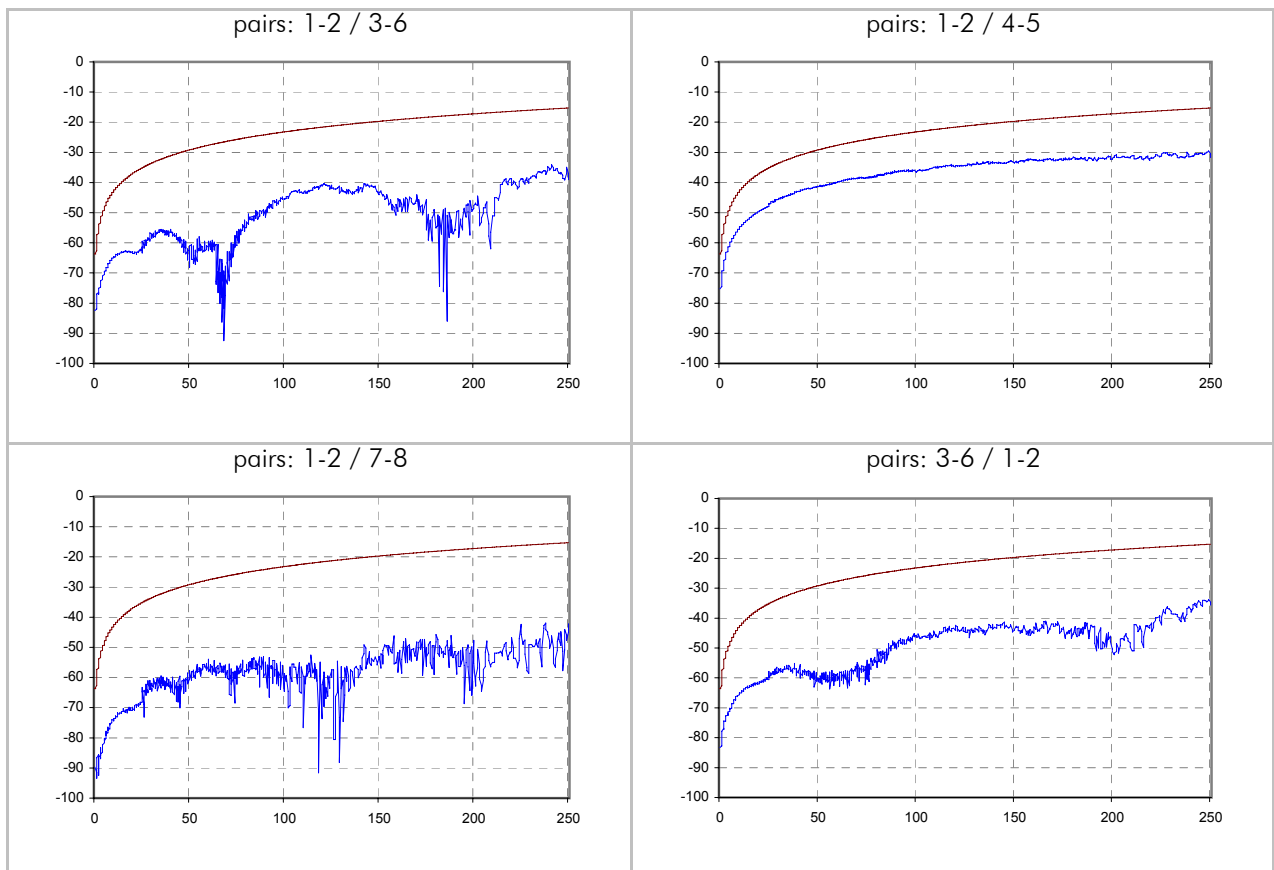
ELFEXT / dB (scanner side - type 1 side)



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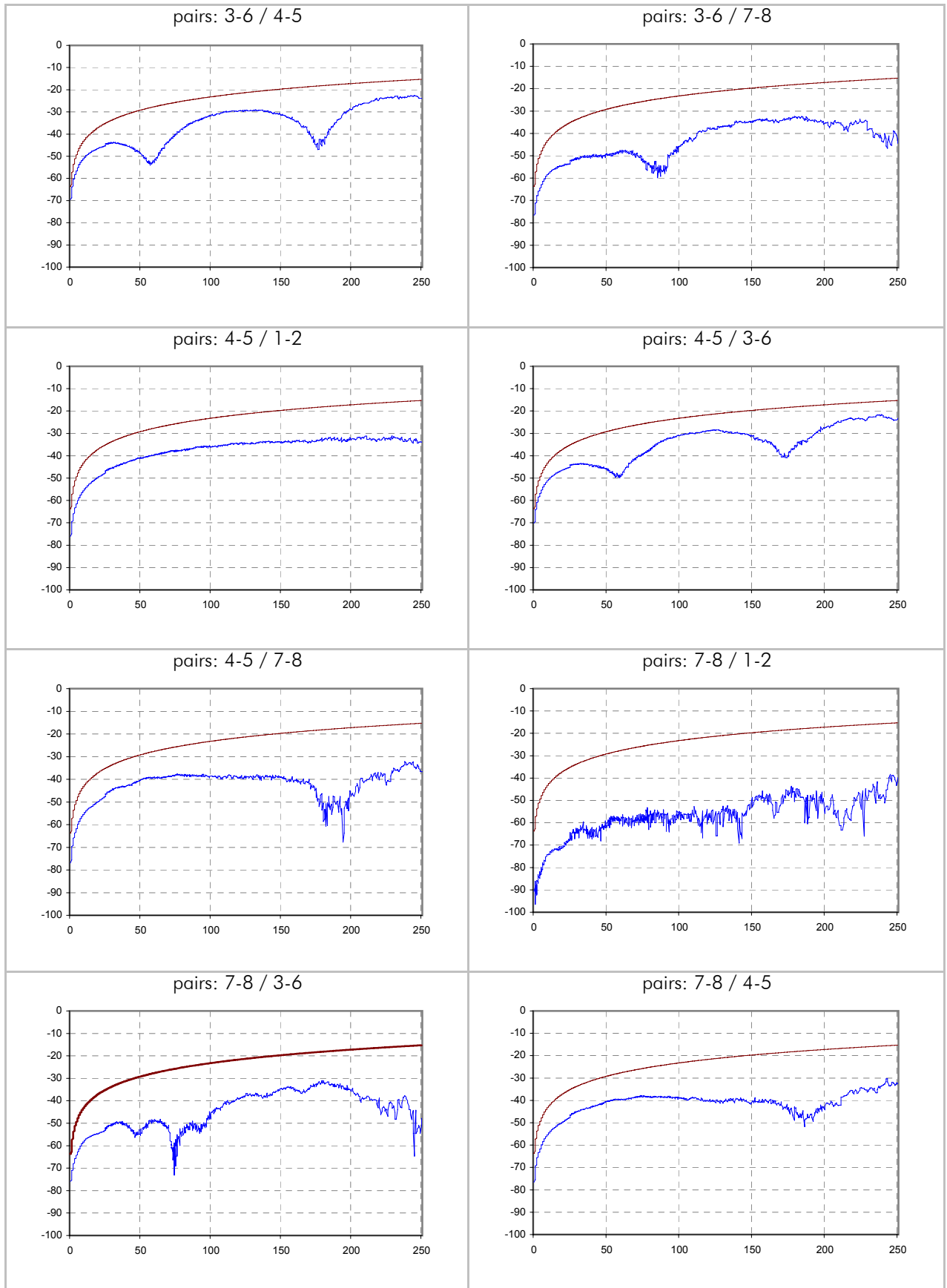


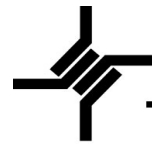
ELFEXT / dB (remote side - type 2 side)



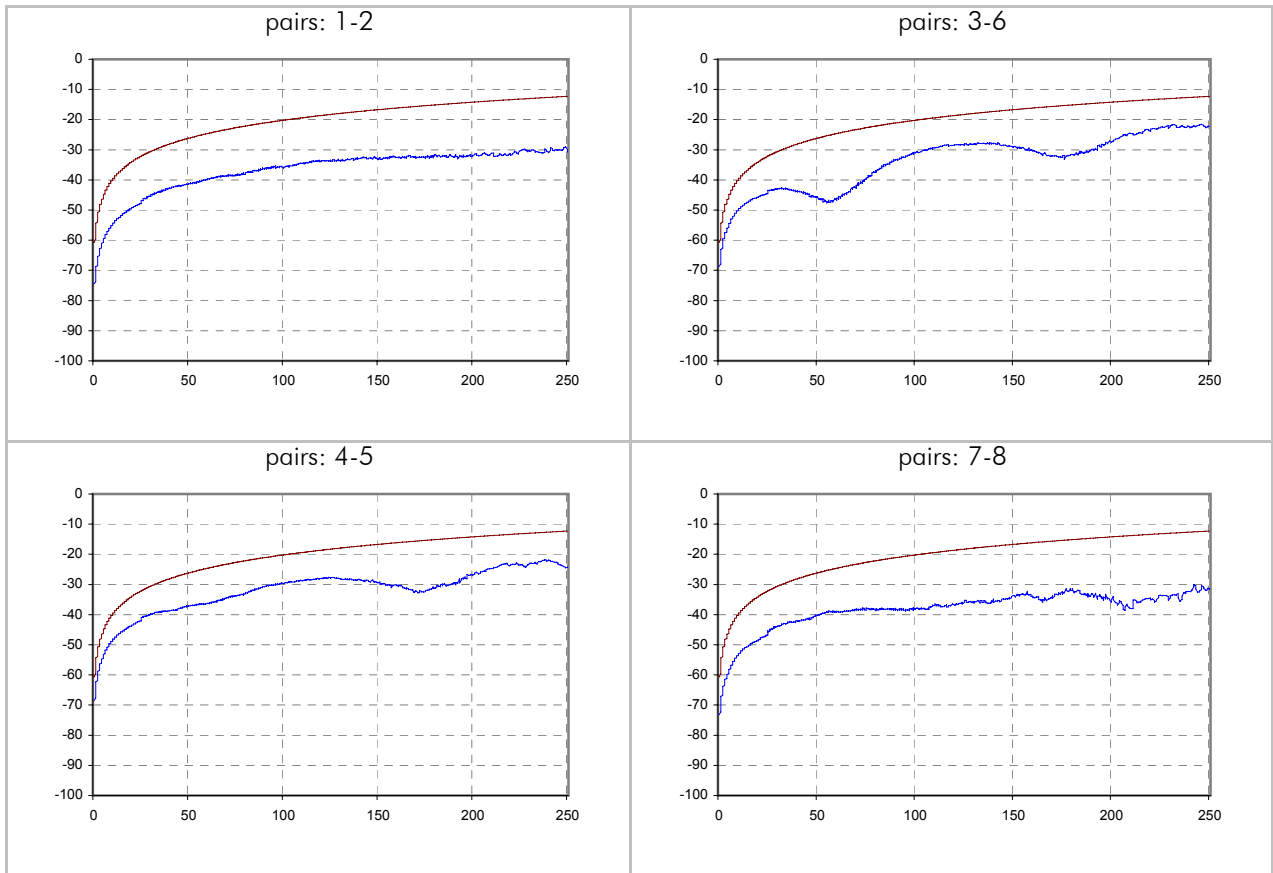


ELFEXT / dB (remote side - type 2 side)

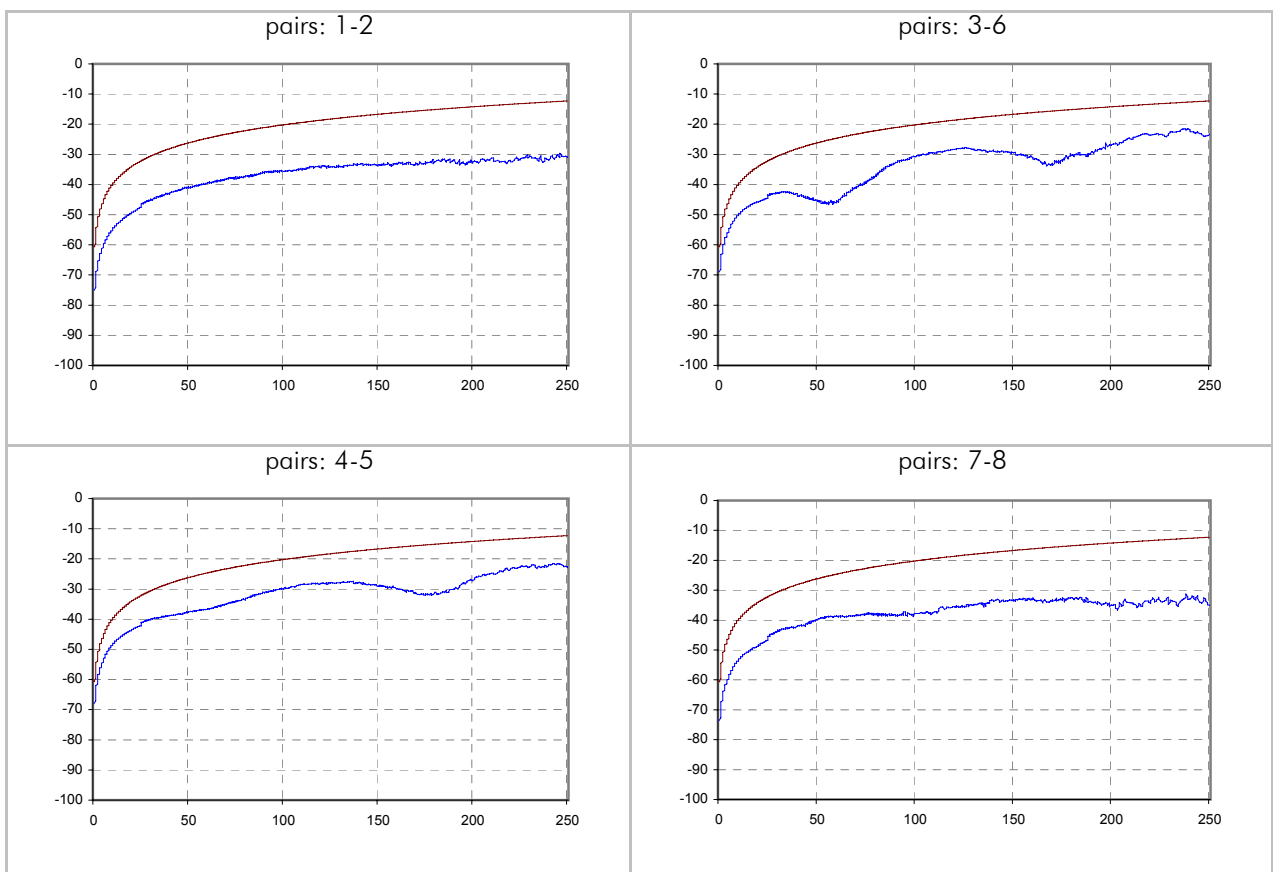




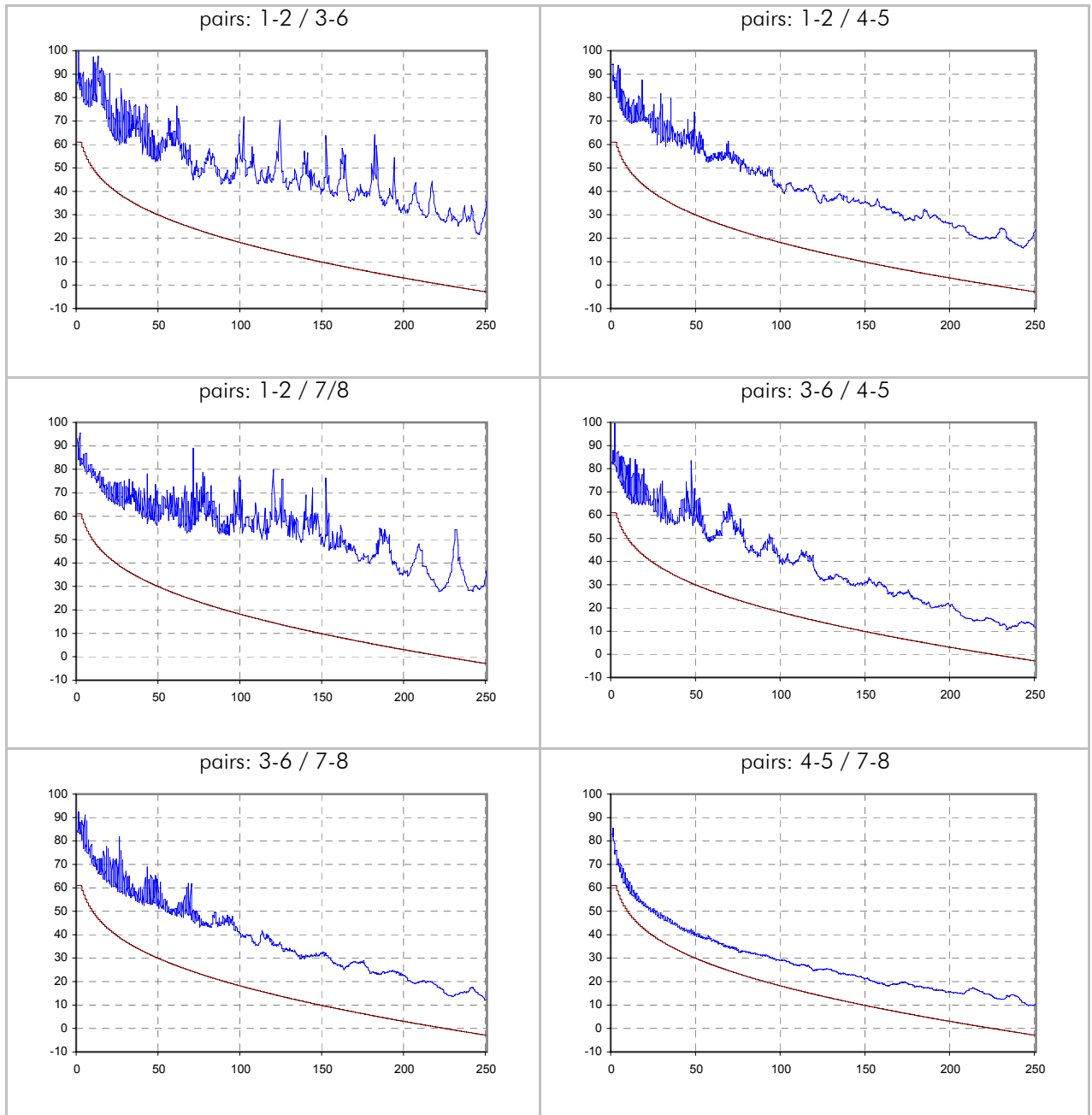
PSELFEXT / dB (scanner side - type 1 side)



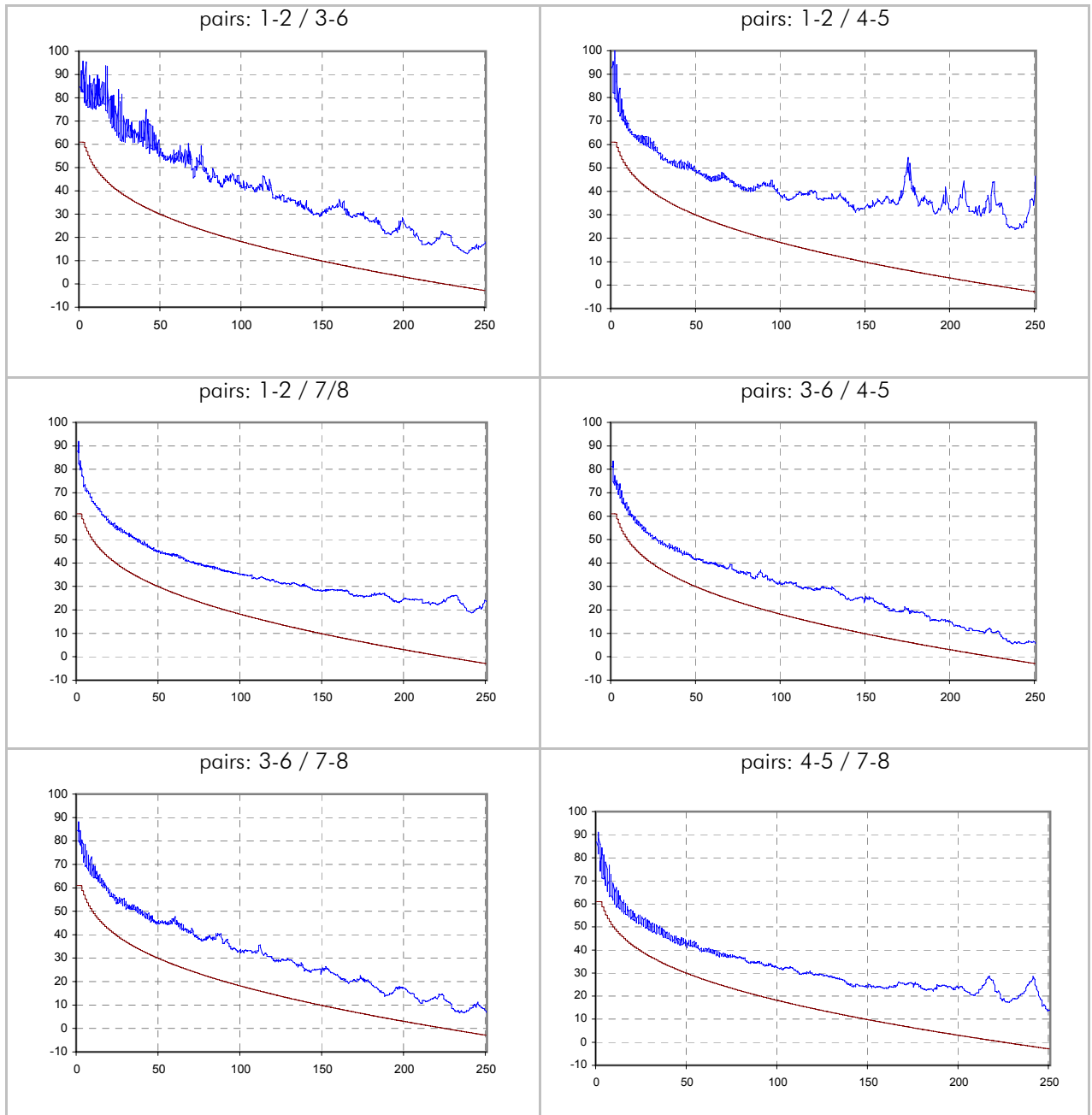
PSELFEXT / dB (remote side - type 2 side)



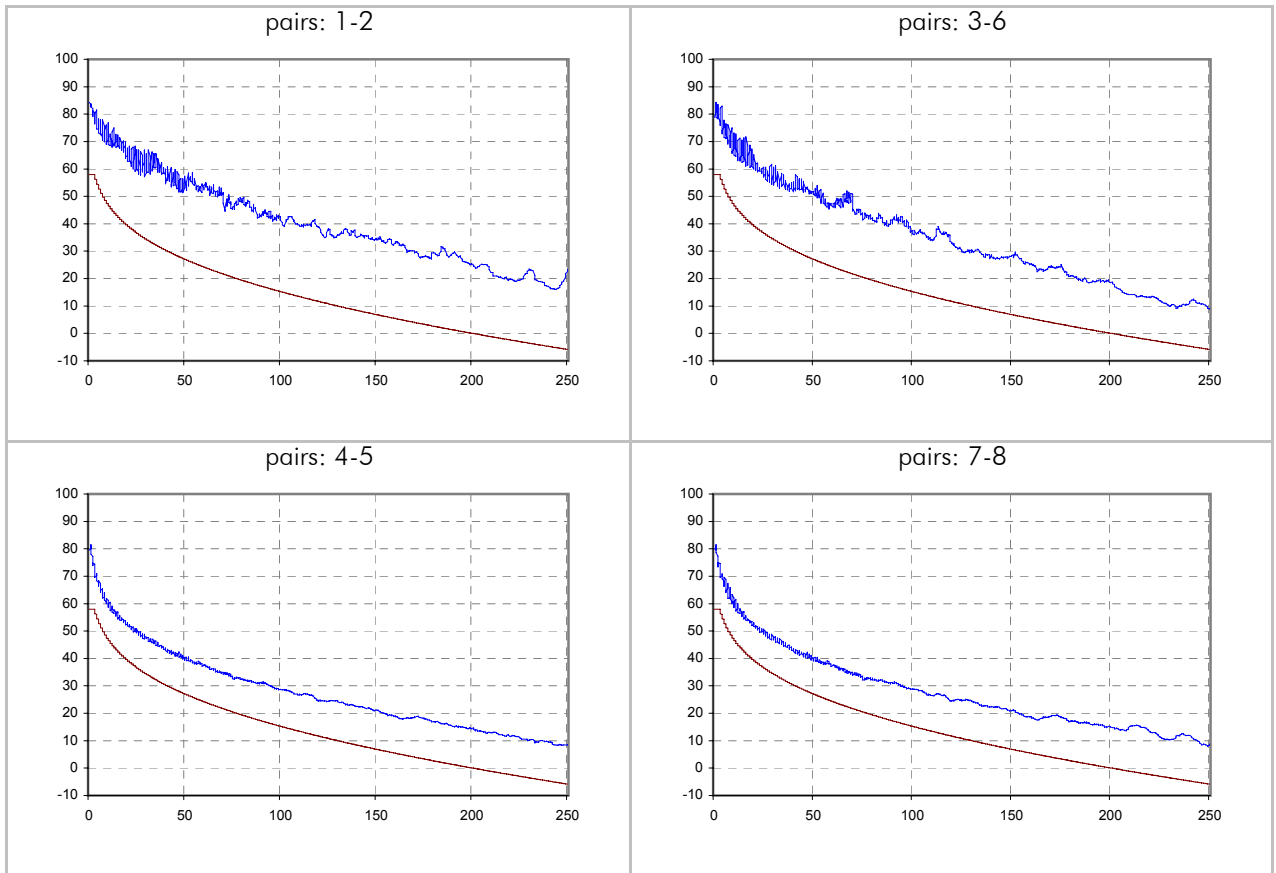
ACR / dB (scanner side - type 1 side)



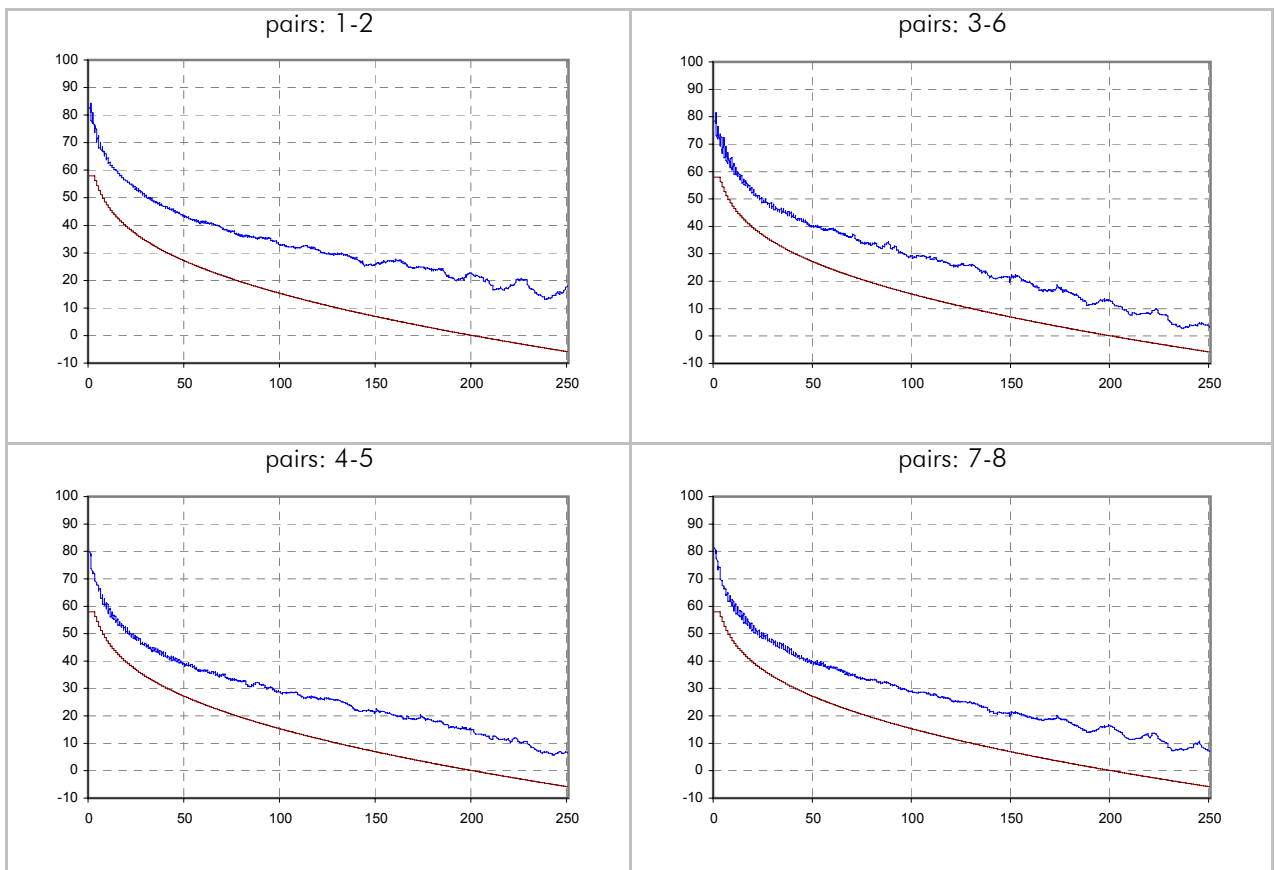
ACR / dB (remote side - type 2 side)



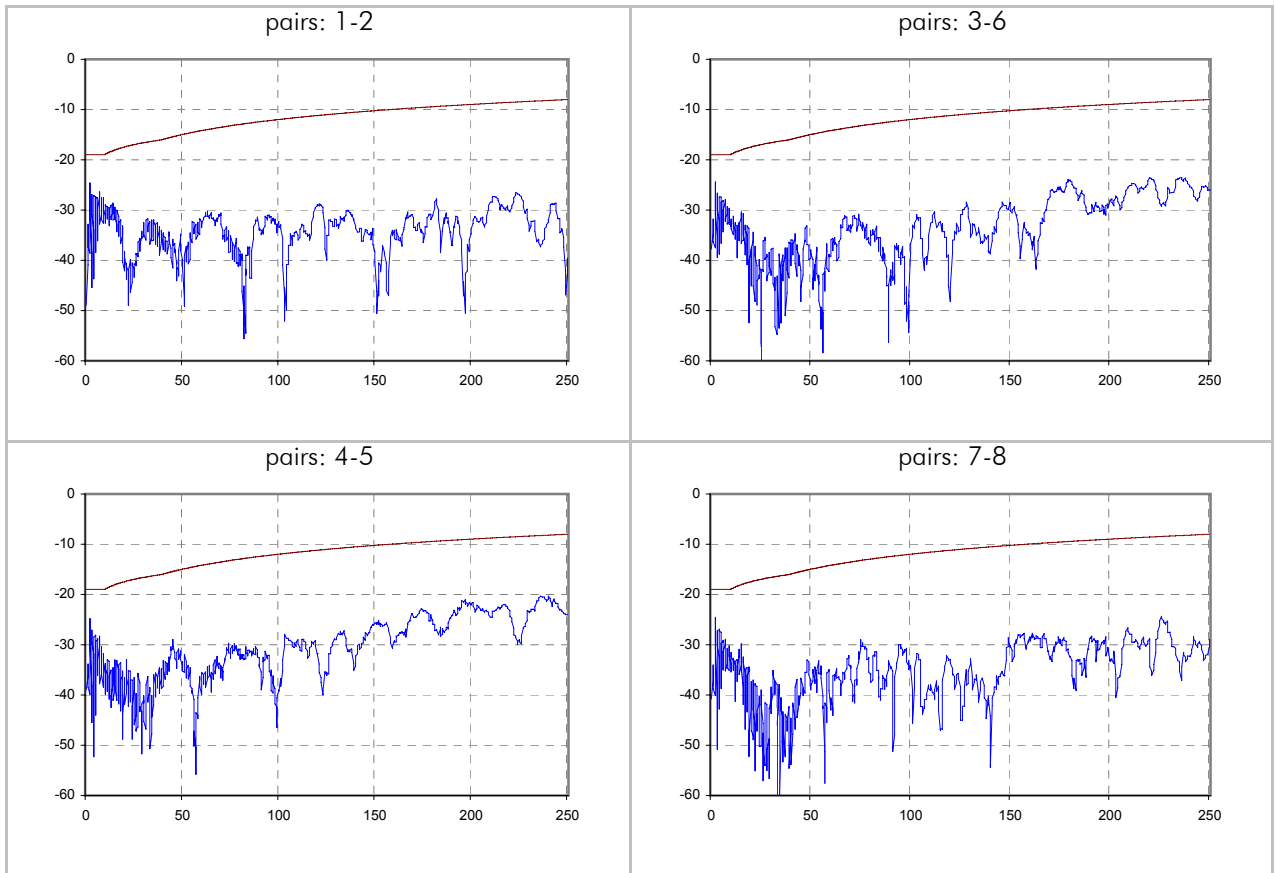
PSACR / dB (scanner side - type 1 side)



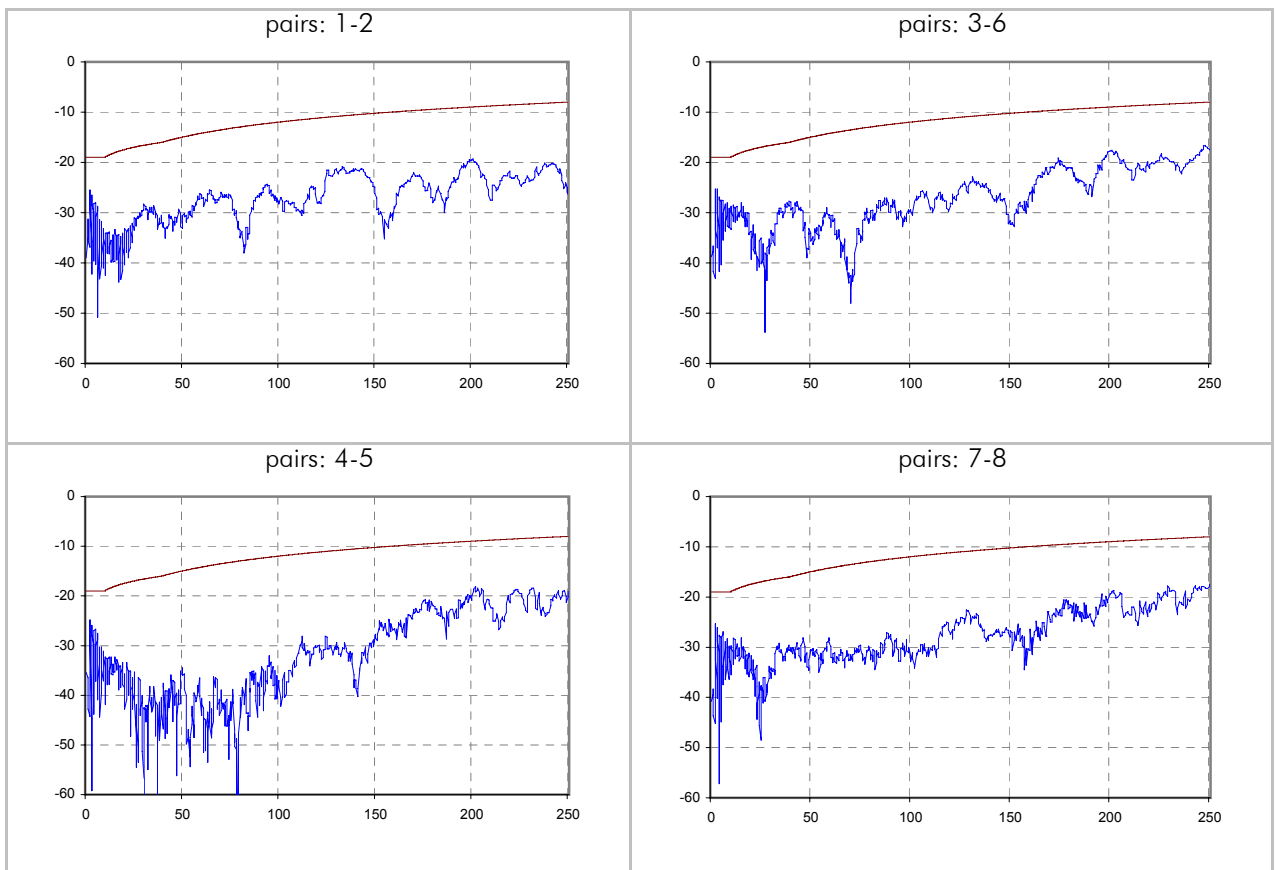
PSACR / dB (remote side - type 2 side)



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



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



Attenuation / dB

