

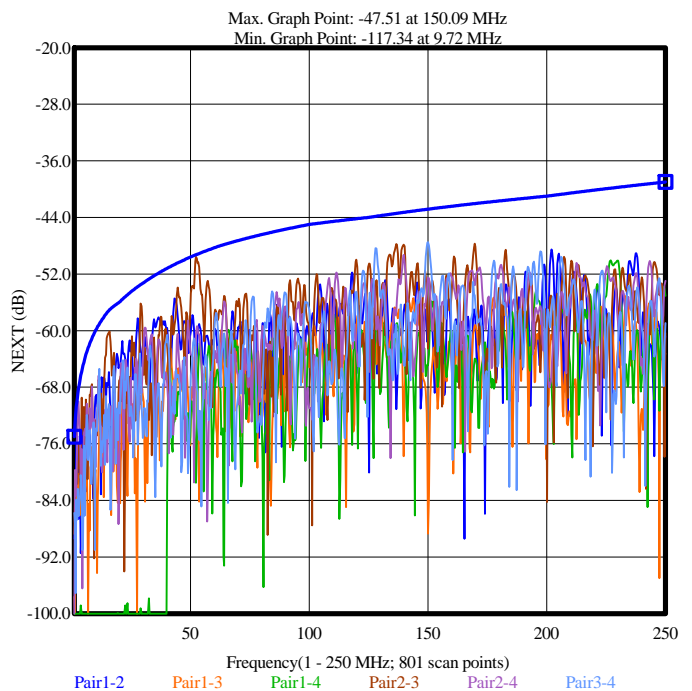
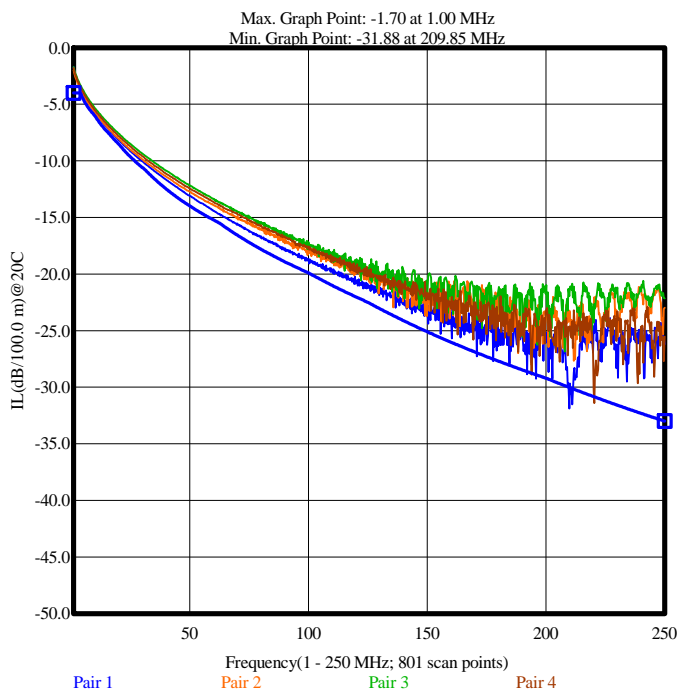
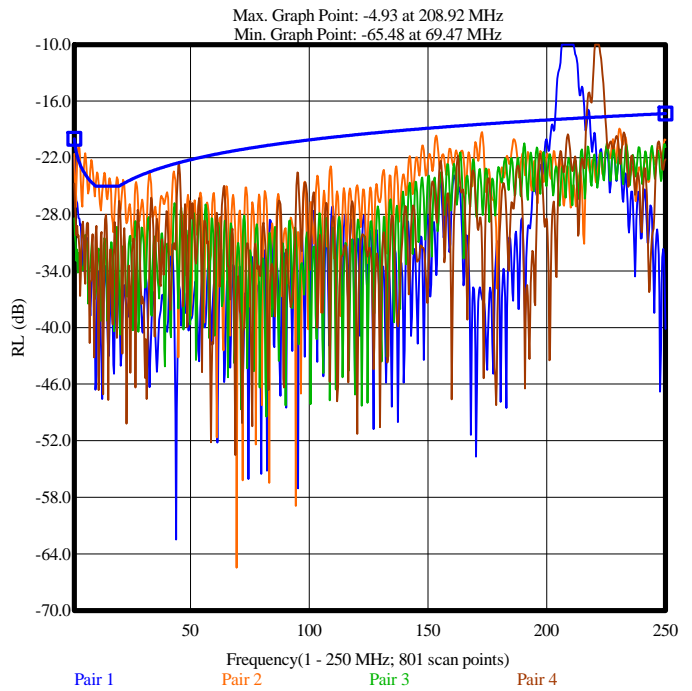
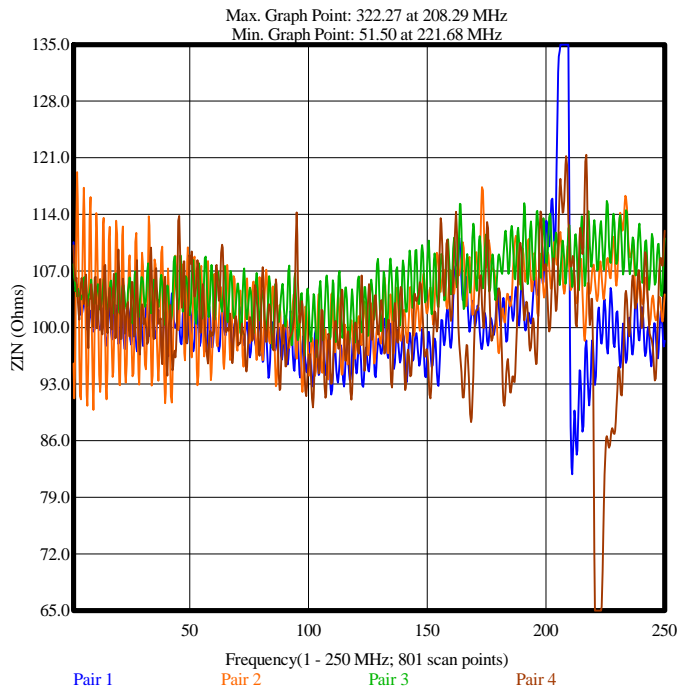
### DCM Test Report

Cable Type : 4x2x24 x PVC	Factory Number : 879835	Data File Name : DA011731.E2G
Cable I.D. : UTP4-C6-SOLID	Order Number : 2013/5/155	Specification File : Категория 6 (250) ТУ 031-2003.2GS
Temperature : 29.00 °C	Operator : Fake Checker	Test Date : 19/06/2013
Length : 305.00 m	Number of Pairs to Test : 4	Test Time : 03:14:11 PM
Starting Position : 1	Test Head : UTP Test Head	

### Worst Case Summary

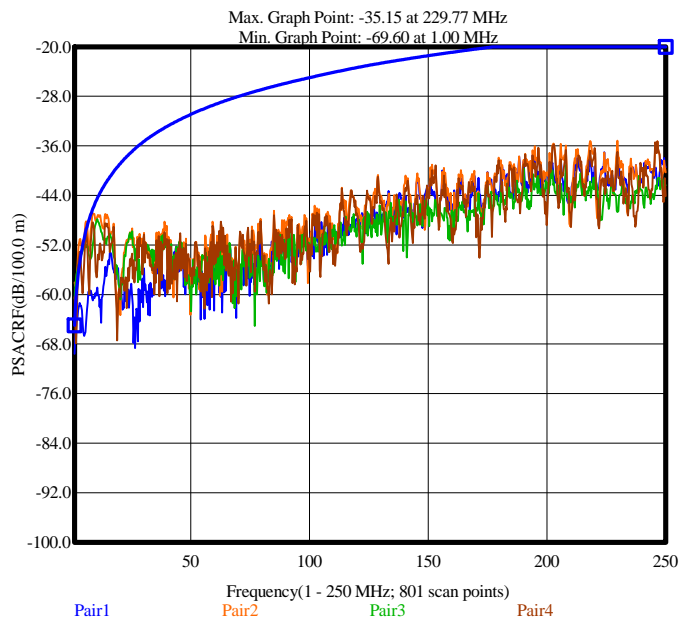
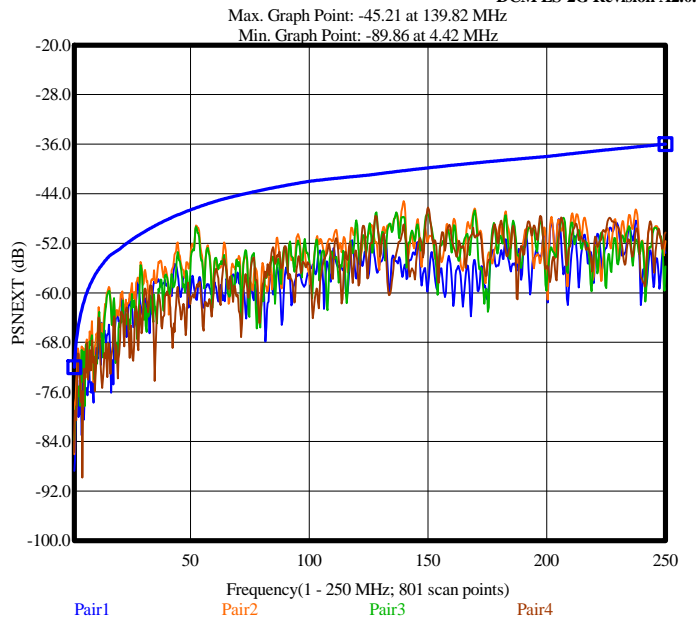
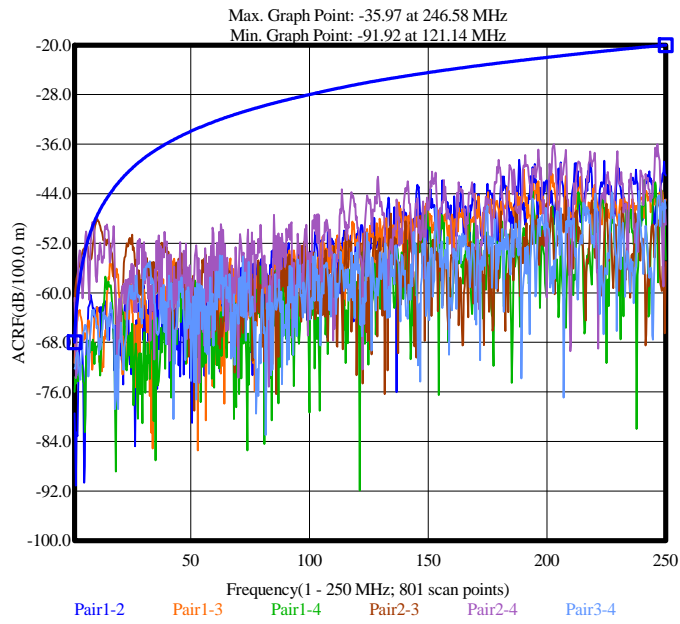
#### High Frequency

Test Type	Specification	Measured (Pair)	Margin	@ Frequency (MHz)	Test Result
Input Impedance (Zin)(Terminated)	xxx (Min)	N/A	N/A	N/A	N/A
Input Impedance (Zin)(Terminated)	xxx (Max)	N/A	N/A	N/A	N/A
Return Loss (RL)(T)	17.87 (Min)	4.93 (Pair 1)	-12.94	208.92	Failed
Insertion Loss (IL)@20C	30.02 (Max)	31.88 (Pair 1)	-1.86	209.85	Failed
Near End Crosstalk (NEXT)	49.28 (Min)	49.59 (Pairs 2-3)	0.31	52.36	Passed
ATT to FEXT Ratio (ACRF)	68.00 (Min)	60.79 (Pairs 2-4)	-7.21	1.00	Failed
Power Sum NEXT(PSNEXT)	46.28 (Min)	49.13 (Pair 2)	2.85	52.36	Passed
Power Sum ACRF (PSACRF)	65.00 (Min)	58.06 (Pair 2)	-6.94	1.00	Failed
Propagation Delay Skew (SKEW)	45.00 (Max)	51.14 (Pairs 1-2)	-6.14	200.00	Failed



N/A = Not Applicable.  
--- = Disable/Bypassed Pair.

\* = Measured value out of spec.  
xxx = No entry.

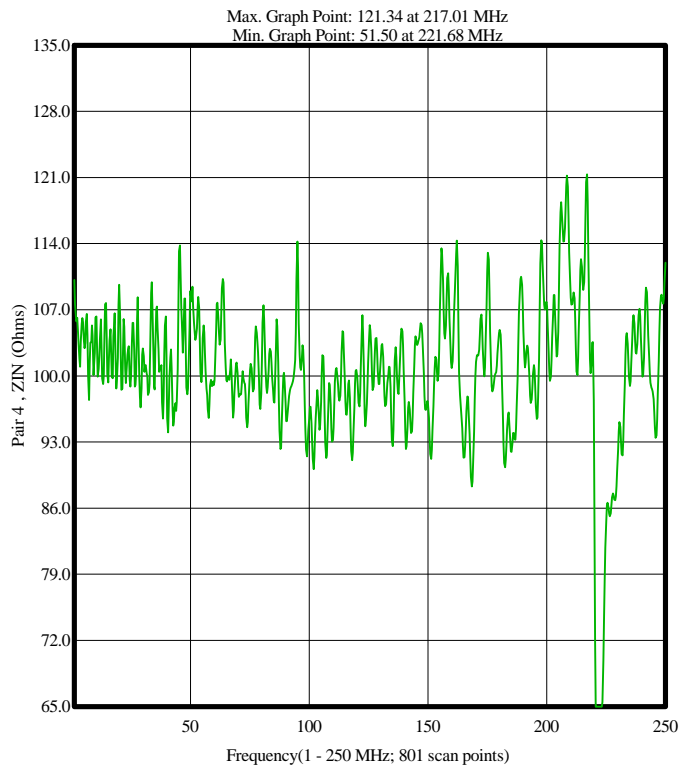
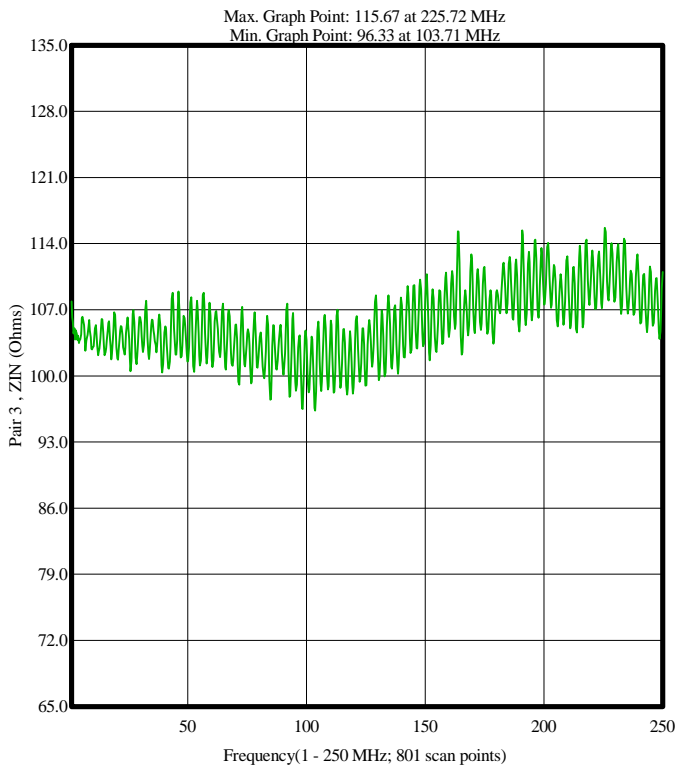
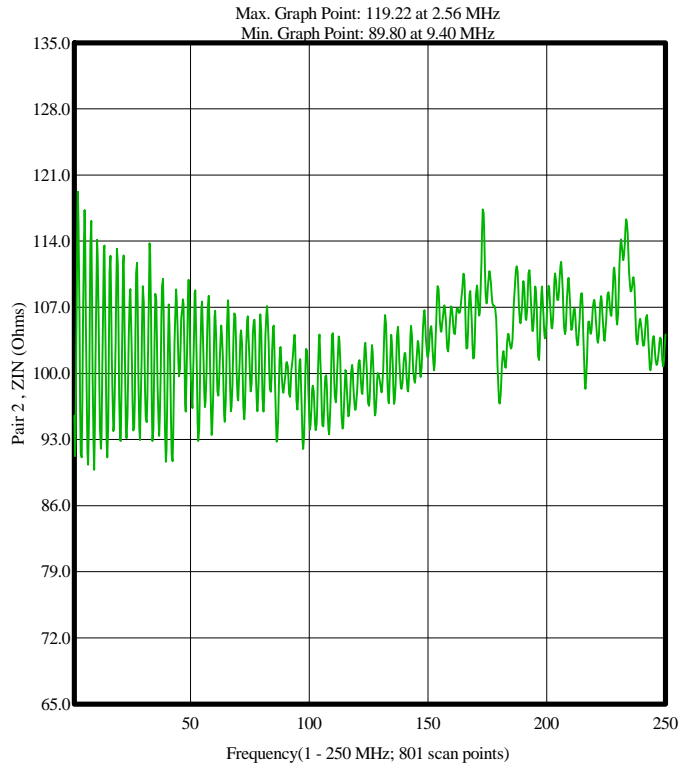
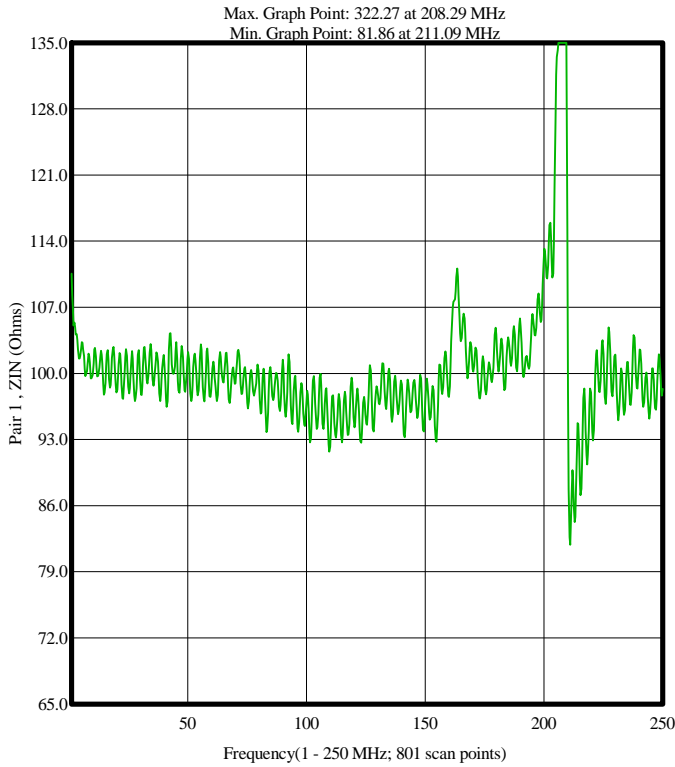


N/A = Not Applicable.  
--- = Disable/Bypassed Pair.

\* = Measured value out of spec.  
xxx = No entry.

### Summary and Graphic: Input Impedance (Zin)(Terminated)

No SUMMARY report due to no valid spec entry.

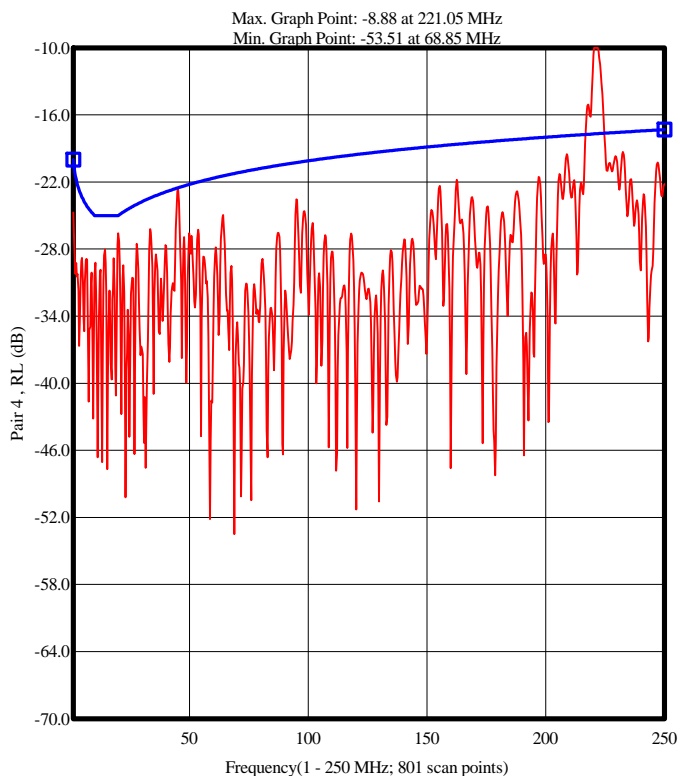
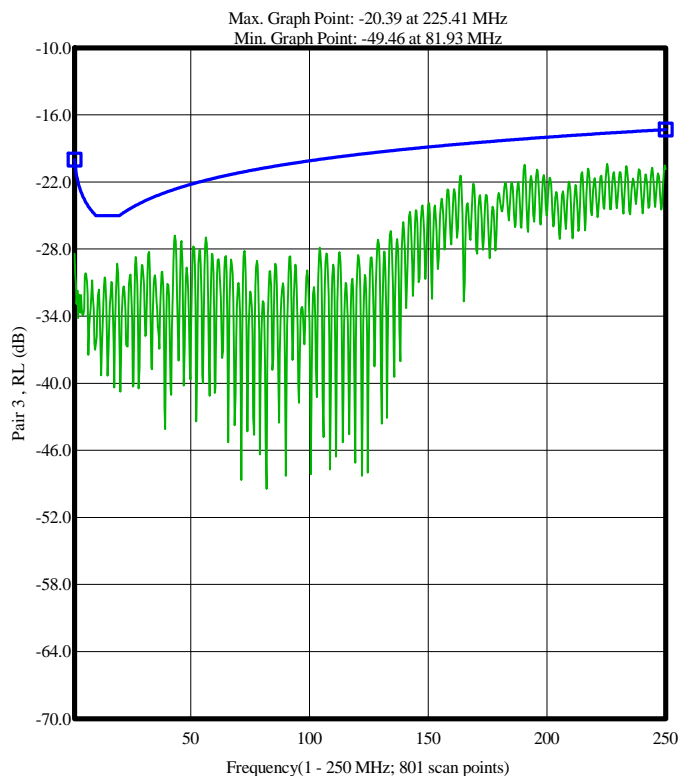
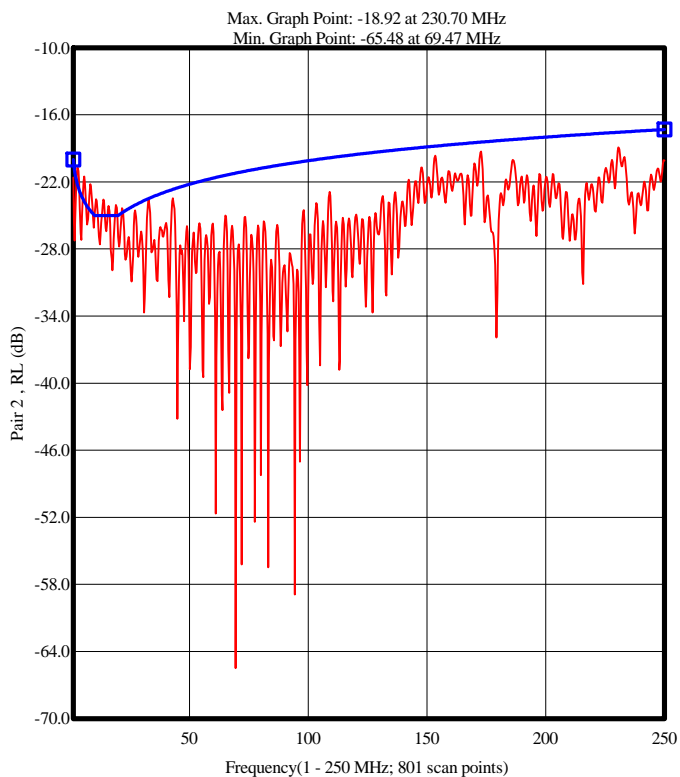
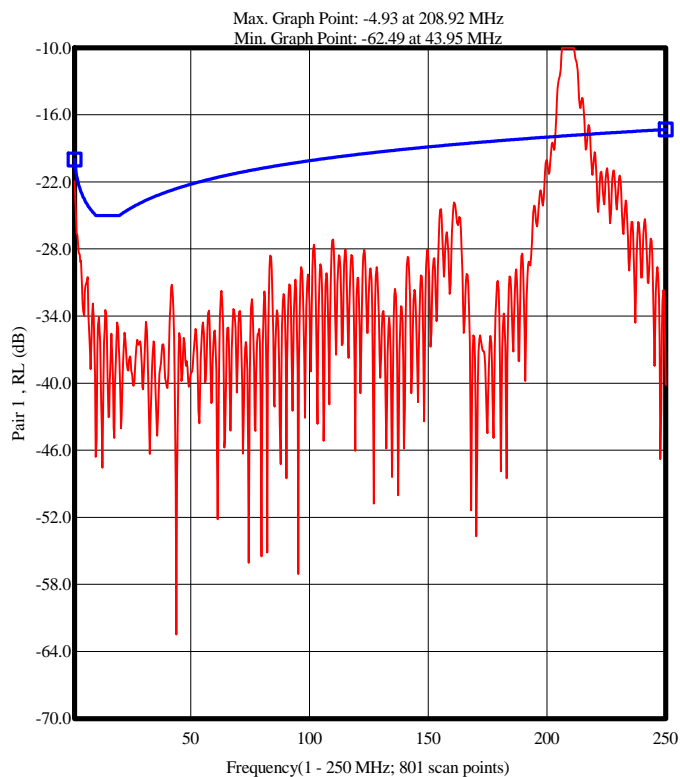


N/A = Not Applicable.  
--- = Disable/Bypassed Pair.

\* = Measured value out of spec.  
xxx = No entry.

**Summary and Graphic: Return Loss (RL)(Terminated)**

Pair	Spec (Min)(dB)	Measured(dB)	Margin (dB)	@ Frequency (MHz)	Test Result
Pair 1	17.87	4.93	-12.94	208.92	Failed
Pair 2	24.56	22.22	-2.34	8.16	Failed
Pair 3	18.15	20.46	2.31	190.55	Passed
Pair 4	17.69	8.88	-8.81	221.05	Failed

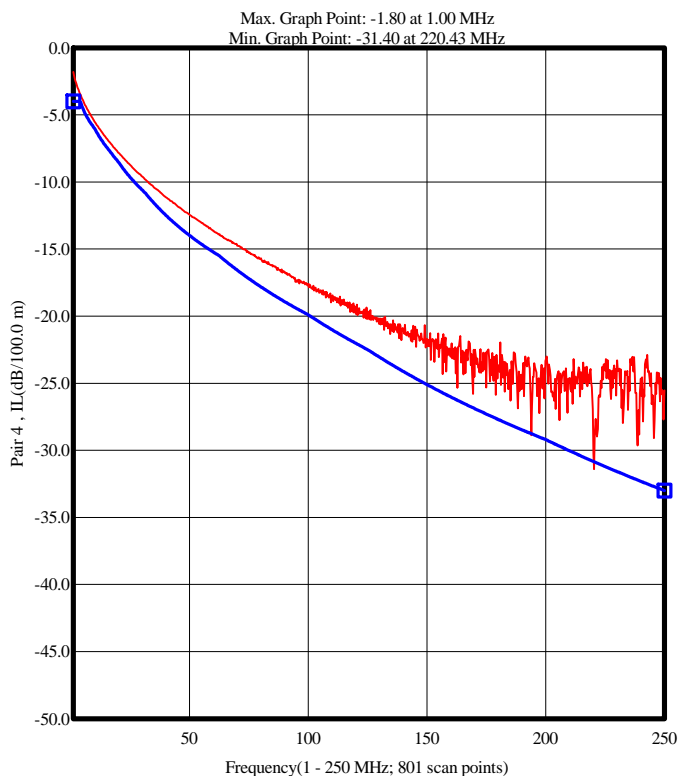
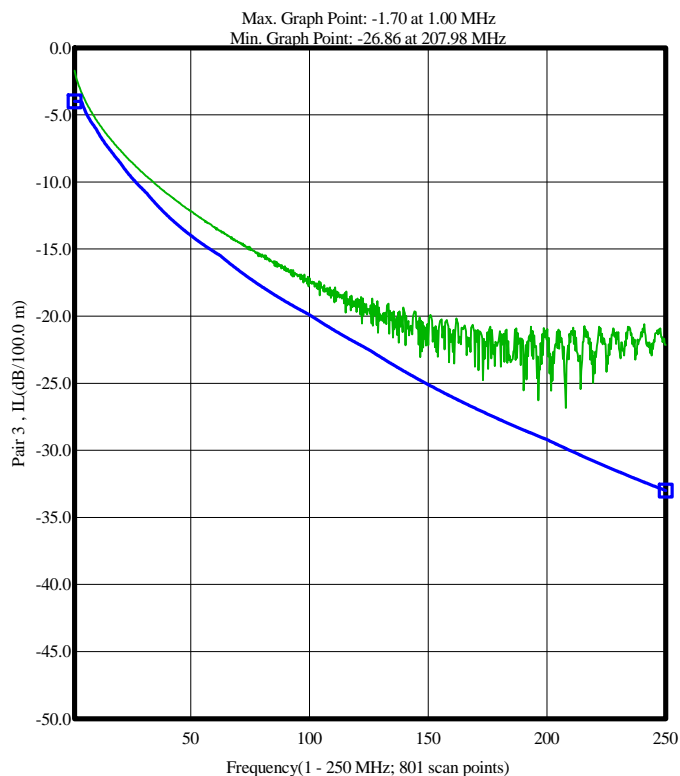
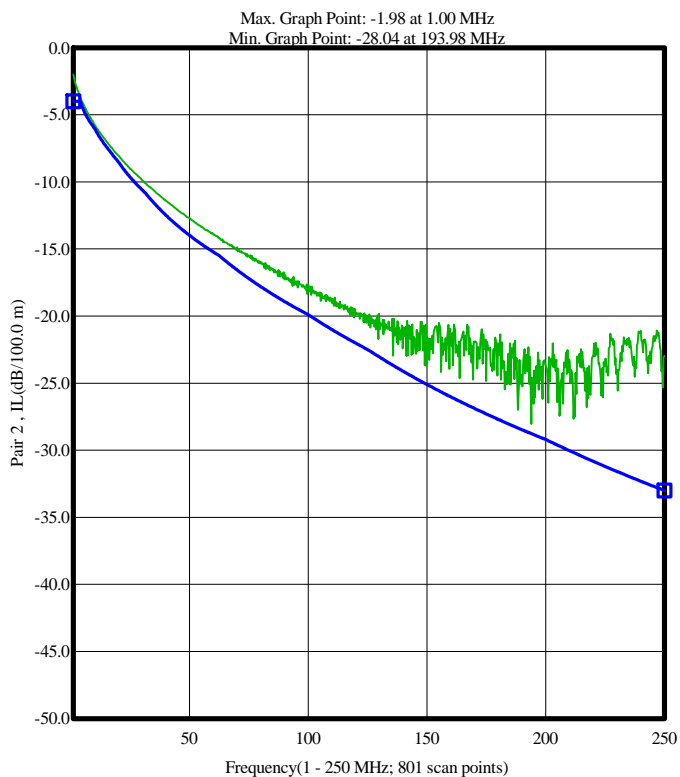
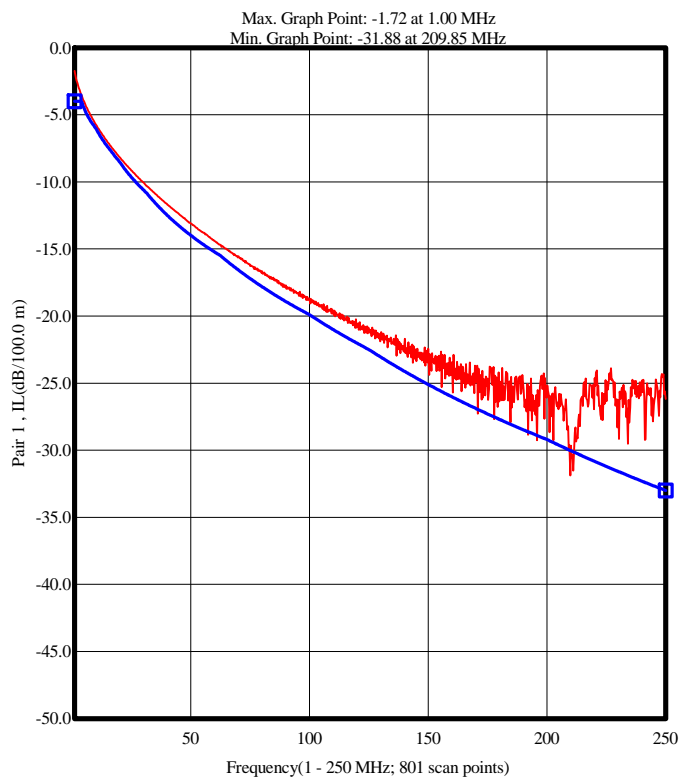


N/A = Not Applicable.  
--- = Disable/Bypassed Pair.

\* = Measured value out of spec.  
xxx = No entry.

Summary and Graphic: Insertion Loss (IL)@20C

Pair	Spec (Max)(dB/100.0 m)	Measured(dB/100.0 m)	Margin (dB/100.0 m)	@ Frequency (MHz)	Test Result
Pair 1	30.02	31.88	-1.86	209.85	Failed
Pair 2	6.01	5.74	0.27	10.03	Passed
Pair 3	4.06	3.39	0.67	4.11	Passed
Pair 4	30.86	31.40	-0.54	220.43	Failed

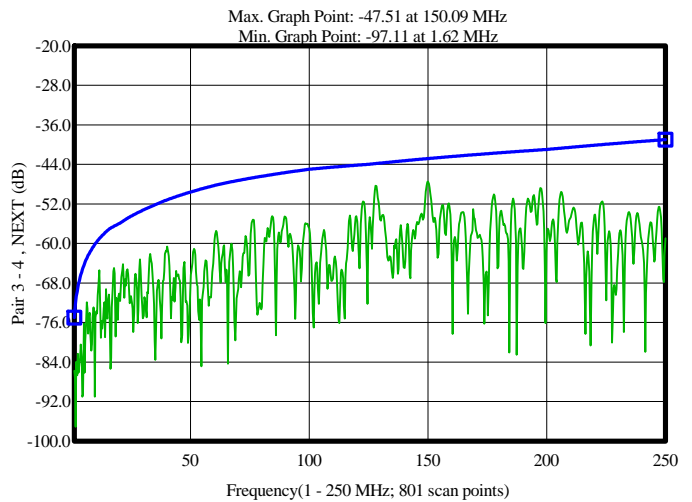
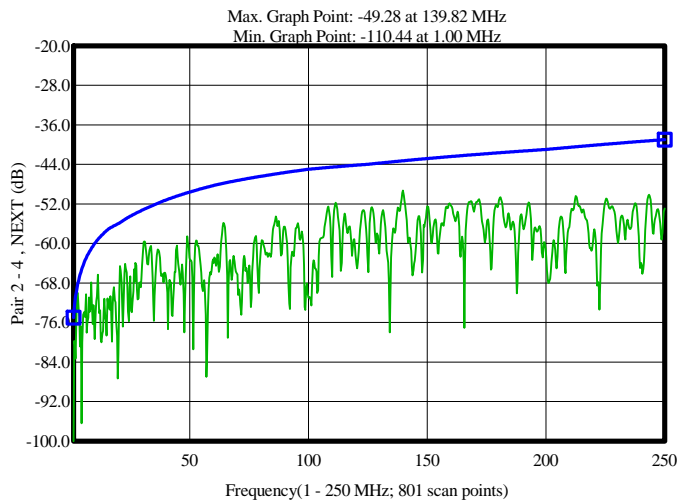
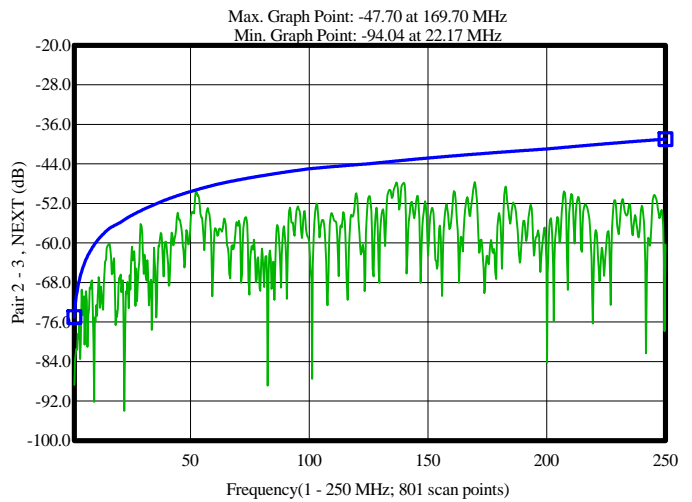
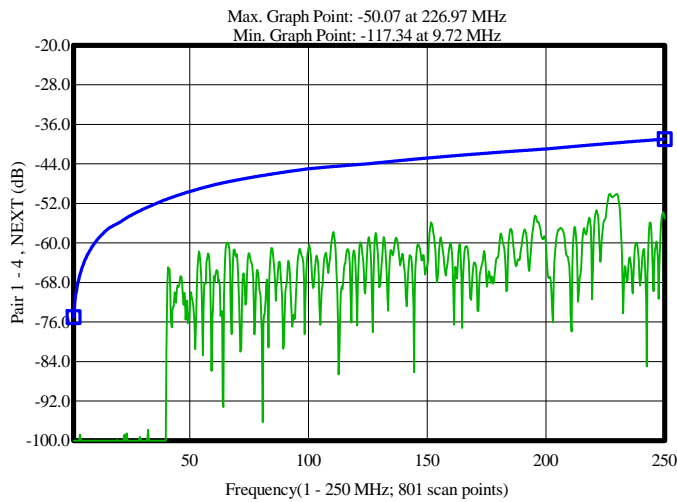
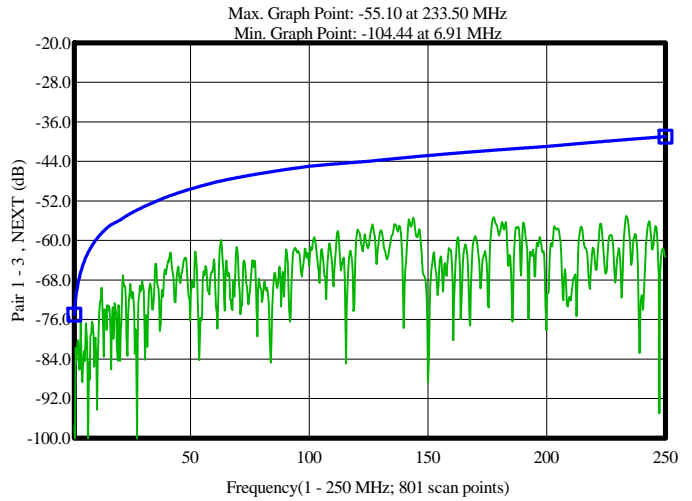
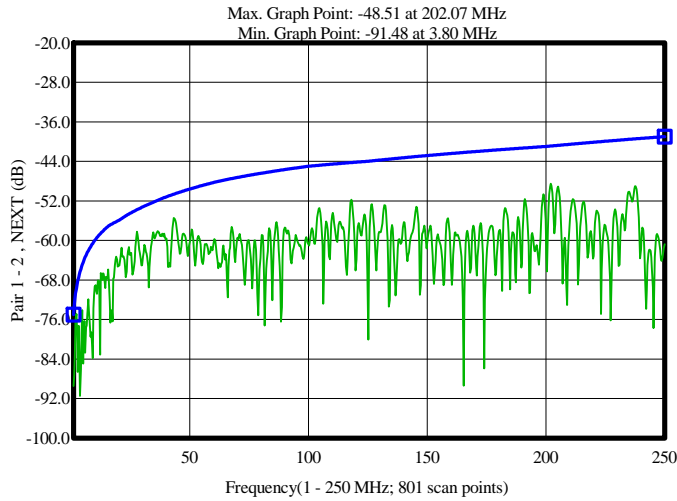


N/A = Not Applicable.  
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xxx = No entry.

### Summary and Graphic: Near End Crosstalk (NEXT)

Pair	Spec (Min)(dB)	Measured(dB)	Margin (dB)	@ Frequency (MHz)	Test Result
Pair 1 - 2	53.79	58.26	4.47	27.77	Passed
Pair 1 - 3	71.86	81.67	9.81	1.62	Passed
Pair 1 - 4	39.87	50.07	10.20	226.97	Passed
Pair 2 - 3	49.28	49.59	0.31	52.36	Passed
Pair 2 - 4	68.91	70.06	1.15	2.56	Passed
Pair 3 - 4	43.85	48.36	4.51	127.99	Passed

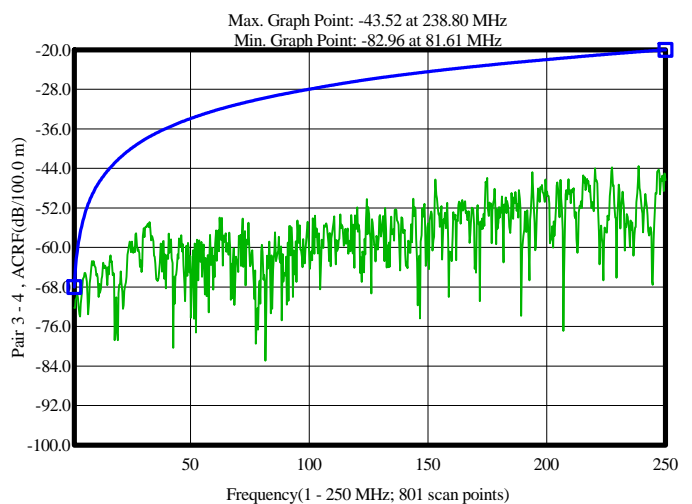
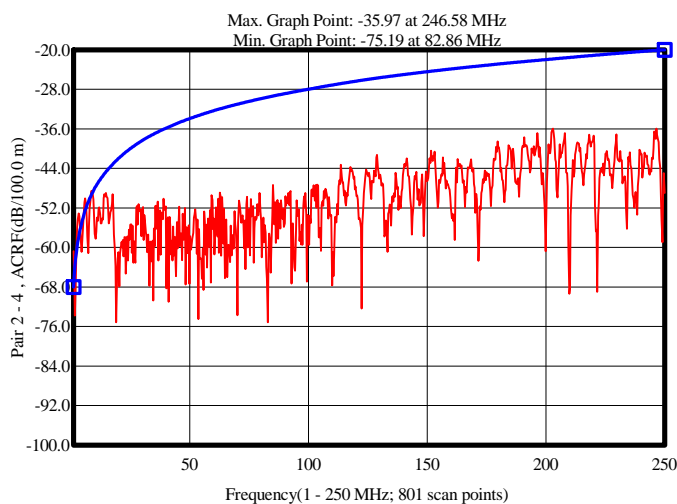
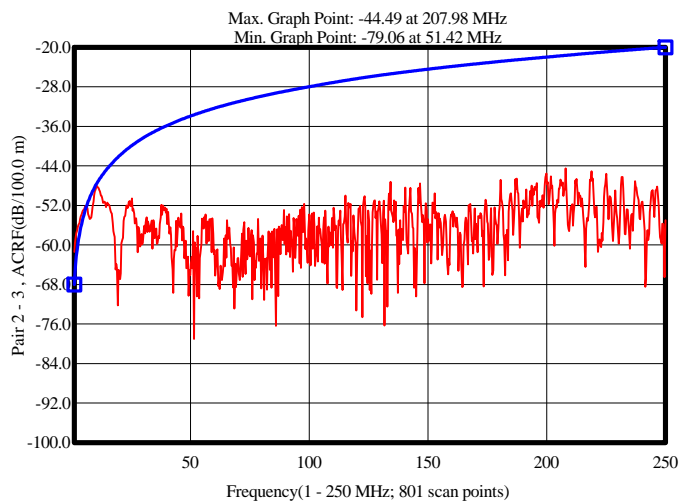
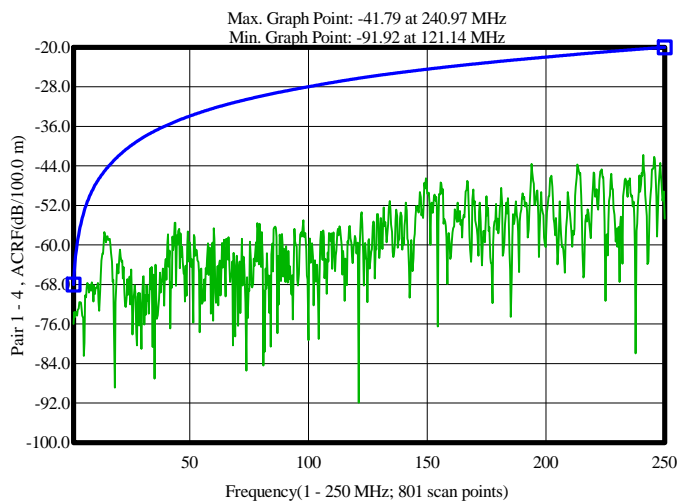
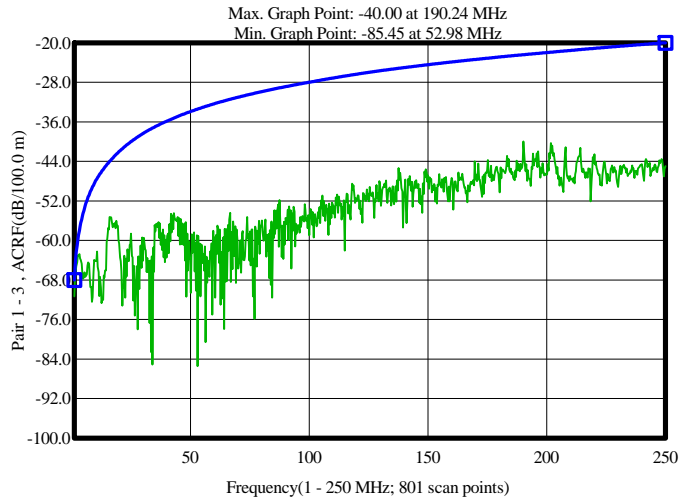
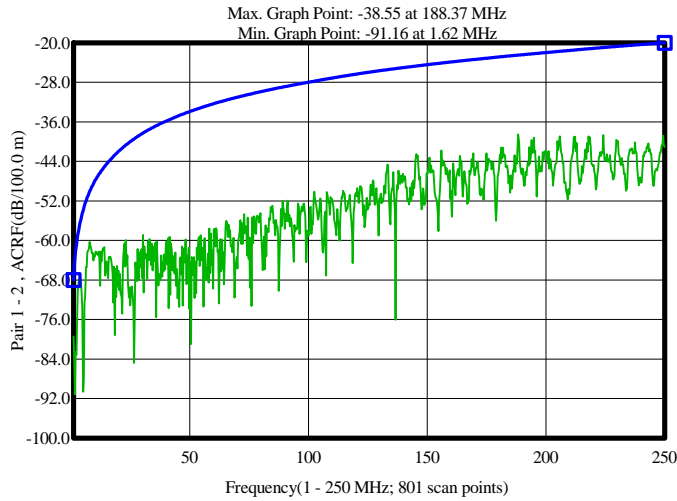


N/A = Not Applicable.  
--- = Disable/Bypassed Pair.

\* = Measured value out of spec.  
xxx = No entry.

**Summary and Graphic: ATT to FEXT Ratio (ACRF)**

Pair	Spec (Min)(dB/100.0 m)	Measured(dB/100.0 m)	Margin (dB/100.0 m)	@ Frequency (MHz)	Test Result
Pair 1 - 2	50.12	60.34	10.22	7.85	Passed
Pair 1 - 3	65.65	67.90	2.25	1.31	Passed
Pair 1 - 4	65.65	73.58	7.93	1.31	Passed
Pair 2 - 3	68.00	61.43	-6.57	1.00	Failed
Pair 2 - 4	68.00	60.79	-7.21	1.00	Failed
Pair 3 - 4	68.00	72.24	4.24	1.00	Passed

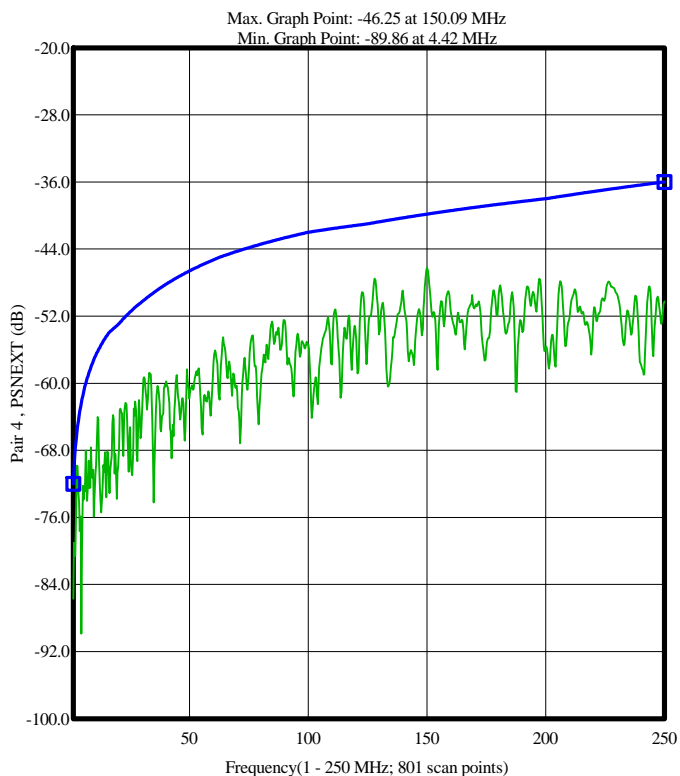
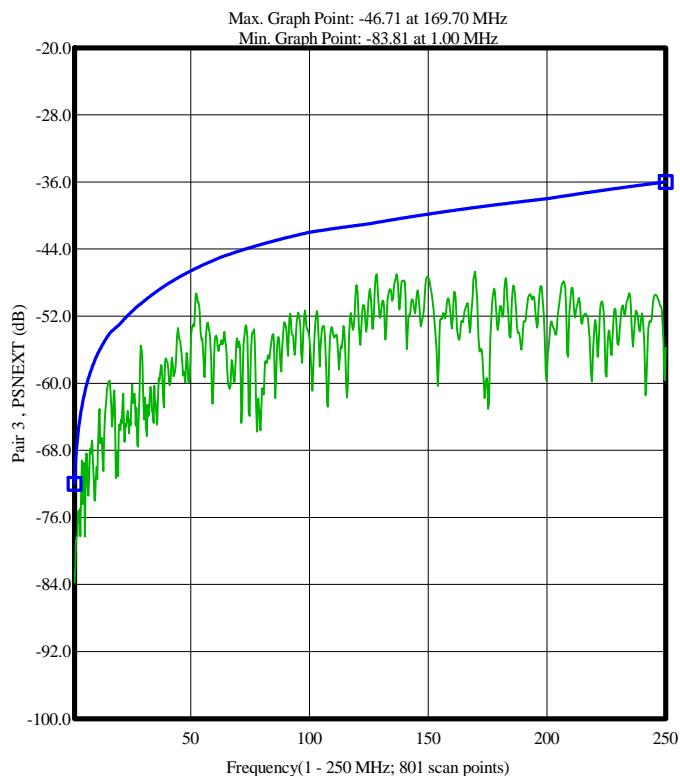
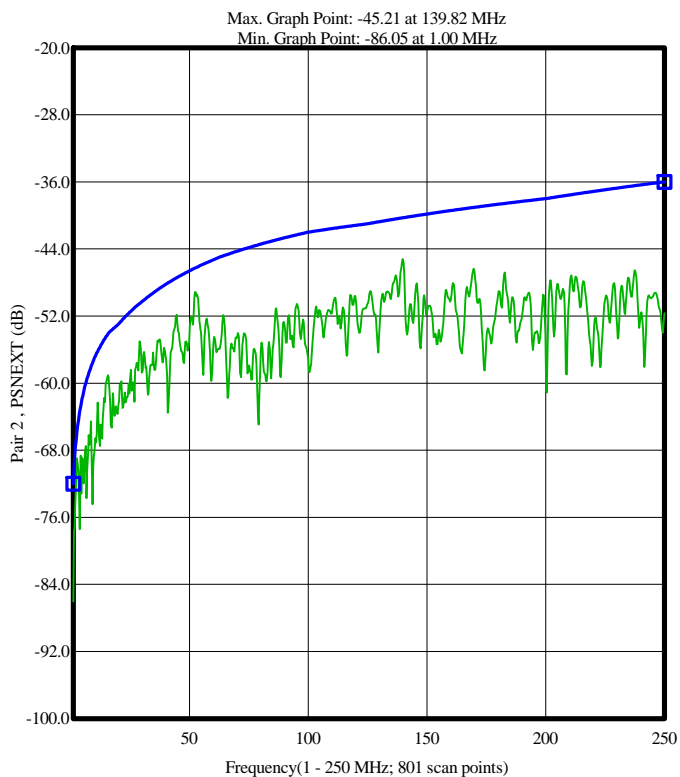
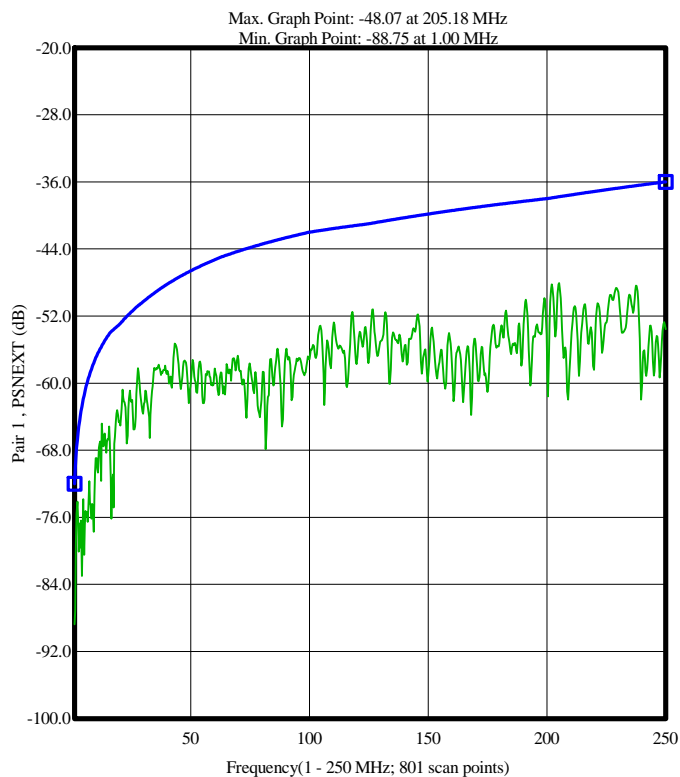


N/A = Not Applicable.  
--- = Disable/Bypassed Pair.

\* = Measured value out of spec.  
xxx = No entry.

**Summary and Graphic: Power Sum NEXT(PSNEXT)**

Pair	Spec (Min)(dB)	Measured(dB)	Margin (dB)	@ Frequency (MHz)	Test Result
Pair 1	66.75	74.14	7.39	2.24	Passed
Pair 2	46.28	49.13	2.85	52.36	Passed
Pair 3	46.28	49.31	3.03	52.36	Passed
Pair 4	65.91	69.81	3.90	2.56	Passed



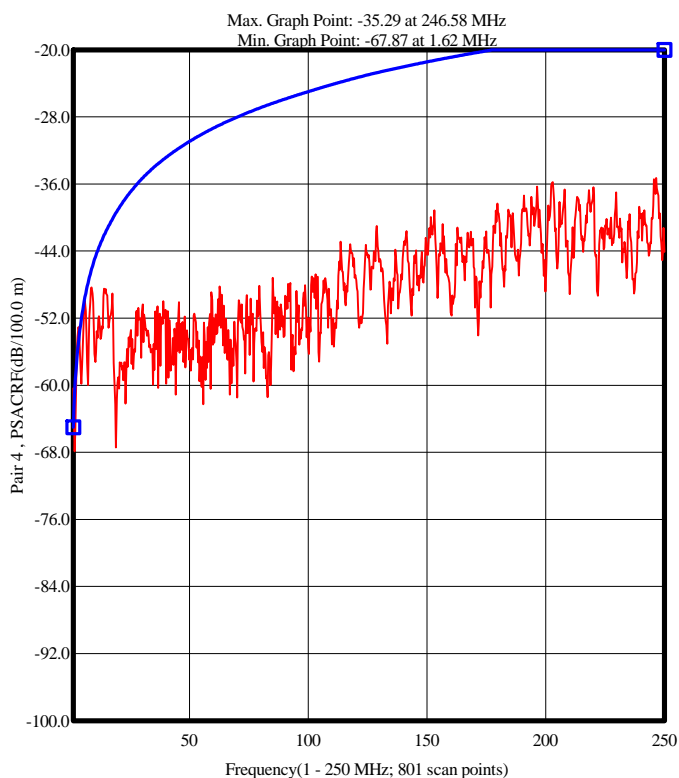
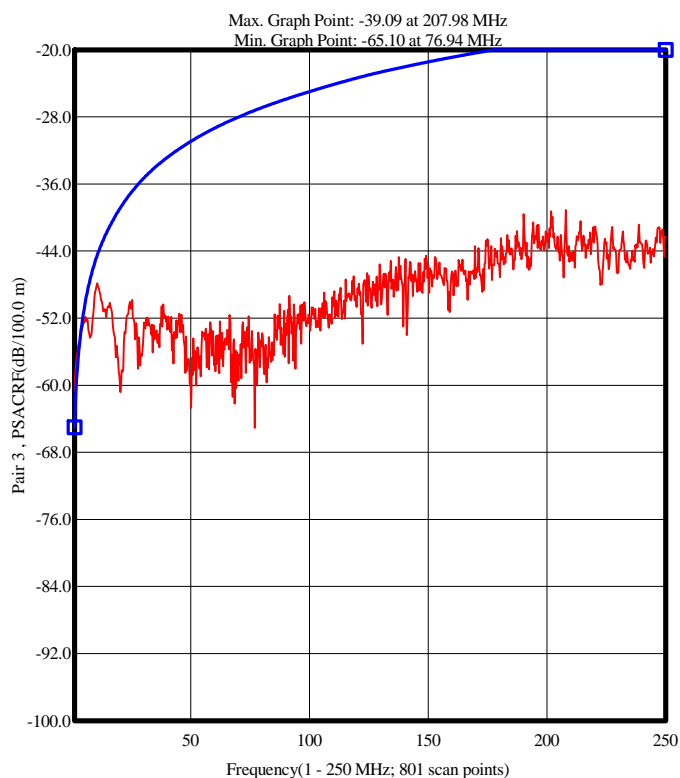
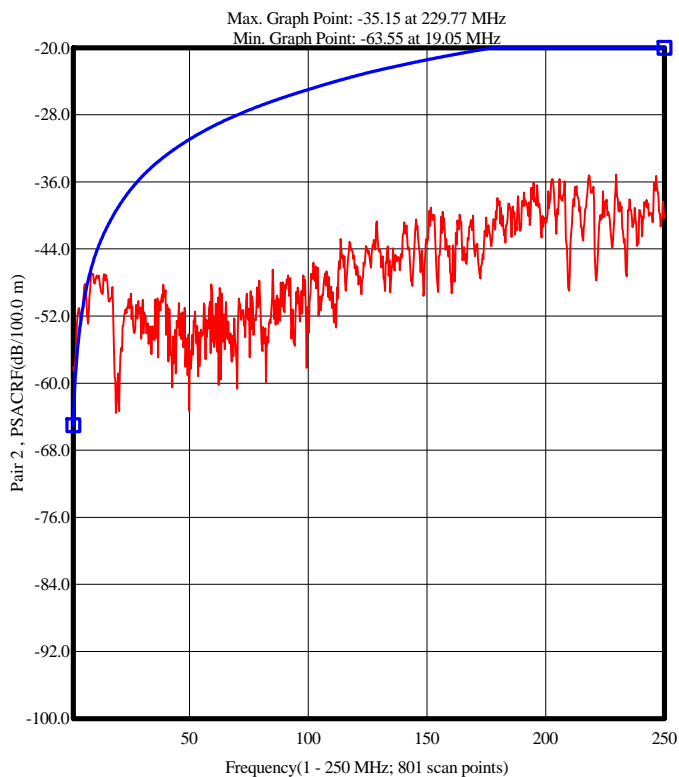
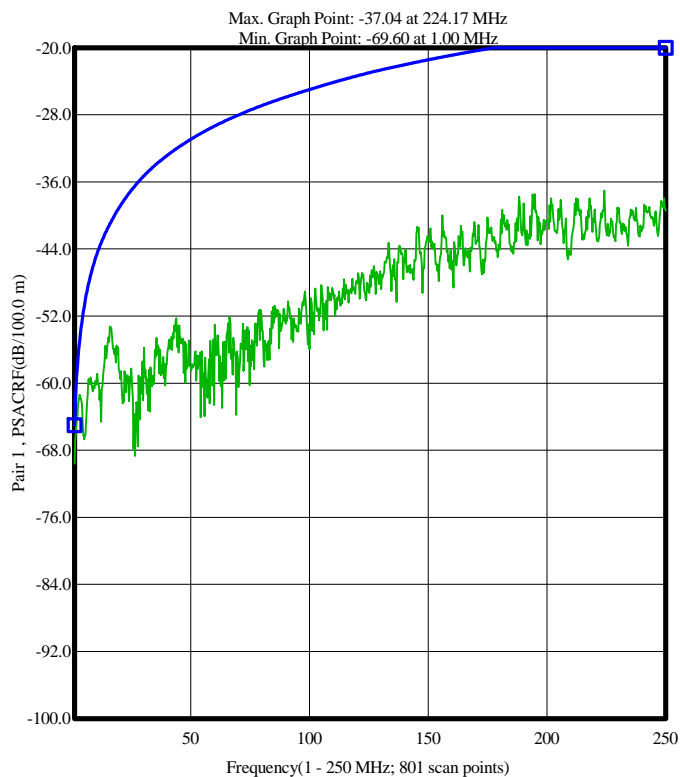
N/A = Not Applicable.  
--- = Disable/Bypassed Pair.

\* = Measured value out of spec.  
xxx = No entry.



**Summary and Graphic: Power Sum ACRF (PSACRF)**

Pair	Spec (Min)(dB/100.0 m)	Measured(dB/100.0 m)	Margin (dB/100.0 m)	@ Frequency (MHz)	Test Result
Pair 1	62.65	66.78	4.13	1.31	Passed
Pair 2	65.00	58.06	-6.94	1.00	Failed
Pair 3	65.00	60.69	-4.31	1.00	Failed
Pair 4	65.00	60.37	-4.63	1.00	Failed



N/A = Not Applicable.  
--- = Disable/Bypassed Pair.

\* = Measured value out of spec.  
xxx = No entry.

**Summary: Propagation Delay Skew (SKEW)**

Sweep Frequency Range: 1 - 250 MHz; 1601 scan points  
(Cat 6A); SKEW <= 45ns/100m

Pair	Spec (Max)(ns/100m)	Measured(ns/100m)	Margin (ns/100m)	@ Frequency (MHz)	Test Result
Pair 1 - 2	45.00	51.14	-6.14	200.00	Failed
Pair 1 - 3	45.00	49.82	-4.82	200.00	Failed
Pair 1 - 4	45.00	26.89	18.11	4.00	Passed
Pair 2 - 3	45.00	10.51	34.49	100.00	Passed
Pair 2 - 4	45.00	36.04	8.96	250.00	Passed
Pair 3 - 4	45.00	44.75	0.25	250.00	Passed

**Detail Discrete Frequencies ---Return Loss (RL)(dB)(Terminated)**

Frequency	1.00	4.00	10.00	16.00	20.00	31.25	62.50	100.00	200.00	250.00
Min Spec	20.00	23.01	25.00	25.00	25.00	23.64	21.54	20.11	18.00	17.32
Pair 1	21.95	30.40	45.99	39.33	37.99	34.66	32.94	33.20	20.12	40.15
Pair 2	21.60	25.79	25.19	24.24*	26.97	31.91	28.34	31.57	21.80	20.10
Pair 3	28.42	33.12	36.64	32.90	36.26	35.04	31.62	34.95	24.83	20.87
Pair 4	24.74	32.12	30.97	34.11	26.61	42.44	34.69	32.36	28.56	22.18

**Detail Discrete Frequencies ---Insertion Loss (IL)(dB/100.0 m)@20C**

Frequency	1.00	4.00	10.00	16.00	20.00	31.25	62.50	100.00	125.00	200.00
Max Spec	4.00	4.00	6.00	7.60	8.50	10.80	15.50	19.90	22.50	29.20
Pair 1	1.72	3.56	5.71	7.27	8.15	10.27	14.69	18.71	20.98	25.76
Pair 2	1.98	3.70	5.73	7.21	8.04	10.09	14.20	17.67	20.00	23.70
Pair 3	1.70	3.34	5.32	6.76	7.58	9.56	13.65	17.20	19.50	21.47
Pair 4	1.80	3.49	5.50	6.96	7.81	9.80	13.91	17.61	20.01	23.28

**Continue:Insertion Loss (IL)(dB/100.0 m)@20C**

Frequency	250.00									
Max Spec	33.00									
Pair 1	26.19									
Pair 2	22.97									
Pair 3	22.15									
Pair 4	25.53									

**Detail Discrete Frequencies ---Near End Crosstalk (NEXT)(dB)**

Frequency	1.00	4.00	10.00	16.00	20.00	31.25	62.50	100.00	125.00	200.00
Min Spec	75.00	66.00	60.00	57.00	56.00	53.00	48.00	45.00	44.00	41.00
Pair 1 - 2	89.45	88.05	69.47	68.81	64.96	61.36	64.79	60.87	72.20	58.18
Pair 1 - 3	97.64	82.61	79.76	74.62	75.42	75.12	61.13	65.03	61.26	75.57
Pair 1 - 4	105.58	100.96	106.06	108.55	116.18	105.90	68.16	60.93	60.10	60.28
Pair 2 - 3	88.74	73.41	75.92	60.39	67.07	66.94	57.18	60.06	50.83	71.16
Pair 2 - 4	110.44	78.25	79.07	72.79	81.78	59.96	65.14	70.99	63.73	61.74
Pair 3 - 4	85.76	82.32	76.33	75.40	70.24	73.23	66.88	57.00	58.84	60.52

**Continue:Near End Crosstalk (NEXT)(dB)**

Frequency	250.00									
Min Spec	39.00									
Pair 1 - 2	60.79									
Pair 1 - 3	63.29									
Pair 1 - 4	55.09									
Pair 2 - 3	60.33									
Pair 2 - 4	52.96									
Pair 3 - 4	58.96									

**Detail Discrete Frequencies ---ATT to FEXT Ratio (ACRF)(dB/100.0 m)**

Frequency	1.00	4.00	10.00	16.00	20.00	31.25	62.50	100.00	125.00	200.00
Min Spec	68.00	56.00	48.00	44.00	42.00	38.00	32.00	28.00	26.00	22.00
Pair 1 - 2	79.46	67.88	63.27	63.37	66.35	63.52	67.68	59.01	53.66	41.95
Pair 1 - 3	71.35	64.45	64.20	55.30	60.75	62.81	66.78	58.71	51.13	46.68
Pair 1 - 4	76.02	71.65	69.80	58.88	65.61	70.92	63.61	77.98	66.70	59.13
Pair 2 - 3	61.43*	53.95*	48.91	52.32	65.80	55.20	66.14	54.18	53.92	46.33
Pair 2 - 4	60.79*	57.77	57.00	54.92	61.29	55.13	53.92	57.12	45.31	58.15
Pair 3 - 4	72.24	70.21	64.03	62.70	67.60	55.78	56.22	61.53	52.40	49.20

N/A = Not Applicable.  
--- = Disable/Bypassed Pair.

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xxx = No entry.

**Continue:ATT to FEXT Ratio (ACRF)(dB/100.0 m)**

Frequency	250.00									
Min Spec	20.00									
Pair 1 - 2	41.06									
Pair 1 - 3	44.96									
Pair 1 - 4	54.67									
Pair 2 - 3	55.00									
Pair 2 - 4	49.02									
Pair 3 - 4	46.38									

**Detail Discrete Frequencies ---Power Sum NEXT(PSNEXT)(dB)**

Frequency	1.00	4.00	10.00	16.00	20.00	31.25	62.50	100.00	125.00	200.00
Min Spec	72.00	63.00	57.00	54.00	53.00	50.00	45.00	42.00	41.00	38.00
Pair 1	88.75	80.62	69.08	67.80	64.57	61.18	58.98	57.12	57.30	55.84
Pair 2	86.05	71.82	68.19	59.57	62.80	57.12	55.93	57.24	50.53	56.13
Pair 3	83.81	70.92	71.88	60.06	64.93	65.52	55.36	54.80	49.81	59.04
Pair 4	85.70	76.52	73.82	70.46	69.81	59.76	61.70	55.40	55.46	55.83

**Continue:Power Sum NEXT(PSNEXT)(dB)**

Frequency	250.00									
Min Spec	36.00									
Pair 1	53.56									
Pair 2	51.66									
Pair 3	55.74									
Pair 4	50.26									

**Detail Discrete Frequencies ---Power Sum ACRF (PSACRF)(dB/100.0 m)**

Frequency	1.00	4.00	10.00	16.00	20.00	31.25	62.50	100.00	125.00	200.00
Min Spec	65.00	53.00	45.00	41.00	39.00	35.00	29.00	25.00	23.00	19.00
Pair 1	69.60	62.29	60.19	53.27	58.66	59.70	58.91	55.76	48.99	40.62
Pair 2	58.06*	52.25*	48.13	50.19	59.04	51.80	53.40	51.50	44.22	40.47
Pair 3	60.69*	53.48	48.65	50.29	58.93	52.06	54.97	52.21	47.56	42.42
Pair 4	60.37*	57.33	56.02	52.96	59.14	52.35	50.14	55.62	44.46	48.17

**Continue:Power Sum ACRF (PSACRF)(dB/100.0 m)**

Frequency	250.00									
Min Spec	17.00									
Pair 1	39.44									
Pair 2	40.27									
Pair 3	42.36									
Pair 4	44.09									

**Detail Discrete Frequencies ---Propagation Delay Skew (SKEW)(ns/100m)**

(Cat 6A): SKEW <= 45ns/100m

Frequency	4.00	100.00	200.00	250.00						
Max Spec	45.00	45.00	45.00	45.00						
Pair 1 - 2	21.72	20.84	51.14*	40.71						
Pair 1 - 3	11.63	10.33	49.82*	49.42*						
Pair 1 - 4	26.89	25.86	21.54	4.67						
Pair 2 - 3	10.09	10.51	1.32	8.71						
Pair 2 - 4	5.17	5.02	29.60	36.04						
Pair 3 - 4	15.26	15.53	28.28	44.75						

N/A = Not Applicable.  
--- = Disable/Bypassed Pair.

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xxx = No entry.