

DCM Test Report

Cable Type : 4x2x24 x PE/PVC	Factory Number : NEX1	Data File Name : DA038171.XLD
Cable I.D. : FTP#24X4P CABLE	Order Number : 9125 GY-360	Specification File : FTP Cat 5e.LDS
Temperature : 25.00 [deg]	Operator : CHANG	Test Date : 10/13/2006
Length : 305.00 m	Number of Pairs to Test : 4	Test Time : 12:51:08 AM
Starting Position : 6		

Pass - Fail Test Certificate - 4 Pairs

High Frequency

Test Type	Test Result
Input Impedance (Zin)(Ohms)(Open/Short)	Passed
Return Loss (RL)(dB)(Open/Short)	Passed
Attenuation (ATT)(Curve Fit)(dB/100.0 m)@20C	Passed
Near End Crosstalk (NEXT)(dB)	Passed
Power Sum NEXT(PSNEXT)(dB)	Passed

Low Frequency

Test Type	Test Result
Conductor Resistance(Ohms/100.0 m)@20C	Passed
Resistance Unbalance(%)@20C	Passed
Cap. Unbalance to Ground(pF/100.0 m)@1000Hz	Passed
Cap. Unbalance to Shield(pF/100.0 m)@1000Hz	Passed

Signature:	Approved:	Date:
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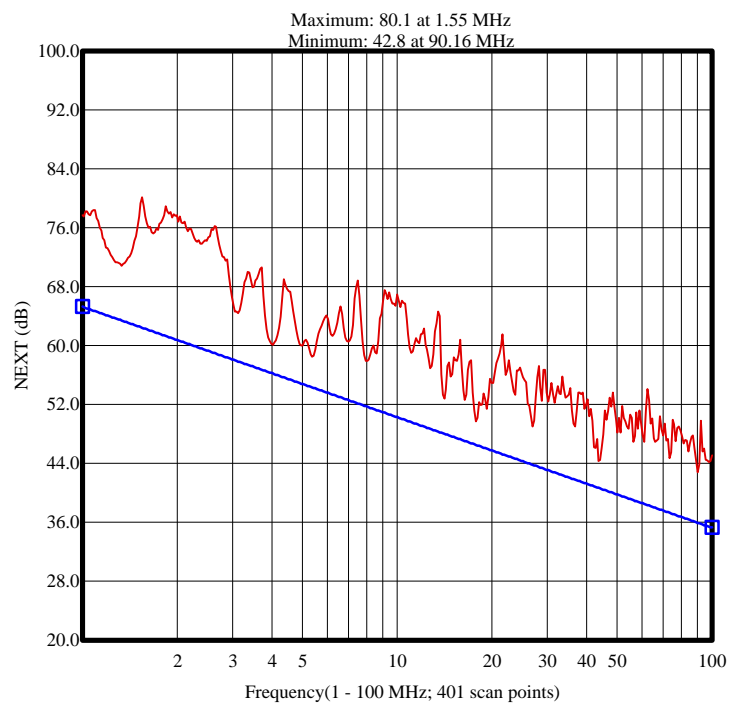
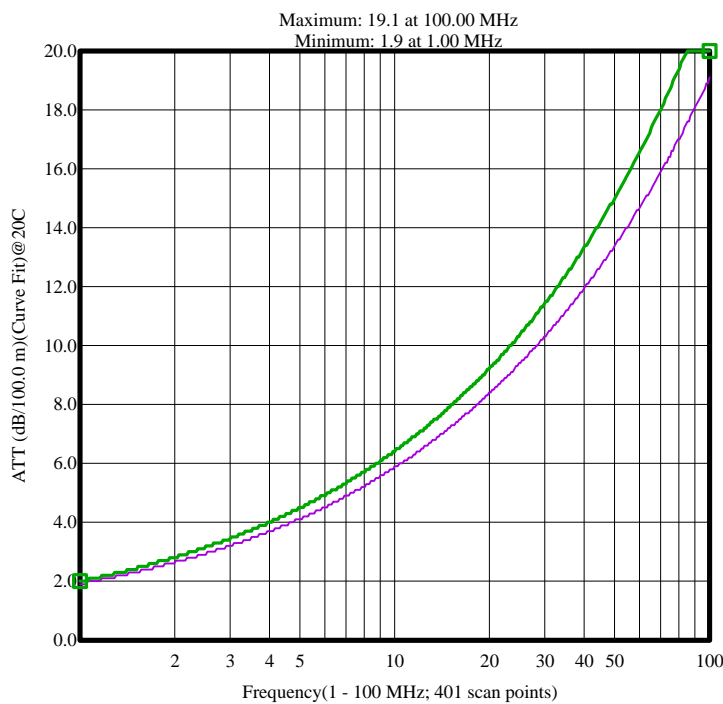
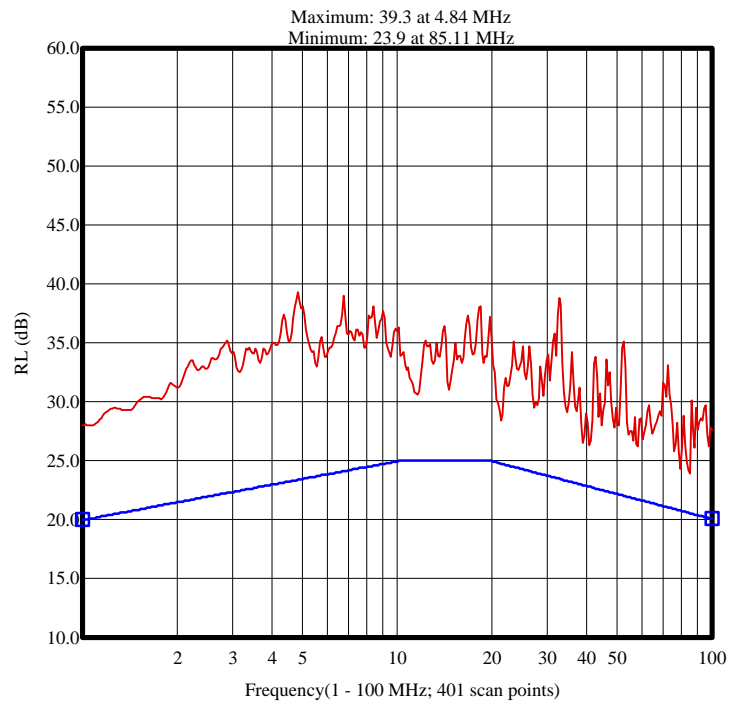
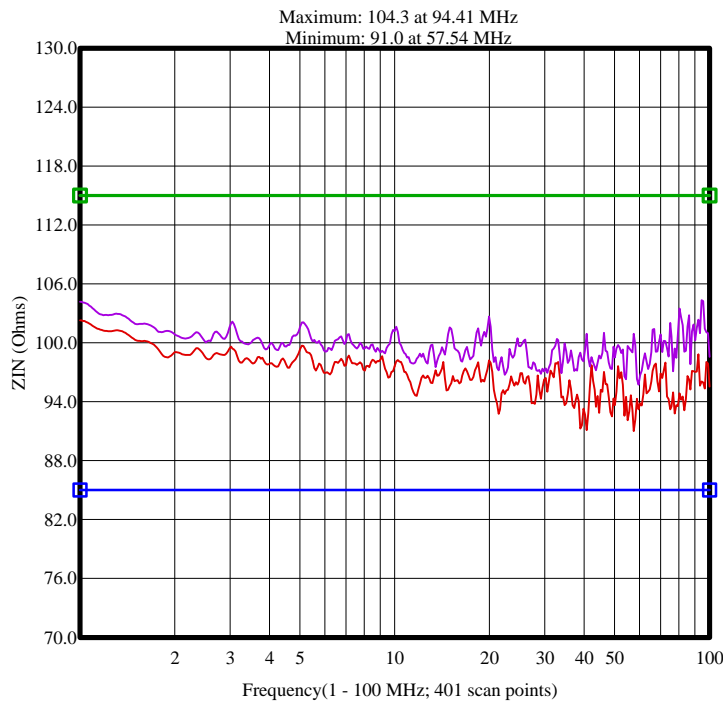
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Cable I.D. : FTP#24X4P CABLE	Order Number : 9125 GY-360	Specification File : FTP Cat 5e.LDS
Temperature : 25.00 [°C]	Operator : CHANG	Test Date : 10/13/2006
Length : 305.00 m	Number of Pairs to Test : 4	Test Time : 12:51:08 AM
Starting Position : 6		

Worst Case Summary

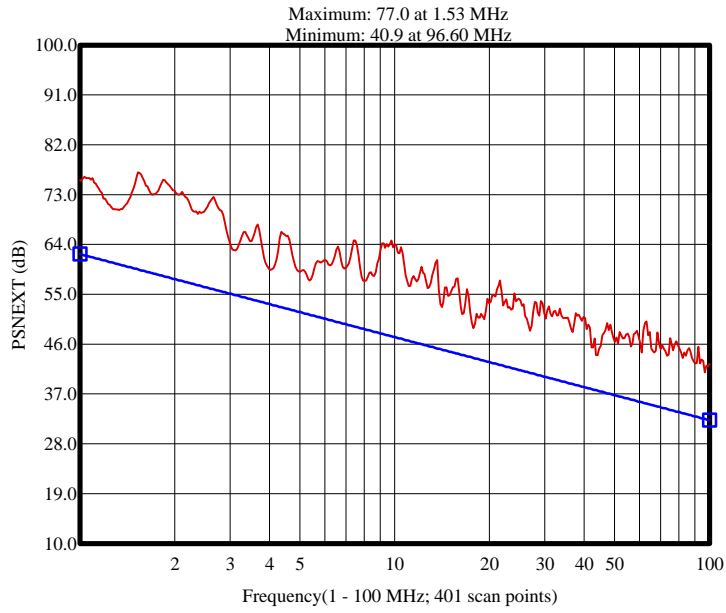
High Frequency

Test Type	Specification	Measured (Pair)	Margin	@ Frequency (MHz)	Test Result
Input Impedance (Zin)(Open/Short)	85.0 (Min)	91.0 (Pair 3)	6.0	57.54	Passed
Input Impedance (Zin)(Open/Short)	115.0 (Max)	104.3 (Pair 2)	10.7	94.41	Passed
Return Loss (RL)(O/S)	20.5 (Min)	23.9 (Pair 2)	3.4	85.11	Passed
Attenuation (ATT)(Curve Fit)@20C	2.0 (Max)	2.0 (Pair 3)	0.0	1.06	Passed
Near End Crosstalk (NEXT)	46.5 (Min)	49.7 (Pairs 3-4)	3.2	17.78	Passed
Power Sum NEXT(PSNEXT)	43.5 (Min)	48.9 (Pair 4)	5.4	17.78	Passed



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

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Worst Case Summay

Low Frequency

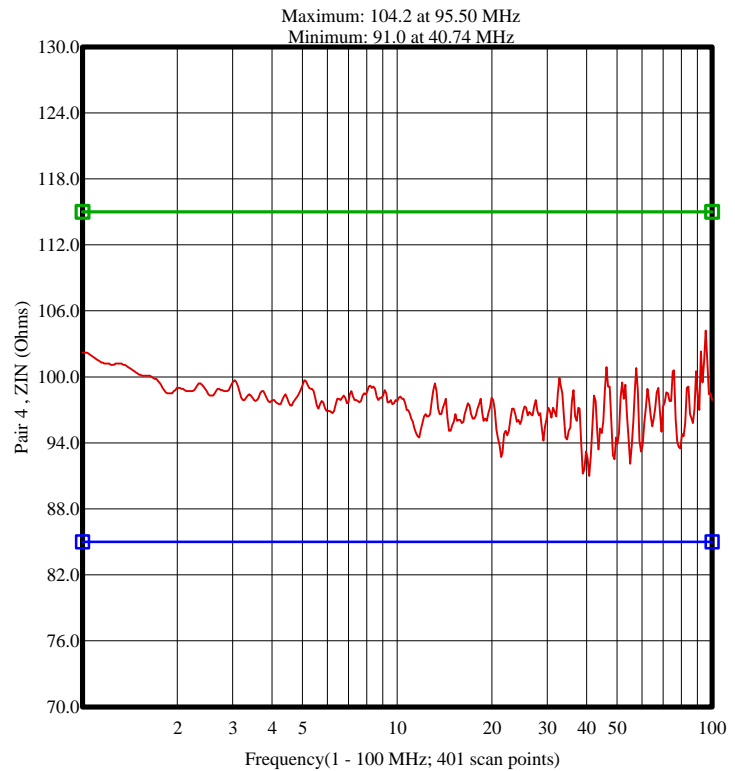
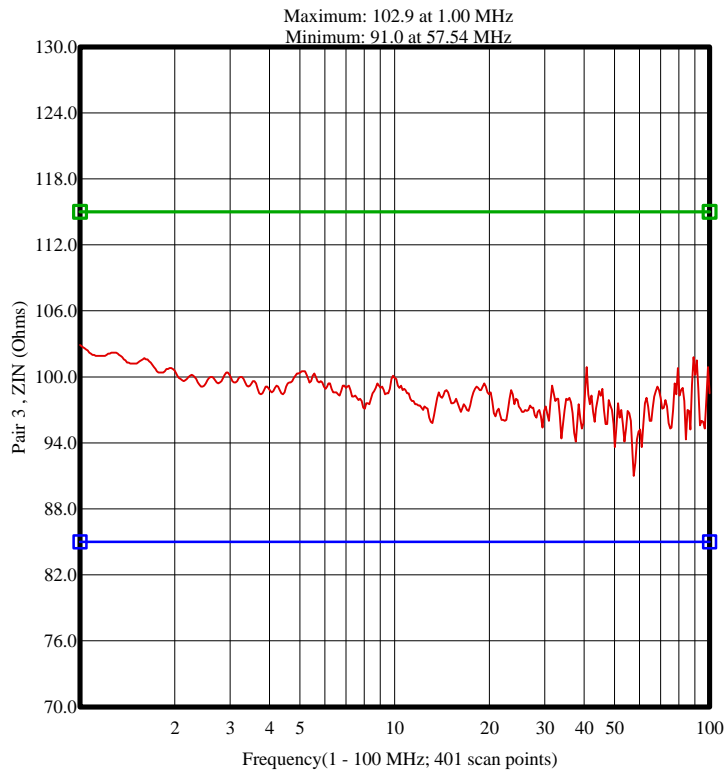
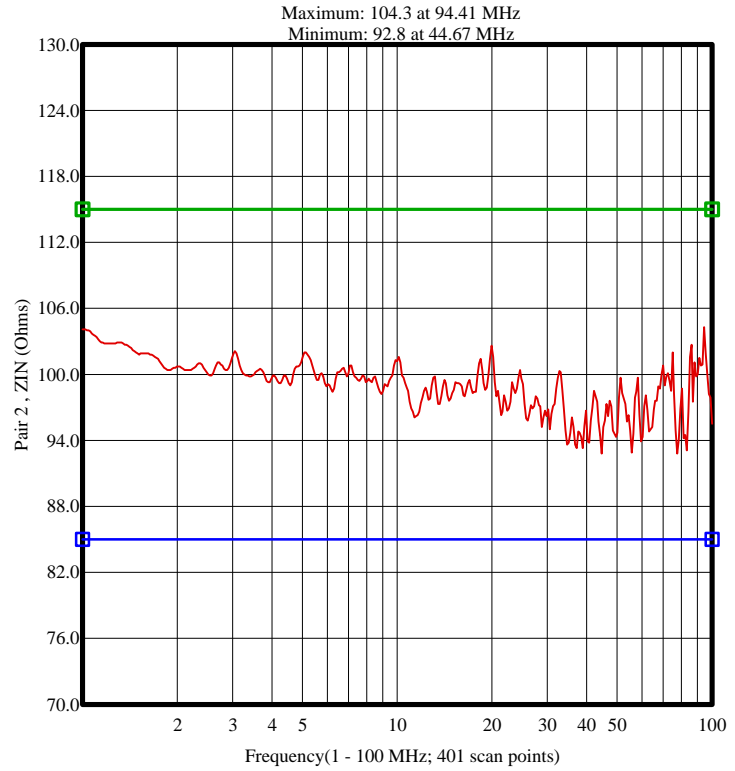
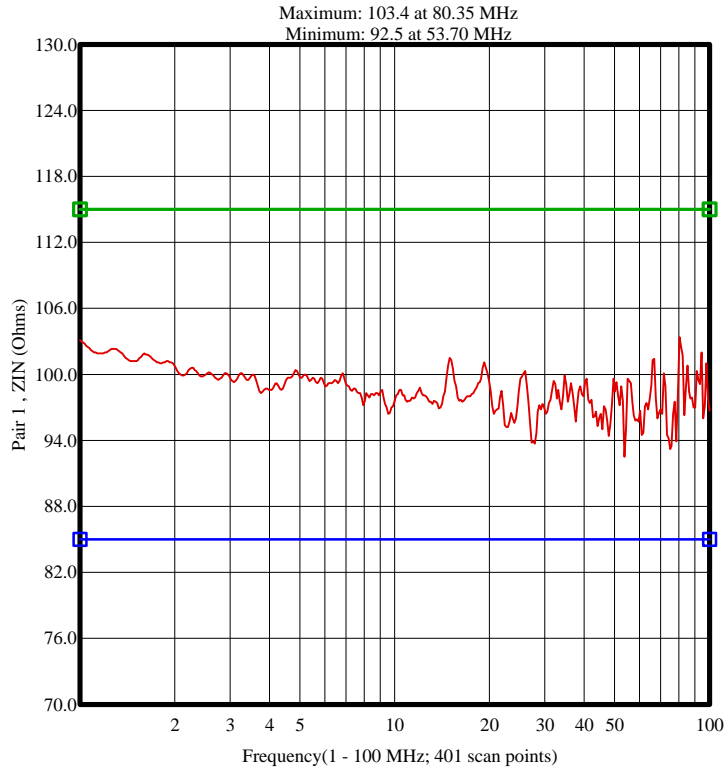
Statistical Parameter	Maximum		Minimum		Average Maximum		Standard Deviation		Result
	Spec Limit	Measured	Spec Limit	Measured	Spec Limit	Measured	Spec Limit	Measured	
Conductor Resistance(Ohms/100.0 m)@20C	9.38	8.00	xxx	7.69	xxx	7.85	xxx	0.124	Passed
Resistance Unbalance(%)	5.00	0.54	xxx	0.15	xxx	0.28	xxx	0.155	Passed
Cap. Unbalance to Ground(pF/100.0 m)@1000Hz	330.00	20.59	xxx	1.97	xxx	8.71	xxx	7.077	Passed
Cap. Unbalance to Shield(pF/100.0 m)@1000Hz	330.00	0.25	xxx	0.03	xxx	0.17	xxx	0.088	Passed

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Summary and Graphic: Input Impedance (Zin)(Open/Short)

Pair [Position]	Specification		Measured(Ohms)		Margin (Ohms)		@ Frequency (MHz)		Test Result
	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	
Pair 1 [6]	85.0	115.0	92.5	103.4	7.5	11.6	53.70	80.35	Passed
Pair 2 [7]	85.0	115.0	92.8	104.3	7.8	10.7	44.67	94.41	Passed
Pair 3 [8]	85.0	115.0	91.0	102.9	6.0	12.1	57.54	1.00	Passed
Pair 4 [9]	85.0	115.0	91.0	104.2	6.0	10.8	40.74	95.50	Passed



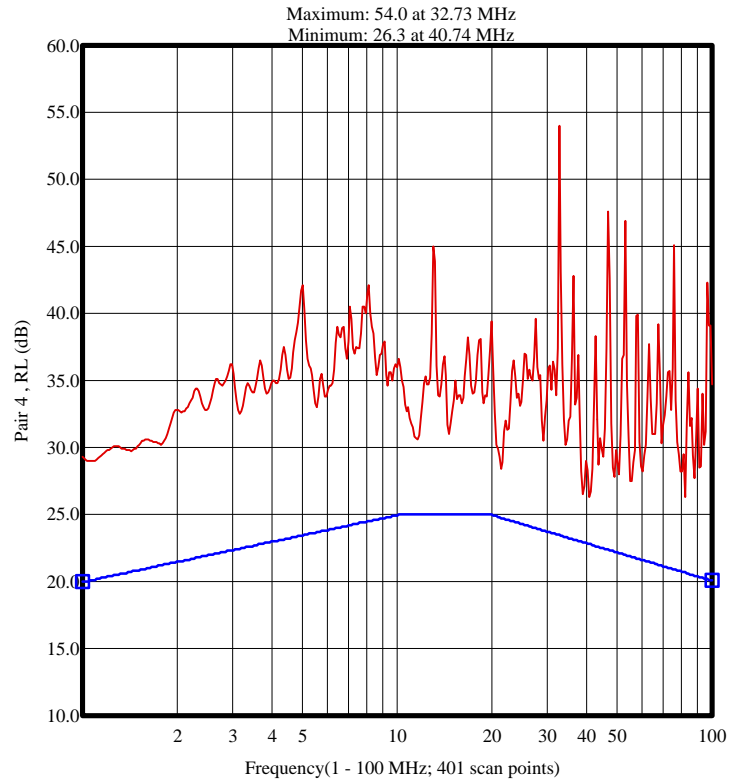
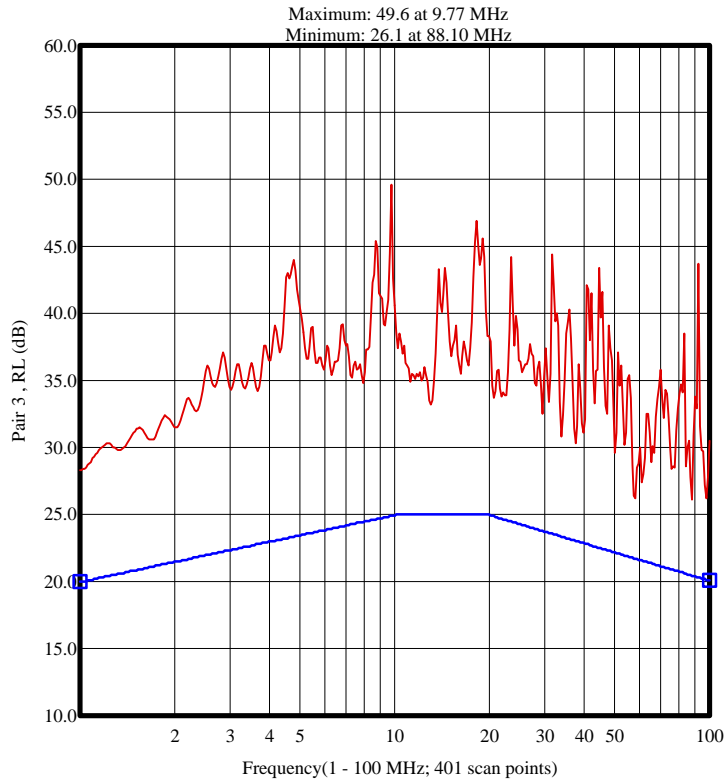
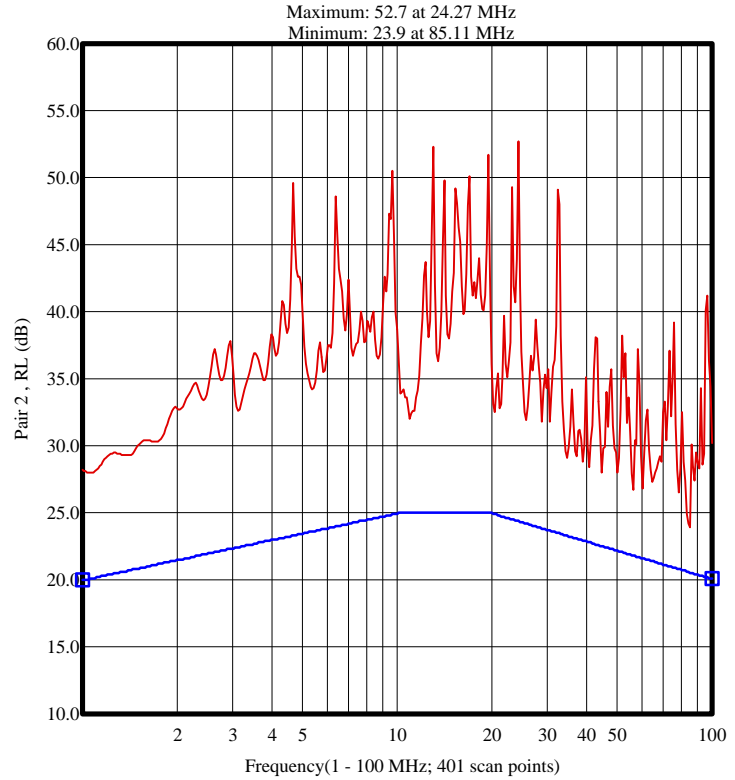
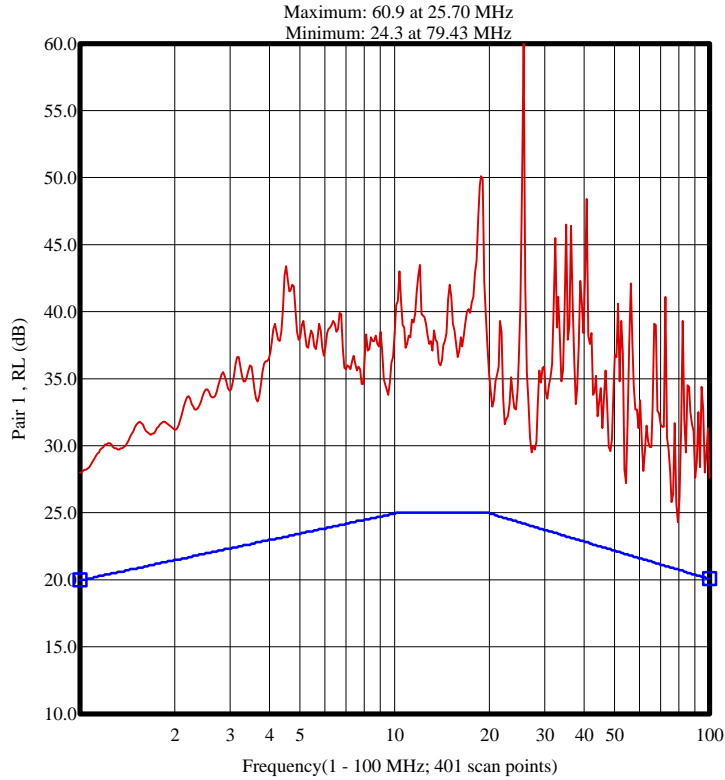
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Summary and Graphic: Return Loss (RL)(Open/Short)

(Cat 5e): RL >= 20+5*log(f); 25; 25-7*log(f/20); (Refer to manual)

Pair [Position]	Spec (Min)(dB)	Measured(dB)	Margin (dB)	@ Frequency (MHz)	Test Result
Pair 1 [6]	20.8	24.3	3.5	79.43	Passed
Pair 2 [7]	20.5	23.9	3.4	85.11	Passed
Pair 3 [8]	21.7	26.2	4.5	58.21	Passed
Pair 4 [9]	22.8	26.3	3.5	40.74	Passed



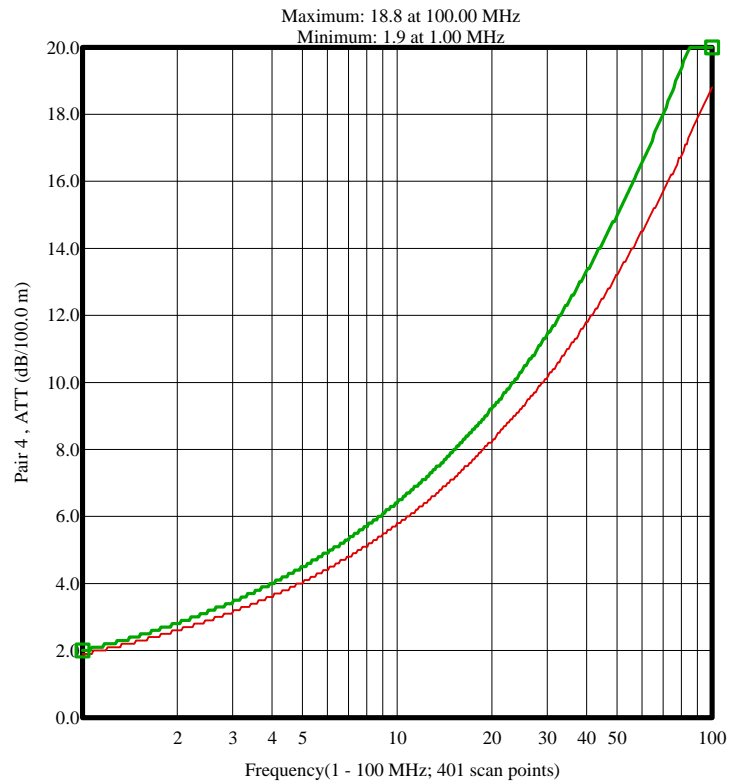
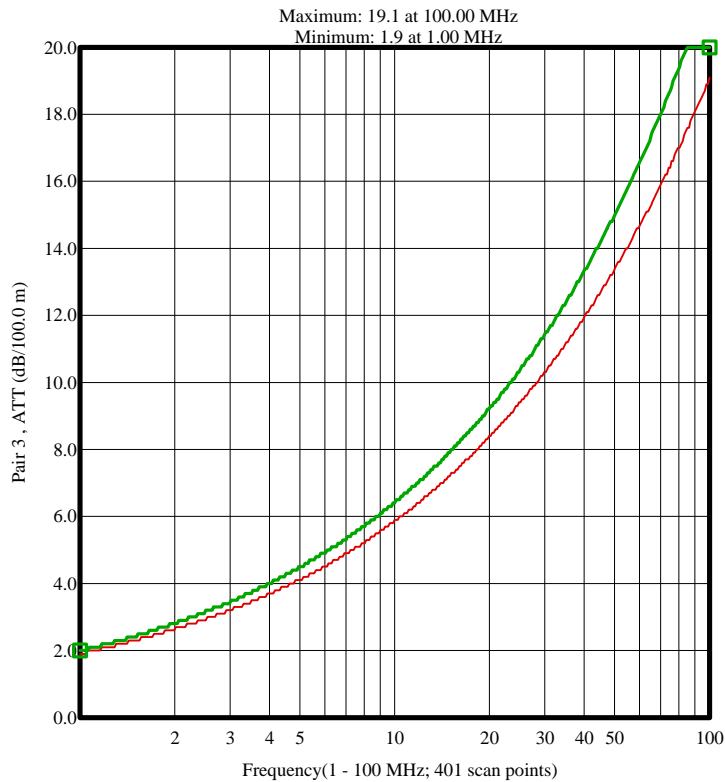
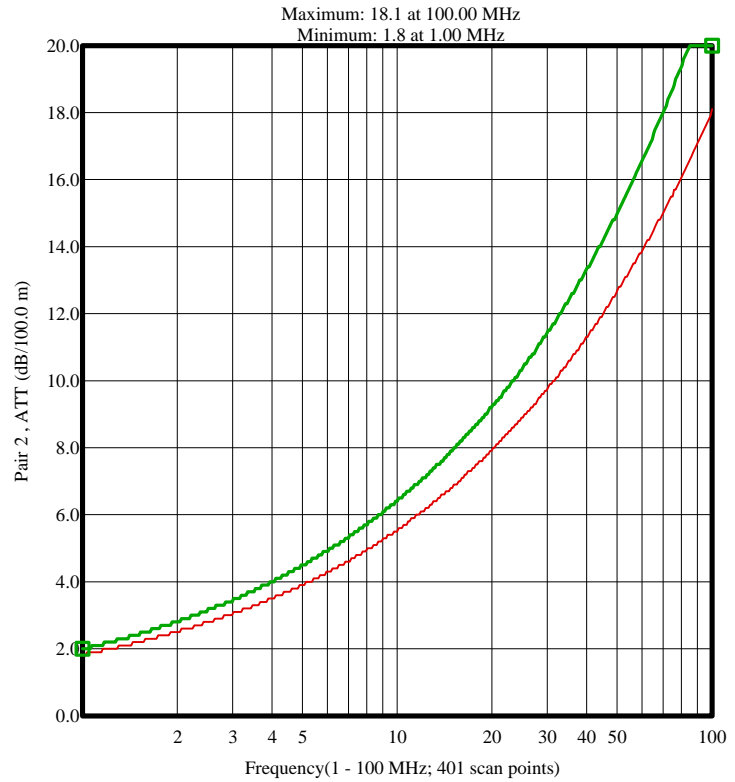
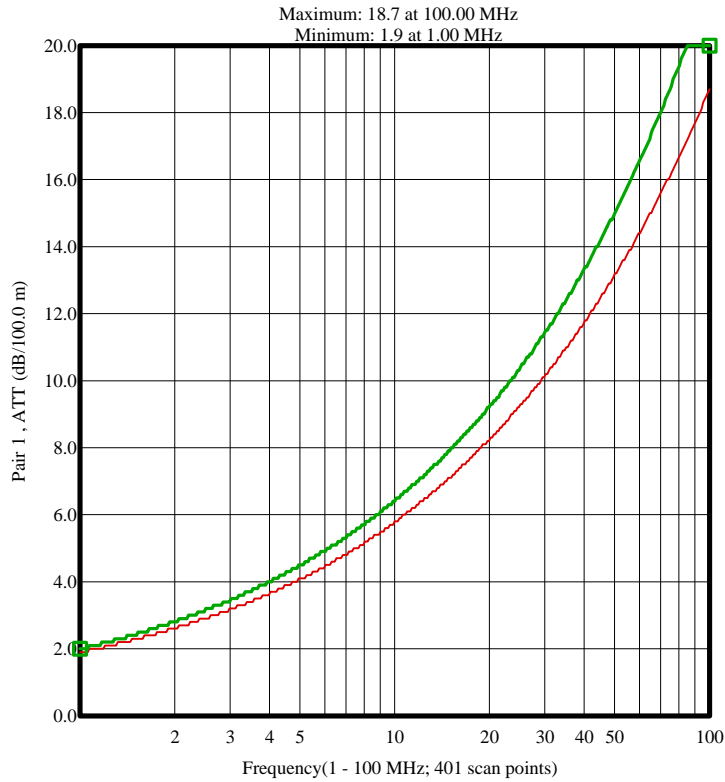
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Summary and Graphic: Attenuation (ATT)(Curve Fit)@20C

(Cat 5): $ATT \leq (1.967 * \sqrt{f}) + (0.023 * f) + (0.050/\sqrt{f})$ (Refer to manual)

Pair [Position]	Spec (Max)(dB/100.0 m)	Measured(dB/100.0 m)	Margin (dB/100.0 m)	@ Frequency (MHz)	Test Result
Pair 1 [6]	2.1	2.0	0.1	1.07	Passed
Pair 2 [7]	2.1	2.0	0.1	1.16	Passed
Pair 3 [8]	2.0	2.0	0.0	1.06	Passed
Pair 4 [9]	2.1	2.0	0.1	1.08	Passed



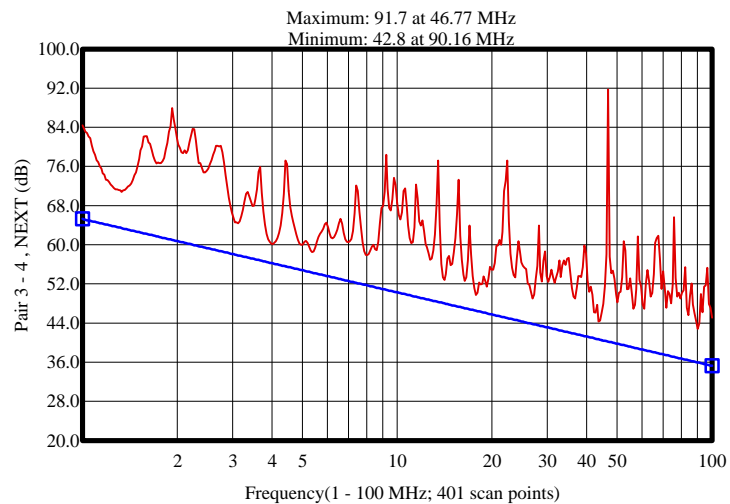
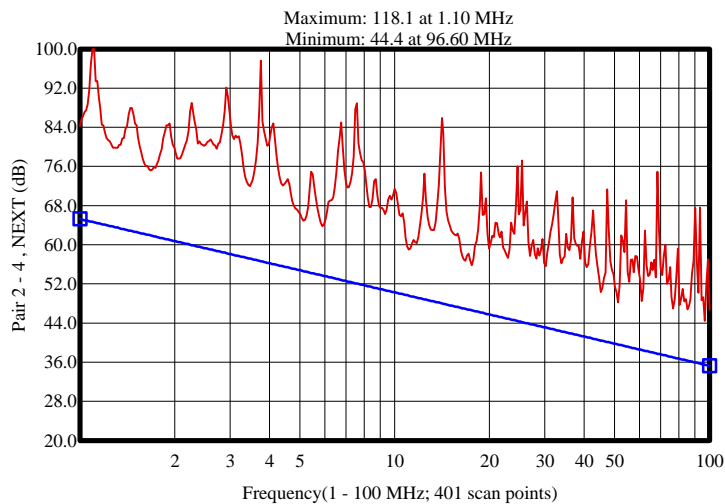
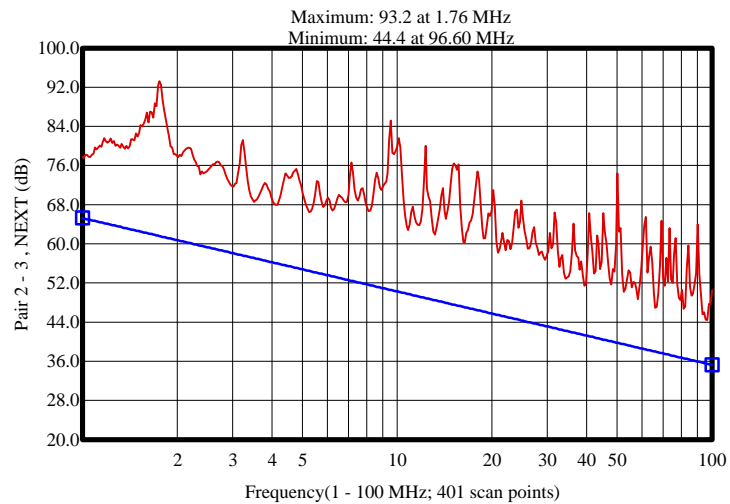
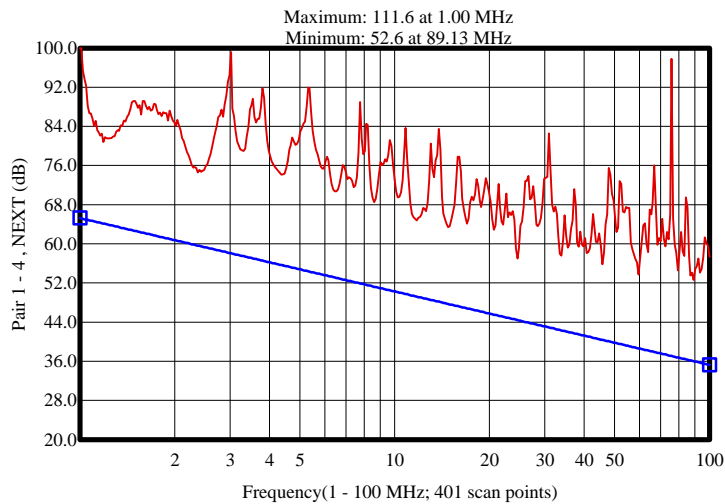
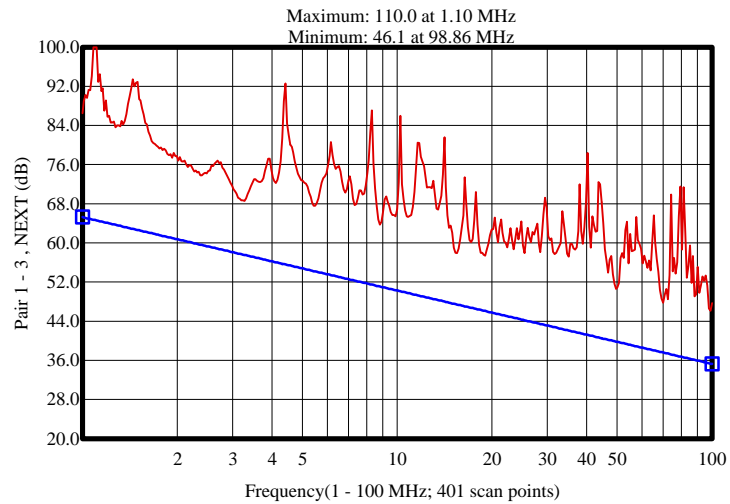
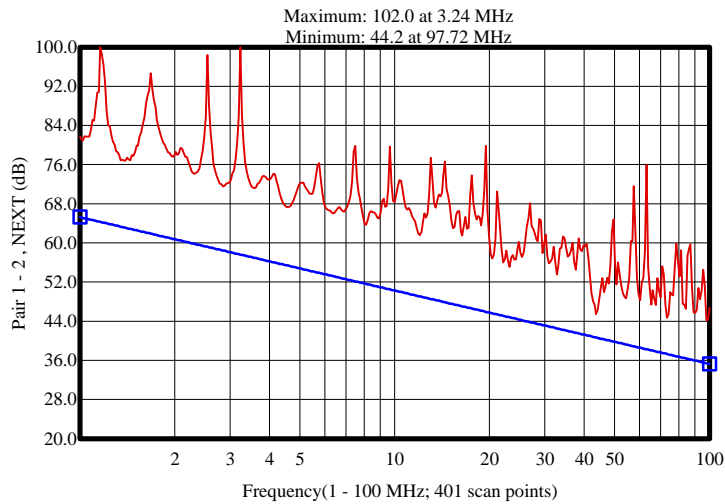
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Summary and Graphic: Near End Crosstalk (NEXT)

(Cat 5e): NEXT >= 67 - 15 * Log(f/0.772)

Pair [Position]	Spec (Min)(dB)	Measured(dB)	Margin (dB)	@ Frequency (MHz)	Test Result
Pair 1 - 2	40.7	45.5	4.8	43.65	Passed
Pair 1 - 3	37.6	47.8	10.2	69.98	Passed
Pair 1 - 4	44.4	57.0	12.6	24.55	Passed
Pair 2 - 3	38.0	46.9	8.9	66.07	Passed
Pair 2 - 4	39.6	48.2	8.6	51.29	Passed
Pair 3 - 4	46.5	49.7	3.2	17.78	Passed



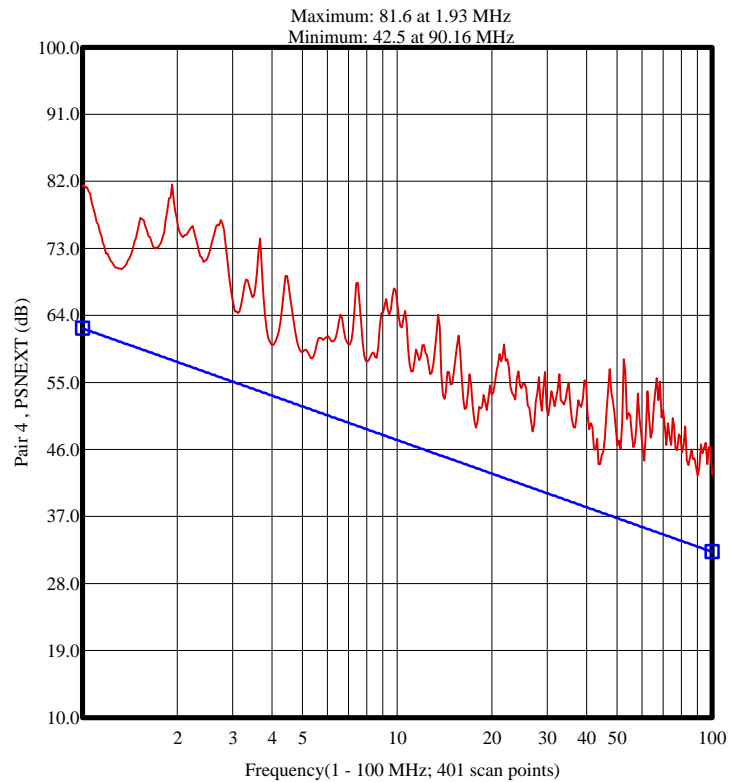
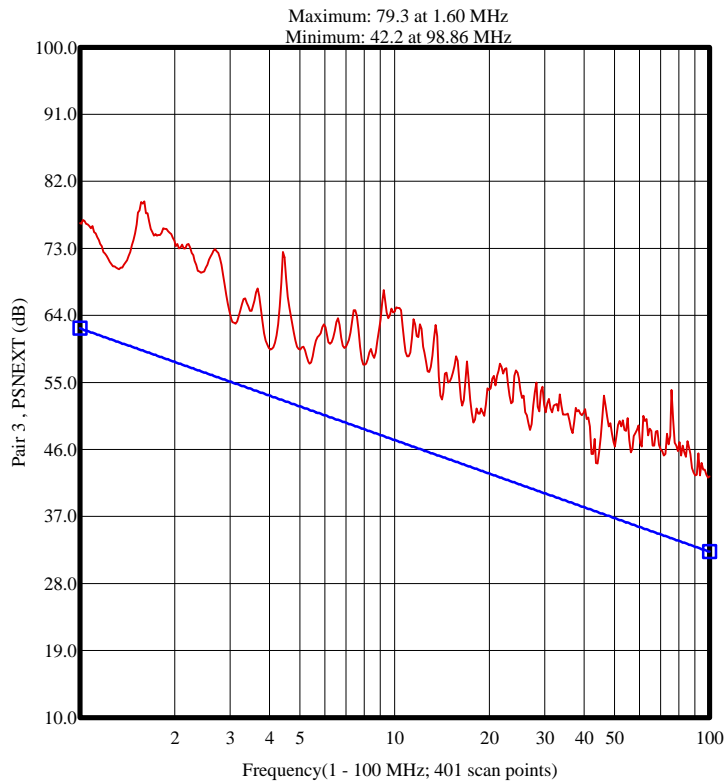
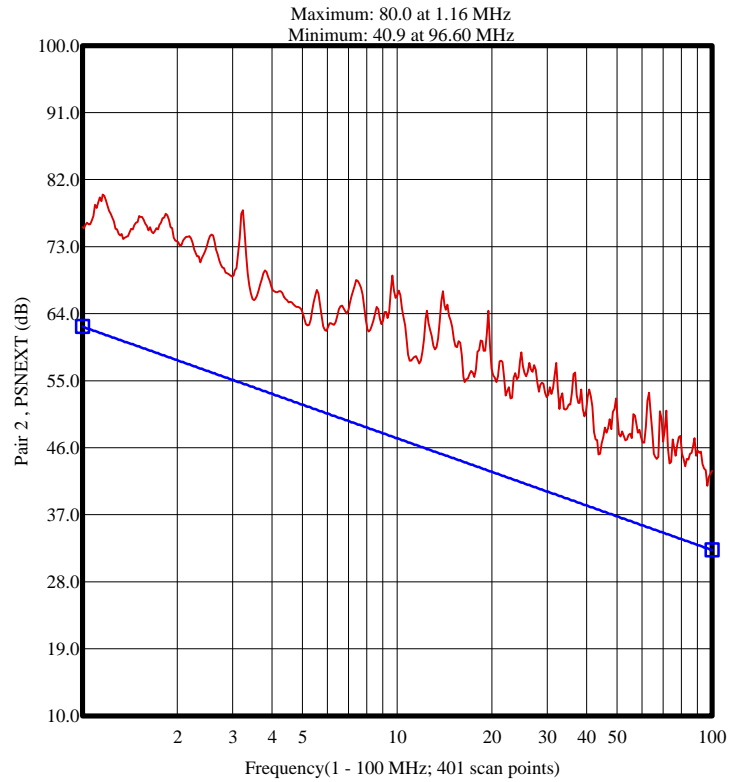
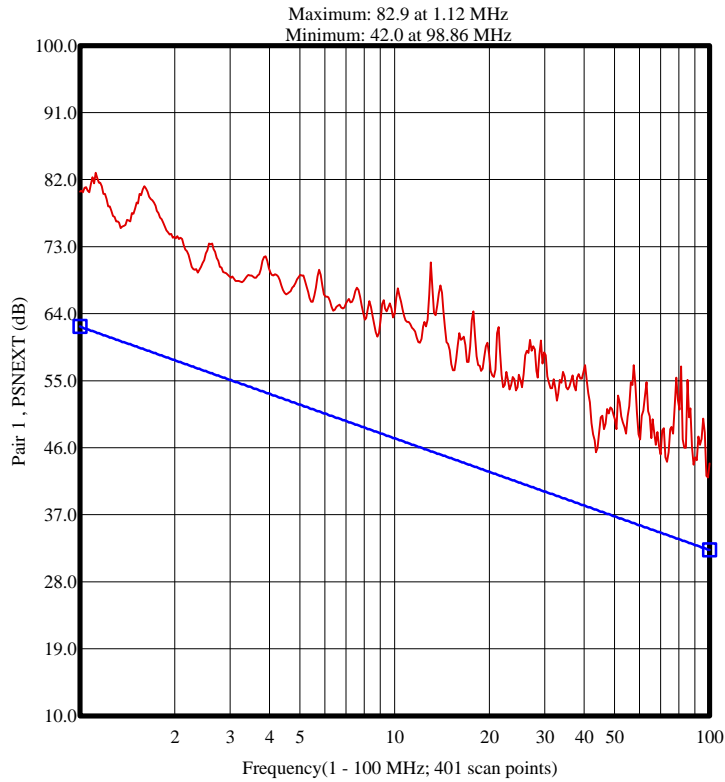
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Summary and Graphic: Power Sum NEXT(PSNEXT)

(Cat 5e): PSNEXT >= 64 - 15 * Log(f/0.772)

Pair [Position]	Spec (Min)(dB)	Measured(dB)	Margin (dB)	@ Frequency (MHz)	Test Result
Pair 1 [6]	37.7	45.4	7.7	43.65	Passed
Pair 2 [7]	37.7	45.1	7.4	43.65	Passed
Pair 3 [8]	43.5	49.6	6.1	17.78	Passed
Pair 4 [9]	43.5	48.9	5.4	17.78	Passed



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