

DCM Test Report

|                                |                                     |                                         |
|--------------------------------|-------------------------------------|-----------------------------------------|
| Cable Type : 4x2x24 x PE/LSZH  | Factory Number : PHOENIX            | Data File Name : DA203150.D3S           |
| Cable I.D. : F/UTP#24X4P CABLE | Order Number : 6183 GR-67 260752720 | Specification File : FTP C5e-305M.S3S   |
| Temperature : 25.00 °C         | Relative Humidity : 50 %            | Test Date/Time : 07/24/2026 10:54:04 AM |
| Length : 305.00 m              | Number of Pairs to Test : 4         | Operator : L 260718WE604006/1           |
| Starting Position : 5          |                                     | Analyzer Type : ENA                     |

Pass - Fail Test Certificate - 4 Pairs

High Frequency

| Test Type                                      | Test Result |
|------------------------------------------------|-------------|
| Input Impedance (Zin)(Ohms)(Terminated)        | OK          |
| Return Loss (RL)(dB)                           | OK          |
| Insertion Loss (IL)(Curve Fit)(dB/100.0 m)@20C | OK          |
| Near End Crosstalk Loss (NEXT)(dB)             | OK          |
| Power Sum NEXT(PSNEXT)(dB)                     | OK          |

Low Frequency

| Test Type                                   | Test Result |
|---------------------------------------------|-------------|
| Conductor Resistance(Ohms/100.0 m)@20C      | OK          |
| Resistance Unbalance( % )                   | OK          |
| Mutual Capacitance(nF/100.0 m)@1000Hz       | OK          |
| Cap. Unbalance to Ground(pF/100.0 m)@1000Hz | OK          |

|            |           |       |
|------------|-----------|-------|
| Signature: | Approved: | Date: |
|------------|-----------|-------|

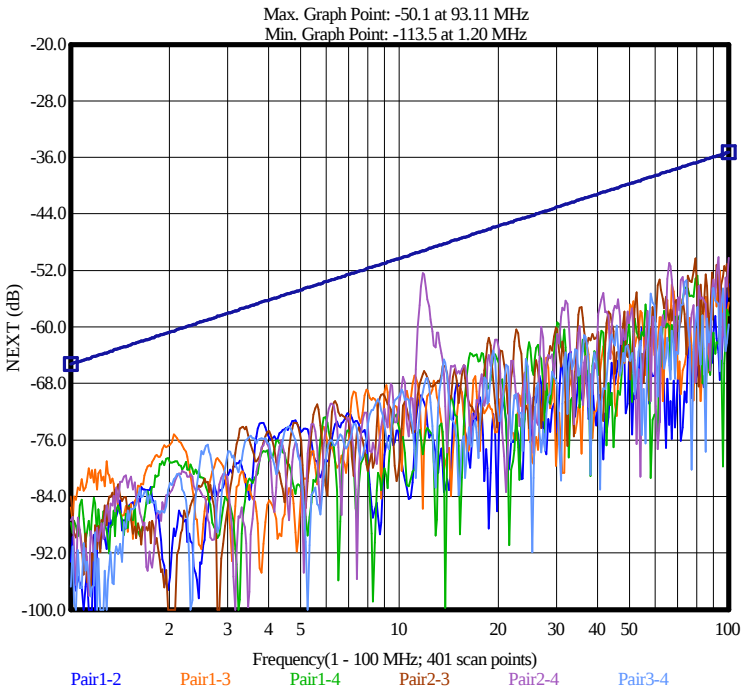
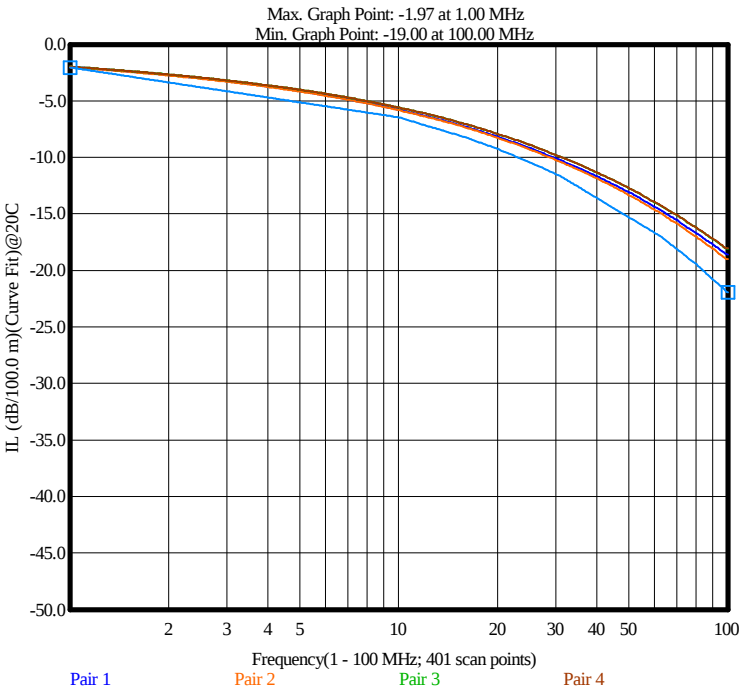
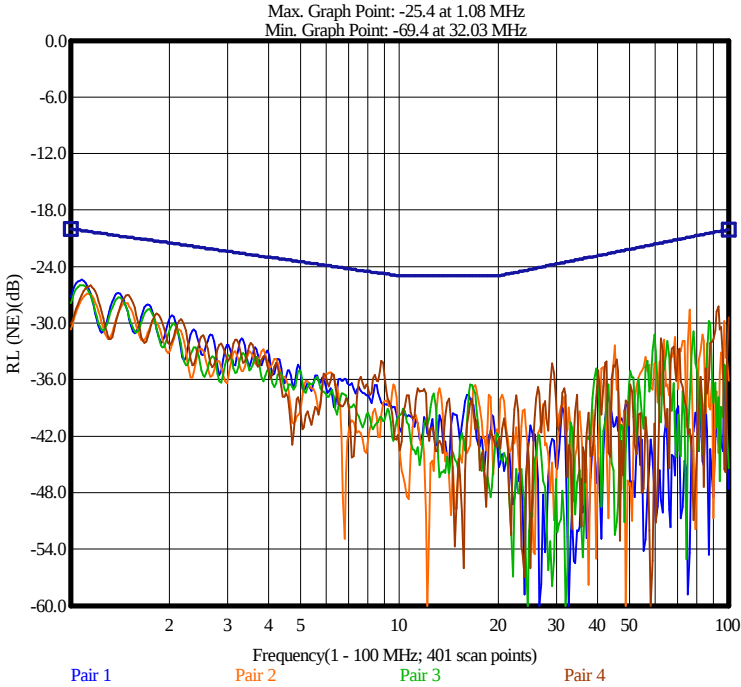
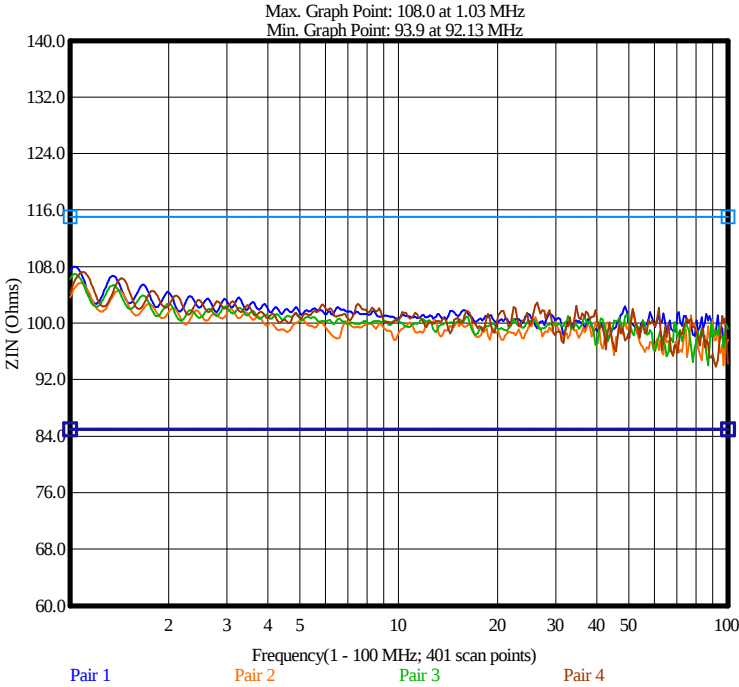
DCM Test Report

|                                |                                     |                                         |
|--------------------------------|-------------------------------------|-----------------------------------------|
| Cable Type : 4x2x24 x PE/LSZH  | Factory Number : PHOENIX            | Data File Name : DA203150.D3S           |
| Cable I.D. : F/UTP#24X4P CABLE | Order Number : 6183 GR-67 260752720 | Specification File : FTP C5e-305M.S3S   |
| Temperature : 25.00 °C         | Relative Humidity : 50 %            | Test Date/Time : 07/24/2026 10:54:04 AM |
| Length : 305.00 m              | Number of Pairs to Test : 4         | Operator : L 260718WE604006/1           |
| Starting Position : 5          |                                     | Analyzer Type : ENA                     |

Worst Case Summary

High Frequency

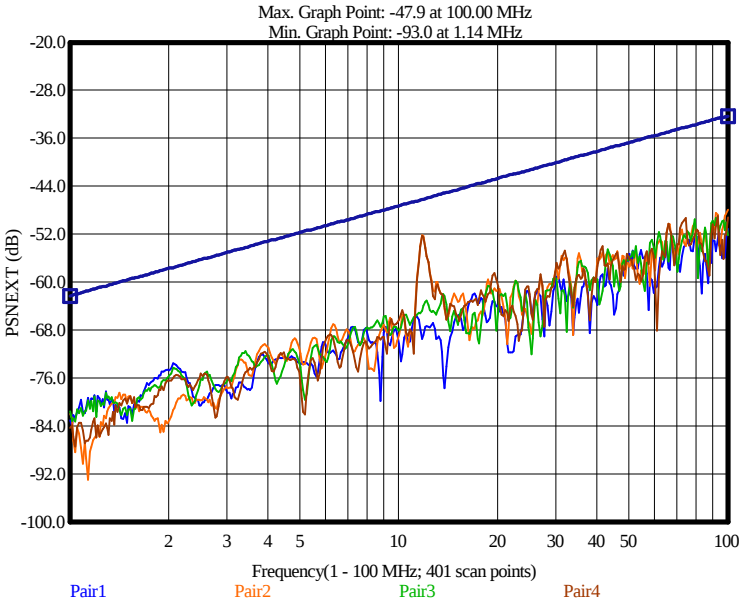
| Test Type                          | Specification | Measured (Pair)  | Margin | @ Frequency (MHz) | Test Result |
|------------------------------------|---------------|------------------|--------|-------------------|-------------|
| Input Impedance (Zin)(Terminated)  | 85.0 (Min)    | 93.9 (Pair 4)    | 8.9    | 92.13             | Passed      |
| Input Impedance (Zin)(Terminated)  | 115.0 (Max)   | 108.0 (Pair 1)   | 7.0    | 1.03              | Passed      |
| Return Loss (RL)                   | 20.2 (Min)    | 25.4 (Pair 1)    | 5.2    | 1.08              | Passed      |
| Insertion Loss (IL)(Curve Fit)@20C | 2.04 (Max)    | 2.02 (Pair 2)    | 0.02   | 1.00              | Passed      |
| Near End Crosstalk Loss (NEXT)     | 49.2 (Min)    | 52.4 (Pairs 2-4) | 3.2    | 11.77             | Passed      |
| Power Sum NEXT(PSNEXT)             | 46.2 (Min)    | 52.2 (Pair 2)    | 6.0    | 11.77             | Passed      |



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

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

\*\*\* = Measured value is invalid.



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Worst Case Summary

Low Frequency

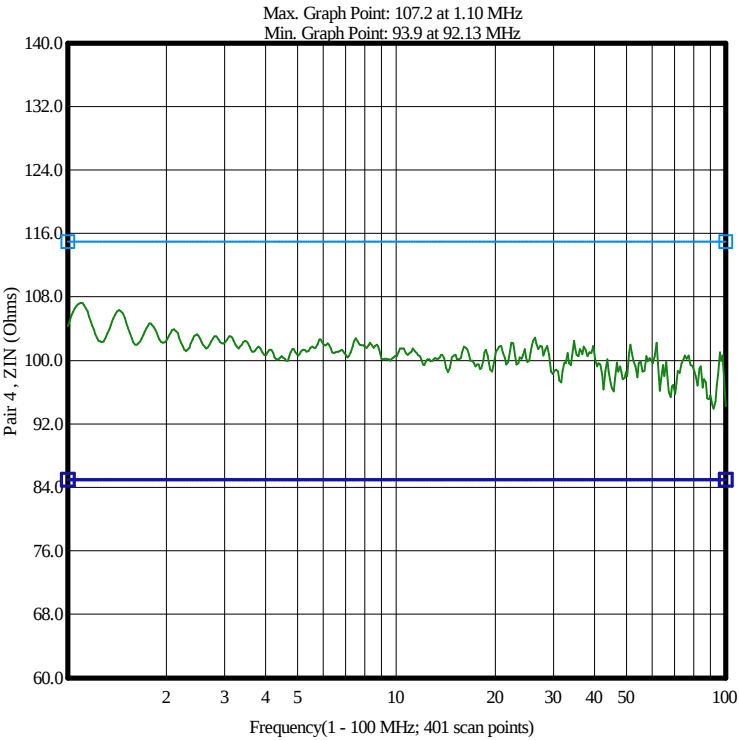
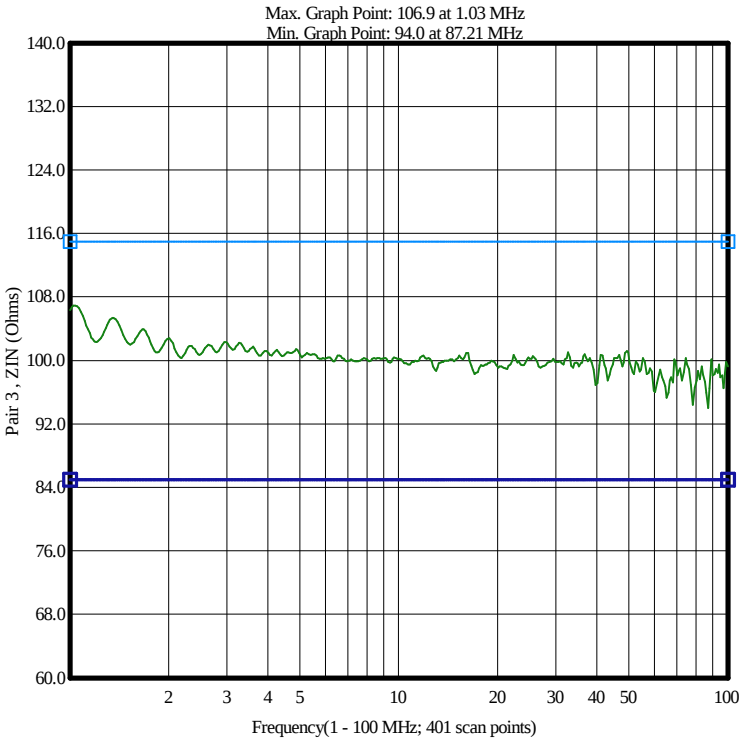
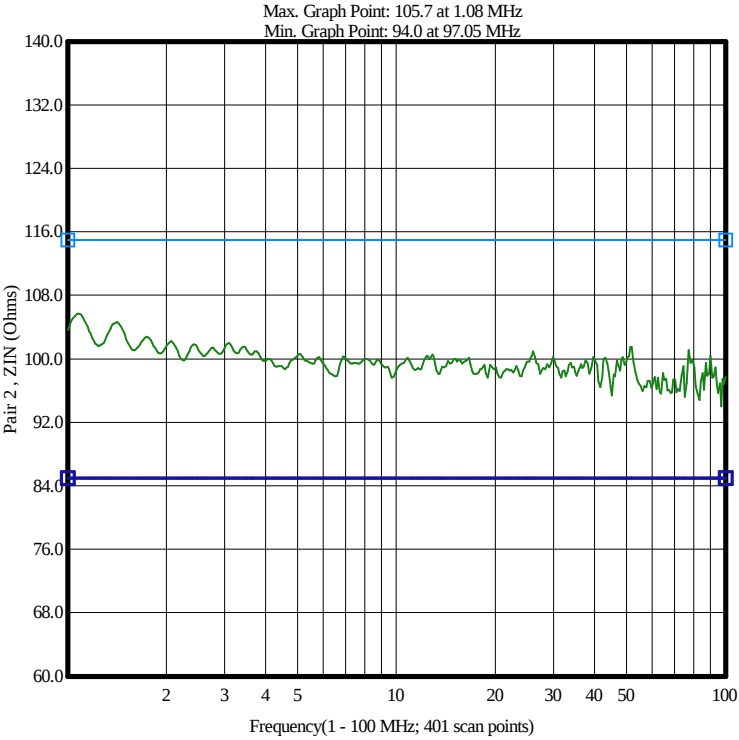
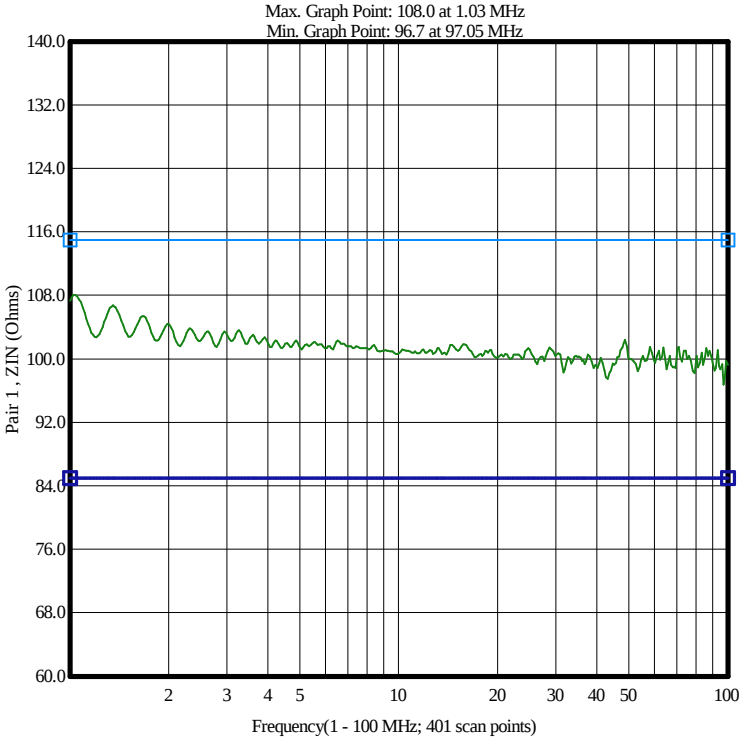
| Statistical Parameter                       | Maximum    |          | Minimum    |          | Average Maximum |          | Standard Deviation |          |        |
|---------------------------------------------|------------|----------|------------|----------|-----------------|----------|--------------------|----------|--------|
| Test Type                                   | Spec Limit | Measured | Spec Limit | Measured | Spec Limit      | Measured | Spec Limit         | Measured | Result |
| Conductor Resistance(Ohms/100.0 m)@20C      | 9.38       | 8.33     | xxx        | 7.93     | xxx             | 8.13     | xxx                | 0.170    | Passed |
| Resistance Unbalance( % )                   | 5.00       | 0.37     | xxx        | 0.09     | xxx             | 0.22     | xxx                | 0.119    | Passed |
| Mutual Capacitance(nF/100.0 m)@1000Hz       | 5.60       | 5.29     | xxx        | 4.99     | xxx             | 5.16     | xxx                | 0.114    | Passed |
| Cap. Unbalance to Ground(pF/100.0 m)@1000Hz | 330.00     | 24.11    | xxx        | 4.37     | xxx             | 14.99    | xxx                | 8.041    | Passed |

Detail: Resistance/Capacitance Measurement -Normalized

| Test Types | Conductor Resistance Ra @20C | Conductor Resistance Rb @20C | Resistance Unbalance | Mutual Capacitance @1000 Hz | Capacitance Unbalance to Ground @1000 Hz | Test Result |
|------------|------------------------------|------------------------------|----------------------|-----------------------------|------------------------------------------|-------------|
| Unit       | Ohms/100.0 m                 | Ohms/100.0 m                 | %                    | nF/100.0 m                  | pF/100.0 m                               |             |
| Max Spec   | 9.38                         | 9.38                         | 5.00                 | 5.60                        | 330.00                                   |             |
| Min Spec   | xxx                          | xxx                          | xxx                  | xxx                         | xxx                                      |             |
| Pair 1 [5] | 8.33                         | 8.30                         | 0.37                 | 5.24                        | 21.28                                    | Passed      |
| Pair 2 [6] | 7.98                         | 7.99                         | 0.12                 | 5.12                        | 24.11                                    | Passed      |
| Pair 3 [7] | 8.28                         | 8.26                         | 0.30                 | 5.29                        | 4.37                                     | Passed      |
| Pair 4 [8] | 7.93                         | 7.94                         | 0.09                 | 4.99                        | 10.18                                    | Passed      |

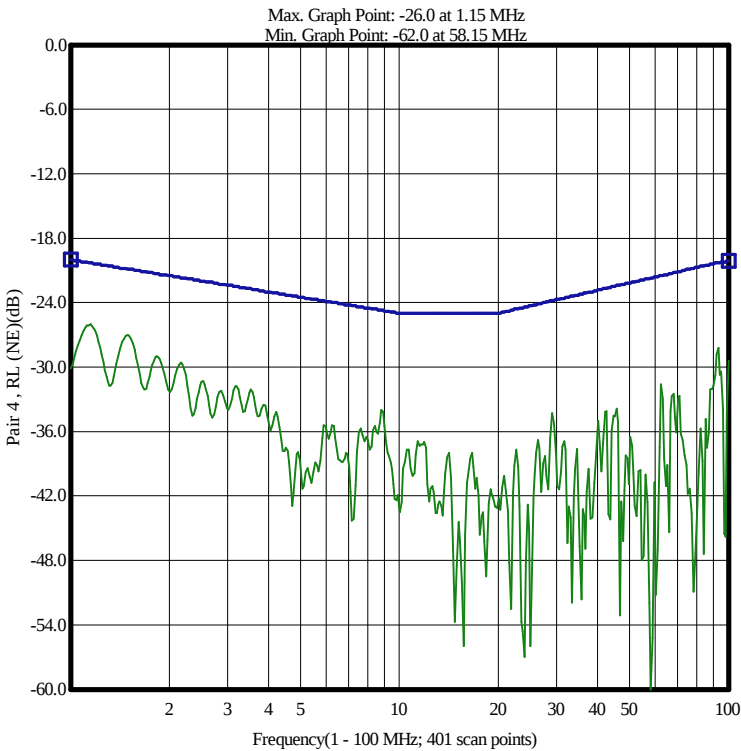
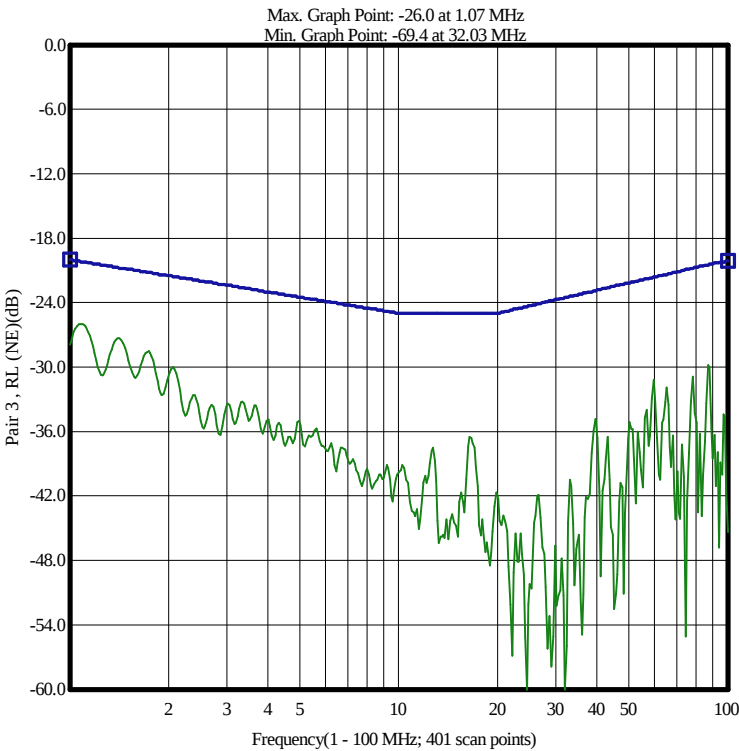
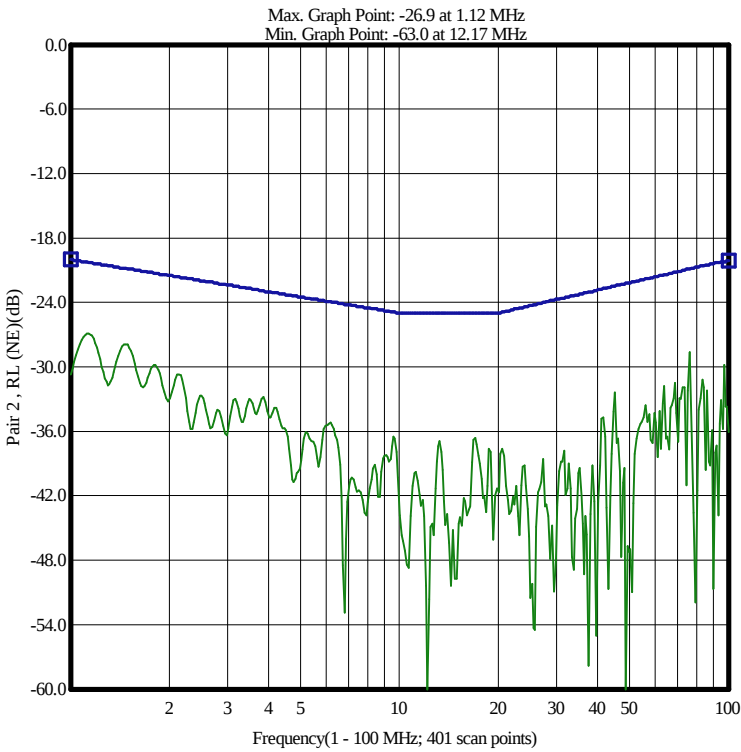
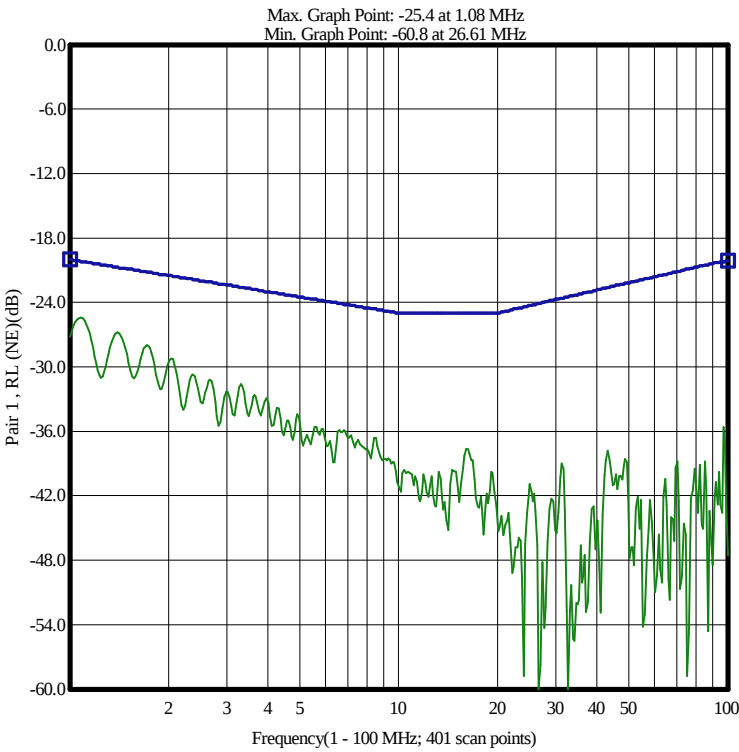
Summary and Graphic: Input Impedance (Zin)(Terminated)

|            | Specification |         | Measured(Ohms) |         | Margin (Ohms) |         | @ Frequency (MHz) |         |             |
|------------|---------------|---------|----------------|---------|---------------|---------|-------------------|---------|-------------|
| Pair       | Minimum       | Maximum | Minimum        | Maximum | Minimum       | Maximum | Minimum           | Maximum | Test Result |
| Pair 1 [5] | 85.0          | 115.0   | 96.7           | 108.0   | 11.7          | 7.0     | 97.05             | 1.03    | Passed      |
| Pair 2 [6] | 85.0          | 115.0   | 94.0           | 105.7   | 9.0           | 9.3     | 97.05             | 1.08    | Passed      |
| Pair 3 [7] | 85.0          | 115.0   | 94.0           | 106.9   | 9.0           | 8.1     | 87.21             | 1.03    | Passed      |
| Pair 4 [8] | 85.0          | 115.0   | 93.9           | 107.2   | 8.9           | 7.8     | 92.13             | 1.10    | Passed      |



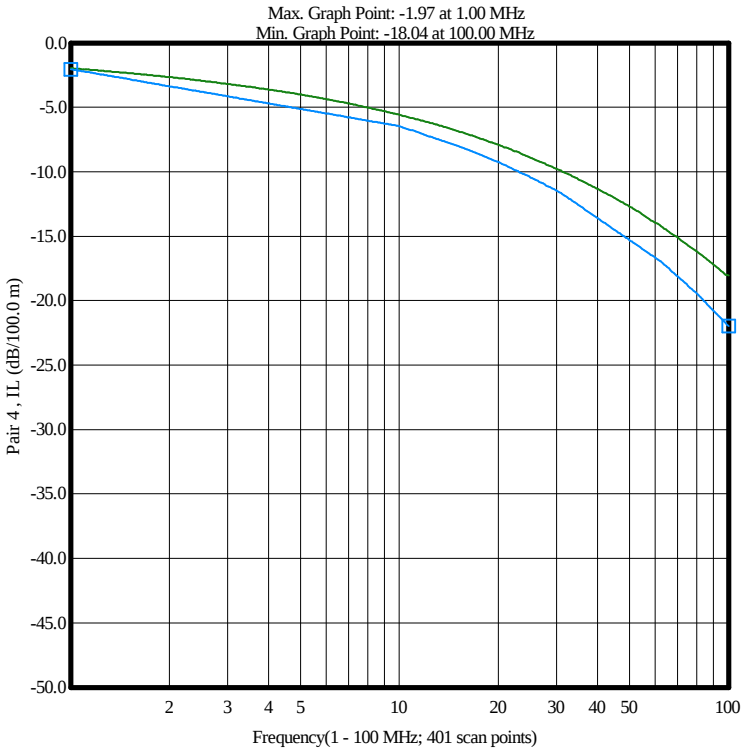
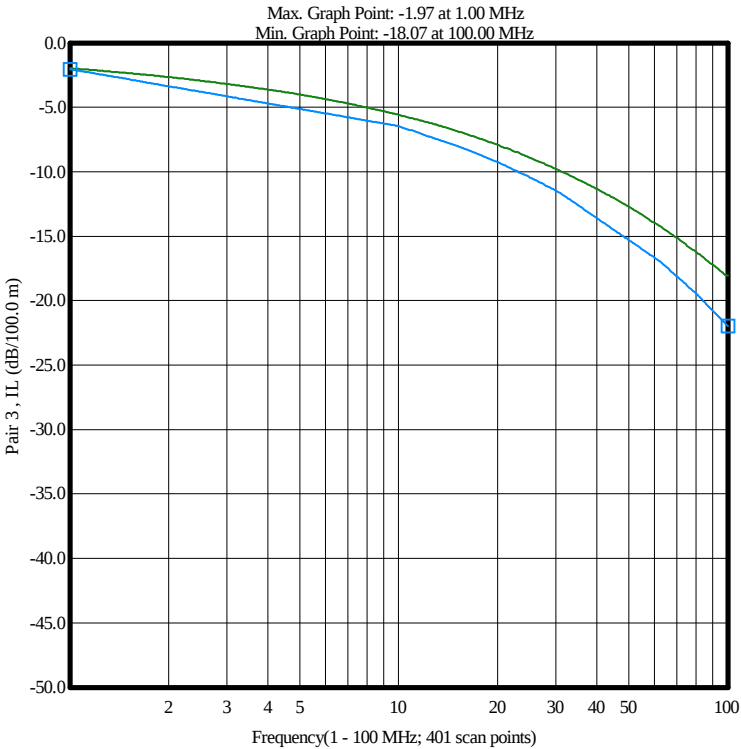
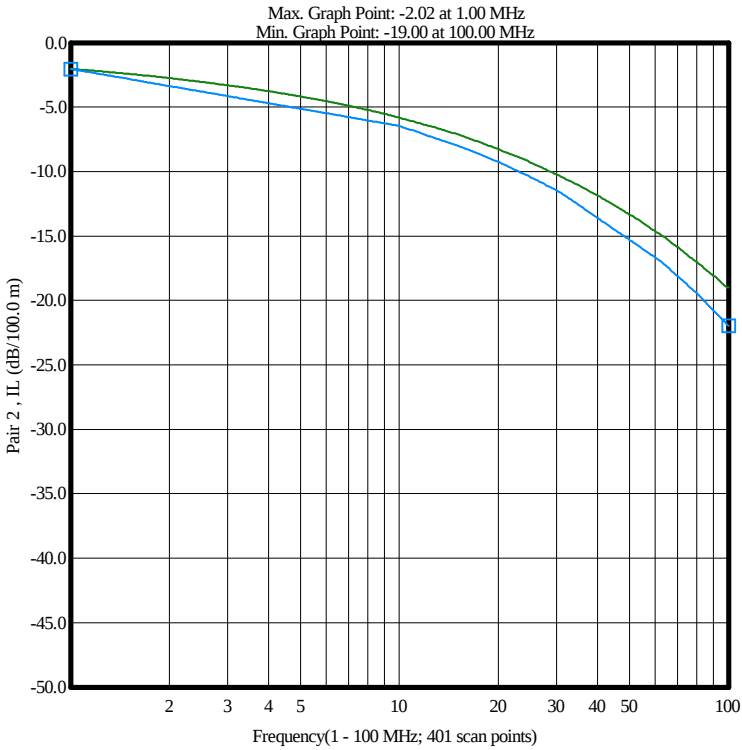
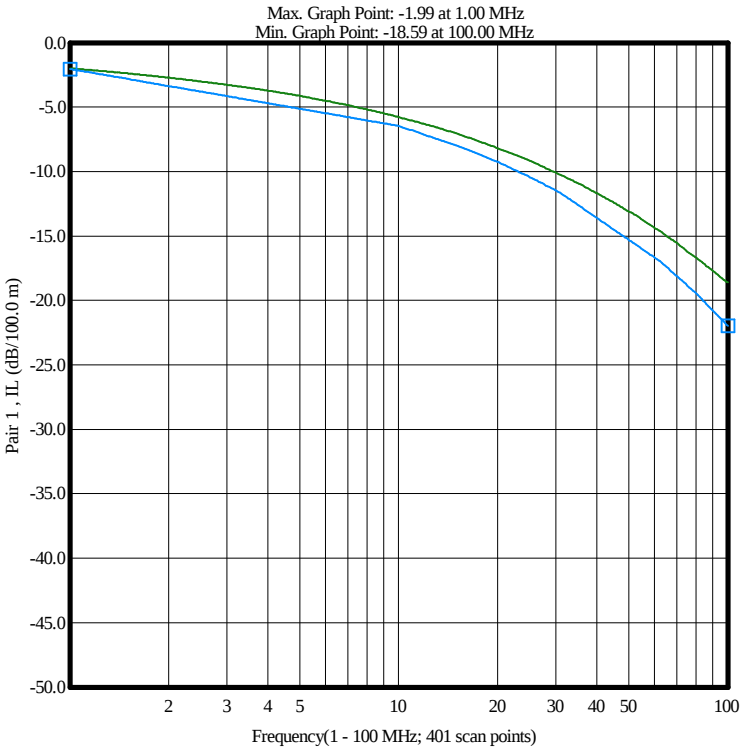
Summary and Graphic: Return Loss (RL)

| Pair       | Spec (Min)(dB) | Measured(dB) | Margin (dB) | @ Frequency (MHz) | Test Result |
|------------|----------------|--------------|-------------|-------------------|-------------|
| Pair 1 [5] | 20.2           | 25.4         | 5.2         | 1.08              | Passed      |
| Pair 2 [6] | 20.3           | 26.9         | 6.6         | 1.14              | Passed      |
| Pair 3 [7] | 20.2           | 26.0         | 5.8         | 1.08              | Passed      |
| Pair 4 [8] | 20.3           | 26.0         | 5.7         | 1.15              | Passed      |



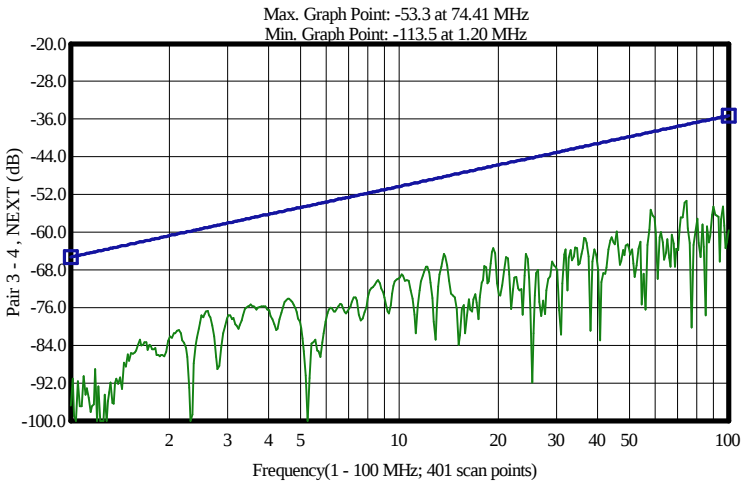
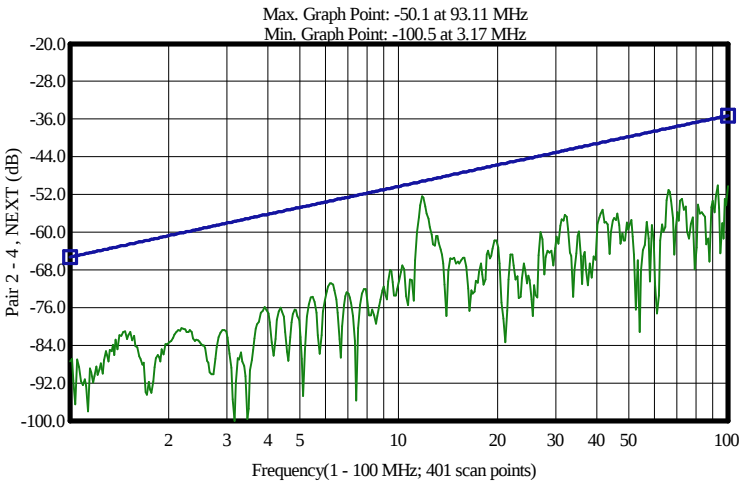
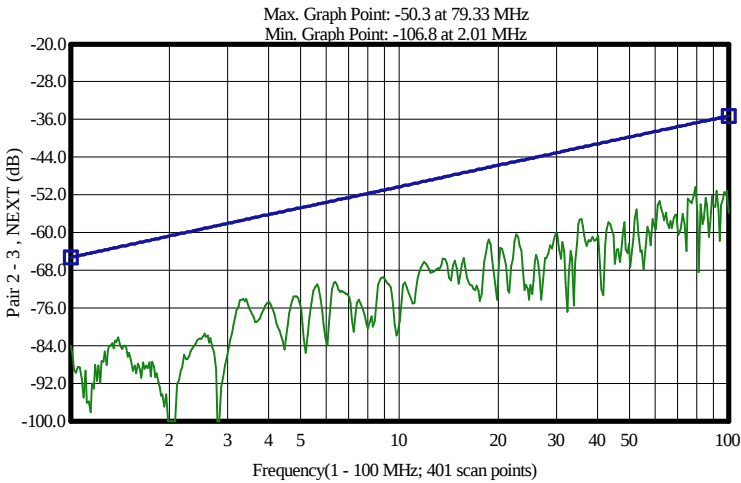
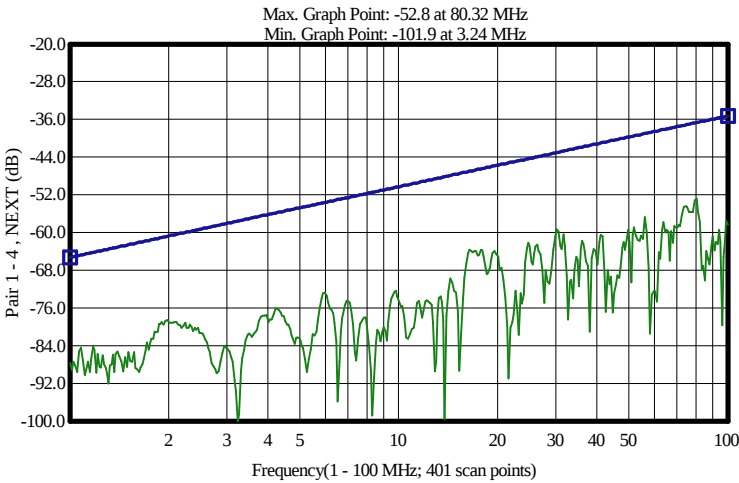
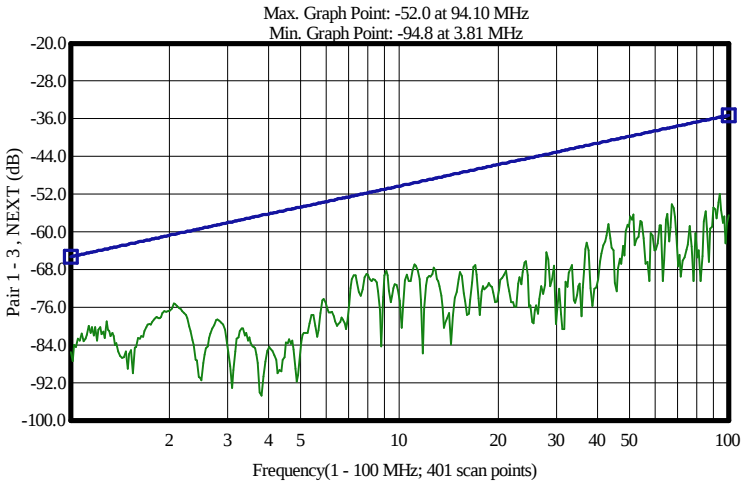
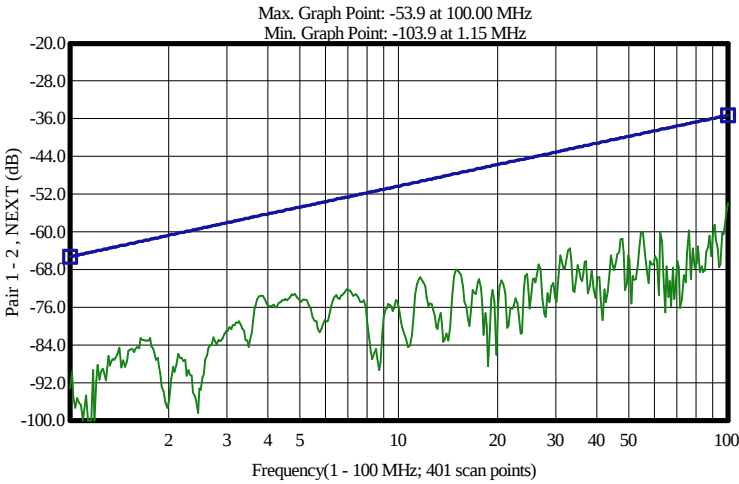
Summary and Graphic: Insertion Loss (IL)(Curve Fit)@20C

| Pair       | Spec (Max)(dB/100.0 m) | Measured(dB/100.0 m) | Margin (dB/100.0 m) | @ Frequency (MHz) | Test Result |
|------------|------------------------|----------------------|---------------------|-------------------|-------------|
| Pair 1 [5] | 2.04                   | 1.99                 | 0.05                | 1.00              | Passed      |
| Pair 2 [6] | 2.04                   | 2.02                 | 0.02                | 1.00              | Passed      |
| Pair 3 [7] | 2.04                   | 1.97                 | 0.07                | 1.00              | Passed      |
| Pair 4 [8] | 2.04                   | 1.97                 | 0.07                | 1.00              | Passed      |



Summary and Graphic: Near End Crosstalk Loss (NEXT)

| Pair       | Spec (Min)(dB) | Measured(dB) | Margin (dB) | @ Frequency (MHz) | Test Result |
|------------|----------------|--------------|-------------|-------------------|-------------|
| Pair 1 - 2 | 56.6           | 73.7         | 17.1        | 3.76              | Passed      |
| Pair 1 - 3 | 60.6           | 75.2         | 14.6        | 2.06              | Passed      |
| Pair 1 - 4 | 36.7           | 52.8         | 16.1        | 80.32             | Passed      |
| Pair 2 - 3 | 36.8           | 50.3         | 13.5        | 79.33             | Passed      |
| Pair 2 - 4 | 49.2           | 52.4         | 3.2         | 11.77             | Passed      |
| Pair 3 - 4 | 37.2           | 53.3         | 16.1        | 74.41             | Passed      |



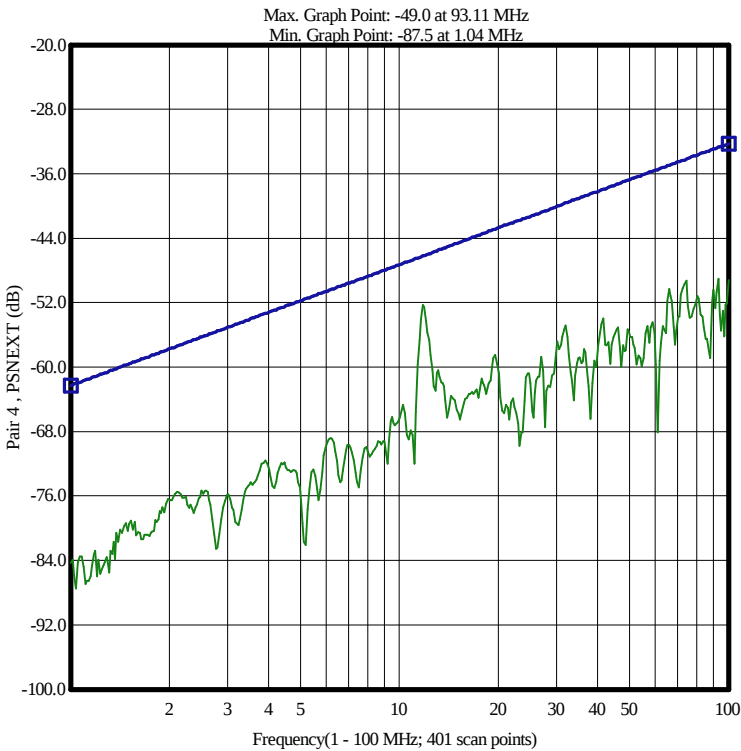
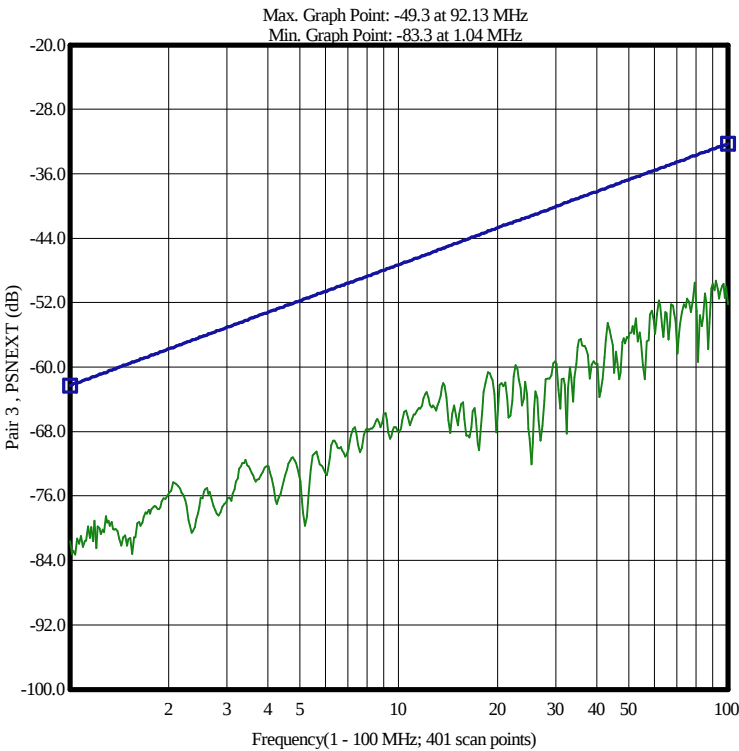
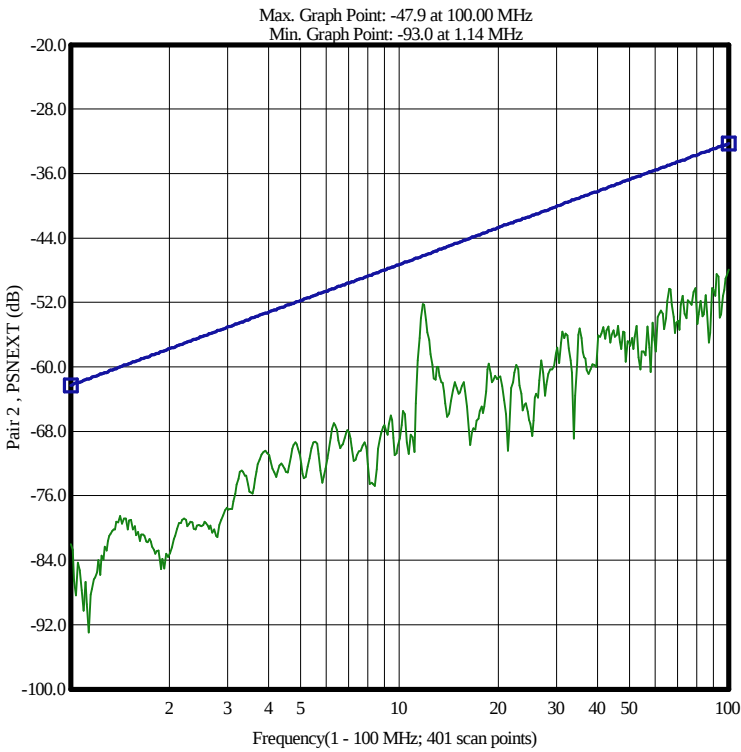
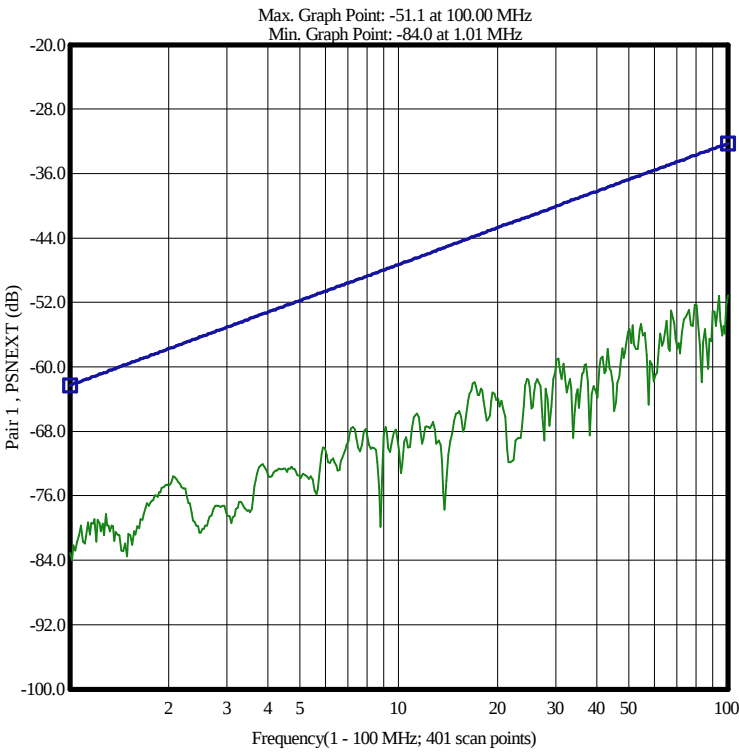
N/A = Not Applicable.  
--- = Disable/Bypassed Pair.

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

\*\*\* = Measured value is invalid.

Summary and Graphic: Power Sum NEXT(PSNEXT)

| Pair       | Spec (Min)(dB) | Measured(dB) | Margin (dB) | @ Frequency (MHz) | Test Result |
|------------|----------------|--------------|-------------|-------------------|-------------|
| Pair 1 [5] | 57.6           | 73.6         | 16.0        | 2.06              | Passed      |
| Pair 2 [6] | 46.2           | 52.2         | 6.0         | 11.77             | Passed      |
| Pair 3 [7] | 33.8           | 49.5         | 15.7        | 79.33             | Passed      |
| Pair 4 [8] | 46.2           | 52.3         | 6.1         | 11.77             | Passed      |



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--- = Disable/Bypassed Pair.

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xxx = No entry.

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

|            |      |      |       |       |       |       |       |       |       |       |
|------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| Frequency  | 1.00 | 4.00 | 10.00 | 16.00 | 20.00 | 25.00 | 30.00 | 31.25 | 62.50 | 80.00 |
| Min Spec   | 20.0 | 23.0 | 25.0  | 25.0  | 25.0  | 24.3  | 23.7  | 23.6  | 21.5  | 20.7  |
| Pair 1 [5] | 27.2 | 33.3 | 41.2  | 37.8  | 45.1  | 41.1  | 45.3  | 39.2  | 49.0  | 41.1  |
| Pair 2 [6] | 30.7 | 34.6 | 43.8  | 43.5  | 41.7  | 50.9  | 45.8  | 38.8  | 37.0  | 44.8  |
| Pair 3 [7] | 27.9 | 34.9 | 39.8  | 41.2  | 42.2  | 50.4  | 49.0  | 48.2  | 39.8  | 34.9  |
| Pair 4 [8] | 30.1 | 35.2 | 43.5  | 42.1  | 42.3  | 54.9  | 39.3  | 37.7  | 31.8  | 44.2  |

Continue:Return Loss (RL)(dB)

|            |        |  |  |  |  |  |  |  |  |  |
|------------|--------|--|--|--|--|--|--|--|--|--|
| Frequency  | 100.00 |  |  |  |  |  |  |  |  |  |
| Min Spec   | 20.1   |  |  |  |  |  |  |  |  |  |
| Pair 1 [5] | 47.6   |  |  |  |  |  |  |  |  |  |
| Pair 2 [6] | 36.1   |  |  |  |  |  |  |  |  |  |
| Pair 3 [7] | 45.4   |  |  |  |  |  |  |  |  |  |
| Pair 4 [8] | 29.4   |  |  |  |  |  |  |  |  |  |

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

|            |      |       |       |       |       |       |       |       |       |        |
|------------|------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| Frequency  | 1.00 | 10.00 | 16.00 | 20.00 | 25.00 | 30.00 | 31.25 | 62.50 | 80.00 | 100.00 |
| Max Spec   | 2.04 | 6.46  | 8.24  | 9.26  | 10.42 | 11.47 | 11.72 | 16.99 | 19.43 | 21.97  |
| Pair 1 [5] | 1.99 | 5.78  | 7.29  | 8.20  | 9.16  | 10.08 | 10.30 | 14.65 | 16.68 | 18.59  |
| Pair 2 [6] | 2.02 | 5.83  | 7.36  | 8.29  | 9.29  | 10.23 | 10.44 | 14.93 | 17.01 | 19.00  |
| Pair 3 [7] | 1.97 | 5.60  | 7.06  | 7.93  | 8.89  | 9.79  | 9.99  | 14.26 | 16.21 | 18.07  |
| Pair 4 [8] | 1.97 | 5.60  | 7.06  | 7.93  | 8.89  | 9.78  | 9.98  | 14.25 | 16.19 | 18.04  |

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

|            |      |      |       |       |       |       |       |       |       |       |
|------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| Frequency  | 1.00 | 4.00 | 10.00 | 16.00 | 20.00 | 25.00 | 30.00 | 31.25 | 62.50 | 80.00 |
| Min Spec   | 65.3 | 56.2 | 50.3  | 47.2  | 45.7  | 44.3  | 43.1  | 42.8  | 38.3  | 36.7  |
| Pair 1 - 2 | 93.3 | 75.6 | 76.3  | 75.6  | 76.1  | 75.9  | 74.4  | 66.0  | 60.5  | 66.9  |
| Pair 1 - 3 | 85.6 | 84.7 | 74.7  | 76.9  | 72.6  | 75.7  | 78.2  | 80.2  | 60.3  | 63.8  |
| Pair 1 - 4 | 87.7 | 78.6 | 74.7  | 67.4  | 65.1  | 62.9  | 60.2  | 63.4  | 64.7  | 52.9  |
| Pair 2 - 3 | 84.0 | 74.8 | 78.8  | 69.0  | 67.2  | 71.4  | 60.2  | 62.6  | 54.9  | 54.0  |
| Pair 2 - 4 | 87.4 | 77.1 | 70.3  | 66.8  | 63.0  | 70.1  | 62.3  | 57.5  | 61.3  | 64.7  |
| Pair 3 - 4 | 96.8 | 76.5 | 69.6  | 78.7  | 73.1  | 75.4  | 67.8  | 72.4  | 60.3  | 58.1  |

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

|            |        |  |  |  |  |  |  |  |  |  |
|------------|--------|--|--|--|--|--|--|--|--|--|
| Frequency  | 100.00 |  |  |  |  |  |  |  |  |  |
| Min Spec   | 35.3   |  |  |  |  |  |  |  |  |  |
| Pair 1 - 2 | 53.9   |  |  |  |  |  |  |  |  |  |
| Pair 1 - 3 | 56.5   |  |  |  |  |  |  |  |  |  |
| Pair 1 - 4 | 58.4   |  |  |  |  |  |  |  |  |  |
| Pair 2 - 3 | 55.8   |  |  |  |  |  |  |  |  |  |
| Pair 2 - 4 | 50.2   |  |  |  |  |  |  |  |  |  |
| Pair 3 - 4 | 59.6   |  |  |  |  |  |  |  |  |  |

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

|            |      |      |       |       |       |       |       |       |       |       |
|------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| Frequency  | 1.00 | 4.00 | 10.00 | 16.00 | 20.00 | 25.00 | 30.00 | 31.25 | 62.50 | 80.00 |
| Min Spec   | 62.3 | 53.2 | 47.3  | 44.2  | 42.7  | 41.3  | 40.1  | 39.8  | 35.3  | 33.7  |
| Pair 1 [5] | 83.1 | 73.4 | 70.4  | 66.4  | 64.0  | 62.4  | 59.9  | 61.4  | 56.1  | 52.4  |
| Pair 2 [6] | 82.0 | 70.9 | 68.9  | 64.4  | 61.3  | 67.0  | 58.0  | 55.8  | 53.1  | 53.3  |
| Pair 3 [7] | 81.6 | 72.3 | 68.1  | 67.9  | 65.1  | 68.8  | 59.4  | 62.0  | 52.7  | 51.9  |
| Pair 4 [8] | 84.3 | 72.5 | 66.3  | 63.9  | 60.7  | 61.9  | 57.7  | 56.3  | 56.8  | 51.5  |

Continue:Power Sum NEXT(PSNEXT)(dB)

|            |        |  |  |  |  |  |  |  |  |  |
|------------|--------|--|--|--|--|--|--|--|--|--|
| Frequency  | 100.00 |  |  |  |  |  |  |  |  |  |
| Min Spec   | 32.3   |  |  |  |  |  |  |  |  |  |
| Pair 1 [5] | 51.1   |  |  |  |  |  |  |  |  |  |
| Pair 2 [6] | 47.9   |  |  |  |  |  |  |  |  |  |
| Pair 3 [7] | 52.2   |  |  |  |  |  |  |  |  |  |
| Pair 4 [8] | 49.2   |  |  |  |  |  |  |  |  |  |