



## RF Characterization Report

LL095-10SP-10SP-XXXX



Test Date: Dec 2024

### Description:

**95 GHZ, Nitrowave™ High-Performance Microwave Cable Assembly,  
1.00mm Plug End Option**



**Series:** LL095

**Description:** 95 GHZ, Nitrowave™ High-Performance Microwave Cable Assembly,  
1.00mm Plug End Option

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**Series:** LL095

**Description:** 95 GHz, Nitrowave™ High-Performance Microwave Cable Assembly,  
1.00mm Plug End Option

## Test Setup Information

### Scope:

Provide standing wave ratio, return loss and insertion loss performance parameters for LL095 high frequency RF cable assembly with 1.00mm Plug End Option.

### Instrument Setup & Test Accessories:

|                  |                                       |
|------------------|---------------------------------------|
| Network Analyzer | Keysight PNA N5227B                   |
| Averaging Factor | 1                                     |
| Smoothing        | Off                                   |
| IF Bandwidth     | 1 KHz                                 |
| Sweep Start      | 10 MHz                                |
| Sweep End        | 95 GHz                                |
| Points           | 9500                                  |
| Test Cables      | Keysight N5293AX01 (110GHz Extenders) |

### Calibration Type:

A Keysight mechanical calibration is performed for N5227B using the Keysight 1.0mm MCAL 85059B.

|                 |                      |
|-----------------|----------------------|
| Calibration Kit | Keysight MCAL 85059B |
|-----------------|----------------------|

### Adapter Use:

Keysight 1.0 mm to 1.0 mm adapter were used, but the adapters effect was removed from the measurement by MCAL.

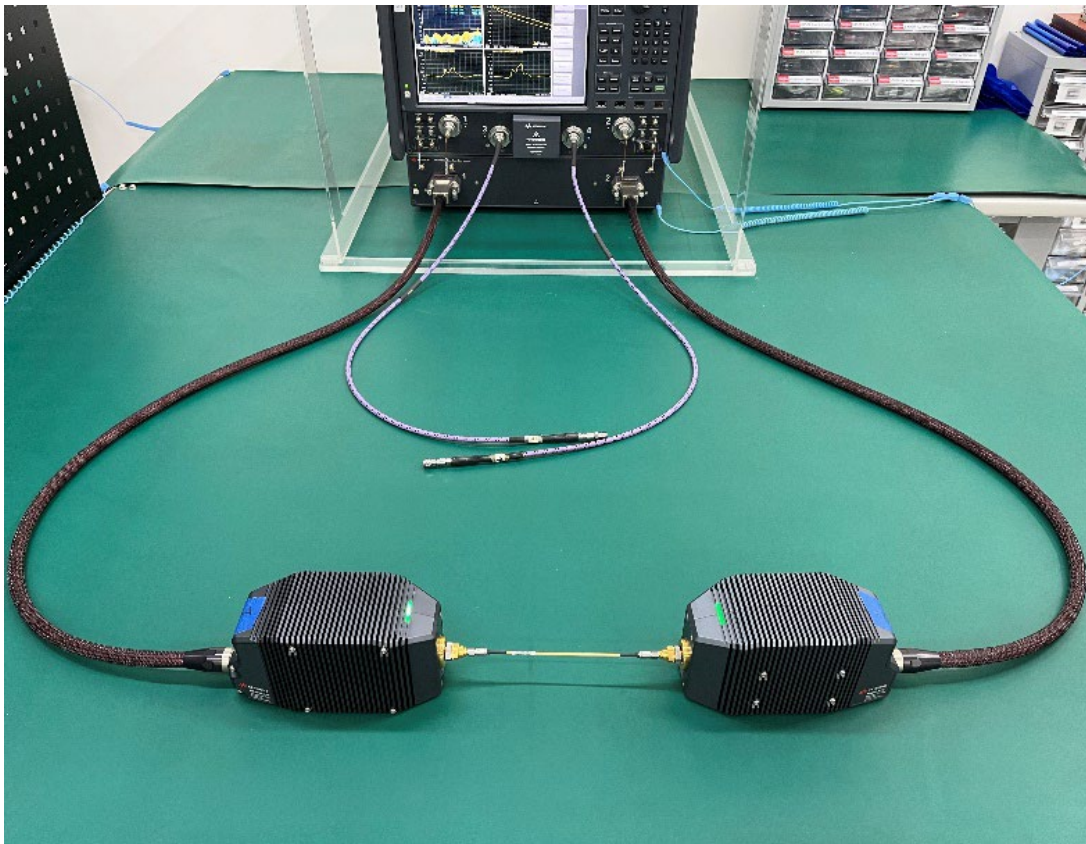
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1.00mm Plug End Option

### LL095-10XX-10XX-XXXX Test Definition

| Part Number          | End 1                | End 2                |
|----------------------|----------------------|----------------------|
| LL095-10SP-10SP-XXXX | 1.00mm Straight Plug | 1.00mm Straight Plug |

### Cable Under Test:



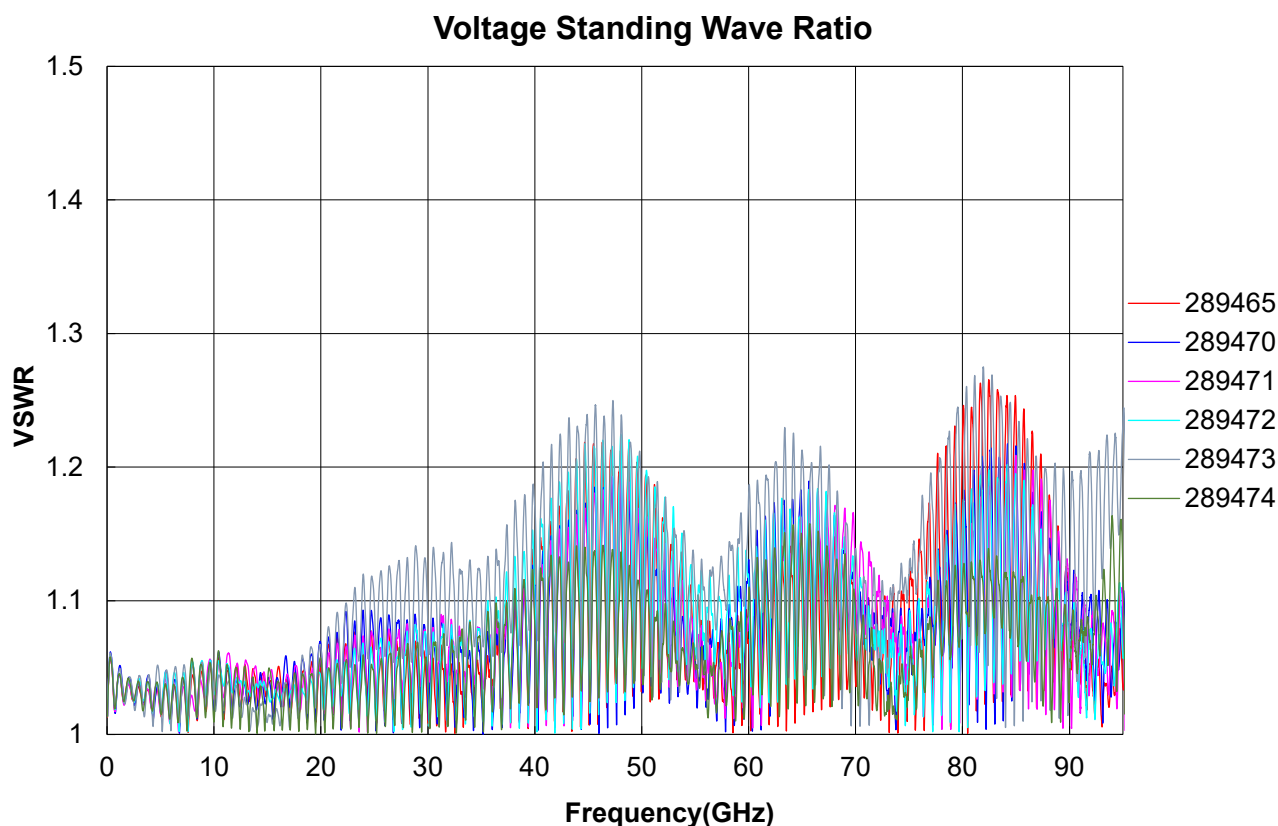
**Series:** LL095

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**Results:** LL095-10SP-10SP-0152

| Description: LL095 High Frequency RF Cable Assembly |               |                 |                |
|-----------------------------------------------------|---------------|-----------------|----------------|
| Sample                                              | VSWR(max)     | RL (dB, max)    | IL(dB, min)    |
| 289465                                              | 1.27@82.46GHz | -18.62@82.46GHz | -1.87@88.10GHz |
| 289470                                              | 1.22@84.22GHz | -20.17@84.22GHz | -1.85@92.65GHz |
| 289471                                              | 1.21@84.99GHz | -20.49@84.99GHz | -1.87@88.16GHz |
| 289472                                              | 1.22@48.05GHz | -19.92@48.05GHz | -1.82@88.10GHz |
| 289473                                              | 1.28@81.95GHz | -18.35@81.95GHz | -1.92@92.71GHz |
| 289474                                              | 1.16@94.00GHz | -22.43@94.00GHz | -1.85@92.58GHz |

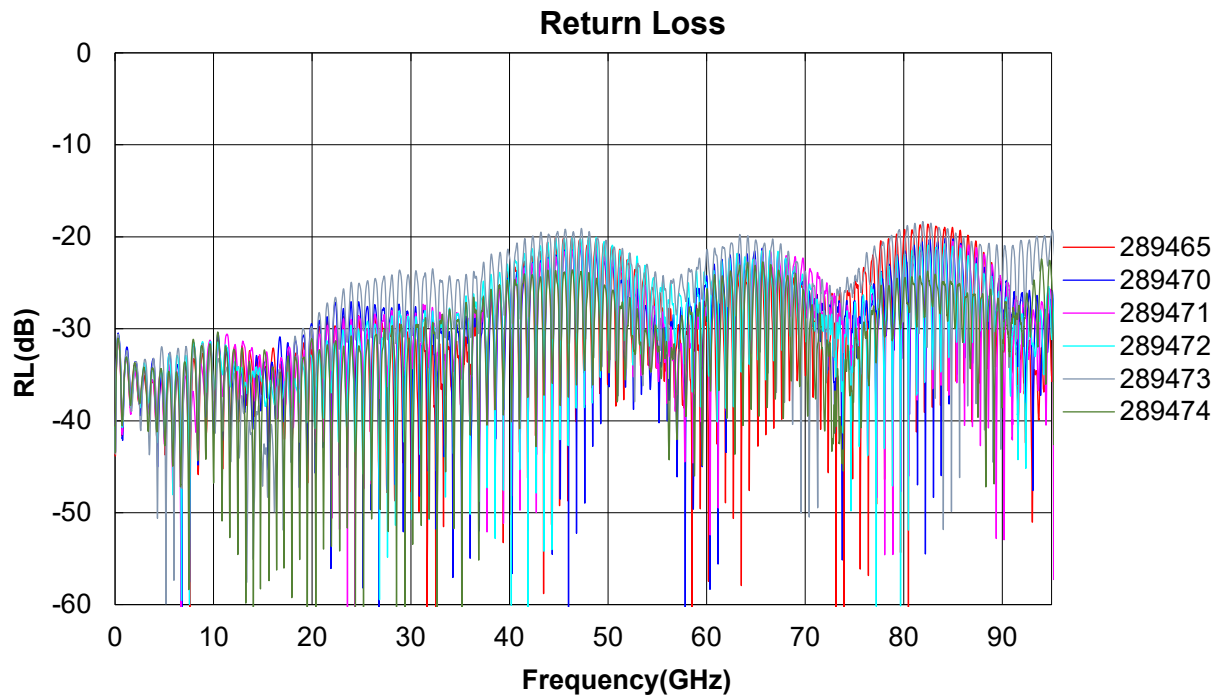
## VSWR



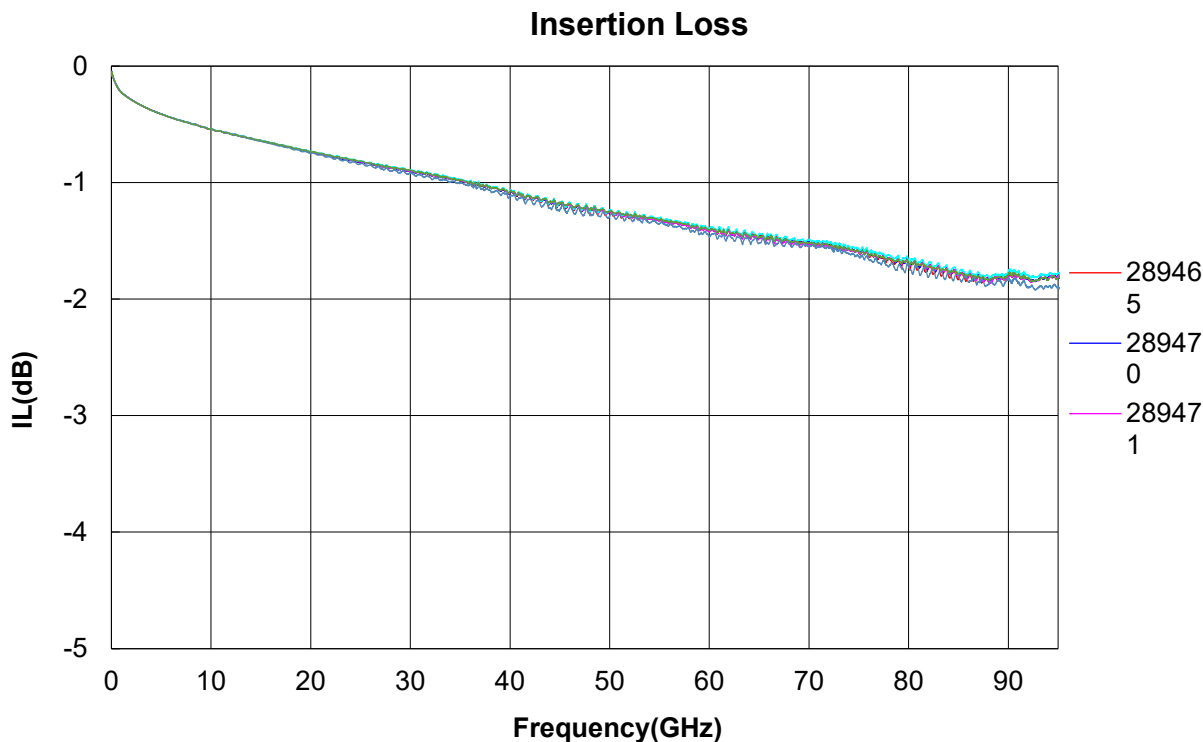
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1.00mm Plug End Option

## Return Loss



## Insertion Loss



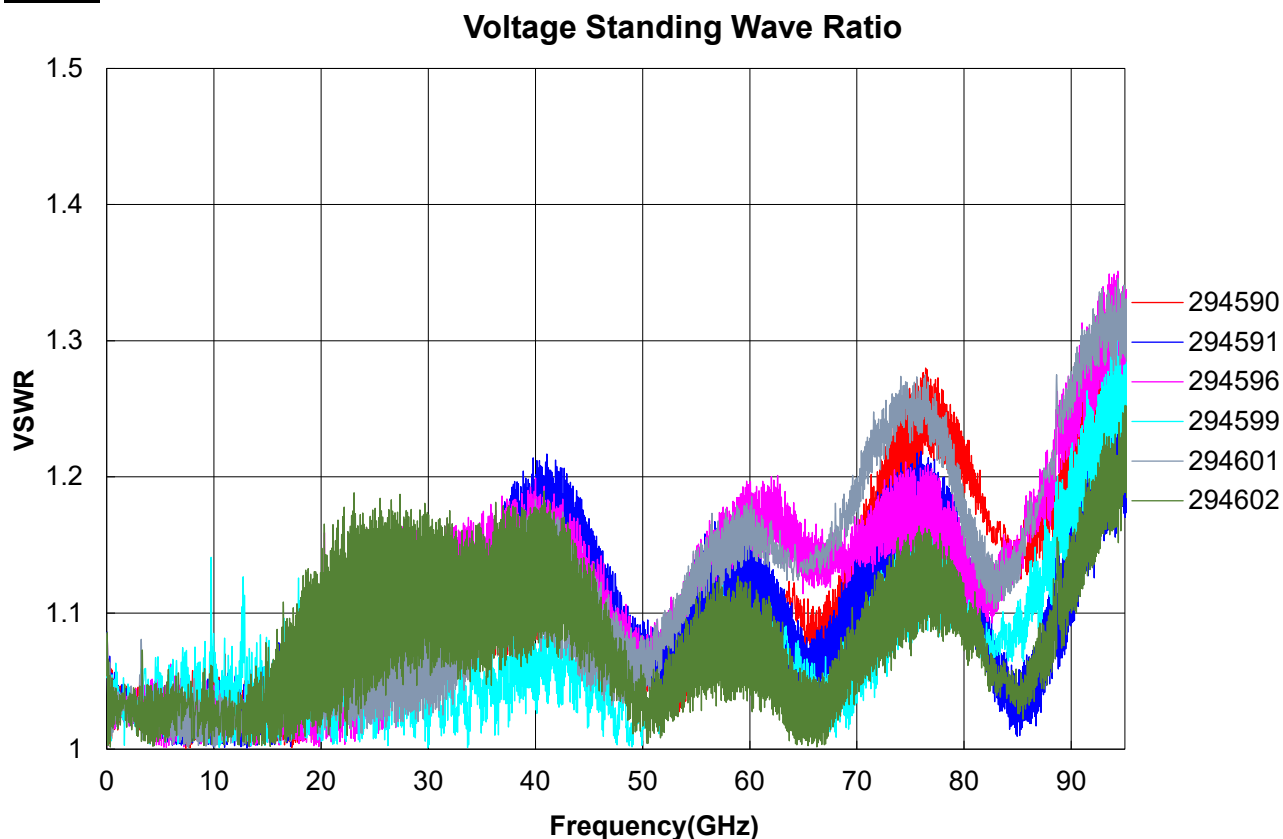
**Series:** LL095

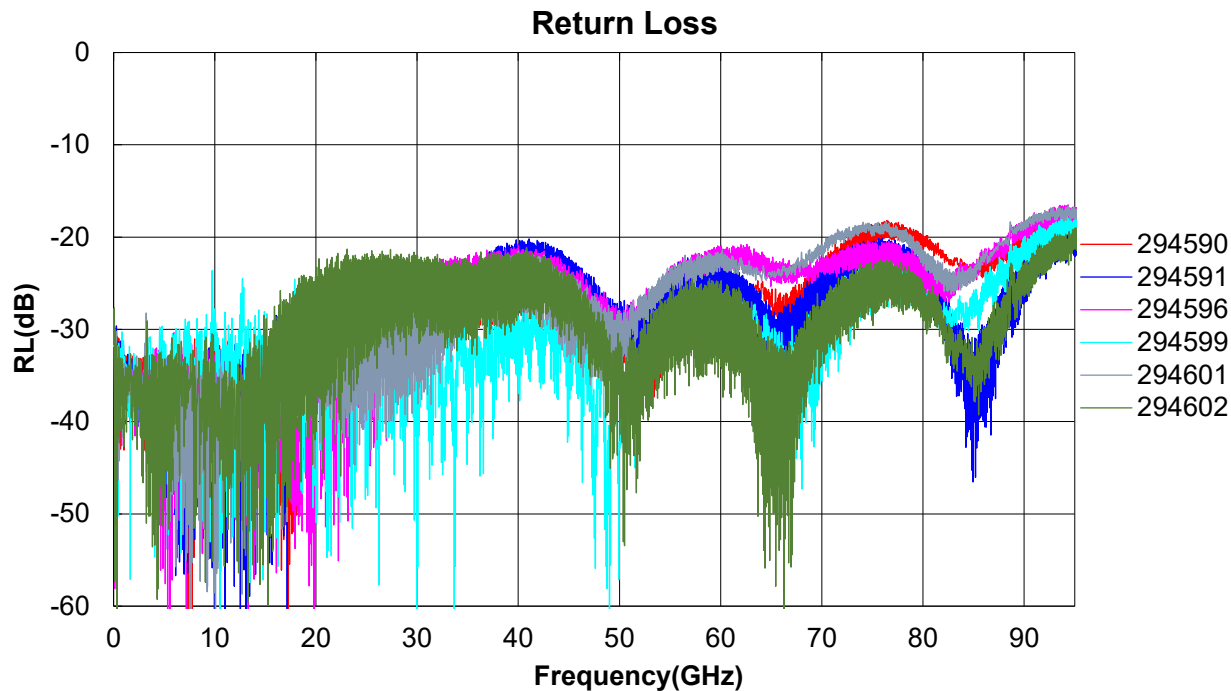
**Description:** 95 GHz, Nitrowave™ High-Performance Microwave Cable Assembly,  
1.00mm Plug End Option

**Results:** LL095-10SP-10SP-1000

| Description: LL095 High Frequency RF Cable Assembly |               |                 |                |
|-----------------------------------------------------|---------------|-----------------|----------------|
| Sample                                              | VSWR(max)     | RL (dB, max)    | IL(dB, min)    |
| 294590                                              | 1.32@93.10GHz | -17.13@93.10GHz | -9.74@94.94GHz |
| 294591                                              | 1.29@94.39GHz | -17.98@94.39GHz | -9.60@94.97GHz |
| 294596                                              | 1.35@94.35GHz | -16.52@94.35GHz | -9.66@94.93GHz |
| 294599                                              | 1.30@94.24GHz | -17.66@94.24GHz | -9.45@94.93GHz |
| 294601                                              | 1.35@94.34GHz | -16.63@94.34GHz | -9.43@94.92GHz |
| 294602                                              | 1.25@94.80GHz | -19.17@94.80GHz | -9.53@94.90GHz |

## VSWR



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1.00mm Plug End OptionReturn LossInsertion Loss