



## RF Characterization Report

LL032-92SP-92SP-XXXX



Test Date: Apr 2025

### Description:

**32 GHz Nitrowave™ High-Performance Microwave Cable Assembly,  
2.92mm Plug End Option**



**Series:** LL032

**Description:** 50 Ohm, Low-loss, high-performance microwave cable assembly,  
2.92mm Plug End Option

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**Series:** LL032**Description:** 50 Ohm, Low-loss, high-performance microwave cable assembly,  
2.92mm Plug End Option

## Test Setup Information

### Scope:

Provide standing wave ratio, return loss and insertion loss performance parameters for LL032 high frequency RF cable assembly with 2.92mm plug connector end option.

### Instrument Setup & Test Accessories:

|                  |                                |
|------------------|--------------------------------|
| Network Analyzer | Keysight PNA N5008A            |
| Averaging Factor | 1                              |
| Smoothing        | Off                            |
| IF Bandwidth     | 1 KHz                          |
| Sweep Start      | 10 MHz                         |
| Sweep End        | 32 GHz                         |
| Points           | 3200                           |
|                  | Junkosha MWX061 (DC to 67 GHz) |
| Test Cables      | 1.85mm Plug – 1.85mm Jack      |

### Calibration Type:

A Keysight mechanical calibration is performed for N5008A using the Keysight 85056D kit.

|                 |                 |
|-----------------|-----------------|
| Calibration Kit | Keysight 85056D |
|-----------------|-----------------|

### Adapter Use:

CentricRF C8193 1.85mm plug to 2.92mm jack adapters were used for the measurements of LL032-92SP-92SP-XXXX. The adapter effects were removed from the measurement using the Fixture Removal method.

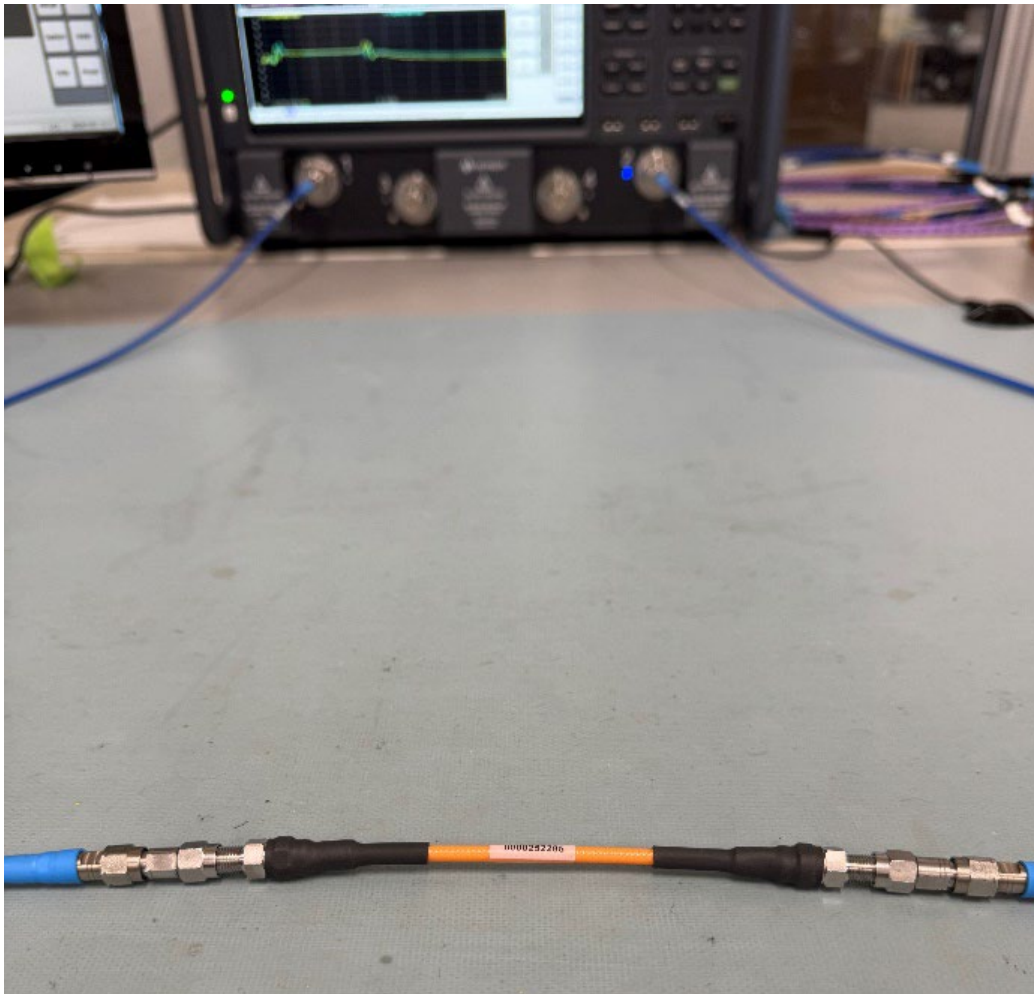
**Series:** LL032

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2.92mm Plug End Option

### LL032-92XX-92XX-XXXX Test Definition

| Part Number          | End 1       | End 2       |
|----------------------|-------------|-------------|
| LL032-92SP-92SP-XXXX | 2.92mm Plug | 2.92mm Plug |

### Cable Under Test:



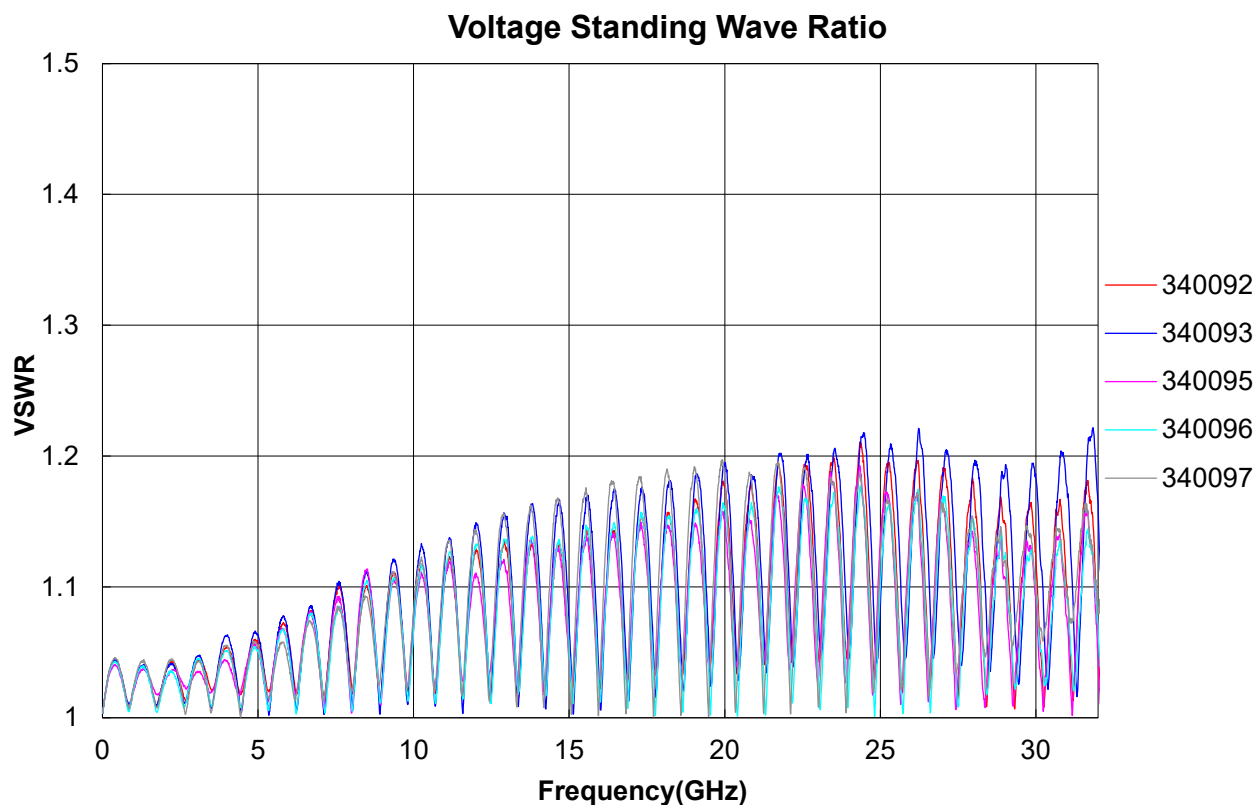
**Series:** LL032

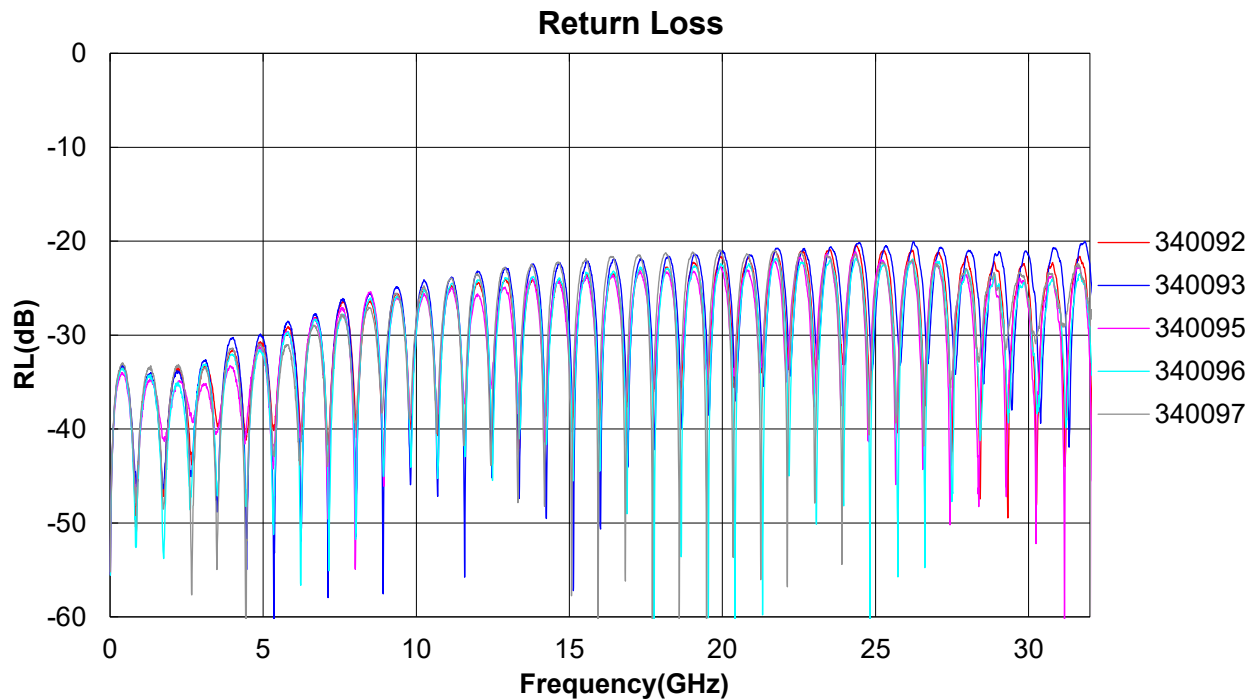
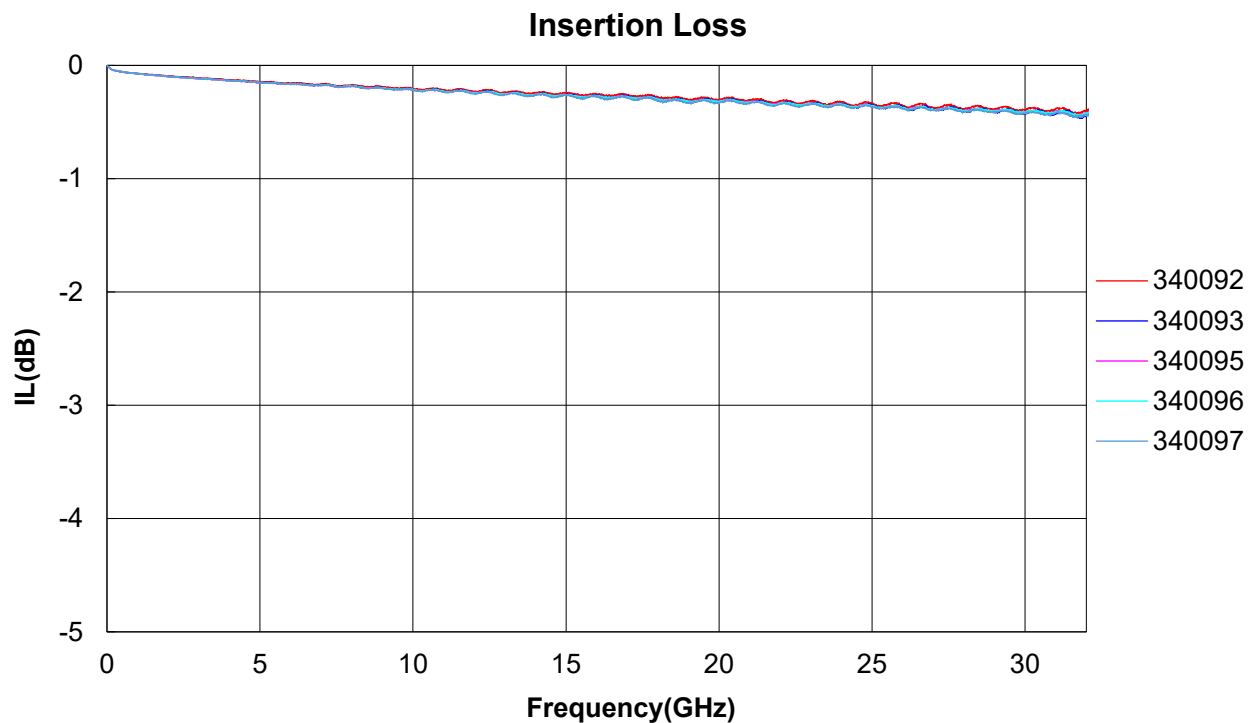
**Description:** 50 Ohm, Low-loss, high-performance microwave cable assembly,  
2.92mm Plug End Option

**Results:** LL032-92SP-92SP-0152

| Description: LL032 High Frequency RF Cable Assembly |                  |                    |                   |
|-----------------------------------------------------|------------------|--------------------|-------------------|
| Sample                                              | VSWR (max)       | RL (dB, max)       | IL(dB, min)       |
| 340092                                              | 1.21 @ 24.36 GHz | -20.40 @ 24.36 GHz | -0.43 @ 31.64 GHz |
| 340093                                              | 1.22 @ 31.84 GHz | -20.02 @ 31.84 GHz | -0.47 @ 31.82 GHz |
| 340095                                              | 1.19 @ 24.34 GHz | -21.11 @ 24.34 GHz | -0.45 @ 31.70 GHz |
| 340096                                              | 1.18 @ 24.36 GHz | -21.79 @ 24.36 GHz | -0.45 @ 31.87 GHz |
| 340097                                              | 1.20 @ 19.92 GHz | -20.93 @ 19.92 GHz | -0.46 @ 31.56 GHz |

## VSWR



**Series:** LL032**Description:** 50 Ohm, Low-loss, high-performance microwave cable assembly,  
2.92mm Plug End OptionReturn LossInsertion Loss

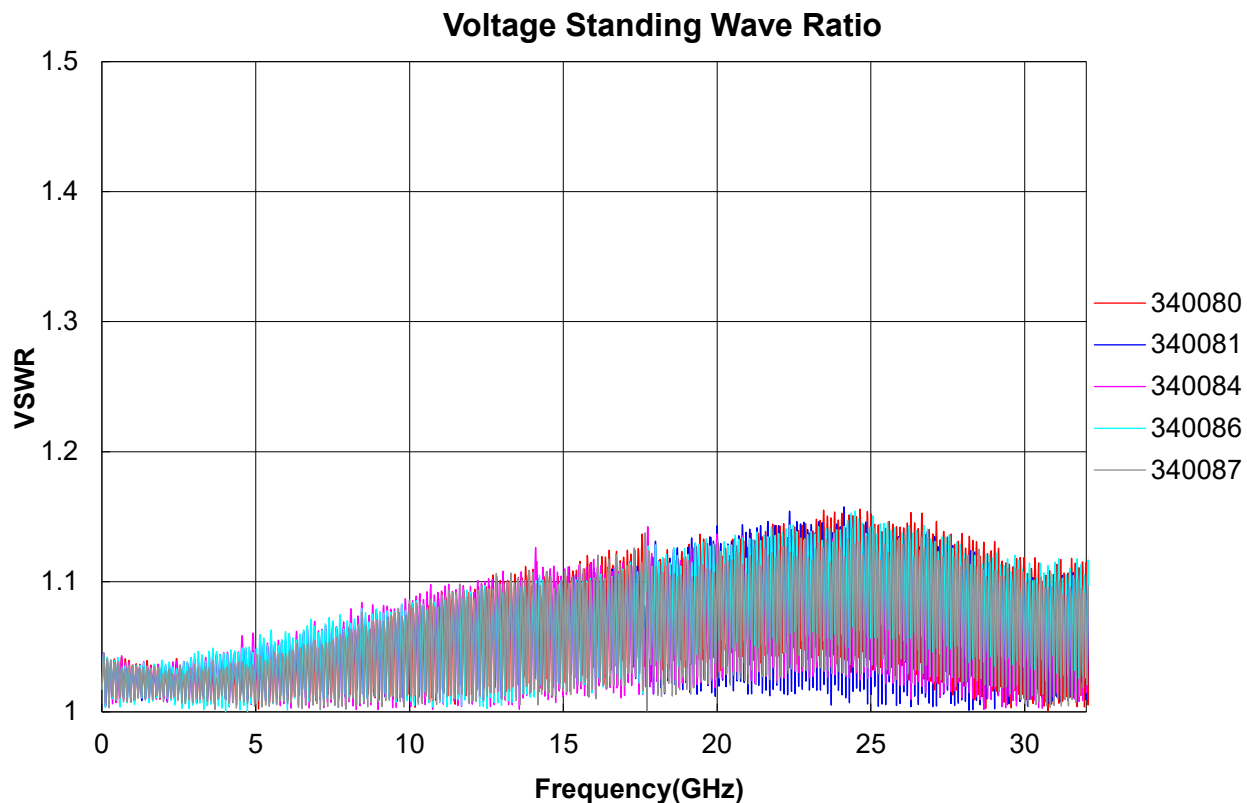
**Series:** LL032

**Description:** 50 Ohm, Low-loss, high-performance microwave cable assembly,  
2.92mm Plug End Option

**Results:** LL032-92SP-92SP-1000

| Description: LL032 High Frequency RF Cable Assembly |                  |                    |                   |
|-----------------------------------------------------|------------------|--------------------|-------------------|
| Sample                                              | VSWR (max)       | RL (dB, max)       | IL(dB, min)       |
| 340080                                              | 1.16 @ 24.65 GHz | -22.81 @ 24.65 GHz | -1.85 @ 31.99 GHz |
| 340081                                              | 1.16 @ 24.12 GHz | -22.73 @ 24.12 GHz | -1.86 @ 31.93 GHz |
| 340084                                              | 1.14 @ 17.75 GHz | -23.55 @ 17.75 GHz | -1.87 @ 31.99 GHz |
| 340086                                              | 1.15 @ 24.47 GHz | -22.89 @ 24.47 GHz | -1.87 @ 31.93 GHz |
| 340087                                              | 1.14 @ 24.97 GHz | -23.55 @ 24.97 GHz | -1.87 @ 31.99 GHz |

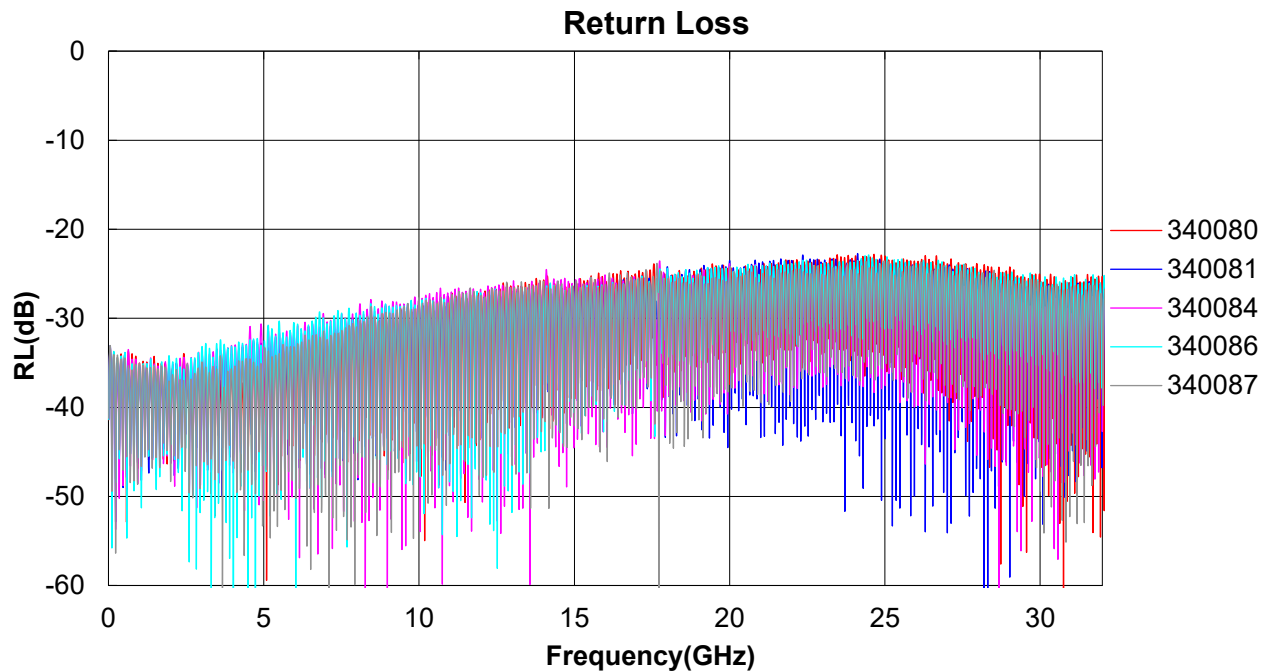
## VSWR



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## Return Loss



## Insertion Loss

