Modification Recommended Service Note

Supersedes: NONE

N4690D option 0DC - DC to 18 GHz Electronic Calibration Module (ECal)

Serial Numbers: See Table 1 Manufacturing ID Number: N/A

The Problem -

On certain N4690D units with Option 0DC, Reflection Tracking may exceed the specification by 0.05 dB at frequencies below 200MHz when measuring high reflective devices.

Parts Required:

None

ADMINISTRATIVE INFORMATION

| ACTION | []] ON SPECIFIED FAILURE | STANDARDS | | | |
|--------------------------------------|--|---|--|--|--|
| CATEGORY: | [X] AGREEABLE TIME | LABOR: 3.5 Hours | | | |
| LOCATION CATEGORY: | [X] SERVICE CENTER [[]] ON-SITE (active On-site contract required) [[]] CHANNEL PARTNERS | SERVICE: [[]] RETURN USED [[]] RETURN INVENTORY: [[]] SCRAP PARTS: [[]] SCRAP [[]] SEE TEXT | | | |
| AVAILABILITY: PRODUCT'S SUPPORT LIFE | | NO CHARGE AVAILABLE UNTIL: 2 Sept 2022 | | | |
| | [X] Calibration Required [[]] Calibration NOT Required | PRODUCT LINE: PLWN AUTHOR: CT | | | |

ADDITIONAL INFORMATION:
Affect N4690D with option ODC only



Situation:

It was identified that certain units of N4690D with option 0DC were affected by an error in the calibration algorithm. For the units affected by this calibration error, the Reflection Tracking may exceed the specification by 0.05 dB at frequencies below 200MHz. The error would only be apparent when measuring highly reflective devices at frequencies below 200MHz. Recalibration at Keysight's service center will resolve the issue and ensure optimized and accurate data is loaded into the unit. If your application does not involve taking any measurements within the impacted frequency range on highly reflective devices, you can continue to use the ECal unit with its currently characterized data. At your next calibration cycle, the unit will be recharacterized and the issue will be resolved.

Solution/Action:

- 1. Return the ECal unit to the nearest Keysight service center for re-calibration.
- 2. A new calibration report will be generated.

Table 1 Serial Number

| Serial Number | | | | | | | | |
|---------------|------------|------------|------------|--|--|--|--|--|
| MY59410134 | MY59410193 | SG59410120 | SG59410126 | | | | | |
| MY59410148 | MY59410198 | SG59410121 | SG59410127 | | | | | |
| MY59410147 | MY59410199 | SG59410122 | SG59410128 | | | | | |
| MY59410153 | MY59410200 | SG59410123 | SG59410129 | | | | | |
| MY59410156 | SG59410104 | SG59410124 | SG59410130 | | | | | |
| MY59410192 | SG59410114 | SG59410125 | SG59410131 | | | | | |

Revision History:

| Date | Service Note Revision | Author | Reason for Change | |
|------------|-----------------------------|--------|-------------------|---|
| 2 Sep 2021 | 01 | Lam CT | As Published | _ |
| 1 Mar 2023 | 02 | Lam CT | Update Labor Hour | |