Modification Recommended Service Note

Supersedes:
NONE

N9048B PXE EMI Receiver

Serial Numbers: MY59290103, MY59290104, MY59290105, MY59290118, MY59290119, MY59290123, MY59290148, MY59500028, MY60300111, MY60450101, MY61390105, MY61390113, MY62220123, MY62220127, MY63030111, MY63072015

The Problem – Signal amplitude loss can occur in Band C/D with Accelerated Time Domain Scan (ATDS) ON on N9048B option 503 (3.6GHz)

Parts Required:
NONE. Software update only

ADMINISTRATIVE INFORMATION

ACTION CATEGORY:	[[]] ON SPECIFIED FAILURE X AGREEABLE TIME	STANDARDS LABOR: 0.5 Hours			
LOCATION CATEGORY:	X SERVICE CENTER [[]] ON-SITE (active On-site contract required) [[]] CHANNEL PARTNERS	SERVICE: [[]] RETURN INVENTORY: [[]] SCRAP [[]] SEE TEXT		USED PARTS: [[]] RETURN [[]] SCRAP [[]] SEE TEXT	
AVAILABILITY: PRODUCT'S SUPPORT LIFE		NO CHARGE AVAILABLE UNTIL: Oct 1-2024			
	[[]] Calibration Required X Calibration NOT Required	PRODUCT LINE: 12 AUTHOR: YC			

ADDITIONAL INFORMATION:

Situation:

There could be an amplitude loss up to 6dB with ATDS ON in Band C/D on N9048B Option 503 after firmware upgrade/ downgrade. The calibration file was overwritten during the firmware upgrade/downgrade process. The calibration file could not be recovered due to option 503 will not run ScarletDualWBDifPhaseAlignmentAlgorithm as this alignment run with 4.8GHz calibration signal which only enable for high frequency option.

This issue only appears on instruments with option 503.

Solution/Action:

Download and install instrument software A.36.02 or later. This software enables ScarletDualWBDifPhaseAlignmentAlgorithm run with 4.8GHz calibrator signal on N9048B Option 503 to recover the calibration file.
Instrument software is available at:
https://www.keysight.com/find/xseries_software

To verify the issue has been resolved, power cycle the instrument after software upgrade. Connect the N9048B to a source with Frequency 200MHz with -10dBm input power. Setup the N9048B in Real Time Scan mode with Center frequency 200MHz. Switching between ATDS OFF and ON and make sure the amplitude reading is consistent and no loss with ATDS ON.
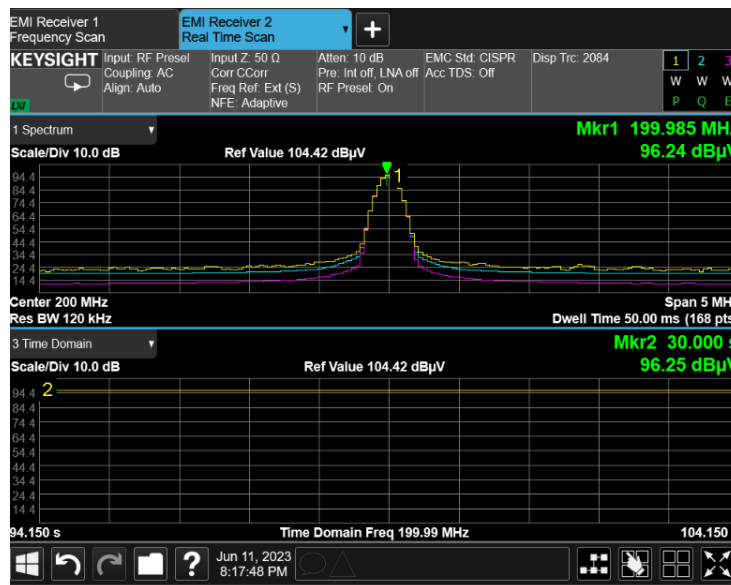
Revision History:

Date	Service Note Revision	Author	Reason for Change
01 Oct 2023	01	Yin Chei, Wong	As Published