

Information Only Service Note

Supersedes:
NONE

E8486A Waveguide Power Sensor

Serial Numbers: ALL

Enhanced test method requiring specifications change for option 200

Parts Required:

P/N	Description	Qty.
NONE		

ADMINISTRATIVE INFORMATION

<input checked="" type="checkbox"/> Calibration Required	PRODUCT LINE: WN
<input type="checkbox"/> Calibration NOT Required	AUTHOR: LSL

ADDITIONAL INFORMATION:

Situation:

Factory enhanced test method requiring specifications change for option 200

New units shipped from 1st July 2025 onwards (with MY65070004 above), or units calibrated from 1st July 2025 onwards will be using the new power linearity specifications below.

- $\leq 10\text{dBm}$: $\pm 5.1\%$
- 10dBm to $\leq +15\text{dBm}$: $\pm 6.3\%$
- 15dBm to $\leq +20\text{dBm}$: $\pm 6.6\%$

Solution/Action:

For E8486A power sensors with option 200 that are sent to Keysight service centers for calibration and/ or repair, Keysight customer Sales / Service Representative will notify the customer of the change in specifications.

Customers are also advised to update the power meter firmware to the following revision (or higher). The firmware can be downloaded from keysight.com.

Power meter firmware revision required:

N1913A/14A - A.01.22 and above

N1913B/14B- A.02.21 and above

If the power meter firmware is not upgraded to the latest version the error messages below will be displayed if the power meter is connected to the E8486A-200 with the latest calibration.

Model	Remarks
E4418B E4419B	1. Not compatible 2. Error list shows "-310: System error ; Sensor EEPROM Cal Factor Data not found or unreadable" 3. Power reference unable to get 0dBm
N1913A N1914A	1. Abnormal power reading 2. CF at 50MHz show 0% 3. Power reference unable to get 0dBm 4. Error list shows no error
N1913B N1914B	
E4416A E4417A	1. Overload 2. Error list shows "-310: System error ; Sensor EEPROM Cal Factor Data not found or unreadable" 3. Power reference unable to get 0dBm
N1911A N1912A	1. Abnormal power reading 2. Power reference unable to get 0dBm 3. Error list shows no error

Note that the obsolete Power Meter E4418B/19B will not be compatible with the newly calibrated E8486A-200. The recommended replacement for E4418B/19B is N1913B/14B.

Revision History:

Date	Service Note Revision	Author	Reason for Change
27 Jun 2025	01	LSL	As Published