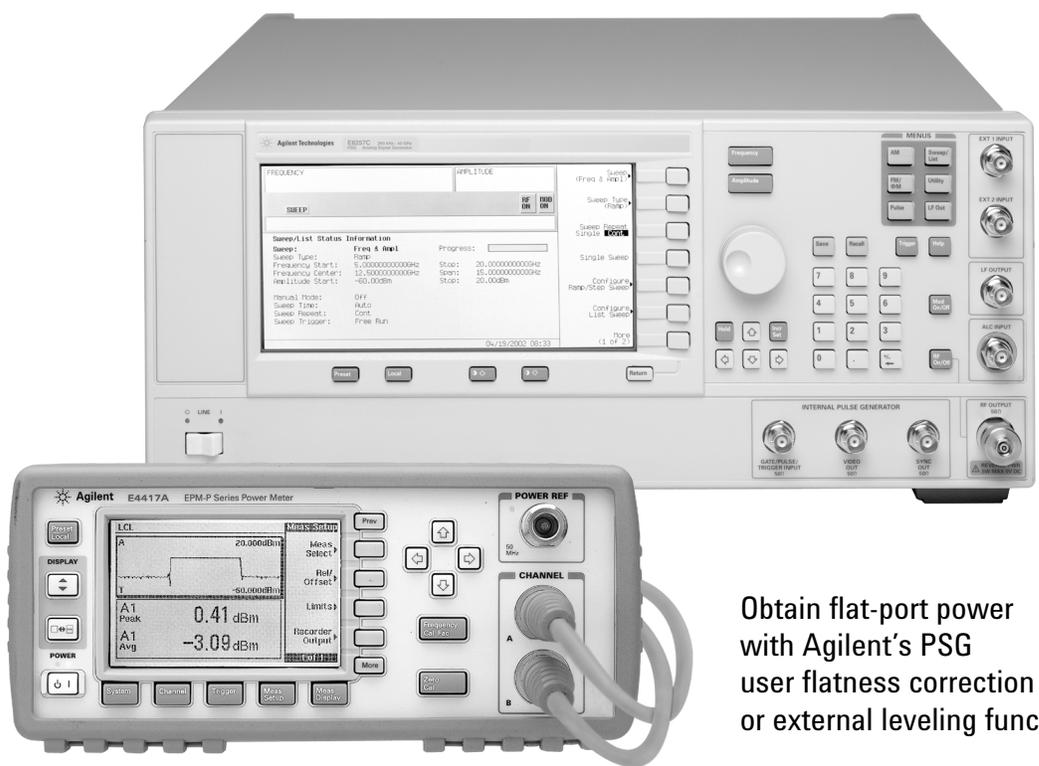# Agilent
E8267C/E8257C/E8247C PSG

Application Note

Obtain flat-port power
with Agilent's PSG
user flatness correction
or external leveling functions

:·: **Agilent Technologies**

E8247C PSG CW signal generator

E8257C PSG analog signal generator

E8267C PSG vector signal generator

Table of Contents

Introduction

The PSG synthesized signal genera-tors provide extremely flat power at your test port for testing power sensitive devices such as amplifiers, mixers, diodes, or detectors. The user flatness correction feature of the PSGs compensates for attenuation and power variations created by components between the source and the test device.

User flatness correction allows the digital adjustment of RF output amplitude for up to 1601 frequency points in any frequency or sweep mode (for example, start/stop, CW, power sweep, and more.). Using a power meter to calibrate the measurement system, a power level correction table is created for the frequencies where power level varia-tions or loss occur. These frequen-cies may be defined in sequential linear steps or arbitrarily spaced. To allow different correction arrays for different tests setup or different frequency ranges, you may save individual user flatness correction tables to the signal generators memory catalog and recall them on demand.

This application note illustrates how to utilize the user flatness correction feature by providing step-by-step instructions for several common measurement examples.

Using External Leveling

The PSG signal generator can be leveled externally by connecting an external sensor at the point where leveled RF output power is desired. The sensor detects changes in RF output power and returns a compensating voltage to the signal generator's ALC input. The ALC circuitry raises or lowers (levels) the RF output power based on the voltage received from the external sensor, ensuring constant power at the point of detection.

Two types of external leveling are available on the PSG. You can use external leveling with a detector and coupler/power splitter setup, or a millimeter-wave source module.

Leveling with detectors and couplers/splitters

Figure 3-1 illustrates a typical external leveling setup. The power level feedback to the ALC circuitry is taken from the external negative detector, rather than the internal signal generator detector. The feedback voltage controls the ALC system, leveling the RF output power at the point of detection.

To use detectors and couplers/splitters for external leveling at an RF output frequency of 10 GHz and an amplitude of 0 dBm, follow the instructions in this section.
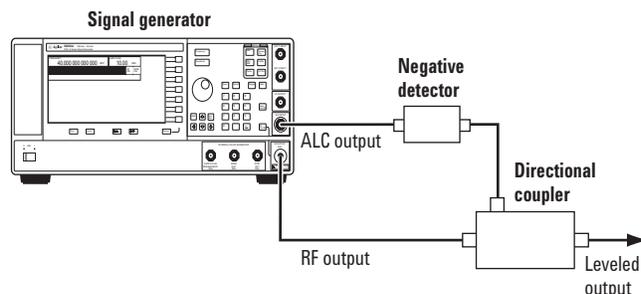
Required equipment
• Agilent 8474E negative detector
• Agilent 87301D directional coupler
• cables and adapters, as required

Connect the equipment
Set up the equipment as shown in Figure 3-1.

Figure 3-1.
External detector leveling with a directional coupler.

Configure the signal generator

1. Press [**Preset**].	
2. Press [**Frequency**] > [**10**] > {**GHz**}.	
3. Press [**Amplitude**] > [**0**] > {**dBm**}.	
4. Press [**RF On/Off**].	
5. Press {**Leveling Mode**} > {**External Detector**}.	This configuration deactivates the internal ALC detector and switches the ALC input path to the front panel ALC INPUT connector. The *EXT* indicator is activated in the *AMPLITUDE* area of the display.
NOTE	For signal generators with Option 1E1, notice that the ATTN HOLD (attenuator hold) enunciator is displayed. During external leveling, the signal generator automatically uncouples the attenuator from the ALC system for all external leveling points. While in this mode, RF output amplitude adjustment is limited to –20 to +25 dBm, the adjustment range of the ALC circuitry. For more information, see External Leveling with Option 1E1 Signal Generators on page 6.
6. Observe the coupling factor printed on the directional coupler at the detector port. Typically, this value is -10 to -20 dB. Enter the *positive* dB value of this coupling factor into the signal generator.	
7. Press {**More (1 of 2)**} > {**Ext Detector Coupling Factor**} > [**16**] (or the positive representation of the value listed at the detector port of the directional coupler) > {**dB**}.	Leveled output power is now available at the output of the directional coupler.
NOTE	While operating in external leveling mode, the signal generator's displayed RF output amplitude is affected by the coupling factor value, resulting in a calculated approximation of the actual RF output amplitude.
To determine the actual RF output amplitude at the point of detection, measure the voltage at the external detector output and refer to Figure 3-2.	

Determining the leveled output power

Figure 3-2 shows the input power versus output voltage characteristics for typical diode detectors from Agilent Technologies. Using this information, you can determine the leveled power at the diode detector input by measuring the external detector output voltage. The range of power adjustment is approximately –20 to +25 dB

## External leveling with Option 1E1 signal generators

Signal generators with Option 1E1 contain a step attenuator prior to the RF output connector. During external leveling, the signal generator automatically holds the present attenuator setting (to avoid power transients that may occur during attenuator switching) as the RF amplitude is changed. A balance must be maintained between the amount of attenuation and the optimum ALC level to achieve the required RF output amplitude. For optimum accuracy and minimum noise, the ALC level should be greater than –10 dBm.

For example, leveling the CW output of a 30 dB gain amplifier to a level of –10 dBm requires the output of the signal generator to be approximately –40 dBm when leveled. This is beyond the amplitude limits of the ALC modulator alone, resulting in an unleveled RF output. Inserting 45 dB of attenuation results in an ALC level of +5 dBm, well within the range of the ALC modulator.

NOTE For modulated carriers, 55 dB is the preferred attenuation choice, resulting in an ALC level of +15 dBm. This provides adequate dynamic range for AM or other functions that vary the RF output amplitude.

To achieve the optimum ALC level at the signal generator RF output of –40 dBm for an unmodulated carrier, follow these steps:

Figure 3-2.
Typical diode detector response at 25° C.
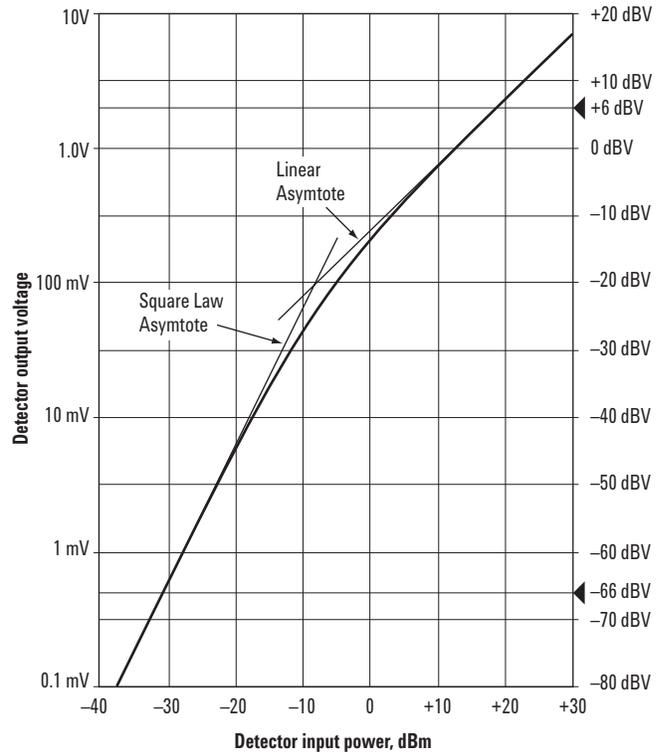
1. Press [Set Atten] > [45] > {dB}.	
2. Press [Set ALC Level] > [5] > {dBm}.	This sets the attenuator to 45 dB and the ALC level to +5 dBm, resulting in an RF output amplitude of –40 dBm, as shown in the *AMPLITUDE* area of the display.

To obtain flatness-corrected power, refer to
Creating and Applying User Flatness Correction.

Leveling with a Millimeter-Wave Source Module

Millimeter-wave source module leveling is similar to external detector leveling. The power level feedback signal to the ALC circuitry is taken from the millimeter-wave source module, rather than the internal signal generator detector. This feedback signal levels the RF output power at the mm-wave source module output through the signal generator's rear panel source module interface connector.

Required equipment

• Agilent 83550 series millimeter-wave source module

• Agilent 8349B microwave amplifier (required for signal generators without Option 1EA)

• cables and adapters, as required

Connect the equipment

CAUTION To prevent damage to the signal generator, turn off the line power to the signal generator before connecting the source module interface cable to the rear panel source module interface connector.

**Figure 3-3.
External Millimeter-wave source module leveling for a signal generator without Option 1EA.**
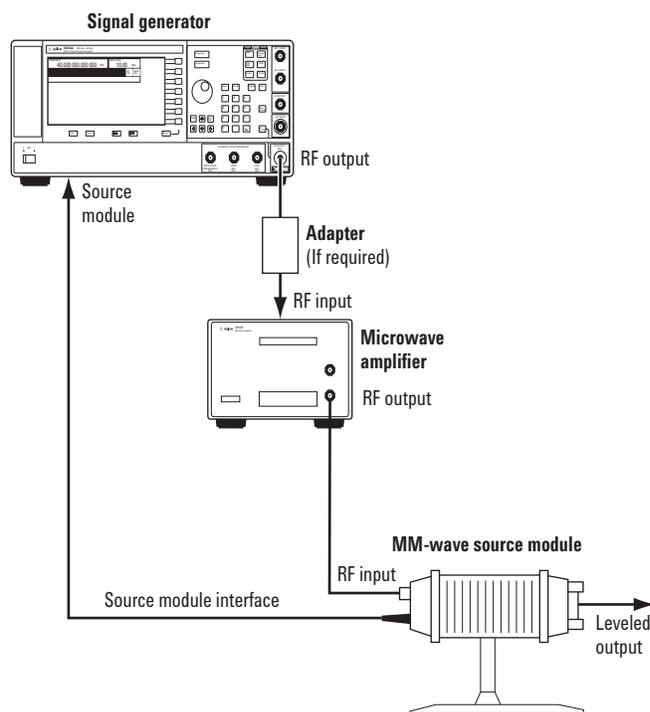
1. Turn off the signal generator's line power.

2. Connect the equipment as shown. Use the setup in Figure 3-3 for signal generators without Option 1EA. Use the setup in Figure 3-4 for Option 1EA signal generators.

**Figure 3-4.
External Millimeter-
wave source module
leveling with an
Option 1EA
signal generator.**
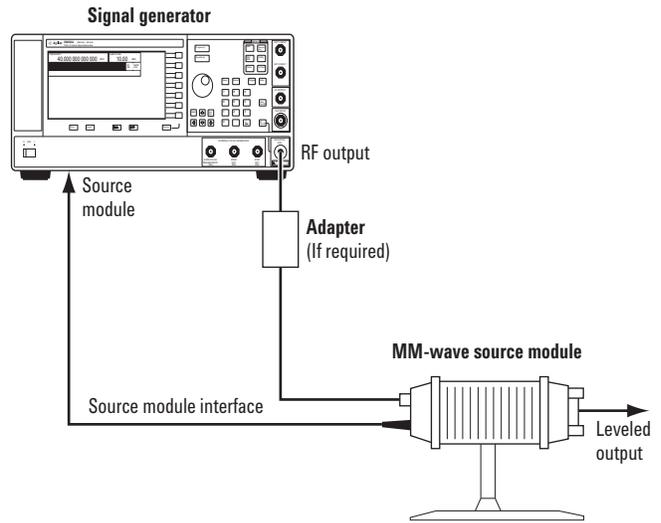
Option 1EA signal generators can drive the output
of millimeter-wave source modules to maximum
specified power without a microwave amplifier.

NOTE	To ensure adequate RF amplitude at the mm-wave source module RF input when using Option IEA signal generators, maximum amplitude loss through the adapters and cables connected between the signal generator's RF output and the mm-wave source module's RF input which should be less than 1.5 dB.

Configure the signal generator

1. Turn on the signal generator's line power.	Upon power-up, the signal generator automatically senses the mm-wave source module, switches the signal generator's leveling mode to external/source module, sets the mm-wave source module frequency and amplitude to the source module's preset values, and displays the RF output frequency and amplitude values available at the mm-wave source module output. The *MMMOD* indicator in the *FREQUENCY* area and the *MM* indicator in the *AMPLITUDE* area of the signal generator's display indicate that the mm-wave source module is active.
NOTE	Refer to the mm-wave source module specifications for the specific frequency and amplitude ranges.
2. If the *RF OFF* annunciator is displayed, press [**RF On/Off**].	Leveled power is now available at the output of the millimeter-wave source module.

To obtain flatness-corrected power, refer to
Creating and Applying User Flatness Correction.

Creating and Applying User Flatness Correction

Using an Agilent E4416A/17A or E4418B/19B power meter, you can create user flatness correction arrays to correct RF output amplitude variances at user-defined frequencies. After completing a user flatness correction, the correction array data can be saved to the signal generator's memory catalog and recalled on demand.

Follow the steps in the next sections to create and apply user flatness correction to the signal generator's RF output.

Afterward, follow the steps in "Recalling and Applying a User Flatness correction Array" to recall a user flatness file from the memory catalog and apply it to the signal generator's RF output.

Creating a user flatness correction array

In this example, you will create a user flatness correction array. The flatness correction array contains ten frequency correction pairs (amplitude correction values for specified frequencies), from 1 to 10 GHz in 1-GHz intervals.

An Agilent E4416A power meter (controlled by the signal generator via GPIB) and E4413A power sensor are used to measure the RF output amplitude at the specified correction frequencies and transfer the results to the signal generator. The signal generator reads the power level data from the power meter, calculates the correction values, and stores the correction pairs in the user flatness correction array.

If you do not have the required Agilent power meter or GPIB interface, you can enter correction values manually.

Required equipment

- Agilent E4416A power meter
- Agilent E4413A E Series CW power sensor
- GPIB interface cable
- adapters and cables, as required

NOTE The equipment setup in Figure 3-5 assumes that if the setup has an external leveling configuration you have followed the necessary steps to correctly level the RF output. If you have questions about external leveling, refer to *Using External Leveling*.

**Figure 3-5.
User Flatness
Correction Equipment
Setup.**
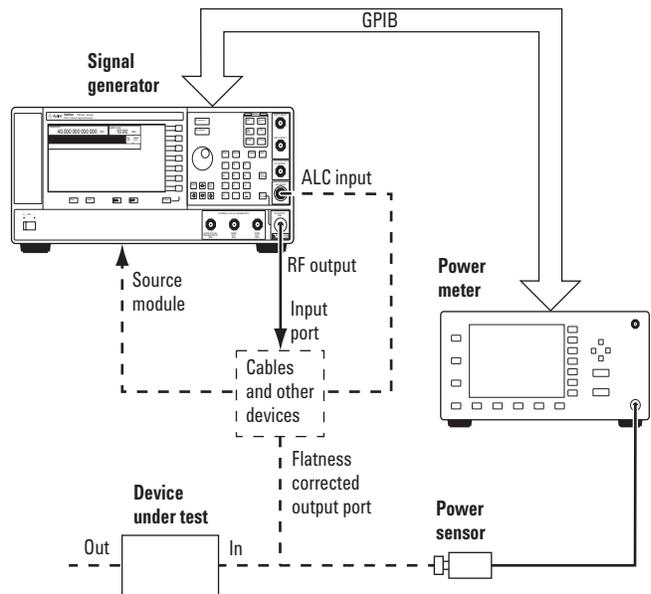
Configure the power meter

1. Zero and calibrate the power meter and power sensor.

NOTE If you are using a power meter/sensor combination other than the Agilent E4416A and E4413A, it may be necessary to:

a. Enter the appropriate power sensor calibration factors into the power meter.

b. Enable the power meter's cal factor array.

For operating information on your particular power meter/sensor, refer to their operating guides.

Connect the equipment

1. Connect the equipment as shown in Figure 3-5.

NOTE During the user flatness correction process, the power meter is slaved to the signal generator via GPIB. No other controllers are allowed on the GPIB interface.

Configure the signal generator

1. Press [**Preset**].	
2. Press [**Amplitude**] > {**More (1 of 2)**} > {**User Flatness**} > {**Configure Cal Array**} > {**More (1 of 2)**} > {**Preset List**} > {**Confirm Preset**}.	This opens the User Flatness table editor and presets the correction array frequency/correction list.
3. Press {**Configure Step Array**}.	This opens a menu for entering the user flatness step array data.
4. Press {**Freq Start**} > [**1**] > {**GHz**}.	
5. Press {**Freq Stop**} > [**10**] > {**GHz**}.	
6. Press {**# of Points**} > [**10**] > [**Enter**].	Steps 4, 5, and 6 enter the desired flatness-corrected frequencies into the step array.
7. Press [**Return**] > {**Load Cal Array From Step Array**} > {**Confirm Load From Step Sweep**}.	**This populates the user flatness correction** array with the frequency settings defined in the step array.
8. Press [**Amplitude**] > [**0**] > {**dBm**}.	
9. Press [**RF On/Off**].	This activates the RF output and the *RF ON* annunciator is displayed on the signal generator.
NOTE	If using an Agilent E4417A/18A/19A power meter, follow these steps to configure the signal generator to perform the user flatness correction:
10. Press [**Amplitude**] > {**More (1 of 2)**} > {**User Flatness**} > {**More (1 of 2)**} > {**Power Meter and E4417A, E4418A, or E4419A**}.	This allows you to choose another power meter model.
11. Press [**Meter Address**] > [**enter the power meter's GPIB address**] > [**Enter**].	**This configures the signal generator to interface** with a power meter at the GPIB address entered.
12. Press [**Meter Channel A B**] to select the power meter's active channel.	
13. Press [**Meter Timeout**] to adjust the length of time before the instrument generates a timeout error while unsuccessfully attempting to communicate with the power meter**.**	

Perform the user flatness correction

NOTE   If you are not using an Agilent E4416A/17A/18A/19A power meter, or if you do not have GPIB interface capability, you can perform the user flatness correction manually. For instructions, see *Performing the User Flatness Correction Manually*.

1. Press {**More (1 of 2)**} > {**User Flatness**} > {**Do Cal**}.	This performs the user flatness correction. The signal generator enters the user flatness correction routine and a progress bar is shown on the display.
2. When prompted, press {**Done**}.	This loads the amplitude correction values into the user flatness correction array.
If desired, press {**Configure Cal Array**}.	This opens the user flatness correction array, where you can view the stored amplitude correction values. The user flatness correction array title displays *User Flatness: (UNSTORED)* indicating that the current user flatness correction array data has not been saved to the memory catalog.

Performing the user flatness correction manually

If you are not using an Agilent E4416A/17A/18A/19A power meter or if you do not have GPIB interface capability, you can perform the user flatness correction manually. Complete the steps in this section and then continue with the User Flatness Correction tutorial.

1. Press {More (1 of 2)} > {User Flatness} > {Configure Cal Array}.	This opens the user flatness table editor and places the cursor over the frequency value (1 GHz) for row 1. The RF output changes to the frequency value of the table row containing the cursor and *1.000 000 000 00* is displayed the *AMPLITUDE* area of the display.
2. Observe and record the measured value from the power meter.	
3. Subtract the measured value from 0 dBm.	
4. Move the table cursor over the correction value in row 1.	
5. Press {Edit Item} > [enter the difference value from Step 3] > {dB}.	The signal generator adjusts the RF output amplitude based on the correction value entered.
6. Repeat Steps 2 through 5 until the power meter reads 0 dBm.	
7. Use the down arrow key to place the cursor over the frequency value for the next row. The RF output changes to the frequency value of the table row containing the cursor, as shown in the *AMPLITUDE* area of the display.	
8. Repeat Steps 2 through 7 for every entry in the User Flatness table.	

Save the user flatness correction data to the memory catalog

This process allows you to save the user flatness correction data as a file in the signal generator's memory catalog. With several user flatness correction files saved to the memory catalog, specific files can be recalled, loaded into the correction array, and applied to the RF output to satisfy specific RF output flatness requirements.

1. Press {Load/Store}.	
2. Press {Store to File}.	
3. Enter the file name FLATCAL1 using the alphanumeric soft keys and the numeric keypad.	
4. Press {Enter}.	The user flatness correction array file FLATCAL1 is now stored in the memory catalog as a UFLT file.

Applying a user flatness correction arrays

1. Press [Return] > [Return] > {Flatness Off On}.	This applies the user flatness correction array to the RF output. The UF indicator is activated in the *AMPLITUDE* section of the signal generator's display and the frequency correction data contained in the correction array is applied to the RF output amplitude.

Recalling and applying a user flatness correction array

Before performing the steps in this section, complete Creating a User Flatness Correction Array.

1. Press [**Preset**].	
2. Press [**Amplitude**] > {**More (1 of 2)**} > {**User Flatness**} > {**Configure Cal Array**} > {**More (1 of 2)**} > {**Preset List**} > {**Confirm Preset**}.	
3. Press {**More (2 of 2)**} > {**Load/Store**}.	
4. Ensure that the file FLATCAL1 is highlighted.	
5. Press {Load From Selected File} > {Confirm Load From File}.	This populates the user flatness correction array with the data contained in the file FLATCAL1. The user flatness correction array title displays User Flatness: FLATCAL1.
6. Press [Return] > {Flatness Off On}.	This applies the user flatness correction data contained in FLATCAL1.

Returning the signal generator to GPIB listener mode

During the user flatness correction process, the power meter is slaved to the signal generator via GPIB, and no other connections are allowed on the GPIB interface. The signal generator operates in GPIB talker mode, as a device controller for the power meter. In this operating mode, it cannot receive SCPI commands via GPIB.

CAUTION If the signal generator is interfaced to a remote controller after performing the user flatness correction, its GPIB controller mode must be changed from GPIB talker to GPIB listener. This is accomplished by presetting the signal generator. If an RF carrier has been previously configured, you must save the present instrument state before returning the signal generator to GPIB listener mode.

1. Save your instrument state to the instrument state register.	For instructions, see Saving an Instrument State in example 6 on page 20.
2. Press [**GPIB Listener Mode**].	This presets the signal generator and returns it to GPIB listener mode. The signal generator can now receive remote commands executed by a remote controller connected to the GPIB interface.
3. Recall your instrument state from the instrument state register.	

For instructions, see "Recalling an Instrument State" in example 6 on page 20.

Array Using a MM-Wave Source Module

In this example, a user flatness correction array is created to provide flatness-corrected power at the output of an Agilent 83554A millimeter-wave source module driven by an Agilent E8247C signal generator.

The flatness correction array contains 28 frequency correction pairs (amplitude correction values for specified frequencies), from 26.5 to 40 GHz in 500 MHz intervals. This will result in 28 evenly spaced flatness corrected frequencies between 26.5 GHz and 40 GHz at the output of the Agilent 83554A millimeter-wave source module.

An Agilent E4416A power meter (controlled by the signal generator via GPIB) and R8486A power sensor are used to measure the RF output amplitude of the millimeter-wave source module at the specified correction frequencies and transfer the results to the signal generator. The signal generator reads the power level data from the power meter, calculates the correction values, and stores the correction pairs in the user flatness correction array.

If you do not have the required Agilent power meter or GPIB interface, you can enter correction values manually.

Required equipment
- Agilent 83554A mm-wave source module
- Agilent E4416A power meter
- Agilent R8486A power sensor
- Agilent 8349B microwave amplifier (required for signal generators without option 1EA)
- GPIB interface cable
- adapters and cables as required

NOTE The equipment setups in Figure 3-6 and Figure 3-7 assume that, if the setups have an external leveling configuration, the steps necessary to correctly level the RF output have been followed. If you have questions about external leveling, refer to "Leveling with a Millimeter-Wave Source Module" in example 6 on page 19

Configure the power meter

1. Zero and calibrate the power meter and power sensor.	
2. Enter the appropriate power sensor calibration factors into the power meter.	
3. Enable the power meter's cal factor array.	
NOTE	For operating information on your particular power meter/sensor, refer to their operating guides.

Connect the equipment
CAUTION To prevent damage to the signal generator, turn off the line power to the signal generator before connecting the source module interface cable to the rear panel source module interface connector.

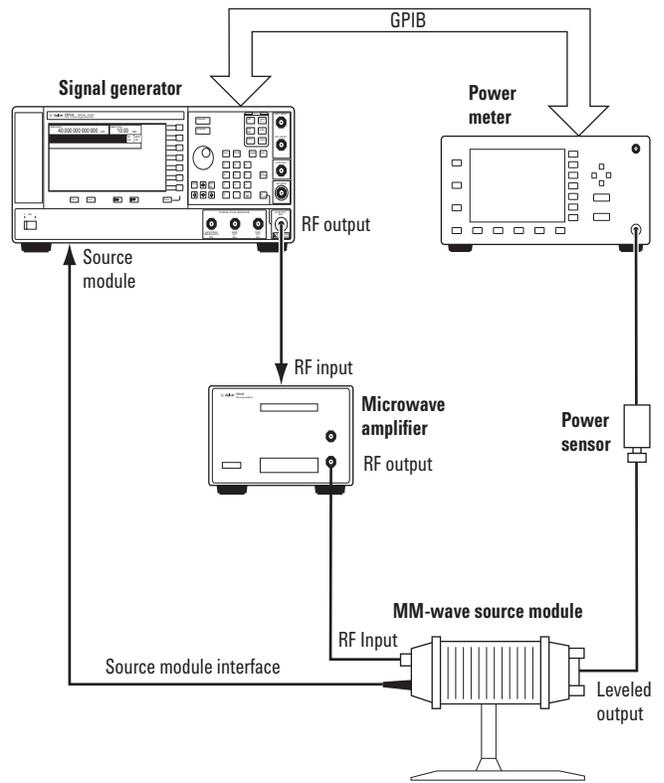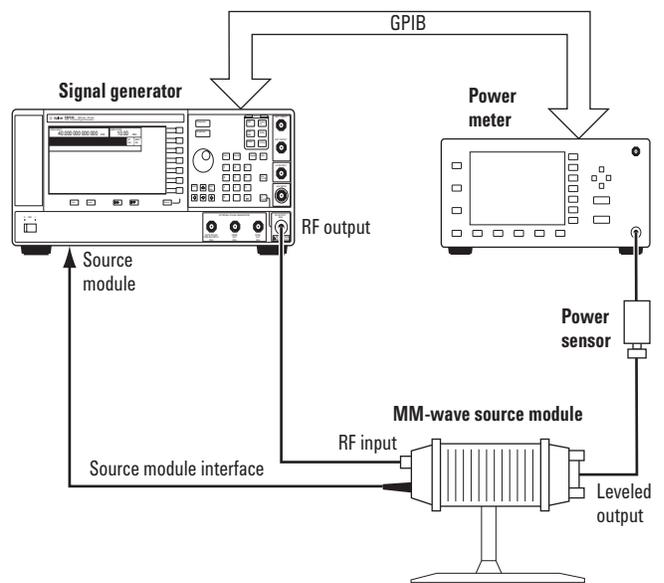|	
1. Turn off the line power to the signal generator.	
2. Connect the equipment. For standard signal generators, use the setup in Figure 3-6. For Option 1EA signal generators, use the setup in Figure 3-7.	
NOTE	During the user flatness correction process, the power meter is slaved to the signal generator via GPIB. No other connections are allowed on the GPIB interface.
NOTE	When using Option 1EA signal generators, to ensure adequate RF amplitude at the mm-wave source module RF input, maximum amplitude loss through the adapters and cables connected between the signal generator's RF output and the mm-wave source module's RF input should be less than 1.5 dB.

Figure 3-6.
User flatness with
mm-wave source
module for a signal
generator without
Option 1EA.

GPIB

Signal generator

Power
meter

RF output

Source
module

RF input

Microwave
amplifier

Power
sensor

RF output

MM-wave source module

RF Input

Source module interface

Leveled
output

Figure 3-7.
User flatness with
mm-wave source
module and option 1EA
signal generator.

GPIB

Signal generator

Power
meter

RF output

Source
module

Power
sensor

MM-wave source module

RF input

Source module interface

Leveled
output

Configure the signal generator

1. Turn on the signal generator's line power.	Upon power-up, the signal generator automatically: senses the mm-wave source module, switches the signal generator's leveling mode to external/source module, sets the mm-wave source module frequency and amplitude to the source module's preset values, and displays the RF output frequency and amplitude values available at the mm-wave source module output. The *MMMOD* indicator in the *FREQUENCY* area and the *MM* indicator in the *AMPLITUDE* area of the signal generator's display indicate that the mm-wave source module is active.
NOTE	Refer to the mm-wave source module specifications for the specific frequency and amplitude ranges.
2. Press **[Amplitude]** > **{More (1 of 2)}** > **{User Flatness}** > **{Configure Cal Array}** > **{More (1 of 2)}** > **{Preset List}** > **{Confirm Preset}**.	This opens the User Flatness table editor and resets the correction array frequency/correction list.
3. Press **{Configure Step Array}**.	This opens a menu for entering the user flatness step array data.
4. Press **{Freq Start}** > [26.5] > **{GHz}**.	
5. Press **{Freq Stop}** > [40] > **{GHz}**.	
6. Press **{# of Points}** > [28] > **{Enter}**.	This enters the desired flatness-corrected frequencies (26.5 GHz to 40 GHz in 500 MHz intervals) into the step array.
7. Press **[Return]** > **{Load Cal Array From Step Array}** > **{Confirm Load From Step Sweep}**.	**This populates the user flatness correction array** with the frequency settings defined in the step array.
8. Press **[Amplitude]** > [0] > **{dBm}**.	
9. Press **[RF On/Off]**.	This activates the RF output and the *RF ON* enunciator is displayed on the signal generator.
NOTE	If using a power meter other than an E4416A, follow these steps to configure the signal generator to perform the user flatness correction.
10. Press **[Amplitude]** > **{More (1 of 2)}** > **{User Flatness}** > **{More (1 of 2)}** > **{Power Meter and E4417A, E4418A, or E4419A}**.	This allows you to choose another **power meter model.**
11. Press **{Meter Address}** > **[enter the power meter's GPIB address]** > **{Enter}**.	**This configures the signal generator to interface** with a power meter at the GPIB address entered.
12. Press **{Meter Channel A B}** to select the power meter's active channel.	For E4419B and E4417B
13. Press **[Meter Timeout]** to adjust the length of time before the instrument generates a timeout error while unsuccessfully attempting to communicate with the power meter.	For E4419B and E4417B

Perform the user flatness correction

NOTE   If you are not using an Agilent E4416A/17A/18A/19A power meter, or if you do not have GPIB interface capability, you can perform the User Flatness Correction manually. For instructions, see "Performing the User Flatness Correction Manually."

1. Press {**More (1 of 2)**} > {**User Flatness**} > {**Do Cal**}.	This performs the user flatness correction. The signal generator enters the user flatness correction routine and a progress bar is shown on the display.
2. When prompted, press {**Done**}.	This loads the amplitude correction values into the user flatness correction array.
If desired, press {**Configure Cal Array**}.	This opens the user flatness correction array, where you can view the list of defined frequencies and their calculated amplitude correction values. The user flatness correction array title displays *User Flatness: (UNSTORED)* indicating that the current user flatness correction array data has not been saved to the memory catalog.

User Flatness Correction Manually

If you are not using an Agilent E4416A/17A/18A/19A power meter or if you do not have GPIB interface capability, you can perform the User Flatness Correction manually. Complete the steps in this section and then continue with the User Flatness Correction tutorial.

Step	Result
1. Press [**More (1 of 2)**] > {**User Flatness**} > {Configure Cal Array}.	This opens the User Flatness table editor and places the cursor over the frequency value (26.5 GHz) for row 1. The RF output changes to the frequency value of the table row containing the cursor and *26.500 000 000 00* is displayed the *AMPLITUDE* area of the display.
2. Observe and record the measured value from the power meter.	
3. Subtract the measured value from 0 dBm.	
4. Move the table cursor over the correction value in row 1.	
5. Press {**Edit Item**} > [**enter the difference value from Step 3**] > {**dB**}.	**The signal generator adjusts the RF output** amplitude based on the correction value entered.
6. Repeat Steps 2 through 5 until the power meter reads 0 dBm.	
7. Use the down arrow key to place the cursor over the frequency value for the next row.	The RF output changes to the frequency value of the table row containing the cursor, as shown in the *AMPLITUDE* area of the display.
8. Repeat Steps 2 through 7 for every entry in the User Flatness table.	

Save the User Flatness Correction Data to the Memory Catalog

This process allows you to save the user flatness correction data as a file in the signal generator's memory catalog. With several user flatness correction files saved to the memory catalog, specific files can be recalled, loaded into the correction array, and applied to the RF output to satisfy various RF output flatness requirements.

1. Press {**Load/Store**}.	
2. Press {**Store to File**}.	
3. Enter the file name FLATCAL2 using the alphanumeric soft keys and the numeric keypad.	
4. Press {**Enter**}.	The user flatness correction array file FLATCAL2 is now stored in the memory catalog as a UFLT file.

Applying the user flatness correction array

1. Press [**Return**] > [**Return**] > {**Flatness Off On**}.	This applies the user flatness correction array to the RF output. The *UF* indicator is activated in the *AMPLITUDE* section of the signal generator's display and the frequency correction data contained in the correction array is applied to the RF output amplitude of the mm-wave source module.

Recalling and applying a user flatness correction array

Before performing the steps in this section, complete the section Creating a User Flatness Correction Array Using a MM-Wave Source Module.

1. Press [**Preset**].	
2. Press [**Amplitude**] > {**More (1 of 2)**} > {**User Flatness**} > {**Configure Cal Array**} > {**More (1 of 2)**} > {**Preset List**} > {**Confirm Preset**}.	
3. Press [**More (2 of 2)**] > {**Load/Store**}.	
4. Ensure that the file FLATCAL2 is highlighted.	
5. Press {**Load From Selected File**} > {**Confirm Load From File**}.	This populates the user flatness correction array with the data contained in the file FLATCAL2. The user flatness correction array title displays *User Flatness: FLATCAL2.*
6. Press [**Return**] > {**Flatness Off On**}.	This activates flatness correction using the data contained in the file FLATCAL2.

To find out more visit:
www.agilent.com/find/psg

Related Agilent literature

Agilent PSG Signal Generators, Brochure,
Literature number 5988-7538EN

Agilent E8267C PSG Vector Signal Generator, Data Sheet,
Literature number 5988-6632EN

Agilent E8247C/E8257C PSG Analog/CW Signal Generator, Data Sheet,
Literature number 5988-7454EN

Agilent PSG Vector Signal Generator Self Guided Demo,
Literature number 5988-8087EN

Agilent E8247C/E8257C PSG Analog/CW Self Guided Demo,
Literature number 5988-2414EN

Agilent E8267C PSG Vector Configuration Guide,
Literature number 5988-7541EN

Agilent E8247C/E8257C PSG Analog/CW Configuration Guide,
Literature number 5988-7879EN

Agilent PSG Series Product Note: Millimeter Head,
Literature number 5988-2567EN

Agilent PSG Two-tone and Multi-tone, *Application Note 1410,*
Literature number: 5988-7689EN

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