

NPR Testing For Forward Path HFC Active Components

Applications

- Quantify intermodulation distortion
- Determine dynamic range
- Amplifiers
- Optical links

Benefits

- Easy to use
- Fast
- Accurate and repeatable



NPRT 2200F Forward Path Noise Power Ratio Test Set

The NPRT 2200 measures the NPR of a device across a range of power levels. This test quantifies intermodulation distortion and determines the dynamic range of optical transmitters, amplifiers, and other active HFC network devices.

The included PC software uses predefined test setups to run a "Power Sweep" series of NPR measurements and graph the results. The measurements are compared to a threshold value to determine the acceptable operating power or dynamic range of the device. Results may be stored on the PC for further analysis and the graphs may be printed.

The NPRT 2200 inserts calibrated levels of white Gaussian noise (WGN) through a Device Under Test (DUT), then measures the noise level at a frequency where a notch filter is located.

The NPR is the ratio of the output power without the notch compared to the power with the notch filter. A graph of NPR versus input power illustrates the linear dynamic range and intermodulation distortion characteristics of the DUT.

"Reliability through Simplicity"

NPRT 2200F

Forward Path Noise Power Ratio Test Set

FEATURES

- Complete unit, source and receiver
- Controlled from front panel or PC
- "Power Sweep" graph printable from PC
- Ideal for laboratory or factory ATE

SOURCE SPECIFICATIONS

Total Power.....-50 to +10 dBm
 (-1.25 to +58.75 dBmV)
 Accuracy.....+/- 0.3 dB
 Resolution.....0.05 dB
 Return Loss.....> 12 dB
 Impedance.....75 Ohm

RECEIVER SPECIFICATIONS

Input Power.....-70 to +10 dBm
 (-21.25 to +58.75 dBmV)
 Accuracy.....+/- 0.3 dB
 Return Loss.....> 20 dB
 Impedance.....75 Ohm

GENERAL SPECIFICATIONS

Dimensions.....20"W x 74.25"H x 26"D
 Power.....120/230 VAC 60/50 Hz
 Computer Interface.....USB & RS-232
 Warranty.....12 month limited
Specifications subject to change without notice.

STANDARD ACCESSORIES

- AC Line Cord
- PC data transfer cable
- Operation Manual

CONFIGURATIONS

Supports up to 4 frequency ranges (54 to 1002 MHz) and up to 4 notch filters (up to 999 MHz). Ranges and notch filters are separately selectable for a total of 16 possible combinations.

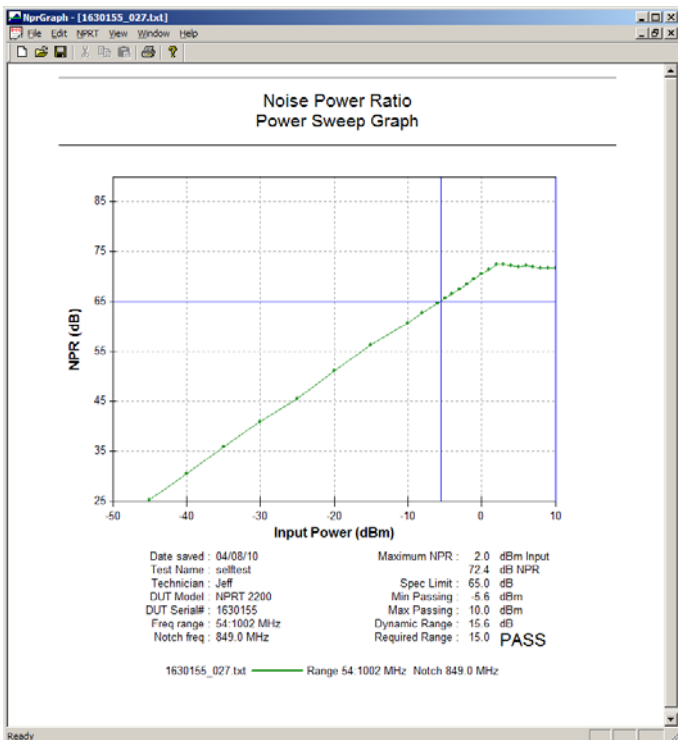
Frequency Ranges

54 to 1002 MHz
 85 to 606 MHz
 85 to 862 MHz
 550 to 650 MHz
 696 to 1002 MHz

Notch Filters

63.0 MHz
 100.0 MHz
 111.0 MHz
 400.0 MHz
 601.0 MHz
 849.0 MHz
 987.0 MHz
 999.0 MHz

**Other custom configurations are available upon request.*



Manufactured by:



Applied Instruments, Inc.
 5230 Elmwood Avenue
 Indianapolis, Indiana 46203 USA
 Tel: (317) 782-4331 Fax: (317) 786-9665
 Toll Free in USA: 1-800-244-2976
<http://www.appliedin.com>

Sales Representative: