

UNCORRECTED PERFORMANCE

The following table shows specified performance without accuracy enhancement.

Table 3-1. Specified Performance without Accuracy Enhancement

HP 8719C and 8720C Standard				
	Frequency Range			
	.050 to 0.5 GHz	0.5 to 2 GHz	2 to 8 GHz	8 to 20 GHz ¹
Directivity ²	30 dB	30 dB	21 dB	16 dB
Source Match	16 dB	18 dB	14 dB	10 dB
Load Match (Fwd)	26 dB	24 dB	15 dB	12 dB
Load Match (Rev)	26 dB	24 dB	15 dB	12 dB
Reflection Tracking ³	±2 dB	±2 dB	±2 dB	±3 dB
Transmission Tracking ³	±1 dB	±1 dB	±1 dB	±1 dB
Crosstalk	80 dB	87 dB	87 dB	85 dB
HP 8719C and 8720C Option 006				
	Frequency Range			
	.050 to 0.5 GHz	0.5 to 2 GHz	2 to 8 GHz	8 to 20 GHz ¹
Directivity ²	30 dB	30 dB	21 dB	16 dB
Source Match	10 dB	10 dB	10 dB	8 dB
Load Match (Fwd)	22 dB	20 dB	15 dB	12 dB
Load Match (Rev)	22 dB	20 dB	15 dB	12 dB
Reflection Tracking ³	±2 dB	±2 dB	±2 dB	±3 dB
Transmission Tracking ³	±1 dB	±1 dB	±1 dB	±1 dB
Crosstalk	80 dB	87 dB	87 dB	85 dB

1. HP 8719C: to 13.5 GHz

2. Includes effect of HP 85131D cable set on test parts.

3. Excludes -1/+3 dB slope, typical, in magnitude response from 2.0 to 20 GHz and rolloff below 2 GHz, which is typically -4 dB at 1 GHz, -9 dB at 500 MHz, -20 dB at 130 MHz, and -26 at 50 MHz.

SOURCE SPECIFICATIONS

SOURCE FREQUENCY SPECIFICATIONS

Table 3-2. Range

	HP 8719C	HP 8720C
Minimum Frequency	50 MHz	50 MHz
Maximum Frequency	18.51 GHz	20.06 GHz

Frequency resolution:	100 kHz (standard); 1 Hz with Option 001; Accuracy and stability not affected by Option 001.
Frequency accuracy:	10 ppm at 23° ± 3°C (can be locked to external frequency reference)
Frequency stability (typical):	±7.5 ppm over 0° to 55°C (temperature) ±3 ppm per year (aging)
Spectral purity (typical):	
<i>Harmonics:</i>	< -15 dBc at +10 dBm (Opt. 006, < -15 dBc at +3 dBm)
<i>Phase noise:</i>	< -35 dBc to 60 kHz from carrier
<i>Spurs:</i>	< -40 dBc at 100 kHz < -50 dBc at 200 kHz < -65 dBc at >200 kHz

SOURCE POWER SPECIFICATIONS (23° ± 3°C)

Table 3-3. Power Range and Power Sweep

POWER RANGE				
	HP 8719C		HP 8720C	
	Std.	Opt.006	Std.	Opt. 006
Maximum Leveled Power	+10 dBm	+3 dBm	+10 dBm	+3 dBm
Minimum Leveled Power	-65 dBm	-70 dBm	-65 dBm	-70 dBm
Resolution	0.05 dB	0.05 dB	0.05 dB	0.05 dB
Flatness	±2.5 dB	±3.5 dB	±2.5 dB	±4 dB

POWER SWEEP		
	HP 8719C	HP 8720C
Range	20 dB	20 dB
Linearity	±0.5 dB	±0.5 dB
Linearity (<5 dB sweep)	±0.2 dB	±0.2 dB

Power accuracy: ±0.5 dB at 2 GHz at maximum power

GENERAL CHARACTERISTICS

MEASUREMENT THROUGHPUT SUMMARY

The following table shows typical measurement times for the analyzer. This information is based on 50 MHz to 20 GHz sweep with 3 kHz IF bandwidth, including system retrace time and all source band changes; 2-port times based on chop mode.

Table 3-4. Typical time for completion (msec) (1 of 2)

MEASUREMENT TIME (ms) VERSUS NUMBER OF POINTS (typical)					
Measurement	3	51	101	201	1801
1-port (3 term) #	350	465	485	530*	1300
Full 2-port	740	990	1100	1335	4650
Fast 2-port	350	480	560	725	3080
Fast 2-port (narrow band, 1 GHz sweep)	155	240	330	510	3010
Time domain conversion	15	180	300	540	2840
HP-IB data transfer					
1: Binary	10	28	40	62	450
2: 32-bit	12	48	60	100	1180
3: 64 bit	15	65	120	235	1790
4: ASCII	40	480	940	1860	14700
5: 32-bit PC	12	48	86	165	1260
* Reference used for following comparisons.					
MEASUREMENT TIME VERSUS SWEEP MODE (typical)					
Sweep Mode		Time (ms)			
Linear		530			
Log		1250			
List		1250			
CW Time		170			
Power		890			
MEASUREMENT TIME VERSUS FREQUENCY SPAN (typical)					
Frequency Range		Time (ms)			
0.05 to 20 GHz		530			
5 to 15 GHz		280			
8 to 12 GHz		275			
9 to 11 GHz		245			

Table 3-4. Typical time for completion (msec) (2 of 2)

MEASUREMENT TIME VERSUS IF BANDWIDTH (typical)	
IF bandwidth	Time (ms)
3000	530
1000	660
300	1100
100	2400
30	7500
10	2200

Measurements with no error correction, response, or response/isolation cuts are similar.

REAR PANEL CONNECTORS

BIAS CONNECT: DC bias input to internal tees, one for each port; internally fused to 500 mA maximum; 40 Vdc maximum

EXT REF IN: external frequency reference input, to which network analyzer locks its internal time-base; external reference must have following characteristics:

Frequency: 1 MHz \pm 20 Hz
 2 MHz \pm 40 Hz
 5 MHz \pm 100 Hz
 10 MHz \pm 200 Hz

Level: -10 to +20 dBm

Impedance: 50 ohms

EXT TRIGGER: external trigger input, activated on negative TTL transition (+5 to 0V); internal 10 k-ohm pull-up resistor allows use of contact closure to ground; input can trigger these functions:

Sweep: begins entire sweep when armed

Point: acquires single data point of multi-point sweep

EXT AM: external AM input; 0 to +10 V into 100 k ohm; approximately -2 dB/volt sensitivity; 1 kHz maximum

AUX INPUT: auxiliary voltage input; -10 to +10 V; can be measured with "analog bus" and displayed as voltage on vertical axis in real format

IO INTERCONNECT (DB-25):

pin 17: limit test output; LS TTL, +5V=pass, 0V=fail

pin 14: +22 Vdc power supply output

pin 8: transfer switch output; LS TTL, +5 V=forward, 0V= reverse

EXT MON (RED/GREEN/BLUE): video outputs to drive external monitors with the following characteristics:

Format: RGB (red green/blue) with sync on green

Impedance: 75 ohms

Horizontal scan rate: 25.5 kHz

Refresh rate: 60 Hz

Level: 1 Vp-p

Compatible monitors:

- HP 35731A/B monochrome monitor
- HP 35741A/B color monitor
- Most other analog multi-sync monitors

REF IN, REF OUT: reference link out/in, between reference power splitter and reference (R) sampler; user may add electrical length to "balance" test set for faster measurements on long devices, without IF shift distortion; has this on the front panel in Option 011

EFFECT OF FREQUENCY RESOLUTION

The following table shows the differences in operation between the standard analyzer (100 kHz frequency resolution) and the option 001 (1 Hz frequency resolution) analyzer.

Table 3-5

	Standard	Option 001
Source Control		
Start/Stop/Center CW	100 kHz	1 Hz
Min. span @ 101 points ¹	10 MHz	100 Hz
Min. span @ 201 points	20 MHz	200 Hz
Time domain:		
Max. time domain range ²	10 μ s	1s
Group Delay:		
Max. group delay range	5 μ s	500 ms
Minimum aperture	100 kHz	1 Hz

- 1. Minimum span = (number of data points - 1) (frequency resolution)
- 2. Using time domain bandpass mode.

Supplemental Characteristics

Supplemental characteristics are intended to provide information useful in applying the instrument, by giving typical but non-warranted performance parameters. These are denoted as "typical," "nominal," or "approximate."

Table 3-6. Dynamic Range Specification (for transmission measurements)¹

Dynamic Range ²	Frequency Range			
	0.05 to 0.5 GHz	0.5 to 2 GHz	2 to 8 GHz	8 to 20 GHz ³
Standard	75 dB	100 dB	103 dB	103 dB
Option 006	71 dB	96 db	98 dB	96 dB

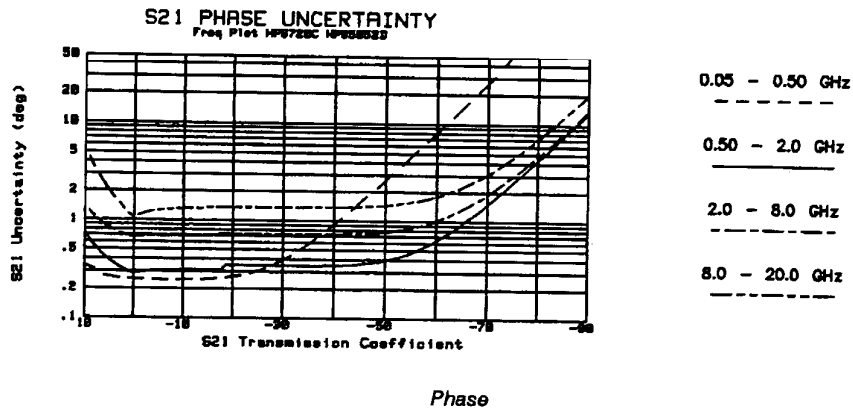
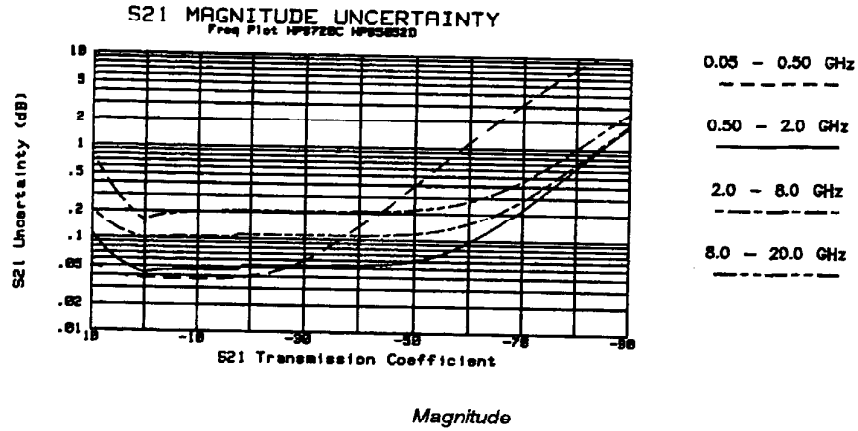
- 1. Refer to Chapter 4, *System Performance and Verification*.
- 2. The difference between maximum leveled power and the peak value of the system noise. Specified for an IF bandwidth of 10 Hz, using a full 2-port calibration (including an isolation calibration performed with an averaging factor of 16).
- 3. HP 8719C 8 to 13.5 GHz

3.5 MM SYSTEM SPECIFICATIONS

DEVICES WITH 3.5 MM CONNECTORS

The following graphs show total worst case uncertainty for the network analyzer after accuracy enhancement using a full 2-port measurement calibration (including isolation) with the HP 85052D 3.5 mm calibration kit, HP 85131F 3.5 mm cable set, and an IF bandwidth of 10 Hz. This includes the residual systematic errors, as well as the system dynamic accuracy, 3.5 mm connector repeatability, noise, and switch repeatability.¹ Specific points on the graphs are verified by measuring the devices in the HP 85053B verification kit.

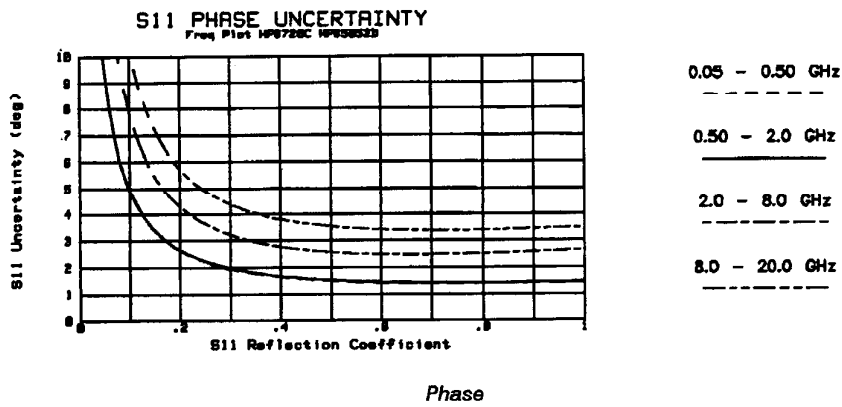
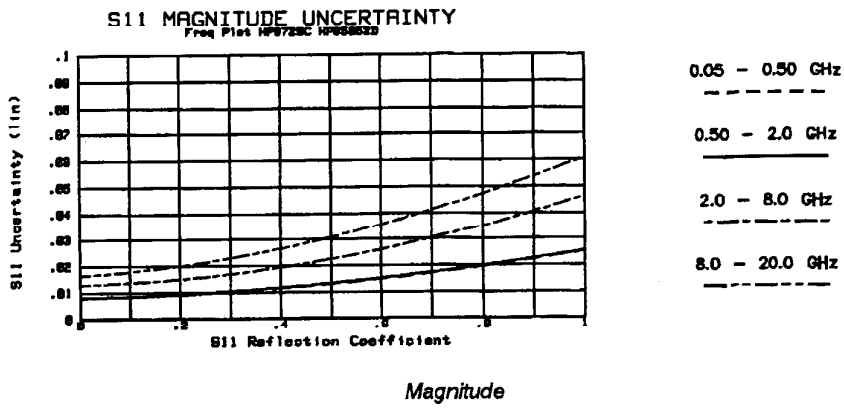
Transmission Measurements² Standard



1. Cable stability and system drift are not included.

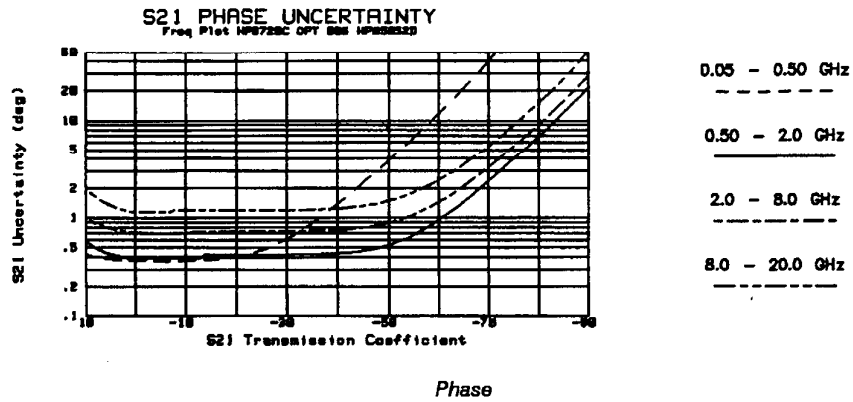
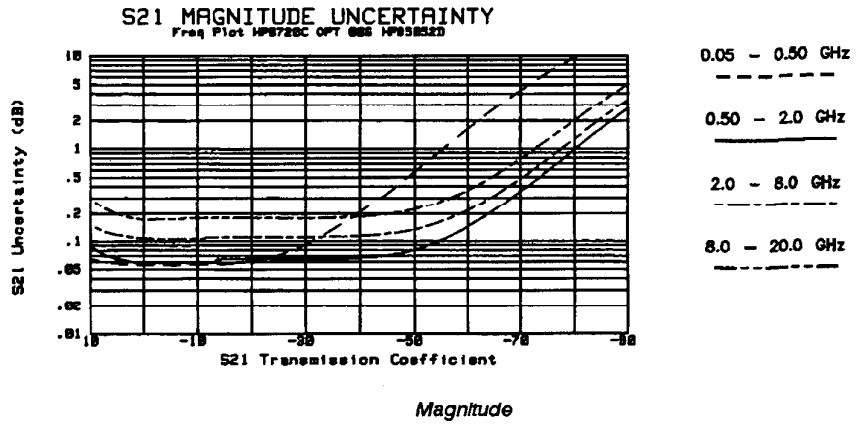
2. The graphs for transmission measurements assume a well-matched device ($S_{11} = S_{22} = 0$).

Reflection Measurements¹ Standard



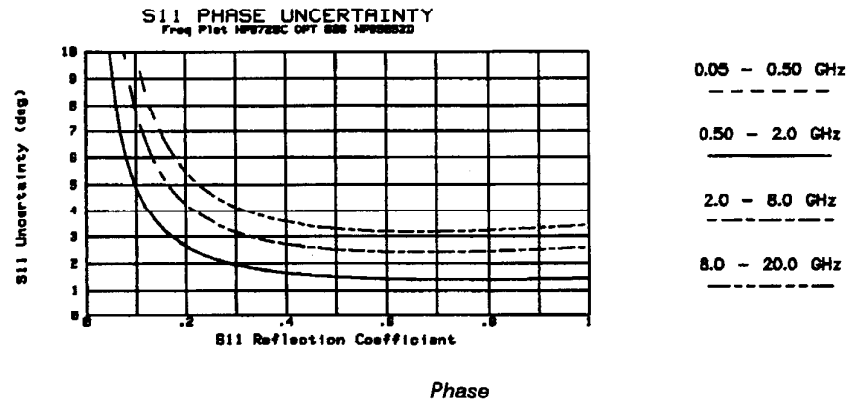
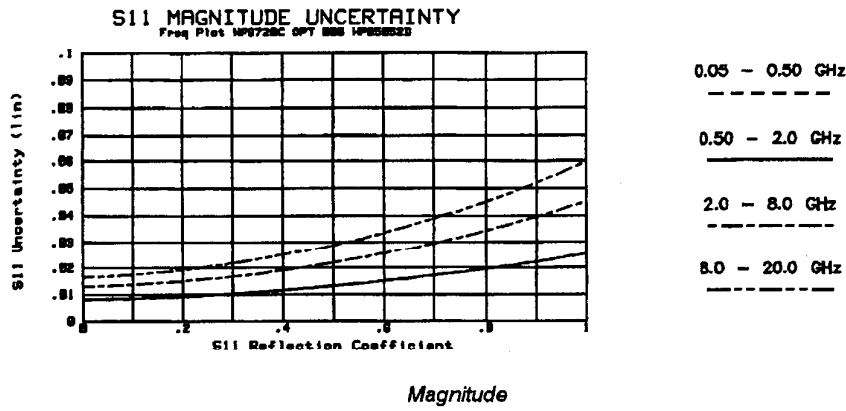
1. The graphs shown for reflection measurement uncertainty apply to a one-port device.

Transmission Measurements¹ Option 006



1. The graphs for transmission measurements assume a well-matched device ($S_{11} = S_{22} = 0$).

Reflection Measurements¹ Option 006



1. The graphs shown for reflection measurement uncertainty apply to a one-port device.

Measurement Port Specifications¹

The following specifications show the residual system performance (including switch repeatability) after accuracy enhancement using a full 2-port measurement calibration (including isolation) with an IF bandwidth of 10 Hz and the specified calibration kit. Environmental temperature is 23° ± 3°C.

Calibration Kit: HP 85052D (male and female broadband precision fixed loads)

Table 3-7. HP 85052D

	Frequency Range			
	.050 to 0.5 GHz	0.5 to 2 GHz	2 to 8 GHz	8 to 20 GHz ²
Directivity	42 dB	42 dB	38 dB	36 dB
Source Match	37 dB	37 dB	30 dB	28 dB
Load Match	42 dB	41 dB	36 dB	34 dB
Reflection Tracking	.005 dB	.010 dB	.030 dB	.031 dB
Transmission Tracking	.014 dB	.020 dB	.080 dB	.139 dB

1. Crosstalk, after an isolation calibration, is no higher than the system noise floor and can be ignored.

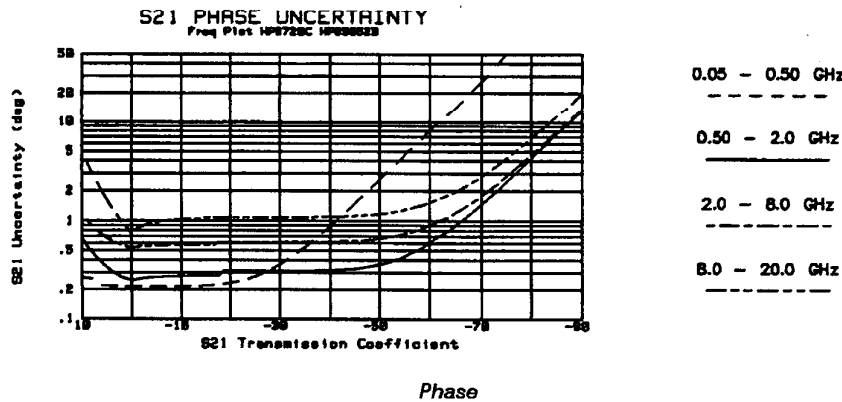
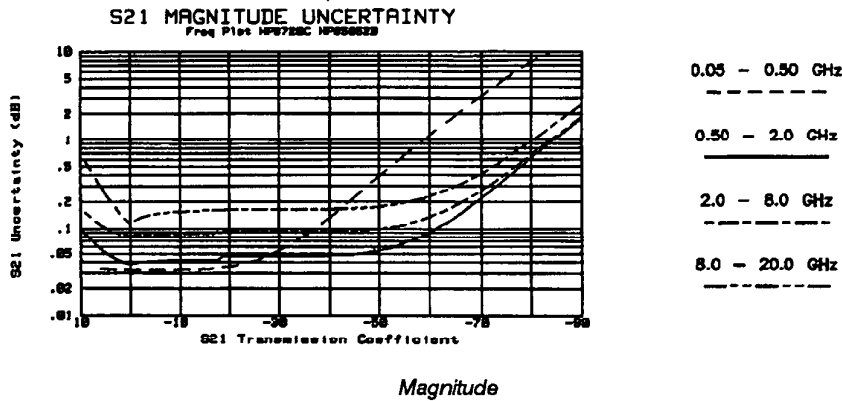
2. HP 8719C; 8 to 13.5 GHz.

Measurement Uncertainty: HP 85052B Calibration Kit

The graphs shown for reflection measurement uncertainty apply to a one-port device.

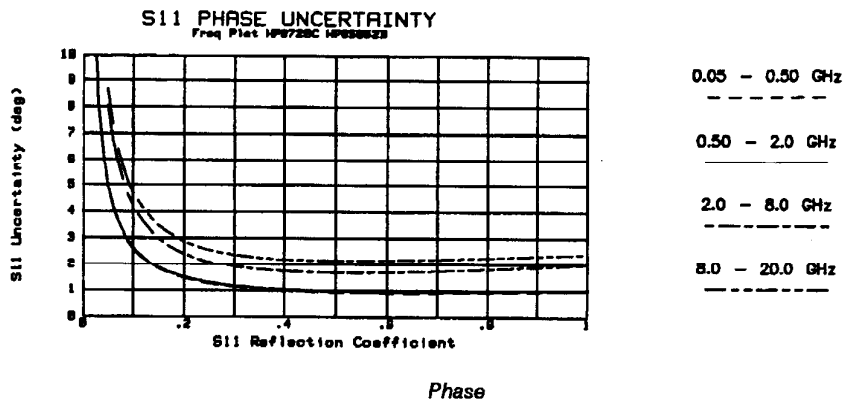
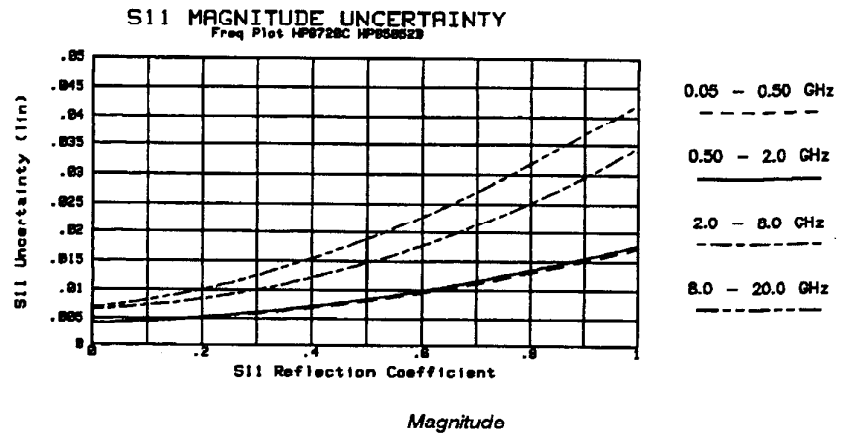
The following graphs show total worst case uncertainty for the network analyzer after accuracy enhancement using a full 2-port measurement calibration (including isolation) with the HP 85052B 3.5 mm calibration kit, HP 85131F 3.5 mm cable set, and an IF bandwidth of 10 Hz. This includes the residual systematic errors, as well as the system dynamic accuracy, 3.5 mm connector repeatability, noise, and switch repeatability.¹ Specific points on the graphs are verified by measuring the devices in the HP 85053B verification kit.

Transmission Measurements² Standard



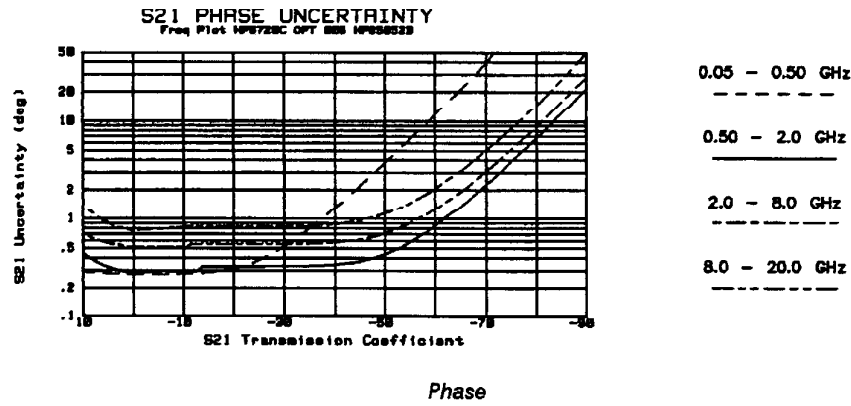
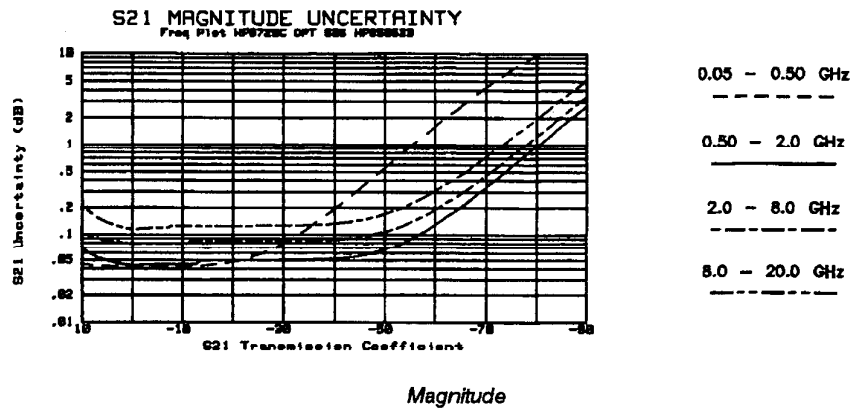
1. Cable stability and system drift are not included.
2. The graphs for transmission measurements assume a well-matched device ($S_{11} = S_{22} = 0$).

Reflection Measurements¹ Standard



1. The graphs shown for reflection measurement uncertainty apply to a one-port device.

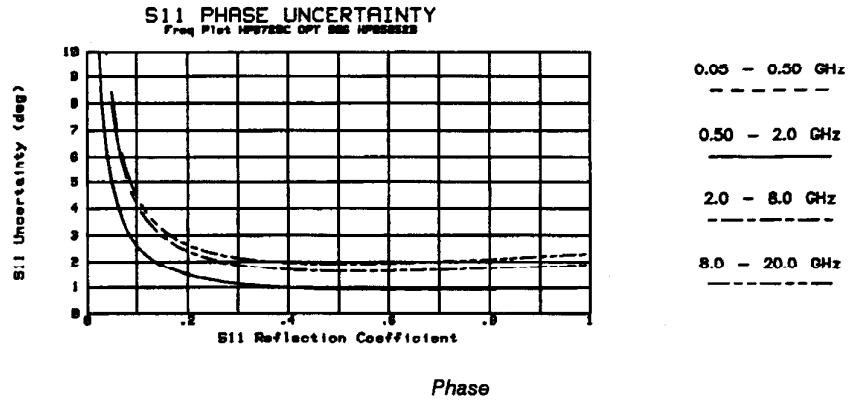
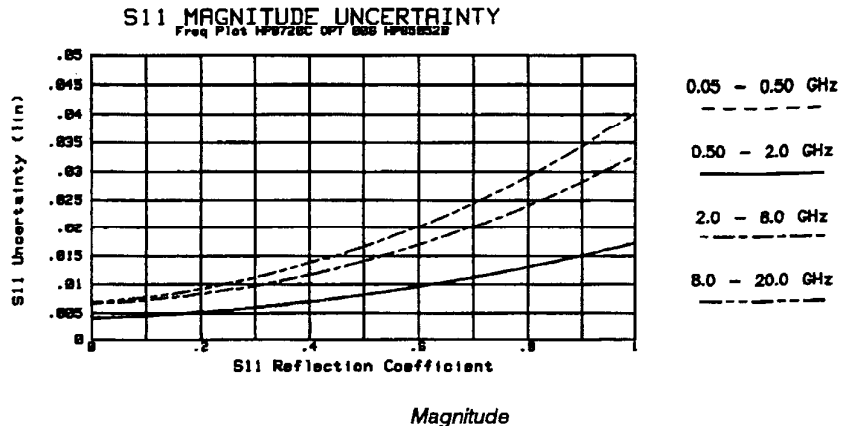
Transmission Measurements¹ Option 006



1. The graphs for transmission measurements assume a well-matched device ($S_{11} = S_{22} = 0$).

Reflection Measurements¹ Option 006

1. The graphs shown for reflection measurement uncertainty apply to a one-port device.



1. The graphs shown for reflection measurement uncertainty apply to a one-port device.

Measurement Port Specifications¹

The following specifications show the residual system performance (including switch repeatability) after accuracy enhancement using a full 2-port measurement calibration (including isolation) with an IF bandwidth of 10 Hz and the specified calibration kit. Environmental temperature is 23° ± 3°C.

Calibration Kit: HP 85052B (male and female lowband and sliding loads)

Table 3-8. HP 85052B

	Frequency Range			
	.050 to 0.5 GHz	0.5 to 2 GHz	2 to 8 GHz	8 to 20 GHz ²
Directivity	48 dB	48 dB	44 dB	44 dB
Source Match	40 dB	39 dB	32 dB	30 dB
Load Match	48 dB	45 dB	39 dB	37 dB
Reflection Tracking	.006 dB	.010 dB	.030 dB	.031 dB
Transmission Tracking	.009 dB	.016 dB	.065 dB	.106 dB

1. Crosstalk, after an Isolation calibration, is no higher than the system noise floor and can be ignored.

2. HP 8719C; 8 to 13.5 GHz.

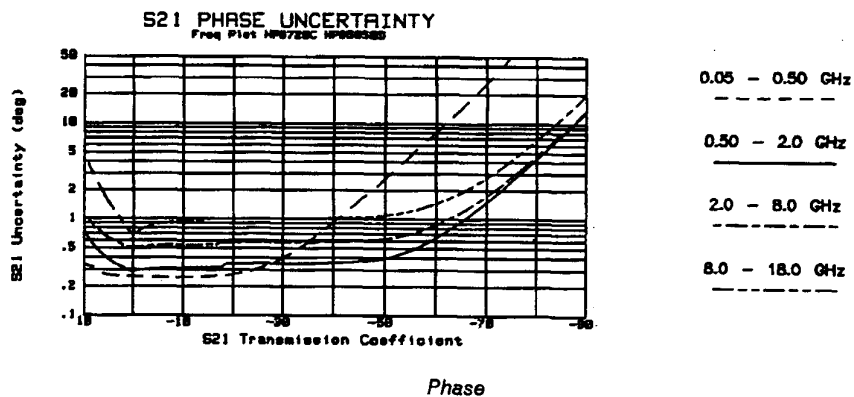
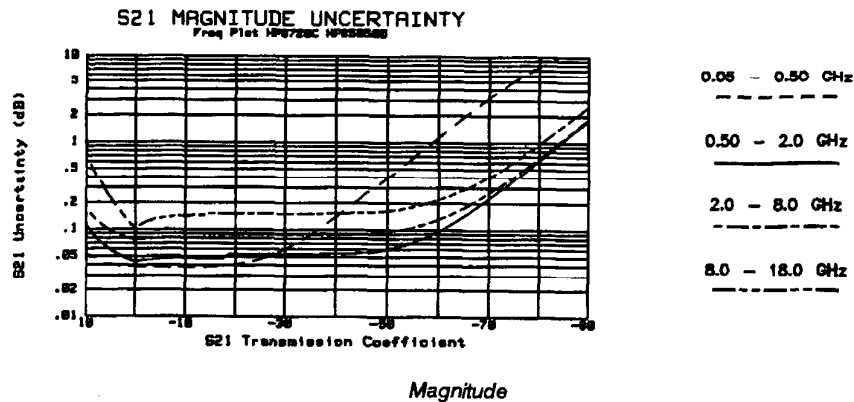
7 MM SYSTEM SPECIFICATIONS

DEVICES WITH 7 MM CONNECTORS

Measurement Uncertainty: HP 85050D Calibration Kit

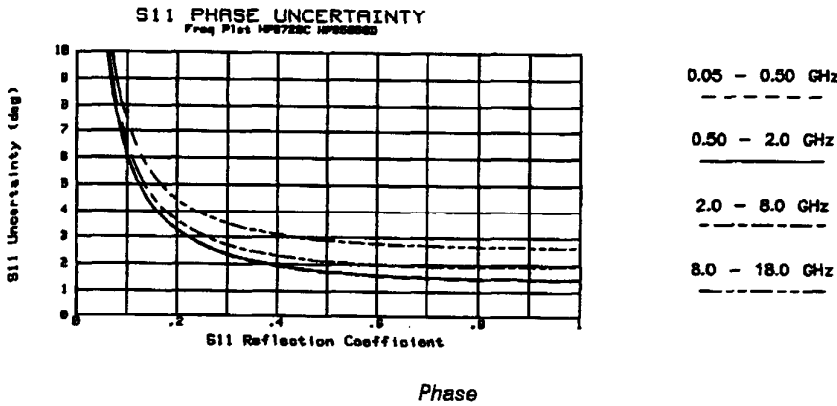
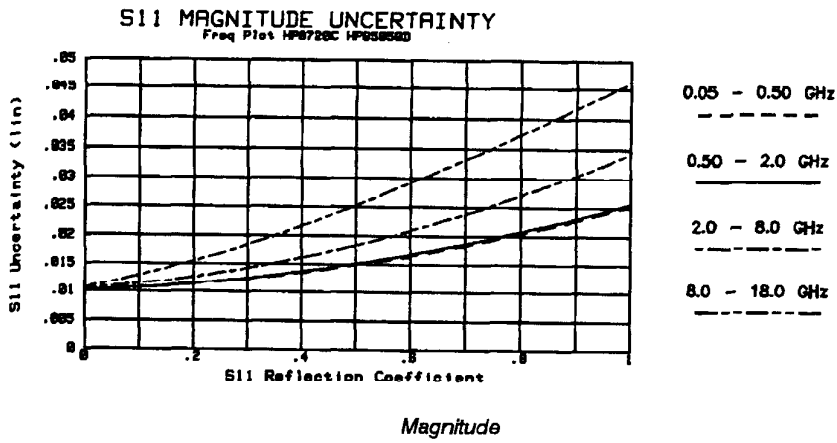
The following graphs show total worst case measurement uncertainty for the network analyzer after accuracy enhancement using a full 2-port measurement calibration (including isolation) with the HP 85050D 7 mm calibration kit, HP 85132D cable set, and an IF bandwidth of 10 Hz. This includes the residual systematic errors, as well as the system dynamic accuracy, 7 mm connector repeatability, noise, and switch repeatability.¹ The HP 85130B special 3.5 mm to 7 mm adapter set is used to adapt the 3.5 mm test ports to 7 mm. Specific points on the graphs are verified by measuring the devices in the HP 85051B verification kit.

Transmission Measurements² Standard



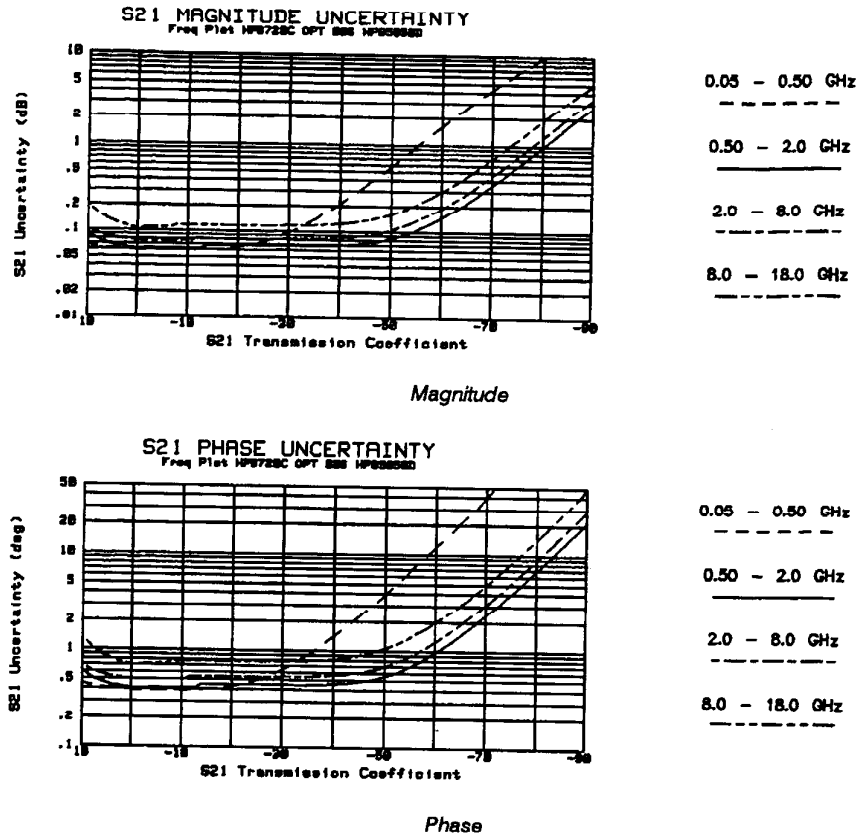
1. Cable stability and system drift are not included.
2. The graphs for transmission measurements assume a well-matched device ($S_{11} = S_{22} = 0$).

Reflection Measurements¹ Standard



1. The graphs for transmission measurements assume a well-matched device ($S_{11} = S_{22} = 0$).

Transmission Measurements¹ Option 006

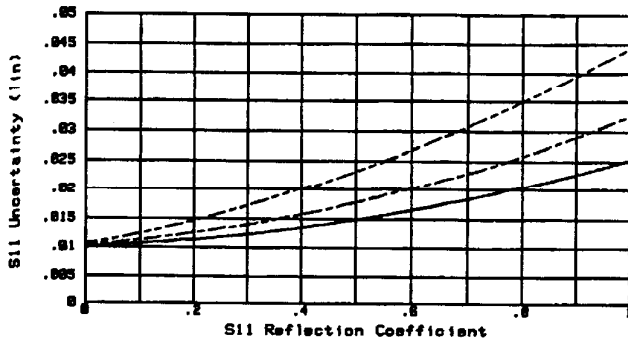


1. The graphs for transmission measurements assume a well-matched device ($S_{11} = S_{22} = 0$).

Reflection Measurements¹ Option 006

S11 MAGNITUDE UNCERTAINTY

Freq Plus HP8720C OPT 006 HP85030D



0.05 - 0.50 GHz

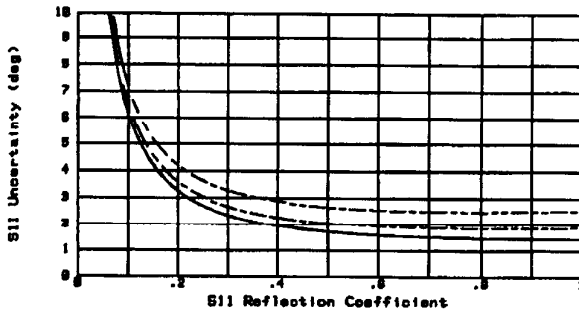
 0.50 - 2.0 GHz

 2.0 - 8.0 GHz
 - · - · - ·
 8.0 - 18.0 GHz
 - - - - -

Magnitude

S11 PHASE UNCERTAINTY

Freq Plus HP8720C OPT 006 HP85030D



0.05 - 0.50 GHz

 0.50 - 2.0 GHz

 2.0 - 8.0 GHz
 - · - · - ·
 8.0 - 18.0 GHz
 - - - - -

Phase

1. The graphs shown for reflection measurement uncertainty apply to a one-port device.

Measurement Port Specifications¹

The following specifications show the residual system performance (including switch repeatability) after accuracy enhancement using a full 2-port measurement calibration (including isolation) with an IF bandwidth of 10 Hz and the specified calibration kit. Environmental temperature is 23° ±3°C.

Calibration Kit: HP 85050D (broadband precision fixed load)

Table 3-9. HP 85050D

	Frequency Range			
	.050 to 0.5 GHz	0.5 to 2 GHz	2 to 8 GHz	8 to 18 GHz ²
Directivity	40 dB	40 dB	40 dB	40 dB
Source Match	39 dB	38 dB	35 dB	33 dB
Load Match	40 dB	39 dB	37 dB	36 dB
Reflection Tracking	.011 dB	.014 dB	.050 dB	.104 dB
Transmission Tracking	.015 dB	.021 dB	.060 dB	.092 dB

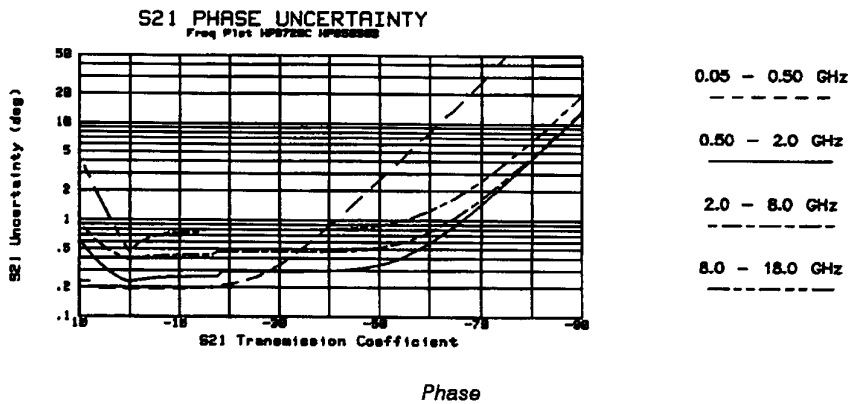
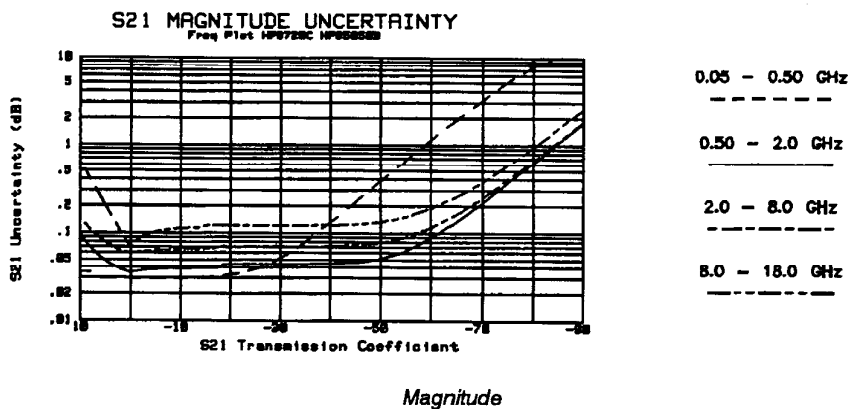
1. Crosstalk after an isolation calibration, is no higher than the system noise floor and can be ignored.

2. HP 8719C 8 to 13.5 GHz

Measurement Uncertainty: 85050B Calibration Kit

The following graphs show total worst case measurement uncertainty for the network analyzer after accuracy enhancement using a full 2-port measurement calibration (including isolation) with the HP 85050B 7 mm calibration kit, HP 85132D cable set, and an IF bandwidth of 10 Hz. This includes the residual systematic errors, as well as the system dynamic accuracy, 7 mm connector repeatability, noise, and switch repeatability.¹ The HP 85130B special 3.5 mm to 7 mm adapter set is used to adapt the 3.5 mm test ports to 7 mm. Specific points on the graphs are verified by measuring the devices in the HP 85051B verification kit.

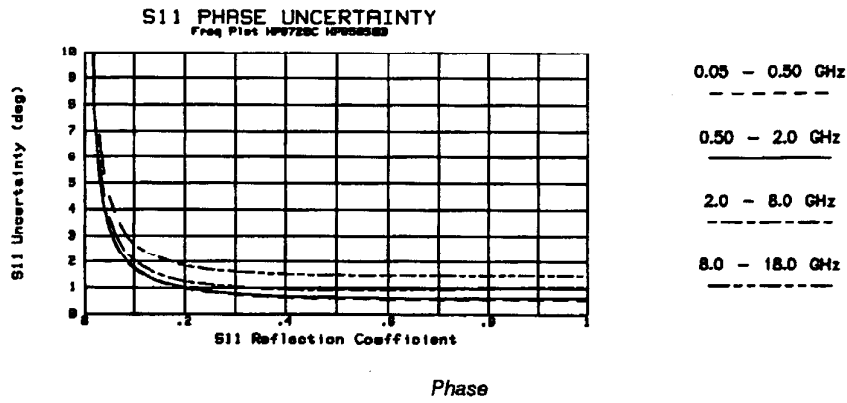
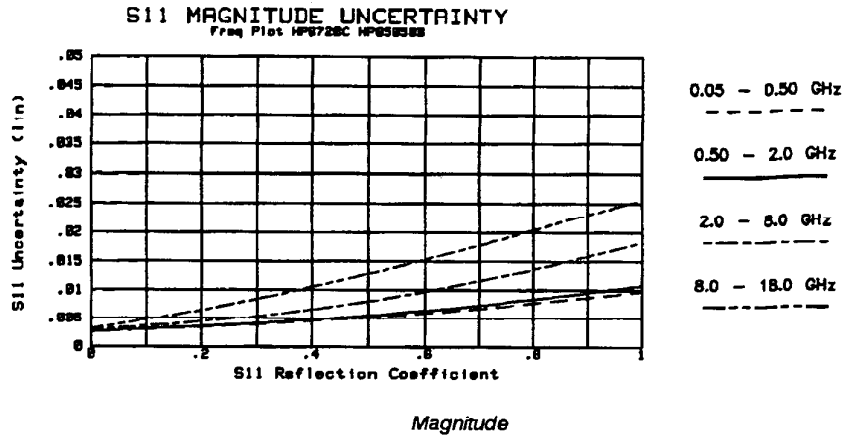
Transmission Measurements² Standard



1. Cable stability and system drift are not included.

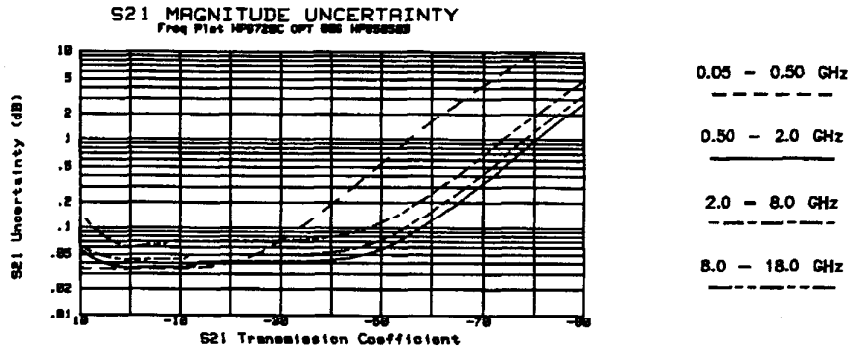
2. The graphs for transmission measurements assume a well-matched device ($S_{11} = S_{22} = 0$).

Reflection Measurements Standard

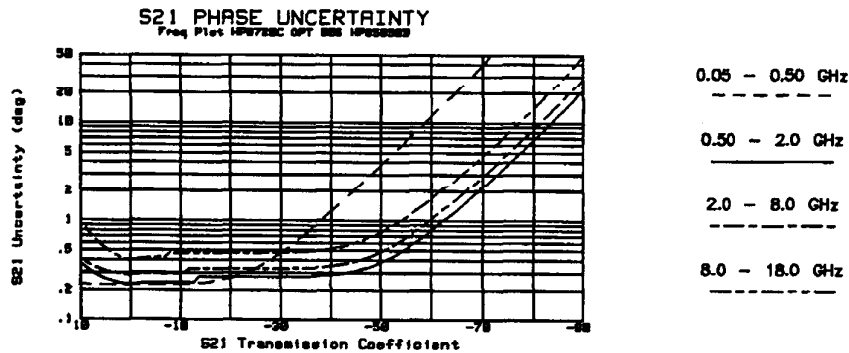


1. The graphs shown for reflection measurement uncertainty apply to a one-port device.

Transmission Measurements¹ Option 006



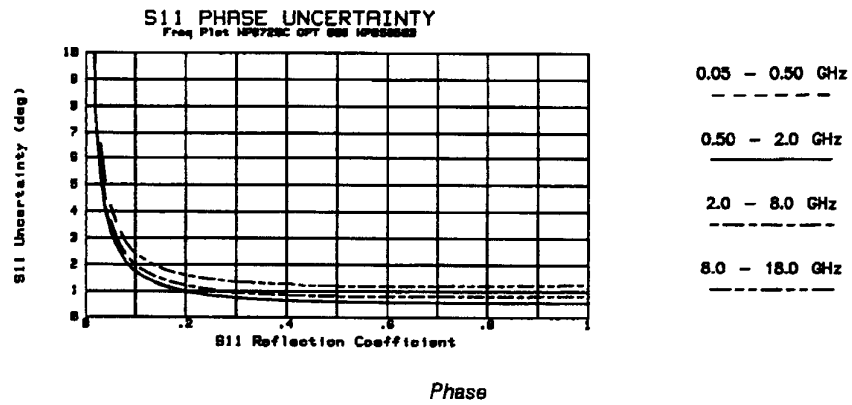
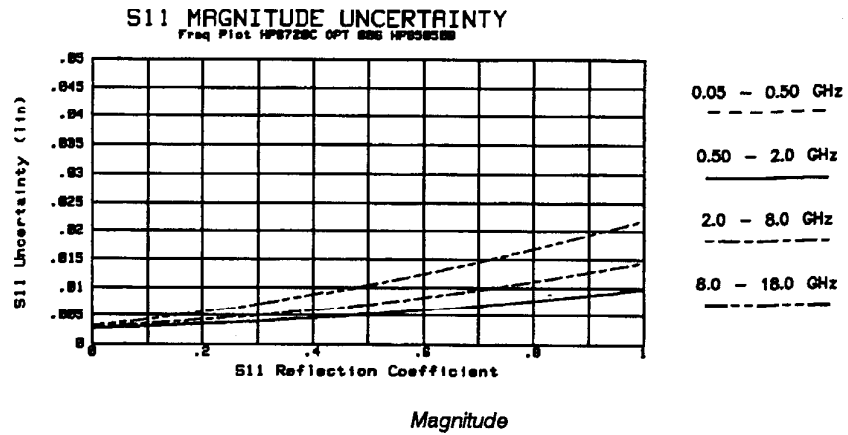
Magnitude



Phase

1. The graphs for transmission measurements assume a well-matched device ($S_{11} = S_{22} = 0$).

Reflection Measurements¹ Option 006



1. The graphs shown for reflection measurement uncertainty apply to a one-port device.

Measurement Port Specifications¹

The following specifications show the residual system performance (including switch repeatability) after accuracy enhancement using a full 2-port measurement calibration (including isolation) with an IF bandwidth of 10 Hz and the specified calibration kit. Environmental temperature is $23^{\circ} \pm 3^{\circ} \text{C}$.

Calibration Kit: HP 85050B (lowband and sliding loads)

Table 3-10 HP 85050B

	Frequency Range			
	.050 to 0.5 GHz	0.5 to 2 GHz	2 to 8 GHz	8 to 18 GHz ²
Directivity	52 dB	52 dB	52 dB	52 dB
Source Match	48 dB	45 dB	39 dB	36 dB
Load Match	51 dB	47 dB	40 dB	38 dB
Reflection Tracking	.006 dB	.010 dB	.034 dB	.056 dB
Transmission Tracking	.007 dB	.013 dB	.047 dB	.071 dB

1. Crosstalk after an isolation calibration, is no higher than the system noise floor and can be ignored.

2. HP 8719C 8 to 13.5 GHz

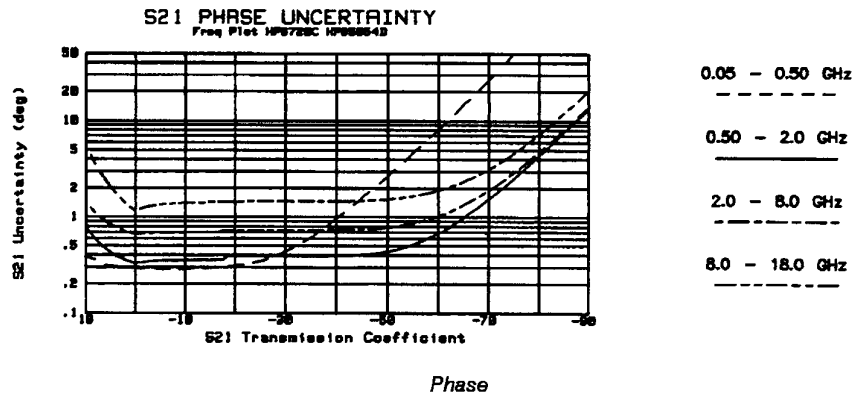
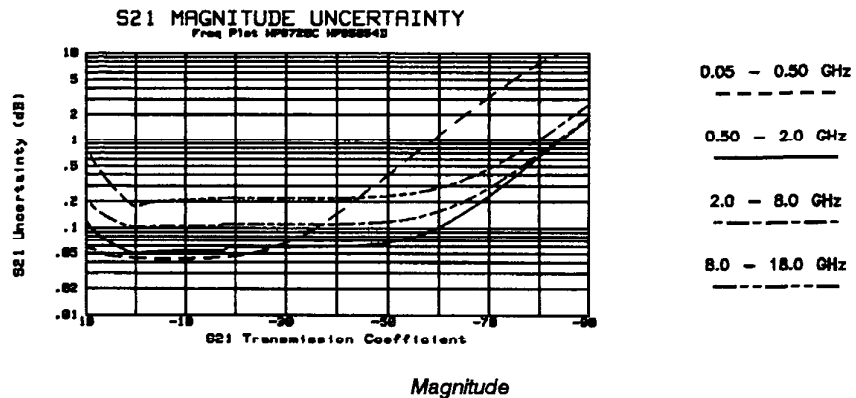
TYPE-N SYSTEM SPECIFICATIONS

DEVICES WITH TYPE-N CONNECTORS

Measurement Uncertainty: HP 85054D Calibration Kit

The following graphs show total worst case measurement uncertainty for the network analyzer after accuracy enhancement using a full 2-port measurement calibration (including isolation) with the HP 85054D type-N calibration kit, HP 85132D cable set, and an IF bandwidths of 10 Hz. This includes the residual systematic errors, as well as the system dynamic accuracy, type-N connector repeatability, noise, and switch repeatability.¹ The 85054-60031 and 85054-60032 special 7 mm to type-N adapter sets are used to adapt the 7 mm cable ports to type-N. Specific points on the graphs are verified by measuring the devices in the HP 85055A verification kit.

Transmission Measurements² Standard

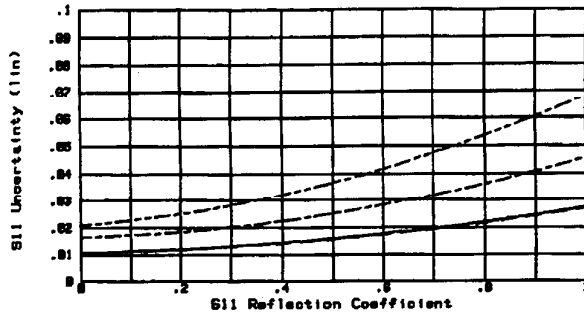


1. Cable stability and system drift are not included.
2. The graphs for transmission measurements assume a well-matched device ($S_{11} = S_{22} = 0$).

Reflection Measurements¹ Standard

S11 MAGNITUDE UNCERTAINTY

Freq Plot HP8720C HP85054D



0.05 - 0.50 GHz

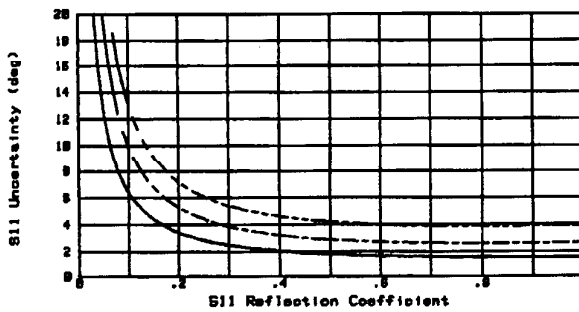
 0.50 - 2.0 GHz

 2.0 - 8.0 GHz
 -.-.-.-
 8.0 - 18.0 GHz
 -.-.-.-

Magnitude

S11 PHASE UNCERTAINTY

Freq Plot HP8720C HP85054D



0.05 - 0.50 GHz

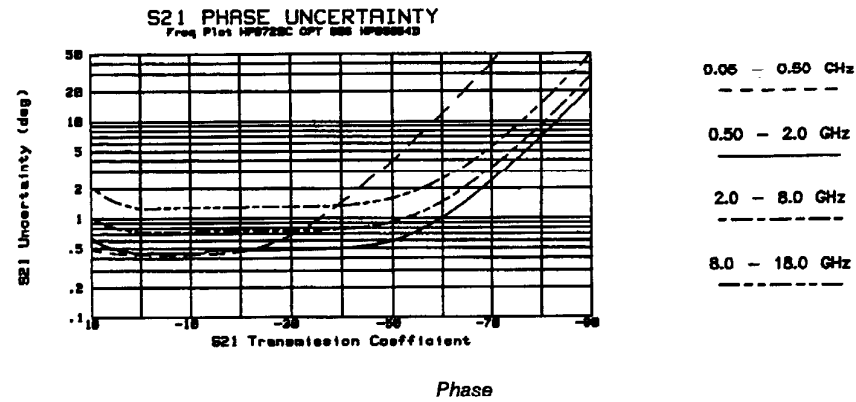
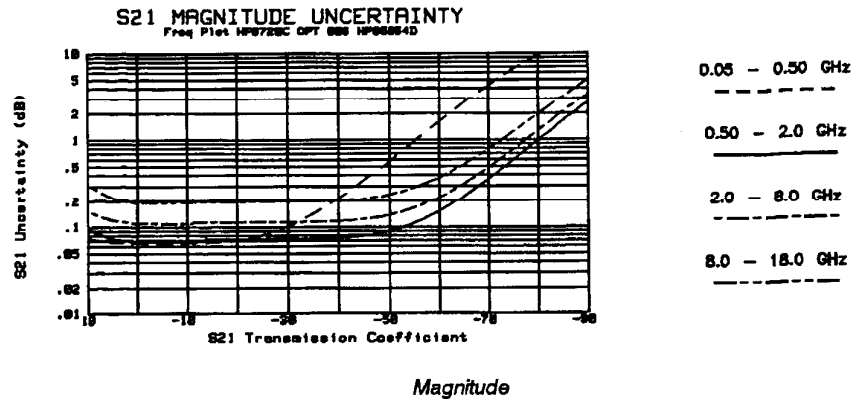
 0.50 - 2.0 GHz

 2.0 - 8.0 GHz
 -.-.-.-
 8.0 - 18.0 GHz
 -.-.-.-

Phase

1. The graphs shown for reflection measurement uncertainty apply to a one-port device.

Transmission Measurements¹ Option 006

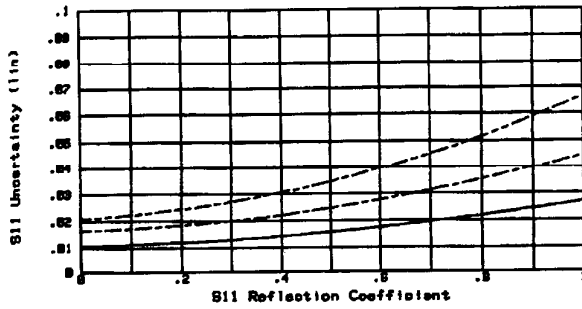


1. The graphs for transmission measurements assume a well-matched device ($S_{11} = S_{22} = 0$).

Reflection Measurements¹ Option 006

S11 MAGNITUDE UNCERTAINTY

Freq Plot HP8720C OPT 006 HP85984D



0.05 - 0.50 GHz

0.50 - 2.0 GHz

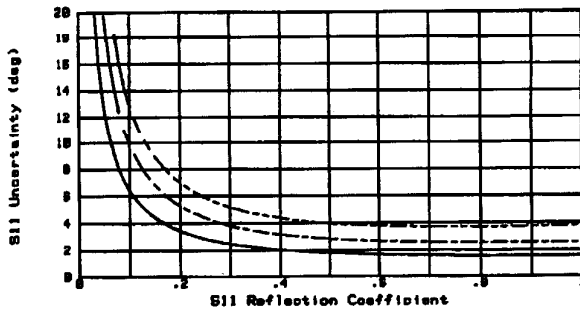
2.0 - 8.0 GHz

8.0 - 18.0 GHz

Magnitude

S11 PHASE UNCERTAINTY

Freq Plot HP8720C OPT 006 HP85984D



0.05 - 0.50 GHz

0.50 - 2.0 GHz

2.0 - 8.0 GHz

8.0 - 18.0 GHz

Phase

1. The graphs shown for reflection measurement uncertainty apply to a one-port device.

Measurement Port Specifications¹

The following specifications show residual system performance (including switch repeatability) after accuracy enhancement using a full 2-port measurement calibration (including isolation) with an HP 85054D type-N calibration kit, and an IF bandwidth of 10 Hz and the specified calibration kit. Environmental temperature is 23° ± 3°C.

Calibration Kit: HP 85054D (male and female broadband precision fixed load)

Table 3-11 HP 85054D

	Frequency Range			
	.050 to 0.5 GHz	0.5 to 2 GHz	2 to 8 GHz	8 to 18 GHz ²
Directivity	40 dB	40 dB	36 dB	34 dB
Source Match	38 dB	38 dB	32 dB	28 dB
Load Match	40 dB	39 dB	35 dB	33 dB
Reflection Tracking	.006 dB	.010 dB	.031 dB	.040 dB
Transmission Tracking	.015 dB	.021 dB	.077 dB	.144 dB

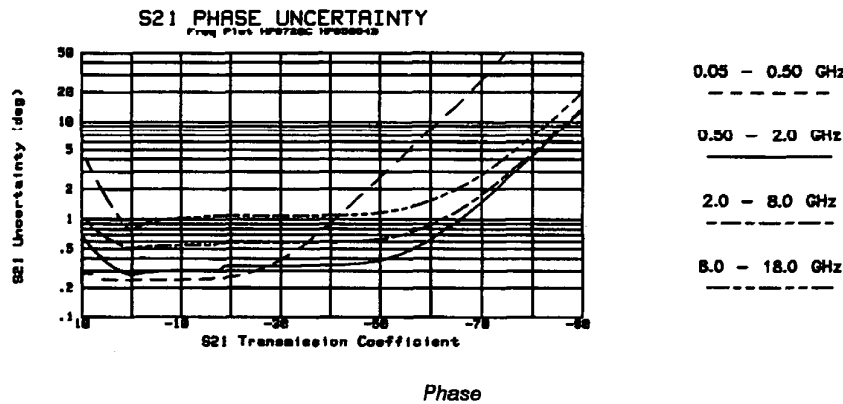
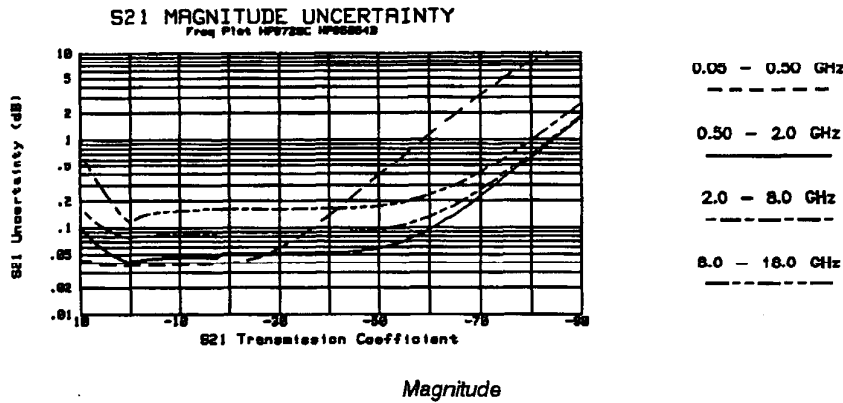
1. Crosstalk after an isolation calibration, is no higher than the system noise floor and can be ignored.

2. HP 8719C 8 to 13.5 GHz

Measurement Uncertainty: HP 85054B Calibration Kit

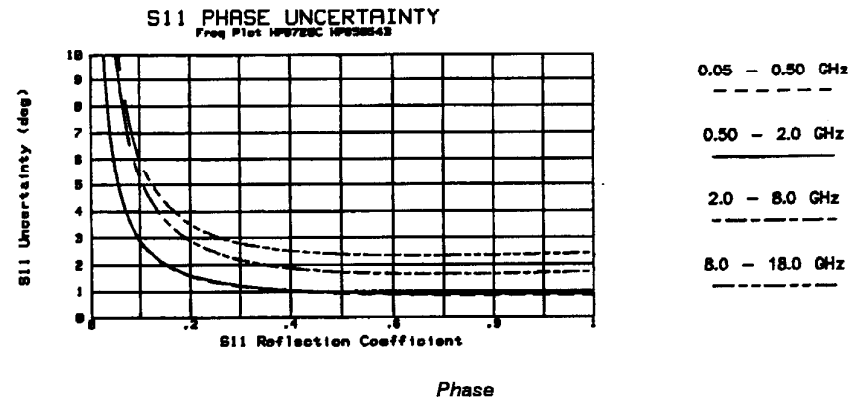
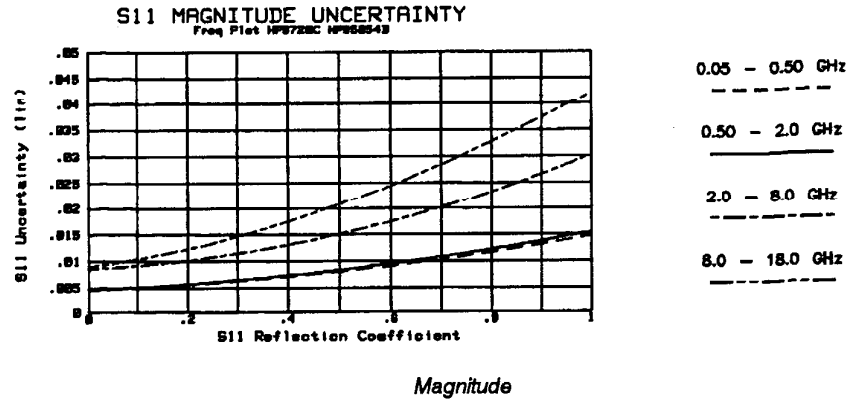
The following graphs show total worst case measurement uncertainty for the network analyzer after accuracy enhancement using a full 2-port measurement calibration (including isolation) with the HP 85054B type-N calibration kit, HP 85132D cable set, and an IF bandwidths of 10 Hz. This includes the residual systematic errors, as well as the system dynamic accuracy, type-N connector repeatability, noise, and switch repeatability.¹ The 85054-60031 and 85054-60032 special 7 mm to type-N adapter sets are used to adapt the 7 mm cable ports to type-N. Specific points on the graphs are verified by measuring the devices in the HP 85055A verification kit.

Transmission Measurements² Standard



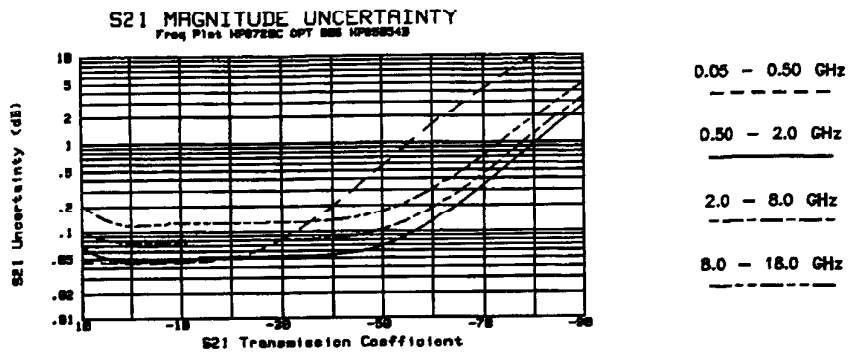
1. Cable stability and system drift are not included.
2. The graphs for transmission measurements assume a well-matched device ($S_{11} = S_{22} = 0$).

Reflection Measurements¹ Standard

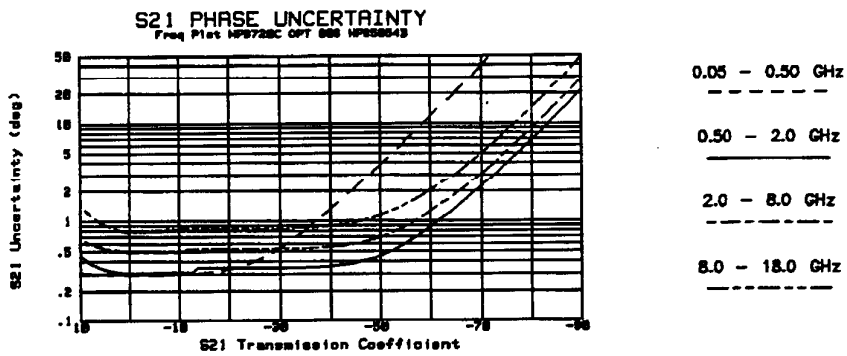


1. The graphs shown for reflection measurement uncertainty apply to a one-port device.

Transmission Measurements¹ Option 006



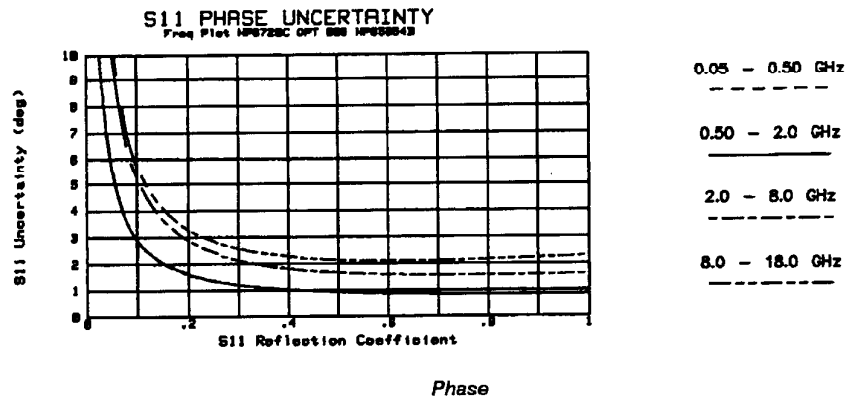
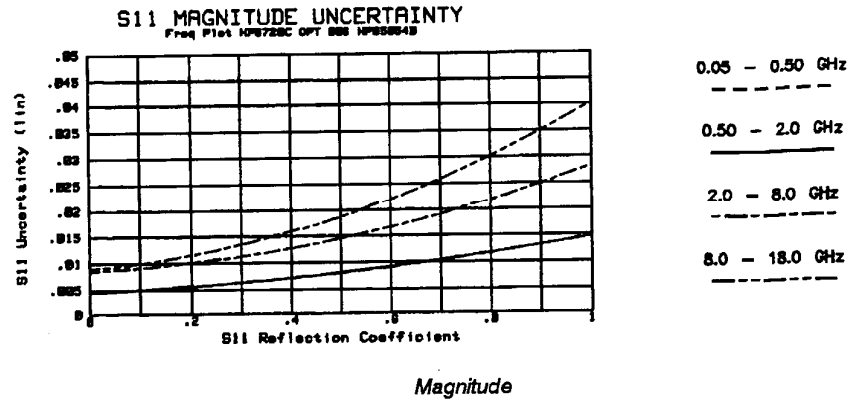
Magnitude



Phase

1. The graphs for transmission measurements assume a well-matched device ($S_{11} = S_{22} = 0$).

Reflection Measurements¹ Option 006



1. The graphs shown for reflection measurement uncertainty apply to a one-port device.

Measurement Port Specifications¹

The following specifications show residual system performance (including switch repeatability) after accuracy enhancement using a full 2-port measurement calibration (including isolation) with an HP 85054D type-N calibration kit, and an IF bandwidth of 10 Hz and the specified calibration kit. Environmental temperature is $23^{\circ} \pm 3^{\circ}\text{C}$.

Calibration Kit: HP 85054B (male and female lowband and sliding loads)

Table 3-12 HP 85054B

	Frequency Range			
	.050 to 0.5 GHz	0.5 to 2 GHz	2 to 8 GHz	8 to 18 GHz ²
Directivity	48 dB	48 dB	42 dB	42 dB
Source Match	45 dB	43 dB	35 dB	31 dB
Load Match	48 dB	45 dB	38 dB	37 dB
Reflection Tracking	.005 dB	.010 dB	.030 dB	.030 dB
Transmission Tracking	.008 dB	.014 dB	.058 dB	.100 dB

1. Crosstalk after an isolation calibration, is no higher than the system noise floor and can be ignored.

2. HP 8719C 8 to 13.5 GHz