4.3 STANDARD PERFORMANCE VERIFICATION PROCEDURE SUMMARY

This table provides an overview of all steps in the Standard Performance Verification Procedure. It is intended to be used as a reference for frequent users. For details on how to perform each Standard Performance Verification Procedure step, refer to section 4.2.

SCOPE PART

STEP	SIGNAL SOURCE	SIGNAL AMPL/FREQ	SCOPEMETER INPUTS	REQUIRED
1	-	-	-	No interrupted lines
2	-	-	-	No interrupted lines
3	-	-	-	Traces on mid screen
4	Fluke 5100B	212.1 mV(RMS)/1 kH (sine)	A	Amplitude: 5.88...6.12 div.
		300 mV/DC	A	Dist. mid screen and trace: 2.94...3.06 div.
5	Fluke 5100B	300 mV/DC	B	Dist. mid screen and trace: 2.94...3.06 div.
		212.1 mV(RMS)/1 kH (sine)	B	Amplitude: 5.88...6.12 div.
6	Fluke 5100B	3V/DC	B	Dist. mid screen and trace: 2.94...3.06 div.
		6V(pp)/1 kHz (sine)	B	Amplitude: 5.88...6.12 div.
7	Fluke 5100B	30V/DC	B	Dist. mid screen and trace: 2.94...3.06 div.
		60V(pp)/1 kHz (sine)	B	Amplitude: 5.88...6.12 div.
8	Tek PG 506	0.5V/1 MHz (fast rise/square wave)	B (50Ω term)	Rise time: < 0.7 div.
9	Tek PG 506	0.5V/1 MHz (fast rise/square wave)	A (50Ω term)	Rise time: < 0.7 div.
10	Tek SG 503	120 mV(pp)/50 kHz (sine)	A (50Ω term)	Adjust amplitude to 6 div.
11	Tek SG 503	120 mV(pp)/50 MHz (sine)	A (50Ω term)	Amplitude: > 4.2 div.
12	Tek SG 503	120 mV(pp)/50 kHz (sine)	B (50Ω term)	Adjust amplitude to 6 div.
13	Tek SG 503	120 mV(pp)/50 MHz (sine)	B (50Ω term)	Amplitude: > 4.2 div.
14	Tek SG 503	≈200 mV(pp)/100 MHz (sine)	B (50Ω term)	Well triggered signal at 4 div.
		≈100 mV(pp)/60 MHz (sine)		Well triggered signal at 2 div.
15	Tek SG 503	300 mV(pp)/10 MHz (sine)	B (50Ω term)	Triggered on falling edge at 1.5 div.
16	Tek SG 503	300 mV(pp)/10 MHz (sine)	A (50Ω term)	Triggered on falling edge at 1.5 div.
17	Tek SG 503	≈200 mV(pp)/100 MHz (sine)	A (50Ω term)	Well triggered signal at 4 div.
		≈100 mV(pp)/60 MHz (sine)		Well triggered signal at 2 div.
18	Tek TG 501	1V(pp)/1 µs (marker)	A (50Ω term)	Markers on lines (tolerance ± 1 pixel = ± 0.04 div.)
19	PM5134	1.8V/1 kHz (sine) (pp) on 1.4V/DC	A & EXT	Well triggered signal
20	PM5134	800 mV(pp)/2 kHz (sine)	A & B	Figure with angle 45° displayed on screen; gap < 10 pixels.
21	-	-	-	Trace jumps < 0.1 div. when switching
22	-	-	-	between setting 21 and 22.

METER PART

STEP	SIGNAL SOURCE	SIGNAL AMPL/FREQ	SCOPEMETER INPUTS	REQUIRED
1	Fluke 5100B	300 mV/DC	A	298.0...302.0 mV
		300 mV(RMS)/1 kHz		292.5...307.5 mV
		3V/DC		2.980...3.020V
		3V(RMS)/1 kHz		2.925...3.075V
		30V/DC		29.80...30.20V
		30V(RMS)/1 kHz		29.25...30.75V
2	Fluke 5100B	300 mV/DC	banana	298.2...301.8 mV
		3V/DC		2.982...3.018V
3	Fluke 5100B	100Ω	banana	99.00...101.0Ω
		10 MΩ		9.900...10.10 MΩ
4	Fluke 5100B	1 kΩ	banana	0.420...0.580V
5	Tek TG 501	1V(pp)/1 ms (marker)	A (50W term)	Stable oscilloscope picture Frequency displayed: 993...1007 Hz.