

Test Procedure for the NCP1337 Adapter Evaluation Board

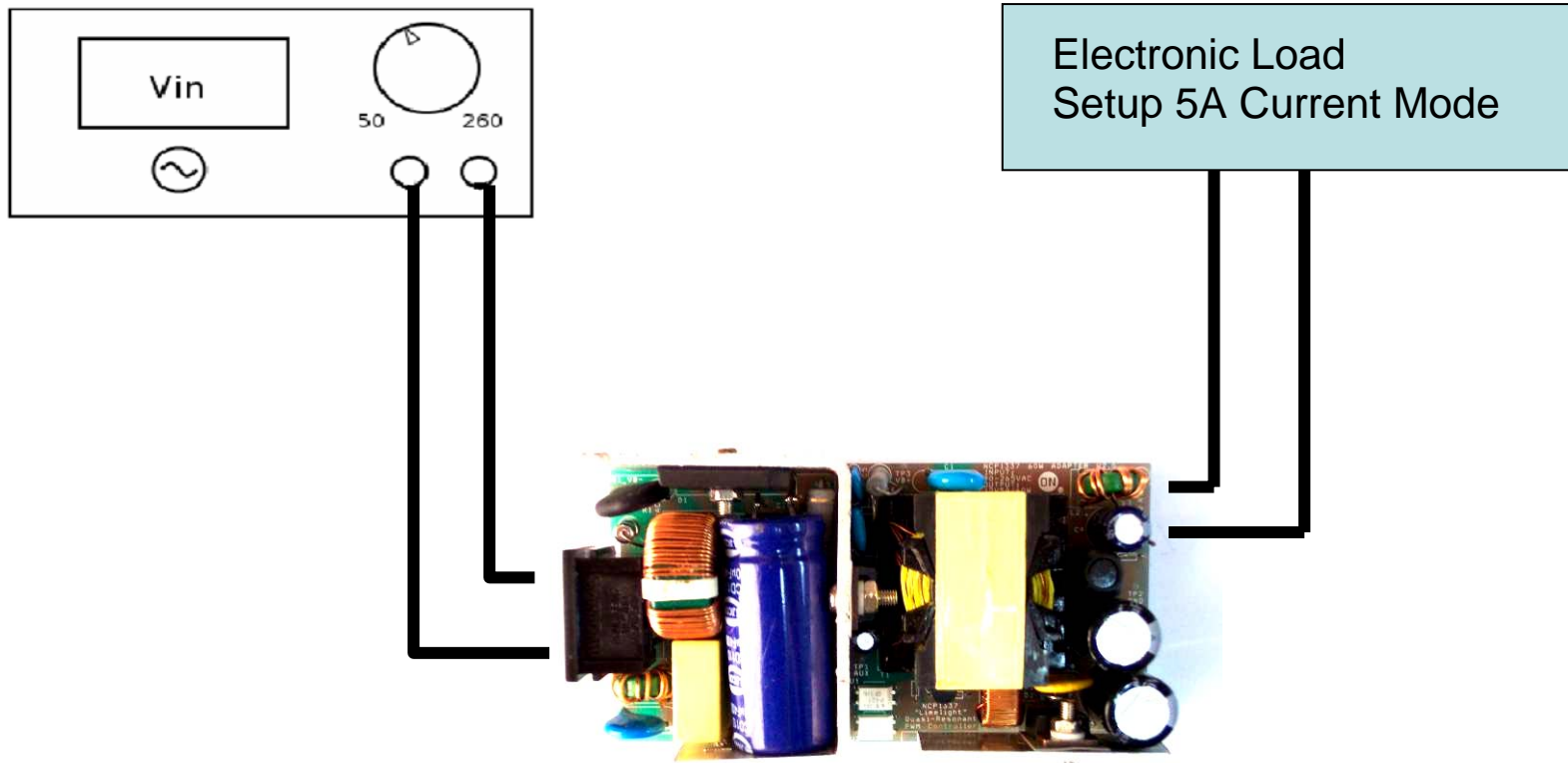


Figure 1 - Test Setup



Table of Required Equipment

AC Power Supply, 85-265Vac 1A
YOKOGAWA Power Meter WT210
Multimeter
Electronic Load

Test Procedure:

1. Connect the test setup as showed above in Figure 1.
2. Apply an input voltage, $85V_{ac} < V_{in} < 265V_{ac}$, 50Hz or 60Hz
3. Measure V_{out} and Efficiency to compare with the table of desired results.

Desired Results

	Measurements	Conditions	Results	Comments
1	Standby input power at high line	$V_{in} = 230 V_{ac}$ $I_{out} = 0A$	$P_{in} < 0.3W$	Output no load
2	Efficiency and V_{out} at high line and full load	$V_{in} = 230 V_{ac}$ $I_{out} = 5A$	Efficiency $> 88\%$ $V_{out} = 12V \pm 5\%$	Efficiency = $(P_{out}/P_{in})*100$
3	Efficiency and V_{out} at low line and full load	$V_{in} = 100 V_{ac}$ $I_{out} = 5A$	Efficiency $> 84\%$ $V_{out} = 12V \pm 5\%$	Efficiency = $(P_{out}/P_{in})*100$
4	Brown out: Turn off level	$I_{out} = 5A$	$V_{in} = 65-75 V_{ac}$	
5	Brown out: Turn on level	$I_{out} = 5A$	$V_{in} = 75-85 V_{ac}$	
6	Overpower Protection at high line	$V_{in} = 230 V_{ac}$	$I_{out} < 7A_{max}$	Power come into auto restart mode
7	Output over voltage protection at high line	$V_{in} = 230 V_{ac}$	Power latch off	Short circuit of opto-coupler U1 pin1 to Pin2