

---

---

# **GR8762A Demo Board Test Report**

---

---

Product No.      GR8762A

---

Test by      David

---

Check by      Jason

Date      2011-04-15

FAE      Department

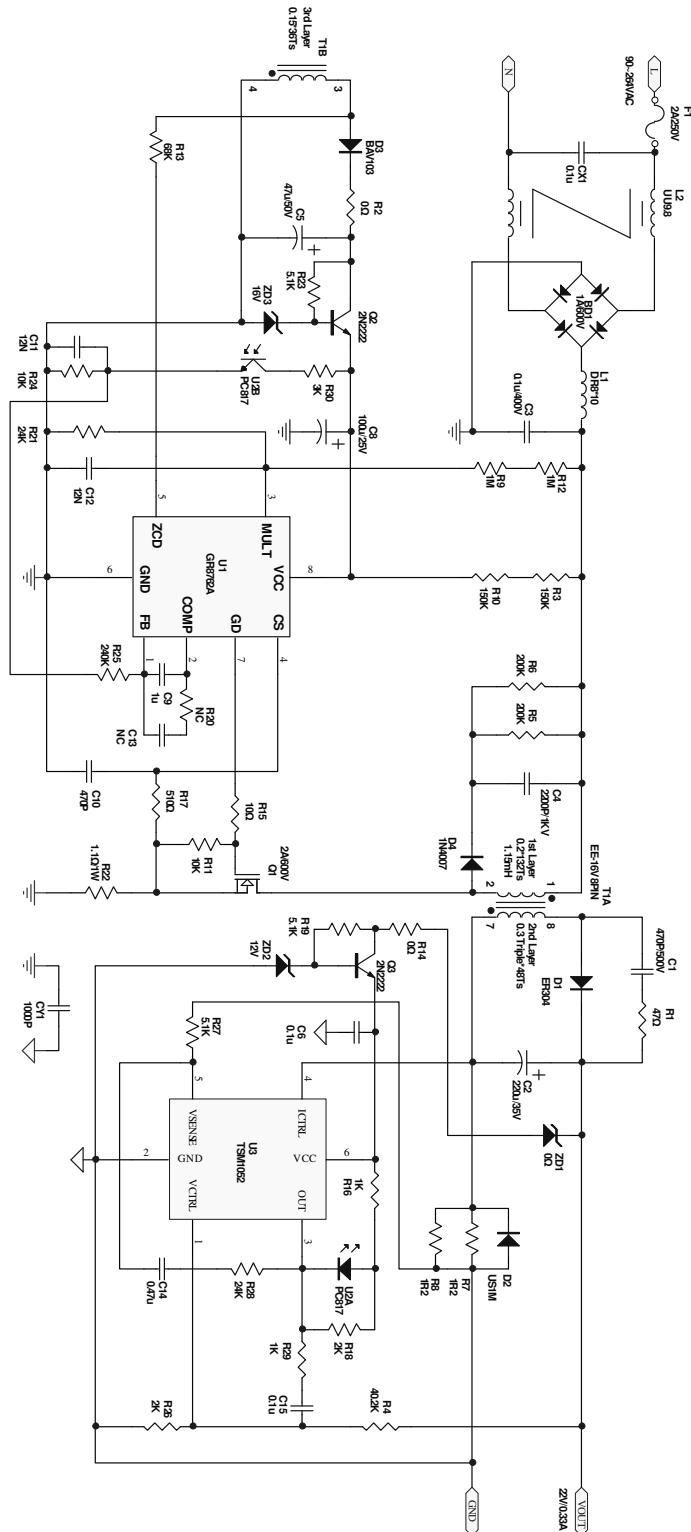
## Contents

<b>Reversion Record .....</b>	<b>3</b>
<b>System Circuitry .....</b>	<b>4</b>
<b>Test Facility .....</b>	<b>5</b>
<b>Test Note .....</b>	<b>5</b>
<b>Basic Specification of system .....</b>	<b>5</b>
<b>Electrical Table.....</b>	<b>6</b>
1. <b>Efficiency .....</b>	<b>6</b>
2. <b>PF .....</b>	<b>7</b>
3. <b>Vin &amp; Iin .....</b>	<b>8</b>
4. <b>THD.....</b>	<b>10</b>
5. <b>Output Current.....</b>	<b>11</b>
6. <b>MUL, CS, ZCD, Vcc .....</b>	<b>12</b>
7. <b>Startup .....</b>	<b>14</b>
8. <b>Ripple.....</b>	<b>17</b>

## Reversion Record

<i>Version</i>	<i>Date</i>	<i>Description</i>
1.0	2011.04.15	GR8762A Single stage for LED drive

# System Circuitry



## Test Facility

- Four Channel Digital Real-Time Oscilloscope (LeCroy WJ324);
- Dual Display Multimeter (Fluke189);
- System Power Supply (Chroma, 61502);
- Laboratory DC Power Supply (GW, GPC-3060D) ;
- Electronic load (Chroma,63108);
- Power meter (Chroma,66201).

## Test Note

- 1.Package: SOP-8.
- 2.Standby power is tested after power input stable.
- 3.Input power (when output is shorted) is tested in 5 mins and take down the max.

## Basic Specification of system

Parameter	Specification
<b>Input Voltage</b>	90Vac~264Vac
<b>Input Frequency</b>	50Hz~60Hz
<b>Output Voltage and Current</b>	21V/0.33A
<b>Output Power</b>	7.0W

## Electrical Table

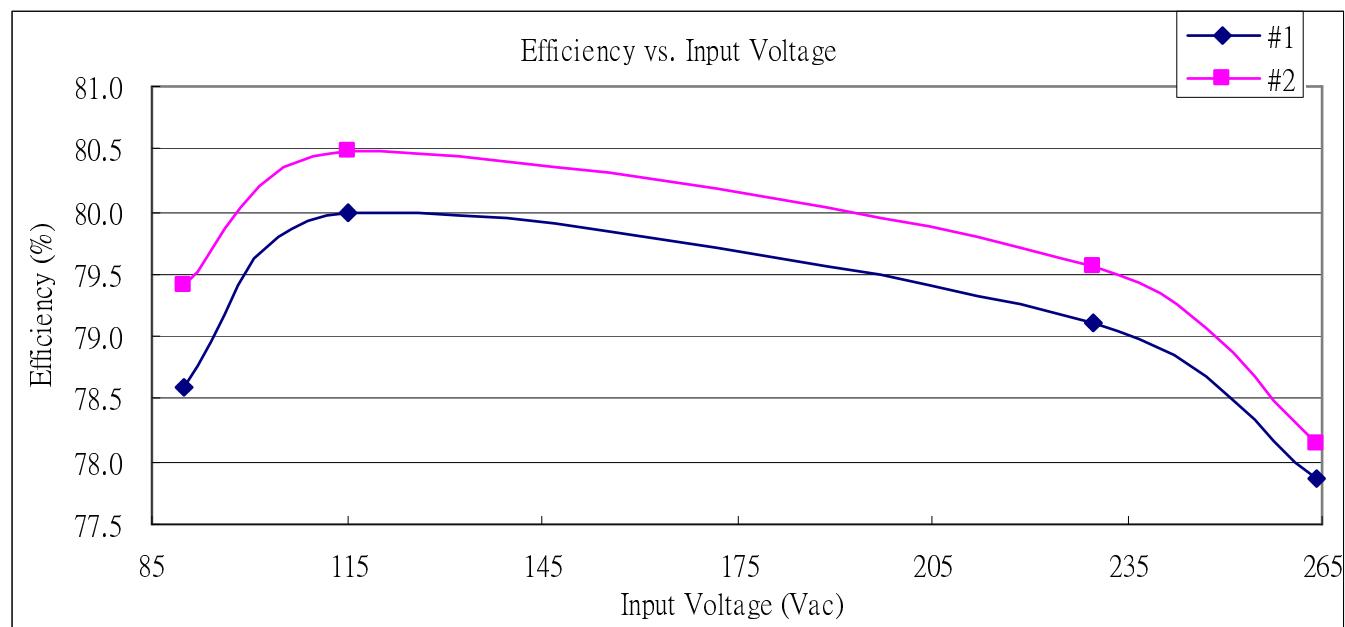
### 1. Efficiency

**Test Condition:**

1. Input voltage= 115V, 230V
2. Load= Full Load

**Test data and results are as follows:**

	115Vac/60Hz	230Vac/50Hz
#1	79.99%	79.10%
#2	80.48%	79.57%



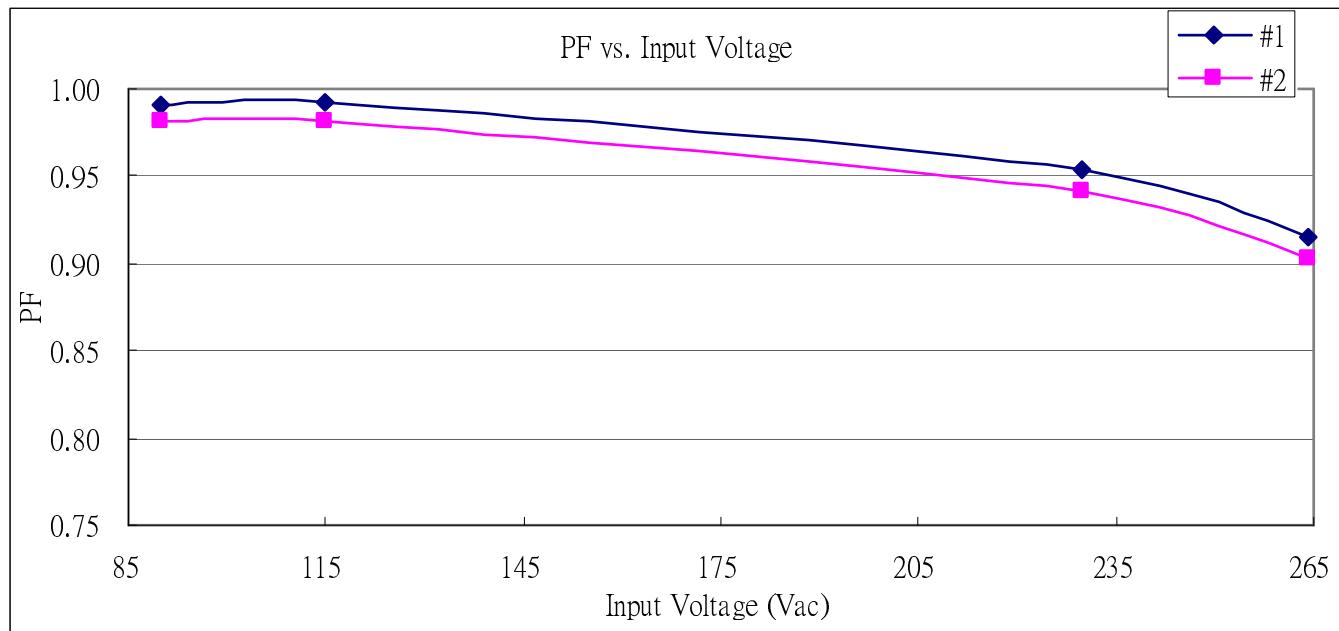
## 2. Power Factor

### Test Condition:

1. Input voltage= 90V, 115V, 230V, 264V
2. Load= Full Load

Test data and results are as follows:

	90Vac/60Hz	115Vac/60Hz	230Vac/50Hz	264Vac/50Hz
#1	0.991	0.993	0.953	0.915
#2	0.981	0.981	0.941	0.903

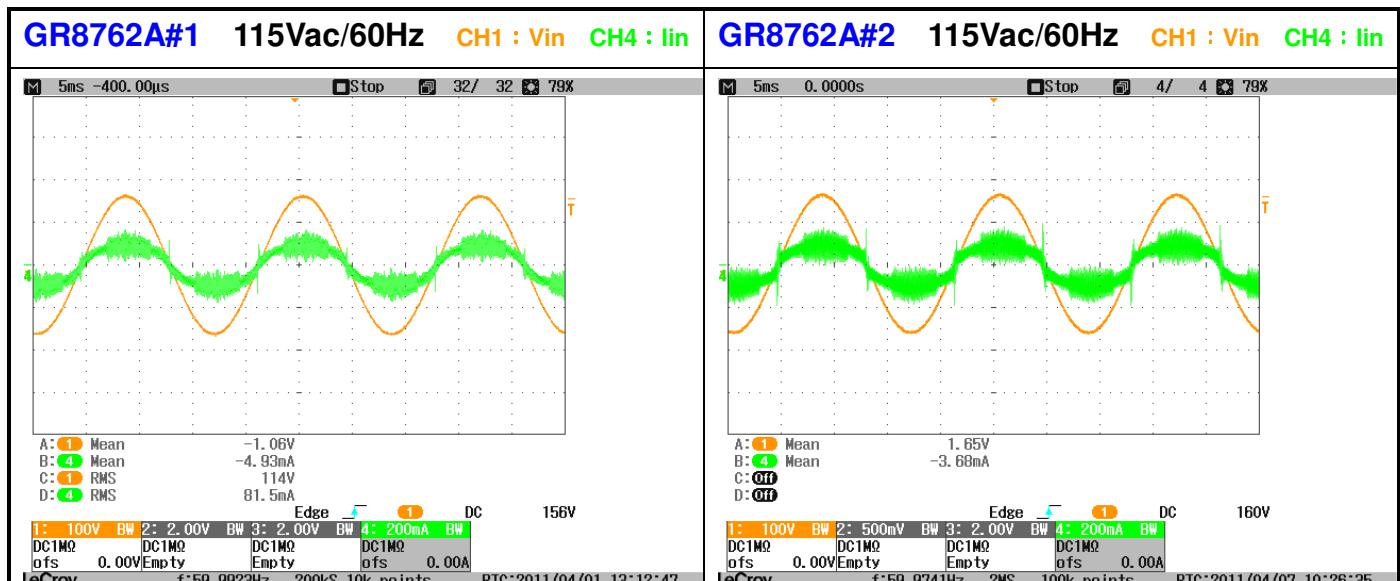
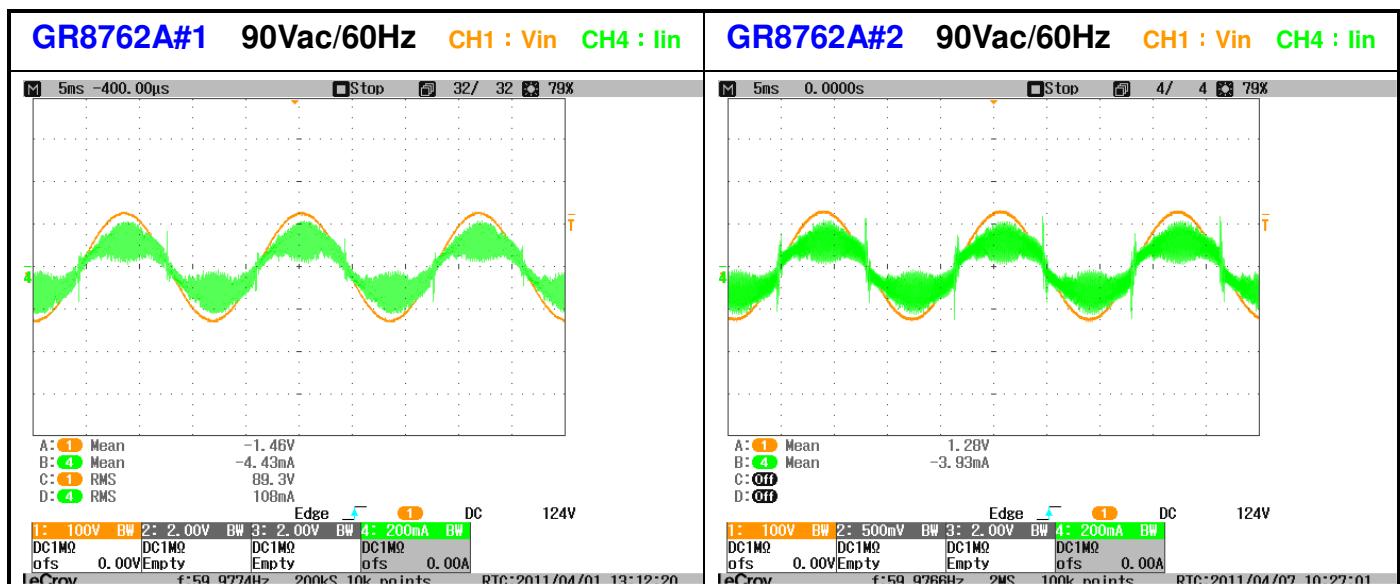


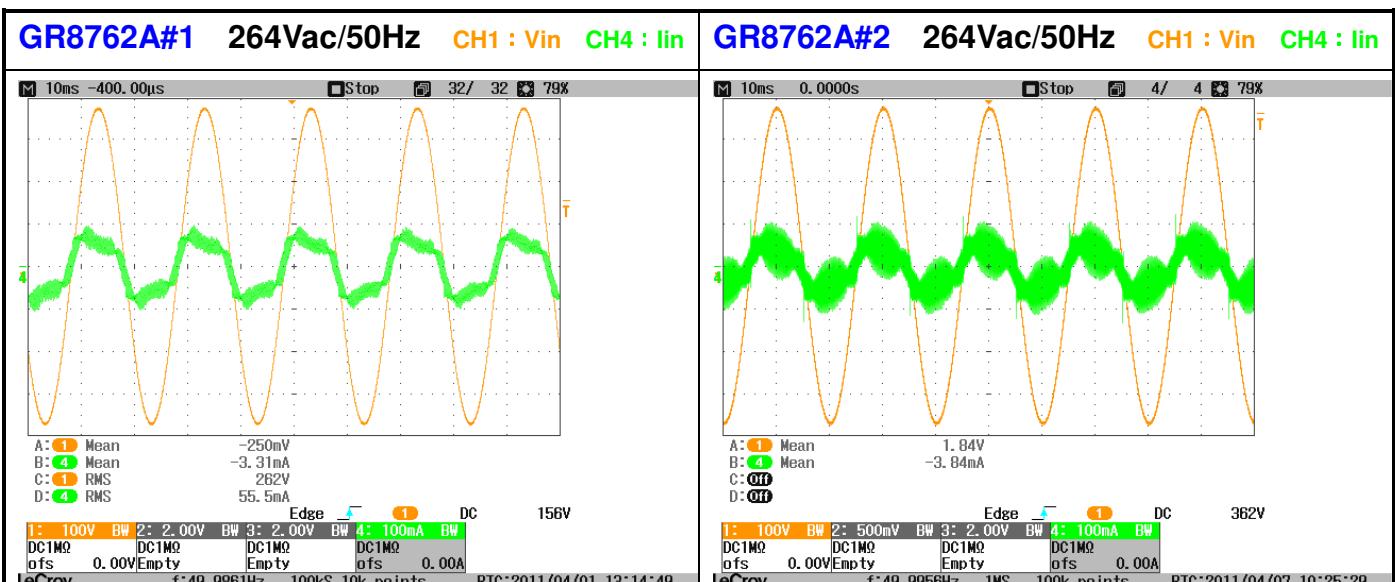
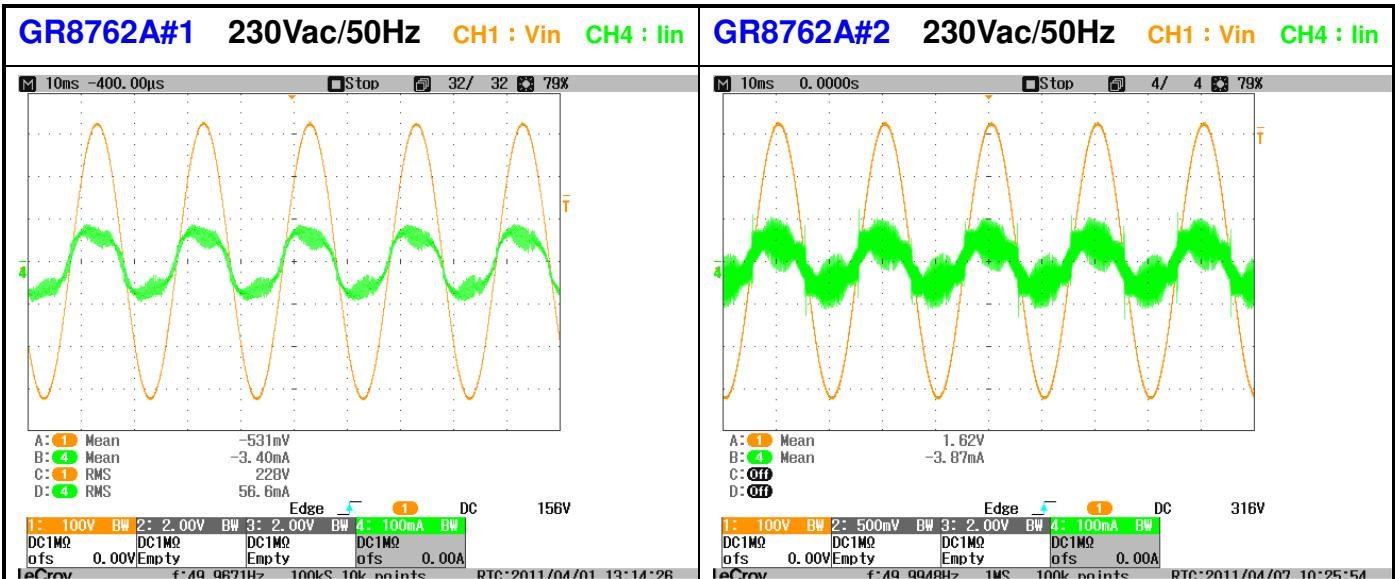
### 3. Vin & Iin

#### Test Condition:

1. Input voltage= 90V, 115V, 230V, 264V
2. Load= Full Load

Test data and results are as follows:





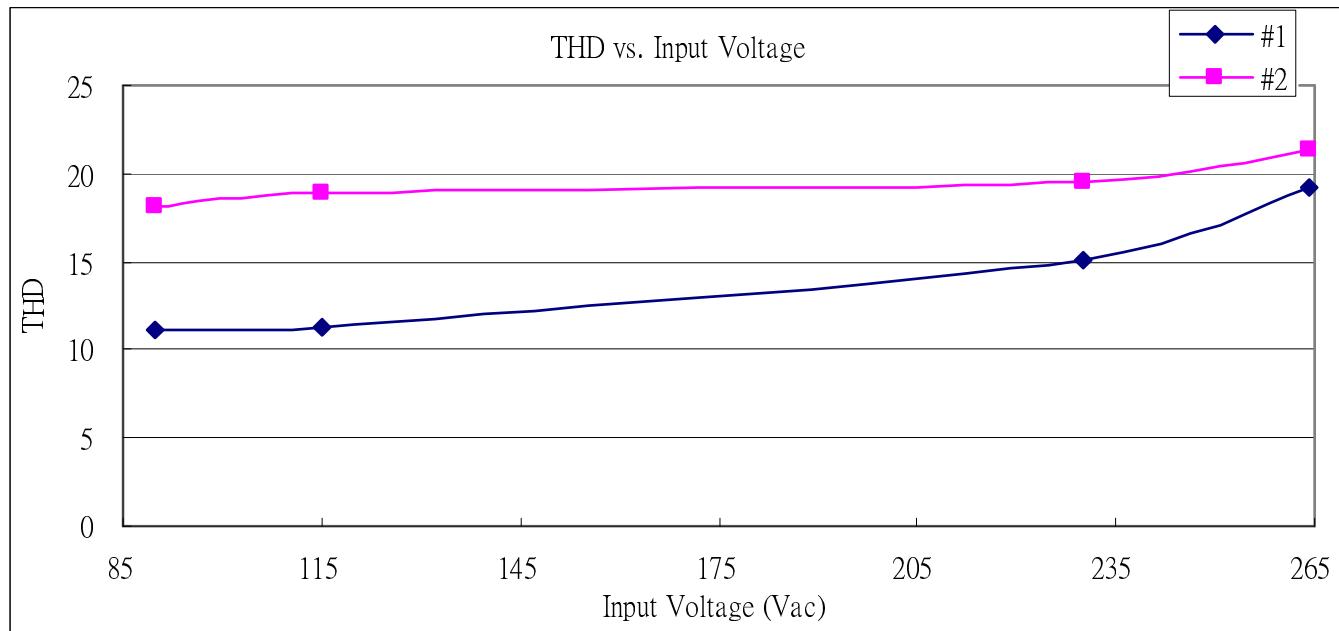
## 4. T.H.D.

### Test Condition:

1. Input voltage= 90V, 115V, 230V, 264V
2. Load= Full Load

Test data and results are as follows:

	90Vac/60Hz	115Vac/60Hz	230Vac/50Hz	264Vac/50Hz
#1	11.07	11.34	15.09	19.14
#2	18.13	18.95	19.44	21.41



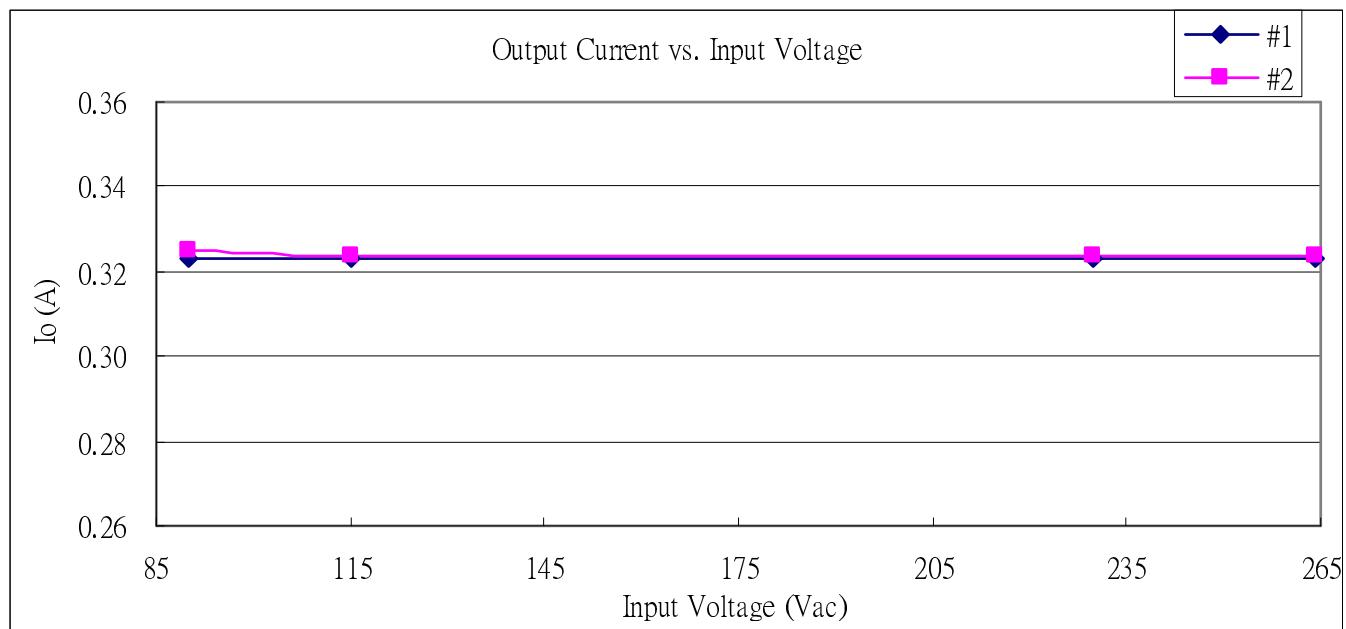
## 5. Output Current

### Test Condition:

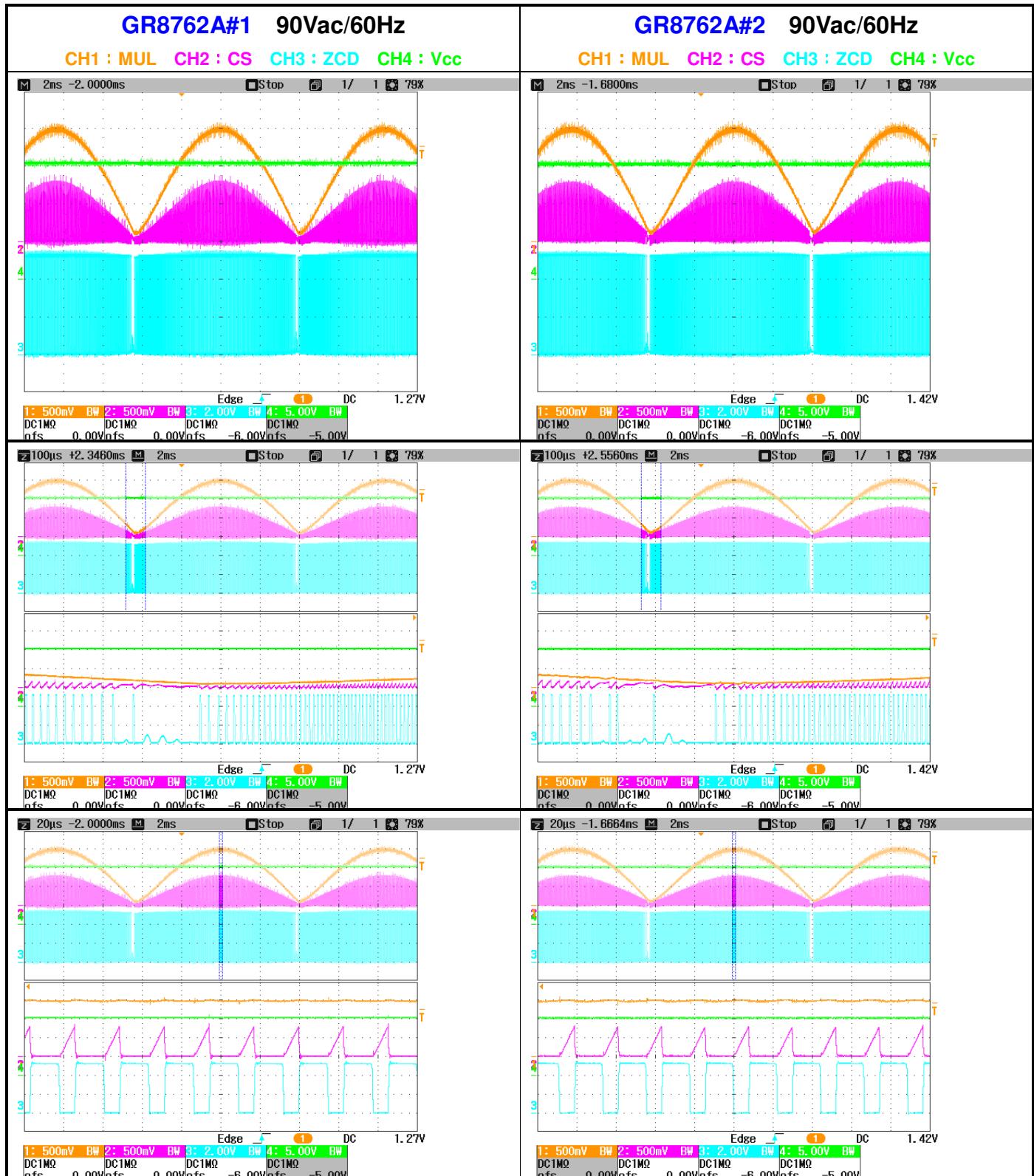
1. Input voltage= 90V, 115V, 230V, 264V
2. Load= Full Load

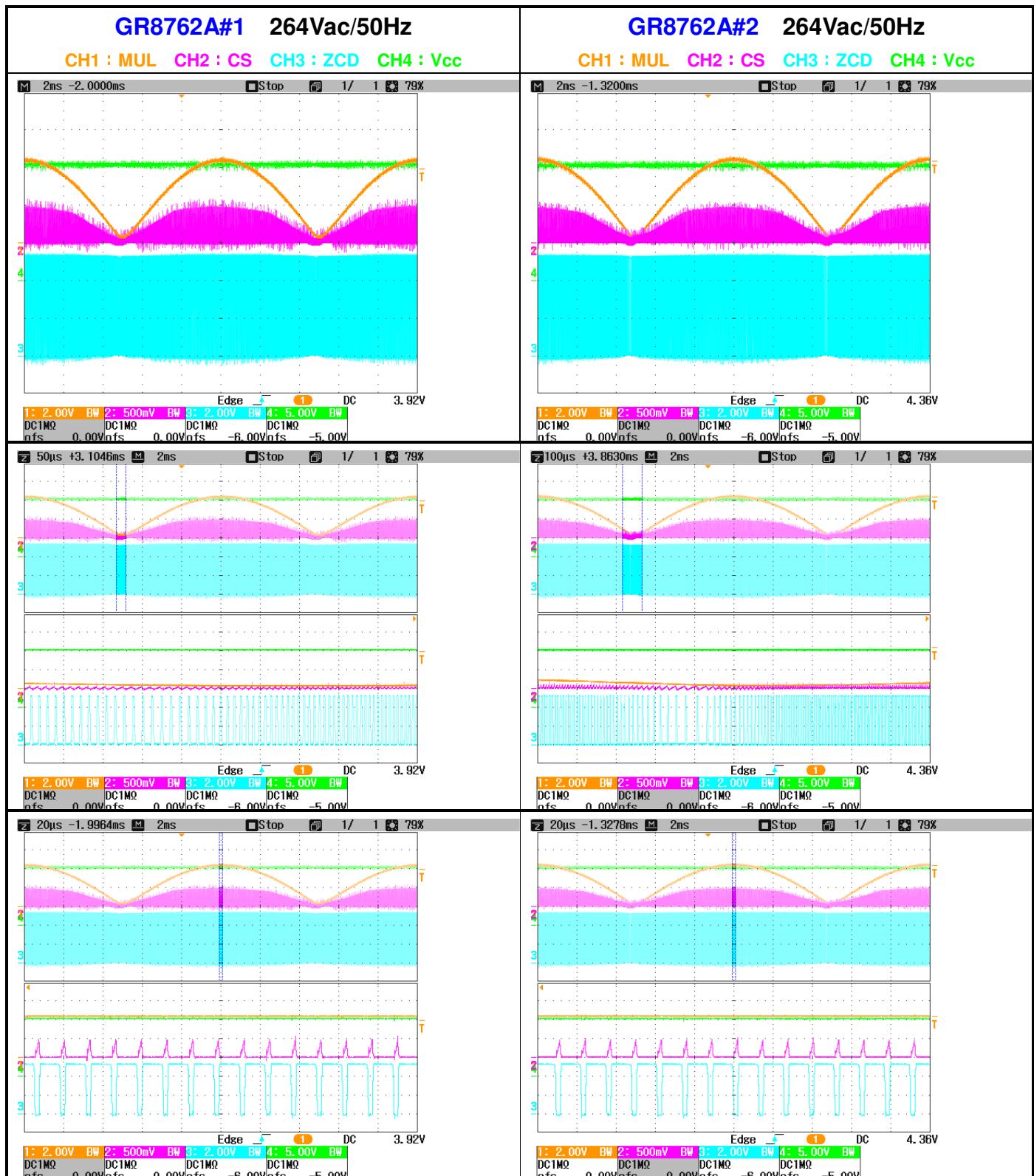
Test data and results are as follows:

	90Vac/60Hz	115Vac/60Hz	230Vac/50Hz	264Vac/50Hz
#1	0.323 A	0.323 A	0.323 A	0.323 A
#2	0.325 A	0.324 A	0.324 A	0.324 A

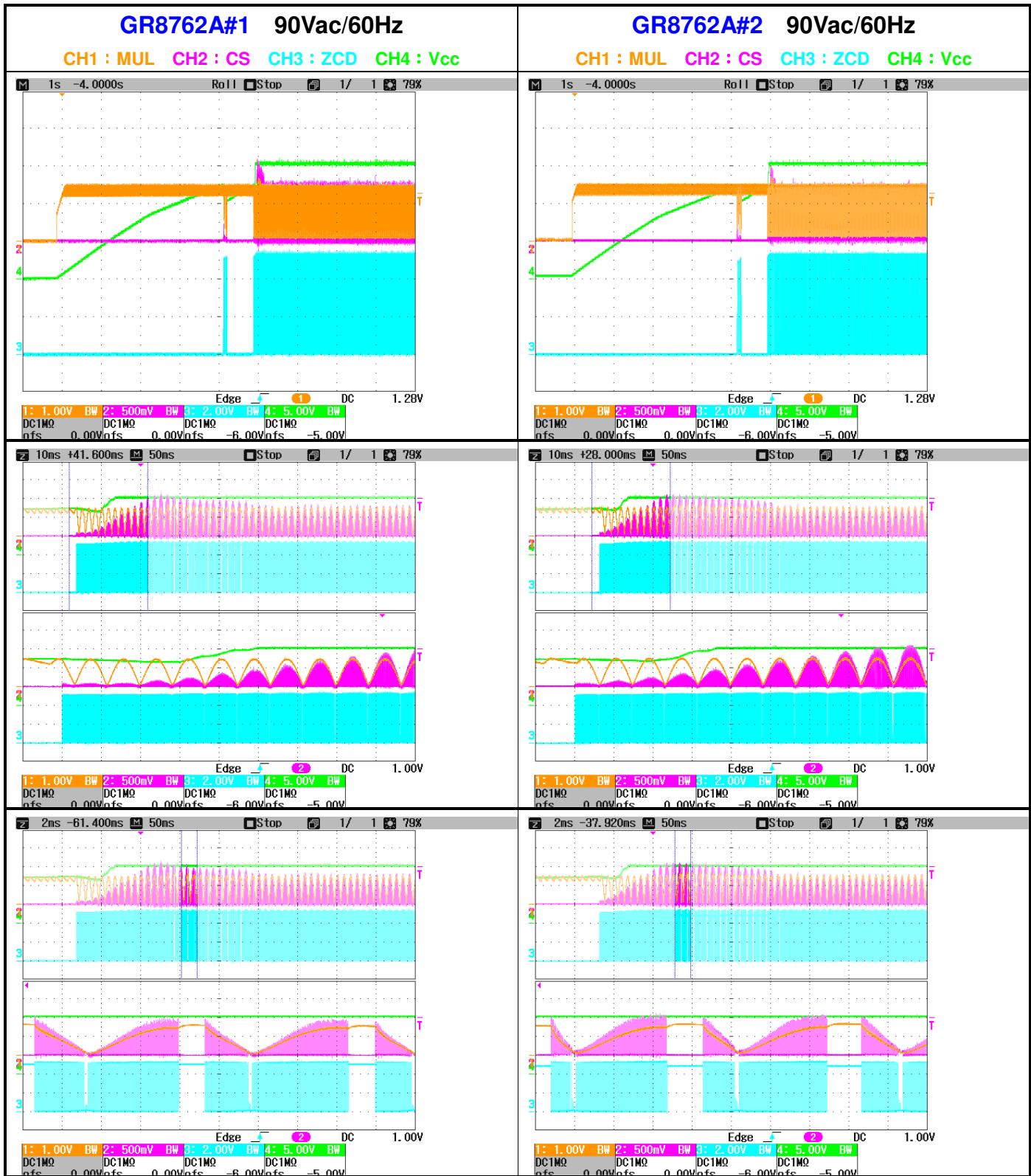


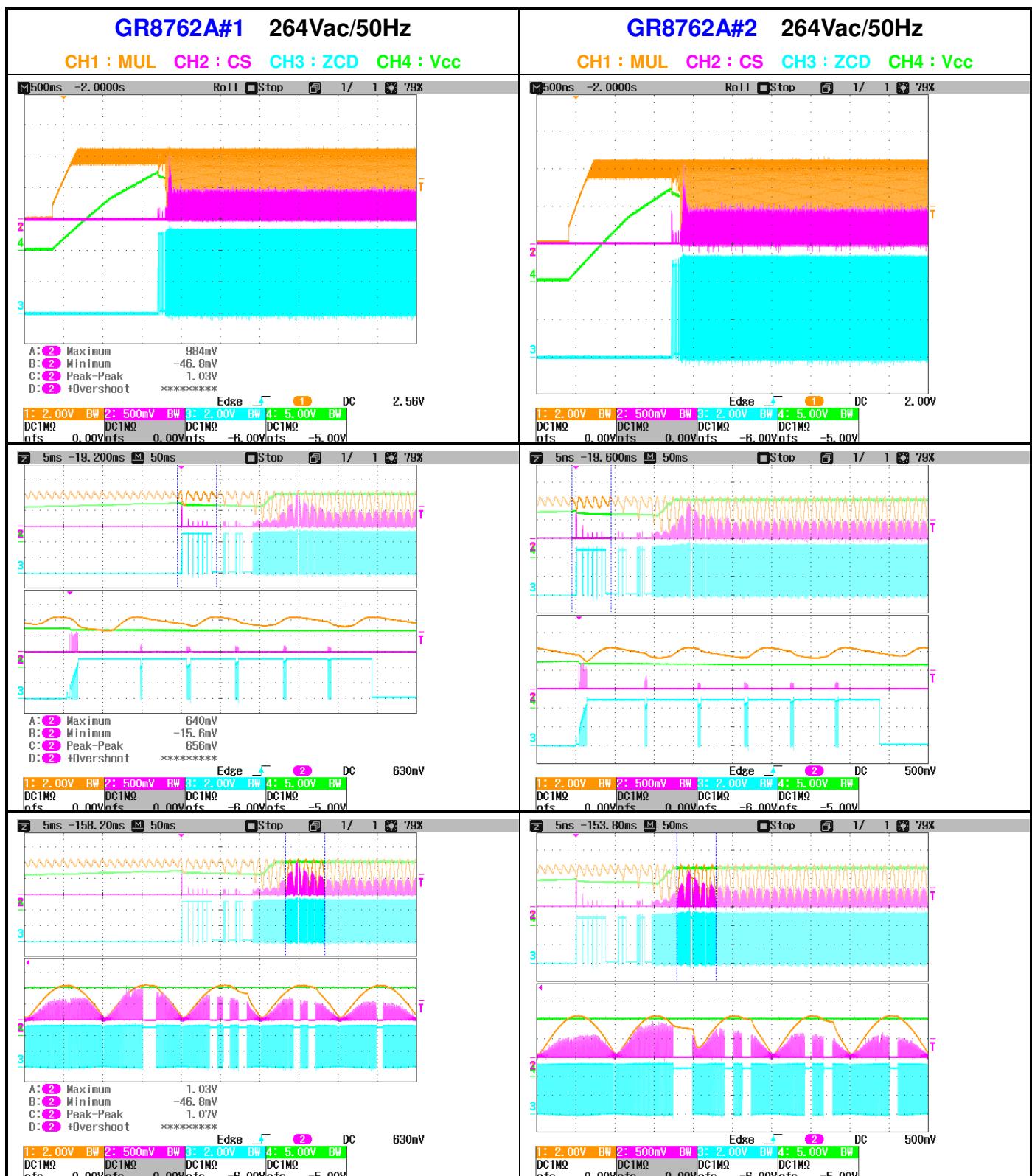
## 6. MUL, CS, ZCD, Vcc

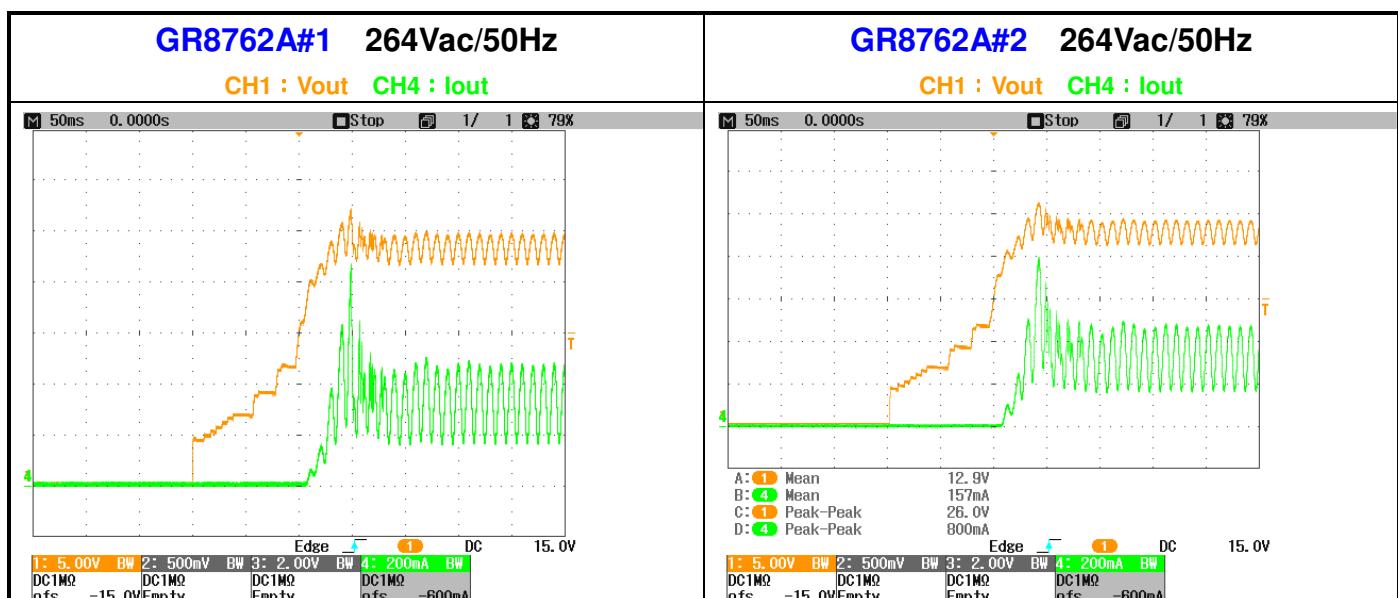
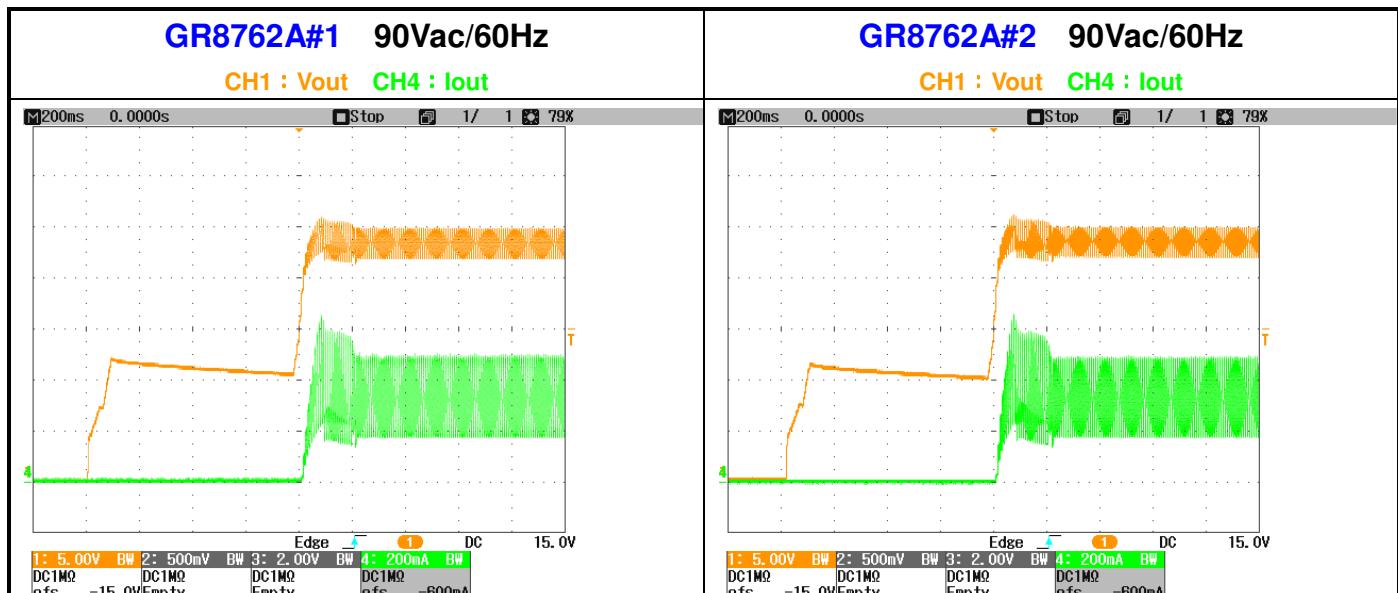




## 7. Startup







## 8. Ripple

### Test Condition:

1. Input voltage= 90V, 115V, 230V, 264V
2. Load= Full Load

Test data and results are as follows:

		90Vac/60Hz	115Vac/60Hz	230Vac/50Hz	264Vac/50Hz
Vo (p-p)	#1	2.96 V	2.96 V	2.96 V	2.96 V
	#2	2.81 V	2.96 V	3.12 V	2.81 V
Io (p-p)	#1	350 mA	350 mA	350 mA	325 Ma
	#2	337 mA	325 mA	343 mA	325 Ma

