

## Energy Related Products

### Standby and Off Mode Energy Efficiency Test Report

Regulatory Reference: COMMISSION REGULATION (EC) No 1275/2008 of 17 December 2008, implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for standby and off mode electric power consumption of electrical and electronic household and office equipment.

|                                     |                                                                                               |
|-------------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Manufacturer Name:</b>           | NEC Display Solutions,Ltd.                                                                    |
| <b>Manufacturer Address:</b>        | 4-28, Mita 1-chome, Minato-ku, Tokyo, Japan                                                   |
| <b>Report no.:</b>                  | NEC_C551_2017-8-21                                                                            |
| <b>Product:</b>                     | LCD Monitor                                                                                   |
| <b>Trademark:</b>                   | NEC                                                                                           |
| <b>Model no.</b>                    | C551                                                                                          |
| <b>Factory Name:</b>                | TPV Electronics (Fujian) Co., Ltd.                                                            |
| <b>Test Lab.:</b>                   | TPV Labs of FuQing Factory                                                                    |
| <b>Address of test Lab:</b>         | Rongqiao Economic and Technological Development Zone, Fuqing City, Fujian Province, P.R.China |
| <b>Test Date:</b>                   | 2017-8-21                                                                                     |
| <b>Test Sample #:</b>               | NA                                                                                            |
| <b>Actual ambient temperature :</b> | 24.5℃                                                                                         |
| <b>Total Harmonic Distortion :</b>  | < 2% THD                                                                                      |
| <b>Test Standard:</b>               | IEC62301 , EN62301                                                                            |

## 1. Test Equipment Information

This section identifies the relevant equipment characteristics to assess conformity with the EuP Standby and Off Mode requirements of Regulation (EC) No 1275/2008, and when applicable, space for including a technical justification if the requirements specified in the EuP Standby and Off Mode requirements are inappropriate for the intended use of equipment.

| Test Equipment description | Test Equipment Supplier and Model No. | Test Equipment Serial No. | Date of Last Calibration |
|----------------------------|---------------------------------------|---------------------------|--------------------------|
| Pattern Generator          | Chroma 2226                           | AGF000000330              | 2017-8-19                |
| Luminance Meter            | CA-210                                | B1106288                  | 2017-7-24                |
| AC Source                  | AC source 1000W                       | F103040001                | 2017-4-22                |
| Power Meter                | WT-210                                | 91J819672                 | 2017-4-30                |

## 2. Test Condition

### a. AC power source

1. Input power and frequency: 230V( $\pm 1\%$ ), 50Hz( $\pm 1\%$ )

### b. Generator side

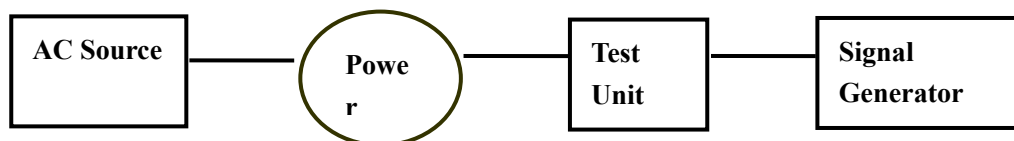
1. Display pattern: 80% white
2. Display size: Full screen

### c. Ambient Condition

1. Temperature:  $20 \pm 5^\circ\text{C}$
2. Humidity: 20~80%

## 3. Test Method

### a. Connecting Diagram



- b. Set up the voltage at 230 ( $\pm 1\%$ ) Volts AC, 50Hz( $\pm 1\%$ )
- c. Set the generator in each low power mode, Sleep mode and Off mode
- d. Warm up the test unit at least 20 minutes
- e. Measure and record the max power under each low power mode, Sleep mode and off mode

## 4. Note:

- a. All the equipments used must be calibrated

- b. After the voltage is stable over at least 5 minutes. Monitor the power consumption for not less an additional 5 minutes
- c. If the power level does not drift over 5% during the latter 5 monitor, then the power can be recorded
- d. Information required by Annex II Clause 4 of Regulation (EC) No 1275/2008:

|                                                                                                                                                                                                                                |                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| Description of first characteristic for assessing conformity ("Standby Mode" or "Off Mode")                                                                                                                                    | Off mode                       |
| Measurement method used (Refer to the standard or specification used or include a description of the measurement method used, if standard or specification is not available.)                                                  | Refer to Directive2005/32/EC   |
| Description of how the appliance mode was selected or programmed (Describe how the product is placed into Standby or Off mode for testing. For example, User depresses Off Mode switch.)                                       | User depresses Off Mode switch |
| Sequence of events to reach the mode where the equipment automatically changes modes (If applicable, when Tier 2 comes into force. For example, Product allowed to enter a low power mode after X minutes of user inactivity.) | more 8 seconds to power saving |

## 5. Test Result

| Mode                                                                                                                                                                               | Test Results | Limit for Off mode (W)                        | Verdict (Pass / Fail) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------------------------------------|-----------------------|
| Off mode (W)                                                                                                                                                                       | 0            | From Jan. 7,2013: ≤0.50W<br>Erp lot 6         | Pass                  |
| Standby mode (W)                                                                                                                                                                   | 0.38         |                                               | Pass                  |
| Power management -Sleep Mode (W)                                                                                                                                                   | 0.38         |                                               | Pass                  |
| Network standby (W)                                                                                                                                                                | 1.43         | For ErP (Network standby) requirement: ≤3.0 W | Pass                  |
| Remark: The power consumption data in Watts rounded to the second decimal place<br>Power management -Sleep Mode data is only tested for VGA function .this is from NDS requirement |              |                                               |                       |

### Test Performed by:

Enter Name: SallyJiang

*Sally Jiang*

2017-9-12

Signature and Date

### Test Reviewed and Approved by:

Enter Name: Winter Feng

*WinterFeng*

2017-9-12

Signature and Date